Bancroft Pedestrian Bridge over the Brandywine Creek



Date: March 28, 2023



Introduction to Speakers



Barry Benton, PE Project Director GPI



Christie Bonniwell, PWS Environmental Scientist GPI



Introduction to Speakers

- Project Role: Project Director
- Education: BS/Civil Engineering/University of Delaware
- Professional Registrations: PE (DE, MD, NY)
- Experience: 30 years in the industry
 - Retired from DelDOT after 25 years
 - Served as the State Bridge Engineer for 5 years
 - Served on AASHTO Committee of Bridges and Structures for 13 years, including 3 years on the Executive Committee
 - Panel Chair for 2 NCHRP projects (culvert joints and ancillary structures)
 - o Bridges, pedestrian bridges (steel, concrete, timber), roadways, culverts, H&H





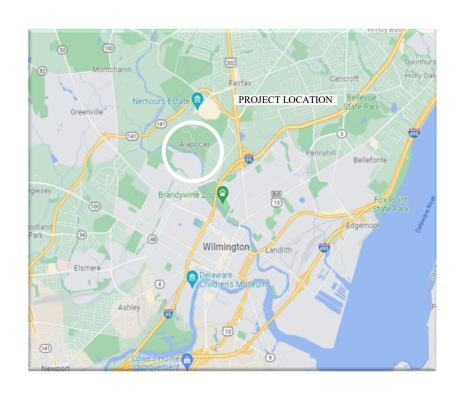
Introduction to Speakers

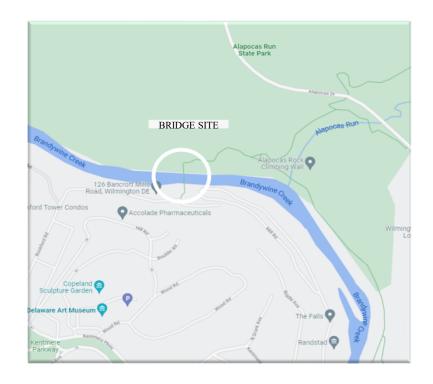
- Project Role: Environmental Scientist
- Education: BS/Natural Resources/Delaware State Univ.
- Professional Registrations: PWS
- Experience: 14 years in the industry
 - Public and private sector natural resource and transportation experience
 - Wetlands, rare, threatened & endangered species, natural resource permitting, wetland mitigation, stream restorations
 - NEPA expert





Bancroft Pedestrian Bridge over the Brandywine Creek







8/26/21 - 9/4/21	Heavy rains and flooding from Hurricane Ida
9/7/21	Preliminary damage inspection performed by DNREC. Bridge closed.
9/13/21	Storm damage assessment by Century Engineering. Recommended bridge remain closed.
10/21	GPI commissioned to evaluate alternatives to get the bridge reopened.



Section 106 coordination with Delaware State Historic Preservation Office (SHPO) began and ongoing

Bridge Alternatives Report submitted to DNREC with recommended alternative

Public Meeting to discuss GPI's findings, recommended alternative and path forward

GPI received Notice to Proceed to begin work on Survey, Soil borings and Environmental disciplines



07/22

Soil borings taken at South side near Condos, and North side in the Alapocas Park; Soil testing to determine design parameters

07/22

Environmental assessment begins, wetland and waterway delineations, tree survey in the Alapocas Park

08/22 and 09/22

Survey work begins in Alapocas Park, and at South end near the condos

08/22 and 09/22

Assessment of Constructability, Access methods, Crane sizing, impacts to Environment



^{09/22} Section 106 Historic Architectural Evaluation begins

^{09/22} Environmental Permitting Work begins



Section 106 Evaluation

- Part of the National Historic Preservation Act (NHPA)
- Requires all federal undertakings to include the effect of the project on cultural resources



DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

Section 106 Evaluation



Bancroft Mills Pedestrian Bridge (CRS # N03646.046) National Register of Historic Places Eligibility Assessment



CHAD Report published in January 2023

Bancroft bridge eligible for National Register of Historic Places



Section 106 Evaluation

- DNREC's intended scope of work sent to FEMA in February 2023
- Intend to replace the bridge, which will be considered Adverse Effect (negative impact to historic properties)
- Consultation between FEMA and Delaware SHPO to evaluate mitigation measures for Adverse Effect



Project funding agency and Lead agency to acquire and submit the project SHPO for review and concurrence

Delaware State Historic Preservation Office

THCA

DELAWARE HISTORICAL
& CULTURAL AFFAIRS

Saving Delaware History



Permitting - Concurrent Activities





Verbal response from Coast Guard that no permitting will be required. Waiting for official response



Anticipated Time of Year Restrictions During Construction



Northern Long Eared Bat



Migratory Birds



Anadromous fish species







Northern Copperhead



Anticipated Time of Year Restrictions During Construction

RTE Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Anadromous Fish												
Migratory Birds												
Northern Long Eared Bat												
Northern Copperhead												
Nesting Birds												



Anticipated Construction Window



Path Forward.....

 Consultation between FEMA and SHPO to determine mitigation measures for Adverse Effect

16

- FEMA to host a Public Meeting as part of Section 106 process to discuss mitigation measures
- Complete design of Option 3 Bridge Replacement
- NEPA evaluation by FEMA
- Procure all permits
- Bid Advertising phase and Project Award
- Begin Construction



Revised Project Schedule

Preconstruction Activities Detailed field survey and property lines mosaic Construction **Procurement** Geotechnical data (soil boring) H&H Report Advertisement Structural design and plan preparation Award Permitting (wetlands, subaqueous rare, Notice to Proceed threatened and endangered species, NCC floodplain, etc.) Cultural resources Plans, specifications, and estimate **April 2025** March 2022 **April August** 2024 2024 (Open Bridge) (Begin Design)

DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

Thank you for your time and attention QUESTIONS?

Contact Information

Brooks Cahall

DNREC, Capital Program Administrator, Division of Parks and Recreation

E-mail: <u>Brooks.Cahall@Delaware.gov</u>

Phone: 302-739-9210



