Electric Vehicle Supply Equipment (EVSE) Grant Program

2018 Application Form





Electric Vehicle Supply Equipment (EVSE) Grant Program

Vermont Department of Housing & Community Development

2018-2019 Grant Application

Submission

Summary Information

■ Municipal Government

Please submit one electronic copy of the complete application (including "Required Attachments," refer to the Checklist) to accd.cpr@vermont.gov. While electronic submissions are preferred, paper applications may be submitted to:

Division for Community Planning and Revitalization Department of Housing and Community Development (DHCD) One National Life Drive, 6th Floor Montpelier, VT 05620-0501

Applications are due on or before Friday, November 30, 2018, 4:30 pm. Late applications will not be accepted.

Please direct questions to Gary Holloway, Downtown Program Coordinator at gary.holloway@vermont.gov or 802-828-3220.

Applications that package multiple sites, may compile and submit the information below in an Excel spreadsheet format or complete individual forms for consideration as a single package. Multi-site awards receive one payment at closeout and cannot be closed out separately.

Applicant & Primary Contact Name: Organization/Title (if applicable): Mailing address: Email address: Phone number: **Applicant Status** (check all that apply) ■ Landowner ☐ Tenant ■ Utility ☐ Equipment Vendor (*landowner will own equipment*) □ Other (explain) **Landowner** (if same as applicant, skip) Name: Mailing address: Email address: Phone number: **Landowner Description** ☐ Individual ☐ Partnership ☐ Common Interest Ownership (example: homeowners' association) ☐ Corporation

	State Government Other (explain)
(If t	oject Location the site does not have an address, or the lot includes several addressed buildings, describe location.) ysical Address:
Oth	her Description:
	oject Site Category Check here to acknowledge that your project will meet the minimum criteria in the Program scription for the category selected below.
Ple	ease select <u>one</u> category that best describes the location:
	CATEGORY 1: STATE-DESIGNATED CENTERS ☐ downtown or surrounding ½-mile neighborhood development or planning area ☐ village or surrounding ¼-mile neighborhood development or planning area ☐ new town center or surrounding ¼-mile neighborhood development or planning area ☐ growth center
	CATEGORY 2: HIGHWAY CORRIDORS Located within one-mile of I-89, I-91, or I-93 interstate exit (list all Exits which apply) I-89; Exits: I-91; Exits: Located within one-mile of US Routes 2, 4, 7, 9, or 100 (Circle all Routes which apply)
	CATEGORY 3: PUBLIC PARK-AND-RIDES AND INTERMODAL TRANSPORTATION HUBS Park & Ride Municipal or State Airport Passenger Rail Station Public Transit Hub
	CATEGORY 4: MAJOR ATTRACTIONS AND INSTITUTIONS Attraction Ski Resort College or University Hospital
	CATEGORY 5: MULTI-FAMILY HOUSING Number of dwelling units on the site:
	CATEGORY 6: WORKPLACES Number of year-round and full-time employees on the site:

Proposed Equipment

☐ Check here to acknowledge that your project's equipment will meet the minimum standard provisions described in the program description and complete the table below for equipment on the site.

	Existing EVSE at Location (quantity)	New EVSE in Application (quantity)	Total Connections (quantity)	Publicly Accessible Connections ⁵ (quantity)	Restricted- Access Connections (quantity)	New Networked EVSE in Application (quantity)
Level 2						
DCFC						

If any of the equipment has optional lower level capability, describe below:

Application Scoring

Grant funds are competitively allocated. The EVSE Inter-Agency Workgroup will use the Competitive Scoring Criteria below to rank applications. The Workgroup will score all qualified projects and may award less funding than requested. Eligible projects scoring less than 60 points will not be funded. Projects are typically funded in rank order until the funds are exhausted; however, The Workgroup may fund projects at its discretion.

Applications may receive a total of **100 points**.

- Up to 60 points will be based on an applicant's responses to the four (4) required Base Criteria below.
- Up to 40 points will be based on an applicant's responses to the five (5) Priority Consideration Criteria below

Competitive Scoring Criteria

Base Criteria - 60 points total

Projects will be reviewed and scored based on each of the following four (4) Base Criteria:

Clearly and concisely respond to the competitive criteria questions 1, 2 & 3 in the text boxes below.

⁵ **Publicly accessible** means the equipment is available to the public without restriction year-round, 24 hours of the day, 7 days of the week. A site that is not maintained year-round or restricts access to customers, tenants, employees, or other consumers is not publicly accessible. A site that limits parking except while charging to manage parking dwell time is considered publicly accessible.

1. Well Defined Project and Need – 20 points

Provide a brief description of your project including clear identification of the project scope, purpose, and need. (For public charging locations this includes consideration of the proposed site relative to gaps in existing charging availability and how the project helps to advance the robustness of the statewide EVSE network and promote the adoption of EV's.) Clear description of the need for an EVSE in the proposed location, primary targeted users, and how this project will benefit users, the community, workplaces, housing, or other economic benefits that may result.

2. Project Readiness – 15 points

Please explain the readiness of your project. Project readiness demonstrates that a project review sheet has been completed by ANR Permit Specialist, permits identified, in progress or secured, match funding secured, and realistic start-date and installation schedule. Project schedule clearly identifies realistic goals for completing the project within two years.

3. Cost-Effective Budget – 15 points

Please justify your budget and provide evidence that it is well-documented, realistic, and appropriate for the project scope. Funding sources identified and secured. Project demonstrates the most cost-effective approach to siting, installation, and equipment that best meets the needs of the intended current and future users of the EVSE. Budget costs are verified and documented and itemized in the application by EVSE supplier, licensed electrician, utility, or other professional with knowledge of EVSE installation.

4. Overall quality of application – 10 points

The application is complete, well-written, clearly identifies the project, and is internally consistent. The experience of the <u>applicant team</u> with successful installation of EVSEs, or similar projects for applicants that have not installed EVSE before, will be part of this score.

Priority Consideration Criteria - 40 points total

Clearly mark ("X") next to each criterion that applies to the project. Applicant <u>MUST</u> provide a written explanation of each additional category in the space provided under the **Category** to receive points.

1. Multiple Categories – 10 points maximum

Check any <u>additional</u> boxes that apply (do not include the "<u>one</u> category" that was checked as the primary category under "Project Site Category" here.)

Category 1: State-Designated Centers (2 points)	
Category 2: Highway Corridors (2 points)	
Category 3: Public Park-and-Rides and Intermodal Transportation Hubs (2 po	oints)
Category 4: Major Attractions and Institutions (2 points)	
Category 5: Multi-Family Housing (2 points)	
Category 6: Workplaces (2 points)	
2. All Categories - 10 points maximum	
Future Proofing. Applications that evaluate the site's suitability to scale-up E future without having to install additional conduit or electrical service capacit	
Driver Charging Discounts. Applications that commit to subsidizing the cost least one (1) year. (2 points)	of charging for at
Existing High Demand. Sites served by existing EVSE equipment where exist exceeding supply. (2 points)	sting EVSE demand is

Multi-Site Applications. Applications that package multiple sites into one application to save costs. (2 points)
Community Impact. The project addresses and supports local revitalization efforts, as articulated in the municipal plan, capital budget, downtown strategic plan, or other adopted documents. (2 points)
3. Publicly Accessible EVSE - 6 points maximum
High Profile . EVSE serving high volume roadways or similarly high-visibility and high-profile public locations. (2 points)
Geographic Gaps. EVSE that fill a Level 2 or DCFC equipment system gap where no publicly accessible universal compatibility EVSE (Level 2 J1772 plug or DCFC with both SAE CCS and CHAdeMO plugs) is available within thirty (30) driving miles as shown on the <u>Drive Electric Vermont Public Charging Map</u> . The <u>VTrans 2017 report on DC Fast Charging Corridors</u> includes a map with a snapshot of DCFC gap areas. (2 points)
Multi-Port Applications. Applications to install at least four EVSE connectors on one site to increase availability and meet higher demand. (2 points)
4. Housing & Workplace Categories - 6 points maximum
Need. Multi-family housing with documented electric vehicles users and survey of potential users after installation. (2 points)
Large Housing Developments. Multi-family housing sites with more than twenty (20) dwelling units. (2 points)
Sustainable Workplaces . Evidence of employer's commitment to a sustainable workplace, such as: LEED certification or Vermont's Building Energy Standards Stretch Code Certification; incentives that encourage employees to: carpool, ride transit or telecommute; policies that discourage vehicle idling; sites that offer installed bike racks or covered bike storage. (2 points)

5. Additional Match Above Minimum - 8 points maximum

Do not check more than one box.			
	25%-50% above match minimum (2 points)		
	50%-75% above match minimum (4 points)		
	75%-100% above match minimum (6 points)		
	100% above match minimum or higher (8 points)		

Grantee Acknowledgement of Terms

Grantees are subject to the program's terms and conditions.

EVSE Implementation & Operation Terms

- Must be installed by a licensed electrician in accordance with all current National Electric Codes and the Vermont Electrical Safety Rules.
- Must obtain a project review sheet from the Agency of Natural Resources and obtain all necessary State and local permits.
- Must be registered with the National Renewable Energy Lab's Alternative Fuels Data Center database, which syncs with <u>Drive Electric Vermont's Public Charging Map</u> (see <u>Appendix E</u> of application).
- Interoperability standards:
 - o Must operate network open standard protocol to ensure that the hardware is not "locked" to a single service provider in perpetuity.
 - o Must not require payment of a subscription fee or membership to use the EVSE.
 - o Unless donation-based or free to the user, fee-based EVSE must accept credit card, debit card, or other common forms of payment with no additional obligations at payment.
 - o Customer service assistance available by phone 24 hours a day, 7 days a week.
- Must remain in operation for 5 years, unless otherwise approved by the EVSE Inter-Agency Workgroup.
- Should have a minimum one-year warranty, three years recommended.
- Must be operated, maintained, and available year-round (including snow removal). Any necessary repairs should be completed within 72 hours.
- Must operate with a maximum of 10% downtime in any 30-day period.
- Fee-based EVSE must be easy to understand and fully disclosed prior to charging the consumer, including any additional network roaming charges that apply to nonmembers.
- Fee-based EVSE must establish a reasonable rate that covers the operational, maintenance expense associated with the equipment including any expense incurred associated with equipment and installation.
- For networked Level 2 and DCFC EVSE installations, applicant must report usage data to Drive Electric VT; networked installations must provide equipment with a telecommunications connection

Grant Closeout Terms

Grant funds will be disbursed upon completion of the project and submission of all required information identified in the grant payment provisions. The final report must be submitted no later than 60 days after the completion date and include:

• A written narrative demonstrating that each of the project elements described in the project description was completed.

- A detailed budget report listing all income and expenses for project-related activities and demonstrating that the total requested reimbursements do not exceed the approved total project cost.
- Copies of invoices, receipts, and canceled checks for all project expenditures.
- Color photographs of all the completed project elements described in the project description.
- A statement from the Grantee's signatory certifying that the contents of the final report are true and accurate.
- A completed EVSE program survey.
- Proof of site registration with the National Renewable Energy Lab's Alternative Fuels Data Center database.

By signing this application, the landowner(s) and applicant(s) described in this application (and

Acknowledgement

	agents, assigns, and successors in interest, hereby apply for a grant to develop the project
	ibed in this application and accept the following:
	Applications will not be considered properly filed unless and until all items necessary for review are complete and submitted;
	All submissions are public records available for inspection and copy;
	All representations made in this application and the materials accompanying it are true,
	accurate, and binding to the best of my knowledge as a party to this application; omission or misstatement of any material fact on this application (which would warrant refusing
_	funding approval) will be grounds for denying or revoking any approval;
ш	Private agreements (such as permit conditions, covenants, deed restrictions, and
	easements) may apply; may be more or less restrictive than federal, state, or local
	regulations; and may affect this project proposal; it is the applicant's responsibility to
	identify, disclose, and comply with these agreements to ensure a smooth project and responsible investment of public funds;
	·
	Federal and local regulations may apply, may be more or less restrictive than State regulations, and may affect this project; it is the applicant's responsibility to obtain all
	required local, State, and federal permits; (Call the State's permit specialist at 802-477-
	2241 with any questions);
_	accordance with all applicable permits and approvals;
	standards and grant closeout requirements shown above and in the grant agreement; it is
	the applicant's responsibility to ensure compliance;
	If an approved project changes, the applicant must request and receive approval to
	amend the project through the Department of Housing & Community Development, which
	will review and respond to the proposed change in consultation with the Workgroup; and
	Grantees must abide by the Standard State Provisions for Contracts and Grants otherwise
	known as Attachment C of the grant agreement.

Financial Management

Please note that responses to the following questions will not impact the competitiveness of your application and will be used for grant administration purposes only.

Does your organization have an accounting system that will allow you to completely and accurately track the receipt and disbursements of funds related to the award? Yes No
What type of accounting system does your organization use? ☐ Automated ☐ Manual ☐ Combination of both
Applicant Signature
forh of the
Date / /
Landowner Signature (if different than applicant)
Date /
Staff Eligibility Check
Complete Application. Application is complete, and the landowner has authorized the application. \Box Yes \Box No
Financial Standing. Potential grantees are in good standing, not (a) suspended or debarred by the Federal Government; (b) delinquent in submitting their sub-recipient annual reports; and (c) delinquent in submitting their Single Audit Reports (if required). \square Yes \square No
Project Site Category Criteria . Application meets category's minimum criteria. \square Yes \square No
Project Standard Provisions . Application meets the minimum standard provisions for site and equipment. ☐ Yes ☐ No

Required Attachments

Checklist

The complete application must contain the application form with following attachments:

1) Municipal Resolution (if applicable)
2) Permit Summary and State Project Review Sheet
3) Project Site Plan and Photographs
4) Technical Equipment Specifications
5) Fee/Rate Structure Statement
6) Project Schedule
7) Budget Worksheet (Appendix A)

1) Municipal Resolution

If applicant or landowner is a municipality, attach a copy of the municipal resolution showing the project and application are authorized by the municipality. (See **Appendix D** for resolution template.) An authorized municipal official, such as the Town Administrator or Selectboard Chair, may sign the application above.

2) Permit Summary & State Project Review Sheet

Attach completed Agency of Natural Resources <u>Project Review Sheet</u> along with a list of any additional permits that may be necessary. Summarize your approach and the approximate timeline for these permits. The project review sheet must be completed by a permit specialist from your region. (Note: please allow at least 2 weeks to obtain the project review sheet.)

3) Site Plan and Photographs

Attach a project site plan that shows existing and proposed conditions, including aerial map, property boundaries, buildings, and streets – with the location of the project clearly marked. (See **Appendix B** for sample site plan). Attach labeled, color photographs of the project site and surroundings, especially adjacent or nearby buildings impacted by the project. If the project involves or impacts historic buildings, include photos of elements or materials that will be removed, altered or repaired. Photographs should be labeled with the project name or description, location/address, and the view, such as EV Charging Station at Welcome Center, 50 Main Street. (See **Appendix C** for sample pictures.)

4) Technical Equipment Specifications

Attach relevant technical specifications for equipment.

5) Fee/Rate Structure

Fee-based EVSE must be easy to understand with fees fully disclosed prior to charging the consumer. Applicants must disclose in the application a fee schedule that accounts for expenses associated with the equipment -- even if the applicant commits to subsidizing the cost of charging for at least one (1) year under priority consideration. Briefly describe what fees and rates users will pay, including any dwell time charges. The schedule should be presented in both a rate per kilowatt hour for charging and in the dollars per gallon fee equivalent.

6) Project Schedule

Attach a project schedule that demonstrates that the project will be completed within two years. Explain how the improvements can be made with minimal disruption to existing utilities or other public infrastructure and describe how the project will be completed within the grant timeline. If part of a larger capital improvement project, please show how this project fits into the overall timeline.

7) Budget Worksheet

Complete **Appendix A**.

EVSE Grant Application – Richmond, VT

Attachments November 30, 2018

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Attachment 1: Municipal Resolution

Application or Grant # 2018 Electric Vehicle Supply Equipment (EVSE) Grant Program

RESOLUTION FOR ELECTRICAL VEHICLE SUPPLY EQUIPMENT

WHEREAS, the Municipality of <u>Richmond</u> is applying for funding as provided for in the FY 2019 Budget Act and may receive an award of funds under said provisions; and
WHEREAS, the Department of Housing and Community Development may offer a Grant Agreement to this Municipality for said funding; and
WHEREAS, the municipality has voted to provide local funds for an electric vehicle charging station,
Now, THEREFORE, BE IT RESOLVED
1. That the Legislative Body of this Municipality enters into and agrees to the requirements and obligations of this grant program including a commitment to match funds of $\underline{10}$ % of total project cost;
2. That the Municipal Planning Commission recommends applying for said Grant;
Mark Fausel // / Javan 11/29/18
(Name of Planning Commission Chair) (Signature)
3a. That (Name) Joshua Arneson Title Town Manager who is either the Chief Executive Officer (CEO), as defined by 10 VSA §683(8), or is a Select Board Member, the Town Manager, the City Manager, or the Town Administrator, is hereby designated to serve as the Municipal/Authorizing Official (M/AO) and to execute the Grant Agreement and other such Documents as may be necessary to secure these funds.
3b. (Alternate Authorizing Official for redundancy) That (Name) Bard Hill Title Select Board Chair who is either the Chief Executive Officer (CEO), as defined by 10 VSA §683(8), or a Select Board Member, is the Town Manager, the City Manager, or the Town Administrator, is hereby designated to serve as the Municipal/ Authorizing Official (M/AO) and to execute the Grant Agreement and other such Documents as may be necessary to secure these funds.
Appendix 3c. That (Name) <u>Joshua Arneson</u> Title <u>Town Manager</u>
is hereby designated as the Grant Administrator, the person with the overall Administrative responsibility for the Electric Vehicle Supply Equipment grant activities related to the application, and any subsequent Grant Agreement provisions.

LEGISLATIVE BODY - Select Board	ě
(name)	(signature)
Bard Hill, Chair	many
David Sander, Vice Chair	
Steve Ackerman	
Roger Brown	
Christy Witters	_ auspirates
	()

Attachment 2: Permit Summary and State Project Review Sheet

Permit Summary

State permits:

State Permit	Required	Notes
Dept. of Fire Safety –	Yes	Required for electrical hookup.
Electrical Installation permit		
Dept. of Fire Safety –	Not	The utility is not expected to require energizing the site
Electrical Energizing permit	expected	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 –	No	We confirmed with Assistant State Fire Marshall Jesse
Construction permit		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.

ANR Project Review Sheet

Please see the following pages.



Department of Environmental Conservation & Natural Resources Board

THIS IS NOT A PERMIT

Project Review Sheet

Date Initiated	11/14/2018		ANR PIN#		WW Project#		a 4 6 1	Pre-application Review						
Project Inf	ormation													
General Info	ormation													
PROJECT NAME (if	applicable)						PROJEC	PROJECT TOWN						
Richmond EV	Charging Station	Municipa	l Parking Lo	ot			Richm	ond						
PROJECT LOCATIO	N (911 address if ava	ilable)			SPAN(S) (if availa	ble)								
203 Bridge Str	eet				519-163-11722									
Contact(s)														
CONTACT TYPE		NAME			ORGANIZATION NAME (if applicable)									
Representativ	e	Linda Pa	arent		Town of Richmond									
ADDRESS					TOWN		STATE	ZIP						
PO Box 285					Richmond		VT	05477						
PHONE		CE	LL PHONE		EMAIL									
(802) 434-222	1				jarenson@ricl	nmondvt.gov	/; Imparent@	gmavt.net; kasperantz@ic						
Project Desc	cription	-						_						
ENTERED BY		INI	FORMATION S	OURCE			DATE E	NTERED						
Jeffrey McMah	non	In	dividual				11/15	/2018 3:30 PM						
PROJECT DESCRIP	TION													
and downtow	n parking utilizir	g the lot.	The 2 port		proposed to be inst			the Town offices, library ag space located on the						
DEC Prior Pe	ermits													
PERMIT TYPE							PERMIT	NUMBER						
Stormwater							7996	7996						
Juris	sdictional Opinion(s,	for permits	that may be i	needed from the District	Environmental Office P	RIOR TO COMI	MENCEMENT	OF CONSTRUCTION						
Act 250 Ju	risdictional	Opinio	n											
This is a jurisdic should be direc Environmental Chapter 220. Th Appeal the entr	tional opinion issu ted to the district o Division (32 Cherry e Notice of Appea y fee required by 3	ed pursuan coordinator Street, 2nd must comp 2 V.S.A. § 1	t to 10 V.S.A. at the above f Floor, Ste. 3 ply with the \ 431, which is	e address. Effective Ma 03, Burlington, VT 054 Vermont Rules for Env \$295.00. The appella	ay 31, 2016, any appea (01) within 30 days of t ironmental Court Proc	I of this decision the date the decedings (VREC py of the Notion	on must be file ecision was iss P). The appell ce of Appeal o	by Act 250 Rule 3(B) and ed with the Superior Court, ued, pursuant to 10 V.S.A. ant must file with the Notice of in the Natural Resources Board, vironmental Court						
PERSON REQUESTING JURISDICTIONAL OPINION REQUESTOR TYPE			ACT 250 PERMIT NUMB	ER (if any)	HAS THE LAND	OWNER SUBDIVIDED BEFORE?								
Jeffrey McMahon Permit Specialist			No Act 250 permit	found	Yes	es No								
TYPE OF PROJECT	(check all that apply)				,									
Commerc	cial Re	A A	gricultural	Municipal State Federal										
IS AN ACT 250 PER	RMIT REQUIRED?			COPIES SENT TO STATUTORY PARTIES?										
Yes No					Yes No									
BASIS FOR DECISION	BASIS FOR DECISION													
The project do	oes not constitut	e developi	ment pursu	ant to Act 250 Rule	2.									

Project Review Sheet Page 1 of 2

VERMONT ePRS ver. 3.20 · rev. 11/13/2018 DISTRICT COORDINATOR SIGNATURE Rachel Lomonaco, District Coordinator VERMONT 2018.11.14 [phone] 802-879-5658 [email] rachel.lomonaco@vermont.gov Natural Resources Board 15:42:35 -05'00' District 4 Environmental Commission 111 West Street, Essex Junction, VT 05452 Wastewater System & Potable Water Supply Permit Jurisdictional Opinion IS A WASTEWATER SYSTEM & POTABLE WATER SUPPLY PERMIT/APPROVAL REQUIRED? PERMIT NOT REQUIRED? Yes Permit application currently under review Boundary Line Adjustment Home Occupation X No Clean Slate Notice of Permit Requirement Permit issued on BASIS FOR DECISION Does not meet the definition of "Permit Required" section 1-303 REGIONAL OFFICE STAFF SIGNATURE Bill Zabiloski, Assistant Regional Engineer VERMONT 2018.11.16 [phone] 802-557-5773 [email] bill.zabiloski@vermont.gov Department of Environmental Conservation 08:43:42 -05'00' Drinking Water & Groundwater Protection Division - Montpelier Regional Office 1 National Life Drive, Davis 1, Montpelier, VT 05620-3703 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 X Flood Plains Northwest Region Contact: Rebecca Pfeiffer, CFM Email: rebecca.pfeiffer@vermont.gov Phone: 802-490-6157 Wetlands [Fact Sheet #29] Chittenden County: Contact: Tina Heath Email: tina.heath@vermont.gov Phone: 802-490-6202 Department of Public Safety Construction Permit Fire Prevention, Electrical, Plumbing, Accessibility (ADA) [Fact Sheets #49, 50, 50.1, & 50.2] Williston: 802-879-2300 **Local Permits** See your Town Clerk, Zoning Administrator, Planning Commission or Public Works

Project Review Sheet Page 2 of 2

Jeff McMahon, Permit Specialist

111 West Street, Essex Junction, VT 05452

[phone] 802-477-2241 [email] jeff.mcmahon@vermont.gov Department of Environmental Conservation Environmental Assistance Office - Essex Regional Office

2018.11.20

07:56:43 -05'00'

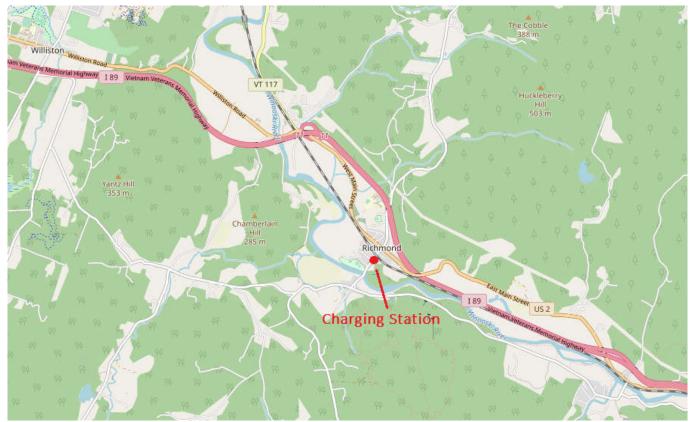
PERMIT SPECIALIST SIGNATURE

VERMONT

Attachment 3: 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:



Site photo - existing spaces to be used:

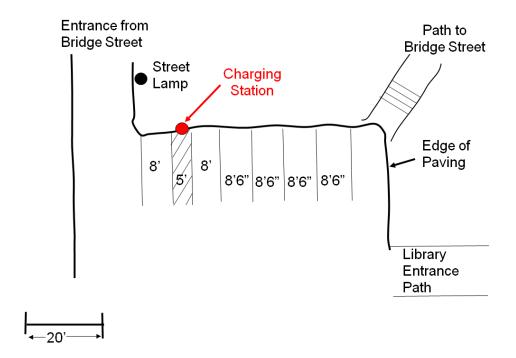


Site photo – spaces to be used are on the left:



Site plan:

Current parking spaces are 9' wide, to be lightly 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.



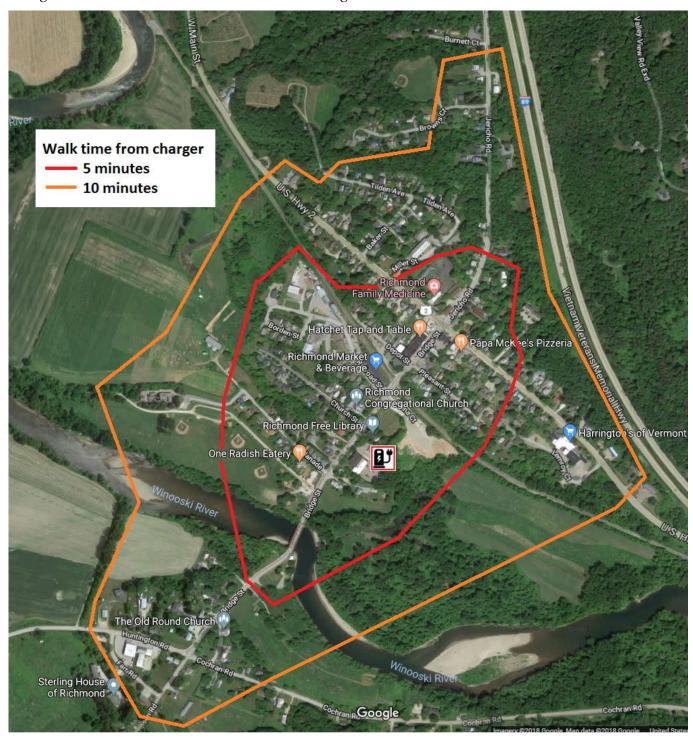
On-site signage:



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 4: 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:

- 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 5: Fee/Rate Structure Statement

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,	6.6 kW,	n/a
	12 miles/hour	25 miles/hour	
\$0.145/kWh charge fee	\$0.04/mile	\$0.04/mile	\$0.11/mile
Cost per mile travelled			
\$1/hour charge fee	\$0.08/mile	\$0.04/mile	\$0.11/mile
Cost per mile travelled			

^{*}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 6: Project Schedule

Project Installation Schedule

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

							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 7: Budget Worksheet

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
Charging station : ChargePoint CT4021-GW1 Dual Port	1	\$7,700	\$7,700
ChargePoint 5-year cloud commercial plan per charger (required)	2	\$1,105	\$2,210
ChargePoint 5-year Assure maintenance Program	1	\$2,580	\$2,580
Installation of charging station, single pedestal mount, dual cable management, trenching/underground wiring, electrical connections (2 40-amp 240V circuits), wireless configuration.	1	\$8,850	\$8,850
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
Bollard, 4-inch, in front of charge equipment, installed	1	\$450	\$450
Pavement striping, remarking 6 spaces + ADA aisle ³	1	\$400	\$400
Signage (on-site) materials – signs, posts, hardware (see Attachment 3 for detail) ⁴	1	\$690	\$690
Signage installation, per post	6	\$100	\$600
State permit, Vermont Department of Fire Safety	1	\$240	\$240
TOTAL			\$25,170

Funding Sources

Funding Source	Status of Funding	Amount
Grant funding	Pending selection	\$22,653
Town match, 10% of total project cost	See below	\$2,517
TOTAL		\$25,170
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	\$750
Town of Richmond direct funding	To be allocated for FY2019	\$1,167
Total		\$2,517

³ Estimate from local striping contractor.

⁴ Signage costs are based on a quote provided by VT Correctional Industries.

Attachment 8: 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. 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 2035. 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."

Several additional goals in the Town Plan reference concentrating growth within our downtown village center, in accordance with state-defined "smart growth" principles. 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 9: Grant Requirements Checklist

The Page # refers to the Grant Program Description document, 2018 Electric Vehicle Supply Equipment (EVSE) Grant Program – Program Description.

Requirement	Page #	Town of Richmond Proposal						
Site Plan & Parking Standards	4							
Nighttime illumination	4	☑ Nighttime lighting is already in place.						
 Level, well-maintained surface, parking striping preferred 	4	☑ Parking spaces to be paved and striped.						
ADA requirements	4	☑ One parking space to be ADA-compliant for cars.						
 Approved on-site general EVSE service sign 	4	☑ Approved signs included in the site plan and budget.						
 Approved on-site EVSE parking dwell-time management sign(s) 	5	☑ Approved signs included in the budget.						
 Project design to accommodate 2 vehicles 	5	☑ Will use existing, side-to-side parking spaces.						
• Protection of station equipment	5	☑ Installation of a bollard is included.						
 Charging cords must not cross sidewalks or other walkways 	5	☑ No interference with walkways.						
General Equipment Standards	5							
 Placement/interface for EVSE must be ADA-compliant 	5	☑ 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	5	☑ Standard feature of proposed charge station.						
 Certified by a nationally recognized testing laboratory 	5	☑ Standard feature of proposed charge station.						
No advertising visible from a public road	5	☑ 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	5	☑ Assumed to be the case for the proposed charge station – will be included in the RFP.						
Designed/located to prevent water damage during flooding	5	☑ 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	5							
 At least 2 connectors that service 2 parking spaces 	5	☑ Proposing 2 connectors for 2 parking spaces.						
 Network monitoring for status, fault reporting, energy consumption, usage patterns 	5	☑ Standard feature for proposed charge station.						
Meet SAE J-1772 standard for EV charging plug connector	5	☑ Standard feature for proposed charge station.						

Requirement	Page #	Town of Richmond Proposal
• Field-serviceable parts, min. cord length 18', cords kept off ground, comply with NEC 625	5	☑ Standard feature for proposed charge station.
• Charging amperage from 16-80 Amps	5	☑ Each charger will be on a 40-amp circuit for a total of 80 amps.
EVSE Implementation & Operation Standards	6	
Installation by licensed electrician to referenced standards	6	☑ Will be included in the RFP.
Obtain project review sheet from ANR, obtain needed permits	6	☑ Project Review Sheet has been obtained. Permit acquisition included in Attachment 6, Schedule.
Register site with NREL AFDC	6	☑ Included in Attachment 6, Schedule.
Interoperability standards: open connection protocol, no subscription fees, credit card payment	6	☑ Standard features for proposed charge station.
Operation for at least 5 years	6	☑ Commitment included in Attachment 6, Schedule.
Report usage data to Vermont PSD	6	☑ Annual reporting included in Attachment 6, Schedule. We will report more often if required by PSD.
Minimum 1-year warranty, 3 years recommended	6	☑ 1-year warrantee on ChargePoint equipment.
Available year-round (including snow removal)	6	☑ Municipal lot is plowed.
Max. 10% downtime in any 30- day period, necessary repairs completed within 72 hours	6	☑ ChargePoint 5-year Assure maintenance program will minimize any unexpected downtime. The Town will prioritize securing any needed repairs.
Fees easy to understand, fully disclosed prior to charging	6	☑ Standard feature for proposed charge station.
Disclose fee schedule, include anticipated escalation during grant agreement period	6	☑ Included in Attachment 5, Fee/Rate Structure.
Employ open, competitive bid solicitation process	6	☑ Included in Attachment 6, Schedule – Town policy for bid process will be followed.