

DRAFT
VTrans Sharon Park and Ride Scoping Report
CMG PARK(42)SC



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August 17, 2016

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1.0 INTRODUCTION

In response to transportation costs and a renewed interest in mass transit, park and ride facilities have gained increasing interest and usage nationally over the last 10 years. Vermont has been no exception. Currently, the Vermont Agency of Transportation (VTrans) operates 23 park and ride facilities statewide and there are approximately 21 municipal park and ride facilities. This scoping report evaluates the need and the potential alternatives for an expanded and/or new park and ride facility in the I-89, Exit 2 area of Sharon, Vermont.

The existing facility is a 23 space facility that is located approximately 240 feet south of I-89 Exit 2 on Vermont Route 132. It is on a land parcel that is owned by the State of Vermont. Given the area's limited existing park and ride facilities and the reports of the existing facility being full at times, VTrans wishes to investigate the existing conditions and develop potential solutions. VTrans contracted with Stantec Consulting Services Inc. (Stantec) to develop a scoping report.

The scoping process includes assessing existing conditions, soliciting public input, establishing the project purpose and needs, evaluating alternatives, and seeking selection of a preferred alternative.



Figure 1 VTrans Park and Ride Locations

A project committee was formed to provide input and guidance throughout the process. Committee members included:

- Wayne Davis – Vermont Agency of Transportation
- Rita Seto - Two Rivers-Ottauquechee Regional Commission (TRORC)
- Greg Edwards, Erik Alling – Stantec

The following report is the result of these scoping efforts.



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2.0 BACKGROUND INFORMATION

2.1 EXISTING FACILITY

The existing facility has the following characteristics:

- Spaces: 23
- Handicap Spaces: Yes - 1
- Surface: Asphalt
- Lined spaces: Yes
- Lighted: No
- Bus Shelter: No
- Bike Rack: Yes
- Telephone: No
- Transit Service: Yes
- Distance to I-89: 240 ft.
- Pedestrian Access: N/A
- Limited snow storage
- Difficult transit circulation due to limited size
- Limited landscaping



Figure 2 Existing Park and Ride

2.2 EXISTING USAGE

The TRORC provided usage counts for the seven VTrans park and ride facilities in their area. The counts were performed on Tuesday October 27, 2015 and Thursday, October 29, 2015. The Sharon park and ride had 88% and 76% occupancy rates respectively on those dates. Of the seven park and rides counted, Sharon had the highest usage by far. The next closest was Bradford, I-91 exit 17, at 50%. When Stantec visited the site on Monday, November 2, 2015, there were only 2 spaces available. VTrans has received calls indicating the Sharon park and ride is frequently full and more spaces are needed.

2.3 EXISTING TRANSIT OPERATIONS

Stagecoach Transportation Services, Inc. (STSI) provides transportation services to the elderly, persons with disabilities, and general public across a 29 town area of northern Windsor and Orange Counties. It operates a route called the 89er North Commuter and serves the Sharon



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Park and Ride at Exit 2. Stagecoach estimated, as referenced in Sharon's 2015 Town Plan, that 50% of its seats are taken from riders picked up in Sharon. A bus schedule is in Appendix A.

Currently, STSI operates a 30 foot, 20-24 passenger vehicle. This vehicle cannot navigate the single driveway lot when filled because there is no ability to turnaround. When the lot is full, the bus has to pass the Park and Ride, turn around at another location and approach the lot from the opposite location. This process adds time to STSI's route.

Due to demand, it is reasonable to consider that a 40 or 45 foot bus may be used in the near future. Typically 10-13 passengers get on the bus at the Sharon Park& Ride stop. STSI suspects that there may be more demand with a larger lot because potential riders pass up the lot when it is expected to be full.

2.4 PARKING DEMAND

To estimate the park and ride lot size, an Institute of Transportation Engineers (ITE) formula was applied. Using traffic volumes projected ahead 20 years from a May 2013 count and using the 1% VTrans interstate projection, and a 6% primary and secondary projection, the formula produced a demand of 62 vehicles per day. Due to the current transit riders using the facility 20 passengers were added to make for 82 parking spaces. See Appendix A for calculations.

3.0 PROJECT PURPOSE AND NEED

3.1 PROJECT PURPOSE

The purpose of this project is to provide a safe and convenient parking facility to encourage the consolidation of travelers and the reduction of single occupancy vehicles on the roads.

3.2 PROJECT NEEDS

- Provide adequate parking capacity to meet future needs. Currently facility experiences some filling of spaces and limited snow removal space reduces spaces in the winter.
- Provide accommodations for public transit and transit riders, such bus access and shelter.
- Locate facilities for visibility and for safe and efficient access by bus and I89 commuting traffic.
- Provide a safe and secure environment by considering lighting, activities near the location and providing landscaping that discourages crime.
- Provide expansion capabilities for potential future user growth.
- Minimize environmental impacts including grading, stormwater runoff, wetlands, floodplains and cultural resources.

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4.0 LOCAL CONCERNS MEETING

A Local Concerns Meeting was held on February 1, 2016. The purpose of the meeting was to collect information and solicit input on the existing conditions of the Sharon Park and Ride and to discuss potential upgrades and alternate locations.

In general, those in attendance were in favor of increasing the capacity of the Sharon Park & Ride and looking into alternate locations for the expansion.

More detailed meeting notes are in Appendix B.

5.0 ALTERNATIVES

The Vermont Agency of Transportation will be responsible for developing the park and ride facility. It will be constructed, owned, and maintained by the State of Vermont. Typically federal transportation funds are used for these projects and their development is subject to Federal Regulations such as NEPA and the Uniform Relocation Act.

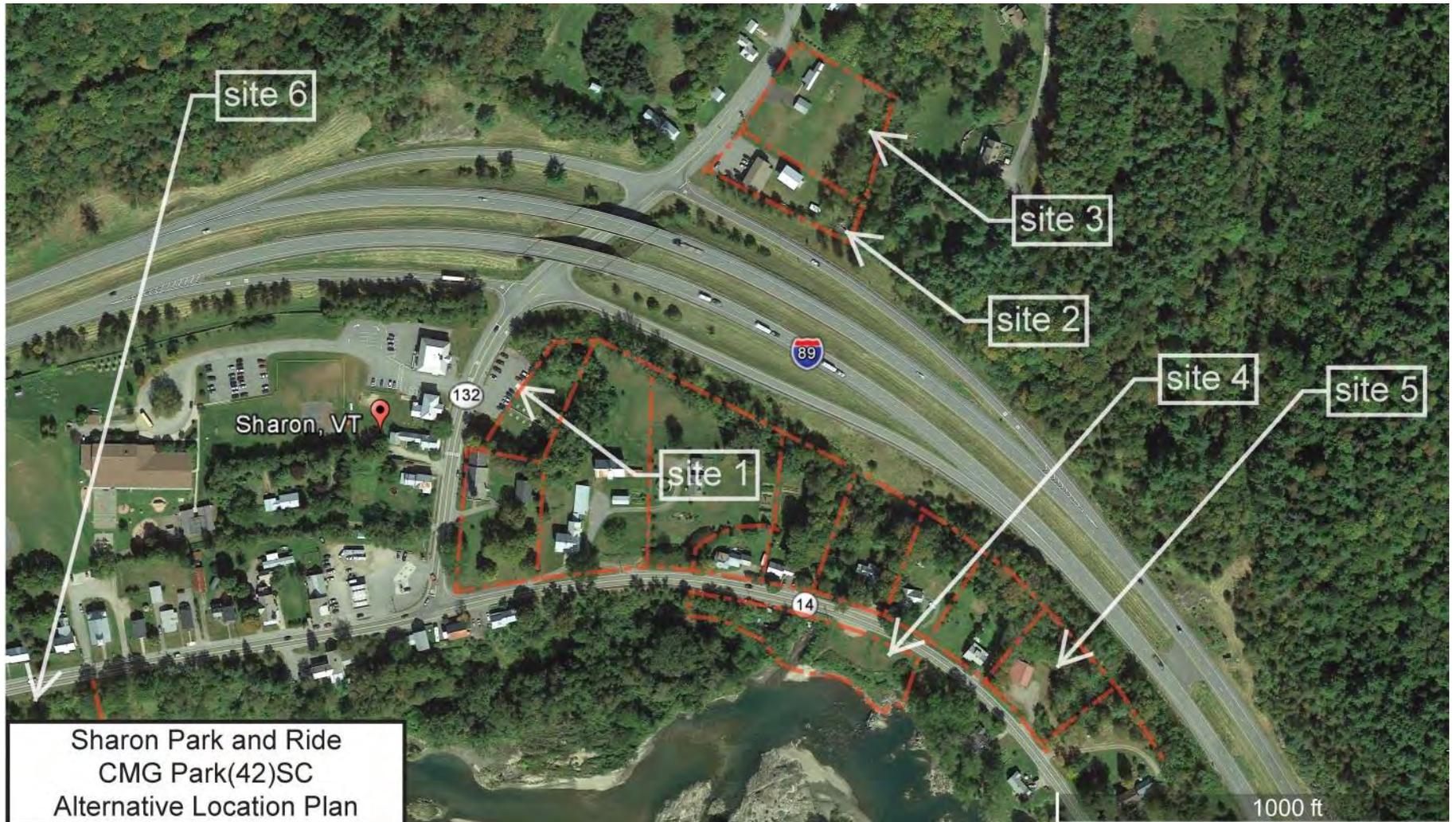
Following the Local Concerns Meeting, Stantec followed up with land owners, reviewed the town land records, and field reviewed various sites. Based on this information, 6 potential sites were identified for consideration and brought to the project team for discussion to determine which should be brought forward for further evaluation. The following location plan illustrates the 6 sites.

The following table provides some preliminary information for each site. This information was reviewed with the project team and three sites were carried forward for further evaluation including performing field resource review, and developing a site plan sketch indicating how a park and ride facility may fit on the site.

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Figure 3 Alternative Location Map



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Figure 4: Summary of Alternative Sites

Site	Name	Owner	Tax Parcel #	Acres	Comments	Recommended Next Step
1A	Improvements within Existing State ROW	State of Vermont		~0.50	<ul style="list-style-type: none"> State owned property, potential impact to environmental resources. Limit area and expansion requires property acquisition 	Include as an alternative in the report and evaluate further.
1B	Expansion of Existing P&R Location	State of Vermont		2.0	<ul style="list-style-type: none"> Requires acquisition of private property Potential to impact current screening/vegetation. 	Include as an alternative in the report and evaluate further.
2	Half Acre Motel Lot	Half Acre Apartments LLC	R02024.R	0.6	<ul style="list-style-type: none"> Land owner seems accepting of development Property currently for sale Small lot with limited capacity Development challenges may require retaining wall, guardrail and steep slopes Direct impact to wetlands. 	Include as an alternative in the report and evaluate further.
3	Durkee Property	Reynolds, Stuart & Barbara (Life Estate) Durkee, Henry C & Connie J	R02028.R 2	1.44	<ul style="list-style-type: none"> Good location adjacent to Exit 2 Open and relatively flat lot Property owner has expressed some interest in selling the property. 	Include as an alternative in the report and evaluate further.
4	Jeremenko Lot	Theodore Jeremenko	019.0006	~0.10 flat and above riverbank, (0.40 total)	<ul style="list-style-type: none"> Site is small and is located adjacent to the outside of a bend in the White River creating risk during flooding periods. Located away from the interstate interchange which creates security concerns. 	Discard from consideration due to the site being located adjacent to the riverbank.
5	Former Sharon Volunteer Fire Station	Flint, Blake & Boles	S14021.L	1.0	<ul style="list-style-type: none"> Property is located 4/10 miles from Exit 2. Main lot is 4-5 feet above VT 132 requiring a steep driveway to access the site. Lot is surrounded by ledge to the north and 	Discard from consideration due to the location, security concerns and small lot size with no possibility for future expansion.



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Site	Name	Owner	Tax Parcel #	Acres	Comments	Recommended Next Step
					<ul style="list-style-type: none"> east. Distance from interstate interchange raises security concerns 	
6	Post Office Pull-off	Town of Sharon		<0.25	<ul style="list-style-type: none"> Lot is small and located adjacent to a steep 25-30 foot high riverbank. 	Discard from consideration due to the small lot size.

Alternative site 4 was discarded because of its small size and close proximity to the White River. Parking would have to be aligned along VT Route 14 allowing for only a small lot with limited spaces.

Alternative site 5 was discarded from further consideration due mainly to its small size. The lot is situated roughly 5-6 feet above VT Route 14's surface necessitating a steep entrance. At one acre total, and with some of the surface being too steep to develop, the lot is quite small and would not accommodate the number of spaces that this project proposes. The lot is surrounded by ledge to the north and east which would make development in these directions impractical.

At less than 0.25 acres, site 6 was also discarded because of its size. Additionally, the site's southern edge is an approximately 30 foot high steep bank of the White River. Because of these constraints, a lot even as big as the undersized existing lot is not possible at this location.

The following sections provide an evaluation of the three remaining sites. For these sites, the natural resources were identified by Stantec. In summary, no jurisdictional wetlands were identified within the project areas. Quation Brook flows from north to south near the eastern limits of Sites 2 and 3. This stream has a mapped 100-foot River Corridor as well as a 100-year floodplain. Any impact to the floodplain would need to be coordinated with ANR and potentially require an Individual Flood Hazard Area and River Corridor Permit. The Project Areas include Prime Agricultural soils. Any impacts to these soils may require coordination with the NRCS via form AD-1006, the Farmland Conversion Impact Rating form. The natural resource review is in Appendix C. An archaeological resource and historic preservation assessment is currently being performed. Once available the results will be included. Given the disturbance and setting of these sites, cultural resources are not anticipated to be an issue but this would need to be verified by the assessment. The northern long-eared bat has been listed as threatened by the U.S. Fish and Wildlife Service in May 2015 and while it is not anticipated that this species is present due to the previous clearing and current use of the sites, the current requirements and necessary actions for construction a park and ride facility will be followed during design.

Using the available aerial orthophotos, a base map was developed for each site. The GIS tax parcel information was added. A park and ride facility of approximately 70 spaces was shown on each site. Based on these sketch plans, the following is a description of each alternative and their attributes and constraints.



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5.1 ALTERNATIVE 1A: EXISTING SITE WITH IMPROVEMENTS WITHIN EXISTING STATE ROW

The existing park and ride site is approximately 0.5 acres of developable land and the area was obtained by the State of Vermont during the ROW acquisition for I-89. Within this area it is possible to provide 35 spaces, but this is well short of the projected need. The improvements of this alternative would include the following:

- Expand the number of spaces to 35.
- Provide lighting to improve security and safety.
- Resurface and delineate parking spaces.
- Add a bus shelter.
- Add an improved bike rack.

This alternative would not provide for a bus turnaround. Transit buses would operate as they do today and not enter the facility when it is full. The limited nature of these improvements would eliminate the need to address stormwater treatment and permit and clearances would be limited to the following:

- NEPA Categorical Exclusion (CE)
- Vermont Construction General Permit

The estimated cost is as follows:

Description	Cost
Construction Cost	\$250,000
Preliminary Engineering (15%)	\$25,000
Construction Engineering (10%)	\$15,000
Right-of-Way	<u>\$0.00</u>
Total Cost	\$290,000

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5.2 ALTERNATIVE 1B: EXPAND EXISTING SITE

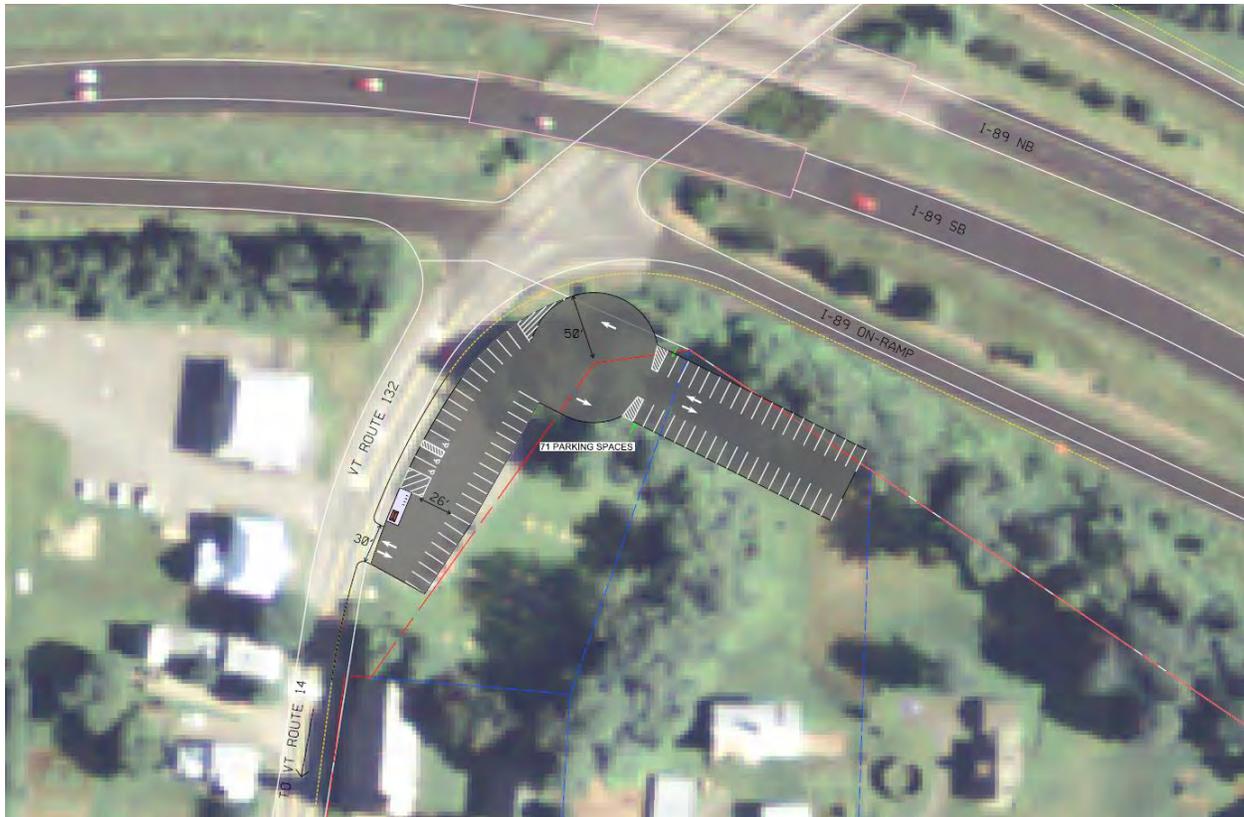


Figure 5 Alternative Site 1B

Alternative Site 1B proposes a 71 space facility, including 3 accessible spaces, that extends north and eastward from the existing facility. It avoids impacting the adjacent horseshoe pits, but does require land acquisition at the northern end of from the Horseshoe Association and the Patricia Donahue property. The access from VT 132 remains at the existing location. The construction requires filling and providing drainage and stormwater treatment facilities. Proposed features of the new facility include the following:

- Expand the number of spaces to 71 with 3 accessible spaces.
- Ability for a bus to turnaround.
- Provide lighting to improve security and safety.
- Delineate parking spaces.
- Provide a bus shelter.
- Provide a bike rack.

The total impervious area of the park and ride facility is less than 1 acre. This will not require a Vermont Agency of Natural Resource Operations Stormwater Discharge Permit and does not strictly require stormwater treatment. It is proposed that stormwater best management practices

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be included in the final design and include the area between the facility and I-89 for this purpose. Additional permit/clearances requirements are as follows:

- NEPA Categorical Exclusion (CE)
- Vermont Construction General Permit
- U.S. Fish and Wildlife Service Section 7 Consultation

Some clearing will be required along the north end side of the facility.

The estimated cost is as follows:

Description	Cost
Construction Cost	\$600,000
Preliminary Engineering (15%)	\$90,000
Construction Engineering (10%)	\$60,000
Right-of-Way*	<u>\$50,000</u>
Total Cost	\$800,000

* Right-of-way is an estimated ballpark amount so as it is accounted for. Actual ROW cost will be based on an appraisal and negotiations.

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5.3 ALTERNATIVE 2: HALF ACRE SITE

The Half Acre site is located adjacent to the I-89 Northbound off ramp. The property contains 2 multi-family buildings with 8 units comprised of (6) one bedroom apartments, (1) two bedroom, and (1) efficiency apartment. It is currently for sale and listed at \$459,000. It is approximately a 120 foot by 400 foot lot. Based on the layout below, 34 parking spaces are provided at this site. This includes locating a bus turnaround at the eastern end that extends into the I-89 ROW. The facility access is from VT 132 approximately 300 feet from the I-89 ramps, The site is relatively flat and the facility is constructed at existing grade and requires removal of the existing dwellings.

Proposed features of the new facility include the following:

- Provide 34 spaces with 2 accessible spaces.
- Ability for a bus to turnaround.
- Provide lighting for security and safety.
- Delineate parking spaces.
- Provide a bus shelter.
- Provide a bike rack.



Figure 6 Alternative Site 2



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The total impervious area of the facility is less than 1 acre. This will not require a Vermont Agency of Natural Resources Operational Stormwater Discharge Permit and does not require the need to provide stormwater treatment. It is proposed that stormwater best management practices be included in the final design and the area between the facility and I-89 would be used for this purpose.

Additional permit/clearances requirements are as follows:

- NEPA Categorical Exclusion (CE)
- Vermont Construction General Permit
- U.S. Fish and Wildlife Service Section 7 Consultation

Some clearing will be required along the north end side of the facility and construction is proposed to be 50 feet from Quation Brook.

The estimated cost is as follows:

Description	Cost
Construction Cost	\$510,000
Preliminary Engineering (15%)	\$77,000
Construction Engineering (10%)	\$51,000
Legal Fees	\$10,000
Right-of-Way*	<u>\$700,000</u>
Total Cost	\$1,348,000

* Right-of-way is the estimated parcel acquisition cost based on the listed price with estimated eligible relocation costs added.

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5.4 ALTERNATIVE SITE 3: DURKEE SITE

The Durkee property is located north of the Half Acre property along VT 132. It is approximately 1.5 acres and contains a one family mobile home and garage. The property is relatively flat and is bordered by Quation Brook to the east. The facility is accessed from VT 132 approximately 700 feet from the I-89 ramps. Based on the layout below, 71 parking spaces are provided at this site. It is sized to allow a 45 foot bus to circulate the parking area. This includes locating a bus turnaround at the eastern end that extends into the I-89 ROW. The facility is constructed at existing grade and requires removal of the existing dwelling and garage.

Proposed features of the new facility include the following:

- Provide 71 spaces with 3 accessible spaces.
- Ability for a bus to turnaround by circulating through the facility.
- Provide lighting for security and safety.
- Delineate parking spaces.
- Provide a bus shelter.
- Provide a bike rack.

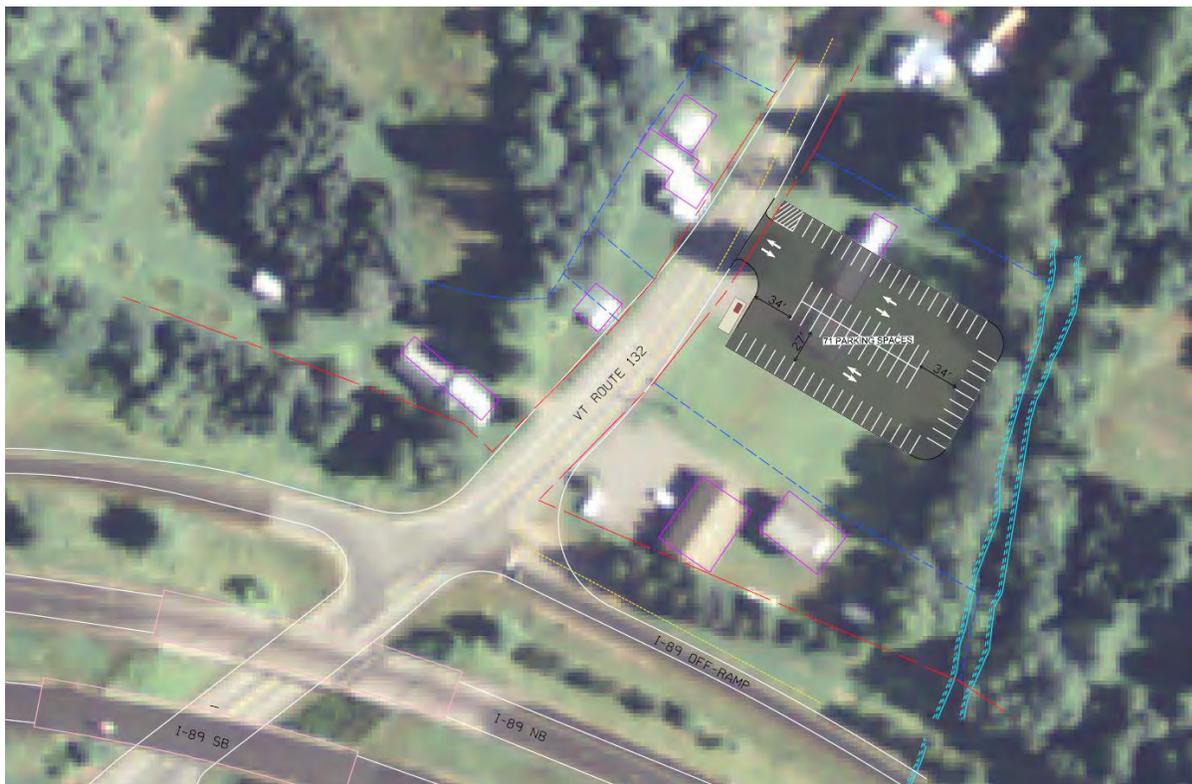


Figure 7 Alternative Site 3

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The total impervious area of the facility is less than 1 acre. This will not require a Vermont Agency of Natural Resources Operational Stormwater Discharge Permit and does not require the need to provide stormwater treatment. It is proposed that stormwater best management practices be included in the final design and the area between the facility and adjacent properties would be used for this purpose.

Additional permit/clearances requirements are as follows:

- NEPA Categorical Exclusion (CE)
- Vermont Construction General Permit
- U.S. Fish and Wildlife Service Section 7 Consultation

Some clearing may be required along the north side of the facility and construction is proposed to be 50 feet from Quation Brook.

The estimated cost is as follows:

Description	Cost
Construction Cost	\$510,000
Preliminary Engineering (15%)	\$77,000
Construction Engineering (10%)	\$51,000
Legal Fees	\$10,000
Right-of-Way*	<u>\$200,000</u>
Total Cost	\$848,000

* Right-of-way is the estimated parcel acquisition cost based on the tax appraisal with estimated eligible relocation costs added.

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5.5 ALTERNATIVES EVALUATION

An alternative evaluation and scoring matrix was developed for this project. A similar method was utilized on previous park and ride facility studies and has been adapted to reflect the issues with this facility. It is not intended that this be the only resource to define the preferred alternative, but to highlight the benefits and limitations of each site and provide a readily comprehensive comparison. The following pages describe the scoring criteria and the results. Based on this, Alternative 3 site scored highest. The Evaluation Matrix and assumptions can be found in Appendix F.

Item	Alternative			
	Alternative 1A: Existing Site With Improvements within Existing ROW	Alternative 1B: Expand Existing Site	Alternative 2: Half Acre Site	Alternative 3: Durkee Site
Economics (33%)				
Ease of Acquisition	No acquisition required	Acquisition required	Favorable property owner	Favorable property owner
Points	20	0	20	20
Site Development Costs	Least	\$800,000 More	\$1,348,000 Highest	\$848,000 More
Points	20	10	0	10
Total Points – Economics	40	10	20	30
Location (33%)				
Proximity to I-89	Close	Close	Close	Close
Points	10	10	10	10
Transit Service Access	Inaccessible	Accessible	Accessible	Accessible
Points	0	20	20	20
Visibility / Security	Good visibility	Good visibility	Good visibility	Good visibility
Points	5	10	10	10
Total Points – Location	15	40	40	40
Site (33%)				
Impacts to Resources	None	None	Minor	Minor
Points	10	10	5	5



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Item	Alternative			
	Alternative 1A: Existing Site With Improvements within Existing ROW	Alternative 1B: Expand Existing Site	Alternative 2: Half Acre Site	Alternative 3: Durkee Site
Effects to Adjacent Property	None	More	Less	More
Points	10	0	5	0
Number of Spaces & Expansion	Does not meet need	Meets need	Does not meet need	Meets need
Points	0	40	0	40
Total Points – Location	20	50	10	50
Weighted Average % of Maximum	57%	69%	56%	86%

6.0 ALTERNATIVES PRESENTATION

To be held on September 20, 2016.

7.0 CONCLUSIONS / RECOMMENDATIONS

Based on the evaluation results and input from the alternatives presentation a preferred alternative will be developed.

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Appendix A EXISTING INFORMATION

Appendix B CORRESPONDENCE, MEETINGS, MINUTES

Appendix C ENVIRONMENTAL EXHIBITS

Appendix D PLANS

Appendix E COST

Appendix F EVALUATION MATRIX AND ASSUMPTIONS