Central Vermont Regional Planning Commission
Town of Plainfield

Pedestrian Bridge & South Side Sidewalk
Conceptual Alignment Analysis

Final Report

Submitted by:

Broadreach Planning & Design

In conjunction with

Stantec Consulting

EIV Technical Services

December 16, 2013

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I. INTRODUCTION

A. OVERVIEW

The Town of Plainfield has been systematically upgrading its pedestrian facilities in the village area since the 1990s, but there are still gaps in the system. Two significant gaps are adequate pedestrian (and bicycle) facilities on Main Street crossing the Winooski River and along the south side of Route 2 heading west between the Main Street bridge and the Plainfield Post Office. The Central Vermont Regional Planning Commission (CVRPC) assisted the Town in obtaining a 2012 Bicycle and Pedestrian Program Grant to undertake a *Pedestrian Bridge and South Side Sidewalk Conceptual Alignment Analysis* (CAA). The CVRPC staff is assisting the Town with the project management duties for this CAA.

With the assistance of the CVRPC, the Town organized a Steering Committee (SC) of local officials and citizens to provide direction for the study. Together they requested proposals from consultants to help them with the feasibility study; the selected consultant team is led by Broadreach Planning & Design and supported by Stantec Consulting Services and EIV Technical Services (the BRPD Team).

The general limits of the Study Area for this project extend on the east from the south side of the Main Street Winooski River bridge westward along Route 2 to the Plainfield Post Office and to the fronts of the existing buildings on Main Street and Route 2. **Figure 1** shows the location of the project and the general extent of the Study Area.

This report is the product of the work of the SC and the BRPD Team. It presents the recommendations of the SC and describes the process used to develop them. The report is formatted for double-sided printing; blank pages are intentional.

B. PURPOSE AND NEED

The purpose of the pedestrian bridge and south sidewalk project is to expand the network of walking and bicycling facilities in Plainfield Village to maximize the capacity of residents and visitors of all ages and abilities to access the various businesses and services along Route 2 in the Upper Village from the Lower Village area, which is already served by improved bicycling and walking facilities, without the need to drive an automobile between each and every one.

Needs for the improvements include:

- The minimal sidewalk and lack of shoulders on the Main Street bridge over the Winooski River;

- The minimal shoulder space and lack of sidewalk for pedestrians or bicyclists on the south side of Route 2 west of the bridge that could provide access to the Cutler Public Library, the Plainfield Post Office and numerous homes and businesses; and
- The presence of dirt paths along the south side of Route 2 created by pedestrians walking along the side of the road.

C. PROJECT DEVELOPMENT PROCESS

After an initial meeting with the SC, the BRPD Team began work on Task B of their scope of work: to analyze the existing conditions in the Study Area. At the end of the work on this Task, the BRPD Team produced an *Existing Conditions* summary describing in detail the existing conditions in the Study Area. **Appendix A** is a copy of the final *Existing Conditions* summary; the main body of this final report incorporates portions of the summary. Before moving to the next Task, the BRPD Team assisted with a public work session to review the *Existing Conditions* summary and get further input on the issues and suggestions for possible solutions.

After the first public work session, the BRPD Team, again with assistance from the SC during a team work session, developed a set of alternatives for possible sidewalk and bridge locations to enhance pedestrian mobility between the Lower and Upper Village areas. They considered as many different options as possible, including taking no action, during their work session. As part of the subsequent analysis after the work session, the BRPD Team reviewed the potential impacts, benefits and cost ranges for the various alternatives. They summarized the numerous alternatives that they considered and analyzed in the *Alternatives* summary. **Appendix B** is a copy of the final *Alternatives* summary; the main body of this final report incorporates portions of the *Alternatives* summary. After further reviewing and refining the alternatives with the SC, the BRPD Team assisted with an Alternatives public work session hosted by the Town to review the alternatives and begin the selection of a preferred alternative.

After the BRPD Team and the SC reviewed the comments of the Alternatives public work session, they decided to modify the preferred alternatives that emerged from the public work session by including a phasing plan that delayed implementation of the last phase to a time in the future. The BRPD Team completed work on a final report summarizing the existing conditions, the alternatives and the recommended alternatives. The final report includes full copies of the *Existing Conditions* and *Alternatives* summaries as part of the appendices.

II. EXISTING CONDITIONS

A. INTRODUCTION

The following text provides an overview of relevant features of the Study Area that have influenced the recommendations. As previously noted, **Appendix A** includes a more

complete description of the existing conditions in the Study Area. **Figure 2** and the plans in **Appendix C** provide a graphic overview of the existing conditions in the Study Area.

B. PROJECTED USERS

Plainfield officials would like to improve walking conditions for people of all ages and abilities. This means that as much as possible, the improvements should be usable by school children, elderly citizens and those with disabilities. While the Town is reviewing improvements for walkers, it also has the opportunity to potentially provide better facilities for bicyclists. These modifications, if possible, should provide better bicycling conditions for as wide a range of bicyclists as possible.

C. TRANSPORTATION FACILITIES

1. ROADWAY DATA

On the western end of the Study Area, Route 2 consists of two 12-foot travel lanes with one-foot paved shoulders on either side of the road for a total paved width of approximately 26 feet. A curb and sidewalk also line the north side of the road. Approximately 100 feet east of the west intersection of Route 2 with Towne Road, the north paved shoulder widens to three feet wide; the south side paved shoulder remains one foot wide. The total pavement width at this point is approximately 28 feet. At the bend in the road just west of the Cutler Library, the north side shoulder gradually narrows back to one foot wide or less. The pavement width narrows to 25 feet wide. The curb and sidewalk continue eastward on the north side of the road to the intersection with Main Street near the eastern end of the Study Area. A gravel shoulder varying in width from one to approximately three feet lines the southern side of the roadway.

The roadway is relatively level with a grade larger than ten percent for a short distance near the intersection with Main Street. The adjacent land at the edge of the right-of-way is approximately three feet lower than the roadway surface along portions of the south side. There is another slope relatively close to the road in the large gap between existing buildings on the south side near the bend in the road.

The right-of-way width of Route 2 in the Study Area appears to be three rods wide or 49.5 feet wide.

2. MAIN STREET BRIDGE DATA

Bridge 27 in Plainfield is a 60-foot single span concrete tee beam bridge that was built in 1927. The bridge carries Main Street over the Winooski River and has a curb-to-curb width of 26.5 feet. The bridge also carries a five-foot-wide sidewalk of the north fascia for a total internal width of 36.5 feet between the railings. A Vermont Agency of Transportation (VTrans) inspection report indicates the superstructure is in satisfactory to fair condition. The substructure appears to be a dry-laid stone masonry abutment in satisfactory condition. Notes from the BRPD Team site observation show deterioration along fascia tee beams,

cracking, spalling and delamination of the concrete on both the ridge deck and beams. **Illustrations 1** and **2** show the bridge configuration and provide a sense of the condition.

Illustration 1: Looking east along Main Street

Illustration 2: Looking under the bridge from the south side showing the west abutment and the south bridge fascia

D. UTILITIES

Utility poles within the Study Area switch from side to side along Route 2. The western few utility poles in the study area are being replaced with taller poles that are placed on the side of the existing poles away from the roadway. Water and sewer lines lie underground within the right-of-way. Two separate closed storm drainage systems exist along portions of the roadway.

E. NATURAL RESOURCES

The topography in the Study Area is generally level in the immediate vicinity of Route 2 but drops significantly towards the Winooski River behind the buildings fronting on the east side of Route 2. There are no watercourses, wetlands or floodplains within the Study Area other than those associated with the Winooski River far below the elevation of Route 2.

There are several large trees located in or close to the Route 2 right-of-way. **Figure 2** shows the location of these trees. The cover illustration shows one of the groups of trees adjacent to the south side of the road between the Town Street intersections.

III. RECOMMENDATIONS & REASONS

A. THE RECOMMENDED ALIGNMENT

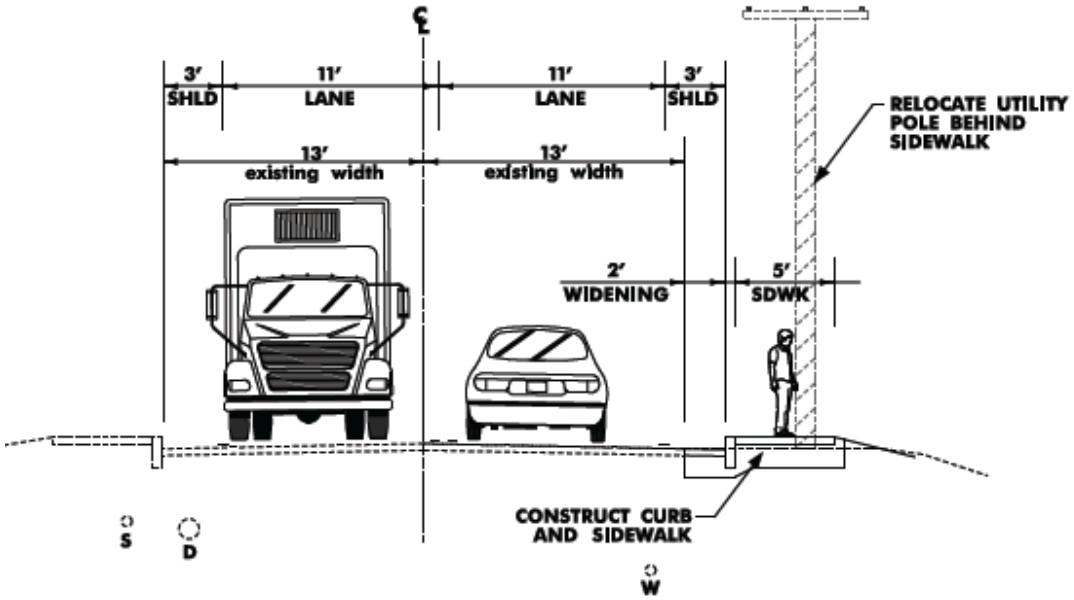
Figure 3 and **Appendix C** show schematic layouts of the recommended alignment of the new pedestrian bridge and south side sidewalks. This recommended alignment for current consideration includes:

- A new, free-standing, prefabricated pedestrian bridge directly south of the existing Main Street bridge over the Winooski River;
- A short new segment of sidewalk on the south side of the bridge that will connect the end of the bridge to the pedestrian circle on the corner of Mill and Main Streets;
- A new sidewalk from the north side of the new bridge to approximately across from the Town Hall that would be adjacent to the roadway separated by a six-inch curb in front of the Town parcel used for parking but without a curb and away from the edge of the pavement closer to the bridge;
- A second section of sidewalk, also adjacent to the road separated by a six-inch curb, on the south side from the Cutler Library running west to the Post Office;
- One relocated crosswalk and one new crosswalk on Route 2; and
- New small tree plantings along Route 2 on the outside edge of the sidewalk. (The locations are mostly under existing utility lines so only trees that mature at low heights should be used.)

A last section of sidewalk would also be added to link the other two new sections at some time in the future.

The new curb will need to be two to three feet away from the existing edge of the pavement on the south side of the road for the new sidewalk west of the Library because the existing pavement is 25 to 26 feet wide. VTrans needs at least 28 feet between curbs to accommodate snowplows. The additional pavement would provide an opportunity to create paved shoulders each at least three feet wide along this portion of Route 2 that could create better conditions for at least some bicyclists. **Illustration 3** shows a typical cross section for the recommendation.

Illustration 3: Typical new Route 2 cross section showing new sidewalk



With the exception of the Library, wide entrances to parking areas would be reduced to a single, two-way opening, usually in the middle of the current entrance. The Library access would be closed in the middle, creating two smaller openings, one at either end of the existing opening. The two openings would create a one-way loop with parallel parking along the library side of the drive.

Illustration 4: Cutler Library Entrance Refinement

Two crosswalks on Route 2 would link the new sidewalk to the existing sidewalk on the north side of High Street. One would be in front of the Library and the second would be approximately 200 feet west of the intersection with Main Street. Additional crosswalks would be added on Towne Road, Main Street and Harvey Hill Road.

Because of the two houses located close to the edge of the existing road, the link between the new sidewalks at each end of the study area is included as part of the overall recommendation but its implementation is left to sometime in the future when the issues associated with the proximity of the two existing historic houses to Route 2 can be adequately resolved.

B. THE BASIS OF THE DECISION

1. BRIDGE ALIGNMENT

Grading challenges and the distance away from Main Street eliminated all but the alternatives located directly adjacent to the existing bridge. Structural challenges and uncertainty about the future needs of the existing bridge eliminated the alternatives that included modifications or replacement of the existing bridge, which left the installation of a new, prefabricated bridge next to the existing bridge as the only viable alternative.

2. SIDEWALK ALIGNMENT

The alignments that did not stay within the Route 2 right-of-way were considered desirable for community trails but not appropriate as a pedestrian transportation facility to help

walkers move between the Upper and Lower Villages or to provide access to homes and business all along Route 2 between Main Street and the Post Office.

Of the alternatives within the Route 2 right-of-way, the community preferred the alignment that was closest to the road to minimize intrusions into existing front yards, even if they were partially contained within the right-of-way of Route 2. The alignment adjacent to the road also eliminated the need to remove existing trees or hedges. The need to relocate mailboxes was considered a problem.

There was also concern about the potential impacts to the two historic houses located very close to the edge of the existing Route 2 pavement. The inability to find a solution that would be acceptable to the two homeowners, the Town and VTrans prompted the SC to push this portion of the recommendation to a future phase.

IV. IMPACTS & ISSUES

A. BRIDGE CONSIDERATIONS

The limited space on the north side of the bridge between the existing bridge and the adjacent historic building on the west side would dictate the location and width of a new pedestrian bridge and the location of the bridge supports. The abutments appear to be in good condition but may not be sufficient to support a new, prefabricated pedestrian bridge. It would most likely be necessary to create concrete footings or foundations behind the existing dry stone abutment walls, leaving the walls themselves untouched. This is would also keep construction activity for the bridge supports from impacting the river.

The prefabricated bridge would be constructed as a flat span between the two support locations behind the existing abutments. As much as possible it would be designed to not degrade the visual quality of the existing bridge and the new light standards located on the concrete railings. A new pedestrian bridge constructed of precast concrete would seem to be most compatible with the existing bridge but it might be acceptable to use a wood or corten steel prefabricated bridge as well. The Town should consult with the Vermont State Historic Preservation Officer and VTrans on the design of the bridge to verify that it does not affect the historic character of the existing roadway bridge. **Appendix D** includes additional information on prefabricated pedestrian bridges.

The new pedestrian bridge would be separated from the existing bridge by at least six inches. It would also be at least one foot away from the existing structure on the north side of the bridge. The railings would limit the width of the travel way on the bridge to approximately five feet wide.

The new sidewalk would meet the end of the new pedestrian bridge on the north side. A new gate adjacent to sidewalk will guard the access to the lower level of the existing

structure. It might be possible to redesign the stairs down to the lower door so that there is a landing inside the gate before the stairs start to descend towards the lower level.

B. TREES

The new sidewalk should not require the removal of any trees.

The tall arborvitae hedge close to the road on the western end of the Study Area (seen on the cover of this report) is far enough from the edge of the road that the extended pavement, curb and new sidewalk should be able to be installed without the need to remove the trees. The excavation for the curb and sidewalk in this area would need to be done carefully so it does not extend too deep. Roots that might be encountered should be cut cleanly. The contractor should place the soil removed away from the trees, leaving as much of the surface around the rest of the trees totally undisturbed. The sidewalk will come close to the trees, so it might be necessary to remove the remaining lower limbs from the trees on the street side, although most of them have already died or been removed (as the cover photo shows).

To cover the potential that the construction activity, even when constructed carefully, might inadvertently stress the trees leading to their demise, the recommended alternative includes planting a new hedge behind the existing hedge, outside of the right-of-way. These trees would be established and growing in the event that the existing trees go into decline as a result of the sidewalk construction. If they continue to thrive, the new hedge would simply add depth to the existing hedge and increase its screening capabilities at street level.

In addition to the hedge planting, the recommendations include adding street trees along Route 2 adjacent to the sidewalk at the outer edges of the right-of-way. These trees would be planted primarily under the existing utility lines and therefore need to be trees that mature at less than 20 feet. Some smaller trees to consider that would also not drop fruit on the sidewalk would be:

Amelanchier species	Serviceberry
Carpinus caroliniana	American Hornbeam
crataegus punctata inermis	Thornless Hawthorn
Syringa reticulata	Japanese Tree Lilac

Some forms of crabapple might also be acceptable as long as they do not have persistent fruit.

C. MAILBOXES

The existing mailboxes on the western end of the Study Area will need to be relocated when the new sidewalk is constructed. The options offered by the Post Office are to cluster the mailboxes in the Towne Street right-of-way just east of the new sidewalk or for the mailbox owners to get a post office box at the nearby Post Office.

D. MAIN STREET INTERSECTION

The Town of Plainfield and the Central Vermont Regional Planning Commission conducted a scoping study of the intersection of Route 2 with Main Street several years ago and developed a recommendation for improving directional clarity, sight distances and traffic movements. (**Attachment EC-2** in **Appendix A** shows the recommended plan.) The recommended alignment of the sidewalk along Main Street from the bridge and onto Route 2 places the sidewalk relatively far away from the edge of the existing roadway pavement, close to the outer edge of the existing right-of-way. The recommended intersection improvement plan includes some changes of grade for the roadways. The recommended location of the new sidewalk in this study should be far enough from the edge of the Route 2 pavement that it would allow the potential widening or changes of grade of the roadway to occur without requiring the removal and replacement of the sidewalk as well. The difference in grade between the future roadway and the new sidewalk should be able to be accommodated within the separation between the two. Illustration 4 shows a schematic layout of the sidewalk in this location.

Illustration 4: Schematic Sidewalk Layout Close to Main Street Bridge

E. GRADING

The grade of the FairPoint Communications parcel and the outer edge of the adjacent Route 2 right-of-way on the western end of the Study Area, across Towne Street from the Post Office, are several feet lower than the grade of Route 2. The construction of a sidewalk in the Route 2 right-of-way as currently recommended would require filling to bring the sidewalk up to the grade of the road. The filling would most likely extend beyond the edge of the right-of-way onto the FairPoint Communications parcel, necessitating a grading easement from FairPoint. The alternative would be to construct a small retaining wall on the

outside edge of the sidewalk to keep the fill from extending onto the FairPoint Communications property.

F. UTILITY LINES

There are several storm drain inlets along Route 2 as it intersects with Main Street. These inlets would not need to be relocated to allow the installation of the new sidewalk. The installation work for the new sidewalk would need to take into account the location of the underground storm sewer pipes that might pass under the sidewalk's alignment. The system might need to be expanded to collect stormwater captured by the new curbs at and west of the Library.

There is also a water line close to the south side of the existing pavement for Route 2, with feeder lines to some of the buildings along the road. The construction contractor for the sidewalk should also be mindful of these water lines to ensure that they are not damaged during the construction process. Two fire hydrants that are close to the road would either need to be left in place and surrounded by the sidewalk, with modifications to the sidewalk's width to maintain ADA compliance, or relocated further from the road to allow room for the sidewalk.

The utility poles supporting the overhead utility lines are in the process of being replaced with higher poles. The new poles tend to be slightly further away from the edge of the existing pavement than the existing poles. When the project goes into design phase, the location of the poles must be verified to see if they would need to be relocated again to allow room for the new sidewalk. It currently appears that the construction of the sidewalk will require several of the poles to be relocated close to the edge of the right-of-way to allow room for the new sidewalk.

G. TOWN HALL PARKING & ACCESS

The recommended improvements associated with the installation of the new south side sidewalk will enhance the link between the Town Hall and the Town-owned parking area on the south side of the street opposite the Town Hall. The relocated crosswalk on Route 2 from the intersection with Main Street will be close enough to the entrance of the parking area that it will be easy for those walking between the parking and the Town Hall to use it without going out of their way. The entrance to the parking area itself would be narrowed to create a clearer point of vehicular entry, helping to maximize the number of parking spaces that can be used in the lot. It also narrows the distance that pedestrians would need to walk across vehicular access ways. The plans in **Appendix C** show this in more detail.

H. LIBRARY PARKING

As part of the installation of the western portion of the south side sidewalk, the vehicular access to the Cutler Library site would be diminished and more clearly defined. The access is currently about 60 feet across, with no clear indications of where vehicles are supposed to enter or exit the parking area or how they are supposed to park. The recommended

alternative would create two narrower access points, closing the middle portion of the existing access area. This in turn would create a one-way loop that would enter the site at the western access and exit the site from the eastern access point. Several parallel parking spaces could be included along the one-way drive; the existing angled parking that extends towards the rear of the site along the west side would remain. The plans in **Appendix C** show these proposed changes in more detail.

I. CROSSWALKS

The proposed plan includes two crosswalks on Route 2 in addition to the existing crosswalk in front of the Post Office. The eastern-most crosswalk is a relocation of an existing crosswalk close to the intersection of Route 2 and Main Street to a position a bit further west on Route 2 in front of the Town Hall. The middle crosswalk in front of the Cutler Library would be a new crosswalk. Initial discussions with VTrans indicated that they would be open to adding this third crosswalk on Route 2 in the Village area. The Town will need to work with them to make sure that installation of the new crosswalk in front of the library is indeed acceptable; it is an integral part of allowing greater walking access to the Cutler Library from the Lower Village. The specific location of the crosswalk should be situated to maximize sight distances in both directions and to work well with the final redesign of the vehicular access points to the library.

V. IMPLEMENTATION

A. PHASING

The BRPD Team suggests dividing the recommendations into three phases:

- Phase A: Construction of the new bridge and sidewalk to the Town Hall;
- Phase B: Construction of the new sidewalk between the Library and the Post Office; and
- Phase C: Future planning and construction of a new sidewalk between the Library and the Town Hall.

Figure 3 shows the location of the three phases.

It would be most appropriate to start with Phase A and proceed to Phase B. If, however, an opportunity arises where it may be possible to construct Phase B before Phase A is ready for construction, the Town should take it. Even without Phase A, Phase B is a viable project on its own, providing a pedestrian link between the Post Office and the Library.

Phase C should only be undertaken when a viable design can be developed that is acceptable to the Town as well as the two landowners with historic residences lying close to Route 2.

B. INITIAL ESTIMATE OF PROBABLE CONSTRUCTION COSTS

The BRPD Consulting Team has prepared an initial estimate of probable construction costs for the different phases of the project. **Tables 1** and **2** provide the basic cost information for Phases A and B. Because there are not real plans yet for Phase C, the BRPD Team has not prepared an initial estimate of probable construction costs for it.

Table 1: Phase A Initial Estimate of Probable Construction Cost

Phase A

Item	Value	Unit	Cost/Unit	Unit Cost
Sidewalk	250	LF	$180	$45,000
Bridge	1	LS	$200,000	$200,000
Crosswalk	1	LS	$2,000	$2,000
Small Street Trees	4	Each	$175	$700
		Sub Total		$247,700
Contingency	20%			$49,540
Design	15%			$37,155
		Sub Total		$334,395
Construction Inspection	10%			$24,770
Local Project Management	10%	Const & Design		$33,440
		TOTAL		**$392,605**

Table 2: Phase B Initial Estimate of Probable Construction Costs

Phase B

Item	Value	Unit	Cost/Unit	Unit Cost
Sidewalk	720	LF	$180	$129,600
Crosswalk	1	LS	$2,000	$2,000
Hedge Planting	1	LS	$4,000	$4,000
Small Street Trees	12	Each	$175	$2,100
		Sub Total		$137,700
Contingency	25%			$34,425
Design	15%			$20,655
		Sub Total		$192,780
Construction Inspection	10%			$13,770
Local Project Managemer	10%	Const & Design		$19,278
		TOTAL		**$225,828**

These initial estimates are based completely on the figures contained in this report. They should be considered as guides in how much funding might be needed to construct the different recommendations. They are based on having each phase completed separately by an independent contractor. The Town might be able to realize savings by constructing the sidewalk with its own road crews.

C. FUNDING

Funding for the pedestrian bridge and new south side sidewalks might be able to be secured from a variety of sources. Below is a list of various funding sources that could be used to help with the implementation of the recommendations, including:

- Transportation Alternatives Program (TA Funds): TA funds can be used to increase bicycle and pedestrian mobility. These funds will cover a maximum of 80 percent of the project with the remaining portions most likely coming from the project-sponsoring organization. TA funds are distributed in Vermont through a competitive grant program.

- Bicycle and Pedestrian Program: These State funds cover specific bicycle and pedestrian improvement projects and are provided via a competitive grant program.

- One Time Tax: A one-year-only increase in the tax rate by one or two cents by the Town could raise funds to start at least some of the recommendations.

- Public-Private Fundraising: The Town could work with non-public entities, such as Goddard College or the Cutler Library, or the general public to raise funds through private fundraising or grant sources available only to the non-public entities to match public funds for the sidewalk. It could be possible to provide some memorial that acknowledges the contributions.

- Bonds: The Town could opt to use bonds to generate funds to undertake a significant portion or all of the recommendations at once.

- Vermont Community and Urban Forestry Council Grants: These grants are awarded to municipalities to aid in conducting a street tree inventory and plan, as well as funding of street tree plantings.

A new online tool developed by a partnership between the Alliance for Biking and Walking and the League of American Bicyclists helps find potential federal funding sources for alternative transportation projects. The site can be reached at: http://bit.ly/11xhEtr.

Other funding sources may be available for the construction of the trails, including:

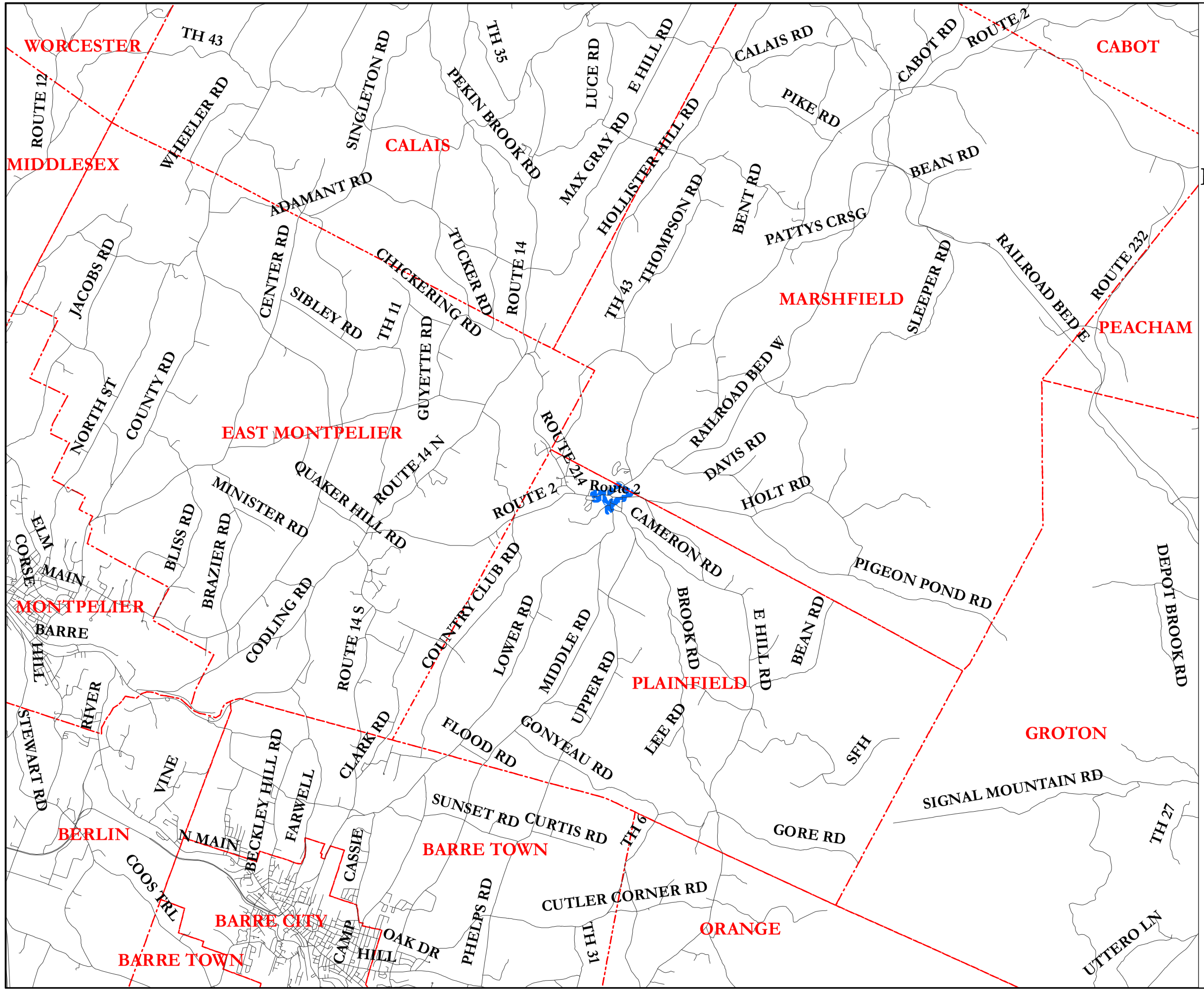
- Potential health grants promoting healthy living;
- The Robert Wood Johnson Foundation (see http://www.rwjf.org/content/rwjf/en/grants/search.html?k=walking&d=&l=);
- MCI/Worldcom Royalty Donation Program (For this and several subsequent ideas, see http://www.americantrails.org/resources/funding/TipsFund.html);
- Bridge sponsorships (and possibly naming rights); and
- RockShox's Grants (see http://www.sramcyclingfund.org/fund-overview.html).

Other potential sources exist. Some additional resources that may provide insight into additional funds include:

http://www.americantrails.org/resources/funding/Funding.html,
http://rlch.org/, and
http://atfiles.org/files/pdf/bicentennialsourcebook.pdf.

Pedestrian Bridge & South Side Sidewalk Scoping Study

Central Vermont Regional Planning Commission & The Town of Plainfield



Legend

- Town Line
- Historic Distsrict

Study Area Location

BROADREACH Planning & Design

EIV Technical Services

Stantec

December 2013

Figure 1

Pedestrian Bridge & South Side Sidewalk Scoping Study

Central Vermont Regional Planning Commission & The Town of Plainfield

To Goddard College

Town Hall

Town Parking

Plainfield Post Office

Cutler Library

Winooski River Bridge

Village Park

Russell Memorial Field

Sewage Treatment Plant

ROBERT LN

Route 2

HIGH

HARVEY HILL

SCHOOL

MAIN

MILL

TOWNE AV

WALKER LN

MARTIN MEADOW RD

RECREATION FIELD RD

HUDSON AV

BROOK RD

Legend

- Destinations
- Storm Inlet
- Storm Drain
- Utility Poles
- Utility Line
- Mailbox
- Marked Crosswalk
- Sidewalk
- Tree
- Drainage Swale
- ROW Issue
- Watercourses
- Public Land
- Property Lines

Existing Conditions

BROADREACH Planning & Design

EIV Technical Services

Stantec

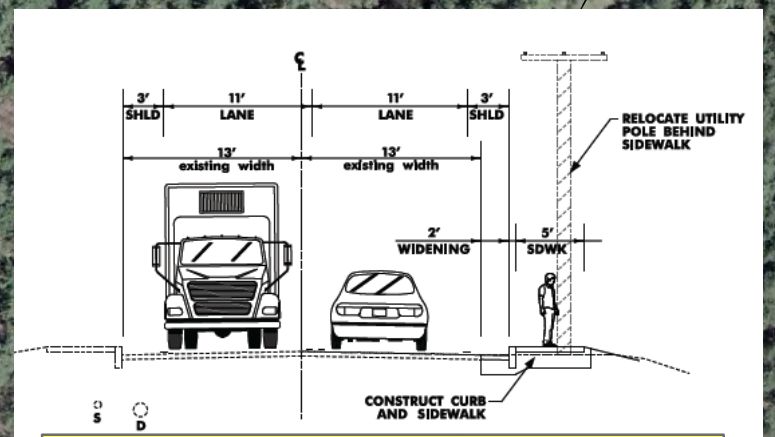
N W E S

0 50 100 200 300 400 Feet

December 2013 Figure 2

Pedestrian Bridge & South Side Sidewalk Scoping Study

Central Vermont Regional Planning Commission & The Town of Plainfield



Typical cross section where sidewalk if adjacent to curb

Typical Section Looking East

Reduce parking entrance to two one-way drives at east and west ends & add crosswalk

Add new sidewalk adjacent to the road with 6-inch curb.

Cutler Library

Town Hall

Add new Sidewalk with curb along Town parking parcel

Town Parking

Pull sidewalk away from roadway without curb to leave room for future intersection grading and realignment

Add new prefabricated bridge southwest of the existing bridge

Winooski River Bridge

FairPoint Communications

Plainfield Post Office

Add new mail box row along Towne Ave. to replace those removed on Main St.

Add new low-maturing street trees at edge of ROW

Keep existing evergreen hedge and add new evergreens behind existing hedge.

ROBERT LN
HARVEY HILL
SCHOOL
HIGH
MAIN
MILL
Route 2
TOWNE AV
WALKER LN
MARTIN MEADOW RD

Legend

- Phase A
- Phase B
- Future Sidewalk
- New Crosswalk
- New Tree/Evergreen
- Existing Tree
- Existing Sidewalk
- Property Lines

Preferred Alignment

BROADREACH Planning & Design

EIV Technical Services

Stantec

N W E S

0 37.5 75 150 225 300 Feet

December 2013

Figure 3

Appendix A
Existing Conditions

Central Vermont Regional Planning Commission
Town of Plainfield

Pedestrian Bridge & South Sidewalk
Conceptual Alignment Analysis

Existing Conditions

Submitted by:
Broadreach Planning & Design

In conjunction with
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EIV Technical Services

June 6, 2013

A. INTRODUCTION

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With the assistance of the CVRPC, the Town organized a Steering Committee (SC) of local officials and citizens to provide direction for the study. Together they requested proposals from consultants to help them with the feasibility study; the selected consultant team (the BRPD Team) is led by Broadreach Planning & Design and supported by Stantec Consulting Services and EIV Technical Services.

The general limits of the Study Area for this project extend on the east from the south side of the Main Street Winooski River bridge westward along Route 2 to the Plainfield Post Office and to the fronts of the existing buildings on Main Street and Route 2. **Figure EC-1** shows the location of the project and the general extent of the Study Area.

This summary report is the first product of the work of the SC and the BRPD Team. The summary describes the existing conditions in the Study Area. The report is formatted for double-sided printing; blank pages are intentional.

2. PURPOSE AND NEED

The purpose of the pedestrian bridge and south sidewalk project is to expand the network of walking and bicycling facilities in Plainfield Village to maximize the ability of residents and visitors to access the various businesses and services along Route 2 in the Upper Village from the Lower Village area, already served by improved bicycling and walking facilities, without the need to drive an automobile between each and every one.

Needs for the improvements include:

- The minimal shoulder space and lack of sidewalk for pedestrians or bicyclists on the south side of Route 2 west of the bridge that could provide access to the Cutler Public Library, the Plainfield Post Office and numerous homes and business;
- The minimal sidewalk and lack of shoulders on the Main Street bridge over the Winooski River; and

- The presence of dirt paths along the south side of Route 2 created by pedestrians walking along the side of the road.

3. PROJECTED USERS

Plainfield officials would like to improve walking conditions for people of all ages and abilities. This means that as much as possible, the improvements should be usable by school children, elderly citizens and those with disabilities. While the Town is reviewing improvements for walkers, it also has the opportunity to potentially provide better facilities for bicyclists. These modifications, if possible, should provide better bicycling conditions for as wide a range of bicyclists as possible. The following sections provide more information on the abilities and needs of the different types of walkers and bicyclists.

Walkers: People vary significantly in their walking skills, experience and willingness to walk different distances. Strong determining factors for walkers are the time and mobility required to reach their destinations. Time and mobility constraints also dictate their usable geographic space; few walkers will venture more than one mile from point to point; most will only undertake trips shorter than ½ mile, unless the trip is recreational or there is some visible destination or landmark.

There are three basic types of walkers:

- *Active walkers*,
- *Basic walkers*, and
- *Circumscribed walkers*.

Active walkers use the road system regularly for transportation, as well as for fitness. They know and generally follow the rules of the road. *Basic walkers* include the majority of older children and healthy adult walkers. *Circumscribed walkers* are those whose speed and mobility are extremely limited. In all cases, when walking on roads, people should walk FACING traffic on the left side of the road in the direction of travel for safety and visibility reasons, in addition to the fact that it is Vermont State Law.

Bicyclists: Among bicyclists, there are three typical user groups that can be expected to use the bicycle facilities:

- *Advanced bicyclists*,
- *Basic bicyclists*, and
- *Beginner bicyclists* or children.

Advanced bicyclists are highly experienced bicycle riders who feel comfortable riding their bikes in heavy traffic and typically prefer to ride on roadways. *Basic bicyclists* comprise the largest category of bicycle riders, including older children, inexperienced adult riders, occasional bicycle commuters, recreational adult bicyclists and experienced riders who still fear or dislike riding in heavy traffic conditions. Basic bicyclists are reasonably competent in

handling their bicycles and they generally understand the rules of the road, but they ride at more moderate speeds and are generally uncomfortable on busy streets unless a striped, obstacle-free shoulder is provided and traffic volumes are low. *Beginner bicyclists* have the weakest bicycling skills. Beginner bicyclists ride more slowly, don't always understand the rules of the road, and are typically uncomfortable riding with motor vehicles. They are best accommodated on low-speed local roads and multi-user paths or even sidewalks for the very young where there are few, if any driveway crossings.

When riding on roadways, bicyclists should always ride with traffic on the right side of the road in the direction of travel. Unless the road is clear, bicyclists should ride single file.

4. ORIGINS, DESTINATIONS & TRAVEL PATTERNS

There are several important destinations within the Study Area for walkers and bicyclists. **Figure EC-2** shows the locations of these areas.

B. LAND USE

The Study Area includes residential, institutional, and commercial land uses. **Figure EC-2** shows the land use types within the Study Area.

C. TRANSPORTATION FACILITIES

1. OVERVIEW

Route 2 in the Upper Village is functionally classified by the Vermont Agency of Transportation (VTrans) as a Principle Arterial on a State Highway. The posted speed is 30 miles per hour (mph) through the upper Village in the Study Area. **Figure EC-3** graphically presents much of the roadway information described below.

2. ROADWAY DATA

On the western end of the Study Area, Route 2 consists of two 12-foot travel lanes with one-foot paved shoulders on either side of the road for a total paved width of approximately 26 feet. A curb and sidewalk also line the north side of the road. Approximately 100 feet east of the west intersection with Towne Road, the north paved shoulder widens to three feet wide; the south side paved shoulder remains one foot wide. The total pavement width at this point is approximately 28 feet. At the bend in the road just west of the Cutler Library, the north side shoulder gradually narrows back to one foot wide. The pavement width narrows to 25 feet wide. The curb and sidewalk continue eastward on the north side of the road to the intersection with Main Street near the eastern end of the Study Area. A gravel shoulder varying in width from one to approximately three feet lines the southern side of the roadway.

Looking west on Route 2; the narrowing of the paved shoulder from three feet to one foot can be seen just past the driveway entrance on the right side of the road.

The roadway surface is in poor condition throughout the project area. VTrans intends to resurface the roadway in the near future, 2015.

The roadway is relatively level with a grade larger than ten percent for a short distance near the intersection with Main Street. There are very small slopes along the south side of the road just to the east of the western intersection with Towne Road heading down and away from the gravel shoulder. The adjacent land at the edge of the right-of-way is approximately three feet lower than the roadway surface. There is another slope relatively close to the road in the large gap between existing buildings on the south side of the road. This slope heads all the way down to the Winooski River, with a drop of approximately 50 feet. There are no guardrails along the sides of the road in the Study Area.

Looking east on Route 2 in front of the FairPoint building showing the drop in grade.

The intersection with Main Street is not signalized but does have a single blinking yellow light facing Route 2 and a single blinking red light facing Main Street.

Looking east on Route 2 towards the intersection with Main Street; the blinking yellow light can be seen just above the tree line. A crosswalk warning sign is also visible on the right.

3. ROUTE 2 RIGHT-OF-WAY WIDTHS

The right-of-way width of Route 2 in the Study Area appears to be three rods wide or 49.5 feet wide. This is based on reconnaissance of the existing development along the road. The road and sidewalk development along Route 2 is within a 50-foot-wide corridor within the Study Area; the building setbacks also support this conclusion.

4. ROUTE 2 TRAFFIC VOLUME & CRASH HISTORY

A traffic count in 2010 slightly west of the Study Area showed that Route 2 at that point had an Average Annual Daily Traffic volume of approximately 6,600 vehicles.

VTrans has identified most of Route 2 within the study area as a high crash location (HCL). These locations are considered to be HCLs because they have had at least five crashes over a five-year period and the actual crash rate, the number of crashes per million vehicles, exceeds a critical crash rate. The critical crash rate is based on the average crash rates of similar roadways in Vermont and is related to the VTrans functional class of a highway and whether it is located in an urban or rural area.

5. MAIN STREET BRIDGE DATA

Bridge 27 is a 60-foot single span concrete tee beam bridge that was built in 1927. The bridge carries Main Street over the Winooski River and has a curb-to-curb width of 26.5 feet. The bridge also carries a 5-foot-wide sidewalk of the north fascia. There appears to be a sidewalk cantilevered over the southeast wingwall that terminates at the bridge. The structure has concrete panel railings with new street lights mounted to the top of the railing. A VTrans inspection report indicates the superstructure is in satisfactory to fair condition. The substructure appears to be a dry-laid stone masonry abutment in satisfactory condition. Notes from the BRPD Team site observation show deterioration along fascia tee beams, cracking, spalling and delamination of the concrete on both the ridge deck and beams. The bridge's federal sufficiency rating is 84.5 of a possible 100 points. Illustrations show the bridge configuration and provide a sense of the condition.

Looking east along Main Street.

Looking under the bridge from the south side showing the west abutment and the south bridge fascia

6. GREEN MOUNTAIN TRANSIT AUTHORITY

The Green Mountain Transit Authority (GMTA) runs the US 2 Commuter (Route #84) along Route 2 through Plainfield. There are three stops near the Study Area:

- On Route 2 near Goddard College,
- In front of the Post Office and on the other side of Route 2 just east of the Post Office, and
- At the Park & Ride on the east side of the Lower Village on Main Street Extension.

GMTA also operates the Health Center Community Shuttle with service to the Health Center just west of the Post Office.

D. UTILITIES

Figure EC-3 shows the general location of the utilities in the Study Area.

Utility poles within the Study Area are co-owned by Green Mountain Power (GMP) and FairPoint; they switch from side to side along Route 2. **Figure EC-3** shows the locations of the utility poles. From the FairPoint building, an underground phone cable also runs west,

approximately under the alignment of the utility poles. The western few utility poles in the Study Area are being replaced with taller poles that are placed on the side of the existing poles away from the roadway.

Water and sewer lines lie underground within the right-of-way. The specific locations of these lines are still being verified. **Figure EC-3** shows the location of sewer manhole covers and water valves.

Two separate closed storm drainage systems exist along portions of the roadway. One has inlets on both sides of the road to the east of the Cutler Library with an outfall near the open steep slope that lies close to the roadway east of the Library. The second system is just to the west of the intersection of Route 2 and Main Street with an outfall on the southeast edge of the Town parking lot on the south side of Route 2 across from the Town Hall. **Figure EC-3** shows the location of the storm sewer systems.

E. NATURAL RESOURCES

1. TOPOGRAPHY

The topography in the Study Area is generally level in the immediate vicinity of Route 2 but drops significantly towards the Winooski River behind the buildings fronting on the east side of Route 2. The drop is visible on Main Street as it descends towards the bridge from the intersection with Route 2. **Figure EC-2** shows the general topography in the Study Area. The drop to the Winooski River comes close to the edge of Route 2 in the gap between the buildings to the east of the Cutler Library, close to the location where there are large logs stored adjacent to the road.

Looking south towards the bridge over the Winooski River; the drop in the road is evident in the photo. Route 2 continues east on the left side of the picture.

2. WATERCOURSES

There are no watercourses in the Study Area. The Winooski River is the primary watercourse just to the south of the Study Area. A drainage swale descends from the outfall of the storm sewer system on the south side of Route 2 to the Winooski River. **Figure EC-2** shows the location of the drainage swale.

Looking east on Route 2 with the steeply sloping area down to the Winooski River shown a few feet away from the pavement.

3. WETLANDS

There are no mapped wetlands in the immediate vicinity of the Study Area.

4. WATER BODIES

There are no significant water bodies within the Study Area.

5. FLOODPLAINS.

Close to the Study Area, the Winooski River floodplain is narrow and confined due to the steepness of the valley sides.

6. FLORA & FAUNA

The State of Vermont has not identified rare, threatened or endangered species; deer wintering areas or natural areas of special importance within or near the Study Area. There is a core habitat area outside the study area to the northwest. **Figure EC-2** shows the edges of the core habitat area.

There are several large trees located in or close to the Route 2 right-of-way. **Figure EC-2** shows the location of these trees. (The figure does not show trees that are further away from the right-of-way.)

Looking west on Route 2 towards an arborvitae hedge on the south side of the road at the edge of the right-of-way.

F. CULTURAL RESOURCES

1. HISTORIC/ARCHEOLOGICAL RESOURCES

The Study Area between the Main Street bridge and eastern intersection with Towne Street lies within the National Register of Historic Places Plainfield Village Historic District. Several of the historic buildings within the District appear to be located either in or directly adjacent to the Route 2 right-of-way. **Figure EC-2** notes the location of these potential infringements.

Archeological and historic reviews were completed in 1996 for the analysis of a bicycle and pedestrian path along various alignments, one of which was along the north side of Route 2 where the sidewalk installed in the 1990s is located. **Attachment EC-1** includes copies of these archeological and historic reviews. They cover a larger area than is being studied for this project. The conclusions of these studies is that potential changes to the front yards of the buildings in the Historic District or to the concrete Main Street bridge over the Winooski River should be reviewed by the State of Vermont Agency of Commerce and Community Development's Historic Preservation Program prior to implementation.

2. OPEN SPACE AND PUBLIC LANDS

There are seven public parcels within the Study Area:

- The Plainfield Town Hall on the north side or Route 2,
- The Town parking area across Route 2 from the Town Hall,
- The Village Mill Street Park,
- The Cutler Library,
- The Post Office,
- The Russell Memorial Field/sewage treatment plant property, and
- The first fire station housing the Plainfield Historical Society.

Figure EC-2 shows the location of these public properties.

3. AGRICULTURAL LANDS

There is a small area of land in agricultural use in the Study Area on the north side of Route 2 across from the Post Office. **Figure EC-2** shows the location of the agricultural land.

G. PLANNING DOCUMENTS

1. MUNICIPAL PLANS

The draft Town Plan currently being finalized has numerous passages in support of the addition of sidewalks to the south side of Route 2 and the improvement of pedestrian circulation across the Winooski River bridge. The support and other relevant text can be found in particular in two sections of the draft Town Plan: *Section 7. Facilities, Utilities & Service* and *Section 8. Transportation.*

Excerpts from *7. Facilities, Utilities & Service* include:

> For years, safety hasn't been a sure thing for foot traffic between the lower and upper village. Given the fact that there are many amenities in both parts of the village, it makes sense to continue to work on improving this deficiency. The Select Board has been in discussions with VTrans and Central Vermont Regional Planning Commission to develop solutions. Recently, the Town was award a $25,000 grant (10% Town match) to study

> the possibility of a sidewalk on the south side of US 2, continuing to the lower village via a pedestrian walkway on the south side of the Main Street Bridge. If constructed, this would allow for a marked crosswalk near the blinking light intersection and would provide a safe connecting link between the parking lot opposite Town Hall and the public parking in the village. The study is to extend from the Mill Street Park to the Post Office.
>
> ….
>
> The Select Board is in discussion with CVRPC and VTrans to figure out both a temporary and a permanent solution to the unsightly and dangerous intersection at the blinking light [of Route 2 and Main Street]. The Town already has an engineered design for improvements to the intersection and the process to implement it is scheduled to begin within the next several years.

Excerpts from *8. Transportation* include:

> Ensuring that this key intersection [of Route 2 and Main Street] is safe for pedestrians as well as highway traffic is of importance to the people of Plainfield in order to avoid accidents and injuries. This improvement will overcome the lack of sight distance from the northeast and permit safe pedestrian crossing of Route 2, re-opening easy access to the town's historic town hall/opera house from the lower village as well as from the town's parking lot on the opposite side of the street that existed in earlier, low-traffic times. Overcoming the highway crossing barrier that has grown up over the years, is critical to the future of this landmark public building as the venue for meeting and as well as a popular dance and performance space.
>
> The 2005 intersection study also proposed that a sidewalk be constructed on the south side of Route 2 from the westerly termination of Main Street in front of the present Blinking Light Gallery to the Town parking lot opposite the Town Hall. If such a sidewalk were built, a crosswalk to the north side of Route 2 in the vicinity of the Town Hall would be permitted by Vermont Agency of Transportation. In order to advance this project, in 2012, the town of Plainfield applied for and received funds from the Vermont Agency of Transportation and the Central Vermont Regional Planning Commission for planning services to study how this improvement could best be accomplished, including a pedestrian bridge added to the existing bridge over the Winooski River to the east, as well as extending it west along Route 2 to the Post Office. The current Select Board is investigating funding sources for this intersection.
>
> ….

> Over the past twenty years, multiple projects have been completed to improve pedestrian traffic through the village. In the mid-1990s, sidewalks were constructed along the northern side of Rt. 2 from the Town Hall to the Post Office. The granite curb gives pedestrians an extra margin of safety, and the Town contracts with a private operator to keep village sidewalks plowed in the winter. In conjunction with the Rt. 2 sidewalk construction, a gravel path was laid down from the Post Office to the Rt. 214 intersection. This unpaved portion of the sidewalk has become overgrown in recent years, but continues to be used by pedestrians walking between the village and Goddard College.
>
> ….
>
> In 2001, the construction of the park on Mill Street included a brick patterned circle at the intersection with Main Street that had the intended effect of slowing traffic by narrowing the over-wide intersection and making the pedestrian crossing shorter and safer. The old, uneven sidewalks in the lower village were rebuilt in 2007- 2008 adding granite curbs, and pedestrian crossing on both Main and Mill Street. Green Mountain Transit Agency, a nonprofit public transportation company, offers door-to-door service for seniors and persons with disabilities.

Among the transportation strategies listed in the draft Town Plan are:

- Create safer pedestrian access from Route 2 through the Village.
- Support and encourage alternative transportation modes: bus, bicycle, walking, etc.
- The Town should implement sidewalk sections over time when the funding becomes available.

2. REGIONAL PLANS

The "Pedestrian and Bicycle Facilities" portion of the CVRPC *Regional Transportation Plan* includes several sections that support the purpose and need of this project, including in the discussion of existing conditions:

> Bicycle and pedestrian facilities are a vital piece of the transportation system. These facilities are very important to the safety and convenience of bicyclists, pedestrians and vehicle traffic. Bicycle and pedestrian facilities provide improved circulation and access in cities, villages, and other densely developed growth areas. These facilities are especially important to people with mobility limitations. The ability to walk or bike to your destinations reduces the need for vehicles, use of fossil fuel, pollution, supports public transit services, facilitates traffic calming, and provides health benefits. The economic benefits are also readily apparent. Tourists are more likely to visit an area with a good sidewalk network. Bicycle touring is very popular on Vermont's scenic highways.

The Regional Plan also indicates that Plainfield's plans for the installation of additional sidewalks along Route 2 in the Village is a candidate project for design and construction. (This project is the first step in the design and construction process leading towards eventual installation.)

3. STATE PLANS

The 2008 *VTrans Pedestrian and Bicycle Policy Plan* includes goals and objectives that directly support the upgrading of bicycling and walking facilities along the Route 2 corridor, including:

Goals

- *Cultural Environment*. Enhance the human scale and livability of Vermont's communities by improving opportunities for pedestrian and bicycle mobility and access in and between towns, downtowns, villages and rural landscapes.

- *Health*. Improve the health of Vermonters and reduce health care costs by making it easier, safer and more convenient for citizens to be more physically active by walking and bicycling on a regular basis.

- *Transportation Choice*. Enhance pedestrian and bicycle transportation options in Vermont so that citizens, regardless of location, socioeconomic status, or health can choose a seamless, convenient and comfortable mode that meets their needs. Promote a transportation network, including roadways, shared use paths, rail trails, rails with trails, and accessible walker facilities, which allow pedestrians and bicyclists to reach their destinations throughout the State or to connect to other modes of travel.

Objectives

- *Objective 8*. Work with citizens, municipalities, regional planning organizations, and other State agencies to develop, plan, and implement pedestrian and bicycle plans, projects, and programs.

- *Objective 12*. Provide a seamless transportation network for pedestrians and bicyclists by improving linkages between walking, bicycling and other modes of transportation.

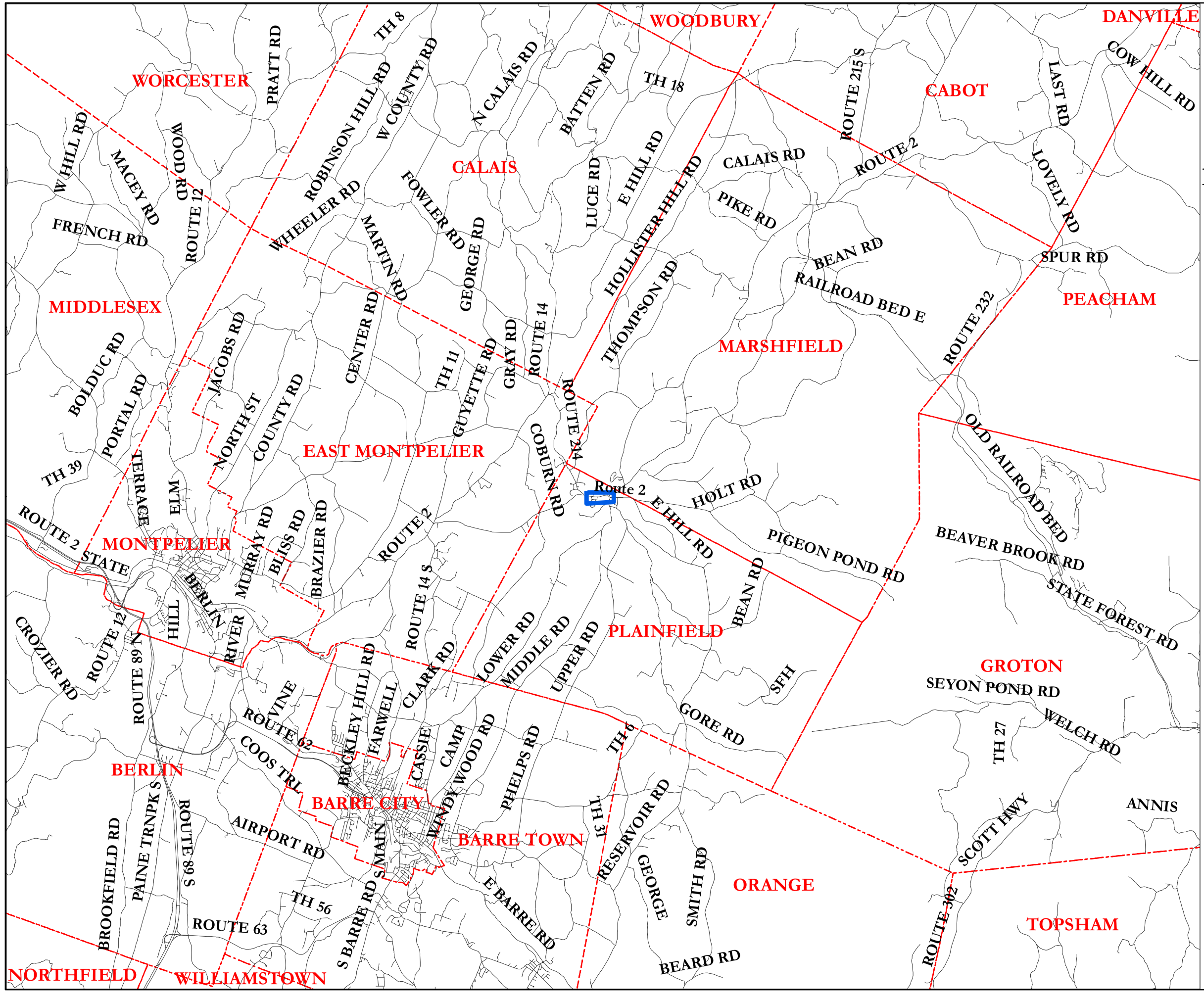
4. OTHER PLANS OR STUDIES

Final Scoping Report - Plainfield US 2 and Main Street Intersection Transportation Study – DuBois and King completed this study in 2005 for the Town and CVRPC. The study examined numerous alternative methods of addressing the grading, sight distance and alignment issues with the intersection and recommended a tee intersection. **Attachment EC-2** includes a

copy of the recommended layout. The layout included a sidewalk on the west and south side of the intersection as well as crosswalks at several locations near the intersection.

Pedestrian Bridge & South Side Sidewalk Scoping Study

Central Vermont Regional Planning Commission & The Town of Plainfield



Legend

- Study Area
- Town Line

Study Area Location

BROADREACH Planning & Design

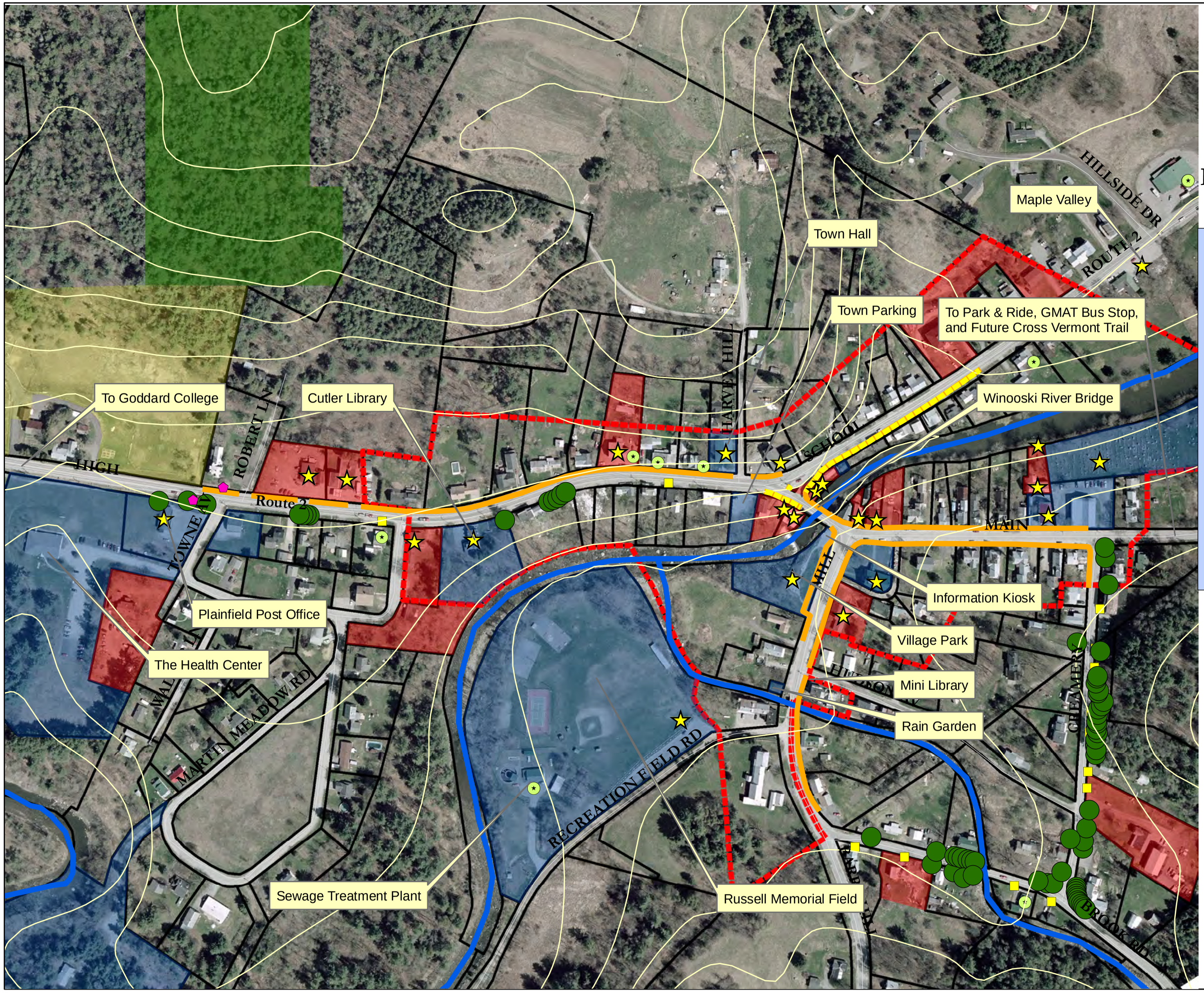
EIV Technical Services

Stantec

December 2013 Figure EC-1

Pedestrian Bridge & South Side Sidewalk Scoping Study

Central Vermont Regional Planning Commission & The Town of Plainfield



Legend

- Destinations
- Bus Stop
- 20 FT Contours
- Tree
- Mailbox
- Haz. Waste Sites
- Sidewalk
- Deteriorated Sidewalk
- Watercourses
- Commercial Use
- Agricultural
- Public/Intitutional
- Historic Distsrict
- Property Lines
- 1 Core Habitat

Existing Conditions: Natural & Cultural Resources

BROADREACH Planning & Design

EIV Technical Services

Stantec

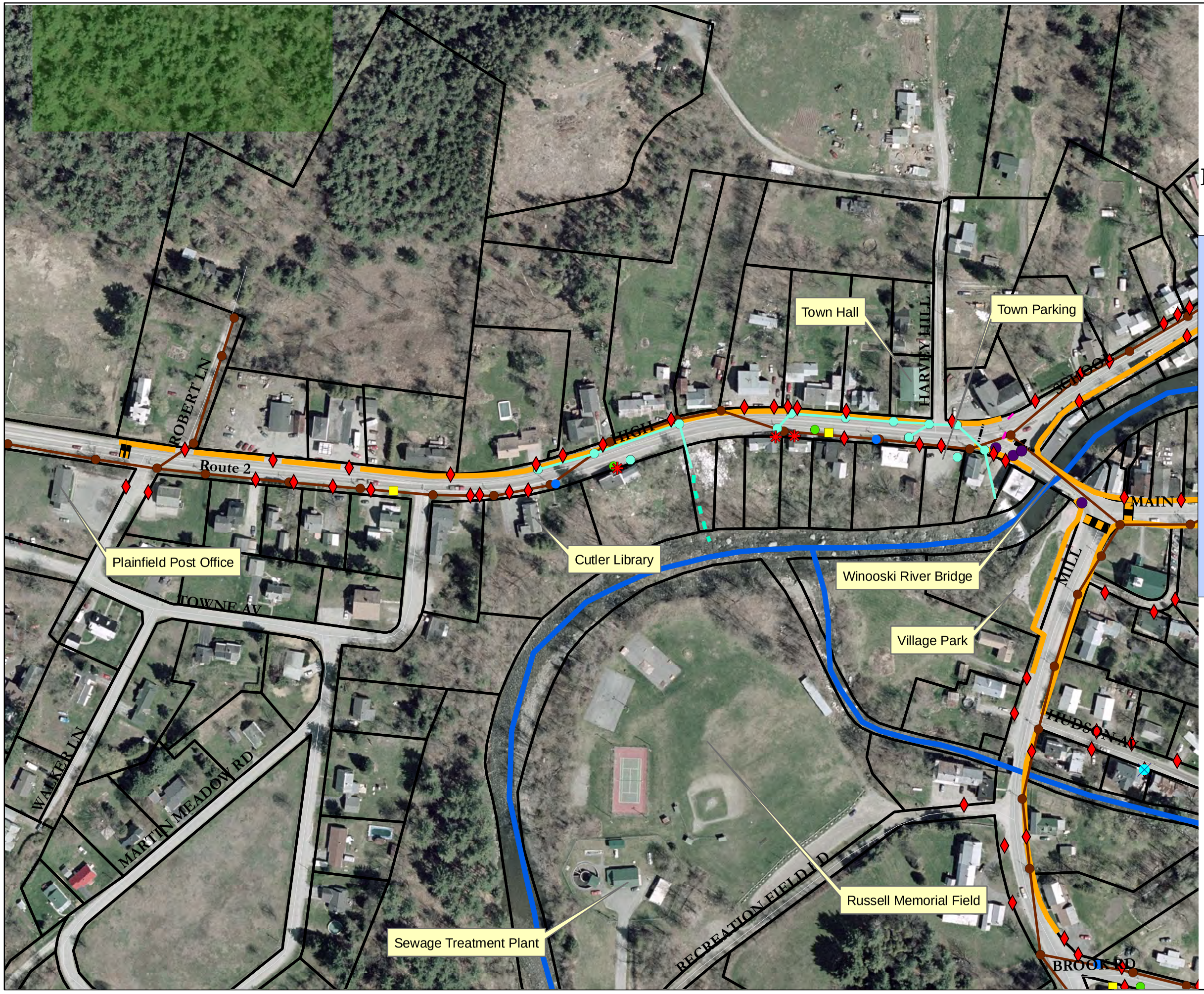
N W E S

0 75 150 300 450 600 Feet

June 7, 2013 Figure EC-2

Pedestrian Bridge & South Side Sidewalk Scoping Study

Central Vermont Regional Planning Commission & The Town of Plainfield



Legend

Unmarked Crosswalk		Curb Cut	
Marked Crosswalk		Water Valve	
Sidewalk		Hydrant	
Stairs		Manhole Cover	
ROW Issue		Storm Inlet	
Drainage Swale		Storm Drain	
Watercourses		Utility Poles	
Property Lines		Utility Line	
		Mailbox	

Existing Conditions: Transportation & Utilities

BROADREACH Planning & Design

EIV Technical Services

Stantec

N W E S

0 50 100 200 300 400 Feet

June 7, 2013

Figure EC-3

Attachment EC-1
Archeological and Historic Reviews

Phase I-A Archaeological Assessment (1996 CAA)

Archaeology Consulting Team, Inc.
P.O. Box 145
67 Lincoln Street
Essex Junction, Vermont 05453-0145
(802) 879-2017

MAR 07 [illegible]

March 6, 1995

Mr. Douglas Weber
Pinkham Engineering Associates, Inc
The Maltex Building
431 Pine Street
Burlington, Vermont 05401

Re: STP Tech (1)S -- Plainfield Bike and Pedestrian Path

Dear Mr. Weber:

Please find enclosed our Pre-Phase I-A assessment of the archaeological potential for the Plainfield Bike and Pedestrian Path Project. Also enclosed is our invoice for this project. Thank You.

Sincerely,

Douglas S. Frink
Principal Investigating Archaeologist

PRELIMINARY PHASE I-A ARCHAEOLOGICAL ASSESSMENT OF THE PLAINFIELD BIKE AND PEDESTRIAN PATH PLAINFIELD VERMONT

The Town of Plainfield Vermont, is proposing to construct a pedestrian and bicycle path under the Vermont Agency of Transportation STP Tech (1) Bicycle and Pedestrian Path Program. The segment of the proposed path being considered at this time is approximately 4 kilometers (2.50 miles) long. It would begin at Goddard College, and follow Route 2 east through the lower village, ending at the Maple Valley Cafe. There is a connecting loop starting at the Main Street bridge, which proceeds east to the junction of Maple Hill and East Hill Roads. Connecting with Main Street the path goes south along Creamery Street until Brook Road, which is followed to the Mill Street junction and proceeds along Mill to Main Street. The path then follows the Winooski River down stream from Mill Privilege to the Recreation Field, and from the recreation field to Martin Meadows and Cross Vermont Trail.

A preliminary archaeological assessment has been requested as part of the scoping phase of this project. Archaeology Consulting Team Inc., of Essex Junction, Vermont, has been retained by Pinkham Engineering Associates, Inc., of Burlington, Vermont, to provide a preliminary Phase I-A archaeological assessment of the potential for archaeological sites which may be affected by bike path construction activities.

The preliminary Phase I-A archaeological assessment consists of: 1) a brief review of the proposed project; 2) a review of the environmental and historical potential for archaeological resources which may be affected by the proposed project; and 3) whether further archaeological studies may be warranted. Following the preliminary documents research, a drive-by and/or walk-over reconnaissance survey is conducted to assess particular areas which may contain archaeological resources.

The project area is located in the Vermont Piedmont physiographic region. The Vermont Piedmont physiographic region contains the eastern foothills of the Green Mountains which are made up of a mixture of limestone, granite, and schist. The Landscape is characterized by gentle hills, broad valleys and quiet lakes. An occasional higher peak punctuates the region. The location of the Piedmont region in the lee of the Green Mountains, has a moderating effect on generally severe climate. Regional variation in topography, however produce numerous cold pockets and valleys. The predominate forest community in the Plainfield area consists of the northern hardwoods-hemlock-white pine grouping. A short distance to the north however a southerly extending lobe of the spruce-fir-northern hardwoods community is found.

The Plainfield segment of the Winooski River flows westerly along Route 2, and is fed by Great Brook from the south, and two unnamed tributaries feeding from the north. The bike path crosses

these drainages at eight corridor locations and parallels the Winooski River along two sections. The soils within project area are sandy and gravely soils formed in relic glacial lake and kame terrace deposits. Silty soils formed in flood deposits of the local drainages also occur.

There are two known Native American sites in the general vicinity of the project area, one in Plainfield along Great Brook and a second in East Montpelier along the Winooski River. Neither site has been studied and are of unknown temporal affiliation. The Winooski River flowing through the center of town formed part of a passageway known as the Newbury Trail. This important communications corridor linked the Abenakis living along Lake Champlain with the Cowasuck village located north of Newbury Vermont.

Historically, the Town of Plainfield was first settled around 1794. By 1804 the first store had opened on present day Creamery Street. By 1858 a thriving community with numerous residences, two churches, a school, blacksmith shop, machine shop, shoe shop, saw and grist mill, cider mill and hotel had been established.

The current settlement model used in determining site sensitivity in the state of Vermont suggests that sloping to level terrain of well-drained soils within 200 feet of water (existing, seasonal, or remnant) are the most likely to contain Native American sites. The project corridor is within relatively level terrain and the studied portion lies along Winooski River and its associated drainages. The corridor will cross existing water sources a total of eight times: the Winooski River in two areas, Great Brook in four areas and each unnamed tributary once. Additional portions of the path come within 200 feet of the Winooski River.

The settlement model based on topography and water indicates that along the Winooski River the potential for encountering Native American archaeological resources within the proposed Plainfield Bike and Pedestrian Path Project is very high. Native American sites may be encountered along the eight crossings of the Winooski River and its tributaries, and the areas within 200 feet of these waterways.

Part of the proposed path is to be built on already existing sidewalks and partly as new construction. The sidewalks are in disrepair and narrow requiring widening and resurfacing. Many of the potentially historic buildings in the village stand close enough to be affected by the sidewalk alteration. Buildings along areas without sidewalks may also be affected.

It is our recommendation that further archaeological investigations be conducted prior to any ground-disturbing activities to assess potential archaeological resources and how they may be affected by construction. First, design plans accurately detailing the proposed location of the pedestrian and bicycle path will be needed in order to determine which areas warrant further archaeological study. Geomorphological (landform) and pedomorphological (soils) assessments will be necessary to identify and

focus on specific areas that are likely to contain Native American sites within the proposed project corridor. We also recommend that in-depth, archival background research be undertaken to identify and locate the potential for historic sites dating to both the early commercial and residential use of the project area.

Historic Resources Review
(1996 CAA)

Liz Pritchett Associates

HISTORIC PRESERVATION • ARCHITECTURAL CONSERVATION

June 5, 1995

Douglas A. Weber, Engineering Consultant
Pinkham Engineering Associates
431 Pine Street
Burlington, VT 05401

Re: Letter Report - Historic Resources Review
VAOT Plainfield Village Pathway, Plainfield, Vermont

Dear Douglas,

This Letter Report will outline my findings, list anticipated issues, and make recommendations for future historic resources investigations, in regard to review of the above-referenced VAOT project.

INTRODUCTION

This report summarizes literature review conducted at the Vermont Division for Historic Preservation and the Vermont Historical Society, and site visit findings for possible adverse effects to historic resources along or adjacent to the proposed transportation pathway in Plainfield. All photographs were taken by Liz Pritchett during her site visit on May 25, 1995.

PROJECT AREA

Three pathway alignments were reviewed (Figure 1):

Route 2 Corridor This begins at the northwesterly terminus on Route 2, adjacent to Goddard College (photo #1), and extends easterly along the north side of Route 2 to the village center where it crosses to the south side of Route 2, extending northeasterly to the town line just prior to the Maple Valley Cafe (photo #11).

Village Core At the intersection of Route 2 and Main Street, the pathway follows the north side of Main Street across the bridge over the Winooski River and extends along both sides of Main Street easterly to Creamery St., where it extends southerly along the west side of the road to Elm St., continuing along the north side of Elm to Water Street. The pathway follows northerly along the east side of Water Street where, just south of the bridge over Great Brook it will return to Main Street along both sides of the road.

Martin Meadows This proposed alignment will follow the east bank of the Winooksi River from the mill privilege area at Main Street by the bridge, crossing to the west side of the river at the town recreation area, and extending up the bank to Martin Meadows southwest of the village.

The Route 2 Corridor and the Village Core alignments are proposed as 5 foot wide pedestrian sidewalks; bike users would be required to ride in the road. The Martin Meadows alignment is being considered, but not as seriously as the other two alignments, and would probably be a gravel path. The proposed Cross-Vermont Trail, for bikers, would connect with the village center along Water Street and extend north to Route 2.

Currently, sidewalks in varying states of repair, exist along much of the proposed alignment. Generally, the sidewalks within the village core are constructed of concrete, those outside of the village are of asphalt and are constructed along the shoulder of the roads.

MAPS

F. W. Beers' *Atlas of Washington County, Vermont, 1871* (Figure 4) indicates that Plainfield was relatively built up by the mid 19th century. Not only was Route 2 a stage road between Burlington and Maine, but also the Montpelier and Wells River Railroad had trackage through Plainfield by the 1860s. The town's growth and development was most likely directly associated with its location along these transportation corridors, as well as its

favorable site along the banks of the Winooski River which provided power for various milling enterprises. Many of the historic structures indicated on the Beers' map, within the project area, exist today in a generally intact condition.

HISTORIC SITES

National Register Most of the proposed pathway alignments fall within the Plainfield Village Historic District (see Figures 2 & 3), entered on the National Register of Historic Places in February 3, 1983. According to the National Register documentation, the Plainfield Village Historic District represents an intact nineteenth century village-scape. See the attached Statement of Significance for specific details of the distinctive character of the historic resources in Plainfield Village.

State Register Outside of the National Register District, two properties are listed on the Vermont Historic Sites and Structures Survey (see Figure 5). These two sites are the Greatwood Campus of Goddard College (VHSS #1) and the Harold and Marjorie Townsend house (VHSS #2). See the survey forms at the end of this report for details of the VHSS properties.

Bridges Three bridges within the project area are historic concrete bridges dating from the 1920s (see Photos 13, 24, 27). Although not yet listed on either the National or State Register, these three bridges may be eligible for the National Register, if an amendment were made to the National Register district.

POSSIBLE ISSUES

The proposed pathway follows an alignment along the roadways that in most sections either follows the path of an existing sidewalk and/or follows the side of the roadway with the widest yards fronting the structures, in comparison with the yards on the opposite side of the roads. In several areas however, preservation issues may arise when developing a possible alignment, because of possible adverse effects to the historic resources, including the *setting* of the historic resources along the alignments.

Specific areas of concern where the pathway appears to pass very close to significant resources are:

- the Town Hall and the (possibly historic) stone wall fronting the Town Hall
- the former Plainfield Hotel
- the bridge and all the structures in the village center along Main Street
- lawns, vegetation and fencing in shallow front yards

Repair or replacement of the three historic concrete bridges is an issue of concern.

RECOMMENDATIONS

Further investigations are necessary to determine if any additional structures or sites are eligible for the National Register. The Vermont SHPO will need to review designs for transportation paths through this proposed project area because of the existing National Register district, the two sites listed on the State Register, and other significant cultural resources that may not be listed on either the State or National Register.

Materials General recommendations are to retain the use of concrete for sidewalks where already existing, especially in the village core. Use hard pack gravel as the surface material for the remaining pathway alignments.

Please contact me if you would like additional information.

Sincerely yours,

Liz Pritchett

Liz Pritchett
Architectural Historian

attachments:
maps, survey forms, photos

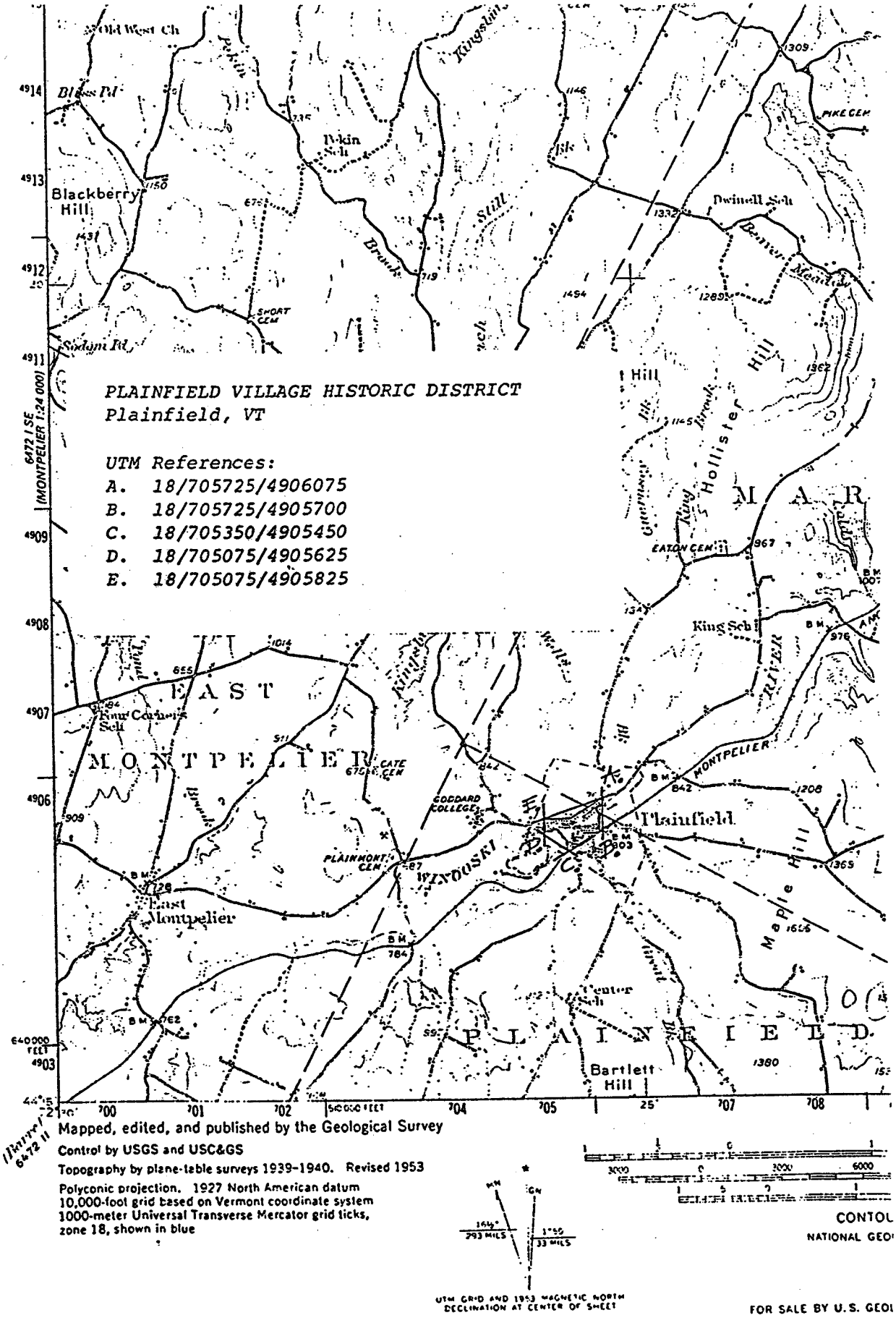


Figure 2
Plainfield Village Historic District
U.S.G.S. Map, 1953

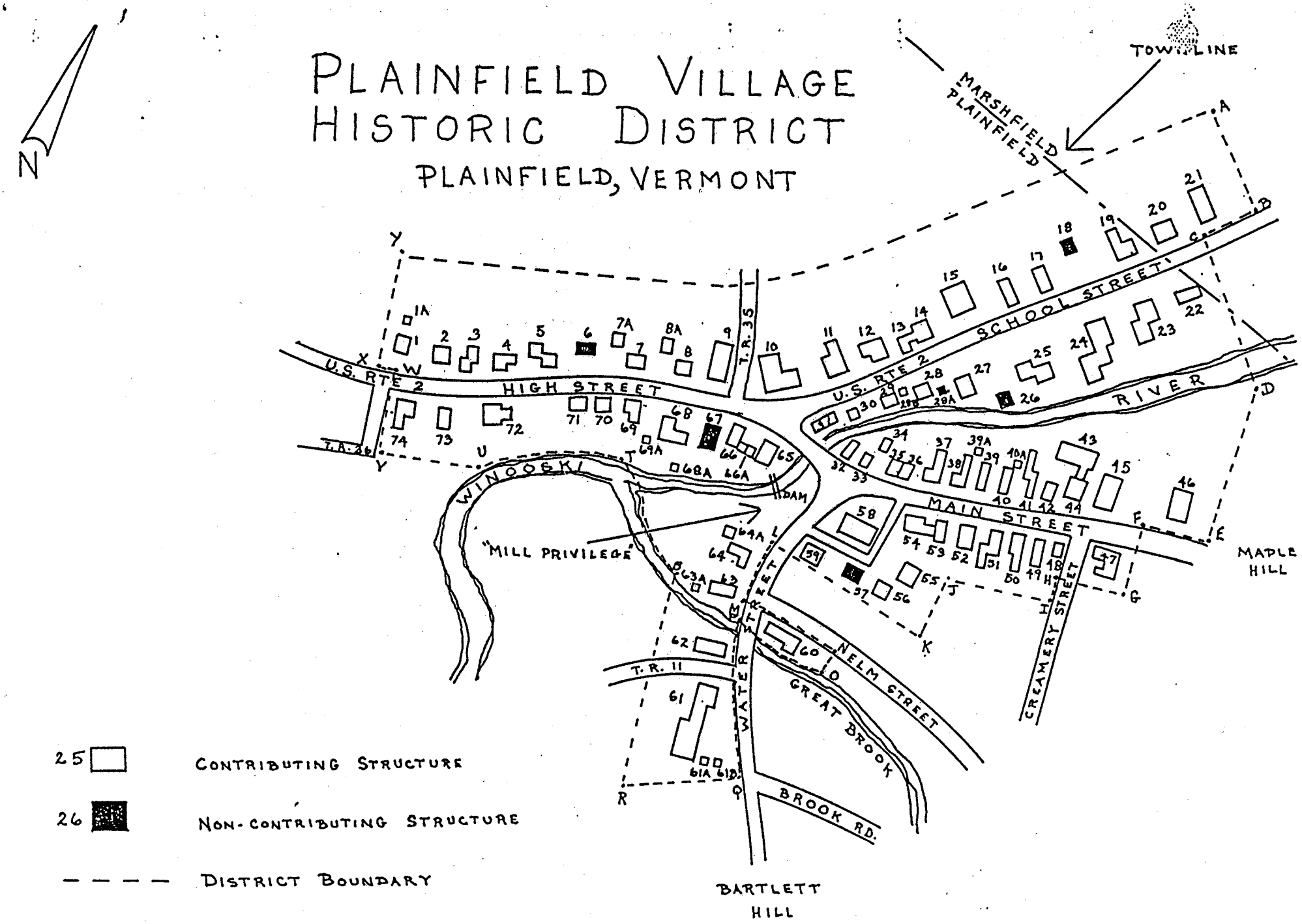
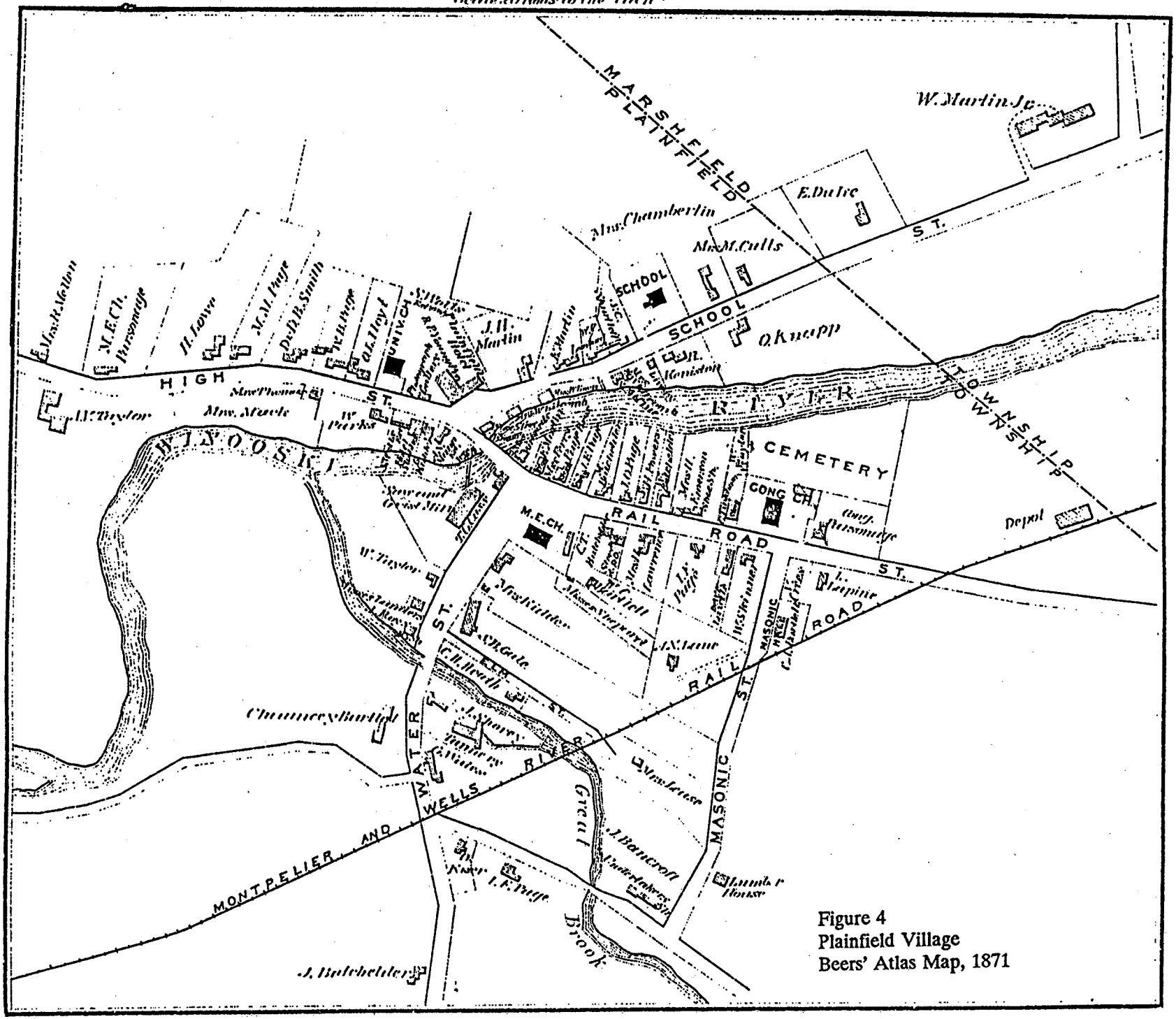


Figure 3
Plainfield Village Historic District
Sketch Map, 1982


PLAINFIELD
TOWN OF PLAINFIELD.
Scale 20 Rods to the inch
MARSHFIELD
PLAINFIELD
W. Martin Jr.
E. Dutre
Mrs. Chamberlin
Mr. M. Cutts
SCHOOL
SCHOOL
ST.
O. Knapp
M.E. Ch. Parsonage
H. Howe
M.M. Page
Dr. R.B. Smith
O.F. Hoyt
UNION CH.
J.H. Martin
HIGH
ST.
CEMETERY
CONG CH.
M.E. CH.
RAIL ROAD
ST.
Depot
TOWNSHIP
WINOOSKI
RIVER
WATER ST.
MASONIC ST.
RAIL ROAD
ST.
MONTPELIER AND WELLS RIVER
Grant
Brook
J. Batchelder
Figure 4
Plainfield Village
Beers' Atlas Map, 1871

8. Significance

Period	Areas of Significance—Check and justify below			
___ prehistoric	___ archeology-prehistoric	___ community planning	___ landscape architecture	___ religion
___ 1400–1499	___ archeology-historic	___ conservation	___ law	___ science
___ 1500–1599	___ agriculture	___ economics	___ literature	___ sculpture
___ 1600–1699	_X_ architecture	___ education	___ military	___ social/ humanitarian
_X_ 1700–1799	___ art	___ engineering	___ music	___ theater
_X_ 1800–1899	___ commerce	___ exploration/settlement	___ philosophy	___ transportation
_X_ 1900–	___ communications	___ industry	___ politics/government	___ other (specify)
		___ invention		

Specific dates N/A **Builder/Architect** N/A

Statement of Significance (in one paragraph)

The Plainfield Village Historic District represents an intact nineteenth century village-scape. Endowed with a moderately high percentage of representative examples of nineteenth century architecture, the village's historic significance lies not so much in the survival of a few outstanding examples as in the architectural cohesiveness of the village-scape as a whole, including a significant concentration of brick buildings derived from an early nineteenth century local building tradition. Few other villages of similar origins and purpose within the state can claim such uniformity, especially on such an extensive scale. The only significant losses to this well preserved environment have been those of the third generation sawmill and grist mill, located next to the falls of the Winooski River on the site traditionally referred to as the "Mill Privilege" and destroyed by fire in 1947, and the 1958 demolition of the Montpelier and Wells River Railroad Depot.

The Plainfield Village Historic District, which encompasses the village's historic core, has always served as the social, cultural, educational, governmental, commercial and manufacturing heart of the town. No other village centers ever developed in competition within the town limits, principally because they lacked the essential water power to do so. Located as it is in the northernmost corner of the town with a portion of its incorporated village limits overlapping into the neighboring town of Marshfield, it has also served, to a lesser degree, as a commercial center for the western part of that town as well.

At the village center survive not only the first frame house (#55, 1798) but what may possibly be the two oldest surviving brick, Federal style commercial buildings in the state. Dated by local oral tradition to 1803-04, but only documentable to 1826-27, the two, two-and-one-half story, gable-front stores are a matched pair, a unique survival.

Besides the village school (#15), three of the four original churches (#'s 9, 45 and 58 - only one of these presently serves as a church, the other two having been remodeled into the town hall and the town fire station), the original fire station (#34), a second generation hotel (Plainfield Inn, #10), and seven of the eight original stores (#'s 31, 32, 33, 35, 36, 53 and 65), the historic district also contains fourteen pre-Civil War brick dwellings, an unusually high number for a state traditionally dependent on wood frame construction for rural development (#'s 2, 4, 8, 11, 12, 37, 46, 50, 52, 54, 61, 63, 64 and 74). All but two are one-and-one-half stories in height, and all but three are Classic Cottages in design. Stylistically, they represent the Federal, Greek Revival and Gothic Revival. Together with the two Federal style brick stores, they represent an outstanding concentration of a local building tradition.

Looking up from the Main Street Bridge towards the northwest, the intersection of High, School and Main Streets is overlooked by the Plainfield Town Hall (#9 - formerly the Universalist Church) and the former Plainfield Inn (#10). Looking down Main Street from High, the view across the bridge is constricted between two flat-roofed, Italianate Revival commercial buildings before opening out once again into the village's historic commercial center. This area, dominated on the east side by the spruce enshrouded, fieldstone walled Plainfield United Methodist Church (#58) and on the north by a pair of matching, Federal style, brick stores (#'s 35 and 36), is the site of the "Mill Privi-

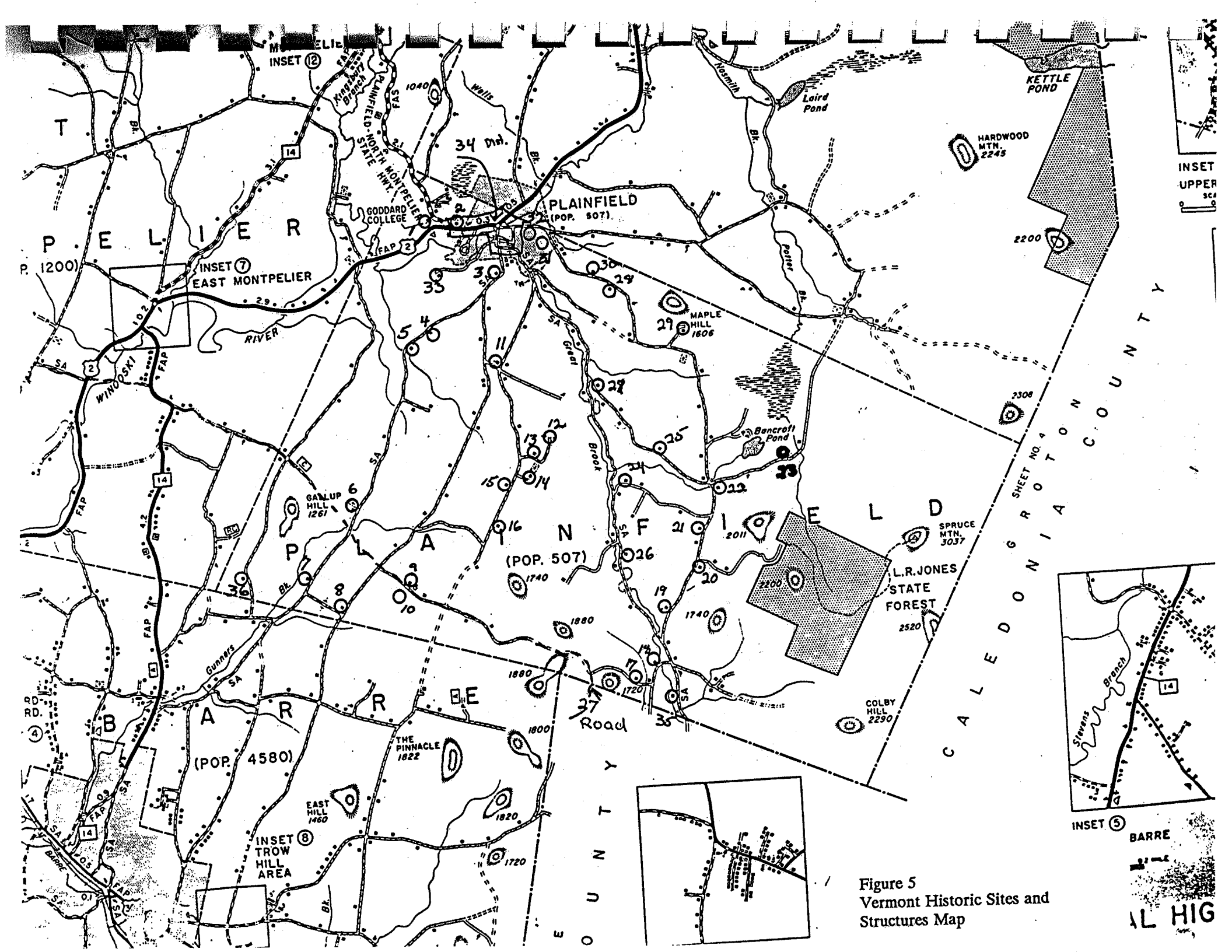


Figure 5
Vermont Historic Sites and Structures Map

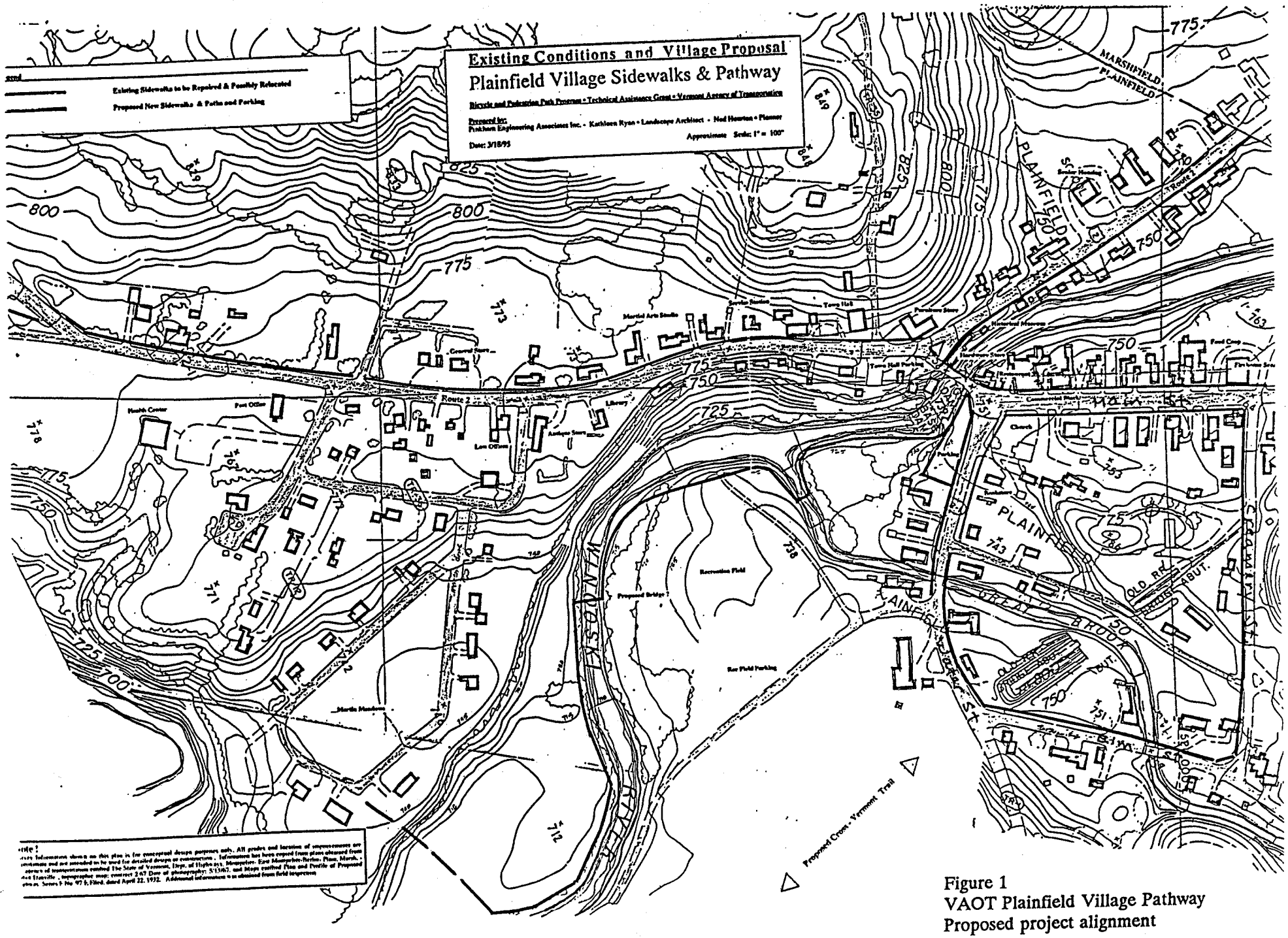


Figure 1
VAOT Plainfield Village Pathway
Proposed project alignment

STATE OF VERMONT
Division for Historic Preservation
Montpelier, VT 05602

HISTORIC SITES & STRUCTURES SURVEY
Individual Structure Survey Form

SURVEY NUMBER: 1214-2

NEGATIVE FILE NUMBER: 76-A-145, 76-A-295

UTM REFERENCES:
Zone/Easting/Northing
18 704800 4905800

U.S.G.S. QUAD. MAP: Plainfield Quad., 15' Series

PRESENT FORMAL NAME:

ORIGINAL FORMAL NAME:

COUNTY: Washington
TOWN: Plainfield
LOCATION: North side of U. S. route #2 East of Road to N. Montpelier.
COMMON NAME: Allen Wood
FUNCTIONAL TYPE: farmhouse
OWNER: Harold Townsend
ADDRESS: & Marjorie Plainfield, Vt.

PRESENT USE:
ORIGINAL USE:
ARCHITECT/ENGINEER:
BUILDER/CONTRACTOR:

PHYSICAL CONDITION OF STRUCTURE:
Excellent ■ Good ☐
Fair ☐ Poor ☐

ACCESSIBILITY TO PUBLIC:
Yes ☐ No ■ Restricted ☐

STYLE: Federal/Greek Revival

LEVEL OF SIGNIFICANCE:
Local ■ State ■ National ☐

DATE BUILT: c. 1827

GENERAL DESCRIPTION:
Structural System large
1. Foundation: Stone ■ Brick ☐ Concrete ☐ Concrete Block ☐
2. Wall Structure
   a. Wood Frame: Post & Beam ☐ Balloon ☐
   b. Load Bearing Masonry: Brick ■ Stone ☐ Concrete ☐
      Concrete Block ☐ 9-course American Bond
   c. Iron ☐ d. Steel ☐ e. Other:
3. Wall Covering: Clapboard ☐ Board & Batten ☐ Wood Shingle ☐
   Shiplap ☐ Novelty ☐ Asbestos Shingle ☐ Sheet Metal ☐
   Aluminum ☐ Asphalt Shingle ☐ Brick Veneer ☐ Stone Veneer ☐
   Bonding Pattern: Other:
4. Roof Structure
   a. Truss: Wood ■ Iron ☐ Steel ☐ Concrete ☐
   b. Other:
5. Roof Covering: Slate ■ Wood Shingle ☐ Asphalt Shingle ☐
   Sheet Metal ☐ Built Up ☐ Rolled ☐ Tile ☐ Other:
6. Engineering Structure:
7. Other:

Appendages: Porches ■ Towers ☐ Cupolas ☐ Dormers ☐ Chimneys ■
Sheds ☐ Ells ■ Wings ■ Bay Window ☐ Other:
Roof Style: Gable ■ Hip ☐ Shed ☐ Flat ☐ Mansard ☐ Gambrel ☐
Jerkinhead ☐ Saw Tooth ☐ With Monitor ☐ With Bellcast ☐
With Parapet ☐ With False Front ☐ Other:
Number of Stories: 1 1/2
Number of Bays: 5 x 3 Entrance Location: central
Approximate Dimensions: 22 x 30 & wing

THREAT TO STRUCTURE:
No Threat ■ Zoning ☐ Roads ☐
Development ☐ Deterioration ☐
Alteration ☐ Other:

LOCAL ATTITUDES:
Positive ■ Negative ☐
Mixed ☐ Other:

ADDITIONAL ARCHITECTURAL OR STRUCTURAL DESCRIPTION:

House has boxed cornice and eave returns. 12/12 sash windows have rectangular cut granite lintels and sills. Both the front parlor and narrow rear bedroom on first floor have fireplaces which use the same single end chimney. A central stair is enclosed. Front door, with 3/4 length sidelights with leaded panels on interior, has massive granite lintel, sill and steps. Six panel door has latch handle with tails. Porch on front of wing has turned posts and brackets.

RELATED STRUCTURES: (Describe)

Barn. Horse barn, now used as an office.

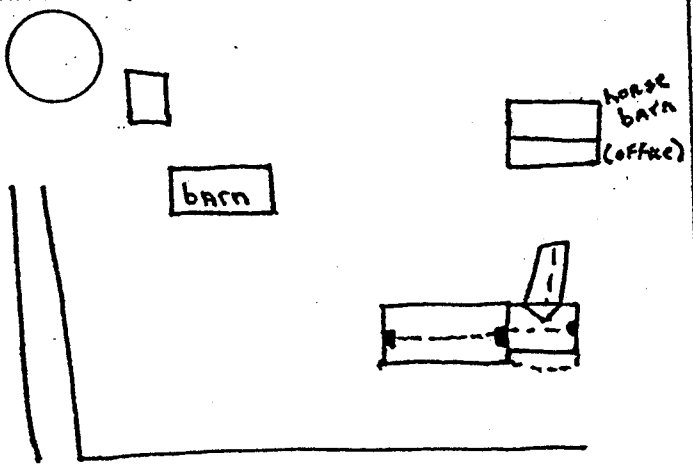
STATEMENT OF SIGNIFICANCE:

This brick cottage is one of a group of brick houses built in Plainfield and East Montpelier from locally made bricks and granite. The central door surround with attenuated paneled pilasters and drilled dentil ornament, retains Federal style characteristics into the early part of the Greek Revival period. The heavy granite lintels are characteristic of the Greek Revival period. The wing, built originally as a log house, was rebuilt after the construction of the brick portion. A fireplace with bee hive oven is still used. Outstanding interior woodwork includes a parlor fireplace mantel with unusual gorged ornamentation.

REFERENCES:

Harold and Marjorie Townsend.

MAP: (Indicate North in Circle)



SURROUNDING ENVIRONMENT:

Open Land ☐ Woodland ☐
Scattered Buildings ☐
Moderately Built Up ■
Densely Built Up ☐
Residential ■ Commercial ☐
Agricultural ☐ Industrial ☐
Roadside Strip Development ☐
Other:

RECORDED BY:

Harvey M. Kaplan

ORGANIZATION:

VT. Div. for Historic Preservation

DATE RECORDED:

Summer-1976

COUNTY Washington TOWN Plainfield

NAME OF SITE	SITE NO.	NEGATIVE FILE NO.	N.R.
Greatwood Campus of Goddard College	1214-1	78-A-334	
Harold-Marjorie Townsend	1214-2	76-A-295 76-A-145	
H. Gordon-Marion Martin	1214-3	76-A-145	
E. R. Armstrong	1214-4	76-A-145	
Kenneth Russell	1214-5	76-A-145	
Jean Morrissey	1214-6	76-A-145	
Donald-Janna Osman	1214-7	76-A-145	
Grant-Grace McClellan	1214-8	76-A-145	
Peter, Annie & Joseph Griffith	1214-9	76-A-145	
South District School	1214-10	76-A-145	
Center School	1214-11	76-A-145	
Bartlett-Petit House	1214-12	76-A-144	
Howard Bartlett House	1214-13	76-A-144	
Carroll, Carol & Bessie Farnham	1214-14	76-A-144	
L. R.-Lois LaVallee	1214-15	76-A-144	
Mark N. Yorra & Catherine M. Gates	1214-16	76-A-144	
Ethel Bower	1214-17	76-A-295	
Carroll Laundry	1214-18	76-A-295	
Ernest Wheeler	1214-19	76-A-295	
Lester Macek	1214-20	76-A-295	
The Dix Place	1214-21	76-A-295	
George-Jean Olson	1214-22	76-A-295	
Old Bean Farm	1214-23	76-A-295	
Mrs. Horace P. Lovell	1214-24	76-A-295	
William Prescott	1214-25	76-A-295	
June Arnold	1214-26	76-A-145	
Andree & Albert Griggs	1214-27	76-A-295	
Andrew Potok	1214-28	76-A-295	

COUNTY Washington TOWN Plainfield

NAME OF SITE	SITE NO.	NEGATIVE FILE NO.	N.R
B. Batchelder Estate	1214-29	76-A-295	
Dale Bartlett	1214-30	76-A-298	
N. Murray	1214-31	76-A-298	
John-Mildred Bailey	1214-32	76-A-298	
Robert-Leonora Light	1214-33	76-A-145	
Plainfield Village Historic District	1214-34	76-A-295; 298 See 76-A-137; 138 N.R.	
Peduzzi House	1214-35	78-A-334; 76-A-295	
Mr. Martin Leinwohl	1214-36	78-A-334	
The Newbury Road	1214-37	78-A-335	

STATE OF VERMONT
Division for Historic Preservation
Montpelier, VT 05602

HISTORIC SITES & STRUCTURES SURVEY
District ☐ Complex ☐ Survey Form

SURVEY NUMBER: 1214-1
NEGATIVE FILE NUMBER(S):
78-A-334, 79-A-10
UTM REFERENCES:
Zone/Easting/Northing
A 18 704250 4905750
B
C
D
U.S.G.S. QUAD. MAP:
Plainfield Quad., Series 15'

COUNTY: Washington
TOWN: Plainfield
LOCATION: West of Plainfield Village, Northwest of intersection U. S #2 & road to north Montpelier.
NAME OF DISTRICT:
TYPE OF DISTRICT:
PHYSICAL CONDITION OF STRUCTURES:
Excellent % Good %
Fair % Poor %
LEVEL OF SIGNIFICANCE:
Local ☐ State ■ National ■
THEMES:

COMPLEX INFORMATION ONLY

COMMON NAME:
Greatwood Campus of Goddard College
PRESENT FORMAL NAME:
ORIGINAL FORMAL NAME:
Greatwood Farm
TYPE OF COMPLEX: Educational
TYPES OF STRUCTURES:
Manor house and adapted farm buildings
PRESENT USE: educational
ORIGINAL USE: agricultural
ARCHITECT/ENGINEER: James T. Kelly, Architect, Arthur Shurcliff, Landscape
BUILDER/CONTRACTOR:
ACCESSIBILITY TO PUBLIC:
Yes ■ No ☐ Restricted ☐

STATEMENT OF SIGNIFICANCE:

Plainfield's Greatwood Farm is an unusual complex of buildings, representing a major architectural and cultural statement by a prominent local family. Built for Willard Shepard Martin in 1908 by a Boston architect, James T. Kelly. It utilized the site and barn of the Martin family farm originally settled in the early 1800's. The main house is a large, shingled mansion with formal gardens to the rear. The architect was reputedly influenced by the bungalows of India, a typical theme of this era. The buildings had hipped roofs with wide overhanging eaves and exposed rafters. The distinctive shingled agricultural complex forms a quadrangle around a two-story clock house.

Mr. Martin was educated at Goddard Seminary in Barre, Vermont and Tufts College (1893). For many years he was associated with Mead-Morrison Manufacturing Co. of Boston, New York and Chicago. In 1929 he was treasurer and general manager of that company and maintained a winter home in Cambridge, Mass. "Greatwood Farm", the principal family home, was renowned for its prize Shropshire sheep, milking Shorthorn cattle and trained sheep dogs. Mr. Martin was the president of the Milking Shorthorn Society of the U. S. and, at the farm, hosted agricultural lectures on "Sheep Days". The estate appeared in "The Field Illustrated" of March 1920 as "Vermont's finest farm". (It at one time contained 1500 acres of fields and 4800 acres of woodland.)

The Martins relocated U. S. Route #2 that runs along the south of the Greatwood complex, since the original road ran directly through the estate. The area was landscaped with masses and avenues of trees, which have now outgrown the design of Arthur A. Shurcliff (Harolds, Graves and Shurcliff of Boston) which includes gardens bounded by dry stone walls varying in height from three to ten feet tall. A lower garden (on map) adjacent to the main house is divided into two parts by a wooden fence. One part contained a rose garden and small pool, the other a formal garden with hedges and a pergola. Stone steps lead from the pergola to a rectangular pool

THREAT TO STRUCTURES:
No Threat ☐ Zoning ☐ Roads ☐
Development ☐ Deterioration ☐
Alteration ■ Other:

LOCAL ATTITUDES:
Positive ■ Negative ☐
Mixed ☐ Other:

Survey Number: 1214-1

Negative File Number: 78-A-334, 79-A-10

STATEMENT OF SIGNIFICANCE:

with five rams' head water spouts in the stair well location and then to the upper walled garden (B on map), the Garden House (a formal step-gabled Tudor Revival miniature of unusually fine detail and craftsmanship) and a brick greenhouse.

Goddard College bought the complex in 1938, after Willard Martin's death and moved their operations here from Barre. They removed the dormers from the barn roofs, but left most of the complex substantially intact.

1214-2

Liz Pritchett Associates

HISTORIC PRESERVATION • ARCHITECTURAL CONSERVATION

June 5, 1995

Curtis Johnson, Survey Manager
Vermont Division for Historic Preservation
135 State St., Drawer 133
Montpelier, VT 05633-1201

Re: Letter Report - Historic Resources Review
VAOT Plainfield Pedestrian Path, Plainfield, Vermont

Dear Curtis,

Attached is the Letter Report that outlines my findings, lists anticipated issues, and makes recommendations for future historic resources investigations, in regard to review of the above-referenced VAOT project.

As this project is for a pedestrian walkway, five feet in width, it appears that the proposed alignment is feasible, although its proximity to various historic resources and the existence of historic concrete bridges along the proposed route, may create preservation issues of adverse effect. I have recommended that further review occur when a project design is drafted.

I look forward to your comments. Feel free to call me if you have questions.

Sincerely,

Liz Pritchett

Liz Pritchett
Architectural Historian

cc. Douglas Weber, Pinkham Engineering

58 EAST STATE ST. MONTPELIER, VERMONT 05602 • 802-229-1035

AGENCY OF DEVELOPMENT
and
COMMUNITY AFFAIRS

DIVISION FOR HISTORIC PRESERVATION
Preserving Vermont's historic, architectural, and archeological resources

STATE OF VERMONT

August 1, 1995

Douglas Weber
Pinkham Engineering Associates
431 Pine Street
Burlington, VT 05401

Re: Plainfield Village Pathway, AOT.

Dear Mr. Weber:

The Division has reviewed Liz Pritchett's letter report regarding the above-referenced project and concurs with her findings and recommendations regarding the proposed project's potential to impact historic structures.

The Division is providing you and the Federal Highway Administration (FHWA) with the following information in its effort to assist the FHWA to meet its obligation to comply with 36 CFR 800, regulations established by the Advisory Council on Historic Preservation to implement Section 106 of the National Historic Preservation Act. Please consider these comments preliminary.

Under the Act, "historic properties" include historic buildings, structures, historic districts, historic landscapes and settings, and recorded or potential archeological resources that may be eligible for inclusion in the National Register of Historic Places.

The proposed project involves construction of a transportation path in Plainfield Village. Portions of the proposed pathway follow along existing sidewalks. The project will also include construction of new stretches of path, parking areas and two new stream crossings.

The views of the State Historic Preservation Officer on further actions that FHWA must take to identify historic properties that may be affected by the above undertaking in accordance with 36 CFR 800.4a(ii) are as follows.

The proposed corridor of the transportation path will need to be inventoried for the presence of archeological resources. It is therefore necessary for the FHWA to assess or cause to have assessed the impact of this project on any prehistoric or historic archeological resources that may be identified.

> A 36CFR-61 qualified consulting archeologist should conduct a Phase IA archeological study to determine the potential existence of archeological properties in the project area. All archeological studies must meet the *Secretary of the Interior's Standards for Archeological documentation* [48 FR 44716]. (As an aid to successfully meeting the Standards, the Division has amplified and clarified them in its *Guidelines for Conducting Archeological Studies*, available upon request.)

Federal regulations require that federal agencies, or their agents, provide the SHPO with the above information regarding historic resources within the project area and the project's potential to impact those resources. It is the SHPO's responsibility to review the submitted information, confirm that it is complete and accurate, and either concur or not concur with the conclusions and recommendations contained therein regarding the impact of the proposed project on Vermont's historic and archeological resources.

By regulation, the Division is encouraged to assist the FHWA in meeting its obligation to comply with the National Historic Preservation Act. Please call if you have any questions.

Sincerely,
DIVISION FOR HISTORIC PRESERVATION
Suzanne C. Jamele

for Eric Gilbertson
Director/Deputy State Historic Preservation Officer

cc: Kate Quinn, FHWA
Duncan Wilkie, AOT
Robin Pratt, RAPT
Plainfield Planning Commission
Central Vermont Regional Planning Commission

Miscellaneous Information on Historical Nature of Project Area

8. von Shummer House, Greek Revival/Gothic Revival style, c.1838.

One-and-one-half story, five-bay facade, rough-cut granite block foundation above grade, wood frame, brick (running bond) veneer, gable roof with center-bay gable wall dormer. Trabeated brick lintels consisting of a single header course; lintels have been painted to appear splayed. Boxed eave with deep, plain fascia. Floor-to-ceiling, double-hung windows in gable wall dormer above front entrance (one window), and on the first and second floors of the east gable elevation (two windows per floor). One-bay entrance porch and two-bay east side porch share similar detail: one story, flat roof, posts which in cross-section have the plan of a Greek cross, decorative wrought iron cresting with fleur-de-lis and pointed arch motifs, and wrought iron brackets.

Wood frame, clapboarded, gable roof wing on west end of main block. Two-story shed roof addition on rear (north) elevation of main block

Probably built by Harrison Ketchum, who lived here in 1858 and was first selectman of Plainfield in 1859 and 1860.

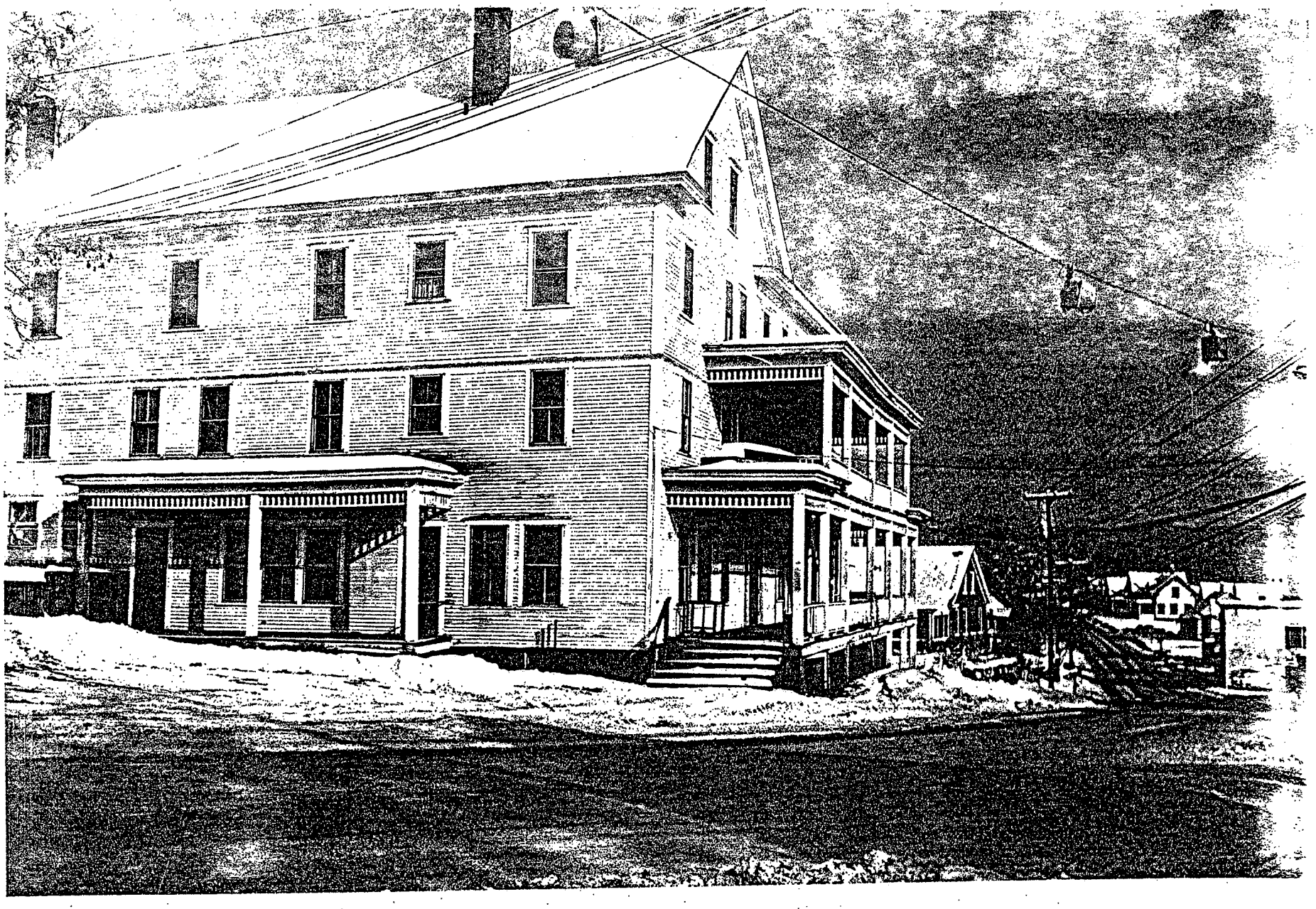
8A. Two-and-one-half story, wood frame, clapboarded, gable roof barn with gable-front orientation and irregular fenestration; c.1860.

9. Town Hall, Greek Revival style, 1841 (originally, Universalist Church; converted to Plainfield Town Hall and Plainfield Opera House in 1911).

One-and-one-half story with full basement story exposed on front facade, rough-cut granite block foundation above grade on other facades. Wood frame, clapboard siding, gable roof with pedimented front gable elevation. Doric corner pilasters and intermediate wall pilasters on sides support full entablature which returns across facade to form gable pediment; triangular louvered fan in pediment. Paired, tall rectangular windows with transom framed by architrave molding and corner blocks. In the 1911 remodeling, the original entrances on the facade (one on each side of existing center window) were removed and the basement story exposed and basement entrance and windows installed. The bell tower was also removed at that time.

10. Inn (former Plainfield Inn), retarditaire vernacular Greek Revival style, 1914 (original, Federal style, wood frame, clapboarded, brick gable end, gable roof inn built in 1833-37, burned in 1914.)

Three-and-one-half story, L-shaped plan, wood frame, clapboard siding, intersecting gable roof with gable end on facade. Full entablature with gable end returns; continuous molded belt course at height of second floor window lintels; entrance with sidelights; irregular fenestration, 2/2 sash. Six-bay, two-story porch on School Street facade, stepped in one bay on each end on second story, with balustered railing and spindle valance; one-story porch on west elevation with spindle valance.



#10

28. Wild House, vernacular Queen Anne style, c.1895.

One-and-one-half story, wood frame, asbestos shingle siding, gable roof with front gable elevation. Wood frame, clapboarded, gable roof wing with attached porch supported by turned posts with scroll brackets.

28A. Two-bay, gable-roofed garage with textured wood siding, c.1965. Non-contributing.

28B. One-bay, gable-roofed garage with shingle siding, dry laid stone foundation, c.1900.

29. Harmon House, Italianate Revival style, c.1880.

Two-story, wood frame, clapboard siding, flat roof. Bracketed cornice; molded window lintels. Paired and tripled windows on front.

30. Office, c.1925. One-and-one-half story, wood frame, wood shingle siding, gambrel roof. Entrance with paired doors beneath gable wall dormer.

31. Plainfield Hardware and Supply, Italianate Revival/vernacular Queen Anne style, 1919.

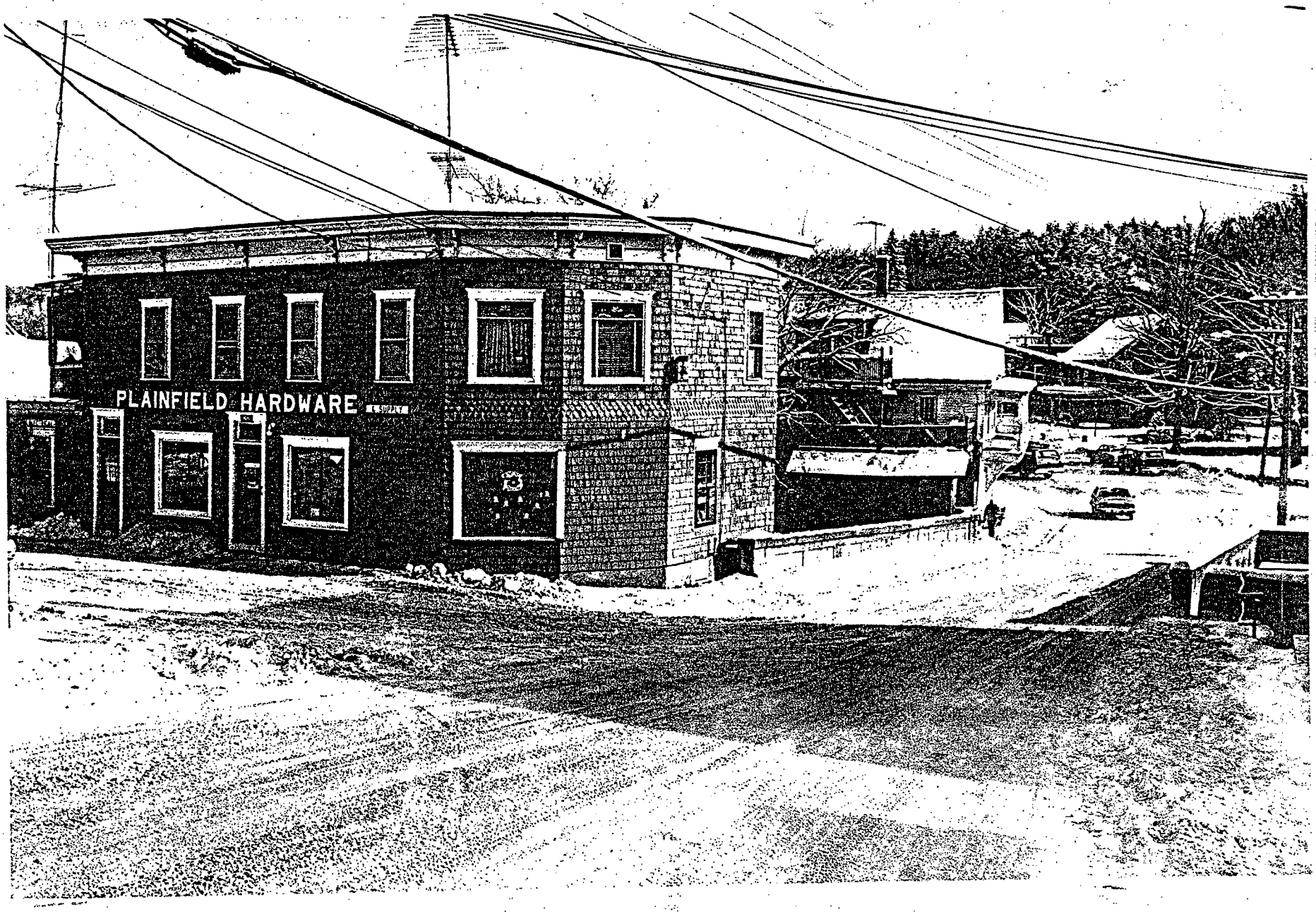
Two-story, wood frame, wood shingle siding, flat roof. Principal polygonal front corner with stained glass transomed second floor "picture" windows; molded window and door lintels; decorative belt course with sawtooth motif between first and second floor windows; bracketed cornice. Storefront composed of separate transomed entrances and flanking, plate glass display windows, with one window located on "rounded" corner. One-story, wood frame, wood shingled, flat and gable roof wing and sheds; overhead garage door in wing.

32. The Riverhouse, Greek Revival style, c.1858.

Two-and-one-half story, wood frame, clapboard siding, gable roof with front gable elevation. Partial entablature with gable end returns. Flat-roofed, overhanging, second floor porch across facade with balustered railing and chamfered posts supported by large-scale brackets. Storefront composed of entrance in each outside bay and two double-hung windows in center bay between overhanging porch brackets. New exterior wood fire escape on west elevation; existing entrances replaced, new fire escape entrances and exits added.

33. Lickety Split Restaurant (formerly Juanita's Cafe), Greek Revival style, c.1850.

One-and-one-half story, three-bay facade, wood frame, clapboard siding, gable roof with front gable elevation. Cornice returns. Shed roof canopy across facade supported by large-scale brackets; porch across east elevation. Storefront composed of separate center entrance and flanking, six-pane display windows.



#31

MEMO

VTrans Policy & Planning

To: Scott Newman, Deputy SHPO

From: Aimee Neveau
Regional Planning Coordinator

Date: October 5, 2004

Subject: Plainfield US 2 & Main Street

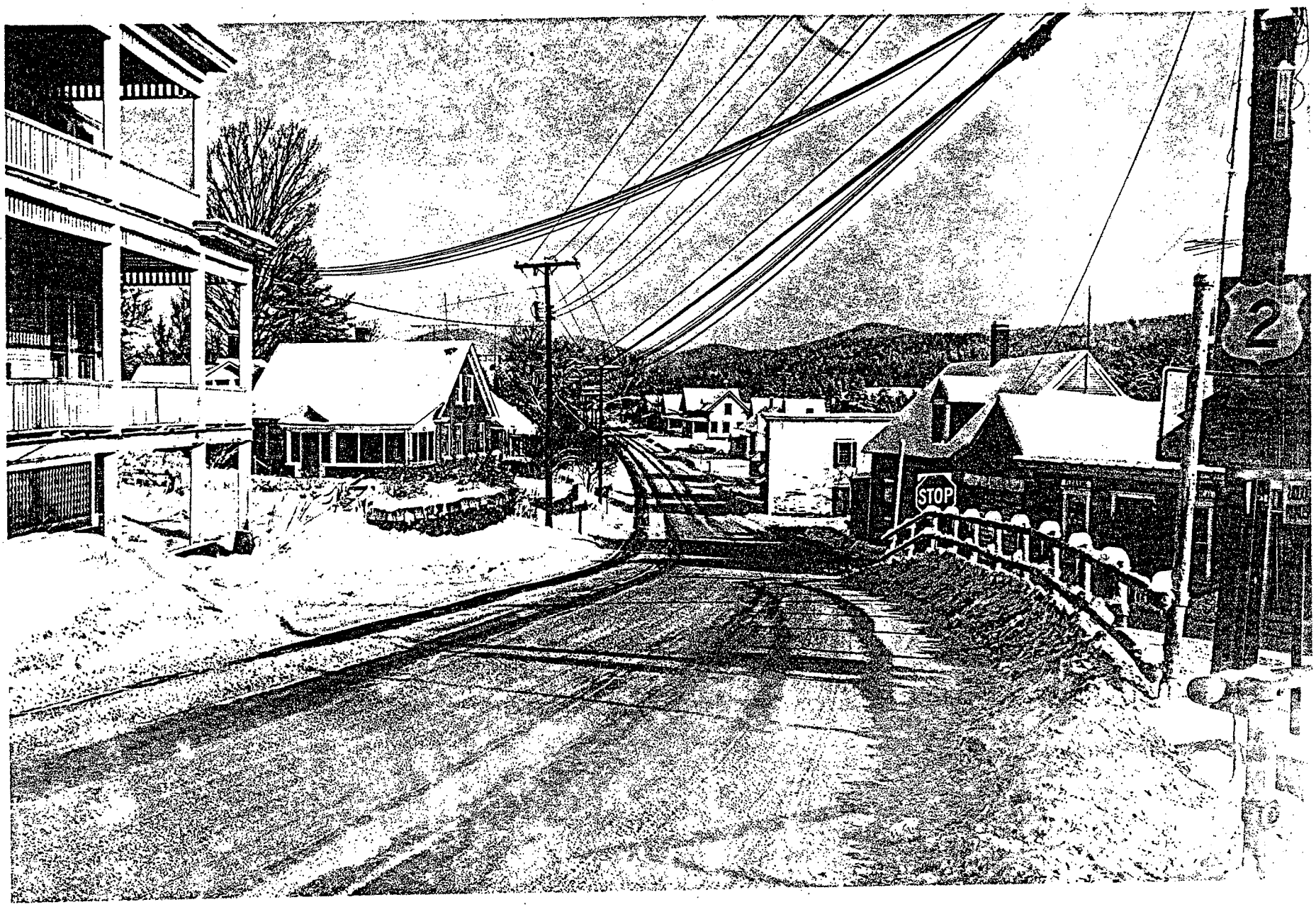
Please find attached a plan view of the existing conditions at the intersection of US 2 and Main Street in Plainfield, Vermont. At a meeting with Dubois & King, Steve Gladczuk, Central Vermont Regional Planning Commission, and the Traffic Operations Section of VTrans, there were discussions regarding the sight distance (as you may note with the pictures on the plan view) and significant grades of this intersection as it relates to safety.

Many changes to the intersection to improve this intersection that were discussed revolved around the porch of the Plainfield Furniture Store. The concern is that in order for pedestrians to safely cross the intersection, changing the grade, signal location, the porch to the building appears to be problematic for any of these alternatives.

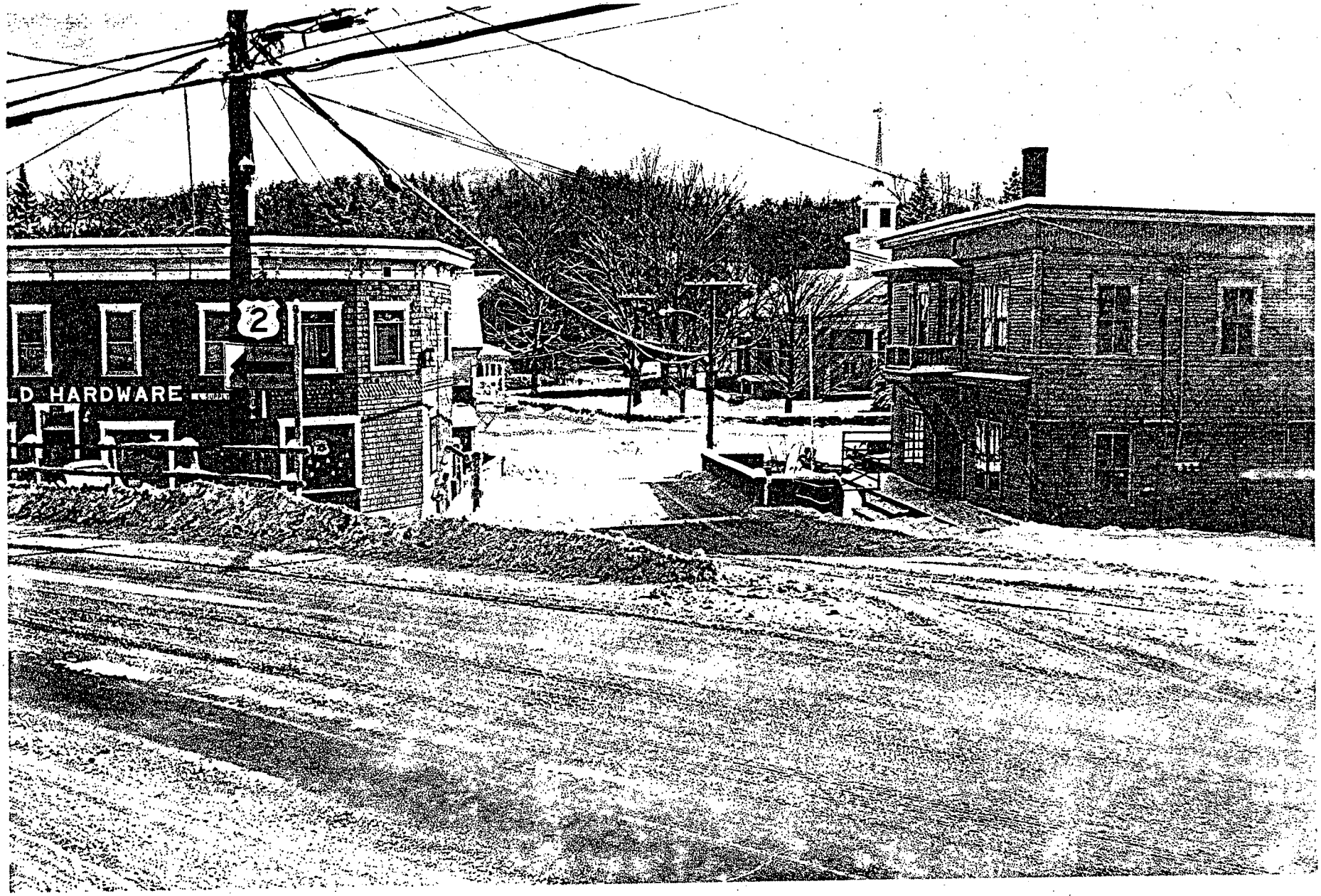
Pedestrians' sight distance is limited by the curve in the road, the grade and the porch. If we use a signal to control pedestrian crossing, the signals only realistic location is the location of the porch steps. Lowering the grade of US 2 to help the Main Street 14% grade also would require impact to the porch.

With this said, I would like your comment on the reasonableness of removing the porch of the Plainfield Furniture store. What types of mitigation factors would be needed based on the historical significance of the structure.

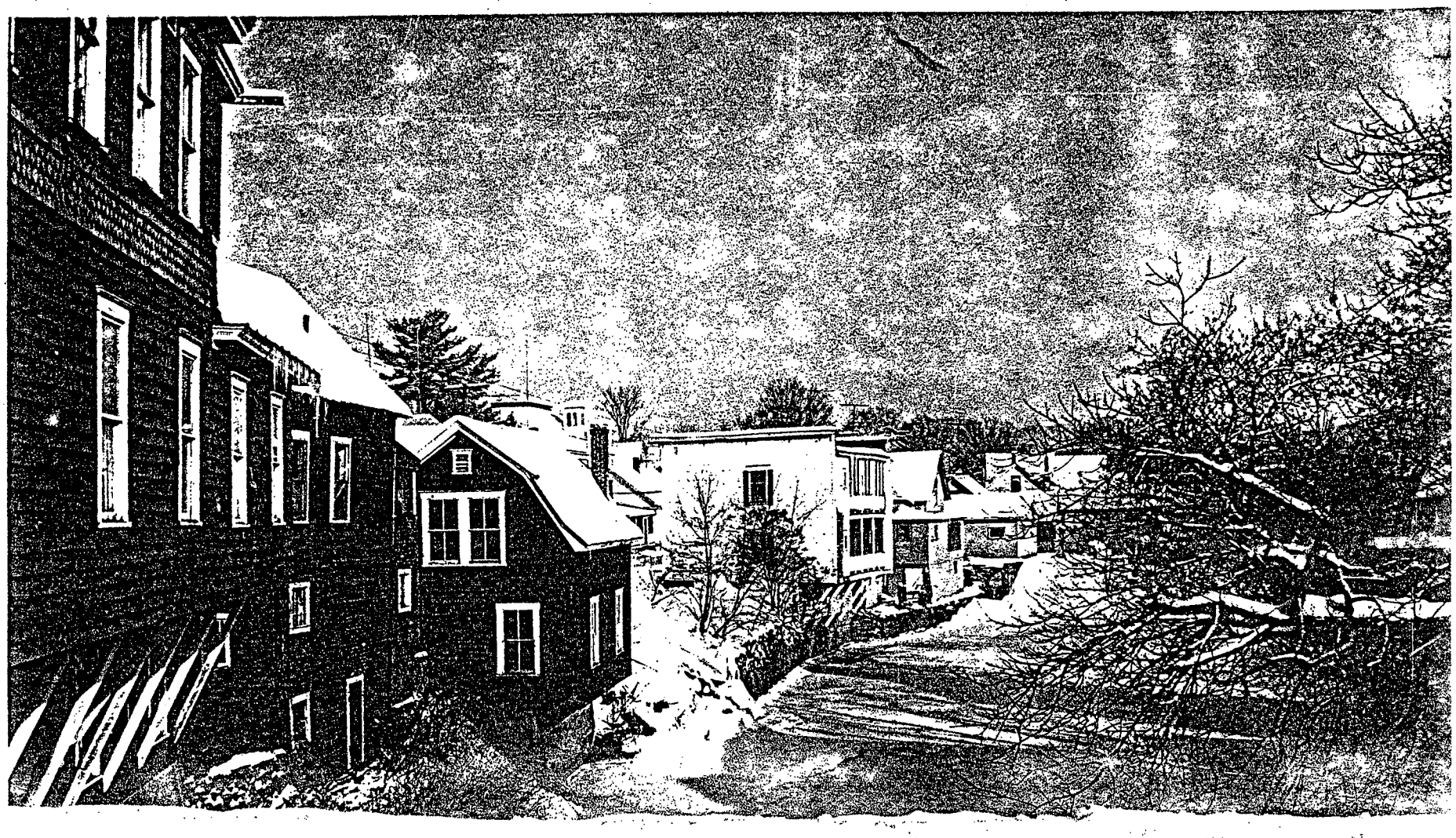
Attachment
Cc: CVRPC file



#5 10, 11, 12. 22, 23, 24, 25, 29, 31

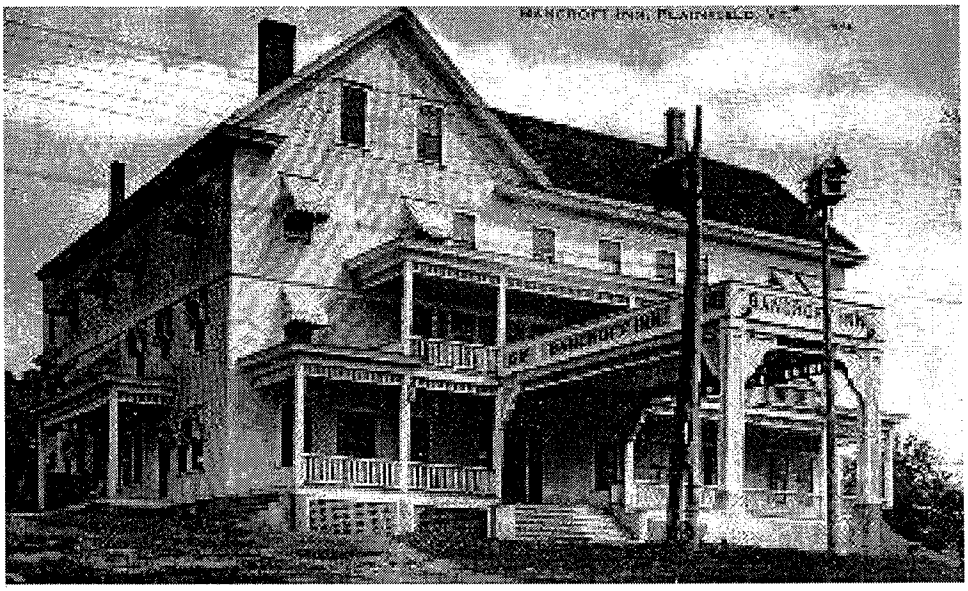


#'s 31, 32, 54, 58, 65



#'s 31, 30, 29, 28, 27, 26,
25, 15

Historic picture of Plainfield Inn
Bancroft Inn, Historic View, 1917-06-13
Source: http://www.uvm.edu/perkins/landscape/LS_ArchiveSearchResults.php



Attachment EC-2
Final Scoping Report - Plainfield US 2 and Main Street Intersection Transportation Study Recommendation

VAOT Metric

N
W E
S

Town Hall

Gravel

HARVEY HILL ROAD

Plainfield Furniture

Gravel Parking

New Traffic Signals

Existing R.O.W.

U.S. ROUTE 2 To Marshfield

New Light (Typ.)

U.S. ROUTE 2

Possible Sidewalk Extension

New Gateway Sign (Typ.)

New Tree (Typ.)

Existing R.O.W.

New Sidewalk (Typ.)

Plainfield Hardware

"Do Not Block Crosswalk" Sign

235.0

230.0

Municipal Parking

MAIN STREET

WINOOSKI RIVER

MH

SCALE IN METERS

0 5 10 15 20

PLOTTED 02/09/2005

NO.	DATE	REVISIONS	BY	CK'D

DuBois & King inc.

engineering planning management development

CENTRAL VERMONT REGIONAL PLANNING COMMISSION

PLAINFIELD VILLAGE US 2/MAIN STREET INTERSECTION TRANSPORTATION STUDY

FIGURE 3: ALTERNATIVE IIA PROPOSED PLAN SHEET

DRAWN BY	DATE
JDA	NOV. 2004
CHECKED BY	PROJ. NO.
EPD	618723
PROJ. ENG.	DRAW. NO.

SHEET 1 OF 1

...\dwg\Plainfield_exhibit.dgn 02/09/2005 09:44:09 AM

Appendix B
Alternatives

Central Vermont Regional Planning Commission
Town of Plainfield

Pedestrian Bridge & South Sidewalk
Conceptual Alignment Analysis

Alternatives

Submitted by:
Broadreach Planning & Design

In conjunction with
Stantec Consulting
EIV Technical Services

August 1, 2013

A. INTRODUCTION

1. OVERVIEW

The Town of Plainfield has been systematically upgrading its pedestrian facilities in the Village area since the 1990s, but there are still gaps in the system. Two significant gaps are adequate pedestrian (and bicycle) facilities on Main Street crossing the Winooski River and along the south side of Route 2 heading west between the Main Street bridge and the Plainfield Post Office. The Central Vermont Regional Planning Commission (CVRPC) assisted the Town in obtaining a 2012 Bicycle and Pedestrian Program Grant to undertake a *Pedestrian Bridge and South Side Sidewalk Conceptual Alignment Analysis* (CAA). The CVRPC staff is assisting the Town with the project management duties for this CAA.

With the assistance of the CVRPC, the Town organized a Steering Committee (SC) of local officials and citizens to provide direction for the study. Together they requested proposals from consultants to help them with the feasibility study; the selected consultant team (the BRPD Team) is led by Broadreach Planning & Design and supported by Stantec Consulting Services and EIV Technical Services.

The general limits of the Study Area for this project extend on the east from the south side of the Main Street Winooski River bridge westward along Route 2 to the Plainfield Post Office and to the fronts of the existing buildings on Main Street and Route 2. **Figure EC-1** in the Existing Conditions report shows the location of the project and the general extent of the Study Area.

This summary report is the second product of the work of the SC and the BRPD Team. The summary describes and compares the different alternatives under consideration for this project and describes the process used to develop them. The report is formatted for double-sided printing; blank pages are intentional.

2. PURPOSE AND NEED

The purpose of the pedestrian bridge and south sidewalk project is to expand the network of walking and bicycling facilities in Plainfield Village to maximize the ability of residents and visitors to access the various businesses and services along Route 2 in the Upper Village from the Lower Village area, already served by improved bicycling and walking facilities, without the need to drive an automobile between each and every one.

Needs for the improvements include:

- The minimal shoulder space and lack of sidewalk for pedestrians or bicyclists on the south side of Route 2 west of the bridge that could provide access to the Cutler Public Library, the Plainfield Post Office and numerous homes and businesses;

- The minimal sidewalk and lack of shoulders on the Main Street bridge over the Winooski River; and
- The presence of dirt paths along the south side of Route 2 created by pedestrians walking along the side of the road.

3. ALTERNATIVES DEVELOPMENT PROCESS

Once the BRPD Team, with assistance from the Town, examined the existing conditions and held an initial public work session on April 30, 2013, they led a work session with the SC to identify as many alternatives as possible for upgrading the existing bridge or otherwise improving the pedestrian crossing over the Winooski River and for creating a sidewalk link between the new bridge and the Post Office on Route 2. The group worked together to do an initial analysis of the alternatives to refine or eliminate those that did not meet the purpose and need or were otherwise unsuitable. Subsequently, the BRPD Team conducted a more detailed analysis of the remaining alternatives and developed a concise, viable set for public discussion. They prepared an initial comparison matrix to help in reviewing and understanding the various initial alternatives. **Attachment AL-1** includes information on the various alternative alignments that were initially considered and the initial evaluation conclusions for them.

Figure AL-1 shows the location of the alternatives initially developed by the BRPD Team; **Figures AL-2a, AL-2b, AL-2c** and **AL-2d** show the alternatives that remained viable after the initial analysis. **Table AL-1** provides a comparison of the different remaining alternatives. **Figure AL-3** provides more information on the issues or impacts associated with the remaining alternatives.

B. ALTERNATIVES

1. INTRODUCTION

The following descriptions of the alternatives typically begin on the west side near the Post Office and head east towards the intersection with Main Street. The identification of the alternatives in this section is not the same as those used to describe the various initial alternatives. The table in **Attachment AL-1** shows how the initial identifications and the final identifications relate to each other.

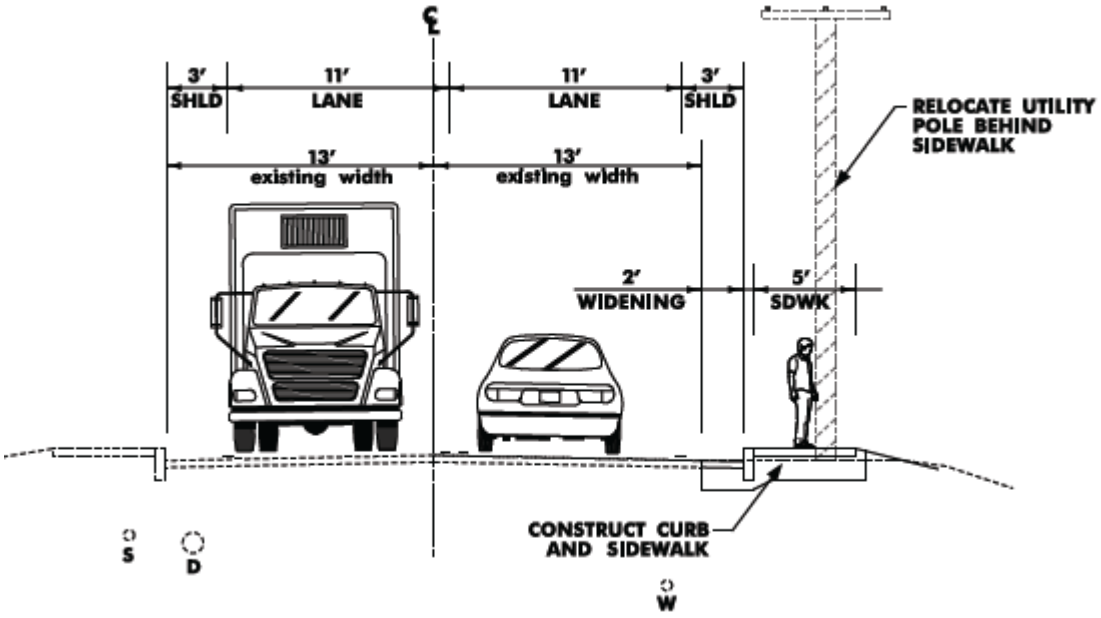
The preferred alternative should include at least one bridge alternative and one sidewalk alternative. It might ultimately include a mix of elements from several alternatives, parts of one alternative or several different alternatives grouped together.

2. ALTERNATIVE A: SIDEWALK AT CURB

Figure AL-2a shows a schematic alignment of this alternative. This alternative creates a sidewalk similar to the existing sidewalk on the north side of Route 2 (High Street) – adjacent to the roadway separated by a six-inch curb. The distance between curbs would

need to be at least 28 feet, so the new curb would be approximately two feet away from the existing edge of the pavement on the south side of the road since the pavement is now only 26 feet wide. This would provide an opportunity to create paved shoulders at least three feet wide each along this portion of Route 2. **Illustration AL-1** shows a typical cross section for this alternative.

Illustration AL-1



The building just east of the area where the logs are now stored would have the two entrance points more closely defined; the extended parking area to the east of the building would be eliminated by the introduction of a curb.

The sidewalk would require a small amount of fill in the erosion channel leading down to the Winooski River (where logs have been stored) to the west of the building at 69 High Street. A gabion retaining wall would keep the fill from extending down the slope towards the river any more than necessary.

The sidewalk would require modifications in front of the building at 69 High Street. The white fence would remain but the parking directly in front of the building would be eliminated to allow room for the sidewalk. The existing parking for this building would be moved further to the west, parallel to the street and adjacent to the building, which would be reached by a single access driveway cut in the curb.

Near the foundation of the building at 55 High Street, which is close to and more than one foot below the roadway, the sidewalk would retain its typical cross section on the curb side of the sidewalk. On the side closest to the house, a retaining wall would keep the sidewalk at

an elevation approximately two feet higher than the elevation of the house foundation. A pedestrian railing would top the outer retaining wall. A new storm drain inlet at the edge of the roadway pavement would collect stormwater and place it into the existing storm drain system addressing the current runoff problems the house experiences. One or two replacement parking spaces perpendicular to the road would be created as part of the sidewalk project in the space on the west side of the building at 55 High Street.

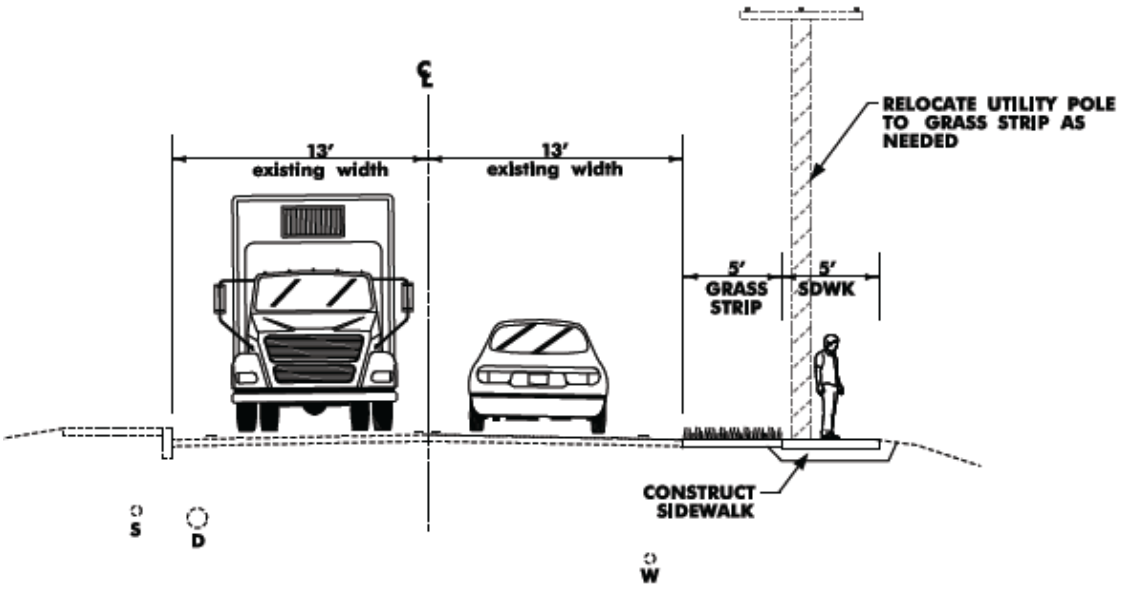
With the exception of the Library, the wide entrances to parking areas would be reduced to a single, two-way opening, usually in the middle of the current entrance. The Library access would be closed in the middle, creating two smaller openings, one at either end of the existing opening. The two openings would create a one-way loop with parallel parking along the library side of the drive.

Two crosswalks would link the new sidewalk to the existing sidewalk on the north side of High Street. One would be in front of the Library and the second would be approximately 200 feet west of the intersection with Main Street.

3. ALTERNATIVE B: SIDEWALK WITH GREEN STRIP

Figure AL-2b shows a schematic alignment of this alternative. Alternative B creates a sidewalk along the south side of Route 2 (High Street) separated from the edge of the existing roadway for most of its length by a green space that is typically at least four feet wide. The green space would allow the existing mailboxes, utility poles, fire hydrants, and in some situations, trees to remain in the current location. The green space would be eliminated or modified only in those areas with special conditions where the typical five-foot green space would create a problem. **Illustration AL-2** shows a typical cross section of this alternative.

Illustration AL-2



The arborvitae hedge along the edge of the roadway in front of the house three buildings east of the west Town Street intersection is one such area; the sidewalk would move closer to the road in this area so that the trees can remain undisturbed. The green space would be reduced to two feet wide.

The building to the west of the vacant area where logs are now stored would have one of the two entrance points closed. The extended parking area to the east of the building would be more defined; the sidewalk would shift further away from the roadway in this area to allow for seven feet of parking between the sidewalk and the edge of the existing roadway.

The erosion channel on the adjacent parcel to the north (with the stored logs) would be filled at the top enough to allow the sidewalk to remain at least seven feet away from the edge of the road. A gabion retaining wall would keep the fill from extending further down the channel than needed; a four-foot-high pedestrian railing would sit on top of the retaining wall. The space between the roadway and the sidewalk would be available for parking.

The sidewalk would shift back closer to the road in front of the building at 69 High Street, once again separated from the road by a four-foot-wide green space. The existing fence would be removed. At the owner's discretion, the fence could be reconstructed closer to the building or replaced with a hedge. The parking for this site would be shifted to the parking areas available on the parcel to the west.

The sidewalk in front of the building at 55 High Street would be similar to the sidewalk presented in Alternative A, except that parking would be accommodated on the parcel further west with available parking between the sidewalk and the roadway.

A crosswalk approximately 200 feet west of the intersection with Main Street would link the new sidewalk to the existing sidewalk on the north side of High Street

4. ALTERNATIVE C: SIDEWALK DOWN TO RIVER

Figure AL-2c shows a schematic alignment of this alternative. Alternative C would start at the Post Office similar to either Alternative A or B. At the western end of the Library parcel, the sidewalk would turn to the south. At the rear of the level portion of the property, the sidewalk would turn eastward again and, either as a sidewalk or an ADA-accessible path, begin a gradual descent of the hillside, moving down across the slope. The grade of the slope would be a maximum of eight percent, with level pads every 30 feet to provide a rest area for the beginner and circumscribed walkers if the slope is more than five percent.

The path would level out at approximately the 750-foot contour, just above the mapped 100-year floodplain. As the path nears the Town-owned parcel with the Town Hall parking area, it would begin to head back up across the slope at the same grade. It would meet the southeast end of the existing Town Hall parking lot where it would turn north along the east side of the parking area. As it reenters the High Street right-of-way, it would turn east and continue towards Main Street separated from the roadway by a green space at least five feet wide. Another sidewalk would lead west to just past the west side property line of the Town

Hall parking parcel where a crosswalk would link to the Town Hall on the north side of High Street.

5. ALTERNATIVE D: NEW PREFABRICATED BRIDGE WEST OF EXISTING BRIDGE

Figure AL-2d shows a schematic alignment of this alternative. Alternative D would add a new prefabricated bridge across the Winooski River directly west of the existing Main Street bridge. The new pedestrian bridge would be a minimum of six feet wide and would be approximately 65 feet long. It would rest on new foundations created behind the existing abutments. On the south side, the new bridge would include a new sidewalk to link the end of the bridge to the existing sidewalk and crosswalk. On the north side, the bridge would link to the new sidewalk using the alignment of the existing sidewalk. A gate would be added to the stairs to the west of the sidewalk; the stairs would be reconstructed as possible to allow for a landing on the inside of the gate before the stairs started.

6. ALTERNATIVE E: PARKING TO PARK BRIDGE

The bridge created in Alternative E would link the southern end of the Town Hall parking area parcel with the upper south bank of the Winooski River in the Mill Street Village Park. The bridge would be a minimum of six feet wide and approximately 160 feet long. The bridge would be sloped downward to the south to help address the difference in elevation between the parking lot and the park. The slope would be approximately six percent. The bridge will most likely need support piers on the slopes on either side of the river. A short sidewalk would link the south end of the bridge with the existing sidewalk on the edge of the park. A second short sidewalk would link the north side of the bridge with the sidewalk created in Alternative C.

7. ALTERNATIVE F: NO ACTION

The no-action alternative would leave things as they are on the south side of High Street and would not add a new pedestrian crossing over the Winooski River.

C. IMPACTS, ISSUES & BENEFITS

1. OVERVIEW

Each of the potential alternatives has issues and potential impacts, as well as benefits for the community. **Tables AL-1** provides a comparison of several issues and impacts of the different alternatives as well as the various benefits for each. **Figure AL-3** shows the locations of various issues and potential impacts of the different alternative alignments and facilities. There are several common issues that are shared by the alternatives. The following text briefly presents these issues, which should be considered when comparing the different alternatives and evaluating which alternative, or combination of alternatives, would be the most appropriate solution for the Town.

2 PURPOSE AND NEED

With the exception of Alternative F: No Action, each of the alternatives has the potential to meet the purpose of the project.

3. FLOODPLAIN

Alternatives C and E are the two that would have an impact or be impacted by the existing Winooski River floodplain. The sidewalk/path in Alternative C behind the houses will need to be constructed into the slope above the 100-year floodplain elevation. The construction will most likely disturb land below the 100-year flood line; the disturbance should not leave fill in the floodplain. This will require the use of retaining walls to minimize the amount of grading above and below the sidewalk/path.

The bridge in Alternative E will also need to be elevated above the floodplain. This bridge will most likely require supports, which would most likely need to be located within the floodplain. They would need to be designed to not only withstand floodwater pressure but also to minimize the risk of creating a blockage for floodwater upriver.

4. UTILITIES

The existing utility poles on the south side of High Street will need to be relocated with the installation of Alternative A. Only the utility poles in the vicinity of 55 High Street will certainly need to be relocated further from the roadway with the installation of Alternative B. The pole near the trees around which the sidewalk shifts in Alternative B may need to be moved, possibly to the north side of the street. This move may also result in the removal of the next pole to the west if the overhead wires are continued to the existing pole at the corner of High Street and Robert Lane. Alternative B may also require shifting a few poles closer to the roadway if they are currently more than five feet from the edge of the pavement.

Water hydrants will need to be shifted further from the road with Alternative A.

.

The alternatives should not have impacts to the rest of the utilities in the Study Area. The sewer line is on the north side of the street; construction of a sidewalk on the south side of the street will need to protect the individual connections to the buildings on the south side. The water line is located on the south side of the road and may lie under the sidewalk alignment, but care during the construction process should protect the water line from any damages or other impacts. If the water line falls directly under the alignment of the sidewalk, it may be necessary to provide an insulation barrier over the water line if it is not buried at least five feet underground.

5. STORMWATER DRAINAGE

The existing stormwater drainage system would be expanded with Alternative A to include at least one additional inlet near 55 High Street to capture the existing stormwater runoff from

the road that drains towards the house foundation. The existing system would also need to be expanded to the west or a separate system would need to be constructed to collect stormwater captured by the new curb west of the Library.

Only the single new inlet near 55 High Street would be needed for Alternative B.

No other modifications to the existing stormwater drainage system would result from the implementation of the other alternatives.

6. CROSSWALKS

The location of crosswalks varies with each alternative, so that the community can make a decision about the most useful crosswalks and the most desirable locations. The crosswalk locations are not tied to the specific alternatives and can be interchanged as the community wishes.

7. RIGHT-OF-WAY/ FRONT YARDS

Each of the sidewalk alternatives uses at least a portion of the High Street/Route 2 right-of-way (ROW). The latest survey data researched for this project shows that the ROW is four rods wide, or approximately 66 feet. Earlier information appeared to indicate that the ROW was only three rods wide, or approximately 49.5 feet. To be on the conservative side, this study is assuming the smaller three-rod ROW. This means that the edge of a three-rod ROW would extend approximately 25 feet outward from the center line of the road. With the paving occupying about 13 feet outward on each side of the centerline, the edge of the ROW would be about 12 feet beyond the edge of the pavement. (The four-rod ROW would be an additional eight feet beyond that.)

At most, the outer edge of the sidewalk would be just about at the limit of the three-rod ROW for Alternative B in those locations where the sidewalk is pushed up to seven feet away from the edge of the pavement to allow room for parking. In most cases the outer edge of the sidewalk in Alternative B would be ten feet beyond the existing edge of the pavement unless moved to accommodate trees or houses. This will place the sidewalk in what looks like the outer edges of the front yards of several houses along High Street. While this land appears to be private, it is in fact either owned or fully controlled by VTrans as part of the ROW.

Even though VTrans controls the ROW, it tries to be sensitive to adjacent landowner issues, especially when the outer part of the ROW is currently unused by VTrans and appears to be part of adjacent parcels. Consequently, when appropriate and possible, the location of the sidewalk has been shifted closer to the roadway to minimize significant impacts to features important to adjacent landowners.

8. PERMITS

Alternatives A and B will require permits from VTrans for the relocation of utilities, the modification to the parking access points and the creation of specific parking spaces to be used by existing property owners.

The disturbance of the slope adjacent to the Winooski River by Alternative C will also require permits from the Agency of Natural Resources (ANR).

The placement of the bridge in each alternative will require permits from ANR. Alternative C and E will also need to meet floodplain requirements in the Town.

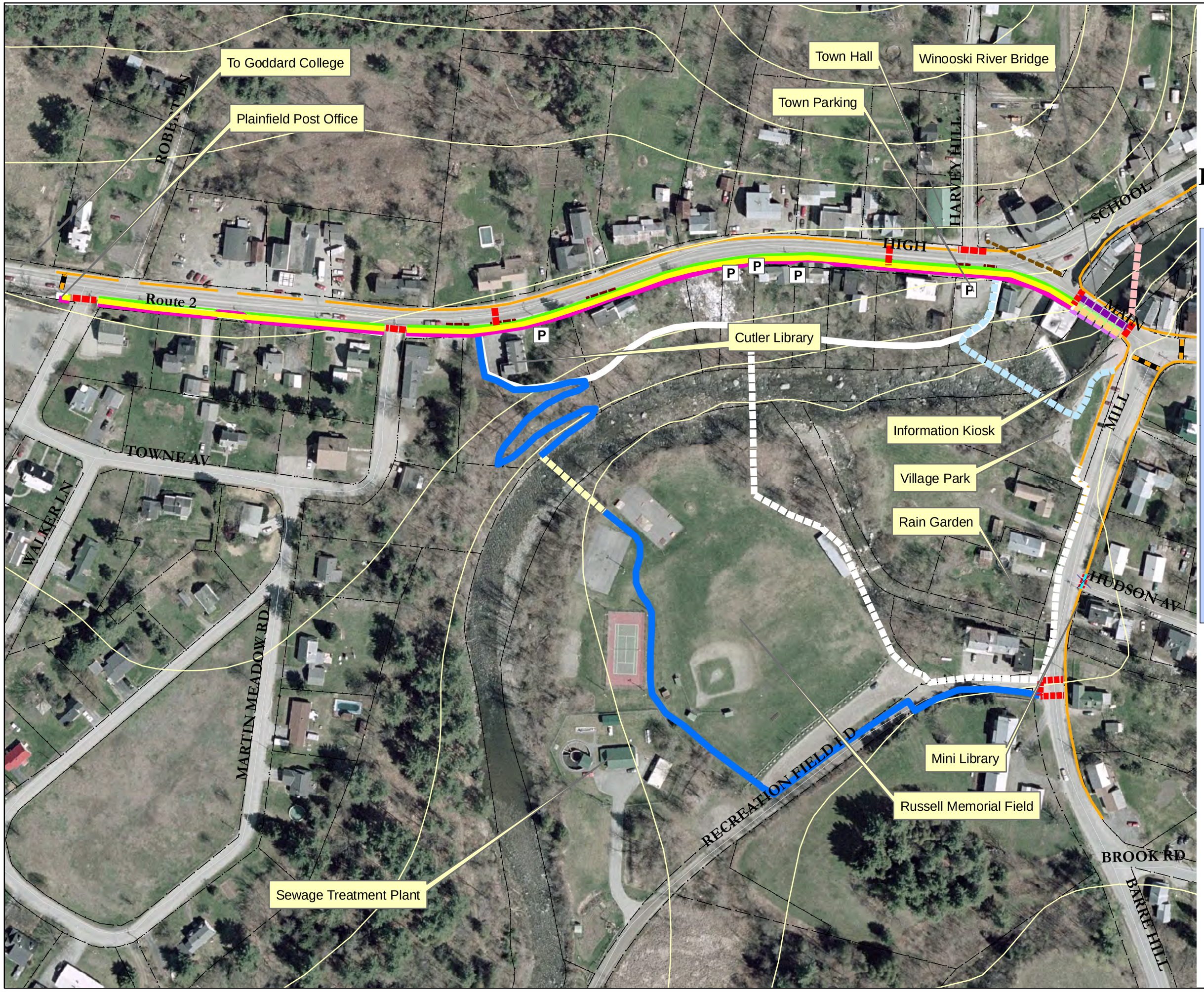
TABLE AL-1: Alternative Analysis
Central Vermont Regional Planning Commission
Town of Plainfield
Pedestrian Bridge & South Sidewalk Conceptual Alignment Analysis
July 23, 2013

Project Type	Sidewalk & Bridge	Sidewalks				Bridges		
	No Action	Alternative A	Alternative B	Alternative C		Alternative D	Alternative E	Alternative F
Project Description								
Length of New Sidewalk	0	1,550 FT	1,550 FT	1,675 FT		15 FT	1,250 FT	170 FT
Length of New Bridge	0	NA	NA	NA		65 FT	160 FT	120 FT
Separation From Roadway	NA	None	Four-Foot Typical	Variable depending on which alingment is used between post office and Library		NA	NA	NA
Curb	No	Yes	No	Variable depending on which alingment is used between post office and Library		NA	NA	NA
Road Widening	No	0	No	Variable depending on which alingment is used between post office and Library		No	No	No
Construction Easements	0	18	18 (Maximum)	18		2	3	3
Permanent Easements	0	0	0	9		0	2	3
Foundation	None	Typical	Typical	Special on Slope		Boring needed to determine foundation requirements	Boring needed to determine foundation requirements	Boring needed to determine foundation requirements
Significant Physical Constraints	None	Erosion Channel; Houses in ROW	Erosion Channel; Houses in ROW	Steep slopes adjacent to river, access to Town Hall parking		Tightness of adjacent building and bridge	Slopes adjacent to floodplain, Mill Street Bridge	Difference in elevation on north & south side of river
Environmental/Cultural Constraints								
Disturbes Forests	No	No	No	Yes		No	No	No
Approximate Wetland or Wetland Buffer Disturbance	0	0	0	0		0	0	0
Approximate 100 Ft River Buffer Disturbance (Other than Bridge Crossing)	0	0	0	750 FT		0	No	No
Disturbes Hazardous Material	No	No	No	No		No	No	No
Disturbs Steep slopes	No	No	No	Yes		No	No	No
Affects Historic Resources	No	Yes	Yes	No		Yes	No	No
Disturbs Flood Plain	No	No	No	Yes		No	Yes	No
Project Attributes								
Meets Purpose and Need Statement by Itself	No	Yes, in combination with a bridge alternative	Yes, in combination with a bridge alternative	Yes, in combination with a bridge alternative		Yes, in combination with a connecting sidewalk alternative	Yes, in combination with a connecting sidewalk alternative	Yes, in combination with a connecting sidewalk alternative
Types of Users Served	Active & Basic Walkers Advanced Bicyclists	All Walkers Advanced & Basic Bicyclists	All Walkers Advanced Bicyclists	All Walkers Advanced Bicyclists		All Walkers Advanced Bicyclists	All Walkers Advanced Bicyclists	All Walkers Advanced Bicyclists
Maximizes Separation between Motor Vehicles and Walkers	No	No	Yes	Yes		Yes	Yes	Yes
Provides Improvements for Bicyclists	No	Yes	No	No		Yes	No	No
Minimizes Disturbances to Utilities	Yes	No	Yes	Yes		Yes	Yes	Yes
Utiliy Modiviations	None	Hydrants & utiity poles relocated	One or two utility poles shifted	None		None known	None known	None
Treats Stormwater Runoff	No	Possibly	Yes	Possibly		NA	NA	NA
Provides Access to Destinations along Route 2 - South Side	No	Yes	Yes	No		NA	NA	NA
ADA Issues	Yes	No	No	Yes		Yes	Yes	Yes
Mailboxes	No change	Moved back	No change	Possibly some change		No	No	No
Order of Magnitude Cost	$0							
Other Issues								
General Comments								

Positive Considerations
Negative Considerations
Neutral

Pedestrian Bridge & South Side Sidewalk Scoping Study

Central Vermont Regional Planning Commission & The Town of Plainfield



Legend

Alternative S-5		New Parking	P
Alternative B-3		Alternative B-8	
Alternative B-1		Alternative B-7	
Alternative B-2		Alternative T-1	
Alternative B-4		New Crosswalk	
Alternative B-5		Alternative S-1	
Alternative B-6		Alternative S-2	
20 FT Contours		Alternative S-3	
Marked Crosswalk		Alternative S-4	
Existing Sidewalk			

Initial Alternatives

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N W E S

50 100 200 300 400 Feet

August 1, 2013 Figure AI-1

Pedestrian Bridge & South Side Sidewalk Scoping Study

Central Vermont Regional Planning Commission & The Town of Plainfield

Eliminate greenspace, add retaining wall behind sidewalk, add drainage inlet & relocate parking to west of building

Keep fence & relocate parking to west end of building

Fill end of erosion channel

Refine two access points & eliminate on-street parking

Reduce parking entrance to two one-way drives at east and west ends & add crosswalk

Plainfield Post Office

Town Hall

Winooski River Bridge

Town Parking

Cutler Library

Village Park

Russell Memorial Field

Route 2

TOWNE AV

WALKER LN

MARTIN MEADOW RD

HIGH

SCHOOL

MAIN

MILL

HUDSON AV

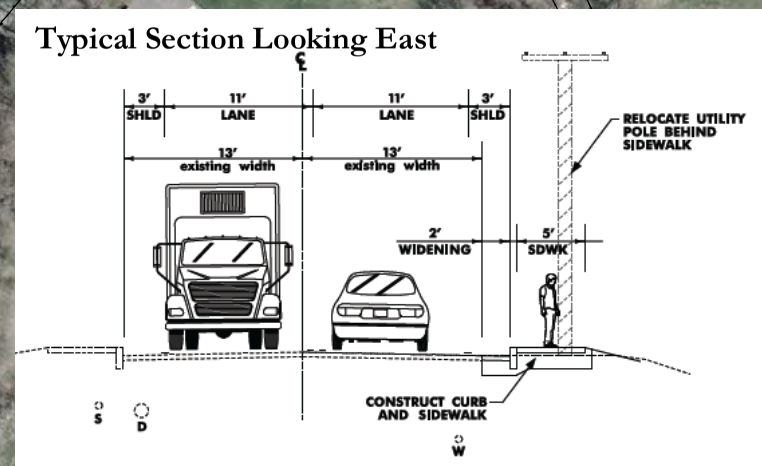
RECREATION FIELD

BROOK RD

BARRE HILL

HARVEY HILL

Typical Section Looking East



Legend

- Alternative A
- New Crosswalk
- Existing Tree
- Marked Crosswalk
- Existing Sidewalk
- Property Lines

Alternative A

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N W E S

50 100 200 300 400 Feet

Augusst 1, 2013 Figure Al-2a

Pedestrian Bridge & South Side Sidewalk Scoping Study

Central Vermont Regional Planning Commission & The Town of Plainfield

Plainfield Post Office

Town Hall

Winooski River Bridge

Town Parking

Reduce greenspace to 2 feet to preserve trees

Reduce Parking entrance to one 24-foot wide entrance

Cutler Library

Eliminate one access point & increase greenspace to 7 feet

Fill end of erosion channell & increase greenspace to seven feet

Remove fence and shift parking to the property to the west

Eliminate greenspace, add retaining wall behind sidewalk, add drainage inlet & relocate parking west

Village Park

Russell Memorial Field

Route 2

TOWNE AV

WALKER LN

RECREATION FIELD RD

BROOK RD

BARRE HILL

HUDSON AV

HIGH

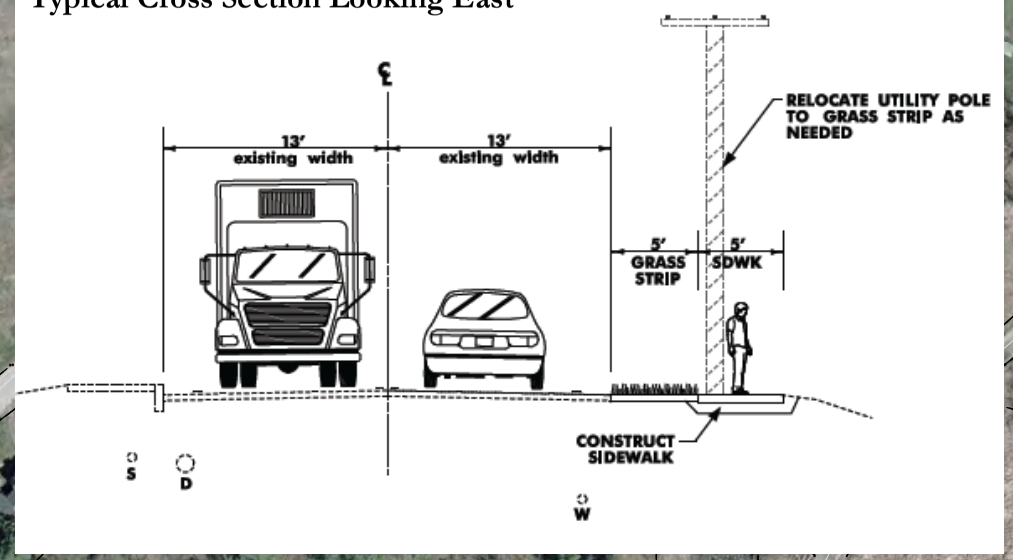
MAIN

MILL

SCHOOL

HARVEY

Typical Cross Section Looking East



Legend

- Alternative B
- Curb Reduction
- New Crosswalk
- Tree
- Existing Sidewalk

Alternative B

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N W E S

50 100 200 300 400 Feet

August 1, 2013 Figure Al-2b

Pedestrian Bridge & South Side Sidewalk Scoping Study

Central Vermont Regional Planning Commission & The Town of Plainfield

Legend

- Alternative C
- Curb Reduction
- New Crosswalk
- Existing Tree
- Existing Sidewalk

Alternative C

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EIV Technical Services

Stantec

N W E S

50 100 200 300 400 Feet

August 1, 2013 Figure Al-2c

Pedestrian Bridge & South Side Sidewalk Scoping Study

Central Vermont Regional Planning Commission & The Town of Plainfield

Town Hall

HARVEY HILL

SCHOOL

HIGH

Winooski River Bridge

Town Parking

Add gate to protect building stairs

Prefabricated bridge to fit in tight space between the existing bridge and the building

Add linking sidewalks at the south end of the bridge

MAIN

Add linking sidewalk at each end of the bridge

Keep bridge above floodplain

Prefabricated or suspension bridge

Slope bridge to connect match grade on each side of the river

MIL

Village Park

Legend

- Alternative D
- Alternative E
- Tree
- Existing Sidewalk

0 25 50 100 150 200 Feet

Bridge Alternatives

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N W E S

August 1, 2013 Figure Al-2d

Pedestrian Bridge & South Side Sidewalk Scoping Study

Central Vermont Regional Planning Commission & The Town of Plainfield

Wide enough to accommodate future road widenings at State Standards

Fence maintains some of existing conditions

New parking limits garden space

Residential parking further from house

Trees maintained with minimal damage to roots

More efficieint parking access & layout

On-street parking eliminated

Trees maintained with minimal impact to roots

Wide enough to accommodate future road widening but with loss of green space

Parking reduced but more defined

On-street parking maintained but drivevway efficiency reduced with possible loss of some trees

"Front yard" behind fence reduced or eliminated

Indirect route

Disturbance of steep slopes & forest

Path low enough to be out of sight of residence

Potential river impacts with secondary supports

Slope on bridge may be slippery

Tight space limits width and use of adjacent private entrance

Most direct connection

ROBERT LN
Route 2
TOWNE AV
WALKER LN
MARTIN MEADOW RD
RECREATION FIELD RD
HIGH
SCHOOL
MAIN
MILL
HUDSON AV
BROOK RD
BARRE HILL

Legend

- Alternative A
- Alternative B
- Alternative C
- Alternative D
- Alternative E
- Potential New Parking (P)
- Curb Reduction
- New Crosswalk
- Existing Tree
- Existing Sidewalk

Issues & Impacts

BROADREACH Planning & Design

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N W E S

50 100 200 300 400 Feet

August 1, 2013 Figure AI-3

Attachment AL-1
Initial Alternatives

Attachment AL-1: Initial Alternative
Central Vermont Regional Planning Commission
Pedestrian Bridge & South Sidewalk Scoping Report
August 1, 2013

Initial Alternative Designation	Description	Disposition	Final Alternative Designation
Alternative S-1	A sidewalk adjacent to the Road with curb. The Roadway would be 28 feet curb to curb, creating wide paved curb lanes for bicycle use.	This alternative was kept and refined for consideration at the public work session.	**Alternative A**
Alternative S-2	Sidewalk separated from the existing roadway by a green space at least four feet wide and no curb. The road would stay as it is.	This alternative was kept and refined for consideration at the public work session.	**AlternativeB**
Alternative S-3	A sidewalk using alternative S-1, S-2 or S-5 between the post office and the west end of the Library and a sidewalk heading perpendicular away from the road and then switching back and forth down the slope behind the Library to the River. East of the River, the sidewalk resumes through Russell Memorial Field to Recreation Road and then to Mill Street where it heads north to the existing sidewalk on the west side of the street.	This alternative was eliminated due to the amount of grading on the slope required by the switchbacks and the indirect route into the lower village.	**Deleted**
Alternative S-4	A sidewalk using alternative S-1, S-2 or S-5 between the post office and the west end of the Library and a sidewalk heading perpendicular away from the road and then sloping down towards the River across the slope. At the bottom of the slope it heads back up the slope to the Town Hall parking lot. It also includes a sidewalk on the west side of one of two bridge options to connect the south side of the bridge to exising sidewalks.	This alternative was kept and refined for consideration at the public work session.	**Alternative C**
Alternative S-5	Sidewalk separated from the existing roadway by a green space at least four feet wide with curb	This alternative was eliminated due to the amount of space required by adding the curb to the south side of the road and then adding the green space; it pushed the sidewalk too far into existing lanws even though still within the Route 2 right-of-way.	**Deleted**
Alternative B-1	A new bridge cantilevered off the existing bridge.	This alternative was elinated because the ability of the existing bridge to support a cantilever is doubtful.	**Deleted**
Alternative B-2	A new bridge created with large beams that would be able to be used as beams in a new, wider bridge when the bridge is replaced.	This alternative was eliminated due to the uncertainty of the type of bridge that might be designed in the future and the limited space available to new beams.	**Deleted**
Alternative B-3	A new prefabricated bridge placed on a new foundation behind the existing abutment walls to the west of the existing bridge.	This alternative was kept and refined for consideration at the public work session.	**Alternative D**
Alternative B-4	Aa new prefabricated bridge linking the end of Alternative S-3 with the western portion of Russell Memorial Field.	This alternative was eliminated because Alternative S-3 was eliminated.	**Deleted**
Alternative B-5	A new prefabricated bridge linking the bottom of Alternative S-4 with the eastern portion of the Russell Memorial Field.	This alternative was eliminated because the route was too circuitous to meet the purpose and need.	**Deleted**
Alternative B-6	A new prefabricated bridge linking the Town Hall parking lot with the Mill Street Village Park.	This alternative was kept and refined for consideration at the public work session.	**Alternative E**
Alternative B-7	A new prefabricated bridge linking the east end of the exiting bridge with the west side of the river near the Town-owned Historical Society Building.	This alternative was eliminate because it did not bring walkers closer to the Town Hall and the difficulty of creating an acceptable pedestrian crossing over the north end of Main Street of Route 2 to bring walkers to the Town Hall.	**Deleted**
Alternative B-8	A new, wider bridge that replaces the existing bridge and provides sidewalks on both sides of the vehicle travel lanes.	This alternative was eliminated because of the current acceptable rating of the bridge indicating it still has at least ten years of usefullness and the new lighting that was just added to the bridge.	**Deleted**
Alternative T-1	A pedestrian tunnel under Route 2 near the intersection with Main Street.	This alternative was eliminated because of the length of ramp that would be needed to access the tunnel from the north side of Route 2 and the potential interference with utilities buried under Route 2.	**Deleted**

Appendix C
Schematic Plans


4+00
5+00
6+00
7+00
8+00
9+00
U.S. ROUTE 2
5' SIDEWALK & CURB
Existing Walk
Existing Bollards
Existing Booth
1 PC
ITEM 656.20
Gravel Parking
Planted Area
Planted General Store
Bituminous
Grassed
Existing 12" RCP
Existing 15" RCP
NEW 375mm CPP
Ex. Manhole
Ex. Inlet
SCALE IN FEET
0
20
40
VT STATE PLANE GRID
N


SCALE IN FEET
0
20
40
WINOOSKI RIVER
ONE WAY LOOP
U.S. ROUTE 2
10+00
11+00
12+00
13+00
14+00
15+00
VT STATE PLANE GRID
N

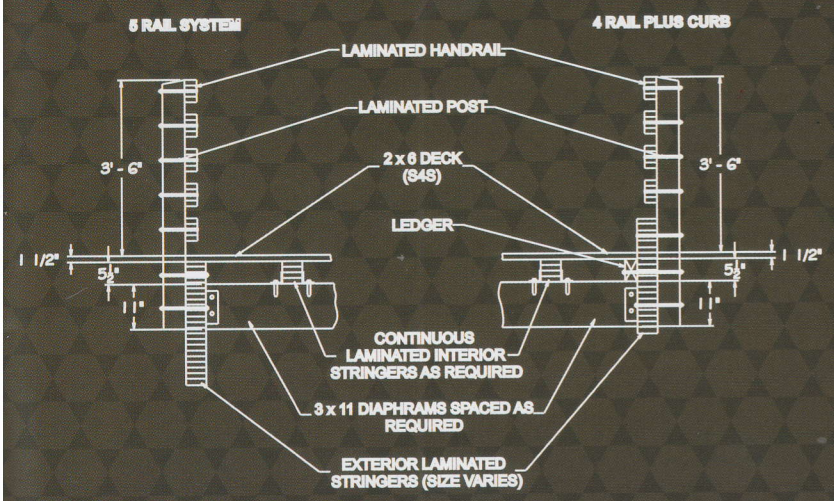

SCALE IN FEET
0
20
40
WINOOSKI RIVER
BRIDGE ST.
U.S. ROUTE 2
RELOCATE UTILITY POLE
NEW PEDESTRIAN BRIDGE
BEGIN CURB
END CURB
5' SIDEWALK & CURB
16+00
17+00
18+00
19+00
20+00
21+00
N
VT STATE PLANE GRID

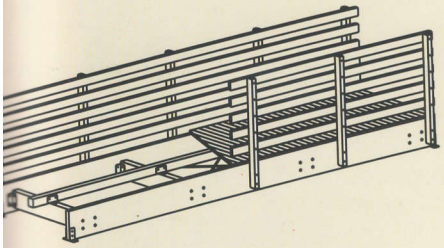
Appendix D
Prefabricated Bridge Samples

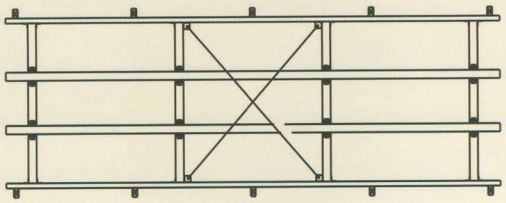

Wheeler

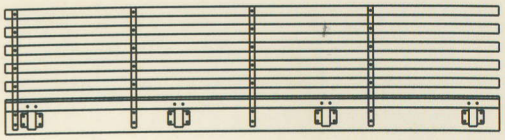

Wheeler

BRIDGES









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Pre-engineered in 4' 6' and 8' clear deck widths, with spans ranging from 16' to 80'

All standard wood components (except decking) are glue laminated Southern Yellow Pine; decking is treated 2" x 6" Southern Yellow Pine

Hardware used to connect glue laminated components is galvanized steel

Bridges up to 60' in length ship fully assembled with installation instructions

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