

Appendix G – Section 106 and Section 4(f) Documentation

Determination of National Register Eligibility for Various Structures and the
Rutland Railroad

Addendum to the Determination of National Register Eligibility Letter

Middlebury Village Historic District Original Boundary Map (1976)

Middlebury Village Historic District Amendment Boundary Map (1980)

Section 106 Determination of Effect (2013)

Section 106 Amendment (2017)

Cover Letter to Representatives of Historic Buildings / RE: Guidelines for
Preparing a Historic Structures Management Plan

Guidelines for Preparing a Historic Structures Management Plan

Programmatic Bridge Use Section 4(f) Evaluation

Section 4(f) *De Minimis* Determinations and Supporting Documents

Town of Middlebury, Letter of Concurrence: Proposed Section 4(f) Finding

Determination of National Register Eligibility for Various Structures and the Rutland Railroad



April 19, 2013

Ref: 57603.00

Scott Newman, Historic Preservation Officer
Vermont Agency of Transportation
One National Life Drive
Montpelier, VT 05633-5001

Re: Middlebury Bridges Replacement Project – Middlebury WCRS (23)
Determination of National Register Eligibility for Various Structures and the
Rutland Railroad

Dear Scott:

Vanasse Hangen Brustlin, Inc. (VHB) is assisting the Town of Middlebury, Vermont (the Town) with design and environmental permitting services for the Middlebury Bridge Replacement Project (the Project). The Project proposes the replacement of two structurally deficient and rapidly deteriorating roadway bridges in downtown Middlebury where Main Street (VT 30 / TH 2 Bridge 102) and Merchants Row (TH 8 Bridge 2) span the Vermont Railway, Inc. (VTR) track, formerly called the Rutland Railroad (see Figure 1, Site Location Map).

The purpose of this letter report is to present information regarding the eligibility of several structures and the Rutland Railroad corridor within the Project limits for listing in the National Register of Historic Places (National Register) and to obtain your agreement on the eligibility recommendations provided. The resources discussed that could be affected by the project are:

- 1) the two bridges that are proposed for replacement, which date to 1921;
- 2) the railroad corridor retaining walls between and beyond the two bridges;
- 3) the Lazarus Building, located on the north side of Main Street, immediately northwest of the Main Street bridge, between the railway and Printer's Alley, which may be the subject of a separate project but is within close proximity to the Main Street bridge; and
- 4) the Rutland Railroad corridor, which has already been determined eligible as a historic district, but which was not mentioned in the National Register nomination for the Middlebury Village Historic District, in which it partially lies.

Lastly, this report also presents information on the evolution of the Middlebury Village Green adjacent to the two bridges, as Project alternatives currently in development include the use of a tunnel, which would allow for repurposing of the current railroad trench between bridges.

At the end of this report, your agreement with the National Register eligibility recommendations provided by VHB is requested.

National Register Eligibility of the Main Street Bridge (Bridge 102) and Merchants Row Bridge (Bridge 2)

Background Information

Both the Main Street and Merchants Row bridges are located within the Middlebury Village History District (MVHD), which was originally listed in the National Register in 1976 (Roomet 1976). This original nomination did not include the bridges in the list of contributing and non-contributing resources, although the 1892 stone Main Street Bridge over the Otter Creek is noted in the nomination as one of two “outstanding historical components within the Middlebury Village Historic District.” The 1893 metal Warren through truss railroad bridge over Otter Creek just south of the Cross Street Bridge is the only other bridge called out within the MVHD (#116 in the nomination).

The current bridges at Merchants Row and Main Street were constructed between 1920 and 1921. They were previously referred to as Bridges 240 and 241, respectively, which are the VTR bridge numbers. They are referred to herein as Middlebury Town Highway Bridges 2 and 102, respectively. Both are two-span concrete-encased steel beam bridges. For both bridges, the approach span is a concrete T-beam construction and the main span is a concrete slab reinforced with steel rails (i.e., “rail top” span). The ends of the approach and main spans are supported by a concrete-encased steel pier. Concrete cracking, delamination, and spalling have occurred on all bridge components with particular deterioration noted on the fascias. Embedded steel reinforcement is exposed in a variety of locations, especially at the fascias, the ends of the pier caps, and in the flanges of the approach spans under the sidewalks. Heavy efflorescence is common on the soffits of both bridges, indicating leakage through the deck.

Both bridges are supported by granite ashlar abutments laid such that approximately 11-12 regular courses are visible above ground surface (Photos 8, 9 and 21). Individual stones are typically 1.6 feet high by 5 to 8 feet long, though blocks as short as 2 feet are present. The abutments clearly supported the previous wood stringer bridges, based not only on their earlier appearance, but because the construction documentation from 1921 for both bridges makes no mention of the installation of masonry abutment materials or labor for same (Rutland Railroad Company 1921a, b).

The ashlar abutments likely date to the late 19th century. The ashlar construction is consistent with stone abutments constructed by many New England railroads during the late 19th century, often as the original abutments reached the end of their lifespan or needed to be rebuilt to accommodate larger rail cars. A report prepared by Hartgen Archaeological Associates (HAA) in 2000 for the proposed replacement of the Main Street bridge stated that “the railroad caused the bridges to be raised three times between 1849 and 1907” (HAA 2000, p. 6). The stone abutments likely date from this time period, and are most likely ca. 1880-1890. The reason(s) for raising the bridges is (are) not noted in the Hartgen report. It is presumed that the bridges were raised to accommodate taller, and likely larger, railroad cars as the 19th



century progressed, since the railroad corridor is located in a trench cut through Middlebury's center. Generally, the stone abutments are intact, especially at the Merchants Row bridge, and may have served at least two earlier wood trestles at both locations.

At the Merchants Row bridge, the abutment walls step down and outward to the ground on the north side, with the bottom stone courses extending approximately 10 to 20 feet farther than the uppermost courses; the uppermost courses do not extend much farther than the width of the bridge superstructure. At the south end of the bridge, the ashlar abutments continue into the ashlar retaining walls; the south end of the west abutment is also stepped, but extends approximately 80 feet beyond the bridge (Photo 2). It is likely that the ashlar abutment walls of the Main Street Bridge exhibited a similar stepped pattern at the edges. However, as part of the 1921 bridge construction, the stone abutments of the Main Street bridge were extended to the south for approximately 10 feet using board-formed plain concrete (Figure 21, Photos 18 to 21). The concrete was poured in direct contact with the stone and partially covers the end face of the abutment. Board-formed concrete is a common early 20th century construction method and dates to the 1920-1921 construction of the current bridges; the same board-formed concrete is used for the arched concrete ribs of the superstructure of both bridges, which raised the elevation of the deck about one foot to accommodate taller rail cars (Rutland Railroad Company 1921e).

The Main Street bridge abutments were also extended to the north, though it appears that the existing rubble retaining walls were incorporated into these extensions. Concrete patching here was applied on top of the existing materials for reinforcement (Photos 23 and 23). There is no such concrete extension or repair work on the Merchants Row bridge abutment. The concrete portions of the Main Street abutments are not as well preserved as the stone portions, and the joints between the two materials are showing signs of wear. The concrete patching is relatively uneven in application, and shows modifications such as subsequent mortar applications. Much of the concrete patching likely dates to the late 20th century, as connection points between the ashlar and the adjoining rubble retaining walls failed. Subsequent concrete repairs and/or the addition of rubble retaining walls at both bridges have largely obscured or replaced the original end faces of the stone abutment walls.

Steel-reinforced concrete bridge seats were added at the top of the stone abutments to accommodate the higher height of the new bridges. The bridges retain their original pipe railings, which line both sides of the streets; a series of photographs of the railroad line taken in 1963 show one other similar bridge at Elm Street (VTR Bridge 241A) in the Middlebury area with the same pipe railing (Figure 24, Poulin Collection).

The Main Street and Merchants Row bridges, along with VTR Bridge 241A and possibly others along the railroad corridor, may have been built with funding provided by the federal government to repair their lines after two years of federal operation during World War I (1918-1920) (Shaughnessy 1997, p. 125).

Determination of Eligibility

A 2000 memo from Scott Gurley, Historic Preservation Specialist with the Vermont Agency of Transportation (VTrans), to Emily Wadhams, State Historic Preservation Officer (SHPO) discussed the eligibility of the bridges and noted that they did not display any significant engineering technology and were difficult to view from the streets. Mr. Gurley stated that “for this reason” (presumably the difficult of seeing them from public ways) the bridges were not included as contributing structures in the MVHD nomination. He considered the bridges to be contributing resources because they were centrally located within the MVHD, retained integrity, and displayed modest historic detail that contributed to the character of the MVHD. He further noted that the stone abutments and the metal railings were the character-defining elements of the bridges and that the decks and the support columns had “minimal historic significance” (VTrans 2000).

The two bridges date to 1921 (Rutland Railroad Company 1921a,b) and were over 50 years old at the time the nomination was prepared. However, it would appear that they were not included in the MVHD nomination due to the fact that they were not as visible as the other resources within the district, as they carried Main Street and Merchants Row over the railroad line (which was noted by Scott Gurley in his 2000 memo), and are quite small. They also may have been excluded because their simple concrete construction was not considered as attractive as the more prominent and older Warren through truss railroad bridge that is included as a contributing resource.

The original nomination does not mention the construction and operation of the Rutland Railroad through Middlebury as a factor in the growth or significance of the MVHD, nor does the addendum nomination prepared in 1980, which added properties to the south of the east and west of the southern boundary of the MVHD (DeLaittre, 1980). The railroad was constructed through the village in 1849, with the line somewhat paralleling Otter Creek and constructed within a trench cut through the center of the village. Otherwise, the line was mostly at grade with the surrounding area in the northern and southern segments of the line in the Middlebury area. The village had both a passenger and freight station, although these were located south and north of the village center (Old Depot grounds were south), respectively, due to the presence of the railroad cut through the village center and lack of available space. The railroad line undoubtedly shipped many of the village’s products of marble, wool, and other numerous industrial products, which in the early 19th century was the state’s most populous town. The Hartgen report notes that

“with the growth of the sheep industry in Vermont, Middlebury was in an advantageous position to supply finished woolen cloth for shipment. However, the completion of the Champlain Canal in 1823 and introduction of the railroad in 1849 drew business away from the village and brought in cheaper goods from outside (HAA 2000, p. 3 – italics added).

The bridges are recommended eligible for the National Register as contributing resources to the MVHD and the RRHD as they are early 20th century elements of a still thriving industrial town and railroad and are representative of the modest bridges erected by the Rutland



Railroad to modernize and continue their operations in the early 20th century. The most important components of the two bridges, as noted in the 2000 memo by Scott Gurley to Emily Wadhams, are the railings and the late 19th century stone abutments; the bridge decks and the support columns are not considered significant elements.

National Register Eligibility of Railroad Retaining Walls

Background Information

The retaining walls that line the railroad corridor in the Project area are comprised of a variety of material types. The pattern of construction and material composition appear to be consistent with what is known about the original construction of the railroad trench and subsequent modification efforts. Based on the evidence presented in historic maps and through field observation, it is clear that the walls are not the product of a single period of construction. As previously mentioned, there were likely three major episodes of construction in the railroad corridor within the Project area: the original 1849 construction, late 19th century (ca. 1880-1890) bridge/abutment replacement, and 1920-1921 construction of the current Merchants Row and Main Street bridges. Figure 2 shows the location of the specified sections used in the following description of wall components. Figures 3 and 4 show the locations of 45 photographs provided to illustrate the current appearance of the walls, as well as other structures discussed in this letter.

Original 1849 Construction

The original 1849 construction of the railroad through the center of Middlebury resulted in a large trench cut through the Village Green and under Merchants Row and Main Street. The trench provided a separated grade at these streets, which was safer, and hid the presence of the railroad from many areas of the village. The extant rubble walls appear to date from the construction of the railroad or shortly after, which is supported by indications of stone walls along the corridor through central Middlebury on late 19th century maps. Based on the 1885 and 1892 Sanborn maps (Figures 8 and 10), it appears that stone retaining walls were in place in 1885 on both sides of the corridor north of Main Street. A lithograph showing a bird's eye view of Middlebury in 1886 shows a stone wall on the eastern side of the corridor north of Main Street (Figure 9, Burleigh 1886). South of the Merchants Row Bridge, the Sanborn maps indicate an 18-foot high "bank wall" was present on the eastern side of the corridor, with no specification for the western side. It is unclear if the term "bank wall" represents a wall of stone construction or otherwise. Between the Main Street and Merchants Row bridges, the Sanborn maps indicate only a 15-foot high "bank" on both sides of the corridor. This "bank" may refer to the sloped earth above the rubble walls at the base of the current retaining wall. Later Sanborn maps do not specify walls or other features between the two bridges.

Current Wall Configuration and Evidence of Past Modifications

Because the landscape slopes to the west and narrows in this direction, the total length of the rubble walls is longer along the eastern side of the railroad corridor. The eastern wall commences at a location approximately 120 feet north of the Main Street bridge and terminates



approximately 240 feet south of the Merchants Row bridge. The western wall commences at a location approximately 80 feet north of the Main Street bridge and terminates approximately 170 feet south of the Merchants Row bridge.

The walls are primarily dry-laid rubble, though portions show evidence of original construction or subsequent rebuilding using cement mortar, especially at the extreme northern end of the walls (Photos 27 to 30). The walls start at a height similar to that of the abutments near the bridges and taper off in height with distance from the bridges.

South of Merchants Row

The retaining wall on the east side of the corridor south of Merchants Row consists primarily of granite blocks and limestone that ranges in size from less than 1 foot by 1 foot to up to roughly 1.5 feet high by 3 feet long (Photos 1, 4 to 6). This wall appears to have been dry laid originally, but has been extensively patched with cement mortar post construction. The height of the wall ranges from roughly 5 feet at the southern end to roughly 12.5 feet at the contact with the ashlar abutment. The eastern wall is in good condition with one instance of localized toppling near the southern end. Multiflora rose and other herbaceous plants are present (Photo 4). Overhanging vegetation likely obscures the view of portions of the wall during the growing season.

The western retaining wall south of Merchants Row consists of the same granite ashlar blocks as the bridge abutments, and were likely completed as part of a single project, ca. 1880-1890. The western retaining wall is in good condition.

Retaining Walls Between Bridges

The material composition of the individual components of the retaining walls between the two bridges varies considerably relative to the walls north of Main Street and south of Merchants Row. Materials used for the original construction appear to be dry-laid fieldstone having an appreciable range of sizes from less than 1 foot to over 3 feet in length (Photos 11 to 15). In some areas, it is evident that repairs and/or wall augmentation used materials different from that of the original construction. Cut marble blocks and clay drainage tile (Photo 17) are two examples of materials used in these efforts. Because of the variable material composition and size, these walls are best characterized as rubble retaining walls. Most of these walls are intact and in fair to good condition, with some later patching and reconstruction confined to specific locations rather than along the entire extent. However, occurrences of more recent wall failure and slumping were noted on the east wall. The heterogeneity of the walls and the fact that wall repairs and augmentations partially bury the bridge abutments (Photos 14, 15, 17 to 19) indicates that the area has been subject to iterative maintenance to correct wall or bank failures.

The east retaining wall is approximately two feet tall and the west wall is approximately six feet tall. The retaining wall is topped by banked land that extends up to street level, marked by scrubby vegetation and small to moderate sized trees. The vegetation between the two bridges extends up the fences at street level (Photo 15 to 16), likely obscuring views down to the railroad right-of-way during the growing season, similar to the limited visibility of the

retaining wall south of the Merchant's Row bridge. Evidence of overland stormwater runoff and seepage discharge was observed at locations on the east retaining wall and ponding between the east and west walls was noted.

North of Main Street

The retaining walls north of Main Street are composed primarily of large fieldstone blocks, though smaller (less than one foot long) components are present (Photos 24 to 31). The shorter west wall appears to be in good condition and generally lacks post-construction patching. However, the east wall (west of the Post Office) has experienced bulging in the past such that tiebacks and cement mortar have been applied at the northern half of the wall (Photos 28 and 30). Wall displacement is thought to have resulted in one instance of municipal water line damage behind the wall when the embedded line was pulled apart.

Retaining Wall at St. Stephen's Episcopal Church

Although focused on a small area within the Project limits, the more recent concrete block retaining wall on St. Stephen's Episcopal Church property closer to street level is the latest episode of changes to the railroad retaining walls (Photos 16 and 17). The church building was erected in 1827 near the west end of the Village Green. It was this green that was cut through to build the railroad trench; an undated late 19th century stereopticon photograph and a ca. 1870 photograph show how close the walls of the cut were to the church (Figures 11 and 12). The ca. 1870 photograph of the church shows a simple open railing, and what appears to be a stone retaining wall below the railing in the upper half of the railroad corridor's wall where the current concrete retaining wall is located. Later 19th and early 20th century photographs have not been extensively researched to determine other changes to this area, but it is likely that other walls, railings, or fences have been built here since the time of the ca. 1870 photograph.

Determination of Eligibility

The retaining walls and abutments along the railroad corridor in central Middlebury exhibit a high degree of integrity. Various construction campaigns undertaken by the railroad are clearly readable in the various materials and construction methods. As such, the walls and abutments along the corridor are considered contributing resources to the National Register eligible RRHD. Although the retaining walls and the abutments are not a commonly viewed element within the MVHD, these walls are located within its boundaries and are physical reminders of the railroad construction and subsequent improvements to the corridor in the late 19th and the 20th century. Therefore, all retaining walls other than the more recent one at the St. Stephen's Episcopal Church are considered contributing resources to the MVHD.

National Register Eligibility of the Lazarus Building

The Lazarus Building is on the north-west side of Main Street adjacent to the Main Street Bridge over the railroad line. The building would not be directly affected by the Project, but may be affected by a future Town-sponsored project. Accordingly, this section of the memo



provides information about the building as it has not previously been officially evaluated for its National Register eligibility.

The Lazarus Building appears to date to the mid-to late 1960s (Photos 38 to 43). A photograph of the Main Street bridge, dated 1963 (Figure 22, Poulin Collection), still shows the wood-frame Italianate building that preceded the current one-story building on this site. The wood-frame Italianate building was at this location since at least 1885 (Figure 8, Sanborn Map), although an earlier wood-frame building with a T-shaped footprint was located here prior to 1885.

The current building is a one-story building with a long rectangular footprint and asymmetrical front gable roof. The presumably wood-frame building is sided with vertical aluminum siding and brick veneer with two large single-pane storefront windows on the front that flank the central entrance that contains two separate doors and is topped with a Neo-Colonial Revival broken pediment. A photo taken of and from the railroad line in 1971 or 1972 shows a sign on a pole at the sidewalk in front of this building that reads "Lazarus Department Store," which is similar in style to the Neo-Colonial broken pediment over its central entrance (Figure 26, Poulin Collection).

In the mid-1970s, when the MVHD nomination was prepared, the building was approximately 10 years old, presuming a mid-to late 1960s construction date. Although the current building was present in the mid-1960s, it was not mentioned at all in the nomination, even as a non-contributing resource. The building is still less than 50 years old in 2013 and therefore is recommended to be a non-contributing resource within the MVHD, due to its age. Additionally, the building is one of very few new structures in the historic district, which is predominantly composed of 19th century buildings, mainly dating to the early part of that century. The nomination's statement of significance does not address mid-20th century buildings as far as the district's significant association with events, individuals, or architecture; its focus is on the 19th century events and numerous residences and commercial buildings that are associated with this period. Therefore, even after the building attains 50 years of age, it would not be considered a contributing resource within the district unless a new statement of significance that addresses the significance of the mid-20th century architecture and events was prepared and accepted. Evaluated individually, the building displays no architectural significance or association with significant events or individuals that would result in its individual eligibility for the National Register.

National Register Eligibility of the Rutland Railroad

The railroad corridor that runs through the center of Middlebury was originally built by the Rutland & Burlington Railroad in 1849, and re-named the Rutland Railroad in 1867. The railroad has been determined eligible for the National Register of Historic Places by VTrans (Newman, communication to Walsh, January 30, 2013). As noted above in the discussion of the National Register eligibility of the two 1921 railroad bridges, the railroad line was not mentioned in the National Register nomination of the MVHD. However, the nomination included the Shingle Style Middlebury Railroad Station on Seymour Street (#257), which was

noted as an outstanding architectural component of the district and the 1893 metal Warren through truss bridge over Otter Creek (#116). A third structure at 33 Seymour Street is likely also be railroad-related (#258). It is described as “a 1-story subsidiary building to the north of the railroad station, which is essentially a copy of its neighbor (the railroad station) without the cupola.”

A walking tour brochure of Middlebury noted that the railroad did increase shipping opportunities for the village’s numerous prominent industries. However, it also caused cheaper competitors to supply goods to the village, which led to the diminution of these older industries (Andres 2005, *The Village Tour*, p. 7). Although the railroad’s contributions to the village are not enumerated in the MVHD nomination, the railroad had an important role in the village’s history and physical development and appearance. The railroad appears to have changed the dynamics of the early 19th century industrial history of the village and caused a significant change in the appearance of the village. In addition to the railroad trench cut through the village center is the construction of the adjacent railroad-related buildings, including the station, an ancillary building next to it, the 1893 Warren through truss bridge, and the addition of the Merchants Row and Main Street bridges, subsequently followed by the raising of the bridges’ height four times. The Rutland Railroad Corridor is therefore recommended as a contributing resource to the Middlebury Village Historic District, in addition to its previously determination as a National Register–eligible historic district.

Middlebury Village Green /Triangle Park

The roughly triangular-shaped green space, which is named the Middlebury Village Green, through which the Rutland Railroad was cut for its construction in 1849, was one of several greens in Middlebury, although it is the largest. The green was donated to the village by Gamaliel Painter in the 1790s and according to the MVHD nomination is “the physical and functional center of the town” (Roomet 1976, Sec. 7, p. 35). The nomination lists the green as a contributing resource (#95).

The entire extent of the original triangular green is only depicted on a map prepared in 1888 that showed the village layout in 1814, prior to the Rutland Railroad’s construction (Figure 5, Brainerd map). The rest of the historic maps that were examined all date after the railroad’s construction in 1849, but the 1888 map depicting this area as it appeared before the railroad confirms that the land on both sides of the railroad cut was a single open parcel prior to the railroad’s construction.

The appearance of the green on the east side of the railroad cut changed minimally over time, based on visual evidence provided by historic photographs and maps (Figure 16). The eastern component was never built upon except for the 1827 construction of St. Stephen’s Episcopal Church in the original center section of the green; a more recently constructed bandstand is also located here.

On the west and smaller section of the green, west of the railroad cut, a commercial building stood here as early as 1853 (Figure 6, Presdee & Edwards map). It appears the same building, identified as the Allen Block on the 1871 map (Figure 7, Beers map) and also shown on the

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1885 Sanborn (Figure 8), burned in the 1891 fire (Figure 13, 1891 photograph showing the aftermath). The 1892 Sanborn shows no building here, but does still note a “reservoir” on the site that was also on the 1885 Sanborn map (Figure 10). The western area, known as Triangle Park, was improved in 1908 by Joseph Battell and the Century Club with a three-tiered cast iron fountain carried by figures of cranes (Figure 17). Increasingly unpopular because its wind-driven spray would dampen the interiors of open cars parked around it, the fountain was dismantled by the town in 1938 and sold for scrap. Another fountain was placed in the park by the Middlebury Garden Club at the time of the national bicentennial in 1976 (Andres 2005, *The Village Tour*, p. 8).

Very truly yours,

VANASSE HANGEN BRUSTLIN, INC.



Rita Walsh
Senior Preservation Planner

RW/dbk
Attachment/Enclosure

cc w/encl: William Finger, Local Project Manager, Town of Middlebury

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Agreement on National Register Eligibility

Please sign and date below if you agree with the five National Register eligibility recommendations provided by VHB.

Main Street TH2 Bridge 102

VHB National Register Eligibility Recommendation – contributing to the National Register-listed Middlebury Village Historic District and to the National Register-eligible Rutland Railroad Historic District

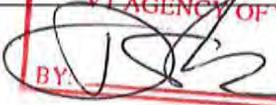
Agree: _____

APPROVED
HISTORIC PRESERVATION
OFFICER
VT AGENCY OF TRANSPORTATION
BY:  DATE: 6/19/13

Merchants Row TH 8 Bridge 2

VHB National Register Eligibility Recommendation – contributing to the National Register-listed Middlebury Village Historic District and to the National Register-eligible Rutland Railroad Historic District

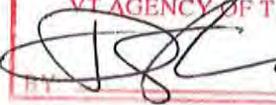
Agree: _____

APPROVED
HISTORIC PRESERVATION
OFFICER
VT AGENCY OF TRANSPORTATION
BY:  DATE: 6/19/13

Railroad corridor retaining walls

VHB National Register Eligibility Recommendation – contributing to the National Register-listed Middlebury Village Historic District and to the National Register-eligible Rutland Railroad Historic District

Agree: _____

APPROVED
HISTORIC PRESERVATION
OFFICER
VT AGENCY OF TRANSPORTATION
BY:  DATE: 6/19/13

Lazarus Building, Main Street

VHB National Register Eligibility Recommendation – not a contributing resource to the National Register Middlebury Village Historic District, nor is the building individually eligible.

Agree: _____

APPROVED
HISTORIC PRESERVATION
OFFICER
VT AGENCY OF TRANSPORTATION
BY:  DATE: 6/19/13

Rutland Railroad Corridor/Historic District

VHB National Register Eligibility Recommendation – contributing to the National Register-listed Middlebury Village Historic District

Agree: _____

APPROVED
HISTORIC PRESERVATION
OFFICER
VT AGENCY OF TRANSPORTATION
BY:  DATE: 6/19/13



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- _____. 1921b. Roadway Completion Report. A.F.E. No. 583. Bridge #241 (Main Street). Unpublished accounting record, VTrans Rail Program, Montpelier, Vermont. 2 pages.

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Sanborn Map Company 1885 Middlebury, Vermont, plate 2, New York, NY.

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Sheldon Museum Collections

General Collection – Maps:

- 1853 Map of Village of Middlebury (Research Room)
- 1814 Brainerd Map of Town of Middlebury, prepared by Ezra Brainerd, 1888 (Map Folder 1A1)

General Collection – Photographs:

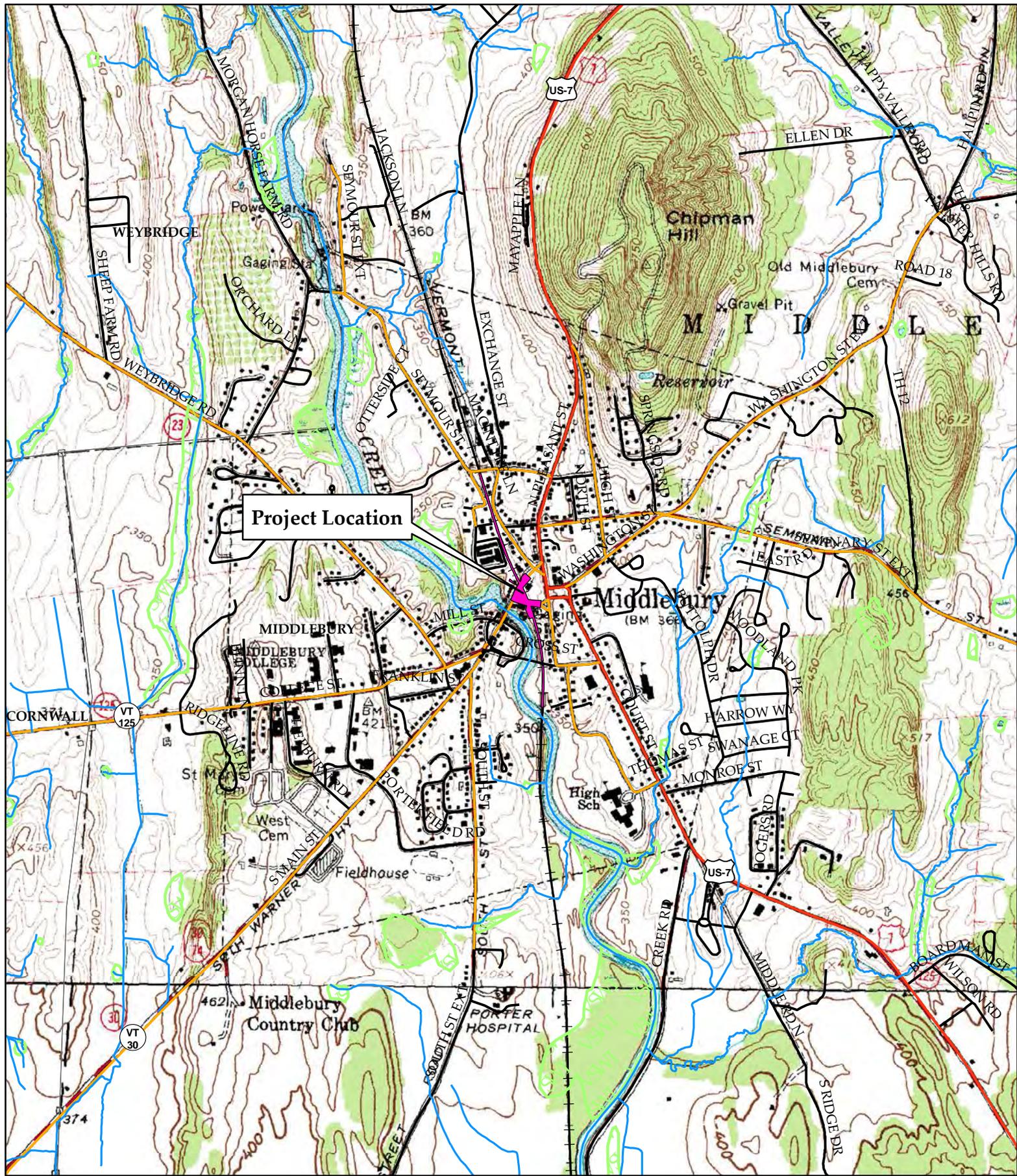
- View of Project Area, c. 1900
- View of Project Area, c. 1905
- View of Project Area, c. 1910
- View of locomotive at Main Street bridge, c. 1939
- View of Project Area, c. 1940
- Aerial View of Project Area, Post-1963

Vermont Agency of Transportation (VTrans). 2000. Memorandum from VTrans Historic Preservation Specialist Scott Gurley to SHPO Emily Wadhams regarding Historic Buildings, Structures, Sites and Districts associated with Middlebury BRF 0161(9)SC and BRF 5900(4)SC. April 14, 2000. 2 pages and 1 map.

Vermont Agency of Transportation (VTrans). 2013. Personal communication from VTrans Historic Preservation Officer Scott Newman to VHB Senior Preservation Planner Rita Walsh, January 30, 2013.



FIGURES



Project Location

- Legend**
- Project Limits
 - Interstate
 - US Highway
 - Vermont State Highway
 - Town Road
 - Railroad
 - County Boundary
 - Town Boundary
 - Stream (VHD 2010)
 - VSWI Wetland



Middlebury WCRS (23)
Main St. & Merchants Row Bridge Replacement
Middlebury, Vermont
Figure 1: Site Location Map

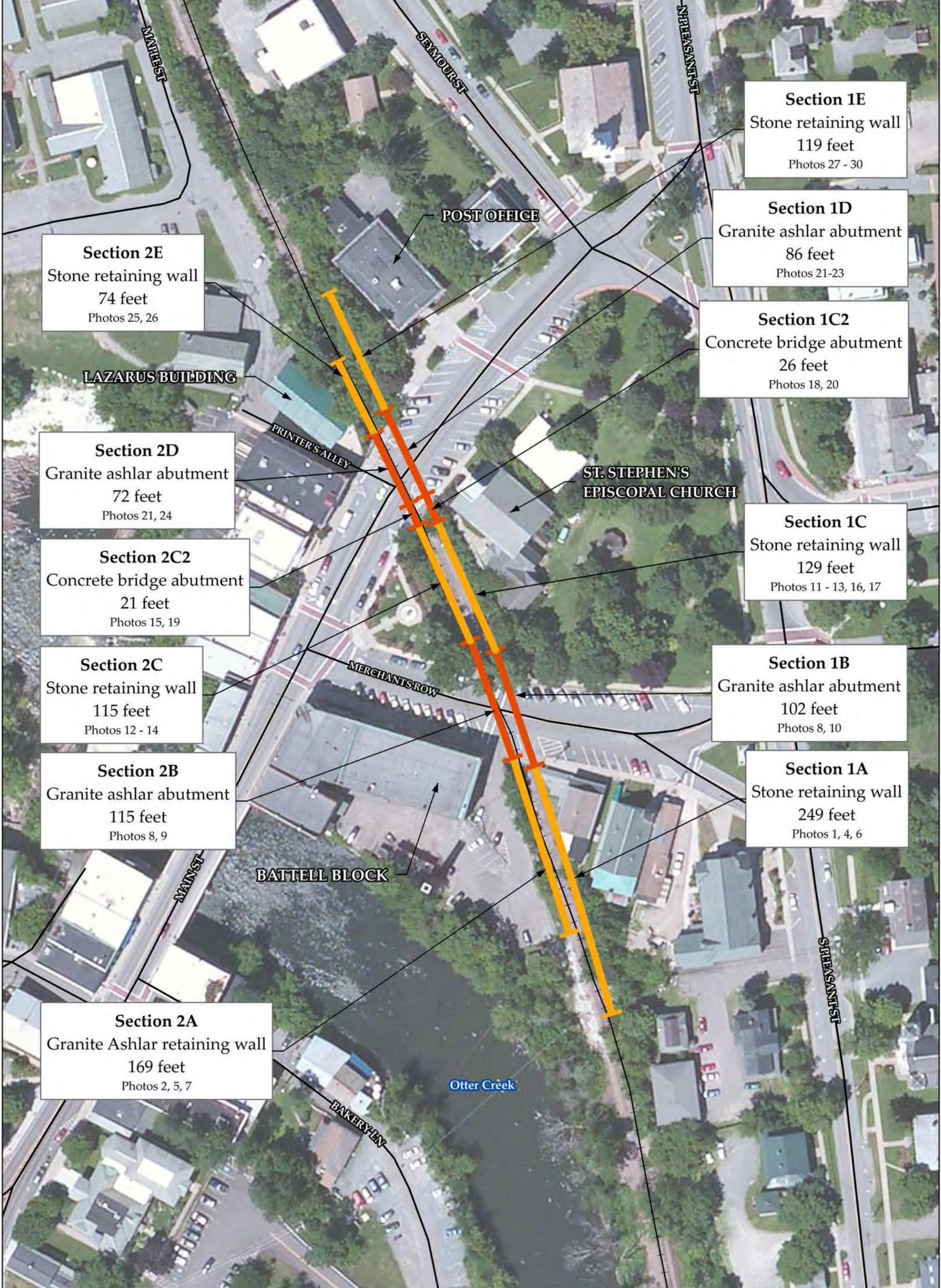
April 19, 2013



Prepared by: MJS

Sources: Background: USGS Topographic Quadrangle (Middlebury 1983, Cornwall 1972); Project Limits digitized by VHB (2013); Railroad by VTrans (2003); Roads by VTrans (2011); VHD Streams, Wetlands, Town and County Boundaries from VCGI (2010).





Section 2E
Stone retaining wall
74 feet
Photos 25, 26

Section 2D
Granite ashlar abutment
72 feet
Photos 21, 24

Section 2C2
Concrete bridge abutment
21 feet
Photos 15, 19

Section 2C
Stone retaining wall
115 feet
Photos 12 - 14

Section 2B
Granite ashlar abutment
115 feet
Photos 8, 9

Section 2A
Granite Ashlar retaining wall
169 feet
Photos 2, 5, 7

Section 1E
Stone retaining wall
119 feet
Photos 27 - 30

Section 1D
Granite ashlar abutment
86 feet
Photos 21-23

Section 1C2
Concrete bridge abutment
26 feet
Photos 18, 20

Section 1C
Stone retaining wall
129 feet
Photos 11 - 13, 16, 17

Section 1B
Granite ashlar abutment
102 feet
Photos 8, 10

Section 1A
Stone retaining wall
249 feet
Photos 1, 4, 6

Legend

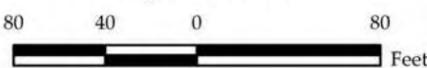
-  Retaining Walls
-  Abutments
-  Railroad
-  Roads



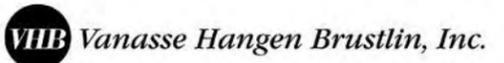
**Middlebury WCRS (23)
Main St. & Merchants Row Bridge Replacement
Middlebury, Vermont**

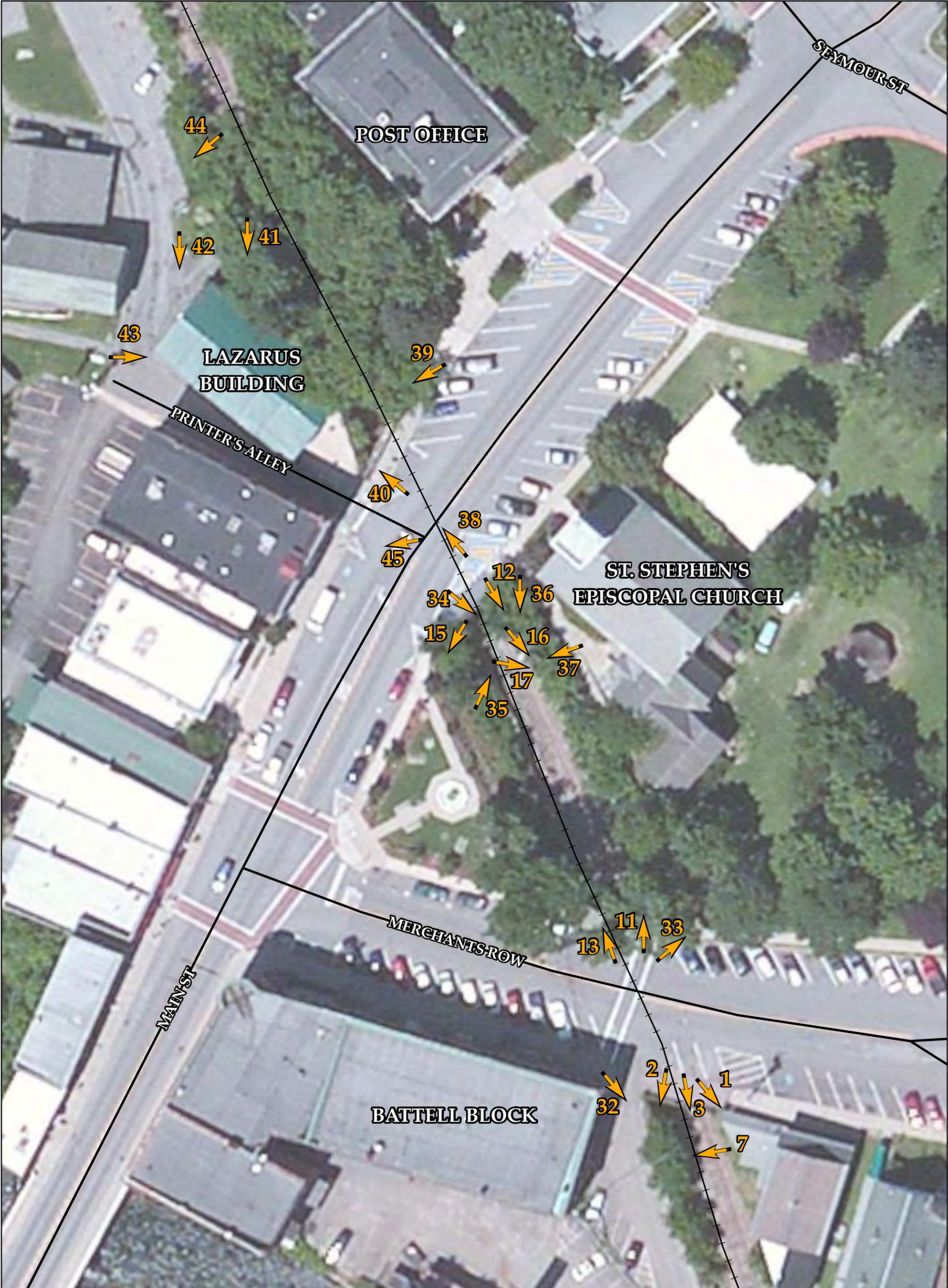
Figure 2: Wall and Abutment Characterization

April 15, 2013



Sources: Background - Bing (2011); Roads by VTrans (2011); Railroad by VTrans (2003); Wall segments digitized by VHB (2013).





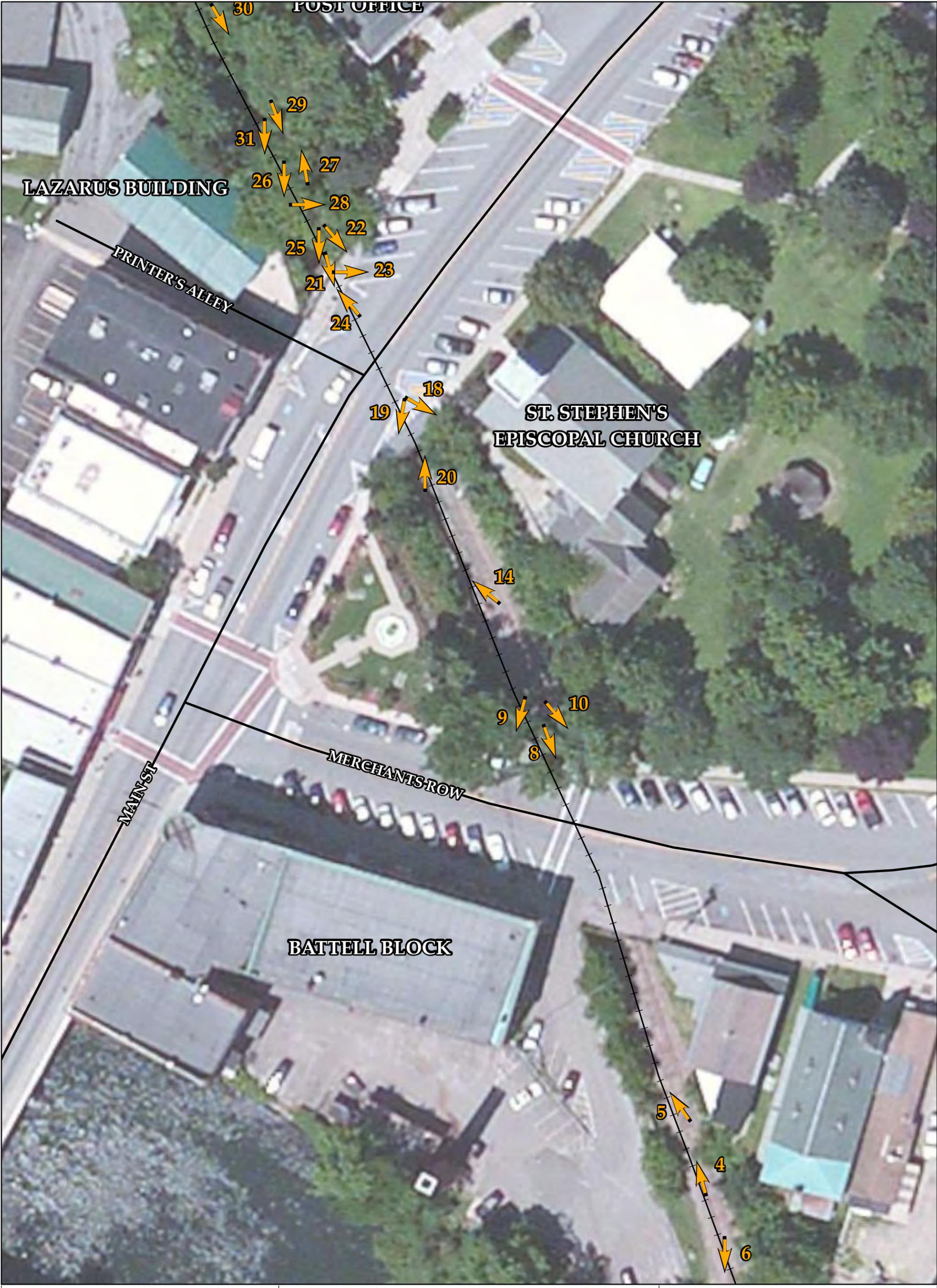
Legend

-  Photograph Orientation
-  Railroad
-  Roads

Middlebury WCRS (23)
Main St. & Merchants Row Bridge Replacement
Middlebury, Vermont
Figure 3: Locations for Photographs Taken
from Street Level and Photographs of Buildings
 April 19, 2013

Sources: Background - Bing (2011); Roads by VTrans (2011); Railroad by VTrans (2003); Photograph Orientation digitized by VHB (2013).





Legend

-  Photograph Orientation
-  Railroad
-  Roads



Middlebury WCRS (23)
Main St. & Merchants Row Bridge Replacement
Middlebury, Vermont
Figure 4: Locations for Photographs
Taken from Railroad Right-of-Way

April 19, 2013



Sources: Background - Bing (2011); Roads by VTrans (2011); Railroad by VTrans (2003); Photograph Orientation digitized by VHB (2013).



Middlebury Bridges Replacement Project – Middlebury WCRS (23)

Determination of National Register Eligibility for Various Structures and the Rutland Railroad

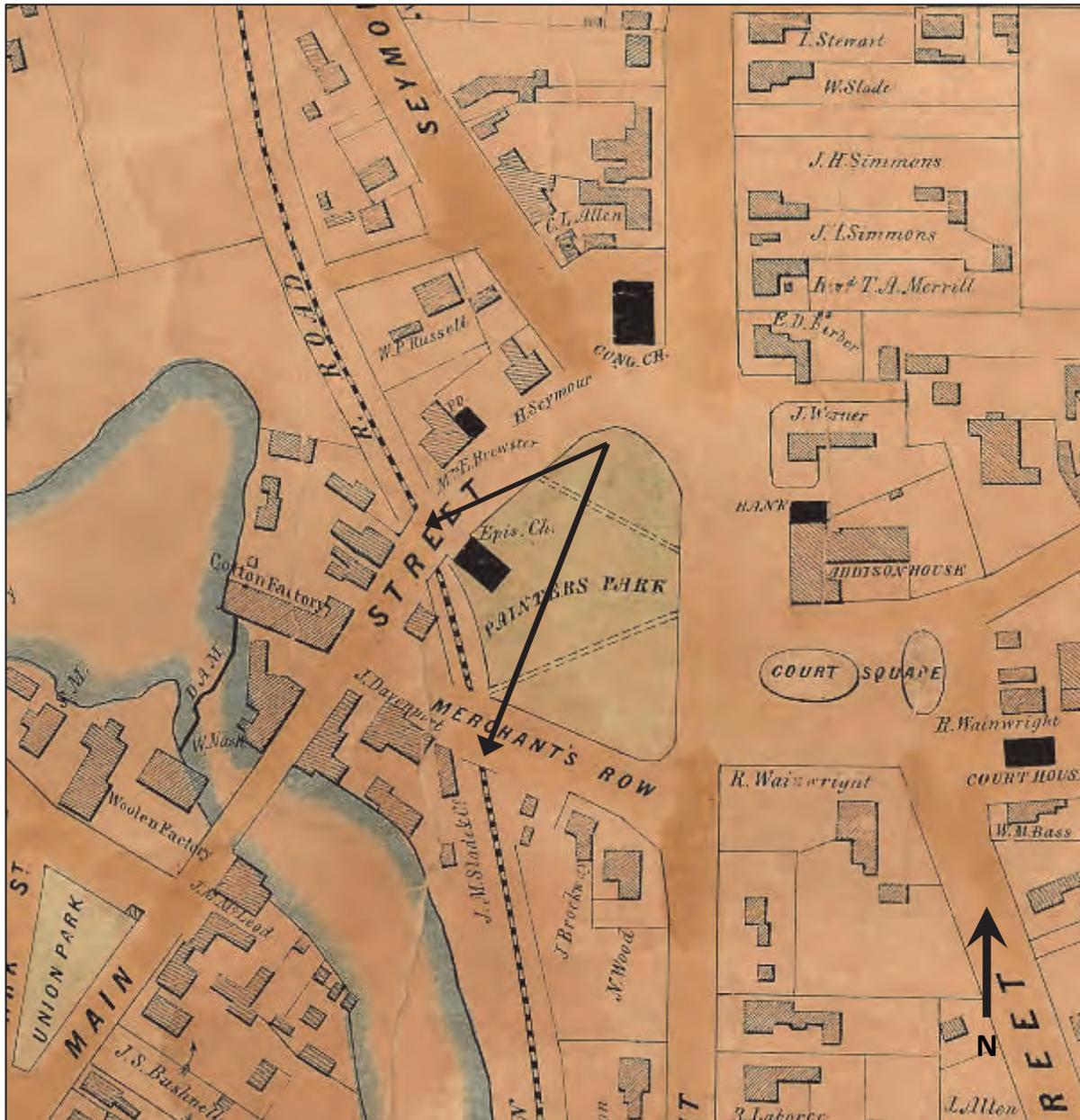


Figure 6. 1853 Presdee & Edwards map of the village of Middlebury, VT, (New York: Presdee & Edwards). Vermont Collection at Middlebury College Library online collections, accessed April 2013, <http://middarchive.middlebury.edu/cdm/singleitem/collection/vtmaps/id/3/rec/49>.

Arrows indicate locations of current bridges.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)

Determination of National Register Eligibility for Various Structures and the Rutland Railroad

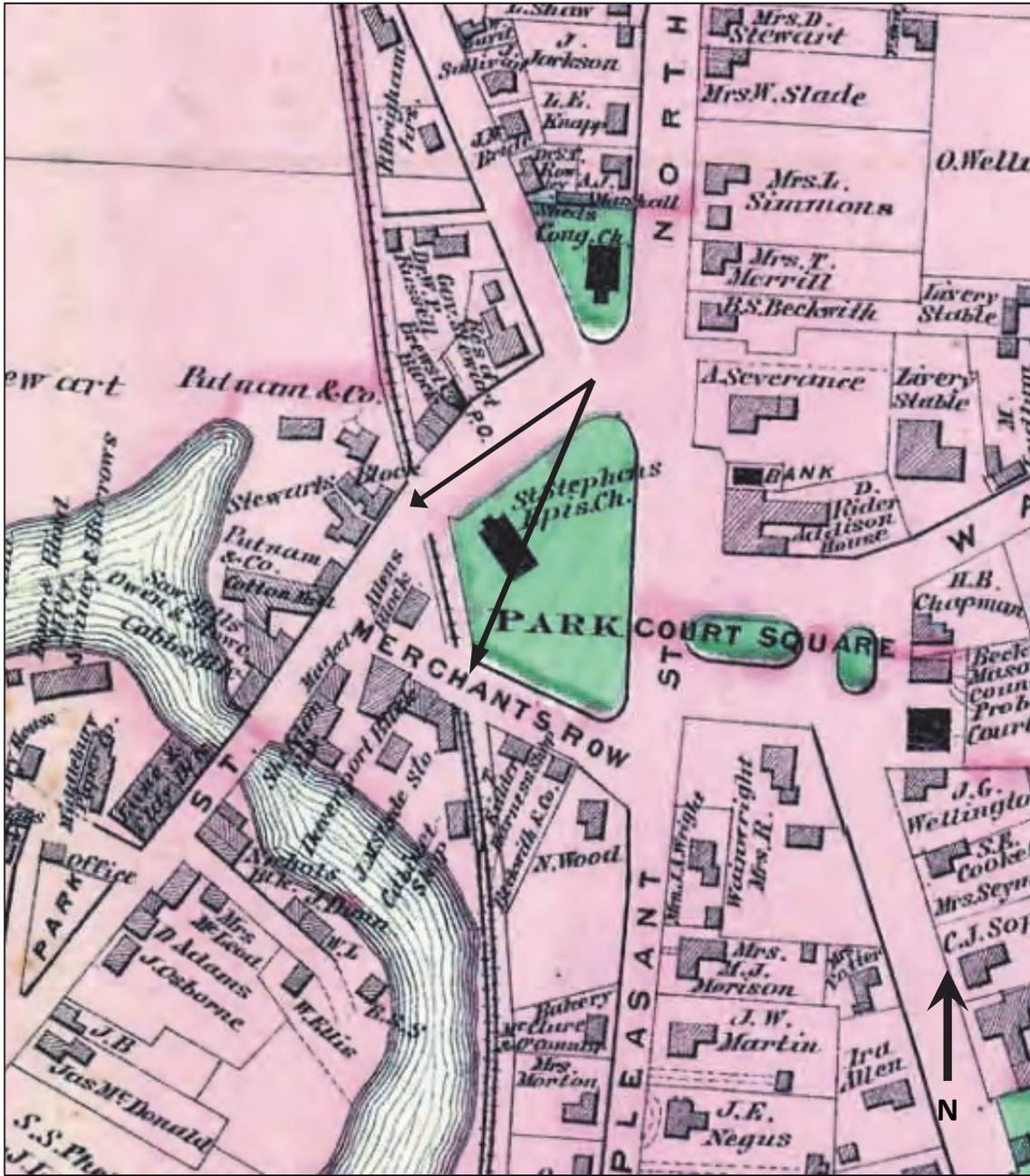


Figure 7. 1871 Beers Atlas of Addison County, VT, “Middlebury,” (New York: F.W. Beers & Co.) <http://www.ancestry.com>, accessed March 2013.

Arrows indicate locations of current bridges.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)

Determination of National Register Eligibility for Various Structures and the Rutland Railroad

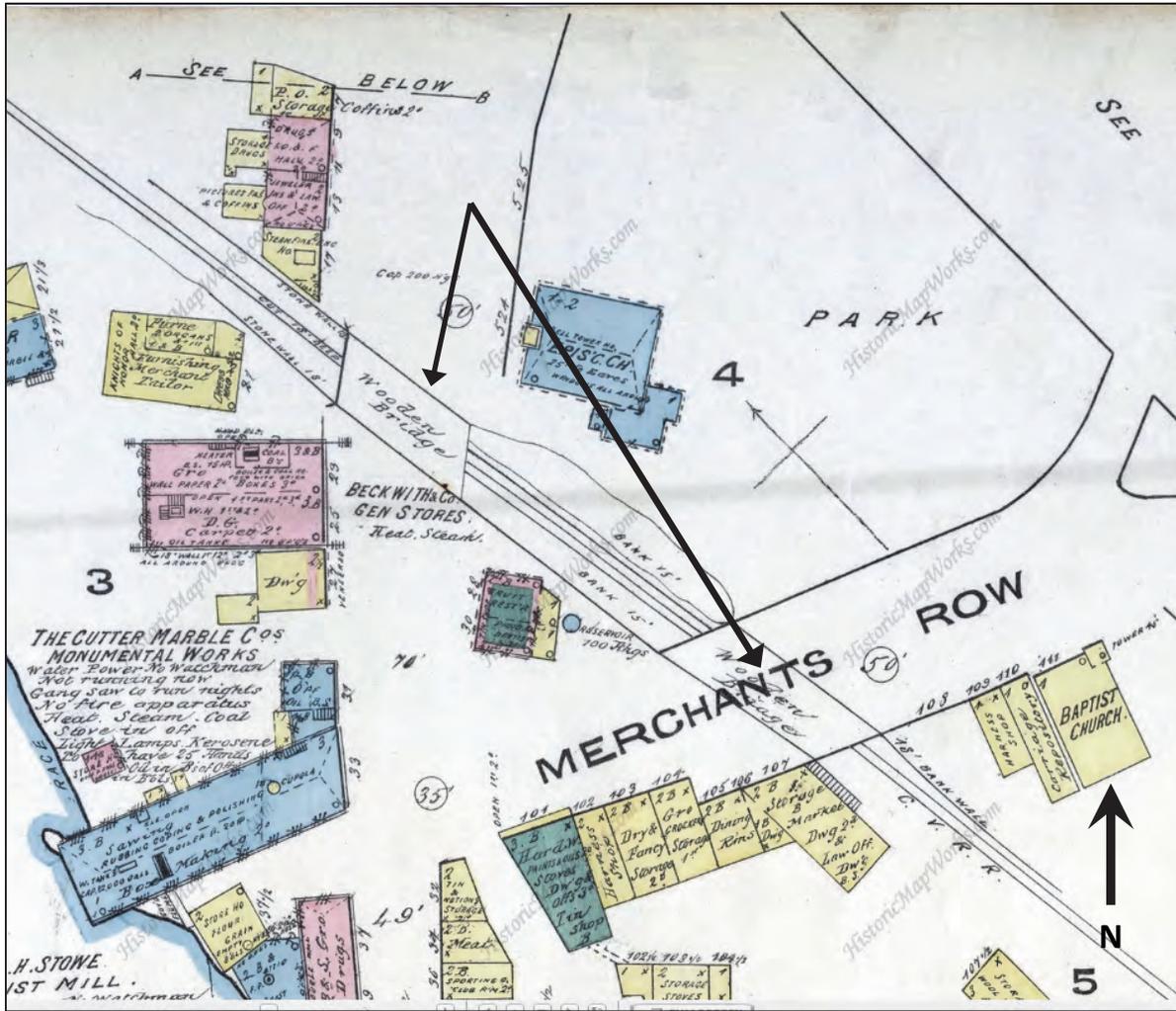


Figure 8. 1885 Sanborn Fire and Insurance Map of Middlebury, Plate 2.
<http://www.historicmapworks.com>, accessed March 2013.

Arrows indicate locations of current bridges.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)

Determination of National Register Eligibility for Various Structures and the Rutland Railroad

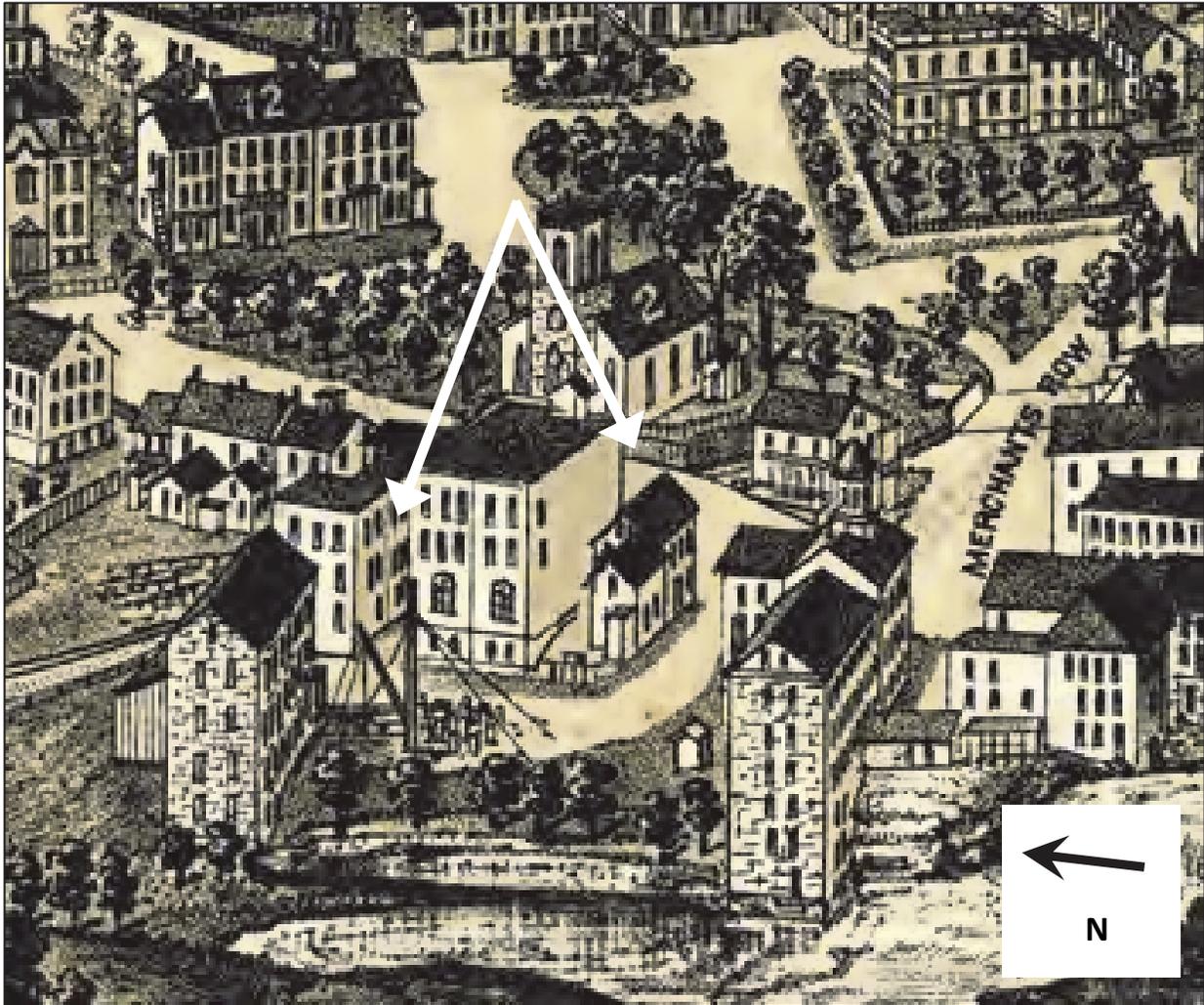


Figure 9. 1886 Burleigh birds-eye view, “Middlebury, VT”, (Troy, NY: L. R. Burleigh).
<http://www.historicmapworks.com>, accessed March 2013.

Arrows indicate locations of current bridges (Main Street Bridge hidden by building).

Middlebury Bridges Replacement Project – Middlebury WCRS (23)

Determination of National Register Eligibility for Various Structures and the Rutland Railroad

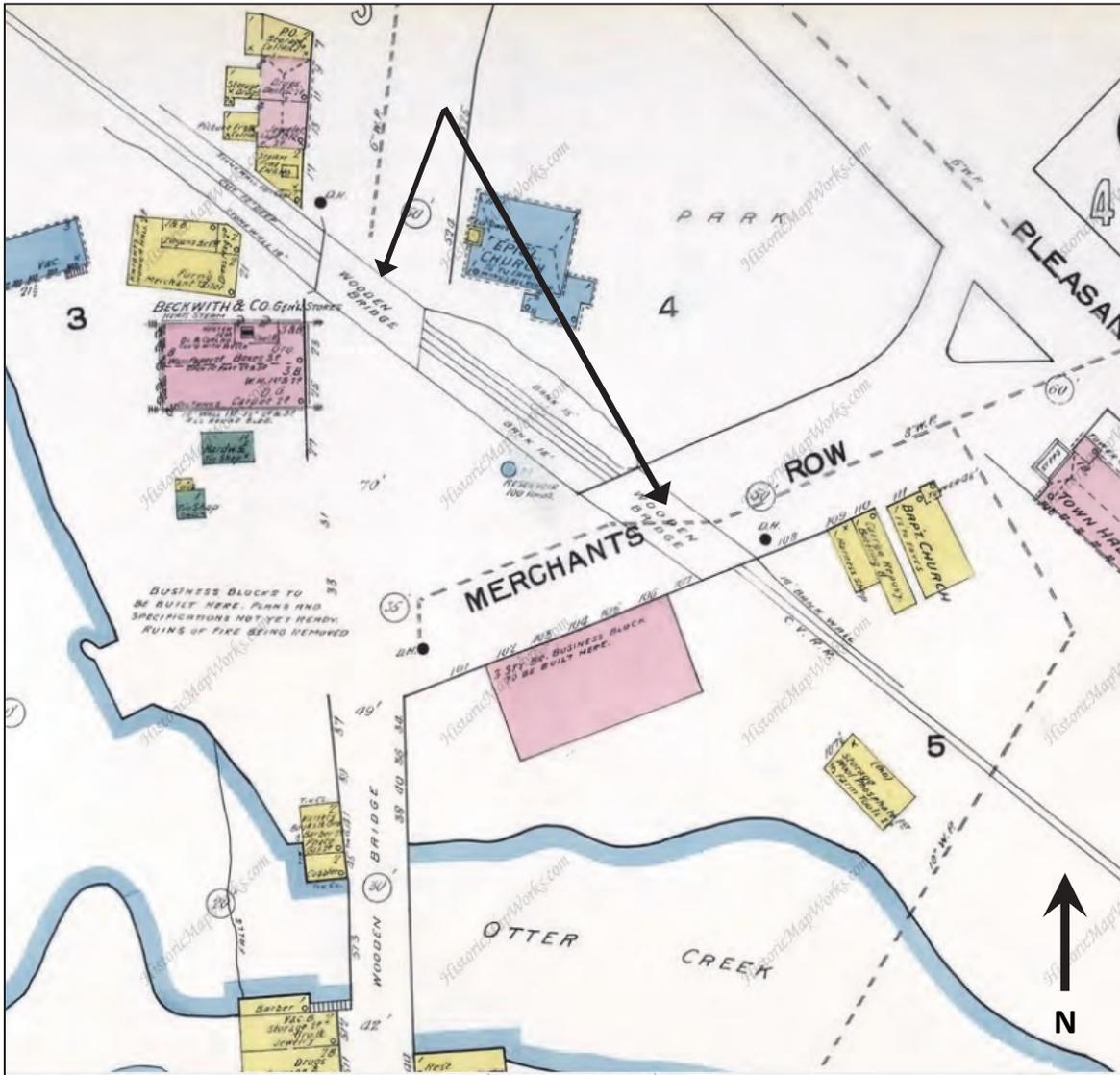


Figure 10. 1892 Sanborn Fire and Insurance Map of Middlebury, Plate 2.

<http://www.historicmapworks.com>, accessed March 2013.

Arrows indicate locations of current bridges.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)

Determination of National Register Eligibility for Various Structures and the Rutland Railroad



Figure 11. View of St. Stephen's Episcopal Church, c. 1870. Glenn M. Andres, "A Walking History of Middlebury," (Middlebury, VT: Middlebury Bicentennial Committee); rev. 1997 by Greg Pahl (Middlebury, VT: Henry Sheldon Museum of Vermont History). Vermont Collection at Middlebury College Library online collections, accessed April 2013, http://middigital.middlebury.edu/walking_history/village_tour/page_6.html.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)

Determination of National Register Eligibility for Various Structures and the Rutland Railroad



Figure 12. View of St. Stephen's Episcopal Church, late 19th century. Vermont Collection at Middlebury College Library online collections, accessed April 2013, <http://middigital.middlebury.edu/SharingVTHistory/Stereopticon/Middlebury/images/MID0004.jpg>.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)

Determination of National Register Eligibility for Various Structures and the Rutland Railroad



Figure 13. View of Project area after 1891 fire, St. Stephen's Episcopal Church on right, Duclos Building in left background. Note remains of Allen Block in current location of Triangle Park. Vermont Collection at Middlebury College Library online collections, accessed April 2013, <http://middigital.middlebury.edu/SharingVTHistory/Photographs/Middlebury/images/MID0012.jpg>.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)

Determination of National Register Eligibility for Various Structures and the Rutland Railroad

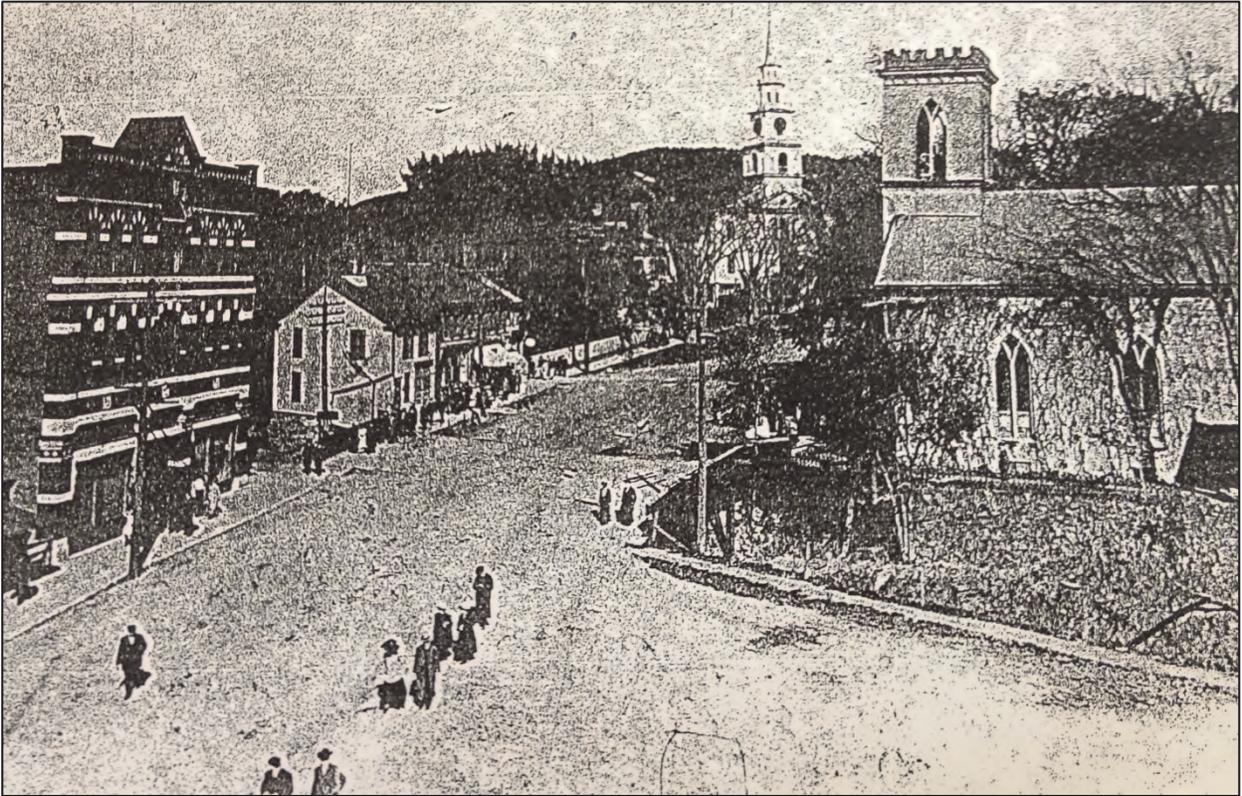


Figure 14. View of Project area, c. 1900. Henry Sheldon Museum of Vermont History archives, Middlebury, VT collection, accessed March 2013.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)

Determination of National Register Eligibility for Various Structures and the Rutland Railroad



Figure 15. View of Project area, c. 1905. Henry Sheldon Museum of Vermont History archives, Middlebury, VT collection, accessed March 2013.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)

Determination of National Register Eligibility for Various Structures and the Rutland Railroad



Figure 16. View of Project area, Merchant's Row Bridge in center, Battell Block on left. Vermont Collection at Middlebury College Library online collections, accessed April 2013, <http://middarchive.middlebury.edu/cdm/singleitem/collection/vtpostcards/id/650/rec/2>.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)

Determination of National Register Eligibility for Various Structures and the Rutland Railroad



Figure 17. View of Project area, c. 1910. Henry Sheldon Museum of Vermont History archives, Middlebury, VT collection, accessed March 2013.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)
 Determination of National Register Eligibility for Various Structures and the Rutland Railroad

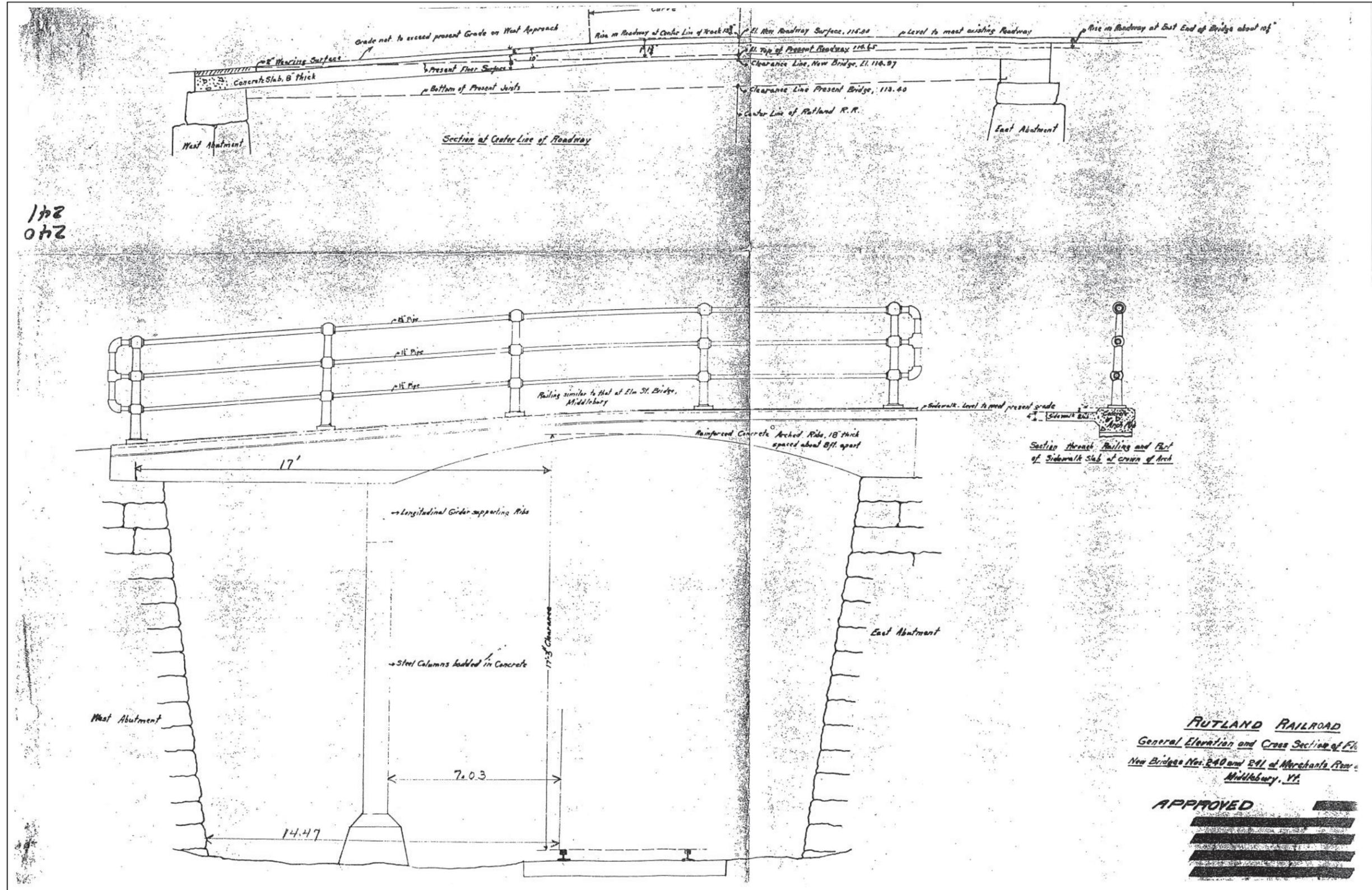


Figure 18. Plans for 1920-1921 construction of Main Street Bridge and Merchant's Row Bridge. VTrans archives, accessed March 2013.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)

Determination of National Register Eligibility for Various Structures and the Rutland Railroad



Figure 19. View of St. Stephen's Episcopal Church and original fountain at Triangle Park, note dense vegetation along railroad line cut. Vermont Collection at Middlebury College Library online collections, accessed April 2013, <http://middarchive.middlebury.edu/cdm/singleitem/collection/vtpostcards/id/650/rec/2>.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)

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Figure 20. View of locomotive emerging from Merchant’s Row Bridge (bridge obscured by smoke) c.1939. Henry Sheldon Museum of Vermont History archives, Middlebury, VT collection, accessed March 2013.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)

Determination of National Register Eligibility for Various Structures and the Rutland Railroad



Figure 21. View of Project area, c. 1940, Main Street Bridge in right foreground. Henry Sheldon Museum of Vermont History archives, Middlebury, VT collection, accessed March 2013.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)

Determination of National Register Eligibility for Various Structures and the Rutland Railroad

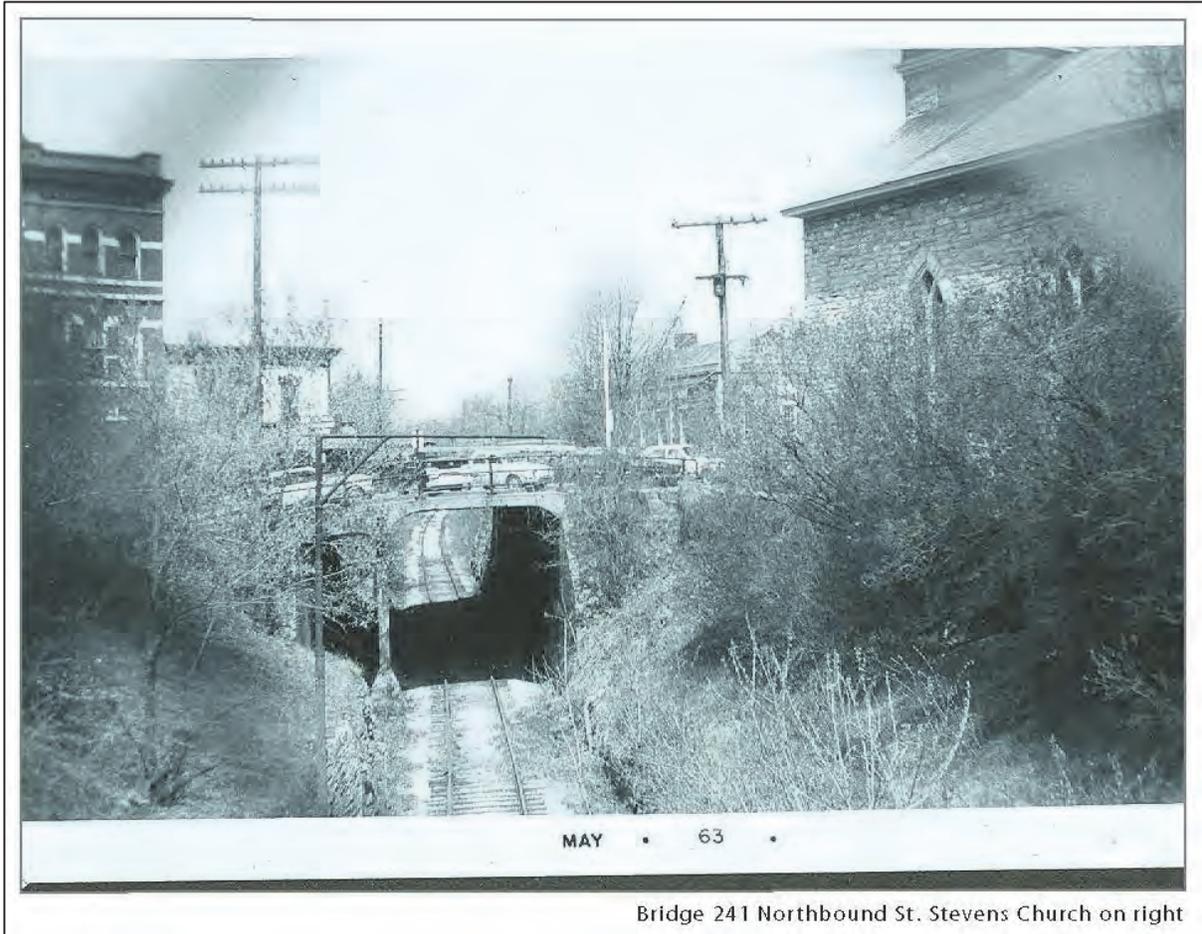


Figure 22. View of Main Street Bridge, 1963. Poulin Collection of Rutland Railroad Photographs, accessed March 2013, http://middigital.middlebury.edu/rutland_railroad/RRAPoulinPhotos/.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)

Determination of National Register Eligibility for Various Structures and the Rutland Railroad



Figure 23. View of Merchant's Row Bridge, 1963, Main Street Bridge in background. Poulin Collection of Rutland Railroad Photographs, accessed March 2013, http://middigital.middlebury.edu/rutland_railroad/RRAPoulinPhotos/.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)

Determination of National Register Eligibility for Various Structures and the Rutland Railroad

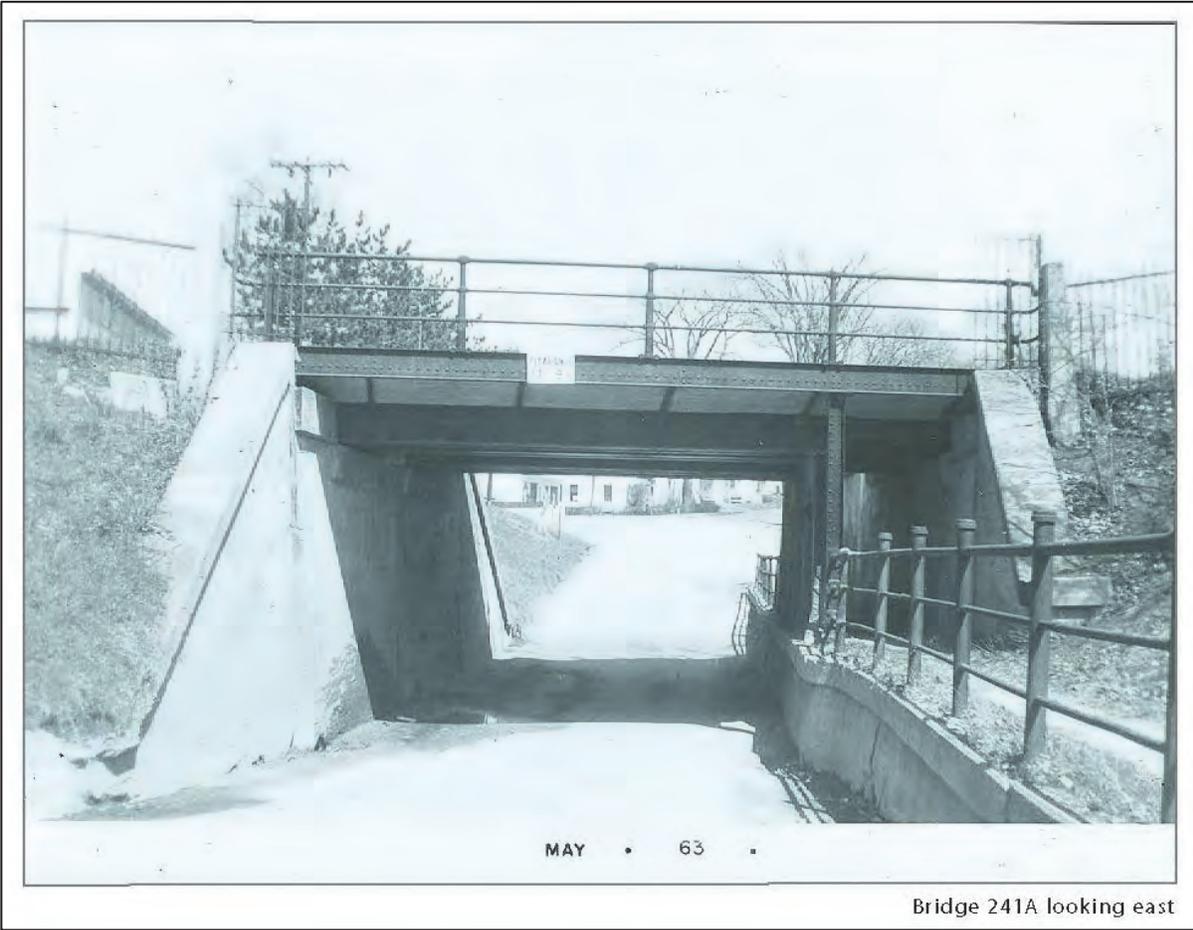


Figure 24. View of Elm Street Bridge, 1963. Note similar railing to Merchant’s Row Bridge and Main Street Bridge, as noted on 1920-1921 plans for bridges (Figure 18). Poulin Collection of Rutland Railroad Photographs, accessed March 2013, http://middigital.middlebury.edu/rutland_railroad/RRAPoulinPhotos/.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)

Determination of National Register Eligibility for Various Structures and the Rutland Railroad

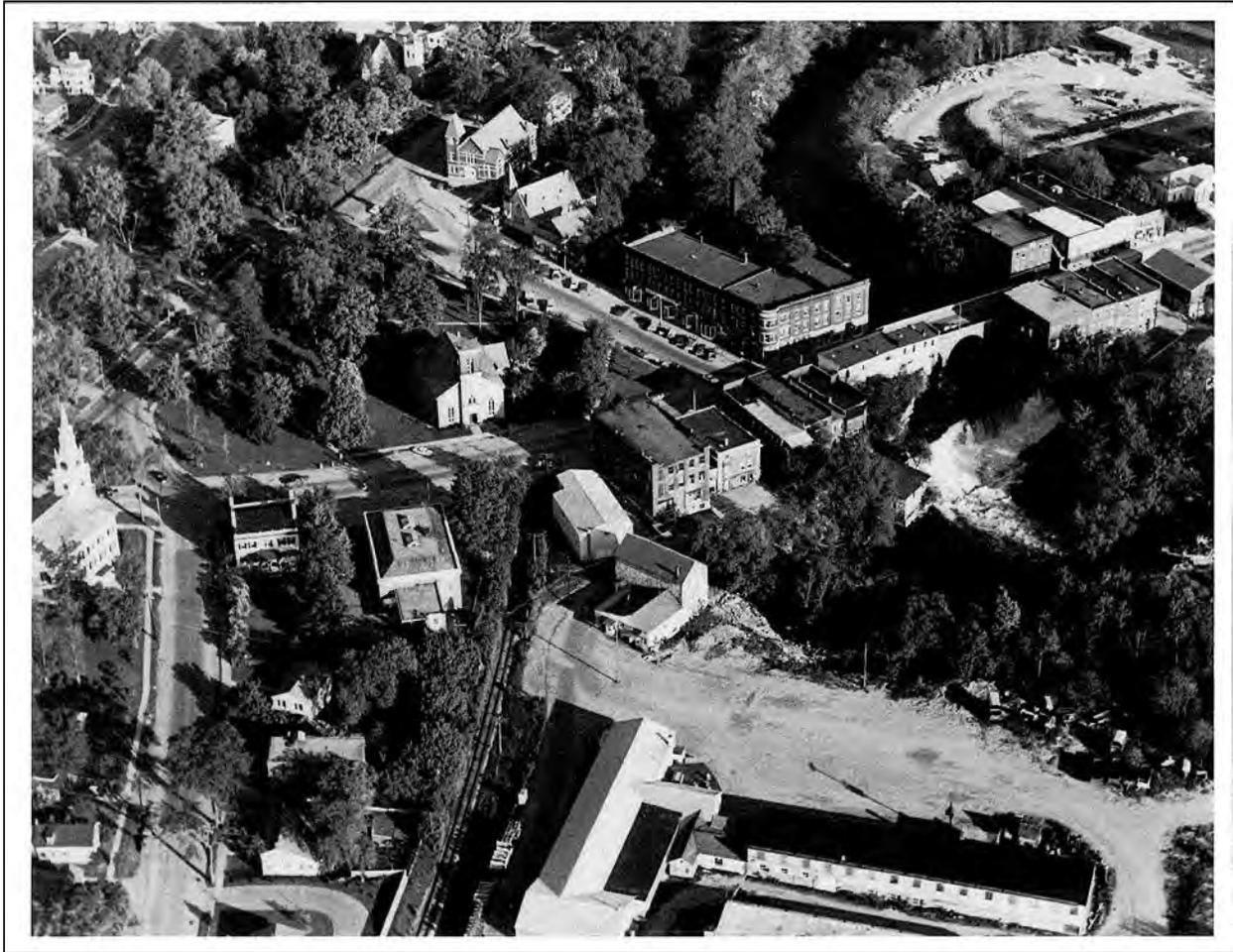


Figure 25. Aerial view of Project area, showing Lazarus Building and St. Stephen's Episcopal Church in center, post-1963. Henry Sheldon Museum of Vermont History archives, Middlebury, VT collection, accessed March 2013.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)

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Figure 26. View of Main Street Bridge, 1971 or 1972, note sign for “Lazarus Department Store” on right. Poulin Collection of Rutland Railroad Photographs, accessed March 2013, http://middigital.middlebury.edu/rutland_railroad/RRAPoulinPhotos/.

PHOTOS

Middlebury Bridges Replacement Project – Middlebury WCRS (23)
Determination of National Register Eligibility for Various Structures and the Rutland Railroad
Photographs of Project Area



1. View of south approach and east wall from Merchants Row Bridge. Photographer facing SE, February 15, 2013.



2. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Merchants Row Bridge, west wall at south approach. Photographer facing S, February 15, 2013.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)
Determination of National Register Eligibility for Various Structures and the Rutland Railroad
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3. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of south approach from Merchants Row Bridge, Cross Street Bridge in background. Photographer facing S, February 15, 2013.



4. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Merchants Row Bridge, showing degree of vegetation growth on east wall. Photographer facing N, February 15, 2013.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)
Determination of National Register Eligibility for Various Structures and the Rutland Railroad
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5. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Merchants Row Bridge, east abutment, south side. Photographer facing NW, February 15, 2013.



6. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of south terminus of east retaining wall, south of Merchants Row Bridge. Photographer facing S, February 15, 2013.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)
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7. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Merchants Row Bridge, west wall and abutment, south side. Photographer facing W, February 15, 2013.



8. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Merchants Row Bridge, piers and abutments. Photographer facing S, February 15, 2013.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)
Determination of National Register Eligibility for Various Structures and the Rutland Railroad
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9. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Merchants Row Bridge, west wall and abutment, north side. Photographer facing SW, February 15, 2013.



10. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Merchants Row Bridge, east abutment, north side. Photographer facing SE, February 15, 2013.

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11. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of east wall of railroad right-of-way and retaining wall southwest of St. Stephen's Episcopal Church, from Merchants Row Bridge. Photographer facing N, February 15, 2013.



12. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Merchants Row Bridge from Main Street Bridge. Photographer facing SE, February 15, 2013.

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13. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Main Street Bridge from Merchants Row Bridge, Duclos Building and Lazarus Building in left background, St. Stephen's Episcopal Church on right. Photographer facing NW, February 15, 2013.



14. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Main Street Bridge, south approach. Photographer facing NW, February 15, 2013.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)
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15. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Main Street Bridge, west wall and end of west abutment, south side. Photographer facing SW, February 15, 2013.



16. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of retaining wall southwest of St. Stephen's Episcopal Church from Main Street Bridge, Merchants Row Bridge in right background. Photographer facing SW, February 15, 2013.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)
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17. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of retaining wall southwest of St. Stephen's Episcopal Church and east retaining wall from Main Street Bridge, south side. Photographer facing E, February 15, 2013.



18. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Main Street Bridge, east wall and abutment, south side. Photographer facing SE, February 15, 2013.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)
Determination of National Register Eligibility for Various Structures and the Rutland Railroad
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19. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Main Street Bridge, west wall and abutment, south side. Photographer facing SW, February 15, 2013.



20. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Main Street Bridge, piers and abutments. Photographer facing N, February 15, 2013.

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21. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Main Street Bridge, west abutment, north side. Photographer facing S, February 15, 2013.



22. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Main Street Bridge, east abutment, north end. Photographer facing SE, February 15, 2013.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)
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23. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. Closeup of Main Street Bridge, east wall and abutment contact point, north end. Photographer facing E, February 15, 2013.



24. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of west wall, Main Street Bridge, north side. Photographer facing NW, February 15, 2013.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)
Determination of National Register Eligibility for Various Structures and the Rutland Railroad
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25. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Main Street Bridge, west wall at north approach. Photographer facing S, February 15, 2013.



26. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Main Street Bridge, west wall below Lazarus Building. Photographer facing S, February 15, 2013.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)
Determination of National Register Eligibility for Various Structures and the Rutland Railroad
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27. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of north terminus of east wall, north of Main Street bridge. Photographer facing N, February 15, 2013.



28. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. Closeup of east retaining wall, north of Main Street bridge, showing tie back. Photographer facing E, February 15, 2013.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)
Determination of National Register Eligibility for Various Structures and the Rutland Railroad
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29. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Main Street Bridge and east wall at north approach. Photographer facing SE, February 15, 2013.



30. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Main Street Bridge, east wall, north side. Photographer facing SE, February 15, 2013.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)
Determination of National Register Eligibility for Various Structures and the Rutland Railroad
Photographs of Project Area



31. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Main Street Bridge, north approach. Photographer facing S, February 15, 2013.



32. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Merchants Row Bridge from Merchants Row, vegetation partially obscures view of railroad right-of-way. Photographer facing SE, February 15, 2013.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)
Determination of National Register Eligibility for Various Structures and the Rutland Railroad
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33. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View from Merchants Row Bridge. Photographer facing NE, February 15, 2013.



34. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of east wall between bridges as seen from Main Street, St. Stephen's Episcopal Church in background. Fence and vegetation growth partially obscures view of wall. Photographer facing SE, February 15, 2013.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)
Determination of National Register Eligibility for Various Structures and the Rutland Railroad
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35. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Main Street Bridge and east wall from Triangle Park, fence and vegetation partially obscure view of bridge and railroad right-of-way. Photographer facing NE, February 15, 2013.



36. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Merchants Row Bridge and railroad right-of-way from north end of St. Stephen's Episcopal Church retaining wall, at Main Street Bridge. Photographer facing S, February 15, 2013.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)
Determination of National Register Eligibility for Various Structures and the Rutland Railroad
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37. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Main Street Bridge from St. Stephen's Episcopal Church retaining wall path, Duclos Building in background. Photographer facing W, February 15, 2013.



38. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Duclos Building and Lazarus Building from Main Street, southeast façades, with Printer Alley between. Main Street Bridge on right. Photographer facing NW, February 15, 2013.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)
Determination of National Register Eligibility for Various Structures and the Rutland Railroad
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39. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Lazarus Building from Main Street Bridge, southeast facade. Photographer facing NW, February 15, 2013.



40. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Lazarus Building, southeast facade. Photographer facing N, February 15, 2013.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)
Determination of National Register Eligibility for Various Structures and the Rutland Railroad
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41. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Lazarus Building, northeast elevation. Photographer facing S, February 15, 2013.



42. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Lazarus Building (left) and Duclos Building (right) from Printers Alley, northwest elevations. Photographer facing S, February 15, 2013.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)
Determination of National Register Eligibility for Various Structures and the Rutland Railroad
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43. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Lazarus Building, southwest elevation. Photographer facing E, February 15, 2013.



44. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Marble Works Building (just north of Lazarus Building) from railroad right-of-way, north and east elevations. Photographer facing SW, February 15, 2013.

Middlebury Bridges Replacement Project – Middlebury WCRS (23)
Determination of National Register Eligibility for Various Structures and the Rutland Railroad
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45. Main Street and Merchants Row Bridge Replacement, Middlebury, VT. View of Duclos Building (southwest of Lazarus Building) from Main Street, southeast facade. Photographer facing NW, February 15, 2013.

Addendum to the Determination of National Register Eligibility Letter



May 29, 2013

**Middlebury Bridges Replacement Project – Middlebury WCRS (23)
Addendum to the Determination of National Register Eligibility letter,
dated April 19, 2013**

In addition to the properties already discussed in the above-referenced letter, we are requesting your agreement on the National Register eligibility recommendation for the small addition to the Bourdon Insurance Agency Building at 48 Merchants Row. (referred to as 10 Merchants Row in the Middlebury Village Historic District National Register nomination). The addition is adjacent to the railroad cut and the east side of the Merchants Row bridge. Each of the alternatives for bridge replacement would require removal of this structure.

The small addition, which houses a barber shop, is a one-story, side gable, rectangular plan structure that appears to have been added to the Bourdon Insurance Agency building in the 1950s or early 1960s. The front of the building has a single door, large storefront window, and a smaller window; it is covered with aluminum siding. The building is connected to the Bourdon Insurance Agency Building through a roof extension and it appears that the opening between the two buildings leads to stairway to the rear of the building. The addition also has a smaller section on the rear.

The Bourdon Insurance Company Building, to which the barber shop is attached, is noted as a contributing resource in the Middlebury Village Historic District National Register nomination as #96. 10 Merchant's Row: a 2½-story (actually the building has 3 stories as it slopes down from the street), stuccoed building set gable end to the road on a random coursed stone foundation. The barber shop extension proposed for removal is not noted or described. Based on the Sanborn maps, the insurance building in its current configuration dates to ca. 1920; earlier Sanborn maps (1905 and 1910) show a 1-story wood-frame building at this location with the same footprint. The 1885 and 1892 Sanborn maps show a similar footprint, but it is not identical. The building was used as a harness shop, grocery, and barber shop. The 1920 Sanborn shows a small concrete building near the location of the subject building, but it has a narrower setback and is not attached to 10 Merchants Row. While it may be presumed it is a different building, it may be possible that the current addition is the earlier concrete building shown on the 1920 map. But the building appears to have received several alterations, including the siding and possibly the storefront window. A 1963 photo of the area does show the building, but it does not present a clear view (Poulin 2013). It is also shown in a photo from 1981-1982 (UVM 2013).

The small addition is not considered to be a significant feature of the earlier 2½-story building, both due to its alterations and the insensitive, non-contextual proportional form of the addition to the Bourdon Insurance Company Building's architectural

design and to the district as a whole. The addition is not recommended as a contributing feature to either the Bourdon Insurance Company Building or to the Middlebury Village Historic District.

Addition to the Bourdon Insurance Company Building, 10 Merchants Row

VHB National Register Eligibility Recommendation – not a contributing resource to the National Register Middlebury Village Historic District, nor is the building individually eligible.

Agree: _____



References

Poulin Collection. 2013. Middlebury. Available online at
http://middigital.middlebury.edu/rutland_railroad/RRAPoulinPhotos/
Accessed April 12, 2013. Last update unknown.

Sanborn Map Company 1885 Middlebury, Vermont, plate 2, New York, NY.

____. 1892 Middlebury, Vermont, plate 5, New York, NY.

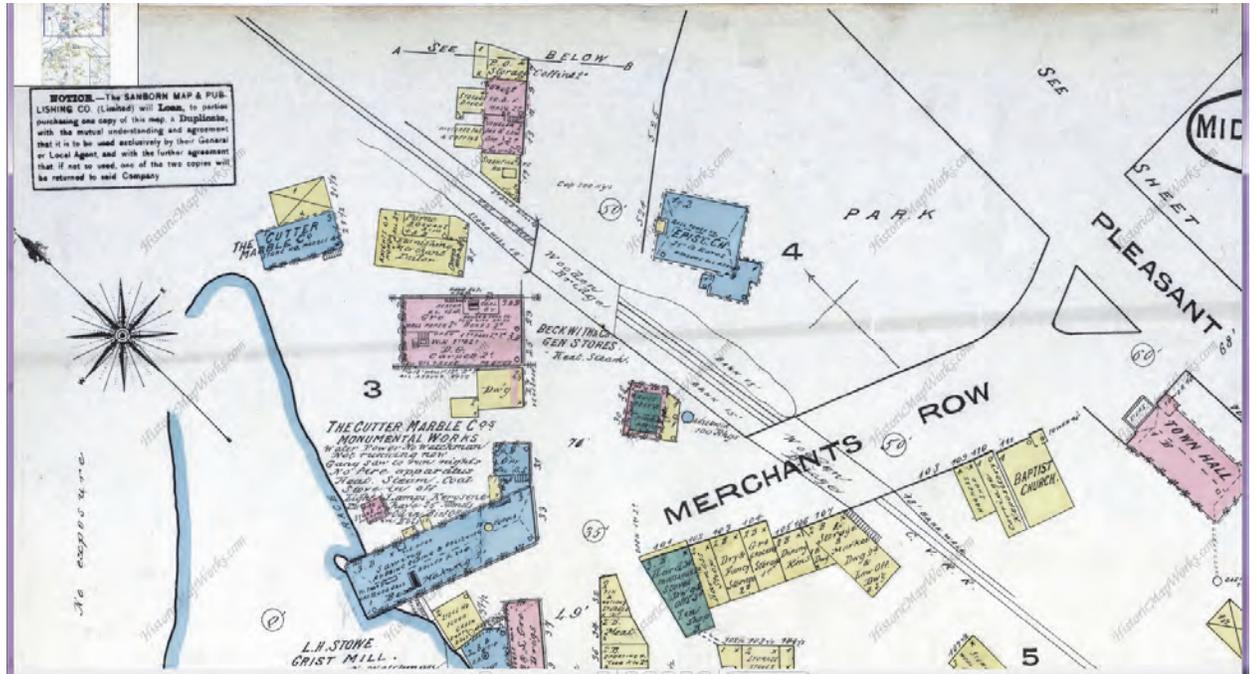
____. 1905 Middlebury, Vermont, plate 6, New York, NY.

____. 1910 Middlebury, Vermont, plate 4, New York, NY.

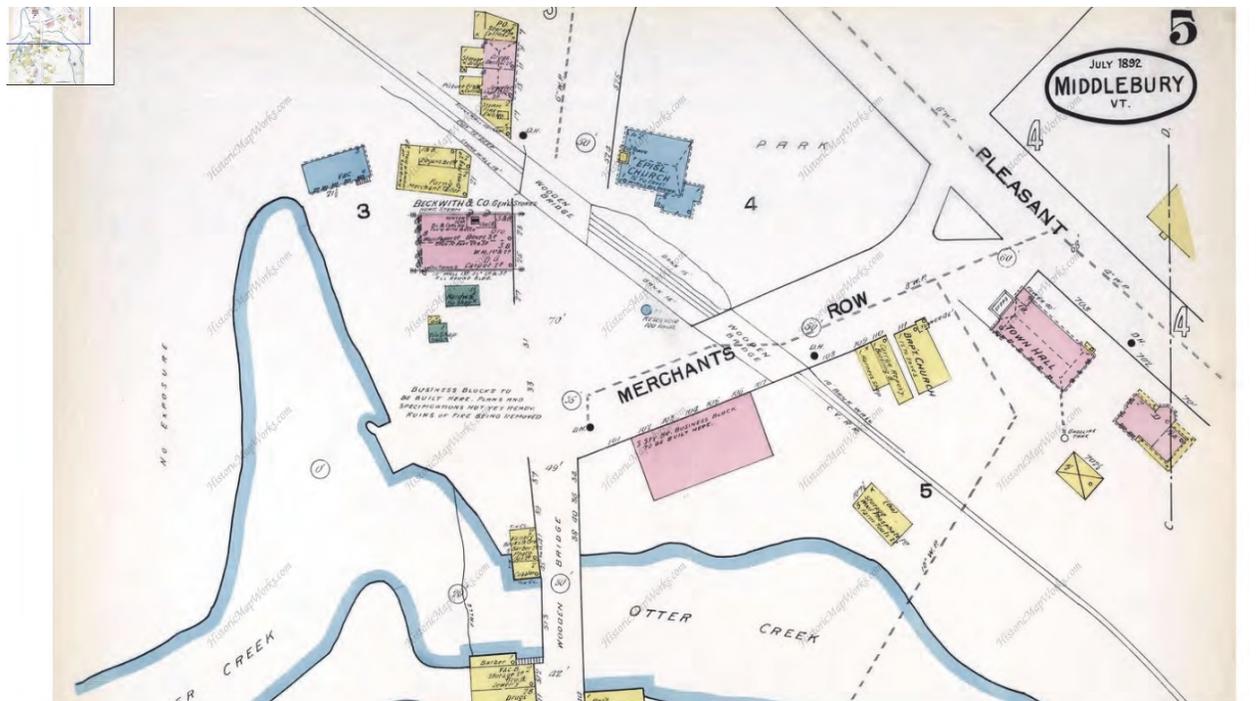
____. 1920 Middlebury, Vermont, plate 4, New York, NY.

University of Vermont. 2013. Landscape Change Program. Available online at
<http://www.uvm.edu/landscape/>
Accessed May 15, 2013. Last update unknown.

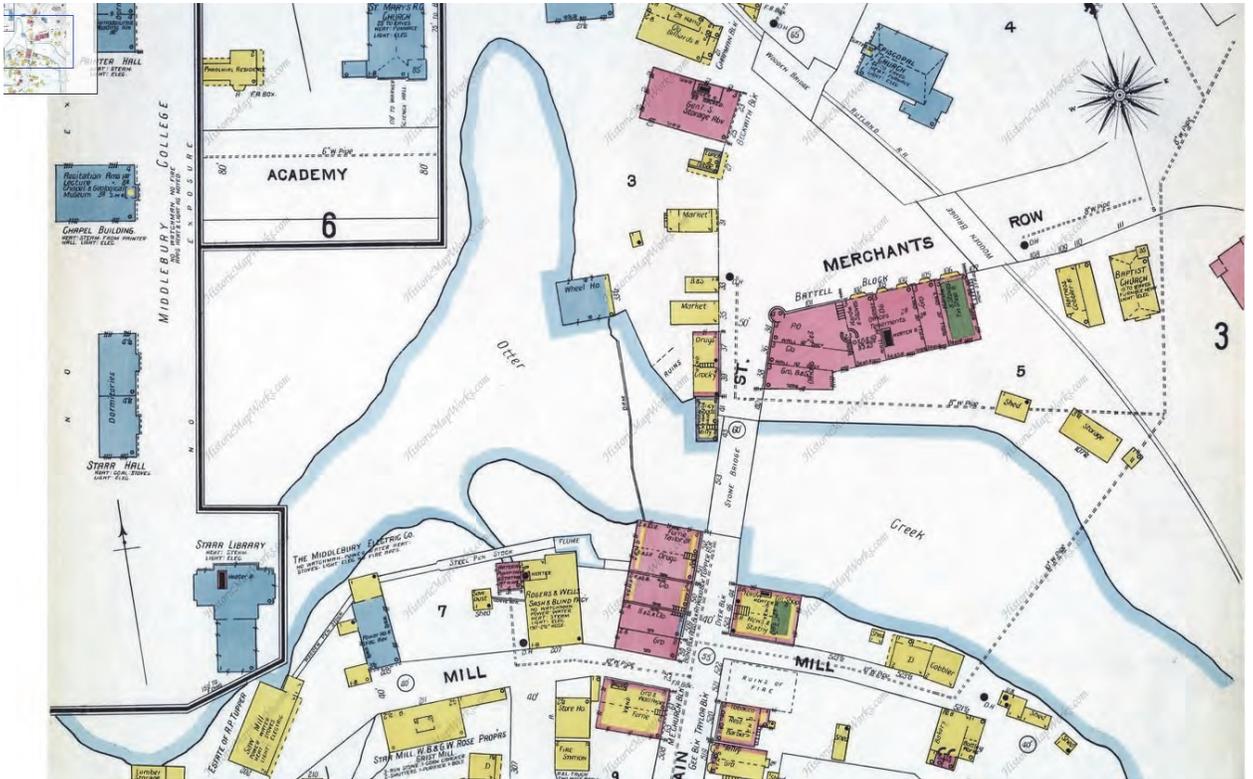
FIGURES



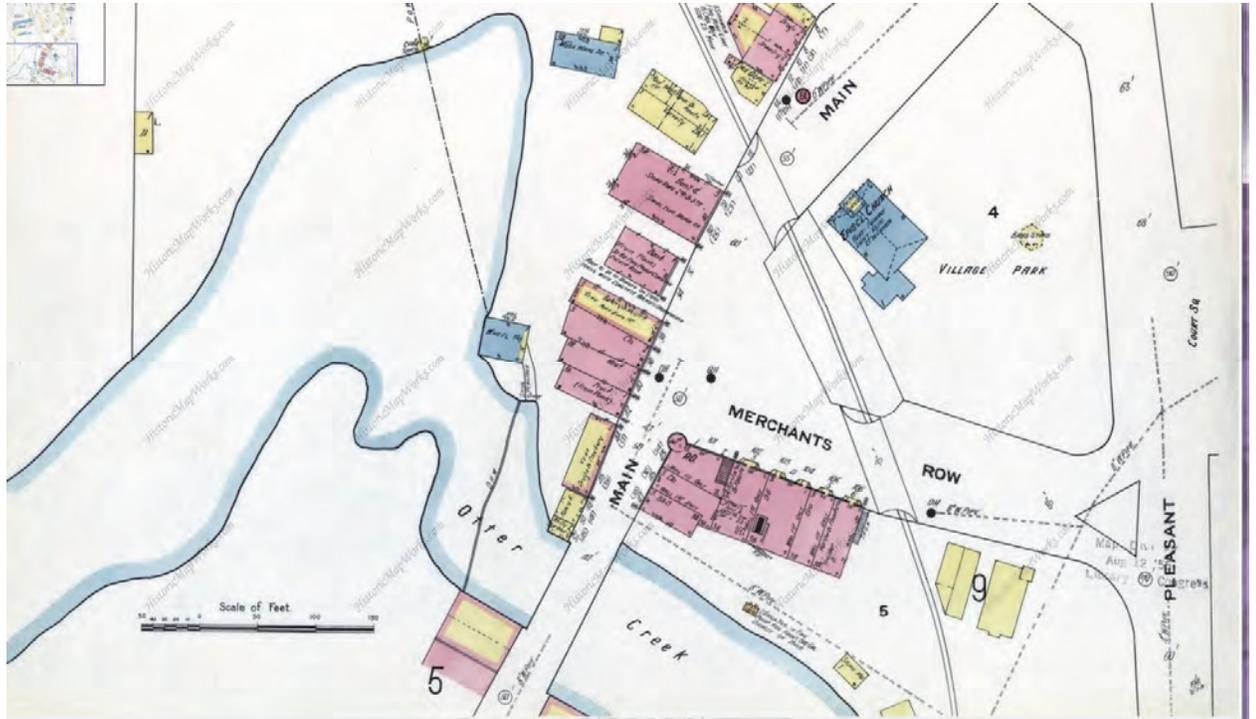
1885 Sanborn map, Plate 2



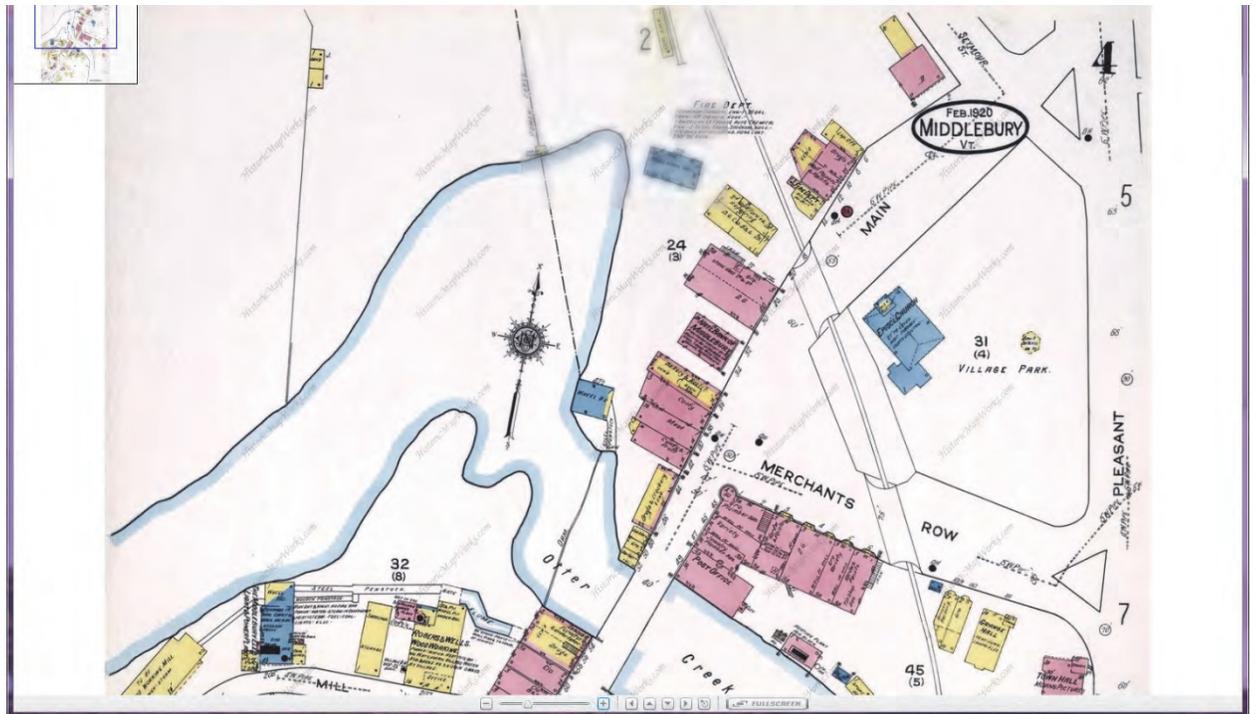
1892 Sanborn map, Plate 5



1905 Sanborn map, Plate 6



1910 Sanborn map, Plate 4



1920 Sanborn map, Plate 4

PHOTOS



Addition to the Bourdon Insurance Agency Building, 48 Merchants Row, Middlebury, Vermont. View facing south, February 2013.



Addition to the Bourdon Insurance Agency Building, 48 Merchants Row, Middlebury, Vermont. View facing west, February 2013.



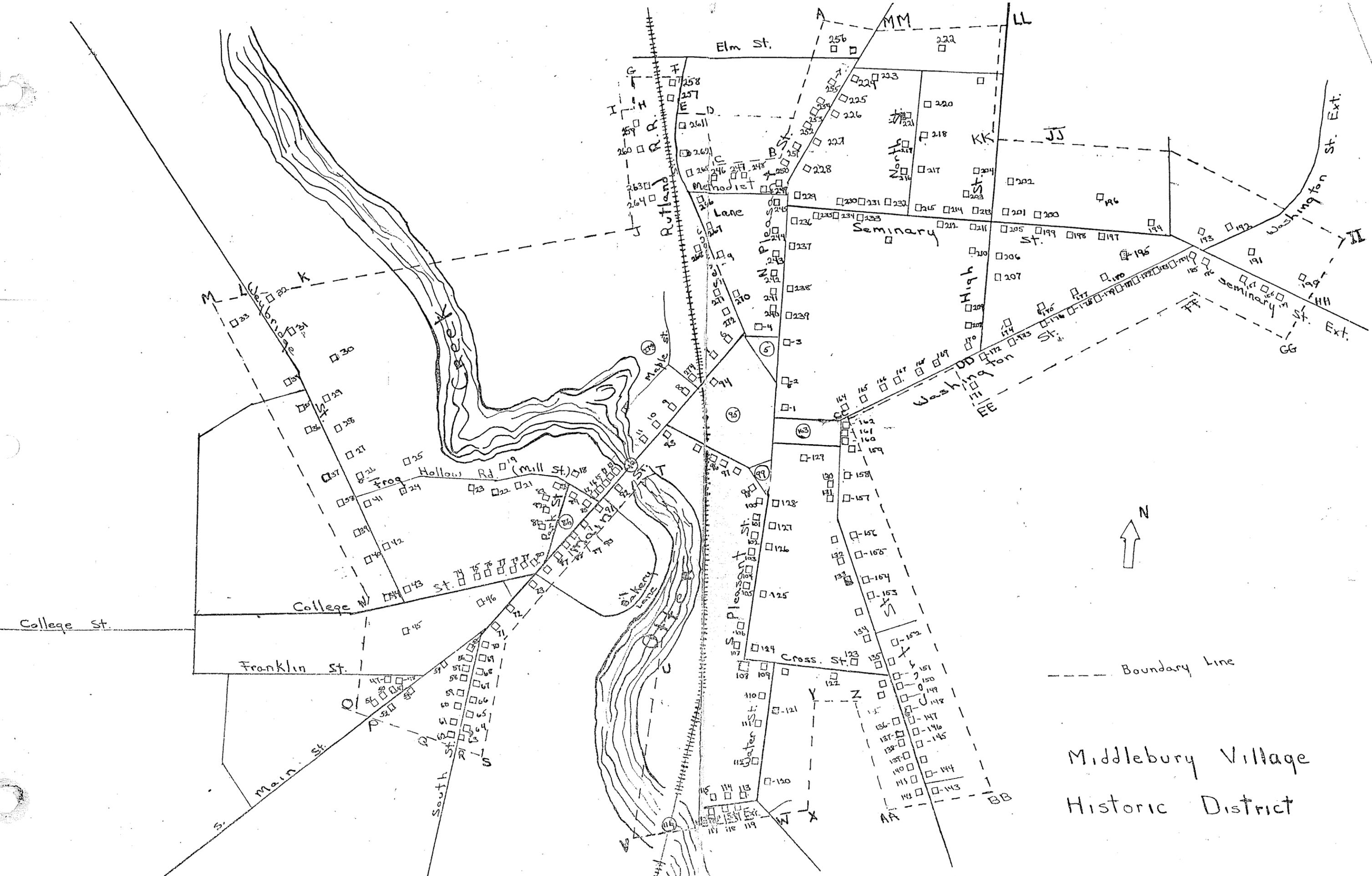
Southbound - Bridge 240 Bourdon Insurance on left, Grange hall 2nd from left, Battell Block on right

1963 Poulin photo



1981-1982 photo

Middlebury Village Historic District Original Boundary Map (1976)




 N
 ----- Boundary Line

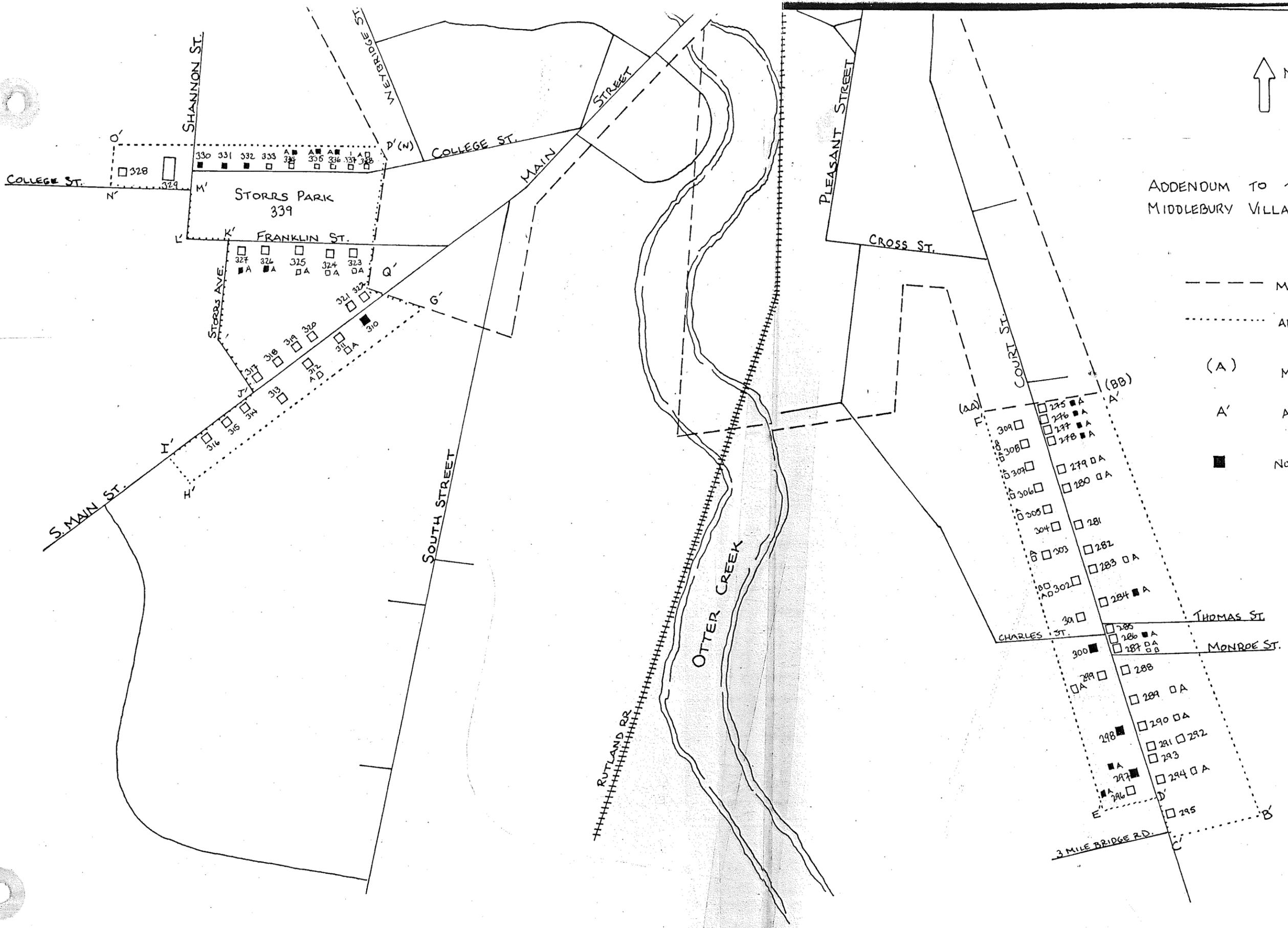
Middlebury Village
 Historic District

Middlebury Village Historic District Amendment Boundary Map (1980)



ADDENDUM TO THE
MIDDLEBURY VILLAGE HISTORIC DISTRICT

- MVHD BOUNDARY LINE
- ADDENDUM BOUNDARY LINE
- (A) MVHD BOUNDARY POINT
- A' ADDENDUM BOUNDARY POINT
- NON-CONTRIBUTING BUILDING



Section 106 Determination of Effect (2013)

MIDDLEBURY WCRS(23) BRIDGE PROJECT

Middlebury, Vermont

Prepared for **Vermont Agency of Transportation**
Cultural Resources Group
1 National Life Drive
Montpelier, Vermont 05633

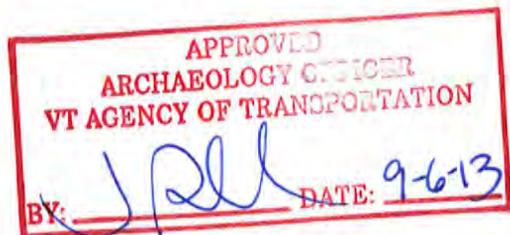
Town of Middlebury
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September 6, 2013

Project Number: 57603.00

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Appendix 1: Purpose and Need

Appendix 2: Conceptual Plans

Precast Box Cross Section

Plan and Profile: Railroad Grade Changes

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Appendix 3: Area of Potential Effects Exhibit

Appendix 4: Map of the Town of Middlebury, F.W. Beers and Company, 1871

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1.0 Introduction

This Determination of Effect for the Middlebury WCRS(23) Bridge Project (Project) has been developed pursuant to Section 106 of the National Historic Preservation Act and in accordance with the Vermont Agency of Transportation (VTTrans) Manual of Standards and Guidelines (VTTrans 2000).¹ This report includes background information to support a finding of **adverse effect on historic resources** (defined as above-ground historic resources) and **no adverse effect on historic period archaeological resources**, provided that certain Stipulations defined herein are followed. Project review consisted of identifying eligible cultural resources (defined as both above-ground historic resources and archaeological sites) within the Project vicinity, determining the Project's Area of Potential Effects (APE), and assessing potential impacts to historic buildings, structures, historic districts, historic landscapes and settings, and to potential archeological resources within the APE. The following information details the recommended findings to support the determination of adverse effect. The applicable Standard Mitigation Measures (SMMs) and Stipulations are described. Lastly, concurrence with this Determination of Effect and the mitigation measures is provided as evidence that the Federal Highway Administration (FHWA) has satisfied its obligations under Section 106 for this undertaking.

2.0 Project Purpose and Need

The Purpose and Need of the Middlebury WCRS(23) Bridge Project has been defined in accordance with the requirements of NEPA, CEQ Regulations 40 CFR Part 1500-1508, and FHWA's Technical Advisory T6640.8A as follows:

- To address the structural deficiencies and existing pedestrian facilities of two roadway bridges in downtown Middlebury where Main Street (VT 30/TH 2 Bridge 102) and Merchants Row (TH 8 Bridge 2) span the Vermont Railway, Inc. (VTR) track.

See **Appendix 1** for the complete Project Purpose and Need.

3.0 Project Description

3.1 Project Alternatives

To evaluate potential options to address the Project's Purpose and Need, various Project alternatives were considered including No Build, Rehabilitation, Build on New Location, Two Bridge Replacement, and Tunnel Replacement. These alternatives and their

¹ Manual of Standards and Guidelines in Accordance with the Programmatic Agreement among The Federal Highway Administration, the Vermont Agency of Transportation, The Advisory Council On Historic Preservation, and The Vermont State Historic Preservation Officer Regarding Implementation of the Federal-Aid Highway Program In Vermont.

associated impacts on cultural resources were presented in detail in the Alternatives Analysis Report, prepared by Vanasse Hangen Brustlin, Inc. (VHB), dated July 23, 2013 (VHB 2013a). These findings are summarized below.

3.1.1 No Build

The No Build Alternative does not meet the Purpose and Need as the severity of the structural deficiencies precludes their being addressed satisfactorily by repair or maintenance work.

3.1.2 Rehabilitation

Bridge rehabilitation involves comprehensive structural repairs to an existing bridge to address deterioration, deficient geometry, or so that it can meet minimum acceptable load ratings or required capacity. Rehabilitation for these bridges is not feasible due to engineering challenges of an extraordinary magnitude and unreasonable Project costs.

3.1.3 Build on New Location

When federal funds are proposed for use on projects that involve the replacement of historic bridges, the Department of Transportation Act of 1966 requires an investigation of alternatives to construct new bridges on a new location or parallel to the existing bridge. This would involve changing either the railroad alignment or the roadway alignment so that the historic integrity of the existing structures is not compromised. Building on a new railroad or roadway alignment is not possible for this Project due to multiple constraints posed by the surrounding development, extensive impacts to historic resources and qualifying Section 4(f) resources, and unreasonable Project costs.

3.1.4 Replacement

Full bridge replacement would provide sufficient vertical clearance to allow for double stack freight cars. All state and American Railway Engineering and Maintenance-of-Way Association (AREMA) Standards can be met with full replacement, while providing safe passage of pedestrian and vehicular traffic, fulfilling the requirements of the Purpose and Need.

Based on the findings of the Alternatives Analysis, the Town of Middlebury Selectboard endorsed the Tunnel Replacement Alternative as the Preferred Alternative for the Project.

3.2 Project Components

The Project will consist of the following principal components:

- replacement of both the Main Street and Merchants Row Bridges using a tunnel, which requires track lowering to meet state and federal requirements for vertical clearance;
- installation of a flood abatement wall south of Merchants Row and between the VTR track and Otter Creek and retaining walls in all areas where track lowering will result in a vertical cut of a height that would otherwise require excavation and/or slope layback that would extend beyond the Right-of-Way (ROW); and
- installation of stormwater drainage infrastructure, including tying into the existing municipal stormwater network to convey runoff through the Project area (one area outside state and Town-owned ROW).

3.2.1 Tunnel Structure

Due to the narrow ROW and constructability constraints that include the requirement to open the Project area to daily rail traffic, the structural element to be used is a precast concrete box (see Precast Box Cross-Section, **Appendix 2**). The box does not require wide footings that would be necessary for typical bridge abutment structures and retaining walls along the railroad trench between the bridge locations. The existing bridges will be replaced by the precast box shape structure throughout the area between the two bridges, creating a tunnel between Main Street and Merchants Row. The tunnel section between the bridge limits will be covered with granular fill and finished with topsoil to establish a grass-covered park setting that links Triangle Park with the remainder of the Village Green. Crash-tested railing will be required on the north side of the Main Street Bridge and south side of the Merchants Row Bridge where the tunnel daylights.

To conform to Vermont statute and FHWA guidelines, the base of the precast box structure will be installed at an elevation allowing for 23'-0" of vertical clearance. However, to allow the railroad to run double stack freight cars immediately after construction without exceeding their current limiting grade, ballast will be placed inside the box structure and timber tie railroad tracks installed to achieve a vertical clearance of 20'-9". This approach provides the railroad with the flexibility to lower the track elevation at some point in the future if and when required (see Plan and Profile: Railroad Grade Changes, **Appendix 2**).

The requirement for horizontal clearance per the AREMA standards is 16'-0" (8'-0" from centerline of track in both directions). A design width of 20'-0" was maintained to allow for construction phasing, track maintenance activities and the potential for a track realignment to accommodate future passenger rail service. Considering the vertical and horizontal clearance requirements, the resulting exterior box dimensions will be approximately 24' wide by 28' tall. All drainage and other utilities will be constructed to allow for track lowering with minor modifications. The variance from the standard vertical clearance of 23'-0" will require an approval from the Transportation Board.

The construction of the tunnel structure will necessitate the temporary relocation of the Addison County Transit Resources (ACTR) bus stop, currently located adjacent to the westbound lane on the Merchants Row Bridge, to a new location on South Pleasant Street. In addition, the barber shop located at the southeast corner of the Merchants Row Bridge will need to be removed to facilitate Project construction.

3.2.2 Flood Abatement and Retaining Walls

Due to the amount of track lowering required to achieve the necessary vertical clearance, approximately 860 feet of the proposed finished track elevation south of the low point of the proposed vertical alignment will lie at an elevation below that of the Zone AE Special Flood Hazard Area, which ranges from 349.60 to 346.8 feet NAVD 88 within the Project area. Accordingly, an earthen berm and a concrete wall with a top elevation of approximately 350.2 feet NAVD 88 will be constructed between the railroad tracks and Otter Creek south of Merchants Row to mitigate the risk of flooding within the sag of the track profile. The earthen berm will extend approximately 300 feet south of the southern face of the Cross Street Bridge pier and the concrete wall will extend for a distance of approximately 500 feet as measured from the northern face of the pier to the southern face of the Merchants Row Bridge. The concrete wall will be installed roughly 15 feet west from the centerline of the track. Its construction will require excavation for the placement of a footer. A similar offset and construction method will be used wherever retaining walls are required due to track lowering.

3.2.3 Stormwater Improvements

The Project will require stormwater improvements, particularly in the tunnel area between Merchants Row and Main Street (see Preliminary Central Drainage Network, **Appendix 2**). The proposed improvements include:

- tying into the existing municipal stormwater network under Merchants Row and installing a new section of pipe approximately 60 feet in length between a catch basin near the sidewalk and one in the grassy area just east of the VTR tracks; and
- tying into the existing drainage pipe and outfall to Otter Creek in the Marble Works area, or replacing/upgrading this pipe and reoccupying its existing alignment.

The pipe replacement/upgrading in the Marble Works area represents a Project-related disturbance outside the railroad (state) or Town-owned ROW. Utilizing this existing drainage alignment will greatly facilitate Project construction, preventing new ROW from being acquired; the Town has a tacit agreement with the landowner to proceed with these improvements and is investigating whether a drainage easement already exists or will be required. In addition, this existing

drain allows for Project drainage via gravity, which precludes the need for a pump station.

4.0 Cultural Resources Identification

4.1 Area of Potential Effects

The Area of Potential Effects (APE) for the Project includes the width of the railroad ROW from the Otter Creek Truss to the Elm Street Bridge, the approach spans leading to the Main Street and Merchants Row Bridges, the bridges themselves, a portion of the Village Green where stormwater interconnections are required, a portion of the Marble Works area where stormwater improvements will be made outside the state or Town-owned ROW, and portions of a parcel which is also outside the state or Town-owned ROW and that contains the barber shop at the southeast corner of the Merchants Row Bridge. A map of the APE is provided in **Appendix 3**.

4.2 Historic Resources

The historic resources within the APE that have been determined to contribute to a historic district listed in the National Register of Historic Places (National Register), or contribute to a National Register-eligible district are discussed in detail in the Determination of National Register Eligibility Report, prepared by VHB and dated April 19, 2013 (VHB 2013b). The National Register eligibility recommendations of this report received the formal concurrence of the VTrans Historic Preservation Officer on June 19, 2013. In summary, the historic resources with the project APE determined to be eligible for the National Register include, per this report and concurrence, are:

- **The Main Street and Merchants Row Bridges:** determined to be eligible as contributing resources to the Middlebury Village Historic District (MVHD) and Rutland Railroad Historic District (RRHD). The railings and stone abutments of the bridges are considered character-defining features, but the bridge decks and support columns are not considered significant elements.
- **Railroad Corridor Retaining Walls:** determined to be eligible as contributing resources to the MVHD and the RRHD.
- **Rutland Railroad Corridor:** determined to be a contributing resource to the MVHD.

The report also concluded that the Lazarus Building, located just northwest of the Main Street Bridge, is not a contributing resource to the MVHD nor is it individually eligible for the National Register. An addendum to the report, dated May 29, 2013, concluded that the addition to the Bourdon Insurance Agency Building southeast of the Merchants Row Bridge (now functioning as a barber shop) is not a contributing resource to the MVHD nor is it individually eligible for the National Register.

4.3 Archaeological Resources

4.3.1 Precontact Archaeological Resources

An Archaeological Resource Initial Identification Study (Study) was completed in 2000 for what was at that time the proposed rehabilitation of the Main Street Bridge (Hartgen 2000). The Study noted that the output from the Environmental Predictive Model for Locating Archaeological Site yielded a sensitivity rating of 4, which indicates a non-sensitive site. From the Study:

"The [project] location would ordinarily have a high sensitivity rating due to proximity to Otter Creek and the falls at Middlebury. However, the low score is due to the intense historical development that has taken place in the project vicinity. Therefore, intact precontact resources are unlikely to be present."

The railway corridor represents once such area of intense development. To install the track through Middlebury and maintain a suitable grade for locomotives, a trench was cut through downtown Middlebury and retaining walls installed. These activities would have disturbed any precontact resources that were present at the time, making it unlikely that these resources remain present within the railroad component of the Project APE.

A review of the Vermont Archaeological Inventory (VAI) and the Town files performed for the Study did not reveal any reported precontact archaeological sites within or immediately adjacent to the Project area, or within what is the current Project APE. Known precontact sites in the general vicinity are typically located along the banks of Otter Creek on small knolls or terraces, though some sites in uplands are present, usually in close proximity to small intermittent streams or springs (Hartgen 2000). Because of the tendency or precontact archaeological sites to occur on the banks of Otter Creek, the locations of the proposed flood abatement and retaining walls south of Merchants Row were evaluated for archaeological sensitivity by Jeannine Russell, VTrans Archaeology Officer, during a site visit on August 21, 2013. This site visit was also attended by John Crock of the University of Vermont Consulting Archaeology Program (UVM-CAP). During this site visit, VHB presented an existing conditions map that depicted the locations of existing utilities, including stormwater, sanitary sewer, and telecommunications. Of particular note was the fact that the orientation of the existing sanitary sewer line is coincident with that of the proposed flood abatement wall. This sewer line consists of clay pipe that was placed roughly 10'- 11' below ground surface. Based on its age and the construction practices typically employed at the time of installation, a trench roughly 8' in width would have been required to install it at this depth. Accordingly, much of the ground surface proposed for excavation to install the flood abatement wall has been previously disturbed.

During the site visit, VHB also presented a map from the 1871 Beers Atlas of Addison County that depicts a rail siding west of the current alignment and

extending from Merchants Row south to the Otter Creek truss bridge, apparently associated with the Old Depot Ground (**Appendix 4**). This siding would have also caused ground disturbance in the area of the proposed flood abatement wall.

In addition to the existing conditions and historic mapping, the following additional observations were made by Jeannine Russell and John Crock:

- The location of the flood abatement wall is on the outside of a meander bend on Otter Creek, which represents an erosional environment as opposed to a depositional one. Accordingly, archaeological resources, if present, would more likely be shallow than deeply buried. Due to the extent of past disturbance and the lateral migration of the creek over time, archaeological resources would have been susceptible to removal or remobilization. The flood of 1927 may have caused considerable streambank erosion. Some historic riprap was observed just north of the pier at the Cross Street Bridge and extending for an undetermined length downstream, suggesting bank erosion was severe enough to require armoring at some point in the past.
- The construction of the original railroad tracks involved excavation along the east side, with some of that fill likely placed on the west side to create a flat surface for the track and perhaps the siding. This excavation extended to the retaining walls near the Battell Block and would have removed and/or possibly reburied archaeological resources.

Based on the available mapping and field observations, the VTrans Archaeology Officer determined that the locations of the proposed flood and retaining walls represent areas of low sensitivity for precontact archaeological resources.

4.3.2 Historic Period Archaeological Resources

The Study describes the historic structures that are or were present within the Project area. It notes that

"Although most of the area has late 19th to early 20th century buildings constructed in the place of previous structures, or is paved over, remains of the earlier structures may be present underneath the paving or under and incorporated into the foundations of the existing structures."

Those structures that are no longer present were removed for redevelopment or destroyed within the fires of 1883 or 1891. The Study concluded that the primary type of resource likely to be present within the APE is "...foundation remains of commercial buildings that were burned or built over as a result of several fires that occurred in the project area." Within the APE, historic period archaeological resources may include but are not restricted to the following:

- **Sargent/Allen's Block:** The "Sargent Block," identified on the 1857 Walling map of Addison County and located in the southwest corner of the Village Green, later referred to as "Allen's Block" on the 1871 Beers Atlas of Addison County (**Appendix 4**). The 1885 Sanborn Map indicates a reservoir is present adjacent to the Allen's Block (**Appendix 5**). The Allen's Block was destroyed by the 1891 fire. The mapped location of this block is roughly coincident with that of the current Triangle Park.
- **Former Main Street and Merchants Row Bridges:** According to the Study and as described in the Determination of Eligibility Report (VHB 2013b), the railroad caused the Main Street and Merchants Row Bridges to be raised three times between 1849 and 1907, before the current bridges were completed in 1921. The 1905 Sanborn map identifies the bridges at that time as being wooden. Remnants of these bridges may have been incorporated into the fill for the existing bridge abutments.

5.0 Effects to Cultural Resources

The effects to cultural resources associated with bridge replacement using the Tunnel Alternative are described below, organized by the three principal Project components.

5.1 Tunnel Structure

5.1.1 Historic Resources

Project construction will have an **adverse effect** on both the MVHD and RRHD via the following actions:

- the removal of historic fabric, including the entirety of both existing bridges (i.e., bridge deck, superstructure, substructure, and railings); and
- the retaining wall along the western side of the Project corridor will be buried in situ, with the one along the eastern side removed.

The following action may contribute to the adverse effect on the MVHD and RRHD:

- the existing view of the tracks and stone retaining walls between the two bridges will be lost.

The relocations of the ACTR bus stop and barber shop building will have **no effect** on historic resources because neither is a contributing resource to the MVHD nor are they individually eligible for the National Register. The Town will coordinate with the barber shop business and property owners with regards to temporary, off-site accommodations for the business during construction. At

this point, it has not yet been determined if the existing structure will be returned to its original location after construction. A new structure may be constructed in its place or compensation provided for the permanent loss of the building. Currently, the Town has no plans to acquire the property. However, if the property or portions thereof are acquired by the Town and the location of the former barber shop improved in any manner as part of the Project, the design of the improvements would be subject to the review and approval of the VTrans Historic Preservation Officer (see Section 8.1).

5.1.2 Archaeological Resources

The extent of intact historic period archaeological resources within the area proposed for the tunnel structure has not been determined. Such an assessment is not feasible without invasive and costly means of investigation, which would be compounded by the challenging setting of an active rail track and disturbance of bridge or retaining wall components. Accordingly, it is unclear if the Project will result in an effect on historic period archaeological resources. However, encountering such resources would be largely restricted to the eastern flank of the rail corridor (i.e., the side of the Village Green containing St. Stephen's Episcopal Church). This is because the proposed method of construction will involve using the existing western ashlar retaining walls and abutments as support of excavation during construction and subsequently burying them in situ as the precast concrete structures are installed. Therefore, no significant excavation will be carried out along the western flank of the rail corridor where remnants of the Sargent/Allen's Block and reservoir may be present. Disturbance along the western flank will involve primarily the removal of the existing bridge decks and seats.

The existing bridge abutments and retaining walls along the eastern side of the Project corridor will be removed in their entirety to accommodate construction access and utility and drainage improvements. This work may expose previously buried portions of the old bridges. Historic mapping suggests that no other structures existed in this portion of the Village Green. Historic period archaeological resources may be present under the barber shop, which is proposed for relocation during construction.

The ACTR bus stop resides atop the Merchants Row Bridge. Its relocation will have **no effect** on archaeological properties. Otherwise, should historic period archaeological resources be exposed or disturbed during the construction of the tunnel structure, these actions will result in **no adverse effect** on archaeological properties provided that the Project adheres with the Stipulations described in Section 8.2.

5.2 Stormwater Improvements

5.2.1 Historic Resources

Though the locations of proposed interconnection with and improvements to existing municipal stormwater infrastructure lie within the MVHD, no above-ground structures are present in these areas. Therefore, these improvements will have **no effect** on historic resources.

5.2.2 Archaeological Resources

The locations of proposed interconnection with and improvements to existing municipal stormwater infrastructure are areas that have undergone past ground disturbance. At the location of the proposed Merchants Row tie-in and new pipe installation, other underground utilities are present in close proximity, including electrical and telecommunications. The stormwater drainage pipe that lies beneath the Marble Works area similarly required excavation and ground disturbance to be installed. Relatively fresh and linear patching of the bituminous surface of Printer's Alley immediately above this pipe suggests that modifications or upgrades to this drainage pathway have occurred recently. As previously mentioned, the proposed stormwater improvements in the Marble Works area represent an activity outside the railroad (state) or Town-owned ROW.

A site visit with the VTrans Archaeology Officer on August 21, 2013 included an evaluation of these two areas. It was concluded that both areas are not sensitive for archaeological resources due to the degree of prior disturbance and the proposed work is anticipated to have **no effect** on archaeological resources providing that the construction footprint is minimized to the extent feasible and that the improvements at the Marble Works reoccupy the existing drainage pathway.

5.3 Flood Abatement and Retaining Walls

5.3.1 Historic Resources

Though the locations of the proposed flood abatement wall and retaining walls lie within the MVHD, no above-ground structures are present in these areas. Therefore, these improvements will have **no effect** on historic resources.

5.3.2 Archaeological Properties

Based on the available mapping and field observations, the VTrans Archaeology Officer determined at the time of the site visit (August 21, 2013) that the locations of the proposed flood and retaining walls represent areas of low sensitivity for

archaeological resources and that their installation is anticipated to have **no effect**. No further surveys or research were recommended.

6.0 Determination of Effects

The Project will have an **adverse effect** on the MVHD and RRHD through the removal of historic resources, specifically the entirety of both the Main Street and Merchants Row (i.e., bridge deck, superstructure, substructure, and railings). In addition, the retaining wall along the western side of the Project corridor would be buried in situ, with the one along the eastern side removed. The loss of the existing view of the track between the two bridges may contribute to the adverse effect on the MVHD and RRHD.

Based on the intensive development and redevelopment within the Project area over the last 200 years, intact precontact deposits are unlikely (Hartgen 2000). Accordingly, the Project is anticipated to have **no effect** on precontact archaeological resources. Historic period archaeological resources may be present within the APE and may be exposed during construction. The exposure and disturbance of such resources during construction would result in **no adverse effect** provided that the Project adheres to the Stipulations contained in Section 8.2.

Section 4(f) de minimis finding notification

By copy of this document, and as required by Section 4(f) regulations, VTrans hereby informs the State Historic Preservation Officer that certain above-ground components of this project may necessitate the acquisition of minor amounts of property outside the ROW. If implemented, these actions may trigger a review of DOT Section 4(f), and to the extent that the actions do not adversely affect historic properties, we will be recommending to FHWA a Section 4(f) de minimis impact finding for those individual components.

7.0 Mitigation for Adverse Effects

Because the Project will have an adverse effect on historic resources, VTrans shall ensure that the following Standard Mitigation Measures (SMMs) are carried out:

1. Photographic Documentation. The VTrans shall ensure that the historic property is recorded prior to its demolition, alteration or relocation in accordance with Historic American Buildings Survey (HABS) or Historic American Engineering Record (HAER) standards, for nationally significant properties, or, for other properties, the Photographic Documentation Standards for Historic Structures adopted by the SHPO. The VTrans shall retain one copy, provide one to DHP, and one or more to appropriate local depositories. Copies of original plans for engineering structures should be part of the documentation package, if possible.

9. Interpretive Signage. The VTrans, through the use of research, design and fabrication consultants as appropriate, shall produce one or more signs to describe the work on a property, archeological resources recovered from a site, the site's history, or its historic context. VTrans and/or local interested parties shall plan the sign(s) and address maintenance and long-term care of permanent sign(s).

14. Salvage of Architectural or Engineering Features. VTrans shall identify appropriate parties to receive salvaged architectural or engineering features. VTrans shall ensure that the features are salvaged prior to demolition activities and properly stored and curated. When feasible, salvaged architectural features shall be reused in other preservation projects.

19. Design of a New Bridge. The design for the new bridge shall be compatible with the surrounding historic and natural environment in design, massing, scale, width, materials, color, etc. The design shall be recognizable as contemporary, and while it may reference the design of the previous bridge, it shall avoid creating an inappropriate false historic appearance.

The following additional information is provided with respect to proposed actions to be taken in accordance with the SMMs.

- **Storage of Surplus Ashlar Blocks (SMM #14):** Surplus ashlar blocks will be stockpiled for later use on Town projects with the approval of the VTrans Historic Preservation Officer.
- **Enhancing Interpretive Opportunities (SMM #9 and #14):** The reestablishment of the original extent of the Village Green provides a means of acknowledging the importance of the railroad to the Town of Middlebury; interpretative signage will be installed in the re-connected green space to describe the importance of the railroad in the development of the Town of Middlebury. The VTrans Historic Preservation Officer will review and approve the sign content and design (SMM #9). Ashlar blocks salvaged from the eastern abutments of both bridges will be used as structural and decorative elements in the new green space, providing a practical means of achieving the necessary cover and site grading above the tunnel and a functional and tactile interpretive element to convey the importance of the railroad to park visitors (SMM #14). The VTrans Historic Preservation Officer will review and approve final plans for the reconnected Village Green and the means of incorporating ashlar blocks (SMM#14).

8.0 Stipulations

8.1 Historic Resources

In addition to the SMMs, it is stipulated that the final plans for the Project and any subsequent modifications thereto are subject to the review and approval of the VTrans

Historic Preservation Officer in advance of construction. The following details are provided with regards to specific design elements; however, the complete plan set is subject to the aforementioned review and approval.

- **Replacement Bridge Railings:** Existing railings will be replaced with crash-tested railing, the selection and design of which will be approved by the VTrans Historic Preservation Officer.
- **Design of Tunnel Ends:** The final configuration of the ends of the tunnel will require coordination with the VTrans Historic Preservation Officer. These areas may terminate parallel to the roadway centerline or perpendicular to the railroad corridor. The VTrans Historic Preservation Officer will review and approve of the design so that it is carried out in a manner consistent with the surrounding elements of the Middlebury Village Historic District.
- **Triangle Park:** The consulting engineer and municipality shall ensure that the VTrans HPO is invited to participate in design work related to reconfiguration of Triangle Park. Plans for the park and environs as affected by this undertaking will require written approval by the VTrans HPO.

8.2 Archaeological Resources

The Project will adhere to the requirements of Section 4(I) of the VTrans Manual of Standards and Guidelines regarding *Discovery of Archaeological Sites During Project Construction*.

- Archaeological monitoring will be conducted to document any structural features that become exposed during construction that may be associated with the properties contributing to the Middlebury Village Historic District and the historic Rutland Railroad (e.g., evidence of early bridge abutments or retaining wall features). These features will be described and photographed. Archaeological monitoring will provide a means to quickly assess and document any such features without interrupting the construction schedule. The archaeological consultant will work closely with the Project engineer and construction contractor to plan to be present at critical times (e.g., the deconstruction of the retaining walls and the dismantling of the bridge abutments) as well as be available on an on-call basis.
- The Town will ensure that the entity responsible for Project construction is familiar with the content and requirements of Section 4(I) and Section 4(J) Treatment of Human Remains.
- The construction footprint for the stormwater improvements in the area of the Village Green will be minimized to the extent feasible and that the improvements at the Marble Works will reoccupy the existing drainage pathway.

9.0 Concurrence

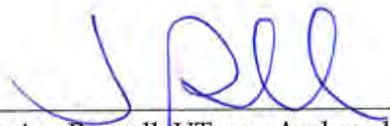
I concur with the findings of this Section 106 Determination of Effect for the Middlebury WCRS(23) Bridge Project and with the Mitigation for Adverse Effects and Stipulations described herein.



Scott Newman, VTrans Historic Preservation Officer

9/6/13

Date



Jeannine Russell, VTrans Archaeology Officer

9-6-13

Date

10.0 References

Hartgen Archeological Associates, Inc. (Hartgen). 2000. Archeological Resource Identification Letter Report: Middlebury BRF 0161(9)SC, Vermont Route 30 (Main Street) over Vermont Railroad, Bridge #102. March 29, 2000.

Vanasse Hangen Brustlin, Inc. (VHB). 2013a. Alternatives Analysis Report, unpublished report prepared by the Town of Middlebury, July 23, 2013.

_____. 2013b Determination of National Register Eligibility for Various Structures and the Rutland Railroad, Middlebury Bridges Replacement Project - Middlebury WCRS(23), April 19, 2013 and Addendum, May 29, 2013.

Appendix 1: Purpose and Need

Project Purpose

The Purpose and Need for the Middlebury Project was developed based on a wealth of available information including bridge inspection reports completed by the Vermont Agency of Transportation (VTrans), technical data, and previously completed conceptual plans. This Purpose and Need statement is consistent with the goals and recommendations of the Middlebury 2012 Town Plan and the 2011 Addison County Regional Plan.

The purpose of the Middlebury WCRS(23) Bridge Project has been defined in accordance with the requirements of NEPA, CEQ Regulations 40 CFR Part 1500-1508, and FHWA's Technical Advisory T6640.8A as follows:

- To address the structural deficiencies and existing pedestrian facilities of two roadway bridges in downtown Middlebury where Main Street (VT 30/ TH 2 Bridge 102) and Merchants Row (TH 8 Bridge 2) span the Vermont Railway, Inc. (VTR) track.

Project Need

The Project Need is defined by the concerns and deficiencies identified in the following areas:

Structural Condition of Bridges

The current bridges at Main Street and Merchants Row were constructed between 1920 and 1921. Both are two-span concrete-encased steel beam bridges. The Merchants Row bridge is supported by granite ashlar abutments and concrete-encased steel bridge seats. The north sidewalk and travel lanes of the Main Street Bridge are supported similarly, with the south sidewalk supported by a concrete abutment. For both bridges, the approach span is a concrete T-beam construction and the main approach is a concrete slab reinforced with steel rails (i.e., "rail top" span). The ends of the approach and main spans are supported by a concrete-encased steel pier. Bridge railings consist of three cast iron pipe or channel rails on steel posts.

For over twenty-five years, bi-annual VTrans bridge inspection records have chronicled the ongoing deterioration of both bridges. Concrete cracking, delamination, and spalling have occurred on all bridge components with particular deterioration noted on the fascias. Embedded steel reinforcement is exposed in a variety of locations,

especially at the fascias, the ends of the pier caps, and in the flanges of the approach spans under the sidewalks. Heavy efflorescence is common on the soffits of both bridges, indicating leakage through the deck. In April 1997, a hole in the sidewalk of the Merchants Row bridge was reported. Inspection reports from 1998 to the present have noted that full depth holes can occur at any location in the Merchants Row bridge, and are most likely to occur under the sidewalks and parking areas. The 1986 bridge inspection report for this same bridge notes a hole in the soffit up to the steel mesh of the bridge decking. At present, the mesh is exposed in multiple locations on the Merchants Row bridge.

Inspection reports from 1994 (Merchants Row) and 1995 (Main Street) recommended bridge replacement. Both bridges have been on the State Bridge Program's Candidate list since funding for preliminary engineering was established in March 1999.

Rail and Pedestrian Safety

In 2008, VTR informed VTrans that spalling concrete from the bridges was falling onto the tracks and passing trains, presenting a safety concern. In response, VTrans issued a Critical Maintenance Report. This report noted that the safety concern extends beyond VTR operations to pedestrian traffic on the sidewalks of the bridges. VTrans recommended cleaning and patching or some type of safety netting to catch debris. The lack of sufficient vertical clearance precluded the installation of a safety net, leaving concrete patching as the only measure to address this problem. While such patching has been carried out over the years, ongoing deck saturation and the age of the structures render these measures as only short-term solutions. Concrete continues to spall from both bridges.

The deterioration of the fascias has compromised the footings of the support posts for the sidewalk-mounted railings. Some of these bases are cracked or rusted through. Railing couplings are cracked and sections of railing are missing. Between 2008 and 2010, chain link fencing was added to the railings to improve safety conditions. However, the integrity of the support posts remains compromised and the substandard bridge railings do not meet current code requirements.

Load Rating

Though VTrans' biannual inspections include a visual assessment for overstressing due to live loads, no design or construction plans are available for either bridge. This makes a more formal determination of the actual load capacity rating impossible as the internal size and

configuration of steel reinforcement in concrete members is unknown. This leaves the current load capacity of the bridges in question.

Consequences of Bridge Failure

Because of the age of the bridges and the ongoing structural deterioration, a number of bridge components are at risk of failure. Bridge failure may affect the sidewalks or travel lanes of the bridges or both, necessitating partial or complete access restriction. Unplanned bridge closures would have multiple impacts.

The failure of one or both bridges and the resulting unplanned interruption of regular traffic routes could increase the response time for emergency services. Because the Middlebury Fire Department and Police Station are both located north of Main Street and east of Otter Creek, the response time for an emergency west of Otter Creek (including access to Middlebury College and Porter Hospital) could be extended should first responders need to use the more distant Cross Street Bridge. The Cross Street Bridge also would likely be experiencing more trips due to its use as a bypass, exacerbating delays as first responders navigate through traffic.

Because there would be a pressing need to quickly repair the failed structure(s), there may not be sufficient time to prepare a comprehensive traffic management plan and disseminate it to the public. Furthermore, the public would have less time to prepare for changes in the transportation network relative to a planned bridge replacement project. These constraints may result in impacts to local business access, transit routes, and commuter patterns and delays may be lengthened.

VTR operations, which include daily trips between Rutland and Burlington, may be adversely affected if bridge failure resulted in a decrease in railroad clearances and/ or track fouling. VTR's daily freight deliveries to points north include significant volumes of diesel fuel to Burlington and grain to New Haven. Both locations only have one day storage capacities for these goods. Any disruption of daily deliveries may have significant economic impacts for farmers, consumers, and businesses in Addison and Chittenden Counties. The minimum length of time for a detour trip from Rutland to Burlington would be two days and most likely longer as it involves other railroad operators. Any detour concept for VTR freight would involve freight transfer to the Green Mountain Railroad Corporation (GMRC) in Rutland to travel southeast to Bellows Falls, where it would be transferred to another entity with the New England Central Railroad (NECR). The freight would then head north to the White River Junction NECR yard where it may stop for

additional train set building before eventually moving north to the St. Albans NECR yard. After arriving in St. Albans, freight could be routed to Burlington based on NECR's southbound freight schedule.

Because emergency bridge repairs would need to be carried out expeditiously, the resulting structures would likely not be capable of addressing the desired railroad clearances and documented drainage problems in the area between the existing bridges. The construction of temporary bridges to address unanticipated bridge failure would result in higher overall project cost and additional disruption to downtown businesses and regional traffic versus planned bridge replacement.

Considerations for Freight Rail

Vermont statute 5 V.S.A. §3670 requires that any new bridge over a railroad track adhere to the clearances set forth in the American Railway Engineering and Maintenance-of-Way (AREMA) Manual for Railway Engineering, as in effect at the time work begins. The Vermont State Design Standards incorporate this requirement as follows:

Structures over railroads should provide a minimum vertical clearance of 23 feet over both rails, unless otherwise provided in a variance agreement entered into by the VAOT, the railroad and any affected municipality, and approved by the Transportation Board in accordance with 5 VSA, Section 3670. Where "double-stacks" are to be accommodated on the railroad, an absolute minimum vertical clearance of 20.75 feet will be required.

The FHWA Memorandum entitled "Guidelines for the Design and Construction of Grade Separation Highway Structures over or under Railroads," dated April 16, 2013, includes similar reference to AREMA specifications, as well as those of the Association of American Railroads, and the American Association of State Highway and Transportation Officials (AASHTO) Load and Resistance Factor (LRFD) Bridge Design Specifications.

The vertical clearance of the Main Street and Merchants Row bridges are 17 ft. 10 in. and 17 ft. 8.5 in. at the rail (ATR), respectively. Accordingly, modified or full double-stacked rail cars currently cannot pass under either bridge. This constraint represents one of only two remaining barriers to allowing double-stack freight car height between Burlington and Rutland (the other being a bridge in Proctor, Vermont). Existing horizontal clearances at both Middlebury bridges is also substandard and represents the limiting horizontal clearance for the entire line.

In 2005, VTrans developed conceptual plans for bridge replacement that involved raising the grade of the bridges to achieve the necessary vertical clearance. Though the concept minimized superstructure thickness by using pre-stressed concrete panels, raising the bridge grade required raising the grades of the approaching roadways by several feet. Because of the proximity of the downtown buildings and drives, the concept required either rebuilding storefronts and constructing new entrances or introducing walls and split level bifurcated sidewalks. The proposed concept carried forward by VTrans included the split sidewalks, primarily because of the relative expense of rebuilding storefronts. The Town of Middlebury rejected the concept because of concerns regarding impacts to property values, public accessibility, parking, economic development, aesthetic and architectural impacts, drainage concerns, and quality of life in the downtown core. Accordingly, the alternatives for bridge replacement developed for the current project must maintain existing bridge and roadway grades with only minimal changes to the grades, which can only be achieved by lowering the grade of the railroad under both bridges.

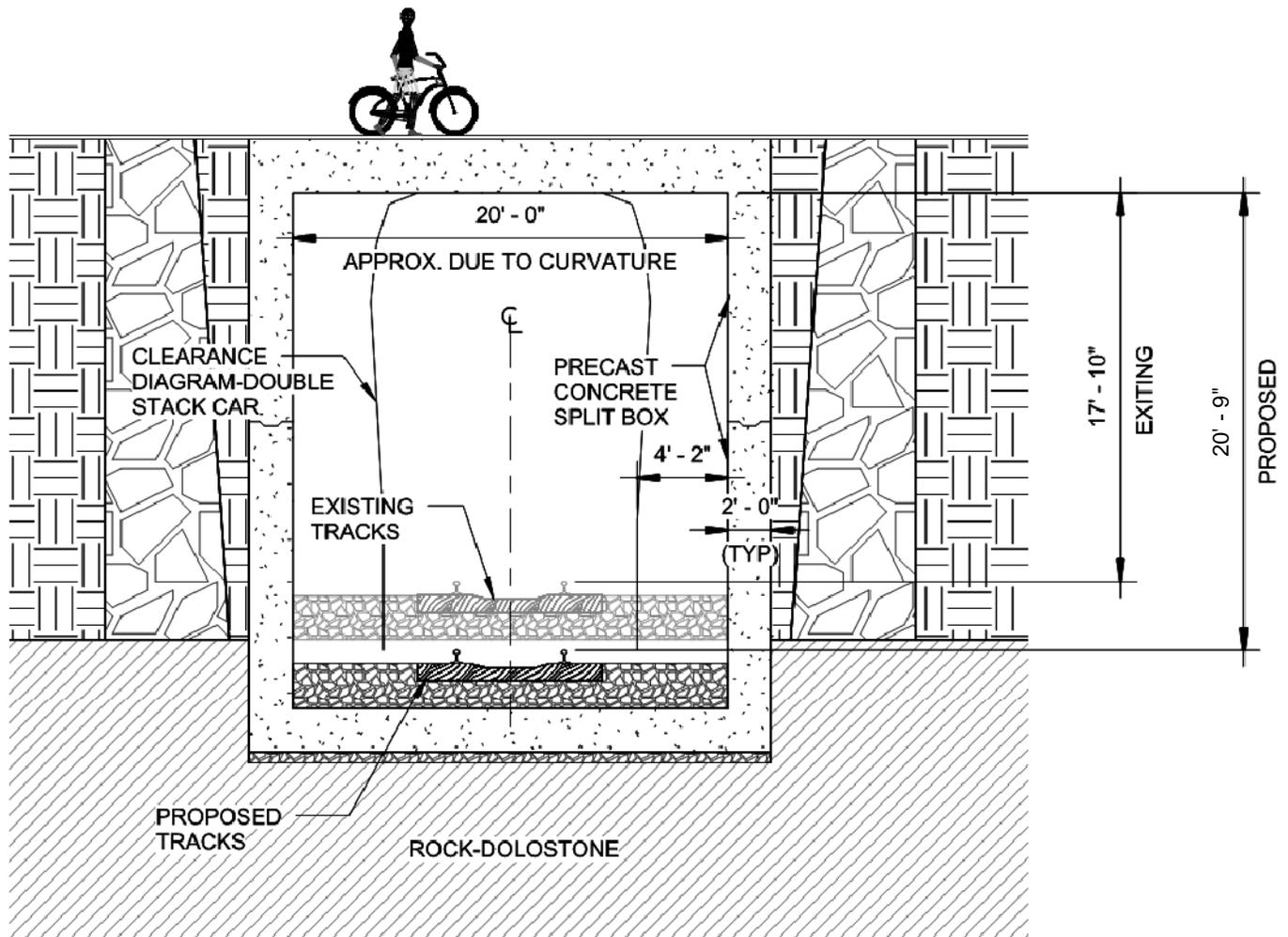
Rail Operations and Public Safety

Deteriorating rubble walls between the Merchants Row and Main Street bridges represent an ongoing maintenance issue for both the State of Vermont and VTR. Localized wall failures have occurred and ongoing monitoring and repair are required. Vegetation on the sloped banks above the rubble walls and below street level requires periodic clearing so that vegetation does not foul the track or cause bank failure by excessive root growth.

The submerged corridor of the of the VTR tracks between the Main Street and Merchants Row bridges contributes to stormwater runoff collecting on the track. This is compounded by the fact that runoff from the adjoining Village Green cascades into the trench on its east side and that this stretch of track profile is depressed within the bridge limits. The project improvements would include plans for routing and control of runoff from the Village Green, thereby improving track conditions. Though the trench is currently separated from the street and park level due to fencing, these barriers present a modest physical deterrent against track access. Accordingly, having an open trench in the downtown core presents some degree of personal safety concern. Discontinuing such access by providing improvements that implement more robust limits on public access would result in improved rail operations and public safety benefits.

Appendix 2: Conceptual Plans

- Precast Box Cross Section
- Plan and Profile: Railroad Grade Changes
- Preliminary Central Drainage Network



Precast Box Cross Section

NOTE: THIS CONCEPTUAL PLAN IS PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY AND DOES NOT DEPICT THE BOX HEIGHT REQUIRED TO ACHIEVE 23'-0" OF VERTICAL CLEARANCE AS DESCRIBED IN THIS DETERMINATION OF EFFECT.

Town Highway Bridge Replacements

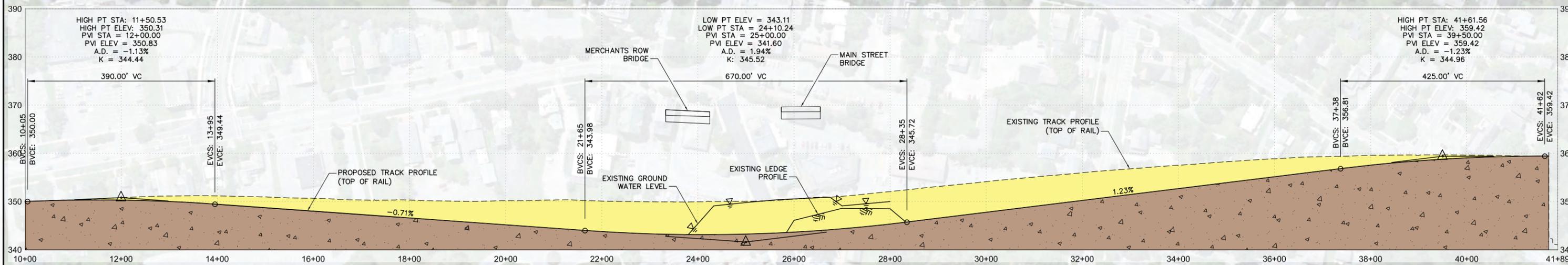
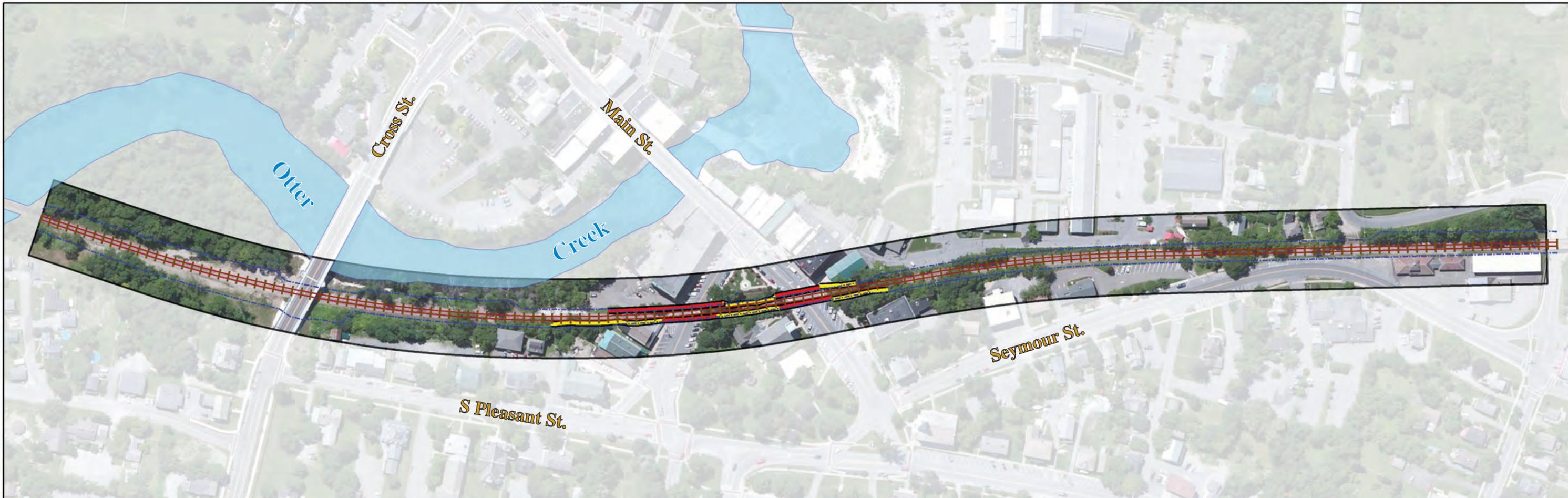
Middlebury WCRS(23)

**Conceptual Plans:
Precast Box Cross Section**



August 28, 2013





**Town Highway Bridge Replacements
Middlebury, Vermont
Plan and Profile
Alternatives Analysis
Railroad Grade Changes**

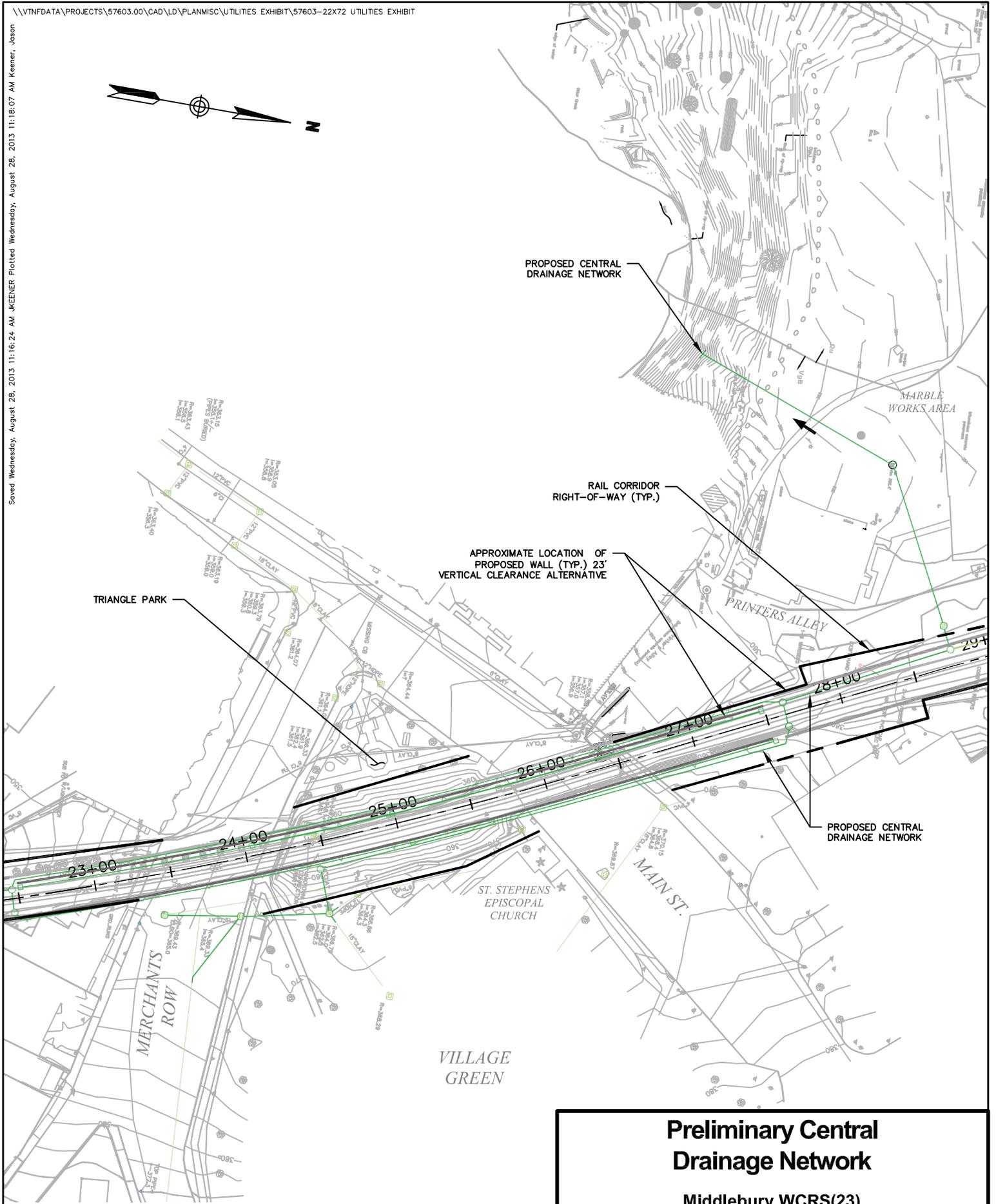
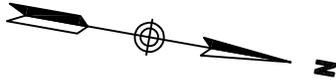
July 10, 2013

150 75 0 150 Feet

Appendix 6

Legend

- Vermont Railway
- Limit of Work
- Granite Retaining Wall
- Stone Retaining Wall



SCALE IN FEET

Preliminary Central Drainage Network

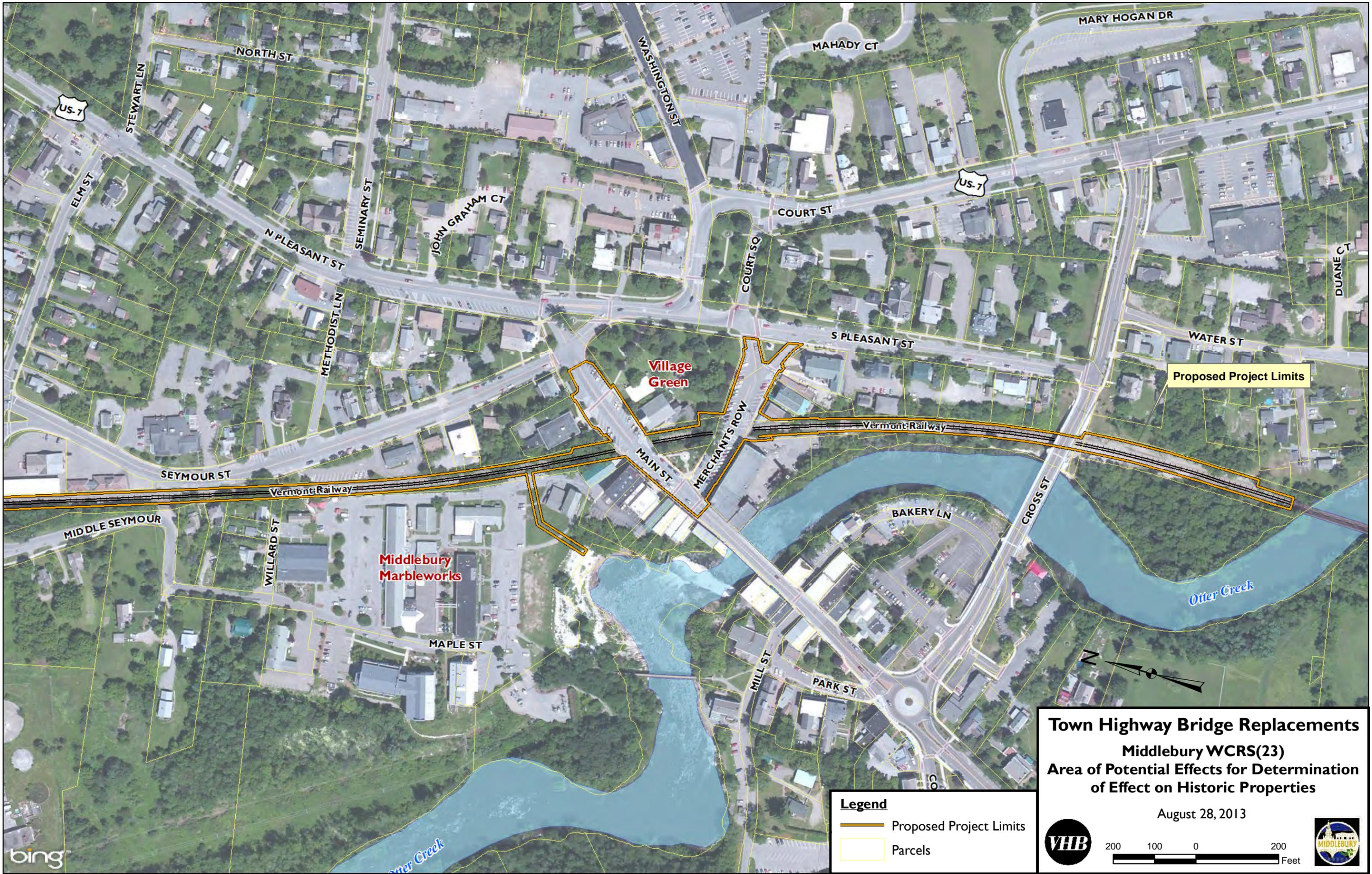
Middlebury WCRS(23)
August 28, 2013



Vanasse Hangen Brustlin, Inc.



Appendix 3: Area of Potential Effect Exhibit



**Town Highway Bridge Replacements
Middlebury WCRS(23)
Area of Potential Effects for Determination
of Effect on Historic Properties**

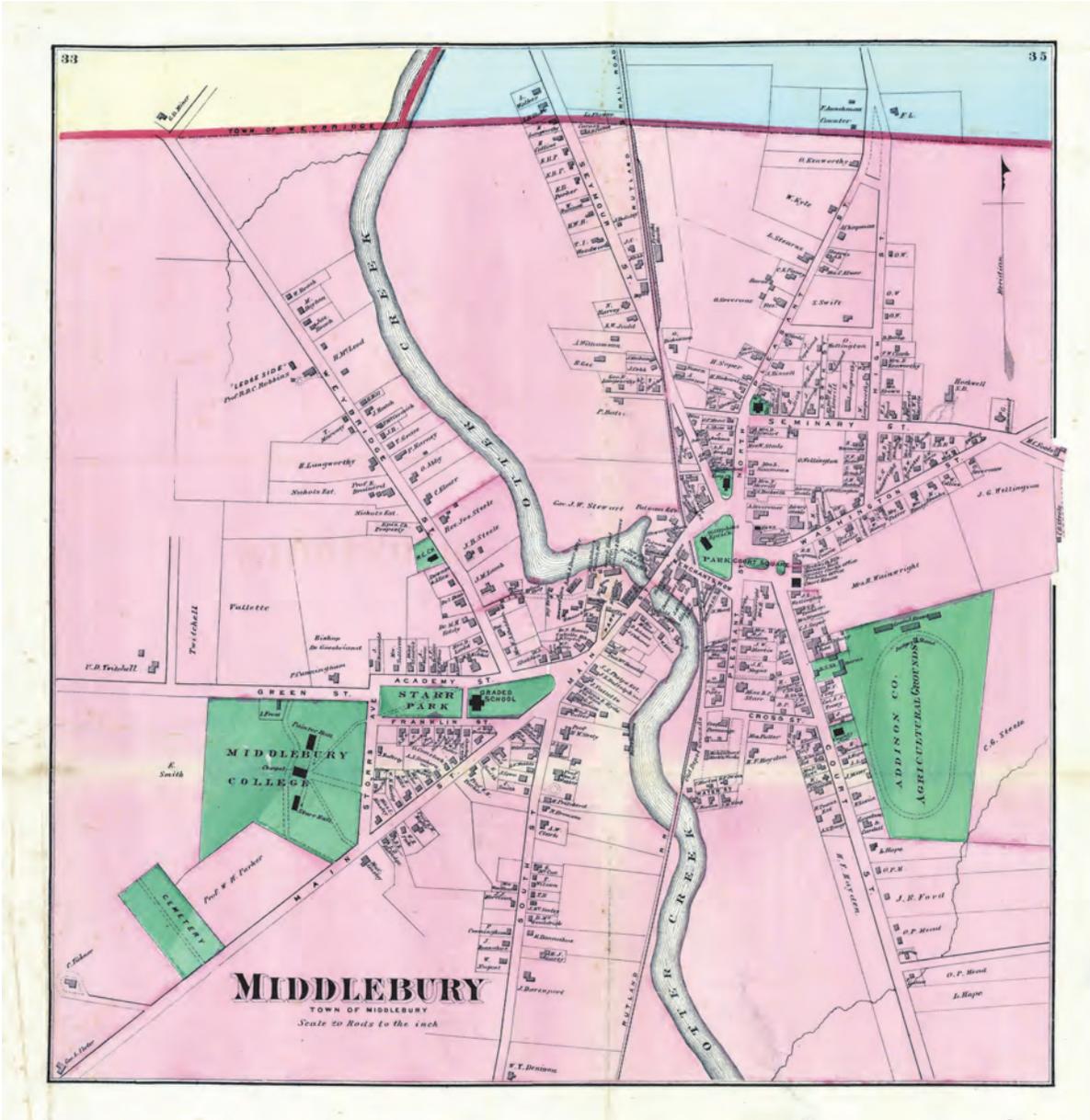
August 28, 2013

Legend

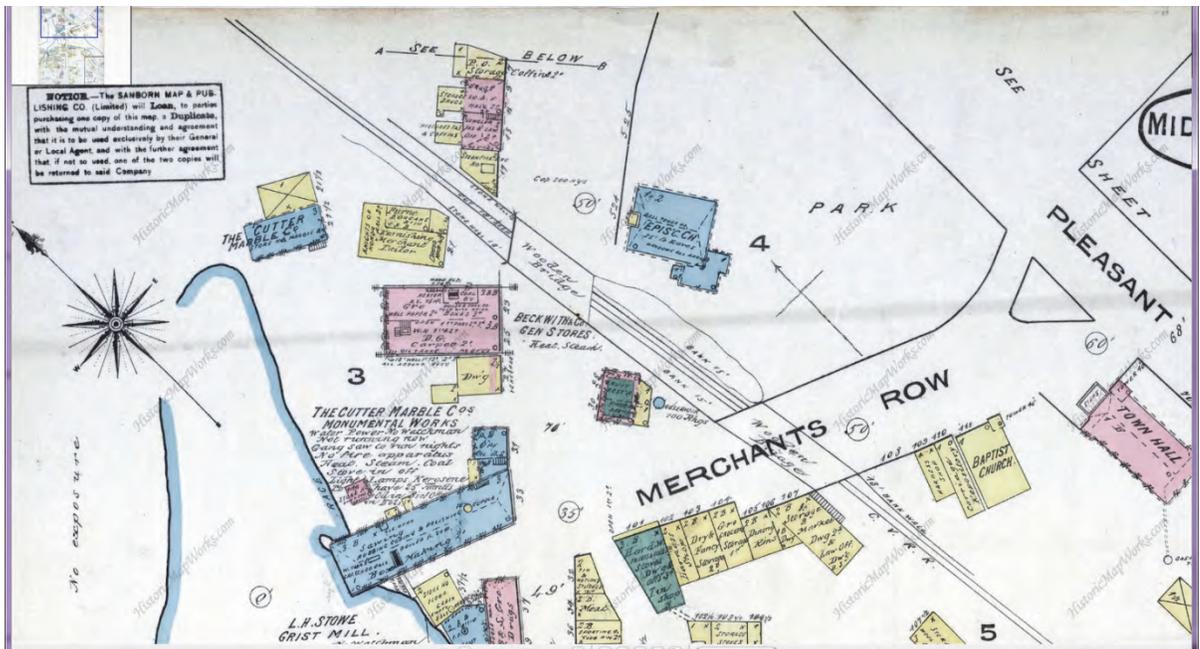
- Proposed Project Limits
- Parcels

VHB 200 100 0 200 Feet

Appendix 4: Town of Middlebury, 1871



Appendix 4: Sanborn Map, 1885



Section 106 Amendment (2017)

Vermont Agency of Transportation
Environmental Section/Highway Division/Project Delivery Bureau
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SECTION 106 PROJECT REVIEW MEMORANDUM - AMENDMENT

To: Rob Sikora, Federal Highway Administration

Date: July 20, 2017

Subject: ADVERSE EFFECT – Amendment to original memo dated 9-6-2013

Project Name: Middlebury Bridge and Rail Project

Project Number: WCRS(23)

Location: Main Street (VT 30) and Merchants Row (TH 8), Middlebury, Vermont

Distribution: Laura Trieschmann, State Historic Preservation Officer
Jeff Ramsey, VTrans Environmental Specialist
Wayne Symonds, VTrans Project Manager
Joel Perrigo, VTrans Project Manager

The Vermont Agency of Transportation (VTrans) has reviewed the following project revisions according to the standards and procedures detailed in the 2000 Programmatic Agreement (PA) regarding Implementation of the Federal Highway Administration's (FHWA) Federal-Aid Highway Program in Vermont and the corresponding Manual of Standards and Guidelines (Manual). Project review consists of identifying historic and archaeological resources within the project's Area of Potential Effect and the project's potential impacts to historic buildings, structures, historic districts, historic landscapes, and settings, and known or potential archeological resources.

The following information substantiates the VTrans Officers' findings. Completion of this document demonstrates that FHWA has satisfied its obligations for Section 106 of the National Historic Preservation Act for this undertaking as specified in the PA and Manual.

Project Description:

A Section 106 Adverse Effect memo was issued on September 6, 2013 for a project to replace the historic Main Street and Merchants Row bridges located in downtown Middlebury. This amendment addresses changes to the project scope of work since the original Section 106 memo was issued in 2013. The project occurs entirely within the boundaries of the Middlebury Village Historic District.

The changes to the project scope of work consists of the following elements:

1. A temporary access road will be constructed from the pedestrian path at Riverfront Park to the outfall location for use during construction of the drainage outfall pipe. The access road will begin by utilizing a section of the pedestrian path south of the parking lot along Riverfront Park accessed from Marble Works and then follow the existing engineered slope to the outfall pipe location as depicted in the attached illustrations. The temporary access road will be sixteen feet wide. Once the project is complete, the temporary road will be removed and the park area restored to pre-construction conditions. A permanent easement will remain in the approximate footprint of the removed temporary road to allow future access for routine maintenance activities.
2. Details for the construction of the drainage outfall pipe have been revised. Construction of the outfall pipe will no longer require excavation within Riverfront Park but will instead use a process known as microtunneling. A 40-foot diameter by 30-foot deep launch pit will be excavated at the location of the former Lazarus Building at 18-20 Main Street. The microtunneling machine will be lowered into this pit and will bore horizontally through bedrock towards Otter Creek and will emerge from the bank approximately 4 feet above the 100-year floodplain elevation. The project also includes microtunneling from the same launch pit towards the north and south along the western side of the railroad as part of the construction of the new drainage system.
3. A temporary access road will be installed along the rail corridor during construction. This access road will begin through an open area of land between 124 and 127 Water Street, cross the Vermont Railway tracks, and continue north along the west side of the tracks under the Cross Street bridge, and end near the parking area south of the Battell Block. Much of this temporary access road will be located within the state-owned rail right-of-way. The temporary access road will be removed along the railroad tracks following construction. The portion of the access road from Water Street to the railroad corridor will remain following construction, but will be topsoiled, seeded, and mulched so that the open area of land between 124 and 127 Water Street will appear similar to its pre-construction condition.
4. The original Section 106 review from 2013 noted that the completed tunnels would have a vertical clearance of 23' but would be filled with temporary ballast to provide for a vertical clearance of 20'-9". The original project was designed to provide the railroad with the flexibility to remove the temporary ballast and lower the track elevation to achieve the fuller height at some point in the future if and when required.

After considering the Federal and State standards and recommendations and the potential rail traffic during the 100-year design life of the bridges, the VTrans Rail Section, Vermont Railway, Inc., and the Town of Middlebury determined that the vertical clearance of the completed tunnel should be reduced from 23' to 21'. The 21' vertical clearance is consistent with Act 15 of the 2015 Vermont General Assembly guidelines.

5. At the time of the original Section 106 review, it was anticipated that the project would require removal of the retaining wall along the eastern side of the railroad track while the retaining wall on the western elevation would be left in place and buried. The project design has been further defined, however, and as of 2017, most of the existing stone retaining wall on the eastern side of the track will be buried and the western retaining wall removed.
6. At the time of the original Section 106 review in 2013, it was anticipated that Triangle Park within the Village Green would be affected by the installation of drainage system components. The Triangle Park area will now be used for project staging and as a location for a crane. All park components, including the fountain, benches, and planters, will be removed prior to construction and safely stored with the town during construction. Triangle Park will be returned to public use once the project is complete, but the new design for the restored park has not yet been finalized. The design will be presented for public comment and reviewed by the Town of Middlebury and the VTrans Historic Preservation Officer.
7. Utility cabinets will be replacing most of the utility poles in the project area. At this time, project plans for the locations and designs of the utility cabinets are being developed, but have not yet been finalized. It is anticipated that the existing cabinet in the Village Green northeast of the Merchants Row Bridge will remain or be modified.

Area of Potential Effect

Because of the above changes to the scope of work, the project's Area of Potential Effects (APE) has expanded from that originally described in the 2013 Section 106 Adverse Effect memo. The APE now also includes the additional area of land within Marble Works Riverfront Park required to construct a temporary access road; the area of land between 124 and 127 Water Street and along the Vermont Railway tracks required to construct a temporary access road; the buildings along Water Street where additional truck traffic is anticipated; the locations of the new project-related utility cabinets; and the property at 18-20 Main Street where the microtunneling access trench will be located.

In addition, VTrans has been working with the town and consultants in response to concerns expressed by a group of owners of historic buildings located near the project area with regards to ground vibrations that may occur because of project-related construction activities. The result of the consultation is a document titled, *Guidelines for Preparing a Historic Structures Management Plan: Middlebury WCRS(23)*, which was distributed amongst the building owners

and town in October 2016 for review and comment. A copy of the plan and cover letter is attached as part of this project review.

As noted in the *Guidelines for Preparing a Historic Structures Management Plan: Middlebury WCRS(23)*, the purpose of the guidance document is threefold:

1. To recommend components of a Special Provision to guide the Construction Contractor in development of a formal Historic Structures Management Plan (“Plan”). The Special Provision will include requirements for, but not limited to, development of a Historic Structures Management Plan. The Plan will be required to include specifics related to a procedure for pre-construction survey and reporting, construction monitoring and reporting, and for a post-construction survey. These guidelines represent an initial step in what is intended to be a collaborative and iterative process, defining the scope of the Special Provision and ultimately the Plan. The Special Provision is intended to augment the General Provisions in Section 107 of VTrans 2011 Standard Specifications for Construction and will be incorporated into the Contract Documents for the Project.
2. To provide the VTrans Historic Preservation Officer (“HPO”) and Project stakeholders with fundamental information regarding the proposed means of protecting historic resources during Project construction. Also, to detail the process by which the HPO, in conjunction with Project stakeholders, will identify and establish specific stipulations and/or mitigation measures that are required to be incorporated into the Project’s Special Provisions to protect historic structures during Project construction.
3. To address the questions and concerns of those landowners abutting the Project corridor regarding what measures will be taken to protect their structures during Project construction.

The first milestone in the recommended steps in the *Guidelines for Preparing a Historic Structures Management Plan: Middlebury WCRS(23)* involves adding the document to the Section 106 amendment, which is why it is included herein, and developing a recommended APE for construction-related ground vibrations.

It has been determined the project will not cause additional train-generated noise or vibration impacts and consequently, no mitigation is required. Nonetheless, because existing rail vibration levels exceed FTA criteria for human annoyance, VTrans is proposing to incorporate elements within the track design, such as ballast mats and/or resilient rail fasteners as a project enhancement to reduce current vibration levels in the Middlebury Village Historic District and the CBD.

Ballast mats are placed on top of packed subgrade, on top of the tunnel invert, and underneath the ballast to reduce vibration propagating to nearby receptors. Ballast mats are typically a few inches thick and made of a resilient material (i.e. rubber or dense foam) and generally, ballast mats are effective at reducing vibration above 25 hertz by 10 to 15 VdB. Resilient rail fasteners include thin pads between the bottom of the rail and the ties, which are generally effective at reducing vibration above 30 to 40 hertz by 5 to 10 VdB.

During final design, the Project Team will evaluate the feasibility of such features and their anticipated effectiveness to reduce vibrations. This enhancement is fully consistent with the purposes of Section 106 and as a preservation measure, because it is intended to help ensure the continued useful economic life of historic properties. This proposed enhancement will only be omitted if inclusion within the design was physically infeasible, or its efficacy is determined to be minimal.

Above-Ground Historic Resources

The VTrans Historic Preservation Officer has visited the project location on multiple occasions, attended meetings with owners of historic buildings in the project area and town officials, and worked with the engineering and historic preservation consultants during project review. Based on information discussed and gathered to date, VTrans has concluded that the proposed changes to the scope of work listed above will have the following effects to historic resources:

1. The proposed temporary access road through Riverfront Park will not affect historic resources. Riverfront Park is not considered a historic resource as the park is less than fifty years of age nor is it a contributing resource in the surrounding historic district.
2. Construction of the launching trench for the microtunneling at the former site of the Lazarus Building will not affect historic resources. The Lazarus Building was determined not eligible for listing on the National Register of Historic Places as part of the original Section 106 review and has since been demolished.
3. The properties at 124 Water Street and 127 Water Street are listed as contributing structures in the original Middlebury Village Historic District, which was listed on the National Register of Historic Places in 1976 and subsequently amended in 1980 and 2001. The residence at 124 Water Street (formerly 10 Water Street Extension) is listed as contributing structure #115 and the residence at 127 Water Street (formerly 13 Water Street Extension) is listed as contributing structure #117.

The residence at 124 Water Street no longer retains sufficient historic or architectural integrity, however, to remain eligible as a contributing resource in the historic district as the building has been remodeled. The residence at 127 Water Street retains its historic integrity and is still considered a contributing resource in the historic district.

The temporary access road to be installed at the end of Water Street will occupy an area of open flat land between these two buildings and adjacent to the Vermont Railway train tracks. Installation and use of the access road will not directly affect 127 Water Street. The historic building at 127 Water Street will be included within the Historic Structures Management Plan.

4. Reducing the vertical height of the completed rail tunnel from 23' to 21' reduces the extent of work required for the project. The reduction in height does not change the overall effect of the project on historic resources, however, so the original determination of effect remains valid for this project component.
5. While the project has changed with regards to which retaining wall will remain in place and buried and which will be removed, the overall effect to the historic retaining wall does not change. The original determination of effect for the project remains valid for this project component.
6. The staging and placement of a crane in Triangle Park as part of this project is planned as a temporary use of this section of the historic Middlebury Village Green, which is a contributing resource in the Middlebury Village Historic District. The corner of the green known as Triangle Park was created in 1908 and the fountain that currently occupies the site was installed in 1976. The temporary use of Triangle Park is not considered adverse provided the design of the new park re-uses elements of the current park and fits within the design and scale of the surrounding historic resources, especially the Middlebury Village Green. It is a requirement of the original Section 106 review memo that the VTrans Historic Preservation Officer review and approve the final plans for the Village Green and this requirement remains valid.
7. The design and locations of the new or replaced utility cabinets will be reviewed for their potential effects on the surrounding historic district once plans have been finalized.

Archaeological Resources:

The VTrans Archaeology Officer along with the Director of the University of Vermont Archaeology Consulting Program met with the engineer on site during 2013 at the location of the outfall pipe. Although the construction process has changed for the construction of the outfall, the area is considered to be extensively disturbed from previous historic development and subsequent demolition of former structures along with landscaping and utility work and therefore is not considered archaeologically sensitive for Pre-Contact sites. Historic maps show a cotton mill and other historic structures in the general location of proposed microtunneling. Although the probability is low for intact historic remains, the VTrans Archaeology Officer will recommend archaeological monitoring for the excavation of the microtunneling in the event that earlier structural remains are discovered. The location of the access road between 124 and 127 Water Street was reviewed for archaeology by Hartgen a couple of years ago as part of a staging request for this project. They assessed the location and no sites were discovered. The location of the access road for the outfall pipe at Riverfront Park has also been previously disturbed. The Riverfront Park area consists of fill and an engineered slope. Although the location is adjacent to the Otter Creek, previous earth work has greatly diminished the likelihood of intact archaeological sites. However, the area west of the pedestrian path does not appear to be excessively disturbed and may contain archaeologically sensitive areas. This area will be avoided during construction by placing temporary protective fencing along the project limits.

Public Consultation:

This project has been the subject of multiple public meetings. As part of the current review of proposed changes to the project scope of work, this Section 106 review memo was presented for public comment as part of the Middlebury Bridge and Rail Project Environmental Assessment document.

Analysis:

The recent proposed changes to the project scope of work, as detailed above, will not adversely affect the historic or archaeological resources within the project's Area of Potential Effect. However, the Determination of Effect for the overall project remains as Adverse Effect per the original Section 106 review. This amendment and all stipulations detailed below will be combined with the original Section 106 letter to ensure that all of the original stipulations are adhered to prior to, during and after construction, as applicable.

Section 4(f) Evaluation:

By copy of this document, and as required by Section 4(f) regulations, VTrans hereby informs the State Historic Preservation Officer (SHPO) that VTrans will be completing an additional Section 4(f) De Minimis Evaluation for FHWA for the minor use of 18 historic properties and the Middlebury Village Green by this project.

Mitigation Measures:

The original September 6, 2013 Section 106 review memo contains several mitigation measures required as a result of the original determination of Adverse Effect. After discussions with the town and FHWA, the following mitigation measure from the original Section 106 review memo will be revised as follows:

14. Salvage of Architectural or Engineering Features/Storage of Surplus Ashlar Blocks:
Surplus ashlar blocks were to be stockpiled for later use on Town projects. The project has changed, however, and it is anticipated that additional blocks will be removed as part of the project. It now appears that there will be too many blocks for the Town to stockpile and use in future projects. Therefore, this mitigation measure is revised to state that the Town of Middlebury is not required to retain all ashlar blocks made available by the current project and instead may select the number of ashlar blocks they consider appropriate for use in future projects.

It is important to note that the following mitigation measure regarding salvaged ashlar blocks is still required, however:

14. Salvage of Architectural or Engineering Features/Enhancing Interpretive Opportunities:
Ashlar blocks salvaged from the eastern abutments of both bridges will be used as structural and decorative elements in the new green space, providing a practical means of

achieving the necessary cover and site grading above the tunnel and a functional and tactile interpretive element to convey the importance of the railroad to park visitors.

In addition to the measure noted above for *Enhancing Interpretive Opportunities*, all other mitigation measures detailed in the original Section 106 remain valid as well.

While there are no new adverse effects to historic resources, the project encompasses a greater area of the Middlebury Village Historic District than initially reviewed and there is a greater potential to directly and/or indirectly affect these resources. As noted in the 1976 National Register nomination, “The historic district encompasses one of the largest continuous areas and highest concentrations of architecturally significant structures in the state of Vermont. Embracing the Town’s major 19th century residential, civic, commercial, and industrial sections, the district clearly bears physical witness to the nature of the Town’s development from a strategically located frontier community...to an early industrial/commercial center...” Middlebury has continued to develop since the historic district was listed in 1976, however, and the historic district nomination no longer accurately reflects the variety of buildings within its boundaries. Because of its local significance, and significance to the State of Vermont, it is essential that the Middlebury Village Historic District nomination be updated.

Therefore, VTrans has determined it appropriate that the following additional Standard Mitigation Measure be added to the existing list of mitigation measures and carried out as part of the current project:

National Register. VTrans shall ensure that a qualified professional prepare a National Register of Historic Places nomination for the following resource: _____

Working in cooperation with the SHPO (State Historic Preservation Officer), VTrans will ensure that a qualified professional prepare a new National Register of Historic Places nomination for an updated Middlebury Village Historic District.

Stipulations for this Amendment:

The stipulations detailed in the original Section 106 review memo remain valid. Because of the changes to the scope of work detailed above, however, the following stipulations will be added to those included in the original Section 106 Adverse Effect letter dated September 6, 2013.

Archaeology Stipulations:

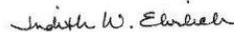
1. Temporary protective fencing will be placed along the western side limits of the access to protect archaeologically sensitive areas west of the existing pedestrian path.
2. There will be no impacts to the area west of the pedestrian path. This area will remain off limits during construction.

3. A qualified archaeologist will monitor the excavation of the launch pit and document any structural features that become exposed that may be related to the cotton mill or other previous properties. These features will be described and photographed. The same procedures for monitoring will apply for this location as those in the original memo for monitoring along the railroad retaining wall. (See Section 106 Adverse Effect letter dated 9-6-13 Section 8.2 Stipulations: Archaeological Resources).

Above-Ground Historic Resources:

1. VTrans will ensure compliance with the steps and milestones detailed in the *Guidelines for Preparing a Historic Structures Management Plan: Middlebury WCRS(23)*, which are attached.
2. The historic building at 127 Water Street will be included within the Historic Structures Management Plan.
3. Ballast mats and/or resilient rail fasteners will be incorporated into the track design as a project enhancement if found to be feasible and effective enhancement measures.
4. During final design, the appearance and locations of the new or replaced utility cabinets will be reviewed to minimize their potential effects on the surrounding historic district.
5. The additional Standard Mitigation Measure requiring a new National Register nomination for the Middlebury Village Historic District, as detailed above, will be carried out as part of this project.

The VTrans Archaeology and Historic Preservation Officers concur with the findings above:



Jeannine Russell, Archaeology Officer

Judith W. Ehrlich, Historic Preservation Officer

Attachments:

- Survey Form(s)
- Photos
- Map
- Report(s): *Guidelines for Preparing a Historic Structures Management Plan: Middlebury WCRS(23)*
- Other: Plan Sheets



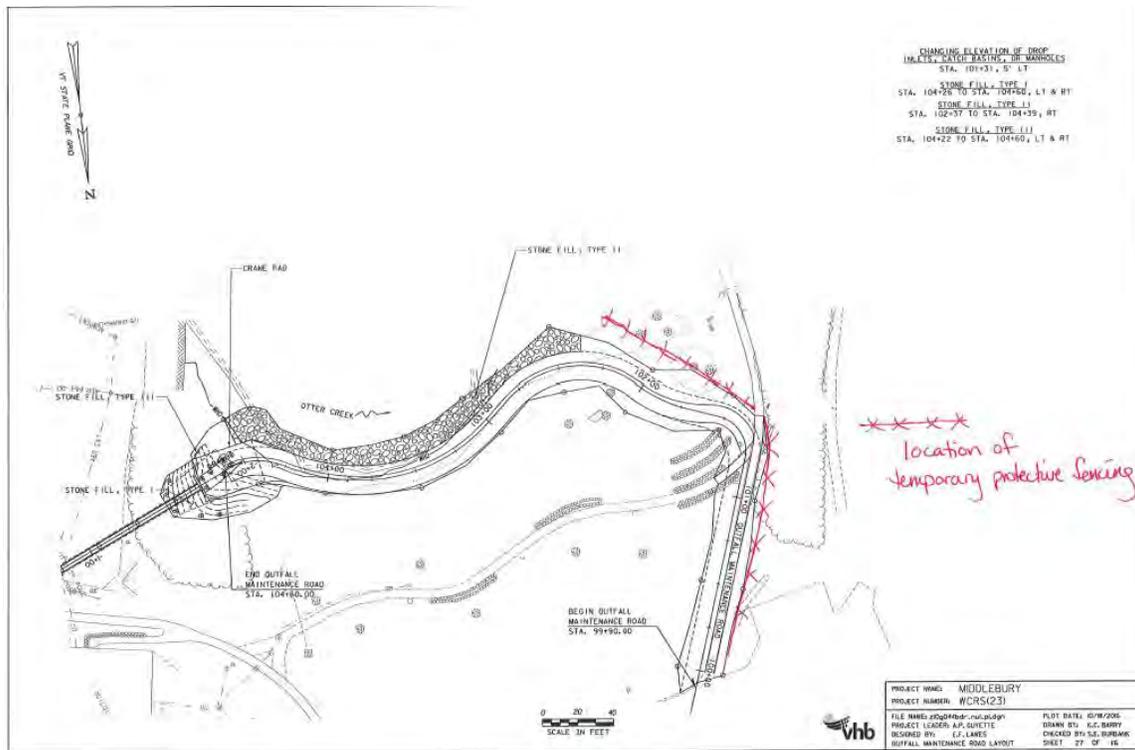
Locations of proposed access road through Riverfront Park and outfall pipe area.



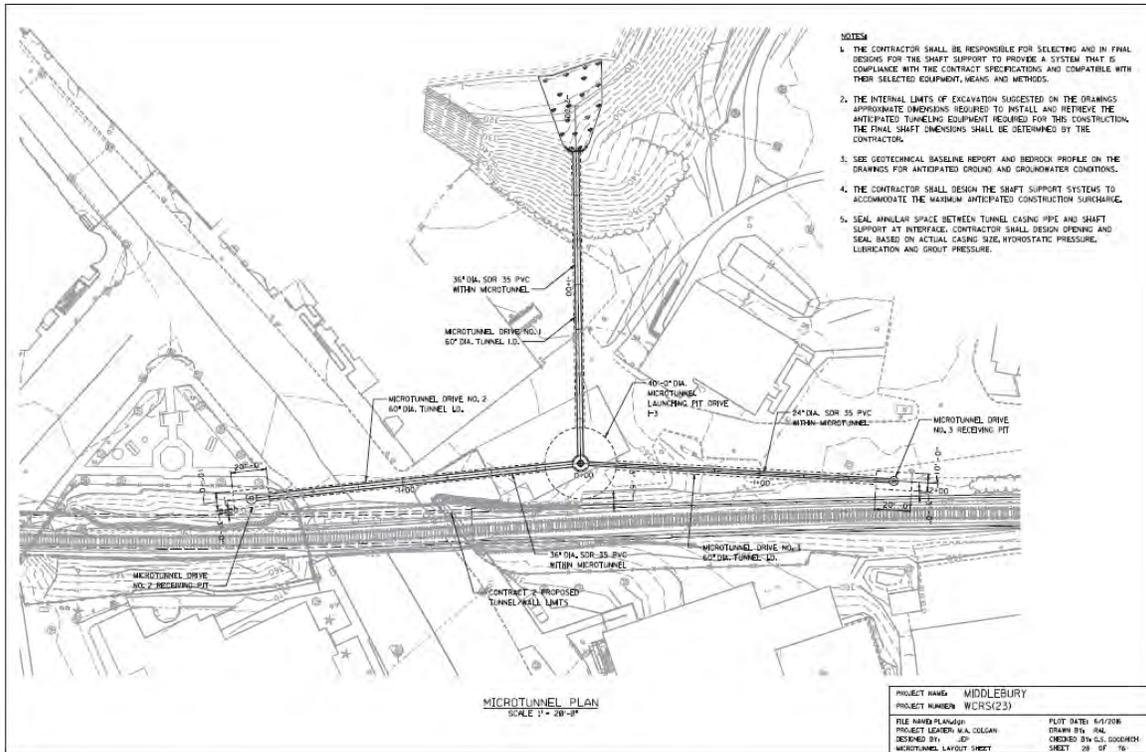
Location of outfall noted with yellow circle. Note Riverfront Park to the left.



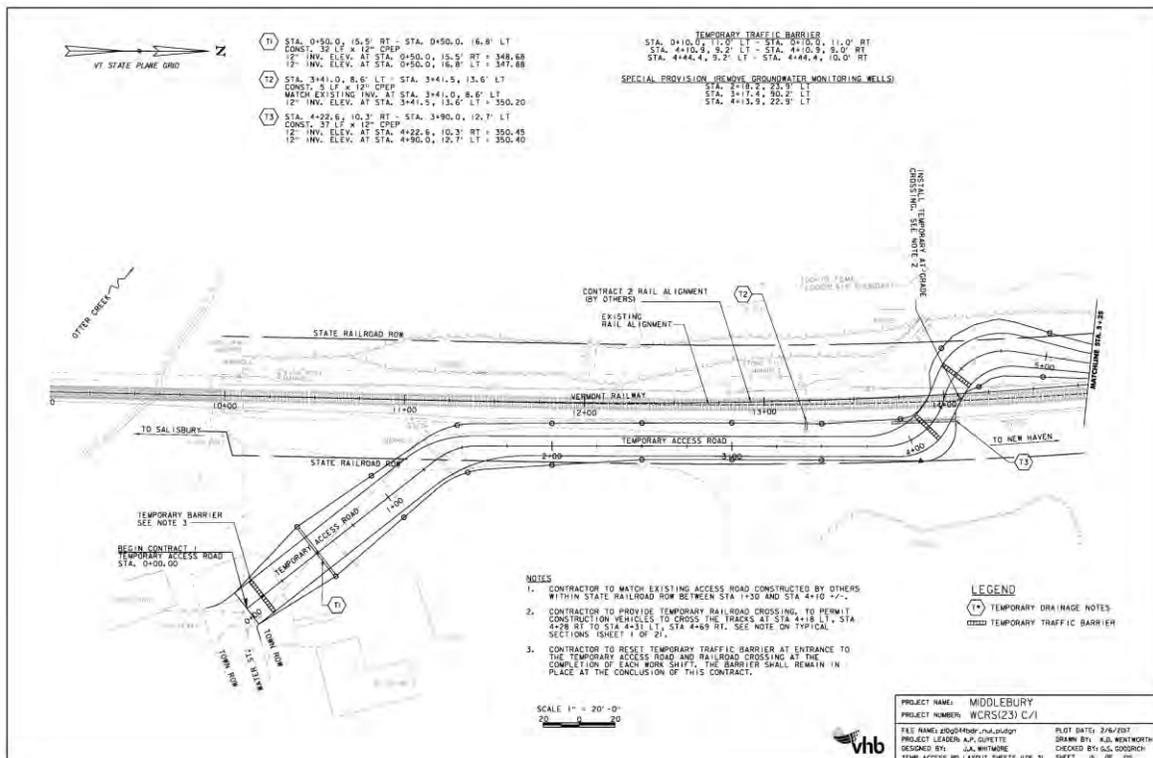
Looking to northwest to Riverfront Park. The access road will descend the bluff and follow the toe of the engineered slope, reoccupying the riprap pathway and extending towards the water.



Locations of limits of access road construction and required protective fencing



Plan illustrating location and limits of micro-tunneling to outfall area



Plan illustrating location of entrance to temporary access road at west end of Water Street.



Map noting general location of temporary access road entrance off Water Street and locations of 124 and 127 Water Street.



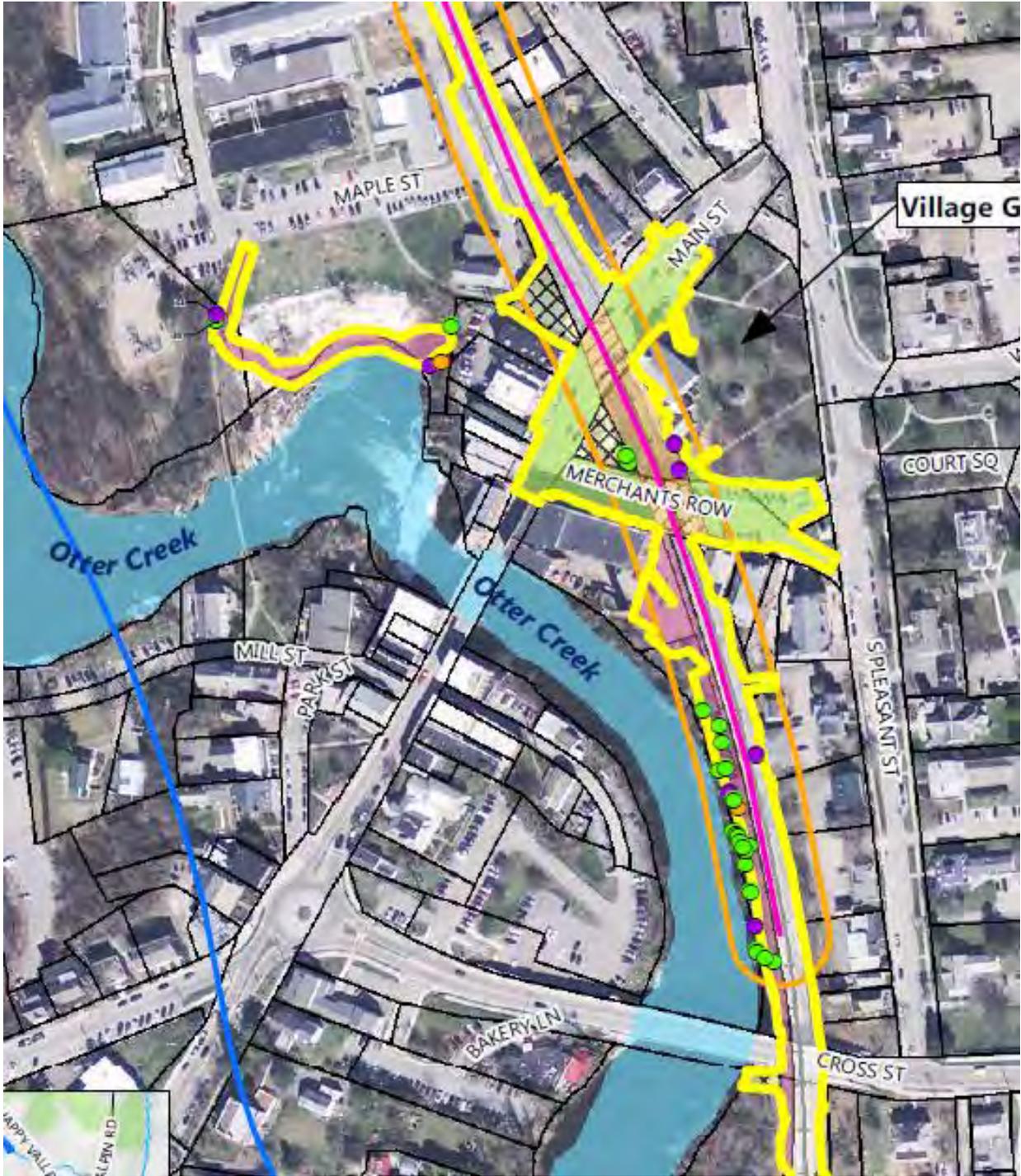
124 Water Street, Middlebury, Vermont. Determined not contributing to Middlebury Village Historic District due to alterations.



127 Water Street, Middlebury. Contributing resource #117 in the Middlebury Village Historic District.



Computer rendering of Triangle Park within the Middlebury Village Green as staging area during Middlebury WCRS(23) construction project.



Access road area in relation to the overall project

Cover Letter to Representatives of Historic Buildings / RE: Guidelines for Preparing a Historic Structures Management Plan



State of Vermont
Project Delivery Bureau - Environmental Section
One National Life Drive
Montpelier, VT 05633-5001
vtrans.vermont.gov

Agency of Transportation

[phone] 802-828-1708
[fax] 802-828-2334
[ttd] 800-253-0191

October 21, 2016

Representatives of Middlebury Historic Buildings
c/o National Bank of Middlebury
P.O. Box 189
Middlebury, VT 05753

Re: Middlebury WCRS(23) (Replacement of Main St. and Merchants Row Over Vermont Railway, Inc.)

Dear Representatives of Middlebury Historic Buildings:

I am writing on behalf of the Vermont Agency of Transportation (VTrans) and the Town of Middlebury to update you on activities VTrans has undertaken in an effort to address concerns expressed in your July 6, 2015 letter to Town Manager Kathleen Ramsey. In that letter you expressed concern that ground vibrations caused by blasting or other construction activities may affect historic buildings in the project area.

This letter is also a follow-up to my October 5, 2015 letter in which the process for protection of historic structures within the project area was preliminarily defined. Since October our team has developed a formal document that further defines this process. By notice of this letter, the document, *Guidelines for Preparing a Historic Structures Management Plan: Middlebury WCRS(23)*, is being provided to you for your review and comment. It is intended that the document will be finalized and incorporated into the Section 106 documentation following a 30-day-review period. As you will read, the guidelines will ultimately shape the approach for development of Project special provisions and implementation of a formal Historic Structures Management Plan.

If you have any questions or concerns about the process that has been established in the document, please compile those comments for discussion with our project team. We'll be setting up individual property meetings within the 30-day review period to discuss the next steps related to this process and will answer your questions at that time.

In addition, please be aware that over the past year there have been several changes to the Project that include the method for construction, splitting the construction into two separate phases, and most recently, switching the management of the Project from the Town of Middlebury to VTrans.

Thank you again for expressing your concerns about this project and for the opportunity to address them. If there are any immediate questions or concerns feel free to reach out to me at judith.ehrlich@vermont.gov or to Joel Perrigo, VTrans Project Manager, at joel.perrigo@vermont.gov.

Sincerely,

A handwritten signature in black ink that reads "Judith W. Ehrlich".

Judith Williams Ehrlich
Vermont Agency of Transportation Historic Preservation Officer

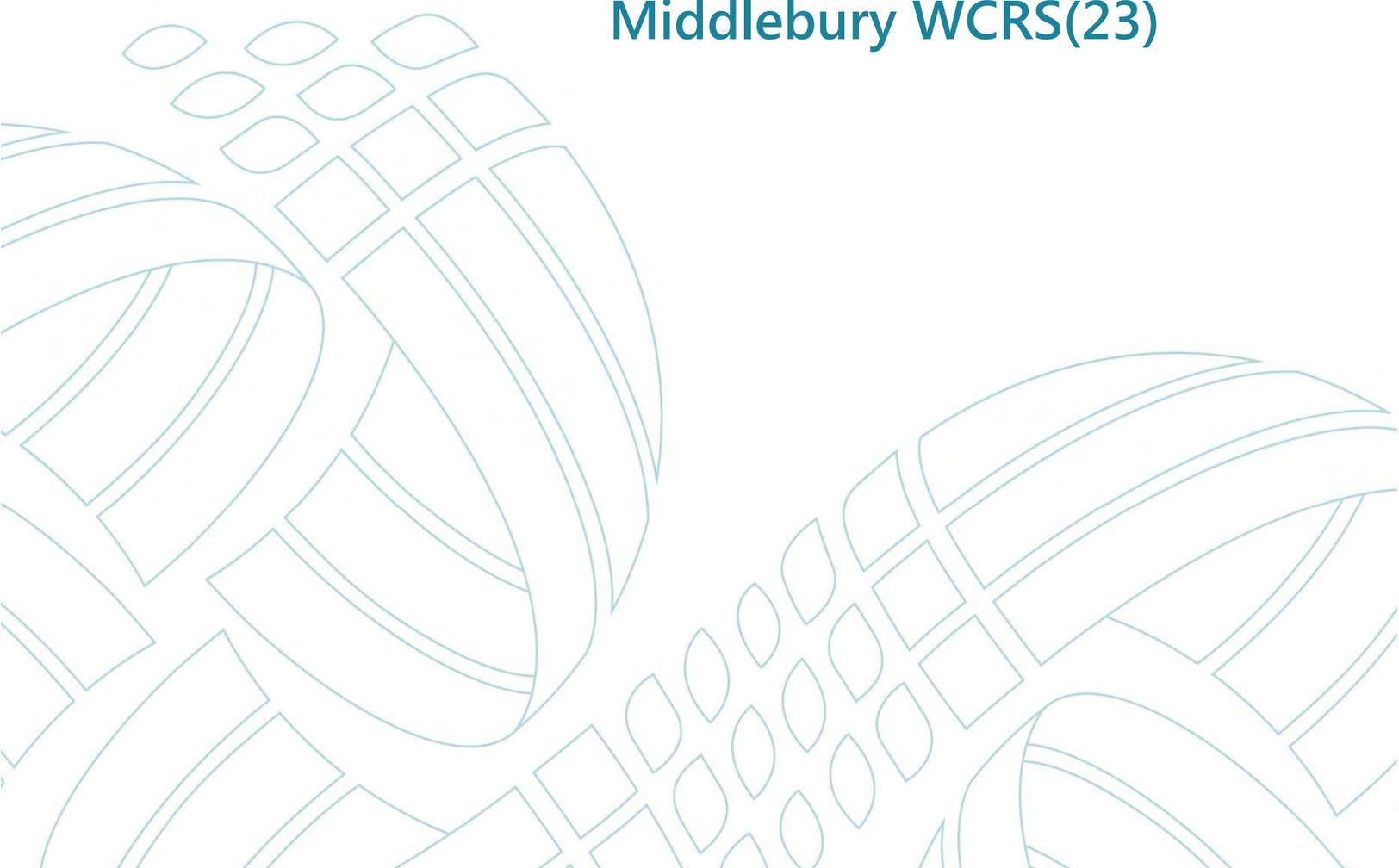
Cc: Kathleen Ramsey, Town of Middlebury
Jim Gish, Town of Middlebury
Kevin Marshia, Chief Engineer, VTrans
Wayne Symonds, Structures Program Manager, VTrans
Joel Perrigo, Project Manager, VTrans
John Dunleavy, Assistant Attorney General, VTrans
Aaron Guyette, VHB

Guidelines for Preparing a Historic Structures Management Plan

August 29, 2016



Guidelines for Preparing a Historic Structures Management Plan: Middlebury WCRS(23)





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Appendices

Appendix A: Project Location Map

Appendix B: From NCHRP 25-25/Task 72: "Flow Chart for Recommended Approach for Addressing Construction Vibration Impacts on Historic Buildings"

Introduction

Vanasse Hangen Brustlin, Inc. (“VHB”) is working with the Vermont Agency of Transportation (“VTrans”) and the Town of Middlebury on the Middlebury WCRS (23) Bridge Project (“the Project”), which includes the full replacement of two roadway bridges in downtown Middlebury where Main Street and Merchants Row span the Vermont Railway, Inc. (“VTR”) track. The Project limits include the VTR Right-of-Way (“ROW”) from the Otter Creek truss bridge 239 at the south to the Elm Street Bridge at the north, and Town of Middlebury roadway ROW that includes Main Street from the Merchants Row intersection to Seymour Street and Merchants Row from the Main Street intersection to South Pleasant Street. A Project Map is included in Appendix A.

Project construction will consist of bridge replacement, track lowering and re-alignment, installing retaining walls, and improving stormwater infrastructure. The need for this Project originates from structural deficiencies of the existing bridges (concrete cracking, delamination, spalling, and exposed steel reinforcement), considerations of future heavy freight and passenger rail use, rail operations, drainage improvements, and public safety. Deteriorating rubble walls along the rail corridor also represent additional ongoing maintenance issues for VTR and the State of Vermont. The Project construction will be carried out in an accelerated fashion, recognizing the need to minimize the construction duration so that impacts associated with road closures and detours are mitigated to the extent feasible. In addition, the Project corridor must be opened for daily train traffic between Rutland and Burlington.

Project Phasing

The Project will be completed in two contracts and will consist of the following principal components:

Contract 1 consists of drainage improvements to include microtunneling through bedrock from the rail corridor just north of the Main Street Bridge out to the Otter Creek for the primary drainage outfall and constructing a temporary access road from Water Street, west across the VTR track and then north in parallel to the track to a location just south of the Battel Block rear parking lot.

Contract 2 consists of the replacement of both the Main Street and Merchants Row bridges using a tunnel, which requires track lowering to meet state and federal requirements for vertical clearance; the installation of retaining walls in areas where track lowering will result in a vertical cut; installation of stormwater drainage infrastructure, including tying into the existing municipal stormwater network to convey runoff through the Project area; and other incidental items.

Construction Sources of Vibration

The Project will likely require removal of bedrock along the rail corridor to achieve the necessary vertical clearance increases and to install stormwater drainage infrastructure. It is anticipated that bedrock removal will be completed through a combination of mechanical means and controlled blasting and will occur primarily within the vicinity of the existing Main

Street Bridge. The Project also will include the use of heavy construction equipment and the installation of temporary and permanent retaining walls including steel sheeting and pilings.

Recognizing that general transportation construction activities may cause ground vibrations, VTrans has included conditions within the VTrans 2011 Standard Specifications for Construction for the use of explosives, and the protection and restoration of property (General Provisions, Sections 107.11 and 107.12). In the case of the Project, its occurrence within the National Register-listed Middlebury Village Historic District and in proximity to contributing historic structures (some of which are individually eligible for the National Register) requires additional measures be taken to ensure compliance with Section 106 of the National Historic Preservation Act of 1966 ("Section 106").

Purpose of the Document

The purpose of this guidance document is threefold:

1. To recommend components of a Special Provision to guide the Construction Contractor in development of a formal Historic Structures Management Plan ("Plan"). The Special Provision will include requirements for, but not limited to, development of a Historic Structures Management Plan. The Plan will be required to include specifics related to a procedure for pre-construction survey and reporting, construction monitoring and reporting, and for a post-construction survey. These guidelines represent an initial step in what is intended to be a collaborative and iterative process, defining the scope of the Special Provision and ultimately the Plan. The Special Provision is intended to augment the General Provisions in Section 107 of VTrans 2011 Standard Specifications for Construction and will be incorporated into the Contract Documents for the Project.
2. To provide the VTrans Historic Preservation Officer ("HPO") and Project stakeholders with fundamental information regarding the proposed means of protecting historic resources during Project construction. Also, to detail the process by which the HPO, in conjunction with Project stakeholders, will identify and establish specific stipulations and/or mitigation measures that are required to be incorporated into the Project's Special Provisions to protect historic structures during Project construction.
3. To address the questions and concerns of those landowners abutting the Project corridor regarding what measures will be taken to protect their structures during Project construction.

These Guidelines incorporate comments and recommendations from the Project Engineer, VTrans Historic Preservation Officer, the VTrans Archaeology Officer, the VTrans Construction Section, the Middlebury Project Liaison and Local Project Management Team, Town Officials and the historic building property owners. Specifically, these include the document prepared by Jim Gish, Middlebury Project Liaison, entitled "Q&A: Preservation of Downtown Historic Buildings," dated March 14, 2016, as well as the letter from Judith Ehrlich, VTrans Historic Preservation Officer, to the Town of Middlebury, dated October 5, 2015. It is important to note that since these documents were developed, the review process has changed slightly, however the original intent remains the same. For the purposes of this document, when referenced,

“**Project Stakeholders**” include those parties identified above as well as the Construction Contractor and its sub-contractors.

Anticipated Next Steps

The process for approving these Guidelines and moving forward with Section 106 compliance for the Project are as follows. It should be noted that these steps are provided to illustrate the general process of Section 106 compliance and the sequencing of events up to Project construction. Additional steps may be determined to be necessary as the process unfolds and per input from Project Stakeholders.

1. **Guidelines Reviewed:** These Guidelines will be offered for a 14-day review by VTrans, the Project Engineer, the Construction Contractor, and the Middlebury Project Liaison.
2. **Property Owner Review:** These Guidelines will be offered for review by the property owners for a 30-day period. Comments will be reviewed and addressed, which may result in revisions to this document.
3. **MILESTONE A – Amending Section 106 NEPA Documentation:** These Guidelines will be used as the basis to document the Project’s compliance with Section 106 for both Contract 1 and Contract 2. The Project’s existing Section 106 letter (dated September 9, 2013) will be amended to reflect these Guidelines. The amended Section 106 letter will facilitate the completion of the Project’s Categorical Exclusion (“CE”) documentation per the requirements of the National Environmental Policy Act (“NEPA”).
4. **Recommendation of Area of Potential Effect:** Once the Section 106 letter is amended, the Project Engineer and/or its sub-contractors will develop the recommended Area of Potential Effect (“APE”) and provide this recommendation to the VTrans HPO for review. It should be noted that the APE for Contract 1 may be different than that for Contract 2.
5. **MILESTONE B – Approval of APE:** The recommended APE will be presented to the Project Stakeholders for review and comment for a period of 14 days. Upon receipt of comments, VTrans will revise (if necessary) the APE and the HPO will review and approve the revisions.
6. **Initial Building Inventories:** Following the APE approval, the Project Engineer and/or its sub-contractors will conduct an initial building inventory. The results of this inventory will be used in part for developing the specific survey and monitoring requirements of the Special Provision.
7. **Development of Special Provision:** Following the inventory, the Project Engineer and/or its sub-contractors will develop a Special Provision for the Contract. The Special Provision will have specific requirements for the construction phase monitoring. The Special Provision will be subject to review by the VTrans HPO.
8. **MILESTONE C – Approval of Special Provision:** The draft Special Provision will be presented to the Project Stakeholders for review and comment for a period of 21 days. Upon receipt of comments, VTrans will revise (if necessary) the Special Provision and the HPO will review and approve the revisions.

9. **Development of Historic Structures Management Plan:** Following the execution of a construction Contract, the Construction Contractor will be responsible for developing a Historic Structures Management Plan in accordance with the Project Special Provisions. The Historic Structures Management Plan shall be submitted to VTrans for review, comments, and approval. The review of the Plan will be to ensure conformance with the Special Provision.
10. **Pre-Construction Survey:** The Construction Contractor will be responsible for documenting existing conditions for historic buildings within the APE through a pre-construction survey. The property owners may conduct their own independent surveys at their expense.
11. **Deployment of Monitoring Equipment:** Monitoring equipment will be deployed consistent with the approved Historic Structures Management Plan and the Special Provision.
12. **Pre-construction (Baseline) Vibration Monitoring:** Once monitoring equipment is deployed and confirmed to be operational, the pre-construction vibrational/ground movement environment shall be characterized in advance of construction.
13. **MILESTONE D – Commencement of Contract 1 Construction and Vibration Monitoring/Reporting:** Construction-phase vibration monitoring and reporting shall be carried out in conformance with the approved Plan.
14. **Post-Construction Survey and Stakeholder Input on Process:** The Construction Contractor will conduct a post-construction historic building survey. Property owners may conduct their own inventory at their expense.

Steps 9 through 14 shall be repeated for Contract 2.

Historic Resources and Compliance with Federal Regulations

Under Section 106 of the National Historic Preservation Act of 1966 ("Section 106"), any project receiving federal funding or permits must be reviewed for its potential effects to historic and archaeological resources. The Middlebury Downtown Bridge Replacement Project is funded in part by the Federal Highway Administration ("FHWA"). By agreement with the FHWA, the Advisory Council on Historic Preservation ("ACHP"), and the Vermont State Historic Preservation Officer ("VT SHPO"), the Vermont Agency of Transportation ("VTrans") is responsible for conducting the Section 106 review for the Project.

Section 106 review includes evaluating a project's potential impacts to historic buildings and structures, historic districts, historic landscapes and settings, and known or potential archeological resources. Historic and archaeological resources include those listed in or eligible for listing in the National Register of Historic Places.

The Middlebury Village Historic District (“MVHD”) includes over 300 properties spread over approximately 2,000 downtown acres and includes such well-known Middlebury landmarks as the Battell Block, St. Stephen’s Episcopal Church, the National Bank of Middlebury, the United States Post Office, and Town Hall Theater. The MVHD is listed in the National Register of Historic Places (“NR”).¹

The guidelines in this document have been developed for recommending measures to be included in the Project Special Provisions. The measures to be included in the Special Provision, which is to be developed by the Project Engineer and/or its sub-contractors and reviewed by the VTrans HPO as well as abutting landowners or their designees, seeks to avoid, minimize, and, if necessary, mitigate adverse effects to the historic structures.

Elements of the following guidelines are based on the National Cooperative Highway Research Program’s 25-25/Task 72 report (“NCHRP 25-25”), “Current Practices to Address Construction Vibration and Potential Effects to Historic Buildings Adjacent to Transportation Projects” (September 2012) prepared by Wilson, Ihrig & Associates, Inc., ICF International, and Simpson, Gumpertz & Heger, Inc.² A flowchart summarizing potential components of the formal Plan is attached as Appendix B. The Project Engineer and/or its sub-contractors shall consult these and other resources in the development of the Special Provisions.

Project Overview

The Project’s Purpose and Need is to address the structural deficiencies of two roadway bridges in downtown Middlebury where Main Street (VT 30/TH 2 Bridge 102) and Merchants Row (TH 8 Bridge 2) span the Vermont Railways, Inc. (“VTR”) track. The Alternatives Analysis Report³ compared the No Build, Rehabilitation, Build on New Alignment, and Replacement options, and determined that the most prudent and feasible alternative is to Replace on Alignment. The full length of the Project, including rail work, is approximately 3,350 ft. As described in the Alternatives Analysis Report, the Preferred Alternative for the replacement of the Main Street Bridge (Bridge 102) and the Merchants Row Bridge (Bridge 2) involves construction of a precast concrete box shaped tunnel. The base of the precast box structure will be installed at an elevation allowing for 21’0” of vertical clearance for trains. Drainage and utilities will be constructed and/or rerouted to allow for this track lowering. The tunnel will be approximately 340 ft. in total length.

Once the tunnel is installed, the section above the tunnel (existing open trench between the former bridges) will be covered with fill and topsoil to establish a grassy park that links Triangle Park with the remainder of the Village Green. While the tunnel construction is a small segment

¹ Middlebury Village Historic District nominations and amendments (1976, 1980, 2001) are available here: http://orc.vermont.gov/Documents/Middlebury_NationalRegister_NominationForm_00000131.pdf (1976) http://orc.vermont.gov/Documents/Middlebury_NationalRegister_NominationForm_00000132.pdf (1980) http://orc.vermont.gov/Documents/Middlebury_NationalRegister_NominationForm_00000133.pdf (2001)

² http://onlinepubs.trb.org/onlinepubs/nchrp/docs/NCHRP25-25%2872%29_FR.pdf

³ Alternatives Analysis Report: Middlebury WCRS(23) Bridge Project, prepared by VHB for Town of Middlebury, July 23, 2013.

of the Project length, it is the most complex part of the Project and necessitates a calculated, thoughtful approach to historic resource protection.

Construction Activities and Timeline

Blasting and excavation of rock and other heavy construction activities will take place near the location of the Main Street Bridge as part of Contract 1. Activities include the construction of launch pits required to construct a drainage outfall to the Otter Creek using a micro-tunneling approach. There will not be any removal of rock under the railroad tracks during Contract 1.

During Contract 2, the vertical clearance increase required for the Project will be obtained by lowering the elevation of the railroad tracks under the bridges. To achieve the appropriate vertical clearance, blasting or other methods of removal of bedrock ledge will be required in a localized area under a section of the existing railroad tracks in the vicinity of the Main Street Bridge. Construction activities may also require the use of heavy equipment and the installation of steel sheeting and piling for retaining walls over the entire distance of the proposed tunnel, which would also generate vibrations in close proximity to historic structures. Contract 2 activities are anticipated to take place over the course of 18-24 months.

During both Contract 1 and Contract 2, there is potential for vibration to occur throughout and adjacent to the Project area. There are three aspects of construction to note:

- As part of the drainage outfall construction for Contract 1, blasting, drilling, rock removal, and micro-tunneling will take approximately 6 months to complete.
- As part of the track lowering and tunnel installation for Contract 2, the greatest potential for vibration will occur during the controlled blasting and mechanical removal of rock under the tracks in the Main Street area. It is estimated that the rock removal will take approximately 6-8 months to complete.
- Areas of temporary and permanent sheeting and piling will need to be installed under both Contract 1 and Contract 2 for various walls and excavation support.

Vibration Monitoring Criteria

While the specifics of the Construction Contractor's vibration monitoring criteria will be detailed during the collaborative development of the Special Provisions, the following section provides general information and an overview of how this process will likely work.

Vibration Monitoring - Area of Potential Effect

To comply with Section 106 requirements, the Area of Potential Effect ("APE") for Project-related vibration will be based on established guidelines, precedent, and a technical analysis of construction-related vibration based upon the specifics of the blasting, geotechnical information, and building conditions. The APE for all construction activities will be proposed by the Project Engineer and/or its sub-contractors, reviewed by Project Stakeholders, and approved by the VTrans Historic Preservation Officer.

Recommendations for and examples of APE determinations found in NCHRP 25-25 state that Departments of Transportation across the country select a range of 200 – 1000 feet, depending on project activities and conditions. The specific limits of the APE for this project will be determined based on structure type and condition, soil conditions, and construction activities.

Vibration Monitoring Criteria

Certain heavy construction activities have the potential to generate ground-borne vibration and cause structural damage. There are various levels of structural damage as follows:

- Cosmetic: The formation of hairline cracks on drywall surfaces or the growth of existing cracks in plaster or drywall surfaces; formation of hairline cracks in mortar joints of brick/concrete blocks.
- Minor: The formation of large cracks or loosening and falling of plaster or drywall surfaces, or cracks through bricks/concrete blocks.
- Major: Damage to structural elements of the building, cracks in support columns, loosening of joints, splaying of masonry cracks, etc.

VTrans Standard Specifications for Construction includes subsection 107.12 (f) on Ground Vibration Limits. The maximum Peak Particle Velocity (PPV) of ground vibration in any of the three mutually perpendicular components of particle velocity for the following structure types shall be limited as follows:

<u>Type of Structure</u>	<u>PPV in mm/s (in/sec)</u>	
	<u>Frequencies < 40 Hertz</u>	<u>Frequencies > or = 40 Hertz</u>
<i>Modern Homes (Drywall interior)</i>	19 (0.75)	50 (2.0)
<i>Older Homes (plaster on wood or lath)</i>	13 (0.50)	50 (2.0)
<i>Non-Residential Structures Underground Utilities</i>		

The ground vibration monitoring criteria will be developed and refined as part of the Special Provision. The Agency reserves the right to lower the PPV limit in areas where there may be structures or elements with a higher sensitivity to ground vibration. VTrans and the HPO will review all vibration monitoring criteria as part of the Special Provision development. Adherence to this specification does not waive the Contractor’s responsibility for damage as specified in this Subsection of the VTrans Standard Specifications for Construction and in Subsection 107.16.

For various reasons, including but not limited to structure materials, structure condition, founding soil condition, the potential to repair if damaged, the importance of buildings such as historic properties, and the type of construction equipment anticipated, lower ground-borne vibration PPV monitoring limits may be determined by the Project Engineer for each structure

identified in the Area of Potential Effect. Key goals for establishing construction vibration monitoring limits are to minimize the risk of damage and to be able to react to construction vibration events in a reasonable manner while also minimizing unnecessary limitations to construction activities due to concerns of vibration.

The NCHRP 25-25/Task 72 report "Current Practices to Address Construction Vibration and Potential Effects to Historic Buildings Adjacent to Transportation Projects" is a valuable resource that can provide insight into different studies, government regulations, guidelines, standards and project reports which establish ground-borne vibration limits for minimizing risk of structural damage.

The following background information on vibration is from the Association for Preservation Technology (APT) Journal:

In simplified terms, vibrations originate at a source, transmit through a media, normally soil, and then reach a receiver, such as a building or other structure. Different buildings will respond quite differently to vibration due to their variations in mass, stiffness, and materials. Moreover, different sources generate ground-borne vibrations that transmit through the soil in different ways. Transient vibrations result from ground impacts, such as from dropping heavy debris, which generate a large initial response that quickly attenuates with distance from the vibration source. Steady-state vibrations result from continuous, high-energy activities, such as vibratory pile driving or vibratory roller compaction of soil. Pseudo-steady-state vibrations are a mixture of transient and steady-state responses.

For buildings, the magnitude of vibrations is typically measured in terms of peak particle velocity (PPV) using units of inches per second (in/sec). The number of vibration cycles in a specified period of time is called the vibration frequency, typically measured in Hertz (Hz) or cycles per second.⁴

As one can infer from the above, there is a wide range of opinion on appropriate vibration limits for historic buildings and structures. There is not one set of guidelines, only recommendations from various agencies and sources. However, determining factors for susceptibility to vibration are construction type and condition, not necessarily that the building is historic.

In addition to concerns of ground-borne vibration, soil settlement caused by nearby excavation is a similar phenomenon and equally as important.⁵ Activities which cause settlement should try to be avoided near all existing structures and special consideration should be made to address potential soil settlement.

The type of construction activities and whether vibrations are continuous or transient are important factors in establishing monitoring limits. Pile driving as well as dynamic compaction

⁴ Johnson, Arne P. and W. Robert Hannen. "Vibration Limits for Historic Buildings and Art Collections." APT Bulletin: Journal of Preservation Technology, no. 46 (2015): 2-3.

⁵ Ibid, page 26.

are activities that would typically generate the highest vibration level.⁶ Blasting is at the high end of the spectrum for potential vibration and traffic is at the low end.

Pre-Construction Building Survey and Construction Monitoring

Management of structures will be initiated through pre-construction monitoring surveys performed by the Construction Contractor. The purpose of this survey is to provide the Contractor with baseline records prior to construction monitoring, as the Contractor is liable for monitoring and damages. Property owners will have the option of hiring a third party to conduct a survey if they would like independent verification of pre-construction building conditions. In the event of a claim, the property owner's survey can be reviewed against that of the Construction Contractor. While the specifics of the Construction Contractor's pre-construction building survey will be detailed during the collaborative development of the Special Provisions, the following section provides general information and an overview of how this process will likely work.

Historic Structures Monitoring Plan

As noted previously, as part of the requirements of the Construction Contract, the Construction Contractor will prepare a Historic Structures Monitoring Plan ("Plan"). The Plan will meet the minimum requirements defined by the Special Provisions of the Contract and will define the actions that the Contractor will take to inventory, monitor, and protect buildings within the defined APE.

Timing / Implementation

In order to facilitate the development of the technical specifications regarding the number and positioning of vibration monitoring equipment, the Initial Building Inventories should be executed as soon as possible.

Pre-Construction Survey

Pre-construction documentation provides a baseline from which construction-related changes to the structures within the APE can be identified, monitored and assessed. Structures in the pre-construction survey may include, but are not limited to:

- Buildings
- Monuments, fountains and statues
- Bridges, dams and retaining walls
- Any other structures or features determined by the Project team and/or VTrans HPO to be particularly susceptible to distress

Documentation should include, but is not limited to:

⁶ Ibid, page 28.

- Address of structure
- Architectural Description
 - Foundation Materials
 - Wall Structure & Cladding (interior and exterior)
 - Windows
 - Roof Type & Covering
 - Number of Stories
 - Entrance Location
 - Approximate Dimensions
 - Noted architectural features, particularly those susceptible to damage
- Condition of Building
 - Location/Width/Inventory of visible defects/cracks/loose materials/previous repairs
 - Drainage features
 - Indications of settlement

Vibration Monitoring

Based on these guidelines and the 2011 VTrans Standard Specifications for Construction, at minimum, the development of a formal Plan – including specific technical details and procedures for vibration monitoring – will be required to be prepared, stamped, and administered by a qualified engineer through the Construction Contractor’s construction contract.

Structures determined to be susceptible to construction vibrations as defined by the Special Provision, will be subjected to both a pre-construction (baseline) vibration monitoring survey and construction-phase vibration monitoring. Vibration monitoring will include but is not limited to the following:

- Vibration Instrumentation
 - Suitable vibration monitors shall be deployed capable of measuring vibration (peak particle vibration velocity or “PPV”) in each of three mutually perpendicular orientations.
 - Equipment shall be maintained as per manufacturer’s recommendations.
 - All vibration instruments shall be able to withstand Vermont’s varying climatic conditions and have redundant sources of power in order to ensure continuous data collection. The Construction Contractor is responsible for ensuring the monitoring equipment is working on a daily basis. No work with the potential to cause vibrations will occur if the monitoring and reporting equipment is not working properly.
- Crack Displacement Monitoring
 - Crack displacement monitoring gauges shall be installed as appropriate across existing structural cracks identified in buildings or structures and deemed necessary during the pre-construction building inspections and agreed to by the property owner. Readings shall be taken from the crack monitoring device

at the time of installation and again just prior to construction start-up and at intervals during construction.

- Additional crack monitoring devices will be installed as deemed necessary during construction to monitor new cracks that are identified as having developed during construction.
- Location of Vibration Monitors and Pre-Construction Baseline Surveying
 - A scaled plan will be prepared indicating monitoring locations, including measurements to be taken at construction site boundaries and at historic structures within the established APE.
 - Each structure will have an individual site plan as needed showing location and type of sensor to be installed.
 - Pre-construction, baseline vibration monitoring should be carried out for a period of time sufficient to adequately characterize the existing vibrational environment associated with typical activities in downtown Middlebury (e.g., train passage, roadway traffic, etc.). The date and time of train trips through the corridor for the full duration of the baseline monitoring should be obtained from Vermont Rail System in order to cross-reference vibrational data with instances of train passage. Any construction or other atypical source of vibration unrelated to the Project but occurring within the APE at the time of the baseline survey should be noted similarly. To the extent feasible, baseline monitoring should be scheduled to avoid such atypical sources of vibration.
- Data Acquisition
 - The information to be provided in the data reports should include, at a minimum, daily histogram plots and the maximum peak vector sum PPV vs. frequency. The reports should also identify construction equipment operating during the monitoring period and their locations and distances to all vibration-sensitive locations.
 - Monitoring reports will be made available to property owners.
- Exceedance Notification and Reporting Procedures
 - Notification of exceedance events [i.e., measurements that are recorded that exceed the established vibration threshold(s)] will be transmitted to the Resident Engineer (RE) in real-time during construction. This will allow the RE, or designee, to react during construction activities.
 - Follow-up procedures to reduce construction vibration levels to below the recommended threshold shall be evaluated by the Construction Contractor and submitted promptly to the RE. Vibration thresholds will be adjusted and/or structure inspections increased.
 - If threshold limits are exceeded and/or impacts to buildings are identified, construction activities causing the vibration will be stopped until alternative equipment or construction procedures can be implemented to generate vibration levels that do not exceed allowable limits.

Post Construction Survey and Report

Upon completion of blasting and/or all vibration-producing construction activities, the Construction Contractor shall again inspect the interior and exterior of all structures and buildings included in the Pre-Construction Survey.

The Construction Contractor shall provide a copy of the complete Post-Construction Survey Report to the RE. The RE will forward the Post-Construction Survey Report, including photo and video documentation, to VTrans for safe-keeping. Each property owner shall have access to the survey for his/her property. Due to the personal nature of information, surveys shall not be available to the public.

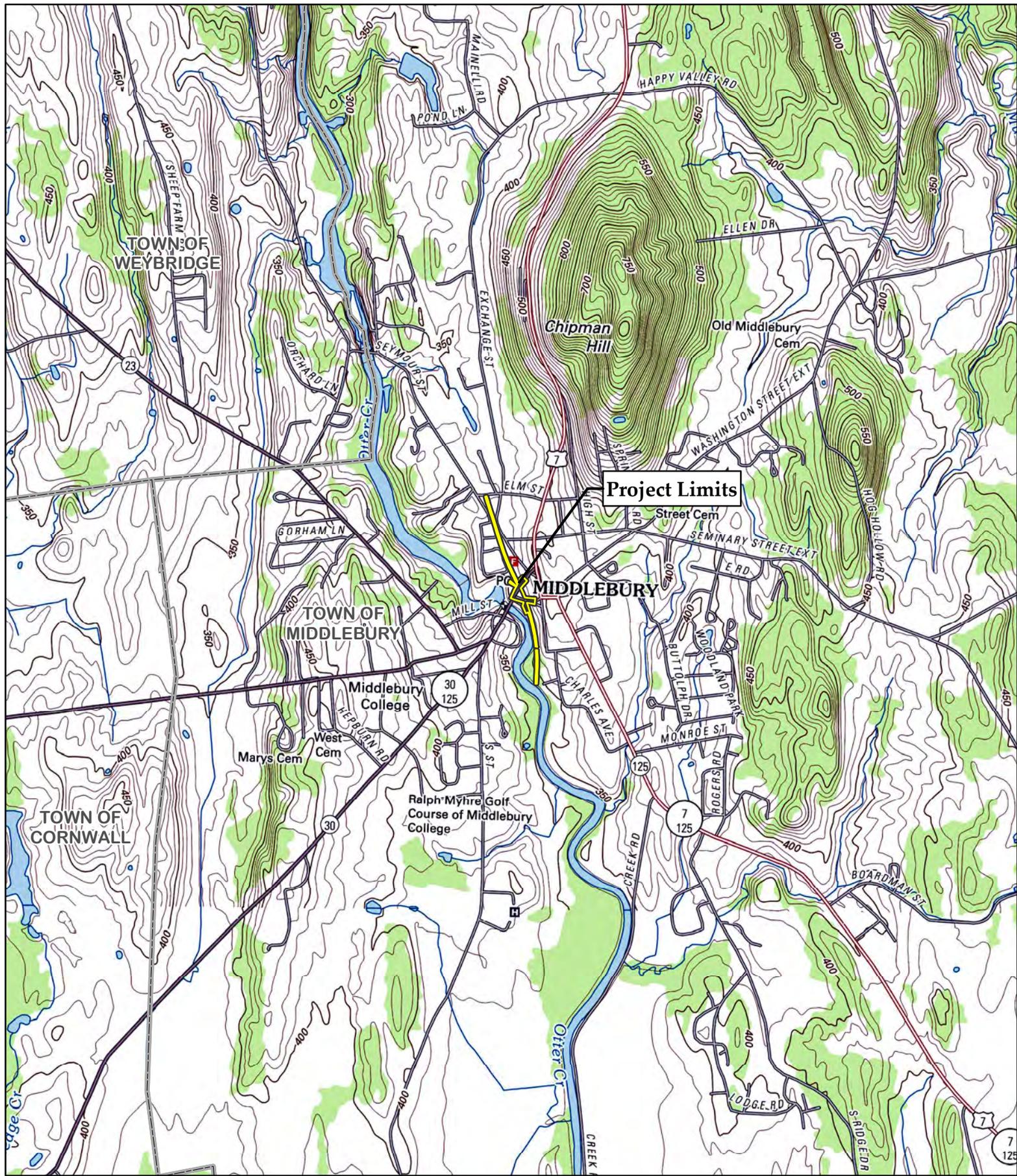
If damages are identified, an engineering damage assessment shall be conducted by a professional structural engineer at the contractor's expense in conjunction with the VTrans HPO to assess impacts to historic structures and identify appropriate repair remedies.

Damages

Damage to historic structures within the APE caused by Project construction shall be repaired to pre-construction condition at the Construction Contractor's expense in a timely manner, appropriate to structural needs and life safety issues. The VTrans HPO shall review and approve proposed repairs before they are carried out, in order to ensure compliance with the Secretary of Interior's Standards for Rehabilitation. Damage remediation shall be detailed in the Special Provisions of the contract documents. Independent pre-construction surveys performed at the request of or on behalf of the property owners can be reviewed at such time a claim of damages is made.

Conclusion

Incorporation of these monitoring guidelines, at minimum, into the Special Provisions of the contract documents and the cooperation of all parties will ensure the protection of historic buildings in compliance with Section 106 of the National Historic Preservation Act. It is the goal of all parties involved to ensure the safety of all involved, to protect historic structures, to comply with all federal regulations.

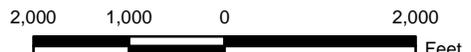


- Legend**
- Project Limits = 3.38 Acres
 - Town Boundary



**Town of Middlebury
Middlebury WCRS (23) - Bridge Project
Middlebury, Vermont
Site Location Map**

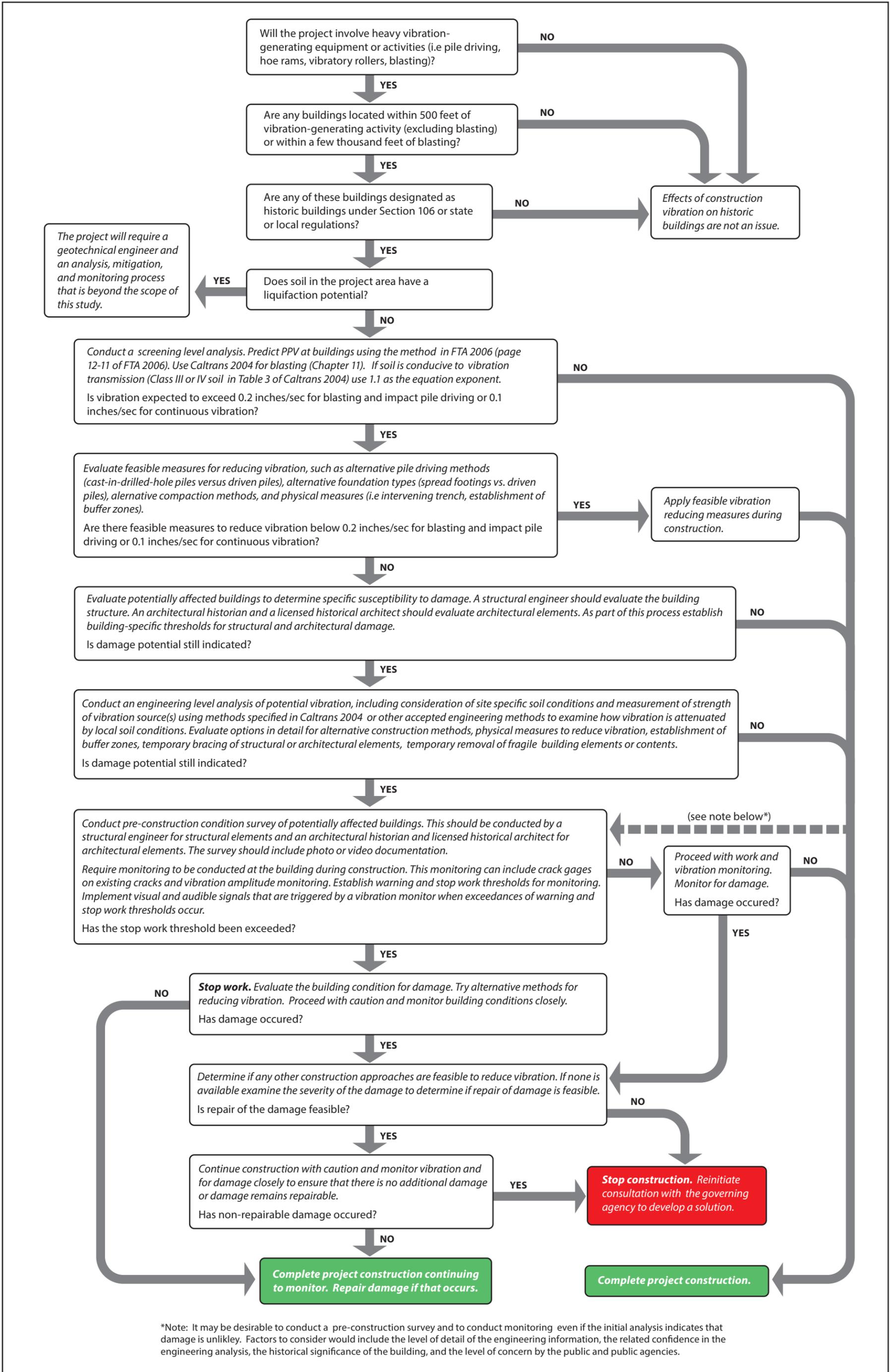
July 25, 2016



Sources: Background - USGS Topographic Quads (Cornwall and Middlebury, 2012); Town Boundaries from VCGI (2009).



Prepared by: jtherrien & koshea



Sac-Graphics ... 586.11 (p-5-12)tm

Figure C-1
Flow Chart for Recommended Approach for Addressing Construction Vibration Impacts on Historic Buildings

Programmatic Bridge Use Section 4(f) Evaluation



U.S. Department
of Transportation
**Federal Highway
Administration**

Memorandum

Subject: Federal-aid Project No. WCRS(23)
Replacement of Bridges No. 102 (VT 30) and No. 2 (TH 8)
Programmatic Section 4(f) Evaluation

Date: July 20, 2017

From: Kenneth R. Sikora, Jr. *KRS*
Environmental Program Manager
Montpelier, Vermont

Reply To
Attn of: HDA-VT

To: Matthew Hake
Division Administrator
Montpelier, Vermont

The following is supporting documentation for a Programmatic Section 4(f) evaluation for the replacement of Bridges No. 102 and No. 2 carrying VT Route 30 and Town Highway 8, respectively, over the Western Vermont Rail Corridor in Middlebury. Both bridges consist of 2-span, reinforced concrete slabs, and are eligible for listing in the National Register of Historic Places as contributing structures to the Middlebury Village Historic District.

As a point of clarification, this evaluation uses the terms *bridge*, *structure*, and *bridge structure* to include all components of a bridge: the superstructure, usually consisting of the deck and curtainwalls, and any supporting elements for the deck; and the substructure, usually consisting of abutments and wingwalls, and their footings or other supports. In Vermont, Section 4(f) evaluations prepared using the *Nationwide Programmatic Section 4(f) Evaluation for the Use of Historic Structures* have consistently applied this comprehensive meaning to these terms. The abutments of the bridges that are the subject of this evaluation, and the wingwalls/retaining walls that are connected to them, consist of various types of built-up stone walls. The walls appear to have been extended over time with the various iterations of bridge construction at the crossings, yet they serve the normal function that wingwalls provide, holding back the earth behind them. But for the grade-separation between the roadways above and the railroad below for which these bridges were originally built to provide, the wingwalls/retaining walls would be unnecessary, and they are therefore considered to be part and parcel of each bridge.

APPLICABILITY

1. Are the bridges to be replaced or rehabilitated with Federal funds?

Yes. Bridge Nos. 102 and 2 will be replaced with Federal funds.

2. Will the project require the use of historic bridge structures which are on or are eligible for listing on the National Register of Historic Places?

Yes. The project involves replacement of the existing historic bridges with a tunnel on their existing alignments.

3. Will the project impair the historic integrity of the bridges either by demolition or rehabilitation?

Yes. The existing historic bridges will be demolished.

4. Are the bridges National Historic Landmarks?

No.

5. Do the facts of the project match those set forth in the sections below, Alternatives, Findings, and Measures to Minimize Harm?

Yes.

6. Is there agreement between the FHWA and the State Historic Preservation Officer (SHPO) pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended?

Yes. The Section 106 requirements for this project were satisfied under the terms of the VTrans Section 106 Programmatic Agreement executed by FHWA, VTSHPO, and others on April 5, 2000. See the Section 106 Determination of Effect Report dated September 6, 2013, concurred in by VTrans, and making a determination of Adverse Effect/Standard Mitigation Measures Applicable for this project. See also the Section 106 amendment dated July 20, 2017.

ALTERNATIVES

1. Do Nothing – Applicable and considered.
2. Rehabilitate the historic bridge without affecting the historic integrity of the structure – Applicable and considered.
3. Build a new structure at a new location without affecting the integrity of the historic bridge – Applicable and considered.

FINDINGS

1. Do Nothing – The do nothing alternative has been studied. The do nothing alternative ignores the basic transportation need. For the following reason this alternative is not considered feasible and prudent:

Safety – Bridges 102 and 2 are considered structurally deficient. These two identical structures are 2-span, reinforced concrete slab construction showing severe deterioration. Both bridges are approaching failure conditions with significant cracking, spalling, heavy section loss, exposed rebar and inadequate railings as illustrated in the inspection photos. The overall level of deterioration of the bridges is beyond the capabilities of normal maintenance.

2. Rehabilitate the historic bridge without affecting the historic integrity of the structure – This alternative was determined not feasible or prudent for the following reason:

Historic Integrity – It is not possible to properly rehabilitate Bridges 102 or 2 without affecting their historic integrity. Deterioration of the concrete superstructures has advanced past the point of repair for both spans. Any attempt to replace failed concrete will require removal of all unstable material, which is known to permeate the entire superstructure, effectively resulting in bridge replacement. The existing ornamental steel bridge railings are rusted through in many sections, are unsafe for both vehicular and pedestrian traffic, and cannot be retained and reused. Because of the extensive lowering of the railroad grade that needs to be undertaken to achieve the design vertical clearance, the stone abutments and wingwalls/retaining walls would be substantially undercut and therefore are precluded from being incorporated into a rehabilitated structure.

3. Build a new structure at a new location without affecting the integrity of the historic bridge – This alternative has been studied. For the following reasons this alternative is not considered feasible and prudent:

Adverse Social, Economic, or Environmental Effects – The existing bridge alignments are at the most logical locations within the existing downtown Middlebury road network. Building new bridges away from the present sites would disrupt long-established travel patterns, require the acquisition of substantial amounts of land and removal of historic buildings, and costly construction of new approach roadways. These impacts, which include other Section 4(f) uses of the Middlebury Village Historic District, would be considered of extraordinary magnitude compared to the relatively minor proposed use caused by the replacement of Bridges 102 and 2, which are mostly valued for their stone abutments and metal railings.

Historic preservation - Even if it were possible to build a new bridge at a new location, Bridges 102 and 2 are close to failed condition and beyond the possibility of rehabilitation while maintaining their historic integrity as discussed in No. 2 above. In addition, there is no alternative use for the bridge at its present site; the bridges would be closed to traffic and eventually collapse. This situation vitiates any benefit of bypassing the historic bridges with

the intent to preserve their historic integrity. Therefore, even if this alternative was feasible and prudent, it could not be considered an avoidance alternative that achieves the historic preservation intent of the Section 4(f) statute.

MEASURES TO MINIMIZE HARM

1. Does the project include all possible planning to minimize harm?

Yes. The measures to minimize harm, excerpted below, were included in the formal Section 106 comment letter dated September 6, 2013 and/or the Section 106 amendment dated July 20, 2017. They include the following Standard Mitigation Measures:

Photographic Documentation - The VAOT shall ensure that the Historic property is recorded prior to its demolition, alteration or relocation in accordance with Historic American Buildings Survey (HABS) or Historic American Engineering Record (HAER) standards, for nationally significant properties, or, for other properties, the Photographic Documentation Standards for Historic Structures adopted by the SHPO. The VAOT shall retain one copy, provide one to DHP, and one or more to appropriate local depositories. Copies of original plans for engineering structures should be part of the documentation package, if possible.

Interpretive Signage. The VTrans, through the use of research, design and fabrication consultants as appropriate, shall produce one or more signs to describe the work on a property, archeological resources recovered from a site, the site's history, or its historic context. VTrans and/or local interested parties shall plan the sign(s) and address maintenance and long-term care of permanent sign(s).

Salvage of Architectural or Engineering Features. VTrans shall identify appropriate parties to receive salvaged architectural or engineering features. VTrans shall ensure that the features are salvaged prior to demolition activities and properly stored and curated. When feasible, salvaged architectural features shall be reused in other preservation projects. *See below.*

Design of a New Bridge - VTrans shall design a new bridge that is compatible with the surrounding historic and natural environment in design, massing, scale, width, materials, color, etc. The design shall be recognizable as contemporary, and while it may reference the design of the previous bridge, it shall avoid creating an inappropriate false historic appearance. *Note, this SMM will be applied to the design of the tunnel ends.*

Salvage of Architectural or Engineering Features/Storage of Surplus Ashlar Blocks: Surplus ashlar blocks were to be stockpiled for later use on Town projects. The project has changed, however, and it is anticipated that additional blocks will be removed as part of the project. It now appears that there will be too many blocks for the Town to stockpile and use in future projects. Therefore, this mitigation measure is revised to state that the Town of

Middlebury is not required to retain all ashlar blocks made available by the current project and instead may select the number of ashlar blocks they consider appropriate for use in future projects.

Salvage of Architectural or Engineering Features/*Enhancing Interpretive Opportunities:*
Ashlar blocks salvaged from the eastern abutments of both bridges will be used as structural and decorative elements in the new green space, providing a practical means of achieving the necessary cover and site grading above the tunnel and a functional and tactile interpretive element to convey the importance of the railroad to park visitors.

2. Will documentation for the bridge be developed to Historic American Building Survey / Engineering Record (HABS/HAER) standards?

Yes. The bridge will be documented according to the procedures outlined in the VTrans Section 106 Statewide Programmatic Agreement for documenting historic structures. It will be documented and a search will be conducted for the original plans for the bridge.

3. Will the existing bridge be made available for an alternate use provided a responsible party agrees to preserve and maintain it?

Yes. A good faith effort will be made to market the bridge to a State or local government agency or responsible private entity in accordance with FHWA's July 22, 1987 memorandum on historic bridges.

4. For bridges that are adversely affected, is there agreement between the FHWA and the SHPO on the Section 106 process?

Yes. The Section 106 requirements for the replacement of this bridge are satisfied under the terms of the VTrans Section 106 Programmatic Agreement dated April 5, 2000, as documented in the VTrans' concurrence in the Section 106 Determination of effect Report dated September 6, 2013. See also the Section 106 amendment dated July 20, 2017.

DETERMINATION

Based on the information/documentation in this memorandum, the following determinations have been made:

1. The project meets the applicability criteria of the Programmatic Section 4(f) for historic bridges.
2. All the alternatives set forth in the Findings section have been fully evaluated.
3. Based on the findings in the Programmatic Section 4(f), as documented memorandum, there is no feasible and prudent alternative to the use of Bridge No. 102 or Bridge No. 2.

4. The proposed project complies with the Measures to Minimize Harm section of the Programmatic Section 4(f) and agreement between FHWA and SHPO has been reached.
5. The measures to minimize harm are hereby assured to be implemented with the construction of the project.
6. This memorandum will document that the Programmatic Section 4(f) applies to this project.

Accordingly, the FHWA approves the proposed use of these historic bridges for the construction of the Middlebury Bridge and Rail Project, WCRS(23) in Middlebury, Vermont, under the above Nationwide Section 4(f) evaluation issued on this date.

Attachments

Section 4(f) *De Minimis* Determinations



U.S. Department
of Transportation
**Federal Highway
Administration**

Vermont Division

July 20, 2017

87 State Street
Montpelier, VT 05602
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(802) 828-4424
Vermont.fhwa@dot.gov

In Reply Refer To:
HEC-VT

Ms. Andrea Wright, P.E.
Environmental Services Engineer
Vermont Agency of Transportation
1 National Life Drive
Montpelier, VT 05633-5001

Subject: Middlebury Bridge and Rail Improvements
FAP No. WCRS(23)
Middlebury, Vermont
Section 4(f) De Minimis Determination – Historic Properties

Dear Ms. Wright:

We have reviewed the July 18, 2017 electronic request by VTrans requesting our determination that the use of Section 4(f) properties on the above project meets the requirements to qualify as a de minimis impact in accordance with 23 CFR 774.3(b). The replacement of Bridges No. 102 and No. 2 carrying VT Route 30 and Town Highway 8, respectively, over the Western Vermont Rail Corridor includes incidental work which will require the acquisition of permanent easements from eighteen adjacent historic properties, all of which are eligible for listing in the National Register of Historic Places as contributing structures to the Middlebury Village Historic District. The minor use of land will not adversely affect any park features or interfere with park activities.

The permanent easements are identified on the attached plans and detailed in the attached schedule of easements. The permanent easements will provide for construction of drainage improvements, municipal water and sanitary sewer improvements, utility installation, and maintenance access. The permanent easements total approximately 43,500 ft². The minor use of land does not adversely affect the historic quality or integrity of the property.

Based on the information attached to your request we have made the following determinations (**in bold**) with respect to question 2A of FHWA's Final Guidance for Determining De Minimis Impacts to Section 4(f) Resources dated December 13, 2005. See also 23 CFR 774.5(b)(1) and 23 CFR 774.17.

Question 2A: What are the requirements for a finding of *de minimis* impact on a historic site?

Answer: A finding of *de minimis* impact on a historic site may be made when:

- 1) The process required by Section 106 of the National Historic Preservation Act results in the determination of "no adverse effect" or "no historic properties affected" with the concurrence of the SHPO and/or THPO, and ACHP if participating in the Section 106 consultation;

Qualified professionals within VTrans are authorized under the terms of the 4/5/99 Programmatic Agreement to implement the Federal-Aid Highway Program in Vermont, to document and make Section 106 determinations of effect for transportation projects on behalf of VT-SHPO. FHWA has reviewed and concurred with the VTrans Section 106 final comment letter dated September 6, 2013 and VTrans Section 106 final comment letter amendment July 20, 2017, concluding that the effect determination for the work associated with the Bridges No. 102 and No. 2 replacement project is No Effect relative to historic properties.

- 2) The SHPO and/or THPO, and ACHP if participating in the Section 106 consultation, is informed of FHWA's or FTA's intent to make a *de minimis* impact finding based on their written concurrence in the Section 106 determination.

Under the terms of the 4/5/99 Programmatic Agreement, VTrans provides copies of Section 106 determinations of effect and supporting documents to VT-SHPO. The SHPO has been informed of the intent to make a *de minimis* finding under Section 4(f) based on the No Effect determination.

- 3) FHWA or FTA has considered the views of any consulting parties participating in the Section 106 consultation.

As part of its standard Section 106 consultation process, VTrans ensures that Section 106 consulting parties are afforded an opportunity to comment, and that these views are considered during the project development process. The project has been discussed at several public meetings where the public had an opportunity to comment, and the Middlebury Historic District was identified as a resource early in the scoping process. Public meetings include a Pre-Design workshop on March 12, 2013, a Local Concerns meeting on March 28, 2013, an Alternatives Discussion meeting on June 4, 2013, and a Public informational meeting on October 1, 2013. In addition, the project was the subject of an April 26, 2017 Environmental Assessment. The Environmental Assessment was made available for a 30 day public review and comment period. As part of the public comment period, a warned public hearing was held on May 11, 2017 at which the project was discussed and reviewed.

Based on the above determinations we have concluded that the project circumstances satisfy the requirements for a de minimis impact determination under 23 CFR 774.3(b). These findings complete the Section 4(f) requirements for the use of Riverfront Park for this project.

If you have any questions please contact this office.

Sincerely yours,

A handwritten signature in blue ink, appearing to read "Kenneth R. Sikora, Jr.", written in a cursive style.

Kenneth R. Sikora, Jr.
Environmental Program Manager

Enclosures



U.S. Department
of Transportation
**Federal Highway
Administration**

Vermont Division

July 20, 2017

87 State Street
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Vermont.fhwa@dot.gov

In Reply Refer To:
HEC-VT

Ms. Andrea Wright, P.E.
Environmental Services Engineer
Vermont Agency of Transportation
1 National Life Drive
Montpelier, VT 05633-5001

Subject: Middlebury Bridge and Rail Improvements
FAP No. WCRS(23)
Middlebury, Vermont
Section 4(f) De Minimis Determination – Riverfront Park

Dear Ms. Wright:

We have reviewed the July 18, 2017 electronic request by VTrans requesting our determination that the use of Section 4(f) properties on the above project meets the requirements to qualify as a de minimis impact in accordance with 23 CFR 774.3(b). The replacement of Bridges No. 102 and No. 2 carrying VT Route 30 and Town Highway 8, respectively, over the Vermont Western Rail Corridor includes stormwater improvements which will require the use of land from Marble Works Riverfront Park to construct an outfall pipe and associated riprap. The total amount of land being converted to a transportation use is 2,550 ft², including a permanent easement to provide access to the pipe for future maintenance. The minor use of land will not adversely affect any park features or interfere with park activities.

Based on the information attached to your request we have made the following determinations (**in bold**) with respect to question 3B of FHWA's Final Guidance for Determining De Minimis Impacts to Section 4(f) Resources dated December 13, 2005. See also 23 CFR 774.5(b)(2) and 23 CFR 774.17.

Question 3B: What are the requirements for a finding of *de minimis* impact with respect to a park, recreation area, or wildlife and waterfowl refuge?

Answer: The impacts of a transportation project on a park, recreation area, or wildlife and waterfowl refuge that qualifies for Section 4(f) protection may be determined to be *de minimis* if:

- 1) The transportation use of the Section 4(f) resource, together with any impact avoidance, minimization, and mitigation or enhancement measures incorporated into the project, does not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f).

FHWA has determined that the project has been designed to minimize impacts to Riverfront Park. The portion of the park being converted to a transportation use is for the construction of a drainage outfall pipe where the park abuts Otter Creek and to provide for future access to the pipe for maintenance purposes. The use of park property will not adversely affect park facilities.

- 2) The official(s) with jurisdiction over the property are informed of FHWA's or FTA's intent to make the *de minimis* impact finding based on their written concurrence that the project will not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f); and

FHWA has determined that the July 11, 2017 letter from the Town of Middlebury Selectboard satisfies this requirement.

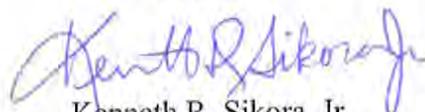
- 3) The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, and attributes of the Section 4(f) resource.

The placement of drainage infrastructure within and future access through Riverfront Park was identified in the April 26, 2017 Environmental Assessment prepared for the Proposed Action to replace the bridges with a tunnel. The Environmental Assessment was made available for a 30 day public review and comment period. As part of the public comment period, a warned public hearing was held on May 11, 2017 at which the project was discussed and reviewed.

Based on the above determinations we have concluded that the project circumstances satisfy the requirements for a *de minimis* impact determination under 23 CFR 774.3(b). These findings complete the Section 4(f) requirements for the use of Riverfront Park for this project.

If you have any questions please contact this office.

Sincerely yours,



Kenneth R. Sikora, Jr.
Environmental Program Manager

Enclosures



U.S. Department
of Transportation
**Federal Highway
Administration**

Vermont Division

July 20, 2017

87 State Street
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In Reply Refer To:
HEC-VT

Ms. Andrea Wright, P.E.
Environmental Services Engineer
Vermont Agency of Transportation
1 National Life Drive
Montpelier, VT 05633-5001

Subject: Middlebury Bridge and Rail Improvements
FAP No. WCRS(23)
Middlebury, Vermont
Section 4(f) De Minimis Determination – Village Green

Dear Ms. Wright:

Our letter of November 27, 2013 determined that the use of the Middlebury Village Green on the above project met the requirements to qualify as a de minimis impact in accordance with 23 CFR 774.3(b).

By e-mail dated July 18, 2017, you advised our office that the permanent easements now total approximately 2,630 ft². There have been some minor revisions in how the project affects the Village Green, for example, there are additional small areas now affected by the introduction of utility cabinets, however, the actual footprint of the permanent easements is largely the same.

The purpose of this letter is to affirm that given the above circumstances, and in consideration of the Section 106 amendment addressing the revisions and the updated letter from the Town of Middlebury Selectboard, the aforementioned de minimis impact determination remains valid.

If you have any questions please contact this office.

Sincerely yours,

Kenneth R. Sikora, Jr.
Environmental Program Manager

Enclosures



U.S. Department
of Transportation
**Federal Highway
Administration**

Vermont Division

November 27, 2013

87 State Street
Montpelier, VT 05602
(802) 828-4423
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Vermont.fhwa@dot.gov

In Reply Refer To:
HEC-VT

Mr. John Narowski, P.E.
Environmental Services Engineer
Vermont Agency of Transportation
1 National Life Drive
Montpelier, VT 05633-5001

Subject: Replacement of Bridges No. 102 (VT 30) and No. 2 (TH 8)
FAP No. WCRS(23)
Middlebury, Vermont
Section 4(f) De Minimis Determination

Dear Mr. Narowski:

We have reviewed the September 19, 2013 electronic request by VTrans requesting our determination that the use of Section 4(f) properties on the above project meets the requirements to qualify as a de minimis impact in accordance with 23 CFR 774.3(b). The replacement of Bridges No. 102 and No. 2 carrying VT Route 30 and Town Highway 8, respectively, over the Vermont Railway includes incidental work which will require the acquisition of permanent easements from five adjacent historic properties, all of which are eligible for listing in the National Register of Historic Places as contributing structures to the Middlebury Village Historic District. The permanent easements will provide for construction of sanitary sewer (1,600 ft²), stormwater facilities (5,600 ft²), and underground utilities (2,500 ft²). The permanent easements total approximately 9,700 ft² and are depicted on the attached plans. The minor use of land does not adversely affect the historic quality or integrity of the property.

Based on the information attached to your request we have made the following determinations (**in bold**) with respect to question 2A of FHWA's Final Guidance for Determining De Minimis Impacts to Section 4(f) Resources dated December 13, 2005. See also 23 CFR 774.5(b)(1) and 23 CFR 774.17.

Question 2A: What are the requirements for a finding of *de minimis* impact on a historic site?

Answer: A finding of *de minimis* impact on a historic site may be made when:

- 1) The process required by Section 106 of the National Historic Preservation Act results in the determination of "no adverse effect" or "no historic properties affected" with the concurrence of the SHPO and/or THPO, and ACHP if participating in the Section 106 consultation;

Qualified professionals within VTrans are authorized under the terms of the 4/5/99 Programmatic Agreement to implement the Federal-Aid Highway Program in Vermont, to document and make Section 106 determinations of effect for transportation projects on behalf of VT-SHPO. FHWA has reviewed and concurred with the VTrans Section 106 final comment letter dated September 6, 2013, concluding that the effect determination for the work associated with the Bridges No. 102 and No. 2 replacement project is No Effect.

- 2) The SHPO and/or THPO, and ACHP if participating in the Section 106 consultation, is informed of FHWA's or FTA's intent to make a *de minimis* impact finding based on their written concurrence in the Section 106 determination.

Under the terms of the 4/5/99 Programmatic Agreement, VTrans provides copies of Section 106 determinations of effect and supporting documents to VT-SHPO. The SHPO has been informed of the intent to make a *de minimis* finding under Section 4(f) based on the No Effect determination.

- 3) FHWA or FTA has considered the views of any consulting parties participating in the Section 106 consultation.

As part of its standard Section 106 consultation process, VTrans ensures that Section 106 consulting parties are afforded an opportunity to comment, and that these views are considered during the project development process. The project has been discussed at several public meetings where the public had an opportunity to comment, and the Middlebury Historic District was identified as a resource early in the scoping process. Public meetings include a Pre-Design workshop on March 12, 2013, a Local Concerns meeting on March 28, 2013, an Alternatives Discussion meeting on June 4, 2013, and a Public informational meeting on October 1, 2013. The public and local Select Board have continually expressed their support for the undertaking.

Two of the historic properties above also qualify for Section 4(f) consideration as public parks, the Middlebury Town Green and the Marbleworks Riverfront Park; therefore, we have also made the following determinations with respect to question 3B of FHWA's Final Guidance for Determining De Minimis Impacts to Section 4(f) Resources dated December 13, 2005. See also 23 CFR 774.5(b)(2).

Question 3B: What are the requirements for a finding of *de minimis* impact with respect to a park, recreation area, or wildlife and waterfowl refuge?

Answer: The impacts of a transportation project on a park, recreation area, or wildlife and waterfowl refuge that qualifies for Section 4(f) protection may be determined to be *de minimis* if:

- 1) The transportation use of the Section 4(f) resource, together with any impact avoidance, minimization, and mitigation or enhancement measures incorporated into the project, does not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f).

FHWA has determined that the project has been designed to minimize impacts to the Middlebury Town Green and the Marbleworks Riverfront Park. At both locations, the use of the park will be limited to installation of underground stormwater facilities. The use of park property will not adversely affect park facilities, and the affected areas of the park will be landscaped and returned to original condition. Planning and design of the work has been undertaken in cooperation with Middlebury Parks officials.

- 2) The official(s) with jurisdiction over the property are informed of FHWA's or FTA's intent to make the *de minimis* impact finding based on their written concurrence that the project will not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f); and

FHWA has determined that the September 19, 2013 letter from Kathleen Ramsay, Middlebury Town Manager, satisfies this requirement.

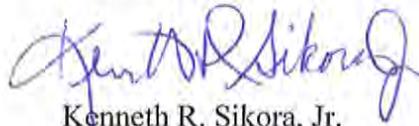
- 3) The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, and attributes of the Section 4(f) resource.

See response to Question 2A-3 above.

Based on the above determinations we have concluded that the project circumstances satisfy the requirements for a *de minimis* impact determination under 23 CFR 774.3(b). These findings complete the Section 4(f) requirements for the use of historic resources for this project.

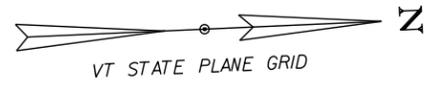
If you have any questions please contact this office.

Sincerely yours,



Kenneth R. Sikora, Jr.
Environmental Program Manager

Enclosure



 = PERMANENT EASEMENT

4
TOWN OF MIDDLEBURY

STATE OF VERMONT
BOOK 59 PAGE 306

MATCHLINE STA. 11+50

1
BRAKELEY,
AUGUST

3
340 NORTH
STREET LLC.

2
GONZALEZ, BARBARA
MORSE, DAVID
& LORRAINE

NF
SLATER, JAMES R.
& CYNTHIA C.

SCALE 1" = 20'-0"
20 0 20

LINES SHOWN ON THIS PLAN AS EXISTING
PROPERTY LINES P/L ARE BELIEVED TO
BE ACCURATE BUT SHOULD NOT BE RELIED
UPON FOR PURPOSES UNRELATED TO THE
STATE OF VERMONT'S ACQUISITION OF
LAND AND RIGHTS FOR THIS PROJECT.



PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: EWP3(I) & WCRS(23)	
FILE NAME: r10g044bdr_4f_impacts.dgn	PLOT DATE: 7/20/2017
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: K.C. BARRY
DESIGNED BY: K.C. BARRY	CHECKED BY: S.E. BURBANK
Map 4,4-1Sec, 4(f) Permanent Easements	SHEET 1 OF 10



[Red square] = PERMANENT EASEMENT

MATCHLINE STA. 11+50

MATCHLINE STA. 16+50

4
TOWN OF MIDDLEBURY

TOWN OF MIDDLEBURY:
BELL PLACE (HISTORIC TOWN ROW)

STATE OF VERMONT
BOOK 59 PAGE 306

EXISTING TOWN R.O.W.
CROSS STREET

CROSS STREET

EXISTING TOWN R.O.W.
CROSS STREET

2
GONZALEZ, BARBARA
MORSE, DAVID
& LORRAINE

3
340 NORTH
STREET LLC.

NF
JACKSON, DORIS &
FIVEASH, MICHAEL
M.

5
TOWN OF
MIDDLEBURY

6
SMITH,
PAMELA & DYLAN

SCALE 1" = 20'-0"
20 0 20

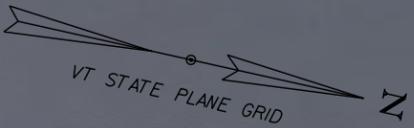
LINES SHOWN ON THIS PLAN AS EXISTING
PROPERTY LINES P/L ARE BELIEVED TO
BE ACCURATE BUT SHOULD NOT BE RELIED
UPON FOR PURPOSES UNRELATED TO THE
STATE OF VERMONT'S ACQUISITION OF
LAND AND RIGHTS FOR THIS PROJECT.



PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: EWP3(I) & WCRS(23)

FILE NAME: r10g04bdr_4f_impacts.dgn PLOT DATE: 7/20/2017
PROJECT LEADER: A.P. GUYETTE DRAWN BY: K.C. BARRY
DESIGNED BY: K.C. BARRY CHECKED BY: S.E. BURBANK
Map 4.4-2 Sec. 4(f) Permanent Easements SHEET 2 OF 10

LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE STATE OF VERMONT'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.



= PERMANENT EASEMENT

MATCHLINE STA. 16+50

MATCHLINE STA. 22+25

STATE OF VERMONT
BOOK 59 PAGE 306

SCALE 1" = 20'-0"
20 0 20

EXISTING TOWN R.O.W.
SOUTH PLEASANT STREET

7
CADORET,
BRIAN

6
SMITH,
PAMELA &
DYLAN

8
AEJ PROPERTIES, LLC.

9
EATON, TIMOTHY

10
EATON, TIMOTHY

11
SMITH HOUSING
LTD PARTNERSHIP

12
CARL & CAETLIN, LLC

13
GRACE BAPTIST CHURCH

NF
TOWN HALL
THEATRE LANDLORD,
LLC

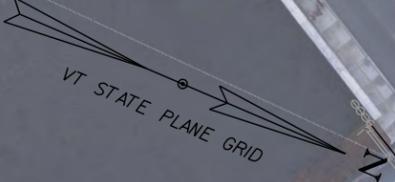
16
BATELL LLC.

TOWN OF MIDDLEBURY

PROJECT NAME:	MIDDLEBURY	FILE NAME:	r10g04bdr_4f_impacts.dgn	PLOT DATE:	7/20/2017
PROJECT NUMBER:	EWP3(I) & WCRS(23)	PROJECT LEADER:	A.P. GUYETTE	DRAWN BY:	K.C. BARRY
		DESIGNED BY:	K.C. BARRY	CHECKED BY:	S.E. BURBANK
		Map 4.4-3 Sec. 4(f) Permanent Easements SHEET 3 OF 10			



EXISTING TOWN R.O.W.



[Red Box] = PERMANENT EASEMENT

LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE STATE OF VERMONT'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.

EXISTING TOWN R.O.W. MAIN STREET

EXISTING TOWN R.O.W. MERCHANTS ROW

NF 770 COMPANY, LLC.

22 THEO FULLER-LOWELL & GARY J. DUPOISE

21 NATIONAL BANK OF MIDDLEBURY

16 BATELL LLC.

20 MIDDLEBURY NATIONAL CORPORATION

R.O.W. LAYOUT SHEET 8

23 MARBLE WORKS PARTNERSHIP

17 TOWN OF MIDDLEBURY

19 TOWN OF MIDDLEBURY

MATCHLINE STA. 22+25

MATCHLINE STA. 28+00

STATE OF VERMONT BOOK 59 PAGE 306

14 BOURDON, J ANDRE & ELIZABETH C.

MAIN STREET

MERCHANTS ROW

13 GRACE BAPTIST CHURCH

24 UNITED STATES OF AMERICA

18 TOWN OF MIDDLEBURY

SCALE 1" = 20'-0"
20 0 20

12 CARL & CAETLIN, LLC

NF TOWN HALL THEATRE LANDLORD, LLC



PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: EWP3(I) & WCRS(23)	
FILE NAME: r10g04bdr_4f_impacts.dgn	PLOT DATE: 7/20/2017
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: K.C. BARRY
DESIGNED BY: K.C. BARRY	CHECKED BY: S.E. BURBANK
Map 4.4-4 Sec. 4(f) Permanent Easements SHEET 4 OF 10	

R.O.W. LAYOUT SHEET 8

VT STATE PLANE GRID

[Red Box] = PERMANENT EASEMENT

23
MARBLE WORKS
PARTNERSHIP

MATCHLINE STA. 28 + 00

STATE OF VERMONT
BOOK 59 PAGE 306

MATCHLINE STA. 33 + 75

24
UNITED STATES
OF AMERICA

26
TOWN OF MIDDLEBURY

27
BRISSON PROPERTIES AT
SEVEN SEYMOUR STREET, LLC.

28
NATIONAL BANK OF MIDDLEBURY

EXISTING TOWN R.O.W.
SEYMOUR STREET

25
MIDDLEBURY COMMUNITY HOUSING, INC.

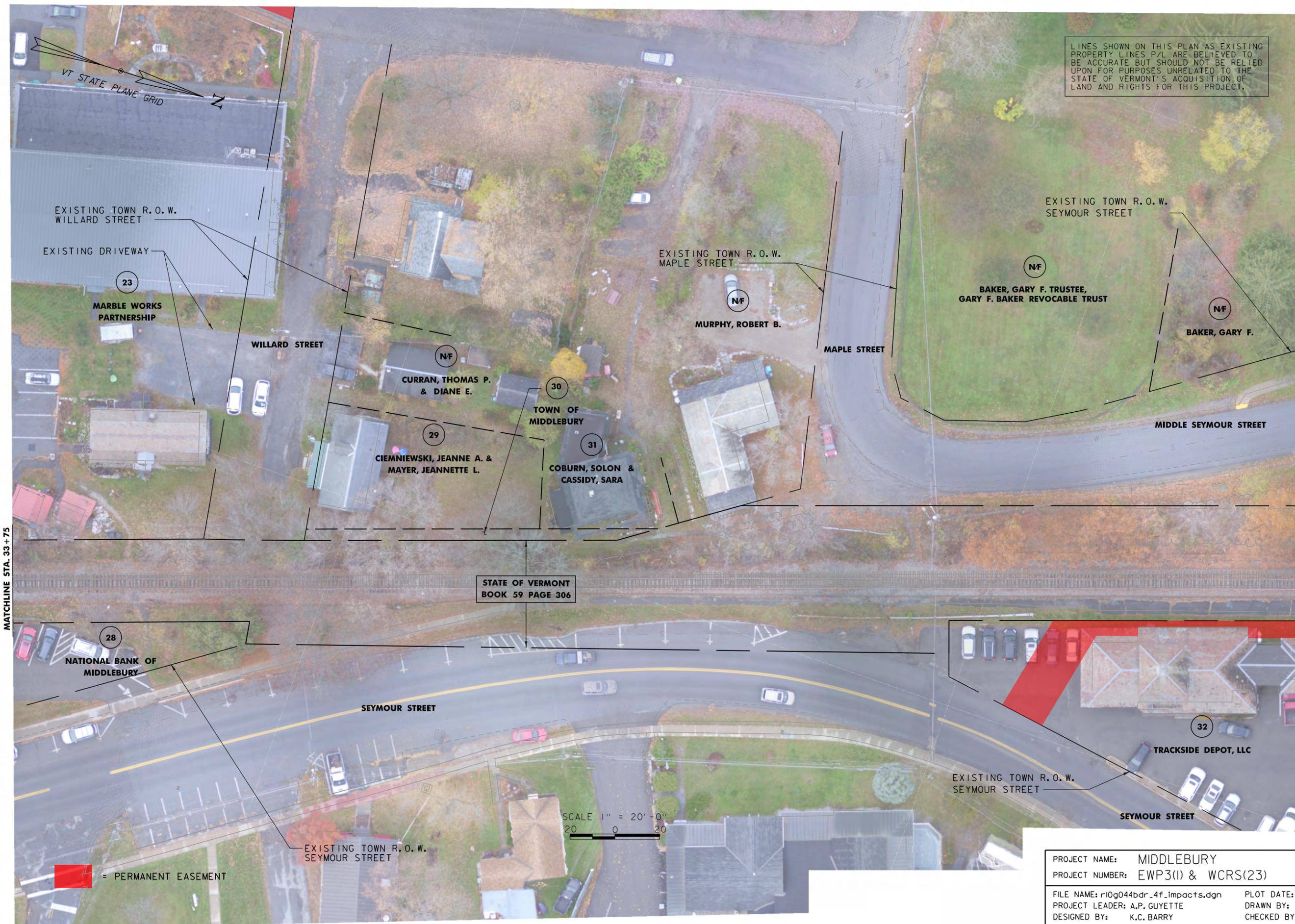
SCALE 1" = 20'-0"
20 0 20

LINES SHOWN ON THIS PLAN AS EXISTING
PROPERTY LINES P/L ARE BELIEVED TO
BE ACCURATE BUT SHOULD NOT BE RELIED
UPON FOR PURPOSES UNRELATED TO THE
STATE OF VERMONT'S ACQUISITION OF
LAND AND RIGHTS FOR THIS PROJECT.



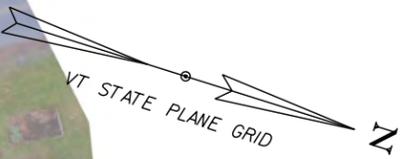
PROJECT NAME:	MIDDLEBURY
PROJECT NUMBER:	EWP3(I) & WCRS(23)
FILE NAME:	r10g044bdr_4f_impacts.dgn
PROJECT LEADER:	A.P. GUYETTE
DESIGNED BY:	K.C. BARRY
Map 4.4-5 Sec. 4(f) Permanent Easements	SHEET 5 OF 10
PLOT DATE:	7/20/2017
DRAWN BY:	K.C. BARRY
CHECKED BY:	S.E. BURBANK

LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE STATE OF VERMONT'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.



PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: EWP3(I) & WCRS(23)	
FILE NAME: r10g04bdr_4f_impacts.dgn	PLOT DATE: 7/20/2017
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: K.C. BARRY
DESIGNED BY: K.C. BARRY	CHECKED BY: S.E. BURBANK
Map 4.4-6 Sec. 4(f) Permanent Easements SHEET 6 OF 10	

LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE STATE OF VERMONT'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.



MIDDLE SEYMOUR STREET

STATE OF VERMONT
BOOK 59 PAGE 306

STATE OF VERMONT
BOOK 59 PAGE 306

MATCHLINE STA. 45+25

33

DUPOISE,
STEPHEN F. & MARCIA S.

EXISTING TOWN R.O.W.
ELM STREET

ELM STREET

NF

COTRONEO
PROPERTIES LLC

NF

VERMONT
RAILWAY

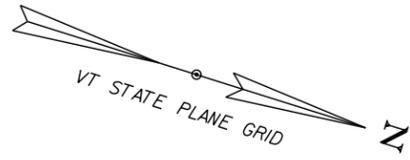
SEYMOUR STREET

SCALE 1" = 20' - 0"
20 0 20

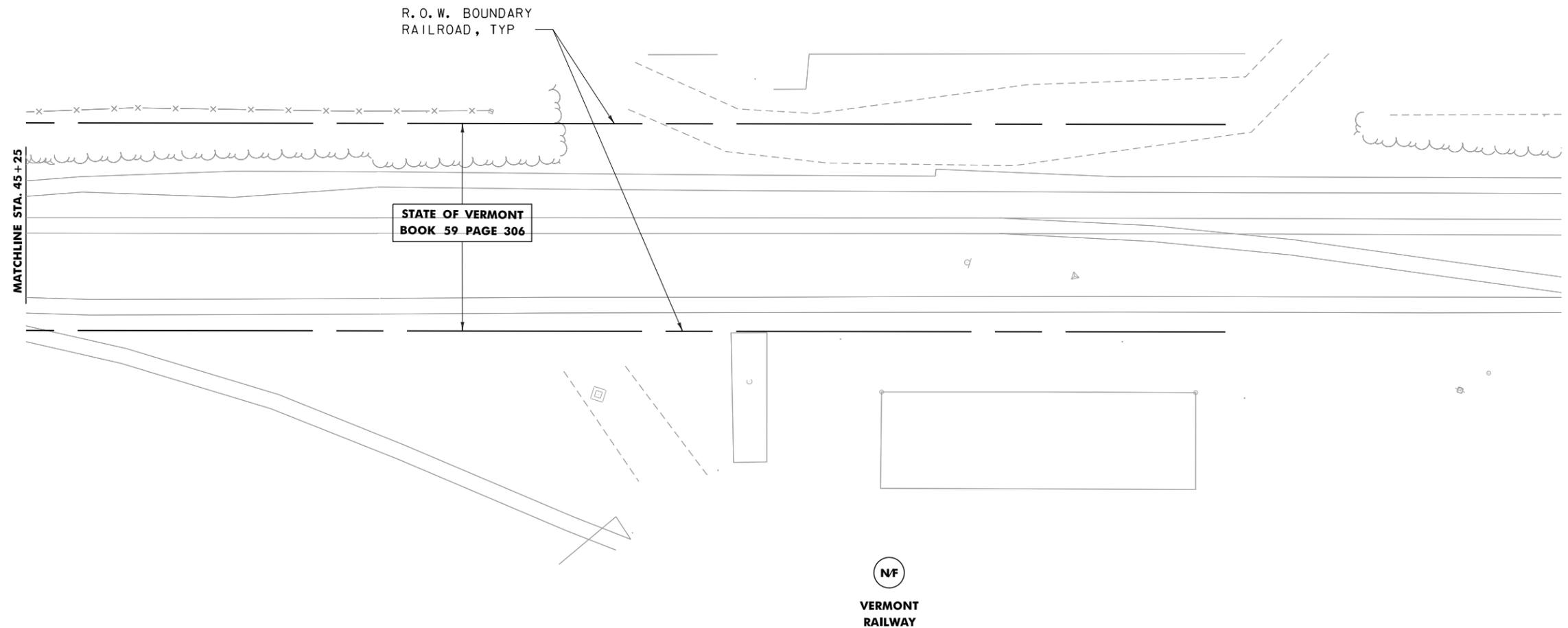
 = PERMANENT EASEMENT



PROJECT NAME:	MIDDLEBURY
PROJECT NUMBER:	EWP3(I) & WCRS(23)
FILE NAME:	r10g04bdr_4f_impacts.dgn
PROJECT LEADER:	A.P. GUYETTE
DESIGNED BY:	K.C. BARRY
Map 4.4-7 Sec. 4(f) Permanent Easements SHEET	7 OF 10
PLOT DATE:	7/20/2017
DRAWN BY:	K.C. BARRY
CHECKED BY:	S.E. BURBANK



 = PERMANENT EASEMENT



LINES SHOWN ON THIS PLAN AS EXISTING
 PROPERTY LINES P/L ARE BELIEVED TO
 BE ACCURATE BUT SHOULD NOT BE RELIED
 UPON FOR PURPOSES UNRELATED TO THE
 STATE OF VERMONT'S ACQUISITION OF
 LAND AND RIGHTS FOR THIS PROJECT.

SCALE 1" = 20'-0"


PROJECT NAME:	MIDDLEBURY
PROJECT NUMBER:	WCRS(23)
FILE NAME:	r10g04bdr_4f_impacts.dgn
PROJECT LEADER:	A.P. GUYETTE
DESIGNED BY:	K.C. BARRY
Map 4,4-8 Sec. 4(f) Permanent Easements SHEET	8 OF 10
PLOT DATE:	7/20/2017
DRAWN BY:	K.C. BARRY
CHECKED BY:	S.E. BURBANK



■ = PERMANENT EASEMENT

LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE STATE OF VERMONT'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.

VT STATE PLANE GRID

770 COMPANY, LLC.

THEO FULLER-LOWELL & GARY J. DUPOISE

NATIONAL BANK OF MIDDLEBURY

MIDDLEBURY NATIONAL CORPORTATION

STATE OF VERMONT

MARBLE WORKS PARTNERSHIP JOINED by TOWN OF MIDDLEBURY

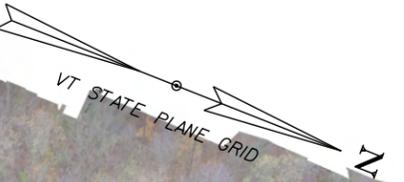
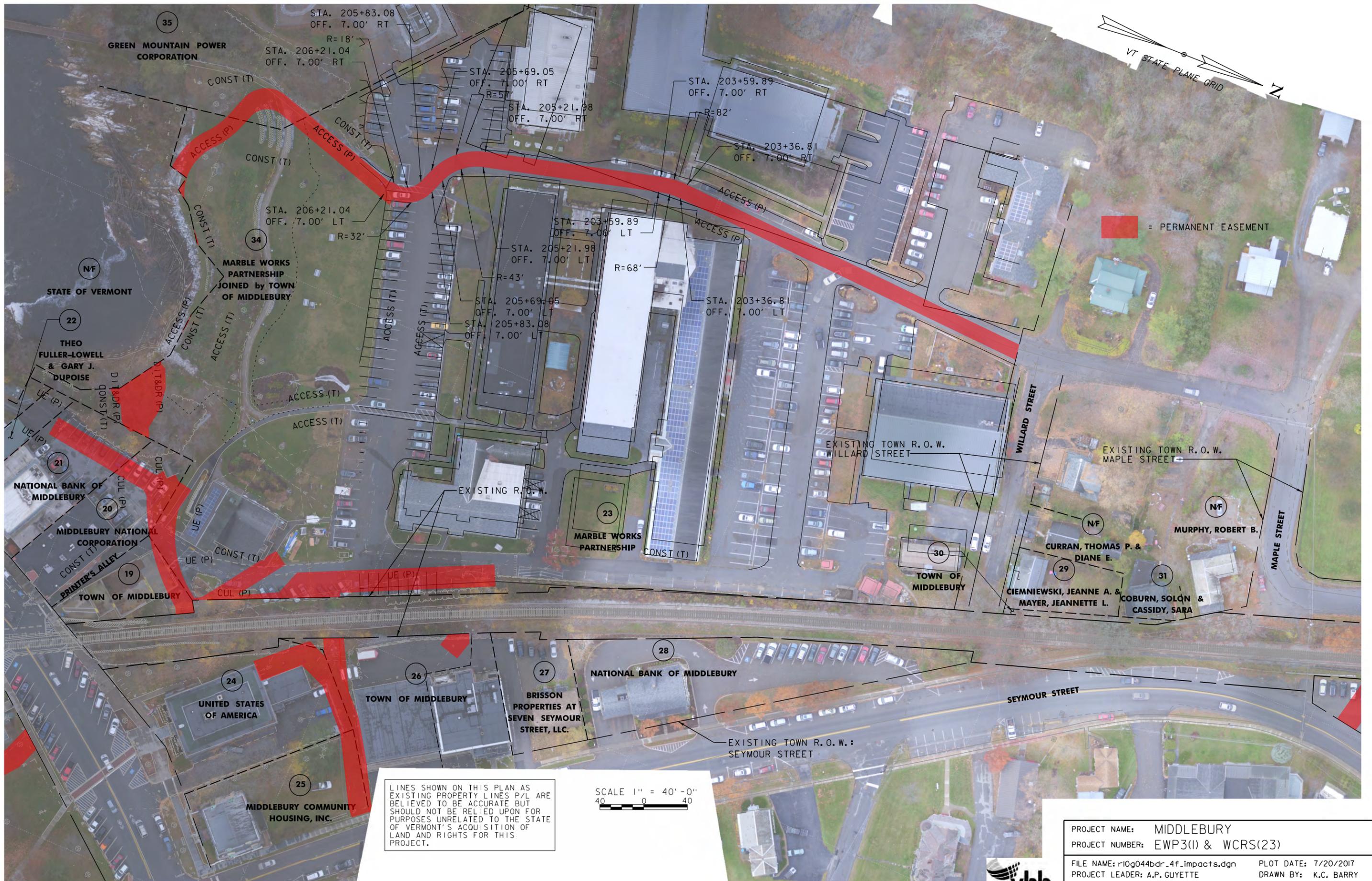
GREEN MOUNTAIN POWER CORPORATION

SCALE 1" = 20'-0"
20 0 20

R.O.W. LAYOUT SHEET 4

R.O.W. LAYOUT SHEET 5

PROJECT NAME: MIDDLEBURY	PLOT DATE: 7/20/2017
PROJECT NUMBER: WCRS(23)	DRAWN BY: K.C. BARRY
FILE NAME: r10g04bdr_4f_impacts.dgn	CHECKED BY: S.E. BURBANK
PROJECT LEADER: A.P. GUYETTE	
DESIGNED BY: K.C. BARRY	
Map 4.4-9 Sec. 4(f) Permanent Easements SHEET	9 OF 10



= PERMANENT EASEMENT

LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE STATE OF VERMONT'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.

SCALE 1" = 40'-0"
 40 0 40

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: EWP3(I) & WCRS(23)	
FILE NAME: r10g04bdr_4f_impacts.dgn	PLOT DATE: 7/20/2017
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: K.C. BARRY
DESIGNED BY: K.C. BARRY	CHECKED BY: S.E. BURBANK
Map 4.4-10 Sec. 4(f) Permanent Easements SHEET 10 OF 10	





**Schedule of Permanent Easements for
 Section 4(f) Historic De Minimis Evaluation**

**Middlebury EWP3(2) & WCRS(23)
 July 10, 2017**

PARCEL NO.	LOCATION	OWNER(S) of Section 4(f) PROPERTY	EASEMENT TYPE/PURPOSE	APPROX. SIZE (S.F)
1	127 Water Street	Brakely, August	Maintenance Access	800
6	168 S. Pleasant St.	Smith, Pamela & Dylan	Utility / Drainage	530
7	160 S. Pleasant St.	Cadoret, Brian	Utility / Drainage	250
8	150 S. Pleasant St.	AEJ Properties, LLC.	Utility / Drainage	800
9	140 S. Pleasant St.	Eaton, Timothy	Utility / Drainage	680
10	112 S. Pleasant St.	Eaton, Timothy	Utility / Drainage	1,420
11	76, 78, 88 S. Pleasant St.	Smith Housing LTD Partnership	Utility / Drainage	1,040
12	66 Merchants Row	Carl & Caetlin, LLC	Utility / Drainage	430
15	Parcel south of Battell block	Town of Middlebury	Utility / Drainage / Sewer / Water	2,820
16	10 Merchants Row	Battell, LLC	Utility / Drainage / Sewer / Water	4,610
20	30 Main Street	Middlebury National Corporation	Sidewalk and Utility/Drainage	1880
21	32 Main Street	National Bank of Middlebury	Utility/Drainage	800
22	34 Main Street	Theo, Fuller-Lowell & Gary J. Dupoise	Utility/Drainage	240

23	Marble Works area	Marble Works Partnership	Utility/Drainage	20,630
24	10 Main Street / Post Office	United States of America	Utility / Sewer	2,000
25	6 Main Street	Middlebury Community Housing, Inc.	Utility / Sewer	1,130
26	Middlebury Fire Department, 5 Seymour Street	Town of Middlebury	Utility / Drainage	1,640
32	29, 31 Seymour Street	Trackside Depot, LLC	Utility / Water	1750
18*	Village Green	Town of Middlebury	Utility/Drainage	2,630
			APPROXIMATE TOTAL	46,080 S.F.

**Schedule of Permanent Easements for
Section 4(f) Parks De Minimis Evaluation**

PARCEL NO.	LOCATION	OWNER(S) of Section 4(f) PROPERTY	EASEMENT TYPE/PURPOSE	APPROX. SIZE (S.F)
18*	Village Green	Town of Middlebury	Utility / Drainage	2,630
34	Riverfront Park	Marble Works Partnership joined by Town of Middlebury	Permanent Access / Maintenance and Utility / Drainage	2,550
			APPROXIMATE TOTAL	5,180 S.F.

** Note: Parcel 18 qualifies as a historic resource and parks resource, and has a separate de minimis determination. There are a total of three de minimis determinations for this project.*

June 27, 2017

Ms. Kathleen Ramsay
Town Manager
Town Manager's Office
77 Main Street
Middlebury, VT 05753

**Re: Notice of Intent to Make a Finding under Section 4(f)
Middlebury EWP3(2) & WCRS(23)
Middlebury Bridge and Rail Project**

Dear Ms. Ramsay:

As part of the permitting process for federal-aid highway projects, VTrans determines the applicability of numerous environmental regulations. Among them is Section 4(f) of the 1966 Department of Transportation Act, as amended, which protects publicly-owned public parks, recreation areas, wildlife and waterfowl refuges, and historic sites. VTrans has determined that the Middlebury Bridge and Rail project will require a Section 4(f) de minimis evaluation for a proposed permanent easement at Riverfront Park and within the Village Green. The project also requires that VTrans consider whether the temporary occupancy of land at Riverfront Park and Triangle Park portion of the Middlebury Village Green can be considered so minimal as to not constitute a use under Section 4(f). This letter will discuss both the temporary occupancy and the de minimis evaluations. For details regarding Section 4(f), please see https://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title23/23cfr774_main_02.tpl

Temporary Occupancy Evaluation

As part of the above project to replace the Main Street and Merchants Row Bridges in Middlebury, portions of two public parks, Riverfront Park and the Village Green, will be temporarily closed during construction to ensure the safety of the public utilizing the parks. Each park is considered a "recreation area" under the regulations of Section 4(f) and because these resources will be affected by the project a Section 4(f) analysis is required. A section of Riverfront Park and all of the Triangle Park portion of the Village Green, are owned by the Town of Middlebury.

VTrans' Environmental Section has reviewed the criteria regarding an evaluation for the temporary use of a 4(F) resource and determined that while the Middlebury project will require the temporary closure of part of the parks during construction, this activity will not constitute a 4(f) use. A temporary occupancy will not constitute a Section 4(f) use when all of the five conditions listed in 23 CFR 774.13(d) (Exceptions; Temporary Occupancies) are satisfied.

VTrans has determined that Conditions #1-4 in 23 CFR 774.13(d) are satisfied for each park as follows:

Riverfront Park:

1. A section of Riverfront Park will be closed temporarily during construction but the majority of the park will remain open. The duration of the closure will be shorter than the duration of the overall construction project.
2. The scope of work affecting Riverfront Park will be minor. A section of Riverfront Park is being temporarily closed to protect the users of the park. Signage will be installed to clearly mark the areas that will be temporarily closed during construction. A temporary access road measuring sixteen feet wide will be installed in Riverfront Park to allow access for equipment to install the drainage outfall pipe. Should the project unexpectedly damage Riverfront Park, VTrans will ensure that it is fully restored to its pre-construction condition.

Once the pipe is installed, the access road will be removed and the affected areas will be restored to their preconstruction conditions. A permanent easement will remain, roughly in the footprint of the abandoned temporary road to provide access to the new outfall for routine maintenance activities and is considered to be a de minimis use under Section 4(f) (See de minimis evaluation section below).

3. There are no anticipated permanent adverse physical impacts to Riverfront Park, nor will there be interference with its protected activities, features, or attributes, on either a temporary or permanent basis. Please see condition #2 above.
4. Riverfront Park will be returned to a pre-construction condition. Please see condition #2 above. Once the work in Riverfront Park is complete, any detour and related detour signs will be removed. As noted above, if the park is damaged unexpectedly during construction VTrans will ensure its restoration.

Middlebury Village Green:

1. A portion of the Middlebury Village Green will be closed during construction but the majority of the Village Green will remain open. An area of the Village Green referred to as Triangle Park (west of the railroad) will be closed for the duration of the project but will be opened again to the public once construction is complete. An area of the Village Green adjacent to St Stephens Episcopal Church (east of the railroad) will be closed temporarily during construction. The majority of the Village Green will remain open

during construction. The duration of the closures will be shorter than the duration of the overall construction project.

2. The scope of work affecting the Middlebury Village Green will be minor. The portion of the Village Green referred to as Triangle Park (west of the railroad) along with a portion of the Village Green adjacent to St Stephens Episcopal Church (east of the railroad) is being temporarily closed to protect the users of the park from ongoing construction operations. Prior to construction, the fountain and other park amenities will be removed and stored offsite for re-installation post-construction. Signage will be installed to clearly mark the areas that will be temporarily closed during construction. The Village Green areas will be restored after completion of the project and some of the current park features, such as the fountain, will be reinstalled post-construction. A section of the park that had been open to the railroad tracks below grade will be covered over by the new tunnel and the top of the tunnel covered with soil and seeded with grass so it will reconnect the overall Village Green. As you are aware, the details for the new design of this area of the Village Green will be developed with approval from the Town of Middlebury. Should the project unexpectedly damage any part of the Middlebury Village Green, VTrans will ensure that it is fully restored to its pre-construction condition.

Adjacent to the Triangle Park portion of the Village Green, new storm water facilities will be installed within the State of Vermont railroad right-of-way. In order to perform routine maintenance activities in the future, a small permanent easement within the Village Green is required and is considered to be a de minimis use under Section 4(f) (See de minimis evaluation section below).

3. There are neither any anticipated permanent adverse physical impacts to the Middlebury Village Green nor will there be interference with its protected activities, features, or attributes, on either a temporary or permanent basis. Please see condition #3 above.
4. The Middlebury Village Green will be restored to a pre-construction condition, with additional amenities installed in the new park area over the new tunnel. Please see condition #3 above. Once the work in the Village Green is complete, any detour and related detour signs will be removed. As noted above, if the Middlebury Village Green is damaged unexpectedly during construction VTrans will ensure its repair.

As listed in 23 CFR 774.13(d), the fifth condition to determine whether a temporary occupancy will constitute a Section 4(f) use requires concurrence from the Official with Jurisdiction over the resource. The Town of Middlebury is the owner of the Middlebury Village Green and is the owner of a permanent easement for public access to Riverfront Park, as Middlebury Town Manager, you are considered the Official with Jurisdiction. This notice therefore advises you that it is the VTrans Environmental Section's recommendation, based on the above conditions, that while the Middlebury project will temporarily occupy the two public parks during construction, this activity will not constitute a Section 4(f) use. We are seeking your concurrence with this recommendation.

De Minimis Evaluation

The Riverfront Park and the Village Green qualify for “parks” under the regulations of Section 4(f), and because this resource is affected by the above subject project, a Section 4(f) evaluation is required.

Changes to the Section 4(f) regulations, directed by Congress in SAFETEA-LU, allow for a streamlined review process (de minimis) when effects to qualifying resources are considered minor. Application of the de minimis criteria allows a project to move forward without an additional time-consuming alternatives investigation if three criteria are met. However, concurrence with our de minimis finding is required from the official with jurisdiction over the resource. The Town of Middlebury is the owner of the Middlebury Village Green and is the owner of a permanent easement for public access to Riverfront Park and, again, as Middlebury Town Manager, you are considered the Official with Jurisdiction.

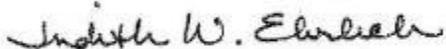
This notice therefore advises you that VTrans intends to make a Section 4(f) de minimis finding for minor project impacts within the boundaries of the Riverfront Park and Village Green in Middlebury to convert park property to transportation use as detailed in the attached plans, and requests your concurrence with this finding. As you are aware, the Middlebury Bridge and Rail Project requires installation of a drainage outfall pipe at the eastern side of Riverfront Park and installation of drainage features adjacent to the Triangle Park portion of the Village Green. The permanent easements associated with these features were one of the subjects of a previous de minimis determination dated 11/27/2013. However, once construction is complete, permanent easements across the parks are required for maintenance access. VTrans has concluded that the permanent easements are considered de minimis impacts to the parks as they will occupy a small area of the parks, be returned to pre-construction conditions, be available for park purposes when not in use, and will not result in physical changes to the park areas. VTrans is seeking your concurrence with this additional de minimis finding.

Conclusion

If you concur with VTrans’ recommendation and findings above, please respond by copying the attached letter onto Town of Middlebury stationary and then signing and forwarding it to me via email. VTrans Environmental Section will forward the signed letter to FHWA for their approval upon receipt.

If you have any questions about this process, please feel free to contact me at judith.ehrlich@vermont.gov or 802-828-1708. Thank you for considering this request and for your assistance in advancing this important project.

Sincerely,
VERMONT AGENCY OF TRANSPORTATION

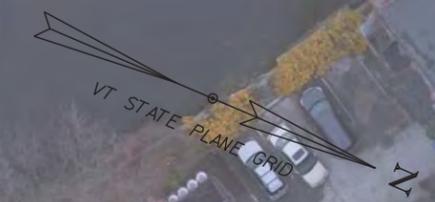


Judith Williams Ehrlich
VTrans Historic Preservation Officer

Cc: John K. Dunleavy, Senior Assistant Attorney General
Andrea Wright, VTrans Environmental Services Manager

Attachment: Plan Sheet

LINES SHOWN ON THIS PLAN AS EXISTING
 PROPERTY (16) P/L ARE BELIEVED TO
 BE ACCURATE BUT SHOULD NOT BE RELIED
 UPON FOR PURPOSES UNRELATED TO THE
 STATE OF VERMONT'S ACQUISITION OF
 LAND AND RIGHTS FOR THIS PROJECT.



EXISTING TOWN R.O.W.
MERCHANTS ROW

NF
 770 COMPANY,
 LLC.

22
 THEO
 FULLER-
 LOWELL
 & GARY
 J. DUPOISE

21
 NATIONAL BANK OF
 MIDDLEBURY

20
 MIDDLEBURY NATIONAL
 CORPORATION

23
 MARBLE WORKS
 PARTNERSHIP

CONST (T) = 310 SF

17
 TOWN OF MIDDLEBURY
 SR (T) = 3370 SF

CUL (P) = 90 SF

STATE OF VERMONT
BOOK 59 PAGE 306

UE (P) = 1280 SF

14
 BOURDON, J ANDRE
 & ELIZABETH C.

MERCHANTS ROW

MAIN STREET

18
 TOWN OF MIDDLEBURY
 CONST (T) = 15,660 SF

UE (P) = 1260 SF

24
 UNITED STATES
 OF AMERICA

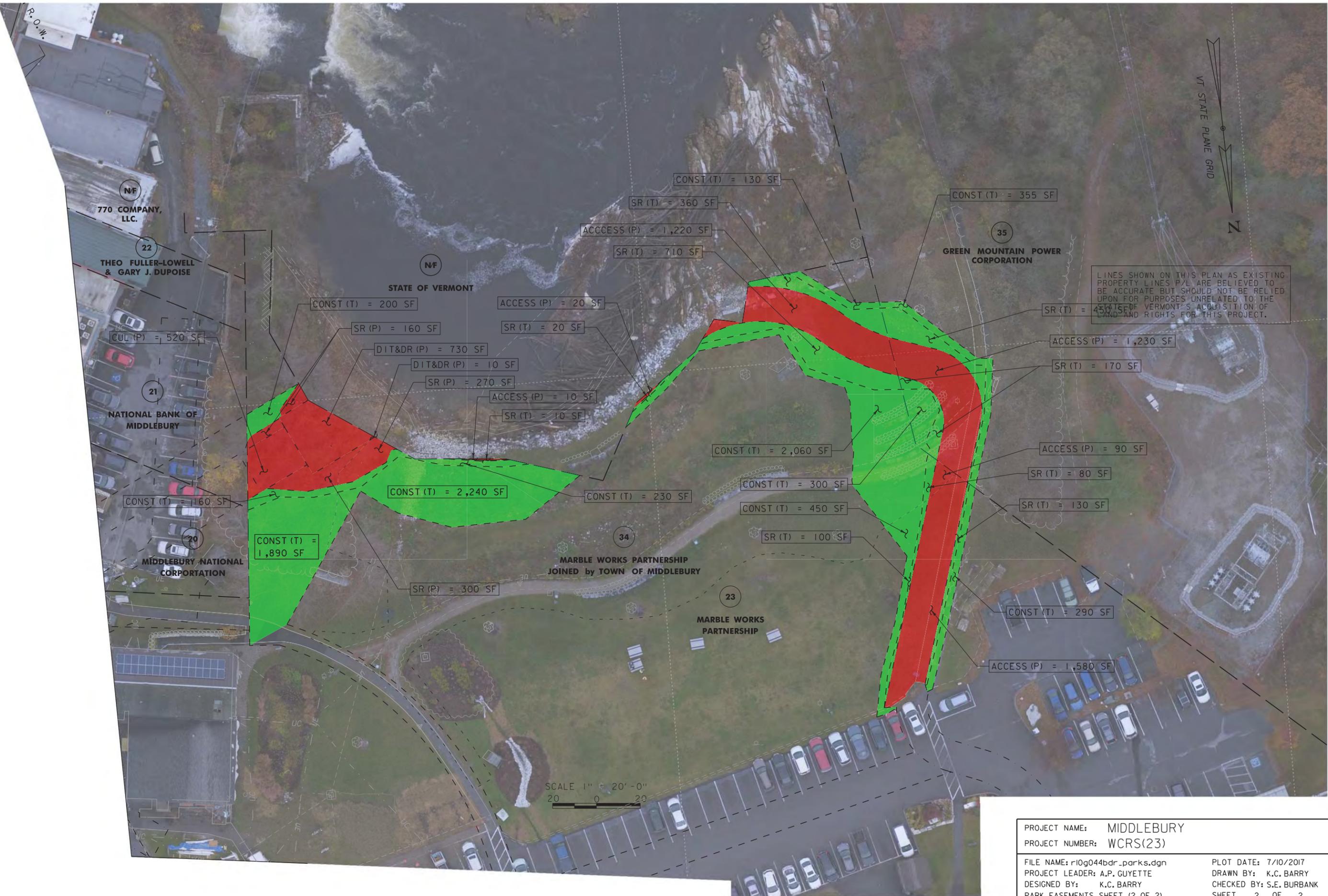
MATCHLINE STA. 22+25

MATCHLINE STA. 28+00

SCALE 1" = 20'-0"
 20 20



PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: EWP3(I) & WCRS(23)	
FILE NAME: r10g04bdr_parks.dgn	PLOT DATE: 7/10/2017
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: K.C. BARRY
DESIGNED BY: K.C. BARRY	CHECKED BY: S.E. BURBANK
PARK EASEMENTS SHEET (1 OF 2)	SHEET 1 OF 2



LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE STATE OF VERMONT'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.

SCALE 1" = 20'-0"
 20 0 20

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: r10g04bdr_parks.dgn	PLOT DATE: 7/10/2017
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: K.C. BARRY
DESIGNED BY: K.C. BARRY	CHECKED BY: S.E. BURBANK
PARK EASEMENTS SHEET (2 OF 2)	SHEET 2 OF 2

Town of Middlebury, Letter of Concurrence: Proposed Section 4(f) Finding



**Town of Middlebury
77 Main Street
Middlebury, Vermont 05753**

July 11, 2017

Ms. Judith Williams Ehrlich
VTrans Historic Preservation Officer
Vermont Agency of Transportation
Project Delivery Bureau – Environmental Section
1 National Life Drive
Montpelier, VT 05633-5001

**Re: Proposed Section 4(f) Finding
Middlebury Bridge and Rail Project**

Dear Ms. Ehrlich:

We are responding to your June 27, 2017 request for the Town of Middlebury's concurrence with the Vermont Agency of Transportation (VTrans) regarding the Notice of Intent to Make a Finding Under Section 4(f) concerning the Middlebury Bridge and Rail Project. As requested in your letter, we have reviewed VTrans' temporary occupancy and the de minimis evaluations for this project.

We are familiar with the project sites and have reviewed the project plans. We are also familiar with the design of the project with regard to its implications for the Town of Middlebury's lands, and the proposed impact avoidance, minimization, and mitigation and enhancement measures.

Temporary Occupancy Evaluation and Concurrence

We understand the requirements for determining a temporary occupancy status under 23 CFR 774.13(d) (Exceptions; Temporary Occupancies) for Riverfront Park and the Village Green inclusive of Triangle Park, which are considered recreation areas for purposes of Section 4(f) of the 1966 Department of Transportation Act. A section of Riverfront Park and a portion of the Village Green will be closed during the bridge replacement project for the safety of the public utilizing the parks.

As noted in your letter, the following conditions for each park will be satisfied as part of the Middlebury Bridge and Rail Project, as required in 23 CFR 774.13(d):

Riverfront Park:

1. A section of Riverfront Park will be closed temporarily during construction but the majority of the park will remain open. The duration of the closure will be shorter than the duration of the overall construction project.
2. The scope of work affecting Riverfront Park will be minor. A section of Riverfront Park is being temporarily closed to protect the users of the park. Signage will be installed to clearly mark the areas that will be temporarily closed during construction. A temporary access road measuring sixteen feet wide will be installed in Riverfront Park to allow access for equipment to install the drainage outfall pipe. Should the project unexpectedly damage Riverfront Park, VTrans will ensure that it is fully restored to its pre-construction condition.

Once the pipe is installed, the access road will be removed and the affected areas will be restored to their preconstruction conditions. A permanent easement will remain, roughly in the footprint of the abandoned temporary road to provide access to the new outfall for routine maintenance activities and is considered to be a de minimis use under Section 4(f) (See de minimis evaluation section below).

3. There are no anticipated permanent adverse physical impacts to Riverfront Park, nor will there be interference with its protected activities, features, or attributes, on either a temporary or permanent basis. Please see condition #2 above.
4. Riverfront Park will be returned to a pre-construction condition. Please see condition #2 above. Once the work in Riverfront Park is complete, any detour and related detour signs will be removed. As noted above, if the park is damaged unexpectedly during construction VTrans will ensure its restoration.

Middlebury Village Green:

1. A portion of the Middlebury Village Green will be closed during construction but the majority of the Village Green will remain open. An area of the Village Green referred to as Triangle Park (west of the railroad) will be closed for the duration of the project but will be opened again to the public once construction is complete. An area of the Village Green adjacent to St Stephens Episcopal Church (east of the railroad) will be closed temporarily during construction. The majority of the Village Green will remain open during construction. The duration of the closures will be shorter than the duration of the overall construction project.
2. The scope of work affecting the Middlebury Village Green will be minor. The portion of the Village Green referred to as Triangle Park (west of the railroad) along with a portion

of the Village Green adjacent to St Stephens Episcopal Church (east of the railroad) is being temporarily closed to protect the users of the park from ongoing construction operations. Prior to construction, the fountain and other park amenities will be removed and stored offsite for re-installation post-construction. Signage will be installed to clearly mark the areas that will be temporarily closed during construction. The Village Green areas will be restored after completion of the project and some of the current park features, such as the fountain, will be reinstalled post-construction. A section of the park that had been open to the railroad tracks below grade will be covered over by the new tunnel and the top of the tunnel covered with soil and seeded with grass so it will reconnect the overall Village Green. As you are aware, the details for the new design of this area of the Village Green will be developed with approval from the Town of Middlebury. Should the project unexpectedly damage any part of the Middlebury Village Green, VTrans will ensure that it is fully restored to its pre-construction condition.

Within the Village Green, adjacent to the Merchants Row sidewalk and the existing control box for downtown street lighting, a new pad mounted transformer will be installed to replace the utility pole and aerial transformer that currently exists. This work is considered to be a de minimis under Section 4(f) (See de minimis evaluation section below).

Adjacent to the Triangle Park portion of the Village Green, new storm water facilities will be installed within the State of Vermont railroad right-of-way. In order to perform routine maintenance activities in the future, a small permanent easement within the Village Green is required and is considered to be a de minimis use under Section 4(f) (See de minimis evaluation section below).

3. There are neither any anticipated permanent adverse physical impacts to the Middlebury Village Green nor will there be interference with its protected activities, features, or attributes, on either a temporary or permanent basis. Please see condition #3 above.
4. The Middlebury Village Green will be restored to a pre-construction condition, with additional amenities installed in the new park area over the new tunnel. Please see condition #3 above. Once the work in the Village Green is complete, any detour and related detour signs will be removed. As noted above, if the Middlebury Village Green is damaged unexpectedly during construction VTrans will ensure its repair.

As the officials with jurisdiction over the property we can confirm that we have been informed of VTrans' intent to make a recommendation to the Federal Highway Administration (FHWA), and concur with the recommendation that the temporary closure of portions of Riverfront Park and the Village Green will not constitute a Section 4(f) use.

De minimis Evaluation

We are very familiar with the site and have reviewed the project plans provided. In addition, we have read and understand the intent of the de minimis 4(f) determination for the minor project impacts within the boundaries of the Riverfront Park and the Village Green in Middlebury,

Vermont. As noted in your letter, the Middlebury Bridge and Rail Project requires installation of a drainage outfall pipe at the eastern side of Riverfront Park and installation of drainage features and utility infrastructure within the Village Green.

As the officials with jurisdiction over the property we can confirm that we have been informed of VTrans' intent to make a Section 4(f) de minimis determination for minor impacts, and concur with the determination that the transportation use of Middlebury's Riverfront Park and Village Green, Section 4(f) resources, together with the proposed impact avoidance, minimization, and mitigation and enhancement measures incorporated into the project, will not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f).

Thank you for the opportunity to offer comments on the Section 4(f) evaluations for the Middlebury Bridge and Rail Project. If you need any additional information, please do not hesitate to contact Town Manager Kathleen Ramsay, 802-458-8000 or kramsay@townofmiddlebury.org.

Sincerely,

TOWN OF MIDDLEBURY SELECTBOARD

 Brian Carpenter, Chair	 Susan Shashok, Vice Chair	 Nick Artim	
 Laura Asermily	 Heather Seely	 Victor Nuovo	 Farhad Khan

Cc: John K. Dunleavy, Senior Assistant Attorney General
Andrea Wright, VTrans Environmental Services Manager