



**CITY OF ESSEX JUNCTION
PLANNING COMMISSION
REGULAR MEETING AGENDA**

Online & 2 Lincoln St.
Essex Junction, VT 0545
Thursday, March 7th 2024,
6:30 PM

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Phone: 802-878-6944, ext. 1607

This meeting will be held in-person at 2 Lincoln Street and available remotely. Options to join the meeting remotely:

- **JOIN ONLINE:** [Join Zoom Meeting](#)
- **JOIN CALLING:** (toll free audio only): (888) 788-0099 | Meeting ID: 953 1240 7791; Passcode: 040339

1. **CALL TO ORDER** [6:30 PM]
2. **AGENDA ADDITIONS/CHANGES**
3. **PUBLIC TO BE HEARD**
 - a. Comments from Public on Items Not on Agenda
4. **MINUTES**
 - a. February 1st, 2024
5. **BUSINESS ITEMS**
 - a. Neighborhood Development Area update
 - b. Review examples of E.V. charging regulations for Land Development Code amendments*
 - c. Land Development Code amendments to Chapter 714: Sign Regulations presentation
6. **MEMBERS UPDATES**
7. **STAFF UPDATES**
8. **ADJOURN**

*attachments included in the packet

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**CITY OF ESSEX JUNCTION
PLANNING COMMISSION
PUBLIC HEARING
MINUTES OF MEETING
February 1, 2024
DRAFT**

MEMBERS PRESENT: Phil Batalion, Chair; Diane Clemens; Scott McCormick; Elijah Massey.

ADMINISTRATION: Chris Yuen, Community Development Director; Jennifer Marbl, City Planner.

OTHERS PRESENT: Cora Delucia.

1. CALL TO ORDER

Phil Batalion called the meeting to order at 6:35 PM.

2. AGENDA ADDITIONS/CHANGES

Director Yuen requested adding a discussion item pertaining to the rental registry as Business Item #5a.

3. PUBLIC TO BE HEARD

a. Comments from Public on Items Not on Agenda

None.

4. MINUTES

a. January 4, 2024

MOTION by SCOTT McCORMICK, SECOND by ELIJAH MASSEY, to approve the minutes of January 4, 2024 as presented. VOTING: unanimous (4-0); motion carries.

5. BUSINESS ITEMS

a. Rental Registry updates

Director Yuen noted that the City Council held a public hearing on the proposed rental registry ordinance last Wednesday, January 24, which was attended by many members of the public. He said that in terms of public engagement, the City had conducted the usual website and social media posts, as well as a mass-mailing to every household in the City. He said that they received feedback from individuals as well as organizations such as Whitcomb Woods (Cathedral Square), stating that they think they should be exempt from the fees and from inspections, given that they are already under heavy regulation and inspection programs. He noted one point they made, which was that their tenants feel that they have inspection fatigue. He noted several messages of support, but that there were many negative comments about the proposal. He said that the negative feedback centered around the cost of the fees and the cost of labor for coordinating inspections. He said that City Council ultimately decided not to move ahead at this juncture, and asked staff to do more work to determine whether this program would fit better within the Fire Department. He said that there is no date warned for the next public hearing, though he anticipates the City Council to discuss this item on February 14, to the extent that the program is included in the proposed FY25 budget.

Commissioner Batalion said that he thinks there may be a communication issues between the Planning Commission and City Council, and said it would be beneficial to schedule joint meetings between the

Planning Commission and City Council to allow space for discussion of these large proposals in advance of warned public hearings, which could help to preempt some of the questions and issues that come up during public hearings. He said that for example, the discussion about how the fees from this could set up a housing trust fund to help landlords and residents may not have been brought to the Council during its public hearing on this, though it was discussed at length by the Planning Commission in its own meetings. He noted that the primary goals of this program were to address health and safety issues in rental units and to establish a rental registry so that the City understands its rental stock. He said that there may be room to address this without the redundancy of inspections and that the City could help facilitate complaints from tenants rather than having the tenants complain at the state level, and potentially have a lower-cost registry program without inspections. Commissioner McCormick suggested a phased approach where the City begins by implementing a rental registry program and database and decide to pursue inspections in later years of the program.

Commissioner McCormick said that he had discussed this with Councilor Certa, who said that he is aware of the desire for joint meetings between the Council and its various boards and committees. He noted that he agrees with Commissioner Batalion on his points, and added that there seems to be confusion about the level of effort for various types of inspections, as fire marshal inspections are different than code enforcement, health, and environmental inspections. He said that clearer articulation of the differences in the types of inspections that would occur at the state and municipal levels would be beneficial to this discussion. He also suggested looking into a staggered or split fee structure, especially for the larger developments with hundreds of units. He further noted that the cost of renovation (raised as a concern) could be offset by a housing trust fund.

Commissioner Clemens noted that though the Planning Commission has had extensive discussions about this proposal over the past year, the City Council and general public may not have that contextual background and likely were hearing about this program for the first time on January 24th. She suggested that future presentations begin with more background and context in order to bring people up to speed and effectively set the stage for the proposal.

Director Yuen agreed that a joint meeting between the City Council and Planning Commission would be beneficial prior to public hearings related to larger proposals. He noted that staff worked closely with the City Council so that they had the background and context of the issue, and said he believes that they understood the recommendations and their rationale, though members of the public may not have had the same understanding. He agreed that there was some confusion about the division of labor between the State and potential City programs, given that some of the changes were implemented by the State very recently. He acknowledged some level of duplication between what the Division of Fire Safety provides and what the City would do in terms of inspection. He said that in terms of a mixed-fee structure, they had played around with fees that would be lower for larger landlords (recognizing efficiencies for inspection buildings with a large number of units), but that in order to make the budgeting work, smaller landlords would have had to have significant fee increases, which did not seem feasible. He said that if this program ultimately ends up in the Fire Department, it could look different than this current proposal of an FTE split between inspection/code enforcement/health officer. He said that the suggestion of phasing this with a registry in the near-term and inspection a few years down the road could be counterproductive.

b. Land Development Code amendments to Chapter 714: Sign regulations

City Planner Marbl noted that changes discussed during the January Planning Commission meeting on sign regulation amendments have been incorporated into the draft amendments for the Commission's further consideration and discussion.

Commissioner Batalion asked about the time limit for string lights and whether 9:00 PM was selected for a reason. City Planner Marbl replied that 9:00 PM seemed like a reasonable limit, given that this is when restaurant establishments begin closing, but welcomed other proposals from Commissioners. Commissioners discussed this and decided that 10:00 PM would be a reasonable limit for string lights.

Commissioner McCormick said that sign requirements are complicated and asked how this (and other components of the LDC) would be enforced. He asked whether all signs would need to be approved by the City. Director Yuen replied that most permanent signs would need to receive a zoning permit and approval. City Planner Marbl noted sign types that are considered temporary and do not need explicit approval from the City, such as sandwich boards, election period signs, and real estate signs. Commissioner McCormick asked how compliance is enforced. Director Yuen replied that proactive enforcement would be more of a possibility if there was a staff member dedicated to code enforcement. He said that even before proactive enforcement, enforcement activities should center on complaints and nuisances.

c. Review examples of E.V. charging regulations for Land Development Code amendments

Director Yuen said that he has sought guidance from the Chittenden County Regional Planning Commission (CCRPC) on recommendations for best practices and current state. He said that the State's Residential Building Efficiency Standards (RBES) and the Commercial Building Efficiency Standards (CBES) are good guidance documents for E.V. regulations. He noted that these standards require one parking space per unit to be Level 2 E.V. charging capable, but that they do not go as far as requiring installation of a charging conduit. He said that the only enforcement mechanism is through private litigation, given that requirements for meeting the standards are self-attestation. He noted that these requirements apply to new buildings, not previously built buildings. He said that though there is not much uptake now of actually installing chargers in spaces, that may go up as the use of EVs increases and the demand for chargers also increases, and developers may be more willing to accommodate more chargers. Commissioner Massey suggested exploring ways to make electric vehicles more attractive, such as the feasibility of installing Level 3 chargers (which are faster chargers). Commissioner McCormick said that Level 3 chargers seem best suited for public charging stations, and that Level 2 charging capabilities should be the minimum requirement for new housing. Commissioner Batalion noted that not every EV has Level 3 charging capabilities. He also noted that renters won't be incentivized to buy electric vehicles if they do not have access to chargers, given that the City does not currently have minimums for the number of actual chargers installed per building. He suggested installing Level 1 outlets at every parking space in addition to having Level 2 capability for every unit. Director Yuen said that developers may feel that this is limiting for their layouts and could increase costs. Commissioner Clemens said that the City should be proactive about aligning their requirements for EV charging with the RBES and CBES at the state level. Commissioner Massey and Commissioner Clemens discussed exploring public (commercial) charging options in addition to the residential access provisions discussed above. City Planner Marbl suggested having unassigned EV charging parking spaces proportional to the number of units in a building, so that residents have the option of charging in those spaces or parking in their normal, assigned parking spaces.

Director Yuen asked several questions regarding moving forward with LDC-level requirements for EV charging in the City. He asked whether the City should align with current best practices and requirements, or whether it should have stricter requirements. Commissioner Clemens suggested at least aligning with the RBES and CBES regulations, and Commissioner McCormick suggested requiring a certain number of charging stations per development based on number of units. Commissioner Batalion said that with the goal of encouraging access to chargers, having EV charger requirements for commercial parking makes sense, and exploring grants for landlords to install chargers may be worth exploring. He said that retrofitting for residential rental unit charging may be trickier, given that common space electrical costs tend to be covered by landlords. Commissioner Clemens pointed out that Green Mountain Power must have some incentives for EV chargers. Director Yuen noted that there are currently grants at the state level to cover 50% of installation costs of EV chargers. Planning Commissioners confirmed that they would like to see a draft proposal of regulations that meet the minimum RBES and CBES requirements and also contain charger requirements that are stricter than those in surrounding municipalities. Commissioner McCormick pointed out that public EV chargers can also make Essex Junction more attractive to visitors.

Director Yuen asked for input on when it would be most beneficial and appropriate to solicit feedback from landlords and developers about this set of LDC amendments. Commissioner McCormick said that the more stakeholders can be engaged proactively and early, the better. Commissioner Batalion said that he would like feedback from landlords and developers about how residential chargers would work for their developments, and whether it would significantly impact their costs. City Planner Marbl replied that she will conduct some research into this. Commissioner Clemens suggested inviting developers to attend a future Planning Commission meeting to discuss these regulations. Director Yuen suggested also engaging nonprofits that advocate for EV uptake in this discussion, as they have a good sense of implementation costs. Commissioner McCormick noted that the Vermont Energy & Climate Action Network, a nonprofit organization that has EV vehicle fairs around Vermont, may be worth engaging.

6. COMMISSIONER UPDATES

Commissioner McCormick spoke about recent activities related to the City's strategic planning and visioning process. He said that there was an open house on Saturday at the community meal and budget discussion event, which had a good turnout. He noted that six pillars for the community were identified, and include housing and density, transportation, economic development, services and facilities, environment, and community engagement. He said that there were additional focus group discussions on Monday and Tuesday around these topics. He said that there is another steering committee meeting on February 9th to discuss the results of the open house and focus group discussions. He noted that there will be a second online community survey fielded in the next several months. Commissioner Massey asked whether those who are working on this have explored how to obtain higher survey response rates and more attendance at community events. Commissioner McCormick noted that postcards were mailed out to residents informing them of these conversations and this initiative. Commissioner Clemens added that one focus of the strategic planning process is around how to engage certain segments of the community and population that have traditionally be underrepresented. She also noted that future focus groups may benefit from a hybrid option in addition to an in-person attendance option.

7. STAFF UPDATES

None.

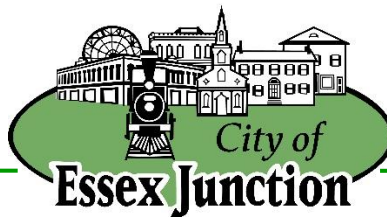
8. ADJOURNMENT

MOTION by ELIJAH MASSEY, SECOND by SCOTT McCORMICK, to adjourn the meeting.

VOTING: unanimous (4-0); motion carries.

The meeting was adjourned at 8:24 P.M.

RScty: AACoonradt



MEMORANDUM

To: Planning Commission
From: Jennifer Marbl, City Planner
Meeting Date: 03/07/2024
Subject: Proposed EV Charging Requirements

Issue

The Planning Commission is evaluating various options for integrating Electric Vehicle (EV) charging requirements into the Land Development Code as part of a larger amendment. As Essex Junction has so few publicly available EV chargers, the adoption of electric vehicles can encourage the transition to electric vehicles.

Discussion

There is a present need to incorporate infrastructure that supports this energy transition to meet state and national goals. Multi-unit apartment buildings / condominiums without EV charging infrastructure are a particular challenge for potential EV owners, as renters/ condo owners cannot make modifications to common areas. The policies outlined below are all portions of different potential policies to facilitate the Planning Commission's discussion on what measures are most appropriate for the City of Essex Junction.

Staff has examined the applicability of adopting existing, state level requirements for Residential Building Energy Standards (RBES) and Commercial Building Energy Standards (CBES), to be a part of municipal requirements. CBES applies to buildings that are four or more stories. These standards are currently self-certified by the applicant with little oversight. The municipality requires that developers certify these and file with the clerk before the issuance of a certificate of occupancy. However, the municipality does not have the authority to condition a permit on these standards unless it is in the zoning bylaw or a municipal building code.

Below are a few options for potential EV Charging regulations in order from least strict to most strict:

A. Recommend and promote voluntary compliance with RBES / CBES EV Charging Requirements

The Residential Building Energy Standards and Commercial Building Standards are existing state standards with significant revisions that will come into effect on July 1st, 2024. The amendment could reference these existing state requirements to recommend developers self-certify these standards. This will have little to no impact. Examples from CCRPC's 2014 recommendations:

1. It is strongly encouraged, but not required under these bylaws, that a minimum of one accessible EV Charging Station be provided. Accessible EV Charging Stations should have a barrier-free route of travel and be in close proximity to the building. It is not necessary to designate the accessible EV Charging Station exclusively for disabled users. Separate from these regulations, the Americans with Disabilities Act (ADA) may require EV Charging Stations to meet accessibility requirements.
2. EV Charging Stations are to be included in the calculation for both the number of minimum and maximum vehicle spaces required, as provided by Section 703 of the Land Development Code.

B. Offer Municipal Incentives

Of all the examples of different municipalities in Vermont that I reviewed, all of them offer various incentives, recommendations, or specific permitting processes for EV charging stations. While voluntary incentives may have little impact, it is a step encouraging the energy transition. These incentives frequently included:

- Example: Rebates for residential and commercial customers to install Level 2 EV chargers can be offered in the form of financial assistance or grants for businesses and developers to include EV charging stations in new construction projects.
- Municipal incentives could provide potential expedited permitting, discounted fees, or other regulatory benefits for those incorporating EV infrastructure.
- Green Mountain Power offers the following incentives for developments:

Table 1. EVSE incentives offered by Vermont electric utilities.

Utility	EVSE Incentive (per port)	Notes
Green Mountain Power	Free Level 2 charger (Residential)	Charger must be internet connected and share access with Green Mountain Power during peak times.
	\$750 (Commercial)	Incentive that can be used for a public or workplace charger. Also offering a workplace charging program for \$35-50/month.

C. Adopt Requirements

As for future developments, South Burlington’s Energy Committee is compiling a set of requirements for EV charging meeting or exceeding the RBES and CBES. These requirements are still under review and not yet available to the public.

Option 1: Copying or Referencing CCRPC’s 2014 Recommendations

- 1) Development of each of the land uses identified in Table 1 - EV Charging Requirements for Development Projects, shall be required to install Level 2 EV charging equipment and provide capacity for future charging station installations at the time of development. The requirements in Table 1 will apply when one of the following conditions is met:
 - the development includes a new off-street parking facility with more than 10 spaces; or
 - the parking capacity of an existing building, site, or parking facility with 20 or more total spaces is increased by 30 percent or more (expressed as $[\text{number of additional spaces}]/[\text{number of existing spaces}] \times 100$).

- 2) Example from CCRPC’s 2014 recommendations continued:

The number of Level 2 EV charging ports required to be installed at the time of development is stated as a percentage of the total number of new or additional parking spaces in Column A of Table 1 below. Requirements will be rounded to closest whole number, but will always be a value of at least one EV charging port to be available at the time of development occupancy.

Table 1 - EV Charging Requirements for Development Projects

Land Use Type	A. Number of Charging Ports Required at the Time of Development (Expressed as a minimum % of New or Added Parking Spaces)	B. Electrical Capacity for Future Charging Ports (Expressed as a minimum % of New or Added Parking Spaces)	C. Total Percent of EV Ready Parking
Multi-household residential	2%	8%	10%
Lodging	2%	3%	5%
Retail, eating and drinking establishment	2%	2%	4%
General office, medical	2%	2%	4%
Industrial	1%	1%	2%

Option 2: Copying or Referencing Based on the Existing (2020) Versions of the RBES and CBES

- 1) For new residential developments with 10 or more dwelling units, the developer shall install a minimum of one Level 2 electric vehicle charging station per every five dwelling units, with a minimum of two charging stations per development. Charging stations shall comply with the specifications outlined in the 2020 Vermont Residential Building Energy Standard (RBES), including energy efficiency and safety requirements.
- 2) For new commercial developments exceeding 10,000 square feet of gross floor area, the developer shall install a minimum of one Level 2 electric vehicle charging station for every 10,000 square feet of gross floor area, with a minimum of two charging stations per development. Charging stations shall comply with the specifications outlined in the 2020 Vermont Commercial Building Energy Standard (CBES), including energy efficiency and safety requirements.
- 3) The developer shall ensure that sufficient electrical infrastructure is provided to support the installation of EV charging stations, with consideration for future expansion and demand.

REQUIRED LEVEL 2 CAPABLE ELECTRIC VEHICLE CHARGING PARKING SPACES
FOR ALL NEW RESIDENTIAL BUILDINGS

NUMBER OF PARKING SPOTS	MINIMUM REQUIRED NUMBER OF LEVEL 2 CAPABLE EV CHARGING PARKING SPACES
10-25	1
26-50	2
51-75	3
76-100	4
>100	4% spots, rounded up to the nearest whole number

Option 3: Copying or Referencing the Amended (2024) Versions of the RBES and CBES

REQUIRED LEVEL 2 CAPABLE ELECTRIC VEHICLE CHARGING PARKING SPACES
FOR ALL NEW RESIDENTIAL BUILDINGS

BUILDING/PARKING TYPE	MINIMUM REQUIRED NUMBER OF LEVEL 2 CAPABLE EV CHARGING PARKING SPACES
Single Family Home or Multifamily Building	1 per dwelling unit or the number of parking spaces provided, whichever is less.
Additional Parking Spaces	25% of remaining parking spaces not utilized by dwelling units, or 40 spaces, whichever is less

The number of required EVSE spaces, EV capable spaces and EV ready spaces shall be determined in accordance with this Section and Table below based on the total number of automobile parking spaces and shall be rounded up to the nearest whole number.

- 1) Where more than one parking facility is provided on a building site, the number of required automobile parking spaces required to have EV power transfer infrastructure shall be calculated separately for each parking facility.
- 2) Where one shared parking facility serves multiple building occupancies, the required number of spaces shall be determined proportionally based on the floor area of each building occupancy.
- 3) Each installed EVSE space with an EV fast charger shall count as four (4) EVSE spaces in Table C405.13.1.
- 4) Installed EVSE spaces that exceed the minimum requirements of this section may be used to meet minimum requirements for EV ready spaces and EV capable spaces.

REQUIRED LEVEL 2 CAPABLE ELECTRIC VEHICLE CHARGING PARKING SPACES
FOR ALL NEW COMMERCIAL BUILDINGS

COMMERCIAL BUILDING OCCUPANCY	EVSE SPACES	EV READY SPACES	EV CAPABLE SPACES
Assembly and Mercantile	2%	0%	20%
Business	6%	0%	30%
Educational	4%	0%	20%
Factory Industrial, High-hazard, Storage	2%	0%	10%
Institutional, Apartments/Dormitories, and occupancies for more than five but not more than 16 persons	3%	0%	10%
Hotels, Motels and Boarding houses	8%	7%	50%
Boarding houses or congregate living facilities with 16 or fewer occupants	0%	0%	Determined in Equation 4-11

Equation 4-11: $R2EVC = D/SU + 0.25 * (APS - D/SU)$

R2EVC = Total requirement for EV Capable Spaces in R-2 building occupancies.

D/SU = Total number of dwelling and sleeping units in the R-2 building.

APS = Total number of automobile parking spaces provided.

OCCUPANCY CLASSIFICATIONS. Building occupancies of the above table were defined by the 2021 *International Building Code*, which is summarized here. For the sake of brevity, staff substituted these group classifications with the title of the types of occupancy for each. Discrepancies in the summary or further clarifications shall defer to the *International Building Code*.

D. Related Details

a.) Definitions:

ELECTRIC VEHICLE CHARGING – LEVEL 2 CAPABLE. Level 2 “capable” includes space in the utility room for panel(s) of at least one minimum 40-ampere branch circuit to be provided to garages and/or the exterior of the building to accommodate a future dedicated Society of Automotive Engineers (SAE) standard J1772-approved Level 2 EVSE with a J1772 connector or NEMA 14-50, or equivalent, within 5 feet of the centerline for each EV charging parking space. A conduit or other unobstructed path to easily run a future wire to the parking spot shall also be provided.

ELECTRIC VEHICLE CAPABLE PARKING SPACE. A parking space with all the requisite infrastructure in place within five feet to allow electrical wiring and connection to power for EVSE.

b.) Exceptions:

Electric vehicle parking spaces are not counted in Table R404.3 (see above) required if one of the following conditions apply:

- i. Parking spaces intended exclusively for storage of vehicles for retail sale or vehicle service.
- ii. Parking spaces are separated from the meter by a public right-of-way.
- iii. Parking spaces which are limited to parking durations of less than one hour.
- iv. EV Capable Spaces are not required where no parking spaces are provided.

- v. The number of parking spaces with EVSE that are marked for “EV use only” need not exceed the number of EV cars driven by occupants of the building. This exception does not reduce the number of EVSE spaces required, just the number that are marked for EV use only.
- c.) R-2 (Defined in the International Building Code as Boarding houses or congregate living facilities with 16 or fewer occupants) Occupancies with Multifamily building garage or covered parking, should provide on electrical drawings the appropriate sized pathway to the building electrical room to accommodate a future electrical upgrade for Level 2 EVSE electric vehicle charging; provide adequate wall and floor space in the building electrical room for future EV charging related electrical equipment; provide the appropriate sized pathways to exterior on-grade surface parking spaces for future Level 2 EVSE electric vehicle charging; provide a line diagram on the electrical drawings demonstrating a pathway for future Level 2 EVSE electric vehicle charging.

Next Steps

If the Planning Commission finds a satisfactory solution, staff will to draft language. Staff will conduct a legal review consulting with the city lawyer, surrounding municipalities, and related state agencies that can contribute to the effort.

Planning Commission should consider engaging with developers and home owners.

Cost

There is no cost to the City for adding EV charging requirements into the Land Development Code. However, the addition of EV charging requirements may affect the economics of private housing development.

Recommendation:

Staff recommends that the Planning Commission select the most appropriate set of regulations or a combination of the presented options. If no options are amenable to the Planning Commission, direct staff to construct other options based on specific directions.

2020 Vermont Residential Building Energy Standards (RBES) Certificate

This certificate is for projects started on or after September 1, 2020.

Before completing this form, refer to the instructions in Chapter 8 of the Residential Energy Code Handbook (5th edition).

For additions, alterations, renovations or repairs, only fill out applicable portions of certificate.

Property Address (Street, City, ZIP Code) _____

Construction START Date _____

Construction FINISH Date _____

Act 250 (Y/N) _____

Act 250 Permit # _____

Units # Stories # Conditioned Sq. Ft. # Bedrooms

Foundation: Basement Slab On Grade Crawl Space Other: _____

Applicable Code: Base Stretch

Project Description

- Single family Renovation / alteration*
 Multi-family Addition*
 Log home Repair*

* Existing Home Project Description: _____

Compliance Method
MUST select Option 1,
Option 2, or Option 3

Option 1: Package-Plus-Points

BASE / STRETCH (circle one) Points required: _____ (Base requires 4-10pts / Stretch 6-12pts, see Handbook Tables 5-2 and 5-5)
Package # _____ Points achieved: _____

Ref. RBES for full requirements of each point option

Option 2: REScheck software (cannot be used for Stretch Code) Passes
_____ UA result _____ Max. UA

- Envelope: Slab, R-10 under all (1pt) ACH50 ≤ 2.0 and qualifying HRV/ERV (3pts for Base OR 1pt for Stretch)
 Envelope: Walls-Upgraded, R20+12 (2pts) ACH50 ≤ 1.0 and qualifying HRV/ERV (4pts) Solar ready (1pt, Base only†)
 Envelope: Walls-High-R, R-40 (3pts) ENERGY STAR DHW (1pt) On-site generation (1-4pts)
 Envelope: Ceiling, R-80 flat / 60 sloped (1pt) ENERGY STAR electric DHW (2pts) _____ kW _____ pts
 Envelope: Windows 0.27 (1pt, Base only) Low flow fixtures (1pt) Solar hot water (2pts)
 Envelope: Windows 0.22 (2pts) Drain water heat recovery (1pt) Building energy monitoring (1pt)
 Pre-drywall blower door (1pt), result _____ User-demand hot water recirculation (1pt) Level 2 EV-ready (1pt)
 ENERGY STAR heating and cooling (1pt) Water certification (2pts) 6 kWh battery backup (1pt)
 Advanced heating and cooling (3pts) List cert. type _____ †See RBES for MF exception

Option 3: HERS/ERI

_____ HERS Result (Overall)
_____ HERS without Renewables
_____ REM/Rate Version #
IAF incorporated into model
Approved Rater Name: _____
(Maximum HERS: 61 Base, 54 Stretch)

Thermal Envelope

Basement: R-_____ Basement / Crawl Space Walls _____ Basement Insulation Depth (ft) U-_____ Basement Windows NFRC Default
Slab: R-_____ Unheated Slab (Under) R-_____ Heated Slab (Under) R-_____ Perimeter Slab Edge
Wall/Ceiling: R-_____ Above-Grade Walls R-_____ Flat Ceilings _____ Area (sq ft) R-_____ Sloped Ceilings _____ Area (sq ft)
Other: R-_____ Floors over Unheated Spaces R-_____ Attic Access Hatch / Door NA
Fenestration U-_____ Windows NFRC Default U-_____ Doors NFRC Default U-_____ Skylights NFRC Default

Air Sealing / Blower Door Test

_____ ACH50
(must report either ACH50 _____ CFM50/sq ft of building shell (6 sides)
or CFM50/sq ft for Base Code) Both measurements are required for Stretch Code

Date of test _____

Air Leakage Tester Name: _____

Ventilation System

(must select one) Balanced, SRE _____ % Flow verification: Rated, OR Measured → _____ Exhaust air flow (total cfm) _____ Supply air flow (total cfm)
 Exhaust-Only Flow verification: Rated, OR Measured → _____ Exhaust air flow (total cfm)

Combustion Safety

(verify all) Exterior (outdoor) air supply is provided for solid fuel-burning appliances and fireplaces, OR NA (no solid fuel burning appliance or fireplace in home)
 Solid fuel burning appliances and fireplaces have gasketed doors with compression closure, OR NA (no solid fuel burning appliance or fireplace in home)
 Spillage testing conducted on combustion equipment not directly-vented, OR NA (no equipment, or all equipment directly-vented)

Mechanical System

(must complete all) Design Load Calculation Method: ACCA Manual J, OR Other Approved Method (List) _____
Calculation details: (Ref. RBES R302 for design temperature exceptions)
_____ Winter design temp, outdoor dry-bulb (VT range: -11 to 1°F) _____ Summer design temp, outdoor dry-bulb (typ. max. 84°F), OR No cooling
_____ Winter design temp, indoor (max 72°F) _____ Summer design temp, indoor (min. 75°F), OR No cooling
_____ Heating design load, Btu/hr _____ Cooling design load, Btu/hr, OR No cooling
_____ Primary heating system size, Btu/hr _____ Primary cooling system size, Btu/hr, OR No cooling
_____ HSPF or COP or AFUE (circle which) _____ SEER or COP (circle which), OR No cooling
 Programmable thermostat, OR Exempt; list reason _____

Ducts

Ducts located completely within conditioned space, OR NA (no ducts)
_____ Duct airtightness test result (CFM @ 25 Pa)
Test performed at Rough-in (max 3 CFM per 100 sq ft of cond. floor area), OR Post-construction (max 4 CFM per 100 sq ft of cond. floor area)

Other Requirements

Mandatory (Base and Stretch): Mechanical system piping, min. R-3 Multi-family: EV charging requirement is met: _____ # spaces
 90% of lamps high efficacy Automatic or gravity dampers for vent. system intake and exhaust
Mandatory (Stretch Code Only): Single-family: Solar ready Single-family: One Level 1 EV-charging space
Where applicable: Circulating service hot water piping, R-3 Pools: All requirements per R403.10 are met Automatic controls for snow-melt systems

I certify to _____ (Owner) that the above information is correct and that the premises listed have been constructed in accordance with the Vermont Residential Building Standards (RBES) created under 30 V.S.A. § 51. Date: _____

Signature: _____ Printed Name: _____

Company: _____ Phone: _____

30 V.S.A. § 51 requires this certificate label to be permanently affixed to the inside electrical service panel or heating or cooling equipment or nearby in a visible location. Copies of the certificate (and Home Energy Rating Certificate if Option 3 is used) also must be provided to 1) the Dept. of Public Service, 112 State St., Montpelier, VT 05602, and 2) the town clerk of the town where the property is located.

NOTE: Noncompliance with RBES may result in action for damages under 30 V.S.A. § 51. This label does not specify all 2020 RBES requirements. QUESTIONS? CALL the Energy Code Assistance Center at 855-887-0673 or the VT PUBLIC SERVICE DEPARTMENT at 802-828-2811.

2020 Vermont Commercial Building Energy Standards (CBES) Certificate

This certificate is for projects whose state or local permit application was submitted on or after September 1, 2020.

Before completing this form, refer to the instructions

Site Address (Street, City, ZIP Code) _____

Construction START Date _____

Construction FINISH Date _____

Act 250 (Y/N): _____

Act 250 Permit # _____

Project Description: _____

Stories Above Grade _____

Stories _____

Building Sq. Ft. _____

Conditioned Sq. Ft _____

Compliance Methods

Option 1a: Chapter 5-Plus-Credits (see CBES for full requirements each point option)

(Must select option 1a, 1b, 2a, 2b or 3)

Option 1b: ASHRAE 90.1-2016 (with CBES amendments C401.2.1) Plus-Credits

Credits achieved: _____ Occupancy Group _____ (See Table C406.1 for credits and groups)

1 More efficient HVAC performance

2.1 Reduced lighting power: Option 1

2.2 Reduced lighting power: Option 2

3 Enhanced lighting controls

4 On-site supply of renewable energy

5 Dedicated outdoor air system

6.1 High-efficiency service water heating

6.2 High-efficiency service water heating

6.3 Heat pump water heating equipment

7 Enhanced envelope

8 Reduced air infiltration

9 Efficient kitchen appliances

10 Controlled Receptacles

Compliance Documentation required: COMcheck™ Software Vermont 2020 CBES Version

Option 2a: ASHRAE/IESNA Standard 90.1-2016 Energy Cost Budget Method

Compliance documentation requirements as noted in Section 11.7

Option 2b: ASHRAE/IESNA Standard 90.1-2016 Appendix G -Performance Rating Method (Review CBES amendments C401.2.1)

Compliance documentation requirements as noted in Appendix G

Option 3: Above Code Program

Contact Vermont PSD for approval of Above Code Program and documentation requirements

Air Sealing / Blower Door Test (if required) _____

CFM75/sq ft of building shell (6 sides)

Date of Test _____

Air Leakage Tester Firm and Testers Name: _____

Other Requirements

Where applicable:

EV charging requirement: _____ # Total Parking Spaces: _____ # Total EVSE Equipped Parking Spaces: _____ # Total EVSE Ready Parking Spaces

I certify that the above information is correct and that the premises listed HAVE been **DESIGNED** in accordance with the Vermont Commercial Building Standards (CBES) created under 30 V.S.A. § 53.

Signature _____

Print Name _____

Company _____

Phone # _____

Date _____

I certify that the above information is correct and that the premises listed HAVE been **CONSTRUCTED** in accordance with the ordinary standard of care applicable to the participating construction trades, and that the subject commercial building was constructed substantially in accordance with the construction documents including the plans and specifications certified herein, and in accordance to 30 V.S.A. §53

Signature _____

Print Name _____

Company _____

Phone # _____

Date _____

30 V.S.A. §53 requires this certificate label to be permanently affixed to the inside electrical service panel or heating or cooling equipment or nearby in a visible location. In addition, affidavits **shall** accompany this certificate, certifying that the commercial construction meets the CBES requirements.

Copies of the certificate, affidavits and compliance documentation shall be provided to the Public Service Department, Division of Efficiency and Energy Resources, 112 State St., Montpelier, VT 05620-2601

NOTE: Noncompliance with CBES may result in action for damages under 30 V.S.A. §53. This label does not specify all 2020 CBES requirements.

QUESTIONS? CALL THE VERMONT PUBLIC SERVICE DEPARTMENT: 800-642-3281 (in state) OR 802-828-4056 (out of state)

The following supporting documentation shall accompany this certificate depending on which code compliance method was used:

Compliance Path	Required Compliance Documentation
2020 CBES (Chapter 4) <i>OR</i> ASHRAE 90.1-2016 (with CBES amendments as noted in Section 401.2.1) ¹	2020 VT CBES Version of COMcheck™ Software or COMcheck-Web™ Results Report, including, where applicable: ² <ul style="list-style-type: none"> • COMcheck Envelope Compliance Certificate³ • COMcheck Interior Lighting Compliance Certificate • COMcheck Exterior Lighting Certificate • COMcheck Mechanical Compliance Certificate • COMcheck Mechanical Requirements Description
ASHRAE/IESNA Standard 90.1–2016 Energy Cost Budget Method	All documentation as noted in Section 11.7 Documentation Requirements of ASHRAE 90.1-2016
ASHRAE/IESNA Standard 90.1–2016 Appendix G - Performance Rating Method	Compliance documentation requirements as noted in Appendix G
Above-Code Program	Contact Vermont DPS for approval of above-code program and required documentation.
<p>1. If using ASHRAE 90.1-2016 as the compliance path, it is the responsibility of the designer to ensure that the project complies with CBES amendments noted in Section 401.2.1. COMcheck will check compliance against ASHRAE 90.1-2016, excluding the CBES amendments.</p> <p>2. Addition/alteration/renovation/repair projects (as described in 2020 CBES Section C101.4.2) only need to include COMcheck compliance sections for building systems, or portions thereof, altered in the project.</p> <p>3. Certain minimum cavity insulation R-values, published in 2020 CBES, when entered into COMCheck, may not register as a passing system. This may happen for certain combinations of assembly types and insulation values due to the calculation methods used in COMcheck. If this occurs, describe the assembly component and the 2020 CBES published minimum R-value in the COMcheck project notes.</p>	

2020 VT COMMERCIAL BUILDING ENERGY STANDARDS (CBES) CONSTRUCTION AFFIDAVIT

Site Address (street, town, ZIP Code)

County

Construction Start Date

Construction Finish Date

Project Description

N/A

Building Sq. Ft.

of Stories Above Grade

Act 250 Permit #

I certify the premise listed above has been constructed in accordance with the ordinary standard of care applicable to the participating construction trades, and that the subject commercial building was constructed substantially in accordance with the construction documents including the plans and specifications certified herein, and in accordance to 30 V.S.A. §53.

Signature

Print Name

Company

Phone #

Date

Subscribed and sworn to before me:

Signature of Notary

Date

Expiration Date

30 V.S.A. §53 requires this affidavit certifying that the commercial construction meets the CBES requirements. Copies of the affidavit and supporting documentation demonstrating code compliance shall be provided to the Public Service Department, Division of Efficiency and Energy Resources, 112 State St., Montpelier, VT 05620-2601

2020 VT COMMERCIAL BUILDING ENERGY STANDARDS (CBES) DESIGN AFFIDAVIT

Site Address (street, town, ZIP Code)

County

Construction Start Date

Construction Finish Date

Project Description

N/A

Building Sq. Ft.

of Stories Above Grade

Act 250 Permit #

I certify the premise listed above has been **designed** in accordance with the designer's professional duty of care, and that the building was designed in substantial compliance with the requirements of the Vermont Commercial Building Energy Standards (CBES) created under 30 V.S.A. § 53.

Signature

Print Name

Company

Phone #

Date

Subscribed and sworn to before me:

Signature of Notary

Date

Expiration Date

30 V.S.A. §53 requires this affidavit certifying that the commercial construction design meets the CBES requirements. Copies of the affidavit and supporting documentation demonstrating code compliance shall be provided to the Public Service Department, Division of Efficiency and Energy Resources, 112 State St., Montpelier, VT 05620-2601