

EVSE Grant Application – Richmond, VT

Required Attachments April xx, 2019 – DRAFT 1

Highlighted text is new since Round 1, plus notes.

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Attachment 1: Municipal Resolution

TBD – Insert scan of new signed version. The resolution is in the PDF application, page 29, Appendix D.

Attachment 2: Permit Summary

State permits:

State Permit	Required	Notes
Dept. of Fire Safety – Electrical Installation permit	Yes	Required for electrical hookup.
Dept. of Fire Safety – Electrical Energizing permit	Not expected	The utility is not expected to require energizing the site since we are using an existing power supply/account. But we will confirm if this is required – there is no fee in addition to the Electrical Installation permit.
Dept. of Fire Safety – Construction permit	No	We confirmed with Assistant State Fire Marshall Jesse Dobiecki that no permit will be needed, since the only building alteration will be a hole through the wall for the conduit to the charge station.
Flood Plains Permit	No	The site is outside the 100-year flood zone. See detail below regarding the ANR Project Review Sheet.
Wetlands permit	No	The project site, including excavation from the Library to the EVSE, is not within 50' of a Class I or II wetland. See detail below regarding the ANR Project Review Sheet.

The ANR Project Review Sheet indicates the possible need for Flood Plain and Wetlands permits. This is due to:

- a portion of the Town lot property is in the 100-year flood zone, but the installation site and excavation for conduit to the Library are outside the flood zone.
- a wetland on the State Wetlands Advisory map layer falls on a portion of the property, but that wetland (actual and as mapped) is on the other side of the parking lot, about 250 feet from the installation site and excavation.

As recommended in a discussion with ANR Permit Specialist Jeff McMahon, if the project moves forward we will bring it to the attention of the respective field offices. But we are confident these permits will not be necessary.

Town permits:

None required, as we are using existing parking spaces.

Attachment 3: ANR Permit Verification Form (Appendix G)

Not required – see ANR Project Review Sheet in Attachment 4.

Attachment 4: ANR Project Review Sheet

Please see the following pages.

Project Review Sheet

Date Initiated	<input type="text" value="11/14/2018"/>	ANR PIN#	<input type="text"/>	WW Project#	<input type="text"/>	Pre-application Review	<input checked="" type="checkbox"/>
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Project Information

General Information

PROJECT NAME (if applicable) Richmond EV Charging Station Municipal Parking Lot	PROJECT TOWN Richmond
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PROJECT LOCATION (911 address if available) 203 Bridge Street	SPAN(S) (if available) 519-163-11722
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Contact(s)

CONTACT TYPE Representative	NAME Linda Parent	ORGANIZATION NAME (if applicable) Town of Richmond
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ADDRESS PO Box 285	TOWN Richmond	STATE VT	ZIP 05477
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PHONE (802) 434-2221	CELL PHONE	EMAIL jarenson@richmondvt.gov; Imparent@gmavt.net; kasperantz@ic
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Project Description

ENTERED BY Jeffrey McMahon	INFORMATION SOURCE Individual	DATE ENTERED 11/15/2018 3:30 PM
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PROJECT DESCRIPTION
A project to install an Electric Vehicle Charging Station in an existing parking lot on a municipal parcel of 2.5 acres w/ the Town offices, library and downtown parking utilizing the lot. The 2 port charging station is proposed to be installed in an existing parking space located on the northwest side of the parking lot. There will be no other changes w/ this proposal.

DEC Prior Permits

PERMIT TYPE Stormwater	PERMIT NUMBER 7996
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*Jurisdictional Opinion(s) for permits that may be needed from the District Environmental Office **PRIOR TO COMMENCEMENT OF CONSTRUCTION***

Act 250 Jurisdictional Opinion

This is a jurisdictional opinion issued pursuant to 10 V.S.A. § 6007(c) and Act 250 Rule 3(A). Reconsideration requests are governed by Act 250 Rule 3(B) and should be directed to the district coordinator at the above address. Effective May 31, 2016, any appeal of this decision must be filed with the Superior Court, Environmental Division (32 Cherry Street, 2nd Floor, Ste. 303, Burlington, VT 05401) within 30 days of the date the decision was issued, pursuant to 10 V.S.A. Chapter 220. The Notice of Appeal must comply with the Vermont Rules for Environmental Court Proceedings (VRECP). The appellant must file with the Notice of Appeal the entry fee required by 32 V.S.A. § 1431, which is \$295.00. The appellant also must serve a copy of the Notice of Appeal on the Natural Resources Board, 10 Baldwin Street, Montpelier, VT 05633-3201, and on other parties in accordance with Rule 5(b)(4)(B) of the Vermont Rules for Environmental Court Proceedings.

PERSON REQUESTING JURISDICTIONAL OPINION Jeffrey McMahon	REQUESTOR TYPE Permit Specialist	ACT 250 PERMIT NUMBER (if any) No Act 250 permit found	HAS THE LANDOWNER SUBDIVIDED BEFORE? <input type="checkbox"/> Yes <input type="checkbox"/> No
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TYPE OF PROJECT (check all that apply)			
<input type="checkbox"/> Commercial	<input type="checkbox"/> Residential	<input type="checkbox"/> Agricultural	<input checked="" type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Federal

IS AN ACT 250 PERMIT REQUIRED? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	COPIES SENT TO STATUTORY PARTIES? <input type="checkbox"/> Yes <input type="checkbox"/> No
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BASIS FOR DECISION
The project does not constitute development pursuant to Act 250 Rule 2.

DISTRICT COORDINATOR SIGNATURE 	2018.11.14 15:42:35 -05'00' Rachel Lomonaco, District Coordinator  [phone] 802-879-5658 [email] rachel.lomonaco@vermont.gov Natural Resources Board District 4 Environmental Commission 111 West Street, Essex Junction, VT 05452
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Wastewater System & Potable Water Supply Permit Jurisdictional Opinion

IS A WASTEWATER SYSTEM & POTABLE WATER SUPPLY PERMIT/APPROVAL REQUIRED? <input type="checkbox"/> Yes <input type="checkbox"/> Permit application currently under review <input checked="" type="checkbox"/> No <input type="checkbox"/> Permit issued on _____	PERMIT NOT REQUIRED? <input type="checkbox"/> Boundary Line Adjustment <input type="checkbox"/> Home Occupation <input type="checkbox"/> Clean Slate <input type="checkbox"/> Notice of Permit Requirement
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BASIS FOR DECISION
Does not meet the definition of "Permit Required" section 1-303

REGIONAL OFFICE STAFF SIGNATURE 	2018.11.16 08:43:42 -05'00' Bill Zabiloski, Assistant Regional Engineer  [phone] 802-557-5773 [email] bill.zabiloski@vermont.gov Department of Environmental Conservation Drinking Water & Groundwater Protection Division - Montpelier Regional Office 1 National Life Drive, Davis 1, Montpelier, VT 05620-3703
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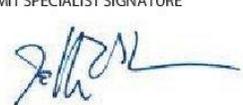
The following are preliminary, non-binding determinations made by DEC Permit Specialists identifying other permits that may be needed
PRIOR TO COMMENCEMENT OF CONSTRUCTION

SPECIAL WETLANDS DISCLAIMER

A desktop review cannot definitively confirm the presence or absence of a wetland in or within fifty feet of your project site. This review sheet is the result of a desktop review that included reviewing the project site with these mapping tools available at <https://anr.vermont.gov/maps>. Many wetlands do not appear on these maps. You are advised to review the site on the ground for wetlands, regardless of whether this box is checked or not (<https://dec.vermont.gov/watershed/wetlands/what/guide>). To confirm the presence/absence of wetlands, contact a qualified environmental consultant (<https://dec.vermont.gov/watershed/wetlands/what/id/wetland-consultant-list>) or the State Wetlands Program (<https://dec.vermont.gov/watershed/wetlands>).

Preliminary, Non-binding Determination of the Applicability of Other State Permits

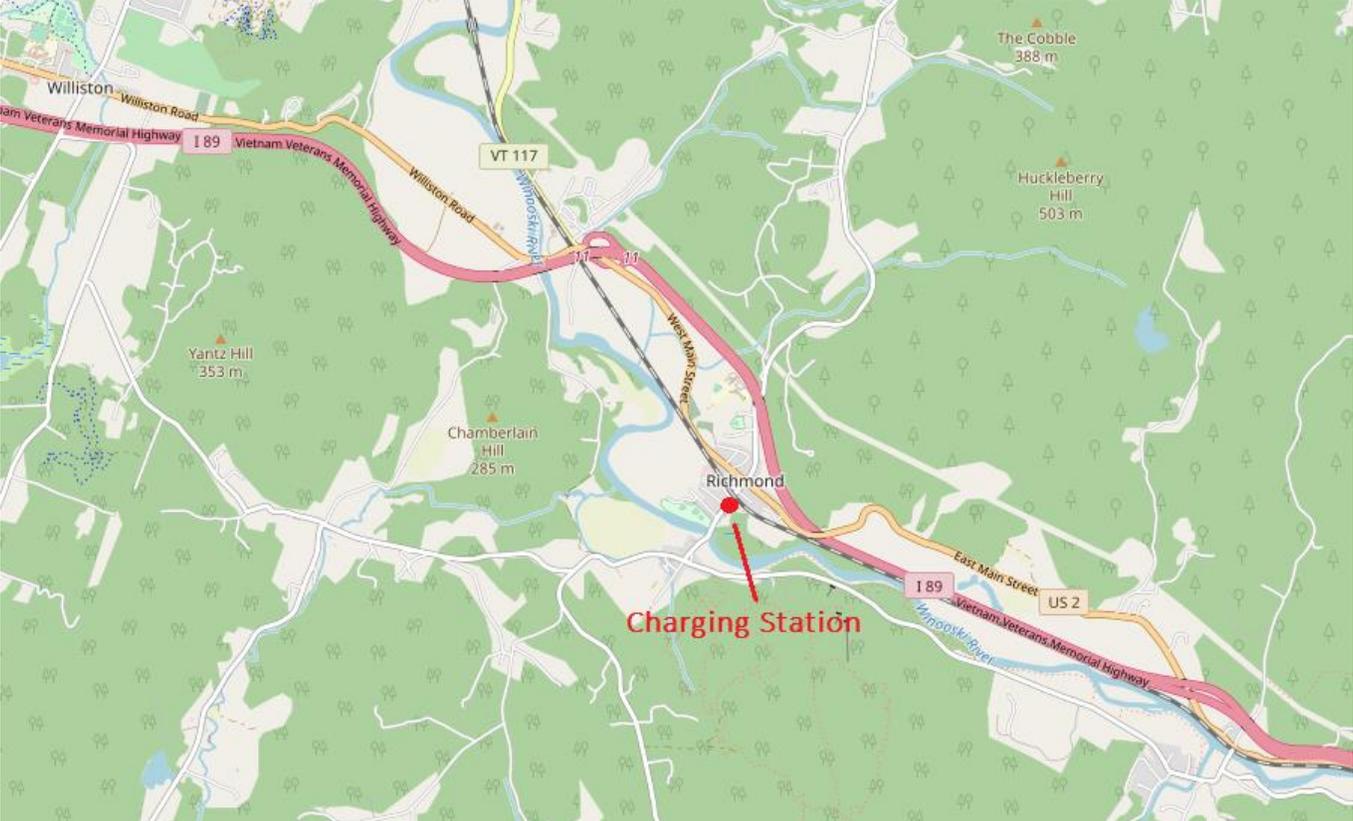
Note: Fact Sheet numbers below refer to permit fact sheets available at: <http://dec.vermont.gov/permits/handbook/info-sheets>

Agency of Natural Resources - Department of Environmental Conservation	
WATERSHED MANAGEMENT DIVISION	
<input checked="" type="checkbox"/> Flood Plains <input checked="" type="checkbox"/> Northwest Region Contact: Rebecca Pfeiffer, CFM Email: rebecca.pfeiffer@vermont.gov Phone: 802-490-6157	
<input checked="" type="checkbox"/> Wetlands [Fact Sheet #29] <input checked="" type="checkbox"/> Chittenden County: Contact: Tina Heath Email: tina.heath@vermont.gov Phone: 802-490-6202	
Department of Public Safety	
<input checked="" type="checkbox"/> Construction Permit Fire Prevention, Electrical, Plumbing, Accessibility (ADA) [Fact Sheets #49, 50, 50.1, & 50.2] <input checked="" type="checkbox"/> Williston: 802-879-2300	
Local Permits	
<input checked="" type="checkbox"/> See your Town Clerk, Zoning Administrator, Planning Commission or Public Works	
PERMIT SPECIALIST SIGNATURE 	2018.11.20 07:56:43 -05'00' Jeff McMahon, Permit Specialist  [phone] 802-477-2241 [email] jeff.mcmahon@vermont.gov Department of Environmental Conservation Environmental Assistance Office - Essex Regional Office 111 West Street, Essex Junction, VT 05452

Attachment 5: Project Site Plan and Photographs

GPS coordinates of proposed location: 44.402910, -72.995185

Location map, surrounding area:



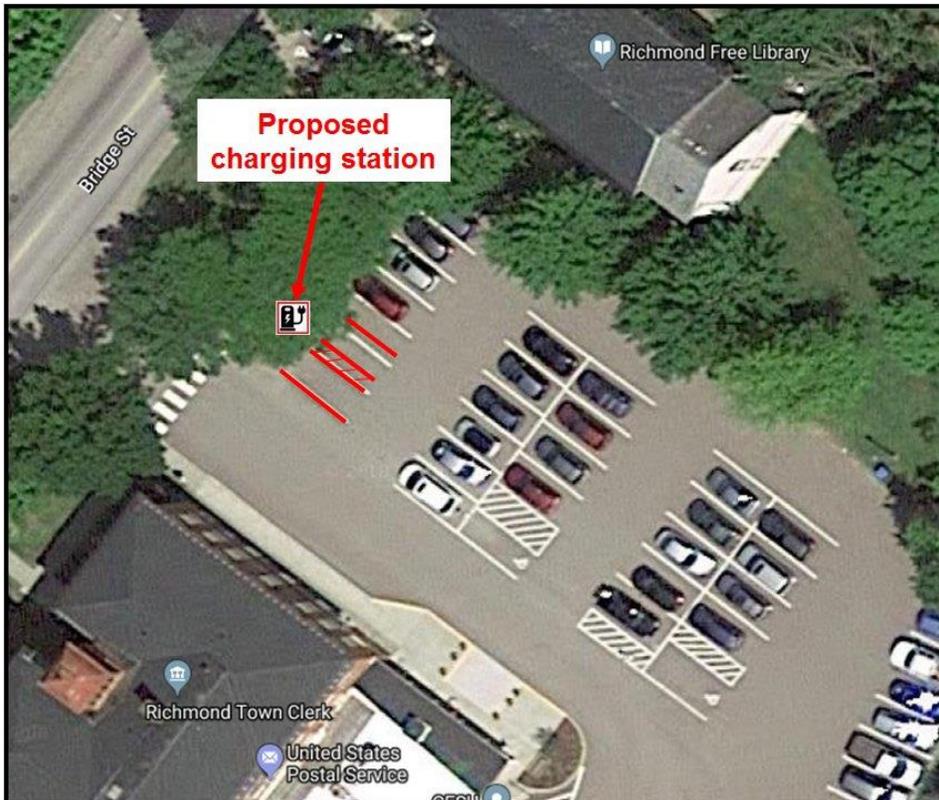
Map © OpenStreetMap Contributors, use allowed with attribution

Location map, Richmond Village:



Map © OpenStreetMap Contributors, use allowed with attribution

Location map, site detail: [TBD] – expand image to show entire parking lot]



Site photo - existing spaces to be used, located prominently next to the parking lot's only entrance/exit:

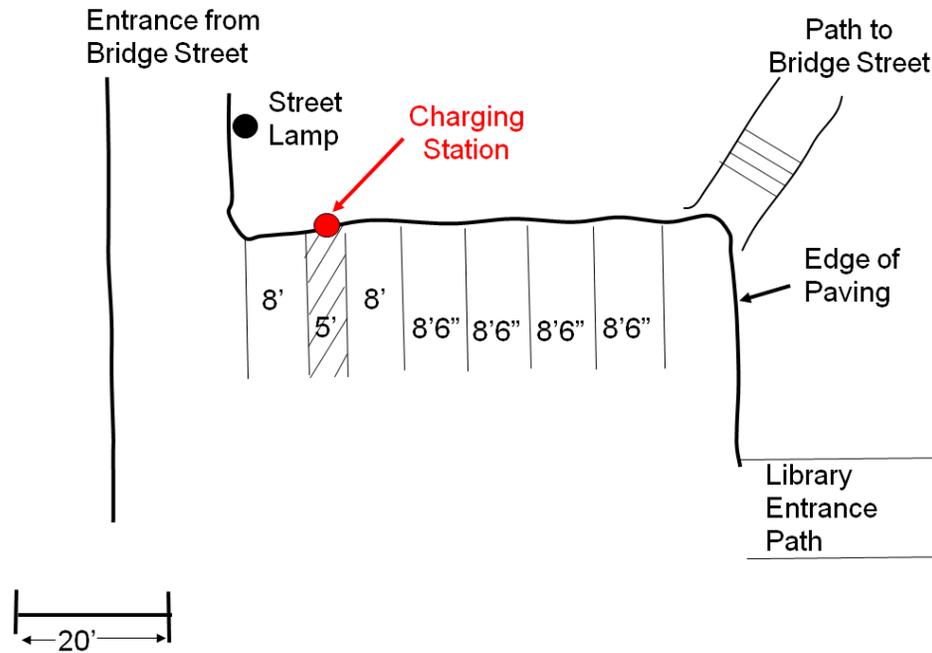


Site photo – spaces to be used are on the left:



Site plan:

Current parking spaces are 9' wide, to be slightly reduced as noted in the diagram to accommodate one ADA-compliant EV space while maintaining the current number of parking spaces. Future expansion of EV chargers would be to the adjacent spaces. The existing sites are reserved for police vehicles, but those reserved spaces will be moved to elsewhere in the parking lot.



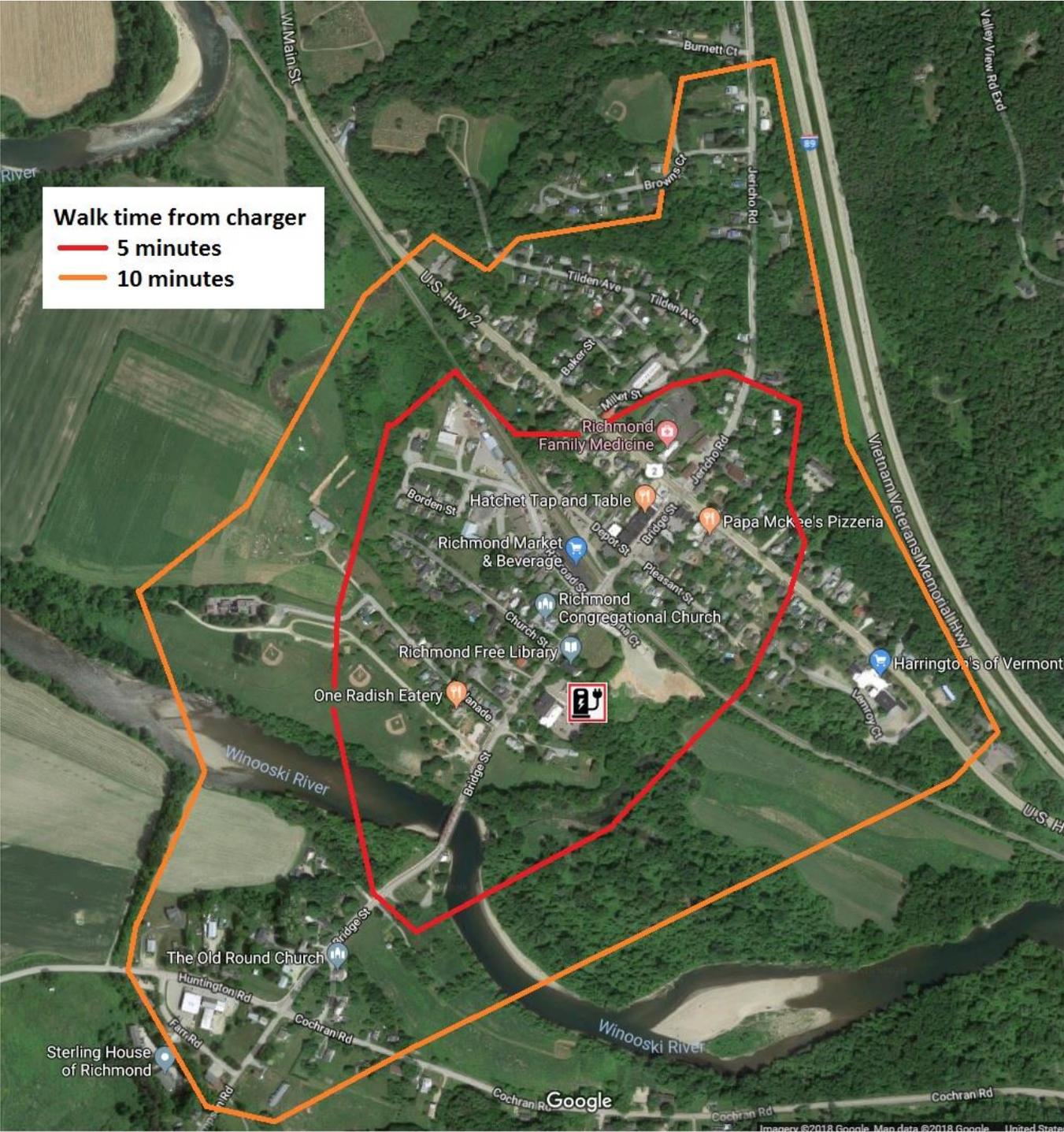
On-site signage:



We have budgeted for:

- 2 Directional signs at the lot entrance (1 for each direction)
- 1 Directional sign on entering the lot
- 2 Parking Space signs (1 per EV space)
- 1 Informational sign ("Please limit use to 2 hours" – not pictured).

Village destinations within 5 and 10 minute walking distance:



Attachment 6: Technical Equipment Specifications

This application was developed by Richmond’s Energy Committee. These Committee members together have expertise in installation and operation of PV sustainable energy installations, small business accounting, and 4 members own/drive EV automobiles.

Several current owner/operators of comparable EV charging facilities (notably Town of Plainfield) were contacted for advice. Studies of charging equipment and operating requirements were reviewed and evaluated, notably:

- *Electric Vehicle Charger Selection Guide*, January 2018
https://www.afdc.energy.gov/uploads/publication/EV_Charger_Selection_Guide_2018-01-112.pdf
- *The Ultimate Guide to Electric Car Charging Networks*, July 2018,
<https://www.plugincars.com/ultimate-guide-electric-car-charging-networks-126530.html>

The following two short-listed options were compared:

- ChargePoint CT4021 Dual station, <https://www.chargepoint.com/products/commercial/>
- SemaConnect station: Dual level 2 station with dual cable management.

Ultimately the ChargePoint CT4021 system was selected, based on the following criteria:

- **Meets the grant requirements**
- Company with extensive national experience (duration of company operations)
- Largest U.S. Network – approximately 6,083 stations, vs. 1,166 for SemaConnect¹
- Energy Star rating (SemaConnect does not yet have EStar-rated equipment)
- Competitive pricing of equipment
- Warrantee options
- Ease of use – high prevalence of registered cardholding users, flexible fee structure
- Anticipated reliability; reported service and downtime record
- Anecdotal preference reports by local users of EV vehicles.

¹ “The Ultimate Guide to Electric Car Charging Networks”, 23-July-2018,
<https://www.plugincars.com/ultimate-guide-electric-car-charging-networks-126530.html>

Attachment 7: Fee/Rate Structure Statement

This Attachment to be revised pending SB/PC input. Options include:

- Charge the cost of the electricity to the Town, as in Round 1 but without the 1-cent subsidy. The Round 1 text is further below.
- Do not charge users for year, which would get us 2 more points in the scoring (and might solidify getting the grant), as described in the following text:

The Round 2 application requires having no charge for at least one year to get those 2 points:

Driver Charging Discounts. Applications that commit to provide charging to users of the stations at no charge for at least one (1) year. (2 points)

To estimate the cost of that to the Town, we can assume:

- An average charging rate of 5 kW (energy/second). Different EVs charge at different kW, but this is the average for typical plug-in hybrid EVs and typical full EVs (no gas engine).
- The 2 chargers will be used an average of 4-12 hours/day total. We have found no solid data to estimate their usage in year 1. We have data from Plainfield (about 2 hours/day on average, by donation) but that is a smaller village with lower EV penetration in that area.

With those assumptions, the cost to the Town in year-1 would be about \$1500 to \$4000:

Average Charge Rate (kW)	Hours/Day Charging	kWh/day	Town's Elec Rate \$/kWh	Cost/Year
5.0	4	20	\$0.155	\$1,132
5.0	8	40	\$0.155	\$2,263
5.0	12	60	\$0.155	\$3,395
5.0	16	80	\$0.155	\$4,526

After year 1, annually, the Select Board could review and raise the rates accordingly, including:

- Continue the full subsidy or raise the rate to a partial subsidy
- Charge the full cost of electricity to the Town
- Include an adder to cover future maintenance costs after year 5 (the Assure Maintenance Program covers us for 5 years).

I (Steve) posed the following questions to Gary Holloway, state grant administrator, on March 20 but have not yet heard back – I will follow up with him:

"Regarding the Driver Charging Discounts, which now requires commitment to providing charging at no charge for at least one (1) year. (2 points):

- If we had no charge but asked for donations, would that meet the criteria for this requirement?
- If there is no charge for a reasonable time (2-3 hours?), could we apply a dwelling charge after that time and meet the "no charge" criteria for this requirement? There's definitely concern about dwelling for this scenario."

Original Round 1 Proposal:

The currently open PUC docket 18-2660-INV is expected to address EV charging rate structures, including oversight of rates and prices, and including whether non-utility owned charge stations in Green Mountain Power territory will be allowed to charge by the kWh.²

Pending the outcome of that docket, we propose to implement this fee/rate structure:

\$0.145/kWh, and \$1.50/hour after 4 hours

(\$1.17/gallon equivalent, assuming 25 mpg vehicle equivalent and 3.1 miles/kWh EV)

The \$0.145/kWh rate is Richmond's electric rate under GMP Group Rate 6, subsidized by \$0.01/kWh to encourage its use. The rate after 4 hours increases to discourage dwell time.

The fee/rate structure will be fully disclosed prior to charging the consumer, both at the charging station and in online apps for finding charging stations (ChargePoint, PlugShare, etc.).

Why a \$/kWh fee/rate structure?

We prefer a \$/kWh rate because that's the actual cost to the Town, and because different EVs charge at different rates in terms of kilowatts (energy/hour), or in terms of miles of charge/hour of charging. As an example for the proposed ChargePoint station, the following table compares typical EVs with different charging rates to a gas-only vehicle. Note that with a rate of \$1/hour, some EVs would pay twice as much per mile as other EVs.

	Typical plug-in hybrid EV*	Typical battery-only EV*	Gas-only vehicle (25 mpg, \$2.75/gallon)
Level 2 charging rate	3.3 kW, 12 miles/hour	6.6 kW, 25 miles/hour	n/a
\$0.145/kWh charge fee Cost per mile travelled	\$0.04/mile	\$0.04/mile	\$0.11/mile
\$1/hour charge fee Cost per mile travelled	\$0.08/mile	\$0.04/mile	\$0.11/mile

*Actual charging rates vary considerably by car model, battery charge level, and other factors. Typical rates used here are from <https://www.chargepoint.com/blog/complete-guide-charging-chevy-volt/>.

Another reason not to use a \$/hr rate is that plug-in hybrid EVs with low battery capacity, or any EV that is "topping off", may "fill up" before the owner returns. It can be a disincentive if forced to pay a rate far above the actual cost of electricity not only when charging, but also after the battery is full.

Future fee/rate structures

In year 2 the Town can review the usage data and fee structure, and consider whether adding an operation/maintenance adder to the fee is appropriate, at most \$0.05 above the Town's electric rate.

If Richmond's electric rate goes up, the EVSE \$/kWh rate will be increased by the same amount.

² <https://epuc.vermont.gov/?q=node/64/134378/FV-BDIssued-PTL>

Attachment 8: Project Schedule

Project Installation Schedule

Grant matching funds become available July 1, 2019, as approved with the FY2019 budget at Town Meeting in March.

TBD – revise tables

		2019										
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
	Task											
1	Grant award	█										
2	Prepare/distribute competitive RFP			█	█							
3	Select Board approval					█						
4	Obtain required permits				█	█	█					
5	Contractor notified						█					
6	Site work (excavation, bollard, etc.)							█	█			
7	Equipment installation								█			
8	Signage									█		
9	Register site with NREL AFDC									█		
10	Go live - charging stations on-line									█		
11	Publicity										█	█
12	Submit final Grant closeout report										█	

Monitoring/Reporting/Publicity Schedule

		2019		2020				2021				2022				2023				2024			
		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Task																						
1	Monitoring/Reporting																						
1.1	Report usage data to PSD		█			█				█				█				█					█
1.2	Report to Town Select Board		█			█				█				█				█					█
1.3																							
2	Publicity																						
2.1	Check/revise online listings	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
2.2	Local publicity/FPF posting	█	█		█	█		█	█			█	█				█	█			█	█	
2.3	Article/letter in local newspapers	█			█			█				█				█				█			

Attachment 9: Budget Worksheet

[Revised – may have further revisions pending more SB/PC input]

Complete the budget form below itemizing the scope of work and the sources and amounts of all project funds. Please indicate the status of each fund and attach this sheet to the application.

Note: Funding may be used for the purchase of Level 2, or direct current fast-charge (DCFC) equipment for light-duty vehicles according to the criteria below. Funding may also support auxiliary costs, including: permitting, design, power connection, striping, on-site signage, warranty, software, internet connection, protective devices, and eligible installation costs.

Funds may not be used to purchase or rent real-estate or pay for other capital costs (such as: construction of buildings, parking facilities, etc.), electricity costs, general operation and maintenance, or administrative costs incurred by the applicant.

Itemized Project Budget

Item Description	Quantity	Unit Cost	Total Cost
EVSE Charging Station			
Charging station : ChargePoint CT4021-GW1 Dual Port, 5-year cloud commercial plan per charger (required), and 5-year Assure maintenance Program [Peck Electric's revised cost. These 3 items were broken out in the Round 1 budget but ChargePoint now only provides a lump sum.]	1	\$10,950	\$10,950
Protective Bollard			
Bollard, 4-inch, in front of charge equipment, installed	1	\$450	\$450
Electrical Service			
Installation of charging station, single pedestal mount, dual cable management, trenching/underground wiring, electrical connections (two 40-amp 240V circuits), wireless configuration.	1	\$9,550	\$9,550
Future proofing – Installation of conduit from Library to charge station to support 2 additional Level 2 chargers in the future	1	\$1,450	\$1,450
Lighting			
N/A – Lighting is already in place			\$0
EVSE Sign(s)			
On-site signage materials – signs, posts, hardware (see Attachment 3 for detail) ³	1	\$690	\$690
Signage installation, per post	6	\$100	\$600
Other			
Pavement striping, remarking 6 spaces + ADA aisle ⁴	1	\$400	\$400
State permit, Vermont Department of Fire Safety	1	\$240	\$240
TOTAL			\$24,330

³ Signage costs are based on a quote provided by VT Correctional Industries.

⁴ Estimate from local striping contractor.

Funding Sources

Funding Source	Status of Funding	Amount
EVSE Grant	Pending	\$21,897
Town match, 10% of total project cost	See detail below	\$2,433
TOTAL		\$24,330
Town 10% Matching Funds		
Signage installation – 6 posts, \$100/post	In-kind, by Highway Dept.	\$600
Green Mountain Power incentive rebate, \$375/charger, paid as a bill credit once the chargers are installed	Confirmed by GMP [reconfirmed by GMP]	\$750
Town of Richmond direct funding	Allocated for FY2019	\$1,083
Total		\$2,433

Attachment 10: Community Impact

The Richmond Town Plan adopted by voters on November 6, 2018, is committed to the Vermont state energy goal of 90% renewable energy across all sectors by 2050.⁵ This includes conversion of Richmond’s privately-owned, light-duty vehicle fleet from 0.6% in 2015 to 89% by 2050, with intermediate goals of 6% by 2025 and 41% by 2035⁶. This anticipated expansion of the EV fleet by a factor of 10 over the next 7 years will require an immediate, significant expansion of public EV supply equipment, of which Richmond currently has none. Specifically, the Plan commits us to: “Support the installation of private and public electric vehicle (EV) charging stations in convenient locations. Consider installing one at the Town Center, the Park and Ride and along travel corridors.”⁷

Several additional goals in the Town Plan reference concentrating growth within our downtown village center, in accordance with state-defined “smart growth” principles.⁸ We are clearly committed to maintaining a vibrant and active downtown consisting of both residential and commercial uses. The addition of an EVSE close to the library, post office, municipal and school district offices, supermarket, hardware store, public park, restaurants and other businesses supports the use of the downtown as an attractive local destination for both residents and visitors, and will provide a convenient rationale for spending time in the center of town.

In addition, this Richmond EVSE will be located 1.8 miles from Exit 11 of I-89 and the Richmond Park and Ride, and 0.2 miles from US Route 2. It will be conveniently positioned between EVSE in Williston and Waterbury along the Montpelier-Burlington corridor, thus providing these two major travel routes with more frequent service intervals. Commuters and travelers will have an opportunity to recharge and visit Richmond’s village center while doing so.

⁵ Town Plan, Energy Section; p. 18

⁶ Almanac; pp. 65-67

⁷ Energy Section; Goal 1, Action 6; p. 20

⁸ Economic Development Section, Goal 1, Action 4 and Goal 3, Actions 1-3, pp. 12-13; Energy Section, Goal 1, Action 1, p.20; Future Land Use Section, Goal 1, p.26; Transportation Section, Goal 4, Action 3, p.38

Attachment 11: Grant Requirements – Additional Detail

TBD : update or remove – the Round 2 application includes this as a checklist

The table below provides additional notes for the Minimum Standards on pages 9-12 of the application form.

Requirement	Page #	Town of Richmond Proposal
Site Plan & Parking Standards		
• Nighttime illumination		<input checked="" type="checkbox"/> Nighttime lighting is already in place.
• Level, well-maintained surface, parking striping preferred		<input checked="" type="checkbox"/> Parking spaces to be paved and striped.
• ADA requirements		<input checked="" type="checkbox"/> One parking space to be ADA-compliant for cars.
• Approved on-site general EVSE service sign		<input checked="" type="checkbox"/> Approved signs included in the site plan and budget.
• Approved on-site EVSE parking dwell-time management sign(s)		<input checked="" type="checkbox"/> Approved signs included in the budget.
• Project design to accommodate 2 vehicles		<input checked="" type="checkbox"/> Will use existing, side-to-side parking spaces.
• Protection of station equipment		<input checked="" type="checkbox"/> Installation of a bollard is included.
• Charging cords must not cross sidewalks or other walkways		<input checked="" type="checkbox"/> No interference with walkways.
General Equipment Standards		
• Placement/interface for EVSE must be ADA-compliant		<input checked="" type="checkbox"/> Interface is assumed to be a standard feature of proposed charge station – will be included in the RFP.
• UI legible in both daytime and nighttime conditions		<input checked="" type="checkbox"/> Standard feature of proposed charge station.
• Certified by a nationally recognized testing laboratory		<input checked="" type="checkbox"/> Standard feature of proposed charge station.
• No advertising visible from a public road		<input checked="" type="checkbox"/> No advertising will be used, other than minimal manufacturer logos on the charge station.
• Meet NEMA type 3R or 4 certification for outdoor electrical enclosures		<input checked="" type="checkbox"/> Assumed to be the case for the proposed charge station – will be included in the RFP.
• Designed/located to prevent water damage during flooding		<input checked="" type="checkbox"/> Proposed parking spaces are outside the 100-year flood zone. The charge station pedestal will installed is as high as possible without violating ADA requirements.
Level 2 Equipment Standards		
• At least 2 connectors that service 2 parking spaces		<input checked="" type="checkbox"/> Proposing 2 connectors for 2 parking spaces.
• Network monitoring for status, fault reporting, energy consumption, usage patterns		<input checked="" type="checkbox"/> Standard feature for proposed charge station.
• Meet SAE J-1772 standard for EV charging plug connector		<input checked="" type="checkbox"/> Standard feature for proposed charge station.

Requirement	Page #	Town of Richmond Proposal
<ul style="list-style-type: none"> Field-serviceable parts, min. cord length 18', cords kept off ground, comply with NEC 625 		<input checked="" type="checkbox"/> Standard feature for proposed charge station.
<ul style="list-style-type: none"> Charging amperage from 16-80 Amps 		<input checked="" type="checkbox"/> Each charger will be on a 40-amp circuit for a total of 80 amps.
EVSE Implementation & Operation Standards		
<ul style="list-style-type: none"> Installation by licensed electrician to referenced standards 		<input checked="" type="checkbox"/> Will be included in the RFP.
<ul style="list-style-type: none"> Obtain project review sheet from ANR, obtain needed permits 		<input checked="" type="checkbox"/> Project Review Sheet has been obtained. Permit acquisition included in Attachment 6, Schedule.
<ul style="list-style-type: none"> Register site with NREL AFDC 		<input checked="" type="checkbox"/> Included in Attachment 6, Schedule.
<ul style="list-style-type: none"> Interoperability standards: open connection protocol, no subscription fees, credit card payment 		<input checked="" type="checkbox"/> Standard features for proposed charge station.
<ul style="list-style-type: none"> Operation for at least 5 years 		<input checked="" type="checkbox"/> Commitment included in Attachment 6, Schedule.
<ul style="list-style-type: none"> Report usage data to Vermont PSD 		<input checked="" type="checkbox"/> Annual reporting included in Attachment 6, Schedule. We will report more often if required by PSD.
<ul style="list-style-type: none"> Minimum 1-year warranty, 3 years recommended 		<input checked="" type="checkbox"/> 1-year warrantee on ChargePoint equipment.
<ul style="list-style-type: none"> Available year-round (including snow removal) 		<input checked="" type="checkbox"/> Municipal lot is plowed.
<ul style="list-style-type: none"> Max. 10% downtime in any 30-day period, necessary repairs completed within 72 hours 		<input checked="" type="checkbox"/> ChargePoint 5-year Assure maintenance program will minimize any unexpected downtime. The Town will prioritize securing any needed repairs.
<ul style="list-style-type: none"> Fees easy to understand, fully disclosed prior to charging 		<input checked="" type="checkbox"/> Standard feature for proposed charge station.
<ul style="list-style-type: none"> Disclose fee schedule, include anticipated escalation during grant agreement period 		<input checked="" type="checkbox"/> Included in Attachment 5, Fee/Rate Structure.
<ul style="list-style-type: none"> Employ open, competitive bid solicitation process 		<input checked="" type="checkbox"/> Included in Attachment 6, Schedule – Town policy for bid process will be followed.