Central Vermont Regional Planning Commission
Town of East Montpelier
Intersection Design Feasibility Study

Final Report

Submitted by:

Lamoureux & Dickinson Consulting Engineers

In conjunction with

Broadreach Planning & Design

Heritage Landscapes LLC

University of Vermont Consulting Archaeology Program

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This report has been formatted for double-sided printing.
Blank pages are intentional, so that the beginning of the report and the appendices can start on an odd numbered, right-side page.

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I. INTRODUCTION

A. OVERVIEW

This study is examining the most appropriate ways to increase safety for motorists, bicyclists, and walkers at the intersection of Gallison Hill Road and Brazier Road with Towne Hill Road in the Town of East Montpelier, Vermont. The project is supported by funds provided by the Vermont Agency of Transportation (VTrans) and administered by the Central Vermont Regional Planning Commission.

To begin the project, the Town of East Montpelier, with assistance from the Central Vermont Regional Planning Commission (CVRPC), created a Steering Committee to guide the development of the project. CVRPC also contracted with the consultant team of Lamoureux & Dickinson, Broadreach Planning & Design, Heritage Landscapes, and the University of Vermont Consulting Archaeology Program (the L&D Team). Together, the Steering Committee and the L&D Team examined the existing conditions around the intersection, reviewed different alternatives and selected a set of preferred alternatives.

B. PURPOSE AND NEED

The purpose of the intersection improvement project examined in this study is to improve conditions on the roadway that will slow motorists moving through the intersection; create longer sight lines for the north, east, and south approaches to the intersection; and provide improved facilities for walkers and bicyclists in and near the intersection.

Needs for the improvements result from:

- High traffic volumes passing through the intersection during peak periods, particularly the morning peak hour;
- Minimal shoulder widths on each roadway approaching the intersection;

- The presence of U-32, a regional middle and high school, on Gallison Hill Road about ½ mile south of the intersection;
- A high number of young and inexperienced drivers who travel through the intersection on their way to or from U-32;
- Motorists traveling through the intersection on Towne Hill Road at high speeds that considerably exceed the 40-mph posted speed limit;
- The number of unreported crashes and near misses reported by local residents and Town staff that have occurred at the intersection;
- Pedestrians, joggers and athletic teams on training runs coming from nearby residences and U-32 crossing Towne Hill Road at the intersection; and
- Restrictions to sight lines caused by the hills on Towne Hill and Gallison Hill Roads as well as by turning buses and trucks at the intersection.

C. REPORT DEVELOPMENT AND ORGANIZATION

This Final Report is the work of the Steering Committee. It focuses on the final recommendations for the intersection, the reasons they were selected, and information that will help the Town implement them. To complete the study, the L&D Team and the Steering Committee:

- Examined the existing conditions,
- Identified as many alternative ways of addressing the purpose and need as possible,
- Examined and analyzed the alternatives, and
- Selected the most appropriate alternatives for future implementation.

They undertook this process with input from the public during public work sessions at three key points during the work:

- During the review of existing conditions on September 11, 2017,
- During the analysis and selection of a preferred alternative on October 16, 2017, and
- Before finalization of the study report on November 20, 2017.

The main text of this report presents the final recommendations of the study and the information used to reach them. Full size **Figures** are located at the end of the text, behind **Table 2**.

The main text of the report is organized after this **Introduction** to present a **Summary** of the relevant sections of the Existing Conditions report for the Towne Hill Road/Gallison Hill Road/Brazier Road Study Area; it presents enough

information to make the recommendations understandable. After **Section II. Summary - Existing Conditions**, the report presents the recommendations in **Section III. Recommendations**. After the recommendations, the report presents explanations on the rationale for the recommendations, the issues and impacts associated with the recommendations, and in **Section IV. Implementation**, information on realizing the recommendations.

Readers that would like to fully understand all of the existing conditions in the Study Areas can skip the **Summary - Existing Conditions** and go directly to **Appendix A**, which includes the complete report about the existing conditions near the Towne Hill Road intersection with Gallison Hill and Brazier Roads that were examined during the first portion of the project. **Appendix B** includes a review of the different alternatives that were generated and analyzed during the course of the study. **Appendix B** also includes the reasons why several of the initial alternatives were not developed for public review. **Appendix C** includes a copy of notes from the three public work sessions conducted during the course of the work.

II. SUMMARY - EXISTING CONDITIONS

A. OVERVIEW

The L&D Team did an extensive analysis of the existing conditions in the Study Area and developed the *Existing Conditions* report to describe what they found. Some existing conditions in the Study Area eventually proved not to be important factors in deciding what the preferred recommendations might be. The following text summarizes those aspects of the *Existing Conditions* report in the Study Area that the Steering Committee found to be important in the development of the recommendations. **Figure 2** in this final report provides graphic representations of the relevant existing conditions in the Study Area.

Appendix A contains a complete version of the *Existing Conditions* report. It provides information on the other aspects of the existing conditions not summarized here, including:

- Archeological resources;
- Rare, threatened or endangered species;
- Wildlife corridors;
- Hazardous waste sites;
- Waterbodies;
- Open space;

- Municipal, regional, and state plans;
- Completed, approved, or anticipated development plans for adjacent parcels; and
- Previous local transportation studies.

Readers who would like to more fully understand the existing conditions in the Study Area should read Appendix A instead of this Summary to avoid reading information twice.

B. LAND USE

Figure 2 shows the land use near the intersection, which is located in a rural portion of East Montpelier. Most of the land near the intersection is in active agricultural use, or is in a some stage of returning to a forested condition (called "wood lot" on **Figure 2**). The northeast corner of the intersection is occupied by a residence. There is also a residence in the southwest corner of the intersection. Both houses are located away from the roads. There is a residence in the southeast corner set very far back from the road, surrounded by a young second-growth wood lot.

C. TRANSPORTATION FACILITIES

1. ROADWAYS

Towne Hill Road, TH #2, is a local Class 2 Town Road. **Table 1** presents details about its layout, management, and use. It serves as a primary commuter link into Montpelier.

The L&D Team conducted a speed study on September 1, 2017 at the intersection.

- The average speed westbound was 42.5 mph and eastbound was 40.1 mph.
- The mean speed westbound was 41.7 mph and eastbound was 40.5 mph
- The 85th percentile speed westbound was 48.9 mph and eastbound was 43.6 mph.

Table 1: Roadway Characteristics

	Towne Hill Rd.	Gallison Hill Rd.	Brazier Rd.	Standard/Recommended
Pavement Width & Type	22 Feet Asphalt	22 Feet Asphalt	18 Feet Gravel	
Paved Shoulder Width	2 feet	1 Foot	none	
Posted Speed Limit	40 MPH	35 MPH	35 MPH	
Stopping Sight Distance		465 Feet EB	460 Feet EB	445 Feet (40 MPH)
		1,000 Feet WB	500 Feet WB	500 Feet (45 MPH)
AADT (September 2016)	2,393 Veh / Day	1,456 Veh/Day		
AM Peak Hour Traffic	353 Veh/Hour	343 Veh/Hour		
PM Peak Hour Traffic	326 Veh/Hour	197 Veh/Hour		
Max. Hour Traffic	368 Veh/Hour	364 Veh/Hour		
State Crash History	3 reported crashes from 7/1/2010 to date at the intersection plus 1 reported crash on Towne Hill Road just west of the intersection. One crash resulted in injury.			

Gallison Hill Road (TH #5) and Brazier Road (TH #50), are Class 2 and 3 town highways, respectively. **Table 1** presents details on their layout, management, and use.

2. INTERSECTION CHARACTERISTICS

VTrans last conducted turning movement counts at the intersection in August of 2013. It shows that most of the turning movements are to or from Gallison Hill Road. There are very few turns to or from Brazier Road. **Attachment C** in **Appendix A** includes details from the traffic count.

3. BICYCLING & WALKING FACILITIES

There are no facilities dedicated to walkers or bicyclists at or near the intersection. U-32 sports teams and others seasonally run along Gallison Hill Road and cross Towne Hill Road at the intersection.

4. TRANSIT

The Green Mountain Transit (GMT) Montpelier Route 2 commuter bus uses Towne Hill Road to enter and leave Montpelier and has an on-call stop at the intersection, but there are no bus stop signs or other facilities to note that the bus stops there.

D. NATURAL RESOURCES

1. WETLANDS

There are no state-identified wetlands near the intersection of Towne Hill Road with Gallison Hill and Brazier Roads. There appears to be a grassed wetland that runs diagonally through the field in the northwest corner of the intersection. **Figure 2** shows the location of the non-state-identified wetland area.

2. TOPOGRAPHY

Figure 2 shows the topography for the Study Area. The land in the Study Area forms somewhat of a large saddle; Gallison Hill and Brazier Roads each descend from higher elevations to the intersection, while Towne Hill Road ascends toward the intersection from the east. Close to the intersection itself, the land on the north side of Towne Hill Road is generally level, but several feet lower than the road surface. The land on the south side of Towne Hill Road gradually rises to more than ten feet higher than the road surface on the west side of Gallison Hill Road and rises a bit higher than that on the east side of Gallison Hill Road.

E. UTILITIES

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

Utility poles are maintained by Washington Electric Cooperative for their overhead electrical wires plus communication cables (Fairpoint and Comcast). Overhead wires run along the south side of Towne Hill Road, the west side of Brazier Road and switch from side to side on Gallison Hill Road in the Study Area.

Culverts run under Towne Hill Road east and west of the intersection and under Gallison Hill Road south of the intersection. A catch basin is located in Brazier Road close the intersection. This catch basin drains under Brazier Road and connects with other catch basins located in the northwest, southwest and southeast corners of the intersection. The resulting drainage discharges to the

east on the south side of Towne Hill Rd. Drainage ditches line both sides of Gallison Hill Road, both sides of Towne Hill Road and the west side of Brazier Road. These convey stormwater runoff to the above catch basins.

F. HISTORIC RESOURCES

The house located in the northeast corner of the intersection as well as the associated barns are considered to be historic resources. **Attachment A** in **Appendix A** includes a complete copy of the Historic Resources Review.

III. RECOMMENDED ALTERNATIVES

A. OVERVIEW

The Steering Committee opted to recommend a series of actions and projects to improve conditions for motorists, bicyclists, and walkers at the intersection of Towne Hill Road with Gallison Hill Road and Brazier Road. They divided the recommendations into four categories, organized around the intent of each recommendation. The four categories of improvements are meant to:

- Increase sight distances on Towne Hill Road to the east of the intersection;
- Lower motor vehicle speeds on Towne Hill Road;
- Increase driver awareness of other traffic in and near the intersection; and
- Create better conditions for walkers and bicyclists near the intersection.

Most of the recommendations that are meant to increase driver awareness of traffic at the intersection would also aid in reducing driving speeds for motorists approaching the intersection.

B. RECOMMENDATIONS

1. INCREASE SIGHT DISTANCE

Increase summer and winter roadside maintenance. Recommendation 1 would include more frequent mowing of the vegetation in the right-of-way in the summer and plowing the snow further away from the edges of the pavement in the winter near the intersection. The additional maintenance would reduce the

interference to sight lines that tall vegetation or nearby snow mounds might cause.

2. LOWER TRAVEL SPEEDS

a. *Construct a raised table intersection*. Recommendation 2a would modify the intersection of Towne Hill Road with Gallison Hill and Brazier Roads to raise the entire center square of the intersection by two and three inches. Ramps would allow access to the table from each of the approaches. This feature would heighten motorists' awareness of the intersection each time they pass through it. It would also lower motorists' speeds near the intersection. It would be designed to be approachable with little impact to tires at the design speed.

b. *Narrow the roadway width on Towne Hill Road near the intersection*. This alternative would involve a slight narrowing of the shoulders by the installation of curbs, the placement of removable planters along the sides of the road, or some other "neckdown" method acceptable to the Town. It might alternately add center medians created from a different pavement material and just slightly raised over the existing roadway elevation.

c. *Lower the speed limit on Towne Hill Road to 35 MPH.* This recommendation would initiate an engineering study that would include an analysis of the existing travel speeds on the road. The engineering study would help the Town evaluate the potential to reduce the posted speed limit on Towne Hill Road east and west of the Gallison Hill Road/Brazier Road intersection to 35 mph. In addition to the speed evaluation, the study would include an analysis of the roadway characteristics, the surrounding area, and other factors that influence travel speeds. If the speed limit is able to be reduced, the work would also include the installation of flashing advanced warning signs of the reduced speed limit before the posted change on both the eastbound and westbound sides of the intersection.

d. *Install Radar Speed Feedback Signs on Towne Hill Road*. This recommendation would add speed feedback signs for both directions of travel on Towne Hill Road east and west of the intersection. The signs would display either the speed or a slow-down warning when a vehicle's speed exceeds the posted speed limit. The sign could also display a "Thank You" when a vehicle's speed is at or below the posted speed limit, as currently used elsewhere in Vermont with much success.

e. *Increase police patrols along Towne Hill Road near the intersection*. This recommendation would increase the amount of policing the Town now contracts from the State Police over the existing 40 hours of monthly patrols. The Town would add the extra hours by either contracting for more hours from the State Police, or requesting patrol hours from the Washington County Sheriff's Department, either of which would, as possible, be focused specifically on Towne Hill Road near the intersection with Gallison Hill Road. The Town would be able to provide more guidance on when the additional patrols would be done when working with the Sheriff's Department.

3. HEIGHTEN DRIVER AWARENESS

a. *Add curbs on Gallison Hill Road.* Alternative 4d would create the feeling of a narrower road on Gallison Hill Road by the addition of curbs along the edge of the existing pavement close to the intersection. The curbs would keep motorists from unsafely passing vehicles waiting to turn left or right onto Towne Hill Road. The curbs would be positioned so that a sidewalk could be easily added on the east side of Gallison Hill Road behind the curb in the future.

b. *Add a blinking STOP AHEAD warning sign on Gallison Hill Road*. This recommendation would replace the existing DANGEROUS INTERSECTION warning sign on Gallison Hill Road south of the intersection with a new flashing blinker STOP AHEAD sign. The blinkers would be activated during the morning and afternoon peak hours as well as potentially at other times automatically by motorists on the road approaching the intersection. The blinkers would be a reminder that the drivers are approaching an intersection. Additionally, a new flashing beacon could be added to the top of the STOP sign itself on the Gallison Hill Road approach to the intersection (or the sign could be replaced with a new blinking STOP sign).

c. *Review, update, and coordinate existing and/or additional signs*. This recommendation would update and coordinate the regulatory and warning signs along Towne Hill Road, Gallison Hill Road, and Brazier Road, removing those that are outdated or no longer relevant, to minimize the number of signs and make the remaining signs more effective and code compliant. It would include:

- Removing existing warning signs which are out of date, e.g. the existing EQUESTRIAN sign west of the intersection on Towne Hill Road.
- Relocating the 35-mph speed advisory plaque on Towne Hill Road west of the intersection from the EQUESTRIAN sign to the CROSS ROAD WARNING sign to match the existing signs east of the intersection. (The

35-mph advisory plaques can be removed if the posted speed limit is lowered to 35 mph.)

- Relocating the STOP AHEAD, CROSS ROAD WARNING and PEDESTRIAN WARNING signs as necessary to meet the Manual on Uniform Traffic Control Devices placement and spacing guidelines.
- Replacing the existing warning signs with new ones using high intensity Type IX or XI retroreflective sheeting and reflective post panels.
- Gate posting (installing signs on both sides of the road) all or some of the above signs.

4. IMPROVE BICYCLING AND WALKING CONDITIONS

a. *Add properly signed GMT bus stop*. Recommendation 4a would add a bus stop sign at a minimum on both the eastbound and westbound departures from the intersection on Towne Hill Road. The specific locations for the signs would be determined with the assistance of Green Mountain Transit.

b. *Add a painted crosswalk with blinkers on the crosswalk warning signs at and before the intersection in both directions on Towne Hill Road*. This recommendation would add a crosswalk on Towne Hill Road. A crosswalk would also be added on Gallison Hill to allow pedestrians to easily access the single crosswalk over Towne Hill Road. Additional protection for pedestrians crossing Towne Hill Road could be provided by installing blinkers on the crosswalk warning signs located adjacent to the crosswalks, as well as the required distance along Towne Hill Road before the crosswalk. The blinkers would provide pedestrian-activated flashing blinkers on both sides of the crosswalk. They would heighten motorist awareness that a pedestrian is present and improve compliance with the required yield to a pedestrian in a designated crosswalk. The blinkers would flash for just the amount of time that it would take a typical pedestrian to cross the road and then go dark until they were activated again. (*The final recommendation included the installation of Rectangular Rapid Flashing Beacons (RRFB). After the selection of the final recommendations, the* Manual of Uniform Traffic Control Devices *(MUTCD), which sets national standards for signs and signals on roadways, was updated to remove the approval of RRFBs. The recommendation was modified to include blinkers on the signs rather than the RRFBs. If the MUTCD is modified again to once more include RRFBs, the Town could switch back to using them instead of the blinkers.*)

C. RATIONALE AND CONSIDERATIONS

The Steering Committee, with input from the public at the work sessions, thought that focusing the attention on slowing the speeds of motorists on Towne Hill Road, especially close to the intersection itself, could yield the best results. Accordingly, they recommended actions and modifications to the existing roadway that focused on speed reduction, especially near the intersection. They also tried to include recommendations that might remind young, inexperienced drivers to pay more attention at the intersection.
Table 2 provides more information on the benefits that each recommendation provides as well as potential impacts that might result from its implementation and obstacles that must be overcome before it could be completed.

IV. IMPLEMENTATION

A. PHASING

There are numerous ways in which the recommendations could be phased. The Steering Committee has made suggestions on how they could be grouped and then implemented in phases. **Table 3** shows the suggested grouping of the recommendations along with the possible phasing. Other groupings and phasing could also be implemented by the Town, if funding or priorities suggest other arrangements.

Prior to beginning implementation of any of the alternatives, the Steering Committee recommends that the Town undertake a bit more analysis of the intersection. The analysis would provide a solid benchmark against which it can measure the effectiveness of the various recommendations when they are implemented. At a minimum, the Town should conduct additional speed studies at different hours of the day and, if possible, different times of the year. It would also be beneficial to do observations of the intersection for a single day to up to a week, ideally several at different times of the year, to record vehicle activity through the intersection, including observed unsafe driving patterns.

The Town can repeat the studies and/or observations after the different phases of recommendations are implemented to test the effectiveness of the changes. The results of the comparison can help the Town decide if it needs or wants to implement more of the recommendations.

The CVRPC can assist the Town in organizing and potentially even conducting the additional studies at the intersection.

Table 3: Suggested Grouping and Phasing

PHASE 1
Recommendation 1: Increased Summer and Winter Maintenance
This recommendation could be implemented at any time assuming funding is available for the work.
Recommendation 3c: Comprehsive Sign Review
This recommendation could be implemented as soon as funding is secured to replace obsolete signs.
GROUP A
Recommendation 2c: Reduced Speed Limit of 35 mph on Towne Hill Road
This recommendation could be implemented at any time assuming funding is available for the work. Once implemented, the actual study could take several months to complete.
Recommendation 2d: Radar Speed Feedback Signs on Towne Hill Road
Recommendation 3b: Flashing STOP AHEAD Warning Sign on Gallison Hill Road
Recommendation 4a: GMT Bus Stop Signs on Towne Hill Road
PHASE 2
Recommendation 2e: Increase Police Patrols near the Intersection
PHASE 3
GROUP B
Recommendation 2a: Raised Table Intersection
Recommendation 2b: Intersection Neckdowns on Towne Hill Road
Recommendation 3a: Curbs Close to the Intersection on Gallison Hill Road
Recommendation 4b: Crosswalk with Blinking Sign on Towne Hill Road
Note: Groups are suggested to be installed as one action

B. INITIAL ESTIMATE OF PROBABLE CONSTRUCTION COSTS

The L&D Team has prepared initial estimates of probable construction costs for the recommendations. **Table 2** includes the estimates.

While it is most likely that the Town would not implement all of the recommendations at one time, it is still beneficial to know that the overall cost of the recommended one-time construction solutions would be approximately $130,000. The initial estimates of probable construction costs presented here

include design, construction management, materials, and installation, when appropriate, but do not include potential costs in acquiring construction or permanent easements, although none are anticipated at this time.

The costs for the on-going yearly recommendations are also included in **Table 2**.

The L&D Team based the initial estimates on the Illustrations and Figures contained in this report and unit costs in the VTrans Estimator database. The numbers should be considered as guides to how much funding might be needed to construct the preferred alignment. They are in 2017 dollars; costs could increase by up to five to ten percent a year. The initial costs estimates are predicated on having the project constructed completely by an independent contractor rather than through a Force Account as part of the Town's funding match.

C. PERMITS, EASEMENTS & APPROVALS

It does not appear that permits from outside state or federal agencies would be needed for any of the preferred recommendations.

D. TIMELINE

The timeline for implementation varies for each recommendation. The following text provides a brief review of the potential time it might take to implement each recommendation.

- Recommendation 1: Increased Summer and Winter Maintenance - This recommendation can be implemented at any time by authorization of the Selectboard. Once it is decided whether it will be additional work for the Town highway crew or reallocation of their existing work, the Town should know if additional preparations would be needed, such as hiring new crew members. If the work will be reallocation of existing work, little to no preceding preparation should be needed to begin implementing the additional maintenance work at the intersection.

- Recommendation 2a: Raised Table Intersection - Once funding has been secured, the implementation of this recommendation will require design work before it can be implemented. The design work would typically take about four months for all of the reviews and approvals to be completed. It would take approximately another two months to circulate

the design, receive construction bids, and accept one. The actual construction of just the raised table could be accomplished in a week's time at the most. If constructed at the same time as the other recommendations in Group B defined in **Table 3**, the construction time might be up to a week longer. It might also be possible to install a rubber "temporary" elevated intersection table during the summer months to test the recommendation before actually doing the construction work. While the rubber elevated intersection could provide a preview of how the elevated intersection might impact driver speeds, it might not provide a good representation of what the sound of traffic passing over it might be, or the ease with which snow plows could maintain it.

- Recommendation 2b: Intersection Neckdowns on Towne Hill Road - This recommendation could be implemented very simply by placing some object in the four corners of the intersection, such as a large half barrel filled with sand or dirt to create the neckdowns. This could also be tried as a test to see whether the recommendation actually has the intended consequences. The specific placement location of the test objects would need to be determined with input from a traffic engineer, the Town Road Foreman, and the school or the bus drivers. The layout should also consider the ability of bicyclists to easily travel through the intersections.

  If the Town wants to install more permanent neckdowns, it would first need to secure funding for the design and construction work. Once funding has been secured, the implementation of this recommendation would require design work to determine the specific locations of the elements of the neckdowns as well as to design whatever modifications to the stormwater system would be needed. The design work would typically take about six months for the reviews and approvals to be completed. It would take approximately another two months to circulate the design, receive construction bids, and accept one. The actual construction of the neckdowns would vary from one to four weeks, depending on the amount and type of stormwater improvements that might be needed. If constructed at the same time as the other recommendations in Group B defined in **Table 3**, the construction time might be up to a week longer.

- Recommendation 2c: Reduced Speed Limit of 35 mph on Towne Hill Road
  It could take approximately two months for the required speed limit engineering study to be completed, once it is started. The specific amount of time it would require might be shorter if the Town hires a consultant to prepare the study. It would take several more months for

the Selectboard to consider the change and allow time for public comments before the change in speed limit is made.

- Recommendation 2d: Radar Speed Feedback Signs on Towne Hill Road - Once funding has been secured for the implementation of Recommendation 2d, the Town can work with VTrans and/or CVRPC to determine the specific location for each sign and to order them both. This could take up to a year to be completed. The actual installation of the sign itself could be accomplished in a day if free standing solar-powered signs are used. Providing a traditional electric power service could extend the implementation time, if not installed during the time that the Town is waiting for delivery of the sign.

- Recommendation 2e: Increase Police Patrols near the Intersection - The most significant amount of time associated with this proposal would be the discussion that the Selectboard would need to have before allocating the funds for its implementation. The actual beginning of the additional patrols might need to wait until a Town budget including the extra funds is approved at the next Town Meeting.

- Recommendation 3a: Curbs Close to the Intersection on Gallison Hill Road - This recommendation could be implemented very simply on a temporary basis by placing barriers, such as parking bumpers or barrels, along the sides of Gallison Hill Road. This would be a test to see whether the curbs actually have the intended consequences.

  If the Town wants to install more permanent curbs, it would first need to secure funding for the design and construction work. Once funding has been secured, the implementation of this recommendation would require design work to determine the specific location and construction details needed to make the curbs secure and long-lasting, in a location that would allow the future construction of an adjacent sidewalk. The design would also need to consider how to address the change in the stormwater runoff the curbs would make. This would include determining the location and type of stormwater facilities needed. If determined to be required or needed at the time of construction, stormwater treatment would need to be included in the design. The design work would typically take about six months for the reviews and approvals to be completed. It would take approximately another two to three months to circulate the design, receive construction bids, and accept one. The actual construction of the curbs would vary from two to six weeks, depending on the amount and type of stormwater

improvements that might be needed. If constructed at the same time as the other recommendations in Group B defined in **Table 3**, the construction time might be up to a week longer.

- Recommendation 3b: Flashing STOP AHEAD Warning Sign on Gallison Hill Road - The installation of flashing warning sign(s) can be accomplished in a day, if free standing solar-powered signs are used. Otherwise, providing a traditional electric power service could take a month or two, when including the initial work or requesting the power source and then waiting for it and a meter to be installed. It might also take several months to obtain the sign with the specific coding, programming, and display requirements requested by the Town. At a minimum, it would probably be six months from the start of the implementation to the time when the sign is installed and running.

- Recommendation 4a: GMT Bus Stop Signs on Towne Hill Road - The installation of the bus stop signs could be accomplished in a day. The time needed to work with GMT to gain their agreement to install the signs and then decide specifically where they should go could take from one to six months (or even more).

- Recommendation 4b: Crosswalk with Blinking Lights on Towne Hill Road - After the Town secures funding for the crosswalk and blinking lights for the crosswalk signs, it should work with a traffic engineer to determine the most appropriate location for the crosswalk on the east side of the intersection, as well as the crosswalk on Gallison Hill Road. The crosswalk warning signs with blinking lights on Towne Hill Road and regular crosswalk warning signs should be installed at the proper locations. The installation of the crosswalks should be able to be accomplished in a day, but might take longer if special types of paint or markings are used for the crosswalk. They should not be installed until the warning signs with blinking lights are ready to be installed as well. The blinking lights and activation buttons should also be able to be installed within two days, after power has been provided if the signs are not solar powered.

E. FUNDING

Funding for the preferred alignment might be able to be secured from a variety of sources. For most of these potential funding sources, the Town should expect to pay approximately 20 percent of the funding in matching support. Below is a list of various funding sources that might be used to help with the

implementation of the recommendations. **Table 4** provides a listing of the different funding sources that could be appropriate for each recommendation.

- 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. Each grant required a 20 percent match from the municipality.

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

- Vermont Infrastructure Bank: The State Infrastructure Bank program, operated by the Vermont Economic Development Authority in conjunction with the Vermont Agency of Transportation and the Federal Highway Administration, is available to assist in the construction or reconstruction of highways, roads and bridges, as well as certain facilities related to rail transit by providing low to no interest loans.

- Hazardous Mitigation Grants: These funds are made available by the Federal Emergency Management Agency and offered to correct identified potentially hazardous situations. They typically require a cost/benefit analysis to show that the corrective actions would actually provide a meaningful benefit to the community. These grants are typically a maximum of $150,000.

- VTrans Transportation Alternatives Program (TA Funds): The VTrans TA funds can be used to increase bicycle and pedestrian mobility. These funds will currently 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, which would require a minimum $75,000 match from the Town. VTrans is limiting these funds to stormwater-related projects for the 2017 and 2018 grant rounds.

- VTrans Class 2 Town Highways and Structures Grants: These grants are provided by VTrans through the management districts to assist with the paving of Class 2 town roads.

- Community Development Block Grants: These grants are administered by the Vermont Agency of Commerce and Community Development and are available to municipalities. The Planning Grants Range from $3,000 to $40,000. These funds have been used to conduct feasibility studies and marketing plans, and produce architectural and engineering documents.

- VTrans Better Back Roads Grants: These funds are grants to municipalities for planning road and culvert inventories and implementation projects related to water quality erosion issues ($40,000 maximum award).

- Department of Environmental Conservation Clean Water Revolving Loan Fund: This fund provides loans to municipalities for planning and project implementation for sewage treatment, drinking water, waste management, and stormwater control.

F. MAINTENANCE

Once the recommendations have been implemented, maintenance of the new features by the Town would vary. **Table 2** includes more information on the potential maintenance that would be needed for each recommendation.

TABLE 2: RECOMMENDATION DETAILS
Town of East Montpelier
Intersection Design Feasibility Study
January 31, 2018

	SIGHT DISTANCE	LOWER TRAVEL SPEEDS					RAISE AWARENESS			IMPROVE BICYCLING AND WALKING	
	1: Increased Summer & Winter Maintenance near Intersection	2a: Raised Table Intersection	2b: Neckdowns at Intersection on Towne Hill Road	2c: Reduced Speed Limit on Towne Hill Road	2d: Radar Speed Feedback Signs on Towne Hill Road	2e: Increased Police Patrols near Intersection	3a: Curbs Close to Intersection on Gallison Hill Road	3b: Flashing Warning Sign on Gallison Hill Road	3c: Review, Update, and Coordinate Existing & New Signs	4a: GMT Bus Stop Signs on Towne Hill Road	4b: Crosswalk with RRFB on Towne Hill Road at Intersection
Project Description											
Alternative Report Number	2.b	3.b	3.a	3.c	3.d	3.e	4.d	4.e	4.b	5.a	5.b
Additional ROW Needed	No	No	No	No	No	No	No	No	No	No	No
Pemanant Easements	No	No	No	No	No	No	No	No	no	No	No
Construction Easements	No	Yes	No	No	No	No	Possibly	No	no	No	No
Number of New Signs	0	4	2	4 Minimum	0	0	2	1	Variable - some signs will be removed	2	6 Minimum
Significant Physical Constraints	Side ditches, Space for snow storage	None	Turning radius of buses will need to be accommodated	None	None	Location to pull off police vehicle from road	Side ditches, Space for snow storage	None	Potential need to remove trees to create adequate sight lines to the signs.	None	Side ditches, Storm Drains
Other Constraints	None	None	Turning radius of buses will need to be accommodated	An engineering study would need to be completed first, which would include additional speed study for Towne Hill Road, to veriy that the reduction in posted speed limit would be appropriate	None	None	None	None	None	None	The VTrans guidelines on pedestrian crossings recommend warrants be met; does not recommend crosswalks without pedestrian facilities on both sides of the crosswalk: and does not encourage the installation of RRFBs at intersections
Environmental/Cultural Constraints											
Tree Disturbance	No	No	Possibly - depending on alignment	No	No	No	Possible	No	Possible	No	No
Wetland or Buffer Disturbance	No	No	No	No	No	No	No	No	No	No	No
Steep Slope Disturbance	No	No	No	No	No	No	Unlikely	No	No	No	No
Historic Resources Impacts	No	No	No	No	No	No	No	No	No	No	
Utility Disturbance	No	No	No	No	No	No	No	No	No	No	No
Storm Sewer Disturbance	No	No	No Change	No	No	No	Unlikely	No	No	No	No
Stormwater Impacts	No	No	No	No	No	No	Yes, stormwater concentrated in areas with curb, and potential loss of vegetative filtering if culvert is added under sidewalk	No	No	No	No
Residential Impacts	No	Yes - Increased noise from vehicles entering and exiting raised table	No	No	Yes - Increased light from sign when it illuminates in the dark	No	No	Possible light impacts from blinking like during hours of darkness	No	No	Yes - Possible night time light impacts if sign activated after dark
Adjacent Roadway Impacts	No	Yes -Possible increase in bypass vehicles on Schoolhouse Road continues	Yes -Possible increase in bypass vehicles on Schoolhouse Road continues	Yes -Possible increase in bypass vehicles on Schoolhouse Road continues	Yes -Possible increase in bypass vehicles on Schoolhouse Road continues	Yes -Possible increase in bypass vehicles on Schoolhouse Road continues	No	No	No	No	No
Other Impacts			Reduces turning radius for emergency vehicles								
Attributes											
Addresses Purpose and Need	Partially - Helps create better sight distances	Yes - Reduce motorists' speeds and increases motorists' awareness of activity near the intersection	Yes - increases awareness of roadway conditions and contributes to lower motor vehicle speeds at the intersection	Yes - Helps reduce motorists' speeds	Yes - Helps reduce motorists' speeds	Yes - Helps reduce motorists' speeds	Yes - Limits ability of motorists to pass turning vehicles and creates space for walkers	Partially - Helps increase motorists' awareness of intersection	Partially - Helps increase motorists' awareness of intersection	Yes - Alerts motorists to the potential for pedestrians to be on or near the edge of the road	Yes - Alerts motorists to potential issues at the intersection
Benefits Motorists	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Benefits Walkers	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Benefits Bicylists	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Reduces Crash Potential	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Possibly	Yes	Yes
Encourages Higher Speed	Yes	No	No	No	No	No	No	No	No	No	Yes
Encourages Lower Speed	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Increases Town Maintenance	Yes - Overall roadway maintenance hours would need to increase, or maintenance would need to be reduces on other Town roads.	Yes - Snow plow operators would need to watch how they plow through the intersection to protect the raised table and ramps from damage from the plows.	Yes - Snow plow operators would need to pull in plows near the intersection to protect the neckdowns from damage, if they include curbs. Summer sweeping needed to keep debris from collecting in any corners created by the neckdown and any plantings looking good.	No	Yes - Town would need to maintain two more electrical roadway signs.	No	Yes - Snow plow operators would need to modify plows to protect curbs from damage. New stormwater facilities would need to be periodically cleaned.	Yes - Town would need to maintain one more electrical roadway sign.	Possibly - Ther might be more or less signs near the intersection once the upgrades are done.	No	Yes - Town would need to maintain four more electrical roadway signs and peridocally repaint the crosswalks.
Annoys Drivers	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No	No	No
Order of Magnitude Cost	$2,000 per year/$27,200[a]	$50,000	$20,000	$10,000	$10,000	$6,600 per year/$90,000[a b]	$10,000	$20,000	$6,000	$500	$15,000

Positive Considerations
Negative Considerations
Neutral

[a] present worth cost based on 4% annual interest over a 20 year time span.
[b] based on 10 hours of additional patrol per month @ $55 per hour

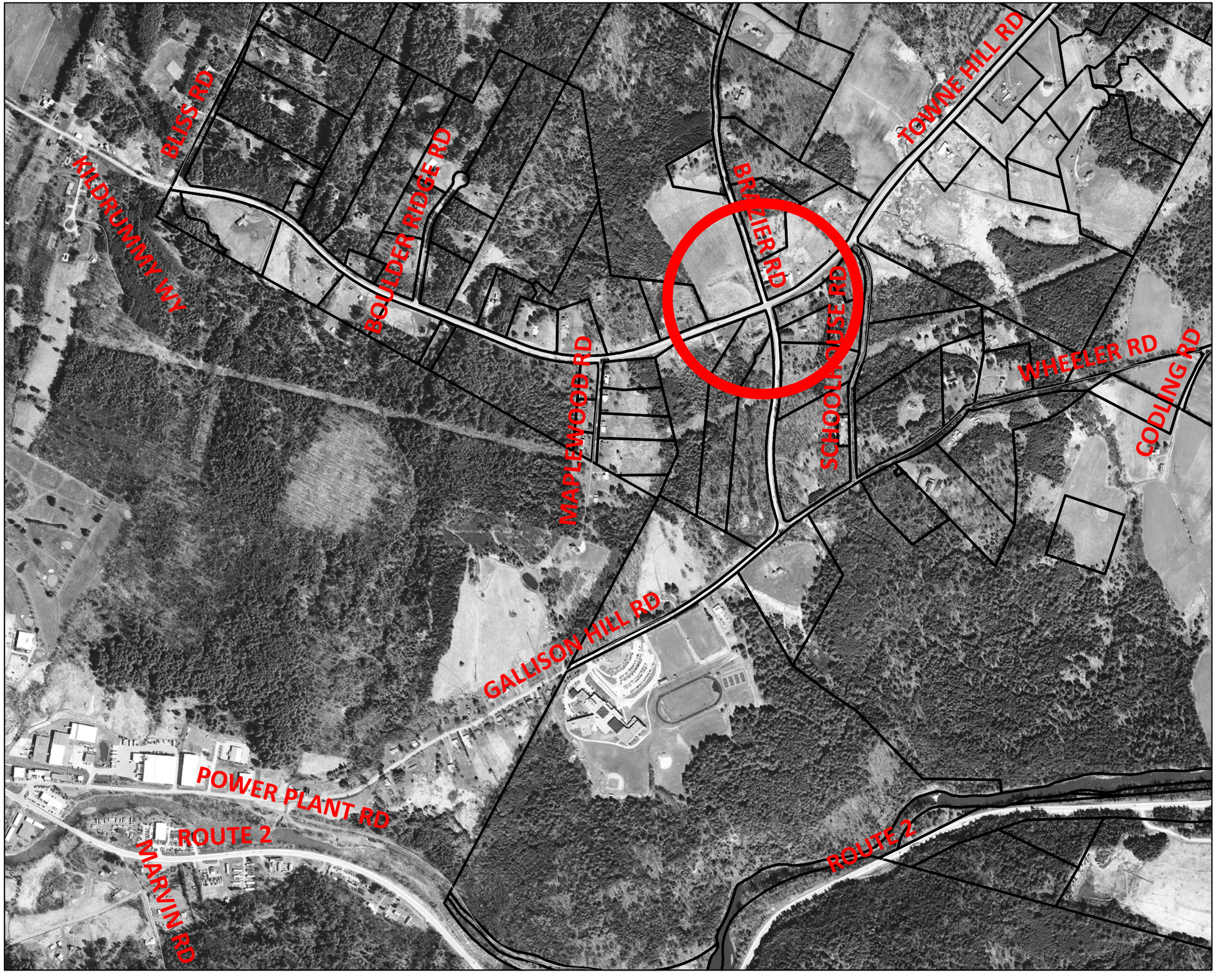
TABLE 4: Funding Sources by Recommendation
Town of East Montpelier
Intersection Design Feasibility Study
November 28, 2017

	SIGHT DISTANCE	LOWER TRAVEL SPEEDS					RAISE AWARENESS			IMPROVE BICYCLING AND WALKING	
	1: Increased Summer & Winter Maintenance near Intersection	2a: Raised Table Intersection	2b: Neckdowns at Intersection on Towne Hill Road	2c: Reduced Speed Limit on Towne Hill Road	2d: Radar Speed Feedback Signs on Towne Hill Road	2e: Increased Police Patrols near Intersection	3a: Curbs Close to Intersection on Gallison Hill Road	3b: Flashing Warning Sign on Gallison Hill Road	3c: Review, Update, and Coordinate Existing & New Signs	4a: GMT Bus Stop Signs on Towne Hill Road	4b: Crosswalk with RRFB on Towne Hill Road at Intersection
Funding Options											
Bicycle and Pedestrian Program											
Bonds											
Vermont Infrastructure Bank											
Hazardous Mitigation Grants											
Transportation Alternatives		Stormwater (2017-18)	Stormwater (2017-18)				Stormwater (2017-18)				Stormwater (2017-18)
Class 2 Town Highways Grants											
Comm. Develop. Block Grants		Design	Design				Design				Design
Better Back Roads Grants		Stormwater					Stormwater				
Clean Water Revolving Loan		Stormwater					Stormwater				
Yearly Town Budget											
Other Funds										GMT Funds	

Potentially applicable to that recommendation

Intersection Design Feasibility Study

East Montpelier, Vermont



Feet

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

BROADREACH Planning & Design

Study Area

N W E S

Heritage Landscapes Preservation Landscape Architects & Planners

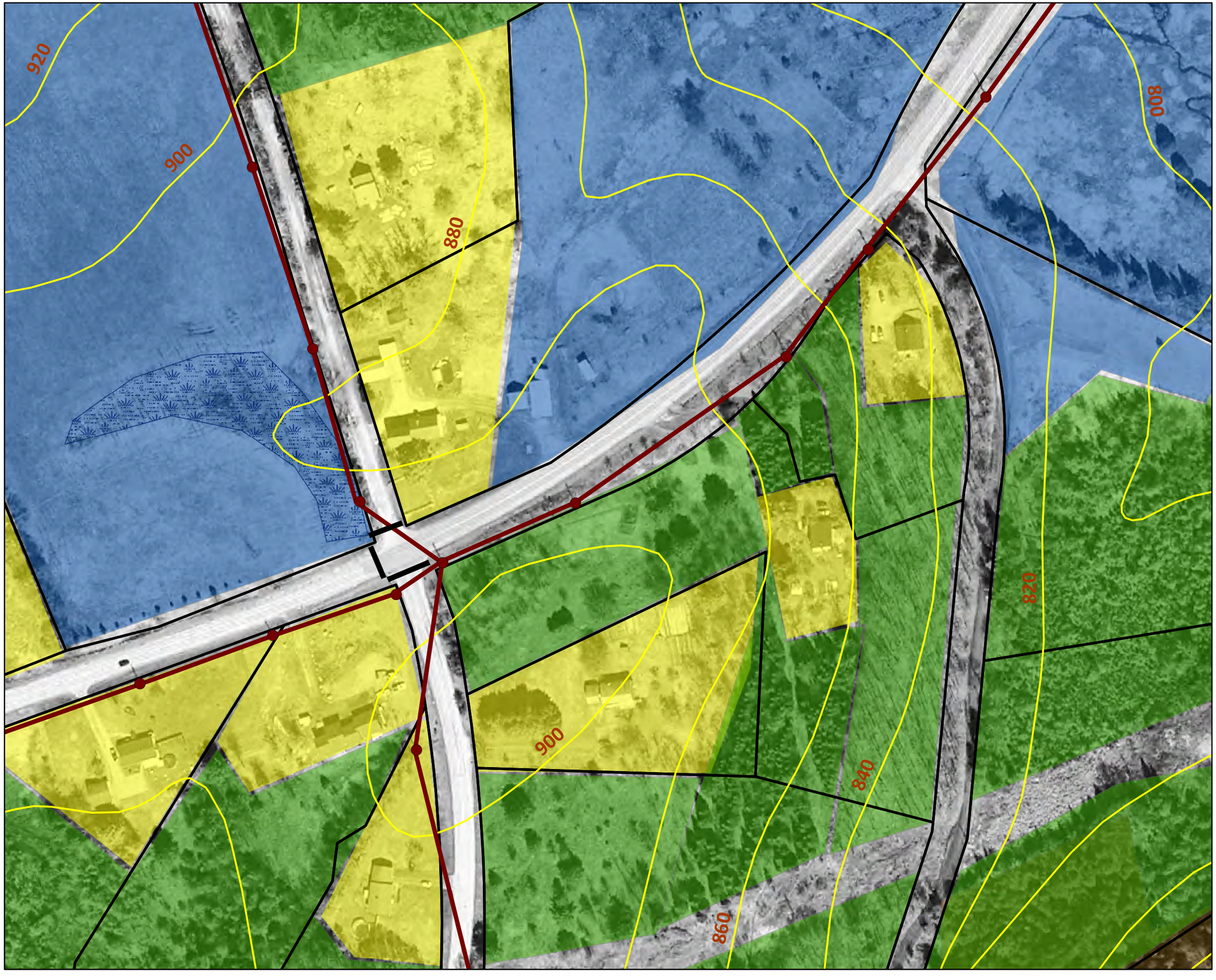
UVM CAP

October 20, 2017

Figure 1

Intersection Design Feasibility Study

East Montpelier, Vermont



Legend

- Utility Pole
- Overhead Utility Line
- Culvert
- Twenty Foot Contour
- Parcel Line
- Wetland
- Wood Lot
- Agriculture
- Residential

Feet

0 50 100 200 300 400

BROADREACH Planning & Design

LD

N W E S

Heritage Landscapes
Preservation Landscape Architects & Planners

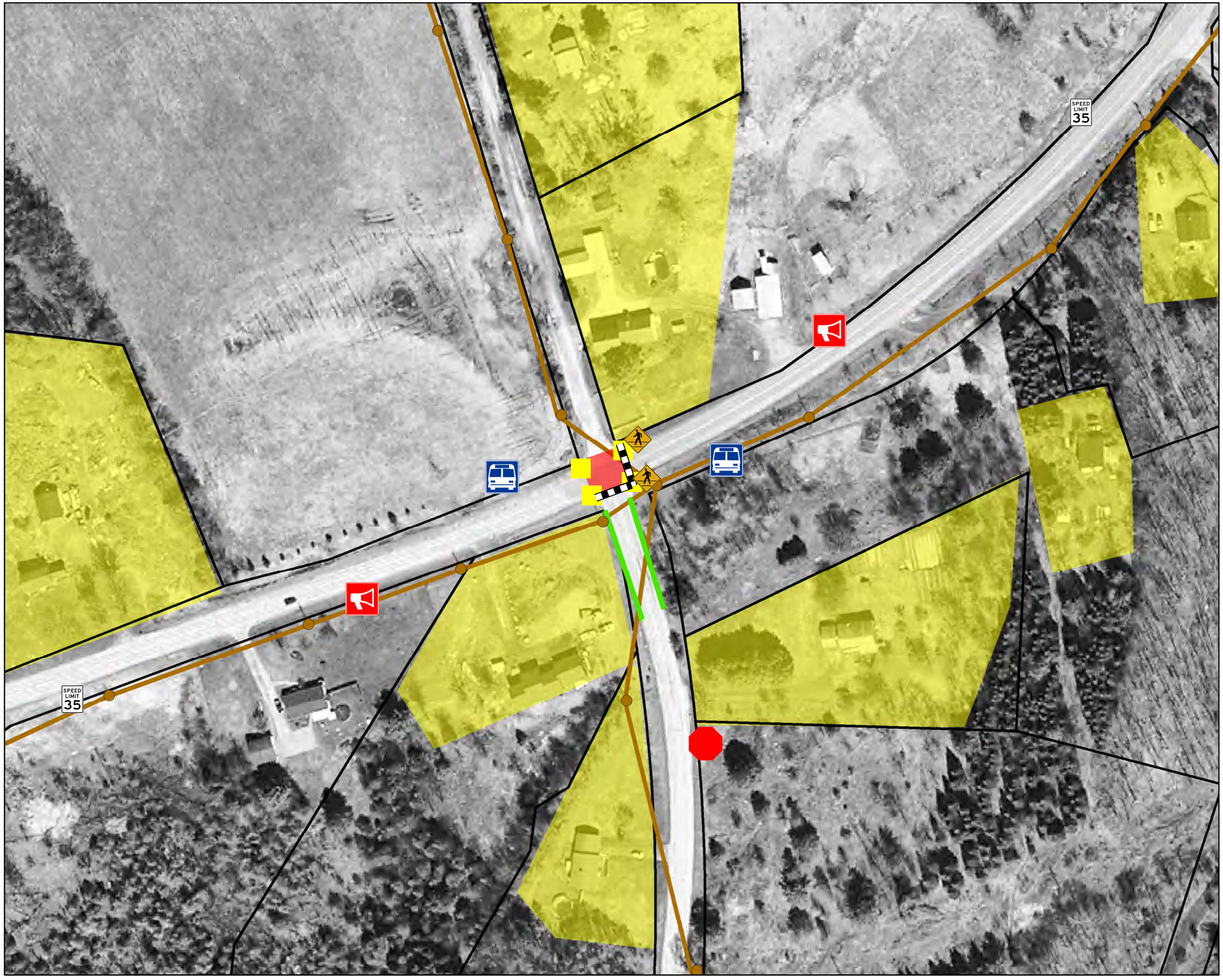
UVM CAP

Existing Conditions

October 20, 2017 **Figure 2**

Intersection Design Feasibility Study

East Montpelier, Vermont



Legend

- Recommendation 2a
- Recommendation 2b
- Recommendation 2c
- Recommendation 2d
- Recommendation 3a
- Recommendation 3b
- Recommendation 4a
- Recommendation 4b
- Recommendation 4b
- Utility Pole
- Overhead Utility Line
- Parcel Line
- Residential

Locations of symbols on the map are suggestive only.
Final locations for the recommendations should be set only after further investigations.

Feet

0 35 70 140 210 280

BROADREACH Planning & Design

LD

Heritage Landscapes
Preservation Landscape Architects & Planners

UVM CAP

N W E S

Preferred Alternatives

November 28, 2017 **Figure 3**

Appendix A
EXISTING CONDITIONS

Central Vermont Regional Planning Commission
Town of East Montpelier
Intersection Design Feasibility Study

Existing Conditions

Submitted by:

Lamoureux & Dickinson Consulting Engineers

In conjunction with

Broadreach Planning & Design

Heritage Landscapes LLC

University of Vermont Consulting Archaeology Program

Janaury 31, 2018

This report has been formatted for double-sided printing.
Blank pages are intentional, so that the beginning of the report and the appendices can start on an odd numbered, right-side page.

A. INTRODUCTION

1. OVERVIEW

This study is examining the most appropriate ways to increase safety for motorists, bicyclists, and walkers at the intersection of Gallison Hill Road and Brazier Road with Towne Hill Road in the Town of East Montpelier, Vermont. **Figure A-1**, located at the end of the text, shows the location of the Study Area. The project is being funded and supported by the Central Vermont Regional Planning Commission. This project is being done in conjunction with another intersection study in the Town of Orange, Vermont.

To begin the project, the Central Vermont Regional Planning Commission (CVRPC) and the Towns of East Montpelier and Orange jointly issued a request for proposals for a consultant to assist them with the completion of the two intersection design feasibility studies. As a result of that process, CVRPC contracted with Lamoureux & Dickinson, assisted by Broadreach Planning & Design, Heritage Landscapes, and the University of Vermont Consulting Archaeology Program (the L&D Team), to help with the project. The Town of East Montpelier (the Town) organized a Steering Committee consisting of municipal staff members, local residents, and property owners. This summary report of existing conditions in the Study Area is the first product of the Steering Committee.

2. PURPOSE AND NEED

The purpose of the intersection improvement project examined in this study is to improve conditions on the roadway that will slow motorists moving through the intersection; create longer sight lines for the north, east, and south approaches to the intersection; and provide improved facilities for walkers and bicyclists in and near the intersection.

Needs for the improvements include:

- The high volume of motor vehicles passing through the intersection in the morning peak travel hour.
- The minimal width of the shoulders on each of the approaches to the intersection.
- The presence of a regional middle and high school about 3,250 feet along Gallison Hill Road from the intersection.
- The high percentage of young and inexperienced drivers that pass through the intersection on their way to or from the high school.

- The number of crashes and near misses reported by local residents and Town staff that has occurred at the intersection.
- Pedestrians coming from the neighborhood and runners from the high school crossing Towne Hill Road at the intersection.
- The restrictions to sight lines caused by the hills on Towne Hill and Gallison Hill Roads as well as by the numerous buses that go through the intersection.

3. ORIGINS, DESTINATIONS & TRAVEL PATTERNS

Towne Hill Road carries many commuting motorists heading west to Montpelier in the morning and to the east as they travel home in the evening. The morning commuter traffic is more concentrated than the afternoon traffic. Gallison Hill Road provides a direct route to U-32, a regional middle and high school located about 3,250 feet south of the intersection. The traffic heading to the school is also more concentrated in the morning than the traffic leaving the school in the evening. School-bound traffic includes school buses, teachers and staff, and students that are able to drive to school. Some of the school traffic also crosses Towne Hill Road traveling between Brazier Road and Gallison Hill Road.

A GMT commuter bus heading into or from Montpelier also travels Towne Hill Road and makes stops at the intersection with Gallison Hill and Brazier Roads.

Pedestrians from the neighborhood and bicyclists cross Towne Hill Road at the intersection between Brazier and Gallison Hill Roads. During the half hour that the L&D Team was gathering information at the intersection after the survey work was completed, three bicyclists passed through the intersection. The high school cross country team also runs north on Gallison Hill Road, crosses Towne Hill Road, and continues north on Brazier Road. They cross Towne Hill Road again on their return run.

B. LAND USE

Figure A-2 shows the land use near the intersection, which is located in a rural portion of East Montpelier. Most of the land near the intersection is in active agricultural use, or is in a some state of returning to a forested condition (called “wood lot” on **Figure A-2**).

The northeast corner of the intersection is occupied by a residence with an associated horse farm. There is also a residence in the southwest corner of the intersection. Both houses are located far back from the roads. The northwest corner of the intersection is an open hay field, while the southeast corner is a young second-growth wood lot surrounding a private home set very far back from the road.

Further west on the south side of Towne Hill Road is another residence that also houses a day care. Further north on the east side of Brazier Road is a second residence.

C. TRANSPORTATION FACILITIES

1. TOWNE HILL ROAD

Towne Hill Road, Town Highway 2, is a local Class 2 Town Road. **Table 1** presents details about its layout, management, and use. It serves as a link between Montpelier and U.S. Route 2. The Central Vermont Regional Transportation Plan classifies Towne Hill Road as a minor arterial west of the intersection and a major collector east of the intersection.

The L&D Team conducted a speed study on September 1, 2017. **Table 2** on page A-4 presents the results of the study.

Table 1: Roadway Characteristics

	Towne Hill Rd.	Gallison Hill Rd.	Brazier Rd.	Standard/Recommended
Pavement Width & Type	22 Feet Asphalt	22 Feet Asphalt	18 Feet Gravel	
Paved Shoulder Width	2 feet	1 Foot	none	
Posted Speed Limit	40 MPH	35 MPH	35 MPH	
Stopping Sight Distance		465 Feet EB	460 Feet EB	445 Feet (40 MPH)
		1,000 Feet WB	500 Feet WB	500 Feet (45 MPH)
AADT (September 2016)	2,393 Veh / Day	1,456 Veh/Day		
AM Peak Hour Traffic	353 Veh/Hour	343 Veh/Hour		
PM Peak Hour Traffic	326 Veh/Hour	197 Veh/Hour		
Max. Hour Traffic	368 Veh/Hour	364 Veh/Hour		
State Crash History	3 reported crashes from 7/1/2010 to date at the intersection plus 1 reported crash on Towne Hill Road just west of the intersection. One crash resulted in injury.			

2. GALLISON HILL ROAD

Gallison Hill Road, Town Highway 5, is a local Class 2 Road. **Table 1** presents details on its layout, management, and use. The Central Vermont Regional Transportation Plan identifies Gallison Hill Road as a major collector. It serves as the primary route to U-32 from the north and south.

3. BRAZIER ROAD

Town Road 50, Brazier Road, is a local Class 3 Town Highway. **Table 1** presents information on its characteristics.

Table 2: Towne Hill Road Speed Study

	Westbound		Eastbound	
Vehicle	Time (sec)	Speed (mph)	Time (sec)	Speed (mph)
1	1.88	33.3	1.50	41.7
2	1.91	32.8	1.66	37.7
3	1.97	31.8	1.69	37.0
4	1.91	32.8	1.59	39.4
5	1.50	41.7	1.44	43.5
6	1.22	51.3	1.37	45.7
7	1.38	45.4	1.47	42.6
8	1.34	46.7	1.41	44.4
9	1.22	51.3	1.62	38.6
10	1.50	41.7	1.44	43.5
11	1.31	47.8	1.65	37.9
12	1.44	43.5	1.50	41.7
13	1.28	48.9	1.53	40.9
14	1.50	41.7	1.66	37.7
15	1.53	40.9	1.81	34.6
16	1.57	39.9	1.35	46.4
17	1.37	45.7	2.00	31.3
18	1.37	45.7	1.53	40.9
19	1.25	48.9	1.69	37.0
20	1.53	40.9	1.56	40.1
21	1.59	39.4		
Average Speed		42.5		40.1
Mean Speed		41.7		40.5
85th Percentile Speed		48.9		43.6
Length of Measurement Location = 92 FT				

4. INTERSECTION CHARACTERISTICS

Turning movement counts were last taken at the intersection in August of 2013. It shows that most of the turning movements are to or from Gallison Hill Road. There are very few turns to or from Brazier Road. **Attachment A-3** includes details from the traffic count.

5. BICYCLING & WALKING FACILITIES

There are no facilities dedicated to walkers or bicyclists at or near the intersection. There are only minimal shoulders along any of the roads approaching the intersection that might be used by bicyclists or walkers. There are no Town trails near the intersection, although there is planned trail that will pass near the intersection on Schoolhouse Road. That trail will cross Towne Hill Road east of the Gallison/Brazier Roads intersection close to the bottom of the hill, and will open other trails north of Towne Hill Road to a larger group of walkers.

6. TRANSIT

The GMT Montpelier Route 2 Commuter Bus uses Towne Hill Road to travel between Montpelier and neighboring towns to the east. This bus route has an on-call stop at the intersection, but there are no bus stop signs or other facilities to note that the bus stops there.

D. NATURAL RESOURCES

1. WETLANDS

There are no state-identified wetlands near the intersection of Towne Hill Road with Gallison Hill and Brazier Roads. There appears to be a grassed wetland that runs diagonally through the field in the northwest corner of the intersection. **Figure A-2** shows the location of the non-state-identified wetland area.

2. WATERBODIES

There are no waterbodies within the Study Area.

3. WATERCOURSES

There are no watercourses within the Study Area.

4. FLOODPLAINS

There are no mapped flood plains within the Study Area.

5. TOPOGRAPHY

Figure A-2 shows the topography for the Study Area. The land in the Study Area forms somewhat of a large saddle; Gallison Hill and Brazier road each descend from higher

elevations to the intersection, while Towne Hill Road ascends toward the intersection most notably from the east. Close to the intersection itself, the land on the north side of Towne Hill Road is generally level, but approximately five feet lower than the road surface. The land on the south side of Towne Hill Road gradually rises to more than ten feet higher than the road surface on the west side of Gallison Hill Road and rises a bit higher than that on the east side of Gallison Hill Road.

6. FLORA & FAUNA

The State of Vermont has not identified natural areas of special importance or rare, threatened or endangered species within the Study Area, other than the Northern Long-Eared Bat (*Myotis septentrionalis*), which is listed statewide as a federally threatened and State of Vermont endangered species.

In addition to the trees in the southeast corner of the intersection, natural vegetation within the Study Area lines the west side of Brazier Road and the crest of the cut slope north of Towne Hill Road east of Brazier Road. There is a planted row of spruce trees on the north side of Towne Hill Road west of Brazier Road starting approximately 200 feet west of the intersection. Other smaller clumps of natural or planted trees and shrubs are also located around the intersection. **Figure A-2** shows the location of most of this vegetation.

There is a state-identified deer wintering area approximately 1,000 feet to the southeast of the intersection. Local residents note that deer are more prevalent closer to the intersection now that more trees are there, and that deer tend to cross Towne Hill Road near the Schoolhouse intersection.

E. UTILITIES

Figure A-4 shows the general location of the utilities in the Study Area.

Utility poles are owned by Washington Electric Coop. They are also used by FairPoint (telephone) and Comcast (cable TV) The utility poles and their overhead wires run along the south side of Towne Hill Road, the west side of Brazier Road and switch from side to side on Gallison Hill Road in the Study Area. There are no street lights on the utility poles and no free-standing lights near the intersection.

Culverts run under Towne Hill Road just west of the intersection and under Gallison Hill Road at the intersection. A catch basin is located on the north side of Brazier Road close the intersection. It drains under Brazier Road via an 18-inch corrugated metal pipe. There are also catch basins in the northwest, southwest and southeast corners of the

intersection; all connected by 18-inch pipes that ultimately drain to the east on the south side of Towne Hill Road.

Drainage ditches line both sides of Gallison Hill Road, both sides of Towne Hill Road and the west side of Brazier Road.

F. OTHER STRUCTURES AND CONDITIONS

There are no guardrails along any portions of the roads in the Study Area. There are numerous signs, both private and public, located within the right-of-way. **Figure A-3** shows the locations of these signs.

Mailboxes are located adjacent to the driveways along the south side of Towne Hill Road.

There are no recorded hazardous waste sites within the Study Area.

G. CULTURAL RESOURCES

1. HISTORIC RESOURCES

The Historic Resources Review identified two houses and two barns/sheds in the northeast corner of the intersection as historic resources, but noted that they were not listed on any historic registers. The report also noted that each of the historic resources was located far enough from the intersection that potential improvements should not negatively impact them. **Attachment A-1** includes a full copy of the Historic Resources Review.

2. ARCHEOLOGICAL RESOURCES

The Archeological Resources Assessment found the probability of impacting archeological resources was very low and that no further reviews would be necessary. **Attachment A-2** includes a full copy of the Archeological Resources Assessment.

3. OPEN SPACE AND PUBLIC LANDS

There are no public open spaces or protected land within the Study Area.

H. PLANNING DOCUMENTS

1. MUNICIPAL PLANS

The 2013 East Montpelier Town Plan contains several facts, goals, and actions that are relevant to this study, including:

- Road paving projects undertaken within the town should provide pavement markings or bike lanes for safe sharing of roads by bicycles and automobiles.
- Towne Hill Road is a heavily used cross-over between Montpelier and U.S. Route 2 near East Montpelier Village. The intersection at Route 2 is heavily used. The road serves as a collector for the residential area and as a major access route to U-32. There has also been increasing residential development along Towne Hill Road and connecting residential roads feeding into it.
- Gallison Hill Road runs from Towne Hill Road, crosses into the City of Montpelier, and ends at U.S. Route 2. The road carries considerable traffic between Montpelier, U.S. Route 2 and the Barre-Montpelier Road but serves primarily to access U-32. The intersection with Towne Hill Road is heavily used. There are several residential properties along Gallison Hill Road
- Enhance opportunities for public transportation.
- Take advantage of a major community and regional focal point [at U-32] by planning for a potential growth area [along Gallison Hill Road] in a manner that is consistent with existing uses and compatible with surrounding residential neighborhoods.

2. REGIONAL TRANSPORTATION PLAN

The Central Vermont Regional Transportation Plan includes a goal and related policies that are relevant to this study.

Goal 6 in the plan is “To make necessary improvements to achieve a transportation system appropriately structured and designed to safely, effectively, and economically move goods and people.”

Two of the policies under this goal read:

- Encourage the appropriate scale and design of streets, highways, and other transportation infrastructure to serve local traffic, destination traffic, and promote traffic safety region-wide.
- Promote safety-targeted measures at high or potential accident locations, and promote traffic safety region-wide.

3. OTHER PLANS

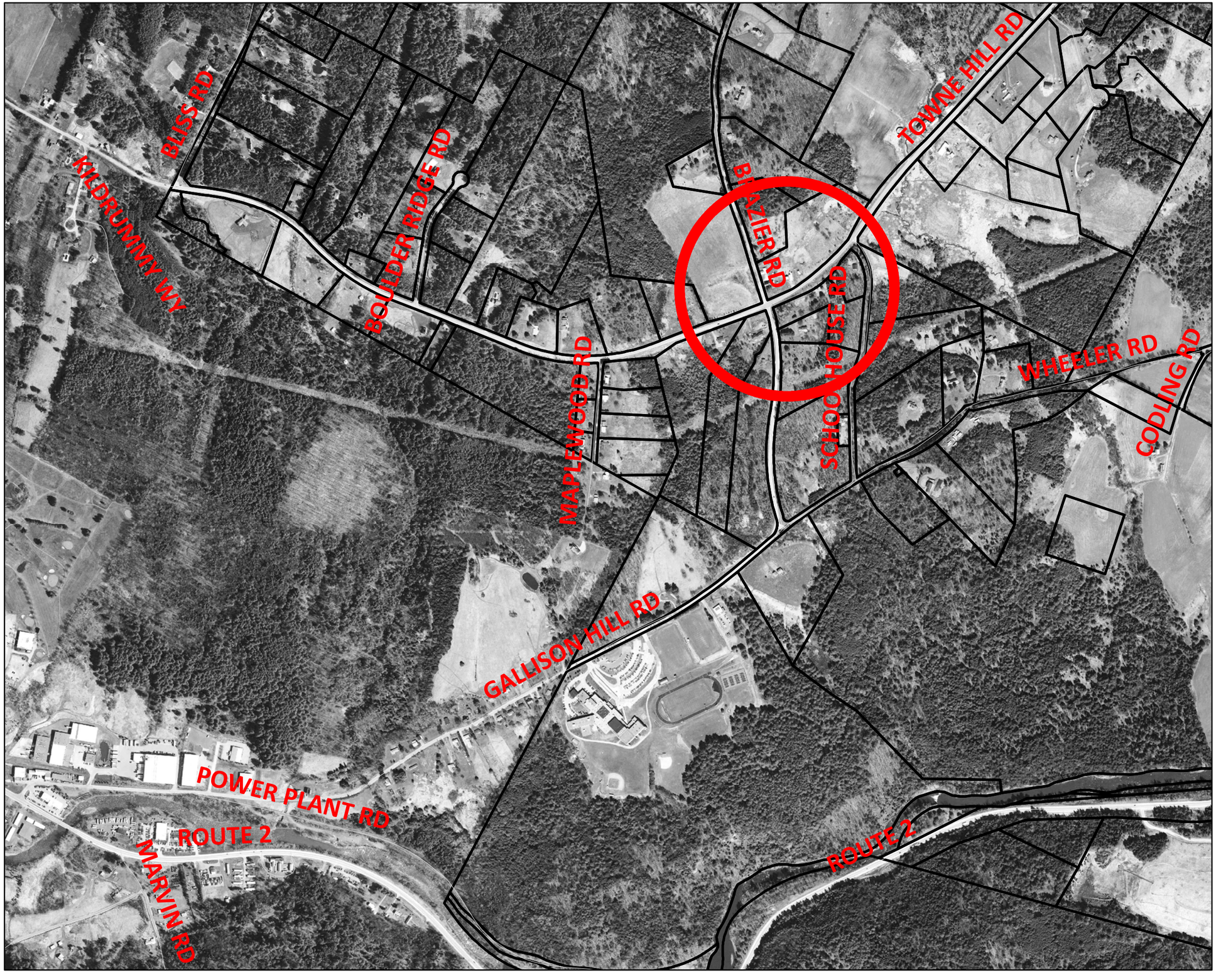
There are no other known local, regional, or state plans that would be relevant to this intersection.

I. DEVELOPMENT

There are currently no approved or proposed development plans or existing permits for development in or close to the Study Area.

Intersection Design Feasibility Study

East Montpelier, Vermont



Feet

0 300 600 1,200 1,800 2,400

BROADREACH Planning & Design

Study Area

LD

N W E S

Heritage Landscapes
Preservation Landscape Architects & Planners

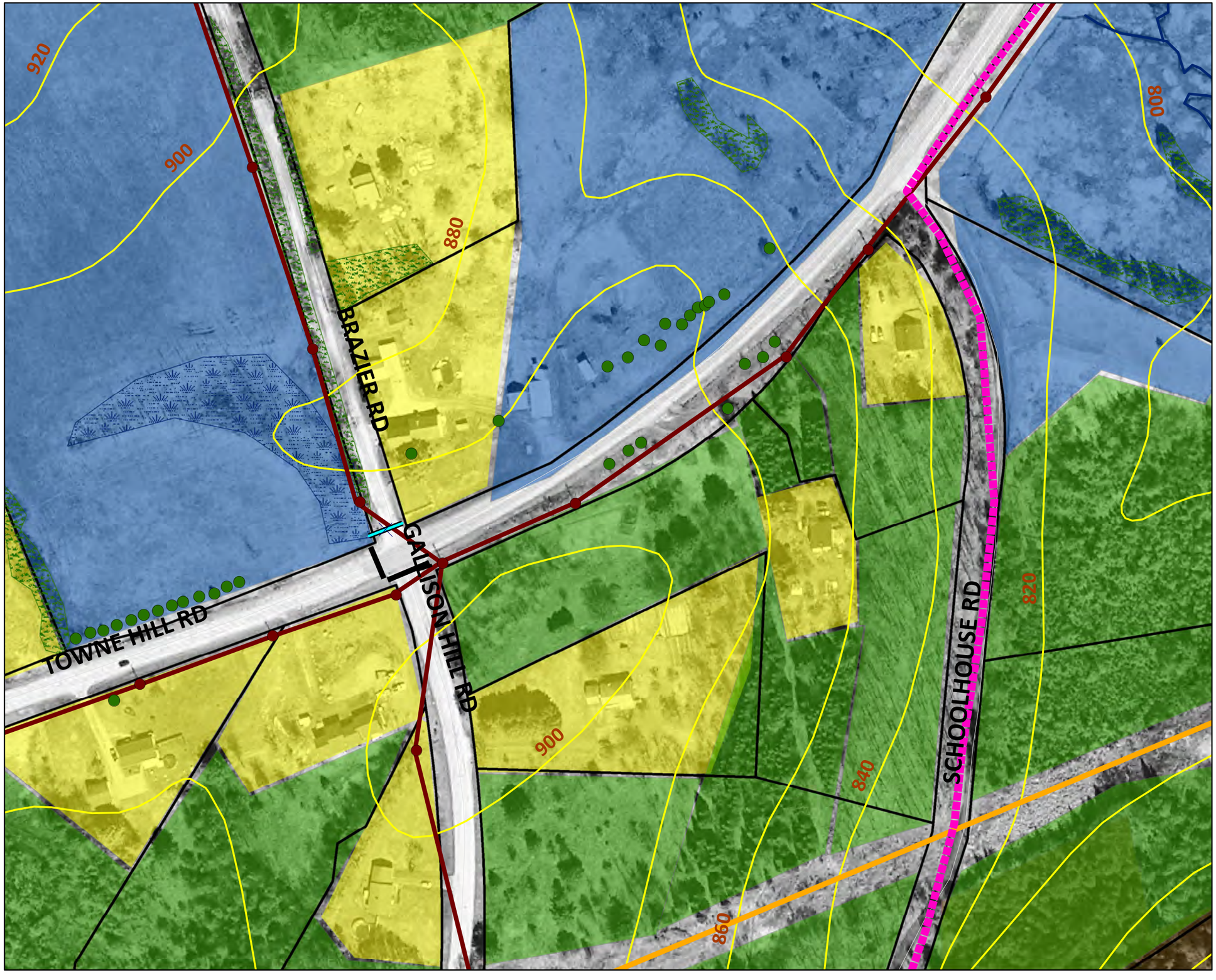
UVM CAP

August 31, 2017

Figure A1

Intersection Design Feasibility Study

East Montpelier, Vermont



Legend

- Tree
- Utility Pole
- Future Trail
- Culvert
- Overhead Utility Line
- Transmission Line
- Stream
- WATER_DLGSW_LINE
- Twenty Foot Contour
- Tree Group
- Parcel Line
- Wetland
- Wood Lot
- Agriculture
- Residential
- Property Lines

Feet

0 50 100 200 300 400

BROADREACH Planning & Design

LD

N W E S

Heritage Landscapes
Preservation Landscape Architects & Planners

UVM CAP

Existing Conditions

September 6, 2017 Figure A2

Attachment A-1

HISTORIC RESOURCES REVIEW

Heritage Landscapes LLC

Historic Aboveground Resources Assessment

East Montpelier Intersection Upgrade

East Montpelier, VT

October 19, 2017

Submitted to:

Jim Donovan, FASLA, AICP
Broadreach Planning & Design
Charlotte, VT 05445

Prepared by:
Rebecca Reese, MHP, Project Leader
Patricia M. O'Donnell, FASLA, AICP Principal
Heritage Landscapes, LLC

INTRODUCTION

The goal of this review is to identify existing historic resources in the project area that are listed on or eligible for the Nation Register of Historic Places and could potentially be affected by the upgrade and widening of the Towne Hill Road and Brazier Road/Gallison Hill Road intersection in East Montpelier and to address the potential effects from the proposed additions. 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 effort is a reconnaissance-level survey of historic aboveground resources, rather than a detailed inventory of National Register eligible properties. In order to determine National Register eligibility, further study would be required.

The work by team leader, Broadreach Planning & Design, indicates several alternatives for the intersection upgrade along Towne Hill Road, Brazier Road and Gallison Hill Road. Few potentially historic resources lie adjacent to the right-of-ways causing no impact to historic or potentially historic resources 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 through the Vermont Agency of Commerce and Community Development Online Research Center considered national, state and local documentation. The following details all documentary sources studied to gain an understanding of the area within the project boundaries:

- *F.W. Beers Atlas of Washington County, Vermont,* (1873).

SUMMARY OF FINDINGS

The Towne Hill Road and Brazier Road/Gallison Hill Road intersection upgrade proposes the widening of the intersection for safety purposes. The project, as-anticipated with various alternatives considered, will not negatively affect or impact the few potentially historic resources identified within the project study area. As noted previously, historic maps served as important research resources. State surveys were consulted but no resources were listed within the project area.

Information is organized by address, with current addresses used. No properties within the project area are known to be listed on the state survey or national register. If the listing is not indicated, the property may or may not be registered. The two properties included are potentially eligible for listing on the state or national register. The record is not exhaustive and further research would be required to ensure all resources and properties were included. All properties that are 50 years or older are eligible for NRHP listing if the resources are of historic value.

- **100 Brazier Road:** Two-story eaves-front dwelling faces west toward Brazier Road. A metal roof caps the three-bay building, with posted-hood covering the front door and stoop. The large set-back of the dwelling protects the potential resource from any adverse or negative effects from the intersection project.
- **2021 Towne Hill Road:** The two-story gable-front dwelling faces west toward Brazier Road. A shed dormer rises from the one-story ell at the rear of the house. Shown on Beer's Atlas, T. Chase once resided at this property. A one-and-a-half story barn stands to the north of the home. The set-back of the dwelling from Brazier Road and Towne Hill Road provide enough space for a redesign of the intersection have no negative effects on the potential resource. A set-back removes the barn from Braizer Road also allowing for the intersection redesign.
    - **Dunroven Stables:** The one-story gable front barn fronts Towne Hill Road. The ample set-back offers space for the intersection redesign without impacting the barn. Much of the historic character of the barn has been lost.

Figure 1.1 This contemporary aerial image shows the intersection at Towne Hill Road and Brazier Road/Gallison Hill Road. The red boxes indicate where potentially historic resources are located. Google Maps. (EastMontpelier _Google Map_HL_18Oct2017)

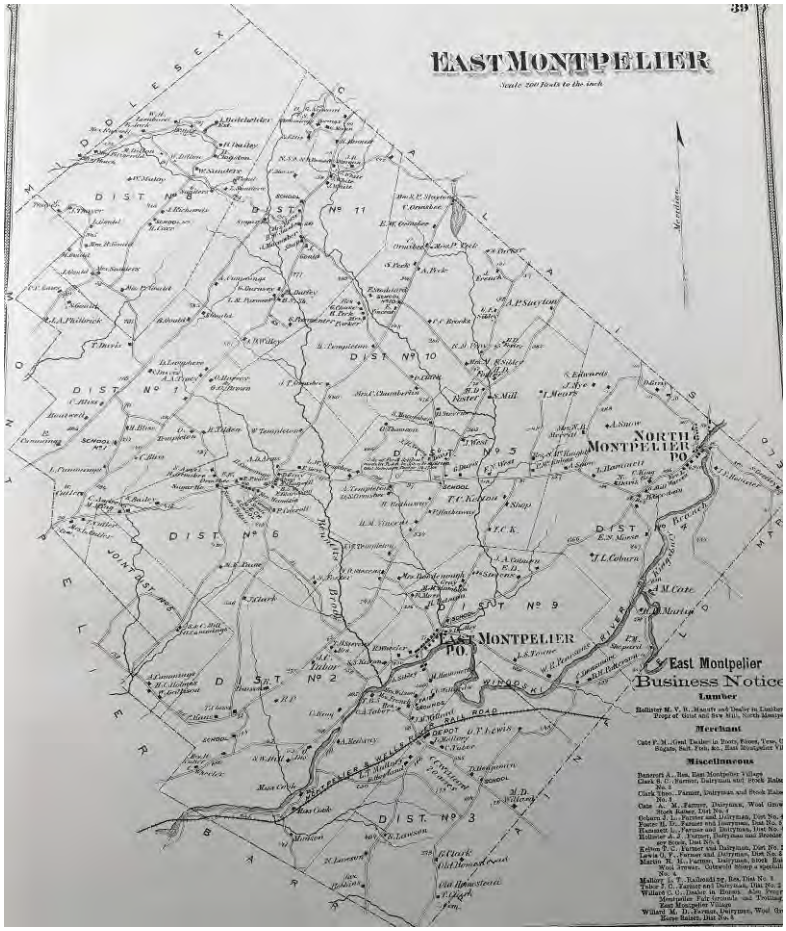


Figure 1.2 This image displays the town of East Montpelier on the 1873 Beer's Atlas. Courtesy University of Vermont Special Collections. (EastMontpelier_Beers Atlas_ HL_3Sept2017)

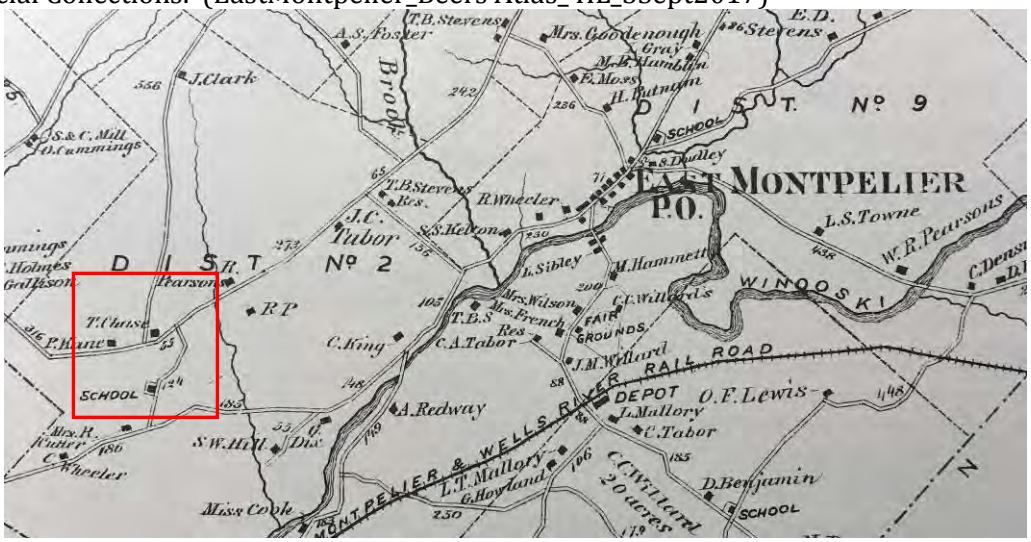


Figure 1.3 The detail of the 1873 Beer's Atlas of East Montpelier shows the intersection and the location of the T. Chase dwelling, today 2021 Towne Hill Road – boxed in red. Courtesy University of Vermont Special Collections. (EastMontpelier_Beers Atlas Detail_HL_3Sept2017)

Figure 1.4 The ample set-back of 100 Brazier Road allows intersection upgrades to occur without negatively impacting the potentially historic resource. (EastMontpelier_100BrazierRd_HL_1Sept2017)

Figure 1.5 2021 Towne Hill Road stands at the northeast corner of the project intersection. The above image illustrates the generous set-back from both Brazier Road to the west (image left) and Towne Hill Road to the south (foreground). (EastMontpelier_2021 Towne Hill_HL_1Sept2017)

Figure 1.6 The barn north of 2021 Towne Hill Road stands closer to Brazier Road, although the set-back provides space for intersection improvements. The project intersection lies in the background of the image. (EastMontpelier_Barn2021Towne Hill_HL_1Sept2017)

Figure 1.7 Dunroven Stables lies east of 2021 Towne Hill Road. Intersection improvements will not affect the structure due to the significant set-back. The structure has also lost much of the historic character. (EastMontpelier_Dunroven_HL_1Sept2017)

Attachment A-2

ARCHEOLOGICAL RESOURCES ANALYSIS

Consulting Archaeological Program
University of Vermont

Archaeological Resources Assessment for the proposed East Montpelier Intersection Upgrade, East Montpelier, Washington County, Vermont

Submitted to:

Roger Dickinson, PE, PTOE
Lamoureux & Dickinson Consulting Engineers, Inc.
14 Morse Drive
Essex, VT 05452

Submitted by:

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

Report No. 1089

September 11, 2017

Archaeological Resources Assessment for the proposed East Montpelier Intersection Upgrade, East Montpelier, Washington County, Vermont

Project Description

The Central Vermont Regional Planning Commission (CVRPC), with assistance from Lamoureux & Dickinson Consulting Engineers, Inc. proposes the East Montpelier Intersection Upgrade Project, East Montpelier, Washington County, Vermont (Figure 1). The proposed upgrade will occur at the intersection of Towne Hill Road and Gillison Hill Road in East Montpelier, Vermont. Potential upgrades to the intersection may include, but are not limited to, the addition of turn lane(s), improved signage, realignment and/or the installation of a traffic signal or roundabout.

The University of Vermont Consulting Archaeology Program conducted an Archaeological Resources Assessment (ARA) as part of the Section 106 permitting process and 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 Area of Potential Effects (APE) that have the potential for containing pre-Contact 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 pre-Contact and historic resources in the study area.

Archaeological Site Potential

No known archaeological sites exist within the limits of the proposed intersection upgrade area. The closest known site, VT-WA-125, is the historic period foundation remains of the Packard Industrial Park, located 2 km m to the southeast. Beyond this, no known sites exist within the general area. On the historic period 1858 Wallings map a structure belonging to R. Wheeler exists in the northeast corner of the intersection (Figure 3). This same structure appears on the 1878 Beers map as belonging to T. Chase (Figure 4). This structure still actively inhabited today and therefore, no buried historic period sites in this location are expected. The portion of Gallison Hill Road to the south of this intersection did not exist as recently as 1922, as indicated on the historic maps, and so no historic period sites are expected there.

Desk Review

As part of the desk review, the UVM CAP utilized the Vermont Division of Historic Preservation's (VDHP) predictive model for identifying pre-Contact Native American

archaeological sites. The East Montpelier Intersection Upgrade Project area scores 8 on the Predictive Model, due to its location within 90 m of a head-of-draw (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 East Montpelier Intersection Upgrade Project is located in an area that contains three sensitivity factors, which are: Wetland and Level Terrain (see Figure 1).

Field Inspection

A field inspection of the project area was carried out on September 7, 2017 by Charles Knight, Assistant Director of the UVM CAP. Both Towne Hill Road and Gallison Hill Road at the point if intersection are built upon significant road prisms (Figure 5). Gallison Hill Road in the south, also contains a sizeable ditch on either side, since it slopes down to the intersection (Figure 6). No portion of the intersection was archaeologically sensitive, or was immediately adjacent to any landform that was archaeologically sensitive (Figure 7). The southeast corner appears to have been cut out of a small knoll, and thus the southwest corner is on the lower reaches of that knoll, and thus built on fill. The northeast corner contains the historic period farmstead and the northwest corner is open field. No areas of archeological sensitivity were identified.

Conclusions

The Central Vermont Regional Planning Commission (CVRPC) proposes the East Montpelier Intersection Upgrade Project, East Montpelier, Washington County, Vermont. The UVM CAP conducted an Archaeological Resources Assessment of the proposed project intersection and no areas of archaeological sensitivity were identified. A historic farmhouse is inhabited in the northeast corner of the intersection, dating back to at least 1858. Beyond this the roads at the intersection are built upon large road prisms, and Gillison Hill Road slopes down into the intersection. The proposed project will not impact the historic farmstead or any sensitive landforms. As a result, no additional archaeological work is recommended for all other project elements.

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

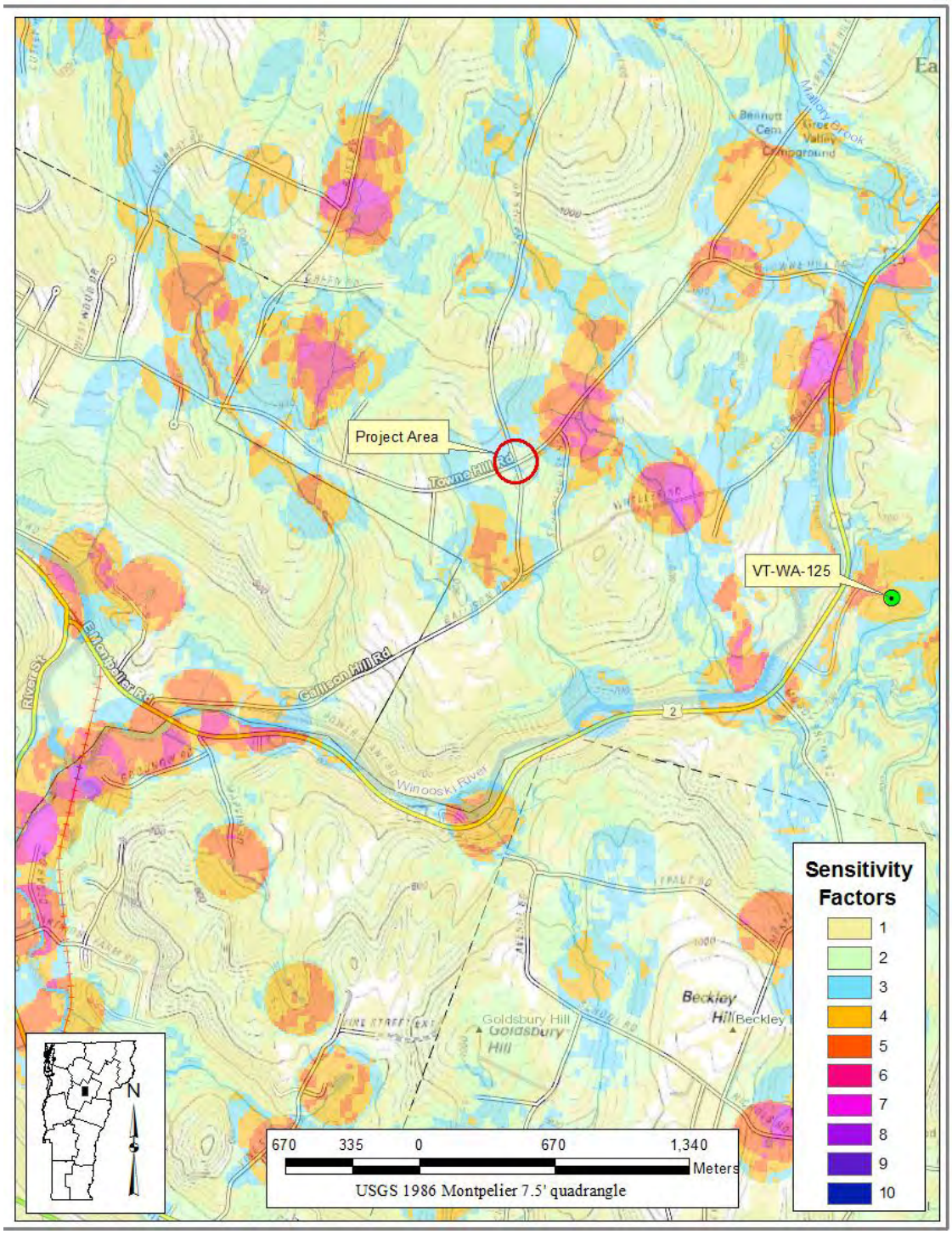


Figure 1. Project map showing the location of the proposed East Montpelier Intersection Upgrade Project, East Montpelier, Washington County, Vermont.

Figure 2. Map showing the locations of the sign pots locations for the proposed East Montpelier Intersection Upgrade Project, East Montpelier, Washington County, Vermont.

Figure 3. Historic 1858 Wallings map showing the boat access locations for the proposed East Montpelier Intersection Upgrade Project, East Montpelier, Washington County, Vermont.

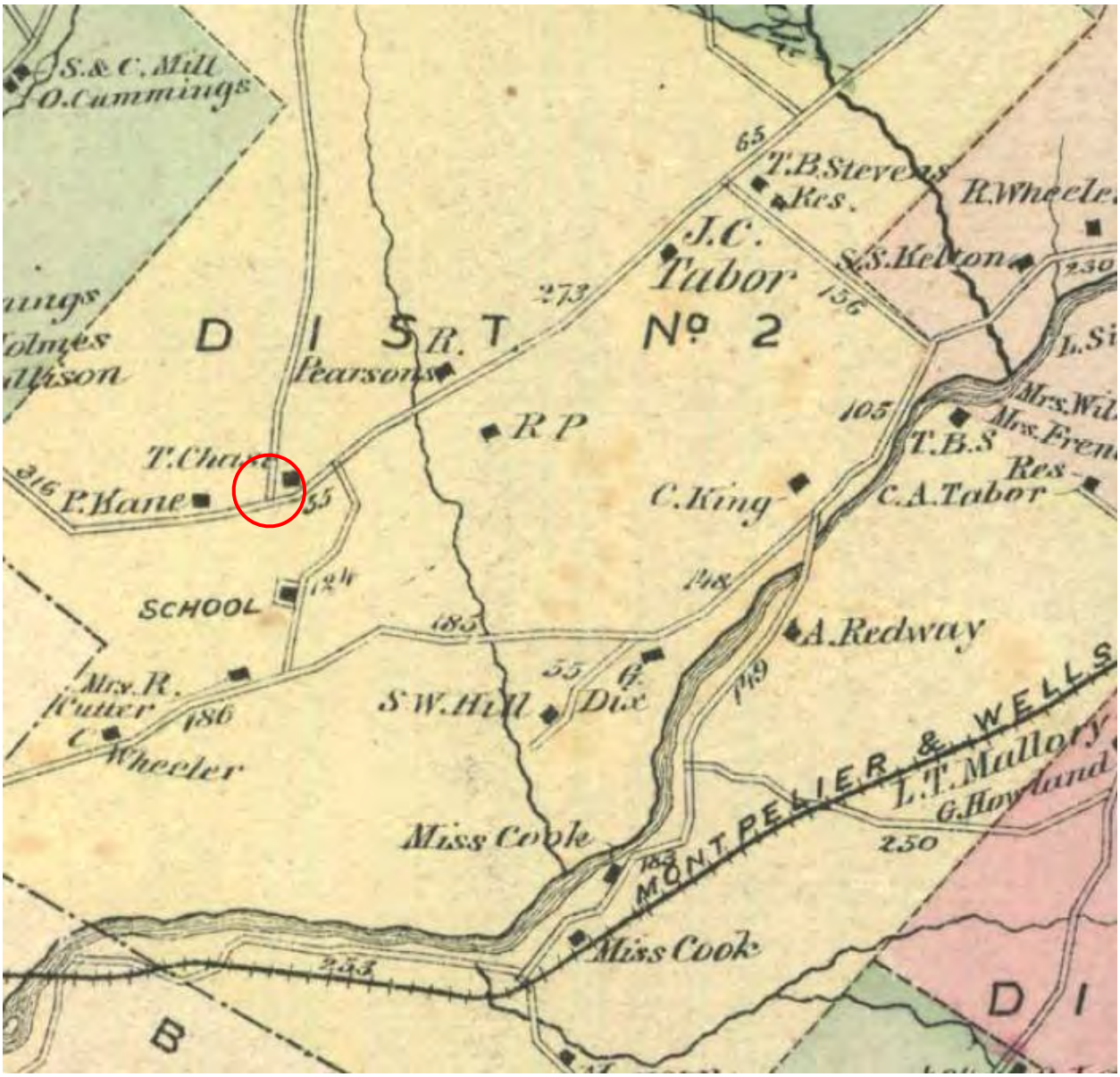


Figure 4. Historic 1873 Beer's atlas showing the boat access locations for the proposed East Montpelier Intersection Upgrade Project, East Montpelier, Washington County, Vermont.

a

b

Figure 5. Photos looking southeast (a) and northwest (b) at the northern end of the existing intersection at the location of the East Montpelier Intersection Upgrade Project, East Montpelier, Washington County, Vermont.

a

b

Figure 6. Photos looking southeast (a) and north (b) at the existing intersection of the East Montpelier Intersection Upgrade Project, East Montpelier, Washington County, Vermont.

Figure 7. Photos looking south along Brazier Road towards the existing intersection of the proposed East Montpelier Intersection Upgrade Project, East Montpelier, Washington County, Vermont.

Attachment A-3

INTERSECTION TURNING MOVEMENT COUNTS

VTrans

Peak Hour Data for Intersection

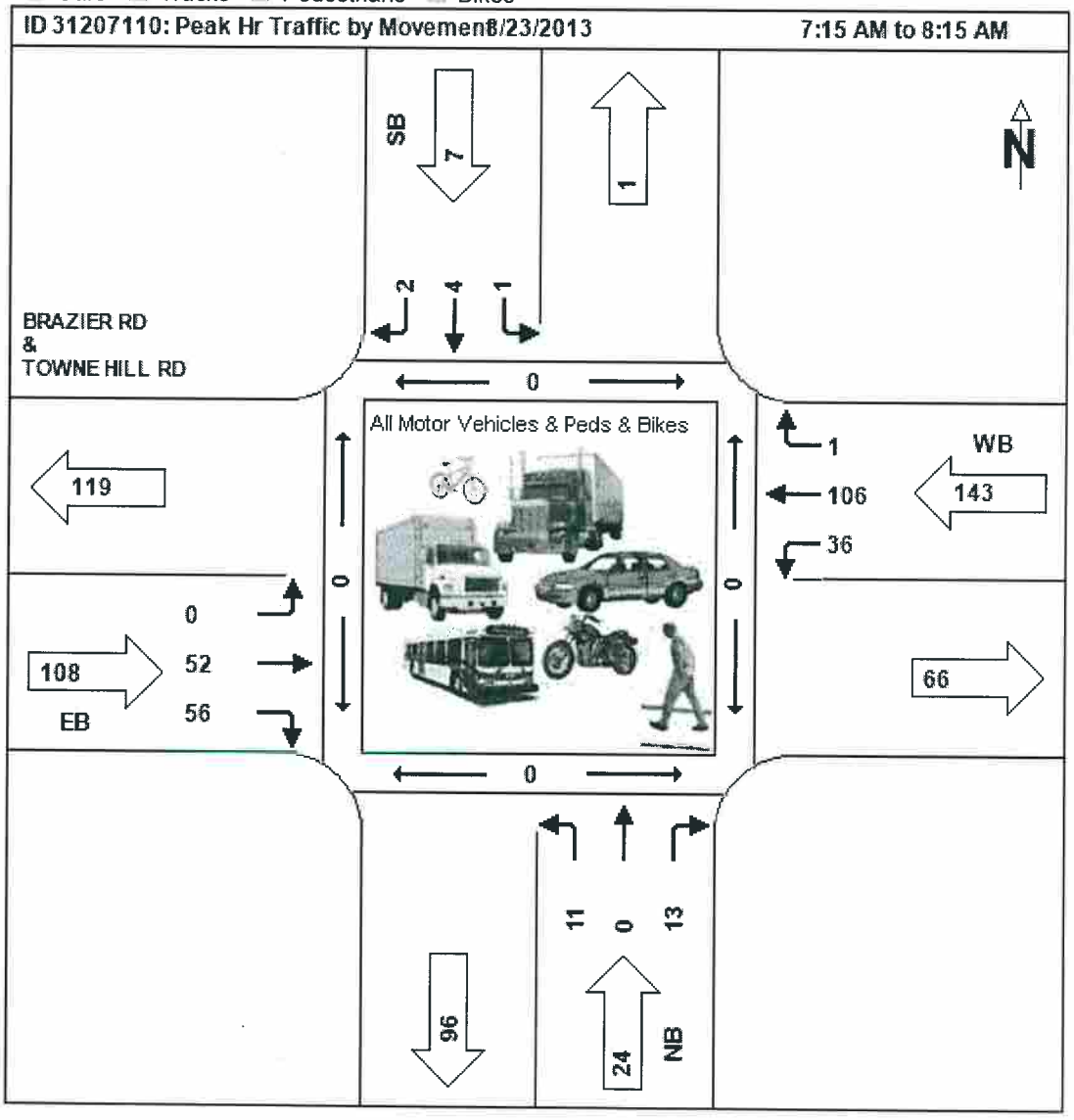
Int ID:	31207110		
Community:	EAST MONTPELIER	**Corridor:**	NA
Road 1:	BRAZIER RD	**Road 3:**	GALLISON HILL RD
Road 2:	TOWNE HILL RD	**Road 4:**	TOWNE HILL RD

|<< < > >>| 1-3 of 3

AM Peak Hour
08/23/2013

Start Time	NB Left	NB Thru	NB Right	NB Ped	NB App Total	EB Left	EB Thru	EB Right	EB Ped	EB App Total	SB Left	SB Thru	SB Right	SB Ped	SB App Total	WB Left	WB Thru	WB Right	WB Ped	WB App Total	Int Total
7:15 AM	2	0	3	0	5	0	11	16	0	27	1	1	1	0	3	6	28	0	0	34	69
7:30 AM	3	0	7	0	10	0	14	19	0	33	0	1	1	0	2	13	23	0	0	36	81
7:45 AM	3	0	0	0	3	0	14	13	0	27	0	1	0	0	1	11	31	0	0	42	73
8:00 AM	3	0	3	0	6	0	13	8	0	21	0	1	0	0	1	6	24	1	0	31	59
Total	11	0	13	0	24	0	52	56	0	108	1	4	2	0	7	36	106	1	0	143	282
PHF	0.92		0.46		0.60		0.93	0.74		0.82	0.25	1.00	0.50		0.58	0.69	0.85	0.25		0.85	
HV %	0		8				4	0			0	0	0			0	1	0			

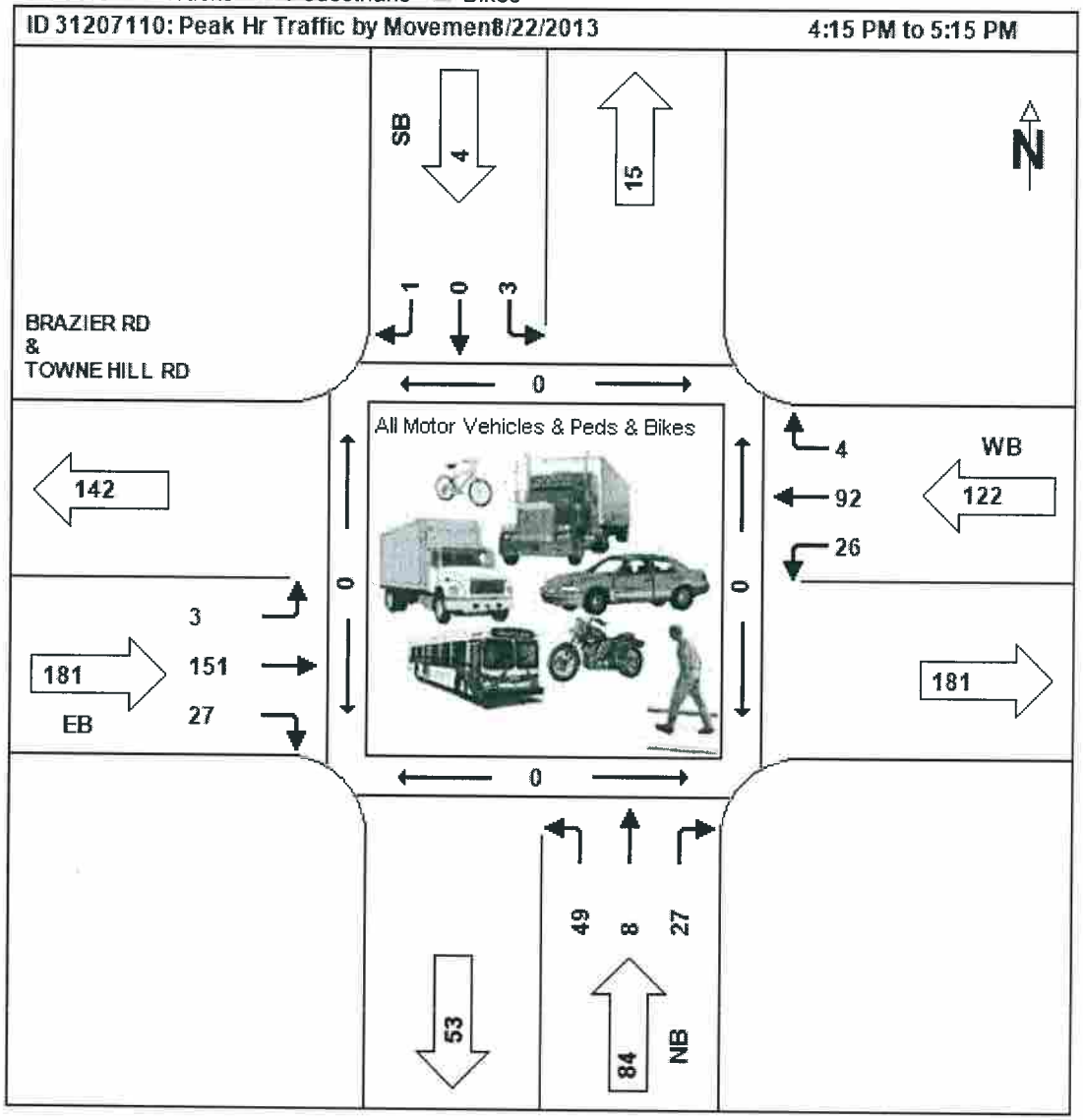
☑ Cars ☑ Trucks ☑ Pedestrians ☑ Bikes



PM Peak Hour
08/22/2013

Start Time	NB Left	NB Thru	NB Right	NB Ped	NB App Total	EB Left	EB Thru	EB Right	EB Ped	EB App Total	SB Left	SB Thru	SB Right	SB Ped	SB App Total	WB Left	WB Thru	WB Right	WB Ped	WB App Total	Int Total
4:15 PM	11	4	6	0	21	2	31	6	0	39	0	0	0	0	0	8	24	1	0	33	93
4:30 PM	8	1	2	0	11	0	39	5	0	44	2	0	0	0	2	3	22	1	0	26	83
4:45 PM	12	2	10	0	24	0	47	7	0	54	1	0	0	0	1	7	24	2	0	33	112
5:00 PM	18	1	9	0	28	1	34	9	0	44	0	0	1	0	1	8	22	0	0	30	103
Total	49	8	27	0	84	3	151	27	0	181	3	0	1	0	4	26	92	4	0	122	391
PHF	0.68	0.50	0.68		0.75	0.38	0.80	0.75		0.84	0.38		0.25		0.50	0.81	0.96	0.50		0.92	
HV %	0	0	0			0	1	4			0		0			0	1	0			

☑ Cars ☑ Trucks ☑ Pedestrians ☑ Bikes



Appendix B
ALTERNATIVES

Central Vermont Regional Planning Commission
Town of East Montpelier
Intersection Design Feasibility Study

Alternatives

Submitted by:

Lamoureux & Dickinson Consulting Engineers

In conjunction with

Broadreach Planning & Design

Heritage Landscapes LLC

University of Vermont Consulting Archaeology Program

November 28, 2017

This report has been formatted for double-sided printing.
Blank pages are intentional, so that the beginning of the report and the appendices can start on an odd numbered, right-side page.

A. INTRODUCTION

1. OVERVIEW

This study is examining the most appropriate ways to increase safety for motorists, bicyclists, and walkers at the intersection of Gallison Hill Road and Brazier Road with Towne Hill Road in the Town of East Montpelier, Vermont. The project is being funded and supported by the Central Vermont Regional Planning Commission.

To begin the project, the Town of East Montpelier, with assistance from the Central Vermont Regional Planning Commission (CVRPC) created a Steering Committee to guide the development of the project. CVRPC also contracted with the consultant team of Lamoureux & Dickinson, Broadreach Planning & Design, Heritage Landscapes, and the University of Vermont Consulting Archaeology Program (the L&D Team). Together, the Steering Committee and the L&D Team examined the existing conditions around the intersection. The *Existing Conditions* summary report was the first product of the Steering Committee.

2. PURPOSE AND NEED

The purpose of the intersection improvement project examined in this study is to improve conditions on the roadway that will slow motorists moving through the intersection; create longer sight lines for the north, east and south approaches to the intersection; and provide improved facilities for walkers and bicyclists in and near the intersection.

Needs for the improvements result from:

- High traffic volumes passing through the intersection during peak periods, particularly the morning peak hour;
- Minimal shoulder widths on each roadway approaching the intersection;
- The presence of U-32, a regional middle and high school, on Gallison Hill Rd about ½ mile south of the intersection;
- A high number of young and inexperienced drivers that pass through the intersection on their way to or from U-32;
- The number of unreported crashes and near misses reported by local residents and Town staff that have occurred at the intersection;

- Pedestrians, joggers and athletic teams on training runs coming from nearby residences and U-32 crossing Towne Hill Road at the intersection; and
- Restrictions to sight lines caused by the hills on Towne Hill and Gallison Hill Roads as well as by turning buses and trucks at the intersection.

3. ALTERNATIVE DEVELOPMENT

The L&D Team assisted the Steering Committee and the CVRPC in the development of over 30 different alternative actions that might address the purpose and need of this project. To create an organized way to consider and present and compare the alternatives, the Steering Committee initially divided them into four categories:

- Actual improvements to Towne Hill Road that would require some change to the pavement of the roadway itself;
- Enhancements to Towne Hill Road that would add features but not change the roadway itself;
- Improvements or changes to Gallison Hill Road; and
- Other types of improvements that would not create direct, permanent changes to the roads.

Together, they did an initial analysis of the different alternatives and eliminated those that did not have the potential to adequately address the purpose. The L&D Team then conducted additional analysis and refined the alternatives to only those that are included in Section B of this report. They worked with the Steering Committee to expand the analysis and prepare this report to assist the Town and local residents in reviewing the alternatives and selecting those that appear to be most appropriate.

Table B-1 presents all of the alternatives initially developed by the Steering Committee and the disposition of each. **Tables B-2** and **B-3** present the more detailed analysis of the remaining alternatives.

4. USE OF THIS REPORT & NEXT STEPS

This report is meant to serve as a guide to the alternatives under consideration for improving driving, walking, and bicycling conditions at and near the intersection of Towne Hill Road and Gallison Hill and Brazier Roads. It presents this information for public review and discussion. **Figure B-1** in this report presents most of the alternatives that are currently under consideration on one

map so that they can be examined and evaluated together. The information in this report and on **Figure B-1** does not imply that all of the alternatives are meant to be developed. None of the alternatives are recommended over any of the others at this point in the project.

The alternatives will be considered at a public work session on October 16, 2017, during which the attendees will have a chance to express their opinions on which alternative, or group of alternatives, would make the most sense for the Town to pursue. By the end of the public work session, the L&D Team and Steering Committee and the Selectboard hope that consensus on the preferred alternatives will emerge.

The Steering Committee will review the results of the public work session and will present a draft set of final recommendations at one final public work session for review before the study is finished. They will prepare a draft final report for the project, which will outline the preferred alternative(s). It will include both the *Existing Conditions* report and this *Alternatives* report as appendices.

Since the final set of preferred alternatives most likely will not include all of the options presented in this *Alternatives* report, the numbering of the preferred alternatives, or recommendations, in the draft final report might not match the numbering used in this report. The titles of the recommendations or preferred alternatives in the final report should match those in this *Alternatives* report.

B. ALTERNATIVES

1. OVERVIEW

After completing the analysis of the alternatives, the Steering Committee found that it would be better to present and compare the alternatives according to the issues they were meant to address. Thus, for this report, the Steering Committee divided the remaining alternatives into four new categories, organized around the intent of the alternative:

- Improvements meant to increase sight distances on Towne Hill Road to the east of the intersection;
- Improvements meant to lower motor vehicle speeds on Towne Hill Road;
- Improvements meant to increase driver awareness of potential challenges at the intersection; and
- Improvements meant to create better conditions for walkers and bicyclists near the intersection.

Most of the alternatives that are meant to increase driver awareness of the potential challenges at the intersection would also aid in reducing driving speeds for motorists approaching the intersection.

In addition to these potential improvements identified by the Steering Committee, taking no action also remains as one of the potential alternatives. The NO ACTION alternative is included in each of the alternative analysis tables so that it can be easily compared to the other alternatives.

2. INCREASE SIGHT DISTANCE

a. *Reduce grade on Towne Hill Road east of the intersection to create longer sight distances*. This alternative would regrade approximately 350 linear feet of Towne Hill Road to reduce the crest in the grade east of the intersection. Lowering the crest would increase sight distances to the east on Towne Hill Road from Gallison Hill Road approximately 600 feet.

b. *Increase summer and winter roadside maintenance*. Alternative 2b would include more frequent mowing of the vegetation in the right-of-way in the summer and plowing the snow further away from the edges of the pavement in the winter near the intersection.

3. LOWER TRAVEL SPEEDS

a. *Narrow the roadway width on Towne Hill Road near the intersection*. This alternative would include a "neckdown," a slight narrowing of the shoulders by the installation of curbs, the placement of removable planters along the sides of the road, or some other method acceptable to the Town. It might alternately add center medians created from a different pavement material and just slightly raised over the existing roadway elevation.

b. *Construct a raised table intersection*. Alternative 2b would modify the intersection of Towne Hill Road with Gallison Hill and Brazier Roads to raise the entire center square of the intersection by between two and three inches, with ramps on each of the approaches. This feature would heighten motorists' awareness of the intersection each time they pass through it. It would also lower motorists' speeds at the intersection.

c. *Lower the speed limit on Towne Hill Road to 35 MPH.* This alternative would reduce the posted speed limit on Towne Hill Road east and west of the Gallison Hill Road/Brazier Road intersection. It would include the installation of flashing advanced warning signs of the reduced speed limit

before the posted change on both the eastbound and westbound sides of the intersection.

d. *Install Radar Speed Feedback Signs on Towne Hill Road*. This alternative would add speed feedback signs for both directions of travel on Towne Hill Road east and west of the intersection. The signs would flash either the speed or a slow-down warning when a vehicle's speed exceeds the posted speed limit, and would flash a "Thank You" when a vehicle's speed is at or below the posted speed limit.

e. *Increase police patrols along Towne Hill Road near the intersection*. This alternative would have the Town of East Montpelier contract for more than 40 hours of monthly patrols by the State Police in East Montpelier with a focus of the extra hours on Towne Hill Road near the intersection.

4. HEIGHTEN DRIVER AWARENESS

a. *Install rumble strips on Towne Hill Road*. The focus of this alternative would be the addition of transverse rumble strips across Towne Hill Road in the westbound lane and possibly the eastbound lane on either side of the Gallison Hill Road intersection. The rumble strips would alert motorists to the approaching intersection and would also encourage compliance with the posted speed limit.

b. *Update existing and/or add additional signage*. This alternative would update the regulatory and warning signs along Towne Hill Road, Gallison Hill Road, and Brazier Road to minimize the number of signs and make the remaining signs more effective and code compliant.

c. *Install new "Be Prepared to Stop" blinker warning signs on Towne Hill Road*. This alternative would replace the existing intersection warning signs on both approaches to the Gallison Hill Road intersection with a "Be Prepared Stop" warning sign and a "When Flashing" plaque, along with vehicle detection on Gallison Hill and Towne Hill Roads. The blinker signs would be activated when traffic is stopped on Towne Hill Road waiting to turn and/or when there is a queue that exceeds two or three vehicles on Gallison Hill Road waiting to turn left or right onto Towne Hill Road.

d. *Add curbs on Gallison Hill Road with a sidewalk*. Alternative 4d would create the feeling of a narrower road with minimal shoulders on Gallison Hill Road by the addition of curbs close to the intersection. The curbs would keep motorists from unsafely passing vehicles waiting to turn left

or right onto Towne Hill Road. A sidewalk would be added on the east side of Gallison Hill Road behind the curb, either directly adjacent to the curb or separated by a green strip.

e. *Add a blinking "Be Prepared to Stop" warning sign on Gallison Hill Road*. This alternative would add a warning sign on Gallison Hill Road south of the intersection that would include a flashing blinker that would be activated during the morning and afternoon peak hours and potentially activated at other times by motorists on the road approaching the intersection.

5. IMPROVE BICYCLING AND WALKING CONDITIONS

a. *Add properly signed GMT bus stop*. Alternative 5a would add a bus stop sign at a minimum on both the eastbound and westbound departures from the intersection on Towne Hill Road.

b. *Add a painted crosswalk with RRFB on Towne Hill Road*. This alternative would add a crosswalk on Towne Hill Road. Crosswalks would also be added on Gallison Hill and Brazier Roads to allow pedestrians to easily access the single crosswalk over Towne Hill Road. Additional protection for pedestrians crossing Towne Hill Road could be provided by installing rectangular rapid flashing beacons (RRFB) to accompany one of the crosswalks. The RRFB would provide unique pedestrian-activated flashing warning beacons on both sides of the crosswalk. They would heighten motorist awareness that a pedestrian is present and improve compliance with the required yield to a pedestrian in a designated crosswalk. The beacons would flash for just the amount of time that it would take a typical pedestrian to cross the road and then go dark until they were activated again.

c. *Increase shoulder widths on Towne Hill Road*. Alternative 5c would add three-foot-wide shoulders on both sides of Towne Hill Road to create a better place for bicyclists and pedestrians using the road.

C. ALTERNATIVE ANALYSIS

1. OVERVIEW

Tables B-2 and **B-3** provide a concise analysis of the alternatives based on the criteria listed in the following sections. Not all of the criteria are listed in each of

the tables. Those that showed the same impacts for each of the alternatives were sometimes eliminated to make the **Tables** easier to understand. For instance, if each of the alternatives for enhancements to Towne Hill Road showed that there would be no impacts to adjacent trees, then the line discussing this impact was removed. Similarly, descriptive elements, listed in Section 2 below, were also removed if that particular element was not relevant to all of the alternatives being compared in the table.

2. PROJECT DESCRIPTION

- Additional Right-of-Way Needed
- Amount of New Paving Installed
- Number of New Signs Installed
- Number of Permanent Easements Needed
- Number of Construction Easements Needed
- Significant Physical Constraints

3. ATTRIBUTES

- Addresses Purpose and Need
- Creates Longer Sight Distances
- Benefits Motorists, Bicyclists, and Pedestrians
- Reduces Crash Potential
- Induces Higher Travel Speeds
- Encourages Slower Travel Speeds
- Requires Additional Town Maintenance Efforts and/or Costs
- Requires Power
- Creates Angry Drivers
- Is Conducive to Future Growth
- Order of Magnitude Cost (For Comparison Purposes Only)

4. ENVIRONMENTAL AND CULTURAL IMPACTS

- Wetland Impacts
- Wetland Buffer Impacts
- Tree Removal
- Steep Slope Disturbance
- Adverse Historic Resource Impacts
- Utility Pole Disturbance
- Stormwater System Disturbance
- Stormwater Quantity or Quality Impacts
- Residential Impacts

- Traffic Increases on Nearby Roads
- Potential for Future Walking & Bicycling Improvements
- Other Potential Impacts

TABLE B-1 Initial Alternatives Analysis

ALTERNATIVE	DESCRIPTION	DISPOSITION	FINAL DESIGNATION
No Action	Continuation of the current arrangement	Kept	
TOWNE HILL ROAD IMPROVEMENTS			
A1: Reduce grade on Towne Hill Road east of the intersection	Regrade the road to reduce the crown in the road and create longer sight distances	Kept	**Alt 2a**
A2: Add westbound left-turn lane on Towne Hill Road	Create a new lane to allow left-turning vehicles to queue outside of the main travel lane	**Deleted** - Not enough turning movement and it increases chances of crashes as stopped turning vehicles block views of motorists on Gallison Hill Road	
A3: Add eastbound right-turn lane on Towne Hill Road	Create a new lane to allow left-turning vehicles to queue outside of the main travel lane	**Deleted** - Not enough turning movement	
A4: Convert the intersection to a roundabout	Create a regular size roundabout	**Deleted** - Requires much more ROW and is not warranted for the amount of traffic at the intersection	
A5: Increase shoulder widths on Towne Hill Road	Add at least two feet of additional paved shoulders on each side of the road close to the intersection	Kept	**Alt 5c**
A6: Install rumble strips or speed humps on Towne Hill Road	Add rumble strips across the road that would create noise as motorists approach the intersection from the east	Kept	**Alt 4a**
A7: Narrow the roadway width on Towne Hill Road near the intersection via center medians and Curb Extensions	Create narrower travel lanes close the intersection to slow traffic	Kept	**Alt 3a**
A8: Construct a raised table intersection	Raise the surface of the entire center area of the intersection by at least three inches	Kept	**Alt 3b**
A9: Add GMT bus pull off	Create a paved pull off that would allow the GMT bus to pull out of the travel lane	**Deleted** - insufficient users or road traffic to warrant pull off	
A10: Install raised crosswalks on Towne Hill Road at the intersection	Add a crosswalk on Towne Hill Road that is at least three inches higher than the rest of the pavement	**Deleted** - insufficient users and it would act as a speed hump slowing and potentially damaging emergency vehicles.	
TOWNE HILL ROAD ENHANCEMENTS			
B1:Install a traffic signal	Add a full traffic signal at the intersection, with the time of operation to be determined.	**Deleted** - Does not meet warrant for traffic signal	
B2: Update existing and/or add additional signage	Consolidate and update signs near the intersection to reduce the overall number of signs.	Kept	**Alt 4b**
B3: Add a painted crosswalk on Towne Hill Road	Add at least one and preferably two crosswalks on Towne Hill Road	**Deleted** - Combined with Alternative B4	
B4: Add a crosswalk and Rectangular Rapid Flashing Beacon sign to the intersection	Add a sign that includes flashing lights that are activiated by pedestrians when crossing the road	Kept	**Alt 5b**
B5: Reduce the speed limit on Towne Hill Road	Lower the speed limit to 30 or 35 mph	Kept	**Alt 3c**
B6: Install vehicle-activated blinker signs	Add signs that would blink when motorists approached	**Deleted** - considered to be not effective	
B7: Install speed feedback signs on Town Hill Road	Add signs that would flash when motorists exceeded the posted speed limit	Kept	**Alt 3d**
B8: Install flashing warning beacons	Add flashing beacons to existing signs	**Deleted** - considered to be not effective	
B9: Install "Be Prepared To Stop When Flashing" warning signs on Towne Hill Road	Add vehicle detection loops on Gallison Hill Road and Towne Hill Road that would activate the sign blinkers when more than a determined number of vehicles stack on Gallison Hill Road or Towne Hill Road at the intersection	Kept	**Alt 4c**
B10: Install multi-way stop signs	Create a four way stop at the intersection	**Deleted** - Warrants for stop signs not met	
B11: Add properly signed GMT bus stop	Add signs noting the presence of a GMT bus stop at or near the intersection	Kept	**Alt 5a**
B12: Narrow lane widths on Towne Hill Road to nine feet wide	Reduce the overall width of the travel lanes	**Deleted** - Travel lanes are at the minimum (10 ft) recommended by State Standards	
B13: Install intersection street lights	Add street lights to existing utility poles	**Deleted** - Determined not to readily address the purpose or need of the project	
GALLISON HILL ROAD IMPROVEMENTS & ENHANCEMENTS			
C1: Install exclusive right-turn lane on Gallison Hill Road	Add a separate lane that would allow motorists turning right to queue in their own lane	**Deleted** - Increases the chances of crashes as turning vehicles block views to the east for vehicles traveling straight or turning left at the intersection	
C2: Increase shoulder width on Gallison Hill Road	Add at least two feet of additional paved shoulders on each side of the road close to the intersection to provide room for pedestrians	**Deleted** - Benefits walkers and bicyclists but increases risks of illegal passing of turning vehicles at the intersection	
C3: Add curbs and sidewalk on Gallison Hill Road near the intersection	Reduce the travel lane width or total pavement width close to the intersection to eliminate the potential to pass turning vehicles and add a sidewalk on the east side	Kept	**Alt 4d**
C4: Install an "Intersection Ahead" sign with flashing beacon on Gallison Hill Road	Add a warning sign on Gallison Hill Road south of the intersection that would flash continually during morning and peak traffic hours.	Kept	**Alt 4e**
OTHER IMPROVEMENT OR ENHANCEMENT ALTERNATIVES			
D1: Create a paired one-way road system between Gallison Hill Road and Schoolhouse Road	Create a one-way loop between the two roads	**Deleted** - does not readily address purpose and need of project	
D2: Make Schoolhouse Road one way north	Make School House Road one way north	**Deleted** - does not readily address purpose and need of project	
D3: Work with U-32 to get more students to car pool	Create more car pools to reduce the number of vehicles going through the intersection	**Deleted** - Requires the cooperation of U32 but with no guarantee of long term continuation of the initiative	
D4: Increase summer and winter roadside maintenance	Cut vegetation along the side of the road more often and push the snow further away from the edge of the pavement	Kept	**Alt 2b**
D5: Work with U-32 to get more students to use the bus to reduce the number of students driving through the intersection	Increase bus usage to reduce the number of vehicles moving through the intersection	**Deleted** - Requires the cooperation of U32 but with no guarnatee of long term continuation of the initiative	
D6: Increase police patrols along Towne Hill Road near the intersection	Increase the number of contracted hours of State Police time per month and devote more time to patrols on Towne Hill Road	Kept	**Alt 3e**
D7: Add sidewalks near the intersection	Add sidewalks for pedestrians near the intersection	**Deleted** - Does not directly address purpose and need of project on its own. Incorporated into Alternative 4b.	
D8: Work with U-32 to let the buses leave five minutes earlier than student-driven cars	Separate the peak time for buses and student-driven vehicles at the intersection	**Deleted** - Requires the cooperation of U32 but with no guarantee of long term continuation of the initiative	

TABLE B-2 Sight Distance / Bicycling & Walking Improvements
Town of East Montpelier
Intersection Design Feasibility Study
January 31, 2018

	NO ACTION	INCREASE SIGHT DISTANCE		NO ACTION	IMPROVE BICYCLING AND WALKING CONDITIONS		
	No Action	2a: Reduced High Point on Towne Hill Road	2b: Increased Summer & Winter Maintenance near Intersection	No Action	5a: GMT Bus Stop Signs on Towne Hill Road	5b: Crosswalk with RRFB on Towne Hill Road at Intersecction	5c: Wider Shoulders on Towne Hill Road
Project Description							
Amount of New or Replacement Paving	0	12,000 SF		0	0	0	7,500 SF
Additional ROW Needed	No	No		No			No
Pemanent Easements	No	No		No			No
Construction Easements	No	No		No			No
Number of New Signs	0	0		0	2	6 Minimum	0
Significant Physical Constraints	None		Side ditches, Space for snow storage	None	None	None	
Other Constraints	None	None	None	None	None	The VTrans guidelines on pedestrian crossings recommend warrants be met and does not recommend the installation of RRFBs at intersections	None
Environmental/Cultural Constraints							
Tree Disturbance	No	Unknown	Possible	No	No	No	Yes
Wetland or Buffer Disturbance	No	No	No	No	No	No	No
Steep Slope Disturbance	No	Yes - Steep side slope would need to be cut	No	No	No	No	Yes - Steep side slope would need to be cut
Historic Resources Impacts	No	No	No	No	No		No
Utility Disturbance	No	No	No	No	No	No	Possible relocation of one utility pole
Storm Sewer Disturbance	No	Modification to drainage ditches	No	No	No	No	Modification to drainage ditches
Stormwater Impacts	No	No	No	No	No	No	Increased impervious surface - treatment probably needed
Residential Impacts	Yes - Continued problems	No	No	Yes - Continued problems	No	Yes - Possible night time light impacts if sign activated after dark	Yes - Reduced area to orient vehicle perpendicular to road for driveway east on south side
Adjacent Roadway Impacts	Yes - Continued bypass vehicles on Schoolhouse Road	No	No	Yes - Continued bypass vehicles on Schoolhouse Road	No	No	No
Other Impacts	No			No			
Attributes							
Addresses Purpose and Need	No	Yes - Increase sight distance to the east on Towne Hill Road	Partially - Helps create better sight distances	No	Yes - Alerts motorists to the potential for pedestrians to be on or near the edge of the road	Yes - Alerts motorists to potential issues at the intersection	Yes - Provides more opportunities for bicyclists and walkers
Creates Longer Sight Distances	No	Yes	Yes	No	No	No	No
Benefits All Users	No	Yes	Yes	No	Yes	Yes	Yes
Reduces Crash Potential	No	Yes	Yes	No	No	Yes	Yes
Encourages Higher Speed	No	Yes	Yes	No	No	No	Yes
Encourages Lower Speed	No	No	No	No	No	Yes	No
Increases Town Maintenance	No	No	Yes	No	No	Yes	Yes
Annoys Drivers	No	No	No	No	No	No	No
Order of Magnitude Cost	$0			$0			

Positive Considerations
Negative Considerations
Neutral

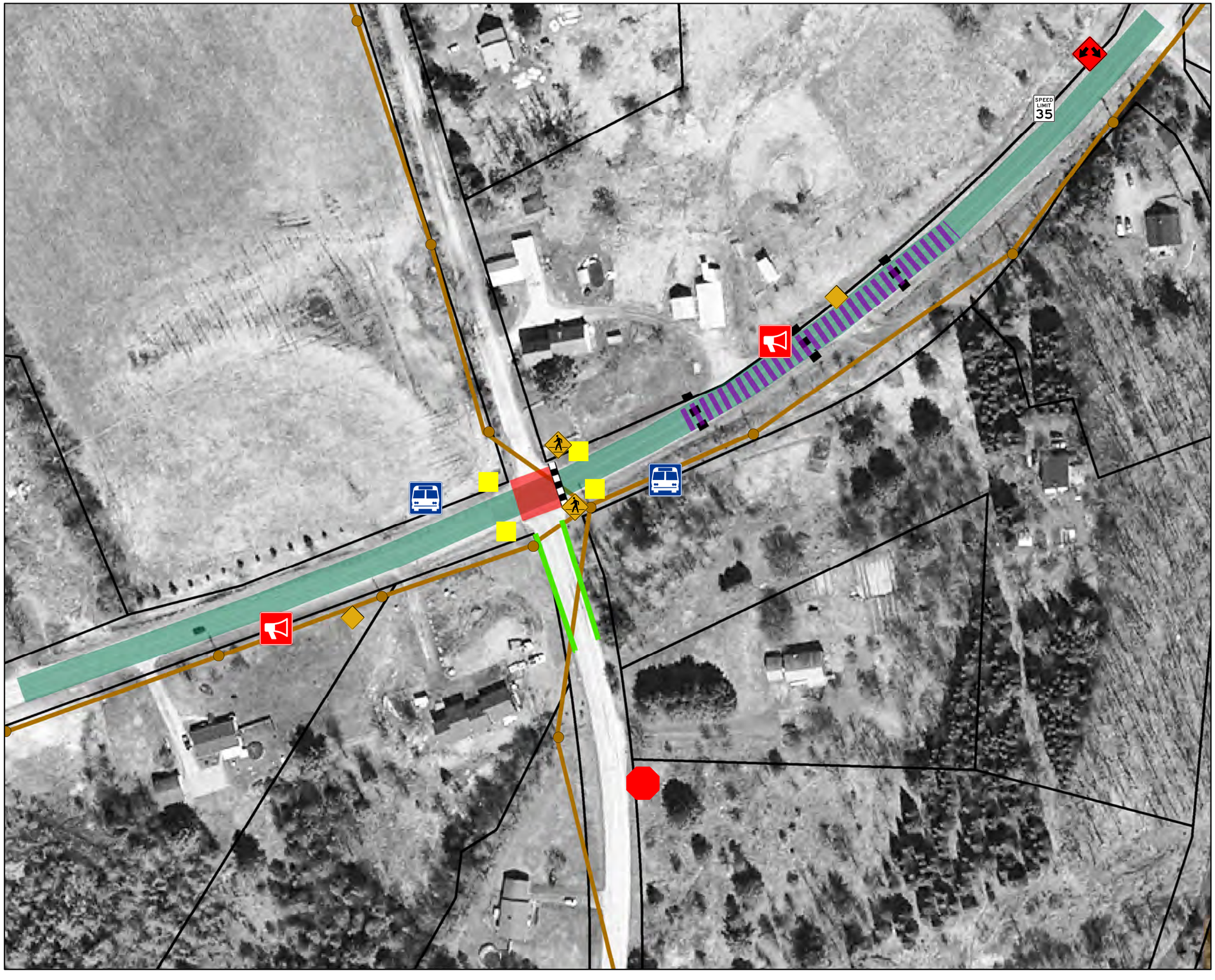
TABLE B-3 Speed Reduction / Heightened Awareness Alternatives
Town of East Montpelier
Intersection Design Feasibility Study
January 31, 2018

	NO ACTION	LOWER TRAVEL SPEEDS					HEIGHTEN DRIVERS AWARENESS				
	No Action	3a: Neckdowns at Intersection on Towne Hill Road	3b: Raised Table Intersection	3c: Reduced Speed Limit on Towne Hill Road	3d: Radar Speed Feedback Signs on Towne Hill Road	3e: Increased Police Patrols near Intersection	4a: Rumble Strips on Towne Hill Road	4b: Additional or Updated Signs	4c: Vehicle Activated "Be Prepared to Stop" Blinking Sign on Towne Hill Road	4d: Add Curb and Sidewalk Close to Intersection on Gallison Hill Road	4e: Flashing Warning Sign on Gallison Hill Road
Project Description											
Amount of New or Replacement Paving	0	0		0	0	0	0	0	0	325 FT of Curb & 875 SF of Sidewalk	0
Additional ROW Needed	No	No	No	No	No	No	No	No	No	No	No
Pemanent Easements	No	No	No	No	No	No	No	No	No	No	No
Construction Easements	No	No	Yes	No	No	No	No	No	No	Possibly	No
Number of New Signs	0	2	4	4 Minimum	0		4	Variable - could result in a reduction	1	2	1
Significant Physical Constraints	None	Turning radius of buses will need to be accommodated		None	None	Location to pull off police vehicle from road	Requires a substantial roadbase	None	None	Side ditches, Space for snow storage	None
Other Constraints		Turning radius of buses will need to be accommodated							Finding the proper location for the detector on Gallision Hill and Towne Hill Roads		
Environmental/Cultural Constraints											
Tree Disturbance	No	Possibly - depending on alignment	No	No	No	No	No	Most likely No - but depends on final sign location	Most likely No - but depends on final sign location	Yes, unless stormwater is placed in culvert under the sidwalk.	No
Wetland or Buffer Disturbance	No	No	No	No	No	No	No	No	No	No	No
Steep Slope Disturbance	No	No	No	No	No	No	No	No	No	Yes, unless stormwater is placed in culvert under the sidwalk.	No
Historic Resources Impacts	No	No	No	No	No	No	Yes - Increased noise near historic house	No	No	No	No
Utility Disturbance	No	No	No	No	No	No	No	No	No	No	No
Storm Sewer Disturbance	No	No Change	No	No	No	No	No	No	No	Yes, drainage ditch will need to be relocated or the stormwater located in a culvert under the sidewalk	No
Stormwater Impacts	No	No	No	No	No	No	No	No	No	Yes, stormwater concentrated in areas with curb, and potential loss of vegetative filtering if culvert is added under sidewalk	No
Residential Impacts	Yes - Continued problems	No	Yes - Increased noise from vehicles entering and exiting raised table	No	Yes - Increased light from sign when it illuminates in the dark	No	Yes - Increased noise from rumble strips	No	Possible light impacts from blinking light during hours of darkness	No	Possible light impacts from blinking light during hours of darkness
Adjacent Roadway Impacts	Yes - Continued bypass vehicles on Schoolhouse Road	Yes -Possible increase in bypass vehicles on Schoolhouse Road continues	Yes -Possible increase in bypass vehicles on Schoolhouse Road continues	Yes -Possible increase in bypass vehicles on Schoolhouse Road continues	Yes -Possible increase in bypass vehicles on Schoolhouse Road continues	Yes -Possible increase in bypass vehicles on Schoolhouse Road continues	Yes -Possible increase in bypass vehicles on Schoolhouse Road continues	No	No	No	No
Other Impacts		Reduces turning radius for emergency vehicles									
Attributes											
Addresses Purpose and Need	No	Yes - increases awareness of roadway conditions and contributes to lower motor vehicle speeds at the intersection	Yes - Reduce motorists' speeds and increases motorists' awareness of activity near the intersection	Yes - Helps reduce motorists' speeds	Yes - Helps reduce motorists' speeds	Yes - Helps reduce motorists' speeds	Yes - increases awareness of roadway conditions and contributes to lower motor vehicle speeds	Yes - Alerts motorists to potential issues at the intersection	Yes - Alerts motorists to potential issues at the intersection	Yes - Limits ability of motorists to pass turning vehicles and creates space for walkers	Partially - Helps increase motorists' awareness of intersection
Benefits All Users	No	No	Yes	Yes	Yes	Yes	No	No	No	Yes	No
Reduces Crash Potential	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Encourages Higher Speed	Yes	No	No	No	No	No	No	No	No	No	No
Encourages Lower Speed	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Increases Town Maintenance	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes
Annoys Drivers	No	Yes	Yes	No	No	Yes	Yes	No	No	Yes	No
Order of Magnitude Cost	$0										

Positive Considerations
Negative Considerations
Neutral

Intersection Design Feasibility Study

East Montpelier, Vermont



Legend

- Alternative 2a
- Alternative 3a
- Alternative 3b
- Alternative 3c
- Alternative 3d
- Alternative 4a
- Alternative 4b
- Alternative 4c
- Alternative 4d
- Alternative 4e
- Alternative 5a
- Alternative 5b
- Alternative 5c
- Utility Pole
- Overhead Utility Line
- Parcel Line

Feet

0 30 60 120 180 240

BROADREACH Planning & Design

LD

Heritage Landscapes
Preservation Landscape Architects & Planners

UVM CAP

N W E S

Alternatives

October 10, 2017

Figure B1

Appendix C
PUBLIC WORK SESSION NOTES

East Montpelier Selectboard Hearing and Meeting APPROVED (10/02/17) MINUTES
September 11, 2017 at the Town Office

Selectboard (SB) members present: Carl Etnier (recording secretary), Seth Gardner, Kim Swasey, Gene Troia, Amy Willis; Bruce Johnson (town and zoning administrator).

Others present: Tom Brazier, Sandal Cate, Daniel Currier, David Delcore, Jim Donovan, Roger Dickinson, Paul Erlbaum, Rachel Grossman, Norm Hill, Lindy Johnson, Charles Johnson, Janet Macleod, Jeanne Malachowski, Madeleine Mongan, Michelle McFadden, Jennifer Myka, Sue Racanelli, Norma Raymond, Richard Smith, Ann Stanton, Mary Stone, Martha Trombley-Oakes, Alison Underhill, Janet Connor, Nona Estrin

A. CALL TO ORDER
Mr. Gardner called the meeting to order at 6:32 p.m.

B. ADDITIONS TO THE AGENDA
None.

C. PUBLIC COMMENT
Norma Raymond asked what is going on with the relationship between the Selectboard (SB) and the town administrator (TA). This was the first of many comments and questions on the topic.

Mr. Gardner explained the relationship is ongoing, there are negotiations, and the results will be public after negotiations are concluded.

Charles Johnson said TA Johnson has worked a long time with the town and has been a wonderful ambassador for the town. He said he would hate to lose him; he has rarely met an administrator who is as efficient and kind.

Ann Stanton seconded Mr. Charles Johnson's remarks. She said she didn't want the situation to devolve into what happened in Montpelier. One thing she has always admired about Vermont is that it recognizes its local talent. That's changed in last 15 years, she said, and it's a mistake to think people are replaceable cogs. She believes TA Johnson is irreplaceable, or almost so. If money is a concern, TA Johnson brings in grants.

Madeleine Mongan said that on East Montpelier Trails, Inc. it has been a pleasure to work with TA Johnson. He has been knowledgeable, sends EMTI state grant info, and helped prepare information for town meeting warning.

Mary Stone said she has relied heavily on TA Johnson for his knowledge of land owners and his sense of humor in working with land owners. He does his work with kindness and a sense of humor.

Janet Macleod said she and TA Johnson are part of the Adamant community, and she has tremendous confidence in him.

Jennifer Myka said everyone she has spoken with about Bruce says he's helpful, knows what he talks about, and is a nice guy. She is concerned the town will become a place people don't want to work at. She said the SB should be willing to pay for good personnel.

Nona Estrin said we have a lot of attorneys in town. TA Johnson is like having an extra lawyer on staff.

Rachel Grossman wondered about the role of personalities and egos in the current negotiations. Mr. Gardner replied that it's not about personalities and egos.

Michelle McFadden said TA Johnson is very helpful. She added he is maybe the most qualified TA in the state, with degrees in engineering and law. She noted he brings in a lot of grants, for sidewalks, park and ride, etc.

Sue Racanelli described speaking to TA Johnson from San Diego back when he didn't know who she was. Nonetheless, he guided her clearly through the process she inquired about.

Paul Erlbaum called TA Johnson “a gem” and asked the SB to add a few pennies to his tax rate to pay for a salary increase.

Ms. Raymond said the SB does a good job keeping tax rate down.

Martha Trombley-Oakes said her family had “an intimate experience” with this SB and TA Johnson after two dog attacks. She said TA Johnson walked her through the process compassionately. The dog attacks were a terrible experience; the work with TA Johnson made her proud of the town that she is raising family in.

Ms. McFadden commented she sees Bruce working long hours on her frequent trips past the town office.

The SB thanked so many townspeople for coming in with their comments.

D. MEETING WITH FUNDING REQUEST STUDY COMMITTEE (FRSC)
An application packet will go out to 30+ organizations by September 29th with a due date of October 27, and a committee report will be presented to board in mid-late December.

Last year's funding request article (without Montpelier Senior Activity Center (MSAC) and Central Vermont Home Health & Hospice) was $21,836. The article size is once again closing in on the $25,000 “vote on the floor” cap, and there is no obvious organization to move to a separate article.

MSAC has already informed us that the FY19 request will be $8,000 (up $1,000 from FY18). MSAC is also requesting answers to two queries: Should it once again follow the FRSC process (fill out the application & provide the relevant documents) despite its separate article status; and, does the SB want MSAC to appear before it to defend the request and secure no-petition warning placement (as it did last year, following the same process the Kellogg-Hubbard Library and Green Mountain Transit have followed for years).

The SB asked the committee to increase the article amount by no more than 10%, if there are no additional organizations. The committee is to return to the SB if that looks difficult or one or more new organizations apply for funding.

The SB will ask MSAC to come directly to the SB from now on, not go through the FRSC. MSAC will be asked to either give the SB all the information on the FSRC application form in their own format or fill out our form.

The SB thanked the committee for its diligent work.

Ms. Johnson said the committee is in much better shape now, including organized historical database and TA Johnson calling organizations. She liked the fact that the appeal process goes to the committee, rather than the SB.

E. REPORT ON CENTRAL VERMONT SOLID WASTE MANAGEMENT DISTRICT
East Montpelier's representative Casey Northrup was unable to attend this SB meeting; his report will be rescheduled for October.

F. CONSIDERATION OF FY2018 MUNICIPAL PLANNING GRANT (MPG) APPLICATION
The Planning Commission is recommending that the town apply for a FY2018 MPG to update the zoning regulations to effectuate the goals included in the soon-to-be-finalized EM Village Master Plan and the in-development 2018 EM Town Plan. The application is for a $26,000 project with $20,000 in grant funding and a $6,000 town match.

Motion: I move to adopt the Municipal Resolution for Municipal Planning Grant. Made: Ms. Swasey. Second: Mr. Troia. 5-0.

G. DISCUSSION ON 2018 DRAFT VERMONT LEAGUE OF CITIES AND TOWNS (VLCT) MUNICIPAL POLICY

The 2017 VLCT Town Fair conference will be held October 4 & 5, 2017 at Killington Resort Grand Hotel; the annual meeting will be at 1:30 p.m. on the 4th with the normal workshops on the 5th.

Mr. Etnier will review the draft municipal policy and send comments in writing to the rest of the SB before the October 2, 2017 regular SB meeting. At that meeting, the SB may formally authorize any proposals for amendment.

H. DESIGNATION OF TOWN DELEGATE TO 2017 VLCT ANNUAL MEETING

Motion: I move to designate Carl Etnier as the town delegate to the VLCT annual meeting. Made: Ms. Swasey. Second: Ms. Willis. 5-0.

I. CONSIDERATION OF WINTER SALT CONTRACTS

The town has for years reserved 609 tons of winter salt from both Cargill and American Rock Salt. The diversified sourcing has been seen as protection against shortfalls in one supplier. This year the prices are $69.91 from Cargill and $75.12 (state contract price) from American. Cargill requires a standard contract; American does not require a formal agreement.

Motion: I move to authorize TA Johnson to sign the winter salt contract with Cargill at $69.91 per ton. Made: Mr. Troia. Second: Ms. Willis. 5-0

J. CONSIDERATION OF REIMBURSEMENT REQUESTS TO VTRANS FOR MURRAY ROAD CULVERT AND COUNTY ROAD PAVING GRANTS

The work is completed on these projects.

Motion: I move to approve submission of Requests for Reimbursement to VTrans for the Murray Road culvert and the County Road paving work. Made: Mr. Troia. Second: Ms. Swasey. 5-0.

K. LISTERS ERRORS & OMISSIONS

Parcel #02-032.600

The listers have determined that they failed to properly include a functional depreciation increase of 2% for an oversized dwelling with a quality grade of 2.5 when they processed a reassessment due to an addition constructed during the past year. The correction will drop the property's assessed value from $212,900 to $210,000; this $2,900 change will decrease the 2017 grand list by $29.

Motion: I move to authorize a reduction in the grand list value of $29 based on lister errors and omissions for parcel # #02-032.600. Made: Ms. Swasey. Second: Ms. Willis. 5-0.

L. ACCESS PERMITS

17-038; Clark Access Relocation at 820 Dodge Road

The Clark family owns the 74-acre complex on Dodge Road just east of Partridge Run and west of the Dodge Road trail access parking lot. In 2012 the Selectboard approved a curb cut for the family's planned residential development that required the existing "y" access be converted to a single curb cut. The family is now ready to move forward with a recommendation from former road foreman Mike Garand to shift the access point to the east up the hill, right next to the trail access, to improve sight lines and access slope issues. Road Foreman Guthrie Perry has recommended approval of the shift. The existing access points would be closed.

Motion: I move to approve access permit 17-038. Made: Mr. Etnier. Second: Mr. Troia. 5-0.

M. WARRANTS
Signed.

N. MINUTES
Motion: I move to approve the minutes of August 21, 2017 as submitted. Made: Ms. Swasey. Second: Mr. Troia. 5-0.

O. OTHER BUSINESS
Mr. Charles Johnson emailed the SB right before the meeting about an unpleasant encounter with a dog on a town road. TA Johnson sent the information to Animal Control Officer Sandy Conti. Mr. Conti knows the dog in question and will get back to the SB.

Ms. Swasey commented that the increased number of contacts to the town office by townspeople is a sign that people are aware of the good processes and policies the town has in place for handling dog complaints.

Town Administrator Report
2018 Mack 10-wheeler: The new truck arrived at the town garage on August 31st.

Replacement check for a taxpayer:
A taxpayer lost the original $4,000 tax overpayment refund check that was on a May 25th warrant. The town stopped payment on that check and issued new one September 1st.

Update on BCBS health plan rates for 2018:
Platinum Plan is going up 9.49%; Gold Plan up 8.93%.
Discussion on 2018 health care options will likely be on the October 16th SB meeting

EM Hazard Mitigation Plan's Renewal/Update Process:
The town is not going to receive the expected assistance from the Central VT Regional Planning Commission, so the town will need to handle the plan's renewal process on its own. TA Johnson will take the lead with Planning Commission support. The current plan expires March 1, 2018.

Fairmont Dairy Phase 1 Conservation Project:
The VT Land Trust, et al. have closed on the development rights purchase of the Drake Road area portion of the old Lylehaven Farm properties. The separate trails easement deal to benefit the Cross VT Trail is expected to close by the end of September. The request for the town's $6,000 Conservation Fund contribution is on this meeting's warrant.

Meeting Schedule:

Sept. 15th	8:30 am	2017 Municipal Day; VT agency workshops at National Life
October 2nd	6:30 pm	SB regular meeting
October 4th	1:30 pm	VLCT annual meeting at Killington
October 16th	6:30 pm	SB regular meeting; second intersection study forum
October 19th	7:00 pm	EMFD quarterly budget presentation at the ESF

Zoning Administrator Report
2 permit applications since August 21, 2017.
The next scheduled DRB meeting is October 3rd for the Casella biennial review and conceptual review of a master plan for 170 Cherry Tree Hill Road; no hearings are scheduled at this time.

P. PUBLIC FORUM ON TOWNE HILL ROAD INTERSECTION STUDY
Three people working on the project (Dan Currier of the Central Vermont Regional Planning Commission, Jim Donovan of Broadreach Planning & Design, and Roger Dickinson of Lamoureux & Dickinson Consulting

Engineers) and many townspeople providing guidance were in attendance. Mr. Donovan presented a draft report on the existing conditions at the intersection. He added that a new peak traffic count had been conducted last week, too late to include in the current draft.

The study group needs better information about vehicle crashes at the intersection; they were referred to East Montpelier Fire Chief Ty Rolland.

Feedback on the draft included:

- The language about purpose and need is confusing.
- Anything done at the intersection could add more traffic to Wheeler/Schoolhouse Road; the study needs to consider that additional impact.
- It seems like there is more traffic in spring, so a fall traffic count will underestimate spring traffic. There may be more students with permits and licenses in the spring.
- The map presented needs to add driveways near the intersection.
- There's a study at U-32 about starting the school day later. While any change would be some years off, it is worth considering the potential impact on the concentration of vehicles at the intersection.

In looking forward to the continued work on the study, Mr. Donovan said the study group will not make a recommendation. They will spell out alternatives, and the town will make a recommendation to itself.

It was requested that behavior solutions be considered, like getting more students to take the bus rather than driving. The study group will consider it.

It was requested that a solution considered be to make Wheeler and Schoolhouse Roads one way. Mr. Donovan doubts it will be advisable, but he added it to the list.

A meeting is planned for Tuesday, September 12 at the town office with the steering group for the study. After that, different alternatives will be considered and winnowed, and the results will be posted online October 10. The SB will be presented with the alternatives at its regular October 16 meeting. Final recommendations will be issued by November 20.

Q. DISCUSSION ON TOWN & ZONING ADMINISTRATOR POSITION
Motion: I move to find that premature general public knowledge of this discussion of the Town and Zoning Administrator position would clearly place the public body or a person involved at a substantial disadvantage, and it involves labor relations agreements with an employees. Made: Mr. Etnier. Second: Ms. Swasey. 5-0.

Motion: I move to enter executive session. Made: Mr. Etnier. Second: Ms. Swasey. 5-0. 9:00 p.m.

The SB came out of executive session at 10:15.

Motion: I move to sign the five-year contract for TA and ZA with Bruce Johnson starting July 1, 2018 as presented. Motion: Ms. Swasey. Second: Ms. Willis. 3-2. (Mr. Troia and Mr. Gardner voting against)

All five SB members signed the proposed contract.

Motion: I move to adjourn. Made: Mr. Troia. Second: Ms. Swasey. 5-0. 10:16 p.m.

East Montpelier Selectboard Hearing and Meeting APPROVED (11/06/17) MINUTES
October 16, 2017 at the Town Office

Selectboard (SB) members present: Carl Etnier (recording secretary), Seth Gardner, Kim Swasey, Amy Willis; Bruce Johnson (town and zoning administrator).

Others present: David Delcore (Times Argus), Bill Powell (WEC), Guthrie Perry (Road Foreman), Don Welch, Norm Hill, Janet Connor, Dan Currier (CVRPC), Stephen Connor, Cathy Rice, Paul Erlbaum, James Sloan, Carol Dickson, Bruce Howlett, Jim Donovan (Broadreach Planning & Design), Roger Dickinson (Lamoureux & Dickinson Consulting Engineers)

A. CALL TO ORDER
Mr. Gardner called the meeting to order at 6:32 p.m.

B. ADDITIONS TO THE AGENDA
Vermont League of Cities and Towns (VLCT) Annual Meeting report

C. **PUBLIC COMMENT**
None.

D. DISCUSSION WITH WASHINGTON ELECTRIC CO-OP (WEC) ON LEVEL II ELECTRIC VEHICLE CHARGING STATION AT PARK AND RIDE
With Bill Powell, WEC Director of Products & Services.

The nearly completed Park and Ride comes with 110 V outlets at the base of each of the four streetlight posts. These can be used to charge electric vehicles—they will be live whether or not the lighting is on. However, they are slow, and charging with them requires a car owner to carry a charging cable and to risk leaving it exposed.

WEC has funding to provide a dual port level 2 (220-240 V) charger, accouterments (like signage and bollards), and five years of maintenance. It will be a total of 6.6 kW, split between the two ports if both are in use. After five years, the town is responsible for maintenance and all other costs associated with it.

The town can charge whatever rate it wishes for charging at the charger, and it can base the rate on time of use, kWh used, or a combination.

The board accepted the WEC offer back on February 1, 2016 and authorized Town Administrator Johnson to complete the process. The discussion at this meeting was on signage, what rates to charge for use, and related issues. WEC will install the facility and let the town collect some data on use before a rate is set. The town will work with WEC to set up signs at the two parking spaces by the charger saying something like “EV parking while charging only.”

E. ROAD FOREMAN REPORT
Road Foreman Guthrie Perry reported that a used hose machine for $1500 that he was interested in was no longer available.

One third of the town's supply of winter sand was hauled to the sand pile last week.

As noted in the previous meeting, the 2008 Volvo loader has become unreliable. Mr. Perry reported on his efforts to solicit bids to replace it.

Center Road needs more center line painting. Everything else but the newly paved Muddy Brook Road is newly painted.

F. CONSIDERATION OF LEGAL ENGAGEMENT LETTER FOR TAX SALE
The board added parcel #06-045.000 to the list of properties going up for tax sale (joining two others). Attorney Jim Barlow is already on board for the other sales; this agreement adds the new property under the same terms.

Motion: I move to accept the letter of engagement from attorney James Barlow written on October 6, 2017 to Delinquent Tax Collector C. Bruce Johnson for proceeding to a tax sale on parcel #06-045.000. Made: Ms. Swasey. Second: Ms. Willis. 4-0.

G. DISCUSSION ON POTENTIAL ALTERATIONS TO THE TOWN'S PROPERTY TAX COLLECTION PROCEDURES
Previously the board decided to handle (in lieu of creating a separate committee) a review and possible recommendation to voters of changes to the town's tax collection procedures.

Now that the town accepts electronic payments of taxes, some electronic filings are happening on the day payment is due but after the 5 p.m. deadline. The board doesn't see a reason to penalize electronic filings after 5 p.m. When preparing the town meeting warning, the board will alter the usual article to allow tax payments to be made electronically or in person through the town office up to 11:59 p.m. Eastern on the day payments are due.

The board saw no reason to alter the current policy of setting the due date according to when the payment is received, rather than when a mailed payment is postmarked.

The board also considered but did not propose a motion on changing from an immediate 8% penalty for delinquent taxes, with a 1% per month penalty thereafter, to a graduated system of penalties. Mr. Etnier will talk with Rick Mastelli, the townsperson who first brought this possibility to the town's attention, to see if Mr. Mastelli would like to present more information on potential advantages of a graduated approach.

H. REPORT FROM VLCT ANNUAL MEETING
Mr. Etnier represented the town at the meeting, which was held in Killington on October 4. There were two changes to the VLCT Municipal Platform (lobbying agenda) that the board asked him to block.

One concerned making the day before an election a "gap day," on which neither voting nor voter registration would be permitted. At the meeting, it was pointed out that VLCT was looking for enabling legislation, to allow some towns to put in a gap day, not a requirement for all towns. Town clerks from some towns said it would make their job much easier. Mr. Etnier's proposed amendment failed.

The other change would enable municipalities to have authority over rules for solid waste and wastewater. Currently, the Agency of Natural Resources handles wastewater permitting, with the possibility of delegating that to a municipality that has sufficient capacity; very few municipalities have accepted the delegation. Mr. Etnier said it was not clear how far-reaching authority the VLCT was advocating for—would municipalities be empowered to permit technologies forbidden at the state level, or vice versa? He reported he did not get a chance to offer an amendment to strike this language.

I. WARRANTS
Signed.

J. MINUTES
Motion: I move to approve the minutes of October 2, 2017 as submitted. Made: Ms. Swasey. Second: Ms. Willis. 4-0.

K. OTHER BUSINESS
Update on Hazard Mitigation Plan renewal
Stephanie Smith, Vermont Emergency Management Hazard Mitigation Planner, will be at the November 6 board meeting to explain the path forward towards renewal of our plan, which expires March 1, 2018.

That meeting will be held at the ESF (the new fire station) with the hazard mitigation item first on the agenda; this will be a type of “kick-off” meeting for the renewal effort with the public invited to participate; FEMA expects to see public input opportunities throughout the plan development process.

Central Vermont Solid Waste Management District annual budget process
A public hearing is to be held October 23, 5:00 p.m. at the ARCC, 540 N. Main Street in Barre.
General Manager Bruce Westcott will come to a Selectboard meeting in November.

Meeting Schedule

October 18th	7:00 pm	Winooski River Tactical Basin Plan forum at Calais Town Hall
November 6th	6:30 pm	Regular Selectboard meeting at ESF; hazard mitigation forum
November 7th	10:00 am	Park ‘n Ride facility walkthrough
November 20th	6:30 pm	Regular Selectboard meeting with Intersection Study forum

L. PUBLIC FORUM ON TOWNE HILL/GALLISON HILL/BRAZIER ROADS INTERSECTION STUDY
Since the September 11, 2017 public forum, the consultants and townspeople have been brainstorming approaches to improve the safety at the intersection. They already have eliminated some from further consideration and brought forward many for further discussion. The consultants presented evaluations of the ideas brought along the lines of many criteria.

Roger Dickinson, of Lamoureux & Dickinson Consulting Engineers, and Jim Donovan, of Broadreach Planning & Design, are the lead consultants on the study facilitated the discussion. Dan Currier of the Central Vermont Regional Planning Commission also attended.

Both the consultants and a townsperson living near the intersection agreed that we know of two crashes at the intersection in the last five and half years. Both involved young drivers pulling into the intersection from Gallison Hill Road without looking properly for traffic.

There was a lively discussion about the alternatives presented, and how attractive they were. Based on the numbering in the charts presented (available on the town's web site for at least the duration of the study), the group recommended nixing 2a, 4a, and 5c. It recommended keeping for further inclusion 3a-d, 3 e (maybe temporarily), 4d, and 5d. A “maybe” was given to 4e.

M. ADJOURNMENT
Motion: I move to adjourn. Made: Mr. Etnier. Second. Ms. Willis. 4-0, 9:40 p.m.

East Montpelier Selectboard Hearing and Meeting APPROVED (12/04/17) MINUTES
November 20, 2017 at the Town Office

Selectboard (SB) members present: Carl Etnier (recording secretary), Seth Gardner, Kim Swasey, Gene Troia, Amy Willis; Bruce Johnson (town and zoning administrator).

Others present: Dan Currier, Jim Donovan, Roger Dickinson, Doug Newton, Kim Watson, Bruce Howlett, Carol Dickson, Paul Erlbaum, Catherine Rice, Stephen Connor, Janet Connor, Richard Smith, Norm Hill

A. CALL TO ORDER
Mr. Gardner called the meeting to order at 6:32 p.m.

B. ADDITIONS TO THE AGENDA
VTrans Park and Ride grant amendment
VTrans Park and Ride property issue

C. **PUBLIC COMMENT**
None.

D. PUBLIC FORUM ON INTERSECTION STUDY
This is the last of three opportunities for the public to assist the consultants for the Towne Hill, Gallison Hill, & Brazier Roads Intersection Study. Jim Donovan of Broadreach Planning & Design presented the draft final report, along with Roger Dickinson of Lamoureux & Dickinson Consulting Engineers. Dan Currier of the Central Vermont Regional Planning Commission (CVRPC) was also present.

The draft report included 10 recommendations from the steering committee, in four areas (improving sight distance, lowering travel speeds, raising awareness, and improving bicycling and walking). The report and related documents have been posted at the Town's web site:
eastmontpeliervt.org/towne-hill-road-intersection-design-feasibility-study

The group present was in agreement with all of the recommendations.

There was a discussion of how to benchmark the intersection's performance as it is currently configured. Ideas included monitoring accidents and/or traffic speeds. It's possible to ask an intern to monitor it for a week at peak times, including near-misses.

Next steps include adding benchmarks to compare future traffic data with, developing a plan for evaluation of the results of measures taken, revisiting costs of the measures, organizing potential funding sources in tables, adding considerations about updating existing signs (including weeding out some, potentially), and adding other revisions based on comments. The report will be sent to the steering committee and then the Selectboard (SB).

E. DISCUSSION ON QUAKER ROAD CULVERT REPLACEMENT PLANS
The town is working with a VTrans structures grant on a project to replace the undersized cross culvert just southeast of the Brown property on Quaker Road, about 0.5 miles from US Rte. 2. The project is in the design phase, with the intent to go out to bid in the spring of 2018. Doug Newton of Newton Technical Services was on hand to discuss the preliminary plans, focusing on the need for guardrails. There is no guardrail at the site presently, but VTrans standards call for installation for this project, because of the steepness and distance of the drop-off at the edge of the road.

The culvert will be upgraded from 24” to 66” with a natural stream bed in the bottom for the benefit of aquatic organisms. The guardrail would be for 275 ft. on one side of the road, 375 ft. on the other side. The SB discussed opportunities to improve safety for pedestrians and bicyclists on this stretch of the road, without incurring undue extra costs. The standard way to add the guardrails would be to have a three-foot shoulder from

the white line to the front of the guardrail. The Selectboard would like to increase the shoulder width for pedestrians and bicyclists on at least one side of the road. Mr. Newton will investigate the option of using 8' posts, which will allow a four-foot shoulder without adding to the total width of the project.

F. CONSIDERATION OF APPLICATION FOR CVRPC TRANSPORTATION PLANNING FUNDING FOR TOWNE HILL ROAD/US RTE. 2 INTERSECTION

CVRPC has funding for a few transportation studies in central Vermont. Last June the board submitted an application for the now-ongoing Towne Hill/Gallison Hill/Brazier Roads intersection study. This would be the same process – the town submits a letter requesting consideration of a particular project, in this case the US Rte. 2/Towne Hill Road intersection. The board will likely be invited to present the proposal to the CVRPC Transportation Advisory Committee (TAC). Frank Pratt is our TAC representative and is very supportive of this study proposal.

Motion: I move to authorize Town Administrator Johnson to complete and sign the application to CVRPC for transportation planning funding for the Towne Hill Road/US Rte. 2 intersection. Made: Ms. Swasey. Second: Mr. Troia. 5-0.

G. CONSIDERATION OF LETTER OF EXTENSION FOR LAPERLE FARM PARCEL VHCB FEASIBILITY STUDY GRANT

The Old LaPerle Farm Property Committee's VHCB (Vermont Housing and Conservation Board) grant expires on December 1st; if an extension is desired, the Selectboard will need to submit a letter of request.

Motion: I move to authorize Chair Seth Gardner to sign a request to VHCB for an extension on the Old LaPerle Farm Property Committee's grant. Made: Ms. Swasey. Second: Ms. Willis. 5-0.

H. WORK SESSION ON HAZARD MITIGATION PLAN UPDATE

The town's current hazard mitigation plan expires March 1, 2018; the desire is to have a plan in place to present to VT Emergency Management by the end of February 2018. The SB focused on projects of concern to highlight in section 6.2 of the plan.

I. EAST MONTPELIER GULLY JUMPERS SNOWMOBILE CLUB REQUEST FOR DESIGNATED TOWN ROAD USAGE FOR TRAIL CROSSINGS

This is an annual request to allow snowmobiles to use town roads to allow non-direct road crossings in certain limited circumstances.

Motion: I move to grant East Montpelier Gully Jumpers permission to use designated town roads for trail crossings. Made: Mr. Troia. Second: Ms. Swasey. 5-0.

J. VTRANS PARK AND RIDE GRANT AMENDMENT

VTrans has awarded the town an amendment to increase the grant from $300,000 to $418,000 to cover construction inspection overages and other added cost. The grant remains 100% federal funding with no town match.

Motion: I move to authorize Town Administrator Johnson to complete the agreement with VTrans to amend the Park and Ride grant. Made: Mr. Etnier. Second: Mr. Troia. 5-0.

K. VTRANS PARK AND RIDE PROPERTY ISSUE

To make mowing easier and ensure a working swale to transport water from the north and east sides toward the south (Old LaPerle farmhouse area) end, the Park and Ride needs more land at the northeast corner. Mr. LaPerle has agreed to trade the triangular parcel he owns behind (to the east of) the old WEC garage to the town in return for some of the land near the putting green further to the east. To make this happen, the town will need to survey a new line and get a formal boundary adjustment approved, followed by deed work to finalize the transfer.

Motion: I move to authorize the boundary adjustment between the Park and Ride and the LaPerle property, along with all necessary work to accomplish it. Made: Mr. Troia. Second: Mr. Etnier. 5-0.

L. APPOINTMENTS
Motion: I move to appoint Ed Deegan as auditor. Made: Mr. Troia. Second: Mr. Etnier. 5-0.

M. ACCESS PERMITS
I move to approve access permit 17-049 for the Birnbaum property on Sparrow Farm Road. Made: Mr. Etnier. Second: Ms.Willis. 5-0.

N. WARRANTS
Signed.

O. MINUTES
Motion: I move to approve the minutes of the November 6 meeting as submitted. Made: Mr. Troia. Second: Ms. Willis. 5-0.

P. OTHER BUSINESS

- Plan for Town Volunteer Appreciation Party:
  - Time: 5:00 to 8:00 p.m., Friday, December 15th
  - The event will honor retired road foreman Mike Garand, who will attend.
- Replacement Process for Justice of Peace Dave Grundy:
  - Mr. Grundy, who resigned last month, was a part of the Democratic Party slate for the November 2016 election. The local Democratic Party is expected to recommend a replacement for Governor Scott's consideration. The party will hold a meeting on this issue next Monday, November 27th, 4:00 p.m. at the town office.
- December 11th Joint Meeting with Calais Selectboard at Calais Town Office:
  - The time is still tentative at 7:00 p.m.
  - There will be two agenda items:
    - Discussion on EMFD FY2019 operation budget request
    - Presentation by Jeremy Hansen, Berlin Selectboard member, on a possible Central VT consortium to provide internet service
- Property Tax Payments – 1st Installment Update:
  - 1st 2017/18 payment was due November 15. There was 3.7% unpaid at this point, compared to 3.2% last year; overall 40.2% of 2017/18 property tax still unpaid, compared to 40.0% last year
- Tax Sale Update:
  - Tax levy has been recorded for three parcels: Clement/Buck, 365 Mays Way; Kaiser, 161 Dodge Road; and, Thomas/Rand, 127 Sandy Pines Road
  - Tax sale is scheduled for January 26, 2017, 10 a.m. at the town office
- Meeting Schedule:
  - December 4th 6:30 pm Regular Selectboard meeting
  - December 7th 7:00 pm Annual EMFD operating budget presentation @ ESF
  - December 11th 7:00 pm Joint EMFD budget meeting with Calais board @ Calais
  - December 15th 5:00 pm Town Volunteer Appreciation Party Honoring Mike Garand
  - December 18th 6:30 pm Regular Selectboard meeting

Zoning Administrator Report

- 3 permit application since November 6, 2017
- No Development Review Board meeting is currently scheduled

Q. ADJOURNMENT
Motion: I move to adjourn. Made: Mr. Etnier. Second: Mr. Troia. 5-0. 9:55 p.m.

Jim,

My notes from last evening's meeting in East Montpelier:

Table 2

2c What factors would cause a recommendation not to reduce the speed limit? *Roger provided a few examples.*
Include the cost of the engineering study in the estimated cost of reducing the speed limit. *(This could cost approximately $1,000, increasing the total cost to $1,500)*

2e Why is the Increases Town Maintenance cell green in the table? Operational costs can be considered as "maintainance".

3a The recommendation to reduce the road width could be tested first with barrels, bales of hay or concrete blocks. Can achieve similar results with raised aprons.

There was a discussion of scale and location of these neckdowns.

3b Reduce the cost of this recommendation to $10,000.

4b VTrans may not be favorably inclined to fund a crosswalk or RRFB given their state crosswalk guidelines.

3b / 4a / 4b
Why do these three recommendations not benefit all users? Add rows or explanation regarding benefits for peds/bikes vs. vehicular traffic.

Table 3 - Police/Sheriff. Sheriffs are less expensive and can be hired for specific times vs. State Police which are most costly and not always available for specific time periods.

Question - How do we evaluate the effectiveness of the Group A recommendations before proceeding to Group B? What are some before/after benchmarks that could be documented? Discussion of videotaping the intersection as one method to use in foregoing.

Funding Options (pg 15) - Add a matrix showing which funding sources work for each recommendation.

Add back in a recommendation to replace and upgrade existing signs.

BROADREACH
Planning & Design

Heritage Landscapes LLC

UVM
CAP