Village of Enosburg Falls

Elm Street
Sidewalk Scoping Study

Final Report

Submitted by:

Broadreach Planning & Design

In conjunction with

Lamoureux & Dickinson Consulting Engineers
Heritage Landscapes LLC
University of Vermont Consulting Archaeology Program

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I. INTRODUCTION

A. OVERVIEW

This study examines the most appropriate ways to upgrade and extend a sidewalk on Elm Street in the Village of Enosburgh Falls, Vermont, heading east from its western end at the intersection with Main Street and West Berkshire Road to the Town of Enosburgh Athletic Fields east of Water Tower Road.

The Village received a grant from the Vermont Agency of Transportation (VTrans) to examine the options for upgrading and extending the sidewalk. Village officials, after circulating a Request for Proposals, selected a consulting team consisting of Broadreach Planning & Design, Lamoureux & Dickinson, Heritage Landscapes LLC and the University of Vermont Consulting Archaeology Program (the BRPD Team) to assist them with the project.

The BRPD Team, with assistance from the Village representatives,

- Examined the existing conditions,
- Identified as many alternative ways of adding a sidewalk along Elm Street in the Study Area as possible,
- Examined and analyzed the alternatives, and
- Selected what appeared to be the most appropriate one.

This was done with input from the Village Board of Trustees and the public at three key points during the work.

This final report is the work of Village officials and the BRPD Team that summarizes the results of the study. It presents a short summary of the relevant existing condition information and then focuses on the final recommendations, the reasons they were selected, and information that will help the Village implement them.

Appendix A includes a more detailed discussion of the Existing Conditions that were examined during the first portion of the study for those that would like to see all of the background information. **Appendix B** includes a review of the different alternatives that were generated and analyzed during the study. It also includes the reasons why they were not selected. **Appendix C** includes a copy of notes from the public work sessions conducted by the Board of Trustees. The following text provides a summary of the results of the study and the information used to reach them. Figures are located at the end of the text. Portion of some of the figures are included in the text for convenience.

Illustration 1, a portion of **Figure 1**, shows the Study Area for the project. It extends from West Berkshire Road on the west, to the Town of Enosburgh's Athletic Fields on the east, and from the roadway portion of Elm Street on the south to the large parcels north of the smaller, mostly residential parcels along the north side of Elm Street.

Illustration 1: The Study Area Shown in Yellow

B. PURPOSE AND NEED

The purpose of the extended sidewalk on Elm Street is to provide a pedestrian connection to the Athletic Fields from the Village center that is compliant with current Americans with Disabilities Act (ADA) regulations and standards.

Needs for the improvements include:

- The lack of any pedestrian accommodations on the eastern end of Elm Street, the western end of Sampsonville Road, and the southern end of Water Tower Road leading to the Athletic Fields;

- The noted speed and traffic volume on Elm Street and Sampsonville Road;
- The presence of a bus route on Elm Street without adequate pedestrian access to stops along the eastern portion of the Study Area;
- The inundation of the existing sidewalk after heavy rains;
- The minimal width of the existing Elm Street north side sidewalk that does not meet current ADA standards; and
- Frequent pedestrian activity to and from the Athletic Fields, especially during the school year, by students and other Enosburg Falls residents.

II. BACKGROUND

A. EXISTING CONDITIONS

1. OVERVIEW

The following text describes the existing conditions that the BRPD Team found to be important in the development of the recommended alignment. **Figures 2a** and **2b**, the second and third figures after page 20, provides a graphic representation of the relevant existing conditions in the Study Area; **Appendix A** includes a more complete discussion of all of the existing conditions.

2. TRANSPORTATION FACILITIES

a. Elm Street

Elm Street runs east between the northern end of Main Street, where it intersects with West Berkshire Road, towards the southern end of Water Tower Road. It is part of the Class 1 Road portion of VT Route 105 in Enosburg Falls. East of the intersection with Water Tower Road, the road changes to a State Route 105 with a corresponding name change to Sampsonville Road.

There are numerous residential driveways along the western end of Elm Street. The commercial and industrial access points on the eastern end of Elm Street are wider and not as well defined. One access point on the north side of the road is nearly 400 feet wide. East of Water Tower Road, there are relatively few access points on Samsponville Road, but they include an access to the Town of Enosburgh Emergency Services Building on the western edge of the same Town-owned parcel that includes the Athletic Fields. There is no other access point to the Athletic Fields from Sampsonville Road. **Illustration 2** shows a portion of **Figure 1** and the different access drives along the road. **Illustration 3** shows the wide access drive to the McDermott property; the view is looking southwest, taken from the VTrans District Maintenance Garage Access Drive.

Illustration 2: Elm Street and the Location of Access Drives

Illustration 3: The Wide Entrance to the McDermott Property

Elm Street has a posted speed limit of 25 miles per hour (MPH).

The BRPD Team did not find specific description for the Elm Street right-of-way in the land records. Several recorded surveys cite a statutory right-of-way width of three rods (49.5 feet). VTrans project Enosburg SN-FAP 134(2) (dated 1941) also graphically shows a three-rod right of way for Sampsonville Road and Water Tower

Road. The BRPD Team used this information to assume that the Elm Street right-of-way is three rods wide.

There were 11 crashes reported along the project segment of Elm Street between 2010 and 2014. The most recent (2010-2104) VTrans High Crash Location Report did not identify either the intersections or project segment as high crash locations. The crash history shows that they appear to have been primarily the result of operator error, rather than any inherent deficiency in the geometric conditions or alignment of Elm Street.

There is an existing crosswalk linking the sidewalk on the west side of Pleasant Street with the existing, older sidewalk on the north side of Elm Street. There is also a crosswalk on Pleasant Street at the intersection as part of the sidewalk on the south side of Elm Street. A third crosswalk is located on West Berkshire Road as it intersects the west end of Elm Street.

b. Water Tower Road

Illustration 4: Water Tower Road in the Study Area

Water Tower Road begins at the eastern end of Elm Street, just after the end of the Class 1 Road. The actual intersection of Route 105 with Water Tower Road is outside of the Village road jurisdiction. There is an access drive to a parking area on the Athletic Fields from Water Tower Road, approximately 900 feet north of the intersection with Elm Street. There are four other driveways on Water Tower Road, two on each side, between the park entrance and Elm Street. There are no curbs on Water Tower Road. The road is lined on the west side by a deep drainage ditch. The grade drops away from the road significantly on the east side. **Illustration 4** shows a portion of **Figure 1** highlighting the driveways along Water Tower Road in the Study Area.

The BRPD Team discovered no descriptions in the land records for Water Tower Road. Several surveys along each of the roads cite Vermont Statute in defining those roads as three rods, or 49.5 feet wide, centered on the existing center of the road.

A traffic count on Water Tower Road in 2011 at 0.4 miles north of the Elm Street intersection showed that 1,200 vehicles per day traveled on the road. The peak hours were 4-6 PM, with an observed peak of 153 vehicles between 5-6 PM.

The posted speed limit on Water Tower Road is 25 MPH.

3. WETLANDS

There are two small, wetland areas on the east side of Water Tower Road south of the Athletic Fields entrance drive. A small extension of this wetland extends south to the edge of the Sampsonville Road pavement. There are no other identified wetlands within the Study Area. **Figure 2** shows the limits of the wetlands.

4. TOPOGRAPHY

Figure B-3 in **Appendix A** shows the general topography in the Study Area. It is level along Elm Street, but rises slightly to the north along Water Tower Road. The road rises faster than the adjacent property to the east, so there is a drop of up to ten feet from the edge of the pavement to the level areas on the adjacent properties.

5. FLORA & FAUNA

The western end of Elm Street has several large street trees growing between the old sidewalk on the north side and the edge of the roadway pavement. There are almost no trees along the north side of the road east of Pleasant Street; **Figure 2** shows the location of the important existing street trees.

6. UTILITIES

Figure 2 shows the general location of the utilities in the Study Area.

Utility poles owned by the local electric company run along the south side of Elm Street and the west side of Water Tower Road.

A gas line runs underground along the north side of Elm Street between the sidewalk and the edge of the pavement. Stormwater lines run along both edges of the Elm Street where there are curbs. A water line runs under the west edge of the Water Tower Road pavement.

7. HISTORIC RESOURCES

The Preliminary Historic Aboveground Resources Assessment noted that most of the residences on the north side of Elm Street were historic, with nine of them listed on the Vermont Historic Sites and Structures Survey. It also noted that the few streets trees that existed, especially the large maple near 93 Elm Street, are a very important component of the historic character of the street.

B. ALTERNATIVES

The BRPD Team and Village officials divided the alternatives into four different sections, so that it might be possible to "mix and match" alternatives in each section if it seemed appropriate. The four sections were:

- Elm Street itself between West Berkshire Road and Water Tower Road;
- Water Tower Road from Elm Street to near the entrance to the Athletic Fields;
- Sampsonville Road, Route 105 east of Water Tower Road; and
- Off-road alignments that might avoid the traffic on Route 105.

Within this organization, they considered sidewalk alternatives in various locations within or close to the right-of-way for each road, as well as through adjacent properties for the off-road alignments. They also examined different alternatives for reducing the large curb cut/entrances to the McDermott Trucking properties. Their initial analysis resulted in the elimination of the off-road alternatives as well as a few of the sidewalk alignments along each of the three roadway sections. As part of the overall analysis, the Study Team also compared the various alternatives against the option of doing nothing - the No Action Alternative.

Figure 3 shows the final alternatives that they considered. **Appendix B** includes a summary report that describes all of the alternatives and presents the analyses that were considered at a public work session on December 22, 2015. At the meeting, there was a mix of opinions as to whether the preferred alignment should be along Elm Street or move away from Elm Street and cross Water Tower Road away from the intersection with Elm Street. At the end of the meeting, the preferred recommendation was for the alignment away from Elm Street.

After more informal discussions within the Village, the Board of Trustees considered several of the alternatives in more detail at their February 23, 2016 meeting, during which they made a decision to endorse the alignment that followed Elm Street and Sampsonville Road, with a Rectangular Rapid Flashing Beacon (RRFB) at the crosswalk on Water Tower Road. After getting comments from VTrans regarding the use of a RRFB at the intersection, The Board of Trustees discussed the alternatives again on June 14, 2016, after which they kept the alignment adjacent to the road, but modified the crosswalk treatment on Water Tower Road. The final recommendation is presented in **Section III**. **Appendix C** includes notes from the various Board of Trustee's meetings.

III. RECOMMENDED ALIGNMENT

A. OVERVIEW

The recommended alignment would upgrade the existing sidewalk between West Berkshire Road and Pleasant Street and construct a new sidewalk on the northern side of Elm Street and Sampsonville Road to the Emergency Services driveway into the Athletic Fields parcel. A green strip of variable width would separate the sidewalk from the edge of the roadway pavement. A new crosswalk on Water Tower Road would link the sidewalks on the east and west side of the road. **Figure 4** shows the recommended alignment of the sidewalk. **Figure 5** summarizes the issues and impacts that will need to be addressed as part of the construction of the sidewalk in the recommended location. It also highlights some of the positive aspects of the new sidewalk.

The following description looks at the three distinct sections of the new sidewalk:

- From West Berkshire Road to Pleasant Street,
- From Pleasant Street to Water Tower Road and
- From Water Tower Road to the Emergency Services Driveway.

It also includes a description of other related improvements that would be a part of the sidewalk project.

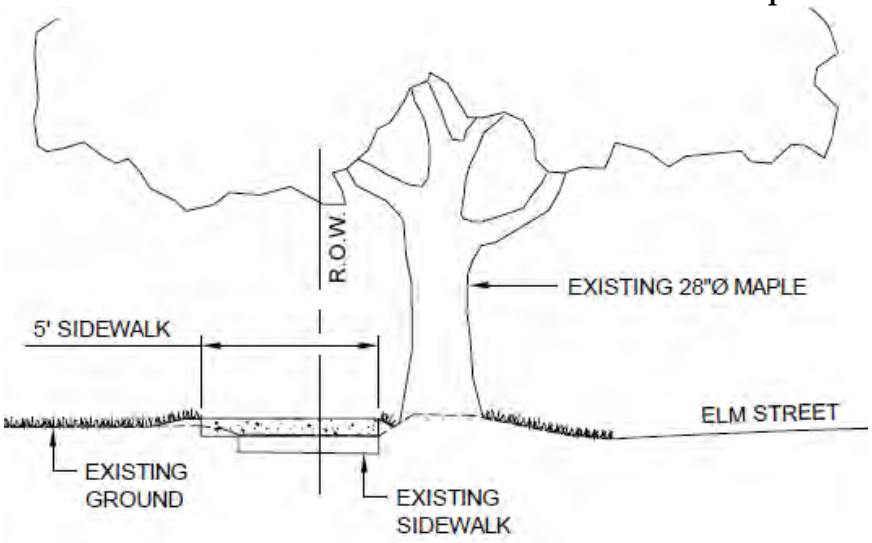
B. WEST BERKSHIRE ROAD TO PLEASANT STREET

The recommended alignment would replace the old, existing four-foot-wide sidewalk with a five-foot-wide concrete sidewalk. No curbs would be added to Elm Street.

The southern edge of the new sidewalk would follow the southern edge of the existing sidewalk. Around the existing old maple tree, the sidewalk would be constructed close to the surface, above the elevation of the existing sidewalk, so that the tree's roots would be disturbed as little as possible by the construction of the new sidewalk. Excavation would be limited to removal of the existing sidewalk and subbase for placement of the new gravel subbase. The sidewalk could also be constructed of asphalt and reduced to four feet wide near the tree, to reduce even further the impacts on the tree. **Illustration 5** shows a typical cross section of the proposed sidewalk close to the existing mature trees.

The existing sidewalk lies mostly outside of the apparent Elm Street right-of-way, so the new sidewalk would also lie mostly outside the right-of-way.

Illustration 5: Recommended Cross Section at 93 Elm Street Maple Tree



C. PLEASANT STREET TO WATER TOWER ROAD

East of the Pleasant Street intersection, the new sidewalk on the north side of Elm Street would lie just inside the northern edge of the Elm Street right-of-way. A five-foot-wide green space would separate the sidewalk from the edge of the existing Elm Street pavement.

The wide access in front of the McDermott property would be reduced to three entry points. The two western entry points would be 30 feet wide. The furthest entry to the east would be approximately 28 feet wide. The parking along the western end of the gravel area in front of the western building would be modified to be parallel to the road. The sidewalk itself would be continuous across the property so that it would be seen by motorists entering and exiting the property. **Illustration 6** on the next page generally shows how the openings would be organized. **Appendix D** shows the layout of these openings in more detail. **Illustration 7** shows a typical cross section in front of the McDermott properties.

At the corner with Water Tower Road, the existing drainage ditch would be filled and replaced with a buried culvert. Existing storm piping will be connected to the new culvert, which will include new catchbasins to collect runoff behind the sidewalk and in the new gutter along Elm Street. The new sidewalk would be separated from the edge of the Elm Street pavement by at least a four-foot-wide green space. **Illustration 8** on the next page shows a typical cross section of this alternative on the eastern end of Elm Street.

Illustration 6: Three Openings across the McDermott Parking

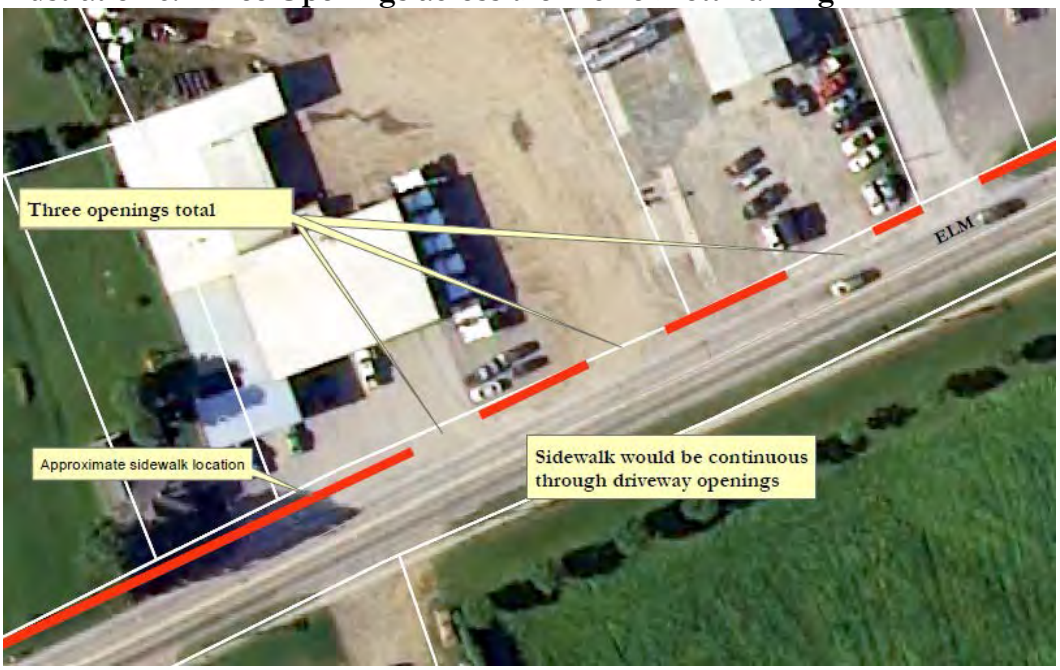


Illustration 7: Recommended Cross Section in front of McDermott Parcels

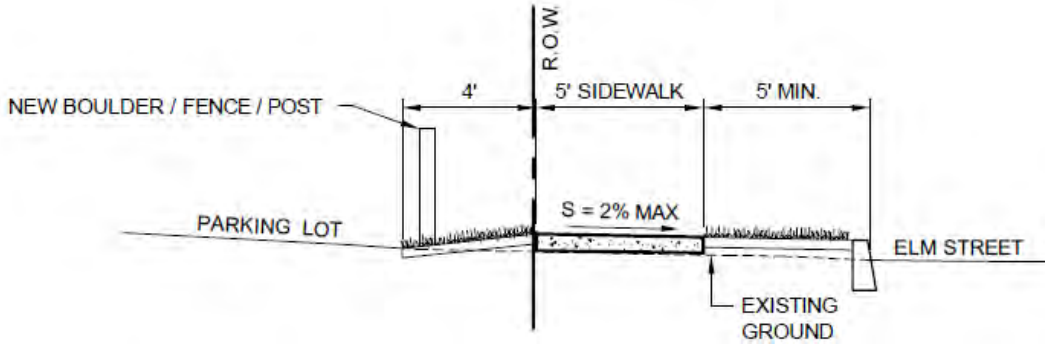
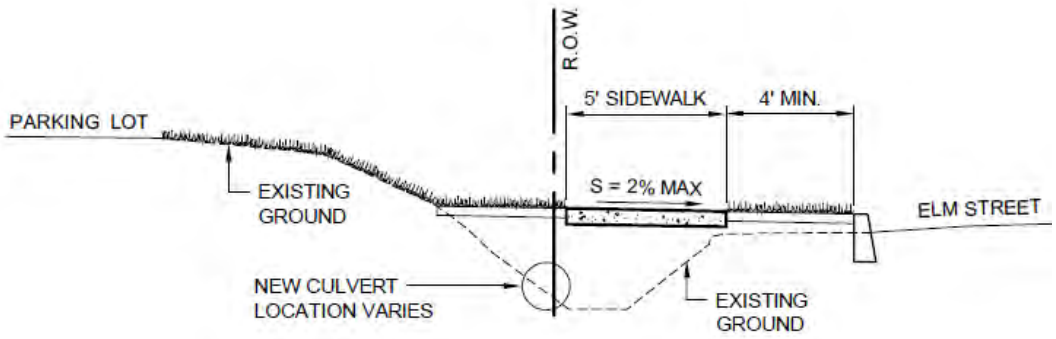


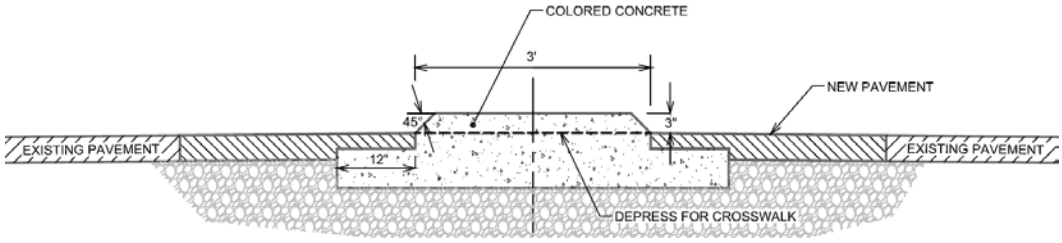
Illustration 8: Recommended Cross Section West of Water Tower Road



D. WATER TOWER ROAD CROSSWALK

The new sidewalk would require a crosswalk on Water Tower Road at the intersection with Elm Street and Sampsonville Road. A second crosswalk might be added to Elm Street at this same intersection. The existing stop bar for the stop sign on Water Tower Road would be pushed further away from the intersection to allow room for the crosswalk. New detectable warning strips and ADA compliant ramps would be included along the edge of the sidewalk at either end of the crosswalk. In addition to the standard pedestrian warning signs, the Village would also add a pedestrian refuge island/delineator strip between the Water Tower Road travel lanes to divide the crosswalk into two sections and provide a safe place for walkers in the middle of the crosswalk. **Appendix D** includes a plan view of the proposed crosswalk layout. **Illustration 9** shows a potential cross section for the delineator strip.

Illustration 9: Delineator Cross Section



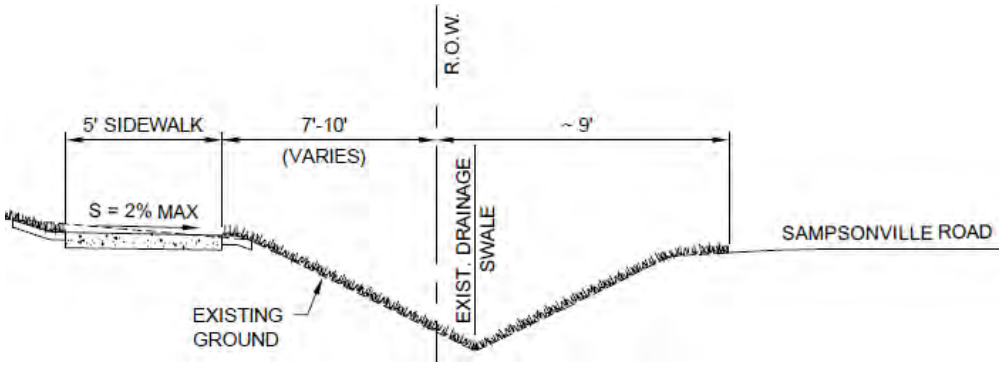
For the potential crosswalk on Elm Street at the intersection with Water Tower Road, the BRPD Team reviewed the VTrans 2015 Guidelines for Pedestrian Crossing Treatments for the proposed crosswalk on Elm Street. The proposed crossing satisfies the criteria for installation, assuming that there are at least 20 pedestrians using the crossing during the highest pedestrian volume hour. Elementary school age and elderly pedestrians are counted as two for the purposes of evaluating the crossing criteria. Since the fall sports season had concluded prior to preparing this report, the BRPD Team could not obtain pedestrian counts in 2015. However, the number of students reportedly using the Athletic Fields would seem to satisfy the criteria, particularly given the potential for use by elementary students. The Village will need to obtain pedestrian counts for the design phase if the selected alternative includes a crosswalk.

A crosswalk warning sign would also be placed on Elm Street to warn motorists turning north onto Water Tower Road of the crosswalk.

E. WATER TOWER ROAD TO EMERGENCY SERVICES DRIVEWAY

The proposed sidewalk would lie along the north side of Sampsonville Road on the outer side of the existing drainage swale. This alignment would place it outside of the existing right-of-way, on the adjacent Community National Bank property. **Illustration 10** on the next page shows a typical cross section of this alternative. As the sidewalk crosses the wetland on the east side of the bank parcel, it would move closer to the road and/or cross the wetland via a boardwalk.

Illustration 10: Recommended Cross Section East of Water Tower Road



Once on the Town parcel, the sidewalk could cross the Emergency Services driveway, turn into the property, and gradually move down slope to intersect with the path at the basketball court. It could also run parallel to the driveway on the western side and cross it closer to the parking area. Initially, the driveway itself could also be used by walkers to reach the rest of the Town of Enosburgh Athletic Fields.

F. ADDITIONAL FEATURES

1. STREET TREES

The sidewalk improvement project would also include additional street trees along Elm Street to create a more enticing environment for walkers as well as to help eventually enclose the streets to induce slower traveling speeds for motorists. **Figure 4** shows the possible location of additional street trees on Elm Street and Sampsonville Road.

2. CURBS & STORMWATER DRAINAGE

The filling of the ditch on the northwest corner of Water Tower Road and Elm Street would make it necessary to add a curb to the corner, from the eastern side of the NAPA Auto driveway on Elm Street to a point on Water Tower Road about 50 feet north of the new crosswalk. The low point along the road, which would be on Elm Street approximately 20 feet east of the NAPA Auto driveway, would need to

have a storm drain inlet to catch the stormwater that now flows directly into the open ditch. The inlet would connect to a manhole at the junction of the existing culverts that empty into the existing ditch. The new buried culvert would link this new manhole to the existing culvert that now carries stormwater from the open drainage ditch north under Water Tower Road.

Appendix D shows a schematic layout of the curb and the stormwater system modifications

To address the issues of additional stormwater runoff and the potential reduction in natural stormwater treatment that the existing ditch provides, the drainage ditch on the other side of the road would be widened slightly to slow the flow of stormwater through it.

Since there will be less than one acre of impervious surface expansion and redevelopment, the new sidewalk and related work would not require a State stormwater permit under the current Stormwater Rule. The stormwater system currently daylights to a ditch located in the Sampsonville Road (VT Route 105) right of way. Although the existing and modified stormwater collection is in the Elm Street (Village) right-of-way, coordination with VTrans will be necessary since the discharge point is located in the State highway right-of[way.

IV. IMPLEMENTATION

A. PHASING

The BRPD Team suggests that, if needed, the project could be divided into two phases. The Blue Phase would include replacement of the existing sidewalk on Elm Street, along with the additional features associated with that portion of the proposed sidewalk. The Green Phase would include the new sidewalk, crosswalk and related infrastructure from Pleasant Street to the access drive to the Emergency Services Building on the western edge of the Town of Enosburgh Athletic Fields. **Figure 5** shows the location of the phases.

B. TRAFFIC MANAGEMENT PLAN

The Village would need to develop a Traffic Management Plan with the design drawings to address pedestrian and vehicular traffic during construction. Since there is an existing sidewalk on the south side of Elm Street along the entire length of the project segment, the Village can easily provide an alternate temporary pedestrian access route. Construction of the new sidewalk along the north side of Elm Street would require managing through traffic and the access to multiple residential and commercial properties. The commercial properties include McDermott's Trucking

and the VTrans District Maintenance Garage, both of which would require regular access for large trucks. The width of the western segment of Elm Street offers the opportunity to maintain two through lanes if daytime on-street parking can be suspended during construction. Along the eastern portion of the project length, the construction process would likely require periodic lane closures during work on the sidewalk.

C. INITIAL ESTIMATE OF PROBABLE CONSTRUCTION COSTS

The BRPD Consulting Team has prepared an initial estimate of probable construction costs for the proposed sidewalk alignment, including the installation of signage, new stormwater infrastructure and street trees, as well as the design and project management. The overall cost of the entire project would be approximately $475,000. The cost of the Blue Phase would be approximately $136,000; the Green Phase would be approximately $336,000. **Tables 1** and **2** provide basic cost information.

Table 1: Initial Estimate of Probable Construction Costs - Blue Phase

Item	Quantity	Unit	Unit Cost	Total
5" Thick Concrete Sidewalk	275	SY	$60	$16,500
8" Thick Concrete Sidewalk	185	SY	$80	$14,800
Gravel Subbase	145	CY	$60	$8,700
Common Excavation	215	CY	$35	$7,525
Rock Excavation	10	CY	$250	$2,500
Detectable Warning Surface	10	SF	$45	$450
Signs & Pavement Markings	1	LS	$500	$500
Erosion Prevention & Sediment Control	1	LS	$1,000	$1,000
Tree Protection	1	LS	$5,000	$5,000
Street Trees	7	EACH	$400	$2,800
Drainage (10%)	1	LS	$8,000	$8,000
Restoration (10%)	1	LS	$8,000	$8,000
Mobilization / Demobilization (8%)	1	LS	$6,500	$6,500
Traffic Control (7%)	1	LS	$5,600	$5,600
			Sub Total	$87,875
Blue Phase Subtotal				$87,875
Engineering (15%)				$13,181
MPM (10%)				$8,788
Construction Inspection (10%)				$8,788
Contingency (20%)				$17,575
			Total	$136,206

The BRPD Team based the initial estimate on the Illustrations and Figures contained in this report. The numbers should be considered as guides in how much funding might be needed to construct the preferred alignment. They are in 2016 dollars; costs could increase by five to ten percent a year. The initial costs estimates are based on having the project constructed by an independent contractor rather than Village crews.

Table 2: Initial Estimate of Probable Construction Costs - Green Phase

5" Thick Concrete Sidewalk	540	SY	$60	$32,400
8" Thick Concrete Sidewalk	155	SY	$80	$12,400
Gravel Subbase	300	CY	$60	$18,000
Common Excavation	425	CY	$35	$14,875
Rock Excavation	10	CY	$200	$2,000
Concrete curb	450	LF	$30	$13,500
Pavement Replacement	100	TON	$150	$15,000
Detectable Warning Surface	30	SF	$45	$1,350
Signs & Pavement Markings	1	LS	$1,500	$1,500
Erosion Prevention & Sediment Control	1	LS	$1,500	$1,500
Street Trees	9	EACH	$400	$3,600
Posts / Fence / Boulders	1	LS	$5,000	$5,000
Drainage Improvements	1	LS	$55,000	$55,000
Restoration (7%)	1	LS	$13,000	$13,000
Mobilization / Demobilization (8%)	1	LS	$15,000	$15,000
Traffic Control (7%)	1	LS	$13,000	$13,000
			Sub Total	$217,125
Green Phase Subtotal				$217,125
Engineering (15%)				$32,569
MPM (10%)				$21,713
Construction Inspection (10%)				$21,713
Contingency (20%)				$43,425
			Total	$336,544

D. PERMITS AND EASEMENTS

The existing sidewalk on Elm Street already lies outside of the Elm Street right-of-way. Consequently, for the portion of the new sidewalk that replaces the old sidewalk, which will follow the same alignment, the Village would need to:

- Obtain easements for the sidewalk from the adjacent landowners;
- Create new right-of-way for the sidewalk using dedication and acceptance, or
- Widen the existing Elm Street right-of-way using the normal methods.

The Village would also need to obtain an easement from the Community National Bank for the sidewalk on Sampsonville Road that is proposed to be outside of the right-of-way. The bank has indicated that they anticipate no problem in working with the Village to establish the necessary easements. Additionally, the Village would most likely need to secure construction easements for the rest of the parcels along the road where there is no sidewalk. These easements would allow temporary disturbance of the properties in order to construct the project.

Based on past projects of this type, the Elm Street sidewalk should not require permits from the Village. A Section 1111 Permit would be required from VTrans for work within the State Highway portion of the right-of-way. This involves the proposed improvements at the Elm Street / Water Tower Road / Jay View Drive intersection and temporary construction work for the new sidewalk along Sampsonville Road. This also includes the potential Elm Street crosswalk to provide a link to the existing sidewalk on the south side of Elm Street and the sidewalk along Jay View Drive.

E. TIMELINE

The timeline for the construction of the Elm Street sidewalk should not be significantly different from what the Village has experienced with other sidewalk construction projects. Once funding is secured, the design of the sidewalk could take from 12 to 24 months, if state approvals are needed. Obtaining necessary permits or temporary construction easements might add more months to the process. Bidding would require at least another two months. The actual construction work on the new sidewalk itself could be accomplished in about two months.

F. FUNDING

Funding for the preferred alignment 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:

- VTrans Transportation Alternatives Program (TA Funds): the VTrans 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. The maximum size of a grant under this program is currently $300,000.

- VTrans Bicycle and Pedestrian Program: These federal funds managed by the State cover specific bicycle and pedestrian improvement projects and are provided via a competitive grant program. In 2015, VTrans had approximately $4 million available for these grants, with no specific limit as to how much each grant could be.

- Bonds: The Village could opt to use bonds to generate funds to undertake the project.

- Vermont Community and Urban Forestry Council Grants (Caring for Canopies): These grants are awarded to municipalities to aid in conducting a street tree inventory and plan, as well as funding of street tree plantings. The grants range in size from $500 to $5,000 and require a 50 percent match.

An 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 sidewalk, including:

- Potential health grants promoting healthy living;
- The Robert Wood Johnson Foundation; and
- MCI/Worldcom Royalty Donation Program (For this and several subsequent ideas, see: http://www.americantrails.org/resources/funding/TipsFund.html).

Even 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.

G. PROCEDURES

As a first step towards implementing the recommendations of this study, the Board of Trustees accepted and endorsed the report at their meeting on August 9, 2016. The Village staff could undertake these additional steps to move the project towards completion:

- Consider applying for funding opportunities through grants, bonding or other sources the Village considers appropriate.
- Keep the Village residents and businesses, especially those along Elm Street, informed on the process of implementing the recommendations.
- Hire a consultant if needed to assist with the design of the sidewalk, looking in particular at:
  - The specific location and widths of the three access points to the McDermott parcels;
  - The very specific methods to be used to protect the large maple tree from construction impacts;
  - The particulars of the new stormwater facilities on the northwest corner of Elm Street and Water Tower Road;
  - The most appropriate location to end the sidewalk on the TownAthletic Fields.
- Move forward as possible with construction.

H. MAINTENANCE

The Village will need to add the new length of sidewalk to the existing sidewalks that it already maintains, including snow plowing in the winter. Assuming that the new sidewalk will be concrete, it will require little maintenance for the next 25 years or so. The only exception might be if the base material fails and one section of sidewalk rises or sinks, creating a difference in elevation greater than one quarter of an inch.

A wise general rule is to budget approximately five percent of the total construction cost as a yearly maintenance cost, which, if accumulated annually, could pay for reconstruction of the sidewalk section when it eventually becomes necessary.

Elm Street Bicycle & Pedestrian Scoping Study

Enosburgh Falls, Vermont

Legend

Village Boundary

Elm Street Study Area

W BERKSHIRE RD
WAYNES WORLD RD
WATER TOWER RD
CAMP RD
SAMPSONVILLE RD
JAYVIEW DR
ELM
PLEASANT
EAST ST
VALENTINE DR
MAIN
BIRCH LN
ORCHARD
DEPOT
FOURTH ST
BISMARK
SEVENTH ST
MAPLE PK
MISSISQUOI
PEARL
PLEASANT
SCHOOL
CENTER
CHURCH
DICKINSON AV
ST ALBANS
DAVIS RD
Enosburg Falls

Feet
0 250 500 1,000 1,500 2,000

BROADREACH Planning & Design

Heritage Landscapes
Preservation Landscape Architects & Planners

Study Area

June 16, 2016

Figure 1

Elm Street Bicycle & Pedestrian Scoping Study

Enosburgh Falls, Vermont

Golf Course

VTrans Garage

McDermott

Elm Street Study Area

W BERKSHIRE RD

ELM

MAIN

CHAMPLAIN

PLEASANT

KENNISON DR

Feet

0 40 80 160 240 320

Legend

- Important Street Trees
- Existing Crosswalk
- Gas Line
- Overhead Wire
- Edge of Roadway
- Sewer Line
- Storm Drain
- Water Line
- Wetland
- Asphalt Sidewalk
- Concrete Sidewalk
- Right-of-Way
- Transmission Line
- Property Line

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Existing Conditions West

June 16, 2016

Figure 2a

Elm Street Bicycle & Pedestrian Scoping Study

Enosburgh Falls, Vermont

Elm Street Study Area

Atheltic Fields

Fire/Rescue & Ambulance

Community National Bank

VTrans Garage

NAPA Auto

McDermott

Hannaford's

SAMPSONVILLE RD

WATER POWER RD

JAY VIEW DR

500

500

480

460

440

440

420

Feet

0 40 80 160 240 320

Legend

- Important Street Trees
- Existing Crosswalk
- Gas Line
- Overhead Wire
- Edge of Roadway
- Sewer Line
- Storm Drain
- Water Line
- Wetland
- Asphalt Sidewalk
- Concrete Sidewalk
- Right-of-Way
- Transmission Line
- Foot Contour 20
- Property Line

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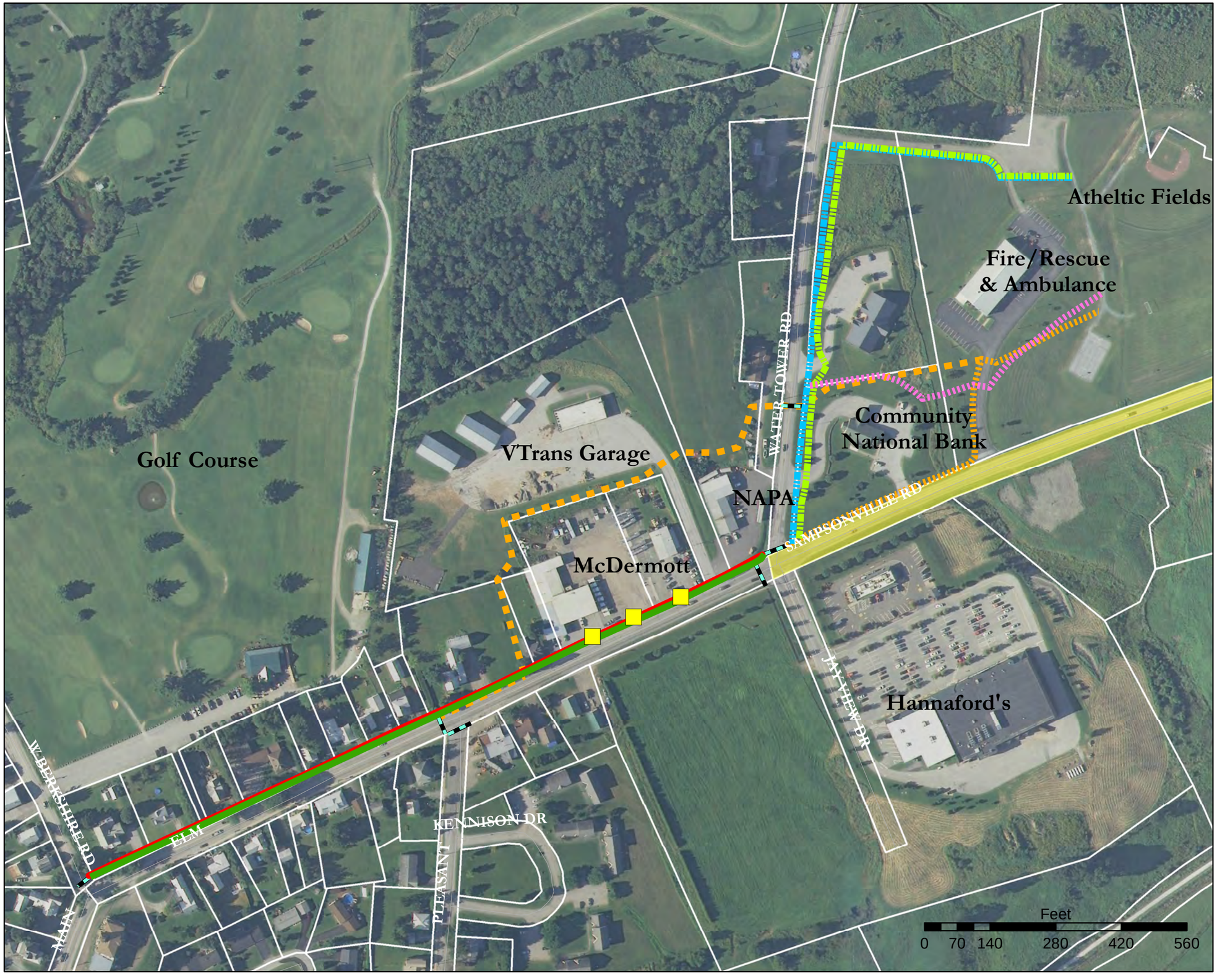
Existing Conditions East

June 16, 2016

Figure 2b

Elm Street Bicycle & Pedestrian Scoping Study

Enosburgh Falls, Vermont



Legend

- Alt A-1
- Alt A-2
- Alt A-3 & A-4
- Alt B-1
- Alt B-2
- Alt B-3
- Alt C-1
- Alt D-C
- New Crosswalk
- Crosswalk
- State Highway
- Property Line

BROADREACH Planning & Design

LD

Heritage Landscapes
Preservation Landscape Architects & Planners

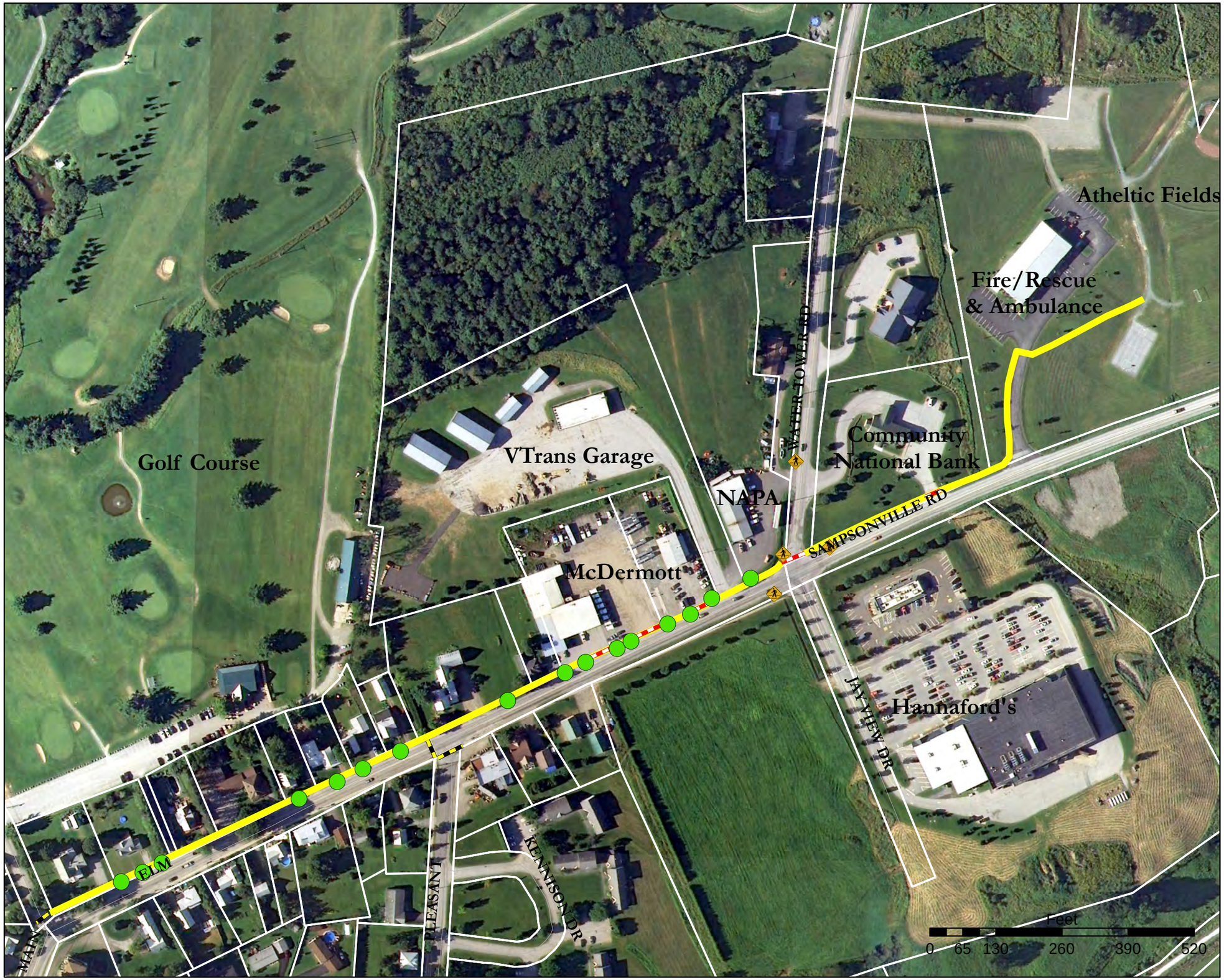
Alternatives

June 16, 2016

Figure 3

Elm Street Bicycle & Pedestrian Scoping Study

Enosburgh Falls, Vermont



Legend

- Recommended Sidewalk Alignment
- New Crosswalk
- New Crosswalk Warning Sign
- New Street Tree
- Existing Crosswalk
- Property Line

BROADREACH Planning & Design

Heritage Landscapes
Preservation Landscape Architects & Planners

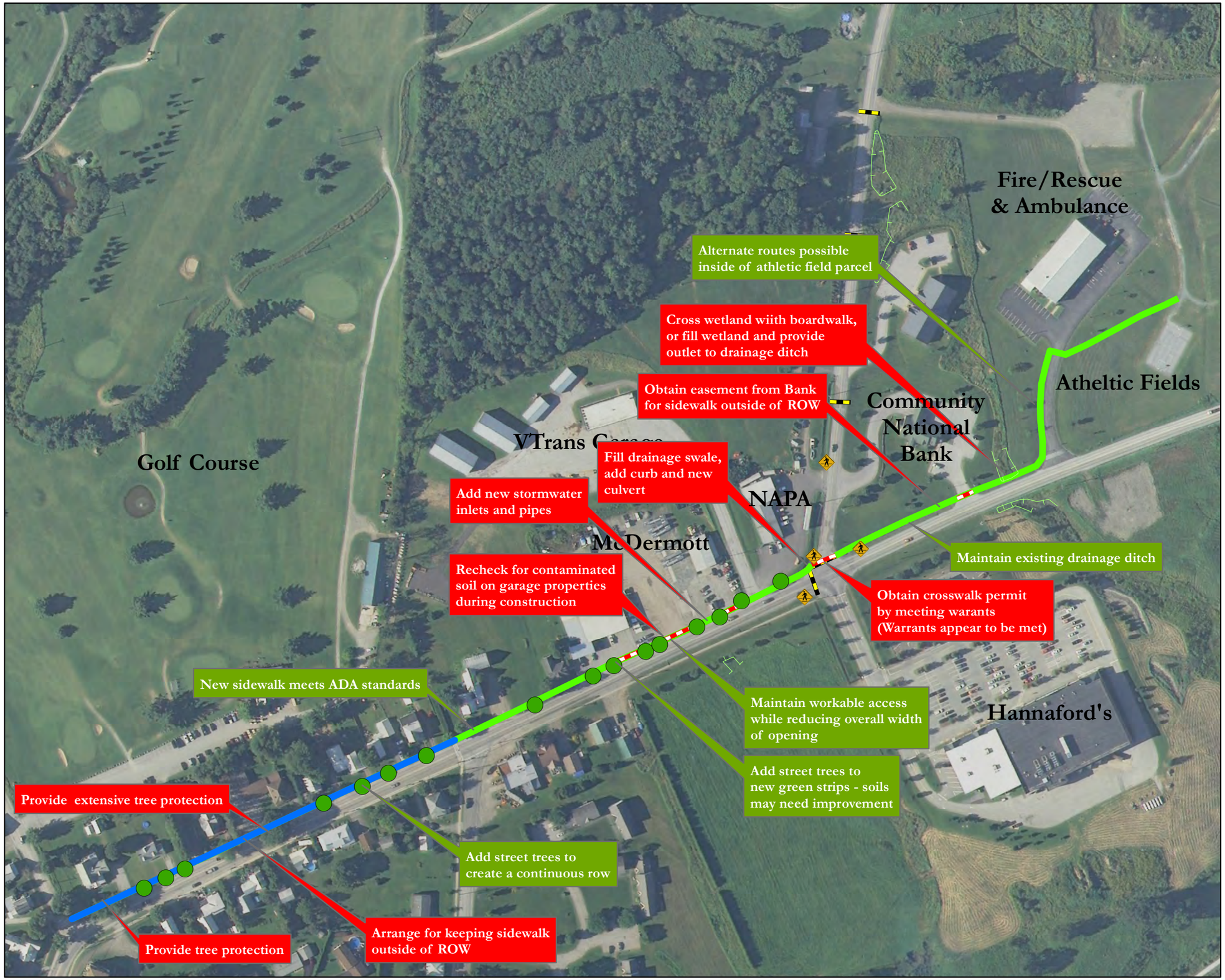
Preferred Alignment

March 29, 2016

Figure 4

Elm Street Bicycle & Pedestrian Scoping Study

Enosburg Falls, Vermont



Legend

- New Crosswalk Warning Sign
- New Street Tree
- Blue Phase
- Green Phase
- New Crosswalk
- Wetland
- Existing Crosswalk
- Property Line

Red notes are actions that need to happen to minimize impacts or allow construction of the sidewalk.

Green notes are actions that will enhance or benefits of the sidewalk.

Feet

0 60 120 240 360 480

BROADREACH Planning & Design

Heritage Landscapes
Preservation Landscape Architects & Planners

Preferred Alignment Impacts & Issues

June 16, 2016

Figure 5

Appendix A
Existing Conditions

Village of Enosburgh Falls

Elm Street
Sidewalk Scoping Study

Existing Conditions

Submitted by:

Broadreach Planning & Design

In conjunction with

Lamoureux & Dickinson Consulting Engineers
Heritage Landscapes, LLC
University of Vermont Consulting Archeology Program

June 16, 2016

This report has been formatted for double-sided printing.
Blank pages are intentional.

A. INTRODUCTION

1. OVERVIEW

This study is examining the most appropriate ways to upgrade and extend a sidewalk on Elm Street heading east from its western end at the intersection with Main Street and West Berkshire Road east to the Village Athletic Fields east of Water Tower Road. **Figure A-1** shows the location of Elm Street in the Village of Enosburgh Falls, Vermont and the surrounding Study Area that is the focus of this report.

The Village received a grant from the Vermont Agency of Transportation (VTrans) to examine the options for upgrading and extending the sidewalk. Village officials, after circulating a Request for Proposals, selected a consulting team consisting of Broadreach Planning & Design, Lamoureux & Dickinson, Heritage Landscapes LLC and the University of Vermont Consulting Archeology Program (the BRPD Team) to assist them with the project.

This summary report is the first product of the work of the Village officials and the BRPD Team. The summary describes the existing conditions in the Study Area.

2. PURPOSE AND NEED

The purpose of the extended sidewalk on Elm Street is to provide a pedestrian connection to the Athletic Fields from the Village center that is compliant with current Americans with Disabilities Act (ADA) regulations and standards.

Needs for the improvements include:

- The lack of any pedestrian accommodations on the eastern end of Elm Street, the western end of Sampsonville Road, and the southern end of Water Tower Road the leading to the Athletic Fields;
- The presence of a bus route on Elm Street without adequate pedestrian access to stops along the eastern portion of the Study Area;
- The minimal width of the existing Elm Street north side sidewalk that does not meet current ADA standards; and
- Frequent pedestrian activity to and from the Athletic Fields, especially during the school year, by students and other Enosburgh Falls residents.

3. PROJECTED USERS

The Village would like to improve walking conditions on Elm Street for people of all ages and abilities. 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 one half 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
- Restricted 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 that walk occasionally and have no trouble walking for short distances of up to 1/2 mile. *Restricted walkers* are those whose speed and mobility are limited.

4. ORIGINS, DESTINATIONS & TRAVEL PATTERNS

The primary destination for walkers on Elm Street is the Athletic Fields just a bit east of Water Tower Road. The origins are the schools to the south on Pleasant Street and the residents in the Village. These same locations serve as destinations for walkers and bicyclists leaving the Athletic Fields. The existing sidewalks on Elm Street, even though not compliant with the current ADA regulations, and a newer sidewalk on Pleasant Street currently serve as pathways leading into and through the Study Area and to the Athletic Fields.

5. ELM STREET SURVEY

AS part of the review of existing conditions, the BRPD Team completed a topographic survey of Elm Street, Sampsonville Road, and Water Tower Road within the Study Area. The survey work provided many of the details described in the following sections and shown on **Figure A-3**. **Attachment A-1** includes copies of the survey, which shows more details than the figure.

B. LAND USE

Figure A-2 shows the existing land uses in the Study Area. The western end of Elm Street is primarily residential, but the land use shifts to industrial and commercial on the eastern end of Elm Street and on to Sampsonville Road. Included in the industrial uses is the VTrans service garage located behind the other industrial properties on the north side of Elm Street. A golf course lies behind the residential properties on the north side of Elm Street.

C. TRANSPORTATION FACILITIES

1. ELM STREET

Elm Street runs between the northern end of Main Street east to the southern end of Water Tower Road. It is part of the Class 1 Road portion of VT Route 105 in Enosburgh Falls. East of the intersection with Water Tower Road, the name changes to a State Route with a corresponding name change to Sampsonville Road.

There are numerous residential driveways along the western end of Elm Street. The commercial and industrial access points on the eastern end of Elm Street are wider and not as well defined. One access point on the north side of the road is nearly 400 feet wide. East of Water Tower Road, there are relatively few access points on Samsponville, but they include an access to the Enosburgh Falls Fire and Rescue/Ambulance center directly west of the Athletic Fields on the same Village-owned parcel. There is no other access point to the Athletic Fields from Sampsonville Road.

The Elm Street pavement width varies. West of Pleasant Street, the pavement width fluctuates from 32 to 42 feet, being widest where the paved gutter extends all the way to the sidewalk on the south side of the street. Parking is also accommodated on the south side of the western end of Elm Street. East of Pleasant Street, the pavement width gradually narrows from 36 feet near Pleasant Street to 28 feet near the Water Tower Road/Jay View Drive intersection. Pavement condition is good on Elm Street; it was paved in 2014 as part of a VTrans class I highway paving project. An old curb, sometimes barely visible, lines the north side of Elm Street between Main Street and Pleasant Street. A newer curb also lines the south side of the street from Main Street to Pleasant Street.

The specific width of the Elm Street right-of-way (ROW) has been difficult to exactly determine, but numerous different source support the assumption that it is three rods, or about 49.5 feet, wide and centered on the roadway.

The latest traffic count on Elm Street between Pleasant Street and Water Tower Road from 2010 show that the road carried about 8400 vehicles. The peak hours were 4-6 PM, with an observed peak of 669 vehicles during both the 4-5 PM hour and the 5-6 PM hour.

The posted speed on Elm Street is 25 miles per hour (MPH).

There were 11 crashes reported along the project segment of Elm Street between 2010 and 2014. The most recent (2010-2104) VTrans High Crash Location Report did not identify either the intersections or project segment as high crash locations. All of the crashes appear to have occurred in the vicinity of the intersections with VT Route 108, Pleasant Street, and Water Tower Road/Jay View Drive. Six of the 11 accidents occurred at the Water Tower Road / Jay View Drive intersection. For

eastbound traffic, this is the beginning of the State highway and where vehicle speed tends to increase, although the posted speed limit only changes from 25 MPH to 30 MPH. **Table 1** shows this crash history. The information shows that crashes appear to have been primarily the result of operator error, rather than any inherent deficiency in the geometric conditions or alignment of Elm Street.

Table 1: 2010 to 2014 Crash History

Location	Crash Type				Injuries
	Rear End	Opposing Direction	Other	Total	
Route 108 intersection (mm 1.20 – mm 1.22)	0	2	0	2	0
Elm Street (mm 1.31 - mm 1.37)	1	1	1	3	5
Water Tower Rd / Jay View Drive intersection (mm 1.50- mm 1.51)	2	4	0	6	1
Totals	3	6	2	11	6

There is an existing crosswalk linking the sidewalk on the west side of Pleasant Street with the existing, older sidewalk on the north side of Elm Street. There is also a crosswalk on Pleasant Street at the intersection as part of the sidewalk on the south side of Elm Street. A third crosswalk is located on West Berkshire Road as it intersects the west end of Elm Street.

The Village sponsored an analysis of the potential for a adding a crosswalk on Sampsonville Road on the east side of the Water Tower Road intersection. The analysis showed that all of the requirements for adding a crosswalk were not met and the marked sidewalk could not be added. **Attachment A-2** includes a copy of the analysis summary.

2. WATER TOWER ROAD

Water Tower Road begins at the eastern end of Elm Street, just after the end of the Class 1 Road. The actual intersection of Route 105 with Water Tower Road is outside of the Village road jurisdiction. Water Tower Road extends north into the Town of Berkshire and ends at its intersection with VT Route 118 in Berkshire Center.

There is an access drive to a parking area on the Athletic Fields from Water Tower Road, approximately 900 feet north of the intersection with Elm Street. There are four other driveways on Water Tower Road, two on each side, between the park entrance and Elm Street. There are no curbs on Water Tower Road. The road is

lined on the west side by a deep drainage ditch. The grade drops away from the road significantly on the east side.

The pavement width on Water Tower Road is 25 to 26 feet and the pavement condition is good. It was reclaimed and paved by the Village in the summer of 2014.

No descriptions were discovered in the land records for Water Tower Road or Elm Street (VT Route 105) Several surveys along each of the roads cite Vermont Statute in defining those roads as three rods, or 49.5 feet wide.

A traffic count on Water Tower Road in 2011 at 0.4 miles north of the Elm Street intersection showed that 1,200 vehicles per day traveled on the road. The peak hours were 4-6 PM, with an observed peak of 153 vehicles between 5-6 PM.

The posted speed limit on the road is 25 MPH.

Recent crash records show only one crash on Water Tower Road within the Study Area.

D. NATURAL RESOURCES

1. WATERCOURSES

There are no streams, brooks or rivers within the Elm Street Study Area

2. WETLANDS

There are two small, Class 3 wetland areas on the east side of Water Tower Road south of the Athletic Field entrance drive. There are no other identified wetlands within the Study Area. **Figure A-3** shows the limits of the wetlands.

3. WATERBODIES

There are no waterbodies within the Study Area.

4. TOPOGRAPHY

Figure B-3 shows the general topography in the Study Area. It is level along Elm Street, but rises slightly to the north along Water Tower Road. The road rises faster than the adjacent property to the east, so there is a drop of up to ten feet from the edge of the pavement to the level areas on the adjacent properties.

5. FLOODPLAINS

There are no 100-year flood plains within the Elm Street Study Area.

6. FLORA & FAUNA

The State of Vermont has not identified natural areas of special importance within the Study Area. There are also no deer wintering areas or other important flora or fauna habitats within the Study Area, including rare, threatened or endangered species.

The western end of Elm Street has several large street trees growing between the old sidewalk on the north side and the edge of the roadway pavement. There are almost no trees along the side of the road east of Pleasant Street, but there is an evergreen hedge along the edge of the Elm Street ROW on the parcel located in the southwest corner of the Elm Street/Water Tower Road, Sampsonville Road/Jay View Road intersection. There is a small forest stand between the Golf Course and Water Tower Road north of the commercial properties lining the north side of Elm Street. **Figure A-2** shows the location of the important existing street trees and forested area.

E. UTILITIES

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

Utility poles owned by the local electric company run along the south side of Elm Street and the west side of Water Tower Road.

A gas line runs underground along the north side of Elm Street between the sidewalk and the edge of the pavement. Two water lines run under the street, on approximately in the middle of the westbound travel land and one approximately in the middle of the east bound travel land. A sewer line lies under the pavement generally on the south side of the street. Stormwater lines run along both edges of the Elm Street where there are curbs.

A water line runs under the west edge of the Water Tower Road pavement. A sewer line runs underground inside and just outside the ROW east of the Water Tower Road pavement.

G. CULTURAL RESOURCES

1. HISTORIC RESOURCES

The Preliminary Historic Aboveground Resources Assessment noted that most of the residences on the north side of Elm Street were historic, with nine of them listed on the Vermont Historic Sites and Structures Survey. It also noted that the few streets trees that existed, especially the large maple near 93 Elm Street, are a very important component of the historic character of the street. The complete historic resources review is included in **Attachments A-3**.

2. ARCHEOLOGICAL RESOURCES

The Archeological Resources Assessment noted that the eastern bank of the drainage ditch on the Community National Bank and adjacent medical office building were sensitive for Native American artifacts.

The complete archeological resources assessment report is included in **Attachment A-4**.

3. OPEN SPACE AND PUBLIC LANDS

The Village owns a large parcel of land north of Sampsonville Road and East of Water Tower Road. It has extensive frontage on Sampsonville Road. It has no frontage on Water Tower Road; the driveway is apparently in an easement over the intervening property between the Athletic Fields and Water Tower Road. The VTrans garage is owned by the State of Vermont. The rest of the properties in the Study Area are in private ownership. **Figure A-2** shows the location of the open space and public lands.

4. HAZARDOUS WASTE SITES

There is one residential property in the Elm Street Study Area included on the Vermont Interactive Waste Management Site. The issue was a leaking buried oil tank that has been addressed. There are no other hazardous waste sites listed within the Study Area.

5. TRANSIT SERVICE

Green Mountain Transit Authority runs a fixed route bus line along Route 105, including Elm Street.

H. PLANNING DOCUMENTS

1. MUNICIPAL PLANS

The Town and Village of Enosburgh, Vermont Comprehensive Plan, was recently updated and completed in 2015. There are numerous statements within it that support the improvement and extension of the sidewalk on Elm Street.

> People and goods move with the assistance of more than one mode, therefore transportation planning should consider how the different modes of transportation could complement each other.
> ...

> Most streets have sidewalks on both sides of the street for particular sections;
> ...
> There is an annual appropriation voted for sidewalk construction and maintenance, which receives yearly allocations at the Enosburg Falls annual meeting.
> ...
> Add facilities (shoulder or sidewalk) to connect to the Emergency Services Building to access the recreation fields. Pedestrians currently cross at Hannafords.
> ...
> The intersection with Route 105, Water Tower Road, and the Hannaford Shopping Center is unsignaled. The State of Vermont owns the Route 105 right-of-way and therefore is responsible for improvements. In 2007, the Village petitioned VTrans to evaluate the intersection to determine if it warranted a traffic light; however, VTrans maintains that the intersection does not yet warrant signalization. VTrans did make alternate improvements to the intersection including lowering the speed limit from 40 MPH to 30 MPH, and repainting the road marks on Route 105 and the intersection with Water Tower Road. In addition, VTrans has posed the question to Enosburg Falls whether Water Tower Road could be straightened to make a "T" at the intersection rather than a "Y" coming onto Route 105; Water Tower Road is owned by Enosburgh Falls and the village would be required to pay for such an improvement. No decision on this matter has been made.

Several of the Transportation Goals relate to this project.

- Provide for a safe, convenient, economic, and energy efficient transportation system that respects the natural environment and utilizes a variety of transportation modes.

- Provide appropriate provisions for bicycle and pedestrian use on designated routes, including sidewalks, paths, proper signage and pavement improvements.

Several Transportation Policies are also applicable.

- Promote a safe, convenient, economic, and energy efficient transportation system for all users including public transit options and paths for pedestrians and bicycles.

- Support public transit efforts of Green Mountain Transit Agency to increase mobility and access for Enosburgh residents.

The Plan lists two Transportation Recommendations that support the upgrading and extension of the Elm Street sidewalk.

- Pursue funding and planning opportunities that support the expansion and maintenance of the sidewalk and trail network.

- Maintain a current Capital Budget & Program that includes a plan for local street and sidewalk improvements, future growth of roads, bridge repair and replacement, and equipment replacement.

2. STATE PLANS

The 2008 VTrans Pedestrian and Bicycle Policy Plan includes several goals and objectives that directly support the creation of a sidewalk along Elm Street to make it easier to use walking as a means of travel, including:

(State Plan) 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 walking facilities, which allow pedestrians and bicyclists to reach their destinations throughout the State or to connect to other modes of travel.

(State Plan) 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.

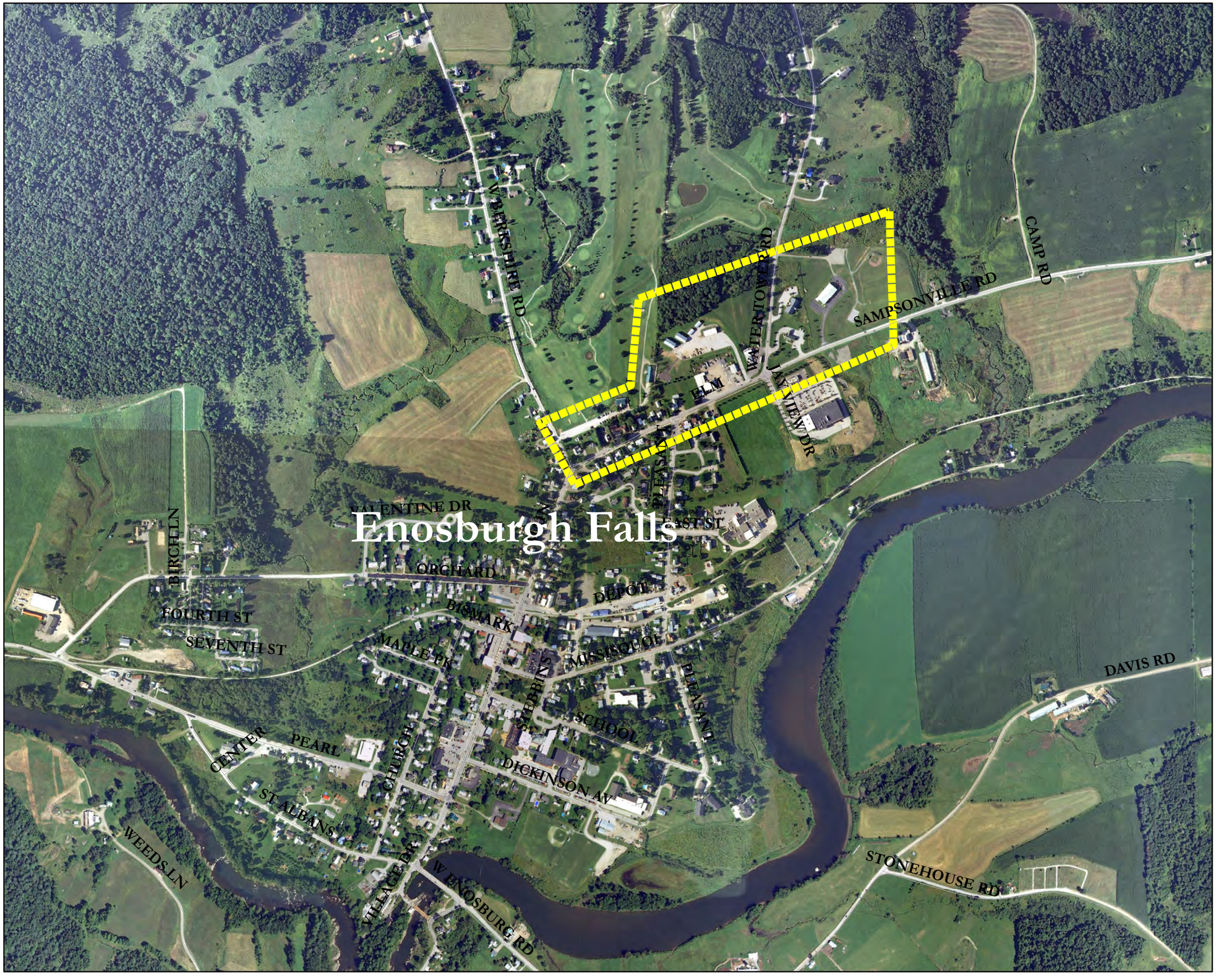
- Objective 12: Provide a seamless transportation network for pedestrians and bicyclists by improving linkages between walking, bicycling and other modes of transportation.

H. ZONING

The Study Area lies within three zoning districts that reflect the current land uses. The western end of Elm Street is in the High Density Residential District as is most of the west side of Water Tower Road. Both sides of the eastern portion of Elm Street and the east side of Water Tower Road are in the Commercial District. The golf course and the Athletic Fields are in the Recreational District. **Figure A-2** shows the location of the current zoning districts.

Elm Street Bicycle & Pedestrian Scoping Study

Enosburgh Falls, Vermont



Legend

Elm Street Study Area

Feet

0 250 500 1,000 1,500 2,000

BROADREACH Planning & Design

Heritage Landscapes
Preservation Landscape Architects & Planners

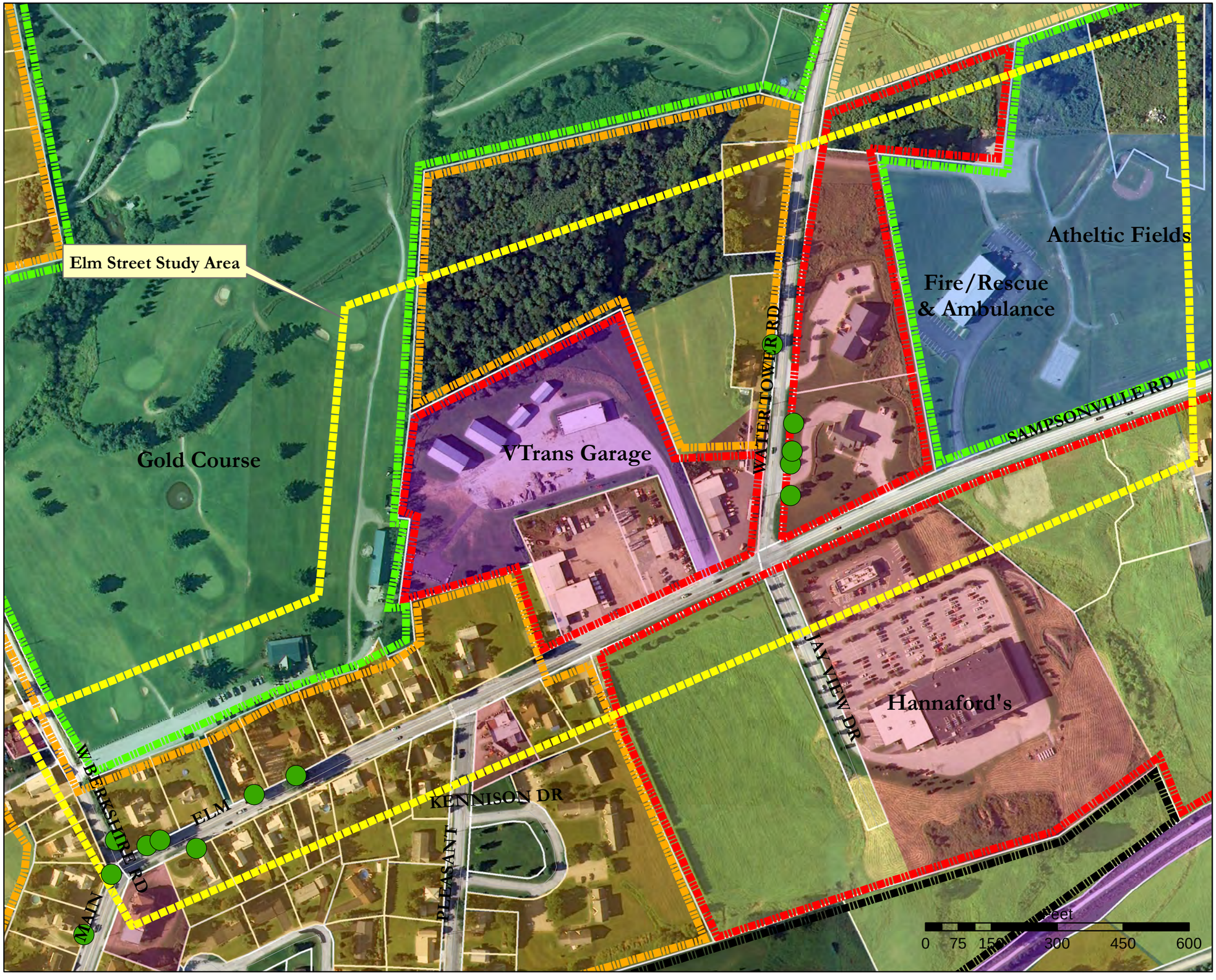
Study Area

October 7, 2015

Figure A-1

Elm Street Bicycle & Pedestrian Scoping Study

Enosburgh Falls, Vermont



Legend

- Important Street Trees
- Recreation District Poly
- Low Density Residential District
- High Density Residential District
- Commercial District poly
- Industrial District
- State Land Use
- Municipal Land Use
- Commercial Land Use
- Agricultural Land Use
- Industrial Use
- Open Land
- Recreational Use
- Residential Land Use
- Property Line

BROADREACH Planning & Design

Heritage Landscapes
Preservation Landscape Architects & Planners

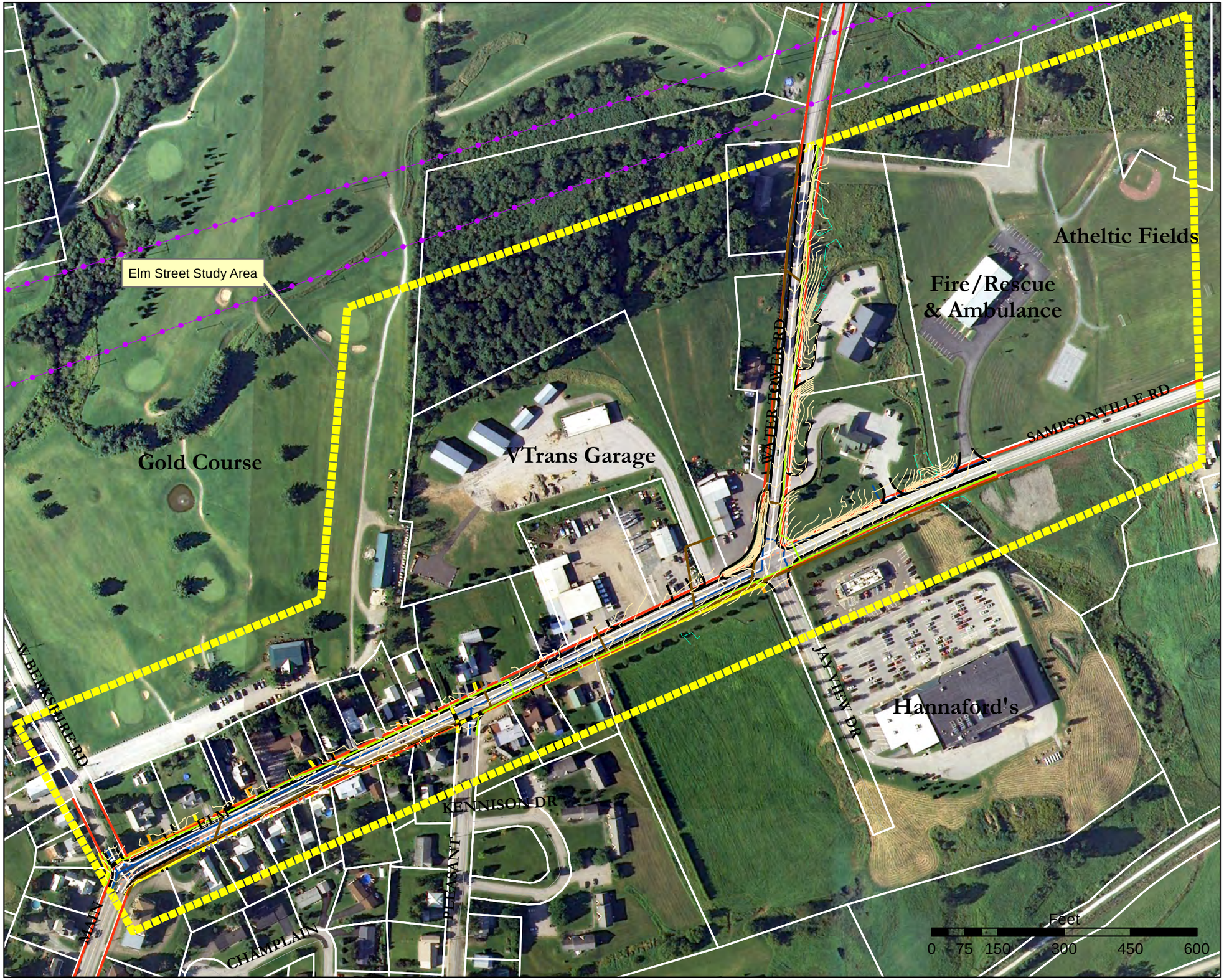
Existing Conditions: Land Use

October 14, 2015

Figure A-2

Elm Street Bicycle & Pedestrian Scoping Study

Enosburgh Falls, Vermont



Legend

- Sewer Line
- Storm Drain
- Water Line
- Overhead Wire
- Transmission Line
- Gas Line
- Gravel Edge
- Edge of Roadway
- Pavement Marking
- Asphalt Sidewalk
- Concrete Sidewalk
- Crosswalk
- Right-of-Way
- Wetland
- One-Foot Contours
- Property Line

BROADREACH Planning & Design

Heritage Landscapes
Preservation Landscape Architects & Planners

Existing Conditions

October 14, 2015

Figure A-3

Attachment A-1
Topographic Survey
Lamoureux & Dickinson
Essex, Vermont

VT Route 108 N

PAUL PETTY
19 ELM ST

KEVIN
DEPATIE
41 ELM ST

ENOSBURG FALLS COUNTRY CLUB
53 ELM ST

SHARON
LAROSE
79 ELM ST

DANIEL & JEAN
JEWETT
93 ELM ST

107 ELM ST

Elm Street (VT Route 105)

612 MAIN ST

ROBERT F.
GLEASON
38 ELM ST

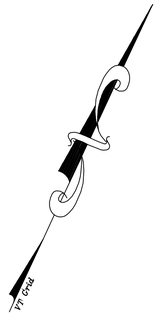
EDWARD
GAGNE
56 ELM ST

KEVIN
BURNOR
74 ELM ST

82 ELM ST

92 ELM ST

NANCY GOKSEL
104 ELM ST



GRAPHIC SCALE

20 0 10 20 40 80

(in feet)
1 inch = 20 ft.

LEGEND

450	GROUND CONTOUR
OHW	OVERHEAD WIRE
W	WATER MAIN
G	GAS LINE
ST	STORMWATER PIPE
S	SEWER MAIN
	UTILITY POLE & GUY
	TREES
	SIGNS
	MAILBOX
	SEWER MANHOLE
	WATER CURB STOP
	WATER VALVE
	WATER HYDRANT
	GAS VALVE
	CATCH BASIN
	PROPERTY CORNER FOUND

Date	Revision	By

These plans shall only be used for the purpose shown below:

- ■ Sketch/Concept
- ☐ Preliminary
- ☐ Final Local Review
- ☐ Act 250 Review
- ☐ Construction
- ☐ Record Drawing

Elm Street Sidewalk

Elm Street Enosburg VT

EXISTING CONDITIONS

Lamoureux & Dickinson
Consulting Engineers, Inc.
14 Morse Drive, Essex, VT 05452
802-878-4450 www.LDengineering.com

Project No.	15091
Survey	KR
Design	AR
Drawn	L&D
Checked	AR
Date	Sept. 2015
Scale	1" = 20'
Sheet number	1

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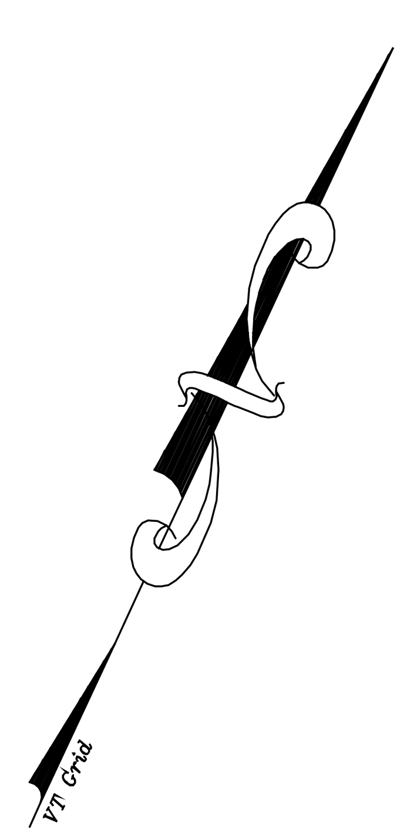

GRAPHIC SCALE

20 0 10 20 40 80

(in feet)
1 inch = 20 ft.

LEGEND

450	GROUND CONTOUR
OHW	OVERHEAD WIRE
W	WATER MAIN
G	GAS LINE
ST	STORMWATER PIPE
S	SEWER MAIN
	UTILITY POLE & GUY
	TREES
	SIGNS
	MAILBOX
	SEWER MANHOLE
	WATER CURB STOP
	WATER VALVE
	WATER HYDRANT
	GAS VALVE
	CATCH BASIN
	PROPERTY CORNER FOUND

Date	Revision	By

These plans shall only be used for the purpose shown below:

- ■ Sketch/Concept
- ☐ Preliminary
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- ☐ Construction
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Elm Street Sidewalk

Elm Street Enosburg VT

EXISTING CONDITIONS

Lamoureux & Dickinson
Consulting Engineers, Inc.
14 Morse Drive, Essex, VT 05452
802-878-4450 www.LDengineering.com

Project No.	15091
Survey	KR
Design	AR
Drawn	L&D
Checked	AR
Date	Sept. 2015
Scale	1" = 20'
Sheet number	2

223 ELM ST

273 ELM ST

281 ELM ST

Elm Street

VT Route 105

Water Tower Road

Sampsonville Road

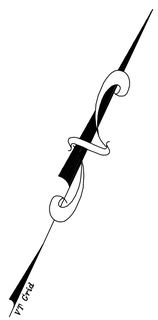
Jay View Dr.

COMMUNITY
NATIONAL BANK
49 SAMPSONVILLE RD

PMMB ENOSBURG LLC
926 SAMPSONVILLE ROAD

JERRY & PAULINE
BAKER
210 ELM ST

P M MCD LLC
41 JAY VIEW DR
McDonalds



GRAPHIC SCALE

20 0 10 20 40 80

(in feet)

1 inch = 20 ft.

LEGEND

	WETLAND BOUNDARY
450	GROUND CONTOUR
OHW	OVERHEAD WIRE
W	WATER MAIN
G	GAS LINE
ST	STORMWATER PIPE
S	SEWER MAIN
	UTILITY POLE & GUY
	TREES
	SIGNS
	MAILBOX
	SEWER MANHOLE
	WATER CURB STOP
	WATER VALVE
	WATER HYDRANT
	GAS VALVE
	CATCH BASIN
	PROPERTY CORNER FOUND

Date	Revision	By

These plans shall only be used for the purpose shown below:

- ■ Sketch/Concept
- ☐ Preliminary
- ☐ Final Local Review
- ☐ Act 250 Review
- ☐ Construction
- ☐ Record Drawing

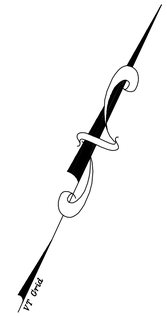
Elm Street Sidewalk

Elm Street Enosburg VT

EXISTING CONDITIONS

Project No.	15091
Survey	KR
Design	AR
Drawn	L&D
Checked	AR
Date	Sept. 2015
Scale	1" = 20'
Sheet number	3

Lamoureux & Dickinson
Consulting Engineers, Inc.
14 Morse Drive, Essex, VT 05452
802-878-4450 www.LDengineering.com



LEGEND

- WETLAND BOUNDARY
- 450 GROUND CONTOUR
- OHW OVERHEAD WIRE
- W WATER MAIN
- G GAS LINE
- ST STORMWATER PIPE
- S SEWER MAIN
- UTILITY POLE & GUY
- TREES
- SIGNS
- MAILBOX
- SEWER MANHOLE
- WATER CURB STOP
- WATER VALVE
- WATER HYDRANT
- GAS VALVE
- CATCH BASIN
- PROPERTY CORNER FOUND

GRAPHIC SCALE

20 0 10 20 40 80

(in feet)

1 inch = 20 ft.

Date	Revision	By

These plans shall only be used for the purpose shown below:

- ■ Sketch/Concept
- ☐ Preliminary
- ☐ Final Local Review
- ☐ Act 250 Review
- ☐ Construction
- ☐ Record Drawing

Elm Street Sidewalk

Elm Street Enosburg VT

EXISTING CONDITIONS

Project No.	15091
Survey	KR
Design	AR
Drawn	L&D
Checked	AR
Date	Sept. 2015
Scale	1" = 20'
Sheet number	4

Lamoureux & Dickinson
Consulting Engineers, Inc.
14 Morse Drive, Essex, VT 05452
802-878-4450 www.LDengineering.com

BIG RED BARN REAL
ESTATE, LLC,
THE BUILDING LLC
81 WATER TOWER RD

CHARLOTTE &
LAWRENCE DONLON
167 WATER TOWER RD

Water Tower Road

LEACH LIFE ESTATE
84 WATER TOWER RD

VT Grid

GRAPHIC SCALE

20 0 10 20 40 80

(in feet)
1 inch = 20 ft.

LEGEND

- WETLAND BOUNDARY
- GROUND CONTOUR
- OVERHEAD WIRE
- WATER MAIN
- GAS LINE
- STORMWATER PIPE
- SEWER MAIN
- UTILITY POLE & GUY
- TREES
- SIGNS
- MAILBOX
- SEWER MANHOLE
- WATER CURB STOP
- WATER VALVE
- WATER HYDRANT
- GAS VALVE
- CATCH BASIN
- PROPERTY CORNER FOUND

Date	Revision	By

These plans shall only be used for the purpose shown below:

- ■ Sketch/Concept
- ☐ Preliminary
- ☐ Final Local Review
- ☐ Act 250 Review
- ☐ Construction
- ☐ Record Drawing

Elm Street Sidewalk

Elm Street Enosburg VT

Project No. 15091
Survey KR
Design AR
Drawn L&D
Checked AR
Date Sept. 2015
Scale 1" = 20'
Sheet number 5

EXISTING CONDITIONS

Lamoureux & Dickinson
Consulting Engineers, Inc.
14 Morse Drive, Essex, VT 05452
802-878-4450 www.LDengineering.com

Attachment A-2

Pedestrian Crosswalk at Route 105/Water Tower Rd/Jay View Dr

Lamoureux & Dickinson

Essex, Vermont

Memorandum

To: Garry Atherton, Village of Enosburg
From: Roger Dickinson, P.E, PTOE
Date: November 29, 2011
RE: Pedestrian Crosswalk at Route 105/Water Tower Rd/Jay View Dr

As requested, we have reviewed the feasibility of installing a crosswalk crossing Route 105 on the east side of the above intersection. We understand the primary pedestrian destination on the north side of Route 105 are the recreational fields adjacent to the nearby Fire/Rescue Station.

Route 105 at this intersection is a state highway. Approval from the Agency of Transportation would be required to install a crosswalk at this location. We therefore obtained background information and traffic/pedestrian counts from the Agency of Transportation. The following criteria are taken from the Agency of Transportation's *Guideline for the Installation of Crosswalk Markings and Pedestrian Signing at Marked and Unmarked Crossings*, July 2004.

The above guidelines establish six criteria for crossings on the uncontrolled approaches of an unsignalized intersection. All six have to be met in order to install crosswalk markings and/or signs.

1. *The speed limit is 40 mph or less.*
   The speed limit at this intersection is 30 mph. This criteria is satisfied.

2. *There are 20 or more pedestrians using the crossing per hour during the vehicular AM and PM peak periods (lesser volumes may be considered if a large percentage of the pedestrian population consists of young, elderly or disabled pedestrians).*
   In June 2007, VTrans performed a traffic count at this intersection. That count showed a maximum of 2 pedestrians crossing Route 105 on the east side of this intersection and 4 pedestrians crossing Route 105 on the west side; both during mid-day off-peak hours. Vehicular AM (7:30-8:30 am) and PM (4:00-5:00 pm) peak hour pedestrian volumes were 0 on both east and west sides. The number of pedestrians using the crossing is substantially lower than required, and there is not a significant pedestrian population of young, elderly, or disabled persons using the crossing. This criteria is not satisfied.

3. *The annual average daily traffic volume for the roadway exceeds 3,000 vehicles per day (both directions combined).*
   Daily traffic volumes on Route 105 are in 8,400 vpd west and 5,300 vpd east of this intersection. This criteria is satisfied.

4. *A sidewalk or adequate shoulder for use by pedestrians exists on both sides of the roadway approach.*
   An existing sidewalk is located along the south side of Route 105 west of Jay View Drive, and along the west side of Jay View Drive. The width of the paved shoulder and a roadside ditch are both limitations to pedestrian use of the shoulders on Water Tower Road. This criteria is not currently satisfied.

5. *There is not another crosswalk across the same roadway within 200 ft of the intersection.*
   This criteria is satisfied.

6. *Adequate sight distance (equal to or exceeding the stopping sight distance for the posted speed) is available in both directions.*
   The minimum safe stopping sight distance at 30 mph is 200 ft on a flat grade. There appears to be more than adequate sight distances on Route 105 approaching this intersection. This criteria is satisfied.

In summary, the major issue preventing all six of the above criteria from being satisfied is the lack of pedestrian traffic crossing Route 105 at this intersection during morning and afternoon peak traffic hours.

The Agency's guidelines do permit the installation of pedestrian warning signs at locations where the criteria for a marked crosswalk are not met. Pedestrian awareness could be improved by installing these signs on Route 105, bracketing this intersection and the nearby Fire/Rescue/Recreation Area driveway.

P:\2011\11100\crossing memo.wpd

Attachment A-3

HISTORIC RESOURCES REVIEW

Heritage Landscapes LLC
Charlotte, Vermont

Preliminary Historic Aboveground Resources Assessment
Elm Street Sidewalk Enosburg Falls, Vermont
4 November 2015

Submitted to:
Jim Donovan
Broadreach Planning & Design
Charlotte, VT 05445

Prepared by:
Rebecca Reese, MSHP, Historic Preservation Specialist
Patricia M. O'Donnell, FASLA, AICP, Principal, Preservation Landscape Architect and Planner
Heritage Landscapes, LLC

REVIEW INTRODUCTION

This Enosburgh Elm Street assessment identifies existing aboveground historic resources within the pedestrian improvements project boundaries that are listed or potentially eligible for listing on the National Register of Historic Places (NRHP) and addresses the potential effects from the proposed sidewalk additions to Elm Street in Enosburg Falls, Vermont. Review of the possible historic resources and effects complies with Section 106 of the National Historic Preservation Act of 1966 and Section 4(f) of the US Department of Transportation Act of 1966. This reconnaissance-level survey of aboveground resources does not document the details of potentially eligible NRHP properties and further study would be required to determine the eligibility of those properties.

Heritage Landscapes conducted research in local and state repositories and carried out a field review to evaluate the project area and possible historic resources. The field inspection of the project area was completed on 25 October 2015, focusing on the visual review of the properties along Elm Street in the project area. A further assessment will be required if the proposed transportation improvements layout and details should change.

Baseline research provided information about historic resources within the project area. Research carried out at the Vermont Agency of Commerce and Community Development Online Research Center secured useful information from the Vermont Historic Sites and Structures Survey (VHSSS), completed in June 1994 for the area. In particular, this resource lists nine properties within the project boundaries. The following details all documentary sources studied to gain an understanding of the area within the project boundaries:

- *F.W. Beers Atlas of Franklin and Grand Isle Counties, Vermont,* (1869).
- *Sanborn Fire Insurance Maps of Enosburg Falls, Franklin County, Vermont,* (1895 to 1930/52).
- *State of Vermont Historic Sites and Structures Survey for Enosburg, Franklin County, Vermont,* (June 1994).

FINDINGS

The Elm Street Sidewalk Project proposes to connect downtown Enosburg Falls with the town Athletic Fields located on Sampsonville Road. This pedestrian improvement project intends to update existing sidewalk on the north side of Elm Street with a standard 5-foot wide sidewalk, extend the current sidewalk on the south side of Elm Street, and add sidewalk to Water Tower Road. The project, as-anticipated, will not negatively affect or impact the historic and potentially historic resources identified within the project study area, although some potentially historic street trees may be affected. Nine properties within the project area are listed as historic resources in the VHSSS and others have the potential to be listed as development continued throughout the 20th century. Typical throughout the project area, buildings display setbacks from the road providing ample space for the addition of a sidewalk. Overall, the project does not adversely impact the historic resources of Enosburg Falls, Vermont.

As noted previously, historic maps served as an important research resource. These documents record the presence of late 19th and early 20th century development occurring along the Elm Street corridor, originally named Main Street. Development in Enosburg Falls appeared on Main Street (Elm Street) before extending to the northeast (Figures 2 and 3). Overall this development follows a pattern of expansion extending away from the intersection. With the exception of a few houses, the oldest structures stand near the Main Street intersection with newer structures developing further from the village.

Information is organized by street address starting with the lowest house number of Elm Street, 19 Elm Street, and extending northeast along Elm Street to Water Tower Road. Current addresses are used for most properties, but names listed on the VHSSS are also listed. Properties known to be listed on the state survey are noted with nine listed properties indicated along Elm Street. Three others appear to be older and may be eligible for listing. Further study would be required. If the listing in not indicated, the property may or may not be registered. Further research is required, as the record is not exhaustive and other structures may be listed. All properties that are 50 years or older are eligible for NRHP listing if the resources are of historic value.

- **19 Elm Street, The Old Herman Royce/Caines Estate:** Constructed in c.1870, the 1-½-story vernacular L-plan wood frame home displays raking eaves and molded cornice, frieze, and corner boards. A metal gable roof caps the home. A 1-story Colonial Revival porch, added c.1910, extends across the front façade of the home. Historic resource listed on the VHSSS.
- **41 Elm Street, The Carroll Bashaw House:** The c.1965 1-½-story contemporary cape displays a gable roof and twin gabled roof dormers. Two street trees growing in tree lawn of the property could be affected by the project. This potentially historic dwelling, which was listed on the VHSSS as noncontributing at the time of the survey, has now reached the 50-year threshold for eligible properties. The significance of the dwelling should be reassessed.
- **79 Elm Street, The W.E. Tillotson House:** A c.1898 Queen Anne-Colonial Revival dwelling stands with wood clapboard and shingle siding, a gable roof, and stone foundation. A garage, added c.1955, attaches to the east façade of the home. A potentially historic street tree grows in the

tree lawn of the property and could be affected by the project. Historic resource listed on the VHSSS.

- **93 Elm Street, The Ruth Larose House:** Built in c.1910 a vernacular Colonial Revival dwelling rises 2-½ stories to a hip roof, with hip roof dormer. A c.1975 one story gable roof wing and attached garage extends from the west façade of the home. An important old street tree grows on this property directly adjacent to the existing narrow sidewalk and could be adversely affected by the project. Historic resource listed on the VHSSS.
- **107 Elm Street, The Winnie & Wilbur Towle House:** The c.1885 2-½-story gable front, vernacular house displays raking eaves, simple cornices, frieze and corner boards, and clapboard siding. A one-story porch supported by turned posts extends along the primary façade of the home. Historic resource listed on the VHSSS.
- **123 Elm Street, The Moses Perley House:** The 1-½-story, c.1865 vernacular home displays a gable roof and side ell with a Gothic-cross gable dormer. A one-story porch extends across the primary façade. Historic resource listed on the VHSSS.
- **131 Elm Street, The Patricia Riggie House:** Constructed in c.1890, the 2-½-story vernacular dwelling has a gable front and clapboard siding. An enclosed one-story porch extends across the primary façade. Historic resource listed on the VHSSS.
- **135 Elm Street, The Theobald E. Charron House:** The c.1900 vernacular L-plan home rises to 2-½ stories with gable roof and an enclosed c.1950 sun porch attached to the primary façade. Historic resource listed on the VHSSS.
- **149 Elm Street, The Old Enosburg Falls Sanitarium:** The transitional Greek Revival-Italianate wood frame dwelling, constructed in c.1878, rises to 2-½ stories tall. A 1-½-story ell attaches to the east façade. Italianate style brackets hang from the wide eaves in the fully closed Greek-Revival style pediment. Historic resource listed on the VHSSS.
- **205 Elm Street, The Esther & Harold Park House:** The c.1934 1-½-story Bungalow displays a hip roof and hip-roof dormers. An enclosed 1-story porch extends across the front façade of the home. Historic resource listed on the VHSSS.
- **223 Elm Street, McDermott's, Inc.:** A parking lot creates a wide setback for the 1-story metal building with 1-story, angled roof ell from Elm Street.
- **273 Elm Street, R & D Enterprises:** A 1-story metal building with three large garage doors sits back from Elm Street, removed by a parking lot. A small, 1-story entrance bay attaches to the east façade of the building.
- **281 Elm Street, Napa Auto Parts:** The 1-story metal building stands setback from Elm Street by a front paved parking lot. A low-pitched gable roof caps the building.

- **81 Water Tower Road:** A mid-century 1-story ranch home fronts Water Tower Road, with 1-story garage attached to the south façade and a sunroom extending from the center of the east façade. More research is needed to determine if the structure is eligible to be listed.
- **84 Water Tower Road, Cold Hallow Family Practice/Dr. Ronald S. Debruin, DDS:** The modern 1-½-story structure is styled after an agricultural barn. A large gable roof with square cupola caps the building.
- **167 Water Tower Road:** A 1-story mid-century ranch dwelling sits removed from Water Tower Road by a wide lawn and is capped by an eaved-front gable roof. A small, screened-in porch extends from the north façade of the structure. More research is needed to determine if the structure is eligible to be listed.

- **41 Jayview Drive, McDonalds:** Recently constructed, the modern building displays the typical and classical McDonalds restaurant design, with mansard roof and large windows. The 1-story building is removed from Elm Street by a wide lawn.

- **49 Sampsonville Road, Community National Bank:** The 1-½-story late 20th century building faces the intersection of Elm Street and Water Tower Road, sitting at an angle with entrances on both streets. Two gable dormers pierce the eaves-front gable roof, as centered, double glass doors serve as the main entrance.

In summary, the proposed sidewalks are located along the street at a distance from the listed dwellings. Other than the large, old street tree in front of 93 Elm Street, there are no further historic elements within the area of the proposed project. This assessment identifies listed resources and concludes that there is not a threat to the historic structures. While the condition of the oldest trees is not known these are witnesses of the past that add a large scale to the street due to their size and age. Any planned work in the vicinity of the two grand old trees should be carefully considered and carried out without damage.

Figure 1. The image illustrates the current built environment that exists along Elm Street, Water Tower Road, and Sampsonville Road. The proposed project seeks to connect the Village of Enosburg Falls, located in the lower-left corner of the image, with the Athletic Fields found in the upper-right corner. Courtesy Google Maps. (R-ES Sidewalk-2015GoogleMap-3Nov2015)

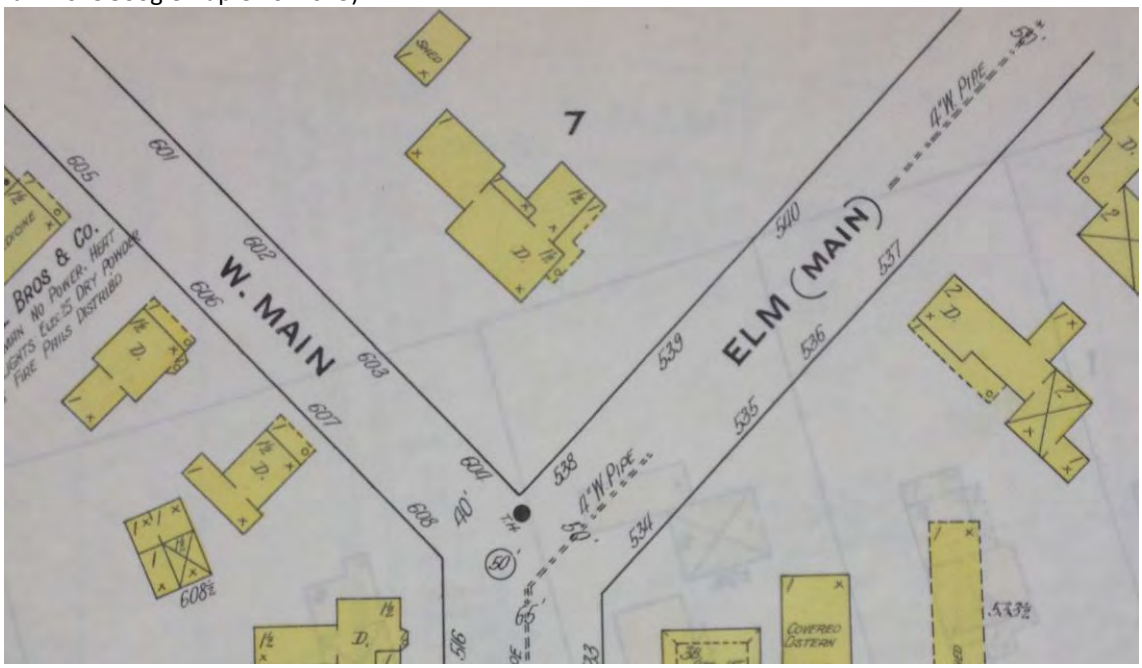


Figure 2. This image of the 1911 Sanborn Fire Insurance Map illustrates the development occurring at the intersection of Main Street and Elm Street. Other dwellings stood along Elm Street at this time, but these maps did not document further afield. This is also the first reference to "Elm Street," instead of Main Street. Courtesy University of Vermont Library Special Collections. (R-ES Sidewalk-1911SanbornMapEnosburg-1Nov2015)

Figure 3. The 1920 Sanborn Map shows expanded development on Elm Street. This is the first year the map documents structures removed from the central village. Several of the houses listed on the VHSSS can be seen here on the left side of Elm Street. Courtesy University of Vermont Library Special Collections. (R-ES Sidewalk-1920SanbornMapEnosburg-1Nov2015)

Figure 4. Two street trees grow in front of 19 Elm Street, the dwelling closest to the Main Street intersection and downtown Enosburg Falls. The intersection of Elm and Main Streets lies in the background of the image. Courtesy Heritage Landscapes. (R-ES Sidewalk-19ElmStreet-25Oct2015)

Figure 5. This c.1965 contemporary cape stands at 41 Elm Street. At the time of the VHSSS, the structure was not considered historic and listed as non-contributing. The dwelling has now reached the 50-year threshold and eligibility may be reassessed. Courtesy Heritage Landscapes. (R-ES Sidewalk-41ElmStreet-25Oct2015)

Figure 6. The c.1898 Queen Anne-Colonial Revival dwelling stands at 79 Elm Street. The large street tree growing in the property's tree lawn could be affected by the proposed sidewalk project. The existing sidewalk path can be seen running in between the house and street tree. Courtesy Heritage Landscapes. (R-ES Sidewalk-79 Elm Street - 25Oct2015)

Figure 7. This photograph illustrates the existing sidewalk path extending along the north side of Elm Street. Here, 93 Elm Street stands to the left of the path, while a large and potentially historic tree grows to the right. The proposed widening of the sidewalk could impact this grand old street tree. Retaining the current width beside this tree would limit impacts. Courtesy Heritage Landscapes. (R-ES Sidewalk-93 Elm Street-25Oct2015)

Figure 8. This image shows the existing sidewalk and wide setback of the homes on Elm Street. The impressive Colonial Revival at 93 Elm Street stands in the background, with 107 Elm Street in the foreground. Courtesy Heritage Landscapes. (R-ES Sidewalk-93and107ElmStreet-25Oct2015)

Figure 9. 149 Elm Street, a circa 1878 residence, is an excellent example of transitional architecture between the Greek Revival and Italianate styles. This dwelling is positioned a distance from the road and will not be negatively impacted by the proposed sidewalk project. Courtesy Heritage Landscapes. (R-ES Sidewalk-149 Elm Street-25Oct2015)

Figure 10. The c.1934 bungalow at 205 Elm Street stands closest to the light industrial development of the 1-story metal buildings and garages further to the northeast. This is the last dwelling listed on the VHSSS for the area. Courtesy Heritage Landscapes. (R-ES Sidewalk-205ElmStreet-25Oct2015)

Figure 11. The mid-century ranch occupies 81 Water Tower Road, with the sun porch and large picture window visible. The home is positioned at a distance from the road atop a slope, ensuring the project will not negatively impact the property. Courtesy Heritage Landscapes. (R-ES Sidewalk-81 Water Tower Road-25Oct2015)

Attachment A-4

ARCHEOLOGICAL RESOURCES ANALYSIS

Consulting Archaeological Program
University of Vermont

The University of Vermont

April 11, 2016

Jim Donovan, FASLA
Broadreach Planning & Design
PO Box 321
Charlotte, Vermont 05445

RE: Archaeological Resources Assessment of the proposed Elm Street Sidewalk Project, Enosburg Falls, Franklin County, Vermont

Dear Jim,

Attached, please find an Archaeological Resources Assessment of the proposed Elm Street Sidewalk Project, Enosburg Falls, Franklin County, Vermont.

A field inspection and background research determined that the proposed project contains one small area of archaeological sensitivity for precontact Native American sites along the Alternative B-3 alignment. Beyond that one area, the various alternative alignments are either in areas of historic development and thus disturbed (Alt A-1 & A-2), or adjacent to a deep ditch and on slope (Alt B-1,B-2, C-1). As a result, no other areas were identified as archaeologically sensitive. A Phase I site identification survey is recommended for this small section of Alternative B-3 as part of the Section 106 permitting process, unless it can be avoided.

Please feel free to contact me if you have any questions.

Sincerely,

Charles Knight, Ph.D.
Assistant Director

CONSULTING ARCHAEOLOGY PROGRAM
111 Delehanty Hall, 180 Colchester Avenue, Burlington, VT 05405
(802) 656-4310 • fax: (802) 656-8033

Archaeological Resources Assessment for the proposed Elm Street Sidewalk Project, Enosburg Falls, Franklin County, Vermont

Submitted to:

Jim Donovan, FASLA
Broadreach Planning & Design
PO Box 321
Charlotte, Vermont 05445

Submitted by:

Charles Knight, Ph.D.
University of Vermont
Consulting Archaeology Program
111 Delehanty Hall
180 Colchester Ave.
Burlington, VT 05405

Report No. 973

April 11, 2016

Archaeological Resources Assessment for the proposed Elm Street Sidewalk Project, Enosburg Falls, Franklin County, Vermont

Project Description

The Town of Enosburg Falls, with assistance from Broadreach Planning & Design, proposes the Elm Street Sidewalk Project, Enosburg Falls, Franklin County, Vermont (Figure 1). The proposed project will construct a new sidewalk along the north side of Elm Street in Enosburg, Vermont (Figure 2). At least 7 alternative versions of the sidewalk exist, with portions along Sampsonville Road and Watertower Road, accessing the athletic fields (Figure 3).

The University of Vermont Consulting Archaeology Program conducted an Archaeological Resources Assessment (ARA) as part of the Section 106 permitting process. No areas of archaeological sensitivity were identified.

Study Goal

The goal of an ARA (or "review") is to identify portions of a specific project's APE that have the potential for containing precontact and/or historic sites. An ARA is to be accomplished through a "background search" and a "field inspection" of the project area. For this study, reference materials were reviewed following established guidelines. Resources examined included the National Register of Historic Places (NRHP) files; the Historic Sites and Structures Survey; and the USGS master archaeological maps that accompany the Vermont Archaeological Inventory (VAI). Relevant town histories and nineteenth-century maps also were consulted. Based on the background research, general contexts were derived for precontact and historic resources in the study area.

Archaeological Site Potential

No known archaeological sites exist along the various proposed path alternative along Elm Street, Sampsonville Road, or Watertower Road. The closest known archaeological site is VT-FR-331, located 980 m to the south of the western end of the project alignment, on the northern banks of the Missisquoi River. Site VT-FR-331 is one of three precontact Native American sites (with VT-FR-332 and VT-FR-333) that exist on the broad, northern river terrace of the Missisquoi River adjacent to the project area. These sites were identified through various archaeological projects as part of the Enosburg Falls High School recreation fields expansion in the early 2000s (Frink 2003; Toney and Crock 2002). These sites were identified from the recovery of lithic debitage representing material sources throughout the Northeast and Pennsylvania (Toney and Crock 2002). The types of artifacts recovered suggest that these sites represent short term hunting camps, and the material types reflect the broad network of material exchange that these people were involved in. No temporally diagnostic artifacts were recovered, so the specific date of occupation could not be determined. Nonetheless, the presence of these sites on a landform next to the Missisquoi River speaks of its use as a major thoroughfare in the precontact and early historic period in Vermont.

In regard to historic period resources, both the historic 1857 Wallings map (Figure 4) and the 1871 Beers map (Figure 5) show no historic period properties within the limits of the project alignments. In the Nineteenth Century the proposed project alignment was located outside of

town, and therefore in an area of very low population density. In the historic maps, a few farms are depicted adjacent to the project alignments, but none will be disturbed by them. No properties within, or adjacent to, the proposed project alignments have been listed on the National Register of Historic Places. As a result, no historic period sites are expected to be disturbed by the proposed project.

Desk Review

As part of the desk review, the UVM CAP utilized the Vermont Division of Historic Preservation's (VDHP) predictive model for identifying precontact Native American archaeological sites. The Elm Street Sidewalk Project area scores 8 on the Predictive Model, due to its location within 90 m of an intermittent tributary of the Missisquoi River (8). In addition to the paper-based predictive model, the desk review uses a Geographical Information System (GIS) developed jointly by the UVM CAP, and its consultant Earth Analytic, Inc., which operationalizes the paper-based model. It does this by applying the VDHP's sensitivity criteria to all lands within the State of Vermont. In these maps, archaeological sensitivity is depicted by the presence of one or more overlapping factors, or types of archaeological sensitivity (i.e. proximity to water, etc.). The Elm Street Sidewalk Project alignment crosses areas that contain one sensitivity factors, which is Level Terrain (see Figure 1).

Field Inspection

A field inspection of the project area was carried out on April 7, 2016 by Charles Knight, Assistant Director of the UVM CAP. Knight walked the length of the various project alternatives. The Alternative A-1 and A-2 along Elm Street is completely disturbed due to the construction of residences and other buildings along its length (Figure 6). The northern side of the road also contains a sidewalk. The proposed road crossing at Elm Street and Pleasant Street has been thoroughly disturbed with historic residential construction (Figure 7). The landform east of Watertower Road and north of Elm Street, now Sampsonville Road, comprises a bank building and the Cold Hollow Family Practice building, and then the fire/rescue & ambulance building further to the east (Figure 8). The intersection of Elm Street and Watertower Road has been significantly ditched, and thus the alignment of Alternative C-1 has been extensively disturbed (Figure 9). Alternative B-3 extends east from Watertower Road between the bank building and the Cold Hollow Family Practice building towards the athletic field and just southwest of the fire/rescue & ambulance building (Figure 10). In doing so it will cross a small drainage, which feeds into a larger tributary of the Missisquoi River. A historic 1995 aerial image shows that this small drainage has remained intact throughout the construction of the adjacent buildings (Figure 11). As such, the narrow strip of land along the eastern side of the drainage, southwest of the fire/rescue & ambulance building and west of a modern septic line, and is crossed by the Alternative B-3 alignment, is archaeologically sensitive (Figure 12). Both Alternatives B-3 and C-1 terminate in the athletic fields, all of which appear to have been heavily modified to level-out the landform (Figure 8). Finally, Alternative B-1 and B-2 follow Watertower Road, then veer east along the dirt access road to the athletic field parking lot. This alternate is entirely on slope, and next to a deep trench along Watertower Road (Figure 13).

Conclusions

The Town of Enosburg Falls proposes the Elm Street Sidewalk Project, Enosburg Falls, Franklin County, Vermont. The UVM CAP conducted an Archaeological Resources Assessment of the path alignment and one small area of archaeological sensitivity was identified along the Alternative B-3 alignment. This sensitive area comprises the eastern bank of a small drainage, southwest of the fire/rescue & ambulance building and west of an existing septic line. Beyond that one area, the various alternative alignments are either in areas of historic development and thus disturbed (Alt A-1 & A-2), or adjacent to a deep ditch and on slope (Alt B-1,B-2, C-1). As a result, no other areas were identified as archaeologically sensitive. The landform that contains the athletic fields encompasses a natural terrace overlooking the Missisquoi river, and thus the small drainage along its western side would have provided access to and from the river. However, the entire athletic field area has been heavily modified to make the fields, and thus all that remains of the natural topography is the small strip along the eastern edge of the drainage west and southwest of the fire/rescue & ambulance building. For this reason a Phase I site identification survey is recommended for this small section of Alternative B-3 as part of the Section 106 permitting process, unless it can be avoided.

Thank you for working with us on this project. Please let me know if you have any questions or comments.

Charles Knight, Ph.D.
Assistant Director

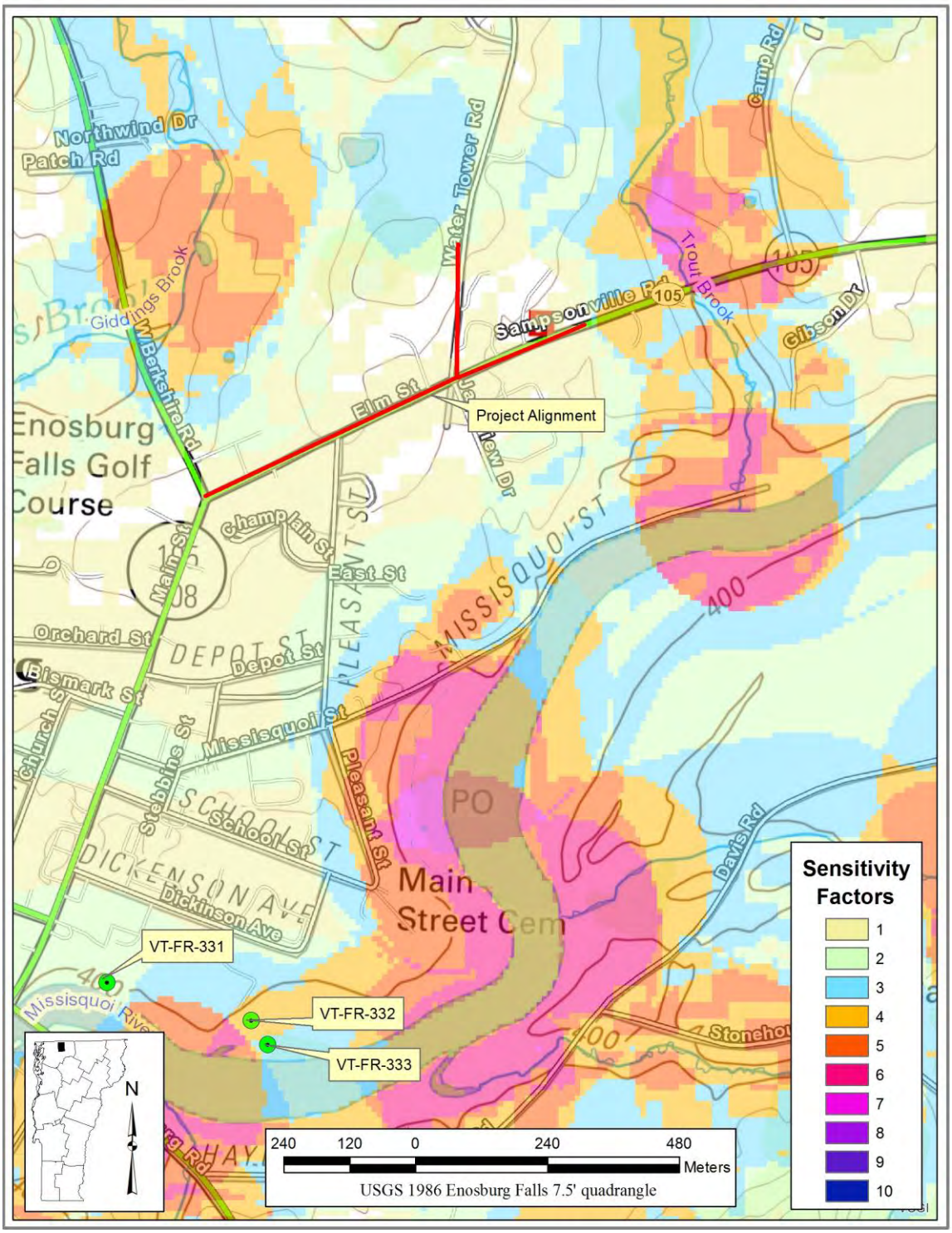


Figure 1. Map showing the location of the proposed Elm Street Sidewalk Project, in relation to archaeological sensitivity factors, Enosburg Falls, Franklin County, Vermont.

Figure 2. Project Map showing a portion of the proposed alignment of the Elm Street Sidewalk Project, Enosburg Falls, Franklin County, Vermont.

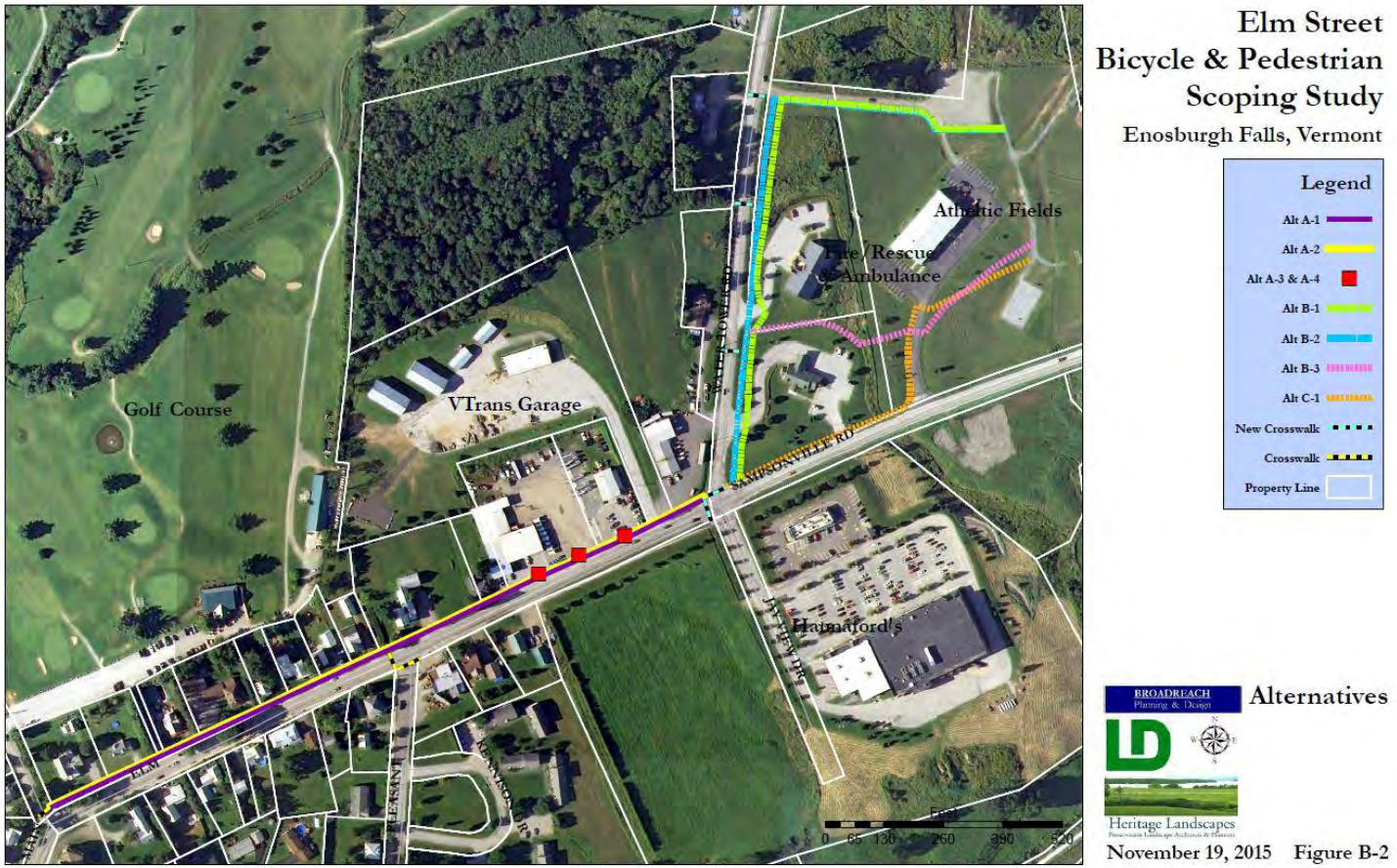


Figure 3. Project Map showing a portion of the proposed alignment of the Elm Street Sidewalk Project, Enosburg Falls, Franklin County, Vermont.

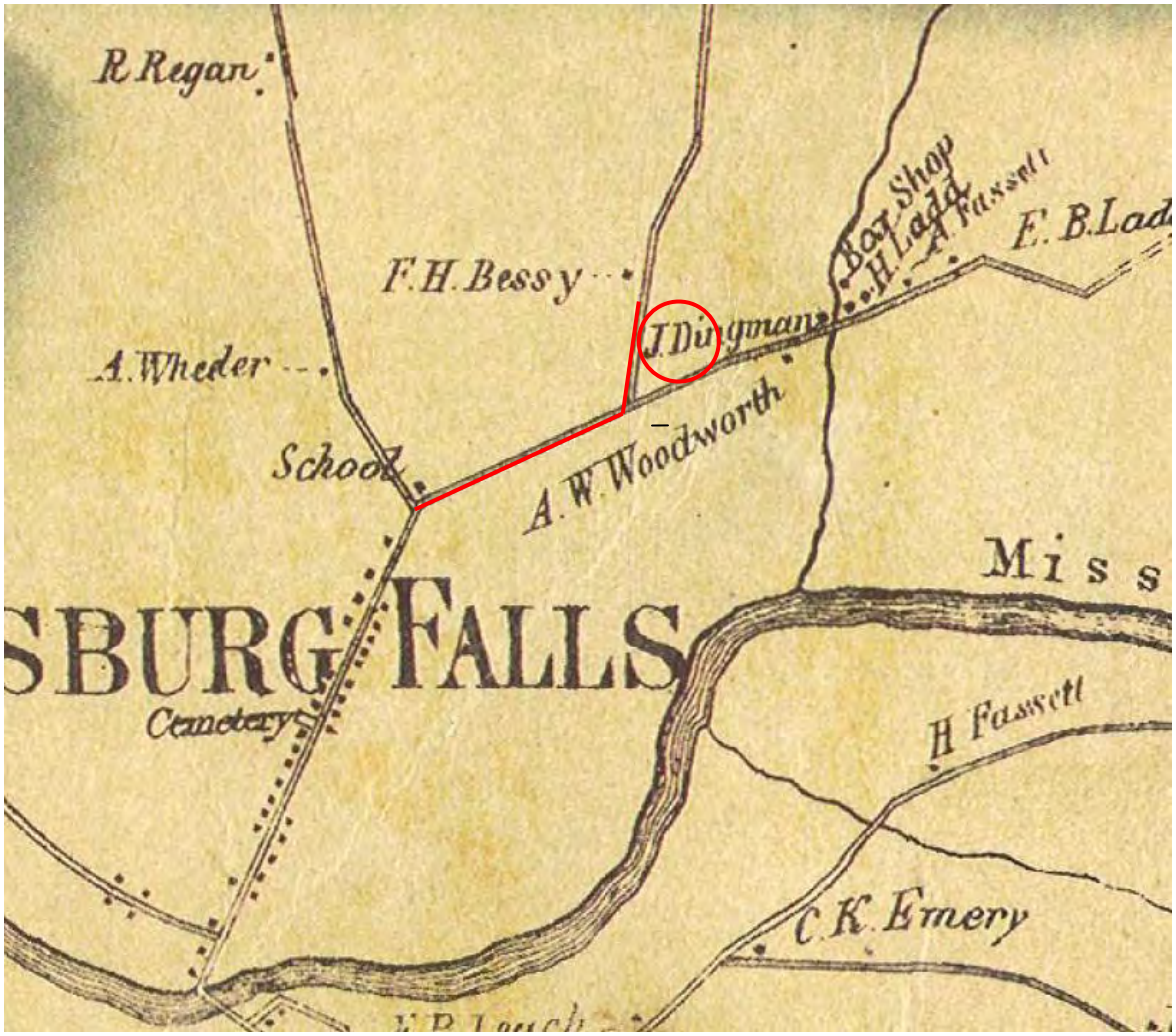


Figure 4. Historic 1857 Wallings map of the project location for the proposed Elm Street Sidewalk Project, Enosburg Falls, Franklin County, Vermont.

Figure 5. Historic 1871 Beer's atlas of the proposed location of the proposed Elm Street Sidewalk Project, Enosburg Falls, Franklin County, Vermont.

a

b

Figure 6. Photos looking west along Elm Street just west of the intersection with Watertower Road (a) and further west near the intersection with Pleasant Street (b) for the Elm Street Sidewalk Project, Enosburg Falls, Franklin County, Vermont.

a

Figure 7. Photo looking southwest at the intersection of Elm Road and Pleasant Street for the proposed Elm Street Sidewalk Project, Enosburg Falls, Franklin County, Vermont.

a

b

Figure 8. Photos looking east along Sampsonville Road (a) and north along Watertower Road, (b) for the proposed Elm Street Sidewalk Project, Enosburg Falls, Franklin County, Vermont.

a

b

Figure 9. Photos looking east along Alternative B-3 from Watertower Road (a), and north along the western side of the drainage immediately east of the bank parking lot (b) for the proposed Elm Street Sidewalk Project, Enosburg Falls, Franklin County, Vermont.

Figure 10. Map showing the location of the archaeologically sensitive area in relation to Alternatives B-3 and C-1 for the proposed Elm Street Sidewalk Project, Enosburg Falls, Franklin County, Vermont.

a

b

Figure 11. Photos looking west along Alternative B-3 across the drainage (a), and north (b) along the sensitive area, with septic pipes to the right for the proposed Elm Street Sidewalk Project, Enosburg Falls, Franklin County, Vermont.

a

b

Figure 12. Photos looking northeast (a) and southeast (b) at the athletic field area and terminus of Alternatives B-3 and C-1 for the proposed Elm Street Sidewalk Project, Enosburg Falls, Franklin County, Vermont.

a

b

Figure 13. Photos looking west along the gravel driveway to the athletic field parking lot (a), and south along Watertower Road (b) for the proposed Elm Street Sidewalk Project, Enosburg Falls, Franklin County, Vermont.

Appendix B
Alternatives

Village of Enosburg Falls

Elm Street
Sidewalk Scoping Study

Alternatives

Submitted by:

Broadreach Planning & Design

In conjunction with

Lamoureux& Dickinson Consulting Engineers

Heritage Landscapes, LLC

University of Vermont Consulting Archeology Program

December 9, 2015

This document has been formatted for double-sided printing.
Blank pages are intentional.

A. INTRODUCTION

1. OVERVIEW

This study is examining the most appropriate ways to upgrade and extend a sidewalk on Elm Street heading east from its western end at the intersection with Main Street and West Berkshire Road east to the Village Athletic Fields east of Water Tower Road.

The Village received a grant from the Vermont Agency of Transportation (VTrans) to examine the options for upgrading and extending the sidewalk. Village officials, after circulating a Request for Proposals, selected a consulting team consisting of Broadreach Planning & Design, Lamoureux& Dickinson, Heritage Landscapes LLC and the University of Vermont Consulting Archeology Program (the BRPD Team) to assist them with the project.

This summary report is the first product of the work of the Village officials and the BRPD Team. The summary describes the existing conditions in the Study Area.

2. PURPOSE AND NEED

The purpose of the extended sidewalk on Elm Street is to provide a pedestrian connection to the Athletic Fields from the Village center that is compliant with current Americans with Disabilities Act (ADA) regulations and standards.

Needs for the improvements include:

- The lack of any pedestrian accommodations on the eastern end of Elm Street, the western end of Sampsonville Road, and the southern end of Water Tower Road leading to the Athletic Fields;
- The presence of a bus route on Elm Street without adequate pedestrian access to stops along the eastern portion of the Study Area;
- The inundation of the existing sidewalk after heavy rains;
- The minimal width of the existing Elm Street north side sidewalk that does not meet current ADA standards; and
- Frequent pedestrian activity to and from the Athletic Fields, especially during the school year, by students and other Enosburg Falls residents.

3. ALTERNATIVES DEVELOPMENT PROCESS

Once the BRPD Team, with assistance from the Village representatives, examined the existing conditions, they led a work session with Village officials to identify as many alternative ways of upgrading and extending the sidewalk along the north side

of Elm Street as possible. The group also 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. The Village Board of Trustees held an initial public work session during their regular meeting on November 24, 2015 to review the existing conditions. After consideration of the comments received at that meeting, the BRPD Team finalized the descriptions and analysis of the alternatives and developed a concise, viable set for public discussion.

Table B-1 shows the alternatives that the BRPD and Village officials initially developed; it also highlights whether they were kept or eliminated prior to the public work session. If the group decided to eliminate an alternative, the table explains the basis for the elimination. **Figure B-1** shows the location of the alternatives initially developed by Village officials and the BRPD Team. **Figure B-2** shows the alternatives that remained viable after the initial analysis. **Figure B-3** provides more information on the issues or impacts associated with the alternatives.

B. ALTERNATIVES

1 OVERVIEW

Each of the alternatives presented in **Figures B-2** and **B-3** below would meet the purpose and need for this project. **Table B-2** provides more details on how each of the alternatives meets the purpose and need for this project; it also provides other details about the benefits and issues associated with each alternative.

The BRPD Team and Village officials decided to divide the alternatives into four different sections, so that it might be possible to "mix and match" sections if it seemed appropriate. The four sections are:

- Elm Street itself between Main Street and Water Tower Road;
- Water Tower Road from Elm Street to near the entrance to the athletic park;
- Sampsonville Road, Route 105 east of Water Tower Road; and
- Off-road alignments that might avoid the traffic on Route 105.

Within this organization, they considered sidewalks alternatives in various locations within or close to the rights-of-way for each road, as well as through adjacent properties for the off-road alignments. They also examined different alternatives for reducing the large curb cut/entrances to the McDermott Trucking properties. Their initial analysis resulted in the elimination of all of the off-road alternatives as well as a few of the sidewalk alignments along each of the three roadway sections. As part of the overall analysis, the Study Team also compared the various alternatives against the option of doing nothing - the **No Action Alternative**.

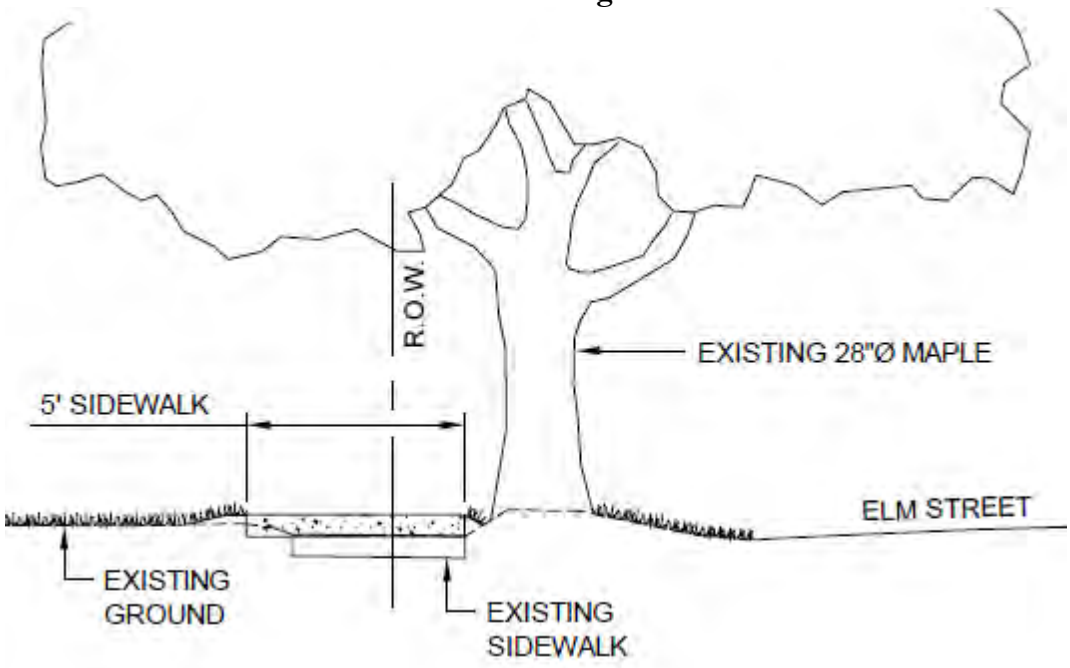
The following Sections present the alternatives under consideration.

2. ELM STREET SIDEWALK

a. Alternatives A-1: Sidewalk Replacement and Extension in Current Alignment - Save Trees

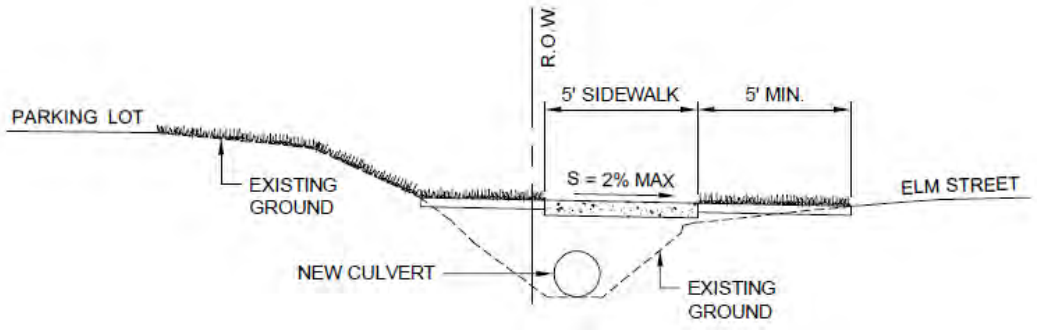
Alternative A-1 would replace the existing sidewalk with a five-foot wide sidewalk, with the southern edge of the new sidewalk aligned with the southern edge of the existing sidewalk. The sidewalk would be constructed close to the surface around the existing trees so that the roots are disturbed as little as possible by the construction of the new sidewalk. The sidewalk could also be constructed of asphalt and reduced to four feet wide near the trees, to reduce even further the impacts on the tree. **Illustration B-1** shows a typical cross section of Alternative A-1 close to the existing mature trees.

Illustration B-1: Alternative A-1 - Current Alignment - Save Trees



Past Pleasant Street, the new sidewalk would cross the McDermott property following the same alignment and keeping the same distance from the edge of the road. The number of openings would be as selected from Alternatives A-3, A-4 or some other option. At the corner with Water Tower Road, the existing drainage ditch would be filled and replaced with a buried culvert. The new sidewalk would be located on top of the new culvert, separated from the roadway by at least a five-foot wide green space to the intersection with Water Tower Road. **Illustration B-2** on the next page shows a typical cross section of this alternative on the eastern end of Elm Street.

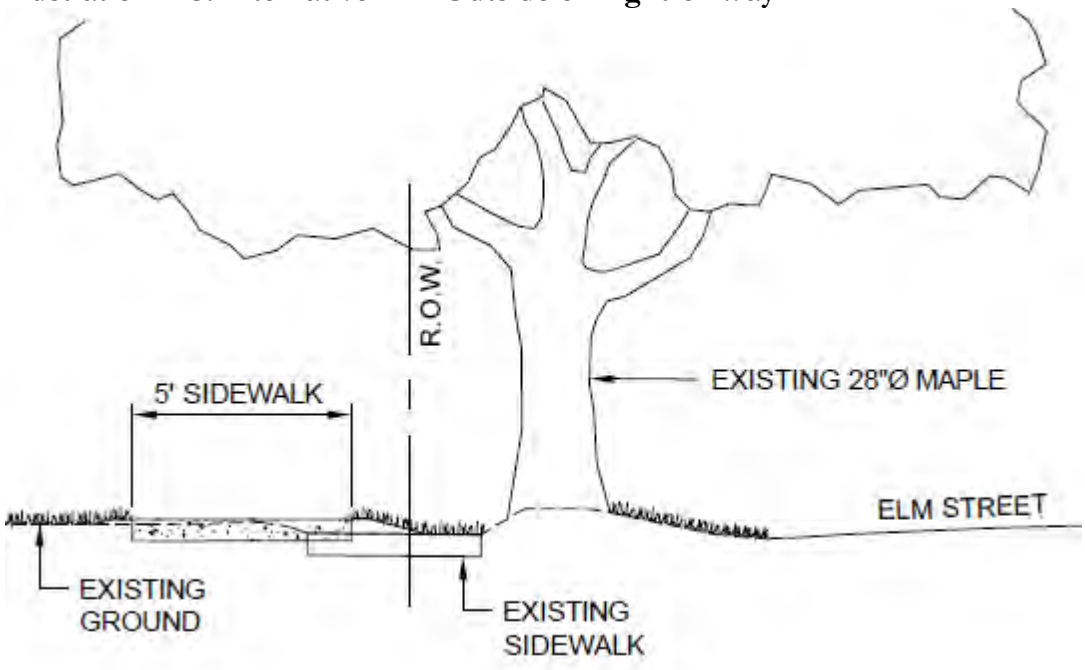
Illustration B-2: Alternative A-1 - Current Alignment - Eastern End



b. Alternative A-2: Sidewalk Replacement and Extension Outside of Right-of-Way - Save Trees

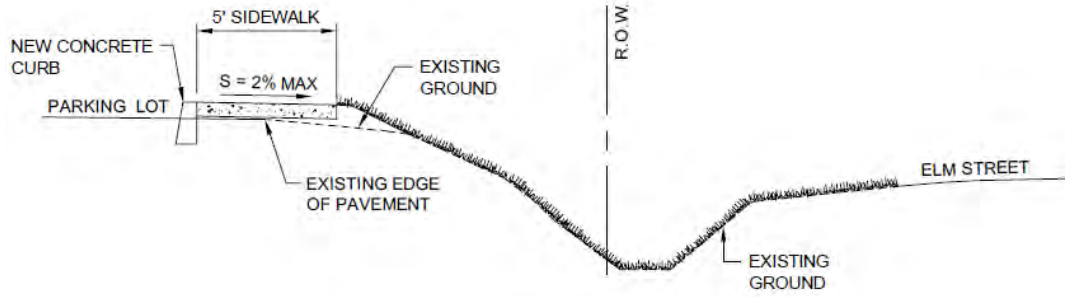
Alternative A-2 would replace the existing sidewalk with a new five-foot wide sidewalk further away from the road to avoid disturbing the roots of mature trees along the road. The sidewalk would be outside of the right-of-way (ROW) at least at the western end of Elm Street where the road is not centered in the ROW. East of the eastern most large maple tree, the sidewalk could shift closer to the road to be at the outer edges but within the ROW. **Illustration B-3** shows a typical cross section of this portion of the Alternative A-2.

Illustration B-3: Alternative A-2- Outside of Right-of-Way



East of Pleasant Street, the new sidewalk would cross the McDermott property at the outer edge of the ROW. The number of openings would be as selected from Alternatives A-3, A-4 or some other option. At the corner with Water Tower Road, the sidewalk would run on the outside of the existing drainage ditch, reducing the size of the existing parking area by approximately three feet. The sidewalk would cross the ditch to reach the road via a new short culvert. **Illustration B-4** shows a cross section of Alternative A-2 close to the intersection with Water Tower Road.

Illustration B-4: Alternative A-2 - Eastern End



c. Alternative A-3: Two 24-foot openings for McDermott Properties

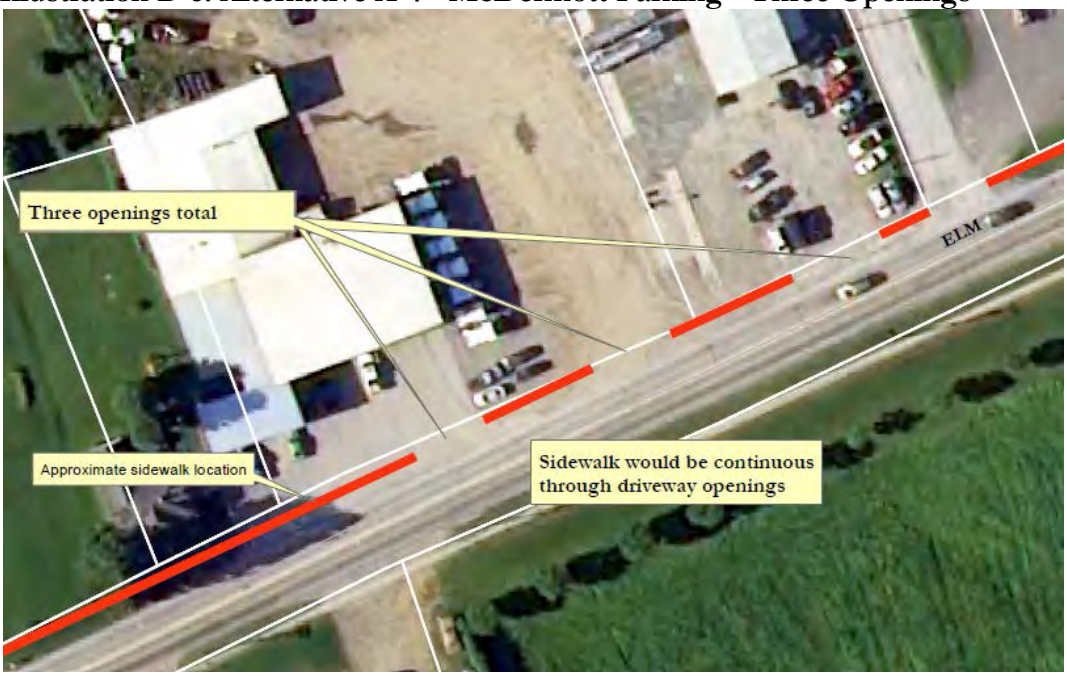
The wide opening in front of the McDermott's property would be reduced to two, 24-foot wide openings as **Illustration B-5** shows. The sidewalk itself would be non-continuous, stopping at each driveway opening.

Illustration B-5: Alternative A-3 - McDermott Parking - Two Openings

d. Alternative A-4: Three Variable-Width Openings for McDermott Properties

The wide opening in front of the McDermott property would be reduced to three entry points. The two eastern entry points would be 24-feet wide. The furthest entry to the west would be approximately 16 feet wide. The parking in this area would be modified to be parallel to the road along the western edge of the existing parking area. The sidewalk itself would be continuous across the property so that it would be seen by motorists entering and exiting the property. **Illustration B-6** shows how the openings would be organized.

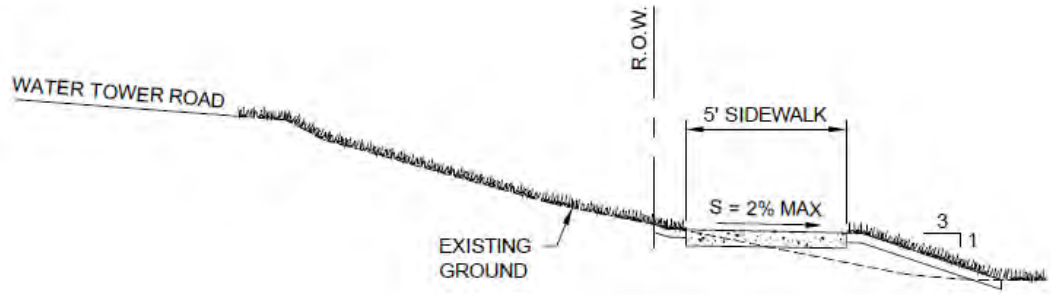
Illustration B-6: Alternative A-4 - McDermott Parking - Three Openings



3. WATER TOWER ROAD

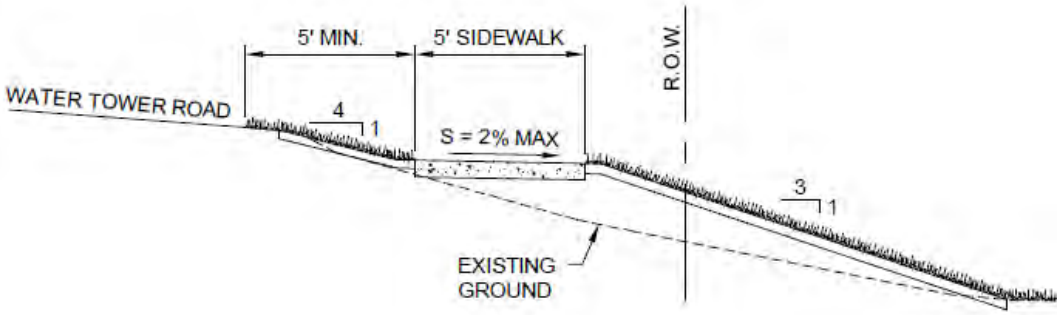
a. Alternative B-1: This alternative would add a new sidewalk on the eastern side of Water Tower Road at the bottom of the short slope on the eastern side of the road. It would need to rise or shift further from the road as it crossed the entrance drive for the bank and to a lesser extent for the health center driveway. At the existing driveway into the athletic fields, the sidewalk would turn east and run parallel to the driveway to the edge of the parking area. **Illustration B-7** shows a typical cross section of this alternative.

Illustration B-7: Alternative B-1 - Water Tower Road - Bottom of Slope



b. Alternative B-2: Alternate B-2 would add a sidewalk at the outer edge of ROW on the east side, slightly lower than the elevation of the roadway. The sidewalk could be benched into the side of the slope by cutting in to grade close to the road and filling a bit on the outer edge of the sidewalk, or it could be constructed completely on fill to keep the slope adjacent to the road unchanged. **Illustration B-8** shows a typical cross section of **Alternative B-2** that places the sidewalk only on fill.

Illustration B-8: Alternative B-2 - Water Tower Road - Edge of Right-of-Way

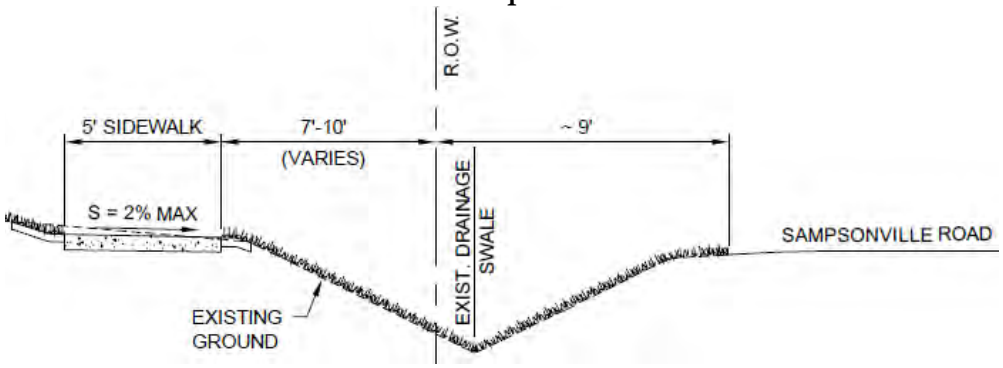


c. Alternative B-3: This alternative adds a sidewalk or path east from Water Tower Road between the bank and the health center to reach the Athletic Fields. A portion of the route would most likely need to be a boardwalk as it crosses the wetland on the eastern edge of the bank and health center properties. The sidewalk would extend into the Town property to the fire and rescue driveway. After crossing the driveway, it would head towards the athletic fields cutting across the slope on the east side of the access drive.

4. SAMPSONVILLE ROAD

Alternative C-1: Alternative C-1 would add a new sidewalk along the north side of Sampsonville Road on the outer side of the existing drainage swale. This alignment would place it partially outside of the existing ROW. **Illustration B-9** shows a typical cross section of this alternative. As the sidewalk crossed the wetland on the east side of the bank parcel, it would move closer to the road and/or cross the wetland via a boardwalk.

Illustration B-9: Alternative C-1 - Sampsonville Road



Once on the Town parcel, the sidewalk could either cross the driveway and turn into the property and gradually move down slope to intersect with the path at the basketball court. It could also run parallel to the driveway on the western side and cross it closer to the parking area. The driveway could be used by walkers to reach the rest of the site.

5. NO ACTION

It will always be possible for the Village to do nothing for the foreseeable future to address the purpose and need of this project - the No Action Alternative. This alternative would leave conditions as they are now with no sidewalk on the eastern segment of Elm Street and no designated walking connection to the Athletic Fields.

6. ADDITIONAL ELEMENTS

a. Crosswalk

The new sidewalk would require a crosswalk on Water Tower Road at the intersection with Elm Street and Sampsonville Road. A second crosswalk might be added to Elm Street at this same intersection.

The VTrans 2015 Guidelines for Pedestrian Crossing Treatments were reviewed for the proposed crosswalk on Elm Street. The proposed crossing satisfies the criteria for installation, assuming that there are at least 20 pedestrians using the crossing during the highest pedestrian volume hour. Elementary school age and elderly pedestrians are counted as two for the purposes of evaluating the crossing criteria. Since the fall sports season had concluded prior to preparing this report, the BRPD Team could not obtain pedestrian counts in 2015. However, the number of students reportedly using the Athletic Fields would seem to satisfy the criteria, particularly given the potential for use by elementary students. The Village will need to obtain pedestrian counts for the design phase if the selected alternative includes a crosswalk.

In addition to the standard pedestrian warning signs, a rectangular rapid flashing beacon (RRFB) may be used to provide emphasis. RRFB are intended for situations

where increased emphasis is needed to alert drivers to pedestrian crossings – such as young, elderly, or disabled users, or a history of pedestrian crashes.

c. Street Trees

The sidewalk improvement plan would also include additional street trees along Elm Street to create a more enticing environment for walkers as well as to help eventually enclose the streets to induce slower traveling speeds for motorists. **Figure B-2** shows the possible location of additional street trees on Elm Street. Alternative C-1 also includes additional street trees along Sampsonville Road; **Figure B-3** also shows the location of these proposed street trees.

TABLE B-1 Elm Street Sidewalk Initial Alternatives Analysis
Village of Enosburg Falls
Bicycle & Pedestrian Scoping Study
November 19, 2015

ALTERNATIVE	ISSUES	DISPOSITION	FINAL LABEL
NO ACTION ALTERNATIVES	Maintaining the existing condition with no new Improvements	Maintained - Required consideration	NA
SECTION A: ELM STREET ALTERNATIVES			
A-A: Sidewalk Replacement in Place with Extension - Save Trees	Sidewalk installed carefully around trees and extending across large driveways	Maintained - Viable alternative	A-1
A-B: Sidewalk Replacement in Place with Extension - Remove Trees	Sidewalk installed with typical details that could damage tree roots and kill large trees	Deleted -Threatening health of trees is not acceptable	
A-C: Sidewalk Replacement Further from Street Outside of Right-of-Way - Save Trees	Sidewalk installed on private property further from trees to help with their preservation	Maintained - Viable alternative but requires easements	A-2
A-D: Two 24-Foot Curb Openings at McDermotts	Provide for workable truck ingress and egress while shortening walking distances across driveway and creating more predictability as to where vehicles will go	Maintained - Viable alternative	A-3
A-E: One 36-Foot Curb Opening at McDermotts	Provide for workable truck ingress and egress while shortening walking distances across driveways and creating more predictability as to where vehicles will go	Deleted - Does not provide adequte access to both properties	
A-F: One 36-Foot Curb Opening at McDermotts with access to west side parking in front of the west building	Provide for workable truck ingress and egress while shortening walking distances across driveway and parking area and creating more predictability as to where vehicles will go	Deleted - Does not provide adequte access to both properties	
A-G: Three openings of variable width at McDermotts with one providing access to west side parking and garage in the west building.	Provide for workable truck ingress and egress while shortening walking distances across driveway and parking area and creating more predictability as to where vehicles will go	Maintained - Viable alternative	A-4
SECTION B: WATER TOWER ROAD ALTERNATIVES			
B-A: Sidewalk at Outer Eastern Edge of Right-of-Way	New Sidewalk Adjacent to New Curb with New Drainage System	Deleted - Too much grading to make this alternative work	
B-B: Sidewalk at Outer Western Edge of Right-of-Way	New Sidewalk Separated from the Road and New Curb by a Five-Foot-Wide Green Space with New Drainage System	Deleted - Too much grading to make this alternative work	
B-C: Sidewalk Outside of Eastern Right-of-Way at Bottom of Slope	New Sidewalk separated from the Road with Drainage Ditch Outside of Sidewalk	Maintained - Viable alternative but requires increased grading at driveway crossing	B-1
B-D: Sidewalk Outside of Eastern Right-of-Way at Top of Slope	New Sidewalk One Foot Away from Edge of Right-of-Way	Maintained - Viable alternative but requires increased grading north of driveway crossing	B-2
B-E: Sidewalk Outside of Western Edge of Right-of-Way	New Shared Use Path Adjacent to the Road	Deleted - Too much grading to make this alternative work	
SECTION C: SAMSPSONVILLE ROAD ALTERNATIVES			
C-A: Sidewalk at Northern Edge of Right-of-Way	Sidewalk would lie in the drainage ditch. The drainage ditch would need to be converted to a culvert to keep sidewalk in the right of way	Deleted -Reducing size of drainage ditch is not an option	
C-B: Sidewalk Outside of Northern Edge of Right-of-Way on Adjacent Property	Sidewalk would lie beyond the drainage ditch and extend beyond the right-of-way onto adjacent private property if there is not sufficient room in the right of way	Maintained - Viable alternative that allows the sidewalk to extend beyond the edge of the right-of-way if needed to keep drainage ditch intact	C-1
C-C: Sidewalk Adjacent to the Road	Sidewalk would lie adjacent to the road, separated from the road itself by a six inch curb	Deleted -Not sufficient room for this option without filling drainage ditch and adding a stormwater sysem; walking directly adjacent to the road is not comfortable for walkers	
SECTION D: OFF-ROAD ALTERNATIVES			
D-A: Shared Use Path from W. Berkshire Road Through Golf Course	Shared use path would use the outer edge of the golf course property, to reach a crossing point just north of the Athletic Field access drive on Water Tower Road.	Deleted - Does not provide a direct route of residents or school children coming from Pleasant Street	
D-B: Shared Use Path North Route Using Golf Course Driveway from Elm Street	Shared use path would use the outer edge of the golf course property and the northern side of the Vtrans property to reach Water Tower Road	Deleted - Does not provide a direct route of residents or school children coming from Pleasant Street	
D-C: Shared Use Path South Route Using Access Opposite Pleasant Street	Shared use path would use the private property west of McDermotts, the southern edge of the VTrans property, and the NAPA Auto Parts property to reach Water Tower Road	Deleted - Does not provide a direct route of residents or school children coming from Pleasant Street and the likely need for fences on both sides of the path on the VTRans property to keep users from entering the VTrans or McDermott properties would create an unacceptable situation	Portion East of Water Tower Road Used as B-3

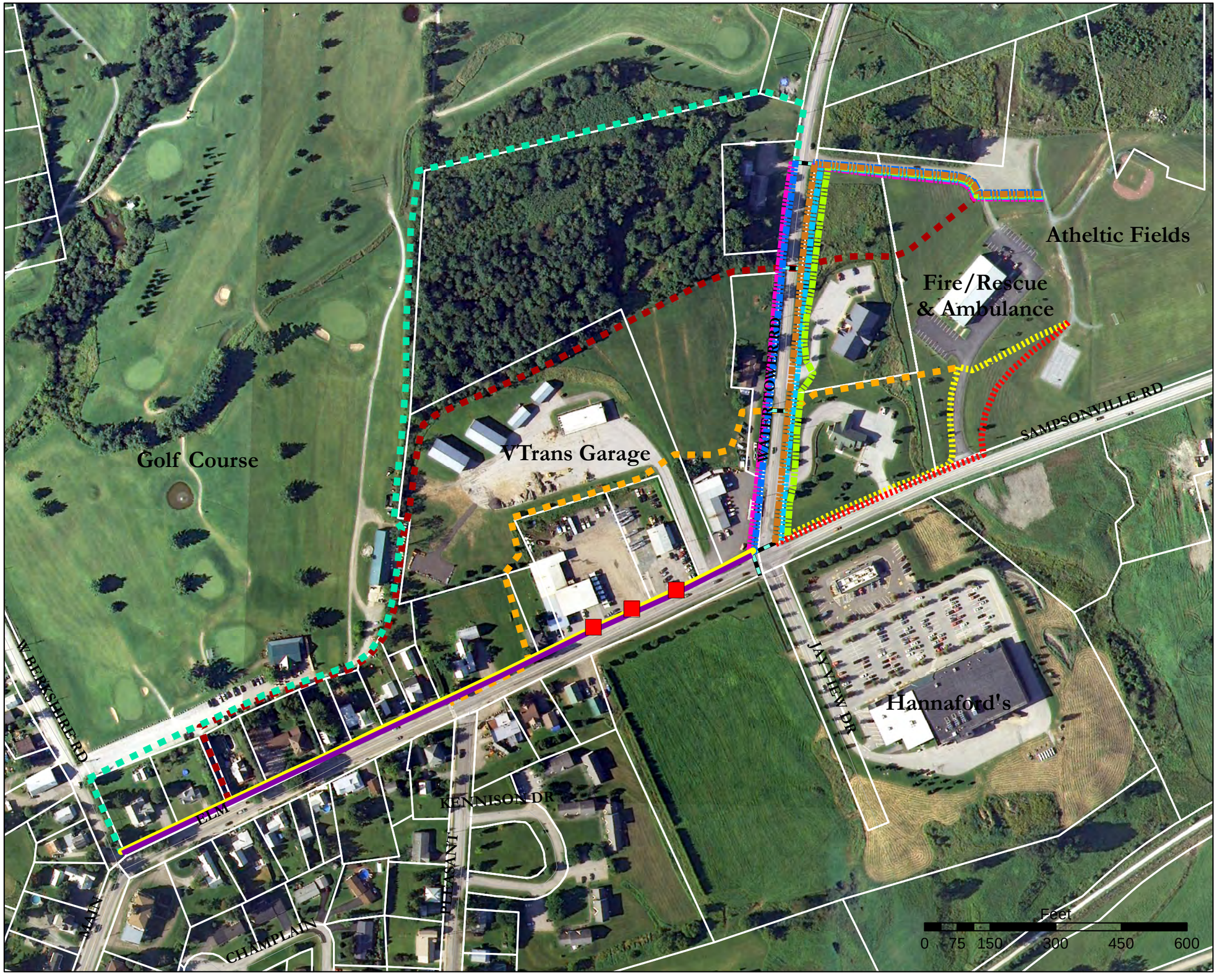
TABLE B-2 Elm Street Sidewalk Alternativs Analysis
Village of Enosburg Falls
Bicycle & Pedestrian Scoping Study
December 9, 2015

		ELM STREET ALTERNATIVES		MCDERMOTT ACCESS ALTERNATIVES		WATER TOWER ROAD ALTERNATIVES			SAMPSONVILLE ROAD
	No Action	**A-1: Add Sidewalk in Same Location**	**A-2: Add Sidewalk Outside of ROW**	**A-3: Two Access Points**	**A-4: Three Access Points**	**B-1: At Bottom of Slope**	**B-2: At Outer Edge of ROW**	**B-3 Off-Road Link**	**C-1: At Outer Edge/Outside of ROW**
Project Description									
Length of Sidewalk	0	1,600 FT	1,600 FT	0	0	850 FT (W.T. Road only)	850 FT (W.T. Road only)	375 FT (To Access Drive)	430 FT (Sampsonville Road Only)
Additional ROW Needed	0	Yes - Existing sidewalk appears to be outside of ROW	Yes - Existing sidewalk appears to be outside of ROW and this alignment is even further from the road	No	No	Yes	No	Yes	Possibly
Private Property Construction Easements	0	Yes - 7	Yes - 7	0	0	Yes - 2	Yes - 2	Yes - 1	Yes - 1
Regrading/Retaining Walls	0	No	No	No	No	Possibly - at the driveway crossings	Yes	No	Possibly - at edge of wetland
Significant Physical Constraints	None	Mature trees with large roots	None	None	None	Slopes away from road	Slopes away from road	Wetlands & short steep slope section	Wetland at eastern edge of bank parcel
Environmental/Cultural Constraints									
Tree Disturbance	No	No - extra care would be take to minimize disturbance to existing mature trees	No - extra care would be take to minimize disturbance to existing mature trees	No	No	No	No	No	No
Wetland Disturbance	No	No	No	No	No	No	No	Yes - minimize by using boardwalk	Possibly if retaining wall is not used to keep fill out of wetland area
Waterbody Disturbance	No	No	No	No	No	No	No	No	No
Steep Slope Disturbance	No	No	No	No	No	Possible - small slope east of Water Tower Road	Yes - small slope east of Water Tower Road	Yes - small slope east of Water Tower Road	No
Archeological Resource Impacts	None Anticipated	None Anticipated	None Anticipated	None Anticipated	None Anticipated	None Anticipated	None Anticipated	None Anticipated	None Anticipated
Historic Resources Impacts	No	No	No	No	No	No	No	No	No
Utility Disturbance	No	No	Utility pole north of large Maple Tree will need to be relocated	No	No	No	Guy wire on utility pole near the southern end of Water Tower Road will need to be modified to accommodate a sidewalk close to the pole under the guy wire.	No, but caution needs to be taken to protect gas and sewer lines	No
Storm Sewers	No	80 feet of storm drain ditch converted to culvert	No Change	No Change	No Change	No Change	No Change	No Change	No Change
Stormwater Impacts	No	Overall reduction in stormwater runoff due to reduction in McDermott access; New smaller vegetated surface swale created to replace converted drainage ditch	Overall reduction in stormwater runoff due to reduction in McDermott access	Reducede impervious surface	Reducede impervious surface	No	No	No	No
Other Impacts	No	Some fences along right-of-way might need to be relocated; Edge stone blocks along sidewalk just east of W. Berkshire Road will need to be relocated	Fences will need to be relocated; Golf course sign will need to be relocated;						
Attributes									
Meets Purpose and Need Statement by Itself	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Types of Users Served	Walkers willing to walk on the	All types of walkers	All types of walkers	All types of walkers	All types of walkers	All types of walkers	All types of walkers	All types of walkers	All types of walkers
Supported by Local Plans	Unclear	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Supported by Regional Plans	Unclear	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Supported by State Plans	Unclear	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Separates Motorized and Non-Motorized Users	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Provides Access to Destinations	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ADA Issues	Yes	No	No	No	No	No	No	No	No
Order of Magnitude Cost	$0	$325,000 (Higher cost due to filling drainage ditch close to Water Tower Road)	$300,000	Included in A-1 or A-2	Included in A-1 or A-2	$150,000	$150,000		$85,000

Positive Considerations
Negative Considerations
Neutral

Elm Street Bicycle & Pedestrian Scoping Study

Enosburgh Falls, Vermont



Legend

- Alt A-A & A- B
- Alt A-C
- Alt A-D, A-E & A- F
- Alt B-A
- Alt B-B
- Alt B-C
- Alt B-D
- Alt B-E
- Alt C-A
- Alt C-B
- Alt D-A
- Alt D-B
- Alt D-C
- New Crosswalk
- Property Line

BROADREACH Planning & Design

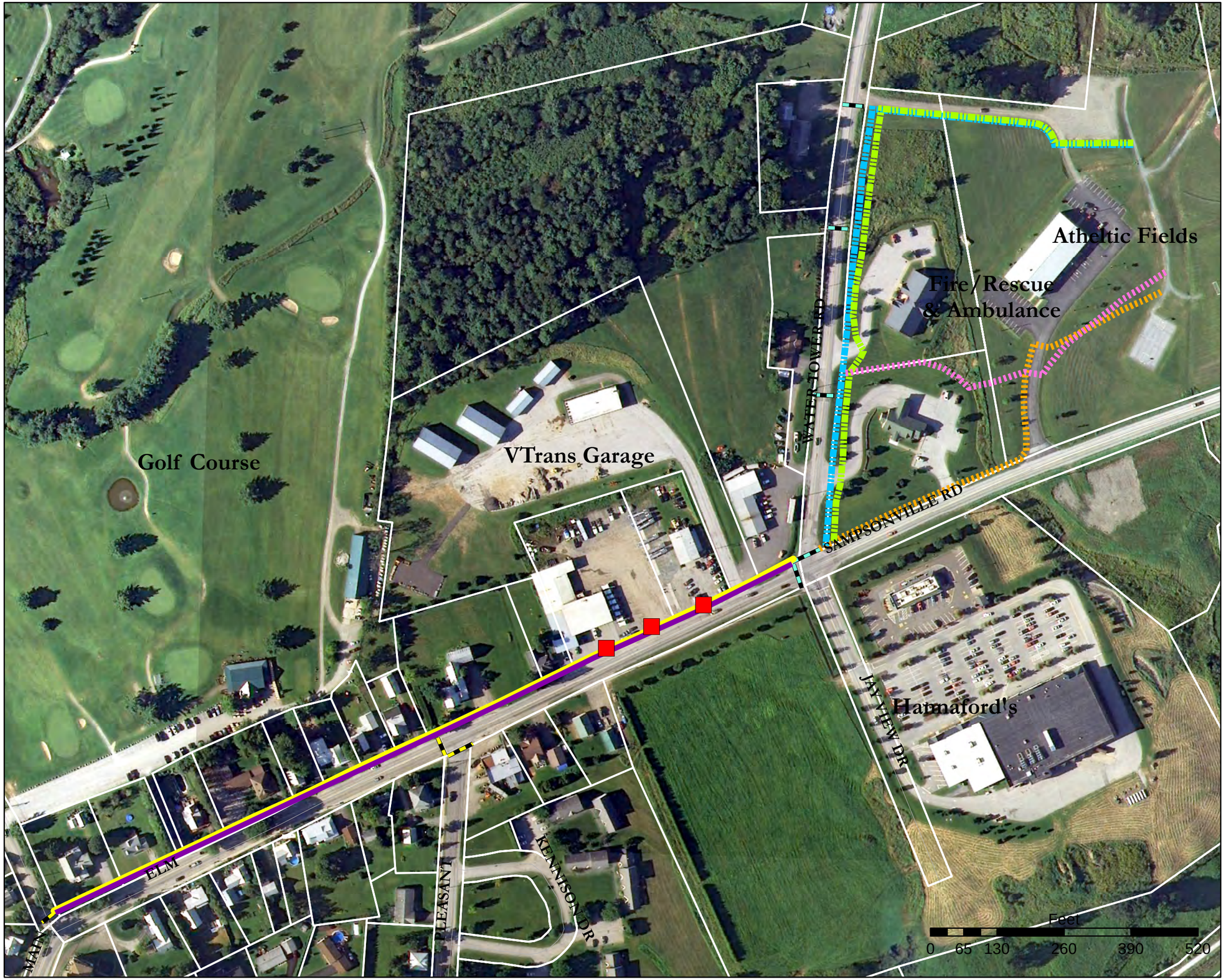
Heritage Landscapes
Preservation Landscape Architects & Planners

Initial Alternatives

November 19, 2015 Figure B-1

Elm Street Bicycle & Pedestrian Scoping Study

Enosburgh Falls, Vermont



Legend

- Alt A-1
- Alt A-2
- Alt A-3 & A-4
- Alt B-1
- Alt B-2
- Alt B-3
- Alt C-1
- New Crosswalk
- Crosswalk
- Property Line

BROADREACH Planning & Design

LD

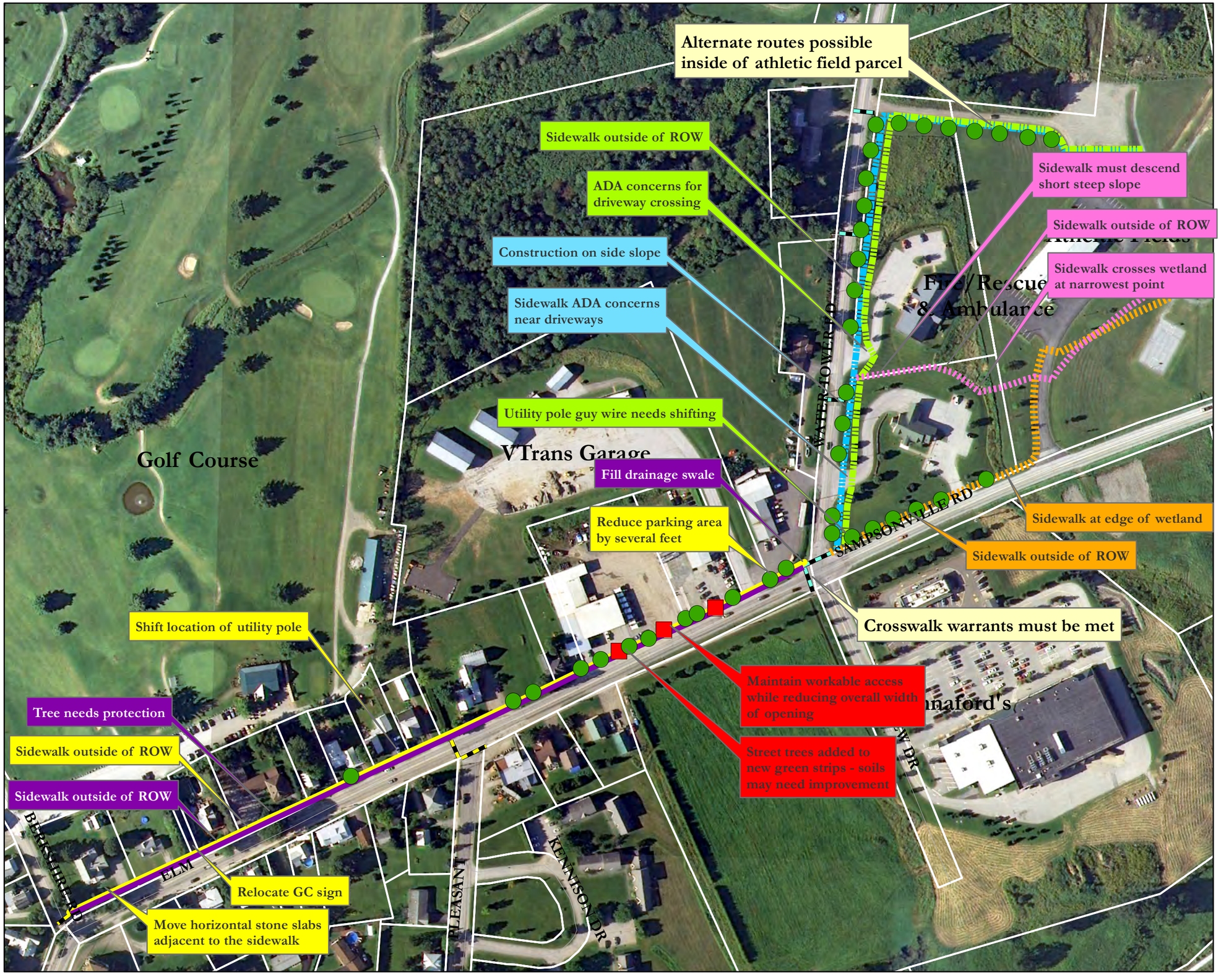
Heritage Landscapes
Preservation Landscape Architects & Planners

Alternatives

November 19, 2015 Figure B-2

Elm Street Bicycle & Pedestrian Scoping Study

Enosburg Falls, Vermont



Legend

- Alt A-1
- Alt A-2
- Alt A-3 & A-4
- Alt B-1
- Alt B-2
- Alt B-3
- Alt C-1
- New Crosswalk
- Street Tree
- Crosswalk
- Property Line

Feet

0 60 120 240 360 480

BROADREACH Planning & Design

Heritage Landscapes
Preservation Landscape Architects & Planners

Alternative Impacts & Issues

December 9, 2015 Figure B-3

Appendix C
Public Work Sessions Notes

VILLAGE OF ENOSBURG FALLS
Meeting of the Board of Trustees
November 24, 2015

Present: Trustees - Walter Scott, Ellen St. Marie, Leonard Charron
Staff – Jonathan Elwell, Caroline Marcy, Ken LaPlant
Guest – Mary Tryhorne, Town of Enosburgh Recreation Director

Meeting called to order by Chair, Walter Scott at 6:35 p.m.

1. Modifications/Changes to Agenda

   Jonathan Elwell stated that he had an item to add regarding a short-notice Grant Application.

2. Review/Approve Minutes of November 10, 2015 Trustee Meeting

   Leonard Charron made the motion to approve the minutes of the November 10, 2015 Trustee Meeting as written. Seconded by Ellen St. Marie. Unanimous.

3. Public Work Session: Duffy Hill Road, and Elm Street Sidewalk Projects

   Jim Donovan of Broadreach Planning and Design and Andy Rowe, representing Lamoureaux & Dickinson Consulting Engineers, were unavailable for the public work session.

   Jonathan Elwell initiated the session by explaining the purpose of the meeting tonight. The purpose of this Public Work Session is to discuss the existing conditions on two sidewalk projects: Duffy Hill Road and Elm Street.

   Jonathan continued to explain that Duffy Hill Road currently does not have any sidewalk facility. The concern at this point is how to get pedestrians, bicyclists, and canoeist safely from the intersection of Route 108 and Duffy Hill Road to the Island View Park located on Duffy Hill Road.

   Mary Tryhorne commented that she has walked from the Village to the Island View Park with her two young children. Safety was a significant concern for her since they had to walk in the road.

   The discussion next shifted to the Elm Street sidewalk project. Jon explained that a sidewalk facility currently exists on the south side of the street that extends to the Hannaford shopping plaza. This section of sidewalk is in relatively good shape.

   The north side of Elm Street has an older sidewalk that extends to the intersection with Pleasant Street where it ends. This section of sidewalk is in extreme disrepair due to upheaval from trees and frost, and is subject to flooding issues. This section of sidewalk

needs to be completely rebuilt. There is no sidewalk facility on the north side of Elm Street from the Pleasant Street intersection to Water Tower Road.

With the completion of the Enosburg Falls Athletic Fields, it is becoming increasingly important to provide a safe environment for pedestrians and bicycle traffic to cross Route 105 and to provide a connection to the fields. Mary Tryhorne, Town of Enosburgh Recreation Director, continued to explain the anticipated growth of diverse programs to be offered at the athletic fields including a soccer program, community gardens, a winterized skating rink, and a summer program.

Of particular concern to those in attendance at the meeting was the approximately 300 feet open access of the two commercial businesses located on the north side of Elm Street between the Pleasant Street intersection and Water Tower Road.

Currently, pedestrians have the option of using a sidewalk to Hannaford's plaza and cross at an unsafe intersection or walk along a section of roadway with no facilities and then cross this 300 ft. section of open access for vehicles in order to access the municipal athletic fields.

Leonard asked about the possibility of installing a walking path behind the commercial businesses – thereby directing pedestrians completely away from Route 105 and traffic. Jon explained that, at this point, all options are on the table and will be explored.

Jon continued to explain that the next step in the scoping study process will be to hold another Public Work Session which is scheduled for December 22, 2015. The next session will be held to discuss and receive public input regarding the various alternatives that the engineers will present on each project, taking into consideration public input from tonight's session.

4. Village Center Renewal Application

The Vermont Downtown Program awards Village Center Designations, which encourages local efforts to revitalize the traditional village centers by offering tax credits for certain revitalizing projects. Jon briefly reviewed with the Trustees the Village's center designation as outlined on the map in red. Businesses that fall within this area are eligible for Historic Tax Credits, Façade Improvement Tax Credits, Code Improvement Tax Credits, and Technology Tax Credits.

Every five years, the Village must submit a renewal application. The Village's Center Designation will expire February 2016. Jon is seeking Trustee ~~endorsement~~approval to proceed with the Village Designation Renewal application.

Leonard Charron made the motion to approve the submission of the application to maintain the Village Center Designation. Seconded by Ellen St. Marie. Unanimous.

5. 2016 Budget

Jon reviewed the updated Projects/Capital Improvements list for the 2016 budget season.

6. APPA Request for Policy Makers Council

Jon informed the Board that APPA is seeking nominations for membership on the Policy Makers Council. If any of the Board members are interested, Jon would be willing to support their nomination. There were no Board members interested in being on APPA's Policy Makers Council.

7. SQRP Report

Jon briefly directed the Board's attention to the quarterly SQRP Report. There were no questions concering the SQRP.

8. Manager's Report

- Local Hazard Mitigation Plan - Earlier this summer, Shaun Coleman from NRPC spoke to the Board about getting a Local Hazard Mitigation Plan in place for the Village so that we can qualify for all State of Vermont matching funds regarding FEMA funded disaster grants. This is the last part we need to do in order to get full state funding as a result of new requirements that took place last year. Shaun has informed us that he intends to start working on this plan next month. It is estimated that the final draft will be submitted to the State by the end of January 2016.
- Flyght 7600 Turbine – Jon has been informed that the used/refurbished Flyght turbine that we were considering purchasing as part of the Hydro Upgrade Project has been sold to another party. Turner Group has been informed of this, and they have told us they will continue to keep their eyes and ears open for other used turbines that may meet our needs in Enosburg Falls.
- NEPPA Board of Directors Meeting – Jon gave a summary of the NEPPA Board of Directors meeting that took place last week.

9. Other Business

Jon informed the Board regarding a grant opportunity that presented itself on short notice. The Vermont Watershed Grant provides grants up to $10,000 with no match for certain qualifying watershed projects. The drainage issue on St. Albans Street is a type of project that fits the grant guidelines and criteria. The Grant Application was due by November 20th. Due to the tight

deadline, staff prepared and submitted the grant application and are now seeking endorsement from the Trustees. The grant application can be revoked if the Trustees so wish.

Leonard Charron made a motion to approve the grant application for the Vermont Watershed Grant in the amount of $10,000.00. Seconded by Ellen St. Marie. Unanimous.

Mary Tryhorne gave the Board a brief update concerning community activities. One noteworthly event has been the "Meeting of the People Who Meet". In order to foster community cohesiveness, members of various local organizations (EBA, Enosburg Recreation, Farmer's Market, Opera House) have decided to meet on a regular basis to collaborate on community issues. Mary welcomed any Board member who wishes to attend as representation for the Village of Enosburg Falls.

10. Executive Session – For the Purpose of Discussing Personnel Issues

Leonard Charron made the motion to enter Executive Session for the purpose of discussing a personnel issue at 7:50 pm. Seconded by Ellen St. Marie. Unanimous. Mary Tryhorne and Ken LaPlant left the meeting at 7:50 pm.

Leonard Charron made a motion to re-enter the Board's Regular Meeting. Seconded by Ellen St. Marie. Unanimous. The Board re-entered their Regular Meeting at 8:05 p.m. There was no action taken as a result of Executive Session.

11. Adjourn.

There being no other business to come before the Board at this time, Leonard Charron made a motion to adjourn. Seconded by Ellen St. Marie. Unanimous. The meeting adjourned at 8:05 p.m.

Respectfully Submitted,

Caroline Marcy, Director of Finance

These minutes were approved as written at the December 8, 2015 regular Trustee Meeting. ~~are not official until approved at the Board of Trustees next regular meeting.~~

VILLAGE OF ENOSBURG FALLS
Meeting of the Board of Trustees
December 22, 2015

Present: Trustees - Walter Scott, Ellen St. Marie, Leonard Charron, Guy Breault, Bill Spears, Jr.
Staff – Jonathan Elwell, Caroline Marcy
Guests – Marilyn Ajami, Jim Donovan representing Broadreach Planning & Design, Andy Rowe representing Lamoureux & Dickinson

Meeting called to order by Chair, Walter Scott at 6:30 p.m.

1. Modifications/Changes to Agenda

   There were no modifications or changes to the agenda.

2. Review/Approve Minutes of December 8, 2015 Trustee Meeting

   Leonard Charron made the motion to approve the minutes of the December 8, 2015 Trustee Meeting as written. Seconded by Bill Spears, Jr. Unanimous.

3. Public Works Session: Duffy Hill Road, Elm Street Sidewalks Projects Alternatives

Jim Donovan, lead engineer from Broadreach Planning and Design, commenced the public works session by giving a brief overview of the two projects and the existing conditions as discussed at the November 24th meeting. The purpose of tonight's meeting is to discuss alternatives for each project.

ELM STREET SIDEWALK ALTERNATIVES

Jim directed the audience's attention to a large aerial map of the project area [Elm Street from the intersection of West Berkshire Road, Water Tower Road, and continuing on Sampsonville Road to the Enosburgh Emergency Services Building and Athletic Fields]. Super imposed on the aerial map was the various alternatives – each color coded. As explained at the November 24th meeting, the purpose of this sidewalk is to provide safe access from the schools and Village to the Athletic Fields on Sampsonville Road behind the Enosburgh Emergency Services Building.

Due to the complexities of the project area, the alternatives were divided into four different sections, so that it might be possible to "mix and match" sections if it seemed appropriate. The four sections are:

- Elm Street itself between Main Street and Water Tower Road
- Water Tower Road from Elm Street to near the entrance of the athletic park
- Sampsonville Road, Route 105 east of Water Tower Road; and
- Off-road alignments that might avoid the traffic on Route 105

In addition to discussing the alternatives for each of the above sections, Jim also presented the options for reducing the large curb cut/entrances to the McDermott Trucking properties.

Jim continued to explain that the two off-road alternatives were discarded for various reasons:

1) The first path marked in green began at the intersection with West Berkshire Road. This option was discarded because the majority of children have been observed coming from the school area off Pleasant Street. This path is too far out of the way to accommodate this use.

2) The second path as outlined in orange would cut across the western border of the McDermott property, pass between the VTrans Garage and back side of the McDermotts and NAPA properties, and cross Water Tower Road between the Health Center Complex and the Community National Bank to the Athletic Fields. This alternative was discarded for three main reasons:

    a) Since none of the property in question belongs to the Village, the Village would need to obtain easements from several property owners which could be difficult.
    b) Most likely VTrans and the two commercial property owners would require a fence between the path and their properties. This would create a hidden alley way with associated potential safety issues.
    c) The main users of the sidewalk system would be children who tend to take the path of least resistance. It has been observed that the kids tend to cross Elm Street at the Pleasant Street intersection, continue across the 300 foot open access of the commercial properties, cross Water Tower Road, continue on Sampsonville Road and access the fields at that point. It was questioned whether the kids would use the off-road path if built or take the shortest, most direct, route.

The alternatives next discussed involved the Water Tower and Sampsonville Road options. Jim explained that for the Sampsonville route, the sidewalk would actually be placed on the outer side of the existing drainage swale providing considerable safety for pedestrians. This alignment would place it partially outside of the existing ROW.

Guy Breault asked if the Village ROW was 3 or 4 rods. Andy responded that it was 3 rods. At this point, Leonard Charron strongly suggested that we reexamine the off road path. As a resident on Elm Street, near the intersection with Pleasant Street, Leonard has witnessed many dangerous situations between children and traffic on Elm Street. He felt that it would be much safer to get the children completely off the main road.

Marilyn Ajami observed that many of the children ride bikes to the fields and she asked if the sidewalk would accommodate bike traffic. Jim responded that the sidewalks were intended for pedestrian activity but that the off-road path could easily be designed as a shared bike/pedestrian path.

It seemed to be the consensus of those in the audience to pursue the off-road path alternative as outlined in orange on the map. Jim mentioned that this option would entail obtaining 3 or 4 easements. He asked if there was a second choice in case this was not possible. There was no second choice presented by those in attendance. Jim counseled that should he not be able to obtain the necessary easements, we would have to meet again to discuss pursuing another alternative.

As for the section of the project from the intersection of West Berkshire Road to where the off-road path would meet, Alternative A-1 – Current Alignment – Save Trees was chosen.

DUFFY HILL ROAD SIDEWALK

The Duffy Hill Road Sidewalk project basically has two viable options:

- Alternative S-1: Sidewalk Adjacent to Road
- Alternative S-2: Sidewalk Separated from the Road

The sidewalk adjacent to the road will be more expensive due to the necessary installation of a curb and resulting water drainage issues. Pedestrians tend to feel safer when separated from the road even with a curb in place.

Alternative S-2: Sidewalk Separated from the Road was chosen as the preferred alternative. This alternative also corresponded to the Master Design Plan for the Eco-Energy Park which features 9 parking spaces between the park and the Bridge of Flowers and Light.

For the culvert issue, those in attendance supported using the existing culvert and gradually shifting Duffy Hill Road to the east

4. Designation of Project Manager for Duffy Hill Road, Elm Street Sidewalk Studies

Jon directed the Board's attention to two letters that have been prepared appointing Caroline Marcy as Local Project Manager for the two above stated sidewalk scoping studies. The Village had appointed Garry Atherton earlier but due to his impending retirement, he will not be able to fulfill this position.

Bill Spears, Jr. made the motion to appoint Caroline Marcy as Local Project Manager for both the Duffy Hill Road and Elm Street Sidewalk Scoping Studies. Seconded by Guy Breault. Unanimous. The Board of Trustees signed both letters.

5. Regional Planning Commission Board Vacancy

Included in the Board's packet was a letter from Sandi Murphy asking the Board to accept her resignation from the Regional Board of Commissioners.

Bill Spears, Jr. made a motion to accept Sandi's resignation from the Regional Board of Commissioners. Seconded by Leonard Charron. Unanimous.

Walter Scott asked Guy Breault if he would touch base with Mike Manahan, the remaining Regional Board representative for the Village of Enosburg Falls, to see if he has any suggestions for the vacancy. Guy said that he would follow up with Mike regarding this matter.

6. Northern Borders Diesel #1 Property Grant

Jon directed the Board's attention to a memo prepared by Caroline Marcy regarding the Northern Borders grant. As was mentioned last September, the Village of Enosburg Falls was awarded a Northern Borders Grant in the amount of $121,581.00 to help transform the Diesel #1 Brownfields property into a public park. This grant requires a 50% match. All matching funds must be secured and committed within one year of the NBRC Letter of Approval dated September 1, 2015.

The Village currently has $62,389.64 in a dedicated savings account for this project. This means that the Village will need to set aside an additional $59,191.36 any time from September 1, 2015 to August 31, 2016. Since it appears as if the Electric Department will end 2015 with a cash flow surplus, it is recommended that we set aside the required funds before the end of 2015.

The attractive aspect of this grant source is that although this grant is provided by Federal funds, by statue, it is NOT considered to be Federal funds. This means that the Village could use other federal or non-federal grant sources as our 50% match. Staff will be diligently pursuing all available grant opportunities for this project.

Leonard Charron made a motion to approve transferring $59,191.36 into the designated savings account for this project. Seconded by Ellen St. Marie. Unanimous.

7. Electric Dept. Digger Truck Rental

Jon presented to the Board a letter from the Village of Swanton. The Village of Swanton is willing to lease their digger truck to our Electric Department for $1,000 per month until our new

digger truck arrives. All that they require is that we maintain insurance on the vehicle and perform any regular preventative maintenance. Jon recommended that we accept this offer as fair and reasonable.

Guy Breault made a motion to approve the lease of the digger truck from the Village of Swanton for $1,000 per month per Swanton's offer in their letter dated December 17, 2015. Seconded by Leonard Charron. Unanimous.

8. Director of Public Works Job Description

Jon advised the Board that ads for the Director of Public Works position have been placed in the St. Albans Messenger, County Courier, on the Village's website, and on the on-line classified section of the VLCT website starting December 17th.

Jon briefly reviewed the requirements of this position as outlined on the informational handout included in the Board's packet. There were several small changes Jon and Garry Atherton recommended be made to the Director of Public Works Job Description at this time. Guy Breault made a motion to approve the recommended changes to the job description. Seconded by Bill Spears, Jr. Unanimous.

9. 2016 Preliminary Budget

Jon handed out the 2016 Village preliminary budgets to the Board. He directed their attention to the schedule on the inside cover informing them of the timetable for each department budget review.

Jon briefly discussed the high points on each department's budget and areas for deeper review and consideration.

10. Manager's Report

- Electric Dept. Hydro Renovation Section 108 - The Hydro Renovation Project is moving forward. The Section 108 financing filing was made on December 10, 2015 to the Public Service Board. This is a necessary step in securing the 1.8 million dollar bond vote. By statue, electric utilities in Vermont must get PSB approval before taking the bond item to their local public vote. For the Board's information, we made the filing for "up to" $2 million to be safe in case construction costs end up higher than estimated.

- Director of Public Works Hiring – Jon attached a copy of the advertisement for the Director of Public Works that appeared in the local newspapers and on-line as mentioned earlier. Resumes are due January 7, 2016. Jon will keep the Board apprised as this progresses.

11. Other Business
    There was no other business.

12. Adjourn

    There being no other business to come before the Board of Trustees at this time, Bill Spears, Jr. made a motion to adjourn. Seconded by Leonard Charron. Unanimous. The meeting adjourned at 8:30 pm.

Respectfully Submitted,

Caroline Marcy

These minutes were approved as corrected at the Board of Trustees Meeting on January 12, 2016.

VILLAGE OF ENOSBURG FALLS
Meeting of the Board of Trustees
February 23, 2016

Present: Trustees - Walter Scott, Guy Breault, Leonard Charron, Ellen St. Marie
Staff – Jonathan Elwell, Caroline Marcy, Garry Atherton, Gary Denton
Guest – Jim Donovan, representing Broadreach Planning & Design

Meeting called to order by Chair, Walter Scott at 6:30 p.m.

1. Modifications/Changes to Agenda

   There were no modifications or changes to the Agenda.

2. Review/Approval Minutes February 9, 2015

   Guy Breault made a motion to approve the February 9, 2016 minutes as written. Seconded by Leonard Charron. Unanimous.

3. Elm Street Sidewalk Alternatives Scoping Study: Jim Donovan, Broadreach Planning & Design

   Jim Donovan was invited back to clarify and review alternatives with the Trustees regarding the Elm Street Sidewalk project. During the December 22nd, Public Work Session, the Trustees had favored a bike/shared path concept that would lead bicyclists and pedestrians off the street by traveling behind the commercial businesses on Elm Street to the Athletic Fields. However, a second alternative was not chosen in the event that the favored bike/path concept proved infeasible, i.e. inability to obtain easements from property owners or restrictions that would create safety issues.

   Jim initiated the discussion by reviewing the three most viable options:

   1) The bike/shared path concept
   2) Sidewalk along Elm Street on the north side extending to Water Tower Road, continuing up the west side of Water Tower Road, and crossing between the Health Center and Community National Bank.
   3) Sidewalk along Elm Street on the north side extending to Water Tower Road, cross at Water Tower Road, continue on Route 105 to the Athletic Fields.

   All present agreed that each alternative had its own challenges and that no single alternative was without a negative concern. It was also the consensus that any project pursued would be a great improvement over the current situation of no sidewalk or safe access to the Fields.

At this point, Caroline Marcy read a letter submitted by Mary Tryhorne, Enosburg Director of Recreation and RiseVT Health Advocate. Mary states that as the Director of Recreation and a lover of walking, she is in full support of creating sidewalks to and from the Recreation fields and Island View Park. Mary continued to explain how Enosburgh Recreation is continuing to grow and expand with various new programs offered for children and residents of the community. Having safe walking access is a top priority as these programs become operational and attract a greater number of visitors to the Recreation fields.

After much discussion on each alternative, the conversation focused on three main aspects: Safety, feasibility, and likely-hood use of the sidewalk facility. Anecdotal evidence indicates that children and high-school aged students currently tend to cross at the Pleasant St./Elm Street intersection, walk through the 300'+ open access space of the commercial businesses, cross Water Tower Road, and continue down Route 105 by walking on the highway to access the fields by the Emergency Services Building.

Jim Donovan continued to explain that alternative number three, as listed above, has the highest degree of likely-hood of use since this is the current preferred method by pedestrians. It also has the highest degree of success since the sidewalk would fall almost completely within the Village right-of-way. This sidewalk alternative would provide safety to pedestrians by reducing the 300' open space into three clearly defined access points. Once pedestrians cross Water Tower Road and continue down Route 105, they would be protected from traffic by the deep swale, with the sidewalk positioned approximately 12' from the highway. This sidewalk proposal also has the added benefit of improving the appearance of the Village and creating an attractive gateway for visitors and residents alike.

One concern of the Trustees regarding this alternative was the safety issue of crossing at Water Tower Road. Jim explained the various ways this crossing could be installed with safety in mind by using techniques such flashing cross-walk signals or a slightly raised walkway.

Guy Breault made the motion to approve the sidewalk alternative of updating and improving the sidewalk on the north side of Elm Street from West Berkshire Road to the intersection of Pleasant Street, installing a new sidewalk facility that would continue to Water Tower Road, cross at Water Tower Road, continue on Route 105 to the Athletic/Recreation Fields as the preferred alternative. Seconded by Leonard Charron. Unanimous. During the course of discussion, it was the general consensus of the Board that the bike/shared path concept would be the second alternative.

Jim Donovan left at 7:40 pm.

4. <u>Enosburg Business Association, Outdoor Activities Permit and General Discussion: Shawna Lovelette, President</u>

The Trustees briefly reviewed a letter prepared by Shawna Lovelette, representing the Enosburg Business Association. The EBA is applying for their outside activities permit from the Village of Enosburg Falls for their 2016 activities:

- Easter Egg Hunt on Lincoln Park, Saturday, March 26th
- Harvest Fest on Lincoln Park, Saturday, September 17th
- Popcorn sales in Lincoln Park, Tuesday evenings to coincide with the Town Band Concerts June – August
- Christmas in Enosburg Falls, Saturday, December 3rd (tree lighting)

The EBA submitted a check in the amount of $50.00 for this permit.

Leonard Charron made a motion to accept this application and approve the 2016 outside activities permit for the Enosburg Business Association. Seconded by Ellen St. Marie. Unanimous.

5. Vtrans Class II Highway Paving Grant Agreement, Duffy Hill Road

After a nine-month delay, Jon informed the Board that the Village has received our Class II Highway Paving Grant Agreement for the Duffy Hill Road Paving Project. Jon has reviewed the agreement and it looks acceptable.

Leonard Charron made a motion to authorize Jonathan Elwell to sign the Grant Agreement on behalf of the Board of Trustees. Seconded by Ellen St. Marie. Unanimous.

6. Vtrans 2016 Class II Paving Grant Application Discussion

Gary Denton is in the process of preparing the Village's 2016 Class II Paving Grant Application. There are three possible options for projects that Gary can submit for paving projects:

- Depot Street
- St. Albans Street
- Orchard St. from Route 105 to the gully at Giddings Brook

Gary briefly described the condition of each road. Based upon the information from Gary, the condition of each road, and the amount of traffic on each road, the consensus of the Board was that Orchard St. should receive top priority.

Garry Atherton mentioned that since the Village just received a Class II grant in 2015, the chances are highly unlikely that we would receive another one in 2016. It may take several years before the Village is eligible for another grant. However, these grants should be prepared and submitted each year for planning purposes.

Garry Atherton and Gary Denton left the meeting at 7:55 pm.

7. Enosburg Falls Lion Club, VT Dairy Festival Permit Request

   Walter Scott and Leonard Charron are members of the Enosburg Falls Lion Club and have recused themselves from this agenda item. Since a remaining quorum is not present, this agenda item has been tabled until three Board members are in attendance that do not have this conflict of interest.

8. Hydro Renovation Project Draft Plans

   Late in the afternoon, Jon received by UPS a set of draft plans for the Hydro Renovation Project from the H.L. Turner Group. The Trustees reviewed the plans.

9. Bank Line of Credit Renewal

   The Village's $750,000 Line of Credit with Peoples Trust is up for renewal. After discussions between Peoples Trust and Staff, due to the timing issue between the renewal date and our Village Annual Meeting elections, the renewal date has been extended to the end of March.

10. Manager's Report

- Route 105 Traffic Study Request –Jon informed the Board that he has contacted Jim Cota, Vtrans District 8 Project Manager regarding the Trustees desire to have another traffic study done at the Route 105, Water Tower Road, Jay View Road intersection for the purpose of having the State put in a traffic light. Jim Cota has forwarded this request on to his supervisors in Montpelier. Jon will keep the Trustees informed when he hears back regarding this issue.

- Reminder of Informational Meeting March 3rd/Annual Meeting March 8th –Just a reminder of these two meetings. Both are being held at the EFHS Auditorium, and will begin at 6:30 pm. Jon has also contacted the school about the request from the Trustees to have these two meetings advertised on the electronic sign in front of EFHS. They agreed to do this on behalf of the Village.

- Garry Atherton Retirement- Garry Atherton's last day as Director of Public Works with the Village of Enosburg Falls will be Friday, February 26th. We will have a small, informal celebration of Garry's 17 years as Enosburg Falls' first Director of Public Works at 3:00 pm at the American Legion Post #43.

11. Other Business

    There was no other business to come before the Board.

12. Adjourn

    There being no other business to come before the Board of Trustees at this time, Guy Breault made a motion to adjourn. Seconded by Leonard Charron. Unanimous. The meeting adjourned at 8:25 pm.

Respectfully Submitted,

Caroline Marcy

These minutes were approved as written at the March 22, 2016 Trustee meeting.

VILLAGE OF ENOSBURG FALLS
Meeting of the Board of Trustees
June 14, 2016

Present: Trustees - Walter Scott, Leonard Charron, Guy Breault, Ellen St. Marie
Staff – Jonathan Elwell, Caroline Marcy, Gary Denton
Guests – Jim Donovan, Broadreach Planning & Design

Meeting called to order by Walter Scott at 6:35 p.m.

1. Modifications/Changes to Agenda

   There were no modifications or changes to the agenda.

2. Review/Approve Minutes May 24, 2016

   Guy Breault made the motion to approve the minutes of the May 24, 2016 Trustee meeting as written. Seconded by Leonard Charron. Jonathan Elwell mentioned that there was a clarification that he wanted to make to the May 24th minutes. Under item #3 Lincoln Park/Maple Park E-Cigarette Prohibition Ordinance, Jon wanted to change the word "all" to read "Lincoln Park/Maple Park" so as to exclude Island View Park from the ordinance as the Board had passed an amendment to an existing ordinance which was intentionally for Lincoln Park and Maple Park only . Guy Breault made the motion to approve the minutes of the May 24th 2015 Trustee meeting with the aforementioned changed. Seconded by Leonard Charron. Unanimous.

3. Elm Street Sidewalk Study Discussion

   In light of Vtrans' comments on the draft Final Report for the Elm Street Sidewalk Scoping Study, Jim Donovan wished to review the results with the Trustees before proceeding with the Final Report. Vtrans has indicated that there is no flexibility in allowing the use of a rectangular rapid flashing beacon (RRFB) crosswalk sign for the crosswalk proposed across Water Tower Road as it intersects Sampsonville Road/Elm Street.

   The use of the RRFB was an important consideration in the Board of Trustee's decision to align the sidewalk along Elm Street and Samponsville Road. Jim proceeded to inform the Board regarding options that Vtrans will accept and allow. Two of the recommended options are:

   1) Install a median in the center as a safe haven area for pedestrians as they cross the road.
   2) Move the stop sign and stop bar back 10 to 15 feet behind the crosswalk.

   Discussion ensued regarding the pros and cons of installing a median in the center considering the volume of large trucks that regularly use this roadway and the difficulty with snowplow trucks in the winter.

Guy Breault made a motion to approve the change to the Final Report to install a mountable curb median and to move the stop bar & sign back 10 – 15 feet behind the crosswalk as an acceptable alternative to the RRFB at the crosswalk on Water Tower Road. Seconded by Leonard Charron. Unanimous.

4. Bridge of Flowers & Light Renovation Project Bids

The Trustees briefly reviewed a memo prepared by Eric Goddard, Knight Consulting Engineers, which outlined bid results of the Bridge of Flowers & Light –Abutment & Railing bid proposal. The Village received two bids on this project. Although D. Tatro Construction, LLC was the apparent low bid, they did not acknowledge Addendum #1 issued May 27, 2016. Due to this fact, this bid has been disqualified. The second bid was received from Blow & Cote for an amount of $87,020 which is over the budgeted amount.

The Board of Trustees reviewed several options. Eric Goddard states that their firm's greatest concern about the integrity of the bridge is the northeastern abutment wall. Failure of this wall would likely result in significant damage to the surface of the bridge, as well, as safety and environmental impacts on the north bank of the River. Knight Engineering strongly states that the northeast abutment wall stabilization work should be performed soon. Guy Breault made a motion to reject both bids and to put the project out to bid again based on the new schedule discussed with the project completion date of September 15, 2016. Seconded by Leonard Charron. Unanimous.

5. Duffy Hill Road Paving Project Bids

The Trustees reviewed a memo prepared by Gary Denton which outlined the bid results of the Duffy Hill Paving project. The Village received only two (2) bids:

	Bid Amount
Pike Industries	**$161,620.00**
Engineers Construction, Inc.	**$179,520.00**

After reviewing both proposals, the apparent low bidder is Pike Industries. This firm fulfills all the requirements established in the bid documents and is a qualified firm. Staff recommends that the Village award the bid to Pike Industries.

Ellen St. Marie made a motion to award the Duffy Hill Paving Project bid contract to Pike Industries and to give Jonathan Elwell authorization to sign the necessary contract paperwork. Seconded by Guy Breault. Unanimous.

6. Lincoln Park Permit Request – Enosburg Public Library

The Trustees reviewed an application submitted by Brenda Stanley on behalf of the Enosburg Public Library. Brenda is requesting use of a small area of Lincoln Park to read and discuss Fredrick Douglas' speech on July 1, 2016 from 6:00 pm to 8:00 pm.

Guy Breault made a motion to approve the Enosburg Public Library application for use of Lincoln Park on July 1st, 2016 from 6:00 pm to 8:00 pm for the purpose of reading and discussing Fredrick Douglas' speech. Seconded by Leonard Charron. Unanimous.

7. Hydro Renovation Project Status Report

Now that the PSB Section 108 issue has been solved, Jon wanted to give the Board an update on the status of the hydro upgrade project. On May 25th, staff met with our engineers from the H.L. Turner Group: John Lavigne, Paul Becht, and Lee Carroll. The following is our new revised schedule:

- Lee Carroll will finish the electrical components by July 8th or 9th
- The project will be out for bid by July 14th
- Bids will be due August 12th
- The Board of Trustees will award the bid on August 23rd
- Construction to start September 7th, 2016 with a firm end date of November 30, 2017

8. Manager's Report

- St. Albans Street Pump Station Property Grant: The Village has received notification that we did not receive the 2017 Ecosystem Restoration Grant we applied for earlier this spring. This funding would have helped with corrective stormwater work needed along St. Albans Street due to stormwater flows impacting the Village's Wastewater Pump Station location on St. Albans Street. We will continue to look at other funding possibilities for this project.
- By-law Focus Group Meetings: The Board received materials from Amanda Holland of Northwest Regional Planning Commission regarding two meetings being held to review Village Zoning By-Laws. The first was held on June 9th and

the second is scheduled for July 7th. Guy Breault and Leonard Charron represented the Village of Enosburg at the June 9th meeting.

- Town of Enosburgh to hold Selectboad Meeting in Village Meeting Room - Jon was contacted by Billie Jo Draper, Town Clerk, and asked if the Town Selectboard could use the Village's Meeting Room to conduct a Selectboard Meeting Monday 20, 2016 from 5:30 pm – 9:00 pm. Jon gave the Town permission to use the room.
- S.230 – Jon had two items to update regarding this bill. Jon had incorrectly reported at the last meeting that this bill removed the cap from net metering projects in Vermont. The final version of this bill did not contain language to that effect. There is, however, an effort coming from the Public Service Board to create a new rule that may remove the cap. This authority was apparently given to them by the Legislature several years ago under Act 99. The rule has not passed, yet, but Jon's understanding is that it is under review by the PSB.

  Another item to report under S.230, is that Governor Shumlin has vetoed S.230. Of particular interest in the bill was the legislature allowing for consideration of municipal and regional interests when siting new renewable energy generation projects. As a response to the veto, the Legislature convened a Special Session Thursday June 9th in which they passed S.260. According to sources at VPPSA, this new bill has much of the same language of S.230, but attempts to address some of the issues around funding for regional planning commissions in their extra work to develop ideal siting plans, and some of the concerns Governor Shumlin has regarding future wind projects in the state.

9. Other Business

   There was no other business.

10. Adjourn

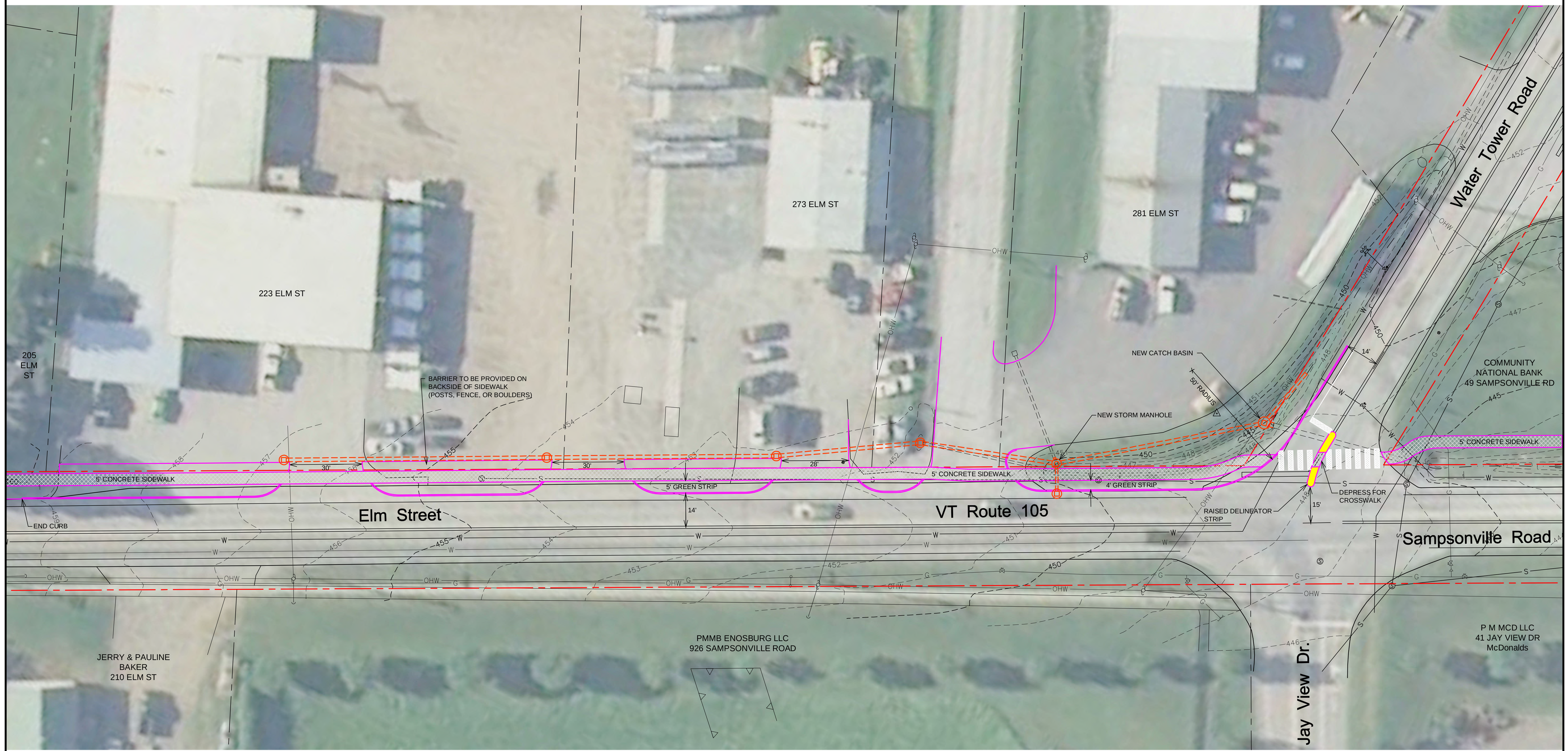
    There being no other business to come before the Board at this time, Guy Breault made a motion to adjourn. Seconded by Leonard Charron. Unanimous. The meeting adjourned at 7:50 pm.

Respectfully Submitted,

Caroline Marcy, Director of Finance

These minutes are not official until approved at the Board of Trustees next regular meeting.

Appendix D
Water Tower Road Area Detailed Plan



VT Grid

GRAPHIC SCALE

20 0 10 20 40 80

(in feet)

1 inch = 20 ft.

LEGEND

450	WETLAND BOUNDARY
	GROUND CONTOUR
OHW	OVERHEAD WIRE
W	WATER MAIN
G	GAS LINE
ST	STORMWATER PIPE
S	SEWER MAIN
	UTILITY POLE & GUY
	TREES
	SIGNS
	MAILBOX
S	SEWER MANHOLE
	WATER CURB STOP
	WATER VALVE
	WATER HYDRANT
	GAS VALVE
	CATCH BASIN
	PROPERTY CORNER FOUND

Date	Revision	By

These plans shall only be used for the purpose shown below:

- ■ Sketch/Concept
- ☐ Preliminary
- ☐ Final Local Review
- ☐ Act 250 Review
- ☐ Construction
- ☐ Record Drawing

Elm Street Sidewalk

Elm Street Enosburg VT

SIDEWALK LAYOUT SKETCH 02-28-16

Project No.	15091
Survey	KR
Design	AR
Drawn	L&D
Checked	AR
Date	Sept. 2015
Scale	1" = 20'
Sheet number	3

Lamoureux & Dickinson
Consulting Engineers, Inc.
14 Morse Drive, Essex, VT 05452
802-878-4450 www.LDengineering.com

BROADREACH
Planning & Design

Heritage Landscapes LLC

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CAP