# Supplemental Supporting Information for a Finding of Effect

Blue Hill 17712.00

Scope: Bridge Improvements Finding: **Adverse Effect** 

## **Purpose and Need**

The purpose of the project is to address the structural deficiency of the Blue Hill Falls Bridge #5038 and improve public safety within the project limits in a cost-effective manner. A successful project will provide a bridge capable of carrying all legal loads, will not require additional capital improvements for at least 25 years, will achieve a minimum remaining service life of at least 50 years, and will improve site safety for pedestrians and motorists.

The need for the project is because the rating condition for the bridge elements are: 5 (fair for the concrete superstructure and 4 (poor) for the stacked stone substructure, and 4 (poor) for the concrete deck. Further deterioration of the bridge elements may require a load posting. The bridge spans over a reversing falls that is a local tourist attraction and there are no pedestrian accommodations at the site which creates a site safety hazard.

# **Proposed Action**

This alternative (Alternative 3-A) would replace the existing bridge with an enhanced girder bridge using Accelerated Bridge Construction (ABC). The new bridge would be 110' long and 30' wide. It would significantly improve motorist sight lines. The replacement bridge would have an anticipated service life of 100 years. The bridge would have a precast arched panel facing. The total construction duration for this alternative would be 12 to 24 months with an off-site detour for 50 to 60 days. Construction cost estimates would total \$5,300,000.

#### **Federal Action**

Federal funding.

# **Definition of Area of Potential Effect (APE)**

The proposed project is located in Blue Hill. The map below shows the project's Area of Potential Effect (APE).

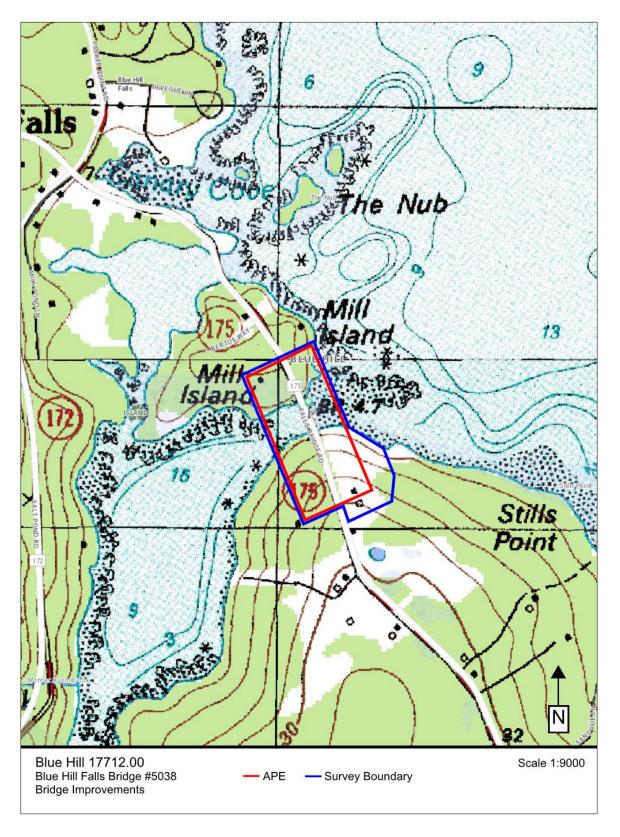


Figure 1. Blue Hill 17712.00 Northern Area of Potential Effect

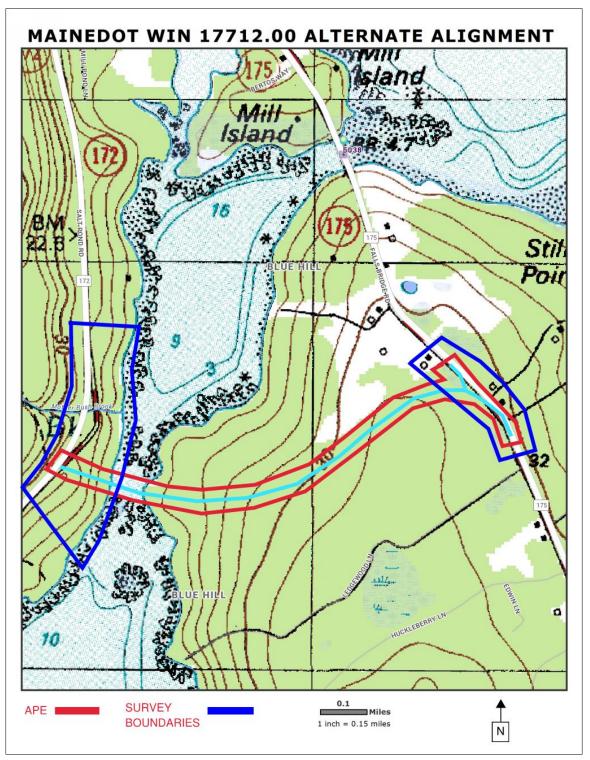


Figure 2. Blue Hill 17712.00 Southern Area of Potential Effect

## **Historic Properties**

The proposed project is located in Blue Hill. The following descriptions of historic properties found within the project area are based on Maine Historic Preservation Commission (MHPC) historic resource forms and reports.

## Blue Hill Falls Historic District (Various Owners)

National Register-Eligible

Criteria A & C, Architecture, Engineering, Landscape Architecture, Recreation/Culture The Blue Hill Falls Historic District contains three historic properties. The district contains Arcady, a 1903 Renaissance Revival-style house with landscaped grounds and high style outbuildings; Wakonda, a 1904 Queen Anne-style cottage; and the Blue Hill Falls Bridge #5038, a 1926 concrete tied arch. Anne Paul Nevin, widow of famed composer and pianist Ethelbert Nevin, built Arcady as a summer estate and enlisted local architect William Hinkley for the design. Nevin also built Wakonda as a residence for summer guests. The two residences are connected by Route 175 via the Blue Hill Falls Bridge. The period of significance is 1903 to 1968.

# Blue Hill Falls Bridge #5038, Falls Bridge Road (State of Maine)

National Register-Eligible

Contributing Resource, Blue Hill Falls Historic District

Criterion C, Engineering

The 1926 Blue Hill Fall Bridge #5038 is a concrete tied arch bridge. It sits on granite ashlar faced concrete abutments with granite ashlar wingwalls. The bridge is 114' long and 26.5' wide. The arch consists of two parallel ribs that are tied by reinforced concrete girders, which resist the thrust of the arch. An uncommon design element on this bridge is the use of shoes where the ribs tie into the girders. The shoes consist of concrete encased steel castings and a built-up member into which the reinforcing bars of the ribs and girders are tied and the stresses are greatest. The bridge has a concrete balustrade. The bridge was completed under the leadership of Maine State Highway Commission state bridge engineer Llewellyn Edwards. Only four concrete tied arch bridges were constructed in the State of Maine. This bridge is one of two remaining in Maine currently. Its period of significance is 1926 to 1968.

# Arcady, 158 Falls Bridge Road (Crocker Nevin)

National Register-Eligible

Contributing Resource, Blue Hill Falls Historic District

Criteria A & C, Architecture, Landscape Architecture, Recreation/Culture

The Arcady estate is centered on a two-story, five-bay Renaissance Revival-style house, fashioned after a Tuscan villa. The house has a stucco exterior, twin exterior chimneys, a two-story loggia facing the front façade, side entrance with projecting arched entry porch, and deep overhanging bracketed eaves. The house faces Blue Hill Bay with a three-tiered lawn sloping away from the front loggia. Each terrace is defined by carved limestone balustrades set to either side of a limestone staircase. The balustrades are adorned with sculpted urns. Several benches and large amphorae are scattered around the terraces. The estate also includes a one-story garage and a guest cottage, both with Renaissance Revival-style elements. Anne Paul Nevins, widow of famed composer and pianist Ethelbert Nevin,

built Arcady as a summer estate and enlisted local architect William Hinkley for the design. Its period of significance is 1903 to 1968. Note: The northwest corner of the property has changed and is not reflected in the attached plans. The steps on the northwest corner near the existing guardrail have been removed. From the existing guardrail north approximately 300 feet, the row of trees lining the road have been removed. These actions were completed at the request of the owner. Some trees have been replanted in a row outside of the MaineDOT right-of-way.

## Wakonda, 119 Falls Bridge Road (Ann Keating Luskey)

National Register-Eligible

Contributing Resource, Blue Hill Falls Historic District

Criteria A & C, Architecture, Recreation/Culture

The Wakonda property consists of a Queen Anne-style cottage and changing house. The main house is two-stories with a compound roof, scroll-sawn projecting rafter tails, jerkinhead gables, shed dormers, and brick chimney. The house is clad in wood shingles and has low band molding surrounding each window and door casing and a slight bow above each exposed window. It also has a hipped roof wraparound porch. The changing house is two stories tall and also features a jerkinhead roof and is clad in wood shingles. Anne Paul Nevin, widow of famed composer and pianist Ethelbert Nevin, built Wakonda as a residence for summer guests. Its period of significance is 1904 to 1968.

# 203 Falls Bridge Road (Chris & Paula Niehoff)

National Register-Eligible

Criteria C, Architecture

The house and barn at 203 Falls Bridge Road are eligible for listing in the National Register under Criterion C for Architecture. The house is an intact example of mid-1800s vernacular architecture with an Italianate-style entry porch. The house retains a high level of integrity with clapboard siding, two-over-one windows, and a granite foundation. It also has a side-ell and engaged upper story screened in sleeping porch. The front entry porch has turned wood columns and railing. A small wood-shingled New England barn is located on the property and a substantial stone wall in the front yard runs parallel to the road. The house at 203 Falls Bridge Road was built by Israel Friend (1808-1865). The Friend family was one of the early settlers of Blue Hill, with Israel's grandfather arriving in Blue Hill in the 1770s from Massachusetts. The period of significance is c.1850 to c.1900.

#### Archeological Resources

Nevin Site (42.1)

National Register-Eligible

Criterion D, Prehistoric

The Nevin Site is a rare Late Archaic Period and Woodland archaeological site that dates from 4,200 to 1,000 years ago. The site is rare as sea level rise has greatly reduced the availability of coastal sites from this timeframe. The site also contains artifacts dating to the Penobscot Nation and pre-European settlement, including the Wabanaki. Further adding to the site's intact nature is that shell fragments in the soil have reduced the acidity

of the soil. The site would contribute invaluable information about Late Archaic and Woodland societies, history, and settlement patterns.

John Roundy House Site (ME 045-005, 42.117) National Register-Eligible

Criterion D, Exploration/Settlement

The John Roundy Site is located west of Route 175 and consists of John Roundy's settlement sites in 1762 and 1763 in Blue Hill. The site includes the sill trenches for 1762 "hut" erected by John Roundy or other early settler Joseph Wood, and John Roundy's 1763 fieldstone house foundation. The site also includes and extensive trash midden. Roundy, who was active in Blue Hill town governance for many years, remained at this location until 1770 or 1771 when he relocated his family to a recently purchased 80-acre lot on Blue Hill Neck. The site is eligible for listing in the National Register under the Draft Farmstead Context of the State Plan because it represents first-wave English settlement in Blue Hill, was occupied by a single family over a short period of time, and its deposits are intact.

*Luskey Site* (42.116)

National Register-Eligible

Criterion D, Historic-Aboriginal

The Luskey Site is a multi-component, pre-contact Native American site west of Route 175. The site includes a semi-subterranean house pit/wigwam feature, hearths, trash pits, and post holes. The site was first occupied during the Middle Archaic period with additional artifacts dating to the Moorehead Phase, Susquehanna tradition, and Middle Ceramic period. The site is eligible for the National Register under the Ceramic Period context of the State Plan because its deposits are intact, its components are horizontally separable, and several of its features have yielded charred botanical remains that can be dated by radiocarbon.

## **Proposed Alternatives**

No Build

The No Build alternative takes no action and does not meet the purpose and need of the project and was therefore removed from further consideration.

Bypass

This alternative would reroute Route 175 and construct a new roadway section with a new crossing at Salt Pond. This alternative would provide repairs to the Falls Bridge, including skim coat and patching. MaineDOT and FHWA would seek a new owner for the Falls Bridge and require a commitment to maintain it following Secretary of the Interior Standards for the Treatment of Historic Properties, and establish use, either as a roadway or pedestrian bridge. The new bridge would be approximately 520' long and the new roadway would be 32' wide. Construction duration would be 18 to 24 months with an estimated construction cost of \$14,400,000. This alternative was dismissed as a new owner for the Falls Bridge would likely not be found. In addition, this alternative would have require substantial in-water work and would cost 64% more than the

preferred alternative. For these reasons, this alternative was dismissed from further consideration.

#### Rehabilitation A

This alternative would rehabilitate the Falls Bridge. The alternative would retain the existing bridge and roadway width. The roadway profile would be elevated and would raise the bridge 4' to accommodate sea level rise. All work on the Falls Bridge would meet the Secretary of the Interior Standards for the Treatment of Historic Properties and include in-kind replacement of bridge materials. A crash rated rail system would be installed, likely a concrete Texas rail. The rehabilitated bridge would have an estimated 50-year service life. This alternative would have a construction duration of 18 to 24 months. The alternative would require an 18 to 24 months off-site detour. Estimated construction costs would be \$8,100,000. In comparison with the preferred alternative, this alternative would have less improvements for pedestrian and motorist safety, required more in-water work, and approximately 35% more construction costs. For these reasons, this alternative was dismissed from further consideration.

## Rehabilitation A-1

This alternative would rehabilitate the Falls Bridge. The alternative would retain the existing bridge and roadway width. The roadway profile would be elevated and would raise the bridge 4' to accommodate sea level rise. All work on the Falls Bridge would meet the Secretary of the Interior Standards for the Treatment of Historic Properties and include in-kind replacement of bridge materials. A crash rated rail system would be installed, likely a concrete Texas rail. The rehabilitated bridge would have an estimated 50-year service life. This alternative would have a construction duration of 18 to 24 months. The alternative would an on-site temporary bridge. Estimated construction costs would be \$8,900,000. In comparison with the preferred alternative, this alternative would have less improvements for pedestrian and motorist safety, more impacts to the John Roundy House and Luskey archaeology sites, required more in-water work, and approximately 41% more construction costs. For these reasons, this alternative was dismissed from further consideration.

#### Rehabilitation B

This alternative would rehabilitate the Falls Bridge and add a 5' sidewalk to the crossing. This alternative would increase the roadway width to 25'. The roadway profile would be elevated and would raise the bridge 4' to accommodate sea level rise. All work on the Falls Bridge would meet the Secretary of the Interior Standards for the Treatment of Historic Properties and include inkind replacement of bridge materials. A crash rated rail system would be installed. The rehabilitated bridge would have an

estimated 50-year service life. The sidewalk would be added via an independent metal pedestrian bridge located to the west of the Falls Bridge. This alternative would have a construction duration of 18 to 24 months. It would require an 18 to 24 months off-site detour. Estimated construction costs would be \$8,300,000. In comparison with the preferred alternative, this alternative would have less improvements to motorist safety, more in-water work, and have approximately 37% more construction costs. For these reasons, this alternative was dismissed from further consideration.

#### Rehabilitation B-1

This alternative would rehabilitate the Falls Bridge and add a 5' sidewalk to the crossing. This alternative would increase the roadway width to 25'. The roadway profile would be elevated and would raise the bridge 4' to accommodate sea level rise. All work on the Falls Bridge would meet the Secretary of the Interior Standards for the Treatment of Historic Properties and include inkind replacement of bridge materials. A crash rated rail system would be installed. The rehabilitated bridge would have an estimated 50-year service life. The sidewalk would be added via an independent metal pedestrian bridge located to the west of the Falls Bridge. This alternative would have a construction duration of 18 to 24 months. It would require an on-site temporary bridge. Estimated construction costs would be \$9,100,000. In comparison with the preferred alternative, this alternative would have less improvements for motorist safety, more impacts to the John Roundy House and Luskey archaeology sites, more in-water work, and approximately 42% more construction costs. For these reasons, this alternative was dismissed from further consideration.

# Replacement 1-A

This alternative would replace the existing bridge with an enhanced girder bridge with conventional construction. The new bridge would be 110' long and 30' wide and its profile would be 4' higher than the existing bridge to accommodate sea level rise. It would significantly improve motorist sight lines. The bridge would have a precast arched panel facing. The replacement bridge would have an anticipated service life of 100 years. This alternative would have a total construction duration of 18 to 24 months and require an off-site detour. Construction cost estimates total \$3,800,000. In comparison with the preferred alternative, this alternative would have more in-water work and a longer off-site detour. For these reasons, this alternative was dismissed from further consideration.

#### Replacement 1-B

This alternative would replace the existing bridge with an enhanced girder bridge with conventional construction. The new bridge would be 110' long and 30' wide and its profile would be 4' higher than the existing bridge to accommodate sea level rise. It would

significantly improve motorist sight lines. The bridge would have a precast arched panel facing. The replacement bridge would have an anticipated service life of 100 years. This alternative would have a total construction duration of 18 to 24 months and require a temporary on-site bridge. Construction cost estimates total \$4,600,000. In comparison with the preferred alternative, this alternative would have more in-water work and require more impacts to the John Roundy House and Luskey archaeology sites. For these reasons, this alternative was dismissed from further consideration.

# Replacement 2-A

This alternative would replace the existing bridge with a metal tied arch bridge with conventional construction. The new bridge would be 110' long and 30' wide and its profile would be 4' higher than the existing bridge to accommodate sea level rise. It would improve motorist sight lines. The replacement bridge would have an anticipated service life of 100 years. This alternative would have a total construction duration of 18 to 24 months. It would require an 18- to 24-month off-site detour. Construction cost estimates total \$6,100,000. In comparison with the preferred alternative, this alternative would provide less improvements for motorist safety, more in-water work, and approximately 14% more construction costs. For these reasons, this alternative was dismissed from further consideration.

# Replacement 2-B

This alternative would replace the existing bridge with a metal tied arch bridge with conventional construction. The new bridge would be 110' long and 30' wide and its profile would be 4' higher than the existing bridge to accommodate sea level rise. It would improve motorist sight lines. The replacement bridge would have an anticipated service life of 100 years. This alternative would have a total construction duration of 18 to 24 months. It would require an on-site temporary bridge. Construction cost estimates total \$6,900,000. In comparison with the preferred alternative, this alternative would have less improvements for motorists safety, more impacts to the John Roundy House and Luskey archaeology sites, more in-water work, and have approximately 24% more construction costs. For these reasons, this alternative was dismissed from further consideration.

#### Replacement 3-B

This alternative would replace the existing bridge with a metal tied arch bridge using ABC. The new bridge would be 110' long and 30' wide. It would improve motorist sight lines. The replacement bridge would have an anticipated service life of 100 years. The total construction duration for this alternative would be 18 to 24 months with an off-site detour for 50 to 60 days. Construction cost estimates

would total \$7,000,000. In comparison with the preferred alternative, this alternative would have less improvements for motorist safety and approximately 25% more construction costs. For these reasons, this alternative was dismissed from further consideration.

# **Impacts to Property**

The following addresses potential impacts to properties by each alternative studied as part of this project.

# Blue Hill Falls Historic District (Various Owners)

National Register-Eligible

Criteria A & C, Architecture, Engineering, Landscape Architecture, Recreation/Culture
The proposed action would result in an Adverse Effect to the Blue Hill Falls Historic
District. This alternative would remove the Blue Hill Falls Bridge, a contributing resource
to the district. This action would significantly diminish the district's integrity of materials,
workmanship, design, feeling, and association. Clearing, cuts, and proposed guardrail at
Wakonda, a contributing resource to the district, would significantly diminish the historic
district's integrity of setting and feeling. The removal of significant amounts of vegetation
would also diminish the integrity of Wakonda. The site has traditionally had a wooded
secluded lot and the proposed action would remove much of the existing vegetation
between the house and the roadway. These actions would significantly diminish the historic
district's integrity of setting, feeling, and design. The proposed action would utilize an
enhanced girder bridge with an arched precast concrete panel facing. This panel facing
would provide continuity between materials from the existing Blue Hill Falls Bridge and
the historic district as outlined in the Standards. The use of the facing would minimize the
magnitude of the adverse effect on the historic district.

#### Blue Hill Falls Bridge #5038, Falls Bridge Road (State of Maine)

National Register-Eligible

Contributing Resource, Blue Hill Falls Historic District

Criterion C, Engineering

The proposed action would in an **Adverse Effect** to the Falls Bridge. This alternative would remove the bridge. The proposed action would replace the Falls Bridge with an enhanced girder bridge with an arched precast concrete panel facing.

# Arcady, 158 Falls Bridge Road (Crocker Nevin)

National Register-Eligible

Contributing Resource, Blue Hill Falls Historic District

Criteria A & C, Architecture, Landscape Architecture, Recreation/Culture

The proposed action in **No Adverse Effect** to Arcady. The planned cuts, clearing, and guardrails would be located in an area that no longer retains original landscape design elements.

#### Wakonda, 119 Falls Bridge Road (Ann Keating Luskey)

National Register-Eligible

Contributing Resource, Blue Hill Falls Historic District

Criteria A & C, Architecture, Recreation/Culture

The proposed action would result in an **Adverse Effect** to Wakonda. The proposed project would require clearing and cuts removing large portions of vegetation from the property. Wakonda, as a rural summer estate, has had a wooded and secluded setting. These actions would greatly diminish the integrity of setting and feeling.

#### 203 Falls Bridge Road (Chris & Paula Niehoff)

National Register-Eligible

Criterion C, Architecture

The proposed action would result in **No Historic Property Affected** to 203 Falls Bridge Road. The house and barn are located outside of the proposed action's project area.

# Archaeological Resources

*Nevin Site* (42.1)

National Register-Eligible

Criterion D, Prehistoric

The proposed action would result in **No Historic Property Affected** to the Nevin Site. This alternative would avoid the property. A knee wall would be constructed bordering the site (Sta. 2+75L) to further prevent construction from affecting the site. Geosynthetic mats, in coordination with MHPC, would be utilized in select locations at this site. Select materials would be placed by hand and not compacted.

John Roundy House Site (ME 045-005, 42.117)

National Register-Eligible

Criterion D, Exploration/Settlement

The proposed action would result in **No Adverse Effect** to the John Roundy House Site. These alternatives would avoid impacting the John Roundy House Site.

*Luskey Site* (42.116)

National Register-Eligible

Criterion D, Historic-Aboriginal

These alternatives would result in an **Adverse Effect** due to the disturbance of the Luskey Site and would require approximately 450 square meters of data recovery.

#### **Local Involvement**

MaineDOT created a Falls Bridge Advisory Committee with local officials and citizens from Blue Hill and the surrounding area. The meetings occurred bi-monthly beginning in 2017. On May 8, 2017, the MaineDOT presented to the committee about the project's cultural resources (architectural history and archaeology) and Section 106 of the National Historic Preservation Act. The Blue Hill Historical Society and Town of Blue Hill have requested consulting party status.

MaineDOT contacted the four federally recognized Native American tribes in Maine. The Penobscot Tribe and Passamaquoddy Tribe replied and requested continued consultation for this project.

On August 21, 2018 Federal Highway Administration (FHWA)-Maine Division and the MaineDOT held a consulting parties meeting. Consulting parties in attendance included officials from the Town of Blue Hill, a representative of the Blue Hill Historical Society, and the Tribal Historic Preservation Officer from the Penobscot Tribe. The meeting provided the consulting parties with a draft determination of effect for all proposed alternatives.

On August 29, 2018 Maine DOT, with FHWA-Maine Division, held a public meeting about the Blue Hill Falls Bridge project. Ann Luskey, owner of Wakonda, requested consulting party status shortly after this meeting.

The Blue Hill Falls Historical Society submitted a comment, received by MaineDOT on September 21, 2018, in support of "the preservation of all historical components of the Falls Bridge site."

In a letter dated October 21, 2018, Gordon R. Smith, counsel, on behalf of Ann Luskey, consulting party and owner of Wakonda, stated support for the Tied Arch with ABC alternative (noted previously as Alterative 2-B, but recorded here as Alternative 3-B). The letter concluded that the Tied Arch with ABC "makes sense as the best way to balance preservation, project costs, and the need for a new crossing at Falls Bridge."

#### Attachments

Art Spiess, MHPC, to Julie Senk, MaineDOT, June 29, 2016.

Julie Senk, MaineDOT, to Kirk Mohney, MHPC, December 17, 2018.

Kirk F. Mohney, MHPC, to David Gardner, MaineDOT, September 13, 2010.

Kirk F. Mohney, MHPC, to David Gardner, MaineDOT, April 25, 2017.

Kirk F. Mohney, MHPC, to Julie Senk, MaineDOT, December 6, 2018.

Phase II Archaeological Testing for the Blue Hill Bridge WIN 17712.00, Blue Hill,

Maine, August 2017, "Management Summary."

# STATE OF MAINE Memorandum

Date: December 17, 2018

To: Kirk Mohney, MHPC

From: Julie Senk, Maine DOT/ENV

Subject: Section 106 Request for Concurrence Project: Blue Hill 17712.00, MHPC #1737-10

The Maine DOT has reviewed this project pursuant to the Maine Programmatic Agreement (PA) and Section 106 of the National Historic Preservation Act of 1966, as amended.

In response to your memo dated December 6, 2018, the MaineDOT has attached all comments received from Section 106 consulting parties on the subject project. No meeting minutes were taken from the Section 106 consulting parties meeting held in August 2018. Additional public comments can be provided to the Commission if they wish to review them.

The MaineDOT accepts the Commission's conclusion that there would be an adverse effect on 203 Falls Bridge Road under the Bypass A Alternative.

Please let me know if I can provide anything else.

cc:

CPD e-file

enc:

Consulting party comments

COMMENTS:	
The Board of the Blue supports the preserve components of the F	Hill Historical Society
supports the preserve	ation of all historical
components of the F	alls Bridge site
	RECEIVED
	SEP 2 1 2018
	HIGHWAY PROCESSAN



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October 12, 2018

Via E-mail

Andrew Lathe Project Manager, MaineDOT 16 State House Station Augusta, ME 04333-0016

Re: Preferred Alternative for Falls Bridge Replacement/Rehabilitation

Dear Andrew,

I am writing on behalf of my client Ann Luskey regarding the proposed alternatives set forth by MaineDOT for the replacement or rehabilitation of Falls Bridge in Blue Hill. Ms. Luskey owns the Wakonda property at the northwest corner of the bridge.

Ms. Luskey understands the need to address the structural problems of the existing Falls Bridge and supports MaineDOT's effort to build a safer crossing for the residents of Blue Hill and others who depend on the bridge. Ms. Luskey is also very concerned about the project's impacts to important historic and environmental resources.

According to MaineDOT's preliminary plans dated September 9, 2018, which depict the footprint of project impacts for various alternatives, and the Supplemental Information for a Finding of Effect prepared by the Kleinfelder consulting firm ("Kleinfelder Report"), the Luskey property, as well as the historic resources located on it, will be significantly impacted by any rehabilitation or replacement alternative.

Given that reality, we believe that the only reasonable alternative, and the alternative required by federal regulation, is the replacement of Falls Bridge with a new tied arch bridge using Accelerated Bridge Construction with no temporary bridge. This alternative, identified as "Replacement 2-B" in the Kleinfelder Report, is cost effective and will be the least disruptive to the area's rare and significant historic and environmental resources. This conclusion is borne out by MaineDOT's Draft Design Alternatives Matrix for the project (revised August 27, 2018), which identifies installation of a replacement bridge with Accelerated Bridge Construction as the alternative with the most "more desirable" outcomes.

Compared to any rehabilitation or conventional construction alternative, which all call for installation of a temporary bridge, the Replacement 2-B alternative would reduce the project footprint and would result in less damage to the significant archeological and historic resources located on the Luskey Property. "Use of a temporary on-site bridge, instead of an off-site detour, would increase the amount of clearing at Wakonda and further diminish integrity of setting and feeling." Kleinfelder Report at 11-12. "The proposed project, particularly with the use of a temporary on-site bridge, would require clearing and cuts removing large portions of vegetation from the southeast side of the [Luskey] property." Kleinfelder Report at 12. Because the Replacement 2-B alternative (as well as the Replacement 2-A alternative) does not call for a temporary on-site bridge, they are the only rehabilitation or replacement options that would avoid any adverse impacts to the John Roundy House Site. Kleinfelder Report at 13. The installation of a temporary on-site bridge would also cause greater harm to wildlife and habitat due to the increase in the project's temporary footprint, in-water activities, and construction duration.

Furthermore, the Replacement 2-B alternative "would utilize a metal tied arch bridge, which would reduce the magnitude of the adverse effect on the Blue Hill Falls Historic District, as a bridge with similar design, scale, size, and proportions as the existing bridge would be added." Kleinfelder Report at 17.

The No Build alternative is not feasible because it does not meet the project purpose and need. Kleinfelder Report at 5. The Bypass A alternative should be discarded because it is prohibitively expensive (estimated construction cost of \$14.4 million) with unknown impacts to historic and other resources. Kleinfelder Report at 5 and e-mail from Meghan Rideout to Julie Senk dated September 17, 2018 (attached). Both rehabilitation alternatives are inappropriate because of their high cost (approximately \$9 million) coupled with limited service life (50 years for rehabilitated bridge vs. 100 years for replacement bridge) and greater adverse effect on historic resources due to installation of a temporary bridge. Kleinfelder Report at 5, 7-8, 15.

Of the remaining alternatives, the Replacement 2-B alternative would result in the lowest level of adverse effect to Wakonda, the Luskey Site, the John Roundy House Site, and the Blue Hill Falls Historic District. In addition, it would mitigate adverse effect to the Blue Hill Falls Bridge by replacing it with a like-kind structure.

All of these resources are eligible for inclusion in the National Register of Historic places and therefore constitute "Section 4(f)" properties subject to the requirements of 49 U.S.C. § 303. When such 4(f) property must be used for a transportation project sponsored by the Federal Highway Administration, the FHWA may approve "only the alternative that . . . Causes the least overall harm in light of the statute's preservation purpose." 23 CFR §774.3(c)(1). Furthermore, "The alternative selected must include all possible planning to minimize harm to Section 4(f) property." *Id.* § 774.3(c)(2). "All possible planning" means "that all reasonable measures identified in the Section 4(f) evaluation to minimize harm or mitigate for adverse impacts and effects must be included in the project." *Id.* § 774.17.

The Replacement 2-B alternative is the only alternative that satisfies these statutory and regulatory requirements to minimize harm and mitigate adverse impacts. In addition, the

October 12, 2018 Page 3

Replacement 2-B alternative simply makes sense as the best way to balance preservation, project costs, and the need for a new crossing at Falls Bridge.

Thank you very much for your time and attention.

Sincerely

Gordon R. Smith

cc:

James Billings, Esq., MDOT Michael Wight, MDOT Cheryl Martin, FHWA Eva Birk, FHWA

# STATE OF MAINE

# MEMORANDUM

December 6, 2018

To:

Julie Senk, ENV/Maine Department of Transportation

From:

Kirk F. Mohney, State Historic Preservation Officer KFM

Subject:

WIN 17712.00, Blue Hill Falls Bridge, Route 175; MHPC # 1737-10

In response to your recent request, I have reviewed the information received November 8 and 30, 2018 to continue consultation on the above referenced undertaking pursuant to the Maine Programmatic Agreement and Section 106 of the National Historic Preservation Act of 1966, as amended.

Identification of Historic Properties (cont.)

The Commission concurs with MaineDOT's determination that 203 Falls Bridge Road is eligible for listing in the National Register of Historic Places under Criterion C with a period of significance of c. 1850-1900.

Finding of Effects

Based on the alternatives presented in the supplemental documentation for finding of effects, the Commission has reached the following conclusions:

No Build

The Commission concurs with MaineDOT that no historic properties would be affected under this alternative.

Bypass A

It appears that this alternative would have an adverse effect on 203 Falls Bridge Road due to the proposed new road that would cut across the southwestern portion of the property to join with Falls Bridge Road. Since no archaeological survey has been completed for this alternative, effects on archaeological sites are unknown. In addition, unless a third-party buyer cannot be identified to maintain the bridge, no other properties would be adversely affected by this alternative.

Rehabilitation A with Detour

The Commission concurs with MaineDOT that this alternative would have an adverse effect on the Blue Hill Falls Historic District, Wakonda, and the Luskey site. This alternative would have no adverse effect to the Blue Hill Falls Bridge or the Roundy site. It appears that Phase III archaeological data recovery of approximately 200 square meters would be required for a temporary work platform for cranes to access the bridge.

# STATE OF MAINE

## **MEMORANDUM**

April 25, 2017

To:

David Gardner, ENV/Maine Department of Transportation

From:

Kirk F. Mohney, State Historic Preservation Officer KFM

Subject:

WIN 17712.00; Blue Hill Falls Bridge; Route 175

In response to your recent request, I have reviewed the information received April 24, 2017 to continue consultation on the above referenced undertaking pursuant to the Maine Programmatic Agreement and Section 106 of the National Historic Preservation Act of 1966, as amended.

It is our understanding that the resources within the NR eligible Blue Hill Falls Historic District have not lost any significance or integrity since the previous evaluation in 2010. We concur that no other buildings constructed between 1960 -1967 are present within the APE.

Based on the information submitted, I concur with MDOT's determination that Blue Hills Falls Bridge, Arcady Estate and Wakanda Estate are eligible for listing in the National Register of Historic Places as a historic district.

Please contact Megan M. Hopkin of our office if we can be of further assistance in this matter.

# STATE OF MAINE

# **MEMORANDUM**

September 13, 2010

To:

David Gardner, ENV/Maine Department of Transportation

From:

Kirk F. Mohney, Deputy State Historic Preservation Officer KFM

Subject:

PIN 17712.00; bridge rehabilitation, Blue Hill Falls Bridge, Rt. 175, Blue Hill;

MHPC #1737-10

In response to your recent request, I have reviewed the information received August 25, 2010 to initiate consultation on the above referenced undertaking pursuant to the Maine Programmatic Agreement and Section 106 of the National Historic Preservation Act of 1966, as amended.

Based on the information submitted, the Commission agrees with the MDOT's conclusion that all of the resources in the APE (Arcady, Wakonda and the Blue Hill Falls Bridge) are eligible for listing in the National Register of Historic Places individually under Criterion A and C, and as part of an historic district.

V Projex V Cpd elile V KC/LD