3.10 Cultural Resources

3.10.1 Introduction

The NHPA of 1966, as amended, defines historic properties as "any prehistoric or historic district, site, building, structure, or object included on or eligible for listing on the National Register [of Historic Places (National Register)] including artifacts, records, and material remains related to the district, site, building, structure, or object" (54 USC 300308). Historic properties ⁴⁶ are found both above and below ground. Archaeological sites or archaeological resources represent the locations of pre-contact and post-contact activities, while above-ground historic properties may include buildings, structures, objects, and sites that are usually at least 50 years old. Historic properties may occur as a grouping: historic/cultural landscapes consist of lands that have been culturally modified; historic districts consist of buildings and other elements that retain identity and integrity as a group; and linear historic districts can include canals, roads, railroads or other manmade linear features. Sacred sites, cemeteries, and burial places are also considered historic properties, although they are generally not considered eligible for the National Register unless they meet special requirements.

The NHPA establishes specific criteria for National Register eligibility:

"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 persons 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 components may lack individual distinction; or
- D. That have yielded, or may be likely to yield, information important in prehistory or history." (36 CFR 60.4)

3.10.1.1 Federal Requirements

Historic properties are afforded protection by compliance with Section 106 of the NHPA (Section 106) and its implementing regulations (36 CFR 800); Section 4(f) of the USDOT Act of 1966 (49 USC 303); and the NEPA of 1969 (42 USC 4321 *et seq.*) and the Council on Environmental Quality (CEQ) NEPA regulations (40 CFR 1500-1508).

Section 106 of the National Historic Preservation Act

Section 106 stipulates that "the head of any federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in any State and the head of any Federal department or independent agency having authority to license any undertaking shall,

prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register. The head of any such Federal agency shall afford the Advisory Council on Historic Preservation (ACHP) established under Title II of this Act a reasonable opportunity to comment with regard to such undertaking." (54 USC 306108). The implementing regulations (36 CFR 800) lay out the Section 106 consultation process.

Section 4(f) of the US Department of Transportation Act

Section 4(f) of the USDOT Act of 1966 [Section 4(f)] (49 USC 303) states that "...special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges and historic sites." The regulations governing Section 4(f) implementation (23 CFR 774) specify that the FHWA may not approve the use of a Section 4(f) property unless it determines: 1) that there is no prudent and feasible avoidance alternative, and 2) that the action includes all possible planning to minimize harm to the property from such use.

Chapter 4 of this FSEIS provides a Section 4(f) evaluation.

NEPA

Through this FSEIS, the Project is also complying with the NEPA of 1969 (42 USC 4321 *et seq.*) and CEQ NEPA regulations (40 CFR 1500-1508), which require that an undertaking consider the impacts of the actions on natural and cultural resources. According to the NEPA regulations, in considering whether an action may "significantly affect the quality of the human environment," an agency must consider, among other things, the "unique characteristics of the geographic area such as proximity to historic or cultural resources [40 CFR 1508.27(b)(3)]," and "the degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places" [40 CFR 1508.27(b)(8)].

3.10.1.2 State Requirements

In New Hampshire, historic resources are afforded protection under RSA 227-C:9, Directive for Cooperation in the Protection of Historic Resources, which directs New Hampshire's state agencies, departments, commissions, and institutions to fully cooperate with the NHDHR while administrating all state licensed, assisted, or contracted projects, activities, or programs to protect historical resources under their administration that may be adversely affected by a state undertaking. The purposes of this process are to locate and identify historical, architectural, archaeological, and historical archaeological resources within a project's impact area; apply the criteria for evaluation of significance to a resource to determine possible eligibility to the National Register, if not previously determined eligible or listed; assess the probable effects of a project on resources listed on or eligible for, the National Register; and avoid historic properties and/or develop appropriate mitigation or minimization methods to lessen a project's impact on affected historic properties. These directives are subject to the agency's budgetary limitations.

consistency with NEPA language, the discussion itself uses "historic properties," as the latter is more commonly used by agencies such as the ACHP, National Park Service, and NHDHR.

⁴⁶ NEPA generally categorizes above-ground and archaeological historic resources as "cultural resources," while Section 106 utilizes the term "historic properties" to refer to those properties listed in, or determined eligible for listing in, the National Register of Historic Places. While the title of this section is "Cultural Resources" to maintain

3.10.2 Methodology for the Identification of Historic Properties

All historic property investigations and consultations were conducted in accordance with Section 106 and its implementing regulations, NEPA, and RSA 227-C:9. Work associated with the above-ground historic properties survey was completed in accordance with NHDHR's Area Form Manual (updated 2015), NHDHR's Architectural Survey Policy (updated 2016), and appropriate guidelines set forth in National Register Bulletin No. 24, *Guidelines for Local Surveys: A Basis For Preservation Planning* (updated 1985).

3.10.2.1 Area of Potential Effects (APE)

The Area of Potential Effect (APE) is defined as "...the geographic area within which the undertaking may cause changes in the character of or use of historic properties if any such properties exist" (36 CFR 800.16(d)). The establishment of a Project's APE is based on the potential for effects, both physical and non-physical that may impact the character-defining features that qualify a historic property for the National Register.

Several factors were considered in determining the APE, including the evaluation of alternatives for the GSB Project. Work components across all alternatives were combined to develop an APE that considered the widest range of potential effects.

Potential impacts that informed the APE boundaries were varied. The GSB footprint, as well as a portion of the approach paths and areas leading to the bridge, were susceptible to potential physical changes resulting from the Project. Additionally, a temporary detour for bicycles and pedestrians to maintain connectivity during construction was considered. Potential non-physical effects included the visual impacts of potentially replacing all or portions of the GSB superstructure.

The resulting APE is an irregularly-shaped footprint, beginning approximately 600 feet north of the bridge crossing on Dover Point, and extending up to 1,500 feet west, 700 feet east, and 1,200 feet south of the crossing (**Figure 3.10-1**).

3.10.2.2 Methodology for the Identification of Above-Ground Historic Properties

Project Area Form: Background Research and Reconnaissance Survey

An updated Project Area Form (PAF) was submitted to NHDHR in September 2018, providing information updating the original Spaulding Turnpike PAF that was finalized in November 2005 (Spaulding Turnpike: Newington-Dover Project Area, ZMT-SPTP (formerly NWN-DOV). The goal of the PAF was to provide a high-level overview of the resources and historic contexts in the APE and provide recommendations for further survey work.

A site file search at NHDHR was completed in November 2018 to determine whether updates had been filed for inventory forms completed in 2005 as part of the larger Newington-Dover, Spaulding Turnpike Improvements Project, and whether additional properties within the current APE had been recorded. Much of the historical narrative and context discussion contained in the

2005 PAF still stands; therefore, current research focused on updating or enhancing these discussions, as appropriate, to bring them up to the present day. Attention was especially given to describing how the recent changes to transportation routes resulting from the Spaulding Turnpike Improvements Project have affected the land use, roadway layout, and integrity of the APE and individual properties discussed in the 2005 PAF. In addition, some historical development patterns described in 2005 have continued to play out in the intervening years, and relevant recent information was provided. Due to the specific nature of the updated information provided in the 2018 PAF update, research sources consisted primarily of map and historic aerial analysis to understand recent development, supplemented by consulting deeds, directory records, building permit records, and land plans, especially for properties not discussed in the 2005 PAF. Information provided by a property owner on Heaphy Lane clarified the recent evolution of this small collection of properties near the Dover Point waterfront.

A reconnaissance survey was conducted to photograph buildings and structures within the APE, as well as streetscapes. This included previously-recorded properties, as well as properties newly included in the 2018 PAF update, to understand and document noted changes in integrity since the preparation of previous inventory forms.

The 2018 PAF update identified 14 resources within the APE that were over 50 years old; 13 additional resources were less than 50 years old but helped inform discussions regarding recent development patterns. Based on the 2018 PAF update, six properties were identified for further survey via the preparation of NHDHR Inventory Forms (Individual or Area, as appropriate) or updates to existing forms **Table 3.10-1**.⁴⁷

Three of the properties were previously listed in the National Register or documented (in whole or in part) through state-level historic documentation. The Newington Railroad Depot and Toll House was listed in the National Register in 2010. In 2012, the Ira F. Pinkham House/Wentworth Summer Residence was recorded in a state-level Historic American Building Survey report, prepared by VHB (NH State No. 626).

Table 3.10-1 2018 PAF Update: Properties Recommended for Further Survey

City	Street #	Street Name	Property Name	Year Built	NHDHR #
Dover	430	Dover Point Rd	Ira F. Pinkham House/Wentworth Summer Residence	1853	DOV0093/ NH doc. #626
Dover	N/A	N/A	Hilton Park Roadside Safety Rest Area (pavilion only)	1938	DOV0150
Dover/ Newington	N/A	N/A	General Sullivan Bridge	1934	DOV0158/ NH doc. #703
Newington	137	Beane Ln	Margeson Cottage (named assigned after 2018 PAF update)	c. 1930	NWN0246 (number assigned

⁴⁷ One additional potentially historic area was subsequently evaluated through the preparation of an NHDHR Area Form, which was not discussed in the 2018 PAF update. See discussion below.

City	Street #	Street Name	Property Name	Year Built	NHDHR#
					after PAF update)
Newington	22	Bloody Point Rd	Axel Johnson Conference Center (Sprague Energy)	c. 1930	NWN-0SEA (formerly NWN-SP)
Newington	24	Bloody Point Rd	Newington Railroad Depot and Toll House	1873	NWN0168/ NR #10000187

Intensive Survey and Eligibility Evaluations

Multiple alternatives and elements of the Project were evaluated and narrowed down by the spring of 2019. As a result of the alternatives evaluation, the list of properties identified for further survey and evaluation resulting from the 2018 PAF update was refined per the discussion below. Ultimately, four properties were subject to intensive-level survey and evaluation via NHDHR Inventory Forms.

An intensive-level survey via the preparation of NHDHR Individual Inventory Forms was completed for three properties, as identified in the 2018 PAF update. One additional NHDHR Area Form, for the Bloody Point Area in Newington, was not discussed in the original or updated PAF, but was completed following the suggestion by a Consulting Party.

- Hilton Park Roadside Safety Rest Area (pavilion only, DOV0150) pavilion determined not eligible (inventory form update)
- General Sullivan Bridge (DOV0158) determined eligible (inventory form update)
- > 137 Beane Lane (NWN0246) determined not eligible; recommended for reevaluation when additions reach 50 years of age (new inventory form)
- Bloody Point Area (NWN-BLPT) determined not eligible (new inventory form)

One of the properties recommended for further study in the 2018 PAF update, the Axel Johnson Conference Center (Sprague Energy, NWN-0SEA, formerly NWN-SP) was among those identified for further study. As evaluations of alternatives progressed into 2019, it became clear that none of the alternatives to be evaluated in the SEIS had the potential to impact this property physically or non-physically due to the distance of the resource and intermediary landforms. Therefore, no NHDHR Inventory Form was completed for the property.

Inventory forms and Determinations of Eligibility are on file at the NHDHR offices in Concord, NH. Determinations of Eligibility for inventory forms completed for this Project are included in **Appendix I**.

3.10.2.3 Methodology for the Identification of Archaeological Resources

Archaeologists conducted a Phase IA archaeological sensitivity assessment (Bunker, et al. 2003) and a Phase IB intensive archaeological investigation/Phase II Determination of Eligibility (Tumelaire, et al. 2011; Tumelaire, et al. 2012) as part of the larger Newington-Dover, Spaulding Turnpike Improvements Project. Background research and documentary review were major components of the Phase IA study, to identify previously recorded archaeological resources and

to complete a chronology of past human activity in the Spaulding Turnpike Improvements Project Area. Data accumulated from archival resources were used to identify particular sites, features, or past land use patterns and to construct contexts to develop expectations for resource presence.

Archival research was completed using a variety of primary and secondary sources at a number of institutions, including Strawbery Banke Museum, the Portsmouth and Newington libraries, the New Hampshire Historical Society, the NHDHR, the NHDOT, and UNH. Documents reviewed included: state-wide inventory files maintained at the NHDHR; published and unpublished archaeological site reports; local and regional histories; historic topographic maps; and historic photographs and aerial photographs. Research was augmented with interviews with property owners, NHDOT personnel, NHDHR personnel, Strawbery Banke Museum historians, archaeologists, and marine specialists.

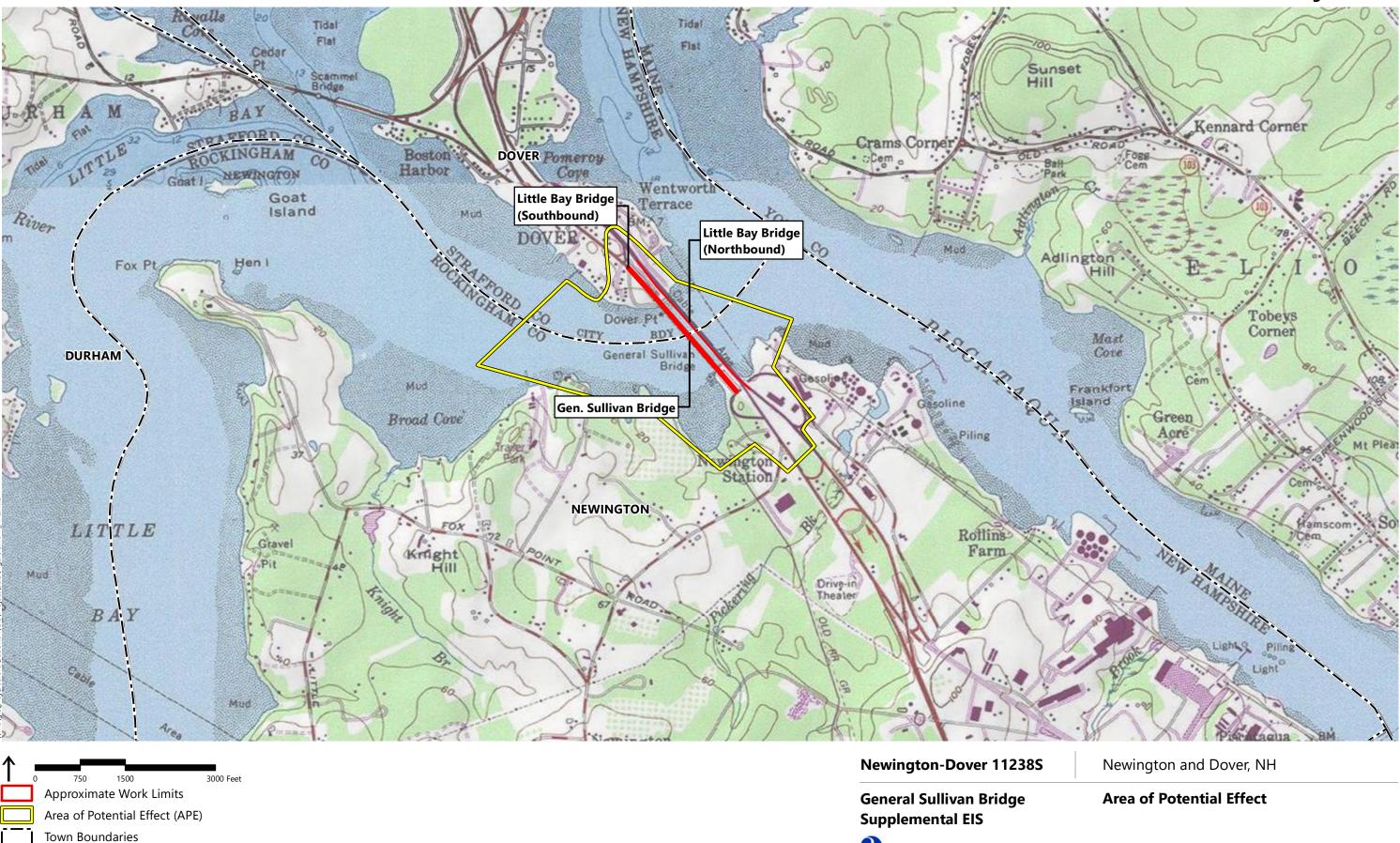
Phase IA background research was followed by a field inspection for both terrestrial and underwater resources. For terrestrial resources, all roadways within the project area were driven and a selected number of areas were walked; field survey was conducted along cove margins at low tide. Where sites were identified, these were recorded with preliminary field sketches and photographs. For maritime and underwater resources, specialists reviewed aerial photographs, conducted inspection at full-moon low tide, and created an underwater topographic view of the Spaulding Turnpike Improvements Project Area via remote sensing. The compilation of Phase IA background research and field studies resulted in the identification of sensitive areas, or areas with the potential for below-ground or underwater archaeological resources.

During the Phase IA inspection, a brickyard site (27-ST-0057) was identified at the base of the GSB, based on the presence of brick debris. The Phase IB effort resulted in the assessment the rubble was not a site (Tumelaire *et al.* 2011: 55), and the NHDOT proposed that a Phase II documentary search and cartographic analysis be undertaken for Test Area 21 (Tumelaire *et al.* 2011:51). The Phase II literature search focused on Dover Point brickyards with special attention on impacts from transportation (*i.e.*, roads, highways, and rail lines). Documentary research included the review of maps, population census data, and historical plans for the GSB and LBB.

For the Phase IB intensive archaeological investigation, archaeologists hand excavated shovel test pits aligned along transects in sensitive areas to confirm the presence or absence of archaeological resources. Archaeologists excavated test holes measuring 0.5 meter by 0.5 meter, screening all soil through 0.25-inch mesh to collect artifacts. The location of each shovel test pit was mapped on a field plan, and coordinates were collected with a hand-held Trimble Juno data collector and Pro 6H GPS receiver. Archaeologists recorded profiles on field forms and with digital photography.

In June 2019, archaeologists conducted additional Phase IB survey on the grounds of Hilton Park to confirm the presence or absence of archaeological resources within the limits of a proposed staging area. Testing was completed with the mechanical excavation of trenches to seek evidence of activities and features related to a brickyard site (27-ST-055). Archaeologists operated a small, tracked excavator to excavate trenches to sample for buried features and deposits.

Figure 3.10-1



Source: VHB, NH GRANIT, USGS 7.5-minute
Topographic Quadrangles Dover East and
Portsmouth, dated 1983

U.S. Department

3.10.2.4 Consultation

As part of the Section 106 consultation, the regulations under 36 CFR 800 require that the Federal agencies consult with the public about Projects and their effects on historic properties. By right, "Consulting Parties" include State Historic Preservation Officers (SHPOs); local governments; federally recognized Indian tribes/THPOs; Native Hawaiian Organizations; the ACHP; and applicants for federal assistance, permits, licenses, and other approvals. Individuals and organizations with a demonstrated legal, economic, or historic preservation interest in an undertaking may also request Consulting Party status from the responsible federal agency; their participation is subject to approval by the federal agency. Stakeholders interested in keeping abreast of the progress of Section 106 consultation may also participate as an "Interested Party."

As of May 2021, the following Consulting and Interested Parties have been identified and approved by the FHWA:

- > Kitty Henderson, Executive Director, Historic Bridge Foundation
- Nathan Holth, HistoricBridges.org
- > Lulu Pickering, Newington Historic District Commission
- Anne Rugg, Manager, CommuteSMART Seacoast (Retired; removed from Consulting Party list on 10/01/2020)
- Karen Saltus, President, Seacoast Area Bicycle Riders (Requested removal from Consulting Party list on 01/02/2020)
- Christopher G. Parker, Assistant City Manager, Director of Planning and Strategic Initiatives,
 City of Dover
- Karen Anderson, Newington Special Project Coordinator, Town of Newington (Interested Party)
- Martha Roy, Newington City Administrator, Town of Newington (Interested Party)
- Senator David Watters, New Hampshire State Senate District 4 (Interested Party)

Information regarding Section 106 consultation meetings and public information meetings can be found in **Chapter 7**, *Public, Agency and Tribal Coordination*. During the process, the PAF update, inventory forms, and effects determinations were distributed to the Consulting and Interested Parties for review and input. These documents were also made available on the Project's website, at www.newington-dover.com/gsb_subsite.

3.10.3 Affected Environment

3.10.3.1 Identified Above-Ground Historic Properties

Based on a review of the architectural and/or historical significance of above-ground resources in the APE pursuant to 36 CFR 800.4 and 36 CFR 67.8, three properties were identified as listed in the National Register or eligible for listing.

A description of the three properties and a summary of their significance is listed below. These properties are also identified in **Figure 3.10-2**, *Cultural Resources*. Additional documentation and a discussion of eligibility is available at NHDHR, NHDOT and FHWA.

General Sullivan Bridge (DOV0158) (GSB)

Built in 1934, the GSB is a 1,528-foot-long bridge, with the primary superstructure consisting of a combination deck truss and partial through arch truss, over Little Bay between the Town of Newington and the City of Dover, New Hampshire. The eligible boundary of the GSB includes the footprint of the bridge itself, its abutments, and the south approach in Newington, leading north from Shattuck Way. The north abutment, and north and south approaches, are considered non-contributing, as they have been rebuilt and/or realigned.

The bridge is significant under Criterion A for its role in the transportation history of the Seacoast area. Constructed at a key crossing along a former turnpike route, the bridge helped reestablish the eastern end of the old turnpike road at Cedar Point in Durham. Previously all traffic between Portsmouth and Concord traveled first to Dover, then through Barrington on NH 9 to join the First New Hampshire Turnpike (US 4) in Northwood. The GSB allowed a more direct route through Durham, Lee, and Nottingham and reestablished the usefulness to the full length of the Turnpike in the early 20th century. At the same time, the bridge, replacing the former road and railroad bridge between Newington and Dover Point, became part of the East Side Road trunk line highway, from the seacoast through Dover to points north. The bridge later carried the Spaulding Turnpike when it was first created in the 1950s.

Construction of the bridge was covered by national engineering publications, due to its technological advances. It was completed in 1934 by the firm of Fay, Spofford & Thorndike, as one of the four textbook examples of the firm's continuous bridge designs that were largely responsible for the adoption of long-span continuous trusses across the country (along with the Lake Champlain Bridge between Crown Point, NY and Chimney Point, VT, and bridges over the Cape Cod Canal in Bourne and Sagamore, MA). Not only did the bridges demonstrate the feasibility of analyzing stresses and the economic advantages in continuous designs, the bridges also became known for an elegant, three-part design of a through-arch truss flanked by deck trusses, which is evident in the GSB. The bridge is nationally significant under Criterion C for its design and engineering.

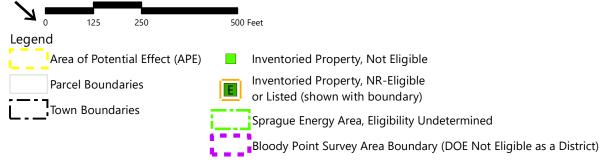
The Newington Railroad Depot and Toll House (NWN0168/ NR #10000187)

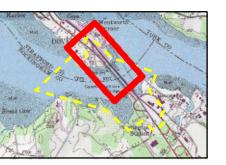
The Newington Railroad Depot and Toll House at 24 Bloody Point Road is located at the tip of Bloody Point in Newington on 3.8 acres of land and marks the former south approach of the Portsmouth and Dover Railroad at a dedicated railroad bridge over the bay, just east of the GSB and LBBs. Constructed in 1873, the 2½-story building retains clapboard siding and wood trim and is a relatively rare example of a depot that also served as a toll house and residence for the stationmaster/toll taker, resulting in a residential form for a railroad-related resource. The railroad tracks and bridge were removed following the abandonment of the line and the operation of the station in 1934. The building is in fair condition, currently vacant but "mothballed" for potential future use.

The property was listed in the National Register in 2010 and is significant under Criteria A and C in the areas of transportation and architecture. It is noted in the nomination that the ending date for the period of significance, 1934, coincided with the construction of the GSB and the abandonment of the railroad line, which ended the utilization of the depot property for transportation purposes.

Figure 3.10-2







General Sullivan Bridge Supplemental EIS



U.S. Department of Transportation Federal Highway

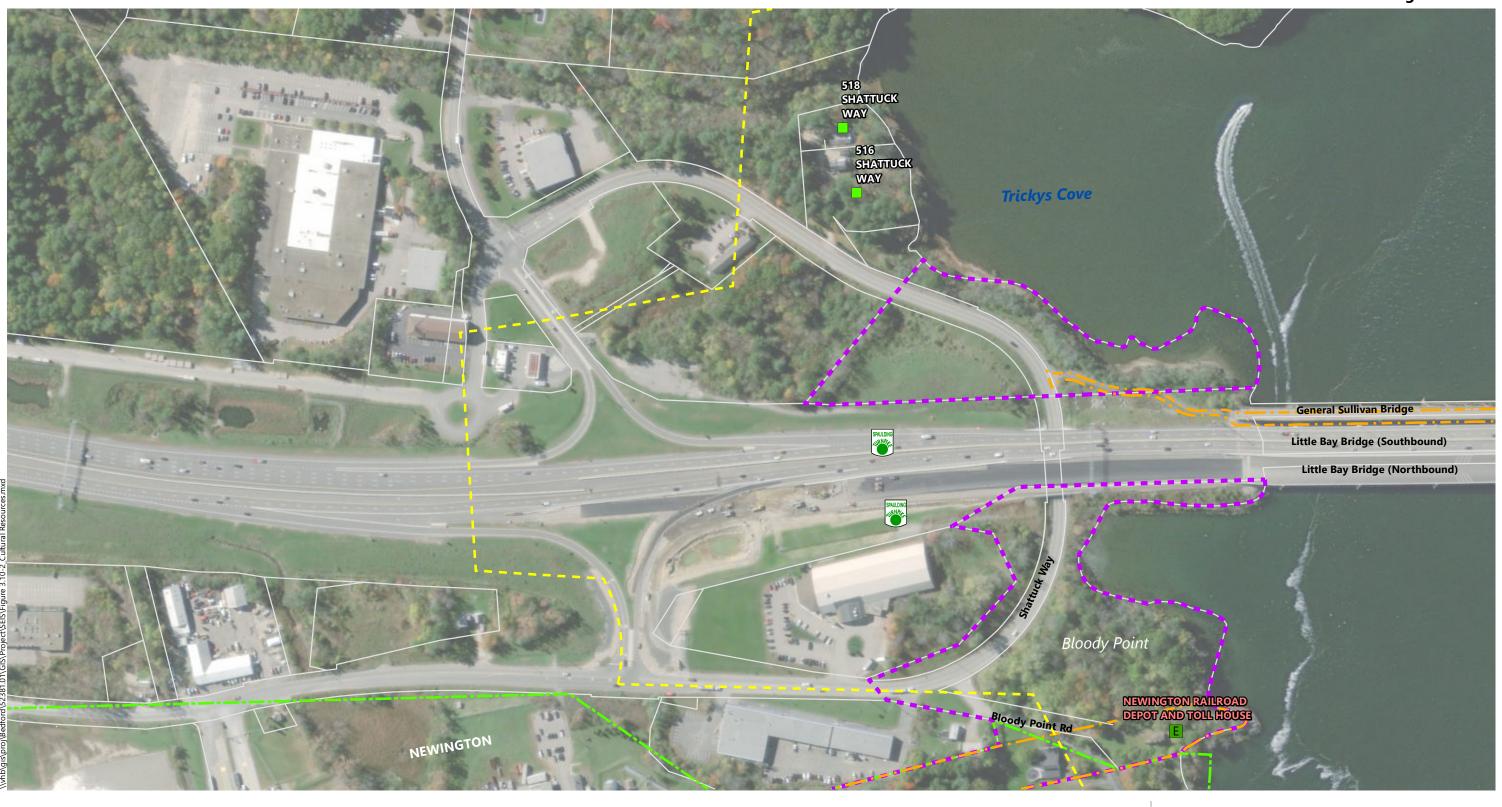


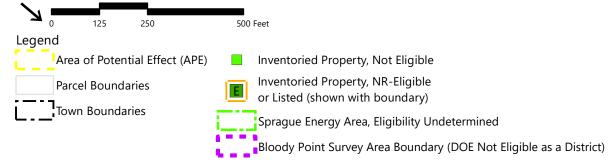
Newington and Dover, NH

Cultural Resources

Sheet 1 of 4

Figure 3.10-2







General Sullivan Bridge Supplemental EIS



U.S. Department of Transportation Federal Highway

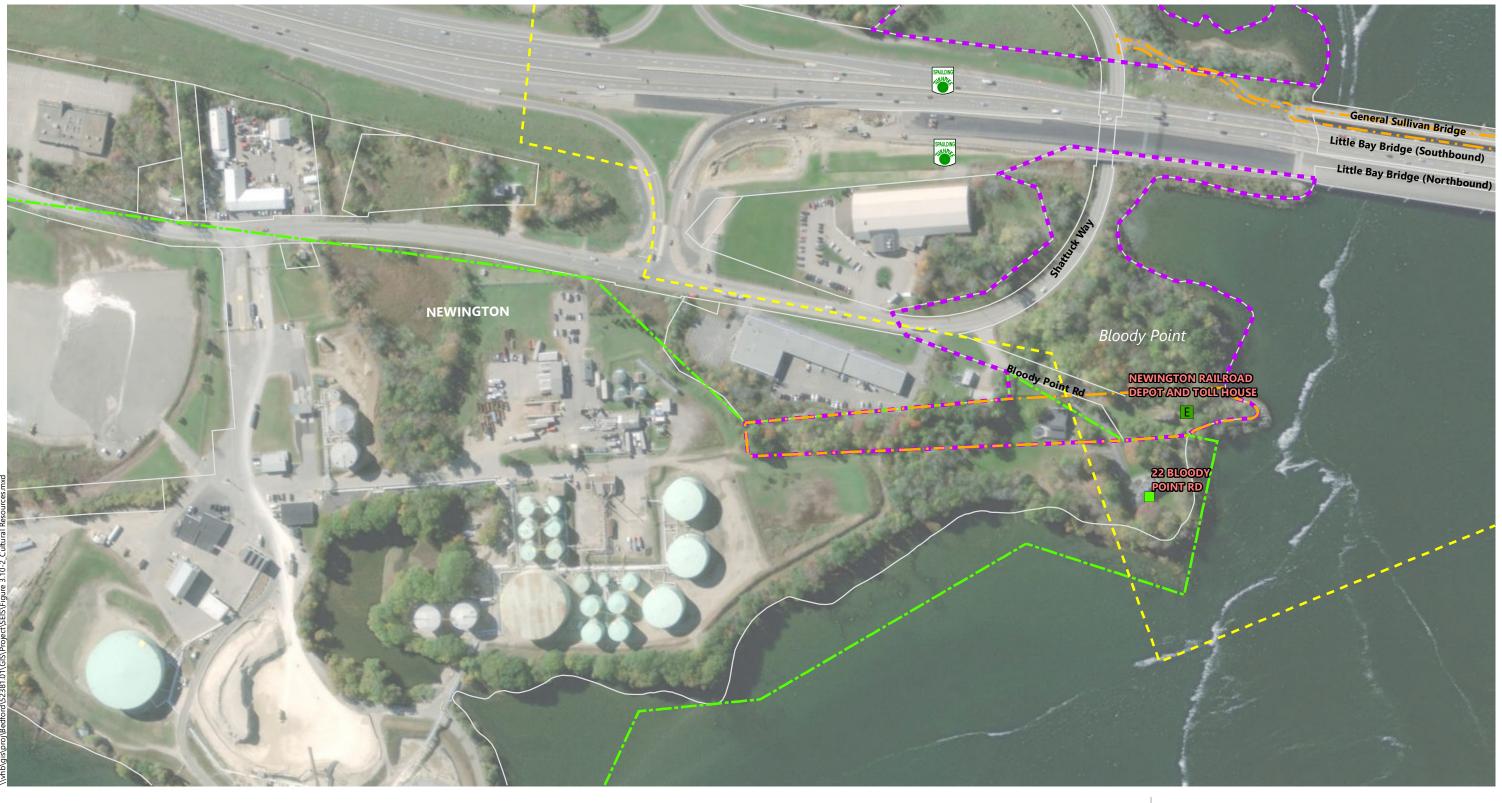


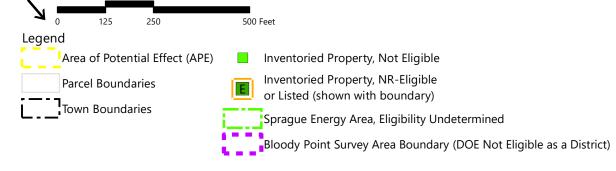
Newington and Dover, NH

Cultural Resources

Sheet 2 of 4

Figure 3.10-2







General Sullivan Bridge Supplemental EIS



U.S. Department of Transportation Federal Highway



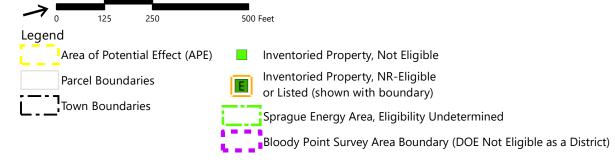
Newington and Dover, NH

Cultural Resources

Sheet 3 of 4

Figure 3.10-2







General Sullivan Bridge Supplemental EIS



U.S. Department of Transportation Federal Highway



Newington and Dover, NH

Cultural Resources

Sheet 4 of 4

Ira F. Pinkham House/Wentworth Summer Residence (DOV0093)

The Ira F. Pinkham House/Wentworth Summer Residence at 430 Dover Point Road in Dover (DOV0093) was constructed c. 1853 for farmer and brickmaker Ira Pinkham. The 1 ½-story house is located on a 0.8-acre property adjacent to the Spaulding Turnpike in Dover. The house has a sidehall plan, is oriented gable-end to the street, and features an early 20th century 1-story enclosed wraparound porch with a pedimented entrance. It was purchased as a summer residence by businessman Frank E. Wentworth and his wife Annie in 1912, who likely enclosed the porch and applied the asbestos shingles in the 1930s and 1940s. A 19th-century barn associated with the house was relocated off-site in 2011-2012.

The property, including the house and an associated barn, was determined eligible for listing in the National Register under Criteria A and C in 2005 for significant associations with Dover Point's former brick-making industry, and the 20th century development of Dover Point as a seasonal destination.

3.10.3.2 Identified Archaeological Resources

Archaeologists conducted a Phase IA archaeological sensitivity assessment (Bunker *et al.* 2003) and a Phase IB intensive archaeological investigation/Phase II Determination of Eligibility (Tumelaire *et al.* 2011; Tumelaire *et al.* 2012) in the Study Area. The 2007 FEIS identifies areas of archaeological sensitivity based on these Phase 1A and Phase 1B findings, for the larger Newington-Dover, Spaulding Turnpike Improvements Project.

The FEIS Phase IA archaeological analysis identified the western side of Hilton Park in Dover, and additional developed area to the northwest (approximately 12.7 acres), as exhibiting sensitivity (*i.e.*, Area 16). This area includes an approximately 0.5-acre verified site, identified as a brickyard (27-ST-55 and 27-ST-56, *i.e.*, Area 17) within Hilton Park. The FEIS Phase IA archaeological analysis also identified the eastern side of Hilton Park to be sensitive (*i.e.*, Area 18). This area includes a portion of Dover Point (*i.e.*, Area 22) associated with an historic railroad bed and pilings.

Within Dover, a thin strip of ground (approximately 0.2 acre) curving along the northern shore of the Piscataqua River beneath the GSB and LBB was identified as a brickyard (identified as Area 21 or site 27-ST-57) during a Phase IA sensitivity assessment completed in 2003. Additional background research and cartographic analysis revealed that the shoreline had been altered and filled from construction of the GSB in 1933, and construction of the LBB in the 1960s and 1980s. Inspections in 2009 resulted in the conclusion that this area was not an archaeological site.⁴⁸

For the Phase IB intensive archaeological investigation, archaeologists hand excavated shovel test pits aligned along transects in five sensitive areas (**Table 3.10-2**), to confirm the presence or absence of archaeological resources.

Table 3.10-2 Findings of the Phase IB Intensive Archaeological Investigation

Contract	Test Area	Results
L	14	No Archaeological Resources Identified
L	16	No Archaeological Resources Identified
L	21	No Archaeological Resources Identified
L	HP1	No Archaeological Resources Identified
М	30	No Archaeological Resources Identified

In June 2019, a Phase IB intensive archaeological investigation was completed in Hilton Park to confirm the presence of archaeological deposits and features relating to Brickyard 27-ST-0055, which was identified in 2003 for the larger Newington-Dover, Spaulding Turnpike Improvements Project. ⁴⁹ The recent Phase IB intensive archaeological investigation identified a brick floor and evidence of thermally altered soil within the western side of Hilton Park. The brick floor extends across a portion of Hilton Park that is adjacent to the area proposed for construction staging. Within Newington, the immediate area surrounding the GSB and LBB abutments was determined to lack integrity and does not exhibit sensitivity for archaeological resources.

3.10.4 Environmental Consequences

3.10.4.1 Impact Methodology

In the Section 106 implementing regulations, the consultation process may have the following outcomes:

No Historic Properties Affected. If the agency official finds that either there are no historic properties present or there are historic properties present but the undertaking will have no effect upon them (36 CFR 800.4(d)(1)).

Finding of Adverse Effect. An adverse effect is determined when an undertaking 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, and association (36 CFR 800.5(a)(1)).

Adverse effects include, but are not limited to (36 CFR 800.5(a)(2)):

- > Physical destruction of or damage to all or part of the property;
- Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR 68) and applicable guidelines;
- Removal of the property from its historic location;
- > Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;

⁴⁸ In May 2009, Dr. Kathleen Wheeler inspected the area with Dr. Joyce McKay of the New Hampshire Department of Transportation, at which time both agreed that the resource (identified as Area 21 or site 27-ST-57) was not an archaeological site (Tumelaire, *et al.* 2011:55).

⁴⁹ Independent Archaeological Consulting. 2019. End-of-Field Report, Hilton Park 11238, Phase IB Intensive Archaeological Investigation, Proposed Staging Area. Unpublished Technical Report issued July 12, 2019.

- Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;
- Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and
- Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

Finding of No Adverse Effect. The agency official, in consultation with the SHPO/THPO, may propose a finding of no adverse effect when the undertaking's effects do not meet the above definition of "adverse effect." This finding may also occur when undertaking is modified or conditions are imposed such as the subsequent review of plans for rehabilitation by the SHPO/THPO to ensure consistency with the Secretary's Standards for the Treatment of Historic Properties (36 CFR 68) and applicable guidelines, to avoid adverse effects (36 CFR 800.5(b)).

For the purposes of this FSEIS, adverse effects on historic properties are further evaluated as direct or indirect. The Section 106 implementing regulations do not define "direct" and "indirect" impacts, other than to note, "Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative" [36 CFR 800.5(a)(1)].

While effects evaluations on historic properties have often interpreted "direct effects" as physical impacts and "indirect effects" as non-physical impacts, a recent opinion by the US Court of Appeals for the District of Columbia provides guidance on more nuanced definitions. Although the court case examined evaluation of effects under Section 110(f) of the NHPA⁵¹, the ACHP has indicated the definitions of "direct" and "indirect" may be applied to Section 106 as well. Based on the guidance provided by this ruling, the distinction between direct and indirect effects is determined by the causality of the effect, not the physicality of the effect.

Direct effects occur when an effect comes from the time and place of the Project with no intervening cause. These effects may include physical, visual, auditory, or other impacts resulting directly from the Project.

Indirect effects to historic properties are those caused by the undertaking that are later in time or farther removed in distance but are still reasonably foreseeable.⁵²

This FSEIS also considers adverse effects to historic properties in terms of duration, as temporary or permanent.

Temporary effects are most often related to the period of construction. They may include impacts due to construction activities, or protective measures implemented during construction such as the establishment of detour routes for bicycles and pedestrians.

Permanent effects are ongoing and will be in place for the reasonably foreseeable future.

3.10.4.2 Impacts to Above-Ground Historic Properties

Direct Impacts

No-Action Alternative

Ira F. Pinkham House/Wentworth Summer Residence (DOV0093): The Ira F. Pinkham House/Wentworth Summer Residence is located nearly a quarter-mile northwest of the GSB, on Dover Point Road and the intervening road alignment and topography preclude a visual relationship between this historic property and the bridge crossing. As there is no physical or visual connection between this resource and the bridge crossing, there would be no direct, permanent or temporary impacts under the No-Action Alternative.

Newington Railroad Depot and Toll House (NWN0168/NR #10000187): The bridge crossing is located approximately 1,400 feet from this resource's National Register boundary and is set on the far side of multiple bridge structures constructed over the last fifty-plus years. Thus, visibility of the bridge crossing is limited to the tip of Bloody Point along the water, where the center span of the GSB peeks up above the LBB, and portions of the truss can be seen between the piers of the modern bridges. As the No-Action Alternative retains the GSB, there would be no direct, permanent or temporary impacts on this historic property.

General Sullivan Bridge (DOV0158): Under the No-Action Alternative, the GSB (DOV0158) would only undergo routine maintenance. This alternative would not correct the existing state of substantial deterioration, which has resulted in the bridge being structurally deficient. Due to the continued and rapid deterioration of the GSB, the No-Action Alternative would result in an adverse, direct, and permanent effect to this historic property. Additionally, under the terms of the existing permit for the GSB and expanded LBB issued by the USCG, the GSB would eventually need to be removed.⁵³

Alternative 1

Ira F. Pinkham House/Wentworth Summer Residence (DOV0093): As in the No-Action Alternative, the bridge crossing is located outside of visual distance from this historic property. Additionally, no roadwork on the north approach from Dover Point Road would be required under Alternative 1, meaning all elements of the Project associated with the rehabilitation of the GSB would remain far removed from the Ira F. Pinkham House/Wentworth Summer Residence. As

⁵⁰ US Court of Appeals. 2019. National Parks Conservation Association v. Todd T. Semonite, ACOE Chief, et al. Appeal from the US District Court from the District of Columba. USCA Case No. 18-5179.

Section 110 requires each Landholding Agency to identify, evaluate, and protect any historic property, and ensure that the historic property within its inventory is managed with consideration for its historic value. Section 110(f) of the NHPA (54 USC 306107) requires an agency to minimize harm to any National Historic Landmark "directly and adversely" affected by a project.

⁵² The definitions outlined in the court opinion have been summarized on the ACHP website: Advisory Council on Historic Preservation. 2019. Court Rules on Definitions; Informs Agencies on Determining Effects. June 10, 2019.

Accessed from https://www.achp.gov/news/ court-rules-definitions-informs-agencies-determining-effects. Accessed on July 15, 2019.

On November 30, 2006, Gary Kassof of the USCG sent a letter to Marc G. Laurin, Senior Environmental Manager of NHDOT, regarding the Draft Environmental Impact Statement for the Newington-Dover, 11238 project. The USCG advised NHDOT that the GSB should be removed as it no longer served a transportation purpose, and that a clear and reasonable rationale must be presented for retaining or rebuilding the structure. The letter also stipulated that the bridge permit application to be submitted must address the need to retain or rebuild the GSB and, if the old bridge is to be removed, should include complete removal of all parts not utilized in the new structure.

described in **Section 3.8**, *Noise*, the Action Alternatives would result in a temporary increase in noise associated with construction equipment. Alternative 1 would result in the greatest duration of increased noise level of up to three years. However, temporary increases in noise levels would not impact the character-defining features for which this property is eligible, nor is it anticipated to affect the ongoing use of the property during construction. Therefore, there would be no direct, permanent or temporary impacts to this property under Alternative 1.

Newington Railroad Depot and Toll House (NWN0168/NR #10000187): As the GSB would be rehabilitated under Alternative 1, much of the potential impacts to the Newington Railroad Depot and Toll House would be similar to those under the No-Action Alternative. As noted above, **Section 3.8**, Noise concludes that increased noise levels associated with the Action Alternatives would be temporary in nature; as a historic transportation resource, having a quiet setting is not a character-defining feature of this property, and a temporary noise increase during construction is not anticipated to affect the ongoing use of the property. Thus, Alternative 1 would have no direct, permanent or temporary impacts to this historic property.

General Sullivan Bridge (DOV0158): The rehabilitation of the GSB would include the replacement of the bridge deck and repairs to the substructure and truss superstructure to support loading requirements. On the sides of the truss superstructure, approximately 39 members and 54 gusset plates require repairs or replacement in kind. In addition, eight of the nine spans of the upper, overhead lateral bracing and all nine spans of the lower lateral bracing require repairs or replacement in kind. A pedestrian bridge railing would be installed, and the Newington (south) abutment would be rehabilitated. Work would also include cleaning, repainting, and repointing bridge elements.

The 2008 MOA stipulated that the NH SHPO agreed that "...the removal and replacement of the floor system and any necessary replacement of rivets with bolts are not considered to be adverse effects." Similarly, it is assumed that in-kind replacement of braces and other structural and substructure elements would not be considered adverse effects and would have an overall beneficial effect of saving the bridge. The new pedestrian railing would be designed to have minor physical and visual impact, so as not to diminish the historic materials and aesthetic of the GSB. Therefore, Alternative 1 would result in a direct and permanent impact to the bridge, but these impacts would not constitute an adverse effect.

Alternative 3

Ira F. Pinkham House/Wentworth Summer Residence (DOV0093): Under Alternative 3, roadwork on Dover Point Road would be necessary. These road improvements would be limited to resolving minor alignment concerns between Dover Point Road and the new approach leading to the new bridge spans and would end approximately 400 feet from this historic property. Therefore, there would be no physical impacts to the property. As described in **Section 3.8**, Noise, Alternative 3 would increase noise levels due to construction temporarily for a period of 1.5 to two years, a shorter duration than Alternative 1 but potentially at a slightly higher intensity. However, temporary increases in noise levels would not impact the character-defining features for which this property is eligible and are not expected to inhibit the use of this property during construction. Thus, Alternative 3 would result in no direct, temporary or permanent effects on the Ira F. Pinkham House/Wentworth Summer Residence.

Newington Railroad Depot and Toll House (NWN0168/NR #10000187): As noted above, there are no physical impacts to this property under any alternative. However, the replacement of the approach spans of the GSB would remove portions of the truss that have been visible features of the landscape of the bridge crossing, in which the Newington Railroad Depot and Toll House and the GSB have co-existed for over seven decades. Although the last remnant of visual connection between the Depot and the GSB would be removed under Alternative 3, for the most part the visual link between the two resources was previously severed by the twentieth- and twenty-first century construction of new bridge structures. Therefore, the removal of the approach spans under Alternative 3 would be noticeable from this property, but this effect would not be adverse.

Additionally, a temporary increase in noise levels associated with the construction of Alternative 3 would not diminish the qualities that make this property eligible for the National Register, nor impact the ongoing use of the property. Thus, Alternative 3 would cause permanent, direct impacts to this historic property, but these impacts would result in no adverse effect.

General Sullivan Bridge (DOV0158): Under Alternative 3, the GSB's central spans (Spans 4, 5, and 6) would be retained, while the approach spans (Spans 1, 2, 3, 7, 8, and 9) would be replaced. The piers and abutments would be retained. This alternative would retain the visually prominent arched central spans, as well as the elegant continuous deck truss/through-truss configuration that defines the bridge as a significant and influential design marrying technological innovation and aesthetics. However, Alternative 3 would result in the removal and replacement of two-thirds of the spans with modern materials, representing a consequential loss of historic materials. Retention of the substructure would not offset the loss of the superstructure spans, as the significance of the bridge's design is carried in its notable and recognizable superstructure truss system.

Removal of a notable and recognizable part of the bridge superstructure essentially negates its significance under Criteria A and C. As the most visible and recognizable element of the GSB, the superstructure embodies the engineering advances and aesthetics that define the bridge's contribution to the development of the national highway network. The replacement of the historic bridge would result in the physical loss of an early, nationally-significant example of its engineering design; dwindling of the bridge type in New Hampshire and nationally; and the loss of this major link in the transportation network of the region, whose evolution is intertwined with the history of the region itself.

Thus, Alternative 3 would have an adverse, direct, and permanent effect on this historic property, although minimized to an extent by the retention of the arched central spans and characteristic continuous deck truss/through-truss configuration.

Alternative 6

Ira F. Pinkham House/Wentworth Summer Residence (DOV0093): Although Alternative 6 includes the replacement of the entire GSB superstructure (both the approach and center spans), the impacts to the Ira F. Pinkham House/Wentworth Summer Residence would be similar to that of Alternative 3. Thus, there would be no temporary or permanent direct impacts to this historic property.

Newington Railroad Depot and Toll House (NWN0168/NR #10000187): The replacement of the GSB superstructure would result in a direct, permanent impact to this historic resource. However, for the reasons discussed in Alternative 3, these impacts would not constitute an adverse effect.

General Sullivan Bridge (DOV0158): Under Alternative 6, the entire GSB superstructure would be demolished, increasing the magnitude of the loss of this primary character-defining feature. The removal of the superstructure would irreversibly impact the historic integrity of the bridge, and therefore its eligibility for the National Register. Therefore, this alternative would result in an adverse, direct, and permanent effect to the GSB.

Alternative 7

Ira F. Pinkham House/Wentworth Summer Residence (DOV0093): For the same reasons as those outlined under Alternatives 3 and 6, Alternative 7 would result in no direct, temporary or permanent effects to this property.

Newington Railroad Depot and Toll House (NWN0168/NR #10000187): The replacement of the GSB superstructure would result in a direct, permanent impact to this historic resource under Alternative 7. However, for the reasons discussed in Alternatives 3 and 6, these impacts would not constitute an adverse effect.

General Sullivan Bridge (DOV0158): Under Alternative 7, the GSB superstructure would be demolished. For the same reasons as those outlined under Alternative 6, Alternative 7 would result in an adverse, direct, and permanent effect to the GSB.

Alternative 9 (Preferred Alternative)

Ira F. Pinkham House/Wentworth Summer Residence (DOV0093): Alternative 9 would involve roadwork on Dover Point Road. These road improvements would be limited to resolving minor alignment concerns between Dover Point Road and the new approach leading to the new bridge spans, and would end approximately 400 feet from this historic property. Therefore, there would be no physical impacts to the property. As described in **Section 3.8**, Noise, Alternative 9 would increase noise levels due to construction temporarily for a period of 1.5 to two years, a shorter duration than Alternative 1 but potentially at a slightly higher intensity. However, temporary increases in noise levels would not impact the character-defining features for which this property is eligible and are not anticipated to inhibit use of the property during this time period. Thus, Alternative 9 would result in no direct, temporary or permanent effects on the Ira F. Pinkham House/Wentworth Summer Residence.

Newington Railroad Depot and Toll House (NWN0168/NR #10000187): As noted above, there are no physical impacts to this property under any alternative. However, the replacement of the approach spans of the GSB would remove portions of the truss that have been visible features of the landscape of the bridge crossing, in which the Newington Railroad Depot and Toll House and the GSB have co-existed for over seven decades. Although the last remnant of visual connection between the Depot and the GSB would be removed under Alternative 9, for the most part, the visual link between the two resources was previously severed by the twentieth- and twenty-first century construction of new bridge structures. Therefore, the removal of the approach spans under Alternative 9 would be noticeable from this property, but this effect would not be adverse.

Additionally, a temporary increase in noise levels associated with the construction of Alternative 9 would not diminish the qualities that make this property eligible for the National Register. It is not anticipated that construction-period noise levels would inhibit use of the property. Thus, as with Alternatives 3, 6, and 7, Alternative 9 would cause permanent, direct impacts to this historic property, but these impacts would result in no adverse effect.

General Sullivan Bridge (DOV0158): Under Alternative 9, the entire GSB superstructure would be demolished, increasing the magnitude of the loss of this primary character-defining feature. The removal of the superstructure would irreversibly impact the historic integrity of the bridge, and therefore its eligibility for the National Register. Therefore, this alternative would result in an adverse, direct, and permanent effect to the GSB.

Indirect Impacts

This section describes the potential indirect impacts of the alternatives on cultural resources. The APE identified for the Project (**Section 3.10.2**, *Methodology for the Identification of Historic Properties*) extends beyond the Study Area defined in **Section 1.1**, *Study Area*, namely along the banks of the Little Bay from which the GSB is visible. However, the reasonably foreseeable actions considered for the assessment of indirect effects to historic properties do not differ between the Study Area and the APE.

No-Action Alternative

Ira F. Pinkham House/Wentworth Summer Residence (DOV0093): Under the No-Action Alternative, potential indirect impacts would consist of the permanent lack of direct recreational access and connectivity for non-vehicular use between Newington and Dover over the Little Bay. The lack of connectivity would not indirectly impact this historic resource.

Newington Railroad Depot and Toll House (NWN0168/NR #10000187): For similar reasons, there would be no measurable indirect impacts to the historic Newington Railroad Depot and Toll House resulting from the No-Action Alternative. There may be less use of the property for recreational reasons if the non-motorized connection to Dover is eliminated.

General Sullivan Bridge (DOV0158): Under the No-Action Alternative, impacts to the GSB would be direct in nature; the permanent severance of recreational access over the Little Bay would result in increased deterioration of the bridge and safety hazards associated with that determination, which are all direct impacts. Thus, there would be no indirect impacts to the GSB under the No-Action Alternative.

Action Alternatives

Ira F. Pinkham House/Wentworth Summer Residence (DOV0093): None of the Action Alternatives would result in measurable indirect impacts on the Ira F. Pinkham House/Wentworth Summer Residence. Improving connectivity for non-motorized transportation across the Little Bay, whether through the rehabilitation of the GSB through Alternative 1 or the partial or wholesale replacements of the bridge under the other Action Alternatives, would result in induced growth.

There are no anticipated indirect effects to this property's character-defining historic features.

Newington Railroad Depot and Toll House (NWN0168/NR #10000187): Indirect impacts to this historic property are identical across all Action Alternatives. The re-introduction of recreational connectivity across the Little Bay, through the reopening of the GSB or the construction of a new structure, would not indirectly impact the property in a measurable way. None of the Action Alternatives would be a substantial source of noise during operations. Connection improvements may encourage increased visitation to the Newington Railroad Depot and Toll House property by recreation users, but this would not impact its historic, character-defining features and may help ensure its viability for future use.

General Sullivan Bridge (DOV0158): Under Alternative 1, impacts associated with maintaining connectivity between Newington and Dover via the GSB would consist entirely of physical, direct impacts to this historic structure, resulting in no adverse effect. Thus, there would be no indirect impact to the GSB under this Action Alternative.

The adverse effects of Alternatives 3, 6, 7, and 9, when considered with other past, present, and reasonably foreseeable projects, would not result in indirect impacts to the GSB because the superstructure would be removed or altered to the extent of permanently impacting the bridge's eligibility for listing in the National Register. Thus, no reasonably foreseeable projects could cause further adverse effects to the GSB.

Section 106 Findings

The Section 106 finding of effect for Alternative 9 (the Preferred Alternative) is a finding of Adverse Effect. Applying the criteria of effect at 36 CFR 800.5(a)(2), it was determined that Alternative 9 will result in an Adverse Effect to the General Sullivan Bridge; No Adverse Effect for the Newington Railroad Depot and Toll House; and No Historic Properties Affected for the Ira F. Pinkham House/Wentworth Summer Residence. The Section 106 findings are provided in an Adverse Effect Memo (**Appendix I**), signed on January 2, 2020 which documents concurrence on effects by FHWA, NHDOT, and NHDHR.

3.10.5 Mitigation

If a project cannot be designed to avoid historic properties, then appropriate mitigation to resolve adverse effects must be established. Mitigation measures for the adverse effect have been finalized and stipulated in a new MOA pursuant to Section 106, which was executed on November 10, 2021 (see **Appendix I**, pages 23-34).⁵⁴ The mitigation measures were refined through the Section 106 consultation process, including input by stakeholders, Consulting and Interested Parties, and the public. On November 10, 2021, the ACHP received a copy of the executed MOA and in a letter addressed to FHWA, acknowledged receipt of the agreement, stating that the filing of the MOA and implementation of its terms fulfills the requirements of Section 106 of the National Historic Preservation Act and the ACHP's regulations (see **Appendix I**).

For the single archaeological resource in the APE – the Brickyard known as Site 27-ST-55 – no mitigation is needed, as no impacts are proposed. Appropriate protection measures will be identified, established and enforced to prevent potential impacts to the site from adjacent construction staging that would be located in Hilton Park. If the project footprint is revised during the final design, then the revised APE would be evaluated for potential impacts. If impacts are likely, all phases of archaeological investigation would be completed.

The NHDHR, FHWA, NHDOT, and Consulting and Interested Parties have discussed potential mitigation measures for the loss of the GSB and a list of ideas was updated periodically as input was provided. After the Adverse Effects Memo was signed on January 2, 2020, meetings among NHDOT, NHDHR, FHWA, ACOE, and the Consulting/Interested Parties focused exclusively on developing mitigation for adverse effects resulting from the project. Consultation regarding mitigation of historic impacts occurred through November 2021.

The stipulations included in the Section 106 MOA were finalized following the public input on the 2021 DSEIS. A summary of the list of mitigation measures as presented in the MOA is as follows:

- Marketing the GSB for re-use in compliance with 23 USC Section 144;
- Documentation of the GSB in accordance with the Historic American Engineering Record standards;
- Promoting and providing access to the NHDOT Historic Bridge Inventory and NHDOT Management Plan;
- > Development of an interpretive program including on-site interpretive panels and an installation at the Woodman Museum in Dover;
- Supporting the future rehabilitation and reuse of the state-owned Newington Depot property on Bloody Point including the assessment of the feasibility for the rehabilitation of the Newington Railroad Depot and possible transfer of the building along with the state-owned land to the Town of Newington; and
- Completion of a feasibility study of a future link between the Dover Community Trail and the new GSB, including development of interpretive signage to highlight the history of the Newington-Dover Branch Line.

The significance of the GSB is tied to its design and engineering, parts of which are invisible to observers, and its role in the development of the regional transportation network, much of which has been overlain by subsequent modernizations in this still-evolving landscape. Thus, the institution of an educational interpretive program has been discussed as particularly apt, as it allows the presentation of historic themes that are not readily apparent. Bloody Point and Hilton Park offer views of the bridge crossing, which would allow a direct visual connection between these areas and the site of the GSB, strengthening the message of an interpretive program. Other benefits include the ability to build upon mitigation carried out to resolve adverse effects resulting from the replacement of the Lake Champlain Bridge, which had a similar history and

grants (see **Appendix I** for the October 25, 2021 and November 1, 2021 Town of Newington Board of Selectmen meeting minutes).

The Town of Newington, the City of Dover, and the Woodman Museum in Dover were invited to sign the MOA as Concurring Parties due to their potential roles in implementing the mitigation measures. As of November 16, 2021, the City of Dover and the Woodman Museum had signed the MOA, while the Town of Newington Board of Selectmen had declined to sign, agreeing to table the MOA discussion until more information is received about potential preservation

significance, and the potential use of the proposed new bridge as an additional location for interpretive materials.

Understanding the specific maintenance and preservation needs of each bridge type is essential to their long-term care and would better inform the public agencies that serve as their stewards amid changing needs and transforming land use. The NHDOT is preparing a historic bridge inventory and management plan to address these needs. The education potential of the conclusions and guidelines is pertinent to the story of the GSB over the last 90 years and would allow municipalities and agencies to better program their maintenance into annual budgets and long-term planning. Utilizing mitigation measures that expand the reach of this educational potential is a meaningful use of resources.

The Newington Railroad Depot and Toll House (NWN0168/ NR #10000187) property on Bloody Point is underutilized. Although it is currently owned by the State, it has previously been leased by the Town of Newington, and discussions regarding a renewed lease or a transfer of ownership to the Town have occurred sporadically over the last few decades. Multiple parties are supportive of rehabilitating the Depot building and developing the recreational space surrounding it, which extends to the waterfront overlooking the bridge crossing. Logistical complications include ensuring rehabilitation is carried out in a historically-sensitive manner; the identification of a feasible use for the building; initial and operational costs associated with improving the property, and the legal complications of land transfer.

3.11 Contamination and Hazardous Materials

As defined by the US Environmental Protection Agency, hazardous waste is a waste with properties that make it dangerous or capable of having a harmful effect on human health or the environment. The NHDES defines hazardous waste as a waste which may pose a present or potential threat to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. Federal polices, regulations, and guidance that may pertain to hazardous materials include:

- > Toxic Substances Control Act Polychlorinated Biphenyl regulations, Title 40 CFR 761;
- Toxic Substances Control Act, 15 USC 2601-2692 including the Asbestos Hazard Emergency Response Action;
- Occupational Safety and Health Administration (OSHA) Lead in Construction Standard, Title 26 CFR 1926.62;
- OSHA Standards for Hazardous Materials, Title 29 CFR 1910 and 1926;
- Comprehensive Environmental Response, Compensation, and Liability Act of 1980 as amended, 42 USC 9601 et seq.; and RCRA and Superfund Amendments and Reauthorization Action, 42 USC 6901 et seq.;
- > USDOT Hazardous Materials Transportation act of 1975 as amended, 49 USC 5101-5127.

State polices, regulations and guidance that may pertain to hazardous materials include:

- > NHDES Env-Or 600 Contaminated Site Management
- New Hampshire Statues Title X Chapter 147-A Hazardous Waste Management

3.11.1 Affected Environment

An assessment of potential petroleum and hazardous materials sites at the corridor level was reported in the 2007 FEIS to identify existing conditions including the release or threat of release of oil and/or hazardous materials (OHM) within the Study Area. An online file review was conducted in 2021 to identify properties within the Study Area that have had a release or pose a threat of release of OHM, and which may impact the environmental quality of the Study Area. Included in these reviews were federal and state environmental databases from EDR® and the NHDES.

Based on a review of the 2007 assessment and online file review in 2021, no properties impacted by hazardous materials were identified within the Study Area. However, there are four properties near the Study Area that based on their regulatory listing have the potential to impact environmental conditions within the Study Area. A description of these properties is provided in **Table 3.11-1** below. The location of these NHDES listed properties and associated Groundwater Management Zone (GMZs) are included in **Figure 3.11-1**.

Table 3.11-1 NHDES Listed Properties within 1,000 feet of the Study Area

Address	Property Name	City	NHDES ID	Databases	Spill Status
410 Shattuck Way	Tradbe Treatment & Recycling of Newington	Newington	17240	Hazardous Waste Generator, Solid Waste Facility, Aboveground Storage Tank Program, Initial Response Spill Site, Leaking underground storage tank	Closed
1149 Spaulding Turnpike	Mitchell's Gulf	Newington	4342	Hazardous Waste Generator, Underground Storage Tank Program, Leaking underground storage tank	Active
430 Dover Point Road	K-9 KAOS	Dover	60233	Initial Response Spill Site	Closed
NH 16	Former Newington Country Store	Newington	17190	Leaking Underground Storage Tank	Active

In October 2008, marine sediments within Little Bay were sampled as part of the larger Newington-Dover Spaulding Turnpike Improvement Project for purposes of complying with Clean Water Act Section 401 Certification requirements. Sediment analytical results from the