Essex Junction Crescent Connector Road

Final Scoping Report

August 2011
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This Scoping report was prepared for the Village of Essex Junction and the Chittenden County Metropolitan Planning Organization (CCMPO).

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1.0 INTRODUCTION

1.1 Background

The purpose of the study is to develop and evaluate design alternatives for a new local road (“Crescent Connector”) connecting VT 2A (Park Street) and VT117 (Maple Street) in the Village of Essex Junction. The Crescent Connector will intersect with VT 117 at Railroad Street (see Figure 1) thus providing access to VT 15 (Main St) as well. The proposed connector road will require a new at-grade rail crossing with the New England Central Railroad Main Line.

The purpose of the Crescent Connector road is to provide additional connectivity in the Village thereby decreasing traffic volumes at the congested Five Corners intersection. It will also provide opportunities for redevelopment in the area by providing access to currently under-developed parcels.

A proposed closure of a VT 15 (Main Street) section between 5-Corners and Railroad Avenue to motorized traffic and creation of a pedestrian mall (the so-called Phase 2 of the project) was not part of the Crescent Connector Road scoping study. The Village will pursue a separate planning/scoping effort in the future to study the traffic circulation and safety effects as well as intersection and roadway design impacts of a VT 15 section closure.

This scoping study follows the Essex Junction Village Connector Road Analysis, a 2010 traffic circulation study, which determined that a connector road between VT2A and VT117 in Essex Junction is feasible from a traffic circulation and new rail crossing perspective. This scoping study further analyzes traffic impacts of the connector; explores build alignments in detail and determines resource impacts for each design alternative including costs.

A steering committee was formed to oversee the study—the committee included representatives from the Village of Essex Junction, the Chittenden County Metropolitan Planning Organization (CCMPO), the Vermont Agency of Transportation (VTrans), Chittenden County Transportation Authority (CCTA) and the Lincoln Development Group which is the group that owns a portion of the land that the proposed Crescent Connector will be built on. Two public meetings were held as part of this project: the first meeting at the beginning of the scoping process to solicit input from the Village Trustees and the public on the proposed Crescent Connector concept; and the second meeting at the end of the process to present the design alternatives for the Crescent Connector road, discuss traffic results and resource impacts for the build design alternatives.

The Steering Committee also met several times with representatives from the New England Central Railroad (NECR) and its parent company RailAmerica to discuss issues associated with a new at-grade rail crossing in the village and other rail issues related to the build alternatives.

The study follows the methods outlined in the VTrans Project Definition Process Manual, as well as the CCMPO Project Definition Study Manual.
1.2 Study Area

The project study area, indicated in red in Figure 1, includes several properties mainly on the southeast quadrant of the Five Corners intersection of VT15, VT2A and VT117. A central feature of the study area is the New England Central Railway mainline, the Southern Wye, and the Burlington Branch.

Figure 1: Study Area
2.0 **EXISTING CONDITIONS**

2.1 **Roadway Alignment & Topography**

The project area is urban in nature and the potential road termini are in close proximity to existing railroad crossings. Beyond the existing road edges the project area is quite flat, varying in elevation by no more than a few feet. Both build alternatives require crossing the New England Central Railway main line, which traverses a series of reverse curves through the project area (see railroad report in Appendix 6). All new crossings must be perpendicular to the rail and transition vertically to accommodate vehicle clearances and design speed.

2.2 **Drainage/Hydraulics**

The existing drainage system consists of both surface runoff with culverts, and subsurface collection and conveyances. Part of the project area drains to the municipal collection system. Appendix 1 shows the various existing drainage features in the project area.

Stormwater runoff drains from the project area at three separate locations. The first is along VT2A which is connected to the municipal subsurface system along that same street. The second drains much of the McEwing parcel underground, south under the railroad, discharging to a surface swale adjacent to Jackson St. The third collects water east of the main line of the railroad, on the Kalanges parcel, with a subsurface system that does not appear to have an outlet (i.e. it is likely this system takes advantage of the sandy soils and infiltrates into the ground).

2.3 **Bicycle and Pedestrian Facilities**

There is an extensive sidewalk network through the Village of Essex Junction. Sidewalks line both sides of Park Street, Pearl Street and Maple Street in the study area; crosswalks connect sidewalks at key junctures (see Figure 2).

There are no designated bicycle lanes on VT 2A. Experienced cyclists share travel lanes with motorists. Less experienced cyclists and children could use the sidewalks. The Village’s municipal code does not prohibit riding of bicycles on sidewalks.

There are designated bike lanes on VT 117 at the northern terminus of the Crescent Connector alignment which facilitate, among other users, students headed to and from AD Lawton Middle School.
2.4 Utilities

Above and underground utility and stormwater infrastructure mapping is shown on a map provided in Appendix 1. See Section 3.2 for more detail on the existing stormwater drainage systems(s).

Overhead utilities traverse both the McEwing and Kalanges parcels, serving power, phone and cable to adjacent parcels. Two existing power poles are impacted by both alternative alignments (on the Kalanges parcel), and one is impacted by alternative 2 only (on the McEwing parcel).

A fiber optic communications line is buried adjacent to the Main line of the railroad, on the east side.

Municipal water and sewer is available on Park St and serves the existing building on the McEwing Parcel.

2.5 Right of Way

The VT2A ROW is 4 rods (66 feet), and was located as part of the topographic survey. The VT117 ROW is 3 rods (49.5 ft) and was located through inspection of the Kalanges parcel plat along with objects found in the field. The railroad Rights of Way vary in width and were located approximately through the use of municipal parcel mapping.

2.6 Railroad

Existing rail facilities and operations have been detailed in a separate report by LTK Engineering, provided in Appendix 6.

In summary, there are 3 rail lines in the project area (see Figure 1):
The Burlington Branch sees an average of 4 trains per day (all freight, including the wood chip train destined for the McNeil Generating Plant in Burlington), and has an operating speed of 10 mph in this area.

The South Leg of the Wye has an operating speed of 10 mph, but is inactive at this time.

The Main Line also sees an average of 4 trains per day and has an operating speed of 25 mph. Recent funding has been procured for upgrades to this rail line and plans are in the works to potentially upgrade this line to a higher speed.

2.7 Land Use

The Study area is in the Village Center commercial district includes several parcels with existing structures, occupied by a variety of businesses. Impacts to these structures from the Crescent Connector alternatives were minimized to the degree possible. The McEwing parcel includes a large commercial building enclosing several retail businesses and the Kalanges property has several interconnected buildings with retail uses as well (see Figure 1). Village zoning in the study area is shown in Figure 3.

Figure 3: Zoning Districts
2.8 Traffic

Average Annual Daily Traffic (AADT) volumes in the project area are presented in Table 1 below.

Table 1: Existing Roadway AADT

<table>
<thead>
<tr>
<th>Route</th>
<th>AADT (2010)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VT117 (Maple St)</td>
<td>8,000</td>
</tr>
<tr>
<td>VT15 (Main St.)</td>
<td>11,600</td>
</tr>
<tr>
<td>VT2A (Park St.)</td>
<td>16,300</td>
</tr>
</tbody>
</table>

Turning movement volumes were collected by VTrans personnel in July and August of 2009, and are provided in Appendix 3 (Alternative Traffic Analysis documentation), along with the necessary adjustments to the Design Hour Volume (DHV).

2.9 Congestion Analysis

A congestion analysis was conducted for existing conditions in the study area and was used for comparison purposes to any proposed improvements.

2.9.1 Level-of-Service Definition

Level-of-Service (LOS) analyses are used to assess operations at intersections (signalized and unsignalized), arterials and other highway facilities. LOS is a qualitative measure describing the operating conditions as perceived by motorists driving in a traffic stream. LOS is estimated using the procedures outlined in the 2000 Highway Capacity Manual. Key inputs for signalized intersection LOS analyses, include traffic volumes, number of lanes, and signal timings.

The 2000 Highway Capacity Manual defines six qualitative grades to describe the level of service at an intersection. Level-of-Service is based on the average control delay per vehicle.

Table 2 shows the various LOS grades and descriptions for signalized and unsignalized intersections. The delay thresholds for LOS at signalized and unsignalized intersections differ because of the driver’s expectations of the operating efficiency for the respective traffic control conditions.

Table 2: Level-of-Service Criteria for Signalized and Unsignalized Intersections

<table>
<thead>
<tr>
<th>LOS</th>
<th>Characteristics</th>
<th>Unsignalized Total Delay (sec)</th>
<th>Signalized Total Delay (sec)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Little or no delay</td>
<td>≤ 10.0</td>
<td>≤ 10.0</td>
</tr>
<tr>
<td>B</td>
<td>Short delays</td>
<td>10.1-15.0</td>
<td>10.1-20.0</td>
</tr>
<tr>
<td>C</td>
<td>Average delays</td>
<td>15.1-25.0</td>
<td>20.1-35.0</td>
</tr>
<tr>
<td>D</td>
<td>Long delays</td>
<td>25.1-35.0</td>
<td>35.1-55.0</td>
</tr>
<tr>
<td>E</td>
<td>Very long delays</td>
<td>35.1-50.0</td>
<td>55.1-80.0</td>
</tr>
<tr>
<td>F</td>
<td>Extreme delays</td>
<td>&gt; 50.0</td>
<td>&gt; 80.0</td>
</tr>
</tbody>
</table>
2.9.2 Existing Intersection Level-of-Service Results

Table 3 below shows the performance of the existing intersections in the project area in the PM Peak Hour. Note that this analysis includes the effects of the existing pedestrian phase at the Five Corners intersection. Table 3 reveals a good deal of congestion at Five Corners, notably several approach lane groups with Levels of Service F and/or Volume to Capacity (v/c) ratios approaching or exceeding 0.9 (indicated with green shading). In addition the analysis shows queues that back up over existing rail crossings (shaded red), or back up to the next intersection (shaded blue).

Table 3: Existing Conditions - Congestion Analysis Results

<table>
<thead>
<tr>
<th>Intersection</th>
<th>2010 - No Build</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LOS</td>
<td>v/c</td>
<td>Average Queue</td>
</tr>
<tr>
<td>5 Corners (VT15/VT117/VT2A)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>E</td>
<td>66</td>
<td>0.85</td>
</tr>
<tr>
<td>Eastbound (VT15) Left</td>
<td>F</td>
<td>85</td>
<td>0.94</td>
</tr>
<tr>
<td>Eastbound Through</td>
<td>E</td>
<td>57</td>
<td>0.74</td>
</tr>
<tr>
<td>Westbound (VT117) Left</td>
<td>E</td>
<td>67</td>
<td>0.75</td>
</tr>
<tr>
<td>Westbound Through</td>
<td>F</td>
<td>97</td>
<td>0.94</td>
</tr>
<tr>
<td>Northbound (VT2A) Left</td>
<td>E</td>
<td>73</td>
<td>0.72</td>
</tr>
<tr>
<td>Northbound Through</td>
<td>E</td>
<td>58</td>
<td>0.84</td>
</tr>
<tr>
<td>Northbound Right</td>
<td>D</td>
<td>46</td>
<td>0.84</td>
</tr>
<tr>
<td>Southbound (VT2A) Left</td>
<td>F</td>
<td>101</td>
<td>0.79</td>
</tr>
<tr>
<td>Southbound Through</td>
<td>D</td>
<td>43</td>
<td>0.45</td>
</tr>
<tr>
<td>South west (VT15) Left</td>
<td>F</td>
<td>102</td>
<td>0.93</td>
</tr>
<tr>
<td>South west Right</td>
<td>E</td>
<td>68</td>
<td>0.73</td>
</tr>
<tr>
<td>Maple Street (VT117) / Connector / RR St.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EB</td>
<td>-</td>
<td>-</td>
<td>0.02</td>
</tr>
<tr>
<td>WB</td>
<td>-</td>
<td>-</td>
<td>0.26</td>
</tr>
<tr>
<td>NB</td>
<td>C</td>
<td>18</td>
<td>0.10</td>
</tr>
<tr>
<td>SB</td>
<td>C</td>
<td>21</td>
<td>0.20</td>
</tr>
<tr>
<td>Main Street (VT15) / Railroad St.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WBL</td>
<td>A</td>
<td>1</td>
<td>0.03</td>
</tr>
<tr>
<td>NB</td>
<td>C</td>
<td>18</td>
<td>0.17</td>
</tr>
<tr>
<td>SB</td>
<td>D</td>
<td>30</td>
<td>0.14</td>
</tr>
</tbody>
</table>

Key to Shading:
- F LOS or V/C ≥ 0.9 exceeds link length
- backs over rail crossing

2.10 Safety Analysis

A previous Essex Junction VT 2A Circulation and Access Study (2010) identified the section of Park St. (VT 2A) from the northern rail crossing to Five Corners as a portion of a designated High Crash Location (HCL)—see Figure 4. More recent data from VTrans confirms that this is still a HCL\(^1\), ranked 28\(^{th}\) in the state. Density of

\(^1\) 5 years of crash records 2003-2007. Crash segment extends from mile marker 0.578 to 0.878, with 5-Corners at mile marker 0.68.
driveways (poor access management), congestion and insufficient signage in this area might be contributing factors to these crashes.

Figure 4: High Crash Location (HCL) in Study Area

2.11 Environmental and Cultural Resources

2.11.1 Agricultural Lands

The soils in the project area are designated as having statewide significance by the Natural Resources Conservation Service, however the project area is in a densely developed village setting, and has been fully disturbed in the past.

2.11.2 Floodplain

Consultation of the Federal Emergency Management Agency flood mapping shows that no flood zone exists within or near the project area.
2.11.3 Fish and Wildlife, Rare, Threatened & Endangered Species, or Wetlands

No Fish and Wildlife, Rare, Threatened & Endangered Species, or Wetlands resources by the VT Agency of Natural Resources have been mapped in the project area, nor are any expected, due to its sandy underlying soils and fully developed nature.

2.11.4 Public Lands

No public lands lie within the project area however a parcel of land owned and occupied by the Essex Junction school district lies on the western side of VT 2A, just west of the project area.

2.11.5 Archaeological and Historic Structures/Sites

Please see the Archaeological Resource Assessment and Historic Resource Review by UVM Consulting Archaeology Program in Appendix 4. The report indicates that no prehistoric sites have been identified in the project area.

The Historic Resource review indicated several important historic structures are within the project area, including the Baxter Bros Cannery building (see Figure 5). Adjacent to the former cannery building, is an associated warehouse built more recently. According to the Historic Resource review, six properties that lie within or immediately adjacent to the Crescent Connector project area are considered significant historic resources at the state level and there was a recommendation that any road construction, structural demolition, new construction or other proposed project work avoid any harmful impacts to the buildings because such impacts would likely result in a determination of Adverse Effect on historic resources. Two of the buildings within the project area [including the cannery building] are likely eligible for inclusion on the National Register of Historic Places, under Criterion C: Properties that embody the distinctive characteristics of a type, period or method of construction.
Figure 5: Historic Resources in Project Area
2.11.6 Noise

Sensitive noise receptors include the residential areas (see Figure 6), where an increase in traffic noise has the potential to impact that use.

**Figure 6: Residential Areas**

2.11.7 Hazardous Waste Sites

Several existing hazardous waste sites have been documented in or near the project area, and their approximate location is shown in Figure 7. Table 4 lists the VT Department of Environmental Conservation file numbers, the general type of contamination found, and whether the site contamination has been addressed to the DEC's satisfaction, and thus deemed “Closed.” If a site is open, the general direction of groundwater (GW) movement is also noted. Most contaminants are related to fuel leaks or spills from underground storage tanks (UST). In addition the Lincoln Inn parcel (just south of site 5 & 6 in Figure 7) has been designated a brownfield (B), due to contamination from adjacent parcels. This designation necessitates caution for any subsurface excavations in this area.
Figure 7: Map of Hazardous Sites

Table 4: Summary of Hazardous Sites

<table>
<thead>
<tr>
<th>site</th>
<th>ID</th>
<th>Name</th>
<th>Issue</th>
<th>Closed?</th>
<th>Plume flowing?</th>
<th>GW at?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>982473</td>
<td>Robinsons Fuel Inc.</td>
<td>spills from UG bulk fuel storage</td>
<td>No</td>
<td>ENE</td>
<td>6-9 ft.</td>
</tr>
<tr>
<td>2</td>
<td>20012942</td>
<td>Flanders Building Supply</td>
<td>above ground fuel spills and coal res.</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>890334</td>
<td>VT Maple Products</td>
<td>UST Petroleum contaminated soils</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>900573</td>
<td>Essex Village Public Works</td>
<td>UST Petroleum contaminated soils</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>961961</td>
<td>Agway/Handy*</td>
<td>UST leaks</td>
<td>No</td>
<td>ENE</td>
<td>12.5 ft.</td>
</tr>
<tr>
<td>6</td>
<td>880261</td>
<td>The Public Wearhouse</td>
<td>UST leaks</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>961993</td>
<td>Road Res-Q</td>
<td>Petroleum contaminated soils</td>
<td>No</td>
<td>WSW</td>
<td>10-15 ft.</td>
</tr>
<tr>
<td>8</td>
<td>982430</td>
<td>Busheys Sunoco</td>
<td>spills and overfills of UG fuel tanks</td>
<td>No</td>
<td>SW</td>
<td>11 ft.</td>
</tr>
<tr>
<td>9</td>
<td>951821</td>
<td>Howard Bank</td>
<td>UST removal</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*possible contributor to Brownfield at Lincoln Inn parcel.
3.0 **PROJECT PURPOSE & NEED**

The purpose of this project is to create an additional route connecting VT 2A with VT 117 and VT 15 in order to facilitate regional travel to destinations south, east and northeast of the Village as well as improve local circulation in the Village center. The additional route will improve operations at the congested Five Corners intersection by reducing vehicular travel through the intersection. The project will also open up three large Village center properties to economic development and support employment growth by providing access to under-developed parcels.

Input from the Steering Committee and Local Concerns meeting as well as analyses of existing traffic conditions in the project area identified the following needs:

- **Improve regional mobility and local connectivity in the Village.** Currently there are no alternate routes linking VT 2A (south of Five Corners) with VT 117 and VT 15 (east and northeast of the Five Corners respectively) that would facilitate regional and local travel by allowing vehicles to bypass the congested Five Corners intersection.

- **Reduce traffic congestion and increase safety around the Five Corners intersection.** Excessive traffic congestion creates and contributes to the following conditions:

  - Vehicle delays at the Five Corners intersection exceed the threshold for Level of Service (LOS) F on multiple approaches during peak hour travel (AM and PM). The overall intersection LOS is also F during PM peak hour;
  - Traffic volumes exceed approach capacities during peak hours of travel (AM and PM);
  - Long vehicle queues disrupt access to adjoining business; and
  - Higher than average vehicle crash rates for the segment of VT 2A from the northern rail crossing to north of the Five Corners intersection when compared to similar roadway segments around the state—it is designated a High Crash Location (HCL) by VTrans, ranked 28th in the state.

- **Increase development potential and promote economic growth in the Village center.** Certain prominent—Brownfield—parcels located in the commercial heart of the Village, particularly those adjacent to the rail lines, have a large amount of underutilized or vacant space that lacks suitable access. This situation hampers their attractiveness to new businesses, as well as their ability to obtain state and local permits for development.
4.0 ALTERNATIVES INVESTIGATION

4.1 Description of Alternatives

Three alternatives have been considered in the report, as follows:

4.1.1 No-build Alternative

The no-build alternative assumes that the Crescent Connector road will not be built. As a result, existing roadway and traffic circulation conditions continue, subject to further development in the Village and increases in background traffic. The no-build alternative is considered for comparison purposes to each of the build alternatives.

4.1.2 Build Alternatives

The general alignment of each build alternative is shown in Figure 8. Alternative 1 is also referred to as the Northern Alignment, and was first identified in the previous Village Connector Road Analysis Study. Alternative 2, the Southern Alignment, was introduced by the Lincoln Development Group in conjunction with planned developments on the McEwing Parcel. Both build alignments create new signalized intersections with VT 2A and VT 117 and the intersection of VT 15 with Railroad Street remains stop controlled.

Figure 8: Build Alternatives - General Alignments
### 4.1.2.1 Build Alignments and Design Criteria

Detail alignments for the Northern and Southern build alternatives are presented in Figures 9 and 10, respectively—see Appendix 2 for full size drawings. The design criteria used in the development of both Crescent Connector road alternatives are listed in Table 5 and criteria for adjacent highways are listed in Table 6.

In addition, the Crescent Connector alignments take into consideration possible changes to the rail line alignment (shifting to the east) to increase speeds through the Village as well as other rail specific geometric and operational issues discussed during several meetings with RailAmerica and NECR representatives.

#### Table 5: Connector Road Design Criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Standard</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>functional class (new road)</td>
<td>local</td>
<td></td>
</tr>
<tr>
<td>AADT - 2030 estimate</td>
<td>2400</td>
<td>Estimate - DHV/k (0.104)</td>
</tr>
<tr>
<td>Posted Speed (mph)</td>
<td>25</td>
<td>Village ordinance</td>
</tr>
<tr>
<td>Design Speed (mph)</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Lane Width (ft)</td>
<td>11</td>
<td>VT State Standards</td>
</tr>
<tr>
<td>shoulder width (ft)</td>
<td>4</td>
<td>Village LDR</td>
</tr>
<tr>
<td>tree belt (ft)</td>
<td>5</td>
<td>Village LDR</td>
</tr>
<tr>
<td>parallel parking shoulder (ft)</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>sidewalk width (ft)</td>
<td>5</td>
<td>Village LDR</td>
</tr>
<tr>
<td>horizontal curvature - radius</td>
<td>165</td>
<td>AASHTO-Low Speed Urban</td>
</tr>
<tr>
<td>horizontal curvature - length</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Superelevation?</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>Include roadway lighting?</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Is roadway curbed?</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>aux. lane tapers (ft)</td>
<td>100</td>
<td>AASHTO, Urban</td>
</tr>
<tr>
<td>Stopping sight distance (SSD)</td>
<td>150</td>
<td>AASHTO</td>
</tr>
<tr>
<td>Corner SD (right turn and crossing)</td>
<td>280</td>
<td>AASHTO</td>
</tr>
<tr>
<td>CSD (left turn)</td>
<td>240</td>
<td>AASHTO</td>
</tr>
</tbody>
</table>

#### Table 6: Adjacent Highway Criteria

<table>
<thead>
<tr>
<th>Route</th>
<th>Functional Class</th>
<th>Jurisdiction</th>
<th>No. Lanes</th>
<th>Width-total/shoulder</th>
<th>Curbed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>VT17 (Maple St)</td>
<td>Principle Arterial Urban</td>
<td>Class 1 (local)</td>
<td>2</td>
<td>36/6</td>
<td>yes</td>
</tr>
<tr>
<td>VT15 (Main St)</td>
<td>Principle Arterial Urban</td>
<td>Class 1 (local)</td>
<td>3</td>
<td>34/0</td>
<td>yes</td>
</tr>
<tr>
<td>VT2A (Park St)</td>
<td>Minor Arterial Urban</td>
<td>Class 1 (local)</td>
<td>3 (+parking)</td>
<td>44/0</td>
<td>yes</td>
</tr>
</tbody>
</table>
Figure 9: Alternative 1 - Northern Alignment of Crescent Connector Road
Figure 10: Alternative 2- Southern Alignment of Crescent Connector Road
4.2 Evaluation of Alternatives

Each build alternative was evaluated to assess its feasibility (design alignment, rail crossing, etc.), effectiveness (traffic), and resource impacts (environmental, archeological, historical, etc.). The build alternatives were then compared to the no-build option. This section presents the results of these evaluations and a comparison among all alternatives in the form of an evaluation matrix.

4.2.1 Traffic Circulation Evaluation

Analyses were conducted for all traffic scenarios listed below for the following study area intersections: Five Corners; VT 2A/Crescent Connector; VT 117/Crescent Connector; and VT 15/Railroad Street.

4.2.1.1 Traffic Scenarios

Traffic volumes were developed for the base year (2010) for all alternatives as well as for two future scenarios for planning year 2030: one with no additional Circumferential (Circ) Highway segments, and one assuming the construction of Circ Segments A-B. All traffic scenarios are listed below:

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2010 base / No-build</td>
</tr>
<tr>
<td>2</td>
<td>2010 base / build Alternative 1</td>
</tr>
<tr>
<td>3</td>
<td>2010 base / build Alternative 2</td>
</tr>
<tr>
<td>4</td>
<td>2030 no Circ improvements / No-build</td>
</tr>
<tr>
<td>5</td>
<td>2030 no Circ improvements / Build Alternative 1</td>
</tr>
<tr>
<td>6</td>
<td>2030 no Circ improvements / Build Alternative 2</td>
</tr>
<tr>
<td>7</td>
<td>2030 with Circ segment A-B (CAB) / No-build</td>
</tr>
<tr>
<td>8</td>
<td>2030 with Circ segment A-B (CAB) / Build Alternative 1</td>
</tr>
<tr>
<td>9</td>
<td>2030 with Circ segment A-B (CAB) / Build Alternative 2</td>
</tr>
</tbody>
</table>

Traffic volumes for each scenario were based on existing traffic turning movement counts, adjusted to the design hour volume and the planning year. Traffic from the development proposed on the McEwing site (within the project area) was estimated using ITE Trip Generation rates and included in the future scenarios. Traffic turning movement volumes for the build scenarios were estimated using a calibrated microsimulation model (Paramics, v 6.7.1), which determines the best route for vehicles based on estimated delay and congestion, thereby re-routing vehicles to the new connector road, when appropriate. The effects of the various Circ Highway scenarios were estimated using model runs from the regional transportation model. Please see Appendix 3 for more detail on the traffic analysis methodologies and results.

4.2.1.2 Diversion of Traffic

The Connector road provides an excellent alternate route to the Five Corners intersection for traffic traveling between VT2A and VT117 as well as VT15. Five corners is an inherently congested intersection as the nexus of three busy state routes, not to mention significant pedestrian traffic, particularly during the morning peak as the three nearby schools convene, and children are walking and biking to school (the Village has no school bus system).

Traffic analyses indicate that an estimated 3,000 vehicles per day will be using the Crescent Connector. Table 7 shows the estimated diversion of traffic away from Five Corners during the PM Peak hour due to the new
connection provided by the Crescent Connector Road (a more detailed diversion analysis is provided in Appendix 3).

Note that the two build alternatives (Northern and Southern) are expected to create the same (re)distribution of traffic in the study area with nearly the same benefit in travel time, therefore the expected diversion effect is the same (i.e., scenarios 2&3, 5&6, or 8&9 have the same effect).

Table 7: Expected Change in PM Peak Hour Traffic Volumes at 5 Corners

<table>
<thead>
<tr>
<th>Scenario</th>
<th>total PM Peak hour volume</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2010 base without Connector</td>
<td>2488</td>
</tr>
<tr>
<td></td>
<td>change due to Connector</td>
<td>-298</td>
</tr>
<tr>
<td>2/3</td>
<td>2010 Base - with Connector</td>
<td>2190</td>
</tr>
<tr>
<td>4</td>
<td>2030 No Circ - without Connector</td>
<td>2587</td>
</tr>
<tr>
<td></td>
<td>change due to Connector</td>
<td>-284</td>
</tr>
<tr>
<td>5/6</td>
<td>2030 No Circ - with Connector</td>
<td>2303</td>
</tr>
<tr>
<td>7</td>
<td>2030 Circ Seg A-B without Connector</td>
<td>2333</td>
</tr>
<tr>
<td></td>
<td>change due to Connector</td>
<td>-114</td>
</tr>
<tr>
<td>8/9</td>
<td>2030 Circ Seg A-B - with Connector</td>
<td>2219</td>
</tr>
</tbody>
</table>

Diversion of traffic from the Five Corners intersection to the Crescent Connector also benefits existing alternate routes—mainly neighborhood streets—which may experience less traffic as drivers switch to this new superior route. This effect is subtle, and would be difficult to model or otherwise estimate, but nevertheless is an important benefit for residents of the affected neighborhood(s).

Another significant benefit of the Crescent Connector is the reduction in the number of vehicles crossing active rail lines. Every trip using the connector road would cross active rail lines only once, while currently vehicles cross active rail lines twice. In addition, the connector road could continue to process northbound traffic from VT 2A when the Burlington Branch line shuts VT 2A down for the “Chip Train.” Southbound connector road traffic onto VT 2A would have to stop since the southbound right from the connector conflicts with this rail crossing.

4.2.1.3 Traffic Results

As discussed in the previous section (4.2.1.2), both the Northern and Southern alternatives are nearly identical from a traffic distribution/diversion and travel savings perspective so the LOS and other capacity results shown in Tables 8 through 10 present only one build condition.

Table 8 presents LOS results for 2010 no-build and build conditions. Results indicate that overall delay and vehicle queues would be reduced at Five Corners in 2010 under the build conditions (with the Crescent Connector road). Notably, traffic traveling westbound on VT117 is less likely to back up over the existing rail crossing under either build alternative. While northbound queues at the Park St/Connector Rd intersection are expected to cross the southern wye rail crossing, it should be noted that this line is inactive, and any rail traffic (which is rare) stops at VT2A before crossing.
Table 8: 2010 PM No-Build / Build Traffic Performance

<table>
<thead>
<tr>
<th>5 Corners (VT15/VT117/VT2A)</th>
<th>2010 - No Build</th>
<th>2010 - Build</th>
<th>available queuing space (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LOS</td>
<td>Delay</td>
<td>v/c</td>
</tr>
<tr>
<td>Overall</td>
<td>E</td>
<td>66</td>
<td>0.85</td>
</tr>
<tr>
<td></td>
<td>EBL</td>
<td>85</td>
<td>0.94</td>
</tr>
<tr>
<td></td>
<td>EBT</td>
<td>57</td>
<td>0.74</td>
</tr>
<tr>
<td></td>
<td>WBL</td>
<td>67</td>
<td>0.75</td>
</tr>
<tr>
<td></td>
<td>WBT</td>
<td>97</td>
<td>0.94</td>
</tr>
<tr>
<td></td>
<td>NBL</td>
<td>73</td>
<td>0.72</td>
</tr>
<tr>
<td></td>
<td>NBT</td>
<td>58</td>
<td>0.84</td>
</tr>
<tr>
<td></td>
<td>NBR</td>
<td>46</td>
<td>0.84</td>
</tr>
<tr>
<td></td>
<td>SBL</td>
<td>101</td>
<td>0.79</td>
</tr>
<tr>
<td></td>
<td>SBT</td>
<td>43</td>
<td>0.45</td>
</tr>
<tr>
<td></td>
<td>SWL</td>
<td>102</td>
<td>0.93</td>
</tr>
<tr>
<td></td>
<td>SWR</td>
<td>68</td>
<td>0.73</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Park St (VT2A) / Connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>WB</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>NBT</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>NBR</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>SBL</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>SBT</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Maple Street (VT117) / Connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>EB</td>
</tr>
<tr>
<td>WBL</td>
</tr>
<tr>
<td>WBT</td>
</tr>
<tr>
<td>NB</td>
</tr>
<tr>
<td>SB</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Main Street (VT15) / Railroad St</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>WBL</td>
</tr>
<tr>
<td>NB</td>
</tr>
<tr>
<td>SB</td>
</tr>
</tbody>
</table>

* "on link" refers to either the space between intersections or length of auxiliary lane

Table 9 presents traffic results for the future planning year (2030) without any additional Circ improvements for the no-build and build conditions. Results indicate a similar effect for the 2030 build with No-Circ as the 2010 build condition; with significantly reduced delays and queues at Five Corners, and less chance of westbound traveling vehicles backing up to the main line rail crossing on VT 117.
Table 9: 2030 PM Build/No-build Traffic Performance (No Circ Improvements)

<table>
<thead>
<tr>
<th></th>
<th>2030 No Circ - No Build</th>
<th>2030 No Circ - Build</th>
<th>available queuing space (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LOS Delay v/c Avg Q 95Q</td>
<td>LOS Delay v/c Avg Q 95Q</td>
<td></td>
</tr>
<tr>
<td>5 Corners (VT15/VT117/VT2A)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>E 78 0.91</td>
<td>E 69 0.88</td>
<td>on Link* to RRX</td>
</tr>
<tr>
<td></td>
<td>F 110 1.03 281 444</td>
<td>F 80 0.95 249 409</td>
<td>&gt;1000</td>
</tr>
<tr>
<td></td>
<td>D 52 0.65 173 290</td>
<td>D 43 0.44 115 238</td>
<td>&gt;1000</td>
</tr>
<tr>
<td></td>
<td>WBL F 91 0.88 164 321</td>
<td>D 53 0.21 31 112</td>
<td>330 275</td>
</tr>
<tr>
<td></td>
<td>WBT F 141 1.07 225 377</td>
<td>F 123 1.01 180 307</td>
<td>360 315</td>
</tr>
<tr>
<td></td>
<td>NBL E 75 0.76 96 174</td>
<td>E 73 0.77 121 238</td>
<td>375</td>
</tr>
<tr>
<td></td>
<td>NBT D 49 0.73 225 352</td>
<td>E 69 0.88 250 415</td>
<td>&gt;500</td>
</tr>
<tr>
<td></td>
<td>NBR D 43 0.83 292 511</td>
<td>D 41 0.75 205 362</td>
<td>&gt;500</td>
</tr>
<tr>
<td></td>
<td>SBL F 116 0.86 65 149</td>
<td>F 105 0.81 47 111</td>
<td>275</td>
</tr>
<tr>
<td></td>
<td>SBT D 44 0.48 101 202</td>
<td>D 50 0.54 110 212</td>
<td>&gt;1000</td>
</tr>
<tr>
<td></td>
<td>SWL F 88 0.89 346 556</td>
<td>E 73 0.81 232 468</td>
<td>250</td>
</tr>
<tr>
<td></td>
<td>SWR F 132 1.06 202 244</td>
<td>F 95 0.93 174 257</td>
<td>460 420</td>
</tr>
<tr>
<td>Park St (VT2A) / Connector</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>B 11 0.78</td>
<td>D 40 0.76 67 115</td>
<td>on Link* to RRX</td>
</tr>
<tr>
<td></td>
<td>WBL D 40 0.76 67 115</td>
<td>E 375 330</td>
<td>375 350</td>
</tr>
<tr>
<td></td>
<td>NBT B 11 0.78 240 456</td>
<td>NBT A 3 0.07 38 118</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td>NBR A 3 0.07 38 118</td>
<td>SBL A 3 0.08 16 48</td>
<td>125</td>
</tr>
<tr>
<td></td>
<td>SBT A 4 0.37 92 190</td>
<td>SBT A 0.37 92 190</td>
<td>625</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maple Street (VT117) / Connector / RR St.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>EB A 9 0.42</td>
<td>A 9 0.42</td>
<td>on Link* to RRX</td>
</tr>
<tr>
<td></td>
<td>WBL - - - - -</td>
<td>A 1 0.03 13 50</td>
<td>360</td>
</tr>
<tr>
<td></td>
<td>WBT - - - - -</td>
<td>A 9 0.51 91 164</td>
<td>125</td>
</tr>
<tr>
<td></td>
<td>NB C 18 0.10 17 45</td>
<td>A 8 0.19 40 83</td>
<td>&gt;1000</td>
</tr>
<tr>
<td></td>
<td>SB C 20 0.18 11 30</td>
<td>A 9 0.32 39 73</td>
<td>&gt;1000</td>
</tr>
<tr>
<td>Main Street (VT15) / Railroad St.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>WBL E 41 0.18 16 51</td>
<td>A 0 0.01 4 18</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td>NB E 41 0.18 16 51</td>
<td>C 21 0.22 13 42</td>
<td>&gt;500</td>
</tr>
<tr>
<td></td>
<td>SB E 39 0.17 9 27</td>
<td>E 39 0.17 9 27</td>
<td>&gt;500</td>
</tr>
</tbody>
</table>

Key to Shading:
- F LOS or V/C > 0.9
- exceeds link length
- backs over rail crossing
- exceeds both link & RR xing

* on link* refers to either the space between intersections or length of auxiliary lane

Table 10 indicates that benefits (less queues and delays) of the Crescent Connector at the Five Corners intersection are less pronounced for the 2030 with Circ segments A&B build scenario compared to the previous build scenarios. This is likely due to a general diversion of trips onto the Circ which will result in fewer trips between VT2A and VT117 or VT15. Fewer trips in the Five Corners area will result to less need for traffic to divert from the Five Corners intersection and less demand for the Crescent Connector. This is clearly illustrated in Table 7 as well.
### 4.2.2 Rail Operations Impacts

Both Crescent Connector alternatives require a new at-grade crossing with the NECR Main Line. LTK Engineering conducted detailed impact analyses of the build alternatives to the existing rail facilities and operations and estimated the expected costs for improvements. Please see Appendix 6 for the complete rail report.

In summary, findings from the rail report conclude:

- Rail analyses show that both alternatives are feasible from an alignment, regulatory, permitting and rail operations perspective.
- Alternative 1 will require new crossing gates at VT 2A, due to its proximity to an active railway (the Burlington Branch), while for Alternative 2 the existing flashing warning system will suffice but will need to be augmented for the third leg of the new intersection.
- Alternative 1 is preferable from a railroad systems perspective because the magnitude of potential future realignment (upgrade) of the rail line is less at this location when compared to Alternative 2.
4.2.3 Impacts to Natural and Cultural Resources

There are no major environmental impacts for either build alternative.

The Archeological and Historic Resource Review of the study area indicated a number of historic resources in the vicinity of the project area and identified the Baxter Bros. Cannery/Mason Bros. Warehouse as a significant historic structure likely eligible for inclusion on the National Register of Historic Places. There was a strong recommendation in the report to avoid any harmful impacts to the historic buildings because such impacts would likely result in a determination of Adverse Effect on historic resources.

The Northern Alignment does not have any impacts to historic structures in the study area whereas the Southern Alignment has an adverse and significant impact on the Baxter Bros. Cannery/Mason Bros. Warehouse historic structure. The Southern alignment will require review and approval from the Vermont State Historic Preservation Officer (SHPO) and possible impact mitigation might include relocation of the business and/or structure, as well as compensation to the owner.

A noise analysis conducted for the two proposed alternatives, consistent with Federal Highway Administration NEPA guidelines, indicated no significant noise impacts are expected for either alternative. See Appendix 5 for more detail.

4.2.4 Satisfaction of Purpose & Need

Both build alternatives meet the Purpose and Need for this project by providing an alternate route around Five Corners thereby reducing the traffic and congestion at that intersection. Both alternatives provide good access to abutting properties which are favored for development, thereby increasing their development potential, allowing for growth within the Village. Adjoining property owners have provided comments on the northern and southern build alignments—see Appendices 7, 8 & 9 for more information.

4.2.5 Impacts to Abutting Properties

The Northern Alignment has the following property impacts:

1. A new 50 feet Right-of-Way (ROW) is proposed on the McEwing Properties parcel.
2. An easement from the NECR is necessary to cross the main rail line, as well as the roadway leading to VT 117. A maintenance agreement is also necessary for the crossing and crossing equipment.
3. A portion of the roadway falls on the Kalanges parcel, requiring a new ROW approximately 24 feet wide.
4. A small impact to the Rose parcel is expected as the proposed sidewalk falls nearly on the property line and the driveway would ideally be relocated away from the intersection with VT 117.
5. Widening of VT 117 for the new westbound left turn lane necessitates moving a portion of the southern sidewalk and a permanent easement on the Rose parcel.
6. Widening of VT 117 for the new westbound left turn lane necessitates moving a portion of the northern sidewalk and temporary construction easement from 3 parcels (Sixteen Maple St, LLC, Parent and Parrella).

The Southern Alignment has the following property impacts:
1. An easement from the NECR is necessary where the new road encroaches on the southern wye rail line.

2. A new 50 feet ROW is proposed on the McEwing Properties parcel and the portion that falls on the Depot Home and Garden parcel (owned by Milex Properties).

3. An easement from the NECR is necessary to cross the rail line, as well as the roadway leading to VT117. A maintenance agreement is also necessary for the crossing and crossing equipment.

4. A small impact to the Leo Parcel, where the proposed sidewalk crosses the northwest corner.

5. A portion of the roadway falls on the Kalanges parcel, requiring a new right of way approximately 24 feet wide. This alignment also impacts the two structures associated with the Mason Bros. Salvage Company, one of which has been deemed to have significant historic value (See ARA Report in Appendix 4 for further information).

6. A small impact to the Rose parcel is expected as the proposed sidewalk falls nearly on the property line and the driveway would ideally be relocated away from the intersection with VT 117.

7. Widening of VT 117 for the new westbound left turn lane necessitates moving a portion of the southern sidewalk and a permanent easement on the Rose parcel.

8. Widening of VT 117 for the new westbound left turn lane necessitates moving a portion of the northern sidewalk and temporary construction easement from 3 parcels (Sixteen Maple St, LLC, Parent and Parrella).

4.3 Permitting Requirements

4.3.1 Act250

No Act 250 permit is required since it is estimated that neither alternative would disturb more than 2 acres of land.

4.3.2 Stormwater

A stormwater permit will be required for the Crescent Connector. Since the entire project area is in the watershed of the Winooski River (a non-impaired waterway), the threshold for requiring a stormwater permit from the VT DEC is the addition of 5,000 s.f. of new impervious surface, if the total project area exceeds one acre.

4.3.3 NEPA

As necessitated by any project receiving Federal funds, this project must conform to the National Environmental Policy Act (NEPA) which requires documentation of impacts through either an Environmental Impact Statement (EIS), Environmental Assessment (EA) or, in the most abbreviated form, a Categorical Exclusion (CE).

Recent communication with FHWA’s Vermont Division (Rob Sikora, Environment & ROW manager) indicates that both the northern and southern Crescent Connector alternative will require Environmental Assessment (EA) since this project creates a 2-lane roadway on a new alignment.
4.3.4 Other Permits

As the project area is in a downtown village area and is confined to existing or previously developed sites and active railroad rights of way, no streams, wetlands or natural habitats are known to exist. Therefore none of the following permits are expected to be applicable: 401 Water Quality, 404 Corps of Engineers, Stream Alternation, Conditional Use, Shoreline Encroachment, or Endangered/Threatened Species.

4.4 Cost Estimates

Detailed itemized cost estimates were developed for each build alternative and are provided in Appendix 15. The estimated cost of the Northern Alignment is $2,425,000 and the Southern Alignment is $2,694,000. This estimate considers all costs including, engineering, stormwater, and construction, however some important assumptions were made, including:

- Overhead utility relocations will be performed by the adjacent property developers
- Right of way (including necessary easements) will be provided by the adjacent property owners at no cost to the Village, other than legal costs.
4.5 Evaluation Matrix

All expected costs, property impacts, engineering elements, environmental resource impacts, and permit requirements for each alternative have been summarized in the following Evaluation Matrix:

Table 11: Alternative Evaluation Matrix

<table>
<thead>
<tr>
<th>Improvement</th>
<th>No Build</th>
<th>Alternative 1 - Northern Alignment</th>
<th>Alternative 2 - Southern Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conceptual Cost Estimate</td>
<td>-</td>
<td>$2,425,000</td>
<td>$2,694,000</td>
</tr>
<tr>
<td>Properties Affected</td>
<td>-</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Typical Section (total road width)</td>
<td>-</td>
<td>4-11.11.4 (30')</td>
<td>4-11.11.4 (30')</td>
</tr>
<tr>
<td>Alignment/Geometric Changes</td>
<td>-</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Bike/Ped Impacts</td>
<td>-</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Underground Utilities</td>
<td>-</td>
<td>No Change</td>
<td>No Change</td>
</tr>
<tr>
<td>Overhead Utilities</td>
<td>-</td>
<td>2 Poles impacted</td>
<td>3 Poles impacted</td>
</tr>
<tr>
<td>Right of Way Impacts</td>
<td>-</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Engineering</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-Comers LOS 2010 PM Peak</td>
<td>E</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>5-Comers LOS 2030 PM Peak - Circ A-B / No-circ Improvements</td>
<td>E</td>
<td>E / E</td>
<td></td>
</tr>
<tr>
<td>volume of redirected traffic - PM Peak 2010 (%)</td>
<td>300 (12%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>volume of redirected traffic - PM Peak 2030 - Circ A-B / No-circ (%)</td>
<td>284 / 114 (11% / 5%)</td>
<td></td>
<td></td>
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<tr>
<td>Environmental Resources</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Agricultural Lands</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Archaeological</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Historic Structures/Sites</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
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<tr>
<td>Floodplain</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<td>Fish and Wildlife</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Rare, Threatened &amp; Endangered</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<td>Public Lands</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Notice</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Wetlands</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Hazardous Waste Sites</td>
<td>No</td>
<td>Not Likely</td>
<td>Not Likely</td>
</tr>
<tr>
<td>Local &amp; Regional Resources</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfies Purpose &amp; Need</td>
<td>-</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Community Character</td>
<td>-</td>
<td>Positive</td>
<td>Positive</td>
</tr>
<tr>
<td>Economic Impacts</td>
<td>-</td>
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<td>Positive</td>
</tr>
<tr>
<td>Conformance to Regional Plan</td>
<td>-</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Permits</td>
<td></td>
<td></td>
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<td>Act 250</td>
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<td>No</td>
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<td>401 Water Quality</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<tr>
<td>404 Corps of Engineers Permit</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<td>Storm Water Discharge</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Shoreline Encroachment</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>End/Threat Species</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>VTTrans ROW Permit</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<td>SHPO Clearance</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>NEPA Process Required</td>
<td>No</td>
<td>Yes (EA)</td>
<td>Yes (EA)</td>
</tr>
</tbody>
</table>
5.0 **PREFERRED ALTERNATIVE**

A Presentation of the Crescent Connector alternatives was made to the Village Board of Trustees on February 22, 2011— See Appendix 12 for the meeting notes. There was an extensive discussion focused on the benefits and impacts of each build alternative—it was observed that the northern alternative satisfies the purpose and need of the project with fewer impacts and uncertainties than the southern alternative and that it was also less expensive in terms of project costs. In particular the northern alignment avoids costs associated with mitigating impacts to the historic structure that the southern alternative would impact. At the conclusion of the public discussion, the Trustees voted to defer the decision on the Crescent Connector preferred alignment until the March 8th Trustees meeting when the full Board will be present.

Following the February 22nd meeting and responding to a request by the Village Manager, the CCMPO sent a memo to the Trustees summarizing the Crescent Connector scoping process, outcomes and impacts—See Appendix 13 for the memo to the Trustees.

The Board of Trustees during their March 8th meeting decided unanimously (see Appendix 14 for the meeting notes) to endorsed the Northern Alignment as the preferred alternative for the Crescent Connector road.
APPENDIX 1

Existing Conditions Map – utilities and stormwater infrastructure
APPENDIX 2

Alternative design drawings – full size
APPENDIX 3

Alternative Traffic analysis documentation – 11-22-10
MEMORANDUM

To: Project Steering Committee Members:
   CCMPO: Eleni Churchill, Jason Charest
   Village of Essex Junction: Dave Crawford, Robin Pierce
   VTrans: Amy Bell, Joseph Flynn
   FHWA: Chris Jolly
   CCTA: Meredith Birkett
   Lincoln Development Group: Ken Braverman, Ben Avery, Alex McEwing

From: Mark Smith, PE
Subject: Essex Junction Crescent Road Scoping – Alternative Traffic Analysis Results (RSG Project # 10109)
Date: 22 November 2010

This memorandum summarizes the traffic analyses conducted for two geometric alternatives of the new connector road (“Crescent” connector) from VT 2A to VT117 in Essex Junction, VT. The study area, approximate alternative road alignments and study intersections are depicted in Figure 1.

*Figure 1. Project Area, Study Intersections and Build Alternatives*
TRAFFIC VOLUME DEVELOPMENT

Turning movement traffic volumes at the study intersections were collected by the CCMPO and VTrans in 2009. These volumes were adjusted to the base year (2010) to represent the Design Hour, or the 30th highest Hour. Future volumes were estimated for the design year (2030) using the Chittenden County Transportation Model (the Model). Two future scenarios were considered: one with no additional Circumferential Highway (the Circ) segments, and one assuming the construction of Circ Segments A-B. A base condition of the Model (2010) was also run for comparison to the two future scenarios. The measured change in traffic was added or subtracted to/from the adjusted base year turning movement volumes for the future year analysis. This method of turning volume development is referred to as “pivoting” and is explained in more detail in the Appendix. Additional information on the Model is available on the CCMPO web site at: http://www.ccmpo.org/modeling/

The base condition and so-called “build” alternatives shown in Figure 1 were further modeled in the software package Paramics Suite (Version 6.7.1). This model uses a microsimulation method where discrete vehicles are assigned routes based on an estimate of traffic volume from one geographic zone to another. Each zone is assigned various OD pairs (origin and destination values representing trips from one zone to each other zone in the modeled network). This matrix of values supplants the intersection “turning movement volumes” of a typical traffic analysis, and allows the model to choose the best route for vehicles, depending on travel time, distance or other parameters. The base Paramics model was run and calibrated as necessary so that when compared to the actual base turning movements it aligned closely.

As congestion is realized during a microsimulation model run, and network delay increases, vehicles can be assigned new, more optimal paths. When new links (roadways) or lanes are added to the network, this type of model has the distinct advantage of being able to determine the expected new travel flow (where links are added) or change in flow (where lanes or other modifications are made). The various scenarios considered in this analysis are as follows:

1  2010 base / No-build
2  2010 base / build Alternative 1
3  2010 base / build Alternative 2
4  2030 no circ improvements / No-build
5  2030 no circ improvements / Build Alternative 1
6  2030 no circ improvements / Build Alternative 2
7  2030 with circ segment A-B (CAB) / No-build
8  2030 with circ segment A-B (CAB) / Build Alternative 1
9  2030 with circ segment A-B (CAB) / Build Alternative 2

Results from microsimulation analyses indicated that there was no significant change in traffic redistribution in the study area between the two “Crescent” Road alternatives. The only appreciable difference between the two alternatives from a traffic perspective is the location of the intersection with VT2A. Therefore, alternatives 1 and 2 are considered identical as far as traffic re-distribution is concerned. A comparison of the differences from an operational perspective is discussed herein.

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1 The overall GEH value, a statistic representing a comparison of modeled vs. ground counts, is typically used to judge calibration. This comparison resulted in a GEH value of 3.3. A GEH of <5 is typically considered calibrated. Traffic Analysis Toolbox, Volume III, FHWA, 6/04.
Additional information presented in the appendix includes:

1) A flow chart representing the progression of steps necessary to develop the various sets of turning volumes for each scenario and alternatives
2) Traffic volume adjustment tables
3) Turning movement diagrams for each scenario

ALTERNATIVES ANALYSIS

The traffic volumes developed for each scenario were modeled using Synchro to estimate the expected performance of the intersections in the study area; gauge the suitability of the assumed lane geometry and traffic control features as well as for comparing the different scenarios.

Assumed improvements – all build scenarios:

1. Traffic signal at New Connector / VT2A (Park Street)
2. Traffic signal at New Connector / VT117 (Maple Street) / Railroad Street
3. A separate westbound left turn lane on Maple Street (VT117) at the New Connector / Railroad St intersection
4. A 2-lane northbound approach at VT2A and the New Connector Road (thru & thru/right)

Generally, the Five Corners intersection was optimized in a similar manner to a recent Park Street Signal Study prepared by Donald Hamlin Consulting Engineers for the Village of Essex Junction (August 2010). The existing cycle lengths, excluding the pedestrian phase, for AM and PM Peak hours are 200 and 205 seconds respectively. The Hamlin study calls for a shorter cycle length (120 seconds) and does not include a pedestrian phase in the PM Peak hour. This scoping study adopts a shorter cycle length (150 seconds), which includes a pedestrian phase with the number of pedestrian calls corresponding to those observed in the recent traffic count. All signal timings were optimized accordingly.

All build scenarios assume the redevelopment of the parcel(s) adjacent to the Connector Road. Tentative plans include the new land uses and estimated vehicle trip generation shown in Table 1. Trip generation was estimated according to the ITE Trip Generation manual, 8th edition, and included in the traffic analysis for all build scenarios. Trip distribution from/to the proposed development was determined by the optimal path calculated in the Paramics microsimulation analysis.

Table 1. Proposed Adjacent Development Land Uses and Expected Vehicle Trip Generation

<table>
<thead>
<tr>
<th>Residential:</th>
<th>ITE LUC</th>
<th>trips enter</th>
<th>trips exit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aged Restricted Senior Housing</td>
<td>100</td>
<td>223</td>
<td>23</td>
</tr>
<tr>
<td>Mixed Income Apartments</td>
<td>100</td>
<td>252</td>
<td>10</td>
</tr>
<tr>
<td>Total: 200 dwelling units</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Retail / Commercial:</th>
<th>ITE LUC</th>
<th>trips enter</th>
<th>trips exit</th>
</tr>
</thead>
<tbody>
<tr>
<td>retail</td>
<td>8,000</td>
<td>820</td>
<td>15</td>
</tr>
<tr>
<td>office</td>
<td>8,000</td>
<td>710</td>
<td>2</td>
</tr>
<tr>
<td>Total: 16,000 square feet</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total trips</td>
<td>49</td>
<td>48</td>
<td></td>
</tr>
</tbody>
</table>

*ITE Land Use Code

A general summary of the change in traffic volumes at Five Corners and on the adjacent road segments leading to the Connector Road are presented in Tables 2 and 3.

1 Ken Braverman, email 9-17-10
Table 2. Summary of Expected Change in PM Peak Traffic Volumes at Five Corners

<table>
<thead>
<tr>
<th>Scenario</th>
<th>total PM Peak hour volume</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2010 base without Connector</td>
<td>2488</td>
<td>-12%</td>
</tr>
<tr>
<td>change due to Connector</td>
<td>-298</td>
<td>-12%</td>
</tr>
<tr>
<td>2 2010 Base - with Connector</td>
<td>2190</td>
<td>-11%</td>
</tr>
<tr>
<td>4 2030 No Circ - without Connector</td>
<td>2587</td>
<td>-11%</td>
</tr>
<tr>
<td>change due to Connector</td>
<td>-284</td>
<td>-11%</td>
</tr>
<tr>
<td>5/6 2030 No Circ - with Connector</td>
<td>2303</td>
<td>-11%</td>
</tr>
<tr>
<td>7 2030 Circ Seg A-B without Connector</td>
<td>2333</td>
<td>-5%</td>
</tr>
<tr>
<td>change due to Connector</td>
<td>-114</td>
<td>-5%</td>
</tr>
<tr>
<td>8/9 2030 Circ Seg A-B - with Connector</td>
<td>2219</td>
<td>-5%</td>
</tr>
</tbody>
</table>

Table 3. Summary of Expected Change in PM Peak Traffic Volumes at Maple, Park and Main Street

<table>
<thead>
<tr>
<th>Road segment hourly volume change* (PM Peak):</th>
<th>Maple (117)</th>
<th>Park (2A)</th>
<th>Main (VT15)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>vol</td>
<td>diff</td>
<td>vol</td>
</tr>
<tr>
<td>1</td>
<td>399</td>
<td>-29%</td>
<td>371</td>
</tr>
<tr>
<td>2/3</td>
<td>283</td>
<td>-29%</td>
<td>248</td>
</tr>
<tr>
<td>4</td>
<td>382</td>
<td>-41%</td>
<td>354</td>
</tr>
<tr>
<td>5/6</td>
<td>224</td>
<td>-41%</td>
<td>227</td>
</tr>
<tr>
<td>7</td>
<td>278</td>
<td>-22%</td>
<td>266</td>
</tr>
<tr>
<td>8/9</td>
<td>218</td>
<td>-22%</td>
<td>178</td>
</tr>
</tbody>
</table>

*segments between the Connector or RR St. and Five Corners

Analysis results are presented in Tables 4 to 6. Delay (in seconds per vehicle), Level of Service (LOS) and Volume to Capacity ratios (v/c) are from the Highway Capacity analysis performed using Synchro. Vehicle queues, both average (Avg Q) and 95th percentile (95Q) are from the analysis performed using Synchro’s microsimulation subroutine, Simtraffic.

Note that traffic movements with particularly high delay or v/c values are highlighted in green, while simulated queues that exceed the available space between adjacent intersections, or for a given turn lane are highlighted in blue. Red highlighting is used to indicate queues that extend over a railroad crossing.

Note that to the stop bars were placed ahead (upstream) of the railroad tracks to avoid vehicle queuing over the tracks at the following locations:

1) At the Connector Road/Railroad Street/Maple Street (VT117) intersection, the eastbound stop bar was assumed to be west of the railroad tracks.

2) At the Connector Road/Park Street (VT2A) intersection (Alternative 1), the southbound stop bar was assumed to be north of the railroad tracks

3) At the Connector Road/Park Street (VT2A) intersection (Alternative 2), the northbound stop bar was assumed to be south of the railroad tracks
Table 4. 2010 PM Build / No-build Traffic Performance

<table>
<thead>
<tr>
<th>5 Corners (VT15/VT117/VT2A)</th>
<th>2010 - No Build</th>
<th>2010 - Build</th>
<th>available queuing space (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>E 66 0.85</td>
<td>E 62 0.88</td>
<td>on Link* to RRX</td>
</tr>
<tr>
<td>EBL F 85 0.94 242 397</td>
<td>E 73 0.88 189 337</td>
<td>&gt;1000</td>
<td></td>
</tr>
<tr>
<td>EBT E 57 0.74 207 355</td>
<td>E 67 0.85 213 380</td>
<td>&gt;1000</td>
<td></td>
</tr>
<tr>
<td>WBL E 67 0.75 133 263</td>
<td>D 50 0.18 29 101</td>
<td>330 275</td>
<td></td>
</tr>
<tr>
<td>WBT F 97 0.94 211 342</td>
<td>F 86 0.90 171 285</td>
<td>360 315</td>
<td></td>
</tr>
<tr>
<td>NBL E 73 0.72 84 163</td>
<td>E 66 0.69 96 207</td>
<td>375</td>
<td></td>
</tr>
<tr>
<td>NBT F 58 0.84 255 425</td>
<td>E 60 0.87 253 405</td>
<td>&gt;500</td>
<td></td>
</tr>
<tr>
<td>NBR D 46 0.84 266 487</td>
<td>C 35 0.64 169 301</td>
<td>&gt;500</td>
<td></td>
</tr>
<tr>
<td>SBL F 101 0.79 45 117</td>
<td>F 91 0.74 44 98</td>
<td>275</td>
<td></td>
</tr>
<tr>
<td>SBT D 43 0.45 94 199</td>
<td>D 42 0.39 91 179</td>
<td>&gt;1000</td>
<td></td>
</tr>
<tr>
<td>SWL F 102 0.93 149 285</td>
<td>F 95 0.89 119 223</td>
<td>250</td>
<td></td>
</tr>
<tr>
<td>SWN E 68 0.73 122 210</td>
<td>E 64 0.64 96 178</td>
<td>460 420</td>
<td></td>
</tr>
</tbody>
</table>

Key to Shading:
- WBT F 97 0.94 211 342 Exceeds link length
- NBT D 43 0.45 94 199 Backs over rail crossing
- NBR A 3 0.08 16 48 >500 Exceeds both link & RR xing
- NBL E 73 0.72 84 163 Exceeds link length
- SBL F 101 0.79 45 117 Backs over rail crossing
- SWL F 102 0.93 149 285
- SWN E 68 0.73 122 210

* "on link" refers to either the space between intersections or length of auxiliary lane

Table 5. 2030 PM Build/No-build Traffic Performance (Assume No Circ Improvements)

<table>
<thead>
<tr>
<th>5 Corners (VT15/VT117/VT2A)</th>
<th>2030 No Circ - No Build</th>
<th>2030 No Circ - Build</th>
<th>available queuing space (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>B 13 0.80</td>
<td>on Link* to RRX</td>
<td></td>
</tr>
<tr>
<td>WB C 31 0.70 74 131</td>
<td>375 330</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBT B 14 0.82 221 433</td>
<td>424 245</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBR A 4 0.07 40 120</td>
<td>150 150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBL A 4 0.09 13 44</td>
<td>125 125</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBT A 5 0.35 76 160</td>
<td>625 820</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key to Shading:
- WBT F 141 1.07 225 377 F LOS or V/C ≥ 0.9
- WBL F 91 0.88 164 321 F LOS or V/C ≥ 0.9
- WBT F 91 0.88 164 321 F LOS or V/C ≥ 0.9
- NBR D 49 0.73 225 352 E 78 0.93 250 415 |

* "on link" refers to either the space between intersections or length of auxiliary lane

Memorandum
Page 5
Table 6. 2030 PM Build/No-build Traffic Performance (Assume Circ Segments A-B)

<table>
<thead>
<tr>
<th>Segment</th>
<th>2030 Circ AB - No Build</th>
<th>2030 Circ AB - Build</th>
<th>available queuing space (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LOS Delay v/c Avg Q 95Q</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Corners (VT15/VT117/VT2A)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>E 73 0.89</td>
<td>E 74 0.90</td>
<td></td>
</tr>
<tr>
<td>EBL</td>
<td>F 86 0.96 297 508</td>
<td>F 87 0.96 262 439</td>
<td>&gt;1000</td>
</tr>
<tr>
<td>EBT</td>
<td>D 46 0.47 181 402</td>
<td>D 45 0.45 115 225</td>
<td>&gt;1000</td>
</tr>
<tr>
<td>WBL</td>
<td>F 123 0.96 123 266</td>
<td>E 55 0.15 19 66</td>
<td>330 275</td>
</tr>
<tr>
<td>WBT</td>
<td>F 122 0.97 227 373</td>
<td>F 124 0.98 149 274</td>
<td>360 315</td>
</tr>
<tr>
<td>NBL</td>
<td>E 78 0.84 184 292</td>
<td>E 80 0.88 201 341</td>
<td>375</td>
</tr>
<tr>
<td>NBT</td>
<td>E 78 0.93 239 375</td>
<td>F 82 0.94 251 415</td>
<td>&gt;500</td>
</tr>
<tr>
<td>NBR</td>
<td>C 31 0.57 147 213</td>
<td>C 33 0.54 145 260</td>
<td>&gt;500</td>
</tr>
<tr>
<td>SBL</td>
<td>F 104 0.85 44 102</td>
<td>F 102 0.87 83 185</td>
<td>275</td>
</tr>
<tr>
<td>SWT</td>
<td>E 59 0.71 172 360</td>
<td>E 68 0.78 143 290</td>
<td>&gt;1000</td>
</tr>
<tr>
<td>SBT</td>
<td>D 48 0.32 207 447</td>
<td>D 49 0.34 274 558</td>
<td>250</td>
</tr>
<tr>
<td>SWR</td>
<td>F 91 0.95 200 239</td>
<td>F 95 0.96 194 253</td>
<td>460 420</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Park St (VT2A) / Connector</th>
<th>Build Alt 1</th>
<th>Build Alt 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WB</td>
<td>B 10 0.75</td>
<td></td>
</tr>
<tr>
<td>NBT</td>
<td>B 10 0.76</td>
<td></td>
</tr>
<tr>
<td>NBR</td>
<td>A 3 0.05</td>
<td>150</td>
</tr>
<tr>
<td>SBL</td>
<td>A 3 0.08</td>
<td>125</td>
</tr>
<tr>
<td>SWT</td>
<td>A 4 0.29</td>
<td>625</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Maple Street (VT117) / Connector</th>
<th>Build Alt 1</th>
<th>Build Alt 2</th>
</tr>
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<tbody>
<tr>
<td>Overall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EB</td>
<td>A 9 0.36</td>
<td></td>
</tr>
<tr>
<td>WBL</td>
<td>B 11 0.60</td>
<td>360</td>
</tr>
<tr>
<td>WBT</td>
<td>A 9 0.22</td>
<td>125</td>
</tr>
<tr>
<td>NBT</td>
<td>A 10 0.51</td>
<td>&gt;1000</td>
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<td>SB</td>
<td>A 7 0.18</td>
<td>70</td>
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<table>
<thead>
<tr>
<th>Main Street (VT15) / Railroad St.</th>
<th>Build Alt 1</th>
<th>Build Alt 2</th>
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<tbody>
<tr>
<td>Overall</td>
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<tr>
<td>WBL</td>
<td>A 1 0.03</td>
<td>150</td>
</tr>
<tr>
<td>NB</td>
<td>C 20 0.15</td>
<td>&gt;500</td>
</tr>
<tr>
<td>SB</td>
<td>D 34 0.15</td>
<td>&gt;500</td>
</tr>
</tbody>
</table>

Key to Shading:
- F LOS or V/C ≥ 0.9
- exceeds link length
- backs over rail crossing
- exceeds both link & RR xing

* "on link" refers to either the space between intersections or length of auxiliary lane

Observations:

- Build Alternative 1 and Build Alternative 2 are nearly identical from an attractiveness and time savings perspective, thus the same impact on the network and traffic diversion is expected.
- Build Alternatives 1 or 2 are projected to reduce traffic at Five Corners by 11-12% without any Circ improvements, and 5% assuming Circ Segments A-B are built.
- Build Alternatives 1 or 2 are projected to reduce traffic on the Maple, Park and Main Street in all scenarios except 2030 with Circ Segment A-B.
- Queuing and delay is reduced at Five Corners under each build alternative except 2030 with Circ Segment A-B, where little change is expected.
- The assumed geometric improvements at the Connector Road intersections at VT2A and VT117 perform well under all scenarios including the expected development of adjacent parcels.

END OF MEMO
Traffic Forecast Methodology

The Chittenden County Transportation Model (the Model) was used to develop traffic forecasts for the future scenario years 2030. The Model estimates the movement of people and vehicles within the region during year 2005 AM and PM peak hours and predicts future traffic volumes based on assumptions about land use and the transportation system as defined by the scenarios described above. This section provides a brief overview of the Model so the reader has a basic understanding of how key land use change and transportation project assumptions related to this study have been accounted for in the forecasts. Additional information on the model is available on the CCMPO web site at http://www.ccmpo.org/modeling/. For a detailed explanation of the Model refer to “CCMPO Model Documentation”.

The 2005 Model is an update from a model developed by CCMPO in 1998, which was also updated in 2000. The 2005 model is based on updated housing and employment data from the 2005 census and includes a revised network. The Model was also transferred from the ITM/TModel modeling software packages to TransCAD, a commercially available transportation modeling and GIS package, in 2000.

The Model combines the highway and transit network with land use. The network includes all arterials and significant collectors in the County and some local streets. Road characteristics such as length, functional class, speed limit, number of lanes, and capacity are included. In addition to roadway characteristics, the CCTA fixed route transit system is also coded along the appropriate roads. The Model also includes intersection capacity characteristics such as type of control (traffic signal, coordinated traffic signals, stop, yield, etc), number of turning lanes, and roadway capacity.

For the purposes of modeling traffic flow, the Model includes 335 internal Transportation Analysis Zones (TAZs) covering the 18 municipalities in Chittenden County. Traffic entering and exiting the region does so through 17 external zones. Land use is described in terms of dwelling units and employment. Each TAZ includes number of households and number of employees. Different employment types such as retail, office, industrial, hotel, and school categories are placed into various high, low, or medium trip generation categories.

The Model follows the five step process shown in Figure 1 to estimate the location of new development and the resulting AM and PM peak hour travel. The steps are defined as follows:

- Trip Generation – estimates the number of person trips produced and attracted to each TAZ.
- Trip Distribution – connects person trips between TAZs.
- Mode Choice – splits person trips into single occupant vehicles, shared vehicle trips, transit trips, or walk/bike trips.
- Assignment – Selects the shortest route for each vehicle and transit trip traveling from one TAZ to another based on distance and travel time.

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1 Resource Systems Group, Inc., for the CCMPO, April 2006


- Land Use Allocation – The Model begins with a base-year land use and distributes county-wide estimates of housing and employment growth to TAZs based in part on accessibility and the availability of land for development (based on zoning, physical constraints, and existing land use). As indicated in Figure 1, the model includes a land use-transportation feedback loop that accounts for (1) the effect of new housing and jobs on the transportation system and (2) the effect of transportation on where housing and jobs are located.

**Figure 1: Model Process**

![Figure 1: Model Process]

- **Land Use Assumptions**

As noted above, the Model distributes region-wide estimates of household and employment growth to TAZs which represent specific areas of the County.

Expected growth used in the Model, for 5 year increments by TAZ and County total, have recently been revised by the Chittenden County Regional Planning Commission (CCRPC) and CCMPO for the 2030 Metropolitan Transportation Plan (MTP). These new figures were used in the model runs for this study.

The regional growth totals establish the upper limit of new households and employment within the County. The Model can be used to distribute some or all of the growth across the County based on zoning, accessibility, existing land use, etc. It is also possible to manually enter households and employment from specific development projects. The consultants for the Circumferential Highway Environmental Impact Study (EIS) developed a list of anticipated development projects in several towns in and around the study area. The EIS list was reviewed, as well as similar lists from the recently completed US 2 Corridor Study and the Dorset St Corridor Study. With the assistance of the municipal planners the list was then refined with the most recent information concerning future development assumptions in the City of South Burlington and the Town of Williston. The Burlington International Airport was also consulted to confirm their growth and development plans. These refined assumptions were used to create a revised “permitted land use” input file that includes future increases in households and employment anticipated in each TAZ in the project area.

- **Traffic Volume Adjustments**

The traffic turning movement volumes evaluated for the 2010 base case scenario are based on ground counts adjusted to reflect the 2010 design hour (DHV). The 2030 traffic forecasts were derived using a

---

2 See Household Employment Forecast Endorsement Memo from the RPC, 1/22/07

3 Received from CCMPO, 1/26/07.
combination of the Model output and the 2010 design hour volumes. This section describes the sources, adjustments and methodologies for each of these steps.

2010 Design Hour Volumes

The design hour volume (DHV) is the 30th highest hour of traffic occurring on a facility over the course of one year and is used for operational analyses and design. This section of the report summarizes the data and methodologies used to adjust traffic counts collected in the field to the DHV for the interstate segments and ramps, intersections between the ramps and non-interstate highways, and the intersections on the local road study intersections.

Intersections

Adjustment factors were applied to ground counts at the study intersections to reflect the 2010 PM Design Hour. The design hour factors were developed using the Continuous Traffic Count (CTC) method as specified in the “2009 Continuous Counter Grouping Study and Regression Analysis Report”. A CTC collects traffic data hourly; 24 hours per day and 365 days a year. These data are used to adjust an intersection turning movement counts collected on a specific day to represent the design hour volume for the entire year. Annual adjustment factors were based on design hour volumes reported at the continuous counter station on VT2A in Williston (D129). Turning movement volumes and related adjustments are attached at the end of the Appendix.

2030 Design Hour Volumes

Traffic volumes for all of the 2030 Build and No-Build scenarios were estimated by using output from the CCMPO’s transportation model in combination with the 2010 base year volumes developed from ground counts as described in the section above using a technique referred to as “pivoting”. The pivoting process is based on the concept that an existing ground count is the best starting point for estimating scenario traffic volumes at an intersection. It uses the change in volumes estimated by the Model to adjust the ground counts. The adjustment may be based on the absolute difference or proportional difference in model traffic volumes.

Capacity Analysis Methodology

The effect of the proposed interchange on congestion along the interstate and the local road network is used to address the traffic operational requirements of the FHWA Interstate Access Policy and is described by the concept of level-of-service. Level-of-service (LOS) is a qualitative measure describing the operating conditions as perceived by motorists driving in a traffic stream. LOS is used to describe congestion at signalized intersections, stop sign controlled intersections, interstate segments, ramp junctions and weaving areas and has been estimated using the procedures outlined in the 2000 Highway Capacity Manual (2000 HCM). LOS at signalized and stop-controlled intersections is related to delay. LOS for freeway segments, ramp junctions and weaving areas is related to density. LOS parameters are briefly discussed below. For additional information, readers should refer to the 2000 (HCM).

LOS at the signalized and stop-controlled intersections was estimated using the software package Synchro (version 7). LOS for basic freeway segments, ramp junctions and weaving areas was estimated using the Highway Capacity Software 2000 (HCS 2000). LOS results are summarized in response to the FHWA access requirements related to traffic operations in Section Error! Reference source not found. of the report.
Level of Service Requirements for Signalized and Stop-Controlled Intersections

The 2000 HCM defines six qualitative grades to describe the level of service at an intersection. Level-of-Service is based on the average control delay per vehicle (Table 1). The delay thresholds for LOS at signalized and stop-controlled intersections differ because of the driver’s expectations of the operating efficiency for the respective traffic control conditions. In signalized and all-way stop-controlled intersections, all movements experience delay and an overall LOS can be calculated. An overall LOS cannot be calculated for two-way stop-controlled intersections because not all movements experience delay. In addition to traffic volumes, key inputs include the number of lanes at each intersection and the traffic signal timing plans. The LOS results are based on the existing lane configurations and control types (signalized or stop signs) at each study intersection.

Table 1 Level of Service Criteria for Signalized and Stop-Controlled Intersections

<table>
<thead>
<tr>
<th>LOS</th>
<th>Characteristics</th>
<th>Traffic Signal Delay (seconds)</th>
<th>Stop Controlled Delay (seconds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Little or no delay</td>
<td>≤10.0</td>
<td>≤10.0</td>
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<tr>
<td>B</td>
<td>Short delays</td>
<td>10.1-20.0</td>
<td>10.1-15.0</td>
</tr>
<tr>
<td>C</td>
<td>Average delays</td>
<td>20.1-35.0</td>
<td>15.1-25.0</td>
</tr>
<tr>
<td>D</td>
<td>Long delays</td>
<td>35.1-55.0</td>
<td>25.1-35.0</td>
</tr>
<tr>
<td>E</td>
<td>Very long delays</td>
<td>55.1-80.0</td>
<td>35.1-50.0</td>
</tr>
<tr>
<td>F</td>
<td>Extreme delays</td>
<td>&gt;80.0</td>
<td>&gt;50.0</td>
</tr>
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</table>

1. Exhibit 16-2; 2000 HCM
2. Exhibit 17-2, 2000 HCM

Queuing Analysis

All queuing results reported are from the average of at least 5 runs in Simtraffic (a microsimulation subroutine of Synchro). These queuing results are generally accepted as more accurate and reliable than queuing reported by Synchro alone, as microsimulation considers the network effects of downstream intersections (platooning or queue spillback), as well as the interaction of queues between adjacent lanes.
PM Peak Hour

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Location</th>
<th>Movement</th>
<th>Volume</th>
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<tbody>
<tr>
<td>07:00</td>
<td>Start</td>
<td>Essex</td>
<td>NB</td>
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<td>07:30</td>
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<td>Essex</td>
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<td>07:45</td>
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DHV & Base Yr Adj.

<table>
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<tr>
<th>Date</th>
<th>Raw Volumes</th>
<th>Location</th>
<th>Movement</th>
<th>Volume</th>
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2010 No Build

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Check All Sites

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2010 Build Alt1

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PM Peak Hour

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<th>Volume</th>
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<tbody>
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DHV & Base Yr Adj.

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2010 No Build

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Balancing

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Check All Sites

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### 2030 CC Model Change

#### WITH CCCH Segment AB

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### 2030 No Build

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### 2030 Balancing

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### 2030 Build Alt1

#### WITH CCCH Segment AB

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</tbody>
</table>
SCENARIO / ALTERNATIVES
1. 2010 base / No-build
2. 2010 base / build Alt 1
3. 2010 base / build Alt 2
4. 2030 no circ improvements / No-build
5. 2030 no circ improvements / Build Alt 1
6. 2030 no circ improvements / Build Alt 2
7. 2030 circ segment A-B (CAB) / No-build
8. 2030 circ segment A-B (CAB) / Build Alt 1
9. 2030 circ segment A-B (CAB) / Build Alt 2

MODEL / VOLUME DEVELOPMENT / ANALYSIS FLOW CHART:

=> signifies volume development step
abc signifies model run
\_\_\_ signifies Synchro analysis step
add development traffic

```
2010 ground counts
\downarrow
\text{adjusted} = \text{Alt 1}

\downarrow
\downarrow

\text{a} - \text{paramics base - calibrated}
\downarrow
\text{b} - \text{paramics build 1 or 2}
\downarrow
\text{Alt 2 (or 3) = 1+(b-a)}

\downarrow
\downarrow
\downarrow
\downarrow
\downarrow
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\downarrow
\downarrow
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\downarrow
\downarrow
\downarrow
\downarrow

\text{c} - \text{CCMPO model base}
\downarrow
\text{d} - \text{CCMPO model 2030 no circ}
\downarrow
\text{Alt 4 = 1+(d-c)}

\downarrow
\text{e} - \text{paramics 2030 no circ base}
\downarrow
\text{f} - \text{paramics 2030 no circ build 1 / 2}
\downarrow
\text{Alt 5 (or 6) = 4+(f-e)}

\downarrow
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\downarrow

\text{g} - \text{CCMPO model 2030 CAB}
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\text{Alt 7 = 1+(g-c)}

\text{h} - \text{paramics 2030 CAB base}
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\text{i} - \text{paramics 2030 CAB build 1 / 2}
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APPENDIX 4

Archaeology Resource Assessment by UVM Consulting, December 2010
ARCHEOLOGICAL RESOURCE ASSESSMENT AND HISTORIC RESOURCES REVIEW FOR THE CRESCENT CONNECTOR SCOPING STUDY, ESSEX JUNCTION, CHITTENDEN COUNTY, VERMONT

View north along Park Street (VT RT 2A) in the early 20th century, Essex Junction, Vermont (from Powell 1977:58).

Submitted to
Mark Smith
Resource Systems Group Inc.
60 Lake Street, Suite 1E
Burlington, VT 05401

Submitted by
Kate Kenny and Catherine Quinn
Consulting Archaeology Program
University of Vermont
180 Colchester Ave
111 Delehanty Hall
Burlington, Vermont 05405

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INTRODUCTION

This Archaeological Resource Assessment (ARA) and Historic Resources Review was conducted by the University of Vermont Consulting Archaeology Program (UVM CAP) and prepared on behalf of Resource Systems Group Inc., for the Essex Junction Crescent Connector Scoping Study being conducted for the Chittenden County Metropolitan Planning Organization. The Crescent Connector is a proposed roadway that would connect Vermont Route 2A (Park Street), Vermont Route 117 (Maple Street), and Vermont Route 15 (Main Street) in the Village of Essex Junction, Chittenden County, Vermont (Figure 1). This review assists with compliance under Section 106 of the 1966 National Historic Preservation Act and its amendments. The proposed project was reviewed according to standards set forth in 36 CFR, the regulations established by the Advisory Council on Historic Preservation to implement Section 106. Review consists of identifying potential archaeological resources within the project area at a general level, and identifying and evaluating potential impacts to historic resources on or eligible for listing on the National Register of Historic Places that may be impacted by project work. A wide range of archival sources were utilized in preparing this report including historic maps, aerial photographs, newspapers, historic postcards, vital records, federal census records, land records, the files of the Vermont Division for Historic Preservation, and published local histories. A site visit and visual inspection of the project area was also conducted.

PROJECT DESCRIPTION AND EXISTING CONDITIONS

Currently, the proposed project consists solely of a scoping study; future, anticipated project activities may include, but are not limited to road construction, structural demolition and new construction. The project area is an approximately 8 to 9 acre multiple lot parcel located on a relatively level relic glacial outwash delta. The Soil Conservation Service’s survey of Chittenden County indicates that the native soil within the study area is primarily Hinesburg fine sandy loam (Allen 1974). The site inspection of the project area noted visual evidence of ground modification, including grading and leveling, building construction and deconstruction, and activities done in connection with the railroad such as tack construction and adding ballast. According to the 1987 USGS topographic map, the elevations within the project area range from approximately 99.1 m (325 ft) to 106.7 m (350 ft) above mean sea level. The closest surface water is the head of an unnamed tributary to the Winooski River located about 140 m (459.3 ft) to the south. Indian Brook is about 525 m (1722.4 ft) to the northeast. The primary standing structures within the current project area include the Mason Brothers Architectural Salvage Warehouse (Figures 2 and 3) and the former Flanders Building Supply and Lumber Company building along with its associated outbuildings (Figures 4-6). Given their location adjacent to, and possibly partially within the project area, an evaluation of buildings along Railroad Street and immediately south of the project area, was also conducted as part of this review (Figures 7 and 8).
Figure 1. Project location, Essex Junction, Chittenden County, Vermont.
Figure 2. View southeast within the project area towards the Mason Brothers Warehouse (formerly the Baxter Brothers’ Cannery).

Figure 3. View south within the project area showing the western end of the Mason Brothers Warehouse.
Figure 4. View southeast within the project area showing the north side of the former Flanders Building Supply building.

Figure 5. View northeast within the project area showing the southern side of the former Central Feed Company building. This building was joined to the Flanders building to the north ca. 1978-1987.
Figure 6. View southeast within the project area showing one of the metal clad sheds standing near the former Flanders Building Supply building.

Figure 7. View north of the project area from just north of the Mason Brothers Warehouse towards Railroad Street. The small blue building at right center was once the village jail.
PRECONTACT NATIVE AMERICAN RESOURCES

A review of the Vermont Archaeological Inventory (VAI), which is maintained by the Vermont Division for Historic Preservation (VDHP) indicates that there are eight previously reported precontact Native American sites within an approximately 1 km (0.62 mi) radius of the current project area (Figure 9 and Table 1). In applying the VDHP’s Environmental Predictive Model for Locating Precontact Archaeological Sites to this project area, a score of 28 is generated, based on its location on a delta complex, its proximity to a relic drainage/intermittent stream, and its proximity to the relic head of draw of the same drainage. Not only does the project area not reach the threshold score (32) to be considered archaeologically sensitive based on the predictive model, historic and modern ground disturbance have altered the project area significantly.
Figure 9. Known archaeological sites within approximately 1 km (0.62 mi) of the current project area.

Table 1. Description of known archaeological sites indicated on Figure 9

<table>
<thead>
<tr>
<th>Site#</th>
<th>Type</th>
<th>Sub-Type</th>
<th>Time Period</th>
<th>Key Artifacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>VT-CH-49</td>
<td>Precontact Native American</td>
<td>Isolated Find</td>
<td>Archaic</td>
<td>Slate projectile point.</td>
</tr>
<tr>
<td>VT-CH-63</td>
<td>Precontact Native American</td>
<td>Undetermined</td>
<td>Archaic-Woodland</td>
<td>Slate, chert, and quartzite bifaces, Levanna and side notched projectile points.</td>
</tr>
<tr>
<td>VT-CH-851</td>
<td>Precontact Native American</td>
<td>Undetermined</td>
<td>Unknown</td>
<td>Lithic debitage.</td>
</tr>
<tr>
<td>VT-CH-852</td>
<td>Precontact Native American</td>
<td>Undetermined</td>
<td>Unknown</td>
<td>Lithic debitage, utilized flakes, fire cracked rock, features.</td>
</tr>
<tr>
<td>VT-CH-853</td>
<td>Precontact Native American</td>
<td>Undetermined</td>
<td>Unknown</td>
<td>Lithic debitage, preform, utilized flake, fire cracked rock.</td>
</tr>
<tr>
<td>VT-CH-867</td>
<td>Precontact Native American</td>
<td>Single Occupation</td>
<td>Terminal Late Archaic ca. 1800-1500 BC</td>
<td>Susquehanna (or Normanskill) projectile point, slate gorget, lithic debitage, bifaces, scrapers, core, drill, knife, preform, hammerstone, utilized flakes.</td>
</tr>
<tr>
<td>VT-CH-868</td>
<td>Precontact Native American</td>
<td>Temporary Camp</td>
<td>Middle to Late Woodland ca. 750-1500 AD</td>
<td>Levanna projectile point, scraper, lithic debitage.</td>
</tr>
<tr>
<td>VT-CH-869</td>
<td>Precontact Native American</td>
<td>Undetermined</td>
<td>Unknown Possible Late Archaic ca. 2500-1000 BC</td>
<td>Brewerton-like projectile point, lithic debitage, fire cracked rock, knife, hammerstone.</td>
</tr>
</tbody>
</table>
HISTORIC BACKGROUND

Many of the buildings within the project area were directly associated with either the railroads or industry and commerce from the mid-19th century through the 20th century (Figure 10). Other buildings, such as houses were likely constructed as an indirect result of the arrival of the railroad and the growth of industry/commerce in Essex Junction. Documentary evidence of settlement or use of this area previous to the arrival of the railroad was inconclusive.

VERMONT CENTRAL RAILROAD
(New England Central Railroad)

In the mid-1800s, the Village of Essex Junction, originally known as Painesville, became the meeting point of two early railroads, the Vermont & Canada and the Vermont Central (together later known as the Central Vermont Railroad). In 1848, with the arrival of the first large construction crew, the Vermont & Canada reportedly held “a formal ground breaking ceremony . . . near the present-day Maple Street crossing site” (Bent 1963:100; Jones 1981:35). Not long afterwards, it was reported that the directors of the Vermont Central Railroad were buying land in “Essex . . . for the purposes of the station building, grounds &c., at the junction of the road with the Vermont and Canada . . . on highly favorable terms” (Burlington Free Press September 18, 1849). Much of the land that the Vermont Central purchased in the heart of the village of Essex Junction, south of Maple Street was acquired from Elijah G. Stanton (Essex Land Records [ELR] 9:506; Walling 1857). Elijah Stanton sold an eleven acre lot, which included the current project area, to the Vermont Central Railroad Company in 1850 (ELR 9:506). In this deed, Stanton reserved the right to remove his house and barn that he had built on it ca. 1849 (ELR 9:506). Unfortunately, the documents do not pinpoint the location of these structures on the larger lot and their site may or may not be within the current project area. The Walling map of 1857 indicates that at that time Stanton’s residence was on the western side of Park Street roughly opposite from the former Flanders Building Supply structure (Figure 11) (Walling 1857). It is known that the buildings in question were removed from the property very soon after their construction, thereby considerably lowering their location’s archaeological potential.

The first structures known to be within the current project area were related to the railroad. The Vermont Central Railroad’s first passenger station was located within the current project area on the eastern side of Park Street in the area of the former Flanders Building Supply building or just to the north (see Figure 11) (Walling 1857). Little is known about this building except that it was superseded by one built in October of 1862 where the present station (which was built in 1957) is located today (Figure 12). The Walling map also indicates that another railroad related structure, possibly later used as a wagon house and then a storehouse, was located in the southwest portion of the current project area (see Figures 10, 11 and 12).
Figure 10. Schematic map showing existing and former buildings within and adjacent to the project area (Aerial Explorations 1937; Areographics Corp. 1974; Beers 1869; Geotechnics & Resources Inc. 1962; Harris Surveying & Land Dispute Resolution 2002; Sanborn Mapping & Publishing Company 1894, 1899, 1904, 1910, 1922, 1928, 1944, and 1962; USGS 1987; Vermont Mapping Program 1978; Walling 1857).
Figure 11. Detail of “Painesville” (now Essex Junction) from H.F. Walling’s *Map of Chittenden County, Vermont* (1857).
The portion of the project area east of the railroad tracks and south of Maple Street has been used for industrial and/or commercial purposes since the mid-1800s. The first known industry in the area was a stone cutting shop operated by Marvin Snyder. The general location of this enterprise is indicated on the Beers map of 1869 (see Figure 12). Marvin Leonard Snyder was born in Huntington, Vermont, on August 25, 1824, the third of seven children of John and Eunice (Squires) Snyder (Free Press Association 1901:95; Rann 1886:853). Marvin Snyder attended the University of Vermont and taught in New Jersey before getting into the marble business as a cutter and a sales agent ca. 1860 and establishing a shop in Essex Junction under the style of Snyder & Brownell in 1864 (Free Press Association 1901:95; Rann 1886:853; U.S. Census 1870 and 1880). Marvin Snyder was married twice; his first wife was Sophia Clark,
daughter of Phillip and Lucy (Swallow) Clark, of Pawlet, Vermont, and his second wife, whom he married in 1863, was Jane H. Latham (b. 1830), daughter of Jacob and Polly (White) Latham, of Jericho, Vermont (Essex Vital Records; Rann 1886:853; U.S. Census 1880). Marvin and Jane Snyder had one child, John Latham Snyder, who was born on September 8, 1872 (Essex Vital Records; Rann 1886:853; U.S. Census 1880 and 1900).

Land records indicate that the stone cutting shop, as well as Snyder’s residence, stood on land that was, in part, purchased by Jane Snyder from E.H. Bowman on April 3, 1865 (1¼ A) as well as another parcel to the south that Marvin Snyder bought in 1866 and which he conveyed to his wife in April of 1893 (ELR 13:259; 14:8; 22:274-275). Initial land record research suggests that this land was part of the property purchased by the Vermont Central Railroad in the 1840s, but that it was conveyed to John S. Eldridge in 1856 (to settle some of its debts), who later sold it to a man named Beach who sold it to Bowman (ELR 9:506, 11:157, and 12:230).

Snyder bought out Brownell in 1867 and he carried on the business under his own name into the late 1880s (Figure 13) (Child 1882:195, 309; U.S. Census 1870 and 1880). The 1880 federal industrial census indicates that Snyder employed ten men (all over eighteen years of age) full-time for eight months of the year paying wages ranging from $2.25 for skilled workers to $1.25 for unskilled workers for each ten hour day (U.S. Industrial Census, Essex, Vermont, 1880). At this time, Snyder’s shop transformed an estimated $1000 of raw stone into $6500 worth of finished product annually (U.S. Industrial Census, Essex, Vermont, 1880).

Figure 13. Advertisement for M.L. Snyder (from Child 1882:286).
In April of 1888, Marvin Snyder joined with several others to form the Essex Junction Marble and Granite Company. The land occupied by this company was leased from M.L. Snyder and his wife (ELR 20:137). On this property, the company built a few new structures somewhere south of Snyder’s old shop fronting Maple Street. The lease as well as a mortgage on the property held by William Fletcher & Sons, described the parcel as being owned by Jane H. Snyder and as being on the southerly side of Maple Street “adjoining the lands of the Central Vt. Railroad on the westerly side” (ELR 19:303; 20:137). The land leased extended “southerly from said road to the new buildings” (consisting of “marble and granite cutting sheds and blacksmith shop thereto attached and the engine and polishing house”) and “covering all the land upon which the said buildings are erected” along with “the privilege of entering upon a space four feet wide around said buildings, for the purpose of completing and repairing the same” (ELR 19:303; 20:137). The documents also reveal that in addition to the new buildings, the new company would also have the “use of the old shop recently moved, and the shop near Maple Street,” which Snyder was to “move back” on the property, “so the same will adjoin the northerly end of the new building recently erected” (ELR 20:137). In May of 1888 a local newspaper described the property in even more detail:

The Essex Junction Marble and Granite Company of Essex Junction, Vt, which was organized in March last, shows a commendable activity which argues well for the prosperity of the new firm. Within 30 days from the date of its organization it had constructed a cutting shed 107 by 30 feet, [a] blacksmith shop 18 x 20 feet, engine and polishing building 22 x 35 feet, equipped the same with a fine Burrell engine of 12 horse power and two of the finest polishing machines ever turned out by Smith, Whitcomb & Cook, of Barre, Vt., had erected their derricks, equipped their shops, built a new side track to accommodate the same, and had the whole business in full blast with an active force of 40 men on their payroll. The firm has already over $20,000 orders booked, and are running their polishing rooms night and day to fill their orders, and already contemplate enlarging their facilities in this direction, to meet the increasing demands of the business. The various departments are ably superintended by the members of the firm themselves, M.L. Snyder and J.S. Young, who have been in the business all their lives so far, having personal charge of the active running of the works and E.R. Fletcher having charge of the books and superintendence of the office, J.W. Bailey a veteran for years in the business, acting as general salesman (Burlington Clipper May 24, 1888).

The newspaper added that the “side track to the yard of the new marble works” was laid out “so that blocks of marble can be moved from the cars to the different doors of the shops by a derrick, the building having been built in a semi-circle around the derrick” (Burlington Clipper May 24, 1888). The J.W. Bailey noted here was John W. Bailey, the father of Guy W. Bailey who later became president of the University of Vermont.

According to Walton’s Vermont Register, the Essex Junction Marble and Granite Company broke up by ca. 1890 into the firms of Fletcher & Co. and M.L. Snyder & Son (Walton 1890). M.L. Snyder & Son probably continued to work at the site within the current project area. This company appears to have ceased work around 1894 or 1895, soon after the death of Marvin
Snyder in Essex on October 11, 1893 (Free Press Association 1901:95; Walton 1892, 1893, 1894, and 1895). Marvin Snyder died owning few possessions, specifically “about $75 worth of household furniture & . . . clothing, a few book accounts not exceed $25 and a few stone cutters tools not to exceed $25” (Chittenden County Probate Court, Record for M.L. Snyder 1893). His wife, Jane Snyder, continued to live on Maple Street until her death on March 30, 1910 (Figure 14) (Chittenden County Probate Court, Record for Jane Snyder 1910; Essex Vital Records). Their son, John L. Snyder, moved to Stockbridge, Massachusetts, in the 1890s and continued in the stone cutting business until his death there on March 2, 1911 (Massachusetts Deaths; Chittenden County Probate Court, Record for John L. Snyder 1913; U.S. Census 1900 and 1910). It does not appear that anyone ever worked in the Snyder’s stone shops again and it is not known when the structures were removed and/or destroyed, but none of the marble shop related buildings are extant today.

Figure 14. View east along Maple Street, ca. 1903 (Postcard Collection, Special Collections, Bailey-Howe Library, University of Vermont). The west end of M.L. Snyder’s residence can be seen at right.
HISTORIC / STANDING RESOURCES

A total of six buildings listed on the Vermont Division for Historic Preservation’s (VDHP) Historic Sites & Structures Survey fall partially within or immediately adjacent to the project area (Figure 15; Appendix I). These buildings were assessed in the field and researched through historic documents. Several other buildings within the project area that are not listed on the survey were also assessed and researched (see Figure 15).

Figure 15. Image showing the location of buildings within or adjacent to the project area that are included on the VDHP Survey (in yellow), and additional buildings surveyed/researched (in red).
The industrial building situated adjacent to the southern edge of the project area, just outside the currently defined project area, was formerly a maple syrup factory and storage facility (see Figure 15; Figure 16 and 17). It is included on the VDHP’s Historic Sites & Structures Survey which lists a construction date of c. 1890. The building first appears on the Sanborn Fire Insurance Map of 1922 (Sanborn Mapping & Publishing Company 1922). A maple syrup business was located in the building until at least 1984; today the facility is occupied by Flex-A-Seal, Inc., an international mechanical seal manufacturer. The building consists of a two story rectangular structure with a flat or very low pitched roof. Since the 1984 VDHP survey, clapboards have been replaced/covered by vinyl siding, windows appear to have been replaced (though they are still multi-paned), and the northern end wall of the building has been raised with a parapet-type wall extension.
Figure 17. An early 20th century view of the Vermont Maple Syrup Co. factory, looking east (from Powell 1977:58).
BAXTER BROS. CANNERY / MASON BROS. WAREHOUSE
11 Maple Street
VDHP Survey No.: #0405-105

Figure 18. View south of the Baxter Bros. Cannery/Mason Bros. Warehouse building.

Located approximately 480 ft south of Maple Street, immediately east of a set of railroad tracks, is the Baxter Brothers Cannery/Mason Brothers Warehouse building (see Figure 15; Figure 18). In 1901, the H.C. Baxter & Bros. Company of Brunswick, Maine (established ca. 1888), then reported to be “the largest canning concern in the United States” showed interest in setting up a cannery in Essex Junction (Burlington Clipper November 23, 1901). At the time, the Baxter Brothers already had three factories in the state; located at Westminster (1892), Windsor (1896), and Brattleboro (1898) (Anonymous 1904:81-82). The company stipulated that they would locate their new cannery in Essex Junction if “the sum of $4000” was “raised to erect the necessary buildings, which the company will lease from the town,” and if local farmers pledged to raise at least 700 acres of corn a year (Burlington Clipper November 23, 1901). It was reported that before the public meeting called to discuss the company’s offer broke up that “$2,400 had been subscribed” and that “nearly all of the $4000 was promised the next day” (Burlington Clipper November 23, 1901). Almost immediately, an organization called “The Essex Industrial Company”, created with the “avowed intention of bringing industries to the village of Essex Junction”, acquired 2¼ acres from Jane Snyder (via S.A. Brownell) “on Maple Street behind her residence and contiguous to the railway” for $900 and promptly leased it to the Baxter Brothers (Figure 19) (Burlington Clipper November 30, 1901 and December 7, 1901;
Figure 19. Plan of land owned by the Essex Industrial Company and the Snowflake Canning Co., ca. 1948 (ELR 48:369).
In the transfer, Jane Snyder also included a 24 foot wide right-of-way to access the property from Maple Street and a structure, “formerly used as a tenant house,” that apparently stood within the right-of-way (ELR 26:469).

The main cannery building was built in January and February of 1902 and was “painted the latest tint of red, something between a Louis Quinze pink and a crushed watermelon” (Figure 20) (Burlington Clipper December 14, 1901; Burlington Clipper September 13, 1902). The main part of the building was approximately 150 feet long, 45 feet wide, and two stories high (Sanborn Mapping & Publishing Company 1910). By early February, it was reported that some of the skilled workmen had arrived from Maine “to begin the manufacture of tin cans at the canning factory” and that “the machinery and steam plant is now being set up” (Burlington Clipper February 15, 1902). However, the first use of the building was for a library fundraiser. A local paper noted: “the big floor space of the new canning factory was utilized as it probably will never be again last Thursday night on the occasion of the endeavor on the part of the library trustees to give the public something in the way of entertainment that would result ultimately in the financial benefit of the book catalogue of the library” (Burlington Clipper March 1, 1902).

Figure 20. An early 20th century view of the Essex Junction corn canning factory, looking east northeast (Postcard Collection, Special Collections, Bailey-Howe Library, University of Vermont). Note the lightly constructed husking shed to the left of the cannery.
Canning operations began with a trial run early in September of 1902 with A.H. Barrows and Albert Miller of Colchester bringing in the first loads of corn to be processed (Burlington Clipper September 13, 1902). At the time, it was reported that: “the cannery at Essex Junction is the finest and most thoroughly equipped plant of its kind in New England” (Burlington Clipper November 1, 1902). The original complement of machinery included “seven cutters, two silkers, two cookers, two wipers, two capping machines and 19 retorts” (Burlington Clipper September 13, 1902). Although the first season of production was marred by a poor corn crop, the cannery remained an important business in Essex for over fifty years (Burlington Clipper November 1, 1902). Each year, “as many as 100 workers were hired for the three-to four week canning season starting in late August” (Allen and Allen 2004:44; Burlington Clipper September 13, 1902). These workers were probably mostly huskers as this task was not easily mechanized. It was noted that “the husks and cobs go back to the farmers for feed” (Burlington Clipper September 13, 1902). While initially it was planned that at the Essex facility would also can “peas, beans, tomatoes, and succotash,” through most, if not all, of its history its output was corn (Burlington Clipper November 23, 1901; Suburban List March 12, 1957). The cannery later operated as a division of the Snowflake Canning Company, which was owned in part by the Baxter Brothers (Suburban List March 12, 1957). The plant was “modernized from time to time till it ceased operation in 1959” (Bent 1963:100). The property was sold by the Essex Industrial Company to the Robinson Warehousing & Distributing Company on July 14, 1961 (ELR 64:446). The warehouse to the south of the main cannery building was added to the property between 1962 and 1974 (Areographics 1974; Geotechnics 1962). This warehouse was built over the old cannery’s southern addition (engine house/boiler) and its railroad platform site.

With the construction of the Essex Junction factory in 1902, Vermont had seven canning factories with a combined estimated output of 2,700,000 two-pound cans in 1903 (Anonymous 1904:81-82). All-in-all Vermont would only have eleven towns hosting industrial scale canneries, these were Brattleboro, Essex, Island Pond, Newbury, Northfield, Randolph, St. Albans, Shelburne, Waterbury, Westminster, and Windsor (Frederic 2002:6). The canning industry faded in Vermont after World War II with most, if not all, of the plants shutting down by the 1960s (Frederic 2002:163). The building now houses an architectural salvage business, antiques store and other small businesses. Much of the interior of the building appears to remain relatively unaltered and there are several features, such as a large service elevator that are likely original to the building. The western half of the building lies directly within the project area.

**Automotive Service Garage**

4 Jackson Street

Four Jackson Street, located immediately south of the Baxter Bros. Cannery/Mason Bros. Warehouse building, is a single story concrete block automotive repair garage that was built between 1937 and 1944 and expanded between 1944 and 1962 (Aerial Explorations 1937; Sanborn Mapping & Publishing Company 1928, 1944, and 1962). The building is currently occupied by Jason Leo”s Automotive. It is situated almost entirely within the project area. This garage is not included on the VDHP”s Historic Sites & Structures Survey.
THE VILLAGE JAIL/RESIDENCE
15 Maple Street

Figure 21. View south of the Village Jail/Residence at 15 Maple Street.

Just within the project area near Maple Street is a building known as the old village jail (see Figure 15; Figure 21). Constructed in the 1870s, this building was used as a barber shop by 1899, and converted into a small jail between 1904 and 1910 (Baker 1973:21; Sanborn Mapping & Publishing Company 1899, 1904, and 1910). Reportedly, as the village lock-up:

……it contained two individual cells, or „cages” as they were called at that time on the first floor. They were of primitive construction-1/8 inch steel sheets on three sides and at the top, with an iron door set in the center of a row of iron bars serving as the fourth side. A set of stairs at the back of the building led to living quarters above. At one time a woman lived above the jail. She provided meals for the inmates whenever the jail was occupied (Baker 1973:21).

The building was converted into a residence and store in the 1920s (Baker 1973:21; Sanborn Mapping & Publishing Company 1922 and 1928). The cells were finally taken out ca.1938 and after their removal they were “stored in a shed behind Lincoln Hall until World War II when the doors were disposed of and the iron bars sold for scrap. The village street department cut up the
sheet steel walls and used them to repair their trucks and elevate the sides” (Baker 1973:21). The building is not included on the VDHP”s Historic Sites & Structures Survey.

**FORMER FLANDERS BUILDING SUPPLY BUILDING – GENERAL AREA**

As noted earlier, in the 19th century much of the land located at the southwest end of the project area was owned by the railroad company. This land remained open for many years with the exception of a few structures that were located east of Park Street such as the early passenger station, a wagon house, and some wood/coal sheds (see Figure 10). However, in the 20th century, the railroad company not only built additional structures for themselves, but they also rented and/or sold off portions of this land to other businesses who also constructed a number of new buildings; aerial photographs and other images document the building changes within the project area here (Figures 22-26).

![Figure 22. Detail of a 1937 aerial photograph of Essex Junction, Vermont, showing the project area and buildings within it (Aerial Explorations Inc., 1937).](image-url)
Figure 23. Detail of an oblique air image of Essex Junction, Vermont, looking southward ca. 1939 showing buildings in the general project area (Henry Sheldon Museum cat#1986.310.224-226 Negative #225).
Figure 24. Detail of a 1962 aerial photograph of Essex Junction, Vermont, showing the project area and the addition of and changes to buildings within the project area since 1937 (see Figure 16) (Geotechnics & Resources Inc., 1962).
Figure 25. Detail of a 1974 aerial photograph of Essex Junction, Vermont, showing the project area and the additions of and changes to buildings since 1962 (Areographics Corp., 1974).
Figure 26. Detail of a 1978 aerial photograph of Essex Junction, Vermont, showing the project area and buildings within it (Vermont Mapping Program 1978).
Flanders Building Supply and Lumber Company  
34 Park Street

The existing former Flanders building on Park Street is made up of two mid-20th century structures; the ca. 1950-1951 Central Feed Company building (south) and the ca. 1953-1954 Flanders Lumber and Supply building (north) (see Figure 15; Figures 27-29) (ELR 54:77 and 62:66; H.A. Manning & Co., 1952 and 1954). These two structures were connected sometime between 1978 and 1987, after the set of tracks separating them was abandoned (probably in the 1960s) (Vermont Mapping Program 1978; USGS 1987). The early Flanders building housed its own sawmill. Today, the building houses several smaller businesses. The Flanders Company also built a number of shed type structures to cover lumber, store coal, and sawdust on the property, a few of which still stand (see Figure 10). None of these buildings are included on the VDHP’s Historic Sites & Structures Survey.

Figure 27. An early 20th century view of the Flanders Building Supply site (just past the parked boxcar on the right side of Park Street), looking north northeast (from Powell 1977:58). The Central Feed building would be built this side of the boxcar in this view. This image also shows the railroad freight depot (at center with the loop drive), the Baxter Brothers’ canning factory (at right center), and another railroad building / storage building (in the right foreground).
Figure 28. Map recorded with a lease executed between the Central Vermont Railroad and the Flanders Building Supply Company in 1953, north is to the bottom right (ELR 54:77).
Figure 29. Map recorded with a warranty deed executed between the Central Vermont Railroad and the Flanders Building Supply Company in 1959, north is to the bottom right (ELR 62:66).
**Gas Station**
No Longer Extant

In the area now generally occupied by the former Flanders Building Supply and Lumber Company building there was once an automotive supply store (tire and battery shop) / gas station (with some in ground and some above ground tanks) that was built between 1928 and 1937 and removed between 1944 and 1951 (Aerial Explorations 1937; ELR 54:77 and 62:66; H.A. Manning & Co. 1937, 1940, 1943; Sanborn Mapping & Publishing Company 1928, 1944, and 1962).

**The Freight Depot**
No Longer Extant

In 1869, the Central Vermont Railroad’s primary freight house in Essex Junction was located on the western side of Park Street, across the road from the current project area (see Figure 12) (Beers 1869). However, by ca. 1890, the company had built another freight house within the project area (Figure 30; see Figures 10 and 27) (Beers 1869; Sanborn Mapping & Publishing Company 1910). This latter structure was roughly 7.9 x 11 m (26 x 36 ft) in plan and 1½ stories high with a concrete foundation, balloon frame, and clapboard and corrugated sheet metal covering. This freight house was listed on the VDHP’s Historic Sites & Structures Survey in 1984 (#0405-107). Even at that time it was described as partially fire damaged and the building was eventually torn down/lost between 1987 and 2002 (Harris Surveying & Land Dispute Resolution 2002; USGS 1987).

**Other Railroad Buildings**
No Longer Extant/Altered

In the area east of Park Street there were several other structures associated with the railroad including a wagon shed / storehouse, coal shed, and other sheds (see Figure 10). Some of these buildings may date to the mid 1800s as both the Walling and Beers maps indicate railroad related structures in this general area. The long wagon house / store house once located in the south west corner of the project area, south of the Central Feed Company structure, possibly dated to soon after the construction of the railroad (see Figures 10, 11 and 12). During the 20th century, this structure was used variously as a wagon shed (1910), storage building (1922, 1944, and 1962), and as paint shop (1928) (Sanborn Mapping & Publishing Company 1910, 1922, 1928, 1944, and 1962). It was apparently razed between ca. 1978 and 1987 (Harris Surveying & Land Dispute Resolution 2002; USGS 1987; Vermont Mapping Program 1978). Other potentially railroad related structures in this portion of the project area were either altered or replaced by the structures associated with the Flanders Building Supply and Lumber Company (see Figure 10).
THE RAILROAD STREET AREA

Trackside “Store House”
No Longer Extant

The H. P. Walling map of 1857 indicates that before Railroad Street was formerly opened ca.1857-1865 there was an early trackside “store house,” possibly within the present street’s right-of-way near its intersection with Main Street (see Figure 11) (Beers 1869; ELR 13:372; Walling 1857). Based on initial land record research, this structure was probably built by Byron Stevens, who owned most of the land north of Maple Street near the project area in the mid-1800s.

This storehouse was not the only structure of its kind in the area. Another early railroad storehouse was located on Main Street west of the Essex Village Cemetery, while another (not depicted on the Walling map) was located on the west side of the railroad tracks on the north side
of Maple Street. The latter building was described in a deed from Byron Stevens to the Vermont & Canada Railroad in April of 1858, which included the following property description:

…..beginning on the north line of the highway leading from Stanton’s Tavern stand to Richmond at a point in said north line nine feet westerly from the centre line of the Vermont and Canada Railroad. Thence westerly to a point at the south east of my storehouse and twenty eight feet westerly from said centre line. Thence northerly to a point in the southerly line of said highway leading from said Stanton’s Tavern to Essex Center, twenty four feet westerly from said center line, thence easterly in the last named highway seventeen feet easterly of said center line. Thence southerly to a point east of the south east corner of said store house and eighteen feet easterly from center line. Thence southerly to a point in the north line of said first named highway and fifty six feet easterly from said center line. Thence westerly in the north line of said first highway to the point if beginning containing one fourth of an acre . . . for the purpose of a railroad track or tracks . . . the company shall maintain at their own cost and expense a side track or turnout to and along side my storehouse now standing between said highway or any future storehouse on the same site while said company shall occupy said land” (ELR 11:426).

_Fletcher Block_
2-4 Railroad Street
VDHP Survey No.: 0405-85

![Figure 31. View northeast of the brick commercial block at 2-4 Railroad Street (left).](image-url)
The 2 story, flat roof, brick commercial block with a roofline sculpted and bracketed entablature, located at the corner of Railroad Street and Main Street was built in 1899 by William S. Fletcher to accommodate a meat market and grocery store (see Figure 15; Figure 31). It was constructed on the site of a combination residential structure and drug store (built ca. 1857-1865) as well as a late 19th century (wood frame and tin clad) photography studio, which was located on the corner of Main and Railroad Streets (ELR 13:372; Sanborn Mapping & Publishing Company 1894). The building has rounded arch windows with brick splayed lintels and granite keystones and sills. A 2 story flat roof wing addition with second story porch is attached to the rear of the building.

**Residence**
12 Railroad Street
VDHP Survey No.: 0405-86

The 2 story, wood framed commercial structure with front projecting box eaves was built ca. 1880 (see Figure 15; Figures 32 and 33). This building was used to house many mercantile enterprises since its construction including a grocery (1894), a restaurant (1899, 1904), a stone cutting shop (1910), and a jewelry store (1922 and 1928) before being converted into a dwelling sometime between 1928 and 1944 (Sanborn Mapping & Publishing Company 1894, 1899, 1904, 1910, 1922, 1928 1944, and 1962). A low pitched roof has been added on top of the original flat roof sometime after the 1984 survey and the front entrance door appears to have been replaced.

**Residence**
14 Railroad Street
VDHP Survey No.: 0405-87

This 1 ½ story, wood frame residence with associated barn at 14 Railroad Street was built ca. 1870 (see Figures 15, 31 and 32). The building has a gable roof with projecting box cornice, returns, and corner and sill trim boards. It has a gable front orientation toward Railroad Street. There is an enclosed porch on the front of the house, and a wing addition to the back of the house. Since the 1984 survey, windows appear to have been added to the front porch, fully enclosing it, and the enclosed porch formerly located on the south side of the house has been eliminated and replaced with a small, open porch with entrance door and projecting roof.
Figure 32. View east of 12 Railroad Street (left) and 14 Railroad Street (right).

Figure 33. View northeast of 12 Railroad Street (left) and 14 Railroad Street (right).
Residence
16 Railroad Street
VDHP Survey No.: 0405-88

The 1 ½ story, gable front, wood frame residential structure at 16 Railroad Street dates from the mid-1800s (see Figure 15; Figures 34 and 35). The VDHP’s Historic Sites & Structure Survey estimates its construction ca. 1865, but it could be earlier. Land records suggest that Byron Stevens, a prominent local builder and farmer sold a half-acre building lot near the railroad to Henry M. Parker in 1854 and that the same property was sold to David F. Tubbs in October of 1856 (see Figures 11 and 12) (Beers 1869; ELR 11:173; Rann 1886: 853; Walling 1857). The earlier deed also suggests that a railroad watering facility was located nearby along the tracks. Modifications since the 1984 survey include: the removal of a front porch, the enclosure of a porch on the north side of the building, the construction of a sizeable addition that projects from the front of the building, and window replacement.

Figure 34. View east of 16 Railroad Street.
STATEMENT OF SIGNIFICANCE / DETERMINATION OF EFFECT AND RECOMMENDATIONS

Documentary evidence indicates that the project area was developed beginning in the mid-1800s. Much of the initial development within the project area occurred as a direct result of the arrival of the railroad in Essex Junction. Once the industrial/commercial trend for development was established, continued development occurred through the 20th century; within the last two decades, there appears to have been little additional development to the area.

ARCHAEOLOGICAL RESOURCES

While it is expected that some buried, physical evidence of earlier historic structures within the current project area remains, such as evidence of the old railway station, M.L. Snyder’s first stone working shop, and buildings related to the marble/stone industry, it is unlikely that any significant historic archaeological resources would be encountered, or additional significant information on the buildings would be determined, given,

1. the type of buildings that previously existed within the current project area (e.g. light commercial or railroad storage structures, such as sheds, warehouses, and open factory structures);
2. the time period of those structures (from the mid-to-late 19th century through the 20th century);
3. the available documentary resources detailing most of these structures; and
4. the significant land modification to the project area within the historic period (e.g. construction and demolition of numerous buildings, landscaping, railroad track activities, such as adding ballast, repairing/replacing track).

Using Vermont’s predictive model, and considering the disturbance outlined above, the project area is also unlikely to yield significant precontact Native American archaeological material and information. Therefore, no additional archaeological work is recommended within the project area and it is recommended that any activities within the currently defined project area would result in a determination of No Effect on archaeological resources.

**STANDING HISTORIC RESOURCES**

Six properties that lie within or immediately adjacent to the proposed Essex Crescent Connector project area are individually included on the VDHP Historic Sites & Structures Survey: the Vermont Maple Orchards Warehouse/Flex-A-Seal building (#0405-106); the Baxter Bros. Cannery/Mason Bros. Warehouse (#0405-105), Fletcher Block/2-4 Railroad Street (#0405-85), 12 Railroad Street (#0405-86), 14 Railroad Street (0405-87), and 16 Railroad Street (#0405-88). These buildings represent the growth in commerce and industry that took place from the mid-1800s and into the 20th century as a result of the railroad’s arrival in Essex Junction in 1849. The development that occurred as a result of the railroad transformed a small village center, then known as Painesville, into a prosperous commercial, industrial and residential center.

All six properties are considered significant historic resources at the state level and this review recommends that any road construction, structural demolition, new construction or other proposed project work avoid any harmful impacts to the buildings because such impacts would likely result in a determination of Adverse Effect on historic resources. Two of the buildings within the project area (Nos. 85 and 105) are likely eligible for inclusion on the National Register of Historic Places, under Criterion C: properties that embody the distinctive characteristics of a type, period or method of construction. Building No. 83, the Fletcher Block is significant under the architecture and commerce categories, and building No. 105, the Baxter Bros. Cannery/Mason Bros. Warehouse, is significant under the architecture and industry categories. Both of these buildings retain their historic integrity, distinctive architectural characteristics, and their qualities of location, design, setting, materials, workmanship, feeling and association. Early project planning and coordination with the VDHP is recommended so that undue adverse effects can be avoided.
APPENDIX I: VDHP HISTORIC SITES & STRUCTURES SURVEY

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<tr>
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<td>Montpelier, VT 05602</td>
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**HISTORIC SITES & STRUCTURES SURVEY**

**Individual Structure Survey Form**

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<td>LEVEL OF SIGNIFICANCE: Local☐ State☐ National☐</td>
<td>LEVEL OF SIGNIFICANCE: Local☐ State☐ National☐</td>
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</table>

**GENERAL DESCRIPTION:**

Structural System

1. Foundation: Stone☐ Brick☐ Concrete☐ Concrete Block☐
2. Wall Structure
   a. Wood Frame: Post & Beam☐ Balloon☐
   b. Load Bearing Masonry: Brick☐ Store☐ Concrete☐ Concrete Block☐
   c. Iron☐ Steel☐ Other:
3. Wall Covering: Corkboard☐ Board & Batten☐ Wood Shingle☐ Shiplap☐ Novelty☐ Asbestos Shingle☐ Sheet Metal☐ Aluminum☐ Asphalt Shingle☐ Brick Veneer☐ Stone Veneer☐ Bonding Pattern:
4. Roof Structure
   a. Truss: Wood☐ Iron☐ Steel☐ Concrete☐
   b. Other:
5. Roof Covering: Slats☐ Wood Shingle☐ Asphalt Shingle☐ Sheet Metal☐ Built Up☐ Rolled☐ Tile☐ Other:
6. Engineering Structure:
7. Other:

Appendages: Porches☐ Towers☐ Cupolas☐ Dormers☐ Chimneys☐ Sheds☐ Elle☐ Wings☐ Bay Window☐ Other:

Roof Style: Gable☐ Hipped☐ Shed☐ Flat☐ Mansard☐ Gambrel☐ Jerkinhead☐ Saw Tooth☐ With Monitor☐ With Bellcast☐ With Parapet☐ With False Front☐ Other:

Number of Stories: 2☐ Entrance Location: Multiple

Approximate Dimensions: 40 x 60

**SURVEY NUMBER:** 0405-106

**NEGATIVE FILE NUMBER:** 84-A-134

**UTM REFERENCES:** Zone/Easting/Northing

18/650750/4927550

**U.S.G.S. QUAD. MAP:** 7.5 Essex Junction

**PRESENT FORMAL NAME:** Vt. Maple Orchards Inc.

**ORIGNAL FORMAL NAME:** Unknown

**PRESENT USE:** Warehouse

**ORIGINAL USE:** Warehouse

**ARCHITECT/ENGINEER:** Unknown

**BUILDER/CONTRACTOR:** Unknown

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

**STYLE:** Vernacular

**DATE BUILT:** c.1890

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

**LOCAL ATTITUDES:** Positive☐ Negative☐ Mixed☐ Other:
ADDITIONAL ARCHITECTURAL OR STRUCTURAL DESCRIPTION:

Rectangular plan, flat roof, clapboard warehouse with shaped exposed rafter ends, fascia, corner and sill boards. The facade-fenestrated by paired 8/8 sash windows and 15/16 sash windows with plain surrounds and cap molded lintels-has north-side double hinge crossbuck doors. An east side pedimented gable hood with shaped trusses protects a modern glass door. Numerous one story, clapboard and brick common bond wings and sheds extend on the south side.

RELATED STRUCTURES: (Describe)

STATEMENT OF SIGNIFICANCE:

E. L. Snyder owned a Maple Shop on the northern section of this land (c.1870) and since then the proximity of the railroad has kept this area commercially valuable. As far as can be documented the Vermont Maple Orchards Company has been in this building since the early 1900’s making and storing their syrup here.

REFERENCES:
Sanborn Map, 1922
Beer's Atlas, 1869

MAP: (Indicate North in Circle)

SURROUNDING ENVIRONMENT:
- Open Land
- Woodland
- Scattered Buildings
- Moderately Built Up
- Densely Built Up
- Residential
- Commercial
- Agricultural
- Industrial
- Roadside Strip Development
- Other:

RECORDED BY:
Karen Czajkowski

ORGANIZATION:
Vt. Div. for Historic Preservation

DATE RECORDED: 4/12/84
STATE OF VERMONT
Division for Historic Preservation
Montpelier, VT 05602

HISTORIC SITES & STRUCTURES SURVEY
Individual Structure Survey Form

COUNTY: Chittenden
TOWN: Essex Junction
LOCATION: 11 Maple Street, end of Jackson Street, north of Elm Street

COMMON NAME: Warehouse
FUNCTIONAL TYPE: Warehouse
OWNER: Investors Corporation of VT
ADDRESS: 35 St. Paul Street Suite 30
Burlington VT 05401
ACCESSIBILITY TO PUBLIC: Yes No Restricted
LEVEL OF SIGNIFICANCE: Local State National

GENERAL DESCRIPTION:
Structural System
1. Foundation: Stone Brick Concrete Concrete Block
   a. Wood Frame Post & Beam Balloon
   b. Load Bearing Masonry: Brick Stone Concrete
      Concrete Block
   c. Iron Steel Other
2. Wall Structure:
   a. Wood Frame Post & Beam Balloon
   b. Load Bearing Masonry: Brick Stone Concrete
      Concrete Block
   c. Iron Steel Other
3. Wall Covering:CISION Board & Batten Wood Shingle Shedlap Novelty Asbestos Shingle Sheet Metal
   a. Iron Aluminum Asphalt Shingle Brick Veneer Stone Veneer
   b. Other Bonding Pattern
4. Roof Structure
   a. Truss: Wood Iron Steel Concrete
   b. Other
5. Roof Covering: Slate Wood Shingle Asphalt Shingle Sheet Metal Built Up Rolled Tile Other
6. Engineering Structure:
   a. Other
   b. Other
   c. Other
   Appendages: Porches Towers Cupolas Dormers Chimneys Sheds Ears Wings Bay Window Other
   Roof Style: Gable Hip Shed Flat Mansard Gambrel Jerkinhead Saw Tooth With Monitor With Bellcast
   With Parapet With False Front Other
   Number of Stories: 2
   Number of Keys: 4 x 9
   Entrance Location: Multiple!
   Approximate Dimensions: 30 x 100

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

LOCAL ATTITUDES:
Positive Negative Mixed Other

SURVEY NUMBER:
0405-105
NEGATIVE FILE NUMBER:
84-A-134
UTM REFERENCES:
Zone/Easting/Northing
16/630700/4927029
U.S.G.S. QUAD. MAP:
7.5 Essex Junction
PRESENT FORMAL NAME:
Baxter Canning Company
PRESENT USE:
Warehouses
ORIGINAL USE:
Warehouses
ARCHITECT/ENGINEER:
Unknown
BUILD/O CONTRACTOR:
Unknown
PHYSICAL CONDITION OF STRUCTURE:
Excellent Good Fair Poor
STYLE:
vernacular
DATE BUILT:
c. 1890
ADDITIONAL ARCHITECTURAL OR STRUCTURAL DESCRIPTION:

An L-shaped plan, clapboard, gable sheet metal roof warehouse with projecting box eaves and corner boards. The facade originally fenestrated by 6/6 sash windows with plain surrounds and lip molded lintels has some altered modern and infilled windows. On the east side is a two story, gable ell and one story, clapboard shed. To the west is a one bay garage.

RELATED STRUCTURES: (Describe)

STATEMENT OF SIGNIFICANCE:

This L-shaped warehouse once housed the machine, steam boiler and packing rooms of the H.C. Baxter & Bros. Corn Canning Factory. Local farms, such as the Whitcomb Farm, supplied the corn for the autumn processing season. By 1922 it was still a canning company but then called The Snowflake Canning Co.

REFERENCES:

Sanborn Map, 1904, 1910, 1922

MAP: (Indicate North in Circle)

SURROUNDING ENVIRONMENT:

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

RECORDED BY:
Karen Gaskowski

ORGANISATION:
Vt. Div. for Historic Preservation

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<td><strong>FUNCTIONAL TYPE:</strong> Commercial Block</td>
<td>Commercial</td>
</tr>
<tr>
<td><strong>OWNER:</strong> John Byes &amp; David Holton</td>
<td><strong>ORIGINAL USE:</strong></td>
</tr>
<tr>
<td><strong>ADDRESS:</strong> 2 Railroad Street</td>
<td>Commercial</td>
</tr>
<tr>
<td>Essex Junction, VT 05452</td>
<td><strong>ARCHITECT/ENGINEER:</strong></td>
</tr>
<tr>
<td><strong>ACCESSIBILITY TO PUBLIC:</strong></td>
<td>Unknown</td>
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<tr>
<td>Restricted</td>
<td><strong>BUILDERS/CONTRACTORS:</strong></td>
</tr>
<tr>
<td><strong>LEVEL OF SIGNIFICANCE:</strong> Local State National</td>
<td>W.S. Fletcher</td>
</tr>
<tr>
<td><strong>GENERAL DESCRIPTION:</strong></td>
<td><strong>PHYSICAL CONDITION OF STRUCTURE:</strong></td>
</tr>
<tr>
<td>Structural System</td>
<td>Excellent Good Fair Poor</td>
</tr>
<tr>
<td>1. Foundation: Stone Brick Concrete Concrete Block</td>
<td><strong>STYLE:</strong> vernacular</td>
</tr>
<tr>
<td>2. Wall Structure</td>
<td><strong>DATE BUILT:</strong> 1899</td>
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<tr>
<td>a. Wood Frame: Post &amp; Beam Balloon</td>
<td><strong>LETTER:</strong></td>
</tr>
<tr>
<td>b. Load Bearing Masonry: Brick Stone Concrete Concrete Block</td>
<td><strong>STRENGTH:</strong></td>
</tr>
<tr>
<td>c. Iron Steel Other</td>
<td><strong>COLOUR:</strong></td>
</tr>
<tr>
<td>3. Wall Covering: Clapboard Board &amp; Batten Wood Shingle Shiplap Novelty Asphalt Shingle Sheet Metal Aluminum Brick Veneer Stone Veneer</td>
<td><strong>CONDITION:</strong></td>
</tr>
<tr>
<td>Boarding Pattern: stretch Other</td>
<td><strong>USE:</strong></td>
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<td>4. Roof Structure</td>
<td><strong>SIGNIFICANCE:</strong></td>
</tr>
<tr>
<td>a. Truss: Wood Iron Steel Concrete Other</td>
<td><strong>STATE:</strong></td>
</tr>
<tr>
<td>b. Other:</td>
<td><strong>PROTECTION:</strong></td>
</tr>
<tr>
<td>5. Roof Covering: Slate Wood Shingle Asphalt Shingle Sheet Metal Built Up Rolled Tile Other</td>
<td><strong>DATE:</strong></td>
</tr>
<tr>
<td>6. Engineering Structure:</td>
<td><strong>CITY:</strong></td>
</tr>
<tr>
<td>7. Other:</td>
<td><strong>COUNTY:</strong></td>
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<tr>
<td>Appendages: Porches Towers Cupolas Dormers Chimneys Sheds Eills Windows Bay Window Other</td>
<td><strong>COUNTRY:</strong></td>
</tr>
<tr>
<td>Roof Style: Gable Hip Shed Flat Mansard Gambrel Jerkinhead Saw Tooth With Monitor With Bellcast</td>
<td><strong>TIME OF YEAR:</strong></td>
</tr>
<tr>
<td>With Parapet With Valse Front Other</td>
<td><strong>COUNTY CODE:</strong></td>
</tr>
<tr>
<td>Number of Stories: 2</td>
<td><strong>VALUE:</strong></td>
</tr>
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<td>Number of Bays: 6 x 2 Entrance Location: Eaves front</td>
<td><strong>HISTORY:</strong></td>
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<td>Approximate Dimensions: 35 x 35 recessed center</td>
<td><strong>LOCAL ATTITUDES:</strong></td>
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<td><strong>THREAT TO STRUCTURE:</strong></td>
<td>Positive Negative Mixed Other:</td>
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<tr>
<td>No Threat Zoning Roads Development Deterioration Alteration Other</td>
<td><strong>RISK:</strong></td>
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ADDITIONAL ARCHITECTURAL OR STRUCTURAL DESCRIPTION:

A brick stretcher bond, front canted corner, vernacular commercial block with projecting box cornice, sculpted brackets and organic motif entablature, 1/1 sash, arch head windows with brick splayed arch lintels, granite keystone and granite rock face sills fenestrate the façade. A front modern sign board, below a molded cornice belt board and plain entablature, hides a small paneled transom above symmetrical picture windows with granite rock face sills. Front granite steps lead to two canted entries with modern glass doors. To the rear is a two story, clapboard, flat roof, false front wing with similar fenestration and a two story, south side porch with scroll sawn brackets, turned posts and square railing. On the north side below a shed hood is a large double horizontal pane and paneled door. A second story porch similar to the wing porches is on the north side.

RELATED STRUCTURES: (Describe)

STATEMENT OF SIGNIFICANCE:

Following the building impetus begun by S.A. Brownell in the Essex Junction commercial district, W.S. Fletcher built his commercial block to house a meat market and grocery store. The structure's diagonal location from the Brownell Block complements the commercial atmosphere of the district and accentuates its own position with ornate detailing.

REFERENCES:
Sanborn Map, 1999
Hugh Henry Town History, 1984

MAP: (Indicate North in Circle)

SURROUNDING ENVIRONMENT:
Open Land □ Woodland □
Scattered Buildings □
Moderately Built Up □
Densely Built Up □
Residential □ Commercial □
Agricultural □ Industrial □
Roadside Strip Development □
Other:

RECORDED BY:
Kazun Czekujewski

ORGANIZATION:
Vt. Dv., for Historic Preservation

DATERecorded: 3/28/84
STATE OF VERMONT  
Division for Historic Preservation  
Montpelier, VT 05602  

HISTORIC SITES & STRUCTURES SURVEY 
Individual Structure Survey Form  

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>Chittenden</th>
</tr>
</thead>
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<tr>
<td>TOWN</td>
<td>Essex Junction</td>
</tr>
<tr>
<td>LOCATION</td>
<td>12 Railroad Street, three lots from the corner of Main Street</td>
</tr>
<tr>
<td>COMMON NAME</td>
<td></td>
</tr>
<tr>
<td>FUNCTIONAL TYPE</td>
<td>House</td>
</tr>
<tr>
<td>OWNER</td>
<td>Ronald &amp; Alice Siegrest</td>
</tr>
<tr>
<td>ADDRESS</td>
<td>226 River Road Essex Junction, VT 05401</td>
</tr>
<tr>
<td>ACCESSIBILITY TO PUBLIC</td>
<td>Yes ☐ No ☐ Restricted ☑</td>
</tr>
<tr>
<td>LEVEL OF SIGNIFICANCE</td>
<td>Local ☐ State ☐ National ☑</td>
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</tbody>
</table>
| GENERAL DESCRIPTION:  
  Structural System  
  1. Foundation: Stone ☐ Brick ☑ Concrete ☐ Concrete Block ☐  
  2. Wall Structure:  
     a. Wood Frame ☐ Post & Beam ☐ Balloon ☐  
     b. Load Bearing Masonry: Brick ☐ Stone ☐ Concrete ☐ Concrete Block ☐  
     c. Iron ☐ d. Steel ☐ e. Other:  
  3. Wall Covering:  
     a. Clapboard ☐ Board & Batten ☐ Wood Shingle ☐ Shiplap ☐ Novelty ☐ Asbestos Shingle ☐ Sheet Metal ☐ Aluminu ☐ Asphalt Shingle ☐ Brick Veneer ☐ Stone Veneer ☐  
     b. Bonding Pattern: Other:  
  4. Roof Structure:  
     a. Truss: Wood ☐ Iron ☐ Steel ☐ Concrete ☐  
     b. Other:  
  5. Roof Covering:  
     a. Built Up ☐ Rolled ☐ Tile ☐ Other:  
  6. Engineering Structure:  
     a. Other:  
  7. Other:  
| Appendages:  
  Porches ☐ Towers ☐ Cupolas ☐ Dormers ☐ Chimneys ☐ Sheds ☐ Bells ☐ Wings ☐ Bay Window ☐ Other:  
| Roof Style:  
  Gable ☐ Hip ☐ Shed ☐ Flat ☐ Mansard ☐ Gambrel ☐  
  Jermkneadr ☐ Saw Tooth ☐ With Monitor ☐ With Bellcast ☐ With Parapet ☐ With False Front ☐ Other:  
| Number of Stories: 2 |
| Number of Bays: 3 x 3 |
| Approximate Dimensions: 20 x 24 |
| ENTRANCE LOCATION: Eaves front, left & center |
| TREATMENT TO STRUCTURE:  
  No Threat ☐ Zoning ☐ Roads ☐ Development ☐ Deterioration ☐ Alteration ☐ Other:  
| LOCAL ATTITUDES:  
  Positive ☑ Negative ☐ Mixed ☐ Other:  
| SURVEY NUMBER:  
  0405-86  
| NEGATIVE FILE NUMBER:  
  77-4-108/84-A-119  
| UTM REFERENCES:  
  Zone/Easting/Northing  
  18/65670/4927940  
| J.S.G. QUAD. MAP:  
  7.9 Essex Junction  
| ORIGINAL FORMAL NAME:  
  Unknown  
| BUILDING/OWNER:  
  Unknown  
| PHYSICAL CONDITION OF STRUCTURE:  
  Excellent ☐ Good ☑ Fair ☐ Poor ☐  
| STYLE: vernacular  
| DATE BUILT: c. 1880  

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ADDITIONAL ARCHITECTURAL OR STRUCTURAL DESCRIPTION:

A flat roof, rectangular plan, clapboard, vernacular style house with front projecting box eaves, scroll sawn brackets, wide fascia board and corner boards. 2/2 sash windows with plain surrounds and cap molded lintels fenestrate the facade. A front porch with dimension lumber posts protects two picture windows with small pane transoms and two single pane and paneled doors. A 2-story dimension lumber porch rises in the rear.

RELATED STRUCTURES: (Describe)

STATEMENT OF SIGNIFICANCE:

The simplistic, vernacular style of this flat roofed building contributes variety to a streetscape of mostly gable front structures. It represents a popular late nineteenth century building type found among commercial dis-

REFERENCES:

MAP: (Indicate North in Circle)

SURROUNDING ENVIRONMENT: Open Land□ Woodland□ Scattered Buildings□ Moderately Built Up□ Densely Built Up□ Residential□ Commercial□ Agricultural□ Industrial□ Roadside Strip Development□ Other:

RECORDED BY: Karen Czalkowski

ORGANIZATION: VT. Div. for Historic Preservation

DATE RECORDED: 3/28/84
STATE OF VERMONT
Division for Historic Preservation
Montpelier, VT 05602

HISTORIC SITES & STRUCTURES SURVEY
Individual Structure Survey Form

COUNTY: Chittenden
TOWN: Essex Junction
LOCATION: 14 Railroad Street, two lots from corner of Maple Street

COMMON NAME:
FUNCTIONAL TYPE: House
OWNER: Chittenden Trust Co.
ADDRESS: P.O. Box 820, 2 Burlington Square, Burlington, VT 05402

ACCESSIBILITY TO PUBLIC: Yes □ No □ Restricted □
LEVEL OF SIGNIFICANCE: Local □ State □ National □

SURVEY NUMBER: 0405-87
U.S.G.S. QUAD. MAP: 7.5 Essex Junction
PRESENT FORMAL NAME:
PHM REFERENCES: Zone/Easting/Northing 18/550680/4927880
PRESENT USE: House
ORIGINAL USE: House
ARCHITECT/ENGINEER: Unknown
BUILDER/CONTRACTOR:
PHYSICAL CONDITION OF STRUCTURE: Excellent □ Good □ Fair □ Poor □
STYLE: Vernacular
DATE BUILT: c. 1870

GENERAL DESCRIPTION:
Structural System
1. Foundation: Stone □ Brick □ Concrete □ Concrete Block □
2. Wall Structure
   a. Wood Frame □ Post & Beam □ Balloon □
   b. Load Bearing Masonry: Brick □ Stone □ Concrete □
   c. Iron □ d. Steel □ e. Other:
3. Wall Covering: Clapboard □ Board & Batten □ Wood Shingle □ Shiplap □ Novelty □ Asbestos Shingle □ Sheet Metal □
   Aluminum □ Asphalt Shingle □ Brick Veneer □ Stone Veneer □
   Bonding Pattern:
   Other:
4. Roof Structure
   a. Truss: Wood □ Iron □ Steel □ Concrete □
   b. Other:
5. Roof Covering: Slate □ Wood Shingle □ Asphalt Shingle □ Sheet Metal □ Built Up □ Rolled □ Tile □ Other:
6. Engineering Structure:
7. Other:
    Appendage: Porches □ Towers □ Cupolas □ Dormers □ Chimneys □
    Sheds □ Bells □ Wings □ Bay Window □ Other:
    Roof Style: Gable □ Hip □ Shed □ Flat □ Mansard □ Gambrel □
    Jackinghead □ Bay Tooth □ With Monitor □ With Hipped Roof □ With Parapet □ With False Front □ Other:
    Number of Stories:
    Number of Rays:
    Entrance Location:
    Approximate Dimensions:
    Threat to Structure: No Threat □ Zoning □ Roads □ Development □ Deterioration □ Alteration □ Other:
    Local Attitudes: Positive □ Negative □ Mixed □ Other:
ADDITIONAL ARCHITECTURAL OR STRUCTURAL DESCRIPTION:

A gable front, right sidehall plan, clapboard, vernacular style house with projecting box cornice, returns, fascia, corner and sill boards. 1/1 sash windows with plain surrounds and cap molded lintels fenestrate the facade which rises to a north-side hip roof wall dormer. A front porch with plain entablature, capped box posts and clapboard skirt protects a molded cornice above a 3/4 pane and panel door flanked by full sidelights and pilaster strips. A one story wing with a similar enclosed porch is on the rear. To the north-side is a one story, clapboard wing.

RELATED STRUCTURES: (Describe)

A gable front, clapboard barn with a sheet metal roof is now a brass bed store with modern sliding glass doors. 6/6 sash windows, a 6-pane peak window and plank hay door open the facade. A shed is attached to the rear.

STATEMENT OF SIGNIFICANCE:

This house and original barn, presently used as a brass bed store, contribute to the mostly gable front streetscape facing the railroad tracks. It complements the neighboring nineteenth century structures.

REFERENCES:

MAP: (Indicate North in Circle)

SURROUNDING ENVIRONMENT:

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

RECORDED BY: Karea Czalkowski
ORGANIZATION: Vt. Div. for Historic Preservation
DATE RECORDED: 3/28/84

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| STATE OF VERMONT | SURVEY NUMBER: |
| Division for Historic Preservation | 0405-88 |
| Montpelier, VT  05602 | NEGATIVE FILE NUMBER: |
| Individual Structure Survey Form | UTM REFERENCES: |
| COUNTY: Chittenden | Zone/Westing/ Northing |
| TOWN: Essex Junction | 18/550700/4927660 |
| LOCATION: 15 Railroad Street, one lot from Maple Street | J.S.G.S. QUAD. MAP: |
| COMMON NAME: | 7.5 Essex Junction |
| FUNCTIONAL TYPE: House | PRESENT FORMAL NAME: |
| OWNER: Edwin J. Griffee, M.D. | Guilfoyl Medical Office |
| ADDRESS: P.O. Box 688 | ORIGINAL FORMAL NAME: |
| Essex Junction, VT 05452 | PRESENT USE: Office |
| ACCESSIBILITY TO PUBLIC: Yes ☐ No ☐ Restricted ☒ | ORIGINAL USE: House |
| LEVEL OF SIGNIFICANCE: Local ☐ State ☐ National ☒ | ARCHITECT/ENGINEER: Unknown |
| BUILDER/CONTRACTOR: Unknown | PHYSICAL CONDITION OF STRUCTURE: |
| GENERAL DESCRIPTION: | Excellent ☑ Good ☐ |
| Structural System | Fair ☐ Poor ☒ |
| 1. Foundation: Stone ☑ Brick ☐ Concrete ☐ Concrete Block ☐ | STYLE: Vernacular Greek Revival |
| 2. Wall Structure | DATE BUILT: c.1865 |
| a. Wood Frame: Post & Beam ☐ Balloon ☒ | |
| b. Load Bearing Masonry: Brick ☐ Stone ☐ Concrete ☐ | |
| c. Iron ☐ d. Steel ☐ e. Other: | |
| 3. Wall Covering: Clapboard ☐ Board & Batten ☐ Wood Shingle ☐ | |
| Shiplap ☐ Novelty ☐ Asbestos Shingle ☐ Sheet Metal ☐ | |
| Aluminum ☐ Asphalt Shingle ☐ Brick Veneer ☐ Stone Veneer ☐ | |
| Bonding Pattern: Other: | |
| 4. Roof Structure | |
| a. Truss: Wood ☐ Iron ☐ Steel ☐ Concrete ☐ | |
| b. Other: | |
| 5. Roof Covering: Slate ☐ Wood Shingle ☐ Asphalt Shingle ☐ | |
| Sheet Metal ☐ Built Up ☐ Rolled ☐ Tile ☐ Other: | |
| 6. Engineering Structure: | |
| 7. Other: | |
| Appendages: Porches ☐ Towers ☐ Cupolas ☐ Dormers ☐ Chimneys ☐ | Entrance Location: Gable front |
| Sheds ☐ Elks ☐ Wings ☐ Bay Window ☐ Other: | |
| Roof Style: Gable ☐ Hip ☐ Shed ☐ Flat ☐ Mansard ☐ Gambrel ☐ | |
| Jerkinhead ☐ Saw Tooth ☐ With Monitor ☐ With Bellcast ☐ | |
| With Parapet ☐ With False Front ☐ Other: | |
| Number of Stories: 1½ | |
| Number of Bays: 3 x 2 | |
| Approximate Dimensions: 18 x 24 | |
| THREAT TO STRUCTURE: No Threat ☐ Zoning ☐ Roads ☐ | LOCAL ATTITUDES: Positive ☐ Negative ☐ |
| Development ☐ Deterioration ☐ | Mixed ☐ Other: |
| Alteration ☐ Other: | |
ADDITIONAL ARCHITECTURAL OR STRUCTURAL DESCRIPTION:
A gable front, center hall plan, aluminum sided, vernacular Greek Revival style house with a projecting box cornice and north-south, one story front gable wing. Altered 6/1 sash windows with plain surrounds fenestrate the facade. A front porch with turned posts, square railing and trellis skirt protects a molded cornice above a modern panel door flanked by full sidelights and pilasters. On the rear north-side is a modern enclosed shed with picture window and shed hood entry (c.1970). Also to the rear is a second story matchstick board sleeping porch.

RELATED STRUCTURES: (describe)
A one-bay, gable front, wood shingle garage with six-pane peak window has two shed additions (c.1910).

STATEMENT OF SIGNIFICANCE:
This house appears to be the oldest structure on Railroad Street. Its gable front location, facing the railroad tracks, contributes to a nineteenth century streetscape and represents the latter 1800 development that continued down Maple Street.

REFERENCES:

MAP: (Indicate North in Circle)

SURROUNDING ENVIRONMENT:
Open Land□ Woodland□
Scattered Buildings□
Moderately Built Up□
Densely Built Up□
Residential□ Commercial□
Agricultural□ Industrial□
Roadside Strip Development□
Other:

RECORDED BY:
Karen Czaikowski

ORGANIZATION:
Vt. Div. for Historic Preservation

DATE RECORDED: 3/27/84
REFERENCES

Aerial Explorations

Allen, George W.

Allen, Richard and Lucille Allen

Anonymous

Areographics Corp.

Beers, Frederick W.

Bent, Frank R. (ed.)

Burlington Clipper (Burlington, Vermont)
1888 May 24, “Essex Junction” (4:1).
1901 November 23, “It Will be the Land of Corn” (1:3-4)
1901 November 30, “The Canning Factory” (8:3)
1901 December 7, “Essex Industrial Company” (8:1)
1901 December 14, “Bids for Canning Factory Wanted” (7:6)
1902 February 15, “Essex Junction” (8:3)
1902 March 1, “The Corn Soiree” (8:3)
1902 September 13, “At the Canning Factory” (1:5)
1902 November 1, “Canning of Corn” (5:3)

Burlington Free Press (Burlington, Vermont)
1849 September 18, “Vermont Central Railroad. We understand . . .” (2:3)

Carlisle, Lilian Baker
Child, Hamilton


Chittenden County Probate Court (Burlington, Vermont)

1893 Ms. Papers relating to the Estate of Marvin L. Snyder, Box 32 File 5146.
1910 Ms. Papers relating to the Estate of Jane H. Snyder, Box 46 File 7980.
1913 Ms. Papers relating to the Estate of John L. Snyder, Box 47 File 8271.

Essex (Town of) Vital Records


Essex (Town of) Land Records [ELR]


Frederic, Paul B.


Free Press Association


Geotechnics & Resources Inc.


Harris Surveying & Land Dispute Resolution

2002 Final Plat of Subdivision and Boundary Adjustment of Lands of Flanders Building Supply Inc. 34 Park Street, Essex Junction, Vermont. Harris Surveying & Land Dispute Resolution, Hinesburg, Vermont. On File Essex Town Clerk’s Office, Essex, Vermont.

Jones, Robert C.


Manning, H.A.


Massachusetts [State of] Death Records

Powell, Harriet Farnsworth

Rann, W. S. (ed.)

Sanborn Mapping & Publishing Company

*Suburban List* (Essex Junction, Vermont)

United States Census [U.S. Census]

United States Geological Survey [USGS]
Vermont Division for Historic Preservation

Vermont Mapping Program

Walling, H.F.

Walton, E.P.
APPENDIX 5

Noise Analysis by RSG, 1/4/11
MEMORANDUM

To: Mark Smith
From: Isaac Old
Subject: Essex Connector Noise Analysis
Date: 4 January 2011
Copy to:

In order to improve the flow of traffic in downtown Essex Junction, Vermont, a connector road has been proposed to run from Park St. to Maple St, bypassing the “Five Corners” intersection that is the center of Essex Junction.

In order to study the full impact of the connector on downtown Essex Junction, it was requested that a preliminary noise analysis be performed to determine the acoustic impact of the connector.

MODELING

Modeling was carried out using Cadna A acoustical modeling software. Made by Datakustik GmbH, Cadna A is an internationally accepted acoustical model, used by many other noise control professionals in the United States and abroad. The software has a high level of reliability and follows methods specified by the International Standards Organization in their ISO 9613-2 standard, “Acoustics – Attenuation of sound during propagation outdoors, Part 2: General Method of Calculation.” For roads, Cadna A follows the Federal Highway Administration’s (FHWA) Traffic Noise Model (TNM) calculation guidelines.

The model takes into account source sound power levels, surface reflection and absorption, atmospheric absorption, geometric divergence, meteorological conditions, walls, barriers, and berms.

The traffic volumes used for the model are the “2030 No Build NO CCCH improvements” and “2030 Build Alt2 NO CCCH improvements” scenarios provided by RSG’s Traffic Engineering Design group. These traffic volumes are considered the worst case scenario volumes.

MODELING RESULTS

Initially, a current configuration (2030 No Build NO CCCH improvements) was modeled to provide a baseline against which the connector addition could be compared. The results from this model are shown in Figure 1.
Figure 1: No Build Scenario
Next the chosen build scenario (2030 Build Alt2 NO CCCH improvements) was modeled and is shown in Figure 2. Three buildings were removed in this model. The differences in sound level between the no-build and Alt2 connection is shown in Figure 3.

*Figure 2: Build Scenario*
Figure 3: Sound Level Differences
As can be seen in Figure 3, the impact on the residences closest to the connector, which are located along Elm and Jackson Streets in the southeast corner of Figure 3, will be between 0 and 2 dBA. The only residence which will receive a greater increase in sound level is that which is located directly on Alt 2. This residence will see an increase in sound level of 4 to 6 dBA. According to the current VTrans noise policy, a 6 dB increase on top of the existing 50 dBA level represents no significant impact. Impacts on other residences will mostly range from 0 to 2 dBA, and in some cases, sound levels will decrease.

Sincerely,

Resource Systems Group

Isaac Old
Associate

---

1 The gap in the map that can be seen in just to the west of Alt2 in Figure 3, is due to the necessary elimination three buildings in the Alt2 scenario.
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## Revision History

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<th>Description of Revision</th>
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<td>0</td>
<td>April 8, 2011</td>
<td>Initial Release</td>
</tr>
<tr>
<td>1</td>
<td>June 1, 2011</td>
<td>Add map of rail wye, address RSG review comments.</td>
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</table>
1 Scope of Services

Resource Systems Group (RSG) has been retained by the Chittenden County Metropolitan Planning Organization (CCMPO) to perform the Crescent Connector Road Scoping Study, building on an earlier study that investigated site circulation, safety and access management issues on VT2A (Park Street) south of the Five Corners intersection in the Village of Essex Junction.

The Scoping Study focuses on the development of alternatives related to the construction of a connector road from VT2A to VT117, (refer to Figure 1) effectively converting the three-way Maple Street/Railroad Street intersection into a four-way intersection. The connector road alternatives will divert some traffic from the Five Corners to cross the New England Central Railroad Main Line at a new at-grade rail-highway grade crossing.

The connector road alternatives have the potential to reduce the number of vehicular crossings of the railroad by a significant percentage because its use by drivers moving from Route 2A to Route 15 or from 2A to Route 117 will mean that vehicles cross the railroad tracks once (the NECR Main Line), rather than twice (the NECR Burlington Branch and the NECR Main Line). LTK supported RSG in the scoping study, focusing on the rail crossing issues as follows:

![Figure 1. Existing Railroad Network in the Village of Essex Junction](image)
• Outlining the geometric, operational, jurisdictional and/or regulatory issues and possible concerns related to the creation of a new at grade railroad crossing with a new local road in the Village of Essex Junction.

• Seeking input and counsel from operating railroads (New England Central Railroad and the National Rail Passenger Corporation (Amtrak), which operates on the trackage subject to a trackage rights agreement), Federal entities and VTrans Rail Section regarding issues related to the new railroad crossing.

• Identifying and documenting the necessary steps which would advance the concept of the new crossing, assuming the new local road is determined feasible from a traffic circulation and conformance with applicable standards/practices perspective.

• Providing cost estimates regarding future planning, design and construction of the new railroad crossing (crossing surface, warning devices and control equipment).

1.1 Summary of Findings
The implementation of a new at-grade crossing of the NECR Main Line by the proposed Connector Road is feasible from an alignment, regulatory and permitting perspective. The cost of the rail-related construction is estimated at $505,000 in 2011 dollars, not including contractor mobilization, demobilization overhead or profit. This cost does not include the cost, if any, for railroad real estate rights. On-going annual maintenance costs are estimated to be $7,700 for the crossing equipment, in 2011 dollars, not including depreciation or allowance for unplanned events such as accidents or weather-related damage.

The Scoping Study developed two alternatives on its short list:

• Alternative 1 – Connector Road Immediately South of Burlington Branch,
• Alternative 2 – Connector Road Immediately North of South Leg of Wye.

From a railroad operational and systems perspective, the two alternatives are functionally equivalent. Both are constructible, maintainable and provide sufficient sight lines for motorists and train crews. Each alternative requires about the same capital costs in terms of grade crossing warning equipment, traffic signal preemption tie-ins and crossing surfaces.

To minimize construction and design risk, Alternative 1 is preferred from a railroad systems perspective because the magnitude of potential future realignment (as part of the FRA High Speed Rail funding) of the railroad between the Burlington Branch switch and the south leg of the wye is less at this location than in Alternative 2. Grade crossing warning devices should be located a minimum of 12 feet from railroad centerlines in order to provide adequate train clearances. At the same time, grade crossing warning devices should not be excessively set back from railroad centerlines (especially in locations such as the Village of Essex where vehicular congestion is pronounced). By selecting a crossing location where the realignment minimizes horizontal track shifts, grade crossing warning equipment can be installed once at a final location, rather than being reconstructed as the track shifts laterally.
2 Rail-Highway Grade Crossings – A National Overview

A rail-highway grade crossing is an intersection where a roadway crosses railroad tracks at the same elevation. As of 2007 (the latest data available), the United States has approximately 139,862 public grade crossings. Of these crossings, approximately 50,132 have gates, 23,215 have only flashing lights, and 1,248 have other forms of active approach warning devices, such as highway traffic signals, wigwags, and bells.

In 2007, incidents at public highway-rail crossings in the United States resulted in 299 deaths and 817 injuries. While the number of railroad grade crossing fatalities, injuries, and crashes are small in comparison to other types of automobile-related incidents, rail-highway crossing incidents are often associated with catastrophic consequences.

Because a grade crossing is a point where multiple transportation modes come together, several entities, both public and private, have jurisdiction over various aspects of the crossing. Railroad companies own and maintain the tracks, and generally own the property (rights-of-way) on either side of the tracks. At grade crossings, they generally install and maintain the tracks, the roadway surface between and around the rails, and warning devices (gates, flashing lights and bells) on their rights-of-way.

While the railroad owns the track, the roadway at a crossing is owned by either a public or private entity. Public crossings are those at which the highway or roadway is under the jurisdiction of and maintained by a public authority such as a municipality, county, or State agency. Private crossings are those in which the roadway is privately owned, such as at a farm or within an industrial complex. This roadway owner, public or private, typically maintains the road approaching the crossing on either side of tracks.

The Federal Highway Administration (FHWA) is responsible for public grade crossing issues that affect highway safety. FHWA provides guidelines and standards for the correct design of grade crossings, the assessment of safety at a grade crossing, and appropriate placement of traffic control devices at and on the approach to a grade crossing. These traffic control devices include the yellow and black advance warning signs, railroad crossbucks (x-shaped signs), pavement markings, and, in some locations, bells, gates, and flashing lights as described in the FHWA’s Manual on Uniform Traffic Control Devices (MUTCD).

The Federal Railroad Administration (FRA) regulates the aspects of grade crossing safety pertaining to railroad operations: track safety, train-activated warning devices, and train safety and visibility. For example, the FRA’s regulations specify the type of lighting to be
placed on a locomotive, the minimal decibel level of the train horns, and the inspection, testing, and maintenance standards for active grade crossing train detection and warning devices.

The FRA’s Highway-Rail Crossing Safety and Trespass Prevention Program includes staff dedicated to reducing the number of collisions at highway-rail grade crossings and along railroad rights-of-way. The FRA indicates that these types of efforts have helped to reduce the number of fatalities at highway-rail crossings by 45 percent since 1994.

The FRA also provides for research into technical aspects of grade crossing safety. The research program addresses evaluation methodologies, visual and audio warnings, motor vehicle and train-presence detection, crossing geometry, crossing-gate and flashing-light technologies, the Intelligent Transportation System (ITS) prototype demonstrations, and the impact of the development of the National ITS Architecture. In addition, the risks posed to both highway and rail users are examined periodically in new FRA risk assessment evaluations.

States determine which public crossings are in need of improvements, and determine what those improvements will be. In order to make these improvements, States rely heavily on federally-supplied funds authorized under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) program (formerly known as “Section 130”). This program allocates money to the States specifically for eliminating hazards at public highway-railroad grade crossings (Federal highway funds cannot be spent on safety improvements at private crossings). The FHWA also administers the distribution of SAFETEA-LU funds.

In fiscal year 2008, $220 million was allocated to the States under SAFETEA-LU. This amount has remained relatively unchanged during the last twenty years (varying from $140 to $155 million since 1987), as has the method for allocating the money between the States. The SAFETEA-LU funds for grade-crossing safety improvements are available at a 90-percent Federal share, with the remaining 10 percent to be paid by State and/or local authorities and/or the railroad. The Federal share may amount to 100 percent for signage; pavement markings; active warning devices; the elimination of hazards; and crossing closures. The decision on whether to allow 100-percent Federal funding rests with the individual States.

At least half of a State’s SAFETEA-LU funds must be used for installing what the FHWA defines as protective devices: the installation of standard signs and pavement markings; the installation or replacement of active warning devices; upgrading active warning devices, including track circuit improvements and interconnections with highway

Existing Main Street crossing of the NECR Main Line, equipped with cantilevered flashers and gates.
traffic signals ("preemption"); crossing illumination; crossing surface improvements; and general site improvements. The remaining funds may be spent on additional warning devices, or on other safety improvements including sight-distance improvements, crossing closures or consolidations, or roadway bridges over/under the railroad tracks ("separations").

According to FHWA and FRA, approximately $3.8 billion has been obligated for grade-crossing improvements since the beginning of the Section 130 Program in 1974. Evaluations of safety improvements made under this program indicate that it has helped prevent over 10,500 fatalities and 51,000 nonfatal injuries over the life of the program.
3 Regulatory Overview and Approvals Process

3.1 Railroad Operations

The proposed crossing design must be consistent with current and future railroad operational needs. According to the NECR, speeds are 10 mph for both freight and passenger trains on the West (Burlington Branch) and South legs of the Essex Junction wye. The maximum authorized speed for both freight and passenger trains on the NECR Main Line or East leg of the Essex Junction wye (the site of the proposed Connector Road) is 25mph.

Both the Burlington Branch and the NECR Main Line see an average of four trains per day.

The Amtrak Vermonter, which connects St. Albans, VT with New York and Washington, DC, passes through the proposed crossing location at about 9:00 a.m. southbound and at about 8:44 p.m. northbound. The train, of course, is subject to periodic schedule adjustments. The Vermonter generally consists of two locomotives (one on each end of the train due to operational requirements in Massachusetts) and five coaches.

The NECR Main Line generally has just two freight trains per day – one northbound and one southbound. These are the primary “road haul” trains that convey interchange traffic between the Canadian National Railway (CN) at St. Albans and connecting railroads in White River Jct. VT, Bellows Falls, VT and Palmer, MA. The northbound freight train (known as NEMPAST or Train 323) usually passes through Essex Junction between 4 and 7 p.m. It should be noted that the freight train schedules are highly variable, changing due to external railroad connection times, the need to create trackwork “work windows” at various points along the line, crewing, locomotive availability and many other factors.

The southbound counterpart, known as NEMSTPA or Train 324, usually operates through Essex Junction between 11 p.m. and midnight. The two road haul trains generally have between 30 and 100 freight cars, pulled by two to five locomotives.

In discussions with VTrans, it was noted that the NECR Main Line is part of the federally-designated Boston-Montréal High Speed Rail Corridor. Any Connector Road design should make provision for possible significant increases in passenger and freight traffic in the future.
The Burlington Branch hosts two weekday round trip “local” freight trains. The first, known as NEUSWBU or Train 500, brings woodchips from a transloading facility in Swanton to Burlington Electric. The “Chip Train”, as it is known, operates through Essex Junction at about 10 a.m. southbound and 1 p.m. northbound. It does not operate everyday in the summer. The second, known as NERSTBU or Train 502, is the Burlington local that connects St. Albans with the Vermont Railway in Burlington. This train operates southbound through Essex Junction mid-afternoon, returning northbound in the late afternoon. The schedules of these two Burlington Branch trains have the effect of putting more freight traffic on the Burlington Branch than on the NECR Main Line during critical daylight hours.

The South Leg of the railroad “wye” in Essex Junction (refer to Figure 1) is in service but not used by any regularly-scheduled train movements. It is used occasionally to park Maintenance of Way equipment and to “wye” local freight trains where one or more cars need to be, effectively, rotated 180 degrees to position the unloading side of the car on the desired side for the freight customer. The South Leg of the wye would be used by Montpelier-Waterbury-Burlington commuter rail service should that operate in the future.

3.2 Railroad Right of Way Ownership

The NECR derives its ownership of the Main Line and Burlington Branch from a February 3, 1995 sale by Central Vermont Railway, Inc. (CV), a subsidiary of CN. The associated deed includes the provision that “it is the intent of the grantor (CV) and the grantee (NECR) that the grantee and its successors and assigns may use the conveyed property for rail transportation, as herein defined, and that the grantor and its successors or assigns may use or grant to third parties the right to use the conveyed property for any other purpose, longitudinal or otherwise that does not interfere with rail transportation.” This provision can be interpreted as meaning that a new NECR Main Line grade crossing will require real estate negotiation with both NECR (and its corporate parent, RailAmerica of Boca Raton, FL) and CN.

The Village of Essex has already had some discussions with the two owning parties. The Village met with Jean Halle, a representative of the CN Real Estate Department, in May, 2009. The Village indicated that Mr. Halle and CN generally looked to NECR to do due diligence on proposals affecting their property and rarely disagreed with NECR’s recommendations. The Village of Essex and LTK met independently in May and June 2009 with Mr. Steve Coomes, NECR General Manager. Mr. Coomes confirmed the CN position. He indicated a preference for a “package deal” that would close one or two crossings while creating a new one. However, he indicated that should the project provide clear safety improvements at the NECR Park Street and Maple Street crossings, the railroad would be willing to consider it. All capital and maintenance cost must be borne by other parties, according to Mr. Coomes.

RailAmerica, the parent company of the NECR, has implemented procedures for initiating applications for new grade crossings. The procedures as they apply to public crossings are as follows:

- To obtain a Grade Crossing Agreement, a Grade Crossing Application that includes photographs, a railroad milepost location, a plat or railroad map that clearly shows the crossing of interest must be submitted. Any incomplete applications or applications which do not include the railroad milepost and railroad subdivision will be immediately rejected.
• A non-refundable $1,000 application/review fee required by the application can be paid via check or money order payable to RailAmerica, Inc. For public crossings the preliminary engineering fee is $7,000. Application for a Grade Crossing does not guarantee approval.

• The approval process can take several months so timely submission of the application and associated fees is an important step to timely processing. The Lessee will also be responsible for any upgrade, installation, or related charges that may be incurred to bring to crossing into compliance with RailAmerica engineering specifications.

• Once approval is secured, a Grade Crossing agreement is drafted and forwarded to the applicant for signature. The Agreement will outline the conditions and terms of the occupancy as well as any insurance requirements; in cases of construction activity Railroad Protective Insurance may also be required. The first year rental payment, deposit, and proof of insurance will be required prior to the execution of the agreement on behalf of the railroad.

• The RailAmerica Real Estate Department should be contacted at 904-538-6365 with any questions about the use or installation of grade crossings.

3.3 Federal Jurisdiction Regarding New Grade Crossings

Discussions with the FRA indicate that there is no federal jurisdiction with respect to creation of a new grade crossing. The FRA requires that any newly-created grade crossing be the subject of a new DOT grade crossing ID and subject to NECR reporting. Either the State (VTrans) or NECR may complete the applicable FRA paperwork.

3.4 State Jurisdiction Regarding New Grade Crossings

On July 17, 2009, LTK spoke with Jenifer Royer, Traffic Operations Engineer at VTrans, who is responsible for coordinating all state rail grade crossing projects. She indicated:

• For private and municipal roads, the state has no jurisdiction over the creation of new crossings. This is a matter solely between the proposer and the railroad.

• RailAmerica, the NECR parent, requires a $7,000 preliminary engineering fee to discuss any detailed design issues (refer to Section 3.2.) For municipally-sponsored crossings, the state would like to be involved in design discussions, especially related to traffic signal pre-emption, but this is optional.

• There is no upper limit on traffic signal preemption time (as long as it does not result in excessive grade crossing warning device time); this is an issue between the municipality and the railroad.

• The Maple Street crossing is presently equipped with pre-emption but the advance warning time is not known by VTrans.

• VTrans has never had to deal with CN (CV Properties) on any crossing projects -- the NECR has handled everything (refer to Section 3.2.). These were all existing crossings, so creating a new crossing might be a different issue.

• There is Sprint fiber optic buried within the ROW. It is believed that CN (CV Properties) retained the associated lease revenues. However, according to VTrans, NECR has coordinated protection of underground utilities during crossing construction projects.
On July 21, 2009, LTK interviewed Mr. Robert Ide, who at the time was the VTrans Rail Program Manager (he has been succeeded by Joseph Flynn). VTrans indicated that the State cannot commit any capital or on-going maintenance funding to the project. Although the Vermont Rail Plan calls for continual grade crossing safety improvements (including closure of crossings), the State understands that there can be compelling reasons to construct new crossings. To this end, the VTrans Rail Bureau will support the project if it improves regional mobility and enjoys substantial local community support.

Additionally, VTrans indicated that any engineering of the new crossing should assume that, given the NECR Main Line's status as part of a federally-designated High Speed Rail Corridor, future train volumes will increase as will train speeds. VTrans confirmed that the crossing of the Main Line should be as close to 90 degrees as possible, consistent with the alternative designs developed by RSG.

Although several commuter rail and multimodal studies have investigated other Essex Junction passenger station locations, VTrans believes that the present Amtrak Essex Junction station should be assumed for the future. This has implications regarding automobile traffic flow and also in the application of grade crossing predictor (Constant Warning Time) technology.

### 3.5 Local Jurisdiction Regarding New Grade Crossings

The Village of Essex has no regulatory authority over the NECR with respect to the creation of a new rail-highway grade crossing. However, the Village must obviously approve the alignment of the highway approaches to the crossing which should not be an issue since the Village would be the principal sponsor of the Connector Road.
4 Construction and Maintenance Cost Estimates

4.1 VTrans High Speed Rail Grant

VTrans received a $50 million grant (later increased to $52.7 million) for High Speed Rail improvements on the NECR Main Line to benefit the Amtrak Vermonter service. On September 29, 2010, U.S. Transportation Secretary Ray LaHood announced the American Recovery and Reinvestment Act (ARRA) funding for improvements to 190 miles of track between St. Albans and Vernon, VT. The purpose of the improvements is to increase passenger train speeds, reduce travel time and improve reliability.

The ARRA grant awarded under the High-Speed Intercity Passenger Rail (HSIPR) Program, will be used to install continuously welded rail and other track improvements, new crossties, and highway-rail at-grade crossing safety improvements on the NECR Main Line. According to VTrans and the FRA, the improvements will also support initiatives for more frequent service through Vermont and for extending the Vermonter service to Montreal, Quebec in the future. As part of the grant agreement, the NECR will provide a private party contribution that brings the total project budget to $72 million. Approximately $4.4 million of the grant was expended in 2010; the vast majority of the FRA funding is expected to be spent in 2011 with project completion slated for October, 2011.

NECR is working on track realignments of selected curves as part of the High-Speed Rail grant. One of the potential alignments is the NECR Main Line between the West Wye (Burlington Branch) switch and the South Wye switch. Because the switches must be flat, little or no existing/proposed super-elevation can be accommodated on the curve, which simplifies the roadway geometry design. Realignment of the NECR Main Line could potentially relocate the track as much as 6 feet to the east, according to the NECR.

To minimize construction and design risk, Alternative 1 is preferred because the magnitude of potential future realignment of the railroad between the Burlington Branch switch and the south leg of the wye is less at this location than in Alternative 2. The magnitude of the realignment is constrained by the physical location of the Burlington Branch switch, which the NECR has indicated will not change under the High Speed Rail improvements. The crossing in Alternative 1 is closer to the switch than in Alternative 2, meaning that there is less distance for a proposed track alignment to differ from the current alignment.

4.2 Essex Junction Amtrak Station Location

The conceptual design of both alternatives in the Scoping Study assumes that the Amtrak Station location north of the Burlington Branch switch remains. However, there is a long-term desire to relocate to the station to the southeastern "crotch" of the wye, in order to serve both NECR Main Line and Montpelier-Burlington commuter trains in the future. A side track off of the NECR Main Line to support a high level platform and/or freight bypass of an Amtrak train may be desirable. However, given the railroad's design criteria precluding any track switches on curves, this would require a major reconfiguration of the south wye switch and the Burlington Branch (west wye) switch.

The conceptual designs do not reflect the potential for long-term relocation of the Amtrak Station to a more southerly location. No specific station location or configuration is known at this time, but such a location does not appear to be in conflict with either of the Connector Road alternatives.
4.3 Design Considerations

The following design considerations are reflected in the two alternative designs developed by RSG:

- The standard location for flashers and gates is for the center of the mast to be 12 ft from the centerline of the track. Gates are always placed at right angles to the highway traffic lane unless local conditions prevent it. (Note that the 2009 version of the Manual on Uniform Traffic Control Devices (MUTCD) shows the 12 ft dimension to be to the closest part of the signal, not the center line of the mast. This is different from the American Railway Engineering and Maintenance-of-Way Association (AREMA) standards and previous versions of MUTCD.)

- Only one gate mechanism can be mounted to a mast. A separate mast is needed for pedestrian gates. Some jurisdictions are reluctant to use pedestrian gates due to concerns about blocking an egress path from the crossing for a person in a wheelchair (sidewalk gates would normally be placed on both sides of the crossing for each sidewalk). The Village and VTrans must determine whether pedestrian gates are to be provided.

- Stop lines should be 8 ft before the gate, per MUTCD. The crossing gates should align with the stop lines, unless site-specific conditions require the gates to be at an angle.

- Additional side-facing flashers should be provided, where applicable, to provide clearer warning to traffic on intersecting roadways.

4.4 Capital Construction Cost Estimate

Based on the proposed Connector Road layout developed by RSG, LTK has developed capital and maintenance cost estimates for the new highway-railway grade crossing of the NECR Main Line. The cross-section of the Connector Road is assumed to have a roadway that is 32 feet curb to curb, along with a 5 foot green strip and 5 foot sidewalk on one side only.

Table 1 details the cost of railroad track reconstruction at the crossing. The rail presently in service at the proposed crossing location is 100# (100 pounds per yard) although rail immediately to the north has been replaced with 115# in recent years. On-going track improvements funded, in part by a Federal railroad Administration High Speed Rail grant may result in track structure upgrades prior to construction of the Connector Road. The track estimate for construction of the new crossing surface of the connector as it crosses the NECR Main Line is based on the following:

- 1 - 78 foot track panel with concrete ties and new 115# rail for the roadway and sidewalk,
• 54 feet of full depth rubber crossing surface covering the roadway and the 5 foot sidewalk on one side. (9 - 6 foot panels), and
• 3 - 78 foot panels with wood ties and new 115# rail on both sides of the crossing.

It should be noted that these cost estimates assume that the highway contractor (whose cost is not included herein) paves to the rubber crossing panels. In addition, the highway contractor is assumed to be responsible for all road striping.

**Table 1 - Conceptual Railroad Track Construction Cost Estimate**

<table>
<thead>
<tr>
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<th>EA</th>
<th>Quantity</th>
<th>Labor $</th>
<th>Material $</th>
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**Table 2 - Conceptual Train Control & Signals Construction Cost Estimate**

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The Train Control and Signals construction estimate in Table 2 includes the following:
• Four quadrant gates without presence detectors for the roadway,
• 2 pedestrian gates for the sidewalk on one side of the connector (no sidewalk assumed on the other side),
• Four flashers,
• Four railroad crossing crossbucks,
• One grade crossing predictor (GCP) with built-in Audio Frequency Overlay (AFO) island circuit looking south from the Connector Road crossing,
• One AFO circuit between the Connector Road crossing and Maple Street to the north,
• Interconnection with approach circuit/GCP from Maple Street for southbound railroad moves,
• Preemption interconnection from the existing crossing relay house at Maple Street to the new traffic signal controller at the intersection of Maple Street and the Connector Road,
• Preemption interconnection from the existing crossing relay house at Park Street to the new traffic signal controller at the intersection of Park Street and the Connector Road, and
• Route selection interface from the NECR Essex Junction Interlocking (rail switch controlling the movement to either the Burlington Branch or the NECR Main Line) to start the applicable crossing for the active route.

The reference to “Gate Complete” in the cost estimate indicates that the capital cost includes foundation, base, mast, gate mechanism, gate arms, crossbucks, flashing lights and a bell.

The Relay House cost estimate reflects inclusion of all of the wired equipment. This includes the Grade Crossing Predictor circuitry, which includes the Computer Processor Unit (CPU), crossing controller, track interface and I/O board for preemption and interlocking interface, Audio Frequency Overlay (AFO) for train detection, battery chargers, lights, heater, and circuit breakers.

Table 3 - Train Control & Signals Soft Costs

<table>
<thead>
<tr>
<th></th>
<th>Soft Costs</th>
<th>%</th>
<th>Total Soft Costs</th>
</tr>
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<tbody>
<tr>
<td>On Site Acceptance Testing</td>
<td>$311,463.52</td>
<td>0.5%</td>
<td>$1,557.32</td>
</tr>
<tr>
<td>Integration Testing</td>
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<td>$3,114.64</td>
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<td>Manuals (O&amp;M, Training)</td>
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<td>3.5%</td>
<td>$10,901.22</td>
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<td>Training</td>
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<td>$15,573.18</td>
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<td>Spare Parts</td>
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<td>5.0%</td>
<td>$15,573.18</td>
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<tr>
<td>Special Tools</td>
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<td>1.0%</td>
<td>$3,114.64</td>
</tr>
<tr>
<td><strong>Total Soft Costs</strong></td>
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<td><strong>5.0%</strong></td>
<td><strong>$49,835</strong></td>
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In addition to traffic signal preemption at the intersection of Maple Street at the proposed connector, the crossing at the intersection of Park Street and the proposed connector requires traffic signal preemption under Alternative 1. This will prevent the traffic light on Park Street from displaying a green into the Burlington Branch crossing when the grade crossing flashers are activated. Should a green be displayed when a train is approaching,
advance preemption will allow the traffic signal controller to cycle to red for all phases except for traffic operating between the connector and Park Street south prior to the activation of the grade crossing flashers.

Under Alternative 2, similar traffic signal preemption will be needed at the three-way intersection of the Connector Road and Park Street. This will be interconnected with the crossing circuitry on the south leg of the wye between the Burlington Branch and the NECR Main Line.

According to VTrans, there may be an existing preemption interconnect with the traffic signal controller at Five Corners. Given the relatively long distances from the intersection to both the Burlington Branch (Park Street) and NECR Main Line (Maple Street), the utility of this preemption connection and the advance train detection time require additional investigation during Preliminary Engineering. A full traffic simulation may be needed to determine the utility of preemption and associated circuitry requirements. No new or altered preemption interconnect to the Five Corners traffic signal controller is assumed in the cost estimate.

The capital cost estimates for track and for signal system construction cover material and direct labor only. Project management, mobilization, demobilization, services, vehicles, equipment costs, fringe, contractor overhead and contractor profit should be added by RSG, consistent with assumptions for the overall construction project.

### 4.5 Maintenance Estimate

Table 4 details the on-going annual grade crossing maintenance cost in 2009 dollars. It should be noted that the Maintenance Estimate does not include unscheduled work due to equipment failure, accident damage, or weather occurrences such as floods or lightning strikes. It should be assumed that the NECR will bill those costs to the Village of Essex on a Time & Materials basis with pre-agreed labor rates. In 2011 dollars, the approximate annual grade crossing maintenance cost is $7700, accounting for increased costs for labor and materials.

<table>
<thead>
<tr>
<th>Table 4 – Train Control &amp; Signals Maintenance Estimated Annual Cost</th>
</tr>
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<tbody>
<tr>
<td>Perform Required Monthly Test And Maintenance By C&amp;S Maintainer Perform</td>
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<tr>
<td>Required Quarterly Test And Maintenance By C&amp;S Maintainer</td>
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<tr>
<td>Perform Required Yearly Test And Maintenance By C&amp;S Maintainer</td>
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<td>Total Programmed C&amp;S Maintainer Hours</td>
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<tr>
<td>Total Vehicle Hours For Leased Ford Hi-Rail Vehicle</td>
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<tr>
<td>Total Vehicle Hours For Fuel For Leased Ford Hi-Rail Vehicle</td>
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<tr>
<td>Total Material And Tools For Programmed Testing And Maintenance By C&amp;S Maintainer Hours</td>
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<tr>
<td>C&amp;S Manager Oversight Of Testing And Maintenance</td>
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<tr>
<td>Yearly Total Programmed Testing And Maintenance</td>
</tr>
</tbody>
</table>
APPENDIX 7

Comments from Margaret Nichols, Depot Home & Garden (landowner)
7 Nichols comment RE bypass

From: Robin Pierce [robin@essexjunction.org]
Sent: Friday, March 11, 2011 8:39 AM
To: 'Eleni Churchill'; 'Jason Charest'; Mark Smith
Subject: FW: bypass

Did I sent this to you before?

Thanks,

Robin.

-----Original Message-----
From: Peg Nichols, Oliver Seed [mailto:ldo.peg@earthlink.net]
Sent: Wednesday, March 02, 2011 1:31 PM
To: robin@essexjunction.org
Subject: bypass

Robin,
Thank you for meeting with us today to go over the two proposals for the 5 Corners Bypass.

As a business owner in the effected area I am strongly in favor of and support the Northern Alignment alternative.

>From the information presented at the 2/22 meeting it would appear that the Southern Alignment alternative is not a viable option. However, should the Village decide to pursue that alternative I would anticipate additional information and discussion before considering the use of Milex Properties llc for the bypass.

Peggy (Margaret) Nichols
Depot Home & Garden
Lawrence D Oliver Seed Co Inc
Milex Properties llc
APPENDIX 8

Comments from William Kalanges (landowner)
December 28, 2010

Robin Pierce, Planning Director
Village of Essex Junction

Dear Robin,

I have been reviewing the proposed plans (Alternate 1 and Alternate 2) for a new road connecting Park Street and Maple Street here in the Village of Essex Junction.

I believe that Alternate 1 would be best for my property. My plans are to keep this as a rental property and I feel that Alternate 1 would give me the best exposure to the new road and would greatly increase the stability of my tenants.

Let me know if there is anything I can do to move this plan along as I feel this new road should be built as soon as possible.

Sincerely,

Bill Kalanges
BK/kj
APPENDIX 9

Comments from Lincoln Development Group (landowner)
February 21, 2011

Essex Junction Village Trustees
Deborah Billado
Peter Gustafson
John Lajza
George Tyler
Stephen Atwood

2 Lincoln St.
Essex Junction, VT 05452

Dear Village Trustees,

At the request of the Chittenden County Municipal Planning Organization, this letter is to formally express our thoughts regarding the two “Crescent Connector” alternatives, as proposed in the draft Scoping Study prepared for The Village of Essex Junction. We would like to say that we certainly appreciate all of the hard work that went into exploring all of the various options for these two alternatives.

It is our belief that the heart of the village should be a traditional New England Downtown customarily seen in the historic towns and villages throughout Vermont, not a traffic thoroughfare. It is this reason that we think the best design for the Crescent, is a village-scaled street that serves two purposes. First and foremost it should be an integral part of the downtown community embracing the needs of the community by providing easy access to housing, commerce and public transportation. Second, is the benefit derived from the relief of traffic pressure at the Five Corners. It will more evenly balance the traffic flow through the intersection and we hope give people more reasons to stop and enjoy the Village as opposed to just drive through (or avoid it altogether). The placement and design of the road will inevitably set the tone for this section of the redeveloped Village Center. As such, we have significant concerns about the design, scale, and aesthetics of the so-called northern alternative.

Our preliminary analysis indicates that the Northern alignment has several design challenges while also missing several community development opportunities. We believe that there may be an opportunity to take better advantage of existing railroad rights of way (for parking, sidewalks, planting strips, utilities, etc) while also utilizing more efficient road design and dimensional standards (i.e. narrower roadway and ROW). This combination may result in a more effective and efficient use of Village lands. Under the Northern Alignment Alternative, there will be substantial financial impact to existing tenants of the 34 Park Street building on both a short term and long term basis. Additionally, it will likely be extremely difficult for us to allocate the necessary space in our redevelopment, for a potential municipal /public project like the proposed Transportation Center. As we understand the position of the Railroad (the third party involved) both alternatives can meet their criteria if designed properly. Additionally, the design of the Northern option creates the feel of a “collector road” (or vehicular by-pass) in our opinion. We believe that when developing a new road in the heart of a village specific consideration
should be given to creating a walkable downtown setting w/ streets and sidewalks that are framed by mixed use buildings. Alternative A fails to achieve this and appears to be (designed solely to move cars through the area quickly) with limited regard for pedestrians and the future need of the Village and its vibrancy.

The Southern option offers several different opportunities in our opinion. First, it incorporates the proposed transportation center. This has not only potential funding benefit, but also an efficient flow of traffic, community space, and pedestrian access. At this time, we believe that the Southern Alignment allows us as developers the space to create a well-planned, pedestrian oriented community, which incorporates the Crescent as a village street within a redeveloped village center. The Southern option also holds open the future potential for additional connections to the village street grid and the grid within our redevelopment project for both cars and pedestrians. Given the information provided to date, we would prefer continued to exploration of the Southern Alternative as a possible location for the Crescent. When evaluating multiple criteria including improved traffic, public-transportation, as well as downtown revitalization and other community development goals, we believe that the Southern Alternative is a more effective use of land and more advantages for the future growth, vibrancy, and prosperity of the Essex Junction Village Center.

We look forward to working with the Village Trustee’s and staff, the CCMPO, CCTA and the State of Vermont to make the Crescent and the proposed downtown redevelopment a reality.

Best Regards,

Alexander D. McEwing

Lincoln Development Group, LLC

cc.

Ken Braverman, The Braverman Company
Michelle Boomhower, CCMPO
Eleni Churchill, CCMPO
Mark Smith, RSG
Robin Peirce, Village of Essex Junction
Dave Crawford, Village of Essex Junction
Bill Kalanges
Chris Cole/Aaron Frank, CCTA
APPENDIX 10

Comments from Essex Junction Village Police
Greetings,

I think this answers the question raised by a resident when Mark made his presentation. I assume it will be included in the final report.

Thanks,

Robin.

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From: Brad Larose [mailto:blarose@ESSEX.ORG]
Sent: Wednesday, March 09, 2011 3:39 PM
To: Robin Pierce
Subject: Crescent Connector

Robin –

I have reviewed the Crescent Connector Road Scoping Study. After discussing this project with you I agree that the north option is the best. This option separates pedestrians from motorists to a greater extent than the southern option.

The Crescent Connector Project seems like a reasonable concept to me in that it should help to more effectively control traffic flow around the 5-corners and increase pedestrian safety in the area.

From what I have read, I understand this concept is intended to be a segue to a Village Center and promote economic growth. I hope this plan falls into place for you and the Village.

Best regards,

Captain Bradley J. LaRose
Essex Police Department
Direct Line (802) 857-0093
Fax (802) 878-1340
APPENDIX 11

Local Concerns Meeting Minutes (Village Trustees 7-20-10)
VILLAGE OF ESSEX JUNCTION
BOARD OF TRUSTEES
MINUTES OF MEETING
July 20, 2010

BOARD OF TRUSTEES: Deb Billado (Village President); Larry Yandow, John Lajza, George Tyler, Peter Gustafson.
ADMINISTRATION: Dave Crawford, Village Manager.

I. CALL TO ORDER and PLEDGE OF ALLEGIANCE
Village President, Deb Billado, called the meeting to order at 6:30 PM and led the assemblage in the Pledge of Allegiance.

II. AGENDA ADDITIONS/CHANGES
There were no changes to the published agenda.

III. GUESTS AND PRESENTATIONS
1. Comments from Public on Items Not on Agenda
There were no comments from the public.

2. Presentation on Crescent Connector Project
Mark Smith with RSG reviewed the crescent connector project scope and impacts. Local concerns and existing conditions including traffic congestion and effects of the road with and without the circumferential highway in place are being compiled. Bike and pedestrian infrastructure and railroad impacts (freight, passenger and potentially high speed passenger rail service) are also included. Capacity at the Five Corners intersection exceeds the failing level now which means there are long traffic queues. The crescent connector will help alleviate congestion. Next steps include drafting a purpose and need statement to guide possible designs and alignments of the connector road.

George Tyler asked how the connector fits in with CCMPO’s vision. Michele Boomhower, CCMPO Executive Director, stated the project is a funding supported activity by CCMPO and is not competing with the circumferential highway. CCMPO is intrigued with the in-fill possibilities with the project and feels the project fits with planning priorities at this time. Trustee Tyler asked if property and business owners in the project area will be contacted during the scoping study. Mark Smith pointed out the public meetings are the venue for public comments. Robin Pierce has been contacting property owners. Dave Crawford added staff is working with the Village Attorney on emails and letters to property owners.

Eleni Churchill, CCMPO, stated after local concerns and existing conditions are determined then the purpose and need statement will be developed. Alternatives will be investigated and detailed. A public presentation will be made in the fall. The preferred alternative will be selected and the scoping report will be published in early 2011. The cost of the scope of work is now $55,000. Tiger 2 grant money is being sought for the project. The connector road is an eligible activity and CCMPO as the regional entity may
be a stronger applicant than the village. The pre-application is due 7/26/10 with the final application due at the end of August and awards in late fall. RSG will assist with the application. The grant will fund up to 80% of the project. Local match is 20%. The project will be scored higher if the local match is greater than 20%. The application cost is between $300,000 and $500,000 (includes environmental assessment, permitting, right-of-way, and such). Michele Boomhower noted the numbers will be refined and will be competitive. The livability component makes the project competitive. The CCMPO Board of Directors felt a resolution was a better mechanism than an MOU with the Lincoln Group in providing funding for planning activities, and will consider and act on the resolution at the next meeting. Ms. Boomhower provided the Trustees with a copy of the resolution which essentially allows staff to continue forward with the Tiger program and utilizing staff resources. Ms. Boomhower will provide the actual dollar amount from the village, and was optimistic about coming up with a 35% total match package. VTrans was given a presentation on the connector road project, said Ms. Boomhower, per their request. The scoping scenarios include no build, having an alignment close to the Lincoln Inn property or having the alignment more to the west with the circumferential highway and without the circumferential highway in place.

George Tyler asked if there are other Tiger grants in the state. Ms. Boomhower stated there is a construction project to revitalize the rail station in White River Jct. Burlington received a Tiger 1 grant and therefore cannot apply for Tiger 2 grants.

Dave Crawford expressed appreciation to CCMPO for working collaboratively with the village on the studies.

3. Presentation on Ladder Truck Replacement
Fire Chief, Chris Gaboriault, reviewed research conducted to determine the equipment needed by the village. Several different ladder and platform trucks from area fire departments were staged to determine reach to a rooftop. Height of a building is not the only consideration, but also building location and where the truck is parked. Aerial equipment available in Chittenden County and mutual aid agreements were also reviewed by Chief Gaboriault. Equipment needs are based on service to an area and available hydrants. The call history from May 2009 through May 2010 shows 419 calls - fire and first response in the village and town. The ladder truck responded to 132 calls. The ladder truck is the first truck out on a fire call in the daytime with four to six firefighters aboard. Response by village firefighters is good (15-18 members per call). The new truck is still being scoped to determine what will best fit the village, said Mr. Gaboriault, and a committee will be created to work on the specifications, talk with manufacturers, and get the plan out to bid in March 2011. The Trustees will be kept updated.

Deb Billado asked about using IBM rescue equipment. Chief Gaboriault stated IBM resources have never been utilized by the village. IBM has a pumper which is used on their site. IBM handles their emergency calls. Ray Weed stated the IBM ambulance and fire truck are out of service and not taken off the site. Trustee Billado asked about first responders. Chris Gaboriault stated medical calls are handled by Essex Rescue. The Fire
Dept. offers first response service if the ambulance is out on a call. St. Mike’s Ambulance is the back-up ambulance.

IV. OLD BUSINESS
1. Review Additional Pearl Street Speed Study & Approve Ordinance Change for Speed Limit on Pearl Street.
Dave Crawford reported a study of the speed limit on Pearl Street was done prior to the recommended changes in the speed limit. Also, there are laws pertaining to center turn lanes. If citizens witness someone using the center lane as a passing lane the police should be notified. John Lajza suggested additional signage may be needed to remind drivers of the proper use of the center turn lane.

Larry Yandow asked about a towing ordinance. Dave Crawford noted staff is working with Police Chief Nadeau on what is needed to address the parking situation that occurs during the annual village block party.

MOTION by John Lajza, SECOND by George Tyler, to approve the amendment to the Municipal Code, Section 846: Speed Limits on Pearl Street as presented.
VOTING: 5 ayes; motion carried.

The speed limit change is effective September 18, 2010.

2. Discuss Citizen Communication and Village Website
George Tyler reviewed the recommendations by Champlain Leadership Group with regard to the current communication network in the village. The existing system should be enhanced. People do not necessarily want emails from the village all the time, but there are occasions and information that should be communicated. New or existing businesses could be featured in a newsletter type email. The website should be upgraded so people continue to explore what is on the page and further links. Trustee Tyler stated the website should be upgraded first followed by development of the email database and email newsletter. A critical mass of email addresses is needed in order to effectively communicate with the citizenry. Invitation to visit the website could be included in the next issue of the village newsletter (hardcopy). If the response is good, then the email newsletter idea can proceed. People seem to like the „Downtown Essex Junction” page on Facebook, continued Trustee Tyler. Sue McCormack is currently editing the page which takes about two hours a week to do (Deb Billado suggested a library staff member may be willing to take over the task). Front Porch Forum is also well used and a good alternative way to disseminate information, but there is other news mixed in with village news.

Dave Crawford reviewed his memo on citizen communication, dated 7/20/10, which covers doing an RFP for a website update provider and support of Facebook and Front Porch Forum. Mr. Crawford agreed upgrading the webpage is the first priority. There was mention of links to Channel 17 clickable agendas from the village webpage. George Tyler will work with village staff on a proposal for potential vendors to upgrade the village webpage. The Board will discuss the matter further at the next meeting.
V. NEW BUSINESS
1. Department Head Briefing by Development Director
Robin Pierce mentioned on-going projects including update of the Land Development Code, working with applicants on various projects (hotel on Park Street, condominiums on Lincoln Street, CVE parking expansion, Village Haven, Village Walk), working with business owners to enhance relationships with the village, representing the village at CCRPC, CCMPO, Vermont Planners Association, and Vermont Landscape and Architect Association, working with developers of Riverside in the Village (formerly NECI), working on the new pavilion at Maple Street Park and expansion of the building at 118-120 Pearl Street, renewing the village center designation, addressing the issue of sandwich boards, continuing work on the crescent connector, and supporting a “can do” attitude in the village. There are other items that are confidential at this time, said Mr. Pierce. A report will be forthcoming when appropriate. Regarding the crescent connector, property owners impacted by the roadway have sent letters confirming a right-of-way will be deeded to the village. Mr. Bushey, owner of the gas station, suggested a traffic light be installed by his gas station when the connector is built to make the area safer for bikes and pedestrians.

Peter Gustafson asked about the expansion by Dunkin’ Donuts. Robin Pierce stated the addition on the back of the building is for retail. A drive-through for Dunkin’ Donuts is also being proposed.

Larry Yandow asked if the Conservation Law Foundation is in support of the crescent connector. Robin Pierce said the CLF sees the road as development of a brown field site in the village center.

John Lajza commented on the circumferential highway as a need that addresses the safety issue of moving emergency vehicles around Chittenden County in an emergency.

VI. VILLAGE MANAGER’S REPORT
1. Meeting Schedule
- July 27 @ 5:30 – Work Session & Trustees Meeting
- August 10 @ 6:30 – Regular Trustees Meeting
- August 24 @ 6:30 – Regular Trustees Meeting
- September 14 @ 6:30 – Regular Trustees Meeting
- September 28 @ 6:30 – Regular Trustees Meeting
- October 12 @ 6:30 – Regular Trustees Meeting
- October 26 @ 6:30 – Regular Trustees Meeting
- November 9 @ 6:30 – Regular Trustees Meeting

Special Meetings/Events:
- August 9 @ 6:30 – Joint Meeting with Essex Selectboard
- October 7 @ CVE – VLCT Town Fair

2. Pearl Street Project Status
Work continues on the streetscape improvements. The project is progressing well. Weston Contracting is willing to hold his prices on the Pearl Street project to extend to Five Corners if funding can be secured. Hamlin Engineering is investigating the matter.

3. Railroad Ave. Property
   The owner of 8 Railroad Ave. is planning to renovate and improve the property through the planning process.

4. Manager Assistant Position
   Jonathan L. Williams, Jr. from Hopewell, NJ was hired to fill the Manager Assistant position recently vacated by Sawyer Joecks. Mr. Williams gained experience writing grants while in the Peace Corps.

5. South Summit Street Bid
   The bid for the work on South Summit Street came in $35,000 lower than the estimate. Work will begin the first part of August. Residents will be notified.

6. Trustee Gustafson Receives Award
   Peter Gustafson was recognized by Essex Rotary for his community service.

7. Positive News
   Good news was received regarding the ruling by the Army Corps. of Engineers on the circumferential highway.

8. Sandwich Boards
   Notices were sent out to business owners about sandwich board signs and finding a balance in the number of signs. There may be recommended changes to the Code.

9. Park Street/South Street Traffic Light
   A report on the traffic light will be forthcoming by the end of the month.

VII. TRUSTEES COMMENTS/CONCERNS

Thanks for Support of Trip to Washington, DC by ADL 8th Graders
   Peter Gustafson thanked the supporters of the bottle drives that helped finance the trip to Washington, DC for the ADL 8th Graders. Deb Billado thanked Peter Gustafson and his wife for their effort and participation in the annual trip.

Petition re: Maple Street Baseball Field
   Deb Billado noted a signed petition on the baseball field at Maple Street Park has been received. Comments from the Prudential Committee on the ball field will be reported at the next Trustees meeting.

Thanks and Appreciation from Larry Yandow
   Larry Yandow thanked everyone for their recent chauffeur services.

VIII. CONSENT AGENDA & READING FILE
MOTION by George Tyler, SECOND by John Lajza, to approve the consent agenda as follows and with the notation that Peter Gustafson and Larry Yandow were not present at the 6/29/10 Trustees meeting and will abstain from the vote on the minutes:

1. Approve Minutes (6/29/10)
2. Approve Warrants
3. Bid Award for South Summit Street Waterline and Roadway Work
4. Reading List Acceptance (Letters & Communications)
   - Press Release re: Circ Highway
   - July 2010 Business People Vermont Magazine – Honors & Awards
     Dept. Picture of WWTF Staff for EPA Award

VOTING: 5 ayes; motion carried.

IX. EXECUTIVE SESSION
MOTION by Peter Gustafson, SECOND by John Lajza, that the Board of Trustees go into Executive Session to consider legal matters, contract negotiations and personnel matters, and potential budget changes related to personnel issues where premature general public knowledge would clearly place the Village at a substantial disadvantage, and to invite the Village Manager, Dave Crawford, to attend.

VOTING: 5 ayes; motion carried.

The Board entered Executive Session at 8:53 PM.

MOTION by George Tyler, SECOND by John Lajza, to adjourn Executive Session and reconvene the regular meeting. VOTING: 5 ayes; motion carried.

Executive Session was adjourned and the regular meeting reconvened at 10:05 PM.

X. ADJOURNMENT
MOTION by John Lajza, SECOND by George Tyler, to adjourn the meeting.

VOTING: 5 ayes; motion carried.

The meeting was adjourned at 10:06 PM.

RScty: M.E.Riordan
APPENDIX 12

Alternatives Presentation Meeting Minutes (Village Trustees 2-22-11)
VILLAGE OF ESSEX JUNCTION
BOARD OF TRUSTEES
MINUTES OF MEETING
February 22, 2011

BOARD OF TRUSTEES: Peter Gustafson, George Tyler, Steve Atwood, John Lajza.
(Deb Billado was absent.)
ADMINISTRATION: Dave Crawford, Village Manager; Lauren Morriseau, Finance Director.

I. CALL TO ORDER and PLEDGE OF ALLEGIANCE
In the absence of Village President, Deb Billado, Peter Gustafson called the meeting to order at 6:30 PM and led the assemblage in the Pledge of Allegiance.

II. AGENDA ADDITIONS/CHANGES
Include in „Guests and Presentations”, Item #3 (public comment on the crescent connector):
- Letter from Bill Kalanges, dated 12/28/10, in support of the northern alternative of the crescent connector
- Letter from Alex McEwing, dated 1/21/11 in support of the southern alternative of the crescent connector
- Memo from Robin Pierce to the Trustees, dated 2/22/11, regarding the RSG crescent connector study

Include in „Old Business”, Item #2 (action on EJRP Agreement):
- Letter from Joseph McNeil, dated 2/22/11, to Deb Billado and Dave Crawford regarding governance of EJRP

Include in „Manager”s Report”:
- Memo from Jonathan Williams, dated 2/18/11, providing an update on projects

Include in „Consent Agenda”:
- Revenue/expense report bill list, dated 2/22/11

III. GUESTS AND PRESENTATION
1. Comments from Public on Items Not on Agenda
There were no comments from the public.

Fred Duplessis reviewed the audit report for FY10, noting the percent of budget held as fund balance in reserve is advised to start at 15%, but the administration must look at short and long term cash flow and managing the tax rate to determine what percentage works best for the village. Mr. Duplessis reported the village did better on both the revenue and expenditure sides of the budget ($125,000 better than budgeted). Enterprise funds (water, sanitation, waste water) are performing as planned. The deficit in Waste Water should be retired in four years. Mr. Duplessis mentioned the various schedules included in the audit report and stated per the management letter there are no material weaknesses or significant deficiencies in the village”s financials. The audit went well.
Staff was prepared and fully cooperative.
George Tyler asked about compensated absences. Fred Duplessis explained compensated absences show as a long term liability because payment does not occur until an employee leaves the village. Payment is taken from the fund for the department where the employee worked. George Tyler asked about the land acquisition fund being separate from other liabilities. Fred Duplessis explained typically towns use this type of fund to acquire a particular piece of property. The village does not have a targeted parcel of land for the fund. The fund is accruing interest and has not been funded in the current year’s budget.

**MOTION** by George Tyler, **SECOND** by Steve Atwood, to accept the FY10 Audit Report as presented and reviewed by the Board of Trustees.

**DISCUSSION:** John Lajza requested more time to review the report and suggested acceptance and approval of the report be deferred to the next meeting.

**AMENDMENT TO MOTION** by George Tyler, **SECOND** by Steve Atwood, to accept and approve the FY10 Audit Report at the next Trustees meeting.

**DISCUSSION ON MOTION AS AMENDED:** George Dunbar, III, village resident, asked if the village charter provides a constraint on the amount of budget held in reserve. Fred Duplessis said if there is a constraint by charter that is not an accounting issue. Mr. Dunbar asked the Trustees to further investigate the question. Mr. Dunbar mentioned the Pearl Street improvement project cost number ($2.34 million total cost) does not match the audit number ($2.58 million). Mr. Dunbar also mentioned the South Summit Street capital reserve. Lauren Morrisseau explained the new capital plan will include what has actually happened with regard to the projects. The current capital plan reflects what is in the audit. There were no further questions or comments.

**VOTING ON MOTION AS AMENDED:** unanimous (4-0); motion carried.

### 3. Crescent Connector Study Presentation and Public Comment

Mark Smith with RSG and Eleni Churchill with CCMPO presented the results of the crescent connector study to include road alternative #1 (north) and #2 (south). The connector road will decrease traffic at Five Corners, Maple Street, Park Street and Main Street, and have a vehicle traveling on Park Street to Route 15 or Route 117 cross the railroad tracks only once instead of twice. The northern alignment essentially parallels the railroad tracks past the former Flanders building. The southern alignment impacts the Mason Brothers building which is an historic building (built in 1904) and comes very close to the former Flanders building. There will not be a connection from the crescent connector to Elm Street. Traffic signals will have to be synchronized and communicate with each other when traffic is present. An environmental assessment will be needed for either alternative though there are very few environmental impacts. Discussion is ongoing with New England Central Railroad regarding rail issues. Next steps include deciding on the alternative and seeking funding, getting the project included in the MPO funding process, proceeding with preliminary and final engineering of the road, acquiring rights-of-way, permitting (there are historic buildings to consider), and then construction. There is opportunity for public comment at each stage.
George Tyler asked if there is any benefit for downtown development and pedestrian access with one alternative or the other. Mark Smith noted the northern alternative uses slightly more land so development potential is reduced.

PUBLIC COMMENTS
A letter from Bill Kalanges in support of alternative #1 (northern alignment) was noted. Mr. Kalanges is one of two major land owners impacted by the road project.

A letter from Lincoln Development Group noted reservations with the original design. Lincoln Development Group is the other major landowner impacted by the road project.

It was mentioned Depot Home property is also impacted by the road project.

Lee Tuure observed the northern alignment appears the least costly, but impacts the Lincoln Inn property. Mr. Tuure asked for an update on the rail and bus transportation hub concept. Dave Crawford explained the Lincoln Development Group has a conceptual plan that includes a transportation hub. An application has not been filed as yet. The concept of in-fill is being encouraged in the area. Mr. Tuure suggested a fence be installed for safety purposes to help direct people to cross the railroad tracks in the designated places. Mark Smith stated the northern alignment will have a fence where the road is up against the railroad tracks. Pedestrian crossings (gates and signals) are incorporated in the road crossings.

Nick Meyer asked if houses on Main Street and Maple Street will be impacted by the road. Mark Smith stated there are noise and traffic impacts. Most traffic is flowing onto Route 117. A fraction is going to Route 15. There will be an increase in traffic on Railroad Street. Parking will remain as is on Railroad Street. George Tyler observed the traffic flow has not changed and now there will be two busy intersections to navigate. Robin Pierce noted Mr. Bushey (gas station) is in support of the proposed traffic light at the crescent road intersection because crossing the road is dangerous for pedestrians. Mark Smith stated there will be the same number of cars, just taking a different route. Congestion will be less at Five Corners.

Marla Durham asked if input from the police has been sought on safety issues with the proposed connector. Robin Pierce confirmed he discussed the initial idea for the road with the Police Chief. Eleni Churchill assured there can be discussions with the police about the road.

IV. OLD BUSINESS
1. Action on Design Alternative for Crescent Connector Road
It was observed that the northern alternative satisfies the needs of the road and has fewer impacts than the southern alternative. The northern alternative is also less expensive.
MOTION by John Lajza, SECOND by George Tyler, to defer the decision on the crescent connector alignment until the next Trustees meeting when the full board is present. VOTING: unanimous (4-0); motion carried.

2. Consider and Take Action on EJRP Agreement from Prudential Committee
Peter Gustafson recused himself from deliberation/decision on the matter as a member of the Board of Trustees.

George Tyler clarified at issue is the land lease between the village and the school district signed in Year 2000 to operate the parks and recreation department on village owned land. The lease expires in July, 2011. The Prudential Committee copied the same agreement verbatim with the exception of extending the end date to 2019 when the bond issued to the school district for the pool and facilities will be paid in full. The agreement does not discuss ownership, just the operation of the recreation department. The Prudential Committee signed the agreement (end date 2019) which is distinct from the agreement sent by the Trustees to the Prudential Committee allowing oversight by village staff and involvement in the governance of EJPR as well as changing the status of the school district to essentially a private contractor.

PUBLIC COMMENTS
Harlan Smith, Fuller Place, read and submitted a statement requesting that the Board of Trustees sign the agreement sent by the Prudential Committee or hold a special meeting to consider the petition that was submitted requesting the Trustee stop wasting time and taxpayer money on the recreation issue and to take public comment on who should govern EJRP. Mr. Smith also submitted several pages of date stamped comments on the recreation issue stated at various Trustees meetings (taken from the Ch. 17 clickable agenda videos). John Lajza explained his position has been consistent in studying and trying to understand what is best for the community. The first issue to settle is “who owns the keys (to EJRP) and that is what the Declaratory Judgment will determine after which responsibilities can be discussed, said Trustee Lajza. There was further discussion and comment relative to the Prudential Committee being willing to work together on a time line that worked for everyone because there was not a crisis at hand, and the lack of response to requests by the Board of Trustees to meet since August 2010 (an executive meeting was finally held on 1/27/11). John Lajza noted there is much misinformation being circulated. Harlan Smith reiterated the request to sign the agreement sent by the Prudential Committee or to hold a special meeting to gather public input on the governance question and stop spending time and money on the issue. Mr. Smith asked about the comment by John Lajza that the decision was up to the Board of Trustees and not by vote of the voters. John Lajza explained statutorily the matter is the responsibility of the Board of Trustees. Harlan Smith countered on the moral end the Trustees signed up to serve the public as a whole and with the statement that was made the public was dismissed. If the public is not allowed to vote, then the Trustees need to hear the voters’ voice. There may be a vote of no confidence on the budget, warned Mr. Smith. John Lajza explained the Trustees are trying to make a decision based on information and has been having difficulty collecting that information.
Peter Gustafson mentioned the faith the public had in the Trustees prior to the recreation issue. Mr. Gustafson said as a citizen he sent an email to the Prudential Committee and Michael Deweese and the Board of Trustees and Dave Crawford to hold a meeting and not leave until the matter is resolved. Only one response from a member of the Prudential Committee has been received thus far, said Mr. Gustafson. George Tyler interjected there was an executive meeting on 1/12/11 between the leadership of the Board of Trustees and CCSU that was three hours long so the complaint about the Prudential Committee not wanting to meet does not make sense. In the legal document sent to CCSU the first line says “...you are being sued...” so the court matter is a lawsuit, clarified Trustee Tyler, opining there are not two boards arguing, but rather one board badgering another to meet sooner than convenient and demanding information even though the other board has agreed to meet within their meeting schedule and agenda because there is not an emergency or crisis to address. At the last three recreation advisory committee meetings there was only one Trustee (George Tyler) and the Village Manager present, said Trustee Tyler, and at the recreation budget development meeting none of the people complaining about access to budget information were in attendance. Mr. Tyler stated in his experience in the past 12 years there has always been open access to budget information and the meetings, but no one shows up. The Prudential Committee and recreation staff questioned why there should be a break in the agenda and meeting schedule to meet with the Trustees when there is not a crisis, and the Trustees could not say so the theoretical question of ownership was raised, said Mr. Tyler. Who runs the current recreation department and are people satisfied are the questions that should be under consideration and there is plenty of time to come to an answer. The agreement sent by the Prudential Committee to the Trustees maintains the status quo. Everyone agrees that EJRP is the finest recreation department in the state so there is no reason not to sign the agreement, stated George Tyler. Harlan Smith suggested a clause be added to the agreement specifying meetings on a regular basis to answer questions and try to save taxpayer money at every opportunity.

Ryan Hegreness, recreation employee, stated the comparison summary by Deb Billado and the recreation consultant’s presentation on 1/11/11 was inaccurate and misleading. The data were not valid for comparison, but rather was selective and some numbers were just wrong. The summary was not keeping within the scope of hire. A final report with accurate numbers will be available, said Mr. Hegreness. The recreation department always welcomes public comment and takes action as needed. EJRP staff halted action (on the baseball field) based on community opinion. The Trustees are in the same position, compared Mr. Hegreness, with the community saying stop, but the Trustees continuing to move the matter forward. The Trustees are encouraged to consider the vision statement and take action that creates community. There have been hundreds of work hours and thousands of dollars spent on the issue. Steve Atwood asked if revised data will be used for the updated report. Ryan Hegreness said the numbers are based on documents from the departments and confirmation from the directors so the information is accurate. Some comparisons by the consultant were not appropriate (apples to oranges). John Lajza stated Mike Deweese said village staff was not allowed to talk to recreation staff so a consultant was hired. Ryan Hegreness reiterated a ridiculous amount of time has been spent on getting relevant information out to the public when there are
recreation programs to run. There has been lots of information published and available. John Lajza countered the Trustees tried to get information, but the blocking point was “who owns the keys” put forth by Michael Deweese.

Marla Durham, village resident, announced her intention to seek a position on the Prudential Committee again after previously serving 12 years. Ms. Durham contended the Trustees are „reinventing the wheel”. The issue of the recreation department under the Prudential Committee (school district) has been studied. Ms. Durham recalled past effort by John Lajza and Deb Billado to have the recreation department managed by the Board of Trustees, adding the current effort is costing the taxpayers money. The children are well served by the recreation department. The school superintendent does protect the staff and there is a protocol to follow. The taxpayers own the recreation department, not the Trustees or CCSU. The taxpayers built the pool and facilities. The recreation department does a great job and has programs before and after school for the children. Staff is screened as part of the school district protocol. Marla Durham strongly encouraged the Trustees to stop the process now and stop wasting taxpayer money. Problems may have started when the recreation advisory committee became advisory to staff rather than the school board. Ms. Durham urged the Trustees to sign the agreement and include reinstatement of the recreation advisory committee to include members from the Board of Trustees, school board, and staff. John Lajza agreed the connection to the school board was lost with the recreation advisory committee and the Trustee member who tried to join the committee was told he was not needed. Marla Durham stated the issue is dividing the community and this needs to stop now. The Trustees need to sign the agreement. The recreation department funds are separate and should remain separate and not included in the village general fund. Ms. Durham addressed the matter of Peter Gustafson recusing himself noting Mr. Gustafson is protected by the teacher’s union and would not lose his job if he participated in a vote on the matter. Mr. Gustafson replied no matter what his vote might be half the community would either agree or disagree.

John Lajza stated there is much misconception about the Declaratory Judgment and read the definition which is to understand each other’s responsibilities and avoid a lawsuit. There must be ultimate cooperation between the two parties though. Marla Durham suggested holding a nonbinding public vote to see if the voters want the Trustees or the school district to govern the recreation department.

Linda Costello, village resident, recalled why she chose to live in Essex Junction and spend 30 years here as a school teacher. Ms. Costello said the “sandlot fight” between the Trustees and Prudential Committee must stop. The economic development efforts to attract and promote business in the community, good schools, fine library, and great recreation program are what attract people to live in the village, but the dispute has to stop.

Bridget Meyer, chairwoman of the recreation advisory council, recalled when the council change the Trustee delegate stepped down after giving assurance the council did not need a Trustee delegate. There was not a delegate from the school department on the council either. Ms. Meyer suggested there be quarterly reports from the recreation department to
the Trustees or the Trustees could join the recreation advisory council to stay informed on recreation matters. The municipal code says the school department is in charge of parks and recreation so there is question how the issue can continue forward. Dave Crawford stated a legal opinion from Joe McNeil has been received that says the code reflects what is currently happening and can be changed by the Trustees. Ms. Meyer asked if public hearings are required prior to approval of a change in the municipal code by the Trustees. Mr. Crawford did not know if there must be public hearings or if there is an appeal period following action by the Trustees.

Adam Luck, village resident, read a prepared statement asking the Trustees to stop wasting time and money on the recreation issue and to allow the recreation department to continue to thrive. Mr. Luck urged the Trustees to sign the agreement sent by the Prudential Committee and take the issue out of the court to find a solution that is superb.

Trustee Tyler proposed a motion to sign the agreement sent to the Trustees by the Prudential Committee. The motion was not supported with a second or a vote. Harlan Smith reiterated there will be a vote of no confidence on the village budget by the taxpayers because there is no trust in the Board of Trustees.

George Dunbar, III, village resident, stated the recreation advisory council no longer being a subcommittee of the Prudential Committee and designating/appointing its out members is a problem because the open meetings laws do not apply. Meetings should be properly warned per the law and minutes taken so the council is accountable to the public or a political body. The recreation advisory council should be part of the Prudential Committee, said Mr. Dunbar, and the Trustees are urged to accept the agreement and reinstate the recreation advisory committee as it existed prior to 2008. Linda Waite-Simpson explained the Prudential Committee was advised subcommittees that have fulfilled their charge should be disbanded and not allowed as a standing committee. There is a 10 year strategic plan for the recreation department and an advisory council to staff, much like the PTO function to the schools. The council appoints its own members who are ambassadors to the community. Staff advises the Prudential Committee.

Ms. Waite-Simpson expressed hope in earnest that the Trustees will adopt the agreement that was forwarded because nothing is broken and it is time to move on. The matter of appointed seats on the recreation advisory council can be reconsidered if necessary, said Ms. Waite-Simpson. The Trustees have been repeatedly invited to meetings with the Prudential Committee. The meeting on 2/3/11 was set aside for discussion with the Trustees. The legal opinion was prepared and available for discussion, but only Trustee George Tyler attended the meeting. The Prudential Committee has offered opportunity to answer questions and concerns, but no one has showed up. John Lajza asked what is wrong with having some oversight by both boards. Mr. Lajza said better understanding is needed of why the Prudential Committee did not communicate concerns at the executive meeting. Linda Waite-Simpson stressed there was discussion in detail at the three hour meeting of operational issues with two boards overseeing the recreation department, but there is nothing broken with the current model. John Lajza said the Trustees wanted to continue to study the formulas used (financials) which was in the contract. Ms. Waite-
Simpson clarified the village ordinance says the school district has complete oversight of the parks and recreation department. The Prudential Committee has complied with the ordinance since 1985, and now the Trustees are asking the school district to violate the ordinance by demanding village oversight. John Lajza countered per state statute (Title 31) a municipality can delegate authority, but cannot give away authority. Ms. Waite-Simpson stated a public vote on the recreation department budget is held every year which is the school department budget. The village can start its own recreation department if desired. The community changed the charter and the legislature approved the change (in 1983) to have the recreation department under the school district. John Lajza interjected the Secretary of State advised this was a referendum only. Linda Waite-Simpson said the Department of Education maintains the school district’s charter.

Peter Gustafson observed good compromise ideas have been presented and suggested Mike Deweese, Linda Waite-Simpson, Dave Crawford, and Deb Billado meet again and settle the issue. Linda Waite-Simpson pointed out there is a filing by the Trustees in Superior Court which needs to be withdrawn before meeting again otherwise the Prudential Committee has no choice but to retain counsel and address the lawsuit brought by the Trustees. Peter Gustafson said both boards do not want their budgets voted down because the voters are angry about this issue. Lots of work has gone into developing the budgets which are sound. Linda Waite-Simpson urged the Trustees to listen to the people who are angry because the Trustees filed in Superior Court for a judgment. The Trustees hired an attorney and the Prudential Committee hired an attorney with the same tax dollars to essentially sue ourselves, said Ms. Waite-Simpson. Dave Crawford said the legal opinion indicated there is no reason the two boards cannot settle the matter while the court case is filed. Mr. Crawford said Ms. Waite-Simpson is making a condition of negotiation to withdraw the lawsuit before holding discussions. Ms. Waite-Simpson stressed the community is asking the Trustees to stop. Dave Crawford explained the school board can decide whether to come to the table or not. The school board and the citizens are making that statement.

George Tyler calculated the village budgeted $12,800 for legal services and has spent year-to-date $16,900 with half the budget year remaining. The legal budget has been over spent already by $4,129. Mr. Tyler asked the percentage of the legal budget spent on the recreation issue. Dave Crawford confirmed a large portion of the funds have been used for the recreation issue along with a huge amount of emotional and staff time. George Tyler used the analogy of the village being willing to talk while holding a gun to the Prudential Committee. The village took the action in court, not the school department. John Lajza reiterated he wants to understand the responsibilities of each party, recalling at one point in time Linda Waite-Simpson said “maybe we’ll have to sue”. Linda Waite-Simpson denied making the statement.

Charlee Day, Prudential Committee member and village resident, said Trustee Lajza and Billado continue to use the phrase “who owns the keys”, but it is the taxpayers who own the keys. Dr. Deweese never indicated there should be a lawsuit which is what is being implied. Slanderous statements have been made, said Ms. Day, and respect for the Trustees has been lost. Ms. Day said she feels “bullied” and will not cast her vote in
support of John Lajza for Trustee. Ms. Day said the school district has a nonbinding vote on the ballot for the public to indicate who they want to run the recreation department.

Annie Cooper, village resident, accused Trustee Lajza of not being truthful. Ms. Cooper spoke of respect for the people in the school and recreation departments and the work that is done, and then having misinformation or incorrect information stated by the Trustees at televised meetings. Ms. Cooper said the Trustees are creating division and are disrespecting the people who work hard in the school and recreation departments which is absolutely disgusting.

A woman in the audience spoke about being inspired by great leadership which includes admitting when a mistake has been made. The people have spoken and the Trustees need to make a decision capable of great leadership.

The consensus of the Trustees is to take action on the agreement when the full board is present. Meeting date to be announced.

3. Adopt and Sign Resolution on WWTF Rehabilitation Project Bond Vote
   **MOTION by John Lajza, SECOND by Steve Atwood, to approve and sign the resolution on the WWTF rehabilitation project bond vote as presented. VOTING: unanimous (4-0); motion carried.**

4. Discussion of Draft Annual Meeting Warning
   There was discussion of adding a nonbinding vote on the recreation department issue to the warning. Dave Crawford stressed it must be clear to the public that the vote is an opinion poll and not binding the direction of the board. John Lajza stated over 800 people spoke against any change in recreation department governance which is fine, but there is problem with some of the contract language and the Prudential Committee is not willing to sign the contract proposed by the Trustees.

   George Dunbar, III, discussed the wording of the articles on the warning, questioning the parenthetical text. Dave Crawford explained the information in the parenthesis is a statement of what is happening now. Mr. Dunbar pointed out there is more money in the rolling stock fund than allowed by the cap and recommended the vote on that item be held before the vote on the overall budget. Dave Crawford explained the rolling stock is a blend of funds from all departments so cutting $115,000 out of the general fund is not a fair way to reduce the rolling stock fund. The fire truck five year note could be extended so the rolling stock cap is not exceeded, suggested Mr. Crawford. George Dunbar pointed out the rolling stock fund does not list the enterprise funds. Dave Crawford concurred the report is in error by saying “street” rather than “sanitation”.

   The consensus of the Trustees is the draft warning as presented is fine and there will be an opinion poll on the recreation issue at the annual meeting.

   **MOTION by George Tyler, SECOND by Steve Atwood, to have a nonbinding survey regarding recreation department governance available during the Australian**
ballot portion of the annual meeting, and that the survey shall not be part of the warned ballet, but be a separate poll.

**DISCUSSION:** John Lajza questioned how the matter can go forward without defining the responsibilities of each party. The two boards have not been able to get together and determine the responsibilities. George Tyler asked if there is anything further to hear from the public that will help make a decision. John Lajza said there must be a contract that allows the Trustees to accomplish the responsibilities they have. Dave Crawford commented there are some conditions that some board members feel have to be in the contract so the opinion poll could ask the public if there is support for an agreement with these conditions. Questions could include whether the governance issue should be in the contract, if an oversight committee should be created, and whether looking at the formulas should be in the contract. John Lajza said his position will not change and spoke in support of going forward with the Declaratory Judgment to define responsibilities. There were no further comments. Dave Crawford will draft sample questions for the survey.

**VOTING:** unanimous (4-0); motion carried.

**V. NEW BUSINESS**

1. Request from Block Party Committee re: Motor Vehicle Ordinance

**MOTION** by John Lajza, **SECOND** by Steve Atwood, to authorize staff to draft the amendment to the motor vehicle ordinance with regard to parking at the annual block party.

**DISCUSSION:** George Tyler asked about liability if a car is damaged during towing. Dave Crawford said the village will tow cars parked on the street. The block party fund will pay for the towing and the village will have the liability. There were no further comments.

**VOTING:** unanimous (4-0); motion carried.

**VI. VILLAGE MANAGER’S REPORT**

The Trustees received a memo on items in the Manager’s Report.

1. Meeting Schedule
   - March 8 @ 6:30 – Regular Trustees Meeting
   - March 22 @ 6:30 – Regular Trustees Meeting
   - April 6 @ 7:00 – Village Annual Meeting
   - April 12 @ 6:30 – Regular Trustees Meeting
   - April 26 @ 6:30 – Regular Trustees Meeting
   - May 10 @ 6:30 – Regular Trustees Meeting
   - May 24 @ 6:30 – Regular Trustees Meeting
   - June 14 @ 6:30 – Regular Trustees Meeting
   - June 28 @ 6:30 – Regular Trustees Meeting

   **Special Meetings/Events:**
   - March 3 @ 1 PM – Reception at CVE for Retiring Police Chief Leo Nadeau
March 3 @ 5 PM – Sign Annual Meeting Warning
April 12 – Australian Ballot Voting for Annual Meeting

2. Arts Grant
Staff is applying for a $25,000 (minimum) grant with a one-to-one match. Application
deadline is March 1st. A letter of interest can be sent and then the Trustees can decide if
they want the grant. Endorsements from businesses in the village can be solicited.

3. Dog Park Ordinance
State land on West Street may be available for a dog park. Dogs cannot be off leash
unless the village ordinance is amended to allow this to happen on the property.

4. Channel 17 Budget Presentation
March 10th is the budget presentation on Channel 17 and March 29th is the candidate
forum.

5. Railroad Crossing
March 11-15, 2011 the railroad will be redoing every crossing. The crossings will be
closed for up to 45 minutes each. Traffic will be detoured.

6. Legal Opinion from Joe O’Neil
The Trustees received copy of the opinion from attorney O’Neil.

VII. TRUSTEES COMMENTS/CONCERNS
John Lajza stated the recreation issue is very confrontational and urged being careful not
to inflame the matter in the community. The intent by the Trustees was to go forward
with low level negotiations, but that did not happen. The Declaratory Judgment is not
suing, but is a clarification of what goes on. Some people are saying very provocative
words on Facebook and the phone and setting bad examples for the children with their
actions.

Peter Gustafson apologized and said he was ashamed to have allowed the tirades to go on
and should have used the meeting gavel to stop the words against Trustee Lajza who has
given many, many hours of community service to the village.

George Tyler stated the community is looking at the Trustees” actions and not hearing the
words. The action by the Trustees was intended to be proactive, but the school district
and public are not taking it that way and there is no explaining it away.

VIII. CONSENT AGENDA & READING FILE
MOTION by George Tyler, SECOND by John Lajza, to approve the consent agenda
as follows and with inclusion of the warrants (bill list, dated 2/22/11):

1. Approve Minutes (2/1/11 & 2/8/11)
2. Approve Warrants
3. Approve Waiver of Noise Ordinance for 4th of July Fireworks
4. Reading List Acceptance (Letters & Communications)
● Reception for Retiring Police Chief Leo Nadeau 3/3/11
VOTING: unanimous (4-0); motion carried.

IX. EXECUTIVE SESSION and/or ADJOURNMENT
MOTION by Peter Gustafson, SECOND by Steve Atwood, to adjourn the meeting.
VOTING: unanimous (4-0); motion carried.

The meeting was adjourned at 10:55 PM

RScty: M.E.Riordan
APPENDIX 13

Summary Memo to Board of Trustees from CCMPO
Memorandum

To: Village of Essex Junction Trustees
From: Eleni Churchill, Senior Transportation Planner, CCMPO
Date: March 2nd, 2011
Subject: Crescent Connector Road Scoping Study

The purpose of this memorandum is to summarize the results of the Crescent Connector Road Scoping Study that the Village of Essex Junction in cooperation with the CCMPO initiated in the summer of 2010.

As you know the purpose of this project is to create an additional route connecting Park St (VT 2A) with Maple St (VT 117) and Main St (VT 15) in order to facilitate regional travel; improve local circulation in the Village center; improve operations at the congested Five Corners intersection; and open up Village center properties to economic development.

Traffic analyses were conducted for two design alternatives (northern and southern) of the crescent connector as well as a no-build alternative. Results from these analyses indicated that the two build alternatives have similar benefits as far as traffic circulation and travel times are concerned:

- An estimated 3,000 vehicles per day will be using the crescent connector under both build (northern and southern) alternatives
- Both build alternatives reduce overall traffic at the Five Corners intersection by 11% to 12% during the afternoon peak hour of travel—specific approaches see higher reductions in traffic
- Queues and delays at the Five Corners intersection decrease under both build alternatives in the future planning year of 2030

Resource impact assessments, including agricultural lands; wetlands; archeological and historic sites; noise; and other resources were conducted for both build alternatives. The Archeological Resource Assessment and Historic Resource Review of the study area indicated a number of historic resources in the vicinity of the project area and identified the Baxter Bros. Cannery/Mason Bros. Warehouse as a significant historic structure likely eligible for inclusion on the National Register of Historic Places. There was a strong recommendation in the report to avoid any harmful impacts to the historic buildings because such impacts would likely result in a determination of Adverse Effect on historic resources.

The southern alignment has an adverse and significant impact on the Baxter Bros. Cannery/Mason Bros. Warehouse historic structure. The northern alignment does not have any impacts to historic structures in the area.

In summary, I offer the following observations:
• Both alternatives meet the purpose and need of the project
• Traffic benefits are the same for both build alternatives
• The southern alignment significantly impacts the Baxter Bros. Cannery/Mason Bros. Warehouse building, a historic structure, which will probably lead to a determination of Adverse Effect on historic resources
• The cost of the northern alignment is estimated to be $2,515,000 whereas the cost of the southern alignment is estimated at $2,694,000. The estimated cost of the southern alignment does not include any additional costs to address the impacts to the Baxter Bros. Cannery/Mason Bros. Warehouse historic structure which might be substantial.

I hope this memorandum will assist you in your deliberations on the preferred alternative for the Crescent Connector Road.

Cc: Dave Crawford, Essex Junction, Village Manager
Michele Boomhower, CCMPO Executive Director
APPENDIX 14

Preferred Alternative Meeting Minutes (Village Trustees 3-8-11)
VILLAGE OF ESSEX JUNCTION
BOARD OF TRUSTEES
MINUTES OF MEETING
March 8, 2011

BOARD OF TRUSTEES: Deb Billado (Village President); Peter Gustafson, George Tyler, Steve Atwood, John Lajza.

ADMINISTRATION: Dave Crawford, Village Manager; Robin Pierce, Development Director.

I. CALL TO ORDER and PLEDGE OF ALLEGIANCE
Village President, Deb Billado, called the meeting to order at 6:30 PM and led the assemblage in the Pledge of Allegiance. Ms. Billado commented on briefings by Supreme Court Chief Justice John Roberts regarding free speech and public debate, cautioning that commitment to open debate is not license for verbal assault.

II. AGENDA ADDITIONS/CHANGES
Include in „Old Business“, Item #4 (action on EJRP Agreement):
- Information on the Declaratory Judgment and Modified Motion on EJRP Agreement

Include in „Manager‟s Report“:
- Notation that there will be a community dessert prior to the annual meeting rather than a dinner because student servers are not available.
- Draft newsletter needs review and comment prior to being mailed.

Add to Consent Agenda:
- Amendment to Employee Agreement relative to employee range changes.

INJUNCTION re: RECREATION DEPT.
George Tyler asked for clarification on the injunction to bar the Recreation Department from using village property after July 1st. Dave Crawford stated there is a need to be resolved and the injunction is part of the Declaratory Judgment (a request to do an injunction). George Tyler noted the injunction document is in addition to other documents provided to the Board of Trustees to this point. The most recent document was the summons (for the Declaratory Judgment). Mr. Tyler stressed he had no idea the Trustees would be filing an injunction. Dave Crawford reiterated the injunction is part of the Declaratory Judgment action. George Tyler asked if and when the Trustees discussed the injunction. Mr. Crawford said the matter came out as the case was reviewed. Trustee Tyler asked if the injunction was discussed during a Board of Trustees meeting. Dave Crawford said the decision to file did not take place in a Trustees meeting. The decision was to move the matter forward as quickly as possible which is as the lawyers advised to do. George Tyler asked who made the decision on the injunction. Dave Crawford said he was involved as were the two attorneys to match the agreement that was made at a Trustees meeting to move forward as quickly as possible. George Tyler questioned at what point the Board had control over the process since he was unaware the Trustees were filing an injunction. Mr. Tyler said he just learned about the injunction now. Deb
Billado stated the injunction is part of the process and may help move the case forward before the court so hopefully there can be resolution.

III. GUESTS AND PRESENTATION
1. Comments from Public on Items Not on Agenda
   There were no comments from the public.

2. Public Hearing: Land Development Code Amendments
   The public hearing was opened at 6:38 PM. Dave Crawford noted a list of the amendments to the Land Development Code is available. Mr. Crawford also noted receipt of an email, dated 3/2/11, from the property owner of Post Office Square against sandwich board signs. There were no other comments from the public.

   MOTION by George Tyler, SECOND by John Lajza, to close the public hearing on the Land Development Code amendments. VOTING: unanimous (5-0); motion carried.

   The public hearing was closed at 6:43 PM.

IV. OLD BUSINESS
1. Action on Land Development Code Amendments
   MOTION by John Lajza, SECOND by Peter Gustafson, to adopt the Land Development Code amendments as advertised and considered at the public hearings on 1/8/11 and 3/8/11.

   DISCUSSION: George Tyler recalled there were comments from business owners on the sandwich boards. John Alden, Essex Junction Planning Commissioner, explained the Planning Commission felt sandwich board signs belonging to a store should be by the business and not on a sidewalk far away from the store. Businesses in the Five Corners area are different in character and have the sidewalk close to the store front. The Planning Commission felt there is a benefit to show there are two kinds of retail in the community. Dan Kerin, Essex Junction Planning Commissioner, mentioned sandwich board signs can hinder sight distance. There were no further comments.

   VOTING: unanimous (5-0); motion carried.

2. Consider/Action on FY’10 Audit Report
   MOTION by John Lajza, SECOND by Steve Atwood, that the Trustees acknowledge review and acceptance of the FY2010 annual audit as prepared by Sullivan Powers & Co. VOTING: unanimous (5-0); motion carried.

3. Action on Design Alternative for Crescent Connector Road
   MOTION by Peter Gustafson, SECOND by Steve Atwood, to accept the progress report for the CCMPO Crescent Connector Road Scoping Study and preference for the “Northern Alternative (#1)".
DISCUSSION: George Tyler recalled there is a conflict in that several land owners are involved and the least expensive alternative and the one that can move forward with the most ease (alternative #1) is opposed by the most significant landowner involved (Lincoln Inn). The decision on the road should not inhibit the process of development of the Lincoln Inn property. Robin Pierce explained the issues with the Lincoln Inn property owner can be worked out. Mr. Crawford said the Lincoln Inn owners have said if they had their druthers they would prefer the southern alignment, but they do not hold the rights to the Depot property to the south. The owner of the Depot property is in support of the northern alignment. Two of the three property owners are in favor of the northern alignment. By accepting the progress report the CCMPO can finalize the study. Deb Billado asked about the southern alternative. Robin Pierce explained there are impacts with the southern alignment including an historic building, businesses being displaced, the Lincoln Inn no longer having an option on the Depot property, and expense. The study looked at the best alternative based on cost and the southern alignment is the more expensive alignment. There were no further comments.

VOTING: unanimous (5-0); motion carried.

4. Consider/Action on EJRP Agreement from Prudential Committee

Peter Gustafson recused himself from deliberation/decision on the matter as a member of the Board of Trustees.

MOTION by John Lajza, SECOND by Steve Atwood, that the Trustees hereby acknowledge the receipt of the Prudential Committee’s Proposed Recreation Agreement (dated 2/10/11) and after considering the proposal finds it does not address the Trustees’ continuing concerns regarding the need for sections addressing: (1) the ownership issue; (2) the need for an oversight committee to deal with public access to the decision making process issue; (3) a method for defining the costs for CCSU services; and (4) specifically approving the lease of village properties.

DISCUSSION: George Tyler spoke with self constraint against going “farther and farther down an alley” by not accepting the agreement. Mr. Tyler recalled the joint three hour meeting with the Prudential Committee in January and the Trustees feeling they were not given the answer they sought and is now saying if the expected answer is not forthcoming there is now a process in place as of July 1st to shut down the Recreation Department. Per the action the Recreation Department will have to abandon the property or they will be deemed trespassing. Mr. Tyler said the Recreation Department has been operating and functioning for the past 42 years with the Prudential Committee (another elected board) and they will have to cease operation and abandon the property if there is no agreement. Mr. Tyler stated the simplest way to get rid of the emotion surrounding the matter is to sign the agreement and continue the contract that has been in place and served the community well for the past 42 years, then deal with the other items over time with a subcommittee. John Lajza respectfully disagreed, recalling the Trustees sent
a contract marked “draft” to the Prudential Committee and requested a meeting which did not happen. The Prudential Committee sent back the exact same contract as the existing contract except with an extended end date. Mr. Lajza agreed the strife needs to end, but the question of who owns the Recreation Department needs to be answered. The injunction will do this. There is no lease and there are insurance implications after July 1st. That is the problem, continued Mr. Lajza, not who operates the Recreation Department. George Tyler stated the Recreation Department has been in operation since 1970. The community “owns” the Recreation Department which has been functioning and operating for 42 years and no one cared about the question, yet now it is so important the Trustees are willing to shut down the department to get a theoretical answer to a theoretical question. John Lajza disagreed that the department will be shut down. Deb Billado clarified the three hour meeting in January with the Prudential Committee Chairwoman and Mike Deweese was not a negotiation. According to Superintendent Deweese the meeting was a meeting of the leaders, and at that meeting the village was basically told the agreement that was offered was not accepted in totality, there is no negotiation, and, in fact, CCSU does not believe an agreement is needed because they own EJRP. That is when the question of ownership was raised, said Trustee Billado, and if the school district owns the Recreation Department then the Village Trustees have no grounds to move toward an agreement; a lease is needed rather than an agreement. When Mike Deweese posed the question of ownership on 1/12/11, continued Ms. Billado, there was agreement an answer was needed in order to know whether an agreement or lease is necessary. The issue should not be left unresolved for future boards, advised Ms. Billado. The Trustees have been trying to meet with the Prudential Committee since July 2010 without success. There has not been a board meeting with the Prudential Committee to date, and now the focus has changed from trying to meet to who owns EJRP. An answer to Mike Deweese’s question is needed in order to move forward. Georg Tyler clarified with all due respect that from the notes and memos to date there is a misunderstanding of Mr. Deweese’s question. Mr. Deweese did not say “ownership”, but said “who owns the keys” and he was referring to what the village determined in 1985 with the Code that the school district runs and has full authority to control the Recreation Department. Deb Billado stressed she was present at the meeting in January with Mike Deweese and knows exactly what was said and inferred. What was inferred was the school district owns EJRP. George Tyler said he has not seen a single document saying the school district owns the Recreation Department. The school district has said they own the buildings. Deb Billado stated programs are not a transferrable commodity (cannot own the programs). George Tyler noted the village attorney even said “the Recreation Department is a school district entity”. Mr. Tyler referred to the injunction, Piece #8, which says “when the agreement expires the district will have no right to use the parks and will be trespassing on the village’s property and such trespass constitutes irreparable harm to the village” and Piece #9 which
says “the district, its agents and employees shall be enjoined from entering the parks upon expiration of the agreement” so if the injunction goes into effect then the department is shut down. John Lajza interjected the action is saying there must be an agreement in place, either a lease or a contract. Mr. Lajza mentioned recreational statutory authority of the municipality through Title 31 that defines the rights of the legislative body of a municipality to tax, create, oversee, provide free music, and delegate power to another entity, such as a school board, adjoining municipality, tax free entity or committee created and adopted by the board of a municipality. George Tyler said no one doubts the right to create and run a recreation department, but now the Trustees are threatening to shut down the Recreation Department. Deb Billado stated other options include transferring the agreement to another organization, having a new agreement with the Prudential Committee, transferring the administration to another organization or returning the operation to the village administration. George Tyler pointed out the other options are not stated in the injunction. Deb Billado rebutted the options do not need to be stated in the legal document. Deb Billado clarified if the administration of EJRP is transferred to the Town of Essex or Colchester or Williston, for example, then the Essex Junction School District no longer has the ability to carry out its current activities at the parks. George Tyler urged declaring the Recreation Department as great and acknowledging the good job that is done as the priority and moving the legal issues off the table until everything calms down. Deb Billado rebutted the question of who owns the keys still needs to be answered and cannot be left hanging for future boards. There are people on both sides who feel oversight of EJRP belongs to the village or to the school district. John Lajza added negotiation is always the potential though the Trustees have failed for the past nine months to get the Prudential Committee to discuss the matter so there is no other way than to find out who has the keys. George Tyler spoke a final plea for the sake of the community and community harmony to restore the agreement that has been in effect for the past 42 years and take up the other items at a later time. John Lajza said this has been done and it does not work.

PUBLIC COMMENTS

Gabrielle Smith asked if some of the other options that were mentioned (i.e. other towns administering the recreation program) have been explored with regard to any budget complications. Ms. Smith urged doing this soon as summer programs need to move forward. Ms. Smith expressed concern the current legal actions could endanger the summer programs.

Marla Durham refuted Deb Billado’s recollection of noninvolvement in the movement involving the Recreation Program 10 years ago. Ms. Durham said both Ms. Billado and Mr. Lajza attended meetings and Ms. Billado contacted her about control of EJRP. Ms. Durham spoke of the work to set up recreation programs and parents counting on the programs. The community is behind the Recreation Department and it is a mistake to sign an injunction of this nature, warned Ms. Durham, adding according to conversation with Mr. Deweese and Ms. Waite-Simpson about the meeting in January with Deb Billado and Dave Crawford.
someone on the village side mentioned the funds from the Recreation Department could be confiscated because the Village Administration collects the school district monies and the Recreation Department monies. Ms. Durham said Mike Deweese asked if the doors will be padlocked to the pool at the start of the swim program on July 1st and Dave Crawford said he would do whatever needs to be done. Ms. Durham said in her experience Mike Deweese would never do anything to injure or harm kids in the district. Ms. Durham expressed sadness that after a three hour meeting with four leaders it has come to this point. The Prudential Committee could not meet with the Trustees because they were dealing with Challenge for Change, continued Ms. Durham, expressing pride at the hard work and what was accomplished. The school district was one of only two that met Challenge for Change under the leadership of Mike Deweese. Deb Billado volunteered to forward Ms. Durham the comments read at the start of the meeting relative to respect for individuals and raising the bar on attacking people.

Dan Kerin observed the recreation program may be outstanding because it is operated under CCSU. Surrounding communities do not have such an outstanding recreation program. It appears the Trustees must have a problem with CCSU since transferring the operation of the Recreation Dept. to another town is acceptable. Deb Billado clarified it is a matter of having an agreement with CCSU. Mr. Kerin asked if the agreement is the „bargaining chip“ on coming to an understanding on governance. Trustee Billado explained the draft agreement sent to the Prudential Committee by the Trustees contained provisions on oversight and joint management, but the agreement sent back by the Prudential Committee is the same agreement the first 350 petitioners urged not to sign. Ms. Billado said she understood the directive to be to work with the Prudential Committee so a new agreement was crafted that brought the two boards together on oversight and management of EJRP, but that agreement was thrown out in totality without room for negotiation, leaving the original agreement which does not meet the needs. Dan Kerin commented the agreement met the needs of the community for many years and expressed concern about the detrimental effects of what is happening, that good programs will be destroyed. Deb Billado recalled during the merger process there was a study of merging the two recreation departments and neither program would have been hurt. Also, the study by the consultant, Denise Clavette, indicated transitioning the Recreation Department would be transparent to the taxpayer and the user. The process would take three months if it occurs. Mr. Kerin recalled the consultant also said EJRP is the finest in the state and did not see an issue with current operation. The consultant also brought up the issue of more parks and bike paths, but the community has more per acre recreation space than any other place in the state. Deb Billado pointed out the small size of the village is the reason for the ratio. Dan Kerin said in a recent conversation with Polly Whitcomb (long time resident farmer in Essex Junction) Ms. Whitcomb said recreation was transferred to the school department in the 1970s because the village government did not feel competent to run the program and this has worked well for the past 42 years. Deb Billado stated the reason for the transfer in the „70s was due to a difference of opinion between the recreation director and some trustees. Several teachers felt they could do a good job managing the recreation department. To clarify, the
Recreation Department was transferred to the Prudential Committee, not CCSU. The Prudential Committee uses CCSU for administration purposes. Sue Earl Hale said her family participates in the recreation program. Ms. Hale commended Peter Gustafson for recusing himself and George Tyler for being the only Trustee making sense in the matter. Ms. Hale said there are many people behind George Tyler because they feel he is advocating the right thing.

John Lajza stated regarding the recreation budget being incorporated into the general fund, the Trustees have not said this would happen. Mr. Lajza said he would not support incorporating the budget into the general fund. The budget in place by CCSU for the Recreation Department would simply be moved over and maintained as a separate entity. There were no further comments.

VOTING: 3 ayes, one nay (George Tyler), one abstention (Peter Gustafson); motion carried.

Peter Gustafson again urged three Trustees and three Prudential Committee members to sit down and resolve the matter before budgets are voted at the annual meetings. Deb Billado agreed and supported the suggestion. George Tyler disagreed with all due respect saying the matter has been incorrectly framed unfortunately as a dispute between the school board and the Board of Trustees, but it is not. This all along has been about the attitude and tactics of the Board of Trustees and doing something that did not need to be done. It could have been done a very different way. The school board has just been trying to do what they have been doing for the past 42 years and for the last seven months they have been trying to run the schools, said Mr. Tyler, so to try to drag them in and say it is as much their fault as ours is incorrect. It is the tactics and attitude of the Board of Trustees that has been the problem. Peter Gustafson politely disagreed, saying “it takes two to tango”. At the very least six people need to get together and work it out, urged Mr. Gustafson.

V. NEW BUSINESS
None.

VI. VILLAGE MANAGER’S REPORT
The Trustees received a memo on items in the Manager’s Report.

1. Meeting Schedule
- March 22 @ 6:30 – Regular Trustees Meeting
- April 6 @ 7:00 – Village Annual Meeting
- April 19 @ 6:30 – Special Trustees Meeting (if quorum available)
- April 26 @ 6:30 – Regular Trustees Meeting
- May 10 @ 6:30 – Regular Trustees Meeting
- May 24 @ 6:30 – Regular Trustees Meeting
- June 14 @ 6:30 – Regular Trustees Meeting
- June 28 @ 6:30 – Regular Trustees Meeting
- July 12 @ 6:30 – Regular Trustees Meeting
- July 26 @ 6:30 – Regular Trustees Meeting
Special Meetings/Events:
- April 12 – Australian Ballot Voting for Annual Meeting
- May 28 – Memorial Day Parade
- July 23 – 10th Annual Block Party

2. Candidate Filing Date Extended
There are three candidates for the two year Trustee position (Tim Allard, Lori Houghton, George Dunbar, Sr.) and two candidates for the three year Trustee position (Peter Gustafson, George Tyler, and Dan Kerin). The Village Manager will send a letter offering to answer questions on issues.

3. Snow Removal
Pictures showing the snow removal effort were shown.

4. Sale of Sewer Capacity to Williston
Meetings with Williston are scheduled to move the sale of sewer capacity forward.

5. Railroad Crossing
A new plan is in place for work on the railroad crossings in the village which will not disrupt traffic.

6. Passenger Shelter at Train Station
There is a preliminary plan for a passenger shelter at the train station. Discussions are ongoing with CCTA, New England Central, and Amtrak.

7. Public Outreach on WWTF Bond Vote
Information brochures, Channel 17 video, and the village newsletter all contain explanation of the upcoming bond vote on the needed improvements to the treatment plant.

8. Grants
The village received an emergency management grant for half the cost of a new generator (total cost is $42,000). Application has been made for a grant to purchase trees in public places and on private property by agreement.

9. Railroad Ave. Information Sign
The sign project is going out to bid.

10. Safety and Wellness Committee
Meetings are scheduled for the committee.

11. Tree Farm
The purchase and sale agreement has been signed.

VII. TRUSTEES COMMENTS/CONCERNS
- Peter Gustafson gave an update on the police station search (358 parcels and 74 existing building were reviewed by the committee, winnowed down to four sites for consideration). A new committee will review the four sites in depth and make a recommendation to the Selectboard. The sites are property by Ehlers on Route 15, IBM property on Maple Street, Torrey property on River Road, and land behind CVS Pharmacy in Essex. A two story building with underground parking is planned.

- John Lajza complimented the street crew on snow removal efforts.

VIII. CONSENT AGENDA & READING FILE

MOTION by Peter Gustafson, SECOND by Steve Atwood, to approve the consent agenda as follows and with inclusion of the amendment to the Employee Amendment (memo from Dave Crawford, dated 3/8/11):

1. Approve Warrants
2. Approve and Sign Resolution for Adoption of Essex/Essex Junction All Hazards Mitigation Plan
3. Approve Trustees Report for Annual Report
4. Reading List Acceptance (Letters & Communications)
   - LCRCC Business After Hours at CVE 3/24/11

DISCUSSION: George Tyler suggested the contentious items mentioned in the Trustees Report for the Annual Report be removed. Deb Billado will review the report.

VOTING: unanimous (5-0); motion carried.

IX. EXECUTIVE SESSION and/or ADJOURNMENT

MOTION by Peter Gustafson, SECOND by Steve Atwood, that the Board of Trustees go into Executive Session to consider personnel matters (Village Manager’s annual evaluation). VOTING: unanimous (5-0); motion carried.

The regular meeting was adjourned and Executive Session convened at 7:55 PM. Executive Session adjourned at 9:15 PM.

RScty: M.E.Riordan
APPENDIX 15

Detailed Opinion of Costs
## Essex Junction Connector Road Scoping Project

December 7, 2010

### COST ESTIMATE - DRAFT

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### CONSTRUCTION TOTAL $1,123,372

- misc items** 10% $112,337
- demolition of existing facilities 2% $22,467
- railroad crossing work see separate est $485,000
- additional gates / flashers at VT2A $160,000
- stormwater treatment 5% $56,169
- final engineering 12% $134,805
- railroad engineering see separate est $50,000
- construction engineering 10% $112,337
- right of way 0% $-
- overhead utility relocation $-
- Contingency 15% $168,506

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CONSTRUCTION TOTAL $1,369,489

misc items** 10% $136,949
demolition of existing facilities 2% $27,390
railroad crossing work (see separate est) $485,000
additional flashers at VT2A $50,000
stormwater treatment 5% $68,474
final engineering 12% $164,339
railroad engineering see separate est $50,000
construction engineering 10% $136,949
right of way 0% $-
overhead utility relocation $-
Contingency 15% $205,423

GRAND TOTAL $2,694,012

** stormwater plan & monitor, erosion control,