COMMENT #1

From: Nathan Holth
To: Chase, Cassandra (FHWA)
Subject: Re[2]: Frank J. Wood - Draft Summary to Accompany Alternatives Matrix
Date: Thursday, November 03, 2016 11:14:13 AM

Cassie,
I will be out of office for the next week as well, but will try to get formal comments the week when I return. Meanwhile, any chance you can supply any additional supporting documentation to go along with the documents presented to date? (See concern #1 in my previous email below).
Thanks,
-Nathan

------ Original Message ------
From: "Chase, Cassandra (FHWA)" <Cassandra.Chase@dot.gov>
To: "Nathan Holth" <nathan@historicbridges.org>
Sent: 10/31/2016 2:16:40 PM
Subject: RE: Frank J. Wood - Draft Summary to Accompany Alternatives Matrix

> Hi Nathan,
>
> Thank you for calling in to last week's Section 106 consulting party meeting. I apologize for providing the Summary and Matrix to the group at the last minute. We were still working on drafting and compiling the information right up until the meeting. But, that's no excuse and I understand that it does not give the Consulting Parties a fair chance to review the information and provide input. As we committed to in last Thursday's meeting, we will be accepting comments on the draft alternatives matrix, draft alternatives summary, and our proposed effect determinations for the next three weeks. I will be sending a separate e-mail out to everyone indicating the specific date. I'm still coordinating with MaineDOT, but I should be sending that e-mail out soon.
>
> I am on leave for a few days, returning to the office on November 2nd. But, if you want to chat about any of this, I'd be more than happy too. I will make sure your other questions/comments are addressed too.
>
> Cassie
>
> Sent from my iPhone
>
> ---
>
> **From:** Nathan Holth [mailto:nathan@historicbridges.org]
> **Sent:** Thursday, October 27, 2016 1:33 PM
> **To:** Chase, Cassandra (FHWA); kitty@historicbridgefoundation.com; s.t.hanson@comcast.net; John Graham; sstern@gwi.net; John Shattuck; lsmith@brunswickme.org; Hopkin, Megan M; Chamberlain, Kristen; robin.k.reed@maine.gov; Kittredge, Joel; Martin, Cheryl (FHWA); Frankhauser Jr, Wayne;

Kate Willis; Emington, Wayne (FHWA); John Eldridge; Norman Baker; Drozd, Maria (FHWA); stevehinchman@gmail.com; amorris@gwi.net; sebordwell@gmail.com; Nancy BikeMaine.org; Folsom, Jeff; ckrussell@gwi.net; Curtis Neufeld (cneufeld@sitelinespa.com); Rod Melanson (rmelanson@topshammaine.com); Carol Eyerman (ceyerman@topshammaine.com); Douglas C. Bennett (dougb@earlham.edu); Victor Langelo (vlangelo@eclipseservices.com); Richard Cromwell (richcromwell1@gmail.com); Androscoggin Dental Care (fredwigand@gwi.net); katzthal@comcast.net; mnaber@achp.gov; david.gardner@maine.gov; Pulver, William; Pelletier, Steve (steve.pelletier@stantec.com); Deb Blum (dblum@brunswickme.org); kirk.mohney@maine.gov
Subject: Re: Frank J. Wood - Draft Summary to Accompany Alternatives Matrix

Cassie,
I wanted to give you and the other consulting parties a heads-up. This document is a very important part of the Section 106 process, and having received it only a couple hours prior to the meeting, this is not a lot of time for me to review and provide consultation input on a document of this importance. I have to schedule these meetings around a busy work schedule, and in preparation for this meeting today I have been too busy to review this document in full. It is therefore my request that no final decisions on a preferred alternative be decided at this meeting. I request more time (30 days would be typical) for the consulting parties to review the data after today's meeting before we come to final consensus on an alternative.

In briefly scanning the document, I have the following concerns that support my request:

1. In my experience with Section 106, a document like this is typically accompanied by additional supporting documents (often in an appendix). Is this information forthcoming at a later date? Specifically, I am looking for: detailed itemized cost estimate and scope of work breakdown for each alternative consider (standard table of work items with columns for quantity, price, total). Additionally, a more detailed explanation for the life cycle costs provided, including an itemized breakdown similar to the initial rehab breakdown I have described above. This is all important because I find the cost estimates for rehab to be unusually high with unusually little long-term benefit, and I believe the scope of work can be adjusted to better rehab this bridge for lesser life cycle cost.

2. A brief scan of the document reveals a critical factual error presented in one of the photo captions: "The only way to truly fix pack rust is to take apart the plates of steel and clean them." This is not true. DOT-approved procedures exist in multiple states for pneumatic removal of pack rust. The procedure simultaneously removes the pack rust, while also bringing the separated plates back into alignment and contact. I am particularly proud of my home state of Michigan which just completed this type of work using a DOT-approved procedure for pack rust removal on a fracture critical girder of a bridge for a limited access highway, with the work completed without closure to traffic. While I could bring this up verbally at the meeting, I would rather not have you take me at my word, but give me time to put together some specific information for you, the procedure used, photos of the work, etc.

I hope you can give my concerns some consideration.

Thanks,
-Nathan Holth

==========
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==========

------ Original Message ------
From: "Chase, Cassandra (FHWA)" <Cassandra.Chase@dot.gov>
To: "kitty@historicbridgefoundation.com" <kitty@historicbridgefoundation.com>; "Nathan Holth" <nathan@historicbridges.org>; "s.t.hanson@comcast.net" <s.t.hanson@comcast.net>; "John Graham" <John@johngrahamrealestate.com>; "sstern@gwi.net" <sstern@gwi.net>; "John Shattuck" <jshattuck@topshammaine.com>; "lsmith@brunswickme.org" <lsmith@brunswickme.org>; "Hopkin, Megan M" <Megan.M.Hopkin@maine.gov>; "Chamberlain, Kristen" <Kristen.Chamberlain@maine.gov>; "robin.k.reed@maine.gov" <robin.k.reed@maine.gov>; "Kittredge, Joel" <Joel.C.Kittredge@maine.gov>; "Martin, Cheryl (FHWA)" <Cheryl.Martin@dot.gov>; "Frankhauser Jr, Wayne" <Wayne.FrankhauserJr@maine.gov>; "Kate Willis" <kwillis@kleinfelder.com>; "Emington, Wayne (FHWA)" <wayne.emington@dot.gov>; "John Eldridge" <jeldridge@brunswickme.org>; "Norman Baker" <norman.baker@tylin.com>; "Drozd, Maria (FHWA)" <Maria.Drozd@dot.gov>; "stevehinchman@gmail.com" <stevehinchman@gmail.com>; "amorris@gwi.net" <amorris@gwi.net>; "sebordwell@gmail.com" <sebordwell@gmail.com>; "Nancy BikeMaine.org" <Nancy@BikeMaine.org>; "Folsom, Jeff" <Jeff.Folsom@maine.gov>; "ckrussell@gwi.net" <ckrussell@gwi.net>; "Curtis Neufeld (cneufeld@sitelinespa.com)" <cneufeld@sitelinespa.com>; "Rod Melanson (rmelanson@topshammaine.com)" <rmelanson@topshammaine.com>; "Carol Eyerman (ceyerman@topshammaine.com)" <ceyerman@topshammaine.com>; "Douglas C. Bennett (dougb@earlham.edu)" <dougb@earlham.edu>; "Victor Langelo (vlangelo@eclipseservices.com)" <vlangelo@eclipseservices.com>; "Richard Cromwell (richcromwell1@gmail.com)" <richcromwell1@gmail.com>; "Androscoggin Dental Care (fredwigand@gwi.net)" <fredwigand@gwi.net>; "katzthal@comcast.net" <katzthal@comcast.net>; "mnaber@achp.gov" <mnaber@achp.gov>;

"david.gardner@maine.gov" <david.gardner@maine.gov>; "Pulver, William" <William.Pulver@maine.gov>; "Pelletier, Steve (steve.pelletier@stantec.com)" <steve.pelletier@stantec.com>; "Deb Blum (dblum@brunswickme.org)" <dblum@brunswickme.org>; "kirk.mohney@maine.gov" <kirk.mohney@maine.gov>
Sent: 10/27/2016 11:53:42 AM
Subject: Frank J. Wood - Draft Summary to Accompany Alternatives Matrix

Good Morning,

Attached, please find a draft Summary of Alternatives to accompany the Alternatives Matrix that I sent out yesterday. We just finished putting this draft together. I will bring some copies of this and the draft alternatives matrix to this afternoon's meeting.

See you all then!

Cassie

Cassie Chase
Environmental Engineer
Federal Highway Administration – Maine Division
Office: 207-512-4921
Cell: 207-689-8007
Cassandra.chase@dot.gov

COMMENT #2

November 21st, 2016

Friends of The Frank J. Wood Bridge
10 Pleasant Street
Topsham, ME 04086

U.S. Federal Highway Administration
40 Western Avenue
Augusta, ME 04330

Attention Ms. Cassandra Chase, Environmental Engineer

Frank J. Wood Bridge MHPC # 1595-15

Dear Ms. Chase,

On behalf of the Friends of the Frank J. Wood Bridge and in response to your email of Nov. 4, 2016 seeking public comment, I wish to again request that the Preliminary Design Report(PDR) for all alternatives be released to the public. It is impossible to effectively and responsibly comment on the limited materials released by FHWA and MDOT to date without being able to review the underlying data, reports, engineering and cost estimates, traffic and pedestrian studies, and all other source information.

At the meeting held at the Topsham Public Library on February 25, 2015, MDOT promised that by the Fall of 2015 it would provide the public with a report of their findings and their recommendations. This never occurred. Rather, in April 2016 MDOT held a series of public meetings at which they declared that the decision had been made to build a new bridge - apparently before the Preliminary Design Report was completed.

Again at the July 106 Meeting I asked about the PDR and was informed it was a few weeks out and would be available by August. In the August 106 meeting my questioning was met with a similar postponed answer.

It is now November and no report has been made available. It is impossible for the public to verify and weigh the alternatives without any of the details, data or supporting information.

Please either release the full report with all of the details or provide a realistic date when the Preliminary Design Report will be released.

Sincerely,

John Graham

President- Friends of the Frank J Wood Bridge

COMMENT #3

Nathan Holth
2767 Eastway Drive
Okemos, MI 48864

269-290-2593
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November 21, 2016

Cassie Chase
Environmental Engineer
Federal Highway Administration – Maine Division
Office: 207-512-4921
Cell: 207-689-8007
Cassandra.chase@dot.gov

Subject: Comments: Section 106 Consulting Party Comments: Frank J. Wood Bridge

Dear Ms. Chase:

I wish to offer the following comments in regards to above listed project.

First, I request an itemized scope of work and cost estimate for the proposed scope of work in regards to the rehabilitation of this bridge.

The October 27 Summary document in Figure 15 states the following: "*The only way to truly fix pack rust is to take apart the plates of steel and clean them, which is usually not feasible.*" This suggests that the Department's position on pack rust is that pack rust cannot be corrected or repaired without full disassembly of built-up members. This statement is not correct, and I request the re-evaluation of rehabilitation using methods of pneumatic pack rust removal currently in-use in other states. A summary follows:

Pack rust removal has been a part of historic truss bridge restoration for many years in states where historic truss preservation is common, such as the states of Indiana and Michigan. It may be new to Maine, in which case I hope I can educate and inspire its practice here. There is a special all-in-one procedure that both drives the actual pack rust out, while also bringing the deformed plates back into shape. The steel is heated to a specific temperature, and then hammered with a pneumatic hammer. Just this year, in Michigan, the DOT took this process which it had previously reserved for historic bridge projects, and expanded it for use on non-historic bridges as well with the rehabilitation of a riveted deck plate girder on a busy limited access highway. The Michigan Department of Transportation worked with Bach Steel, a Michigan fabricator/contractor that specializes in this work, to develop a procedure that worked well for the contractor, but also ensured it met the standards of the Department. Of additional interest, the work was completed without closure to traffic. This being the case, and being as the girders were fracture critical members, the DOT limited the number of rivets that could be removed at one time during the work. As it turned out however, the contractor was able to remove most of the pack rust without even removing the rivets, and without causing the rivets to break or otherwise fail. Also of concern is the temperature of the metal during the heating process. The procedure developed specified a maximum temperature that was allowed, and required the contractor to actively monitor the temperature of the steel throughout the heating process. The work was monitored by an on-site inspector.

Pack rust removal will not repair existing cracks in gusset plates, but it can prevent damage of this type by removing pack rust and reversing the effects of existing pack rust (bending of steel). I recommend the

Department consider this repair, and re-evaluate the project cost and life-cycle value in light of this procedure. I am including a brief project description from Bach Steel (which has a few photos), and I am also including the procedure as specified by the Michigan Department of Transportation.

Sincerely,



Nathan Holth

Author/Webmaster, HistoricBridges.org

Project: M-14 Huron River Bridge

Project Completed: 2016

Overview: The restoration methods Bach Steel uses for historic bridges can also be used to cost-effectively prolong the use of any metal bridge (whether historic or not). This is why we are excited to be part of the Michigan DOT's decision to employ pack rust removal repairs as part of the M-14 Huron River Bridge project in Ann Arbor. As far as we know MDOT has not done this work on non-historic bridges in the past. Elected officials are always talking about how bad America's bridges are... fixing what we have is a way to improve this problem at lesser cost than replacing existing bridges. Doing this work properly involves careful heating of the steel. The experienced Bach Steel crew closely monitors the temperature of the steel throughout the heating process to insure the integrity of the steel is not compromised. Working with MDOT, Bach Steel developed a procedure to ensure this work could safely be performed with the bridge open to traffic.



Overview of bridge.



Overview of the crew.



Driving the pack rust out.



Careful temperature monitoring during heating was a requirement on this job.



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Pack Rust Removal Work Plan

DESCRIPTION:
This work shall be in accordance with the 2012 Standard Specifications for Construction of the Michigan Department of Transportation. This Work Plan shall cover work associated with removing pack rust between the bottom cover plates at the bearing areas of the primary girders and other areas of the primary girders on the R01 structure over the Huron River.

GENERAL:
The work shall include heating up areas of pack rust to 800°F with an oxy-fuel torch with a rosebud tip, temporarily placing a protective piece of steel over the heated area, applying impact force with a rivet gun or similar device. Apply a combination of heat and impact until the pack rust between the built up sections is removed. Moderate the application of heat to avoid annealing the steel or otherwise changing its properties by only heating short sections at a time.

MDOT personnel will oversee any heating operations to ensure area the temperatures do not exceed the per plan temperatures.

A video demonstration of this technique may be found at:

http://www.historicbridgerestoration.com

Areas chosen for pack rust removal shall be reasonably accessible to the Contractor to perform the above discussed procedure. Areas subject to this item shall be marked by the Engineer and completed by the Contractor prior to bridge cleaning operations. These areas are typically between the bottom cover plates at the bearing areas of the primary girders where they are exposed to the elements.

Areas selected for pack rust removal will be abrasive blasted to in accordance with section 715 of the Standard Specifications.

Rivets that are damaged during the pack rust removal work, or rivets that interfere with the work, shall be removed and replaced with high strength bolts of matching length and diameter.

The following job specific procedures will be followed for rivet removal on the R01 Structure:

Rivet Replacement in bottom girder flange plates at Piers 7 thru 10

Assuming Live Load (approx. 20% of total load):

- At the 3/8" cover plate, 10'-11" long, with rivet pitch = 4 ½", the maximum unbraced length allowed is 22 inches
- Therefore: Four rivets, in 1 outside row, can be concurrently removed.

- At the 5/8" cover plate, 17'-0" long (6'-1" exposure along flange), with rivet pitch = 4 ½", the maximum unbraced length allowed is 35 inches
- Therefore: Seven rivets, in 1 outside row, can be concurrently removed.
- See sketch (detail A)

Assuming No Live Load:

- At the 3/8" cover plate, 10'-11" long, with rivet pitch = 4 ½", the maximum unbraced length allowed is 26 inches
- Therefore: Five rivets, in 1 outside row, can be concurrently removed.

- At the 5/8" cover plate, 17'-0" long (6'-1" exposure along flange), with rivet pitch = 4 ½", the maximum unbraced length allowed is 43 inches
- Therefore: Eight rivets, in 1 outside row, can be concurrently removed.

Upon completion of pack rust removal, areas of effected by this operation shall be re-cleaned and coated in accordance with Section 715 of the Standard Specification.

Beam Plate Sealant shall be applied to all areas of the built up sections and plate areas of the bottom flange in the areas of pack rust removal to ensure sealing of any remaining voids. Sealant material shall be chosen from the QPL.

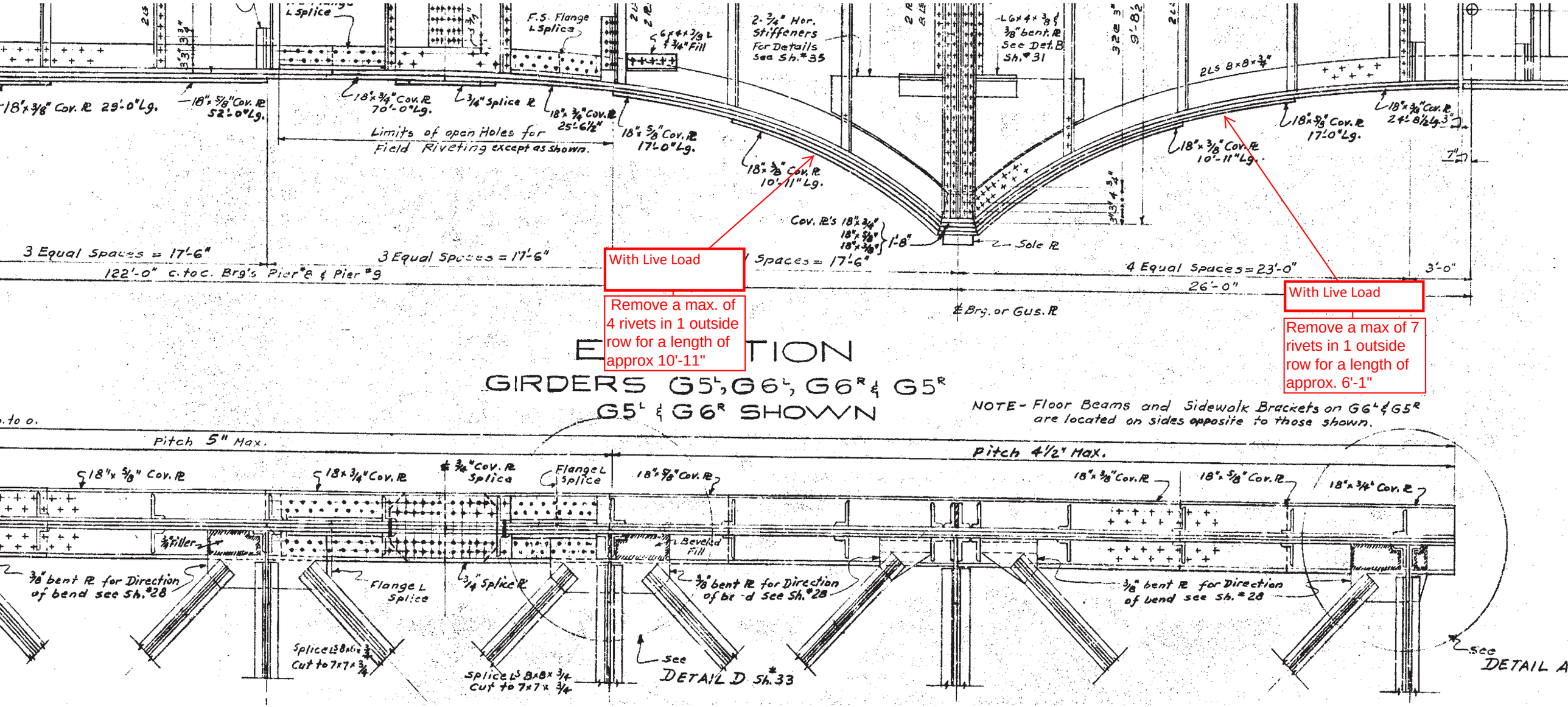
METHOD OF PAYMENT:

The work associated with this work plan shall be paid for in accordance with section 109.05.D (Force Account) of the 2012 Standard Specifications for Construction.

It is the intention of the contract team, to perform this work on one girder line under section 109.05.D and calculate the cost for this work to be prorated into a per linear foot (LFT) unit price for the remainder of the work.

The completed work as measured for pack rust removal will be paid for at the prorated unit contract unit price (LFT) for the following extra work and includes all material, equipment, access, incidentals, and labor to complete this item.

Work includes pack rust removal, rivet replacement with high strength bolts, cleaning and coating of these areas and sealant.



ELEVATION
GIRDERS G5L, G6L, G6R & G5R
G5L & G6R SHOWN

NOTE - Floor Beams and Sidewalk Brackets on G6L & G5R are located on sides opposite to those shown.

Piers 7 thru 10

COMMENT #4

From:	Victor Langelo
To:	Chase, Cassandra (FHWA); John Shattuck; lsmith@brunswickme.org; Hopkin, Megan M; Chamberlain, Kristen; robin.k.reed@maine.gov; Kittredge, Joel; Martin, Cheryl (FHWA); Frankhauser Jr, Wayne; Kate Willis; Emington, Wayne (FHWA); John Eldridge; Norman Baker; Drozd, Maria (FHWA); sebordwell@gmail.com; Nancy BikeMaine.org; Folsom, Jeff; Rod Melanson (rmelanson@topshammaine.com); Carol Eyerman (ceyerman@topshammaine.com); Douglas C. Bennett (dougb@earlham.edu); Androscoggin Dental Care (fredwigand@gwi.net); Pelletier, Steve (steve.pelletier@stantec.com); Deb Blum (dblum@brunswickme.org)
Subject:	Re: Frank J. Wood Bridge Project - Request for Comments on Section 106 Documents
Date:	Monday, November 21, 2016 2:33:40 PM

Dear Ms. Chase and Mr. Kittredge,

There is no cost for the pack rust remediation mentioned in Mr Holth's comments. The particular project mentioned in MI was done this year. There's no mention of the long term effectiveness. The information provided by Mr. Holth is Bach Steel's marketing pitch. Just because it was cost effective for one particular bridge doesn't mean it's cost effective for all bridges. I suppose a cost assessment for this technique applied to the Frank J Woods bridge would help clarify the practicality here.

Thanks,

Victor Langelo

On 11/21/16 11:22 AM, Nathan Holth wrote:

> Ms. Chase,
> Please find attached my Section 106 Consulting Party Comments for this bridge. Please let me know you received them.
> Thanks,
> -Nathan Holth
>
> ==========
> **Nathan Holth**
> Author/ Photographer/Webmaster
> **-----HistoricBridges.org-----**
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COMMENT #5

From:	John Graham
To:	Chase, Cassandra (FHWA); Joel.C.Kittredge@maine.gov
Cc:	Scott Hanson; Steve Hinchman
Subject:	Maine Historic Bridge survey update request
Date:	Monday, November 21, 2016 3:01:06 PM
Attachments:	Maine DOT Historic Bridge Survey Phase II Final Report & Histori.pdf

Hi Cassie,

Please see the 2004 Historical Bridge Survey of the State's bridges. In the appendix V-9 page 141 it lists Steel Thru Truss Bridges. Can you get MDOT to update this list. In 2004 there were 22 listed, 15 of which are State owned and 3 of which are Contributing to Historical Districts. I would like to see this updated as Mary Ann Naber suggested would be prudent in the last meeting. How many of these 22 bridges are still exist?
Can you provide this to me and also make it part of the final record and presentation.

Thanks,

John

John Graham
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Note: MaineDOT Historic Bridge Survey Phase II Final Report was attached to this e-mail. This has been located in FHWA's project files.

COMMENT #5 Attachment

Maine State Library
Maine State Documents

Transportation Documents | Transportation

8-2004

Maine DOT Historic Bridge Survey, Phase II Final Report & Historic Context. 2004

Lichtenstein Consulting Engineers

Maine Department of Transportation

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Maine DOT Historic Bridge Survey

Phase II Final Report & Historic Context



Free/Black Bridge, Brunswick #0323. Photo Courtesy MHPC.

Prepared by Lichtenstein Consulting Engineers
August 2004

Lichtenstein
Consulting Engineers

MAINEDOT
Maine Department of Transportation

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Introduction

Phase II of the historic bridge survey of Maine s pre-1956 bridges was undertaken to determine which meet the National Register criteria for evaluation. The Surface Transportation and Uniform Relocation Assistance Act (STURAA) of 1987 charged each state with identifying its population of historic bridges. Historic is defined as those that meet the National Register criteria for evaluation set forth in 36 CFR Part 60.4.

The project was undertaken as a cooperative, interagency effort by the Maine Department of Transportation (MDOT), Maine Division of the Federal Highway Administration (FHWA), and the Maine Historic Preservation Commission (MHPC). Lichtenstein Consulting Engineers, Inc. performed the Phase II work. Representatives from each of the agencies served on the Historic Bridge Committee (HBC) that directed the project and reviewed the findings and eligibility recommendations.

The information generated by the project is useful in environmental studies, transportation planning, and preliminary engineering studies, as well as promoting an appreciation and understanding of the state s engineering and transportation history. The findings have identified those bridges in the study population that meet the National Register criteria for evaluation. The study population was defined as all bridges built before 1956 and greater than 10' long in MDOT s TINIS bridge database, a total of 2,030 bridges.

The primary work products of Phase II were:

- Historic context for bridge technology in Maine based on the extant bridge types and designs found in the survey.

- A narrative history of the Maine State Highway Commission Bridge Division, 1915-1955.

- Electronic databases to facilitate the retrieval and analysis of historic bridge data and survey forms for all bridge types.

- Documentation generated from the field inspection of 650 bridges (truss, arch, rigid frame, movable, girder-floorbeam, suspension, and culvert bridge types). Documentation includes four-page bridge survey forms, supporting historical research and field notes, black-and-white archival photos, sketch maps, and bridge location quad maps in hardcopy and digital format (Thumbs Plus).

- One-page survey forms and laser-printed photos for the 1,480 bridges of the slab, T beam, or stringer bridge types in TINIS.

" Eligibility recommendations for all 2,030 pre-1956 bridges in TINIS.

As a result of the inventory, **136** existing bridges were identified as National Register listed or eligible. Listed and eligible historic bridges are subject to the considerations afforded to identified historic properties under the provisions of the US DOT Act of 1966 (Section 4(f) procedures) and the National Historic Preservation Act of 1966 (as amended).

Section I. Methodology for Field Inspection, Research, and Evaluation

The Maine Department of Transportation (MDOT) completed Phase I of the Maine historic bridge inventory in late 1997. The Phase I work products were a narrative of the history of bridge building in Maine; the development of a four-page historic bridge report (i.e., survey form); a rating system; and a Phase II work plan. For more information on Phase I, refer to the Phase I final report, *Maine Statewide Historic Bridge Inventory, Final Phase I Survey Plan*, Nov. 1997. Phase II was initiated in late 1998.

Phase II work included the field inspection and eligibility evaluations of the following pre-1956 bridge types: (1) truss, (2) arch, (3) rigid frame, (4) suspension, (5) movable, (6) girder-floorbeam, and (7) culverts with a span length of greater than 10' as reported in the TINIS database. The total number of bridges in the population of those bridge types was 650 bridges. At the request of MDOT, the truss bridges were inspected first as a group in Fall/Winter 1998. The remaining bridge types were field inspected and researched over the course of the 1999 and 2000 seasons.

A stand-alone database using the information categories (fields) defined in Phase I was created in Lotus Approach for the truss, arch, rigid frame, suspension, movable, girder-floorbeam, and culvert bridge types. The database included fields imported from TINIS and fields for new data generated by the field inspections, historical research, and eligibility evaluations. A four-page survey form for each bridge was also created in Lotus Approach (See sample survey form, **Appendix 1**).

The Historic Bridge Committee (HBC) decided not to field inspect the pre-1956 slab, stringer, and T beam bridges (a total of 1,480 bridges) in the inventory population. During Phase II, the slab, stringer, and T beam bridges were evaluated using the scanned photos and information in the state's digitized bridge inspection files (Thumbs Plus) as an alternative to field inspection of those three bridge types. A separate database was created in Microsoft Access 97. A one-page survey form was completed for each bridge (See sample form, **Appendix 2**). The forms were printed and laser-printed photos from Thumbs Plus were attached for the HBC's review. All of the data shown on the individual one-page forms is stored in the project's Access database. A selection of about 40 slab, stringer, and T beam bridges were identified as requiring field inspection to clarify questions about their aspects of integrity, dates of construction, setting/context, and historical and technological significance. These bridges were field inspected and photographed, and the information gathered from field inspection entered on the one-page survey forms.

Field Inspection

All truss, arch, rigid frame, suspension, movable, girder-floorbeam, and culvert with head walls bridges were field inspected by historians and engineers knowledgeable

about old bridge technologies. The purpose of each field inspection was to evaluate the significance of the bridges in comparison to its statewide population; its relationship to any larger contexts such as its setting or improvement campaign; and its integrity. If the bridge had modifications/alterations, the affect on the bridge s overall ability to meet the National Register criteria was assessed. The four-page bridge survey form and ratings sheet included a prescribed list of descriptions and questions to be answered that had been developed during Phase I. Those that could be answered using field-generated data were completed at the time of the field inspection. Any questions that needed to be resolved as part of further research in primary or secondary sources were noted, and the bridge was photo documented with black-and-white 35 mm photography. A sketch map was prepared, and the bridge location was marked on a USGS 15-minute quad bit map.

Research

The four-page bridge survey form was a prescribed list of questions to be answered for each bridge, thus the research in primary and secondary source material was geared to answer those specific questions. Of greatest use were the old department records maintained in the Bridge Maintenance Section. The old records include bridge plans, the 1924 statewide bridge survey, historic photographs for most of the bridges with some dating to before 1920, annual reports, and old bridge cards that identified the design and builder. Each bridge was checked against this impressive assemblage of data as needed in order to complete the field report. Contemporary data contained in the maintenance section s bridge inspection files was also used, particularly to date alterations/modifications.

A great deal of information about the history and technological advances of common bridge types was gleaned from period engineering and text books, as well as trade and education material. Those sources were cited on the individual bridge field reports. Railroad histories and the state s recent inventory of railroad-related structures were also consulted to establish the significance of the many bridges built in association with railroad improvements (i.e., grade-crossings).

A summary history was written for each bridge type/technology with identification of significant examples in the Maine inventory. **Section II** of this report, Historic Context for Bridge Technology in Maine, is the result of that effort.

Early in the process of the field inspections, the HBC and the consultant determined that a more in-depth history of the activities and accomplishments of the Maine State Highway Commission Bridge Division was desirable to answer several of the prescribed questions about each bridge s significance. The majority of bridges in the inventory are state-built highway bridges and an understanding of the Bridge Division s history was critical to determining their significance. A narrative history was written

using mostly primary source materials in MDOT s bridge maintenance section. **Section III** of this report, Highway Bridge Building in Maine by the Maine State Highway Commission, 1905-1955, is the result of that effort.

The HBC agreed for consistency to use the date of a bridge s superstructure as the governing date of construction entered in the date of construction field in the survey databases. Research revealed that the dates of construction originally transferred from TINIS to the bridge survey databases were not always superstructure dates of construction but sometimes earlier dates of construction based on other information (e.g., reused substructure elements, foundations, replaced bridges on the same alignment, etc.). Consequently, the dates of construction of 123 bridges were updated and now appear in the databases with dates of construction after 1955. Additionally, some bridges were replaced during the course of the project. Again, the date of the present superstructure was consistently used for this project, so there were some bridges that were reported with modern dates of construction. The intent of the HBC was to provide a snapshot in time of the state s bridge population, so those bridges that were identified as part of the project as having been built after 1955 were maintained in the study population in order to provide complete information. Modern bridges were consistently recommended as not eligible based on their dates of construction.

Determining Eligibility

The information gathered through field inspection and research was synthesized to complete the bridge survey forms and to prepare a supported National Register eligibility recommendation for each bridge. The forms, photos, and maps for bridges of each major bridge type were submitted to the HBC for review. A separate meeting was held to review, discuss, and reach consensus on the evaluations and recommendations for the bridges of each bridge type. The eligibility determination on each bridge survey form was achieved through consultation among MDOT, FHWA, and MHPC. The consultant made revisions and clarifications as requested. MHPC provided formal letters of eligibility concurrence for each set of bridges reviewed. No eligibility decisions were left unresolved with decisions made for a final set of thirteen (13) arch and rigid frame bridges in July 2004.

The Maine Historic Preservation Commission (MHPC) was consulted for information from their survey and National Register files when appropriate for guidance on historic districts and historic contexts.

A number of the bridges in the survey population were National Register listed, or they had been been previously evaluated for National Register eligibility during the course of MDOT projects predating or concurrent with the inventory. For previously listed or

evaluated bridges, information was entered on the bridge forms from the nominations or eligibility reports. No changes were made to previous eligibility determinations.

Following review and approval of the information and eligibility recommendations by the HBC, the four-page field reports, ratings sheet, black-and-white photos, and quad maps were scanned. The consultant supplied MDOT with compact disks with the scanned files for the bridges. The scanned historic bridge field reports are available on the department s network through Thumbs Plus software.

Criteria for Determining Significance

The goal of the project was to evaluate each bridge no matter what type in full consideration of the National Register criteria for evaluation.*

The National Register of Historic Places Criteria for Evaluation are

> The quality of significance in American history, architecture, archeology, engineering and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and:
>
> A. that are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> B. that are associated with the lives of person significant in our past; or
>
> C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose component may lack individual distinction; or
>
> D. that have yielded or may be likely to yield information important in prehistory or history.

Two criteria considerations also apply to the evaluation of bridges:

> Criteria considerations: Ordinarily...structures that have been moved from their original locations...and properties that have achieved significance within the past 50

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*Note: The original scope of work defined by Phase I was to address the stringer, T beam, and slab bridges solely on architectural features under Criterion C. In Phase II, the HBC changed that approach so that those bridge types were evaluated in full consideration of the National Register criteria for evaluation.

years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

b. a building or structure removed from its original location but which is significant primarily for architectural value or which is the surviving structure most importantly associated with a historic person or event; or

g. a property achieving significance within the past 50 years if it is of exceptional importance.

Applying the National Register Criteria for Evaluation

The following explains how the individual criterion were applied to evaluate the National Register eligibility potential of bridges in Maine.

Criterion A addresses a bridge s association with an event or pattern of events that made an important contribution to the historical and physical development of a locality or a region. This ranged from bridges associated with railroads that spurred the settlement and development of a region to bridges, such as the Boston & Maine Railroad main line, or that were constructed in association with a significant military facility, such as the Portsmouth Navy Yard. Criterion A considered bridges in association with transportation routes like the Maine Turnpike, bridges reflecting the influence of urban planning, or an important railroad route that initially opened northern Maine for harvesting of timber.

All bridges have a history. They were built by a railroad, a county, the state, a town, or a private commission, and are thus related to larger historic contexts, such as development of improved railroad rights of way or an expansion of the state highway system using the then-prevailing bridge technology. Criterion A was used to draw distinctions between bridges with common history, like the many state, county, and municipal-built bridges that were built to replace a previous bridge and to keep a crossing in service, from those associated with locally significant events like a bridge built over a canal as part of project to supply waterpower to a mill that had a significant impact on a local economy. Furthermore, emphasizing association with important events, criterion A differentiated between history that is common to nearly every bridge and distinguishable events that made a <u>significant</u> contribution to historical development on the national, state or local level. Thus, bridges with no links to significant events were evaluated as not meeting Criterion A.

Criterion B addresses historic association with great persons from the past. This criterion generally has not been commonly applied to bridges, as the works of noted engineers and builders are usually better represented under Criterion C. For a bridge

to be recommended as eligible under B, the association with the great person, like a prominent designing engineer, the association needed to be direct, not just the work of his firm or division. Examples listed or eligible under Criterion B are the bridges in Acadia National Park that were built under the direct supervision of John D. Rockefeller, Jr.

Criterion C, the most broadly applicable criterion, addresses bridges that meet at least one of the following characteristics: they embody distinctive characteristics of a type, period, or method of construction; they are the work of a master; they possess high artistic value.

Criterion C affords recognition of the evolution of bridge types/designs and bridge building technology over time, as well as the importance of the engineer/engineering firm who designed a bridge and the fabricator/contractor who erected it. Architectonic and aesthetic bridges, bridges with unusual construction details, or rare surviving examples of a type that was significant in the development of a bridge technology, and the distinguished work of noted engineers, engineering firms, or bridge companies were evaluated as eligible under Criterion C.

Criterion C applies to common bridge types such, as steel stringer bridges and reinforced concrete T beam and slab bridges that are ubiquitous throughout the state. Common types were evaluated to identify which examples are technologically significant. Priority was placed on identifying examples that mark the introduction of a particular technology, have distinguishing details, or illustrate engineering advances within the technology, like continuous-span steel stringer bridges in the 1930s or multiple-span rigid frame bridges in the 1940s. This often meant that the examples that were recommended as eligible were the earlier, longer, or more complicated bridges.

The Bridge Division of the Maine State Highway Commission has played a historically significant role in the development of the state's roads and bridges. Recognizing its commonly used, standardized bridge types and designs was an important consideration, as was recognizing when those designs and details were introduced, the frequency at which a standardized design was built, and the technological significance of the specific examples. Emphasis was placed on recommending eligible early standard-design examples as they are generally regarded as more significant than later examples because they represent a shift in technology or construction techniques.

Unique, rare, or infrequent surviving types and unusual designs of a particular bridge technology were also evaluated as having engineering significance under Criterion C. Increasingly rare examples of bridge type important in the development of metal truss bridge technology, like riveted Pratt thru truss bridges, were generally evaluated as eligible. Likewise, unusual construction details, like early pin-and-hanger details or continuous design spans were evaluated as eligible because they reflect the era of

experimentation in the establishment of different principles of bridge engineering design and theory.

Criterion D is generally interpreted to refer to archaeological resources, but it can also apply to structures and objects that contain important information if the structure or object is the principal source of important information. With the complete bridge records at Maine DOT, Criterion D did not apply to any bridges.

Bridges in Historic Districts

Under Criteria A or C, bridges could also be contributing resources to existing or potential National Register historic districts. Historic districts can include the bridge s immediate surroundings in a town, an entire transportation route like the Bangor & Aroostook Railroad s LaGrange-Searsport line, or a bridge across a power canal in a mill complex.

For a bridge to be eligible as a contributing resource in a historic district, it must have been present in the district during the years that the district achieved its significance. The period of significance is determined by historical research and the physical development of a district. To be evaluated as a contributing resource within a historic district, a structure must have been built within that period of significance. For example, a 1944 T beam bridge built during a World War II improvement campaign to alleviate traffic congestion on an arterial road associated with a significant war-related facility might contribute to a potential historic district. Conversely, a late 1940s bridge built in a historic district that achieved its significance prior to World War II would be rated as noncontributing regardless of its state of preservation because it is outside the period of significance of the district.

If a bridge, usually a culvert, a rigid frame, or a slab, is not visible from within the historic district, it was not recommended as eligible as a contributing resource. This includes culverts that channelize streams under city streets and structures.

Integrity

In addition to significance, in order for a bridge to be recommended as eligible, either individually or as a contributing resource in an historic district, it must also have integrity. A synonym for the state of completeness or preservation, integrity refers to a resource s retention of original fabric and historic appearance. It does not refer to its state of repair or its structural or functional adequacy as usually defined by national and state bridge inspection standards. The National Register criteria recognizes seven aspects or qualities of integrity: location, design, setting, materials, workmanship, feeling, and association. To retain integrity a property will always possess several and usually most of these qualities.

The aspects of integrity were an important consideration during the course of the historic bridge inventory because the population included so many bridges of the same type and design. This means that only the most complete and earliest examples of common types and designs, such as steel stringer, T beam, and slab were recommended for further National Register consideration.

To arrive at an accurate assessment of integrity, alterations were studied to determine if they (1) were historic or not (executed within the past 50 years), (2) changed the design or how the bridge functions, or (3) compromised the technological and/or historical significance of the structure. These issues figured greatly in the assessment of the eligibility of each bridge.

Alterations that were considered drastic enough to affect eligibility of common bridge types include removal of original balustrades/parapets/railings or widening on both sides so that the original structure was no longer visible in the elevation view.

A higher degree of alteration was acceptable for some bridges, especially for very old or very rare types and designs. When a resource type or detail became so infrequent or rare that losing one or two examples meant that it was no longer represented in the bridge population, then the integrity question was secondary to recognizing the worthiness of preserving a disappearing bridge type or design.

Some modifications common to a particular bridge type or design can be considered as alterations that do not detract from the potential significance of a bridge because the changes (1) were necessary to address inherent weaknesses in the original design, like outriggers on pony truss bridges, (2) were such minor changes that they did not affect the overall appearance or design of the span, (3) were sensitive alterations done in a manner that did not detract from the original design, or (4) are reversible alterations that did not involve the removal of original fabric. These common modifications included placing toe walls and scour protection, replacement of stringers and decks or wearing surfaces on girder-floorbeam and truss bridges, and the addition of a few helper bents on metal bridges. Other common alterations that did not diminish integrity included the addition of beam guide rails when they were attached in a manner so as not to irreversibly impact the historic fabric. Limited in-kind replacement and adding members and sections for strengthening, like adding cover plate to flanges, did not adversely affect the technological and historical significance of a bridge in the same way reconstruction did.

The integrity necessary for a resource to contribute to a historic district was commonly interpreted differently from the integrity needed for individual eligibility. This was because a district as a whole could meet the criteria for significance and integrity even though some of the components were somewhat altered. For example, a reinforced concrete bridge that had been widened on one side might not be individually eligible,

but if it had sufficient integrity and was from the period and area(s) of significance of the district, the bridge was often evaluated as a contributing resource. On the other hand, a steel stringer bridge that had been widened and had modern railings/barrier and no longer appeared or functioned as it did when the district achieved its significance was evaluated as noncontributing and thus not recommended as eligible.

Methodology for Finalizing Evaluations of the Stringer, T Beam and Slab Bridges

The state s digitized bridge inspection records (Thumbs Plus) were reviewed for all pre-1956 stringer, T beam, and slab bridges (a total of 1,480 bridges). The inspection records include photos of the bridges and their settings. Using the criteria for evaluation, the bridges were separated into two groups: (1) those that clearly do not meet the criteria and thus can be evaluated not eligible, and (2) those that require further evaluation. The data including a justification of the eligibility recommendation was compiled in a database using Microsoft Access 97. A one-page survey form was printed for each slab and girder bridge with attached laser-printed photos from MDOT s ThumbsPlus program for the HBC s review and approval.

As a result of the initial evaluation using Thumbs Plus, 123 of the 1,480 stringer, T beam, and slab bridges were identified for further evaluation because their settings, date of construction, or details suggested that they might meet one or more of the National Register criteria for evaluation, but Thumbs Plus did not contain sufficient information to make a final recommendation. The HBC agreed that field inspection was not necessary for bridges for which there was concurrence on eligibility and sufficient pictorial information in Thumbs Plus. The HBC committee also recommended that the consultant do the additional primary and secondary research and inspection necessary to make final eligibility recommendations for the 123 bridges requiring information beyond that available in the Thumbs Plus.

Many of the 123 stringer, T beam, and slab bridges requiring further evaluation had questions related to their settings because period buildings or other features in the state s digitized inspection photographs were suggestive of possible historic districts. MHPC personnel and files were consulted to identify and confirm existing listed, eligible, and potential historic districts. In a few cases MHPC personnel agreed to inspect the settings for a final recommendation on historic district eligibility.

Most of the historical or technological questions surrounding the 123 bridges were resolved through further research in primary and secondary source materials, particularly the bridge maintenance section s extensive collection of historic photos, bridge cards, and plans. About 40 of the stringer, T beam, and slab bridges received field visits from the consultant when no other means were available to assess questions

about integrity or significance. Information gathered from field inspections was entered on the bridge survey forms.

At project s end, all stringer, T beam, and slab bridges had been evaluated with supportable eligibility recommendations.

Summary of Results

As a result of the Phase II work, 2,030 bridges dated before 1956 and over 10' long were evaluated for National Register eligibility. The 2,030 bridges are all of the bridges with pre-1956 dates of construction in the state s TINIS database. The total of 2,030 includes 650 truss, arch, rigid frame, suspension, movable, girder-floorbeam, and culverts that were field inspected and for which a four-page field report was completed. The remaining 1,480 stringer, T beam, and slab bridges were evaluated using the state s Thumbs Plus software and a one-page survey form was completed for each. Additional research and inspections were completed as necessary to make eligibility recommendations for all stringer, T beam, and slab bridges.

Section IV is a list in alphabetical town order of all evaluated bridges of all bridge types with bridge number, bridge name, bridge type, and eligibility recommendation. The HBC reviewed and commented on all eligibility recommendations, and unless otherwise noted, concurrence has been received from MHPC.

Section V is a list and summary by bridge type of all National Register-listed or eligible bridges.

The results of the historic bridge inventory will be useful to FHWA, MDOT, MHPC, and other agencies in the planning and review of future bridge projects. The large number of bridges reviewed and with formal concurrence will increase the efficiency of the Section 106 review process and identifies well in advance of projects which bridges are eligible and not eligible and for what reasons.

The HBC has undertaken a state historic bridge preservation plan for the National Register-listed and eligible bridges identified as a result of the inventory. The HBC has agreed that the plan meet the needs of both MDOT and MHPC. The plan identifies bridges that have a high preservation priority because they are rare and endangered or have high levels of historic significance; an objective assessment of the long-term preservation potential of each bridge; appropriate methodologies for maintenance and repair of historic bridges; and appropriate ways to correct common deficiencies in historic bridge types and designs.

List of Preparers

The Phase II bridge survey was performed by Lichtenstein Consulting Engineers, Inc. Principal-in-charge was Joseph J. Pullaro, P.E. Project manager and architectural historian was Mary McCahon. Senior Historian was J. Patrick Harshbarger. Engineering and project management assistance was provided by Evan Lowell and Niket M. Telang. Field surveying assistance was provided by Scott Darling, Jennifer Diman, and Paul Nagel.

Section II. Historic Context for Bridge Technology in Maine

This section of the Phase II report supplements the historic narrative prepared for Phase I (1997). The Phase II context for bridge technology is designed to address more completely the findings of the Phase II field inspections and file search and to give specific examples from the surviving bridges identified during the survey.

A. Truss Bridges

The modern era of bridge technology in the United States was ushered in about 1800 when the truss was applied to longer span bridges. Until that time, bridge technology was limited to stone arch or timber beam structures. The truss is a structure composed of triangles where all members take either tension or compression. The loads generally come through the vertical members and are transmitted by diagonals into the horizontal members and back to the bearings. While the truss was known since at least the third century B.C., what was innovative at the beginning of the 19th century was that the basic truss pattern was multiplied many times over to span much greater distances than those possible with then available bridge types such as the stone arch or timber stringer.

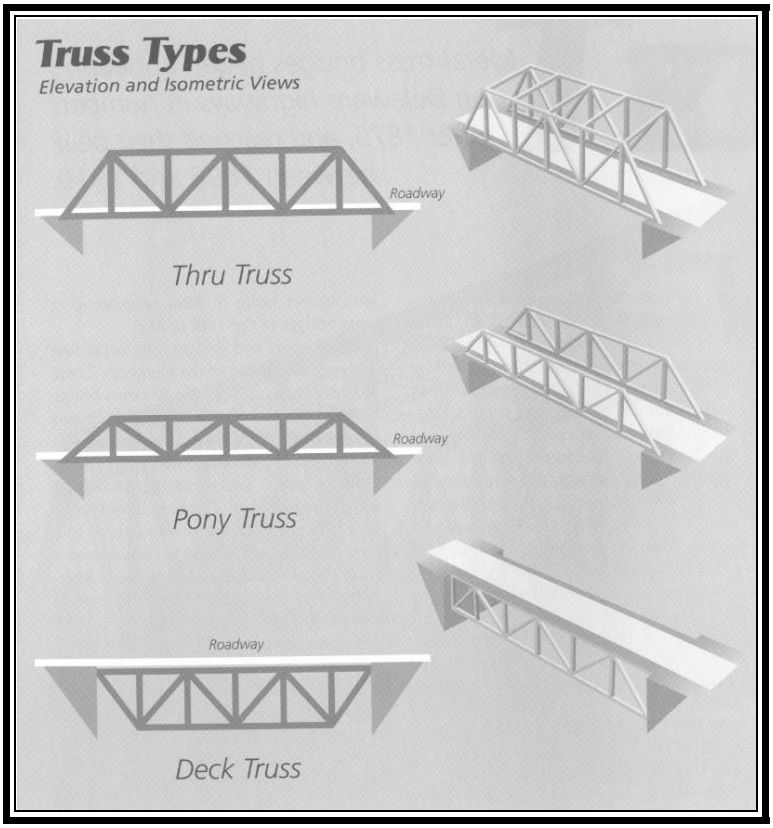


Figure II-1. Truss types. Source: Delaware s Historic Bridges, 2001. Prepared by Lichtenstein Consulting Engineers for DelDOT.

Truss types and designs vary according to the configuration of the members. Three truss types are the thru truss, pony truss, and deck truss. In a ***thru truss*** bridge, the road passes between the truss lines and is carried on the deck and floor system connected to the bottom chords at the panel points. There is lateral bracing connecting the top chords of the trusses. This type is generally used for spans of more than 100' long. A ***pony truss*** bridge is the same as a thru truss, but it does not have lateral bracing between the top chords. This type is generally used for shorter spans of 45' to 100' long. In a ***deck truss*** bridge the road is above the trusses, and the deck system is

on the top chords. No matter the location of the deck, the principles of the truss technology are the same.

Historically, a wide variety of truss designs have been used, and all have different ways of accommodating the tensile and compressive forces. They are frequently named for the engineer that patented or originated the design such as the Pratt truss patented by Thomas and Caleb Pratt in 1844 or James Warren s truss design that was patented in 1848.

Wood Truss Bridges

The need for bridges of sufficient length for long waterway crossings stimulated the burgeoning of bridge engineering during the early 19th century. Master carpenters or architects used America s abundant hardwood timber and the truss principles to span greater lengths. Many of the early, impressive examples of wood truss bridge technology were built in New England, including one of the earliest and most famous between Maine and New Hampshire, Timothy Palmer s 1794 Piscataqua River bridge.

Maine s abundant forests and the skill of its master carpenters made wood truss bridges, both covered (for protection from the elements) and uncovered, a popular bridge type into the first decade of the 20th century. Records show that Maine builders employed a great variety of wood truss designs, including Burr arch-truss, Town lattice, Long, Paddleford, Howe, Pratt, queen post and king post. The master carpenters copied the truss designs from other builders and engineers, such as Theodore Burr, Ithiel Town, Stephen Long, William Howe, and Thomas Pratt, who patented and promoted their truss designs prior to the Civil War. Maine s master carpenters continued to use the designs decades after the patents had expired. The truss designs demonstrated the different ways to accommodate tensile and compressive forces based on

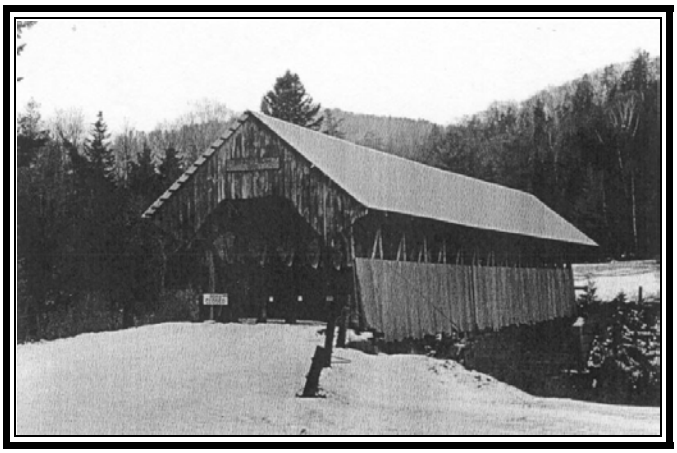


Figure II-2. Bennett Bridge (Lincoln Plantation # 1005), built in 1898 by Mason Brothers of Bethel, is one of five Paddleford trusses in Maine. The Paddleford truss is an unpatented design attributed to master bridge builder Peter Paddleford of Littleton, NH. In about 1846, he remodeled the Long truss (developed in the 1830s by engineer Stephen Long) by replacing counter braces with a stiffening member fastened to the inside of the posts near the tops and bottoms and extending to the chords. This resulted in an unusually strong and rigid structure. Other local builders became interested and a considerable number were built in New England through the beginning of the 20th century.

economy of materials, section capacity, and ease of erection. They were also a testament to Yankee ingenuity and craftsmanship.

Eight wood truss bridges are included in the state bridge inventory. Seven of the eight are covered bridges from 1857 to 1911. Five of the seven are Paddleford truss bridges, a variation on a Long truss, except with double-intersecting counters. Paddleford truss bridges are the most common extant wood truss design in Maine, but they are very rare in other states with the exception of New Hampshire. The other two of the seven covered truss bridges are the 1876 Robyville Bridge (Corinth #1003), a Long truss, and the 1911 Watsons Covered Bridge (Littleton #1006), a Howe truss. Both are later examples of truss designs patented before 1850. All of the covered bridges are listed in the National Register of Historic Places, and they are protected by special state legislation passed in 1959.

The eighth wood truss bridge in the inventory was the 1942 Howe pony truss (Hobbs RR Overpass, Berwick #5352) built by the Boston & Maine RR. Many railroad companies continued to build wood truss overpass bridges into the mid 20th century, in part because of economy and ready access to creosoted timber. The selection of a wood truss bridge for this location was probably influenced by World War II shortages of steel and concrete. The Hobbs Railroad Overpass bridge was determined eligible by MHPC (1998) and was replaced in 2002.

Pre-1900 Metal Truss Bridges

The most influential factor in the disappearance of timber truss bridges was the development and acceptance of metal truss bridges. Wood works well in compression, but it cannot accommodate tensile forces efficiently, especially at the connections. The railroads needed long spans capable of carrying every-increasing live loads and that need stimulated the great era of iron truss bridges after 1850. The era also ushered in new scientific methods for analyzing and predicting the structural action of bridges. Advances in engineering education accompanied new standards and understanding of materials, workmanship, and construction. A generation of college-educated civil engineers applied scientific theory and experimentation to bridge construction and energetically sought out the cooperation of manufacturers and builders. They established the modern approach to bridge building that includes stress analysis, plans, specifications, testing, and inspection.

Nationally and in Maine, the application of metal truss bridges to highway use was generally not as early, quick, or crucial as with the railroads. Metal truss bridges began appearing on Maine highways in numbers after 1875, and they reached their peak in about 1900. The 1924 survey of bridges undertaken by the Maine State Highway Department documents the impressive diversity of metal truss bridges that once existed in Maine. Dozens of bridge fabricating companies operated in the state. They varied

from large fabrication and erection companies that were owned by large iron and steel manufacturers that marketed their bridges all across the country to small independent contractors operating within a limited geographic region. Each company had its own preferred or proprietary truss details, like ways of connecting the members, the shapes of the members, or the truss designs themselves. Unfortunately, examples of pre-1900 metal truss bridges have virtually disappeared from the Maine landscape. Considered too narrow and under capacity for the safety of automobiles and trucks, they were the subject of a concentrated bridge replacement program beginning in the 1920s.

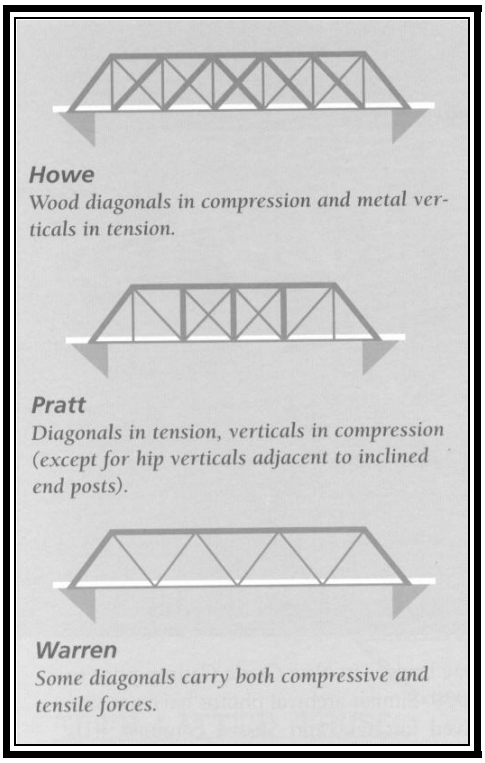


Figure II-3. Common truss designs. Source: Delaware s Historic Bridges, 2001.

The most common truss design built in Maine, and all across the country, was the Pratt design or one of its variations. It offered simplicity of design and fabrication, made economical by the use of standard rolled angle and channel section, plates, bars, rods, and I beams. The Pratt truss design was patented in 1844 by Thomas and Caleb Pratt. The original design was for a composite timber and iron truss, with the wrought-iron diagonals in tension and the timber vertical members in compression. The Pratt truss easily adapted into an all metal truss, especially with the increasing availability of wrought-iron eye bars for the tension members. The Pratt truss was by far the most popular truss design of the last quarter of the 19th century.

Most metal truss highway bridges built before 1900, from light Pratt pony trusses to heavier thru or deck truss railroad spans, were assembled in the field (at the site) with pinned connections. Improvements in pneumatic riveting equipment led to the transition from pinned to riveted connections around the turn of the century. A result was the expanded use of the Warren truss design. Patented in 1848 by British engineers James Warren and Willoughby Monzani, the straightforward Warren truss is particularly well suited for rigid, riveted connections. The Warren truss is distinguished by its ease of construction with equal-sized members, and by the ability of some of the diagonals to act in both tension and compression. It could be stiffened by the addition of verticals.

The inventory has identified three pre-1900 metal truss bridges. They are the 1888 Granite Street bridge (Yarmouth #0210), an early railroad-built example of a rivet-connected Warren thru truss fabricated by the Union Bridge Company of Athens,

Pennsylvania; the 1890 St. John Street Underpass (Portland #0327), a rivet-connected Baltimore thru truss (a variation of the Pratt with substruts and ties) built by the Boston Bridge Works to carry the Maine Central Railroad over a city street; and the 1890 Grants Railroad overpass (Berwick #5429), a pin-connected Pratt pony truss with unusual double-pinned floorbeam hangers. The 1888 Granite Street bridge and the 1890 Grants overpass have been previously determined eligible by MHPC. They were disassembled and relocated in 2001-02 to Maine railroad museums for preservation and reuse.



Figure II-4. The St. John Street Underpass (Portland # 0327), built in 1890, is a rivet-connected Baltimore thru truss bridge. It is significant as an early, complete example of its type and design that was built by the Boston Bridge Works, a major regional manufacturer in the late 19th century, noteworthy for its railroad-related work. The bridge represents a significant period in the development of the truss bridge technology in the United States, when builders shifted from pinned to riveted connections to better meet the railroad s demands for bridges of greater capacity.

Post-1900 Steel Truss Bridges

By 1900, the great experimental era of the metal truss bridge technology had ended. Standardization of truss design was driven by economy and the tendency of engineering science toward greater uniformity and standardization of design and metallurgy. A significant factor in standardization was the availability of economical steel from about 1890 onward. Steel performs well in both tension and compression, as does wrought iron, but it generally has a higher tensile strength and thus is a superior material for truss bridges. Another factor in standardization was the creation of large bridge companies, such as the American Bridge Company, a subsidiary of U.S. Steel, which bought or drove from business many of the smaller bridge manufacturers. Most importantly, however, truss bridges faced increasing competition from other bridge types, such as steel stringer bridges and a variety of reinforced concrete bridge types. Those technologies advanced and spread during the first decades of the 20th century, and they proved to be more economical and to require less maintenance than metal truss bridges. The Maine State Highway Commission favored the new technologies as it began developing the state highway system starting in 1913 and the use of truss technology gradually declined in Maine.

The majority of Maine s extant steel truss bridges date from the post-1900 era of standardization of design and materials. Relatively few examples stand out as truly innovative or noteworthy from a history of bridge engineering point of view. Rather, most are best viewed as the conservative application of a well-established technology.

The pre-1920 examples are considered historically and technologically significant because they are Maine s earliest and only surviving examples of once common truss types and designs. Included in this category are a handful of rivet-connected Warren truss bridges, such as the 1908 New Mills Bridge (Gardiner #2605), the 1912 Gambo Falls Bridge (Windham #0266), and the 1915 Bailey Bridge (Harmony #1022, replaced in 2001 by the town). The 1916 New Sharon Bridge (Sharon #2608), a pin-connected Pennsylvania thru truss, is the state s last lengthy pin-connected highway bridge. The 1909 Free/Black Bridge (Brunswick #0323) is a significant example of the rivet-connected Baltimore thru truss type/design with an unusual double deck arrangement. A roadway section is suspended by pin-connected eyebars below the lower chords. The upper deck carries a track of the Maine Central Railroad.



Figure II-5. New Sharon Bridge (New Sharon #2608) is Maine s last pin-connected thru truss highway bridge. The one-span, 268'-long, Pennsylvania thru truss was fabricated in 1916 by the Groton Bridge Co. of Groton, NY.

The Maine State Highway Commission Bridge Division designed approximately 85 steel truss bridges between 1920 and 1955, according to annual reports. The survey identified 67 of the state-built truss bridges still in use today. They account for the majority of truss bridges included in the historic bridge inventory, but they account for less than seven percent of the estimated 1,300 total bridges of all types designed by the division from 1920 to 1955. In overall terms, the truss bridge type had relatively limited application in Maine after 1920.

The post-1920, steel truss bridges designed by the Bridge Division typically range in individual span length from 75' to 300'. In this range of lengths, they held some practical and economic advantages over other bridge types. They could usually be erected more quickly and less expensively than long-span

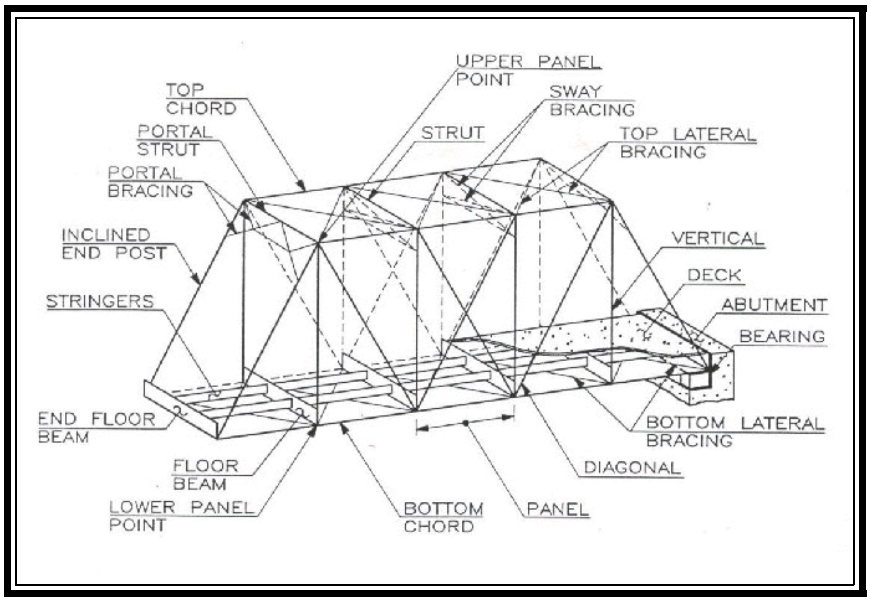


Figure II-6. Truss Nomenclature.

reinforced concrete bridge types, which needed additional form work and time to cure, a consideration because of Maine s shorter construction season. Sometimes local conditions, such as a swift running stream or the desire to reuse a previous bridge s substructure, made a truss bridge desirable.



Figure II-7. The 1921-22 Androscoggin River Bridge (Gilead #5084) is among the earliest surviving examples of rivet-connected truss bridges designed by the Maine State Highway Commission.

All of Maine s post-1920 truss bridges are rivet-connected Warren, Pratt, or Pratt variation designs, such as the Pennsylvania, Parker, or Camelback. The bridges have few details that are unique to Maine. They are textbook designs that were known and used by engineers throughout the United States since the last decade of the 19th century. Maine truss bridge contracts, plans, and specifications regularly refer to American Association of State Highway Officials (AASHO) and American Society of Testing Materials (ASTM) approved practices and materials. These organizations coordinated a national highway policy and developed standard specifications for designs and materials applied throughout the nation. State bridge engineers Llewellyn Edwards and Max Wilder were active participants in AASHO, and they helped to develop the standards.

Maine s post-1920 truss bridges are not uncommon or unique to Maine, therefore historically and technologically significant examples are considered those earliest examples from when the Bridge Division was founded immediately after World War I. These early extant examples are considered as having established the prototypical design practice for the dozens of ordinary truss bridges to follow. Two of these early extant examples are the 1921 International Bridge (Madawaska #2399) and the 1921-22 Androscoggin River bridge (Gilead #5084).



Figure II-8. Piscataquis River Bridge (Howland #3040), built in 1929, is one of the three earliest rivet-connected truss bridges designed by the state bridge division to substitute rolled section members for built-up members for verticals and diagonals.

Later examples that illustrate some refinement in design are also considered significant. The earliest rivet-connected truss bridges to substitute rolled section members for built-up members in the verticals and diagonals are the International Bridge (Fort Kent #2398), Piscataquis bridge (Howland #3040), and Mill Pond bridge (Salem #2565), each designed by the Bridge Division in

1929. Improvements in metallurgy and the lower cost of rolled sections made this substitution possible. It occurred with steel truss bridges at about the same time throughout the United States. Rolled section members would be used with most truss bridges built by the state highway commission after 1929.

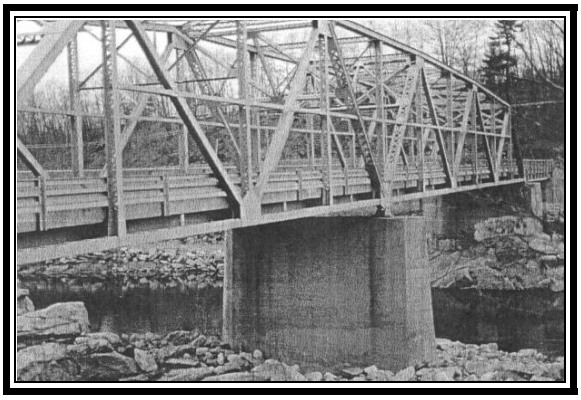


Figure II-9. The 1937 Durham Bridge (Durham #3334) is an early example of the application of a continuous design by the Maine State Highway Commission Bridge Division under the leadership of state bridge engineer Max L. Wilder. The truss continues uninterrupted over the pier, allowing for a longer span for the given depth of truss, and achieving greater economy of material in comparison to a simple span and reducing the number of deck joints, a frequent source of deterioration and high maintenance costs.

Another later refinement in design was the use of continuous designs. Three continuous design truss bridges, all built in 1937, are the West Buxton bridge (Buxton #3340), the Durham bridge (Durham #3334) and the Bar Mills bridge (Hollis #3333). A continuous design is where the superstructure extends over one or more piers. It achieves economy of material and deck joint reduction in comparison with simply supported spans of similar length. Although continuous designs had been known for decades, many engineers initially resisted their use because of the difficulties of precise analysis of the stresses. Nationally, resistance faded from the late 1920s to the 1930s mainly because of advances in engineering theory that made design calculations more precise. Again, the Maine State Highway Commission s Bridge Division adopted continuous designs at about the same time as other states.

The number of truss bridges designed by the Bridge Division declined sharply after 1945, as other bridge types, especially continuous-design steel girder-floorbeam and stringer bridge types, became a more economical alternative to longer span truss bridges. Truss bridges of note during the post-1945 period are three cantilever truss bridges. The 1949 Augusta Memorial bridge (Augusta #5196), the 1950 Max L. Wilder Memorial bridge (Arrowsic #2026), and the 1952 Aroostook River bridge (Caribou #5572) are considered handsome examples of the type and design. They are the only cantilever truss highway bridges identified in the state. However, they are not innovative from the perspective of the history of bridge technology. Before 1900, the very longest truss spans had come to be built in combinations of two cantilevers and a suspended span. State bridge engineer Max Wilder conservatively but quite successfully applied the well-established cantilever design principles to three of the longer crossings designed by the Bridge Division after 1945. The Arrowsic bridge was named after Wilder posthumously in 1963.

B. Movable Bridges

Movable bridges are those that can change position to allow the passage of marine traffic. Movable bridge technology dates from ancient times, with the earliest documented examples represented by simple draw bridges that were hinged at one end and lifted at the other end by an outhaul line. The movable bridge remained in its primitive stage until the late 19th century when the bridge type progressed rapidly due to advances in mechanical, electrical, and civil engineering. In the United States, the same need for accommodating greater capacity and span lengths that spawned the railroad's great era of experimentation with metal truss bridges had a similar impact on movable bridge technology. In the last quarter of the 19th century, movable bridge technology entered the modern era which was dominated initially by swing span bridges and after the early 1890s, by bascule (a French word meaning balance) bridges.

Maine with its coastline and numerous waterways, has a long history of movable bridges. In the colonial and early republic periods, settlers established Maine s economically important communities on navigable streams because of the reliance on waterborne trade, fishing, and transportation. One of the early movable bridges in Maine was the 1761 Sewall s Bridge over the York River. In 1934, the colonial era bascule span was replaced by the current steel stringer bridge with a fixed span built to appear like the original movable span because of local residents concern to maintain the historic setting in York Village (York # 3096). The bridge ranks as one of the nation s earliest historic bridge preservation projects.

Eleven pre-1956 movable highway bridges survive in Maine. Eight are swing span bridges and three are vertical lift bridges. No operable historic bascule bridges were identified.

Swing Span Bridges

A swing span bridge rotates in a horizontal plane around a vertical axis to a position parallel with the marine channel. When in operation, the movable span is supported in one of two methods: ***center bearing*** on a vertical pin or pivot, or ***rim bearing*** on a circular girder called a drum, which in turning moves on rollers. All surviving Maine examples are the lighter and more easily designed, operated, and maintained center bearing design with the pivot set on a pier, known as the pivot pier. The rim bearing design was used for wider and heavier swing span bridges. The superstructures of swing span bridges can be trusses, stringers or girder-floorbeams. Historically, the superstructures reflect the prevailing practices of fixed bridge construction with the specific type and design matched to the length and capacity needed at the crossing. Swing span bridges were known in Europe since at least the 17th century. Spurred by

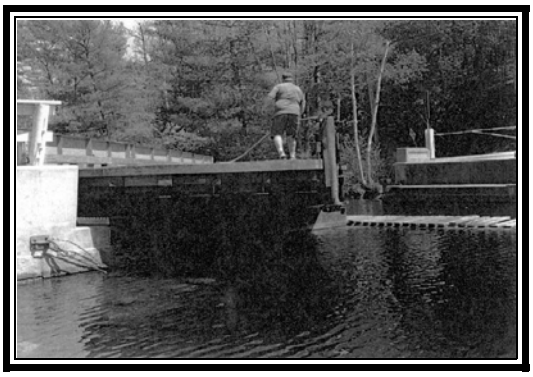


Figure II-10. The Songo Lock Draw (Naples #2780) is the state s oldest swing span bridge, fabricated in 1901. It was originally located over the Chutes Riv er at Naples Bay and moved to its present location in 1926. The swing span opens manually by a capstan engaging a pinion gear mounted on the pivot pier. A single operator opens the 60'-long bridge easily as long as it is well balanced.

railroad expansion and the advances in metallurgy and bridge engineering, the bridge type developed most rapidly between 1840 and 1890 in this country.

Swing span bridges are rotated by a series of reducing gear sets and a rack and pinion drive. Operators houses and equipment houses with the controls and machinery are located adjacent to or on the bridge. Many light swing span bridges were operated manually, but larger ones were first powered by steam engines and later by direct current electric motors.

Maine s oldest surviving movable highway bridge is the 1901 Songo Lock draw bridge, a hand-operated center-bearing bobtail swing span (Naples #2780). The bridge was originally located at Naples Bay. In 1926, the state highway commission relocated it to Songo Lock, but the function and operation of the 60'-long bridge remained virtually unchanged. Other swing span bridges of note are the 1930 Maine Kennebec Bridge (Richmond #2506), 1936 Great South bridge (Milbridge #1475), and the 1939 Southport Bridge (Southport #2789). All are complete examples of period swing span technology.

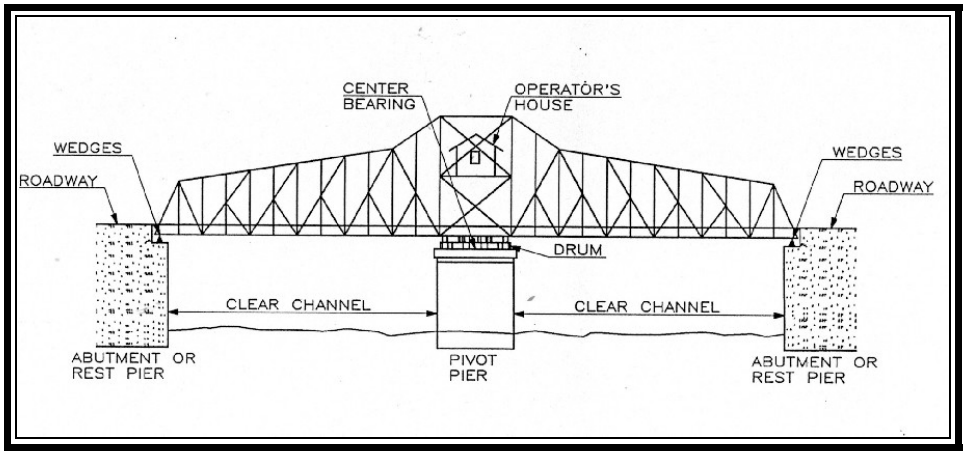


Figure II-11. Swing span nomenclature.

Vertical Lift Bridges

A vertical lift bridge rises and descends in the same vertical plane, maintaining at all times a horizontal position. Vertical lift bridges had been built in the United States since the 1850s, but the early examples had modest span lengths and were usually associated with canals, like the Erie Canal. Engineer J. A. L. Waddell s 1894 South Halsted Street bridge over the Chicago River (Chicago, Illinois) is considered the first

modern vertical lift bridge. Most large vertical lift bridges since the South Halsted Street bridge have been variations of the Waddell design. The Waddell vertical lift bridge has a central power source, housed in a mechanical room on the lift span and moving up and down with it. Gear trains transfer power to the winding drums and wire ropes. The span is raised and lowered by means of the wire ropes passing over sheaves on built-up steel towers and connected to concrete counterweights about equal to the span weight.

Although Waddell won great acclaim for the 1894 South Halsted Street bridge, it did not soon win him any new bridge commissions. By all accounts, the South Halsted Street bridge gave satisfactory performance, but the design presented complex engineering problems, from how to cast the massive steel sheaves to how to account for wire ropes that did not always stretch uniformly. Waddell did not design another vertical lift bridge until 13 years later in 1907. By this time, he had formed a partnership with John Lyle Harrington, who according to several biographical sources had the mechanical engineering know-how to develop Waddell s basic idea into a rational, well-integrated design that could economically compete with swing span and bascule bridge types. Waddell & Harrington designed more than two dozen vertical lift bridges between 1909 and 1914, taking out numerous patents to cover their improvements, such as various sheave designs and equalizers for the wire ropes. Despite the success, Waddell and Harrington, both men of strong and temperamental personalities, mutually agreed to dissolve their partnership in 1914. They went on to establish other firms Waddell & Hardesty and Harrington, Howard & Ash and each continued to excel in vertical lift bridge design.

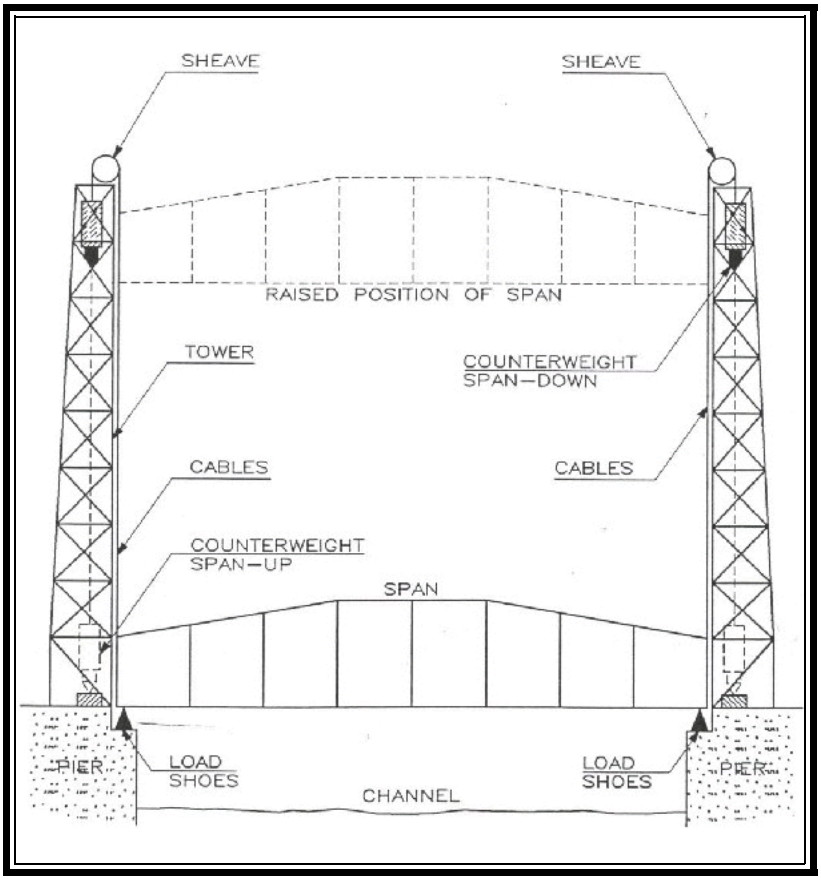


Figure II-12. Vertical lift nomenclature.

Maine s oldest vertical lift bridge was designed by consulting engineer J. A. L. Waddell. It is the 1920-21 Memorial Bridge over the Piscataqua River between Kittery and Portsmouth,

New Hampshire (Kittery #2546). The main span consists of a 302'-long vertical lift span flanked by two, 300'-long rivet-connected Warren thru truss spans with polygonal top chords. The bridge was built in response to growing levels of highway traffic to replace a toll bridge with a free interstate bridge on the principal highway route (Portland Post Road) from coastal New Hampshire and points south. After prolonged negotiations among Maine, New Hampshire, and the United States governments, it was agreed to build the bridge with $500,000 contributions from each. The bridge was built under the direction of a bridge commission. The Memorial Bridge is not one of Waddell s early innovative designs but it has all of the characteristic features including operators house at the middle of the lift span, spiral grooved winding drums, multiple tower sheaves, and concrete counterweights. Another Waddell design is the 1926 Carlton Bridge adjacent to the shipyard in Bath. In operation the Carlton Bridge is similar to the Memorial Bridge only the Carlton Bridge is double deck for railroad and highway traffic. In 2000, Maine DOT opened a new bridge adjacent to the Carlton Bridge to carry highway traffic on US 1. The Carlton Bridge remains in service for the railroad.

The third of Maine s vertical lift bridge is the 1940 Sarah Mildred Long Bridge (Kittery #3641) over the Piscataqua River upstream of the Memorial Bridge. The Sarah Mildred Long Bridge was built in response to traffic congestion on US 1 and the need to replace a wooden bridge of the Boston & Maine Railroad s eastern branch. Rather than build two bridges that would cause greater obstruction or delay to navigation, it was decided to build a combined double-deck bridge under the auspices of the Maine-New Hampshire Interstate Bridge Authority. Federal aid was provided through a grant of the Public Works Administration (PWA), a New Deal work relief program. The bridge was located on a bypass to the west of downtown Portsmouth and Kittery to remove through traffic from local streets. The bridge was designed by Harrington & Cortelyou, consulting engineers of Kansas City. This was the same John Lyle Harrington who had worked with Waddell in the early 20th century. The Sarah Mildred Long Bridge is a significant example of its type with mid 20th century refinements, most notably the arrangement of the operating system with drive motors and synchronous motors located on the top of the towers. The built-up steel towers have Art Moderne style sheathing of metal plates welded to the steel frames.

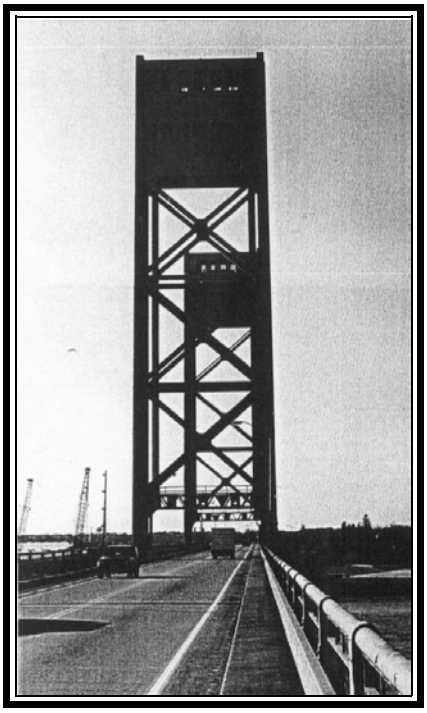


Figure II-13. Sara Mildred Long Bridge (Kittery # 3641), built in 1940 by the Maine-New Hampshire Interstate Bridge Authority, is a double-deck vertical lift bridge, with vehicular service on the upper deck and railroad on the lower deck.. It was named in 1988 for the authority s longtime secretary.

C. Suspension Bridges

Maine has three suspension bridges: Wire Bridge (New Portland #3383); Waldo-Hancock Bridge (Prospect #3008); and Deer Isle-Sedgwick (Deer Isle #3257). Although few in number, they are each significant examples of the bridge technology in a national context.

Suspension bridges are composed of two or more cables with the deck hung by vertical suspenders. The cables, which are in tension, pass over towers and are tied into anchorages which transmit the stresses into the foundation. Usually, the deck must be stiffened by girders or trusses sufficiently to prevent excessive vibrations from traffic and wind.

The suspension bridge technology is ancient with the earliest known examples made from bamboo cables in China during the first century B.C. Europeans were aware of the technology by the 16th century but it remained to Americans to develop its full potential beginning in the 19th century. In 1801, James Finley is usually recognized as building the first American suspension bridge from cables made of wrought iron chains over Jacobs Creek in Uniontown, Pennsylvania. He was followed by other pioneer suspension bridge builders, most notably Charles Ellet and John Roebling who in the 1840s made pioneering use wire-rope cables for exceptionally long-span bridges. Early extant examples of their work are Roebling s 1849 Delaware River Aqueduct (Pennsylvania-New York) and Charles Ellett s 1849 Wheeling Suspension Bridge (West Virginia).

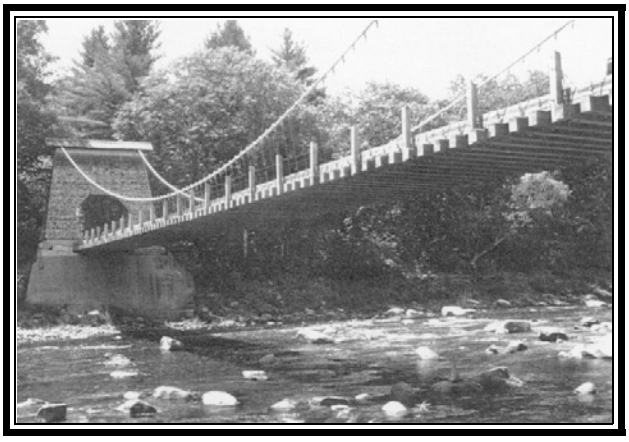


Figure II-14. The Wire Bridge (New Portland #3383) over the Carrabasset River was listed in the National Register of Historic Places in 1969. The bridge, with its distinctive, timber towers covered with boards protected by shingles, is among the oldest extant suspension bridges in the United States. It was honored with Maine American Society of Civil Engineers landmark designation in 1990.

Maine holds an important place in early American wire suspension bridge technology by virtue of the ca. 1864-66 Wire Bridge. The single-span 163'-long suspension bridge has main cables composed of wrapped metal wires, timber frame towers, and anchorages of metal chains embedded in stone and concrete. The bridge is among the oldest and most distinctive early suspension bridges surviving in the United States. It reflects local thinking about the technology. As several bridge historians have pointed out, the history of the bridge is surrounded by unsubstantiated local legend, including attribution to Col. F. B. Morse in 1841-42. Town records indicate, however, several

payments to David Elder, cited in a March 1, 1866 entry as agent for the bridge, and Capt. John B. Clark between 1864 and 1866. Elder and Clark are believed to have patterned the New Portland bridge after an earlier wire suspension bridge in the region, the 1856 wire suspensension bridge (non-extant) over the Sandy River at Strong. New Portland s Wire Bridge is National Register listed and a Maine-chapter American Society of Civil Engineers historic landmark.

The United States eventually produced many of the world s longest, monumental supension bridges from the Brooklyn Bridge (1883) to the Golden Gate Bridge (1939). Among America s leading 20th century suspension bridge engineers was David B. Steinman who completed two significant works in Maine: the 1931 Waldo-Hancock Bridge and the 1939 Deer Isle-Sedgwick Bridge. Steinman earned an engineering degree from Columbia University in 1909 and after a period of apprenticeship with Gustav Lindenthal, then at work on New York s Hell Gate bridge, emerged in the late 1920s as an outstanding and innovative suspension bridge designer. The 1931 St. Johns Bridge in Portland, Oregon, and the 1931 Waldo-Hancock Bridge were Steinman s first major suspension bridge commissions in the United States, although he had preceeded them with suspension bridges in Brazil and Canada. Later bridges included New York s Thousand Islands Bridge (1938) and Michigan s Mackinac Bridge (1957).



Figure II-15. The 1931 Waldo-Hancock Bridge (Prospect #3008), listed in the National Register of Historic Places in 1985, is a significant example of the suspension bridge type designed by the important 20th-century engineer David B. Steinman.

The 1,500'-long Waldo-Hancock Bridge ranks as one of the great American suspension bridges of the 20th century. Although not among the longest, it made use of innovative prestressed wire rope strand cables that eliminated the time-consuming process of spinning the cables in place, and it was the first suspension bridge to have Vierendeel truss towers. Named after Belgian engineer Arthur Vierendeel, the chief characteristic is the absence of diagonals. Rigid frame construction connects the posts to the chords. The advantage is economy of material and construction, as well as aesthetics. Steinman sought to emphasize straight lines with simple elements in repetition and alternation. The Waldo-Hancock Bridge is listed in the National Register.

The 1939 Deer Isle-Sedgwick bridge used both prestressed wire rope stand cables and Vierendeel truss towers, but it is perhaps best known for its shallow stiffening girders,

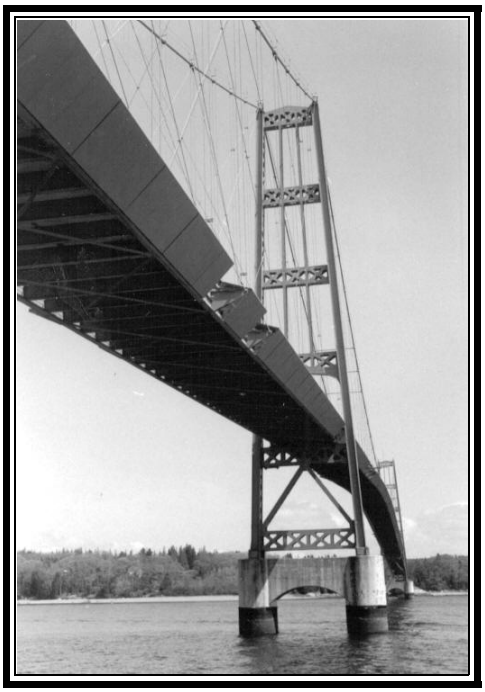


Figure II-16. The Deer Isle-Sedgwick Bridge (Deer Isle # 3257), built in 1939, was the second of Steinman s commissions in Maine. It is a handsome, aesthetic bridge in a stunning scenic setting, but suffers from wind-enduced vibrations due to its shallow stiffening girders. The appropriate depth of the girders was the topic of heated theoretical engineering debates in the 1930s, but Steinman and other suspension bridge designers held that excessive stiffening was not required.

which are only 6.5' deep. In the 1930s, the trend was to use shallower stiffening trusses or girders for economic and aesthetic reasons. As well, a prominent theory held by Steinman and other engineers was that the mere weight of such long bridges would prevent them from requiring excessive stiffening. This led to the unforeseen problem of aerodynamic instability with vertical oscillation caused by high sustained winds. In 1940, the Tacoma Narrows bridge in Washington, a bridge strikingly similar to the Deer Isle-Sedgwick bridge, was demolished in a spectacular fashion by wind-enduced vibrations. In 1943, this concern led Steinman to install a system of diagonal stays on the Deer Isle-Sedgwick bridge. Most recently, in 1994, U-shaped, steel plate wind fairings were placed on the exterior faces of the stiffening girders in an effort to dampen the effects of the wind.

D. Arch Bridges

Arch bridges are curved construction with the convex side upward. Regardless of size, shape or material, the principle behind the arch bridge type remains the same; the arch ring compresses under vertical loads and the outward thrust at the base of the arch must be balanced by equal reactions at the abutments. The arch shape can be semicircular, elliptical or segmental.

Stone Arch Bridges

The stone arch bridge technology was used since ancient times, and it was brought to this country by European colonists. The technology was well suited for the compressive strength inherent in natural rock, and it was the only technology available for permanent, substantial structures prior to the introduction of truss bridge technology during the first half of the 19th century. Stone arch bridges continued to be built for railroad and highway use through the first decades of the 20th century.

The principle behind stone arch construction is that shaped stone blocks of the arch ring compress together under vertical loads. Historically, the stone arch was constructed by building the abutments and wingwalls, then erecting a wood, arch-shaped form, known as falsework or centering. The arch ring, spandrel walls, and

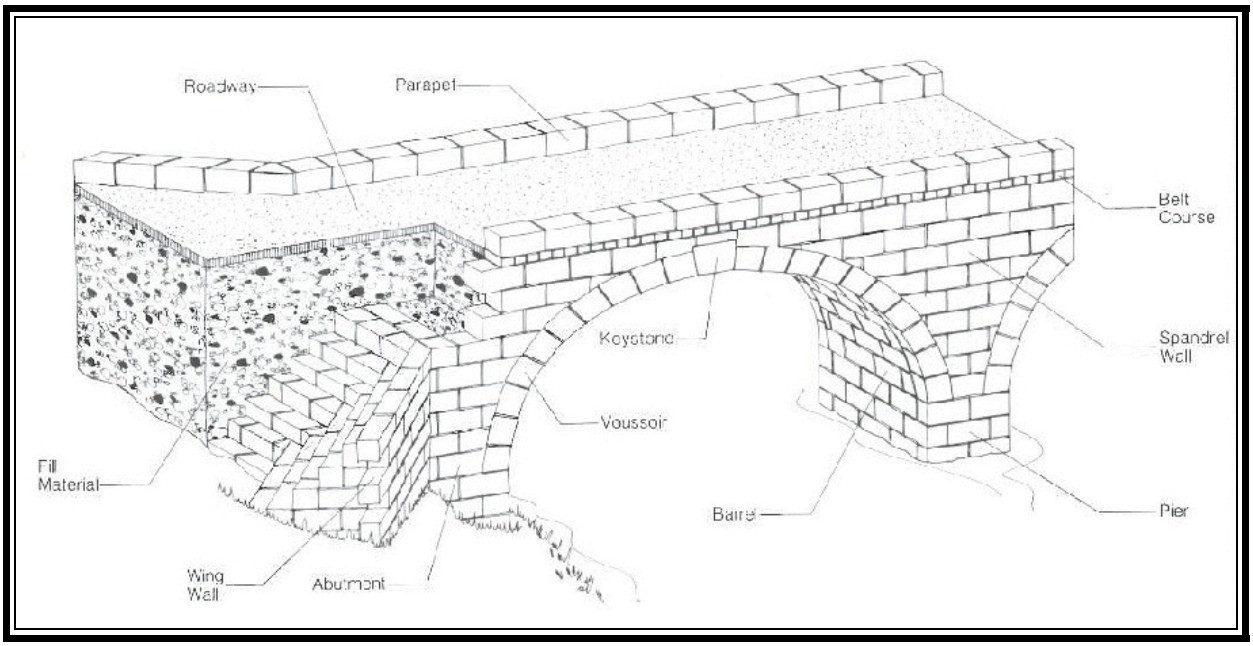


Figure II-17. Stone arch bridge nomenclature. Source: PennDOT. Historic Highway Bridges of Pennsylvania.

parapets were placed, then the structure was backfilled with fill material (usually stones, large rocks, and earth), Finally, builders removed the falsework, allowing the arch to compress into a locked and stable unit that supported itself through compression.

Stone arch bridges were usually laid up with mortared joints, although some were dry laid (no mortar between the stones). Until the late 19th century, the mortar was a soft, plastic, lime-based mortar, rather than a hard Portland or artificial cement. Portland cement came into common use in the 1880s and 1890s.



Figure II-18. The Arch Bridge in Pembroke (#2021) is among the most complete, extant stone arch bridges in Maine. It was built in 1894 by the town.

At least 12 stone arch highway bridges remain in service on public roads in Maine. They are most often composed of granite blocks, an abundant natural resource that was quarried because of its suitability as a building material.

The oldest documented extant stone arch bridge is the 1854 Water Street Bridge (Augusta #0563). Like many of the state s arch bridges it is laid up in ashlar, i.e., squared stone.

Among the stone arch bridges most noteworthy for completeness and quality of craftsmanship are the ca. 1873 Clark Street Overpass (Portland #0328), the 1894 Arch Bridge (Pembroke #2021), and the 1905 Vaughan Memorial Bridge (Hallowell #0490). The Clark Street Overpass was built by the Boston & Maine Railroad as part of the development of its Portland terminal. The Vaughan Memorial Bridge was built by the Vaughan family as a gift to the town and a memorial to William Manning Vaughan (1807-1891), a member of one of the town s founding families.

Reinforced Concrete Arch Bridges

The same principles that govern traditional stone arch construction govern reinforced concrete arch construction, only that rather than shaped blocks compressed together under vertical loads as in a stone arch, reinforced concrete arches are monolithic structures with the reinforcement distributed in the tension zones of the arch ring. In traditional stone arch or plain [unreinforced] concrete arch bridges, the sheer mass of material is used to absorb the tensile stresses, but reinforced concrete arches use reinforcing bars to perform the same function. Reinforced concrete arches are in many ways a more efficient design, since a lesser volume of material can do the work formerly done by the additional mass.

In the 1880s and 1890s, the earliest reinforced concrete bridges built in the United States were closed spandrel deck arches where the arch ring supported the spandrel walls that hold back the fill between the arch ring and the roadway. During the early period of the reinforced concrete arch technology, a trial-and-error approach prevailed with a variety of competing ideas about the appropriate shape, volume, and placement of reinforcing metal. A number of engineers patented and marketed different arch reinforcing systems, but by far the two most common systems in North America were versions of either the Melan or Ransome systems.

The Melan system, invented in 1892 by Austrian engineer Josef Melan and patented in this country in 1893, utilized steel beams embedded in the concrete. Really more a steel arch with concrete encasing than a true reinforced concrete structure, the Melan system was able to support greater capacity for longer span lengths than earlier systems. The leading proponent of the Melan system in the United States was engineer Edwin Thacher. He designed the first major Melan-type arch, a three-span structure, over the Kansas River at Topeka beginning in 1894. He established the Concrete-Steel Engineering Company of New York City in 1901, and the firm went on to design more than 200 Melan arch bridges prior to 1912. Examples of Melan arches built by Thacher and other builders are known to have existed in Maine, but no documented examples are documented to have survived. The 1903 Old Wesserunset Bridge (Skowhegan #1074) appears to be a Melan-type arch but no plans document its construction. It has been significantly altered and has lost its integrity of original design.

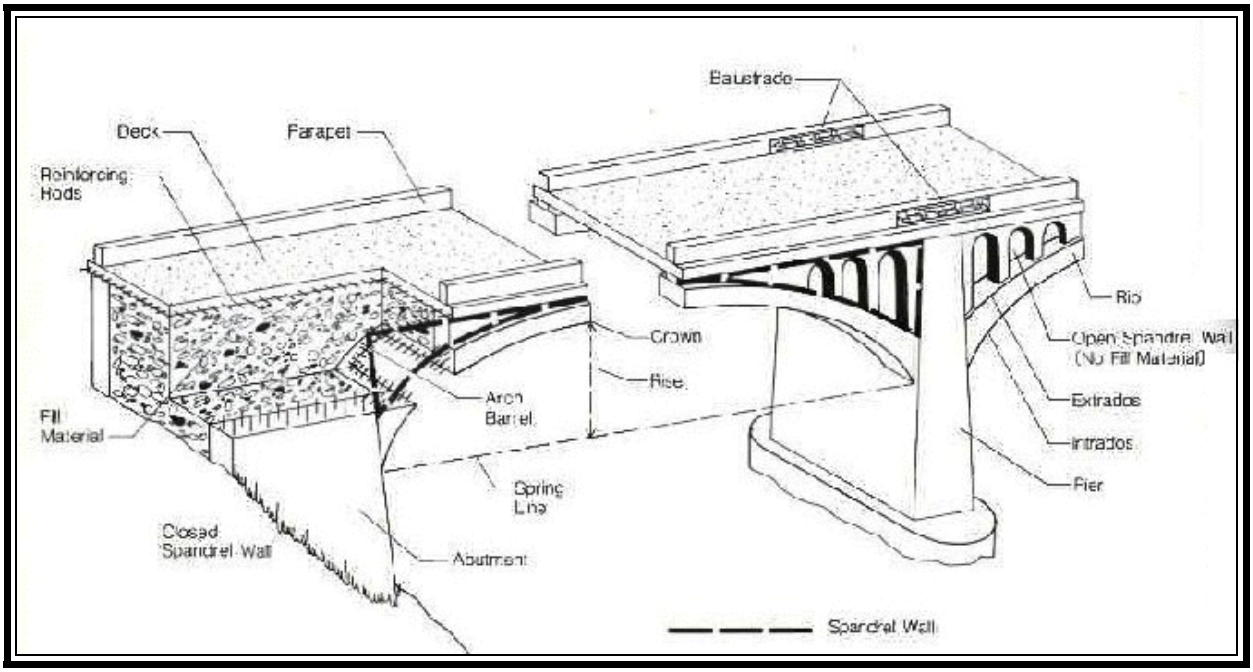


Figure II-19. Reinforced concrete arch bridge nomenclature. Source: PennDOT, Historic Highway Bridges of Pennsylvania.

The Melan system was eclipsed during the first decade of the 20th century by versions of the Ransome system of twisted reinforcing bars, first used by Ernest Ransome in the late 1880s. Ransome was a California builder and manufacturer of concrete block who received a patent for the commonly used square twisted reinforcing bar in 1884. He patented the reinforcing system after experimenting in search of a factory-building material that offered superior resistance to earthquake, explosion, and fire. He later applied the twisted reinforcing bars to arch bridges and his 1889 Alvord Lake bridge in San Francisco s Golden Gate Park is considered America s first concrete arch with steel reinforcing bars. The Ransome system offered important advantages; the twisted bar provided a much better bond between the steel and concrete, and twisting the bar cold raised the steel s yield point considerably. The bars could be offered in a range of sizes, thus providing greater control over the available cross section and eliminating unnecessary metal.

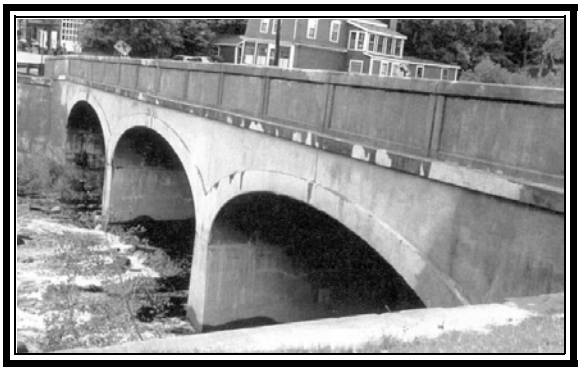


Figure II-20. The 1902 Pope Memorial Bridge (East Machias #2682) is Maine s oldest identified example of a reinforced concrete deck arch bridge. The bridge was built by the Pope Lumber Co. to improve the crossing of the East Machias River near its lumber mill and shipyard.

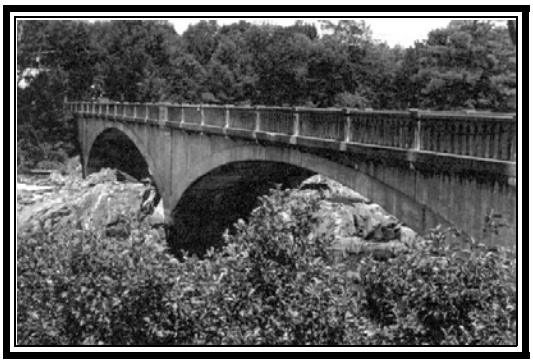


Figure II-21. The 1923 Carabasset Bridge (New Portland #5131) is one of the longer, earlier, and complete, reinforced concrete arch bridges designed by the state bridge division.

Although Ransome usually was given credit for inventing what became the most popular reinforcing system, other engineers and builders were given credit for promoting and propagating reinforced concrete arch bridges using the twisted reinforcing bars. The popularization of the technology was achieved through engineering periodicals, textbooks, and advertising that reached a national audience of engineers and contractors receptive to the apparent economic and structural advantages of the material.

By 1910, reinforced concrete deck arch construction had become widely accepted practice throughout the United States. Builders and engineers in Maine were in step with national trends. At least 33 examples from 1902 to 1953 have been identified. The oldest extant example is the 1902 Pope Memorial Bridge (East Machias #2682). Other examples of the technology as it had matured after 1910 are the ca. 1915 Hartford Street Bridge (Rumford #3638) and the 1916 Centennial Bridge (Kingfield #5852). The bridges exhibit typical period details such as paneled concrete parapets or concrete balustrades, and plain or minimally detailed spandrel walls. The Maine State Highway Commission oversaw the construction of a number of reinforced concrete deck arch bridges for towns in the 1910s, and beginning in the late 1910s, the commission also designed many examples in house. A complete example of the Bridge Division s work with many of the standard details is the 1924 Carabasset Bridge (New Portland #5131).

In the first decades of the 20th century, engineers developed other reinforced concrete arch bridge types, most notably open spandrel arches and thru arches. Open spandrel arch bridges differed from closed spandrel arch bridges in that spandrel columns were used to support a deck slab rather than walls holding back earth fill. Open spandrel arch bridges were built nationally from about 1907 through the 1930s. Although they offered economy of material in comparison to closed spandrel arches of similar size and lessening of dead load, they also required more complicated formwork and were thus best suited to long-span

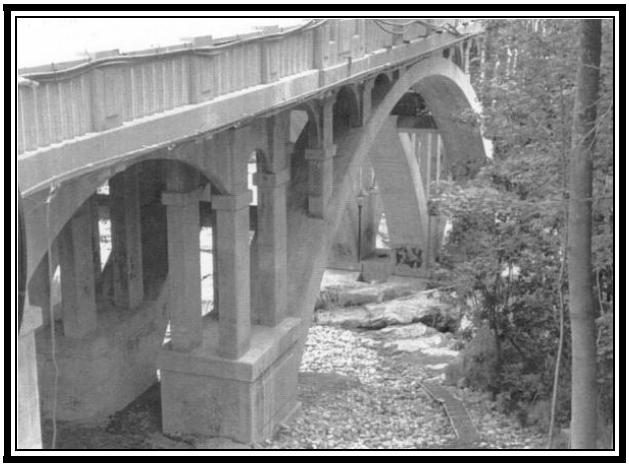


Figure II-22. The Chisolm Park Bridge (Rumford #2990), built in 1929-30, is the only open spandrel arch highway bridge in Maine.

crossings where a graceful yet powerful bridge was desired and the economy of material could be used to best advantage. Many open spandrel arch bridges have arch rings composed of individual ribs, resulting in further economy of material. Maine has one notable ribbed open spandrel arch bridge, the 1929 Chisolm Park Bridge (Rumford #2990). Like many open spandrel arch bridges nationally, it is in a setting where the aesthetics of the design and its architectural features are shown off to best advantage.

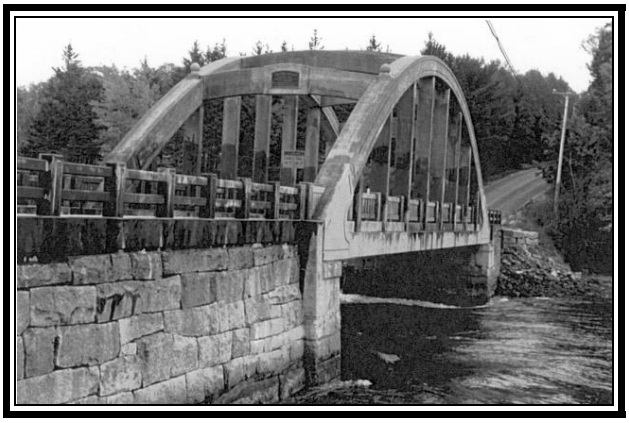


Figure II-23. The Blue Hill Falls Bridge (Blue Hill # 5038) is one of the significant, beautifully detailed tied thru arch bridges designed by the Maine State Highway Commission in the 1920s.

Reinforced concrete thru arch bridges appeared in the United States during the early 1910s, with the best known variation a patented design by James B. Marsh of Des Moines, Iowa. The thru arch usually consisted of two parallel arch ribs that were tied by reinforced concrete girders, which resist the thrust of the arch. The structural action was similar to an archer's bow, and the bridge type was sometimes also called a bowstring arch for that reason. The design reduces the size of the required substructure. Thru arches were often located in settings where an aesthetic arch bridge was desired but conditions did not permit massive abutments or low vertical clearances.

Many thru arches were built throughout the Midwest in the 1910s and 1920s, but they were never greatly popular on the East Coast. Maine's state bridge engineer, Llewellyn Edwards, however, chose the reinforced concrete thru arch type/design for the state bridge division's signature work. Although the state highway department built only three examples during his tenure from 1921 to 1928, they were exceptionally proportioned and well detailed examples that rank among the most graceful in the nation. The 1926 Blue Hill Falls Bridge (Blue Hill #5038) is the earliest of Maine's three examples. The bridge is complemented by its natural setting along the rocky coastline. The 1928 Covered Bridge (Norridgewock #2187) is the longest and only multi-span example of the three in Maine. The 1927 Chestnut Street Bridge (Lewiston #5003) is the third example located over a power canal adjacent to Lewiston's textile mills.

By 1930, the great era of reinforced concrete arch bridges had ended nationally and in Maine. Afterward, reinforced concrete arch bridges were built less frequently as plain utilitarian structures because of their comparatively high cost of construction and material in comparison to steel and other reinforced concrete bridge types, such as T beams, slabs, and rigid frames. They did, however, continue to be built in small numbers in urban or park-like settings where a traditional arch bridge was desired.

Among Maine s significant later reinforced concrete arch bridges are the collection built for Acadia National Park s carriage roads and motor roads by John D. Rockefeller, Jr. He developed the park on his own private land, later donated to the federal government, as part of his effort to offer the public a way to experience Acadia s natural beauty. A significant feature of Rockefeller s planning for the park was a system of carriage roads reserved for pedestrians, horse riders, and carriages. The carriage roads were separated from the motor roads, which themselves were sited to fit gracefully to the island s topography. Where carriage roads and motor roads intersected or crossed streams, Rockefeller designed reinforced concrete arch or reinforced concrete rigid frame bridges faced with native stone. The application of stone veneer to reinforced concrete bridges was a technique that was in use from the first decade of the 20th century. The Acadia National Park bridges have a high quality of stone craftsmanship used to great effect in harmony with the natural landscape. The road and bridge system is considered a masterpiece of the intersection of engineering and landscape architecture. It has had a significant influence on the design of parks throughout the United States.



Figure II-24. The Stanley Brook Bridge (Overpass NPS #0265, Mt. Desert #0559) is one of the signature, stone-faced, reinforced concrete arch bridges in Acadia National Park. John D. Rockefeller, Jr., had the bridge built in 1933 as part of the development of a series of grade-separated carriage roads and motor roads.

Steel Arch Bridges

Metal has been used for arch bridges since the famous 1779 cast-iron arch over the River Severn at Coalbrookdale in England. The first American iron arch bridge is the 1839 Dunlap s Creek bridge at Brownsville, Pennsylvania, on the National Road. Steel was introduced for arch bridges in the United States during the 1870s. Maine has no significant 19th or early 20th century examples of the steel arch technology.

The only example of a steel arch bridge that is not a structural steel plate corrugated arch is the 1935 Morse Bridge (Rumford #2585). The Morse Bridge has a 230'-long, 3-hinge, steel tied thru arch main span. The bridge works under the same basic principles as the reinforced concrete tied thru arch bridge type/design only the material is different. The steel tied thru arch technology was developed in Europe during the last half of the 19th century. The first important long-span steel tied thru arch bridge in the United States was the 780'-long 1930-32 West End-North Side Bridge over the Ohio River in Pittsburgh. During the 1930s, American engineers increasingly considered tied steel thru arch bridges as an important alternative to other bridge types, especially for bridges in the range of 200' to 800' spans. The type/design was usually chosen for reasons of economy, appearance, and because conditions at the bridge site restricted water flow. The 3-hinge variation is not uncommon in steel arch bridges. It was developed for deck arch bridges in about 1870 and later applied to thru arch bridges. The 3-hinge design is a determinate structure and the hinges compensate for secondary stresses. The Morse Bridge is Maine s only example of its type/design and it reflects period thinking on the technology.

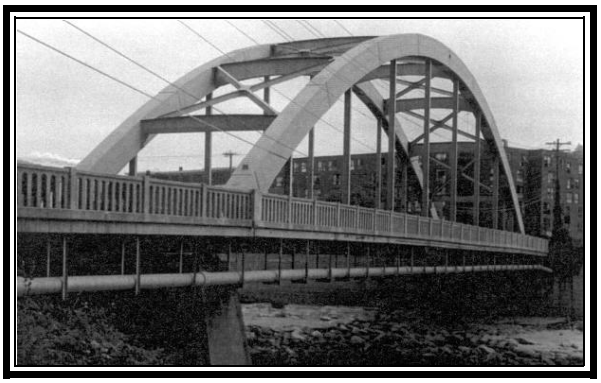


Figure II-25. The Morse Bridge (Rumford #2585), a tied steel thru arch, built in 1935.

Structural Steel Plate Corrugated Arches

A very common type of drainage structure on highways and railroads throughout Maine and the nation is the structural steel plate corrugated arch. The arches were introduced in 1931 when Armco Drainage and Metal Products, Inc. of Middletown, Ohio, began producing them in diameters up to about 20'. They were the product of advances associated with the corrugated metal pipe culverts that were introduced in about 1905 and had become ubiquitous during the 1910s and 1920s. The multi-plate arches were developed because of the practical limitations of manufacturing and shipping pipes in large diameters. Most steel late corrugated arches are either the half-circular (spring lines vertical with the footings) or reentrant (spring lines are above the footings) design, and both are typically placed on concrete footings. The multi-plate arches are built up of corrugated steel plates curved at the factory and shipped in nested, knocked-down form for bolted assembly in the field. The multi-plate arch design proved to be resistant to cracking and disjointing under loads, easy to construct, and durable. It was immediately popular in Maine and throughout the country, and it is still being used today with little variation in design. None of the identified corrugated metal plate arches in Maine were evaluated as significant for their technology or engineering.

E. Rigid Frame Bridges

The reinforced concrete rigid frame bridge type, where the top member and the verticals are integral, is one of the most efficient uses of both steel and concrete. It was developed in Europe during the late 19th century and transferred to the United States in the early part of the 20th century. In Maine, two variants of the type/design were identified: the low rise and the high rise.

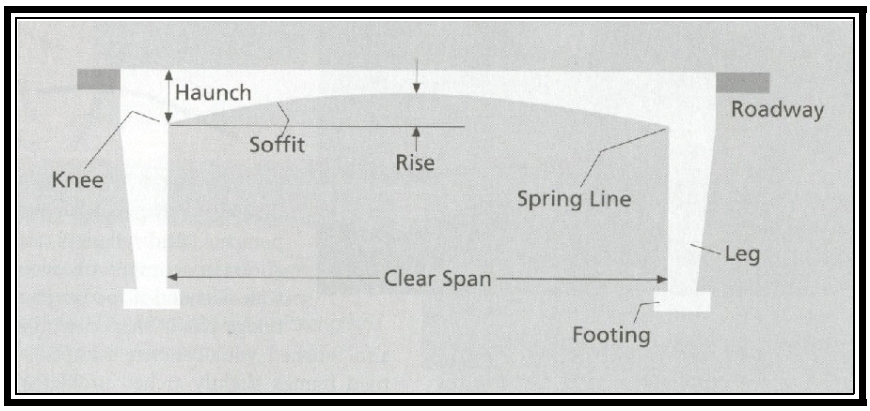


Figure II-26. Rigid frame bridge nomenclature. Source: DelDOT, Delaware s Historic Bridges, 2001.

Low-Rise Rigid Frame Bridges

Low-rise rigid frame bridges range in length from about 15' to 25' long. The legs and slab are integral. Haunches at the inside corners are reinforced to take stresses.

The bridge type/design was introduced in Maine and the United States during the first decade of the 20th century and was usually identified in period literature as an open (no floor) or closed (with floor) box culvert. Today, they are usually considered rigid frame bridges because they have in common the basic principle of a rigid frame bridge, where the top member and the verticals are integral and the legs perform useful work in supporting the loads. The low rise examples do not have the engineering sophistication, proportions, or economical use of material of the later longer, high-rise examples.

The low-rise rigid frame bridge type/design has a history in common with other standard reinforced concrete bridge types, such as the slab and T beam (see below). They were promoted by federal, state, and municipal engineers as an economical and permanent solution to providing roads with short drainage structures. The earliest identified example of the standard design used by the Maine State Highway Commission is the 1917 Youngs Bridge (Union #2971). Other examples are four 1928 bridges in Acadia National Park (Mt. Desert #0466, #0467, #0468, #0479).

High-Rise Rigid Frame Bridges

In the 1920s, Arthur G. Hayden, designing engineer of the Westchester County (NY) Parks Commission, introduced the rigid frame bridge type from Europe for use with

longer span and greater vertical clearance bridges. The bridge type/design requires expensive and restrictive formwork to erect but it is an efficient use of material. It reduces the amount of work in the ground because the mass of the abutments is reduced. The rigid frame s slightly arched profile to the soffit provides maximum depth at the knees where the bending moment is greatest and the stress pattern most complex. The bridge type results in well proportioned span s with clean lines.

The Maine State Highway Commission Bridge Division under the leadership of state bridge engineer Max Wilder was in step with national trends when it introduced the bridge type/design for longer span crossings that were not culvert-like low-rise rigid frame bridges in the early 1930s. The oldest and first documented use is the 1931 Canal Bridge (Madison #2122), a modest 41'-long bridge. A longer and later example is the 74'-long, Partridge Bridge built in 1935 (Whitefield #2650).

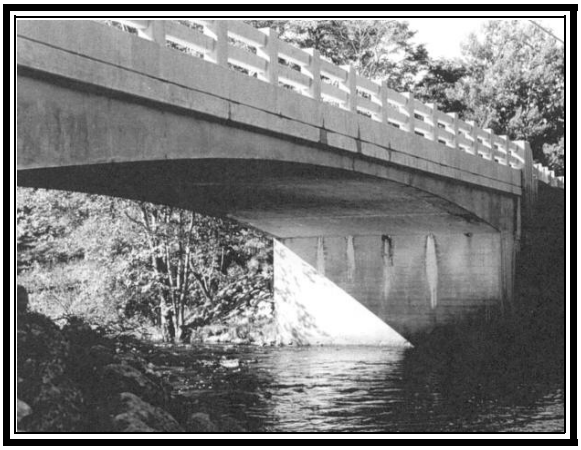


Figure II-27. The 1935 Partridge Bridge (Whitefield #2650) illustrates the intrinsic arch profile and handsome lines that characterize the high-rise rigid frame bridge type.

A later mid 20th century refinement to the rigid frame bridge type/design was the application of continuous reinforcing to multiple spans. By the late 1930s, rigid frame bridges were common, but in general used only for single spans from 35' to 85'-long. Multiple span applications required difficult and sophisticated stress analysis because of the indeterminate nature of rigid frame structures, and thus, they were not often attempted. In the 1940s, engineers demonstrated growing confidence in the design calculations necessary to build continuous, indeterminate structures of both steel and reinforced concrete. Most state highway departments attempted their first multiple span, rigid frame bridges in the years after World War II. One of the earliest and most complete in Maine is the 1949 Mechanic Falls Bridge (Mechanic Falls #2540).

F. Girder-Floorbeam Bridges

An important advance in girder technology occurred with the transition from wood to metal girders in the mid 19th century. America s antebellum bridge engineers understood the superior bending strength of metal but the initial development of the technology, and its widespread application, relied upon later improvements in the manufacture of rolled-iron structural shapes, such as angles, channels, plates, and I-beams.

As early as 1847, wrought-iron girder bridges were introduced by the railroads. In most instances, the railroads used built-up beams, composed of rivet-connected plates for the web and angles for the flanges, to make a beam of sufficient depth to span greater distances than possible with then available rolled beams. (Depth of a beam is related to span length, with the greater the desired length, the greater the depth.) Built-up girder bridges proved to be efficient and economical for railroad-carrying spans, and they were the only serious competitors to metal trusses for railroad use in the late 19th century. Railroad companies especially appreciated the ease of installation. Since the built-up beams were almost completely assembled in fabricating shops, conveniently located on rail lines, the bridges could be loaded easily onto flatbed cars. Once at the erection site, cranes quickly hoisted them into position with minimum traffic interruption. The ability to transport beams was often a factor limiting their length, and in general, built-up girder *highway* bridges were not built in great numbers because of the difficulty of transporting the beams overland by wagons or sleds. Most extant 19th century girder bridges and many 20th century ones are associated with railroads.

By the 1890s, improvements in the open-hearth steel making process resulted in larger quantities of structural steel at lower prices. Consequently, bridge builders increasingly chose steel rather than wrought-iron sections to make use of steel's superior tensile strength. As steel plants developed larger rolling mills, it was also possible to substitute deeper rolled beams of I-section for built-up beams. Although wrought-iron rolled I-beams had been available since the 1850s, they had been used sparingly in bridge construction, usually as floorbeams or stringers of truss bridges, because of their high cost and the difficulties of rolling long and deep beams.

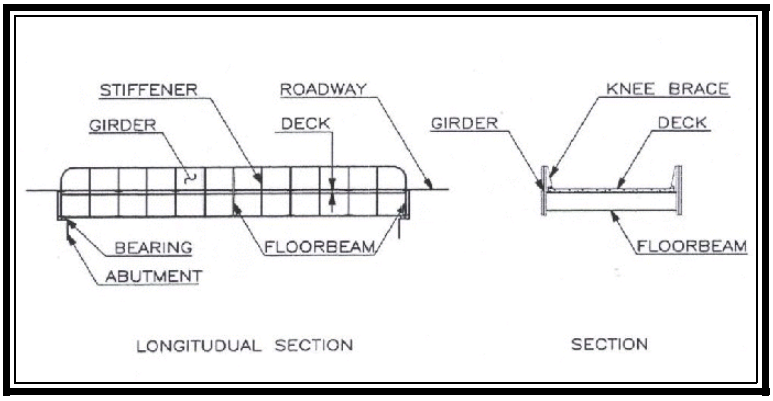


Figure II-28. Girder bridge nomenclature.

The two most common designs of girder with floorbeams bridges are the ***thru girder*** and the ***deck girder***. The thru girder is where the floorbeams are placed in line with the bottom flanges of the girders with the travelway passing between the paired girders. The deck girder is where the floorbeams are placed near the top flanges of the girders and the travelway located at the top of the girders. Other than the placement of the floorbeams and travelway, no significant technological difference exists between the thru and deck designs. Deck girders are often associated with locations where vertical underneath clearances were not critical.

The girder-floorbeam bridge technology was mature by the last decades of the 19th century, consequently, there have been few significant changes during the 20th century. The bridge type continues to be built today with minor refinements, mostly in metallurgy and the use of welded and bolted connections rather than riveted connections. The increasing application of continuous design principles was an important advance in bridge engineering during the mid 20th century, and it was applied to girder with floorbeams bridges, as well as most other major bridge types and designs. A continuous design is where the superstructure extends without joints over one or more piers. The continuous designs achieved economy of material in comparison to simply supported spans of similar length.

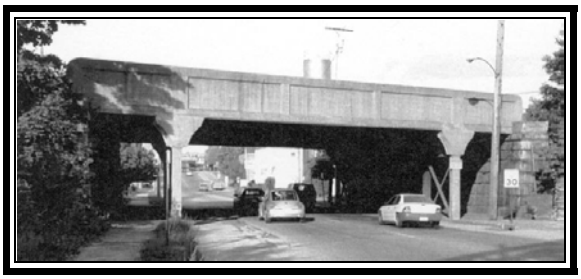


Figure II-29. The Park Avenue Underpass (Portland #0326 is an early and complete surviving example of a girder-floorbeam bridge with concrete encasement to protect the beams.

The bridge survey evaluated 97 girder-floorbeam bridges, not counting the previously evaluated 6 movable bridges that have girder-floorbeam superstructures. Twenty-two (22) of the 97 bridges are evaluated eligible for the National Register of Historic Places. It was also determined that 11 of 97 had post-1956 dates of construction and were thus built after the survey s cutoff date.

Maine s girder bridges fall well within national trends and thinking about the technology. They are mostly textbook designs built using standard details for girders, flooring systems, railings, and substructure elements.

All of the oldest extant examples in the state are associated with railroads. This is to be expected. The railroads developed the technology in the mid 19th century and used it unsparingly through the middle of the 20th century. It is important to note that the bridge survey includes only those railroad-built bridges that cross highways as grade separation structures. Although it is unknown how many other girder-floorbeams bridges are on the railroads, it is to be expected that the number is very large indeed. Most of these uninventoried bridges are presumed to have been built between 1890 and 1929 when the railroad companies wholesale upgraded bridges on their lines for heavier locomotive loadings.

The oldest example in the survey is the 1890 Park Avenue Underpass (Portland #0326). It is an early application of concrete encasement, a technique that was successfully developed to protect steel beams in the late 19th century and which was very popular through the first half of the 20th century. In this case, the concrete encasement is also used as an architectural treatment in deference to the bridge s

prominent urban situation. The bridge is among the earliest extant structures built by the Portland Union Railway Station Company, organized in 1887 to rationalize and improve the terminal operations of formerly competing rail lines in a congested urban setting.

A number of railroad-built girder-floorbeam bridges are evaluated significant for their historic association with rail lines that have made important contributions to the economic and physical development of the state, region, or locality. It is their historic association with an important rail line with integrity that sets them apart from other bridges with a common technological heritage.

Seven steel girder-floorbeam bridges (Frankfort #1132, Winterport #1143, Hampden #3526, Stockton Springs #5388, Hermon #5420, Frankfort #1130, Frankfort #1136) are significant for their historic association with the original 1905 section of the Bangor & Aroostook Railroad s line from Northern Maine Junction to Searsport. The line was the most costly construction project undertaken by the railroad as part of its successful effort to promote the development of northern Maine's forest and wood products industries and open markets to northern Maine's farmers, particularly for potatoes. The B&A RR had built or acquired a network of lines from north of Bangor between 1891 and 1902, but the company did not have an all-weather seaport terminal. It was thus at the financial mercy of other railroads, particularly the Maine Central, which could set rates and terms for shipment. The extension of the line from South LaGrange to its new wharves and coal terminal at Searsport had a significant impact on the growth of industry along the B&A RR, particularly the expansion of the Great Northern paper mills in Millinocket. The Pennsylvania Steel Company of Steelton, PA, held the B&A RR s contract for bridge construction on the line and fabricated all of the identified girder with floorbeams bridges. The bridges are among the earliest extant examples of the type/design identified and their significance is enhanced by the overall integrity of the line. Several of the bridges have good period details, such as shiplap details or steel bents with built-up battered columns of Z-shaped section and plate.

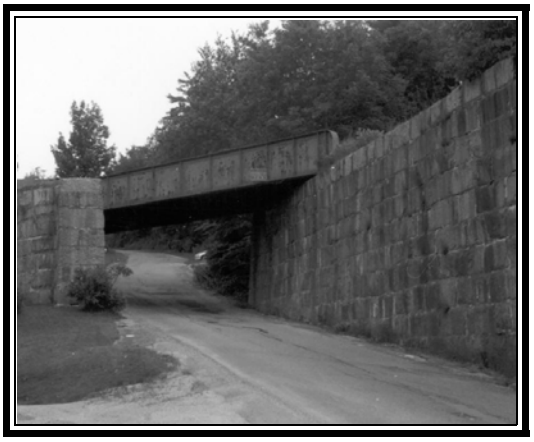


Figure II-30. Frankfort #1136 is one of seven overpass bridges built in 1905 by the Bangor & Aroostook Railroad for its Lagrange-Searsport main line extension. The line retains an early 20th century character and many of its period buildings and structures between Northern Maine Junction and Searsport.

Field observations and research in B&A RR company history indicates that the section of the extension from Northern Maine Junction to Searsport appears to retain integrity of original design, including most of its original alignment, grade, cuts, fills, bridges (17 bridges according

to the company history) and many of the early 20th century facilities, including stations & depots (Frankfort, Searsport, Winterport) and shops/yard at Northern Maine Junction. The section of line from Northern Maine Junction to Searsport has the significance and integrity of a historic corridor under Criterion A.

Another significant grouping of girder-floorbeam bridges are those on the Boston & Maine Railroad s 1927-28 Saco-Biddeford Main Line grade separation. The B&M Main Line from South Berwick to Portland by way of Saco-Biddeford was initially constructed in 1873. It was built in response to competition for the Boston-Portland traffic between the Eastern RR and the B&M, in which the B&M had lost trackage rights over an earlier line. The B&M emerged from the financial turmoil of the 1870s as the strongest of the competing lines and from thenceforth was the dominant carrier of all freight and passenger traffic from Portland south to Boston and other points in New England. The B&M played a significant role in the transportation and economic development of Maine by tying its agricultural and industrial products to the national economy. The Main Line was the backbone of the B&M system and a dominant transportation force in the state through the 1920s until it began consolidating operations and slowly abandoning its lines after the 1930s in response to competition from motorized vehicles.

The B&M RR Main Line was continually improved from its initial development in 1873 through the end of its heyday in the late 1920s. The section of line in Biddeford-Saco was improved in 1927-28 with replacement of at least seven overpass bridges (Biddeford #1351, Saco #1352, #1353, #1354, #1355, #1364 & #1365). Biddeford #1351 is a truss bridge, and Saco #1353 is a steel stringer, but the others are girder with floorbeams bridges, all fabricated by the Phoenix Bridge Co. of Phoenixville, PA. The Main Line was known by railroaders as the high iron" because the double track, easy grades, and limited grade crossings were designed for speed and efficiency. The bridges are complete examples of their type and design, engineered for heavy locomotive loadings of the early 20th century. The Biddeford-Saco grade separation has the integrity of a historic corridor.



Figure II-31. The Common Street Bridge (Saco #1354) illustrates the ubiquitous girder-floorbeam technology used by Maine s and the nation s railroads. It is one of seven bridges built in 1927-28 as part of the Boston & Maine s Saco-Biddeford grade separation.

Among other bridges with important railroad associations are the Maine Central s 1914 Water Street Bridge Underpass (Augusta #0564), part of a multi-span viaduct with riveted Warren deck trusses over the Kennebec River; the Maine Central s 1914 Water Street Bridge (Hallowell #5391) and 1930 Second Street Bridge (Hallowell #0565), both located in and contributing to the National Register-listed Hallowell Historic District;

and the 1920 B&M RR Underpass (Wells #5337), also part of the high iron of the B&M Main Line.

The steel girder -floorbeam bridge type was within the repertoire of bridge types built by the Maine State Highway Commission, but in comparison to other standard bridge types, it has not played as significant a role in the development of the state s highway system. There are no state-built examples predating 1928, and those later examples of the technology have few noteworthy features or details. Many were built as replacement bridges using salvaged girders and beams as an expedient. The 1930 Charles River bridge (Fryeburg #2151) is a formulaic example of a state bridge division-designed girder with floorbeams bridge that is noteworthy for its setting in an area with rural historic district potential.

The most impressive of the state bridge division girder bridges are the 2 multiple span continuous deck girder bridges built in the 1940s. The 1940 Seven Mile Brook bridge (Vassalboro #3657) and the 1946 Highland Avenue bridge (Houlton #3874) have haunched built-up girders with center spans of over 100'. They are historically and technologically significant applications of continuous design principles illustrating the economy of design and material achieved during the mid 20th century. Although not early in a national context where the continuous designs began appearing in the 1920s and 1930s, they are the earliest continuous deck girder with floorbeams bridges designed by the bridge division under the leadership of state bridge engineer Max Wilder.

Two girder with floorbeams bridges are of note in Kittery. The 1919 Navy Yard Entrance bridge (Kittery #1357) is historically significant in association with the National Register-listed Portsmouth Naval Shipyard. The bridge built by the federal government dates from an important period in the shipyard's history when it retooled and expanded to meet the demands of submarine production during World War I. The heavily built thru girder bridge continues in its historic function providing railroad, highway, and pedestrian access to the shipyard. It contributes to the historic character and significance of its setting.

The Viaduct (Kittery #5276) in Kittery consists of the 10 deck girder approach spans to the 1920-21 Memorial Bridge (Kittery #2546), a historically and technologically distinguished example of a vertical lift bridge that was designed by America's premiere vertical-lift bridge designer, J. A. L. Waddell. The deck girder spans, while not of themselves technologically significant as examples of deck girder technology, are structurally part of a larger resource that has been determined NR-eligible. They are maintained under a separate bridge number for administrative purposes but they were historically built at the same time and as part of the Memorial Bridge and are thus significant by association.

It should be noted that the Kittery Viaduct spans are not the only girder with floorbeams spans that have been determined eligible as the approach spans of other bridge types. Among the other determined eligible bridges with girder with floorbeams approach spans are the 1902 B&A RR bridge (Ashland #0159), the 1931 Waldo Hancock bridge (Prospect #3008), the 1939 Deer Isle-Sedgwick bridge (Deer Isle #3257), the 1940 Sara Mildred Long bridge (Kittery #3641), and the 1949 Memorial bridge (Augusta #3641). None of the latter bridges approach spans, however, are administered under separate bridge numbers.

Most of Maine s girder with floorbeams bridges are steel but it is possible to build the bridge type out of other materials, including reinforced concrete. Two reinforced concrete thru girder bridges have been identified. The 1916 Tom Collins bridge (Bingham #2845) is the earliest and most complete (the other is Abbot #2887, built in 1918, which is closed to traffic and has lost integrity of original design and materials). Reinforced concrete thru girder bridges are composed of a pair of cast-in-place longitudinal girders and transverse floorbeams that are connected by the arrangement of the steel reinforcing bars. The roadway passes between the paired girders. The girders are commonly very large in appearance and have panels to save on weight. The girders actually serve as the bridge parapets, as well as the main supporting members.



Figure II-32. The 1916 Tom Collins bridge (Bingham #2845) is a standard reinforced concrete bridge type the thru girder that was used by the state bridge division for a brief period in the mid to late 1910s.

Like other reinforced concrete bridge types, thru girders appeared in the first decade of the 20th century. Thru girders were one of the least successful of the standard reinforced concrete bridge types, mainly because they proved less economical than T beam bridges for the same range of span lengths (30'-50') and were limited to relatively narrow roadway widths. By 1928, George A. Hool, a noted authority on reinforced concrete bridge construction, reported that "from the standpoint of economy, the thru girder bridge should not be built except where insufficient headroom or other local conditions prevent the use of the deck girder [T beam]." In Maine, the bridge type does not appear to have ever been widely popular. The state highway commission is known to have built a limited number of examples in the mid to late 1910s. The 1916 Tom Collins bridge is historically and technologically significant as the only identified complete example that appears to have survived in use.

G. Culverts

The majority of pre-1956 structures coded by TINIS as culverts are pipe culverts or box culverts. Generally speaking, however, the culvert classification does not refer to a distinct bridge type or design. In addition to pipe culverts and box culverts, the TINIS culvert population includes a number of short-span structures that could alternatively be classified as low-rise reinforced concrete rigid frame bridges, reinforced concrete slab bridges, or structural steel plate corrugated arch bridges.[1]

Pipe Culverts

A very common type of drainage structure on roadways and railroads throughout Maine and the nation is the pipe culvert. Pipes have been used since time immemorial to direct the flow of small streams and runoff. Early builders used materials such as wood and terra-cotta, while builders of the 19th century made increasing use of cast iron. During the 20th century, pipe culverts have been made of either reinforced concrete or steel. Pipes of either material are characterized by prefabrication at factories and shipment to construction sites. The pipes are manufactured in standard lengths and diameters unless a custom order is made by the contractor. Once delivered to the construction site, the pipes are placed in stream beds and backfilled with earth. Pipe culverts may be single or multiple cells (one or more openings).

Reinforced concrete pipe culverts in precast units ranging from 15" to 6' diameters have been available to builders since the first decade of the 20th century. The history of reinforced concrete pipe manufacturer parallels the development of reinforced concrete as a building material, and it was a mature technology by the 1910s. The amount of reinforcement in the pipe depends on its size and the load to be carried by the pipe.

Corrugated steel pipe culverts were introduced in the United States about 1905. They were quickly adopted by railroad and highway builders, especially as pipe manufacturers increased capacity and the price of pipes fell through the 1910s to 1930s. The pipes were found to resist cracking and disjointing under a load, as well as to have comparatively light weight, ease of handling and installation, freedom from

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[1] In layman's terms, a culvert is a small bridge and not a distinct bridge type/design. The Culvert Inspection Manual (FHWA, 1986) defines a culvert as a drainage opening beneath a roadway embankment. This definition reflects that the soil or embankment material surrounding the culvert plays a structural role regardless of the type/design or material of the culvert. TINIS codes pipes and box culverts (whether under an embankment or not) with the number 4" for culvert as the first digit in the five number structure code.

maintenance, and adaptability to extension and reuse. Corrugated steel pipes were produced in diameters ranging up to a maximum of about 9' by 1930.

The Maine State Highway Commission (MSHC) was using pipe culverts for roadway drainage by 1910. For instance, the commission estimated that 30 lineal feet of metal pipe were required for a state-aid road project in Lisbon in 1911. Early 20th century pipe culverts built as part of state-aid road improvement projects were not classified as bridges. The earliest pipe culverts in the bridge survey date after 1930. The later date is a reflection of the bridge division keeping records of the larger pipe culverts on state highways after hundreds of town-owned bridges on the state system were brought under state maintenance and ownership in 1931.

Pipe culverts are so ubiquitous and undifferentiated that they are not considered historically or technologically significant unless they have the distinction of association with an important construction project, such as a historically important highway or railroad. Pipe culverts are still built today with little change in the technology of manufacturing or placing pipes. Pipe culvert design has advanced in the last 40 years with more sophisticated site analysis, particularly in the area of hydrology, where culvert openings are now more closely sized to match peak stream flows, and in the area of hydraulic analysis, where embankment materials are analyzed to determine lateral soil pressures and the embankment's ability to support vertical loads.

No historically significant pre-1956 examples of pipe culverts were identified as a result of the historic bridge survey.

Box Culverts

Reinforced concrete box culverts appeared on American and Maine roadways during the first decade of the 20th century, and they were increasingly ubiquitous by the early 1910s. Their history is nearly identical to the development of other standard reinforced concrete bridge types/designs, such as T beam and slab bridges (see below).

A box culvert derives its name from its similarity to a box with open ends, and it is usually distinguished by a cover slab (top) integral with the side walls and floor. Historically, however, the term box culvert has referred to both open (no floor) or closed (with floor) examples. The open box culverts in Maine's TINIS are for the most part indistinguishable from what have also been classified as low-rise rigid frame bridges.

Box culverts are adapted to minor streams and locations where headroom is limited. They require little expensive form work or foundation work and may be placed in trenches. The cover (top) slab may directly support the roadway or be placed under a fill, and it is proportioned to carry both live load and the entire weight of the fill, if any. Box culverts may be single or multiple cells with the single-cell span length rarely

exceeding twice the height. Since the 1910s, box culverts have been found to be economical and practical under the majority of conditions for spans in the range of 6' to 15'. The technology has changed little since the early 20th century. The only noteworthy change is the increasing substitution of precast box sections for cast-in-place sections in the last thirty years.

The most common box culvert material is reinforced concrete, but there are other materials that can be used including wood, stone, brick, and metal. All of the identified pre-1956 Maine box culverts are reinforced concrete with the exception of two timber box culverts.

The state highway commission commonly built reinforced concrete box culverts beginning in the 1910s. Numerous references to box culverts are found in state highway annual reports, both as part of state-aid road projects and as part of bridge replacement projects under the General Bridge Act. The majority of identified surviving examples date after 1930. Most earlier examples have alterations such as widening. None are individually significant. A 1938 box culvert (Woodstock #3590) has been determined contributing to a potential South Woodstock historic district.

H. Stringer Bridges

The stringer bridge type consists of a series of parallel, longitudinal beams supporting a deck, usually of wood planks or concrete. In Maine, the stringer bridges are often called "girder" bridges and they are coded that way in TINIS, along with longitudinal beam bridges of reinforced concrete (T beam bridges). The stringer bridge, like girder bridges of all materials, relies on the bending strength of the material to resist the loads. An important advance in stringer technology occurred with the transition from wood to metal beams in the mid 19th century. America's antebellum bridge engineers understood the superior bending strength of metal but the initial development of the technology, and its widespread application, relied upon later improvements in the manufacture of rolled-iron structural shapes.

By the 1890s, improvements in the open-hearth steel making process resulted in larger quantities of structural steel at lower prices. Consequently, bridge builders increasingly chose steel rather than wrought-iron sections to make use of steel's superior tensile strength. As steel plants developed larger rolling mills, it was also possible to substitute deeper rolled beams of I-section for built-up beams. Although wrought-iron rolled I-beams had been available since the 1850s, they had been used sparingly in bridge construction, usually as floorbeams or stringers of truss bridges, because of their high cost and the difficulties of rolling long and deep beams.

In 1908, a major technological breakthrough occurred when Pennsylvania's Bethlehem Steel Company began producing wide-flange rolled steel beams on the Grey Mill,

named after its inventor Henry Grey. The mill rolled beams at greater speeds and depths and at an approximately 10 percent savings in material with no reduction in strength. Although the company first met difficulties marketing the new 26", 28" and 30" deep beams, Bethlehem had overcome the problems by the early 1910s. In his 1916 edition of Bridge Engineering, J. A. L. Waddell touted the superiority of the improved steel I-beams, calling them a great boon to bridge designers and builders because of their simplicity, compactness and lower price.

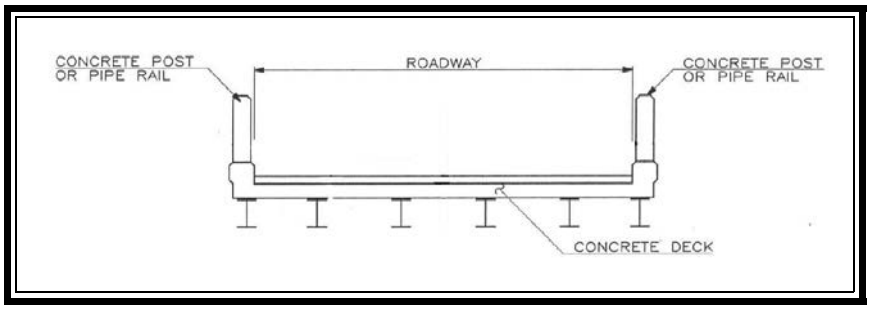


Figure II-33. Stringer bridge nomenclature.

As a class, rolled steel stringer bridges proved ideally suited for the highway building campaigns of the 20th century. They came to the fore before World War I, and by the mid 1920s, rolled section stringer bridges were ubiquitous. The advantages of the technology were particularly attractive to state and county bridge engineers for spans up to 60' in length. They could be easily erected with readily available beam sections and were cheaper than pony truss bridges. Rubber-tired trucks and improved heavy construction equipment eased the problems of transporting girders and on-site erection. With primarily accessible flat surfaces, girder bridges were easier to clean and paint than trusses, and a concrete deck over the beams added protection from exposure. Steel stringer bridges are very common in Maine with more than 570 identified pre-1956 examples.

Several common design variations of the steel stringer bridge type were in use in Maine and throughout the United States during the first half of the 20th century. The stringers could be used plain, completely encased in concrete, or with jack arch deck slab. A common detail of steel stringer bridges is the concrete encasement of the beams. The technique was introduced in the 1890s to protect beams from corrosion and eliminate the need for periodic painting. Although it added dead load to the bridge, encasement had long-term maintenance cost benefits and was used frequently as a technique by highway departments and railroad companies through the mid 20th century.

A design that was used for both local and state bridges from the 1910s to 1930s is the concrete jack arch deck. By using a form liner like corrugated metal sheets placed in an arched shape between the stringer, the concrete deck was poured so as to integrate the stringers with the deck and thus better distribute the live loads. The jack arch deck design became obsolete in the late 1930s for both economic reasons and technological

advances and understanding of continuous reinforced concrete decks. The jack arch deck stopped being used as reinforced concrete decks improved. A good complete example of the jack arch deck design is the 1920 Jellison bridge in Sanford (#1302).

After 1935, continuous design steel stringer bridges became very common in Maine. Over 120 pre-1956 examples were identified by the inventory. Continuous designs are those where the beam continues uninterrupted over one or more piers. They have significant economic advantages because they use less material for a given span length than simple spans. By spanning greater lengths with smaller section beams than comparable simply supported spans, which must accommodate the entire load within the span, the continuous span distributes loads from bearing to bearing over two or more spans. The reinforced concrete deck would be continuous over the interior substructure units, thus reducing the number of expansion joints, whose failure is a primary source of bridge deterioration.

In the mid 1930s, the Maine State Highway Commission was in step with national trends in taking advantage of the economy of continuous designs. The bridge department benefitted from advances in engineering theory and knowledge. Perhaps the most important advance was the development of standard methods for determining the moments and shears in continuous beam bridges. Prior to this time, the design of continuous beam bridges was tedious, intricate, and time consuming. Few state bridge engineers used continuous designs because of the problems involved in analyzing the indeterminate structures. Beginning in 1932, the American Society of Civil Engineers (ASCE) published standard methods and tables for calculating moment distribution, and in 1941 AASHO added these to their standard specifications. Continuous steel stringer bridges became very common after World War II.

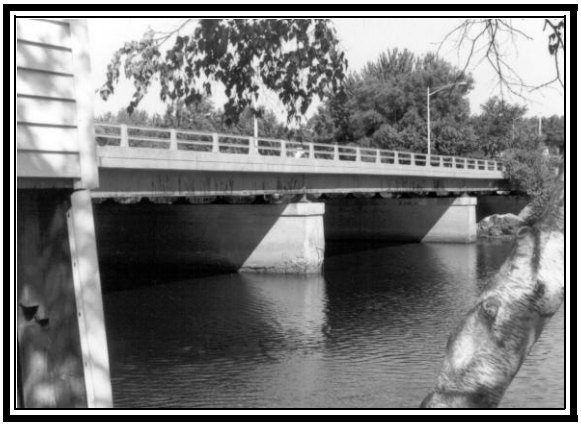


Figure II-34. The 5-span, 344'-long, steel stringer Somesville Bridge (Saco #3412), built in 1937, is an early application of continuous design by the state bridge division.

Early complete examples of continuous steel stringer bridges designed by the state bridge division are the 1937 Somesville bridge (Saco #3412), the1938 Badger Island bridge (Kittery #2031), and the 1938 Billings bridge (Paris #2979).

I. Reinforced Concrete Slab and T Beam Bridges

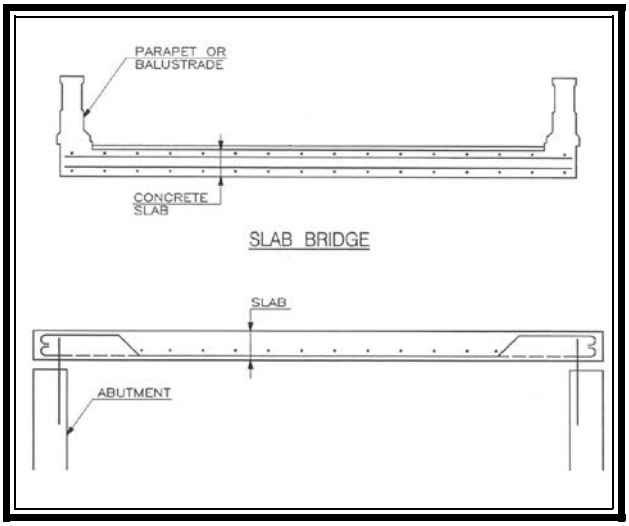


Figure II-35. Typical slab bridge.

Late 1890s advancement in the understanding of reinforcing placement to accommodate tension and shear forces resulted in reinforced concrete being used more frequently for slab and T beam bridges early at the turn of the 20th century. The appropriateness of one bridge type over another was predicated on several factors, such as length of span, roadway profile, and economical use of steel. Beginning in the 1910s, the bridge types proved ideally suited to the preparation of standard plans that could be used in a variety of conditions with the result that state highway departments built hundreds of nearly identical slab and tee beam bridges as part of the development of state highway systems. Slab and T beam bridges in Maine are technologically undifferentiated from those in other states.



Figure II-36. The Old Buffam bridge (Wells #0821), built in 1909, is the oldest reinforced concrete slab highway bridge in Maine. The bridge is located on the old alignment of the Portsmouth-Portland Post Road.

The slab bridge concentrates reinforcing steel, in the form of twisted or deformed rods, in the lower portion and ends where tensile forces and shear are the greatest. As with all other bridge types, the amount of steel and depth of the slab is predicated on its length and live-load capacity. Slab bridges spans up to about 35', beyond which other bridge types are more economical. Slab bridges are the most common bridge type in the historic bridge inventory with over 600 pre-1956 examples. The earliest complete example identified is the 1909 Old Buffam bridge in Wells (#0821), which was built as part of an early improvement to the Boston-Portland post road, later designated US 1.

T beams bridges are cast-in-place reinforced concrete beams with integral monolithic flanking deck sections used for spans of up to 50' in length. The primary reinforcing steel is placed longitudinally in the bottom of the beam stem, and the deck or flange reinforcing is placed perpendicularly to the stem. T beams are almost always supported on reinforced concrete substructures, and they were favored in Maine for span lengths of over 20' because of their low long-term maintenance and thus overall economy of material. The technology of the T beam bridge did not change from the 1910s through the 1950s, and it is based on the integral connection of the longitudinal beam and deck section. It is a more efficient use of material than the slab design. The T beam design proportions the deck thickness and longitudinal beam size and spacing to achieve a lighter, stronger, and more economical section.

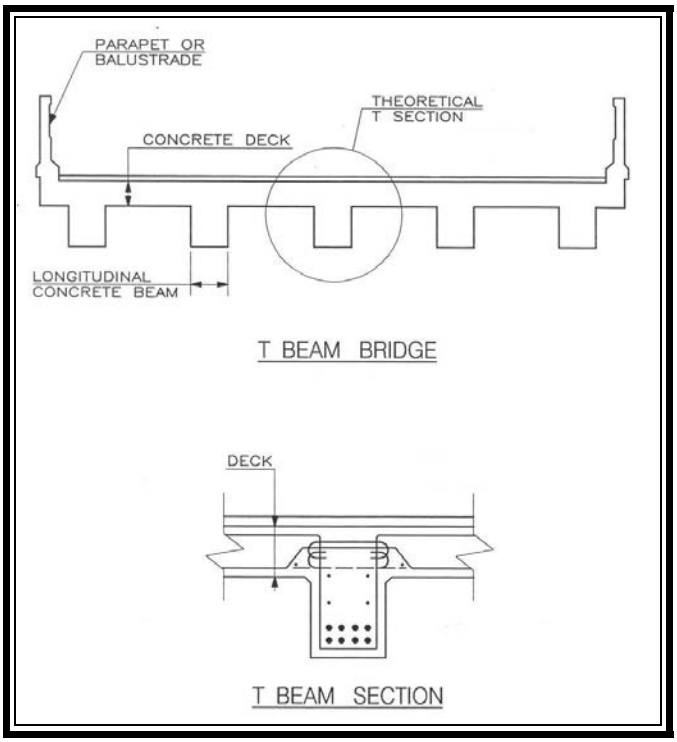


Figure II-37. Typical T-beam section.


Figure II-38. The Kingman Road Bridge (Macwahoc Plantation #5021), built in 1919, is among the earliest, complete, state-built T beam bridges in Maine. It was built under the authority of the General Bridge Act of 1915, which established regular funding and a set of procedures for the improvement of the state s highway bridges. The bridge documents the introduction of the prototypical T beam bridge as a standard state highway bridge type for use in the development of the state highway system.

Beginning in the late 1910s, T beam bridges emerged as one of the most popular state bridge department designs. It was used ubiquitously through the 1920s and early 1930s and continued to be popular through the 1950s, although it increasingly faced competition from steel stringer technology in the same range of span lengths. The cast-in-place bridges are labor intensive owing to the requisite form work and they are not built frequently today because of high labor costs. More than 260 examples have been identified. Early complete examples of this workhorse bridge type/design are the 1918 Leigh bridge in Vassalboro (#2454) and the 1919 Kingman Road bridge in Macwahoc Plantation (#5021).

J. Stone Slab (Post and Lintel) Bridges

Stone slab bridges, also known as post and lintel bridges, consists of large flat stones laid horizontally over posts. They are a traditional bridge type that has been in use since ancient times in Europe. Stone slab bridges were a common colonial bridge type, and they continued to be used as a survival technology until the early 20th century. The 1924 state bridge survey identified more than 490 stone highway bridges, most of the post and lintel type. Many were demolished or bypassed as part of state highway improvement campaigns in the mid 20th century and only a handful of inventoried examples survive today. At least nine extant examples have been identified, including two National Register-listed off-system (bypassed) examples: the 1797 Churchill bridge in Buckfield and the 1808 Allen's Mill bridge in Industry. Among the significant on-system examples are the ca. 1879 McLeary bridge in Strong (#0403), originally built by one of Maine's narrow-gauge logging railroads and later incorporated into a state highway and the 1890 Watsons bridge in Waterford (#0747).

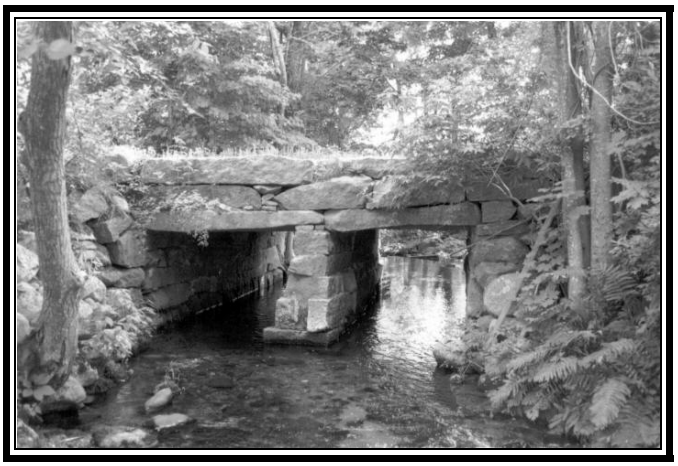


Figure II-39. The 1890 town-built Watsons bridge (Waterford #0747) is a 2-span, 24'-long, split granite slab bridge with dry laid stone abutments, pier, and lintel stones. Stone post and lintel bridges were a common colonial bridge type, and they continued to be used as a survival technology until the early 20th century.

Section III. Highway Bridge Building in Maine by the Maine State Highway Commission, 1905-1956[1]

Introduction

In order to evaluate the National Register eligibility of the pre-1956 highway bridge population in Maine, it is important that the historic context fully address the role of the Maine State Highway Commission and, in particular, its Bridge Division. During most of the 20th century, the commission has been the state s leading organization for the design, construction, and maintenance of roads and bridges. Other organizations, such as railroad companies and toll bridge authorities, and other units of government, such as counties, towns and cities, have participated and continue to participate in highway bridge building, but none has had as great an impact as the state highway commission.

Of the more than 2,030 bridges in the state s pre-1956 bridge inventory over 95 percent date from 1915 to 1955, a period when the Maine State Highway Commission was active in most highway bridge projects of any significant size or cost. The office of the Commissioner of Highways was established in 1905, but it was not until 1913 that a three-man Maine State Highway Commission was authorized to employ a fully staffed organization to build and maintain a state highway system. Bridges became a full-time concern of the commission with the passage of the 1915 General Bridge Act providing state aid to improve bridges both on and off of the state highway system. Over the next decades, the commission continually met the public s demands for roads and bridges designed for greater capacity, traffic volume, and speeds. As these demands grew, so did the administrative, financial, and technological capacity of the commission to meet them. Federal and state funding increased steadily. The commission expanded and hired engineers and staff with impressive levels of expertise and specialization.

A Bridge Division within the Maine State Highway Commission was created in 1916. The first state bridge engineer of record was Llewellyn Nathaniel Edwards, who served from 1921 to 1928. Max Lincoln Wilder succeeded Edwards and served as the state bridge engineer from 1929 to 1962. Under the able leadership of these two men, the Bridge Division prepared and reviewed designs for hundreds of bridges, as well as supervised their construction and maintenance. The immense task of improving bridges on the state s roads required that the division s engineers apply the available bridge types and materials economically as possible while still maintaining quality, durability, and public safety.

[1] The following historic context was prepared to supplement the narrative that was prepared as part of the Phase 1 Survey Plan (Nov. 1997). Readers are referred to that narrative for a broader view of Maine s transportation history.

The Maine State Highway Commission s engineers had close professional ties with the federal Bureau of Public Roads (BPR), the American Association of State Highway Officials (AASHO, renamed AASHTO in the 1960s), and the American Society of Testing Materials (ASTM). The BPR administered the federal aid program, established in 1916, which provided annual appropriations to be matched by the states for road and bridge improvements. It coordinated a national highway policy through AASHO and ASTM activities and meetings, which were attended regularly by Maine s highway officials, including the state bridge engineers, who served on committees with their counterparts from other states. They developed standard specifications for designs and materials that were endorsed by the BPR and applied throughout the nation. As a result, the majority of common bridge types and designs used in Maine became virtually interchangeable with those used in other states.

The Maine State Highway Commission is Established and Enters the Business of Building Bridges, 1905-1916.

The Maine State Highway Commission, like all other state highway departments throughout the nation, was established as a direct result of the Good Roads Movement. The movement was one of the sundry Progressive reform movements that emerged in the late 19th century and peaked during the 20th century s first decade. Although historians have long struggled to define the Progressives, generally they agree that the movement s leaders advocated the expansion of government for the improvement of schools, welfare, public health, roads, public works, and the management of natural resources. According to the Progressives, these functions were best placed in the hands of professional government employees who were protected from political partisanship by civil service laws. The Progressive era was a key moment in American history when federal and state governments took on many of the functions that are taken for granted today. Up to that time, these activities had resided primarily with local governments or private companies and individuals. Road and bridge building, for instance, was traditionally supervised by town and county officials, usually laymen with no formal engineering training. Where a road or bridge was considered to have more than local importance, the state sometimes granted a charter to a private company to operate a turnpike or toll bridge, the tolls used to offset the initial construction expenses, but rarely meeting the long-term maintenance costs.

The Good Roads Movement emerged first with a bicycle craze that swept the country in the 1880s. Bicyclists demanded better roads for touring the countryside surrounding larger towns and cities, but rural residents often met those demands with indifference. By the 1890s, however, the Good Roads Movement was gaining a broader audience. Advocates included grangers, railroad officials, engineers, and college professors, to be joined by the growing number of early automobilists at about the turn-of-the-century. They sought to convince rural residents that good roads were a key to a better life. Good roads, they argued, would end rural isolation and improve access to markets.

Rural roads and bridges were the neglected part of the nation s transportation infrastructure. Railroads were able to move freight hundreds of miles in a few days, but what good was that if the freight could not make it the last five or ten miles of its journey because of rutted, muddy, and seasonally impassable roads, or because of unsafe and inadequate bridges.

Until the mid 1890s, the Good Roads Movement lacked a national leadership or program. In 1895, that condition changed when the U. S. Department of Agriculture established the federal Office of Road Inquiry (ORI), headed by Roy Stone, a civil engineer and an ardent bicyclist.[2] Stone collected data and published general information about road conditions and construction throughout the United States. He used his position to build a network of like-minded reformers who lobbied state governments to endorse the message of good roads and adopt model state-aid laws. The model laws endorsed the creation of state highway departments, headed by engineers, who would administer and supervise state funding for the improvement of rural roads and bridges.

In 1896, the model state-aid laws were given a significant push forward with the inauguration of Rural Free Delivery (RFD) mail service, which started that year as an experimental program and was expanded throughout the United States by 1900. RFD had a significant impact on rural life, bringing daily mail and news to rural citizens, and opening to them a world of catalog shopping, such as from Sears-Roebuck. RFD routes were not authorized by the U.S. Post Office Department unless they were passable in all weather. So, by the turn-of-the-century farmers in Maine and throughout the nation were clamoring for RFD, and therefore good roads and bridges on which to deliver the mail. From the late 1890s to the mid 1910s, one-by-one the individual states adopted versions of the model state-aid laws. In general, the more affluent, industrial northern states were quicker to establish state-aid programs than those in the south and west.

Maine was in national step with the Good Roads Movement. In 1901, the state legislature created a very modest state-aid program. Up to $100 was budgeted for each town to use on the improvement of a state road, loosely defined as the main thoroughfare through a town. It was a small program, but the Good Roads Movement had taken hold in Maine. The next step was the establishment of the office of the Commissioner of Highways in 1905. Paul D. Sargent was the first commissioner and an earnest good roads reformer who believed in expanding the state-aid program. His approach to the job was professional and non-partisan. Sargent, a native of Machias, was an 1896 civil engineering graduate of the University of Maine. He had served as

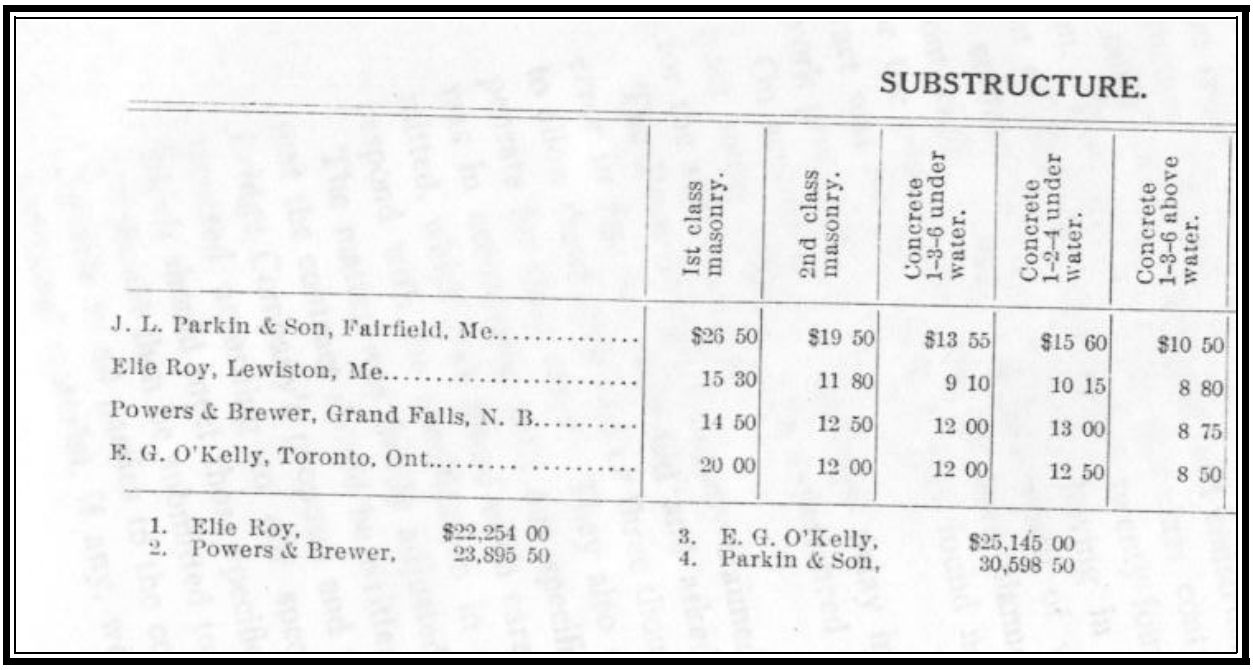
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[2] The ORI was later renamed the Office of Public Roads (OPR) in 1905 and then the Bureau of Public Roads (BPR) in 1919. The BPR was renamed the Federal Highway Administration (FHWA) in 1967.

the Assistant Engineer of the Washington Railroad from 1897 to 1903, and as the recorder of deeds of Washington County from 1903 to 1905.

Sargent sought to establish himself as the state s leading expert on road and bridge construction. He traveled the state contacting town officials to inform them of the benefits of the state aid program. Many towns had not applied for aid simply because the local officials did not know of or understand the application process. He dispensed practical advice about how to build improved roads with adequate drainage and materials that would last longer. The commissioner s first annual reports were how to guides for better roads with simple plans showing proper methods of crowning a dirt road or mixing sand and clay for harder, longer lasting road surfaces. Sargent provided local officials straightforward specifications for state-aid road work. His reports to the legislature showcased successful state-aid construction projects in Maine towns, sparking a sense of local pride.

Commissioner Sargent s initial work focused on roadway improvements, but it was not long before he was applying himself to bridges as well. Bridges had long been recognized by state government as one of the most expensive improvements



SUBSTRUCTURE.

	1st class masonry.	2nd class masonry.	Concrete 1-3-6 under water.	Concrete 1-2-4 under water.	Concrete 1-3-6 above water.
J. L. Parkin & Son, Fairfield, Me.....	$26 50	$19 50	$13 55	$15 60	$10 50
Ellie Roy, Lewiston, Me.....	15 30	11 80	9 10	10 15	8 80
Powers & Brewer, Grand Falls, N. B.....	14 50	12 50	12 00	13 00	8 75
E. G. O'Kelly, Toronto, Ont.....	20 00	12 00	12 00	12 50	8 50

1. Ellie Roy, $22,254 00
2. Powers & Brewer, 23,895 50
3. E. G. O'Kelly, $25,145 00
4. Parkin & Son, 30,598 50

Figure III-1. A hallmark of the Progressive style of government adopted by the newly established Maine Commissioner of Highways in 1907 was a business-like and professional approach to the state s work. In the early years, the annual reports provided a comprehensive accounting, including publishing the bids of contractors. This excerpt from a 1910 report listed all of the bids and prices for the substructure of the International Bridge at Van Buren. The lowest bid by Ellie Roy of Lewiston was thrown out on account of a check not being certified and two of the items submitted by him not being called for in the specifications. The work went to the next lowest bidder, Powers and Brewer of Grand Falls, New Brunswick. Source: Commissioner of Highways, Annual Report, 1910.

undertaken by towns and counties. For nearly a century the state legislature had from time-to-time provided financial assistance to counties and towns for specific bridge projects. Such projects usually were based on need, but they were also a form of monies distributed as a reward to members of the dominant Republican party. Good roads reformers, such as Sargent, complained that the practice, which was as common in Maine as in most other states, allowed party officials to spend the state s funds unwisely without first having plans prepared and reviewed by trained and impartial engineers. It resulted in sub-standard work with the towns spending as little of their own money as possible and contractors building as cheap a bridge as possible.

In 1907, a reform-minded legislature inaugurated a practice of expending the specially appropriated funds for bridge projects (called special resolves) through the supervision of the state highway commissioner. The expectation was that it would improve the class of bridge work because of the commissioner s involvement in the approval of plans and contracts. Usually, the state put up only a portion of a new bridge s cost, requiring the towns and counties also to make a substantial contribution.

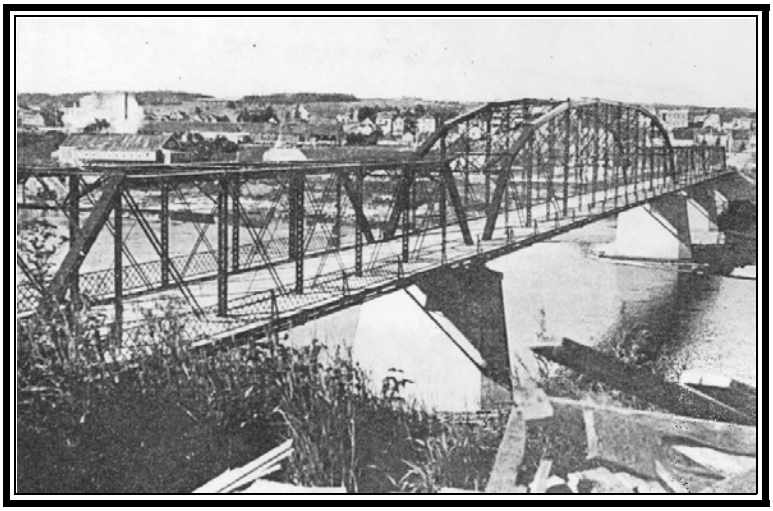


Figure III-2. The non-extant International Bridge between Van Buren, Maine, and St. Leonards, New Brunswick, completed in 1911, was one of the first major accomplishments of the state highway commission. Paul D. Sargent, chief engineer, oversaw the project for Maine, which contributed $35,500 toward its construction, with the Dominion Government of Canada paying the other half. Powers & Brewer, general contractors, of Grand Falls, New Brunswick, built the substructure, and the Penn Bridge Co. of Beaver Falls, Pennsylvania, built the pin-connected truss superstructure. Source: Maine Commissioner of Highways, Annual Report, 1911.

The first bridge project of any size undertaken by the commissioner was for a new steel swing span bridge (non-extant) between Machiasport and East Machias, built in 1907-08. Sargent provided general plans, selected the competitive bid of the American Bridge Company (the nation s largest steel bridge fabricator), and made a final inspection. Additionally that year, the commissioner traveled to Van Buren to survey the site of an international bridge over the St. John River and to coordinate its construction with Canadian officials. The four span bridge, fabricated by the Penn Bridge Company of Beaver Falls, PA, consisted of a 322'-long, pin-connected Parker thru truss main span and three 143'-long, pin-connected Pratt thru truss spans. It opened in 1911 and has since been replaced with a modern span. The Van Buren

international bridge ranked as the first long-span bridge built under the auspices of the Commissioner of Highways, but it was a conservative application of a metal truss bridge type and design that was first used in the mid 1870s and very well established and standardized before 1900.

Sargent emphasized placing highway bridge building on a business-like basis with fair and competitive bidding. In the past, bridge companies often prepared general bridge plans then fabricated and erected the bridge. Sargent discouraged this practice because he felt that no greater mistake could be made than trusting the contractor with bridge design. After all, he reasoned, the contractor s primary purpose was to make as much money as possible. Any savings in material or labor meant more profit to the contractor, but could result in a substantially weaker or less durable bridge. Under the new preferred arrangement for state-funded bridge projects, the commissioner himself, or a consulting engineer chosen by the commissioner, would in most instances draw up the plans and oversee construction. Contracts for the steel truss and girder bridges often went to large, and generally reputable, bridge companies, such as the American Bridge Company of Ambridge, Pennsylvania (or their agents, the United Construction Company of Albany, New York); the Penn Bridge Company of Beaver Falls, Pennsylvania; the Berlin Construction Company, Berlin, Connecticut; the Groton Bridge Company, Groton, New York; the Canton Bridge Company, Canton, Ohio; and the Boston Bridge Company, Boston, Massachusetts. These companies went on to be the most active steel bridge fabricators in Maine through the 1920s and 1930s.

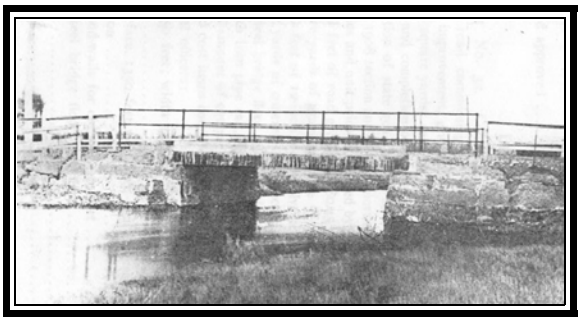


Figure III-3. The non-extant steel stringer bridge with a concrete floor was built in 1911 in Lisbon Falls. The state highway commission featured it as an example of its work providing technical and financial assistance to town governments. The simple-looking bridge belies the fact that the beam size and spacing was calculated by the state s professional engineers to meet then-current standards for live load. This was in contrast to the process that most Maine town s had used previously, which was to rely on contractors and town laymen to make engineering decisions, including what type of bridge would give the town the best value.

While the business of building bridges was improved by the commissioner, his involvement in a bridge project did not immediately result in state-of-the-art bridge technology. The annual reports indicate that a variety of older bridge types, such as pin-connected metal truss bridges, stone arch culverts, timber pile and beam bridges, and wood truss bridges (such as Howe and King Post truss spans) were authorized by the commissioner. Often, the decision in favor of one of the older bridge types and designs was based on cost. The trend, however, was toward the expanded use of more modern types and materials. For instance, the 1911 annual report Commissioner of

Highways features a 20'-long steel stringer bridge with a concrete deck that was built at Lisbon Falls (non-extant). Because of improvements in rolling mill technology, I-shaped rolled beam stringer bridges had become an increasingly economical alternative to other bridge types during the first decade of the 20th century. The beams could be bought from the steel mills, shipped to the bridge site, and placed with a minimum of skilled labor. The 1911 report also features a 66'-long patented Luten, reinforced concrete arch bridge at Mars Hill over Presque Isle Stream (non-extant). After 1905, reinforced concrete arch bridges emerged as a popular highway bridge type. Daniel Luten was one of the type s most successful promoters, reputedly building thousands of examples through affiliated companies, such as the Ley Construction Company of Boston. During the first decade of the 20th century, a growing number of Maine contractors also had experience with reinforced concrete bridge types.

By 1910, the Commissioner of Highways was an established part of the state government, but whether his future role would remain as a technical advisor and state-aid administrator to locally owned and maintained roads and bridges or as something more was a debated question. The office was not without growing pains or without its critics, and this had sometimes hampered road and bridge projects, especially when the commissioner s opinions differed from those of local officials. In 1907, for instance, Sargent reported that $500 had been appropriated and paid to the town of Whitneyville to repair the abutment of a bridge over the Machias River. He had drawn up plans for a concrete abutment, but the town selectmen had gone stubbornly right ahead and built a very poor wooden abutment in order to save money.

To Sargent s mind, this type of defiance was minor compared to the greater problem of convincing town officials to cooperate with each other and choose road and bridge projects that would help to form an interconnected network of improved highways between the state s principal towns and cities. Most state aid road projects began in the center of towns and worked outward to outlying villages and farms, but never connected with the improved roads of neighboring towns. Many local officials did not see it in their town s best interest to appropriate funds to match state aid for these isolated sections of road or to improve out-of-the-way bridges that would form links over rivers and streams at town lines.

Although Sargent was confident that the benefit of an interconnected system of good roads and bridges was self evident and that eventually state and local officials would see what was best, the clash between local officials and the commissioner ran head long into trouble when it came to the hiring of laborers and the selection of contractors. As the number of state aid and special resolve projects under his supervision steadily increased, the commissioner could no longer oversee all of the projects directly himself or attend to all of the bids and plans with his small staff of one clerk and two stenographers. Much of the control over the letting of contracts, the hiring of laborers, and the selection of right-of-way fell to the local party officials who stubbornly held on

to their traditional ways. These men sometimes had their own surveying and contracting businesses, and thus had potential conflicts of interest and opportunities to turn personal profit at the expense of the state-aid program, not to mention using it toward their own political ambitions if they so desired. Some politicians viewed the letting of contracts, the hiring of laborers, and ultimately even control of the commissioner s office, as a potentially powerful source of patronage.

The details of the episode are unclear but the outlines of it are that Sargent either left or was forced from his office in February 1911 as a result of party politics. There ensued a period of allegations about the suspicious use of funds and preferential treatment for the letting of contracts, the hiring of laborers, and the allocation of state aid. Sargent left Maine to work briefly as the Assistant Director of the federal Office of Public Roads (OPR) in Washington, D.C. The state attorney general began investigating the commissioner of highway s office in 1912, and by late in the year the state aid road program was at a stand still. By the time the state legislature convened in its biennial session in early 1913, the Progressive reformers had the upper hand in the state house, and new legislation was drafted and passed reorganizing the highway commission and giving it greater autonomy and funding.

In July 1913, the Commissioner of Highways was replaced by a three-member Maine State Highway Commission, appointed by the governor for staggered terms. The commissioners were authorized to appoint a chief engineer who would have everyday oversight of engineering and operations, and who would be insulated from party politics by the commissioners. They chose Paul D. Sargent and recalled him from Washington, D.C. The new commissioners unanimously adopted a resolution that it was the unqualified purpose of the Commission to eliminate politics throughout its department, and to perform its duty in the construction and maintenance of highways by placing its standard of employment on the basis of merit and efficiency, regardless of politics. Offensive partisanship on the part of any employee was to be considered sufficient reason for dismissal. An accounting department with rigorous standards was created so that the commissioners would know how every penny had been spent.

Just as partisanship was attacked as an unhealthy influence on the commission s activities, so was the influence of the parochialism of local government. The 1913 legislation left the state-aid program intact, but the commission was authorized to create and designate a ***state highway system*** of roads taken over from the towns and owned and maintained by the state. Initial improvements were to be paid for by a $300,000 bond issue. The creation of a state highway system rationalized the way the state spent its funds on the development of an interconnected network of roads between the state s principal towns and cities. Funds were also provided for the commission to hire engineers, maintenance patrols, and other staff.

In all of the whirlwind of reorganization in 1913, the issue of how to build and maintain bridges in a systematic fashion was not addressed by legislation. In 1914, the state highway commissioners and Chief Engineer Sargent, to the surprise of some legislators, announced that they believed that it is not the intent of any of the laws under which [the commission] operates that the funds at its disposal from bond issue shall be used in bridge work, but rather that this money should be devoted for the building of highway proper, exclusive of bridges. They therefore established a rule that the bond issue would not be used to build any structures over 12' long on state highways, and that these structures would remain the responsibility of the towns, which were encouraged as far as practicable to improve and properly maintain all bridges lying along the path of the state highway system. Shorter structures were classified as culverts and eligible for the funding. The commissioners and chief engineer also noted that each session of the legislature appropriated funds by special resolve to aid towns with the construction of new bridges. This practice could no longer be recommended unless special riders were attached that the towns would pay to protect the state's investment by reimbursing the commission for its own crews to properly maintain the structures.

The commissioners and chief engineer had correctly gauged that the state legislature would vote in favor of increased funding and a more systematic and business-like approach to bridge construction and maintenance at its next session. State lawmakers rose to the occasion in 1915 passing the General Bridge Act (Chapter 319) which, with amendments, would remain an important component of the state's highway bridge policy for the next seventy years. The law provided regular appropriations of state and county aid to towns and cities in the construction of new bridges. The towns received the aid by petition to a joint board composed of the state highway commission, the county commissioners, and the municipal officers. The act was approved by a general referendum of December 1916. The first 24 bridges under the General Bridge Act were built in 1917. All but four of the bridges were reinforced concrete structures.

In one last great flurry of activity before the General Bridge Act took affect, the 1915 state legislature introduced 84 special resolves for assisting towns and counties in the construction and maintenance of specific roads and bridges. Some projects had been previously endorsed by the state highway commission, others were local bridge projects that legislators wanted funded before they would have to be reviewed by the joint board through the provisions of the new bridge law. In either case, 1915-1916 saw the construction of an impressive number of new structures, mostly steel truss bridges or reinforced concrete arch bridges.

One special resolve of note in 1915 was the one to pay the legal fees of the town of Falmouth in a patent infringement suit brought by Edwin Thacher of the Concrete-Steel Engineering Company of New York. Thacher was an important figure in the development of arch bridge technology in the United States. He was noteworthy for

introducing and promoting the Melan system, invented in 1892 by Austrian engineer Josef Melan. The system utilized steel beams embedded in the concrete arch ring. Really more like a steel arch with concrete encasing than a true reinforced concrete structure, the Melan system was able to support greater capacity for longer span lengths than earlier systems. Thacher designed the country s first major Melan arch, a three-span structure, over the Kansas River at Topeka, Kansas, beginning in 1894. He went on to improve the system, applying for and receiving his own patents. It was an 1899 patent that Thacher claimed Falmouth had infringed. The patent consisted of a flat bar imbedded near the surface of the extrados of the arch ring and a second bar imbedded near the surface of the intrados, the two bars joined by dowels, rivets, bolts, or rods.

Although Thacher s lawsuit singled out only one arch bridge (non-extant) across the Presumpscot River at Smelt Hill, the Maine State Highway Commission undertook the legal defense on behalf of the town of Falmouth because other towns in the state had built similar bridges. Several bridges built directly by the state were also likely involved. The cost of paying royalties and damages to Thacher were potentially substantial. The basis of the state s defense was an extensive literature search on the history and current uses of concrete in bridge design. The lawyers and engineers attempted to show that Maine s bridges were within the general state-of-the-art of arch construction and that Thacher s patent was no longer valid, and in fact, based on prior German publications which illustrated the invention. Although a similar case had been won previously by Thacher in a U.S. District Court for Baltimore, the U.S. District Court for Portland found in favor of Falmouth in 1916. The commission noted that other state highway commissions across the nation had watched Maine as a test case. According to the commission, theirs was the only determined fight that had ever been made against the validity of the Thacher patents.

In historical perspective, the lawsuit did not have great technological significance since the Thacher system was already on the decline by 1910. Other reinforcing systems, most notably twisted and textured reinforcing bars, had proven more economical, using less steel in the tension zones of the arch. The suit did, however, signify the changing nature of bridge building in the United States. No longer would a myriad of bridge companies with proprietary and patented rights to certain bridge details or systems of construction lead the highway bridge field. Rather, the leaders of the new generation of bridge builders were dedicated civil servant engineers using more general, proven, and standard bridge types and designs.

Activities of the Bridge Division, 1916-1928

With the passage of the General Bridge Act of 1915, the Maine State Highway Commission announced in 1916 that it was contemplating the organization of a Bridge Division under the immediate supervision of a state bridge engineer qualified to design

and superintend the construction of all classes of highway structures. There is no record of Chief Engineer Sargent hiring a state bridge engineer prior to World War I, and it seems that the war intervened before the proposed bridge division could be fully organized. During the early months of the war, the majority of the commission s engineers volunteered for the armed services. Wartime restrictions on steel, concrete, and other bridge materials, as well as lack of sufficient labor, slowed road and bridge work from the latter part of 1917 through 1919. With war dragging to an end during 1919 and the soldiers subsequently returning home, the state highway commission renewed the state s road and bridge program. Federal and state funds bottled up during the war years were released. Applications for state assistance in the construction of bridges began to be processed in steady numbers: 33 applications in 1919, 53 applications in 1920, and 44 applications in 1921.

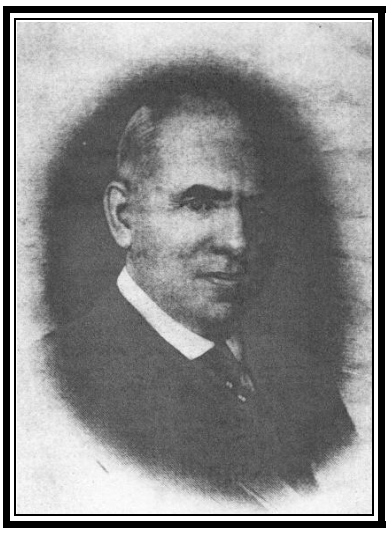


Figure III-4. Llewellyn Edwards, Maine s first state bridge engineer, 1921-28. Source: L. N. Edwards, A Record of History and Evolution of Early American Bridges, 1959.

In early 1921, Llewellyn Nathaniel Edwards (1873-1952) was appointed the commission s first state bridge engineer of record. Edwards was born in Otisfield, Maine, the son of an apple grower. He attended the University of Maine, receiving a civil engineer bachelor s degree in 1899 and a master s degree in 1901. Edwards was one in a growing tradition of Maine State Highway Commission engineers trained at the University of Maine. As with most engineers of this period, Edwards gained a basic grasp of mathematics, surveying, and mechanics at college and then went off to work his way up through practical experience in the profession s ranks. He showed an interest in bridge design, and thus accepted a journeyman s position as draftsman with the Boston Bridge Works. This was followed by positions of growing responsibility in the bridge design departments of the Boston & Maine Railroad (1903-05), the Chicago & Northwestern Railway (1906-07), and the Grand Trunk Railway (1907-1912). He was resident engineer for five bridges on the Grand Trunk s Lewiston Branch in Maine.

From railroad bridges, Edwards career shifted to highway bridges when he went to work as the supervising engineer for bridges for the City of Toronto, Ontario, Canada, in 1913. Edwards returned to the United States in 1919, serving as a senior highway bridge engineer for the U.S. Bureau of Public Roads (BPR) inspecting federal aid work in Texas, Oklahoma, Arkansas, and Louisiana through 1920. During this period, he produced a technical pamphlet on the design and construction of bridge foundations. This how to pamphlet was directed at state, county, and municipal highway officials. It stressed the importance of adequate foundation surveys to determine the characteristics of the natural foundation materials, such as bedrock, gravels, sands,

clays, and soft soils, as well as the conditions affecting substructure failures, such as stream scour. He warned that every bridge deserved a professional assessment of its natural foundation and stream conditions, and based on that careful assessment, the selection as necessary of an appropriate man-made foundation, such as compacted soils, grillage, piles, and cribs. This emphasis on the need to approach each bridge as an individual problem, even when using standard and well-tried technologies, is a philosophy that Edwards carried with him to the Maine State Highway Commission in 1921. An emphasis on individual design would become a trait of the Bridge Division.

When Edwards arrived in Augusta at the state highway commission s offices in 1921, he found an organization funded and geared up to enter what some historians have termed the golden age of road and highway bridge building in the United States. Over the next 20 years there would be a remarkable period of improvements that would steadily transform the state s and the nation s highways from the days of horse and buggy to those of the automobile and truck. It was a large undertaking, but one that was underway by bridge divisions in every state. Edwards clearly saw his job in that national perspective. He had more than twenty years of experience in bridge engineering and many professional contacts across North America. Furthermore, he had an uncommon interest in the history of bridge building, a great sense of where bridge technology had been and where it was going. In 1922, he attended the American Association of State Highway Officials (AASHO) conference and delivered a paper on Present Tendencies of Highway Bridge Design and Construction. This paper stands as a statement of how Edwards saw the role of the state bridge engineer. A condensed version was reproduced in both American and Canadian engineering journals.

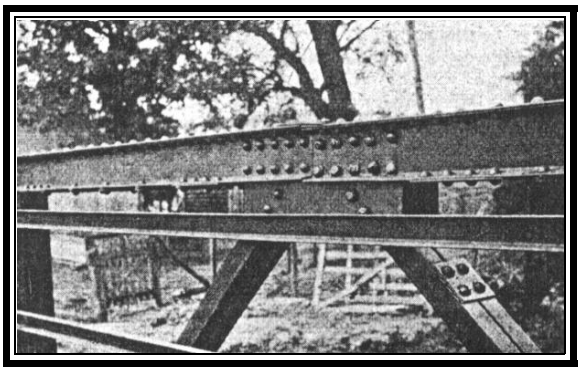


Figure III-5. A photo from Edwards 1922 AASHO paper illustrated the tendencies in local bridge building that the Maine State Highway Commission Bridge Division worked against under his tenure as state bridge engineer. The misaligned upper chord of the truss was a Specimen of crude shop work and inefficient field riveting. No inspection in either shop or field, according to Edwards. Individual design and attention to detail, including inspections of all work by trained engineers, would become a hallmark of the department. Edwards led the state s towns away from relying on bridge-building companies for prefabricated trusses. Source: L. N. Edwards, Present Tendencies of Highway Bridge Design and Construction, The Canadian Engineer (Dec. 12, 1922), p. 617.

Edwards began his paper with a Darwinian view of bridge technology, stating that the best bridge types and designs in use in the early 20th century were the result of survival of the fittest. Many bridge technologies had become obsolete because of uniform, steady progress in scientific knowledge and by the experience of trial and

error, weeding out less fit materials and designs. The two most modern bridge materials, he stated, were steel, most suitable for long span structures, and reinforced concrete, suitable for almost all classes of work. Experience had proven that attention to individual detail in every bridge project resulted in ultimate economies of material and permanency of structure that more than offset the costs involved in the additional engineering. He continued that every bridge required a complete location survey considering roadway alignment, stream conditions, and foundation conditions.

Edwards stated that load capacity constituted a ruling factor in bridge design. Speaking generally, highway bridge engineers were in a state of uncertainty as to future highway loads. Edwards ventured to predict, and correctly, that automobiles and trucks had not yet reached their peak axle weights. AASHO s newly formed bridge committee, consisting of the state bridge engineers of every state, was currently considering the adoption of national standard specifications for design, allowable stresses, and classification of materials. These would eventually define standard live loads still in use today, such as H15 and H20. They would be formally adopted and published in the first edition of AASHO s Standard Specifications in 1931. Edwards recommended very liberal allowances for overload, thus establishing a national standard safety factor. Maine s state bridge engineer noted that apart from strength, it was becoming more essential to take care to create structures that were pleasing to the eye. By this, he did not mean the overuse of architectural ornament, but the use of mass combined with straight and gracefully curved lines. As a final thought, Edwards stated that to secure, a strong, reliable and durable bridge there must be a sense of team play between the bridge designers in the office and the field superintending engineers at the bridge site. This sense of team play was something he was striving to build within Maine s Bridge Division.

As the state highway officials gathered to hear Edwards paper in December 1922, little in his presentation would have caused controversy. It was an articulate address on the state-of-the-art of ordinary highway bridge design. Surely there would have been plenty of nodding of heads in agreement by the audience, although a few eyebrows might have been raised at Edwards assertion that every bridge should be designed individually. Some state bridge engineers at this time were adopting standard-design plans, one set of plan sheets that could be used to build dozens if not hundreds of nearly identical cookie-cutter type bridges. For instance, Georgia s standard designs for reinforced concrete T beam highway bridges covered a range of span lengths from 20' to 55' long, the spacing and dimensions of the beams read off of a table depending on the length and width of the required bridge. Any minor modifications to the standard design were left up to the resident engineer and the contractor at the construction site. This practice hardly lent itself to careful survey and analysis of each bridge project, but it did cut engineering costs and was considered desirable by some understaffed or weakly funded state highway departments. Standard designs were not used by Maine s Bridge Division, except for very minor culverts. In Maine, each bridge design

would be worked out individually with separate plan sheets for every bridge although the bridges used the same basic materials and design.

Designing bridges individually did not necessarily lead to the use of a greater variety of bridge types or materials. Between 1921 and 1928, Edwards bridge division designed and supervised the construction of approximately 330 structures, according to annual reports. For Edwards and his fellow state bridge engineers, designing and building highway bridges was a practical problem to be approached rationally, systematically, and in a business-like manner. The wisest use of a state s funds was not in a large number of experimental bridge types or the use of untested technologies and materials. Of the 330 bridges and culverts listed in the state highway commission s annual reports from 1922 to 1928, 250 (75 percent) were reinforced concrete slab or T beam bridges. Most of the slab and T beam bridges were built either by local contractors or by the state highway commission s own forces. Late 1890s advancement in the understanding of the placement of reinforcing steel bars to accommodate tension and shear forces resulted in reinforced concrete being used with ever increasing frequency after 1905 for slab and T beam bridges. By the late 1910s, both of these bridge types were well tried and considered among the most economical and durable for span lengths in the range of 6' to 25' for slab bridges, and from 20' to a maximum of about 60' for T beam bridges. They were built in the thousands across the entire United States and are still built today.

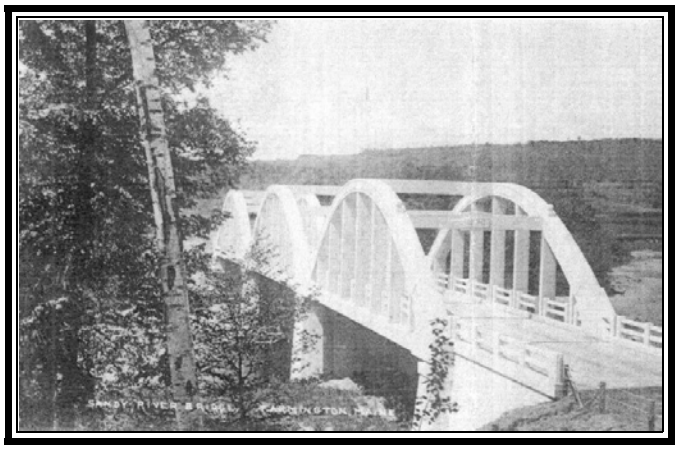


Figure III-6. The Fairbanks Bridge was one of four reinforced concrete thru arch bridges designed by Llewellyn Edwards, chief bridge engineer of the state highway commission. The bridge in Farmington was lost in a 1987 flood, but the other three thru arch bridges survive. They are among the most accomplished works of the state bridge engineer during the 1920s golden age of highway and bridge building in Maine. Source: Postcard, Private Collection.

Edwards also used steel truss bridges but in fewer numbers, usually for sites requiring a bridge with individual spans of over 75' long. Between 1921 and 1928, annual reports list the construction of 15 steel truss bridges. Steel truss bridges were a very well-established bridge technology fully developed by the end of the 19th century. Truss bridges could usually be erected more quickly and less expensively for longer spans than reinforced concrete bridge types, which needed additional form work and time to cure, a consideration with Maine s shorter construction season. Edwards noted in a 1924 report that floods were a regular late winter or spring occurrence in Maine, usually resulting in the loss of bridges, especially the

older structures that had been built low in flood plains or with less than adequate substructures. Truss bridges, he reported, were more easily placed above extreme high-water levels than most reinforced concrete bridge types. In May 1923, a particularly severe flood wrecked a large number of bridges and resulted in a considerable number of petitions for aid. Seven truss bridges were built in 1923 and early 1924 as a way to replace washed out bridges.

While much of the 1920s bridge work was routine, there were occasional opportunities where less common bridge types were justified. Among Edwards most accomplished works were a series of reinforced concrete tied, thru arch bridges built from 1926 to 1929. Included in this group are the Blue Hill Falls Bridge (1926, Blue Hill #5038), the Chestnut Street Bridge (1927, Lewiston #5003), the Covered Bridge (1928, Norridgewock #2187), and the Fairbanks Bridge (1928-1929, Farmington, destroyed in a 1987 flood). The handsome reinforced concrete thru arch bridge type had been developed in the United States during the early 1910s, but it apparently had never before been built in Maine. Other important bridges designed by Edwards were the Chisolm Park Bridge over the Androscoggin River in Rumford (#2990, designed by Edwards but not built until 1929-1930), the state s longest and only open spandrel arch highway bridge, and the 1921 steel thru truss International Bridge over the St. John River at Madawaska (#2399), a structure which aided materially in the development of the paper industry in Northern Maine.

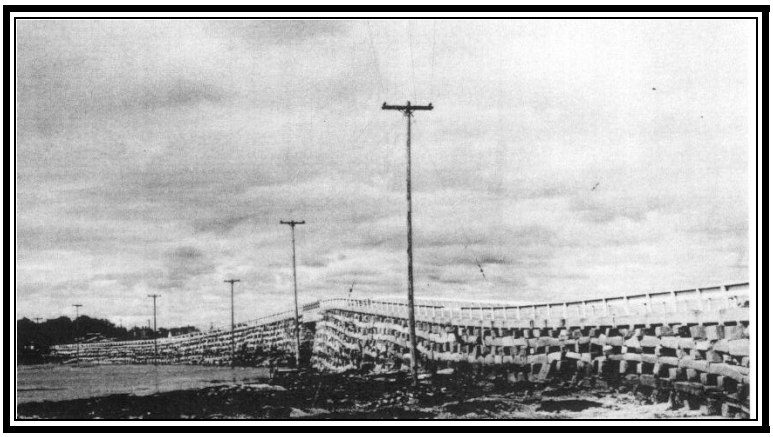
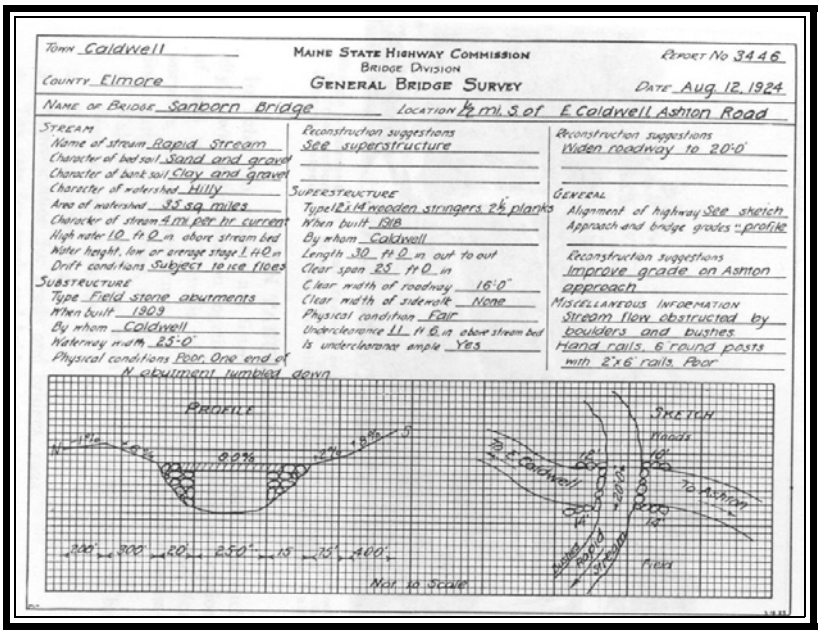


Figure III-7. The Bailey Island Bridge showcased the creativity of state bridge engineer Llewellyn Edwards. His granite slab cribbage design withstood the strong tides but allowed the water to flow freely. It is unique among American highway bridges of the 20th century. Source: Postcard, Private Collection.

Of course, Edwards may be most remembered for the 1928 Bailey Island Bridge (Harpswell # 2033), a 1,040'-long stone crib structure, unique in the United States, but reportedly inspired by similar bridges in Scotland. Although certainly something of an experiment, Edwards had well justified reasons for building such an unusual structure, and it had everything to do with location. For all but a narrow channel, the bridge would rest on a rock shelf and never be more than a few feet below water at low tide, but the tide itself had a very strong current. The weight of the granite slabs would be enough to withstand the tide, but the openings between them would allow the tide to



Town Caldwell
County Elmore
Name of Bridge Sanborn Bridge
MAINE STATE HIGHWAY COMMISSION
BRIDGE DIVISION
GENERAL BRIDGE SURVEY
Report No 3446
Date Aug. 12, 1924
Location ½ mi. S. of E. Caldwell Ashton Road

STREAM
Name of stream Rapid Stream
Character of bed soil Sand and gravel
Character of bank soil Clay and gravel
Character of watershed Hilly
Area of watershed 35 sq. miles
Character of stream 4 mi per hr current
High water 10 ft 0 in above stream bed
Water height, low or average stage 1 ft 0 in
Drift conditions Subject to ice flees

SUBSTRUCTURE
Type Field stone abutments
When built 1909
By whom Caldwell
Waterway width 25'-0"
Physical conditions Poor. One end of N abutment tumbled down

Reconstruction suggestions
See superstructure

SUPERSTRUCTURE
Type 12 x 14 wooden stringers 2½ planks
When built 1918
By whom Caldwell
Length 30 ft 0 in out to out
Clear span 25 ft 0 in
Clear width of roadway 16'0"
Clear width of sidewalk None
Physical condition Fair
Undercleorance 11 ft 0 in above stream bed
Is undercleorance ample Yes

Reconstruction suggestions
Widen roadway to 20'0"

GENERAL
Alignment of highway See sketch
Approach and bridge grades "profile

Reconstruction suggestions
Improve grade on Ashton approach

MISCELLANEOUS INFORMATION
Stream flow obstructed by boulders and bushes
Hand rails, 6 round posts with 2"x6" rails. Poor

PROFILE
SKETCH
Not to Scale

Figure III-8. A sample form from the 1924 statewide bridge survey. The survey established a baseline for estimating the state s highway bridge needs and costs. The survey also created an impressive record for posterity, although that was not its original purpose. It offers a snapshot in time of more than 6,700 bridges of most every conceivable 19th and early 20th century type. The original forms and photos are still maintained by Maine DOT and were an invaluable source of information for the historic bridge survey. Source: Maine State Highway Commission, Annual Report, 1924.

flow freely without greatly increasing its velocity. Furthermore, there was an excellent granite quarry nearby.

None of the Bridge Division s accomplishments during the Edwards years would have been possible without a steady source of funding. In 1923, the Bridge Division was asked by the legislature to undertake a survey of all of the bridges on public highways in the state. Until this time, there had never been an accurate inventory, and the information was deemed important to ascertaining just what the state s bridge needs were, especially from a standpoint of cost. Questionnaires were sent to town officials and survey parties fanned out across the state, filling out a standard form and taking photographs of each bridge. Completed in 1924, the survey survives today as an invaluable snapshot in time of the state of bridge technology in Maine in the early 1920s. It documents hundreds of bridges and bridge types and designs that have long since ceased to exist. Historic documentation was not, however, the purpose of the survey. At the time, it was used to estimate the useful life and reconstruction cost of the more than 6,763 identified bridges and culverts of more than 6' long. The survey also was used to determine the geographic distribution of the bridges, identifying those municipalities that by accidents of topography and geography had relatively greater bridge burdens than other towns. It was felt that this data would help determine the fairest apportionment of state aid. These figures were used to inform the legislature s decision in 1925 to authorize $3 million in bonds and to justify an increase in the state s indebtedness to the voters in a referendum, approved in September 1926. With the additional funds, the commission was able to meet the growing number of town petitions for state aid bridge work.

In 1928, Edwards left the Maine State Highway Commission to take up a post as a researcher for the U.S. Bureau of Public Roads in Washington, D.C. At this post, he

was more properly able to satisfy a thirst for experimentation and scientific research, for which there was little justification in the position of a state bridge engineer. He undertook special research relating to the strength, bonding, and deterioration of concrete in association with the American Society of Testing Materials (ASTM) and the New York State Department of Public Works, and he published a Glossary of Terms and Compendium of Information Relating to Bridge Materials and Construction (1937). Edwards also contributed to the history of bridge building in America by his The Evolution of Early American Bridges, first published in 1934 and reprinted in 1959. It is still a well-regarded portrayal of 18th- and 19th-century bridge engineering. His extensive collection of old books on early bridge engineering is the nucleus of an important collection housed today at the Smithsonian Institution. Reportedly, the Smithsonian s curator of engineering still uses Edwards old rolltop desk. Edwards retired from the BPR in 1943 and passed away in 1952.

When Edwards moved on from Maine s Bridge Division, he left a legacy that was as much human as it was technological. The division achieved results, the quality of the bridge work spoke for itself, and the professional, workmanlike approach to engineering inspired confidence on the part of the highway commissioners, the state legislature, and the general public. Edwards established a cohesive bridge division with a proven record and an organized approach to the work of bridge design and construction. Recruited into the division were a generation of engineers who would steadily carry on with the same high standards for over the next 40 years. Chief among them were Edwards successor Max L. Wilder, who served as state bridge engineer from 1929 to 1962, and Charles A. Whitten, who served as the division s bridge construction engineer until 1962 and state bridge engineer after 1962.

Activities of the Bridge Division, 1929-1941



Figure III-9. Max L. Wilder, state bridge engineer, 1929-1962. Source: Kennebec Journal (Nov. 22, 1962), microfilm.

The Bridge Division entered a new period in 1929 with the administration of state bridge engineer Max L. Wilder (1894-1962). Born in Augusta, he attended the University of Maine, earning a civil engineer degree in 1914. Directly out of college, he was hired by the Maine State Highway Commission, among the first recruits of newly appointed chief engineer Paul D. Sargent. With the exception of two year s military service during World War I from 1917 to 1919, Wilder was a career state highway commission employee. In 1929, at the age of 35, he had gained the respect and confidence of his superiors and was appointed state bridge engineer to succeed Edwards. For the next 33 years until his retirement in 1962, Wilder would lead the Bridge Division and provide it with a remarkable level of consistency through an economic depression, a world war, and a post-war economic expansion.

Wilder took over the Bridge Division in 1929 on the brink of the Great Depression. The nation s worst economic collapse was not, however, evident in early 1929, and even after the stock market crash of October, few believed that the nation s economy would reach the depths that it did during the 1930s. Maine s highway and bridge program continued apace in 1929 with the state legislature authorizing a new bond issue of $5 million to pay for the state s portion of the cost of new bridge construction under the provisions of the General Bridge Act. In 1929 and 1930, the state highway commission built a combined 120 new bridges. The types of bridges were very similar to those constructed in previous years and included 40 T beam bridges, 52 slab bridges, five steel truss bridges, four box culverts, six steel stringer bridges, one bascule bridge, one swing span bridge, one bowstring arch bridge, five steel girder bridges, three timber stringer bridges, one closed spandrel arch bridge, and one open spandrel arch bridge. The appointment of Wilder as the new state bridge engineer did not lead to any noticeable changes in the bridge types selected for use by the division.

By 1931, the state s bridge program needed to adapt to the deepening financial crisis of the Depression. As unemployment spread and business stagnated, local government finances were particularly hard hit. It became increasingly impossible for town governments to carry out their basic functions, let alone make contributions to the state aid bridge program. Now that the towns were struggling financially and in many cases could not contribute to a new structure, let alone meet maintenance costs, the time seemed appropriate to transfer ownership of the bridges on the state highway system from the towns to the state. In July 1931 by an amendment to the General Bridge Act, the state highway commission took over the maintenance and cost of construction of all bridges on state highways, except in the compact sections of any city or town of over 10,000 inhabitants. About 550 bridges were by this amendment placed under the direct control of the commission, and for the first time the state was the owner and caretaker of a large number of bridges. In 1933, the act was amended to include all bridges on the state highway system without exception.

Through mid 1932, the Maine State Highway Commission remained on relatively stable financial footing. Although the economy was in bad shape, people continued to drive and the highway program funded by the state gasoline tax and federal aid provided a relatively level source of income while other sources of state revenue were collapsing. In 1932, the state was still able to find buyers for $1.5 million in highway and bridge bonds and the state aid bridge program continued at normal levels. The state bridge engineer reported that 173 bridges were built in 1931 and 1932 under the provisions of the General Bridge Act, but 1932 was to be the last normal year for some time.

By late 1932, Maine s state government, like state governments all across the nation, faced huge budget shortfalls. To avoid defaulting on loans and to pay other general expenses, lawmakers diverted the highway departments gas tax and registration and license fee funds, which were normally dedicated for highway improvements. Federal

and state engineers opposed the raids but they could do little to stop them. The Maine State Highway Commission, like the nation s other state highway commissions, was left no choice but to cut back on construction and maintenance. In 1933, the number of bridges built by the Bridge Division dipped almost 40 percent to 49 bridges, and most of these smaller structures, as compared to 87 the previous year. With the pace of work slowing, the state highway commission contemplated laying off the engineering staff, but most of these men had no other jobs to which they could turn.

In January 1933, newly elected President Franklin D. Roosevelt announced his New Deal program to get Americans back to work by a federally sponsored unemployment relief program. One of the provisions of the New Deal was huge sums of money to be funneled by federal agencies such as the Emergency Relief Administration, the U. S. Public Works Administration (PWA), and the Bureau of Public Roads (BPR) to state highway departments, which stood among the only organizations already in place in every state with experience in the administration of large public works projects. The state highway departments were a natural conduit for much of the federal New Deal financial assistance. Since 1916, the federal-aid highway program had been considered a model of federalism in which the state highway departments had worked in cooperative partnership with the BPR to spend hundreds of millions of dollars to be matched by the states on highway improvements. The BPR reviewed and requested changes to plans and technical specifications but allowed the individual states to tailor how federal aid dollars were spent to their own needs. In Maine, for instance, from 1917 to 1933, approximately $11.7 million in federal aid had been spent. The commission had allocated most of its federal aid to road work, such as grading, foundations, and paving, on the state highway system.

The New Deal came just in time to rescue the Maine State Highway Commission s road and bridge program and sustain it through the late 1930s. The federal National Industrial Recovery Act (1933), the Hayden-Cartwright Act (1934), and the Emergency Relief Appropriation Act (1935) apportioned approximately $8 million in federal dollars to the commission through fiscal year 1937. In 1936, regular federal-aid appropriations resumed at approximately $1 million per year, and these federal funds and other state funds were supplemented by labor costs paid from the federal Works Progress Administration (WPA). Most of the federal dollars were grants provided on the condition that they be matched by state dollars. The New Deal programs thus encouraged the state legislature to maintain funding to the commission and limit the diversion of highway funds to pay other state expenses.

New Deal programs supported approximately 45 percent of the Bridge Division s work from 1934 to 1938. Of 293 bridges listed in annual reports, 142 were built with some form of federal aid. The federal programs provided employment for a large portion of the commission s engineering staff, preventing layoffs and the loss of trained

employees. In 1937, for instance, Wilder reported a list of 27 engineers in the Bridge Division who otherwise would have been released if not for a grant from the PWA.

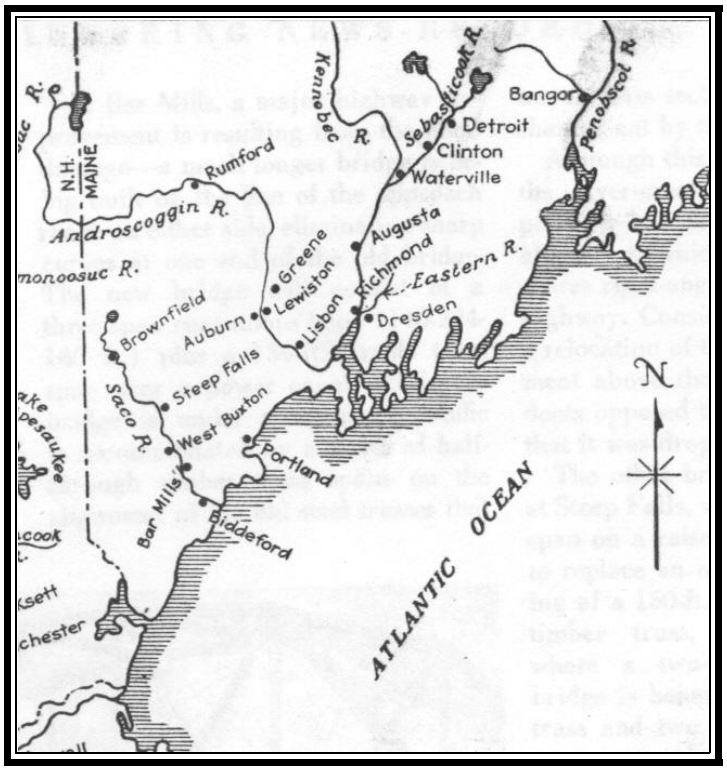


Figure III-10. The 1936 flood made national headlines and the reconstruction effort was followed by national engineering journals. Engineering News Record (July 22, 1937) offered this map showing by town name the location of principal bridges damaged by floods on rivers in Maine.

Of all of the New Deal programs that supported bridge building, the one that is most remembered in New England is the federal assistance provided following the floods of March 1936. The loss of bridges due to flooding is historically not an uncommon occurrence, and localized seasonal flooding destroyed a small number of bridges almost annually in the first half of this century, according to state highway commission annual reports. The denuding of forests was blamed for causing greater than normal run-off. Large floods hit portions of New England in 1923, 1927, 1936, and 1954. The March 1936 flood was one of the most destructive, resulting in the loss or damage of an estimated 150 bridges in Maine, believed to be the hardest hit of the New England states due to the force of the flood and crest of the ice pack on the Saco, Androscoggin, Kennebec, and Penobscot rivers. Assistance to the affected states in repairing and replacing bridges was given by the PWA through the U.S. Works Program Flood Replacement Project. The project totaled about $2.5 million of which about half was distributed to Maine.

Reconstruction or replacement of the flood-lost bridges was handled as a joint effort by the PWA and the state highway commission. In general, the smaller bridges were built by the WPA using its labor forces directed by regional and county administrators, and the larger bridges were handled like ordinary federal aid projects with the design and construction supervised by the state highway commission under the direction of the BPR with the PWA merely acting as a fiscal agent.

Of the estimated 150 damaged or lost bridges in Maine, 17 were considered major crossings of large rivers. Reports noted that 16 of the 17 major bridges lost were old

and light wood or metal truss bridges where the crest of the flood knocked them off their piers or caused scour resulting in pier settlement and collapse. It is interesting to note that most of these bridges were already in the state's work program or identified as deficient. The only new major bridge to be heavily damaged by the flooding was the Maine Kennebec Bridge at Richmond, built in 1931, which lost three of its six spans. Wilder reported that state highway commission-built concrete T beam and steel stringer bridges stood up well against the ice pressure and that the design of such structures would not be changed as a result of the flood. Concrete piers would, however, henceforth be reinforced, since the Maine Kennebec bridge's five-year-old piers had been unreinforced and badly cracked when the ice jam moved sideways against them.

Wilder's approach to the replacement of the lost bridges was conservative with most replacement bridges constructed as either steel stringer or steel truss bridges. Of the 25 bridges listed in annual reports as U.S. Public Works Flood Relief projects, 13 were steel truss bridges, nine were steel stringer bridges, two were T beam bridges, and one was a slab bridge. The selection of steel truss and steel stringer bridge types was governed, in part, by the need to erect the bridges as quickly as possible. The steel bridges could be erected without extensive formwork or time for curing of concrete. The steel truss and stringer bridges also provided the advantage of placing the superstructures for the longer bridges as high above extreme water levels as was economically possible, as well as also giving the superstructure as much weight and rigidity as was economically justified. The steel truss bridges, mostly of Parker, Warren and Pratt designs, were of a type and design with riveted connections and members of standard sections that had been used by the Bridge Division since the late 1920s. In many cases, a similar bridge probably would have been built eventually to replace the older bridges over the Saco, Androscoggin, Kennebec, and Penobscot rivers, whether they had been taken by the flood or not. Engineering News-Record reported in July 1937 that Maine's flood bridge program was interesting but not sensational.

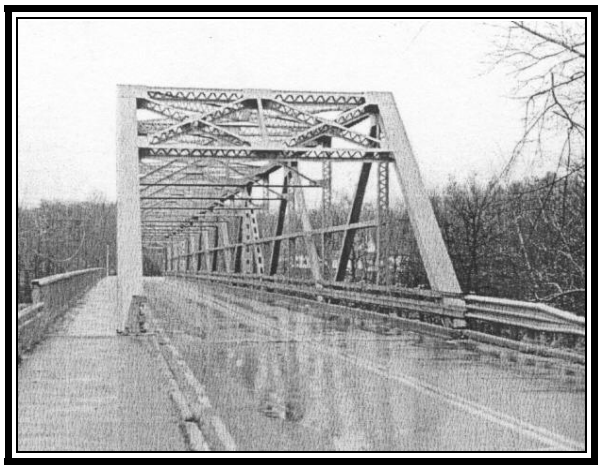


Figure III-11. The Bar Mills Bridge (Hollis # 3333) was one of many truss bridges built by the Maine State Highway Commission to replace bridges lost to the flood of March 1936. The replacement bridges were financed with funds provided by the U. S. Public Works Administration, a federal New Deal agency.

In terms of bridge technology, it is very clear that the federal New Deal programs did not result in the construction of substantially different bridge types or designs. While it is possible, for instance, to identify PWA courthouses and post offices based on

architectural style, no such distinctions can be made for bridges. In Maine, as in every other state, the New Deal was primarily a funding mechanism for roads and bridges. The programs put unemployed laborers to work. They required federally mandated minimum wages, the selection of unemployed skilled and unskilled workers off of WPA roles, and the use of AASHO and ASTM approved standard specifications for materials, but bridge design was left up to the state Bridge Division s engineers, who continued to use very common bridge types such as T beam bridges, slab bridges, steel truss bridges, steel girder-floorbeam bridges, and steel stringer bridges.

The austerity of the 1930s did have one noticeable impact on the Bridge Division s selection of bridge types and designs and that was some adjustment to maintain economy based on the prices of materials. The most obvious of the adjustments was an increasing use of steel stringer bridges for a longer range of span lengths, supplanting the use to some degree of T beam bridges, especially in the range of 30' to 60' long. In 1933, the number of steel stringer bridges built by the Bridge Division for the first time equaled or surpassed T beam bridges, and the increasing use of steel stringer bridges was a trend that was to continue for at least the next twenty years. The reasons for this were no doubt the falling prices of rolled steel beams of sufficient depth to make them ever more competitive in a range of longer span lengths.

Another notable change in bridge design was the more frequent use of continuous designs for several bridge types including steel truss bridges, steel stringer bridges, and steel girder-floorbeam bridges. A continuous design is where the superstructure extends without joints over one or more piers. In 1936-37, according to annual reports, the Bridge Division introduced its first longer span continuous designs with the West Buxton (Buxton #3340), Bar Mills (Hollis #3333) and Lisbon-Durham (Durham #3334) steel truss bridges. The continuous designs achieved ease of erection, permanence, deck joint reduction, and economy of material in comparison to simply supported spans of similar length. Continuous spans allowed for longer spans for the given depth of truss or beam. Although the principles of continuous designs had been known by bridge engineers for decades, continuous designs were initially resisted because of the difficulties of precise analysis of the stresses. Nationally, this resistance was broken down from the late 1920s to the 1930s with growing confidence in the theoretical knowledge of structural behavior, strength of materials, and the publication of standard tables for working out the stresses in continuous designs by the American Association of State Highway Officials (AASHO). In Maine, continuous-design bridges were built in limited numbers from 1936 to 1941, and then with greater frequency after the end of World War II in 1945.

The only major bridge type to be introduced by the Bridge Division during the 1930s was the reinforced concrete high-rise rigid frame. According to annual reports, the Bridge Division s first reinforced concrete high-rise rigid frame bridge was the Canal Bridge (Madison #2122), a 30'-long bridge built in 1931. The reinforced concrete rigid

frame bridge, where the top member and the verticals are integral, is one of the most efficient uses of reinforcing steel and concrete. The technology was developed in Europe during the last part of the 19th century, but it was not introduced for anything but culvert-like bridges in the United States until the early 1920s when it was used by Arthur G. Hayden, designing engineer of the Westchester County Park Commission, on the Westchester County (NY) parkways. The rigid frame technology results in well proportioned spans with clean lines, and it was favored initially for use on parkways and in park settings where aesthetics were a significant consideration. Between 1935 and 1941, Maine s Bridge Division built at least 15 examples.

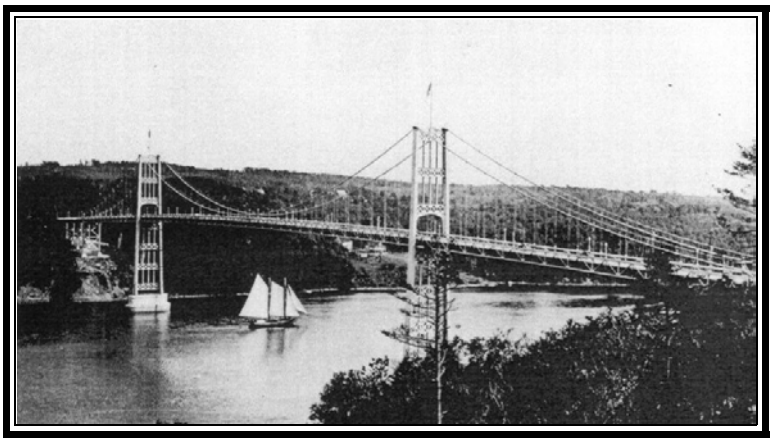


Figure III-12. The Waldo-Hancock Bridge (Prospect #3008) was one of several toll bridges built in Maine during the 1930s. The tolls financed bonds to pay for the construction in a time of fiscal austerity, but were later removed when the bridges were paid off. Source: Postcard, Private Collection.

Beginning in the late 1920s, a special category of bridges in Maine were some truly major toll bridges, such as the Maine Kennebec Bridge (1931, Richmond #2506), the Waldo-Hancock Bridge (1931, Prospect #3008), and the Deer Isle-Sedgwick Bridge (1939, Deer Isle #3257), to name the standouts. None of these bridges were originally Maine State Highway Commission bridges, per se. They were all built by special toll bridge commissions, and then later transferred to the Maine State Highway Commission. Financing for the bridges came from a variety of sources including federal and state aid, as well as bonded indebtedness, with tolls used to pay off the debts. Usually one or more state highway commissioners or the commission s chief engineer were members of the toll bridge commissions. The motivating factor in the bridges construction was improving the capacity of major waterway crossings to handle growing numbers of motorized vehicles on state highways. The state s Bridge Division prepared the design of the Maine Kennebec Bridge, but consulting engineers prepared the designs for the other bridges with the state bridge engineer playing an advisory or supervisory role. The consultants were nationally prominent, such as movable bridge experts J. A. L. Waddell and Shortridge Hardesty, for the vertical lift span of the Carlton Bridge, and suspension bridge expert David B. Steinman for the Waldo-Hancock Bridge and the Deer Isle-Sedgwick Bridge. Because these bridges were major structures often involving technological challenges or innovative designs, they were reported in national engineering journals such as the Engineering News-Record.

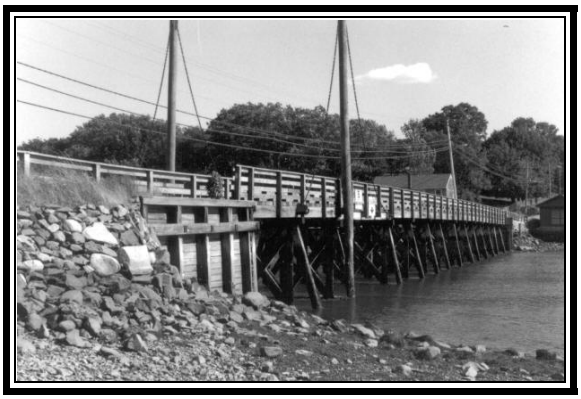


Figure III-13. Sewalls Bridge (York # 3096) over the York River is a 255'-long stringer bridge built in 1934 replacing the historic 1761 bridge that is held as the first engineered bridge in the nation and the first supported on timber pile bents. Its 1934 replacement, done under the direction of the Maine State Highway Commission, reproduced the substructure arrangement of the original, and it is finished with towers to replicate the appearance of the old, 30'-long lift span. The replica bridge was built because of the influence of local residents who wanted an identical bridge to maintain the historic character of the setting. It ranks as one of the earliest such preservation efforts by a state highway commission, and it made national headlines in engineering journals.

A final note on the Bridge Division s accomplishments during the 1930s is Sewall s Bridge (York #3096). It may loosely be called the division s first historic bridge project. In 1933, the state highway commission announced plans to replace a deteriorated 14-span wood stringer bridge with a wood bascule span at York Village over the York River. The crossing dated from 1761 but over the course of more than 170 years it had been extensively altered by replacement of material and widening, although it was found that some original square-hewn oak piles remained. Local residents opposed the replacement project on the grounds of the bridge s historic importance and a desire to maintain the character of the neighborhood. An initial study indicated that a replacement wood stringer bridge was feasible and economical. Philip Dana Orcutt, a Boston architect, was retained to assist with the design of a bridge that would reproduce in its outward appearance the details of Major Samuel Sewall s original 1761 bridge drawings. Wilder and the Bridge Division took Orcutt s architectural renderings and adapted them for a bridge composed of 13, 17'-long treated-timber stringer spans and a 30'-long steel stringer span with the beams sheathed in wood for the non-operative dummy draw span. The bridge was supported on braced timber piles. The Engineering News-Record (Nov. 15, 1934) proclaimed Maine Recreates the First Pile Bridge in America. Since 1934, historians have discovered records of earlier examples, although Sewall s Bridge remains one of the best documented.

Activities of the Bridge Division, 1942-1956

America s entry into World War II brought road and bridge building in Maine and across the nation to a standstill by early 1942. Wartime restrictions on materials and labor prevented the state highway commission from initiating any large projects except those that were considered essential to the war effort. In 1942, state bridge engineer Wilder reported that only 12 bridge projects had been completed during the year, and in general, these were emergency work performed because bridges had been washed out or were unsafe and required more than general maintenance. Six of the nine new

bridges in 1942 were timber stringer bridges because of restrictions on steel and concrete. In 1943, the number of bridge projects reached a low of three bridges. The state took out sabotage insurance and war-damage insurance against five of its major bridges and placed guards at three bridges, but these were removed after it seemed unnecessary in 1944. The state highway commission undertook a number of projects to improve access roads to army reservations, naval airbases and stations, and sources of critical raw materials (primarily wood), but none of these road projects involved bridges other than minor culverts and drainage structures.

By late 1944, it was clear that the Allies would win the war, the question was merely when. There was already a general consensus that at war s end the federal aid program would resume at near prewar levels in an effort to stave off the return of the Depression. The Maine State Highway Commission planned to match the federal aid, as well as fund a large number of state projects through the General Highway Fund and bond issues. The war had caused maintenance to be deferred on the state s roads and bridges. It had also provided time for those state engineers ineligible for the armed services to prepare plans for a large number of projects for advertisement as soon as the war ended.

Thus, with the end of the war in 1945, state bridge engineer Max Wilder expected that there would be a large program of bridge construction in 1946. But in Maine and across the nation, state highway engineers were disappointed when other complications reduced the amount of work and prevented them from making a fast start. Shortages of structural steel and lumber, a very limited supply of labor, and unanticipated postwar inflation caused great financial uncertainty, limited the desire of contractors to bid, and made it difficult for the engineers to budget projects when prices were often 50 percent higher than before the war. In 1946, the Maine State Highway Commission let fewer than 20 bridge project contracts. In 1947, economic conditions were only slightly better and the commission let just 30 bridge projects, but by 1948 the pace of new bridge construction was returning to normal with 46 projects. During the next eight years, the Bridge Division steadily averaged from 45

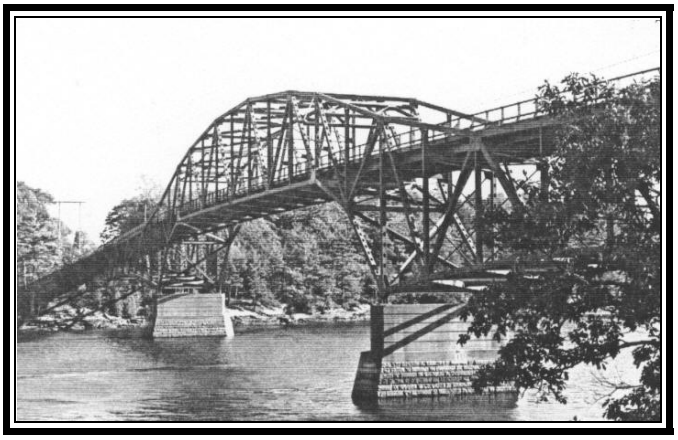


Figure III-14. The Arrowsic-Woolwich Bridge on Route 127, built in 1950, was renamed by special legislative resolve the Max L. Wilder Memorial Bridge in 1963 in memory of the state bridge engineer who directed its design and construction. Under Wilder s steady leadership, the state highway commission built hundreds of bridges between 1928 and 1962.

to over 60 projects per year, with about a fourth of those projects supported by federal aid.

The Bridge Division s choices of bridge types and designs were technologically conservative during the postwar years. While a handful of other state highway departments were moving ahead with some interesting new technologies, particularly exploring the possibilities of prestressed concrete as a bridge material, Maine s Bridge Division utilized tried and true technologies. According to annual reports, the three most frequently built bridge types, accounting for over 80 percent of the bridges and culverts from 1946 to 1956, were steel stringer bridges, reinforced concrete slab bridges, and corrugated metal pipe culverts, the latter used primarily for structures under 20' long. Improvements in the strength of materials, such as reinforced concrete, allowed the bridge designers to push slab bridges to lengths of up to 40', and steel stringer bridges up to 100' span when using continuous designs. This greatly decreased the use of some bridge types, such as T beam bridges, rigid frame bridges, and steel truss bridges, which were still built occasionally but not in great numbers. Even the division s largest bridge projects, such as the Augusta Memorial Bridge (1948-49, Augusta #5196) and the Max L. Wilder Memorial Bridge (1950, Arrowsic #2026, named after Wilder posthumously in 1963), both cantilever truss bridges, presented little in the way of truly innovative or noteworthy engineering. Unlike in previous years, most of these larger projects did not even make news in the standard national engineering periodicals.

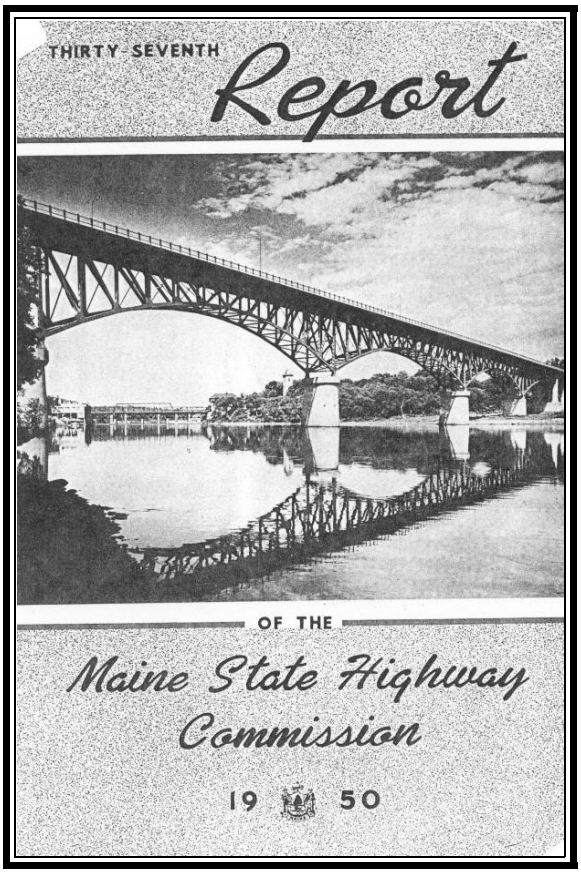


Figure III-15. The Augusta Memorial Bridge (Augusta #5196) was one of the major bridges completed by the Maine State Highway Commission after WW II. Here it is featured on the cover of the 1950 Annual Report.

More important than innovation was that the Bridge Division continued in its tradition of steadiness, quality, and economy, and there is little doubt that this was the case. The Bridge Division kept up with the national standards, especially those published in AASHO s specifications, which were updated by a national committee of state bridge engineers every few years. These defined such critical design variables as allowable stresses, traffic lane widths, live loads, and materials, and they were continually updated. The postwar era was

one of higher technical standards with bridges having greater roadway widths, with safety shoulders for example, and higher capacity designs for live loads, such as HS-20, adopted in 1944. By closely following AASHO s ever more detailed specifications, Maine ended up with bridges looking ever more like bridges constructed in other states. This was a trend reinforced by the large number of bridge projects involving federal aid where BPR district engineersused AASHO standards to review and evaluate state plans.



Figure III-16. In the 1950s and 1960s, the Maine State Highway Commission undertook projects to restore and maintain many of the state s oldest historic bridges, including the Wire Bridge (New Portland #3383), built ca. 1864-66, shown here under restoration about 1960. State lawmakers protected Maine s covered bridges by special legislation and funding in 1959. The Bridge Division took an active role in restoration under the leadership of chief bridge maintenance engineer Roy A. Wentzel.

Maintenance and improvement of existing bridges was the most notable area of expansion in the Bridge Division s activities during the late 1940s and 1950s. According to annual reports, an increasing number of bridge projects were not for new bridges but for widening and strengthening older bridges, especially first-generation state highway bridges from the 1910s and 1920s. Many T beam and slab bridges were widened from their original 18', 20' and 22' widths to more current standard widths such as 26', 28', and 30'. Much of the work of strengthening older bridges, such as welding cover plate to stringers and replacing decks, was done by state maintenance forces. Since 1931, when all of the bridges on state highways had been transferred to state ownership, the number of bridges that were maintained directly by the commission had steadily grown from 550 to over 740 in 1946. The number of bridges maintained by the state more than doubled in 1947 when the state legislature placed under state maintenance all 800 bridges previously built under the General Bridge Act from 1915 to 1947. This increased the number of bridges under state maintenance to 1,547 bridges. By 1956, more than 2,000 bridges were directly under the state highway commission s care. Maintaining the bridges became a large and well organized effort headed by the state s chief bridge maintenance engineer, Roy A. Wentzel.

In Maine, and elsewhere across the nation, the real challenge from both a design and maintenance standpoint was keeping up with the expanding number of automobiles and trucks on the highways in the 1940s and 1950s. As millions of Americans bought cars and took to the roads for everyday travel, as well as vacationing, the wear and tear on roads and bridges increased exponentially. It was not until after World War II that

all working Americans, not just the middle and upper classes, could afford a car, and the bottled up demand from the war made the postwar years the golden age of the automobile manufacturers. The trucking industry also greatly expanded during the 1940s and 1950s as wholesalers and retailers also discovered that trucks were an economical means of moving many types of goods. Trucking gave them a time and cost advantage over the railroads, the traditional long- and medium-distance haulers.

While many Americans relished the freedom of travel provided by cars and trucks, the motor vehicle had its downside, too. A summer traffic jam on US 1 in Maine could be as bad as any New York City rush hour of the time. To relieve congestion, the state highway commission began looking before World War II at building a high-speed superhighway patterned after the Pennsylvania Turnpike (1938-41), considered the nation's first successful long-distance limited access highway. The Pennsylvania Turnpike immediately inspired the idea that there should be a national system of limited-access highways, but there was disagreement about whether they should be built as toll roads, such as the Pennsylvania Turnpike, or as toll-free roads paid for by gas tax revenues. It would take at least 15 years for a political consensus to be reached in Washington creating a toll free interstate highway system paid for by 90 percent federal financing under of the Federal-Aid Highway Act of 1956. In the meantime, some states moved ahead with plans for toll turnpikes, and Maine was at the forefront of this movement. The seeds of the Maine Turnpike were planted in 1941 when Maine state legislator Joseph T. Sayward sponsored legislation to create a toll road similar to the Pennsylvania Turnpike through the coastal region of southeastern Maine to alleviate the crowded conditions on US 1. The Maine Turnpike Authority was created by an act of the state legislature in April 1941, but nothing in the way of substantial progress could be made until after World War II.



Figure III-17. The Maine Turnpike, begun in 1941 and constructed in 1946-47, proved to the nation that a self-financing toll roads would be popular with the traveling public, setting off a wave of turnpike construction in other states eager to relieve traffic congestion and frustrated with the lack of a national highway policy for high-standard superhighways. The Maine Turnpike has been recognized as an American Society of Civil Engineers Historic Landmark. The turnpike has undergone many improvements over the years and is not considered to have the aspects of integrity required of a National Register-eligible resource.

The Maine Turnpike was the state's premiere transportation project of the postwar era. The turnpike was not a state highway commission project, but chief engineer Lucius D. Barrows, served as the turnpike authority's secretary-treasurer, and

Max Wilder assisted, ensuring that the turnpike would be integrated into the pre-existing system of state roads and bridges. The commission s engineers did much of the preliminary survey for the turnpike during World War II, but final designs, plans, and supervision of construction was handled directly for the turnpike authority by consulting engineers Howard, Needles, Tammen & Bergendoff (HNTB). The first section of the 47-mile-long, four-lane, superhighway was built from Kittery to Portland in 1946-1947. The project involved approximately 45 bridges, including two large steel girder bridges over the Saco and York rivers, and the remainder mostly grade separation structures of a fairly conventional standardized steel stringer bridge type and design. In general, all construction conformed with AASHO standard specifications adopted in 1945, and there were few really innovative design standards established.

Where the Maine Turnpike stands out historically is its impact on turnpikes in other states. Many highway experts predicted that Maine s self-liquidating turnpike was a huge financial mistake that would never pay for itself. The Pennsylvania Turnpike had been partially funded by a federal PWA grant. In comparison, the Maine Turnpike was financed by bonds backed only by the turnpike s own prospective earnings. Travelers, the sceptics said, would avoid the tolls and the bond holders would be left with an expensive white elephant. Furthermore, the Maine Turnpike was bitterly opposed by the federal BPR s powerful Chief Thomas H. MacDonald who saw turnpikes as a threat to the federal aid funding formula. The political fallout of going against MacDonald was greatly feared. Other states, such as New Jersey, watched closely throughout 1946 and 1947 placing their own turnpike plans on hold until some indication of success or failure was seen in Maine. The turnpike opened on December 13, 1947, and within months traffic on the highway had far exceeded even the most optimistic predictions. Within the year, even the most cynical observers were satisfied, if grudgingly, and there were launched similar turnpike projects in over a dozen states from the late 1940s to the mid 1950s. In late 1955, a second 63-mile long section of the Maine Turnpike opened from Portland to Augusta. The new section had a total of 91 bridges, only ten of them over rivers or streams, the majority eliminating grade crossings. The longest bridge on the extension was the 846'-long steel girder bridge over the Androscoggin River. Again, the design work was handled by HNTB. The completion of the Maine Turnpike extension brought to an end the pre-interstate highway era of road and bridge building in Maine.

Conclusion

The historic context of Maine's bridges from 1905 to 1956 places the bridges at a time when Maine, and much of the nation, was coming to terms with the new automobile age. Leading the effort to improve roads and bridges to meet the demands of motor vehicles was the Maine State Highway Commission staffed by professionally trained engineers. Men such as chief engineers Paul D. Sargent and Lucius D. Barrows, and state bridge engineers Llewellyn N. Edwards and Max L. Wilder, set a tone of

professionalism and business-like management that would permeate the commission s activities. The commission successfully led the transition of Maine s roads and bridges from the dirt roads and byways of the late 19th century to the superhighways of the mid 20th century. By the 1940s, the state highway commission had grown to maturity; it was no longer a fledgling agency, but a powerful force in the Maine political and economic scene with strong ties to the Federal Highway Administration. Most new bridge designs originated in the Bridge Division where the state's bridge engineers chose from well-established, standardized bridge technologies of rolled steel beam and reinforced concrete materials. The engineers brought with them a scientific approach to bridge building that stressed theoretical and practical knowledge of structural behavior, strength of materials, and economy of design. When they viewed their plans for Maine's roads and bridges, they adopted an essentially national outlook, but molded it to fit Maine conditions.

Section IV: Master List of Surveyed Bridges and Recommendations

The following pages are a master list (in alphabetical town order) of all of the bridges of all types that have been evaluated during the inventory and their eligibility recommendations to date. This data is also compiled in a Microsoft Access database table (filename: Master_List.mdb).

The key to finding the individual bridge survey forms in the databases is knowing the bridge type.

If the bridge type is a truss, arch, rigid frame, suspension, movable, girder-floorbeam or culvert then the forms, photos, and maps were scanned and available in the corresponding Thumbs Plus folder on the MDOT network. The forms and data are also available in the Lotus Approach database (filename: finalhbsform.dbf).

If the bridge is a slab, t beam, or stringer bridge type then forms and data are in the Microsoft Access database (filename: slabgird.mdb). Within this database, the individual bridge forms can be viewed from the Form for Viewing and Printing. Most of these bridges were not field inspected or mapped, but state inspection photos are available in the Thumbs Plus software used by bridge maintenance. Approximately 40 slab, tee beam, or stringer bridges were field inspected to resolve eligibility questions. The forms, maps, and photos for the field inspected bridges were scanned and are available in the corresponding Thumbs Plus folder on the MDOT network.

Some exceptions to the above categorizations by bridge type:

(1) 124 pre-1956 **culverts without headwalls** or structural railings were as a class recommended not eligible by the Historic Bridge Committee (HBC) during Phase II. These are generally small pipe culverts. They were not field inspected and there are no forms, photos, or maps for these culverts in the Thumbs Plus for culverts. The raw data and not eligible recommendation for these culverts without headwalls has been maintained in the Lotus Approach database and they appear on the below master list.

(2) **Movable bridges** are in the Lotus Approach database under their superstructure (e.g., truss, girder-floorbeam, etc.) for the bridge structural type field. They were scanned as their own category in Thumbs Plus.

(3) **Replaced bridges.** In the Microsoft Access database (slabgird.mdb) is a table with 91 bridges that were determined to be post-1955 replacement superstructures. TINIS originally reported these bridges as older structures, but subsequent research determined that they were entirely modern or that only elements of the substructures were old.

(4) **Some individual exceptions.** The following bridges are reported in the Microsoft Access database (slabgird.mdb) although their bridge types are not slab, stringer, or t beam.

Auburn	#0086	Deck Girder
Bar Harbor	#5380	Rigid Frame
Camden	#0573	Box Culvert
Dixfield	#5255	Thru Girder
Frankfort	#1130	Girder-Floorbeam
Frankfort	#1136	Girder-Floorbeam
Hermon	#5421	Thru Girder
Houlton	#2629	Rigid Frame
Mt. Desert	#0478	Rigid Frame
Strong	#3904	Rigid Frame
Waterboro	#3876	Arch

A Note on Eligibility Recommendations. Most of the bridges have been recommended No (i.e., not eligible) or Yes (i.e., eligible), but there are some exceptions.

Six stringer or slab bridges are noted as no info available. These are short (less than 20' long) local bridges for which no photos or files were available at MDOT. These bridges were originally reported into TINIS in the mid 1980s. It is not known whether they still exist.

Since the survey began in 1999, fourteen (14) bridges that were recommended eligible have been replaced. The replaced bridges have been noted, but remain on the list for reference purposes only.

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
ABBOT	2888	ABBOT #2	T BEAM	No
ABBOT	3507	OLD COVERED	TRUSS	No
ABBOT	3760	THORNE	T BEAM	No
ABBOT	0956	LITTLE BRIDGE	SLAB	No
ABBOT	2887	ABBOT #1	GIRDER-FLR B	No
ABBOT	2003	ABBOT	T BEAM	No
ACTON	2408	JEFF BRACKETT	SLAB	No
ACTON	6365	WEST SHORE DRIVE	CULVERT	No
ACTON	2065	BEN BRACKETT	SLAB	No
ACTON	2363	HEATH	SLAB	No
ACTON	0642	CANAL BRIDGE	ARCH	No
ACTON	1208	ROWE	STRINGER	No
ADDISON	3718	DYKE	CULVERT	No
ADDISON	2395	INDIAN RIVER 4	T BEAM	No
ADDISON	2445	LAMSON	SLAB	No
ADDISON	3444	ADA BATSON	ARCH	No
ALBANY TWP	3108	BIRD	T BEAM	No
ALBANY TWP	0721	KIMBALLS BR	STRINGER	No
ALBANY TWP	0750	FERNALD MILL BR.	STRINGER	No
ALBANY TWP	0722	EMERY	CULVERT	No
ALBANY TWP	3476	CAL CUMMINGS	SLAB	No
ALBANY TWP	0719	NEW ENGLAND BROOK	CULVERT	No
ALBANY TWP	3148	FURLONG	T BEAM	No
ALBANY TWP	0725	FULLERTON	STRINGER	No
ALBION	2832	TANNERY	T BEAM	No
ALBION	2389	HUSSEY	SLAB	No
ALBION	3006	MEADOW BROOK	SLAB	No
ALBION	2529	MCDONALD	SLAB	No
ALBION	2216	DANFORTH	SLAB	No
ALBION	3107	PUDDLE DOCK	STRINGER	No
ALEXANDER	5474	BEAR BROOK	CULVERT	No
ALFRED	1295	RUSSELL MILL	STRINGER	No
ALFRED	1272	LITTLEFIELD MILL	STRINGER	No
ALFRED	2734	SACO	SLAB	No
ALFRED	1264	SWETTS	STRINGER	No
ALFRED	5651	LEWIS	SLAB	No
ALFRED	1271	NUTTER'S	STRINGER	No
ALFRED	3761	SHAKER MILL	SLAB	No
ALFRED	1263	GREAT WORKS(STEVENS	STRINGER	No
ALNA	2130	CARLTON	T BEAM	No
ALNA	5179	HEAD TIDE	STRINGER	No
ALNA	3145	AVERILL	RIGID FRAME	No
ALNA	3284	DOCK	TRUSS	Yes
ALNA	3639	JOHN ERSKINE	CULVERT	No
ALNA	3899	SHEEPSCOT	STRINGER	No
ALTON	5419	BROWN	SLAB	No
ALTON	5099	MILL	SLAB	No
ALTON	5100	TANNERY	GIRDER-FLR B	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
ALTON	5098	FERNALD	SLAB	No
AMITY	5067	DAVIS	STRINGER	No
AMITY	2330	GREENLEAF BROOK	SLAB	No
ANDOVER	5080	HALL	SLAB	No
ANDOVER	1001	LOVEJOY	TRUSS	Yes
ANDOVER	5081	GORDON BRIDGE	T BEAM	No
ANDOVER	0757	CROCKER BR	STRINGER	No
ANDOVER	2249	EAST ANDOVER	STRINGER	No
ANDOVER	3996	BRICKETT	STRINGER	No
ANDOVER	3336	ANDOVER FALLS	STRINGER	No
ANDOVER	3337	BLACK BROOK RTE 120	T BEAM	No
ANDOVER	0649	LEARNED BR	STRINGER	No
ANDOVER	0641	BLACK BROOK BRIDGE	STRINGER	No
ANDOVER	3971	STONEY BROOK	SLAB	No
ANDOVER	3215	MERRILL	TRUSS	No
ANSON	5295	TIBBETTS	ARCH	No
ANSON	1095	MOORES SHOP	STRINGER	No
ANSON	1094	SPEAR HILL RD BR.	STRINGER	No
ANSON	1080	TOWN FARM RD. BR.	STRINGER	No
ANSON	1062	MARSHALL	STRINGER	No
ANSON	1057	MCGEE	STRINGER	No
ANSON	1055	ROGERS	STRINGER	No
ANSON	2655	PELTON STREAM	SLAB	No
ANSON	3285	LEMON STREAM BRIDGE	STRINGER	No
ANSON	3920	OLIVER STREAM	ARCH	No
ANSON	3726	ICE HOUSE	SLAB	No
ANSON	2654	PEASE ST. BRIDGE	STRINGER	No
ANSON	1056	OLIVER MILL	GIRDER-FLR B	No
APPLETON	5076	MCLAINS MILL	T BEAM	No
APPLETON	5530	JONAS DAVIS	SLAB	No
APPLETON	5532	ALLEN BROOK	ARCH	No
APPLETON	0581	SHERMAN MILLS BR	STRINGER	No
APPLETON	5529	NORTH APPLETON	STRINGER	No
APPLETON	3487	BURKETT	T BEAM	No
ARGYLE TWP	3735	HEMLOCK STREAM	RIGID FRAME	No
ARGYLE TWP	3427	HOYT BROOK	SLAB	No
ARROWSIC	3016	BACK RIVER	TRUSS	Yes
ARROWSIC	2026	MAX L. WILDER MEMORIAL	TRUSS	Yes
ARUNDEL	1482	KENNEBUNK RIVER SB	STRINGER	No
ARUNDEL	2085	B&M CROSSING	GIRDER-FLR B	No
ARUNDEL	1334	LIMERICK ROAD	STRINGER	No
ARUNDEL	3948	HUTCHINS	ARCH	No
ARUNDEL	1335	OLD ALFRED RD	STRINGER	No
ASHLAND	5159	BIG MACHIAS RIVER	T BEAM	No
ASHLAND	5011	HORSE BROOK	SLAB	No
ASHLAND	0159	B&ARR/SA5&ARO R RR#A44.74	TRUSS	Yes
ATHENS	2925	WESSERUNSETT	T BEAM	No
ATHENS	3165	TANNERY	T BEAM	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
ATKINSON	2879	UNION	T BEAM	No
ATKINSON	3134	ATKINSON MILLS	T BEAM	No
ATKINSON	0930	MCCORRISON	STRINGER	No
AUBURN	3330	SOUTH BRIDGE	TRUSS	Yes
AUBURN	5454	AUBURN ROAD	SLAB	No
AUBURN	0046	TURNER STREET	GIRDER-FLR B	No
AUBURN	0075	BROWN	STRINGER	No
AUBURN	1493	MTPK(SB)/RTE 202 & CRR	STRINGER	No
AUBURN	2648	PARSONS MILL	SLAB	No
AUBURN	1492	MTPK(SB)/CNRR	STRINGER	No
AUBURN	2625	OAKDALE NB/RT 100,4,202	T BEAM	No
AUBURN	2209	CRYSTAL SPRING	CULVERT	No
AUBURN	0081	AUBURN INTERCHANGE/MTPK	STRINGER	No
AUBURN	0074	HELM BRIDGE	STRINGER	No
AUBURN	0083	DANVILLE CORNERS(BEECH H)	STRINGER	No
AUBURN	0086	MTPK(NB)/ANDROSCOGGIN	DECK GIRDER	No
AUBURN	0078	SOPERS MILL BRIDGE	STRINGER	No
AUBURN	3895	IRON	GIRDER-FLR B	No
AUBURN	0085	SOUTH MAIN STREET/MTPK	STRINGER	No
AUBURN	0082	MTPK(NB)/RTE 202 & MCRR	STRINGER	No
AUBURN	0079	RTE 122/OLD HOTEL RD	STRINGER	No
AUBURN	0070	NORTH BRIDGE	STRINGER	No
AUBURN	0084	HACKETT ROAD/MTPK	STRINGER	No
AUBURN	2875	TURNER STREET	SLAB	No
AUBURN	3338	LITTLEFIELDS	TRUSS	No
AUBURN	3339	BOBBIN MILL BROOK	T BEAM	No
AUBURN	0073	GARDINER	STRINGER	No
AUBURN	3999	CRYSTAL SPRING	SLAB	No
AUBURN	0080	MTPK(NB)/CNRR	STRINGER	No
AUGUSTA	5809	AUGUSTA INTERCHANGE	STRINGER	No
AUGUSTA	5196	MEMORIAL	TRUSS	Yes
AUGUSTA	0521	SPRING BROOK BR	CULVERT	No
AUGUSTA	3077	BOND BROOK NO 1	STRINGER	No
AUGUSTA	5808	WESTERN AVE.	STRINGER	No
AUGUSTA	0535	CURTIS	ARCH	No
AUGUSTA	0563	WATER STREET	ARCH	Yes
AUGUSTA	0564	WATER ST BR. UNDERPASS	GIRDER-FLR B	Yes
AUGUSTA	2109	BURBANK		No
AUGUSTA	2528	MCARTHUR BROOK	ARCH	No
AUGUSTA	5714	STONY BROOK NO. 2	CULVERT	No
AUGUSTA	3528	RINES HILL	STRINGER	No
AUGUSTA	2719	RIGGS	ARCH	Yes
AVON	2890	VALLEY BROOK	T BEAM	No
AVON	2138	CATES	T BEAM	No
AVON	2028	AVON CORNER	SLAB	No
BAILEYVILLE	5839	MAIN STREET	T BEAM	No
BALDWIN	2595	MURCH	SLAB	No
BALDWIN	0261	BURNELLS MILL	STRINGER	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
BALDWIN	3692	PARKER	SLAB	No
BALDWIN	3693	FOLLY	SLAB	No
BALDWIN	2694	QUAKER	SLAB	No
BALDWIN	0225	NEW ROAD	STRINGER	No
BALDWIN	2748	SCHOOLHOUSE	SLAB	No
BALDWIN	5036	BURNELL	SLAB	No
BALDWIN	0224	BOWERS BR.	STRINGER	No
BALDWIN	2911	WARREN	SLAB	No
BALDWIN	2098	BREAKNECK	SLAB	No
BALDWIN	5045	HEATH	SLAB	No
BANCROFT	5592	SHOREY BROOK	CULVERT	No
BANGOR	3905	MAXFIELD	T BEAM	No
BANGOR	2711	RED	SLAB	No
BANGOR	0860	COOK BRIDGE	T BEAM	No
BANGOR	0903	DUTTON STREET UNDERPASS	STRINGER	No
BANGOR	2294	FRANKLIN ST		No
BANGOR	5312	JOSHUA CHAMBERLAIN	STRINGER	No
BANGOR	5413	B&ARR/BDWY-R15 RR#35-13	GIRDER-FLR B	No
BANGOR	2038	BANGOR BREWER BRIDGE	TRUSS	No
BANGOR	5422	B&ARR/UNION-R222 RR#33.84	GIRDER-FLR B	No
BANGOR	2857	TIN	GIRDER-FLR B	No
BANGOR	2646	PARKER BROOK	SLAB	No
BAR HARBOR	0471	MOUNTAIN RD	ARCH	Yes
BAR HARBOR	0472	OVERPASS(WEST ST-	ARCH	Yes
BAR HARBOR	0470	OVERPASS (NPS 1700-002P)	ARCH	Yes
BAR HARBOR	3161	KITTREDGE BRIDGE	SLAB	No
BAR HARBOR	0482	CROMWELL BROOK BR #2	SLAB	No
BAR HARBOR	0469	KEBO BROOK (NPS# 018P)	ARCH	Yes
BAR HARBOR	0457	KEBO BROOK #2	SLAB	No
BAR HARBOR	0458	EAGLE LAKE RD (NPS #01255	ARCH	Yes
BAR HARBOR	5380	RTE #3 OVERPASS (NPS 0060	RIGID FRAME	Yes
BAR HARBOR	3917	MAIN STREET	SLAB	No
BARING	1158	MAHAR	CULVERT	No
BARING	1178	MOOSEHORN	CULVERT	No
BARNARD	5117	BEAR BROOK	T BEAM	No
BATCHELDERS	5509	MUD BROOK	SLAB	No
BATCHELDERS	5510	STONEY BROOK	SLAB	No
BATCHELDERS	5508	MORRISON BROOK	SLAB	No
BATCHELDERS	5507	HASTINGS BRIDGE	STRINGER	No
BATCHELDERS	5506	EVANS BROOK	STRINGER	No
BATCHELDERS	5511	SPRUCE HILL	ARCH	No
BATH	2604	NEW MEADOWS #2	GIRDER-FLR B	No
BATH	0990	OAK GROVE AVE.BR.	GIRDER-FLR B	No
BATH	0989	SEWALLS FARM	STRINGER	No
BATH	0996	HIGH ST. BR	STRINGER	No
BATH	5402	OLD BATH ROAD U.P.	GIRDER-FLR B	No
BATH	3007	CARLTON BRIDGE	TRUSS	No
BATH	3837	HIGH STREET	RIGID FRAME	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
BATH	0988	WHISKEAG BR	SLAB	No
BEAVER COVE	5443	BEAVER CREEK	SLAB	No
BEAVER COVE	5560	MUD BROOK	ARCH	No
BEDDINGTON	1157	LOWER GUAGUS	STRINGER	No
BELFAST	1140	TURKEY FARM ROAD	STRINGER	No
BELFAST	2319	GOOSE RIVER	SLAB	No
BELFAST	5558	POORS MILL	T BEAM	No
BELFAST	5557	SHELDON	ARCH	No
BELFAST	2477	LOWER	SLAB	No
BELFAST	5143	PERKINS	T BEAM	No
BELFAST	5262	RED	CULVERT	No
BELFAST	2232	DOG ISLAND	STRINGER	No
BELFAST	5263	KELLEY	SLAB	No
BELFAST	2937	WHITE	T BEAM	No
BELGRADE	3934	MILL	CULVERT	No
BELGRADE	5245	CRANK	CULVERT	No
BELGRADE	2922	WELLMAN	T BEAM	No
BENTON	5069	FIFTEEN MILE STREAM	T BEAM	No
BENTON	5246	JEWETT	ARCH	No
BERWICK	1227	ROBERTS	STRINGER	No
BERWICK	1232	BLACKBERRY HILL	STRINGER	No
BERWICK	5429	GRANTS RR OVERPASS	TRUSS	Yes (Relocated)
BERWICK	2060	BEAVER DAM	SLAB	No
BERWICK	6387	LOVERS BROOK	STRINGER	No
BERWICK	3489	WORSTER BROOK	RIGID FRAME	No
BERWICK	5352	HOBBS RR OVERPASS	TRUSS	Yes (Replaced)
BETHEL	2483	LOWER MILL	SLAB	No
BETHEL	5043	OTTER BROOK	CULVERT	No
BETHEL	2673	PLEASANT RIVER	T BEAM	No
BETHEL	5082	UPPER MILL	SLAB	No
BIDDEFORD	5504	DAVIS	SLAB	No
BIDDEFORD	3163	SWAN POND	STRINGER	No
BIDDEFORD	1341	SACO RIVER NB	STRINGER	No
BIDDEFORD	5593	GOODWINS MILLS ROAD	CULVERT	No
BIDDEFORD	1340	RIVER ROAD	STRINGER	No
BIDDEFORD	1339	BRANCH OF SACO	CULVERT	No
BIDDEFORD	3423	MAIN STREET	GIRDER-FLR B	No
BIDDEFORD	5227	OLD MOORES	SLAB	No
BIDDEFORD	1338	BIDDEFORD EXCHANGE	STRINGER	No
BIDDEFORD	5594	WITHAM	ARCH	No
BIDDEFORD	1337	THATCHER BROOK	CULVERT	No
BIDDEFORD	2265	ELM STREET BRIDGE	STRINGER	No
BIDDEFORD	1351	ELM ST BR	TRUSS	Yes
BIDDEFORD	3910	SNAKE RIVER	STRINGER	No
BIDDEFORD	3908	ALFRED ROAD CROSSING	STRINGER	No
BINGHAM	5254	JOHNSON BROOK	ARCH	No
BINGHAM	5214	REYNOLDS #1	GIRDER-FLR B	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
BINGHAM	2845	TOM COLLINS	GIRDER-FLR B	Yes
BINGHAM	1017	MILL BROOK	STRINGER	No
BLAINE	3834	UPPER	T BEAM	No
BLAINE	3952	ROBINSON	STRINGER	No
BLAINE	2853	THREE BROOKS	SLAB	No
BLANCHARD TWP	0958	GULLY BR	SLAB	No
BLANCHARD TWP	3529	JACKSON BROOK	SLAB	No
BLANCHARD TWP	0940	BLACKSTONE	STRINGER	No
BLUE HILL	5038	BLUE HILL FALLS	ARCH	Yes
BLUE HILL	2893	VILLAGE	SLAB	Yes
BOOTHBAY	2039	BARTERS ISLAND	TRUSS	No
BOOTHBAY HARBOR	0629	ECHO BR.	SLAB	No
BOW DOIN	3498	BLACKSMITH SHOP	SLAB	No
BOW DOIN	2367	HENRY WEBBER	SLAB	No
BOW DOIN	5396	LEWIS	CULVERT	No
BOW DOIN	3635	GILLESPIE	SLAB	No
BOW DOIN	5395	COOMBS	SLAB	No
BOW DOIN	2670	PLANK	SLAB	No
BOW DOIN	0978	DEAD RIVER BR	STRINGER	No
BOW DOIN	3713	FRANK CASKERY	SLAB	No
BOW DOINHAM	1685	UPPER ABAGADASSET BR.	STRINGER	No
BOW DOINHAM	0977	CARD MACHINE BR	STRINGER	No
BOW DOINHAM	3273	HARWARDS CROSSING	STRINGER	No
BOW DOINHAM	0972	TWO BRIDGES WEST	T BEAM	No
BOW DOINHAM	3632	LEAVITT	CULVERT	No
BOW DOINHAM	5397	CREEK	CULVERT	No
BOW DOINHAM	5493	ABAGADASSET	STRINGER	No
BOW DOINHAM	5190	BROOKLYN	TRUSS	No
BOW DOINHAM	3432	LOWER ABAGADASSET	GIRDER-FLR B	No
BOW DOINHAM	3991	RANDALL	RIGID FRAME	No
BOW DOINHAM	2974	TWO BRIDGES EAST	T BEAM	No
BOW DOINHAM	3990	CARR	RIGID FRAME	No
BOW DOINHAM	5469	STONE	ARCH	No
BRADFORD	5446	LARRABEE	SLAB	No
BRADFORD	3430	WILSON	SLAB	No
BRADFORD	3473	MIDDLE BRANCH	SLAB	No
BRADFORD	3745	HANSON	T BEAM	No
BREWER	5638	ELM STREET	CULVERT	No
BREWER	2755	SEDGEUNKEDUNK	ARCH	No
BRIDGEWATER	5495	BOOTFOOT	ARCH	No
BRIDGEWATER	5012	WHITED	SLAB	No
BRIDGEWATER	3734	BOUNDRY	T BEAM	No
BRIDGEWATER	2942	WHITNEY BROOK	T BEAM	No
BRIDGEWATER	3872	DEAD	SLAB	No
BRIDGTON	2581	MOOSE POND	SLAB	No
BRIDGTON	3606	RODGERS BROOK OLD	SLAB	No
BRIDGTON	0316	FOUNDRY	GIRDER-FLR B	No
BRIDGTON	0317	WALKERS SHOP BR.	GIRDER-FLR B	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
BRIDGTON	3607	BROWNS MILL OLD	SLAB	No
BRIDGTON	0318	CORNSHOP BR.	STRINGER	No
BRIDGTON	3966	SANDY CREEK	RIGID FRAME	Yes
BRIDGTON	0218	WILLETT BROOK	GIRDER-FLR B	No
BRIDGTON	3965	HIGHLAND LAKE	CULVERT	No
BRIGHTON PLT	5194	CORSON	CULVERT	No
BRIGHTON PLT	5124	CLOUGH	SLAB	No
BRISTOL	2357	HATCHTOWN	SLAB	No
BRISTOL	3133	MONROE	STRINGER	No
BRISTOL	0632	HEBERT	STRINGER	No
BRISTOL	6360	DAYS BRIDGE	SLAB	No
BRISTOL	0619	THE ARCH BR.	ARCH	Yes
BRISTOL	5314	PEMAQUID FALLS	SLAB	No
BRISTOL	0628	LONG COVE POINT BR	STRINGER	No
BRISTOL	0620	PARTRIDGE BR.	STRINGER	No
BRISTOL	0633	HERBERT	STRINGER	Yes
BROOKS	2309	GIBBS	SLAB	No
BROOKS	2154	CITES	SLAB	No
BROOKS	1125	B&M LAKE R.R.	STRINGER	No
BROOKS	5471	HALL	CULVERT	No
BROOKS	2450	LANG	T BEAM	No
BROOKS	2446	LAMPHIER	SLAB	No
BROOKS	2945	WIGGIN	SLAB	No
BROOKS	2894	VILLAGE	T BEAM	No
BROOKSVILLE	3043	CAPE ROSIER	GIRDER-FLR B	No
BROOKSVILLE	3628	DAVIS NARROWS	STRINGER	No
BROOKSVILLE	3282	WALKER POND	SLAB	No
BROWNFIELD	2759	SHEPARDS RIVER	T BEAM	No
BROWNFIELD	0712	BOYNTON BR	TRUSS	No
BROWNFIELD	2839	TEN MILE BROOK	SLAB	No
BROWNFIELD	2242	DURGINS MILL	CULVERT	No
BROWNFIELD	5485	SEAVEY	STRINGER	No
BROWNFIELD	3417	COVERED	TRUSS	No
BROWNFIELD	0715	SMITH BR	STRINGER	No
BROWNFIELD	0717	HAMILTON	STRINGER	No
BROWNFIELD	2821	BILLY BROOK	SLAB	No
BROWNFIELD	5211	BURNT MEADOWS	SLAB	No
BROWNVILLE	3222	BROWNVILLE JUNCTION	TRUSS	No
BRUNSWICK	0265	GORDREAU	CULVERT	No
BRUNSWICK	0323	FREE / BLACK	TRUSS	Yes
BRUNSWICK	0324	SPRING ST OVERPASS	GIRDER-FLR B	No
BRUNSWICK	0354	JORDAN AVE UNDERPASS	GIRDER-FLR B	No
BRUNSWICK	0204	HARDING ROAD OVERPASS	STRINGER	No
BRUNSWICK	2016	FRANK J. WOOD	TRUSS	Yes
BRUNSWICK	3125	NEW MEADOWS	SLAB	No
BRUNSWICK	5219	BUNGANAC	ARCH	No
BRUNSWICK	1014	WATER ST. U.P.(DUMP RD.)	GIRDER-FLR B	No
BUCKFIELD	5453	BASIN FALLS	SLAB	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
BUCKFIELD	0790	DARNIT BROOK	STRINGER	No
BUCKFIELD	5450	RIVER	STRINGER	No
BUCKFIELD	5452	NO.BUCKFIELD	STRINGER	No
BUCKFIELD	3287	HALL	STRINGER	No
BUCKFIELD	3724	SHAW	STRINGER	No
BUCKSPORT	2496	MAIN STREET	T BEAM	No
BUCKSPORT	3472	STUBBS BROOK	SLAB	No
BUCKSPORT	5239	STA 63&00	CULVERT	No
BUCKSPORT	3561	STUBBS BROOK #2	SLAB	No
BUCKSPORT	3816	SILVER LAKE STREAM	SLAB	No
BUCKSPORT	3279	MOOSEHORN	T BEAM	No
BUCKSPORT	6355	MIDDLE MOOSEHORN	STRINGER	No
BURLINGTON	3883	SAPONAC	SLAB	No
BURNHAM	5144	25 MILE STREAM	T BEAM	No
BURNHAM	2415	JOHNSON BROOK	SLAB	No
BURNHAM	5257	VILLAGE	STRINGER	No
BUXTON	3340	WEST BUXTON	TRUSS	Yes
BUXTON	1293	HAYNES MEADOW	SLAB	No
BUXTON	5492	DUNN	SLAB	No
BUXTON	1278	LITTLE RIVER	STRINGER	No
BUXTON	3931	LEAVITT	SLAB	No
BUXTON	5301	HAINES MEADOW	SLAB	No
BYRON	2587	MORT BRIDGE	T BEAM	No
BYRON	2176	COOS	GIRDER-FLR B	No
BYRON	2281	FIRST MILL BROOK	T BEAM	No
CALAIS	1185	BRIDGE	STRINGER	No Info Avail
CALAIS	1186	BRIDGE	STRINGER	No Info Avail
CALAIS	5517	MCRR OVERPASS	SLAB	No
CALAIS	1187	BRIDGE	STRINGER	No Info Avail
CAMBRIDGE	2276	PARKMAN RD / FERGUSON	RIGID FRAME	Yes
CAMBRIDGE	1069	HILTON	SLAB	No
CAMBRIDGE	3291	KNICKERBOCKER	T BEAM	No
CAMBRIDGE	3583	RIPLEY RD / FERGUSON STR.	RIGID FRAME	No
CAMBRIDGE	3315	DEXTER RD / IKE BROOK	SLAB	No
CAMDEN	0582	FISH HATCHERY NO 2(W)	SLAB	No
CAMDEN	3283	KNOWLTON ST.	T BEAM	No
CAMDEN	2794	SPRING BROOK	CULVERT	No
CAMDEN	2497	MAIN STREET	SLAB	No
CAMDEN	3173	RAWSON AVE.	SLAB	No
CAMDEN	3602	CARLE BROOK	SLAB	No
CAMDEN	2981	BAKERY	SLAB	No
CAMDEN	0573	BOG BR	BOX CULVERT	No
CAMDEN	3601	FISH HATCHERY NO 1(E)	SLAB	No
CAMDEN	2326	GREAT BROOK	SLAB	No
CAMDEN	5077	WOOLEN MILL	SLAB	No
CANAAN	3159	HALL	STRINGER	No
CANAAN	2602	NEW	STRINGER	No
CANAAN	6116	MOORE BRIDGE	STRINGER	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
CANAAN	1032	CRUMETT	STRINGER	No
CANAAN	5551	NICKERSON	STRINGER	No
CANAAN	2120	CANAAN	RIGID FRAME	No
CANAAN	2767	SIBLEY POND	SLAB	No
CANTON	0753	CROSS ST. BR.	STRINGER	No
CANTON	0660	FULLER BROOK BR	STRINGER	No
CANTON	3356	SCHOOLHOUSE	T BEAM	No
CANTON	0645	BOG BROOK	STRINGER	No
CANTON	2312	GILBERTVILLE	TRUSS	No
CARATUNK	3921	PLEASANT POND NO. 2	SLAB	No
CARATUNK	2672	PLEASANT POND	SLAB	No
CARIBOU	5567	LITTLE MADAWASKA	STRINGER	No
CARIBOU	5572	AROOSTOOK RIVER	TRUSS	Yes
CARIBOU	2331	GRIMES MILLS	T BEAM	No
CARIBOU	5581	B&ARR/ROUTE 89 RR#227.63	GIRDER-FLR B	No
CARIBOU	5625	GREENLAW BROOK NO. 2	CULVERT	No
CARIBOU	5568	OTTER BROOK	T BEAM	No
CARIBOU	5554	GREENLAW STREAM	CULVERT	No
CARIBOU	3298	BARRETTS CROSSING	STRINGER	No
CARIBOU	2284	FISH HATCHERY	SLAB	No
CARMEL	5191	TRACY	SLAB	No
CARMEL	5267	OTIS	SLAB	No
CARMEL	2153	CHEESE FACTORY	SLAB	No
CARMEL	3985	RUGGLES	CULVERT	No
CARMEL	0853	MCRR OVER FIVE RD	GIRDER-FLR B	No
CARMEL	2976	MCRR CROSSING	GIRDER-FLR B	No
CARMEL	5102	NORTON	SLAB	No
CARMEL	0882	HASKELL BR.	STRINGER	No
CARMEL	5632	FIVE	SLAB	No
CARMEL	0843	GARLAND BR.	STRINGER	No
CARMEL	0841	BLAGDON BR.	STRINGER	No
CARMEL	2356	HARVEY	SLAB	No
CARRABASSETT	5345	BIGELOW BRIDGE	SLAB	No
CARRABASSETT	5350	HAMMOND FIELD	SLAB	No
CARRABASSETT	3731	REDINGTON STREAM	STRINGER	No
CARRYING PLACE	1078	POND STREAM BRIDGE	STRINGER	No
CARRYING PLACE	1077	JEROME BROOK BRIDGE	STRINGER	No
CARTHAGE	0424	SO. CARTHAGE BR	GIRDER-FLR B	No
CARTHAGE	2519	MASON	SLAB	No
CARTHAGE	2610	NEWMAN	T BEAM	No
CARTHAGE	2916	WEBB RIVER	T BEAM	No
CARY PLT	5577	OLIVER	SLAB	No
CASCO	2551	MILL	SLAB	No
CASCO	0239	COOKS MILL BR.	CULVERT	No
CENTERVILLE	1170	MIDDLE BRANCH	STRINGER	No
CENTERVILLE	3622	MILL STREAM	SLAB	No
CHAIN OF PONDS	3135	DEAD RIVER	STRINGER	No
CHARLESTON	0852	STROUT BR.	STRINGER	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
CHARLESTON	3972	RICHARDS	CULVERT	No
CHARLESTON	2196	CREAMERY	SLAB	No
CHARLOTTE	3787	ROUND POND	T BEAM	No
CHARLOTTE	1165	OHIO	CULVERT	No
CHARLOTTE	3332	MOOSEHORN	CULVERT	No
CHELSEA	3030	TRASK	SLAB	No
CHELSEA	2994	TOGUS STREAM	SLAB	No
CHELSEA	5392	MADDOCKS	ARCH	No
CHELSEA	0527	SKEW	RIGID FRAME	No
CHERRYFIELD	3649	SCHOODIC	T BEAM	No
CHERRYFIELD	1182	RIDGE ROAD	STRINGER	No
CHERRYFIELD	5155	UPPER CORNER	T BEAM	No
CHERRYFIELD	2889	UPPER TUNK	T BEAM	No
CHERRYFIELD	2192	COVERED	T BEAM	No
CHESTER	5566	BIG EBHORSE	ARCH	No
CHESTER	3790	PENOBSCOT RIVER	TRUSS	No
CHESTERVILLE	2273	FARMINGTON FALLS	T BEAM	No
CHESTERVILLE	5199	BERSLEY	CULVERT	No
CHESTERVILLE	0425	TUCKER	SLAB	No
CHESTERVILLE	3181	WILLIAMS #2	TRUSS	No
CHESTERVILLE	3951	DUTCH GAP	CULVERT	No
CHESTERVILLE	0561	GEORGE WASHINGTON	SLAB	No
CHESTERVILLE	5180	CENTER	SLAB	No
CHINA	3065	CHINA VILLAGE	SLAB	No
CHINA	2096	BRANCH MILLS	SLAB	Yes
CLIFTON	5440	OTIS ROAD	ARCH	No
CLIFTON	3522	LOWER	SLAB	No
CLINTON	3579	OSBORNE	SLAB	No
CLINTON	3321	SEBASTICOOK	TRUSS	No
CLINTON	2117	CAIN	SLAB	No
CLINTON	5459	HERN	SLAB	No
CLINTON	2508	MANLEY HOLT	SLAB	No
CLINTON	3578	BEAN	SLAB	No
CLINTON	2225	DECKER	SLAB	No
COLUMBIA	2095	BRANCH BROOK	CULVERT	No
COLUMBIA	3848	LITTLE RIVER	T BEAM	No
COLUMBIA	3621	DYKE BROOK	CULVERT	No
COLUMBIA	3322	LOWES IRON	STRINGER	No
COLUMBIA	3324	SACO	STRINGER	No
COLUMBIA	5177	CARBERRY SCHOOL	ARCH	No
COLUMBIA FALLS	3849	LITTLE RIVER	ARCH	No
COLUMBIA FALLS	2674	PLEASANT RIVER	T BEAM	Yes
CONCORD TWP	1059	COOL RD. (COVE)	STRINGER	No
CONNOR TWP	5479	BLACK BROOK	SLAB	No
CONNOR TWP	2344	HALFWAY BROOK	T BEAM	No
CONNOR TWP	5607	BLACK BROOK #2	SLAB	No
COOPER	3755	LELAND	SLAB	No
COPLIN PLT	3070	NASH	TRUSS	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
COPLIN PLT	5054	STRATTON	T BEAM	No
CORINNA	0834	LINCOLN MILLS BR.	STRINGER	No
CORINNA	0824	MOODY'S MILL BR.	STRINGER	No
CORINNA	2177	CORINNA	STRINGER	No
CORINNA	2849	THOMPSON	CULVERT	No
CORINNA	5103	ALDER STREAM	SLAB	No
CORINNA	2788	SOUTHARDS MILLS	SLAB	No
CORINTH	1003	ROBYVILLE	TRUSS	Yes
CORINTH	5533	IRON	STRINGER	No
CORINTH	5534	PIERRE PAUL	SLAB	No
CORINTH	3674	JOSHUA GOODWIN	SLAB	No
CORINTH	3559	CHAPMAN	T BEAM	No
CORNISH	1289	KING ST BR	CULVERT	No
CORNISH	2465	LITTLE RIVER	ARCH	No
CORNISH	5088	WARREN	T BEAM	No
CORNISH	5087	HIRAM	T BEAM	No
CORNVILLE	3314	PAINE BROOK	SLAB	No
CORNVILLE	1026	WESTERN	STRINGER	No
CORNVILLE	3699	HARVILLE	SLAB	No
CRYSTAL	3048	CRYSTAL BROOK	T BEAM	No
CRYSTAL	3975	FISH STREAM	STRINGER	No
CUMBERLAND	0285	BLACKSTRAP RD/MTPK	STRINGER	No
CUMBERLAND	2233	DOUGHTY	RIGID FRAME	No
CUSHING	3748	MEDUNCOOK	SLAB	No
CUTLER	6240	ANDREWS MEADOW BROOK	CULVERT	No
CUTLER	6241	SCHOONER BROOK 2	SLAB	No
DALLAS PLT	3260	GULL POND	SLAB	No
DAMARISCOTTA	3049	NARROWS	STRINGER	No
DANFORTH	5461	TOWN BRIDGE	STRINGER	No
DAYTON	5259	LEAVITT	CULVERT	No
DAYTON	1284	HEMINGWAY BR	CULVERT	No
DAYTON	5371	GOODWINS MILLS	SLAB	No
DAYTON	2105	BRUCE	SLAB	No
DEAD RIVER TWP. (T3	1076	BOG BROOK	STRINGER	No
DEBLOIS	1154	FALLS BRANCH	SLAB	No
DEER ISLE	3257	DEER ISLE SEDGWICK	SUSPENSION	Yes
DENMARK	5411	BUCK MEADOW	CULVERT	No
DENMARK	5410	BRACKETT MILL	ARCH	No
DENNISTOWN PLT	5715	EAST BRANCH SANDY STREAM	SLAB	No
DENNYSVILLE	5284	STEEL	STRINGER	No
DENNYSVILLE	2881	UPPER	T BEAM	No
DETROIT	3309	VILLAGE	TRUSS	No
DETROIT	3627	DETROIT OVER HEAD	STRINGER	No
DETROIT	5125	POND	SLAB	No
DEXTER	2286	GUY H. HALL MEM.(FLOAT)	STRINGER	No
DEXTER	0837	PULLEN BR.	STRINGER	No
DEXTER	2099	BRIDGES BROOK	SLAB	No
DEXTER	5435	GROVE STREET	SLAB	No

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TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
DEXTER	3142	SILVER MILLS	ARCH	No
DEXTER	0901	WATER STREET BRIDGE	SLAB	No
DEXTER	3978	LINCOLN STREET	CULVERT	No
DEXTER	0826	RAILROAD AVE UP	STRINGER	No
DEXTER	3095	NORTH DEXTER	T BEAM	No
DIXFIELD	3243	NEWTON BROOK	CULVERT	No
DIXFIELD	3732	EAST DIXFIELD BRIDGE	STRINGER	No
DIXFIELD	2350	HANNAFORD	T BEAM	No
DIXFIELD	5255	WHEEL WRIGHT	THRU GIRDER	No
DIXFIELD	0656	BIG RUSSELL	STRINGER	No
DIXFIELD	5181	AUNT HANNAH	SLAB	No
DIXMONT	3715	TWIN	SLAB	No
DIXMONT	5424	CROCKER BROOK	CULVERT	No
DOVER-FOXCROFT	2766	SIAS	SLAB	No
DOVER-FOXCROFT	2723	ROBINSON	SLAB	No
DOVER-FOXCROFT	2808	STINCHFIELD BROOK	CULVERT	No
DOVER-FOXCROFT	2293	FOXCROFT-WEST	ARCH	No
DOVER-FOXCROFT	2983	CAREY	CULVERT	No
DOVER-FOXCROFT	5287	CASS NOTCH CROSSING	STRINGER	No
DOVER-FOXCROFT	5118	DOVER	T BEAM	No
DOVER-FOXCROFT	3892	E DOVER	STRINGER	No
DOVER-FOXCROFT	3728	FIRST	ARCH	No
DOVER-FOXCROFT	0933	PRATT BR.	STRINGER	No
DOVER-FOXCROFT	3730	THIRD	SLAB	No
DRESDEN	3341	MIDDLE BRIDGE	TRUSS	No
DRESDEN	3880	LOWER	STRINGER	No
DREW PLT	5105	MATTAWAMKEAG	T BEAM	No
DURHAM	0616	DOUGHTY'S	SLAB	No Info Avail
DURHAM	0025	ALLENS BRIDGE	SLAB	No
DURHAM	2852	TRACY BROOK	SLAB	No
DURHAM	3120	NEWELL BROOK BR.	SLAB	No
DURHAM	3334	DURHAM	TRUSS	Yes
DYER BROOK	3187	R.R.CROSSING	STRINGER	No
EAST MACHIAS	2682	POPE MEMORIAL	ARCH	Yes
EAST MACHIAS	5464	LOWER JACKSONVILLE	STRINGER	No
EAST MACHIAS	2532	MEADOW BROOK	SLAB	No
EAST MACHIAS	3219	JACKSONVILLE	TRUSS	No
EAST MACHIAS	5465	CHASE MILLS	SLAB	No
EASTBROOK	0456	MARSH STR.	SLAB	No
EASTBROOK	0442	CLOUGHS MILL BR	SLAB	No
EASTON	0137	PRESTILE BROOK	RIGID FRAME	No
EASTON	2687	PRESTILE BROOK	CULVERT	No
EASTON	0134	ALBEE	CULVERT	No
EASTON	3532	FLEWELLING	ARCH	No
EASTON	0139	WOLVERTON BRIDGE	CULVERT	No
EDDINGTON	5546	BLACKMAN STR. NO. 2	ARCH	No
EDDINGTON	5547	BLACKMAN STR. NO. 3	ARCH	No
EDDINGTON	5545	BLACKMAN STREAM NO. 1	ARCH	No

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TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
EDGECOMB	2289	FOLLY	STRINGER	No
EDINBURG	3517	POLLARD BROOK	SLAB	No
EDMUNDS TWP	5612	NEW HOBART	STRINGER	No
EDMUNDS TWP	3171	TIDE MILL NO. 2	TRUSS	No
EDMUNDS TWP	5626	DENNYS RIVER	STRINGER	No
EDMUNDS TWP	2374	HOBART	T BEAM	No
ELIOT	3310	STURGEON CREEK	STRINGER	No
ELLIOTTSVILLE TWP	3146	BIG WILSON STR	T BEAM	No
ELLSWORTH	2499	MAIN STREET	ARCH	No
ELLSWORTH	0463	GRAHAM LAKE DAM BR	T BEAM	Yes
ELLSWORTH	3914	REEDS BROOK	STRINGER	No
EMBDEN	2090	BOYINGTON	T BEAM	No
EMBDEN	2552	MILL	T BEAM	No
EMBDEN	2579	MOORE	SLAB	No
EMBDEN	2267	EMBDEN SOLON	STRINGER	No
EMBDEN	3372	HANCOCK BRIDGE	SLAB	No
EMBDEN	5536	BARON BROOK	CULVERT	No
EMBDEN	1061	MILL STREAM BRIDGE	STRINGER	No Info Avail
ENFIELD	2164	COLD STREAM	CULVERT	No
EUSTIS	3264	TROUT BROOK	CULVERT	No
EXETER	0833	WASHBURN BRIDGE	STRINGER	No
EXETER	3373	FRENCH'S MILL	T BEAM	No
EXETER	5824	ORDWAY	CULVERT	No
EXETER	3733	MILL	T BEAM	No
FAIRFIELD	3055	FISH BROOK	SLAB	No
FAIRFIELD	1522	KENNEBEC RIVER CENTER	TRUSS	Yes (Replaced)
FAIRFIELD	3106	KENNEBEC RIVER EAST	TRUSS	Yes (Replaced)
FAIRFIELD	1087	ISLAND AVE OVERPASS	GIRDER-FLR B	No
FAIRFIELD	1523	KENNEBEC RIVER WEST	TRUSS	Yes (Replaced)
FAIRFIELD	1092	MAIN ST BR.	GIRDER-FLR B	No
FAIRFIELD	3707	WYMAN CROSSING	GIRDER-FLR B	No
FAIRFIELD	3969	LARONE	CULVERT	No
FALMOUTH	0283	BLACKSTRAP RD	STRINGER	No
FALMOUTH	5921	I-95 SPUR OVER US RT	STRINGER	No
FALMOUTH	3686	W FALMOUTH RD	STRINGER	No
FALMOUTH	0364	MCRR EB	STRINGER	No
FALMOUTH	0365	AUBURN ST	STRINGER	No
FALMOUTH	0363	BLACKSTRAP RD	STRINGER	No
FALMOUTH	2702	RR CROSSING	TRUSS	No
FALMOUTH	0206	HURRICANE RD/PISCATAQUA	STRINGER	No
FALMOUTH	0362	MOUNTAIN RD	STRINGER	No
FALMOUTH	5462	DUNHAM ROAD BR	CULVERT	No
FALMOUTH	1489	PRESUMSCOT RIVER SB	STRINGER	No
FALMOUTH	3563	MERRILLS	RIGID FRAME	No
FALMOUTH	0361	LEIGHTONRD	STRINGER	No
FALMOUTH	0284	PISCATAQUA RIVER #28	STRINGER	No
FALMOUTH	0281	PRESUMSCOT RIVER EB	STRINGER	No
FALMOUTH	0280	HURRICANE RD/MTPK	STRINGER	No

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TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
FALMOUTH	0279	PISCATAQUA RIVER #31	STRINGER	No
FALMOUTH	0278	RTE100INTER	STRINGER	No
FALMOUTH	0277	PRESUMSCOT RIVER NB	STRINGER	No
FALMOUTH	1468	PRESUMSCOT RIVER WB	STRINGER	No
FALMOUTH	0213	FIELD	STRINGER	No
FALMOUTH	6020	RTE 9	STRINGER	No
FALMOUTH	5237	MILL CREEK NO. 2	RIGID FRAME	No
FALMOUTH	2457	LIBBY	T BEAM	No
FALMOUTH	5600	MACKWORTH ISLAND BR	STRINGER	No
FALMOUTH	1467	MCRR WB	STRINGER	No
FALMOUTH	2560	MILL CREEK	ARCH	Yes
FALMOUTH	2782	SOULE	SLAB	No
FARMINGDALE	0552	MAPLE STREET	STRINGER	No
FARMINGDALE	0480	SHELDON ST. BRIDGE	SLAB	No
FARMINGDALE	0551	NORTHERN AVE	STRINGER	No
FARMINGTON	2980	WILLIAMS NO. 1	ARCH	No
FARMINGTON	0374	TWIN NO. 2	STRINGER	No
FARMINGTON	3066	NO CHESTERVILLE	T BEAM	No
FARMINGTON	2623	NORTH TWIN	T BEAM	No
FARMINGTON	5358	BARKER STREAM	CULVERT	No
FARMINGTON	2705	RED	T BEAM	No
FARMINGTON	3286	HAMLIN	STRINGER	No
FARMINGTON	3982	WALTON MILL	STRINGER	No
FARMINGTON	0416	WEBSTER BR.	GIRDER-FLR B	No
FARMINGTON	0410	BRIDGE	CULVERT	No
FAYETTE	3053	FAYETTE MILLS	SLAB	No
FOREST CITY TWP.	2397	INTERNATIONAL	T BEAM	No
FOREST TWP. (T10 R3	1176	TOMAH STREAM BR.	SLAB	No
FORT FAIRFIELD	3252	HOCKENHULL	SLAB	No
FORT FAIRFIELD	2077	BLAISDELL BROOK	CULVERT	No
FORT FAIRFIELD	2691	PUDDLE DOCK	T BEAM	No
FORT FAIRFIELD	3481	EVERETT BROOK	SLAB	No
FORT FAIRFIELD	0126	MUNSON'S	T BEAM	No
FORT FAIRFIELD	3706	MAIN STREET	CULVERT	No
FORT KENT	5016	FORT KENT MILLS	T BEAM	No
FORT KENT	2726	ROSSIGNOL	RIGID FRAME	No
FORT KENT	2500	MAIN STREET	STRINGER	No
FORT KENT	2398	INTERNATIONAL	TRUSS	Yes
FRANKFORT	1130	B&ARR / MONROE RD RR#1603	GIRDER-FLR B	Yes
FRANKFORT	1132	B&ARR/TW & BROOK RR#14.58	GIRDER-FLR B	Yes
FRANKFORT	2964	HARRY HARTLEY	CULVERT	No
FRANKFORT	2222	LEROY HAMM	CULVERT	No
FRANKFORT	1136	B&ARR / TOWN WAY RR#15.61	GIRDER-FLR B	Yes
FRANKFORT	2422	JOSIAH KINGSBURY	CULVERT	No
FRANKFORT	2089	BOYD	STRINGER	No
FRANKLIN	5673	W FRANKLIN BRIDGE	SLAB	No
FRANKLIN	5728	ALDER BROOK	CULVERT	No
FRANKLIN	3451	MILL STREAM	SLAB	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
FRANKLIN	3307	BIG BRIDGE	T BEAM	No
FRANKLIN	3306	LITTLE	SLAB	No
FRANKLIN	5727	STA 25 30	CULVERT	No
FREEDOM	5150	UPPER	SLAB	No
FREEDOM	5148	HUSTUS BROOK	SLAB	No
FREEDOM	5145	BARLOW BROOK	SLAB	No
FREEDOM	2485	LOWER VILLAGE	SLAB	No
FREEMAN TWP	3677	BURBANK	ARCH	No
FREEPORT	3123	PORTER LANDING	CULVERT	No
FREEPORT	5431	FREEPORT CROSSING	RIGID FRAME	No
FREEPORT	5503	WARDTOWN	SLAB	No
FREEPORT	2183	COUSINS RIVER RTE 1	T BEAM	No
FREEPORT	2167	COLLINS MILL	T BEAM	No
FREEPORT	3172	R R CROSSING	RIGID FRAME	Yes
FRENCHVILLE	2391	GAGNON	SLAB	No
FRENCHVILLE	2303	GAGNON BROOK	CULVERT	No
FRENCHVILLE	2213	DAIGLE BRIDGE	SLAB	No
FRIENDSHIP	5265	GOOSE RIVER BRIDGE	SLAB	No
FRYEBURG	2121	CANAL BRIDGE	T BEAM	No
FRYEBURG	2261	EDDY FLATS	SLAB	No
FRYEBURG	2933	WESTON	STRINGER	No
FRYEBURG	2765	SHORTRIDGE	SLAB	No
FRYEBURG	2464	LITTLE POND	SLAB	No
FRYEBURG	1004	HEMLOCK	TRUSS	Yes
FRYEBURG	3695	CRICK BROOK	CULVERT	No
FRYEBURG	5573	KIMBALL BROOK	CULVERT	No
FRYEBURG	2151	CHARLES RIVER	GIRDER-FLR B	Yes
FRYEBURG	2470	LITTLE SACO	SLAB	No
FRYEBURG	3694	KEZAR OUTLET	T BEAM	No
GARDINER	3098	MAIN AVE	T BEAM	No
GARDINER	2605	NEW MILLS	TRUSS	Yes
GARDINER	2101	BRIDGE STREET	T BEAM	No
GARDINER	5280	CAPEN ROAD	CULVERT	No
GARLAND	0827	CROWELL BR.	STRINGER	No
GARLAND	0828	HOLT'S MILL BR. #2	STRINGER	No
GARLAND	2379	HOLTS MILL	SLAB	No
GARLAND	5286	WEST GARLAND	CULVERT	No
GEORGETOWN	2927	WEST BRIDGE	STRINGER	No
GEORGETOWN	2248	EAST	STRINGER	No
GILEAD	2452	LEARY	STRINGER	No
GILEAD	3509	CHAPMAN BROOK	SLAB	No
GILEAD	2948	WILD RIVER	T BEAM	No
GILEAD	5084	ANDROSCOGGIN R	TRUSS	Yes
GILEAD	3299	PEABODY BROOK	SLAB	No
GILEAD	5085	WIGHT BROOK	SLAB	No
GORHAM	0229	BRIDGE	CULVERT	No
GORHAM	3762	DEGUIO MILL	STRINGER	No
GORHAM	2219	DAVIS MILL	SLAB	No

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TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
GORHAM	2308	GETCHELL	SLAB	No
GORHAM	3404	LONGFELLOW BRIDGE	STRINGER	No
GORHAM	5449	NORTH BRANCH BROOK	ARCH	No
GORHAM	3112	LITTLE RIVER	GIRDER-FLR B	No
GORHAM	3993	WARREN	ARCH	No
GORHAM	3557	SHAD GULLY	CULVERT	No
GORHAM	5303	SHAWS	T BEAM	No
GOULDSBORO	5041	PROSPECT HARBOR	SLAB	No
GOULDSBORO	5226	GUZZLE	SLAB	No
GOULDSBORO	2783	SOULES	SLAB	No
GRAFTON TWP. (TA	2589	MOTHER WALKER	T BEAM	No
GRAFTON TWP. (TA	2234	DOUGLAS	SLAB	No
GRAFTON TWP. (TA	2212	CUR	SLAB	No
GRAFTON TWP. (TA	2142	CEDAR BROOK	SLAB	No
GRAFTON TWP. (TA	3524	CAMBRIDGE	STRINGER	No
GRAND LAKE	3584	MILFORD STREET	STRINGER	No
GRAY	0291	RTE 26	STRINGER	No
GRAY	0310	PLEASANT RIVER	CULVERT	No
GRAY	0311	COLLIER BROOK	CULVERT	No
GRAY	1490	EAGLE NEST RD SB	STRINGER	No
GRAY	2618	NORTH GRAY	T BEAM	No
GRAY	2387	HUNTS MEADOW	SLAB	No
GRAY	2386	HUNTS	RIGID FRAME	No
GRAY	0309	FOREST LAKE BROOK	CULVERT	No
GRAY	0292	WEYMOUTH RD	STRINGER	No
GRAY	0290	GRAY INTERCHANGE	STRINGER	No
GRAY	0289	RTE202	STRINGER	No
GRAY	0288	OLD PORTLAND RD	STRINGER	No
GRAY	0287	EAGLE NEST RD NB	STRINGER	No
GRAY	0286	DUTTON HILL RD	STRINGER	No
GRAY	3625	DAVIS	ARCH	No
GRAY	3750	LEAVITT	ARCH	No
GRAY	0306	HUNTS HILL RD	STRINGER	No
GREENBUSH	2986	OLAMON	SLAB	No
GREENBUSH	3034	FOLSOM	SLAB	No
GREENBUSH	3727	NEW OLAMON	STRINGER	No
GREENE	2698	QUIMBY	SLAB	No
GREENE	3426	TURNER CENTER	TRUSS	No
GREENE	0001	HOOKER BROOK BRIDGE	SLAB	No
GREENFIELD	5605	SUNKHAZE	SLAB	No
GREENFIELD	2628	OLAMAN	SLAB	No
GREENVILLE	3247	CPRR CROSSING	STRINGER	No
GREENVILLE	0968	CPRR / RTE. 6, 15	GIRDER-FLR B	No
GREENVILLE	3752	WEST COVE	SLAB	No
GREENWOOD	3382	LITTLE ANDROSCOGGIN	STRINGER	No
GREENWOOD	3381	MORGAN BROOK NO 2	STRINGER	No
GREENWOOD	0676	SCHOOL BR	STRINGER	No
GREENWOOD	5086	JOHNNIES NO. 1	SLAB	No

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TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
GREENWOOD	5586	GREENWOOD	SLAB	No
GREENWOOD	3380	MORGAN BROOK NO.1	STRINGER	No
GREENWOOD	2413	JOHNNIES	SLAB	No
GRINDSTONE TWP.	0814	GRINDSTONE TWP. (TI R7)	TRUSS	No
GUILFORD	5120	CHASE	SLAB	No
GUILFORD	2801	SANGERVILLE STATION	TRUSS	No
GUILFORD	2337	GUILFORD MEMORIAL	STRINGER	No
GUILFORD	3512	DAVIS BROOK BRIDGE	CULVERT	No
GUILFORD	3873	BEARCE BRIDGE	STRINGER	No
GUILFORD	3044	SALMON STREAM	CULVERT	No
GUILFORD	0929	SALMON STREAM BRIDGE	STRINGER	No
HALLOWELL	0556	VAUGHN STREAM	CULVERT	No
HALLOWELL	3642	OUTLET ROAD	CULVERT	No
HALLOWELL	0490	VAUGHAN MEM. BR.	ARCH	Yes
HALLOWELL	5391	WATER STREET	GIRDER-FLR B	Yes
HALLOWELL	0553	LITCHFIELD ROAD	STRINGER	No
HALLOWELL	2892	VAUGHAN	SLAB	No
HALLOWELL	3158	MILLIKENS CROSSING	STRINGER	No
HALLOWELL	1501	CENTRAL STREET SB	STRINGER	No
HALLOWELL	0565	SECOND ST BR	GIRDER-FLR B	Yes
HALLOWELL	0555	WINTHROP ROAD	STRINGER	No
HALLOWELL	0557	OUTLET CONNECTION	CULVERT	No
HALLOWELL	0554	CENTRAL STREET NB	STRINGER	No
HALLOWELL	0566	VAUGHAN ST. BR.	TRUSS	No
HAMLIN	2516	MARTIN BROOK	CULVERT	No
HAMMOND	2114	MITCHELL	GIRDER-FLR B	No
HAMPDEN	5109	YORK	T BEAM	No
HAMPDEN	3526	B&ARR#27.731PAPER MILL RD	GIRDER-FLR B	Yes
HAMPDEN	2334	GRIST MILL	T BEAM	No
HAMPDEN	5315	TWIN	ARCH	No
HANCOCK	2435	KILKENNY	SLAB	No
HANCOCK	2134	CARRYING PLACE	STRINGER	No
HANCOCK	2973	HANCOCK-SULLIVAN	TRUSS	No
HANOVER	2744	SAUNDERS MILL	CULVERT	No
HANOVER	2812	STONEY BROOK	SLAB	No
HARMONY	5222	NARROWS	SLAB	No
HARMONY	3221	WATERSTREET	SLAB	No
HARMONY	2896	VILLAGE	T BEAM	No
HARMONY	3603	FERGUSON RIPLEY ROAD	SLAB	No
HARMONY	1022	BAILEY	TRUSS	Yes (Replaced)
HARMONY	5127	SAND FARM	T BEAM	No
HARPSWELL	3144	ORRS ISLAND	STRINGER	No
HARPSWELL	2033	BAILEY ISLAND BRIDGE	T BEAM	Yes
HARRINGTON	2478	LOWER	T BEAM	No
HARRISON	3354	BOLSTERS MILLS	STRINGER	No
HARRISON	0560	CAPE MONDAY BRIDGE	CULVERT	No
HARRISON	3345	SCRIBNER'S BRIDGE	STRINGER	No
HARRISON	3609	CRYSTAL LAKE OUTLET	SLAB	No

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TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
HARRISON	3119	EDSON BROOK	CULVERT	No
HARRISON	0238	RYEFIELD BRIDGE	TRUSS	Yes
HARTFORD	3118	SPARROW BROOK	SLAB	No
HARTFORD	1476	TWIN NO. 2	SLAB	No
HARTFORD	0694	EAST BRANCH	STRINGER	No
HARTFORD	5498	THOMPSON BROOK	ARCH	No
HARTFORD	5408	EAST SUMNER	T BEAM	No
HARTFORD	0701	NEZINSCOT BR		No
HARTFORD	3292	TWIN NO. 1	SLAB	No
HARTLAND	3390	RACEWAY	STRINGER	No
HARTLAND	1033	RAPID BROOK	STRINGER	No
HARTLAND	3179	IRON	T BEAM	No
HARTLAND	1097	WATER STREET	SLAB	Yes
HAYNESVILLE	3457	MILL	CULVERT	No
HAYNESVILLE	5623	HAYNESVILLE	STRINGER	No
HEBRON	3574	BRICKNELL	SLAB	No
HEBRON	2800	HEBRON STATION	CULVERT	No
HEBRON	0707	BICKNELL BROOK	STRINGER	No
HERMON	2205	CROSS	SLAB	No
HERMON	5420	B&ARR/HAMOND&MCR	GIRDER-FLR B	Yes
HERMON	3786	BLACK STREAM	SLAB	No
HERMON	5225	HERMAN POND	STRINGER	No
HERMON	2368	HERMON CENTER	SLAB	No
HERMON	3449	WHEELER STREAM	SLAB	No
HERMON	0845	UNDERPASS	STRINGER	No
HERMON	3560	GOODSPEED	STRINGER	No
HERMON	5421	B&ARR/US 2 & R100RR#29.73	THRU GIRDER	No
HERSEY	3409	SEAMS BROOK	CULVERT	No
HIGHLAND PLT	3950	BRITENELL	CULVERT	No
HIGHLAND PLT	1070	LOWER MICHAEL	SLAB	No
HIRAM	0648	CRANBERRY BOG BR	SLAB	No
HIRAM	3946	WADSWORTH	SLAB	No
HIRAM	3789	RANKIN MILL	T BEAM	No
HIRAM	0740	ADAMS BROOK BR	STRINGER	No
HIRAM	0786	RANKINS MILL	GIRDER-FLR B	No
HIRAM	3879	BURBANK	CULVERT	No
HIRAM	0743	STANLEY POND BR.	STRINGER	No
HIRAM	0766	LOCK BR.	STRINGER	No
HIRAM	2709	RED MILL BROOK	SLAB	No
HODGDON	0149	OLD HAMILTON	GIRDER-FLR B	No
HODGDON	2492	MADUSKEAG	SLAB	No
HODGDON	3103	HODGDON MILLS	T BEAM	No
HOLDEN	3690	MILL	SLAB	No
HOLLIS	3136	CLARKS MILLS	SLAB	No
HOLLIS	5297	KILLICK	CULVERT	No
HOLLIS	3708	SALMON FALLS	STRINGER	No
HOLLIS	1525	CANAL	TRUSS	Yes
HOLLIS	3333	BAR MILLS	TRUSS	Yes

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TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
HOLLIS	2190	BONNY EAGLE COVERED	TRUSS	No
HOPE	2283	FISH	SLAB	No
HOULTON	3401	COOKS BROOK	SLAB	No
HOULTON	3533	B&ARR/SMYRNA ST RR#166.38	GIRDER-FLR B	No
HOULTON	2580	MOOSE BROOK	T BEAM	No
HOULTON	5019	PEARCE BROOK NO. 6	RIGID FRAME	No
HOULTON	3458	HODGDON STREAM	T BEAM	No
HOULTON	3874	HIGHLAND AVENUE	GIRDER-FLR B	Yes (Replaced)
HOULTON	0155	HOLLYWOOD ROAD BRIDGE	CULVERT	No
HOULTON	2629	OLD IRON	RIGID FRAME	Yes
HOULTON	3234	CARY'S MILL	STRINGER	No
HOULTON	2706	RED	T BEAM	No
HOULTON	5195	MOOSEBROOK PORTER	SLAB	No
HOWLAND	3040	PISCATAQUIS	TRUSS	Yes
HOWLAND	2660	PENOBSCOT RIVER	TRUSS	No
HOWLAND	2730	RUN-AROUND	STRINGER	No
HOWLAND	2533	MEADOW BROOK	SLAB	No
HUDSON	3984	MOHAWK	CULVERT	No
HUDSON	2897	VILLAGE	T BEAM	No
INDUSTRY	5046	MERRY	SLAB	No
INDUSTRY	5047	SAWYER	SLAB	No
INDUSTRY	5018	CONFORTH	SLAB	No
INDUSTRY	0434	GOODRICH BROOK	SLAB	No
INDUSTRY	0375	SEAVEY BR.	SLAB	No
ISLAND FALLS	2403	IRON	T BEAM	No
ISLAND FALLS	5020	FISH STREAM	T BEAM	No
ISLAND FALLS	2703	RANDALL	STRINGER	No
ISLAND FALLS	2243	DYER BROOK	T BEAM	No
ISLAND FALLS	2163	COLD BROOK	SLAB	No
ISLESBORO	3490	MILL	SLAB	No
JACKMAN	2583	MOOSE RIVER	T BEAM	No
JACKMAN	5601	HALFWAY BROOK	ARCH	No
JACKMAN	3585	NICHOLS	STRINGER	No
JACKSON	3805	COOK	SLAB	No
JACKSON	3128	GREAT FARM	STRINGER	No
JACKSON	5582	CHASE	SLAB	No
JACKSON	3776	PERRY	T BEAM	No
JAY	3510	RIDLEY BROOK	CULVERT	No
JAY	3801	SEVEN MILE STREAM	STRINGER	No
JAY	2476	LOOK BROOK	CULVERT	No
JEFFERSON	3045	MILL	SLAB	No
JEFFERSON	2713	REEVES BROOK	SLAB	No
JEFFERSON	2307	GERRY	SLAB	No
JEFFERSON	0611	BOSWELL BR.	STRINGER	No
JEFFERSON	2534	MEADOW BROOK	SLAB	No
JEFFERSON	3405	DAVIS #2	STRINGER	No
JONESBORO	2149	CHANDLER RIVER	T BEAM	No
JONESBORO	3295	BEAVER STREAM	RIGID FRAME	No

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TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
JONESBORO	3956	DRISKO	STRINGER	No
JONESPORT	2207	CROSS COVE	T BEAM	No
JONESPORT	2211	CUMMINGS	SLAB	No
KENDUSKEAG	3753	HIGGINSVILLE	STRINGER	No
KENDUSKEAG	2975	VILLAGE	TRUSS	No
KENDUSKEAG	2075	BLACK BROOK	CULVERT	No
KENNEBUNK	2431	KENNEBUNK	T BEAM	No
KENNEBUNK	2157	CLAYHILL	STRINGER	No
KENNEBUNK	1268	B & M RR/BROWN ST.	STRINGER	No
KENNEBUNK	1330	CAT MOUSAM RD	STRINGER	No
KENNEBUNK	1481	MOUSAM RIVER SB	STRINGER	No
KENNEBUNK	1329	MCGUIRE RD	STRINGER	No
KENNEBUNK	2230	DOCK SQUARE	GIRDER-FLR B	No
KENNEBUNK	1332	WEST KENNEBUNK RD	STRINGER	No
KENNEBUNK	1333	KENNEBUNK RIVER NB	STRINGER	No
KENNEBUNK	2041	BARTLETT	T BEAM	No
KENNEBUNK	3597	OVERPASS-SUMMER ST.	STRINGER	Yes (Replaced)
KENNEBUNK	2221	DAYS MILLS	T BEAM	No
KENNEBUNK	1331	MOUSAM RIVER NB	STRINGER	No
KENNEBUNK	5333	SMITH'S		No
KENNEBUNKPORT	1287	BEAVER POND BR	CULVERT	No
KENNEBUNKPORT	1301	GOOSEFARE BAY	STRINGER	No
KINGFIELD	5852	CENTENNIAL	ARCH	Yes
KINGFIELD	5704	LEDGE BROOK	ARCH	No
KINGFIELD	5351	REED BROOK	SLAB	No
KINGFIELD	3374	ALDER STREAM	SLAB	No
KINGFIELD	5053	NORTON	T BEAM	No
KINGSBURY PLT	3290	KINGSBURY	T BEAM	No
KINGSBURY PLT	3415	HALE BROOK BRIDGE	SLAB	No
KITTERY	1361	B&M RR TUNNEL	RIGID FRAME	No
KITTERY	1247	PICOTT ROAD BRIDGE	SLAB	No
KITTERY	5276	VIADUCT	GIRDER-FLR B	Yes
KITTERY	3860	KITTERY OVERPASS	RIGID FRAME	No
KITTERY	3641	SARAH MILDRED LONG	TRUSS	Yes
KITTERY	3783	GERRISH ISLAND	T BEAM	No
KITTERY	5620	B&M OVERPASS	STRINGER	No
KITTERY	1357	NAVY YARD ENT.	GIRDER-FLR B	Yes
KITTERY	6222	RAMP M - US1 / I95 RAMP	STRINGER	No
KITTERY	6224	SPRUCE CREEK	STRINGER	No
KITTERY	2546	MEMORIAL BRIDGE	TRUSS	Yes
KITTERY	2031	BADGER ISLAND	STRINGER	Yes
KITTERY	1362	ELIOT RD OVERPASS	STRINGER	No
KITTERY	1248	CUTTS ISLAND	SLAB	No
KNOX	2007	ABBOT NO. 3	SLAB	No
KNOX	2206	CROSS	ARCH	No
KNOX	2433	KENNEY	SLAB	No
KNOX	2360	HAWKINS	STRINGER	No
KNOX	2441	KNOX STATION	SLAB	No

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TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
KNOX	2919	WEED	SLAB	No
KNOX	2440	KNOX CENTER	T BEAM	No
LAGRANGE	3867	B&A OVERHEAD	STRINGER	No
LAGRANGE	2073	BIRCH STREAM	ARCH	No
LAKEVILLE	0887	WHITING MILL	SLAB	No
LAKEVILLE	0867	GETCHELL BR.	CULVERT	No
LAMBERT LAKE TWP.	3441	LAMBERT LAKE	SLAB	No
LEBANON	2302	FURBUSH	SLAB	No
LEBANON	5649	BIG BROOK	SLAB	No
LEBANON	5162	MILTON	STRINGER	No
LEBANON	5717	BEAVER DAM	CULVERT	No
LEBANON	1219	FORD	STRINGER	No
LEBANON	2257	E. ROCHESTER	ARCH	Yes
LEBANON	3717	NEW	STRINGER	No
LEBANON	5650	KEAY	CULVERT	No
LEE	0871	MERRILL	STRINGER	No
LEE	3177	POND	SLAB	No
LEE	5417	MILL STREAM	SLAB	No
LEEDS	5002	STINCHFIELD	TRUSS	No
LEEDS	3214	NORTH TURNER EAST	TRUSS	Yes
LEEDS	3614	DALEY	STRINGER	No
LEEDS	2290	FOSS	TRUSS	No
LEEDS	5001	JOHNSON 00	CULVERT	No
LETTERD TWP (OR	3615	BEMIS	CULVERT	No
LEVANT	3064	BLACK STREAM	T BEAM	No
LEVANT	0839	HUNGRY HOLLOW ROAD	STRINGER	No
LEVANT	5488	EMERSON	SLAB	No
LEVANT	5489	HARDING	T BEAM	No
LEVANT	5253	MILL	SLAB	No
LEVANT	3594	HARVEY MILL	CULVERT	No
LEWISTON	0060	INTERCHANGE/RTE 196	STRINGER	No
LEWISTON	6378	COTTON ROAD BRIDGE	SLAB	No
LEWISTON	0059	MTPK EXIT 13/MCRR	STRINGER	No
LEWISTON	0092	HAMEL RD BRIDGE	CULVERT	No
LEWISTON	5003	CHESTNUT STREET	ARCH	Yes
LEWISTON	0098	LEWISTON INTERCHANGE (NB)	STRINGER	No
LEWISTON	5643	COLLEGE STREET BRIDGE	SLAB	No
LEWISTON	1498	MTPK(SB) / RTE 196 & MCRR	STRINGER	No
LEWISTON	0054	RIVERSIDE ST BRIDGE	GIRDER-FLR B	No
LEWISTON	0103	MTPK/DILL BROOK	CULVERT	No
LEWISTON	2803	STETSON BRIDGE	SLAB	No
LEWISTON	1497	LEWISTON INTERCHANGE (SB)	STRINGER	No
LEWISTON	0051	LINCOLN ST ALLEY BRIDGE	GIRDER-FLR B	No
LEWISTON	1496	MTPK(SB)/GOODARD ROAD	STRINGER	No
LEWISTON	1495	MTPK(SB)/RIVER ROAD	STRINGER	No
LEWISTON	2229	DILL	CULVERT	No
LEWISTON	1494	MTPK(SB)/ANDROSCOGGIN RIV	STRINGER	No
LEWISTON	0049	HINES ALLEY BRIDGE	GIRDER-FLR B	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
LEWISTON	0102	WEBSTER ROAD/MTPK	STRINGER	No
LEWISTON	0087	CROWLEYS ROAD BRIDGE	STRINGER	No
LEWISTON	0101	OLD LISBON ROAD/MTPK	STRINGER	No
LEWISTON	0100	MTPK(NB)/RTE 196 & MCRR	STRINGER	No
LEWISTON	0099	MTPK/FERRY & COTTAGE	STRINGER	No
LEWISTON	0097	MTPK(NB)/GOODARD ROAD	STRINGER	No
LEWISTON	0105	NO NAME BROOK CULVERT	SLAB	No
LEWISTON	0096	MTPK(NB)/RIVER ROAD	STRINGER	No
LEWISTON	3201	FAIRGROUNDS CROSSING	GIRDER-FLR B	No
LEWISTON	0091	STETSON BROOK BRIDGE	STRINGER	No
LEWISTON	0089	RANDALL BR. (SCRIBNER)	STRINGER	No
LEWISTON	0104	CITY FARM CULVERT	SLAB	No
LEXINGTON TWP	5128	LOWER SANDY STREAM	GIRDER-FLR B	No
LEXINGTON TWP	5523	UPPER SANDY STREAM	GIRDER-FLR B	No
LEXINGTON TWP. (T2	3042	A. J. ALBEE	T BEAM	No
LIBERTY	2818	SUCKER MILL	SLAB	No
LIBERTY	3493	STEVENS	SLAB	No
LIBERTY	1114	VALLEY BR	GIRDER-FLR B	No
LIBERTY	3631	FULLER	ARCH	No
LIBERTY	3156	SOUTH LIBERTY	CULVERT	No
LILY BAY TWP. (TA R1	5455	SOUTH BK	CULVERT	No
LIMERICK	5518	TARR	ARCH	No
LIMERICK	1200	HOSAC STR	STRINGER	No
LIMERICK	5163	KELLEY	SLAB	No
LIMERICK	5164	THING	T BEAM	No
LIMERICK	3157	SOKOKIS BRIDGE	SLAB	No
LIMESTONE	5186	LONG ROAD	SLAB	No
LIMESTONE	5291	BLAKE ROAD	SLAB	No
LIMESTONE	5292	NOYES MILL	SLAB	No
LIMINGTON	3281	CHASES MILL	STRINGER	No
LIMINGTON	3026	WHALEBACK	CULVERT	No
LIMINGTON	2918	WEBSTERS MILL	SLAB	No
LIMINGTON	2348	HAMLIN BROOK	RIGID FRAME	No
LIMINGTON	3328	STEEP FALLS	TRUSS	No
LIMINGTON	5165	NASONS MILL	TRUSS	No
LIMINGTON	3050	CREEK	SLAB	No
LIMINGTON	3768	GILKEY	SLAB	No
LIMINGTON	3024	TANNERY	CULVERT	No
LINCOLN	2170	COMBELLASSIE	SLAB	No
LINCOLN	2128	CARDING MILL	CULVERT	No
LINCOLN	2298	FROST ST	SLAB	No
LINCOLN	2680	POLLACK BRK.	SLAB	No
LINCOLN	3963	HIGH ST	STRINGER	No
LINCOLN PLT	3515	ABBOTT	T BEAM	No
LINCOLN PLT	1005	BENNETT	TRUSS	Yes
LINCOLNVILLE	2458	LINCOLNVILLE BEACH	SLAB	No
LINCOLNVILLE	5151	WADSWORTH	SLAB	No
LINCOLNVILLE	3194	KNIGHTS HILL	SLAB	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
LINCOLNVILLE	2949	WILEY BROOK	SLAB	No
LINCOLNVILLE	2235	DUCK TRAP RIVER		No
LINCOLNVILLE	3994	MEETING HOUSE	CULVERT	No
LINCOLNVILLE	1120	WEATHERSPOON BR	STRINGER	No
LINCOLNVILLE	3193	POND	CULVERT	No
LINNEUS	3709	BITHER BROOK	CULVERT	No
LINNEUS	5311	CAMPBELL	SLAB	No
LISBON	3530	BARKER BROOK NO. 2	SLAB	No
LISBON	0063	LISBON VETERANS' MEMORIAL	ARCH	No
LISBON	5006	CUSHMAN	SLAB	No
LISBON	3954	FRAZIER	ARCH	No
LISBON	6271	DEERING	STRINGER	No
LISBON	0991	EDGECOMB BR	STRINGER	No
LISBON	0017	DOUGLAS	STRINGER	No
LISBON	5007	LISBON CENTER	T BEAM	No
LISBON	2733	SABATTUS STREAM	STRINGER	No
LISBON	3976	DURGIN	STRINGER	No
LISBON	2159	COBBS BR	STRINGER	No
LITCHFIELD	0543	RTE1 197	STRINGER	No
LITCHFIELD	3924	POTTER TOWN	SLAB	No
LITCHFIELD	3591	HATCH	CULVERT	No
LITCHFIELD	0544	SMALL RD	STRINGER	No
LITCHFIELD	0537	POTTERS BROOK	CULVERT	No
LITCHFIELD	0545	STEVENS TOWN ROAD	STRINGER	No
LITCHFIELD	3195	HARVEY BRIDGE	CULVERT	No
LITCHFIELD	0517	OLD MILL	STRINGER	No
LITCHFIELD	3329	WHARF	STRINGER	No
LITCHFIELD	2029	BABCOCK	T BEAM	No
LITCHFIELD	0542	HALLOWELL RD	STRINGER	No
LITCHFIELD	0541	HUNTINGTON HILL ROAD	STRINGER	No
LITCHFIELD	0540	FERRIN ROAD MTPK	STRINGER	No
LITCHFIELD	0547	COBBOSSEECONTEE STREAM	STRINGER	No
LITCHFIELD	1392	PLAINS RD	STRINGER	No
LITCHFIELD	0546	LUNTS HILL RD	STRINGER	No
LITCHFIELD	5141	PALMER	CULVERT	No
LITCHFIELD	0488	BRIDGE	STRINGER	No
LITTLETON	1006	WATSON COVERED	TRUSS	Yes
LITTLETON	5273	WILEY ROAD	ARCH	No
LITTLETON	5044	JARVIS	CULVERT	No
LIVERMORE	2103	BRETTUNS POND	CULVERT	No
LIVERMORE	3463	MARTIN STREAM NO 1	T BEAM	No
LIVERMORE	3452	MILL BRIDGE	SLAB	No
LIVERMORE	3464	MARTIN STREAM NO 2	T BEAM	No
LIVERMORE FALLS	2923	WENTWORTH	SLAB	No
LIVERMORE FALLS	3104	SHY BROOK SOUTH	CULVERT	No
LIVERMORE FALLS	5537	SHY	SLAB	No
LOVELL	5525	NARROWS	GIRDER-FLR B	No
LOVELL	5630	GERRY	STRINGER	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
LOWELL	3527	PASSADUMKEAG	STRINGER	No
LOWELL	5112	WAKEFIELD MILL #2	SLAB	No
LOWELL	0873	ESKUTASIS ST	STRINGER	No
LOWELL	3278	WOODMAN MILLS	STRINGER	No
LOWELL	2906	WAKEFIELD MILL NO. 1	SLAB	No
LUBEC	5308	MCCURDYS	CULVERT	No
LUDLOW	5249	MOOSE BROOK	SLAB	No
LYMAN	3060	COUSINS	CULVERT	No
LYMAN	2824	SUNKEN BRANCH	SLAB	No
LYMAN	5825	KENNEBUNK RIVER	CULVERT	No
LYMAN	3593	STAPLES	SLAB	No
MACHIAS	3224	LIBBY BROOK	SLAB	No
MACHIAS	2246	DYKE	CULVERT	No
MACHIAS	1470	COVERED WEST	T BEAM	No
MACHIAS	2191	COVERED EAST	T BEAM	No
MACHIAS	5544	SMELT BROOK	ARCH	No
MACHIAS	1469	COVERED CENTER	GIRDER-FLR B	No
MACWAHOC PLT	5021	KINGMAN ROAD	T BEAM	Yes
MACWAHOC PLT	3097	JORDAN MILL	T BEAM	No
MADAWASKA	5294	GAGNON	CULVERT	No
MADAWASKA	2399	INTERNATIONAL	TRUSS	Yes
MADAWASKA	2481	LOWER BEAULIEU	SLAB	No
MADISON	3804	MILL STREAM	T BEAM	No
MADISON	5513	ROCKWELL	CULVERT	No
MADISON	2122	CANAL	RIGID FRAME	No
MADISON	3303	HAYDEN	CULVERT	No
MADISON	3962	LOWER MILLS	CULVERT	No
MADRID	3391	WEBBER	SLAB	No
MADRID	3186	VILLAGE	STRINGER	No
MADRID	2934	WEYMOUTH	T BEAM	No
MAPLETON	3552	MAPLETON	T BEAM	No
MAPLETON	5324	B&ARR/ROUTE 163 RR #W17.78	GIRDER-FLR B	No
MAPLETON	3551	BRANNEN	T BEAM	No
MAPLETON	5698	LIBBY BROOK 1	SLAB	No
MARIAVILLE	3511	TANNERY	SLAB	No
MARIAVILLE	3562	GOODWIN	STRINGER	No
MARIAVILLE	3230	DUMB BROOK	CULVERT	No
MARIAVILLE	0455	TANNERY BROOK BR.	STRINGER	No
MARION TWP	3140	PATRICK BROOK	CULVERT	No
MARS HILL	5024	KINGS GROVE	SLAB	No
MARS HILL	6154	ROCKY BROOK	CULVERT	No
MARS HILL	5268	BOYNTON	ARCH	No
MARS HILL	5269	CUSTOMS HOUSE	CULVERT	No
MARS HILL	2686	PRESTILE STREAM	T BEAM	No
MARSHFIELD	3973	STRIDE	CULVERT	No
MASARDIS	5025	SQUA PAN	T BEAM	No
MASARDIS	3766	ST CROIX	STRINGER	No
MASON TWP	0762	BEANS MILL BR.	GIRDER-FLR B	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
MASON TWP	2675	PLEASANT RIVER	STRINGER	No
MATTAMISCONTIS	3099	MATTAMISCONTIS	STRINGER	No
MATTAWAMKEAG	2520	MATTASEUNK	STRINGER	No
MATTAWAMKEAG	2522	MATTAWAMKEAG	T BEAM	No
MAYFIELD TWP. (T2	3673	RIFT BROOK	SLAB	No
MECHANIC FALLS	2540	MECHANIC FALLS	RIGID FRAME	Yes
MECHANIC FALLS	5009	RED BRIDGE	T BEAM	No
MECHANIC FALLS	5008	PUMPING STATION	SLAB	No
MECHANIC FALLS	3502	CNRR	SLAB	No
MECHANIC FALLS	0055		STRINGER	No
MEDDYBEMPS	3736	MEDDYBEMPS	RIGID FRAME	No
MEDFORD	0915	ALDER BROOK BR	T BEAM	No
MEDFORD	0484	PISCATAQUIS R	TRUSS	No
MEDFORD	3061	SCOOTARZA	SLAB	No
MEDWAY	2256	E.BR. PENOBSCOT	TRUSS	No
MEDWAY	2738	SALMON STREAM	T BEAM	No
MEDWAY	2471	LITTLE SALMON STREAM	RIGID FRAME	No
MEDWAY	3009	PENOBSCOT	TRUSS	No
MERCER	2080	BOG STREAM	SLAB	No
MERCER	3843	MILL POND BRIDGE	SLAB	No
MERRILL	3150	EAST HASTINGS	SLAB	No
MEXICO	3326	THAD WHITE BRIDGE	STRINGER	No
MEXICO	0804	GRANITE ST BR	SLAB	No
MEXICO	2917	WEBB RIVER	T BEAM	No
MEXICO	3792	ANDREW LANG	SLAB	No
MILBRIDGE	5555	WYMAN	SLAB	No
MILBRIDGE	3655	EMERSON	STRINGER	No
MILBRIDGE	3280	GREAT NORTH	TRUSS	No
MILBRIDGE	1475	GREAT SOUTH	GIRDER-FLR B	Yes
MILBRIDGE	5475	SAWYER BROOK	SLAB	No
MILFORD	2036	BAKER BROOK	ARCH	No
MILFORD	3534	UPPER TRESTLE	SLAB	No
MILFORD	3535	LOWER TRESTLE	SLAB	No
MILFORD	2179	COSTIGAN	SLAB	No
MILFORD	2282	FIRST OTTER STREAM	STRINGER	No
MILFORD	2754	SECOND OTTER	TRUSS	No
MILFORD	2842	THIRD OTTER	T BEAM	No
MILFORD	2825	SUNKHASE	T BEAM	No
MILFORD	2630	OLD TOWN-MILFORD BRIDGE	ARCH	No
MILLINOCKET	3277	B&ARR/BATES ST RR#104.64	SLAB	No
MILLINOCKET	0902	GRANITE STREET BRIDGE	STRINGER	No
MILLINOCKET	5684	STATION RD. CULVERT	SLAB	No
MILLINOCKET	0905	LITTLE SMITH BK	RIGID FRAME	No
MILLINOCKET	5827	SMITH BROOK	SLAB	No
MILLINOCKET	2747	SCHOODIC	T BEAM	No
MILO	2867	TOLL	T BEAM	No
MILO	3244	PLEASANT R	TRUSS	No
MILO	2573	MILO WEST OPENING	ARCH	Yes

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TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
MILO	2572	MILO EAST	ARCH	No
MILO	2124	CANAL	SLAB	No
MILO	0965	MEADOW BRIDGE	ARCH	Yes
MILTON TWP	3465	CHASE	ARCH	No
MILTON TWP	0669	YORK BR.	CULVERT	No
MILTON TWP	5561	CONCORD RIVER	SLAB	No
MINOT	5563	WEST MINOT NO. 2	T BEAM	No
MINOT	3293	WEST MINOT NO 1	T BEAM	No
MINOT	3491	HACKETT	SLAB	No
MONMOUTH	3840	NORTH MONMOUTH	SLAB	No
MONMOUTH	3453	CARVER BRIDGE	STRINGER	No
MONMOUTH	3226	SO MONMOUTH	SLAB	No
MONMOUTH	0562	BRIDGE	SLAB	No
MONMOUTH	2412	JOCK STR	SLAB	No
MONROE	5224	VILLAGE	STRINGER	No
MONROE	5538	BICKFORD	SLAB	No
MONROE	2172	COOK	T BEAM	No
MONROE	3775	CHASE	CULVERT	No
MONROE	5539	CILLEY	CULVERT	No
MONROE	3988	BRALEY	T BEAM	No
MONROE	1127	MONROE CENTER BR	GIRDER-FLR B	No
MONROE	5466	FAIRBANKS	SLAB	No
MONROE	5467	THURLOWS	SLAB	No
MONROE	3348	LORD	STRINGER	No
MONSON	3413	BARROWS FALLS	STRINGER	No
MONSON	3913	GULLY BROOK	ARCH	No
MONSON	3149	GOODALL	SLAB	No
MONTICELLO	3047	DEAD STREAM	CULVERT	No
MONTVILLE	1111	DOTTYS BRIDGE	STRINGER	No
MONTVILLE	2144	CENTER MONTVILLE BRIDGE	CULVERT	No
MONTVILLE	3169	BEAN	SLAB	No
MONTVILLE	3970	SO. MONTVILLE	T BEAM	No
MONTVILLE	2653	PEAVEY BRIDGE	STRINGER	No
MOOSE RIVER	3479	HEALD STREAM	T BEAM	No
MORO PLT	5027	TUCKER	T BEAM	No
MORO PLT	5480	WEST BRIDGE	CULVERT	No
MORRILL	5468	POLAND	SLAB	No
MORRILL	5296	PAUL	ARCH	No
MORRILL	2843	THOMAS	SLAB	No
MOSCOW	2226	DECKER BROOK	T BEAM	No
MOSCOW	5531	SCHOOLHOUSE	SLAB	No
MOSCOW	2133	CARNEY	T BEAM	No
MOSCOW	2838	TEMPLE POND	SLAB	No
MOSCOW	2936	WHITCOMB	T BEAM	No
MOXIE GORE (T1 R5	3961	MILE A QUARTER	ARCH	No
MT CHASE	2210	CRYSTAL STREAM	SLAB	No
MT CHASE	3516	SARGENT BROOK	SLAB	No
MT CHASE	2760	SHIN POND	SLAB	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
MT DESERT	5570	STANLEY BROOK	STRINGER	No
MT DESERT	0465	SOMES POND	STRINGER	No
MT DESERT	0468	BRIDGE (NPS # 032P)	RIGID FRAME	Yes
MT DESERT	0477	OVERPASS(NPS #0055)	ARCH	Yes
MT DESERT	0467	BRIDGE (NPS # 031P)	RIGID FRAME	Yes
MT DESERT	0479	BRIDGE (NPS # 030P)	RIGID FRAME	Yes
MT DESERT	0478	CARRIAGE RD BR (NPS#004P)	RIGID FRAME	Yes
MT DESERT	0459	OVERPASS	ARCH	Yes
MT DESERT	0466	BRIDGE 1	RIGID FRAME	Yes
MT DESERT	0475	OTTER CREEK (NPS # 019P)	ARCH	Yes
MT DESERT	0356	UL #1	SLAB	Yes (Replaced)
MT DESERT	0559	OVERPASS(NPS#0265)	ARCH	Yes
MT DESERT	5042	RICHARDSON BROOK	SLAB	Yes
MT VERNON	2930	WEST MT. VERNON	SLAB	No
MT VERNON	2837	TELEPHONE	SLAB	No
MT VERNON	2332	GRIST MILL	SLAB	No
MT VERNON	2987	WALTON MILL	SLAB	No
MT VERNON	2380	HOPKINS BRIDGE	STRINGER	No
NAPLES	3499	SONGO LOCK	TRUSS	No
NAPLES	0222	MUDDY BRIDGE	STRINGER	No
NAPLES	2780	SONGO LOCK DRAW	GIRDER-FLR B	Yes
NAPLES	0187	OLD CROOKED RIVER	T BEAM	No
NAPLES	2047	NAPLES BAY	GIRDER-FLR B	No
NAPLES	2199	CROCKETT	RIGID FRAME	No
NAPLES	3347	EDES FALLS	STRINGER	No
NEW CANADA	0141	SLY BROOK	STRINGER	No
NEW GLOUCESTER	0298	MTPK(NB)/BALD HILL ROAD	STRINGER	No
NEW GLOUCESTER	0293	MAYALL RD	STRINGER	No
NEW GLOUCESTER	0312	FOSTER BROOK	CULVERT	No
NEW GLOUCESTER	0294	BENNETT RD	STRINGER	No
NEW GLOUCESTER	0295	CHANDLER MILL ROAD	STRINGER	No
NEW GLOUCESTER	0296	SHAKERRD	STRINGER	No
NEW GLOUCESTER	0267	OUTLET	SLAB	No
NEW GLOUCESTER	0297	ROYAL RIVER	STRINGER	No
NEW GLOUCESTER	3137	COBBS	T BEAM	No
NEW GLOUCESTER	0242	MCRR/TRAPP RD.	GIRDER-FLR B	No
NEW GLOUCESTER	0248	PENNY RD./ MCRR	GIRDER-FLR B	No
NEW GLOUCESTER	1491	BALD HILL RD SB	STRINGER	No
NEW GLOUCESTER	3394	UPPER GLOUCESTER BRIDGE	STRINGER	No
NEW LIMERICK	5247	TANNERY	SLAB	No
NEW LIMERICK	3995	MOOERS	SLAB	No
NEW LIMERICK	2388	HUNTER BROOK	T BEAM	No
NEW LIMERICK	2858	TITCOMB	T BEAM	No
NEW PORTLAND	2836	TAYLOR BROOK	CULVERT	No
NEW PORTLAND	5131	CARABASSET	ARCH	Yes
NEW PORTLAND	5129	BARTLETT	T BEAM	No
NEW PORTLAND	3166	PARSONS	T BEAM	No
NEW PORTLAND	5133	GRIST MILL	SLAB	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
NEW PORTLAND	2322	GOULD HILL	SLAB	No
NEW PORTLAND	3383	WIRE BRIDGE	SUSPENSION	Yes
NEW PORTLAND	5718	NEW GREAT WORKS	T BEAM	No
NEW PORTLAND	1045	LUCE BROOK	STRINGER	No
NEW PORTLAND	5132	GREAT WORKS	T BEAM	No
NEW PORTLAND	5130	BUTLER	SLAB	No
NEW PORTLAND	1072	LOWER	SLAB	No
NEW SHARON	3842	FILLIBROWN	STRINGER	No
NEW SHARON	2345	HALE	SLAB	No
NEW SHARON	0406	WEEKS MILLS BR.	STRINGER	No
NEW SHARON	5178	SUCKER BROOK NO. 2	SLAB	No
NEW SHARON	0407	BULLENS MILL BR.	STRINGER	No
NEW SHARON	0408	SWAN BROOK	STRINGER	No
NEW SHARON	2608	NEW SHARON BRIDGE	TRUSS	Yes
NEW SHARON	2594	MUDDY BROOK	T BEAM	No
NEW SHARON	3131	TANNERY	CULVERT	No
NEW SHARON	2530	MCGURDY POND	SLAB	No
NEW SWEDEN	3110	BEARSLEY BROOK	ARCH	No
NEW VINEYARD	5355	POST OFFICE	SLAB	No
NEW VINEYARD	5353	TWIN NO. 2	SLAB	No
NEW VINEYARD	5598	PORTER LAKE STREAM	ARCH	No
NEW VINEYARD	5356	BARKER STREAM	SLAB	No
NEWBURGH	3863	WARD	CULVERT	No
NEWBURGH	3644	KELLEY	SLAB	No
NEW CASTLE	2613	NICHOLS	SLAB	No
NEW CASTLE	0614	SHERMAN'S OVERPASS	STRINGER	No
NEW CASTLE	1530	DYERS	STRINGER	No
NEW CASTLE	0617	WRIGHTS CROSSING	GIRDER-FLR B	No
NEW CASTLE	5281	NORTH NEW CASTLE	SLAB	No
NEW CASTLE	2215	DAMARISCOTTA RIVER	STRINGER	No
NEW CASTLE	2535	MEADOW BROOK	SLAB	No
NEW FIELD	5166	AYER	SLAB	No
NEW FIELD	3037	GOODRICH	SLAB	No
NEW FIELD	5167	CHELLIS	SLAB	No
NEW FIELD	5169	MOULTONS MILL	SLAB	No
NEW FIELD	5168	LONG	SLAB	No
NEW FIELD	5313	DAM'S MILLS	STRINGER	No
NEWPORT	3170	DURHAM	STRINGER	No
NEWPORT	2501	MAIN STREET	T BEAM	No
NEWPORT	3506	CORINNA STREAM	STRINGER	No
NEWPORT	2885	UPPER	STRINGER	No
NEWPORT	5277	MIDDLE	STRINGER	No
NEWRY	2094	BRANCH BROOK	T BEAM	No
NEWRY	2327	GREAT BROOK	SLAB	No
NEWRY	0758	EAMES BRIDGE	STRINGER	No
NEWRY	3167	SIMONDS BROOK	SLAB	No
NEWRY	1007	ARTIST COVERED	TRUSS	Yes
NEWRY	2055	BEAR RIVER	T BEAM	No

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TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
NEWRY	0759	CHASE HILL BR	STRINGER	No
NOBLEBORO	3923	HEAD GATE	STRINGER	No
NOBLEBORO	3132	JONES	SLAB	No
NORRIDGEWOCK	2814	STORER BROOK	RIGID FRAME	No
NORRIDGEWOCK	2502	MAIN STREET	SLAB	No
NORRIDGEWOCK	5134	HALE STREAM	RIGID FRAME	No
NORRIDGEWOCK	2187	COVERED	ARCH	Yes
NORRIDGEWOCK	2487	MOORE BRIDGE	STRINGER	No
NORTH BERWICK	5174	SUMMER MORRILL	SLAB	No
NORTH BERWICK	5173	MORRILLS MILL	SLAB	No
NORTH BERWICK	1213	STACKPOLE (STACO)	STRINGER	No
NORTH BERWICK	2424	JUNKINS	STRINGER	No
NORTH BERWICK	3031	HUSSEY	SLAB	No
NORTH BERWICK	5170	BOYLE	SLAB	No
NORTH BERWICK	5171	GOVERNOR GOODWIN	SLAB	No
NORTH HAVEN	3955	BEACH	STRINGER	No
NORTH YARMOUTH	5048	HAYS	T BEAM	No
NORTH YARMOUTH	5535	DUNNS	RIGID FRAME	No
NORTH YARMOUTH	0208	SLIGO RD	GIRDER-FLR B	No
NORTHFIELD	3719	BOG STREAM	T BEAM	No
NORTHPORT	2757	SHAWS HILL UPPER	SLAB	No
NORTHPORT	5183	SHAWS BROOK	ARCH	No
NORTHPORT	2988	LITTLE RIVER	T BEAM	No
NORWAY	5218	WATERFORD ROAD	SLAB	No
NORWAY	5090	HOLT	SLAB	No
NORWAY	3035	LOMBARD	SLAB	No
NORWAY	3610	TANNERY BROOK	SLAB	No
NORWAY	0801	BRIDGE ST. BR	STRINGER	No
NORWAY	0796	BEAL ST. BR	STRINGER	No
NORWAY	3041	CROCKETT	CULVERT	No
NORWAY	0799	GREENLEAF BR	STRINGER	No
NORWAY	0797	LYNN STREET BRIDGE	STRINGER	No
NORWAY	2802	STEEP FALLS	STRINGER	No
OAKFIELD	3504	B&ARR/WEEKS RD RR#148.70	GIRDER-FLR B	No
OAKFIELD	2898	VILLAGE	T BEAM	No
OAKLAND	0570	UNDERPASS	STRINGER	No
OAKLAND	3508	RAILROAD CROSSING	STRINGER	No
OAKLAND	2513	MARSTON	STRINGER	No
OAKLAND	0567	EMMERSON STEVENS BR	GIRDER-FLR B	No
OGUNQUIT	1315	N BERWICK RD	STRINGER	No
OGUNQUIT	1252	DICKENS HILL BR	STRINGER	No
OGUNQUIT	3759	WEARS	SLAB	No
OGUNQUIT	1316	CAPTAIN THOMAS RD	STRINGER	No
OGUNQUIT	3492	OGUNQUIT BEACH	STRINGER	No
OGUNQUIT	2239	DONNELLS	SLAB	No
OGUNQUIT	2663	PHILLIPS	SLAB	No
OGUNQUIT	1317	OGUNQUIT RIVER BRIDGE	ARCH	No
OLD ORCHARD	5234	MILLIKENS MILL	CULVERT	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
OLD TOWN	2806	STILLWATER #2	STRINGER	No
OLD TOWN	2084	BOOM BIRCH	STRINGER	No
OLD TOWN	2405	IRVING	TRUSS	No
OLD TOWN	2593	MUD POND INLET #1&#2	STRINGER	No
OLD TOWN	1472	STILLWATER #1	STRINGER	No
ORIENT	2772	SKAGROCK	SLAB	No
ORLAND	5205	TODDY POND NO. 2	SLAB	No
ORLAND	2632	ORLAND RIVER	T BEAM	No
ORLAND	3153	UPPER FALLS	CULVERT	No
ORNEVILLE TWP	5121	BADGER	SLAB	No
ORONO	2278	FERRY HILL	GIRDER-FLR B	No
ORRINGTON	5285	SWETTS POND	ARCH	No
ORRINGTON	3613	RED	SLAB	No
ORRINGTON	2108	BUNKER	SLAB	No
ORRINGTON	0885	SMITH BR.	STRINGER	No
ORRINGTON	5300	E. ORRINGTON	ARCH	No
OTIS	3539	BEECH HILL STREAM	RIGID FRAME	No
OTISFIELD	3475	COLLEGE SWAMP	SLAB	No
OTISFIELD	5049	EAST OTISFIELD	SLAB	No
OWLS HEAD	2198	CRIPPLE CREEK	SLAB	No
OXBOW PLT	2877	UMCOLCUS STREAM	STRINGER	No
OXFORD	3903	WARDWELL	STRINGER	No
OXFORD	2921	WELCHVILLE	T BEAM	No
OXFORD	2037	BAKER	SLAB	No
OXFORD	2574	MINISTER BROOK	SLAB	No
OXFORD	3738	COVERED	STRINGER	No
OXFORD	5552	KING STREET	SLAB	No
PALERMO	2351	HANNAN	ARCH	No
PALMYRA	1035	HANSON BR.	CULVERT	No
PALMYRA	5331	GOODRICH	SLAB	No
PALMYRA	2644	PALMYRA	SLAB	No
PARIS	2979	BILLINGS BRIDGE	STRINGER	No
PARIS	0805	CROSS ST. BR	STRINGER	No
PARIS	3536	HAMMON	SLAB	No
PARIS	0708	BRETTS BR	STRINGER	No
PARIS	2645	PARK STREET	T BEAM	No
PARIS	3478	STONEY BROOK 3	T BEAM	No
PARIS	3659	STOCK FARM	SLAB	No
PARKMAN	0944	HARLOW POND BRIDGE	SLAB	No
PARLIN POND TWP.	2048	BEAN BROOK	SLAB	No
PARLIN POND TWP.	2993	PIEL BRIDGE	CULVERT	No
PARSONSFIELD	1194	STEWART BR	CULVERT	No
PARSONSFIELD	1010	PORTER COVERED	TRUSS	Yes
PARSONSFIELD	2432	KEZAR FALLS	ARCH	Yes (Replaced)
PARSONSFIELD	2125	CANAL	T BEAM	No
PARSONSFIELD	1193	CORPORAL BR	STRINGER	No
PARSONSFIELD	2316	GLIDDEN MEADOW	SLAB	No
PASSADUMKEAG	3505	HATHAWAY	TRUSS	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
PASSADUMKEAG	2059	BEAVER BROOK	SLAB	No
PASSADUMKEAG	3071	LANCASTER	SLAB	No
PASSAMAQUODDY(IN	2385	HUNTLEY BROOK	T BEAM	No
PATTEN	3897	LOVEJOY	SLAB	No
PATTEN	3626	BARR STATION	STRINGER	No
PATTEN	3122	FISH STREAM	T BEAM	No
PEMBROKE	2021	ARCH BRIDGE	ARCH	Yes
PEMBROKE	2208	CROW BROOK	SLAB	No
PEMBROKE	3884	LITTLE FALLS	STRINGER	No
PEMBROKE	5326	PENNAMAQUAN	STRINGER	No
PEMBROKE	5501	UPPER CROW BROOK	CULVERT	No
PENOBSCOT	3297	COVE BRIDGE	SLAB	No
PERHAM	3814	SPAULDING	RIGID FRAME	No
PERKINS TWP	5364	HILDRETHS MILL	SLAB	No
PERRY	3865	LEIGHTON	SLAB	No
PERRY	2774	SMELT BROOK	SLAB	No
PERRY	0138	LITTLE RIVER	CULVERT	No
PERU	0752	THOMAS BROOK	CULVERT	No
PERU	0781	MARY T	STRINGER	No
PERU	5432	GOW ELL	T BEAM	No
PERU	0791	SICOTTE	STRINGER	No
PERU	2640	M.C.R.R. OVERPASS	GIRDER-FLR B	No
PERU	2019	ANDROSCOGGIN RIVER	TRUSS	No
PERU	5603	DICKVALE	SLAB	No
PERU	3450	OUTLET	SLAB	No
PHILLIPS	2228	DILL	T BEAM	No
PHILLIPS	3371	FIELD	STRINGER	No
PHILLIPS	2545	MEETING PLACE	TRUSS	No
PHILLIPS	5063	LOWER VILLAGE BRIDGE	ARCH	Yes
PHILLIPS	5064	ROSS BRIDGE	ARCH	No
PHILLIPS	2180	COTTLE BROOK	SLAB	No
PHILLIPS	2955	WING	STRINGER	No
PHIPPSBURG	2959	WINNEGANCE	SLAB	No
PHIPPSBURG	5587	PHIPPSBURG SLUICEWAY	SLAB	No
PITTSFIELD	2600	NEAL	T BEAM	No
PITTSFIELD	5136	SPRING ROAD	SLAB	No
PITTSFIELD	2274	FARNHAM	SLAB	No
PITTSFIELD	2634	OSBORNE	SLAB	No
PITTSFIELD	5279	WAVERLEY	STRINGER	No
PITTSFIELD	2784	SOUTH OF VILLAGE	SLAB	No
PITTSTON	5272	EAST PITTSTON	SLAB	No
PITTSTON	0499	FALLS	STRINGER	No
PITTSTON	2862	TOGUS BRIDGE	T BEAM	No
PLYMOUTH	2982	TANNERY	STRINGER	No
POLAND	2550	MIDDLE RANGE	T BEAM	No
POLAND	5202	MANLEY BURNHAM	T BEAM	No
POLAND	3501	LOWER RANGE OUTLET	CULVERT	No
PORTER	0765	RIDLON BR.	STRINGER	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
PORTER	2872	TOWLES MILL	RIGID FRAME	No
PORTER	3237	ROBBINS MILL	CULVERT	No
PORTLAND	0326	PARK AVE UNDERPASS	GIRDER-FLR B	Yes
PORTLAND	0308	MEADER BROOK	CULVERT	No
PORTLAND	0321	CAPISIC STREET	CULVERT	No
PORTLAND	1487	MTPK SB FOREST AVE	STRINGER	No
PORTLAND	3525	DANFORTH ST CROSSING	RIGID FRAME	Yes
PORTLAND	0327	ST JOHN ST UNDERPASS	TRUSS	Yes
PORTLAND	0328	CLARK ST. OVERPASS	ARCH	Yes
PORTLAND	0353	FORE RIVER	CULVERT	No
PORTLAND	1486	WARREN AVE SB	STRINGER	No
PORTLAND	0366	LUCAS STREET BRIDGE	CULVERT	No
PORTLAND	1488	MTPK SB RIVERSIDE ST	STRINGER	No
PORTLAND	0348	PORTLAND WESTBROOK	STRINGER	No
PORTLAND	6015	B ROAD OVERPASS	STRINGER	Yes (Replaced)
PORTLAND	5182	CAPISIC	RIGID FRAME	No
PORTLAND	2515	MARTIN POINT	GIRDER	No
PORTLAND	0340	RAY STREET BRIDGE	SLAB	No
PORTLAND	0343	CONGRESS STREET	STRINGER	No
PORTLAND	0344	STROUDWATER RIVER NB	STRINGER	No
PORTLAND	0345	WESTBROOKST	STRINGER	No
PORTLAND	6016	DANFORTH ST. VIADUCT	STRINGER	Yes (Replaced)
PORTLAND	1485	MTPK(SB)/MCRR	STRINGER	No
PORTLAND	0347	BRIGHTON AVE	STRINGER	No
PORTLAND	0349	WARREN AVE NB	STRINGER	No
PORTLAND	0350	FOREST AVE NB	STRINGER	No
PORTLAND	0351	RIVERSIDE NB	STRINGER	No
PORTLAND	0352	FALMOUTH INTER	STRINGER	No
PORTLAND	5052	VERANDA ST. OVERPASS	GIRDER-FLR B	No
PORTLAND	5618	KENSINGTON STREET	T BEAM	No
PORTLAND	5617	SHERWOOD ST.	T BEAM	No
PORTLAND	5616	CNR CROSSING	T BEAM	No
PORTLAND	0346	MCRR NB	STRINGER	No
PORTLAND	1484	STROUDWATER RIVER SB	STRINGER	No
POWNAL	0191	UNDERPASS	STRINGER	No
POWNAL	5644	DYER	CULVERT	No
POWNAL	0193	KUSHMAN BRIDGE	CULVERT	No
POWNAL	0199	SNOW BRIDGE	CULVERT	No
POWNAL	5646	POWNAL CENTER	CULVERT	No
PRENTISS PLT	2795	SPRUCE BROOK	ARCH	No
PRENTISS PLT	5185	MATAGOODUS BROOK	CULVERT	No
PRENTISS PLT	2416	JONES	SLAB	No
PRESQUE ISLE	2155	CLARK	CULVERT	No
PRESQUE ISLE	2352	HANSON	ARCH	No
PRESQUE ISLE	2421	ARNOLD	SLAB	No
PRESQUE ISLE	3881	GOULDVILLE	GIRDER-FLR B	No
PRESQUE ISLE	3259	PHAIR CROSSING	STRINGER	No
PRESQUE ISLE	5290	CLARK BROOK #4	CULVERT	No

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TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
PRESQUE ISLE	5524	CHAPMAN STREET	SLAB	No
PRINCETON	2688	PRINCETON	STRINGER	No
PRINCETON	5599	ANDERSON BROOK	ARCH	No
PRINCETON	3723	DOG BROOK	CULVERT	No
PROSPECT	2820	DEAD BROOK	CULVERT	No
PROSPECT	2132	CARLEY	ARCH	No
PROSPECT	3008	WALDO HANCOCK	SUSPENSION	Yes
PROSPECT	2449	LANE	RIGID FRAME	No
PROSPECT	2168	COLSON	T BEAM	No
PROSPECT	5386	B&A RR # 13.49 / US-1A	GIRDER-FLR B	No
PROSPECT	3739	DICKEY BROOK	CULVERT	No
RANGELEY	3288	HALEY POND OUTLET	SLAB	No
RANGELEY	2384	HUNTER COVE	STRINGER	No
RANGELEY	2631	OQUASSOC	STRINGER	No
RANGELEY	2669	NILE BROOK	SLAB	No
RANGELEY	2231	DODGE POND	SLAB	No
RANGELEY PLT	1815	BEMIS STREAM	STRINGER	No
RAYMOND	5271	FISH HATCHERY	SLAB	No
RAYMOND	2418	JORDAN RIVER	SLAB	No
RAYMOND	5604	BARTLETT BROOK	SLAB	No
READFIELD	5692	WOOLEN MILL BRIDGE	STRINGER	No
READFIELD	2224	DEAD STREAM	SLAB	No
READFIELD	3392	INTERVALE	CULVERT	No
READFIELD	5209	HANDY BROOK	SLAB	No
READFIELD	2871	TORSEY POND	SLAB	No
REED PLT	2968	WYTOPITLOCK	T BEAM	No
REED PLT	3538	FINN BROOK	SLAB	No
RICHMOND	5394	RICHMOND RD.	GIRDER-FLR B	No
RICHMOND	2506	MAINE KENNEBEC	TRUSS	Yes
RICHMOND	2568	MILL STREAM	SLAB	No
RICHMOND	3556	HALEYS	CULVERT	No
RICHMOND	5266	PLEASANT POND	CULVERT	No
RIPLEY	2498	MAIN STREAM	T BEAM	No
RIPLEY	5220	ADDITON	ARCH	No
RIPLEY	3474	VILLAGE	SLAB	No
ROBBINSTON	2559	MILL COVE	SLAB	No
ROBBINSTON	2566	SWEENEY	SLAB	No
ROCKLAND	0592	LOWER MEADOW BK BR	STRINGER	No
ROCKPORT	5240	GOOSE RIVER	CULVERT	No
ROCKPORT	5142	SIMONTON CORNER	CULVERT	No
ROCKPORT	2724	ROCKPORT	STRINGER	No
ROME	5071	MEADOW STREAM	T BEAM	No
ROME	5221	UPPER	CULVERT	No
ROQUE BLUFFS	3964	ENGLISHMAN RIVER	STRINGER	No
ROQUE BLUFFS	3701	MEADOW BROOK	SLAB	No
ROXBURY	5213	THOMAS FARM	SLAB	No
ROXBURY	5212	NOISY BROOK	SLAB	No
ROXBURY	3205	WALKER	SLAB	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
RUMFORD	3253	BROWN	CULVERT	No
RUMFORD	3056	MT. ZIRCON	SLAB	No
RUMFORD	5188	HIGH BRIDGE	TRUSS	No
RUMFORD	2662	PETERSON	T BEAM	No
RUMFORD	3094	THURSTON	SLAB	No
RUMFORD	3327	RIDLONVILLE	TRUSS	No
RUMFORD	2010	ABBOTTS MILL	T BEAM	No
RUMFORD	2690	PROSPECT AVE	T BEAM	No
RUMFORD	2585	MORSE	ARCH	Yes
RUMFORD	2707	RED	GIRDER-FLR B	No
RUMFORD	5590	ISTHMUS ROAD	SLAB	No
RUMFORD	3248	MARTIN MEMORIAL (RUMF.PT)	TRUSS	Yes
RUMFORD	5619	UPPER CANAL	STRINGER	No
RUMFORD	5310	SCOTTY RICHARDSON	ARCH	No
RUMFORD	5631	COBURN BROOK	SLAB	No
RUMFORD	2990	CHISHOLM PARK	ARCH	Yes
RUMFORD	5093	BARKER BROOK	SLAB	No
RUMFORD	2161	COFFIN BROOK	SLAB	No
RUMFORD	5679	RUMFORD CENTER	SLAB	No
RUMFORD	3638	HARTFORD ST. BRIDGE	ARCH	Yes
RUMFORD	2514	MARTINS	T BEAM	No
SABATTUS	0041	MAXWELL SCHOOL ROAD	STRINGER	No
SABATTUS	1499	MTPK(SB)/SABATTUS RIVER	STRINGER	No
SABATTUS	0042	NEWOEGIN CULVERT	SLAB	No
SABATTUS	5393	SABATTUS RIVER	STRINGER	No
SABATTUS	0045	MAXWELLS	CULVERT	No
SABATTUS	0014	CURTIS BRIDGE	CULVERT	No
SABATTUS	0039	FISHER ROAD	STRINGER	No
SABATTUS	2106	BRYANTS	SLAB	No
SABATTUS	0040	CURTIS BOG RD(BOWDOIN RD)	STRINGER	No
SABATTUS	0038	PLEASANT RIDGE ROAD/MTPK	STRINGER	No
SABATTUS	0037	RTE 9/MTPK	STRINGER	No
SABATTUS	0036	MTPK(NB)/SABATTUS RIVER	STRINGER	No
SABATTUS	0035	LISBON RD(SABATTUS RD)	STRINGER	No
SABATTUS	0034	GROVE ROAD/MTPK	STRINGER	No
SABATTUS	0043	MAXWELL BROOK	CULVERT	No
SACO	1365	OLD ORCHARD RD BR	GIRDER-FLR B	Yes
SACO	1345	BUXTON RD	STRINGER	No
SACO	3643	GOOSE FARE	STRINGER	No
SACO	1483	SACO RIVER SB	STRINGER	No
SACO	1355	JAMES ST BR	GIRDER-FLR B	Yes
SACO	1353	WHARF ST BR	STRINGER	Yes
SACO	1347	FLAG POND ROAD	STRINGER	No
SACO	1342	BOOM ROAD	STRINGER	No
SACO	1364	BEACH ST BR	GIRDER-FLR B	Yes
SACO	1343	NEW COUNTY RD	STRINGER	No
SACO	1354	COMMON ST BR	GIRDER-FLR B	Yes
SACO	1352	FRONT ST BR	GIRDER-FLR B	Yes

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TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
SACO	1344	SACO INTERCHANGE	STRINGER	No
SACO	3412	SOMESVILLE BRIDGE	STRINGER	Yes
SACO	1346	CASCADE BROOK	CULVERT	No
SACO	3185	FOXWELL BROOK	SLAB	No
SALEM TWP	3057	TWIN 1	SLAB	No
SALEM TWP	1473	TWIN 2	T BEAM	No
SALEM TWP	2565	MILL POND	TRUSS	Yes
SANDY BAY TWP	5233	KELLEY BROOK 2	CULVERT	No
SANDY BAY TWP. (T5	2428	KELLY	CULVERT	No
SANDY BAY TWP. (T5	5716	EAST BRANCH SANDY STREAM	ARCH	No
SANDY RIVER PLT	3586	SOUTH SIDE BRIDGE	STRINGER	No
SANDY RIVER PLT	0373	SADDLEBACK	STRINGER	No
SANDY RIVER PLT	2735	SADDLEBACK	SLAB	No
SANFORD	1359	WASHINGTON ST BR	ARCH	Yes (Replaced)
SANFORD	3747	GREAT WORKS BROOK	RIGID FRAME	No
SANFORD	1302	JELLISON BRIDGE	STRINGER	Yes
SANFORD	1360	MILL ST BR	SLAB	No
SANFORD	1358	BRIDGE ST BR	ARCH	Yes
SANFORD	3636	JELLISON	SLAB	No
SANFORD	5368	HAY BROOK	STRINGER	No
SANGERVILLE	5559	BROCKWAYS MILL	SLAB	No
SANGERVILLE	3893	CARLETON	STRINGER	No
SANGERVILLE	3483	BLACK STREAM	T BEAM	No
SAPLING TWP. (T1 R7	3256	CPR CROSSING	STRINGER	No
SCARBOROUGH	3911	PLEASANT AVE. CROSSING	GIRDER-FLR B	No
SCARBOROUGH	2614	NONESUCH RIVER	RIGID FRAME	No
SCARBOROUGH	3944	LIBBY	RIGID FRAME	No
SCARBOROUGH	5260	PINE POINT CROSSING	STRINGER	No
SCARBOROUGH	3182	CARTER	SLAB	No
SCARBOROUGH	0276	SPRING ST	STRINGER	No
SCARBOROUGH	0271	HOLMES RD	STRINGER	No
SCARBOROUGH	0270	TWO ROD RD	STRINGER	No
SCARBOROUGH	0269	BEACH RIDGE RD	STRINGER	No
SCARBOROUGH	0268	BROADTURN RD	STRINGER	No
SCARBOROUGH	0304	SOUTH BRANCH	CULVERT	No
SCARBOROUGH	3573	PHILLIPS	SLAB	No
SCARBOROUGH	0264	CENTER PAYNE ROAD BRIDGE	CULVERT	No
SCARBOROUGH	0272	NONESUCH RIVER	ARCH	No
SCARBOROUGH	0215	MESERVE BRIDGE	SLAB	No
SEARSMONT	3721	SCHOOL HOUSE	SLAB	No
SEARSMONT	5574	BICKFORD	ARCH	No
SEARSMONT	1116	THOMPSON BR	CULVERT	No
SEARSMONT	1119	JAM BROOK BR	CULVERT	No
SEARSMONT	2555	MILL	T BEAM	No
SEARSMONT	5316	STEARNS	SLAB	No
SEARSMONT	3856	SLAB CITY	SLAB	No
SEARSMONT	5154	WOODMANS MILL	SLAB	No
SEARSMONT	5571	GHENT	T BEAM	No

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TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
SEARSMONT	5153	TANNERY	T BEAM	No
SEARSMONT	2621	NORTH SEARSMONT	T BEAM	No
SEARSPORT	2751	SEARSPORT	RIGID FRAME	No
SEARSPORT	5640	SMART BRIDGE	SLAB	No
SEBAGO	5056	FITCH	SLAB	No
SEBAGO	5305	NORTHWEST RIVER	STRINGER	No
SEBAGO	3698	BREAKNECK	ARCH	No
SEBAGO	0223	FOLLY RD BR.	STRINGER	No
SEBAGO	5057	MACK'S CORNER	SLAB	No
SEBOEIS PLT	5114	SEBOEIS	T BEAM	No
SEDGWICK	0464	CAMP STREAM BR	SLAB	No
SHAPLEIGH	3637	SHAPLEIGH	RIGID FRAME	No
SHAPLEIGH	1296	WEBBER BR	STRINGER	No
SHAPLEIGH	5175	AUSTIN	SLAB	No
SHAPLEIGH	1198	HARGRAVE	STRINGER	No
SHAPLEIGH	1214	EMERY'S MILL	STRINGER	No
SHAPLEIGH	2543	MEETING HOUSE	SLAB	No
SHAPLEIGH	3795	ALBERT HAM	SLAB	No
SHERMAN	2899	VILLAGE	SLAB	No
SHERMAN	3940	LITTLE MOLUNKUS	CULVERT	No
SHERMAN	3815	LOGAN	RIGID FRAME	No
SHIRLEY	2761	SHIRLEY MILLS	STRINGER	No
SHIRLEY	5591	LOWER DENNEN	CULVERT	No
SIDNEY	5073	TOWN FARM	T BEAM	No
SIDNEY	5463	MILL POND	CULVERT	No
SKOWHEGAN	2924	WESSERUNSETT	STRINGER	No
SKOWHEGAN	2661	PERKINS	CULVERT	No
SKOWHEGAN	2965	WOOLEN MILL	SLAB	No
SKOWHEGAN	2777	SMITH POND (OLD)	T BEAM	No
SKOWHEGAN	2444	LAMBERT BROOK	SLAB	No
SKOWHEGAN	2819	SUCY	SLAB	No
SKOWHEGAN	1074	OLD WESSERUNSET	ARCH	No
SKOWHEGAN	1091	MILL ST BR.	STRINGER	No
SMITHFIELD	3466	MILL STREAM	SLAB	No
SMYRNA	5837	DUNN BROOK	CULVERT	No
SOLDIERTOWN TWP.	2361	HAY BROOK	SLAB	No
SOLON	2548	MICHAEL STREAM	SLAB	No
SOLON	2504	MAIN STREET	T BEAM	No
SOMERVILLE	3672	FRENCH NO 1 (W)	SLAB	No
SOMERVILLE	1517	FRENCH NO 2 (E)	RIGID FRAME	No
SOMERVILLE	5473	SOMERVILLE	T BEAM	No
SOMERVILLE	3977	SOMERVILLE CORNER	T BEAM	No
SOUTH BERWICK	1240	DENET BR #2	STRINGER	No
SOUTH BERWICK	1235	RODIER BR	STRINGER	No
SOUTH BERWICK	5610	GREAT WORKS RIVER	STRINGER	No
SOUTH BERWICK	3312	VARNEYS BRIDGE	STRINGER	No
SOUTH BERWICK	1237	BENNETT BR	STRINGER	No
SOUTH BRISTOL	2339	THE GUT	GIRDER-FLR B	No

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TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
SOUTH BRISTOL	2651	PAUL	CULVERT	No
SOUTH PORTLAND	6199	INTERCHANGE OVERPASS	STRINGER	No
SOUTH PORTLAND	5900	PORTLAND,SOUTH PORTLAND	GIRDER	No
SOUTH PORTLAND	6200	PAYNE RD BRIDGE NB	STRINGER	No
SOUTH PORTLAND	3945	VETERANS MEMORIAL	GIRDER-FLR B	Yes
SOUTH PORTLAND	0341	MILL CREEK	ARCH	No
SOUTH PORTLAND	6219	LONG CREEK #2	CULVERT	No
SOUTH PORTLAND	6182	WEST BROADWAY	STRINGER	No
SOUTH PORTLAND	0370	S PORTLAND INTERCHANGE	STRINGER	No
SOUTH THOMASTON	2425	KEAG BRIDGE	T BEAM	No
SOUTH THOMASTON	5578	SPRUCE HEAD	STRINGER	No
SOUTHPORT	2848	THOMPSONS	STRINGER	No
SOUTHPORT	2789	SOUTHPORT	TRUSS	Yes
SOUTHWEST	2511	MARSH BRIDGE	SLAB	No
ST AGATHA	5029	DICKEY BROOK	T BEAM	No
ST ALBANS	3384	LOWER MILL HILL	STRINGER	No
ST ALBANS	2978	UPPER	RIGID FRAME	No
ST ALBANS	5527	INDIAN	ARCH	No
ST FRANCIS	3233	ST. FRANCIS	ARCH	No
ST GEORGE	2558	MILL BROOK	SLAB	No
STACYVILLE	3680	SYBERIA	SLAB	No
STANDISH	5216	WATCHIC BROOK	SLAB	No
STANDISH	5634	JOSIES BROOK 2	CULVERT	No
STANDISH	2914	WATCHIC	RIGID FRAME	No
STANDISH	3907	SEBAGO L.RD. CROSSING	STRINGER	No
STANDISH	3857	WHITES	STRINGER	No
STANDISH	2717	RICH MILL	SLAB	No
STANDISH	2001	AARON NASON	SLAB	No
STARKS	3758	VILLAGE	STRINGER	No
STARKS	3571	CURTIS	SLAB	No
STARKS	3054	JOSHUA BROOK	SLAB	No
STETSON	5115	MILL	SLAB	No
STETSON	5629	HILL MILL	ARCH	No
STETSON	0819	BUSIELL BR.	CULVERT	No
STEUBEN	2944	WHITTEN STREAM	T BEAM	No
STEUBEN	5447	UNIONVILLE	SLAB	No
STEUBEN	1175	SMITH MILL	STRINGER	No
STEUBEN	5526	DYKE	CULVERT	No
STEUBEN	2900	VILLAGE	T BEAM	No
STEUBEN	3067	DYER BAY	STRINGER	No
STOCKHOLM	0111	SNAKE BROOK 1	STRINGER	No
STOCKHOLM	5160	MADAWASKA	T BEAM	No
STOCKTON SPRINGS	3176	CAPE JELLISON	STRINGER	No
STOCKTON SPRINGS	3756	MEADOW ROAD	SLAB	No
STOCKTON SPRINGS	5388	B & A RR #07.51/TW	GIRDER-FLR B	Yes
STONEHAM	3744	SAWYER	SLAB	No
STONEHAM	5095	GREAT BROOK	T BEAM	No
STONEHAM	5096	MILL BROOK	SLAB	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
STONINGTON	3063	MILL HILL	T BEAM	No
STONINGTON	3696	OCEANVILLE	STRINGER	No
STOW	2996	COLD RIVER	T BEAM	No
STOW	3751	LUFKIN	SLAB	No
STOW	3581	LITTLE COLD RIVER	RIGID FRAME	Yes
STOW	5512	STATELINE	STRINGER	No
STRONG	3813	STARBIRD	T BEAM	No
STRONG	0403	MCLEARY BR.	CULVERT	Yes
STRONG	5189	LISHERNESS	SLAB	No
STRONG	3904	VALLEY BROOK	RIGID FRAME	No
STRONG	5575	SKILLINGS BROOK	SLAB	No
STRONG	2044	BARTON BROOK	SLAB	No
STRONG	3364	STEVENS BRIDGE	STRINGER	No
SULLIVAN	5896	VILLAGE	CULVERT	No
SULLIVAN	2285	FLANDERS STREAM	SLAB	No
SULLIVAN	5668	MORANCY PD OUTLET	ARCH	No
SULLIVAN	5184	BEAN	CULVERT	No
SULLIVAN	2984	SMITH MILL BRIDGE	SLAB	No
SUMNER	3351	HODGDON	STRINGER	No
SUMNER	0644	BROWNS BR	SLAB	No
SUMNER	0673	HEALD BR	STRINGER	No
SUMNER	0674	DYER BRIDGE	STRINGER	No
SUMNER	0700	PROCTOR	STRINGER	No
SUMNER	0702	CHANDLER BR	STRINGER	No
SUMNER	0691	LABRADOR POND BR	STRINGER	No
SURRY	2586	VILLAGE	SLAB	No
SURRY	3740	GOLD BROOK	RIGID FRAME	No
SURRY	3741	MEADOW BROOK	SLAB	No
SWANVILLE	3737	NICKERSONS MILLS	CULVERT	No
T 3 INDIAN	3666	WEST BRANCH BRIDGE	TRUSS	No
T5 R9 NWP	3781	STATION 350	STRINGER	No
T5 R9 NWP	0921	MIDDLE BRANCH	STRINGER	No Info Avail
T5 R9 NWP	3869	BABBLE BROOK	CULVERT	No
TAUNTON AND	3113	WEST OUTLET	TRUSS	No
TEMPLE	3653	MELL MITCHELL	SLAB	No
TEMPLE	3974	BLODGETT	GIRDER-FLR B	No
TEMPLE	0393	HENRY MITCHELL BRIDGE	SLAB	No
TEMPLE	3654	EDES	SLAB	No
TEMPLE	5065	TEMPLE MILL	T BEAM	No
THE FORKS PLT	2991	KELLY BROOK	SLAB	No
THE FORKS PLT	2377	HOLLY BROOK	T BEAM	No
THOMASTON	2904	WADSWORTH STREET	TRUSS	Yes
THOMASTON	2562	MILL CREEK	SLAB	No
THOMASTON	0593	GREENHOUSE BR.	STRINGER	No
THOMASTON	2912	OYSTER RIVER	T BEAM	No
THOMASTON	0606	WADSWORTH O.P.	STRINGER	No
THORNDIKE	1107	WARD	CULVERT	No
THORNDIKE	2716	RICH	SLAB	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
THORNDIKE	5138	CATES	SLAB	No
THORNDIKE	2306	GEORGE WARD	SLAB	No
THORNDIKE	5139	LEACH	SLAB	No
THORNDIKE	2442	KNOX STATION	SLAB	No
TOPSFIELD	5378	FARROW LAKE STREAM	CULVERT	No
TOPSHAM	5123	CATHANCE	T BEAM	No
TOPSHAM	1011	MCRR OVERPASS	STRINGER	No
TOPSHAM	3825	MUDDY RIVER	STRINGER	No
TOPSHAM	0999	MILL RD OVERPASS	STRINGER	Yes
TREMONT	3663	CLARK	SLAB	No
TRESCOTT TWP	2714	RICE	SLAB	No
TRESCOTT TWP	2258	EAST STREAM	T BEAM	No
TROY	5569	CUNNINGHAM	SLAB	No
TROY	2195	CREAMERY	SLAB	No
TURNER	2152	CHASES MILL	T BEAM	No
TURNER	2874	TURNER	TRUSS	No
TURNER	2622	NORTH TURNER	STRINGER	No
TURNER	1474	NORTH TURNER WEST	TRUSS	Yes
TURNER	0019	RICKERS BRIDGE	STRINGER	No
TURNER	5441	TEAGUE	CULVERT	No
TURNER	3886	TURNER CENTER	STRINGER	No
TURNER	2619	NORTH PARISH	STRINGER	No
TWP 01 R 05 WELS	2338	GULLIVER BROOK	SLAB	No
TWP 03 R 04 BKPWKR	1075	LONG FALLS	STRINGER	No
TWP 04 R 09 NWP	3888	BEAR BROOK BRIDGE	CULVERT	No
TWP 06 R 07 WELS	5482	CCC	CULVERT	No
TWP 08 R 05 WELS	3767	BOODY	ARCH	No
TWP 09 R 05 WELS	5232	HOULTON BROOK	CULVERT	No
TWP 09 R 05 WELS	5483	TROUT BROOK	SLAB	No
TWP 10 SD	3812	FISH HATCHERY	SLAB	No
TWP 18 ED	5375	SOUTHERN INLET	ARCH	No
TWP 22 MD	5653	UPPER GUAGUS	SLAB	No
TWP 28 MD	5486	STARVATION BROOK	SLAB	No
TWP C	5580	CLEARWATER BROOK	ARCH	No
UNION	5665	STUART BRIDGE	SLAB	No
UNION	2069	BESSEY	STRINGER	No
UNION	2259	EAST UNION	SLAB	No
UNION	0572	MESSER	SLAB	No
UNION	6134	FAIRGROUNDS BRIDGE	TRUSS	No
UNION	3841	TRUES	STRINGER	No
UNION	0587	MILLER BR	STRINGER	No
UNION	2971	YOUNGS	RIGID FRAME	Yes
UNITY	2204	CROSBY	SLAB	No
UNITY	5811	FOWLER BROOK	CULVERT	No
UNITY	2390	HUSSEY	T BEAM	No
UNITY	2538	MEADOW BROOK	SLAB	No
UNITY	5228	UNITY	STRINGER	No
UNITY	2637	OUTLET	T BEAM	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
UNITY	2590	MOULTON	T BEAM	No
UNITY	5384	BACON	CULVERT	No
UNITY	2074	BITHER MILL	SLAB	No
UNITY	2641	OXBOW	SLAB	No
UPTON	5241	MILL	STRINGER	No
UPTON	3090	ANDOVER DAM BRIDGE	TRUSS	No
VAN BUREN	2335	GRIST MILL	CULVERT	No
VAN BUREN	5306	VIOLET STREAM	SLAB	No
VAN BUREN	0113	LITTLE R 2	STRINGER	No
VASSALBORO	3151	GULLY BROOK	SLAB	No
VASSALBORO	3722	SCOTT CLARK	CULVERT	No
VASSALBORO	5074	BRIDGE ST	SLAB	No
VASSALBORO	3092	LOMBARD	STRINGER	No
VASSALBORO	0496	CANAL BR.	SLAB	No
VASSALBORO	5075	EAST VASSALBORO	SLAB	No
VASSALBORO	3657	SEVEN MILE BROOK	GIRDER-FLR B	Yes
VASSALBORO	2454	LEIGH	T BEAM	Yes
VERONA	3927	ULMERS	ARCH	No
VIENNA	2901	VILLAGE	SLAB	No
VINALHAVEN	5270	LANE ISLAND BRIDGE	STRINGER	No
WALDO	3023	DUTTON	SLAB	No
WALDO	2741	SANBORN	SLAB	No
WALDO	5585	PAUL	CULVERT	No
WALDO	2455	LEVANSELLER	SLAB	No
WALDOBORO	2999	MCRR CROSSING	STRINGER	No
WALDOBORO	2844	THOMAS HILL	SLAB	No
WALDOBORO	5427	SOULE	STRINGER	No
WALDOBORO	3033	NEW MEDOMAK	T BEAM	No
WALDOBORO	2905	WAGNER #2	SLAB	No
WALDOBORO	5078	WINSLOWS MILLS	SLAB	No
WALES	0012	DENNISON BRIDGE	STRINGER	No
WALES	3239	DEAD BROOK	ARCH	No
WALES	2185	COUNTY	SLAB	No
WALLAGRASS	2815	STRIP	RIGID FRAME	No
WALLAGRASS	3901	SOLDIER POND	STRINGER	No
WALLAGRASS	2909	WALLAGRASS	T BEAM	No
WALTHAM	3238	JONES	STRINGER	No
WALTHAM	3231	WEBB BROOK	T BEAM	No
WARREN	3447	STARRET	STRINGER	No
WARREN	3612	VILLAGE	STRINGER	No
WARREN	3785	KALLOCK	SLAB	No
WARREN	6052	W BR OYSTER RIVER	STRINGER	No
WARREN	5611	WATTONS MILL	ARCH	No
WARREN	3784	FULLER	CULVERT	No
WASHBURN	5458	CLAYTON BROOK	CULVERT	No
WASHBURN	5250	KENNARD BROOK	CULVERT	No
WASHBURN	3630	CHURCHILL BROOK	CULVERT	No
WASHBURN	3703	BRIDGE STREET	T BEAM	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
WASHINGTON	2088	BOWMAN	T BEAM	No
WASHINGTON	0578	SKIDMORE BR.	STRINGER	No
WASHINGTON	3930	LITTLE MEDOMAK	SLAB	No
WASHINGTON	2541	MEDOMAK	T BEAM	No
WASHINGTON	3929	FARRAR	ARCH	No
WASHINGTON	2768	SIDMILL	SLAB	No
WASHINGTON	3073	BRANCH	T BEAM	No
WATERBORO	2807	STINSON	T BEAM	No
WATERBORO	3829	CARPENTER	CULVERT	No
WATERBORO	3876	JOHNSONS MILL	ARCH	Yes
WATERBORO	3830	SCHOOL	SLAB	No
WATERFORD	0746	FISK ROAD	STRINGER	No
WATERFORD	0747	WATSONS	SLAB	Yes
WATERFORD	0748	FISK ROAD	STRINGER	No
WATERFORD	0779	MILLBROOK BR	SLAB	No
WATERFORD	5192	HORRS	STRINGER	No
WATERFORD	5097	BEAR BROOK	SLAB	No
WATERFORD	3797	KNIGHTLY	STRINGER	No
WATERFORD	3245	BEAR POND	T BEAM	No
WATERFORD	5522	MUTINY BROOK	SLAB	No
WATERFORD	5193	DURGIN MILL	STRINGER	No
WATERVILLE	3121	GILMAN STREET	STRINGER	No
WATERVILLE	2854	TICONIC	STRINGER	No
WATERVILLE	3650	COLBY COLLEGE UNDERPASS	GIRDER-FLR B	No
WATERVILLE	0495	OVERPASS	GIRDER-FLR B	No
WATERVILLE	3836	WESTERN AVENUE	STRINGER	No
WATERVILLE	3164	HOLLAND	ARCH	No
WAYNE	2624	NORTH WAYNE	T BEAM	No
WAYNE	3227	MAIN ST	T BEAM	No
WAYNE	5550	HALES BROOK	CULVERT	No
WEBSTER PLT	5116	MATTAGODUS	T BEAM	No
WEBSTER PLT	3808	PATCH	SLAB	No
WELD	5066	WELD	T BEAM	No
WELD	5528	EAST BROOK NO 2	SLAB	No
WELD	5359	CHASE BROOK	SLAB	No
WELD	5588	ROBERTSON	SLAB	No
WELD	0395	BUKER BR	CULVERT	No
WELD	5361	HOUGHTON BROOK	SLAB	No
WELD	5362	BOWLEY BROOK	SLAB	No
WELD	3656	LORENZO ROBERTSON	SLAB	No
WELD	2045	BATCHELDER BROOK	SLAB	No
WELD	3109	FOSTER	T BEAM	No
WELLINGTON	3477	ROBINSON	SLAB	No
WELLINGTON	3794	BUSSELL	SLAB	No
WELLS	5338	MERRILAND RIDGE BRIDGE	STRINGER	No
WELLS	3091	BRANCH BROOK	CULVERT	No
WELLS	3199	HIGH PINE CROSSING	RIGID FRAME	No
WELLS	2468	LITTLE RIVER	SLAB	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
WELLS	1326	MERRILAND RIVER BRIDGE	ARCH	No
WELLS	1255	CLARK BR	CULVERT	No
WELLS	1321	WEBHANNET BRANCH	CULVERT	No
WELLS	1320	WEBHANNET RIVER	CULVERT	No
WELLS	2693	PUMPING STATION	SLAB	No
WELLS	3916	LEWIS WEST	CULVERT	No
WELLS	1478	B&M RR OVERPASS SB	STRINGER	No
WELLS	1323	WELLS SANFORD RD NB	STRINGER	No
WELLS	1322	B&M RR OVERPASS NB	STRINGER	No
WELLS	2107	BUFFAM	SLAB	No
WELLS	1325	BURNT MILL RD	STRINGER	No
WELLS	3844	BERT WELLS	SLAB	No
WELLS	5337	B&M RR UNDERPASS	GIRDER-FLR B	Yes
WELLS	2126	CAPELL	T BEAM	No
WELLS	1324	WELLS INTERCHANGE NB	STRINGER	No
WELLS	1319	LITTLEFIELD RD	STRINGER	No
WELLS	3771	SKINNER	STRINGER	No
WELLS	1318	TATNIC RD	STRINGER	No
WELLS	3175	ISLAND LEDGE ROAD	STRINGER	No
WELLS	1479	MTPK(SB)/WELLS-SANFORD	STRINGER	No
WELLS	1480	WELLS INTERCHANGE SB	STRINGER	No
WELLS	3915	CHARLES WEST	SLAB	No
WELLS	3765	BOURNE AVENUE	STRINGER	No
WELLS	0821	BUFFAM (OLD)	SLAB	Yes
WELLS	1328	BRANCH RIVER	CULVERT	No
WELLS	1327	COLES HILL RD	STRINGER	No
WESLEY	6289	BIG NEW STREAM	SLAB	No
WEST FORKS	2241	DURGIN BROOK	CULVERT	No
WEST FORKS	1079	DURGIN BROOK	STRINGER	No
WEST GARDINER	0548	ROUTE 126	STRINGER	No
WEST GARDINER	0549	GARDINER INTERCHANGE	STRINGER	No
WEST GARDINER	0550	HIGH STREET	STRINGER	No
WEST GARDINER	1500	COBBOSSEECONTEE STREAM	STRINGER	No
WEST GARDINER	2165	COLD STREAM	T BEAM	No
WEST GARDINER	5200	CURTIS BROOK	CULVERT	No
WEST GARDINER	2112	BURNHAM	STRINGER	No
WEST PARIS	5091	WEST PARIS	SLAB	No
WEST PARIS	2015	ANDREWS BRIDGE	T BEAM	No
WEST PARIS	3575	TRAP CORNER	T BEAM	No
WEST PARIS	2582	MOOSE POND BROOK	SLAB	No
WESTBROOK	0330	CUMBERLAND ST UNDERPASS	GIRDER-FLR B	No
WESTBROOK	3987	LITTLE	CULVERT	No
WESTBROOK	5751	JOHNSONS	T BEAM	No
WESTBROOK	1519	CUMBERLAND MILLS WEST	STRINGER	No
WESTBROOK	0331	BROWN ST. UNDERPASS	GIRDER-FLR B	No
WESTBROOK	3467	MILL BROOK	CULVERT	No
WESTBROOK	5490	CUMBERLAND MILLS EAST	STRINGER	No
WESTFIELD	5037	PRESTILE STREAM	T BEAM	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
WESTFIELD	2970	YOUNGS BROOK	SLAB	No
WHITEFIELD	3831	ALBEE	T BEAM	No
WHITEFIELD	5460	JEWETT	CULVERT	No
WHITEFIELD	3395	NORTHY BRIDGE	GIRDER-FLR B	No
WHITEFIELD	2650	PARTRIDGE	RIGID FRAME	Yes
WHITEFIELD	5198	HICKEY	CULVERT	No
WHITEFIELD	5197	ALBEE SCHOOLHOUSE	CULVERT	No
WHITEFIELD	5363	CLARYS	SLAB	No
WHITEFIELD	2175	COOPERS MILLS	T BEAM	No
WHITING	2194	NEW CRANE	STRINGER	No
WHITING	2091	BOYNTON & ESTY	T BEAM	No
WHITING	5515	OLD CRANE	T BEAM	No
WHITNEYVILLE	3462	MACHIAS RIVER	STRINGER	No
WHITNEYVILLE	1515	MACHIAS RIVER RACEWAY #2	STRINGER	No
WHITNEYVILLE	5374	GREAT BROOK	SLAB	No
WHITNEYVILLE	1514	MACHIAS RIVER RACEWAY #1	CULVERT	No
WHITNEYVILLE	2217	DAN HILL	SLAB	No
WILLIAMSBURG	0916	WHETSTONE BRIDGE NORTH	RIGID FRAME	No
WILLIAMSBURG TWP.	5122	WHETSTONE SOUTH	SLAB	No
WILLIMANTIC	2317	GOODELL	STRINGER	No
WILLIMANTIC	2995	EARLEYS	STRINGER	No
WILLIMANTIC	3052	SEARS	STRINGER	No
WILLIMANTIC	2023	ARNOLD	TRUSS	No
WILLIMANTIC	3051	MONSON STREAM	ARCH	No
WILTON	2116	BUTTERFIELD	STRINGER	No
WILTON	0439	CANAL ST. BR.	GIRDER-FLR B	No
WILTON	0429	UNDERPASS	GIRDER-FLR B	No
WILTON	6379	LIBRARY ACCESS	STRINGER	No
WILTON	2102	BRIDGES	STRINGER	No
WILTON	0436	DRYDEN	STRINGER	No
WILTON	2813	STONY BROOK	SLAB	No
WILTON	3682	RAND	CULVERT	No
WILTON	2484	LOWER MILL	T BEAM	No
WILTON	2341	HALL	SLAB	No
WILTON	0430	WILSON POND STR. BRIDGE	STRINGER	No
WINDHAM	2939	WHITES	CULVERT	No
WINDHAM	2787	SOUTH WINDHAM	T BEAM	No
WINDHAM	2315	GLANTZ	SLAB	No
WINDHAM	5298	ANDERSON	STRINGER	No
WINDHAM	0266	GAMBO FALLS BR	TRUSS	Yes
WINDHAM	3059	INKHORN	CULVERT	No
WINDHAM	0234	JONES	STRINGER	No
WINDHAM	5061	DOLES	SLAB	No
WINDHAM	0302	BLACK BROOK BR	STRINGER	No
WINDHAM	3018	LOVEITT	STRINGER	No
WINDSOR	3611	COLBURN	SLAB	No
WINDSOR	5541	BARTON BROOK	ARCH	No
WINDSOR	5543	MAXCYS	SLAB	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
WINDSOR	3803	SAMPSON	ARCH	No
WINDSOR	3249	YORK	STRINGER	No
WINN	2737	SALMON BROOK	SLAB	No
WINSLOW	3228	MILE BROOK	GIRDER-FLR B	No
WINSLOW	3710	SHODDY HOLLOW	RIGID FRAME	No
WINSLOW	2362	HAYDEN	SLAB	No
WINSLOW	0511	MAST BRIDGE	ARCH	No
WINSLOW	0509	FISH	CULVERT	No
WINTER HARBOR	3240	MILL STREAM	SLAB	No
WINTERPORT	5487	CLEMENT	ARCH	No
WINTERPORT	5655	CONANT STREAM	CULVERT	No
WINTERPORT	1143	B&ARR/RIVER RD & MARSH R.	GIRDER-FLR B	Yes
WINTERPORT	3342	LEWIS WHITE	SLAB	No
WINTERPORT	3344	TIBBETTS	STRINGER	No
WINTERPORT	3634	PLUMMER	SLAB	No
WINTERPORT	2606	NEW ROAD	SLAB	No
WINTHROP	5521	RTE US202 OVER MCRR	STRINGER	No
WINTHROP	5729	NEW MILL STREAM	CULVERT	No
WINTHROP	2567	MILL STREAM	SLAB	No
WISCASSET	2607	NEW ROAD	SLAB	No
WOODLAND	3705	EDDY	T BEAM	No
WOODLAND	3826	DEADWATER BROOK BRIDGE	CULVERT	No
WOODSTOCK	1516	ANDREWS #2	SLAB	Yes
WOODSTOCK	3590	ANDREWS	CULVERT	Yes
WOODSTOCK	3604	DAVIS	RIGID FRAME	No
WOODSTOCK	2992	SANBORN	SLAB	No
WOODSTOCK	2722	ROBBINS	SLAB	No
WOODVILLE	5595	BIG EBHORSE	ARCH	No
WOODVILLE	5596	LITTLE EBHORSE	CULVERT	No
WOOLWICH	3197	DYKE	CULVERT	No
WOOLWICH	0987	NEQUASSET OVER MCRR	GIRDER-FLR B	No
WOOLWICH	1013	REED STREET	STRINGER	No
WOOLWICH	2577	MONTSWEAG FARM	SLAB	No
WOOLWICH	1012	MDOT RR OVER	STRINGER	No
WOOLWICH	0986	HEDGE	CULVERT	No
WOOLWICH	5399	ARROWSIC RD OVERPASS	STRINGER	No
WOOLWICH	3039	STATION 46	STRINGER	No
WOOLWICH	0985	HAWTHORNE BK	STRINGER	No
WOOLWICH	2601	OLD NEQUASSET	T BEAM	No
WOOLWICH	0983	J. BAILEY BR	CULVERT	No
WOOLWICH	0994	NEQUASSET BROOK	STRINGER	No
WYMAN TWP. (T4 R3	5342	STONEY BROOK	STRINGER	No
YARMOUTH	5230	MAIN STREET	T BEAM	Yes
YARMOUTH	5635	ELLIS C. SNODGRASS MEM.	STRINGER	No
YARMOUTH	5444	NORTH ELM	GIRDER-FLR B	No
YARMOUTH	5229	EAST MAIN ST. BRIDGE	T BEAM	No
YARMOUTH	6135	LITTLE JOHNS ISLAND	GIRDER-FLR B	No
YARMOUTH	3416	DAVIS LANDING	SLAB	No

Master List of Surveyed Bridges and Recommendations

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
YARMOUTH	3313	MCRR CROSSING	TRUSS	No
YARMOUTH	2272	FALLS BRIDGE	ARCH	Yes
YARMOUTH	0338	HODSON	SLAB	No
YARMOUTH	0210	OVERPASS	TRUSS	Yes (Relocated)
YARMOUTH	3983	COTTON MILL	STRINGER	No
YARMOUTH	3800	ROYAL RIVER	STRINGER	No
YORK	1308	YORK RIVER SB	STRINGER	No
YORK	5176	PASSACONWAY	T BEAM	No
YORK	3223	CHASES POND	SLAB	No
YORK	3096	SEWALLS	STRINGER	Yes
YORK	2715	RICES	STRINGER	No
YORK	2127	CAPE NEDDICK	SLAB	No
YORK	2393	ICE POND	SLAB	No
YORK	3592	CLARKS	STRINGER	No
YORK	6227	YORK RIVER NB	STRINGER	No
YORK	1313	JOSIAS RIVER	CULVERT	No
YORK	1311	CAPE NEDDICK RIVER	CULVERT	No
YORK	2469	LITTLE RIVER	CULVERT	No
YORK	3500	BARRELL	STRINGER	No

Section V. National Register Listed/Eligible Historic Bridges

As of August 2004, **136** existing National Register-listed or eligible bridges had been identified.

Bridge Ownership

Of the 136 identified Listed or Eligible bridges, ownership of the bridges is as follows:

State	78
Municipal	17
Federal	16 *15 in Acadia NP; 1 at Portsmouth Naval Ship Yard)
Private	1
Railroad	19
Joint Ownership (Maine-Canada)	2
Joint Ownership (Maine-NH)	3

Number of Listed/Eligible Bridges by Type

The 136 Listed or Eligible historic bridges include the following bridge types:

Bridge Type	Number of Listed/Eligible Examples in Survey
Stone Slab	4
Stone Arch	9
Reinforced Concrete Deck Arch	16
Reinforced Concrete Open Spandrel Arch	1
Reinforced Concrete Thru Arch	3
Steel Thru Arch	1
Wood Thru Truss (Covered)	7
Steel Thru Truss	22
Steel Pony Truss	2
Steel Deck Truss	4
Steel Swing Span	4
Steel Vertical Lift	2
Suspension	3
Steel Stringer	7
Steel Girder-Floorbeam	22
Reinforced Concrete Slab	4
Reinforced Concrete T Beam	6
Reinforced Concrete Thru Girder	1
Reinforced Concrete Box Culvert	1
Reinforced Concrete Rigid Frame	17

Listed/Eligible Bridges in Alphabetical Town Order

TOWN NAME	BRIDGE NAME	BRIDGE#	BRIDGE TYPE
ALNA	DOCK	3284	TRUSS
ANDOVER	LOVEJOY	1001	TRUSS
ARROWSIC	MAX L. WILDER MEMORIAL	2026	TRUSS
ARROWSIC	BACK RIVER	3016	TRUSS
ASHLAND	B&ARR/SA5&ARO R RR#A44.74	0159	TRUSS
AUBURN	SOUTH BRIDGE	3330	TRUSS
AUGUSTA	MEMORIAL	5196	TRUSS
AUGUSTA	WATER STREET	0563	ARCH
AUGUSTA	WATER ST BR. UNDERPASS	0564	GIRDER-FLR B
AUGUSTA	RIGGS	2719	ARCH
BAR HARBOR	KEBO BROOK (NPS# 018P)	0469	ARCH
BAR HARBOR	OVERPASS(WEST ST-NPS#010P	0472	ARCH
BAR HARBOR	EAGLE LAKE RD (NPS #01255	0458	ARCH
BAR HARBOR	MOUNTAIN RD	0471	ARCH
BAR HARBOR	RTE #3 OVERPASS (NPS 0060	5380	RIGID FRAME
BAR HARBOR	OVERPASS (NPS 1700-002P)	0470	ARCH
BIDDEFORD	ELM ST BR	1351	TRUSS
BINGHAM	TOM COLLINS	2845	GIRDER-FLR B
BLUE HILL	VILLAGE	2893	SLAB
BLUE HILL	BLUE HILL FALLS	5038	ARCH
BRIDGTON	SANDY CREEK	3966	RIGID FRAME
BRISTOL	HERBERT	0633	STRINGER
BRISTOL	ARCH BRIDGE	0619	ARCH
BRUNSWICK	FREE / BLACK	0323	TRUSS
BRUNSWICK	FRANK J. WOOD (ANDROSCOG)	2016	TRUSS
BUXTON	WEST BUXTON	3340	TRUSS
CAMBRIDGE	PARKMAN/FERGUSON STREAM	2276	RIGID FRAME
CARIBOU	AROOSTOOK RIVER	5572	TRUSS
CHINA	BRANCH MILLS	2096	SLAB
COLUMBIA FALLS	PLEASANT RIVER	2674	T BEAM
CORINTH	ROBYVILLE	1003	TRUSS
DEER ISLE	DEER ISLE SEDGWICK	3257	SUSPENSION
DURHAM	DURHAM	3334	TRUSS
EAST MACHIAS	POPE MEMORIAL	2682	ARCH
ELLSWORTH	GRAHAM LAKE DAM BRIDGE	0463	T BEAM
FALMOUTH	MILL CREEK	2560	ARCH
FORT KENT	INTERNATIONAL	2398	TRUSS
FRANKFORT	B&ARR/TW & BROOK RR#14.58	1132	GIRDER-FLR B
FRANKFORT	B&ARR / MONROE RD RR#1603	1130	STRINGER
FRANKFORT	B&ARR / TOWN WAY RR#15.61	1136	STRINGER
FREEPORT	RR CROSSING	3172	RIGID FRAME
FRYEBURG	HEMLOCK	1004	TRUSS
FRYEBURG	CHARLES RIVER	2151	GIRDER-FLR B
GARDINER	NEW MILLS	2605	TRUSS
GILEAD	ANDROSCOGGIN R	5084	TRUSS
HALLOWELL	WATER STREET	5391	GIRDER-FLR B
HALLOWELL	VAUGHAN MEM. BR.	0490	ARCH

Listed/Eligible Bridges in Alphabetical Town Order

TOWN NAME	BRIDGE NAME	BRIDGE#	BRIDGE TYPE
HALLOWELL	SECOND ST BR	0565	GIRDER-FLR B
HAMPDEN	B&ARR#27.731PAPER MILL RD	3526	GIRDER-FLR B
HARPSWELL	BAILEY ISLAND BRIDGE	2033	T BEAM
HARRISON	RYEFIELD BRIDGE	0238	TRUSS
HARTLAND	WATER STREET	1097	SLAB
HERMON	B&ARR/HAMOND&MCR	5420	GIRDER-FLR B
HOLLIS	BAR MILLS	3333	TRUSS
HOLLIS	CANAL	1525	TRUSS
HOULTON	OLD IRON	2629	RIGID FRAME
HOWLAND	PISCATAQUIS	3040	TRUSS
KINGFIELD	CENTENNIAL	5852	ARCH
KITTERY	BADGER ISLAND	2031	STRINGER
KITTERY	SARAH MILDRED LONG	3641	TRUSS
KITTERY	MEMORIAL BRIDGE	2546	TRUSS
KITTERY	VIADUCT	5276	GIRDER-FLR B
KITTERY	NAVY YARD ENT.	1357	GIRDER-FLR B
LEBANON	EAST ROCHESTER	2257	ARCH
LEEDS	NORTH TURNER EAST	3214	TRUSS
LEWISTON	CHESTNUT STREET	5003	ARCH
LINCOLN PLT	BENNETT	1005	TRUSS
LITTLETON	WATSON COVERED	1006	TRUSS
MACWAHOC PLT	KINGMAN ROAD	5021	T BEAM
MADAWASKA	INTERNATIONAL	2399	TRUSS
MECHANIC FALLS	MECHANIC FALLS	2540	RIGID FRAME
MILBRIDGE	GREAT SOUTH	1475	GIRDER-FLR B
MILO	MEADOW	0965	ARCH
MILO	MILO WEST OPENING	2573	ARCH
MT DESERT	BRIDGE (NPS # 031P)	0467	RIGID FRAME
MT DESERT	CARRIAGE RD BR (NPS#004P)	0478	RIGID FRAME
MT DESERT	BRIDGE 1	0466	RIGID FRAME
MT DESERT	OTTER CREEK (NPS # 019P)	0475	ARCH
MT DESERT	OVERPASS(NPS#0265)	0559	ARCH
MT DESERT	BRIDGE (NPS # 030P)	0479	RIGID FRAME
MT DESERT	OVERPASS	0459	ARCH
MT DESERT	RICHARDSON BROOK	5042	SLAB
MT DESERT	OVERPASS(NPS #0055)	0477	ARCH
MT DESERT	BRIDGE (NPS # 032P)	0468	RIGID FRAME
NAPLES	SONGO LOCK DRAW	2780	GIRDER-FLR B
NEW PORTLAND	CARABASSET	5131	ARCH
NEW PORTLAND	WIRE BRIDGE	3383	SUSPENSION
NEW SHARON	NEW SHARON BRIDGE	2608	TRUSS
NEWRY	ARTIST COVERED	1007	TRUSS
NORRIDGEWOCK	COVERED	2187	ARCH
PARSONSFIELD	PORTER COVERED	1010	TRUSS
PEMBROKE	ARCH BRIDGE	2021	ARCH
PHILLIPS	LOWER VILLAGE	5063	ARCH
PORTLAND	CLARK ST. OVERPASS	0328	ARCH

TOWN NAME	BRIDGE NAME	BRIDGE#	BRIDGE TYPE
PORTLAND	DANFORTH ST CROSSING	3525	RIGID FRAME
PORTLAND	ST JOHN ST UNDERPASS	0327	TRUSS
PORTLAND	PARK AVE UNDERPASS	0326	GIRDER-FLR B
PROSPECT	WALDO HANCOCK	3008	SUSPENSION
RICHMOND	MAINE KENNEBEC	2506	TRUSS
RUMFORD	HARTFORD ST. BRIDGE	3638	ARCH
RUMFORD	MORSE	2585	ARCH
RUMFORD	CHISHOLM PARK	2990	ARCH
RUMFORD	MARTIN MEMORIAL (RUMF.PT)	3248	TRUSS
SACO	JAMES ST BR	1355	GIRDER-FLR B
SACO	SOMESVILLE BRIDGE	3412	STRINGER
SACO	WHARF ST BR	1353	STRINGER
SACO	COMMON ST BR	1354	GIRDER-FLR B
SACO	BEACH ST BR	1364	GIRDER-FLR B
SACO	OLD ORCHARD RD BR	1365	GIRDER-FLR B
SACO	FRONT ST BR	1352	GIRDER-FLR B
SALEM TWP	MILL POND	2565	TRUSS
SANFORD	BRIDGE ST	1358	ARCH
SANFORD	JELLISON BRIDGE	1302	STRINGER
SOUTH PORTLAND	VETERANS MEMORIAL	3945	GIRDER-FLR B
SOUTHPORT	SOUTHPORT	2789	TRUSS
STOCKTON SPRINGS	B & A RR #07.51/TW	5388	GIRDER-FLR B
STOW	LITTLE COLD RIVER	3581	RIGID FRAME
STRONG	MCLEARY BR.	0403	CULVERT
THOMASTON	WADSWORTH STREET	2904	TRUSS
TOPSHAM	MILL RD OVERPASS	0999	STRINGER
TURNER	NORTH TURNER WEST	1474	TRUSS
UNION	YOUNGS	2971	RIGID FRAME
VASSALBORO	SEVEN MILE BROOK	3657	GIRDER-FLR B
VASSALBORO	LEIGH	2454	T BEAM
WATERBORO	JOHNSONS MILL	3876	ARCH
WATERFORD	WATSONS	0747	SLAB
WELLS	BUFFAM (OLD)	0821	SLAB
WELLS	B&M RR UNDERPASS	5337	GIRDER-FLR B
WHITEFIELD	PARTRIDGE	2650	RIGID FRAME
WINDHAM	GAMBO FALLS BR	0266	TRUSS
WINTERPORT	B&ARR/RIVER RD & MARSH R.	1143	GIRDER-FLR B
WOODSTOCK	ANDREWS	3590	CULVERT
WOODSTOCK	ANDREWS #2	1516	SLAB
YARMOUTH	FALLS BRIDGE	2272	ARCH
YARMOUTH	MAIN STREET	5230	T BEAM
YORK	SEWALLS	3096	STRINGER

Listed/Eligible Bridges by Type

Stone Slab

Town	Bridge#/Name	Date	Contributing to HD ?	Owner	Notes
Hartland	1097/Water Street	ca. 1925	No	Municipal	Significant example of type.
Mt. Desert	5042/Richardson Brook	ca.1930	No	State	Significant for association with development of Acadia NP
Strong	0403/McLeary	ca.1879	No	State	Significant for association with narrow-gauge logging railroad (Sandy River RR).
Waterford	0747/Watsons	1890	Yes	Municipal	Individually eligible example of type, also contributing to a potential historic district.

Stone Arch

Town	Bridge#/Name	Date	Contributing to HD ?	Owner	Notes
Augusta	2719/Riggs	ca.1900	No	State	Significant example of a stone arch.
Augusta	0563/Water St.	1854	No	Municipal	Oldest stone arch Identified.
Bristol	0619/Arch	Unknown	No	Municipal	NR-listed, 2003.
Falmouth	2560/Mill Creek	1894	No	State	Significant example of stone arch.
Hallowell	0490/Vaughan Memorial	1905	No	Municipal	Very fine example, good aesthetics.
Milo	0965/Meadow	ca. 1895	No	Municipal	Built by B&A RR.
Pembroke	2021/Arch Bridge	1894	No	Municipal	An excellent example.
Portland	0328/Clark St. Overpass	ca.1873	No	State	Fine example of a stone arch; historically associated with Boston & Maine RR development of Portland terminal.
Sanford	1358/Bridge St.	1903	No	Municipal	Representative example of type.

Reinforced Concrete Deck Arch

Town	Bridge#/Name	Date	Contributing to HD ?	Owner	Note
Bar Harbor	0469/Kebo Brook	1938	Yes	Federal	Acadia NP Roads & Bridges.
Bar Harbor	0470/Overpass	1938	Yes	Federal	Acadia NP Roads & Bridges.
Bar Harbor	0471/Mountain Rd. Underpass	1951	Yes	Federal	Acadia NP Roads & Bridges.
Bar Harbor	0472/Overpass	1953	Yes	Federal	Acadia NP Roads & Bridges.
Bar Harbor	0458/Eagle Lake Rd.	1928	Yes	Federal	NR Listed. Acadia Carriage Paths/Bridges & Gatehouses.
East Machias	2682/Pope Memorial	1902	Yes	State	Contributes to NR Listed East Machias HD. Oldest r.c. arch bridge in state.
Kingfield	5852/Centennial	1916	Yes	State	Only ribbed closed spandrel arch identified. Contributes to potential historic district.
Lebanon	2257/East Rochester	1945	No	State-NH	Representative example of its type with stone veneer.
Milo	2573/West Opening	1915	No	State	Complete, early extant example of its type
Mt. Desert	0559/Overpass	1933	Yes	Federal	NR Listed. Acadia Carriage Paths/Bridges & Gatehouses.
Mt. Desert	0475/Otter Creek	1938	Yes	Federal	Acadia NP Roads & Bridges.
New Portland	5131/Carabasset	1923		State	Significant example of its type representing an early MSHC design.
Phillips	5063/Lower Village	1927	No	State	Representative example of its type.
Rumford	3638/Hartford St.	ca.1915	No	Municipal	Significant example of its type/design.
Waterboro	3876/Johnsons Mill	1920	Yes	State	Contributing to Johnson Mill complex.
Yarmouth	2272/Falls Bridge	1930	No	State	Representative example of its type.

Reinforced Concrete Thru Arch

Town	Bridge#/Name	Date	Contributing to HD ?	Owner	Notes
Blue Hill	5038/Blue Hill Falls	1926	No	State	A stunning bridge in a stunning setting. Significant example of its type/design.
Lewiston	5003/Chestnut St.	1927	Yes	State	Significant example of its type/design, and contributing to Bates Mill complex.
Norridgewock	2187/Covered	1928	No	State	Significant example of its type/design. Noteworthy design by MSHC.

Reinforced Concrete Open Spandrel Arch

Town	Bridge#/Name	Date	Contributing to HD ?	Owner	Notes
Rumford	2990/Chisolm Park	1929	No	State	Significant as the state s only open spandrel arch bridge. Fine example of the work of the MSHC.

Steel Thru Arch

Town	Bridge#/Name	Date	Contributing to HD ?	Owner	Notes
Rumford	2585/Morse	1935	No	State	Only example of its type/design. Significant New Deal era accomplishment of the MSHC.

Wood Thru Truss (Covered)

Town	Bridge#/Name	Date	Contributing to HD ?	Owner	Notes
Andover	1001/Lovejoy	1868	No	State	Paddleford truss design, unique to northern New England. NR-listed.
Corinth	1003/Robyville	1876	No	State	Rare Long truss design. NR-listed.
Fryeburg	1004/Hemlock	1857	No	State	Paddleford truss design, unique to northern New England. NR-listed.

Lincoln Plt.	1005/Bennett	1898	No	State	Paddleford truss design, unique to northern New England. NR-listed.
Littleton	1006/Watson Covered	1911	No	Municipal	Only Howe thru truss. NR-listed.
Newry	1007/Artists Covered	1872	No	State	Paddleford truss design, unique to northern New England. NR-listed.
Parsonfield	1010/Porter Covered	1889	No	Municipal	Paddleford truss design, unique to northern New England. NR-listed.

Steel Thru Truss

Town	Bridge#/Name	Date	Contributing to HD ?	Owner	Notes
Arrowsic	2026/Max Wilder	1950	No	State	A very successful cantilever truss bridge named for Max Wilder, state bridge engineer.
Auburn	3330/South Bridge	1937	No	State	Significant example of riveted Warren thru truss.
Biddeford	1351/Elm Street	1928	No	Railroad	Significant example of riveted Baltimore thru truss. Associated with Saco-Biddeford grade separation of Boston & Maine RR.
Brunswick	0323/Free Black	1909	No	Municipal	Unusual double-deck design built by Maine Central RR. Riveted Baltimore thru trusses with suspended lower deck.
Brunswick	2016/Frank J. Wood	1932	Yes	State	Contributing to Brunswick Topsham Industrial historic district.
Buxton	3340/West Buxton	1937	Yes	State	Significant continuous riveted Warren thru truss design. Also contributing to potential W. Buxton HD.
Durham	3334/Durham	1937	No	State	Significant continuous riveted Warren thru truss design.
Fort Kent	2398/International	1929	No	State-Canada	Significant riveted Pennsylvania thru truss design by MSHC.
Gardiner	2605/New Mills	1908	No	State	Former electric railway bridge. Significant riveted Warren thru truss design.

Gilead	5084/Androscoggin R.	1921	No	State	Significant example of riveted Camelback thru truss design.
Harrison	0238/Ryefield	1912	No	Municipal	Significant double-intersection Warren truss design. Only example identified.
Hollis	1525/Canal	1937	No	State	Riveted Warren thru truss significant because built in association with #3333.
Hollis	3333/Bar Mills	1937	No	State	Significant continuous riveted Warren thru truss design.
Howland	3040/Piscataquis	1929	No	State	Significant example of riveted Pennsylvania thru truss design by MSHC.
Leeds	3214/N. Turner East	1936	No	State	Significant example of riveted Camelback thru truss. 1 of 2 bridges in row at this crossing.
Madawaska	2399/International	1921	No	State-Canada	Significant example of riveted Pennsylvania thru truss design. Early project of the MSHC with significant impact on the region.
New Sharon	2608/New Sharon	1916	No	Municipal	The state s last big pin-connected truss highway bridge. Pennsylvania design.
Portland	0327/St. John St. Underpass	1890	No	Railroad	A very early and significant riveted Baltimore truss design fabricated by the Boston Bridge Works.
Rumford	3248/Martin Memorial	1955	Yes	State	Contributing to potential Rumford Pt. HD.
Salem Twp.	2565/Mill Pond	1929	No	State	Significant example of riveted Pratt truss design by the MSHC.
Thomaston	2904/Wadsworth St.	1925	No	State	Significant as former (non-operable) rolling counterweight bascule. Only example identified.
Turner	1474/North Turner West	1936	No	State	Significant example of riveted Parker thru truss. 1 of 2 bridges at crossing.

Steel Pony Truss

Town	Bridge#/Name	Date	Contributing to HD ?	Owner	Notes

Alna	3284/Dock	1936	Yes	State	Contributing to Alna Rural historic district. Riveted Warren pony truss.
Windham	0266/Gambo Falls	1912	No	Municipal	Significant example of riveted Warren pony truss.

Steel Deck Truss

Town	Bridge#/Name	Date	Contributing to HD ?	Owner	Notes
Ashland	0159/B&A RR MP.44.74	1902	No	Railroad	Excellent example of pin-connected Pratt deck truss for railroad loadings.
Arrowsic	3016/Back River	1933	No	State	Distinctive example of riveted Pratt deck truss design by MSHC.
Augusta	5196/Memorial	1949	No	State	Significant example of cantilever truss design by MSHC. 1 of 3 in state.
Caribou	5572/Aroostook River	1952	No	State	Significant example of cantilever truss design by MSHC. 1 of 3 in state.

Steel Swing Span

Town	Bridge#/Name	Date	Contributing to HD ?	Owner	Notes
Millbridge	1475/Great South	1936	No	State	Centerbearing with girder-floorbeam superstructure. Significant example of its type.
Naples	2780/Songo Lock Draw	1901	No	State	Oldest identified operable movable bridge. Girder-floorbeam superstructure.
Richmond	2506/Maine Kennebec	1931	No	State	Centerbearing with thru truss superstructure. Significant example of its type/design.
Southport	2789/Southport	1939	No	State	Centerbearing with thru truss superstructure. Significant example of its type/design.

Steel Vertical Lift

Town	Bridge#/Name	Date	Contributing to HD ?	Owner	Notes
Kittery	2546/Memorial	1921	No	State-NH	Significant example of a vertical lift bridges by noted engineer J. A. L. Waddell
Kittery	3641/Sarah Mildred Long	1940	No	State-NH	Significant example of vertical lift bridge with mid-20th-c. details. Moderne-style architectural details.

Suspension

Town	Bridge#/Name	Date	Contributing to HD ?	Owner	Notes
Deer Isle	3257/Deer Isle Sedgwick	1931	No	State	Nationally significant example of its type/design by noted engineer David Steinman.
New Portland	3383/Wire Bridge	ca.1866	No	State	An early and unique example of this important bridge type. Nationall significant. ASCE landmark.
Prospect	3008/Waldo Hancock	1939	No	State	Nationally significant example of its type/design by noted engineer David Steinman.

Steel Stringer

Town	Bridge#/Name	Date	Contributing to HD ?	Owner	Notes
Bristol	0633/Herbert	ca. 1950	Yes	Municipal	Contributing to potential Bristol Mills Historic District.
Kittery	2031/Badger Island	1938	No	State	Significant as an early continuous design by the MSHC.
Saco	3412/Somesville	1937	No	State	Significant as an early continuous design of the MSHC.
Saco	1353/Wharf Street	1928	No	Railroad	Significant in association with the Boston & Maine RR Saco-Biddeford grade separation.
Sanford	1302/Jellison	1920	No	State	Significant as example of steel stringer with concrete jack arch deck.
Topsham	0999/Mill Rd Overpass	1909	No	State	The approach span to the Free Black bridge (#0323).

York	3096/Sewalls	1934	Yes	State	Contributing to York HD. Significant as one of the nation s earliest bridge preservation projects.

Steel Girder-Floorbeam

Town	Bridge#/Name	Date	Contributing to HD ?	Owner	Notes
Augusta	0564/Water Street Underpass	1914	No	State	Significant as the approach span to the MCRR Kennebec River truss bridge.
Frankfort	1136/B&A RR MP 15.61	1905	No	Railroad	Significant for association with the Bangor & Aroostook RR LaGrange-Searsport line.
Frankfort	1130/B&A RR MP 16.03	1905	No	Railroad	Significant for association with the Bangor & Aroostook RR LaGrange-Searsport line.
Frankfort	1132/B&A RR MP 14.58	1905	No	Railroad	Significant example of its type/design built in association with the Bangor & Aroostook RR LaGrange-Searsport line.
Fryeburg	2151/Charles River	1930	Yes	State	Contributing to Potential Fryeburg-Charles River Rural HD.
Hallowell	5391/Water Street	1914	Yes	State	Contributing to Hallowell HD.
Hallowell	0565/Second Street	1930	Yes	State	Contributing to Hallowell HD.
Hampden	3526/B&A RR MP 27.73	1905	No	Railroad	Significant example of its type/design built in association with the Bangor & Aroostook RR LaGrange-Searsport line.
Hermon	5420/B&A RR MP 29.64	1905	No	Railroad	Significant example of its type/design built in association with the Bangor & Aroostook RR LaGrange-Searsport line.
Kittery	5276/Viaduct	1921	No	State	Significant as the approach spans to the Memorial vertical lift bridge (#2546).
Kittery	1357/Navy Yard Entrance	1919	Yes	Federal	Contributing to Portsmouth Navy Yard HD.

Portland	0326/Park Ave Underpass	1890	No	Railroad	Significant example of an early concrete-encased girder built by the Portland Union Railway Station Co.
Saco	1352/Front St	1928	No	Railroad	Significant in association with the Boston & Maine RR Saco-Biddeford grade separation.
Saco	1354/Common St	1928	No	Railroad	Significant in association with the Boston & Maine RR Saco-Biddeford grade separation.
Saco	1355/James St	1928	No	Railroad	Significant in association with the Boston & Maine RR Saco-Biddeford grade separation.
Saco	1365/Old Orchard Rd	1927	No	Railroad	Significant in association with the Boston & Maine RR Saco-Biddeford grade separation.
Saco	1364/Beach St	1928	No	Railroad	Significant in association with the Boston & Maine RR Saco-Biddeford grade separation.
South Portland	3945/Veterans Memorial	1954	No	State	Significant in the context of the development of Portland harbor and an early urban project of the MSHC.
Stockton Springs	5388/B&A RR MP 7.51	1905	No	Railroad	Significant for association with the Bangor & Aroostook RR LaGrange-Searsport line.
Vassalboro	3657/Seven Mile Brook	1940	No	State	Significant example of an early continuous/cantilever design by the MSHC.
Wells	5337/B&M RR Underpass	1920	No	Railroad	Significant in association with development of Boston & Maine RR main line.
Winterport	1143/B&A RR/River Rd	1905	No	Railroad	Significant example of its type/design built in association with the Bangor & Aroostook RR LaGrange-Searsport line.

Reinforced Concrete Slab

Town	Bridge#/Name	Date	Contributing to HD ?	Owner	Notes
Blue Hill	2893/Village	1930	Yes	State	Contributing to Blue Hill HD.
China	2096/Branch Mills	1931	Yes	State	Contributing to Palermo HD.
Wells	0821/Buffam (Old)	1909	No	Municipal	Significant as the oldest identified reinforced concrete slab bridge in state. Built as an early improvement to Boston-Portland post road.
Woodstock	1516/Andrews #2	1938	Yes	State	Contributing to Potential S. Woodstock HD.

Reinforced Concrete T Beam

Town	Bridge#/Name	Date	Contributing to HD ?	Owner	Notes
Columbia Falls	2674/Pleasant River	1920	Yes	State	Contributing to potential Columbia Falls HD.
Ellsworth	0463/Graham Lake Dam Bridge	1922	No	Private	Significant in association with the Graham Lake Dam.
Harpswell	2033/Bailey Island	1926	No	State	Main span is T beam, but approach spans are famous granite cribbage. NR-listed. ASCE landmark.
Macwahoc Plt	5021/Kingman Road	1919	No	State	Significant early example of its type/design by the MSHC.
Vassalboro	2454/Leigh	1918	No	State	Significant early example of its type/design by the MSHC.
Yarmouth	5230/Main Street	1948	No	State	Handsome continuous design by the MSHC.

Reinforced Concrete Thru Girder

Town	Bridge#/Name	Date	Contributing to HD ?	Owner	Notes
Bingham	2845/Tom Collins	1916	No	State	Only complete example of the bridge type.

Reinforced Concrete Box Culvert

Town	Bridge#/Name	Date	Contributing to HD ?	Owner	Notes
Woodstock	3590/Andrews	1938	Yes	State	Contributing to potential S. Woodstock HD.

Reinforced Concrete Rigid Frame

Town	Bridge#/Name	Date	Contributing to HD ?	Owner	Notes
Bar Harbor	5380/Route 3 Overpass	1940	Yes	Federal	Acadia NP Roads & Bridges.
Bridgton	3966/Sandy Creek	1949	No	State	Representative example of its type.
Cambridge	2276/Parkman Rd-Ferguson Stream	1929	No	State	Representative example of its type.
Freeport	3172/RR Crossing	1936	No	State	Representative example of its type.
Houlton	2629/Old Iron	1944	No	State	Significant early continuous multiple span rigid frame bridge by the MSHC. Built as WWII defense project.
Mechanic Falls	2540/Mechanic Falls	1949	No	State	Significant example of its type/design.
Mt Desert	0478/Carriage Rd Bridge	1952	Yes	Federal	Acadia NP Roads & Bridges.
Mt Desert	0479/Bridge NPS 030P	1928	Yes	Federal	Acadia NP Roads & Bridges.
Mt Desert	0477/Bridge NPS 0055	1939	Yes	Federal	NR Listed. Acadia Carriage Paths/Bridges & Gatehouse.
Mt Desert	0468/Bridge NPS 032P	1928	Yes	Federal	Acadia NP Roads & Bridges.
Mt Desert	0467/Bridge NPS 031P	1928	Yes	Federal	Acadia NP Roads & Bridges.
Mt Desert	0466/Bridge1	1928	Yes	Federal	Acadia NP Roads & Bridges.
Mt Desert	0459/Overpass	1932	Yes	Federal	NR Listed. Acadia Carriage Paths/Bridges & Gatehouses.

Portland	3525/Danforth St. Crossing	1939	No	Railroad	Representative example of its type.
Stow	3581/Little Cold River	1938	No	State	Representative example of its type.
Union	2971/Youngs	1917	No	State	Significant as an early low-rise rigid frame by the MSHC.
Whitefield	2650/Partridge	1935	No	State	Significant example of its type/design by the MSHC.

Bridges Recommended Eligible by the MDOT Historic Bridge Inventory (1999-2001) and Later Replaced or Relocated Off System.

TOWN NAME	BRIDGE#	BRIDGE NAME	BRIDGE TYPE	NR RECOMMENDATION
BERWICK	5429	GRANTS RR OVERPASS	TRUSS	Yes (Relocated)
BERWICK	5352	HOBBS RR OVERPASS	TRUSS	Yes (Replaced)
FAIRFIELD	1522	KENNEBEC RIVER CENTER	TRUSS	Yes (Replaced)
FAIRFIELD	3106	KENNEBEC RIVER EAST	TRUSS	Yes (Replaced)
FAIRFIELD	1523	KENNEBEC RIVER WEST	TRUSS	Yes (Replaced)
KENNEBUNK	3597	OVERPASS-SUMMER ST	STRINGER	Yes (Replaced)
HARMONY	1022	BAILEY	TRUSS	Yes (Replaced)
HOULTON	3874	HIGHLAND AVENUE	GIRDER-FLR B	Yes (Replaced)
MT DESERT	0356	UL #1	SLAB	Yes (Replaced)
PARSONSFIELD	2432	KEZAR FALLS	ARCH	Yes (Replaced)
PORTLAND	6015	B ROAD OVERPASS	STRINGER	Yes (Replaced)
PORTLAND	6016	DANFORTH ST. VIADUCT	STRINGER	Yes (Replaced)
SANFORD	1359	WASHINGTON ST BR	ARCH	Yes (Replaced)
YARMOUTH	0210	OVERPASS	TRUSS	Yes (Relocated)

VI. Bibliography

TheThe principal primary historic sources uThe principal primary historic sources usedThe princi
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aa bibliographic field that references prima bibliographic field that references primara bibliogra
specific bridge.

FollowingFollowing is a bibliography of select sources consulted as part of theFollowing is a bibliogr
phase.

Allen, C. K.
1928 Pneumatic Pneumatic Caissons Sealed Pneumatic Caissons Sealed at Record Depths, Using
(Carlton Bridge) Engineering News-Record (March 22, 1928), pp. 484-487.

American Association of State Highway Officials
1931-56 AASHO Standard Specifications. Washington, D.C.

Armco Culvert Manufacturers Assoc.
1945 Handbook of Culvert and Drainage Practice. Chicago.

Barnard, Everett and Wentzel, Phil
1999 NotesNotes onNotes on Discussion with Patrick HarshbargerNotes on Discussion with Patrick Ha
on the Commission s Historic Approach to Bridge Design and Construction.

Barrows, Lucius D.
1937 Direct Direct Initiative Direct Initiative Act in Maine to Prevent Diversion of Highway Direct Initiat
of the American Road Builders Association. Washington, D.C.

Bowman, Waldo G.
1937 Bridgebuilding Down East . Engineering News-Record (July (July 22, 1937), pp. 149-
153.

1937 Bridge Bridge Building Follows Flood . Engineering News-Record (July (July 8, 1937), (July 8,
58.

Brown, Kathi Ann
1989 DiversityDiversity by DDiversity by Design: CeDiversity by Design: Celebrating 75 Yea
Bergendoff, 1914-1989. HNTB/Lowell Press, Kansas City.

Edwards, Llewellyn Nathaniel
1920 Design Design and Construction of Bridge Foundations . PublicPublic Roads (November 1920) pp. 19-25.

1921 Design Design of Design of Foundations for Highway Design of Foundations for Highway Bric Review. (June 8, 1921), pp. 583-587.

1922 Present Present Te Present Tendenci Present Tendencies of Highway Bridge Construction (December 12, 1922), pp. 617-619.

1923 Highway Highway Bridge Highway Bridge Design and Construction . RoadsRoads and Streets (20-24.

1925 Notes Notes on the Inspection of Metal Bridges . The Canadian Engineer (November (Novembe 1925), pp. 567-570.

1959 AA Record of History and Evolution of Early American Bridges. 2nd Ed. 2nd Ed. University Press, Orono.

Engineering & Contracting
1928 Design Design and Construction of Design and Construction of R Design and Constructi Bridge). (September 1928), pp. 451-453.

Engineering News-Record
1938 Tailor-Made Tailor-Made Cofferdams (Sarah Mildred Tailor-Made Cofferdams (Sarah Mildred (August 18, 1938), pp. 207-211.

1947 Building Building the Maine Turnpike . Engineering News-Record (November 27, (November pp. 63-67.

1955 Maine Maine Ends Second Round of Turnpike Build Maine Ends Second Round of Turnp (December 22, 1955), p. 22.

Hayden, Arthur G.
1940 The Rigid-Frame Bridge. New York.

Hool, George A.
1928 Reinforced Concrete Construction. Volume III: Bridges and Culverts. New York.

Hool, George A. and W. S. Kinne
1924 Movable and Long-Span Steel Bridges. New York.

Kennebec Journal
1962 Retired State Bridge Engineer Retired State Bridge Engineer Wilder Dies . Retired State Brid
p. 1.

Maine Department of Transportation
1970 A History of Maine Roads, 1600-1970 . Augusta.

1997 Maine Statewide Historic Bridge Inventory. Final Phase I Survey Plan. Augusta.

Maine Department of Transportation. Bridge Maintenance Section.
1924 Statewide Bridge Inventory. Augusta.

1920-97 Bridge Maintenance Files, Records, and Photos. Augusta.

Maine State Commissioner of Highways
1907-13 Report of the Commissioner of Highways. Augusta.

Maine State Highway Commission
1913-56 Annual Report of the Maine State Highway Commission. Augusta.

Marquis, Albert N., ed.
1927 Who s Who in America. v. 14. New York.

Needles, E. R.
1947 W Work Work Begins on the Maine Turnpike . Engineering News-Record (Jan (January 23
1947), pp. 121-124.

Orcutt, Philip Dana
1934 Maine Maine Recreates Maine Recreates the First Pile Bridge in America (Sewall s Bridge). E
News-Record (November 15, 1934), pp. 616-617.

Plowden, David
1974 Bridges: The Spans of North America. New York.

Robinson, H.D.
1939 Building Building Deer Island-Sedgewick Building Deer Island-Sedgewick Bridge . Building De
6.

Seely, Bruce E.
1987 BuildingBuilding the American HighwayBuilding the American Highway SystemBuilding the
University Press, Philadelphia.

Steinman, D. B. & Gronquist, C. H.
1932 Building Building First Long-Span Bridge Building First Long-Span Bridge in Building First Lon
News-Record (March 17, 1932), pp. 386-389.

Wentzel, Roy A.
1950 Brid Bridge Bridge Maintenance . Unpublished Manuscript by Maine State Bridge
Maintenance Engineer. MDOT. Augusta.

Wilder, Max L.
1937 Letter to Mr. R. E. Mullaney, Public Works Administration. April 6, 1937.

Appendix I
Sample Survey Form

Bridge Types
Truss
Arch
Rigid Frame
Movable
Suspension
Girder-Floorbeam
Culvert

Appendix 2
Sample Survey Form

Bridge Types
Stringer
T Beam
Slab

COMMENT #6

From:	Douglas C. Bennett
To:	Chase, Cassandra (FHWA)
Cc:	Martin, Cheryl (FHWA); Hopkin, Megan M; kitty@historicbridgefoundation.com; Scott Hanson; John Graham; sstern; John Shattuck; lsmith@brunswickme.org; Chamberlain, Kristen; robin k reed; Kittredge, Joel; Frankhauser Jr, Wayne; Kate Willis; Emington, Wayne (FHWA); John Eldridge; Norman Baker; Drozd, Maria (FHWA); stevehinchman@gmail.com; admorris; sebordwell@gmail.com; Nancy BikeMaine.org; Folsom, Jeff; Russell Caroline; Curtis Neufeld (cneufeld@sitelinespa.com); Rod Melanson; Carol Eyerman; Victor Langelo (vlangelo@eclipseservices.com); Richard Cromwell (richcromwell1@gmail.com); Fred Wigand; katzthal@comcast.net; mnaber@achp.gov; david gardner; Pulver, William; steve pelletier; Deb Blum (dblum@brunswickme.org); kirk mohney; Nathan Holth
Subject:	Economic Considerations on the Frank J. Wood Project -- Request for Comments on Section 106 Documents
Date:	Wednesday, November 23, 2016 7:50:55 AM
Attachments:	DCB, Comments on Economic Considerations 16.11.23.pdf

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Cassandra Chase and others involved in the Section 106 consideration of the Frank J. Wood Bridge--

I am forwarding to you for the section 106 comments a column I wrote for the *Brunswick Times Record* on November 11, and a subsequent piece in the *BTR* by John Graham, of the Friends of the Frank J. Wood Bridge on November 22:

http://www.timesrecord.com/news/2016-11-11/Opinion/Bringing_Economics_Into_the_Bridge_Decision.html

http://www.timesrecord.com/news/2016-11-22/Opinion/Adding_Apples_and_Oranges.html

I would add that the cost figures in the column I wrote are not mine but rather those of MDOT, and are drawn from the 10/26/2016 "Matrix of Alternatives Investigated" distributed at the 10/27 meeting of the section 106 process. As I wrote in the first piece, "when MDOT has put forward numbers showing renovation to be a costly proposition, the Friends have challenged the competence and integrity of those making the estimates."

Challenging the competence or integrity of public servants is the right of every citizen under the First Amendment. But it is a serious charge, and I see no reason for others to join them in their aspersions.

This is my home, the country where my heart is;

Here are my hopes, my dreams, my sacred shrine.

But other hearts in other lands are beating,

With hopes and dreams as true and high as mine.

--Lloyd Stone, poet, 1912-93

Cassandra Chase and others involved in the Section 106 consideration of the Frank J. Wood Bridge--

I am forwarding to you for the section 106 comments a column I wrote for the *Brunswick Times Record* on November 11, and a subsequent piece in the *BTR* by John Graham, of the Friends of the Frank J. Wood Bridge on November 22:

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Challenging the competence or integrity of public servants is the right of every citizen under the First Amendment. But it is a serious charge, and I see no reason, presented here or elsewhere, for others to join them in their aspersions.

Douglas C. Bennett
53 Elm Street, Topsham, ME 04086

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2016-11-11 / Opinion

Bringing Economics Into the Bridge Decision

BY DOUG BENNETT
Guest Column

I hope you are paying attention, citizens of Brunswick and Topsham. A federally mandated legal process is playing out in the meeting rooms of our two town halls that could affect the economic viability of many businesses in our towns and affect the taxes we pay as well.

It's a section 106 process. People are speaking on your behalf, and you should know what they are saying.

Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires Federal agencies to take into account the effects of their activities on historic properties. The historic property in question is the Frank J. Wood Bridge, which was constructed in 1932. The question is whether the Maine Department of Transportation can replace the bridge or whether instead it should renovate the bridge.

No one doubts that something needs to be done. Rust is degrading the bridge's structural integrity. Following an inspection this summer, it was posted with a maximum weight of 25 tons. Said Maine Department of Transportation (MDOT), "The inspection team of MaineDOT bridge engineers found rapid deterioration of structural steel which triggered a drop in the ranking of the bridge deck and superstructure from fair condition to poor condition."

Last spring, MDOT announced a plan to replace the bridge. That is when the section 106 process was triggered because replacement of the bridge could have an "adverse impact" on historic properties. An organization, the "Friends of the Frank J. Wood Bridge," was formed to press the case that the bridge is too important, too historic, to discard.

The section 106 process began in July. At a succession of meetings MDOT has laid out its understanding of the condition of the bridge, the alternatives (replacements or renovation) and the likely effects on recognized historic structures. At each meeting, the Friends of the Frank J. Wood Bridge have pressed their case. They question almost every assertion MDOT makes about condition, costs, setting and historic significance. Theirs are nearly the only voices from Topsham or Brunswick to be heard. Sometimes they suggest that they speak for nearly all of us.

Costs rarely play any part in the public arguments of the Friends of the Frank J. Wood Bridge. And when MDOT has put forward numbers showing renovation to be a costly proposition, the Friends have challenged the competence and integrity of those making the estimates. MDOT's estimates, however, are very much in line with the costs of bridge renovation projects elsewhere.

I admire citizen advocacy. I respect the conviction of the Friends of the Frank J. Wood Bridge that saving the bridge is of paramount importance to them. But I disagree with them and I expect most others in the community would as well in taking a fuller, sober look at choice before us.

At some point, the economics of the bridge have to be weighed. This state (as many others) is already struggling to find enough money to maintain its bridges and roads. What is the cost to taxpayers of historic renovation vs. the cost of replacement with a new bridge? How much would pursuing either course disrupt now-thriving businesses at either end of the bridge?

A recent study by MDOT's consultants on the bridge project put the construction cost of a new bridge expected to last 100 years at $13 million. Life cycle costs (adding in the costs of future repairs) would push this to $13.7 million.

On the other hand, renovation of the existing bridge to last 75 years, they estimate, would cost $17 million. This includes the cost of erecting a temporary bridge to carry traffic while the renovation proceeded.

Because of its age and manner of construction, such a renovated bridge would need considerably more maintenance than a new one, pushing its life cycle costs to $23.2 million. Moreover, that needed maintenance would cause much more traffic disruption, with recurring negative consequences for the businesses at either end of the bridge.

Agreed, the Frank J. Wood Bridge is "historic". But is it worth $10 million more in taxpayer cost to save it? Is it worth months of traffic disruption each of the many times such a renovated bridge would need to be repaired? (Think about that while the bridge is again being repaired this summer.)

Perhaps it is time we stopped letting the Friends of the Frank J. Wood be the only voices heard. The economic vitality of the towns at either end of the bridge is at stake. History counts, but the bridge is an artery that gives present life to both Brunswick and Topsham.

Doug Bennett is a member of the Brunswick/Topsham Bridge Design Committee.

The Times Record
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Adding Apples and Oranges

BY JOHN GRAHAM
Guest column

On Nov. 11, The Times Record published a guest column written by Doug Bennett on the fate of the Frank J. Wood bridge between Brunswick.

The thrust of Mr. Bennett's column was that the decision whether to renovate the current steel truss bridge or replace it with a concrete and steel highway bridge is basically an economic question. Mr. Bennett cited figures to " prove" that the difference between renovation and replacement is on the order of $10 million over the lifespan of each alternative.

The accuracy of the figures cited is highly questionable. The difference he cites is based on an assumption that renovation of the existing span will require $6.2 million for maintenance during its lifespan, an average of about $82,000 per year. He contrasts this with the life cycle cost of a new bridge, and concludes that a new concrete and steel bridge would be nearly maintenance-free over its 100 year life, and would cost only an average of $7,000 per year to maintain. If anyone imagines that concrete structures can have a 100- year life with little maintenance, a brief visit to Bath to observe the condition of the overhead viaduct that is being demolished would indicate the reality about concrete structures. In fact, the technical literature on the life span of concrete bridges indicates a hot debate on their useful life, with some engineers contending that for the ordinary concrete bridge built today, a lifespan of 50 to 60 years is more appropriate.

Even more inaccurate is the method of the calculation Mr. Bennett uses. Adding future maintenance costs to today's cost of construction is like adding apples and oranges. The calculations which financial analysts actually use to compare life cycle costs is to bring all costs back to their present value, to today's value. That method takes account of the fact that a dollar to be spent 75 years from now is worth far less than a dollar today. When the $ 6.2 million in maintenance Mr. Bennett projects over 75 years are reduced to their present value, they amount to about $2.5 million in today's terms. If that is added to the cost of renovation of the current bridge that Mr. Bennett uses, the total in present day terms is about $ 19.5 million, about $4 million less than what he gets by adding apples and oranges.

But the question of cost and lifespan is really secondary to what is far more important. The decision of whether to renovate a historic structure is really a question of values. For example, no doubt that one can often replace an historic structure with an ordinary new building at a cheaper cost. For example, the historic Bowdoin Mill and Fort Andross could have been demolished and replaced by modern office buildings, more efficient and perhaps less costly. But what a tragedy that would have been.

The replacement of the Frank Wood Bridge would likewise be a tragedy, as well as economically shortsighted. Financially, the difference cited by Mr. Bennett is minuscule compared to income that tourism brings to our area. Eighteen million tourists in Maine spend over $5 billion every year, the

largest industry in the state. And how do we in this area fare in the competition for those tourist dollars? Pretty well, it would seem. And why? Because we have made a conscious effort in this community to preserve its historic nature. The Frank J. Wood Bridge, and the mills at either end, are a major part of our historic environment. Literally tens of thousands of tourists come to our area because we have honored our historic past, bringing in tens of millions of dollars every year. Some communities in this country have even made their historic bridges into magnets for tourism, with art festivals, music festivals, community festivals centered on their historic bridges.

I understand that both Topsham and Brunswick and their business sectors want to preserve and improve the business climate. But it is a delusion to imagine that destroying an historic bridge, one of the last ones of its type in Maine, and replacing it with a concrete and steel highway bridge will make the community more attractive and more prosperous. Surely we can be more creative than that.

John Graham is president of the Friends of Frank J Wood Bridge and a member of the Topsham Historical Commission.

COMMENT #7a

From:	John Graham
To:	Chase, Cassandra (FHWA)
Cc:	Joel.C.Kittredge@maine.gov; Scott Hanson; Steve Hinchman
Subject:	106 Comments
Date:	Wednesday, November 23, 2016 10:33:48 AM
Attachments:	Comments to draft report- john graham1.pdf B-14_DawsonBridgeRehab.pdf

Hi Cassie,

Please see my personal comments in RED on the Draft Report, which I have attached. I find it very difficult if not impossible to comment on this without the full information, thus the need to have the formal request for the PDR earlier this week.

I do take serious issue with the change in the Purpose and Needs statement. This is unacceptable. The purpose keeps changing. It was originally an improvement and all notices to tribes, historical etc. went out with the original purpose. If the purpose has changed the process should start from the beginning again. Again the structural condition was not poor when this process started. A study needs to be done to prove that any pedestrian improvements are required- (MDOT guidelines say any bridge over 200' does not require 2 sidewalks). Mid-block cross walks will still exist with or without a new bridge. Bike lanes can be equal with either bridge. This new Purpose and Needs appears to be crafted to rule out the option of rehabbing the existing bridge and maintaining one sidewalk.

If one writes the purpose to fit the outcome they get the out come they desire (which MDOT has made clear this April was a new bridge was their desire). The agency in charge of maintaining the bridge, lets it fall into disrepair and then uses that as a reason to get their desired outcome is also not acceptable.

I expect a lot more detail, sources, and breakdown of costs before I, or anyone, can fully comment on this.

There are also several falsehoods in the report. For example the sidewalks on the downriver side do not go right to the bridge. Instead they stop well short of it on both sides. These are details that are either omitted to make an argument stronger or omitted because no real study has been preformed.

Further because of the lack of detail there are statements like : "Other lightweight deck configurations were also considered but no others were found light enough without even more expense." Which other options were considered, what are their costs, pros and cons? Please see the attached Dawsons Bridge rehab sheet below. It is impossible to know if this was considered or not? Again if the PDR in full would be released one could provide better comment to what was actually considered.

I would also like you to look into the New Hope-Lambertville Bridge between Penn and NJ. https://www.drjtbc.org/default.aspx?pageid=74 This bridge has only one sidewalk and connects two towns with robust shopping districts and can see as many as 14,000 people walk across it in a single weekend. This is also a good example of a bypass bridge (further way then ours) where the State moved the main Route to the bypass to ease truck and traffic in general. Why is this prudent in between these towns and not between ours?

The bridge is narrower and longer than ours and they have managed to save it and keep it as a focal point between their two historical downtowns.

The report still reads like a rhetorical overview of the project and alternatives with both language and photos that without further understanding or study, leads one to believe that the only option is a new bridge. I have read several MDOT prepared PDR's on other projects and the engineers report this summer on the downgrade of the bridge; there are great examples of the neutral detail rich reports I am looking for. MDOT

is capable of providing the public the full information. Please release it and provide the public adequate time to comment on it before any decision is made.

Personally, John Graham

John Graham
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Comments- John Graham

Frank J. Wood Bridge: Summary of Alternatives

Prepared by T.Y. Lin International October 27, 2016

BACKGROUND

The Frank J. Wood Bridge is a critical link spanning the Androscoggin River between the Towns of Brunswick and Topsham, carrying US 201 Has a study been done as to why 201 still needs to connect to route 1 through Topsham's Main Street rather than the 196 bypass?

and ME 24 and about 19,000 vehicles a day. Just 500 feet upriver of the bridge is a power generation dam harnessing the power of Brunswick Falls. On the southern, Brunswick side of the bridge sits the 250th Anniversary Park on the east and the bustling Fort Andross Mill Complex on the west. The Topsham approach adjoins a bank on the west side, and a dentist office and the Bowdoin Mill Complex on the east side. Both the Fort Andross and the Bowdoin mill complexes house a variety of shops, businesses, and restaurants, and the Frank J. Wood Bridge is a key there is also a pedestrian bridge 1000' +/- feet upstream pedestrian connection between the two of them and between the larger business districts and communities on each side. The bridge links the hearts (or is the heart) of the two communities across the Androscoggin River, connecting Brunswick and Topsham.

It should be also noted that less then a half mile down street is a bypass bridge.



Figure 1: The Frank J. Wood Bridge spanning the Androscoggin River between Brunswick and Topsham

The Frank J. Wood Bridge is an 85-year-old, 805 ft long steel truss that is now in poor (the deck and lower cords are in poor condition- the upper supper structure is in fair or better- condition. It was rehabilitated (this is miss leading- it has had repairs but rehabilitation leads one to think more than repairs where done.- repairing the bridge joints in 2015 is not "rehabilitating the structure…) most recently in 1985, 2006, and 2015. It is a "fracture critical" structure, indicating it is vulnerable to sudden collapse if certain components fail. Because of this designation, more detailed and frequent inspections are required. Detailed inspections by MaineDOT in 2012, June 2016 and August 2016 (all bridges are required to be inspected every two years. Is it MDOT's policy to remove all "fracture critical" bridges? It must be also stated that the bridge was not in that condition when the original conclusion to replace the bridge was made. If one waits long enough and is responsible to maintain they can always make this conclusion… the deck and carrying cords can feasibly and prudently be replaced so this argument should be left out of any final conclusion.)found many deteriorated areas. A load rating done by MaineDOT in 2013 and updated in August 2016 found several truss members are not

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strong enough to meet load-carrying standards (this is not accurate- it was the deck and one lower true cord.…) The bridge is now posted for 25 tons. The three-span steel through-truss (with spans of 310'-310'-175') and the concrete deck are currently in poor condition, and the bridge has a FHWA Sufficiency Rating of 25.4. There is corrosion and steel loss in the floor system supporting the deck (the transverse cross beams, longitudinal stringers, and transverse floor beams). Corrosion is continuing and speeding up, and will do so until the truss is rehabilitated comprehensively or the truss is removed.

Because of the ongoing deterioration of the truss, MaineDOT plans to do temporary repairs to address the worst issues so the truss can maintain its current load rating for up to five years. Steel will be added to the

worst sections of the floor system beneath the deck and missing and deteriorated rivets will be repaired or replaced. These temporary repairs are needed to keep the 25 ton weight limit from being reduced more. As maintenance, this 5-year repair will be funded separately from the longer-term "capital improvement" project. However, a long-term solution needs to be implemented within the 5 year timeframe this maintenance buys. This report examines what the alternatives are for the long-term solution.

The travelway over the truss is 30 ft wide, with two 11 ft travel lanes and 4 ft shoulders. Though there are sidewalks on both sides of the road approaching the bridge,(this is also false. one the downriver side the Topsham sidewalk is 100' plus feet and on the Brunswick side it is 300' plus feet away from the bridge. the existing truss carries a single sidewalk on the west side of the bridge. Because the outer 2 feet of the shoulders is made of an open steel grid, the usable shoulder width for bicycle travel is reduced to just 2 ft.

This bridge is eligible for listing on the National Register of Historic Places as part of the Brunswick-Topsham Industrial Historic District. It is also adjacent to the National Register-Listed Pejepscot Paper Company Historic District.

Accident data from 2009-2013 shows 27 accidents at the intersection of Maine Street and Bow/Cabot Street in Brunswick and 11 accidents at Summer Street and Main Street in Topsham. Also, there were 24 accidents just off the bridge on the Brunswick approach. The accident reports show that these accidents were primarily caused by driver inattention and distraction or by following too closely. (none of this seems relevant- since none of the accidents happened on the bridge and a new bridge improves none of the intersections where the accidents happened- why include it? And if you do include it please explain how a new bridge with increased speeding will help?)

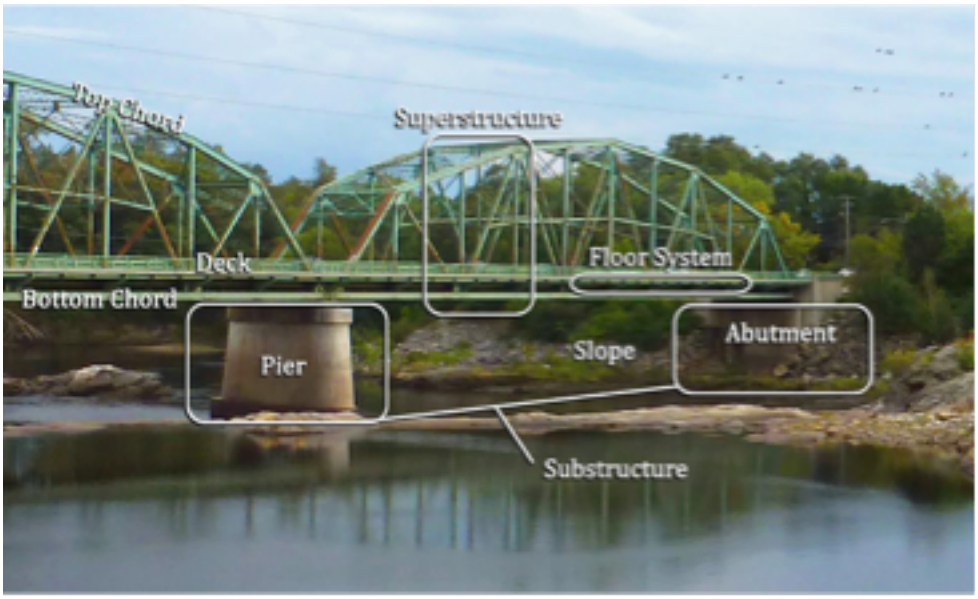


Figure 2: This report uses technical terms to describe various parts of the bridge. The superstructure is what many think of as a "bridge", including the floor system or girders below the deck, while the substructure is what supports the superstructure. The deck (what cars drive on) rests on the floor system, which is made up of floorbeams, stringers, and sometimes crossbeams. The floor system carries load from the deck to the truss bottom chord.

FAR

PURPOSE AND NEED

The purpose of the project is to address poor structural conditions and load capacity issues on the Frank J. Wood Bridge and to address pedestrian and bicycle mobility and safety concerns. (this I have serious concerns with. The purpose keeps changing. It was originally an improvement and all notices to tribes, historical etc. went out with the original purpose. If the purpose has changed the process should start from the beginning again. Again the structural condition was not poor when this process started. A study needs to be done to prove that any pedestrian improvements are required- (they are not and MDOT guidelines say any bridge over 200' does not require 2 sidewalks. Bike lanes can be equal with either bridge.

If one writes the purpose to fit the outcome they get the out come. This is not acceptable!

Bridge improvements are needed to improve the condition ratings of the superstructure and deck from a rating of 4 (poor condition) to 7 (good condition). Because of the age of the bridge, 85 years old, and the considerable number of heavy loading cycles it has already experienced, steel fatigue concerns on critical tension members need to be addressed to continue to carry heavy truck traffic on the existing truss. Additionally, the floor beams and stringers need improvements to bring their load rating factors to a 1.0 for all MaineDOT legal loads.

This bridge is classified by the Federal Highway Administration (FHWA) as structurally deficient with superstructure and deck condition ratings of 4 out of 9 (poor condition). The 3 truss spans are fracture critical, meaning that failure of certain steel tension members could cause any of the 3 spans to collapse. Some of the steel truss bridge components are fatigue sensitive, susceptible to cracking and fracture as a result of heavy cyclic loading. The floor beams and stringers within the truss spans do not meet current design load or MaineDOT legal load standards. (again is it MDOT's policy to remove all Fracture critical bridges?)

Pedestrians on the east side of Routes 201/24 cannot cross the river without crossing the highway, and the existing mid-block pedestrian crossings are considered dangerous. Bicycle traffic is seriously limited by the narrow, 2 ft, paved shoulder. (There are six mid-block cross walks from Route 196 to the bridge and at least that many on Maine Street in Brunswick. MDOT's sponsored bike path across from the Topsham town hall just had one installed. A pedestrian study needs to be done. If one looks at pedestrian patterns a second side walk does not stop the requirement for mid block crossings.

SUMMARY OF ALTERNATIVES

The following alternatives were considered:

1. New 800 ft bridge on the existing alignment.

2. New 835 ft bridge on a curved alignment upstream of the existing bridge.

3. Rehabilitation of the existing steel truss bridge.

4. Rehabilitation of the existing steel truss bridge, including the addition of a new east
   side sidewalk.

5. New 800 ft bridge on a parallel alignment downstream of the existing bridge.

The No Build alternative was also considered. The No Build alternative was included as a benchmark against which the impacts of other alternatives can be compared. Short-term maintenance and minor rehabilitation is considered as part of the No Build alternative.

On Point Construction Services, a private consultant firm specializing in construction scheduling and estimating, joined the Project Team to review the constructability of the proposed alternatives, to develop construction schedules, and to estimate temporary bridge costs.

All of the alternatives were compared based on hydraulic requirements; environmental, right of way, and utility impacts; maintenance of traffic, constructability, maintainability, geotechnical site conditions; and construction, life cycle, and user costs.

REPLACEMENT ALTERNATIVES

Alternatives 1, 2, and 5 would provide a new bridge. Many characteristics of the new bridge would be the same for each of the replacement alternatives; these will be discussed below before the specifics of each alternative are presented.

RFA



A new bridge would be a multi-span steel girder bridge, with 4 or 5 spans. Steel girder bridges are easily the most cost- effective new structure type for this site. To increase the life span of the new structure, the concrete deck would likely be reinforced with Glass Fiber Reinforced Polymer (GFRP) rebar and the steel girders would be metalized. Metalization of the girders will reduce corrosion from spray from the

Figure 4: Artist's rendering of a steel girder bridge

turbulent river beneath the bridge. The new bridge would have concrete wall abutments and solid shaft piers, all founded on the shallow bedrock at this site.

Any new bridge would include 11 foot lanes, 5 foot shoulders, and 5 foot sidewalks on each side. Having sidewalks on both sides of the bridge would connect the existing sidewalks on the approaches and would improve safety by reducing the need for pedestrians to cross the road. Having 5 foot shoulders and no adjacent bridge railing or truss verticals would dramatically improve the bridge for bicyclists. The current bridge has only 2 foot paved shoulders.

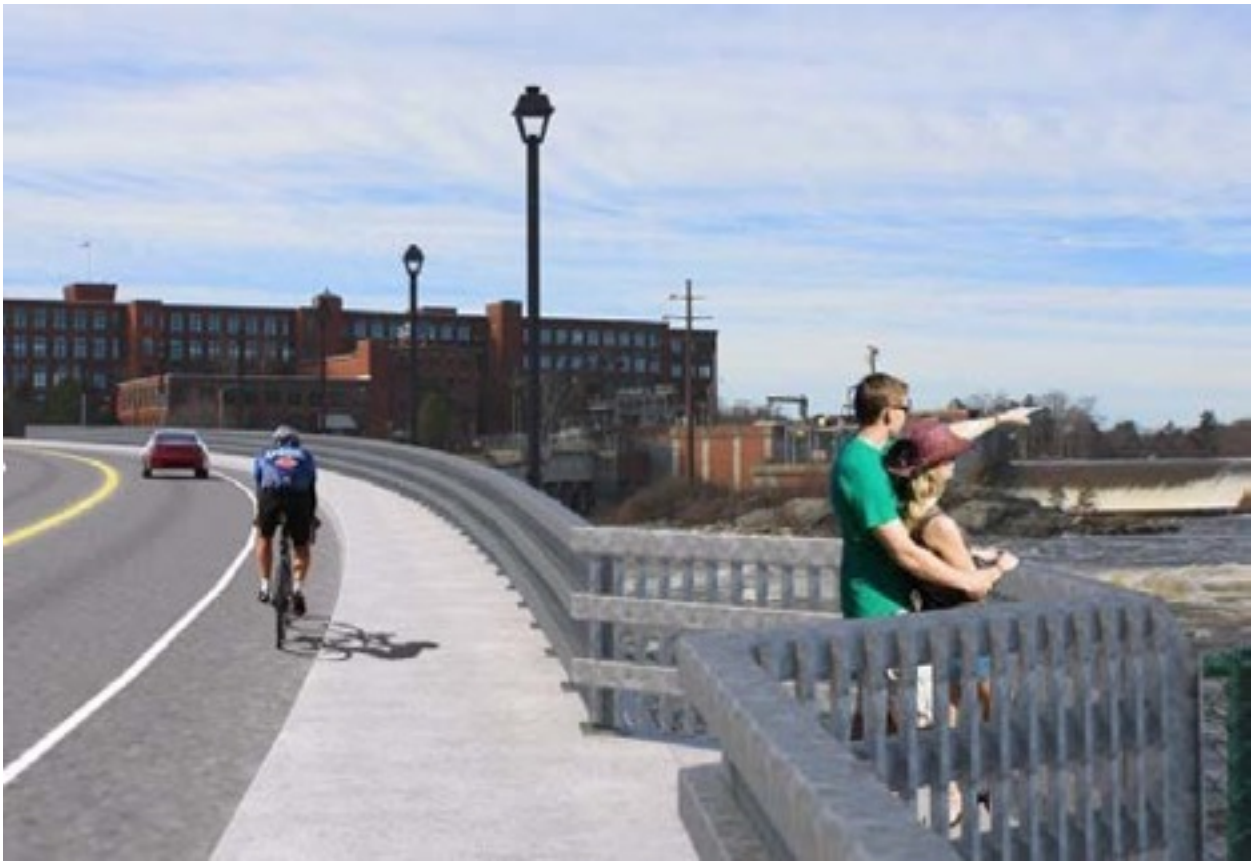
For new bridges on this site, the contractor would need a work trestle for access to construct the cofferdams and piers, to erect the structural steel superstructure, to place deck concrete, and to remove the existing bridge. A cost premium of $1 million is included in the estimate for each new bridge to account for this trestle. Installation of a work trestle at this site is unique due to the exposed and highly variable bedrock, exposure to high velocity flows, and proximity to the upstream dam.

Railings for a new bridge would meet all standards for vehicle and pedestrian safety. Railings go through stringent testing programs to ensure appropriate safety in a variety of situations. Only those railings that meet appropriate criteria can be used on a new bridge, based on the specific constraints of this site. MaineDOT's standard 4-bar steel pedestrian and traffic rail is recommended if a new replacement bridge ends up being the preferred alternative, but input from the Towns of Brunswick and Topsham and the Section 106 consulting parties would be considered for the final selection of the rail type.

Figure 5: Rendering of a Possible New Bridge

During meetings with Officials from both Towns, requests were made to enhance the "River Walk Loop" that exists over the existing bridge and continues to the pedestrian bridge upstream of the dam. A new bridge at this site would include deck overlooks, where the sidewalk widens out to

provide viewpoints of the river upstream and downstream. In addition, the bridge would be lighted and lamp posts and fixtures would be ornamental and closely match the street lighting in the approaches. The MaineDOT would consider input from the Towns of Brunswick and Topsham and the Section 106 consulting parties for the final selection ofthebridgelightingduringfinal design.



ARD

Alternative 1: New 800 ft Bridge on Existing Alignment

Alternative 1 is a new 800 ft, five span, steel girder bridge on the existing alignment. The new bridge would have the characteristics discussed above that are similar for any replacement bridge on this site.

Because the new bridge would be constructed on the existing alignment, the old truss would have to be removed completely before new construction could begin. The limitations on in-water work add to the construction duration. Without a temporary bridge, this alternative would have a traffic disruption period of over 2 years.

Given the tremendous user costs and other impacts such a disruption would cause, a temporary bridge is required for this alternative. This adds another year to the construction duration, bringing the total construction time to 3.5 years. Unfortunately, this also increases the riverimpactsevenfurther—thisalternativewouldneedaworktrestleandatemporary bridge beyond the impacts of the new structure itself. Permanent environmental impacts would include the wetland footprint impact of 4 piers and riprap protected abutment slopes within the river channel. Two of the piers would be located near the edges of the Brunswick side powerhouse outfall channel.

The construction cost of this alternative is estimated at $16,000,000 (including the cost of a temporary bridge).

Alternative 1 Summary:

- New 800 ft bridge on the existing alignment
- 11 ft travel lanes with 5 ft shoulders and 5 ft sidewalks each side
- Construction Cost: $16 million
- Life Cycle Cost: $16.7 million
- Construction Duration: approximately 3.5 years
- Maintenance of Traffic: on-site temporary detour
- River Impacts: temporary work trestle, temporary bridge, 4 in-water piers, new
  slopes at abutments
- Meets Purpose and Need

Alternative 2: New 835 ft Bridge on Curved Upstream Alignment

Alternative 2 is a new 835 ft, five span, steel girder bridge on a curved upstream alignment. A curved bridge reduces the length of approach roadway construction and reduces right of way impacts to abutting properties. This structure would have a short southern span to better align the spans to bridge the Brookfield power station outflow channel with a minimum of impact. The remaining four spans would be continuous haunched steel girder spans with a concrete deck. The span arrangement and number of piers would be selected to minimize footprint impact within the channel and within the FERC Boundary and to maximize the efficiency of steel girder superstructure. Also, the existing hydraulic clearance over the river would be maintained as a minimum.

The estimated construction duration for this alternative is approximately 2.5 years. No temporary bridge is required since traffic could be maintained on the existing bridge during construction. A short term

(about 2 month) single lane northbound road closure and detour as described in the “Maintenance of Traffic” section for the New Alignment maintenance of traffic option would be needed during the final tie-in.

The four piers and the abutment slopes would be permanent wetland environmental impacts. Two of the piers would be located near the edges of the Brunswick side powerhouse outfall channel. Temporary environmental impacts would include the construction of a work trestle from the Topsham bank of the river out to the proposed Pier 2 location.

TFA RDA



Figure 6: A Possible Curved Upstream Bridge

The construction cost of this alternative is estimated to be $13,000,000.

The life cycle construction cost of this alternative (Alternative 2 – Replacement Bridge on Parallel Upstream Alignment) is estimated to be $13,700,000. The life cycle cost includes costs for future inspection and maintenance (painting and wearing surface replacement) anticipated to be needed out to 100 years.

Alternative 2 Summary:

- 835 ft replacement bridge on a curved, upstream alignment

- 11 ft travel lanes with 5 ft shoulders and 5 ft sidewalks each side

- Construction Cost: $13 million

- Life Cycle Cost: $13.7 million

- Construction Duration: approximately 2.5 years

- Maintenance of Traffic: on existing bridge

- River Impacts: temporary work trestle, 4 in-water piers, slopes at abutments

- Meets Purpose and Need

Alternative 5: New 800 ft Bridge on Parallel Downstream Alignment

Alternative 5 is listed here, since like Alternatives 1 and 2 it is a new bridge. It would be a new 800 ft, five span steel girder bridge located downstream of the existing bridge on a straight alignment, between the current bridge and the Bowdoin Mill Complex parking lot. For all of the bridge alternatives, a hydraulic analysis was run to estimate how the river would behave with new piers added in the river. This analysis showed that a downstream replacement bridge will raise water levels at the Bowdoin Mill Complex, particularly the end of the mill building where the Sea Dog Brewing Company is located. The models suggested that during the design flood, floodwaters would rise more than 6 feet higher than existing conditions near the deck area of the Sea Dog. No reasonable approach to reduce that water rise could be found, so Alternate 5 was rejected.

REHABILITATION ALTERNATIVES

Alternative 3 and Alternative 4 are both rehabilitation options, where the existing truss bridge is repaired. Detailed inspections of the truss were done by MaineDOT in 2012, June 2016 and August 2016, and a load rating was done by MaineDOT in 2013 and updated in August 2016. These reports outline what needs to be done to bring the existing truss bridge up to the standards established as the "Purpose & Need" (because of "newly drafted Purpose and Need" this alternative has still not been seriously looked into) for this project, which were described above.

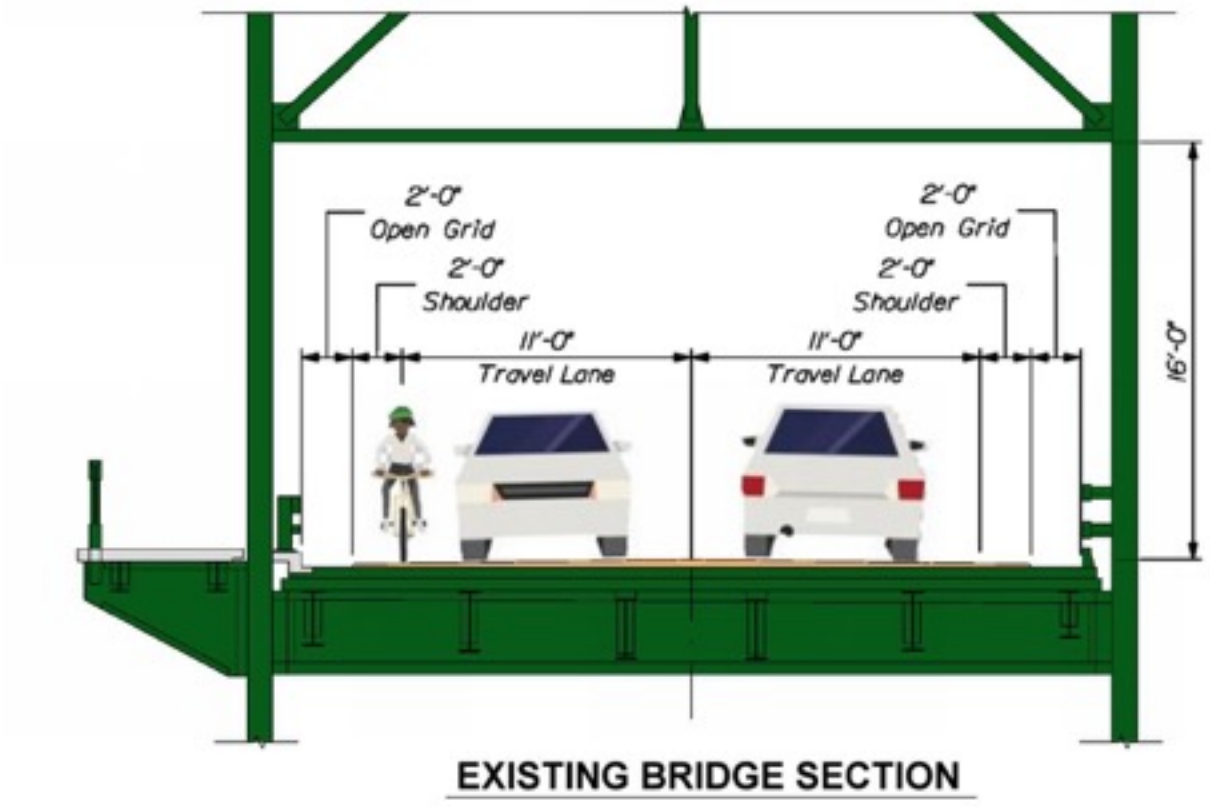


Figure 7: The existing truss bridge cross section

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These repair needs will be described here, and the differences between the two rehabilitation alternatives will be discussed later. The needs are:



1. Replace existing bridge deck with a new reinforced concrete bridge deck with an integral concrete wearing surface. This includes the removal of the badly deteriorated transverse cross beams seen in Figure 8.

2. Repair the top of steel sidewalk support brackets. The top of each bracket is non- existent now due to corrosion or other past modifications.

3. Replace the bridge joints. Although these were replaced in 2015, replacement of the existing deck will require these to be replaced.

Figure 8: Deteriorated cross beams & deck

4. Replace the entire steel flooring system, including the longitudinal stringer beams and transverse floor beams. The floor system is heavily deteriorated and is below load carrying standards (see Figures 9 and 10).





Figure 10: Hole in floorbeam

Figure 9: Deteriorated floorbeam

5. Replace portions of the bottom chord of main trusses due to corrosion and distortion from pack rust, as seen in Figure 11.

6. Paint the entire steel truss superstructure, including all above and below deck components. Doing a comprehensive paint job on this structure is expected to cost about $4,000,000.



Figure 11: Bottom chord corrosion and debris



7. Replace all existing utility brackets that support the conduit and water lines on the truss. See Figure 12.

8. Remove and reuse the existing pedestrian sidewalk rail and bridge traffic rails. They will have to be removed to replace the deck and floor system.

9. Replace the abutment back walls due to the overall poor condition of these elements.

10. Repair areas of stone masonry with missing and loose stones at the south abutment by encasing the masonry in concrete due. See Figure 13.

Figure 12: Utility brackets

11. Replace cracked concrete bearing pedestals at Pier 2 supporting the east side truss of Span 3 near the Topsham end of the bridge. This work will also include removal, refurbishing, and resetting of the truss bearing at this support. See Figure 14.

Figure 13: Abutment masonry Figure 14: Damaged concrete pedestals

Once all of the listed repairs are completed, the structure will meet all design strength requirements for the foreseeable future. All repairs would be completed using modern design standards and construction practices to help them last as long as possible. (So this is Prudent?)

The existing bridge deck is a lightweight, concrete-filled steel grid deck. To keep from adding more weight to the truss, a new bare concrete bridge deck without a paved surface will be required. Some of the main truss members already have borderline load ratings, so increasing the weight of the structure is not acceptable. To improve durability of the new deck, it would likely be reinforced with non-corrosive GFRP rebar. A comprehensive drainage system would be added to limit moisture and salt on the lower parts of the truss; the existing deck has open drainage which lets salt and water from the road drop right onto the steel. (this needs further study. There are other alternatives that exist that provide light weight and are able to be paved

The existing 30 ft available travelway matches the existing approaches and would provide two 11 ft travel lanes with 4 ft shoulders bound by rails located along the inside of the trusses. 10 ft travel lanes with 5 ft shoulders for bicyclists were considered briefly but dismissed


3



as an option. The Department considers these narrower travel lanes as less safe given the high traffic volume, almost 19,000 vehicles per day, this bridge has. (this is not acceptable. I require more details then the Department decided. The bridge is posted at 25 mile per hour. We want safe slow traffic not a highway. Please provide studies and sources. We also know the Department wants a new bridge. The burden of proof is on the Department and statements like this do not build the department credit.

A full road closure is needed to complete all major truss rehabilitation activities except painting. The construction and traffic disruption duration for this alternative is approximately 20 months. The user costs and other impacts require a temporary bridge for this alternative. When the temporary bridge is added in, construction duration for this alternative is approximately 3 years. (has serious thought been given to using the bypass? It takes an extra 2 minutes to drive around. With proper signage and a temp light at the elm street bipass connection in Topsham this is a feasible alternative if it cuts down on the closure time significantly.

Rehabilitating the existing truss would preserve the existing river flow conditions and would have the least permanent environmental, right of way and utility impacts. It would also have the least impact to the National Register-Eligible historic bridge and districts. However, construction of a temporary bridge will still have temporary environmental impacts. Utilities on the truss will have to be temporarily relocated on the bridge during the rehab process.

Despite all efforts, a bridge rehabilitation will probably still require significant future maintenance. To get 75 more years of life, the bridge will need approximately 3 future paintings, 1 deck replacement, and 2 substructure rehabilitations, beyond the current project. All of these activities will disrupt traffic to varying degrees. Painting will disrupt traffic for about 8 months, and each deck replacement will disrupt traffic for about 6 months. (yes maintenance is required. The deck option needs further study and all road maintenance causes disruption. Main Street Topsham was paved this summer and it took over 2 months of disruption.

Based on past performance of the modern paint systems used by MaineDOT on similar truss bridges that also had pack rust, the truss will need to be painted about every 20 years. The current paint systems used today perform very well, replacing the previous lead-based paint systems. The paint successfully seals the steel and stops corrosion when

installed. It spans the seams of the built-up steel members and prevents water and air from getting to the steel. However, once the paint cracks at all, existing pack rust will immediately reactivate (see Figure 15). The existing truss has pack rust in (see Nathan Holt's reply)



Figure 15: Pack rust is corrosion in the numerous locations. To effectively maintain **crevice between two plates of steel that are**

structures with this condition, paint systems need

replacement more frequently. Painting a truss like

bolted or riveted together. As the rust progresses, it gradually pushes the pieces of steel apart, bending them and sometimes

this currently costs an estimated $4,000,000. To **breaking bolts or rivets. The only way to**

prevent pack rust and other corrosion issues from destroying the truss, future paint jobs would have to be budgeted for and done on a regular cycle.

truly fix pack rust is to take apart the plates of steel and clean them, which is usually not feasible.

Use of GFRP reinforcement would extend the life of a bare concrete deck, but without a high performance membrane and paved wearing surface that can be regularly replaced, 50 years of life is a good estimate. Based on the historic performance of similar aged bridges (currently 85 years old) and the age of the most recent major substructure rehabilitation (2006), additional substructure rehabilitations would be expected at years 20 and 50 following this current project.

Besides these major future maintenance efforts, there will be more frequent smaller repair efforts needed on the steel, bridge joints, and the aging substructure. This truss will also

require Routine and Fracture Critical Bridge Inspections, costing about $60,000 every two years.(can I get details on this… this seems extremely high- MDOT just did 2 inspections this summer and it cost $60,000 for a truck and two guys? They wrote an excellent report in less then 2 weeks. Please provide a detailed breakdown of costs and man hors. These inspections will also disrupt traffic, requiring a single lane closure for 1 to 2 weeks. If cracks in fatigue sensitive or fracture critical

members are found in these inspections, more frequent inspections or immediate repairs will be required.

Alternative 3: Rehabilitation of Existing Steel Truss Bridge:

Alternative 3 would rehabilitate the existing truss as outlined above. It would still have only one sidewalk, so pedestrian mobility and safety would not be improved. (this is a false statement and used only to disqualify this option. The open grid decking along the outside of the existing shoulders would be replaced with a solid concrete deck, improving the situation for bicyclists. However, the shoulders would still be only 4 feet wide and the railing right at the edge of the shoulder restricts the useable width for bicyclists even more. how is a railing any different then a 9" curb- ones bike peddle is still restricted by the same? It would still not be a very good bridge for bicyclists. Therefore, this alternative does not fully meet the pedestrian and bicyclist portion of the Purpose and Need for this project. Again if one changes the purpose and need to fit the desired outcome of course it doesn't. There are feasible and prudent options and a lot more studies that are required before this statement can be thrown out there.

The construction cost of this alternative is estimated at $15,000,000. This cost includes a 15 percent contingency above the repair work that has already been identified. Rehabilitation projects nearly always discover issues not previously found in inspections, causing budget overruns.

The overall life cycle construction cost of this alternative, including estimates for all future maintenance on the truss out to 75 years of life, is projected to be $20,800,000.

Early in the investigation of alternatives at this site, this alternative was examined as a 30 year rehabilitation and either maintaining one lane of traffic on the bridge or allowing a 5 to 7 month bridge closure. A replacement after 30 years would yield the lowest life cycle cost of any

rehabilitation option. Given changes to the rehabilitation scope since the latest bridge inspection and recognition of the user costs of the maintenance of traffic options, the initial cost of this alternative now must include a temporary bridge. The originally estimated construction cost of $8 million to rehabilitate the bridge now is $15 million after adding a full floor system replacement and an on-site temporary bridge detour.

Summary of Alternative 3:

- Rehabilitation of existing steel truss bridge
- 11 ft travel lanes with 4 ft shoulders each side and a 5 ft sidewalk on the West side
- Construction Cost: $15 million
- Life Cycle Cost: $20.8 million
- Construction Duration: approximately 3 years
- Maintenance of Traffic: on-site temporary detour
- River Impacts: temporary bridge, Abutment 1 repair work
- **Does not** meet Purpose and Need (pedestrian needs)

Alternative 4: Rehabilitation of Existing Steel Truss Bridge with Added East Sidewalk

Alternative 4 is also a rehabilitation of the existing truss, but with a second 5 foot sidewalk added on the opposite side of the bridge. This fully addresses the pedestrian issues at this site. Like Alternative 3, bicyclists would have 4 foot shoulders with adjacent traffic rails, a

TFA RDA

less than ideal situation. However, this would still be better than the current condition for bicyclists. Alternative 4 adequately meets the Purpose and Need for this project. (so in the above one side walk option- the bike lanes are not adequate but on this one they aren't? One can't use the same argument for and against the same Purpose and needs. I have repeatedly asked for a study that proves a second side walk is necessary. If a proper study was done it would show that mid block cross walks are necessary- on the Topsham side the next block is 1/2 mile to Elm Street. There are solutions like under the abutments(below the bridge cross walks)… This needs further study.

To add the additional weight of a second sidewalk, weight must be taken off the truss somewhere else. The existing bridge deck would need to be replaced with a new lightweight concrete filled Exodermic deck.(if this deck will last 75 years with maintenance and without the second side walk take pavement- why wasn't it used in the first rehab option? An Exodermic deck system can be as much as fifty percent lighter than a conventional concrete deck of the same span. An Exodermic deck has exposed steel on the bottom of the deck, so future maintenance would be anticipated. Other lightweight deck configurations were also considered this is great- can you provide a list and explanation of each option considered, its pros and cons, cost and why it was ultimately not used. DETAILS. but no others were found light enough without even more expense. This alternative includes the addition of new structural steel framing, concrete deck, and pedestrian rail for the added 5 ft wide sidewalk on the east side of the bridge. Between the more expensive deck and the new sidewalk and framing, this option will have a construction cost about $2,000,000 more than Alternative 3.

The estimated construction duration for this alternative is approximately 3 years (similar to Alternative 3).

Hydraulic conditions, environmental impacts, right-of way impacts, utility impacts, maintenance of traffic and maintenance concerns for Alternative 4 would be the same as those noted for Alternative 3 with the exception of the impacts to the NR-Eligible Historic Bridge and Districts. The additional sidewalk is an addition that is not part of the NR-Eligible Historic Bridge.

The construction cost of this alternative is estimated at $17,000,000. The life cycle cost of this alternative, including estimates for all future maintenance on the truss out to 75 years of life, is estimated to be $23,200,000. Every figure in this needs an appendix that breaks it down to specifics, materials, man hours, contingencies, etc…

Summary of Alternative 4:

- Rehabilitation of existing steel truss bridge with added east sidewalk

- 11 ft travel lanes with 4 ft shoulders and 5 ft sidewalks each side

- Construction Cost: $17 million

- Life Cycle Cost: $23.2 million

- Construction Duration: approximately 3 years

- Maintenance of Traffic: on-site temporary detour

- River Impacts: temporary bridge, Abutment 1 concrete work

- Meets Purpose and Need

  Repurpose Existing Bridge and Build a New Replacement Bridge

  An additional alternative suggested by the public was to '*Restore and repurpose the historic bridge for pedestrian and bicycle use, and as a public historic park. Build a new bridge on alternative alignment.'* This is a combination of two alternatives discussed above, Alternatives 2 and 3. All work to preserve the existing bridge under Alternative 3 would still be required, except possibly rehabilitating the sidewalk. Conservatively, the construction cost of this rehabilitation could be reduced to $9.5 million (with the removal of the sidewalk), and there would be no need for a temporary bridge. This alternative would also require the cost of a

new replacement bridge, Alternative 2, at $13 million, for a total construction cost of $22.5 million. The question of future ownership and maintenance responsibility for the truss would

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have to be addressed. Also, the effect on river water levels from having more piers permanently in the river channel would need investigation.

MAINTENANCE OF TRAFFIC

Four options were investigated to maintain traffic at this site during construction. They are not all feasible for all of the bridge improvement alternatives. Specifics for each alternative, along with estimated traffic disruption durations and user costs, are discussed later in this report.

1. Complete road closure with a detour. Detour all traffic along U.S. Route 1, State Route 196, and State Route 24. Can this be explained and the cost of $22,000 per day be broken down as with

the increased speed in which the rehab could be achieved?

2. Single lane closure with staged construction. One way, southbound traffic will be carried across the bridge on a 12 foot travelway and all northbound traffic will be detoured. This option can only work for certain construction activities, like painting. This traffic control method has been used successfully in the past on the Frank J. Wood Bridge.

3. On-site detour on temporary bridge. Construct a 2 lane temporary bridge parallel to the existing bridge and detour all traffic onto it. Traffic would only be disrupted during the construction of tie-ins to the existing roadway and to the new roadway upon conclusion of the project. These disruptions could be limited by requiring work be done during off-peak hours. Construction and removal of the temporary bridge would likely extend the total construction duration by about 1 1⁄2 years (1 construction season for construction of the temporary bridge and half a season for its removal). The cost for a temporary bridge is estimated to be about $4 million.

4. New alignment. If a new bridge is constructed on a new alignment, the existing bridge could be used to maintain traffic during construction. Traffic would primarily be disrupted during construction of the final tie-in. Again, this could be mitigated by requiring work during off-peak hours. This option would result in the least traffic disruption.

Staged construction maintaining two-way traffic is not feasible due to the existing structure type and needed rehabilitation repairs. Alternating

one-way traffic is not feasible because of the traffic volume and proximity of signalized intersections.

Traffic disruption results in indirect costs to the users of the bridge and to the surrounding businesses. A user cost may be estimated for the delays to the traveling public, assigning a dollar value to the disruption. Daily user costs were prepared by MaineDOT estimating costs associated with delays at intersections and additional miles traveled. The user cost for a complete road closure is estimated at almost $22,000 per day, while the user cost for a northbound lane closure is estimated at over $10,000 per day. This cost will be compared with that of a temporary bridge to determine whether paying for a temporary bridge is justified for a given construction alternative. (can we see this in details?)

UTILITIES

A hydropower dam operated by Brookfield Renewable Energy Partners (Brookfield) is located about 500 ft upstream of the existing bridge crossing. No impacts (including hydraulic impacts) to this facility are anticipated for any of the bridge improvement alternatives investigated.

Overhead utilities and a water main are carried by the existing bridge. Temporary support or relocation of these facilities within the limits of the existing bridge would be needed during a bridge rehabilitation.

With a bridge replacement, these facilities would need to be relocated. Some of the utility poles in the approaches would also need to be relocated. The overhead utilities would need to transition to underground in the approaches close to the replacement bridge ends. The overhead utilities and the waterline would be carried on the bridge below the bridge deck, between girders, out of sight.

RIGHT OF WAY

A bridge rehabilitation or bridge replacement on the existing alignment would not require permanent property impacts. However, temporary property rights would be needed for any temporary bridge.

Construction of a replacement bridge on a new upstream alignment would require permanent property acquisitions of parts of two properties on the west side of the south approach and one property on each side of the north approach. The south approach property impacts would include reconstruction of a retaining wall between the drive entrances to the small Fort Andross parking lot and the Brookfield hydroelectric station at the dam. The 250th Anniversary Park located at the southeast corner of the bridge is a Brunswick town park constructed on land leased from Brookfield. The only park impacts would be fill slopes within the existing State-owned right of way. The north approach would have a new 130-ft-long retaining wall along the northwest approach to limit impacts to the property and parking area. Reconstruction of the drive entrance to the Bowdoin Mill complex will require impacts beyond the existing MaineDOT right of way.

Temporary property rights would be needed to construct work access platforms like work trestles. These rights would be similar to temporary rights needed for a temporary bridge.

Additionally, for an upstream bridge replacement alternative, the abutments and three of the four bridge piers would be located within the limits of the Federal Energy Regulatory Commission (FERC) Boundary of the dam. Temporary property rights would be needed for construction access along the north side of the approaches and within the FERC Boundary.

ENVIRONMENTAL

Endangered species such as the shortnose sturgeon and Atlantic sturgeon spawn in the project area. This project is within Essential Fish Habitat and permanent and temporary impacts need to be avoided or minimized. In-water work must be avoided during crucial migrating periods. This restriction is in place from April 7 to August 30, and will be a substantial constraint on construction durations. Impacts to the Brunswick Fishway at the Brookfield dam will be avoided and requests to shade the Fishway from moving shadows produced by construction equipment and the traveling public will be considered.

The existing bridge is eligible for listing on the National Register of Historic Places as part of the Brunswick-Topsham Industrial Historic District, which is considered National Register- Eligible. It is also abutting the National Register-Listed Pejepscot Paper Company Historic District.

If a temporary bridge is used to maintain traffic for either a bridge rehabilitation or bridge replacement, then temporary environmental impacts would occur within the existing Androscoggin River.

Construction of a new replacement bridge would have environmental impacts that would need to be minimized or mitigated. Permanent impacts would include the piers and pier foundations within the channel. Foundation locations should avoid the Brunswick side powerhouse outfall river channel that leads to the dam fishway by taking advantage of ledge outcrops where possible.

Figure 3: Two types of temporary impacts



DFAR

Also,ifatemporaryworktrestleisneededfortheconstructionofa newreplacement bridge or to rehabilitate the existing bridge, temporary environmental impacts would occur and would need to be addressed.

Historic impacts and avoidance and minimization strategies will be determined through the ongoing Section 106, 4(f) and NEPA processes.

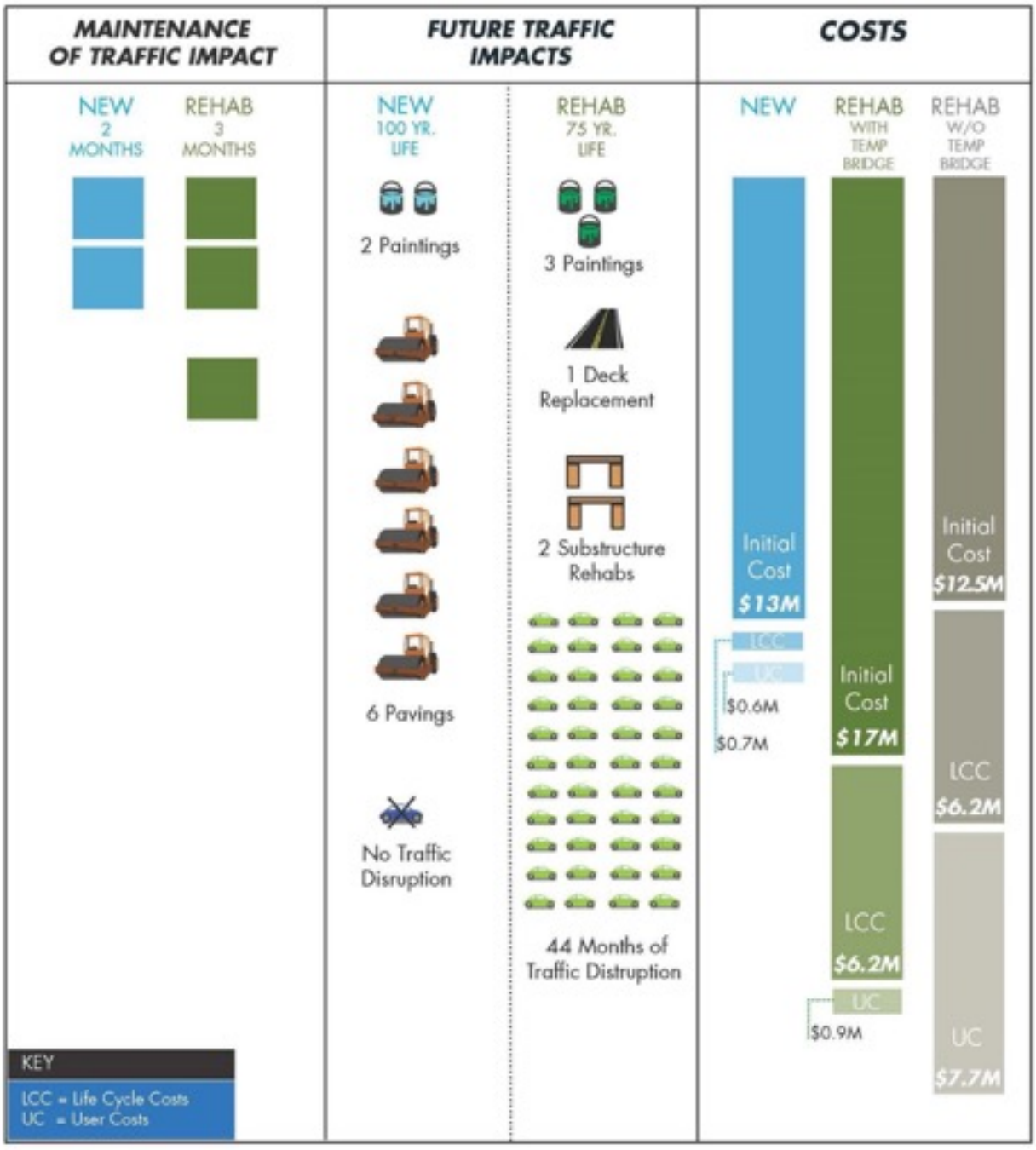
LIFE CYCLE COST ESTIMATE

Life cycle costs are considered in the comparison of bridge improvement alternatives. A life cycle cost estimate (LCCE) totals all estimated bridge costs throughout the life of each bridge improvement alternative and translates them to current dollar equivalents. The LCCE accounts for estimated construction costs on the current project and the translated present value of anticipated future inspection, maintenance, and rehabilitation. It also accounts for anticipated future bridge replacement dates for each alternative. Specifics of the life cycle costs for each alternative are discussed later in this report.

GRAPHIC COMPARISON

The graphic below compares Alternative 2 (the low cost replacement or new option) and Alternative 4 (the best rehab option). Three main areas are contrasted: maintenance of traffic during construction, future rehabilitation and maintenance, and total costs.

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MAINTENANCE OF TRAFFIC IMPACT
NEW
2
MONTHS
REHAB
3
MONTHS
KEY
LCC = Life Cycle Costs
UC = User Costs
FUTURE TRAFFIC IMPACTS
NEW
100 YR.
LIFE
2 Paintings
6 Pavings
No Traffic Disruption
REHAB
75 YR.
LIFE
3 Paintings
1 Deck Replacement
2 Substructure Rehabs
44 Months of Traffic Distruption
COSTS
NEW
Initial Cost
$13M
LCC
$0.6M
UC
$0.7M
REHAB
WITH TEMP BRIDGE
Initial Cost
$17M
LCC
$6.2M
UC
$0.9M
REHAB
W/O TEMP BRIDGE
Initial Cost
$12.5M
LCC
$6.2M
UC
$7.7M

pavingings have impacts- even at night they effect local night time businesses.

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RDA

COMMENT #7b

From:	John Graham
To:	Chase, Cassandra (FHWA)
Cc:	Joel.C.Kittredge@maine.gov; Scott Hanson; Steve Hinchman
Subject:	106 Comments
Date:	Wednesday, November 23, 2016 10:33:48 AM
Attachments:	Comments to draft report- john graham1.pdf B-14_DawsonBridgeRehab.pdf

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Hi Cassie,

Please see my personal comments in RED on the Draft Report, which I have attached. I find it very difficult if not impossible to comment on this without the full information, thus the need to have the formal request for the PDR earlier this week.

I do take serious issue with the change in the Purpose and Needs statement. This is unacceptable. The purpose keeps changing. It was originally an improvement and all notices to tribes, historical etc. went out with the original purpose. If the purpose has changed the process should start from the beginning again. Again the structural condition was not poor when this process started. A study needs to be done to prove that any pedestrian improvements are required- (MDOT guidelines say any bridge over 200' does not require 2 sidewalks). Mid-block cross walks will still exist with or without a new bridge. Bike lanes can be equal with either bridge. This new Purpose and Needs appears to be crafted to rule out the option of rehabbing the existing bridge and maintaining one sidewalk.

If one writes the purpose to fit the outcome they get the out come they desire (which MDOT has made clear this April was a new bridge was their desire). The agency in charge of maintaining the bridge, lets it fall into disrepair and then uses that as a reason to get their desired outcome is also not acceptable.

I expect a lot more detail, sources, and breakdown of costs before I, or anyone, can fully comment on this.

There are also several falsehoods in the report. For example the sidewalks on the downriver side do not go right to the bridge. Instead they stop well short of it on both sides. These are details that are either omitted to make an argument stronger or omitted because no real study has been preformed.

Further because of the lack of detail there are statements like : "Other lightweight deck configurations were also considered but no others were found light enough without even more expense." Which other options were considered, what are their costs, pros and cons? Please see the attached Dawsons Bridge rehab sheet below. It is impossible to know if this was considered or not? Again if the PDR in full would be released one could provide better comment to what was actually considered.

I would also like you to look into the New Hope-Lambertville Bridge between Penn and NJ. https://www.drjtbc.org/default.aspx?pageid=74 This bridge has only one sidewalk and connects two towns with robust shopping districts and can see as many as 14,000 people walk across it in a single weekend. This is also a good example of a bypass bridge (further way then ours) where the State moved the main Route to the bypass to ease truck and traffic in general. Why is this prudent in between these towns and not between ours?

The bridge is narrower and longer than ours and they have managed to save it and keep it as a focal point between their two historical downtowns.

The report still reads like a rhetorical overview of the project and alternatives with both language and photos that without further understanding or study, leads one to believe that the only option is a new bridge. I have read several MDOT prepared PDR's on other projects and the engineers report this summer on the downgrade of the bridge; there are great examples of the neutral detail rich reports I am looking for. MDOT

is capable of providing the public the full information. Please release it and provide the public adequate time to comment on it before any decision is made.

Personally, John Graham

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DAWSON BRIDGE REHABILITATION

EDMONTON, ALBERTA

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PROJECT OVERVIEW: NEW LIFE FOR A 100-YEAR-OLD STEEL TRUSS BRIDGE

In its 100th year of service, Dawson Bridge is now one of Edmonton's most modern bridges thanks to the innovative use of new technology. During its 2010 rehabilitation, its deteriorated concrete-on-timber deck was replaced with an SPS™ composite steel plate and elastomer lightweight deck system. Dawson is the largest bridge in the world with this innovative steel deck system, and the first designed with unique bolting details that entirely eliminate field welding.

The shop-fabricated lightweight steel deck drastically reduced the need for costly and difficult truss strengthening. Bolted quickly into position, the speed of deck installation allowed the entire rehabilitation project–truss strengthening, painting, deck replacement, and sidewalk widening–to be completed in one year, months faster and millions less expensive than a traditional concrete deck.

BRIDGE HISTORY

A five-span riveted steel through-truss, Dawson Bridge was originally constructed to carry electric trains to a coal mine located on the east bank of the North Saskatchewan River. With five simply supported spans of 43.3 m, 43.3 m, 43.3 m, 76.2 m, and 30.5 m from west to east, its overall length between abutment walls is 236.5 m. Today the bridge carries one lane of vehicular traffic in each direction–about 16,000 vehicles per day–along with many pedestrians and cyclists on its two sidewalks as part of the River Valley trail system.

The City of Edmonton commissioned a condition assessment for Dawson Bridge in 2007. That study revealed the superstructure was in need of significant repair, including total bridge deck replacement and truss repainting. Field inspection and structural analysis also identified numerous truss members that required strengthening or replacement in order to increase the level of safety to modern standards and to extend the service life of the bridge. The original narrow sidewalks were also identified as a detraction and potential safety hazard for pedestrians and cyclists.

Dawson Bridge is listed on the register of historic resources in The City of Edmonton and is one of very few structures in the city–of any kind–to reach its centenary. The project team was given the mandate to respect the historical appearance of the existing structure and make certain that the rehabilitation measures would not be apparent to the public once construction was complete.

INNOVATIVE REHABILITATION

During the design phase, a load rating of Dawson Bridge was conducted using an Alberta CS3 rating vehicle, the heaviest vehicle that might practically access the bridge considering its vertical clearance restrictions and location. That assessment concluded that numerous truss members must be strengthened or replaced in order to increase the level of safety and to extend the lifespan of the bridge.

The analysis work also showed that the scope of strengthening work could be reduced significantly by choosing a deck replacement option that lightens dead load on the bridge. By replacing the existing, deteriorated 165 mm semi-lightweight concrete deck with a lightweight steel deck, those weight savings could be applied to carrying additional live load and widening the sidewalks.

Two lightweight deck options were considered for the project: orthotropic steel deck and an innovative composite steel plate and elastomer decking system. Ultimately, the deck design best suited to the project was determined to be a composite steel plate and elastomer decking system patented by Intelligent Engineering (Canada) Ltd. of Ottawa. Called the Sandwich Plate System (SPS™), the system was originally developed for use in the marine industry for ship hulls and decks. Application of this new technology has recently begun in the bridge industry.

SPS makes use of two relatively thin steel face plates–10mm thick, in the case of Dawson Bridge–connected by an injected elastomer core. The final product is a composite panel with high stiffness and strength, but relatively low weight. The deck plates are fabricated in the shop using conventional steel fabrication techniques, and the liquid elastomer, which cures into solid form within an hour, is injected to form the core. For Dawson Bridge, the 10mm 350AT steel face plates sandwich a 25mm elastomer core, forming a composite deck panel only 45mm in total thickness.

The design team recommended to the City of Edmonton an intensive risk control program for the application of a new technology, especially considering that Dawson Bridge is a large and expensive asset for the City. Only a handful of bridges around the world have been built using SPS technology, and all have involved significant field welding that is both costly and difficult to maintain consistent quality.

As the first and most important step of the risk control program, the design team set out to develop new details for connection of the SPS deck panels in order to eliminate entirely the need for field welding. The new details, developed by the design team and detailed by Intelligent Engineering, involve using splice plates to connect adjacent deck panels with countersunk ASTM A325 bolts. To save weight and complexity, the top flange of the new floor stringers act as the bottom splice plate. Also as part of the risk control plan, full three-scale samples of the new connection detail were built and tested under fatigue loading at the structural engineering laboratory at the University of Alberta. Those tests demonstrated that the new connection detail can withstand fatigue loads nearly double in magnitude to those expected in actual in-service conditions.

Because the composite steel deck panels could be fabricated entirely in the shop and bolted quickly into position on the bridge, erection of the deck was completely in only six weeks. This speed allowed construction to be completed in 12 months, with the bridge closed on January 4, 2010 and reopened on December 20, 2010. If a traditional concrete deck had been used, the difficultly and expense of strengthening truss members would have been far greater and the construction schedule would have taken at least 18 months.

CONCLUSION

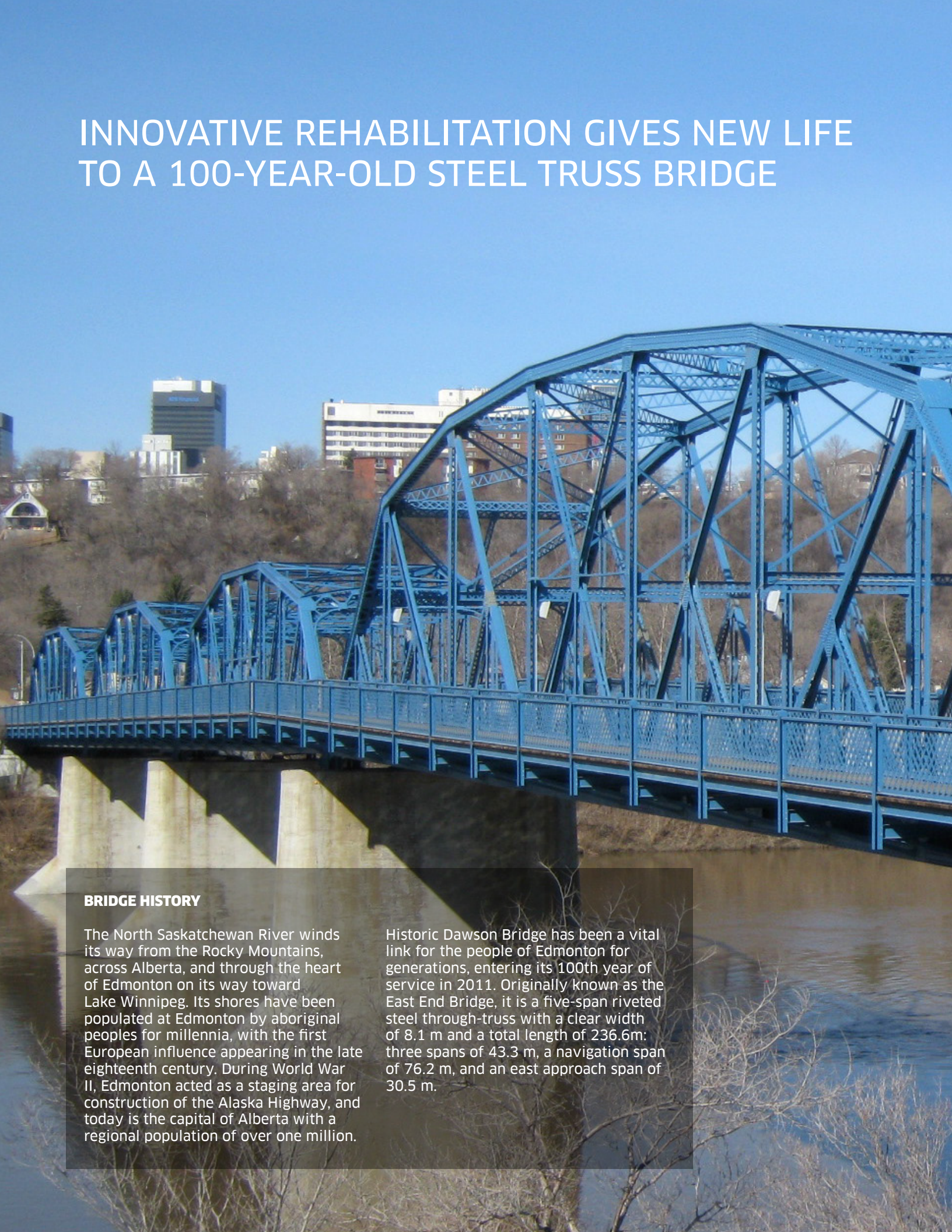
The rehabilitation project involved removing the existing deteriorated concrete deck, erecting new floor stringers, installing 1850 m^2 of innovative composite steel plate and elastomer decking, removing 17,500 rivets, tightening 37,500 new bolts, and blast cleaning and recoating of the entire structure with high-performance zinc/epoxy/urethane paint. New sidewalks 2.65m wide were also installed. Under budget at $17 million, Dawson Bridge reopened to traffic almost exactly on schedule on December 20, 2010.

The Dawson Bridge project has successfully advanced the state of the art in bridge engineering and has achieved millions in cost savings for the City of Edmonton, while allowing the rehabilitation work to be completed within a single construction season. Today, Dawson Bridge is fully rehabilitated with the world's largest SPS deck--and the only installation built entirely without field welding--standing prepared to serve generations of Edmontonians.

PROJECT AWARDS

CISC Alberta Steel Design Award of Excellence - Sustainability, March 2011

INNOVATIVE REHABILITATION GIVES NEW LIFE TO A 100-YEAR-OLD STEEL TRUSS BRIDGE

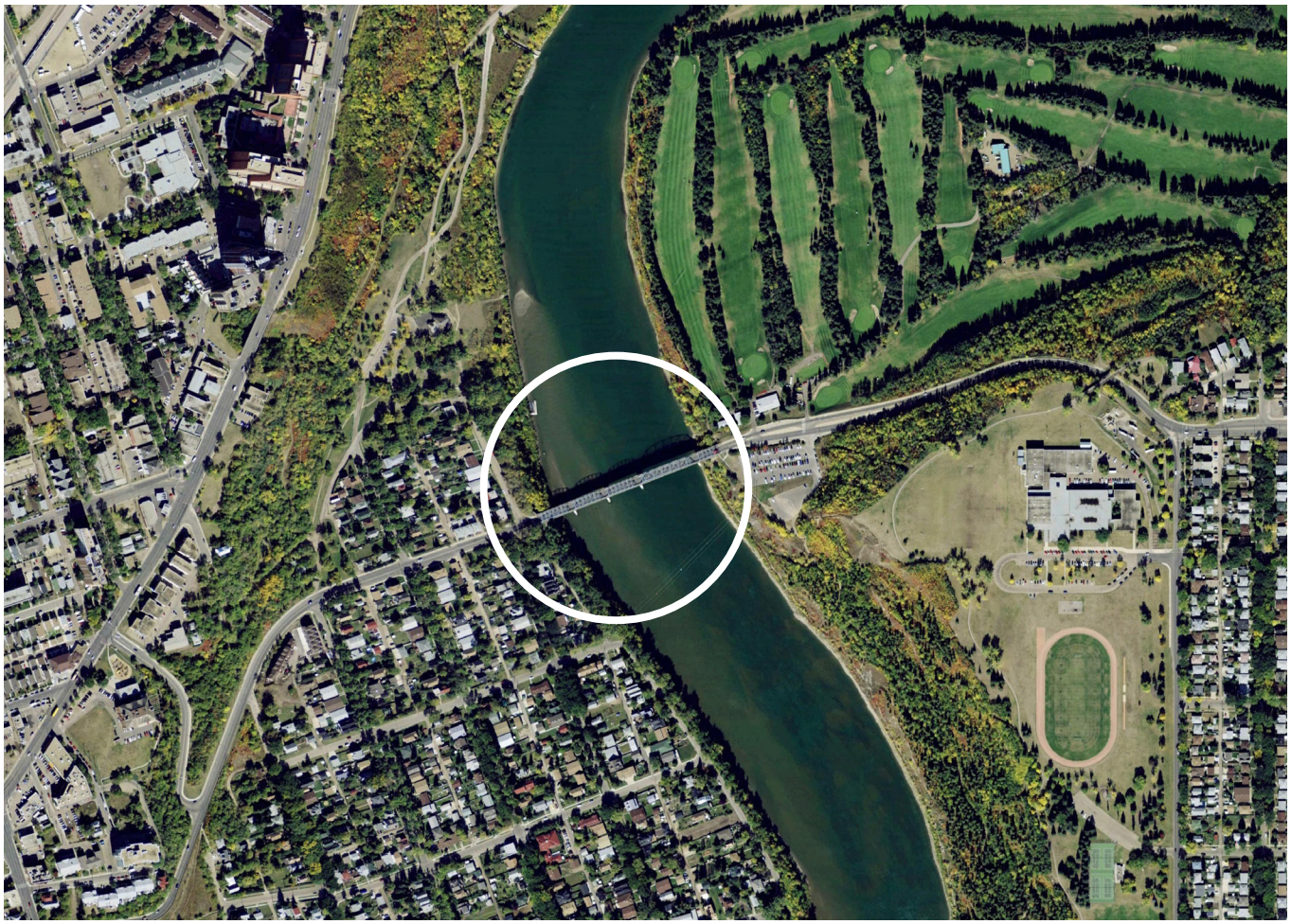


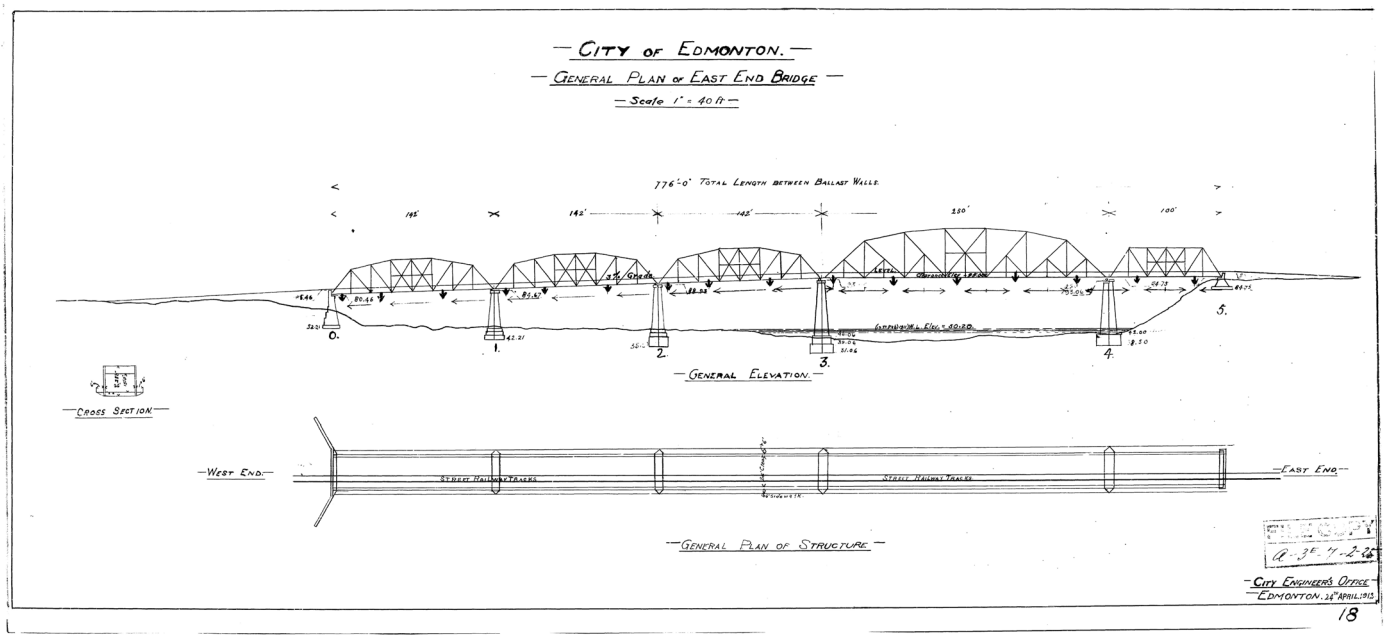
BRIDGE HISTORY

The North Saskatchewan River winds its way from the Rocky Mountains, across Alberta, and through the heart of Edmonton on its way toward Lake Winnipeg. Its shores have been populated at Edmonton by aboriginal peoples for millennia, with the first European influence appearing in the late eighteenth century. During World War II, Edmonton acted as a staging area for construction of the Alaska Highway, and today is the capital of Alberta with a regional population of over one million.

Historic Dawson Bridge has been a vital link for the people of Edmonton for generations, entering its 100th year of service in 2011. Originally known as the East End Bridge, it is a five-span riveted steel through-truss with a clear width of 8.1 m and a total length of 236.6m: three spans of 43.3 m, a navigation span of 76.2 m, and an east approach span of 30.5 m.


DIALOG™




CITY OF EDMONTON.
GENERAL PLAN OF EAST END BRIDGE
Scale 1" = 40 ft
776'-0" Total Length between Ballast Walls
185'
182'
182'
230'
100'
GENERAL ELEVATION.
CROSS SECTION
WEST END.
EAST END.
STREET RAILWAY TRACKS
STREET RAILWAY TRACKS
GENERAL PLAN OF STRUCTURE
CITY ENGINEER'S OFFICE
EDMONTON, 24th APRIL 1913.
18

Originally constructed to carry horse-drawn wagons and electric trains to the Dawson Coal Company mine located on the east bank, the bridge opened on October 8, 1912 with a construction cost of $145,000. Only the second bridge to cross the North Saskatchewan River at Edmonton, Dawson Bridge quickly became a vital link for the city's growth, allowing coal to be transported quickly into the heart of the city for industry and home heating.

After closure of the Dawson Mine in 1944, the bridge was converted to carry only highway vehicles. Today, the bridge has one lane of traffic in each direction and accommodates about 17,000 vehicles each weekday. As a link to Edmonton's extensive multi-use river valley trail system, the two sidewalks on Dawson Bridge serve many pedestrians and cyclists.

CONDITION ASSESSMENT

In 2007 The City of Edmonton commissioned DIALOG™ to conduct a condition assessment for Dawson Bridge. Field inspection revealed the superstructure in need of significant repair, including total replacement of the bridge deck and complete repainting of all steelwork. Structural analysis also identified numerous truss members requiring strengthening or replacement in order to increase the service life of the bridge and meet the safety requirements of the Canadian Highway Bridge Design Code 2006. In addition, the original narrow sidewalks—only 1.5 m wide—caused safety concerns due to mixed use by pedestrians and cyclists.



Especially problematic was the existing 165 mm steel-fibre-reinforced semi-lightweight concrete deck, cast in 1986 on top of old timber subdecking from the 1940's. Though its relatively light weight was beneficial for limiting dead loads, the thin concrete deck was too flexible to resist cracking. In particular, The City of Edmonton was experiencing continual maintenance problems with the methyl methacrylate thin membrane wearing surface at details where the concrete deck passed over the transverse floor beams. The concrete deck section was reduced to only 65 mm thick to clear the top flange of the floor beams, making it nearly impossible to control cracking.

As part of the assessment, a load rating of Dawson Bridge was conducted using a 4-axle, 63.5 tonne Alberta CS3 rating vehicle, the largest vehicle that might practically access the bridge considering its vertical clearance restrictions and location. That assessment concluded that numerous truss members must be strengthened or replaced in order to meet the required level of safety and to extend the lifespan of the bridge.

Dawson Bridge is listed on the register of historic resources in The City of Edmonton and is one of very few structures in the city—of any kind—to reach its centenary. The project team was given the mandate to respect the historical appearance of the existing structure and make certain that the rehabilitation measures would not be apparent to the public once construction was complete.

TRUSS REHABILITATION

The original truss members of Dawson Bridge are built-up rivetted members with an I-shaped cross-section, with steel angles forming the flanges and lattice plates crossing back and forth between the flanges to form the web. All members were originally connected by 19 mm or 22 mm rivets.

The load rating results showed that it was necessary to strengthen or replace several of the existing truss members. For the replacement members, the new members are constructed to the same dimensions as the original, but they have solid plates welded together to form the flanges and the webs. The original lattice pattern of the web is duplicated by plasma-cut holes in the new web plate, an economical modern construction technique that maintains the historical appearance of the members.



An analysis of estimated remaining fatigue life showed that the fatigue life of many of the riveted connections on the bridge has theoretically been consumed. Fortunately, the steel inspection carried out as part of this assessment did not reveal any fatigue cracking. In response, a simple fatigue strengthening strategy was implemented by to reduce the risk of structural problems over the remaining service life of the Dawson Bridge replacing all rivets at critical connection locations with high strength pre-tensioned bolts.









After completion of all truss strengthening and rivet replacement work, the entire superstructure was blast cleaned and recoated with a three-part organic zinc/epoxy/polyurethane system. This system is anticipated to last 25 years before overcoating is required.

One change from the original appearance is that the new sidewalks are nearly twice as wide as the original sidewalks. However, steelwork detailing for the new sidewalk brackets was done using geometry that matches the historical nature of the bridge. The new, wider sidewalk dramatically improves the experience for pedestrians and cyclists using this bridge as part of the River Valley trail system.

LIGHTWEIGHT DECK: INNOVATION AND RISK CONTROL

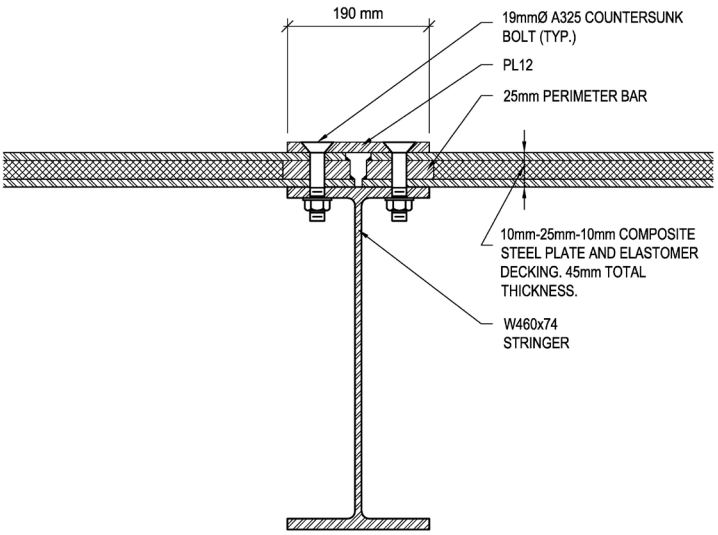
As options for rehabilitation were developed, it became clear that the bridge could be rehabilitated economically only if a lightweight deck replaced the existing deteriorated concrete deck. A traditional concrete deck would require costly replacement or strengthening of many truss members along with difficult upgrading of existing connections. Additionally, it might cause overload for the piers, abutments, and foundations. By replacing the existing semi-lightweight concrete deck with a lightweight steel deck, the design team concluded that the dead load savings could be applied to carrying additional live load and widening the sidewalks. Only steel offered viable lightweight deck options: grating, orthotropic deck, or an innovative composite steel plate and elastomer system called the Sandwich Plate System (SPS™) patented by Intelligent Engineering (Canada) Ltd.

Grating was quickly eliminated as an option for the deck because increased road noise would be detrimental to the nearby Riverdale community. Orthotropic steel deck was judged a suitable option, but detailing would be challenging where the deck had to clear the tops of the floor beams without raising the grade line, and orthotropic deck may be susceptible to fatigue cracking. After considerable research, the design team recommended SPS to The City of Edmonton, judging that SPS technology offered the best combination of light weight, thin profile, and ease of erection for the Dawson Bridge Rehabilitation project.

The SPS composite steel plate and elastomer system was originally developed by Intelligent Engineering Ltd. for ship hulls and decks in the marine industry. Application of this technology began about a decade ago in the bridge industry, and SPS has been installed on several bridges worldwide. The technology is gradually gaining acceptance by bridge engineers.

SPS makes use of two relatively thin steel face plates connected by an injected thermosetting elastomer core. The final product is a composite panel with high stiffness and strength, but relatively low weight.







Deck panels are fabricated in the shop using conventional steel fabrication techniques. First, solid “perimeter bars” are welded along each edge of the bottom plate using a continuous fillet weld. The top plate is then lowered onto the perimeter bars and fillet welded all around forming a panel with a sealed void. The liquid elastomer, which cures into solid form within an hour, is injected through a port to form the core. For Dawson Bridge, the 10 mm steel face plates sandwich a 25 mm elastomer core, forming a composite deck panel with a total thickness of only 45 mm. These prefabricated panels are typically 1.9 m wide and 8.5 m long.

Risk is inherent in the application of all new technologies in all industries. Perceived risk—and its associated liability—often dissuades engineers from trying innovations that might advance the state of the art in their area of practice. Potential liability places a constriction on the pace of innovation that, in the long run, is most often a disservice to society. Striking the right balance between innovation and risk control is the key to success. Thus, when DIALOG recommended SPS—a relatively new technology—to the City of Edmonton, that recommendation came with the proviso that an intensive risk control program must be implemented, especially since Dawson Bridge is an important and expensive asset. The City of Edmonton is a progressive bridge owner that welcomes innovation, and they directed the design team to proceed with SPS as the basis of design for the deck.

The risk control plan developed for the deck comprised six key elements:

- Extensive background research in the available literature;
- Site visits by the design team to other bridges with SPS decks, and interviews with the bridge authority managing those structures;
- Development of improved connection details in consultation with Intelligent Engineering;
- Fatigue testing of full-scale sample connections in the laboratory;
- Enhanced quality control and quality assurance programs during deck fabrication and erection; and,
- Monitoring of deck performance over the lifetime of the bridge as part of the City of Edmonton's bridge maintenance program.

DIALOG judged the most important aspect of the risk control plan to be the development of new connection details between adjacent SPS deck panels. Of the handful of bridges around the world built using SPS technology, all have involved significant field welding—a method that is costly and makes quality control difficult. Risks associated with field welding include fit-up out-of-tolerance, the potential for excessive heat input that might debond the elastomer from the steel, and undesirable weld flaws that might inadvertently result in premature fatigue cracking.

Taking to heart the golden rule "shop weld and field bolt," the DIALOG design team developed unique bolted details for connecting the SPS deck panels. These details completely eliminate the need for field welding. Bolted connections drastically increase speed of erection, significantly reduce cost, and improve fatigue performance from Detail Category D (depending on the specifics of the weld geometry) to Detail Category B when using slip-critical connections.











To connect adjacent SPS deck panels, a top splice plate is fastened by a single row of countersunk pretensioned 19 mm ASTM A325 bolts. Countersunk bolts provide a flat surface for the finished deck, except for the thickness of the splice plate itself. This surface, once grit blasted, is prepared to receive a waterproof membrane and asphalt. In order to make deck detailing and construction simpler, the SPS deck in each span is planar with no cross-fall. To achieve positive drainage, the asphalt varies in thickness from 100 mm at the crown to 40 mm at the shoulders.

Longitudinal deck splices are designed to align with floor stringers below. This arrangement enables the top flange of the stringers to act as the bottom splice plate for the connection, saving both weight and complexity. The new stringers chosen—W460x74—are larger than required for flexural strength but offer a flange wide enough to accept a row of bolts on each side. At transverse deck joints, located away from floor beams to avoid clashes, bolted splice plates are used both top and bottom. In all cases enough bolts are used so that sealing requirements are met and negative moments in the deck can be transferred across the supporting stringers. This very simple approach to connections makes the deck very easy to fabricate and simple to erect. Using similar bolting details, the traffic barriers along the length of the bridge are also bolted down through the deck to the edge stringer.

Also as part of the risk control plan, three small 1:1-scale samples of the longitudinal bolted deck connection detail were built and tested under fatigue loading at the University of Alberta with the assistance of Professor Gilbert Grondin, Ph.D., P.Eng. Those tests demonstrated that the new connection detail can withstand fatigue loads nearly double in magnitude to those expected in actual in-service conditions.

REAPING THE BENEFITS OF INNOVATION

Because the composite steel deck panels could be fabricated entirely in the shop and bolted quickly into position on the bridge, erection of the deck was completed in only six weeks during July and August 2010. This speed allowed the $17 million rehabilitation to be finished in only 12 months: the bridge closed to traffic on January 4, 2010, and reopened on December 20, 2010. A traditional concrete deck would have extended the project schedule to at least 18 months, added millions of dollars of extra truss strengthening work, and caused numerous other technical issues.

The Dawson Bridge project has successfully advanced the state of the art in bridge technology and has achieved cost savings for the City of Edmonton, while allowing the rehabilitation work to be completed within a single construction season. Today, Dawson Bridge is fully rehabilitated with the world's largest SPS deck—the only installation built entirely without field welding—and it stands prepared to serve Edmontonians for many generations to come.



DAWSON BRIDGE REHABILITATION – PROJECT CREDITS

Owner
The City of Edmonton

Prime Consultant Bridge Engineering
DIALOG

Civil Engineering
Al-Terra Engineering Ltd.

General Contractor
ConCreate USL Ltd.

Steel Detailing and Fabrication – Stringers and Connections
Empire Iron Works Ltd.

Steel Detailing and Fabrication – Sidewalks and Truss Upgrades
Steel Design and Fabricators Ltd. (SDF)

Steel Design and Detailing – Composite Steel Plate and Elastomer Decking
Intelligent Engineering Canada Ltd.

Steel Fabricator – Composite Steel Plate and Elastomer Decking
Cemilas B.V.

Steel Erector
Steel Design and Fabricators Ltd. (SDF)

Paint
Certified Coatings Specialists Inc.

COMMENT #8

From:	John Shattuck
To:	Chase, Cassandra (FHWA); Kittredge, Joel
Cc:	Dave Douglass; Marie Brillant; Roland Tufts; Ruth Lyons (Seleperson); Bill Thompson; Rich Roedner
Subject:	Topsham Selectmen"s §106 Review comments
Date:	Friday, December 02, 2016 12:35:03 PM
Attachments:	2016-12-01 Topsham BOS §106 Comments.pdf

CASSIE & JOEL: Attached please find the Topsham Selectmen's comments submitted for your consideration as you develop your report on the §106 Review. Please don't hesitate to let me know if you would like the original hardcopy of the attached letter. Thank you, John

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John Shattuck
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Topsham because: http://youtu.be/Y_luU6wJMOU

Per 1 MRSA § 402(3), all communications with public officials (with limited exceptions) are considered public records and available for review by any interested party.

Board of Selectmen
100 Main Street
Topsham, ME 04086

Phone: 207-725-5821
Fax: 207-725-1731

December 1, 2016

Cassandra Chase
Environmental Engineer
Federal Highway Administration – Maine Division
US Department of Transportation

Joel Kittredge
Project Manager
Maine Department of Transportation

Re: Frank J. Wood Bridge §106 Review

Dear Ms. Chase & Mr. Kittredge:

Please accept our thanks for your attention to the critically important issues of historic and environmental impacts involved in deciding whether the current Frank Wood Bridge should be rehabilitated or replaced.

As you are aware, in June of this year we unanimously adopted a resolution supporting the replacement of the Frank Wood Bridge for a variety of reasons enumerated in the resolution, which is attached. We write today to reiterate our conviction that replacement is still the best option and that the case for replacement has only grown stronger as additional information has been made available by the Maine Department of Transportation, as well as through your review process and the efforts of the Brunswick-Topsham Bridge Design Advisory Committee.

This §106 Review has attracted strong interest and requests for consulting party status designation from a wide array of individuals and organizations, including a number located far from our community and many without any prior history of involvement in historic preservation, or involvement in local government as elected officials, staff professionals or even as volunteers. In a review process that includes relatively few statutorily entitled consulting parties under 36 CFR §800.2, we would respectfully note that we are such a statutorily designated consulting party, as well as being the only Review participant representing a local government.

We agree that a careful review of historic and environmental impacts are essential to a balanced and fully informed decision on the disposition of the bridge, but we also recognize that they cannot be the

sole and controlling considerations in reaching that decision. Accordingly, we respectfully request that you carefully consider the following additional input of duly-elected local officials with respect to the environmental, historic, and financial impacts of this decision.

Environmental impacts

With regard to the differing environmental impacts of rehabilitation or replacement, we believe that there can be little doubt that replacement will present far less risk of environmental degradation to the river than would inevitably result from a major, lengthy initial rehabilitation and reconstruction project, followed by many recurring (if smaller scale) rehabilitation, repair and rebuilding cycles to ensure that this incredibly intricate web of aged and continuously corroding metal remains structurally sound and safe to use. This is a bridge that has been shedding lead paint and lead-impregnated steel into the Androscoggin River for more than eight decades. The obsolete materials and the equally obsolete structural technology employed in the design of this bridge guarantees that corrosion will continue to occur at the thousands of joints, through-bolts and layered plates throughout the bridge and will require repeated repainting to slow, but not defeat, the ongoing decay.

Despite improvements in paint formulations, and the best efforts at containment during repeated reconstruction and repainting, it's indisputable that this structure will continue to deposit far more paint and metal corrosion byproducts into the river than would a new bridge. A replacement bridge, built with vastly more corrosion-resistant modern materials, and with far less (and enormously less fragmented) exposed metal will require much less extensive and less frequent painting and maintenance – with the result that adverse environmental impacts will be hugely reduced.

Our State and riverfront communities have invested substantial resources in the restoration of the shamefully degraded environment of the Androscoggin River. If maintaining that success and further restoring our river is important – and it definitely is – then the choice between rehabilitation and replacement should not be a close call.

Historical impacts

With regard to the differing historical impacts of rehabilitation or replacement, we believe that replacement offers far superior opportunities to recognize, celebrate and enjoy the historic significance of both the natural and built environments at this unique site. To date, the §106 Review has included repeated assertions that the Frank Wood Bridge is historically important from both engineering and aesthetic perspectives, and that it constitutes an inseparable, intrinsic piece of a single fabric incorporating the bridge and our two communities' waterfront mills.

Based on the historic record, we respectfully disagree.

While the Boston Bridge Works certainly built some beautiful bridges, this technologically simple bridge, with little consideration or expense devoted to aesthetic elements, is not one of their artistic successes – a comparison to the company's Tyngsborough Bridge is illustrative. In the 1930s, as is still the case today, Maine was a state with limited economic resources and a disproportionately high number of road miles and river crossings in relation to its small population. The current bridge was

chosen from a pattern book, with cost considerations paramount, to meet critical transportation needs, not to make an aesthetic statement.

Another telling comparison lies just a few hundred yards upstream from the current bridge: the Androscoggin Swinging Bridge. This 124-year-old bridge was built by the John A. Roebling's Sons Company, one of the premier bridge designers and builders of their day, perhaps best known for building the Brooklyn Bridge. Even though it was built 40 years earlier, the Swinging Bridge's tower and cable suspension engineering was a far more sophisticated building technique than the through-truss method employed in the Wood Bridge. Truss bridge technology was the predominate approach in bridge construction beginning in the 1870s, but, when the Wood Bridge was built, this method was already being abandoned across the most of country in favor of concrete girder and beam bridges or suspension bridges, for longer spans.

The Swinging Bridge is not simply a National Register eligible structure; it has been listed on the National Register of Historic Places since 2004, and in 2011 the Maine Section of the American Society of Civil Engineers recognized it as a Maine Historic Civil Engineering Landmark. This bridge is intimately tied to the history of both our towns and the mill workers it was built to serve, and is particularly significant in illuminating the social and cultural history of that time.

While aesthetic evaluations are necessarily subjective, we believe that most in our communities would agree that, with its elegant arcs and lines, the Swinging Bridge is far more appealing than the boxy, asymmetrical Wood Bridge superstructure, which obscures views of Topsham's and Brunswick's historic waterfronts, and the river itself, from all of us.

The contention that the Wood Bridge constitutes an inseparable, intrinsic piece of a single fabric incorporating the bridge and our two communities' waterfront mills is discredited by the history of the bridge. The Wood Bridge was built well over a century later than the Brunswick mill, and more than 60 years later than Topsham's Pejepscot Mill. Indeed, the Wood Bridge replaced a bridge that actually connected directly to the Pejepscot Mill, where Topsham's Main Street ran through the center of the mill complex. So, the placement of Wood Bridge actually disregarded this historic connection to the mill and realigned Main Street, substantially disrupting the fabric of Topsham's historic Lower Village and displacing long-standing buildings to make way for the rerouted Main Street.

By contrast, the Maine Department of Transportation's proposed replacement bridge would tie in to the existing road alignments in both Topsham and Brunswick with minimal disruption, and with no buildings displaced.

Even a relatively casual review of the history of the Pejepscot Falls reveals that the current bridge is merely one of at least nine bridges constructed in this area and, more importantly, that the enduring historic significance of this location arises from the existence of the Pejepscot Falls across centuries, not from the ephemeral bridges that have been built nearby. The falls were the site of very lengthy habitation and intensive fishing by Native Americans long before European colonists arrived. This was the site of the earliest Colonial precursors of our two towns, as settlers were drawn here by the abundant fishing resource and, later, by the hydro power provided by the falls.

Insisting on the preservation of what is only the most recent of the many bridges at this site disproportionately elevates an ancillary structure, and a brief instant of time, over the full and rich historical context of this location. Such an approach is historic distortion, not meaningful historic preservation. Simply put, the history of this site is much bigger than any one bridge.

We believe that the construction of the proposed replacement bridge would do far more to preserve and respect our local historic legacy – both natural and built – than would the protracted and repeated rehabilitation of a single structure that is not historically significant on technological, aesthetic or cultural grounds. The mere accumulation of years does not create significance.

Unlike the Wood Bridge, the proposed replacement bridge would enable all of us to enjoy unobstructed views of the historic waterfronts of both towns, particularly the historic and appealing Cabot and Pejepscot Mills, which both preceded the Wood Bridge by many years and which were both built with far more attention to aesthetic impact. We would also gain open, sweeping views of our beautiful river for the first time in living memory.

These views constitute a genuine historic – and natural - legacy that is worthy of restoration, preservation and celebration.

We recognize that, by law, the §106 Review is focused solely on historic and environmental issues. And, for the reasons set forth above, we believe that replacement of the exiting bridge is clearly the superior alternative, even based solely on historic and environmental impacts.

But, as elected officials, we are also accountable to our constituents for thoughtful, effective and efficient use of their taxes and for prudent stewardship of public property and resources, including infrastructure.

Financial impacts

The Maine Department of Transportation's draft Matrix of Alternatives, released on October 26th, 2016, includes preliminary cost information, which compellingly reinforces the already strong case for the replacement alternative. We understand that the two alternatives that are most likely to be the final options are: Upstream replacement (Alternative 2) and Rehabilitation with the addition of a second sidewalk (Alternative 4). The Matrix projects that the initial construction cost for Alternative 2 will be 13 million dollars, while for Alternative 4 the initial rehabilitation cost will be 17 million dollars, nearly a third more expensive. The Matrix reports that estimated life cycle costs, even discounted for present value, would be nearly 10 million dollars more for the rehabilitation alternative.

Although our municipality would not bear these costs directly, Topsham's residents, and all the residents of Maine, will bear these costs. Given our State's limited economic resources, and our growing but chronically underfunded infrastructure needs, expending 10 million dollars more than necessary for this bridge infrastructure would be neither prudent nor reasonable.

It is our understanding that some advocates for the rehabilitation alternative have proposed eliminating key elements of the preferred rehabilitation plan (Alternative 4), apparently for the sole purpose of

bringing down the higher cost of rehabilitation in comparison to replacement. The much enhanced pedestrian and cycling facilities of a new bridge enjoy broad public support and would be a major contributor to our Board's long-term efforts to develop the Lower Village and improve the connection between Topsham's and Brunswick's Main/e Streets and historic downtowns.

In addition to unnecessary maintenance costs, a decision to rehabilitate will impose a dramatically greater financial hardship on local business and travelers. Closures would be more frequent with a rehabilitated bridge, as clearly documented in MDOT's 2016-10-27 draft Summary of Alternatives. Each one of these closures will mean less business for our local businesses, and will generate losses that they must simply endure without compensation. Even though we understand that these business losses are not a formal part of your evaluation, they are nonetheless the very real and substantial consequences of a rehabilitation decision. By contrast, a replacement decision would minimize business losses in the short and long term. With the daily trip count at this crossing already approaching 19,000 vehicles a day, closures will impose a heavy burden not just on our town, but will disrupt traffic and commerce across our region.

In summary, we believe that expending 10 million more discounted dollars than necessary to maintain a decaying bridge would be irresponsible and indefensible in this period of limited finances, especially when one considers that a rehabilitated bridge will:

- be less accessible and functional for all users,
- be more detrimental to the environment,
- obstruct our shared legacy of historic built and natural view-sheds,
- repeatedly disrupt travelers and businesses with far more frequent and longer closures,
- have a shorter functional life,
- and cost substantially more to maintain.

.

Thank you for your attentive consideration of our concerns.

Sincerely,

David Douglass

William Thompson

Marie Brillant

Ruth Lyons

Roland Tufts

COMMENT #9

From:	John Shattuck
To:	Chase, Cassandra (FHWA); Kittredge, Joel
Cc:	Dave Douglass; Marie Brillant; Roland Tufts; Ruth Lyons (Seleperson); Bill Thompson; Rich Roedner
Subject:	§106 Review comments - local resolutions, letters and published comments
Date:	Friday, December 02, 2016 3:04:23 PM
Attachments:	2106-12-02 §106 comments - resolutions, letters & published comments.pdf

CASSIE & JOEL: Attached please find a packet of the below-listed local resolutions, letters and published comments in support of the replacement of the Frank Wood Bridge with a new bridge. Please note that the packet includes resolutions from the Topsham Selectmen, the municipal economic development corporations of both Topsham and Brunswick, the Southern Midcoast Maine Chamber of Commerce representing over 500 businesses in the Brunswick-Topsham region served by the bridge, as well as the Brunswick Bicycle Pedestrian Advisory Committee and the Bicycle Coalition of Maine. Please don't hesitate to let me know if you would like the hardcopies of these documents of the attached letter. Thank you, John

RESOLUTIONS & LETTERS SUPPORTING NEW BRUNSWICK-TOPSHAM BRIDGE

RESOLUTIONS

2016-05-12 Topsham Lower Village Development Committee
2016-05-26 Southern Midcoast Maine Chamber of Commerce
2016-06-01 Brunswick Development Corporation
2016-06-01 Topsham Development, Inc. Board of Directors
2016-06-02 Topsham Board of Selectmen
2016-06-22 Brunswick Bicycle Pedestrian Advisory Committee
2016-08-15 Bicycle Coalition of Maine

LETTERS

2016-06-01 Curtis Picard to Topsham Board of Selectmen
2016-06-03 Douglas Bennett to Topsham Board of Selectmen
2016-10-26 Sue Spann-ReMax Riverside to §106 Review
2016-10-27 Kevin Clark-Sitelines to §106 Review

PUBLISHED COMMENTS

2016-05-04 Bruce Van Note guest column – Times Record
2016-07-20 Douglas Bennett guest column – Times Record
2016-11-11 Douglas Bennett guest column – Times Record

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John Shattuck
Director, Economic & Community Development
Town of Topsham
100 Main Street
Topsham ME 04086

Office: (207) 373-5097
Mobile: (207) 650-0012
Email: jshattuck@TopshamMaine.com

Topsham because: http://youtu.be/Y_luU6wJMOU

Per 1 MRSA § 402(3), all communications with public officials (with limited exceptions) are considered public records and available for review by any interested party.

RESOLUTIONS & LETTERS SUPPORTING NEW BRUNSWICK-TOPSHAM BRIDGE

RESOLUTIONS

2016-05-12 Topsham Lower Village Development Committee
2016-05-26 Southern Midcoast Maine Chamber of Commerce
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PUBLISHED COMMENTS

2016-05-04 Bruce Van Note guest column – Times Record
2016-07-20 Douglas Bennett guest column – Times Record
2016-11-11 Douglas Bennett guest column – Times Record

RESOLUTIONS

Resolution Regarding the Bridge Between Topsham and Brunswick
Topsham Lower Village Development Committee
Adopted: May 12, 2016

The Lower Village Development Committee endorses construction of a new bridge to replace the current Frank J. Wood Bridge, noting that the new bridge will connect the two village centers of Topsham and Brunswick and should be designed, in function and appearance, to further the residential and commercial purposes of the two historic village centers. More specifically:

1. We want a new bridge design that works in a manner that <u>complements</u> the 196 Coastal Connector Bridge, which is really a by-pass bridge. Each should be expected to serve different purposes, and drivers should be encouraged to choose which bridge they use based on those intended different purposes.
   The By-Pass Bridge should
   - move traffic quickly around the towns to destinations beyond the town centers.

   The Maine/Main Street Bridge should
   - connect meaningfully and purposefully to two village centers.

2. We want a new bridge design that encourages <u>economic development</u> in the two villages the bridge connects. It should
   - facilitate walkability in the village centers at either end, and
   - facilitate cars parking and turning in the villages at either end and allowing cars to turn left or right onto Main/Maine Street when errands are completed.

3. We want a new bridge design that provides both <u>safety and the feeling of safety</u> for cyclists and pedestrians as well as motor vehicle drivers. More specifically, the design should
   - facilitate pedestrian crossing at either end where the bridge connects to the villages.
   - move traffic in a manner that makes the village streets at either end *complete streets*: streets that work for cars, bicycles and pedestrians, streets that work for children and seniors as well as other adults, and streets that work for those with disabilities.

4. We want a new bridge design that is <u>attractive and appropriate in appearance</u> to its setting because we know that viewscape is important to people choosing to live in Brunswick and Topsham. More specifically, the design should
   - be appropriate in appearance to the historic setting when viewed from the villages.
   - allow views of the river.
   - allow views of the mills and surrounding historic settings from the bridge.

_____

Douglas Bennett
On behalf of the Lower Village Redevelopment Committee

Southern Midcoast
MAINE CHAMBER
Increasing Prosperity in our Region

Southern Midcoast Maine Chamber
RESOLUTION REGARDING THE TOPSHAM-BRUNSWICK BRIDGE
Adopted: May 26, 2016
http://www.midcoastmaine.com/blog/post/southern-midcoast-maine-chamber-resolution-regarding-the-topsham-brunswick-bridge-adopted-may-26-2016

WHEREAS: The Directors of the Southern Midcoast Maine Chamber of Commerce acknowledge and respect the long service of the Frank J. Wood Bridge, but also express the following very strong concerns regarding continued reliance on this 84-year-old bridge:

- Accelerating deterioration in the condition of the existing bridge
- Increasing maintenance and inspection costs associated with a rehabilitated bridge
- Very substantial adverse impacts to local businesses arising from the repeated, lengthy closures required for rehabilitation of the existing bridge
- Much lower life-cycle costs of a new bridge
- Significantly improved and safer transportation facilities provided by a new bridge for all users, including pedestrians and bicyclists
- The fact that the bridge would still need to be replaced – at even higher cost – at the end of the limited additional useful life resulting from a rehabilitation
- The recommendation of the Maine Department of Transportation that the existing bridge be replaced, based upon more than a year of careful consideration of all alternatives, including rehabilitation

BE IT RESOLVED, THEREFORE: That the Directors of the Southern Midcoast Maine Chamber of Commerce fully support the replacement of the Frank J. Wood Bridge with a new bridge that includes improved access and safety for all users, including pedestrians and bicyclists, and minimizes the current and future financial impacts on our communities. Furthermore, to ensure local input on the design of the bridge, the Directors encourage the Towns of Brunswick and Topsham to establish a joint Design Advisory Committee to work with the Maine Department of Transportation to optimize the final design for the new bridge.

Brunswick Development Corporation
85 Union Street
Brunswick, Maine 04011

June 1, 2016

Joel Kittredge, Project Manager
Maine Department of Transportation
16 State House Station
Augusta, Maine 04333-0016

Dear Mr. Kittredge:

The Brunswick Development Corporation (BDC) was created in 1995 to encourage and promote the development of business enterprises within the Town of Brunswick, Maine for purposes of stimulating economic development by, among other things, providing incentives for businesses to locate and expand in Brunswick and to construct and expand facilities incorporating new techniques, and for purposes of maintaining and improving the economic health of the Town, lessening the burdens of government, and providing for additional employment opportunities and increased tax base within the Town. Infrastructure improvements, such as rehabilitating or replacing the current Brunswick-Topsham bridge, fall within the parameters of stimulating economic development in Brunswick and as such are of concern to the BDC.

Based on the presentations that the Maine Department of Transportation (DOT) has made to the Brunswick Town Council and the general public in the Brunswick-Topsham area on April 19, 2016 and April 27, 2016 respectively, it appears that continued investment in the 84 year old Frank J. Wood bridge would not be the preferred option, due to the rehabilitation costs, limited life cycle, and expensive, labor-intensive follow-up maintenance. While the BDC Board recognizes that the existing bridge has advocates for its rehabilitation, we also appreciate the benefits that can accrue to the Brunswick and Topsham communities if a new bridge is put in place, such as improved access and safety for pedestrians and bicyclists, observation "bump-outs" for upstream and downstream viewing of the river, reduced maintenance and inspection costs, and a longer life cycle. In addition, the prospect of the potential closures, associated with the rehabilitation of the existing bridge, that are anticipated to be for five to seven months per year for two or three years, constitutes an unacceptable burden on our Town's businesses, particularly those in our downtown.

Therefore, the BDC Board voted at its May 20, 2016 meeting to support the recommendation of the Maine DOT that the existing bridge be replaced, based upon more than a year of careful consideration of all alternatives, including rehabilitation. We appreciate the Maine DOT opportunity to provide comments on its recommendation and applaud its invitation to Brunswick and Topsham municipalities to appoint representatives to a Design Advisory Team to help increase the new bridge's aesthetic appeal for both communities.

Sincerely,

Larissa Darcy
BDC President

Cc: John Eldridge, Brunswick Town Manager

TOPSHAM DEVELOPMENT, INC.
RESOLUTION REGARDING THE TOPSHAM-BRUNSWICK BRIDGE
Adopted: 2016-06-01

WHEREAS: The Directors of Topsham Development, Inc. acknowledge and respect the long service of the Frank J. Wood Bridge, but also express very strong concerns regarding continued reliance on this 84-year-old bridge and note that the following considerations all demonstrate the need for a new Topsham-Brunswick bridge:

- Accelerating deterioration in the condition of the existing bridge
- Increasing maintenance and inspection costs associated with a rehabilitated bridge
- Very substantial adverse impacts to local businesses arising from the repeated, lengthy closures required for rehabilitation of the existing bridge
- Much lower life-cycle costs of a new bridge
- Significantly improved and safer transportation facilities provided by a new bridge for ***all*** users, including pedestrians and bicyclists
- The fact that the bridge would still need to be replaced – at even higher cost – at the end of the limited additional useful life resulting from a rehabilitation
- The recommendation of the Maine Department of Transportation that the existing bridge be replaced, based upon more than a year of careful consideration of all alternatives, including rehabilitation

BE IT RESOLVED, THEREFORE: That the Directors of Topsham Development, Inc. fully support the replacement of the existing bridge with a new bridge that includes improved access and safety for all users, including pedestrians and bicyclists. Furthermore, to ensure local input on the design of the bridge, the Directors encourage the Towns of Brunswick and Topsham to establish a joint Design Advisory Committee to work with the Maine Department of Transportation to optimize the final design for the new bridge.

Don Spann

Chair, Topsham Development, Inc.

TOPSHAM BOARD OF SELECTMEN
RESOLUTION REGARDING THE TOPSHAM-BRUNSWICK BRIDGE
ADOPTED: June 2, 2016

WHEREAS: The Topsham Selectmen acknowledge and respect the long service of the Frank J. Wood Bridge and its familiar presence as an admired element of Topsham's Lower Village.

AND WHEREAS: We also take notice and assert our deep concern regarding the following critical issues in connection with our community's continued reliance on this 84-year-old bridge:

- Accelerating deterioration in the condition of the existing bridge
- Increasing maintenance and inspection costs associated with a rehabilitated bridge
- Very substantial adverse impacts to local businesses arising from the repeated, lengthy closures required for rehabilitation of the existing bridge
- Much lower life-cycle costs of a new bridge
- Significantly improved and safer transportation facilities provided by a new bridge for all users, including pedestrians and bicyclists
- The fact that the bridge would still need to be replaced – at even higher cost – at the end of the limited additional useful life resulting from a rehabilitation
- The recommendation of the Maine Department of Transportation that the existing bridge be replaced, based upon more than a year of careful consideration of all alternatives, including rehabilitation.

BE IT RESOLVED, THEREFORE: The Topsham Selectmen fully support the replacement of the existing bridge with a new bridge that includes improved access and safety for all users, including pedestrians and bicyclists.

BE IT FURTHER RESOLVED: To ensure that the final design of the new bridge best meets both the State's responsibility to meet the public's transportation needs, and incorporates, to the degree that is financially feasible, the aesthetic and functional needs and preferences of Topsham and Brunswick, we will appoint, jointly with Brunswick, a Design Advisory Committee to work with the Maine Department of Transportation to optimize the final design for the new bridge.

BE IT FURTHER RESOLVED: Pursuant to 36 CFR § 800.2(c)(3), a representative of a local government with jurisdiction over the area in which the effects of an undertaking may occur is entitled to participate as a consulting party. The Town of Topsham asks that its status as an entitled consulting party be recognized and hereby appoints John Shattuck, Topsham Economic and Community Development Director, to be the Town's representative in the §106 process for the Frank J. Wood Bridge.

TOWN OF BRUNSWICK
BICYCLE & PEDESTRIAN ADVISORY COMMITTEE

To: Members of Town Council

Date: June 22, 2016

At BBPAC's May 19, 2016 monthly meeting, BBPAC Committee members voted unanimously to recommend Council support of the construction of a new bridge rather than the restoration of the Frank S. Wood Bridge.

At our June 16, 2016 BBPAC meeting, we unanimously reaffirmed our support for the new bridge option.

In addition, we disagree with some of the public statements made by the Friends of the Frank J. Wood Bridge.

- In order to cut costs, they recommend the elimination of the downriver canter- levered side walk (page 13); We feel that having a sidewalk in both directions is a positive enhancement for pedestrians in the new bridge design and a necessity if the old bridge is restored,
- The report states that 'safe pedestrian sidewalks are still lacking on both sides' (page 15) of the new bridge. A raised five foot sidewalk, separated from the travel lane by a five foot bicycle lane, seems relatively safe. Most Town sidewalks do not meet that standard.
- The assertion that 'bike lanes will be equal on either bridge' (page 15) is misleading. The 5' bike lanes are only possible as in the FJWB Report they have reduced the travel lane width on the old bridge to ten feet to accommodate two 5' bike lanes. The Committee does not feel 10' is sufficient for unrestricted opposing vehicular traffic, and therefore, this renders the bike lanes unsafe.

Respectfully Submitted,

BBPAC Co-Chair Will Wilkoff,
BBPAC Co-Chair Rich Cromwell

All Bicycle & Pedestrian Advisory Committee meetings are televised and open to the public. All are invited to attend and participate. For additional information please call the Brunswick Department of Planning & Development (725-6660).

Public Comment Regarding:
Frank J. Wood Bridge (BR #2016)
Route 201, Brunswick & Topsham, ME
MaineDOT WIN: 22603.00

August 15, 2016
Reference File: Maine DOT Record of Public Meeting "Public+Meeting+Minutes 4-27-16.pdf"

Summary Statement
The Bicycle Coalition of Maine is a statewide organization that works to make Maine better for bicycling and walking. We support well-designed development and streets that create environments that are safe and welcoming for those traveling on foot or bike.

We are writing to comment on the proposed rehabilitation or replacement of the Frank J. Wood Bridge, and its impacts on the safety and convenience of vulnerable users of the bridge. Because the proposed replacement bridge appears to offer more benefits for similar costs than rehabilitating the existing bridge (including better accommodation for vulnerable users and a longer lifespan), we believe that the best use of public funds is to replace the Frank J. Wood Bridge.

Project Discussion

The Frank J Wood Bridge is an approximately 84 year old bridge that serves as a critical connection between Topsham and Brunswick. The bridge needs considerable maintenance, and is being considered for either rehabilitation or replacement.

The bridge is a truss design that some people find very attractive and historic, and a vocal group of proponents prefers rehabbing the existing bridge to preserve its aesthetic and historical qualities. According to Maine DOT, the cost of rehabilitating the existing bridge will run approximately $10 million dollars, and will add about 30 years to the life of the bridge.

Alternatively, the bridge could simply be replaced with a lower profile, more modern design that some locals also find very attractive, and which significantly improves the conditions for walkers and bicycle riders. According to Maine DOT, the cost of replacing the bridge will run to approximately $10-12 million, and will create a bridge with an expected life span of 100 years or more.

We choose to make no comment on the relative aesthetic merits of the new versus the old bridge, but rather to focus on the fact that this bridge is an important piece of transportation infrastructure that needs to serve all users safely. In our view, the *function* of the bridge is more significant than its historic or aesthetic properties, and in our view, the existing bridge is deficient in providing safe transportation functionality for vulnerable users.

The existing bridge has one sidewalk on the west, upstream side, which appears to provide decent accommodation for pedestrians. The proposed rehab would include an additional sidewalk on the other side, which we do feel would further improve pedestrian access to both sides of Rt. 201.

P.O. Box 15272, Portland, ME 04112
207-623-4511 | www.bikemaine.org

The existing bridge has no bicycle accommodations and is a very uncomfortable, and for some, unsafe, place to ride. The shoulders include approximately 2 foot storm water grates running the length of the bridge that reduce a nominal 4 foot shoulder to about 2 feet of space outside the travel lanes. As a result, bicycles currently are advised to take the lane while crossing the bridge, as the travel lane is too narrow to be safely shared by bicycles and motor vehicles. This creates real and perceived conflicts between bicycle riders and motor vehicle drivers. Even if the existing travel lanes were reduced to 10 feet, the usable space for bicycle riders would remain too narrow for acceptable accommodation on a bridge in this urban location. Options like cantilevering on a multi-use path or widening the deck are likely to not be feasible due to cost and structural challenges. For this reason, rehabilitation does not appear to offer much in the way of improved conditions for bicycle riders.

The proposed replacement bridge will offer much better conditions for *both* walkers and bicycle riders.

The proposed replacement bridge features 5 foot bike lanes and 5 foot sidewalks, with small expansions apparently possible to include fishing or overlook spots near the ends. Travel lanes appear to be spec'd at 11 feet. **While we feel that these accommodations are a significant improvement over current conditions, we strongly urge that even narrower travel lanes be considered to improve compliance with posted 25 mph speed limits and to create additional space for wider or buffered bike lanes.** FHWA design guidelines do not warrant 11 foot travel lanes unless there is more than 8% heavy truck traffic on the roadway, which would need to be studied.

Ultimately, the Bicycle Coalition of Maine's position is that the best use of public funds would be to replace the bridge. The costs of the two alternatives are roughly comparable ($10 million versus $12 million), but the benefits are not. Rehabbing the existing bridge only extends the life of the bridge by about 30 years, while outright replacement provides up to 100 years of use. Rehabbing the existing bridge would preserve the currently sub-standard and unacceptable bicycle and pedestrian accommodations. Replacing the bridge would provide expanded and improved conditions for vulnerable users.

Thank you for the opportunity to comment, and please contact us if you have any questions.

Sincerely

Nancy Grant
Executive Director
Bicycle Coalition of Maine

James C. Tassé, PhD
Assistant Director
Bicycle Coalition of Maine

P.O. Box 15272, Portland, ME 04112
207-623-4511 | www.bikemaine.org

LETTERS

CURTIS PICARD

18 Roberts Hill Road • Topsham, ME 04086

June 1, 2016

David Douglass, Chair
Members of the Board of Selectmen
Town of Topsham
Topsham, ME 04086

RE: Letter of Support for the Replacement of the Frank J. Wood Bridge

Dear Chairman Douglass and members of the Board of Selectmen:

I am writing as a resident of Topsham on the issue of the Frank J. Wood Bridge. After having attended more than one of the information sessions regarding either replacing or rehabbing the bridge, I feel that I have enough information to support replacement. Here's why:

- In my view, the reasonable extra cost with replacing the bridge will provide a better, safer structure connecting Topsham and Brunswick.
- The useful life of a new bridge is dramatically longer than a restored existing structure. A new bridge for $13 million for 100 years is a much better investment of limited resources than spending $10 million for another 30 years useful life of the existing bridge.
- The new design will open up views of the river; provide safer bike and pedestrian lanes and I like the idea of adding scenic view bump outs along the bridge in key areas.
- The length of time needed to do the work along with the expected bridge closures / lane shut down is dramatically lessened by replacement because the replacement bridge work can go on while the existing bridge continues to be open.
- I have strong concerns that extended periods of lane closures or bridge shut downs will irreparably harm the businesses on both sides of the bridge.
- Finally, I also support the creation of a bridge advisory task force to work with MDOT on the final designs of new bridge.

Thank you for considering my comments.

Sincerely,

Curtis Picard

53 Elm Street
Topsham, Maine 04086
June 3, 2016

To Members of the Board of Selectmen:

I was present at last evening's meeting of the Board of Selectmen, and listened to the public comments about the question of replacing or renovating the Frank J. Wood Bridge. I did not offer comments myself having spoken at the previous meeting urging replacement but also urging a redesign of the proposed new bridge. I have also joined other members of the Lower Village Development Committee in a resolution you have received urging replacement and also outlining considerations in designing a new bridge.

I did hear the passionate comments of those urging renovation and their urging that "all the facts be heard." I took notes on the renovation bridge projects they named as examples of successful renovations. It caught my attention that while they criticized the cost estimates of MDOT, they used those same estimates as a basis for what renovation would cost if (say) a second sidewalk were eliminated. What I did not hear was any statement of costs of the other renovation projects they held up as exemplars. The costs of those projects are, of course, a matter of public record. The report they submitted to you as members of the BOS has much information about those projects, but nothing about their costs. I know the five of you to be attentive to taxpayer dollars, and I appreciate that about each of you. Here is what the Friends of the Frank J. Wood omitted to include in their presentations:

The Tyngsborough Bridge (Tyngsborough, MA) project (2009-12) cost $19 million for a bridge 547 feet in length, took three years to complete with the use of a constructed temporary bridge.

The Duck Bridge (Lowell, MA) project (2010-12) cost $16 million for a bridge 610 feet in length, and took two years to complete with a temporary pedestrian bridge. (Vehicular traffic was re-rerouted.)

I could not find cost figures for the Aiken Street Bridge (Lowell, MA). This 780 foot bridge was renovated in 1998.

In the past, the Friends of the Frank J. Wood Bridge have held up the Checkered House bridge (Richmond, VT) as an exemplar, and it appears on their Facebook page. This 350 foot bridge renovation (2011-13) cost $13.9 million, and took two years to complete with a temporary bridge. The Friends Facebook page also features the Healdsburg Bridge (Healdsburg, CA), a 438 foot bridge that was closed for a year when it was renovated (2015) at a cost of $12 million.

These figures strongly suggest that the cost of a renovated bridge might well exceed the cost of a new bridge. Our bridge is longer than each of these and passes over a river with stronger water flow. When I found these cost figures this morning, they led me to question the sincerity of the 'we need all the information' posture of the Friends of the Frank J. Wood Bridge.

What especially catches my attention beyond the cost of renovation is the length of time each bridge was closed to allow renovation. We have businesses at each end of the bridge that would be seriously harmed by a lengthy bridge closure. Both Topsham and Brunswick have worked hard to encourage economic development as something both good in its own right and also as something that generates tax revenues that ease tax burdens on homeowners. A bridge closure of a year or two or three would be devastating to the businesses at either end of the bridge.

Economic development was hardly mentioned last evening and it should be a driving consideration in how to proceed. That consideration speaks strongly for replacement.

Of course I do not know the end resolute of the section 106 process, but I expect it will be a recommendation not that we renovate the bridge but rather that we document the 1932 bridge with text and photos as we move to replace it. I salute your resolution supporting replacement last evening.

There are serious design issues with the preliminary sketches of the new bridge. A few of those were mentioned last evening, but the question of design got lost in the campaign to save the bridge. I urge you to appoint Topsham members of a joint Topsham/Brunswick committee to work with MDOT on design of a new bridge.

Sincerely yours,



Douglas C. Bennett

COST PROJECTIONS TO FRANK J. WOOD BRIDGE – John Shattuck 2016-06-06 To the below excerpts from Douglas Bennett's letter to the Topsham Selectmen, I have inserted (**in blue**) my simple projections of FJWB rehab costs based on the lineal rehab costs of the completed projects cited by the Friends of the Frank J. Wood Bridge. All these bridges (like the Frank J. Wood Bridge) are two lane bridges with deck widths of 30′ or less.

EXCERPTS - Douglas Bennett letter:

Here is what the Friends of the Frank J. Wood omitted to include in their presentations:

The Tyngsborough Bridge (Tyngsborough, MA) project (2009-12) cost $19 million for a bridge 547 feet in length, took three years to complete with the use of a constructed temporary bridge.

FJWB is 1.5 times longer – projected cost: $28.3 million

The Duck Bridge (Lowell, MA) project (2010-12) cost $16 million for a bridge 610 feet in length, and took two years to complete with a temporary pedestrian bridge. (Vehicular traffic was re-rerouted.)

FJWB is 1.3 times longer – projected cost: $21.4 million

In the past, the Friends of the Frank J. Wood Bridge have held up the Checkered House Bridge (Richmond, VT) as an exemplar, and it appears on their Facebook page. This 350 foot bridge renovation (2011-13) cost $13.9 million, and took three years to complete with a temporary bridge.

FJWB is 2.3 times longer – projected cost: $32.4 million

The Friends Facebook page also features the Healdsburg Bridge (Healdsburg, CA), a 438 foot bridge that was closed for a year when it was renovated (2015) at a cost of $12 million.

FJWB is 1.9 times longer – projected cost: $22.3 million

These figures strongly suggest that the cost of a renovated bridge might well exceed the cost of a new bridge. Our bridge is longer than each of these and passes over a river with stronger water flow. When I found these cost figures this morning, they led me to question the sincerity of the 'we need all the information' posture of the Friends of the Frank J. Wood Bridge.

Per MDOT 2015-11 estimate for the cost of a bridge replacement in the same location, a temporary bridge would cost $4 million

Cassandra Chase
Environmental Engineer
Federal Highway Administration – Maine Division
US Department of Transportation

Kristen Chamberlain
Bridge, Multi Modal and Traffic Team Leader
Environmental Office
Maine Department of Transportation

Re: Frank J. Wood Bridge §106 Review

I write this as a Lower Village business owner, to provide input to the work your committee is addressing in comparing the value of replacement vs repair of the Frank Wood Bridge.

I hope you will strongly consider the impact of repairing the bridge, as it will create significant disruption of the access and traffic flow during not only the time of initial repair/re-building (which will take months, if not years to complete), but also for years in the future as maintenance of the aged structure requires. Paramount in consideration during this discussion should be the issue of community safety, which is placed in jeopardy with a repair process as well as ongoing structural concerns with the existing bridge.

The building process for a new structure will have much less impact on traffic to and from the Lower Village, and therefore less negative impact on the existing and future businesses. Personally, I believe the "open" concept appearance of the proposed bridge will be visually appealing. It will by design provide expansive views down the river in one direction, and of the rocks/falls in the opposing direction. One needs only to drive over the new bridge connecting Lisbon and Durham to recognize the astounding view and difference that we will have. It will be a staggeringly beautiful change for this community.

I support and certainly recognize the value of preserving history, evidenced by the investment my husband and I dedicated to restoring our office space in the Bowdoin Mill. That said, I also value the environment. Literally daily I think of the shedding of rusted surface and lead-based paint into the Androscoggin from the existing bridge. I support total removal of this contaminant from our area, and the river we all respect.

Thank you for considering my thoughts.

Sue Spann
Owner/Broker
RE/MAX Riverside
1 Bowdoin Mill Island Suite 101
Topsham, Maine 04086

Sue

RE/MAX
Riverside
1 Bowdoin Mill Island, Suite 101
Topsham, ME 04086
Office: 207.725.8505
Fax: 207.725.8509

OUTSTANDING AGENTS. OUTSTANDING RESULTS.℠
Each Office is Independently Owned and Operated

October 27, 2016

RE: Frank J. Wood Bridge
Topsham - Brunswick

To whom it may concern,

As a local small business owner, local property owner and a taxpayer, it is unfathomable to me how it can be proposed that a single extra dollar be spent beyond that necessary to prolong the life of the current bridge until a replacement can be constructed. We are "kicking the can down the road" in two respects, forcing our children to both make a decision that we should be making today and then asking them to pay what will undoubtedly be a far greater cost for a replacement bridge, after millions have been wasted on extending the life of an obsolete structure.

The existing "green" bridge is neither the first nor the last bridge that will connect to the two villages. We should be celebrating the successes and the future of the two communities, as well as the extensive history that has taken place on the banks of the Androscoggin and the falls. The "green" bridge has existed for but a snippet in time compared to the broader history of the area and yes it should be commemorated for its contribution to that rich history.

Not only do the economics of the rehabilitation costs versus a replacement bridge not make sense, the economic impacts to the two downtowns during two to three years of seasonal closing will be devastating.

I urge all to support the construction of a new bridge and with it commemorate the rich history of fishing, living, industrial enterprises and previous bridges via visual and written documentation within a riverside park on each bank of the mighty Androscoggin.

Thank you,

Kevin P. Clark

Kevin P. Clark, PLS
President

SITELINES P.A. **ENGINEERS - PLANNERS - SURVEYORS - LANDSCAPE ARCHITECTS**
8 CUMBERLAND STREET, BRUNSWICK, MAINE 04011 PHONE: 207-725-1200 FAX: 207-725-1114

PUBLISHED COMMENTS

GUEST COLUMN: We Will Love Our New Bridge
2016-05-04 By Bruce Van Note © Times Record
http://media.adfrontiers.com/[CLICKMACRO]http://adserver.adtechus.com/?adlink/9402/2869461/0/225/AdId=-3;BnId=0;itime=381457685;
Bruce Van Note owns a home near the bridge and is a Topsham Planning Board member. A UMaine engineering graduate, he has worked as a surveyor, lawyer, mediator and at MaineDOT in executive policy positions under three Maine governors. He is the director of Policy and Planning at the Maine Turnpike Authority.

The 84-year old Frank J. Wood Bridge between Brunswick and Topsham is structurally deficient, doesn't have enough room for pedestrians and bicyclists, and needs to be replaced. Given the value that we place on history and local control, that can be a tough pill to swallow. Thus it is understandable that some good people will react with skepticism, want to save the old bridge, and maybe even take some unwarranted shots at the messenger, MaineDOT. Change is hard. But there is good news from experience in other Maine towns where some people felt the same way: We will love our new bridge.

The reasons we need a new bridge are straightforward:

Bridges Don't Last Forever

When well built and maintained, bridges last about as long as people do. The existing bridge is 84 years old. That's a good long life. Even if the state spent the $10 million or so that it would take to strengthen, patch, and paint it and add a second sidewalk as desired by the towns, we would get only 30 more years of bridge life. Of course, old bridge supporters will want a rehab to cost less and last longer. But as anyone who has renovated an old house knows, things usually get worse, not better, once you start tearing things apart. Most people will accept the unbiased judgments of state professional bridge engineers who have the training, experience and obligation to make state bridge engineering decisions.

Safety Must Be Primary

Although the old bridge is safe today, it is what engineers call a "fracture critical, non-redundant structure." This means that there are few if any back-up support beams and if the old bridge fails, it could fail fast. To prevent that, even after a rehab the old bridge would require detailed inspections at least every two years, costing about $60,000 each time.

Rehabilitation Would Be Very Disruptive

To rehabilitate the old bridge, it will need to be closed or restricted to one-way traffic for most of 2 years, and possibly up to 3 years. This would inconvenience commuters and likely devastate local businesses. With a new bridge, the old bridge would continue to be used during construction, and the impact may be as little as a few weeks.

A New Bridge is the Only Cost Effective Solution

The proposed new bridge will cost about $13 million and will last 100 years. Again, the rehab option would cost about $10 million and last 30 years. So for about 30 percent more money, we'll get more than three times the bridge life. Although we value preservation, we demand public financial discipline, and the new bridge is a fiscal "no-brainer." MaineDOT is footing the bill in a context of juggling 2,300 bridges and 8,800 miles of highways statewide with inadequate funding. Given this, doubters should ask themselves why MaineDOT would want to spend more up front if they could just "patch and pray" and spend the money elsewhere. The answer is because they have a duty to find a long-term, safe and cost effective solution.

Experience in other towns provides perspective. Near Bucksport, the Waldo-Hancock suspension bridge that carried Route 1 over the Penobscot River reached the end of its useful life after 72 years. Many mourned the loss and wanted to save it or build a larger replica with more sidewalls. Today, the new Penobscot Narrows Bridge seamlessly compliments nearby historic Fort Knox and is an icon to local communities.

In Naples, a moveable swing bridge that carried Route 302 over the waters between Long Lake and Brandy Pond needed improvement after 60 years of service. Again, some local residents wanted to save it, or replace it in kind with more sidewalks. Fast forward a few years, and local officials celebrated "our new bridge" at their ribbon cutting ceremony, the abutting causeway is humming with business activity and area kids take prom photos there this time of year.

The point is that once we engage in a respectful and grounded manner, the project will turn out great.

Let's work with MaineDOT on their design of the new bridge. My initial reaction to it was that it provides liberating open vistas, greatly enhances the pedestrian and bicycle experience, and has a simple and utilitarian look that fits the site's industrial past. Others disagree, and that's OK. Let's collaborate, evaluate, and offer reasonable suggestions to MaineDOT. They will continue to listen and work with us.

Perhaps we can honor the site's history with a riverfront park near its Topsham abutment including interpretive panels highlighting its early place name (Pejepscot Falls), previous bridges, mills, floods, etc. Perhaps we can calm traffic and add character through the use of materials, textures, colors, or striping. Perhaps we can make it "ours" with suggestions regarding railings, lighting, ties to the Riverwalk, and the pedestrian bump-outs. Other ideas will emerge. Some will work; some won't. But in the end, the process will work, and in a few years, we will love our new bridge.

GUEST COLUMN: To Honor the Frank J. Wood Bridge – And Much More

2016-07-20 By Douglass Bennett © Times Record

Douglas C. Bennett is a resident of Topsham's Historic District and a member of the town's Lower Village Development Committee

http://www.timesrecord.com/news/2016-07-20/Opinion/To_Honor_the_Frank_J_Wood_Bridge__And_Much_More.html

To insure the safety of all who use it, and also to insure the vitality of the two communities it links, the Frank J. Wood Bridge should be replaced, not renovated. Because the Frank J. Wood Bridge is a historical structure beloved by those who use it, we need to find appropriate ways to memorialize and celebrate this bridge as we replace it.

It is the river and the weather that are weakening the Frank J. Wood through rust. No act of preservation can reverse the damage already incurred. Repair and paint might extend the life of the bridge a few decades at most, but at nearly the cost of a new bridge and requiring long closures during renovation. Even with conscientious maintenance (something not seen in decades), a repaired Frank J. Wood Bridge would be vulnerable to failure. In that case, a vital artery between the two towns would be lost for years with ruinous economic consequences. A new bridge would last decades longer, require much less closure in its construction, and present much less risk.

This is not, however, a simple trade-off between historic preservation, on the one hand, and current community needs, on the other. Sometimes the best way to preserve history is not by freezing our attention at some point in the past but rather by telling the story of the changes that have transformed a place.

Today, nearly all of us picture the Frank J. Wood Bridge as the crossing between the towns of Brunswick and Topsham Maine. Connecting Maine Street (Brunswick) to Main Street (Topsham), town center to town center, it allows passage of cars, trucks, bicycles and pedestrians across the Androscoggin at the river's head of tide, just below the Androscoggin Dam. Cabot Mill and Pejepscot Mill stand sentinel at either end. Countless recent photographs of this apparently timeless scene show the bridge spanning the river, the dam in the background, the two mills at either end, a sunny sky dotted with puffy clouds.

But this iconic picture obscures more than it reveals about the river crossing point. Change not constancy has been the normal state of affairs. It has not been one timeless bridge that has spanned the river. The seasons and the currents have broken down a succession of bridges.

For Native Americans in the centuries before white settlement, there was no bridge. The lower falls of the Androscoggin were a place where they fished for salmon and sturgeon. In the first century of white settlement, there was still no bridge. White settlers, too, fished the lower falls, salted their catch and shipped it elsewhere. Before 1795, passage across the river was by foot in winter and otherwise by boat. On some days in some seasons, that passage was perilous because the river raged.

1795 was the year of the first bridge, a wooden bridge of course and likely covered like its several wooden successors. Fifteen years later, in 1811, a 'freshet' (a spring flood) carried off this first bridge. The bridge was built again.

In 1814 and again in 1827 these bridges were also carried off by a flood and rebuilt, in 1827 with stone abutments. In 1842 a fire destroyed the bridge and again it was rebuilt. All these bridges were privately built and maintained, their owners charging a fee for passage. In 1871, the two towns bought the still-wooden bridge.

In 1877, the towns replaced the wooden bridge with an iron bow bridge. A wrought iron bridge built by the King Iron Company (Cleveland) was washed away in 1914, and replaced.

In 1932, after all these others (at least eight), the current Frank J. Wood Bridge, a riveted Warren thru truss bridge was purchased from Boston Bridge Works and erected.

Each of these bridges might have been a worthy candidate for preservation had any of them stood up to the elements. It would be great to see each and every one of them today as we view the crossing.

Through all these years this river crossing has been a site of intense economic activity. Fishing was a significant activity until industry turned the river too foul to support any living thing. In the early 19th century, there were shipyards just below the current bridge site on the Topsham side. These are long gone, but today recreational fishing has returned to the lower Androscoggin.

Beginning in the late 18th century, making use of water-power from the falls, mills were constructed on both sides, first sawmills, then paper and cotton mills. These mills, too, were regularly wrecked by spring floods, then rebuilt, often larger. Parts of the Cabot Mill (Fort Andross) on the Brunswick side date from the early 19th century. The Pejepscot Mill (originally the Topsham Paper Mill) was constructed in 1868. While today they frame our picture of the Frank J. Wood Bridge, both mills have looked out on several other bridges at the site.

Various dams have crossed the falls channeling, taming and harnessing the river's power. A dam at this site began generating electric power in the 1890s. The current

Androscoggin Dam was last rebuilt several decades ago.

It is not only the one bridge that stands today we should honor. Instead, it is this river crossing, its relentless changes, and its succession of bridges, mills, dams and shipyards that we should lift up. We should see them all.

There is already a park (the 200th Anniversary Park) on the Brunswick side, where several earlier bridges once abutted. Topsham is planning a park in its Lower Village. The abutments of

the Frank J. Wood and the adjacent land should be part of that new park. Those two parks could be used to show the succession of bridges and to help residents of the two communities and visitors, too, understand how Brunswick and Topsham were established, thrived together and changed.

One further aspect of a prospective park on the Topsham side should be lifted up because it, too, concerns a bridge. The Granny Hole stream powered the Pejepscot Mill. It is a partly natural, partly human-expanded channel that carried Androscoggin River water around the mill. Until recently, a small, iron 19th century through truss bridge allowed passage over the Granny Hole stream. It was removed for safety reasons, but it would be useful to again have a passage where it once crossed. The bridge is now in storage. It could be renovated and restored as part of this new park to carry light traffic and to help tell the wonderful story of the bridges, dams and mills that made the two towns. That would be history well preserved.

GUEST COLUMN: Bringing Economics Into the Bridge Decision

2016-11-11 By Doug Bennett © Times Record

Doug Bennett is a member of the Brunswick/Topsham Bridge Design Committee.

http://www.timesrecord.com/news/2016-11-11/Opinion/Bringing_Economics_Into_the_Bridge_Decision.html

I hope you are paying attention, citizens of Brunswick and Topsham. A federally mandated legal process is playing out in the meeting rooms of our two town halls that could affect the economic viability of many businesses in our towns and affect the taxes we pay as well. It's a section 106 process. People are speaking on your behalf, and you should know what they are saying.

Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires Federal agencies to take into account the effects of their activities on historic properties. The historic property in question is the Frank J. Wood Bridge, which was constructed in 1932. The question is whether the Maine Department of Transportation can replace the bridge or whether instead it should renovate the bridge.

No one doubts that something needs to be done. Rust is degrading the bridge's structural integrity. Following an inspection this summer, it was posted with a maximum weight of 25 tons. Said Maine Department of Transportation (MDOT), "The inspection team of MaineDOT bridge engineers found rapid deterioration of structural steel which triggered a drop in the ranking of the bridge deck and superstructure from fair condition to poor condition."

Last spring, MDOT announced a plan to replace the bridge. That is when the section 106 process was triggered because replacement of the bridge could have an "adverse impact" on historic properties. An organization, the "Friends of the Frank J. Wood Bridge," was formed to press the case that the bridge is too important, too historic, to discard.

The section 106 process began in July. At a succession of meetings MDOT has laid out its understanding of the condition of the bridge, the alternatives (replacements or renovation) and the likely effects on recognized historic structures. At each meeting, the Friends of the Frank J. Wood Bridge have pressed their case. They question almost every assertion MDOT makes about condition, costs, setting and historic significance. Theirs are nearly the only voices from Topsham or Brunswick to be heard. Sometimes they suggest that they speak for nearly all of us.

Costs rarely play any part in the public arguments of the Friends of the Frank J. Wood Bridge. And when MDOT has put forward numbers showing renovation to be a costly proposition, the Friends have challenged the competence and integrity of those making the estimates. MDOT's estimates, however, are very much in line with the costs of bridge renovation projects elsewhere.

I admire citizen advocacy. I respect the conviction of the Friends of the Frank J. Wood Bridge that saving the bridge is of paramount importance to them. But I disagree with them and I expect most others in the community would as well in taking a fuller, sober look at choice

before us.

At some point, the economics of the bridge have to be weighed. This state (as many others) is already struggling to find enough money to maintain its bridges and roads. What is the cost to taxpayers of historic renovation vs. the cost of replacement with a new bridge? How much would pursuing either course disrupt now-thriving businesses at either end of the bridge?

A recent study by MDOT's consultants on the bridge project put the construction cost of a new bridge expected to last 100 years at $13 million. Life cycle costs (adding in the costs of future repairs) would push this to $13.7 million.

On the other hand, renovation of the existing bridge to last 75 years, they estimate, would cost $17 million. This includes the cost of erecting a temporary bridge to carry traffic while the renovation proceeded.

Because of its age and manner of construction, such a renovated bridge would need considerably more maintenance than a new one, pushing its life cycle costs to $23.2 million. Moreover, that needed maintenance would cause much more traffic disruption, with recurring negative consequences for the businesses at either end of the bridge.

Agreed, the Frank J. Wood Bridge is "historic". But is it worth $10 million more in taxpayer cost to save it? Is it worth months of traffic disruption each of the many times such a renovated bridge would need to be repaired? (Think about that while the bridge is again being repaired this summer.)

Perhaps it is time we stopped letting the Friends of the Frank J. Wood be the only voices heard. The economic vitality of the towns at either end of the bridge is at stake. History counts, but the bridge is an artery that gives present life to both Brunswick and Topsham.

OPINION: Letters to the Editor
2016-05-03 By Nancy Randolph
https://brunswicktimesrecord.our-hometown.com/news/2016-05-03/Opinion/LETTERS.html

I attended the MDOT Public Hearing about the replacement or rehabilitation of the Frank J. Wood Bridge.

I agree that the bridge is iconic in this region. I don't think it is unique and we all know that although it was built in 1932 it is aging. The steel is pitted and its strength degraded. It is unsafe for people on bicycles, its sidewalk is inadequate to the need.

I did a little research about the metal truss bridges and about replacement rather than rehabilitation.

Virginia completed a study in 2006 about what it takes to rehabilitate a metal truss bridge. Based on my reading of this report, I think MDOT's estimate for rehabilitation is actually much too low.

I understand wanting to keep things the same. I also know that a true rehabilitation of this bridge would require (as with the historic Swinging Bridge) dismantling, testing every part, replacing many parts. Much of the replacement parts would be made in China where initiatives in low cost bridge building and repair methods have been exploding.

I do believe our bridge should be replaced. I think 8-10 inch esplanades [or separate bike lanes and sidewalks] should be on each side of the bridge for people on bicycles, people pushing strollers, people using their lunch time out for a stroll, maybe even benches for lunch or just for a waterside break in the day. I envision planters and lights (such as on Bowdoin Mill Island) being placed between the road bed and the pedestrian/bicycle/ park area.

Let's make our town connection better and safer. Spend the extra money not on retaining an icon that doesn't serve to a new icon of 21st century community building. Let's gather a group of engineers, citizens, architects and charrette a design for the 21st Century. This is possible. Let's do it.

Join your community neighbors Monday, May 9 from 6-8 p.m. in the Topsham Municipal Building's 1st floor conference room.

Nancy E. Randolph,
Topsham

COMMENT #10

From:	John Graham
To:	Chase, Cassandra (FHWA); Joel.C.Kittredge@maine.gov
Cc:	nathan@historicbridges.org; Kitty Henderson; mnaber@achp.gov; Steve Hinchman; Scott Hanson
Subject:	Friends of the Frank J Wood Bridge formal response.
Date:	Friday, December 02, 2016 4:20:51 PM
Attachments:	RE_Cabot Mill DOE (2).pdf C. Mitchell email about Cabot Mill eligibility 10-2013.pdf FJWB-Cabot Mill 106.pdf

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Hi Cassie,

Please see the attached formal response on the eligibility of the Cabot Mill plus two supporting documents. Please confirm that you received this.

Thanks,

John

President - Friends of the Frank J Wood Bridge

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40 Western Avenue
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Attention Ms. Cassandra Chase, Environmental Engineer

Frank J. Wood Bridge MHPC # 1595-15

Cabot Mill National Register eligibility:

Dear Ms. Chase,

The Friends of the Frank J. Wood Bridge requests that this be placed in the formal record of both the 106 and the 4f in response to Cabot Mill National Register eligibility and the adverse impacts of removing the bridge.

MDOT and their team have repeatedly stated that removal of the Frank J. Wood Bridge would have no impact on the National Register eligibility of the Cabot Mill property. We believe their confidence in this assertion is unfounded.

The determination of eligibility for the Cabot Mill property is found in a May 4, 1999 Memorandum from Earle G. Shettleworth, Jr., SHPO, to Judith Lindsey-Foster, MDOT, OES, subject: Historic Bridge Survey – Truss Bridges – National Register eligibility review. On pages 4-5 of that memo, it states:

"The bridges in Brunswick and Rumford are located in proximity to concentrations of historic resources that merit nomination to the Register as historic districts. In Brunswick, this includes the already listed Bowdoin Mill (located in Topsham) and the Cabot Mill on the other side of the river. The Frank J. Wood Bridge forms a link between these two industrial complexes and is, in its own right, a product of the industrial age. …"

This determination of eligibility for the Cabot Mill unmistakably says that the Frank J. Wood Bridge is the link uniting the two mill complexes into a single district. There is no reasonable argument to assume that a district would still exist without the Frank J. Wood Bridge linking Cabot Mill to the Bowdoin Mill on the other side of the river.

It is also worth noting that this determination of eligibility does not include the hydro dam or power facilities. MDOT's team has continued to include those elements as contributing to a potential district in spite of having been informed that they date from the 1980's and are not historic. While there have been dams on the site since the early 19th century, this dam is considerably less than the 50 years old that is required for a resource to be contributing to a National Register district. Statements included in the report that claim this dam powered the two mill complexes are inaccurate. The existing dam had never powered either mill. The Bowdoin/Pejepscot Paper Company mill was powered by a lower dam that no longer exists.

Earlier dams approximately on the site of the current dam powered Cabot Mill, but the existing dam was constructed thirty years after production stopped in the Cabot Mill. It was built to produce electrical power for the grid and continues in that use. When the American Woolen Company – Foxcroft Mill historic district in Dover-Foxcroft, ME was nominated to the National Register in 2012 (NR #12001068) the dam was excluded from the district at the insistence of Christi Mitchell because it had been rebuilt in the 1980's. The existing dam at Brunswick-Topsham does not contribute to the potential industrial historic district comprised of the Cabot Mill, Frank J. Wood Bridge, and Bowdoin/Pejepscot Mill.

Kirk F. Mohney's June 16, 2016 letter to Megan M. Hopkin, Subject: Bridge Improvements/ replacement, Brunswick; MHPC #1595-15 states, "The MDOT also concludes that the dam located upstream of these three resources is a contributing feature of the district, and although we do not disagree, we would also include any extant hydroelectric generating facilities constructed during the period of significance that retain integrity." This statement is clearly based on the inaccurate indication in the MDOT report that the dam was historic and related to the functioning of the two mills. Since neither the existing dam nor the existing hydroelectric facilities are from the period of significance or connected to the operation of either mill, MHPC needs to be provided with more accurate information and asked to clarify if they still don't disagree with the inclusion of the dam as a contributing resource in the potential district.

It appears that MDOT's team has attempted to include the dam in the potential district simply because the removal of the bridge would appear less impactful if it was one of four resources in the potential district, rather than one of three. There is no case for the dam's inclusion in a potential district and, in fact, removal of the Frank J. Wood Bridge would almost certainly eliminate the possibility of a district including the Bowdoin Mill and Cabot Mill properties based on past determinations by Maine Historic Preservation Commission.

The construction of a modern concrete bridge between the two mill properties would further weaken any argument for a district by introducing a major contemporary element that would negatively impact the setting, feeling, and associations of the historic mill properties.

MDOT's team has introduced a 2010 Section 106 review for cell phone towers on the Cabot Mill as evidence of a determination of individual NR eligibility for the mill. Based on the wording of that document, referencing an" industrial complex," and the absence of any evidence that an actual determination of individual eligibility for the mill has ever been done, it is clear that the "Industrial complex" referred to is the industrial complex described in the May 1999 memo above, the potential district that includes the Bowdoin Mill, Frank J. Wood Bridge, and Cabot Mill.

In an email to architectural historian Scott Hanson on the subject of the potential eligibility of the Cabot Mill property, dated October 13, 2013, Christi Mitchell wrote, "Roger Reed did a fairly intensive survey form for the Cabot Mill in 1992. Some time ago the mill was considered eligible within the context of a small historic district that included the Pejepscot Mill, the bridge, and the Cabot Mill. *However, if this is a tax credit question, I would say that it needs to be evaluated on its own.*"

This statement from Maine's National Register Coordinator (now Assistant Director of MHPC) clearly indicates that Cabot Mill's eligibility needs to be confirmed. It has only been determined eligible as part of a district including the Frank J. Wood Bridge and Bowdoin Mill. Demolition of the Frank J. Wood Bridge and construction of a modern concrete highway-style bridge between the two mills will fundamentally alter the basis of the 1999 determination of eligibility. The potential effect of demolishing the Frank J. Wood Bridge on the Cabot Mill (including the possible use of historic tax credits for rehabilitation) cannot be assessed without doing an individual determination of eligibility for the property.

Period of Significance. In the MDOT report, the period of significance for the eligible Brunswick-Topsham Industrial Historic District is identified as "ca. 1850 to ca. 1930." The oldest resource within the eligible district is the granite portion of the Cabot Mill Picker House, built in 1836. The period of significance needs to be changed to reflect this fact.

Summer Street:

MDOT's team has concluded that the demolition of the Frank J. Wood Bridge and construction of a modern concrete highway-style bridge would have no adverse impact on the eligible potential district on Summer Street.

According to statements made at the last Section 106 meeting on this project, that conclusion is based on a belief that "Setting" "Feeling" and "Association" do not need to be considered when considering the seven aspects of integrity.

The National Register Bulletin, *How to Apply the National Register Criteria for Evaluation* is the official guidance on the subject from the National Park Service. It addresses "Understanding the Aspects of Integrity."

Regarding "Setting," it states:

> **Setting is the physical environment of a historic property.** Whereas location refers to the specific place where a property was built or an event occurred, setting refers to the *character* of the place in which the property played its historical role. It involves *how*, not just where, the property is situated and its relationship to surrounding features and open space.
>
> Setting often reflects the basic physical conditions under which a property was built and the functions it was intended to serve. In addition, the way in which a property is positioned in its environment can reflect the designer's concept of nature and aesthetic preferences.
>
> The physical features that constitute the setting of a historic property can be either natural or manmade, including such elements as:
>
> - Topographic features (a gorge or the crest of a hill);
> - Vegetation;
> - Simple manmade features (paths or fences); and
> - Relationships between buildings and other features or open space.

> These features and their relationships should be examined not only within the exact boundaries of the property, but also between the property and its *surroundings*. This is particularly important for districts.

Regarding "Feeling" and "Association," it states:

> **Feeling is a property's expression of the aesthetic or historic sense of a particular period of time.** It results from the presence of physical features that, taken together, convey the property's historic character. For example, a rural historic district retaining original design, materials, workmanship, and setting will relate the feeling of agricultural life in the 19th century. A grouping of prehistoric petroglyphs, unmarred by graffiti and intrusions and located on its original isolated bluff, can evoke a sense of tribal spiritual life.
>
> **Association is the direct link between an important historic event or person and a historic property.** A property retains association if it is the place where the event or activity occurred and is sufficiently intact to convey that relationship to an observer. Like feeling, association requires the presence of physical features that convey a property's historic character. For example, a Revolutionary War battlefield whose natural and manmade elements have remained intact since the 18th century will retain its quality of association with the battle.
>
> Because feeling and association depend on individual perceptions, their retention *alone* is never sufficient to support eligibility of a property for the National Register.

It appears that MDOT's team has misunderstood the meaning of this last paragraph, specifically "their retention *alone* is never sufficient to support eligibility of a property for the National Register," and concluded that these aspects of integrity do not have to be considered at all. There is no basis for this conclusion.

In terms of Setting, the Summer Street neighborhood needs to be considered in relationship to topographic features and relationships between buildings and other features or open space. Specifically, the neighborhood needs to be considered in relationship to the river. From the identified period of significance through the present the neighborhood has had an open view across the river with visibility of the water, the falls, and the wildlife attracted to the water. Bridges crossing the river since the first built in 1796, including the Frank J. Wood Bridge, have all been far enough downstream of the neighborhood to leave the view of the river unimpeded.

The guidance in the Bulletin states, "<u>These features and their relationships should be examined not only within the exact boundaries of the property, but also between the property and its *surroundings*. This is particularly important for districts.</u>" It is not possible to make a reasonable argument that building a new concrete highway-style bridge that curves upstream of the location of the Frank J. Wood Bridge, blocking the views of the river from the Summer Street neighborhood, will not have an adverse impact on the setting of the potential district.

In Kirk Mohney's June 16, 2016 letter to Megan Hopkin, cited above, he states, "As to the inclusion of the houses along Summer Street in Topsham in this industrial district, it is the Commission's opinion that unless documentation can be found that establishes a direct link between their construction and/or occupants to the operation of the mills, this area should

not be included. However, these properties may be eligible for listing in the Register as a separate residential historic district, the extent of which has not been determined."

A review of the 1940 U.S. Census data for Summer Street shows that 16 residents from the 18 households on the street worked in the mills in various capacities. Earlier censuses were not reviewed but it is highly likely that similar results will be found in the Census data from the other decades of the period of significance for the potential industrial district. Additionally, the Pejepscot Paper Company owned the house at 15 Summer Street and used it to house the Mill Agent for a period of time.

If the relationship between these houses and the industrial properties and bridge is such that they collectively form an eligible district, as suggested in Kirk Mohney's letter, the demolition of the Frank J. Wood Bridge and construction of a modern concrete highway-style bridge in the midst of all these resources would certainly have an adverse impact on the eligible district.

Frank J. Wood Bridge As an Example Of the Warren Truss Type To Be Preserved:

On page 5 of Earle Shettleworth's May 4, 1999 memo to MDOT regarding the bridge survey, he wrote:

> We have two additional matters to raise at this time regarding the opinions of eligibility and ineligibility expressed in both your memo and this one. The first relates to the long term survivability of a particular truss type over time. As it stands, representative examples of each truss type (as well as visually distinctive subtypes) are included on our eligible lists. The Commission believes that the preservation of one or more of each example should be a high priority in managing these resources. Although we recognize that the bridge management phase of the survey will address this issue, we are concerned that until such time that this plan is developed and implemented, the bridges which we have identified may continue to deteriorate or be replaced with the potential result that a bridge type is no longer represented in the inventory. We recommend, therefore, the institution of a policy that enables our agencies to periodically review the status of the inventory, and to take any necessary measures (such as reevaluating our present non-eligibility determinations) in order to assure the continued existence of particular bridge types.

Unfortunately, the number of National Register eligible truss bridges in Maine has been dramatically reduced since this inventory was done in 1999. The recommendations of the Commission have not been followed to plan for preserving examples of each type and no update of the inventory has been done. Without an updated inventory it is not possible to state how many of each type of truss bridge have been demolished or how many, if any, of each type remain.

Friends of the Frank J. Wood Bridge have been saying since spring that this bridge should be preserved as an example of the type. Sited near the juncture of Route 1 and Interstate 295 and with the adjoining mills and adjacent historic districts, it is uniquely well suited to be the

example that is preserved. We reiterate our point on that and point to Earle Shettleworth's statement above as evidence that our position is well grounded and reasonable.

Sincerely,

John Graham

President- Friends of the Frank J Wood Bridge

MAINE HISTORIC PRESERVATION COMMISSION
55 CAPITOL STREET
65 STATE HOUSE STATION
AUGUSTA, MAINE
04333

ANGUS S. KING, JR.
GOVERNOR

EARLE G. SHETTLEWORTH, JR.
DIRECTOR

MEMORANDUM

To: Judith Lindsey-Foster, MDOT, OES
From: Earle G. Shettleworth, Jr., SHPO
Date: May 4, 1999
Subject: Historic Bridge Survey -- Truss Bridges -- National Register eligibility review

The Commission has completed its assessment of the 94 truss bridges which have been surveyed by Lichtenstein & Associates, as well as the National Register eligibility recommendations made by your consultant and discussed at the HBS Committee on April 15.

It is my opinion, in concurrence with the recommendations contained in your memo of April 1, 1999, that the following previously unevaluated bridges merit nomination to the National Register of Historic Places either under Criterion A or C or a combination thereof:

Town	Bridge Name	Bridge #
Arrowsic	Max L. Wilder Memorial	2026
Ashland	B&ARR/SA5	0159
Augusta	Memorial	5196
Biddeford	Elm Street Bridge	1351
Buxton	West Buxton	3340
Caribou	Aroostook River	5572
Durham	Durham	3334
Fort Kent	International	2398
Gardiner	New Mills	2605
Harmony	Bailey	1022
Hollis	Bar Mills	3333
Hollis	Canal	1525
Howland	Piscataquis	3040
Kittery	Memorial Bridge	2546
Kittery	Sarah Mildred Long	3641
Portland	St. John Street Underpass	0327
Salem Twp.	Mill Pond	2565

PHONE: (207) 287-2132

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MAINE HISTORIC PRESERVATION COMMISSION
55 Capitol Street
State House Station 65
Augusta, Maine 04333



Town	Bridge Name	Bridge #
Thomaston	Wadsworth Street	2904

Bridges that appear in the following list were previously determined to be eligible by the MHPC during Section 106 consultation on individual undertakings, and these determinations were affirmed by the present survey:

Town	Bridge Name	Bridge #
Auburn	South Bridge	3330
Berwick	Grants RR Overpass	5429
Berwick	Hobbs RR Overpass	5352
Fairfield	Kennebec River Center	1522
Fairfield	Kennebec River East	3106
Fairfield	Kennebec River West 1573	
Gilead	Androscoggin River	5084
Harrison	Ryefield	0238
Madawaska	International	2399
New Sharon	New Sharon	2608
Windham	Gambo Falls	0266
Yarmouth	Granite Street Overpass	0210

The following wooden truss bridges are presently listed in the National Register:

Town	Bridge Name	Bridge #
Andover	Lovejoy	1001
Corinth	Robyville	1003
Fryeburg	Hemlock	1004
Lincoln Plt.	Bennett	1005
Littleton	Watson Covered	1006
Newry	Artist Covered	1007
Parsonsfield-Porter	Parsonsfield-Porter Covered	1010

The Commission concurs with MDOT's recommendations that the bridges contained in the following list do not appear to meet the National Register criteria:

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Augusta, Maine 04333

Town	Bridge Name	Bridge #
Abbot	Old Covered	3507
Andover	Merrill	3215
Auburn	Littlefields	3338
Bangor	Bangor-Brewer (replaced)	2038
Bath	Carlton	3007
Bowdoinham	Brooklyn	5190
Brownfield	Covered	3417
Brownfield	Boynton	0712
Brownville	Brownville Junction	3222
Canton	Gilbertville	2312
Chester	Penobscot River	3790
Chesterville	Williams #2	3181
Clinton	Sebasticook	3321
Coplin Plt.	Nash	3070
Detroit	Village	3309
Dresden	Middle Bridge	3341
East Machias	Jacksonville	3219
Edmunds Twp.	Tide Mill #2	3171
Falmouth	RR Crossing	2702
Greene	Turner Center	3426
Grindstone	Grindstone Twp.	0814
Guilford	Sangerville Station	2801
Hallowell	Vaughn Street (replaced)	0566
Hancock	Hancock-Sullivan	2973
Hollis	Bonny Eagle Covered	2190
Howland	Penobscot River	2660
Kenduskeag	Village	2975
Leeds	Foss	2290
Leeds	Stinchfield	5002
Limington	Nasons Mill	5165
Limington	Steep Falls	3328
Medford	Piscataquis River	0484
Medway	East Branch Penobscot	2256
Milbridge	Great North	3280

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Town	Bridge Name	Bridge #
Milford	Second Otter	2754
Milo	Pleasant River	3244
Naples	Songo Lock	3499
Old Town	Irving	2405
Passadumkeag	Hathaway	3505
Peru	Androscoggin River	2019
Phillips	Meeting Place	2545
Rumford	High Bridge	5188
Rumford	Ridlonville	3327
T3 Indian Purchase	West Branch Bridge	3666
Taunton	West Outlet	3113
Turner	Turner	2874
Union	Fairgrounds	6134
Upton	Andover Dam	3090
Willimantic	Arnold	2023
Yarmouth	MCRR Crossing	3313

During the Historic Bridge Committee's meeting on April 15, 1999, we indicated that the Dock Bridge (#3284) in Alna might be a contributing resource in a rural historic district that includes the village of Alna and the surrounding landscape that retains much of its agricultural character. Since then we have confirmed this observation, and have discussed this finding with Lisa Dickson. In addition, we raised a concern about the exclusion of the Back River Bridge (#3016) in Arrowsic as an example of a deck truss. After further deliberation about the visual distinctiveness of this bridge, the Commission believes that it should be considered eligible. Likewise, it is our opinion that the following four bridges -- which the MDOT considers to be ineligible -- appear to meet the National Register criteria:

Town	Bridge Name	Bridge #
Brunswick	Frank J. Wood	2016
Leeds	North Turner East	3214
Rumford	Martin Memorial	3248
Turner	North Turner West	1474

The bridges in Brunswick and Rumford are located in proximity to concentrations of historic resources that merit nomination to the Register as historic districts. In Brunswick, this includes the

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already listed Bowdoin Mill (located in Topsham) and the Cabot Mill on the other side of the river. The Frank J. Wood Bridge forms a link between these two industrial complexes and is, in its own right, a product of the industrial age. We consider the Martin Memorial Bridge in Rumford, like the Dock Bridge in Alna, to be part of an eligible historic district at Rumford Point. The North Turner East and North Turner West bridges offer an experience of moving through and over three different steel truss types (a camelback, a Parker, and a pony) in an undisturbed rural setting. The Commission believes that this group should be viewed as a district, in much the same way that the Kennebec River East, Center, and West bridges in Fairfield/Benton were found to be eligible. Inasmuch as the latter bridges will be replaced in the near future, the existence of such groupings is uncommon in Maine.

We have two additional matters to raise at this time regarding the opinions of eligibility and ineligibility expressed in both your memo and this one. The first relates to the long term survivability of particular truss types over time. As it stands, representative examples of each truss type (as well as visually distinctive subtypes) are included on our eligible lists. The Commission believes that the preservation of one or more of each example should be a high priority in managing these resources. Although we recognize that the bridge management phase of the survey will address this issue, we are concerned that until such time that this plan is developed and implemented, the bridges which we have identified may continue to deteriorate or be replaced with the potential result that a bridge type is no longer represented in the inventory. We recommend, therefore, the institution of a policy that enables our agencies to periodically review the status of the inventory, and to take any necessary measures (such as reevaluating our present non-eligibility determinations) in order to assure the continued existence of particular bridge types.

The second issue relates to how the MDOT will obtain public input on the methodology used to make determinations of eligibility. As you know, the Advisory Council's regulations for implementing Section 106 directs an Agency Official to seek input from the public in gathering information about historic properties (Part 800.4(a)(1)(iii)). In view of the fact that the bridge survey has not formally sought such input, and that such input may have a bearing on our evaluations of eligibility, we recommend that a strategy be devised to solicit the opinions of the public on the present phase of the survey. This information is important to consider before we finalize the list of eligible bridges.

If you have any questions relating to our findings and recommendations, please do not hesitate to contact me or Kirk Mohney of my staff.

From: Mitchell, Christi
To: Scott Hanson (scotthanson@sutherlandcc.net)
Subject: Cabot Mill
Date: Thursday, October 03, 2013 3:39:19 PM

Hi Scott,

Roger Reed did a fairly intensive survey form for the Cabot Mill in 1992. Some time ago the mill was considered eligible within the context of a small historic district that included the Pejepscot Mill, the bridge, and the Cabot Mill. However, if this is a tax credit question, I would say that it needs to be evaluated on its own.

Christi A. Mitchell
Architectural Historian
Maine Historic Preservation Commission
55 Capitol Street
State House Station 65
Augusta, Maine 04333-0065
(207) 287-2132 x 2
fax: (207) 287-2335
www.maine.gov/mhpc

"People ought to know about the past. If it's something to be proud of, they ought to take example from it; if it ain't, then they ought to buckle down and see to it that the present times should be better." Ruth Moore, The Walk Down Main Street.

COMMENT #11

From:	John Shattuck
To:	Chase, Cassandra (FHWA); Kittredge, Joel
Cc:	Dave Douglass; Marie Brillant; Roland Tufts; Ruth Lyons (Seleperson); Bill Thompson; Rich Roedner
Subject:	Town of Topsham §106 Review comments
Date:	Friday, December 02, 2016 7:31:09 PM
Attachments:	2016-12-02 §106 comments - Town of Topsham.pdf

CASSIE & JOEL: Attached please find additional Town of Topsham comments, limited to more technical aspects of historic and financial impacts, submitted for your consideration as you develop your report on the §106 Review. Please don't hesitate to let me know if you would like a hardcopy of the comments. Thank you, John

--
John Shattuck
Director, Economic & Community Development
Town of Topsham
100 Main Street
Topsham ME 04086

Office: (207) 373-5097
Mobile: (207) 650-0012
Email: jshattuck@TopshamMaine.com

Topsham because: http://youtu.be/Y_luU6wJMOU

Per 1 MRSA § 402(3), all communications with public officials (with limited exceptions) are considered public records and available for review by any interested party.

TOWN OF TOPSHAM
100 Main Street
Topsham ME 04086

TOWN OF TOPSHAM §106 REVIEW COMMENTS

HISTORIC IMPACTS

At the 2016-10-27 §106 Review meeting, the Preliminary Effect Determinations Presentation, regarding historic impacts of the various alternatives for the rehabilitation or replacement of the Frank Wood Bridge made frequent references to the "Brunswick-Topsham Industrial Historic District" and the "Summer Street Historic District." While these districts were apparently demarcated for the purposes of the historic impact analysis, it should be noted that there is no "Brunswick-Topsham Industrial Historic District" that has been delineated or designated by either Brunswick or Topsham as a historic district. Additionally, there is no "Summer Street Historic District" that has been delineated or recognized by Topsham as a historic district. Topsham voters considered, but rejected, the inclusion of a portion of Summer Street in the Topsham Historic District, which has been listed on the National Register of Historic Places since 1978.

More tellingly, the Frank Wood Bridge is not included or referenced in either the Topsham Historic District or the Brunswick Commercial Historic District, which was added to the National Register of Historic Places in January of this year. Neither is the Cabot Mill included in the Brunswick Commercial Historic District.

As noted by the Topsham Selectmen in their 2016-12-01 comments submitted to the §106 Review:

> The contention that the Wood Bridge constitutes an inseparable, intrinsic piece of a single fabric incorporating the bridge and our two communities' waterfront mills is discredited by the history of the bridge. The Wood Bridge was built well over a century later than the Brunswick mill, and more than 60 years later than Topsham's Pejepscot Mill. Indeed, the Wood Bridge replaced a bridge that actually connected directly to the Pejepscot Mill, where Topsham's Main Street ran through the center of the mill complex. So, the placement of Wood Bridge actually disregarded this historic connection to the mill and realigned Main Street, substantially disrupting the fabric of Topsham's historic Lower Village and displacing long-standing buildings to make way for the rerouted Main Street.

Finally, the Comprehensive Plans of Topsham and Brunswick do not identify the Frank Wood Bridge as an historic or economic asset, and neither Plan includes the preservation of the bridge as a community goal.

FINANCIAL IMPACTS

The draft Matrix of Alternatives Investigated was provided to the §106 Review by the Maine Department of Transportation (MaineDOT) on 2016-10-26. This document estimated that the initial construction cost for the upstream replacement of the Wood Bridge (Alternative 2) would be 13 million dollars, while the initial construction cost for the rehabilitation of the Wood Bridge (Alternative 4) would be 17 million dollars, or nearly a third more expensive. This report also stated that the Life Cycle Cost Estimate (including initial construction) for the upstream replacement of the Wood Bridge (Alternative 2) would be 13.7 million dollars, while the estimated cost for the rehabilitation of the Wood Bridge (Alternative 4) would be 23.2 million dollars, or more than two thirds – and nearly 10 million dollars - more expensive.

As explained in MaineDOT's 2016-10-27 draft Summary of Alternatives, at p. 19, the Estimated Life Cycle Costs are discounted to provide the present value of estimated initial and future costs: "The LCCE accounts for estimated construction costs on the current project and the translated present value of anticipated future inspection, maintenance, and rehabilitation." A 4% discount rate was used to calculate the present values.

In order to ensure a fair and consistent comparison of alternative project costs, MaineDOT regularly uses such a present value calculation in determining Life Cycle Cost Estimates (LCCE). This is an entirely appropriate approach but, as is the case with a number of generally accepted auditing standards, such an fixed method can sometimes yield arbitrary results that do not reflect real-world economic realities.

The below table is excerpted from a document entitled "Summary Costs for Service Life of Alternatives," which I requested and received from the Maine Department of Transportation on 2016-11-21. The table is excerpted only in that I have included just the two bridge alternatives that appear to be the most likely potential outcomes of the §106 Review. This table provides the total estimated costs of initial construction plus anticipated future inspection, maintenance, and rehabilitation costs for replacement of the Wood Bridge (Alternative 2) and the rehabilitation of the Wood Bridge (Alternative 4) ***without a present value discount.*** The totals resulting from this method are most illuminating:

Work Effort	Alt #2 Repl 2 SW Serv. Life 100 yrs	Alt #4 Rehab 2 SW Serv. Life 75 yrs
Initial Construction Cost	$13.0 M	$17.0 M
Inspection	(50) $0.1 M	(38) $2.2 M
Maintenance	(100) $0.1 M	(74) $3.0 M
Paint	(2) $3.5 M	(3) $12.0 M
Deck Replacement	------	$2.0 M
Substructure Rehab	------	(2) 2.0 M
Wearing Surface Replacement	(6) $0.6 M	-------
Total	**$17.3 M**	**$38.2 M**

(x) – denotes number of times effort is completed during the alternative's service life.

Without a present value discount, a simple arithmetic total of the estimated costs of initial construction plus anticipated future costs of inspection, maintenance, and rehabilitation results in a total, undiscounted cost for the upstream replacement of the Wood Bridge (Alternative 2) of 17.3 million dollars, while the total, undiscounted cost for the rehabilitation of the Wood Bridge (Alternative 4) would be 38.2 million dollars, or nearly 21 million dollars more expensive - more than twice the total cost of replacement.

No doubt some will argue that only costs with a present value discount provide an accurate comparison, but several simple, objective factors illustrate that costs calculated with a present value discount do ***not*** accurately reflect the real-world economic realities of the actual costs of funding these two bridge alternatives in the future.

A simple definition of present value is: "… the current worth of cash to be received in the future with one or more payments, which has been discounted at a market rate of interest." (http://www.accountingtools.com/present-value-definition). In practical terms, present value is compound interest in reverse: in other words, present value is the amount of cash that would need to be ***invested or saved today***, in order to have a specific amount (or pay a specific cost), at a specific date in the future. The prerequisite for a specific present value to yield a targeted amount in the future is that the present value amount, in cash, ***is actually invested or saved today***, so that the rate of return/interest, compounded over the intervening years, will result in the desired future amount.

The problem with using this approach in connection with future bridge costs is that we all know that MaineDOT, unfortunately, will ***not*** be receiving sufficient funding to set aside and reserve that present cash amount so it can grow to meet those future costs. But if no present cash amount is actually being set aside to grow, then using a present value discount does not reflect real-world economic realities of what will be required to fund these costs in the future.

The hard truth is that ***all*** of these future costs, ***at full value***, will have to be met by future year to year budgets, as there will be no reserve fund, established now, growing to meet these costs.

In fact, the reality is even harsher: The above table provides the total estimated costs of initial construction plus anticipated future inspection, maintenance, and rehabilitation costs for replacement or rehabilitation without a present value discount, but it uses ***today's*** costs for all anticipated future costs. In other words, these totals make no provision for the inevitable impact of inflation. We all know that we will not be able to purchase something that costs a dollar (or a million dollars) today for the same amount 20 years from now - much less 75 or 100 years from now.

While current inflation rates are exceptionally low (1.1% for the year ending 2016-08), we are looking at life cycle costs over the next 75 to 100 years. Given that timeline, the average inflation rate over the past century (3.29%) is much more likely to reflect inflation rates over the next century. And, at that unremarkable inflation rate, costs double every 22 years.

Whatever the actual inflation rate is over the next 75 to 100 years, it only takes simple arithmetic to see that the increased costs resulting from inflation will be much, much higher when applied to a current cost total of 38.2 million dollars than it will be for a total of 17.3 million dollars. And ***all*** those costs, including inflation, will have to be met by future year to year budgets.

It's not difficult to discern which alternative will be very substantially more burdensome to Maine taxpayers.

COMMENT #12

Ms. Cheryl Martin
Assistant Division Administrator. November 28, 2016
Federal Highway Administration, Maine Division
40 Western Avenue
Augusta, ME. 04330. Copy to Mr. Joel Kittredge, MDOT

Dear Ms. Martin. RE: Frank J. Wood Bridge, Androscoggin River

We understand it was stated by MDOT's historic preservation consultant, during the most recent Section 106 meeting, that the demolition of the Frank J. Wood Bridge and construction of a new bridge upstream would have no negative impact on the historic character and significance of our neighborhood on Summer Street, Topsham. We understand our neighborhood to be eligible as a National Register Historic district.

In case you are not familiar with the elements of Summer Street, it is a short street, consisting of 7 single family houses and 2 multifamily houses. All but one of the buildings were built in the 19th century, some as early as the 1830's. In addition, Summer Street is a part of the walking trail that goes along the river. It has, as well, a Prayer Wheel Garden and labyrinth which is dedicated to all spiritual traditions, and which is visited by many people, both local and tourists, each day. Residents have taken great care to preserve the character of the houses and the neighborhood. The neighborhood of is intimately connected to the existing bridge, as residents use it to walk and cycle into Brunswick, as well as view it daily from their windows.

Based on the seven Aspects of Integrity presented by the consultant, her statement of no negative impact is blatantly incorrect. In fact, it is so incorrect that her statement seems to be less of a finding, and more of a justification for the MDOT proposal. Three of the Aspects - Setting, Feeling, and Association - would all be very seriously impacted by the removal of the Wood Bridge and/or construction of a modern highway style bridge upstream, closer to our neighborhood. The consultant's "survey" of our neighborhood plainly did not provide her with any idea what the residents of Summer Street value and appreciate about the historic character of the existing bridge, and what it contributes to the neighborhood.

Looking out our windows at an open river framed by this historic truss bridge which has existed alongside our neighborhood for 85 years, bookended by 2 historic mills, is fundamentally different from looking out at the underside of a concrete slab on deep steel girders that hides the river and everything beyond it. The curved bridge proposed would cause vehicle headlights to sweep across our neighborhood and into our windows every night. The location of the proposed new bridge would bring the dirt and noise of the road much closer to our homes. Bringing the bridge closer to the concrete dam would amplify the noise even further.

In addition, the view presently includes the lower falls in which Native Americans fished for millennia. European settlement began nearby in 1628, with a trading post intended

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to buy fish caught by Native Americans in the lower falls. Documentation exists too concerning European settlers who also fished in the falls beginning in the 1670's. The proposed plan would destroy the character of the falls. Piers for the proposed new concrete and steel bridge would be built in the falls themselves, destroying the natural character and view of this last and important falls on the Androscoggin. The view of this falls is a central part of the view from Summer Street. In addition, the alignment of the proposed new bridge over the lower falls is presently frequented by eagles, peregrine falcons, blue herons, kingfishers, and many others, who would be displaced by the proposed construction. In fact, during spring runoff, the area of the proposed alignment is used by hundreds of birds of all types.

There is simply no way a reasonable argument can be made that the loss of our historic bridge and its associations, the loss of our river view, and the impacts of a highway bridge veering into our neighborhood will not negatively affect the Setting, Feeling, and Association of this eligible National Register District. We respectfully request that our letter be included in the record of the proceedings of Section 106 and 4(f) hearings.

Sincerely

The residents of Summer Street whose names, and signatures appear below:

Name.	Address.	Signature
Kevin + Alison Quirk	17 Summer St.	
"	" " "	
PAUL SEAQUIST	29 SUMMER ST	
Marsha L Dillard	29 Summer Street	
JEFFREY MUNSON	15 SUMMER ST	
Karen L Munson	15 Summer st	
Charles H. Carroll	24 Summer ST.	
Josephine L. Seymour	27 Summer St.	
MAYNARD D. McCORKLE	23 SUMMER ST	
Claudia S. McCorkle	23 Summer St	
William D. McCorkle	23 Summer St.	
Jill Brayman	25 Summer St.	

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS. FOLD AT DOTTED LINE

CERTIFIED MAIL

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04011
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$6.00
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04011

RETURN RECEIPT REQUESTED

Ms. Cheryl Martin
Asst. Division Administrator
Federal Highway Administration, Maine Division
40 Western Ave
Augusta ME 04330

043006325 0000

3

COMMENT #13

From:	MaryAnn Naber
To:	Chase, Cassandra (FHWA)
Subject:	Re: Frank J. Wood Bridge Project - Request for Comments on Section 106 Documents
Date:	Monday, December 05, 2016 4:53:56 PM

Hi, Cassie-

I realized when I saw your response to Mr. Graham's comments that I had never followed up our later discussion with written comments. I have concerns about both the preliminary assessment of effects and the manner in which alternatives were considered.

The overview of eligibility upon which the assessment of effects was based is inadequate to consider the full range of effects to the historic resources identified. The statements of eligibility should include a more complete discussion of all the contributing elements and the relative aspects of integrity in order that project effects may be assessed by applying the criteria of adverse effect. Integrity is not limited to "essential" physical features. It should be noted that the criteria of effect is based on the potential that a project "may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association." In addition, the regulations at 36 CFR 800.5 state, "Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register." Accordingly, it may be necessary to re-visit, update, and expand the original determinations of eligibility to ensure all contributing features of the properties are identified and may be taken into account. The overview of resource eligibility is not adequate to capture the full range of potential impacts to the historic properties, in particular with regard to indirect impacts such as those to setting, feeling, and association. Furthermore, these aspects of integrity seem to have been discounted if they were at all previously "compromised." For example, the presence of a parking lot is implied to have negated any aspect of the integrity of setting. However the relationship of the mills with the source of water power which gave rise to both and the water crossing between them are nevertheless significant features of the respective settings of each of those elements, and may yet be diminished by removal of the historic bridge.

I am also concerned with the order and weight given the various alternatives. Both Section 106 and Section 4(f) set a higher bar for selecting an alternative which would replace the Frank J. Wood Bridge. As a historic property, the approaches which would preserve the bridge must be given additional weight in evaluating the available alternatives. Cost and the degree to which the alternative meets the identified purpose and need are but two of the factors that should evaluated in selecting the alternative. The rehabilitation alternatives that preserve the bridge to the greatest degree should first be considered fairly and eliminated before determining that replacement with a new bridge is the only prudent alternative. I am also concerned that the firm providing the initial evaluation seems to have a bias toward new construction and does not have the experience with rehabilitating historic bridges to make a full and fair assessment of the rehabilitation potential for the Wood Bridge. I recommend that you seek a second opinion from a firm with historic bridge experience to evaluate the rehabilitation alternatives from that perspective.

Thank you for the opportunity to provide comments on the preliminary effects assessment and draft alternatives matrix. I look forward to our next meeting and discussing the project in

further detail.

MARYANN NABER
Senior Program Analyst, FHWA Liaison
Advisory Council on Historic Preservation

On Fri, Nov 4, 2016 at 8:56 AM -0400, "Chase, Cassandra (FHWA)" <Cassandra.Chase@dot.gov> wrote:

Good Morning,

Thank you all for attending the October 27th Section 106 Consulting Party Meeting for the Frank J. Wood Bridge Project. As mentioned at the meeting, we apologize for providing the materials just prior to the meeting. We were still working on compiling all of the information right up until the meeting, but we understand and recognize that this does not provide you with an adequate opportunity to review and come prepared to the meeting. In the future, we are committed to providing you with all documents to be discussed at future Section 106 consulting party meetings at least two weeks prior to the meeting.

Additionally, to ensure you are able to review and provide input on the draft alternatives matrix summary, the draft alternatives matrix, and the preliminary effect determinations, we are accepting and would appreciate any comments you have by COB on December 2, 2016. Please send your comments to both me (cassandra.chase@dot.gov) and Joel Kittredge (joel.c.kittredge@maine.gov). If you'd like to send your comments by mail, please either mail them to my attention at the Federal Highway Administration, Edmund S. Muskie Federal Building, 40 Western Avenue, Room 614, Augusta, Maine 04330; or Joel's attention at the Maine Department of Transportation, 16 SHS, Augusta, ME 04333-0016. We are currently working on addressing the comments received at last week's consulting party meeting. After we receive all of your comments by December 2nd, we will begin reviewing, addressing and considering those comments as well. You can expect to see another e-mail from me, in response to your comments particular to the Section 106 process, sometime in mid-December.

In addition to attaching the October 27th sign-in sheet, the draft alternatives matrix summary, draft alternatives matrix, and the preliminary effect determination presentation, I have attached a copy of the Cabot Mill Historic Survey, which indicates that the Cabot Mill is individually eligible for listing under the National Register of Historic Places. This was requested at the October 27th meeting. Also requested at the Section 106 consulting parties meeting was a link to view the architectural survey and eligibility package. This information can be found on MaineDOT's website at http://www.maine.gov/mdot/env/documents/Brunswick22603.00106Package8.2.16.pdf.

A public meeting, specific to the overall project, will be held in the near future and comments will also be received at that time on the project in its entirety. As always, feel free to contact me if you have any questions.

Cassie

Cassie Chase
Environmental Engineer
Federal Highway Administration – Maine Division
Office: 207-512-4921
Cell: 207-689-8007
Cassandra.chase@dot.gov

COMMENT #14

1/17/2017 3:55 PM

Ms. Martin,

I have enclosed a DVD of the Green Bridge in Topsham during high water on May 27, 2013.

There are two separate file/movies, 2 and 5 minutes of length. Hope they play on your computer fine.

It was a great sight !

Bill Morin



Topsham



Frank J Wood Bridge Androscoggin River Brunswick Topsham Maine

Tuesday, January 17, 2017

From The Desk of William F. Morin:

6 Front Street Topsham, Maine 04086
207-729-1760
williammorin@midmaine.com

Cheryl Martin
Assistant Division Administrator

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JAN 20 2017
FHWA
Maine Division

Federal Highway Administration – Maine Division
40 Western Ave
Augusta, ME 04330

Dear Ms. Martin:

I wish to express my comments regarding the proposed plans for replacement of the Frank J. Wood Bridge # 2016 between Topsham and Brunswick Maine. Maine DOT has proposed a new bridge to be constructed to replace the current one and the Section 106 review process is under way to make an appropriate determination regarding historical prominence of the Wood Bridge.

Designation of Frank J Wood Bridge for Historical Classification

The review process is to evaluate the effect of the undertaking by DOT to remove and replace the current bridge and also determine if any surrounding historical resources would be negatively affected. An undertaking such as this can potentially cause change, beneficially or adversely, to the quality of the historical, architectural, archeological, or cultural character of a resource that qualifies for listing on the NRHP. Each undertaking has an area of potential effect and it is to be determined by the HRO (Heritage Resource Specialist) and SHPO (State Historic Preservation Office) if the area is physically or visually affected by the proposed undertaking.

That portion of the process is currently being deliberated after a presentation by DOT and FHWA staff at the Topsham Town Office with Consulting Parties on October 27, 2016. The attendees were presented with a detailed **Matrix of Alternatives Investigated – Draft 10-26-2016** for consideration and is discussed as follows.

The following is a description of the various impacts based upon Section 106 of the National Historic Preservation Act as presented in the **Matrix of Alternatives Investigated – Draft 10-26-2016** and are summarized as follows.

Alternative No Build: No effect on the Brunswick-Topsham Industrial Historic District, Cabot Mill, Summer Street Historic District or the Pejepscot Paper Company Historic District.

Alternate 1 Replacement Bridge: Adverse Effect on the Brunswick – Topsham Industrial Historic District

Alternate 2 Replacement Bridge: Adverse Effect on the Brunswick – Topsham Industrial Historic District

Alternate 5 Replacement Bridge: Adverse Effect on the Brunswick – Topsham Industrial Historic District

Alternate 3 Rehabilitate Bridge: No Adverse Effect on the Brunswick – Topsham Industrial Historic District

Alternate 4 Rehabilitate Bridge: No Adverse Effect on the Brunswick – Topsham Industrial Historic District

Removal and replacement of the bridge will result in losing a structure that could well serve as a recognized historical asset in its own right and also would remove an historical corridor that connects all the other historical districts and have an adverse effect on the Brunswick-Topsham Industrial Historic District. I believe the loss of the Wood Bridge would somewhat diminish the sites of the surrounding area though not adversely affect them.

The replacement bridge would definitely not conform to the historical era of the Cabot Mill, Summer Street Historic District or the Pejepscot Paper Company Historic Districts and not add any significant qualification to the Industrial Historic District.

Replacement of the bridge would only have an adverse effect on the on the Brunswick-Topsham Industrial Historic District.

Environment of The Frank J. Wood Bridge Discussion

These districts, of the Brunswick – Topsham Industrial Historic District, the Cabot Mill, the Summer Street Historic District and the Pejepscot Paper Company Historic Districts, the Wood Bridge, the Falls and the surrounding area are an exceptional, historical and distinctive locale and I believe that all their components enhance the site and the loss of any member would be detrimental. The site is an iconic attraction and many people frequent this area for dining, entertainment, antique shopping, and visits to the many and various business offices, and medical services among others and to view the scenic falls which many visitors marvel at. The entire site attracts many hundreds of people day and night most everyday of the week and is definitely a destination for these many purposes.

Observing the entire sight, one sees the importance of the river which brought the industries over the last 200 years and the harnessing of the river to produce energy and the resultant commercial and residential development adjacent to the river. Over this river, there are a number of bridges that serve the communities. One is a footbridge that harkens back to the 1890s and has significant historical prominence, another a Warren Truss railroad bridge built around 1910 and another railroad trestle bridge built in the early 20th century. Also, two modern style vehicular bridges also are present, one North and one South of downtown Brunswick. The five bridges described exist within a mile or so of each other between Brunswick and Topsham with the Wood Bridge being in a central positon between these other bridges. This location is central to all other bridges and the central main streets in Brunswick and Topsham. The railroad bridges exist because of the Brunswick central rail lines that trail

along the Androscoggin River to Lewiston, Portland, and along the Maine coast and to Augusta.

There are certainly a large amount of bridges mentioned but they all have a useful purpose. The Wood Bridge is a local and not a thru corridor bridge and it predecessors have occupied the same locale for over two hundred years long before any of the previously mentioned bridges. At the site of the Wood Bridge, a crossing and the Falls were important to the indigenous inhabitants before settlement by the white man.

The functional structures of this area have changed over the course of over three centuries. They have ranged from a 18th century garrison fort near the Falls to rehabilitated sites of business and residences contained in the districts. The Wood Bridge is actually a new comer to this environment except for the two newer vehicular bridges. It seems a untimely consideration for this relatively new structure not to be preserved. It is older but a new enough bridge to continue serving as it has for over 80 years.

Perspective Thoughts of The Frank J. Wood Bridge Discussion

In the 106 process, there are many and varied factors used to determine the historical representation of the subject property and I appreciate the difficulty in doing so. My interpretations are based on the previous Historical Classification and Environmental Discussion paragraphs.

First, I believe that the Wood Bridge has standing to be classified as an historical asset as defined under the Historical Act of 1966 as approved by President Johnson. The signed legislation has been the bedrock of historical preservation for 50 years. That Act was in response to many historical structures and sites being unprotected and subsequently destroyed. Here in Maine that movement especially began after the demolishment of the admired Portland railroad station in 1961 and other railroad stations. By 1966, the Act was in place and one early recipient was the Brooklyn Bridge which was listed in October 1966.

When President Johnson visited Maine during the summer of 1966, his motorcade drove over the Wood Bridge and stopped at the Topsham Dairy Joy for a frozen treat. I can't help but believe he found the Wood Bridge appealing and of course, he did the touristy thing and stopped in Topsham.

As an observer of this bridge for many years, I have seen it grow in appreciation by local citizens and more recently visitors and tourists. The same reaction is also present in the recently rehabilitated Foot Bridge between Topsham and Brunswick. Its historical significance has become well known and widespread with daily visitors almost constantly all day long in the warmer months and throughout the year. I see the same happening at the Wood Bridge as visitors wish to see the Falls and this bridge (a favorite of photographers) draws them to view

the scenery. These two bridges are now popular tourist attractions and the Wood Bridge deserves also to be recognized as an historical bridge.

Few public assets in small town America are as revered as much as a local bridge. Perhaps it is the largeness of the structure, its design, the public events that can be identified with it, its usefulness in everyday life, its appearance over a running body of water and sometimes the drama of a flood that increases the watchfulness of a bridge by local citizens.

The Wood Bridge has been an familiar icon of the mid coast region of Maine for many years. Destruction of this icon would be inconsistent with the structure itself. It is a well-built bridge that was designed to accommodate two lanes of traffic plus a central railroad track to accommodate railroad cars and heavy steam engines. Granted, the travel lanes then were narrower than our current travel lane standards but because of the original wider design to accommodate three lanes, the width of the Wood Bridge is very suitable to present day two lane traffic of vehicles.

A bridge of this truss design consists of many girders and beams and if a deficiency is found, it can be replaced by a new member. Such a bridge like this is similar to a large old house which may have lower support sills that need replacing. The rest of the structure can have "good bones" and rehabilitation can restore it to a safe and attractive structure.

The Wood Bridge was built by the Boston Bridge Company which was active at the turn of the19th century up to the time of the Wood Bridge construction. Most of their bridges were built in Massachusetts and with others constructed in all the other New England states starting in the 1880s to the 1930s. Only three Boston Bridge Company structures are accounted for in Maine and the Wood Bridge is by far the largest and most impressive. Bridges of this type and builder are getting scarce not unlike the covered bridges of yesteryear.

Discussion and Designation of District for Historical Classification

I obtained and quote the following from an issue of The National Register Bulletin and it describes the distinguishable appearance of an historic district very well.

"Significance"

"A district must be significant, as well as being an identifiable entity. It must be important for historical, architectural, archeological, engineering, or cultural values. .."

"A district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development."

"Concentration, Linkage, & Continuity of Features"

"A district derives its importance from being a unified entity, even though it is often composed of a wide variety of resources. The identity of a district results from **the interrelationship of its resources**, which can convey a visual sense of the overall historic environment or be an arrangement of historically or functionally related properties. For example, a district can reflect one principal activity, such as a mill or a ranch, or it can encompass several interrelated activities, such as an area that includes industrial, residential, or commercial buildings, sites, structures, or objects. A district can also be a grouping of archeological sites related primarily by their common components; these types of districts often will not visually represent a specific historic environment."

"Types of Features"

"A district can comprise both features that lack individual distinction and individually distinctive features that serve as focal points. It may even be considered eligible if all of the components lack individual distinction, provided that the grouping achieves significance as a whole within its historic context. In either case, **the majority of the components that add to the district's historic character, even if they are individually undistinguished, must possess integrity, as must the district as a whole.**

A district can contain buildings, structures, sites, objects, or open spaces that do not contribute to the significance of the district. The number of noncontributing properties a district can contain yet still convey its sense of time and place and historical development depends on how these properties affect the district's integrity. In archeological districts, the primary factor to be considered is the effect of any disturbances on the information potential of the district as a whole."

"Geographical Boundaries"

"A district must be a definable geographic area that can be distinguished from surrounding properties by changes such as density, scale, type, age, style of sites, buildings, structures, and objects, or by documented differences in patterns of historic development or associations. It is seldom defined, however, by the limits of current parcels of ownership, management, or planning boundaries. The boundaries must be based upon a shared relationship among the properties constituting the district." END OF ALL QUOTES

The following is a discussion and views regarding the historical classification with emphasis of the characteristics of the Wood Bridge. First, I must say that many of the features of historical properties as outlined in the previous quoted paragraphs are also clearly visible in the

structural assets of the Brunswick-Topsham Industrial Historic District, Cabot Mill, Summer Street Historic District or the Pejepscot Paper Company Historic District.

The characteristics are; Significance, Concentration and Linkage, Features, and Boundaries.

Significance:

It is certainly a site of significance as it is a magnificent and collective grouping of historical and manufacturing structures and supporting housing and public bridges that portray a past industrial and economic age that emerged here and in other river towns of New England. This district was the recipient of the enormous and perpetual renewable energy of the Androscoggin River that turned the waterwheels and electric turbines of the mills. The river flows from the upper reaches of the White Mountains and is actually a large mountain stream subject to the melting snows and spring rains which cause flooding at times. The historical districts are the result of that freely available abundant energy and businesses that combined to build mills, bridges, houses and employ an industrious workforce that we physically still see in these assets. The original industries are gone as well as the people of those generations, but the properties of the districts remain to represent that culture and for us to interpret their lives and occupation.

Concentration, Linkage, & Continuity of Features:

This area illustrates the industrial revolution that took place during the late 19th century to the 20th century. Paper and textile mills were a part of the expansion of industrial activity at this site and were enabled by abundant water power and much immigrant labor to thrive during this period. Much concentrated commercial and residential development occurred on both sides of the bridge at this time. Brunswick's Maine Street is now an historical district which is essentially adjacent to the Cabot Mill and the Brunswick-Topsham Industrial Historic District. It is virtually a unified area of historical designation. The Wood Bridge is a binding property in this location as it was and continues to be the only major vehicular and pedestrian corridor between the two towns connecting Brunswick's Maine Street and Topsham's Main Street. This bridge therefore certainly provides the continuity to relate all of the districts of concern and can accomplish this function for the foreseeable future.

Further, The Frank J Wood Bridge #2016 was previously inventoried as part of the Maine DOT Historic Bridge Survey. It was determined a contributing resource to a potentially eligible industrial district at the time. The eligible Brunswick – Topsham Industrial district is comprised of the NR eligible Summer Street Historic District, the NR eligible Cabot Mill, the Bridge and the National Register listed Pejepscot Paper Company. The Pejepscot Paper Company was listed in the National Register of Historic Places in 1974. It retains integrity to remain listed in the register. The important fact is that the bridge is an additional supporting asset for the potentially eligible industrial district.

Types of Features:

The districts of concern and the Wood Bridge are of varying degree of prominence or function, but they are in a state of collocation and arrangement and integrity which substantiates that this area of the Wood Bridge and the districts is a locality that provides one the ability to recognize that this a historical site that reveals the period of its development. This is true because the majority of the district was built in the 19th century and structures like this no longer are built.

Geographical Boundaries:

The districts of concern and the Wood Bridge occupy an area of the river and falls that would not be in any other area as they simply were built there to take advantage of water power to run the two mills. A bridge would be a part of it for transportation and communication between the two towns and the adjacent Summer Street Historic District dwellings were to provide residences for employees and management most likely in this case for the Pejepscot Paper Company. The four districts are exclusively related to each other as their function is wholly dependent upon the site of the river and falls and the boundaries of the districts are apparent by their relationship in the same surroundings.

Community Participation Comments:

I attended the meeting of October 27th, when interested parties gathered to discuss the eligibility of the Frank J. Wood Bridge for the National Register of Historic Places with DOT and FHWA staff at the Topsham Town Office. I must say honestly, that I was somewhat surprised at the presentation known as 106 review and immediately started some research about this process.

I have always been interested in the Wood Bridge plus the Foot Bridge and the Black Bridge in Topsham as I am a local born resident and all my life I have crossed all three bridges tens of thousands times and have admired them and valued their existence. Last winter DOT made a presentation in Topsham regarding the condition of the Wood Bridge and a proposal to replace it. It seemed as presented as the best alternative and I felt there was no other approach that was conceivable. In October after hearing about the meeting on the 27th I went to the meeting and got exposed to the 106 process and learned there are options to replacing historic bridges by advocating for preservation. My impression now is that there was a rush of judgment in early 2016 to condemn this bridge with little serious attention given to consider the alternative of preserving this bridge.

The Topsham Board of Selectmen, at their June 2, 2016 meeting, adopted a resolution in support of the replacement of the existing bridge and voted that a Joint Design Advisory Committee (with Brunswick) be appointed to work with MDOT to create the best plan to meet MDOT's transportation needs and the Town's design and function preferences for a new bridge.

There was local input from citizens at the meeting and the following are quoted minutes of that meeting of The Topsham Board of Selectmen on June 2, 2016. This was not an advertised

public hearing but rather a regularly scheduled board meeting. I enclose these minutes as there were many attending respondents who wanted to address the fact that an action quoted as follows was to be considered: "16-46 CONSIDERATION AND ANY APPROPRIATE ACTION ON MAINE DOT PROPOSAL FOR REPLACING THE FRANK WOOD BRIDGE."

I and others at that time was not aware of any approval decision to be acted upon in June 2016 as I thought the previous public meetings were informational and not subject to a consensus or a decision action.

The following are the approved minutes of that discussion in quotes. I include the minutes as evidence that citizens who attended this June 2016 meeting do have strong opinions for or against and some felt that it wasn't necessary that the town pass a resolution regarding the replacement of the Frank Wood Bridge and that some members of the Board at that meeting "were not aware of the 106 Process and statement was made that that process will determine what will finally happen." The major purpose of including these minutes is the public comments where 2 citizens did not approve of rehabilitation for financial reasons; 1 citizen recommended making a recommendation to Maine DOT to replace the bridge; and 8 citizens opted in their comments for rehabilitation and 1 citizen said there was no hurry to adopt a resolution for replacement of the Wood Bridge for a total of twelve respondents. The dialogue is considerably in favor of rehabilitation and these respondents were also logical and informed in presenting their justifications. Please note first paragraph.

"APPROVED 6-16-16
BOARD OF SELECTMEN MINUTES

Minutes of the Board of Selectmen

"16-46 CONSIDERATION AND ANY APPROPRIATE ACTION ON MAINE DOT PROPOSAL FOR REPLACING THE FRANK WOOD BRIDGE

Economic Development Director, John Shattuck, opened the discussion on this agenda item saying this is the 7th public meeting held on the Frank J. Woods Bridge. The Maine Department of Transportation has completed their study and both Topsham and Brunswick agree with MDOT that the bridge should be replaced.

Chairman Douglass asked how we arrived at naming Mr. Shattuck (our Economic and Development Director) as the Town's representation in the 106 Process. The Town Manager responded that the Town has a seat if we want one and it seemed easiest to have Mr. Shattuck represent the Town dealing with both historic and environmental purposes rather than several other department heads.

Although not a Public Hearing, the meeting was opened at this point to receive comments from members of the public. Several individuals spoke, including:

Scott Hanson - Mr. Hanson spoke on behalf of the group "Friends of the Frank J. Wood Bridge." He said the organization is registered with the State and has a facebook page also. Mr. Hanson spoke at length saying the group feels the MDOT decision to replace the bridge is premature and the 106 Process can demand that MDOT do further research. The group has 764 followers on facebook. The group prepared a booklet entitled "Frank J. Wood Bridge Improvement Project Considerations" and Mr. Hanson asked the Board to review the information it contained. (A copy is filed with these minutes.) The group questions the validity of the report done by T.Y.Lin. Mr. Hanson urged the Board to not take any action on this agenda item. Mr. Hanson said the Federal Highway Administration will fund the 106 Process.

Phiney White, Bridge Street - Mr. White displayed enlarged color photographs of three bridges in Massachusetts built in 1931 by Boston Bridge Works - same company that build the Frank J. Wood Bridge. They were rehabilitated in 2012. One was built in 1883 and rehabilitated in 2013.

He said rehabilitation of a bridge is not foreign to large firms. Mr. White said that T.Y. Lin's figures are not accurate. Wants to see the bridge rehabilitated.

Paul Loveless, 36 Williams Drive - Said he was here in Topsham during the last rehab. Said it will take more time and more money to rehab. Spending dollars to save this bridge is not a good idea. If one is stopped on the bridge when a big truck goes by, the bridge rocks back and forth. Bridge needs to be replaced.

Curt Neufeld, 14 Merrymeeting Drive - In favor of new bridge. Said bridges are being taken down because they need to be replaced. Bridge was built in 1932 for cars and trucks built in 1932 which are no comparison to cars and trucks of today. Agreed that the bridge is a hero, but should be replaced. Urged the Board not to throw good money after bad.

Don Russell, 80 Winter Street - Urged the Board to make a recommendation to MDOT relevant to replacing the bridge. You need to do that based on what you have heard. The one thing I did hear, I want to thank Scott for the work they did. In favor of proceeding with the 106 Process.

John Graham, Pleasant Street - In favor of restoring the bridge. Have walked across it many times. It is a historical structure and should be saved. The Town should have appointed the Historic District Commission to handle the 106 process, not a person in the town office.

Ann Carroll, Summer Street - Plea is emotional. It was insulting that no one in our neighborhood was notified of the meetings. It was like we didn't count. Urged the Board to take the human element into account. Thanked Don Russell for spending money to keep his property up. When you drive by Don's house you have a piece of history.

Jill Raymond, 25 Summer Street - I have never come to a meeting. I did not get a notice of these meetings. It is offensive that I heard nothing. Want to see a restoration project, not a new bridge. Does a village have a super highway?

Charles Carroll, Summer Street - This is a neighborhood built 200 years ago. Our house was built in 1825. This is a neighborhood 200 years old. People socialize on this bridge. We are closest to the bridge. Have lived there for 6,000 nights. I look at the bridge every single day. The folks that built the bridge gave it much thought. I don't feel that way about the design of the new bridge. It seems nonsensible for you as a Board to take a position. The better part of wisdom would be for you to say "No, we don't need to take a position."

Arlene Morris, 13 Main Street - Loves Topsham. Urged the Board not to vote one way or another. There is no hurry.

John Shattuck - Brief statement. When a public outreach is done, some people will be missed. However, the papers were plastered with announcements of these meetings. This is a process that has been on-going for over 14 months. The 106 Process will continue over the next 6 or 7 months.

Steve Stern, 13 Main Street - Said he has degrees in Civil and Structural Engineering from Maine and MIT. Is not unfamiliar with some of the issues being brought up. This bridge is safe. It has been deemed safe by the DOT. There are mistakes made in any profession. As an engineer, he can attest to some of the mistakes. TY Lin is the largest engineering firm in the world. They have about a $3 billion overrun on a bridge that is now rusting. Some of the smaller projects they get...they are not as screened as they possibly should be. We are trying to save this historic bridge. Save money and make everybody happy. All we are asking, is...it is obvious we don't have all the information. If you go ahead and endorse the DOT's recommendations...we intend to have meetings with Joyce Taylor, the Chief Engineer at DOT. She is a reasonable person. I think you have to be very careful, because you can look very bad if you make the wrong decision here tonight.

Josey Seamore, Summer Street - Want to see the bridge saved. It is an important part of my life, my children's lives and my grandchildren's.

Having heard comments from all who wanted to speak, the Board entered into a lengthy discussion with each Board member contributing. Chairman Douglass read the letter mentioned earlier from Curtis Pickard speaking in favor of the new bridge. Some on the Board were not aware of the 106 Process and statement was made that that process will determine what will finally happen. Statement was made that the State does not take proper care, maintenance wise, and if the bridge is rehabilitated, would they let its care lapse.

Following discussion, motion was made by Selectman Tufts, seconded by Selectman Thompson, and it was unanimously ;

VOTED : To approve the Maine DOT proposal for replacement of the Frank J. Wood Bridge and to adopt the resolution regarding the Topsham-Brunswick Bridge."

Final Comments and Discussion:

I trust that I was able to analyze and convey my assessment of the best outcome for the Wood Bridge to you. There is a lot a discussion and study in this matter and much is factual and of course many regulations and participants in this process. However, a decision must be made based upon all factual aspects and still consider subjective opinion.

I conclude that the impartial and fact based criteria used in determining historical prominence as applied to the Wood Bridge and surrounding districts support the endorsement of the Wood Bridge as a historical structure worthy of preservation. Subjectively, the Wood Bridge is also supported but by a more open type of reasoning from the general public. This source uses their opinions and preferences and general cultural connections to form a more independently and unrestricted conclusion. Thus, the decision is more apt to keep an asset than to replace it. I would say that is the prevailing reaction in this matter.

In closing, I hope I haven't been too verbose but I wanted to justify the historical prominence and to explain some historical and social aspect of the bridge and its relationship to other elements of this significantly historical area which is comprised of other historic districts. Also and very important, the inclusion of the meeting minutes shows an assortment of the rationales for preservation which is of course are immeasurable.

Thank you for your attention and time to review this letter as I and others appreciate your concerns. If I can be of any help or need for clarification, please do not hesitate to contact me.

Sincerely,

William F. Morin



COMMENT #15

From:	Hopkin, Megan M
To:	kwillis@kleinfelder.com; Chase, Cassandra (FHWA); Chamberlain, Kristen
Subject:	Fwd: Comment about a Section 106 project
Date:	Wednesday, February 15, 2017 10:05:06 PM

Sent from my device using ZixOne

> On Wed, Feb 15, 2017 6:23pm,
> justaminpin@gmail.com wrote:
>
> Name: Kathy E Wilson
> Phone: 207 725 0179
> Organization:
> WIN or Town: Brunswick
> Comments: I think the old green, Frank Wood, bridge should be torn down, It is an eyesore and difficult to maintain. I am 71, as born in Brunswick and have been here my whole life. I do not think it is worth saving for historic purpose I think the mills on both sides of the river are more historic and beautiful, and currently the beauty of the mills and the river are overshadowed by the ALWAYS rusty, ugly bridge...that in and of itself, does not serve all citizens of Brunswick and Topsham. Sidewalks on just one side cause the danger of citizens having to cross traffic at several very dangerous points..such as the Anniversary park...a gem that doesn't get it full worth shown or used. Also if wanting to walk or bike to businesses on the Topsham side of the bridge crossing the street is scary I am a biker, and I will NOT ride across the green bridge...It is just not safe, nor wide enough. A new bridge is the ONLY answer in my mind.. I also do not think the green bridge sh
> ould qualify as historic,..My Dad, born in Brunswick spoke of a couple other bridges that were truly historic...This green bridge is simply a mean of crossing the river built in a time when no one knew how else to do it... It is not historic, it is an outdated piece of junk...ugly to look at and FAR too expensive to maintain .
> E-Mail: justaminpin@gmail.com
> Verifiy: 15

COMMENT #16

From:	Scott Hanson
To:	Chase, Cassandra (FHWA); joel.kittredge@maine.gov; John Graham; stevehinchman@gmail.com; Steven H Stern; Charles Carroll; James White; Arlene Morris; kirk.mohney@maine.gov; nathan@historicbridges.org; mnaber@achp.gov; kitty@historicbridgefoundation.com
Subject:	Documentation for dam locations and configurations
Date:	Monday, December 12, 2016 8:05:11 AM

Hi Cassie,

I wanted to add some photographic documentation to the written comments made by Friends of the Frank J. Wood Bridge on December 2nd. The three historic images attached are a c. 1950's aerial view of the Cabot Mill complex before Route 1 was built along Mill Street, separating the mill from the downtown; a c. 1980 aerial view showing the same dam location and configuration as the c. 1950's view; and a view of the lower dam that powered the Pejepscot/Bowdoin paper mill.

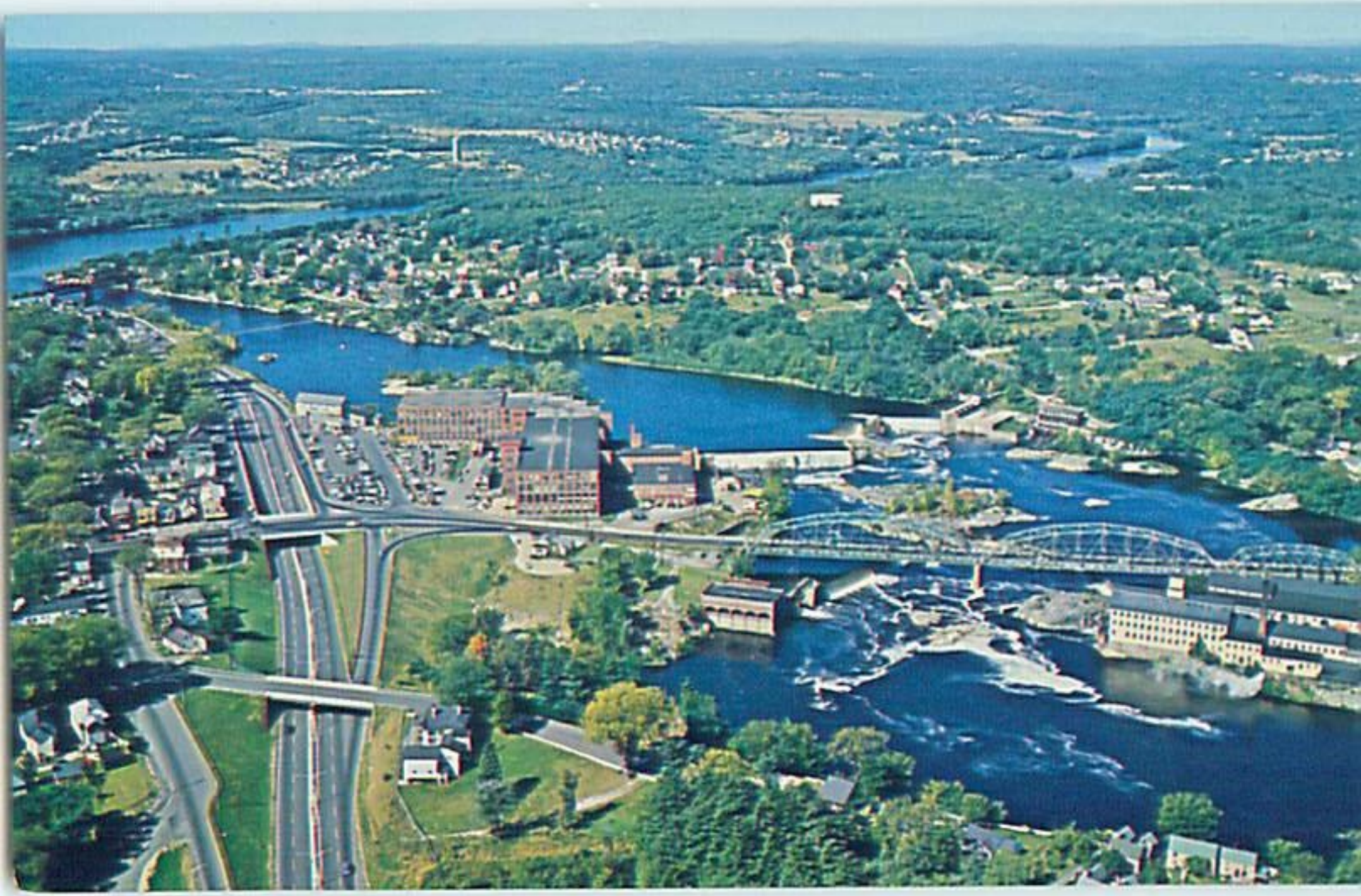
These clearly show that the current dam is not the dam that powered Cabot Mill or Pejepscot/Bowdoin paper co. and that it was constructed in its current form after the period of significance for the eligible Brunswick-Topsham Industrial Historic District. It also shows that the current dam, running in a straight line from bank to bank, is not the same location or form as the historic dam, which zig-zagged between rock formations.

I'm sorry not to have included these in the comments we sent you on the 2nd. I'd forgotten that I had them.

Sincerely,

-Scott Hanson







BRUNSWICK-TOPSHAM BRIDGE OVER ANDROSCOGGIN RIVER IN MAINE

2A1328

COMMENT #17

From: Phinney Baxter White
To: Chase, Cassandra (FHWA)
Subject: Re: Frank Wood Bridge / request to be consulting party
Date: Monday, December 12, 2016 7:54:42 PM

Much appreciated Cassie!
I was out at sunset today and took this nice shot of the bridge..



On Dec 9, 2016, at 12:54 PM, Chase, Cassandra (FHWA) <Cassandra.Chase@dot.gov> wrote:

Hi Phinney,

Thank you for your request to become a Section 106 consulting party on the Frank J Wood Bridge project, representing Governor Baxter, LLC. Please see the attached letter in response to your request. I will be sure you are included on all future meeting invites, appointments, and e-mails.

Take care and have a great weekend!

Cassie

Cassie Chase
Environmental Engineer
Federal Highway Administration – Maine Division
Office: 207-512-4921
Cell: 207-689-8007
Cassandra.chase@dot.gov

From: Phinney Baxter White [mailto:phin@governorbaxter.com]
Sent: Thursday, December 08, 2016 11:07 AM
To: Chase, Cassandra (FHWA)
Subject: Frank Wood Bridge / request to be consulting party

Dear Cassie,

I am trying to determine if my company, **Governor Baxter, LLC** can be acknowledged as one of the consulting parties within the 106 process underway for the Frank Wood Bridge.
My small business is based in Topsham. I would not have located my headquarters here if I knew that Topsham officials would favor the removal of this historic structure and insult it by calling it a "historic tchotchke".
Am I too late to be qualified as a consulting party? If your office is not the correct party to contact about this can you please point me in the right direction?

Warm Regards & Merry Christmas,

Phinney at Governor Baxter, LLC

James Phinney Baxter White

GOVERNOR BAXTER, LLC
www.governorbaxter.com
67 Bridge Street
Topsham, Maine 04086
<FHWA Letter to Governor Baxter, LLC - Response to Consulting Party Request.pdf>

COMMENT #18

From:	Phinney Baxter White
To:	Chase, Cassandra (FHWA)
Cc:	Hopkin, Megan M (Megan.M.Hopkin@maine.gov)
Subject:	Re: Frank Wood Bridge / request to be consulting party
Date:	Tuesday, January 31, 2017 10:14:47 AM

hey Cassie,

Things have been quiet so I thought I should check in. Let me know if a date has been set for the next 106 meeting.
For what it is worth to you and your team.. I have a couple of pictures I want to submit. they are attached. I took the photo on Memorial day last year. I am supplying you with a Photoshopped version as well that shows how nice the bridge could look if rehabilitated. I even added the second sidewalk.
Here are the images.. below.
My best,
Phinney





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Cassie

Cassie Chase
Environmental Engineer
Federal Highway Administration – Maine Division
Office: 207-512-4921
Cell: 207-689-8007
Cassandra.chase@dot.gov

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Am I too late to be qualified as a consulting party? If your office is not the correct party to contact about this can you please point me in the right direction?

Warm Regards & Merry Christmas,

Phinney at Governor Baxter, LLC

James Phinney Baxter White
GOVERNOR BAXTER, LLC
www.governorbaxter.com
67 Bridge Street
Topsham, Maine 04086
<FHWA Letter to Governor Baxter, LLC - Response to Consulting Party Request.pdf>

From:	Phinney Baxter White
To:	Chase, Cassandra (FHWA)
Cc:	kitty@historicbridgefoundation.com; Nathan Holth; s.t.hanson@comcast.net; John Graham; sstern@gwi.net; John Shattuck; lsmith@brunswickme.org; Hopkin, Megan M; Chamberlain, Kristen; Kittredge, Joel; Martin, Cheryl (FHWA); Frankhauser Jr, Wayne; Kate Willis; Emington, Wayne (FHWA); John Eldridge; Norman Baker; Drozd, Maria (FHWA); stevehinchman@gmail.com; admorris@gwi.net; sebordwell@gmail.com; Nancy BikeMaine.org; Folsom, Jeff; ckrussell@gwi.net; Curtis Neufeld (cneufeld@sitelinespa.com); Rod Melanson (rmelanson@topshammaine.com); Carol Eyerman (ceyerman@topshammaine.com); Douglas C. Bennett (dougb@earlham.edu); Victor Langelo (vlangelo@eclipseservices.com); Richard Cromwell (richcromwell1@gmail.com); Androscoggin Dental Care (fredwigand@gwi.net); katzthal@comcast.net; mnaber@achp.gov; david.gardner@maine.gov; Pulver, William; Pelletier, Steve (steve.pelletier@stantec.com); Deb Blum (dblum@brunswickme.org); kirk.mohney@maine.gov; William F Morin
Subject:	Re: Frank J. Wood Bridge Project - Request for Comments on the Section 106 Finding of Effect
Date:	Friday, February 03, 2017 4:47:49 PM

Dear Cassie,

Thank you for the getting this report to all of us.

I would like to comment on the portion about the the “Androscoggin River Falls”. The finding in the report indicates the falls would not be eligible for listing on the National Register.

In the 1877 book “History of Brunswick, Topsham, and Harpswell, Maine” by George and Henry Wheeler— the first mention of the falls is printed in upper case letters, called out as “the notable BRUNSWICK FALLS”. This is interesting because in Wheeler’s book the upper case style is utilized for town and river names. I think this indicates the importance of the falls to Wheeler’s writing in 1877. The description of the falls in the book evokes emotion and indicates the falls are special to the history of Brunswick and Topsham:

“Here is the beginning of the notable BRUNSWICK FALLS, the finest water-power on the Atlantic coast. This magnificent fall of water, though lacking the grandeur which attaches to the more famous falls of some other rivers, has yet a beauty of its own, which by no means should be overlooked. Its numerous cascades afford not only varied and picturesque views, but furnish a motive-power probably unsurpassed in New England within so small a space. The natural bed of the fall consists of coarse graphic granite and gneiss. The rock upon the middle fall projects above the water at several points, serving as natural abutments to the several sections of the dam. Shad island, the former site of mills, divides the lower fall about midway. There are three pitches: the first has a vertical descent of about eleven feet, the middle of fourteen feet, and the lower of about fifteen feet. The total height of the fall is about forty-one feet above high tide, which floes to the foot of the fall, causing a variation in the hight of the water of about three feet."

The falls also have unique geological formations that will be destroyed and or obscured from view with the proposed upstream bridge. There are well defined veins of a type of rock running through another type of rock. It appears to be a quartz vein running through the granite. In addition there are numerous kettles, also known as a “giant’s kettle" or “pot-hole” in geological lingo. Kettles can be formed while a glacier is covering an area. They can also be formed at the foot of cascades. More often they are associated with the melt water of a glacier. There are destinations and parks in Europe and the United Staes where people go specifically to see these “kettle" formations. I am not suggesting these features warrant NR eligibility. They serve as evidence of time, something from back in time.

The report makes reference to “NR bulletin 15” and further on defines “a location of a significant event, prehistoric or historic, occupation or activity, or a building or structure, whether standing ruined, or vanished, where the location itself possesses historic, cultural or archeological value regardless of the value of any existing structure”. I feel further research is needed to assess the significance of Brunswick’s first settler Thomas Purchase in relation to the falls. Historical records indicate he traded with the Indians at the falls and set up a successful fishing operation there as early as 1628. Historical record shows there are figures indicating the numbers of barrels of salmon and sturgeon he exported for foreign markets. This commerce facilitated a London company to station an agent at the foot of the falls and they erecting a building there. Going back to NR bulletin 15.. and the qualification: "historic, occupation or activity, or a building or structure, whether standing ruined, or vanished”. Thomas Purchase’s historic **activity or occupation** of founding a successful fishing operation at the falls and the building erected (now **vanished)** to facilitate commerce at the falls may qualify the site to be listed on the National Register. The geological formations prove we have the ability to gaze at this site knowing it is unchanged— with features that have remained the same for hundreds of years. When looking at the last tier of the natural falls by the Frank Wood bridge we can see what the early settlers, the Native Americans and Thomas Purchase saw. For this reason the falls are very special. It would be a crime to cover them up with concrete.

Phin

On Feb 2, 2017, at 7:53 PM, Chase, Cassandra (FHWA) <Cassandra.Chase@dot.gov> wrote:

Good Evening,

The Federal Highway Administration (FHWA) is pleased to provide you with a copy of the Section 106 Supplemental Supporting Information for a Finding of Effect for the Frank J. Wood Bridge Project, located between the Towns of Brunswick and Topsham, Maine, and proposed by the Maine Department of Transportation (MaineDOT). Please click on the below link to download the Section 106 Finding of Effect document.

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Following the Section 106 consulting parties meeting held on October 27, 2016, FHWA asked the consulting parties to provide comments on the draft alternatives matrix, the draft alternatives matrix summary, and the preliminary effect determinations by December 2, 2016. FHWA and MaineDOT have since been considering and addressing those comments received. Comments related to the eligibility of and potential effects to historic properties have been addressed within the text of the Section 106 Supplemental Supporting Information for a Finding of Effect document. The purpose of this document is also to memorialize the Section 106 consultation discussions at previous Section 106 consulting parties meetings and to present the FHWA finding of effect for each alternative.

FHWA and MaineDOT are providing the Supplemental Supporting Information for a Finding of Effect to the Maine Historic Preservation Commission (MHPC), requesting the State Historic Preservation Officer's (SHPO's) concurrence with the Section 106 determination of effect for each of the proposed alternatives. In accordance with 36 CFR Part 800, the SHPO has 30 days to review the finding and provide a response.

FHWA and MaineDOT would also like input from the Section 106 consulting parties on the Supplemental Supporting Information for a Finding of Effect. Please provide us with your comments on this document within 30 days, or by March 6, 2017. Please send your comments to me (cassandra.chase@dot.gov) and Joel Kittredge (joel.c.kittredge@maine.gov). If you would like to send your comments by mail, please either mail them to my attention at the Federal Highway Administration, Edmund S. Muskie Federal Building, 40 Western Avenue, Room 614, Augusta, Maine, 04330; or Joel's attention at the Maine Department of Transportation, 16 SHS, Augusta, Maine 04333-0016.

A public meeting, specific to the overall project, will be held sometime in March. I will notify you as soon as this meeting is scheduled. Comments will also be received at that time, specific to other environmental impacts, engineering, costs, constructability, and the overall project in its entirety.

Please feel free to contact me if you have any questions or require any additional information.

Cassie

Cassie Chase
Environmental Engineer
Federal Highway Administration – Maine Division
Office: 207-512-4921
Cell: 207-689-8007
Cassandra.chase@dot.gov

COMMENT #19

From:	Phinney Baxter White
To:	Chase, Cassandra (FHWA)
Cc:	Martin, Cheryl (FHWA)
Subject:	Re: Frank J. Wood Bridge Project - Request for Comments on the Section 106 Finding of Effect
Date:	Monday, February 27, 2017 11:20:44 AM
Attachments:	Brunswick council may weigh in on 'Green Bridge' replacement – The Forecaster.pdf Topsham's turn on bridge viewpoints www.timesrecord.com The Times Record.pdf Council tables resolution on bridge www.timesrecord.com The Times Record.pdf Green Bridge project sparks debate www.timesrecord.com The Times Record.pdf Brunswick-Topsham bridge debate shifts to historic value – The Forecaster.pdf

Dear Cassie,

I would like to submit additional published comments that were not included in your section of "Published Comments". These are local newspaper articles pertaining to the bridge and contain many quotes/comments from various people and officials.
They are attached below.

Thanks,
Phin

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Please feel free to contact me if you have any questions or require any additional information.

Cassie

Cassie Chase
Environmental Engineer
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Office: 207-512-4921
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Cassandra.chase@dot.gov





Brunswick council may weigh in on 'Green Bridge' replacement

By Walter Wuthmann on May 18, 2016 @wwuthmann

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BRUNSWICK — The Town Council is considering endorsing the Maine Department of Transportation's plan to replace the Frank J. Wood Bridge, commonly referred to as the "Green Bridge," with a modern concrete crossing.

Councilors on Monday ended up tabling the item after hearing public testimony from residents on both sides of the issue.

The impact of any "resolution of support" is unclear, because the project is completely within DOT's jurisdiction. Council Chairwoman Sarah Brayman said after the meeting that action by the council would be "largely symbolic."

MDOT is recommending building a new bridge upstream from the current structure, for an estimated $12-13 million. Although rehabilitating the existing bridge would only cost $10 million, a new bridge would have a 100-year lifespan, the department contends, compared with 30 years for a rehabilitated bridge.

The department has taken public comment at several meetings in Brunswick and Topsham. DOT estimates construction of the new bridge could start in 2018.

Nevertheless, Town Manager John Eldridge said a council resolution could be used for "discussion purposes," and to set up some kind of committee to suggest modifications to DOT's plan that are in the best interest of Brunswick and Topsham.





Some r nday did recommend modifications. George Gilmore, of Middle Bay Road, suggest ridge should end in a roundabout on the Brunswick side, to more efficiently move tr treet or Pleasant Street.

0

G+1

But muc comment period was dominated by those skeptical of, or opposed to, DOT's

plan.

0
Like

Topshar ney White said he did not believe DOT's claim that a rehabilitated bridge would h ear lifespan. He said many historic steel truss bridges have been succes around the country, and are still in use.

He add ge lies in the Brunswick-Topsham Industrial Historic District, which is eligible for listin al Register of Historic Places.

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White a il if it would have voted to tear down the historic Town Hall in the 1960s, a decisior still lament. "I don't think you have all the facts on this (bridge)," he said.

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Bruce M Road, compared the Wood Bridge to the Eiffel Tower, the Chrysler Building, and the ridge, saying, "These are (all) symbols of community."

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Bungan nt Steve Stern also brought up the Golden Gate, as well as the Brooklyn Bridge a tral Station, as examples of functioning historic preservation.

0

Citing h ivil and structural engineer, Stern said not all the information about the 85-year-olc been presented. He said he is organizing independent engineering evaluati ge.

He urged the council to hold off voting on the resolution, and at the end of his comments, asked councilors if they had ever looked at the local phone book.

Hoisting the yellow book into the air, he pointed to a photo of the "Green Bridge" on its cover.

"This is what represents Brunswick," he said.

Council Chairwoman Sarah Brayman moved to table the motion by Councilor Jane Millett to adopt the resolution supporting DOT's recommendation.

Councilors agreed to tabling, with only Councilor Kathy Wilson opposed.

Before voting, however, some councilors spoke about making a statement for or against the project. "(It's) not our decision to make," Millett said

Councilor Suzan Wilson agreed: "(MDOT) will make the decision they make."

Still, after the meeting, Brayman said some kind of advisory committee, set up by the council, could influence the final design for the project.

She said a committee could discuss ideas like widening the width of the sidewalk on the bridge to accommodate food trucks, or incorporating public art.

Walter Wuthmann can be reached at 781-3661 ext. 100 or wwuthmann@theforecaster.net. Follow Walter on Twitter: @wwuthmann.

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TOP VOTED

The Universal Notebook: Huckabee's hillbilly heroine (10 votes)
No-'pushover' South Portland assessor to retire (10 votes)
The Universal Notebook: Trashing the transgender travesty (10 votes)
Intentionally Unreasonable: Love, bullies, hypocrites and liars (10 votes)
Abby's Road: Let's talk about guns (9 votes)





The Maine Department of Transportation is recommending replacing the Frank J. Wood Bridge between Brunswick and Topsham with a $13 million concrete bridge.



An MDOT rendering of a proposed replacement for the Frank J. Wood Bridge.

0

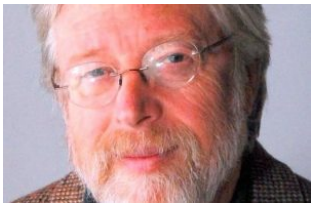




Brunswick/Harpswell reporter for The Forecaster. Bowdoin College grad, San Francisco Bay Area native. Follow for municipal, school, community, and environmental news from the Midcoast.

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farmertom2 • 9 months ago

I've always thought the bridge should be stripped, sealed, painted and then covered, ala the many covered bridges in Vermont.

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Scott Harriman • 9 months ago

> *George Gilmore, of Middle Bay Road, suggested that a new bridge should end in a roundabout on the Brunswick side, to more efficiently move traffic to Maine Street or Pleasant Street.*

I agree. That intersection is a most inefficient pile of crap.

• Reply • Share ›

Chew H Bird ➔ Scott Harriman • 9 months ago

I fully agree with changing the current Brunswick side situation, however we have a Maine Street with speed bump hazards, no or low visibility for people backing out of parking spaces, and an active Mall area so efficiency and safety has clearly been not part of the traffic flow process... Additionally, the left hand turn at the start of the Topsham hill can back up traffic halfway down Brunswick Maine Street when someone wants to turn left. The entire traffic pattern between Brunswick and Topsham, in my opinion, should be re-designed from the ground up but without a budget to implement improvements nothing will happen.

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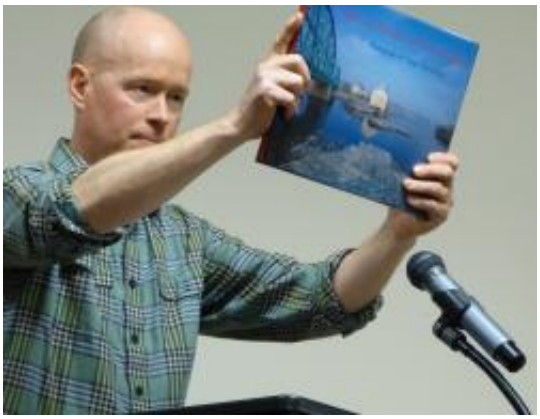
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Topsham's turn on bridge viewpoints

Selectmen receive update on future of 'Green Bridge'
BY DARCIE MOORE
Times Record Staff



PHIN WHITE of Bridge Street in Topsham stands before Topsham selectmen Thursday night holding up a 1988 book of photos by Serge Hambourg documenting 900 mills and factories in New England — "Mills and Factories of New England." The book has the Frank J. Wood Bridge and Bowdoin Mill on the cover. A bridge people want in photographs and on postcards creates an economic factor, he said.
DARCIE MOORE /THE TIMES RECORD

TOPSHAM

Three out of four Topsham selectmen in attendance during Thursday's presentation on the Frank J. Wood "Green" Bridge spoke in favor of replacing the structure.

The board took no formal action during the meeting, however. The Maine Department of Transportation is asking the board to support replacing the bridge, despite a call by some residents to save it.

Topsham Economic and Community Development Director John Shattuck gave an update on MDOT's improvement process regarding the bridge that connects Route 24 in Brunswick and Topsham and spans the Androscoggin River.

The public was told at a MDOT meeting on the bridge on April 27 that, while safe for the time being, the bridge is structurally deficient. Officials recommended replacing the bridge with a new structure for an estimate cost of $12 million to $13 million. That's compared with the estimated $10 million it would cost to rehabilitate the existing bridge and extend its life by another 30 years. A new bridge, by contrast, would have a 100-year life span.

Shattuck said bridge rehabilitation would hurt downtown businesses, because the bridge would be closed for between 10 and 21 months. Rehabilitation would result in higher maintenance and inspection costs, and the bridge would still need to be replaced in 30 years following the rehabilitation.

There have been many suggestions for improvements to MDOT's new bridge design, including aesthetic and functional features and traffic calming measures.

Shattuck recommended selectmen consider adopting a resolution supporting replacement of the existing bridge, as well as appointing a design advisory committee jointly with Brunswick to create the best plan that meets Topsham's needs.

The board will consider Shattuck's request at its June 2 meeting.

"At the end of the day, this isn't Topsham's decision. This isn't Brunswick's decision," Selectman Dave Douglass said. "We have an ability to work with (MDOT) to try to serve our needs as much as we can, is my take. But at the end of the day, we can either be a part of this process and swim along with the fish or we can get muddy in the water and still make no headway."

Selectman William Thompson said the bridge replacement project may help the town move forward with development of its Lower Village. At some point the 84-year-old bridge needs to be replaced, he said.

"Taking the emotions out of it, the politics, whatever you want to call it … when I look at money for a rehab project and a money for a rebuilt project and the timelines involved, to me it's pretty much a no-brainer," he said.

Doug Bennett, of Elm Street, said he wants the town to get behind working with MDOT on the design of the bridge because the preliminary bridge design is not appropriate.

"What we need … is a bridge that connects the two towns and serves the purposes of the two village standards that it connects," Bennett said. "And the bridge that they've designed wouldn't do that. It says zoom. It says floor it, and we do not need people moving their cars at 30, 35, 40 miles an hour through our villages."

Speakers disagreed with MDOT's projected cost of a rehabilitation and also the resulting life span of a rehabilitation. No one came to speak to the 16 families living near the bridge, said Ann Carroll of Summer Street.

"It's really terrible for anybody who is living there," she said. "What we're subjected to then is this concrete understory that we're having to look at and because the new bridge has such a deep steel girder. It really, for us, becomes not only ugly but really threatening."

"There are a number of us who have concerns about it coming down," said Scott Hanson of Pleasant Street an architectural historian. The federal historic review is underway on this project, he said, which will influence whether or not the old bridge can come down.

He urged selectmen to wait before making any resolution because that process is just beginning.

A number of other states have rehabilitated other bridges of this sort with life expectations of 75, 80 and 100 years, Hanson said. He argued saving the bridge would make it a "rare surviving example" that will add to the historic attractiveness of the community.

dmoore@timesrecord.com

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Council tables resolution on bridge

BY DOUGLAS MCINTIRE
Times Record Staff



PHINNEY WHITE, who grew up in Brunswick and now lives in Topsham, addressed the Brunswick Town Council on Monday about saving the Frank J. Wood Bridge.
DOUGLAS MCINTIRE / THE TIMES RECORD

BRUNSWICK

The Brunswick Town Council voted to table a resolution expressing the council's support for the Maine Department of Transportation's proposal to replace the Frank J. Wood Bridge on Monday night following public comments and possible new information on rehabilitating the current structure.

Town Manager John Eldridge outlined the process thus far, meeting with the MDOT on April 19, and again in Topsham and at Southern Maine Community College where options given the town included a new, upstream replacement bridge for $13 million or rehabilitating the current bridge for $10 million.

The MDOT claimed the new bridge would cause minimal traffic disruptions and have a life span of 100 years while providing an extra walkway and river overlooks.

Likewise, the department said any rehab work on the bridge would only extend its life perhaps another 30 years and require lengthy traffic disruptions and frequent, costly inspections of the 83-year-old structure.

Eldridge further suggested a bridge design committee be formed to provide aesthetic input for MDOT moving forward.

Vice Chairman Steve Walker asked Eldridge if the new bridge was the only option at this stage. Eldridge responded that it's the MDOT's recommended option and if the towns decide to rehab the bridge, in 30 years, the MDOT may tell them they have some expensive decisions to make.

"The MDOT's analysis was pretty straightforward," Eldridge said.

Topsham resident Phinney White has lived on both sides of the bridge throughout his life and believes the bridge should stay. According to White, the character of the bridge is the "center of town."

"Go to Frontier (Cafe) — your beer tastes four times better when you're drinking a beer and looking out at that steel truss bridge than a cement high- way overpass," White said.

White claimed that through connections made on the Save the Frank J. Wood Bridge Facebook page, he has found that more and more historic bridges are being saved and rehabilitated in different states.

White claimed that rather than 30 years, these bridges were given a new lease for upward of 80 years.

White also said that cyclists who claim that the new bridge would be safer aren't from the area. As a person who regularly crosses the bridge on a bike, he said the current design is safer because it's "precarious."

White said it creates the felling of a narrowed space, naturally slowing vehicular traffic — something he said if replaced would create a speedway where cyclists will be in greater danger.

George Gilmore of Brunswick spoke out in favor of replacing the bridge based on cost-benefit analysis. Gilmore not only called for a new bridge, but a roundabout as well in the intersection in Brunswick preceding the bridge.

Richard Fisco of Brunswick also wanted to see a new bridge, adding that he didn't want to see any remnants of the old bridge when the project was complete.

Steve Stern of Brunswick holds degrees in civil and structural engineering from the University of Maine and the Massachusetts Institute of Technology and owns property on both sides of the bridge.

"I'm getting old and older by the day and I like old things," Stern said.

Aesthetics aside, Stern said he believes the MDOT numbers to be incorrect. Stern mentioned bridges such as the Golden Gate and the Brooklyn Bridge, as well as iron and steel structures still used in Europe today, as simple proof the bridge would last more than another 30 years.

Stern called losses of historic places around Brunswick and Maine in general as examples of "poor insight into the future."

Stern asked the council to wait as new information is being compiled.

"Have you ever looked at the phone book — what's the picture on the phone book," Stern asked, referring to the bridge as an iconic link between two mill towns.

Stern said he will be having the engineering department from the University of Maine as well as engineers from out of state to evaluate the bridge. Before finishing, he reminded the council to get all the information before making a decision that could make them look bad.

Council Chairman Sarah Brayman motioned to table the resolution until June 6, providing the council more time to look at any possible new information.

More time

• **BRUNSWICK TOWN COUNCIL** Chairman Sarah Brayman motioned to table the bridge resolution until June 6, providing the council more time to look at any possible new information.

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Green Bridge project sparks debate

MDOT hears wide range of comments on structure's future
BY DARCIE MOORE
Times Record Staff



A BIRD'S-EYE VIEW of a rendering of a proposed replacement bridge over the Androscoggin River between Brunswick and Topsham. It would replace the current Frank J. Wood Bridge.
IMAGE PROVIDED BY MAINE DEPARTMENT OF TRANSPORTATION

BRUNSWICK

After sharing their recommendations to replace the Frank J. Wood Bridge, Maine Department of Transportation officials listened on Wednesday to more than an hour of mixed comments from the public, ranging from delight to disgust over the proposed design and a plea by several residents to rehabilitate the 84-year-old structure.

Joel Kittredge, project manager for the MDOT Multimodal Program, said rehabilitating the "Green Bridge" would add a second sidewalk and cost $10 million. It would give the bridge another 30 years if not less before it would need replacement, he said.

It would maintain the existing alignment and reduce environmental and right-of-way impacts. However, rehabilitation would also take about 19 months, with five months of traffic use in the middle.

A new bridge would cost $12 million to $13 million, would increase safety and mobility and have a life span of 100 years. The preferred upstream alternative would be closer to the dam and fishway, where there are better hydraulics and ledge outcrops can be used to help keep the bridge structure up out of the water. The old bridge would remain during construction so traffic wouldn't be impacted.

Kittredge said the new bridge would increase mobility with 5-foot shoulders and two 5-foot-wide sidewalks, while also offering street lamps and bump-outs 5-foot wide and a 10-foot-long viewing deck. The department can also make connections to parks and recreation areas on both ends of the bridge. It is open to working with the municipalities and public interest groups on increasing other aesthetic features.

Darlene Kritzman, the first to speak, said, "I drive over the bridge every day on my way to work and I don't enjoy the current one because it's all rusty."

When she saw the design for the new proposed bridge, she said, "I just think it's just absolutely gorgeous. I love the low profile. I love the way it brings more attention to the river instead of the bridge. I love this new bridge and can't wait for it."

Phinney White of Bridge Street in Topsham started his comments by holding up a large photo he shot Sunday of the bridge and said, "In many ways this is probably the best argument for trying to save the Frank Wood Bridge," which drew a round of applause. "It's not a type of image that they actually included in their slide show."

White said the bridge is eligible to be on the National Register of Historic Places and is afforded the same protections, and requires the federal government to consider impact of projects on historic places under Section 106 of the National Historic Preservation Act of 1966.

"I think that is reason alone to not have a discussion about replacing the bridge and lets have a discussion about maybe improving that length of time it takes to rehabilitate the bridge," he said.

Doug Bennett of Topsham said he believes a new bridge would increase safety, but has worries about the design MDOT officials presented.

"It looks like a bridge that doesn't so much connect two towns with downtowns that we want to be very pedestrian and cyclist friendly. It says this is a bridge that transports people rapidly through our towns and I worry very much that it will work very poorly against the pedestrian walkable character of two small but beautiful downtowns we have," he said.

Scott Hanson of Topsham urged MDOT to look at rehabilitation without a second sidewalk, which might put the cost closer to $5 million or $6 million.

"If there's any place in the state of Maine where a through truss bridge should be preserved, it's this one," he said. "You have National Register Historic Districts on both ends, you have iconic mill complexes on both ends and you have a bridge that appears on the cover of books as an iconic Maine image, so please consider this one as the one you'll save and look again at what it would take to do that."

Kittredge said the MDOT will sit down and address comments made at the meeting. The department will continue to work with the towns. He said people can contact him with their thoughts and concerns, as well as their local representatives, municipal officials and legislators.

The MDOT can make a new bridge work, he said.

dmoore@timesrecord.com

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Brunswick-Topsham bridge debate shifts to historic value

By Callie Ferguson on November 2, 2016 @calliecferguson

1 SHARE SHARE TWEET SHARE SHARE 6 COMMENTS

TOPSHAM — Is the rushing sound of a nearby river critical to preserving the industrial heritage of an old mill? Does eliminating an iconic feature from a setting diminish the character of the surrounding historical properties?

These were the kinds of questions asked Oct. 27, when interested parties gathered to discuss eligibility of the Frank J. Wood Bridge for the National Register of Historic Places.

At the same time, project engineers provided answers about all the possibilities for appearance and cost of a revamped bridge, either new or rehabilitated. Analysis showed that the long-term costs of rehabilitating the bridge might be nearly double the costs of replacing it with a concrete alternative.

A state land surveyor told the crowd of about 35 that, so far, she does not believe removing the bridge will diminish or infringe upon the integrity of the four surrounding historic districts.

However, the meeting ended without a clear sense of whether the bridge meets the criteria to be listed on the register, which the Federal Highway Administration must determine in order for the structure to earn the protection the listing would provide.

The Department of Transportation's June announcement that it wants to replace the 85-year-old "Green Bridge" initiated the review by the Federal Highway Administration.

The bridge is eligible for review because it is in the Brunswick/Topsham Industrial Historic District. The FHA will get the final say as to whether the bridge must be preserved as a National Historic Place, and will likely make a decision by early next year.

It is yet unclear whether the listing would prevent the bridge from being replaced under the Historical Preservation Act of 1966, but proponents of rehabilitation attended the meeting to defend the bridge's historic value, based on its iconic architecture and its status in the views seen from surrounding historic districts.





In addition to the Section 106 process, federal agencies are also reviewing the bridge to ensure that construction will not violate laws that protect the area's natural species and environments.

Bridge over historic water?

There are seven sets of criteria to qualify for the National Register of Historic Places: location, design, setting, materials, workmanship, feeling and association.

To be listed, a place must meet at least one of the first five; the site cannot be listed if it only

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The bric es Route 201 between Brunswick and Topsham, lies at the intersection of four sep istricts and places already listed on the register: the Summer Street historic district, Paper Co. Historic District, the Brunswick/Topsham Industrial Historic District, and the

At the C land surveyor Kate Willis, who conducted a survey of the bridge last winter, s he bridge would not alter the historical nature of the other sites, which have views o

Additior although the bridge is listed as a "contributing factor" in the historical setting of at lea urround historical sites, the bridge itself does not necessarily qualify indeper e same criteria.

Membe s of the Frank J. Wood Bridge pro-rehabilitation group questioned that judgme ve one element of the setting," Friends' attorney Steve Hinchman said, "doesn' tting" of the other sites protected by the registry?

Willis cc e crossing is more important than the structure itself. In addition, she said, the Frar ge is not the original bridge that corresponds to the historical era in question.

In previ he Friends' have argued that the bridge is worth preserving because, accordi t provided by Graham, it is a "good example of a Warren Truss Bridge, a type of once common in Maine and is now becoming rare."

"It helps ce,' which sets us apart and makes us unique and attracts both tourists, busines nts, as it attracted my family and my business to relocate to the area," Graham said in an email Tuesday, arguing that the bridge is not only representative of Maine infrastructure, but a defining feature in the Brunswick/Topsham Industrial Historic District.

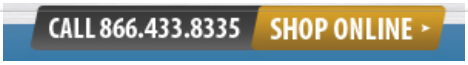
John Shattuck, Topsham director economic development director, took her point further after the meeting. "Why is this particular part in history … one that must be preserved at all costs?" he said.

Friends' member and Topsham business owner Phinney White pointed out the bridge's proximity to the Brunswick falls, which flow beneath it and provided the power source that gave rise to industry in the 1800s. He worried that a new, concrete bridge (especially one along a new alignment) would disrupt the falls.

Friends' President John Graham agreed. "The reason Brunswick and Topsham sit where they sit is because of those three natural falls," he said, noting the two of the falls were removed to make way for the dam the sits upstream of the bridge.

Willis wasn't sure if a natural feature qualified as a contributing factor to a historical place, but noted that "there's definitely setting there."





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Shattuck argued the opposite point of view. He suggested that a new bridge might enhance the historical value of the area, because it would no longer obstruct the views from the Cabot Mill to the Bowdoin Mill.

Additionally, he said, a new bridge would be safer and more accessible to bicyclists and pedestrians crossing the bridge and taking in the historic industrial setting along the Androscoggin. At the suggestion of Brunswick and Topsham officials, the DOT included wide sidewalks and pedestrian overlooks in their designs for a new bridge.

Weighing costs

While the historical nature of the bridge is still unclear, the condition of its structural integrity was decided months ago.

The DOT announced its plan to replace the bridge last April, after finding that the 805-foot-long truss bridge has suffered major deterioration along its floor beams and earned a “poor condition” rating from the Federal Highway Administration.

However, the DOT has walked back its commitment to replacing the bridge, and project engineer Joel Kittredge would not confirm whether the DOT would still consider rehabilitation if the FHA decides not to designate the bridge as historical.

“In light of all the information that has come to light recently, we’re looking for direction from the (FHA),” Kittredge said. “I cannot say for the DOT what we’re going to do.”

Of the five possible designs the DOT and T.Y. Lin provided Oct. 29, two are rehabilitation options, differing only by the addition of an easterly sidewalk, which adds $2 million to construction costs, but improves bicycle and pedestrian passage.

In these cases, construction would cost $15 million and $17 million, respectively. However, the lifetime costs are projected at $20.8 million and $23.2 million over an estimated 75 years.

Replacing the bridge, on the other hand, would cost between $13 and $16 million, with one option for replacement yet to be determined.

The DOT provided three replacement options, and, in every case, the design calls for a concrete and steel girder bridge. While aesthetically and structurally similar, the alternatives vary in cost, length, and alignment: one version keeps the existing alignment; another proposes a curved, upstream alignment, and the last, a parallel parallel downstream alignment that, unlike the others, impacts Topsham properties along the banks.

Engineers called the steel girder bridge the most cost-effective option because of its low maintenance cost. Though T.Y. Lin could not provide specific figures for the cost of maintaining a new bridge, it would be substantially lower than the rehabilitated options, and require fewer paint jobs and no major structural repairs.

In the case of one design, lifetime maintenance of a new bridge increases the overall cost by only $700,000.

For Shattuck, the cost analysis makes the choice clear.

He said that rehabilitating the bridge is “socially irresponsible” to taxpayers around the state, who would be stuck with a bill for for Brunswick and Topsham to enjoy a “historic tchotchke.”

Callie Ferguson can be reached at 781-3661 ext. 100 or cferguson@theforecaster.net. Follow Callie on Twitter: @calliecferguson.



Cassie Chase of the Federal Highway Administration, center, leads an Oct. 27 Topsham meeting on the eligibility of the Frank J. Wood Bridge for the National Register of Historic Places.



Figure 6: A Possible Curved Upstream Bridge

If the Federal Highway Administration recommends replacing the Frank J. Wood Bridge, the Maine Department of Transportation might replace the structure with a steel girder bridge depicted in this rendering.

Edited 11/8 to correct the date of the meeting, which took place Oct. 27. Edited 12/27 to clarify that it remains unclear whether a listing on the register would prevent replacement.

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new styles arriving all

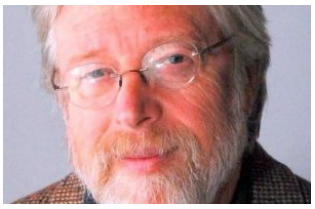
TAKE ANOTHER LO



Reporting on municipal, school, and community news in Brunswick and Harpswell. Bowdoin graduate, Wild Oats sandwich-eater. Callie can be reached at 207-781-3661 ext. 100, or cferguson@theforecaster.net.

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Chew H Bird • 4 months ago

There are fewer of these truss bridges remaining because of inherent weaknesses in the structure over an extended time frame. The location of the bridge is mission critical for Brunswick and Topsham and the additional bypass does not diminish the importance of this primary local route. Rare does not (by definition) equate to valuable.

The people wanting to preserve the bridge should, in my opinion, focus on a different structure that is less critical to community safety, access, and commerce. There is no logical reason to saddle the taxpayers of Maine and our communities with higher upkeep costs that will be passed along to our children, while reducing the safety of cyclists and pedestrians on such a heavily traveled bridge.

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MG Smith • 4 months ago

This should be ENTIRELY about selecting the most cost-effective plan. It is abundantly clear that a new, modern bridge gives tax payers the best bang for the dollar.

DO NOT GIVE IN TO THE BRUNSWICK NUTS WHO SAY OTHERWISE!

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VTXnME • 4 months ago

15-17 million to rehab an 85 year old bridge or 13-16 million to just replace it with a brand new one with a brand new life span. . . this is why Maine has one of the highest costs of living in the country. This should be a no brainer, replacement. They could very easily replace the existing span in the existing footprint to alleviate any disruption to the falls (or create a minimal disruption).

Why is anyone even entertaining a 15-17 million dollar rehab that's going to buy the bridge MAYBE another 15-20 years (previous article estimated life extension) where a new bridge (lower cost) will have a brand new 100+yr lifespan out of the gate.

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farmertom2 • 4 months ago

What would be nice is a covered bridge. Keeping the weather off the bridge would help extend its life and covered bridges are tres New England. Any new bridge should be covered

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Yellow Submarine • 4 months ago

If they can't post the cost of long term maintenance for a new bridge then we can't weigh the facts.

• Reply • Share ›

tommy2me • 4 months ago

The bridge has been a rusty ugly, non attraction to this community. Cost to maintain (paint) was up to the communities whereby the State did not have the funds in the budget. I grew up here for the last 60+ years and its always been ugly. We had grating on the base roadway for years. When they put a paved surface on the gratings, did they calculate the additional weight of the paving? Did they reinforce the deck surface support structures?

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COMMENT #20

From:	Nathan Holth
To:	Chase, Cassandra (FHWA)
Cc:	Kitty Henderson; mnaber@achp.gov
Subject:	Re[2]: Frank J. Wood Bridge Project - Request for Comments on the Section 106 Finding of Effect
Date:	Thursday, March 02, 2017 12:50:31 PM
Attachments:	comments3.pdf

Cassie,

Please find attached my Section 106 Consulting Party comments. Please let me know you recieved them.

Thanks,
-Nathan Holth

==========
Nathan Holth
Author/ Photographer/Webmaster
-----HistoricBridges.org-----
"Promoting the Preservation Of Our Transportation Heritage"
Mailing Address:
2767 Eastway Drive
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269-290-2593
nathan@historicbridges.org
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==========

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------ Original Message ------
From: "Chase, Cassandra (FHWA)" <Cassandra.Chase@dot.gov>
To: "Nathan Holth" <nathan@historicbridges.org>
Sent: 2/17/2017 9:57:49 AM
Subject: RE: Frank J. Wood Bridge Project - Request for Comments on the Section 106 Finding of Effect

> Hi Nathan,
>
> I have a meeting with MaineDOT on March 1st to go over the comments received to date that we have not yet responded to. We will be discussing your pack rust comments in detail and I will ensure MaineDOT has reviewed your proposed pack rust techniques at that time.
>
> Call me if you wish to discuss further or if you have any questions: 207-512-4921.
>
> Have a great weekend.
>
> Cassie
>
> ---
>
> **From:** Nathan Holth [mailto:nathan@historicbridges.org]
> **Sent:** Friday, February 03, 2017 5:26 PM
> **To:** Chase, Cassandra (FHWA)
> **Cc:** Kitty Henderson; Megan.M.Hopkin@maine.gov; mnaber@achp.gov
> **Subject:** Re: Frank J. Wood Bridge Project - Request for Comments on the Section 106 Finding of Effect
>
> Could you do me a favor and confirm the planned process for addressing my pack rust comments from November 21

2016? I am a bit confused, and am just seeking clarity. Any comments made by the Department prior to my letter about pack rust will be considered later, I understand that. So I just want to confirm that any documents prepared by the Department included in this Finding of Effect Document that reference pack rust (the documents that originally prompted my comments) can be basically ignored and will be re-evalutated and revised as needed after considering my comments in future documentation?

The reason I ask is I am trying to get a sense of how much comment I need to provide on this document. From what you are describing, a further discussion and additional documentation of the rehabailitation alternative(s) of this bridge (giving full consideration to my comments) will be occuring for sure at a future date?

Thanks,
-Nathan Holth

==========
Nathan Holth
Author/ Photographer/Webmaster
-----HistoricBridges.org-----
"Promoting the Preservation Of Our Transportation Heritage"
Mailing Address:
2767 Eastway Drive
Okemos, MI, 48864

269-290-2593
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------ Original Message ------
From: "Chase, Cassandra (FHWA)" <Cassandra.Chase@dot.gov>
To: "kitty@historicbridgefoundation.com" <kitty@historicbridgefoundation.com>; "Nathan Holth" <nathan@historicbridges.org>; "s.t.hanson@comcast.net" <s.t.hanson@comcast.net>; "John Graham" <John@johngrahamrealestate.com>; "sstern@gwi.net" <sstern@gwi.net>; "John Shattuck" <jshattuck@topshammaine.com>; "lsmith@brunswickme.org" <lsmith@brunswickme.org>; "Hopkin, Megan M" <Megan.M.Hopkin@maine.gov>; "Chamberlain, Kristen" <Kristen.Chamberlain@maine.gov>; "Kittredge, Joel" <Joel.C.Kittredge@maine.gov>; "Martin, Cheryl (FHWA)" <Cheryl.Martin@dot.gov>; "Frankhauser Jr, Wayne" <Wayne.FrankhauserJr@maine.gov>; "Kate Willis" <kwillis@kleinfelder.com>; "Emington, Wayne (FHWA)" <wayne.emington@dot.gov>; "John Eldridge" <jeldridge@brunswickme.org>; "Norman Baker" <norman.baker@tylin.com>; "Drozd, Maria (FHWA)" <Maria.Drozd@dot.gov>; "stevehinchman@gmail.com" <stevehinchman@gmail.com>; "admorris@gwi.net" <admorris@gwi.net>; "sebordwell@gmail.com" <sebordwell@gmail.com>; "Nancy BikeMaine.org" <Nancy@BikeMaine.org>; "Folsom, Jeff" <Jeff.Folsom@maine.gov>; "ckrussell@gwi.net" <ckrussell@gwi.net>; "Curtis Neufeld (cneufeld@sitelinespa.com)" <cneufeld@sitelinespa.com>; "Rod Melanson (rmelanson@topshammaine.com)" <rmelanson@topshammaine.com>; "Carol Eyerman (ceyerman@topshammaine.com)" <ceyerman@topshammaine.com>; "Douglas C. Bennett (dougb@earlham.edu)" <dougb@earlham.edu>; "Victor Langelo (vlangelo@eclipseservices.com)" <vlangelo@eclipseservices.com>; "Richard Cromwell (richcromwell1@gmail.com)" <richcromwell1@gmail.com>; "Androscoggin Dental Care (fredwigand@gwi.net)" <fredwigand@gwi.net>; "katzthal@comcast.net" <katzthal@comcast.net>; "mnaber@achp.gov" <mnaber@achp.gov>; "david.gardner@maine.gov" <david.gardner@maine.gov>; "Pulver, William" <William.Pulver@maine.gov>; "Pelletier, Steve (steve.pelletier@stantec.com)" <steve.pelletier@stantec.com>; "Deb Blum (dblum@brunswickme.org)" <dblum@brunswickme.org>; "kirk.mohney@maine.gov" <kirk.mohney@maine.gov>;

"Phinney Baxter White (phin@governorbaxter.com)" <phin@governorbaxter.com>; "William F Morin" <williammorin@midmaine.com>
Sent: 2/2/2017 7:53:00 PM
Subject: Frank J. Wood Bridge Project - Request for Comments on the Section 106 Finding of Effect

Good Evening,

The Federal Highway Administration (FHWA) is pleased to provide you with a copy of the Section 106 Supplemental Supporting Information for a Finding of Effect for the Frank J. Wood Bridge Project, located between the Towns of Brunswick and Topsham, Maine, and proposed by the Maine Department of Transportation (MaineDOT). Please click on the below link to download the Section 106 Finding of Effect document.

Secure File Downloads:
Available until: **04 March 2017**

Click link to download:

Frank J Wood Draft Finding of Effect Rev 7_2-2-2017.pdf
37.72 MB, Fingerprint: 8f8c441b68b21590a67e354ec35a430e (What is this?)
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Following the Section 106 consulting parties meeting held on October 27, 2016, FHWA asked the consulting parties to provide comments on the draft alternatives matrix, the draft alternatives matrix summary, and the preliminary effect determinations by December 2, 2016. FHWA and MaineDOT have since been considering and addressing those comments received. Comments related to the eligibility of and potential effects to historic properties have been addressed within the text of the Section 106 Supplemental Supporting Information for a Finding of Effect document. The purpose of this document is also to memorialize the Section 106 consultation discussions at previous Section 106 consulting parties meetings and to present the FHWA finding of effect for each alternative.

FHWA and MaineDOT are providing the Supplemental Supporting Information for a Finding of Effect to the Maine Historic Preservation Commission (MHPC), requesting the State Historic Preservation Officer's (SHPO's) concurrence with the Section 106 determination of effect for each of the proposed alternatives. In accordance with 36 CFR Part 800, the SHPO has 30 days to review the finding and provide a response.

FHWA and MaineDOT would also like input from the Section 106 consulting parties on the Supplemental Supporting Information for a Finding of Effect. Please provide us with your comments on this document within 30 days, or by March 6, 2017. Please send your comments to me (cassandra.chase@dot.gov) and Joel Kittredge (joel.c.kittredge@maine.gov). If you would like to send your comments by mail, please either mail them to my attention at the Federal Highway Administration, Edmund S. Muskie Federal Building, 40 Western Avenue, Room 614, Augusta, Maine, 04330; or Joel's attention at the Maine Department of Transportation, 16 SHS, Augusta, Maine 04333-0016.

A public meeting, specific to the overall project, will be held sometime in March. I will notify you as soon as this meeting is scheduled. Comments will also be received at that time, specific to other environmental impacts, engineering, costs, constructability, and the overall project in its entirety.

Please feel free to contact me if you have any questions or require any additional information.

Cassie

Cassie Chase
Environmental Engineer
Federal Highway Administration – Maine Division
Office: 207-512-4921
Cell: 207-689-8007

Nathan Holth
2767 Eastway Drive
Okemos, MI 48864

269-290-2593
nathan@historicbridges.org

February 2, 2017

Cassie Chase
Environmental Engineer
Federal Highway Administration – Maine Division
Office: 207-512-4921
Cell: 207-689-8007
Cassandra.chase@dot.gov

Subject: Comments: Section 106 Consulting Party Comments: Frank J. Wood Bridge, Draft Effects Finding

Dear Ms. Chase:

I wish to offer the following comments in regards to above listed project.

FHWA has informed me that my previous comments and information provided in regards to removal and repair of existing pack rust on this bridge have not yet been addressed but will be in future documentation. This being the case, I want to state for the public record that until these comments have been considered, that selection of any preferred alternative, or determination of any alternative as "feasible and prudent" or not is premature as the full consideration of acceptable repair methods (and associated cost-benefits) such as pack rust removal could result in a substantial difference in the project cost, and the expected useful life and maintenance costs of the bridge following rehabilitation.

There is another aspect of the alternatives analysis that I am requesting further study and reconsideration of. It was brought to my attention that Exodermic decks were dismissed from the study on a claim that exposed steel would lead to maintenance costs. This statement is not correct, because the steel of a proposed exodermic deck would use steel that was hot dip galvanized. Galvanization is a long-term coating, meaning the steel is not exposed. Any DOT should be extremely familiar with hot dip galvanization, since it is used on other non-bridge structures such as guiderail, and overhead sign trusses. For this reason I find it rather disturbing that the report does not seem to acknowledge the well-known properties of galvanization. Hot dip galvanized coatings should last 50-75 years, and this should be common knowledge in any DOT. The exodemic deck is worthy of consideration because it offers a reduction in dead load, can be installed quickly (reducing bridge closure time), and does not require unusual levels of maintenance.

Other consulting parties have referenced the potential individual eligibility of this bridge on the National Register of Historic Places. I believe this bridge should be considered individually eligible for Listing on the National Register for the following reasons. First, the context of metal truss bridges is unique in Maine. No other state in this region of the country has fewer surviving

metal truss bridges. Moreover, the number of pre-1930s truss bridges in Maine is unbelievably low in comparison with other states. This means that bridges built in the 1930s and 1940s are actually among the earlier surviving truss bridges in the state. Another staggering fact is that a couple years ago, Maine demolished the only pin-connected highway truss in the entire state. I am not sure if any other state in the contiguous United States lacks a single pin-connected highway truss, it is as far as I know unprecedented. This fact means that Maine's only remaining record of this important category of historic bridge (steel truss) is among rivet-connected truss bridges such as the Frank J. Wood Bridge. In short, a bridge like the Frank J. Wood Bridge, in the unique context of Maine, is a rare example of its type and an early surviving example of its type.

Sincerely,



Nathan Holth

Author/Webmaster, HistoricBridges.org

COMMENT #21

From:	Nathaniel Wheelwright
To:	Chase, Cassandra (FHWA); joel.c.kittredge@maine.gov
Subject:	Frank J. Wood Bridge Project
Date:	Friday, March 03, 2017 5:11:50 PM

Dear Cassie and Joel,

As the Federal Highway Administration analyzes the Frank J. Wood Bridge Project and weighs the views of Maine citizens, I hope that you will give particular consideration to the project's potential effects on wildlife and on the public's appreciation of wildlife.

As a long-time Brunswick resident and a professor of ecology and ornithology, I can attest to the importance of the existing bridge as a special place for me, my students and colleagues and the local residents view various charismatic water birds and birds of prey. Any development that either unduly damaged habitats or opportunities for appreciating our natural heritage should be avoided at all costs.

Thank you for your attention.

Sincerely,
Nat Wheelwright

--

Nathaniel T. Wheelwright
Bass Professor of Natural Science
Chair, Dept. Biology
Bowdoin College
Brunswick, ME 04011
tel: 207-725-3583; nwheelwr@bowdoin.edu
http://www.bowdoin.edu/faculty/n/nwheelwr/index.shtml

COMMENT #22

From: Anthony Gatti
To: Martin, Cheryl (FHWA); Joel.C.Kittredge@maine.gov
Cc: Chase, Cassandra (FHWA); John@johngrahamrealestate.com; kirk.mohney@maine.gov
Subject: Fort Andross & Bridge
Date: Saturday, March 04, 2017 1:48:11 PM
Attachments: Fort Andross & Frank Wood Bridge .pdf

Hello-

I am responding on behalf of Waterfront Maine to the MaineDot public notice for comment on the Brunswick-Topsham 22603.00, Frank J. Wood Bridge project and its effect on historic properties. We ask that our attached letter also be entered into the record for the recent request by Federal Highway for input from the consulting 106 parties on the Supplemental Supporting Information for a Finding of effect. Though we are not a consulting party, Waterfront Maine is a significant stakeholder in proximity to the bridge with our Fort Andross Mill complex.

Thank You,

Anthony Gatti
Waterfront MainePreview attachment Fort Andross & Frank Wood Bridge .pdf

Cheryl Martin
Assistant Division Administrator
Federal Highway Administration – Maine Division
40 Western Ave
Augusta, ME 04330

Joel Kittredge
Maine DOT
16 State House Station
Augusta, ME 04333-0016

RE: Frank J. Wood Bridge Section 106 Historic Review

Dear Ms. Martin and Mr. Kittredge:

Waterfront Maine owns the Fort Andross (Cabot Mill) property adjacent to the Frank J. Wood Bridge in downtown Brunswick, ME. We purchased the vacant and neglected property in 1986 and have invested in excess of $20 million dollars in it since that time. Today, the former mill houses dozens of local businesses including professional services, restaurants, artist studios, a wood working shop, an antique store, and a flea market. It is a thriving and dynamic part of downtown Brunswick and we are proud of our work to save this mill and repurpose it for new uses.

This historic character of the Fort Andross property and of the Brunswick downtown are an important element of our success. It draws people to the mill, and to the community. The key to that character is history, as recorded in the community's buildings and structures. Without its historic buildings and structures, Brunswick would be just another unexceptional and indistinguishable town full of modern buildings that look exactly like the modern buildings in thousands of other towns across the country. The Frank J. Wood Bridge is an important part of the character of Brunswick that is highly visible to many of our tenants. As the link between the historic mills on either side of the river, and the historic downtowns beyond the mills, it serves to unite these historic elements of the two communities.

Waterfront Maine supports the rehabilitation of the existing historic bridge and opposes construction of a new bridge unless and until it is demonstrated that rehabilitation is not possible. We recognize the importance of maintaining traffic flow during rehabilitation and strongly encourage the use of a temporary two-way bridge with sidewalk during rehabilitation. This was successfully done for the Cribstone Bridge in Harpswell several years ago and should be done here. We realize rehabilitation is more complicated than constructing a new bridge and that maintaining historic structures requires additional investment over time, however, these are the investments that must be made if we are to maintain the unique character of this community.

Fort Andross is the largest property abutting the project area and will be the most affected if the current proposal for a new bridge is implemented. Access to the new bridge will require the taking of a portion of our property and the demolition of historic retaining walls on our land. It will also complicate, if not eliminate, access to our rear parking lot - deeply and permanently affecting our tenant, Frontier restaurant. It may also restrict access to the lower driveway and limit our ability to rehabilitate the Picker House building, which remains vacant. The taking of land and reconfiguration of access to the

rear portion of our property will have a permanent negative impact on our ability to attract and retain tenants for those spaces.

We are also concerned about the potential impact on our property's eligibility for the National Register of Historic Places if the bridge is demolished. The existing eligibility of the property is as part of a potential "mill district" that includes the Frank J. Wood Bridge and Bowdoin Mill across the river. If the bridge is demolished, the eligibility of our property will be in question as one of the three elements of the "district" will be gone. Eligibility to the National Register is essential for the use of state and federal historic tax credits for rehabilitation. Combined, these represent 45% of rehabilitation costs. Waterfront Maine used these credits in the rehabilitation of Merrill's Wharf in Portland, where the value of the credits was more than $7 million dollars. The potential loss of our ability to make use of these historic tax credits at Fort Andross is of great concern to us.

Waterfront Maine urges the Federal Highway Administration to insist on a full alternatives analysis as part of the Section 106 review process and to recognize the substantial harm that will be done to the historic character of the community and to our property if demolition of the Frank J. Wood Bridge is allowed.

Sincerely,

Anthony Gatti

COMMENT #23

From:	Allison Brigham
To:	Martin, Cheryl (FHWA); Joel.C.Kittredge@maine.gov
Cc:	Chase, Cassandra (FHWA); John Graham; kirk.mohney@maine.gov
Subject:	Frank J. Wood Bridge/Summer Street Historic District 106 Historic Review
Date:	Saturday, March 04, 2017 9:27:07 PM

Cheryl Martin
Assistant Division Manager
Federal Highway Administration- Maine Division

Joel Kittredge
Project Manager
Maine DOT

Dear Ms Martin, and Mr. Kittredge,

I am sending this email in response to the Maine DOT public notice to comment on the Brunswick-Topsham 22603.00, Frank J. Wood Bridge project and its effect on historic properties. I am requesting that these comments be entered into the record, for the recent request by the Federal Highway Administration for input from the consulting 106 parties on the Supplemental Supporting Information for a Finding of Effect. Though I am not a consulting party; I am a supporter of the Friends of the Frank J. Wood Bridge group, that is a consulting party. In addition my property is located at 17 Summer Street; part of the Summer Street Historic District in Topsham Maine.

Our home, is one of 9 residential buildings located on Summer Street; 7 of which have been recognized as "contributory" with historical significance. All of the homes recognized as "contributory" directly face the Frank. J. Wood Bridge. Our residents have paid tremendous attention to maintain the historical integrity of their individual properties, and the neighborhood takes great pride in being located with such impressive views of the river, the Bowdoin Mill, the Cabot Mill, and most importantly the Frank J. Wood Bridge. When I look out from the front windows of our 1800's cape, my line of vision passes over a clear view of the beautiful lower falls, the grand steel truss of the Frank J. Wood Bridge, and directly across the mighty Androscoggin River, to a completely unobstructed view of the Cabot Mill. If I look slightly to the left; I can see the beautiful Bowdoin Mill, just beyond the truss of the Frank J. Wood Bridge. I am proud to live in an area, so rich in history, with these historically recognized landmarks connected by a remarkable bridge; which although lacking in recent maintenance and upkeep, maintains the architectural wonder of a era long gone by, and is an integral part of the historical story, charm, and beauty of the SSHD. I do not claim to be a historical, or architectural expert; but I do believe that my address doe s make me an important voice regarding demolition of our current bridge, and replacement with a modern, concrete bridge.

I cannot help, but to dispute the findings listed in the Supplemental Supporting Information for a Finding of Effect; stating that all replacement bridge alternatives would have "no adverse effect" on the Summer Street Historic District. Although I do acknowledge that the Frank J. Wood Bridge construction was not completed until 1932, more than a century after our own home was built; this bridge has become a fixture in the historical landscape consisting of and connecting the Pejepscot Paper Company, the Brunswick-Topsham Industrial Historic District, Bowdoin Mill, Cabot Mill, and the Summer Street Historic district. Therefore, I must raise the question; Will a concrete bridge replacement permanently and negatively alter the landscape of a historically recognized street, one which has been present since at least the early 1800's, and the only strictly residential street to abut the proposed new construction?

Our ancestors and previous homeowners have seen 3 different bridge designs spanning the Androscoggin River in front of their homes located within the SSHD. Do any of the proposed alternative new construction designs seem appropriate for the magnitude of history which will surround it? The Frank J. Wood bridge has become an iconic and integral contributor to the beauty, history, and splendor that all residents of Summer Street Historical District have come to appreciate and celebrate.

In conclusion, I support efforts for rehabilitation of the Frank J. Wood Bridge, and I am requesting that rehabilitation of the current structure be considered both carefully, and fairly. Thank you for your consideration and time.

Sincerely,

Allison Brigham

17 Summer Street
Topsham, Maine

COMMENT #24

From:	betty leonard
To:	Martin, Cheryl (FHWA); Joel.C.Kittredge@maine.gov
Cc:	Chase, Cassandra (FHWA); John@johngrahamrealestate.com; Kirk.Mohney@maine.gov
Subject:	Frank J. Wood Bridge
Date:	Sunday, March 05, 2017 2:18:44 PM

March 5, 2017

Dear Ms. Martin, and Mr. Kitredge,

I am sending this email in response to the Maine DOT public notice to comment on the Brunswick-Topsham 22603.00, Frank J. Wood Bridge project and its effect on historic properties. I am requesting that my letter be entered into the record for the recent request by the Federal Highway Administration for input from the consulting 106 parties on the Supplemental Supporting Information for a Finding of Effect. Though I am not a consulting party, I am a supporter of the Friends of the Frank J. Wood Bridge group, that is a consulting party.

"We will probably be judged not by the monuments we build but by those we have destroyed." I refer to a New York Times editorial (October 30, 1963), written at the beginning of the federal effort in historic preservation. The National Historic Preservation Act of 1966 saved a myriad of historic structures including Grand Central and Union Stations. Unfortunately, in Maine much of our architectural heritage has been lost. Portland residents mourn the loss of their Post Office and Union Train Station and disparage the inadequacies of their replacements. Brunswick citizens are still bemoaning the razing of our iconic town hall and train station along with numerous churches and Federal period homes. Now, we are considering destroying the Frank J. Wood Bridge, one of the few remaining steel truss bridges in Maine, and critically linking downtown Brunswick with Topsham.

One consideration which has not been adequately addressed in the rush to demolish this historic structure, are the living memories of the populations of both Brunswick and Topsham. Topsham residents remember daily transiting this bridge from their homes to their work places in the Cabot Mill. Likewise, Brunswick citizens walked or drove over this span from home to work, day and night, to arrive at the Pejepscot Paper Company. I personally walked across this bridge for day and night shifts at the paper company. Not only do current residents cherish the bridge but we have memories of generations of our forebears treading the same span. Many of the letters and resolutions I have read arguing for demolition of the bridge come from people "from away" who don't share or appreciate these memories. They fail to understand what a powerful sense of place this unique steel truss edifice evokes!

Another consideration which has been overlooked is that when transiting this bridge, one becomes acutely aware of the cultural importance of the Androscoggin River itself. In my lifetime, I've watched the quality of the water and the air around it slowly improve. Back in the day, the water was so polluted, some days the river ran red, yellow or other hues depending on the dying process going on at the time in the paper mills upstream. The resultant air and water pollution made it impossible for nearby home owners to keep paint on their houses. Also, the river was unsafe for swimming or fishing. Overtime, with enhanced federal environmental regulations, the river has become an attraction rather than a calamity. We now have successful restaurants and businesses located in the mills on both sides of the Androscoggin offering river, mill, and bridge views. People congregate along the river banks and bridge sidewalk to observe wildlife and riverscape. The existing Frank J. Wood Bridge

allows people to see the beautiful natural rock formations upriver that would be completely obscured by a replacement bridge. The ongoing demolition of dams in Maine may soon lead to the removal of the existing ugly concrete dam and allow full exposure of the natural rock formations that create the rapids which the bridge and mills overlook.

With cruise ships plying the Maine coast and bus and train tours of the Portland, Freeport and Brunswick area, one can foresee many more tourists coming to the Brunswick/Topsham area. We want them to enjoy what we have conserved- including our beautiful steel truss bridge. I conclude with a quotation by Jacqueline Onassis Kennedy:

"Americans care about their past, but for short-term gain they ignore it and tear down everything that matters."

Sincerely,

Elizabeth Hanks Leonard
8 Appletree Drive
Brunswick, ME 04011

COMMENT #25

From:	Phinney Baxter White
To:	Chase, Cassandra (FHWA)
Cc:	kitty@historicbridgefoundation.com; Nathan Holth; s.t.hanson@comcast.net; John Graham; sstern@gwi.net; John Shattuck; lsmith@brunswickme.org; Hopkin, Megan M; Chamberlain, Kristen; Kittredge, Joel; Martin, Cheryl (FHWA); Frankhauser Jr, Wayne; Kate Willis; Emington, Wayne (FHWA); John Eldridge; Norman Baker; Drozd, Maria (FHWA); stevehinchman@gmail.com; admorris@gwi.net; sebordwell@gmail.com; Nancy BikeMaine.org; Folsom, Jeff; ckrussell@gwi.net; Curtis Neufeld (cneufeld@sitelinespa.com); Rod Melanson (rmelanson@topshammaine.com); Carol Eyerman (ceyerman@topshammaine.com); Douglas C. Bennett (dougb@earlham.edu); Victor Langelo (vlangelo@eclipseservices.com); Richard Cromwell (richcromwell1@gmail.com); Androscoggin Dental Care (fredwigand@gwi.net); katzthal@comcast.net; mnaber@achp.gov; david.gardner@maine.gov; Pulver, William; Pelletier, Steve (steve.pelletier@stantec.com); Deb Blum (dblum@brunswickme.org); kirk.mohney@maine.gov; William F Morin
Subject:	Re: Frank J. Wood Bridge Project - Request for Comments on the Section 106 Finding of Effect
Date:	Sunday, March 05, 2017 4:41:49 PM
Attachments:	JPBW106.pdf

Dera Cassie,

I appreciate the opportunity to respond. I have attached my letter which includes supporting images and emails.

Best,
Phin

On Feb 2, 2017, at 7:53 PM, Chase, Cassandra (FHWA) <Cassandra.Chase@dot.gov> wrote:

Good Evening,

The Federal Highway Administration (FHWA) is pleased to provide you with a copy of the Section 106 Supplemental Supporting Information for a Finding of Effect for the Frank J. Wood Bridge Project, located between the Towns of Brunswick and Topsham, Maine, and proposed by the Maine Department of Transportation (MaineDOT). Please click on the below link to download the Section 106 Finding of Effect document.

Secure File Downloads:
Available until: **04 March 2017**

Click link to download:

Frank J Wood Draft Finding of Effect Rev 7_2-2-2017.pdf
37.72 MB, Fingerprint: 8f8c441b68b21590a67e354ec35a430e (What is this?)
You have received attachment link(s) within this email sent via Accellion Secure File Transfer. To retrieve the attachment(s), please click on the link(s).

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Following the Section 106 consulting parties meeting held on October 27, 2016, FHWA asked the consulting parties to provide comments on the draft alternatives matrix, the draft alternatives matrix summary, and the preliminary effect determinations by December 2, 2016. FHWA and MaineDOT have since been considering and addressing those comments received. Comments related to the eligibility of and potential effects to historic properties have been addressed within the text of the Section 106 Supplemental Supporting Information for a Finding of Effect document. The purpose of this document is also to memorialize the Section 106 consultation discussions at previous Section 106 consulting parties meetings and to present the FHWA finding of effect for each alternative.

FHWA and MaineDOT are providing the Supplemental Supporting Information for a Finding of Effect to the Maine Historic Preservation Commission (MHPC), requesting the State Historic Preservation Officer's (SHPO's) concurrence with the Section 106 determination of effect for each of the proposed alternatives. In accordance with 36 CFR Part 800, the SHPO has 30 days to review the finding and provide a response.

FHWA and MaineDOT would also like input from the Section 106 consulting parties on the Supplemental Supporting Information for a Finding of Effect. Please provide us with your comments on this document within 30 days, or by March 6, 2017. Please send your comments to me (cassandra.chase@dot.gov) and Joel Kittredge (joel.c.kittredge@maine.gov). If you would like to send your comments by mail, please either mail them to my attention at the Federal Highway Administration, Edmund S. Muskie Federal Building, 40 Western Avenue, Room 614, Augusta, Maine, 04330; or Joel's attention at the Maine Department of Transportation, 16 SHS,

Augusta, Maine 04333-0016.

A public meeting, specific to the overall project, will be held sometime in March. I will notify you as soon as this meeting is scheduled. Comments will also be received at that time, specific to other environmental impacts, engineering, costs, constructability, and the overall project in its entirety.

Please feel free to contact me if you have any questions or require any additional information.

Cassie

Cassie Chase
Environmental Engineer
Federal Highway Administration – Maine Division
Office: 207-512-4921
Cell: 207-689-8007
Cassandra.chase@dot.gov

Cassie Chase
Environmental Engineer
Federal Highway Administration – Maine Division
40 Western Ave
Augusta, ME 04330

Joel Kittredge
Maine DOT
16 State House Station
Augusta, ME 04333-0016

Dear Ms. Chase and Mr. Kittredge:

The accelerated removal of our steel truss bridges in Maine is leading to a conclusion where there won't be any examples left. From town to town these new concrete bridges all look the same. They look like ramps to turnpikes and interstates. Their style evokes a message, as if to say: ***Get A Move On.***

The Frank Wood Bridge captures people's attention. Huge steel truss beams with patina weaving the two mills and the two towns together. It's what distinguishes our area from others. It is a landmark and a gateway. It's also a statement, it says: ***You have Arrived. Explore. Enjoy.***

Images of the Frank Wood Bridge can be found on postcards, websites, our local phonebook, paintings, marketing collateral for banks and colleges, and advertisements for local politicians-- even one who is a supporter for a new bridge used the historic bridge to promote her campaign.

In the 1988 book titled "**Mills and Factories of New England**" it is featured prominently on the cover of the book. The photographer documented hundreds of mills in New England. From the thousands of photographs he took he chose the Frank Wood Bridge for the cover photo. His name is Serge Hambourg. He is from away. Like France, away.

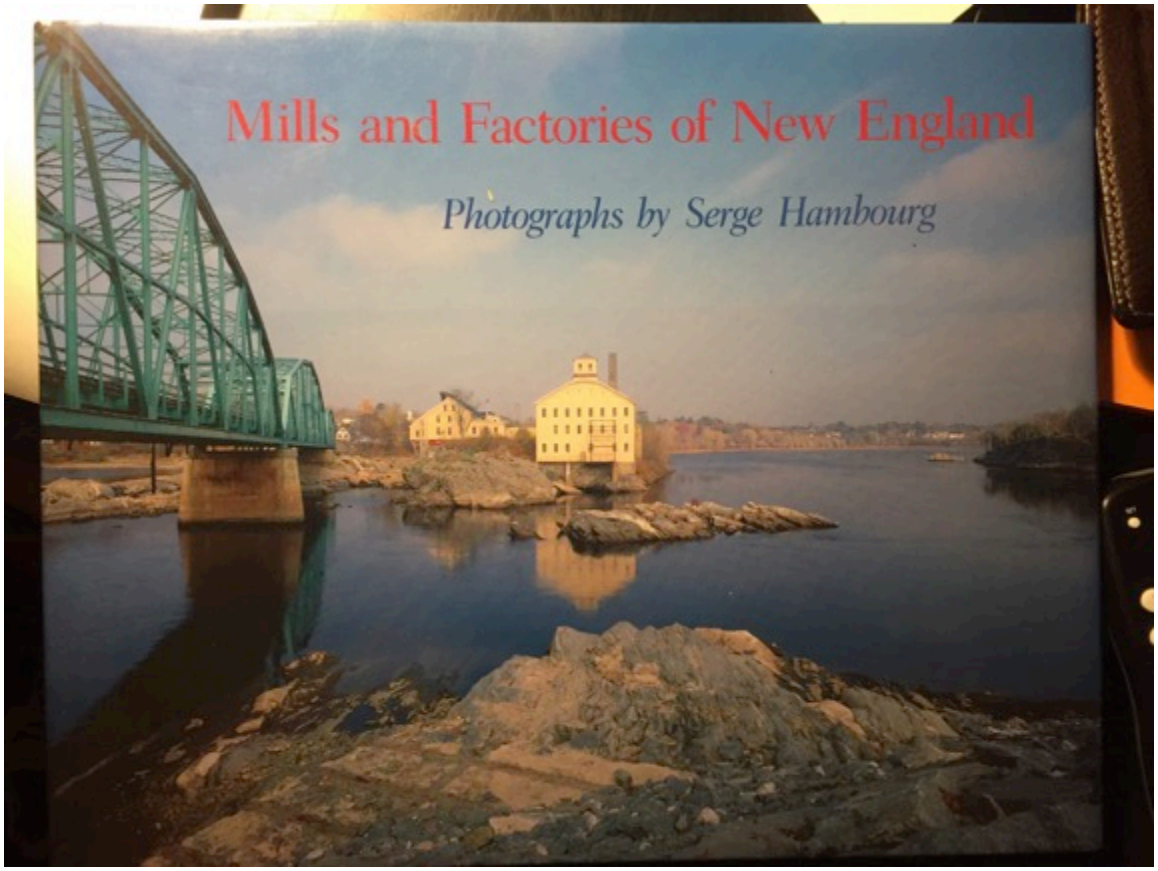
I contacted Mr. Hambourg about the Frank Wood Bridge. He responded: ***"I am sorry to know that the bridge at Topsham is now under threat. I liked the Pjepscot paper mill, the landscape and the bridge so that why I made that pictures many years ago reproduced on the cover and on 51 and 52 in my book "Mills and factories of New-England"."***

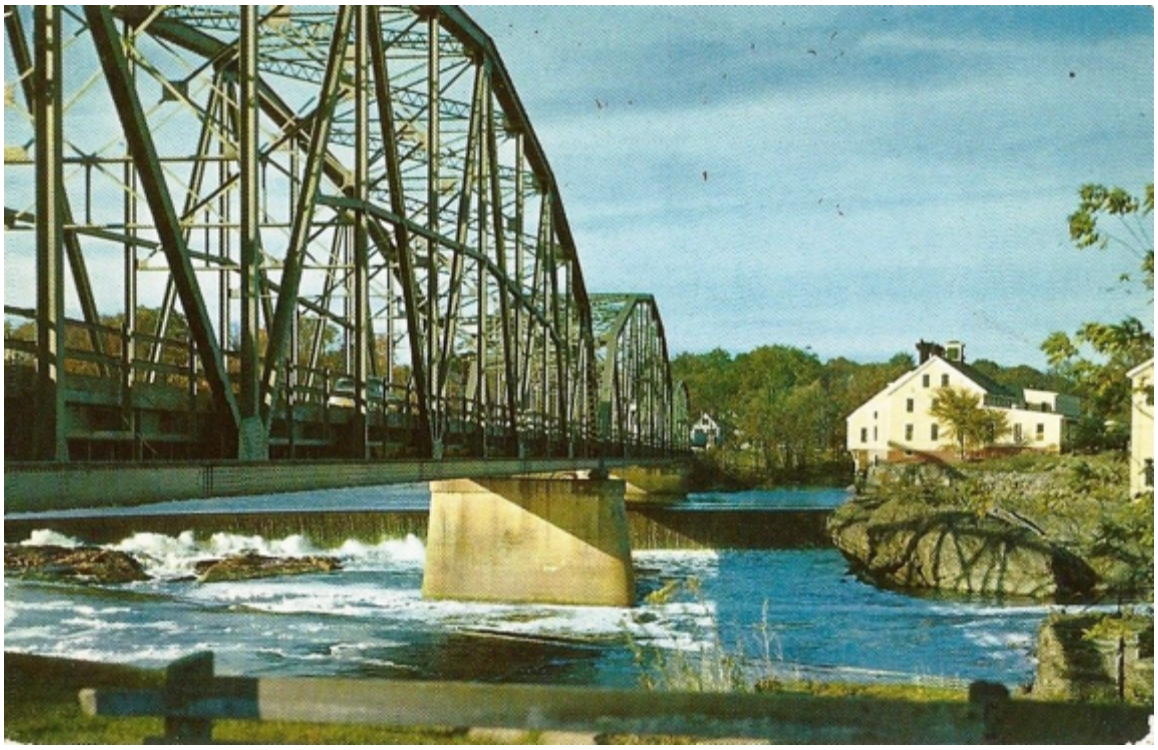
This is all the evidence you need to justify rehabilitation.
The Frank Wood Bridge, nestled in the mill landscape is picturesque and notable. Even to people who have visited for the first time. A person from another continent and thousands of miles away confirms **"*I liked the …. mill, the landscape and the bridge".***

Removal of the bridge will clearly be an adverse effect on both of the mills, the landscape and obviously to the bridge. There has been enough loss of historic structures and scenic landscapes throughout the state. If you take the Frank Wood Bridge out of the picture you will have gutted our community. Please preserve this one.

J. Phinney Baxter White
Governor Baxter, LLC

Supporting images: The Frank Wood Bridge on the cover of "Mills and Factories of New England", postcards, a website, a painting, the phonebook, a wall mural at a bank, a college catalog and a local politicians campaign ad:


Mills and Factories of New England
Photographs by Serge Hambourg




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@memorialdaymaine
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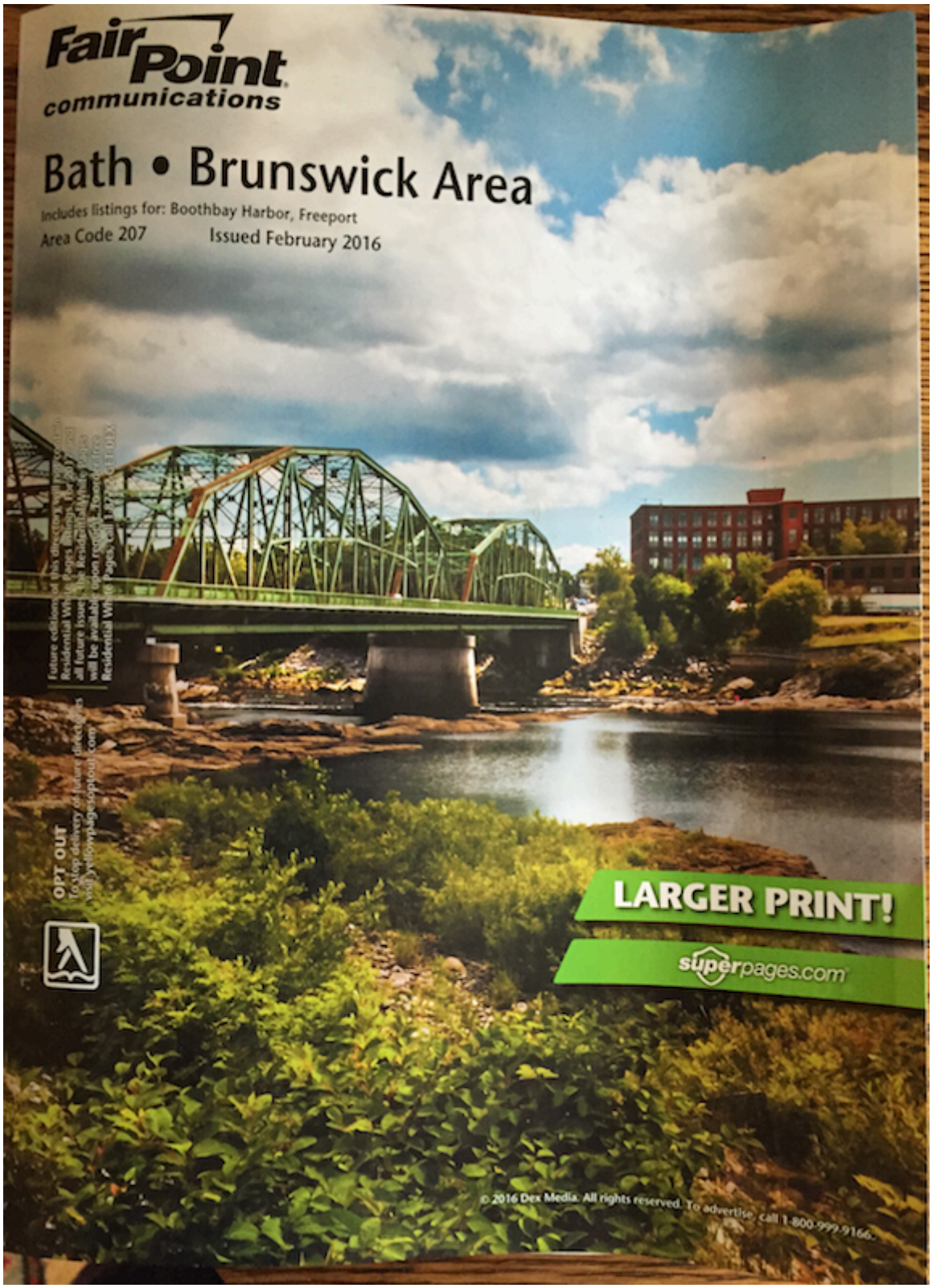


Tim Gaydos
Night Bridge
acrylic on canvas
30 x 48
$4800

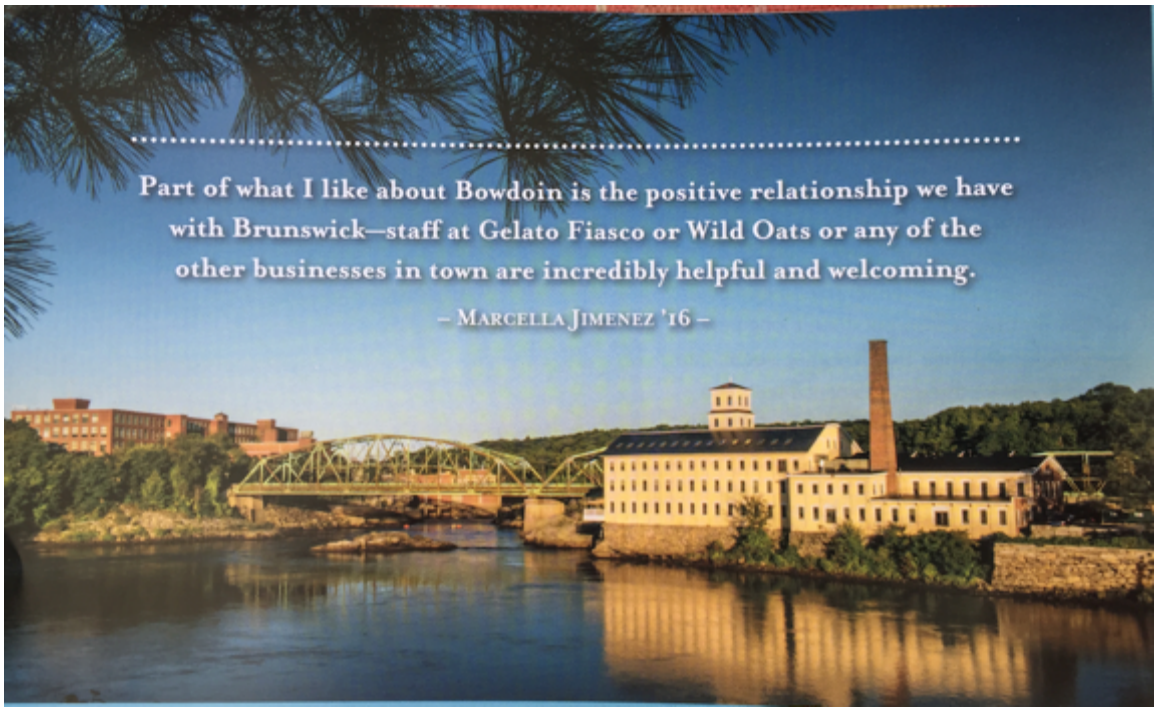
Brunswick

Bayview Gallery
art@bayviewgallery.com

58 Maine Street, Brunswick, Maine


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Part of what I like about Bowdoin is the positive relationship we have with Brunswick—staff at Gelato Fiasco or Wild Oats or any of the other businesses in town are incredibly helpful and welcoming.
– Marcella Jimenez '16 –





DISTRICT 54

Ruth Lyons

I would be honored to be your choice for District 54 in November.

-Ruth

ruthamy@comcast.net

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Political advertisement paid for and approved by Ruth Lyons for Maine House of Representatives, District 54.

Supporting emails from Serge Hambourg:

From: **Serge Hambourg** serge.hambourg@sfr.fr
Subject: Re: your cover photo on Mills and Factories of New England
Date: April 24, 2016 at 11:32 AM
To: SERGE HAMBOURG Photographe phinwhite@me.com

SH

Dear Phinney White,

I thank you for your mail and I am sorry to know that the bridge at Topsham in now under threat. I liked the mill (Pejepscot paper mill) the landscape and the bridge so that why I made that pictures many years ago reproduced on the cover and on 51 and 52 in my book "Mills and factories of New-England. Nevertheless I have to tell you that no photographs © Serge Hambourg may be reproduced in any manner in any media or transmitted by any means whatsoever electronic or mechanical (including photocopy, film or video recording, internet posting or any other information storage and retrieval system) without payments of rights and prior written permission of the photographer Serge Hambourg.
I am sorry for this constraint but I am swamped by people asking permission to use my work for free and it is impossible ,alas for me now, to say "yes". Cordially yours , Serge Hambourg.

From: **Serge Hambourg** serge.hambourg@sfr.fr
Subject: Re: my cover photo on Mills and Factories of New England
Date: April 26, 2016 at 10:20 AM
To: James White phinwhite@me.com

SH

Dear Mr. White,

I authorize you to reproduce only as a document in a low resolution the full cover of my book without any modification (as it is) and showing my name and the title of the book. I hope that it will help you in your interesting project . With my best wishes and cordially to you Mr. White , Serge Hambourg.

COMMENT #26

From:	Local market
To:	Martin, Cheryl (FHWA); Joel.C.Kittredge@maine.gov; Chase, Cassandra (FHWA); John@johngrahamrealestate.com; kirk.mohney@maine.g
Subject:	Frank J. Wood Bridge Project
Date:	Sunday, March 05, 2017 4:55:26 PM

Dear DOT,
I am responding to the MaineDot public notice to comment on the Brunswick-Topsham 22603.00, Frank J. Wood Bridge project and its effect on historic properties. And I ask that these comments be entered into the record for the recent request by Federal Highway for input from the consulting 106 parties on the Supplemental Supporting Information for a Finding of effect. Though I am not a consulting party I am a supporter of the Friends of the Frank J. Wood Bridge group, who is a consulting party.

As a long time resident and business owner in Brunswick, I have concerns about the proposal to demolish the Frank J Wood Bridge - an important part of the historic character of the Brunswick and Topsham downtown neighborhoods.

My family invested heavily in growing this community, but always with a balance to maintain the authenticity and small town feel they loved. I grew up in Brunswick, bought my first bike at the old Western Auto on Maine St, marched with the Girl Scouts over the historic green bridge. I opened Local Market & Cafe on Maine St in 2012 because of my love for that past and my desire to be part of this historic community.

I support the efforts of the Friends of the Frank J Wood Bridge to oppose demolition and instead encourage rehabilitation.
Sincerely,
Sharon Smiley

Local Market & Cafe
148 Maine Street
Brunswick, Maine 04011
207-729-1328

localmarket04011.com
Instagram.com/localmarket04011
Facebook.com/localbrunswick

COMMENT #27

From:	Wylersbrunswick
To:	Martin, Cheryl (FHWA); Joel.C.Kittredge@maine.gov; Chase, Cassandra (FHWA); John@johngrahamrealestate.com; kirk.mohney@maine.gov
Subject:	Frank J. Wood Bridge
Date:	Sunday, March 05, 2017 5:29:39 PM

Dear DOT,
I am responding to the MaineDot public notice to comment on the Brunswick-Topsham 22603.00, Frank J. Wood Bridge project and its effect on historic properties. And I ask that these comments be entered into the record for the recent request by Federal Highway for input from the consulting 106 parties on the Supplemental Supporting Information for a Finding of effect. Though I am not a consulting party I am a supporter of the Friends of the Frank J. Wood Bridge group, who is a consulting party.

As a long time resident and business owner in Brunswick, I have concerns about the proposal to demolish the Frank J Wood Bridge - an important part of the historic character of the Brunswick and Topsham downtown neighborhoods.

I opened Wyler's on Maine St. in 1993 because of my love for and desire to be part of this historic community. My customers enjoy the quaint feel of Brunswick, so much so that it has become a shopping destination for people from all over Maine and beyond. I also own the Lemont Block on the corner of Maine and Pleasant Streets. I can't support a plan that would change this and potentially harm downtown business in Brunswick & Topsham.

I support the efforts of the Friends of the Frank J Wood Bridge to oppose demolition and instead encourage rehabilitation.
Sincerely,
Sylvia Wyler

WYLER'S
150 Maine St. Brunswick ME 04011
207-729-1321
www.shopwylersmaine
IG @wylersmaine

LOCAL MARKET
148 Maine St. Brunswick ME 04011
207-729-1328
IG @localmarket04011

COMMENT #28

From:	John Graham
To:	Chase, Cassandra (FHWA); Joel.C.Kittredge@maine.gov
Cc:	Steve Hinchman; Kitty Henderson; mnaber@achp.gov
Subject:	Friends of the Frank J Wood Bridge Comments on Draft
Date:	Monday, March 06, 2017 10:09:16 AM
Attachments:	Image 0099.pdf Image 0098.pdf 122 Signed Petitions to Save FJW.pdf Friends Section 106 comments for Kirk Mohney 2017.02.28 reduced for email.pdf

Hi Cassie,

Please see the attached comments, including almost 150 letters that failed to be make the draft(?) and 180 signatures of a petition; all of which we request be included in the final record. There is also a list of questions that have not been answered the most pressing of course is where is the Preliminary Design Report! I have personally been asking for this for close to a year now and have received nothing but promises of soon. We still do not have a detailed breakdown of any of the numbers provided in the report and thus are unable to verify them. How one is expected to accept any conclusions of cost without a breakdown is beyond fathomable.

Regards,

John
President of the Friends of the Frank J Wood Bridge.

John Graham
John Graham Real Estate
www.johngrahamrealestate.com
207-491-1660
10 Pleasant Street
Topsham, ME 04086

United States Department of the Interior
NATIONAL PARK SERVICE
HABS/HAER/HALS Division
1201 Eye St NW #2270
Washington, DC 20005

14 September 2016

Cheryl Martin
Assistant Division Administrator
Federal Highway Administration – Maine Division
40 Western Ave
Augusta, ME 04330

Joel Kittredge
Maine DOT
16 State House Station
Augusta, ME 04333-0016

Dear Cheryl and Joel,

I am saddened to hear about the proposal to demolish the Frank J. Wood Bridge in Brunswick, Maine. This National Register eligible structure is a 1932 Warren through truss, built by the Boston Bridge Works. The bridge is a stunning visual landmark that connects the two historic districts of the milltowns of Brunswick and Topsham, over the scenic falls of the Androscoggin River.

The Frank J. Wood Bridge should be rehabilitated, not replaced by a modern structure. The bridge is in severe need of maintenance and repair, but mostly to its deck only. While the bridge is 80 years old, it has a solid substructure and still meets the traffic needs of the area. Rehabilitation is a more cost effective option to meeting AASHTO Standards, and will assure the preservation of this iconic structure for decades to come.

As an architect at the Historic American Engineering Record, and co-executive editor of the recent publication, *Covered Bridges and the Birth of American Engineering,* I urge the FHWA and Maine DOT to reconsider. Please preserve the Frank J. Wood Bridge and save an historic icon of Maine's transportation heritage.

Sincerely,

Christopher H. Marston
Architect
Historic American Engineering Record, National Park Service
1201 Eye Street, NW, 2270
Washington, DC 20005
202-354-2162
christopher_marston@nps.gov

Ms Cassandra Chase, Environmental Engineer
U. S. Federal Highway Administration
40 Western Ave, Augusta, Maine 04330

August 3, 2016

Dear Ms. Chase,

I am writing this letter because I have grave concerns about the proposal to demolish the Frank J Wood Bridge that spans the Androscoggin River.

As a commercial property owner of seven buildings in downtown Brunswick, all of which were in need of substantial rehabilitation when purchased, I know the value of preserving structures that reflect a bygone past. In preserving the architectural integrity of my buildings and bringing them up to code, I have made a significant investment of almost $3,000,000 over a twenty year period in order to insure their continued use for another century. All my properties are ninety percent occupied with commercial and residential tenants.

The existing Frank J Wood bridge is an important part of the character of the Brunswick and Topsham downtown areas that link two historic mills that were rehabilitated in the past by owner/developers who had an eye for preserving the past. Given that Brunswick has recently been granted historic designation with the aid of of federal funds to rehabilitate the fine buildings of downtown Brunswick, I fail to see how a proposed replacement connector, simply a concrete deck on steel girders, can possibly enhance the heart of the historic community. It will contribute nothing to the area and does not solve existing bottleneck traffic problems on the Brunswick side of the river.

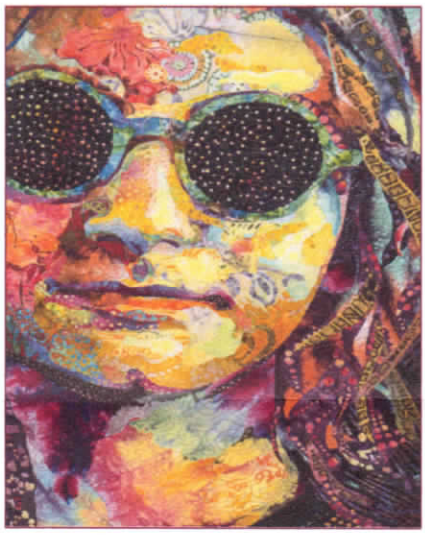
I fully support the efforts of the Friends of the Frank J. Wood Bridge to oppose demolition and encourage rehabilitation instead. I urge the Federal Highway Administration to insist on a full alternative analysis as part of the Section 106 review process and to recognize the substantial loss that will be done to the historic character of both towns if demolition is allowed.

The Town of Brunswick should not be granted "historical status" if it votes to tear down the historic bridge.

Sincerely yours,

Richard Nemrow

Maine Fiberarts



Maine Fiberarts Gallery & The Red Studio

13 Main Street
Topsham, ME 04086
Hours: Wednesday-Friday, 11-4;
Saturday, 11-2
Phone: 207.721.0678
Email: christine@mainefiberarts.org
Web: www.mainefiberarts.org

Staff & Volunteer

Christine Macchi, Executive Director
Carol Jones, Graphic, Web, and Digital Technology Coordinator
Chris Antonak
Elizabeth Berkana

Directors & Advisors

Katharine Cobey, Artist
Paul Hollingsworth, Exhibitions
Barbara Goodbody, Advisor
David C. Knight, BCC Associates
Arlene Morris, Studio Artist
Sybil Shiland, Weaver
Dr. Donald Talbot, Artist/Educator
Nelson A. Toner; Bernstein, Shur
Katharine Watson, Advisor
Carolyn Wollen, Quilter/Advocate

Upcoming Exhibition

"Innovations: Contemporary Art," work by 30 Maine artists
June 10—September 3, 2016

July 28, 2016

Cassandra Chase
U.S. Federal Highway Administration
40 Western Avenue
Augusta, Maine 04330

Dear Cassandra Chase,

I am the founding director of a statewide arts nonprofit that is housed in an 1840's brick building in the historic district of Topsham, Maine. Maine Fiberarts creates exhibitions, studio tours, workshops and programs to advance the field of fiber—knitting, weaving, hooking, sculpture and more. Over the years, through our Tour Maps and web presence, we have built up a statewide and even national following, receiving visitors from all US states, Canada, and from abroad.

One of the reasons so many people visit our gallery is our beautiful historic building, our surrounding gardens and stone work, and our proximity to the mills and to the Frank Wood Bridge. Cultural tourism is an important sector to Maine's economy and to the artists we represent. We are lucky to have landlords who care about the beauty of our location.

I understand there are plans to take down the historic Frank Wood Bridge and to replace it with a concrete throughway. Having just watched that very scene happen in Richmond, on my drive home to Dresden, I've seen a lovely old bridge spanning the Kennebec River replaced by a two-lane eyesore that doesn't even have a path for pedestrians. In fact, traffic speed has increased in an area that once allowed travelers to enjoy the town and its river.

As malls, gas stations, and commercial establishments take over Topsham, there is so little left of greenery, old buildings and valuable landmarks. I urge you to preserve this bridge for what it represents to our community.

Thank you,

Maine Fiberarts

Christine Macchi

Christine Macchi,
Executive Director

13 Main Street
Topsham, Maine 04086
June 19, 2016

Mr. Joel Kittredge, Project Manager
MDOT
Bridge Program
16 State House Station
Augusta, Maine 04333-0016

Re: Frank J. Wood Bridge

Dear Mr. Kittredge:

I own a historic commercial building that abuts the Frank J. Wood Bridge, and urge you to please do whatever is in your power to save this iconic structure. Not only is it an impressive engineering feat and thing of beauty, it also connects the historic districts of two towns and compliments two historic mills. The Bridge adds much to a sense of place, and demolishing it is bad for economic development…bad business.

I have started to go door to door letting people know that the Bridge is in peril, and it is amazing to me how few people know what is planned. Thus far, everyone that I have asked to sign a petition that gives further consideration to rehabilitating the Bridge has readily agreed to sign.

I thank you for your consideration in making sure that everything possible is done by the MDOT to finding a way to rehabilitate the Frank J. Wood Bridge.

Sincerely yours,

Arlene Morris

Petition to Request Further Consideration of Rehabilitating the Frank J. Wood Bridge to Preserve Our Community's Character and Heritage

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Action petitioned for	We, the undersigned, are concerned citizens who urge our leaders to seek more information on rehabilitation as a serious option to preserve our community's character and provide a safe and cost-effective long-term river crossing for pedestrians, bicycles, and automotive traffic.

Printed Name	Signature	Town	Email Address	Date
Malorrie Nadeau	Malorrie Nadeau	Brunswick	malorrie.nadeau@gmail.com	7-15
Sharon Rosen	Sharon Rosen	Portland	slrosen@me.com	7-14
Taylor Smith	Taylor Smith	Brunswick	taylormarksmith@gmail.com	7/21
Nicole Pilgrim	Nicole Pilgrim	Bath	nikkiMpilgrim@gmail.com	7/21
Delia Guzman-Bass	Delia Guzman-Bass	Brunswick	dguzman1964@gmail.com	7/22/16
Bear DeCarcy	Bear DeCarcy	Brunswick	Bdecarcy@hotmail.com	7/22/16
Charlie & Anne Golec	Anne Golec	Portland	golecca@yahoo.com	7/23/16
Andrew Hesselbart	Andrew Hesselbart	Portland		7/26/16
Sharon Harvie	Sharon Harvie	Brunswick	sharvie@brunswick.k12.me.us	8-10-16
Thomas J. Keselitz	Thomas J. Keselitz	Holmdel, NJ	TJK141@verizon.net	8/18/16
THOMAS WIRTH		Phippsburg ME	tomwirth@thomaswirthassociates.com	

Petition to Request Further Consideration of Rehabilitating the Frank J. Wood Bridge to Preserve Our Community's Character and Heritage

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Printed Name	Signature	Town	Email Address	Date
Ralph Williams	Ralph a Williams	TOPSHAM	topsham.historian@yahoo.com	6/14/16
EDWARD C. MENDES	Edward C Mendes	TOPSHAM	EMENDES@GWI.NET	6/14/16
Susan L Sorg	Susan L Sorg	Topsham	susans1210@hotmail.net	6/14/16
Paul Brown	Paul Brown	Topsham	pandebrown@comcast.net	6/14/16
DIANE P. HENDER	Diane P Hender	TOPSHAM	DPHENDER@COMCAST.NET	6/14/16

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Printed Name	Signature	Town	Email Address	Date
Amanda Lambert	Lambert	Portland	amandasgr8day@gmail.com	10/21/16
Peter Roberts	Peter K Rob	Phippsburg	robbotsta@comcast.net	12 Sept 15
Kristin Pearson	Kristin Pearson	Brunswick	ktpearson18@gmail.com	9/11/15
ROBERT MIAL		BRUNSWICK	RPMIAL.48@GMAIL.COM	9/16/16
Melissa Mial	Melissa Mial	Brunswick	mial.missy@gmail.com	9-16-2016
Lauri Gibson	Lauri L. Gibson	Portland	LauriLgibson@gmail	9/27/2016
Nikki Rice	D. Rice	Brunswick	dominiquerice@hotmail.	29/9/16
Chris Dalton	C Dalton	Portland	christophercayce@outlook.com	10/2/16
Kylian Roever	Kylian Roever	San Diego	nearborder@hotmail.com	10/0/16
Adam Silberberg		Brunswick	cartha@gmail.com	10/5/16
Barbara Duff	Barbara J. Duff	Brunswick	bjduffwriter@yahoo.com	10/13/16

DON'T REPLACE The Bridge!

Printed Name	Signature	Town	Email Address	Date
MARY M. KING	Mary M. King	Bath	mmking@gmail	11/1/16
VAUGHN STINSON	Vaughn Stinson	Topsham	VAUGHN34BRIDGE@gmail.com	11/1/16
Mary Meier	Mary Meier	Topsham	~~mlmeier~~ @comcast.net mlmeier	11/4/16
GiGi QUINBY	GiGi Quinby	YARMOUTH	GIGISAILS@AOL.COM	11/16/16
GEOFF NELSON	Geoff Nelson	FREEPORT		11/25/16
Amanda Dilke	Amanda Dilke	Freeport	amanda.dilke@gmail.com	11/26/16
DONNA NEFF	D. Neff	Brunswick		12.6.16
Gil Plourde	Gil Plourde	Bowdoin	g.l.plourde@gmail.com	12/23/16
Julia Farey	Julia Farey	Portland	Gmaefarl@me.com	12/30/16
Misha Charleson	Misha Charleson	Harpswell	mishagirl66@gmail.com	1/22/17
Elaina Shanahan	Elaina Shanahan	Bowdoinham	jackgypsy55@yahoo.com	1/24/17
Julia Brown	Julia Brown	Bruns	juliabrown94@gmail.com	
MATT CARTER	Matt Carter	Topsham	MMcarter25@me.com	1/25/17
JUDY Conlan		Bath	conlanjudy@gmail.com	1/29

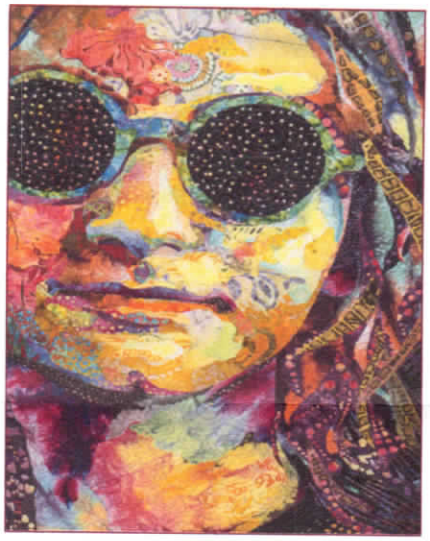
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Printed Name	Signature	Town	Email Address	Date
Emily Wolf	Emily Wolf	Bowdoinham	emily@explorefrontier.com	7/1/16
Noly Lopez		Brunswick	noly@explorefrontier.com	7/1/16
Scott Smith		Brunswick	scottesmith1237@gmail.com	7/2/16
CHRISTINE SIROIS		RANDOLPH / BOWDOINHAM		7/2/16
Joseph Leaver	Joseph Leaver	Brunswick		7/2/16
Heather Jordan	Heather Jordan	Topsham	heather.jordan1@gmail.com	7/2/16
Cera Jerome		Topsham		7/2/16
Courtney Rogers	Courtney Rogers	Bowdoin		7/2/16
Lilly Plumer		Brunswick		7/2/16
IRL ROSNER		Brunswick		7/5/16
Chris Ceccarini		Brunswick		7-5-16

Printed Name	Signature	Town	Email Address	Date
SEAN MORIN	Sean Morin	Auburn	sean@exploretrontier.com	7/5/16
NathanAckerman	[signature]	Hampswell	thebestpizza@gmail.com	8/16/16
Lindsay Bernal	[signature]	Hampswell	lindsaybernal.dc@gmail.com	8/16/16
ALEXANDER SHARP	[signature]	BRUNSWICK	ASHARP@Sikorsky.com	8/24/16
Meredith Farnum	Meredith Farnum	Falmouth	mfarnum@maine.rr.com	8/23/16
JAMES BARR	[signature]	PORTLAND	———	10/20/16
Havana Caso	[signature]	Brunswick	hmcasodc@bowdoin.edu	10/22/16

Maine Fiberarts



Maine Fiberarts Gallery & The Red Studio
13 Main Street
Topsham, ME 04086
Hours: Wednesday-Friday, 11-4;
Saturday, 11-2
Phone: 207.721.0678

July 28, 2016

Cassandra Chase
U.S. Federal Highway Administration
40 Western Avenue
Augusta, Maine 04330

Dear Cassandra Chase,

I am the founding director of a statewide arts nonprofit that is housed in an 1840's brick building in the historic district of Topsham, Maine. Maine Fiberarts creates exhibitions, studio tours, workshops and programs to advance the field of fiber—knitting, weaving, hooking, sculpture and more. Over the years, through our Tour Maps and web presence, we have built up a statewide and even national following, receiving visitors from all US states, Canada, and from abroad.

One of the reasons so many people visit our gallery is our beautiful historic building, our surrounding gardens and stone work, and our proximity to the mills and to the Frank Wood Bridge. Cultural tourism is an important sector to Maine's economy and to the artists we represent. We are lucky to have landlords who care about the beauty of our location.

I understand there are plans to take down the historic Frank Wood Bridge and to replace it with a concrete throughway. Having just watched that very scene happen in Richmond, on my drive home to Dresden, I've seen a lovely old bridge

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Printed Name	Signature	Town	Email Address	Date
Ruby G Card	Ruby G Card	Bowdoin		6/19/2016
Lisa Card	Lisa Card	Bowdoin		6/19
Wyatt Card		Bowdoin		6/19
Shirley Carter	Shirley Carter	Bowdoin		
Dawn Anderson		Bowdoin		
Eric Anderson	Eric Anderson	Bowdoin		

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Printed Name	Signature	Town	Email Address	Date
Sue Perlas	Sue Perlas	Brunswick	superless3@aol.com	
Mark M. Eule	Mark M. Eule	Falmouth	mmeule@hotmail.com	9/3/2016
JAMES A PLATZ	JAMES A PLATZ	POLAND	JMPLATZ@GMAIL.COM	9-3-16
Lasty Weathers	Lasty Weathers	Topsham	lweathers11@gmail.com	9-7-16
Steven Spaulding	Steven Spaulding	Topsham	spaulding428@gmail	9-7-16
DARREN KORUNICH	KORUNICH	BRUNSWICK	KORUNICH16@GMAIL.COM.	9-7-16

Collected by rebrooks@gmail.com
Robin E Brooks
Topsham
7/12/16

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Printed Name	Signature	Town	Email Address	Date
✓ Ben Riggleman	Benjamin Riggleman	Topsham, ME	entiretotal@gmail.com	06/28/16
? Jon Riggleman	Jon Riggleman	Topsham, ME	jriggleman@brunswick.k12.me.us	6/29/16
✓ Kathleen Claerr	Kathleen Claerr	Bowdoin, ME	kclaerr1@comcast.net	7/11/16
✓ Margret Christian	Margret Christian	Bowdoinham, Me	peggyannchristian@gmail.com	7/11/16
✓ Joanne Rosenthal	Joanne Rosenthal	Brunswick, ME	Katzthal@comcast.net	7/11/16
✓ Jane Seidenberg	Jane Seidenberg	portland ME	lenkspt@yahoo.com	7/11/16
Elizabeth Woodworth	Elizabeth Woodworth	WESTBROOK, ME	———	7/12/16

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	Printed Name	Signature	Town	Email Address	Date
✓	Stephen Laskey		Whitefield	selaskey@hotmail.com	6/25/16
?	TINA LASKEY		Whitefield	tinaj1963@myfairpoint.net	6/25/16
✓	Olivia Robbins		Brunswick	orobbins117@gmail.com	6/25/16
✓	NAOMI LASKEY		Brunswick	nelaskey@myfairpoint.net	6/25/16
✓	Mary Edgerton		Brunswick	mary.edgerton@comcast.net	6/25/2016
✓	Pamelia Edgerton		Brunswick	ponnie@mac.com	6/25/2016
✓	JAMES McGOLTY		BRUNSWICK	JIM.McGOLTY@COMCAST.NET	6/25/16
?	JEFF PIAMPIANO		Brunswick	jeff.piampiano@gmail.com	6/25/16
✓	Laura Piampiano		Brunswick	lpiampiano@myfairpoint.net	6/25/16
✓	MICHAEL LASKEY		BRUNSWICK	MCLASKEY@COMCAST.NET	6/25/16
✓	Catherine Worthington		BRUNSWICK	cworthington63@gmail.com	6/29/16

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Printed Name	Signature	Town	Email Address	Date
Hilary Titcomb	Hilary Titcomb	West Gardiner		6-4-16
Alex Titcomb	Alex Titcomb	West Gardiner		6-4-16
JOE BRENNAN	Joe Brennan	Boudoin		6-5-16
Denise Brennan	Denise L Brennan	Bowdoin		6-5-16
Sherianne Card	Sherianne Card	Bowdoin		6/5/16
Wendall Card sr	Wendall Card sr	Bowdoin		6/5/16
DAVID HALL	Dave Hall	Topsham		6-5-16
Barbara Hall	Barbara Hall	Topsham		6-5-16
PRISCILLA HALL	Priscilla Wall	TOPSHAM		6-5-16
JOHN KETNER	John Ketner	TOPSHAM		6-5-16
Melissa Argraves	Melissa Argraves	Boudoin		6-5-16

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Printed Name	Signature	Town	Email Address	Date
GAIL A Coulombe	Gail A Coulombe	Brunswick Me	coulag@comcast.net	6/1/16
David Broussard	[redacted]	Brunswick, ME	davebroussard@hotmail.com	6/1/16
Lisa Compagna	Lisa Compagna	Brunswick, ME	ljcomps@comcast.net	6/1/16
Arlene Lathan	Arlene Lathan	West Bath. ME	awhorff@gmail.com	6/1/16
Emily Greear	Emily Greear	Auburn, ME	emilykeith7@yahoo.com	6/1/16
Kelsey Eaman	Kelsey Eaman	Brunswick, ME	keaman@yahoo.com	6/1/16
BENITA LANZARONE	Benita Lanzarone	PHIPPSBURG, ME	⌀	6/1/16
Shana Guven	Shana Guven	Brunswick, ME	shana.stilphen@gmail.com	6/1/16
Mark P. LeGassey	Mark P. LeGassey	Brunswick, ME	markplegassey@gmail.com	6-1-16
Paul H. Hollingsworth	Paul H. Hollingsworth	Maine St. Business owner Brunswick, ME	paul@henryandmarty.com	6-5-16
STEVE BELANGER	Steve A Belanger	Brunswick, ME	sabelangerary@fairpoint.net	6-6-16

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Printed Name	Signature	Town	Email Address	Date
ANDREW HOPE	Andrew Hope	BOWDOINHAM	andrewfloriganderer@smart.com	6-7-16
Phil Gray	Phil Gray	Harpswell	philgray@gwi.net	6.7.16
DAVE MATTS	Dave Matts	BATH	DAVIDWMATTS@yahoo.com	6-7-16
MARTHA DILLARD	Martha Dillard	TOPSHAM	mddesign@comcast.net	6/12/2016
PAUL SEAQUIST	Paul Seaquist	TOPSHAM	———	6/12/16
Ula Wallin	Ula Wallin	Harpswell	ulawallin@gmail.com	
Shayne O'Neil	Shayne O'Neil	Harpswell	shayne@oneilstudio.com	6.20.16
EDWARD CASWELL	Edward Caswell	TOPSHAM	ebcasw@gmail.com	7-1-16
Lynne Caswell	Lynne Caswell	Topsham	lccasw@comcast.net	7-1-16
Jessica McCurdy	Jessica McCurdy	Freeport	jessicamccurdy3@gmail.com	7-1-16
Rob Horne	Rob Horne	Topsham	robhorn@live.com	7-1-16

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Printed Name	Signature	Town	Email Address	Date
Kathleen A. Aldrich	Kathleen A. Aldrich	Durham	Kald55@comcast.net	6/3/16
Janet Brand	Janet Brand	Brunswick	photoncloud@gmail.com	6/3/16
Tim Mayer	Tim Mayer	Brunswick	SLOMOTION43@GMAIL.COM	6/3/16
Bette Mayer	Bette Mayer	Brunswick	bamayer1@comcast.net	
Alan Yuodsnukis	Alan G. Yuodsnukis	Brunswick	ayuodsnukis@gmail.com	6/4/2016
Anthony Yuodsnukis	Anthony Yuodsnukis	BRUNSWICK	BOPPY42@COMCAST.NET	6-4-16
Barbara Yuodsnukis	Barbara Yuodsnukis	Brunswick	NONNA 42 @ COMCAST. Net	6-4-16
Susan Stoddard	Susan Stoddard	Brunswick	susanbstoddard@gmail	6/4/16
Brooks Stoddard	B Stoddard	Brunswick	brooksstut@gmail.com	6/4/16
Nowell Stoddard	Nowell Stoddard	Brunswick	13Stoddard4@gmail.com	6/4/16
DONNA L. DIONNE	Donna L. Dionne	BRUNSWICK	dionned@link75.org	06.07.16

Printed Name	Signature	Town	Email Address	Date
Steve Graeff	S Graeff	Bowdoin		6-5-16
JOHN SIMONSON	John Simonson	BOWDOIN		6-5-16
Alice Lozier	Alice Lozier	Bowdoin		6-5-16
Sheryl Smith	Sheryl Smith	Bowdoin		6 5 -16
Sharon Jewett	Sharon Jewett	Bowdoin	sharon-jewett@live.com	6/5/2016
Mary Ann York	Mary Ann York	Bowdoin		6/5/16
Steve Hanson	Steve Hanson	New Gloucester		6/5/16
Nancy Hanson	Nancy Hanson	New Gloucester		6/5/16
Deborah Obptande	Deborah Oliptandi	Bowdoin		6/5/16
Mark Holbrook		Brunswick		6/5/16
Peggy Bardier	Peggy Bardier	Turner		6-9-16
Viola Bardier	Viola Bardier	Turner		6-9-16
MARY ALLOTO		RICHMOND		6-18-16
LAWRENCE DONAHUE		Richmond		6-18-16
Kelly Grib	Kelly Grib	Richmond		6/18/16
BORIS GRIB		RICHMOND		6/18/16
Kaitlyn Grib	Kaitlyn Grib	Richmond	KaitlynGrib@hotmail.com	6/1

Printed Name	Signature	Town	Email Address	Date
Kathe Mickunas		Brunswick	kathemickunas@gmail.com	5/8/16
Donna Verhoeven		Brunswick	mcauleymom508@gmail.com	5/8/16
Gabriel Smith		Brunswick	smithg52715@gmail.com	5/8/16
Ginger Bronstein		Brunswick	bronsteinginger@yahoo.com	6/8/16
Kate Pierce		Brunswick	kestocks@gmail.com	6/8/16
Alex Lavergne		Brunswick	aysiel@live.com	06.08.16
Mary Richard		Lisbon/work Brunswick	MfcRichard	6/10/16
Jeff Thistlewaite		Auburn/Work in Brunswick	Jeffreythistlewaite	6/10/16
Gayle Mueller		Brunswick	gemfarm@sbcglobal.net yahoo.com	6/10/16
Darcy Whitten		Brunswick	dwhitten12@gmail.com	6/10/16
Thomas J. Porter		Topsham	thomasjamesporter@gmail	6/11/16
Jill Jacobs		Bath/downtown Brunswick Biz owner	jsjacobs4@gmail	6/17/16
Sarah Bertew		Brunswick	sbertew1@comcast	6/17/16
Jeff Degen		Richmond Works in Bruns & Topsham	Moxie	6/17/16
Shelby Rossignol		Topsham	shelbyrossignol@yahoo.com	6/17/16
Denise Sears		Topsham	neicy.sears@gmail.com	6/17/16

Printed Name	Signature	Town	Email Address	Date
Rita Allen	Rita Allen	Freeport	—	7/6/16
BRUCE CLARK	Bruce Clark	B. TOWNSWICK	—	7/24/16
JOANNE COHEN	Joanne Cohen	Philadelphia	JZC@JOANNEZCOHEN.COM	7/24/16

Printed Name	Signature	Town	Email Address	Date
DD Somay-Miller		Harpswell	ddsomay@maineradio.com	6/7/16
JOHN MCKEE	John McKee	Brunswick	jmckee@bowdoin.edu	6 ~~April~~ June 2016
Jon Thibeault	Jonathon Thibeault	Brunswick	Jon.Thibeault@comcast.net	6/8/2016
BARB TAYLOR	Barbara Taylor	BRUNSWICK	barbtay0202@yahoo.net	6/8/16
CHRISTINE MACHI	Christine Machi	Dresden my business abuts bridge	christine@mainefiberarts.org	6/8/201
LINDA SKERNICK		Bath	lindaskernick@comcast.net	6/8/16
Elizabeth Berkana	Elizabeth Berkana	Portland – Work in Topsham	berkbark@hotmail.com	6/9/16
Will Smith		Brunswick	willpower4life@gmail	6/9/16
Lynn Miller		Bowdoinham	lmdbb0206@yahoo.com	6/9/16
Elizabeth Judd	Elizabeth Judd	Brunswick	ejudd@earthlink.net	6/17/16
Edward M. Perry	Edward M. Perry	Brunswick	henrymarty@gwi.net	6/17/16
Peter Garlid	Peter Garlid	Brunswick	pgarlid@gmail.com	6/17/16
Catherine Garlid	Catherine Garlid	Brunswick	"	6/17/16
Robin Brooks	Robin E. Brooks	Topsham	robinellenb@gmail.com	6/22/16
Candace Kanes	Candace Kanes	Brunswick	cakanes@gmail.com	6/23/16
Julianne Carle	Julianne Carle	Topsham	Stirfrypeapod@gmail.com	6/24/16

Kirk Mohney, SHPO
Maine Historic Preservation Commission
55 Capitol Street
65 State House Station
Augusta, Maine, 04333-0065

Frank J Wood Bridge.

February 27, 2017

Dear Kirk:

Friends of the Frank J. Wood Bridge continues to have significant concerns about how the Section 106 process has been conducted and with the conclusions presented in the draft alternatives analysis report by FHWA and MDOT, dated 02/02/2017. Our group was formed in April 2016, in response to MDOT's announcement of their intent to demolish the Frank J. Wood Bridge. We have more than 1075 followers of our Facebook page and represent the desire of many in our community that the historic Frank J. Wood Bridge be rehabilitated and preserved.

In April 2016, MDOT reported that since 1999, they had demolished 47 truss bridges in Maine, 23 of which were National Register eligible, and had rehabilitated only one. In the 10 months since that statement was made by MDOT, several more have been demolished, including the one closest to Brunswick-Topsham in Lisbon Falls. It is clear that MDOT has a policy of demolishing these bridges without any plan to preserve examples of various types of historic truss bridges which can continue to function well into the future if rehabilitated – despite being urged to develop such a plan by MHPC in the late 1990's and early 2000's.

In this case, MDOT came forward in April 2016 with a recommendation for demolition and replacement of the Frank J. Wood Bridge before the Section 106, 4F, or various environmental review processes were even initiated. If not for organized opposition by Friends of the Frank J. Wood Bridge and others to this recommendation made prior to any serious consideration of rehabilitation or analysis of alternatives to demolition, the fate of the Frank J. Wood Bridge would already have been sealed, with only lip-service paid to the Section 106 and other reviews required under federal law.

Since being challenged by our group and other groups interested in the preservation of historic bridges, MDOT has gone through the motions of conducting a more thorough analysis of alternatives, while clearly skewing the information presented in their reports to favor the conclusion they had made before beginning the process. They have refused to involve an engineering firm with expertise in the rehabilitation of historic steel truss bridges in the analysis process, in spite of being urged to do so by Mary Ann Nabor at ACHP. They have simply not responded to numerous questions posed by our group and others when the answers might not support their foregone conclusion. A list of some of those questions is attached.

In their determination to make a case for the demolition of the Frank J. Wood Bridge, they have refused to seriously consider the potential impact on National Register eligibility of the Cabot Mill property if the bridge is removed. The Cabot Mill property was determined eligible as part of a potential Brunswick-Topsham Industrial Historic District comprised of the Cabot

Mill property, the Frank J. Wood Bridge, and the Bowdoin, or Pejepscot, Mill property across the river in Topsham.

The argument put forward that the “crossing” is significant because it has always been a crossing, that there were bridges there before the Frank J. Wood Bridge, and thus the current bridge itself is not important to the potential Brunswick-Topsham Industrial Historical District as long as “a” bridge is present is ridiculous. This line of argument would allow anybody to replace a historical structure with a modern one without impacting the historic significance and eligibility of a property as long as the use is similar. To take this argument a step farther with an example- it would allow a developer to tear down the Cabot Mill and build a modern mill complex with no impact to eligibility because the mill structure is not important, what is important is that it remain a mill. It always was used as a mill so by replacing it with a modern mill it will not affect the Brunswick-Topsham Industrial District! The argument is ludicrous and unsupported by National Register program guidance.

Without the Frank J. Wood Bridge there can be no Brunswick-Topsham Industrial Historic District. Also, to date there has been no Determination of Individual Eligibility done for the Cabot Mill property. This is a serious concern given that other mill properties in Maine that have lost key components of their historic complexes have been found ineligible for the National Register. Saco Island is an example of this, where the surviving mill buildings were ultimately found eligible as part of a district with the mill buildings across the river in Biddeford but were not individually eligible as a complex. Inclusion in the Biddeford and Saco Mill Historic District has allowed the use of state and federal historic tax credits to rehabilitate several of the buildings on the island. If removal of the Frank J. Wood Bridge closes off the possibility of a district including the Cabot Mill property and if it is not individually eligible, the owners will lose the ability to utilize historic tax credits for future work to the buildings. Approximately half of the square footage of the Cabot Mill has not been rehabilitated to date and the owners have stated they are interested in using historic tax credits to continue their 30 year efforts to rehab the property.

The report asserts that the Cabot Mill property is individually eligible for the National Register since the only loss of integrity was to its setting when Route 1 was constructed in the 1960’s. This ignores other losses to the integrity of the mill complex including the demolition of its historic dam, power house, office building, cotton storage building, and boiler house smokestack. Additionally, a modern hydroelectric generation plant was constructed on the property by Central Maine Power Company in the 1980’s.

The report also fails to make any mention the two surviving Cabot Mill tenement buildings on the property. These are the only surviving tenements of the more than one hundred once owned by the mill company. The survival of these resources on the Cabot Mill property suggests that historic uses of the buildings in the potential National Register district must include residential use tied to the industrial uses of the primary resources. Logically, this would result in the Summer Street neighborhood in Topsham also being included in the district, as the majority of those houses also provided homes to mill workers. The draft report acknowledges that the houses were likely built in response to the construction of the mills, to provide housing for workers. Documentation of mill workers residing on Summer Street was provided by Friends of the Frank J. Wood Bridge in our comments to the previous draft report but were not reflected in the analysis of alternatives in the current draft of the report.

The report also fails to note that several of the later Victorian style homes on the street were originally modest capes which were later expanded. This creates the impression that these

houses were built after the period of mill construction when the demand for worker housing was most acute. The "Plan of the Androscoggin River at Brunswick & Topsham" published by The Brunswick Company in 1835 shows that none of the worker housing on Summer Street was in existence when that company had this map drawn to promote their planned mill, which later became the Cabot Mill (map: https://www.mainememory.net/artifact/27752/). An early photo of the houses on Summer Street before several were expanded shows them to be simple, identical, capes of the 1830's (photo: https://www.mainememory.net/artifact/20979/). There can be little doubt that these houses were built in response to the construction of the 146' x 45' five story granite mill on the Cabot Mill property. The 1940 census data previously provided to FHWA and MDOT documents that the majority of these houses continued to house mill workers well into the 20th century. The draft report considers the houses on Summer Street only under Criteria C – Architecture, when clearly, they also are eligible under Critera A as examples of mill worker housing built in response to the development of the Cabot and Bowdoin Mills. Under Criteria A, the period of significance for the Summer Street houses extends until the end of the period of significance of the industrial district as a whole, well after the construction of the Frank J. Woods Bridge.

Although residential properties are not typically included in industrial historic districts, the presence of two highly-significant early mill-owned tenement buildings on the Cabot Mill property strongly suggests that this district should include the surviving worker housing. On both sides of the river, the surviving mill worker housing is physically separated from other residential parts of Brunswick and Topsham and clearly associated with the mills along the river.

The report also minimizes the impact of the proposed new bridge on the Summer Street neighborhood while failing to provide all the information needed for analyzing that impact. In moving the location of the new bridge upstream, closer to the historic houses on Summer Street, the historic views of the river from these houses will be substantially impacted. Moving the road closer to the concrete dam will result in increased traffic noise in the neighborhood, amplified by reverberation off the dam structure. MDOT engineers have acknowledged to the community design committee for the new bridge that the structure must be higher than initially reported due to the ledge under the proposed location. They have refused to state how much higher the structure will be or how the new height will be transitioned to at either end of the bridge. Historic photos show flood waters reaching the deck level of the Frank J. Wood Bridge. Using the distance from the water to the underside of the Frank J. Wood Bridge as a guide while noting that the new bridge will have 8' – 10' tall steel girders supporting it from the underside (not supported from above like the trusses on the FJW Bridge) and that the ledge under the new location is approximately 15' higher than the clearance under the existing bridge, it is not difficult to see that any new bridge deck needs to be considerably higher than the current bridge deck. Once again, the information provided is insufficient to accurately analyze the impact of the proposed work on the historic resources.

The draft report fails to follow the format that Lichtenstein Consulting Engineers used in their Maine DOT Historical Bridge Survey, Phase II Final Report & Historical Context 2004, rather than updating the list of 22 eligible steel through truss bridges (Section V. pages V-9-10) they list all of the states Warren Truss Bridges. Although this is important; to the lay person a Warren Truss does not necessarily mean a through truss bridge and, in fact, cover a wide variety of bridge types that do not look like the Frank J. Wood Bridge. It does not state the number of through-truss bridges surviving in Maine, nor does it state how many of the 22 eligible bridges still exist and or are on the list to be demolished. Instead it combines all

other types of surviving Warren Truss bridges, making it impossible to determine how many of steel through-truss survive. There is also no analysis of the rehabilitation potential of any other surviving Warren through-truss highway bridges compared to the potential for rehabilitation of the Frank J. Wood Bridge. Since the Frank J. Wood Bridge was built to accommodate the passenger and freight hauling electric railroad line, it was exceptionally wide, tall, and strong when compared to other highway bridges of the period in Maine. Due to these attributes, it is not functionally obsolete based on current clearance limits in 2017. If rehabilitated, it will meet all current load limits as well. If there are no or few other surviving steel through-truss highway bridges in Maine with these attributes, the case for the preservation and rehabilitation of the Frank J. Wood Bridge is strengthened. No attempt has been made by FHWA and MDOT to provide the information necessary to truly determine the rarity and significance of the Frank J. Wood Bridge as a surviving exceptionally wide and long steel through-truss highway bridge in Maine.

Finally, we are deeply concerned that, while including fourteen letters or resolutions in support of a new bridge in their report, FHWA and MDOT failed to include nearly 150 letters they have received urging rehabilitation of the Frank J. Wood Bridge. We have attached copies of those letters. The exclusion of these letters from the record of this Section 106 consultation by the responsible agencies violates the spirit and intent of the process and should be of serious concern to MHPC and the ACHP.

Given all the concerns remaining about this Section 106 process and the conclusions presented in the draft report, the Friends of the Frank J. Wood Bridge urges you not to concur with the conclusions of the draft report.

Sincerely,

John Graham

President, The Friends of the Frank J. Wood Bridge

10 Pleasant Street

Topsham, ME 04086

207-491-1660

Friends of the Frank J. Wood Bridge Unanswered Questions:

Where is the Preliminary Design Report? (See letter included in Draft Findings)

(Probably in the Preliminary Design Report but still unanswered)

A detail cost breakdown of all alternatives-

What deck systems and rehab options were considered-

How many of the 22 eligible Through Truss Bridges are still in existence and how many are scheduled to be replaced?

Why can't Route 201 be rerouted along the Bypass (Route 196) to change the highway class?

A detailed traffic and pedestrian study be preformed that supports the need for a temporary bridge and a second sidewalk.

Questions and observations associated with the Summary of Alternatives- T.Y. Lin International 10/27/2016

Starting on page 2 and continuing throughout the report the author confuses the designation of superstructure, trusses and deck. These are all separate components and should be treated as such.

On Figure 2 they correctly indicate that the superstructure is composed of all structure supported on the piers, but they delineate the floor system but not the truss system of the superstructure. In the body of the report they use "truss" when they are explicitly talking of the deck system, while it implicitly refers to the truss also. By doing so, it may appear to some readers that the whole bridge is in very poor condition while only the deck system and a small portion of the main truss lower chord is such. Nowhere do they state that the majority of the main load carrying truss members are in much better condition.

Pg. 2: The statement that "the bridge is fracture critical" refers to certain main load carrying truss members, not to the deck system. There are no members of the deck that are fracture critical.

Rehab Questions: Were user costs for maintenance of traffic used previously in the consideration of alternatives? They say in para 4 that rehabilitation scope has changed since the latest bridge inspection implying that because of this they are now recognizing User Costs of the Maintenance of Traffic for all options.

These costs (given with no details as to assumptions used) are being used to justify a $4.5 million temporary bridge that then makes the alternative construction costs of each replacement option more than that of the replacement alternative. Take this cost away and

one has CC's of $10.5m and $12.5m for Alt 3,4 respectively . Even if the LLC are added, they are still less than the replacement option.

In addition to the added $4.5 million the temporary bridge adds 1.5 years to the construction schedule. If this were not done, the construction time for the replacement bridge would be almost 1 year more than either replacement option.

How does a work bridge supporting construction materials and equipment along the length of the new and replacement bridge cost $1 m and a temporary traffic bridge $4.5 m?

In the traffic model, where did the numbers to calculate the user costs of traffic disruption? Did they do a Study of current and projected future traffic? If so, did they use the Bypass Bridge with say a redo of intersections (signage, lights etc) in Topsham, or did they re-direct traffic to I-295?

Pg 10: With respect to painting bridge members they state that " However, once paint cracks at all, existing pack rust will immediately reactivate." This would only happen if the existing steel was not properly prepared by removing ALL rust prior to painting. It would be absurd not to take all such members down to white metal prior to paint application.

Pgs 15 and 16: With respect to the Table – What is the last row "Expected Total Cost over Service Life of Bridge" . The numbers are not supported by any numbers given in the report : with respect to Figure 16 – How does 2 paintings and 6 pavings (that would also take 6 scarifications of the deck) cause NO Traffic Disruptions , while rehab on the replacement options takes 44 months?

Most of the above questions could be answered if detailed numbers were provided.

What qualifications and experience do the team at MDOT and T.Y. Lin International have in rehabbing historical bridges?

What accounts for the $65,0000 cost to inspect the bridge every two years? Was the suggestion to look into the cost of electronic/remote inspection ever studied?

United States Department of the Interior
NATIONAL PARK SERVICE
HABS/HAER/HALS Division
1201 Eye St NW #2270
Washington, DC 20005

14 September 2016

Cheryl Martin
Assistant Division Administrator
Federal Highway Administration – Maine Division
40 Western Ave
Augusta, ME 04330

Joel Kittredge
Maine DOT
16 State House Station
Augusta, ME 04333-0016

Dear Cheryl and Joel,

I am saddened to hear about the proposal to demolish the Frank J. Wood Bridge in Brunswick, Maine. This National Register eligible structure is a 1932 Warren through truss, built by the Boston Bridge Works. The bridge is a stunning visual landmark that connects the two historic districts of the milltowns of Brunswick and Topsham, over the scenic falls of the Androscoggin River.

The Frank J. Wood Bridge should be rehabilitated, not replaced by a modern structure. The bridge is in severe need of maintenance and repair, but mostly to its deck only. While the bridge is 80 years old, it has a solid substructure and still meets the traffic needs of the area. Rehabilitation is a more cost effective option to meeting AASHTO Standards, and will assure the preservation of this iconic structure for decades to come.

As an architect at the Historic American Engineering Record, and co-executive editor of the recent publication, *Covered Bridges and the Birth of American Engineering*, I urge the FHWA and Maine DOT to reconsider. Please preserve the Frank J. Wood Bridge and save an historic icon of Maine's transportation heritage.

Sincerely,

Christopher H. Marston
Architect
Historic American Engineering Record, National Park Service
1201 Eye Street, NW, 2270
Washington, DC 20005
202-354-2162
christopher_marston@nps.gov

Ms Cassandra Chase, Environmental Engineer
U. S. Federal Highway Administration
40 Western Ave, Augusta, Maine 04330

August 3, 2016

Dear Ms. Chase,

I am writing this letter because I have grave concerns about the proposal to demolish the Frank J Wood Bridge that spans the Androscoggin River.

As a commercial property owner of seven buildings in downtown Brunswick, all of which were in need of substantial rehabilitation when purchased, I know the value of preserving structures that reflect a bygone past. In preserving the architectural integrity of my buildings and bringing them up to code, I have made a significant investment of almost $3,000,000 over a twenty year period in order to insure their continued use for another century. All my properties are ninety percent occupied with commercial and residential tenants.

The existing Frank J Wood bridge is an important part of the character of the Brunswick and Topsham downtown areas that link two historic mills that were rehabilitated in the past by owner/developers who had an eye for preserving the past. Given that Brunswick has recently been granted historic designation with the aid of of federal funds to rehabilitate the fine buildings of downtown Brunswick, I fail to see how a proposed replacement connector, simply a concrete deck on steel girders, can possibly enhance the heart of the historic community. It will contribute nothing to the area and does not solve existing bottleneck traffic problems on the Brunswick side of the river.

I fully support the efforts of the Friends of the Frank J. Wood Bridge to oppose demolition and encourage rehabilitation instead. I urge the Federal Highway Administration to insist on a full alternative analysis as part of the Section 106 review process and to recognize the substantial loss that will be done to the historic character of both towns if demolition is allowed.

The Town of Brunswick should not be granted "historical status" if it votes to tear down the historic bridge.

Sincerely yours,

Richard Nemrow

Maine Fiberarts



Maine Fiberarts Gallery & The Red Studio

13 Main Street
Topsham, ME 04086
Hours: Wednesday-Friday, 11-4;
Saturday, 11-2
Phone: 207.721.0678
Email: christine@mainefiberarts.org
Web: www.mainefiberarts.org

Staff & Volunteer

Christine Macchi, Executive Director
Carol Jones, Graphic, Web, and Digital Technology Coordinator
Chris Antonak
Elizabeth Berkana

Directors & Advisors

Katharine Cobey, Artist
Paul Hollingsworth, Exhibitions
Barbara Goodbody, Advisor
David C. Knight, BCC Associates
Arlene Morris, Studio Artist
Sybil Shiland, Weaver
Dr. Donald Talbot, Artist/Educator
Nelson A. Toner; Bernstein, Shur
Katharine Watson, Advisor
Carolyn Wollen, Quilter/Advocate

Upcoming Exhibition

"Innovations: Contemporary Art," work by 30 Maine artists
June 10—September 3, 2016

July 28, 2016

Cassandra Chase
U.S. Federal Highway Administration
40 Western Avenue
Augusta, Maine 04330

Dear Cassandra Chase,

I am the founding director of a statewide arts nonprofit that is housed in an 1840's brick building in the historic district of Topsham, Maine. Maine Fiberarts creates exhibitions, studio tours, workshops and programs to advance the field of fiber—knitting, weaving, hooking, sculpture and more. Over the years, through our Tour Maps and web presence, we have built up a statewide and even national following, receiving visitors from all US states, Canada, and from abroad.

One of the reasons so many people visit our gallery is our beautiful historic building, our surrounding gardens and stone work, and our proximity to the mills and to the Frank Wood Bridge. Cultural tourism is an important sector to Maine's economy and to the artists we represent. We are lucky to have landlords who care about the beauty of our location.

I understand there are plans to take down the historic Frank Wood Bridge and to replace it with a concrete throughway. Having just watched that very scene happen in Richmond, on my drive home to Dresden, I've seen a lovely old bridge spanning the Kennebec River replaced by a two-lane eyesore that doesn't even have a path for pedestrians. In fact, traffic speed has increased in an area that once allowed travelers to enjoy the town and its river.

As malls, gas stations, and commercial establishments take over Topsham, there is so little left of greenery, old buildings and valuable landmarks. I urge you to preserve this bridge for what it represents to our community.

Thank you,

Maine Fiberarts

Christine Macchi

Christine Macchi,
Executive Director

13 Main Street
Topsham, Maine 04086
June 19, 2016

Mr. Joel Kittredge, Project Manager
MDOT
Bridge Program
16 State House Station
Augusta, Maine 04333-0016

Re: Frank J. Wood Bridge

Dear Mr. Kittredge:

I own a historic commercial building that abuts the Frank J. Wood Bridge, and urge you to please do whatever is in your power to save this iconic structure. Not only is it an impressive engineering feat and thing of beauty, it also connects the historic districts of two towns and compliments two historic mills. The Bridge adds much to a sense of place, and demolishing it is bad for economic development…bad business.

I have started to go door to door letting people know that the Bridge is in peril, and it is amazing to me how few people know what is planned. Thus far, everyone that I have asked to sign a petition that gives further consideration to rehabilitating the Bridge has readily agreed to sign.

I thank you for your consideration in making sure that everything possible is done by the MDOT to finding a way to rehabilitate the Frank J. Wood Bridge.

Sincerely yours,

Arlene Morris

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

Maine Department of Transportation has demolished 47 historic truss bridges since 1999 while rehabilitating one bridge. These structures have been important character defining features of many Maine communities for more than 75 years and will soon be nearly all gone. The Frank J. Wood Bridge should be rehabilitated and preserved as an example of this once-common feature. It has an exceptional context with its adjoining mills and districts and is easily accessible to the traveling public.

I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,
MJ Eastly

Martha Eastly
quizzling@comcast.net
760 West St
Attleboro, Massachusetts 02703

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,
Robin Moran

Robin Moran
mexirobi@yahoo.com
3 Hanson Drive
Topsham , Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge sits between two historic mill complexes, and the Frank J. Wood Bridge unites these features of the two communities into a continuous whole.

I also want to state: it adds character and a unique quality to the towns. I always enjoyed using it before I moved to the area and it brings a singular quality that would be lost forever if replaced.

Watch the light of the sunset on it one evening and see how it creates a delightful mood. These small pleasures are part of what give small towns their distinctive character.

I urge that you give real consideration to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,
Susan Brown Stoddard

Susan Stoddard
susanbstoddard@gmail.com
171 Bunganuc Road
Brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Amber Riendeau
ariendeau808@gmail.com
5 north street
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a visual anchor for the two towns' meeting point, key to drawing the economic investment that has revitalized these community while others in Maine continue to struggle mightily. I own the home closest to the bridge and reside there. It is a joy to see people walking over it daily and pausing to take photos, enjoy the river, and be in conversation that this bridge seems to facilitate and encourage. It feels like an old friend. I am deeply concerned about the changed social dynamic that the proposed replacement bridge would create. The design invites faster traffic and looses the city gateway experience provided by the Frank Wood Bridge. I know this sounds highly subjective, but as a pastor and visual artist, I can say with certainty that the ritual of moving through such an iconic structure, whether on foot, bicycle, or in vehicles m atters in human sense of community and identity.

It is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Karen I Munson
klmunson60@gmail.com
15 Summer St
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Terrence M. Wood
terry.wood@outlook.com
67 Stony Brook Dr
Limerick, Maine, Maine 04048

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Dino Pelliccia
opelliccia@gmail.com
612 N American St
Philadelphia, Pennsylvania 19123

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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Maine Department of Transportation has demolished 47 historic truss bridges since 1999, while rehabilitating only one bridge. These structures have been important character-defining features of many Maine communities for more than 75 years and will soon be nearly all gone. The Frank J. Wood Bridge should be rehabilitated and preserved as a fine example of this once-common feature. It has an exceptional context with its adjoining mills and districts and is easily accessible to the traveling public.

I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

John McKee
jmckee@bowdoin.edu
600 Highland Rd
Brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

Maine Department of Transportation has demolished 47 historic truss bridges since 1999 while rehabilitating one bridge. These structures have been important character defining features of many Maine communities for more than 75 years and will soon be nearly all gone. The Frank J. Wood Bridge should be rehabilitated and preserved as an example of this once-common feature. It has an exceptional context with its adjoining mills and districts and is easily accessible to the traveling public.

I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

linda skernick
lindaskernick@comcast.net
944 Middle St.
Bath, Maine 04530

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Andrew Jones
webrat84@gmail.com
8 Pleasant Street
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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Sincerely,

Yves A. Feder

yves feder
yafeder37@comcast.net
944 middle street
bath, Maine 04530

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

David Broussard
davebroussard@hotmail.com
6 Aspen Dr
Brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

We have a "new" bypass, please don't destroy this bridge in the name of progress.

Sincerely,

T.R. Mayer

T. R. Mayer
slomotion43@gmail.com
284 Bunganuc Rd.
Brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,
Kathe Mickunas

Kathe Mickunas
kathemickunas@gmail.com
19 Lincoln Street, Apt. #1
Brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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Sincerely,

Bette Mayer
bamayer1@comcast.net
284 Bunganuc Rd
Brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
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Brunswick-Topsham, ME

Ms. Chase:

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I am additionally concerned about how new construction might effect the migration of anadromous fishes through the Androscoggin waterway. I have seen no consideration taken for this important environmental aspect in the decision-making regarding the bridge replacement.

I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Kathleen Claerr
kclaerr1@comcast.net
214 Lewis Hill Rd
Bowdoin, Maine 04287-7336

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

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Sincerely,
Janet Brand

Janet Brand
photoncloud@gmail.com
318 Bunganuc Road
Brunswick, ME, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Paul Hollingsworth
paul@henryandmarty.com
26 Willow Grove Rd
Brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

As an art teacher at Williams-Cone Elementary School just over the bridge in Topsham, I hope to be able to show my students this bridge and help them to appreciate the built environment and unique heritage of our region. Please keep in mind that once these structures are lost, they are lost forever.

Sincerely,

Robin E. Brooks, MFA
Topsham, Maine

Robin Brooks
robinellenb@gmail.com
47 Ivanhoe Drive
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

History is a very important thing to me. I am not a Mainer by birth, but I am most definitely by choice. My husband and I moved to Maine from the gulf coast ten years ago. Down south, there was open space everywhere, even in the city. Sprawling ranch homes, wide six lane roads, and people living on large acres of land. It was common to cross many a causeway to get from one place to another. We took so much pride, however, in the sparse historical patches left within our community. There wasn't nearly as much rich history there as in New England.

When we moved to the tiny community of Brunswick (a town we automatically fell in love with in every way), we took root and began our family. In this town I proudly call home, I'm impressed with the efforts that local townspeople and small businesses have taken to keep their historical buildings as they once were. Thousands of dollars have been poured into this, and I know it wasn't an easy road for many of them to travel. I sincerely hope that similarly, we can work together to keep the historical bridge that connects our town with Topsham, just one other beautiful historical feature that this town cares about.

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,
Jill Nash

Robin Brooks
robinellenb@gmail.com
47 Ivanhoe Drive
Topsham, Maine 04086

To:
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Federal Highway Administration
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Brunswick-Topsham, ME

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Sincerely,
Tony Yuodsnukis

Tony Yuodsnukis
boppy42@comcast.net
276 Bunganuc Rd
Brunswick , Maine 04011

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Federal Highway Administration
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Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,Sharon Drake.207-751-0581

Sharon Drake
sharonlo@sharondrake.com
136 Front St.
Bath, Maine 04530

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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Sincerely, Andrew Fiori

andrew fiori
andrewfiorigardener@gmail.com
212 fisher rd.
Bowdoinham, Maine 04008

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Federal Highway Administration
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Brunswick-Topsham, ME

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

As a Brunswick resident who has walked across the bridge every few days for years, who has brought visitors to see it, and who has often photographed (and watched others photographing) the falls and wildlife from the bridge, I'm extremely demoralized that we could lose such an important feature of the community. Not only will the proposed new bridge apparently make it impossible to see the falls and birds below, but the replacement plans seem to introduce major hazards for pedestrians (lack of guardrails, etc).

All in all, I strongly urge that you reconsider the plan to replace the Green Bridge and instead take whatever steps are necessary to preserve such a recognizable and valued landmark.

Sincerely,
Elizabeth Judd

Elizabeth Judd
ejudd@earthlink.net
4 Oak St., Apt. 7
Brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

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Sincerely,

Andrew Graham
agraham43@mac.com
43 Macy St.
Portland, Maine 04102

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Leigh Doran
lmadeleine@gmail.con
17 Williams Dr
Topsham , Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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Sincerely,

Tahnthawan M Coffin

Tahnthawan Coffin
tahnthawan@gmail.com
9 Thompson st
Brunswick , Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Dear Ms. Chase:

Please help us preserve the beautiful, unique and memory rich truss bridge in our community. We don't want or need another characterless asphalt generic bridge blocking our view of our cherished rocks and waterfalls with birds diving for fish below. Our truss bridge is a treasure for all residents and visitors to behold and enjoy. Please help us save it! Please and Thank-you.
I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Susan Williams
davidcolt@aol.com
14 Arboretum Way
Harpswell, Maine 04079

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Roberta Schwartz
filledeau@yahoo.com
4 Larkspur Lane
Brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Trish Petty
pettys3@verizon.net
1112 C st SE
Washington , District of Columbia 20003

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Terri Burgess
tgurgess06@icloud.com
64 Friendship St.
Brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

Maine Department of Transportation has demolished 47 historic truss bridges since 1999 while rehabilitating one bridge. These structures have been important character defining features of many Maine communities for more than 75 years and will soon be nearly all gone. The Frank J. Wood Bridge should be rehabilitated and preserved as an example of this once-common feature. It has an exceptional context with its adjoining mills and districts and is easily accessible to the traveling public.

I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,
Adria van den Berg

Adria van den Berg
adriatica@gmail.com
124 Columbia Avenue
Brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Christina DiBiase
minkdiamondz@gmail.com
29 Corliss Street
Bath, Maine 04530

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,
Beth Sugarman

Beth Sugarman
sugarman@mindspring.com
226 gun point rd
Harpswell , Maine 04079

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,
Maggie Bokor

Maggie Bokor
info@maggiebokor.com
33 elm st
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

paulette canonico
canonico1@comcast.net
po box 873
brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,
H. M. Solomon

Howard Solomon
howard.solomon@maine.edu
POB 324
Bowdoinham, Maine 04008

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Yvette Meunier
yvette.meunier@maine.edu
35 prospect st
topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase: a

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Donna Lee
me.cabincreations@gmail.com
Spring street
Brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am writing in support of repairing the Frank J. Wood Bridge. This is a historic landmark and iconic structure for the area. It complements the surrounding community with character and history and is loved by many.

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Tom Gilbert

Tom Gilbert
tom_gilbert_4@yahoo.com
35 Prospect St
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Please help save our bridge, we don't need some cookie cutter, Anytown USA bridge, we need our Green Bridge!!

Sincerely,

Alex Hooydonk

Alex Hooydonk
ayah04011@aol.com
25 Weymouth St
Brunswick , Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

This might be my second letter. In addition to the good prepared comments below, please note that this bridge presents an iconic visual image of the Brunswick- Topsham area. It is an intrinsic part of the local identity. It is an integral and character defining element in the cluster of mill buildings and the dam that comprise this historic context. All reasonable efforts should be made to rehabilitate the bridge to give it many more years of useful life. Before a decision is taken that would destroy this great bridge a rehabilitation plan must be prepared to provide a fair and objective assessment of the option. I believe that preservation of this historic resource is an important part of the future vitality and economy of the region. These are the archetypal images that attract residents and visitors to the State of Maine. Restoration or rehabilitation of this bridge is a worthy investment in the authentic character that makes this a unique and special place.

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,
Alex Jaegerman

Alex Jaegerman
alecjaegerman@gmail.com
398 Spring Street
Portland , Maine 04102

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Good Morning Ms. Chase:

In this ever increasing throw away world, it seems more and more important that we value and preserve parts of our communities that can be saved, reused, repurposed or preserved. I have lived in Maine for over 40 years, most of it in the greater Portland area but have friends in the Brunswick and volunteer at a gallery in Topsham, just over the bridge. Watching Portland's historic areas fold under the encroaching sameness of so much new construction, I, like many others, value the reminders of times that brought us to where we are today.

Please, SAVE THE FRANK J. WOOD BRIDGE so it may continue its place connecting two towns, the past and the future, and as a testament to people, like you, who did the right thing in the present.

If the Frank J. Wood bridge were NOT deemed repairable, carry on with a replacement. But, as it has been determined to qualify for preservation, PLEASE make that happen. The falls, the river, the bridge, and the surrounding buildings make up a beautiful historic area with reminders that not everything needs to be demolished and replaced in order to continue to serve their important functions.
Thank you.

Sincerely,
Elizabeth Berkana

Elizabeth Berkana
berkbark@hotmail.com
31 Taylor St Apt 2
Portland , Maine 04102

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely, Theodore G Furbish

ted furbish
tedfurbish@yahoo.com
2703 hallowell rd
litchfield, Maine 04350

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Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,
Merlynda Thibodeaux

Merlynda Thibodeaux
mph919@yahoo.com
21 Western Ave
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sometimes it's not just about the money, losing this bridge would cost the people of Brunswick and Topsham a peice of their heritage.

Sincerely,
Sierra Thibeault

Sierra Thibeault
sierra.thibeault@gmail.com
56 old Portland road
Maine, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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Sincerely,
Amie Leckwold

Amie Leckwold
omgitsme31@yahoo.com
9 Walnut St
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. This bridge is historic and iconic! The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

I, for one, would choose to move away from my beloved town of Brunswick if this bridge no longer stands...it's really that simple for me. The landscape would be changed forever. This bridge is historic and should be maintained and preserved. Anything less is a loss for the towns of Brunswick and Topsham.

Sincerely,

Ann Slattery
catnip_five@yahoo.com
251 Basin Point Rd.
Harpswell, Maine 04079

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,
Sonia Engler

Sonia Engler
soniaduda17@gmail.com
420 pleasant hill road
Brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,
Sabine Mojica

Sabine Mojica
sabinehp@msn.com
68B Federal St
Brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Meghan Murphy
meghan@homes4maine.com
3 Middle St
Topsham , Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Matt Carter
mmcarter25@me.com
6 Greig Ln
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

This iconic structure, like the Wood Island Life Saving Station, is quintessentially Maine. Consider the bridge is in Maine bank's mural. It is featured on the cover of the Bowdoin College catalogue. The bridge, the rapids, and the mill. This needs to be saved.

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Steve Lindsey
SteveLindsey60@hotmail.com
17 Center St.
Keene, New Hampshire 03431

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Dennis Mixon
dmixon@gwi.net
13 Walnut St
Topsham, ME , Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

Maine Department of Transportation has demolished 47 historic truss bridges since 1999 while rehabilitating one bridge. These structures have been important character defining features of many Maine communities for more than 75 years and will soon be nearly all gone. The Frank J. Wood Bridge should be rehabilitated and preserved as an example of this once-common feature. It has an exceptional context with its adjoining mills and districts and is easily accessible to the traveling public.

I was raised in the greater Topsham area and then left for a career in the military. Of all the wonderful place I've lived around the world, I came back to Topsham to plant my roots. I love the small town charm, where life is a little slower, where people look you in the eye and say hello. The "green bridge" is part of the tapestry of my life - and a part of the charm I so appreciate. Some parts of history are worth saving.

I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Cheryl King
inthegarden24@yahoo.com
12 Walnut St
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

Please do not destroy the Esthetics of Topsham. This is the most photographed location in Topsham with the bridge in the foreground and the Pejepscot Mill in the background. It defines our town. I understand that the bridge has aged but rehabilitating the bridge or building an exact replica would be the best solution instead of replacing with something that doesn't do the Frank J. Wood Bridge justice.

I urge that full consideration be given to the rehabilitation or building of an exact replica of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,
Dianne Hoffman
13 Ivanhoe Dr.
Topsham, Maine 04086

Dianne Hoffman
dhoffman247@gmail.com
13 Ivanhoe Dr
Topsham, ME, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Heidi Aakjer
heidiaakjer@gmail.com
24 Front St
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

I am an artist and public school teacher. My small public elementary school, home to 240 children in grades kindergarten through fifth, is in walking distance to the Frank Wood Bridge. Teaching about the build environment is part of my curriculum and this bridge and the mill architecture are hand in glove. One of the great flaws of our country is in believing that the past has no value. Please preserve our bridge so that future generations can experience this structure as an example of living history.

Sincerely,

Robin Brooks
robinellenb@gmail.com
47 Ivanhoe Drive
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,
Susan E. Mathias

Susan Mathias
mandolins00@aol.com
12 Holbrook Street Apt. 6
Freeport, ME, Maine 04032

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Fred Burnell
fredburnell84@gmail.com
41 River Road apt 4D
Brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,
Iris D. Fields

Iris Fields
irthie@gmail.com
PO Box 426
Brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Samantha Bailey
meteoraangel24@yahoo.com
9 Mallett drive
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Re: Please replace the bridge

Ms. Chase:

I am deeply concerned about the proposed preservation of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick.

The Frank J. Wood Bridge is younger than the historic mills it connects, too narrow, too hard to repair, and likely to last for 20 years with load ratings - and a lot of maintenance. Instead, we could install a new bridge that could last for 150 years with little maintenance in my lifetime.

Maine Department of Transportation has demolished 47 deficient truss bridges since 1999 while rehabilitating one bridge. These structures have been replaced by functional, easy to repair, new structures that include space for pedestrians and bicycles. The Frank J. Wood Bridge should be replaced and a new bridge built that provides a better tie between the downtowns of Brunswick and Topsham.

I urge that full consideration be given to the replacement of the Frank J. Wood Bridge.

Sincerely,
Helen C. Watts PE
Structural Engineer

Helen Watts
hcwatts@gwi.net
455 Litchfield Road
Bowdoin, Maine 04287

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

Maine Department of Transportation has demolished 47 historic truss bridges since 1999 while rehabilitating one bridge. These structures have been important character defining features of many Maine communities for more than 75 years and will soon be nearly all gone. The Frank J. Wood Bridge should be rehabilitated and preserved as an example of this once-common feature. It has an exceptional context with its adjoining mills and districts and is easily accessible to the traveling public.

I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Shelly Elmer

Ps I love that bridge. I walk it regularly with visitors.

Shelly Elmer
shelmervangoat@yahoo.com
1 south st
Yarmouth, Maine O4096

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,
Chaz Wing

chaz wing
charles.wing@baxter-academy.org
24 hanson dr
topsham, Maine 04086

Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

The form letter they want to send is below. But let me add my personal feelings about the bridge.

I moved to the Brunswick-Topsham area eight years ago. I'd always loved Maine, and on my way to Popham or other points beyond, I used to love coming to this area and fantasized about how cool it would be to live here. I remember the first time I crossed the Frank J. Wood Bridge and fell in love with it. And as stupid as it sounds, every time I came to town I found some excuse to cross it, just because I loved it so much. I can't help but think the bridge entered into my decision to move to the area. And I am sure it has drawn repeat tourists and new residents to the area as well. Everyone, it seems, falls in love with it.

Today, I still find excuses to drive into Brunswick, I think, just so I can cross my beloved bridge. Every time I look at her, I can't help but smile, and the thought of her being ripped down breaks my heart. Why take away something that adds so much to the town and replace it with the same ol' same ol' everyone else has, particularly when the new will also take away the view of the falls?

The form letter is below. I beg you to reconsider. Wrecking such beauty and history is a crying shame. Please don't do it.

Sincerely

Nicole LePera
61 Elm Street

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Nicole LePera
paxvolupia@yahoo.com
61 Elm Street
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,
Mardie Womeldorf

Mardie Womeldorf
mg4maine@yahoo.com
47 Cluf Bay Rd
Brunswick , Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Nicole Caron
nickycole1075@yahoo.com
907 River rd
Brunswick , Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Susan Cooney
suecooneyinmaine@gmail.com
27 Lemont Street
Bath, Maine 04530

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Grimaldi Murphy Jr
grimaldijr@yahoo.com
3 Middle Street
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

James Mixon
mixj444@gmail.com
21 SUmmer st
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,
Steven H Stern

Steven Stern
sstern@gwi.net
295 Bunganuc Road
Brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,
Amy R. Robinson

amy r Robinson
amyreedrobinson@gmail.com
33 Mae Lane
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Louise Rosen
mainerosen@gmail.com
16 High Street
Brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine.

This historic and beautiful steel truss bridge is also the main streets of Brunswick Maine and Topsham Maine. It is the center piece of a gorgeous and historic intersection of a dramatic natural river site, beautifully restored old mill buildings on both sides of the river, and it is the central thread that links two historically interdependent towns. We citizens cross this bridge daily, and love it deeply. It is a visible and vital part of our history and our identity.

Maine Department of Transportation has demolished 47 historic truss bridges since 1999 while rehabilitating one bridge. These structures have been important character defining features of many Maine communities for more than 75 years and will soon be nearly all gone. The Frank J. Wood Bridge should be rehabilitated and preserved as an example of this once-common feature. It has an exceptional context with its adjoining mills and districts and is easily accessible to the traveling public.

I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Priscilla Smith
psnarrative@gmail.com
306 Maine St
Brunswick, ME, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,
Henry D'Alessandris & Martin Perry

Henry D'Alessandris
henrymarty@gwi.net
25 Cumberland Street
Brunswick, ME, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

My name is Amy Haible. I was the Planning Director for the Town of Brunswick from 1989 until 1993. The historic character of Brunswick and Topsham is integral to the economic vitality of both communities. That is why II am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Amy Haible
anhaible@comcast.net
123 Spy Rock Road
Harpswell, Maine Maine

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

Since I can't say it much better than the statement below by supporters of the Frank Wood Bridge in Brunswick/Topsham, Maine, I'll use it below.

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

Maine Department of Transportation has demolished 47 historic truss bridges since 1999 while rehabilitating one bridge. Recently the bridge connecting LIsbon to Durham Maine was demolished, a beautiful old truss bridge. In its place? A generic, aesthetically uninteresting concrete "thing". These smaller bridges, and I include the Frank Wood Bridge in that category, are community icons that offer character and history. They contribute to the tourism that Maine depends on. At the rate Maine DOT is demolishing these bridges in the simple interest of "economy", few of them will be left. The Frank J. Wood Bridge should be rehabilitated and preserved as an example of this once-common feature. It has an exceptional context with its adjoining mills and districts and is easily accessible to the traveling public. The cost to fix is not that far off from replacement, but the cost of a new, generic bridge to the regional character is way too high. Engineers are smart, they c an keep the old bridge going for many more years to come.

I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Thomas Haible
spike@spikehaible.com
123 Spy Rock Rd.
Harpswell, Maine 04079

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

Maine Department of Transportation has demolished 47 historic truss bridges since 1999 while rehabilitating one bridge. These structures have been important character defining features of many Maine communities for more than 75 years and will soon be nearly all gone. The Frank J. Wood Bridge should be rehabilitated and preserved as an example of this once-common feature. It has an exceptional context with its adjoining mills and districts and is easily accessible to the traveling public.

I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Kamal Ayad
kamal_ayad@hotmail.com
47 litchfield road
Freeport , Maine 04032

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,
Mardie Womeldorf

Mardie Womeldorf
mg4maine@yahoo.com
47 Cluf Bay Rd
Brunswick , Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,
Ryan P. Cooney

Ryan Cooney
tudorroseinmaine@gmail.com
27 Lemont St
Bath, Maine 04530

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Hedy Blauvelt
hblauv@gmail.com
PO Box 52
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Susan Cooney
suecooneyinmaine@gmail.com
27 Lemont Street
Bath, Maine 04530

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Garrett Masse
gmasse38@gmail.com
43 highland rd
Brunswick, Maine , Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,
Catherine Leonard

Catherine Leonard
cleonard@growstown.com
268 Church Rd
Brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Edward Mendes
emendes@gwi.net
21 Western Ave
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades. As a former Brunswick resident. I still go back twice a year, and love to cross the bridge and marvel at its structure. Please save this bridge!

Sincerely,
Kerry A. Laitala

Kerry Laitala
kerrylaitala@gmail.com
798 Post Street #304
San Francisco, California 94109

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades. * Please save this bridge ! We have lost our bridge here in Lisbon Falls, our history is being erased. Again Please save this historic, beautiful bridge. *
Sincerely, Lorna Marquis

Lorna Marquis
lorna1722@gmail.com
174 Bowdoinham Rd.
Lisbon Falls, Maine 04252

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Deb Desmond
debdesmond28@gmail.com
18 Sokokis circle
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:
PLEASE!!! SAVE OUR MOST BEAUTIFUL, HISTORIC, CHARMING, ROMANTIC TRUSS BRIDGE!!!!
WE LOVE IT SO MUCH! ! ! THE GREEN TRUSS IS SO EVOCATIVE. IT MAKES BRUNSWICK SPECIAL.
NO OTHER BRIDGE COULD PRESERVE THE MEMORIES WE ALL SHARE OF THIS ELEGANT BRIDGE WHICH IS A ROMANTIC DESTINATION FOR SO MANY POETS, LOVERS, AND ARTISTS! WE NEED IT TO ALWAYS BE HERE!!!! PLEASE HELP US KEEP IT!!!! THE BIRDS LOVE IT TOO.

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Susan Williams
davidcolt@aol.com
14 Arboretum Way
Harpswell, Maine 04079

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Bonnie Dumont
bj_dumont@msn.com
24 Henry Creek Way
Harpswell, Maine 04079

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Nicole LePera
paxvolupia@yahoo.com
61 Elm Street
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

It is hard to express the importance of this bridge. I travel accross it from my home to Fort Andross as part of my business and my personal access to Brunswick. I see our proud mill buildings and the power generated from the water. I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Terrill Waldman
terrillcj@gmail.com
eagle lodge lne
Dresden, Maine 04342

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Alexander Lehnen
alx.lehnen@gmail.com
51 Hammond Street
Portland, Maine 04101

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Austin Carlton
acarlton718@gmail.com
19 Justamere Rd
Brunswick , Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I was raised in Maine, but moved away for much of my adult life living around the world. I returned to Maine because I value the quaint, small town historic charm found in Topsham. The Frank J. Wood is a part of the fabric of my life, and in my opinion, worth saving. It's a beautiful bridge that I appreciate every day when walking in the area. Replacing it with a cement overpass will destroy part of what makes the Brunswick/Topsham area special.

Maine Department of Transportation has demolished 47 historic truss bridges since 1999 while rehabilitating one bridge. These structures have been important character defining features of many Maine communities for more than 75 years and will soon be nearly all gone. The Frank J. Wood Bridge should be rehabilitated and preserved as an example of this once-common feature. It has an exceptional context with its adjoining mills and districts and is easily accessible to the traveling public.

I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Cheryl King

Cheryl King
inthegarden24@yahoo.com
12 Walnut St
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Joy Grannis
joy.grannis@gmail.com
Xx
Portland , Maine 04101

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,
Melissa Jones
44 Bridge St
Topsham ME 04086

Melissa Jones
melissajunk303@gmail.com
44 Bridge St
Topsham , Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Edward Perrin
tedperrin2009@yahoo.com
7 Densmore Ct.
Hallowell, Maine 04347

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

David Soucier
dave_soucier@yahoo.com
31 Lamb St Apt 1
Westbrook , Maine 04092

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

Maine Department of Transportation has demolished 47 historic truss bridges since 1999 while rehabilitating one bridge. These structures have been important character defining features of many Maine communities for more than 75 years and will soon be nearly all gone. The Frank J. Wood Bridge should be rehabilitated and preserved as an example of this once-common feature. It has an exceptional context with its adjoining mills and districts and is easily accessible to the traveling public.

I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Elaina Barker
gypsygreeneyes67@yahoo.com
5 stetson st.
BRUNSWICK, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Nicole Caron
nickycole1075@yahoo.com
907 River rd
Brunswick , Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Anne Macri
anne.macri@gmail.com
84 bridge street
Topsham, ME, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Yvette Meunier
yvette_meunier@hotmail.com
35 Prospect St
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine.

I grew up in Topsham and currently am a senior "across the bridge" at Bowdoin College in Brunswick. The Frank J. Wood Bridge has been a constant through my life and I cannot imagine my home without it. The bridge serves as a connection between my past and present and it saddens me to think about returning to Brunswick one day and seeing it so drastically altered.

We have a duty to preserve the past, be it a building, a road, or a bridge. Thank you for your consideration on this matter.

Sincerely,
Elizabeth Snowdon

Elizabeth Snowdon
snowdone@gmail.com
819 Smith Union, Bowdoin College
Brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am more than deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine.

Why destroy the bridge when it can be rehabilitated? Rehabilitation ensures historic and esthetic continuity which lends more value to the communities than the faster moving of vehicles through can possibly do. Rehabilitation is an enhancer of community by ensuring its identity as a place with individuality.

I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,
Cynthia Howland

Cynthia Howland
cbhowland@gmail.com
25 Water St
Brunswick, ME, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Jordan Doherty
jordanldoherty@gmail.com
1 krampf cir
Brunswick , Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Philip Morin
philip401962@yahoo.com
174 hillside rd
Brunswick , Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

Many of my fellow townsmen are deeply upset about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine.

Even though I don't particularly care for the bridge myself, I think that if it can be saved for a few more decades and for a reasonable investment of money, we should try to save it.

I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,
Darlene Kritzman

Darlene Kritzman
sciencemaineiac@gmail.com
14 Sokokis Circle
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Andrea Laskey
Laskeydpt@gmail.com
405 Lewis Hill Rd
Bowdoin, Maine 04287

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Mary White
hodywhite@gmail.com
100 Central Ave
Brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,
Ellie Begin

Ellie Begin
elliebegin@yahoo.com
22 West Rd.
Bowdoin, Maine 04287

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely,

Evan Duda

Evan Duda
ejd1287@gmail.com
146 Unity Rd.
Albion, Maine 04910

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Jesse Riendeau
jesstr808@yahoo.com
5 North St
Topsham ME, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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Furthermore, this bridge is an iconic landmark used far and wide to represent Maine. Without it, fond memories will turn to bitter regret. There are countless precedents arguing for its rehabilitation and continued use. There are countless precedents warning us of the regret that our communities will feel if this bridge is carelessly demolished and replaced.

Maine Department of Transportation has demolished 47 historic truss bridges since 1999 while rehabilitating only one bridge. These structures have been important character defining features of many Maine communities for more than 75 years and will soon be nearly all gone. The Frank J. Wood Bridge should be rehabilitated and preserved as an example of this once-common feature. It has an exceptional context with its adjoining mills and districts and is easily accessible to the traveling public.

I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

Sincerely and with urgency,
Gavin Engler

Gavin Engler
gavin.engler@gmail.com
420 Pleasant Hill Road
Brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Susan White
merepointer@yahoo.com
67 Bridge St
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Bonnie Reynolds
Hawahosawaka@aol.com
3763 W. Prospect Rd
Hanover, Indiana, Indiana 47243

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Penninah Graham

Penninah Graham
penninah@hotmail.com
10 Pleasant Street
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Jami Ream
jream10273@aol.com
35 McLellan St
Brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

mike barker
screamingguitarman2000@yahoo.com
5 stetson st
brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Lynzie Millard
lynziemillard@hotmail.com
8 Hawthorne lane
Topsham , Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Amie Leckwold
omgitsme31@yahoo.com
9 Walnut St
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

My husband and I walk across the beautiful Wood Bridge almost every day. We chose to retire to Maine because of the character and ambiance of the area in which we chose to live. Before retiring we owned a vacation home here and came every summer for decades. We have paid taxes for many years, and are happy to do so to support this beautiful state, but we are concerned that, in terms of the bridge, the state is being penny wise and pound foolish. The uniqueness of our community rests largely on the sense of history it conveys, and the careful preservation is critical to its continued ability to attract residents and tourists. Cost and efficiency are important, but replacing the bridge with the familiar and unappealing swath of concrete would be short sighted and would greatly undermine the charm that draws people here. I deeply hope that the bridge will be rehabilitated and preserved as an irreplaceable asset to the area.

Thank you.
Sincerely,
Lynn Lockwood

Lynn Lockwood
maineratlast@comcast.net
32 Frost Lane
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades. It is perfectly situated and beautiful as well as scenic.
Sincerely,
Dr. Gale Greenleaf

gale greenleaf
fiddle@utexas.edu
4 lori dr
brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Christine Macchi
christine@mainefiberarts.org
13 Main Street
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

We have already lost a unique old wooden deck bridge, please don't take this one too.

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Laurie Sims
tynbai@gwi.net
9 Swett St
Brunswick, Maine 04011

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,
Paulette canonico

Paulette Canonico
canonico1@comcast.net
174brackett rd.
Brunswick, Maine 04011

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Federal Highway Administration
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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.
Sincerely,

Jinger Howell
jingerhowell@comcast.net
205 Starbird Corner Road
Bowdoin, Maine 04287

To:
Cassandra Chase
Federal Highway Administration
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Brunswick-Topsham, ME

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I urge that full consideration be given to the rehabilitation of the Frank J. Wood Bridge for continued use for many more decades.

I also want to add this bridge is not only a link between the two towns, one of which I live in, but a link to our past. It's one we take pride in, and should preserve.

Sincerely,

Susan Sorg

Susan Sorg
rassls@comcast.net
121 Cathance Road
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

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Sincerely,

Donna Barrett
quilter29@live.com
76 Barrett Lane
Fayette, ME, Maine 04349

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Cassandra Chase
Federal Highway Administration
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Brunswick-Topsham, ME

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Sincerely,
Anne W. Webster

Anne Webster
awebster@midcoast.com
PO Box 438
Georgetown, Maine, Maine 04548

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Federal Highway Administration
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Sincerely,

Houghton White
hodywhite@icloud.com
100 Central Ave
Topsham, Maine 04086

To:
Cassandra Chase
Federal Highway Administration
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Brunswick-Topsham, ME

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Sincerely,
Bonnie Biedrzycki

Bonnie Biedrzycki
maine@starfishcovestudio.com
76 Bridge Street
Topsham, Maine 04086

To:
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Federal Highway Administration
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Sincerely,

Eric Pierce
jesse_lucy@msn.com
5145 FM 1187
Burleson, Texas 76028

To:
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Federal Highway Administration
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Brunswick-Topsham, ME

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Sincerely,

Amy Graham
agraham@mtbluersd.org
111 Cushman Dr
Farmington, Maine 04938

To:
Cassandra Chase
Federal Highway Administration
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Brunswick-Topsham, ME

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Sincerely,

Christopher Emerson
chris76@maine.rr.com
62 Autumn Lane
Yarmouth, Maine 04096

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Sincerely,

John Graham

John Graham
john@johngrahamrealestate.com
10 pleasant
Me, Maine 04086

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Sincerely,

James White
phinwhite@me.com
67 Bridge St
Topsham, Maine 04086

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Sincerely,

John Weeks
Burnsville, MN

John Weeks
john@johnweeks.com
1438 McAndrews Road East
Burnsville, Minnesota 55337

106 review comments ,

To:
Cassandra Chase
Federal Highway Administration
RE: Section 106 Historic Review for Frank J. Wood Bridge Improvement Project
Brunswick-Topsham, ME

Ms. Chase:

WE HAVE A BEAUTIFUL BRIDGE IN OUR COMMUNITY.

IT IS PART OF OUR FABRIC. PART OF THE APPEAL OF LIVING HERE IS STUFF LIKE THIS.

PLEASE DON'T LET THEM TAKE IT AWAY

I am deeply concerned about the proposed destruction of the historic Frank J. Wood Bridge between Brunswick and Topsham, Maine. The bridge is a fine example of a Warren through truss bridge and one of the largest left in Maine. It sits between two historic rehabilitated mill complexes, one listed on the National Register and the other eligible for the register. Beyond the mills, on both sides of the river, are National Register historic districts in Topsham and Brunswick. The National Register eligible Frank J. Wood Bridge unites all of these important historic character defining features of the two communities into a continuous whole.

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Sincerely,

D ISRAEL
DISRAEL@BOWDOIN.EDU
9600 COLLEGE STATION
BRUNSWICK, Maine 04011

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Sincerely,

Scott Hanson
s.t.hanson@comcast.net
8 Pleasant St
Topsham, Maine, Maine 04086

From: Elizabeth Berkana <berkbark@hotmail.com>
Sent: Wednesday, October 19, 2016 11:03 AM
To: Cassandra Chase
Subject: save the Frank J Wood bridge

Good Morning Ms. Chase:

In this ever increasing throw away world, it seems more and more important that we value and preserve parts of our communities that can be saved, reused, repurposed or preserved. I have lived in Maine for over 40 years, most of it in the greater Portland area but have friends in the Brunswick and volunteer at a gallery in Topsham, just over the bridge. Watching Portland's historic areas fold under the encroaching sameness of so much new construction, I, like many others, value the reminders of times that bridge, and the surrounding buildings make up a beautiful historic area with reminders that not everything needs to be demolished and replaced in order to continue to serve their important functions.

Thank you.

Sincerely,

Elizabeth Berkana

Greet every morning with

curiosity and hope.

Preserve the Bridge

I grew up in Topsham and I live in Brunswick. I am almost as old as the bridge, so I have a special feeling for it. We have lost many important structures: The old Brunswick Hospital on Cumberland Street where I was born; the old St. Charles Church on upper Maine Street where Mary and I were married; Dr. Elliot's beautiful antique house on the corner of Pleasant and Maine Streets that was demolished to make way for Roane's gas station; Sam Forsaith's home next to the old First National Bank on Maine Street; the old train station on Railroad Avenue; our old High School which I attended; and, of course, our beloved Town Hall, replaced by JJ Newbury's Department store.

Let's not add our bridge to that shameful list.

Houghton White,
Brunswick

MDOT Presentation Failed to Show Green Bridge Repair Options

On April 27, at the Brunswick Town Landing, the Maine Department of Transportation presented their power point and proposals for either building a new bridge to replace the Frank Wood (green) bridge connecting Topsham and Brunswick's Main/e streets or restoring the existing bridge.

It appeared that there may have been between 50 and 60 people present to both hear and respond to proposals. I am sorry to say that I was only able to stay for two hours during the public comment period but something that is worth noting regarding the public discourse that I heard: People from varying perspectives spoke either for or against the proposals. Both sides were heard with respect for differences.

Had I been able to stay longer I would have commented on the following about the MDOT presentation.

It had a strong bias for building a new bridge because all of the power point renderings illustrated the new bridge but all of the current Frank Wood (green) bridge photos showed the existing bridge in need of repair or restoration — what we all see every day when we pass over the bridge. There were NO renderings of what the renovation might look like at a cost of $10 million compared to the new bridge at a cost of between $12 to 13 million. The final slide that was projected during the entire public comment period had a rendering of the new bridge.

The new bridge looks like a strip mall or a highway between Topsham and Brunswick. How many of us have seen these straight concrete lines across water systems regardless of what city or state you may be passing through? This picture is similar to the takeover of down towns all across the country with the new Main streets that look exactly the same — motels, drive in burgers, quick coffee drive throughs, gas stations and enormous car dealerships. No character and no charm and certainly no historic identities.

A couple of people noted that an open concrete roadway encourages speeding. I agree. Consider how you drive across the Bath Bridge compared with how you drive across the green bridge.

One man commented that he does prefer the existing bridge however he has a small business at its entrance from the Topsham side. He is concerned that a predicted longer closure period (MDOT prediction) for restoration will negatively impact his livelihood. This is a very real concern for businesses that the MDOT did not address. And who is to say realistically how long either project will take? The MDOT rep commented that we all know what it is like to plan a budget for home renovations and often end up spending a lot more. What about the plans we make for finishing a big home renovation project by such and such a date. Do you agree that the best laid plans are often disrupted? I can't imagine how many contractors might be involved with either the restoration or the building of a new bridge and then are they local contractors? That has yet to be determined is my guess and in need of another public comment period.

If the green bridge in its present condition is a threat to lives, we must make changes. If those changes mean a new bridge, I hope that bridge planners and architects have other options beyond flat concrete highway looking structures. Brunswick and Topsham deserve better.

Patricia Maloney
Topsham

sanity from Will Rogers, one of America's greatest humorists.

The words he spoke about elections during the Great Depression are as helpful to us now as they were then.

"If you ever injected truth into politics you have no politics"

"One of the evils of democracy is you have to put up with the man you elect whether you want him or not. That's why we call it democracy."

"Both gangs have been bad sports, so see if at least one can't redeem themselves by offering no alibis, but cooperate with the winner, for no matter which one it is, the poor fellow is going to need it."

As king of the velvet-tipped barb, Rogers never intended to be mean but rather to bring us to our senses. One of his favorite subjects was to remind the political class that it worked for us — not the other way around.

"When Congress makes a joke, it's a law, and when they make a law, it's a joke."

"You can't hardly find a law school in the country that don't, through some inherent weakness, turn out a senator or congressman from time to time ... if their rating is real low, even a president."

"The more you observe politics, the more you've got to admit that each party is worse than the other."

Our current presidential election cycle is the nuttiest of my lifetime, but Rogers

Clinton, Trum

BY GORDON L. WEIL



Trade policy, often misunderstood or ignored, may be a major political issue this year.

Hillary Clinton, the likely Democratic presidential nominee, and Donald Trump, the likely GOP standard-bearer, take similar positions.

They say President Obama and previous presidents have gone too far in making international trade agreements. It's time to stop negotiating new ones or even unravel existing pacts.

Since John F. Kennedy was president, the U.S. has pushed for lowering trade barriers among countries. Trade agreements, both worldwide and one-on-one, have been negotiated. Trade has increased and national economies have become linked, supporting so-called globalization.

But trade accords have met increasing opposition, at least in this country.

Labor unions and others argue that foreign suppliers can compete successfully in the American market because they pay much less than U.S. employers. Without doubt, jobs are outsourced to places like China and Bangladesh because their labor costs and working conditions are far below those here.

Trade deals are likely to throw some people out of work even while adding new jobs. The federal government is supposed to provide "trade adjustment assistance" to displaced workers, but it has often done poorly. Workers can feel they bear the burden of living with change.

Recently, after complaints about competing Canadian paper production, apparently government subsidized, Obama belittled the dispute, saying it would ultimately be compromised. Since then, paper companies in Maine have been shutting down. Jobs have been lost.

Even if new jobs are created by trade deals, it is difficult to calculate their net

COMMENT #29

From:	William F Morin
To:	Chase, Cassandra (FHWA)
Subject:	Supplemental Supporting Information for a Finding of Effect
Date:	Monday, March 06, 2017 2:49:37 PM
Attachments:	A DOT LETTER START 17 FEB DUE 28 FEB.docx

Ms. Chase;

Here are my comments as you requested as follows:

FHWA and MaineDOT would also like input from the Section 106 consulting parties on the Supplemental Supporting Information for a Finding of Effect. Please provide us with your comments on this document within 30 days, or by March 6, 2017.

Again thank you for my participation in the 106 process.

Sincerely,

William Morin

6 Front Street

Topsham, Maine



Frank J Wood Bridge Spanning Androscoggin River Between Brunswick and Topsham Maine

"Here is Where We Are"



Monday, March 06, 2017

From The Desk of William F. Morin*:*

6 Front Street Topsham, Maine 04086
207-729-1760
williammorin@midmaine.com

Cassie Chase
Environmental Engineer
Federal Highway Administration – Maine Division
Office: 207-512-4921
Cell: 207-689-8007
Cassandra.chase@dot.gov

Subject: Supplemental Supporting Information for a Finding of Effect
Project: Bridge #2016 - Frank J. Wood Bridge/ WIN 22603.00 / STP-2260(300)

Discussion: Rehabilitation of the Frank J. Wood Bridge (NR-E) Maine (2016) versus Removal and Destruction of the Frank J. Wood Bridge

Dear Ms. Chase:

To the FHWA and Maine DOT staff:

Thank you this opportunity for 106 consulting parties to review the Supplemental Supporting Information for a Finding of Effect and provide comments on this document. The comprehensive content of Supplemental Supporting Information for a Finding of Effect **is** a guidance procedure to present a pertinent description of the Frank J. Wood Bridge project to all process participants with a special emphasis how an historic property is assessed for eligibility , contributing elements, aspects of integrity, and criteria and adverse effect to its integrity, possible rehabilitation alternatives and many other considerations. In examining the document, I found a very detailed description of and the need for the project, the funding source, location and details of the bridge. I based my assessment on previous evaluations, collaborating information, and proposals and the Supplemental Supporting Information for a Finding of Effect.

Much additional material is included but the primary question of the bridge being assessed as eligible for National Register-Eligible is stated as follows.

"Frank J. Wood Bridge (#2016)
During the 2001 Maine DOT Historic Bridge Survey: Phase II Final Report and Historic Context review process, the Frank J. Wood Bridge was determined ineligible for individual listing, but determined a contributing resource to the NR-E BTIHD. This determination was again concurred with on June 16, 2016 (attached in Appendix F) as part of the Section 106 consultation process for this project. A property that contributes to a NR-E or listed historic district is afforded the same consideration under Section 106 as an individually eligible or listed property."[1] Supplemental Supporting Information for a Finding of Effect Project: Bridge #2016 - Frank J. Wood Bridge/ WIN 22603.00 / STP-2260(300)

The Appendix F reference which was stated by the State Historical Preservation Officer was that the Frank J. Wood Bridge was a contributing asset and was included within the NR-E BTIHD as were the contributing assets of the other two mills.

Another paragraph that further explains this National Register-Eligible designation is as follows.
"While truss bridges have been replaced due to structural deficiency and functional obsolescence, the Frank J. Wood Bridge remains ineligible for individual listing. It does not represent emerging technology, nor is its construction associated with a significant event or person. Therefore it does not hold individual significance in

[1] Supplemental Supporting Information for a Finding of Effect Project: Bridge #2016 - Frank J. Wood Bridge/ WIN 22603.00 / STP-2260(300)

any **area** under any **criteria**. However, the bridge remains eligible for listing as a contributing resource to the NR-E BTIHD and the FHWA is required to consider the effects its project may have on the bridge."[2] Supplemental Supporting Information for a Finding of Effect

Therefore, I consider the description of the Frank J. Wood Bridge (NR-E) as an historical asset (NR-E) National Registration – Eligible and it's inclusion in the Brunswick – Topsham Industrial Historic District (BTIHD) (NR-E) as a supporting and a contributing resource to the BTIHD) (NR-E). It is understandable that the Frank J. Wood Bridge may not have all the exact or any criteria needed for historical designation (NR-L) National Register Listed as a standalone asset but when considered as a contributing resource property to the NR-E BTIHD, it can certainly substantiate and confirm the designation of the NR-E BTIHD as an industrial historical district. If the Frank J. Wood Bridge were removed, there would be an adverse effect on the NR-E BTIHD. The Frank J. Wood Bridge was classified as a contributing resource to the NR-E BTIHD in 2001 and "During the October 24, 2016 Section 106 Consulting Parties meeting it was questioned whether or not the individual eligibility of the bridge needed to be reconsidered due to the 15 years that passed since completion of the bridge survey. FHWA determined that the individual eligibility should be re-examined."[3] Supplemental Supporting Information for a Finding of Effect

The finding of a supporting resource and a contributing resource to an eligible historical district is a condition applied to the Frank J. Wood Bridge and others including a very similar situation in the case of the Duck or Union Street Bridge over the Merrimack River on Union Street in Lawrence, Massachusetts. It has some very striking similarities to the Frank J. Wood Bridge and a brief description of the Duck Bridge is provided from local sources as follows.

The following is a blog of general information from the city of Lawrence Massachusetts for residents describing the Duck Bridge.

Credits go to:
Louise Sandberg, Special Collections
Lawrence Public Library
51 Lawrence St.
Lawrence, MA 01841

Posted on October 27, 2009 by queencity.ma Lawrence Massachusetts

"The Library owns the account book used when the bridge was the Lawrence Toll Bridge. It also has a series of photographs from the Boston Bridge Works who rebuilt the bridge in 1888. Two of the photos are of the Union Street Bridge.

The Lawrence Bridge was built and chartered in 1854 for the purpose of accommodating the traffic between Lawrence and North Andover and to avoid the railroad crossing. It followed Union Street over the Merrimack River. It opened for business November 8th, 1855, the owners celebrating the event that evening with dinner at the Franklin House. The Lawrence Bridge Company ran the bridge as toll bridge until August 7, 1868, at 9:00 AM, when the bridge became free as a public highway. The city paid the larger part of the value assuming the care of the bridge under the county commissioner's award. Nicholas Chapman performed the function as Keeper of the Lawrence Bridge during the entire time the company collected tolls. Every month he collected the fees and turned them in to George D. Cabot, the manager of the Lawrence Gas Company. The Lawrence

[2] Supplemental Supporting Information for a Finding of Effect
[3] Supplemental Supporting Information for a Finding of Effect

Bridge was destroyed by fire in 1887 and rebuilt in iron 1888 by the Boston Bridge Works. It was built as a five-span through truss bridge with George L Vose as the engineer with It is a five riveted, double-intersection Warren through truss spans and is 609.9 ft. in length. At present it is known as the Union Street Bridge or the Duck Bridge (in honor of the mill nearby the produced duck fabric) and enables 29,000 vehicles to cross every day. Renovations of the bridge were completed in 2012."[4]

In 2010, the Duck Bridge was closed after inspections were done to accomplish the needed repairs and rehabilitated.

From the Official Blog of the Massachusetts Department of Transportation of November 16, 2012 came the following.

"The $16 million Mass DOT project reconstructed existing bridge piers and abutments, repaired bridge truss members, and constructed a new concrete and steel bridge deck.

The new bridge provides two travel lanes, with sidewalks on both sides of the bridge.

The bridge was closed to traffic in July 2010 with detours in place.

The federally funded project was constructed by S&R Corporation from Lowell and completed four months ahead of schedule.

Mass DOT appreciates the patience shown by drivers and abutters affected by the closure and the associated traffic detour during construction."[5]

From Bridgehunter.com which is a database of historic or notable bridges in the United States, the following current description of the Duck Bridge was obtained:

Overview: Five-span through truss bridge over Merrimack River on Union Street in Lawrence
Location: Lawrence, Essex County, Massachusetts
History: Built 1888
Builders: Boston Bridge Works of Boston, Massachusetts
George L. Vase (Consulting engineer)
Design: Five riveted, double-intersection Warren through truss spans
Dimensions: Total length: 609.9 ft.
Recognition: Listed as a contributing resource to the North Canal Historic District
Quadrangle map: Lawrence
Inventory numbers:
MA L04003 (Massachusetts bridge number)
BH 19257 (Bridgehunter.com ID)
Inspection: (as of 01/2015)
Deck condition rating: Very Good (8 out of 9)
Superstructure condition rating: Satisfactory (6 out of 9)
Substructure condition rating: Good (7 out of 9)
Sufficiency rating: 70.1 (out of 100)
Average daily traffic (as of 2015) 20,800

[4] Description of the Duck Bridge :City of Lawrence Massachusetts Louise Sandberg, Special Collections Lawrence Public Library Blog Posted on October 27, 2009 by queencityma

[5] Official Blog of the Massachusetts Department of Transportation of November 16, 2012

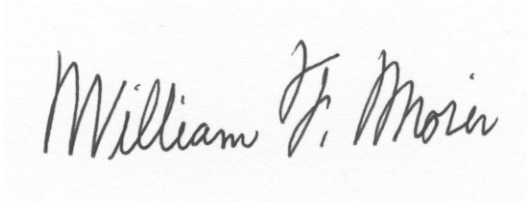
Most notable are some similarities between the Frank J. Wood Bridge and the Duck Bridge are the builder , similar traffic count, bridge design, size and most important and noteworthy is that the bridge is recognized as a contributing resource to the North Canal Historic District on the Merrimack River between North and South Lawrence.

The Impacts under Section 106 of the National Historic Preservation Act as described in the Matrix of Alternatives Investigated – Draft 10-26-2016 and the various removal and construction or rehabilitation scenarios are most effective in stating the results of adverse effects and is the basis for my assessment. The most authoritative directive in the instance of the Frank J. Wood Bridge is as follows . "A property that contributes to a NR-E or listed historic district is afforded the same consideration under Section 106 as an individually eligible or listed property."[6] This is a very binding law that protects the NR-E or listed historic district and in these cases also protects resources that would otherwise not be eligible in any case. Therefore, I feel very strongly that this would be the best outcome for the Frank J. Wood Bridge resulting from this process as it was for the Duck Bridge in Lawrence Massachusetts.

In summary of other considerations of concern, I believe the T Y Lin Summary of Alternatives of October 27, 2016 (DRAFT) needs to be finalized and/or another consultant more knowledgeable about the restoration of bridges being contracted. Very little attention was made for a rehabilitation result and it being the major study, it is therefore lacking.

Also, of concern is that I saw a certain amount of public expression which endorsed the adverse action of bridge replacement long before the consulting parties met in October 2016 which was premature as to the future discussions and findings of the FHWA – Maine Division. Numerous editorials, personal endorsements and a municipal resolution were generated mostly in favor of a new bridge based only upon cost estimates and traffic concerns before a final assessment. These pronouncements were in some case not fully accurate or lacked a full understanding of all aspects of the Section 106 efforts of MAINE DOT and FHWA. Personally, I am waiting to hear the facts of a studied assessment and a final considered recommendation from the FHWA in consideration of Section 106 of the National Historic Preservation Act of 1966. 36 CFR 800.1. The section 106 process currently continues in progress and seeks input from literally everyone and is the agent for the appropriate interpretation of National Historic Preservation Act of 1966.

Sincerely,



William F. Morin

[6] Supplemental Supporting Information for a Finding of Effect

COMMENT #30

From:	Arlene Morris
To:	Martin, Cheryl (FHWA); Joel Kittredge
Cc:	Chase, Cassandra (FHWA)
Subject:	Frank J. Wood Bridge
Date:	Monday, March 06, 2017 4:45:12 PM

Dear Ms. Martin and Mr. Kittredge:

This letter is in response to the Maine Department of Transportation Public Notice to comment on the Brunswick-Topsham 22603, Frank J. Wood Project and the effect on historic properties. Please enter my comments into the record.

In 2001 I purchased the 1834 historic brick building at 13 Main Street in Topsham that abuts the Frank J. Wood Bridge. Over the years I have invested more than $150,000 in rehabilitating the two buildings. Every change to the structures had to be approved by the Topsham Historic Commission. It is my understanding that the building was the first Androscoggin Bank for the Bowdoin Mill. I bought the building because of its connection to the Mills, the River, the Bridge and Green and Summer Street historic districts. The building is also near the Underground Railroad. For all these reasons this is an amazing place to live and work. Over time the Bridge has become an iconic structure that holds it all together. If you replace it with a concrete highway, you will destroy what makes our two towns unique. A concrete highway would speed up traffic, destroy what is left of the natural falls, be bad for economic development, and take away much of the character of our communities.

I urge you to do everything in your power to save the Frank J. Wood Bridge. Too many of these truss bridges are being destroyed. This one must be saved.

Sincerely,
Arlene Morris

COMMENT #31

From:	John Shattuck
To:	Chase, Cassandra (FHWA); kitty@historicbridgefoundation.com; Nathan Holth; s.t.hanson@comcast.net; John Graham; sstern@gwi.net; lsmith@brunswickme.org; Hopkin, Megan M; Chamberlain, Kristen; robin.k.reed@maine.gov; Kittredge, Joel; Martin, Cheryl (FHWA); Frankhauser Jr, Wayne; Kate Willis; Emington, Wayne (FHWA); John Eldridge; Norman Baker; Drozd, Maria (FHWA); stevehinchman@gmail.com; admorris@gwi.net; sebordwell@gmail.com; Nancy BikeMaine.org; Folsom, Jeff; ckrussell@gwi.net; Curtis Neufeld (cneufeld@sitelinespa.com); Rod Melanson; Carol Eyerman; Douglas C. Bennett (dougb@earlham.edu); Victor Langelo (vlangelo@eclipseservices.com); Richard Cromwell (richcromwell1@gmail.com); Androscoggin Dental Care (fredwigand@gwi.net); katzthal@comcast.net; mnaber@achp.gov; david.gardner@maine.gov; Pulver, William; Pelletier, Steve (steve.pelletier@stantec.com); Deb Blum (dblum@brunswickme.org); kirk.mohney@maine.gov
Cc:	Marie Brillant; Dave Douglass; Ruth Lyons (Seleperson); Rich Roedner; Bill Thompson; Roland Tufts
Subject:	Frank J. Wood Bridge Project - Request for Comments on Section 106 Documents
Date:	Monday, March 06, 2017 6:34:34 PM
Attachments:	2017-03-06 TOPSHAM §106 comments re 2017-02-02 daft findings of effect.pdf 2016-12-01 TOPSHAM BOS §106 comments - SIGNED.pdf 2016-12-02 TOPSHAM STAFF §106 comments.pdf

CASSIE: Attached please find the Town of Topsham's comments, with attachments, regarding the 2017-02-02 draft findings of effect. Thanks, John

--
John Shattuck
Director, Economic & Community Development
Town of Topsham
100 Main Street
Topsham ME 04086

Office: (207) 373-5097
Mobile: (207) 650-0012
Email: jshattuck@TopshamMaine.com

Topsham because: http://youtu.be/Y_luU6wJMOU

Per 1 MRSA § 402(3), all communications with public officials (with limited exceptions) are considered public records and available for review by any interested party.

From: Chase, Cassandra (FHWA) [mailto:Cassandra.Chase@dot.gov]
Sent: December 07, 2016 08:10
To: kitty@historicbridgefoundation.com; Nathan Holth <nathan@historicbridges.org>; s.t.hanson@comcast.net; John Graham <John@johngrahamrealestate.com>; sstern@gwi.net; John Shattuck <jshattuck@topshammaine.com>; lsmith@brunswickme.org; Hopkin, Megan M <Megan.M.Hopkin@maine.gov>; Chamberlain, Kristen <Kristen.Chamberlain@maine.gov>; robin.k.reed@maine.gov; Kittredge, Joel <Joel.C.Kittredge@maine.gov>; Martin, Cheryl (FHWA) <Cheryl.Martin@dot.gov>; Frankhauser Jr, Wayne <Wayne.FrankhauserJr@maine.gov>; Kate Willis <kwillis@kleinfelder.com>; Emington, Wayne (FHWA) <wayne.emington@dot.gov>; John Eldridge <jeldridge@brunswickme.org>; Norman Baker <norman.baker@tylin.com>; Drozd, Maria (FHWA) <Maria.Drozd@dot.gov>; stevehinchman@gmail.com; admorris@gwi.net; sebordwell@gmail.com; Nancy BikeMaine.org <Nancy@BikeMaine.org>; Folsom, Jeff <Jeff.Folsom@maine.gov>; ckrussell@gwi.net; Curtis Neufeld (cneufeld@sitelinespa.com) <cneufeld@sitelinespa.com>; Rod Melanson <rmelanson@topshammaine.com>; Carol Eyerman <ceyerman@topshammaine.com>; Douglas C. Bennett (dougb@earlham.edu) <dougb@earlham.edu>; Victor Langelo (vlangelo@eclipseservices.com) <vlangelo@eclipseservices.com>; Richard Cromwell

(richcromwell1@gmail.com) <richcromwell1@gmail.com>; Androscoggin Dental Care (fredwigand@gwi.net) <fredwigand@gwi.net>; katzthal@comcast.net; mnaber@achp.gov; david.gardner@maine.gov; Pulver, William <William.Pulver@maine.gov>; Pelletier, Steve (steve.pelletier@stantec.com) <steve.pelletier@stantec.com>; Deb Blum (dblum@brunswickme.org) <dblum@brunswickme.org>; kirk.mohney@maine.gov
Subject: RE: Frank J. Wood Bridge Project - Request for Comments on Section 106 Documents

Good Morning,

Thank you for providing comments on the Section 106 documents for the Frank J. Wood Bridge Project. We are currently compiling all comments received and will be addressing and responding to each comment. We will touch base with all of you soon.

Cassie

Cassie Chase
Environmental Engineer
Federal Highway Administration – Maine Division
Office: 207-512-4921
Cell: 207-689-8007
Cassandra.chase@dot.gov

From: Chase, Cassandra (FHWA)
Sent: Friday, November 04, 2016 8:51 AM
To: 'kitty@historicbridgefoundation.com'; 'Nathan Holth'; 's.t.hanson@comcast.net'; 'John Graham'; 'sstern@gwi.net'; 'John Shattuck'; 'lsmith@brunswickme.org'; 'Hopkin, Megan M'; 'Chamberlain, Kristen'; 'robin.k.reed@maine.gov'; 'Kittredge, Joel'; Martin, Cheryl (FHWA); 'Frankhauser Jr, Wayne'; 'Kate Willis'; Emington, Wayne (FHWA); 'John Eldridge'; 'Norman Baker'; Drozd, Maria (FHWA); 'stevehinchman@gmail.com'; 'admorris@gwi.net'; 'sebordwell@gmail.com'; Nancy Grant (nancy@bikemaine.org); 'Folsom, Jeff'; 'ckrussell@gwi.net'; Curtis Neufeld (cneufeld@sitelinespa.com); Rod Melanson (rmelanson@topshammaine.com); Carol Eyerman (ceyerman@topshammaine.com); Douglas C. Bennett (dougb@earlham.edu); Victor Langelo (vlangelo@eclipseservices.com); Richard Cromwell (richcromwell1@gmail.com); Androscoggin Dental Care (fredwigand@gwi.net); 'katzthal@comcast.net'; mnaber@achp.gov; 'david.gardner@maine.gov'; 'Pulver, William'; Pelletier, Steve (steve.pelletier@stantec.com); Deb Blum (dblum@brunswickme.org); kirk.mohney@maine.gov
Subject: Frank J. Wood Bridge Project - Request for Comments on Section 106 Documents

Good Morning,

Thank you all for attending the October 27th Section 106 Consulting Party Meeting for the Frank J. Wood Bridge Project. As mentioned at the meeting, we apologize for providing the materials just prior to the meeting. We were still working on compiling all of the information right up until the meeting, but we understand and recognize that this does not provide you with an adequate opportunity to review and come prepared to the meeting. In the future, we are committed to providing you with all documents to be discussed at future Section 106 consulting party meetings at least two weeks prior to the meeting.

Additionally, to ensure you are able to review and provide input on the draft alternatives matrix summary, the draft alternatives matrix, and the preliminary effect determinations, we are accepting and would appreciate any comments you have by COB on December 2, 2016. Please send your comments to both me (cassandra.chase@dot.gov) and Joel Kittredge (joel.c.kittredge@maine.gov). If you'd like to send your comments by mail, please either mail them to my attention at the Federal Highway Administration, Edmund S. Muskie Federal Building, 40 Western Avenue, Room 614, Augusta, Maine 04330; or Joel's attention at the Maine Department of Transportation, 16 SHS, Augusta, ME 04333-0016. We are currently working on addressing the comments received at last week's consulting party meeting. After we receive all of your comments by December 2nd, we will begin reviewing, addressing and considering those comments as well. You can expect to see another e-mail from me, in response to your comments particular to the Section 106 process, sometime in mid-December.

In addition to attaching the October 27th sign-in sheet, the draft alternatives matrix summary, draft alternatives matrix, and the preliminary effect determination presentation, I have attached a copy of the Cabot Mill Historic Survey, which indicates that the Cabot Mill is individually eligible for listing under the National Register of Historic Places. This was requested at the October 27th meeting. Also requested at the Section 106 consulting parties meeting was a link to view the architectural survey and eligibility package. This information can be found on MaineDOT's website at http://www.maine.gov/mdot/env/documents/Brunswick22603.00106Package8.2.16.pdf.

A public meeting, specific to the overall project, will be held in the near future and comments will also be received at that time on the project in its entirety. As always, feel free to contact me if you have any questions.

Cassie

Cassie Chase
Environmental Engineer
Federal Highway Administration – Maine Division
Office: 207-512-4921
Cell: 207-689-8007
Cassandra.chase@dot.gov

TOWN OF TOPSHAM
100 Main Street
Topsham ME 04086

TOWN OF TOPSHAM §106 REVIEW COMMENTS **2017-03-06**

Re: 2017-02-02 Frank J Wood Finding of Effect – DRAFT

HISTORIC IMPACTS

As one of the very few statutorily designated consulting parties involved in this process, the Town of Topsham, reasserts, in summary, its arguments that the removal of the Frank Wood Bridge would ***not*** constitute an adverse effect to any of the abutting structures or areas. These arguments are more fully stated in the 2016-12-02 Topsham Selectmen's §106 Comments and the 2016-12-02 Topsham Staff §106 Comments, both of which are attached and hereinto incorporated by reference.

Historic Districts: The draft finding of effect makes frequent references to the "Brunswick-Topsham Industrial Historic District" and the "Summer Street Historic District." While these districts were apparently demarcated for the purposes of the historic impact analysis, it should be noted that there is no "Brunswick-Topsham Industrial Historic District" that has been delineated or designated by either Brunswick or Topsham as a historic district. Additionally, there is no "Summer Street Historic District" that has been delineated or recognized by Topsham as a historic district. Topsham voters considered, but rejected, the inclusion of a portion of Summer Street in the Topsham Historic District, which has been listed on the National Register of Historic Places since 1978.

More tellingly, the Frank Wood Bridge is not included or referenced in either the Topsham Historic District or the Brunswick Commercial Historic District, which was added to the National Register of Historic Places in January of this year. Neither is the Cabot Mill included in the Brunswick Commercial Historic District.

Finally, the Comprehensive Plans of Topsham and Brunswick do not identify the Frank Wood Bridge as an historic or economic asset, and neither Plan includes the preservation of the bridge as a community goal.

Overlapping periods of significance: The draft finding of effect notes that the Wood Bridge has existed during part of the periods of significance for the Cabot Mill and the Pejepscot Paper Company, during the final years of their rapidly diminishing function as mills. But it should be acknowledged that the bridge's existence overlaps with only a third, or less, of the periods of significance of either mill, or of the stated period of significance of the non-existent "Brunswick-Topsham Industrial Historic District."

As noted by the Topsham Selectmen in their 2016-12-01 comments submitted to the §106 Review:

> The contention that the Wood Bridge constitutes an inseparable, intrinsic piece of a single fabric incorporating the bridge and our two communities' waterfront mills is discredited by the history of the bridge. The Wood Bridge was built well over a century later than the Brunswick mill, and more than 60 years later than Topsham's Pejepscot Mill. Indeed, the Wood Bridge replaced a bridge that actually connected directly to the Pejepscot Mill, where Topsham's Main Street ran through the

> center of the mill complex. So, the placement of Wood Bridge actually disregarded this historic connection to the mill and realigned Main Street, substantially disrupting the fabric of Topsham's historic Lower Village and displacing long-standing buildings to make way for the rerouted Main Street.

And the draft finding of effect does acknowledge this history repeatedly:

> Additionally, while the Frank J. Wood Bridge plays a role in the **setting**, the **historic context** of the area reveals that at least two other bridges provided a permanent crossing between Topsham and Brunswick in proximity to the Cabot Mill. Therefore, a permanent crossing plays a role in the Cabot Mill's **integrity** and **essential physical features**. *Draft findings at p. 11 –* **emphasis** *in original*

> Additionally, while the Frank J. Wood Bridge plays a role the **setting**, the **historic context** of the area reveals that at least two other bridges provided a permanent crossing between Topsham and Brunswick in near proximity to the PPC. Therefore, a permanent crossing plays a role in the PPC's **integrity** and **essential physical features**. *Draft findings at p. 12 –* **emphasis** *in original*

In fact, research indicates that the Wood Bridge was the ninth permanent bridge at this crossing, as outlined in Douglas Bennett's 2016-07-20 Guest Column in the Times Record:

> 1795 was the year of the first bridge, a wooden bridge of course and likely covered like its several wooden successors.
>
> Fifteen years later, in 1811, a 'freshet' (a spring flood) carried off this first bridge. The bridge was built again.
>
> In 1814 and again in 1827 these bridges were also carried off by a flood and rebuilt, in 1827 with stone abutments. In 1842 a fire destroyed the bridge and again it was rebuilt. All these bridges were privately built and maintained, their owners charging a fee for passage.
>
> In 1871, the two towns bought the still-wooden bridge.
>
> In 1877, the towns replaced the wooden bridge with an iron bow bridge. A wrought iron bridge built by the King Iron Company (Cleveland) was washed away in 1914, and replaced.
>
> In 1932, after all these others (at least eight), the current Frank J. Wood Bridge, a riveted Warren thru truss bridge was purchased from Boston Bridge Works and erected.

Accordingly, the Town of Topsham, reasserts its factually-supported position that the removal of the Wood Bridge would ***not*** constitute an adverse effect to any of the nearby structures or areas. The Wood Bridge, the ninth bridge at this crossing, and one that replaced and older bridge that ***directly*** linked the mills, is not an integral part of the nearby mills and historic districts simply because its existence happened to overlap with a short period of mills' declining years of use as mills. The historically important element at this location is the existence of a permanent crossing, and the Town of Topsham supports the continuation of that crossing in a manner that enhances safety, access and functionality for all users, while maintaining this crucial crossing in a financially prudent and feasible manner.

Board of Selectmen
100 Main Street
Topsham, ME 04086

Phone: 207-725-5821
Fax: 207-725-1731

December 1, 2016

Cassandra Chase
Environmental Engineer
Federal Highway Administration – Maine Division
US Department of Transportation

Joel Kittredge
Project Manager
Maine Department of Transportation

Re: Frank J. Wood Bridge §106 Review

Dear Ms. Chase & Mr. Kittredge:

Please accept our thanks for your attention to the critically important issues of historic and environmental impacts involved in deciding whether the current Frank Wood Bridge should be rehabilitated or replaced.

As you are aware, in June of this year we unanimously adopted a resolution supporting the replacement of the Frank Wood Bridge for a variety of reasons enumerated in the resolution, which is attached. We write today to reiterate our conviction that replacement is still the best option and that the case for replacement has only grown stronger as additional information has been made available by the Maine Department of Transportation, as well as through your review process and the efforts of the Brunswick-Topsham Bridge Design Advisory Committee.

This §106 Review has attracted strong interest and requests for consulting party status designation from a wide array of individuals and organizations, including a number located far from our community and many without any prior history of involvement in historic preservation, or involvement in local government as elected officials, staff professionals or even as volunteers. In a review process that includes relatively few statutorily entitled consulting parties under 36 CFR §800.2, we would respectfully note that we are such a statutorily designated consulting party, as well as being the only Review participant representing a local government.

We agree that a careful review of historic and environmental impacts are essential to a balanced and fully informed decision on the disposition of the bridge, but we also recognize that they cannot be the

sole and controlling considerations in reaching that decision. Accordingly, we respectfully request that you carefully consider the following additional input of duly-elected local officials with respect to the environmental, historic, and financial impacts of this decision.

Environmental impacts

With regard to the differing environmental impacts of rehabilitation or replacement, we believe that there can be little doubt that replacement will present far less risk of environmental degradation to the river than would inevitably result from a major, lengthy initial rehabilitation and reconstruction project, followed by many recurring (if smaller scale) rehabilitation, repair and rebuilding cycles to ensure that this incredibly intricate web of aged and continuously corroding metal remains structurally sound and safe to use. This is a bridge that has been shedding lead paint and lead-impregnated steel into the Androscoggin River for more than eight decades. The obsolete materials and the equally obsolete structural technology employed in the design of this bridge guarantees that corrosion will continue to occur at the thousands of joints, through-bolts and layered plates throughout the bridge and will require repeated repainting to slow, but not defeat, the ongoing decay.

Despite improvements in paint formulations, and the best efforts at containment during repeated reconstruction and repainting, it's indisputable that this structure will continue to deposit far more paint and metal corrosion byproducts into the river than would a new bridge. A replacement bridge, built with vastly more corrosion-resistant modern materials, and with far less (and enormously less fragmented) exposed metal will require much less extensive and less frequent painting and maintenance – with the result that adverse environmental impacts will be hugely reduced.

Our State and riverfront communities have invested substantial resources in the restoration of the shamefully degraded environment of the Androscoggin River. If maintaining that success and further restoring our river is important – and it definitely is – then the choice between rehabilitation and replacement should not be a close call.

Historical impacts

With regard to the differing historical impacts of rehabilitation or replacement, we believe that replacement offers far superior opportunities to recognize, celebrate and enjoy the historic significance of both the natural and built environments at this unique site. To date, the §106 Review has included repeated assertions that the Frank Wood Bridge is historically important from both engineering and aesthetic perspectives, and that it constitutes an inseparable, intrinsic piece of a single fabric incorporating the bridge and our two communities' waterfront mills.

Based on the historic record, we respectfully disagree.

While the Boston Bridge Works certainly built some beautiful bridges, this technologically simple bridge, with little consideration or expense devoted to aesthetic elements, is not one of their artistic successes – a comparison to the company's Tyngsborough Bridge is illustrative. In the 1930s, as is still the case today, Maine was a state with limited economic resources and a disproportionately high number of road miles and river crossings in relation to its small population. The current bridge was

chosen from a pattern book, with cost considerations paramount, to meet critical transportation needs, not to make an aesthetic statement.

Another telling comparison lies just a few hundred yards upstream from the current bridge: the Androscoggin Swinging Bridge. This 124-year-old bridge was built by the John A. Roebling's Sons Company, one of the premier bridge designers and builders of their day, perhaps best known for building the Brooklyn Bridge. Even though it was built 40 years earlier, the Swinging Bridge's tower and cable suspension engineering was a far more sophisticated building technique than the through-truss method employed in the Wood Bridge. Truss bridge technology was the predominate approach in bridge construction beginning in the 1870s, but, when the Wood Bridge was built, this method was already being abandoned across the most of country in favor of concrete girder and beam bridges or suspension bridges, for longer spans.

The Swinging Bridge is not simply a National Register eligible structure; it has been listed on the National Register of Historic Places since 2004, and in 2011 the Maine Section of the American Society of Civil Engineers recognized it as a Maine Historic Civil Engineering Landmark. This bridge is intimately tied to the history of both our towns and the mill workers it was built to serve, and is particularly significant in illuminating the social and cultural history of that time.

While aesthetic evaluations are necessarily subjective, we believe that most in our communities would agree that, with its elegant arcs and lines, the Swinging Bridge is far more appealing than the boxy, asymmetrical Wood Bridge superstructure, which obscures views of Topsham's and Brunswick's historic waterfronts, and the river itself, from all of us.

The contention that the Wood Bridge constitutes an inseparable, intrinsic piece of a single fabric incorporating the bridge and our two communities' waterfront mills is discredited by the history of the bridge. The Wood Bridge was built well over a century later than the Brunswick mill, and more than 60 years later than Topsham's Pejepscot Mill. Indeed, the Wood Bridge replaced a bridge that actually connected directly to the Pejepscot Mill, where Topsham's Main Street ran through the center of the mill complex. So, the placement of Wood Bridge actually disregarded this historic connection to the mill and realigned Main Street, substantially disrupting the fabric of Topsham's historic Lower Village and displacing long-standing buildings to make way for the rerouted Main Street.

By contrast, the Maine Department of Transportation's proposed replacement bridge would tie in to the existing road alignments in both Topsham and Brunswick with minimal disruption, and with no buildings displaced.

Even a relatively casual review of the history of the Pejepscot Falls reveals that the current bridge is merely one of at least nine bridges constructed in this area and, more importantly, that the enduring historic significance of this location arises from the existence of the Pejepscot Falls across centuries, not from the ephemeral bridges that have been built nearby. The falls were the site of very lengthy habitation and intensive fishing by Native Americans long before European colonists arrived. This was the site of the earliest Colonial precursors of our two towns, as settlers were drawn here by the abundant fishing resource and, later, by the hydro power provided by the falls.

Insisting on the preservation of what is only the most recent of the many bridges at this site disproportionately elevates an ancillary structure, and a brief instant of time, over the full and rich historical context of this location. Such an approach is historic distortion, not meaningful historic preservation. Simply put, the history of this site is much bigger than any one bridge.

We believe that the construction of the proposed replacement bridge would do far more to preserve and respect our local historic legacy – both natural and built – than would the protracted and repeated rehabilitation of a single structure that is not historically significant on technological, aesthetic or cultural grounds. The mere accumulation of years does not create significance.

Unlike the Wood Bridge, the proposed replacement bridge would enable all of us to enjoy unobstructed views of the historic waterfronts of both towns, particularly the historic and appealing Cabot and Pejepscot Mills, which both preceded the Wood Bridge by many years and which were both built with far more attention to aesthetic impact. We would also gain open, sweeping views of our beautiful river for the first time in living memory.

These views constitute a genuine historic – and natural - legacy that is worthy of restoration, preservation and celebration.

We recognize that, by law, the §106 Review is focused solely on historic and environmental issues. And, for the reasons set forth above, we believe that replacement of the exiting bridge is clearly the superior alternative, even based solely on historic and environmental impacts.

But, as elected officials, we are also accountable to our constituents for thoughtful, effective and efficient use of their taxes and for prudent stewardship of public property and resources, including infrastructure.

Financial impacts

The Maine Department of Transportation's draft Matrix of Alternatives, released on October 26th, 2016, includes preliminary cost information, which compellingly reinforces the already strong case for the replacement alternative. We understand that the two alternatives that are most likely to be the final options are: Upstream replacement (Alternative 2) and Rehabilitation with the addition of a second sidewalk (Alternative 4). The Matrix projects that the initial construction cost for Alternative 2 will be 13 million dollars, while for Alternative 4 the initial rehabilitation cost will be 17 million dollars, nearly a third more expensive. The Matrix reports that estimated life cycle costs, even discounted for present value, would be nearly 10 million dollars more for the rehabilitation alternative.

Although our municipality would not bear these costs directly, Topsham's residents, and all the residents of Maine, will bear these costs. Given our State's limited economic resources, and our growing but chronically underfunded infrastructure needs, expending 10 million dollars more than necessary for this bridge infrastructure would be neither prudent nor reasonable.

It is our understanding that some advocates for the rehabilitation alternative have proposed eliminating key elements of the preferred rehabilitation plan (Alternative 4), apparently for the sole purpose of

bringing down the higher cost of rehabilitation in comparison to replacement. The much enhanced pedestrian and cycling facilities of a new bridge enjoy broad public support and would be a major contributor to our Board's long-term efforts to develop the Lower Village and improve the connection between Topsham's and Brunswick's Main/e Streets and historic downtowns.

In addition to unnecessary maintenance costs, a decision to rehabilitate will impose a dramatically greater financial hardship on local business and travelers. Closures would be more frequent with a rehabilitated bridge, as clearly documented in MDOT's 2016-10-27 draft Summary of Alternatives. Each one of these closures will mean less business for our local businesses, and will generate losses that they must simply endure without compensation. Even though we understand that these business losses are not a formal part of your evaluation, they are nonetheless the very real and substantial consequences of a rehabilitation decision. By contrast, a replacement decision would minimize business losses in the short and long term. With the daily trip count at this crossing already approaching 19,000 vehicles a day, closures will impose a heavy burden not just on our town, but will disrupt traffic and commerce across our region.

In summary, we believe that expending 10 million more discounted dollars than necessary to maintain a decaying bridge would be irresponsible and indefensible in this period of limited finances, especially when one considers that a rehabilitated bridge will:

- be less accessible and functional for all users,
- be more detrimental to the environment,
- obstruct our shared legacy of historic built and natural view-sheds,
- repeatedly disrupt travelers and businesses with far more frequent and longer closures,
- have a shorter functional life,
- and cost substantially more to maintain.

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Thank you for your attentive consideration of our concerns.

Sincerely,

David Douglass

William Thompson

Marie Brillant

Ruth Lyons

Roland Tufts

TOWN OF TOPSHAM
100 Main Street
Topsham ME 04086

TOWN OF TOPSHAM §106 REVIEW COMMENTS 2016-12-02

HISTORIC IMPACTS

At the 2016-10-27 §106 Review meeting, the Preliminary Effect Determinations Presentation, regarding historic impacts of the various alternatives for the rehabilitation or replacement of the Frank Wood Bridge made frequent references to the "Brunswick-Topsham Industrial Historic District" and the "Summer Street Historic District." While these districts were apparently demarcated for the purposes of the historic impact analysis, it should be noted that there is no "Brunswick-Topsham Industrial Historic District" that has been delineated or designated by either Brunswick or Topsham as a historic district. Additionally, there is no "Summer Street Historic District" that has been delineated or recognized by Topsham as a historic district. Topsham voters considered, but rejected, the inclusion of a portion of Summer Street in the Topsham Historic District, which has been listed on the National Register of Historic Places since 1978.

More tellingly, the Frank Wood Bridge is not included or referenced in either the Topsham Historic District or the Brunswick Commercial Historic District, which was added to the National Register of Historic Places in January of this year. Neither is the Cabot Mill included in the Brunswick Commercial Historic District.

As noted by the Topsham Selectmen in their 2016-12-01 comments submitted to the §106 Review:

> The contention that the Wood Bridge constitutes an inseparable, intrinsic piece of a single fabric incorporating the bridge and our two communities' waterfront mills is discredited by the history of the bridge. The Wood Bridge was built well over a century later than the Brunswick mill, and more than 60 years later than Topsham's Pejepscot Mill. Indeed, the Wood Bridge replaced a bridge that actually connected directly to the Pejepscot Mill, where Topsham's Main Street ran through the center of the mill complex. So, the placement of Wood Bridge actually disregarded this historic connection to the mill and realigned Main Street, substantially disrupting the fabric of Topsham's historic Lower Village and displacing long-standing buildings to make way for the rerouted Main Street.

Finally, the Comprehensive Plans of Topsham and Brunswick do not identify the Frank Wood Bridge as an historic or economic asset, and neither Plan includes the preservation of the bridge as a community goal.

FINANCIAL IMPACTS

The draft Matrix of Alternatives Investigated was provided to the §106 Review by the Maine Department of Transportation (MaineDOT) on 2016-10-26. This document estimated that the initial construction cost for the upstream replacement of the Wood Bridge (Alternative 2) would be 13 million dollars, while the initial construction cost for the rehabilitation of the Wood Bridge (Alternative 4) would be 17 million dollars, or nearly a third more expensive. This report also stated that the Life Cycle Cost Estimate (including initial construction) for the upstream replacement of the Wood Bridge (Alternative 2) would be 13.7 million dollars, while the estimated cost for the rehabilitation of the Wood Bridge (Alternative 4) would be 23.2 million dollars, or more than two thirds – and nearly 10 million dollars - more expensive.

As explained in MaineDOT's 2016-10-27 draft Summary of Alternatives, at p. 19, the Estimated Life Cycle Costs are discounted to provide the present value of estimated initial and future costs: "The LCCE accounts for estimated construction costs on the current project and the translated present value of anticipated future inspection, maintenance, and rehabilitation." A 4% discount rate was used to calculate the present values.

In order to ensure a fair and consistent comparison of alternative project costs, MaineDOT regularly uses such a present value calculation in determining Life Cycle Cost Estimates (LCCE). This is an entirely appropriate approach but, as is the case with a number of generally accepted auditing standards, such an fixed method can sometimes yield arbitrary results that do not reflect real-world economic realities.

The below table is excerpted from a document entitled "Summary Costs for Service Life of Alternatives," which I requested and received from the Maine Department of Transportation on 2016-11-21. The table is excerpted only in that I have included just the two bridge alternatives that appear to be the most likely potential outcomes of the §106 Review. This table provides the total estimated costs of initial construction plus anticipated future inspection, maintenance, and rehabilitation costs for replacement of the Wood Bridge (Alternative 2) and the rehabilitation of the Wood Bridge (Alternative 4) ***without a present value discount.*** The totals resulting from this method are most illuminating:

Work Effort	Alt #2 Repl 2 SW Serv. Life 100 yrs	Alt #4 Rehab 2 SW Serv. Life 75 yrs
Initial Construction Cost	$13.0 M	$17.0 M
Inspection	(50) $0.1 M	(38) $2.2 M
Maintenance	(100) $0.1 M	(74) $3.0 M
Paint	(2) $3.5 M	(3) $12.0 M
Deck Replacement	------	$2.0 M
Substructure Rehab	------	(2) 2.0 M
Wearing Surface Replacement	(6) $0.6 M	-------
Total	**$17.3 M**	**$38.2 M**

(x) – denotes number of times effort is completed during the alternative's service life.

Without a present value discount, a simple arithmetic total of the estimated costs of initial construction plus anticipated future costs of inspection, maintenance, and rehabilitation results in a total, undiscounted cost for the upstream replacement of the Wood Bridge (Alternative 2) of 17.3 million dollars, while the total, undiscounted cost for the rehabilitation of the Wood Bridge (Alternative 4) would be 38.2 million dollars, or nearly 21 million dollars more expensive - more than twice the total cost of replacement.

No doubt some will argue that only costs with a present value discount provide an accurate comparison, but several simple, objective factors illustrate that costs calculated with a present value discount do ***not*** accurately reflect the real-world economic realities of the actual costs of funding these two bridge alternatives in the future.

A simple definition of present value is: "… the current worth of cash to be received in the future with one or more payments, which has been discounted at a market rate of interest." (http://www.accountingtools.com/present-value-definition). In practical terms, present value is compound interest in reverse: in other words, present value is the amount of cash that would need to be ***invested or saved today***, in order to have a specific amount (or pay a specific cost), at a specific date in the future. The prerequisite for a specific present value to yield a targeted amount in the future is that the present value amount, in cash, ***is actually invested or saved today***, so that the rate of return/interest, compounded over the intervening years, will result in the desired future amount.

The problem with using this approach in connection with future bridge costs is that we all know that MaineDOT, unfortunately, will ***not*** be receiving sufficient funding to set aside and reserve that present cash amount so it can grow to meet those future costs. But if no present cash amount is actually being set aside to grow, then using a present value discount does not reflect real-world economic realities of what will be required to fund these costs in the future.

The hard truth is that ***all*** of these future costs, ***at full value***, will have to be met by future year to year budgets, as there will be no reserve fund, established now, growing to meet these costs.

In fact, the reality is even harsher: The above table provides the total estimated costs of initial construction plus anticipated future inspection, maintenance, and rehabilitation costs for replacement or rehabilitation without a present value discount, but it uses ***today's*** costs for all anticipated future costs. In other words, these totals make no provision for the inevitable impact of inflation. We all know that we will not be able to purchase something that costs a dollar (or a million dollars) today for the same amount 20 years from now - much less 75 or 100 years from now.

While current inflation rates are exceptionally low (1.1% for the year ending 2016-08), we are looking at life cycle costs over the next 75 to 100 years. Given that timeline, the average inflation rate over the past century (3.29%) is much more likely to reflect inflation rates over the next century. And, at that unremarkable inflation rate, costs double every 22 years.

Whatever the actual inflation rate is over the next 75 to 100 years, it only takes simple arithmetic to see that the increased costs resulting from inflation will be much, much higher when applied to a current cost total of 38.2 million dollars than it will be for a total of 17.3 million dollars. And ***all*** those costs, including inflation, will have to be met by future year to year budgets.

It's not difficult to discern which alternative will be very substantially more burdensome to Maine taxpayers.

COMMENT #32

From:	Greg Paxton
To:	Chase, Cassandra (FHWA); joel.c.kittredge@maine.gov
Cc:	Kirk Mohney (Kirk.Mohney@maine.gov)
Subject:	Comments on Frank J. Wood Bridge, Brunswick-Topsham
Date:	Monday, March 06, 2017 11:56:22 PM
Attachments:	Maine Preservation Comments on Frank J. Wood Bridge, Brunswick-Topsham.docx

Cassie and Joel

Please find Maine Preservation's Comments attached. Thank you for the opportunity to comment.

Please add Maine Preservation as an Interested Party.

Thank you.

Greg

Greg Paxton
Executive Director
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March 6, 2017

Joel Kittridge
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Cassandra Chase
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Dear Cassandra and Joel:

Thank you for the opportunity for Maine Preservation to comment on the Brunswick-Topsham 22603.00, Frank J. Wood Bridge project and its effects. Demolition of this bridge would have an adverse effect on the scenic and historic qualities of the district and should not be undertaken until the significance of the bridge has been properly assessed, the impacts of its demolition completely analyzed and the economic evaluation of rehabilitation vs. replacement analyzed in the context of current bridge repair and maintenance protocols and experiences on steel truss bridges nationwide.

Given that in the 16 years since the completion of the last survey of historic bridges that of the 14 Warren truss bridges found individually eligible for the National Register in 2001, the Supplemental Supporting Information for a Finding of Effect report states that 10 have been replaced. Given that only four remain across the state, the significance of the Frank J. Wood Bridge should be reassessed given the removal of more than 70% of the eligible bridges in only 10 years. National Register eligibility includes structures not only of national or state significance, but structures of local significance.

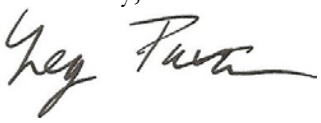
Other errors in the analysis of the significance of the bridge include that this document refers to it as "an intrusion." A contributing structure in a National Register district cannot be an intrusion. This term appears to arise from an overreliance on the earlier history of the district, even though the report later correctly notes that "Integrity is assessed in part by defining the essential physical features that must be present to represent significance." The history of former bridges is not relevant – they are gone - and do not detract from the significance of the present bridge.

Based on the letter of Waterfront Maine and other comments, it is clear that the disruption that removal, temporary replacement and complete replacement of the bridge will cause impacts that have not been completely assessed.

Finally the inexperience of MDOT with contemporary maintenance techniques and coatings for historic bridges found beneficial in other states has resulted in a too-short and too-expensive assessment of the expected lifetime and maintenance costs of a rehabilitated bridge. Given the shortage of funds for bridge repair and replacement, an assessment of the experience of other states in this regard could save the State considerable resources.

Thank you for this opportunity to comment.

Yours truly,



Greg Paxton
Executive Director