ENVIROMENTAL ASSESSMENT
Section 408 Request to Alter the Johnstown Local Protection Project
for State Route 0403 Bridge Replacement
Amendment to Previously Approved 2016 Request
in Cambria County, PA
June 12, 2018

Prepared By: Environmental and Cultural Resources Section, Planning and Environmental Branch,
U.S. Army Corps of Engineers Pittsburgh District

1. **Name of Requestor:** Pennsylvania Department of Transportation Engineering District 9-0

2. **Authority:** Proposed alterations to U.S. Army Corps of Engineers (USACE) federally-authorized civil works projects require USACE permission. USACE authority to grant permission for temporary or permanent alterations is contained in Section 14 of the Rivers and Harbors Act of 1899 (Taking possession of, use of, or injury to harbor or river improvements), which states: "It shall not be lawful for any person or persons to take possession of or make use of for any purpose, or build upon, alter, deface, destroy, move, injure, obstruct by fastening vessels thereto or otherwise, or in any manner whatever impair the usefulness of any sea wall, bulkhead, jetty, dike, levee, wharf, pier, or other work built by the United States, or any piece of plant, floating or otherwise, used in the construction of such work under the control of the United States, in whole or in part, for the preservation and improvement of any of its navigable waters or to prevent floods, or as boundary marks, tide gauges, surveying stations, buoys, or other established marks, nor remove for ballast or other purposes any stone or other material composing such works: Provided, That the Secretary of the Army may, on the recommendation of the Chief of Engineers, grant permission for the temporary occupation or use of any of the aforementioned public works when in his judgment such occupation or use will not be injurious to the public interest: Provided further, That the Secretary may, on the recommendation of the Chief of Engineers, grant permission for the alteration or permanent occupation or use of any of the aforementioned public works when in the judgment of the Secretary such occupation or use will not be injurious to the public interest and will not impair the usefulness of such work." 33USC 408.

3. **Location of the Proposed Alteration:** State Route 0403 (SR-0403, aka Central Avenue) Bridge crossing Stonycreek River in the City of Johnstown, Cambria County, PA. The bridge crosses the Stonycreek River at the upstream limit of the concrete-lined banks for the Johnstown Local Protection Project (LPP). (40.301749° N, -78.910915° W)

4. **Federal Project Proposed to be Altered:** The Johnstown LPP was authorized by the Flood Control Acts of 1936 and 1937. It was constructed by USACE between 1938 and 1943 and consists of 9.2 miles of concrete lined channel, 6,505 feet of floodwall and 2,963 feet of dike. This project is maintained by the Federal Government.

5. **Requested Alteration:** PennDOT was initially authorized by the USACE Pittsburgh District Regulatory Branch on September 23, 2016 under the Pennsylvania State Programmatic General Permit-5 (PASPGP-5) to discharge fill associated with the construction of an access road and phased construction of two partial width causeways temporarily impacting approximately 270 linear feet of Stonycreek River
and Sams Run to facilitate the removal and replacement of the SR-0403 bridge over Stonycreek River on the existing alignment and profile. Prior to the issuance of the PASPGP-5 authorization, a review of the proposed project was completed by the USACE Engineering and Construction Division and it was determined that the originally proposed bridge construction was not injurious to the public interest nor would it impair the usefulness of the local protection project. Phase 1 construction of the causeway and pier replacement began in 2017 (Figure 1). Phase 1 access is currently in place. PennDOT submitted a request for an amendment to their PASPGP-5 permit in 2017. This EA reviews the proposed amendment to the previously approved work.

The original proposal included one causeway for each construction phase: Phase 1 downstream of the bridge (Figure 1) and Phase 2 upstream of the bridge (Figure 2) with the causeways only to be in place during the normal spring-to-fall construction season. It was not originally proposed that the causeways would be in place simultaneously. The causeways were to extend from the south bank of the river via access roads constructed through and on the channel bank. The causeways provide the contractor with access to the pier to construct phased temporary cofferdams around the pier for dewatering during its replacement. The causeways consist of clean rock embankments. Details of the temporary roads, causeways, and cofferdams are included on the Erosion and Sediment Pollution Control Plan. A hydraulic analysis of the Stonycreek River for the effects of the temporary in-stream measures on the 2-year discharge results in increases in backwater elevations that remain within the channel.

The amendment request submitted to USACE proposes to leave part of the Phase 1 causeway in place and construct the Phase 2 causeway using the Phase 1 causeway for access (Figure 3).

Replacement of the bridge has temporarily altered portions of the concrete lined banks and vertical walls of the LPP downstream of the bridge. This work began in 2017. To provide vehicular access to the stream, the construction and use of a rock causeway required removal of a right bank section of the LPP structure for an access road. The altered section of the LPP will be replaced in kind. Removal of the existing concrete arch at the interface with the LPP and construction of the integral abutments has necessitated temporary removal of portions of the LPP on both banks in the immediate vicinity of the bridge. In-kind replacement will occur for all removed portions of the LPP except for those that the widened bridge permanently replaces. High traffic volume and the lack of a feasible detour necessitate replacing the bridge in partial-width construction that maintains access on the bridge for vehicles and pedestrians. The causeways and access roads provide the contractor with access to the riverbed for bridge demolition, superstructure erection, and pier replacement.

The existing bridge is a two-span closed spandrel concrete arch bridge. The bridge is classified by PennDOT as structurally deficient. The replacement structure is a two-span steel multi-girder bridge with integral abutments and a wall type pier. The overall width of the bridge will be increased from 63 feet 4 inches wide to 65 feet 8 inches wide, in addition the clear horizontal distance between the abutments will increase from 225 feet to 229 feet with equal spans centered on a narrowed replacement pier.

Permanent alterations to the LPP include a new pier that replaces the existing pier. Temporary alterations to the LPP include the removal and replacement in-kind of the right bank section of the LPP.
and the removal and replacement of portions of the LPP on both banks in the immediate vicinity of the bridge. Temporary alterations also include the discharge of fill associated with the causeway construction. It is expected that the causeway fill will be removed upon completion of the project.
Figure 1. PennDOT water obstruction and encroachment graphic for originally proposed Phase 1 with the approximate LPP extent (outlined in red) in the project area shown (based on as-built permanent easement extents). LPP area continues to the east and west beyond the red outlined area shown.
Figure 2. PennDOT water obstruction and encroachment graphic for originally proposed Phase 2 with the approximate LPP extent (outlined in red) in the project area shown (based on as-built permanent easement extents). LPP area continues to the east and west beyond the red outlined area shown.
Figure 3. PennDOT water obstruction and encroachment graphic for amendment request. Area in blue depicts Sams Run relocation (underneath causeway). Red area depicts proposed amendment request combining Phase 1 access and Phase 2 access.
6. **Alternatives:**

   a. **No Action:** Denial of the request to amend the 2016 Section 408 request. Denial of the request would not permit the amendment of their original 2016 permit, requiring PennDOT to complete their work as they originally submitted.

   b. **Action Alternative - Requester’s Preferred Alternative:** Approval of the request to amend the 2016 Section 408 request would allow the amended plan to alter the Johnstown LPP, permitting PennDOT to use their preferred bridge replacement method.

7. **Environmental Setting:** The Johnstown LPP in the proposed modification area is located along Stonycreek River in the City of Johnstown within Cambria County, Pennsylvania. The project area is an existing urban four-lane avenue and bridge, in and over Stonycreek River.


   The stream bed material likely consists of sand, gravel and cobbles. Two waterways exist within the project area, Stonycreek River (Figures 4, 5 and 6) and Sams Run (Figure 7). The PADEP stream classification of both Stonycreek River and Sams Run are Warm Water Fishes. Stonycreek River has been channelized with concrete floodwalls that line the sides of the streambanks as part of the Johnstown LPP. No wetlands are present within the proposed project area.

   The nearest alternate stream crossing over Stonycreek River is at Homer Street, approximately 1.3 mi additional travel from the south side of the Moxham bridge crossing, and an additional 0.2 mi travel from the north side of the Moxham bridge crossing.
Figure 4. Looking downstream at Central Avenue bridge (August 2012). (Photo provided by PennDOT.)

Figure 5. Looking downstream from Central Avenue bridge. (Photo provided by PennDOT.)
8. Environmental Effects of the Proposed Action: Per EC 1165-2-216, *Policy and Procedural Guidance for Processing Requests to Alter US Army Corps of Engineers Civil Works Projects*, the U.S. Army Corps of Engineers (USACE) has jurisdiction under Section 408 only over the specific activities or portions of activities that have the potential to alter the USACE project. Therefore, if a proposed alteration is part of a larger project (and/or its associated features) that extends beyond the USACE project boundaries, only
those portions or features of the larger project over which USACE has sufficient control and responsibility over are to be included in the USACE environmental review. The scope of analysis for the NEPA and environmental compliance evaluations for the subject request are limited to the area of the alteration and those adjacent areas that are directly or indirectly affected by the alteration.

PennDOT must acquire all other necessary permissions or authorizations required by federal, state, and local laws or regulations, including required permits from the USACE Regulatory Program (Section 10/404 permits). These permits will consider impacts beyond the LPP footprint commensurate with their scope. In addition, an approval under Section 408 does not grant any property rights or exclusive privileges.

Table 1. Anticipated impacts of the proposed Section 408 activity.

<table>
<thead>
<tr>
<th>Environmental Parameter</th>
<th>No-Action Alternative</th>
<th>Action Alternative</th>
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<tbody>
<tr>
<td>Land Use &amp; Socio-Economic</td>
<td><strong>Minor Effect.</strong> Denial of the permit would not permit the amendment of their original 2016 permit, requiring PennDOT to complete their work as they originally submitted. The current land use patterns would not be significantly affected by this project. The local socio-economic conditions may even improve slightly during construction and possibly after construction.</td>
<td><strong>Minor Effect.</strong> Similar to the no-action alternative, the current land use patterns would not be significantly affected by this project. The local socio-economic conditions may even improve slightly during construction and possibly after construction.</td>
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<tr>
<td>Conditions</td>
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<tr>
<td>Vegetation and Wildlife Habitat</td>
<td><strong>Minor Effect.</strong> Denial of the request would not permit the amendment of their original 2016 permit, requiring PennDOT to complete their work as they originally submitted. The site is predominantly herbaceous vegetation which would recolonize quickly after construction.</td>
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<tr>
<td>Water Quality and Fisheries</td>
<td><strong>Minor Effect.</strong> Denial of the request would not permit the amendment of their original 2016 permit, requiring PennDOT to complete their work as they originally submitted. Temporary (220 linear feet /0.70 acre) impacts to Stonycreek River and Sams Run (50 linear feet) will occur. Temporary erosion control measures will be used to protect water quality, including the use of filter socks. Concrete will not be allowed to enter the stream. Causeways will be removed upon completion of the project.</td>
<td><strong>Minor Effect.</strong> Similar to the no-action alternative, temporary (220 linear feet /0.70 acre) impacts to Stonycreek River and Sams Run (50 linear feet) will occur. Temporary erosion control measures will be used to protect water quality, including the use of filter socks. Concrete will not be allowed to enter the stream. Causeways will be removed upon completion of the project.</td>
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<td>Category</td>
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<td>Description</td>
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<td>Floodplains</td>
<td>Minor Effect.</td>
<td>Denial of the request would not permit the amendment of their original 2016 permit, requiring PennDOT to complete their work as they originally submitted. The project is located within the floodplain. Temporary effects to the floodplain will occur during construction. Area will be restored upon project completion. The new bridge will maintain the same hydraulic conditions and no permanent floodplain impacts are expected.</td>
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<tr>
<td>Noise</td>
<td>Minor Effect.</td>
<td>Denial of the request would not permit the amendment of their original 2016 permit, requiring PennDOT to complete their work as they originally submitted. Bridge replacement work would temporarily increase noise in the area during construction. The bridge replacement is not expected to significantly increase traffic or have a permanent impact on noise in the area.</td>
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<tr>
<td>Aesthetics</td>
<td>Minor Effect.</td>
<td>Denial of the request, would not permit the amendment of their original 2016 permit, requiring PennDOT to complete their work as they originally submitted. The presence of construction equipment and supplies during construction will have a temporary impact on aesthetics. The aesthetics of the new bridge are expected to be equivalent to or an improvement of the existing structure.</td>
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<tr>
<td>Recreation</td>
<td>Minor Effect.</td>
<td>Temporary impacts to waterway users may occur during construction activities. An Aids to Navigation plan has been prepared and warning signs will be placed upstream and downstream of the bridge to alert waterway users of the construction.</td>
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<tr>
<td>Endangered Species</td>
<td>No Effect.</td>
<td>A PNDI search (PNDI-602405) showed that there are no effects to threatened or endangered species.</td>
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<tr>
<td>Historic and Archaeological Resources</td>
<td><strong>No Effect.</strong> The area has been previously disturbed by the construction of the LPP. No impacts to archaeological resources will occur. The bridge is not eligible for the National Registry of Historic Places. Two National Register properties are located within the Area of Potential Effect – the Johnstown LPP (floodwalls are spanned by the bridge) and Cochran Junior High School. Floodwalls have been temporarily removed during construction and will be reconstructed to pre-project conditions. Impacts to Cochran Junior High School are limited to approximately 2000 square feet of lawn ground disturbance which will be restored upon project completion. PennDOT cultural resources staff determined that there would be no effect to archaeological resources and no adverse effects to above ground historic properties. The new bridge design will incorporate three context sensitive features. PHMC concurrence on 3/28/12 that nearby railroad is ineligible for the National Register. No effects to cultural resources is expected.</td>
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<td>Traffic</td>
<td><strong>Minor Effect.</strong> The bridge reconstruction will maintain pedestrian and vehicle access although temporary traffic delays during construction may occur. No permanent impacts to traffic are expected.</td>
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<td>Public Safety</td>
<td><strong>No Effect.</strong> The Section 408 engineering review is under separate cover and found no objection to the 408 request. No change in the flood risk reduction benefit that would impact public safety is anticipated.</td>
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<td>Hazardous Wastes</td>
<td><strong>No Effect.</strong> Clean fill will be used and proper waste disposal will occur.</td>
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9. **Cumulative Effects:** Routine operation and maintenance of the LPP by USACE is anticipated. The USACE 2014 inspection report of the LPP noted maintenance items in the portion of the LPP within the vicinity of the bridge replacement and Stonycreek River, including removal of vegetation, shoaling (sediment deposition), encroachments, and concrete repairs.
Cumulative impacts result from the incremental impacts of an action, when added to other past, present, and reasonably foreseeable future actions - regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. Following review of the proposed project's scale, the resources considered in Table 1, and information made available to the agency, no significant cumulative effects of the proposed alteration within the Section 408 authority are anticipated. Impacts for the no-action alternative (construct the bridge as originally submitted and approved in 2016) and the preferred alternative (construct the bridge with amended plan) are nearly identical. Temporary impacts, including noise and traffic pattern changes, would not be significant. The bridge replacement is largely similar to the existing structure and is not anticipated to change overall traffic use of the area. Temporary construction-related increases in noise and emissions, and temporary, minor impacts to land use, vegetation, water quality, floodplains, aesthetics, recreation and traffic would not be significant, even if they occur simultaneous to expected repairs/maintenance of the LPP. No significant cumulative effects of the proposed alteration within the Section 408 authority are anticipated.

10. Coordination: USACE provided a copy of this report to the appropriate agencies during the public comment period. A 15-day public comment period occurred from 23 May 2018 to 7 June 2018. No comments were received.

11. Principal Environmental Laws and Executive Orders considered, where applicable, in conjunction with NEPA.

Public Laws:
- Archeological and Historic Preservation Act, 16 U.S.C. 469 et seq.
- Clean Air Act, as amended, 42 U.S.C. 1857h-7, et seq.
- Endangered Species Act, 16 U.S.C. 1531 et seq.
- Fish and Wildlife Coordination Act, 16 U.S.C. 661, et seq.
- Safe Drinking Water Act 42 U.S.C. 300 et seq.

Executive Orders (EO):
- 11514 Protection and Enhancement of Environmental Quality
- 11593 Protection and Enhancement of the Cultural Environment
12. Summary/Conclusion: Based on the above analysis, USACE permission for PennDOT to alter the Johnstown LPP, in the manner described above, is not a major Federal action significantly affecting the quality of the human or natural environment, and therefore does not require preparation of an environmental impact statement.
FINDING OF NO SIGNIFICANT IMPACT

Section 408 Request to Alter the Johnstown Local Protection Project Amendment to Previously Approved 2016 Request Cambria County, Pennsylvania

In accordance with the National Environmental Policy Act (NEPA) and implementing regulations, an Environmental Assessment (EA) was developed to evaluate potential impacts associated with issuing permission to alter the federal Johnstown Local Protection Project (LPP) along Stonycreek River in Johnstown, Pennsylvania. The Johnstown LPP was authorized by the Flood Control Acts of 1936 and 1937. It was constructed by the U.S. Army Corps of Engineers (Corps) between 1938 and 1943 and consists of 9.2 miles of concrete lined channel, 6,505 feet of floodwall and 2,963 feet of dike. This project is maintained by the Federal Government.

In 2016, PennDOT received authorization under the Pennsylvania State Programmatic General Permit-5 (PASPGP-5) to replace the State Route 0403 (SR-0403 aka Central Avenue) bridge superstructure over Stonycreek River on the existing alignment. The bridge has been classified as structurally deficient. Replacement of the bridge required an alteration of the Johnstown LPP, as the construction of temporary causeways are necessary for access. Prior to the issuance of the PASPGP-5 authorization, a review of the proposed project was completed by the USACE Engineering and Construction Division and it was determined that the originally proposed bridge construction was not injurious to the public interest nor would it impair the usefulness of the local protection project. PennDOT submitted a request for an amendment to their PASPGP-5 permit in 2017 and the draft EA reviews the proposed amendment to the previously approved work. The authority to grant permission for temporary or permanent alterations to a federal project is set forth at Section 14 of the Rivers & Harbors Act of 1899 and codified in 33 USC 408 (Section 408). Corps review ensures that proposed alterations are neither injurious to the public interest nor would they affect the federal project’s ability to meet its authorized purpose.

Per Corps guidance, the agency analyzed two alternatives including a “No Action” alternative (denial of the Section 408 request) and Alternative 1, the Requester’s Preferred Alternative (granting of the Section 408 request). Outside of the 408 process, PennDOT must acquire any other necessary permissions or authorizations required by federal, state, and local laws or regulations, including any permits required by the Corps’ Regulatory Program.

This EA has determined that the proposed action (granting of the Section 408 request) will not result in significant impacts to the natural or human environment, and does not require the preparation of an Environmental Impact Statement (EIS). All environmental, social, and economic factors that are relevant to the proposal were considered in this assessment. These include, but are not limited to, water quality, noise, wetlands, wildlife, threatened and endangered species, and cultural resources. Anticipated impacts include temporary and permanent impacts to vegetation, temporary stream impacts, temporary impacts to aesthetics, recreation, land use, construction-related increases in noise,
emissions, and traffic, and negligible impacts to floodplains. Best management practices would be used to minimize effects, including temporary erosion control measures. No effects to public safety, wetlands, cultural resources or to threatened or endangered species are expected. Minor permanent benefits to local economic development would occur with the bridge replacement. Overall, effects are expected to be non-significant.

A 15-day public comment period occurred from 23 May 2018 to 7 June 2018. No comments were received.

After having carefully evaluated all aspects of the Proposed Action and based on the EA, I have reasonably concluded that the Proposed Action does not constitute a major federal action significantly affecting the quality of the human environment. Therefore, an environmental impact statement is not required and will not be prepared.

John P. Lloyd
Colonel, Corps of Engineers
Pittsburgh District Commander

2018-06-28
Date