

MEMORANDUM OF AGREEMENT
AMONG THE UNITED STATES ARMY CORPS OF ENGINEERS AND THE DELAWARE
STATE HISTORIC PRESERVATION OFFICE
PURSUANT TO 33 CFR § 325, APPENDIX C, 1, (g)(1) AND 36 CFR 800.6(b)(1) REGARDING
MODIFICATION OF DAMS 4 & 6 ON BRANDYWINE CREEK
CITY OF WILMINGTON, NEW CASTLE COUNTY, DELAWARE

WHEREAS, Brandywine River Restoration Trust (the “Applicant”) is proposing to remove a substantial portion of Dam 4 (Alapocas or Bancroft Mills Dam) and Dam 6 (DuPont Experimental Station or Rockford Park Dam) (the “Project”), located on Brandywine Creek in the City of Wilmington, New Castle County, Delaware; and

WHEREAS, the Project involves: (1) removing a substantial portion of Dam 4 and Dam 6 to provide suitable water depths, velocities, and variability to facilitate upstream fish passage; (2) placement of rock adjacent to Dam 4 and Dam 6; and (3) temporarily transporting, driving, and storing equipment and materials near the banks of the Brandywine Creek to facilitate construction; and

WHEREAS, the Project requires a Department of the Army, Nationwide Permit 27 (“NWP 27”), pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act (33 U.S.C. 1344), and the U.S. Army Corps of Engineers (USACE) is the responsible Federal Agency for issuing the permit; and the Philadelphia District, U.S. Army Corps of Engineers (“USACE”) is the responsible Federal Agency for issuing the permit; and

WHEREAS, the Project is considered an undertaking as defined in Section 106 of the National Historic Preservation Act (54 USCS § 300320), and is therefore subject to that law; and

WHEREAS, the USACE must demonstrate compliance with Section 106 of the NHPA prior to issuing any Department of the Army Permits, and is considering the effects of the Project on historic properties for the purposes of compliance with Section 106 of the NHPA as part of the overall permitting process; and

WHEREAS, pursuant to 36 CFR § 800.4(a) and 33 CFR § 325, Appendix C, 1, the USACE has established in consultation with the Delaware State Historic Preservation Office (DESHPO) that the Permit Area for the Project includes the limits of disturbance for all of the Project components and in this instance is equivalent to the Area of Potential Effects (APE); and

WHEREAS, the Applicant, in coordination with the USACE and the DESHPO, has executed cultural resources studies to identify properties listed in or eligible for listing in the National Register of Historic Places (NRHP); and

WHEREAS, the USACE pursuant to 36 CFR § 800.4 and in consultation with the DESHPO has determined that there are resources listed on or eligible for the NRHP within the APE and permit area for the Project; and

WHEREAS, Dam 4 (also known as the Kentmere/Bancroft II Dam) is a contributing resource to the Bancroft and Sons Cotton Mills Historic District (N03646) (NR: 12/20/1984), which is listed in the

NRHP, and has also been determined individually eligible for listing in the NRHP under Criteria A and C with significance at the local level (DESHPO Letter: 5/5/2022); and

WHEREAS, Dam 6 (also known as the Rockford Park Dam) has been determined eligible for listing in the National Register of Historic Places under Criteria A and C with significance at the local level (DESHPO Letter: 5/5/2022); and

WHEREAS, the Applicant, in coordination with the USACE and the DESHPO, has executed a Phase IB Archaeological Survey and determined that there are no sites within the APE and no further archaeological survey is needed in the upland section of the APE at both Dam 4 and Dam 6; and

WHEREAS, the USACE has contacted the Delaware Nation, the Delaware Tribe of Indians and the Stockbridge-Munsee Community, hereafter referred to as the Federally Recognized Indian Tribes (Tribes) to determine their interest in being a consulting party for this project; and

WHEREAS, the USACE has invited The City of Wilmington Historic Preservation Planning Office (the "City"), Delaware Greenways, the Wilmington State Parks within the Delaware Department of Natural Resources and Environmental Control (DNREC), Friends of Wilmington Parks, the Delaware Historical Society, Old Brandywine Village, Preservation Delaware Inc., the Lenape Indian Tribe of Delaware, and Wilmington City Council to be consulting parties for this Project, and, into formal consultation; and

WHEREAS, the USACE has consulted with the DESHPO, the Tribes, and other Consulting Parties regarding the scope and effects of the Project on historic properties and afforded them the opportunity to comment on the proposed Project and mitigation; and

WHEREAS, pursuant to 36 CFR § 800.5(a) and 33 CFR § 325, Appendix C, 7, the USACE has determined in consultation with the DESHPO, the Tribes and other Consulting Parties that the Project will result in adverse effects to Dam 4 and Dam 6; and

WHEREAS, the USACE has consulted with the DESHPO, the Tribes and other Consulting Parties in accordance with Section 106 of the NHPA, its implementing regulations (36 CFR § 800) and the USACE implementing regulations (33 CFR § 325 Appendix C, 8-10) to resolve the adverse effects of the Project at Dam 4 and Dam 6; and

WHEREAS, the USACE has notified the Advisory Council on Historic Preservation (ACHP) of the adverse effects determination on July 21, 2023 and invited the ACHP to participate in the consultation in accordance with 36 CFR Part 800.6(a)(1) and Appendix C, but declined to participate in the consultation pursuant to 36 CFR 800.6(a)(1)(iii) as indicated in their communication dated August 7, 2023; and

WHEREAS, the Applicant has participated in the consultation, has responsibilities for implementing stipulations under this Memorandum of Agreement (MOA), and has been invited to be a signatory to this Agreement.

NOW, THEREFORE, the USACE, the Applicant and the DESHPO agree that the Project shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

Stipulations

The APPLICANT will ensure that the following stipulations are implemented:

I. Stipulations

A. Archaeological Monitoring Protocol

The archaeological monitoring effort will be preceded by the preparation of an archaeological monitoring protocol that will outline the methods of dam documentation and reports and specify the contacts for the construction, engineering, and archaeological monitoring firms, the USACE, DESHPO, DNREC, and the City. The archaeological monitoring protocol must be reviewed and approved prior to implementation of archaeological monitoring during construction. Monitoring protocol must be sent via email to the USACE, DESHPO, DNREC and the City 45 days prior to construction for review and comment with final revisions completed within 30 days.

B. Construction Monitoring

Applicant will allow and fund archaeological monitoring during construction in accordance with the approved Archaeological Monitoring Protocol, particularly during any dewatering that may expose portions of the structure that are typically below the waterline. Monitoring will include photographic and scale-line drawing recordation of up to two (2) profiles of each dam dependent upon accessibility, water level, water turbidity, and worker safety conditions in the river; the completion of an archaeological site registration form for each dam, and artifact collection, if applicable. Monitoring will commence during dam removal and will continue until dam removal excavation activities have been completed in order to document sample profiles of the dam structures and any currently submerged archaeological structures in the river, such as former historic dams on the upriver side of Dams 4 and 6, that may be exposed and require removal. Applicant will provide a monitoring summary to the USACE, the DESHPO, the Tribes, and other Consulting Parties for review and comment within 6 months of construction completion.

The Applicant will ensure its contractors are aware of the historic nature of the Dam 4 and Dam 6 structures and the surrounding Historic District, will take steps to ensure no damage is done to elements of Dam 4 and Dam 6 that are not to be affected by the substantial removal.

C. Education and Outreach

1. Interpretive Panels

The Applicant will fund and oversee the placement of two or more permanent interpretive panels, at Dam 4 and at Dam 6, within the existing APE-Archaeology, explaining the historical significance of the dams with

reference to the portion of the dams still extant to inform passersby of the site's historical importance and the nature of the dams' construction. The Applicant will coordinate with DNREC and the City concerning the location and manner of installation. Applicant shall coordinate with the DNREC Division of Parks to ensure uniformity of signage with existing signage in the park and determine the number and size of the panels in order to maximize exposure to the public and contain required information.

The Applicant, in coordination with the USACE, will develop specific text and graphics for the interpretive panel in consultation with the DESHPO, the Tribes, DNREC and the City of Wilmington. The Applicant will submit, prior to or concurrent with commencement of construction of the Project, draft designs for the panel to the parties for a 30-calendar day review. The Applicant will finalize design of the interpretive panels once it has been approved by the parties and will install the panel within 3 months of the approval.

The panels will contain a QR Code that will link to a more detailed description of the historical significance of the Dams as part of the website being developed under Stipulation C.2 below.

2. Website

The Applicant will add information to its website (www.BRRT.org) that will reference and build upon the onsite interpretive panels developed under Stipulation C.1. The website will include information collected as part of the cultural resource surveys and contextual studies completed for the Project, addressing the historic industrial development of the Brandywine Creek and its many dams, as well as the importance of American Shad to pre-Contact period Native American groups and historic colonial/post-colonial communities. The website will also contain digital copies of the cultural resource reports completed for the Project, as well as a copy of the booklet to be developed under Stipulation C.3. All information relating to the location of archaeological sites shall be redacted from the reports before they are made available to the public. The Applicant will submit a draft of the content to consulting parties for a 30-calendar day review. The USACE will also host this information on a website within 6 months of receipt of final website design.

3. Booklet

The Applicant will develop a public-oriented booklet that examines the broad historical contexts within which the series of dams on the Brandywine were constructed. The booklet will utilize information developed for the Project's cultural resource surveys and explore topics such as colonial and post-colonial milling operations and the early importance of the creek to Native Americans for resource acquisition and trade/travel. A minimum of 100 copies of the booklet will be printed. The booklet will be posted on the BRRT

website (www.BRRT.org) and the USACE website. The Applicant will submit a draft of the content to consulting parties for a 30-calendar day review. Deliverables will be submitted within 6 months of final design approval.

4. Tours of Dams

The Applicant will offer and conduct a minimum of 1 educational tour per year of Dam 4 and Dam 6 in coordination with Delaware State Parks and free of charge for the public for a term of five (5) years. The tours will explain the mission of Brandywine River Restoration Trust, the historical significance of the dams, and the benefits of dam removal in restoring native fish passages. The Applicant will submit a draft of the content to consulting parties for a 30-calendar day review. First tour will take place within 6 months of the final design approval.

5. Public Presentation

The Applicant will organize a public presentation, in cooperation with other historical and/or preservation organizations in Delaware, to share historical information about the Lower Brandywine dams, including historical, architectural, and/or archaeological contexts and findings. The Applicant will submit a draft of the content and presentation plan to consulting parties for a 30-calendar day review. Public presentation shall be conducted within 6 months of final design approval.

II. Unanticipated Discoveries

If any unanticipated discoveries of historic properties or archaeological sites are encountered, or unanticipated effects to known historic properties occur during the implementation of this undertaking, the Applicant shall immediately (within 48 hours) notify the USACE. The USACE shall comply with 36 CFR § 800.13 and 33 CFR § 325, Appendix C, 11 by consulting with the DESHPO, the Tribes, and other Consulting Parties to develop and implement appropriate treatment of the discovery.

III. Review of Project Plans

Applicant shall provide copies of the final design plans of the Project to the DESHPO and the Other Consulting Parties. The USACE shall provide copies of the final design plans to the Tribes. The parties will have thirty (30) days from the receipt of materials to provide comments on the plans. The USACE and Applicant shall take into account any comments provided. Design will be finalized within thirty (30) days of review comments.

IV. Subsequent Changes to the Project

If Applicant proposes any changes to the Projects affecting location, design, methods of construction, materials, or footprint of the Projects, Applicant shall provide the

DESHPO, and other consulting parties identified later in time, with information concerning the proposed changes. The DESHPO and consulting parties will have thirty (30) days from the receipt of this information to comment on the proposed changes. Applicant shall take into account any consulting party comments prior to implementing such changes. Should changes occur, Applicant and the USACE, in consultation with the DESHPO, may need to redefine the Permit Area/APE beyond the areas defined in this MOA. The USACE shall consult with the DESHPO to identify and evaluate historic buildings, structures, sites and/or districts in any newly affected areas, and assess the effects of the Project thereafter, as applicable under 36 CFR 800.13. Changes will not be applied until the Applicant receives final approval email.

V. Administrative Conditions

A. Personnel Qualifications

The USACE shall ensure that all work conducted by the Applicant pursuant to Stipulations A and B of this MOA is approved by a person or persons meeting at a minimum the *Secretary of the Interior's Professional Qualification Standards* (48 FR 44738-9), and that all historic preservation work is approved by a person or persons meeting at a minimum the *Secretary of the Interior's Professional Qualification Standards for Historic Archaeology and Prehistoric Archaeology* (48 FR 44738-9). A copy of the selected professional's Curriculum Vitae shall be submitted to the USACE and the DESHPO prior to the completion of all stipulations.

B. Survey and Data Recovery Standards

The Applicant and USACE shall ensure that any and all cultural resource surveys conducted pursuant to this Agreement are done in accordance with the *Secretary of the Interior's Standards and Guidelines for Identification* (<https://www.nps.gov/articles/sec-stds-identification-guidelines.htm>), *Evaluation* (<https://www.nps.gov/articles/sec-stds-evaluation-guidelines.htm>), and for *Archaeological Documentation* (<https://www.nps.gov/articles/sec-standards-archaeo-doc-guidelines.htm>), as applicable, and in accordance with the DESHPO's *Architectural Survey in Delaware* (2015, or its successor) and *Archaeological Survey in Delaware* (2015, or its successor).

The Applicant and the USACE shall ensure that all draft and final cultural resource reports are provided to the DESHPO within two (2) years of the completion of any fieldwork. Draft and final cultural resource reports relevant to Native American Sites will also be provided to the Federally Recognized Indian Tribes.

VI. Amendments

Any party to this MOA may propose to the USACE that this MOA be amended, whereupon the USACE shall consult with the other parties to this MOA to consider such an amendment in accordance with 33 CFR § 325, Appendix C, 8 and 36 CFR § 800.6(c)(7).

VII. Resolving Objections

- A. Should any party to this MOA object in writing to the USACE regarding any actions carried out or proposed with respect to the Project or implementation of this MOA, the USACE shall consult with the objecting party to resolve the objection. If after initiating such consultation the USACE determines that the objection cannot be resolved through consultation, the USACE shall forward all documentation relevant to the objection to the ACHP including the USACE proposed response to the objection. Within 30 days after receipt of all pertinent documentation, the ACHP shall exercise one of the following options:
1. Advise the USACE that the ACHP concurs in the USACE proposed response to the objection, whereupon the USACE shall respond to the objection accordingly;
 2. Provide the USACE with recommendations, which the USACE shall take into account in reaching a final decision regarding its response to the objection; or
- B. Notify the USACE that the objection will be referred for comment pursuant to 36 CFR § 800.7, and proceed to refer the objection and comment. The resulting comment shall be taken into account by the USACE in accordance with 33 CFR § 325, Appendix C, 10(a), 36 CFR § 800.7(c)(4), and Part 110(1) of NHPA. Should the ACHP not exercise one of the above options within thirty (30) days after receipt of all pertinent documentation, the USACE may assume the ACHP's concurrence in its proposed response to the objection.
- C. The USACE shall take into account any ACHP recommendation or comment provided in accordance with this stipulation with reference only to the subject of the objection; the USACE responsibility to carry out all actions under this MOA that are not the subjects of the objection shall remain unchanged.

VIII. Review of Implementation

Applicant shall provide the USACE and DESHPO a written review of the project annually, to monitor progress of the implementation of the terms of this Agreement.

If the stipulations have not been implemented within ten (10) years after execution of this MOA, the parties to this agreement 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 § 800 and 33 CFR Part 325, Appendix C to make such revisions.

IX. Duration

This MOA shall remain in force until its stipulations have been fulfilled. This time period shall not exceed ten (10) years from the date of the final signature. Within six (6) months prior to the end of this ten-year period should any stipulations remain

unfulfilled, the parties to this MOA will consult to determine if extension or other amendment of the MOA is needed. No extension or amendment will be considered in effect unless all the signatories to the MOA have agreed to it in writing.

X. Termination

- A. If the USACE determines that it cannot implement the terms of this MOA, or if the DESHPO determines that the MOA is not being properly implemented, the USACE or the DESHPO may propose to the other parties to this MOA that it be terminated.
- B. The party proposing to terminate this MOA shall so notify all parties to this MOA, explaining the reasons for termination and affording them at least thirty (30) days to consult and seek alternatives to termination. The parties shall then consult.
- C. Should such consultation fail, the USACE or the DESHPO may terminate the MOA by so notifying all parties.
- D. Should this MOA be terminated, the USACE shall either:
 - 1. Consult in accordance with 33 CFR § 325, Appendix C, 8 and 36 CFR § 800.6(a)(1) to develop a new MOA; or
 - 2. Request the comments of the ACHP pursuant to 33 CFR § 325, Appendix C, 8 and 36 CFR § 800.7(a)(1). The ACHP shall have forty-five (45) days to respond with comments.
- E. The USACE and the ACHP may conclude the Section 106 process with a MOA between them if the DESHPO terminates consultation in accordance with 36 CFR § 800.7(a)(2).

Execution of this MOA by the USACE, APPLICANT and the DESHPO and implementation of its terms evidence that the USACE has taken into account the effects of the undertaking on historic properties and APPLICANT'S Section 106 requirements for permitting the Project will be fulfilled.

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REGARDING MODIFICATION OF DAMS 4 & 6 ON BRANDYWINE CREEK
CITY OF WILMINGTON, NEW CASTLE COUNTY, DELAWARE

UNITED STATES ARMY CORPS OF ENGINEERS

By: LANDIS.MICHAEL.A.1 229059188 Digitally signed by
LANDIS.MICHAEL.A.1229059188 Date: 2023.09.19 15:46:20 -04'00' Date: 19 September 2023

Name: Mr. Michael A. Landis, Chief, Operations Division

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CITY OF WILMINGTON, NEW CASTLE COUNTY, DELAWARE

DELAWARE STATE HISTORIC PRESERVATION OFFICE

By: Suzanne Savery, Director Digitally signed by Suzanne Savery,
Director Date: 2023.09.20 11:25:45 -04'00' Date: 09/20/2023

Name: Suzanne Savery, State Historic Preservation Officer

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BRANDYWINE RIVER RESTORATION TRUST

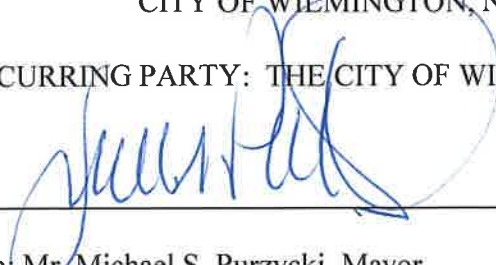
By: **James B Shanahan** Digitally signed by James B Shanahan
Date: 2023.09.22 14:59:23 -04'00'
Adobe Acrobat version: 2023.006.20320 Date: 9/22/2023

Name: Mr. James B. Shanahan, Executive Director

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CITY OF WILMINGTON, NEW CASTLE COUNTY, DELAWARE

CONCURRING PARTY: THE CITY OF WILMINGTON

By: _____



Date: _____



Name: Mr. Michael S. Purzycki, Mayor