

# Agencies of Agriculture and Natural Resources Collaborative Laboratory Site Analysis



August 2014



Agencies of Agriculture and Natural Resources Collaborative Laboratory  
**SITE ANALYSIS: OVERVIEW**

August 8, 2014

The statutory request:

*On or before August 15, 2014, the Department of Buildings and General Services, the Agency of Agriculture, Food and Markets, and the Agency of Natural Resources shall submit a site location proposal for a shared laboratory to the House Committee on Corrections and Institutions and the Senate Committee on Institutions. It is the intent of the General Assembly that when evaluating site locations, preference shall be given to State-owned property.* (Act 178 of 2014, Section 33)

Buildings and General Services was charged by the Legislature to evaluate and propose a site for new shared laboratory facilities for the Agencies of Agriculture and Natural Resources. The Agencies have worked for two years to define the nature of the laboratory and its governance. They envision a community of environmental scientists, with a core of analytical chemists and biologists and a periphery of applied scientists. The new laboratory will allow them to share support staff and increase their quality assurance, data systems, and safety. From March to May of 2014, the Agencies and BGS developed a detailed program, cutting 4,500 sf from the feasibility study’s program.

The search for a site has been methodical and thorough. Further details of the process, including copies of forms and information for each candidate site, are bound in a companion appendix.

**Advertising and background research**

A comprehensive list of criteria was developed, and BGS advertised in area newspapers for land offers. Fifteen sites were offered, and these were analyzed in addition to four State-owned sites. A civil engineering firm was hired to help BGS. All sites were checked for permitting issues and environmental concerns.

**First round of scoring**

Members from BGS, the Agency of Agriculture, and the Agency of Natural Resources then met to score each site. Eight criteria were used: lot size, lot physical characteristics, utilities, zoning/permitting, neighborhood, special construction costs, benefits of the location to users, and benefits of the location to the State of Vermont as a whole. Cost, either for acquisition or for development, was not considered in this first round. This report is organized by the sites’ ranking, and each site tab sheet briefly explains how that site was scored.

<b>Rank</b>	<b>1 Randolph: VTC</b>	<b>34.0</b>	<b>Rank</b>	<b>11 Berlin: Route 12</b>	<b>27.2</b>
	<b>2 Waterbury: State Complex</b>	<b>30.6</b>		<b>12 Montpelier: Armory</b>	<b>26.8</b>
	<b>3 Colchester: Health Lab</b>	<b>29.8</b>		<b>13 Berlin: Regional Library</b>	<b>26.1</b>
	<b>4 Berlin “Back Lot” (Paine T.)</b>	<b>29.3</b>		<b>14 Richmond: Creamery</b>	<b>24.2</b>
	<b>(tie) Berlin: Dog River Road</b>	<b>29.2</b>		<b>15 Randolph: Exit 4</b>	<b>24.0</b>
	<b>(tie) Colchester: Severance Road</b>	<b>29.2</b>		<b>16 Berlin: F&amp;W Land</b>	<b>23.2</b>
	<b>7 So. Burl: Tech Park</b>	<b>28.6</b>		<b>17 Milton</b>	<b>20.2</b>
	<b>8 So. Burl: Spear St/UVM</b>	<b>28.2</b>		<b>18 Richmond: Route 2</b>	<b>17.5</b>
	<b>9 Montpelier: 2 Rivers Farm</b>	<b>27.8</b>		<b>19 Burl: 195 Colchester Ave</b>	<b>17.2</b>
	<b>10 So. Burl: Hinesburg Rd</b>	<b>27.3</b>			

### **Further research: site plans and cost estimating**

The engineers then analyzed the six top-ranked sites plus two remaining State-owned sites. At this time 195 Colchester Avenue was eliminated from analysis because it was clear the site could not support the project without extreme cost and effort. Cost information was added, creating Chart 1 (page 3).

### **Second round of elimination**

Criteria 7 and 8, benefits to Laboratory programs and users and benefits to the Agencies and the State of Vermont, were now focused on, as well as cost both for acquisition and development. A more detailed description of these criteria may be found in the Appendix. The top four sites' benefits were compared in Chart 2 (pages 4-5).

#### Criterion 7: Benefits to the Programs and Users

- Proximity
- Ability to expand
- Accessibility for volunteers, public and commercial users
- Hold time for samples

#### Criterion 8: Benefits to the Agencies and the State of Vermont

- Intern availability
- Shared equipment and space
- Shared intellectual capital
- Utility and maintenance savings for co-locating State buildings
- Contributing to village and growth center economies

### **Final Recommendation**

The BGS team then eliminated the remaining sites with the following logic:

- 1) The Berlin site is far more expensive than the other options, and it ranks last.
- 2) The Colchester site is limited. For now the entire program can fit on the site, but UVM may need space used for exterior storage at a later date. There is no room for the laboratory to expand. It is the farthest site from Montpelier.
- 3) Waterbury is a good site. It is more expensive to build there, and it is distant from interns. Large savings are possible from sharing heating and cooling from the Complex. This "current asset" of heating/cooling capacity is a one-time savings for the State of Vermont, and the BGS team questions whether this project is the best use of that savings.
- 4) VTC is also a good site. Locating the laboratory at VTC is a big benefit to the laboratory, and it is a huge benefit to the students and faculty of VTC. The benefits of this co-location can be measured for decades, as half the graduating VTC students work in Vermont businesses and State jobs. This location is also the least expensive place to build if heating capacity is shared from VTC.

**BGS recommends the VTC site for the laboratory.**

## CHART 1: Site Related Costs by Ranked Site

<u>RANK</u>	<u>LOCATION</u>	<u>Acquisition Cost</u>	<u>Site Devel. Cost</u>	<u>Peripheral Cost</u>	<u>TOTAL COST</u>
1	Randolph: VTC	\$50	\$890,000	\$50,000 (1) (\$ 360,000) (2)	\$530,000
2	Waterbury	\$0	\$1,170,000	(\$1,130,000) (2)	\$40,000
3	Colchester: Health Lab	\$50	\$650,000		\$650,000
tie	Berlin: Back Lot	\$1,200,000	\$1,140,000		\$2,340,000
tie	Berlin: Dog River Rd	\$632,500	\$1,450,000		\$2,082,000
tie	Colchester: Severance Rd	\$1,260,000	\$550,000		\$1,810,000
7	So Burl: Tech Park	lease	< \$500,000		n/a
8	So Burl: Spear St	\$50	average		\$700,000 +
9	Mplr: 2 Rivers Farm	\$245,000	very high		\$1,050,000+
10	So Burl: Hinesburg Rd	\$725,000	average		\$1,400,000+
11	Berlin: Rte 12	\$400,000	abv. average		\$1,200,000+
12	Mplr: Armory	lease	abv. average		n/a
13	Berlin: Regional Library	\$0	\$810,000	\$3,700,000 (3)	\$4,510,000
14	Richmond: Creamery	\$575,000	abv. average		\$1,400,000+
15	Randolph: Exit 4	\$500-750k	abv. average		\$1,300,000+
16	Berlin: F&W Land	\$0	\$1,720,000	\$170,000 (4)	\$1,720,000
17	Milton	\$550,000	average		\$1,200,000+
18	Richmond: Rte 2	\$1,250,000	abv. average		\$2,100,000+
19	Burl.: 195 Colchester Ave	\$0	very high		\$950,000+

**Notes:** (1) replace orchard if south lot is chosen  
 (2) shared heat plant: equipment savings  
 (3) replace library structure elsewhere  
 (4) possible compensation to F&W

Average: approx \$700,000  
 Above average: \$800,000 - \$950,000  
 Very high: \$950,000 - \$1,200,000

## CHART 2: Comparison of the Final Four Sites

<u>Criterion</u>	<u>Randolph</u> <b>RANK #1</b>	<u>Waterbury</u> <b>RANK #2</b>
<b>Buildability</b> (1-6)	<b>25.8/30 (#1)</b> open land; easy utilities; easy permitting; agreeable neighborhood; good construction site	<b>22.6/30 (#6)</b> tight site; stormwater problems; height could be an issue with neighbors; average site for construction
<b>Program &amp; Customer Benefits</b> (Crit. 7)	<b>3.6/5 (#8)</b> 24 miles from Montpelier 62 miles from Health Lab Closer for east, south & SW staff Closer for out-of-state customers Room for boat/trailer storage Ability to expand More central for sample drop off	<b>4.0/5 (tied for #3)</b> 13 miles from Montpelier 29 miles from Health Lab Closer for western staff  Room for boat/trailer storage Ability to expand (Wasson?)
<b>SOV Benefits</b> (Crit. 8)	<b>4.6/5 (#1)</b> Tech-oriented interns year-round Strong vet tech program; potential to share classrooms & programs CE tech program-- overlap with Wastewater training? Strong program benefit to VTC. VTC is already used as a meeting point Ag business incubator nearby Can use heat from VTC plant (no cooling)  Is it good for the State to have a BSL-2+ lab remote from Burlington?	<b>4.0/5 (#2)</b> Removed from interns  Potential to share meeting space with other State buildings  Benefit to Village of Waterbury Waterbury is already a meeting point. Close to the Forensics lab Shared heating & cooling in Complex Maintenance staff can be shared.
<b>Overall score</b>	<b>34.0/40 (#1)</b>	<b>30.6/40 (#2)</b>
<b>Cost</b>	<b>Acquisition: \$1/yr ground lease</b> <b>Site Dev. Costs: \$890,000</b> <b>\$890,000</b> Possible equipment savings from sharing heat: \$360,000 <b>( \$530,000 net)</b>	<b>Acquisition: already owned</b> <b>Site Dev. Costs: \$1,170,000</b> <b>\$1,170,000</b> Possible equipment savings from sharing heat and cooling: \$1,130,000 <b>(\$ 40,000 net)</b>
<b>Legend</b>	14.5/30 (#3) = scored points/possible points (rank out of 19 sites)	

<u>Criterion</u>	<u>Colchester</u> <b>RANK #3</b>	<u>Berlin</u> <b>RANK #4</b>
<b>Buildability</b> (1-6)	<b>24.3/30 (#4)</b> tight site; have to screen exterior storage and it may be separated; utilities all available and complex is similar use; permitting easy	<b>21.9/30 (#8)</b> large site but has wetlands; roads and utilities have to be extended; use not permitted; neighborhood in transition; grades & soil small issue
<b>Program &amp; Customer Benefits</b> (Crit. 7)	<b>2.2/5 (tied for #12)</b> 40 miles from Montpelier next to Health Lab Farther for all users except staff on western edge of state May lose space for boat/trailer storage No room to expand	<b>3.7/5 (tied for #6)</b> 4 miles from Montpelier 42 miles from Health Lab Optimal for users from NE Kingdom Middle for other users Room for boat/trailer storage Ability to expand Central for sample drop-off
<b>SOV Benefits</b> (Crit. 8)	<b>3.3/5 (#8)</b> Year-round interns Pre-vet program at UVM. Would not share meeting space/classrooms. Could share meeting space with Health Lab  Benefit to Health Lab and UVM.  Next to the Health Lab Has to be stand-alone building Maintenance staff can be shared.	<b>3.7/5 (tied for #4)</b> Removed from interns  Potential to share meeting space with other State buildings  Negative impact on Berlin town center?  Could create campus for heat/cooling. Maintenance staff can be shared.
<b>Overall score</b>	<b>29.8/40 (#3)</b>	<b>29.3/40 (tied for #4)</b>
<b>Cost</b>	<b>Acquisition: \$1/yr ground lease Site Dev. Costs: \$690,000 \$650,000  ( \$650,000 net)</b>	<b>Acquisition: \$1,200,000 Site Dev. Costs: \$1,140,000 \$2,340,000  ( \$2,340,000 net)</b>
Legend	14.5/30 (#3) = scored points/possible points (rank out of 19 sites)	



# SITE ANALYSES

**What follows is an analysis of all nineteen possible sites.**

**Each site's analysis starts with a tabbed summary sheet.**

- **A map shows the site's relationship (shown as a red dot) to the Agencies' remote duty stations (shown as blue dots).**
- **The distances from the site to Montpelier and to the Health Lab are shown as red arrows.**
- **A summary of the site's scoring shows in the bottom left corner.**
- **Size and cost summaries are in the bottom right corner.**

**A legend that provides further details is located on the next page.**

**For preliminary analysis, all sites got a project location map and a permitting summary. Environmental overlay maps were also made; these may be found in the Appendix.**

**After preliminary analysis, eight sites were given site plans and detailed cost estimates. The other sites got rough cost estimates.**

## LEGEND FOR THE TABBED SUMMARY SHEETS



The blue dots on the maps represent remote duty stations for Agriculture and Natural Resources. Frequently traveled routes are shown in blue.

<p><b>Air:</b> Bennington Burlington (x2) Rutland Underhill</p>	<p><b>Animals:</b> Benson Greensboro Milton Consumer</p>	<p><b>Dairy:</b> Cuttingsville Enosburg New Haven Orwell Shaftsbury Swanton Vergennes Westmore</p>
<p><b>Water:</b> Barre Essex Junction Rutland St Johnsbury Springfield</p>	<p><b>Consumer Protection:</b> Barre Benson Milton Newport Center Orwell Springfield</p>	<p><b>Weights &amp; Measures:</b> Barre Benson Milton Newport Orwell Windsor</p>
<p><b>Plants:</b> Burlington Middlebury Rutland Woodstock</p>	<p><b>Fish &amp; Wildlife:</b> Roxbury Salisbury Bennington West Burke Grand Isle Morgan Essex Junction Shaftsbury Essex Junction Newport Center Randolph Shrewsbury Starksboro Wheelock</p>	<p><b>Meat:</b> Barre Chelsea Glover Hardwick Morrisville Orange Shelburne Springfield</p>
<p><b>Forest:</b> Barre Bennington Brattleboro Essex Junction Middlebury Rutland Morrisville St. Albans St Johnsbury Springfield White River</p>		



The red dot is the site's location. Red arrows show road distances in miles to both Montpelier and to the Health Lab in Colchester.

## PRELIMINARY SCORING INFORMATION

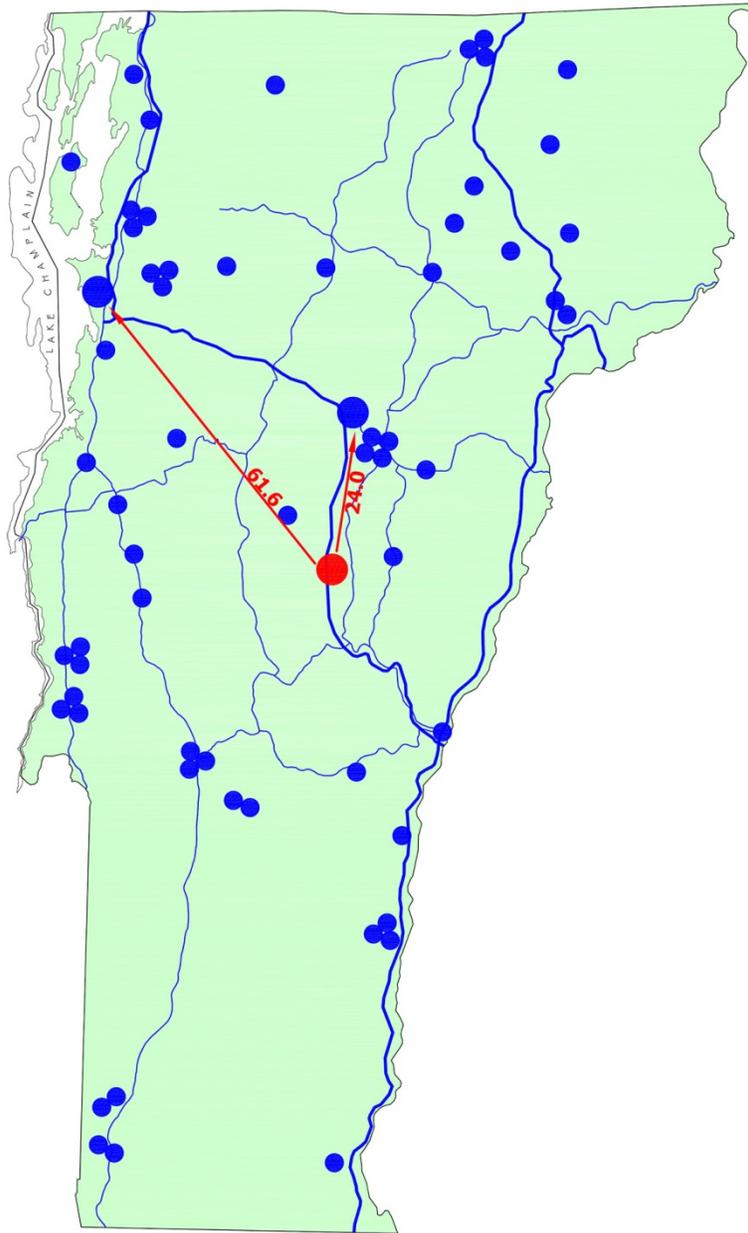
**Overall score = scored points/possible points (# rank out of 19 sites)**

The eight criteria were:

1. Lot size and accommodation of program
2. The site's physical characteristics
3. Utilities
4. Zoning/permitting
5. Neighborhood characteristics
6. Ease of construction and related issues
7. Benefits to programs and users
8. Benefits to the Agencies and State

Five points were possible for each criterion:

- 5 = excellent
- 4 = above average
- 3 = average
- 2 = below average
- 1 = poor

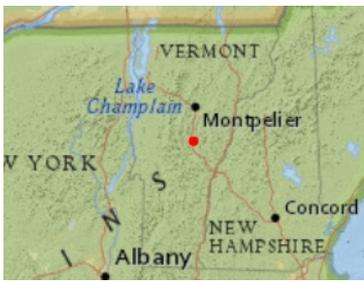
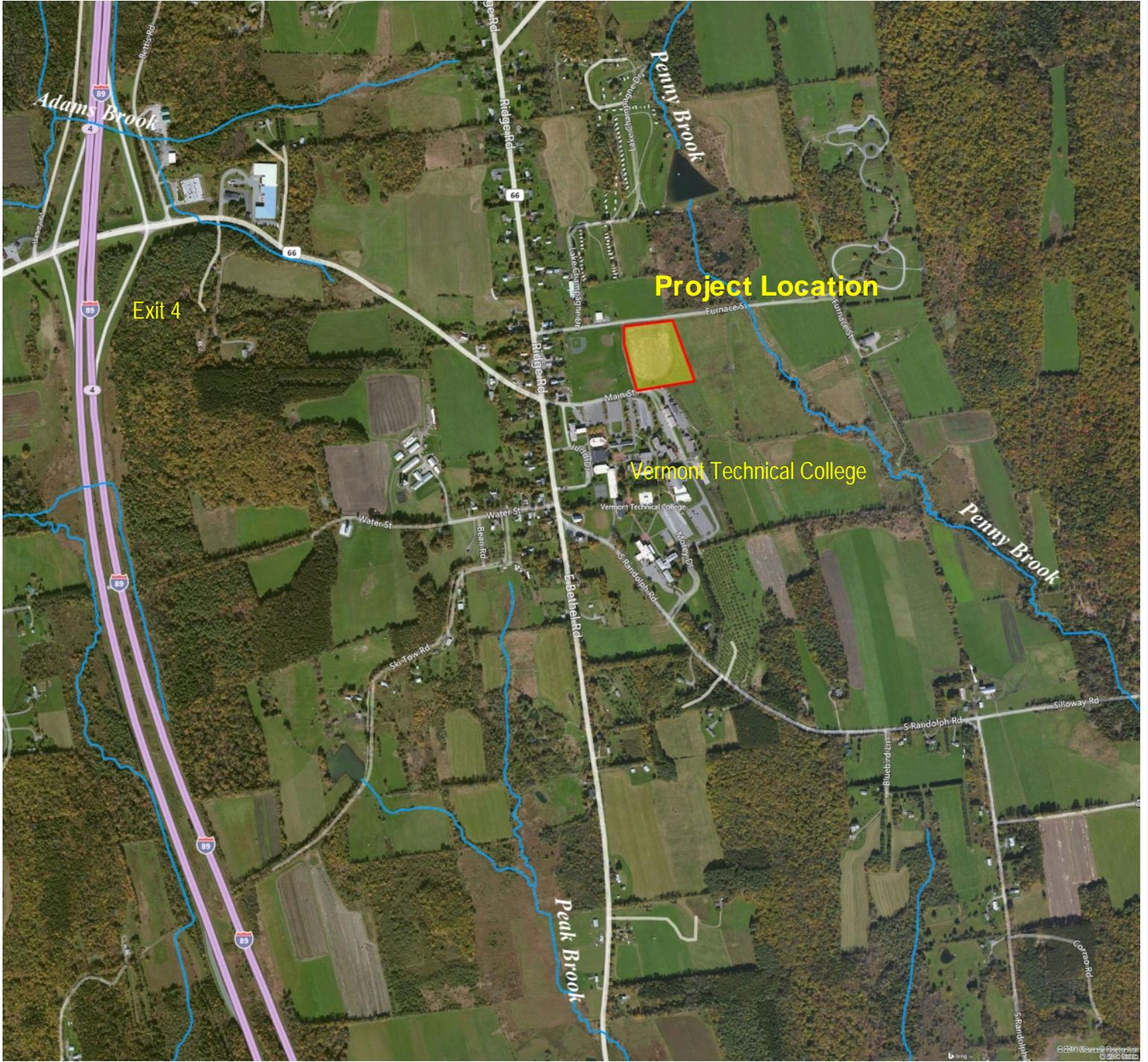


**OVERALL SCORE: 34.0/40 (# 1)**

**VTC CAMPUS, RANDOLPH**

Criteria & Scores

- |    |     |  |   |
|----|-----|--|---|
| 1. | 4.5 | Plenty of space for program and expansion, good place for exterior storage. Room for a solar array |   |
| 2. | 4.5 | Site is moderately sloped, good soils, good access   | Size: 5+ acres                                  |
| 3. | 4.0 | All utilities including fiberoptic nearby<br>Possibility of sharing the campus heat plant          |   |
| 4. | 4.3 | Minimal local permitting; needs Act 250 amendment  | Acquisition cost: \$1/year ground lease         |
| 5. | 4.0 | Compatible neighborhood (college campus)   | Rough cost to develop: \$890,000                |
| 6. | 4.5 | Straightforward and open site for construction   | Savings for sharing VTC's heat plant: (360,000) |
| 7. | 3.6 | Distant from Montpelier  | <b>TOTAL \$530,000</b>                          |
| 8. | 4.6 | Collocation has significant benefits to Agencies and State   |   |

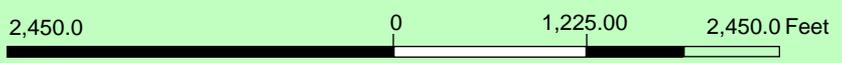


- LEGEND**
- Railroads
  - Stream
  - Designated Downtown Areas
  - Designated Village Areas
  - Town Boundary
  - County Boundary

**NOTES**

Map created using ANR's Natural Resources Atlas

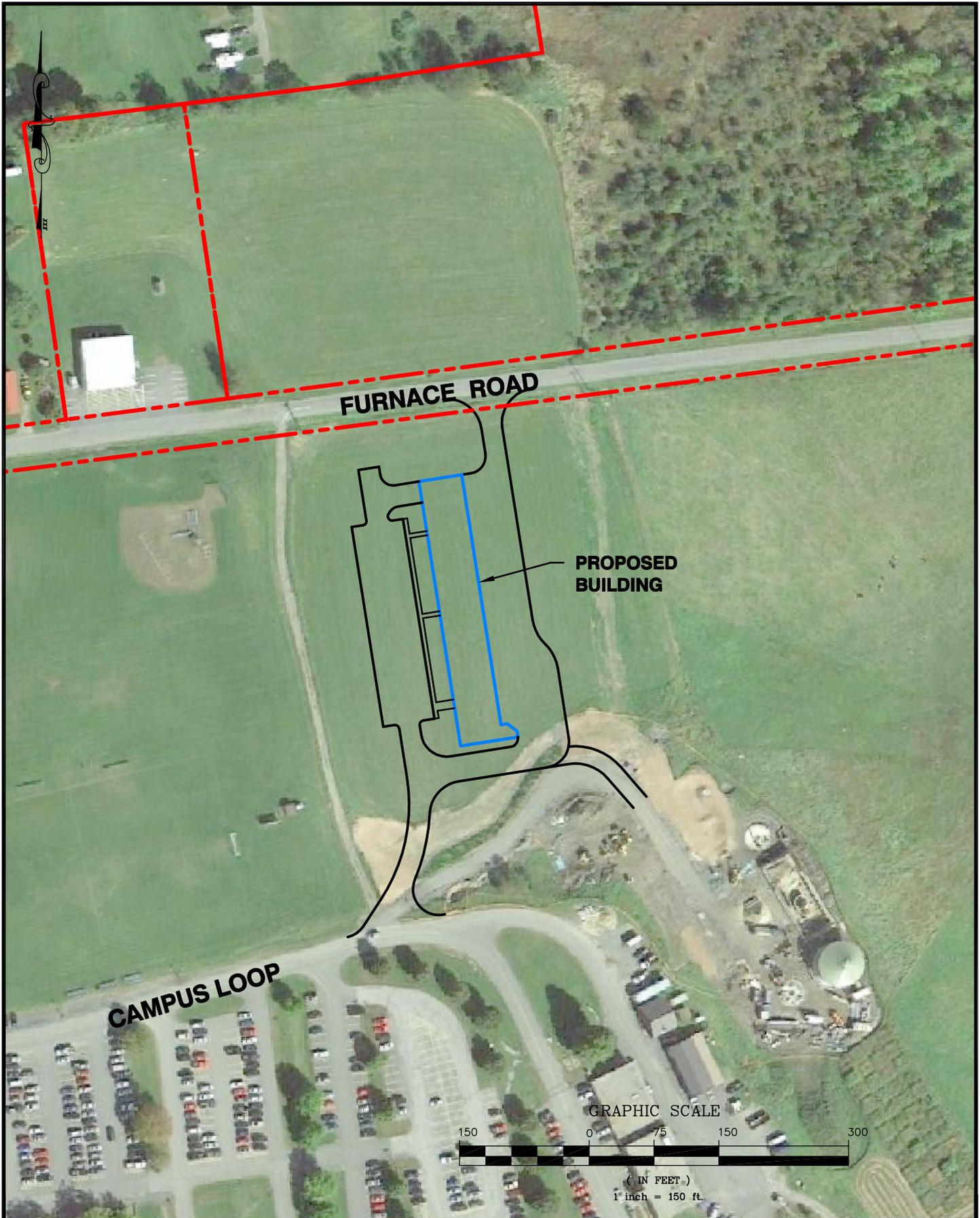
1: 14,700  
July 30, 2014



WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere  
© Vermont Agency of Natural Resources

1" = 1225 Ft.    1cm = 147 Meters  
THIS MAP IS NOT TO BE USED FOR NAVIGATION

**DISCLAIMER:** This map is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. ANR and the State of Vermont make no representations of any kind, including but not limited to, the warranties of merchantability, or fitness for a particular use, nor are any such warranties to be implied with respect to the data on this map.



**CIVIL ENGINEERING ASSOCIATES, INC.**

10 MANSFIELD VIEW LN.,  
 SO. BURLINGTON, VT 05403  
 802-864-2323 FAX: 802-864-2271



Scale 1" = 150'  
 Date JUL. 29. 2014

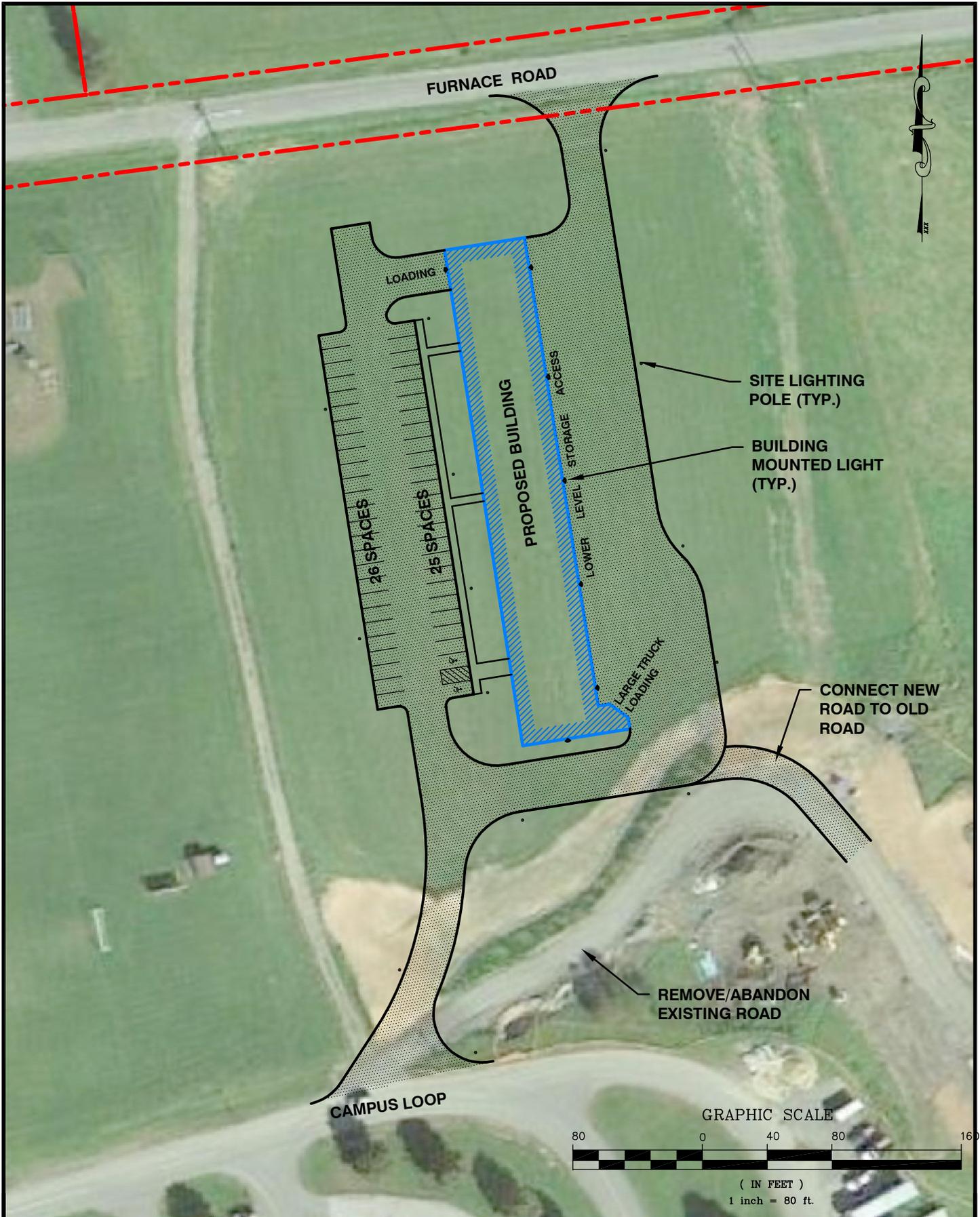
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 CEA Project No. 14165



STATE  
 OF  
 VERMONT

DEPARTMENT OF  
 BUILDINGS & GENERAL SERVICES

NEW AGRICULTURAL/ENVIRONMENTAL LAB  
**OVERALL PROPERTY PLAN**  
 VTC SITE - NORTH  
 RANDOLPH VERMONT



**CIVIL ENGINEERING ASSOCIATES, INC.**

10 MANSFIELD VIEW LN.,  
 SO. BURLINGTON, VT 05403  
 802-864-2323 FAX: 802-864-2271



Scale 1" = 80'  
 Date JUL. 29. 2014

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 CEA Project No. 14165



STATE  
 OF  
 VERMONT

DEPARTMENT OF  
 BUILDINGS & GENERAL SERVICES

NEW AGRICULTURAL/ENVIRONMENTAL LAB

**SITE PLAN**  
**VTC SITE - NORTH**

RANDOLPH

VERMONT

Randolph: VTC, north site



## **Randolph: VTC, North Site**

### **Permitting Summary**

#### **Municipal**

Zone: RU-5

Use: permitted. They also defer to Title 24, so no building review. Only a limited site plan review. No dimensional criteria like setbacks or maximum height.

#### **State**

Wastewater – The project will require a pump station to tie into the existing sewage collection system.

Water Supply – The project will be served by the VTC campus supply and distribution system.

Construction Stormwater – The project may qualify for a Low Risk Authorization under the State Construction Stormwater General Permit.

Operational Stormwater – Coverage under the State Operation Stormwater General Permit will be required as amount of impervious area on the property exceeds the one acre jurisdictional limit. The extent of the mitigation may change as the State is in the process of modifying the Stormwater Rules to require additional on-site retention of storm events.

Wetlands – The project site does have the potential for wetlands along the eastern edge. Previous farming limits would indicate that any wetlands are east of the site. Still, the site work may extend into the wetland buffer thereby requiring the acquisition of a wetland permit.

Stream Alteration – Not applicable

#### **Act 250**

The VTC campus is subject to existing Act 250 permits and as such, this project will require an amendment Land Use Permit application to be submitted. Items of exposure are archaeological issues (much of the site has been disturbed but sits on fill perhaps encapsulating sensitive items), prime agricultural soils, and traffic impact.

#### **Federal**

Corps of Engineers – The project is not likely proposing any wetland impact, therefore no authorization should be required.

NEPA – Many of the criteria handled within the Act 250 process can be used to address the requirements of the NEPA review.

# VTC Randolph

## Summary of Estimate of Probable Site Development Cost July 31, 2014

Description	Qty	Unit		Unit Cost		Cost
Site & Building Demolition	1	LS	x	\$0	=	\$0
Mass Earthwork	9,630	CY	x	\$12.00	=	\$115,556
Rock Removal	10	CY	x	\$40	=	\$400
Supplemental Foundation Costs	1	LS	x	\$2,000	=	\$2,000
Sewer Disposal	1	LS	x	\$21,300	=	\$21,300
Water Supply	1	LS	x	\$17,900	=	\$17,900
Stormwater Management	1	LS	x	\$62,000	=	\$62,000
Site Development Components	1	LS	x	\$106,600	=	\$106,600
Special Site Conditions	1	LS	x	\$16,325	=	\$16,325
Retaining Walls	1	SF	x	\$4,800	=	\$4,800
Communications Utilities	1	LS	x	\$62,000	=	\$62,000
Pavement Surfaces	47,200	SF	x	\$5.31	=	\$250,576
Wetland Mitigation Measures	1	LS	x	\$44,400	=	\$44,400
Environmental Permitting	1	LS	x	\$1,000	=	<u>\$38,700</u>

Subtotal      \$742,557

20%      Contingency      \$147,443

**Total      \$890,000**



**CIVIL ENGINEERING ASSOCIATES, INC.**  
10 MANSFIELD VIEW LANE, SOUTH BURLINGTON, VT 05403  
802-864-2323 FAX: 802-864-2271 web: www.cea-vt.com

**Not included:**

Landscaping, foundation work, sidewalks and ramps, signage, solar infrastructure, or solar panels.

# VTC Randolph

## Detail Breakdown of Probable Development Cost August 8, 2014

Page 1 of 4

Description	Qty	Unit		Unit Cost		Cost
<b>Site &amp; Building Demolition</b>						
Materials Recycling	0	CF	x	\$3,500	=	\$0
Building Decommissioning	0	CF	x	\$5,500	=	\$0
Materials to Landfill	0	CF	x	\$12,000	=	<u>\$0</u>
						\$0
<b>Mass Earthwork</b>						
Access Road	0	CY	x	\$8	=	\$0
Building Site (Cut to Fill)	<u>9630</u>	CY	x	\$12	=	<u>\$115,556</u>
	9630			\$12		\$115,556
<b>Rock Removal</b>						
Excavated	10	CY	x	\$40	=	\$400
Chipped	0	CY	x	\$60	=	\$0
Blasted	<u>0</u>	CY	x	\$100	=	<u>\$0</u>
	10			\$40		\$400
<b>Supplemental Foundation Costs</b>						
Spread Foundation	0	SF	x	\$20	=	\$0
GeoPiers	0	EA	x	\$1,000	=	\$0
Poor Soil Replacement	50	CY	x	\$40	=	<u>\$2,000</u>
						\$2,000
<b>Sewage Disposal</b>						
6" Sewer Service	100	LF	x	\$20	=	\$2,000
Septic Tank	0	Gal	x	\$3.25	=	\$0
Pump Station	1	LS	x	\$10,500	=	\$10,500
On-Site Wastewater Disposal Sys.	0	LS	x	\$25,000	=	\$0
2" Force Main	400	LF	x	\$20	=	\$8,000
Manhole Connection	1	LS	x	\$800	=	<u>\$800</u>
						\$21,300
<b>Water Supply</b>						
8" Fire Service	100	LF	x	\$60	=	\$6,000
New Hydrant Assembly	1	EA	x	\$2,500	=	\$2,500
6" Sprinkler Service	50	LF	x	\$58	=	\$2,900
Wet Tap at Municipal Line	1	LS	x	\$3,000	=	\$3,000
1" Domestic Service	100	LF	x	\$25	=	\$2,500
Water Main Connection	1	LS	x	\$1,000	=	<u>\$1,000</u>
						\$17,900

Prepared by Civil Engineering Associates, Inc.

**VTC**  
**Randolph**

**Detail Breakdown of Probable Development Cost**  
**August 8, 2014**

Page 2 of 4

Description	Qty	Unit		Unit Cost	=	Cost
<b>Stormwater Management</b>						
Wet Pond	1	LS	x	\$30,000	=	\$30,000
Underground Sediment Trap	0	LS	x	\$15,000	=	\$0
Underground Filter	0	LS	x	\$25,000	=	\$0
Infiltration Galley	0	LF	x	\$40	=	\$0
Catch Basins/DMH's	5	EA	x	\$2,500	=	\$12,500
15" Storm Drain Pipe	300	LF	x	\$35	=	\$10,500
Grass Lined Swale	450	LF	x	\$20	=	<u>\$9,000</u>
						\$62,000
<b>Standard Site Development Items</b>						
Perimeter Chain Link Fence	0	LF	x	\$20	=	\$0
Signage/Pavement Markings	1	LS	x	\$4,500	=	\$4,500
Area Light Poles & Bases	14	EA	x	\$2,500	=	\$35,000
Bldg Mounted Lights	7	EA	x	\$1,000	=	\$7,000
Secondary Electrical Condu. & Wire	950	LF	x	\$20	=	\$19,000
Strip Topsoil & Stockpile	1280	CY	x	\$10	=	\$12,800
Spread Topsoil, Seed, Fert & Mulch	520	CY	x	\$15	=	\$7,800
Import Screened Topsoil & Spread	50	CY	x	\$35	=	\$1,750
Loading Area Concrete Surface	450	SF	x	\$15	=	\$6,750
Erosion Prevention & Sed. Control	1	LS	x	\$12,000	=	<u>\$12,000</u>
						\$106,600
<b>Special Site Conditions</b>						
Tree Clearing	2.4	Acre	x	\$6,000	=	\$14,325
Tree Protection	20	EA	x	\$100	=	\$2,000
Special Fencing	0	LF	x	\$40	=	\$0
Erosion Prevention & Sed. Control	1	LS	x	\$0	=	<u>\$0</u>
						\$16,325
<b>Loading Area Retaining Walls</b>	80	SF	x	\$60	=	\$4,800
<b>Power &amp; Communications Utilities</b>						
Phone & Cable Conduit & Line	100	LF	x	\$40	=	\$4,000
Fiber Optic Conduit & Line	600	LF	x	\$60	=	\$36,000
Primary Power Conduit & Wire	100	LF	x	\$50	=	\$5,000
Concrete Encasement	40	LF	x	\$50	=	\$2,000
Transformer & Base	1	EA	x	\$15,000	=	<u>\$15,000</u>
						\$62,000

Prepared by Civil Engineering Associates, Inc.

**VTC**  
**Randolph**

**Detail Breakdown of Probable Development Cost**  
**August 8, 2014**

Page 3 of 4  
Cost

Description	Qty	Unit	Unit Cost		Cost
<b>Pavement Surfaces</b>					
Access Road	7,300	SF	x	\$6.17 =	\$45,017
Parking Lot	18,700	SF	x	\$5.43 =	\$101,523
Additional Circulation	<u>21,200</u>	SF	x	\$4.91 =	<u>\$104,037</u>
	47,200			\$5.31	\$250,576
<b>Wetland Mitigation</b>					
Avoidance					
Retaining walls	500	SF	x	\$60 =	\$30,000
Steep Slopes	3600	SY	x	\$4 =	\$14,400
Special Surfaces	0	SY	x	\$12 =	<u>\$0</u>
					\$44,400

*Prepared by Civil Engineering Associates, Inc.*

**VTC  
Randolph**

**Detail Breakdown of Probable Development Cost  
August 8, 2014**

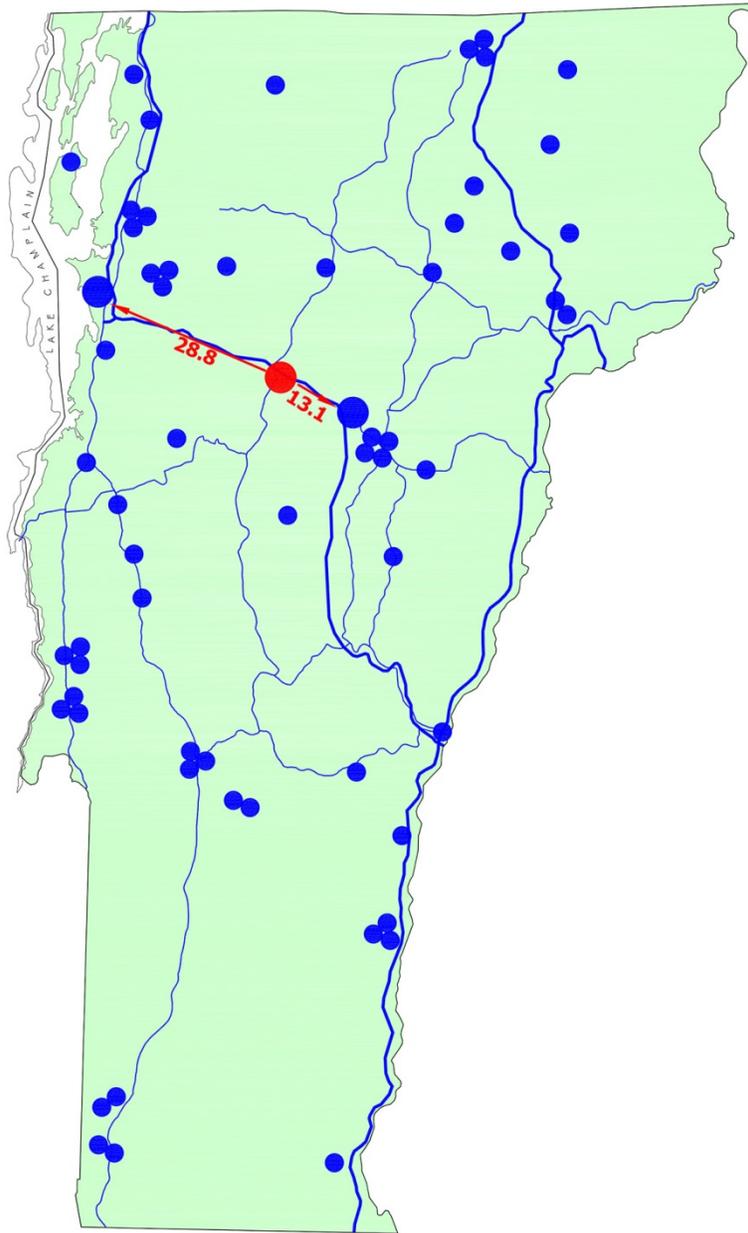
Page 4 of 4

Description	Qty	Unit	Unit Cost	=	Cost
<b>Environmental Permitting</b>					
<i>Basic Plan Package Preparation</i>					
Existing Condition Documentation	1	LS	x \$3,000	=	\$3,000
Boundary Survey	0	LS	x \$4,000	=	\$0
Wetland Delineation	0	LS	x \$2,500	=	\$0
Site Grading & Stormwater Plan	1	LS	x \$7,000	=	\$7,000
Site Utility Plan	1	LS	x \$3,500	=	\$3,500
EPSC Plan	1	LS	x \$1,500	=	\$1,500
Details	1	LS	x \$2,000	=	\$2,000
Specifications	1	LS	x \$1,500	=	<u>\$1,500</u>
					\$18,500
<i>Local</i>					
Site Plan	1	LS	x \$1,500	=	\$1,500
Condition Use	1	LS	x \$1,000	=	\$1,000
<i>State</i>					
WW & Potable Water Supply	1	LS	x \$1,200	=	\$1,200
Water Supply Permit to Construct	0	LS	x \$2,500	=	\$0
<i>Construction Stormwater</i>					
Low Risk Site	1	LS	x \$500	=	\$500
Moderate Risk Site	0	LS	x \$2,500	=	\$0
Operational Stormwater	1	LS	x \$4,000	=	\$4,000
Stream Alteration	0	LS	x \$1,200	=	\$0
<i>Act 250/NEPA</i>					
Land Use Permit Application	1	LS	x \$3,000	=	\$3,000
Administrative Amendment	0	LS	x \$800	=	\$0
Level 1 Environmental Assessment	1	LS	x \$1,500	=	\$1,500
Archeology Study	1	LS	x \$4,000	=	\$4,000
Traffic Study	1	LS	x \$3,500	=	\$3,500
<i>Federal</i>					
Corps of Engineers Wetlands	0	LS	x \$1,500	=	<u>\$0</u>

Does not include the development of Construction Documents

**Total    \$38,700**

*Prepared by Civil Engineering Associates, Inc.*



**OVERALL SCORE: 30.6/40 (#2)**

**STATE COMPLEX, WATERBURY**

Criteria & Scores

- |    |     |  |  |
|----|-----|--|--|
| 1. | 4.0 | Site a little tight but works if storage is under building<br>Room for solar array; no room to expand          |  |
| 2. | 3.7 | Site is urban and already developed  | Size: 5+ acres   |
| 3. | 4.3 | All utilities available, including fiberoptic<br>Stormwater drainage will be a challenge                       |  |
| 4. | 4.0 | Conditional use. Act 250 amendment and floodplain nec.   | Acquisition cost: (none)   |
| 5. | 2.8 | State complex, but next to residential neighborhood<br>New building will be 6' to 7' higher than existing ones | Rough cost to develop: \$1,170,000<br>Savings for sharing heating & cooling: \$1,130,000 |
| 6. | 3.8 | Tight site; demolition   | <b>TOTAL \$40,000</b>  |
| 7. | 4.0 | Medium distance from Montpelier  |  |
| 8. | 4.0 | Can share meeting space and custodians with Complex  |  |

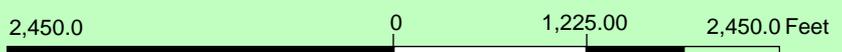


- LEGEND**
- Railroads
  - Designated Downtown Areas
  - Designated Village Areas
  - Town Boundary
  - County Boundary

**NOTES**

Map created using ANR's Natural Resources Atlas

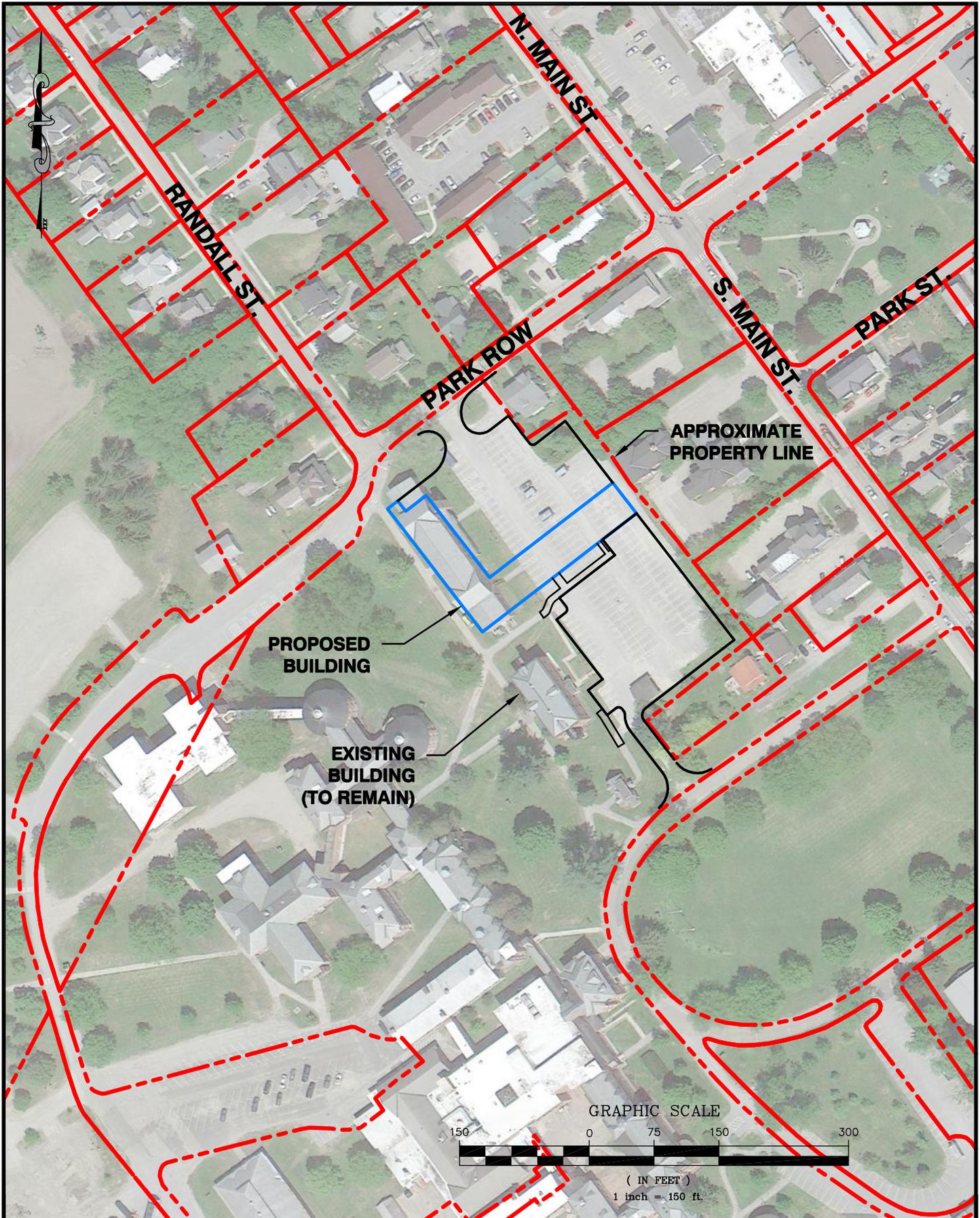
1: 14,700  
July 18, 2014



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 Date JUL. 29. 2014

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 CEA Project No. 14165



STATE  
 OF  
 VERMONT

DEPARTMENT OF  
 BUILDINGS & GENERAL SERVICES

NEW AGRICULTURAL/ENVIRONMENTAL LAB  
**OVERALL PROPERTY PLAN**  
**WATERBURY SITE**  
 WATERBURY VERMONT



Waterbury: State Complex



# Waterbury: State Complex

## Permitting Summary

### Municipal

Zone: Village Mixed Residential (VMR) with Interim Campus Overlay District and Flood Hazard Area Overlay. No existing PUD, nor is one required.

Use: Permitted as office; conditional as government building. Immune to use review due to Title 24.

15' setback on edge of campus, coverage 30% max, height 50'. (Fits dimensional criteria)

### State

Wastewater – The project site is currently served by municipal water and sewer and will require the acquisition of a State Wastewater Disposal and Potable Water Supply Permit. There are no known technical issues associated with the acquisition of this permit.

Water Supply – The project may require the acquisition of a Permit to Construct from the Water Supply Division if a hydrant is required on the property.

Construction Stormwater – The project may qualify for a Low Risk Authorization under the State Construction Stormwater General Permit.

Operational Stormwater – Coverage under the State Operation Stormwater General Permit will be required as there will be an increase in impervious areas in comparison to the existing conditions. The extent of the mitigation may change as the State is in the process of modifying the Stormwater Rules to require additional on-site retention of storm events.

Wetlands – The project does extend into the wetland buffer thereby requiring the acquisition of a wetland permit.

Stream Alteration – Authorization under the State General Permit will be required as the outfall for the low parking park will need to discharge at the embankment of the Winooski River.

### Act 250

The State Complex currently has a permit. This project will require an amendment.

### Federal

Corps of Engineers – Hydraulics study and permit for changes in Zero Rise Zone needed.

NEPA – Many of the criteria otherwise handled within the Act 250 process will be addressed as part of the NEPA review. An archaeology survey is complete, but may need to be amended for this project. The last traffic study was done before the flood, so it may also need to be amended even if traffic will be less.

# Waterbury

## Summary of Estimate of Probable Site Development Cost August 8, 2014

Description	Qty	Unit		Unit Cost		Cost
Site & Building Demolition	1	LS	x	\$100,000	=	\$100,000
Mass Earthwork	6,000	CY	x	\$15.00	=	\$90,000
Rock Removal	10	CY	x	\$40	=	\$400
Supplemental Foundation Costs	1	LS	x	\$2,000	=	\$2,000
Sewer Disposal	1	LS	x	\$1,800	=	\$1,800
Water Supply	1	LS	x	\$8,150	=	\$8,150
Stormwater Management	1	LS	x	\$122,500	=	\$122,500
Site Development Components	1	LS	x	\$76,150	=	\$76,150
Special Site Conditions	1	LS	x	\$132,667	=	\$132,667
Retaining Walls	1	SF	x	\$4,800	=	\$4,800
Communications Utilities	1	LS	x	\$9,500	=	\$9,500
Pavement Surfaces	53,800	SF	x	\$5.26	=	\$282,991
Flood Plain Mitigation Measures	1	LS	x	\$103,800	=	\$103,800
Environmental Permitting	1	LS	x	\$1,000	=	<u>\$43,700</u>
Subtotal						\$978,458
20% Contingency						<u>\$191,542</u>
<b>Total</b>						<b>\$1,170,000</b>



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Not included:

Landscaping, foundation work, sidewalks and ramps, signage, solar infrastructure, or solar panels.

# Waterbury

## Detail Breakdown of Probable Development Cost

August 8, 2014

Page 1 of 4

Description	Qty	Unit	Unit Cost	=	Cost
<b>Site &amp; Building Demolition</b>					
Materials Recycling	1	CF	x \$30,000	=	\$30,000
Building Decommissioning	1	CF	x \$30,000	=	\$30,000
Materials to Landfill	1	CF	x \$40,000	=	<u>\$40,000</u>
					\$100,000
<b>Mass Earthwork</b>					
Access Road	0	CY	x \$8	=	\$0
Building Site (Cut to Fill)	<u>6000</u>	CY	x \$15	=	<u>\$90,000</u>
	6000		\$15		\$90,000
<b>Rock Removal</b>					
Excavated	10	CY	x \$40	=	\$400
Chipped	0	CY	x \$60	=	\$0
Blasted	<u>0</u>	CY	x \$100	=	<u>\$0</u>
	10		\$40		\$400
<b>Supplemental Foundation Costs</b>					
Spread Foundation	0	SF	x \$20	=	\$0
GeoPiers	0	EA	x \$1,000	=	\$0
Poor Soil Replacement	50	CY	x \$40	=	<u>\$2,000</u>
					\$2,000
<b>Sewage Disposal</b>					
6" Sewer Service	50	LF	x \$20	=	\$1,000
Septic Tank	0	Gal	x \$3.25	=	\$0
Pump Station	0	LS	x \$5,500	=	\$0
On-Site Wastewater Disposal Sys.	0	LS	x \$25,000	=	\$0
2" Force Main	0	LF	x \$20	=	\$0
Manhole Connection	1	LS	x \$800	=	<u>\$800</u>
					\$1,800
<b>Water Supply</b>					
8" Fire Service	0	LF	x \$60	=	\$0
New Hydrant Assembly	0	EA	x \$2,500	=	\$0
6" Sprinkler Service	50	LF	x \$58	=	\$2,900
Wet Tap at Municipal Line	1	LS	x \$3,000	=	\$3,000
1" Domestic Service	50	LF	x \$25	=	\$1,250
Water Main Connection	1	LS	x \$1,000	=	<u>\$1,000</u>
					\$8,150

Prepared by Civil Engineering Associates, Inc.

# Waterbury

## Detail Breakdown of Probable Development Cost

August 8, 2014

Page 2 of 4

Description	Qty	Unit	Unit Cost	=	Cost
<b>Stormwater Management</b>					
Wet Pond	1	LS	\$35,000	=	\$35,000
Underground Sediment Trap	0	LS	\$15,000	=	\$0
Underground Filter	0	LS	\$25,000	=	\$0
Backflow Preventer	1	LS	\$3,500	=	\$3,500
Catch Basins/DMH's	10	EA	\$2,500	=	\$25,000
15" Storm Drain Pipe	1600	LF	\$35	=	\$56,000
Grass Lined Swale	150	LF	\$20	=	<u>\$3,000</u>
					\$122,500
<b>Standard Site Development Items</b>					
Perimeter Chain Link Fence	220	LF	\$20	=	\$4,400
Signage/Pavement Markings	1	LS	\$4,500	=	\$4,500
Area Light Poles & Bases	8	EA	\$2,500	=	\$20,000
Bldg Mounted Lights	7	EA	\$1,000	=	\$7,000
Secondary Electrical Condu. & Wire	800	LF	\$20	=	\$16,000
Strip Topsoil & Stockpile	150	CY	\$10	=	\$1,500
Spread Topsoil, Seed, Fert & Mulch	150	CY	\$15	=	\$2,250
Import Screened Topsoil & Spread	50	CY	\$35	=	\$1,750
Loading Area Concrete Surface	450	SF	\$15	=	\$6,750
Erosion Prevention & Sed. Control	1	LS	\$12,000	=	<u>\$12,000</u>
					\$76,150
<b>Special Site Conditions</b>					
Tree Clearing	0.1	Acre	\$6,000	=	\$600
Tree Protection	4	EA	\$100	=	\$400
Off-site Cut for Flood Mitigation	8444	CY	\$15	=	\$126,667
Erosion Prevention & Sed. Control	1	LS	\$5,000	=	<u>\$5,000</u>
					\$132,667
<b>Loading Area Retaining Walls</b>					
	80	SF	\$60	=	\$4,800
<b>Power &amp; Communications Utilities</b>					
Phone & Cable Conduit & Line	50	LF	\$40	=	\$2,000
Fiber Optic Conduit & Line	50	LF	\$60	=	\$3,000
Primary Power Conduit & Wire	50	LF	\$50	=	\$2,500
Concrete Encasement	40	LF	\$50	=	\$2,000
Transformer & Base	0	EA	\$15,000	=	<u>\$0</u>
					\$9,500

Prepared by Civil Engineering Associates, Inc.

# Waterbury

## Detail Breakdown of Probable Development Cost August 8, 2014

Description	Qty	Unit	Unit Cost		Page 3 of 4 Cost
<b>Pavement Surfaces</b>					
Access Road	3,800	SF	x	\$6.17 =	\$23,433
Parking Lot	27,200	SF	x	\$5.43 =	\$147,669
Additional Circulation	<u>22,800</u>	SF	x	\$4.91 =	<u>\$111,889</u>
	53,800			\$5.26	\$282,991
<b>Wetland Mitigation</b>					
Avoidance					
Retaining walls	1650	SF	x	\$60 =	\$99,000
Steep Slopes	1200	SY	x	\$4 =	\$4,800
Special Surfaces	0	SY	x	\$12 =	<u>\$0</u>
					\$103,800

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# Waterbury

## Detail Breakdown of Probable Development Cost August 8, 2014

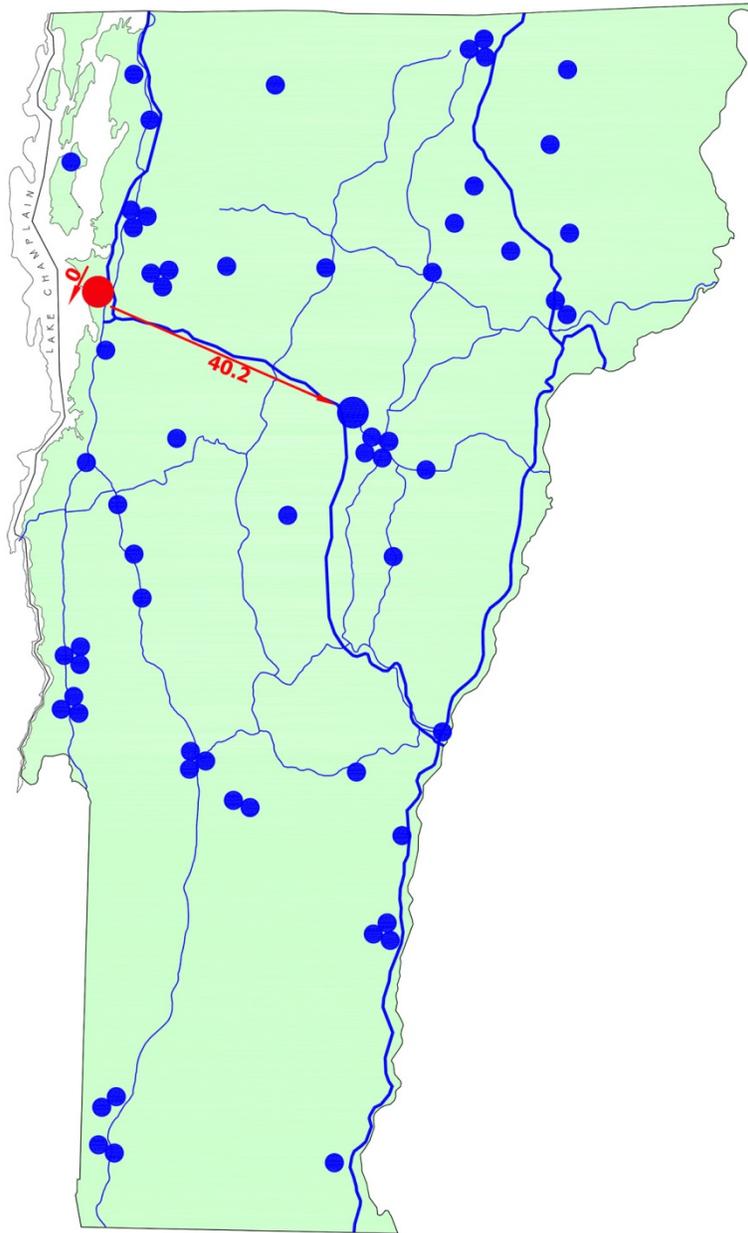
Page 4 of 4

Description	Qty	Unit	Unit Cost	=	Cost
<b>Environmental Permitting</b>					
<i>Basic Plan Package Preparation</i>					
Existing Condition Documentation	1	LS	x \$3,000	=	\$3,000
Boundary Survey	0	LS	x \$4,000	=	\$0
Wetland Delineation	1	LS	x \$2,500	=	\$2,500
Site Grading & Stormwater Plan	1	LS	x \$7,000	=	\$7,000
Site Utility Plan	1	LS	x \$2,500	=	\$2,500
EPSC Plan	1	LS	x \$1,500	=	\$1,500
Details	1	LS	x \$2,000	=	\$2,000
Specifications	1	LS	x \$1,500	=	<u>\$1,500</u>
					\$20,000
<i>Local</i>					
Site Plan	1	LS	x \$1,500	=	\$1,500
Condition Use	1	LS	x \$1,000	=	\$1,000
<i>State</i>					
WW & Potable Water Supply	1	LS	x \$1,200	=	\$1,200
Water Supply Permit to Construct	1	LS	x \$2,500	=	\$2,500
<i>Construction Stormwater</i>					
Low Risk Site	1	LS	x \$500	=	\$500
Moderate Risk Site	0	LS	x \$2,500	=	\$0
Operational Stormwater	1	LS	x \$4,000	=	\$4,000
Stream Alteration	0	LS	x \$1,200	=	\$0
<i>Act 250/NEPA</i>					
Land Use Permit Application	0	LS	x \$3,000	=	\$0
Administrative Amendment	0	LS	x \$800	=	\$0
Level 1 Environmental Assessment	1	LS	x \$1,500	=	\$1,500
Archeology Study	1	LS	x \$2,500	=	\$2,500
Traffic Study	1	LS	x \$3,500	=	\$3,500
<i>Federal</i>					
Corps of Engineers Wetlands	0	LS	x \$1,500	=	<u>\$5,500</u>

Does not include the development of Construction Documents

**Total    \$43,700**

*Prepared by Civil Engineering Associates, Inc.*



**OVERALL SCORE: 29.8/40 (#3)**

**HEALTH LAB SITE, COLCHESTER**

Criteria & Scores

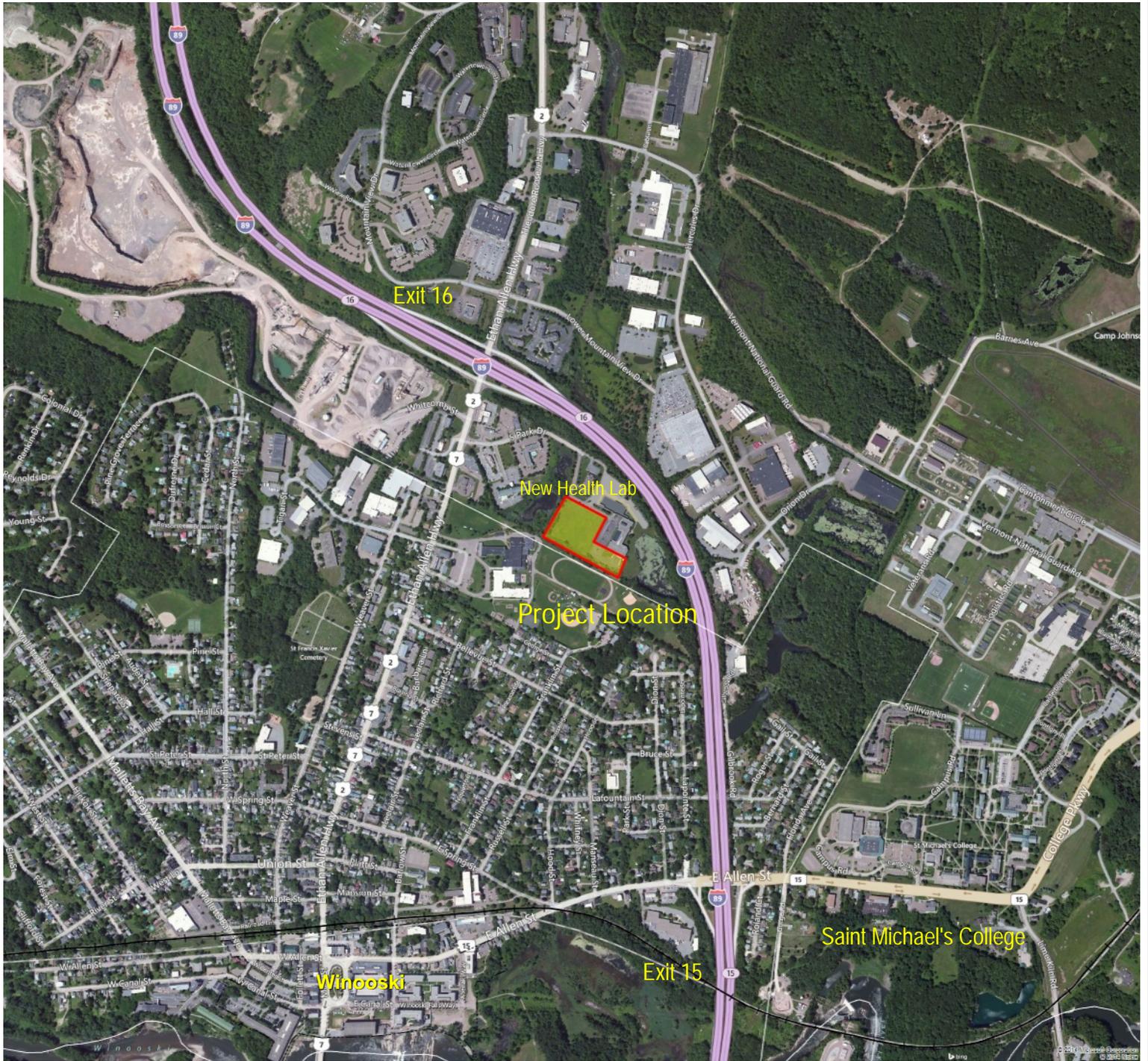
1. 3.5 Site is tight. No room to expand; difficult for exterior storage. No room for solar array
2. 3.3 Site is developed. Poor soils
3. 4.8 All utilities including fiberoptic at site
4. 4.5 Permitted use; needs Act 250 amendment
5. 4.2 Neighboring buildings are the same use.
6. 4.0 Tight site but otherwise good for construction
7. 2.2 Distant from Montpelier
8. 3.3 Next to the health lab; UVM interns nearby

Size: 2.1 acres

Acquisition cost: \$1/year ground lease

Rough cost to develop: \$650,000

**TOTAL \$650,000**



- LEGEND**
-  Railroads
  -  Designated Downtown Areas
  -  Designated Village Areas
  -  Town Boundary
  -  County Boundary

**NOTES**

Map created using ANR's Natural Resources Atlas

1: 14,700

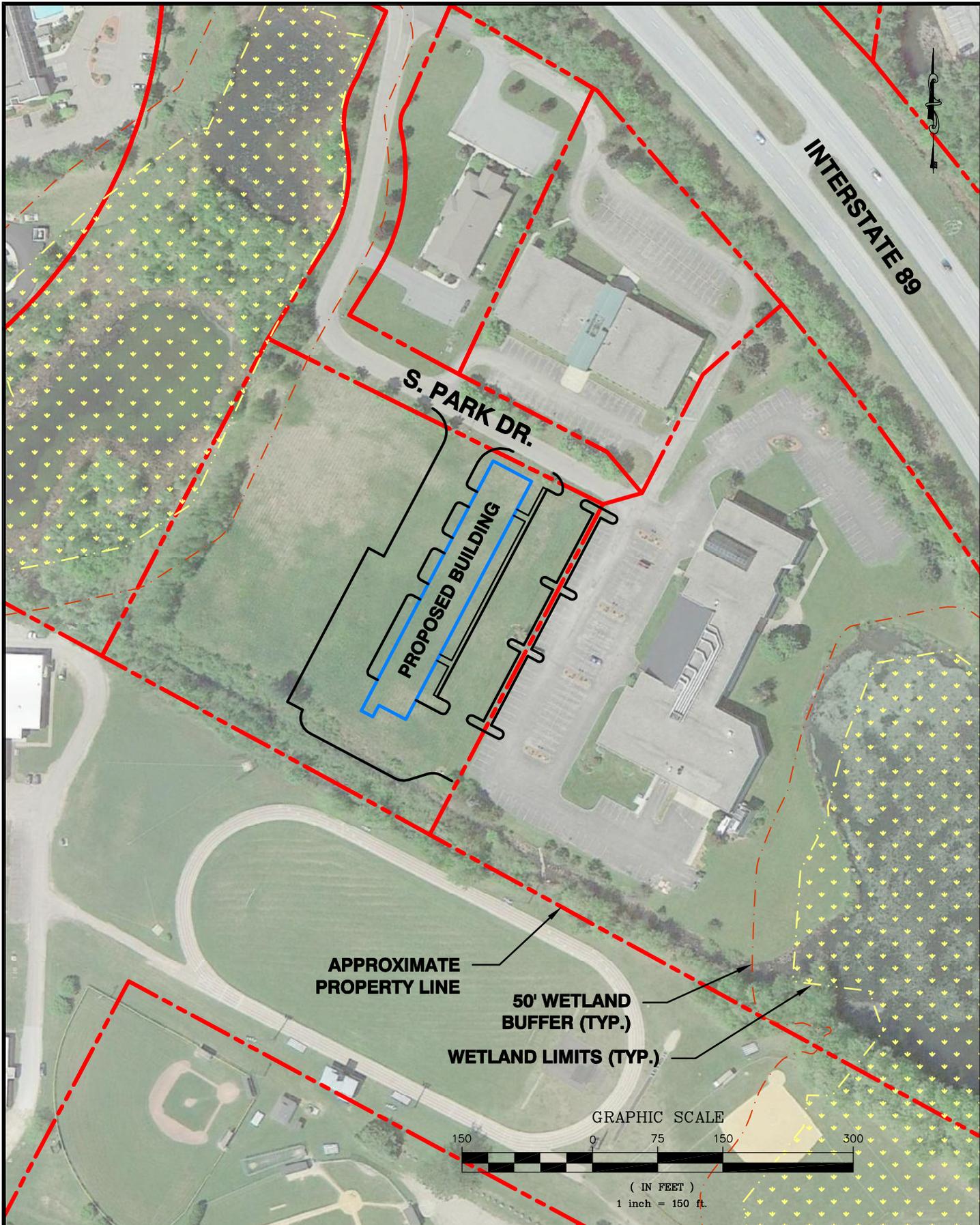
July 24, 2014



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Scale 1" = 150'  
 Date JUL. 29. 2014

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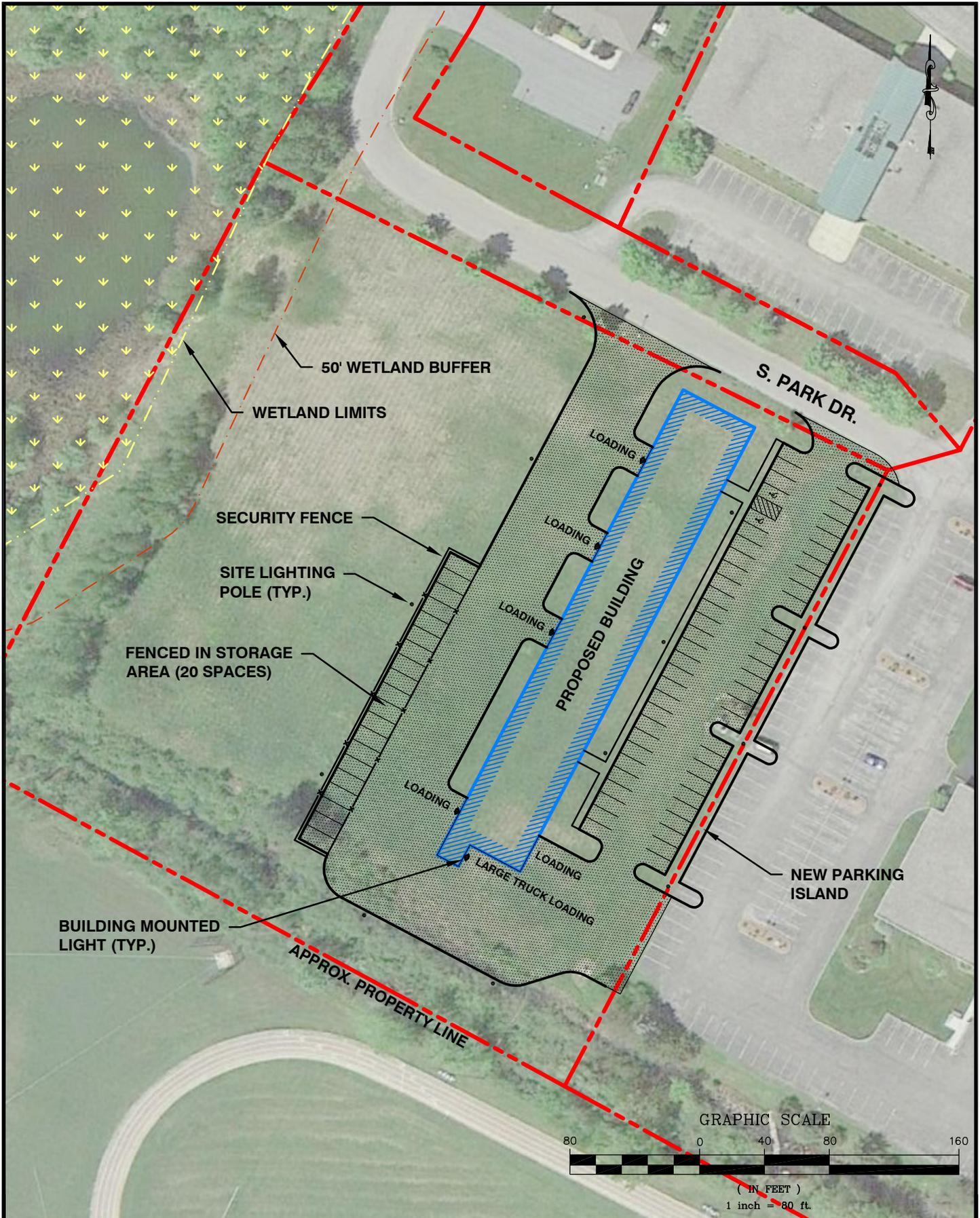
DEPARTMENT OF  
 BUILDINGS & GENERAL SERVICES

NEW AGRICULTURAL/ENVIRONMENTAL LAB

**OVERALL PROPERTY PLAN  
 HEALTH LAB SITE**

COLCHESTER

VERMONT



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STATE  
 OF  
 VERMONT

DEPARTMENT OF  
 BUILDINGS & GENERAL SERVICES

NEW AGRICULTURAL/ENVIRONMENTAL LAB

**SITE PLAN**  
**HEALTH LAB SITE**

COLCHESTER

VERMONT

Colchester: Health Lab site



# Colchester: Health Lab Site

## Permitting Summary

### Municipal

Zone: Commercial

Use is permitted.

45' front yard setback; 15' side yard setback; 30' rear setback. 35' height. (height exceeds limit, but adjacent buildings exceed it also)

### State

Wastewater – The project site is served by municipal water and sewer. A modest water and sewer allocation will be required to be acquired from the Town for this project. There are no other known technical issues associated with the acquisition of its permit.

Water Supply – The project may require the acquisition of a Permit to Construct from the Water Supply Division if a hydrant is required on the property.

Construction Stormwater – The project may qualify for a Low Risk Authorization under the State Construction Stormwater General Permit.

Operational Stormwater – The site's existing State Operation Stormwater General covers this project's additional impervious area. The extent of the mitigation may change as the State is in the process of modifying the Stormwater Rules to require additional on-site retention of storm events. At this time assume a stormwater "wet pond" is not required.

Wetlands – The project is located adjacent to mapped wetlands. (see attached map) Since the construction will occur over previously developed / disturbed areas there are no anticipated impacts to the wetlands or wetland buffer.

Stream Alteration – Not applicable

### Act 250

The subject parcel is part of an Act 250 permit. The project will require an amendment.

### Federal

Corps of Engineers – The project is not proposing any wetland impact, therefore no authorization should be required.

NEPA – Many of the items required as part of the NEPA review have been addressed in the existing Act 250 permitting process.

# Health Lab Site Colchester

## Summary of Estimate of Probable Site Development Cost August 8, 2014

Description	Qty	Unit		Unit Cost		Cost
Site & Building Demolition	1	LS	x	\$0	=	\$0
Mass Earthwork	1,667	CY	x	\$15.00	=	\$25,000
Rock Removal	10	CY	x	\$40	=	\$400
Supplemental Foundation Costs	1	LS	x	\$30,000	=	\$30,000
Sewer Disposal	1	LS	x	\$6,200	=	\$6,200
Water Supply	1	LS	x	\$16,250	=	\$16,250
Stormwater Management	1	LS	x	\$32,000	=	\$32,000
Site Development Components	1	LS	x	\$109,200	=	\$109,200
Special Site Conditions	1	LS	x	\$18,200	=	\$18,200
Retaining Walls	1	SF	x	\$4,800	=	\$4,800
Communications Utilities	1	LS	x	\$11,000	=	\$11,000
Pavement Surfaces	50,900	SF	x	\$5.08	=	\$258,498
Wetland Mitigation Measures	1	LS	x	\$1,200	=	\$1,200
Environmental Permitting	1	LS	x	\$1,000	=	<u>\$32,200</u>

Subtotal      \$544,948

20%      Contingency      \$105,052

**Total      \$650,000**



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Not included:

Landscaping, foundation work, sidewalks and ramps, signage, solar infrastructure, or solar panels.

# Health Lab Site Colchester

## Detail Breakdown of Probable Development Cost August 8, 2014

Page 1 of 4

Description	Qty	Unit	Unit Cost	=	Cost
<b>Site &amp; Building Demolition</b>					
Materials Recycling	0	CF	x \$3,500	=	\$0
Building Decommissioning	0	CF	x \$5,500	=	\$0
Materials to Landfill	0	CF	x \$12,000	=	<u>\$0</u>
					\$0
<b>Mass Earthwork</b>					
Access Road	0	CY	x \$8	=	\$0
Building Site (Cut to Fill)	<u>1667</u>	CY	x \$15	=	<u>\$25,000</u>
	1667		\$15		\$25,000
<b>Rock Removal</b>					
Excavated	10	CY	x \$40	=	\$400
Chipped	0	CY	x \$60	=	\$0
Blasted	<u>0</u>	CY	x \$100	=	<u>\$0</u>
	10		\$40		\$400
<b>Supplemental Foundation Costs</b>					
Spread Foundation	1200	SF	x \$20	=	\$24,000
GeoPiers	0	EA	x \$1,000	=	\$0
Poor Soil Replacement	150	CY	x \$40	=	<u>\$6,000</u>
					\$30,000
<b>Sewage Disposal</b>					
6" Sewer Service	270	LF	x \$20	=	\$5,400
Septic Tank	0	Gal	x \$3.25	=	\$0
Pump Station	0	LS	x \$5,500	=	\$0
On-Site Wastewater Disposal Sys.	0	LS	x \$25,000	=	\$0
2" Force Main	0	LF	x \$20	=	\$0
Manhole Connection	1	LS	x \$800	=	<u>\$800</u>
					\$6,200
<b>Water Supply</b>					
8" Fire Service	150	LF	x \$60	=	\$9,000
New Hydrant Assembly	1	EA	x \$2,500	=	\$2,500
6" Sprinkler Service	0	LF	x \$58	=	\$0
Wet Tap at Municipal Line	0	LS	x \$3,000	=	\$0
1" Domestic Service	150	LF	x \$25	=	\$3,750
Water Main Connection	1	LS	x \$1,000	=	<u>\$1,000</u>
					\$16,250

Prepared by Civil Engineering Associates, Inc.

# Health Lab Site Colchester

## Detail Breakdown of Probable Development Cost August 8, 2014

Page 2 of 4

Description	Qty	Unit	Unit Cost	=	Cost
<b>Stormwater Management</b>					
Wet Pond	0	LS	x \$30,000	=	\$0
Underground Sediment Trap	0	LS	x \$15,000	=	\$0
Underground Filter	0	LS	x \$25,000	=	\$0
Infiltration Galley	0	LF	x \$40	=	\$0
Catch Basins/DMH's	5	EA	x \$2,500	=	\$12,500
15" Storm Drain Pipe	300	LF	x \$35	=	\$10,500
Grass Lined Swale	450	LF	x \$20	=	<u>\$9,000</u>
					\$32,000
<b>Standard Site Development Items</b>					
Perimeter Chain Link Fence	450	LF	x \$20	=	\$9,000
Signage/Pavement Markings	1	LS	x \$4,500	=	\$4,500
Area Light Poles & Bases	13	EA	x \$2,500	=	\$32,500
Bldg Mounted Lights	5	EA	x \$1,000	=	\$5,000
Secondary Electrical Condu. & Wire	980	LF	x \$20	=	\$19,600
Strip Topsoil & Stockpile	1210	CY	x \$10	=	\$12,100
Spread Topsoil, Seed, Fert & Mulch	400	CY	x \$15	=	\$6,000
Import Screened Topsoil & Spread	50	CY	x \$35	=	\$1,750
Loading Area Concrete Surface	450	SF	x \$15	=	\$6,750
Erosion Prevention & Sed. Control	1	LS	x \$12,000	=	<u>\$12,000</u>
					\$109,200
<b>Special Site Conditions</b>					
Tree Clearing	0	Acre	x \$6,000	=	\$0
Tree Protection	2	EA	x \$100	=	\$200
Special Fencing	450	LF	x \$40	=	\$18,000
Erosion Prevention & Sed. Control	1	LS	x \$0	=	<u>\$0</u>
					\$18,200
<b>Loading Area Retaining Walls</b>					
	80	SF	x \$60	=	\$4,800
<b>Power &amp; Communications Utilities</b>					
Phone & Cable Conduit & Line	60	LF	x \$40	=	\$2,400
Fiber Optic Conduit & Line	60	LF	x \$60	=	\$3,600
Primary Power Conduit & Wire	60	LF	x \$50	=	\$3,000
Concrete Encasement	40	LF	x \$50	=	\$2,000
Transformer & Base	0	EA	x \$15,000	=	<u>\$0</u>
					\$11,000

Prepared by Civil Engineering Associates, Inc.

# Health Lab Site

## Colchester

### Detail Breakdown of Probable Development Cost

August 8, 2014

Description	Qty	Unit	Unit Cost	Page 3 of 4 Cost
<b>Pavement Surfaces</b>				
Access Road	-	SF	x \$6.17 =	\$0
Parking Lot	16,700	SF	x \$5.43 =	\$90,665
Additional Circulation	<u>34,200</u>	SF	x \$4.91 =	<u>\$167,833</u>
	50,900		\$5.08	\$258,498
<b>Wetland Mitigation</b>				
Avoidance				
Retaining walls	0	SF	x \$60 =	\$0
Steep Slopes	300	SY	x \$4 =	\$1,200
Special Surfaces	0	SY	x \$12 =	<u>\$0</u>
				\$1,200

Prepared by Civil Engineering Associates, Inc.

# Health Lab Site Colchester

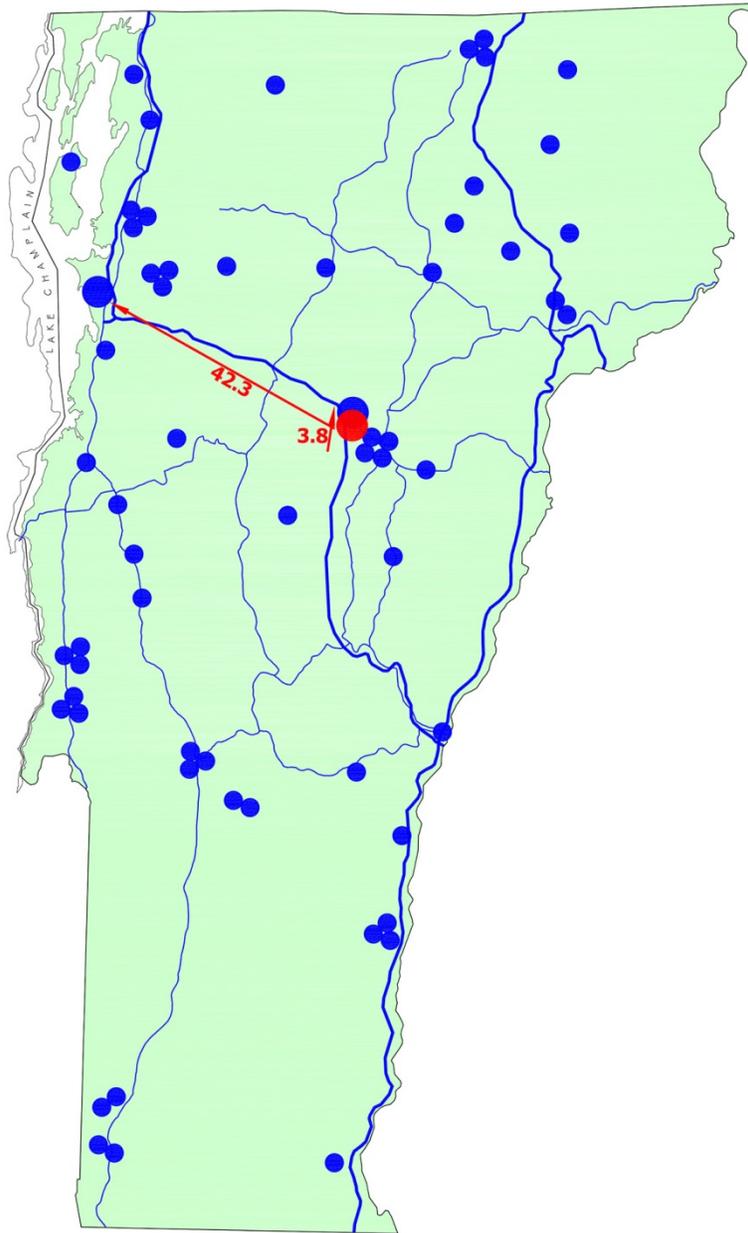
## Detail Breakdown of Probable Development Cost August 8, 2014

Description	Qty	Unit	Unit Cost	=	Cost
<b>Environmental Permitting</b>					
<i>Basic Plan Package Preparation</i>					
Existing Condition Documentation	1	LS	x \$3,000	=	\$3,000
Boundary Survey	0	LS	x \$4,000	=	\$0
Wetland Delineation	0	LS	x \$2,500	=	\$0
Site Grading & Stormwater Plan	1	LS	x \$6,000	=	\$6,000
Site Utility Plan	1	LS	x \$2,500	=	\$2,500
EPSC Plan	1	LS	x \$1,500	=	\$1,500
Details	1	LS	x \$2,000	=	\$2,000
Specifications	1	LS	x \$1,500	=	<u>\$1,500</u>
					\$16,500
<i>Local</i>					
Site Plan	1	LS	x \$1,500	=	\$1,500
Condition Use	1	LS	x \$1,000	=	\$1,000
<i>State</i>					
WW & Potable Water Supply	1	LS	x \$1,200	=	\$1,200
Water Supply Permit to Construct	0	LS	x \$2,500	=	\$0
<i>Construction Stormwater</i>					
Low Risk Site	1	LS	x \$500	=	\$500
Moderate Risk Site	0	LS	x \$2,500	=	\$0
Operational Stormwater	0	LS	x \$1,000	=	\$0
Stream Alteration	0	LS	x \$1,200	=	\$0
<i>Act 250/NEPA</i>					
Land Use Permit Application	1	LS	x \$3,000	=	\$3,000
Administrative Amendment	0	LS	x \$800	=	\$0
Level 1 Environmental Assessment	1	LS	x \$1,500	=	\$1,500
Archeology Study	1	LS	x \$3,500	=	\$3,500
Traffic Study	1	LS	x \$3,500	=	\$3,500
<i>Federal</i>					
Corps of Engineers Wetlands	0	LS	x \$1,500	=	<u>\$0</u>

Does not include the development of Construction Documents

**Total    \$32,200**

*Prepared by Civil Engineering Associates, Inc.*



**OVERALL SCORE: 29.3/40 (TIED FOR # 4)**

**“BACK LOT,” PAINE TURNPIKE, BERLIN**

Criteria & Scores

1. 4.5 Plenty of room. Room for solar array
2. 3.5 Wetlands, some poor soils, slope
3. 4.2 All utilities including fiberoptic are available
4. 2.0 This use is prohibited. Title 24 would have to be invoked. No Act 250 but NEPA is required.
5. 4.0 Compatible neighborhood; in transition
6. 3.7 Somewhat remote from road
7. 3.7 Close to Montpelier; deliveries easier if 2 entries
8. 3.7 Possible economies with other State buildings

Size: 17.8 acres

Acquisition cost: \$1,200,000

Rough cost to develop: \$1,140,000

**TOTAL \$2,340,000**



- LEGEND**
- Railroads
  - Designated Downtown Areas
  - Designated Village Areas
  - Town Boundary
  - County Boundary

**NOTES**

Map created using ANR's Natural Resources Atlas

1: 14,700

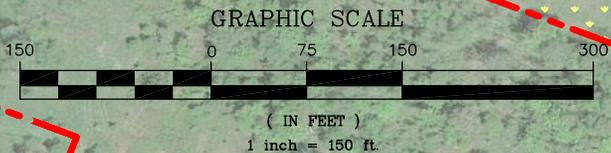
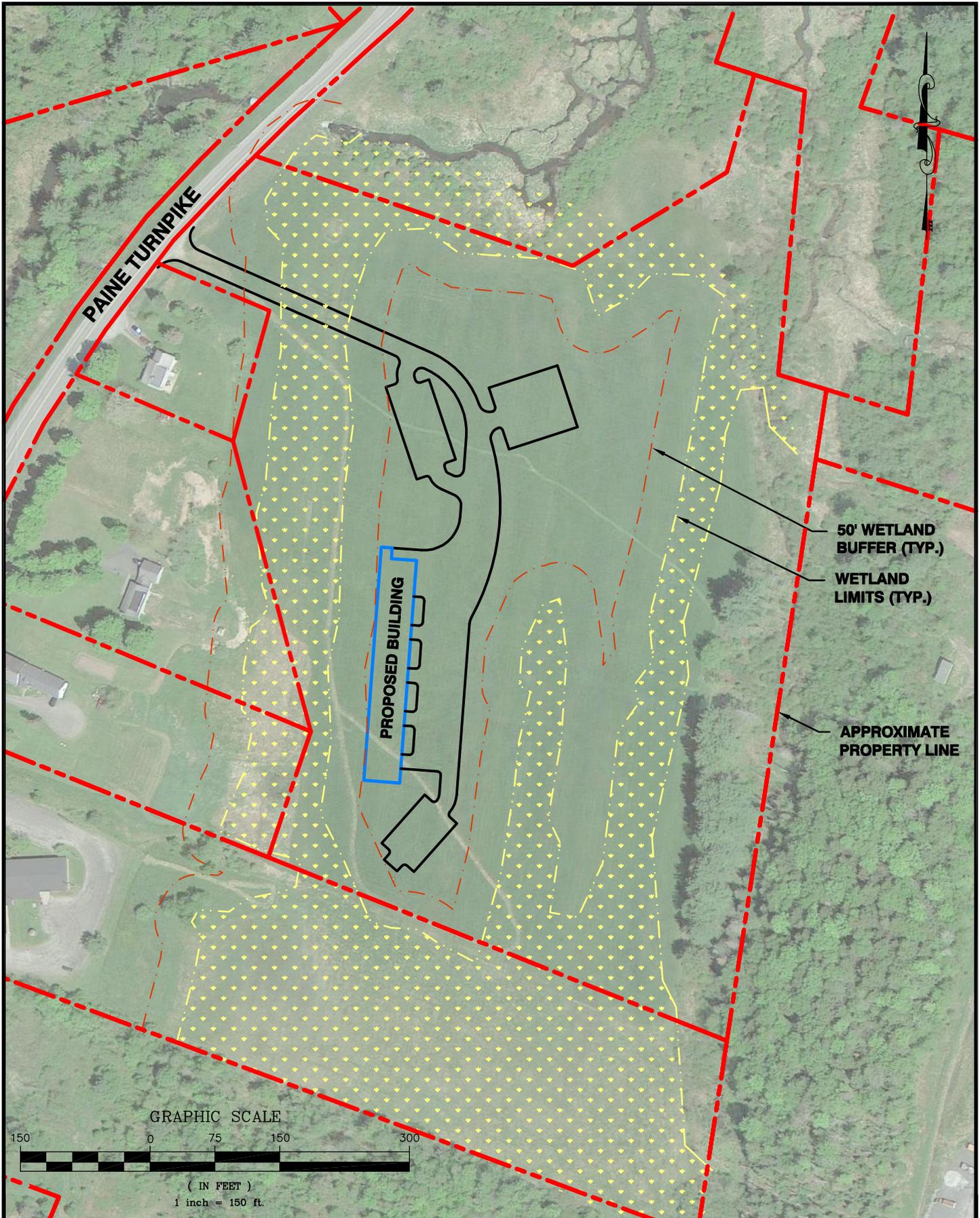
July 18, 2014



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 SO. BURLINGTON, VT 05403  
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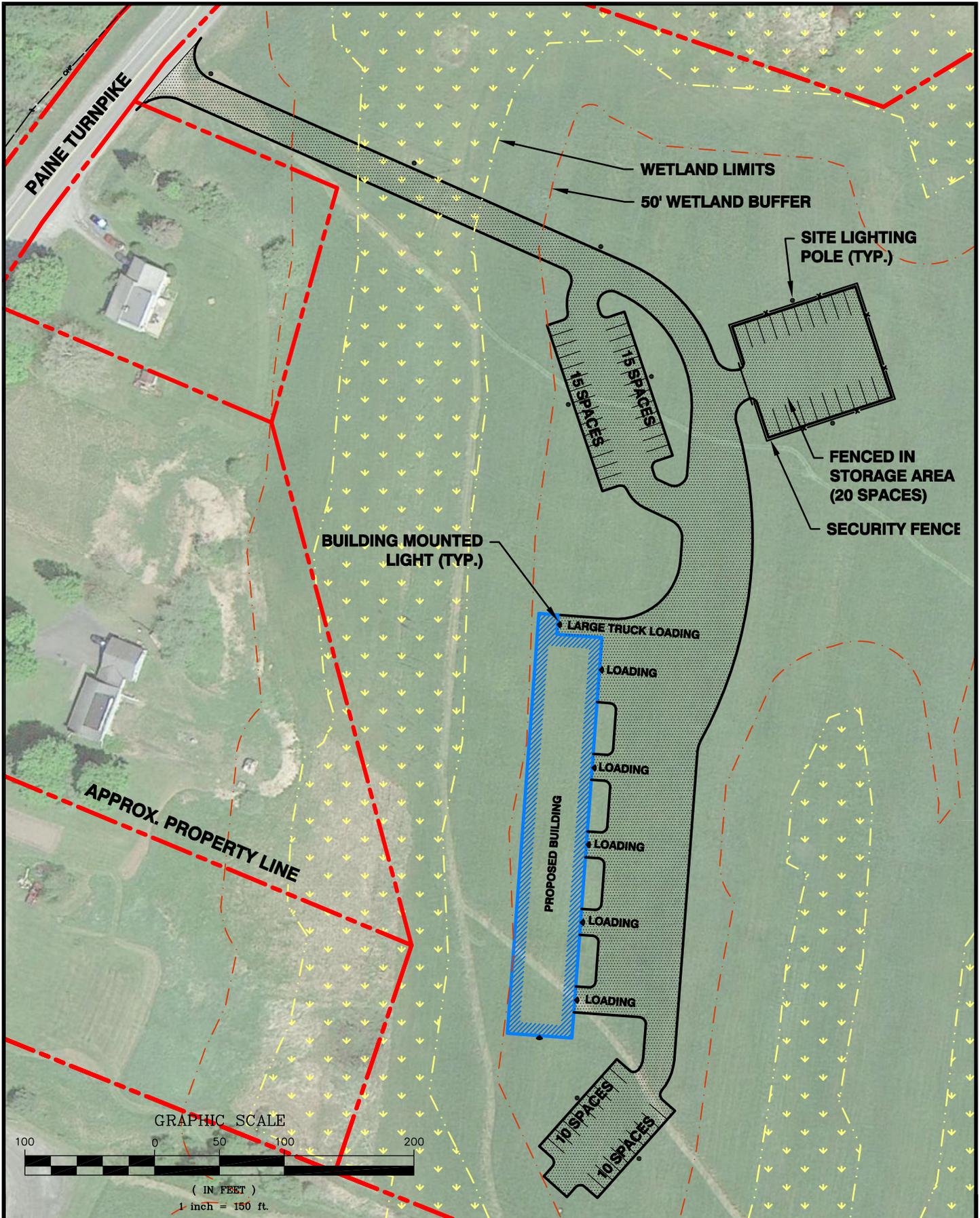
STATE  
 OF  
 VERMONT

DEPARTMENT OF  
 BUILDINGS & GENERAL SERVICES

NEW AGRICULTURAL/ENVIRONMENTAL LAB  
**OVERALL PROPERTY PLAN**  
**BACK LOT SITE**

BERLIN

VERMONT



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STATE  
 OF  
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DEPARTMENT OF  
 BUILDINGS & GENERAL SERVICES

NEW AGRICULTURAL/ENVIRONMENTAL LAB

**SITE PLAN  
 BACK LOT SITE**

BERLIN

VERMONT

Berlin: Paine Turnpike Back Lot



# Berlin : Paine Turnpike “Back Lot” Site

## Permitting Summary

### Municipal

Zone: Town Center. Laboratory use is prohibited. There is a precedent established in Berlin to honor Title 24.

15’ front yard setback; 10’ side and rear yard setback. Building height 45’ allowed.

Lot coverage 75%

### State

Wastewater – The project will rely upon the timely construction of the extension of municipal sewer to this portion of the Town of Berlin. This is scheduled to occur in the near future. A modest water and sewer allocation will be required to be acquired from the Town for this project. There are no other known technical issues associated with the acquisition of is permit.

Water Supply – The project may require the acquisition of a Permit to Construct from the Water Supply Division if a hydrant is required on the property.

Construction Stormwater – The project may qualify for a Low Risk Authorization under the State Construction Stormwater General Permit.

Operational Stormwater – Coverage under the State Operation Stormwater General Permit will be required as amount of impervious area on the property exceeds the one acre jurisdictional limit. The extent of the mitigation may change as the State is in the process of modifying the Stormwater Rules to require additional on-site retention of storm events.

Wetlands – The project crosses Class II wetlands and will require the acquisition of a State Wetland Permit.

Stream Alteration – The proposed wetland crossing may trigger the need for an authorization under the State Stream Alteration General Permit.

### Act 250

Provided that the project will disturb less than 10 acres and the underlying property has not triggered Act 250 jurisdiction, Act 250 jurisdiction should not attach to this project.

### Federal

Corps of Engineers – The project is proposing some wetland impact associated with the proposed road crossing and as this will likely be greater than 3000 square feet this will require an authorization to be issued under the Federal General Permit.

NEPA – Many of the criteria otherwise handled within the Act 250 process will need to be addressed as part of the NEPA review. Items of exposure are archaeological issues, prime agricultural soils, and traffic impact.

# Back Lot

## Berlin

### Summary of Estimate of Probable Site Development Cost

August 8, 2014

Description	Qty	Unit		Unit Cost		Cost
Site & Building Demolition	1	LS	x	\$0	=	\$0
Mass Earthwork	100	CY	x	\$8.00	=	\$800
Rock Removal	10	CY	x	\$40	=	\$400
Supplemental Foundation Costs	1	LS	x	\$46,000	=	\$46,000
Sewer Disposal	1	LS	x	\$30,900	=	\$30,900
Water Supply	1	LS	x	\$64,700	=	\$64,700
Stormwater Management	1	LS	x	\$65,000	=	\$65,000
Site Development Components	1	LS	x	\$169,472	=	\$169,472
Special Site Conditions	1	LS	x	\$4,600	=	\$4,600
Retaining Walls	1	SF	x	\$4,800	=	\$4,800
Communications Utilities	1	LS	x	\$137,500	=	\$137,500
Pavement Surfaces	68,150	SF	x	\$5.52	=	\$376,252
Wetland Mitigation Measures	1	LS	x	\$7,600	=	\$7,600
Environmental Permitting	1	LS	x	\$1,000	=	<u>\$41,500</u>

Subtotal \$949,524

20% Contingency \$190,476

**Total \$1,140,000**



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Not included:

Landscaping, foundation work, sidewalks and ramps, signage, solar infrastructure, or solar panels.

# Back Lot

## Berlin

### Detail Breakdown of Probable Development Cost

August 8, 2014

Page 1 of 4

Description	Qty	Unit		Unit Cost	=	Cost
<b>Site &amp; Building Demolition</b>						
Materials Recycling	0	LS	x	\$3,500	=	\$0
Building Decommissioning	0	LS	x	\$5,500	=	\$0
Materials to Landfill	0	LS	x	\$12,000	=	<u>\$0</u>
						\$0
<b>Mass Earthwork</b>						
Access Road	100	CY	x	\$8	=	\$800
Building Site (to Off-site Waste)	<u>0</u>	CY	x	\$15	=	<u>\$0</u>
	100			\$8		\$800
<b>Rock Removal</b>						
Excavated	10	CY	x	\$40	=	\$400
Chipped	0	CY	x	\$60	=	\$0
Blasted	<u>0</u>	CY	x	\$100	=	<u>\$0</u>
	10			\$40		\$400
<b>Supplemental Foundation Costs</b>						
Spread Foundation	2100	SF	x	\$20	=	\$42,000
GeoPiers	0	EA	x	\$1,000	=	\$0
Poor Soil Replacement	100	CY	x	\$40	=	<u>\$4,000</u>
						\$46,000
<b>Sewage Disposal</b>						
6" Sewer Service	100	LF	x	\$20	=	\$2,000
Septic Tank	0	Gal	x	\$3.25	=	\$0
Pump Station	1	LS	x	\$10,500	=	\$10,500
On-Site Wastewater Disposal Sys.	0	LS	x	\$25,000	=	\$0
2" Force Main	880	LF	x	\$20	=	\$17,600
Manhole Connection	1	LS	x	\$800	=	<u>\$800</u>
						\$30,900
<b>Water Supply</b>						
8" Fire Service	830	LF	x	\$60	=	\$49,800
New Hydrant Assembly	2	EA	x	\$2,500	=	\$5,000
6" Sprinkler Service	50	LF	x	\$58	=	\$2,900
Wet Tap at Municipal Line	1	LS	x	\$3,000	=	\$3,000
1" Domestic Service	120	LF	x	\$25	=	\$3,000
Water Main Connection	1	LS	x	\$1,000	=	<u>\$1,000</u>
						\$64,700

Prepared by Civil Engineering Associates, Inc.

# Back Lot

## Berlin

### Detail Breakdown of Probable Development Cost

August 8, 2014

Page 2 of 4

Description	Qty	Unit	Unit Cost	Cost
<b>Stormwater Management</b>				
Wet Pond	1	LS	x \$30,000 =	\$30,000
Underground Sediment Trap	0	LS	x \$15,000 =	\$0
Underground Filter	0	LS	x \$25,000 =	\$0
Infiltration Galley	0	LF	x \$40 =	\$0
Catch Basins/DMH's	5	EA	x \$2,500 =	\$12,500
15" Storm Drain Pipe	300	LF	x \$35 =	\$10,500
Grass Lined Swale	600	LF	x \$20 =	<u>\$12,000</u>
				\$65,000
<b>Standard Site Development Items</b>				
Perimeter Chain Link Fence	420	LF	x \$20 =	\$8,400
Signage/Pavement Markings	1	LS	x \$4,500 =	\$4,500
Area Light Poles & Bases	9	EA	x \$2,500 =	\$22,500
Bldg Mounted Lights	7	EA	x \$1,000 =	\$7,000
Secondary Electrical Condu. & Wire	1430	LF	x \$20 =	\$28,600
Strip Topsoil & Stockpile	6222	CY	x \$10 =	\$62,222
Spread Topsoil, Seed, Fert & Mulch	1050	CY	x \$15 =	\$15,750
Import Screened Topsoil & Spread	50	CY	x \$35 =	\$1,750
Loading Area Concrete Surface	450	SF	x \$15 =	\$6,750
Erosion Prevention & Sed. Control	1	LS	x \$12,000 =	<u>\$12,000</u>
				\$169,472
<b>Special Site Conditions</b>				
Tree Clearing	0.1	Acre	x \$6,000 =	\$600
Tree Protection	0	EA	x \$100 =	\$0
Special Fencing	0	LF	x \$40 =	\$0
Erosion Prevention & Sed. Control	1	LS	x \$4,000 =	<u>\$4,000</u>
				\$4,600
<b>Loading Area Retaining Walls</b>				
	80	SF	x \$60 =	\$4,800
<b>Power &amp; Communications Utilities</b>				
Phone & Cable Conduit & Line	800	LF	x \$40 =	\$32,000
Fiber Optic Conduit & Line	800	LF	x \$60 =	\$48,000
Primary Power Conduit & Wire	800	LF	x \$50 =	\$40,000
Concrete Encasement	50	LF	x \$50 =	\$2,500
Transformer & Base	1	EA	x \$15,000 =	<u>\$15,000</u>
				\$137,500

Prepared by Civil Engineering Associates, Inc.

# Back Lot

## Berlin

### Detail Breakdown of Probable Development Cost

August 8, 2014

Page 3 of 4

Description	Qty	Unit	Unit Cost	Cost
<b>Pavement Surfaces</b>				
Access Road	26,100	SF	x \$6.17 =	\$160,950
Parking Lot	17,150	SF	x \$5.43 =	\$93,108
Additional Circulation	<u>24,900</u>	SF	x \$4.91 =	<u>\$122,194</u>
	68,150		\$5.52	\$376,252
<b>Wetland Mitigation</b>				
Avoidance				
Retaining walls	0	SF	x \$60 =	\$0
Steep Slopes	700	SY	x \$4 =	\$2,800
24" Culvert	80	LF	x \$60 =	\$4,800
Special Surfaces	0	SY	x \$12 =	<u>\$0</u>
				\$7,600

Prepared by Civil Engineering Associates, Inc.

# Back Lot Berlin

## Detail Breakdown of Probable Development Cost August 8, 2014

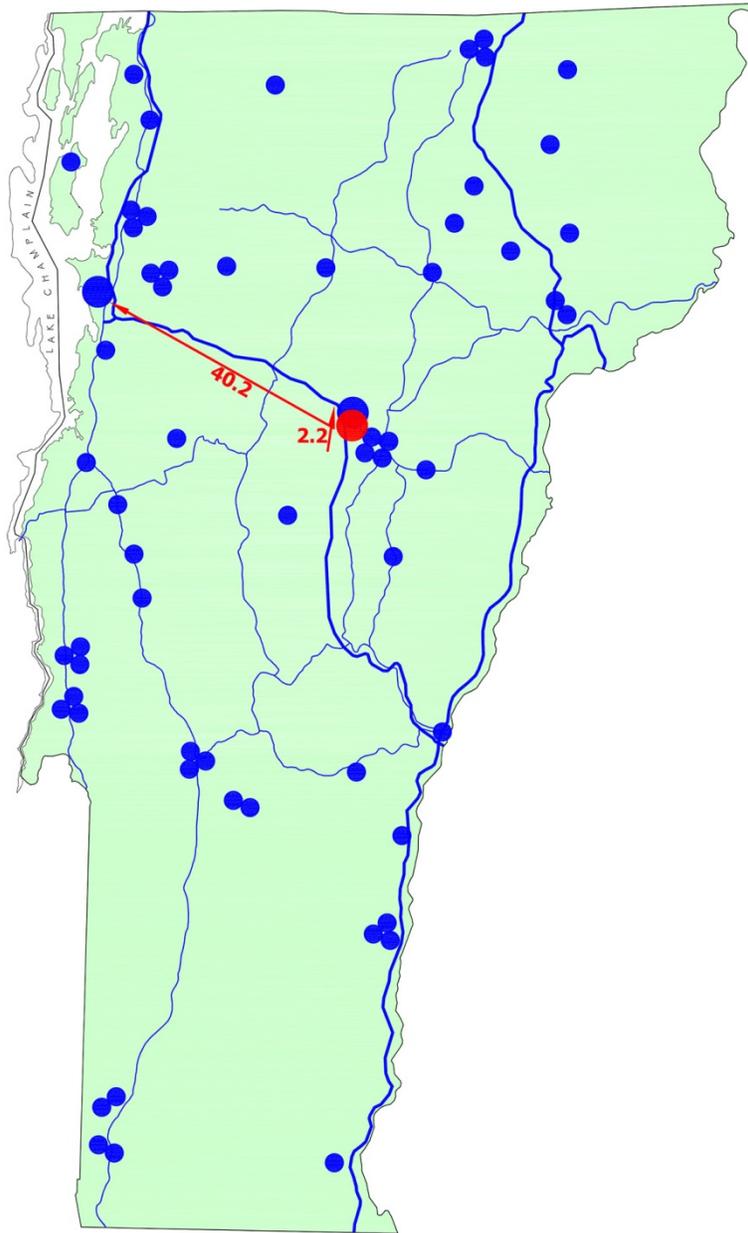
Page 4 of 4

Description	Qty	Unit	Unit Cost	=	Cost
<b>Environmental Permitting</b>					
<i>Basic Plan Package Preparation</i>					
Existing Condition Documentation	1	LS	x \$1,000	=	\$1,000
Boundary Survey	0	LS	x \$4,000	=	\$0
Wetland Delineation	1	LS	x \$1,000	=	\$1,000
Site Grading & Stormwater Plan	1	LS	x \$7,000	=	\$7,000
Site Utility Plan	1	LS	x \$3,000	=	\$3,000
EPSC Plan	1	LS	x \$1,500	=	\$1,500
Details	1	LS	x \$2,000	=	\$2,000
Specifications	1	LS	x \$1,500	=	<u>\$1,500</u>
					\$17,000
<i>Local</i>					
Site Plan	1	LS	x \$1,500	=	\$1,500
Condition Use	1	LS	x \$1,000	=	\$1,000
<i>State</i>					
WW & Potable Water Supply	1	LS	x \$1,800	=	\$1,800
Water Supply Permit to Construct	1	LS	x \$2,500	=	\$2,500
<i>Construction Stormwater</i>					
Low Risk Site	1	LS	x \$500	=	\$500
Moderate Risk Site	0	LS	x \$2,500	=	\$0
Operational Stormwater	1	LS	x \$4,000	=	\$4,000
Stream Alteration	1	LS	x \$1,200	=	\$1,200
<i>Act 250/NEPA</i>					
Land Use Permit Application	1	LS	x \$3,000	=	\$3,000
Administrative Amendment	0	LS	x \$800	=	\$0
Level 1 Environmental Assessment	1	LS	x \$1,500	=	\$1,500
Archeology Study	1	LS	x \$2,500	=	\$2,500
Traffic Study	1	LS	x \$3,500	=	\$3,500
<i>Federal</i>					
Corps of Engineers Wetlands	1	LS	x \$1,500	=	<u>\$1,500</u>

Does not include the development of Construction Documents

**Total    \$41,500**

*Prepared by Civil Engineering Associates, Inc.*



**OVERALL SCORE: 29.2/40 (TIED FOR #4)**

**DOG RIVER ROAD, BERLIN**

Criteria & Scores

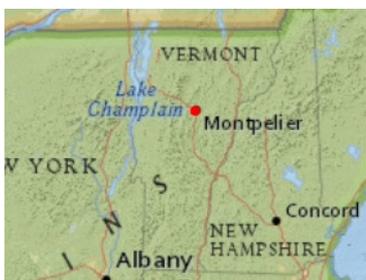
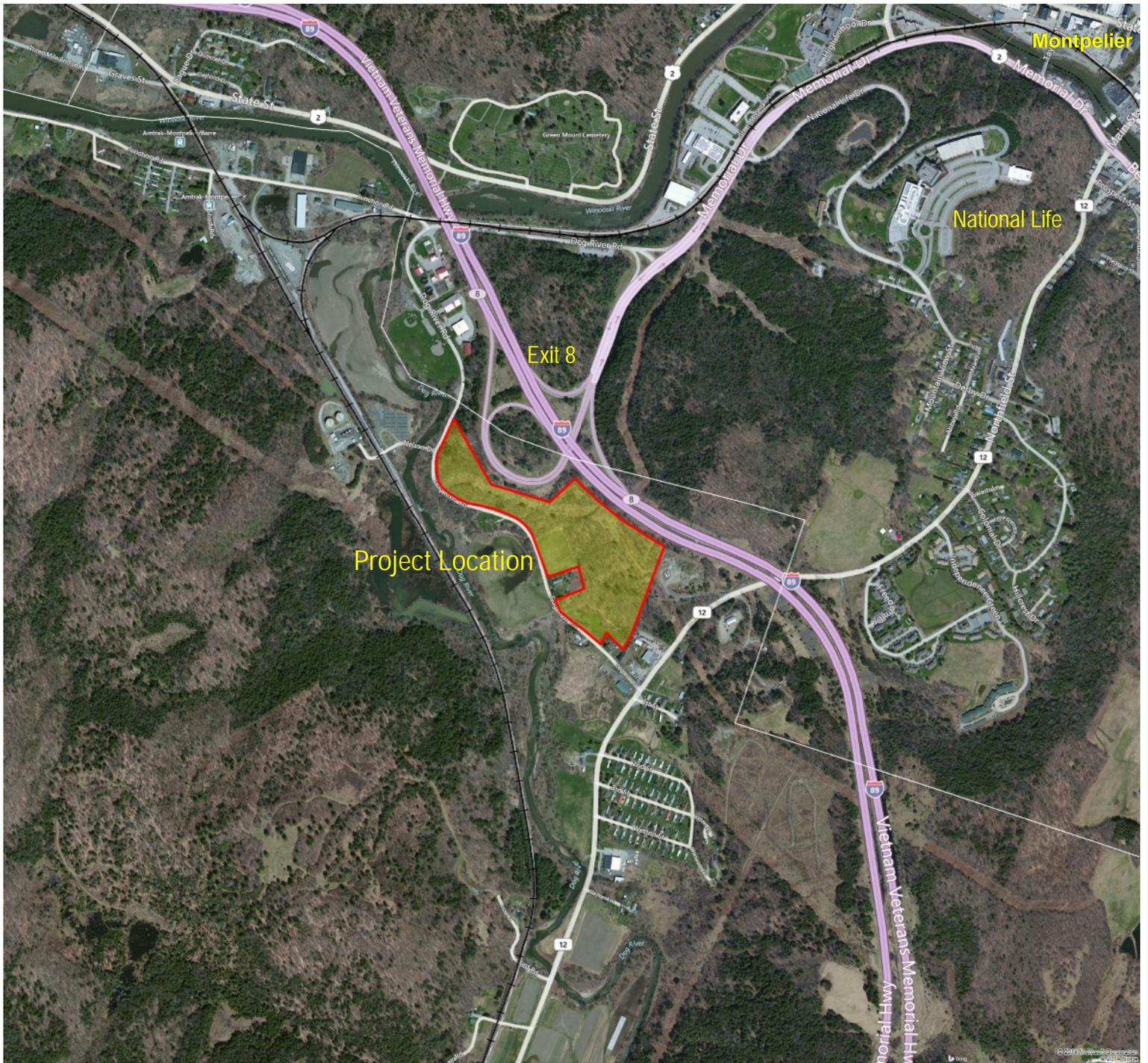
1. 4.2 Plenty of room; site sloped in back. Minimal room for solar array on the 5 acres
2. 3.8 Site is open with poor soils; wetland
3. 2.0 Fiberoptic is available. No water/sewer; would extend municipal water and build septic on site.
4. 3.8 Conditional use. NEPA necessary; may need wetland
5. 3.7 Compatible, although rural and close to interstate
6. 3.7 Only problems are soils and slope
7. 4.3 Close to Montpelier; very close to National Life
8. 3.7 No wider benefits

Size: 5+ acres

Acquisition cost: \$632,500

Rough cost to develop: \$1,450,000

**TOTAL \$2,082,000**



- LEGEND**
- Railroads
  - Designated Downtown Areas
  - Designated Village Areas
  - Town Boundary
  - County Boundary

**NOTES**

Map created using ANR's Natural Resources Atlas

1: 14,700

July 18, 2014



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1" = 1225 Ft. 1cm = 147 Meters  
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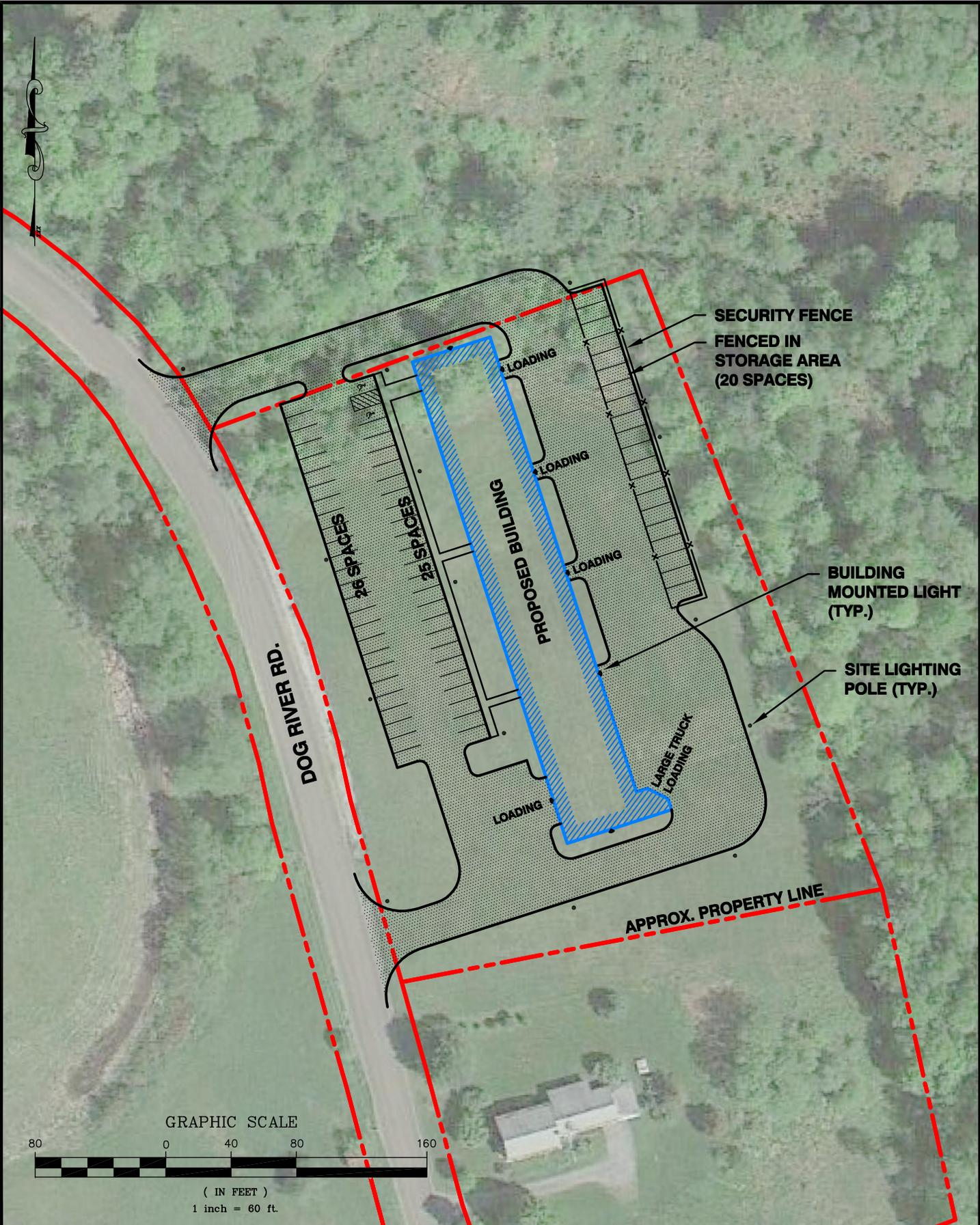
DEPARTMENT OF  
 BUILDINGS & GENERAL SERVICES

NEW AGRICULTURAL/ENVIRONMENTAL LAB

**OVERALL PROPERTY PLAN  
 DOG RIVER ROAD SITE**

BERLIN

VERMONT



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DEPARTMENT OF  
 BUILDINGS & GENERAL SERVICES

NEW AGRICULTURAL/ENVIRONMENTAL LAB

**SITE PLAN**  
**DOG RIVER ROAD SITE**

BERLIN

VERMONT

Berlin: Dog River Road



# **Berlin: Dog River Road**

## Permitting Summary

### **Municipal**

Zone: Commercial (CG); use is conditional.

50' front yard setback; 25' rear and side yard setbacks; 60' maximum building height

### **State**

Wastewater – The proposed site does not have access to municipal sewer at this time. There are discussions about a potential future sewer main along Route 12 however the construction schedule is unknown. The site contains very steep slopes and poor soils in the remaining areas where an on-site system could be sited. This site should connect to the municipal system in Montpelier.

Water Supply – The site would does not have access to municipal water at this time. The site would need to be served by a proposed drilled well. The project may require the acquisition of a Permit to Construct from the Water Supply Division depending upon the water source and number of people using it.

Construction Stormwater – The project may qualify for a Low Risk Authorization under the State Construction Stormwater General Permit.

Operational Stormwater – Coverage under the State Operation Stormwater General Permit will be required as amount of impervious area on the property exceeds the one acre jurisdictional limit. The extent of the mitigation may change as the State is in the process of modifying the Stormwater Rules to require additional on-site retention of storm events.

Wetlands – The project does contain mapped Class II wetlands. Depending upon the final site layout any construction into either the wetland or buffer would require the acquisition of a wetland permit.

Stream Alteration – Not applicable

### **Act 250**

Currently the proposed area of disturbance is less than 10 acres and barring any other jurisdictional triggers associated with the creation of residential units or lots within the past 5 years and 5 miles of this site, Act 250 jurisdiction should not attach to this project.

### **Federal**

Corps of Engineers – The project contains mapped Class II wetlands. Depending upon the final site layout any construction into either the wetland or buffer would require a wetland permit.

NEPA – Many of the criteria otherwise handled within the Act 250 process will need to be addressed as part of the NEPA review. Items of exposure are archaeological issues (much of the site has been disturbed but sits on fill perhaps encapsulating sensitive items) and traffic impacts.

# Dog River Rd Berlin

## Summary of Estimate of Probable Site Development Cost August 8, 2014

Description	Qty	Unit		Unit Cost		Cost
Site & Building Demolition	1	LS	x	\$0	=	\$0
Mass Earthwork	4,333	CY	x	\$12.00	=	\$52,000
Rock Removal	10	CY	x	\$40	=	\$400
Supplemental Foundation Costs	1	LS	x	\$30,000	=	\$30,000
Sewer Disposal	1	LS	x	\$145,700	=	\$145,700
Water Supply	1	LS	x	\$225,500	=	\$225,500
Stormwater Management	1	LS	x	\$105,750	=	\$105,750
Site Development Components	1	LS	x	\$119,100	=	\$119,100
Special Site Conditions	1	LS	x	\$14,000	=	\$14,000
Retaining Walls	1	SF	x	\$4,800	=	\$4,800
Communications Utilities	1	LS	x	\$56,500	=	\$56,500
Pavement Surfaces	55,700	SF	x	\$5.34	=	\$297,623
Wetland Mitigation Measures	1	LS	x	\$110,400	=	\$110,400
Environmental Permitting	1	LS	x	\$1,000	=	<u>\$45,200</u>

Subtotal                    \$1,206,973

20%                    Contingency                    \$243,027

**Total                    \$1,450,000**



**CIVIL ENGINEERING ASSOCIATES, INC.**  
10 MANSFIELD VIEW LANE, SOUTH BURLINGTON, VT 05403  
802-864-2323    FAX: 802-864-2271    web: www.cea-vt.com

Not included:

Landscaping, foundation work, sidewalks and ramps, signage, solar infrastructure, or solar panels.

# Dog River Rd Berlin

## Detail Breakdown of Probable Development Cost August 8, 2014

Page 1 of 4

Description	Qty	Unit		Unit Cost		Cost
<b>Site &amp; Building Demolition</b>						
Materials Recycling	0	CF	x	\$3,500	=	\$0
Building Decommissioning	0	CF	x	\$5,500	=	\$0
Materials to Landfill	0	CF	x	\$12,000	=	<u>\$0</u>
						\$0
<b>Mass Earthwork</b>						
Access Road	0	CY	x	\$8	=	\$0
Building Site (Cut to Fill)	<u>4333</u>	CY	x	\$12	=	<u>\$52,000</u>
	4333.3			\$12		\$52,000
<b>Rock Removal</b>						
Excavated	10	CY	x	\$40	=	\$400
Chipped	0	CY	x	\$60	=	\$0
Blasted	<u>0</u>	CY	x	\$100	=	<u>\$0</u>
	10			\$40		\$400
<b>Supplemental Foundation Costs</b>						
Spread Foundation	1200	SF	x	\$20	=	\$24,000
GeoPiers	0	EA	x	\$1,000	=	\$0
Poor Soil Replacement	150	CY	x	\$40	=	<u>\$6,000</u>
						\$30,000
<b>Sewage Disposal</b>						
6" Sewer Service	100	LF	x	\$20	=	\$2,000
Septic Tank	0	Gal	x	\$3.25	=	\$0
Pump Station	1	LS	x	\$10,500	=	\$10,500
On-Site Wastewater Disposal Sys.	0	LS	x	\$25,000	=	\$0
2" Force Main	3310	LF	x	\$40	=	\$132,400
Manhole Connection	1	LS	x	\$800	=	<u>\$800</u>
						\$145,700
<b>Water Supply</b>						
8" Fire Service	3310	LF	x	\$60	=	\$198,600
New Hydrant Assembly	7	EA	x	\$2,500	=	\$17,500
6" Sprinkler Service	50	LF	x	\$58	=	\$2,900
Wet Tap at Municipal Line	1	LS	x	\$3,000	=	\$3,000
1" Domestic Service	100	LF	x	\$25	=	\$2,500
Water Main Connection	1	LS	x	\$1,000	=	<u>\$1,000</u>
						\$225,500

Prepared by Civil Engineering Associates, Inc.

# Dog River Rd

Berlin

## Detail Breakdown of Probable Development Cost

August 8, 2014

Page 2 of 4

Description	Qty	Unit		Unit Cost	=	Cost
<b>Stormwater Management</b>						
Wet Pond	0	LS	x	\$30,000	=	\$0
Underground Sediment Trap	1	LS	x	\$15,000	=	\$15,000
Underground Filter	1	LS	x	\$25,000	=	\$25,000
Infiltration Galley/Storage	600	LF	x	\$40	=	\$24,000
Catch Basins/DMH's	5	EA	x	\$2,500	=	\$12,500
15" Storm Drain Pipe	550	LF	x	\$35	=	\$19,250
Grass Lined Swale	500	LF	x	\$20	=	<u>\$10,000</u>
						\$105,750
<b>Standard Site Development Items</b>						
Perimeter Chain Link Fence	460	LF	x	\$20	=	\$9,200
Signage/Pavement Markings	1	LS	x	\$4,500	=	\$4,500
Area Light Poles & Bases	13	EA	x	\$2,500	=	\$32,500
Bldg Mounted Lights	7	EA	x	\$1,000	=	\$7,000
Secondary Electrical Condu. & Wire	1155	LF	x	\$20	=	\$23,100
Strip Topsoil & Stockpile	1420	CY	x	\$10	=	\$14,200
Spread Topsoil, Seed, Fert & Mulch	540	CY	x	\$15	=	\$8,100
Import Screened Topsoil & Spread	50	CY	x	\$35	=	\$1,750
Loading Area Concrete Surface	450	SF	x	\$15	=	\$6,750
Erosion Prevention & Sed. Control	1	LS	x	\$12,000	=	<u>\$12,000</u>
						\$119,100
<b>Special Site Conditions</b>						
Tree Clearing	0.5	Acre	x	\$6,000	=	\$3,000
Tree Protection	10	EA	x	\$100	=	\$1,000
Special Fencing	250	LF	x	\$40	=	\$10,000
Erosion Prevention & Sed. Control	1	LS	x	\$0	=	<u>\$0</u>
						\$14,000
<b>Loading Area Retaining Walls</b>						
	80	SF	x	\$60	=	\$4,800
<b>Power &amp; Communications Utilities</b>						
Phone & Cable Conduit & Line	250	LF	x	\$40	=	\$10,000
Fiber Optic Conduit & Line	250	LF	x	\$60	=	\$15,000
Primary Power Conduit & Wire	250	LF	x	\$50	=	\$12,500
Concrete Encasement	80	LF	x	\$50	=	\$4,000
Transformer & Base	1	EA	x	\$15,000	=	<u>\$15,000</u>
						\$56,500

Prepared by Civil Engineering Associates, Inc.

# Dog River Rd

Berlin

## Detail Breakdown of Probable Development Cost

August 8, 2014

Description	Qty	Unit	Unit Cost		Page 3 of 4 Cost
<b>Pavement Surfaces</b>					
Access Road	13,400	SF	x	\$6.17 =	\$82,633
Parking Lot	14,200	SF	x	\$5.43 =	\$77,092
Additional Circulation	<u>28,100</u>	SF	x	\$4.91 =	<u>\$137,898</u>
	55,700			\$5.34	\$297,623
<b>Wetland Mitigation</b>					
Avoidance					
Retaining walls	1,600	SF	x	\$60 =	\$96,000
Steep Slopes	3,600	SY	x	\$4 =	\$14,400
Special Surfaces	0	SY	x	\$12 =	<u>\$0</u>
					\$110,400

Prepared by Civil Engineering Associates, Inc.

# Dog River Rd Berlin

## Detail Breakdown of Probable Development Cost August 8, 2014

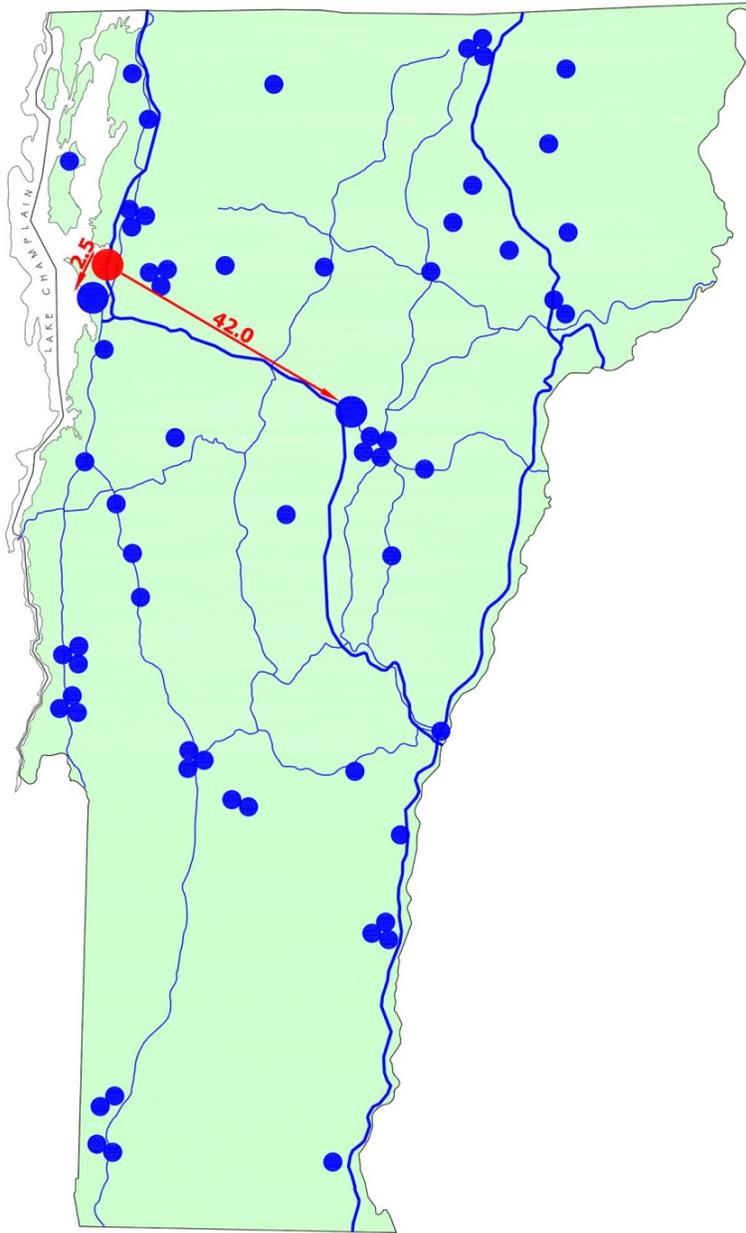
Page 4 of 4

Description	Qty	Unit	Unit Cost	=	Cost
<b>Environmental Permitting</b>					
<i>Basic Plan Package Preparation</i>					
Existing Condition Documentation	1	LS	x \$4,000	=	\$4,000
Boundary Survey	0	LS	x \$2,500	=	\$0
Wetland Delineation	1	LS	x \$1,000	=	\$1,000
Site Grading & Stormwater Plan	1	LS	x \$10,500	=	\$10,500
Site Utility Plan	1	LS	x \$6,500	=	\$6,500
EPSC Plan	1	LS	x \$1,500	=	\$1,500
Details	1	LS	x \$2,000	=	\$2,000
Specifications	1	LS	x \$1,500	=	<u>\$1,500</u>
					\$27,000
<i>Local</i>					
Site Plan	1	LS	x \$1,500	=	\$1,500
Condition Use	1	LS	x \$1,000	=	\$1,000
<i>State</i>					
WW & Potable Water Supply	1	LS	x \$1,200	=	\$1,200
Water Supply Permit to Construct	1	LS	x \$2,500	=	\$2,500
<i>Construction Stormwater</i>					
Low Risk Site	1	LS	x \$500	=	\$500
Moderate Risk Site	0	LS	x \$2,500	=	\$0
Operational Stormwater	1	LS	x \$4,000	=	\$4,000
Stream Alteration	0	LS	x \$1,200	=	\$0
<i>Act 250/NEPA</i>					
Land Use Permit Application	0	LS	x \$3,000	=	\$0
Administrative Amendment	0	LS	x \$800	=	\$0
Level 1 Environmental Assessment	1	LS	x \$1,500	=	\$1,500
Archeology Study	1	LS	x \$2,500	=	\$2,500
Traffic Study	1	LS	x \$3,500	=	\$3,500
<i>Federal</i>					
Corps of Engineers Wetlands	0	LS	x \$1,500	=	<u>\$0</u>

Does not include the development of Construction Documents

**Total    \$45,200**

*Prepared by Civil Engineering Associates, Inc.*



**OVERALL SCORE: 29.2/40 (TIED FOR #4)**

**SEVERANCE ROAD, COLCHESTER**

Criteria & Scores

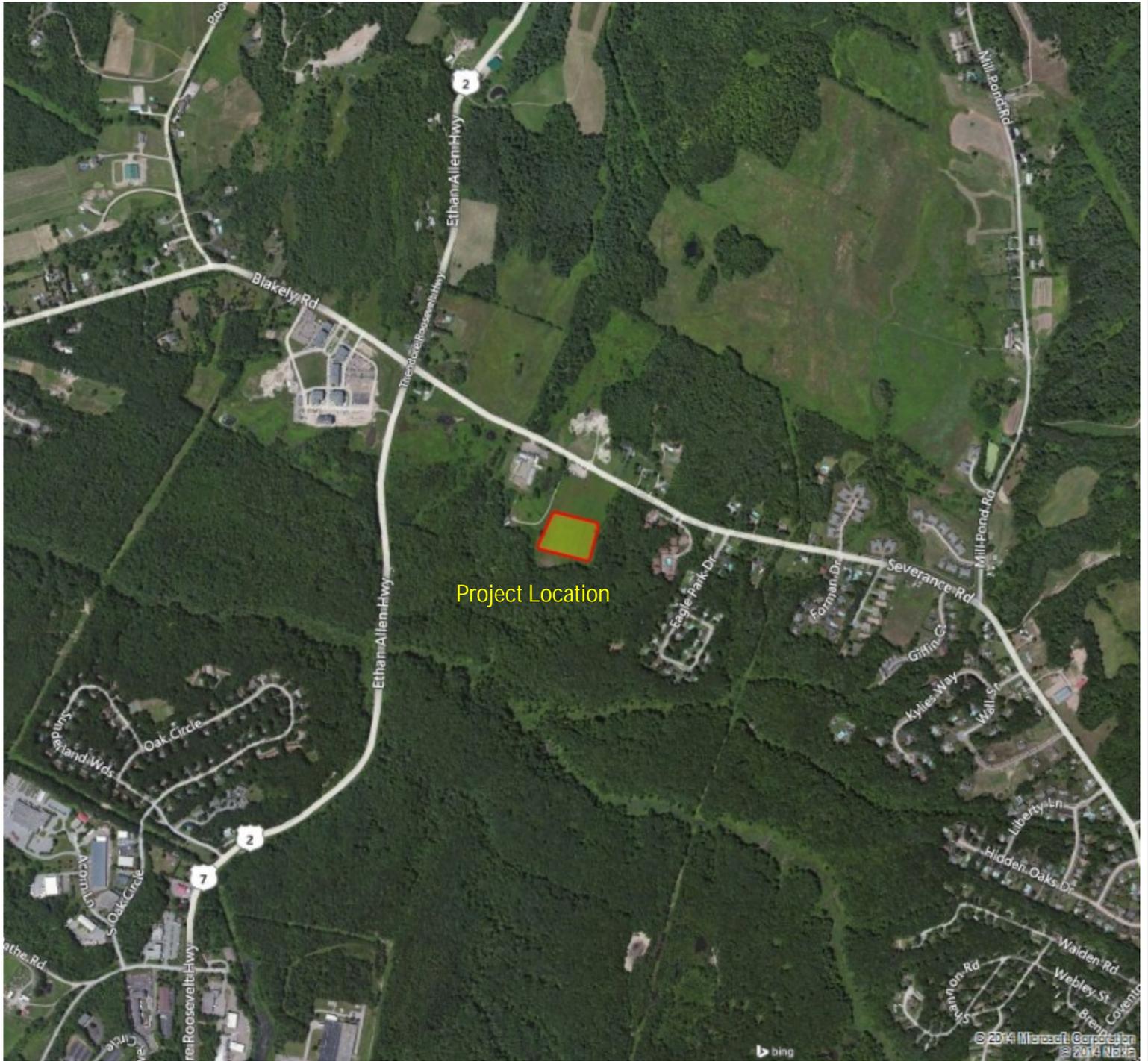
1. 4.3 Site is adequate; minimal room for solar array
2. 4.2 Site is open with good soils
3. 4.3 All utilities to site, including fiberoptic
4. 3.7 Permitted use. No Act 250 because the site is in a growth center. NEPA may require traffic study
5. 4.0 Compatible, although in a planned neighborhood
6. 4.8 Optimal for construction
7. 1.7 Distant from Montpelier
8. 2.2 Growth center

Size: 5+ acres

Acquisition cost: \$1,260,000

Rough cost to develop: \$550,000

**TOTAL \$1,810,000**



- LEGEND**
- Railroads
  - Designated Downtown Areas
  - Designated Village Areas
  - Town Boundary
  - County Boundary

**NOTES**

Map created using ANR's Natural Resources Atlas

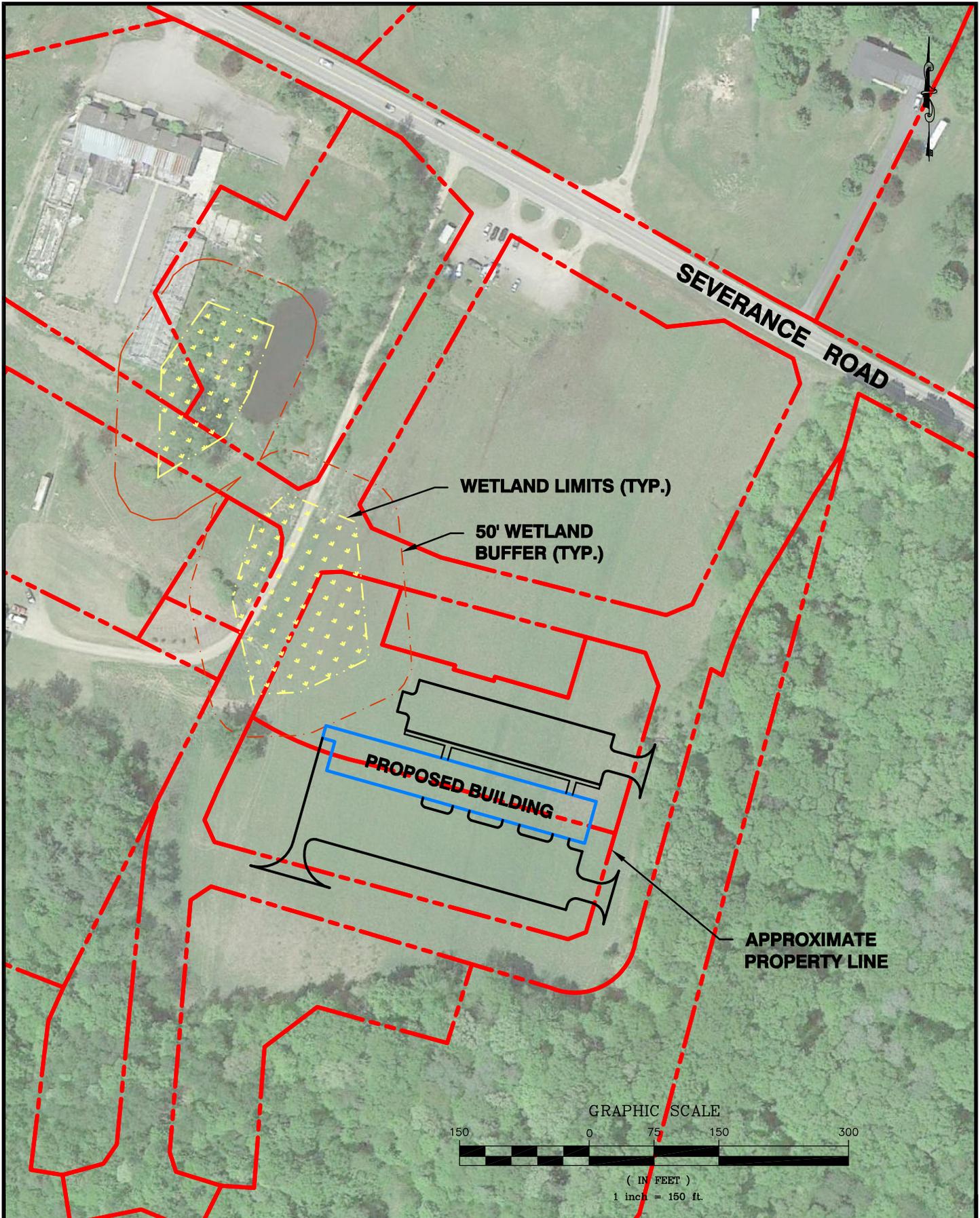
1: 14,700  
July 17, 2014



WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere  
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1" = 1225 Ft.    1cm = 147 Meters  
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**CIVIL ENGINEERING ASSOCIATES, INC.**  
 10 MANSFIELD VIEW LN.,  
 SO. BURLINGTON, VT 05403  
 802-864-2323 FAX: 802-864-2271



Scale 1" = 150'  
 Date JUL. 29. 2014

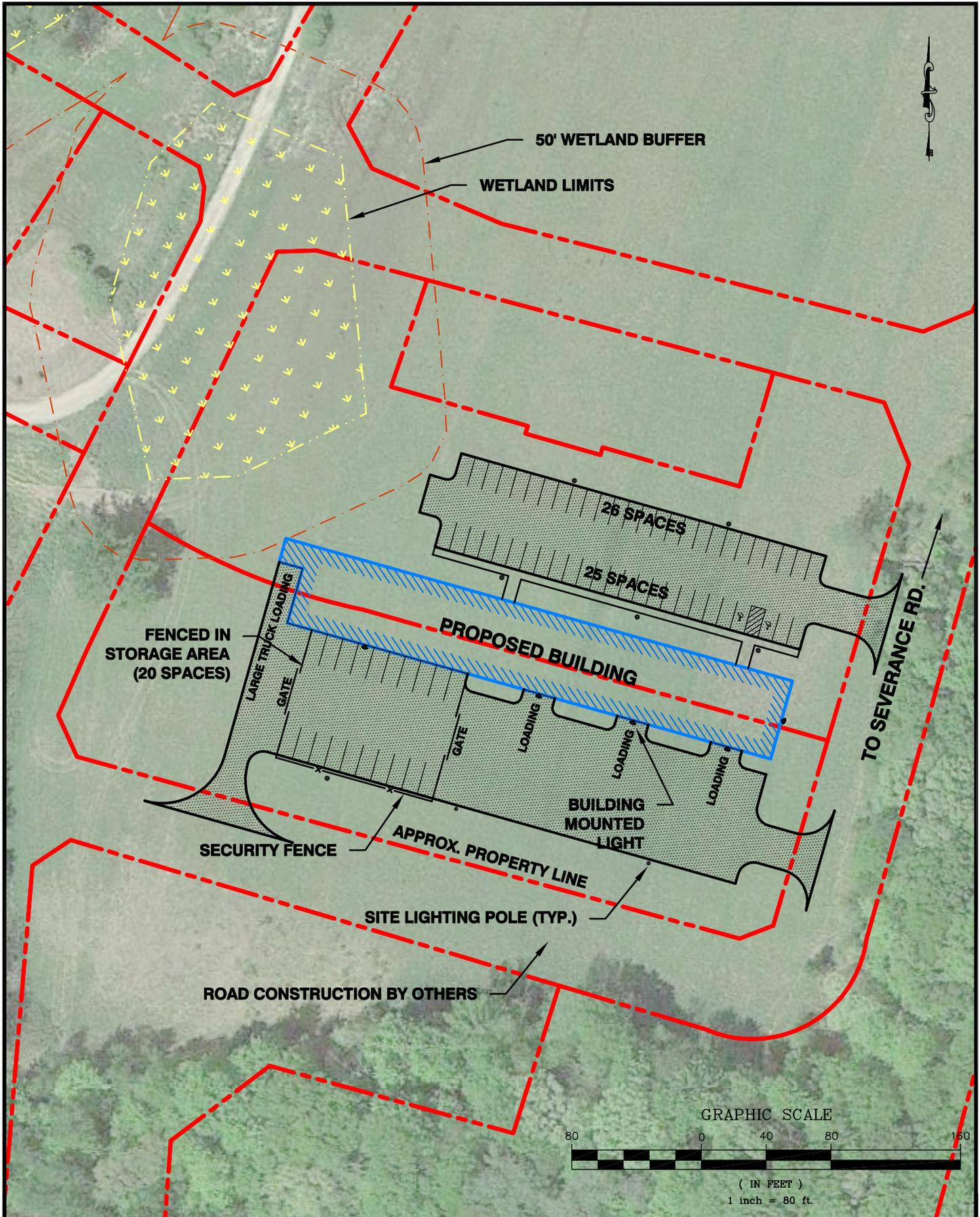
Drawn by SAL  
 CEA Project No. 14165



STATE  
 OF  
 VERMONT

DEPARTMENT OF  
 BUILDINGS & GENERAL SERVICES

NEW AGRICULTURAL/ENVIRONMENTAL LAB  
**OVERALL PROPERTY PLAN**  
**SEVERANCE ROAD SITE**  
 COLCHESTER VERMONT



**CIVIL ENGINEERING ASSOCIATES, INC.**  
 10 MANSFIELD VIEW LN.,  
 SO. BURLINGTON, VT 05403  
 802-864-2323 FAX: 802-864-2271



Scale 1" = 80'  
 Date JUL. 29. 2014

Drawn by SAL  
 CEA Project No. 14165



STATE  
 OF  
 VERMONT

DEPARTMENT OF  
 BUILDINGS & GENERAL SERVICES

NEW AGRICULTURAL/ENVIRONMENTAL LAB  
**SITE PLAN**  
**SEVERANCE ROAD SITE**  
 COLCHESTER VERMONT

Colchester: Severance Road



# Colchester: Severance Road

## Permitting Summary

### Municipal

Zone: Growth Center form-based district (GD3)

Use is permitted. At most this project would require a site plan amendment.

All dimensional criteria can be met for "B Street."

### State

Wastewater – The project will rely upon the timely construction of both municipal water and sewer infrastructure to the site by S.D. Ireland. A modest water and sewer allocation will be required to be acquired from the Town for this project. There are no other known technical issues associated with the acquisition of is permit.

Water Supply – The project may require the acquisition of a Permit to Construct from the Water Supply Division if a hydrant is required on the property.

Construction Stormwater – The project may qualify for a Low Risk Authorization under the State Construction Stormwater General Permit.

Operational Stormwater – Coverage under the State Operation Stormwater General Permit will be required as amount of impervious area on the property exceeds the one acre jurisdictional limit. The extent of the mitigation may change as the State is in the process of modifying the Stormwater Rules to require additional on-site retention of storm events.

Wetlands – The project tract does contain wetlands on and adjacent to the site. The final layout and any associated impacts to the wetlands will determine whether the project will require the acquisition of a wetland permit.

Stream Alteration – Not applicable

### Act 250

Currently the parcel size is less than 10 acres and barring any other jurisdictional triggers associated with the creation of residential units or lots within the past 5 years and 5 miles of this site, Act 250 jurisdiction should not attach to this project. The project is located within a defined growth center which limits the amount of information required to be submitted.

### Federal

Corps of Engineers – The project is not proposing any wetland impact, therefore no authorization should be required.

NEPA – Many of the criteria otherwise handled within the Act 250 process will need to be addressed as part of the NEPA review. Items of exposure are archaeological issues and traffic impacts.

# Severance Road

## Colchester

### Summary of Estimate of Probable Site Development Cost August 8, 2014

Description	Qty	Unit		Unit Cost		Cost
Site & Building Demolition	1	LS	x	\$0	=	\$0
Mass Earthwork	200	CY	x	\$15.00	=	\$3,000
Rock Removal	10	CY	x	\$40	=	\$400
Supplemental Foundation Costs	1	LS	x	\$2,000	=	\$2,000
Sewer Disposal	1	LS	x	\$2,800	=	\$2,800
Water Supply	1	LS	x	\$12,300	=	\$12,300
Stormwater Management	1	LS	x	\$32,000	=	\$32,000
Site Development Components	1	LS	x	\$97,550	=	\$97,550
Special Site Conditions	1	LS	x	\$100	=	\$100
Retaining Walls	1	SF	x	\$4,800	=	\$4,800
Communications Utilities	1	LS	x	\$35,000	=	\$35,000
Pavement Surfaces	44,300	SF	x	\$5.21	=	\$230,893
Wetland Mitigation Measures	1	LS	x	\$0	=	\$0
Environmental Permitting	1	LS	x	\$1,000	=	<u>\$37,200</u>

Subtotal      \$458,043

20%      Contingency      \$91,957

**Total      \$550,000**



**CIVIL ENGINEERING ASSOCIATES, INC.**  
10 MANSFIELD VIEW LANE, SOUTH BURLINGTON, VT 05403  
802-864-2323 FAX: 802-864-2271 web: www.cea-vt.com

Not included:

Landscaping, foundation work, sidewalks and ramps, signage, solar infrastructure, or solar panels.

# Severance Road Colchester

## Detail Breakdown of Probable Development Cost August 8, 2014

Page 1 of 4

Description	Qty	Unit	Unit Cost	=	Cost
<b>Site &amp; Building Demolition</b>					
Materials Recycling	0	CF	x \$3,500	=	\$0
Building Decommissioning	0	CF	x \$5,500	=	\$0
Materials to Landfill	0	CF	x \$12,000	=	<u>\$0</u> \$0
<b>Mass Earthwork</b>					
Access Road	0	CY	x \$8	=	\$0
Building Site (Cut to Fill)	<u>200</u>	CY	x \$15	=	<u>\$3,000</u>
	200		\$15		\$3,000
<b>Rock Removal</b>					
Excavated	10	CY	x \$40	=	\$400
Chipped	0	CY	x \$60	=	\$0
Blasted	<u>0</u>	CY	x \$100	=	<u>\$0</u>
	10		\$40		\$400
<b>Supplemental Foundation Costs</b>					
Spread Foundation	0	SF	x \$20	=	\$0
GeoPiers	0	EA	x \$1,000	=	\$0
Poor Soil Replacement	50	CY	x \$40	=	<u>\$2,000</u> \$2,000
<b>Sewage Disposal</b>					
6" Sewer Service	100	LF	x \$20	=	\$2,000
Septic Tank	0	Gal	x \$3.25	=	\$0
Pump Station	0	LS	x \$5,500	=	\$0
On-Site Wastewater Disposal Sys.	0	LS	x \$25,000	=	\$0
2" Force Main	0	LF	x \$20	=	\$0
Manhole Connection	1	LS	x \$800	=	<u>\$800</u> \$2,800
<b>Water Supply</b>					
8" Fire Service	0	LF	x \$60	=	\$0
New Hydrant Assembly	0	EA	x \$2,500	=	\$0
6" Sprinkler Service	100	LF	x \$58	=	\$5,800
Wet Tap at Municipal Line	1	LS	x \$3,000	=	\$3,000
1" Domestic Service	100	LF	x \$25	=	\$2,500
Water Main Connection	1	LS	x \$1,000	=	<u>\$1,000</u> \$12,300

Prepared by Civil Engineering Associates, Inc.

**Severance Road**  
**Colchester**  
**Detail Breakdown of Probable Development Cost**  
**August 8, 2014**

Description	Qty	Unit		Unit Cost	=	Cost
<b>Stormwater Management</b>						
Wet Pond	0	LS	x	\$30,000	=	\$0
Underground Sediment Trap	0	LS	x	\$15,000	=	\$0
Underground Filter	0	LS	x	\$25,000	=	\$0
Infiltration Galley	0	LF	x	\$40	=	\$0
Catch Basins/DMH's	5	EA	x	\$2,500	=	\$12,500
15" Storm Drain Pipe	300	LF	x	\$35	=	\$10,500
Grass Lined Swale	450	LF	x	\$20	=	<u>\$9,000</u>
						\$32,000
<b>Standard Site Development Items</b>						
Perimeter Chain Link Fence	300	LF	x	\$20	=	\$6,000
Signage/Pavement Markings	1	LS	x	\$4,500	=	\$4,500
Area Light Poles & Bases	10	EA	x	\$2,500	=	\$25,000
Bldg Mounted Lights	9	EA	x	\$1,000	=	\$9,000
Secondary Electrical Condu. & Wire	720	LF	x	\$20	=	\$14,400
Strip Topsoil & Stockpile	1170	CY	x	\$10	=	\$11,700
Spread Topsoil, Seed, Fert & Mulch	430	CY	x	\$15	=	\$6,450
Import Screened Topsoil & Spread	50	CY	x	\$35	=	\$1,750
Loading Area Concrete Surface	450	SF	x	\$15	=	\$6,750
Erosion Prevention & Sed. Control	1	LS	x	\$12,000	=	<u>\$12,000</u>
						\$97,550
<b>Special Site Conditions</b>						
Tree Clearing	0	Acre	x	\$6,000	=	\$0
Tree Protection	1	EA	x	\$100	=	\$100
Special Fencing	0	LF	x	\$40	=	\$0
Erosion Prevention & Sed. Control	1	LS	x	\$0	=	<u>\$0</u>
						\$100
<b>Loading Area Retaining Walls</b>						
	80	SF	x	\$60	=	\$4,800
<b>Power &amp; Communications Utilities</b>						
Phone & Cable Conduit & Line	120	LF	x	\$40	=	\$4,800
Fiber Optic Conduit & Line	120	LF	x	\$60	=	\$7,200
Primary Power Conduit & Wire	120	LF	x	\$50	=	\$6,000
Concrete Encasement	40	LF	x	\$50	=	\$2,000
Transformer & Base	1	EA	x	\$15,000	=	<u>\$15,000</u>
						\$35,000

## Severance Road Colchester

### Detail Breakdown of Probable Development Cost August 8, 2014

Description	Qty	Unit	Unit Cost	=	Cost
<b>Pavement Surfaces</b>					
Access Road	5,000	SF	x \$6.17	=	\$30,833
Parking Lot	13,800	SF	x \$5.43	=	\$74,920
Additional Circulation	<u>25,500</u>	SF	x \$4.91	=	<u>\$125,139</u>
	44,300		\$5.21		\$230,893
<b>Wetland Mitigation</b>					
Avoidance					
Retaining walls	0	SF	x \$60	=	\$0
Steep Slopes	0	SY	x \$4	=	\$0
Special Surfaces	0	SY	x \$12	=	<u>\$0</u>
					\$0

*Prepared by Civil Engineering Associates, Inc.*

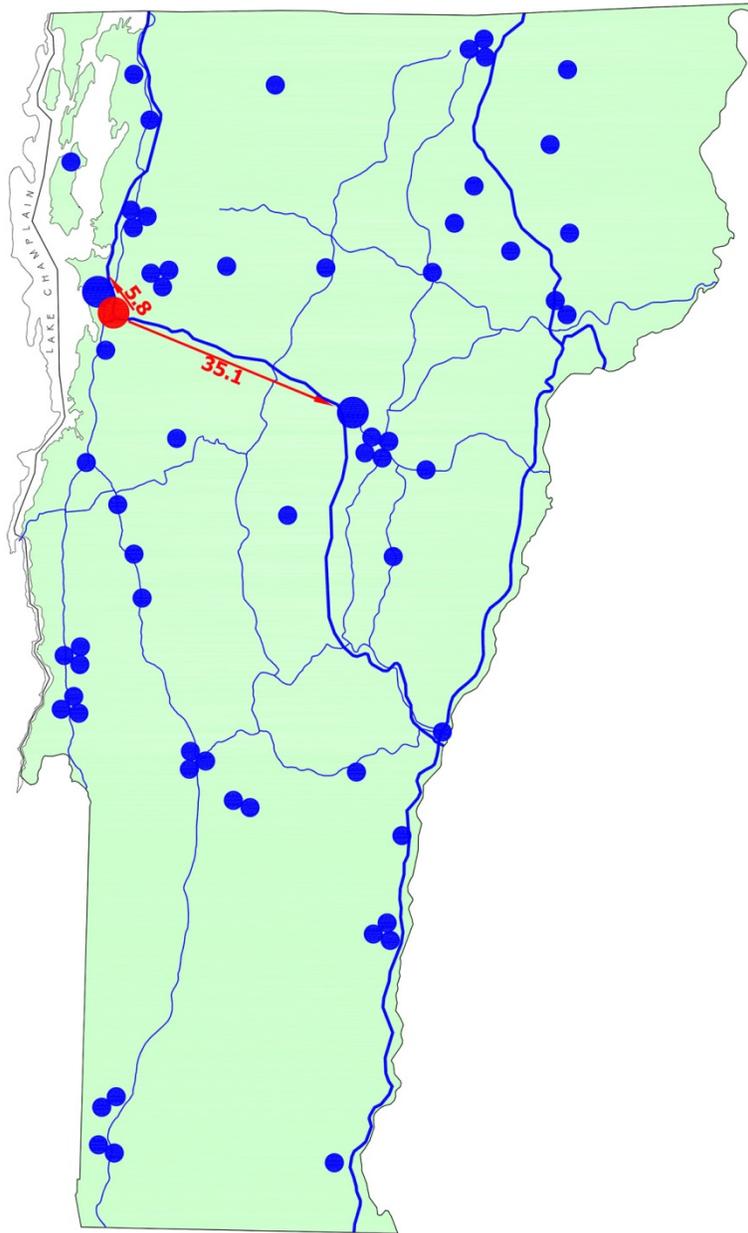
**Severance Road**  
**Colchester**  
**Detail Breakdown of Probable Development Cost**  
**August 8, 2014**

Description	Qty	Unit		Unit Cost	=	Cost
<b>Environmental Permitting</b>						
<i>Basic Plan Package Preparation</i>						
Existing Condition Documentation	0	LS	x	\$3,000	=	\$0
Boundary Survey	1	LS	x	\$1,000	=	\$1,000
Wetland Delineation	0	LS	x	\$2,500	=	\$0
Site Grading & Stormwater Plan	1	LS	x	\$5,500	=	\$5,500
Site Utility Plan	1	LS	x	\$2,500	=	\$2,500
EPSC Plan	1	LS	x	\$1,500	=	\$1,500
Details	1	LS	x	\$2,000	=	\$2,000
Specifications	1	LS	x	\$1,500	=	<u>\$1,500</u>
						\$14,000
<i>Local</i>						
Site Plan	1	LS	x	\$1,500	=	\$1,500
Condition Use	1	LS	x	\$1,000	=	\$1,000
<i>State</i>						
WW & Potable Water Supply	1	LS	x	\$1,200	=	\$1,200
Water Supply Permit to Construct	1	LS	x	\$2,500	=	\$2,500
<i>Construction Stormwater</i>						
Low Risk Site	0	LS	x	\$500	=	\$0
Moderate Risk Site	1	LS	x	\$2,500	=	\$2,500
Operational Stormwater	1	LS	x	\$4,000	=	\$4,000
Stream Alteration	0	LS	x	\$1,200	=	\$0
<i>Act 250/NEPA</i>						
Land Use Permit Application	1	LS	x	\$3,000	=	\$3,000
Administrative Amendment	0	LS	x	\$800	=	\$0
Level 1 Environmental Assessment	1	LS	x	\$1,500	=	\$1,500
Archeology Study	1	LS	x	\$2,500	=	\$2,500
Traffic Study	1	LS	x	\$3,500	=	\$3,500
<i>Federal</i>						
Corps of Engineers Wetlands	0	LS	x	\$1,500	=	<u>\$0</u>

Does not include the development of Construction Documents

**Total    \$37,200**

*Prepared by Civil Engineering Associates, Inc.*



**OVERALL SCORE: 28.6/40 (# 7)**

**TECHNOLOGY PARK, SOUTH BURLINGTON**

Criteria & Scores

1. 3.5 Site a little tight, although space will be made for exterior storage. No room for solar array
2. 3.8 Physical features: not applicable
3. 4.8 All utilities are in building, including fiberoptic
4. 4.3 Conditional use, particularly height. NEPA nec. Height for towers and stacks may be an issue.
5. 4.5 Compatible, similar labs nearby
6. 3.3 Above average for construction
7. 2.2 Distant from Montpelier. Under flight path
8. 2.2 No wider benefits

Size: indoor space

Acquisition cost: n/a (lease)

Rough cost to develop: < \$500,000

**TOTAL not applicable**

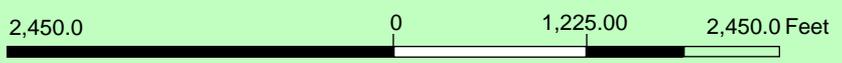


- LEGEND**
- Railroads
  - Designated Downtown Areas
  - Designated Village Areas
  - Town Boundary
  - County Boundary

**NOTES**

Map created using ANR's Natural Resources Atlas

1: 14,700  
July 17, 2014



WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere  
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1" = 1225 Ft.    1cm = 147 Meters  
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South Burlington: Technology Park



# South Burlington: Technology Park

## Permitting Summary

### Municipal

Zone: Mixed Industrial and Commercial with Transit Overlay and Airport Approach Corridor Use is permitted.

Zoning is not applicable since the project would be a fit-up.

HVAC components that exceed the 35' height standard for flat roof structures will require approval from the Development Review Board (DRB). For structures which are part of a planned unit development or master plan, the DRB may waive the 35' limit as long as the general objectives of the applicable zoning district are met. A request for approval of a taller structure shall include the submittal of a plan(s) showing the elevations and architectural design of the structure, pre-construction grade, post-construction grade, and height of the structure. Such plan shall demonstrate that the proposed building will not detract from scenic views from adjacent public roadways and other public rights-of-way.

### State

Wastewater – The site is currently served by municipal sewer and water. Depending upon the proposed design and layout there may need to be utilities relocated within the project site. A modest water and sewer allocation will be required to be acquired from the Town for this project. There are no other known technical issues associated with the acquisition of is permit.

Water Supply – The project may require the acquisition of a Permit to Construct from the Water Supply Division if a hydrant is required on the property.

Construction Stormwater – The project may qualify for a Low Risk Authorization under the State Construction Stormwater General Permit.

Operational Stormwater – Coverage under the State Operation Stormwater General Permit will be required as amount of impervious area on the property exceeds the one acre jurisdictional limit. The extent of the mitigation may change as the State is in the process of modifying the Stormwater Rules to require additional on-site retention of storm events.

Wetlands – The project does contain mapped wetlands. (see attached map) Depending upon the site layout if impacts to either the wetland or wetland buffer are made there may be the need to acquire a wetland permit.

Stream Alteration – Not applicable

**Act 250** – The project site is currently subject to Act 250 jurisdiction and will require an amendment Land Use Permit to reflect changes in use or modifications to the exterior of the building to accommodate the stacks and mechanical equipment.

### Federal

Corps of Engineers – The project is not proposing any wetland impact, therefore no authorization should be required.

NEPA – Many of the criteria addressed by Act 250 will provide information for the NEPA review.

# South Burlington Technology Park

## Summary of Estimate of Standard Site Development Cost August 8, 2014

### Description

Site & Building Demolition	less than average				
Mass Earthwork	less than average				
Rock Removal	not applicable				
Supplemental Foundation Costs	not applicable				
Sewer Disposal	not applicable				
Water Supply	not applicable				
Stormwater Management	less than average				
Site Development Components	less than average				
Special Site Conditions	not applicable				
Retaining Walls	not applicable				
Communications Utilities	not applicable				
Pavement Surfaces	less than average				
Wetland Mitigation Measures	not applicable				
Environmental Permitting	less than average				

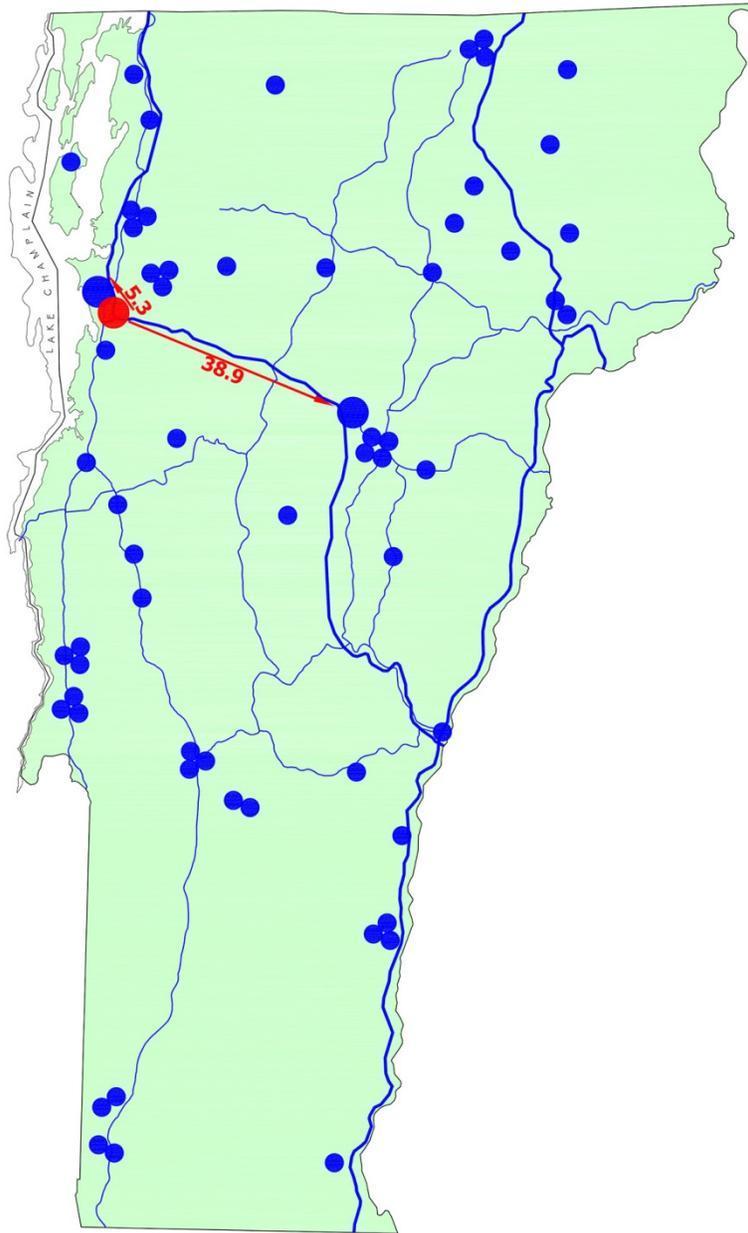
**Total < \$500,000**



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Not included:

Landscaping, foundation work, sidewalks and ramps, signage, solar infrastructure, or solar panels.



**OVERALL SCORE: 28.2/40 (# 8)**

**SPEAR STREET (UVM), SOUTH BURLINGTON**

Criteria & Scores

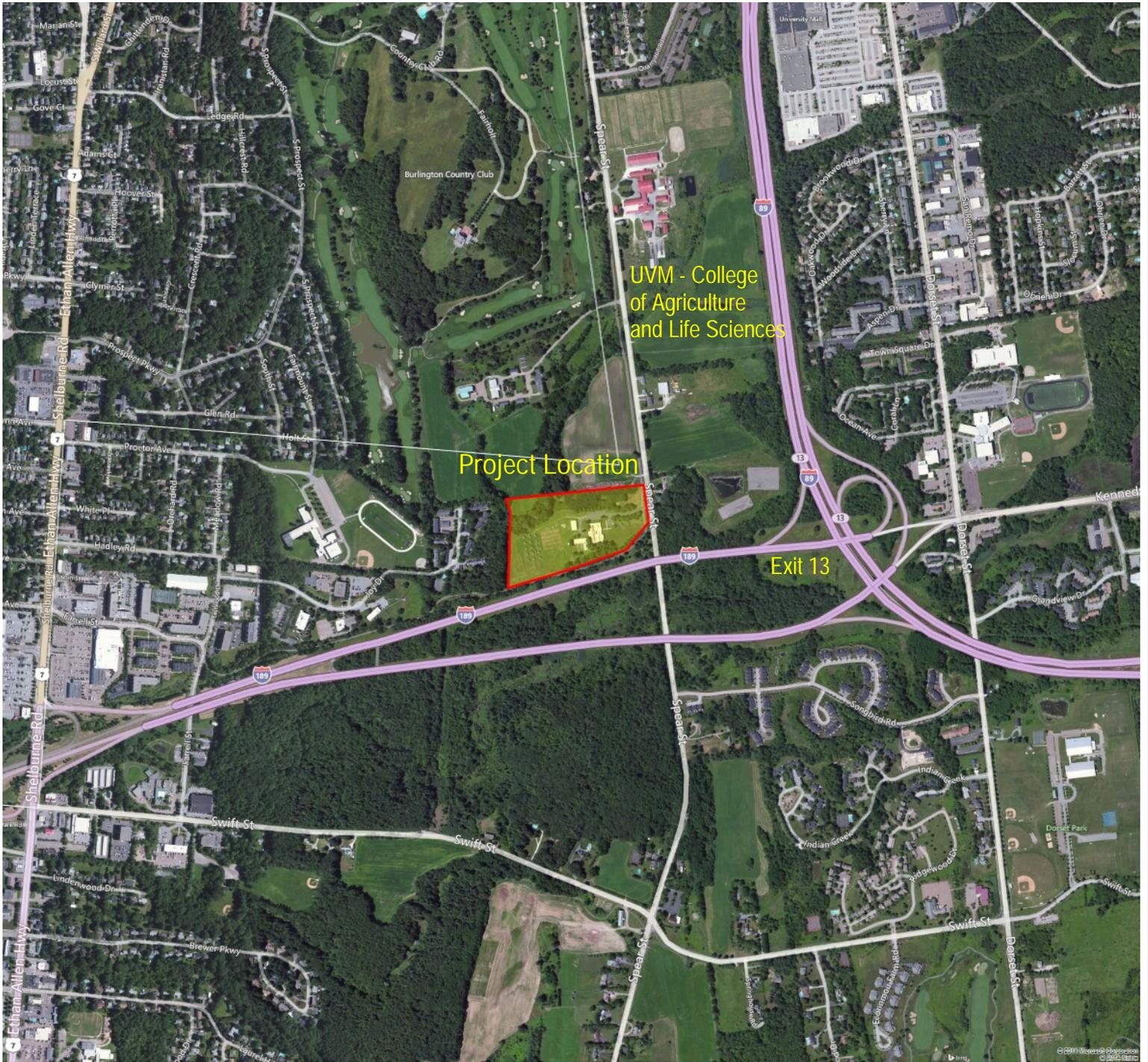
1. 3.3 Large site, but much is used for experiments  
No room for more solar panels
2. 3.5 Somewhat limited for building configuration
3. 4.7 All utilities available, including fiberoptic
4. 3.0 Conditional use; deep setbacks and height restrictions; needs PUD approval and Act 250 amendment
5. 3.8 Compatible; bike path along front of site
6. 3.8 Some demolition; care for experiments
7. 2.3 Distant from Montpelier
8. 3.8 Close to UVM scientists and students

Size: 19 acres

Acquisition cost: \$1/year ground lease

Rough cost to develop: +/- \$700,000

**TOTAL +/- \$700,000**



- LEGEND**
- Railroads
  - Designated Downtown Areas
  - Designated Village Areas
  - Town Boundary
  - County Boundary

**NOTES**

Map created using ANR's Natural Resources Atlas

1: 14,700

July 17, 2014



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South Burlington: Spear Street (UVM land)



# South Burlington: Spear Street (UVM)

## Permitting Summary

### Municipal

Zone: Institutional and Agricultural-South

Lab is permitted without limitation as long as it is used in conjunction with a principal educational facility. NEEDS PUD APPROVAL.

Height is the only dimensional issue. 35' allowed. Higher buildings may have conditional approval especially if part of a PUD. Setbacks may be increased.

75' front yard setback; side and rear yard setback 50'.

Area is the other concern. This zone allows 10% building coverage. 20% max total impervious coverage.

### State

Wastewater – The Project has access to municipal water and sewer and will require a State Water Supply and Water Supply Permit.

Water Supply – The project may require the acquisition of a Permit to Construct from the Water Supply Division if a hydrant is required on the property.

Construction Stormwater – The project may qualify for a Low Risk Authorization under the State Construction Stormwater General Permit.

Operational Stormwater – Coverage under the State Operation Stormwater General Permit will be required as amount of impervious area on the property exceeds the one acre jurisdictional limit. The extent of the mitigation may change as the State is in the process of modifying the Stormwater Rules to require additional on-site retention of storm events.

Wetlands – The project does not include any wetlands.

Stream Alteration – Not applicable

### Act 250

The property is currently subject to Act 250 jurisdiction and will require the acquisition of an Amendment Land Use Permit.

### Federal

Corps of Engineers – The project is not proposing any wetland impact, therefore no authorization should be required.

NEPA – Many of the criteria otherwise handled within the Act 250 process will need to be addressed as part of the NEPA review. Items of exposure are archaeological issues and traffic impacts.

# South Burlington Spear Street

## Summary of Estimate of Standard Site Development Cost August 8, 2014

### Description

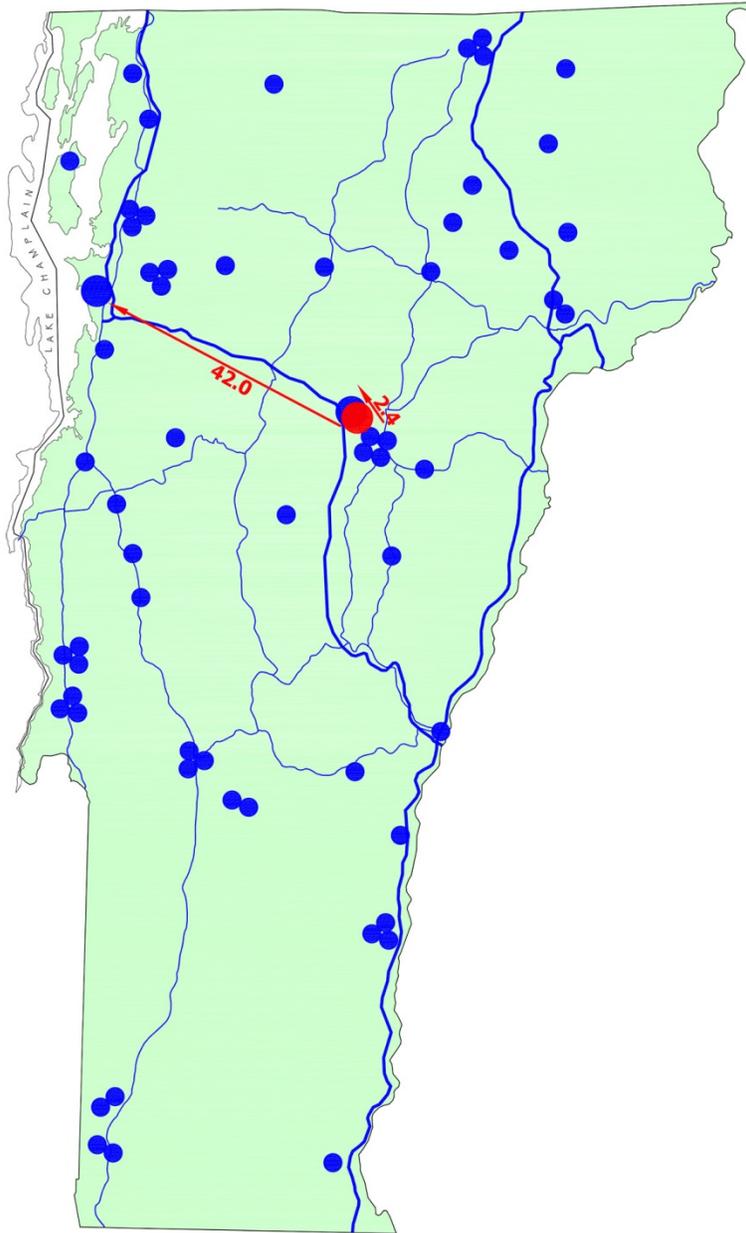
Site & Building Demolition	average					
Mass Earthwork	average					
Rock Removal	less than average					
Supplemental Foundation Costs	not applicable					
Sewer Disposal	average					
Water Supply	average					
Stormwater Management	above average: near stream/wetland					
Site Development Components	average					
Special Site Conditions	average					
Retaining Walls	less than average					
Communications Utilities	average					
Pavement Surfaces	average					
Wetland Mitigation Measures	average					
Environmental Permitting	average					

**Average: +/- \$700,000**



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Not included:  
Landscaping, foundation work, sidewalks and ramps, signage, solar infrastructure, or solar panels.



**OVERALL SCORE: 27.8/40 (# 9)**

**TWO RIVERS FARM, MONTPELIER**

Criteria & Scores

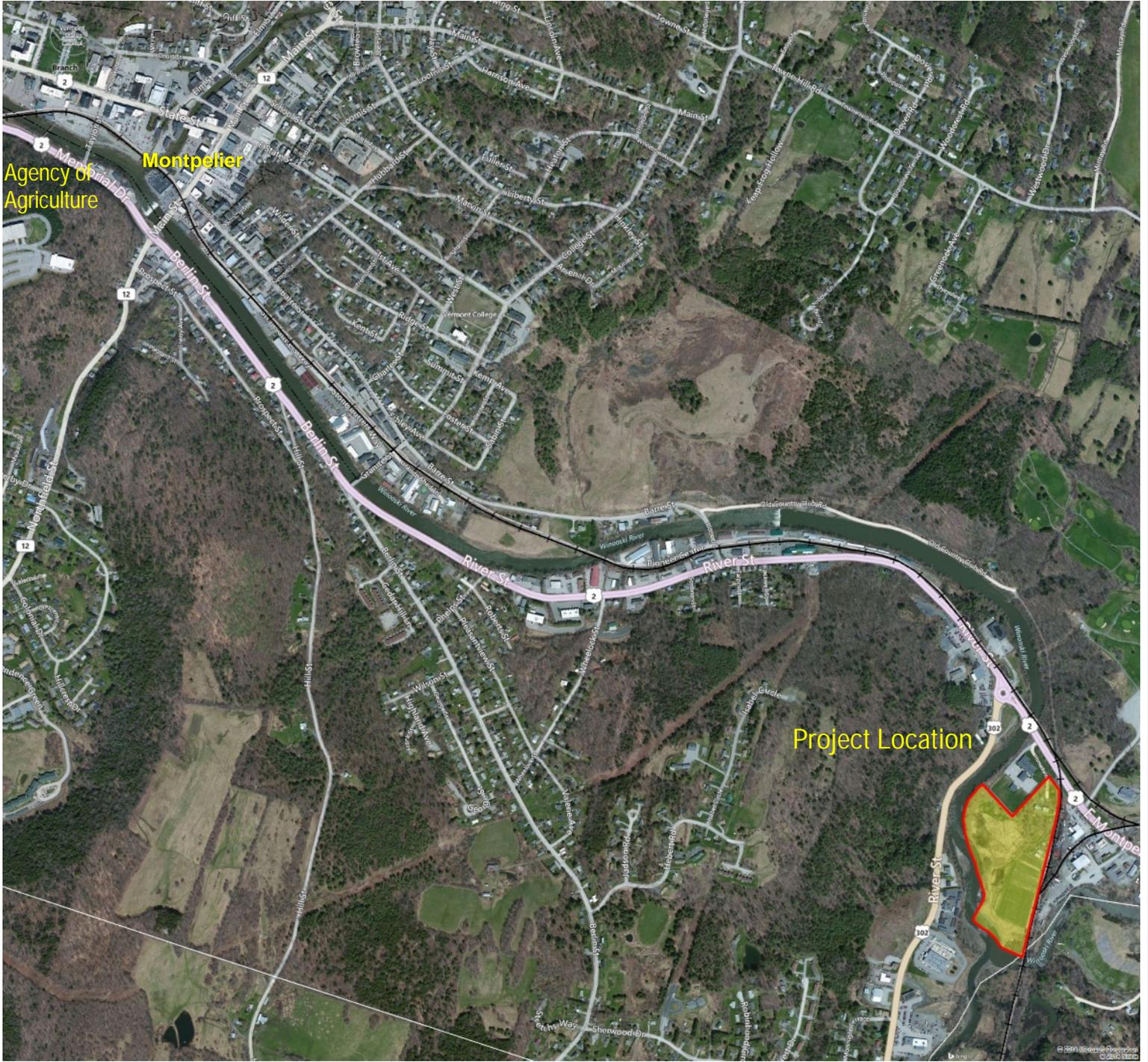
1. 4.2 Site is spacious with room for fields, solar array, and expansion
2. 2.8 Site is in a floodway; will need fill
3. 4.3 All utilities available, including fiberoptic
4. 3.3 Conditional use. Phase I complete. NEPA is required, plus Corps of Engineers for floodway
5. 3.8 Commercial neighborhood
6. 2.7 Demolition of historic building or move it
7. 3.7 Close to Montpelier
8. 3.0 Possible demonstration site for agriculture

Size: 18.4 acres

Acquisition cost: \$245,000

Rough cost to develop: \$800,000 - \$950,000

**TOTAL \$1,050,000 +**



- LEGEND**
- Railroads
  - Designated Downtown Areas
  - Designated Village Areas
  - Town Boundary
  - County Boundary

**NOTES**

Map created using ANR's Natural Resources Atlas

1: 14,700  
July 24, 2014



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Montpelier: Two Rivers Farm



# Montpelier: Two Rivers Farm

## Permitting Summary

### Municipal

Zone: Industrial; Use is conditional.

50' front yard setback; 20' rear and side yard setbacks; 45' maximum building height

33% maximum building coverage on lot.

### State

Wastewater – The project can be served by both municipal water and sewer connections. There are no other known technical issues associated with the acquisition of this permit.

Water Supply – The project may require the acquisition of a Permit to Construct from the Water Supply Division if a hydrant is required or the service extension exceeds 500 feet.

Construction Stormwater – The project may qualify for a Low Risk Authorization under the State Construction Stormwater General Permit.

Operational Stormwater – Coverage under the State Operation Stormwater General Permit will be required as amount of impervious area on the property exceeds the one acre jurisdictional limit. The extent of the mitigation may change as the State is in the process of modifying the Stormwater Rules to require additional on-site retention of storm events.

Wetlands – The project does not appear to contain any wetlands but may contain Class II wetland buffers from adjacent wetlands. (see attached map) Depending on the siting a State Wetland Permit may be required.

Stream Alteration – As this project will likely require fill to be placed within the 100-year flood plain, the project will require an Individual Stream Alteration Permit. This work will include the preparation of predevelopment and post-development floodway capacity study with proposed mitigation measures.

### Act 250

Currently the proposed area of disturbance would be less than 10 acres and barring any other jurisdictional triggers associated with the creation of residential units or lots within the past 5 years and 5 miles of this site, Act 250 jurisdiction should not attach to this project.

### Federal

Corps of Engineers – The project is not proposing any wetland impact, however, the project is located within the 100-year flood plain and is subject to ES ACE review as it relates to potentially impact to navigable waters. Similar to the State Stream Alteration Permit this work will include the preparation of predevelopment and post-development floodway capacity study with proposed mitigation measures.

NEPA – Many Act 250 criteria will need to be addressed as part of the NEPA review. Items of exposure are archaeological issues (high exposure) and traffic impacts.

## Two Rivers Farm Montpelier

### Summary of Estimate of Standard Site Development Cost August 8, 2014

#### Description

Site & Building Demolition	very high - move building?				
Mass Earthwork	very high - accessibility or raise parking & cut				
Rock Removal	average				
Supplemental Foundation Costs	very high - poor soils				
Sewer Disposal	very high - long connection				
Water Supply	very high - long connection				
Stormwater Management	average -				
Site Development Components	average				
Special Site Conditions	average				
Retaining Walls	very high				
Communications Utilities	average				
Pavement Surfaces	very high - long driveway				
Wetland Mitigation Measures	very high				
Environmental Permitting	very high: floodplain, historic building				

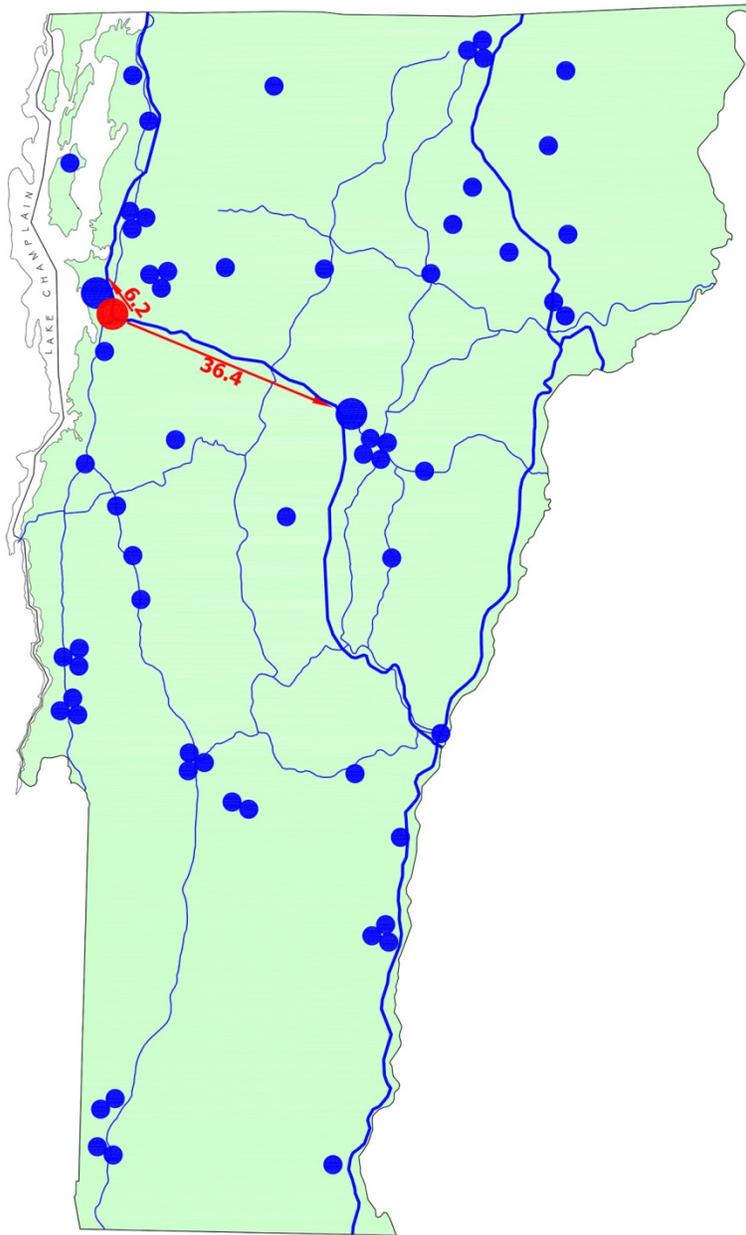
**Total: \$950,000 - \$1,200,000**



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**Not included:**

Landscaping, foundation work, sidewalks and ramps, signage, solar infrastructure, or solar panels.



**OVERALL SCORE: 27.3/40 (# 10)**

**HINESBURG ROAD, SOUTH BURLINGTON**

Criteria & Scores

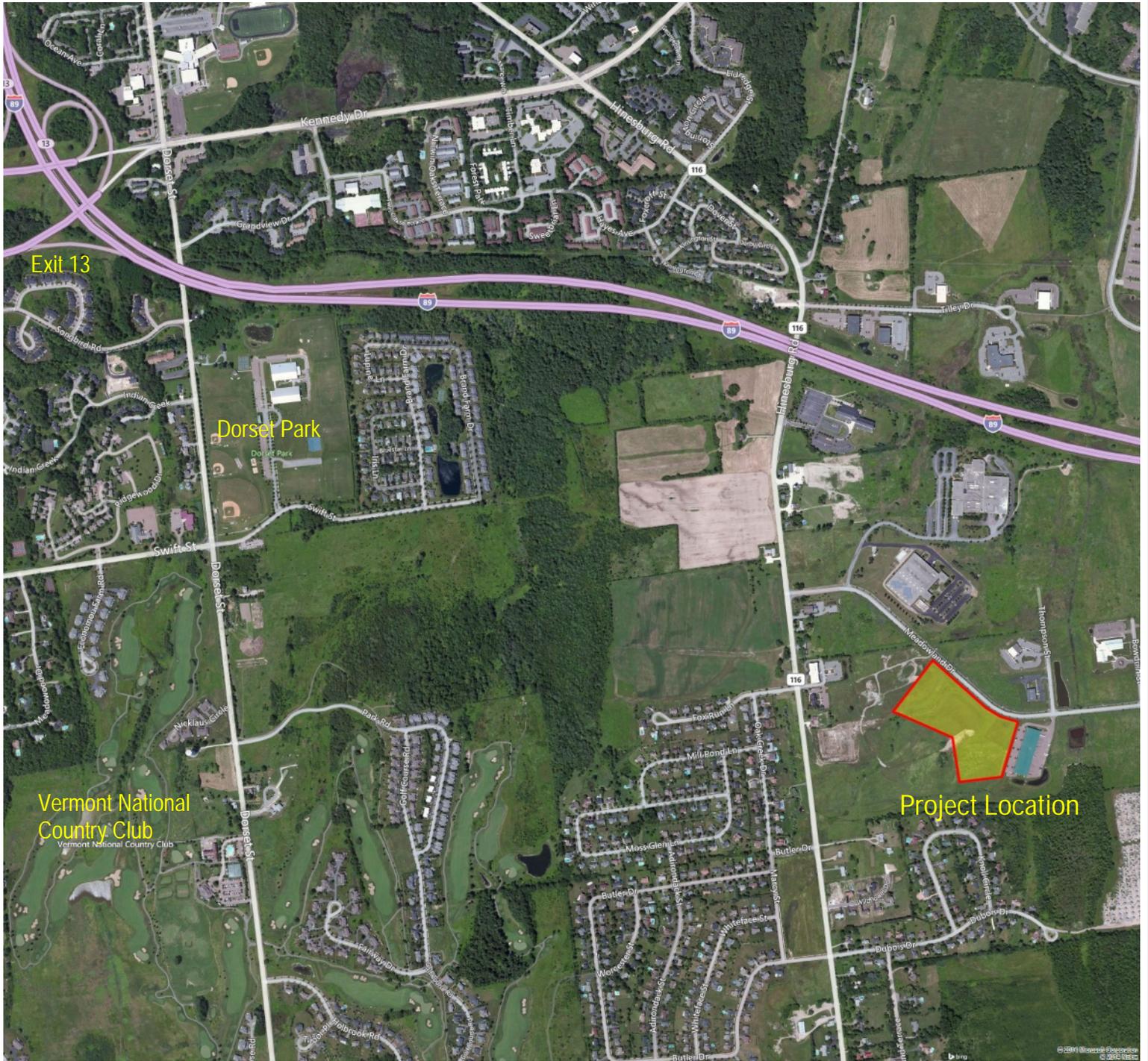
1. 4.0 Site fits program, minimal room for expansion and solar array
2. 4.3 Site is open with good soils
3. 4.8 All utilities available including fiberoptic
4. 4.2 Permitted use, height okay depending on precise location. NEPA necessary
5. 3.5 Compatible: industrial/commercial park
6. 4.2 Site is good for construction
7. 1.3 Distant from Montpelier. In airport approach corridor
8. 1.0 No wider benefits

Size: 5+ acres

Acquisition cost: \$725,000

Rough cost to develop: +/- \$700,000

**TOTAL \$1,400,000+**

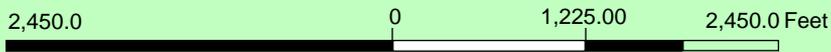


- LEGEND**
- Railroads
  - Designated Downtown Areas
  - Designated Village Areas
  - Town Boundary
  - County Boundary

**NOTES**

Map created using ANR's Natural Resources Atlas

1: 14,700  
July 17, 2014



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South Burlington: Hinesburg Road



# South Burlington: Hinesburg Road

## Permitting Summary

### Municipal

Zone: Industrial/open with “Hinesburg North” overlay and Airport Approach Corridor  
Use is permitted.

Parking is to be set on the sides of rear of the buildings which will impact the ability to utilize both sides of the buildings without orienting the long axis of the building perpendicular to the street frontage. This will control the location of the building as the site generally slopes moderately from west to east. Lot coverage is allowed to be up to 50%.

The height of the building is limited by the Hinesburg Road (VT Rte. 116) View Protection Zone which seeks to protect views of the distant mountains. The building will need to be located on the lower end of the site closer to Meadowland Drive to satisfy this requirement.

Flat roof building height is limited to 35’ above existing grade. Higher buildings may have conditional approval if setbacks are increased. Aesthetics of the building and mitigation of the taller portions will be integral components of the DRB review.

### State

Wastewater – The project has access to both municipal water and sewer services. The final design of the utilities will be based on the lot layout. A modest water and sewer allocation will be required to be acquired from the Town for this project. There are no other known technical issues associated with the acquisition of is permit.

Water Supply – The project may require the acquisition of a Permit to Construct from the Water Supply Division if a hydrant is required on the property.

Construction Stormwater – The project may qualify for a Low Risk Authorization under the State Construction Stormwater General Permit.

Operational Stormwater – Coverage under the State Operation Stormwater General Permit will be required as amount of impervious area on the property exceeds the one acre jurisdictional limit. The extent of the mitigation may change as the State is in the process of modifying the Stormwater Rules to require additional on-site retention of storm events.

Wetlands – The project does extend into the wetland buffer thereby requiring the acquisition of a wetland permit.

Stream Alteration – Not applicable

**Act 250** – The subject parcel is currently under Act 250 Jurisdiction and will require an amendment to the existing Act 250 permit, which was a master plan.

### Federal

Corps of Engineers – The project is not proposing any wetland impact, therefore no authorization should be required.

NEPA – Many Act 250 criteria process will need to be addressed as part of the NEPA review.

# South Burlington Hinesburg Road

## Summary of Estimate of Standard Site Development Cost August 8, 2014

### Description

Site & Building Demolition	less than average				
Mass Earthwork	average				
Rock Removal	average				
Supplemental Foundation Costs	average				
Sewer Disposal	average				
Water Supply	average				
Stormwater Management	average				
Site Development Components	higher than average - height mitigation				
Special Site Conditions	average				
Retaining Walls	average				
Communications Utilities	average				
Pavement Surfaces	average				
Wetland Mitigation Measures	less than average				
Environmental Permitting	average				

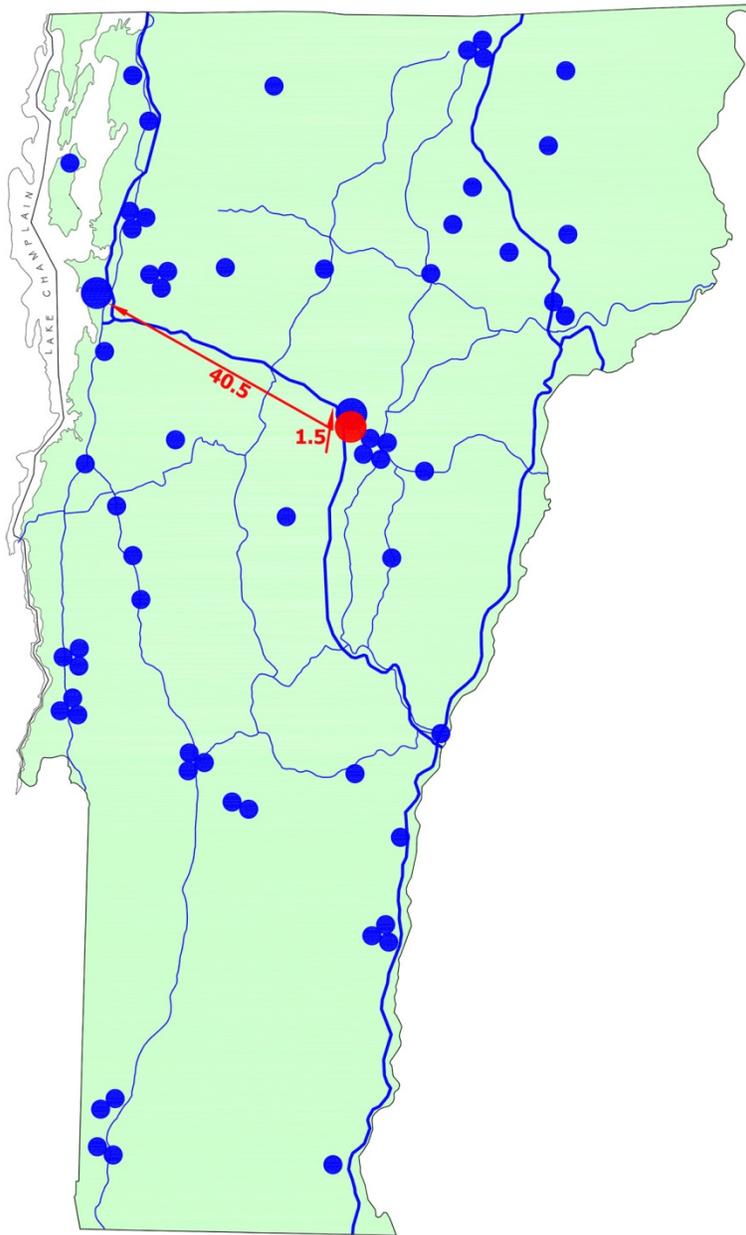
**Average: + /- \$700,00**



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Not included:

Landscaping, foundation work, sidewalks and ramps, signage, solar infrastructure, or solar panels.



**OVERALL SCORE: 27.2/40 (# 11)**

**ROUTE 12, BERLIN**

Criteria & Scores

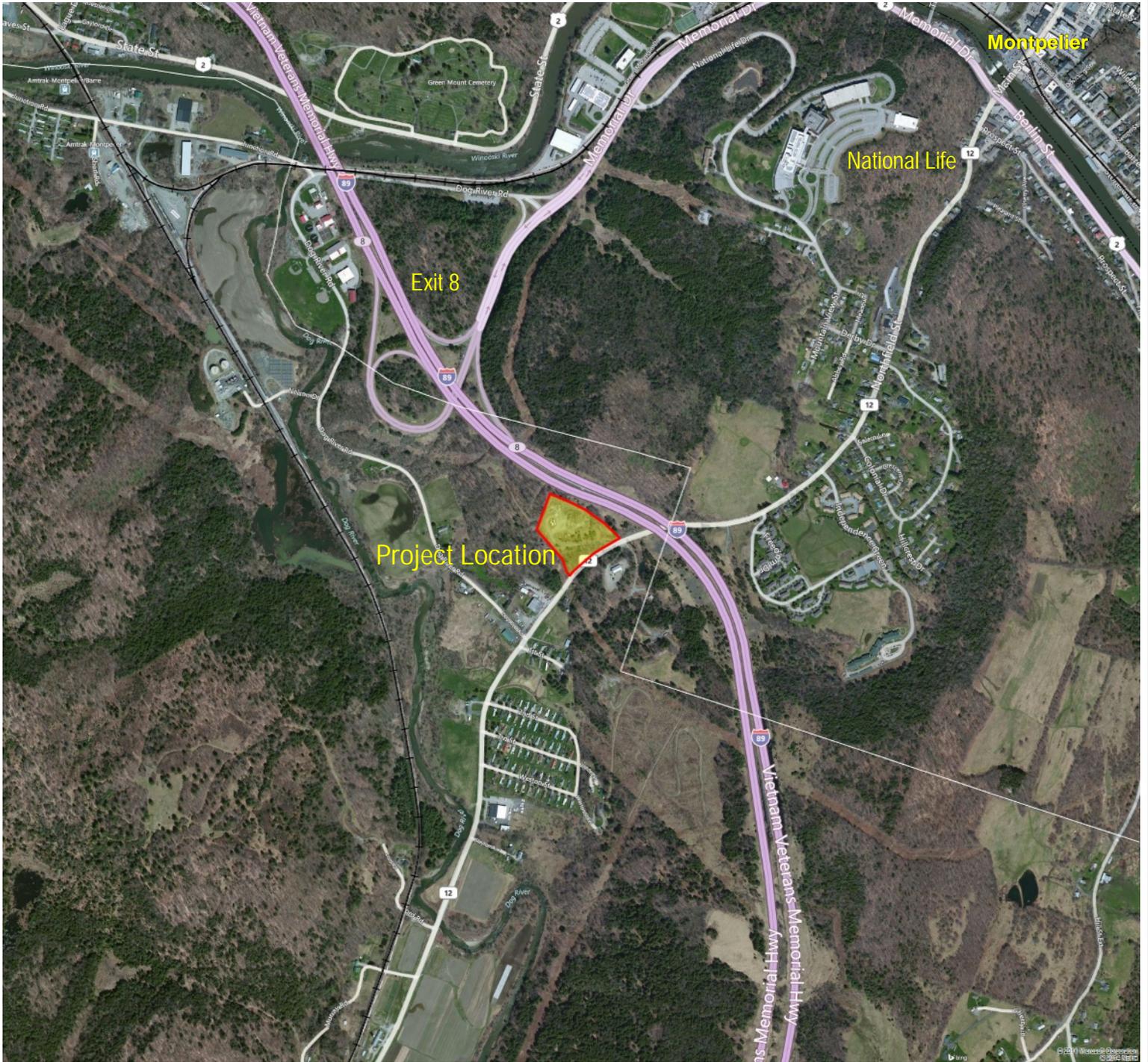
1. 3.8 Site a little tight esp. if septic field is needed  
Steep drive up; needs to be reconfigured
2. 3.5 Site is a plateau with steep slopes; no room for septic
3. 1.8 Water would be a well. Extend wastewater up Rte  
12 to Independence Green. Fiberoptic is available
4. 3.2 Conditional use, height fine. NEPA necessary
5. 3.7 Compatible, although visible from interstate
6. 3.2 Somewhat tight for construction and steep drive
7. 4.3 Very close to Montpelier, particularly National Life
8. 3.7 No wider benefits

Size: 6 acres

Acquisition cost: \$400,000

Rough cost to develop: \$800,000 - \$950,000

**TOTAL \$1,200,000+**



- LEGEND**
- Railroads
  - Designated Downtown Areas
  - Designated Village Areas
  - Town Boundary
  - County Boundary

**NOTES**

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## **Berlin: Route 12**

### Permitting Summary

#### **Municipal**

Zone: Commercial (CG)

Conditional use.

50' front yard setback; 25' rear and side yard setbacks; 60' maximum building height  
(Fits all dimensional criteria)

#### **State**

Wastewater – The proposed site does not have access to municipal sewer at this time. There are discussions about a potential future sewer main along Route 12 however the construction schedule is unknown. The site contains very steep slopes and poor soils so the capacity for an onsite location is limited.

Water Supply – The site would does not have access to municipal water at this time. The site would need to be served by a proposed drilled well. The project may require the acquisition of a Permit to Construct from the Water Supply Division depending upon the water source and number of people using it.

Construction Stormwater – The project may qualify for a Low Risk Authorization under the State Construction Stormwater General Permit.

Operational Stormwater – Coverage under the State Operation Stormwater General Permit will be required as amount of impervious area on the property exceeds the one acre jurisdictional limit. The extent of the mitigation may change as the State is in the process of modifying the Stormwater Rules to require additional on-site retention of storm events.

Wetlands – The project does not appear to contain any wetlands.

Stream Alteration – Not applicable

**Act 250** – Currently the parcel size is less than 10 acres and barring any other jurisdictional triggers associated with the creation of residential units or lots within the past 5 years and 5 miles of this site, Act 250 jurisdiction should not attach to this project.

#### **Federal**

Corps of Engineers – The project is not proposing any wetland impact, therefore no authorization should be required.

NEPA – Many of the criteria otherwise handled within the Act 250 process will need to be addressed as part of the NEPA review. Items of exposure are archaeological issues (much of the site has been disturbed but sits on fill perhaps encapsulating sensitive items, and traffic impacts.

# Route 12

## Berlin

### Summary of Estimate of Standard Site Development Cost

August 8, 2014

#### Description

Site & Building Demolition	less than average				
Mass Earthwork	very high - steep slopes; realign driveway				
Rock Removal	above average				
Supplemental Foundation Costs	average				
Sewer Disposal	very high - long connection				
Water Supply	above average - well or long connection				
Stormwater Management	average				
Site Development Components	average				
Special Site Conditions	average				
Retaining Walls	above average				
Communications Utilities	above average				
Pavement Surfaces	very high - long driveway				
Wetland Mitigation Measures	less than average				
Environmental Permitting	above average				

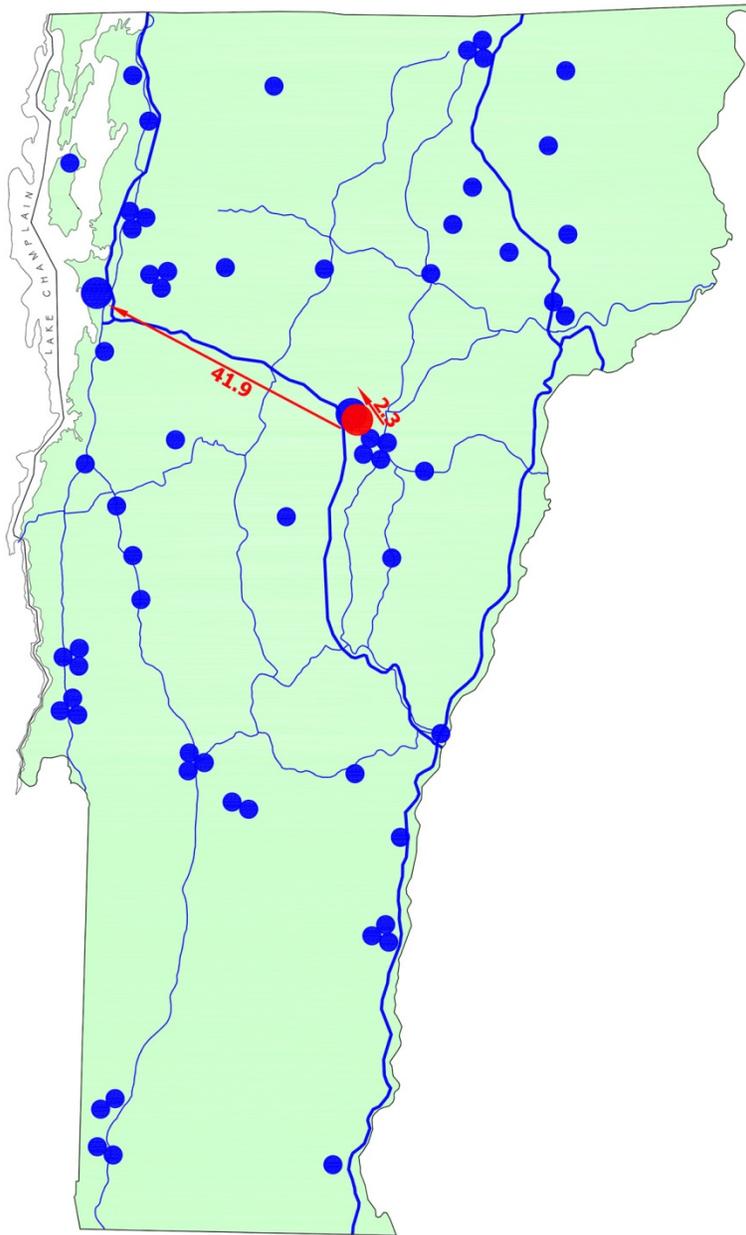
**Total: \$800,000 - \$950,000**



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#### Not included:

Landscaping, foundation work, sidewalks and ramps, signage, solar infrastructure, or solar panels.



**OVERALL SCORE: 26.8/40 (# 12)**

**OLD ARMORY SITE, MONTPELIER**

Criteria & Scores

1. 2.0 Site is tight especially with flood plain  
No room for solar array
2. 2.7 Flood plain
3. 4.5 All utilities available including fiberoptic
4. 3.3 Conditional use. NEPA required
5. 3.8 Commercial neighborhood
6. 3.5 Significant demolition or renovation of  
the existing building
7. 4.0 Close to Montpelier
8. 3.0 No wider benefits

Size: 4.3 acres

Acquisition cost: n/a (lease)

Rough cost to develop: \$800,000 - \$950,000

**TOTAL not applicable**



- LEGEND**
- Railroads
  - Designated Downtown Areas
  - Designated Village Areas
  - Town Boundary
  - County Boundary

**NOTES**

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Montpelier: Old Armory (now Cabot Cheese)



# Montpelier: Old Armory Site

## Permitting Summary

### Municipal

Zone: Industrial; Use is conditional.

50' front yard setback; 20' rear and side yard setbacks; 45' maximum building height; 33% maximum building coverage on lot. (Fits all dimensional criteria)

### State

Wastewater – The project will rely upon municipal water and sewer connections. There are no other known technical issues associated with the acquisition of its permit.

Water Supply – The project may require the acquisition of a Permit to Construct from the Water Supply Division if a hydrant is required on the property.

Construction Stormwater – The project may qualify for a Low Risk Authorization under the State Construction Stormwater General Permit.

Operational Stormwater – Coverage under the State Operation Stormwater General Permit will be required as amount of impervious area on the property exceeds the one acre jurisdictional limit. The extent of the mitigation may change as the State is in the process of modifying the Stormwater Rules to require additional on-site retention of storm events.

Wetlands – There does not appear to be any wetlands located on the project site.

Stream Alteration – As this project will likely require fill to be placed within the 100-year flood plain, the project will require an Individual Stream Alteration Permit. This work will include the preparation of predevelopment and post-development floodway capacity study with proposed mitigation measures.

### Act 250

Currently the parcel size is less than 10 acres and barring any other jurisdictional triggers associated with the creation of residential units or lots within the past 5 years and 5 miles of this site, Act 250 jurisdiction should not attach to this project.

### Federal

Corps of Engineers – The project is not proposing any wetland impact, however, the project is located within the 100-year flood plan and is subject to USACE review as it relates to potentially impact to navigable waters. Similar to the State Stream Alteration Permit this work will include the preparation of predevelopment and post-development floodway capacity study with proposed mitigation measures.

NEPA – Many of the criteria otherwise handled within the Act 250 process will need to be addressed as part of the NEPA review. Items of exposure are archaeological issues (due to the proximity to the river and need to expand beyond the existing armory footprint) and traffic impacts.

## Old Armory Montpelier

### Summary of Estimate of Standard Site Development Cost August 8, 2014

#### Description

Site & Building Demolition	very high - large building to demolish				
Mass Earthwork	very high - demolition; floodplain cut/fill				
Rock Removal	average				
Supplemental Foundation Costs	above average				
Sewer Disposal	average				
Water Supply	average				
Stormwater Management	above average				
Site Development Components	above average				
Special Site Conditions	average				
Retaining Walls	above average				
Communications Utilities	average				
Pavement Surfaces	average				
Wetland Mitigation Measures	above average				
Environmental Permitting	above average				

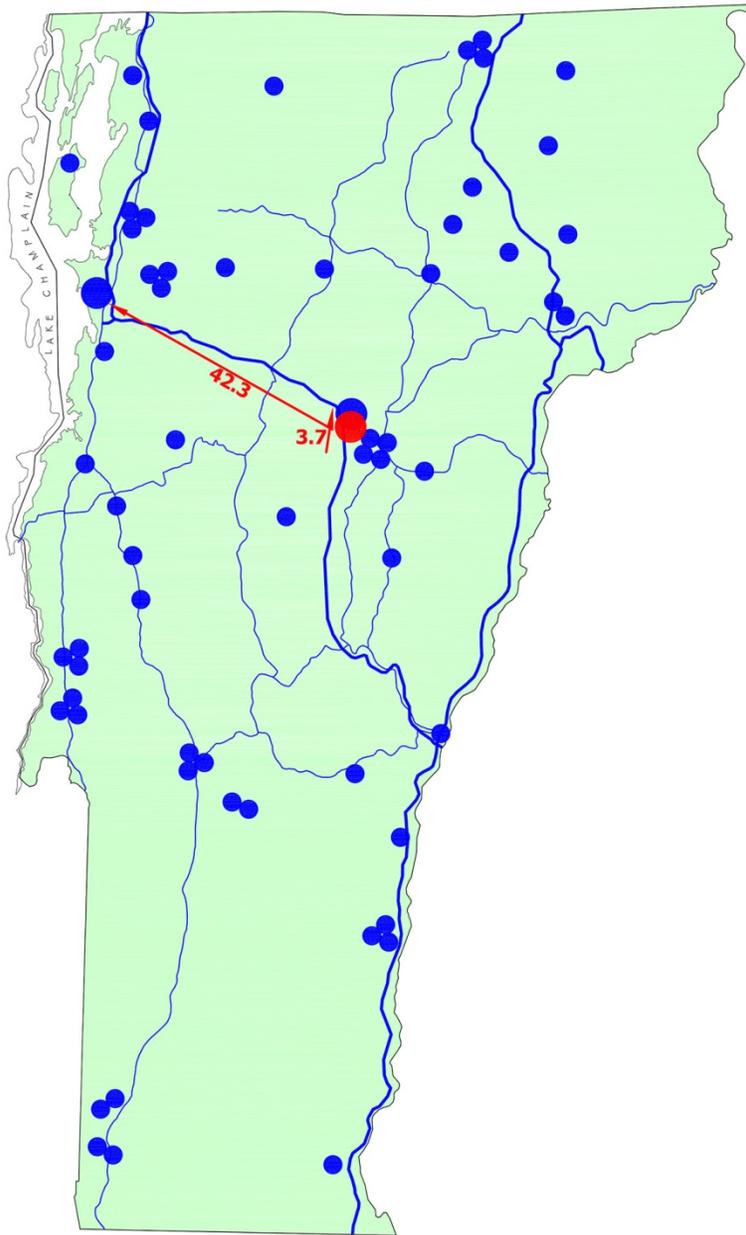
**Total: \$800,000 - \$950,000**



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#### Not included:

Landscaping, foundation work, sidewalks and ramps, signage, solar infrastructure, or solar panels.



**OVERALL SCORE: 26.1/40 (# 13)**

**REGIONAL LIBRARY SITE, BERLIN**

Criteria & Scores

1. 3.3 Site a little tight with wetlands. No room for expansion; solar array is possible
2. 3.2 Site is average; slope at front of property
3. 4.2 All utilities at site; fiberoptic available
4. 2.0 This use is prohibited. Title 24 would have to be invoked. No Act 250 but NEPA is required.
5. 3.7 Compatible neighborhood; in transition
6. 2.7 Demolition of library necessary
7. 3.5 Close to Montpelier
8. 3.5 Possible economies with other State buildings

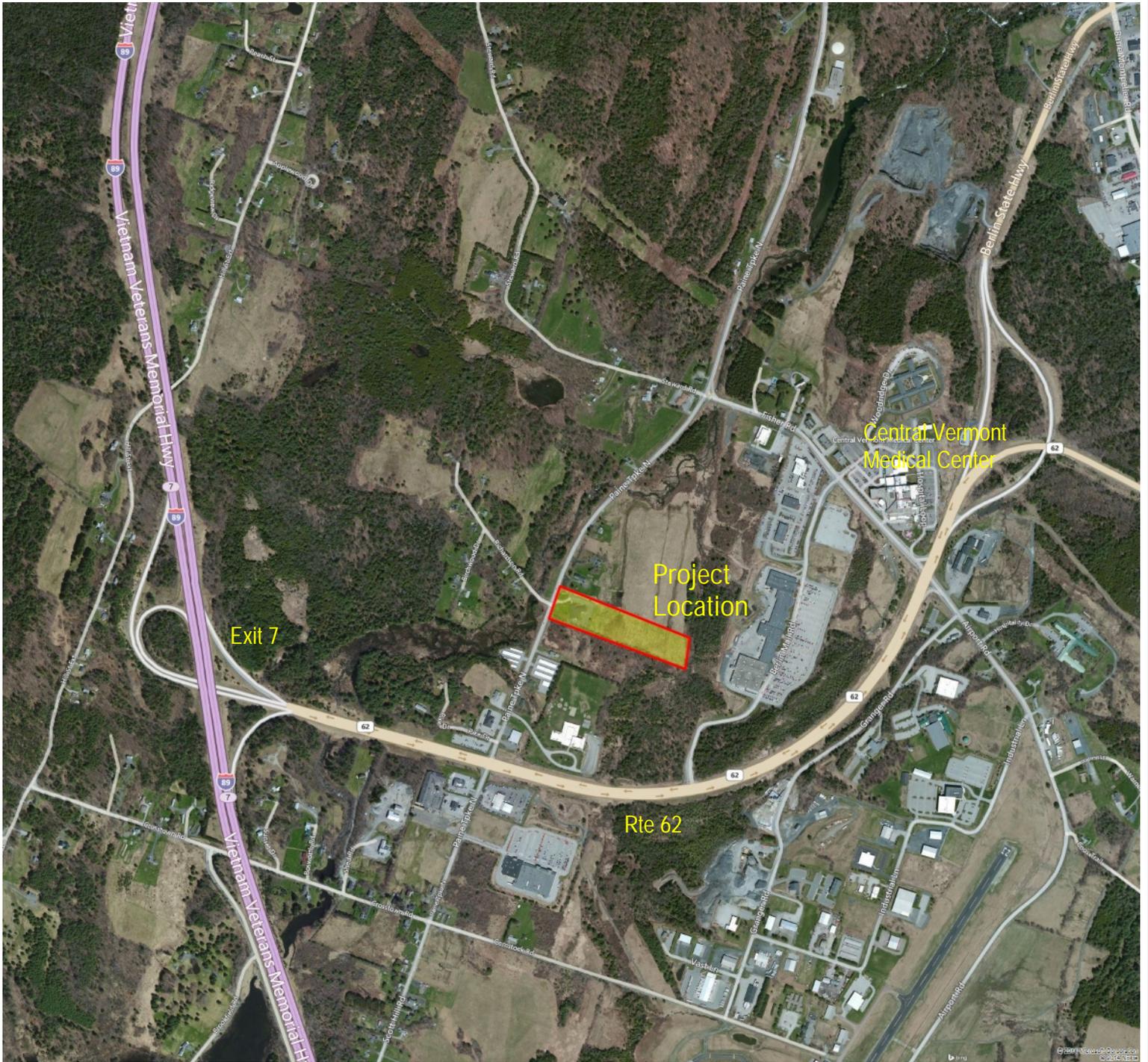
Size: 8.2 acres

Acquisition cost: (none)

Rough cost to develop site: \$810,000

Cost to replace the library: \$3,700,000

**TOTAL \$4,510,000**

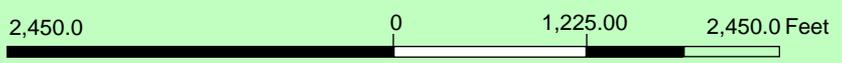


- LEGEND**
- Railroads
  - Designated Downtown Areas
  - Designated Village Areas
  - Town Boundary
  - County Boundary

**NOTES**

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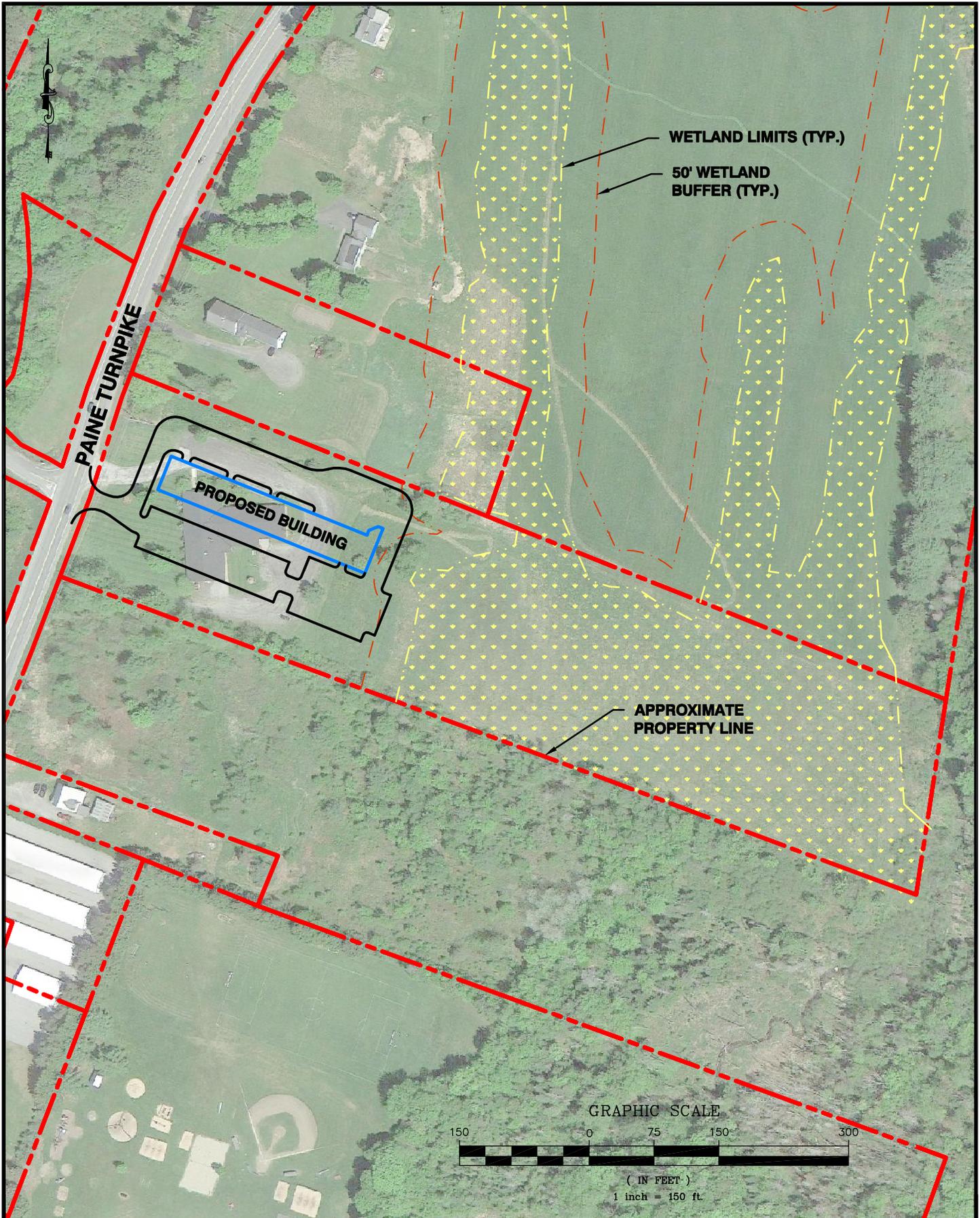
1: 14,700  
 July 16, 2014



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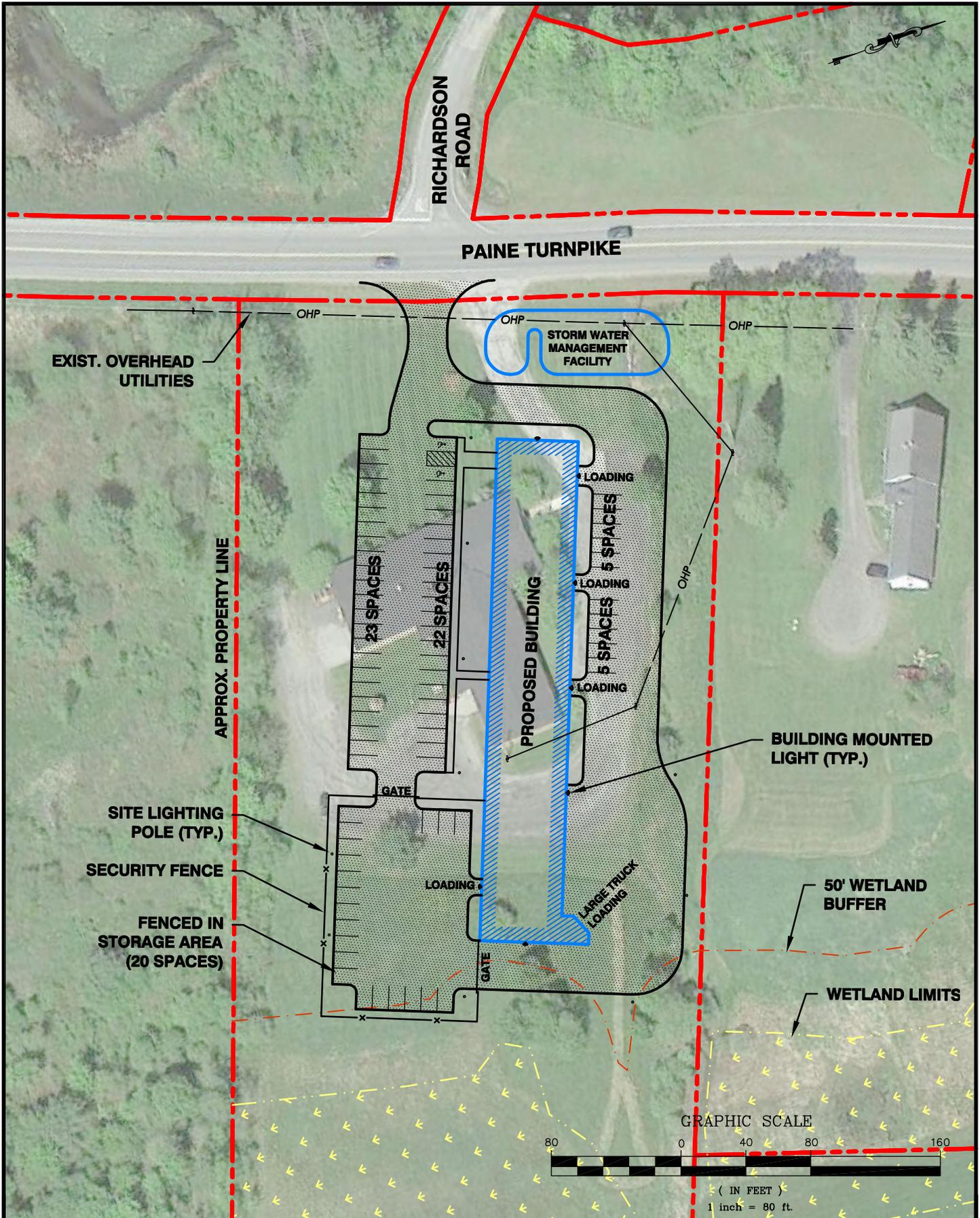
DEPARTMENT OF  
 BUILDINGS & GENERAL SERVICES

**NEW AGRICULTURAL/ENVIRONMENTAL LAB**

**OVERALL PROPERTY PLAN  
 REGIONAL LIBRARY SITE**

**BERLIN**

**VERMONT**



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STATE  
 OF  
 VERMONT

DEPARTMENT OF  
 BUILDINGS & GENERAL SERVICES

NEW AGRICULTURAL/ENVIRONMENTAL LAB  
**SITE PLAN**  
 REGIONAL LIBRARY SITE  
 BERLIN VERMONT

Berlin: Regional Library site



# Berlin: Regional Library Site

## Permitting Summary

### Municipal

Zone: Town Center. Laboratory use is prohibited. There is a precedent established in Berlin to honor Title 24.

15' front yard setback; 10' side and rear yard setback. Building height 45' allowed.

Lot coverage 75%

### State

Wastewater – The project will rely upon the timely construction of the extension of municipal sewer to this portion of the Town of Berlin. This is currently underway. A modest water and sewer allocation will be required to be acquired from the Town for this project. There are no other known technical issues associated with the acquisition of is permit.

Water Supply – The project may require the acquisition of a Permit to Construct from the Water Supply Division if a hydrant is required on the property. Fire Flow Capacity may become an issue as this is located at the higher portion of the proposed distribution system.

Construction Stormwater – The project may qualify for a Low Risk Authorization under the State Construction Stormwater General Permit.

Operational Stormwater – Coverage under the State Operation Stormwater General Permit will be required as amount of impervious area on the property exceeds the one acre jurisdictional limit. The extent of the mitigation may change as the State is in the process of modifying the Stormwater Rules to require additional on-site retention of storm events.

Wetlands – The project does extend into the wetland buffer thereby requiring the acquisition of a wetland permit.

Stream Alteration – Not applicable

### Act 250

Currently the parcel size is less than 10 acres and barring any other jurisdictional triggers associated with the creation of residential units or lots within the past 5 years and 5 miles of this site, Act 250 jurisdiction should not attach to this project.

### Federal

Corps of Engineers – The project is not proposing any wetland impact, therefore no authorization should be required.

NEPA – Many of the criteria otherwise handled within the Act 250 process will need to be addressed as part of the NEPA review. Items of exposure are archaeological issues (much of the site has been disturbed but sits on fill perhaps encapsulating sensitive items, and traffic impacts.

# Regional Library Site

Berlin

## Summary of Estimate of Probable Site Development Cost

August 8, 2014

Description	Qty	Unit		Unit Cost		Cost
Site & Building Demolition	1	LS	x	\$21,000	=	\$21,000
Mass Earthwork	6,667	CY	x	\$15.00	=	\$100,000
Rock Removal	10	CY	x	\$40	=	\$400
Supplemental Foundation Costs	1	LS	x	\$12,000	=	\$12,000
Sewer Disposal	1	LS	x	\$2,800	=	\$2,800
Water Supply	1	LS	x	\$30,400	=	\$30,400
Stormwater Management	1	LS	x	\$56,000	=	\$56,000
Site Development Components	1	LS	x	\$100,200	=	\$100,200
Special Site Conditions	1	LS	x	\$1,000	=	\$1,000
Retaining Walls	1	SF	x	\$4,800	=	\$4,800
Communications Utilities	1	LS	x	\$32,000	=	\$32,000
Pavement Surfaces	50,585	SF	x	\$5.44	=	\$275,334
Wetland Mitigation Measures	1	LS	x	\$2,800	=	\$2,800
Environmental Permitting	1	LS	x	\$1,000	=	<u>\$38,200</u>

Subtotal \$676,934

20% Contingency \$133,066

**Total \$810,000**



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Not included:

Landscaping, foundation work, sidewalks and ramps, signage, solar infrastructure, or solar panels.

# Regional Library Site

## Berlin

### Detail Breakdown of Probable Development Cost

August 8, 2014

Page 1 of 4

Description	Qty	Unit		Unit Cost		Cost
<b>Site &amp; Building Demolition</b>						
Materials Recycling	1	CF	x	\$3,500	=	\$3,500
Building Decommissioning	1	CF	x	\$5,500	=	\$5,500
Materials to Landfill	1	CF	x	\$12,000	=	<u>\$12,000</u>
						\$21,000
<b>Mass Earthwork</b>						
Access Road	0	CY	x	\$8	=	\$0
Building Site (to Off-site Waste)	<u>6666.7</u>	CY	x	\$15	=	<u>\$100,000</u>
	6666.7			\$15		\$100,000
<b>Rock Removal</b>						
Excavated	10	CY	x	\$40	=	\$400
Chipped	0	CY	x	\$60	=	\$0
Blasted	<u>0</u>	CY	x	\$100	=	<u>\$0</u>
	10			\$40		\$400
<b>Supplemental Foundation Costs</b>						
Spread Foundation	300	SF	x	\$20	=	\$6,000
GeoPiers	0	EA	x	\$1,000	=	\$0
Poor Soil Replacement	150	CY	x	\$40	=	<u>\$6,000</u>
						\$12,000
<b>Sewage Disposal</b>						
6" Sewer Service	100	LF	x	\$20	=	\$2,000
Septic Tank	0	Gal	x	\$3.25	=	\$0
Pump Station	0	LS	x	\$5,500	=	\$0
On-Site Wastewater Disposal Sys.	0	LS	x	\$25,000	=	\$0
2" Force Main	0	LF	x	\$20	=	\$0
Manhole Connection	1	LS	x	\$800	=	<u>\$800</u>
						\$2,800
<b>Water Supply</b>						
8" Fire Service	300	LF	x	\$60	=	\$18,000
New Hydrant Assembly	1	EA	x	\$2,500	=	\$2,500
6" Sprinkler Service	50	LF	x	\$58	=	\$2,900
Wet Tap at Municipal Line	1	LS	x	\$3,000	=	\$3,000
1" Domestic Service	120	LF	x	\$25	=	\$3,000
Water Main Connection	1	LS	x	\$1,000	=	<u>\$1,000</u>
						\$30,400

Prepared by Civil Engineering Associates, Inc.

# Regional Library Site

Berlin

## Detail Breakdown of Probable Development Cost

August 8, 2014

Page 2 of 4

Description	Qty	Unit	Unit Cost	=	Cost
<b>Stormwater Management</b>					
Wet Pond	1	LS	\$30,000	=	\$30,000
Underground Sediment Trap	0	LS	\$15,000	=	\$0
Underground Filter	0	LS	\$25,000	=	\$0
Infiltration Galley	0	LF	\$40	=	\$0
Catch Basins/DMH's	5	EA	\$2,500	=	\$12,500
15" Storm Drain Pipe	300	LF	\$35	=	\$10,500
Grass Lined Swale	150	LF	\$20	=	<u>\$3,000</u>
					\$56,000
<b>Standard Site Development Items</b>					
Perimeter Chain Link Fence	380	LF	\$20	=	\$7,600
Signage/Pavement Markings	1	LS	\$4,500	=	\$4,500
Area Light Poles & Bases	10	EA	\$2,500	=	\$25,000
Bldg Mounted Lights	7	EA	\$1,000	=	\$7,000
Secondary Electrical Condu. & Wire	750	LF	\$20	=	\$15,000
Strip Topsoil & Stockpile	1310	CY	\$10	=	\$13,100
Spread Topsoil, Seed, Fert & Mulch	500	CY	\$15	=	\$7,500
Import Screened Topsoil & Spread	50	CY	\$35	=	\$1,750
Loading Area Concrete Surface	450	SF	\$15	=	\$6,750
Erosion Prevention & Sed. Control	1	LS	\$12,000	=	<u>\$12,000</u>
					\$100,200
<b>Special Site Conditions</b>					
Tree Clearing	0.1	Acre	\$6,000	=	\$600
Tree Protection	4	EA	\$100	=	\$400
Special Fencing	0	LF	\$40	=	\$0
Erosion Prevention & Sed. Control	1	LS	\$0	=	<u>\$0</u>
					\$1,000
<b>Loading Area Retaining Walls</b>					
	80	SF	\$60	=	\$4,800
<b>Power &amp; Communications Utilities</b>					
Phone & Cable Conduit & Line	100	LF	\$40	=	\$4,000
Fiber Optic Conduit & Line	100	LF	\$60	=	\$6,000
Primary Power Conduit & Wire	100	LF	\$50	=	\$5,000
Concrete Encasement	40	LF	\$50	=	\$2,000
Transformer & Base	1	EA	\$15,000	=	<u>\$15,000</u>
					\$32,000

Prepared by Civil Engineering Associates, Inc.

# Regional Library Site

Berlin

## Detail Breakdown of Probable Development Cost

August 8, 2014

Description	Qty	Unit	Unit Cost		Page 3 of 4 Cost
<b>Pavement Surfaces</b>					
Access Road	2,685	SF	x	\$6.17 =	\$16,558
Parking Lot	45,460	SF	x	\$5.43 =	\$246,803
Additional Circulation	<u>2,440</u>	SF	x	\$4.91 =	<u>\$11,974</u>
	50,585			\$5.44	\$275,334
<b>Wetland Mitigation</b>					
Avoidance					
Retaining walls	0	SF	x	\$60 =	\$0
Steep Slopes	700	SY	x	\$4 =	\$2,800
Special Surfaces	0	SY	x	\$12 =	<u>\$0</u>
					\$2,800

Prepared by Civil Engineering Associates, Inc.

# Regional Library Site

Berlin

## Detail Breakdown of Probable Development Cost

August 8, 2014

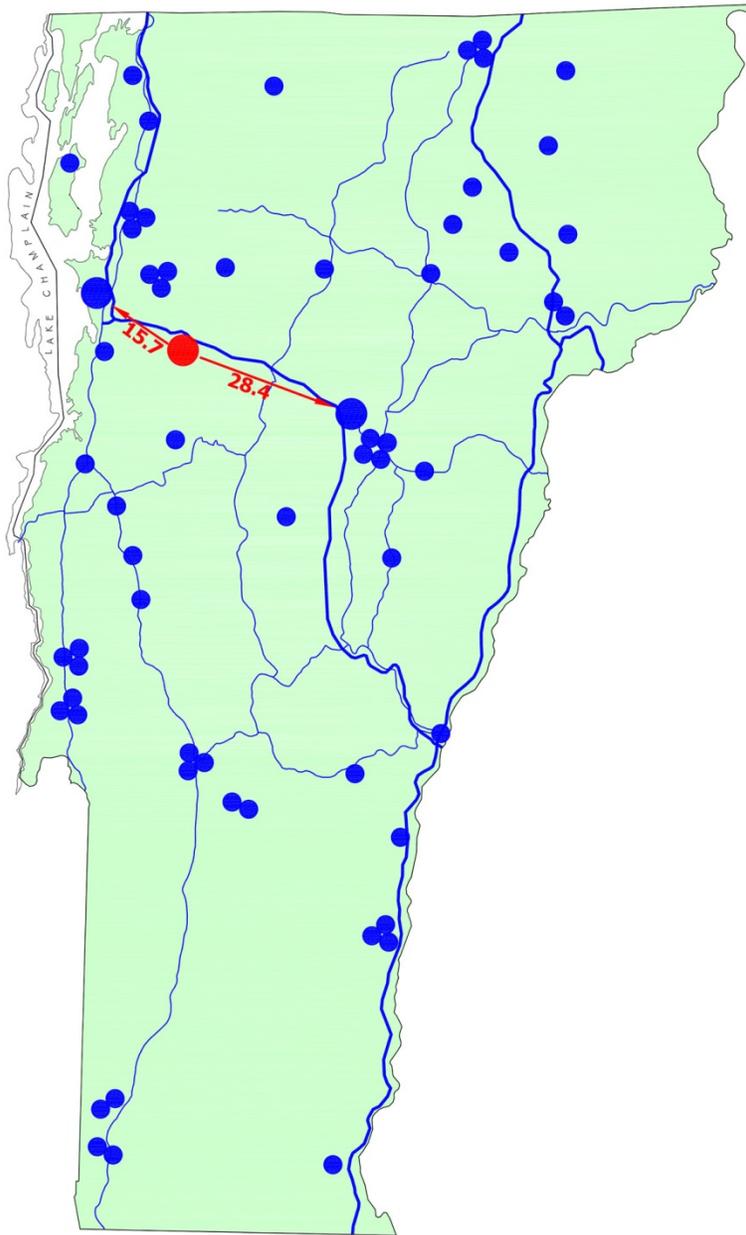
Page 4 of 4

Description	Qty	Unit	Unit Cost	=	Cost
<b>Environmental Permitting</b>					
<i>Basic Plan Package Preparation</i>					
Existing Condition Documentation	1	LS	x \$3,000	=	\$3,000
Boundary Survey	0	LS	x \$4,000	=	\$0
Wetland Delineation	1	LS	x \$2,500	=	\$2,500
Site Grading & Stormwater Plan	1	LS	x \$7,000	=	\$7,000
Site Utility Plan	1	LS	x \$2,500	=	\$2,500
EPSC Plan	1	LS	x \$1,500	=	\$1,500
Details	1	LS	x \$2,000	=	\$2,000
Specifications	1	LS	x \$1,500	=	<u>\$1,500</u>
					\$20,000
<i>Local</i>					
Site Plan	1	LS	x \$1,500	=	\$1,500
Condition Use	1	LS	x \$1,000	=	\$1,000
<i>State</i>					
WW & Potable Water Supply	1	LS	x \$1,200	=	\$1,200
Water Supply Permit to Construct	1	LS	x \$2,500	=	\$2,500
<i>Construction Stormwater</i>					
Low Risk Site	1	LS	x \$500	=	\$500
Moderate Risk Site	0	LS	x \$2,500	=	\$0
Operational Stormwater	1	LS	x \$4,000	=	\$4,000
Stream Alteration	0	LS	x \$1,200	=	\$0
<i>Act 250/NEPA</i>					
Land Use Permit Application	0	LS	x \$3,000	=	\$0
Administrative Amendment	0	LS	x \$800	=	\$0
Level 1 Environmental Assessment	1	LS	x \$1,500	=	\$1,500
Archeology Study	1	LS	x \$2,500	=	\$2,500
Traffic Study	1	LS	x \$3,500	=	\$3,500
<i>Federal</i>					
Corps of Engineers Wetlands	0	LS	x \$1,500	=	<u>\$0</u>

Does not include the development of Construction Documents

**Total    \$38,200**

*Prepared by Civil Engineering Associates, Inc.*



**OVERALL SCORE: 24.2/40 (# 14)**

**OLD CREAMERY SITE, RICHMOND**

Criteria & Scores

1. 2.3 Plateau is a little tight for program. No room for expansion, but room below for solar array
2. 3.3 Floodplain. Currently a brownfield
3. 4.3 All utilities at site except fiberoptic
4. 3.8 Conditional use, particularly height. NEPA nec.
5. 2.7 Compatible neighborhood (commercial)
6. 3.5 Site will be delivered "clean" (including demolition)
7. 1.8 Distant from Montpelier. Potential shaking from adjacent railroad
8. 2.5 Benefit to village; possible to use fields

Size: 6 acres

Acquisition cost: \$575,000

Rough cost to develop: \$800,000 - \$950,000

**TOTAL \$1,400,000+**

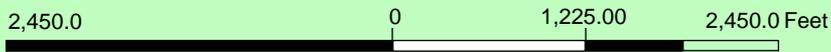


- LEGEND**
- Railroads
  - Designated Downtown Areas
  - Designated Village Areas
  - Town Boundary
  - County Boundary

**NOTES**

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Richmond: Old Creamery (Village)



# Richmond: Old Creamery Site

## Permitting Summary

### Municipal

Zone: Joline Court Interim Zoning District with Flood Zone Overlay District

Laboratory use is conditional.

80% lot coverage; 15' front yard setback. 5' side and rear yard setback. (No problem to meet.)

Maximum building height is 38' due to fire fighting equipment. The penthouse may be exempt, and if not the Town will negotiate a solution.

### State

Wastewater – The site is connected to municipal water and sewer. The sewer connection will likely require a sewage pump station to connect to the municipal system. Water and sewer allocations are in place. There are no other known technical issues associated with the acquisition of this permit.

Water Supply – The project may require the acquisition of a Permit to Construct from the Water Supply Division if a hydrant is required on the property.

Construction Stormwater – The project may qualify for a Low Risk Authorization under the State Construction Stormwater General Permit.

Operational Stormwater – Coverage under the State Operation Stormwater General Permit will be required as amount of impervious area on the property exceeds the one acre jurisdictional limit. The extent of the mitigation may change as the State is in the process of modifying the Stormwater Rules to require additional on-site retention of storm events.

Wetlands – There is a mapped Class II wetland located on the site. The existing development is not adjacent to the mapped wetland. If construction occurs within the wetland or wetland buffer a wetland permit will be required.

Stream Alteration – Not applicable

### Act 250

Currently the parcel size is less than 10 acres and barring any other jurisdictional triggers associated with the creation of residential units or lots within the past 5 years and 5 miles of this site, Act 250 jurisdiction should not attach to this project.

### Federal

Corps of Engineers – The site layout and design will govern whether there is any wetland impact, if any disturbance of either the wetland or buffer occurs a wetland permit would be required. The building area is above the 500-year floodplain.

NEPA –An archeological survey was conducted in 2009. The historic structure has been approved for demolition. A traffic study may be required.

# Creamery Richmond

## Summary of Estimate of Standard Site Development Cost August 8, 2014

### Description

Site & Building Demolition	average - site will be sold "clean"				
Mass Earthwork	average				
Rock Removal	average				
Supplemental Foundation Costs	average				
Sewer Disposal	average				
Water Supply	average				
Stormwater Management	above average				
Site Development Components	average				
Special Site Conditions	average				
Retaining Walls	above average				
Communications Utilities	average				
Pavement Surfaces	above average - long driveway				
Wetland Mitigation Measures	above average				
Environmental Permitting	above average				

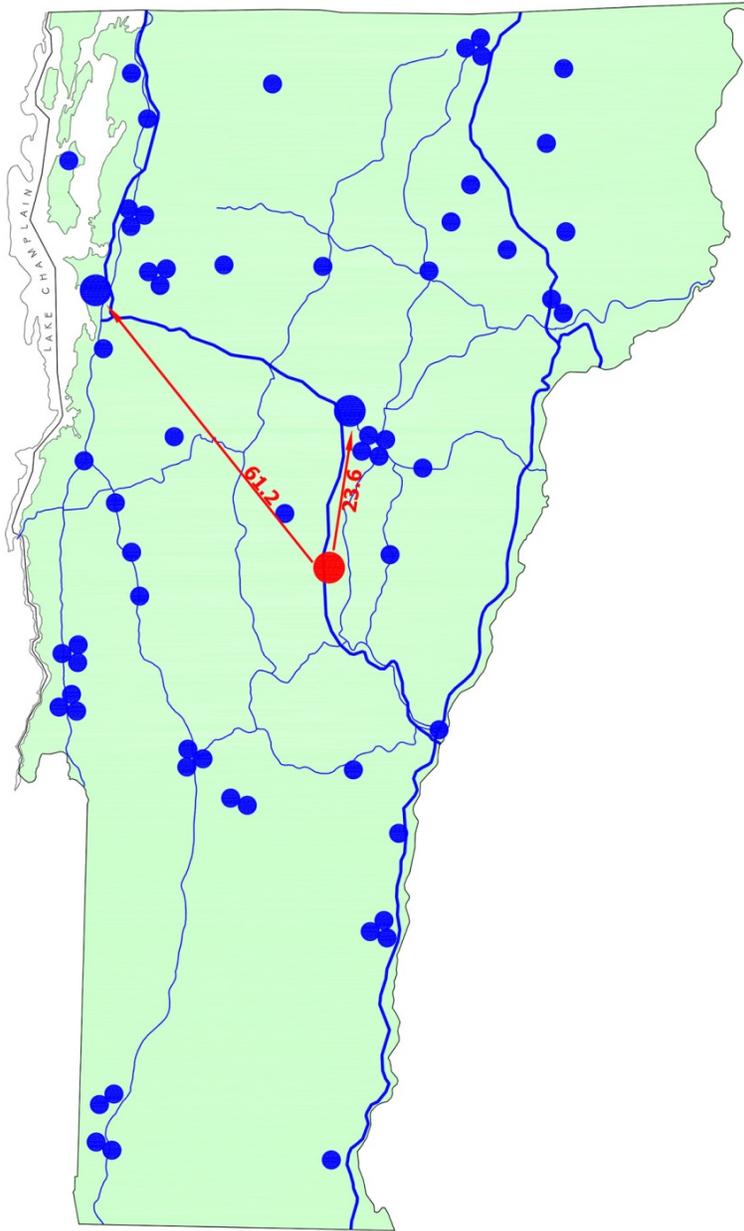
**Total: \$800,000 - \$950,000**



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Not included:

Landscaping, foundation work, sidewalks and ramps, signage, solar infrastructure, or solar panels.

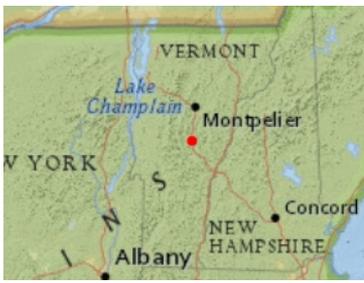
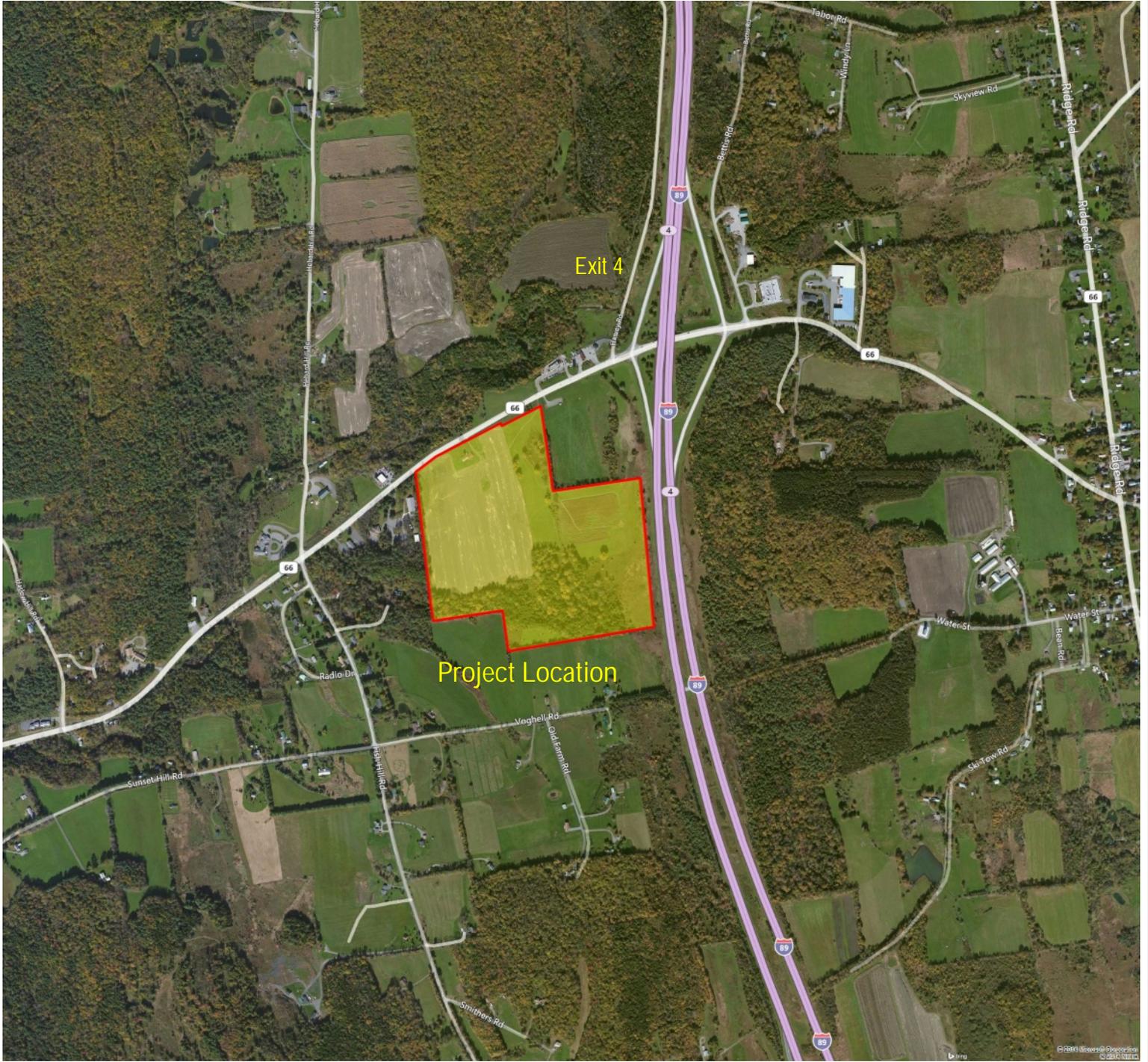


**OVERALL SCORE: 24.0/40 (# 15)**

**NEAR EXIT 4 (ROUTE 66), RANDOLPH**

Criteria & Scores

- |  |  |
|--|--|
| 1. 3.6 Site fits program well; would use "walkout" design because of slope. Minimal room for solar array |  |
| 2. 2.4 Site is open with good soils; slope   | Size: 5+ acres                               |
| 3. 2.6 Wastewater available; no water. Needs well<br>Fiberoptic is available                             |  |
| 4. 2.8 Conditional use. Act 250 is in process. NEPA required   | Acquisition cost: \$500,000                  |
| 5. 3.2 Area being developed as commercial use  | Rough cost to develop: \$800,000 - \$950,000 |
| 6. 3.6 Good site for construction other than slope   | <b>TOTAL \$1,300,000+</b>                    |
| 7. 2.8 Distant from Montpelier   |  |
| 8. 3.0 No wider benefits   |  |

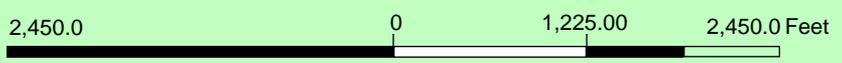


- LEGEND**
- Railroads
  - Designated Downtown Areas
  - Designated Village Areas
  - Town Boundary
  - County Boundary

**NOTES**

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1: 14,700  
July 18, 2014



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Randolph: Exit 4 (Route 66)



## **Randolph: Exit 4 (Route 66)**

### Permitting Summary

#### **Municipal**

Zone: Interchange SW (Int-SW)

Use is conditional.

60' front yard setback from center of road; 30' side and rear yard setbacks.

Height may be up to 50' but must be approved by DRB for sensitive scenery from the interstate.

Max building coverage 8%, max impervious coverage 24%. Other soil max 30% coverage.

#### **State**

Wastewater – The project has access to municipal sewer. A modest sewer allocation will be required to be acquired from the Town for this project. There are no other known technical issues associated with the acquisition of is permit.

Water Supply – The site will be served by a new drilled well as there is not municipal water service. The project may require the acquisition of a Permit to Construct from the Water Supply Division depending upon the proposed water source and the number of people connected to this service.

Construction Stormwater – The project may qualify for a Low Risk Authorization under the State Construction Stormwater General Permit.

Operational Stormwater – Coverage under the State Operation Stormwater General Permit will be required as amount of impervious area on the property exceeds the one acre jurisdictional limit. The extent of the mitigation may change as the State is in the process of modifying the Stormwater Rules to require additional on-site retention of storm events.

Wetlands – The project does appear to contain any wetlands.

Stream Alteration – Not applicable

#### **Act 250**

The subdivision is in the process of receiving Act 250 approval. Because the area of disturbance does not exceed 10 acres, this project would not otherwise need an Act 250 permit. It may, however, need an amendment to the masterplan.

#### **Federal**

Corps of Engineers – The project is not proposing any wetland impact, therefore no authorization should be required.

NEPA – Many of the criteria otherwise handled within the Act 250 process will need to be addressed as part of the NEPA review. Items of exposure are archaeological issues and traffic impacts.

## Exit 4 Randolph

### Summary of Estimate of Standard Site Development Cost August 8, 2014

#### Description

Site & Building Demolition	average					
Mass Earthwork	very high: steep slope					
Rock Removal	average					
Supplemental Foundation Costs	average					
Sewer Disposal	average					
Water Supply	above average - well					
Stormwater Management	average					
Site Development Components	average					
Special Site Conditions	average					
Retaining Walls	above average - sloping site					
Communications Utilities	average					
Pavement Surfaces	average					
Wetland Mitigation Measures	average					
Environmental Permitting	average					

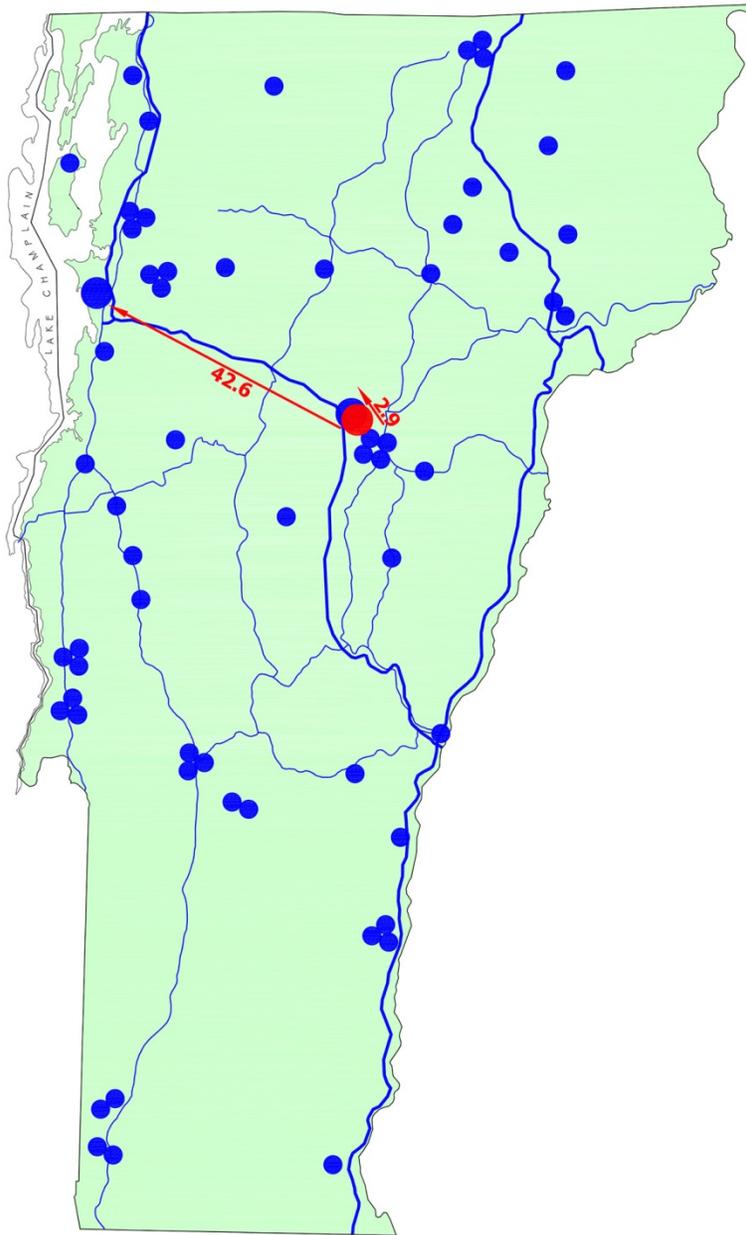
**Total: \$800,000 - \$950,000**



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**Not included:**

Landscaping, foundation work, sidewalks and ramps, signage, solar infrastructure, or solar panels.



**OVERALL SCORE: 23.2/40 (# 16)**

**FISH & WILDLIFE PROPERTY, BERLIN**

Criteria & Scores

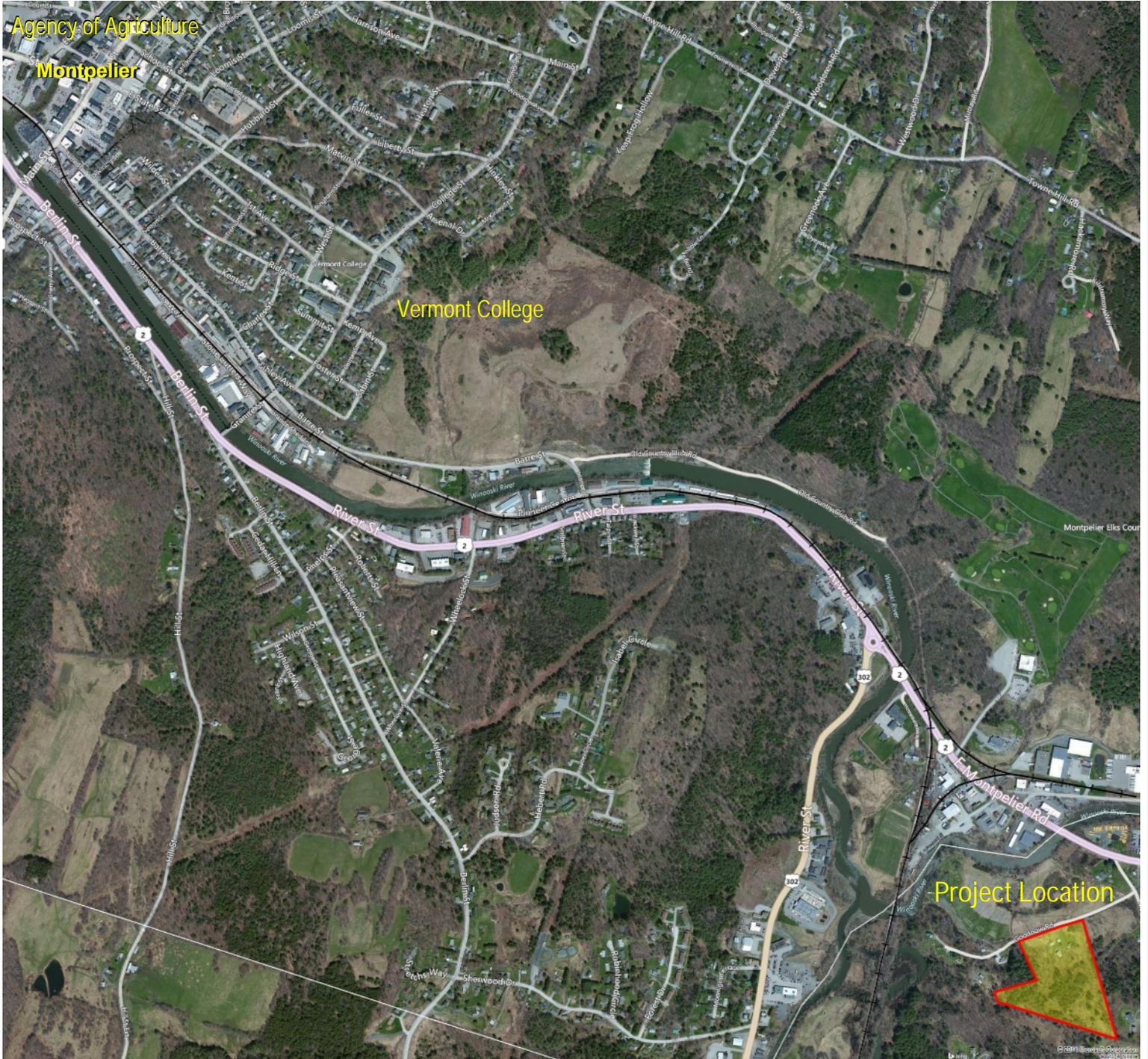
1. 3.7 Site is tight due to little buildable area; no room to expand. Plenty of room for a solar array
2. 2.2 Front of lot is wetland, quickly slopes up
3. 1.2 No utilities available, not even 3-phase electric  
Have to connect at Gallison Hill Road
4. 3.2 Conditional use; NEPA and wetland permit required
5. 2.8 Rural site, although commercial is nearby
6. 3.5 No hindrances to construction. Some demolition
7. 3.8 Close to Montpelier
8. 2.8 No wider benefits

Size: 13 acres

Acquisition cost: (none)

Rough cost to develop: \$1,720,000

**TOTAL \$1,720,000**



- LEGEND**
-  Railroads
  -  Designated Downtown Areas
  -  Designated Village Areas
  -  Town Boundary
  -  County Boundary

**NOTES**

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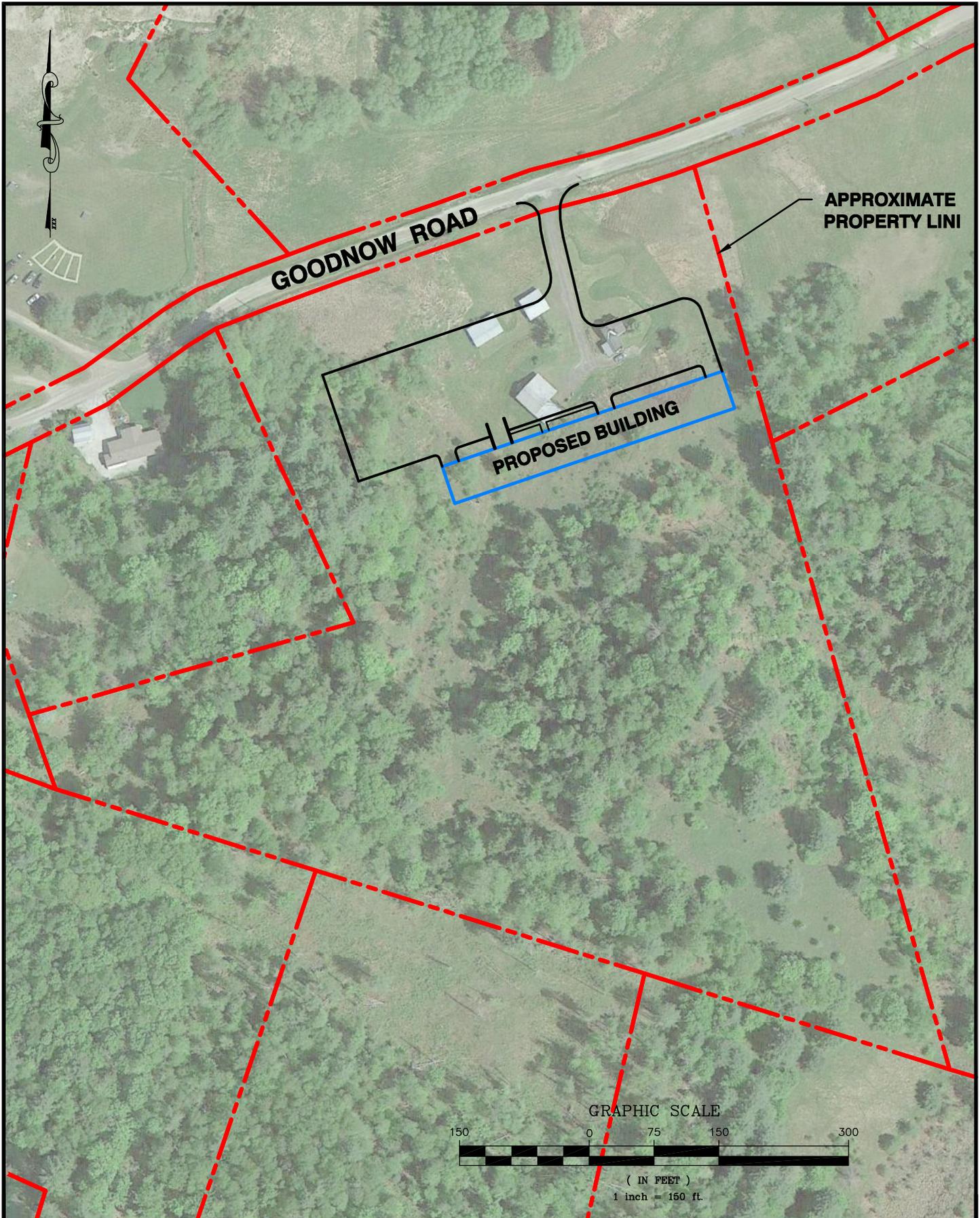
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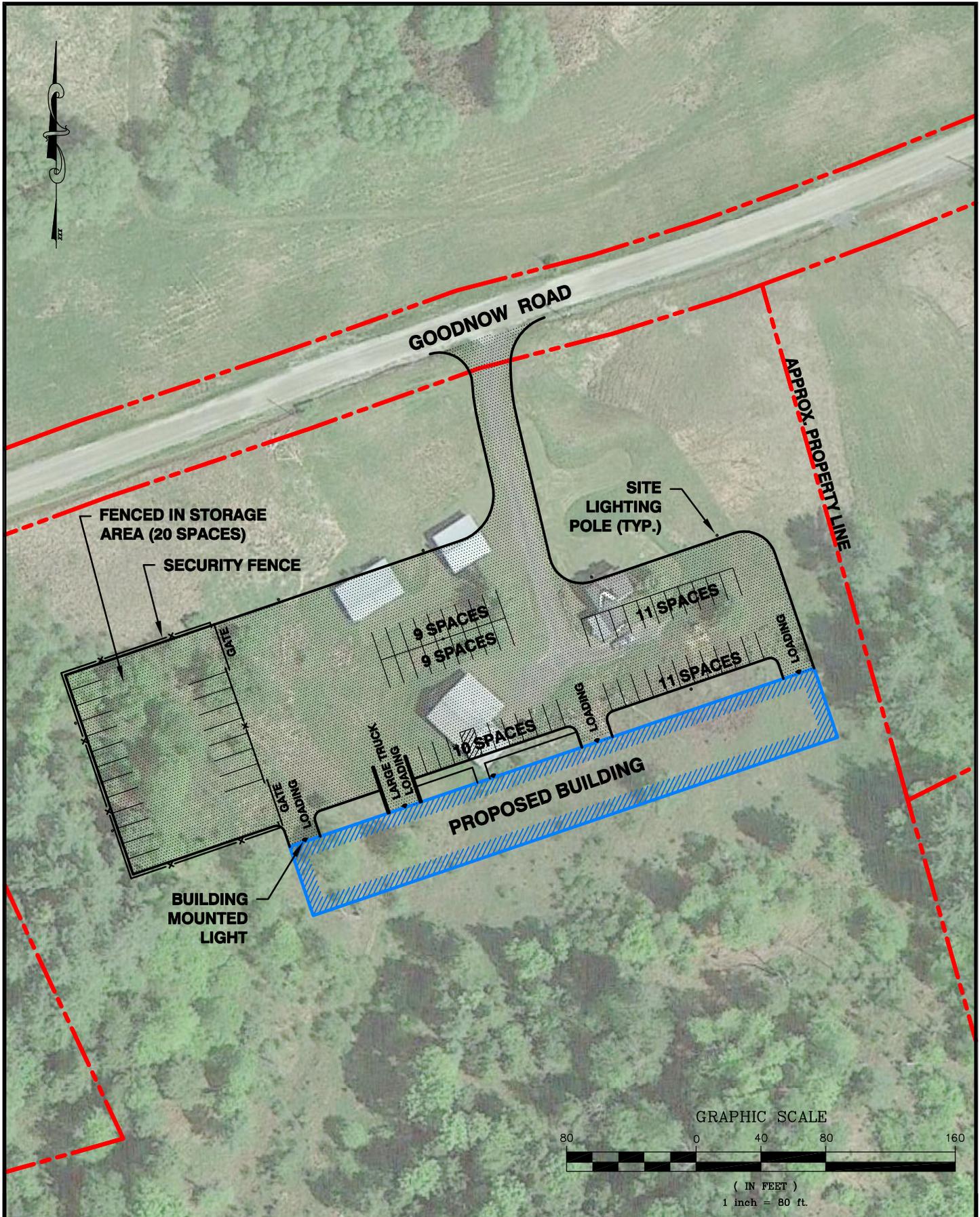
STATE  
 OF  
 VERMONT

DEPARTMENT OF  
 BUILDINGS & GENERAL SERVICES

NEW AGRICULTURAL/ENVIRONMENTAL LAB  
**OVERALL PROPERTY PLAN**  
**F & W SITE**

BERLIN

VERMONT



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 802-864-2323 FAX: 802-864-2271



Scale 1" = 80'  
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Drawn by SAL  
 CEA Project No. 14165



STATE  
 OF  
 VERMONT

DEPARTMENT OF  
 BUILDINGS & GENERAL SERVICES

NEW AGRICULTURAL/ENVIRONMENTAL LAB

**SITE PLAN  
 F & W SITE**

BERLIN

VERMONT



# **Berlin: Fish & Wildlife Property**

## **Permitting Summary**

### **Municipal**

Zone: Highway Commercial

Conditional use.

50' front yard setback; 25' rear and side yard setbacks; 45' maximum building height

### **State**

Wastewater – The City of Montpelier has indicated that it will accept the wastewater from this site provided that the infrastructure is constructed from the site to the existing collection system. This will require coordination with the State Wastewater Management Division and the City of Montpelier.

Water Supply – The project will require the acquisition of a Permit to Construct from the Water Supply Division if municipal water is to be extended from the City of Montpelier to the site. Otherwise a drilled well will be required.

Construction Stormwater – The project may qualify for a Low Risk Authorization under the State Construction Stormwater General Permit.

Operational Stormwater – Coverage under the State Operation Stormwater General Permit will be required as amount of impervious area on the property exceeds the one acre jurisdictional limit. The extent of the mitigation may change as the State is in the process of modifying the Stormwater Rules to require additional on-site retention of storm events.

Wetlands – The project includes wetlands that will be impacted by the site not only for the access but also the program requirements outside the footprint of the building. This will require the application for a State Wetland Permit.

Stream Alteration – Depending on the means of extending municipal services to the site, a Stream Alteration Permit may be required as a result of the crossing of the Winooski River.

### **Act 250**

Currently the parcel size is less than 10 acres and barring any other jurisdictional triggers associated with the creation of residential units or lots within the past 5 years and 5 miles of this site, Act 250 jurisdiction should not attach to this project.

### **Federal**

Corps of Engineers – The project is proposing a significant wetland impact, and an authorization and likely wetland mitigation will be required.

NEPA – Many of the criteria otherwise handled within the Act 250 process will need to be addressed as part of the NEPA review. Items of exposure are archaeological and traffic impacts.

# F & W Land

## Berlin

### Summary of Estimate of Probable Site Development Cost

August 8, 2014

Description	Qty	Unit		Unit Cost		Cost
Site & Building Demolition	1	LS	x	\$13,500	=	\$13,500
Mass Earthwork	6,667	CY	x	\$15.00	=	\$100,000
Rock Removal	40	CY	x	\$40	=	\$1,600
Supplemental Foundation Costs	1	LS	x	\$161,556	=	\$161,556
Sewer Disposal	1	LS	x	\$66,175	=	\$66,175
Water Supply	1	LS	x	\$128,400	=	\$128,400
Stormwater Management	1	LS	x	\$109,000	=	\$109,000
Site Development Components	1	LS	x	\$80,400	=	\$80,400
Special Site Conditions	1	LS	x	\$9,400	=	\$9,400
Retaining Walls	1	SF	x	\$4,800	=	\$4,800
Communications Utilities	1	LS	x	\$282,000	=	\$282,000
Pavement Surfaces	54,000	SF	x	\$5.35	=	\$288,694
Wetland Mitigation Measures	1	LS	x	\$127,200	=	\$127,200
Environmental Permitting	1	LS	x	\$1,000	=	<u>\$61,800</u>

Subtotal \$1,434,525

20% Contingency \$285,475

**Total \$1,720,000**



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Not included:

Landscaping, foundation work, sidewalks and ramps, signage, solar infrastructure, or solar panels.

# F & W Land Berlin

## Detail Breakdown of Probable Development Cost August 8, 2014

Page 1 of 4

Description	Qty	Unit	Unit Cost	=	Cost
<b>Site &amp; Building Demolition</b>					
Materials Recycling	1	CF	x \$2,000	=	\$2,000
Building Decommissioning	1	CF	x \$3,500	=	\$3,500
Materials to Landfill	1	CF	x \$8,000	=	<u>\$8,000</u>
					\$13,500
<b>Mass Earthwork</b>					
Access Road	0	CY	x \$8	=	\$0
Building Site (to Off-site Waste)	<u>6666.7</u>	CY	x \$15	=	<u>\$100,000</u>
	6666.7		\$15		\$100,000
<b>Rock Removal</b>					
Excavated	40	CY	x \$40	=	\$1,600
Chipped	0	CY	x \$60	=	\$0
Blasted	<u>0</u>	CY	x \$100	=	<u>\$0</u>
	40		\$40		\$1,600
<b>Supplemental Foundation Costs</b>					
Spread Foundation	300	SF	x \$20	=	\$6,000
GeoPiers	48	EA	x \$2,500	=	\$120,000
Poor Soil Replacement	<u>888.89</u>	CY	x \$40	=	<u>\$35,556</u>
					\$161,556
<b>Sewage Disposal</b>					
6" Sewer Service	100	LF	x \$20	=	\$2,000
Septic Tank	1500	Gal	x \$3.25	=	\$4,875
Pump Station	1	LS	x \$5,500	=	\$5,500
Bridge/River Crossing	1	LS	x \$25,000	=	\$25,000
2" Force Main	1400	LF	x \$20	=	\$28,000
Manhole Connection	1	LS	x \$800	=	<u>\$800</u>
					\$66,175
<b>Water Supply</b>					
8" Fire Service	1400	LF	x \$60	=	\$84,000
New Hydrant Assembly	4	EA	x \$2,500	=	\$10,000
6" Sprinkler Service	50	LF	x \$58	=	\$2,900
Wet Tap at Municipal Line	1	LS	x \$3,000	=	\$3,000
1" Domestic Service	100	LF	x \$25	=	\$2,500
Bridge/River Crossing	1	LS	x \$25,000	=	\$25,000
Water Main Connection	1	LS	x \$1,000	=	<u>\$1,000</u>
					\$128,400

Prepared by Civil Engineering Associates, Inc.

# F & W Land

## Berlin

### Detail Breakdown of Probable Development Cost

August 8, 2014

Page 2 of 4

Description	Qty	Unit		Unit Cost	=	Cost
<b>Stormwater Management</b>						
Wet Pond	0	LS	x	\$30,000	=	\$0
Underground Sediment Trap	2	LS	x	\$15,000	=	\$30,000
Underground Filter	1	LS	x	\$25,000	=	\$25,000
Infiltration/Storage Galley	600	LF	x	\$40	=	\$24,000
Catch Basins/DMH's	5	EA	x	\$2,500	=	\$12,500
15" Storm Drain Pipe	300	LF	x	\$35	=	\$10,500
Grass Lined Swale	350	LF	x	\$20	=	<u>\$7,000</u>
						\$109,000
<b>Standard Site Development Items</b>						
Perimeter Chain Link Fence	200	LF	x	\$20	=	\$4,000
Signage/Pavement Markings	1	LS	x	\$4,500	=	\$4,500
Area Light Poles & Bases	8	EA	x	\$2,500	=	\$20,000
Bldg Mounted Lights	6	EA	x	\$1,000	=	\$6,000
Secondary Electrical Condu. & Wire	750	LF	x	\$20	=	\$15,000
Strip Topsoil & Stockpile	740	CY	x	\$10	=	\$7,400
Spread Topsoil, Seed, Fert & Mulch	200	CY	x	\$15	=	\$3,000
Import Screened Topsoil & Spread	50	CY	x	\$35	=	\$1,750
Loading Area Concrete Surface	450	SF	x	\$15	=	\$6,750
Erosion Prevention & Sed. Control	1	LS	x	\$12,000	=	<u>\$12,000</u>
						\$80,400
<b>Special Site Conditions</b>						
Tree Clearing	0.6	Acre	x	\$6,000	=	\$3,600
Tree Protection	8	EA	x	\$100	=	\$800
Special Fencing	0	LF	x	\$40	=	\$0
Erosion Prevention & Sed. Control	1	LS	x	\$5,000	=	<u>\$5,000</u>
						\$9,400
<b>Loading Area Retaining Walls</b>						
	80	SF	x	\$60	=	\$4,800
<b>Power &amp; Communications Utilities</b>						
Phone & Cable Conduit & Line	1740	LF	x	\$40	=	\$69,600
Fiber Optic Conduit & Line	1740	LF	x	\$60	=	\$104,400
Primary Power Conduit & Wire	1740	LF	x	\$50	=	\$87,000
Concrete Encasement	120	LF	x	\$50	=	\$6,000
Transformer & Base	1	EA	x	\$15,000	=	<u>\$15,000</u>
						\$282,000

Prepared by Civil Engineering Associates, Inc.

**F & W Land  
Berlin**

**Detail Breakdown of Probable Development Cost  
August 8, 2014**

Description	Qty	Unit	Unit Cost	Page 3 of 4 Cost
<b>Pavement Surfaces</b>				
Access Road	3,200	SF	x \$6.17 =	\$19,733
Parking Lot	37,700	SF	x \$5.43 =	\$204,674
Additional Circulation	<u>13,100</u>	SF	x \$4.91 =	<u>\$64,287</u>
	54,000		\$5.35	\$288,694
<b>Wetland Mitigation</b>				
Avoidance				
Retaining walls	2000	SF	x \$60 =	\$120,000
Steep Slopes	1800	SY	x \$4 =	\$7,200
Special Surfaces	0	SY	x \$12 =	<u>\$0</u>
				\$127,200

*Prepared by Civil Engineering Associates, Inc.*

# F & W Land Berlin

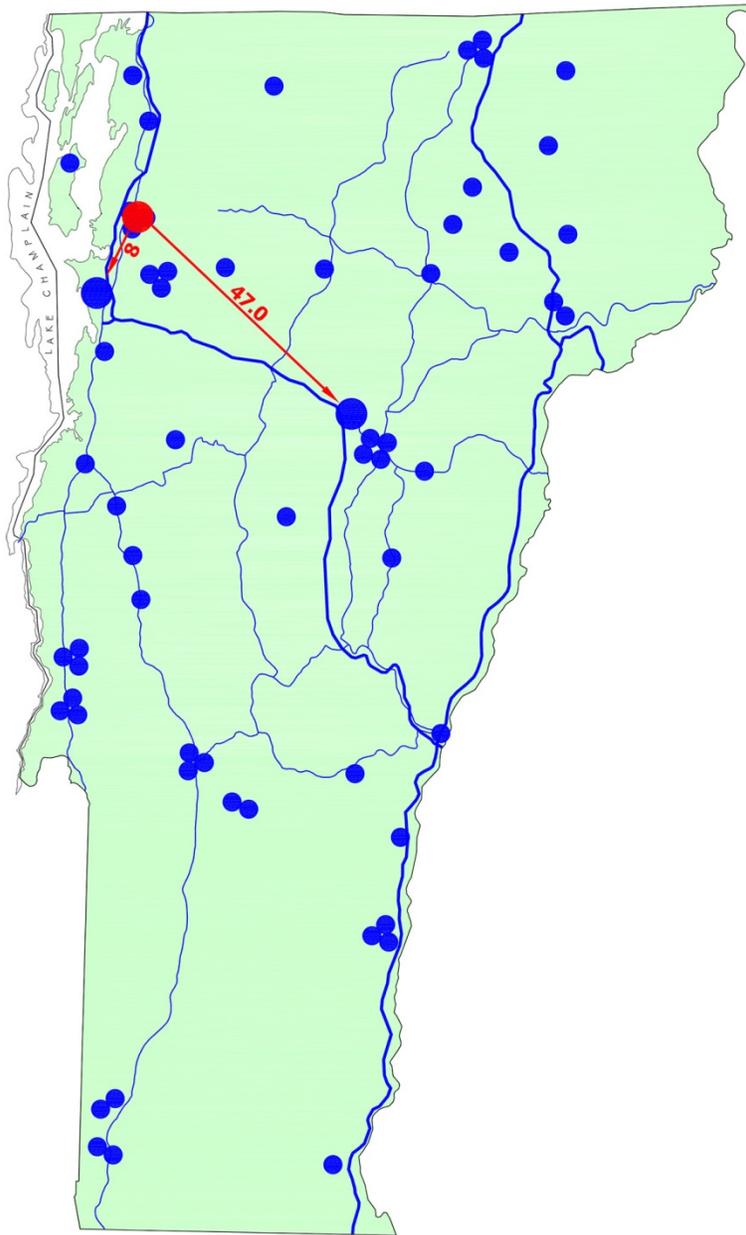
## Detail Breakdown of Probable Development Cost August 8, 2014

Description	Qty	Unit	Unit Cost	=	Cost
<b>Environmental Permitting</b>					
<i>Basic Plan Package Preparation</i>					
Existing Condition Documentation	1	LS	x \$4,000	=	\$4,000
Boundary Survey	1	LS	x \$6,000	=	\$6,000
Wetland Delineation	1	LS	x \$3,500	=	\$3,500
Site Grading & Stormwater Plan	1	LS	x \$10,500	=	\$10,500
Site Utility Plan	1	LS	x \$8,500	=	\$8,500
EPSC Plan	1	LS	x \$2,500	=	\$2,500
Details	1	LS	x \$2,500	=	\$2,500
Specifications	1	LS	x \$1,500	=	<u>\$1,500</u>
					\$39,000
<i>Local</i>					
Site Plan	1	LS	x \$1,500	=	\$1,500
Condition Use	1	LS	x \$1,000	=	\$1,000
<i>State</i>					
WW & Potable Water Supply	1	LS	x \$1,800	=	\$1,800
Water Supply Permit to Construct	1	LS	x \$2,500	=	\$2,500
<i>Construction Stormwater</i>					
Low Risk Site	0	LS	x \$500	=	\$0
Moderate Risk Site	1	LS	x \$2,500	=	\$2,500
Operational Stormwater	1	LS	x \$4,000	=	\$4,000
Stream Alteration	0	LS	x \$1,200	=	\$0
<i>Act 250/NEPA</i>					
Land Use Permit Application	0	LS	x \$3,000	=	\$0
Administrative Amendment	0	LS	x \$800	=	\$0
Level 1 Environmental Assessment	1	LS	x \$2,000	=	\$2,000
Archeology Study	1	LS	x \$2,500	=	\$2,500
Traffic Study	1	LS	x \$3,500	=	\$3,500
<i>Federal</i>					
Corps of Engineers Wetlands	1	LS	x \$1,500	=	<u>\$1,500</u>

Does not include the development of Construction Documents

**Total    \$61,800**

*Prepared by Civil Engineering Associates, Inc.*



**OVERALL SCORE: 20.2 (# 17)**

**96 GONYEAU ROAD, MILTON**

Criteria & Scores

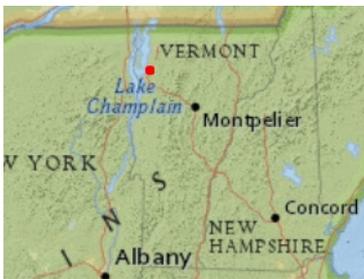
- 1. 2.8 Site a little tight esp. if septic field is needed  
No room for solar panels
- 2. 2.8 Site is open with good soils
- 3. 3.2 Sewer hook up remote. Water nearby  
No fiberoptic
- 4. 2.8 Conditional use, particularly height. NEPA nec.
- 5. 3.2 Compatible, although close to interstate
- 6. 3.0 Tight site but otherwise good for construction
- 7. 1.2 Distant from Montpelier
- 8. 1.2 No wider benefits

Size: 5.5 acres

Acquisition cost: \$550,000

Rough cost to develop: +/- \$700,000

**TOTAL +/- \$1,200,000**



- LEGEND**
- Railroads
  - Designated Downtown Areas
  - Designated Village Areas
  - Town Boundary
  - County Boundary

**NOTES**

Map created using ANR's Natural Resources Atlas

1: 14,700  
July 17, 2014





# Milton: 96 Gonyeau Road

## Permitting Summary

### Municipal

Zone: General Industrial (I2)

Permitted use: Research and development laboratory

Conditional use: State facility

Only other issue is height. 35' is permitted. Another 10' for penthouses is permitted as conditional use.

### State

Wastewater – This estimating assumes the design, permitting and construction of an on-site wastewater system. Sewer connection is available nearby but needs an easement. Capacity is available from the Town.

Water Supply – The project is served by municipal water which is available adjacent to the project site. A modest water allocation will be required to be acquired from the Town for this project. The project may require the acquisition of a Permit to Construct from the Water Supply Division if a hydrant is required on the property. There are no other known technical issues associated with the acquisition of is permit.

Construction Stormwater – The project may qualify for a Low Risk Authorization under the State Construction Stormwater General Permit.

Operational Stormwater – Coverage under the State Operation Stormwater General Permit will be required as amount of impervious area on the property exceeds the one acre jurisdictional limit. The extent of the mitigation may change as the State is in the process of modifying the Stormwater Rules to require additional on-site retention of storm events.

Wetlands – The project does not appear to contain wetlands which would thereby not require the acquisition of a wetland permit.

Stream Alteration – Not applicable

### Act 250

Currently the parcel size is less than 10 acres and barring any other jurisdictional triggers associated with the creation of residential units or lots within the past 5 years and 5 miles of this site, Act 250 jurisdiction should not attach to this project.

### Federal

Corps of Engineers – The project is not proposing any wetland impact, therefore no authorization should be required.

NEPA – Many of the criteria otherwise handled within the Act 250 process will need to be addressed as part of the NEPA review. Items of exposure are archaeological and traffic impacts.

## Milton

### Summary of Estimate of Standard Site Development Cost August 8, 2014

#### Description

Site & Building Demolition	less than average				
Mass Earthwork	average				
Rock Removal	less than average				
Supplemental Foundation Costs	average				
Sewer Disposal	very high - long connection or septic system				
Water Supply	average				
Stormwater Management	average				
Site Development Components	average				
Special Site Conditions	average				
Retaining Walls	average				
Communications Utilities	average				
Pavement Surfaces	average				
Wetland Mitigation Measures	less than average				
Environmental Permitting	average				

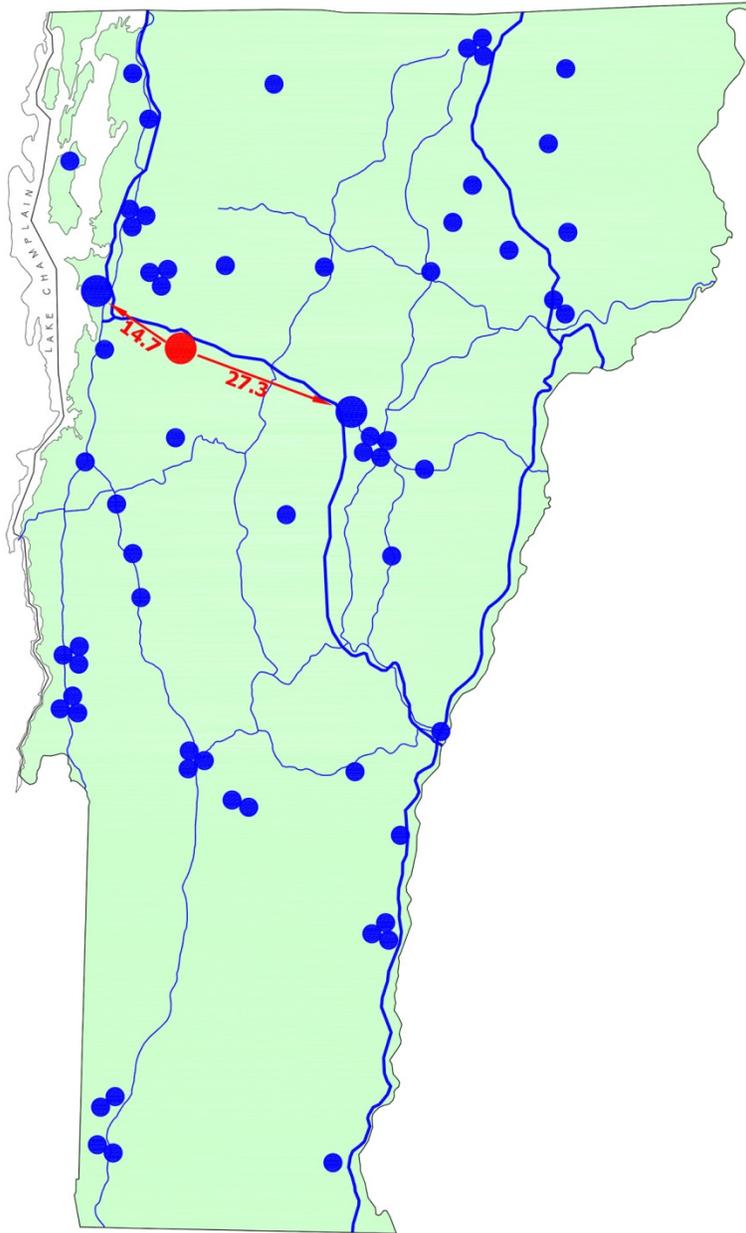
**Total: +/- \$700,000**



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**Not included:**

Landscaping, foundation work, sidewalks and ramps, signage, solar infrastructure, or solar panels.



**OVERALL SCORE: 17.5/40 (# 18)**

**ROUTE 2, RICHMOND**

Criteria & Scores

1. 2.3 Flat area of site is limited. Minimal room for a solar array if 5 acres purchased
2. 3.0 Site is open with good soils; slopes
3. 1.5 No utilities now except fiberoptic. Town is Committed to providing utilities by next year
4. 2.5 Use not permitted under current regs; in revision
5. 2.2 Compatible neighborhood, although close to interstate
6. 3.0 No significant barriers to construction
7. 1.7 Distant from Montpelier
8. 1.3 No wider benefits

Size: 5 acres

Acquisition cost: \$1,250,000

Rough cost to develop: \$800,000 - \$950,000

**TOTAL \$2,100,000+**

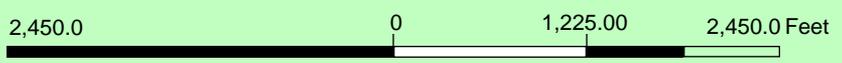


- LEGEND**
- Railroads
  - Designated Downtown Areas
  - Designated Village Areas
  - Town Boundary
  - County Boundary

**NOTES**

Map created using ANR's Natural Resources Atlas

1: 14,700  
July 18, 2014



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1" = 1225 Ft.    1cm = 147 Meters  
THIS MAP IS NOT TO BE USED FOR NAVIGATION

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## **Richmond: Route 2 (850 West Main Street)**

### **Permitting Summary**

#### **Municipal**

Zone: Gateway Commercial (G)

Currently laboratory use >5,000 sf is neither permitted nor conditional. Town Manager confirms regulations will be revised by the end of 2014.

#### **State**

Wastewater – According to the Town Manager, the Town is very interested in extending water/sewer service to or past this site. All parties are in favor, and an engineer has been retained to do a preliminary design and cost estimate. It should be known by the end of October if this project will proceed. This estimating assumes the design, permitting and construction of an on-site wastewater system and drilled well. Soil investigation will need to be performed to verify the capacity for an on-site system. There are no other known technical issues associated with the acquisition of is permit.

Water Supply – The project may require the acquisition of a Permit to Construct from the Water Supply Division depending upon the water system design and number of people being served by this water supply.

Construction Stormwater – The project may qualify for a Low Risk Authorization under the State Construction Stormwater General Permit.

Operational Stormwater – Coverage under the State Operation Stormwater General Permit will be required as amount of impervious area on the property exceeds the one acre jurisdictional limit. The extent of the mitigation may change as the State is in the process of modifying the Stormwater Rules to require additional on-site retention of storm events.

Wetlands – The project does not appear to extend into the wetland buffer thereby it is not anticipated that the acquisition of a wetland permit is required.

Stream Alteration – Not applicable

#### **Act 250**

Currently the parcel size is less than 10 acres and barring any other jurisdictional triggers associated with the creation of residential units or lots within the past 5 years and 5 miles of this site, Act 250 jurisdiction should not attach to this project.

#### **Federal**

Corps of Engineers – The project is not proposing any wetland impact, therefore no authorization should be required.

NEPA – Many of the criteria otherwise handled within the Act 250 process will need to be addressed as part of the NEPA review. Items of exposure are archaeological issues and traffic impacts.

## Route 2 Richmond

### Summary of Estimate of Standard Site Development Cost August 8, 2014

#### Description

Site & Building Demolition	average				
Mass Earthwork	very high - sloping site				
Rock Removal	above average				
Supplemental Foundation Costs	above average				
Sewer Disposal	very high - long connection or septic system				
Water Supply	above average				
Stormwater Management	average				
Site Development Components	average				
Special Site Conditions	average				
Retaining Walls	above average				
Communications Utilities	average				
Pavement Surfaces	above average				
Wetland Mitigation Measures	less than average				
Environmental Permitting	average				

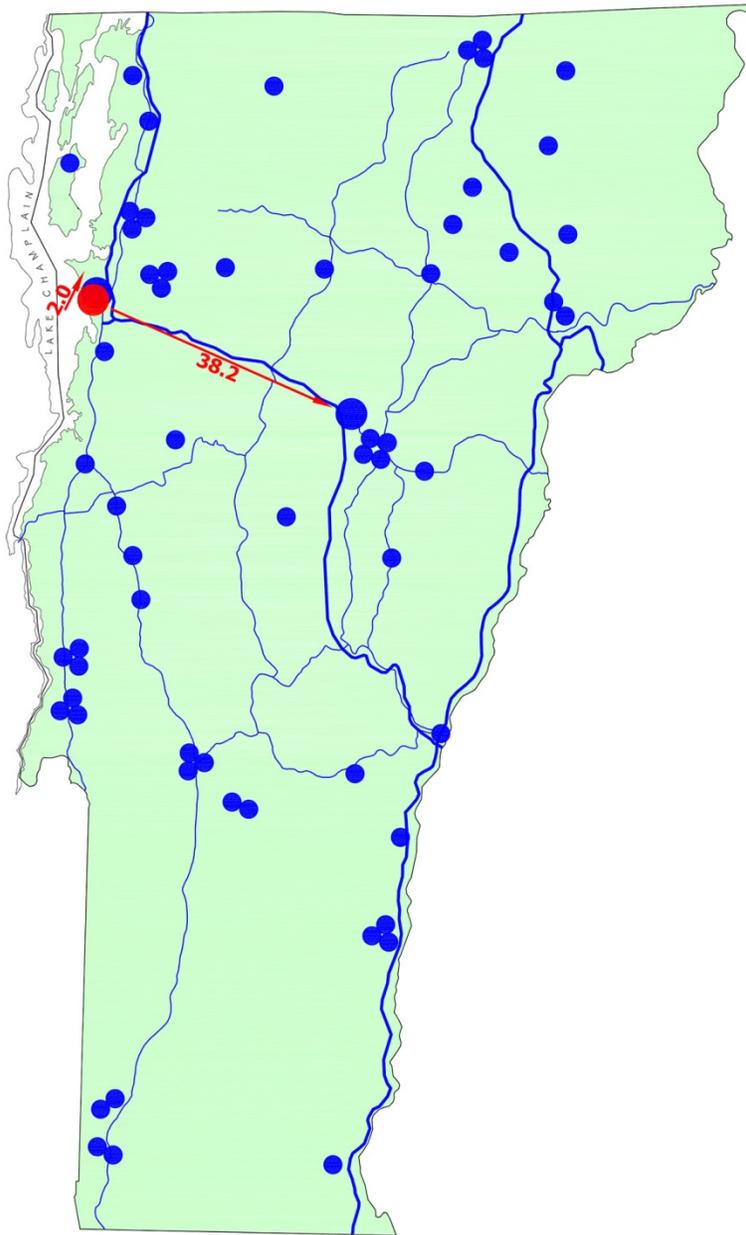
**Total: \$800,000 - \$950,000**



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Not included:

Landscaping, foundation work, sidewalks and ramps, signage, solar infrastructure, or solar panels.

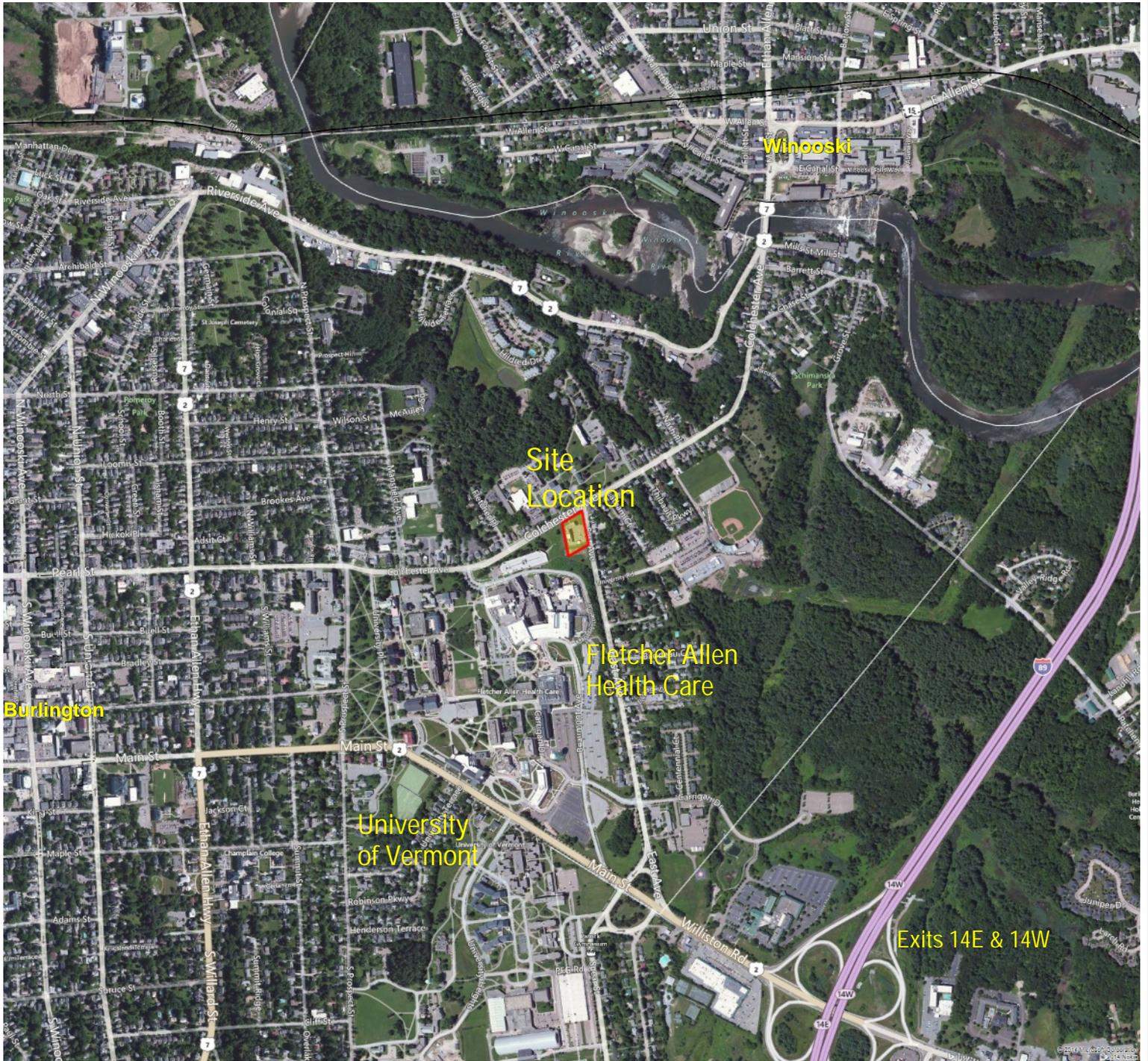


**OVERALL SCORE: 17.2/40 (# 19)**

**195 COLCHESTER AVENUE, BURLINGTON**

Criteria & Scores

- |    |     |   |  |
|----|-----|---|--|
| 1. | 1.2 | Site is very tight. Limited to 36 parking spaces<br>No room for exterior storage or solar array       |  |
| 2. | 1.5 | Site is sloped to the east. Requires 3 story building   | Size: 1.4 acres                                |
| 3. | 4.8 | All utilities including fiberoptic are on site  |  |
| 4. | 2.0 | Pre-existing use, dimensional requirements can<br>be met. Parking is problem. Needs Act 250 amendment | Acquisition cost: (none)                       |
| 5. | 2.0 | Residential neighborhood to east; they will lose open space   | Rough cost to develop: \$950,000 - \$1,200,000 |
| 6. | 1.0 | Urban restrictions to construction; demolition  | <b>TOTAL \$950,000+</b>                        |
| 7. | 1.5 | Distant from Montpelier. Hard to get to interstate  |  |
| 8. | 3.2 | Closest location to UVM interns and faculty   |  |



**LEGEND**

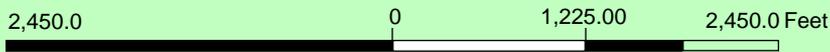
- Railroads
- Designated Downtown Areas
- Designated Village Areas
- Town Boundary
- County Boundary

**NOTES**

Map created using ANR's Natural Resources Atlas

1: 14,700

July 17, 2014



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1" = 1225 Ft.    1cm = 147 Meters  
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# **Burlington: 195 Colchester Avenue**

## **Permitting Summary**

### **Municipal**

Zone: Institutional, FAHC Overlay (transitional buffer)

Use: laboratory (existing use)

65% lot coverage, except 40% if our lot's land is not considered owned by UVM.

No new parking spaces may be added.

All other criteria can be met: 15' setback on streets. Height = top of FAMC. 3 stories is possible.

### **State**

Wastewater – The project is served by municipal water and sewer connections. A modest water and sewer allocation will be required to be acquired from the City for this project. There are no other known technical issues associated with the acquisition of is permit.

Water Supply – The project may require the acquisition of a Permit to Construct from the Water Supply Division if additional hydrants are required on the property.

Construction Stormwater – The project may qualify for a Low Risk Authorization under the State Construction Stormwater General Permit.

Operational Stormwater – Coverage under the State Operation Stormwater General Permit will be required as amount of impervious area on the property exceeds the one acre jurisdictional limit. The extent of the mitigation may change as the State is in the process of modifying the Stormwater Rules to require additional on-site retention of storm events.

Wetlands – The project involves a previously developed parcel. There are not any anticipated wetland or wetland buffer impacts associated with this project.

Stream Alteration – Not applicable

### **Act 250**

Currently the parcel size is less than 10 acres and barring any other jurisdictional triggers associated with the creation of residential units or lots within the past 5 years and 5 miles of this site, Act 250 jurisdiction should not attach to this project.

### **Federal**

Corps of Engineers – The project is not proposing any wetland impact, therefore no authorization should be required.

NEPA – Many of the criteria otherwise handled within the Act 250 process will need to be addressed as part of the NEPA review. Items of exposure are archaeological issues (much of the site has been disturbed but sits on fill perhaps encapsulating sensitive items, and traffic impacts.

**195 Colchester Avenue  
Burlington**

**Summary of Estimate of Standard Site Development Cost  
August 8, 2014**

**Description**

Site & Building Demolition	very high - large building demolition				
Mass Earthwork	above average - cut into hillside				
Rock Removal	above average - cut into hillside				
Supplemental Foundation Costs	above average - slope				
Sewer Disposal	average				
Water Supply	average				
Stormwater Management	average				
Site Development Components	average				
Special Site Conditions	very high - off site parking				
Retaining Walls	above average				
Communications Utilities	average				
Pavement Surfaces	average				
Wetland Mitigation Measures	less than average				
Environmental Permitting	average				

**Total: \$950,000 - \$1,200,000**



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**Not included:**

Landscaping, foundation work, sidewalks and ramps, signage, solar infrastructure, or solar panels.