



HARTGEN

archeological associates inc

ARCHEOLOGICAL RESOURCE ASSESSMENT

Munsill Avenue Sidewalk Scoping Study

Munsill Avenue
Town of Bristol
Addison County, Vermont

HAA # 5798-11

Submitted to:

DuBois & King, Inc.
28 North Main Street
Randolph, Vermont 05060

Prepared by:

Hartgen Archeological Associates, Inc.

P.O. Box 81
Putney, VT 05346
p +1 802 387 6020
f +1 802 387 8524
e hartgen@hartgen.com

www.hartgen.com

An ACRA Member Firm
www.acra-crm.org

May 2022

MANAGEMENT SUMMARY

SHPO Project Review Number:

Involved State and Federal Agencies: *Vermont Agency of Transportation (VTrans)*

Phase of Survey: *Archeological Resource Assessment (ARA)*

LOCATION INFORMATION

Municipality: *Town of Bristol*

County: *Addison County, Vermont*

SURVEY AREA

Length: *1,610 feet (490 m)*

Width: *50 feet (15.2 m)*

Area: *1.8 acres (0.75 ha)*

RESULTS OF RESEARCH

Archeological sites within one mile: *nine sites, 7 precontact, 2 historic*

Surveys in or adjacent: *None*

NR/NRE sites in or adjacent: *Bristol Village Historic District adjacent to APE*

Precontact Sensitivity: *Low*

Historic Sensitivity: *Low*

RECOMMENDATIONS

Disturbance from water lines, previous sidewalk and 19th-century development have reduced archeological potential within the APE. No further archeological review is recommended.

Report Authors: *Thomas R. Jamison, PhD, RPA #16566*

Date of Report: *May 2022*

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ARCHEOLOGICAL RESOURCE ASSESSMENT

1 Introduction

Hartgen Archeological Associates, Inc. (Hartgen) conducted an Archeological Resource Assessment for the proposed Munsill Avenue Sidewalk Project (Project) located in the Town of Bristol, Addison County, Vermont (Map 1). The Project requires approvals by Vermont Agency of Transportation (VTrans). This investigation was conducted to comply with Section 106 of the National Historic Preservation Act of 1966, as amended, and will be reviewed by the VTrans archeology officer. This investigation adheres to the Vermont State Historic Preservation Office's (SHPO) *Guidelines for Conducting Archeology in Vermont* (2017).

2 Project Information

A site visit was conducted by Rachel Freeman on April 1 and 2, 2022 to observe and photograph existing conditions within the Project Area. The information gathered during the site visit is included in the relevant sections of the report.

2.1 Project Location

The project is located along both sides of Munsill Avenue in the village of Bristol, between West Street (Route 116) on the south and Pine Street on the north.

2.2 Description of the Project

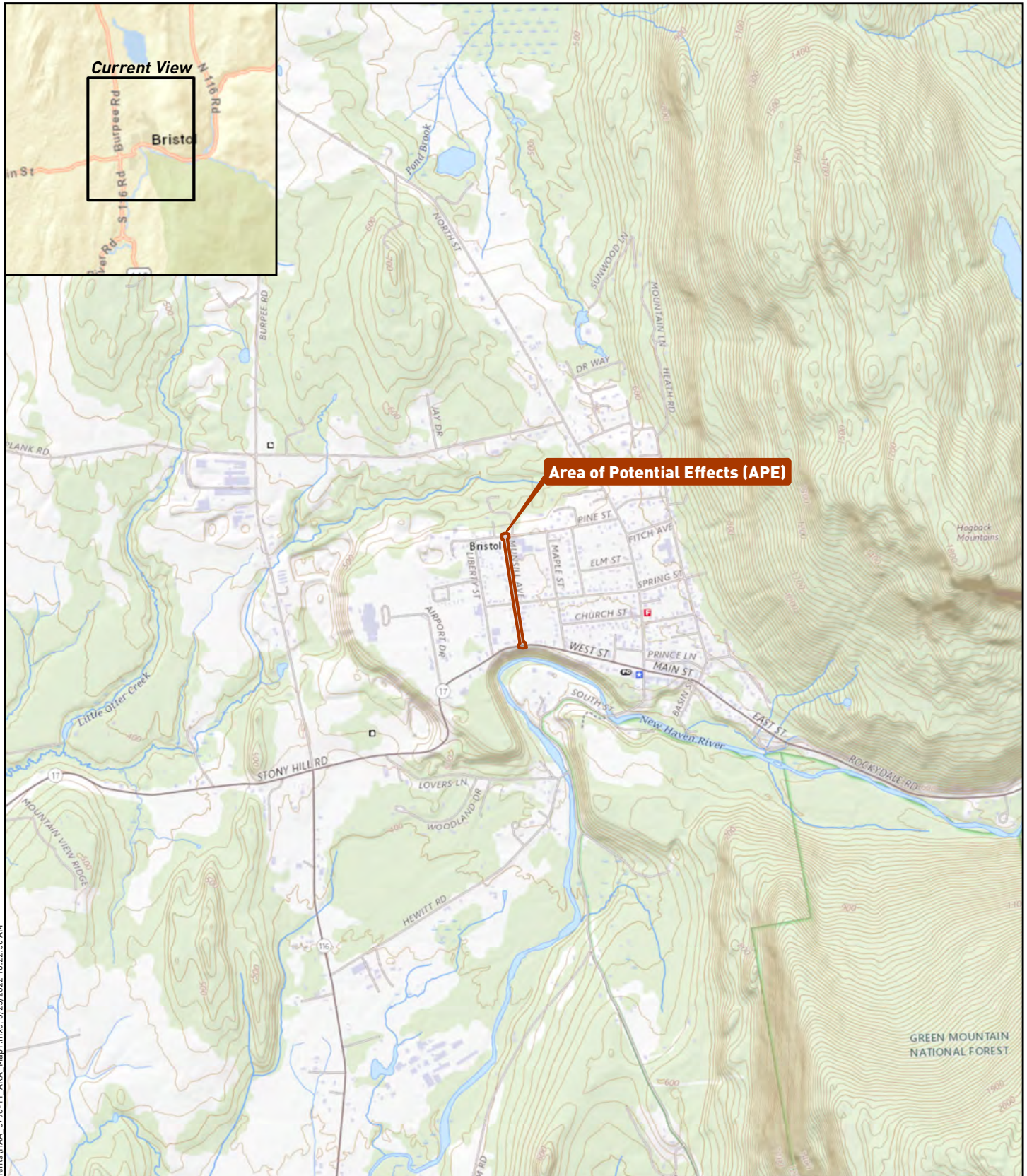
The project entails scoping for construction of a sidewalk along one side of Munsill Avenue extending from West Street (Route 116) to Pine Street. The side of the street has not been chosen.

2.3 Description of the Area of Potential Effects (APE)

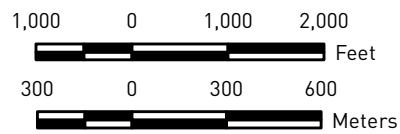
The area of potential effects (APE) includes all portions of the property that will be directly or indirectly altered by the proposed undertaking. The APE measures approximately 1,610 feet (490 m) in length with the width of the right-of-way being 50 feet (15.2 m), for a total APE of 1.8 acres (0.75 ha).

3 Environmental Background

The environment of an area is significant for determining the sensitivity of the Project Area for archeological resources. Precontact and historic groups often favored level, well-drained areas near wetlands and waterways. Therefore, topography, proximity to wetlands, and soils are examined to determine if there are landforms in the Project Area that are more likely to contain archeological resources. In addition, bedrock formations may contain chert or other resources that may have been quarried by precontact groups. Soil conditions can provide a clue to past climatic conditions, as well as changes in local hydrology.



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Note: Contour interval is 20 feet.

Project Location

GIS Services Accessed 3/25/2022:
 Environmental Systems Research
 Institute, Inc., World Street Map;
 USGS The National Map

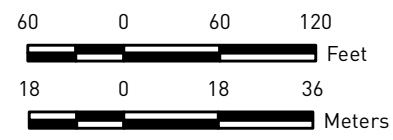
HARTGEN
 archeological associates inc





Map 1



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Legend

-  Photo Angle
-  Area of Potential Effects (APE)

Project Map

Vermont Center for Geographic
 Information, Orthoimagery, 2016-2020



Map 2

3.1 Present Land Use and Current Conditions

The project area is lined with generally small house lots with associated houses, lawns, driveways and plantings (Photos 1 to 9). There are a few small businesses run out of houses. The exception is along the northeast section of the APE that is adjacent to a former box factory that was located to the east of the alignment. Currently, that section is home to Bristol Works!, a community redevelopment center with six buildings for companies to lease. A large parking lot bounds the APE for much of that length. A small segment of sidewalk is visible on the east side at the south end of the APE, no other sidewalks were noted on Munsill Avenue. There is a sidewalk, however, along the south side of Pine Street that intersects Munsill Avenue.



Photo 1. South end of the APE from West Street (Route 116). View to the north.



Photo 2. Remnant of sidewalk along the east side of the APE. View to the north.



Photo 3. Fence around property at southeast corner of Munsill Avenue/Pleasant Street intersection. View to the south/southeast.



Photo 4. Intersection of Munsill Avenue and Pleasant Street. Note sidewalk along the south side of Pleasant Street. View to the southwest.



Photo 5. Intersection of Munsill Avenue and Pleasant Street, northeast quadrant and view toward Bristol Works! Facility. View to the north.



Photo 6. Intersection of Munsill Avenue and Pleasant Street. View to the northwest.



Photo 7. Munsill Avenue north of Pleasant Street. View to the south.



Photo 8. Munsill Avenue adjacent to Bristol Works! parking lot. View to the south.



Photo 9. Intersection of Munsill Avenue and Pine Street. Note slight slope down to Pine Street in the foreground. View to the south.

3.2 Soils

Soil surveys provide a general characterization of the types and depths of soils that are found in an area. This information is an important factor in determining the appropriate methodology if and when a field study is recommended. The soil type also informs the degree of artifact visibility and likely recovery rates. For example, artifacts are more visible and more easily recovered in sand than in stiff glacial clay, which will not pass through a screen easily.

The soils of the project area developed on glaciofluvial sediments deposited at the end of the Pleistocene era (USDA 2022). These soils are unlikely to have deeply stratified deposits.

Table 1. Soils in Project Area

Symbol	Name	Textures	Slope	Drainage	Landform
CtA	Colton	Gravelly sandy loam	0-3%	Excessively drained	Glaciofluvial terrace/outwash plain
CtB	Colton	Gravelly sandy loam	8-15%	Excessively drained	Glaciofluvial terrace/outwash plain

3.3 Bedrock Geology

The bedrock in the Project Area is the Dunham Dolostone consisting of “buff- and pink-mottled and massive, or light-gray, pinkish-gray-weathering, and massive to poorly bedded dolostone” (Ratcliffe 2011). Outside of the APE to the east, the Cheshire Quartzite that is a “light-gray- to tannish-gray-weathering, massive to poorly bedded vitreous quartzite”. The Cheshire quartzite is well known throughout the northeast as an important source for stone tool production during the precontact era.

The Dunham Dolostone is not known to have been used by Native American groups for stone tool manufacture. Cheshire Quartzite, in contrast, was heavily exploited with a quarry site (VT-AD-0411 Heffernan Quarry) known in the hills west of the project.

3.4 Physiography and Hydrology

The Project Area is generally level with a slight rise near the middle of the alignment. The APE is on glaciofluvial sediments that have not been highly dissected by erosion. The nearest water source is the New Haven River that forms a sharp bend down a steep embankment just south of the APE.

4 Documentary Research

Hartgen conducted research at the Vermont Division for Historic Preservation (VDHP) to identify previously reported archeological sites, State and National Register (NR) properties, properties determined eligible for the NR (NRE), and previous cultural resource surveys.

4.1 Archeological Sites

The archeological site files at VDHP contained 11 sites within one mile (1.6 km) of the Project Area (Table 2). Previously reported archeological sites provide an overview of both the types of sites that may be present in the APE and the relationship of sites throughout the surrounding region. The presence of few reported sites, however, may result from a lack of previous systematic survey and does not necessarily indicate a decreased archeological sensitivity within the APE.

The archeological sites in the project vicinity document the intensive precontact occupation of the area. Of the 11 sites within a mile of the APE, nine are precontact dating to the Middle Archaic (8000 to 6000 BP), Late Archaic (6000 to 3700 BP), Early Woodland (2700 to 2000 BP) and Late Woodland (1000 to 400 BP), covering much of the precontact era. The two historic sites relate to the small scale industry common throughout Vermont during the 19th century.

Table 2. Vermont Archeological Inventory (VAI) sites within one mile (1.6 km) of the Project Area

VAI Site No.	Site Identifier	Description	Proximity to Project Area
VT-AD-0409	Bedell Lime Kiln	Late 19 th -century lime kiln	0.97 mi/1.56 km to SW
VT-AD-0433		Pos. Late Archaic to Early Woodland, pos. Orient Fishtail projectile point and other tool fragments and debitage	1 mi/1.6 km to W/NW
VT-AD-0434	KL Site	Late Archaic, quartzite and chert Brewerton	1 mi/1.6 km to W/NW

VAI Site No.	Site Identifier	Description	Proximity to Project Area
		projectile points, fragments of quartzite projectile points, bifaces, cores, chopping tool	
VT-AD-0784		Unknown precontact, debitage, FCR	1 mi/1.6 km to W/NW
VT-AD-0888	Hill Site	Unknown precontact, quartzite flakes, quartzite utilized flake	0.97 mi/1.57 km to W/NW
VT-AD-1363	Lathrop Gravel Pit	Unknown precontact, quartz, quartzite and chert debitage, chert biface and scraper	0.82 mi/1.3 km to SE
VT-AD-1364	Lathrop Gravel Pit	Unknown precontact, chert debitage, quartzite modified flake, FCR	0.63 mi/1 km to S
VT-AD-1672	Bristol Forge	19 th -century iron forge	0.48 mi/0.77 km to SE
VT-AD-1705	Short Site	Late Woodland, isolated find of quartzite Levanna projectile point	0.87 mi/1.4 km to E
VT-AD-1725	Stoney Hill Properties Site Area A	Middle Archaic, Neville projectile point, chert, quartz and quartzite tools and debitage, FCR	0.27 mi/0.44 km to S/SW
VT-AD-1726	Stoney Hill Properties Site Area B	Unknown precontact, quartz and quartzite debitage	0.36 mi/0.58 km to S/SW

4.2 Historic Properties

An examination of the files at VDHP identified one State Register listed property at the southwest corner of the APE. It is a c. 1875 vernacular French Second Empire style house fronting on West Street at the corner with Munsill Avenue. That structure is identified in *The Historic Architecture of Addison County* as #16 of the SR listed structures in the town (Johnson, et al. 1992). No other historic properties are listed within the APE. However, the Bristol Village Historic District, listed on the State Register on September 10, 1980 backs up on the project APE and extends to the east (Table 3).

Table 3. Inventoried properties within or adjacent to the APE

No.	Property Name/Address	Description of Building
Johnson #16	60 West Street	c. 1875 vernacular French Second Empire residence
SR 0103-32	Bristol Village Historic District	19 th -century residential section of the village of Bristol, SR listed 09/10/1980

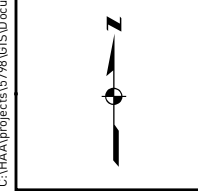
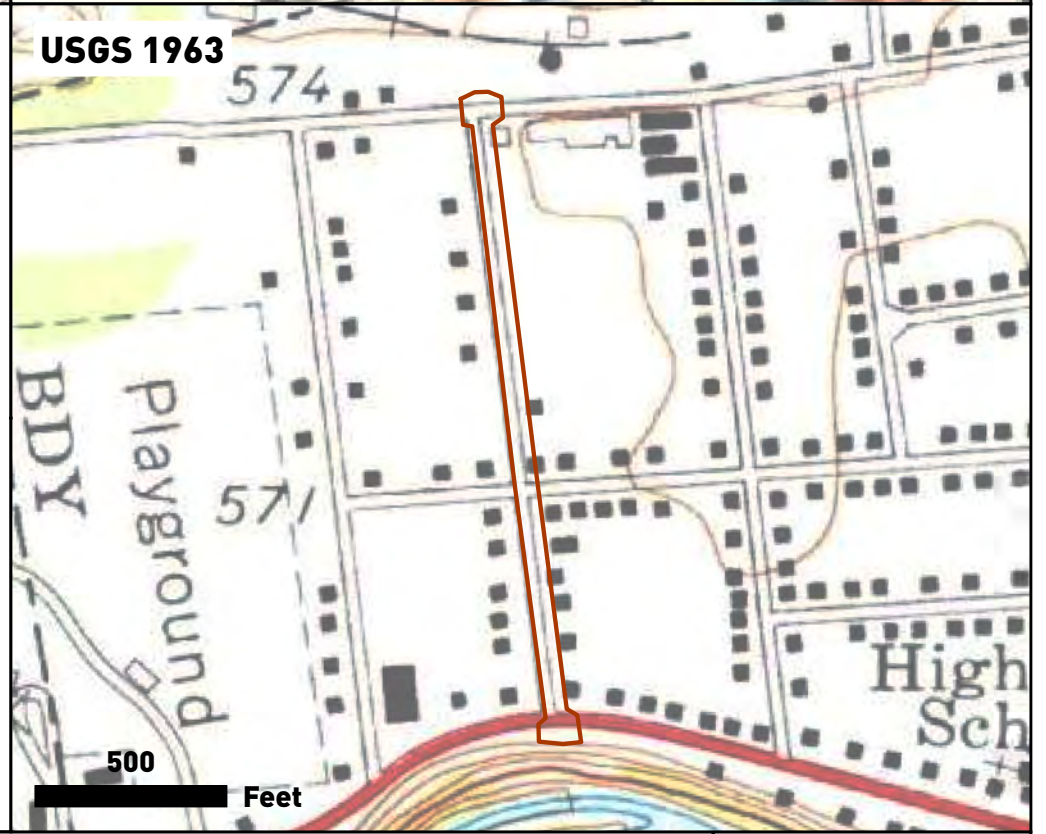
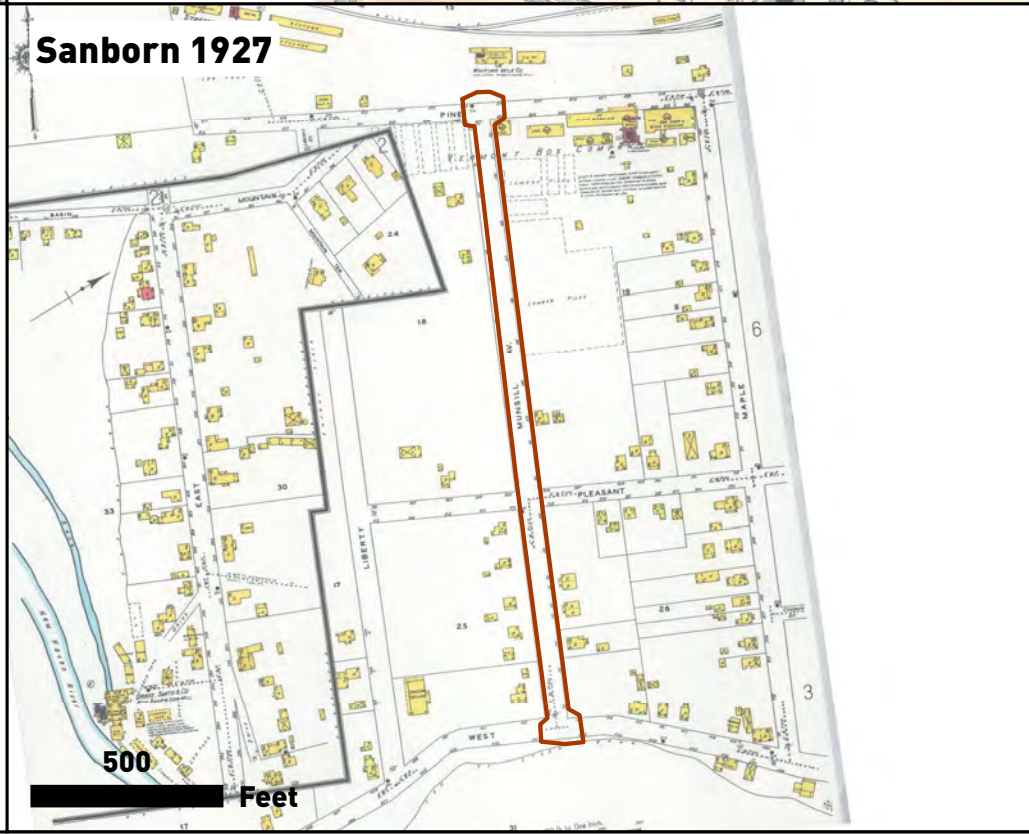
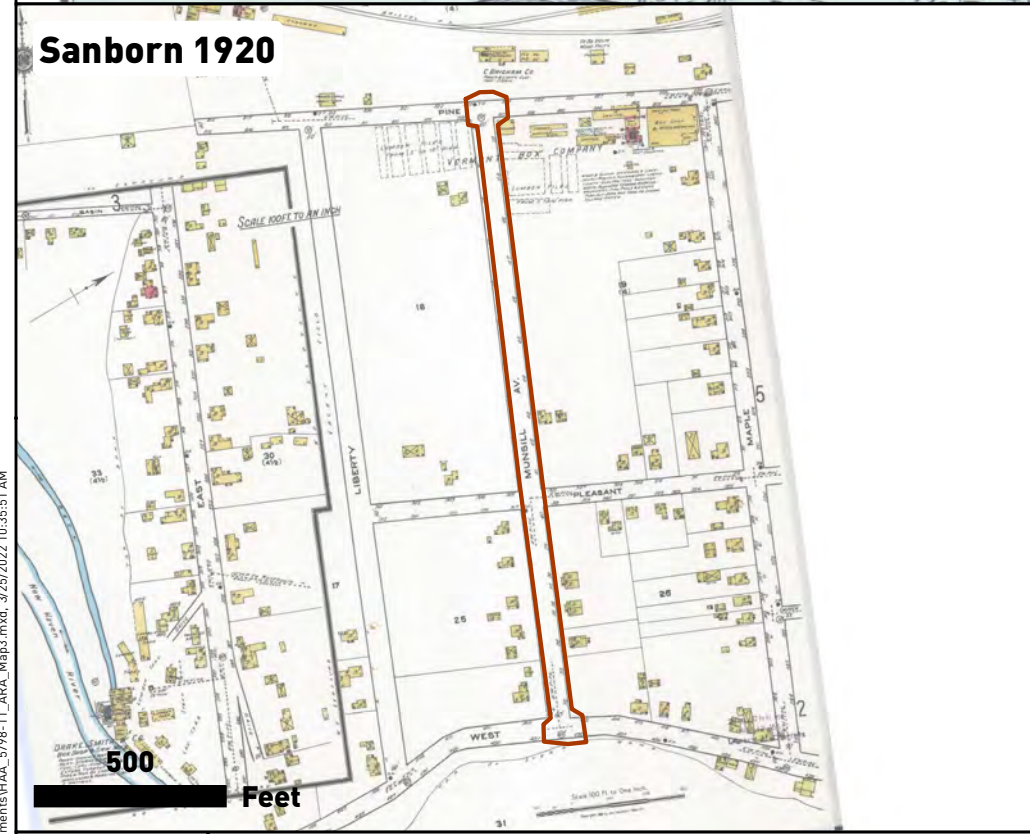
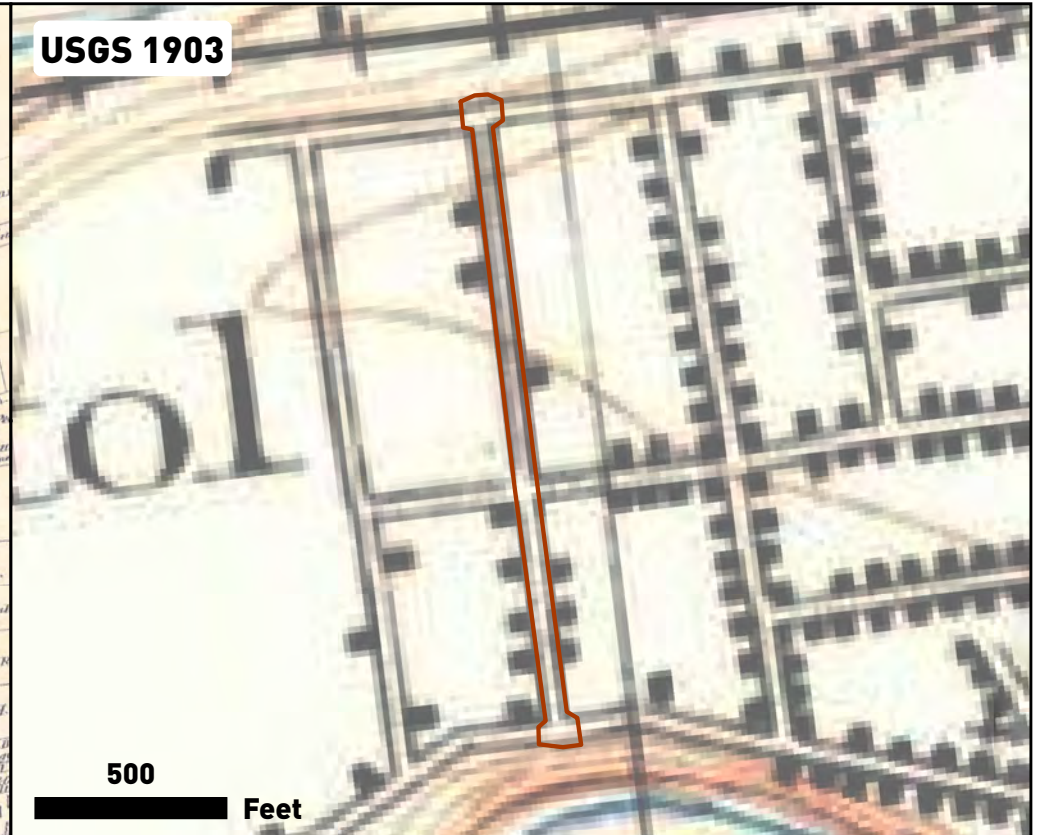
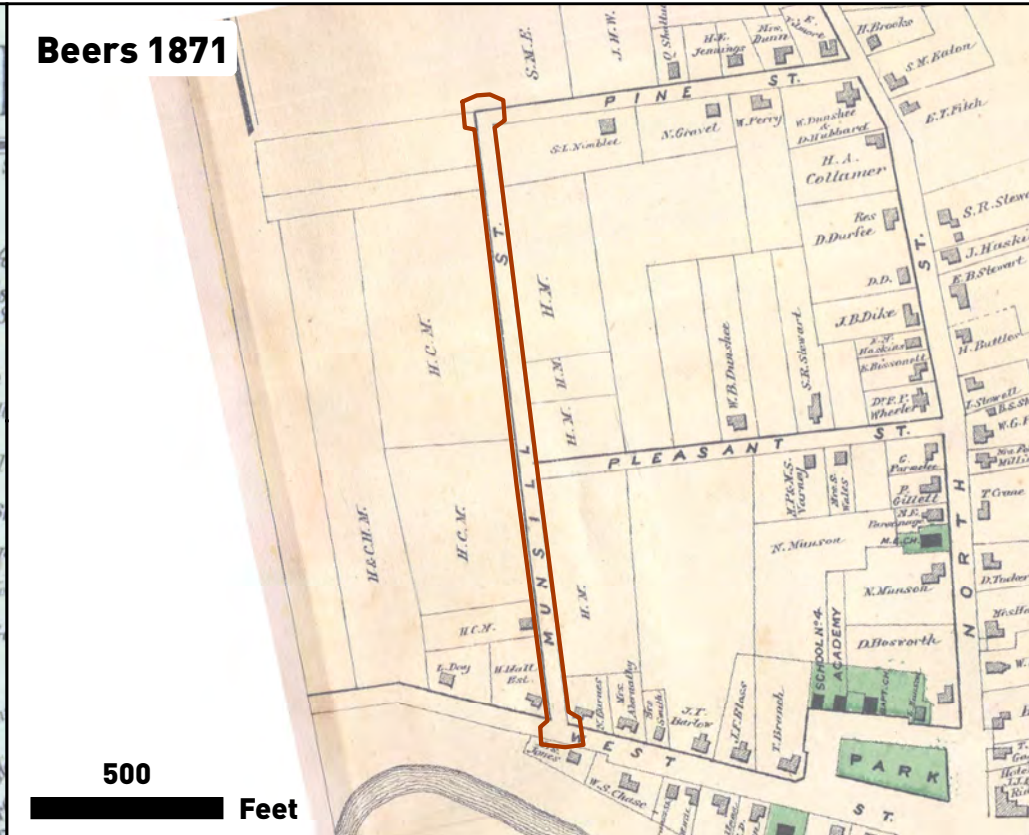
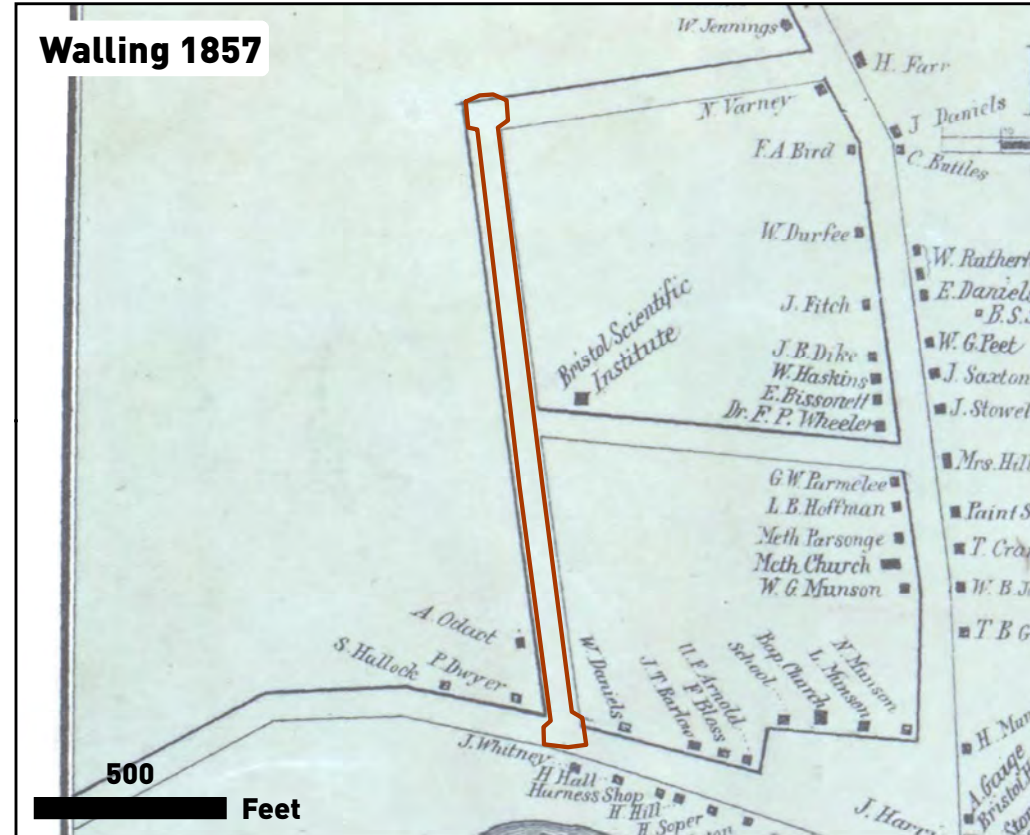
4.3 Previous Surveys

On file at VDHP are no previous surveys within the immediate vicinity of the Project. However, one survey was conducted for a storm water upgrade project in the neighborhood to the east, along North Street and Spring Street. Shovel tests were excavated in areas of archeological potential. Although up to 80 centimeters (32 in) of fill and some utility trenches were encountered, some areas of buried A horizons were identified. However, no significant archeological deposits were encountered (Mandel and Knight 2009). This survey was conducted in an area similar to that of the current project, a densely settled residential neighborhood.

5 Historical Map Review

The historical maps of the project area indicate that Munsill Avenue was developed quite late in the history of the village (Map 3). The 1857 Walling map (Walling 1857) does not show an alignment for Munsill Avenue. By the time of the 1871 Beers map (Beers 1871), the street is depicted with a total of three structures shown adjacent to the APE, two of those being residences fronting onto West Street. The third is a structure labeled H. C. M., for Harvey C. Munsill, a leading member of the community who at one time owned most of the land west of Maple Street, including the entire APE (Outlook Club 1980). The remaining open space along Munsill Avenue is divided into large blocks with those and other Munsill family initials. The 1889 birdseye view of the village (Norris 1889) shows Munsill Avenue laid out with only one house at the southwest corner with West Street and the street lined with maple trees reputedly planted by Munsill (Outlook Club 1980).

By the time of the 1902 USGS quadrangle, there are 10 structures depicted along the APE (USGS 1903). The Sanborn maps of the area show the structures along the street in some detail. The 1920 Sanborn map (Sanborn 1920) shows 10 residences, primarily along the south half of the APE. At the north end is the Vermont Box Company, surrounded by open areas of stacked lumber. The 1927 Sanborn map (Sanborn 1927) shows 11 residences along the APE with the box factory lumber piles remaining a large presence at the north end of the APE. The 1963 USGS quad shows 20 structures along the APE (USGS 1963).



Legend

Area of Potential Effects (APE)

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6 Archeological Discussion

6.1 Precontact Archeological Sensitivity Assessment

Completion of the VDHP Environmental Predictive Model provides a measure of the precontact archeological sensitivity of the project area (Appendix 1). The Project Area is sensitive for proximity to the New Haven River at the south end of the APE, being located on an outwash plain and being on the travel corridor of the level terrace along the river. The Project Area has a score of 36. A score of 32 and above is considered to indicate precontact sensitivity. Therefore, the APE has a low sensitivity for precontact archeological sites.

6.2 Historic Archeological Sensitivity Assessment

The historic sensitivity of an area is based primarily on proximity to previously documented historic archeological sites, map-documented structures, or other documented historical activities (e.g. battlefields).

The historic sensitivity is most likely related to the late 19th- to early 20th-century development of Munsill Avenue as a residential street with the northern end being used as a storage yard for the Vermont Box Company.

6.3 Archeological Potential

Archeological potential is the likelihood of locating intact archeological remains within an area. The consideration of archeological potential takes into account subsequent uses of an area and the impact those uses would likely have on archeological remains.

The precontact archeological potential is low due to a number of factors. Although the southern end is adjacent to the New Haven River, it is at the top of a very steep slope above the river. In addition, water lines have been installed along the west side of the road in the south end of the APE. The water lines cross to the east side of the road from Pleasant Street to Pine Street. At the south end of the APE on the east side of the road, an existing sidewalk and parking area have disturbed areas of sensitivity associated with proximity to the slope down to the river.

Although the APE crosses a number of 19th-century residential properties, the potential for related archeological deposits is low. They are generally small houses that would be unlikely to have associated features in front of the house along the road. Activities at such residences typically were located at the side or back yards of the lot while keeping the front space along the road free of debris (Borstel 2005).

The development of the box factory during the 19th to 20th centuries is also unlikely to have left any significant archeological remains. Judging by the depiction on the Sanborn maps, the segment of the APE adjacent to the factory was devoted to storage of lumber in piles outside of any formal structure.

6.4 Archeological Recommendations

Disturbance from water lines, previous sidewalk and 19th-century development have reduced archeological potential within the APE. No further archeological review is recommended.

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Appendix 1: VDHP Environmental Predictive Model

VERMONT DIVISION FOR HISTORIC PRESERVATION
Environmental Predictive Model for Locating Pre-contact Archaeological Sites

Project Name
DHP No.

Map No.

County
Staff Init.

Town
Date

Additional Information

Environmental Variable	Proximity	Value	Assigned Score
A. RIVERS and STREAMS (EXISTING or RELICT):			
1) Distance to River or Permanent Stream (measured from top of bank)	0- 90 m	12	
	90- 180 m	6	
2) Distance to Intermittent Stream	0- 90 m	8	
	90-180 m	4	
3) Confluence of River/River or River/Stream	0-90 m	12	
	90 –180 m	6	
4) Confluence of Intermittent Streams	0 – 90 m	8	
	90 – 180 m	4	
5) Falls or Rapids	0 – 90 m	8	
	90 – 180 m	4	
6) Head of Draw	0 – 90 m	8	
	90 – 180 m	4	
7) Major Floodplain/Alluvial Terrace		32	
8) Knoll or swamp island		32	
9) Stable Riverine Island		32	
B. LAKES and PONDS (EXISTING or RELICT):			
10) Distance to Pond or Lake	0- 90 m	12	
	90 -180 m	6	
11) Confluence of River or Stream	0-90 m	12	
	90 –180 m	6	
12) Lake Cove/Peninsula/Head of Bay		12	
C. WETLANDS:			
13) Distance to Wetland (wetland > one acre in size)	0- 90 m	12	
	90 -180 m	6	
14) Knoll or swamp island		32	
D. VALLEY EDGE and GLACIAL LAND FORMS:			
15) High elevated landform such as Knoll Top/Ridge Crest/ Promontory		12	
16) Valley edge features such as Kame/Outwash Terrace**		12	

17) Marine/Lake Delta Complex**		12	
18) Champlain Sea or Glacial Lake Shore Line**		32	
E. OTHER ENVIRONMENTAL FACTORS:			
19) Caves /Rockshelters		32	
20) <input type="checkbox"/> Natural Travel Corridor <input type="checkbox"/> Sole or important access to another drainage <input type="checkbox"/> Drainage divide		12	
21) Existing or Relict Spring	0 – 90 m 90 – 180 m	8 4	
22) Potential or Apparent Prehistoric Quarry for stone procurement	0 – 180 m	32	
23)) Special Environmental or Natural Area, such as Milton aquifer, mountain top, etc. (these may be historic or prehistoric sacred or traditional site locations and prehistoric site types as well)		32	
F. OTHER HIGH SENSITIVITY FACTORS:			
24) High Likelihood of Burials		32	
25) High Recorded Site Density		32	
26) High likelihood of containing significant site based on recorded or archival data or oral tradition		32	
G. NEGATIVE FACTORS:			
27) Excessive Slope (>15%) or Steep Erosional Slope (>20)		- 32	
28) Previously disturbed land as evaluated by a qualified archeological professional or engineer based on coring, earlier as-built plans, or obvious surface evidence (such as a gravel pit)		- 32	
** refer to 1970 Surficial Geological Map of Vermont			
			Total Score:
Other Comments :			
0- 31 = Archeologically Non- Sensitive 32+ = Archeologically Sensitive			