

BRIDGE ADVISORY COMMITTEE MEETING  
MINUTES  
05/08/17

IN ATTENDANCE:

Bridge Advisory Committee (BAC) Members:

Jim Schatz (Facilitator), Deborah Brewster, John Chapman, Lynne Clark, Bill Cousins, Vaughn Leach, Stephen Rappaport, Lori Sitzabee, Karen Wyatt

Blue Hill Historical Society: R. Sawyer

Department of Transportation (MDOT): Wayne Frankhauser, David Gardner,  
Andrew Lathe, Michael Wight

Federal Highway Administration (FHWA): Cassie Chase, Cheryl Martin

Haight Farms: Courtenay Haight

HNTB: Kevin Brayley, Tim Cote

Kleinfelder: Amanda Taylor

Maine Historic Preservation Commission: Arthur Spiess

Penobscot Nation THPO: Chris Sockalexis

Public: Thom McLaughlin, D. Scott Miller, Anne Nevin, Dolores Seymour

Weekly Packet: Anne Berleant

Blue Hill Town Office: Deb Boyd

Old Business

- Field Trip to Falls Bridge on 04/24/17.
- Minutes from 04/13/17 Meeting were distributed to BAC members.

New Business

- Work Groups  
Jim asked BAC Members to list challenges for the Falls Bridge endeavor:

Group I      (Lynne / Vaughn)

Speed Conditions after Fix  
Pedestrian Safety  
Parking  
Appropriate (Bridge) Width  
Rate of Deterioration  
Space for Temporary Bridge

Group II (Deborah / Lori)

Process (Navigating to Address Challenges and Issues  
Contending with Emotional and Historic Attachments  
Outreach to as Many Voices as Possible  
Securing Funding for "Extras"  
Deployment of Emergency Services during Construction

Group III (John / Bill / Steve)

Location of Temporary Bridge  
Duration of Building Project  
Preservation of Important Archeological and Architectural  
Features Association with the Bridge and its Surroundings  
Preserving "View Shed" Around and Near the Bridge

Public Hydrology Pertaining to The Falls

Andy asked BAC member if anything stood out to them after their tour of the bridge.

At North side, when the tide is in, water shoots through the walls / Velocity on existing structure;

Utility wires on East side.

Topic Presentation: Archaeological Significance by Arthur Spiess

- Looting  
Generally prevent site location and details from public knowledge to prevent looting. Falls Bridge archaeological sites are public knowledge and locations are highly visited, especially in the summer. Need to monitor regularly, with local help. Landowners are protective of the archaeology, and wish to be left in peace.
- Stone Artifact Discovery  
Around 1924, an iron-truss bridge was replaced with a concrete arch bridge at Blue Hill's reversing falls. In 1926, a person named Mitchell found a stone artifact on the east side of the bridge.
- Nevin Site Artifacts  
In 1936 and 1937, archaeological excavations resulted in collections at two museums in Massachusetts, and a portion repatriated to the Penobscot tribe.

- 2014-16 Archaeology Findings - Maine Historic Preservation Commission

Southern Bridge Approach - No significant archaeology within possible area of impact of bridge replacement project along southern approach to the bridge. East (under Crocker Nevin's lawn/landscaping) and west (only scattered material) of the road, there are findings of prehistoric or pre-European Native American archaeological material, but findings are out of the way or not significant.

Northern Bridge Approach – Has 3 sites of significant importance that extend up to or underneath the bridge approach road:

NEVIN SITE (East Side)

Owner: Crocker Nevin

Consultant: Chris Sockalexis, Archaeologist and  
Penobscot Tribal Historic Preservation Officer

Stratified (Layered) Shell Midden:

Oldest/Lowest Layer, approximately 4200 years old.

Youngest Layer, approximately 1000 years old.

"Shell Midden" – shellfish remains were discarded on the site; the neutralizing effect of the shells preserves bone tools, food animal bone and other bone.

Inventory from 1936-1937 Dig, dates back 4200 years

Ground and chipped stone knives, spearpoints, fishing weights, pottery, and bone tools (beaver-tooth knives, sewing needles, harpoons, and slotted swordfish fore shafts). These findings are rare; coastal sites normally don't have enough shell to neutralize the soil to preserve the bone

Graves

Graves date back 4000 years and are major concern of the Tribe. In 2015 testing, no graves were found next to the road; not an issue for the road reconstruction, as designed.

Rising Sea Level Since the End of the Last Ice Age

Sea level 5-6 feet higher now than 4000 years ago. Tide amplitude (difference between high & low tide) was smaller then (1-2 feet) compared to now (9-13 feet). Fishing 4000 years ago from dugout canoes, composite harpoons (made from swordfish sword) were used to catch alewives, sturgeon and swordfish. Gulf of Maine surface waters were warmer then, and Salt Pond was actually a fresh-water

lake. About 1000-2000 years ago, sea levels and tidal amplitude increased, and people enjoyed the beginnings of the reversing falls.

4000 Years-Old and Older Sites are Rare Due to Sea Level Rise  
After 1936-1937 dig, is there more material and information that we can extract today that was missed in 1936? How close to the road do the archaeological layers come? From 8 test pits in 2015, 7 had archaeological material in them. Archaeology team located exact edge of 1936-37 dig and saw cut and backfill from 1936-37 excavation in vertical walls of two test pits. Swath of un-dug land between 1936-37 dig and the road has intact, unexcavated material dating back 4200 years.

#### Utilities, Drainage and Drainage Ditching

Maine Historic Preservation Commission urges MDOT to be careful about installing utilities, drainage and drainage ditching on the Nevin site side of the road. If fill is necessary, it needs to be placed gently over geotextile to avoid compaction to the Nevin site.

#### LUSKEY SITE (West Side)

Owners: Ann Luskey  
Sean & Chris Guinness  
K. & Melissa Guinness

#### Inventory from 2015 Dig (Phase I)

Pre-historic stone tools, English pottery (Revolutionary War)

#### Inventory from 2016 Dig (Phase II)

Wigwam (3x4 yards) floor (2000 years old), fire hearth, pit features, post holes, Native pottery, trash Midden, faint stain of historic structure wooden sill, and Revolutionary War era artifact fragments that are the stone foundation of John Roundy's cabin.

#### On-going Laboratory Work

Reconstructing hunting/fishing patterns (from 2000 years ago) from burned animal food bone and charcoal.

ROUNDY SITE: (West Side)

Structure 1

In 1762, John Roundy and Joseph Wood came to Blue Hill from Beverly, Massachusetts. They built a temporary structure, clearing land on Falls Island. Roundy's historic wooden sill was possibly found at the Luskey site.

Structure 2

In 1763, John Roundy built a house on a stone foundation, which he and his family occupied until 1770-71. John Roundy dismantled the house, leaving behind half of a pair of dividers and a piece of chalk, presumably tools of his house wright trade (per census records).

Inventory from 2016 Dig

Daub (clay lining) for possible daub-lined chimney, shot and gun flints

Topic Presentation: Architectural Significance by Amanda Taylor

- Section 106 of the National Historic Preservation Act (NEPA)  
Federal agencies must consider project impacts on historic properties:
  - Extends up and down road, 100 feet, side to side
  - Check properties 45 years and older
  - Apply criteria:
    - Criterion A Associated with events that have made a significant contribution to the broad patterns of history
    - Criterion B Associated with the lives of persons significant in our past
    - Criterion C Embodies a distinctive type, period, method of construction; represents work of a master; possesses high artistic values
    - Criterion D Yielded, or likely to yield, information important in pre-history or history

31 Areas of Significance

## 7 Aspects of Integrity

Location, Design, Setting, Materials, Workmanship, Feeling, Association

## Determination of Effect

Federal Highway Administration (FHWA) and Department of Transportation (DOT) are responsible for applying Adverse Effect criteria in consultation with the State Historic Preservation Office (SHPO), the Tribal Historic Preservation Office (THPO), and consulting parties

Adverse Effects (are based on action's impact on characteristics that qualify it for listing)

Examples:

Direct – Take, remove, demolish

Indirect – Atmospheric, audible and visual elements

## Mitigation

If project results in Adverse Effects, FHWA, DOT, SHPO and THPO negotiate appropriate stipulations (recordings, documentation, interpretive panels, booklets, use of Secretary of Interior Standards for design) to mitigate. Consulting Parties may provide input on stipulations.

## Other Determining Factors

Endangered species, bridge condition and functionality, critical habitats, contaminated soils, water quality

- Blue Hill Falls Bridge (Historic Property)

National Register-Eligible

Criterion C

Area of Significance: Engineering

Level of Significance: State

Period of Significance: 1926-c.1960

Character Defining Features:

Concrete-tied arch thru bridge

Granite-faced concrete abutments

Ashlar wingwalls

Concrete rail

Tidal Setting

- Arcady (Historic Property)
  - National Register-Eligible
  - Criteria A & C
  - Area of Significance: Architecture, Entertainment/Recreation, and Landscape Architecture
  - Level of Significance: Local
  - Period of Significance: 1903-c.1960
  - Character Defining Features:
    - Renaissance Revival-style
    - Stucco exterior
    - 3-terraced lawn with limestone staircases and landscaped elements
    - Garage and Guest House
  
- Wakonda (Historic Property)
  - National Register-Eligible
  - Criteria A & C
  - Area of Significance: Architecture, Entertainment/Recreation
  - Level of Significance: Local
  - Period of Significance: 1903-c.1960
  - Character Defining Features:
    - Queen Anne-style architectural features and massing
    - Wooded setting
  
- Blue Hill Falls Historic District (all 3 Historic Properties together)
  - Criteria A & C
  - Area of Significance: Architecture, Engineering, Entertainment/Recreation, and Landscape Architecture
  - Level of Significance: Local / State
  - Period of Significance: 1903-c.1960
  - Character Defining Features:
    - High-style architecture
    - Coastal and wooded setting
    - Landscape architect-designed gardens
    - Concrete-tied arch thru bridge

#### Group Discussion

- Adverse Effect
  - If parties don't agree, sent to Advisory Council.
  - Is there an Appeals Process?
  
- Build bridge like existing bridge using 2017 technology

- Survey Results

BAC Committee Members were asked to complete a survey concerning:

Pedestrian and bicyclist access at the Falls Bridge  
(consensus: not safe);

Parking along the shoulder  
(Consensus: not safe);

Physical characteristics, comfort & image  
(Varied responses);

Recreational use & activities  
(Consensus: agreed); and

Maintaining traffic during construction  
(Consensus: agreed)

- Design Matrix

Tim Cote briefly reviewed layout of Matrix. He asked BAC to give thought to archeological and architecture aspects to be discussed at next meeting.

Next Meeting: Monday, 05/22/17, 6-8pm

Public Comment – None

Adjourned at 8pm