Safe Routes to School Pedestrian Improvement Study

Warren, Vermont

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Final Report

Stantec

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1.0 Introduction

The Town of Warren has identified the need for safe pedestrian facilities to connect the existing sidewalks along Main Street to the Warren School at the end of School Road. The Town of Warren is defined by a commercial center, which includes the Warren Store, Pitcher Inn and other commercial sites, surrounded by residential areas and municipal buildings such as the Village offices, post office, town hall and library. The Town experiences a high amount of pedestrian activity, especially by school-age children. Over the years, the speed and volume of traffic have both increased to the point where some residents feel like the roads are no longer a safe place for students to walk.

A feasibility study entitled "*The Warren Village Pedestrian Enhancement Plan*" was completed in 2004. This study reviewed numerous alternatives for sidewalks and traffic calming measures to enhance pedestrian safety to and from numerous key destinations, including the Town Offices, Library, Elementary School, Post Office and General Store. The final recommendations of the study did not include sidewalks along Main Street, Flat Iron Road and School Road; mainly due to the perception by residents that sidewalks will alter the character of the Village. Rather, the study recommended various traffic calming measures including narrowing travel lanes on existing roads to 9' by adding shoulder stripes. Despite citizen support for the recommendations in the study, the Town did not pursue the project recommendations at the time due to budgetary concerns and increased focus on wastewater planning.

In 2008, the Town received funding from the Vermont Agency of Transportation Safe Routes to School Program to develop *The Warren School Travel Plan*, herein referred to as the Travel Plan. The purpose of the Travel Plan was to identify how the Town can actively promote walking and bicycling to and from the Warren School. A local Safe Routes to School (SRTS) team consisting of Town residents developed the Travel Plan with the following goals:

- To promote a sense of community at the school and in the village.
- To make it safer to walk and bicycle to and from both the school and the other community resources throughout the village.
- To promote life-long healthy habits among students and their families.
- To teach students decision-making skills about traffic, weather and route-finding.
- To decrease Warren residents' reliance on automobiles; and subsequently reducing greenhouse gas emissions.
- To have fun.

As part of the Travel Plan, a survey was conducted with parents to identify the barriers to walking and biking to school. Parents representing approximately 55% of the student body responded to the survey. Only one family reported walking to school. All other students either drive or ride the bus to school. The top barriers to walking to school reported by the parents are traffic speed and lack of sidewalks and pathways, especially on Brook Road and School Road

Using this information, the SRTS team identified various infrastructure improvements that would address traffic speeds and lack of sidewalks. These improvements include the following:

1. Pursue the infrastructure improvements recommended in the 2004 "*The Warren Village Pedestrian Enhancement Plan"*
2. Radar speed signs
3. School site parking & traffic safety
4. A path along School Road
5. Path options connecting Brook Road and the Warren School
6. Centerline In-Street Pedestrian Crossing Signs

Based on the recommendations of the School Travel Plan, the Town received a SRTS grant in 2011 to study possible pedestrian connections from the existing sidewalk on Main Street to the Warren School.

The ultimate goal of the study is to identify recommended improvements; and their impacts and cost so that funding may be pursued for engineering, permitting and construction. This report summarizes the study and recommendations for improvements and future steps.

The study process is generally defined by the following outline:

- Investigating existing conditions (Section 2.0)
- Soliciting public input on existing conditions (Section 3.0)
- Establishing the project purpose and needs (Section 4.0)
- Evaluating alternatives and recommending improvements (Section 5.0)
- Making final recommendations including next steps (Section 6.0)

2.0 Existing Conditions

Existing physical and environmental conditions were documented to assist with identifying and evaluating alternative improvements. Team members researched and reviewed available information, solicited input from the Town and VTrans, and field reviewed the project area. This field review included recording conditions and taking numerous photographs. The following details the results of these efforts.

2.1 Project Area

The project area is located in the Town of Warren, just east of Vermont Route 100. It begins at the end of the existing sidewalk on Main Street near the Warren Store, extends along Main Street to the intersection with Brook Road, continues east along Brook Road to the intersection with School Road, and then runs north along School Road where it ends at the Warren School. Freeman Brook flows through this area and crosses the roadway in two locations. The study area is represented as a red dashed line in Figure 1.

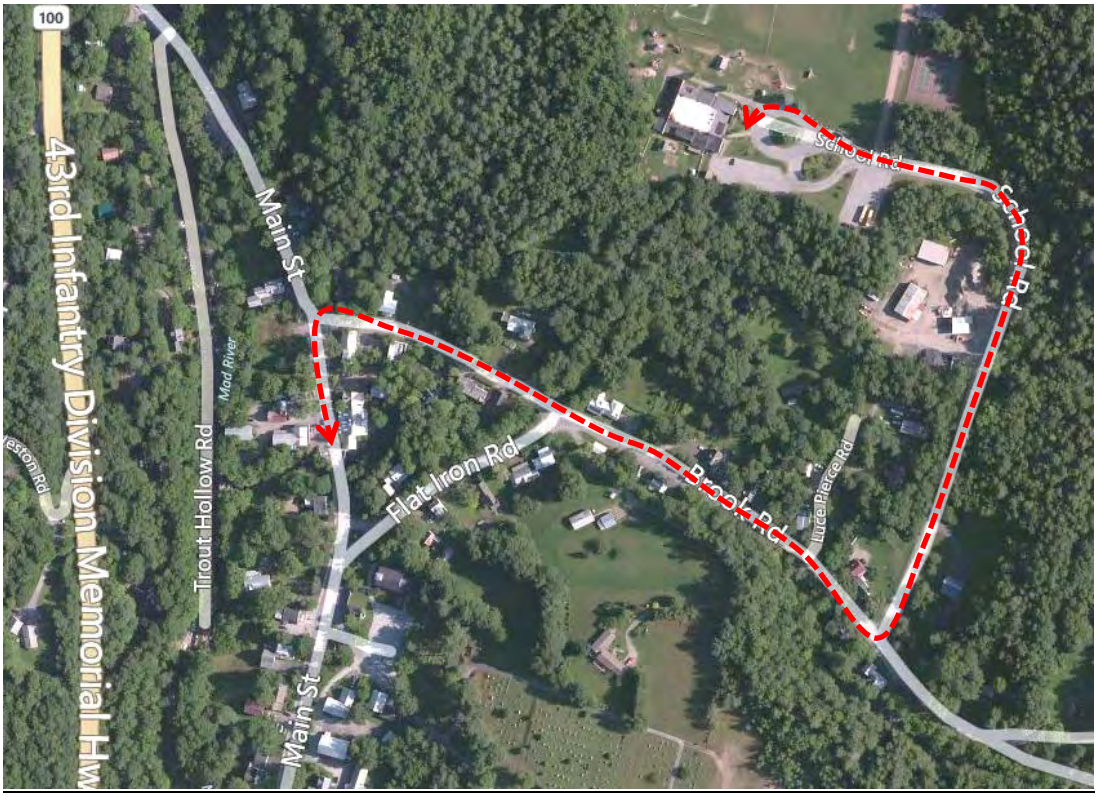

Figure 1 - Study Area

2.2 Roadway Functional Classification

Brook Road is a Major Collector Class 2 Town Highway that acts as a main corridor for traffic traveling through the village to East Warren or to Roxbury and Northfield. Main Street is a Local Road Class 2 Town Highway that connects Warren Village to VT Route 100. School Road is a Local Road Class 3 Town Highway and serves as the access road to the Warren School and Town Garage. Main Street, Brook Road and School Road are owned and maintained by the Town of Warren.

2.3 Traffic Volumes

Brook Road and Main Street in Warren experience tourist traffic being in close proximity to the Sugarbush Ski Area. Delivery trucks, school buses and Town trucks frequent the study area, particularly in the morning. In addition, Brook Road is used as an east-west corridor connection between Route 100 and Route 12A via Roxbury Mountain Road.

Annual Average Daily Traffic for each of the town highways with the year the traffic count was conducted is shown in Table 1.

Road	AADT (veh/day)
Main Street	820 (2007)
Brook Road	1339 (2008)
School Road	372 (2008)

Table 1 - AADT for Study Roads as shown in "Warren School Travel Plan", August 2009

2.4 Roadway Widths

Brook Road is generally 24'-25' wide with two travel lanes and unmarked shoulders. The Main Street portion of the project has two travel lanes with on street parking on each side; and varies considerably in width. School Road averages 25 feet in width with two lanes and a four foot fog line designated for bicyclists and pedestrians. Figures 2 through 6 are existing conditions photos within the study area.

2.5 Posted Speed Limit/85th Percentile Speeds

The posted speed limit is 25 miles per hour throughout the project area. On Brook Road headed toward School Road from the east, the speed limit drops from 35 to the posted 25 mph on a steep down grade. Speed studies conducted by Central Vermont Regional Planning Commission indicate that the 85th percentile vehicle speed is 9 mph over the speed limit on Brook Road and 8-11 mph over the speed limit on Main Street. The speed studies are contained in the appendix.

2.6 Grades

Main Street and Brook Road within the study area are relatively flat. On School Road there is a steep down grade from the Warren School to Brook Road.

Figure 2 - Main Street looking towards Brook Road

Figure 3 - Brook Road at intersection with Main St. Building on the right is in close proximity to the road.

Figure 4 - Retaining wall and porch stairs in close proximity to Brook Road.

Figure 5 - Brook Road looking toward School Road

Figure 6 - School Road looking toward the Warren School

2.7 Right of Way Widths

The existing right-of-way width along Brook Road and Main St. are 50 feet wide. School Road does not have a designated right-of-way width as this road is part of the parcel owned by the Town. Many buildings and appurtenances along Main Street and Brook Road are located within the Town right-of-way and in close proximity to the road.

2.8 Existing Utilities

Existing utilities are described in detail in "*The Warren Village Pedestrian Enhancement Plan*". The relevant section of this report is contained in the appendix. In general, overhead electric and power lines run along the east side of Main Street and the north side of Brook Road. A municipal sewer system runs along Brook Road and Main Street. There are several sewer manholes along the north side of Brook Road.

There is no existing municipal water system and houses are fed by well or spring. There is a spring line that runs from #189 Brook Road under the road, through the brook and up into the woods.

No existing utilities run along School Road.

2.9 Existing Drainage

A culvert runs across Brook Road between Flat Iron Road and Main Street. Another culvert crosses Brook Road at the end of a drainage ditch that runs adjacent to the roadway near School

Road. A culvert across School Road feeds this drainage ditch. Another culvert crosses School Road by the town garage.

2.10 Natural Resources

Stantec performed an assessment of the natural resources within the project limits on April 27, 2011. A summary is presented below. The Stantec report is contained in the appendix.

2.10.1 Wetlands

One wetland area was identified during the April 27 site visit. This area is located at the toe of slope on the east side of School Road, across from the Public Works building. It is a palustrine scrub-shrub wetland dominated by gray alder (Alnus incana) and sensitive fern (Onoclea sensibilis). Soils were saturated to the surface during the site investigation, and water flowed from east to west through the wetland. This water is conveyed in a culvert beneath School Road, and then in a channelized drainage on the west side of the road.

Disturbance of this wetland will likely require a Vermont Wetlands permit and an Army Corps of Engineers Vermont General Permit.

2.10.2 Lakes/Ponds/Streams/Rivers

Stantec identified one perennial stream and one ephemeral stream within the project corridor. Freeman Brook flows from east to west through the study area, crossing Brook Road twice. The banks of this stream have been armored in places, particularly near the road crossings. The ephemeral stream drains the wetland described above.

2.10.3 Floodplains

Portions of the study area lie within the 100 year floodway and floodplain for Freeman Brook, and proposed improvements will be susceptible to flooding. These areas are located where the brook crosses under or flows along the roads. Any proposed improvements within the floodplain must not further restrict the flows of Freeman Brook. Fills within the floodplain will need to be evaluated by the Town, the State Stream Alteration Engineer and the Army Corps of Engineers.

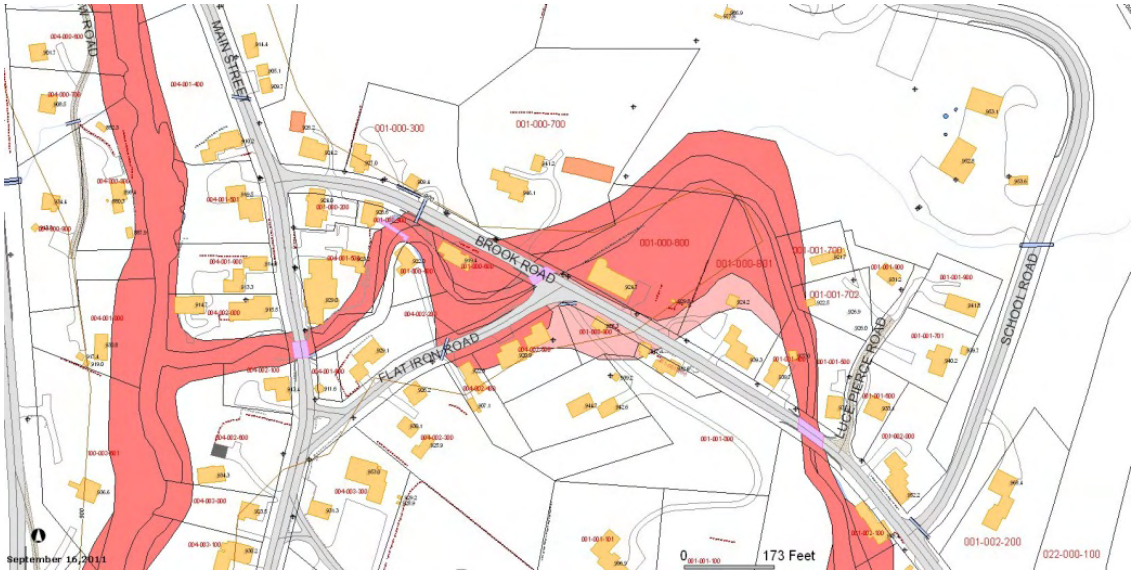

Figure 7 - Floodplains within study area

2.10.4 Endangered Species

No endangered species are known to be present within the project area.

2.10.5 Flora/Fauna

The project area is a relatively narrow corridor along existing roads, with residences and retail stores present. The narrow corridor has limited wildlife habitat value. American robins (*Turdus migratorius)* were observed within the project area during the April 27, 2011 site visit, as were black-capped chickadee (*Poecile atricapillus)*, and Northern cardinal (*Cardinalis cardinalis*). Freeman Brook is stocked with brook trout (*Salvelinus fontinalis*), and fishing in the village is restricted to children.

2.10.6 Stormwater

The Vermont Agency of Natural Resource (ANR) Interest Locator program indicates that the project area is not in an impaired watershed.

Proposed improvements will require a stormwater discharge permit if the new impervious area exceeds 5,000 square feet and the total impervious area within the construction limits exceeds 1 acre.

Proposed improvements will require a Vermont Construction General Permit if the area of disturbance exceeds 1 acre.

2.10.7 Hazardous Wastes

The Vermont Agency of Natural Resource (ANR) Interest Locator program indicates that no hazardous waste sites or facilities are located within the study area.

2.11 Cultural Resources

2.11.1 Historic Resources

An Archeological Resource Assessment (ARA) was completed for the area by Hartgen Archeological Associates, Inc. The Main Street and Brook Road project areas are entirely located within the Warren Village Historic District. The southernmost portion of School Road is also located in this district as well. Historic resources within the project limits include retaining walls, trees, plantings and fences. Impacts to these resources should be avoided if possible.

Materials that fit in with the historic Village are preferred over traditional concrete for new path construction.

A copy of the ARA is contained in the appendix.

2.11.2 Archaeological Resources

The Village of Warren is considered to have archeological sensitivity especially along Brook Road and Main Street. However, along the projects proposed alignment the sensitivity of these areas has decreased because of previous disturbance from road and utility construction.

There are three areas on Main Street and Brook Road that are considered sensitive for precontact resources. These areas are described in the ARA contained in the appendix. Systematic shovel testing during the engineering phase is recommended for these three areas.

2.11.3 Public Lands

No designated state or town conservation zones are present within the project corridor. The project area is located in part within the Warren Village Historic District.

2.11.4 Agricultural Lands

The project area is not used for agriculture. According to the NRCS Web Soil Survey for Washington County, Vermont, the Colton gravelly loamy sand, 0-3% slope soils surrounding the school are considered soils with statewide agricultural significance. Based on the history of land use and field/playground development surrounding the school, it is unlikely that any agricultural use would take place within the narrow undeveloped portion of the project area corridor. Other portions of the school property remain available for use as a kitchen garden or similar small-scale agricultural use.

3.0 Local Concerns Meeting

A Local Concerns Meeting was held at the Warren Municipal Offices on October 25, 2011. The meeting was noticed to the general public. The purpose of the meeting was to present the need for the project and existing conditions within the project area, and solicit input from the public regarding the project. The meeting was a useful step in the data gathering phase and many public comments were insightful. Notes from this meeting are contained in the appendix. The most notable concerns from this meeting included:

- Can the width of the sidewalk be reduced from the standard 5'?
- How far will sidewalk encroach into lawns?
- Will there be enough room to maintain features such as existing retaining walls or gardens in residents' front lawns?
- Will pedestrian bridge cause additional flooding issues?
- Can the road be narrowed further?
- Will sidewalk make road appear wider and accelerate traffic?
- Can the town maintain its character while providing safe pedestrian travel ways?
- Main St. and Brook Road – not many people currently walk in that area
- How will the sidewalks be maintained?

The overwhelming response from the attendees was that although safety improvements for pedestrians are welcome, these improvements need to be planned to result in little to no impact to the historic character of the Village.

4.0 Purpose and Need

The Purpose and Need statement summarizes what the study is intending to accomplish and for what reasons. The Purpose defines the problem to be solved. The Need provides the data to support the Purpose. The Purpose and Need Statement is a fundamental requirement for projects that will pursue federal funding; and sets the stage for developing alternative solutions to the transportation problem.

Working with the Town; and using the input received at the Local Concerns meeting, the following Purpose and Need statement was developed.

4.1 Purpose

Investigate the feasibility of pedestrian connections from the existing sidewalk on Main Street to the Warren School as recommended in the School Travel Plan.

4.2 Need

The project needs are as follows:

- Sidewalk/pedestrian connections. A parent survey conducted as part of *The Warren School Travel Plan* identified the lack of sidewalks or paths to and from the Warren School as the primary concern that is preventing students from walking to school. The next major concern was traffic speed, particularly along Brook Road. Roads are insufficient for pedestrian travel because they are narrow and traffic speeds are generally 8-11 mph above posted speed limits as documented by speed studies conducted by the Central Vermont Regional Planning Commission.
- Retention of Village character. The study area is primarily located within the Warren Village Historic District. Proposed sidewalk/pedestrian connections must result in no adverse impact on the historic resources as identified in the Archeological Resource Assessment; and must be planned to result in little to no impact to the Village character and aesthetic.

5.0 Alternatives

Various alternatives were developed to address the project purpose and need as defined in Section 4.0. The following summarizes the alternatives developed and the recommended alternative.

5.1 Design Criteria

Based on pertinent standards and references, applicable roadway, bicycle and sidewalk design criteria was researched and summarized. These references include the following:

- Vermont Pedestrian and Bicycle Facility Planning and Design Manual
- Vermont State Standards for the Design of Transportation Construction, Reconstruction and Rehabilitation on Freeways, Roadways and Street (herein referred to as the Vermont State Standards).
- AASHTO Guide for the Development of Bicycle Facilities.

The design criteria serves as the basis for developing alternatives and is contained in the appendix.

According to Vermont State Standards, the minimum allowable width for shoulders is 2' and a travel lane is 9' along Main Street, Brook Road and School Road. According to the Vermont Pedestrian and Bicycle Facility Planning and Design Manual, the minimum sidewalk width is 5'. The sidewalk width may be reduced to 4' at point obstructions such as utility poles or retaining walls or if 5'x5' passing areas are provided at intervals of no more than 200'. This is essential for meeting Americans with Disabilities Act (ADA) requirements. All surfaces must be stable, firm and slip-resistant as required by the ADA. Deviations from these standards will likely disqualify proposed improvements from receiving Federal or State funding through VTrans.

5.2 Alternatives Considered

Alternatives to make pedestrian connections were investigated for each of the three roadways within the study area. The study area was broken into three segments so that improvements could be evaluated separately and phased in depending on available funding. These alternatives are as follows:

Segment 1 - Main Street

- Alternative 1A – Do nothing
- Alternative 1B – 5' path on west side of Main St.

Segment 2 – Brook Road

- Alternative 2A – Do nothing
- Alternative 2B – Restripe roadway
- Alternative 2C – 5' path on north side of Brook Road
- Alternative 2D – 5' path on south side of Brook Road

Segment 3 – School Road

- Alternative 3A – Do nothing
- Alternative 3B – 10’ path on east side of School Road
- Alternative 3C – 10’ path on west side of School Road

These alternatives represent potential improvements that minimize impacts to the historic resources within the study area. Other alternatives representing greater safety improvements, such as providing more separation via a green strip between the road and the path along Brook Road, were not investigated due to the potential impacts on buildings and historic resources within the study area. The following summarizes improvements, potential benefits and impacts/considerations for each alternative.

5.2.1 Segment 1 – Main Street

Alternative 1A – Do Nothing

This alternative proposes to do nothing along Main Street. This alternative has no impact on historic resources, however does not address concerns about lack of pedestrian facilities. Pedestrians on Main Street will continue to use the roadway. This alternative is not consistent with the recommendations of the School Travel Plan.

Alternative 1B – 5’ Path on West Side of Main Street

Figures 8-10 graphically depict Alternative 1B improvements. This alternative consists of constructing a 5’ wide path on the west side of Main Street from the termination of the existing Main Street sidewalk to the Brook Rd/Main St intersection. The path would be separated from the roadway by either existing historic fencing or a grass buffer strip of varying width. Existing roadway widths and on-street parking will not be impacted. This alternative will require temporary and/or permanent easements from #226 and #242 Main Street to install and maintain the sidewalk. The existing picket and post-and-chain fences are recommended to be removed, refurbished and reset or replaced in-kind in their existing location to avoid damage during construction.

Pedestrians walking by the Warren Store can either elect to use the existing porch in front of the store, or walk behind the vehicles as often occurs today. Pavement markings or a textured/patterned driveway crossing behind the vehicles can be considered for pedestrians, but is not necessary.

The path surface must be stable, firm and slip-resistant as required by the Americans with Disabilities Act (ADA). Path materials should be consistent with the historic elements of the Village.

This alternative has minimal impact to historic resources and provides a dedicated sidewalk separated from motor vehicle traffic. The improvements address concerns about the lack of pedestrian facilities; and are consistent with the recommendations of the School Travel Plan.

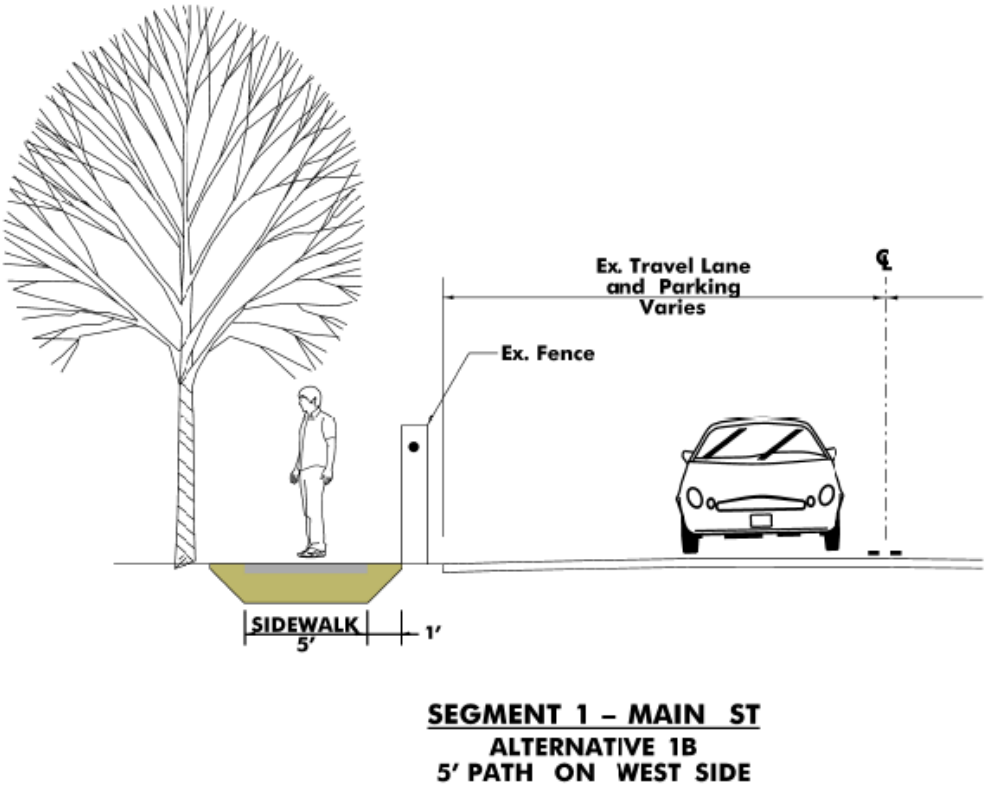

Figure 8 - Typical Section for 5' path on west side of Main Street

Figure 9 - Photosimulation showing 5' path on the west side of Main Street. Man and child shown in picture are walking toward the Warren Store.

Figure 10 - Photosimulation showing 5' path on the west side of Main Street. The Warren Store is the 2nd building on the right and the Pitcher Inn is shown on the left.

5.2.2 Segment 2 – Brook Road

Alternative 2A – Do Nothing

This alternative proposes to do nothing along Brook Road. This alternative has no impact on historic resources, however does not address concerns about lack of pedestrian facilities. Pedestrians on Brook Road will continue to use the roadway. This alternative is not consistent with the recommendations of the School Travel Plan.

Alternative 2B – Restripe the Roadway

Figures 11 and12 graphically depict Alternative 2B improvements. This alternative is consistent with the recommendations of the 2004 "*The Warren Village Pedestrian Enhancement Plan"*. Improvements consist of maintaining the existing pavement width, shifting the roadway centerline 1' to the south, and painting white lines to delineate 9' vehicle travel lanes. This will leave a 2' paved shoulder on the south side of the road and a 4' shoulder on the north side of the road. An option to this alternative would be to widen the north side paved shoulder by 1' to provide a 5' shoulder on this side of the road.

The existing bridge near the intersection with School Road is 24' wide. The proposed restriping can be accomplished within this width. Another option would be to restrict the bridge to one-way alternating traffic. This option would provide for additional shoulder width for the pedestrians and slow vehicle speeds along Brook Road as they approach the bridge.

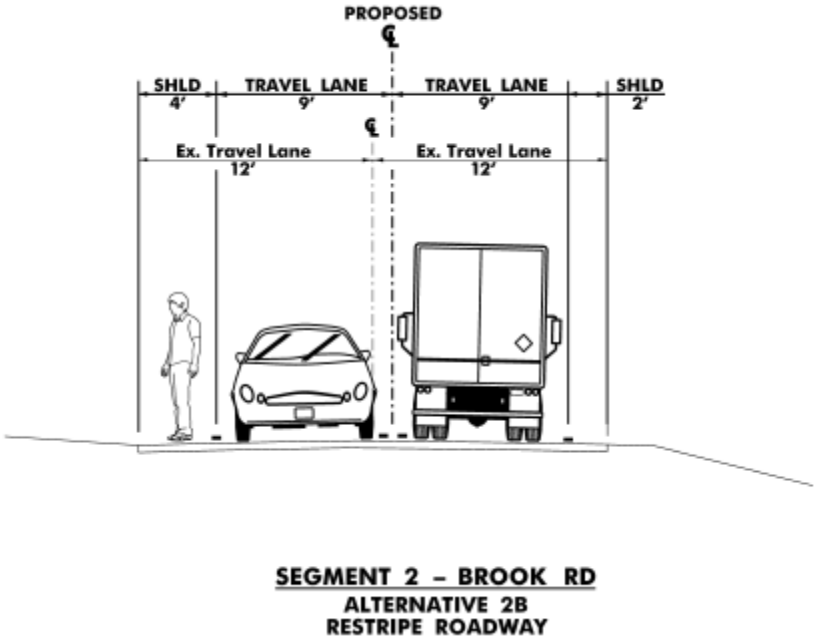

Figure 11 - Typical Section for restriping Brook Road

Figure 12 - Photosimulation showing restriping along Brook Road. #141 Brook Road is on the left. Parent and child shown in picture are walking toward School Road.

Benefits to this alternative include the following:

- A wider paved shoulder for pedestrians to walk-on
- Potential for traffic calming with narrower travel lanes
- Low-cost solution that can be re-striped back to existing conditions if not successful.
- No impact to historic or landscape features located alongside roadway

Considerations for this alternative include the following:

- May not lead to desired increase in pedestrian travel because pedestrians/parents may still perceive walking along the road to be unsafe.
- May lead to pedestrians walking in the same direction of traffic.
- Shoulder unlikely to be used if striping is not highly visible. Road will need to be restriped regularly each year, after last snowfall.
- Pavement markings will be obscured when snow is on the road.
- Shoulder width on the bridge will be no wider than 4' unless bridge is restricted to one-way alternating traffic.

Alternative 2C - 5' Sidewalk on North Side of Brook Road

Figures 13-15 graphically depict Alternative 2C improvements. This alternative consists of reducing the roadway pavement width by restriping the road to have 9' travel lanes and 2' shoulders, and constructing granite curb along the north side of Brook Road with a 5' wide path immediately adjacent to the curb. With the addition of the curb, an underground drainage system consisting of inlets and pipes will need to be installed along the curb to remove water from the road.

Options to cross the bridge near School Road include restriping the roadway to provide a 4' shoulder on the north side or restricting the bridge to one-way alternating traffic. A separated pedestrian bridge or a widened bridge to accommodate pedestrians will have significant impact to the existing driveways near each approach to the bridge, and therefore is not feasible.

The path surface must be stable, firm and slip-resistant as required by the Americans with Disabilities Act (ADA). Path materials should be consistent with the historic elements of the Village.

While this alternative has temporary impacts to historic resources, these impacts are not considered adverse and will be mitigated. To minimize impacts to historic features, the following mitigation is recommended:

- Careful cutting of tree roots and limited excavation in front of #15 Brook Road to avoid impact to trees.
- Re-build stairs and path in front of #95 Brook Road to dovetail into path.
- Re-build garden in-kind at frontage of #141 Brook Road to make room for path. The re-build is necessary to make room for the path.
- Re-build garden in-kind at frontage of #189 Brook Road to make room for path. The re-build is necessary to make room for the path.
- Re-build stone wall in front of #251 Brook Road. The re-build is necessary to make room for the path.

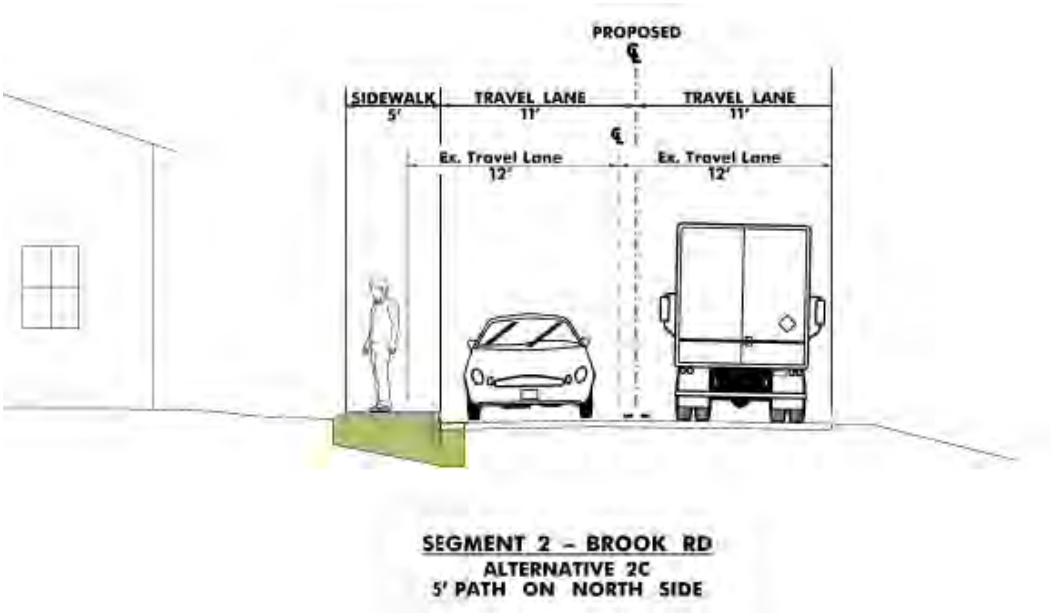

Figure 13 - Typical Section for 5' path on north side of Brook Road

Figure 14 - Photosimulation showing 5' path on the north side of Brook Road. #141 Brook Road is on the left. Children shown in picture are walking toward Main Street.

Figure 15 - Photosimulation showing 5' path on the north side of Brook Road. #33 Brook Road is on the left. Parent and child shown in picture are walking toward School Road.

Benefits to this alternative include the following:

- Provides a dedicated sidewalk separated from motor vehicle traffic that addresses concerns about the lack of pedestrian facilities from Main Street to School Road.
- Does not rely on pavement markings to define the path.
- Potential for traffic calming with narrower travel lanes and curb along one side of the road.
- All improvements are within the Town-owned right-of-way for Brook Road.

The main considerations for this alternative include the following:

- The installation of a 5’ sidewalk may be perceived by residents as significantly altering the character of the Village.
- The sidewalk will need to be plowed in the winter time using equipment not currently owned by the Town. One option may be to pool resources with another nearby town to contract snowplowing services.

Alternative 2D – Sidewalk on South Side of Brook Road

This alternative consists of reducing the roadway pavement width by restriping the road to have 9’ travel lanes and 2’ shoulders, and constructing granite curb along the south side of Brook Road with a 5’ wide path immediately adjacent to the curb. With the addition of the curb, an underground drainage system consisting of inlets and pipes will need to be installed along the curb to remove water from the road.

Options to cross the bridge near School Road include restriping the roadway to provide a 4’ shoulder on the north side or restricting the bridge to one-way alternating traffic. A separated

pedestrian bridge or a widened bridge to accommodate pedestrians will have significant impact to the existing driveways near each approach to the bridge, and therefore is not feasible.

The path surface must be stable, firm and slip-resistant as required by the Americans with Disabilities Act (ADA). Path materials should be consistent with the historic elements of the Village.

Benefits to this alternative include the following:

- Provides a dedicated sidewalk separated from motor vehicle traffic that addresses concerns about the lack of pedestrian facilities from Main Street to School Road.
- Does not rely on pavement markings to define the path.
- Potential for traffic calming with narrower travel lanes and curb along one side of the road.
- All improvements are within the Town-owned right-of-way for Brook Road.

The main considerations for this alternative include the following:

- The installation of a 5' sidewalk may be perceived by residents as significantly altering the character of the Village.
- Buildings along the south side of Brook Road (#247 Main St. and #40, #166, #264 Brook Road) are located very close to the roadway making it difficult to install a path in some locations.
- A retaining wall constructed within the mapped floodway will be required adjacent to the brook. A retaining wall likely restricts the flow of the brook during larger storms. This alternative will not likely be accepted by Federal and State permitting agencies considering the path can be built on the other side of the road without restricting flow of the brook.
- This option requires a crosswalk at Flat Iron Road and Brook Road at the School Road intersection.
- The sidewalk will need to be plowed in the winter time using equipment not currently owned by the Town. One option may be to pool resources with another nearby town to contract snowplowing services.

5.2.3 Segment 3 – School Road

Alternative 3A – Do Nothing

This alternative proposes to do nothing along School Road. This alternative does not address concerns about lack of pedestrian facilities. Pedestrians on School Road will continue to use the 4' paved shoulder along the east side of the road. This alternative does not meet the purpose and need of the project.

Alternative 3B – 10' shared-use path along east side of School Road

Figures 16-19 graphically depict Alternative 3B. This alternative consists of constructing a 10' wide asphalt path on the east side of School Road from Brook Road up to the Warren School. The path is proposed to be separated from the roadway by a 5' vegetated buffer strip. To minimize impacts to the property at the north east corner of the Brook Road and School Road intersection, an option is to construct the path immediately adjacent to the road with a wood guardrail for separation between the path and the road.

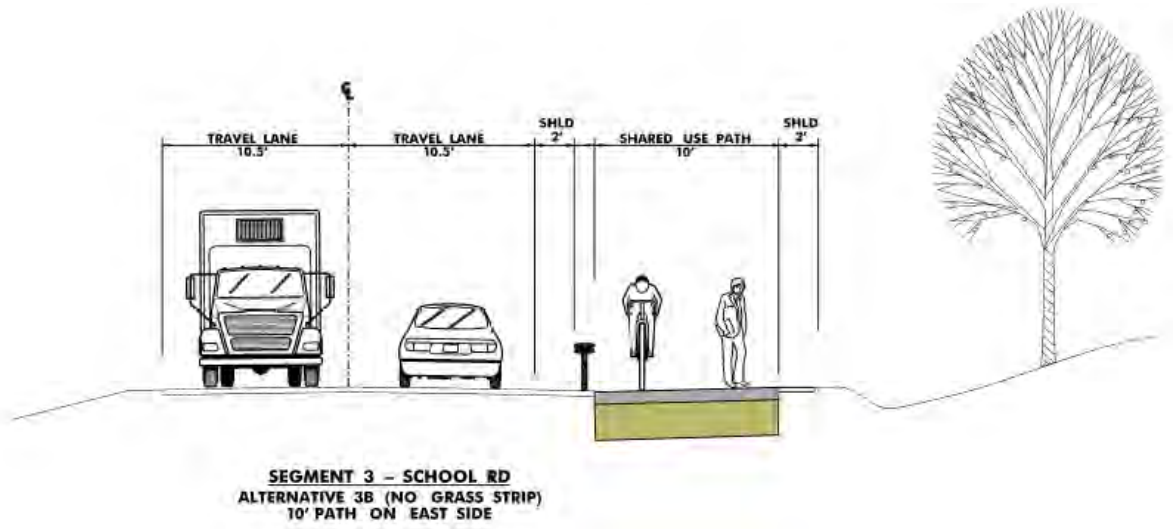

Figure 16 - Typical section for 10' asphalt path immediately adjacent to School Road

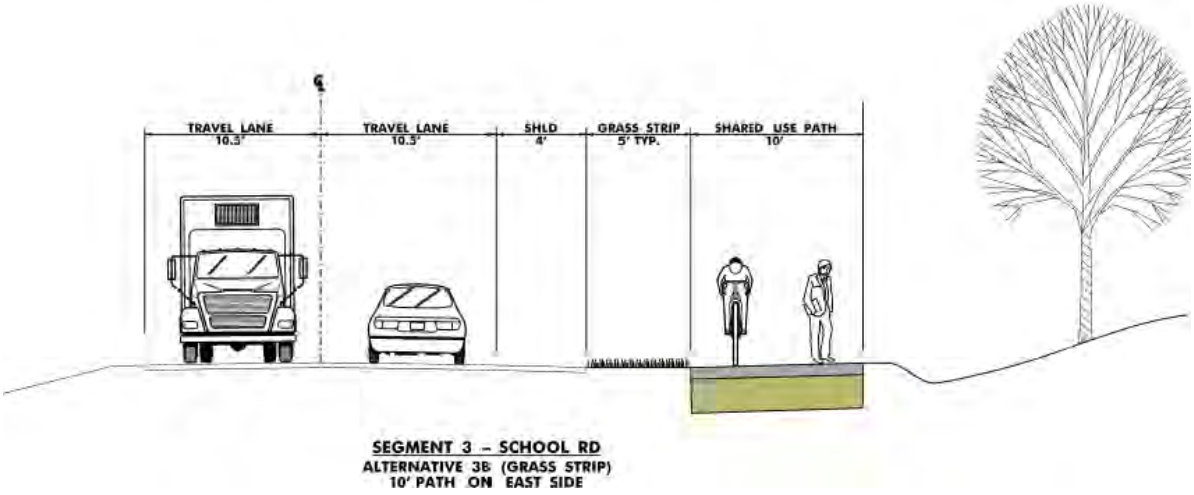

Figure 17 - Typical section for 10' asphalt path separated from School Road by 5' grass strip

Figure 18 – Photosimulation showing 10'asphalt path on east side of School Road. Parent and child are walking toward the school.

Figure 19 - Photosimulation showing 10'asphalt path on east side of School Road. Wood guardrail separates path from the road. Parent and child are walking toward Brook Road.

Benefits to this alternative include the following:

- Provides a dedicated path separated from motor vehicle traffic that addresses concerns about the lack of pedestrian facilities from Main Street to the Warren School consistent with the recommendations of the School Travel Plan.
- 10’ wide path provides for additional recreational opportunities.
- No historic impacts.
- Path can be designed to minimize property impacts.
- Does not rely on pavement markings to define the path.
- All improvements are located within the Town-owned property.

The main considerations for this alternative include the following:

- The sidewalk will need to be plowed in the winter time using equipment not currently owned by the Town. One option may be to pool resources with another nearby town to contract snowplowing services.
- The existing culvert under School Road will need to be extended to construct the path.

Alternative 3C – 10’ Shared-use path along west side of School Road

This alternative consists of constructing a 10’ wide asphalt path on the west side of School Road from Brook Road up to the Warren School. The path is proposed to be separated from the roadway by a 5’ vegetated buffer strip.

Benefits to this alternative include the following:

- Provides a dedicated path separated from motor vehicle traffic that addresses concerns about the lack of pedestrian facilities from Main Street to the Warren School consistent with the recommendations of the School Travel Plan.
- 10’ wide path provides for additional recreational opportunities.
- No historic impacts.
- Does not rely on pavement markings to define the path.
- All improvements are located within the Town-owned property.

The main considerations for this alternative include the following:

- The path crosses the driveway of the Public Works building resulting in potential conflicts with pedestrians/bicyclists with large trucks.
- The sidewalk will need to be plowed in the winter time using equipment not currently owned by the Town. One option may be to pool resources with another nearby town to contract snowplowing services.
- The existing culvert under School Road will need to be extended to construct the path.

5.3 Evaluation Matrix

An Evaluation Matrix was prepared to summarize the alternatives and compare various aspects of each alternative such as purpose & need, safety, and environmental impacts. The matrix is shown in Figure 20.

ROADWAY SEGMENT	Main Street		Brook Road				School Road		
ALTERNATIVE #	**1A**	**1B**	**2A**	**2B**	**2C**	**2D**	**3A**	**3B**	**3C**
DESCRIPTION	**Do Nothing**	**Sidewalk on West Side**	**Do Nothing**	**Restripe Roadway**	**Sidewalk on North Side**	**Sidewalk on South Side**	**Do Nothing**	**Path on East Side**	**Path on West Side**
PURPOSE AND NEED									
Provide sidewalk/pedestrian connections from Main Street to the Warren School	No	Yes	No	Minimal	Yes	Yes	No	Yes	Yes
Retain Village character and aesthetics	Yes	Yes	Yes	Yes	Possibly	Possibly	Yes	Yes	Yes
IMPACTS									
Utility Impacts (Water/Sewer/Electrical/Communications)	None	None	None	None	None	None	None	None	None
ROW Impacts									
Permanent Rights	None	2	None	None	None	None	None	None	None
Temporary Rights	None	2	None	None	9	6	None	1	1
Class III Wetland Impacts	None	None	None	None	None	None	None	Possible	None
Historic Property Impacts	None	None	None	Temporary	Temporary	Temporary	None	None	None
Archeological Impacts	None	Possible	None	None	Possible	Possible	None	None	None
SAFETY									
Provides Direct Access for Adjoining Property Owners	No	Yes	No	No	Yes	Yes	No	Yes	Yes
Number of Locations the Path Crosses Roadways (Roadway Crossings)	None	1 (Main St)	None	None	1 (School Rd)	2 (Flat Iron & Brook Rd)	None	None	1 (School Road)
Number of Locations the Path Crosses Driveways	None	2	None	11	11	6	0	0	1
PERMITS									
ACT 250	No	No	No	No	No	No	No	No	No
NEPA	No	Yes	No	No	Yes	Yes	No	Yes	Yes
404 COE Wetlands (< 3,000 SF Impact - Category 1: Non-Reporting)	No	No	No	No	No	No	No	Possible	No
ANR Wetlands	No	No	No	No	No	No	No	Possible	No
Stream Alteration	No	No	No	No	No	No	No	No	No
Stormwater Discharge	No	No	No	No	No	No	No	No	No
Construction General	No	No	No	No	No	No	No	No	No
Archaeology - Phase 1B	No	Yes	No	No	Yes	Yes	No	No	No
Section 106 / Historic	No	Yes	No	No	Yes	Yes	No	No	No
Prime Agricultural Soils	No	No	No	No	No	No	No	No	No
Rare, Threatened, Endangered Species	No	No	No	No	No	No	No	No	No

Figure 20 - Alternatives Evaluation Matrix

5.4 Recommended Improvements

Based on previous work completed by the Town in the previous studies, and the need to balance pedestrian safety with the historic character and aesthetics of the Village, the following improvements are recommended.

Main Street:

Alternative 1B – Construct a 5' wide path on west side of Main Street. This alternative best meets the purpose and need of the project by improving pedestrian access to Brook Road and results in no adverse impacts to the character or aesthetic of the Village. Path materials should be consistent with the historic elements of the Village.

Brook Road:

Alternative 2C – Construct a 5' wide path on north side of Brook Road. This alternative best meets the need to provide pedestrian access from Main Street to School Road. Path materials should be consistent with the historic elements of the Village. Impacts to historic features such as retaining walls, gardens, walkways and planters should be mitigated in-kind.

If impacts to the character of the Village are perceived to be too great, then Alternative 2B – Restripe Roadway is recommended at a minimum.

For either alternative, it is recommended that a trial run for one-way alternating traffic on the bridge be conducted to determine if a permanent one-way alternating traffic pattern leads to acceptable traffic flows and reduction in vehicular speeds. If the trial is successful, it is recommended the Town pursue a permanent one-way traffic pattern across the bridge to provide greater width and slower traffic speeds for pedestrians crossing the bridge. Otherwise, pavement markings should be applied to provide for a 4' shoulder on the north side of the bridge.

School Road:

Alternative 3B – Construct a 10' wide asphalt path on east side of School Road. This alternative best provides pedestrian access from Brook Road to the Warren School and results in no adverse impacts to the character or aesthetic of the Village.

5.5 Alternatives Presentation Meeting

A meeting with Town residents and Selectboard was held on December 11, 2012. The purpose of the meeting was to review alternatives developed (Section 5.2), present the recommended improvements (Section 5.4), and receive public and Selectboard input on the recommendations. Input received at this meeting was used to finalize the recommendations for improvements as shown in Section 6. Notes from this meeting are contained in the appendix. The following summarizes the key comments received at the meeting regarding the recommendations for improvements.

- Instead of specifying a path material in the recommendations, suggest recommending that the path be constructed of a material that is consistent with the historic elements of the Village.

- A 4' path along School Road with 5'x5' passing areas installed a minimum of 200' apart may be more desirable to minimize impact to front lawns while meeting ADA requirements.

- Improvements along Brook Road need to minimize impact to front lawns even though the recommended improvements would be entirely located within the Town-owned right-of-way.

- A separated pedestrian bridge or a wider bridge on Brook Road near the intersection with School Road is not a viable option as it would eliminate driveway access to the homes located on either end of the bridge.

- Consider a 5’ path along the east side of School Road instead of a 10’ wide path. Bicyclists should be separated from pedestrians given the steep grade of School Road and the potential for high bicycle speeds. Bicyclists should use the road.

- Pedestrian improvements should be continuous along Main St, Brook Rd and School Rd. but also need to be designed to be visually appealing.

6.0 Final Recommendations

6.1 Recommendations

The following pedestrian improvements are recommended. These improvements are the recommendations contained in Section 5.4 of the report updated based on the input received at the Alternatives Presentation Meeting (Section 5.5).

Main Street:

Alternative 1B – Construct a 5' wide path on west side of Main Street. This alternative best meets the purpose and need of the project by improving pedestrian access to Brook Road and results in no adverse impacts to the character or aesthetic of the Village. Path materials should be consistent with the historic elements of the Village. Impacts to historic features such as the post and chain fence and the wood picket fence should be mitigated in-kind.

Brook Road:

Short Term: Alternative 2B – Restripe Roadway. The roadway restriping can be completed in Spring 2013 at a minor cost whilst pursuit of engineering/construction funding for a long-term improvement. Restriping the road to provide a 4' shoulder on one-side of the road may encourage more pedestrians to use the road.

It is recommended that a trial run for one-way alternating traffic on the bridge be conducted to determine if a permanent one-way alternating traffic pattern leads to acceptable traffic flows and reduction in vehicular speeds. Cones or temporary traffic barriers and signage can be installed at a low-cost to conduct the trial.

If the trial is successful, it is recommended the Town pursue a permanent one-way traffic pattern across the bridge as part of the long-term improvements to provide greater width for pedestrians and slow traffic speeds. Otherwise, pavement markings delineating a 4' shoulder on the north side of the bridge are recommended to be applied.

Long Term: Alternative 2C – Construct a 5' wide path on north side of Brook Road. This alternative best meets the need to provide pedestrian access from Main Street to School Road. Path materials should be consistent with the historic elements of the Village. Impacts to historic features such as retaining walls, gardens, walkways and planters should be mitigated in-kind.

A 5' wide path is recommended for ease of maintenance. At a minimum, the path must be 4' wide with 5'x5' passing areas spaced no more than 200' apart to meet ADA requirements. A 4' wide path will make maintenance of the path more difficult.

School Road:

Modification to Alternative 3B – Construct a 5' wide path on the east side of School Road. This alternative best provides pedestrian access from Brook Road to the Warren School and results in no adverse impacts to the character or aesthetic of the Village. The 5' wide path is recommended to be separated from the road by a 5' wide grass buffer strip. The path can be widened to 10' in the future to accommodate bicyclists if this becomes a need for the Town.

6.2 Cost Estimates & Funding Sources

Estimated costs to design and construct the recommended improvements are summarized in Table 2. Costs shown include costs for preliminary engineering, right-of-way, construction and construction inspection. A detailed cost summary is included in the appendix.

Segment	Main Street	Brook Road	School Road
Path Length	200 feet	1400 feet	1700 feet
Construction	$30,000	$320,000	$150,000
Preliminary Engineering	$25,000	$60,000	$40,000
Construction Engineering	$10,000	$50,000	$30,000
Municipal Project Management	$5,000	$30,000	$20,000
Legal Fees	$10,000	$25,000	$5,000
Right-of-Way	$10,000	$15,000	$5,000
Total	**$90,000**	**$500,000**	**$250,000**

Table 2 - Estimated Costs for Recommended Improvements

The recommended improvements can be funded through a Safe Routes to School Grant or Bicycle and Pedestrian Enhancement Grant. These funding sources typically have defined limits. The final recommendations and cost estimates were divided into the three roadway segments so that improvements can be phased in over time.

The Town will be obligated to maintain the paths year round if State and Federal funds are used for construction. Estimated cost for a sidewalk plow is $130,000. Annual maintenance costs, such as labor and equipment repairs, will need to be estimated and budgeted for by the Town.

6.3 Next Steps

The following summarizes next steps the Town can take to move the recommended improvements into the engineering and construction phases.

- Review and accept/reject recommendations for improvements – to be completed by Town Selectboard
- Budget for and complete short-term recommendations along Brook Road if accepted
- Prioritize other accepted improvements along School Road, Main Street and Brook Road
- Apply for grant funding based on prioritization. Budget for Town match required in grant applications.
- Solicit proposals for engineering services to develop bid plans and documents for long-term improvement(s). Proposals should include the following specialty work:
    - Phase 1B Archeological Study (not required for School Road)
    - A Landscape Architect specializing in historic Village improvements to assist with materials selection, path aesthetics and coordination with State Historic Preservation Officer.
    - Permitting services
    - Right-of-Way plan and draft easement documents development
- Develop bid plans and documents for long-term improvements
- Advertise project(s) for bid, award contract and begin construction

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Appendices

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Appendix A

Central Vermont Regional Planning Commission
29 Main Street, Suite 4
Montpelier, VT 05602
(802) 229-0389

Site Code: 2308517263
Station ID: surface- paved
TH-1, Brook Rd- Warren VT
178 ft E of School St intersection
Latitude: 0' 0.000 Undefined

eastbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/11/09	1	1	1	1	1	1	0	1	0	0	0	0	0	0	7	27-36	3
01:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	*	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	27-36	2
05:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
06:00	0	0	1	2	3	4	0	0	0	0	0	0	0	0	10	29-38	8
07:00	6	1	1	7	5	4	1	0	0	0	0	0	0	0	25	25-34	12
08:00	2	1	7	12	21	7	0	1	0	0	0	0	0	0	51	26-35	33
09:00	4	0	6	15	22	3	1	0	0	0	0	0	0	0	51	26-35	37
10:00	4	1	3	14	18	2	0	1	0	0	0	0	0	0	43	26-35	32
11:00	1	0	4	12	20	7	1	0	0	0	0	0	0	0	45	26-35	32
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	19	4	23	64	92	29	3	3	0	0	0	0	0	0	237		
Percent	8.0%	1.7%	9.7%	27.0%	38.8%	12.2%	1.3%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	00:00	08:00	09:00	09:00	08:00	07:00	00:00							08:00		
Vol.	6	1	7	15	22	7	1	1							51		
PM Peak Vol.																	
Total	638	109	626	1884	2266	741	104	12	3	0	0	0	0	0	6383		
Percent	10.0%	1.7%	9.8%	29.5%	35.5%	11.6%	1.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile :	22 MPH
50th Percentile :	30 MPH
85th Percentile :	35 MPH
95th Percentile :	39 MPH

Stats

10 MPH Pace Speed :	26-35 MPH
Number in Pace :	4150
Percent in Pace :	65.0%
Number of Vehicles > 25 MPH :	5010
Percent of Vehicles > 25 MPH :	78.5%
Mean Speed(Average) :	29 MPH

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eastbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/10/09	0	0	0	1	1	1	0	0	0	0	0	0	0	0	3	27-36	3
01:00	0	0	0	2	2	1	0	0	0	0	0	0	0	0	5	27-36	5
02:00	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3	*	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	27-36	2
05:00	2	0	0	2	2	0	0	0	0	0	0	0	0	0	6	23-32	4
06:00	0	0	0	1	6	0	1	0	0	0	0	0	0	0	8	26-35	7
07:00	3	0	0	5	5	5	1	0	0	0	0	0	0	0	19	26-35	10
08:00	4	1	4	11	17	2	0	0	0	0	0	0	0	0	39	26-35	28
09:00	5	1	9	15	22	4	1	0	0	0	0	0	0	0	57	26-35	37
10:00	5	3	8	26	15	7	0	0	0	0	0	0	0	0	64	26-35	41
11:00	2	2	3	20	21	8	1	0	0	0	0	0	0	0	57	26-35	41
12 PM	8	4	10	20	15	6	0	1	0	0	0	0	0	0	64	26-35	35
13:00	6	1	3	15	25	9	0	0	0	0	0	0	0	0	59	26-35	40
14:00	11	2	3	26	31	7	0	0	0	0	0	0	0	0	80	26-35	57
15:00	9	3	8	20	27	9	3	0	0	0	0	0	0	0	79	26-35	47
16:00	5	0	12	23	28	9	1	0	0	0	0	0	0	0	78	26-35	51
17:00	6	1	8	22	25	9	1	0	0	0	0	0	0	0	72	26-35	47
18:00	6	1	6	9	16	11	0	0	0	0	0	0	0	0	49	27-36	27
19:00	1	1	3	12	13	3	2	0	0	0	0	0	0	0	35	26-35	25
20:00	3	1	8	6	10	0	1	0	0	0	0	0	0	0	29	26-35	16
21:00	2	0	3	7	2	2	0	0	0	0	0	0	0	0	16	21-30	10
22:00	1	0	0	2	5	1	0	0	0	0	0	0	0	0	9	27-36	8
23:00	0	0	1	3	3	2	0	0	0	0	0	0	0	0	9	28-37	8
Total	81	22	89	248	292	97	12	1	0	0	0	0	0	0	842		
Percent	9.6%	2.6%	10.6%	29.5%	34.7%	11.5%	1.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	09:00	10:00	09:00	10:00	09:00	11:00	06:00								10:00		
Vol.	5	3	9	26	22	8	1								64		
PM Peak	14:00	12:00	16:00	14:00	14:00	18:00	15:00	12:00							14:00		
Vol.	11	4	12	26	31	11	3	1							80		

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eastbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/09/09	0	0	0	5	4	1	0	0	0	0	0	0	0	0	10	25-34	9
01:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	27-36	2
02:00	0	0	0	2	1	0	0	0	0	0	0	0	0	0	3	22-31	3
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	23-32	2
06:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
07:00	1	0	0	7	3	1	0	0	0	0	0	0	0	0	12	24-33	10
08:00	2	0	0	8	10	4	0	1	0	0	0	0	0	0	25	26-35	18
09:00	2	0	1	13	14	5	1	0	0	0	0	0	0	0	36	26-35	27
10:00	4	2	5	11	10	10	1	0	0	0	0	0	0	0	43	26-35	21
11:00	5	1	2	21	26	5	1	1	0	0	0	0	0	0	62	26-35	47
12 PM	4	1	6	14	19	4	2	0	0	0	0	0	0	0	50	26-35	33
13:00	3	0	2	22	21	8	3	0	0	0	0	0	0	0	59	26-35	43
14:00	4	0	4	21	30	7	2	0	0	0	0	0	0	0	68	26-35	51
15:00	1	1	5	23	27	5	0	0	0	0	0	0	0	0	62	26-35	50
16:00	1	1	6	14	28	6	0	0	0	0	0	0	0	0	56	26-35	42
17:00	5	2	9	16	11	6	4	0	0	0	0	0	0	0	53	22-31	27
18:00	3	0	4	7	19	9	1	0	0	0	0	0	0	0	43	29-38	29
19:00	0	0	1	7	12	5	0	0	0	0	0	0	0	0	25	26-35	19
20:00	1	0	1	8	11	1	0	0	0	0	0	0	0	0	22	26-35	19
21:00	4	1	2	7	9	3	0	0	0	0	0	0	0	0	26	25-34	16
22:00	2	0	2	5	7	4	0	0	0	0	0	0	0	0	20	24-33	12
23:00	2	0	0	0	2	2	0	0	0	0	0	0	0	0	6	28-37	4
Total	44	9	50	212	267	87	15	2	0	0	0	0	0	0	686		
Percent	6.4%	1.3%	7.3%	30.9%	38.9%	12.7%	2.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	10:00	10:00	11:00	11:00	10:00	09:00	08:00							11:00		
Vol.	5	2	5	21	26	10	1	1							62		
PM Peak	17:00	17:00	17:00	15:00	14:00	18:00	17:00								14:00		
Vol.	5	2	9	23	30	9	4								68		

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Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/08/09	2	0	1	3	4	0	0	0	0	0	0	0	0	0	10	25-34	8
01:00	0	0	1	1	4	2	0	0	0	0	0	0	0	0	8	28-37	7
02:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	22-31	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	27-36	1
05:00	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2	32-41	2
06:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	27-36	1
07:00	1	0	1	4	2	3	**2**	0	0	0	0	0	0	0	13	33-42	7
08:00	1	**1**	2	9	8	**8**	0	0	0	0	0	0	0	0	29	26-35	17
09:00	1	0	3	14	20	2	0	0	0	0	0	0	0	0	40	26-35	34
10:00	1	0	**5**	**15**	**26**	6	0	**1**	0	0	0	0	0	0	54	26-35	41
11:00	**8**	0	5	15	21	6	2	0	0	0	0	0	0	0	**57**	26-35	36
12 PM	8	**1**	4	9	24	8	1	0	0	0	0	0	0	0	55	27-36	34
13:00	6	**3**	**8**	19	**29**	11	0	0	0	0	0	0	0	0	**76**	26-35	48
14:00	7	**1**	8	**22**	26	6	0	0	0	0	0	0	0	0	70	26-35	48
15:00	5	0	3	20	17	**5**	**1**	0	0	0	0	0	0	0	51	26-35	37
16:00	**10**	0	3	17	28	8	1	0	0	0	0	0	0	0	67	26-35	45
17:00	6	1	3	11	25	**13**	0	0	0	0	0	0	0	0	59	29-38	39
18:00	5	1	3	17	18	5	1	0	0	0	0	0	0	0	50	26-35	35
19:00	3	0	5	11	11	2	0	0	0	0	0	0	0	0	32	26-35	22
20:00	3	0	4	12	7	3	1	0	0	0	0	0	0	0	30	23-32	19
21:00	1	0	3	16	12	2	**2**	0	0	0	0	0	0	0	36	26-35	28
22:00	1	0	0	2	6	1	1	0	0	0	0	0	0	0	11	26-35	8
23:00	1	0	2	8	6	3	0	**1**	0	0	0	0	0	0	21	24-33	14
Total	70	8	64	226	295	97	13	2	0	0	0	0	0	0	775		
Percent	9.0%	1.0%	8.3%	29.2%	38.1%	12.5%	1.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	08:00	10:00	10:00	10:00	08:00	07:00	10:00							11:00		
Vol.	8	1	5	15	26	8	2	1							57		
PM Peak	16:00	13:00	13:00	14:00	13:00	17:00	21:00	23:00							13:00		
Vol.	10	3	8	22	29	13	2	1							76		

Central Vermont Regional Planning Commission
29 Main Street, Suite 4
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(802) 229-0389

Site Code: 2308517263
Station ID: surface- paved
TH-1, Brook Rd- Warren VT
178 ft E of School St intersection
Latitude: 0' 0.000 Undefined

eastbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/07/09	3	0	0	2	4	0	0	0	0	0	0	0	0	0	9	25-34	6
01:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
02:00	0	0	0	1	1	0	1	0	0	0	0	0	0	0	3	22-31	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
05:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	32-41	1
06:00	2	0	2	5	2	1	0	0	0	0	0	0	0	0	12	23-32	9
07:00	2	0	4	8	8	5	0	0	0	0	0	0	0	0	27	24-33	16
08:00	1	0	1	15	12	7	0	0	0	0	0	0	0	0	36	26-35	27
09:00	1	0	**10**	**19**	10	4	1	0	0	0	0	0	0	0	45	21-30	29
10:00	5	**1**	3	12	24	3	0	0	0	0	0	0	0	0	48	26-35	36
11:00	**8**	0	4	13	**29**	**9**	**3**	0	0	0	0	0	0	0	**66**	26-35	42
12 PM	**12**	**3**	5	12	19	5	1	0	0	0	0	0	0	0	57	26-35	31
13:00	5	0	3	**23**	26	9	1	0	0	0	0	0	0	0	67	26-35	49
14:00	8	2	5	17	24	**13**	**2**	0	0	0	0	0	0	0	**71**	26-35	41
15:00	9	0	**7**	18	24	9	1	0	0	0	0	0	0	0	68	26-35	42
16:00	**11**	0	5	19	22	6	0	0	0	0	0	0	0	0	63	26-35	41
17:00	8	1	4	11	**36**	9	0	0	0	0	0	0	0	0	69	26-35	47
18:00	9	1	3	11	13	3	0	0	0	0	0	0	0	0	40	26-35	24
19:00	4	0	3	13	20	5	1	0	0	0	0	0	0	0	46	26-35	33
20:00	2	0	4	15	12	2	0	0	0	0	0	0	0	0	35	26-35	27
21:00	3	0	3	8	10	3	0	0	0	0	0	0	0	0	27	26-35	18
22:00	1	0	1	9	4	2	0	0	0	0	0	0	0	0	17	25-34	14
23:00	3	0	2	1	8	3	0	0	0	0	0	0	0	0	17	29-38	12
Total	97	8	69	232	310	98	12	0	0	0	0	0	0	0	826		
Percent	11.7%	1.0%	8.4%	28.1%	37.5%	11.9%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	10:00	09:00	09:00	11:00	11:00	11:00								11:00		
Vol.	8	1	10	19	29	9	3								66		
PM Peak	12:00	12:00	15:00	13:00	17:00	14:00	14:00								14:00		
Vol.	12	3	7	23	36	13	2								71		

Central Vermont Regional Planning Commission
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(802) 229-0389

Site Code: 2308517263
Station ID: surface- paved
TH-1, Brook Rd- Warren VT
178 ft E of School St intersection
Latitude: 0' 0.000 Undefined

eastbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/06/09	0	0	0	1	1	1	0	0	0	0	0	0	0	0	3	27-36	3
01:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	18-27	2
05:00	2	0	1	1	1	1	1	0	0	0	0	0	0	0	7	32-41	3
06:00	3	2	0	4	5	2	0	0	0	0	0	0	0	0	16	27-36	10
07:00	0	0	2	6	6	3	0	1	0	0	0	0	0	0	18	24-33	12
08:00	2	1	6	23	9	4	2	0	0	0	0	0	0	0	47	25-34	33
09:00	3	0	4	18	17	5	2	0	0	0	0	0	0	0	49	26-35	35
10:00	4	1	6	22	15	3	1	0	0	0	0	0	0	0	52	26-35	37
11:00	5	0	4	12	12	3	0	0	0	0	0	0	0	0	36	26-35	24
12 PM	8	1	7	14	12	5	0	0	0	0	0	0	0	0	47	24-33	26
13:00	6	0	9	23	23	7	0	0	0	0	0	0	0	0	68	26-35	46
14:00	5	4	7	16	18	6	1	0	0	0	0	0	0	0	57	26-35	34
15:00	6	2	9	20	20	4	2	0	0	0	0	0	0	0	63	26-35	40
16:00	7	1	7	24	24	7	0	0	0	0	0	0	0	0	70	26-35	48
17:00	6	0	2	17	25	9	2	0	0	0	0	0	0	0	61	26-35	42
18:00	7	1	2	14	16	6	0	0	0	0	0	0	0	0	46	26-35	30
19:00	2	1	3	6	13	8	1	0	0	0	0	0	0	0	34	29-38	22
20:00	3	1	7	11	13	5	0	0	0	0	0	0	0	0	40	24-33	24
21:00	2	0	2	8	11	3	0	0	0	0	0	0	0	0	26	26-35	19
22:00	0	0	2	3	4	2	0	0	0	0	0	0	0	0	11	28-37	9
23:00	1	1	2	5	9	3	2	1	0	0	0	0	0	0	24	25-34	14
Total	72	16	82	251	255	87	14	2	0	0	0	0	0	0	779		
Percent	9.2%	2.1%	10.5%	32.2%	32.7%	11.2%	1.8%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	06:00	08:00	08:00	09:00	09:00	08:00	07:00							10:00		
Vol.	5	2	6	23	17	5	2	1							52		
PM Peak	12:00	14:00	13:00	16:00	17:00	17:00	15:00	23:00							16:00		
Vol.	8	4	9	24	25	9	2	1							70		

Central Vermont Regional Planning Commission
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Site Code: 2308517263
Station ID: surface- paved
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Latitude: 0' 0.000 Undefined

eastbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/05/09	0	**2**	0	1	0	0	0	0	0	0	0	0	0	0	3	8-17	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	1	32-41	1
03:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	27-36	1
04:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
05:00	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2	17-26	1
06:00	2	1	1	3	3	1	0	0	0	0	0	0	0	0	11	24-33	7
07:00	1	0	2	9	9	3	**1**	0	0	0	0	0	0	0	25	25-34	18
08:00	5	1	**7**	11	16	7	0	**1**	0	0	0	0	0	0	48	26-35	27
09:00	4	0	4	17	14	7	0	0	0	0	0	0	0	0	46	26-35	31
10:00	5	1	4	11	16	**8**	0	0	0	0	0	0	0	0	45	26-35	27
11:00	**8**	2	7	**21**	**25**	8	1	0	0	0	0	0	0	0	**72**	26-35	46
12 PM	8	**6**	6	16	21	8	0	0	0	0	0	0	0	0	65	26-35	37
13:00	**15**	2	9	14	16	11	0	0	0	0	0	0	0	0	67	27-36	31
14:00	14	1	**10**	15	23	7	0	0	0	0	0	0	0	0	70	26-35	38
15:00	11	2	8	21	26	8	**3**	0	0	0	0	0	0	0	79	26-35	47
16:00	13	0	5	20	**37**	**13**	0	0	0	0	0	0	0	0	**88**	26-35	57
17:00	6	1	9	**26**	24	10	0	0	0	0	0	0	0	0	76	26-35	50
18:00	3	0	5	12	22	4	0	0	**1**	0	0	0	0	0	47	26-35	34
19:00	3	0	4	10	14	3	0	0	0	0	0	0	0	0	34	26-35	24
20:00	3	3	6	13	8	3	0	0	0	0	0	0	0	0	36	24-33	22
21:00	0	0	1	5	14	1	0	0	1	0	0	0	0	0	22	26-35	19
22:00	2	0	0	5	6	2	2	0	0	0	0	0	0	0	17	26-35	11
23:00	1	0	0	4	4	2	0	0	0	0	0	0	0	0	11	27-36	9
Total	104	22	88	236	298	108	8	1	2	0	0	0	0	0	867		
Percent	12.0%	2.5%	10.1%	27.2%	34.4%	12.5%	0.9%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	00:00	08:00	11:00	11:00	10:00	02:00	08:00							11:00		
Vol.	8	2	7	21	25	8	1	1							72		
PM Peak	13:00	12:00	14:00	17:00	16:00	16:00	15:00		18:00						16:00		
Vol.	15	6	10	26	37	13	3		1						88		

Central Vermont Regional Planning Commission
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Site Code: 2308517263
Station ID: surface- paved
TH-1, Brook Rd- Warren VT
178 ft E of School St intersection
Latitude: 0' 0.000 Undefined

eastbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/04/09	1	0	0	3	4	0	1	0	0	0	0	0	0	0	9	25-34	7
01:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
02:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
05:00	0	0	0	0	1	0	1	1	0	0	0	0	0	0	3	37-46	2
06:00	1	0	1	5	3	2	0	0	0	0	0	0	0	0	12	24-33	9
07:00	6	5	1	10	18	5	0	0	0	0	0	0	0	0	45	26-35	28
08:00	2	0	5	21	13	9	0	0	0	0	0	0	0	0	50	26-35	34
09:00	11	3	7	14	21	4	2	0	0	0	0	0	0	0	62	26-35	35
10:00	4	1	3	15	18	5	0	0	0	0	0	0	0	0	46	26-35	33
11:00	9	0	3	10	20	8	1	0	0	0	0	0	0	0	51	26-35	30
12 PM	4	0	16	18	16	5	0	0	0	0	0	0	0	0	59	22-31	35
13:00	10	0	8	9	27	6	2	0	0	0	0	0	0	0	62	27-36	37
14:00	8	1	7	22	19	4	3	0	0	0	0	0	0	0	64	26-35	41
15:00	9	2	7	16	21	8	1	0	0	0	0	0	0	0	64	26-35	37
16:00	6	0	12	30	39	4	1	0	0	0	0	0	0	0	92	26-35	69
17:00	13	0	7	17	26	15	3	0	0	0	0	0	0	0	81	26-35	43
18:00	9	2	5	18	27	7	0	0	0	0	0	0	0	0	68	26-35	45
19:00	2	0	2	10	13	7	1	0	0	0	0	0	0	0	35	26-35	23
20:00	1	1	1	12	6	2	1	0	0	0	0	0	0	0	24	25-34	18
21:00	2	0	0	8	11	2	0	0	1	0	0	0	0	0	24	26-35	19
22:00	0	0	2	8	8	3	1	0	0	0	0	0	0	0	22	24-33	16
23:00	3	0	0	2	3	1	0	0	0	0	0	0	0	0	9	27-36	6
Total	101	15	87	249	316	97	18	1	1	0	0	0	0	0	885		
Percent	11.4%	1.7%	9.8%	28.1%	35.7%	11.0%	2.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	09:00	07:00	09:00	08:00	09:00	08:00	09:00	05:00							09:00		
Vol.	11	5	7	21	21	9	2	1							62		
PM Peak	17:00	15:00	12:00	16:00	16:00	17:00	14:00		21:00						16:00		
Vol.	13	2	16	30	39	15	3		1						92		

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Latitude: 0' 0.000 Undefined

eastbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/03/09	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	3	0	9	15	21	4	0	0	0	0	0	0	0	0	52	26-35	36
15:00	12	3	7	18	22	7	0	0	0	0	0	0	0	0	69	26-35	40
16:00	15	0	6	24	22	11	3	0	0	0	0	0	0	0	81	26-35	46
17:00	5	2	10	33	19	5	2	0	0	0	0	0	0	0	76	26-35	52
18:00	6	0	9	13	14	5	1	0	0	0	0	0	0	0	48	25-34	27
19:00	3	0	4	13	10	3	0	0	0	0	0	0	0	0	33	26-35	23
20:00	2	0	17	30	13	2	0	0	0	0	0	0	0	0	64	21-30	47
21:00	2	0	7	10	11	2	0	0	0	0	0	0	0	0	32	24-33	21
22:00	1	0	4	8	3	0	2	0	0	0	0	0	0	0	18	22-31	13
23:00	1	0	1	2	6	2	1	0	0	0	0	0	0	0	13	28-37	10
Total	50	5	74	166	141	41	9	0	0	0	0	0	0	0	486		
Percent	10.3%	1.0%	15.2%	34.2%	29.0%	8.4%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak Vol.																	
PM Peak	16:00	15:00	20:00	17:00	15:00	16:00	16:00								16:00		
Vol.	15	3	17	33	22	11	3								81		

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westbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/11/09	1	0	0	0	1	2	0	0	0	0	0	0	0	0	4	28-37	3
01:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	*	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
04:00	0	0	2	0	0	1	0	0	0	0	0	0	0	0	3	13-22	2
05:00	0	0	2	4	2	1	0	0	0	0	0	0	0	0	9	23-32	8
06:00	1	0	3	5	5	1	0	0	0	0	0	0	0	0	15	23-32	10
07:00	4	0	4	22	14	1	1	0	0	0	0	0	0	0	46	26-35	36
08:00	13	2	**15**	**32**	**24**	8	**2**	0	0	0	0	0	0	0	**96**	26-35	56
09:00	16	**4**	6	27	18	**12**	0	0	0	0	0	0	0	0	83	26-35	45
10:00	**22**	0	6	13	7	6	1	0	0	0	0	0	0	0	55	23-32	21
11:00	22	0	6	17	23	3	0	0	0	0	0	0	0	0	71	26-35	40
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	80	6	44	121	94	35	4	0	0	0	0	0	0	0	384		
Percent	20.8%	1.6%	11.5%	31.5%	24.5%	9.1%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	09:00	08:00	08:00	08:00	09:00	08:00								08:00		
Vol.	22	4	15	32	24	12	2								96		
PM Peak Vol.																	
Total	2152	103	860	2277	1857	689	131	14	0	1	0	1	0	0	8085		
Percent	26.6%	1.3%	10.6%	28.2%	23.0%	8.5%	1.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

	15th Percentile :	8 MPH
	50th Percentile :	28 MPH
	85th Percentile :	34 MPH
	95th Percentile :	39 MPH
Stats	10 MPH Pace Speed :	26-35 MPH
	Number in Pace :	4134
	Percent in Pace :	51.1%
	Number of Vehicles > 25 MPH :	4970
	Percent of Vehicles > 25 MPH :	61.5%
	Mean Speed(Average) :	24 MPH

Central Vermont Regional Planning Commission
29 Main Street, Suite 4
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(802) 229-0389

Site Code: 2308517263
Station ID: surface- paved
TH-1, Brook Rd- Warren VT
178 ft E of School St intersection
Latitude: 0' 0.000 Undefined

westbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/10/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2	12-21	1
02:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	27-36	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
05:00	1	0	1	3	0	2	0	0	0	0	0	0	0	0	7	19-28	4
06:00	3	0	2	4	5	3	2	0	0	0	0	0	0	0	19	27-36	10
07:00	3	0	7	13	13	1	1	1	0	0	0	0	0	0	39	24-33	26
08:00	13	1	22	30	16	4	0	0	0	0	0	0	0	0	86	21-30	52
09:00	14	0	16	25	15	1	2	0	0	0	0	0	0	0	73	21-30	41
10:00	19	2	10	28	16	1	0	0	0	0	0	0	0	0	76	26-35	44
11:00	30	0	19	28	15	2	1	0	0	0	0	0	0	0	95	21-30	47
12 PM	24	1	11	23	9	2	1	0	0	0	0	0	0	0	71	21-30	34
13:00	27	0	5	25	11	3	1	0	0	0	0	0	0	0	72	26-35	36
14:00	40	5	13	30	16	5	0	1	0	0	0	0	0	0	110	23-32	46
15:00	32	2	7	20	15	8	0	0	0	0	0	0	0	0	84	26-35	35
16:00	30	0	4	19	17	7	2	1	0	0	0	0	0	0	80	26-35	36
17:00	33	1	7	12	9	9	1	0	0	0	0	0	0	0	72	*	21
18:00	18	0	5	15	20	7	2	0	0	0	0	0	0	0	67	26-35	35
19:00	10	1	5	13	14	0	1	0	0	0	0	0	0	0	44	26-35	27
20:00	6	1	4	8	6	1	1	0	0	0	0	0	0	0	27	22-31	14
21:00	5	0	3	10	5	1	1	0	0	0	0	0	0	0	25	23-32	15
22:00	2	0	1	2	4	1	0	1	0	0	0	0	0	0	11	25-34	7
23:00	4	0	0	2	1	0	0	0	0	0	0	0	0	0	7	*	4
Total	314	14	143	310	210	59	16	4	0	0	0	0	0	0	1070		
Percent	29.3%	1.3%	13.4%	29.0%	19.6%	5.5%	1.5%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	10:00	08:00	08:00	08:00	08:00	06:00	07:00							11:00		
Vol.	30	2	22	30	16	4	2	1							95		
PM Peak	14:00	14:00	14:00	14:00	18:00	17:00	16:00	14:00							14:00		
Vol.	40	5	13	30	20	9	2	1							110		

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Latitude: 0' 0.000 Undefined

westbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/09/09	0	0	0	2	1	0	0	0	0	0	0	0	0	0	3	22-31	3
01:00	0	0	0	2	0	1	0	0	0	0	0	0	0	0	3	18-27	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
05:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
06:00	0	0	0	3	3	1	0	0	0	0	0	0	0	0	7	27-36	7
07:00	1	0	1	6	4	2	4	0	0	0	0	0	0	0	18	25-34	11
08:00	3	0	5	10	11	4	3	0	0	0	0	0	0	0	36	26-35	21
09:00	9	0	6	13	11	7	1	0	0	0	0	0	0	0	47	25-34	24
10:00	15	0	5	14	21	7	0	0	0	0	0	0	0	0	62	26-35	35
11:00	26	0	8	22	19	3	3	1	0	0	0	0	0	0	82	26-35	41
12 PM	16	0	5	23	13	2	0	0	0	0	0	0	0	0	59	26-35	36
13:00	17	2	11	26	15	6	0	0	0	0	0	0	0	0	77	25-34	41
14:00	21	1	6	17	15	1	0	0	0	0	0	0	0	0	61	26-35	32
15:00	18	0	3	13	23	3	0	0	0	0	0	0	0	0	60	26-35	36
16:00	18	0	3	24	17	5	0	0	0	0	0	0	0	0	67	26-35	41
17:00	10	1	7	8	10	6	2	0	0	0	0	0	0	0	44	27-36	19
18:00	11	0	3	10	11	5	2	0	0	0	0	0	0	0	42	26-35	21
19:00	5	0	2	5	11	2	1	0	0	0	0	0	0	0	26	26-35	16
20:00	5	0	0	6	3	4	1	0	0	0	0	0	0	0	19	26-35	9
21:00	4	0	2	3	7	2	1	0	0	0	0	0	0	0	19	28-37	12
22:00	5	1	1	4	6	3	0	0	0	0	0	0	0	0	20	27-36	11
23:00	3	0	0	2	1	1	0	0	0	0	0	0	0	0	7	*	3
Total	187	5	68	214	203	65	18	1	0	0	0	0	0	0	761		
Percent	24.6%	0.7%	8.9%	28.1%	26.7%	8.5%	2.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00		11:00	11:00	10:00	09:00	07:00	11:00							11:00		
Vol.	26		8	22	21	7	4	1							82		
PM Peak	14:00	13:00	13:00	13:00	15:00	13:00	17:00								13:00		
Vol.	21	2	11	26	23	6	2								77		

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Latitude: 0' 0.000 Undefined

westbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/08/09	1	0	0	0	2	2	1	0	0	0	0	0	0	0	6	32-41	5
01:00	2	0	0	0	0	0	1	0	0	0	0	0	0	0	3	*	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	2	2	0	0	0	0	0	0	0	0	0	4	23-32	4
06:00	0	0	0	4	2	1	0	0	0	0	0	0	0	0	7	23-32	6
07:00	0	0	1	8	7	1	2	0	0	0	0	0	0	0	19	25-34	15
08:00	4	0	7	20	10	3	0	0	0	0	0	0	0	0	44	24-33	30
09:00	6	0	15	36	31	4	2	0	0	0	0	0	0	0	94	26-35	67
10:00	13	0	12	19	24	7	0	0	0	0	0	0	0	0	75	26-35	43
11:00	20	0	9	14	22	8	2	0	0	0	0	0	0	0	75	26-35	36
12 PM	26	0	5	28	27	8	5	0	0	0	0	0	0	0	99	26-35	55
13:00	31	0	8	22	15	11	1	0	0	0	0	0	0	0	88	26-35	37
14:00	29	1	6	21	15	9	0	1	0	0	0	0	0	0	82	26-35	36
15:00	26	1	10	17	14	3	1	0	0	0	0	0	0	0	72	25-34	31
16:00	26	1	8	12	29	9	1	0	0	0	0	0	0	0	86	26-35	41
17:00	28	0	2	21	13	13	1	0	0	0	0	0	0	0	78	26-35	34
18:00	16	0	6	20	14	4	4	0	0	0	0	0	0	0	64	25-34	34
19:00	8	2	2	13	8	7	0	0	0	0	0	0	0	0	40	24-33	21
20:00	5	1	0	9	5	2	0	0	0	0	0	0	0	0	22	26-35	14
21:00	5	0	2	11	4	5	0	0	0	0	0	0	0	0	27	24-33	15
22:00	1	0	2	4	3	3	0	0	0	0	0	0	0	0	13	24-33	7
23:00	1	0	0	0	1	1	1	1	0	0	0	0	0	0	5	37-46	3
Total	248	6	95	281	249	101	22	2	0	0	0	0	0	0	1004		
Percent	24.7%	0.6%	9.5%	28.0%	24.8%	10.1%	2.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00		09:00	09:00	09:00	11:00	07:00								09:00		
Vol.	20		15	36	31	8	2								94		
PM Peak	13:00	19:00	15:00	12:00	16:00	17:00	12:00	14:00							12:00		
Vol.	31	2	10	28	29	13	5	1							99		

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Latitude: 0' 0.000 Undefined

westbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/07/09	0	0	0	0	1	2	1	0	0	0	0	0	0	0	4	32-41	4
01:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2	12-21	1
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
05:00	0	1	1	4	1	0	0	0	0	0	0	0	0	0	7	20-29	6
06:00	2	0	3	8	2	0	1	0	0	0	0	0	0	0	16	23-32	13
07:00	5	0	5	12	9	4	0	0	0	0	0	0	0	0	35	25-34	21
08:00	5	0	11	**35**	**19**	3	**2**	0	0	0	0	0	0	0	75	25-34	54
09:00	4	0	**16**	33	16	3	0	**2**	0	0	0	0	0	0	74	22-31	50
10:00	14	0	11	21	14	5	0	0	0	0	0	0	0	0	65	25-34	36
11:00	**23**	0	5	23	17	**8**	0	0	0	0	0	0	0	0	**76**	26-35	40
12 PM	21	2	7	21	18	4	**3**	0	0	0	0	0	0	0	76	26-35	39
13:00	29	1	4	13	**25**	6	1	0	0	0	0	**1**	0	0	80	26-35	38
14:00	30	1	**13**	**25**	15	8	1	0	0	0	0	0	0	0	93	23-32	40
15:00	29	**3**	11	21	23	**14**	0	**1**	0	0	0	0	0	0	**102**	26-35	44
16:00	**33**	1	9	19	17	12	2	0	0	0	0	0	0	0	93	26-35	36
17:00	24	1	8	16	21	9	0	0	0	0	0	0	0	0	79	26-35	37
18:00	14	0	8	25	18	6	2	1	0	0	0	0	0	0	74	26-35	43
19:00	9	0	4	14	13	8	3	0	0	0	0	0	0	0	51	26-35	27
20:00	7	0	0	8	13	6	0	0	0	0	0	0	0	0	34	27-36	22
21:00	6	3	1	11	10	5	0	0	0	0	0	0	0	0	36	26-35	21
22:00	2	0	4	9	3	5	2	0	0	0	0	0	0	0	25	21-30	13
23:00	3	0	0	3	2	3	1	0	0	0	0	0	0	0	12	32-41	6
Total	260	13	122	321	260	111	19	4	0	0	0	1	0	0	1111		
Percent	23.4%	1.2%	11.0%	28.9%	23.4%	10.0%	1.7%	0.4%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%			
AM Peak	11:00	05:00	09:00	08:00	08:00	11:00	08:00	09:00							11:00		
Vol.	23	1	16	35	19	8	2	2							76		
PM Peak	16:00	15:00	14:00	14:00	13:00	15:00	12:00	15:00				13:00			15:00		
Vol.	33	3	13	25	25	14	3	1				1			102		

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westbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/06/09	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	4	0	0	1	0	0	0	0	0	0	0	5	20-29	4
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	1	2	2	0	1	0	0	0	0	0	0	0	6	23-32	5
06:00	3	1	3	4	4	2	**2**	0	0	0	0	0	0	0	19	23-32	9
07:00	3	0	3	9	**11**	1	0	0	0	0	0	0	0	0	27	26-35	20
08:00	8	1	**14**	**30**	**17**	**6**	0	0	0	0	0	0	0	0	**76**	23-32	47
09:00	15	0	9	26	16	6	2	0	0	0	0	0	0	0	74	26-35	42
10:00	**16**	**2**	4	16	15	5	0	0	0	0	0	0	0	0	58	26-35	31
11:00	15	0	6	18	17	5	1	0	0	0	0	0	0	0	62	26-35	35
12 PM	17	2	9	24	**20**	3	1	0	0	0	0	0	0	0	76	26-35	44
13:00	25	0	8	23	**11**	5	0	0	0	0	0	0	0	0	72	23-32	34
14:00	16	1	**16**	19	17	2	1	0	0	0	0	0	0	0	72	23-32	37
15:00	27	**3**	14	24	8	1	1	0	0	0	0	0	0	0	**78**	21-30	38
16:00	**31**	2	5	19	16	5	0	0	0	0	0	0	0	0	78	26-35	35
17:00	27	0	7	16	9	4	1	0	0	0	0	0	0	0	64	24-33	26
18:00	17	1	5	**28**	15	**6**	**4**	0	0	0	0	0	0	0	76	26-35	43
19:00	10	0	4	13	9	2	0	0	0	0	0	0	0	0	38	25-34	22
20:00	5	0	3	6	6	3	0	0	0	0	0	0	0	0	23	23-32	12
21:00	4	0	2	5	7	2	0	0	0	0	0	0	0	0	20	24-33	12
22:00	1	0	0	3	4	3	0	0	0	0	0	0	0	0	11	28-37	9
23:00	2	0	0	2	4	2	0	0	0	0	0	0	0	0	10	28-37	8
Total	242	13	113	292	209	63	15	0	0	0	0	0	0	0	947		
Percent	25.6%	1.4%	11.9%	30.8%	22.1%	6.7%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	10:00	08:00	08:00	08:00	08:00	06:00								08:00		
Vol.	16	2	14	30	17	6	2								76		
PM Peak	16:00	15:00	14:00	18:00	12:00	18:00	18:00								15:00		
Vol.	31	3	16	28	20	6	4								78		

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westbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/05/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	**1**	0	2	2	0	0	0	0	0	0	0	0	0	5	23-32	4
06:00	1	1	3	8	5	2	1	0	0	0	0	0	0	0	21	23-32	13
07:00	6	0	6	21	14	1	0	0	0	0	0	0	0	0	48	25-34	35
08:00	**19**	1	**10**	23	15	**11**	0	0	0	0	0	0	0	0	**79**	26-35	38
09:00	16	1	7	20	16	4	1	0	0	0	0	0	0	0	65	26-35	36
10:00	16	0	10	22	**24**	3	**2**	0	0	0	0	0	0	0	77	26-35	46
11:00	18	1	5	**24**	16	5	0	0	0	0	0	0	0	0	69	26-35	40
12 PM	35	2	6	19	**24**	2	0	0	0	0	0	0	0	0	88	26-35	43
13:00	37	4	**11**	10	22	10	1	0	0	0	0	0	0	0	95	26-35	32
14:00	32	**8**	10	23	16	9	2	0	0	0	0	0	0	0	100	26-35	39
15:00	**41**	1	5	17	24	18	**3**	0	0	0	0	0	0	0	**109**	29-38	44
16:00	40	0	5	**29**	14	7	1	**2**	0	0	0	0	0	0	98	26-35	43
17:00	28	1	6	21	18	**20**	2	0	0	0	0	0	0	0	96	26-35	39
18:00	27	1	5	26	14	3	1	0	0	0	0	0	0	0	77	26-35	40
19:00	6	0	5	14	9	2	1	0	0	0	0	0	0	0	37	25-34	23
20:00	4	0	1	9	10	2	0	0	0	0	0	0	0	0	26	26-35	19
21:00	3	0	1	3	2	0	0	0	0	0	0	0	0	0	9	23-32	6
22:00	2	0	2	3	3	4	1	0	0	0	0	0	0	0	**15**	28-37	8
23:00	2	0	1	2	2	0	0	0	0	0	0	0	0	0	7	23-32	5
Total	333	22	99	296	252	103	16	2	0	0	0	0	0	0	1123		
Percent	29.7%	2.0%	8.8%	26.4%	22.4%	9.2%	1.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	05:00	08:00	11:00	10:00	08:00	10:00								08:00		
Vol.	19	1	10	24	24	11	2								79		
PM Peak	15:00	14:00	13:00	16:00	12:00	17:00	15:00	16:00							15:00		
Vol.	41	8	11	29	24	20	3	2							109		

Central Vermont Regional Planning Commission
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(802) 229-0389

Site Code: 2308517263
Station ID: surface- paved
TH-1, Brook Rd- Warren VT
178 ft E of School St intersection
Latitude: 0' 0.000 Undefined

westbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/04/09	1	0	0	1	1	0	0	0	0	0	0	0	0	0	3	22-31	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	23-32	2
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	1	2	1	0	0	0	0	0	0	0	0	0	4	22-31	4
06:00	0	0	2	8	4	1	0	0	0	0	0	0	0	0	15	24-33	13
07:00	2	3	8	22	10	1	0	0	0	0	0	0	0	0	46	23-32	32
08:00	10	1	13	31	22	7	1	0	0	0	0	0	0	0	85	26-35	53
09:00	19	3	13	23	20	10	1	0	0	0	0	0	0	0	89	26-35	43
10:00	16	1	15	23	22	7	0	0	0	0	0	0	0	0	84	26-35	45
11:00	20	1	4	28	19	7	3	0	0	0	0	0	0	0	82	26-35	47
12 PM	27	1	9	13	13	4	0	0	0	0	0	0	0	0	67	24-33	26
13:00	34	1	8	18	12	8	1	0	0	0	0	0	0	0	82	23-32	30
14:00	22	1	12	24	23	7	0	1	0	0	0	0	0	0	90	26-35	47
15:00	27	2	7	22	20	8	1	0	0	0	0	0	0	0	87	26-35	42
16:00	52	2	6	21	23	4	1	0	0	0	0	0	0	0	109	26-35	44
17:00	46	1	1	12	30	9	2	0	0	1	0	0	0	0	102	26-35	42
18:00	22	1	4	21	17	12	1	0	0	0	0	0	0	0	78	26-35	38
19:00	9	0	2	12	8	4	2	0	0	0	0	0	0	0	37	24-33	20
20:00	3	0	1	7	5	2	0	0	0	0	0	0	0	0	18	25-34	12
21:00	9	1	5	8	2	2	0	0	0	0	0	0	0	0	27	20-29	13
22:00	1	0	2	5	3	0	0	0	0	0	0	0	0	0	11	24-33	10
23:00	2	0	0	1	1	4	1	0	0	0	0	0	0	0	9	30-39	6
Total	322	19	113	302	258	97	14	1	0	1	0	0	0	0	1127		
Percent	28.6%	1.7%	10.0%	26.8%	22.9%	8.6%	1.2%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	07:00	10:00	08:00	08:00	09:00	11:00								09:00		
Vol.	20	3	15	31	22	10	3								89		
PM Peak	16:00	15:00	14:00	14:00	17:00	18:00	17:00	14:00		17:00					16:00		
Vol.	52	2	12	24	30	12	2	1		1					109		

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Latitude: 0' 0.000 Undefined

westbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/03/09	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	35	0	8	26	14	9	0	0	0	0	0	0	0	0	92	25-34	40
15:00	27	0	11	24	**24**	6	1	0	0	0	0	0	0	0	93	26-35	48
16:00	**36**	0	12	20	18	10	1	0	0	0	0	0	0	0	97	24-33	38
17:00	27	**2**	**14**	**29**	23	**11**	0	0	0	0	0	0	0	0	**106**	26-35	52
18:00	**15**	2	8	23	19	8	**2**	0	0	0	0	0	0	0	77	26-35	42
19:00	**11**	0	3	10	6	4	1	0	0	0	0	0	0	0	35	23-32	16
20:00	8	1	5	5	4	2	0	0	0	0	0	0	0	0	25	20-29	10
21:00	5	0	1	2	8	2	1	0	0	0	0	0	0	0	19	28-37	12
22:00	1	0	1	0	4	1	1	0	0	0	0	0	0	0	8	31-40	5
23:00	1	0	0	1	2	2	0	0	0	0	0	0	0	0	6	28-37	5
Total	166	5	63	140	122	55	7	0	0	0	0	0	0	0	558		
Percent	29.7%	0.9%	11.3%	25.1%	21.9%	9.9%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak Vol.																	
PM Peak Vol.	16:00 36	17:00 2	17:00 14	17:00 29	15:00 24	17:00 11	18:00 2								17:00 106		

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Site Code: 2308549165
Station ID: surface- paved
TH-4, Main St- Warren VT
585 ft S of Rt 100 intersection
Latitude: 0' 0.000 Undefined

northbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/03/09	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	**6**	5	12	45	13	**3**	0	0	0	0	0	0	0	0	84	24-33	60
15:00	3	**9**	16	**54**	**23**	3	0	0	0	0	0	0	0	0	**108**	25-34	77
16:00	0	5	16	34	14	1	0	0	0	0	0	0	0	0	70	21-30	50
17:00	2	2	**20**	53	13	0	**1**	0	0	0	0	0	0	0	91	21-30	73
18:00	5	0	11	27	12	3	0	0	0	0	0	0	0	0	58	23-32	40
19:00	0	1	12	12	5	1	0	0	0	0	0	0	0	0	31	21-30	24
20:00	2	1	9	16	6	1	0	0	0	0	0	0	0	0	35	22-31	26
21:00	0	0	2	6	1	1	0	0	0	0	0	0	0	0	10	21-30	8
22:00	0	0	4	9	1	0	0	0	0	0	0	0	0	0	14	22-31	14
23:00	0	0	0	4	4	0	0	0	0	0	0	0	0	0	8	25-34	8
Total	18	23	102	260	92	13	1	0	0	0	0	0	0	0	509		
Percent	3.5%	4.5%	20.0%	51.1%	18.1%	2.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak Vol.																	
PM Peak	14:00	15:00	17:00	15:00	15:00	14:00	17:00								15:00		
Vol.	6	9	20	54	23	3	1								108		

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Site Code: 2308549165
Station ID: surface- paved
TH-4, Main St- Warren VT
585 ft S of Rt 100 intersection
Latitude: 0' 0.000 Undefined

northbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/04/09	0	0	3	2	0	0	0	0	0	0	0	0	0	0	5	18-27	5
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	12-21	1
03:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	22-31	2
04:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
05:00	0	0	1	6	2	1	0	0	0	0	0	0	0	0	10	23-32	9
06:00	1	0	3	16	4	0	0	0	0	0	0	0	0	0	24	23-32	21
07:00	4	2	12	31	15	0	0	0	0	0	0	0	0	0	64	24-33	46
08:00	4	3	12	**47**	**22**	**3**	0	0	0	0	0	0	0	0	91	26-35	69
09:00	4	3	21	41	21	0	0	0	0	0	0	0	0	0	90	22-31	63
10:00	2	2	16	41	11	1	1	0	0	0	0	0	0	0	74	21-30	57
11:00	**8**	**5**	**28**	40	14	0	0	0	0	0	0	0	0	0	**95**	21-30	68
12 PM	2	2	13	45	14	0	0	0	0	0	0	0	0	0	76	23-32	60
13:00	2	**4**	21	33	13	3	0	0	0	0	0	0	0	0	76	21-30	54
14:00	3	1	**36**	**46**	14	1	0	0	0	0	0	0	0	0	**101**	21-30	82
15:00	3	3	26	41	12	**4**	0	0	0	0	0	0	0	0	89	21-30	67
16:00	**5**	3	14	28	**19**	**5**	0	0	0	0	0	0	0	0	74	25-34	47
17:00	2	4	12	26	14	0	1	0	0	0	0	0	0	0	59	24-33	41
18:00	0	3	16	31	9	3	0	0	0	0	0	0	0	0	62	21-30	47
19:00	1	0	11	21	6	1	1	0	0	0	0	0	0	0	41	21-30	32
20:00	0	0	8	14	2	0	0	0	0	0	0	0	0	0	24	21-30	22
21:00	1	0	6	10	5	0	0	0	0	0	0	0	0	0	22	21-30	16
22:00	0	0	3	5	1	0	0	0	0	0	0	0	0	0	9	22-31	9
23:00	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3	23-32	3
Total	42	35	263	527	201	22	3	0	0	0	0	0	0	0	1093		
Percent	3.8%	3.2%	24.1%	48.2%	18.4%	2.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	11:00	11:00	08:00	08:00	08:00	10:00								11:00		
Vol.	8	5	28	47	22	3	1								95		
PM Peak	16:00	13:00	14:00	14:00	16:00	16:00	17:00								14:00		
Vol.	5	4	36	46	19	5	1								101		

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northbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/05/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
04:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
05:00	0	0	0	3	4	0	0	0	0	0	0	0	0	0	7	25-34	7
06:00	0	0	9	16	4	0	0	0	0	0	0	0	0	0	29	21-30	25
07:00	0	4	11	27	12	0	0	0	0	0	0	0	0	0	54	23-32	40
08:00	3	1	9	43	18	2	0	0	0	0	0	0	0	0	76	26-35	61
09:00	3	1	15	40	16	0	0	0	0	0	0	0	0	0	75	22-31	56
10:00	2	3	15	41	7	0	1	0	0	0	0	0	0	0	69	21-30	56
11:00	3	4	22	29	15	1	0	0	0	0	0	0	0	0	74	21-30	51
12 PM	2	2	15	36	17	1	0	0	0	0	0	0	0	0	73	23-32	53
13:00	3	4	17	36	14	2	0	0	0	0	0	0	0	0	76	21-30	53
14:00	5	3	17	40	22	2	0	0	0	0	0	0	0	0	89	24-33	62
15:00	4	1	17	57	34	6	1	0	0	0	0	0	0	0	120	26-35	91
16:00	2	2	9	37	21	2	0	0	0	0	0	0	0	0	73	26-35	58
17:00	4	1	8	48	21	5	0	0	0	0	0	0	0	0	87	26-35	69
18:00	1	1	7	23	10	0	0	0	0	0	0	0	0	0	42	24-33	33
19:00	1	0	4	22	7	1	0	0	0	0	0	0	0	0	35	23-32	29
20:00	2	1	10	17	13	2	0	0	0	0	0	0	0	0	45	24-33	30
21:00	0	0	4	7	1	0	0	0	0	0	0	0	0	0	12	22-31	12
22:00	2	1	4	10	2	0	1	0	0	0	0	0	0	0	20	22-31	15
23:00	0	0	1	3	0	0	0	0	0	0	0	0	0	0	4	19-28	4
Total	37	29	194	537	239	24	3	0	0	0	0	0	0	0	1063		
Percent	3.5%	2.7%	18.3%	50.5%	22.5%	2.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	07:00	11:00	08:00	08:00	08:00	10:00								08:00		
Vol.	3	4	22	43	18	2	1								76		
PM Peak	14:00	13:00	13:00	15:00	15:00	15:00	15:00								15:00		
Vol.	5	4	17	57	34	6	1								120		

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northbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/06/09	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	12-21	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	1	0	0	3	1	0	0	0	0	0	0	0	0	0	5	22-31	4
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
04:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
05:00	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5	21-30	5
06:00	1	0	7	10	4	0	1	0	0	0	0	0	0	0	23	21-30	17
07:00	0	0	11	26	10	1	0	0	0	0	0	0	0	0	48	21-30	37
08:00	5	0	8	47	25	2	0	0	0	0	0	0	0	0	87	26-35	72
09:00	1	4	22	35	13	2	1	0	0	0	0	0	0	0	78	21-30	57
10:00	2	1	19	28	13	3	0	0	0	0	0	0	0	0	66	21-30	47
11:00	2	0	22	40	13	1	0	0	0	0	0	0	0	0	78	21-30	62
12 PM	5	2	22	46	12	1	1	0	0	0	0	0	0	0	89	21-30	68
13:00	2	1	17	53	15	0	0	0	0	0	0	0	0	0	88	21-30	70
14:00	1	2	24	38	16	2	0	0	0	0	0	0	0	0	83	21-30	62
15:00	5	4	17	41	20	0	0	0	0	0	0	0	0	0	87	24-33	61
16:00	3	2	14	41	18	0	0	0	0	0	0	0	0	0	78	24-33	59
17:00	5	1	9	25	11	1	0	0	0	0	0	0	0	0	52	22-31	36
18:00	1	0	8	31	9	2	0	0	0	0	0	0	0	0	51	23-32	41
19:00	5	2	11	29	10	0	0	0	0	0	0	0	0	0	57	21-30	40
20:00	0	2	11	20	9	0	0	0	0	0	0	0	0	0	42	21-30	31
21:00	0	0	3	2	8	1	0	0	0	0	0	0	0	0	14	27-36	11
22:00	1	0	3	3	4	0	0	0	0	0	0	0	0	0	11	23-32	8
23:00	1	1	3	4	3	1	0	0	0	0	0	0	0	0	13	23-32	9
Total	41	22	232	528	215	17	3	0	0	0	0	0	0	0	1058		
Percent	3.9%	2.1%	21.9%	49.9%	20.3%	1.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	09:00	09:00	08:00	08:00	10:00	06:00								08:00		
Vol.	5	4	22	47	25	3	1								87		
PM Peak	12:00	15:00	14:00	13:00	15:00	14:00	12:00								12:00		
Vol.	5	4	24	53	20	2	1								89		

Central Vermont Regional Planning Commission
29 Main Street, Suite 4
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(802) 229-0389

Site Code: 2308549165
Station ID: surface- paved
TH-4, Main St- Warren VT
585 ft S of Rt 100 intersection
Latitude: 0' 0.000 Undefined

northbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/07/09	0	1	1	0	2	0	0	0	0	0	0	0	0	0	4	12-21	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
04:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	18-27	2
05:00	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5	21-30	5
06:00	1	0	7	13	3	0	0	0	0	0	0	0	0	0	24	21-30	20
07:00	1	0	9	29	11	1	0	0	0	0	0	0	0	0	51	22-31	40
08:00	**4**	1	**15**	**54**	12	**3**	0	0	0	0	0	0	0	0	**89**	21-30	69
09:00	3	0	14	52	16	0	0	0	0	0	0	0	0	0	85	22-31	68
10:00	4	1	15	36	11	1	0	0	0	0	0	0	0	0	68	21-30	51
11:00	3	**4**	13	45	**20**	1	0	0	0	0	0	0	0	0	86	26-35	65
12 PM	2	4	23	38	17	2	0	0	0	0	0	0	0	0	86	21-30	61
13:00	2	5	18	36	13	**4**	0	0	0	0	0	0	0	0	78	21-30	54
14:00	5	0	16	**49**	14	2	0	0	0	0	0	0	0	0	86	21-30	65
15:00	**6**	2	17	46	**27**	2	0	0	0	0	0	0	0	0	100	26-35	73
16:00	5	1	**26**	47	20	2	0	0	0	0	0	0	0	0	**101**	21-30	73
17:00	5	3	10	35	7	1	0	0	0	0	0	0	0	0	61	21-30	45
18:00	2	2	11	42	14	0	0	0	0	0	0	0	0	0	71	25-34	57
19:00	1	0	5	21	12	1	0	0	0	0	0	0	0	0	40	26-35	33
20:00	3	**7**	13	25	8	1	0	0	0	0	0	0	0	0	57	21-30	38
21:00	0	0	4	24	3	1	0	0	0	0	0	0	0	0	32	22-31	29
22:00	0	0	4	18	8	2	0	0	0	0	0	0	0	0	32	24-33	26
23:00	0	1	3	3	5	1	0	0	0	0	0	0	0	0	13	27-36	9
Total	47	32	224	621	224	25	0	0	0	0	0	0	0	0	1173		
Percent	4.0%	2.7%	19.1%	52.9%	19.1%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	11:00	08:00	08:00	11:00	08:00									08:00		
Vol.	4	4	15	54	20	3									89		
PM Peak	15:00	20:00	16:00	14:00	15:00	13:00									16:00		
Vol.	6	7	26	49	27	4									101		

Central Vermont Regional Planning Commission
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(802) 229-0389

Site Code: 2308549165
Station ID: surface- paved
TH-4, Main St- Warren VT
585 ft S of Rt 100 intersection
Latitude: 0' 0.000 Undefined

northbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/08/09	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	18-27	2
01:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	27-36	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	1	0	0	6	0	0	0	0	0	0	0	0	0	0	7	21-30	6
06:00	0	0	3	8	3	0	0	0	0	0	0	0	0	0	14	23-32	13
07:00	0	0	3	5	11	**6**	0	**1**	0	0	0	0	0	0	26	27-36	17
08:00	1	2	13	40	12	1	**1**	0	0	0	0	0	0	0	70	23-32	55
09:00	1	2	**29**	**71**	17	0	0	0	0	0	0	0	0	0	**120**	21-30	100
10:00	**4**	**3**	20	48	**22**	3	0	0	**1**	0	0	0	0	0	101	23-32	70
11:00	3	2	11	41	21	2	0	1	0	0	0	0	0	0	81	26-35	62
12 PM	**11**	5	16	46	10	1	0	0	0	0	0	0	0	0	**89**	21-30	62
13:00	2	**8**	20	17	6	0	0	0	0	0	0	0	0	0	53	21-30	37
14:00	2	6	18	**48**	10	1	**1**	**1**	0	0	0	0	0	0	87	21-30	66
15:00	0	2	**22**	30	13	1	0	0	0	0	0	0	0	0	68	21-30	52
16:00	4	2	13	37	15	3	0	0	0	0	0	0	0	0	74	23-32	52
17:00	3	5	18	28	**18**	1	0	0	0	0	0	0	0	0	73	23-32	48
18:00	2	0	14	19	14	**4**	0	0	0	0	0	0	0	0	53	22-31	34
19:00	1	0	6	19	7	1	1	0	0	0	0	0	0	0	35	23-32	27
20:00	1	0	4	16	5	1	0	0	0	0	0	0	0	0	27	22-31	21
21:00	1	2	7	12	7	0	0	0	0	0	0	0	0	0	29	23-32	21
22:00	0	0	2	6	4	0	0	0	0	0	0	0	0	0	12	24-33	11
23:00	2	0	2	1	3	1	0	0	0	0	0	0	0	0	9	27-36	5
Total	39	39	221	500	198	27	3	3	1	0	0	0	0	0	1031		
Percent	3.8%	3.8%	21.4%	48.5%	19.2%	2.6%	0.3%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	10:00	09:00	09:00	10:00	07:00	08:00	07:00	10:00						09:00		
Vol.	4	3	29	71	22	6	1	1	1						120		
PM Peak	12:00	13:00	15:00	14:00	17:00	18:00	14:00	14:00							12:00		
Vol.	11	8	22	48	18	4	1	1							89		

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Latitude: 0' 0.000 Undefined

northbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/09/09	0	0	1	3	0	0	0	0	0	0	0	0	0	0	4	19-28	4
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	7-16	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	12-21	1
05:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
06:00	0	0	2	3	3	0	0	0	0	0	0	0	0	0	8	24-33	8
07:00	0	1	1	7	11	0	0	0	0	0	0	0	0	0	20	26-35	18
08:00	**3**	1	7	18	7	**2**	0	0	0	0	0	0	0	0	38	23-32	27
09:00	2	**2**	10	27	14	1	0	0	0	0	0	0	0	0	56	25-34	41
10:00	0	0	8	27	**20**	0	0	0	0	0	0	0	0	0	55	26-35	47
11:00	3	1	**23**	**35**	11	1	0	0	0	0	0	0	0	0	**74**	21-30	58
12 PM	**7**	**4**	19	**33**	11	1	0	0	0	0	0	0	0	0	**75**	21-30	52
13:00	1	4	**24**	28	13	1	0	0	0	0	0	0	0	0	71	21-30	52
14:00	1	2	18	32	11	0	**1**	0	0	0	0	0	0	0	65	21-30	50
15:00	3	2	14	25	12	**3**	1	0	0	0	0	0	0	0	60	22-31	40
16:00	2	0	10	25	**19**	2	0	0	0	0	0	0	0	0	58	26-35	44
17:00	4	1	11	16	18	1	0	0	0	0	0	0	0	0	51	25-34	34
18:00	2	1	5	17	6	1	0	0	0	0	0	0	0	0	32	22-31	23
19:00	1	1	2	14	6	0	1	0	0	0	0	0	0	0	25	24-33	20
20:00	0	1	2	8	4	1	0	0	0	0	0	0	0	0	16	24-33	13
21:00	1	0	3	7	4	1	0	0	0	0	0	0	0	0	16	23-32	12
22:00	0	0	2	5	2	0	0	0	0	0	0	0	0	0	9	23-32	9
23:00	1	0	2	2	2	0	0	0	0	0	0	0	0	0	7	23-32	6
Total	31	22	165	333	174	15	3	0	0	0	0	0	0	0	743		
Percent	4.2%	3.0%	22.2%	44.8%	23.4%	2.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	09:00	11:00	11:00	10:00	08:00									11:00		
Vol.	3	2	23	35	20	2									74		
PM Peak	12:00	12:00	13:00	12:00	16:00	15:00	14:00								12:00		
Vol.	7	4	24	33	19	3	1								75		

Central Vermont Regional Planning Commission
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585 ft S of Rt 100 intersection
Latitude: 0' 0.000 Undefined

northbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/10/09	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
01:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
05:00	1	0	1	2	2	1	0	0	0	0	0	0	0	0	7	23-32	5
06:00	1	2	5	11	5	1	0	0	0	0	0	0	0	0	25	21-30	16
07:00	1	1	7	35	13	1	0	0	0	0	0	0	0	0	58	24-33	48
08:00	1	3	18	37	16	1	0	0	0	0	0	0	0	0	76	22-31	56
09:00	3	0	10	45	19	0	1	0	0	0	0	0	0	0	78	26-35	64
10:00	6	1	17	50	11	0	0	0	0	0	0	0	0	0	85	21-30	67
11:00	7	6	20	38	13	1	0	0	0	0	0	0	0	0	85	21-30	58
12 PM	3	1	16	28	12	0	0	1	0	0	0	0	0	0	61	21-30	44
13:00	6	1	13	40	19	0	1	0	0	0	0	0	0	0	80	25-34	59
14:00	3	5	27	47	22	2	0	0	0	0	0	0	0	0	106	21-30	74
15:00	3	1	13	34	16	2	0	0	0	0	0	0	0	0	69	23-32	50
16:00	4	0	12	35	22	4	0	0	0	0	0	0	0	0	77	26-35	57
17:00	2	2	11	25	22	1	0	0	0	0	0	0	0	0	63	26-35	47
18:00	2	1	9	23	8	0	0	0	0	0	0	0	0	0	43	22-31	33
19:00	1	6	4	23	10	2	0	0	0	0	0	0	0	0	46	26-35	33
20:00	0	3	5	17	2	1	0	0	0	0	0	0	0	0	28	21-30	22
21:00	1	0	3	13	6	0	0	0	0	0	0	0	0	0	23	23-32	19
22:00	0	0	2	6	3	0	0	0	0	0	0	0	0	0	11	24-33	11
23:00	0	0	0	3	1	2	0	0	0	0	0	0	0	0	6	26-35	4
Total	45	33	193	513	225	19	2	1	0	0	0	0	0	0	1031		
Percent	4.4%	3.2%	18.7%	49.8%	21.8%	1.8%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	11:00	11:00	10:00	09:00	05:00	09:00								10:00		
Vol.	7	6	20	50	19	1	1								85		
PM Peak	13:00	19:00	14:00	14:00	14:00	16:00	13:00	12:00							14:00		
Vol.	6	6	27	47	22	4	1	1							106		

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northbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/11/09	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3	23-32	3
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	1	0	2	0	0	0	0	0	0	0	0	0	3	23-32	2
05:00	0	1	2	6	4	0	0	0	0	0	0	0	0	0	13	24-33	11
06:00	1	1	3	13	6	1	0	0	0	0	0	0	0	0	25	23-32	19
07:00	2	0	10	28	22	0	0	0	0	0	0	0	0	0	62	26-35	50
08:00	2	0	11	**66**	**26**	1	0	0	0	0	0	0	0	0	**106**	26-35	92
09:00	1	2	**16**	42	17	1	0	0	0	0	0	0	0	0	79	23-32	60
10:00	4	2	16	26	16	2	0	0	0	0	0	0	0	0	66	22-31	43
11:00	**9**	**6**	11	35	18	**3**	0	0	0	0	0	0	0	0	82	25-34	53
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	19	12	70	217	113	8	0	0	0	0	0	0	0	0	439		
Percent	4.3%	2.7%	15.9%	49.4%	25.7%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	11:00	09:00	08:00	08:00	11:00									08:00		
Vol.	9	6	16	66	26	3									106		
PM Peak Vol.																	
Total	319	247	1664	4036	1681	170	18	4	1	0	0	0	0	0	8140		
Percent	3.9%	3.0%	20.4%	49.6%	20.7%	2.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile :	22 MPH
50th Percentile :	28 MPH
85th Percentile :	32 MPH
95th Percentile :	35 MPH

Stats

10 MPH Pace Speed :	26-35 MPH
Number in Pace :	5717
Percent in Pace :	70.2%
Number of Vehicles > 25 MPH :	5910
Percent of Vehicles > 25 MPH :	72.6%
Mean Speed(Average) :	27 MPH

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southbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/03/09	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	**3**	**7**	12	40	25	1	0	0	0	0	0	0	0	0	88	26-35	65
15:00	2	5	**23**	22	24	**7**	0	0	0	0	0	0	0	0	83	25-34	46
16:00	1	0	16	**46**	**28**	3	**1**	0	0	0	0	0	0	0	**95**	26-35	74
17:00	0	4	17	41	25	3	1	0	0	0	0	0	0	0	91	26-35	66
18:00	0	1	10	28	17	1	0	0	0	0	0	0	0	0	57	26-35	45
19:00	1	0	6	24	8	2	0	0	0	0	0	0	0	0	41	24-33	33
20:00	1	2	7	42	14	1	0	0	0	0	0	0	0	0	67	25-34	56
21:00	0	0	2	16	5	1	0	0	0	0	0	0	0	0	24	24-33	21
22:00	0	0	2	5	9	0	0	0	0	0	0	0	0	0	16	25-34	14
23:00	0	0	0	4	5	2	0	0	0	0	0	0	0	0	11	27-36	10
Total	8	19	95	268	160	21	2	0	0	0	0	0	0	0	573		
Percent	1.4%	3.3%	16.6%	46.8%	27.9%	3.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak Vol.																	
PM Peak	14:00	14:00	15:00	16:00	16:00	15:00	16:00								16:00		
Vol.	3	7	23	46	28	7	1								95		

Central Vermont Regional Planning Commission
29 Main Street, Suite 4
Montpelier, VT 05602
(802) 229-0389

Site Code: 2308549165
Station ID: surface- paved
TH-4, Main St- Warren VT
585 ft S of Rt 100 intersection
Latitude: 0' 0.000 Undefined

southbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/04/09	0	0	0	1	1	1	0	0	0	0	0	0	0	0	3	27-36	3
01:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	22-31	2
05:00	0	0	1	2	0	**2**	0	0	0	0	0	0	0	0	5	18-27	3
06:00	0	0	1	11	3	1	0	0	0	0	0	0	0	0	**16**	24-33	15
07:00	0	**3**	4	20	16	1	0	0	0	0	0	0	0	0	44	26-35	36
08:00	0	1	**19**	31	18	1	**1**	0	0	0	0	0	0	0	71	22-31	51
09:00	**1**	0	5	34	**17**	1	0	0	0	0	0	0	0	0	58	26-35	51
10:00	1	1	6	**40**	**24**	2	1	0	0	0	0	0	0	0	**75**	26-35	64
11:00	1	1	7	39	13	1	0	0	0	0	0	0	0	0	62	24-33	52
12 PM	**5**	**10**	**28**	37	21	0	0	0	0	0	0	0	0	0	101	21-30	65
13:00	0	2	10	38	**31**	4	0	0	0	0	0	0	0	0	85	26-35	69
14:00	1	1	23	38	21	2	0	0	0	0	0	0	0	0	86	22-31	62
15:00	3	1	15	35	21	1	1	0	0	0	0	0	0	0	77	26-35	56
16:00	0	4	15	45	24	1	0	0	0	0	0	0	0	0	89	26-35	69
17:00	5	1	10	**52**	29	**6**	0	0	0	0	0	0	0	0	**103**	26-35	81
18:00	0	2	10	38	23	2	0	0	0	0	0	0	0	0	75	26-35	61
19:00	0	0	4	19	11	3	0	0	0	0	0	0	0	0	37	26-35	30
20:00	0	0	7	17	8	1	0	0	0	0	0	0	0	0	33	24-33	27
21:00	0	1	7	14	13	1	**2**	0	0	0	0	0	0	0	38	24-33	27
22:00	0	0	3	13	4	1	0	0	0	0	0	0	0	0	21	23-32	18
23:00	0	0	1	4	3	2	0	0	0	0	0	0	0	0	10	24-33	8
Total	17	28	176	530	302	34	5	0	0	0	0	0	0	0	1092		
Percent	1.6%	2.6%	16.1%	48.5%	27.7%	3.1%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	09:00	07:00	08:00	10:00	10:00	05:00	08:00								10:00		
Vol.	1	3	19	40	24	2	1								75		
PM Peak	12:00	12:00	12:00	17:00	13:00	17:00	21:00								17:00		
Vol.	5	10	28	52	31	6	2								103		

Central Vermont Regional Planning Commission
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Site Code: 2308549165
Station ID: surface- paved
TH-4, Main St- Warren VT
585 ft S of Rt 100 intersection
Latitude: 0' 0.000 Undefined

southbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/05/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	27-36	1
03:00	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	12-21	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	2	2	2	2	0	0	0	0	0	0	0	0	8	28-37	6
06:00	0	0	4	11	1	1	0	0	0	0	0	0	0	0	17	21-30	15
07:00	2	0	5	18	7	1	0	0	0	0	0	0	0	0	33	23-32	25
08:00	0	1	13	28	26	2	1	0	0	0	0	0	0	0	71	26-35	54
09:00	0	5	11	33	16	2	0	0	0	0	0	0	0	0	67	25-34	49
10:00	1	2	9	36	18	2	0	0	0	0	0	0	0	0	68	26-35	54
11:00	0	2	15	38	16	4	0	0	0	0	0	0	0	0	75	22-31	54
12 PM	2	0	12	39	21	3	0	0	0	0	0	0	0	0	77	26-35	60
13:00	3	1	16	36	26	1	0	0	0	0	0	0	0	0	83	26-35	62
14:00	3	3	14	41	24	2	0	0	0	0	0	0	0	0	87	26-35	65
15:00	0	1	10	47	31	2	1	0	0	0	0	0	0	0	92	26-35	78
16:00	6	4	13	55	36	1	0	0	0	0	0	0	0	0	115	26-35	91
17:00	2	1	10	42	35	5	0	0	0	0	0	0	0	0	95	26-35	77
18:00	1	0	13	28	28	1	2	0	0	0	0	0	0	0	73	26-35	56
19:00	0	1	5	22	11	1	0	0	0	0	0	0	0	0	40	26-35	33
20:00	1	5	8	16	8	1	0	0	0	0	0	0	0	0	39	23-32	26
21:00	0	0	3	15	9	1	1	0	0	0	0	0	0	0	29	25-34	24
22:00	1	0	2	7	7	1	0	0	0	0	0	0	0	0	18	24-33	14
23:00	0	0	2	3	2	1	0	0	0	0	0	0	0	0	8	23-32	7
Total	22	26	168	517	324	36	5	0	0	0	0	0	0	0	1098		
Percent	2.0%	2.4%	15.3%	47.1%	29.5%	3.3%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	09:00	11:00	11:00	08:00	11:00	08:00								11:00		
Vol.	2	5	15	38	26	4	1								75		
PM Peak	16:00	20:00	13:00	16:00	16:00	17:00	18:00								16:00		
Vol.	6	5	16	55	36	5	2								115		

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southbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/06/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	7-16	1
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
05:00	0	0	1	2	5	1	0	0	0	0	0	0	0	0	9	27-36	8
06:00	0	0	2	6	8	1	0	0	0	0	0	0	0	0	17	24-33	14
07:00	1	0	1	14	6	1	0	0	0	0	0	0	0	0	23	25-34	20
08:00	1	1	5	32	**21**	**2**	0	0	0	0	0	0	0	0	62	26-35	53
09:00	0	4	**15**	31	16	1	0	0	0	0	0	0	0	0	67	22-31	47
10:00	**2**	2	12	**41**	14	1	0	0	0	0	0	0	0	0	72	24-33	56
11:00	2	**6**	10	35	21	2	0	0	0	0	0	0	0	0	**76**	26-35	56
12 PM	2	2	**18**	36	19	2	0	0	0	0	0	0	0	0	79	23-32	56
13:00	**3**	2	10	**62**	20	2	0	0	0	0	0	0	0	0	**99**	26-35	82
14:00	2	**8**	12	36	20	4	0	0	0	0	0	0	0	0	82	26-35	56
15:00	**1**	0	14	39	**25**	**5**	0	0	0	0	0	0	0	0	84	26-35	64
16:00	2	4	13	48	22	2	0	0	0	0	0	0	0	0	91	26-35	70
17:00	**1**	3	15	43	24	5	0	0	0	0	0	0	0	0	91	26-35	67
18:00	0	2	7	33	16	1	0	0	0	0	0	0	0	0	59	26-35	49
19:00	0	1	3	20	14	**1**	0	0	0	0	0	0	0	0	39	26-35	34
20:00	0	0	10	20	11	1	0	0	0	0	0	0	0	0	42	22-31	31
21:00	0	0	6	14	5	3	0	0	0	0	0	0	0	0	28	21-30	20
22:00	0	0	5	5	7	2	0	0	0	0	0	0	0	0	19	23-32	12
23:00	0	1	3	14	5	1	0	0	0	0	0	0	0	0	24	23-32	19
Total	17	37	162	531	281	38	0	0	0	0	0	0	0	0	1066		
Percent	1.6%	3.5%	15.2%	49.8%	26.4%	3.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	11:00	09:00	10:00	08:00	08:00									11:00		
Vol.	2	6	15	41	21	2									76		
PM Peak	13:00	14:00	12:00	13:00	15:00	15:00									13:00		
Vol.	3	8	18	62	25	5									99		

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southbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/07/09	0	0	0	4	1	0	1	0	0	0	0	0	0	0	6	22-31	5
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	27-36	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	2	3	0	0	0	0	0	0	0	0	5	29-38	5
06:00	0	0	3	9	5	2	0	0	0	0	0	0	0	0	19	23-32	14
07:00	1	1	1	22	9	2	0	0	0	0	0	0	0	0	36	25-34	31
08:00	0	4	11	26	15	3	0	0	0	0	0	0	0	0	59	25-34	41
09:00	2	2	12	34	15	1	0	0	0	0	0	0	0	0	66	24-33	49
10:00	1	1	11	40	19	1	0	0	0	0	0	0	0	0	73	25-34	59
11:00	3	1	22	38	24	2	0	0	0	0	0	0	0	0	90	24-33	63
12 PM	3	4	20	38	19	2	0	0	0	0	0	0	0	0	86	21-30	58
13:00	4	4	14	43	16	6	0	0	0	0	0	0	0	0	87	22-31	59
14:00	2	4	12	32	28	3	0	0	0	0	0	0	0	0	81	26-35	60
15:00	3	6	13	38	18	8	0	0	0	0	0	0	0	0	86	24-33	56
16:00	0	2	19	52	19	3	0	0	0	0	0	0	0	0	95	22-31	72
17:00	5	7	14	46	29	1	0	0	0	0	0	0	0	0	102	26-35	75
18:00	0	0	13	22	16	2	0	0	0	0	0	0	0	0	53	23-32	38
19:00	0	3	8	24	17	2	0	0	0	0	0	0	0	0	54	26-35	41
20:00	0	1	4	25	10	0	0	0	0	0	0	0	0	0	40	26-35	35
21:00	0	0	1	16	10	1	1	0	0	0	0	0	0	0	29	26-35	26
22:00	0	0	2	6	3	1	0	0	0	0	0	0	0	0	12	24-33	11
23:00	0	1	1	7	8	0	0	0	0	0	0	0	0	0	17	25-34	15
Total	24	41	181	522	284	44	2	0	0	0	0	0	0	0	1098		
Percent	2.2%	3.7%	16.5%	47.5%	25.9%	4.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	08:00	11:00	10:00	11:00	05:00	00:00								11:00		
Vol.	3	4	22	40	24	3	1								90		
PM Peak	17:00	17:00	12:00	16:00	17:00	15:00	21:00								17:00		
Vol.	5	7	20	52	29	8	1								102		

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southbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/08/09	0	1	0	5	0	0	0	0	0	0	0	0	0	0	6	21-30	5
01:00	0	0	0	7	4	0	0	0	0	0	0	0	0	0	11	25-34	11
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
05:00	1	0	0	0	1	1	1	0	0	0	0	0	0	0	4	32-41	3
06:00	0	0	0	3	4	1	1	0	0	0	0	0	0	0	9	25-34	7
07:00	0	0	4	8	9	3	1	0	0	0	0	0	0	0	25	25-34	17
08:00	1	2	11	20	16	1	0	0	0	0	0	0	0	0	51	25-34	36
09:00	3	1	19	35	24	3	1	0	0	0	0	0	0	0	86	25-34	59
10:00	0	6	19	40	16	2	0	0	0	0	0	0	0	0	83	22-31	60
11:00	3	1	10	47	20	1	0	0	0	0	0	0	0	0	82	26-35	67
12 PM	7	4	31	27	14	4	0	0	0	0	0	0	0	0	87	21-30	58
13:00	7	8	20	36	12	1	0	0	0	0	0	0	0	0	84	21-30	56
14:00	4	7	24	47	19	1	0	0	0	0	0	0	0	0	102	21-30	71
15:00	0	3	8	38	20	3	0	0	0	0	0	0	0	0	72	26-35	58
16:00	0	1	12	27	27	2	1	1	0	0	0	0	0	0	71	26-35	54
17:00	3	1	15	33	12	3	0	0	0	0	0	0	0	0	67	21-30	48
18:00	2	3	9	23	14	4	0	0	0	0	0	0	0	0	55	25-34	37
19:00	0	1	2	18	14	1	0	0	0	0	0	0	0	0	36	26-35	32
20:00	0	1	11	12	8	1	0	0	0	0	0	0	0	0	33	21-30	23
21:00	0	0	2	17	10	2	0	0	0	0	0	0	0	0	31	26-35	27
22:00	0	0	0	7	4	0	0	0	0	0	0	0	0	0	11	25-34	11
23:00	0	0	7	9	6	2	0	0	0	0	0	0	0	0	24	22-31	17
Total	31	40	204	460	255	36	5	1	0	0	0	0	0	0	1032		
Percent	3.0%	3.9%	19.8%	44.6%	24.7%	3.5%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	09:00	10:00	09:00	11:00	09:00	07:00	05:00								09:00		
Vol.	3	6	19	47	24	3	1								86		
PM Peak	12:00	13:00	12:00	14:00	16:00	12:00	16:00	16:00							14:00		
Vol.	7	8	31	47	27	4	1	1							102		

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Latitude: 0' 0.000 Undefined

southbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/09/09	0	0	0	6	4	0	0	0	0	0	0	0	0	0	10	25-34	10
01:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	22-31	2
02:00	0	0	0	2	1	0	0	0	0	0	0	0	0	0	3	22-31	3
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3	19-28	3
06:00	0	0	1	3	0	0	0	0	0	0	0	0	0	0	4	19-28	4
07:00	0	1	0	11	7	2	0	0	0	0	0	0	0	0	21	26-35	18
08:00	1	2	7	13	12	2	0	0	0	0	0	0	0	0	37	24-33	25
09:00	0	4	12	44	16	1	0	0	0	0	0	0	0	0	77	24-33	60
10:00	0	6	7	16	18	2	0	0	0	0	0	0	0	0	49	26-35	34
11:00	0	5	9	42	20	2	0	0	0	0	0	0	0	0	78	26-35	62
12 PM	2	2	13	24	19	3	0	0	0	0	0	0	0	0	63	25-34	43
13:00	0	1	15	37	15	1	0	0	0	0	0	0	0	0	69	21-30	52
14:00	2	2	15	41	26	1	0	0	0	0	0	0	0	0	87	26-35	67
15:00	2	0	19	33	17	7	0	0	0	0	0	0	0	0	78	22-31	53
16:00	1	0	7	28	19	2	0	0	0	0	0	0	0	0	57	26-35	47
17:00	3	4	6	19	21	3	0	0	0	0	0	0	0	0	56	26-35	40
18:00	0	1	4	27	11	4	0	0	0	0	0	0	0	0	47	26-35	38
19:00	1	1	1	9	7	3	0	0	0	0	0	0	0	0	22	25-34	16
20:00	0	1	3	9	4	1	0	0	0	0	0	0	0	0	18	23-32	14
21:00	0	0	6	8	6	0	0	0	0	0	0	0	0	0	20	22-31	15
22:00	0	0	0	7	6	1	0	0	0	0	0	0	0	0	14	26-35	13
23:00	0	0	0	3	4	1	0	0	0	0	0	0	0	0	8	27-36	8
Total	12	30	125	386	234	36	0	0	0	0	0	0	0	0	823		
Percent	1.5%	3.6%	15.2%	46.9%	28.4%	4.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	10:00	09:00	09:00	11:00	07:00									11:00		
Vol.	1	6	12	44	20	2									78		
PM Peak	17:00	17:00	15:00	14:00	14:00	15:00									14:00		
Vol.	3	4	19	41	26	7									87		

Central Vermont Regional Planning Commission
29 Main Street, Suite 4
Montpelier, VT 05602
(802) 229-0389

Site Code: 2308549165
Station ID: surface- paved
TH-4, Main St- Warren VT
585 ft S of Rt 100 intersection
Latitude: 0' 0.000 Undefined

southbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/10/09	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	17-26	2
01:00	0	0	0	2	0	1	0	0	0	0	0	0	0	0	3	18-27	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	22-31	2
05:00	1	0	1	3	1	1	0	0	0	0	0	0	0	0	7	19-28	4
06:00	0	0	3	6	9	0	1	0	0	0	0	0	0	0	19	25-34	15
07:00	0	2	5	21	8	1	0	0	0	0	0	0	0	0	37	24-33	29
08:00	1	0	5	17	24	3	0	0	0	0	0	0	0	0	50	26-35	41
09:00	1	2	9	35	21	1	0	0	0	0	0	0	0	0	69	26-35	56
10:00	3	3	14	45	19	3	0	0	0	0	0	0	0	0	87	25-34	64
11:00	2	1	14	31	23	1	0	0	0	0	0	0	0	0	72	26-35	54
12 PM	3	0	14	46	15	2	0	0	0	0	0	0	0	0	80	22-31	61
13:00	2	1	17	35	27	4	0	0	0	0	0	0	0	0	86	26-35	62
14:00	2	0	16	38	30	3	0	0	0	0	0	0	0	0	89	26-35	68
15:00	1	1	10	38	23	3	0	0	0	0	0	0	0	0	76	26-35	61
16:00	0	0	19	48	34	5	0	0	0	0	0	0	0	0	106	26-35	82
17:00	1	2	9	36	26	2	0	0	0	0	0	0	0	0	76	26-35	62
18:00	1	0	6	33	22	4	1	0	0	0	0	0	0	0	67	26-35	55
19:00	0	1	5	19	16	0	0	0	0	0	0	0	0	0	41	26-35	35
20:00	0	0	6	14	8	0	0	0	0	0	0	0	0	0	28	24-33	23
21:00	0	0	5	10	4	2	0	0	0	0	0	0	0	0	21	21-30	15
22:00	0	0	0	4	6	0	0	0	0	0	0	0	0	0	10	26-35	10
23:00	0	0	0	2	4	1	0	0	0	0	0	0	0	0	7	27-36	7
Total	18	13	159	485	321	37	2	0	0	0	0	0	0	0	1035		
Percent	1.7%	1.3%	15.4%	46.9%	31.0%	3.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	10:00	10:00	10:00	08:00	08:00	06:00								10:00		
Vol.	3	3	14	45	24	3	1								87		
PM Peak	12:00	17:00	16:00	16:00	16:00	16:00	18:00								16:00		
Vol.	3	2	19	48	34	5	1								106		

Central Vermont Regional Planning Commission
29 Main Street, Suite 4
Montpelier, VT 05602
(802) 229-0389

Site Code: 2308549165
Station ID: surface- paved
TH-4, Main St- Warren VT
585 ft S of Rt 100 intersection
Latitude: 0' 0.000 Undefined

southbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/11/09	0	0	0	1	3	0	0	0	0	0	0	0	0	0	4	24-33	4
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
04:00	0	0	1	0	2	0	0	0	0	0	0	0	0	0	3	23-32	2
05:00	0	0	0	3	2	0	0	0	0	0	0	0	0	0	5	23-32	5
06:00	0	0	0	8	6	1	0	0	0	0	0	0	0	0	15	26-35	14
07:00	0	1	0	25	5	4	0	0	0	0	0	0	0	0	35	26-35	30
08:00	0	0	11	32	**24**	**5**	0	0	0	0	0	0	0	0	72	26-35	56
09:00	2	1	15	32	14	3	**1**	0	0	0	0	0	0	0	68	21-30	47
10:00	1	0	**20**	31	16	0	1	0	0	0	0	0	0	0	69	21-30	51
11:00	**3**	**2**	14	**44**	20	1	1	0	0	0	0	0	0	0	**85**	26-35	64
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	6	4	61	176	93	14	3	0	0	0	0	0	0	0	357		
Percent	1.7%	1.1%	17.1%	49.3%	26.1%	3.9%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	11:00	10:00	11:00	08:00	08:00	09:00								11:00		
Vol.	3	2	20	44	24	5	1								85		
PM Peak Vol.																	
Total	155	238	1331	3875	2254	296	24	1	0	0	0	0	0	0	8174		
Percent	1.9%	2.9%	16.3%	47.4%	27.6%	3.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

	15th Percentile :	24 MPH
	50th Percentile :	29 MPH
	85th Percentile :	33 MPH
	95th Percentile :	35 MPH
Stats	10 MPH Pace Speed :	26-35 MPH
	Number in Pace :	6129
	Percent in Pace :	75.0%
	Number of Vehicles > 25 MPH :	6450
	Percent of Vehicles > 25 MPH :	78.9%
	Mean Speed(Average) :	28 MPH

Central Vermont Regional Planning Commission
29 Main Street, Suite 4
Montpelier, VT 05602
(802) 229-0389

Site Code: 2308549066
Station ID: surface- paved
TH-4, Main St- Warren VT
900 ft S of Covered Bridge Rd int.
Latitude: 0' 0.000 Undefined

northbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/03/09	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	**2**	0	0	**2**	5	0	0	0	0	0	0	0	0	0	9	26-35	7
16:00	2	0	0	6	3	0	**1**	0	0	0	0	0	0	0	12	24-33	9
17:00	1	0	**1**	**8**	**10**	**3**	0	**1**	0	0	0	0	0	0	**24**	26-35	18
18:00	2	0	1	3	5	0	1	0	0	0	0	0	0	0	12	25-34	8
19:00	1	0	**1**	1	1	1	0	0	0	0	0	0	0	0	5	27-36	3
20:00	0	0	**2**	0	4	1	0	0	0	0	0	0	0	0	7	27-36	5
21:00	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3	24-33	3
22:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	27-36	1
23:00	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3	24-33	3
Total	8	0	5	20	34	6	2	1	0	0	0	0	0	0	76		
Percent	10.5%	0.0%	6.6%	26.3%	44.7%	7.9%	2.6%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak Vol.																	
PM Peak	15:00		20:00	17:00	17:00	17:00	16:00	17:00							17:00		
Vol.	2		2	8	10	3	1	1							24		

Central Vermont Regional Planning Commission
29 Main Street, Suite 4
Montpelier, VT 05602
(802) 229-0389

Site Code: 2308549066
Station ID: surface- paved
TH-4, Main St- Warren VT
900 ft S of Covered Bridge Rd int.
Latitude: 0' 0.000 Undefined

northbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/04/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	*	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
06:00	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2	7-16	1
07:00	0	0	0	3	0	3	1	0	0	0	0	0	0	0	7	32-41	4
08:00	0	0	1	1	1	1	1	0	0	0	0	0	0	0	5	32-41	3
09:00	0	0	0	4	1	1	0	1	0	0	0	0	0	0	7	26-35	5
10:00	0	0	1	2	5	1	1	0	0	0	0	0	0	0	10	25-34	7
11:00	0	0	3	1	4	3	1	0	0	0	0	0	0	0	12	29-38	8
12 PM	0	0	1	6	3	1	0	0	0	0	0	0	0	0	11	24-33	10
13:00	2	0	4	8	3	1	0	0	0	0	0	0	0	0	18	22-31	13
14:00	1	0	2	5	10	0	0	0	0	0	0	0	0	0	18	26-35	15
15:00	1	1	2	5	3	1	0	0	0	0	0	0	0	0	13	24-33	10
16:00	0	0	1	2	3	0	2	1	0	0	0	0	0	0	9	24-33	6
17:00	1	0	0	5	2	3	0	0	0	0	0	0	0	0	11	26-35	7
18:00	2	1	1	5	5	2	0	0	0	0	0	0	0	0	16	25-34	10
19:00	3	0	1	3	1	0	0	0	0	0	0	0	0	0	8	22-31	5
20:00	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3	24-33	3
21:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	27-36	2
22:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	12-21	1
23:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
Total	11	3	18	52	46	18	6	2	0	0	0	0	0	0	156		
Percent	7.1%	1.9%	11.5%	33.3%	29.5%	11.5%	3.8%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	01:00	06:00	11:00	09:00	10:00	07:00	07:00	09:00							11:00		
Vol.	1	1	3	4	5	3	1	1							12		
PM Peak	19:00	15:00	13:00	13:00	14:00	17:00	16:00	16:00							13:00		
Vol.	3	1	4	8	10	3	2	1							18		

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Site Code: 2308549066
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TH-4, Main St- Warren VT
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Latitude: 0' 0.000 Undefined

northbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/05/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
06:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	12-21	1
07:00	0	0	0	2	1	0	1	0	0	0	0	0	0	0	4	22-31	3
08:00	0	0	1	3	1	1	0	0	0	0	0	0	0	0	6	19-28	4
09:00	0	0	1	3	2	1	0	0	0	0	0	0	0	0	7	23-32	6
10:00	1	1	3	1	7	1	1	0	0	0	0	0	0	0	15	26-35	8
11:00	0	0	0	6	4	2	0	0	0	0	0	0	0	0	12	25-34	10
12 PM	0	0	1	2	2	2	0	0	0	0	0	0	0	0	7	28-37	6
13:00	1	0	2	4	4	4	0	0	0	0	0	0	0	0	15	27-36	9
14:00	0	1	1	4	5	3	0	0	0	0	0	0	0	0	14	27-36	10
15:00	0	0	1	1	4	0	0	0	0	0	0	0	0	0	6	25-34	6
16:00	1	0	2	4	5	4	1	0	0	0	0	0	0	0	17	27-36	10
17:00	4	0	1	3	6	2	0	0	0	0	0	0	0	0	16	28-37	11
18:00	0	0	0	3	6	0	0	0	0	0	0	0	0	0	9	26-35	9
19:00	1	0	0	1	1	1	0	0	0	0	0	0	0	0	4	27-36	3
20:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
21:00	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	17-26	2
22:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
Total	8	2	15	40	49	21	3	0	0	0	0	0	0	0	138		
Percent	5.8%	1.4%	10.9%	29.0%	35.5%	15.2%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	10:00	10:00	11:00	10:00	11:00	07:00								10:00		
Vol.	1	1	3	6	7	2	1								15		
PM Peak	17:00	14:00	13:00	13:00	17:00	13:00	16:00								16:00		
Vol.	4	1	2	4	6	4	1								17		

Central Vermont Regional Planning Commission
29 Main Street, Suite 4
Montpelier, VT 05602
(802) 229-0389

Site Code: 2308549066
Station ID: surface- paved
TH-4, Main St- Warren VT
900 ft S of Covered Bridge Rd int.
Latitude: 0' 0.000 Undefined

northbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/06/09	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	27-36	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
05:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
07:00	0	0	2	1	2	0	0	0	0	0	0	0	0	0	5	21-30	3
08:00	0	1	0	1	3	1	0	0	0	0	0	0	0	0	6	27-36	5
09:00	2	0	1	4	3	0	0	0	0	0	0	0	0	0	10	24-33	8
10:00	2	1	4	3	2	0	0	0	0	0	0	0	0	0	12	19-28	8
11:00	1	2	2	4	3	0	0	0	0	0	0	0	0	0	12	24-33	9
12 PM	1	0	0	5	1	1	0	0	0	0	0	0	0	0	8	26-35	6
13:00	2	2	3	9	6	1	1	0	0	0	0	0	0	0	24	23-32	15
14:00	1	0	1	3	3	3	1	0	0	0	0	0	0	0	12	28-37	8
15:00	0	0	1	3	6	1	0	0	0	1	0	0	0	0	12	27-36	10
16:00	0	0	0	2	1	1	0	0	0	0	0	0	0	0	4	26-35	3
17:00	1	0	2	5	3	1	1	0	0	0	0	0	0	0	13	24-33	10
18:00	4	1	1	9	1	1	0	0	0	0	0	0	0	0	17	20-29	10
19:00	0	0	1	1	4	0	0	0	0	0	0	0	0	0	6	25-34	6
20:00	0	0	0	0	2	1	1	0	0	0	0	0	0	0	4	31-40	3
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
23:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	18-27	2
Total	14	7	18	52	43	12	4	0	0	1	0	0	0	0	151		
Percent	9.3%	4.6%	11.9%	34.4%	28.5%	7.9%	2.6%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%			
AM Peak	09:00	11:00	10:00	09:00	08:00	00:00									10:00		
Vol.	2	2	4	4	3	1									12		
PM Peak	18:00	13:00	13:00	13:00	13:00	14:00	13:00			15:00					13:00		
Vol.	4	2	3	9	6	3	1			1					24		

Central Vermont Regional Planning Commission
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Station ID: surface- paved
TH-4, Main St- Warren VT
900 ft S of Covered Bridge Rd int.
Latitude: 0' 0.000 Undefined

northbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/07/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
07:00	0	0	0	2	1	1	0	0	0	0	0	0	0	0	4	26-35	3
08:00	0	0	1	3	1	0	0	0	0	0	0	0	0	0	5	22-31	5
09:00	0	0	0	2	2	2	0	0	0	0	0	0	0	0	6	28-37	6
10:00	0	1	2	4	3	1	0	0	0	0	0	0	0	0	11	24-33	9
11:00	0	0	2	9	6	2	0	0	0	0	0	0	0	0	19	24-33	15
12 PM	1	0	5	9	0	1	0	0	0	0	0	0	0	0	16	21-30	14
13:00	0	0	5	4	7	1	0	0	0	0	0	0	0	0	17	27-36	12
14:00	2	0	2	4	8	0	1	0	0	0	0	0	0	0	17	24-33	12
15:00	0	0	1	3	3	3	1	1	0	0	0	0	0	0	12	28-37	8
16:00	3	0	1	3	5	1	0	1	0	0	0	0	0	0	14	27-36	9
17:00	1	0	4	1	3	1	0	0	0	0	0	0	0	0	10	21-30	5
18:00	0	0	0	1	6	3	0	0	0	0	0	0	0	0	10	29-38	10
19:00	1	1	2	2	0	0	1	1	0	0	0	0	0	0	8	18-27	5
20:00	0	0	1	0	2	0	0	0	0	0	0	0	0	0	3	23-32	2
21:00	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3	23-32	3
22:00	0	0	1	0	2	0	0	0	0	0	0	0	0	0	3	23-32	2
23:00	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	28-37	2
Total	8	2	27	49	51	18	3	3	0	0	0	0	0	0	161		
Percent	5.0%	1.2%	16.8%	30.4%	31.7%	11.2%	1.9%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak		10:00	10:00	11:00	11:00	09:00									11:00		
Vol.		1	2	9	6	2									19		
PM Peak	16:00	19:00	12:00	12:00	14:00	15:00	14:00	15:00							13:00		
Vol.	3	1	5	9	8	3	1	1							17		

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TH-4, Main St- Warren VT
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Latitude: 0' 0.000 Undefined

northbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/08/09	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
01:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	32-41	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	27-36	1
07:00	0	0	0	2	3	1	1	0	0	0	0	0	0	0	7	24-33	5
08:00	0	0	0	3	1	0	0	1	0	0	0	0	0	0	5	22-31	4
09:00	1	0	1	5	2	1	0	0	0	0	0	0	0	0	10	23-32	8
10:00	3	0	2	7	1	3	0	0	0	0	0	0	0	0	16	21-30	9
11:00	0	1	0	2	5	1	0	0	0	0	0	0	0	0	9	27-36	8
12 PM	2	1	1	8	9	0	0	0	0	0	0	0	0	0	21	25-34	17
13:00	2	0	2	4	8	2	0	0	0	0	0	0	0	0	18	27-36	13
14:00	1	0	2	4	8	1	2	0	0	0	0	0	0	0	18	24-33	12
15:00	2	0	0	6	5	4	1	0	0	0	0	0	0	0	18	26-35	11
16:00	2	0	3	7	7	2	0	0	0	0	0	0	0	0	21	23-32	14
17:00	0	0	2	6	5	2	0	0	0	0	0	0	0	0	15	24-33	11
18:00	0	0	3	5	3	3	0	0	0	0	0	0	0	0	14	21-30	8
19:00	1	0	1	3	1	0	0	0	0	0	0	0	0	0	6	22-31	5
20:00	0	0	1	0	2	1	0	0	0	0	0	0	0	0	4	27-36	3
21:00	0	0	0	0	2	1	0	0	0	0	0	0	0	0	3	27-36	3
22:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	37-46	1
23:00	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	28-37	2
Total	14	2	18	63	63	25	5	2	0	0	0	0	0	0	192		
Percent	7.3%	1.0%	9.4%	32.8%	32.8%	13.0%	2.6%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	11:00	10:00	10:00	11:00	10:00	01:00	08:00							10:00		
Vol.	3	1	2	7	5	3	1	1							16		
PM Peak	12:00	12:00	16:00	12:00	12:00	15:00	14:00	22:00							12:00		
Vol.	2	1	3	8	9	4	2	1							21		

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Latitude: 0' 0.000 Undefined

northbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/09/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	27-36	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
07:00	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2	22-31	1
08:00	0	0	0	1	0	2	1	0	0	0	0	0	0	0	4	32-41	3
09:00	1	0	0	1	2	2	0	0	0	0	0	0	0	0	6	28-37	5
10:00	0	0	5	6	2	1	0	0	0	0	0	0	0	0	14	21-30	11
11:00	2	1	2	8	6	1	0	0	0	0	0	0	0	0	20	24-33	14
12 PM	0	0	3	2	1	5	3	1	0	0	0	0	0	0	15	34-43	9
13:00	4	2	1	7	9	4	1	0	0	0	0	0	0	0	28	25-34	16
14:00	1	0	4	3	7	0	0	1	0	0	0	0	0	0	16	26-35	10
15:00	0	0	3	8	9	3	0	0	0	0	0	0	0	0	23	25-34	17
16:00	0	1	0	2	9	2	0	0	0	0	0	0	0	0	14	28-37	13
17:00	0	0	2	3	0	0	0	0	0	0	0	0	0	0	5	19-28	5
18:00	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2	17-26	1
19:00	0	0	1	1	0	1	0	0	0	0	0	0	0	0	3	17-26	2
20:00	0	3	0	2	2	0	0	0	0	0	0	0	0	0	7	23-32	4
21:00	0	0	0	0	5	4	0	0	0	0	0	0	0	0	9	30-39	9
22:00	0	1	1	0	2	0	0	0	0	0	0	0	0	0	4	12-21	2
23:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	22-31	2
Total	8	8	22	46	57	27	6	2	0	0	0	0	0	0	176		
Percent	4.5%	4.5%	12.5%	26.1%	32.4%	15.3%	3.4%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	11:00	10:00	11:00	11:00	08:00	07:00								11:00		
Vol.	2	1	5	8	6	2	1								20		
PM Peak	13:00	20:00	14:00	15:00	13:00	12:00	12:00	12:00							13:00		
Vol.	4	3	4	8	9	5	3	1							28		

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Latitude: 0' 0.000 Undefined

northbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/10/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	12-21	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
05:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	22-31	2
06:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
07:00	0	0	0	1	1	0	0	1	0	0	0	0	0	0	3	22-31	2
08:00	0	0	1	2	8	1	0	0	0	0	0	0	0	0	12	27-36	11
09:00	1	0	1	4	2	1	0	0	0	0	0	0	0	0	9	23-32	7
10:00	2	2	2	9	7	1	0	0	0	0	0	0	0	0	23	24-33	16
11:00	0	0	1	5	5	2	1	0	0	0	0	0	0	0	14	25-34	10
12 PM	1	0	1	5	3	0	1	1	0	0	0	0	0	0	12	24-33	9
13:00	0	1	3	6	5	2	0	0	0	0	0	0	0	0	17	23-32	11
14:00	2	0	3	8	3	0	0	1	0	0	0	0	0	0	17	23-32	13
15:00	4	1	4	5	2	0	0	0	0	0	0	0	0	0	16	22-31	10
16:00	2	0	0	5	1	2	1	1	0	0	0	0	0	0	12	26-35	6
17:00	2	0	0	2	3	3	0	0	0	0	0	0	0	0	10	29-38	8
18:00	0	0	0	4	3	0	0	0	0	0	0	0	0	0	7	24-33	7
19:00	1	0	0	3	1	0	0	0	0	0	0	0	0	0	5	22-31	4
20:00	0	0	1	1	3	0	0	0	0	0	0	0	0	0	5	24-33	5
21:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	32-41	1
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
23:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
Total	15	4	18	61	51	12	4	4	0	0	0	0	0	0	169		
Percent	8.9%	2.4%	10.7%	36.1%	30.2%	7.1%	2.4%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	10:00	10:00	10:00	08:00	11:00	11:00	07:00							10:00		
Vol.	2	2	2	9	8	2	1	1							23		
PM Peak	15:00	13:00	15:00	14:00	13:00	17:00	12:00	12:00							13:00		
Vol.	4	1	4	8	5	3	1	1							17		

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northbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/11/09	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	27-36	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
05:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
06:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
07:00	0	0	2	0	1	0	0	1	0	0	0	0	0	0	4	13-22	2
08:00	0	0	0	2	3	0	1	0	0	0	0	0	0	0	6	24-33	5
09:00	0	1	1	0	3	0	0	0	0	0	0	0	0	0	5	24-33	3
10:00	0	0	3	3	3	0	0	0	0	0	0	0	0	0	9	23-32	8
11:00	1	1	0	1	3	1	0	0	0	0	0	0	0	0	7	27-36	5
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	1	2	6	9	14	2	1	1	0	0	0	0	0	0	36		
Percent	2.8%	5.6%	16.7%	25.0%	38.9%	5.6%	2.8%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	09:00	10:00	10:00	08:00	00:00	08:00	07:00							10:00		
Vol.	1	1	3	3	3	1	1	1							9		
PM Peak Vol.																	
Total	87	30	147	392	408	141	34	15	0	1	0	0	0	0	1255		
Percent	6.9%	2.4%	11.7%	31.2%	32.5%	11.2%	2.7%	1.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%			

	15th Percentile :	23 MPH
	50th Percentile :	30 MPH
	85th Percentile :	36 MPH
	95th Percentile :	40 MPH

Stats	10 MPH Pace Speed :	26-35 MPH
	Number in Pace :	800
	Percent in Pace :	63.7%
	Number of Vehicles > 25 MPH :	991
	Percent of Vehicles > 25 MPH :	79.0%
	Mean Speed(Average) :	29 MPH

Central Vermont Regional Planning Commission
29 Main Street, Suite 4
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(802) 229-0389

Site Code: 2308549066
Station ID: surface- paved
TH-4, Main St- Warren VT
900 ft S of Covered Bridge Rd int.
Latitude: 0' 0.000 Undefined

southbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/03/09	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	0	**2**	2	**8**	4	0	0	0	0	0	0	0	0	0	**16**	24-33	13
16:00	0	0	**3**	1	**6**	0	0	0	0	0	0	0	0	0	10	26-35	7
17:00	0	0	1	3	6	0	0	0	0	0	0	0	0	0	10	25-34	9
18:00	0	0	0	1	4	**1**	**1**	0	0	0	0	0	0	0	7	25-34	5
19:00	0	1	1	3	2	1	0	0	0	0	0	0	0	0	8	23-32	6
20:00	**1**	0	1	2	2	1	0	**1**	0	0	0	0	0	0	8	23-32	5
21:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	27-36	1
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
Total	1	3	8	18	24	4	1	1	0	0	0	0	0	0	60		
Percent	1.7%	5.0%	13.3%	30.0%	40.0%	6.7%	1.7%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak Vol.																	
PM Peak	20:00	15:00	16:00	15:00	16:00	18:00	18:00	20:00							15:00		
Vol.	1	2	3	8	6	1	1	1							16		

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Latitude: 0' 0.000 Undefined

southbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/04/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	*	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
07:00	0	0	0	1	1	3	0	0	0	0	0	0	0	0	5	29-38	5
08:00	0	0	0	2	0	1	1	0	0	0	0	0	0	0	4	18-27	2
09:00	0	0	1	1	1	0	1	0	0	0	0	0	0	0	4	22-31	3
10:00	1	0	0	6	3	2	0	0	0	0	0	0	0	0	12	24-33	9
11:00	0	0	2	4	4	0	0	0	0	0	0	0	0	0	10	24-33	9
12 PM	0	0	0	3	3	2	0	0	0	0	0	0	0	0	8	28-37	8
13:00	0	0	2	8	3	1	0	0	0	0	0	0	0	0	14	24-33	13
14:00	0	0	1	5	2	2	0	0	0	0	0	0	0	0	10	25-34	7
15:00	0	0	4	5	7	1	0	0	0	0	0	0	0	0	17	23-32	12
16:00	0	0	1	3	8	1	0	0	0	0	0	0	0	0	13	27-36	12
17:00	0	0	0	5	2	4	0	0	0	0	0	0	0	0	11	26-35	7
18:00	0	0	2	1	3	0	1	0	0	0	0	0	0	0	7	24-33	4
19:00	1	1	0	0	1	3	0	0	0	0	0	0	0	0	6	29-38	4
20:00	1	0	0	6	1	0	0	0	0	0	0	0	0	0	8	22-31	7
21:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
22:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	27-36	1
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
Total	4	1	13	52	39	21	3	0	0	0	0	0	0	0	133		
Percent	3.0%	0.8%	9.8%	39.1%	29.3%	15.8%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	01:00		11:00	10:00	11:00	07:00	08:00								10:00		
Vol.	1		2	6	4	3	1								12		
PM Peak	19:00	19:00	15:00	13:00	16:00	17:00	18:00								15:00		
Vol.	1	1	4	8	8	4	1								17		

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Latitude: 0' 0.000 Undefined

southbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/05/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
06:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	12-21	1
07:00	0	0	0	2	2	2	0	0	0	0	0	0	0	0	6	28-37	6
08:00	0	0	0	2	3	1	**1**	0	0	0	0	0	0	0	7	24-33	5
09:00	0	**1**	0	2	2	0	0	0	0	0	0	0	0	0	5	23-32	4
10:00	**1**	0	0	**8**	**6**	**3**	0	0	0	0	0	0	0	0	**18**	26-35	**14**
11:00	0	0	**3**	5	1	0	0	0	0	0	0	0	0	0	9	22-31	9
12 PM	0	0	1	4	**5**	2	0	0	0	0	0	0	0	0	12	27-36	10
13:00	0	**1**	**2**	**5**	1	2	0	**1**	0	0	0	0	0	0	12	20-29	7
14:00	0	0	1	1	1	2	0	0	0	0	0	0	0	0	5	28-37	4
15:00	0	1	1	2	2	4	**1**	0	0	0	0	0	0	0	11	29-38	7
16:00	0	0	2	5	5	**5**	0	0	0	0	0	0	0	0	**17**	24-33	10
17:00	0	1	0	2	2	1	0	0	0	0	0	0	0	0	6	27-36	5
18:00	0	0	1	3	0	0	1	0	0	0	0	0	0	0	5	19-28	4
19:00	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	28-37	2
20:00	0	0	1	2	3	0	0	0	0	0	0	0	0	0	6	24-33	6
21:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	32-41	1
22:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	23-32	2
23:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	12-21	1
Total	1	4	14	43	36	24	4	1	0	0	0	0	0	0	127		
Percent	0.8%	3.1%	11.0%	33.9%	28.3%	18.9%	3.1%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	09:00	11:00	10:00	10:00	10:00	08:00								10:00		
Vol.	1	1	3	8	6	3	1								18		
PM Peak		13:00	13:00	13:00	12:00	16:00	15:00	13:00							16:00		
Vol.		1	2	5	5	5	1	1							17		

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Latitude: 0' 0.000 Undefined

southbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/06/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	1	0	**1**	0	0	0	0	0	0	0	2	22-31	1
06:00	0	0	0	1	1	1	0	0	0	0	0	0	0	0	3	27-36	3
07:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2	12-21	1
08:00	0	0	0	1	1	**2**	0	0	0	0	0	0	0	0	4	28-37	4
09:00	0	0	**3**	**5**	1	2	1	0	0	0	0	0	0	0	**12**	21-30	8
10:00	0	**1**	3	3	2	0	0	0	0	0	0	0	0	0	9	23-32	8
11:00	0	0	2	3	**5**	1	0	0	0	0	0	0	0	0	11	27-36	9
12 PM	0	**1**	1	2	2	1	0	0	0	0	0	0	0	0	7	23-32	5
13:00	0	0	2	5	3	0	0	0	0	0	0	0	0	0	10	24-33	10
14:00	0	0	0	**8**	1	2	0	0	0	0	0	0	0	0	11	26-35	9
15:00	0	1	3	**1**	**4**	**3**	**2**	0	0	0	0	0	0	0	**14**	29-38	8
16:00	0	0	**4**	4	4	0	0	0	0	0	0	0	0	0	12	22-31	9
17:00	**1**	0	1	0	**5**	1	0	0	0	0	0	0	0	0	8	27-36	6
18:00	1	0	1	1	0	1	0	0	0	0	0	0	0	0	4	17-26	2
19:00	0	0	1	5	1	0	0	0	0	0	0	0	0	0	7	22-31	7
20:00	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4	20-29	4
21:00	0	0	0	0	**1**	0	0	**1**	0	0	0	0	0	0	2	22-31	1
22:00	1	0	0	0	1	1	0	0	0	0	0	0	0	0	3	27-36	2
23:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	22-31	2
Total	3	3	22	44	35	15	4	1	0	0	0	0	0	0	127		
Percent	2.4%	2.4%	17.3%	34.6%	27.6%	11.8%	3.1%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak		10:00	09:00	09:00	11:00	08:00	05:00								09:00		
Vol.		1	3	5	5	2	1								12		
PM Peak	17:00	12:00	16:00	14:00	17:00	15:00	15:00	21:00							15:00		
Vol.	1	1	4	8	5	3	2	1							14		

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Latitude: 0' 0.000 Undefined

southbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/07/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	27-36	1
05:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	27-36	1
06:00	0	0	0	1	0	0	**1**	0	0	0	0	0	0	0	2	17-26	1
07:00	0	0	0	1	**1**	1	0	0	0	0	0	0	0	0	3	27-36	3
08:00	**1**	**1**	0	2	3	0	0	0	0	0	0	0	0	0	7	24-33	5
09:00	0	0	**3**	4	2	1	1	0	0	0	0	0	0	0	11	23-32	9
10:00	0	0	1	5	3	0	0	0	0	0	0	0	0	0	9	24-33	9
11:00	0	1	3	**6**	**4**	**3**	0	0	0	0	0	0	0	0	**17**	23-32	11
12 PM	**1**	0	**5**	2	3	1	0	0	0	0	0	0	0	0	12	21-30	7
13:00	0	0	4	4	**5**	1	0	0	0	0	0	0	0	0	**14**	27-36	10
14:00	0	**1**	1	4	4	1	0	0	0	0	0	0	0	0	11	25-34	9
15:00	0	0	1	3	3	1	**1**	0	0	0	0	0	0	0	9	24-33	7
16:00	0	0	2	4	3	**2**	1	0	0	0	0	0	0	0	12	24-33	9
17:00	0	0	0	**6**	3	2	0	0	0	0	0	0	0	0	11	24-33	9
18:00	0	0	1	4	3	0	1	0	0	0	0	0	0	0	9	24-33	8
19:00	0	1	0	0	3	0	1	0	0	0	0	0	0	0	5	24-33	3
20:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2	12-21	1
21:00	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2	7-16	1
22:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
Total	2	5	22	48	41	15	6	0	0	0	0	0	0	0	139		
Percent	1.4%	3.6%	15.8%	34.5%	29.5%	10.8%	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	08:00	09:00	11:00	11:00	11:00	06:00								11:00		
Vol.	1	1	3	6	4	3	1								17		
PM Peak	12:00	14:00	12:00	17:00	13:00	16:00	15:00								13:00		
Vol.	1	1	5	6	5	2	1								14		

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southbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/08/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	27-36	1
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
08:00	0	0	1	2	1	0	0	0	0	0	0	0	0	0	4	22-31	4
09:00	0	0	0	3	4	1	2	0	0	0	0	0	0	0	10	25-34	7
10:00	0	0	2	1	5	3	0	0	0	0	0	0	0	0	11	29-38	9
11:00	0	1	1	4	4	3	0	0	0	0	0	0	0	0	13	25-34	9
12 PM	0	1	6	6	4	4	1	0	0	0	0	0	0	0	22	20-29	12
13:00	0	0	0	4	6	0	0	0	0	0	0	0	0	0	10	26-35	10
14:00	1	0	0	7	8	1	2	0	0	0	0	0	0	0	19	26-35	15
15:00	0	0	3	6	8	3	0	0	0	0	0	0	0	0	20	24-33	14
16:00	0	0	2	7	4	2	0	0	0	0	0	0	0	0	15	24-33	12
17:00	0	0	4	7	5	2	1	0	0	0	0	0	0	0	19	22-31	12
18:00	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3	24-33	3
19:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	*	1
20:00	0	0	2	1	0	0	0	0	0	0	0	0	0	0	3	17-26	3
21:00	0	1	0	2	0	0	0	0	0	0	0	0	0	0	3	18-27	2
22:00	0	0	0	1	1	0	0	0	1	0	0	0	0	0	3	22-31	2
23:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	22-31	2
Total	2	3	21	52	55	20	6	0	1	0	0	0	0	0	160		
Percent	1.3%	1.9%	13.1%	32.5%	34.4%	12.5%	3.8%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak		11:00	10:00	11:00	10:00	10:00	09:00								11:00		
Vol.		1	2	4	5	3	2								13		
PM Peak	14:00	12:00	12:00	14:00	14:00	12:00	14:00		22:00						12:00		
Vol.	1	1	6	7	8	4	2		1						22		

Central Vermont Regional Planning Commission
29 Main Street, Suite 4
Montpelier, VT 05602
(802) 229-0389

Site Code: 2308549066
Station ID: surface- paved
TH-4, Main St- Warren VT
900 ft S of Covered Bridge Rd int.
Latitude: 0' 0.000 Undefined

southbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/09/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	27-36	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	22-31	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
07:00	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2	22-31	1
08:00	0	0	0	5	2	1	0	0	0	0	0	0	0	0	8	23-32	7
09:00	0	0	5	3	3	1	1	0	0	0	0	0	0	0	13	21-30	8
10:00	1	1	1	3	3	2	0	0	0	0	0	0	0	0	11	28-37	8
11:00	0	1	2	6	5	0	0	0	0	0	0	0	0	0	14	24-33	11
12 PM	1	1	4	1	3	1	0	0	0	0	0	0	0	0	11	15-24	6
13:00	0	2	2	2	2	0	0	0	0	0	0	0	0	0	8	23-32	6
14:00	0	3	1	4	2	0	1	0	0	0	0	0	0	0	11	23-32	7
15:00	0	0	5	3	3	2	0	0	0	0	0	0	0	0	13	21-30	8
16:00	0	0	1	3	3	1	0	0	0	0	0	0	0	0	8	24-33	7
17:00	0	0	1	4	4	0	0	0	0	0	0	0	0	0	9	25-34	9
18:00	0	0	0	1	3	3	0	0	0	0	0	0	0	0	7	29-38	7
19:00	0	0	2	0	0	1	0	0	0	0	0	0	0	0	3	13-22	2
20:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	18-27	2
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
22:00	0	0	1	3	0	0	0	0	0	0	0	0	0	0	4	19-28	4
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
Total	2	8	25	40	35	13	3	0	0	0	0	0	0	0	126		
Percent	1.6%	6.3%	19.8%	31.7%	27.8%	10.3%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	10:00	09:00	11:00	11:00	10:00	07:00								11:00		
Vol.	1	1	5	6	5	2	1								14		
PM Peak	12:00	14:00	15:00	14:00	17:00	18:00	14:00								15:00		
Vol.	1	3	5	4	4	3	1								13		

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900 ft S of Covered Bridge Rd int.
Latitude: 0' 0.000 Undefined

southbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/10/09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2	22-31	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	27-36	1
07:00	0	1	0	2	1	0	0	0	0	0	0	0	0	0	4	22-31	3
08:00	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2	7-16	1
09:00	1	0	0	6	1	4	0	0	0	0	0	0	0	0	12	26-35	7
10:00	0	2	4	3	4	1	0	0	0	0	0	0	0	0	14	27-36	8
11:00	0	0	3	4	3	1	0	1	0	0	0	0	0	0	12	23-32	9
12 PM	0	1	2	8	2	0	1	0	0	0	0	0	0	0	14	23-32	12
13:00	0	1	4	3	0	2	0	0	0	0	0	0	0	0	10	19-28	8
14:00	1	0	1	4	2	0	0	0	0	0	0	0	0	0	8	23-32	7
15:00	2	0	0	1	3	1	0	0	0	0	0	0	0	0	7	27-36	5
16:00	0	1	1	1	7	2	0	0	0	0	0	0	0	0	12	28-37	10
17:00	0	0	1	4	3	2	0	0	0	0	0	0	0	0	10	24-33	8
18:00	0	0	0	5	1	1	0	0	0	0	0	0	0	0	7	26-35	6
19:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	22-31	2
20:00	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	28-37	2
21:00	0	0	1	1	1	1	0	0	0	0	0	0	0	0	4	27-36	3
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
Total	4	7	17	44	30	18	2	1	0	0	0	0	0	0	123		
Percent	3.3%	5.7%	13.8%	35.8%	24.4%	14.6%	1.6%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	09:00	10:00	10:00	09:00	10:00	09:00	04:00	11:00							10:00		
Vol.	1	2	4	6	4	4	1	1							14		
PM Peak	15:00	12:00	13:00	12:00	16:00	13:00	12:00								12:00		
Vol.	2	1	4	8	7	2	1								14		

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southbound

Start Time	0 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
08/11/09	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
05:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
06:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	27-36	1
07:00	0	0	0	1	1	1	0	0	0	0	0	0	0	0	3	27-36	3
08:00	0	0	2	6	3	1	0	0	0	0	0	0	0	0	12	24-33	11
09:00	0	0	2	3	1	1	0	0	0	0	0	0	0	0	7	19-28	5
10:00	0	1	2	2	3	0	0	0	0	0	0	0	0	0	8	24-33	7
11:00	0	0	2	2	1	0	0	0	0	0	0	0	0	0	5	22-31	5
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	0	1	8	17	9	4	0	0	0	0	0	0	0	0	39		
Percent	0.0%	2.6%	20.5%	43.6%	23.1%	10.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak		10:00	08:00	08:00	08:00	06:00									08:00		
Vol.		1	2	6	3	1									12		
PM Peak Vol.																	
Total	19	35	150	358	304	134	29	4	1	0	0	0	0	0	1034		
Percent	1.8%	3.4%	14.5%	34.6%	29.4%	13.0%	2.8%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			

	15th Percentile :	24 MPH
	50th Percentile :	30 MPH
	85th Percentile :	36 MPH
	95th Percentile :	40 MPH
Stats	10 MPH Pace Speed :	26-35 MPH
	Number in Pace :	662
	Percent in Pace :	64.0%
	Number of Vehicles > 25 MPH :	830
	Percent of Vehicles > 25 MPH :	80.3%
	Mean Speed(Average) :	30 MPH

Appendix B

UTILITY IMPACTS

This section provides an overview of existing utility infrastructure in the study area (see *Utility Infrastructure Map* in Appendix D). Potential conflict areas have been identified. It is important that the conceptual plans be reviewed in detail for drainage and stormwater design and other engineering as a next step prior to implementation. An engineer will be able to determine the potential for problems related with the design or construction of the improvements and can recommend appropriate mitigation methods.

Drainage Facilities

Existing drainage structures such as catch basins and culverts are located in several locations throughout the project area. Generally, these structures will not be affected by the proposed enhancements. One area that will require review by an engineer during the development of construction documents is at the second proposed light fixture on Brook Road, where a culvert is located next to the proposed light, approximately 225 feet east from the center line on Main Street. Alternatively, this light could be moved to avoid any problems.

Currently, no areas within the project limits experience drainage problems and periodic ponding, nor do any culverts house breeding populations. However, during the development of construction documents and implementation of the pedestrian improvements, drainage should always be considered and minor grading may be necessary to address future problems.

Water

There is no municipal water in the project area. However, there are thirteen wells located within the project limits. The wells are comprised of three types: bedrock, shallow and dry.

There are eight bedrock wells. The first is located in front of the Grossman property (#565) along the right of way 14 feet from the east side of Main Street. The second well is 41 feet north on the west side of Main Street in front of the Mosley property (#580). It is approximately 12 feet from the road. The next well is approximately 419 feet north on the west side of Main Street in front of the Groom property (#508). It is approximately 12 feet from the road. The fourth well is approximately 355 feet north on the west side of Main Street in front of the Cota property (#440). It is approximately 11 feet from the road. Continuing north on Main Street approximately 1048 feet, the fifth well is located 10 feet from the road in front of the Roth property (#242).

There are two bedrock wells within the project limits on Brook Road. The first is approximately 70 feet east of the intersection of Flat Iron Road and Brook Road on the north side of Brook Road. It is 13 feet from the road in front of the Connell property (#141). The second bedrock well on Brook Road is approximately 700 feet east. It is approximately 12 feet from the south side of the road in front of the Neil property (#264).

There is only one shallow well within the scope of the project. It is located on Brook Road just east of the Lassner property (#166). The well is approximately 4 feet from the south side of Brook Road.

There are four dry wells located throughout the project area: one on Main Street and the other three on Brook Road. The well on Main Street is located in front of the Stewart property (#439). It is approximately 11 feet from the east side of the street. The well itself is approximately 5 feet by 6 feet.

The first shallow well on Brook Road is located approximately 25 feet east of the proposed textured intersection. It is approximately 10 feet from the south side of the road. The well itself is approximately 8 feet by 7 feet. The other two shallow wells are approximately 18 feet east in front of the Thompson property (#136). They are both circular wells with an approximate diameter of three feet. The wells are approximately 8 feet from the south side of the road and 4 feet from one another. Wells located within the project area will not be affected by the proposed enhancements. However, it is recommended that an engineer review the plans during the next phase of the project.

Sewer System

There are twenty manholes throughout the project area. The manholes on Main Street start just north of the Fuller Hill Road and Main Street intersection. The manholes continue north on Main Street and are located just east of the centerline. The manholes on Brook Road start approximately 28 feet east from the centerline on Main Street. The next manhole is approximately 154 feet east on Brook Road just south of the centerline. The next manhole is located on the north side of Brook Road just east of the Flat Iron Road and Brook Road intersection. The manholes continue east on the north side of Brook Road along the right of way. The manholes on Flat Iron Road start approximately 93 feet east of the Main Street and Flat Iron Road intersection. The manholes are located on the south side of the road. Manholes within the project area are not in conflict with the proposed improvements.

The sewer line on Main Street starts just north of the Fuller Hill Road and Main Street intersection. The line runs approximately 507 feet north on Main Street along the east side of the road. The line branches east and west to service properties along Main Street. The line first branches approximately 14 feet north of its start to the east to the Stewart property (#439). It then branches 13 feet north to the west to the Cota property (#440). The line branches approximately 71 feet north to the east to the Lobel property (#417). The line then branches approximately 170 feet north to the east to the Town Hall (#413). It then branches approximately 3 feet north to the west to Barn Apartments/Miserendino (#392). The line continues north approximately 104 feet and branches west to the Ryan property (#374). The sewer line then branches approximately 26 feet north to the east to the Town of Warren property (#28). The line continues north approximately 97 feet where it ends. From the end of this sewer line approximately 74 feet north on Main Street just east of the center line another sewer line goes west across Main Street.

The first sewer line on Flat Iron Road starts approximately 21 feet east of the triangle at the Main Street and Flat Iron Road intersection. It is located on the south side of the road and the line extends to the Warren United Church (#339). The second sewer line starts 215 feet east from the previous line. It runs along the south side of Flat Iron Road for approximately 309 feet. The line branches 26 feet east to the south to the Simpson property (#70). The line continues east for approximately 128 feet where it branches south to the Norton property (#96). The line then continues 92 feet east where it branches southeast to the Thompson property (#136). The sewer line continues east and crosses over to the north side of Brook Road for approximately 702 feet where the line then crosses to the south side of Brook Road and runs approximately 71 feet. The line on Brook Road first branches approximately 395 feet east to the north to the Perellie property (#203). The line continues east for approximately 334 feet where it branches north to the Krushenik property (#251). The sewer line continues east for approximately 64 feet to its end. Approximately 8 feet west of the end the line branches to cross to the south side of Brook Road. The line then branches to the Neil property (#264) and to the Bergman property (#294). The sewer lines will not be in conflict with the proposed enhancements. However, it is recommended that an engineer review the plans during the next phase of the project.

Electric and Telephone

Other utilities in the area include electric lines owned and maintained by Green Mountain Power and telephone lines owned and maintained by Champlain Valley Telecom. The Village electric and telephone lines located throughout the project area are primarily on overhead wires

and utility poles. More specifically, the utility poles on Main Street start on the west side of the street in front of the Dawson property (#630) and run north on Main Street for approximately 126 feet and then cross over to the east side of Main Street. The utility poles run north on Main Street for approximately 2349 feet and then cross over to the west side of Main Street just south of the bridge.

The utility poles on Brook Road start 136 feet east of Main Street. The poles run along the north side of the road east for 1136 feet and then cross over to the south side just east of the Neil (#264)/Bergman (#294) property line.

The utility poles on Flat Iron Road start 42 feet east of the intersection and run along the south side of the road for 184 feet.

For most of the project area, the existing utility poles do not appear to be in conflict with the proposed pedestrian enhancements. However, utility poles should always be considered and minor construction changes may be necessary to address any future problems,

There are three locations within the project area where the electrical lines are underground. From the utility pole just north of the pump station the line runs 9 feet south and then turns east crossing over the ROW. The other two underground lines are located on Flat Iron Road. The line runs from Hiram Inc. (#43) on the north side of the road to the utility pole on the south side of the road in front of the pump station. The third underground line runs from the previously mentioned utility pole to the storage tank. The electrical and telephone lines do not appear to be in conflict with the proposed enhancements. However, it is recommended that an engineer review the plans during the next phase of the project.

Conclusion

Impact to utility infrastructure will be minimal or non-existent in the project area. We therefore believe that the project as proposed is permittable from a State and Federal perspective.

Appendix C

Memo

Stantec

To:	Greg Goyette South Burlington, VT	From:	Polly Harris South Burlington, VT
File:	Warren SRTS Project 195310305	Date:	May 10, 2011

Reference: Warren SRTS Project Corridor Natural Resource Review

As requested, on April 27, 2011, Stantec Consulting (Stantec) evaluated the natural resources present within the Warren Safe Routes To School (SRTS) project corridor. For the purposes of this review, the project area includes a 25-foot wide corridor from the edge of pavement along Main Street, Brook Road, and School Road (see attached Base Map). Specifically, as part of this reconnaissance-level investigation, Stantec identified and characterized observable rare, threatened or endangered (RTE) species, wetlands, streams, wildlife habitat, agricultural land, and conservation zones. Potential wetland boundaries under state and federal jurisdiction were determined using the technical criteria described in the *2009 Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region.* Following is a summary of our findings.

General Site Description

The project area varies, and includes existing roadways, roadsides, historic buildings and outbuildings, homes, developed yards, utility corridors, and streams crossings. Vegetation also varies – it includes a primarily built environment along Main Street, to mowed lawns and ornamental plantings along Brook Road, to relatively undisturbed habitat along portions of School Road. Freeman Brook crosses under Brook Road twice and Main Street once within the project corridor, prior to discharging to the Mad River to the west of the project area (see Photos 1 - 6).

Natural Resource Review Summary

According to the Natural Resource Conservation Service (NRCS) Web Soil Survey[1] for Washington County, Vermont, soils are mapped as Tunbridge-Lyman complex in the western portion of the project area, and Colton gravelly loamy sand, with varying slopes, in the eastern portion. Neither of these soil types are considered hydric. Colton gravelly loamy sand, 0-3% slope soils are considered farmland soils of statewide importance. This soil type is located on the school property at the north end of School Road.

Stantec used the Vermont Agency of Natural Resources (ANR) Environmental Interest Locator program to assess the likelihood of the presence or absence of mapped Vermont Significant Wetland Inventory (VSWI) wetlands and rare, threatened, and endangered (RTE) plant and

[1] Natural Resource Conservation Service Web Soil Survey: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Refer to map for Washington County, Vermont. Accessed on May 10, 2011.

animal species. According to this program,[2] there are no VSWI wetlands, RTE species, or significant natural communities within the project area (see attached figure).

Wetlands and Streams

One wetland area was identified during the April 27 site visit. This area is located at the toe of slope on the east side of School Road, across from the Public Works building. It is a palustrine scrub-shrub wetland dominated by gray alder (*Alnus incana*) and sensitive fern (*Onoclea sensibilis*). Soils were saturated to the surface during the site investigation, and water flowed from east to west through the wetland. This water is conveyed in a culvert beneath School Road, and then in a channelized drainage on the west side of the road (see Photos 7 and 8).

Stantec identified one perennial stream and one ephemeral stream within the project corridor (see Photos 4 – 6; 8). Freeman Brook flows from east to west through the study area, crossing Brook Road twice. The banks of this stream have been armored in places, particularly near the road crossings. The ephemeral stream drains the wetland described above.

RTE Species

Stantec identified no RTE plant species during the April 27, 2011 site visit. Because the majority of the area has been disturbed by road construction, structures, or yard-related work, it is unlikely that any RTE plant species occur within the project corridor.

Wildlife and Wildlife Habitat

The project area is a relatively narrow corridor along existing roads, with residences and retail stores present. The narrow corridor has limited wildlife habitat value. American robins (*Turdus migratorius)* were observed within the project area during the April 27, 2011 site visit, as were black-capped chickadee (*Poecile atricapillus)*, and Northern cardinal (*Cardinalis cardinalis*). Freeman Brook is stocked with brook trout (*Salvelinus fontinalis*), and fishing in the village is restricted to children.

Agricultural Land

The project area is not used for agriculture. As described above, according to the NRCS Web Soil Survey for Washington County, Vermont, the Colton gravelly loamy sand, 0-3% slope soils surrounding the school are considered soils with statewide agricultural significance. Based on the history of land use and field/playground development surrounding the school, it is unlikely that any agricultural use would take place within the narrow undeveloped portion of the project area corridor. Other portions of the school property remain available for use as a kitchen garden or similar small-scale agricultural use.

Conservation Zones

No designated state or town conservation zones are present within the project corridor. The project area is located in part within the Warren Village Historic District.

Federal and State Wetland Regulations

The Corps regulates the streams identified within the project area. Under the provisions of Section 404 of the Clean Water Act, the Corps regulates activities within waters of the United States, which include navigable waters and all their tributaries, adjacent wetlands, and other waters or wetlands where degradation or destruction could affect interstate or foreign commerce. The Corps has issued a Programmatic General Permit for the State of Vermont. Typically,

[2] http://maps.vermont.gov/imf/sites/ANR_NATRESViewer/jsp/launch.jsp

wetland and stream impacts of less than one acre may be covered by a Programmatic General Permit.

The Vermont Wetland Rules were recently revised (effective Aug. 1, 2010). Impacts to the wetland area identified within the project corridor, or its buffer, would likely require authorization under the Vermont Wetland Permit or Vermont General Permit. Stream impacts would likely require authorization through a Stream Alteration Permit from the Vermont Agency of Natural Resources.

Summary

In summary, one wetland, one perennial stream, and one ephemeral stream were identified within the project corridor. A small palustrine scrub/shrub wetland was identified along the east side of School Road, across from the Public Works building, and the ephemeral stream flows from that wetland on the west side of School Road. Freeman Brook, a perennial stream, flows from east to west along Brook Road, traversing Brook Road twice and Main Street once within the project corridor. Once a preferred alignment is selected, Stantec recommends that an additional survey be conducted to confirm what impacts, if any, the preferred alternative would have on the natural resources present within the project corridor. Stantec recommends that impacts to these resources be minimized.

STANTEC CONSULTING SERVICES INC.

Polly Harris
Environmental Project Manager
Polly.Harris@stantec.com

Reference: **Warren SRTS Project Corridor Natural Resource Review**

Warren SRTS
Project Area Photos

Photo 1. The SRTS project corridor is restricted by stone walls, ornamental plantings, and structures along Brook Road. 4/27/11

Photo 2. Rock outcrops are present along Brook Road within the project corridor. 4/27/11

Reference: **Warren SRTS Project Corridor Natural Resource Review**

Photo 3. The area along School Road is vegetated with trees, shrubs, and lawns. 4/27/11

Photo 4. Freeman Brook flows from east to west along Brook Road. 4/27/11

Reference: **Warren SRTS Project Corridor Natural Resource Review**

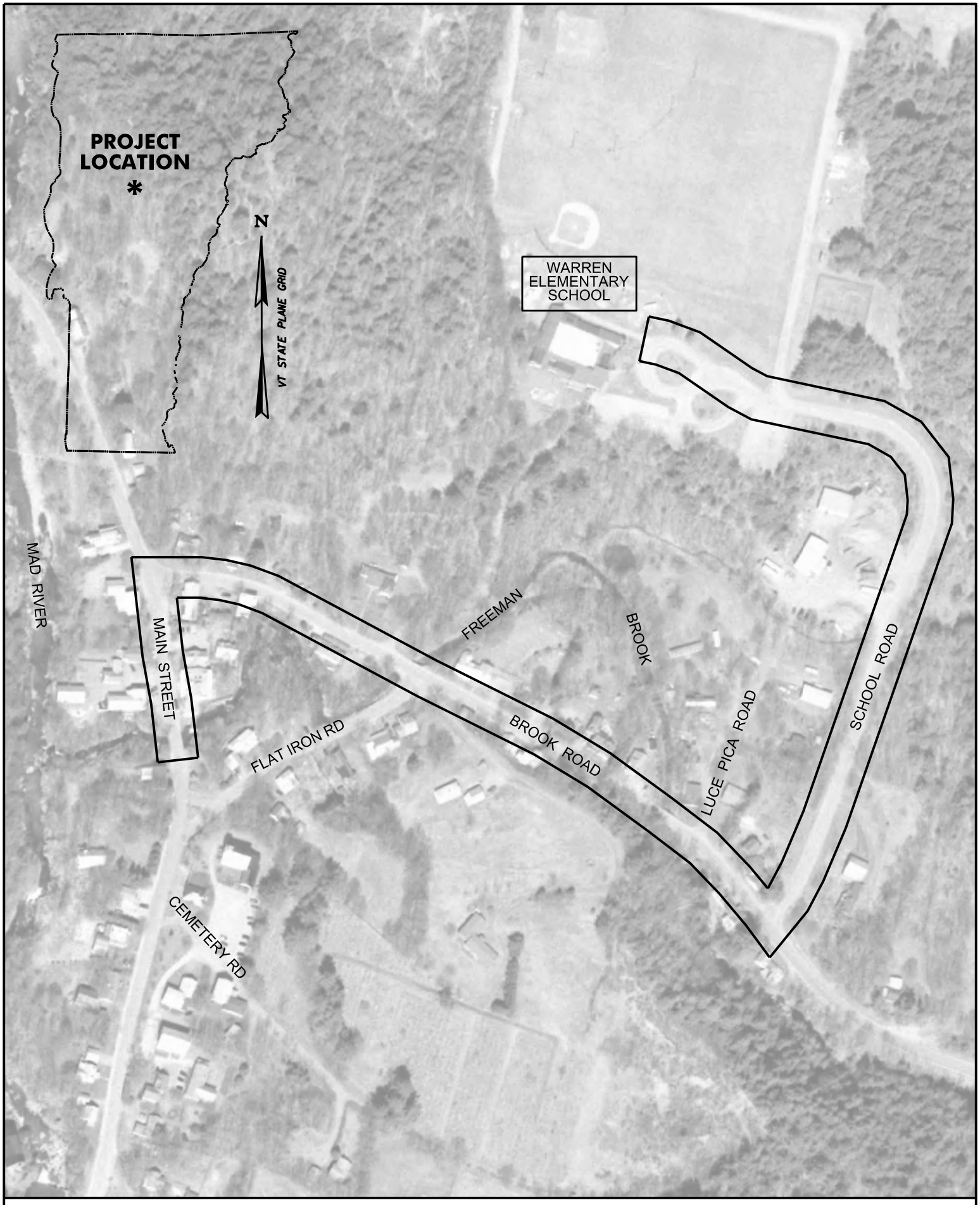
Photo 5. The banks of Freeman Brook are armored near road crossings. 4/27/11

Photo 6. Freeman Brook flows under Main Street toward its confluence with the Mad River. 4/27/11

Reference: **Warren SRTS Project Corridor Natural Resource Review**

Photo 7. A palustrine scrub/shrub wetland is located along the east side of School Road. 4/27/11

Photo 8. Drainage from the wetland flows to the west in a channel. 4/27/11



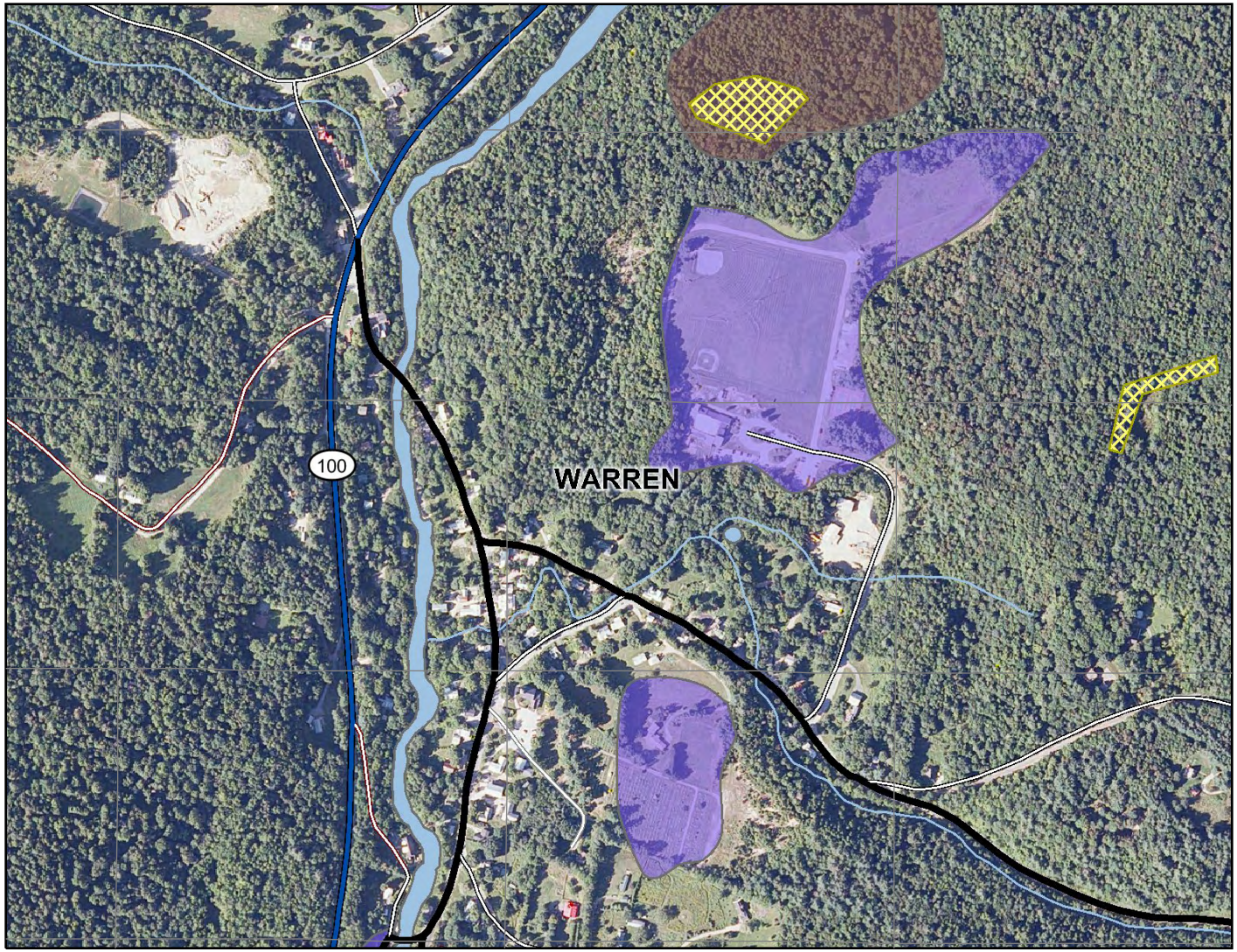
SAFE ROUTES TO SCHOOL – TOWN OF WARREN
SIDEWALK FEASIBILITY STUDY BASE MAP

Stantec

ANR Environmental Interest Locator

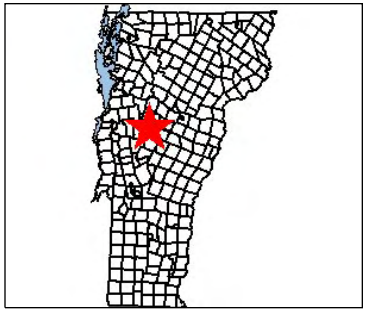
Vermont Agency of Natural Resources (ANR)

Warren SRTS ANR Map



0 750 1500 2250 ft.

Map center: 471666, 179579



Legend

Roads
- US Highway
- Vermont State Highway
- Class One
- Class Two
- Legal Trail
- Emergency U-Turn Area
- Proposed Class Two
- Proposed Class Three
- Proposed Vermont State Highway
- Proposed US Highway
- Proposed Interstate
- Discontinued Interstate
- Class Three
- Class Four
- State/National Forest Highway
- Military Road (No Public Access)
- Private Road

Wetland Advisory Layer: Class 3 Wetlands

VSWI
- Class 1 Wetland
- Class 2 Wetland

Rare, Threatened, and Endangered Species
- Threatened or Endangered
- Rare (Not T or E)

Significant Natural Communities
- Palustrine
- Terrestrial

Hydrography Lakes and Ponds (VHD 5k)

Hydrography (VHD 5k)

VT County Boundary

Hydric Soils

Hydric Soils

Soils - Prime Agricultural
- Local
- Local (b)
- Prime
- Prime (b)
- Prime (c)

VT State Plane Meters (NAD83)

N

Scale: 1:7,555

Notes: note: local ag soils

URL: http://maps.vermont.gov/imf/sites/ANR_NATRESViewer/jsp/launch.jsp

5/10/11

Appendix D

HARTGEN
archeological associates inc

ARCHEOLOGICAL RESOURCE ASSESSMENT

Warren Sidewalk Improvements

Town of Warren
Washington County, Vermont

HAA # V553.11

Submitted to:

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www.acra-crm.org

May 2011

ARCHEOLOGICAL RESOURCE ASSESSMENT

INTRODUCTION

Hartgen Archeological Associates, Inc. (HAA, Inc.) was retained by Stantec to conduct an Archeological Resource Assessment (ARA) and historical resources assessment for the Warren Sidewalk Improvements Feasibility Study located in Warren, Vermont (Map 1). The proposed sidewalks will be constructed along Main Street (from the Warren Store to the intersection with Brook Road), along Brook Road (between its intersections with Main Street and School Road), and along School Road (from Brook Road to the school).

At present, the project plans include the following improvements. Along Main Street, a five foot (1.5 m) wide sidewalk is proposed to be constructed on the west side of the road. Along Brook Road, a five foot (1.5 m) wide sidewalk is proposed to be built along the north side of the road. However, it is possible that the sidewalk could be placed along the south side of the road. Given the close proximity of the houses to the road, the proposed sidewalk will likely be constructed immediately adjacent to Brook Road. Along School Road, a ten foot (3 m) wide path is proposed, comprised of a 5 foot (1.5 m) wide sidewalk and a 5 foot (1.5 m) wide green strip separating it from the edge of the road. It is anticipated that sidewalk construction/ground disturbance will likely occur no more than 35 feet (11 m) offset from centerline for all three segments.

RESEARCH DESIGN

This review and sensitivity assessment was conducted to comply with Section 106 of the National Historic Preservation Act. The investigation was conducted according to the Vermont State Historic Preservation Office's Guidelines for Conducting Archeology in Vermont (2002). This project will be funded in part by the Vermont Agency of Transportation (VTrans), and the ARA report will be reviewed by the VTrans archeology officer for concurrence.

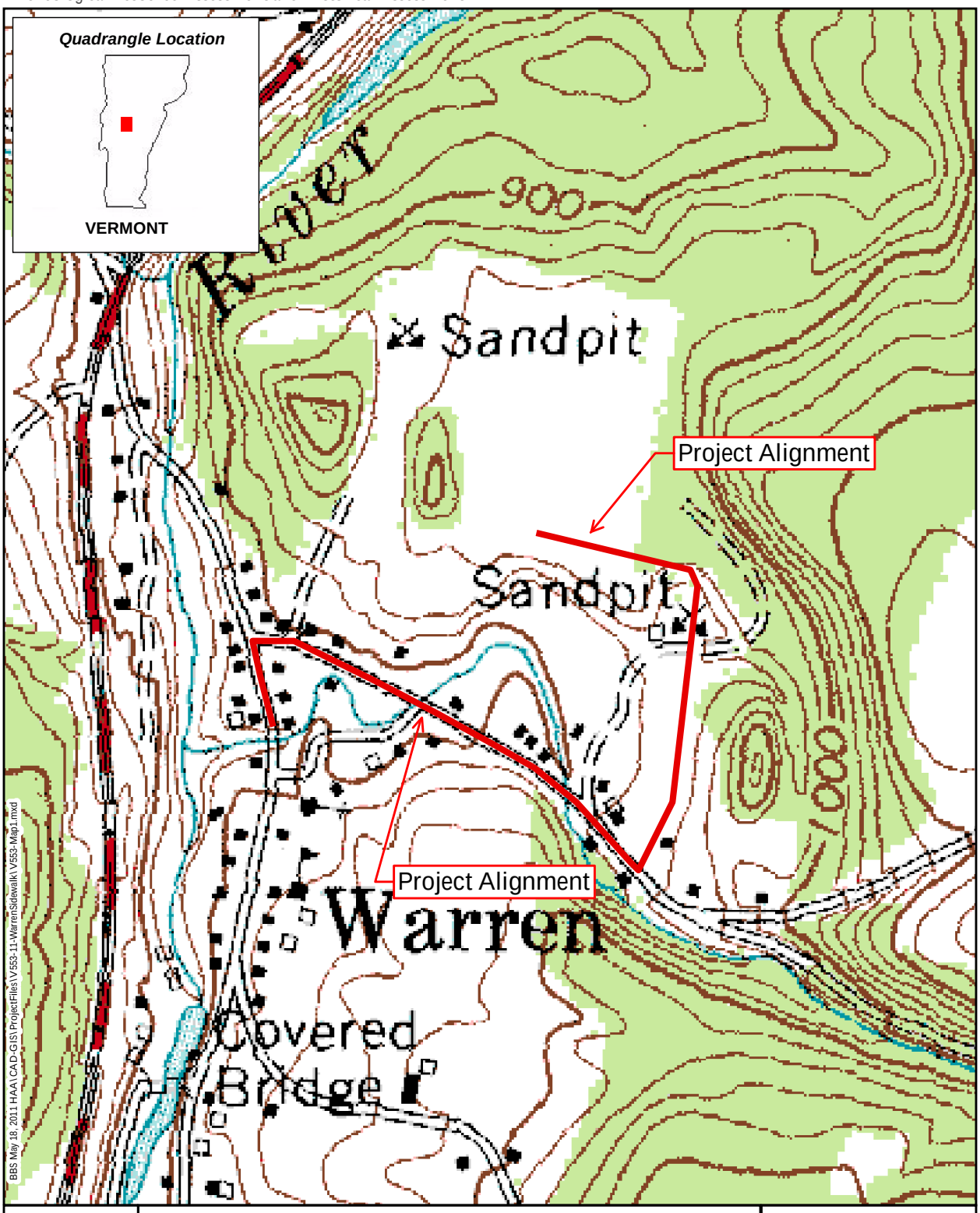
The project objectives are to identify areas of archeological sensitivity based on environmental factors, known site information and historical information for the project Area of Potential Effects (APE). Reference to the general project vicinity is provided as appropriate to understanding the local cultural and historical context. Background research was conducted at the Vermont Division for Historic Preservation (VDHP) where archeological site files, National Register (NR), State Register (SR) and town information were reviewed. A site visit was conducted by Elise Manning Sterling on May 13, 2011 to observe and photograph existing conditions within the project area.

ENVIRONMENTAL BACKGROUND

Present Land Use and Current Conditions

Located in the Town of Warren, the Area of Potential Effects (APE) comprises a section of Main Street extending from the bridge over Freeman Brook northward to the intersection with Brook Road, extending eastward along Brook Road to its intersection with School Road, and continuing north and west on School Road to the Warren School.

The Main Street and Brook Road portions of the project area are characterized by relatively level terrain along two village streets lined with mid to late-19th century domestic residences and businesses, as well as a number of contributing outbuildings, stone walls, planting beds, and historic trees and plantings. The entire Main Street and Brook Road portions of the project area are located within the Warren Village Historic District (WVHD), as well as the southernmost end of the School Road project area. The remainder of School Road, which is a relatively recent manifestation and contains no historic structures, is not included in the WVHD.



N

0 500 1,000 Feet

0 100 200 300 Meters

Note: Contour interval is 20 feet.

Legend

Project Area

USGS 1970, Warren, Vermont

HARTGEN archeological associates inc

Map 1

Physiography, Hydrology and Soils

Environmental characteristics of an area are significant for determining the sensitivity for archeological resources. Precontact and historic groups often favored level, well-drained locations near wetlands and waterways. Therefore, topography, proximity to wetlands, and soils are examined to determine if there are landforms in the project area that are more likely to contain archeological resources. In addition, bedrock formations or other lithic sources may contain resources that may have been quarried by precontact groups. Other locations can also be special purpose sacred and traditional use sites. Soil conditions can provide a clue to past climatic conditions, as well as changes in local hydrology.

The Town of Warren is located in the Green Mountain physiographic province that extends north to south through the center of Vermont (Meeks 1986:7). The terrain is mountainous with narrow valleys. The Mad River is the primary drainage through the town with its source located in a small wetland on the north side of Granville Notch about 10.7 kilometers (6.6 mi) upstream of the project area and flows to the north to the Winooski River about 27.3 kilometers (17 mi) to the northeast of the project area at Middlesex. The Mad River is joined by many small tributaries that flow out of the surrounding mountains.

The project area is situated adjacent to one such tributary, Freeman Brook, that meanders westward, crossing twice under Brook Road, beneath Main Street, and a short distance later, meeting with the Mad River. Some of the surrounding mountains rise over 1219 meters (4000 ft) to the west while the eastern side of the valley is bounded by the Northfield Ridge at about 823 to 884 meters (2700 to 2900 ft). The Main Street portion of the project area is situated at 898 feet (278 m) above mean sea level. The western end of Brook Road is located at 898 feet (278 m) amsl and rises to a height of 960 feet (298 m) at the eastern boundary of the APE at the intersection of School Road. School Road curves upward, terminating at an approximate height of 990 feet (307 m) at the hilltop where the school is located.

The bedrock geology of the project vicinity is the Pinney Hollow formation that consists mostly of schist with some schistose quartzite (Doll et al. 1961). Although quartzite was commonly used for stone tools by precontact Native Americans, the quality of the quartzite in the vicinity is low and unlikely to have been utilized. Soils in the project area are primarily of the Tunbridge-Lyman Complex, which is characterized as very rocky, with slopes ranging from 15 to 35%. These soils were formed in loamy glacial till on uplands. Tunbridge soils are moderately deep to bedrock and well drained. Lyman soils are shallow to bedrock and somewhat excessively drained. Permeability is moderately rapid for both soil types (USDA 2005).

During the glaciation of Vermont the project area was covered by glaciers and high glacial lakes. As the glaciers retreated, various ice contact features formed in the Mad River valley and in the project area. The surficial geology mapping of the state characterizes the entire project area as glacial kame terrace deposits (Calkin and MacClintock 1963-1966). These materials formed in stream beds that were bound on one side by the valley wall and on the opposite side by the stagnant glacial ice (Flint 1971:209). At a later time a high glacial lake formed in the area that emptied to the south through Granville Gulf before the ice dam to the north melted and allowed the flow to run north into the Winooski River valley (Larsen 1987:218). These lacustrine deposits do not appear on the surficial geology map of the area possibly due to the short time span of Lake Granville and erosion of the lake deposits (personal communication, Springston 3/2003).

The vegetation of the project area was originally of the Northern Hardwoods zone dominated by maple, beech, birch and hemlock (Küchler 1964). With European settlement all of the original forest has been modified through cutting and regrowth. Currently the vegetation in the general project vicinity is characterized by a mixture of hardwoods and evergreens.

HISTORIC RESEARCH AND HISTORIC ARCHEOLOGICAL SENSITIVITY

Historic Archeological Site File Research

There are two reported historical archeological sites in the project vicinity. Both were identified by David Skinas of the USDA during assessment of the flood damage in June 1998. No archeological investigations

were conducted at these sites. VT-WA-103 is located at the south end of the village close to the Route 100 bridge that crosses over the river. The site was identified based on the presence of a dry-laid stone mill foundation or portions of a dam on the east bank of the river. Some concrete reinforcement of the stone work was also present. This site appears to be the location of the Sargent tool manufactory dating as early as 1840.

Site VT-WA-104 is located at the west side of the existing dam and consists of a penstock and parts of a mill foundation. These features are associated with the Brooks Mill that went out of service in 1936. Skinas' report on this site also references foundation remains on the east side of the river, but does not clearly include them in the site definition. The features on the east side are related to the Cardell and Bragg sawmill, the Warren Creamery and the Abel Blacksmith shop dating from the middle 19th century into the 20th century.

Cemeteries

There are no known cemeteries located within the project area (Hyde and Hyde 1991).

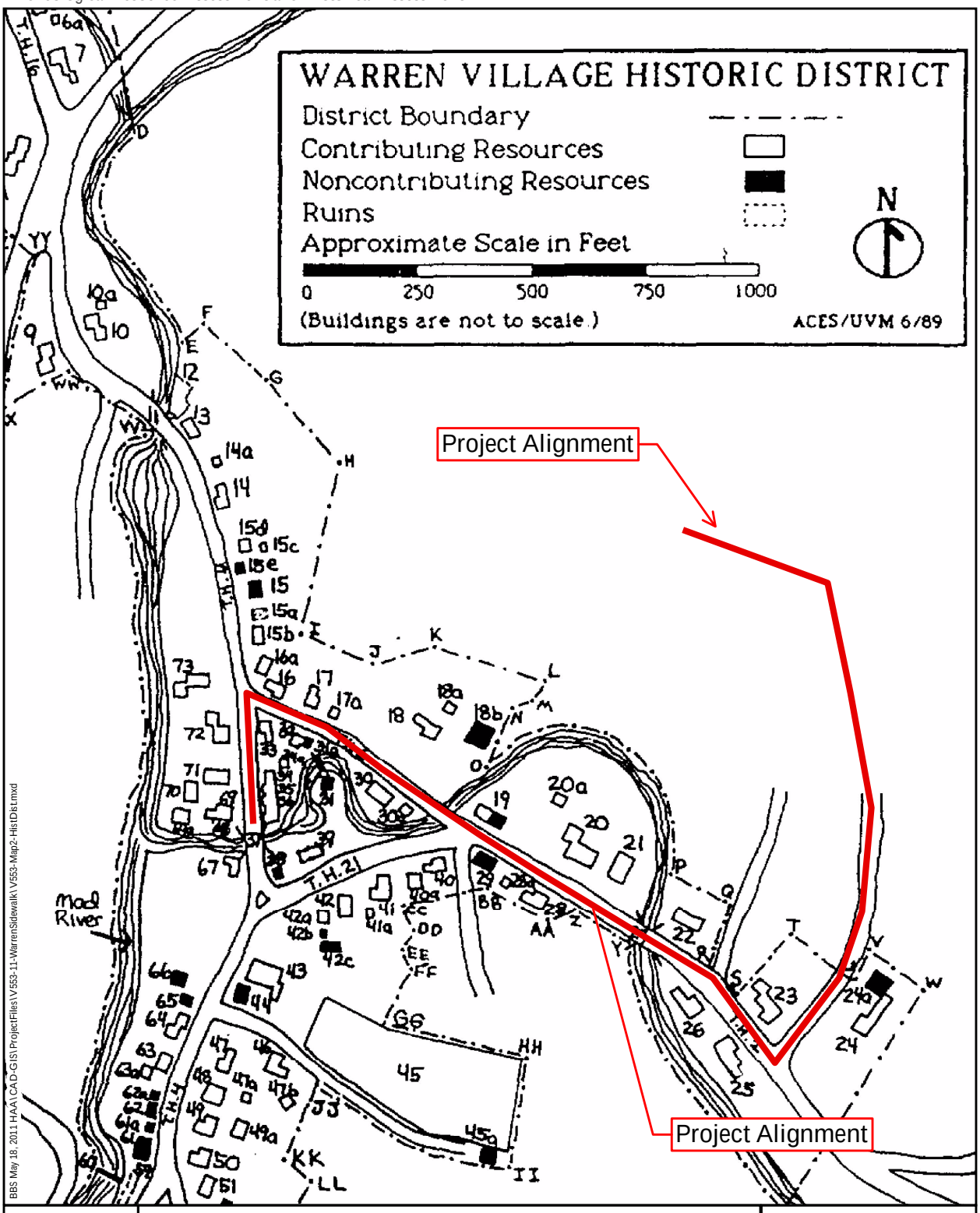
Historic Document and Map Research

The history of Warren is similar to many upland Vermont towns with early development being focused on agriculture, timber cutting and small water-powered industry. The town was chartered in 1789 to John Throop and 67 associates. It was enlarged in 1824 by adding a portion of Lincoln for a total of 27,390 acres (Hartshorn 1991:22). The first settlement was established by Samuel Laird and Seth Leavett in 1797 (Child 1889:475-476). The focus of the town was originally in what is now called East Warren where farming was the predominant activity. However, in the early 1800s the development of several mill sites on the Mad River near the center of the town encouraged greater settlement at that site and by the 1820s the village of Warren surpassed East Warren as the center of commerce (Hartshorn 1991:25).

State and National Register

The National Register (NR) listed Warren Village Historic District (WVHD) encompasses the majority of the town, as shown on the district boundary map (Map 2). The NR Nomination form describes the WVHD's significance as "an excellent example of a small, 19th century mill village that has retained its character and context to the present day with few alterations" (Visser and Wolfe 1989, Section 7, Page 1). The district is located adjacent to the Mad River, which acts as its western boundary, and two of its tributaries, Bradley and Freeman Brooks. The clapboarded domestic residences, businesses and public buildings in the district primarily date from the 1830s to 1880s. A number of architectural styles are represented, including Italianate commercial buildings, Greek Revival public buildings, a late Federal church, and residences in the Greek Revival, Gothic Revival, Italianate, and Second Empire styles (Visser and Wolfe 1989). In addition to the primary domestic and business structures, there are a number of contributing outbuildings, stone walls, planting beds, and historic trees and plantings.

The project APE falls within the Warren Village Historic District, listed on the National Register of Historic Places in 1993 (Visser and Wolfe 1988) (Map 2). The district includes is approximately one mile in length, contains 74 contributing buildings 3 contributing sites, and 4 contributing structures, and a total of 81 resources dating from c. 1830 to 1956. Several additional non-contributing buildings constructed within the past 40 years are also located within the District. The project APE encompasses, or is directly adjacent to, 27 of those buildings. Two buildings (NRHD 72 and NRHD 22) which were listed as contributing to the Historic District are no longer extant. The site of structure NRHD 22 is presently occupied by a mobile home. An additional two buildings located within the APE were considered to be non-contributing to the Historic District in 1993, leaving 23 standing National Register Listed buildings located within the APE. Brief descriptions of these properties and their locations are provided below in Table 1, and keyed to Map 2.



N

0 250 500 Feet
0 50 100 150 Meters

Note: Scale is Approximate.

Legend
Project Area

Warren National Register Historic District Map, 1989

HARTGEN archeological associates inc

Map 2

Table 1. NR/NRE Properties and Inventoried Buildings within or Adjacent (<200ft) to the Project Area

NR# (Map 2)	Property Name	Status	Description	Location
16	Daniel Ralph House	NRL	c. 1850 vernacular side hall plan with Greek Revival elements; associated with a c. 1930 bank barn (Carter Barn, 16a)	North side of Brook Road, immediately east of intersection with Main Street
17	W. McAllister House	NRL	c. 1865 vernacular Classic Cottage (5 x 2) with c. 1900 gabled Queen Anne porch; with associated c. 1930 two-bay garage (Seller's Garage, 17a)	North Side of Brook Road, south of Main Street
18	Bradley House	NRL	c. 1890 Second Empire house with wings; with two associated c. 1900 barns (18a & 18b)	North side of Brook Road on west side of Freeman Brook
19	C. Devall House	NRL	c. 1835 gable-roofed Classic Cottage	North side of Brook Road, on east side of Freeman Brook
20	W. H. H. Hall House	NRL	c. 1870 Greek Revival sidehall with ell; associated 1930 garage is non-contributing (20a)	North side of Brook Road, between Flat Iron Road and Luce Pica Road
21	Perellie House	NRL	c. 1890 vernacular sidehall plan with rear wing	North side of Brook Road on west side of Freeman Brook, east of Flat Iron Road
22	Woodward/Pierce House	No longer extant—formerly NRL	c. 1900 3 x 2 bay single story vernacular house	North side of Brook Road and west side of Luce Pica Road at intersection
23	Morin House	NRL	c. 1870 Greek Revival sidehall plan	North side of Brood Road between Luce Pica Road and School Road
24	Bass/Hickey House	NRL	c. 1880 Classic Cottage with wing and woodshed leading to attached garage; with associated non-contributing c.1980 attached garage	East side of School Road, north of Brook Road
25	Bergman House	NRL	c. 1890 vernacular temple-front 3 x 3 bay house with ell and attached garage	South side of Brook Road, west of School Road
26	Neill House	NRL	1890 vernacular sidehall plan with an ell and attached garage	South side of Brook Road on east side of Freeman Brook
27	Bridge	NRL	c. 1940 short span concrete deck over I-beams	Spans Freeman Brook on Brook Road west of Luce Pica Road
28	Klarsfeld House	NRL	c. 1900 gable-front 3 x 2 bay house with right side ell; with associated 1920 single bay garage (Klarsfeld Garage, 28a)	South side of Brook Road east of intersection with Flat Iron Road

NR# (Map 2)	Property Name	Status	Description	Location
29	Thomas House	Non-contributing	c. 1900 barn 20' x 30' converted into house	South side of Brook Road on east side of intersection with Flat Iron Road
30	Weston House	NRL	c. 1890 vernacular Classic Cottage with wing and attached barn; with associated c. 1930 single bay garage (Weston Garage, 30a)	South side of Brook Road west of Flat Iron Road
31	"The Barn"	Non-contributing	c. 1890 bank barn converted into architect's office; associated non-contributing c. 1980 footbridge (31a)	South side of Brook Road surrounded by bend of Freeman Brook
32	Odd Fellows Building	NRL	c. 1900 three story commercial building with nearly flat roof	South side of Brook Road just east of intersection with Main Street
33	J. Cardell House	NRL	c. 1865 Classic Cottage 5 x 3 bays with a wing	East side of Main Street south of intersection with Brook Road
34	Pitcher Inn	NRL	c. 1850 Greek Revival sidehall plan; with associated c.1890 bank barn (Pitcher Inn Barn , 34a)	East side of Main Street between Brook Road and Flat Iron Road
35	Bragg's Store	NRL	c. 1900 three story commercial Italianate building with false-front parapet	East side of Main Street between Brook Road and Flat Iron Road
36	The Dana Block	NRL	c. 1865 Greek Revival house	East side of Main Street on north side of Freeman Brook
37	Bridge	NRL	1936 concrete deck over over I-beams	Spans Freeman Brook on Main Street just north of Flat Iron Road
69	The Warren House Hotel	NRL	c. 1840 Greek Revival 5 x 3 bay inn with Federal period ell and c.1975 addition; with associated c. 1890 bank barn (69a)	West side of Main Street on north side of Freeman Brook
70	Warren Village Shop	NRL	c. 1870 gable-front 3 x 2 bay commercial building with ell	West side of Main Street, north of Freeman Brook and east of the Mad River
71	Cardell-Bradley House	NRL	c. 1850 Greek Revival sidehall plan house with a wing	West side of Main Street between Brook Road and Flat Iron Road
72	Daniel Ralph-E. Hewitt House	No longer extant—formerly NRL	c. 1855 Classic Cottage with returning cornice	West side of Main Street south of intersection with Brook Road
73	Owings House	NRL	c. 1870 Gothic Cottage with central cross gable	West side of Main Street slightly north of intersection with Brook Road

A review of historic maps of the project area was conducted to attain an overview of the changing historical and environmental landscape within the project area. This includes the study of historic structures that may be or may no longer be extant, alterations to road and rail systems, and changes in stream and river courses.

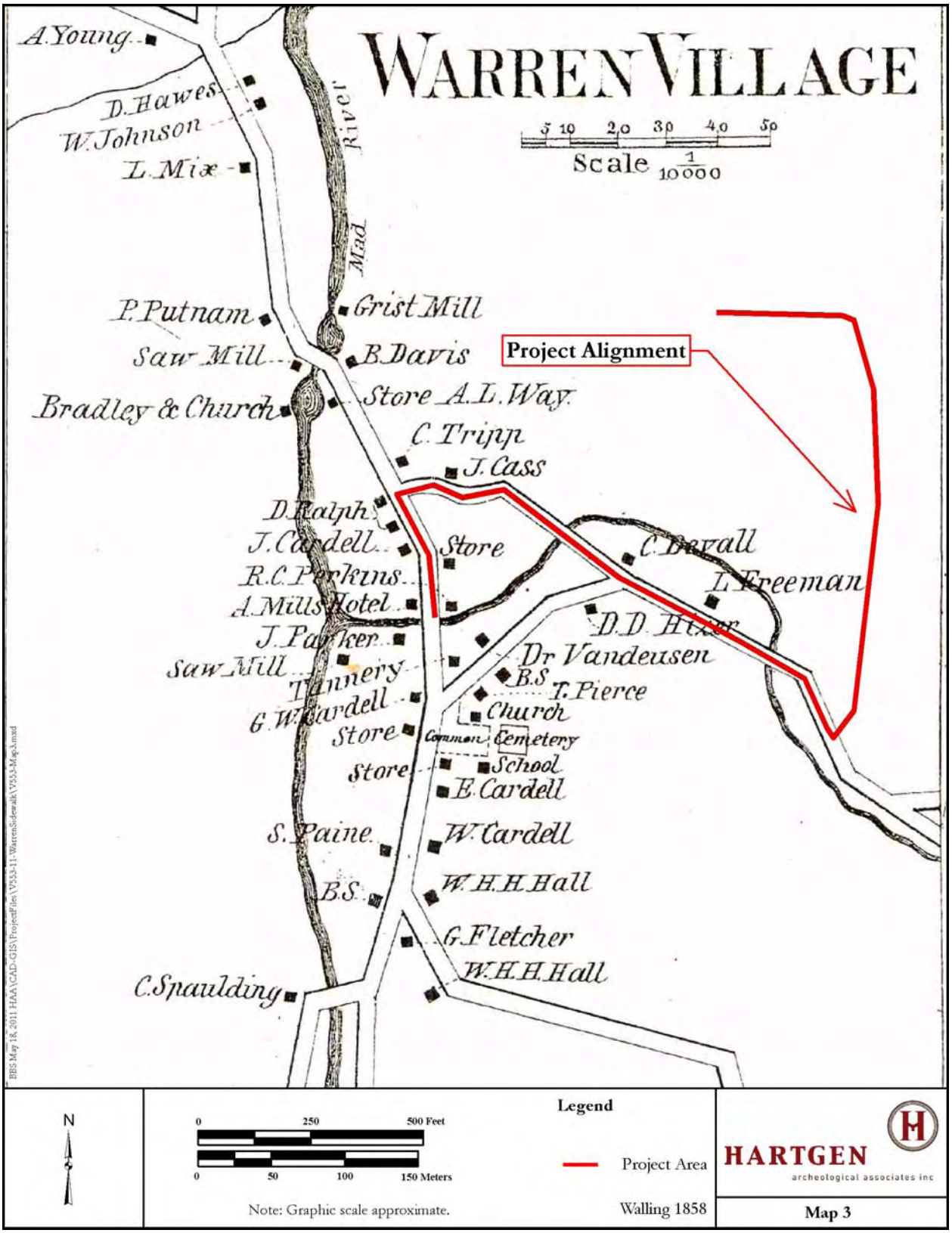
The 1858 Walling map and the 1873 Beers map depicts the roadways and river and stream courses in the project area, as well as the names of the residents who lived there in those years (Maps 3 & 4). The Walling map of Warren dated 1858 reveals a highly developed and prosperous community with a large number of residences located along the established roadways, as well as several churches, a school, a cemetery, four stores, a hotel, a blacksmith shop, a rake manufactory, a tannery a grist mill and two sawmills (Map 3). Within the project area, there are four structures depicted on the west side of Main Street (A. Mills Hotel, J. Candell, and D. Ralph), and two on the east side (R.C. Pickins, and Store). On the north side of Brook Road, two structures are shown at its western end (C.Tripp and J. Cass), and two others depicted near the large bend in Freeman's Brook (C. Devall and L. Freeman).

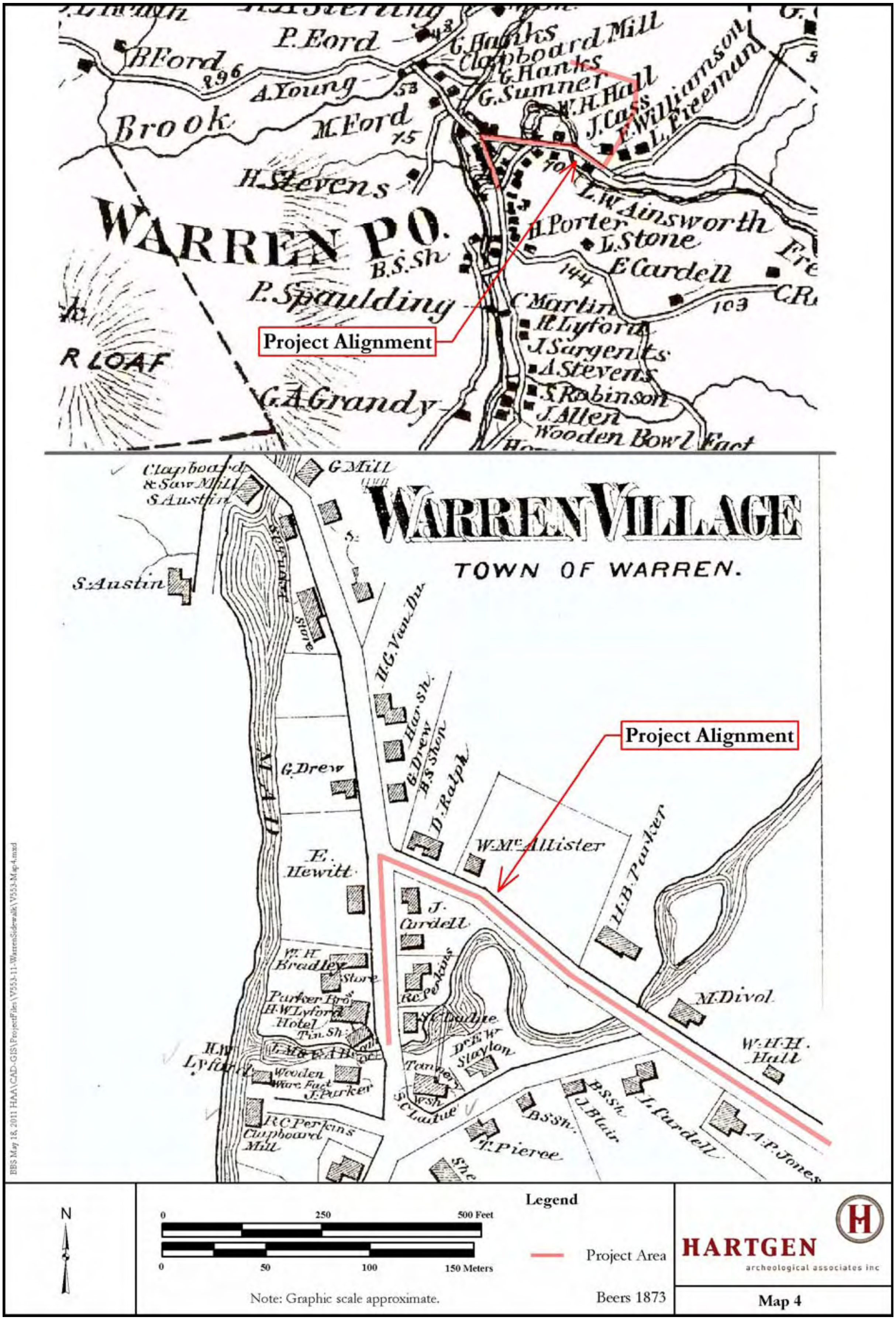
Interestingly, the number of extant structures shown on the 1858 Walling map does not correspond with the number of structures that would be expected based on the construction dates of structures detailed in the WVHD. Based on that document, only WVHD structures #69 (c. 1840), #71 (c. 1850) ,#72 (c. 1855), #34 (c. 1850), #16 (c. 1850) and #19 (c. 1835) would have been constructed by 1858. It is possible that either there were earlier structures that were razed and/or replaced by newer construction, or that some of the WVHD listed structures were of an earlier date than documented in the nomination document.

The Beers map of Warren from 1873 indicates how the village had grown over the next fifteen years, and also provides greater detail about the village, including the dimensions of buildings, and their location and configuration on lots (Map 4). Since 1858, newly constructed buildings along Main Street included the Parker Brothers Store (#71, c. 1870), the residences of G. Drew (#73 c. 1870) and J. Cardell (#33, 1865), and the Dana Block (#36, c. 1865, though its name designation on the 1873 map is indecipherable). At that time, there was a tin shop which was located between the H.W. Lyford Hotel (#69) and the Freeman Brook. On Brook Road, there were two additional structures built since 1858, including the home of H.B. Parker on the north side of the road, and A.P. Jones on the south. These are likely the WVHD structures #18 and #28, though the historic district documentation provides the construction dates for these structures as 1890 and 1900, respectively.

The Village of Warren contains a large number of historic structures and associated features, and as such, demonstrates an archeological sensitivity to historical cultural resources. Because of the number of historic residences and businesses located along Main Street and Brook Road, these portions of the project area demonstrate a greater sensitivity for the presence of historic resources than the School Road component. School Road, as a relatively new construction addition to the town grid, has a low historic archeological sensitivity.

The project plans include a sidewalk alignment located directly along the roadside on the Main Street and Brook Road components. The area directly adjacent to the roadway has a decreased sensitivity because of previous disturbance from road and utility construction. However, one area which has potential to contain intact historical deposits is the grass lawn area surrounding the previous location of the structure WVHD #72 (c. 1855) on the west side of Main Street near its intersection with Brook Road.


WARREN VILLAGE
Scale 1/10000
5 10 20 30 40 50
Project Alignment
A.Young
D.Hawes
W.Johnson
L.Mix
Mad River
P.Putnam
Saw Mill
Bradley & Church
Grist Mill
B.Davis
Store A.L.Way
C.Tripp
J.Cass
D.Ralph
J.Cardell
R.C.Perkins
A.Mills Hotel
J.Parker
Saw Mill
Tannery
G.W.Cardell
Store
Store
S.Paine
B.S
C.Spaulding
Store
C.Devall
L.Freeman
D.D.Hitchcock
Dr Vandeusen
B.S
T.Pierce
Church
Common
Cemetery
School
E.Cardell
W.Cardell
W.H.H.Hall
G.Fletcher
W.H.H.Hall
N
0 250 500 Feet
0 50 100 150 Meters
Note: Graphic scale approximate.
Legend
Project Area
Walling 1858
HARTGEN
archeological associates inc
Map 3
BBS May 18, 2011 H:\AA\CAD-GIS\ProjectFiles\V553-11-WarrenSidewalk\V553-Map3.mxd


P. Ford
B. Ford
A. Young
Brook
M. Ford
H. Stevens
WARREN P.O.
B.S.Sh
P. Spaulding
R LOAF
G.A.Grandy
G. Hanks
Clapboard Mill
G. Hanks
G. Sumner
W.H. Hall
J. Cass
F. Williamson
L. Freeman
L.W. Ainsworth
H. Porter
L. Stone
E. Cardell
C. Martin
H. Lyford
J. Sargents
A. Stevens
S. Robinson
J. Allen
Wooden Bowl Fact
Project Alignment
WARREN VILLAGE
TOWN OF WARREN.
Clapboard & Saw Mill S. Austin
G. Mill
S. Austin
Store
H.G. Van Du
Har. Sh.
G. Drew
B.S. Shop
D. Ralph
G. Drew
E. Hewitt
W. McAllister
H.B. Parker
Project Alignment
J. Cardell
W. H. Bradley
Store
Parker Bros.
H.W. Lyford Hotel
Tin. Sh.
H.W. Lyford
Wooden Ware Fact
J. Parker
R.C. Perkins Clapboard Mill
M. Divol
W.H.H. Hall
T. Pierce
B.S.Sh.
J. Blair
L. Cardell
A.P. Jones
N
0
250
500 Feet
0
50
100
150 Meters
Note: Graphic scale approximate.
Legend
Project Area
Beers 1873
HARTGEN
archeological associates inc
Map 4
BBS May 18, 2011 HAA\CAD-GIS\ProjectFiles\V553-11-WarrenSidewalk\V553-Map4.mxd

ARCHITECTURAL DISCUSSION AND RECOMMENDATIONS

The project area is located within the National Register listed Warren Village Historic District. The District is characterized in the National Register nomination form as "an excellent example of a small, 19th century mill village that has retained its character and context to the present day with few alterations....A triangular parcel at the center of the village acts as an intersecting point for the access roads to north, south and east, and provides a point of focus. Along these intersecting roads are the clapboarded residences, businesses and public buildings of Warren, most of which date from the 1830s to the 1880s....Their similarity in scale, setback, materials and workmanship lends the district a feeling of integrity and context." (Visser and Wolfe 1988). Vernacular buildings and styles popular in the 19th century including Greek Revival, Gothic Revival, Second Empire and Italianate are represented in the Historic District. The property numbers used in this report are from the nomination form by (Visser and Wolfe 1989).

Sidewalks and curbs

Private bluestone sidewalks and stoops are located in front of 33 Brook Road (WVHD 17), 141 Brook Road (WVHD 19), 247 Main Street (NR 33), the Pitcher Inn and its associated barn (WVHD 34), Bragg's Store (WVHD 35), and the Dana Block (WVHD 36). A concrete sidewalk is located along the west side of Main Street beginning at the south end of the concrete bridge constructed in 1936 (WVHD 37). A single private concrete sidewalk is associated with the Bradley house (WVHD 18). There are no curbs. Given the preponderance of the use of bluestone or slate for private sidewalks, foundations and retaining walls within the Historic District, use of this material for new sidewalks would be preferred over concrete or another material. If this proves infeasible, texturized concrete paving, using the same scale, size, color and detailing as that used for the manufacture of the stone paving, could be substituted.

Retaining walls

Fieldstone retaining walls comprised of native bluestone or slate are located throughout the Warren Village Historic District. Within the APE, retaining walls of this type are associated with 189 Brook Road (WVHD 20), 251 Brook Road (WVHD 23), 138 Brook Road (WVHD 28), the Odd Fellows building (WVHD 32), 247 Main Street (WVHD 33), the Pitcher Inn and its associated barn (WVHD 34), Bragg's Store (WVHD 35), the Dana Block (WVHD 36), and the Warren Village Shop (WVHD 70). Impacts to these features should be avoided. Any new retaining walls should reproduce the scale, size, bedding, material and color of the extant examples within the Historic District.

Historic Trees, Plantings and Fences

Many of the buildings and associated structures located along Brook Road are located close to the edge of the pavement. Large trees and other plantings located in front of some of the buildings in the District may be impacted by the proposed project. In particular, the trees in front of 15 Brook Road (WVHD 16), 251 Brook Road (WVHD 23), 136 Brook Road (WVHD 28), 247 Main Street (WVHD 33), 270 Main Street (WVHD 71), and evergreen shrubs in front of 76 Brook Road (WVHD 30) and the Owings house (WVHD 73) are all potentially threatened by this work. Impacts may include removal or damage to root systems. Impacts to these and other similar plantings, which contribute to the character of the Village as well as providing a buffer between these houses and the street, should be avoided.

Fences are associated with the Pitcher Inn (WVHD 34) and 136 Brook Road (WVHD 28). While not possessing great age, both contribute to the delineation of the adjacent street and provide a degree of privacy from it. Impacts to these features should be avoided.

Precontact Site File Research and Archeological Sensitivity

Examination of VDHP site files indicate that there are no precontact sites reported within two miles of the project. However, precontact sites in the area have the potential to range from 11,000 year old Paleoindian camps to sites dating just prior to European contact. The few sites reported for the wider vicinity include VT-WA-39 and WA-FS-11. VT-WA-39 is the reported site of a Paleo-Indian fluted point find, contact period Native American artifacts and an early 19th-century cooper shop. Shovel testing in the area encountered deposits only associated with the cooper shop (Dowd and Trubitt 1990:38). WA-FS-11 is the reported site of a projectile point of unknown age (Doherty et al. 1997:11). Testing in the area did not encounter any precontact deposits (Dowd and Trubitt 1990:35). These two reported sites are located north of the project area in Waitsfield. These reported sites provide clues, although no confirmation, of the precontact archeological potential of the general project area.

The Vermont Division for Historic Preservation Internet Mapping Site was accessed and used to formulate the archeological sensitivity of the proposed project area (VDHP 2009). The mapping site evaluates the precontact potential of all areas of Vermont, based on 11 environmental factors, such as the presence of specific terrain, soils, or proximity to streams or wetlands. If an area possesses just one of these environmental characteristics, it is considered by the Vermont Division for Historic Preservation (VDHP) / State Historic Preservation Officer (SHPO) to be archeologically sensitive. Based on the Vermont ArcheoMap Information System, the project area possessed five sensitivity factors, including the proximity to: a river, a waterbody, a stream confluence, and a stream waterbody-confluence, as well as the presence of level terrain.

The VDHP Environmental Predictive Model was completed for the project area which produced an overall rating of 36 (Appendix I), indicating precontact sensitivity. The project area received points based on its location adjacent to a river, near a confluence with a primary waterway in the region, and situated within a natural travel corridor.

Although the area is removed from locations of highest potential for regular settlement, the location on a travel corridor from the Winooski Valley into the Green Mountains suggests a potential for small campsites, kill sites, caches of goods for later retrieval and find spots of artifacts lost or left behind. In addition, resources found in the Mad River suggest a potential for extractive sites of a variety of types to be present in the vicinity. The river provided a navigable waterway for parts of its length and transportation also took place on foot along the river course. Therefore, the extraction of resources in the vicinity may have been facilitated by the ability to transport materials out of the area to base camps and villages, probably along the Winooski in the vicinity of Burlington. The limited number of precontact sites encountered in the area is probably a reflection of the limited amount of investigation that has taken place, rather than indicative of the number of sites present in the vicinity. Undisturbed level areas within the project area which lie adjacent to the Mad River or Freeman Brook are considered to have archeological sensitivity for precontact resources.

ARCHEOLOGICAL POTENTIAL AND RECOMMENDATIONS

A site visit was made to Warren on May 13, 2011 under sunny and warm conditions. The Main Street and Brook Road portions of the project area are characterized by relatively level terrain along two village streets lined with mid to late-19th century domestic residences, businesses, and associated outbuildings, landscape features, and historic plantings (Photos 1-4).

The proposed alignment for the School Road segment would extend in front of a domestic structure (WVHD #24, c. 1880) located at northeast corner of its intersection with Brook Road. The proposed grass strip and sidewalk would be located adjacent to the roadside down the slope from this historic homestead (Photo 5). The remainder of the proposed sidewalk alignment would then continue uphill to the school

Photo 1. Photo shows the proposed sidewalk alignment on the west side of Main Street. The southern portion of Archeological Sensitivity Area 1 can be seen in the foreground on the grass lawn. Structure WVHD #71 is located in the background. View is to the south.

Photo 2. General photograph of Main Street, showing the Pitcher Inn (WVHD #34-36) . View is to the southeast.

Photo 3. Photo shows the historic homes and plantings located at the intersection of Main Street and Brook Road. Structure WVHD #16 is centrally located, with large historic trees located in the front yard bordering Brook Road. View is to the northeast.

Photo 4. General photograph of the proposed project alignment along Brook Road. WVHD Structure #30 is visible to the left. View is to the west.

Photo 5. Photo shows the southern end of the proposed School Road project alignment. The apple trees are located on the front lawn of WVHD structure #24. View is to the north

extending across a grass strip slope located adjacent to young woods (Photos 6-7). The relatively recent construction of this road entailed creating a level road surface through an area of slope. This portion of the alignment is not considered to be archeologically sensitive.

The project alignment crosses over the Freeman Brook a total of three times, including two bridge crossings on Brook Road, and one crossing on Main Street. Brook Road crosses over Freeman Brook near its intersection with T.H. 21 (Photo 8), and further to the east, a c. 1940 concrete bridge (WVHD #27) crosses over the brook (Photo 9). The southern end of the Main Street project area is bound by Freeman Brook, and a 1936 bridge (WVHD #37, Photo 10).

Recommendations for Historic Resources

The Village of Warren, especially the Main Street and Brook Road components of the project area, are considered to have archeological sensitivity for historic resources. However, the project plans entail the sidewalk construction directly adjacent to the roadway. These areas have a decreased sensitivity because of previous disturbance from road and utility construction. The area located between Freeman Brook and the Warren General Store, the previous location of a tin smith shop, as shown on Map 4, has eroded considerably, and is therefore not considered to be archeologically sensitive (Photo 11). The previous location of WVHD #22, a c. 1900 domestic residence, now contains a mobile home and driveway, and is therefore not considered archeologically sensitive (Photo 12).

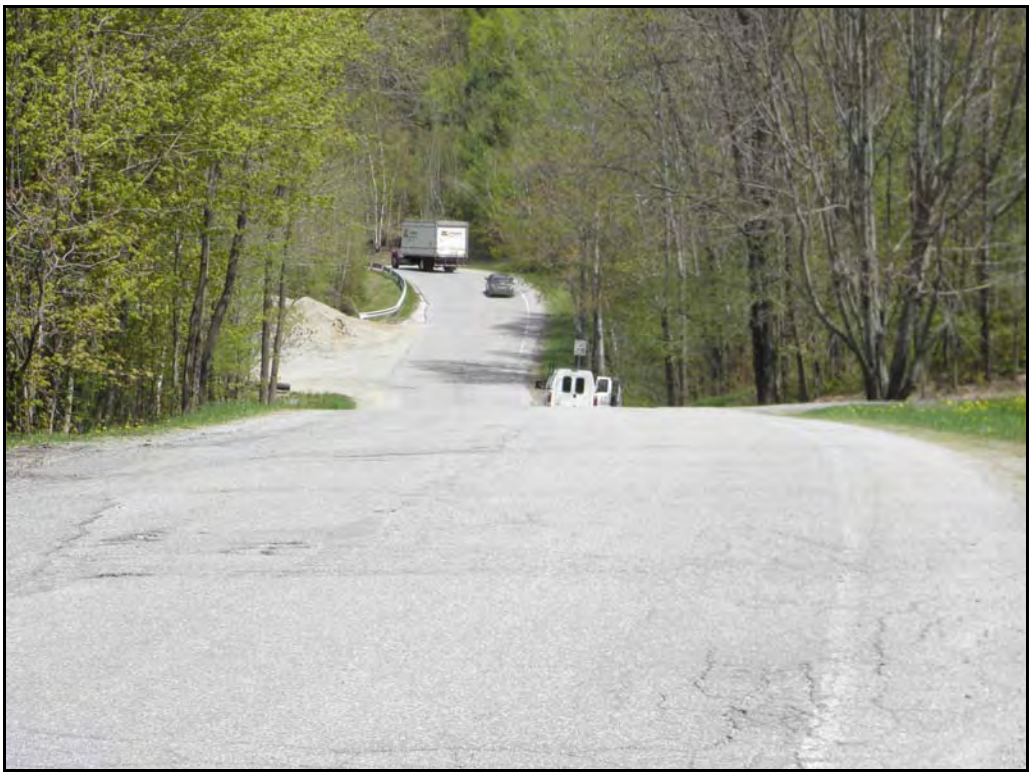


Photo 6. Photo shows the proposed sidewalk alignment route adjacent to School Road. View is to the north.

Photo 7. Photo shows the proposed sidewalk alignment route on the east side of School Road. School buildings can be seen in the background. View is to the west.

Photo 8. The bridge over Freeman Brook at Brook Road's western end. View is to the west.

Photo 9. The c. 1940 bridge (WVHD #27) situated over Freeman Brook at the eastern end of Brook Road, with WVHD structure #21 in the background. View is to the west.

Photo 10. The c. 1936 bridge (WVHD #37) located over Freeman Brook on Main Street. View is to the southwest.

Photo 11. The tin shop, as shown on the 1873 Beers map, would have been approximately located in the area of slope wash between the Warren General Store (WVHD #69) and Freeman Brook. View is to the northwest.

Photo 12. A mobile home is now present at the previous identified location of a c. 1900 domestic residence (WVHD #22). View is to the northeast

One area, designated as Sensitivity Area 1, has potential to contain intact historical deposits is the grass lawn area surrounding the previous location of the structure WVHD #72 (c. 1855) on the west side of Main Street near its intersection with Brook Road (Photo 13). A systematic shovel test survey is recommended in this locale to test for the presence of both historic and precontact archeological resources.

Recommendations for Precontact Resources

Level undisturbed terrain adjacent to the Mad River and Freeman Brook are considered to have archeological sensitivity for precontact resources. The majority of the Main Street and Brook Road alignments have been previously disturbed through road and bridge construction, historic alterations, or the presence of slope. There are three areas which are considered sensitive for precontact resources, and for which systematic shovel testing is recommended. The area described above as the lawn area surrounding the previous location of structure WVDH #72 is also considered to be sensitive for precontact resources (Photo 13).

There are two small sensitivity areas located on Brook Road, and situated adjacent to or overlooking Freeman Brook. Sensitivity Area 2 is an informal parking area located directly east of a small barn (WVDH 17a) on the north side of Brook Road (Photo 14). This small parcel of level land does contain disturbance in the form a culvert and ditch, with the remainder of the property possibly undisturbed. Sensitivity Area 3 is a small wedge of level land located on the south side of Brook Road, situated west of the (WVDH #27) bridge (Photo 15). Systematic shovel testing is recommended for the three precontact sensitivity areas.

Photo 14. Precontact Sensitivity Area 2 on the north side of Brook Road. Note culvert depression in center of photo near trees. WVHD structure #17 and 17a are visible in the background. View is to the northwest.

Photo 15. Precontact Sensitivity Area 3 on the south side of Brook Road, just west of WVHD #27 bridge. View is to the west.

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APPENDIX 1: VDHP Archaeological Resources Assessment Form

Vermont Division for Historic Preservation
Archeological Resources Assessment Form
Warren Sidewalk Feasibility Study

DHP# _____
Organization & Recorder: **HAA. INC./ E. Manning**
Date: 5/12/2011

Envronmental Predictive Model				ArcheoMapTool GIS Model	Field Inspection Comments
Variable	Proximity	Value	Assigned Score	Variable	
A. Rivers and Streams (Existing or relict)					
1) Proximity to Rivers and Permanent Streams	0–90 m	12	**12**	Layer 1: Proximity to Rivers and Permanent Streams (0-180 m)	
	90-180 m	6			
2) Proximity to Intermittent Streams	0–90 m	12		-	
	90-180 m	6			
3) Proximity to Permanent River/Stream Confluences	0–90 m	8	**12**	Layer 6: Proximity to River/Stream Confluences (0-180 m)	
	90-180 m	4			
4) Proximity to Intermittent Stream Confluences	0–90 m	12		-	
	90-180 m	6			
5) Proximity to Waterfalls	0–90 m	8		Layer 7: Proximity to Waterfalls (0-180 m)	
	90-180 m	4			
6) Proximity to Heads of Drainages	0–90 m	8		Layer 5: Proximity to Heads of Permanent Drainages (0-300 m)	
	90-180 m	4			
7) Major Floodplain - Alluvial Terrace	0–90 m	8		Layer 10: Floodplain Soils Presence	
	90-180 m	4			
8) Knoll or Swamp Island		32		Layer 1: Proximity to Rivers and Permanent Streams (0-180 m)	
9) Stable Riverine Island		32		Layer 2: Proximity to Waterbodies (0-180 m)	
B. Lakes and Ponds					
10) Proximity to Pond or Lake	0–90 m	12		Layer 2: Proximity to Waterbodies (0-180 m)	
	90-180 m	6			
11) Proximity to Stream-Waterbody Confluences	0–90 m	12		Layer 4: Proximity to Stream-Waterbody Confluences (0-180 m)	
	90-180 m	6			
12) Lake Coves, Peninsulas, and Bayheads	0–90 m	12		Layer 2: Proximity to Waterbodies (0-180 m)	
	90-180 m	6			
C. Wetlands					
13) Proximity to Wetlands*	0–90 m	12		Layer 3: Proximity to Wetlands (0-180 m)	
	90-180 m	6			

Envronmental Predictive Model				ArcheoMapTool GIS Model	Field Inspection Comments
Variable	Proximity	Value	Assigned Score	Variable	
14) Knoll or Swamp Island		32		Layer 3: Proximity to Wetlands (0-180 m)	
D) Valley edge and Glacial Landforms					
15) High Elevated Landform (e.g. Knoll Top, Ridge Crest, Promontory)		12		See Landmarks (Info Layers) and Catchment layers (Water-related Layers)	
16) Valley Edge Features (e.g. Kame Outwash Terrace)		12		Layer 9 Glacial Outwash and Kame Terrace Soils	
17) Marine/Lake Delta Complexes		12		Layer 9 Glacial Outwash and Kame Terrace Soils Presence	
18) Champlain Sea or Glacial Lake Shore Line**		12		Layer 8: Paleo Lake Soils Proximity (0-180 m)	
E. Other Environmental Factors					
19) Caves and Rockshelters		32		-	
20) Natural Travel Corridors (e.g. Drainage Divides)		12	**12**	See Landmarks (Info Layers) and catchment layers (Water-related Layers)	
21) Existing or Relict Springs	0–90 m	8		-	
	90–180 m	4			
22) Potential or Apparent Prehistoric Quarry for Lithic Material Procurement	0–90 m	8		See Soils with "M" parent material (Under Construction)	
	90–180 m	4			
23) Special Environmental or Natural Area~	0–180 m	32		-	
F. Other High Sensitivity Layers					
24) High Likelihood of Burials		32		See VAI layer (Under Construction)	
25) High Recorded Archeological Site Density		32		See VAI layer (Under Construction)	
26) High likelihood of containing significant site based on recorded or archival data or oral tradition		32		See VAI layer (Under Construction)	

Envronmental Predictive Model				ArcheoMapTool GIS Model	Field Inspection Comments
Variable	Proximity	Value	Assigned Score	Variable	
G. Negative Factors					
27) Excessive (>15%) or Steep Erosional (>20%) Slopes		-32		See Slope Layer (Info Layers folder)	
28) Previously Disturbed Land***		-32		See Land Use ND Building Footprint Layers (Info Layers folder)	
Total Score:			**36**		

** remains incompletely mapped; digital layer includes paleo lakes and wetlands based on soils data
*** as evaluated by a qualified archeological professional or engineer based on coring, earlier as-built plans, or obvious surface evidence (such as a gravel pit)
~such as Milton acquifer, mountain top, etc. (historic or prehistoric sacred or traditional site locations, other prehistoric site types)
*Environmental predictive model limits wetlands to those > one acre in size; ArchSensMap

Appendix E

Meeting Notes

Warren Town Meeting

Warren SRTS Feasibility Study

Stantec

Date/Time:	10/25/11 7:00 AM
Place:	Town of Warren
Next Meeting:	
Attendees:	The Warren Select Board
	Town Residents, see attached Check-in List
Absentees:	
Distribution:	

Item:	Action:
Village Concerns and Discussions:	
Path Usage – 15 students in village enough to justify? Paths would be used by students at the school during trips to the town. Not just children would use the paths.	
Width of Sidewalk – can the width of the sidewalk be reduced from the standard 5'? With federal aid money it may be difficult but the option can be explored by talking with the State Preservation Officer.	Contact State Preservation Officer, explore other options
Property Infringement – will sidewalk reduce value of homes when encroaching on already constricted lawns and driveways? Other options will be explored to limit the effect on properties.	Look into alternative alignments in other locations
Property Owner Feature Adjustment – will there be enough room to maintain features in residents front lawns?	Explore options to provide less impact
Flooding Issues – Will pedestrian bridge cause additional flooding issues? Will curb channel water down road an into peoples drives? Drainage system will need to be installed and maintained.	
Narrow Road? – can road be narrowed? Will sidewalk make road appear wider and accelerate traffic? As a minor collector, Brook road is considered a federal aid roadway which could make it difficult to narrow roadway but options will be considered.	Explore options regarding a narrower road

Flat Iron Road – can a sidewalk be built on flat iron road?	Create an alternative alignment down flat iron road
Similar Towns – how have sidewalks worked in other small, village towns?	Research other similar towns
Character of Town – can the town maintain its character while providing safe pedestrian travel ways? Consider soft paths.	Explore more un-conventional, architectural designs
Federal/State Restrictions – Too many restrictions forcing the design into an uncharacteristic design. The current plan is a Conventional Design for a Non-Conventional Village. Options fostering public opinion will be explored by talking with the State Preservation Officer.	Contact State Preservation Officer to explore other more un-conventional alternatives
Main St. Brook Road – not many people currently walk in that area	
Maintenance – how will the sidewalks be maintained? Does the town have the funds to maintain proposed pedestrian walkways?	Provide a section in the report regarding future maintenance requirements

The meeting adjourned at 9:00 AM.
The foregoing is considered to be a true and accurate record of all items discussed. If any discrepancies or inconsistencies are noted, please contact the writer immediately.

STANTEC CONSULTING SERVICES INC.

Christopher Gendron
Transportation Designer
Christopher.Gendron@stantec.com

Attachment: Check-in List

Project: Warren SRTS Feasibility Study
Date: 10/25/11
Location: Warren Village

Check-in List

NAME	ADDRESS	PHONE #	EMAIL
BARRY SIMPSON	109 DIMETRO RD WARREN VT 05674	496 2951	forevermont@hotmail.com
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Chrissy Gilhuly	"	"	Chrissygilhuly@yahoo.com

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Tracy Lynn	PO Box 316 Warren	6-5159	lynnfamily@madriver.com
Tim & Grace Holte	183 Main st	6-5148	graceholte@madriver.com

Appendix F

PROJECT DESIGN CRITERIA

Based on pertinent standards and references, applicable design criteria are tabulated below. These references include:

- Vermont State Standard for the Design of Transportation Construction, Reconstruction and Rehabilitation on Freeways, Roads and Streets (VSS)
- Vermont Pedestrian and Bicycle Facility Planning and Design Manual (VPBFPDM)

PARAMETER	MAIN STREET	BROOK ROAD	SCHOOL ROAD	REFERENCE
ROADWAY DESIGN				
Functional Classification	Local Road – Class 2 Town Highway	Major Collector – Class 2 Town Highway	Local Road – Class 3 Town Highway	Vermont General Highway Map for Warren, VT 2006
AADT (Year)	820 (2007)	1339 (2008)	372 (2008)	Warren School Travel Plan, Aug. 2009
Posted Speed	25 mph			
Design Speed	25 mph			
Travel Lane/Shoulder Width (Minimum)	9 ft./2 ft.			VSS Sect. 5.5, 6.4
Offset from Travel Lane to Curb (Minimum)	2 ft.			VSS Sect. 5.5, 6.4
PATH DESIGN				
Width	5 ft. (min.), 4 ft. at any point May go down to 4 ft. width with 5'x5' passing areas spaced a minimum 200' apart along sidewalk length. Along School Road, consider 10' future width if Town elects to open up path to bicycle use.			VPBFPDM Sect. 3.4.1
Running slope	Follow grade of adjacent road level landings adjacent to building entrances.			VPBFPDM Sect. 3.4.2
Cross slope	2% max. toward street			VPBFPDM Sect. 3.4.3
Surfaces	Firm, stable, slip-resistant to meet ADA requirements. Materials shall be selected to fit into character of Village			
Driveways	Paved to ROW line, sidewalk to dip at driveway with max. grade of 1:12 to meet ADA requirements			VPBFPDM Fig. 3-10
Separation from travelway	Uncurbed, 5 ft. green space	2' shoulder + curb	Uncurbed, 5' ft. green space	VPBFPDM Sect. 3.4.8
Vertical clearance	7 ft. for traffic signs, tree branches			VPBFPDM Sect. 3.4.9
Horizontal clearance	2 ft. adjacent to walls, railings, fence and bridge rails where possible			VPBFPDM Sect. 3.4.9
Curb ramps	ADA compliant with detectable warning surface, max grade = 1:12			VPBFPDM Sect. 3.5.4 VTrans STD. C-3A, C-3B

Appendix G

Meeting Notes

Alternatives Presentation Meeting

Warren SRTS Feasibility Study

Date/Time:	12/11/12 7:00 PM
Place:	Town of Warren Municipal Offices
Next Meeting:	
Attendees:	Warren Selectboard, Town Residents, Greg Goyette (Stantec)
Distribution:	Patti Coburn

Item:

Meeting Purpose

The purpose of the meeting was to:

- Review history of recent efforts to promote walking and bicycling to and from the Warren School
- Review project development process
- Review purpose & need of the study
- Present alternatives and recommendations for pedestrian improvements
- Solicit additional information, issues and concerns / answer questions so that recommendations for improvements can be finalized

History

A history of previous studies to promote walking and bicycling in Warren was reviewed. This study picks up where previous studies left off.

Project Development Process

A typical process for project development was reviewed. It was noted that this study represents the initial phase of the process and will lay the groundwork for the Town to obtain funding for engineering and construction of desired improvements.

Purpose and Need

The purpose and need for the project was reviewed. The purpose and need is as follows:

Project Purpose:

Investigate the feasibility of pedestrian connections from the existing sidewalk on Main Street to the Warren School as recommended in the School Travel Plan.

Project Needs:

- ADA Accessible Sidewalk/pedestrian connections. The School Travel Plan identified the lack of sidewalks or paths to and from the Warren School as primary concern that is preventing students from walking to school. Warren Village Roads are insufficient for pedestrian travel because they are narrow and traffic speeds are generally 8-11 mph above posted speed limits as documented by speed studies conducted by the Central Vermont Regional Planning Commission.

- Retention of Village character. The study area is primarily located within the Warren Village Historic District. Proposed sidewalk/pedestrian connections must result in no adverse impact on the historic resources as identified in the Archeological Resource Assessment; and must be planned to result in little to no impact to the Village character and aesthetic.

Alternatives

Improvements, benefits and considerations were reviewed for each segment of roadway studied. Recommended improvements were presented. The following summarizes key comments received on the recommended improvements:

- Bluestone or crushed stone may not be the best choice to fit in with the historic character of the Town. Instead of specifying material in the recommendations, suggest recommending that the path be constructed of a material that is consistent with the historic elements of the Village.

- Recommend a 4’ path along School Road with 5’x5’ passing areas installed a minimum of 200’ apart to minimize impact to front lawns.

- Improvements along Brook Road need to minimize impact to front lawns even though the recommended improvements would be entirely located within the Town-owned right-of-way.

- A separated pedestrian bridge or a wider bridge on Brook Road near the intersection with School Road is not a viable option as it would eliminate driveway access to the homes located on either end of the bridge.

- Consider a 5’ path along the east side of School Road instead of a 10’ wide path. Bicyclists should be separated from pedestrians given the steep grade of School Road and the potential for high bicycle speeds. Bicyclists should use the road.

- Pedestrian improvements should be continuous along Main St, Brook Rd and School Rd. but also need to be designed to be visually appealing.

Next Steps

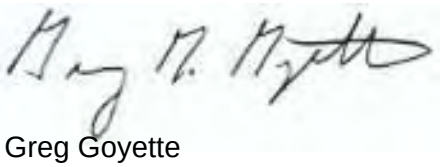
- Stantec will finalize recommendations, cost estimates and report based on

input received at this meeting

- The Final Report will be submitted to the Town for review and comment.
- Town pursues funding for engineering/construction for recommended improvements

The foregoing is considered to be a true and accurate record of all items discussed. If any discrepancies or inconsistencies are noted, please contact the writer immediately.

STANTEC CONSULTING SERVICES INC.



Greg Goyette
Associate
greg.goyette@stantec.com

Appendix H

Stantec
55 Green Mountain Drive
South Burlington, VT 05403
Tel: (802) 864-0223
Fax: (802) 864-0223

Quantity Summary

Warren, VT

195310601

Warren Scoping Study

	Initials	Date
Calc'd By:	CAG	12/28/2012
Checked By:	GGG	12/31/2012
Revised By:		
Checked By:		

Item No.	Item Description	Unit	Unit Price	MAIN ST. Sidewalk Quantity	MAIN ST. Sidewalk $	BROOK RD. Sidewalk and Curb Quantity	BROOK RD. Sidewalk and Curb $	SCHOOL RD. Paved Path Quantity	SCHOOL RD. Paved Path $
201.10	Clearing And Grubbing, Including IndIVidual Trees And Stumps	LS	$10,000.00					1	$10,000.00
203.15	Common Excavation	CY	$13.00	80	$1,040.00	555	$7,215.00	590	$7,670.00
203.16	Solid Rock Excavation	CY	$35.00					60	$2,100.00
205.10	Drilling And Blasting Of Solid Rock	LF	$25.00					60	$1,500.00
301.35	Subbase Of Dense Graded Crushed Stone	CY	$40.00	45	$1,800.00	315	$12,600.00	380	$15,200.00
616.21	Vertical Granite Curb	LF	$30.00			1400	$42,000.00		
618.00	Blue Stone Walk	SY	$120.00	115	$13,800.00	780	$93,600.00		
618.15	Bituminous Concrete Sidewalk	TON	$255.00					112	$28,560.00
620.50	Removing And Resetting Fence	LF	$10.00	110	$1,100.00				
604.10	Concrete Catch Basin With Cast Iron Grate	EACH	$3,000.00			5	$15,000.00		
601.0915	18" CPEP	LF	$45.00			1000	$45,000.00		
	Rebuild Garden	EACH	$10,000.00			2	$20,000.00		
	Rebuild Stone Wall	EACH	$10,000.00			1	$10,000.00		
	Extend Culvert	LS	$10,000.00					1	$10,000.00
	Drainage	LS						10%	$7,503.00
	Contingency	LS		30%	$5,322.00	30%	$73,624.50	30%	$22,509.00

Total Opinion of Probable Construction Cost	$ 23,062	$ 319,040	$ 105,042
Rounding:	$ 6,938	$ 961	$ 4,958
Total Cost:	**$ 30,000**	**$ 320,000**	**$ 110,000**