

**U.S. DISTRICT COURT FOR THE  
EASTERN DISTRICT OF PENNSYLVANIA**

DELAWARE RIVERKEEPER )  
NETWORK, and the DELAWARE )  
RIVERKEEPER, MAYA VAN ROSSUM, )

Plaintiffs, )

v. )

PENNSYLVANIA DEPARTMENT )  
OF TRANSPORTATION, )  
FEDERAL HIGHWAY )  
ADMINISTRATION, GREGORY )  
G. NADEAU, FHWA )  
Administrator, in his official capacity, and )  
LESLIE RICHARDS, PennDOT Secretary, )  
in her official capacity, )

Defendants. )

COMPLAINT FOR  
DECLARATORY  
JUDGMENT

CASE NO. \_\_\_\_\_

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1. Plaintiffs Delaware Riverkeeper Network, and the Delaware Riverkeeper, Maya van Rossum, (“DRN” or “Plaintiffs”) challenge the Pennsylvania Department of Transportation’s (“PennDOT”) and the Federal Highway Administration’s (“FHWA”) (collectively “Defendants”) issuance of a Categorical Exclusion (“CE”) and Final Individual Section 4(f) Evaluation with regard to the Headquarters Road Bridge Project (“Bridge” or “Bridge Project”), in Tinicum Township, Bucks County. Defendants have unlawfully determined that the Bridge must be destroyed and replaced with a new 2-lane concrete structure.

2. This is an action for Declaratory Judgment pursuant to 5 U.S.C. § 706, and 42 U.S.C. § 4321 *et seq.* to declare that their CE for the Bridge Project is not properly documented or supported by the administrative record, and violates the National Environmental Policy Act (42 U.S.C. §§ 4321 *et seq.*) (“NEPA”). A decision to approve a CE for the Project would be arbitrary, capricious or otherwise not in accordance with law.

3. Additionally, PennDOT and FHWA have failed to comply with Section 4(f) of the Department of Transportation Act, 49 U.S.C. § 303. Plaintiffs respectfully request this Court to annul as arbitrary and capricious the agencies’ issuance of the Final 4(f) Evaluation for the Project, and remand this matter for the agencies’ consideration of alternatives to bridge replacement – in particular, rehabilitation and repair – consistent with federal law.

4. The Final CE and Section 4(f) Evaluation’s conclusion to replace the Bridge constitutes a final agency action which has an immediate threatened effect.

5. There is a substantial and continuing controversy between Plaintiffs and Defendants, and a declaration of rights is both necessary and appropriate to establish that Defendants failed to follow statutorily mandated procedures and substantive determinations and thus cannot destroy and replace the Bridge.

6. At risk is the survival of a unique historic bridge, one of the last of its kind, which has stood for over 200 years and still contributes immeasurable value to the surrounding community.

7. Also at risk is Tinicum Creek, a pristine Pennsylvania Department of Environmental Protection categorized “Exceptional Value” waterway within the designated Lower Delaware National Wild and Scenic River system.

8. Federal laws and regulations require that the Bridge be rehabilitated, not destroyed.

### **PARTIES**

9. Plaintiff Delaware Riverkeeper Network (“DRN”) is a Pennsylvania non-profit organization with its principal place of business at 925 Canal Street, 7th Floor, Suite 3701, Bristol, Pennsylvania. It was established in 1988 and has more than 19,000 members. DRN’s mission is to protect and restore the Delaware River, and its tributaries, habitats and resources. To achieve these goals, DRN organizes and implements stream bank restorations, a volunteer monitoring program, educational programs, environmental advocacy initiatives, recreational activities, and environmental law enforcement efforts throughout the entire Delaware River watershed – an area which includes portions of Pennsylvania, New York, New Jersey and Delaware.

10. DRN members include individuals concerned about the protection and restoration of the Delaware River, and its tributaries, habitats and resources. DRN's members are dedicated to preserving and improving the cultural, historic and environmental resources of the Delaware River watershed.

11. DRN had a pivotal role in obtaining Special Protection Waters status for the Upper and Middle Delaware Wild and Scenic River segments by petitioning the Delaware River Basin Commission in 1992. In 2001, DRN again petitioned the Commission to classify the Lower Delaware as Special Protection Waters. As a result of DRN's efforts, the Commission permanently designated the Lower Delaware as Significant Resource Waters, a type of Special Protection status, in July 2008. DRN played a significant role in advocating for, advancing, and securing wild and scenic status of the lower Delaware River, including the Tinicum Creek. In fact Maya van Rossum personally testified before congress in support of this designation.

12. DRN's thousands of members, and Maya van Rossum, all enjoy the water quality and bucolic surroundings of the Delaware River. DRN members boat, fish, canoe, bird watch, hike and participate in other recreational activities throughout the watershed, including the areas near and immediately surrounding the Bridge. DRN's members will be adversely affected by the anticipated changes in atmosphere, water quality, flow and floodplains around the Bridge and to areas downstream, and by subsequent impacts to habitat, boating, fishing, hiking, and other recreational and

aesthetic uses of the waters within the Delaware River watershed because of Defendants' decision to replace the Bridge. Also impacted will be downstream properties impacted by changed flow and erosion patterns. DRN, DRN's members, and the Delaware Riverkeeper will also be adversely affected by the loss of the historic Bridge, which has stood for over 200 years, contributes to the beauty and cultural value of the local community and the Ridge Valley Rural Historic District, as well as contributing to the regulatory protections applicable to the resources of the region.

13. The laws of Pennsylvania and DRN's articles of incorporation, bylaws, and Board of Directors authorize it to bring this action on behalf of itself and its members.

14. Plaintiff the Delaware Riverkeeper, Maya van Rossum, is a full-time privately funded ombudsman responsible for the protection of the waterways in the Delaware River Watershed. Maya van Rossum advocates for the protection and restoration of the cultural, historical, ecological, recreational, commercial and aesthetic qualities of the Delaware River and its tributaries, habitats and resources.

15. Maya van Rossum regularly visits the Delaware River for personal and professional reasons, and her use and enjoyment of the River and the Tinicum creek area will be significantly diminished by PennDOT's and FHWA's decision to

replace the Bridge, and by the impacts to Tinicum Creek, and areas downstream resulting from this Project.

16. Personally and professionally the Delaware Riverkeeper, Maya van Rossum, is a regular visitor to Tinicum Township, the Tinicum Creek, and locations at and around the proposed Bridge site that would be adversely affected by the final actions taken. Her use, enjoyment, and appreciation of the Creek and the Tinicum community will be reduced and degraded by the replacement of the Bridge and resulting environmental impacts.

17. Defendant PennDOT is an agency and instrumentality of the Commonwealth of Pennsylvania created in 1970, with its principal place of business at 400 North Street, Harrisburg, Pennsylvania. It oversees programs and policies affecting highways, urban and rural public transportation, state and local bridges, airports, railroads, ports and waterways.

18. Under the *Programmatic Agreement Among the Federal Highway Administration, the Pennsylvania Department of Transportation, the Pennsylvania State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Implementation of Minor Transportation Projects* (“Programmatic Agreement”), FHWA delegated to PennDOT the authority to administer the Federal-Aid Highway Program and ensure compliance with the National Historic Preservation Act, 54 U.S.C. §§ 300101 *et seq.* (NHPA) in

Pennsylvania. FHWA remains responsible for compliance with Section 106 of NHPA with respect to the Bridge Project.

19. Defendant FHWA is an agency within the U.S. Department of Transportation with its principal place of business at 1200 New Jersey Avenue SE, Washington, DC. It was created in 1966, and provides stewardship over the construction, maintenance and preservation of the nation's highways, bridges and tunnels.

20. FHWA has the authority to take the lead on consultation in accordance with the Programmatic Agreement and 36 C.F.R. §§ 800.3-800.6.

21. FHWA was named as the lead agency on the Bridge Project for the purposes of the CE and Section 4(f) Evaluation, and maintained the authority to give final approval to PennDOT's consultative process and decisions.

22. Defendant Gregory G. Nadeau is the Administrator of FHWA. Administrator Nadeau is responsible for the administration, operations, and activities of FHWA and its Divisions. In his official capacity, Administrator Nadeau resides in Washington, DC. Administrator Nadeau is being sued in his official capacity.

23. Defendant Leslie Richards is the Secretary of PennDOT. Secretary Richards is responsible for the administration, operations, and activities of PennDOT and its regional offices, including District 6 which covers Bucks County. In her official capacity, Secretary Richards resides in Harrisburg. Secretary Richards is being sued in her official capacity.

## JURISDICTION AND VENUE

24. This Court has subject matter jurisdiction over this action under 28 U.S.C. § 1331 (federal question) and 5 U.S.C. § 702 because the action arises under the laws of the United States, including Section 4(f) of the Department of Transportation Act (49 U.S.C. §§ 301 *et seq.*) (the “Act”), and the National Environmental Policy Act.

25. The Court may grant declaratory and injunctive relief pursuant to 28 U.S.C. §§ 2201-2202.

26. Venue is proper in this Court pursuant to 28 U.S.C. § 1391(b) because it is the judicial district within which the Bridge at issue is located, and within which PennDOT’s and FHWA’s actions giving rise to this Complaint occurred.

## FACTUAL ALLEGATIONS

### **A. Historical, Cultural, and Environmental Values of the Bridge**

27. The Bridge was built in 1812 and historically known as the Burnt Mill Bridge. It is one of the oldest bridges of its type left in Pennsylvania, and one of only a few spans in the entire nation over 200 years old.

28. The Bridge – which itself is a protected 4(f) resource – is an integral contributing resource of the Ridge Valley Rural Historic District with an extremely rare pier-to-pier design.

29. According to a bridge survey conducted by PennDOT in 2003, there were only eight working bridges in Pennsylvania built before 1812. All were of the more

common stone arch construction design. The Bridge is one of the oldest surviving pier-to-pier bridges left in Pennsylvania, as there is only **one other known surviving bridge of this type in the country.**

30. The Bridge was partially modernized in 1919 during the early automobile era with a new concrete deck with railings, designed by noted engineer and architect Oscar Martin, to replace the earlier wooden deck that once spanned the piers. The design of the surviving 1812 abutments and piers uniquely mirrors the designs used on covered bridges, particularly the numerous Delaware River crossings between Pennsylvania and New Jersey.

31. The Bridge is considered significant in the Ridge Valley Rural Historic District due to its age, design, and rarity. The water flowing down the Tinicum Creek and its tributaries – combined with nearby site of Christian Fretz’s grist mill, built in the eighteenth century – creates a sense of place, a feeling of arrival, and provides the visitor with an experience little changed in over two centuries.

32. While the Bridge itself qualifies as a Section 4(f) resource, it is also subject to the protections and regulatory requirements of Section 4(f) because the Bridge is a contributing element to the Ridge Valley Rural Historic District.

33. When PennDOT completed its scoping field view in 2005, it treated the Bridge as not eligible for inclusion on the National Registry of Historic Places.

34. The NHPA requires that agencies comply with Section 106 when National Register-eligible properties are involved. 36 C.F.R. § 800.4(c)(1),(2).

35. By letter dated April 26, 2006, the Keeper of the National Register of Historic Places issued a Determination of Eligibility for the Bridge, stating that the Bridge is eligible for the National Register as a contributing element to the Ridge Valley Rural Historic District and that its replacement would most likely result in an “Adverse Effect” on the District.

36. The Ridge Valley Rural Historic District is nationally significant. It encapsulates the rise of upper Bucks County from a farming region with distinctive English and Quaker vernacular architecture into a region colonized by artists and celebrities in the 1930s. The district has been home to humorist Dorothy Parker, writer James Michener, sculptor Charles Rudy, screenwriter John Wexley, actress Miriam Hopkins, songwriter Jerome Kern, and playwright S.J. Perelman.

37. Wexley and Rudy lived on Sheephole Road near the Bridge and along Tinicum Creek. Charles Rudy’s widow Lorraine Rudy spoke of the rural beauty and simple living of the region as the main impetus for buying a farm in the area. She also explained that the rural countryside of the Ridge Valley Rural Historic District allowed a lifestyle that informed and made possible her husband’s creative endeavors.

38. Bucks County has a national reputation as a sanctuary for artists. The Ridge Valley Rural Historic District is the single best example of a surviving remnant landscape that continues to look and feel like the Bucks County landscape of nearly one hundred years ago that attracted creative people to settle on the back roads of a rural area rich in stone vernacular architecture and a landscape of fields, forests and streams. The Bridge, with its associated roadways and the motorist experience that can still be had traveling through that portion of the Historic District, retains historic integrity and reveals the power of place that all of Bucks County was once known for.

39. Furthermore, the Bridge is part of a collection of bridges found in Tincum Township that reflects a unique and complete historical collection that represents the history of our nation's waterway crossings from fords to modern day spans. The loss of the Bridge would result in a permanent gap in this distinctive collection of bridges.

40. The Bridge is also environmentally valuable. It crosses over Tincum Creek, a Pennsylvania Department of Environmental Protection categorized "Exceptional Value" waterway within the designated Lower Delaware National Wild and Scenic River system under the Wild and Scenic Rivers Act (16 U.S.C. §§ 1271, *et seq.*) and a state-listed Exceptional Value watershed (25 Pa. Cons. Stat. § 93.4b).

41. Tincum Creek contains a wide variety of uncommon plant communities, large numbers of rare plant and animal species, and exceptional-quality water. It is

estimated that four hundred plant species and over one hundred nesting bird species inhabit the watershed.

42. Replacing the Bridge with new construction would have direct adverse effects on the surrounding aquatic ecosystem, posing a risk to both the physic-chemical and ecological quality of Tincum Creek water quality, as well as to waterway hydraulics and aquatic organisms.

43. One of the most significant threats to Tincum Creek during construction will be fine sediment pollution which can result in direct mortality, reduced reproductive success, and reduction in the food base. Additionally, the chosen proposed Project would also result in an alteration of stream flows in ways detrimental to waterway health, streamside property and floodplains, and causing adverse downstream impacts.

44. A study conducted in Pennsylvania found that even with sediment control techniques, streams impacted by highway construction carried five to twelve times more sediment.

45. For over 200 years the solid rock structure of the Bridge has controlled the flow of Tincum Creek, particularly downstream of the Bridge, and made possible the stable agricultural fields that flank the stream and contribute to the National Register listing. The proposed Bridge replacement alters this flow regime by changing the direction and velocity of the flow exiting the Bridge. Such a

fundamental modification in the physical features of the creek threatens damage to Tinicum Creek and the adjoining historic properties. To date, both PennDOT and FHWA have failed to offer any studies of potential effects downstream.

## **B. Procedural Background**

46. FHWA's and PennDOT's discussions and procedures regarding the Bridge have been going on for over a decade, beginning in or around October 2002, when engineering funding for the Project first appeared on Delaware Valley Regional Planning Commission's Transportation Improvement Program ("TIP"). According to the Commission, "[t]he TIP is the regionally agreed upon list of priority transportation projects, as required by federal law."

47. Initial efforts to identify historic properties, to assess the integrity and historic value of the Bridge, and to scope the Project, began in 2003. Various entities inspected the Bridge and discussed options for handling the Project.

48. In September 2005, a public meeting was held and members of the public who attended the meeting expressed concerns about the loss of the historic structure, environmental consequences, and asked PennDOT to use the existing substructure to preserve piers and abutments, or to move the new bridge downstream to allow preservation of the stone abutments, piers and face of the existing Bridge. Also in September 2005, PennDOT issued the first round of Consulting Party ("CP") invitations.

49. In April 2006, the Keeper of the National Register of Historic Places issued a Determination of Eligibility for the Bridge, stating that the Bridge is eligible for the National Register as a contributing element to the Ridge Valley Rural Historic District, and that its replacement would most likely result in an “Adverse Effect” on the District.

50. During this time period the PennDOT allowed the Bridge’s condition to deteriorate. A hole in the deck was repaired with a steel plate in December 2008, and the condition of the superstructure worsened.

51. In 2010, due to PennDOT’s continued failure to maintain the Bridge, the Bridge further deteriorated and the load limit was reduced from nineteen to ten tons, and the historic width of the Bridge was reduced to ten feet, eight inches.

52. On or about March 2, 2011, PennDOT closed the Bridge to all traffic.

53. In January 2013, federal money was set aside for the Bridge Project.

54. DRN has been engaged with PennDOT for several years regarding the Bridge Project, going so far as to contract a historic bridge rehabilitation engineering specialist to draft rehabilitation plans that were submitted to the agencies. Additionally, over this time period, DRN sent letters, comments, and numerous other expert reports to PennDOT and FHWA providing information about – among other critically important subjects – estimated costs, predicted permitting procedure, environmental impacts, the approach to the Section 4(f) evaluation, purpose and

need statement, core drilling and other test results, discussions surrounding installation of a temporary bridge, mitigation policies, categorical exclusions, rehabilitation construction plans, and other matters. PennDOT and FHWA replied to some of these communications and not to others.

55. DRN's consultants on engineering, historical, and environmental issues consistently advised PennDOT and FHWA to rehabilitate the Bridge. DRN's expert consultants cited, *inter alia*, the lower costs and shorter timeline of rehabilitation, feasibility of rehabilitation, the Bridge's status as an irreplaceable historic and environmental resource, and the damage to the watershed and the Ridge Valley Rural Historic District that replacement would cause as reasons to save the Bridge.

56. DRN spent considerable time and resources in securing and submitting expert reports to FHWA and PennDOT from bridge rehabilitation specialists, civil engineers, transportation consultants, and architectural historians showing the agencies' numerous failures to follow the statutory and regulatory mandates of the Department of Transportation Act by claiming a Level 2 Categorical Exclusion to limit its review of impacts and options, and by choosing Bridge replacement.

57. DRN also spent considerable time and resources in securing a submitting other expert reports to FHWA and PennDOT from environmental engineers outlining a plethora of environmental harms that will necessarily result if the Bridge Replacement Project moves ahead as planned.

## **FINAL AGENCY ACTION ON THE BRIDGE PROJECT**

58. Defendants discussed designating the Project as a Level 2 Categorical Exclusion at least as early as April 2005, prior to the Keeper's April 2006 determination that the Bridge is eligible for the National Register as a contributing resource to the Ridge Valley Rural Historic District.

59. Despite DRN's efforts showing that FHWA and PennDOT were proceeding in violation of the National Environmental Policy Act and the Department of Transportation Act, in late 2016, FHWA and PennDOT circulated a Draft Categorical Exclusion ("Draft CE"). Plaintiffs DRN and the Delaware Riverkeeper submitted comments on the Draft CE, as well as several consultant reports, setting forth in detail the many reasons that the proposed CE and 4(f) determinations were impermissible for the Project.

60. Nevertheless, FHWA and PennDOT confirmed the Draft CE on September 24, 2018, as well as the Final Section 4(f) determination. *See* Exhibit A.

## **THE NATIONAL ENVIRONMENTAL POLICY ACT**

61. NEPA, signed into law on January 1, 1970, establishes national environmental policy and goals for the protection, maintenance, and enhancement of the environment and provides a process for implementing these goals within the federal agencies. NEPA requires federal agencies to integrate environmental values into

their decision-making by considering the environmental impacts of their proposed actions and reasonable alternatives to those actions.

62. Under the *Programmatic Agreement Among the Federal Highway Administration, the Pennsylvania Department of Transportation, the Pennsylvania State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Implementation of Minor Transportation Projects* (“Programmatic Agreement”), certain minor transportation projects may be exempt from NEPA review as categorical exclusions.

63. A categorical exclusion “means a category of actions which do not individually or cumulatively have a significant effect on the human environment and which have been found to have no such effect in procedure adopted by a Federal agency in implementation of these regulations (40 C.F.R. § 1507.3) and for which, therefore, neither an environmental assessment nor an environmental impact statement is required.” 40 C.F.R. § 1508.4.

64. FHWA established three classes of action related to the NEPA requirement that the lead federal agency determine whether an Environmental Assessment or an Environmental Impact Statement must be prepared. *See* 23 C.F.R. § 771.115.

- a. Class I lists those projects, which by their nature require an environmental impact statement. *See* 23 C.F.R. § 771.115(a).
- b. Class II relates to categorical exclusions, “[a]ctions that do not individually or cumulatively have a significant environmental effect are

excluded from the requirement to prepare an EA or EIS.” 23 C.F.R. § 771.115(b).

- c. All actions not in Class I or Class II, are Class III actions requiring preparation of an environmental assessment. *See* 23 C.F.R. § 771.115(c).

65. Under FHWA regulations, a Class II categorical exclusion is appropriate for actions which:

[D]o not induce significant impacts to planned growth or land use for the area; do not require the relocation of significant numbers of people; do not have a significant impact on any natural, cultural, recreational, historic or other resource; do not involve significant air, noise, or water quality impacts; do not have significant impacts on travel patterns; or do not otherwise, either individually or cumulatively, have any significant environmental impacts.

23 C.F.R. § 771.117(a).

66. Under the FHWA’s regulations, the use of CE’s for certain projects may not be processed as a CE if the project involves:

(2) An action that needs a bridge permit from the U.S. Coast Guard, or an action that does not meet the terms and conditions of a U.S. Army Corps of Engineers nationwide or general permit under section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act of 1899;

(3) A finding of “adverse effect” to historic properties under the National Historic Preservation Act, the use of a resource protected under 23 U.S.C. 138 or 49 U.S.C. 303 (section 4(f)) except for actions resulting in *de minimis* impacts, or a finding of “may affect, likely to adversely affect” threatened or endangered species or critical habitat under the Endangered Species Act;

...

(6) A floodplain encroachment other than functionally dependent uses

(e.g., bridges, wetlands) or actions that facilitate open space use (e.g., recreational trails, bicycle and pedestrian paths); or construction activities in, across or adjacent to a river component designated or proposed for inclusion in the National System of Wild and Scenic Rivers.

23 C.F.R. § 771.117(e) (2), (3), (6).

67. Categorical exclusions are also not available where “unusual circumstances” require “appropriate environmental studies to determine if the CE classification is proper.” 23 C.F.R. § 771.117(b). “Unusual circumstances” include:

- (1) Significant environmental impacts;
- (2) Substantial controversy on environmental grounds;
- (3) Significant impact on properties protected by section 4(f) of the DOT Act or section 106 of the National Historic Preservation Act;  
or
- (4) Inconsistencies with any Federal, State, or local law, requirement or administrative determination relating to the environmental aspects of the action.

### **THE DEPARTMENT OF TRANSPORTATION ACT**

68. The Department of Transportation Act (the “Act”), 49 U.S.C. §§ 301 *et seq.*, became law on October 15, 1966.

69. Pursuant to the Act, a Section 4(f) evaluation must be prepared for each location within a proposed project before the use of Section 4(f) land is approved. *See* 23 CFR 771.135(a).

70. For projects processed as categorical exclusions, the individual Section 4(f) evaluation should be included as a separate Section 4(f) evaluation document.

71. Section 4(f) of the Act imposes a substantive mandate on an agency's actions. *See North Idaho Community Action Network v. U.S. Dept. of Transp.*, 545 F.3d 1147, 1158 (9th Cir. 2008).

72. Specifically, section 303(c) of the Act states that:

[T]he Secretary may approve a transportation program or project ... requiring the use of ... land of an historic site of national, State, or local significance ... **only if — (1) there is no prudent and feasible alternative to using that land; and (2) the program or project includes all possible planning to minimize harm to the ... historic site resulting from the use.**

49 U.S.C. § 303(c) (emphasis added).

73. Section 4(f) thus requires agencies to reasonably consider all “prudent and feasible” alternatives and mitigate any potential adverse effects to historic resources.

74. “An alternative is not feasible if it cannot be built as a matter of sound engineering judgment.” 23 C.F.R. § 774.17.

75. The Act's regulations state: “[a]n alternative is not prudent if: (i) it compromises the project to a degree that it is unreasonable to proceed with the project in light of its stated purpose and need.” 23 C.F.R. § 774.17(3).

76. An applicant's purpose must be “legitimate.” *Friends of the Earth v. Hintz*, 800 F.2d 822, 833 (9th Cir. 1986). “Obviously, an applicant cannot define a project in order to preclude the existence of any alternative sites and thus make what is practicable appear impracticable.” *Sylvester v. U.S. Army Corps of Engineers*, 882 F.2d 407, 409 (9th Cir. 1989).

77. If the agency determines that there is no feasible and prudent avoidance alternative, it may seek approval for one of the remaining alternatives that causes the least overall harm to Section 4(f) resources. The least overall harm is determined by balancing several factors, one of which is “[t]he degree to which each alternative meets the purpose and need for the project.” 23 C.F.R. § 774.3(c)(1).

78. An agency’s Section 4(f) evaluation “shall include sufficient supporting documentation to demonstrate why there is no feasible and prudent avoidance alternative and shall summarize the results of all possible planning to minimize harm to the Section 4(f) property.” 23 C.F.R. § 774.7(a).

79. Section 4(f) further requires agencies to engage in all possible planning to minimize harm to historic properties. 23 C.F.R. § 774.3.

80. Section 4(f) governs not simply the direct use of protected resources, but also “constructive” use, which occurs “when the transportation project does not incorporate land from a Section 4(f) property, but the project's proximity impacts are so severe that the protected activities, features, or attributes that qualify the property for protection under Section 4(f) are substantially impaired. Substantial impairment occurs only when the protected activities, features, or attributes of the property are substantially diminished.” *Id.* § 774.15(a).

81. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), made the first substantive revision to Section

4(f) since the 1966 Act. Section 6009 amended existing Section 4(f), allowing approval of projects that have only *de minimis* impacts on lands governed by Section 4(f).

82. With respect to historic sites, “the Secretary may make a finding of *de minimis* impact only if—

(A) the Secretary has determined, in accordance with the consultation process required under section 306108 of title 54, United States Code, that—

(i) the transportation program or project will have no adverse effect on the historic site; or

(ii) there will be no historic properties affected by the transportation program or project;

(B) the finding of the Secretary has received written concurrence from the applicable State historic preservation officer or tribal historic preservation officer (and from the Advisory Council on Historic Preservation if the Council is participating in the consultation process); and

(C) the finding of the Secretary has been developed in consultation with parties consulting as part of the process referred to in subparagraph (A).”

49 U.S.C.A. § 303(d)(2).

83. Historic properties will be affected by the Project and the Bridge replacement does not qualify for a finding of *de minimis* impact.

84. FHWA and PennDOT acknowledge that the Bridge Project is governed by Section 4(f) of the Act.

85. A Court considers whether the agencies’ decision to use Section 4(f) property was “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance

with law.”” *Citizens to Protect Overton Park, Inc. v. Volpe*, 401 U.S. 402, 416 (1971) (quoting 5 U.S.C. § 706(2)(A)).

86. In addition, the Court must decide “whether the Secretary acted within the scope of his [or her] authority” and “whether the Secretary’s action followed the necessary procedural requirements.” *Id.* at 415, 417.

## CLAIMS FOR RELIEF

### COUNT I

#### **DEFENDANTS’ VIOLATED THE NATIONAL ENVIRONMENTAL POLICY ACT BECAUSE ITS “PURPOSE AND NEED” DETERMINATION WAS ARBITRARY, CAPRICIOUS, OR OTHER OTHERWISE NOT IN ACCORDANCE WITH LAW**

87. The above paragraphs are incorporated as if fully set forth herein.

88. The scope of PennDOT’s NEPA analysis fundamentally relies on first a determination regarding the proposed Bridge Project’s “purpose and need,” because “[p]roject need forms the foundation of the rest of the NEPA process.” DESIGN MANUAL PART 1B POST-TIP NEPA PROCEDURES, Pennsylvania Department of Transportation (November 9, 2015), at 4-5 (emphasis added).

89. The FHWA relied on a purpose and need determination from PennDOT to guide the scope of its NEPA analysis; however, the purpose and need statement relies on verifiably false and inaccurate data regarding the safety and geometric design of the bridge.

90. Considering that the purpose and need determination provides the foundation of the NEPA process, and the FHWA knowingly relied on representations that were verifiably false and inaccurate, PennDOT and FHWA's decision to proceed with its Level 2 Categorical Exclusion is unlawful.

91. Additionally, an applicant's purpose must be "legitimate." *Friends of the Earth v. Hintz*, 800 F.2d 822, 833 (9th Cir. 1986). "Obviously, an applicant cannot define a project in order to preclude the existence of any alternative sites and thus make what is practicable appear impracticable." *Sylvester v. U.S. Army Corps of Engineers*, 882 F.2d 407, 409 (9th Cir. 1989).

92. The "purpose and need" statement was defined so narrowly as to exclude rehabilitation construction plans provided by a certified historic bridge rehabilitation specialist from consideration.

93. Furthermore, when PennDOT initiated the NEPA process to select a preferred alternative for Headquarters Road Bridge, it did so with a predetermined outcome in mind: replacement of the Bridge.

94. There is no evidence in the administrative record that PennDOT meaningfully considered input from the public in drafting the purpose and need statement; rather, record evidence shows that PennDot pre-determined its course of action regarding bridge replacement as early as November 2004.

## COUNT II

**DEFENDANTS' CATEGORICAL EXCLUSION DETERMINATION IS IN VIOLATION OF THE NATIONAL ENVIRONMENTAL POLICY ACT BECAUSE THE TERMS LISTED IN 23 C.F.R. 771.117(b) PROHIBIT THE ISSUANCE OF A CATEGORICAL EXCLUSION**

95. The above paragraphs are incorporated as if fully set forth herein.

96. The Bridge Project does not qualify for a Level 2 CE because “unusual circumstances” require “appropriate environmental studies to determine if the CE classification is proper.” 23 C.F.R. § 771.117(b).

**1. 23 C.F.R. § 771.117(b)(1) – Significant Environmental Impacts**

97. Significant environmental impacts prohibit treating this Project as a CE. 23 C.F.R. § 771.117(b)(1). The proposed replacement of the Bridge would have a significant impact on natural and environmental resources, and would impact water quality and other significant environmental values.

98. For example, PennDOT’s consultant Urban Engineers submitted an Alternatives Analysis Hydraulic Summary in 2012 finding that the hydraulic improvements of removing piers – as proposed here – were “not as significant as anticipated,” and that reduced low chord elevations of the single-span options also did not provide as much hydraulic benefit as expected. These findings led Urban Engineers to recommend plans that leave the abutments and piers in their existing locations.

99. Urban Engineer's 2012 study also found that removing the piers increases the stream velocities at the bridge more than any other alternative evaluated for the 25-year water level. This increase in velocity will "lead directly to additional scour of the stream bed and cause more erosion in the vicinity of the Headquarters Road bridge." Additionally, the proposed Bridge Project "will change the flow of Tinicum creek at and downstream of the bridge site, obviously resulting in a shift of the stream westward, causing bank erosion and flow alterations that will cause significant changes to the creek, its flows, habitats and quality at and downstream of the bridge site that have not been considered by PennDOT."

100. Also, Plaintiffs submitted numerous technical expert reports by civil and environmental engineering firms expressing serious concerns about environmental impacts resulting from the proposed Project. These reports identify several areas of concern: local property damage from changes to the floodplain and flood elevations in larger storms; increase of the hydraulic impacts on the stream; dramatic stream realignment that will accelerate streambank erosion, reduce tree cover due to extensive direct removal of mature trees and streambanks, and undercut the area of relocated bridge abutments; increase in scour in the vicinity of the Bridge and the abutment; potential impacts to the aquatic ecosystem, posing a risk to both the physio-chemical and ecological quality of the Creek; impacts upon the Creek's uncommon plant communities, large numbers of rare plant and animal species, and

exceptional water quality; increases in the rate, volume, and temperature of runoff; impacts to groundwater; and other environmental impacts yet to be considered or measured adequately.

**2. 23 C.F.R. § 771.117(b)(2) – Substantial Controversy on Environmental Grounds**

101. The Project is likely to entail – and has already caused – substantial controversy on environmental grounds. 23 C.F.R. § 771.117(b)(2). A substantial dispute exists as to the size, nature, and effect of the Project. As noted above in paragraphs 98-101, incorporated herewith, Plaintiffs and other parties have submitted numerous expert reports, comments, and letters all calling into question the environmental impacts of the proposed Project. Additionally, Defendants also have received numerous responses from other conservationists, biologists, and other knowledgeable experts, all highly critical of the Project on environmental grounds.

102. The administrative record is replete with comments, letters, and expert reports generated by Plaintiffs and other parties that dispute, conflict, or otherwise refute the findings of PennDOT and FHWA regarding the size, nature, and effect of the environmental impacts resulting from the Bridge Project. Additionally, an overwhelming proportion of the Section 106 Consulting Parties have clearly, and repeatedly, expressed their rejection of the proposed Project based on environmental concerns.

**3. 23 C.F.R. § 771.117(b)(3) – Significant Impact on 4(f) or NHPA Properties**

103. Section 771.117(b)(3) states that if a project has a “[s]ignificant impact on properties protected by section 4(f) of the DOTA or section 106 of the National Historic Preservation Act,” it cannot be treated as a CE. The replacement of the Bridge is a “significant impact” on properties protected by DOTA Section 4(f) – the Bridge and Tincum Creek.

104. Both the Bridge and the Creek are section 4(f) properties. The Bridge is a 4(f) resource under NEPA because it is eligible for the National Historic Register as a contributing property. *See* 23 C.F.R. § 771.135(e). FHWA acknowledges that the Bridge is a 4(f) resource, stating that “[t]he Headquarters Road Bridge ... is subject to the requirements of Section 4(f).” The FHWA has also stated that “the Ridge Valley Rural Historic District **and** its contributing resources (**the Headquarters Road Bridge** and the adjoining tax parcels) are considered Section 4(f) resources.” In other words, the FHWA has made the determination that the Bridge itself is “considered a 4(f) resource.”

105. The Creek is also a 4(f) resource. Because the Historic District forms around the Creek, and the Creek is included within the federal Wild and Scenic Rivers System, which considers natural, recreational and historic resources (16 U.S.C. § 1274(a)(165)(A)), the Creek is a 4(f) property.

106. The Bridge Project would also have a significant impact on properties protected by section 106 of the NHPA. Headquarters Road Bridge was listed in the National Register of Historic Places on July 24, 1992, as a contributing property in the Ridge Valley Rural Historic District, a determination confirmed in April 2006.

107. An architectural historian found that removing the single-lane historic Headquarters Road Bridge and building a modern two lane bridge “would cause significant damage to the historic integrity of this portion of the Ridge Valley Historic District.”

108. PennDOT, NPS, and PHMC all agree that the replacement of the Bridge will have an Adverse Effect on the Ridge Valley Rural Historic District.

**4. 23 C.F.R. § 771.117(b)(4) – Inconsistencies with Federal, State or Local Laws**

109. Pursuant to 23 C.F.R. § 771.117(b)(4), “unusual circumstances” which prevent projects being treated as CEs includes “inconsistencies with any Federal, State, or local law, requirement or administrative determination relating to the environmental aspects of the action.”

110. It is impossible for FHWA to comply with its mandate to ensure that the proposed Project will not result in any inconsistency with “any Federal, State, or local law, requirement or administrative determination relating to the environmental aspects of the action” because none of the required federal and state permits have been issued.

111. The Project will result in inconsistencies with several “Federal, State, or local law, [or] requirement[s],” as prohibited by 23 C.F.R. § 771.117(b)(4). First, the Project cannot comply with Pennsylvania’s Chapter 105 regulatory requirements of the Pennsylvania Code. Specifically, the Project must comply with 25 Pa. Code § 105.161, which involves the design criteria for determining hydraulic capacity. As described above, the Project will likely “impact the stability downstream of the bridge as well as direct flow in a manner which would result in erosion of the streambank.” Therefore, it cannot comply with Section 105.161.

112. Additionally, the Project cannot comply with Section 105.165, which addresses issues involving bridge abutments. The proposed bridge abutment has clearly “not been aligned with the current flow of the stream and will result in potential downstream erosion.”

113. In addition, impacts identified herein violate 25 Pa. Code § 93.4a, which mandates that “[t]he water quality of Exceptional Value Waters shall be maintained and protected.” 25 Pa. Code § 93.4a. Removal and replacement of the Bridge poses a substantial risk to the integrity and quality of Tinicum Creek, and will thus violate Pennsylvania law.

114. The proposed Project will likely violate Section 7 of the WSRA. The WSRA states, in part:

Each component of the national wild and scenic rivers system shall be administered in such manner as to protect and enhance the values which

caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration *primary emphasis shall be given to protecting its esthetic, scenic, historic, archeologic, and scientific features.*

16 U.S.C. § 1281(a) (emphasis added). Section 7 requires that NPS determine whether a project will have a “direct and adverse effect on the values for which the [Tinicum Creek and the Lower Delaware] River was established.” *Id.*

115. Demolition of the historic Headquarters Road Bridge will have a direct and adverse effect on the values that supported designation of Tinicum Creek and the Lower Delaware River within the Wild and Scenic River System, and will threaten the ecological quality of the Tinicum Creek.

116. The proposed Project also likely violates the Department of Transportation Act (“DOTA”). As described in Count VI, to obtain project approval, DOTA requires PennDOT to find that: (1) there is no feasible and prudent alternative that completely avoids the use of the Section 4(f) property; and (2) the project includes all possible planning to minimize harm to the Section 4(f) property, 23 C.F.R. § 774.3(a), or “that the use of the property, including any measure(s) to minimize harm ... will have a de minimis impact....” *Id.* § 774.3(b).

117. PennDOT’s decision to demolish and replace the Bridge violates the DOTA by disregarding reasonable and prudent alternatives, and by failing to minimize harm to the Bridge.

118. To avoid the application of Section 4(f), FHWA would have to determine that, as a matter of sound engineering, it would not be feasible to construct a bridge which is an alternative to removing the Bridge. Plaintiff DRN has submitted numerous reports and plans demonstrating that under sound engineering principles, rehabilitation in a way that maintains the fundamental character of the Bridge is feasible.

119. Moreover, the rehabilitation of the Bridge is prudent, as it does not present any extraordinary or unique problems that would disqualify it as an alternative to removal and replacement.

120. Defendants have failed to follow applicable laws and regulations by treating the Project as a CE, thus rendering the entire process unreliable.

121. Defendants' CE determination was arbitrary, capricious, or otherwise not in accordance with law.

### **COUNT III**

#### **DEFENDANTS' CATEGORICAL EXCLUSION DETERMINATION IS IN VIOLATION OF THE NATIONAL ENVIRONMENTAL POLICY ACT BECAUSE THE TERMS LISTED IN 23 C.F.R. 771.117(e) PROHIBIT THE ISSUANCE OF A CATEGORICAL EXCLUSION**

122. The above paragraphs are incorporated as if fully set forth herein.

123. As noted above, projects may **not** be processed as CEs if they involve:

(2) An action that needs a bridge permit from the U.S. Coast Guard, or an action that does not meet the terms and conditions of a U.S. Army Corps of Engineers nationwide or general permit under section 404 of the Clean

Water Act and/or section 10 of the Rivers and Harbors Act of 1899;

(3) A finding of “adverse effect” to historic properties under the National Historic Preservation Act, the use of a resource protected under 23 U.S.C. 138 or 49 U.S.C. 303 (section 4(f)) except for actions resulting in *de minimis* impacts, or a finding of “may affect, likely to adversely affect” threatened or endangered species or critical habitat under the Endangered Species Act;

...

(6) A floodplain encroachment other than functionally dependent uses (e.g., bridges, wetlands) or actions that facilitate open space use (e.g., recreational trails, bicycle and pedestrian paths); or construction activities in, across or adjacent to a river component designated or proposed for inclusion in the National System of Wild and Scenic Rivers.

23 C.F.R. § 771.117(e)(2), (3), (6).

124. Upon information and belief, an individual permit from the Army Corps will be required because the Project is not eligible for treatment under any nationwide or general Corps permit. Also, PennDOT has indicated that it will not pursue general permit treatment for a replacement bridge project. Accordingly, the Project is not eligible for a CE pursuant to 23 C.F.R. § 771.117(e)(2).

125. Defendants have acknowledged that the proposed Project will have an adverse effect on the Ridge Valley Rural Historic District under the National Historic Preservation Act. Accordingly, the Project cannot be processed as a CE. *See* 23 C.F.R. § 771.117(e)(3).

126. Also, 23 C.F.R. § 771.117(e)(6) prohibits a project from being treated as a CE if it involves “construction activities in, across or adjacent to a river component

designated or proposed for inclusion in the National System of Wild and Scenic Rivers.”

127. Tincum Creek and the Lower Delaware River have been designated as “wild and scenic” under the Wild and Scenic Rivers Act, and the entire non-tidal Delaware River is protected as Exceptional Value under 25 Pa. Cons. Stat. § 93.4b. Accordingly, the Project cannot be processed as a CE according to 23 C.F.R. § 771.117(e)(6).

#### COUNT IV

#### **DEFENDANTS’ CATEGORICAL EXCLUSION DETERMINATION IS IN VIOLATION OF THE NATIONAL ENVIRONMENTAL POLICTY ACT BECAUSE THE TERMS LISTED IN 23 C.F.R. 771.117(a) PROHIBIT THE ISSUANCE OF A CATEGORICAL EXCLUSION**

128. The above paragraphs are incorporated as if set forth herein.

129. The FHWA regulations make clear that categorical exclusions are only appropriate for actions which:

[D]o not induce significant impacts to planned growth or land use for the area; do not require the relocation of significant numbers of people; do not have a significant impact on any natural, cultural, recreational, historic or other resource; do not involve significant air, noise, or water quality impacts; do not have significant impacts on travel patterns; or do not otherwise, either individually or cumulatively, have any significant environmental impacts.

23 C.F.R. § 771.117.

130. As described above in Count I, the destruction and replacement of the Bridge will have significant environmental impacts. Additionally, the demolition of the

Bridge would have a significant impact on natural, cultural, recreational and historic resources; on water quality; on travel patterns, causing increased speeds and traffic as prohibited by 23 C.F.R. § 771.117(a); and on other elements of the Bridge and its surrounding roadways, waterways, and the local community and environment.

131. The proposed replacement of the Bridge would have a significant impact on natural, environmental, cultural, historic, and recreational resources. It would significantly impact water quality, as well as other significant environmental values, which therefore disqualifies the project from a Level 2 CE. FHWA's NEPA regulations plainly prohibit treatment of the Bridge Project as a CE.

#### **COUNT V**

#### **DEFENDANTS' FAILURE TO GENERATE AN ENVIRONMENTAL ASSESSMENT WAS ARBITRARY, CAPRICIOUS, OR OTHER OTHERWISE NOT IN ACCORDANCE WITH LAW**

132. The above paragraphs are incorporated as if set forth herein.

133. The FHWA regulations state that an Environmental Assessment ("EA") is required when the proposed action is an "action in which the significance of the environmental impact is not clearly established." 23 C.F.R. 771.117.

134. Since the proposed Project did not qualify as a CE, an EA was warranted.

135. Pursuant to NEPA, an EA is an important step in determining the need for an Environmental Impact Statement ("EIS").

136. Defendants' failure to perform environmental studies or to undertake an EA was arbitrary and capricious.

**COUNT VI**  
**DEFENDANTS' "PURPOSE AND NEED" DETERMINATION PROVIDED**  
**IN THE FINAL SECTION 4(f) EVALUATION WAS ARBITRARY,**  
**CAPRICIOUS, OR OTHER OTHERWISE NOT IN ACCORDANCE WITH**  
**LAW**

137. The above paragraphs are incorporated as if fully set forth herein.

138. The Final 4(f) Evaluation document issued by the FHWA for the Project was required to make a "purpose and need" determination to guide its "prudent and feasible" alternatives analysis. *See* 23 C.F.R. § 774.17(3).

139. Here, the FHWA violated Section 4(f) of the Act and its implementing regulations by accepting a "purpose and need" determination from PennDOT for the Section 4(f) Evaluation that necessarily relied on verifiably false and inaccurate data regarding, *inter alia*, the safety and geometric design of the bridge.

140. Additionally, record evidence shows that PennDOT pre-determined its final course of action regarding bridge replacement as early as November 2004, long before any consideration of whether rehabilitation of the Bridge could meet the purpose and need of the Project.

141. The "purpose and need" statement was also defined so narrowly as to exclude from consideration rehabilitation construction plans provided by a certified historic bridge rehabilitation specialist.

142. As a result of the fatally flawed “purpose and need” determination, the FHWA improperly found that rehabilitation of the bridge was not prudent or feasible in its Section 4(f) Evaluation.

## **COUNT VII**

### **DEFENDANTS’ FAILURE TO CHOOSE A “PRUDENT AND FEASIBLE” ALTERNATIVE VIOLATES 49 U.S.C.A. § 303(c)**

143. The above paragraphs are incorporated as if set forth herein.

144. Pursuant to 49 U.S.C.A. § 303(c), the Secretary of Transportation may only approve a transportation project requiring the use of properties that are of national, State or local historic significance if: (1) there is no prudent and feasible alternative to using that land; and (2) the program or project includes all possible planning to minimize harm to the historic site resulting from the use.

145. Both the Bridge individually and as part of the Ridge Valley Rural Historic District, and Tincum Creek meet the requirements of being considered 4(f) resources.

146. Defendants violated Section 303(c) of the Act by approving the Bridge Project despite the fact that there is a prudent and feasible alternative – bridge rehabilitation.

147. Defendants also violated Section 303(c) by approving the Project despite the fact that the Project did not include all possible planning to minimize harm to the historic site resulting from the use.

148. The administrative record fails to demonstrate that rehabilitating the existing bridge was either prohibitively costly or infeasible from an engineering perspective.

149. Rather, the record shows that rehabilitation, rather than replacement, of the historic Bridge is a “feasible” alternative.

150. The record also shows that Bridge rehabilitation is “prudent” because it would not compromise the Project in light of its stated purpose and need.

151. The approved plan for the destruction of the National Historic Register eligible Bridge does not constitute a *de minimis* impact under 49 U.S.C.A § 303(d).

152. Defendants failed to adequately consider the “prudent and feasible” alternative of Bridge rehabilitation for its Section 4(f) Evaluation, and failed to engage in all possible planning to minimize harm prior to completing the 4(f) Evaluation.

153. As such, Defendants’ decision to issue a Final Section 4(f) Evaluation is arbitrary, capricious, or otherwise not in accordance with law.

154. Defendants’ approval of the Project must be annulled as a matter of law.

### **COUNT VIII**

#### **DEFENDANTS’ FAILURE TO PERFORM MANDATORY MAINTENANCE ON BRIDGE WAS ARBITRARY, CAPRICIOUS, OR OTHER OTHERWISE NOT IN ACCORDANCE WITH LAW**

155. The above paragraphs are incorporated as if set forth herein.

156. According to PennDOT, “[p]reventive maintenance is extremely important in extending the life of structures throughout Pennsylvania as well as the nation.... PennDOT inspects most state bridges at least once every two years. Based on inspection results or structural needs, PennDOT crews do bridge replacements or structural repairs to steel or concrete components.”

<http://www.dot.state.pa.us/public/PubsForms/Publications/PUB%20370J.pdf>.

157. “The bridge owner is responsible to ensure that the individual bridges and structures under his purview are inspected.” Bridge Safety Inspection Manual, PennDOT Pub 238.

158. Pennsylvania law requires PennDOT to “mark, build, rebuild, relocate, fix the width of, construct, repair, and maintain State designated highways and transportation facilities and rights of way.” 71 P.S. § 512(a)(8). “For ... highway bridges (8-20’ length) ... owned by the Department, the Department shall inventory and inspect those bridges in accordance with NBIS and Department standards.” Bridge Safety Inspection Manual, PennDOT Pub 238.

159. “In 2006, FHWA data showed that Pennsylvania’s bridges were fifth in the nation in terms of highest percent of Structurally Deficient (SD) deck area at 20.3%. With 20.7 million square feet of total SD deck area, Pennsylvania is second to only California... the goal is to perform maintenance on bridges before bridge conditions require Priority 0 [Prompt action required] or 1 [High Priority, as soon as work can

be scheduled] activities to correct.”

[http://www.dot7.state.pa.us/BPR\\_PDF\\_FILES/Documents/Research/Complete%20Projects/Design/Bridge%20Academy%20Handbook%20MEDP%20FINAL.pdf](http://www.dot7.state.pa.us/BPR_PDF_FILES/Documents/Research/Complete%20Projects/Design/Bridge%20Academy%20Handbook%20MEDP%20FINAL.pdf).

160. PennDOT’s policies require that bridge elements be replaced to ensure the continued usability of the structure:

During the bridge’s lifespan, rehabilitation or replacement of certain elements becomes necessary in order to ensure the bridge remains serviceable and to prevent advanced deterioration of critical structural members. In some instances, bridge components become deteriorated to the point that replacement of those components becomes the most cost-effective method to keep a bridge serviceable.

While “[t]he objective of preventive maintenance is to extend the service life of a bridge before bridge conditions deteriorate to a level requiring corrective maintenance, such as structural repairs... Preventive and corrective maintenance are both desirable in a comprehensive bridge preservation program, [] emphasis should be placed on preventive maintenance.” *Id.*

161. In violation of state law, PennDOT failed to maintain the Bridge.

162. Upon information and belief, PennDOT disregarded its maintenance obligations on the Bridge in the hopes that the agency could argue that the Bridge could not be rehabilitated and needed to be replaced.

163. Defendants’ failure to perform mandatory maintenance on the Bridge was arbitrary, capricious, and otherwise not in accordance with law.

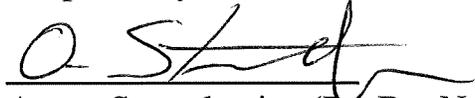
## **REQUEST FOR RELIEF**

WHEREFORE, Plaintiffs request:

- A. A declaratory judgment pursuant to 28 U.S.C. §§ 2201-2202 that Defendants' decision to issue a Categorical Exclusion regarding the Headquarters Road Bridge Project was arbitrary, capricious, and otherwise not in accordance with law;
- B. A declaratory judgment pursuant to 28 U.S.C. §§ 2201-2202 that Defendants' decision to issue a Section 4(f) Evaluation regarding the Headquarters Road Bridge Project was arbitrary, capricious, and otherwise not in accordance with law;
- C. A declaratory judgment pursuant to 28 U.S.C. §§ 2201-2202 that Defendant PennDOT's failure to perform mandatory maintenance on the Bridge was arbitrary, capricious, and otherwise not in accordance with law;
- D. An Order to stop commencement or continuation of any site clearance (i.e., tree felling) or construction activities, or preparation of construction activities, pending the Defendants' reevaluation of the Project under 42 U.S.C. § 4321 *et seq.*, the regulations promulgated in accordance therewith, and 49 U.S.C.A § 303;

- E. An Order to provide additional and appropriate mitigation for the impacts to Section 4(f) properties to the extent the Project is allowed to proceed as proposed;
- F. An Order for the Defendants to generate the appropriate National Environmental Policy Act review documents – here an Environmental Impact Statement.
- G. An award to Plaintiffs of reasonable attorneys’ fees and expert fees in bringing and maintaining this action pursuant to 28 U.S.C. § 2412; and
- H. An award to Plaintiffs of any other relief that the Court deems appropriate.

Respectfully submitted,



Aaron Stemplewicz (Pa. Bar No. 312371)  
Delaware Riverkeeper Network  
925 Canal Street  
7th Floor, Suite 3701  
Bristol, PA 19007  
aaron@delawareriverkeeper.org

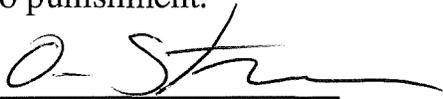
*Attorney for Plaintiffs*

DATED: October 22, 2018

**FED. R. CIV. P. 7.1 DISCLOSURE**

I am the senior attorney with Delaware Riverkeeper Network, having offices at 925 Canal Street, 7th Floor, Suite 3701, Bristol, Pennsylvania 19007, and am familiar with the proceedings and documents related to the above-captioned matter, and declare that the following is true and accurate to the best of my knowledge: the Delaware Riverkeeper Network is a non-profit organization. There is no corporation or parent corporation that owns stock in the Delaware Riverkeeper Network.

I hereby certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.



Aaron Stemplewicz (Pa. Bar No. 312371)  
Senior Attorney  
Delaware Riverkeeper Network  
925 Canal Street  
7th Floor, Suite 3701  
Bristol, PA 19007

*Attorney for Plaintiffs*

DATED: October 22, 2018

## CERTIFICATE OF SERVICE

I hereby certify that, on October 22, 2018 I filed the original of the foregoing Complaint with the Clerk's Office, and also served via First Class Mail the parties below:

Leslie Richards, Secretary  
Pennsylvania Department of Transportation  
Keystone Building  
400 North St., Fifth Floor  
Harrisburg, PA 17120

Josh Shapiro  
Attorney General of Pennsylvania  
Strawberry Square – 16th Floor  
Harrisburg, PA 17120

Gregory G. Nadeau, Secretary  
Federal Highway Administration  
1200 New Jersey Ave., SE  
Washington, DC 20590

United States of America  
Attorney General's Office  
U.S. Department of Justice  
950 Pennsylvania Avenue, NW  
Washington, DC 20530-0001

Dated: October 22, 2018



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*Attorney for Plaintiffs*

# Package Document

Related Packages: [2688 \(Scoping - Approved 04/27/05\)](#)

## Funding

Federal Funding? Yes      Federal Oversight? No      [Federal Oversight Agreement \(June 2015\)](#)

## Type

Is this project being documented as an emergency project?       Yes       No

Phase: Evaluation

Classification: Categorical Exclusion (Class II)

CE Level: 2

CE Action:  04    05    06    07    08    09  
 10    11    12    13    14    Other

## Projects

PDOT Project Manager: Ryan M Whittington

Federal Project Number: TBD

| MPMS Projects                             |                                   |                 |            |  |
|---|-----------------------------------|-----------------|------------|--|
| Lead?                                     | Status/Title                      | District/County | SR/Sec     | Description  |
| <input checked="" type="checkbox"/> 13716 | Active / Hdquarters Rd/Tinicum Cr | 06 / Bucks      | 1012 / BRC | Headquarters Road over Tinicum Creek; Tinicum Township; Bridge Replacement or Rehabilitation |

\*The last time MPMS data was added or refreshed was on Thursday, 09 August 2018 04:09 PM.

| Project Funding & Fiscal Constraint  |  |        |        |           |                    |            |
|--|--|--------|--------|-----------|--------------------|------------|
| MPMS   | FD \$  | ROW \$ | UTL \$ | CON \$    | TIP                | L RTP Date |
| 13716  |  |        |        | 3,596,000 | FFY 2017 DVRPC TIP |            |
|  |  |        |        | 4,404,000 | FFY 2019 DVRPC TIP |            |
| <b>Remarks:</b>  | Federal Funding is anticipated for construction. |        |        |           |                    |            |
| <p>For federally funded projects where the construction phase (and if needed, ROW and/or utilities phases) is not programmed on the current TIP, remarks provide a detailed reference to the current LRTP identifying full funding for the project.</p> <p>"LRTP Date" is the date of the last adopted Long Range Transportation Plan.<br/> Refer to Supplement to January 28, 2008 "Transportation Planning Requirements and Their Relationship to NEPA Process Completion"</p> |  |        |        |           |                    |            |

**Editors**

- Names & Groups:**
- Angelo J Waters/PennDOT BP-000037
  - Colleen Kelly/PennDOT BP-000083
  - Gina Tartamosa/PennDOT BP-000083
  - Jason C Vendetti/PennDOT BP-000083
  - Mathew C Marquardt PE/PennDOT BP-000037
  - Michael J Mcatee PE/PennDOT BP-000037
  - Russell Stevenson/PennDOT BP-000083
  - Sharon Yates/PennDOT BP-000083
  - Shoenfelt Vanessa/PennDOT BP-000083
  - Stacy Silva/PennDOT BP-000083
  - All District 06 Users

**Reviewers**

|  | System User Names                | Non-System / Other Addresses |
|--|----------------------------------|------------------------------|
| <b>Notify These Additional Emails Upon Approval:</b> | Colleen Kelly/PennDOT BP-000083  |                              |
|  | Gina Tartamosa/PennDOT BP-000083 |                              |

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Package was submitted on Thursday, 23 August 2018 09:28 AM by Mark J Radatti/PennDOT

| <b>Email Notify</b>  | <b>Reviewed By</b>            | <b>Date/Time</b>       |
|--|-------------------------------|------------------------|
| <b>EM:</b> Keith Highlands/PennDOT   | Keith Highlands/PennDOT       | Fri, 09/07/18 02:57 PM |
| <b>ADE:</b> Chuck Davies/PennDOT   | Chuck Davies/PennDOT          | Fri, 09/07/18 03:25 PM |
| <b>HDTS:</b> Eastern Region<br>Allen S Melley/PennDOT<br>Booker T Bates/PennDOT<br>Brian E Shunk/PennDOT<br>Harrison Knox/PennDOT<br>Julius B Sanders/PennDOT<br>Keith Highlands/PennDOT<br>Nina Ertel/PennDOT<br>Ryan R Shiffler/PennDOT<br>Sarah A Cordek/PennDOT  | Brian E Shunk/PennDOT         | Mon, 09/10/18 11:31 AM |
| <b>FHWA:</b> Barbara J Shaffer/PennDOT BP-001391<br>Camille A Otto/PennDOT BP-001391<br>Christopher Walston/PennDOT BP-001391<br>Clint H Beck/PennDOT BP-001391<br>Deborah Sucismith/PennDOT BP-001391<br>Edgar Lopez/PennDOT BP-001391<br>Ezequiel Lujan/PennDOT BP-001391<br>George Fleagle/PennDOT BP-001391<br>Jennifer Crobak/PennDOT BP-001391<br>Jennifer Elsken/PennDOT BP-001391<br>Jennifer Horn/PennDOT BP-001391<br>John Bork/PennDOT BP-001391<br>Jonathan Buck/PennDOT BP-001391<br>Jonathan Crum/PennDOT BP-001391<br>Karyn Vandervoort/PennDOT BP-001391<br>Keith Lynch/PennDOT BP-001391<br>Matt Smoker/PennDOT BP-001391<br>Michael Sherman/PennDOT BP-001391<br>Phillip Bobitz/PennDOT BP-001391<br>Roger L Ryder/PennDOT BP-001391<br>Tony Mento/PennDOT BP-001391<br>Veronica L Feliciano/PennDOT BP-001391 | Keith Lynch/PennDOT BP-001391 | Mon, 09/24/18 01:45 PM |

**CEES Package Number: 23520**

## **Categorical Exclusion Evaluation**

**MPMS:** 13716

**Project:** Hdquarters Rd/Tinicum Cr



**SR/Section:** 1012 / BRC

**County:** Bucks

**District:** 06

**CE Level:** 2

**CE Action:** 13

**Created:** 08/08/16 by Shoenfelt Vanessa

**Submitted:** 08/23/18 by Mark J Radatti

**Approved:** 09/24/18 by Keith Lynch

# CE Evaluation Part A

## General Project Identification & Description

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### **Project Identification**

**Part A Prepared By:** A.D. Marble/Urban Engineers

**Originating Office:** District 6-0

**Date:** 08/09/18

**Federal Project Number:** TBD

**Township/Municipality:** Tincum Township

**Local Name:** Headquarters Road Bridge over Tincum Creek

**Limits of Work (Segment/Offset)**

**Construction Stations**

**Start:**  
0020/2520

**End:**  
0020/3045

**Start:**  
10+75.00

**End:**  
16+00

**Total Length:** 525 ft

**Program:** 361 - Bridge  
Construction

**Funding:** **federal** 80%

**state** 20%

**local** 0%

**other** 0%

**Have context sensitive solutions and/or smart transportation strategies been integrated into the project?**  Yes  No

**Remarks**

While the bridge width will increase, the height and proportions of the new structure will be similar to the existing bridge to maintain integrity of feeling and setting of the Ridge Valley Rural Historic District. A context-sensitive bridge is being designed with input from the Consulting Parties, the public, the Advisory Council on Historic Preservation (ACHP) and the Pennsylvania State Historic Preservation Office (PASHPO) to maintain viewsheds and sightlines and to work in harmony with the surrounding setting, which is a character-defining feature of the district. The specific context-sensitive solutions to be incorporated into the project will be through the project's executed Memorandum of Agreement (MOA). The stipulations can be found in B:A-4-Cultural Resources.

**Date of First Federal Authorization for Preliminary Engineering:**

N/A

**Date of Federal Authorization Time Extension(s) for Preliminary Engineering (if applicable):**

N/A

---

## **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).**

The project is located in Tincum Township, Bucks County (see attached Project Location Map). The two-lane replacement alternative consists of a full replacement of the existing 3-span, single lane structure with a new, 2-span, 2-lane superstructure supported on a reinforced concrete substructure. The existing 16-foot wide (curb-to-curb) bridge will be replaced with a 24-foot wide (curb to curb), two-lane bridge, that meets PennDOT's standards for this type of roadway. A rendering and plan view of this alternative is attached. Aesthetic treatments for the alternative were coordinated with interested stakeholders during the Section 106 Consulting Party meeting held on August 24, 2016. The aesthetic treatments are depicted conceptually in the attached rendering and will be further refined as design progresses in conjunction with the Design Advisory Committee (DAC), as stipulated in the executed MOA.

The proposed approach is to remove the two existing piers and replace them with one center pier improves water flow. In coordination with the Pennsylvania Department of Environmental Protection (PA DEP), the reduction of the number of piers is proposed to comply with the PA Code, Chapter 105 - Dam Safety and Waterway Management regulations. Section 105.163 of Chapter 105 states, "Bridge piers shall be kept to a minimum in number and cross-sectional area and shall be designed to offer the least obstruction to the passage of water and ice, consistent with safety." In-stream work involves demolition of the existing substructure elements, construction of new abutments, and construction of a center pier. This in-stream work will include temporary stream diversions and the dewatering of the areas around the existing substructure units to provide a safe work area and to facilitate the construction of the new pier and abutments.

This alternative also involves the installation of rip-rap stone scour countermeasures. The size of the rip-rap that will be used for scour protection is R-6, which has a maximum stone size of 24-inches. This scour countermeasure will be depressed to a depth of approximately 1 foot below the finished grade of the stream and choked with smaller stone and natural stream bottom material to a depth of 6 inches. Rip-rap proposed to be located around the center pier will not be visible as it will be depressed one foot below the existing streambed elevation and will be backfilled with one foot of streambed material to bring it to the same elevation as the existing streambed. Much of the rip-rap will be obscured by the water of Tincum Creek; however, some rip-rap will be visible above the water line at the base of the abutments and along the edges of the wingwalls. The visual impact will be minor, as the stone will be choked with natural streambed material and will feature riparian plantings. The rip-rap will only be located at the base of the pier and abutments, and much of it will be located under the superstructure, which will further obscure it from the view of motorists. Lastly, to further minimize the visual impacts of the rip-rap to the Ridge Valley Rural Historic District, stone will be locally sourced, if possible, in an effort to match the visual appearance of the rip-rap to the stone found in the project area. Specifically, a red shale or argillite stone will be specified in the project's Special Provisions to fit in with the surrounding geologic conditions.

A temporary causeway will also be required to provide access for construction equipment to the project site. To facilitate these operations, temporary construction easements (TCEs) will be required, which equate to approximately 0.088 acre of adjacent parcels. This work will take place in accordance with the PA Code of Chapter 102 regulations concerning Erosion and Sediment Control and in accordance with the waterway permit required for this project. A slope easement is also required in the southeast and southwest quadrants for slope stabilization and total approximately 0.005 acre.

Due to portions of the existing structure being located outside of PennDOT Right-of Way (ROW) and to provide for maintenance access for the new structure, minimal ROW acquisitions from two parcels are anticipated. A total of 0.015 acre of required ROW is needed for the project.

## **Project Purpose and Need**

### **Include narrative to describe the project need.**

The purpose of this project is to provide a crossing for Headquarters Road over Tinicum Creek that is structurally sound and capable of safely and effectively handling the expected vehicular needs of the public and emergency services of the surrounding area.

Due to a hole found in the bridge deck during a routine inspection, the bridge was closed to the public on March 2, 2011. According to the most recent bridge inspection, performed in October 2015, the bridge remains in imminent failure based on its current condition, and the structure, in its current state, is structurally deficient. Prior to the closure of the Geigel Hill Road Bridge in 2002, the Headquarters Road structure accommodated approximately 900 vehicles per day (2001 PennDOT Traffic Count). Prior to its closure in 2011, an average of 631 vehicles per day used the Headquarters Road Bridge (2008 PennDOT Traffic Count).

The existing masonry substructure exhibits multiple areas of stone displacement and advanced streambed erosion, which has exposed the structure's foundation. The retaining walls that lie in the northwest, northeast, and southeast quadrants of the structure show signs of settlement and base slippage, with some areas of wall displaced as much as 12 inches with localized collapse. Sediment deposition at the bridge, coupled with the movement of the stream over time, has caused the stream channel to intersect with the westernmost abutment, creating a scour hazard. To temporarily alleviate concerns of the substructure deteriorating further, grout bags were installed to address immediate scour concerns, and shotcrete repairs were made to areas of damaged masonry.

The superstructure is severely deteriorated; the majority of the concrete façade cracked and spalled, exposing the steel stringers. These exposed steel stringers exhibit extensive section loss, which has reduced their load carrying capacity, and the concrete deck exhibits full-depth longitudinal cracking and spalling, as well as several large holes that have been covered by steel plates.

In addition to the severely deteriorated state of the structure, the existing bridge has a curb-to-curb width of 16 feet, allowing only one lane of traffic to pass at any given time. A turning movement analysis showed that a single unit vehicle (30 feet in length) making a left-hand turn onto the bridge from Headquarters Road would impact the bridge. The structure, therefore, cannot accommodate Tinicum Township's largest fire response vehicle, a 41.5-foot ladder truck.

Lastly, the sight distance and horizontal curve radius of the western approach to the Headquarters Road bridge does not meet PennDOT safety criteria.

In order to address the above issues, the needs for the project include:

- The bridge is structurally deficient;
- The bridge is functionally obsolete;
- The retaining walls exhibit failure;
- Due to the existing structure's geometry and limited roadway width, it cannot safely and effectively accommodate current and future traffic needs including emergency response vehicles; and
- Heavy scour exists along the western abutment, resulting in the exposure of the bridge foundations and an increase in the structures' vulnerability to further deterioration.

A project goal is to develop a solution that is sensitive to the historic and rural nature of the surrounding area.

## **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.) and support the evaluation. 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 CEE and project circumstances with the length and content varying accordingly.**

The project area is rural in nature and consists of mostly residential and agricultural land. The entire project area is located within the Ridge Valley Rural Historic District. Tincum Creek flows in an east to west direction through the project area and is an Exceptional Value (EV) waterway. Tincum Creek is classified by the National Park Service (NPS) as a federal scenic river within the Lower Delaware Wild and Scenic River.

The west side of the bridge is located in Ottsville, Pennsylvania, and the east side is located in Erwinna, Pennsylvania. There is a T-intersection on the east side of the structure, with Sheep Hole Road continuing to the north and Headquarters Road continuing to the south.

Headquarters Road is classified as a Neighborhood Collector Road, according to the Pennsylvania Department of Transportation's Publication 13M, Design Manual, Part 2 (DM-2). The Average Daily Traffic (ADT) along this roadway prior to its closure varied from 900 in 2001 to 631 in 2008. The posted speed limit on both approaches is 25 miles per hour. The bridge is currently closed to traffic. The Headquarters Road Bridge consists of a concrete-encased, steel I-beam superstructure supported on masonry piers and abutments. The superstructure was constructed in 1919 and consists of three spans. The stone abutments, piers, and wing walls are estimated to have been originally constructed in 1812. When the bridge was open to traffic, it carried one 16-foot lane with no shoulders and a 1-foot wide curb on each side. The total width of the existing bridge is 18 feet.

The original bridge railing system consisted of concrete curbs with steel pipe rails. Since then, the bridge railing system has been improved to provide a greater level of protection for vehicles crossing the bridge. The pipe rail was replaced with steel beam guide rail attached to the concrete curbs in 1991. After a vehicular impact to the guide rail in 2001 led to the failure of the bridge railing anchorage to the concrete curb, 2-foot wide concrete jersey barriers were installed along the curb lines on each side of the bridge, which restricted the bridge width to a minimum of 10 feet.

Tincum Creek, in the vicinity of the project area, has meandered over the years. As the stream continues to meander, the upstream banks have become unstable. The existing channel under the existing bridge exhibits evidence of contraction scour, which results from the meandering stream and from the obstruction of the channel by the existing structure's abutments and two piers. A large scour hole was observed adjacent to the west abutment and northwest wing wall. The normal stream depth upstream of the structure is approximately 6 inches deep. At the deepest point of the scour hole, the stream bed elevation is nearly 5 feet deep. Temporary scour countermeasures (grout bags) were installed. However, these items have been undermined and are only considered a short-term solution.

There are no sidewalks or bike trails on the bridge. Cyclists and pedestrians currently navigate the existing road network on narrow two lane roadways. Motorists are expected to yield to pedestrians and cyclists whether they are on a roadway or a bridge.

**Describe the involvement with utilities with this project.**

Aerial utility lines exist south of the bridge. During Final Design, the need to relocate or replace the existing utility pole will be determined. The impact from relocating a single utility pole will not have a significant impact on the natural environment.

**Describe the involvement with any railroad (active or inactive) including all rail lines, crossings, bridges, or signals.**

N/A

**Describe changes to access control.**

N/A

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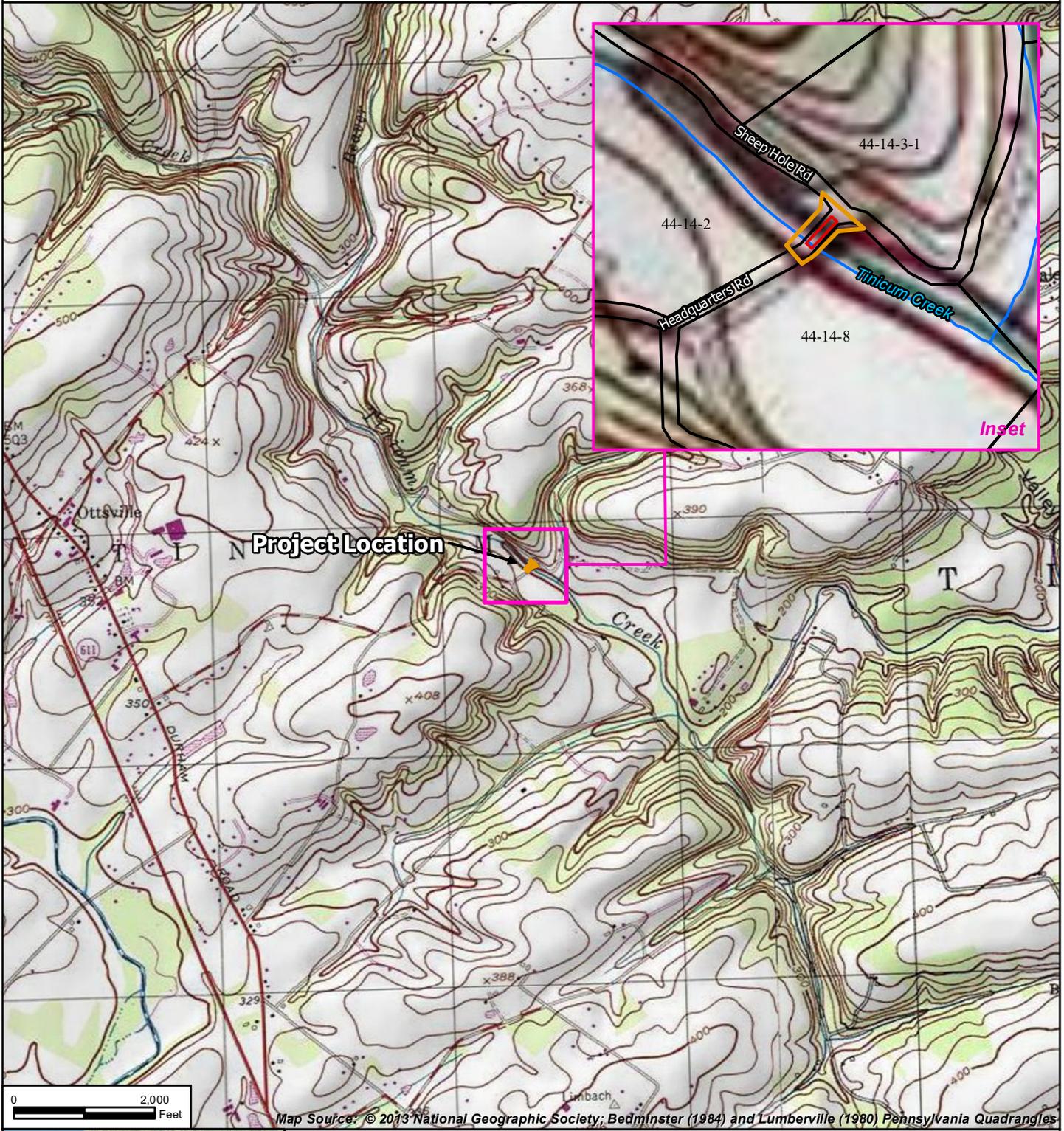
## **Additional Information**

Remarks, Footnotes, Supplemental Data

### **Attachments**

1. [Figure1\\_PLM\\_CEEver.pdf](#) (1326KB / 1.3MB)
2. [Headquarters Rd\\_renderings.pdf](#) (762KB / 0.7MB)
3. [SR 1012 Sec BRC Plan View.pdf](#) (87KB / 0.1MB)

**Project Location Map**  
 S.R. 1012, Section BRC  
 Headquarters Road Bridge Project  
 Tincicum Township, Bucks County, Pennsylvania



P:\GIS\Projects\1822\AMXD\Historic\Effects Determination\Report\Figure1\_PLM\_CEE\Ever.mxd November 17, 2016 a.grove



-  Project Location / Area of Potential Effects
-  Bridge (Contributing)
-  Approximate Tax Parcel Boundary
-  Stream



Note: Final aesthetic treatments to be determined in consultation with the Section 106 Consulting Parties and the Design Advisory Committee.



**Alterative 6 Rendering**  
S.R. 1012, Section BRC  
Headquarters Road Bridge over Tinicum Creek  
Tinicum Township, Bucks County, PA



Note: Final aesthetic treatments to be determined in consultation with the Section 106 Consulting Parties and the Design Advisory Committee.



### **Alterative 6 Rendering (Elevation View)**

S.R. 1012, Section BRC

Headquarters Road Bridge over Tincum Creek  
Tincum Township, Bucks County, PA

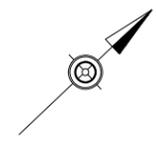
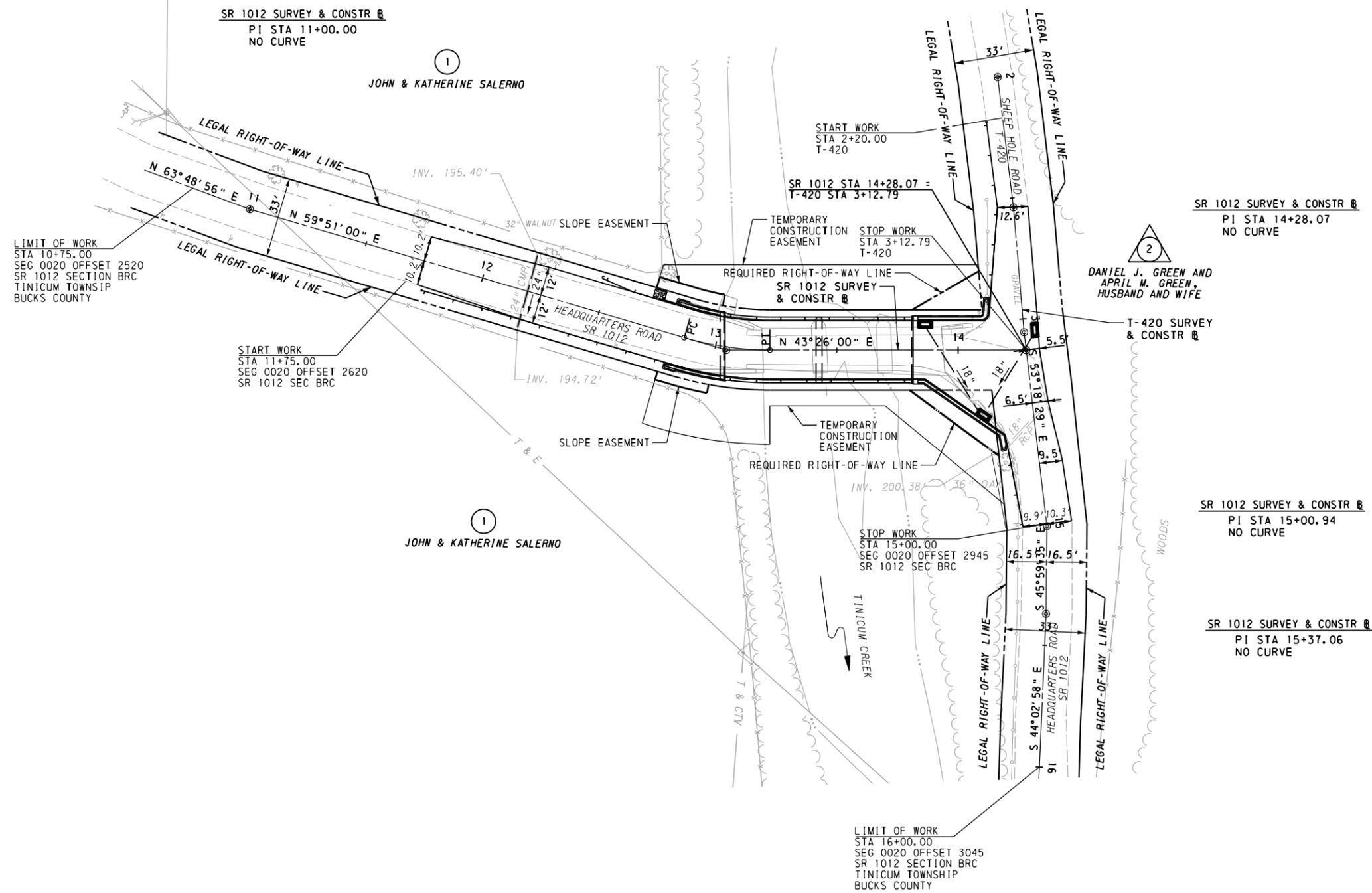
|                  |           |       |         |        |
|------------------|-----------|-------|---------|--------|
| DISTRICT         | COUNTY    | ROUTE | SECTION | SHEET  |
| 6-0              | BUCKS     | 1012  | BRC     | 4 OF 5 |
| TINICUM TOWNSHIP |           |       |         |        |
| REVISION NUMBER  | REVISIONS | DATE  | BY      |        |
|                  |           |       |         |        |

PLOTTED: 7/13/2017 3:49:17 PM

D-9012 CADD (02-90) REVISED (10-04)

OPERATOR: S:\br\edge\503501\Highway\503501\CE Document\CP-01.dgn  
FILE NAME: S:\br\edge\503501\Highway\503501\CE Document\CP-01.dgn

**SR 1012 SURVEY & CONSTR**  
 PI STA 13+04.67  
 Δ= 16°25'00" LT  
 D= 45°50'12"  
 T= 18.03'  
 L= 35.82'  
 R= 125.00'  
 E= 1.29'  
 PC= 12+86.64  
 PT= 13+22.46



SCALE  
 0 25 50 FEET

# CE Evaluation Part A

## Engineering Information

---

### Design Criteria

**Roadway Description:** S.R. 1012, Section BRC over Tincum Creek

**Functional Classification:** Minor Collector  Urban  Rural

**Current ADT:** 631 (2008) - See note in Remarks.

**Design Year No-Build / Build ADT, as well as Current / Design Year Build LOS, is only necessary when PM2.5 hot spot analysis is required.**

**If PM2.5 hot spot analysis is not needed (see exempt project list in Air Quality Handbook, Pub #321), "N/A" can be entered for these values.**

**Design Year No-Build ADT:** 0

**Current LOS:** N/A

**Design Year Build ADT:** 1090 (2037)

**Design Year Build LOS:** N/A

**DHV:** 134

**Truck %:** 10

**D (Directional Distribution) %:** 50

**Design Speed:** 25 mi/h

**Posted Speed:** 25 mi/h

#### Required Minimum Widths

**Lane Width:** 10 ft

**Shoulder Width:** 2 ft

**Bridge Curb-to-Curb:** 24 ft

**Design Exception Required?**  Yes  No

#### If "Yes", explain.

Design exceptions will be required due to existing substandard geometric conditions.

Safety issues associated with the existing roadway configuration and bridge are listed below that, if maintained, would require design exceptions.

- Sight Distance – At the west approach to the structure, the existing Stopping Sight Distance (SSD) is 162 feet, and the Headlight Sight Distance (HLSD) is 63 feet. For this roadway classification and speed limit, the required SSD and HLSD is 200 feet.
- Approach Grades – The existing roadway approach grade at the west end of the bridge (Ottsville side) of 12.3 percent exceeds the maximum allowable grade, which is 9 percent for a Rural Collector roadway with a 30-mile per hour design speed in "rolling" terrain.
- Horizontal Alignment– The existing Headquarters Road has a horizontal curve on the west approach to the bridge. The radius of that curve is 125 feet. For this roadway classification and speed limit, the minimum required horizontal curve radius is 231 feet.

**Typology:** Neighborhood Collector – Rural

**Topography:**  Level  Rolling  Mountainous

**Proposed Design Criteria:** New and Reconstruction

---

### Traffic Control Measures

The following traffic control measures will be implemented:

- Temporary Bridge(s)
- Temporary Roadway
- Detour
- Ramp Closure
- Other (specify)
- None

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

If the answer to any of the above questions was "False", please explain.

---

Detours should be clearly shown on the map and described, including provisions for pedestrians, bicycles, disabled and the elderly.

Approximate length of planned detour: 12.2 miles  Detour Map

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.

#### Describe impacts

The current detour, which totals 12.2 miles and only uses state-owned roads, will be maintained through construction of the new structure. Prior to construction, any changes in the traffic control plans will be coordinated with the local officials and local service agencies (police, fire, emergency services, and school district).

---

## Estimated Costs

Engineering: \$ 1,863,183

Right-of-Way: \$ 50,000

Construction: \$ 3,319,537

Utilities: \$ 50,000

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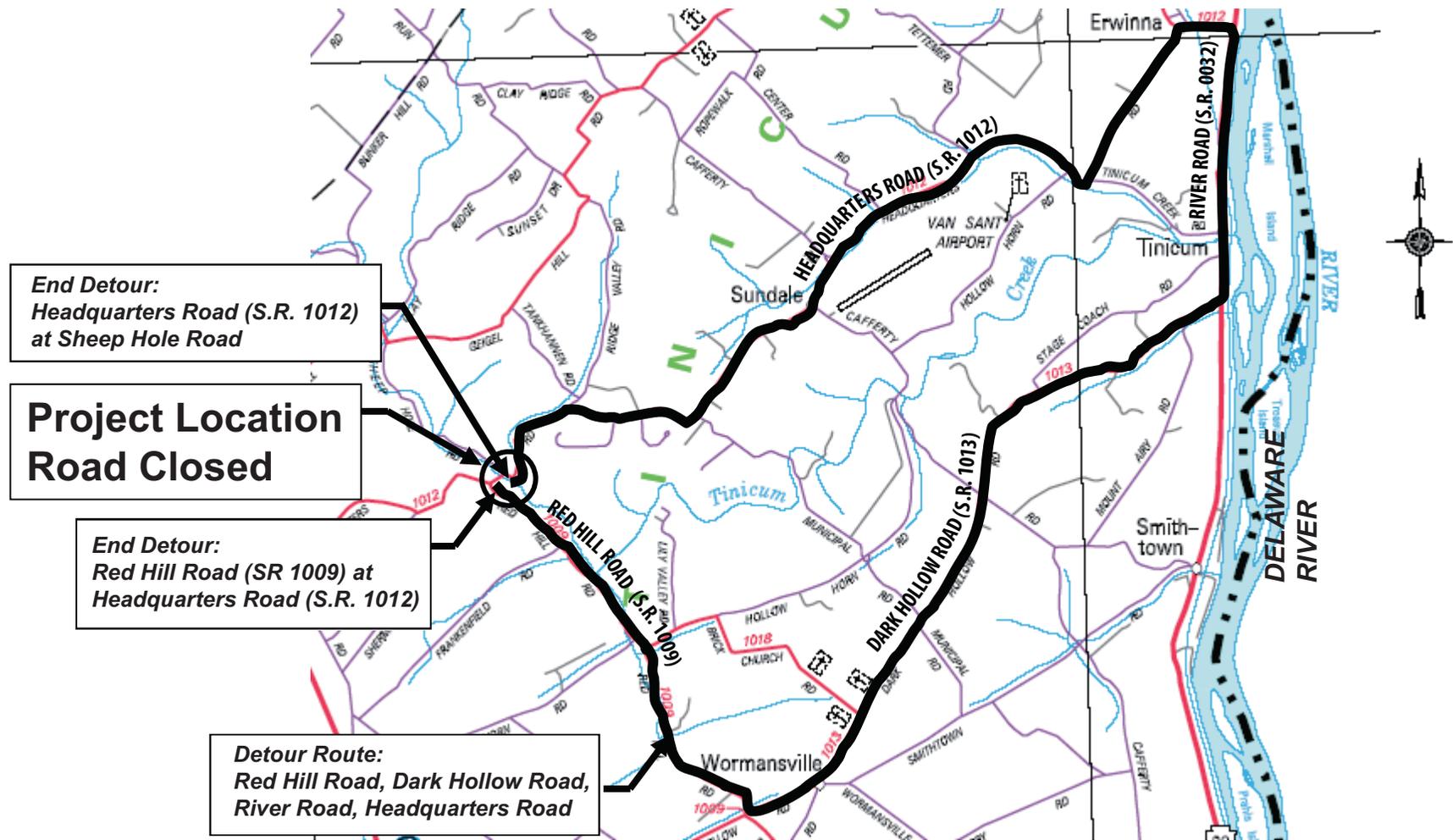
## **Additional Information**

### **Remarks, Footnotes, Supplemental Data**

\*Additionally, volumes were recorded in 2001 at 900 (prior to the closure of both Geigel Hill Road and Dark Hollow Road bridges). As required 2, the bridge roadway width will be 24'. Note that the estimated construction cost, provided above, is lower than the amount programmed on the estimated costs include the construction of the bridge and anticipated maintenance costs over the life of the structure. During Final Design, the or replace the existing utility pole will be determined. Turning Radius – Preliminary Turning Radius studies using AutoTurn 9.0 software were one-lane, 16-foot wide (curb-to-curb) superstructure width to confirm if the bridge width can accommodate the turning movements of Tincum T fire response vehicle, a 41.5-foot ladder truck. It was found that this bridge width cannot suitably accommodate the ladder trucks of the local fire turning radius study also shows that even with the construction of a two-lane bridge, the ladder truck will need to encroach upon the opposing maneuver through the intersection.

### **Attachments**

1. [SR 1012 Sec BRC - Detour.pdf](#) (160KB / 0.2MB)



**Figure 4**  
**Detour Route**  
S.R. 1012, Section BRC, Headquarters Road Bridge Project  
Tincum Township, Bucks County, Pennsylvania

# CE Evaluation Part A

## Roadway

---

No roadways included with this project

### Roadway Description

SR 1012 / Sec BRC

|                     | Existing | Proposed |
|---------------------|----------|----------|
| Number of Lanes:    | 2        | 2        |
| Lane Width:         | 10 ft    | 10 ft    |
| Shoulder Width:     | 0 ft     | 2 ft     |
| Median Width:       | N/A ft   | N/A ft   |
| Sidewalk Width:     | N/A ft   | N/A ft   |
| Bicycle Lane Width: | N/A ft   | N/A ft   |
| Clear Zone Width:   | 10 ft    | 10 ft    |

---

### Additional Information

#### Remarks, Footnotes, Supplemental Data

There is not a dedicated bicycle lane currently or proposed. Bikes will continue to share the road as is the current condition. When the existing traffic, traffic was required to stop prior to crossing the bridge, to look for oncoming traffic.

#### Attachments

# CE Evaluation Part A

## Structure

---

No structures included with this project

**BMS Number:** 09-1012-0020-2764

**BRKEY:** 7128

**Description:** (provide name of waterway or facility structure crosses)

Tinicum Creek

|                             | Existing  | Proposed                             |
|-----------------------------|---|--------------------------------------|
| <b>Structure Type:</b>      | Concrete encased steel beam   | Prestressed Concrete Spread Box beam |
| <b>Weight Restrictions:</b> | 10 ton prior to closure ton   | N/A ton                              |
| <b>Height Restrictions:</b> | N/A ft  | N/A ft                               |
| <b>Curb to Curb Width:</b>  | 16 ft   | 24 ft                                |
| <b>Lane Width:</b>          | 16* ft  | 10 ft                                |
| <b>Shoulder Width:</b>      | 0 ft  | 2 ft                                 |
| <b>Sidewalk Width:</b>      | N/A ft  | N/A ft                               |
| <b>Total Bridge Width*:</b> | 18 ft   | 27 ft                                |
|                             | <b>*Total Bridge Width is measured from outside of barrier to outside of barrier, which should include sidewalks, when present.</b> |                                      |
| <b>Under Clearance:</b>     | N/A ft  | N/A ft                               |
| <b>Lateral Clearance:</b>   | N/A ft  | N/A ft                               |
| <b>Sufficiency Rating:</b>  | 15.4  |                                      |
| <b>Structure Length:</b>    | 80 ft   | 80 ft                                |

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## **Additional Information**

### **Remarks, Footnotes, Supplemental Data**

As required by PennDOT DM-2, the bridge roadway width will be 24'. The existing structure lane width was 16 feet, however as the bridge detour wide jersey barriers were placed on both sides of the bridge, reducing the lane width. Due to the curved geometry of the approaches, the lane width is approximately 11-feet. Prior to the bridge's closing in 2011, the bridge was posted as having a weight limit of 10 tons. The existing substructure and the proposed substructure type is reinforced concrete with stone facing. Per Stipulation 2, Section a through b of the project's MOA and list 4, during demolition of the existing structure PennDOT will salvage stone from the existing structure's masonry components will be salvaged for the proposed 2-lane concrete structure.

### **Attachments**

# CE Evaluation Part B, Section A-1

## Environmental Evaluation Subject Areas (Aquatic Resources)

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Federal Project Number: TBD

### 1. AQUATIC RESOURCES

|   | PRESENCE   | IMPACTS <sup>2</sup>  |
|---|--|---|
| <b>STREAMS, RIVERS &amp; WATERCOURSES<sup>1</sup></b> | <input type="radio"/> Not Present <input checked="" type="radio"/> Present |   |
| Intermittent (streams only)                           | <input checked="" type="radio"/> Not Present <input type="radio"/> Present | <input checked="" type="radio"/> No <input type="radio"/> Yes |
| Perennial   | <input type="radio"/> Not Present <input checked="" type="radio"/> Present | <input type="radio"/> No <input checked="" type="radio"/> Yes |
| Wild trout streams                                    | <input checked="" type="radio"/> Not Present <input type="radio"/> Present | <input checked="" type="radio"/> No <input type="radio"/> Yes |
| Stocked trout streams                                 | <input checked="" type="radio"/> Not Present <input type="radio"/> Present | <input checked="" type="radio"/> No <input type="radio"/> Yes |

**Identify all streams and their classifications per Chapter 93 of 25 PA Code (e.g. CWF, WWF, HQ, EV)**

Tinicum Creek is classified as Exceptional Value (EV), Migratory Fishes (MF) in PA Code, Title 25, Chapter 93 (Water Quality Standards).

<http://www.pacode.com/secure/data/025/chapter93/chap93toc.html>

According to the Pennsylvania Fish and Boat Commission, Tinicum Creek is not classified as an Approved Trout Water, Class A Wild Trout Stream, or Stream Listed with Naturally Reproducing Trout. Supporting links:

[http://fishandboat.com/trout\\_repro.pdf](http://fishandboat.com/trout_repro.pdf)

<http://fishandboat.com/classa.pdf>

[http://fbweb.pa.gov/stocking/TroutStockingDetails\\_GIS.aspx](http://fbweb.pa.gov/stocking/TroutStockingDetails_GIS.aspx)

**Linear feet of Streams permanently impacted:** 77

**Describe Any Permanent Impacts**

It is anticipated that 50 feet of stream bank scour protection will be required on the east downstream side of the bridge along Sheep Hole Road and a lesser amount on the west side. This required 50 feet of stream bank scour protection can be performed from the land side and will not have any temporary impacts to the stream channel. Therefore, the permanent impacts to Tinicum Creek will be limited to 77 linear feet. Due to the EV water quality designation of Tinicum Creek, rip-rap will be depressed to a depth of approximately 1 foot below the finished grade of the stream and choked with smaller stone and natural stream bottom material to a depth of 6 inches. Rip-rap proposed to be located around the center pier will not be visible as it will be depressed one foot below the existing streambed elevation and will be backfilled with one foot of streambed material to bring it to the same elevation as the existing streambed. The rip-rap will extend along the stream bank immediately adjacent to the structure and will be choked with smaller stone and natural stream bed material and fines to a depth of 6 inches to minimize, to the extent possible, visible rock. The area will then be planted with riparian plantings and seeded with a riparian seed mix that will be compatible with the EV waters. While much of the rip-rap will be obscured by the water of Tinicum Creek, some rip-rap will be visible above the water line at the base of the abutments and along the edges of the wingwalls. The size of the rip-rap that will be used for scour protection is R-6, which has a maximum stone size of 24-inches. The stone will be locally sourced, if possible, and a red shale or argillite stone will be specified in the project's special provisions to fit in with the surrounding geologic conditions.

**Describe Any Temporary Impacts**

It is anticipated that the contractor will require a 23-foot temporary construction easement on the upstream side of the bridge and a 10-foot temporary easement on the downstream side of the bridge. Construction activities in the waterway will be performed within cofferdams that will be constructed around the proposed foundations, which will contain the sediment prior to excavation and prevent discharge of material into the channel. Due to temporary construction access, the proposed project will temporarily impact 33 linear feet of Tinicum Creek.

Is mitigation incorporated?  No  Yes

Project Specific Restoration/Enhancement: 0 linear feet

Advanced Compensation/Banking: 0 linear feet

Other:

**Mitigation Remarks**

Rock scour protection surrounding bridge abutments will be choked with top-soil and seeded with a riparian seed mix to minimize, to the extent possible, visible rock. One foot of streambed material will be retained and placed onto the rip-rap at the center pier. The size of the rip-rap that would be used for scour protection is R-6, which has a maximum stone size of 24-inches. The stone would be locally sourced, if possible, and a red shale or argillite stone will be specified in the project's special provisions to fit in with the surrounding geologic conditions.

**Remarks**

The proposed project will result in a benefit to the free-flowing nature of the stream through the removal of an existing abutment from the stream channel as well as the elimination of one pier. There will be no long-term water quality impacts of the proposed structure, and short-term impacts caused by construction activities will be mitigated through the use of standard Erosion and Sediment Pollution Control Best Management Practices, which are appropriate for EV streams and reviewed and approved by the PADEP. With the removal of the pier, creating a better free flow condition, fish will be able to pass more freely. The proposed bridge eliminates a pier and repositions the western abutment outside the stream channel. The fill in front of the abutment will be graded to direct the channel into the existing downstream location. These modifications will increase the cross sectional area of the stream which will improve the hydraulic capability of the proposed structure compared to the existing structure. The proposed bridge structure will maintain the natural free flowing nature of Tinicum Creek and will not present the conditions that impede fish passage such as flow constriction, hydraulic drop at flow transition into the structure, hydraulic jumps within the structure or downstream of its outlet, and shallow flows and comparatively high velocities within the structure. These fish passage impediment conditions are experienced more by culverts than by bridges. The proposed bridge will be designed to maintain water depths similar to the adjacent natural stream channel and contain natural stream substrate through the structure. The natural substrate will provide a roughness to the flow through the structure allowing for fish and macroinvertebrate passage and recolonization. Temporary impacts to aquatic life during construction of the proposed structure from the use of a temporary causeway are anticipated, though with half of the stream being de-watered at a time, the ability for fish to pass through the project area will be maintained throughout construction. The proposed scour protection will be choked with natural streambed material providing substrate for the recolonization by macroinvertebrates and finfish. Additionally, the natural stream bed substrate will infill the area of disturbance over time providing recolonization for the entire stream bed within the limit of disturbance. Downstream drift is the most common mechanism for recolonization by macroinvertebrates, with supplemental aerial recolonization by winged adult stage species. The aerial recolonization can take place in all directions and from neighboring streams. Although the scope of this project is to replace only the bridge structure and to mimic the existing stream condition, the need to remove the upstream gravel bar will be evaluated during the final design process and through coordination with the PADEP and the Bucks County Conservation District. By mimicking the existing stream conditions, downstream impacts will be minimized.

---

**PRESENCE**

**IMPACTS<sup>2</sup>**

**FEDERAL WILD & SCENIC RIVERS & STREAMS<sup>1</sup>**

Not Present  Present

No  Yes

**Documentation<sup>3</sup>**

- National Parks Service Coordination Letter
- U.S. Forest Service Coordination Letter (Allegheny/Clarion Rivers)

**Describe Any Permanent and Temporary Impacts**

Same as above Aquatic Resources section

Is mitigation incorporated?  No  Yes

**Describe Mitigation**

Same as Aquatic Resources section and Cultural Resources section

**Remarks**

The Wild and Scenic Rivers Act was established in 1968 in an effort to preserve certain rivers with outstanding natural, cultural, and recreational values. The Lower Delaware River is designated as a Wild and Scenic River and includes many of its tributaries, such as Tincum Creek. Tincum Creek is classified by the NPS as a Federal Scenic River or Stream within the Lower Delaware Wild and Scenic River. The Lower Delaware River watershed is 12,757 square miles, of which about half is located in Pennsylvania. The watershed, which contains 42 counties and 838 municipalities, also extends into New Jersey, New York, and Delaware. Outstandingly remarkable values (ORVs) are defined by the Wild and Scenic Rivers Act as the characteristics that make a river worthy of special protection, along with the river's free-flowing nature and water quality. The Lower Delaware River possesses all five ORVs -- Cultural, Ecological, Geological, Recreational, and Scenic. Tincum Creek contains cultural, geological, and scenic ORVs. The S.R. 1012 bridge over Tincum Creek is a contributing resource to the surrounding Ridge Valley Rural Historic District, which was listed in the National Register of Historic Places in 1992. The Rural Historic District is considered to be an ORV to the Lower Delaware River. However, it should be noted that an Adverse Effect, as determined under Section 106 does not equate to an Adverse Effect, as determined under Section 7 of the Wild and Scenic Rivers Act. As NPS indicates in their comment letter (attached), they are concerned with the protection of the Ridge Valley Rural Historic District since it is an ORV. NPS concurs with the Section 106 adverse effect regarding the replacement of the bridge. NPS stated "While the NPS is disappointed that the current condition of the bridge requires that it be demolished, we feel that the specific provisions of the MOA with the proposed design of the new bridge, coupled with the specific mitigation provisions, represents an appropriate effect to minimize impacts to the historic district." Coordination with the NPS will continue throughout final design.

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|  |  |   |
|--|--|---|
|  | <b>PRESENCE</b>  | <b>IMPACTS<sup>2</sup></b>                                    |
| <b>STATE SCENIC RIVERS &amp; STREAMS<sup>1</sup></b> | <input checked="" type="radio"/> Not Present <input type="radio"/> Present | <input checked="" type="radio"/> No <input type="radio"/> Yes |

**Remarks**

Tincum Creek is not classified as a state scenic river or stream by the Pennsylvania Department of Conservation and Natural Resources; therefore, no impacts will occur.  
<http://www.dcnr.state.pa.us/brc/conservation/rivers/scenicrivers/index.htm>

---

|  |  |                            |
|--|--|----------------------------|
|  | <b>PRESENCE</b>  | <b>IMPACTS<sup>2</sup></b> |
| <b>NAVIGABLE WATERWAYS<sup>1</sup></b> | <input checked="" type="radio"/> Not Present <input type="radio"/> Present |                            |

**Remarks**

According to MPMS-IQ, Tincum Creek is not a navigable watercourse and therefore does not require U.S. Coast Guard coordination or an ATON Plan. Tincum Creek is also not listed in "Keystone Canoeing" (Gertler, 2004) or on the American Whitewater website <https://www.americanwhitewater.org/content/River/state-summary/state/PA/>  
[http://www.dot7.state.pa.us/MPMS\\_IQ/Mapping](http://www.dot7.state.pa.us/MPMS_IQ/Mapping)

---

|   |  |                            |
|---|--|----------------------------|
|   | <b>PRESENCE</b>  | <b>IMPACTS<sup>2</sup></b> |
| <b>OTHER SURFACE WATERS<sup>1</sup></b> | <input checked="" type="radio"/> Not Present <input type="radio"/> Present |                            |

**Remarks**

There are no other surface waters in the project area.

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**PRESENCE**

**IMPACTS<sup>2</sup>**

**GROUNDWATER RESOURCES<sup>1</sup>**

Not Present  Present

**Remarks**

According to eMapPA, there are no groundwater resources (public water supply, groundwater monitoring sites) present in the project area. Residents in the vicinity of the project area utilize private wells as their water supply; none of the wells will be impacted by the project. There is a United States Geological Survey (USGS) gauging station attached to the east parapet; however, this gauging station has been inactive since January 1993. According to the United States EPA's EnviroMapper, the project is not located within a sole source aquifer. Upon review of the USGS report (Slotto) and the potentiometric-surface map of McManus and Rowland (1993), the reach of Tohickon Creek below Lake Nockamixon dam is a losing reach; Tincum Creek is not. The potentiometric-surface map shows that water levels measured in wells in the area are below the elevation of Tohickon Creek, indicating loss of water from the stream into the aquifer. Streamflow lost from Tohickon Creek to the ground-water system in the reach is discharged to Tincum Creek. This project will not have detrimental impacts to the aquifer.

The following links support this information:

[http://waterdata.usgs.gov/pa/nwis/dv/?site\\_no=01458900](http://waterdata.usgs.gov/pa/nwis/dv/?site_no=01458900)

<https://map11.epa.gov/myem/efmap/index.html?ve=13,40.48627853393555,-75.0792465209961&pText=Tincum%20Creek,%20PA>

<http://www.depgis.state.pa.us/emappa/>

---

**PRESENCE**

**IMPACTS<sup>2</sup>**

**WETLANDS<sup>1</sup>**

Not Present  Present

**Documentation<sup>3</sup>**

- Data Forms
- Wetland Identification and Delineation Report
- Conceptual Mitigation Plan
- 404 (b)(1) Alternative Analysis
- Jurisdictional Determination
- Functional Assessment Analysis

**Remarks**

A wetland delineation was conducted on April 27, 2005 and on February 15, 2017. No wetlands were identified within the project area. While there are two vegetated gravel bars in the waterway, they do not meet the vegetation or soil criteria of a wetland. Although the intent of this project is to replace only the bridge structure, the need to remove the upstream gravel bar will be evaluated during the final design process and through coordination with the PADEP and the Bucks County Conservation District. A Letter of No Wetland Finding was prepared and is in the project technical file.

---

**PRESENCE**

**IMPACTS<sup>2</sup>**

**COASTAL ZONE<sup>1</sup>**

Not Present  Present

No  Yes

**Remarks**

According to eMapPA, the proposed project is not located within a coastal zone.

<http://www.depgis.state.pa.us/emappa/>

---

**PRESENCE****IMPACTS<sup>2</sup>****FLOODPLAINS<sup>1</sup>** Not Present  Present No  Yes No significant floodplain encroachment would occur.

**If, after consultation with FHWA, it is concluded that there will be significant floodplain encroachment, a floodplain finding is required, and an EIS or EA will need to be prepared because a CEE is not an appropriate level of NEPA documentation. Significant floodplain encroachment is defined in DM-1B.**

**Describe Any Permanent and Temporary Impacts**

Temporary impacts to the floodplain will occur as a result of disturbance associated with construction activities, de-watering of portions of the stream, and reconstruction of approach roadways. Permanent impacts to the floodplain will result from re-grading of approach roadway embankments to be compliant with current guiderail standards. These impacts are not anticipated to result in a significant encroachment of the floodplain.

**Is mitigation incorporated?** No  Yes**Remarks**

The stream bed at the proposed site consists mostly of smooth small stones and a few large rocks, with several depositions of stone downstream of the bridge from previous scouring of the stream bed beneath the bridge. The upstream side of the west abutment shows signs of scour at the footing.

There is moderate erosion of the left and right side of the upstream banks. The left bank, looking downstream, is relatively flat with stones and trees up to the embankment of Sheep Hole Road, where the bank becomes steep. Trees at the bottom of the bank are leaning toward the creek because of water undermining the tree's roots. The right bank has a relatively moderate slope. Trees sloping toward the creek are also present at this location. With the exception of the sloping trees on the downstream end, the banks upstream and downstream seem stable.

To address the potential for erosion downstream of the new West Abutment, the area behind the existing abutment will be graded with a 2:1 slope to establish new stream banks that are coincident with the location of the existing abutment. The new slope in front of the proposed abutment will consist of rip-rap scour protection choked with native stream bed materials and fines, then seeded with a riparian seed mix that will be compatible with the EV waters. This new grading will tie into the existing banks on the upstream and downstream sides of the bridge to provide a uniform stream cross section transition. A preliminary Hydrologic and Hydraulic analysis was performed to determine if changes to the water surface elevations and velocities would result downstream. Any increase in these values was found to be insignificant and is not anticipated to result in any impacts downstream.

This project is located within the 100-year floodplain. The project will have no significant floodplain encroachment, as defined in 23 CFR Park 650, Subpart A, Section 650.105(q), since the project will not: 1. Have a significant potential for interruption or termination of a transportation facility which is needed for emergency vehicles or provides a community's only evacuation route, 2. Have a significant risk, 3. Have a significant adverse impact on natural and beneficial floodplain values. <http://msc.fema.gov/portal>

---

**SOIL EROSION & SEDIMENTATION<sup>1</sup>****Are there activities that could cause erosion or sedimentation and would require E&S Controls?**  Yes  No  N/A**Documentation<sup>3</sup>**

- Coordination w/County Conservation District
- E&S Control Plan
- NPDES Stormwater Construction Permit

**Is mitigation incorporated?** No  Yes

**Describe Mitigation**

Erosion and Sediment Pollution Control Best Management Practices will be implemented to avoid and minimize soil erosion and sedimentation.

**Remarks**

The proposed project will include coordination with the Bucks County Conservation District and the development of an E&S Control Plan in final design. Long term impacts to water quality and aquatic life within Tinicum Creek from sediment discharge is not anticipated. Temporary impacts associated with construction will be minimized by the implementation of an approved Erosion and Sedimentation Control Plan. It is anticipated that sediment discharge will be reduced due to the removal of one of the piers, stabilization of the stream banks, and the addition of scour protection.

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- 1 If the resource is not present, do not complete the remainder of this subject area.
  - 2 If the resource is present but no impacts are anticipated, describe in Remarks why there will be no impact. If there will be no impact because avoidance/mitigation measures will be included, describe those in the mitigation text box provided.
  - 3 Unless required as an attachment, documentation for subject areas should be maintained in the project's Technical Support Data and does not need to be submitted with the CEE.
- 

**Additional Information**

Remarks, Footnotes, Supplemental Data

**Attachments**

1. [NPS Letter 2017\\_01\\_12.pdf](#) (207KB / 0.2MB)



# United States Department of the Interior

NATIONAL PARK SERVICE  
Northeast Region  
United States Custom House  
200 Chestnut Street  
Philadelphia, PA 19106

IN REPLY REFER TO:

A.1.2.(NER-RSS)

**JAN 12 2017**

Ryan M. Whittington, E.I.T. Consultant Project Management (HNTB)  
PA Department of Transportation  
Engineering District 6-0  
7000 Geerdes Boulevard, King of Prussia, PA 19406

Re: Draft Categorical Exclusion Evaluation, S.R. 1012, Section BRC, Headquarters  
Road/Tinicum Creek, Bucks County, PA

Dear Mr. Whittington:

The National Park Service (NPS) has the following comments regarding the Draft Categorical Exclusion (CE) Evaluation for the Headquarters Road Bridge over Tinicum Creek.

## **Wild and Scenic River Status**

The CE correctly identifies the Wild and Scenic River status of Tinicum Creek as well as the designation's objective to protect free-flowing character, water quality, and identified "Outstandingly Remarkable" natural, cultural and recreational resource values (ORV). Section 7 of the Wild and Scenic Rivers Act (WSRA) specifies in pertinent part that: "no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with its administration."

In this case, the Secretary of the Interior, through the National Park Service, is charged with administering Section 7 of the Act. A determination under Section 7 will be provided once the project is in final review form. In the meantime, we offer the following comments based on the content of the CE document:

## **Values Associated with Tinicum Creek**

As with all Wild and Scenic Rivers, the NPS is concerned with the protection of water quality and free-flowing character as important components of the Headquarters Road project. In addition, as noted in the CE, the Ridge Valley Rural Historic District is considered an ORV subject to the protections of the Wild and Scenic Rivers Act.

**Water Quality:** The CE identifies that the proposed project will have no long-term water quality impact and that the use of standard best management practices will mitigate any potential short-term impacts. The NPS has no reason to disagree with this general characterization, but would need to review details of construction plans, timing, dewatering plans, temporary and long-term bank stabilization plans, etc. to be confident that the construction activities subject to Section 7 of the WSRA are adequate to protect water quality both during construction and for the long-term.

**Free-Flowing Character:** The NPS has substantial interest and concern related to the free-flowing character of Tincum Creek through the project area, and believes that careful analysis in this regard is warranted. Present conditions at the site include recent alluvial deposition upstream of the bridge (now beginning to vegetate) likely indicative of backwater effects at the bridge during high flow events. Additionally, as noted in the CE, flow is currently directed against the west abutment of the bridge in a de-stabilizing manner which has produced a substantial downstream scour hole. The larger picture at the site, however, demonstrates overall long-term stability of the stream channel, with mature hardwoods lining streambanks both above and below the bridge. Hydrology and hydraulics (e.g., HEC-RAS, scour analysis, discharge estimates, flood elevations) need to be well understood at the site coupled with geomorphic assessments (e.g., bankfull width/depth, longitudinal profile, pebble counts, etc.) in conjunction with advancement and approval of any final project configuration at the site. Changes to long-term bridge configuration such as moving and reconfiguring of abutments will need to consider these factors. The CE does not address whether or not (or to what extent) the upstream gravel deposition will be removed, and does not reference any data regarding the potential downstream streambank impacts of the proposal to move the western abutment landward by a significant distance.

Additional details typically needed for review would include:

- Water quality protection measures (e.g., erosion and sediment control, water diversion specs);
- Channel bed restoration materials specifications (e.g., particle size class distribution, quantities);
- Scour countermeasure materials specifications (e.g., rock composition, size, shape, color);
- List of plant species and specifications (e.g., seed mixes, potted plants, live stakes, etc.);
- Bioengineering materials specifications (e.g., geotextile fabrics, etc.);

### **Ridge Valley Rural Historic District/106 National Historic Preservation Act (NHPA)**

As an ORV cited as contributing to the values for which Congress enacted the Wild and Scenic River designation of the Lower Delaware (and its tributary, Tincum Creek), the NPS is very concerned with protection of the Ridge Valley Rural Historic District. The specific setting and character of the Headquarters Road Bridge and its surrounding environment (within the viewshed

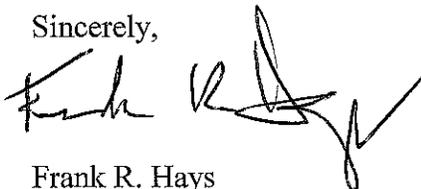
of the bridge) is exemplary in its contribution to the overall character and purpose of the Ridge Valley district. Preservation of the character of the bridge within this overall setting is of high importance to the overall District.

The CE document references the ongoing proceedings under Section 106 of the NHPA, and includes a draft Memorandum of Agreement (MOA) designed to mitigate the adverse effect of the proposal to replace the existing bridge with a new structure. The NPS concurs with the assessment of adverse effect regarding the replacement of the historic bridge. While the NPS is disappointed that the current condition of the bridge requires that it be demolished, we feel that the specific provisions of the MOA with the proposed design of the new bridge, coupled with the specific mitigation provisions, represents an appropriate effort to minimize impacts to the historic district. The NPS looks forward to participating on the Design Advisory Committee; our current contact for this endeavor is Jamie Fosburgh, Acting Chief, Northeast Region, Wild and Scenic Rivers Program. You may reach him at [jamie\\_fosburgh@nps.gov](mailto:jamie_fosburgh@nps.gov); or 617-223-5191.

NPS remains concerned with the cumulative effects to the Ridge Valley Rural Historic District from the bridge and related transportation improvement projects. The District lists six bridges among the contributing structures, along with two fords and a generally narrow, meandering transportation infrastructure designed to meet the needs of local, rural agriculture. Preservation of the overall character of the District is greatly influenced by modern transportation construction and maintenance. The Geigel Hill Road Bridge was recently replaced with a context-sensitive bridge. The four other bridges noted within the District were constructed between 1909 and 1936. NPS urges a comprehensive approach to ensuring that transportation infrastructure contained within the District continues to support the important rural, agricultural heritage and character.

Thank you for the opportunity to supply these comments for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'Frank R. Hays', written in a cursive style.

Frank R. Hays  
Associate Regional Director  
Resource Stewardship and Science

## CE Evaluation Part B, Section A-2

### Environmental Evaluation Subject Areas (Land)

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## **2. LAND**

| <b>AGRICULTURAL RESOURCES<sup>1</sup></b>         | <b>PRESENCE</b>  | <b>IMPACTS<sup>2</sup></b>                                    |
|---|--|---|
|   | <input type="radio"/> Not Present <input checked="" type="radio"/> Present |   |
| Productive Agricultural Land                      | <input checked="" type="radio"/> Not Present <input type="radio"/> Present | <input checked="" type="radio"/> No <input type="radio"/> Yes |
| Agricultural Security Areas                       | <input checked="" type="radio"/> Not Present <input type="radio"/> Present | <input checked="" type="radio"/> No <input type="radio"/> Yes |
| Prime Agricultural Land                           | <input checked="" type="radio"/> Not Present <input type="radio"/> Present | <input checked="" type="radio"/> No <input type="radio"/> Yes |
| Agricultural Conservation Easements               | <input checked="" type="radio"/> Not Present <input type="radio"/> Present | <input checked="" type="radio"/> No <input type="radio"/> Yes |
| Farmland Enrolled in Preferential Tax Assessments | <input type="radio"/> Not Present <input checked="" type="radio"/> Present | <input type="radio"/> No <input checked="" type="radio"/> Yes |
| Agricultural Zoning                               | <input type="radio"/> Not Present <input checked="" type="radio"/> Present | <input type="radio"/> No <input checked="" type="radio"/> Yes |
| Soil Capability Classes I, II, III, IV            | <input type="radio"/> Not Present <input checked="" type="radio"/> Present | <input type="radio"/> No <input checked="" type="radio"/> Yes |
| Prime or Unique Soil                              | <input type="radio"/> Not Present <input checked="" type="radio"/> Present | <input type="radio"/> No <input checked="" type="radio"/> Yes |
| Statewide or Locally Important Soils              | <input checked="" type="radio"/> Not Present <input type="radio"/> Present | <input checked="" type="radio"/> No <input type="radio"/> Yes |

#### **Documentation<sup>3</sup>**

- Farmland Assessment Report
- ALCAB Approval
- Agricultural Land Preservation Policy Conformance Statement
- Form AD-1006 - Farmland Conversion Impact Rating or Form NRCS-CPA-106 for Corridor Type Projects
- Coordination with County Tax Assessor

#### **Describe Any Permanent and Temporary Impacts**

Due to the proposed project, approximately 0.01 acre (373.79 sq. ft.) of Soil Capability Class II, less than 0.01 acre (267.35 sq. ft.) of Soil Capability Class IV, and 0.01 acre (641.14 sq. ft.) of Clean and Green and agriculturally zoned land will be converted to transportation use. There are temporary impacts to the horse pasture in the southeast quadrant (0.013 ac; 568.76 sq. ft.) for access during construction; however, this land will be fully restored after construction. Portions of the pasture fence are within the TCE, and will be impacted during construction. Coordination with the property owner will occur. The fence will be replaced in kind after the completion of construction.

**Is mitigation incorporated?**  No  Yes

**Remarks**

Soil Capability Class II and IV are present in the project area. According to Bucks County Agricultural Land Preservation Program, there are no Agricultural Security Areas (ASAs) or conservation easements within the PSA. However, there is agricultural zoning and land enrolled in Clean and Green within the project area. Adjacent to the project is land that is in pasture; however, it will not be permanently impacted, and none of the area within the required right-of-way is actively farmed. Therefore, there is no Prime Agricultural Land according to the Agricultural Land Preservation Policy. While productive agricultural land and Prime Agricultural Land (as defined in PennDOT's Publication 324 (March 2016)) are located within the project vicinity, this type of land is not located within the area that will be directly impacted by the project. It should be noted that based on the coordination with the Bucks County Agricultural Land Preservation Program, the land within the project area is not within Act 43- Agricultural Conservation Easement property.

This project is in conformance with 4 Pa Code Chapter 7, Section 7.301 et seq., ALPP.

Farmland Protection Policy Act (FPPA) farmland soils are present within the project area, and less than 0.02 acre will be impacted. (<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>). However, bridge replacements on-alignment are considered exempt from the FPPA provisions as per Part 523.11 Farmland Protection Policy Act Manual, Subpart C. Activities Not Subject to the Provisions of the FPPA – 10. Restoration, maintenance, renovation, or replacement of existing structures prior to the time of Federal assistance.

Approximately 0.01 acre of Clean and Green land will be converted to transportation use. The Clean and Green land conversion to transportation use will not impact its Clean and Green status, as more than 10 acres will remain in the designated use. Per PennDOT Publication 324, Clean and Green (PA Act 319) is a voluntary program and generally requires a minimum of 10 acres that will remain in the designated use (productive agriculture, agricultural reserve, forest reserve). This Act is designed to preserve farmland, forest land, and open space by taxing land according to its use rather than the prevailing market value.

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|                               | <b>PRESENCE</b>  | <b>IMPACTS<sup>2</sup></b>                                    |
|-------------------------------|--|---|
| <b>VEGETATION<sup>1</sup></b> | <input type="radio"/> Not Present <input checked="" type="radio"/> Present |   |
| Landscaped                    | <input type="radio"/> Not Present <input checked="" type="radio"/> Present | <input checked="" type="radio"/> No <input type="radio"/> Yes |
| Agricultural                  | <input checked="" type="radio"/> Not Present <input type="radio"/> Present | <input checked="" type="radio"/> No <input type="radio"/> Yes |
| Forest Land                   | <input type="radio"/> Not Present <input checked="" type="radio"/> Present | <input checked="" type="radio"/> No <input type="radio"/> Yes |
| Rangeland                     | <input checked="" type="radio"/> Not Present <input type="radio"/> Present | <input checked="" type="radio"/> No <input type="radio"/> Yes |
| Other (describe in remarks)   | <input type="radio"/> Not Present <input checked="" type="radio"/> Present | <input type="radio"/> No <input checked="" type="radio"/> Yes |

**Describe Any Permanent and Temporary Impacts**

A small amount of permanent impacts to roadside vegetation will occur in the northeast and southeast quadrants as a result of fill for the roadway embankment. Temporary impact to vegetation will be needed to access the bridge location during construction. Revegetation will occur upon completion of construction.

In addition, 13 mature trees, which are considered to be those with trunks greater than 6 inches in diameter, will be impacted as a result of the proposed project's permanent ROW acquisition and TCE limits. The number of trees impacted will be refined during Final Design.

Invasive Non-Native Plants are Present

**Mitigation:**

Are measures being taken to minimize movement of invasive plant parts (roots, tubers, seeds)?  Yes  No

Will native plants be used in project landscaping or mitigation?  Yes  No **If Yes, explain in Describe Mitigation.**

Other?  Yes  No **If Yes, explain in Describe Mitigation.**

**Describe Mitigation**

All disturbed vegetative areas will be stabilized and seeding/re-vegetation will conform to Executive Order 13112 to prevent the introduction of invasive plant species onto highway right-of-way. Additionally, all efforts will be taken to minimize the movement of existing invasive plant parts (roots, tubers, and seeds) found in the project area. The invasive plant species (DCNR Invasive Plant Species list) found in the project area include: *Alliaria petiolata* (garlic mustard), *Lonicera japonica* (Japanese honeysuckle), *Lonicera tatarica* (Tartarian honeysuckle), *Ranunculus ficaria* (Lesser celandine), and *Rosa multiflora* (Multiflora rose). Native plants will be planted to replace the trees removed, and the planting of native sapling trees will be investigated during final design.

**Remarks**

Vegetation is present in the project area and is comprised of areas of mowed lawn, trees, and roadside vegetation around the bridge. The stability of the upstream and downstream streambanks is an important consideration in the construction of the recommended preferred alternative. In addition to the proposed vegetated rip-rap stream bank stabilization measures immediately adjacent to the structure, maintaining woody vegetation along the banks is an important factor in promoting bank stability. The need to remove trees for construction access to build the new structure will be balanced with preserving as many trees as possible. The total number of trees impacted will be refined during final design, currently 13 mature trees are anticipated to be impacted. Native plants will be planted to replace the trees removed, and the planting of native sapling trees will be investigated as design progresses.

---

**GEOLOGIC RESOURCES<sup>1</sup>**                      **PRESENCE**                      **IMPACTS<sup>2</sup>**  
 Not Present  Present

**Remarks**

A review of the Pennsylvania Geological Survey's Outstanding Scenic Geological Features of Pennsylvania - Part 1 indicated that there are no geological features within or in the proximity of the project area.

---

**PARKS & RECREATION FACILITIES<sup>1</sup>**                      **PRESENCE**                      **IMPACTS<sup>2</sup>**  
 Not Present  Present

**Remarks**

A review of Google Maps, the PA Gazetteer (DeLorme 2012), aerial imagery and the results of the field reconnaissance did not identify any parks or recreational areas within the project area ([http://www.dot7.state.pa.us/MPMS\\_IQ/Splash.aspx](http://www.dot7.state.pa.us/MPMS_IQ/Splash.aspx)).

---

**FOREST & GAMELANDS<sup>1</sup>**                      **PRESENCE**                      **IMPACTS<sup>2</sup>**  
 Not Present  Present

**Remarks**

Per Pennsylvania Game Commission and DCNR, there are no forests or gamelands within the project area. (See <http://www.pgc.pa.gov/HuntTrap/StateGameLands/Pages/default.aspx#.V0Lul-bD-Uk> and <http://www.gis.dcnr.state.pa.us/maps/index.html?forestry=true>)

---

**PRESENCE**  
**WILDERNESS, NATURAL & WILD AREAS<sup>1</sup>**  Not Present  Present

**IMPACTS<sup>2</sup>**

**Remarks**

A review of the Pennsylvania Gazetteer (DeLorme 2012) and DCNR's website, there are no wilderness, natural, and wild areas within the project area.

---

**PRESENCE**  
**NATIONAL NATURAL LANDMARKS<sup>1</sup>**  Not Present  Present

**IMPACTS<sup>2</sup>**  
 No  Yes

**Remarks**

According to the National Park Service, there are no national natural landmarks in the project area. (<http://www.nature.nps.gov/nnl/state.cfm?State=PA/>)

---

**PRESENCE**  
**HAZARDOUS OR RESIDUAL WASTE SITES<sup>1</sup>**  Not Present  Present

**IMPACTS<sup>2</sup>**  
 No  Yes

**Remarks**

There are no hazardous or residual waste sites present in the project area.

---

- 1 If the resource is not present, do not complete the remainder of this subject area.
  - 2 If the resource is present but no impacts are anticipated, describe in Remarks why there will be no impact. If there will be no impact because avoidance/mitigation measures will be included, describe those in the mitigation text box provided.
  - 3 Unless required as an attachment, documentation for subject areas should be maintained in the project's Technical Support Data and does not need to be submitted with the CEE.
-

**Additional Information**

Remarks, Footnotes, Supplemental Data

Attachments

# CE Evaluation Part B, Section A-3

## Environmental Evaluation Subject Areas (Wildlife)

---

### **3. WILDLIFE**

|   | PRESENCE   | IMPACTS <sup>2</sup> |
|---|--|----------------------|
| <b>WILDLIFE &amp; HABITAT<sup>1</sup></b>   | <input checked="" type="radio"/> Not Present <input type="radio"/> Present |                      |
| <b>Remarks</b>  |  |                      |
| <p>The results of the field reconnaissance and review of the Pennsylvania Gazateer (DeLorme 2012), United States Fish and Wildlife Service (USFWS), and Nature Conservancy Map Portals did not identify any wildlife sanctuaries, wildlife refuges, unique or critical habitat, or wildlife preserves in the project area. (See <a href="http://www.fws.gov/refuges/refugeLocatorMaps/Pennsylvania.html">http://www.fws.gov/refuges/refugeLocatorMaps/Pennsylvania.html</a> and <a href="http://www.nature.org/about-us/visit-preserve-map/index.htm">http://www.nature.org/about-us/visit-preserve-map/index.htm</a>.)</p> |  |                      |

---

|   | PRESENCE  | IMPACTS <sup>2</sup>  |
|---|---|---|
| <b>THREATENED &amp; ENDANGERED PLANTS &amp; ANIMALS<sup>1</sup></b> | <input checked="" type="radio"/> Not Present<br><input type="radio"/> Present<br><input type="radio"/> No Coordination Needed | <input checked="" type="checkbox"/> No Potential Impacts<br><input type="checkbox"/> Potential Impacts with Avoidance Measures<br><input type="checkbox"/> Potential Impacts with Conservation Measures<br><input type="checkbox"/> Potential Impacts |

**Reviews, concurrences and approvals for Threatened and Endangered Species searches/coordination are time sensitive. If the coordination is greater than two years old, a new coordination effort will be required with the commenting/review agency(s).**

#### **Documentation**

PNDI ER Receipt

#### **Agency Documentation**

PFBC Correspondence

PGC Correspondence

DCNR Correspondence

USFWS Correspondence

#### **Remarks**

According to the Pennsylvania Natural Diversity Inventory (PNDI) search completed on August 9, 2018, there are no threatened or endangered species within the project area. Bucks County is a county known to support the bog turtle. However, no wetlands were identified within 300 feet of the project area. Therefore, no bog turtle habitat is present, and no additional coordination with USFWS is needed.

---

- 1 If the resource is not present, do not complete the remainder of this subject area.
  - 2 If the resource is present but no impacts are anticipated, describe in Remarks why there will be no impact. If there will be no impact because avoidance/mitigation measures will be included, describe those in the mitigation text box provided.
  - 3 Unless required as an attachment, documentation for subject areas should be maintained in the project's Technical Support Data and does not need to be submitted with the CEE.
- 

### **Additional Information**

Remarks, Footnotes, Supplemental Data

Attachments

1. [Headquarters Road Final PNDI 080918.PDF](#) (3131KB / 3.1MB)

## 1. PROJECT INFORMATION

Project Name: **Headquarters Road over Tincum Creek**

Date of Review: **8/9/2018 11:40:12 AM**

Project Category: **Transportation, Structures and Bridges, Bridge Replacement and/or Removal - on existing alignment (within 12 feet up/down stream)**

Project Area: **0.21 acres**

County(s): **Bucks**

Township/Municipality(s): **TINICUM**

ZIP Code: **18920; 18942; 18947**

Quadrangle Name(s): **BEDMINSTER**

Watersheds HUC 8: **Middle Delaware-Musconetcong**

Watersheds HUC 12: **Tincum Creek-Delaware River**

Decimal Degrees: **40.470826, -75.136567**

Degrees Minutes Seconds: **40° 28' 14.9734" N, 75° 8' 11.6410" W**

## 2. SEARCH RESULTS

| Agency  | Results         | Response                   |
|---|-----------------|----------------------------|
| PA Game Commission                                  | No Known Impact | No Further Review Required |
| PA Department of Conservation and Natural Resources | No Known Impact | No Further Review Required |
| PA Fish and Boat Commission                         | No Known Impact | No Further Review Required |
| U.S. Fish and Wildlife Service                      | No Known Impact | No Further Review Required |

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate no known impacts to threatened and endangered species and/or special concern species and resources within the project area. Therefore, based on the information you provided, no further coordination is required with the jurisdictional agencies. This response does not reflect potential agency concerns regarding impacts to other ecological resources, such as wetlands.

Note that regardless of PNDI search results, projects requiring a Chapter 105 DEP individual permit or GP 5, 6, 7, 8, 9 or 11 must comply with the bog turtle habitat screening requirements of the PASPGP.

## Headquarters Road over Tinicum Creek



- Project Boundary
- Buffered Project Boundary



Service Layer Credits: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community  
Esri, HERE, Gamin, © OpenStreetMap contributors, and the GIS user community

### Headquarters Road over Tincicum Creek



-  Project Boundary
-  Buffered Project Boundary

Service Layer Credits: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community  
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS,



### 3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jurisdictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

#### PA Game Commission

##### RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

#### PA Department of Conservation and Natural Resources

##### RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

#### PA Fish and Boat Commission

##### RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

#### U.S. Fish and Wildlife Service

##### RESPONSE:

No impacts to **federally** listed or proposed species are anticipated. Therefore, no further consultation/coordination under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq. is required. Because no take of federally listed species is anticipated, none is authorized. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

### 4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. Two review options are available to permit applicants for handling PNDI coordination in conjunction with DEP's permit review process involving either T&E Species or species of special concern. Under sequential review, the permit applicant performs a PNDI screening and completes all coordination with the appropriate jurisdictional agencies prior to submitting the permit application. The applicant will include with its application, both a PNDI receipt and/or a clearance letter from the jurisdictional agency if the PNDI Receipt shows a Potential Impact to a species or the applicant chooses to obtain letters directly from the jurisdictional agencies. Under concurrent review, DEP, where feasible, will allow technical review of the permit to occur concurrently with the T&E species consultation with the jurisdictional agency. The applicant must still supply a copy of the PNDI Receipt with its permit application. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. The applicant and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at <https://conservationexplorer.dcnr.pa.gov/content/resources>.

## 5. ADDITIONAL INFORMATION

The PNDI environmental review website is a preliminary screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page ([www.naturalheritage.state.pa.us](http://www.naturalheritage.state.pa.us)). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

## 6. AGENCY CONTACT INFORMATION

### PA Department of Conservation and Natural Resources

Bureau of Forestry, Ecological Services Section  
400 Market Street, PO Box 8552  
Harrisburg, PA 17105-8552  
Email: [RA-HeritageReview@pa.gov](mailto:RA-HeritageReview@pa.gov)

### U.S. Fish and Wildlife Service

Pennsylvania Field Office  
Endangered Species Section  
110 Radnor Rd; Suite 101  
State College, PA 16801  
NO Faxes Please

### PA Fish and Boat Commission

Division of Environmental Services  
595 E. Rolling Ridge Dr., Bellefonte, PA 16823  
Email: [RA-FBPACENOTIFY@pa.gov](mailto:RA-FBPACENOTIFY@pa.gov)

### PA Game Commission

Bureau of Wildlife Habitat Management  
Division of Environmental Planning and Habitat Protection  
2001 Elmerton Avenue, Harrisburg, PA 17110-9797  
Email: [RA-PGC\\_PNDI@pa.gov](mailto:RA-PGC_PNDI@pa.gov)  
NO Faxes Please

## 7. PROJECT CONTACT INFORMATION

Name: Brook Gabriel  
Company/Business Name: A-D Marble  
Address: 2700 Renaissance Blvd, Suite 200  
City, State, Zip: King of Prussia, PA 19406  
Phone: ( 484 ) 533-2563 Fax: ( 484 ) 533-2599  
Email: bgabel@admarble.com

## 8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to re-do the online environmental review.

Brook Gabriel  
applicant/project proponent signature

8/9/18  
date

## CE Evaluation Part B, Section A-4

### Environmental Evaluation Subject Areas (Cultural Resources)

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#### **4. CULTURAL RESOURCES**

Were Cultural Resource Professionals (CRPs) needed for project scoping?  Yes  No

CRP Scoping Field View Date: 04/06/05

CRP Architectural Historian in Attendance: Monica Harrower

CRP Archaeologist in Attendance: Catherine Spohn

Was a Project Early Notification / Scoping Results Form completed?  Yes  No

---

For projects exempted from further Section 106 review under Appendix C of the Statewide Section 106 Programmatic Agreement, determine whether eligible resources are present for application of Section 4(f).

Is the project exempted from review by the District Designee or CRP as per Appendix C of the Statewide Section 106 Programmatic Agreement?  Yes  No

---

Is the project exempted from review by the District Designee or CRP as per Stipulation III of the Emergency Relief Projects Programmatic Agreement (2005)?  Yes  No

---

|  | <u>PRESENCE</u>                     |                                       |                           |                                     | <u>LEVEL OF EFFECTS</u>             |                          |                                     |
|--|-------------------------------------|---------------------------------------|---------------------------|-------------------------------------|-------------------------------------|--------------------------|-------------------------------------|
|  | Not Present                         | Potentially Eligible Resource Present | Eligible Resource Present | Listed Resource Present             | No Historic Properties Affected     | No Adverse Effect        | Adverse Effect                      |
| <b>CULTURAL RESOURCES</b>                      | <input type="checkbox"/>            | <input type="checkbox"/>              | <input type="checkbox"/>  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <b><u>Archaeology</u></b>                      |                                     |                                       |                           |                                     |                                     |                          |                                     |
| Pre-Contact:                                   | <input checked="" type="checkbox"/> | <input type="checkbox"/>              | <input type="checkbox"/>  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| Contact Native American:                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>              | <input type="checkbox"/>  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| Historic:                                      | <input checked="" type="checkbox"/> | <input type="checkbox"/>              | <input type="checkbox"/>  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| <b><u>Above-Ground Historic Properties</u></b> |                                     |                                       |                           |                                     |                                     |                          |                                     |
| Structure/Building:                            | <input checked="" type="checkbox"/> | <input type="checkbox"/>              | <input type="checkbox"/>  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| District:                                      | <input type="checkbox"/>            | <input type="checkbox"/>              | <input type="checkbox"/>  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**Documentation**

**Conclusion of Section 106 consultation must be documented in the following ways:**

**For projects *having an adverse effect*, one of the following:**

- Memorandum of Agreement (MOA)
- Letter of Agreement (LOA)
- Memorandum of Understanding (MOU)
- Letter of Understanding (LOU)
- Specific Programmatic Agreement (PA)
- Standard Treatment
- Deferral of Archaeological Testing

**For projects *not having a known adverse effect*, one from each column:**

**Above-Ground Historic Properties**

- Above-Ground Historic Properties Field Assessment and Finding
- Above-Ground Historic Properties Finding Letter
- Section 106 (Above-Ground Historic Properties) Effect Concurrence Letter
- TE Project Field Assessment and Finding Checklist

**Archaeology**

- Archaeology Field Assessment and Finding
- Archaeology Finding Letter
- Section 106 (Archaeology) Effect Concurrence Letter
- TE Project Field Assessment and Finding Checklist
- Deferred Archaeological Testing Form
- Project Specific Programmatic Agreement

**Supplemental documentation should be completed as warranted:**

- Historic Structures Survey / Determination of Eligibility Report
- Phase Ia Archaeological Sensitivity Report
- Geomorphological Survey Report
- Archaeological Disturbance Report
- Archaeology Identification (Phase I) Report
- Archaeology Negative Survey Form
- Archaeology Evaluation (Phase II) Report
- Combined Archaeology Identification/Evaluation Report
- Determination of Effects Report
- (Bridge) Feasibility Report
- Other **(describe in remarks)**

**Include Section 106 Public Involvement in Part B, Section C, Public Involvement.**

**Describe Any Permanent and Temporary Impacts**

The project will result in an Adverse Effect to the Ridge Valley Rural Historic District due to the removal and replacement of the Headquarters Road Bridge. The project requires a total of 0.015-acres of ROW within the Ridge Valley Rural Historic District will need to be acquired around the bridge to accommodate the replacement bridge. Temporary construction easements and slope easements are also needed; however, these will be returned to their pre-construction condition after the project is complete.

**Are mitigation and/or standard treatments required?**

No  Yes

## Describe Mitigation / Standard Treatments

The following mitigation measures and/or standard treatments have been developed through coordination with Section 106 Consulting Parties and are included in the MOA:

1. PennDOT, in consultation with the other signatory parties, will form a Design Advisory Committee (DAC) for the project, consisting of no more than 9 members. The following five federal, state and local agencies will each be invited to provide one member: National Park Service, Bucks County Officials, Tincum Township Supervisors, the PA State Historic Preservation Office, and the Advisory Council on Historic Preservation. The remaining members will be drawn from the consulting parties of this Project and the local public.
  - a) The DAC will be invited to review project plans and specifications and provide feedback on aesthetic elements. DAC review will occur at least three times during the project development process at roughly the 30%, 60% and 90% phases. The DAC will again be engaged during the early stages of construction to provide input on the masonry sample panel.
  - b) PennDOT will incorporate the recommendations of the DAC, as practicable.
2. PennDOT will proceed as follows during demolition and will also ensure that the design of the replacement bridge will, at minimum, incorporate the following measures:
  - a) During demolition of the existing structure PennDOT will salvage stone from the existing structure's masonry components will be salvaged for use in the proposed 2-lane concrete structure.
  - b) Using a stone mason with experience in similar projects, the stone mason will use the salvaged stone as a stone facing on concrete components of the new structure, including the abutments, wingwalls and approach roadway barriers. The stone facing should closely match, to the extent possible, the orientation and layout of existing stone, taking special care to place larger cut stones at the base of the substructure and transitioning to smaller rubble course at the top.
  - c) PennDOT will construct a masonry sample panel prior to the start of the application of any masonry facing to demonstrate the layout and orientation of the proposed stone work as well as mortar pointing.
  - d) PennDOT will hold a field meeting with members of the Design Advisory Committee (DAC) to review the masonry sample panel and provide comment. The result of the field meeting together with the masonry sample panel will serve as a guide for all stone work which is to take place on the structure.
  - e) PennDOT will construct a bridge with the minimum allowable roadway width, in accordance with the applicable design standards, within the same approximate footprint as the existing bridge.
  - f) The new bridge will incorporate brown, painted, Type 10M railing.
  - g) The existing bridge plaque will be retained and incorporated into the new bridge.
  - h) Rock scour protection surrounding bridge abutments will be choked with top-soil and seeded with a riparian seed mix to minimize, to the extent possible, visible rock.
  - i) The DAC will be invited to discuss the creation and incorporation of a plaque into the new bridge. If the DAC is in favor of incorporating a plaque PennDOT will create and incorporate a plaque into the new bridge. Minimally, the plaque should indicate the date of construction of the new bridge and reference that the new bridge incorporated stone from the historic bridge that stood previously at this location. The DAC will be invited to review and comment on wording for the plaque, the material to be utilized, and the location on the new bridge.
3. PennDOT will complete measured drawings of the Headquarters Road Bridge. The measured drawings will be provided to the signatory parties and offered to the Library of Congress Historic American Engineering Record (HAER).
4. PennDOT, in consultation with the other signatory parties, will develop and construct a physical display, or content for web publication, on the history and historic significance of the Ridge Valley Rural Historic District, including information on the Headquarters Road Bridge over Tincum Creek, a contributing component of this historic district. PennDOT will invite consulting parties and members of the DAC to comment on possible locations for a display, should the signatory parties elect to construct a physical display, as well as a draft of display or web content, prior to finalization and production.

## Remarks

A Phase 1A Archaeological Letter Report was completed on July 19, 2005. The report, which included a geomorphology survey, found that the alluvial landscape on the south and west side of Tinicum Creek consists of a low-lying floodplain that is both too poorly drained and probably too young to have any potential for precontact cultural resources. Upland positions on the opposite side of the creek are severely disturbed and too steeply sloping for human occupation. Additionally, no potential historic archaeological resources relating to a stone extant farmhouse and razed mill site are expected in the Area of Potential Effect (APE), as the dwelling and former mill site are situated a considerable distance from the southwest of the S.R. 1012 bridge. Accordingly, no prospects for intact, potentially significant cultural resources exist within the expected project impact area. No further archaeological work was recommended for the S.R. 1012, Section BRC bridge replacement project. The State Historic Preservation Office (PA SHPO) concurred with this in the attached letter dated September 8, 2005. On August 10, 2015, Catherine Spohn, PennDOT District 6 CRP, reviewed the updated APE and reached the same conclusion that no further work is needed.

The project is located within the Ridge Valley Rural Historic District (see attached map of the Ridge Valley Rural Historic District, as requested to be attached to the CE by PA SHPO).

While the National Register of Historic Places Registration Form for the Ridge Valley Rural Historic District prepared in March 1992, does not specifically state the character-defining features, the following is noted in Section 8 (Significance of property and justify criteria, criteria considerations, and areas and periods of significance): "The proposed Ridge Valley Rural Historic District, located in Tinicum Township, Bucks County is locally significant under Criterion A in the area of Agriculture as an example of farming in small stream valleys in the county. This type of farm forms a distinctive subset of traditional Bucks County agricultural development. It is also eligible under Criteria C for its architecture which is representative of southeast Pennsylvania rural vernacular architecture from the late 18th to the early 20th century. Throughout the Ridge Valley Historic District winding dirt roads, stone farmsteads and outbuildings, fields and meadows are found in visual harmony with the intact and undisturbed wetlands and woodlands. These features provide an outstanding context for the district's architecture."

When the project was initiated in 2005, the United States Army Corps of Engineers (USACE) was the lead Federal agency. During this time, several designs were evaluated including one-lane and two-lane options. In 2005, the PA SHPO concurred that the bridge was not individually eligible and did not contribute to the Ridge Valley Historic District. In 2006, due to questions regarding the historic status of the bridge, the USACE elevated the bridge's eligibility issue to the Keeper of the National Register (Keeper). The Keeper responded via a letter dated April 28, 2006, that the bridge was not individually eligible but did contribute to the Ridge Valley Historic District and that its removal would likely result in an Adverse Effect to the historic district. Three Section 106 Consulting Party meetings were held (August 14, 2006; October 20, 2006; and July 31, 2007) while the USACE was the lead federal agency.

In 2013, the project's funding changed from State to Federal, and the FHWA became the lead Federal agency. Four additional Section 106 Consulting Party meetings were held (June 17, 2013; November 4, 2013; April 2, 2014; and August 24, 2016), bringing the total number of Consulting Party meetings to seven. Additional Consulting Party coordination can be found on the [www.PAprojectpath.org](http://www.PAprojectpath.org) website. These postings include letters and transmissions both to and from PennDOT from Consulting Parties, PA SHPO and other agencies, meeting minutes, comment response documents, and specific investigations like the core drilling results and bridge width evaluation. Hardcopies of much of this information was also mailed to the Consulting Parties throughout the process. In addition, in 2013 the FHWA invited the Advisory Council on Historic Preservation (ACHP) to participate in the Section 106 process due to the high level of controversy, and ACHP agreed in a letter dated December 17, 2013. The ACHP has continued to participate in the process, and a representative attended the Consulting Party meetings held on April 2, 2016 and August 24, 2016.

An Alternatives Analysis and Effects Report was completed and updated in June 2016; the only alternative to fully meet the project's purpose and need is the two-lane replacement (replacement on existing alignment, two-lane, 12-foot travel lane, single pier). This alternative meets the project's purpose and need, but will have an Adverse Effect to the Ridge Valley Historic District due to the removal of a contributing resource (the Headquarters Road Bridge). The PA SHPO concurred with the Adverse Effect finding in their letter to PennDOT dated July 22, 2016.

At the Section 106 Consulting Party meeting on August 24, 2016, the Consulting Parties were asked to generate ideas for mitigating the Adverse Effect to the Ridge Valley Historic District. These ideas have been summarized and included in the mitigation commitments in the attached, executed Memorandum of Agreement (MOA).

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## **Additional Information**

### **Remarks, Footnotes, Supplemental Data**

As requested to be attached to the CE by PA SHPO, see attached table showing the steps in the Section 106 process and the project coordination for each step. Additional Consulting Party coordination can be found on ProjectPATH: <https://search.paprojectpath.org/ProjectDetails.aspx?Pr>

### **Attachments**

1. [SHPO Response\\_Efx\\_22July2016.pdf](#) (67KB / 0.1MB)
2. [KeeperCorrespondence\\_2006April28.pdf](#) (73KB / 0.1MB)
3. [RuralRidgeValleyHD\\_figure.pdf](#) (1306KB / 1.3MB)
4. [SR 1012 PHMC Concurrence 2005Sept08.pdf](#) (51KB / 0MB)
5. [HQ Road over Tincum Creek - Executed MOA - 08 07 2018.pdf](#) (278KB / 0.3MB)
6. [13716 HQ bridgetimeline\\_revised\\_August2018.pdf](#) (240KB / 0.2MB)



Pennsylvania State Historic Preservation Office

PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

22 July 2016

Brian Thompson, Director  
Bureau of Project Delivery  
Attn: Monica Harrower  
PA Department of Transportation  
P O Box 2966  
Harrisburg, PA 17105

Re: ER# 2005-8029-017-CCC (MPMS 13716)  
Headquarters Road over Tinicum Creek (S.R.  
1012, Section BRC)  
Tinicum Township, Bucks County  
Determination of Effect Report Addendum

Dear Mr. Thompson:

Thank you for submitting information concerning the above referenced project. The Bureau for Historic Preservation (the State Historic Preservation Office) reviews projects in accordance with state and federal laws. Section 106 of the National Historic Preservation Act of 1966, and the implementing regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation, is the primary federal legislation.

We are in receipt of the additional information, including alternatives analysis, provided in response to our comments on the Determination of Effects Report for the above listed project. It is our opinion that there has been sufficient consideration of designs that accommodate project purpose and need while avoiding/minimizing effects to the National Register listed Ridge Valley Rural Historic District. The proposed project will result in the physical destruction of a contributing resource and introduction of a two-lane bridge; therefore we are in agreement with the finding of Historic Properties Adversely Affected. We anticipate additional consultation with FHWA, PennDOT and the consulting parties regarding relevant minimization and mitigation efforts including visual compatibility of the new bridge with the surrounding historic district.

Please contact Barbara Frederick at (717) 772-0921 for further information regarding this review.

Sincerely,

A handwritten signature in blue ink, appearing to read 'D. McLearn'.

Douglas C. McLearn, Chief  
Division of Archaeology and Protection



# United States Department of the Interior

NATIONAL PARK SERVICE  
1849 C Street, N.W.  
Washington, D.C. 20240

BY COPY REFER TO:

9926

## DETERMINATION OF ELIGIBILITY NOTIFICATION

National Register of Historic Places  
National Park Service

Name of Property: Headquarters Road Bridge (AKA Burnt Mill Bridge)

Location: Bucks County

State: Pennsylvania

Request submitted by: Frank J. Cianfrani, Chief, Regulatory Branch, Dept of the ARMY,  
Philadelphia District, Corps of Engineers

Date received: 03/16/2006 Additional information received

Opinion of the State Historic Preservation Officer:

Eligible     Not Eligible     No Response     Need More Information

Comments:

The Secretary of the Interior has determined that this property is:

Eligible Applicable criteria: A and C     Not Eligible

Comment:

The Headquarters Road Bridge is eligible for the National Register of Historic Places as a contributing property in the National Register-listed Ridge Valley Rural Historic District. See attached for detailed comment.

*Patrick Andrews*  
for Keeper of the National Register  
Date: 4/28/2006

From-NRHE NPS WASO

202-343-1838

T-405 P.003/003 F-748



# United States Department of the Interior

NATIONAL PARK SERVICE  
1849 C Street, N.W.  
Washington, D.C. 20240

IN REPLY REFER TO:

## DETERMINATION OF ELIGIBILITY NOTIFICATION

National Register of Historic Places  
National Park Service

Name of Property: Headquarters Road Bridge (AKA Burnt Mill Bridge)

Location: Bucks County

State: Pennsylvania

p.2

The Headquarters Road Bridge was listed in the National Register of Historic Places on July 24, 1992, as a contributing property in the Ridge Valley Rural Historic District, Bucks County, Pennsylvania. The bridge consists of early 19<sup>th</sup> century stone abutments and piers carrying an early 20<sup>th</sup> century replacement concrete deck supported on concrete-encased steel I beams. Both its original construction and alteration occurred within the historic district's defined Period of Significance (1790-1940). The bridge is historically significant in the context of the development of the township, regional transportation, and the operation of local mills, and is of engineering significance both for its early 19<sup>th</sup> century construction and its sensitive modernization in 1919. Although the concrete deck shows signs of considerable deterioration and the deck has been altered with the removal of the 1919 railings, the bridge retains sufficient historic integrity to continue to contribute to the Ridge Valley Rural Historic District.

Patrick Andrus  
Historian  
National Register of Historic Places  
4/28/2006





Commonwealth of Pennsylvania  
Pennsylvania Historical and Museum Commission  
Bureau for Historic Preservation  
Commonwealth Keystone Building, 2nd Floor  
400 North Street  
Harrisburg, PA 17120-0093  
www.phmc.state.pa.us

September 8, 2005

Department of Transportation  
Attn: R. Scott Christie, P.E., Director  
Bureau of Design  
P.O. Box 2966  
Harrisburg, PA 17105

RE: ER# 05-8029-017-C  
S.R. 1012, Section BRC, Headquarters Road over  
Tinicum Creek Bridge Replacement Project, Phase  
IA Archaeological Report, Tinicum Township,  
Bucks County.

Dear Mr. Christie:

The Bureau for Historic Preservation (the State Historic Preservation Office) has reviewed the above named project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended in 1980 and 1992, and the regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation as revised in 1999. Our comments are as follows:

Based on the results of this investigation, we agree with the recommendation that no further archaeological work is necessary for this project. Project activities should have no effect on significant archaeological resources.

Please provide three additional copies of this report for our files and for distribution to the other report repositories. We appreciate your cooperation.

If you have any questions or comments regarding our review of this report, please contact Mark Shaffer at (717) 783-9900.

Sincerely,

A handwritten signature in cursive script that reads "Mark Shaffer for".

Douglas C. McLearn, Chief  
Division of Archaeology & Protection

cc: Catherine Spohn, PennDOT District 6-0

**MEMORANDUM OF AGREEMENT  
AMONG THE FEDERAL HIGHWAY ADMINISTRATION,  
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION AND  
THE PENNSYLVANIA STATE HISTORIC PRESERVATION OFFICER,  
PURSUANT TO 36 CFR § 800.6(b)(2)  
REGARDING THE HEADQUARTERS ROAD OVER TINICUM CREEK PROJECT, STATE  
ROUTE 1012, SECTION BRC  
TINICUM TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA**

WHEREAS, the Federal Highway Administration (“FHWA”), proposes to replace the Headquarters Road Bridge over Tincum Creek/ State Route (S.R.) 1012, Section BRC in Tincum Township, Bucks County (hereafter referred to as “the Project”);

WHEREAS, the FHWA, pursuant to 36 CFR Part 800.4(c), has determined, in consultation with the Pennsylvania State Historic Preservation Officer (“SHPO”), that the Headquarters Road Bridge is eligible for inclusion in the National Register of Historic Places (“National Register”) as a contributing resource to the National Register listed Ridge Valley Rural Historic District;

WHEREAS, the FHWA has determined that the Project will have an adverse effect on the Ridge Valley Rural Historic District due to the demolition of the contributing bridge;

WHEREAS, in accordance with the project’s Purpose and Need as outlined in the National Environmental Policy Act (NEPA) document, the FHWA and PennDOT has reviewed avoidance and minimization alternatives, including rehabilitation of the stone piers; and determined that they will not meet the project’s Purpose and Need;

WHEREAS, the FHWA has consulted with the SHPO in accordance with Section 106 of the National Historic Preservation Act, 16 U.S.C. Part 470 (“NHPA”), and its implementing regulations (36 CFR § 800) to resolve the effects of the Project on historic properties;

WHEREAS, pursuant to 36 CFR 800.3, the FHWA has made an effort to seek consulting parties and the list of consulting parties can be found in Appendix A of this document;

WHEREAS, the FHWA will continue to involve the public and consulting parties as stipulated under the National Environmental Policy Act (NEPA) of 1969, as amended, and the NHPA and 36 CFR § 800, in a manner consistent with the Pennsylvania Department of Transportation’s (“PennDOT”) Public Involvement Procedures;

WHEREAS, the FHWA has notified the Advisory Council on Historic Preservation (“ACHP”) of the adverse effect of the Project on historic properties and has invited the ACHP to participate in consultation and the ACHP accepted;

WHEREAS, PennDOT participated in the consultation regarding this Project and has been invited to sign this Memorandum of Agreement (“MOA”);

WHEREAS, the FHWA and PennDOT recognize that, to the maximum extent possible, the new structure will be designed in accordance with the *Secretary of the Interior's Standards* which indicate new construction should be compatible with the massing, size, scale, materials, texture and color of the historic resource.

NOW, THEREFORE, FHWA, the ACHP, and the SHPO agree that upon FHWA's decision to proceed with the Project, FHWA shall ensure that PennDOT implements the following stipulations in order to take into account the effects of the proposed action on historic properties.

#### Recitals

The recitals set forth above are incorporated by reference as a material part of the MOA.

#### Stipulations

1. PennDOT, in consultation with the other signatory parties, will form a Design Advisory Committee (DAC) for the project, consisting of no more than nine members. The following five federal, state and local agencies will each be invited to provide one member: National Park Service, Bucks County Officials, Tinicum Township Supervisors, the PA State Historic Preservation Office, and the Advisory Council on Historic Preservation. The remaining members will be drawn from the consulting parties of this Project and the local public.
  - a) The DAC will be invited to review project plans and specifications and provide feedback on aesthetic elements. DAC review will occur at least three times during the project development process at roughly the 30%, 60% and 90% phases. The DAC will again be engaged during the early stages of construction to provide input on the masonry sample panel.
  - b) PennDOT will incorporate the recommendations of the DAC, as practicable.
2. PennDOT will proceed as follows during demolition and will also ensure that the design of the replacement bridge will, at a minimum, incorporate the following measures:
  - a) During demolition of the existing structure PennDOT will salvage stone from the existing structure's masonry components for use in the proposed 2 lane concrete structure.
  - b) Using a stone mason with experience in similar projects, the stone mason will use the salvaged stone as a stone facing on concrete components of the new structure including the abutments, wingwalls and approach roadway barriers. The stone facing should closely match, to the extent possible, the orientation and layout of existing stone, taking special care to place larger cut stones at the base of the substructure and transitioning to a smaller rubble course at the top.
  - c) PennDOT will construct a masonry sample panel prior to the start of the application of any masonry facing to demonstrate the layout and orientation of the proposed stone work as well as mortar pointing.

- d) PennDOT will hold a field meeting with members of the Design Advisory Committee (DAC) to review the masonry sample panel and provide comment. The result of the field meeting together with the masonry sample panel will serve as a guide for all stone work which is to take place on the structure.
  - e) PennDOT will construct a bridge with the minimum allowable roadway width, in accordance with the applicable design standards, within the same approximate footprint as the existing bridge.
  - f) The new bridge will incorporate brown, painted, Type 10M railing.
  - g) The existing bridge plaque will be retained and incorporated into the new bridge.
  - h) Rock scour protection surrounding the bridge abutments will be choked with top-soil and seeded with a riparian seed mix to minimize, to the extent possible, visible rock.
  - i) The DAC will be invited to discuss the creation and incorporation of a plaque into the new bridge. If the DAC is in favor of incorporating a plaque PennDOT will create and incorporate a plaque into the new bridge. Minimally, the plaque should indicate the date of construction of the new bridge and reference that the new bridge incorporates stone from the historic bridge that stood previously at this location. The DAC will be invited to review and comment on wording for the plaque, the material to be utilized, and the location on the new bridge.
3. PennDOT will complete measured drawings of the Headquarters Road Bridge. The measured drawings will be provided to the signatory parties and offered to the Library of Congress Historic American Engineering Record (HAER).
  4. PennDOT, in consultation with the other signatory parties, will develop and construct a physical display, or content for web publication, on the history and historic significance of the Ridge Valley Rural Historic District, including information on the Headquarters Road Bridge over Tinicum Creek, a contributing component of this historic district. PennDOT will invite consulting parties and members of the DAC to comment on possible locations for a display, should the signatory parties elect to construct a physical display, as well as a draft of display or web content, prior to finalization and production.

#### Administrative Stipulations

##### A. Personnel Qualifications

PennDOT will ensure that all historic preservation work carried out pursuant to this agreement will be by or under the direct supervision of a person or persons meeting at a minimum the *Secretary of the Interior's Professional Qualification Standards for Historic Preservation Professionals* (61 CFR Appendix A).

##### B. Late Discoveries

If any unanticipated discoveries of historic properties or archaeological sites are encountered during the implementation of this undertaking, PennDOT shall suspend work in the area of the discovery, and PennDOT shall immediately notify

the FHWA. In compliance with 36 CFR §800.13, FHWA shall notify within 24 hours the ACHP, the SHPO, and, if applicable, federally recognized tribal organizations that attach religious and/or cultural significance to the affected property. The SHPO, the FHWA, PennDOT, and Tribal representatives, as appropriate, may conduct a joint field view within 72 hours of the notification to the FHWA. The FHWA, in consultation with the appropriate parties, will determine an appropriate treatment of the discovery prior to the resumption of construction activities in the area of the discovery.

PennDOT shall ensure that any human remains and/or grave-associated artifacts encountered during the archaeological investigations are brought to the immediate attention of the FHWA, the SHPO, PennDOT, and any federally recognized Tribes that may attach religious and/or cultural significance to the affected property. Notification will be within 48 hours of the discovery. No activities which might disturb or damage the remains will be conducted until FHWA, in consultation with the appropriate parties, has developed a treatment plan that considers the comments of the appropriate parties. All procedures will follow the guidance outlined in the National Park Service publication *National Register Bulletin 41: Guidelines for Evaluating and Registering Cemeteries and Burial Places*, taking into account the Native American Graves Protection and Repatriation Act of 1990 (PL 101-601) and the Pennsylvania Historical and Museum Commission's *Policy for the Treatment of Burials and Human Remains (1993)*.

C. Amendments

Any party to this MOA may propose to FHWA that it be amended, whereupon FHWA shall consult with the other parties to this MOA to consider such an amendment. 36 CFR § 800.6(c)(7) shall govern the execution of any such amendment.

D. Resolving Objections

- a. Should any party to this MOA object in writing to FHWA regarding any action carried out or proposed with respect to the Project or implementation of this MOA, FHWA shall consult with the objecting party to resolve the objection. If after initiating such consultation FHWA determines that the objection cannot be resolved through consultation, FHWA shall forward all documentation relevant to the objection to the ACHP, including FHWA's proposed response to the objection. Within thirty (30) days after receipt of all pertinent documentation, the ACHP shall exercise one of the following options:
  - 1) Advise FHWA that the ACHP concurs in FHWA's proposed response to the objection, whereupon FHWA shall respond to the objection accordingly;
  - 2) Provide FHWA with recommendations, which FHWA shall take into account in reaching a final decision regarding its response to the objection; or

- 3) Notify FHWA that the objection will be referred to comment pursuant to 36 CFR § 800.7, and proceed to refer the objection and comment. The resulting comment shall be taken into account by FHWA in accordance with 36 CFR § 800.7(c)(4) and § 110(1) of NHPA.
- b. Should the ACHP not exercise one of the above options within thirty (30) days after receipt of all pertinent documentation, FHWA may assume the ACHP's concurrence in its proposed response to the objection.
- c. FHWA shall take into account any ACHP recommendation or comment provided in accordance with this stipulation with reference only to the subject of the objection; FHWA's responsibility to carry out all actions under this MOA that are not the subjects of the objection shall remain unchanged.

E. Resolution of Objections by the Public

At any time during implementation of the measures stipulated in this MOA, should any objection pertaining to any such measure or its manner of this implementation be raised by a member of the public, FHWA shall notify the parties of this MOA and take the objection into account consulting with the objector and, should the objector so request, with any of the parties to this MOA to resolve the objection.

F. Review of Implementation, Sunsetting and Duration

If the stipulations have not been initiated within five years after the FHWA's execution of this MOA, the parties to this MOA shall review the MOA to determine whether revisions are needed. If revisions are needed, the parties to this MOA shall consult in accordance with 36 CFR Part 800 to make such revisions.

If the terms of this MOA have not been implemented by seven (7) years from the date of the signed MOA by FHWA, this MOA shall be considered null and void. In such event, FHWA shall notify the parties to this MOA, and if it chooses to continue with the Project, shall re-initiate review of the Project in accordance with 36 CFR § 800.

G. Termination

- a. Any signatory may terminate this MOA by providing notice to the other parties, provided that the parties will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. Termination of this MOA will require compliance with 36 CFR 800.
- b. If at any time during the course of the Project, PennDOT cancels the Project or withdraws its request for federal funding, PennDOT will so notify the FHWA. The FHWA will notify the other signatories to the MOA that it is terminating the Agreement. The FHWA, in consultation with those parties, will consider the effects of any Project-related activities undertaken prior to Project cancellation or withdrawal of the funding request, and the FHWA will assess its responsibilities and obligations pursuant to 36 CFR § 800 and determine steps to terminate the MOA.

H. Assignment

The responsibilities included in this MOA may not be assigned by any party to this MOA either in whole or in part, without the written consent of the Signatories.

I. Notices

a. The contact person for each of the signatories of the MOA shall be the following:

- 1) For FHWA: Director of Program Development, 228 Walnut Street, 5<sup>th</sup> Floor, Harrisburg, PA 17101, Telephone Number: (717) 221-4545.
- 2) For PennDOT: Director, Bureau of Project Delivery, 400 North Street, 7<sup>th</sup> Floor, Harrisburg, PA 17120, Telephone Number: (717) 787-3310.
- 3) For SHPO: Deputy SHPO, 400 North Street, 2<sup>nd</sup> Floor, Harrisburg, PA 17120, Telephone Number: (717) 787-4215.
- 4) For ACHP: Director, Office of Federal Agency Programs, 401 F Street NW, Suite 308, Washington DC 20001-2637, Telephone Number: (202) 517-0200.

b. Any signatory may change its designated contact person by providing written notice to the other signatories.

[Signature Page Follows]

Execution of this MOA by the FHWA, the ACHP and the SHPO, and implementation of its terms, is evidence that the FHWA has taken into account the effects of the undertaking on historic properties.

**SIGNATORIES:**

**FEDERAL HIGHWAY ADMINISTRATION**

By: [Signature] Date: 8/7/2018

**ADVISORY COUNCIL ON HISTORIC PRESERVATION**

By: Valerie Hally Date: 8/3/18  
for John M. Bowler, Executive Director

**PENNSYLVANIA STATE HISTORIC PRESERVATION OFFICER**

By: [Signature] Date: 5/15/18

**PENNSYLVANIA DEPARTMENT OF TRANSPORTATION**

By: [Signature] Date: 4/13/18

*Approved as to Legality and Form*

By: [Signature] Date: 6/6/18  
for PennDOT Chief Counsel

By: [Signature] Date: 6/26/18  
for PHMC Counsel

By: [Signature] Date: 6/27/18  
Deputy General Counsel

By: [Signature] Date: 7/16/18  
Deputy Attorney General

## Appendix A

### Consulting Party List as of May 2017

| Organization/Name  | Primary First Name                 | Primary Last Name | Title   | State                                    | City             | State |
|--|------------------------------------|-------------------|---|--|------------------|-------|
| National Park Service  | Janie                              | Forburgh          |   |  | Boston           | MA    |
| Advisory Council on Historic Preservation                      | Maryann                            | Naber             | Sr. Program Analyst/HRWA Liaison                  |  | Washington       | DC    |
| US Senator Robert Casey, Jr.                                   | Robert                             | Casey             | Senator   | Lara Flynn, Regional Representative      | Philadelphia     | PA    |
| US House of Representatives- 14th Congressional District of PA | Brian                              | Fitzpatrick       | Representative                                    | Angela Hibbert, District Director        | Langhorne        | PA    |
| US Army Corps of Engineers, Philadelphia District              | Nicola                             | Minnichbach       |   |  | Philadelphia     | PA    |
| US Army Corps of Engineers, Philadelphia District              | Todd                               | Schaible          |   |  | Philadelphia     | PA    |
| PA Department of Environmental Protection- Southeast Region    | Christian                          | Viot              | Water Pollution Biologist, Waterways and Wetlands |  | Norristown       | PA    |
| PA State Senate- 10th District                                 | Charles                            | McInhney Jr.      | Senator   | Tammil Mancuso, Administrative Assistant | Doyletown        | PA    |
| PA State Senate- 24th District                                 | Bob                                | Mensch            | Senator   | Lisa Water, Chief of Staff               | Pennsburg        | PA    |
| PA House of Representatives- 143rd District                    | Marguerite                         | Quinn             | Representative                                    | Olene Smith                              | Doyletown        | PA    |
| Pennsylvania Historical and Museum Commission                  | Barbara                            | Frederick         | Historic Preservation Supervisor                  |  | Harrisburg       | PA    |
| Tincum Township  | Teri                               | Lewis             | Township Manager                                  |  | Pipersville      | PA    |
| Tincum Township Board of Supervisors                           | John                               | Blanchard         | Township Supervisor                               |  | Pipersville      | PA    |
| Tincum Township Board of Supervisors                           | Vincent                            | Dohi              | Township Supervisor                               |  | Pipersville      | PA    |
| Tincum Township Board of Supervisors                           | Rich                               | Rosamilia         | Township Supervisor                               |  | Pipersville      | PA    |
| Tincum Township Historical Commission                          | Janine                             | Black             | Chairperson                                       |  | Pipersville      | PA    |
| Tincum Township EAC  | Robert                             | Stanfield         | Chair   |  | Pipersville      | PA    |
| Tincum Creek Watershed Association                             | Michael A.                         | Smith             | President   |  | Ottsville        | PA    |
| Tincum Creek Watershed Association                             | Damon                              | Aheme             |   |  | Upper Black Eddy | PA    |
| Delaware Riverkeeper Network                                   | Maya K.                            | van Rostum        | Delaware Riverkeeper                              |  | Bristol          | PA    |
| Tincum Conservancy   | Jeff                               | Keller            | Trustee   |  | Upper Black Eddy | PA    |
| Historic Bridge Foundation                                     | Kitty                              | Henderson         | Executive Director                                |  | Austin           | TX    |
|  | Evelyn                             | Aheme             |   |  | Erwinna          | PA    |
|  | James                              | Ambrugi           |   |  | Erwinna          | PA    |
|  | Kathryn Ann                        | Auerbach          |   |  | Upper Black Eddy | PA    |
|  | Semintha Beattie and Stephen Smith |                   |   |  | Erwinna          | PA    |
|  | Jerome & Kristine                  | Becker            |   |  | Erwinna          | PA    |
|  | Charles                            | Boone             |   |  | Ottsville        | PA    |
|  | Boyce                              | Budd              |   |  | Erwinna          | PA    |
|  | Timothy                            | Cashman           |   |  | Ottsville        | PA    |
|  | Louis and Janet                    | Cicalese          |   |  | Ottsville        | PA    |
|  | Robert & Judith                    | Esch              |   |  | Oboya            | PA    |
|  | Daniel and April                   | Green             |   |  | Ottsville        | PA    |
|  | Chris                              | Hackley           |   |  | Ottsville        | PA    |
|  | Marilyn                            | Herd              |   |  | Ottsville        | PA    |
|  | Kevin                              | Joy               |   |  | Solebury         | PA    |
|  | Holly                              | Krupp Kelly       |   |  | Ottsville        | PA    |
|  | Marlon and Neil                    | Kyde              |   |  | Ottsville        | PA    |
|  | Richard & Stana                    | Lennor            |   |  | Erwinna          | PA    |
|  | Norman                             | MacArthur         |   |  | Erwinna          | PA    |
|  | F.A.                               | Morgan            |   |  | Erwinna          | PA    |
|  | Brian                              | Murphy            |   |  | Ottsville        | PA    |
|  | Graham                             | Place             |   |  | Erwinna          | PA    |
|  | Mary & Amleto                      | Pucci             |   |  | Erwinna          | PA    |
|  | Joan                               | Ramage-Macdonald  |   |  | Erwinna          | PA    |
|  | Charles                            | Rechner           |   |  | Revere           | PA    |
|  | David                              | Rothschild        |   |  | Ottsville        | PA    |
|  | Vladimir & Jesse                   | Salomon           |   |  | Erwinna          | PA    |
|  | John                               | Salerno           |   |  | Ottsville        | PA    |
|  | Bruce                              | Wallace           |   |  | Ottsville        | PA    |
|  | Paul                               | Wiesand           |   |  | Ottsville        | PA    |
|  | June                               | Wothkopf          |   |  | Ottsville        | PA    |

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| <b>Section 106 Steps and Consultation for the Headquarters Road Bridge Project</b> |  |
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| <b>Date</b>  | <b>Action</b>  |
| 10/20/2002   | Engineering funding for Headquarters (HQ) Road bridge improvement project appears on DVRPC TIP   |
| <b>Steps 1-2: Initiate Section 106 Process, and Identify Historic Properties</b>   |  |
| <b>Date</b>  | <b>Action</b>  |
| 3/2003   | Kathryn Auerbach authors Assessment of Historical Significance for HQ Road Bridge.   |
| 7/3/2003   | Scoping field view meeting held to determine project scope and environmental study area.   |
| 4/4/2005   | PennDOT Chief Engineer, Chief Bridge Engineer, and District Bridge Engineer inspect bridge for feasibility of rehabilitation - Preliminary field observations conclude no.   |
| 4/6/2005   | Field view with resource agencies (including PennDOT, FHWA and PHMC) held. PHMC comments on the significant features of the bridge. A discussion of the deteriorated condition of the bridge occurs. (NOTE: meeting minutes included as attachment to April 19, 2005 telephone conversation log.)  |
| 4/12/2005  | PennDOT holds kick-off meeting with design consultant, Urban Engineers.  |
| 4/21/2005  | A.D. Marble & Company submits loss of integrity memo and finding that HQ Road bridge is no longer contributing to RVRHD to PennDOT.  |
| 4/21/2005  | PennDOT submission of loss of integrity memo to PHMC   |
| 5/2/2005   | PHMC letter concurs the bridge is not eligible for listing in the National Register as a contributing resource to the RVRHD due to loss of integrity and states the project would be a conditional no adverse effect upon the historic district if the plans and specifications are prepared in accordance with the Secretary of the Interior's Standards and Guidelines. Letter requests future design review.                          |
| 5/9/2005   | Public Officials Meeting: <ul style="list-style-type: none"> <li>• Township requests 2-span replacement structure.</li> <li>• 24' wide structure proposed (2 – 12' lanes) as this is in accordance with PennDOT design standards (Design Manual, Part 2 – Chapter 1) . Acceptable to Township.</li> <li>• Native stone, wood siding, and tin parapet cap requested by Township.</li> <li>• Dry hydrant requested by Township.</li> </ul> |
| 6/29/2005  | K. Auerbach letter to the PHMC providing an overview of the RVRHD landscape and history of the bridge, stating the bridge should be considered an important contributing resource to the RVRHD. The letter also advocates the preservation of the bridge and its setting.  |
| 7/13/2005  | G. Hoffman letter to Charles McIlhinney, Jr., with updates on Bucks County Bridge Projects. (NOTE: letter includes attachment with Scoping Field View form from April 6, 2005).  |
| 7/19/2005  | Phase IA Archaeological Letter Report submitted to PennDOT. The report found no prospects for intact, potentially significant cultural resources within the expected project impact area.  |
| 7/20/2005  | K. Auerbach letter to the PHMC argues against delisting of bridge.   |
| 7/25/2005  | PennDOT approves Type, Size, and Location and Foundation design for 24' wide, 2-span structure. Final structural design may commence.  |

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| 8/5/2005   | Letter to public officials sent out as a notice of the Public Meeting and Public Officials Meeting on September 6, 2005.   |
| 8/8/2005   | Consulting Party letters sent advising of Public Officials Meeting #2 on September 6, 2005.  |
| <b>Step 3: Assess Effects to Historic Properties</b> |  |
| <b>Date</b>  | <b>Action</b>  |
| 8/10/2005  | A.D. Marble & Company submits Determination of Effect Report to PennDOT presenting the finding that the HQ Road Bridge is not eligible and the replacement will have No Adverse Effect on the RVRHD.   |
| 8/10/2005  | PennDOT submission of Phase IA Report and Determination of Effect Report to PHMC. Stipulation D submittal- (Objection received. This Stipulation D finding is no longer valid because the bridge was determined to be a contributing resource to the historic district.)   |
| 8/31/2005  | Bureau of Historic Preservation holds field view to investigate loss of integrity memo. Kathryn Auerbach, Pat Whitacre (Tinicum Twp Historical Commission), Boyce Budd, Damon Aherne, and Bruce Wallace in attendance. BHP confirms loss of integrity.   |
| 9/6/2005   | Public Officials Meeting (prior to Public Meeting): <ul style="list-style-type: none"> <li>• 2-span replacement structure agreed upon.</li> <li>• 24' wide structure agreed upon.</li> <li>• Use of existing stone agreed upon.</li> <li>• Replacement of stream gauge and dry hydrant agreed upon.</li> <li>• Township provides PennDOT comments received from Tinicum Historical Commission from September 5, 2005</li> <li>• PennDOT explains that the requested design changes will delay project which will allow existing bridge to further deteriorate.</li> <li>• 14-point agreement was developed at the meeting regarding bridge design.</li> <li>• 14-point agreement to be provided to PennDOT following review by Tinicum Historical Commission</li> <li>• As a result of a request of the Tinicum Township Historical Commission presented at the meeting, the design would be modified to include open railings and a minimal footprint with no shoulders.</li> </ul> |
| 9/6/2005   | Public Meeting: <ul style="list-style-type: none"> <li>• The 14-point agreement that was developed at the above-noted meeting regarding bridge design was presented to the public.</li> <li>• Public requests to move bridge a few feet downstream in order to preserve the original stone abutments and piers and the upstream face.</li> <li>• Public requests that new bridge use old substructure to preserve existing piers and abutments.</li> <li>• PennDOT explains that requested design changes will delay project which will allow existing bridge to further deteriorate.</li> <li>• Public requests that HQ bridge not be closed for construction until Geigel Hill Road bridge is complete.</li> <li>• K. Auerbach provided information on the history and significance of the bridge. (Three-page report entitled HQ Road (Burnt Mills) Bridge, Significance of Resource. Argues bridge has historical significance as a</li> </ul>                                   |

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|            | <p>transportation component, representative example of period stonework, and for its engineering and construction information.)</p> <ul style="list-style-type: none"> <li>• Section 106 CP (CP) invitation issued by Monica Harrower who noted the effect report and archaeology reports had been submitted to PHMC in early August 2005.</li> <li>• A member of the public requested open railings, elimination of red timber siding, and a design in keeping with the Secretary of the Interior's Standards.</li> </ul> |
| 9/8/2005   | PHMC response letter concurs no additional archaeological investigation are necessary based on results of Phase IA Archaeological Letter Report.   |
| 9/12/2005  | PHMC letter recognizing public controversy within the local historical community, noting submission of effect report prior to September 6, 2005 public meeting, and requesting consultation with CPs prior to comment on the effect report. The letter requests addition information on bridge width and clarifies that land of adjacent parcel #44-14-8 is contributing to the historic district.   |
| 9/30/2005  | Bridge posting reduced to 19 tons.   |
| 10/6/2005  | Letter from Acting District 6-0 Executive Rina Cutler to Linda McNeill, Tincum Township re: comments sent by Boyce Budd on the preliminary plans for the bridge replacement project.   |
| 10/11/2005 | Urban Engineers letter to Sam Reynolds, USACE regarding Section 106 Coordination.  |
| 11/15/2005 | K. Auerbach letter to Tincum Township Board of Supervisors stating disagreement with the findings of the April 21, 2005 loss of integrity memo and the August 2005 Determination of Effect Report. States concern that the bridge has not been recognized for its historic contribution to the RVRHD and that the construction and condition of the bridge have been misrepresented. Also, questions the environmental review processes related to the rehabilitation of the bridge.                                       |
| 12/28/2005 | Ms. Andrea C. Ferster, Council for the Institute for Community Preservation (ICP) letter to USACE challenging finding by PHMC and PennDOT that the bridge is not a contributing feature to the RVRHD.  |
| 3/13/2006  | USACE letter to Keeper of the National Register (the Keeper) requesting opinion of eligibility for HQ bridge as a contributing resource to the RVRHD. Enclosures included: April 21, 2005 A.D. Marble memo; May 2, 2005 PHMC response letter; March 2003 report prepared by K. Auerbach; June 29, 2005 letter from K. Auerbach to PHMC; July 20, 2005 letter from K. Auerbach to PHMC; and December 28, 2005 letter from A. Ferster, ICP to USACE.   |
| 3/29/2006  | K. Auerbach letter to Keeper outlining why HQ Road Bridge contributes to the RVRHD and encouraging its future preservation or a sensitive repair or reconstruction. Enclosures include September 6, 2005 outline prepared by K. Auerbach for the public meeting and November 15, 2005 letter from K. Auerbach to Tincum Township.  |
| 4/28/2006  | Determination of Eligibility Notification by the Keeper states HQ bridge is eligible for the National Register as a contributing element to the RVRHD. States bridge replacement project will most likely result in "Adverse Effect" on historic district.   |

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| 7/6/2006  | Urban Engineers letter to consulting parties regarding August 14, 2006 CP meeting.   |
| 7/21/2006 | District Bridge Engineer C. Davies, P.E., letter to Monica Harrower reporting that rehab of bridge is not feasible.  |
| 7/21/2006 | CP invitation letter mailed to Bucks County Historical Society, Heritage Conservancy of Bucks County, and the Board of Supervisors of Tincum Township. Includes invitation to August 14, 2006 CP meeting.  |
| 7/24/2006 | Urban Engineers letter to Patricia Whitacre, Tincum Township Historical Commission, regarding invitation to August 14th consulting party meeting.  |
| 7/25/2006 | PennDOT sends letter to PHMC with opinion that bridge cannot be rehabilitated.   |
| 8/3/2006  | Institute of Community Preservation letter, prepared by Henry W. Rowan, Executive Director, to USACE requesting examination of the project scope and Section 106 process. Requests examination of alternatives to replacement of HQ Road Bridge and traffic analysis. Also requests update on the Section 106 process and roles and responsibilities of the participating agencies.  |
| 8/14/2006 | <p>First Section 106 CP Meeting:</p> <ul style="list-style-type: none"> <li>• USACE presents the Keeper's April 28, 2006 finding that the HQ bridge is a contributing resource to the National Register-listed RVRHD and recognizes any reconstruction of the HQ bridge would likely result in an Adverse Effect to the RVRHD.</li> <li>• PennDOT explains that since the eligibility finding has changed and the design presented in the August 2005 effect report is obsolete, the report will need to be updated and resubmitted to the CPs.</li> <li>• PennDOT explains the project background noting the initial preferred alternative, a two, 12-foot lane replacement design for the proposed structure, was developed in May 2005 prior to the Keeper's finding that the bridge was contributing to the RVRHD. As a result of a request of the Tincum Township Historical Commission presented at the September 2005 public officials meeting, the design was modified to include open railings and a minimal footprint with no shoulders.</li> <li>• Design measures requested by the CPs included the use of original stones as cladding on a new structure, retention of the dimensions and shape of the existing piers, and preservation of the bridge plaque.</li> <li>• A presentation of the preliminary alternatives and advantages and disadvantages of each was provided by Urban Engineers. Alternatives presented included rehabilitation of existing structure, construction of a new structure on new alignment, construction of a new structure on the existing alignment (replacement), construction of a new structure on the existing alignment (piers remain), and construction of a new structure on existing alignment (piers and abutments remain). A Structure Alternative Analysis Study (summarized in a matrix) was completed and was referred to during the meeting.</li> <li>• A one-lane bridge was requested by various CPs due to concerns about increasing traffic affecting the setting of the historic district.</li> <li>• PennDOT explained that the two-lane bridge is proposed to improve safety and eliminate the stop conditions at both ends of the bridge. If a</li> </ul> |

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|   | <p>one-lane bridge is requested, the Township would need to take over ownership of the structure as PennDOT is not willing to accept ownership of an unsafe bridge.</p> <ul style="list-style-type: none"> <li>• Exploration of a 3-span bridge was requested by the CPs as it mimics the appearance of the existing structure. This option is to be explored by Urban Engineers and presented at the next CP meeting.</li> <li>• The need for a flared span on the Erwinna side of the bridge was discussed. This full taper of the bridge width is required for turning radii improvements at Sheephole and HQ Road in order to accommodate emergency vehicles.</li> <li>• Urban Engineers was asked to provide a report examining the feasibility of re-using the existing bridge substructure.</li> </ul> |
| 8/15/2006                                       | PHMC response letter states cannot concur with the request to replace the bridge based on the need to examine other alternatives as discussed at the August 14, 2006 meeting  |
| 8/16/2006                                       | Letter from Kathy Auerbach requests that the Secretary of the Interior's Guidelines for preservation be pursued to the fullest extent. Also recommended that a systematic maintenance program be considered and included in the MOA.  |
| 8/18/2006                                       | Urban Engineers performs inspection of HQ bridge to determine feasibility of re-using the existing substructure.  |
| 8/21/2006                                       | Letter from John and Katherine Salerno to USACE requesting CP status.   |
| 8/23/2006                                       | PennDOT District 6-0 letters inviting recipients to become Section 106 Consulting Parties.  |
| 9/12/2006                                       | PennDOT Response letter to Kathy Auerbach's August 16, 2006 letter.   |
| 9/15/2006                                       | CP Meeting #2 invitations are sent.   |
| 10/2/2006                                       | Letter from Kathy Auerbach requested that all aspects of the project be reassessed with the ultimate goal of preservation of the bridge's contributing status and minimal, if any, impact to the adjacent areas within the historic district.   |
| 8/8/2006  | Institute of Community Preservation letter, prepared by Henry W. Rowan, to USACE requests examination of the project scope and Section 106 process.   |
| 8/13/2006                                       | Letter from Damon Aherne providing comments on his opinion to restore the Headquarters Road Bridge and protect the attributes of Tincium Creek that make it a scenic river and exceptional value waterway.  |
| 8/16/2006                                       | Response via email from USACE to Damon Aherne.  |
| 8/17/2006                                       | CP response letter from PennDOT District 6-0 to K. Auerbach regarding concerns in October 2, 2006 letter.   |
| 8/17/2006                                       | CP letter from Daniel Green to USACE regarding project concerns.  |
| 8/18/2006                                       | PennDOT Response sent to Kathy Auerbach's October 2, 2006 letter  |
| <b>Step 4: Resolve/Mitigate Adverse Effects</b> |   |
| <b>Date</b>                                     | <b>Action</b>   |
| 10/20/2006                                      | <p>Second Section 106 CP Meeting:</p> <ul style="list-style-type: none"> <li>• USACE notes purpose of this meeting is to respond to comments provided in CP letters and present a design that is closer to the requests of the consulting parties. The initially preferred alternative (2-lane bridge) has been the basis for previous discussions. The design has and</li> </ul>   |

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|            | <p>will continue to be modified in order to avoid, minimize or mitigate adverse effect to the RVRHD.</p> <ul style="list-style-type: none"> <li>• The 3-span bridge, as requested by CPs at previous meeting, was deemed feasible by Urban Engineers in their analysis.</li> <li>• 3-way stop configuration requested by CPs as traffic calming measure. To be investigated.</li> <li>• Urban Engineers explains that re-use of existing substructure cannot be accomplished due to advanced state of deterioration. Reuse of the substructure would not meet project purpose of providing a safe crossing. Copy of analysis report (titled “Existing Structure Condition Evaluation Report”) to be provided to CPs.</li> <li>• Urban Engineers reviews proposed mitigation measures (3-span structure; minimization of roadway width to 24’; similar symmetry and shape of superstructure; re-use of as much existing stone as possible; elimination of full taper at Sheep Hold Road; open railing; paint over galvanized steel railings; and sensitive treatment of concrete surfaces. A rendering of the proposed 3-span bridge with no taper is presented.</li> <li>• PennDOT states that a one-lane bridge will need to be owned and maintained by Township. The Township indicates they are investigating the take-back option.</li> <li>• The Determination of Effects report will be revised after the project scope is finalized (one-lane vs. two-lane structure) and will include the alternatives analysis and studies and rationale for selection as well as a finding of effects.</li> <li>• An action item from this meeting was for the consulting party’s to provide PennDOT with a Professional Engineer signed and sealed copy of the independent bridge inspection report that was conducted. This was never received.</li> </ul> |
| 10/20/2006 | Alternative Analysis prepared for October 20, 2006 CP meeting.   |
| 11/2006    | Per request at October 2006 CP meeting, Urban Engineers Existing Structure Condition Evaluation Report (November 2006) published. Based upon the structural deficiencies documented in this report, a full replacement of the Headquarters Road Bridge was recommended. Report concludes that re-use of piers and abutments is not feasible. Rehabilitation of the existing structure will not provide a safe and economically viable solution to the problems that exist on this project. A full replacement will provide a safe structure that meets all current design standards and provides an adequate service life.   |
| 12/1/2006  | Priority 1 repairs (high priority) recommended temporary bridge barriers.  |
| 12/11/2006 | Temporary barriers linked with guide rail to improve stability.  |
| 1/5/2007   | Urban report on re-use of substructure released to CPs as an attachment to the October 2006 meeting minutes. (NOTE: This report was included as an attachment to the Meeting Minutes that were circulated to the CPs. This report is titled “Existing Structure Condition Evaluation Report” and dated November 2006).   |
| 1/31/2007  | K. Auerbach letter to USACE in response to October 2006 CP meeting minutes.  |
| 2/20/2007  | Township holds meeting to discuss turn-back agreement to return ownership of one-lane bridge to Tinicum Township.  |

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| 2/26/2007 | Tinicum Township passes resolution number 02-20-07-01 formalizing the Township's intent to enter into a turn-back agreement with PennDOT.  |
| 3/7/2007  | PennDOT responds to CP comments regarding: the structure cannot be rehabilitated; turn-back agreement; the project is not a corridor study; due to the extent of deterioration, a new superstructure and substructure are needed.  |
| 3/19/2007 | Urban Engineers memo to HNTB regarding Design Issues – One-Lane Bridge Take-Back.  |
| 4/18/2007 | PennDOT, Design Consultant, and Township meet at project site to discuss turning radius requirements to determine if a one-lane bridge is feasible without wing-wall flare at Sheephole Road.  |
| 12/2007   | Cost comparison sent to the Township   |
| 6/16/2008 | Township Officials Meeting: <ul style="list-style-type: none"> <li>• PennDOT states that turn-back funding is not currently dedicated.</li> <li>• PennDOT offers to construct, own, and maintain two-lane bridge.</li> <li>• Township explains confidence in maintenance funding for one-lane bridge and requests PennDOT to advance one-lane bridge design</li> <li>• PennDOT to hold public meeting on June 17, 2008 to present one-lane bridge. configuration. Section 106 process to commence following this public meeting.</li> </ul>  |
| 6/17/2008 | Public Meeting: <ul style="list-style-type: none"> <li>• Subsequent to the receipt of the Township's turnback agreement and at the request of the Township, PennDOT presented the following at a public meeting:</li> <li>• A rendering and conceptual plan view of a one-lane, 3-span bridge configuration presented to public.</li> <li>• Public requests aggregate-finish to concrete be provided.</li> <li>• Public requests the use of timber barrier on bridge.</li> <li>• Public requests that deck overhang be eliminated to mimic existing bridge.</li> <li>• Public requests minimal change in vertical roadway alignment.</li> <li>• Public requests that wing-wall configuration mimic the existing bridge and not be flared at Sheephole Road to improve turning radii.</li> <li>• Township requests that HQ Bridge not be closed until Geigel Hill Road is re-opened.</li> <li>• Township requests that turning movement studies be forwarded to their engineer for review.</li> </ul> |
| 6/17/2008 | Urban Engineers Project Status Report to Township  |
| 7/1/2008  | Invitations to July 31, 2008 meeting sent to CPs by A.D. Marble & Company on behalf of PennDOT and USACE.  |
| 7/15/2008 | K. Auderbach letter to Colleen Kelly of A.D. Marble & Company requesting mitigation measures including: reuse of stone; treatment of concrete; reinstallation of bridge plaque; historic marker; elimination of increased width and turning radius at Sheep Hole Road; and three-way stop sign.  |
| 7/31/2008 | Third Section 106 CP Meeting: <ul style="list-style-type: none"> <li>• USACE explains the purpose of the meeting is to discuss context sensitive design measures and mitigation.</li> <li>• Urban provides an overview of one-lane, 3-span bridge configuration to</li> </ul>  |

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|            | <p>CPs.</p> <ul style="list-style-type: none"> <li>• During a discussion on the proposed bridge, PennDOT explained that the abutments and piers would be reinforced concrete with a stone masonry cladding to mimic the existing configuration.</li> <li>• CPs request that the MOA include language about the use of local stone and its configuration.</li> <li>• CPs to provide examples of stone on existing bridges by September 2008.</li> </ul> <p>Other mitigation measures are discussed. The existing bridge plaque reinstallation on the Sheep Hole Road side; the potential placement of interpretive signage near the bridge; and the recordation of the bridge to state level standards prior to removal.</p> <ul style="list-style-type: none"> <li>• The roadway geometry and turning radius study is presented. Township to look into option of cutting into slope along Sheep Hole Road in order to allow for the safe movement of emergency vehicles on and off the bridge. This will enable elimination of flare from bridge design.</li> <li>• Determination of Effects report to be revised.</li> </ul> |
| 9/17/2008  | K. Auerbach letter to A.D. Marble & Company providing guidelines for stonework for the proposed replacement bridge.   |
| 12/4/2008  | Hole in deck found. Repaired with steel plate.  |
| 4/20/2009  | Design consultant provides turning movement analysis to Township with rock-cut scenario at Sheephole Road.  |
| 6/20/2009  | Township cuts into slope at Sheephole Road allowing the turning radii for a one-lane bridge eliminating the need for flaring the road at Sheephole Road.<br>(Photographs from July 2009)  |
| 3/8/2010   | Bridge inspection reveals that superstructure deteriorates further; barriers no longer connected to deck due to lack of sound concrete.   |
| 3/10/2010  | Township requests PennDOT conduct traffic study to prohibit trucks from using HQ bridge.  |
| 4/28/2010  | Posting is reduced from 19 tons to 10 tons. Barriers moved in, reducing roadway width to 10'-8".  |
| 6/18/2010  | Meeting held with Township, State Rep., and State Senators. Severity of HQ bridge condition discussed and need to move forward with design. PennDOT states that turn back funding not guaranteed.   |
| 7/6/2010   | Township agrees to proceed with Geigel Hill Road bridge despite lack of maintenance funding for turn back. No decision made on HQ bridge.   |
| 10/19/2010 | Township Meeting held: <ul style="list-style-type: none"> <li>• Township requests that PennDOT give public description of options going forward.</li> <li>• Options include a PennDOT owned/maintained two-lane bridge and Township owned/maintained one-lane bridge.</li> <li>• Township to have vote at later date to give PennDOT official direction on one-lane or two-lane design.</li> </ul>  |
| 12/7/2010  | Township meeting. No decision regarding HQ bridge reached.  |
| 2/1/2011   | Township meeting regarding HQ bridge cancelled.   |
| 3/1/2011   | Township meeting regarding HQ bridge. Final decision guaranteed on March 15, 2011.  |

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| 3/2/2011  | PennDOT closes HQ bridge due to 1' x 3' hole found in deck. The bridge is closed to traffic until it can be reconstructed completely.  |
| 3/15/2011   | Township gives PennDOT official direction on preferred bridge design, two-lane option. Township determined it would not be fair to place the financial burden of maintenance of a one-lane bridge on future residents.   |
| 3/16/2011   | Township letter to PennDOT outlining direction on preferred bridge design, decided at March 15, 2011 supervisors meeting.  |
| 4/27/2011   | PennDOT holds all-day public plans display   |
| <b>1/2013</b>   | <b>Federal money is programmed for the project, making FHWA the lead Federal Agency for Section 106. Due to the time elapsed and change in lead Federal Agency, the consulting parties identification and solicitation coordination was updated/reinitiated.</b>   |
| <b>Step 1: Initiate Section 106 Process – Consulting Party Identification and Solicitation Update</b> |  |
| <b>Date</b>   | <b>Action</b>  |
| 1/8/2013  | Tinicum Township Board of Supervisors letter sent by Vincent Dotti to Camille Otto (FHWA)  |
| 1/11/2013   | Consulting Party Bruce Wallace letter to Camille Otto (FHWA)   |
| 1/31/2013   | Maya K. van Rossum (DE Riverkeeper) letter to Camille Otto (FHWA)  |
| 3/1/2013 – 1/7/2013   | Consulting Party Initiation Letters sent to Potential Consulting Parties   |
| 3/8/2013  | John Salerno email to PennDOT via ProjectPATH  |
| 6/2013  | Burnt Mill Bridge Historical Assessment Summary  |
| 6/5/2013  | Sen. Bob Casey letter to Jonathan Jarvis (NPS) and Victor Mendez (FHWA)  |
| 6/7/2013  | Maya K. van Rossum (DE Riverkeeper) letter to Camille Otto (FHWA)  |
| 6/14/2013   | Douglas Bond (McMullan & Associates) letter to Maya K. van Rossum (DE Riverkeeper)   |
| 6/17/2013   | Fourth Section 106 Consulting Party Meeting  |
| 6/17/2013   | Maya K. van Rossum (DE Riverkeeper) letter to Camille Otto (FHWA)  |
| 6/18/2013   | Email from Consulting Party Jerome Becker re: 106 Meeting  |
| 6/20/2013   | Tinicum Township Residents Petition  |
| 6/21/2013   | Mailing to Section 106 Consulting Parties as a follow-up to June 17 Meeting. The following information was provided: 2001 PennDOT Traffic Monitoring Data; 2008 PennDOT Traffic Monitoring Data; 2002 DVRPC Travel Monitoring Data; 2003 DVRPC Travel Monitoring Data; 2008 DVRPC Travel Monitoring Data; November 2006 Existing Structure Condition Evaluation Report, prepared by Urban Engineers; and February 2013 Photo Log, prepared by Urban Engineers. |
| 6/25/2013   | Consulting Party Joan Ramage Macdonald letter to Camille Otto (FHWA) and Ryan Whittington  |
| 7/1/2013  | Maya K. van Rossum DE Riverkeeper letter with Section 106 CP Meeting comments to Camille Otto (FHWA) and Ryan Whittington  |
| 7/9/2013  | June 17th Meeting Minutes Distributed to Section 106 Consulting Parties  |
| 7/24/2013   | Delaware Riverkeeper Network letter to Jonathan Crum (FHWA) and Ryan Whittington regarding DVRPC website   |
| 7/25/2013   | Mailing to Section 106 Consulting Parties as a follow-up to June 17 Meeting. The following information was provided: <ul style="list-style-type: none"> <li>○ Summary of Section 106 Review <ul style="list-style-type: none"> <li>▪ April 6, 2005: Environmental Scoping Field View Meeting for</li> </ul> </li> </ul>  |

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|   | <p>Headquarters Road</p> <ul style="list-style-type: none"> <li>▪ May 9, 2005: Public Officials Meeting #1 Minutes</li> <li>▪ September 6, 2005: Public Officials Meeting #2 and Public Meeting Minutes</li> <li>▪ April 28, 2006: Determination of Eligibility Notification by the Keeper states HQ bridge is eligible for the National Register as a contributing element to the RVRHD.</li> <li>▪ August 14, 2006: First Section 106 Consulting Party Meeting Minutes</li> <li>▪ October 20, 2006: Second Section 106 Consulting Party Meeting Minutes</li> <li>▪ June 16, 2008: Public Officials Meeting #3 Minutes</li> <li>▪ June 17, 2008: Public Meeting Minutes</li> <li>▪ July 31, 2008: Third Section 106 Consulting Party Meeting Minutes</li> <li>▪ July 12, 2013 consulting party list <ul style="list-style-type: none"> <li>○ Inspection reports for 2006, 2008, 2010 and 2012</li> <li>○ Maintenance records from 2005 to 2011</li> <li>○ Turning Radius Study (Urban Engineers, April 2009)</li> </ul> </li> </ul> |
| 7/25/2013   | Email from Consulting Party Jerome Becker to Ryan Whittington re: 106 Meeting.   |
| 7/26/2013   | Marion F. Werkheiser of Cultural Heritage Partners, PLLC letter to Ryan M. Whittington   |
| 7/30/2013   | Marion F. Werkheiser of Cultural Heritage Partners, PLLC letter to Ryan M. Whittington   |
| 9/12/2013   | Comment Response Document Distributed to Section 106 Consulting Parties  |
| 10/4/2013   | June 17th Revised Meeting Minutes Distributed to Section 106 Consulting Parties  |
| <b>Step 2: Identification – Determine Scope of Effort</b> |  |
| 10/29/2013  | Cultural Heritage Partners Reply to PennDOT regarding Comment Response Document  |
| 10/31/2013  | Cultural Heritage Partners Correction Letter to PennDOT regarding Comment Response Document  |
| 10/31/2013  | Cultural Heritage Partners Letter to PennDOT regarding stenographer at November 4 Consulting Party Meeting   |
| 11/4/2013   | Cultural Heritage Partners Letter to PennDOT regarding stenographer at November 4 Consulting Party Meeting   |
| 11/4/2013   | Fifth Section 106 Consulting Party Meeting   |
| 12/17/2013  | Letter from Cultural Heritage Partners to PennDOT regarding the November 4th Consulting Party meeting  |
| 12/17/2013  | Letter from ACHP to FHWA regarding participation in the Section 106 Process  |
| 1/7/2014  | Revised Purpose and Need Statement posted to ProjectPATH   |
| 1/24/2014   | Section 106 Project Timeline Distributed to Section 106 Consulting Parties   |
| 2/5/2014  | November 4th Consulting Party Meeting Minutes Distributed to Section 106 Consulting Parties  |
| 2/25/2014   | Letter from Cultural Heritage Partners to PennDOT regarding the scheduled March 13, 2014 Consulting Party Meeting  |

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| 3/17/2014                            | Core Drilling Investigation Report Distributed to Section 106 Consulting Parties  |
| 3/28/2014                            | Letter from PennDOT to Cultural Heritage Partners to PennDOT regarding the February 25, 2014 letter   |
| 4/2/2014                             | Sixth Section 106 Consulting Party Meeting  |
| 4/30/2014                            | April 2nd Consulting Party Meeting Minutes Distributed to Section 106 Consulting Parties  |
| 7/30/2014                            | Public Meeting held to update the community on the infrastructure improvement project and answer questions. The open house will have stations devoted to the National Environmental Policy (NEPA) process; State and Federal permitting processes; Section 106 of the National Historic Preservation Act; and Section 4(f) of the Department of Transportation Act. PennDOT also will display various alternatives that have been studied for the project as well as concepts for a temporary bridge. |
| 8/11/2014                            | PennDOT response to Mr. Pucci (Section 106 Consulting Party) regarding NEPA document and hydraulic calculations   |
| 8/13/2014                            | PennDOT request to DRKN to hold an engineering meeting to discuss McMullan & Associates rehabilitation proposal.  |
| 8/18/2014                            | DRKN letter to PennDOT regarding NEPA process.  |
| 9/1/2014                             | Pucci letter to PennDOT and NPS   |
| 10/1/2014                            | ACHP letter to FHWA regarding Section 106 Process and initiating a meeting between FHWA, ACHP, PennDOT, and PHMC  |
| 11/19/2014                           | AD Marble & Company to NPS regarding Section 4(f) designation of Tinicum Creek  |
| 11/24/2014                           | Email from NPS to AD Marble & Company regarding Section 4(f) designation of Tinicum Creek   |
| 12/18/2014                           | PennDOT response to Pucci email from September 1, 2014  |
| 12/19/2014                           | Pucci email to PennDOT regarding level of the project's environmental document  |
| 12/22/2014                           | FHWA letter to NPS regarding Section 4(f) designation of Tinicum Creek  |
| 6/6/2015                             | FHWA agreed with the determination outlined in the Bridge Width Evaluation that a single-lane bridge would not meet the project's purpose and need  |
| <b>Step 3: Assessment of Effects</b> |   |
| 11/9/2015                            | PennDOT posts Above-Ground Historic Properties Finding Form and Determination of Effects Report to ProjectPATH and notifies Consulting Parties for review and comment   |
| 11/10/2015                           | Charles Reichner email to PennDOT regarding preferred alternative   |
| 12/7/2015                            | Tinicum Township Supervisor Linda McNeil comment letter to PennDOT regarding Determination of Effects Report  |
| 12/8/2015                            | Kathryn Auerbach email to A.D. Marble requesting time extension of review period for the Determination of Effects Report and request of paper copies of reports   |
| 12/9/2015                            | Ryan Whittington memo to Monica Harrower regarding Effects Report review deadline extension and phone logs of calls made to Consulting Parties informing them of extension  |
| 12/9/2015                            | Delaware Riverkeeper Network email to Ryan Whittington regarding Effects Report review deadline extension   |
| 12/9/2015                            | Email from A.D. Marble to Consulting Parties informing them that the Effects  |

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|                    | Report review deadline will be extended until December 15, 2015  |
| 12/9/2015          | Letter from A.D. Marble to Consulting Parties informing them that the Effects Report review deadline will be extended until December 15, 2015  |
| 12/9/2015          | Email from Ryan Whittington to Delaware Riverkeeper Network informing them that the Effects Report review deadline will be extended until December 15, 2015  |
| 12/9/2015          | Kathryn Auerbach email to PennDOT with comments regarding Bridge Width Evaluation  |
| 12/9/2015          | Judith Esch email to PennDOT with comments regarding Determination of Effects Report   |
| 12/11/2015         | Marilyn Herd letter to PennDOT expressing support for two-lane bridge  |
| 12/11/2015         | Kathryn Auerbach email to A.D. Marble stating she has not received hardcopies of the reports   |
| 12/11/2015         | Fernande Morgan fax to PennDOT with comments regarding Determination of Effects Report   |
| 12/14/2015         | Jesse Salamun email to PennDOT with comments regarding Determination of Effects Report   |
| 12/14/2015         | Bruce Wallace letter to PennDOT with comments regarding Determination of Effects Report  |
| 12/15/2015         | Ryan Whittington response to Kathryn Auerbach email from December 11, 2015   |
| 12/15/2015         | SHPO letter to PennDOT with comments regarding Determination of Effects Report   |
| 12/15/2015         | Damon Aherne letter to A.D. Marble with comments regarding Determination of Effects Report   |
| 12/15/2015         | Delaware Riverkeeper Network letter to Ryan Whittington with comments regarding Determination Effects Report, including comments from the Delaware Riverkeeper Network's subconsultants review of the report |
| 12/16/2015         | Kathryn Auerbach email to PennDOT with comments regarding Determination of Effects Report  |
| 12/16/2015         | John Salerno fax to PennDOT with comments regarding Determination of Effects Report  |
| 12/17 - 12/18/2015 | Email exchange between Ryan Whittington and Kathryn Auerbach regarding use of email notifications and hard copies of reports   |
| 1/22/2016          | Amleto Pucci email and letter to Ryan Whittington with comments regarding the Bridge Width Evaluation and Determination of Effects Report  |
| 4/20/2016          | Delaware Riverkeeper Network Letter to PennDOT and FHWA regarding safety issues at the bridge  |
| 4/25/2016          | PennDOT response letter to the Delaware Riverkeeper Network regarding safety issues at the bridge  |
| 6/20/2016          | A.D. Marble memo to PennDOT, FHWA, regarding the response to PA SHPO comments on Determination of Effect Report Alternative Analysis – Additional Information  |
| 6/21/2016          | A.D. Marble email to Consulting Parties indicating the response to PA SHPO comments on Determination of Effect Report Alternative Analysis – Additional Information, has been posted to ProjectPATH          |
| 6/21/2016          | A.D. Marble letter to Consulting Parties without email, transmitting a hardcopy of the response to PA SHPO comments on Determination of Effect Report  |

| Alternative Analysis – Additional Information |  |
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| 6/21/2016                                     | ACHP email to PennDOT/FHWA thanking for Response to SHPO comments on the Determination of Effect Report and reminding agencies they are a Consulting Party for the project   |
| 6/23/2016                                     | FHWA response email to ACHP regarding their email sent on June 21, 2016  |
| 6/23/2016                                     | PennDOT/FHWA Comment Response Document to Determination of Effects Report comments posted to ProjectPATH   |
| 6/24/2016                                     | A.D. Marble letter to Judy Esch, transmitting a hardcopy of the response to PA SHPO comments on Determination of Effect Report Alternative Analysis – Additional Information |
| 6/24/2016                                     | A.D. Marble notification email to Consulting Parties that the Comment Response Document to the Determination of Effects Report comments has been posted to ProjectPATH       |
| 6/24/2016                                     | A.D. Marble letter and hardcopy of Comment Response Document mailed to Consulting Parties who do not have email addresses  |
| 7/22/2016                                     | PA SHPO response to additional information request and comments on Determination of Effect Report Alternative Analysis, noting they concur with the Adverse Effect finding   |
| Step 4: Resolve/Mitigate Adverse Effects      |  |
| 7/28/2016                                     | Email invitation to Consulting Parties notifying them of the upcoming August 24, 2016 Consulting Party Meeting   |
| 7/28/2016                                     | Letter invitation to Consulting Parties without email notifying them of the upcoming August 24, 2016 Consulting Party Meeting  |
| 8/11/2016                                     | PennDOT/FHWA email response to Consulting Parties regarding concerns with the planned August 24, 2016 Consulting Party Meeting   |
| 8/24/2016                                     | Seventh Section 106 Consulting Party Meeting   |
| 9/14/2016                                     | ACHP letter to FHWA responding to letters they received from Consulting Parties with concerns over the Headquarters Road bridge project                                      |
| 9/30/2016                                     | Email to Consulting Parties with summary of August 24, 2016 Consulting Party Meeting asking for comments   |
| 9/30/2016                                     | Letter to Consulting Parties without email with summary of August 24, 2016 Consulting Party Meeting asking for comments  |
| 9/30/2016                                     | Kathryn Auerbach letter to FHWA with comments and concerns regarding the Headquarters Road bridge project  |
| 10/13/2016                                    | Amleto Pucci email to PennDOT/A.D. Marble with comments regarding the summary of August 24, 2016 Consulting Party Meeting  |
| 10/18/2016                                    | FHWA response letter to ACHP letter sent on September 14, 2016, with a response document to ACHP's concerns  |
| 10/20/2016                                    | PennDOT email to Consulting Parties notifying them that the response to ACHP's letter comments has been posted to PATH   |
| 10/20/2016                                    | PennDOT letter to Consulting Parties without email notifying them that the response to ACHP's letter comments has been posted to PATH  |
| 11/14/2016                                    | PennDOT email to Consulting Parties notifying and inviting them to the Public Hearing to be held on December 13, 2016 for the Headquarters Road bridge project               |
| 11/14/2016                                    | PennDOT letter to Consulting Parties notifying and inviting them to the Public Hearing to be held on December 13, 2016 for the Headquarters Road project                     |

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| 11/15/2016 | PennDOT email to Consulting Parties notifying them that the Mitigation and Minimization memo, which summarizes the mitigation and minimization ideas generated at the August 24, 2016 Consulting Party Meeting has been posted to PATH                   |
| 11/15/2016 | PennDOT letter to Consulting Parties without email sending a hard copy of the Mitigation and Minimization memo, which summarizes the mitigation and minimization ideas generated at the August 24, 2016 Consulting Party Meeting has been posted to PATH |
| 11/26/2016 | Michael Smith letter to PennDOT requesting a position on the Design Advisory Committee   |
| 11/28/2016 | PennDOT Draft CE is posted to ProjectPATH  |
| 11/28/2016 | A.D. Marble email to Consulting Parties notifying them the draft CE has been posted to ProjectPATH for review online and noting hardcopies are available for review at select locations  |
| 11/28/2016 | A.D. Marble letter to Consulting Parties without email notifying them the draft CE has been posted to ProjectPATH for review online and noting hardcopies are available for review at select locations   |
| 12/15/2016 | PA SHPO response to PennDOT regarding comments to the Mitigation and Minimization memo   |
| 12/15/2016 | Robert Reynolds letter to Delaware Riverkeeper with comments regarding the Mitigation and Minimization memo  |
| 12/15/2016 | Kathryn Auerbach letter to PennDOT regarding the Mitigation and Minimization memo and draft MOA  |
| 12/15/2016 | Bruce Wallace letter to PennDOT regarding the Mitigation and Minimization memo   |
| 12/15/2016 | Damon Aherne letter to PennDOT regarding the Mitigation and Minimization memo  |
| 4/14/2017  | PennDOT posts Mitigation and Minimization Comment Response Document to ProjectPATH   |
| 4/26/2017  | A.D. Marble letter and hard copy of the Mitigation and Minimization Comment Response document sent to Consulting Parties without email   |
| 4/26/2017  | A.D. Marble email sent to Consulting Parties notifying them the Mitigation and Minimization Comment Response Document has been posted to ProjectPATH   |
| 4/26/2017  | A.D. Marble email resent to Consulting Parties with new email addresses notifying them the Mitigation and Minimization Comment Response Document has been posted to PATH   |
| 5/17/2017  | PennDOT Draft CE Comment Response Document posted to ProjectPATH   |
| 5/23/2017  | A.D. Marble letter to Consulting Parties without email notifying them the Draft CE Comment Response Document is available for review online, and via hardcopy located at the Tincum Township Municipal Office  |
| 5/23/2017  | A.D. Marble email to Consulting Parties notifying them the Draft CE Comment Response Document is available for review online, and via hardcopy located at the Tincum Township Municipal Office   |
| 8/8/2017   | Draft MOA Circulated to Consulting Parties   |
| 12/19/2017 | ACHP provides comment on Draft MOA   |
| 8/7/2018   | Final MOA Executed   |

# CE Evaluation Part B, Section A-5

## Environmental Evaluation Subject Areas (Section 4(f) Resources)

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### **5. SECTION 4(f) RESOURCES**

**SECTION 4(f) RESOURCES**                      **PRESENCE**    **USE<sup>1</sup>**  
 Not Present    Present     No    Yes

**Documentation<sup>2</sup>**

- Individual Section 4(f) Evaluation
- Programmatic Section 4(f) Evaluation
- Section 2002 Evaluation
- De Minimis Use/No Adverse Use Checklist
- Non-Applicability/No Use Checklist
- Temporary Use Checklist
- FHWA Coordination Documents

**Will temporary easements during construction be necessary from Section 4(f) resources?**     No    Yes

**Describe Any Permanent and Temporary Impacts**

Due to portions of the existing structure being located outside of PennDOT right-of-way and to provide for maintenance access for the new structure, the proposed project would require a total of 0.015 acre of permanent takes from two parcels that are contributing elements to the Ridge Valley Rural Historic District - 0.005 acre from Parcel 44-14-2 and 0.01 acre from Parcel 44-14-8. A slope easement is also required; this is approximately 0.005 acre.

Removal of the existing substructure elements, construction of the new abutments and a center pier, as well as installation of scour countermeasures, would require dewatering of the work area by temporarily diverting flows through a series of flume pipes. A temporary causeway would also be required to provide access for construction equipment to the project site. To facilitate these operations, temporary occupancies of Section 4(f) resources would be required, which equate to approximately 0.088 acre of the Ridge Valley Rural Historic District, including the adjoining contributing parcels. The temporary occupancies satisfy 23CFR 774.13(d) and do not constitute a use under Section 4(f).

**Is mitigation incorporated?**     No    Yes

**Describe Mitigation**

See Cultural Resources mitigation

## Remarks

Within the project area, the Ridge Valley Rural Historic District and its contributing resources (the Headquarters Road Bridge and the adjoining tax parcels) are considered Section 4(f) resources. The parcel on the east side of Sheep Hole Road (Parcel 44-14-3-1) is also a contributing element to the district. The Individual Section 4(f) Evaluation documents the design alternatives considered and their anticipated social, economic, environmental, and cultural impacts. It also describes the alternative(s) that totally avoid the use of the Section 4(f) resources and an analysis of the alternatives to determine which result in the least overall harm to the resource.

Seven alternatives are considered in the Draft Individual Section 4(f) Evaluation, including the No-Build and Total Avoidance Alternative. Based on the evaluation of alternatives, it was determined that there are no feasible and prudent avoidance alternatives. Further, upon completion of the least overall harm analysis, the recommended preferred alternative was identified as that which causes the least overall harm to the Section 4(f) resource.

The two-lane replacement alternative addresses the existing bridge's structural deficiency (both superstructure and substructure), thus improving the load carrying capacity and meeting the structurally deficient need. This alternative improves the operational efficiency of the bridge by providing a two-lane bridge (meeting PennDOT and American Association of State Highway and Transportation Officials [AASHTO] requirements based on traffic volume), thus meeting the functionally obsolete need. This alternative addresses the turning radius issues for emergency service vehicles and is sound from an engineering perspective. Due to the roadway classification and traffic volume on the bridge, PennDOT's Design Manual 2 requires a roadway and bridge width of 24 feet curb-to-curb. The ADT along this roadway prior to its closure varied from 900 in 2001 (prior to the closure of both the Geigel Hill Road and Dark Hollow Road bridges) to 681 in 2008, both greater than 400. The two-lane replacement alternative meets the 24 feet curb-to-curb width criteria and was carried forward to the assessment of least overall harm.

The Final Individual Section 4(f) Evaluation with executed MOA was provided to FHWA in August 2018 and was found legally sufficient by FHWA on August 21, 2018 (see attached). The Final Individual Section 4(f) Evaluation is located in the Project Technical File.

Mitigation is incorporated, and PennDOT and the FHWA will coordinate with the Section 106 Consulting Parties regarding minimization and mitigation measures which can be found in Part B:E of this CEE.

- 
- 1 If the resource is present but no use is anticipated, describe in Remarks why there will be no use. If there will be no use because avoidance/mitigation measures will be included, describe those in the mitigation text box provided.**
  - 2 Unless required as an attachment, documentation for subject areas should be maintained in the project's Technical Support Data and does not need to be submitted with the CEE.**
- 

## Additional Information

### Remarks, Footnotes, Supplemental Data

### Attachments

1. [PA\\_Headquarters Bridge\\_Updated Legal Sufficiency\\_21August2018.pdf](#) (38KB / 0MB)



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

# Memorandum

Subject: Final Section 4(f) Evaluation  
SR 1012, Section BRC  
Headquarters Road Bridge Project  
Tinicum Township

Date: August 21, 2018

From: Silvio J. Morales  
Attorney-Advisor  
North Field Legal Services

In Reply Refer to:  
HCC-FLSN

To: Jon Crum  
Pennsylvania Division  
Harrisburg, Pennsylvania

I have reviewed the Final Section 4(f) Evaluation for the above-named project, which would involve replacement of the bridge and construction of an adequate curve to the SR 1012 crossing of Tinicum Creek in Tinicum Township, Bucks County.

The Final Section 4(f) Evaluation adequately demonstrates the purpose and need for the project and that the Preferred Alternative would best meet that need. Additionally, the Final Section 4(f) Evaluation adequately demonstrates that there exists no prudent and feasible alternative to the Preferred Alternative's use of resources from the Ridge Valley Rural Historic District (Headquarters Road Bridge) and other contributing structures. All possible planning has been undertaken to minimize harm to the Section 4(f) properties. Therefore, pursuant to the provisions of 23 C.F.R. § 774.3, I hereby find the Final Section 4(f) to be legally sufficient.

# CE Evaluation Part B, Section A-6

## Environmental Evaluation Subject Areas (Air Quality and Noise)

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### 6. AIR QUALITY AND NOISE

#### AIR QUALITY

Is the project exempt from regional ozone conformity analysis and a CO, PM10 & PM2.5 Hot-Spot analysis?  Yes  No

See exempt project list in Air Quality Handbook, Pub #321.

If Yes, the system skips the next few questions.

#### Mobile Source Air Toxics (MSATs)

Is the project exempt from an analysis for MSATs based on Pub #321?  Yes  No

See Air Quality Handbook, Pub #321, for exemptions.

If Yes, the system skips the remainder of this section.

#### Air Quality Remarks

This project is an online bridge replacement and is therefore exempt from air quality analysis in accordance with 40 CFR 93.126 as outlined in Table 2.1 of PennDOT Publication 321. This project will have no significant adverse impact on air quality.

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#### NOISE

1. Is the project a:

Reference PennDOT Pub #24 for additional information on Type I, II and III Projects.

A. Type I Project?  Yes  No

B. Type II Project?  Yes  No

C. Type III Project?  Yes  No

- The project meets the criteria for a Type III project established in 23 CFR 772. Therefore, the project requires no analysis for highway traffic noise impacts. Type III projects do not involve added capacity, construction of new through lanes or auxiliary lanes, changes in the horizontal or vertical alignment of the roadway or exposure of noise sensitive land uses to a new or existing highway noise source. PennDOT acknowledges that a noise analysis is required if changes to the proposed project result in reclassification to a Type I project.

#### Noise Remarks

This project is an online (no significant change to horizontal or vertical alignment) bridge replacement project. Due to the limited scope of work, this project will have no substantial adverse noise-related impacts resulting from traffic volumes, composition, and speed; geometric relationships between the highway or receptor; redistribution of traffic patterns; parking lots; and effects of grades. There will be no noise-related public controversy or substantial construction noise impacts. Therefore, this project is exempt from a noise impact assessment.

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### **Additional Information**

**Remarks, Footnotes, Supplemental Data**

**Attachments**

# CE Evaluation Part B, Section A-7

## Environmental Evaluation Subject Areas (Socioeconomic Areas)

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Where mitigation is incorporated for socioeconomic impacts, add the mitigation commitments to form B: E.

### REGIONAL & COMMUNITY GROWTH

Will the project induce impacts (positive and negative) on planned growth, land use, or development patterns for the area?  Yes  No

Is the project consistent with planned growth?  Yes  No

**Basis of this determination:**

This project will not induce impacts (either positive or negative) on planned growth, land use, or development patterns for the area. The municipality, in this case Tincicum Township, is responsible for land use decisions, which would be the source of any future planned growth in the area. This project will not induce secondary growth.

The bridge was never listed as part of a truck route and will not be in the future given that the local roadways in the vicinity of the bridge are not conducive to truck traffic. To the west, Headquarters Road has grades as steep as 13 percent, and to the east, Headquarters Road has a tight 50-foot radius curve. Furthermore, the federally mandated Surface Transportation Assistance Act of 1982 was established to provide a network of highways for large trucks. These roads meet the geometric requirements for safe operation of trucks. With the exception of S.R. 0611, no roads in Tincicum Township meet these requirements.

Will the project induce secondary growth?  Yes  No

---

### PUBLIC FACILITIES & SERVICES

Will the project induce negative impacts on health and educational facilities; public utilities; fire, police and emergency services; civil defense; religious institutions; or public transportation?  Yes  No

Does the project incorporate bicycle or pedestrian facilities into the overall design or operations (including construction)?  Yes  No

**Explain.** (Complete a bicycle/pedestrian checklist if applicable for this project.)

There are no sidewalks or bike trails on the bridge. Cyclists and pedestrians currently navigate the existing road network on narrow two lane roadways. Motorists are expected to yield to pedestrians and cyclists whether they are on a roadway or a bridge. A two lane replacement bridge would provide additional bridge width for the safe passage of pedestrians and bicyclists, as passing vehicles could encroach on the opposing lane if needed to pass.

EMapPA did not identify any Rails to Trails within or adjacent to the project area.

<http://www.depgis.state.pa.us/emappa/>

Will the project have a positive impact to the public facilities and services listed above?

Yes  No

**If Yes, explain.**

The design of the replacement bridge will accommodate the longer fire truck owned by Ottsville Volunteer Fire Company, which could not make the turn from Headquarters Road to Sheep Hole Road without doing a three point turn on the existing bridge. Since the bridge's 2011 closure, emergency services have had delayed response times, which has been a concern to local residents. In addition, schoolbuses have had to make unsafe U-turns since they can no longer utilize the bridge. The existing detour, which utilizes state roads, will be maintained during construction of the replacement structure and will be coordinated with the local officials and local service agencies (police, fire, emergency services, and school district).

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## COMMUNITY COHESION

Will the project induce impacts to community cohesion?

Yes  No

Will the project induce impacts to the local tax base or property values?

Yes  No

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## ENVIRONMENTAL JUSTICE

Is the project exempt from Detailed Project Level Environmental Justice Analysis per Section 2.1 of Publication 746, Project Level Environmental Justice Guidance?  Yes  No

Is an Environmental Justice population, as identified in Executive Order 12898, present? <sup>1</sup>

Yes  No

**If Yes, briefly summarize the methods used to determine the presence of an Environmental Justice Population.**

An evaluation was conducted with the EPA EJSCREEN tool and there is a potential for there to be a below poverty level population in the project area. The minority population percentage ranges at the project area range from 0 percent to 8.38 percent, which is less than the county level of 14.07 percent. The below poverty level at the project area is 11.28 percent, which is higher than the county level of 5.87 percent. There are no community facilities adjacent to the bridge and no sidewalks. Additionally, while the posted detour is 12.2 miles, there are numerous local roads in the area that can be used to avoid the road closure at the bridge that would be significantly shorter than the posted detour. An alternate route includes Headquarters Road to Durham Road to Geigel Road to Tankhannen Road to Ridge Valley Road and back to Headquarters Road, which would be an approximately 4.5-mile detour. While the closure of the bridge and associated detour causes temporary adverse impacts to traffic in the area, this is experienced by all members of the community and does not disproportionately impact EJ populations. Additionally, due to the bridge's deteriorated condition, the bridge is currently closed which results in a continued use of the detour. Upon completion of construction, the community will benefit in the long term from a safer and more reliable bridge crossing. EJ Research documentation is located in the project technical file.

Will the project induce disproportionately high and adverse impacts to minority or low income populations?

Yes  No

No known minority or low-income populations have been identified that would be disproportionately highly and adversely affected by this project as determined above. Therefore, this project has met the provisions of Executive Order 12898.

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## RIGHT-OF-WAY ACQUISITIONS OR DISPLACEMENTS OF PEOPLE, BUSINESSES OR FARMS

How many parcels require right-of-way acquisition, either partial or total?

2

**Describe the extent and locations of acquisitions.**

Portions of the existing structure are located outside of PennDOT's ROW. Minor permanent sliver acquisition from two parcels totaling 0.015 acres is anticipated in the northeast and southeast quadrants where Wing Wall C would be reconstructed with a taper and where Wing Wall D currently encroaches beyond the existing ROW. Slope easements are also required in the southeast and southwest quadrants; these total 0.005 acre. To create a work area for the pier, abutment, and scour countermeasure work, the areas around the piers and abutments would need to be dewatered by temporarily diverting flow through a series of flume pipes. A temporary causeway would be required to provide access for construction equipment to the project site. Temporary Construction Easements (TCEs) would be required to facilitate these operations. TCEs are anticipated in all four quadrants totaling 0.088 acres. The project will not require the relocation of people, businesses or farms. These impacts are minor and isolated to the area directly adjacent to the bridge.

Will the project require the relocation of people, businesses or farms?  Yes  No

Will the project induce impacts to economic activity, including employment gains and losses?  Yes  No

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## MAINTENANCE AND OPERATING COSTS OF THE PROJECT AND RELATED FACILITIES

Will the project induce increases of operating or maintenance costs?  Yes  No

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## PUBLIC CONTROVERSY ON ENVIRONMENTAL GROUNDS

Will the project involve substantial controversy concerning social, cultural, or natural resource impacts?  Yes  No

**If Yes, explain.**

The public and Section 106 consulting parties have expressed concerns relating to social, cultural, and natural resource impacts. From a social aspect and with the current bridge being closed, concerns have been expressed at the Section 106 Consulting Party meetings and during the December 2016 Public Hearing regarding the impact on emergency response times to those living in and traveling through the surrounding area. During the November 2013 Consulting Party meeting (Chris Hackley and Tim Cashman) and the December 2016 Public Hearing (Holly Krupp Kelly), noted that due to the bridge being closed, property values have decreased in the project vicinity and home sales have been deterred. During the November 2013 Consulting Party meeting, Tim Cashman indicated that with the bridge closure, school busses must make a six-point turn at McCann Drive and Headquarters Road to turn around since the Headquarters Road bridge is closed. Parents are concerned about the safety of the children on the bus as impatient drivers waiting for the buses to turn around go around the bus endangering the children who are waiting on the side of the road to get onto the school bus. During the June 2013 Section 106 Consulting Party meeting, during a discussion on the localized collapse of the northeast wingwall from vehicular impact, Tim Cashman indicated that when the bridge was still open school buses hit the bridge and caused damage to the bridge structure; he was concerned about the safety of the school children on the bus.

There are concerns regarding the Section 106 Adverse Effect to the National Register-listed Ridge Valley Rural Historic District due to removal of the existing bridge, which is a contributing resource to the historic district. Further information on these concerns and the coordination that has occurred can be found in Part B, Section A-4 and Part B, Section C and on ProjectPATH. Public concerns have also been raised regarding the potential project impacts to Tinicum Creek, which is classified as an EV stream. Tinicum Creek is also designated by the NPS as part of the Lower Delaware Wild and Scenic River for the following ORVs: Cultural, Geological, and Scenic. Coordination with NPS will continue through final design. Coordination will also occur with the public, Section 106 consulting parties, and resource agencies during final design.

Recognizing the substantial public interest in the project, extensive public involvement and Section 106 consulting party engagement has

been conducted. A total of 4 public meetings, 1 all-day plans display, 1 public hearing, and 7 Section 106 Consulting Party meetings have been held to collect feedback, address concerns and develop mitigation and minimization measures to address project effects. This coordination included review of the draft CE by the public and a public hearing to gather feedback and address concerns on the draft CE. Although there has been a significant amount of public interest in the project, the potential impacts to the exceptional value and wild and scenic Tincum Creek and the Ridge Valley Rural Historic District resulting from the recommended preferred alternative are not significant in light of the mitigation proposed by the Department as part of the project. Some oppose the recommended preferred alternative (the two-lane replacement structure), particularly the Delaware Riverkeeper Network, its consultants, and a select group of residents that live within the Ridge Valley Rural Historic District, preferring instead a one lane rehabilitation alternative. The Department considered one and two lane rehabilitation alternatives and found that these alternatives would not satisfy the project needs.

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## AESTHETIC AND OTHER VALUES

Will the project be visually intrusive to the surrounding environment?  Yes  No

Will the project include "multiple use" opportunities? <sup>2</sup>  Yes  No

Will the project involve "joint development" activities? <sup>3</sup>  Yes  No

- 
- 1 **Copies of pertinent EJ information, data, analyses, and outreach activities should be placed in the project's Technical Support Data files.**
  - 2 **Examples of "multiple use" may include historical monuments, parking areas, bikeways, pedestrian paths, and other shared-use facilities on highway right-of-way.**
  - 3 **"Joint development" involves compatible development in conjunction with the highway. Examples could include construction of highway facilities such as highways, turning lanes, interchanges, or lane widening in conjunction with planned residential, shopping, commercial, or industrial facilities.**

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### Additional Information

Remarks, Footnotes, Supplemental Data

Attachments

# CE Evaluation Part B, Section B

## Consistency Determinations

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If the project is not consistent with established guidelines or will be made consistent through agreed upon mitigation, describe mitigation measures.

- DEP Coastal Zone Management Plan:  Not Applicable  Consistent  Not Consistent
- DCNR/NPS Wild and Scenic River Management Plan:  Not Applicable  Consistent  Not Consistent
- FEMA Flood Map:  Not Applicable  Consistent  Not Consistent
- Other (describe in Remarks):  Not Applicable  Consistent  Not Consistent

### Describe Mitigation

### Remarks

NPS commented on the draft CE indicating that they would need to review the details of the construction plans, timing, dewatering plans, temporary and long-term bank stabilization plans, etc. to be confident that the construction activities subject to Section 7 of the WSRA are adequate to protect water quality during construction and for the long-term. PennDOT will provide this information during Final Design and during the Chapter 105/404 permitting phase of the project.

As NPS indicates in their comment letter, dated January 12, 2017, they are concerned with the protection of the Ridge Valley Rural Historic District since it is cited as contributing to the Outstandingly Remarkable natural, cultural, and recreational resource values (ORV) for which Congress enacted the Wild & Scenic River designation of the Lower Delaware River and its tributary, Tinicum Creek. NPS concurs with the Section 106 Adverse Effect regarding the replacement of the bridge. NPS stated "While the NPS is disappointed that the current condition of the bridge requires that it be demolished, we feel that the specific provisions of the MOA with the proposed design of the new bridge, coupled with the specific mitigation provisions, represents an appropriate effect to minimize impacts to the historic district."

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### Additional Information

Remarks, Footnotes, Supplemental Data

Attachments

## CE Evaluation Part B, Section C

### Public Involvement

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Document all public involvement efforts, including but not limited to, meetings, intent to enter letters, and displays. Indicate number of events when applicable. Include in the project technical file: notification of public involvement activities, and the resolution to relevant issues or concerns raised during public involvement.

|   | # | Comments  |
|---|---|---|
| <input checked="" type="checkbox"/> Plans Display             | 1 | An all-day public plans display was held on April 27, 2011.   |
| <input checked="" type="checkbox"/> Public Officials Meetings | 8 | <p>A public officials meeting was held on May 9, 2005. At that meeting, Tinicum Township made the following requests: a two-span replacement structure; native stone, wood siding, and tin parapet cap; and a dry hydrant. Additionally, the township found the 22-foot-wide proposed structure as acceptable.</p> <p>The second public officials meeting was held on September 6, 2005, prior to the public meeting. The following items were agreed upon: two-span, 24-foot-wide replacement structure; use of existing stone; and replacement of stream gauge and dry hydrant.</p> <p>Additionally, a 14-point agreement regarding bridge design was developed at the meeting. As a result of a request of the Tinicum Township Historical Commission presented at the meeting, the design would be modified to include open railings and a minimal footprint with no shoulders.</p> <p>A township officials meeting was held on June 16, 2008. The township explains confidence in maintenance funding for one-lane bridge and requests PennDOT to advance one-lane bridge design.</p> <p>On June 18, 2010, a meeting was held with the township and state representatives and senators. The severity of the HQ bridge condition was discussed and the need to move forward with design. PennDOT states that turn back funding is not guaranteed.</p> <p>On October 19, 2010, a township meeting was held. The township requested that PennDOT provides the public with options, which include a PennDOT-owned/maintained two-lane bridge and a township-owned/maintained one-lane bridge. Township to have vote at later date to give PennDOT official direction on one-lane</p> |

or two-lane design.

A township meeting was held December 7, 2010. No decision regarding the options was made.

The February 1, 2011, township meeting regarding the HQ bridge was canceled.

The township meeting was held on March 1, 2011, regarding the HQ bridge. A final decision was guaranteed to occur on March 15, 2011. The final decision was the two-lane option.

Public Meetings

4

A public meeting was held on September 6, 2005. The following requests were made: move bridge a few feet downstream in order to preserve the original stone abutments and piers and the upstream face; new bridge use old substructure to preserve existing piers and abutments; HQ bridge not be closed for construction until Geigel Hill Road bridge is complete; open railings, elimination of red timber siding, and a design in keeping with the Secretary of the Interior's Standards.

A public meeting was held on June 17, 2008, at which PennDOT presented a rendering and conceptual plan view of a one-lane, three-span bridge configuration. The following requests were made from the public and/or township: aggregate-finish to concrete; use of timber barrier; deck overhang be eliminated to mimic existing bridge; minimal change in vertical roadway alignment; wing-wall configuration mimic the existing bridge and not be flared at Sheephole Road to improve turning radii; HQ Bridge not be closed until Geigel Hill Road is re-opened; and turning movement studies be forwarded to township engineer for review.

A public meeting was held on October 28, 2013. Public Meeting held to update the community on the bridge project and to answer questions. The open house included a PowerPoint detailing the existing bridge condition, stream migration/meandering, existing scour conditions, bridge inspection summary, rehabilitation options, and replacement options.

A public meeting was held July 30, 2014, to update the community on the infrastructure improvement project and answer questions. The open house had stations devoted to the National Environmental Policy (NEPA) process; State and Federal permitting processes; Section 106 of the National Historic Preservation Act; and Section 4(f) of the

Department of Transportation Act. PennDOT also displayed various alternatives that have been studied for the project as well as concepts for a temporary bridge.

Public Hearing

A Public Hearing for this project was held on Tuesday, December 13, 2016 at Palisades High School. A copy of the transcript from the hearing, along with the comments and comment responses can be found in the project technical file.

Special Purpose Meetings (specify)

Section 106 Public Involvement / Consulting Parties (specify)

Three Section 106 Consulting Party meetings were held (8/14/2006, 10/20/2006, and 7/31/2007) while the USACE was the lead Federal Agency. In 2013, the funding changed and FHWA became the lead Federal agency. Four additional Section 106 Consulting Party meetings were held (6/17/2013, 11/4/2013, 4/2/2014, and 8/24/2016), bringing the total number of consulting party meetings to seven. Additional information on consulting party coordination can be found on ProjectPATH: <https://search.paprojectpath.org/ProjectDetails.aspx?ProjectID=688>

Section 106 Tribal Consultation  
(specify Tribe(s) contacted and Tribal response)

Environmental Justice Community Involvement (if applicable)

Other information dissemination activities (specify)

## Remarks

The following meetings have been held:

- One public plans display
  - Eight public officials meetings and additional Tincum Township meetings held where the Headquarters Road project was discussed.
  - Four public meetings
  - Seven Section 106 CP meetings
  - One public hearing
-

**Additional Information**

Remarks, Footnotes, Supplemental Data

Attachments

# CE Evaluation Part B, Section D

## Permits Checklist

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Check all permits required for permanent and temporary actions.

No Permits Required

United States 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

### Other Permits Information

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#### Additional Information

##### Remarks, Footnotes, Supplemental Data

The PADEP/ACOE permit will be submitted in Final Design.

##### Attachments

# CE Evaluation Part B, Section E

## Resources To Be Avoided and Mitigation Measures

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The mitigation measures summarized in this section should be incorporated into the project's design documents. In order to track and transfer mitigation commitments through the project development process, [Environmental Commitments & Mitigation Tracking System \(ECMTS\)](#) documentation should be prepared and submitted to the appropriate channels, including the Contract Management Unit, as the project moves through Final Design and Construction. Mitigation is automatically completed for the resource specific areas in this document. Non-resourced specific mitigation should be added to this page for documentation purposes.

Mitigation measures are COMMITMENTS of both the Department and FHWA and are agreed to and approved by the District Executive for Level 1 CEEs and by the Division Administrator of FHWA for Level 2 CEEs.

Impacts and mitigation commitments are based on Preliminary Design and may change as the project moves through Final Design and Construction. Final design information and final mitigation commitments are included in the ECMTS documentation.

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### 1. Specific Permanent Impacts

Streams (B:A-1): 77 linear feet

Wetlands (B:A-1): acres

State Gamelands (B:A-2): acres

### 2. Specific Mitigation Commitments

#### STREAMS (B:A-1)

Project Specific Restoration/Enhancement: 0 linear feet

Advanced Compensation/Banking: 0 linear feet

Other:

**Mitigation Remarks:** Rock scour protection surrounding bridge abutments will be choked with top-soil and seeded with a riparian seed mix to minimize, to the extent possible, visible rock. One foot of streambed material will be retained and placed onto the rip-rap at the center pier.

The size of the rip-rap that would be used for scour protection is R-6, which has a maximum stone size of 24-inches. The stone would be locally sourced, if possible, and a red shale or argillite stone will be specified in the project's special provisions to fit in with the surrounding geologic conditions.

#### WETLANDS (B:A-1)

Project Specific Replacement/Construction: acres

Banking: acres

Bank to be Debited:

Restoration: acres

Preservation: acres

In-Lieu Fee: whole dollars

Other:

Mitigation Remarks:

**STATE GAMELANDS (B:A-2)**

**Project Specific Replacement:** *acres*

**Banking:** *acres*

**Bank to be Debited:**

**Other:**

**Mitigation Remarks:**

**3. Other Mitigation Commitments**

**RESOURCE SPECIFIC**

**Federal Wild & Scenic Rivers & Streams (B:A-1)**

Same as Aquatic Resources section and Cultural Resources section

**Soil Erosion & Sedimentation (B:A-1)**

Erosion and Sediment Pollution Control Best Management Practices will be implemented to avoid and minimize soil erosion and sedimentation.

**Vegetation (B:A-2)**

All disturbed vegetative areas will be stabilized and seeding/re-vegetation will conform to Executive Order 13112 to prevent the introduction of invasive plant species onto highway right-of-way. Additionally, all efforts will be taken to minimize the movement of existing invasive plant parts (roots, tubers, and seeds) found in the project area. The invasive plant species (DCNR Invasive Plant Species list) found in the project area include: *Alliaria petiolata* (garlic mustard), *Lonicera japonica* (Japanese honeysuckle), *Lonicera tatarica* (Tartarian honeysuckle), *Ranunculus ficaria* (Lesser celandine), and *Rosa multiflora* (Multiflora rose). Native plants will be planted to replace the trees removed, and the planting of native sapling trees will be investigated during final design.

**Cultural Resources (B:A-4)**

The following mitigation measures and/or standard treatments have been developed through coordination with Section 106 Consulting Parties and are included in the MOA:

1. PennDOT, in consultation with the other signatory parties, will form a Design Advisory Committee (DAC) for the project, consisting of no more than 9 members. The following five federal, state and local agencies will each be invited to provide one member: National Park Service, Bucks County Officials, Tincum Township Supervisors, the PA State Historic Preservation Office, and the Advisory Council on Historic Preservation. The remaining members will be drawn from the consulting parties of this Project and the local public.
  - a) The DAC will be invited to review project plans and specifications and provide feedback on aesthetic elements. DAC review will occur at least three times during the project development process at roughly the 30%, 60% and 90% phases. The DAC will again be engaged during the early stages of construction to provide input on the masonry sample panel.
  - b) PennDOT will incorporate the recommendations of the DAC, as practicable.
2. PennDOT will proceed as follows during demolition and will also ensure that the design of the replacement bridge will, at minimum, incorporate the following measures:
  - a) During demolition of the existing structure PennDOT will salvage stone from the existing structure's masonry components will be salvaged for use in the proposed 2-lane concrete structure.
  - b) Using a stone mason with experience in similar projects, the stone mason will use the salvaged stone as a stone facing on concrete components of the new structure, including the abutments, wingwalls and approach roadway barriers. The stone facing should closely match, to the extent possible, the orientation and layout of existing stone, taking special care to place larger cut stones at the base of the substructure and transitioning to smaller rubble course at the top.
  - c) PennDOT will construct a masonry sample panel prior to the start of the application of any masonry facing to demonstrate the layout and orientation of the proposed stone work as well as mortar pointing.
  - d) PennDOT will hold a field meeting with members of the Design Advisory Committee (DAC) to review the masonry sample panel

and provide comment. The result of the field meeting together with the masonry sample panel will serve as a guide for all stone work which is to take place on the structure.

e) PennDOT will construct a bridge with the minimum allowable roadway width, in accordance with the applicable design standards, within the same approximate footprint as the existing bridge.

f) The new bridge will incorporate brown, painted, Type 10M railing.

g) The existing bridge plaque will be retained and incorporated into the new bridge.

h) Rock scour protection surrounding bridge abutments will be choked with top-soil and seeded with a riparian seed mix to minimize, to the extent possible, visible rock.

i) The DAC will be invited to discuss the creation and incorporation of a plaque into the new bridge. If the DAC is in favor of incorporating a plaque PennDOT will create and incorporate a plaque into the new bridge. Minimally, the plaque should indicate the date of construction of the new bridge and reference that the new bridge incorporated stone from the historic bridge that stood previously at this location. The DAC will be invited to review and comment on wording for the plaque, the material to be utilized, and the location on the new bridge.

3. PennDOT will complete measured drawings of the Headquarters Road Bridge. The measured drawings will be provided to the signatory parties and offered to the Library of Congress Historic American Engineering Record (HAER).

4. PennDOT, in consultation with the other signatory parties, will develop and construct a physical display, or content for web publication, on the history and historic significance of the Ridge Valley Rural Historic District, including information on the Headquarters Road Bridge over Tinicum Creek, a contributing component of this historic district. PennDOT will invite consulting parties and members of the DAC to comment on possible locations for a display, should the signatory parties elect to construct a physical display, as well as a draft of display or web content, prior to finalization and production.

#### **Section 4(f) Resources (B:A-5)**

See Cultural Resources mitigation

#### **NON-RESOURCE SPECIFIC**

##### **Other 1**

The current detour, which totals 12.2 miles and only uses state-owned roads, will be maintained through construction of the new structure. Prior to construction, any changes in the traffic control plans will be coordinated with the local officials and local service agencies (police, fire, emergency services, and school district).

##### **Other 2**

Portions of the pasture fence are within the TCE, and will be impacted during construction. Coordination with the property owner will occur. The fence will be replaced in kind after the completion of construction.

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#### **Additional Information**

##### **Remarks, Footnotes, Supplemental Data**

All minimization and mitigation commitments will be tracked throughout final design and into construction through PennDOT's Environmental Mitigation Tracking System (ECMTS).

##### **Attachments**

1. [Headquarters\\_ECMTS\\_20180810.pdf](#) (105KB / 0.1MB)







# CE Evaluation Part B, Section F

## Scoping Field View

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**Date of Scoping Field View:** 04/06/05

**Attendee List (Name, Organization)**

Gary Hoffman, Deputy Secretary – PennDOT

M G Patel, Chief Engineer – PennDOT

Chuck Davies, Acting ADE - PennDOT District 6-0

Dan Stewart - Central Office Design

Bob Keller - Environmental Manager, PennDOT District 6-0

Dave Cough, Director of Operations - FHWA Representative

Chuck McIlhinney

Ken Resinger - PADEP

John Kennedy, Assistant Regional Director - PADEP

Todd Schaible - PADEP

Dave Spotts – PAF&BC

Jean Cutler - PA SHPO

Susan Zacher - PA SHPO

Scott Christy, Chief Bridge Engineer - PennDOT CO

Tom Maccio, Quality Assurance Bridge – PennDOT CO

**Anticipated NEPA Documentation**

As supported by the information available at the time of scoping, this project appears to qualify for a Level 2 Categorical Exclusion in accordance with 23 CFR Part 771.117(d), Item Number 13.

**Remarks**     **Provide a brief description of NEPA documentation requirements agreed to at the field view.**

As supported by the information available at the time of scoping, this project appears to qualify for a Level 2 Categorical Exclusion in accordance with 23 CFR Part 771.117(d), Item No. 03 as published in the August 28, 1987 Federal Register.

**Scoping Field View Documentation Concurrences**

**Print this page, gather signatures, scan and attach to this document.**

**County:** Bucks    **SR/Sec:** 1012/BRC    **MPMS:** 13716    **Project:** Hdquarters Rd/Tinicum Cr

|                                |       |                          |       |
|--------------------------------|-------|--------------------------|-------|
| _____                          | _____ | _____                    | _____ |
| District Environmental Manager | Date  | District Project Manager | Date  |

|                                   |       |                           |       |
|-----------------------------------|-------|---------------------------|-------|
| _____                             | _____ | _____                     | _____ |
| Asst. District Executive - Design | Date  | BOD Project Dev. Engineer | Date  |

|                                |       |                                |       |
|--------------------------------|-------|--------------------------------|-------|
| _____                          | _____ | _____                          | _____ |
| Authorized FHWA Representative | Date  | Authorized FHWA Representative | Date  |

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**Additional Information**

**Remarks, Footnotes, Supplemental Data**

**Attachments**

# CE Evaluation Part C

## CEE Approval Processing

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### **Section B - Level 2 CEE Approval**

As supported by the attached Categorical Exclusion Evaluation, this project qualifies for a Level 2 Categorical Exclusion in accordance with 23 CFR 771.117(d), Item Number 13. Furthermore, the project will not result in any of the four circumstances cited in 23 CFR 771.117(b).

**County:** Bucks      **SR/Sec:** 1012/BRC      **MPMS:** 13716      **Project:** Hdquarters Rd/Tinicum Cr

**Prepared By:** Gina Burritt  
**Title:** Environmental Planner      **Date:** 08/07/18

**Approved By:** Keith Lynch      **Date:** 09/24/18  
**Title:** Federal Highway Administration

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The following individuals concurred with the statement above.

**District Environmental Manager:** Keith Highlands      **Date:** 09/07/18

**Assistant District Executive for Design:** Chuck Davies      **Date:** 09/07/18

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### **Additional Information**

Remarks, Footnotes, Supplemental Data

Attachments