

# **ELECTRIC VEHICLE CHARGING STATIONS WORKING GROUP**

**August 25, 2022**

**Via Webinar**



## WESTFORD ELECTRIC VEHICLE (EV) CHARGING STATIONS WORKING GROUP

### MEETING AGENDA

Thursday, August 25, 2022

7:00 PM Meeting

**Via Webinar**

**Please see instructions for participation below**

1. Call to order
2. Old/New business
3. Discuss final comments submitted to the DOER regarding Updated Stretch Code
4. Discuss update to be provided to Planning Board at September meeting
5. Set date, time, and scribe for next meeting
6. Approve minutes: August 4, 2022
7. Adjournment

#### **Instructions for participation:**

Register for the meeting by going to this link:

[https://westfordma.gov.zoom.us/webinar/register/WN\\_nGEe1Sd9QnqE4vixRYH2zw](https://westfordma.gov.zoom.us/webinar/register/WN_nGEe1Sd9QnqE4vixRYH2zw)

After registering, you will receive a confirmation email containing information about joining the webinar.

If you do not have access to this method of participation, please submit written comments to Sierra Pelletier, Assistant Planner, [spelletier@westfordma.gov](mailto:spelletier@westfordma.gov) by 12:00 pm on August 25, 2022.

If any member of the public wishing to attend this meeting seeks special accommodations in accordance with the Americans with Disabilities Act, please contact the Permitting Department at (978) 692-5524 or email [etoothaker@westfordma.gov](mailto:etoothaker@westfordma.gov)

## Old/New business

## Definitions to be added to Westford ZBL, Section 10.2 GENERAL DEFINITIONS

References:

- 1) Massachusetts General Laws (MGL) Chapter 25A Section 16 Public Electrical Vehicle Charging Stations
- 2) Massachusetts State Building Code 780 CMR *Tenth Edition*, Chapter 2 Definitions (In Draft)
- 3) Massachusetts Electrical Code 527 CMR 12.00 (Amendments) Section 625.2

**Electric Vehicle (EV):** A vehicle that is powered entirely or primarily by an electric motor drawing current from on-board electric energy storage (battery) that is charged from an external source of electricity. For the purposes of these bylaws, electric vehicles (EV) will be one of two types: 1) Battery Electric Vehicle (BEV); or, 2) Plug-in Hybrid Electric Vehicle (PHEV). For more information see: MGL Ch.25A Sec.16; MA 780 CMR Ch.2

**Electric Vehicle Charging Services:** The transfer of electric energy from an Electric Vehicle Charging Station (EVCSt) to a battery or other storage device in an electric vehicle and associated billing services, networking, operation, and maintenance. For more information see: MGL Ch.25A Sec.16

**Electric Vehicle Charging Space (EVCSp):** A vehicle parking space equipped as an Electric Vehicle Charging Station (EVCSt) and specially designated for electric vehicle charging. An Electric Vehicle Charging Space may be one of two types: 1) Private Electric Vehicle Charging Space; or 2) Public Electric Vehicle Charging Space. For more information see: MGL Ch.25A Sec.16; MA 780 CMR Ch.2

**Electric Vehicle Charging Station (EVCSt):** One or more vehicle parking spaces served by Electric Vehicle Service Equipment (EVSE) designed specifically to charge batteries within electric vehicles by permitting the transfer of electric energy to a battery or other storage device onboard an electric vehicle. For more information see: MGL Ch.25A Sec.16; MA 780 CMR Ch.2.

**Electric Vehicle Service/Supply Equipment (EVSE):** Equipment, including electrical supply, cord, and connector, expressly designed for safe charging of an Electric Vehicle (EV). For the purposes of these bylaws EVSE will be one of two types: 1) Level 2 208/240V AC; or 2) Level 3 DC Fast Charging (DCFC). For more information see: MGL Ch.25A Sec.16; MA 780 CMR Ch.2; MA 527 CMR 12.00 Sec.625.2.

**EV “Make-Ready” Space (EVMR):** A vehicle parking space equipped with the infrastructure necessary to support electric vehicle charging, other than the EVSE equipment itself, to facilitate future installation of EVSE without costly refit. EVSE “Make-Ready” infrastructure includes space and capacity within the electric supply panel to accommodate future EVSE in 100% of the spaces so designated, and electrical raceways or conduit of sufficient size that are continuous from the supply panel to the designated location(s).

**Discuss final comments submitted to DOER regarding  
Updated Stretch Code**

## Sierra Pelletier

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**From:** Tom Teller <tteller@earthlink.net>  
**Sent:** Thursday, August 11, 2022 3:39 PM  
**To:** Chauncey Chu  
**Cc:** Sierra Pelletier  
**Subject:** Re: Draft submission to DOER

Chauncey,

I got a call back from an individual with the MA Executive Office of Energy and Environmental Affairs, responding to our questions as facilitated by Rep Arciero's office.

He confirmed the understanding of the approval process we have cobbled together, with a minor difference.

- The 2021 Climate Bill mandates DOER to develop the new stretch and specialized opt-in codes, and the proposed code updates are implementing that mandate.
- The Senate TUE Committee has oversight in this area, and DOER will report the final drafts of the codes to them for their REVIEW. It should be emphasized that approval or ratification by TUE is NOT required. TUE can comment and report those comments back to DOER; DOER can choose to make adjustments based on those comments (or not).
- The timeline is still to promulgate the updated stretch and specialized opt-in codes by year end.
- The stretch code will go into effect immediately (with any required transition period), expected to be January, 2023. As a Green Community, the stretch code will be binding on Westford immediately with no further action by the Town.
- The specialized opt-in code will be finalized in the same timeframe, then available for consideration by cities and towns. It would take additional action by the Town (Town Meeting I presume) for Westford to adopt the specialized opt-in code.

I have the contact info for the individual if we have follow up questions.

Tom

On Aug 11, 2022, at 2:34 PM, Chauncey Chu <[K1OPE@msn.com](mailto:K1OPE@msn.com)> wrote:

Hi Tom

Great cover letter and table of our comments.

Straight to the point with our bona fides.

Will send this this afternoon as shown below to: [Stretchcode@mass.gov](mailto:Stretchcode@mass.gov) with a copy to the Mike Barrett Legislative Aide, Audrey Horst, [Audrey.Horst@MAsenate.gov](mailto:Audrey.Horst@MAsenate.gov).

Barrett is the Chair of the Joint Committee on Telecommunications, Utilities and Energy, General Court of the Commonwealth of Massachusetts, who will decide on this code.

Thanks for the good job.

Chauncey

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**From:** Tom Teller <[tteller@earthlink.net](mailto:tteller@earthlink.net)>  
**Sent:** Thursday, August 11, 2022 10:12 AM  
**To:** Chu Chauncey <[k1ope@msn.com](mailto:k1ope@msn.com)>  
**Cc:** Pelletier Sierra <[spelletier@westfordma.gov](mailto:spelletier@westfordma.gov)>  
**Subject:** Draft submission to DOER

Good morning Chauncey,

You will find my draft "cover letter" below the line, and I have attached the draft comments document, updated to remove the final sentence about "no comment" on the performance standards.

Both are provided for your convenience. I hope that you will make any changes or corrections that you see fit.

Best regards,

Tom

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Comments pertaining to:

- [225\\_CM\\_22\\_MA\\_Residential\\_low-rise\\_redline\\_06-24-22](#) [225 CMR 22]
- [225\\_CM\\_23\\_MA\\_Commercial\\_redline\\_06-24-22](#) [225 CMR 23]

Dear Sir or Madam:

I am submitting the attached comments as Chair of the EV Charging Stations Working Group, appointed by the Planning Board of the Town of Westford. Established by the Board in November, 2021, the working group is charged with making recommendations for changes or additions to the zoning bylaws of the Town of Westford or other local regulations pertinent to facilitating public and private electric vehicle charging in the Town.

As such, our interest and comments are focused on provisions in the draft documents cited above pertinent to electric vehicles and electric vehicle charging.

Thank you for the opportunity to submit comments on these excellent documents.

Sincerely,

Chauncey Chu, Chair  
Electric Vehicle Charging Stations Working Group  
Town of Westford  
[k1ope@msn.com](mailto:k1ope@msn.com)

<Draft Comments for submission to DOER\_r1.docx>

Draft Comments for submission to DOER pertaining to the documents cited below.

- 225\_CM\_22\_MA\_Residential\_low-rise\_redline\_06-24-22 [225 CMR 22]
- 225\_CM\_23\_MA\_Commercial\_redline\_06-24-22 [225 CMR 23]

#	Section	Comment
1		The cited documents both propose definitions pertinent to electric vehicles and EV charging to be added to the cited documents respectively.
1.1	225 CMR 22 Ch.2 [RE] Sect R202 p.3	<p>Definitions proposed for ELECTRIC VEHICLE and ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE) are not consistent with definitions of these same terms already published in MGL Ch. 25A Sect. 16. The definitions for ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE) closely conforms to the definition of this term already published in 527 CMR 12.00 MA Electrical Code (Amendments) sect 625.2.</p> <p>We recommend adjusting the definitions in 225 CMR 22 Sect R202 to more closely conform to those already published in MGL Ch. 25A Sect.16, while remaining consistent with those already published in 527 CMR 12.00 Sect. 625.2.</p>
1.2	225 CMR 22 Ch.2 [RE] Sect R202 p.3	<p>Definition proposed for ELECTRIC VEHICLE CHARGING SPACE (“EV Ready Space”) is not consistent with definitions and usage of similar terms related to electric vehicle charging already in broad use. Specifically, the abbreviated form (“EV Ready Space”) is very similar to a term in broad use (“EV Make-Ready Space”) leading to potential confusion.</p> <p>We recommend adjusting the terminology used in 225 CMR 22 Sect R202 to more closely conform to prevailing usage, e.g., “EVSE Equipped Space.”</p>
1.3	225 CMR 22 Ch.2 [RE] Sect R202 p.3	<p>Zoning Bylaws and/or zoning ordinances published for other jurisdictions introduce the terminology “EV Make-Ready Space” to refer to vehicle parking spaces equipped with the infrastructure necessary to support EV charging other than the EVSE equipment itself.</p> <p>We recommend adding the term “EV Make-Ready Space” defined as:</p> <p>“A vehicle parking space equipped with the infrastructure necessary to support electric vehicle charging, other than the EVSE equipment itself, to facilitate future installation of EVSE without costly refit. EVSE “Make-Ready” infrastructure includes space and capacity within the electric supply panel to accommodate future EVSE in 100% of the spaces so designated, and electrical raceways or conduit of sufficient size that are continuous from the supply panel to the designated location(s).”</p>
1.4	225 CMR 23 Ch.2 [CE] p.4	<p>Definition proposed for ELECTRIC VEHICLE, ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE) are not consistent with definitions of these same terms already published in MGL Ch. 25A Sect. 16. The definition for this term closely conforms to the definition of this term already published in 527 CMR 12.00 MA Electrical Code (Amendments) sect 625.2.</p> <p>We recommend adjusting the definitions in 225 CMR 23 Ch.2 to more closely conform to those already published in MGL Ch. 25A Sect.16, while remaining consistent with those already published in 527 CMR 12.00 Sect. 625.2.</p>



#	Section	Comment
1.5	225 CMR 23 Ch.2 [CE] p.4	<p>Definition proposed for ELECTRIC VEHICLE CHARGING SPACE (“EV Ready Space”) is not consistent with definitions and usage of similar terms related to electric vehicle charging already in broad use. Specifically, the abbreviated form (“EV Ready Space”) is very similar to a term in broad use (“EV Make-Ready Space”) leading to potential confusion.</p> <p>We recommend adjusting the terminology used in 225 CMR 22 Sect R202 to more closely conform to prevailing usage, e.g., “EVSE Equipped Space.”</p>
1.6	225 CMR 23 Ch.2 [CE] p.4	<p>Zoning Bylaws and/or zoning ordinances published for other jurisdictions introduce the terminology “EV Make-Ready Space” to refer to vehicle parking spaces equipped with the infrastructure necessary to support EV charging other than the EVSE equipment itself.</p> <p>We recommend adding the term “EV Make-Ready Space” defined as:  “A vehicle parking space equipped with the infrastructure necessary to support electric vehicle charging, other than the EVSE equipment itself, to facilitate future installation of EVSE without costly refit. EVSE “Make-Ready” infrastructure includes space and capacity within the electric supply panel to accommodate future EVSE in 100% of the spaces so designated, and electrical raceways or conduit of sufficient size that are continuous from the supply panel to the designated location(s).”</p>
2	The cited documents both propose new requirements for EV related parking spaces equipped to provide charging to electric vehicles.	
2.1	225 CMR 22 Ch.4 [RE] Sect R404.4 pp.8-9	<p>New requirements for wiring of Electric Vehicle Charging Spaces (“EV Ready Spaces”) specifically require that all spaces for 1 &amp; 2 family dwellings and town homes and 20% of spaces required for all other R-use buildings be fully equipped with EVSE and terminating in NEMA receptacle or SAE Standard J1772 electrical connector.</p> <p>We recommend that consideration be given to amending the requirement for all other R-use buildings such that some portion of the requirement can be met by “EV Make-Ready Spaces” (see Comment 1.3 above)</p>
2.2	225 CMR 23 Ch.4 [CE] Sect C405.13 &C405.13.1 pp.26-27	<p>New requirements for Electric Vehicle Ready Parking Spaces (“EV Ready Spaces”) (Mandatory) specifically require that 20% of spaces required for Group R and Group B occupancy classifications and 10% of spaces required for all other occupancy classifications be fully equipped per the definition for EV Ready spaces noted above.</p> <p>We recommend that consideration be given to amending these requirements such that some portion of the requirement can be met by “EV Make-Ready Spaces” (see Comments 1.6 above)</p>

**Discuss update to be provided to Planning Board at  
September meeting**

**From:** [k1ope@msn.com](mailto:k1ope@msn.com)  
**To:** [Gerry DiBello](#); [Thomas Teller](#); [Jeremy Arnold](#); [Robert Shaffer](#); [Sierra Pelletier](#)  
**Subject:** EVWG Update to Planning Board Sept. 19  
**Date:** Friday, August 19, 2022 8:57:11 AM

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In preparing remarks for the Sept. 19th Planning Board meeting, because of the points to be conveyed, I decided it would be best not to do this extemporaneously.

Instead, the following should be included in their meeting packet. I would emphasize these points at the meeting.

I would welcome your comments/additions/deletions/questions (specially to verify my Green Community comment) at our Aug 25th meeting.

Thanks, and enjoy the weekend,

Chauncey

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### **Draft of EV Charging Stations WG Status Report to Planning Board September 19, 2022**

The EV Charging Stations Working Group would like to provide this update to the Planning Board on our progress and what our next steps will be.

But first I like to take this opportunity to thank the working group, Gerry DiBello, Tom Teller, Bob Shaffer, Jeremy Arnold and Sierra Pelletier, for their tireless efforts these past ten months. They have spent many hours researching EV charging stations and the applicable zoning. We have learned quite a bit.

We wish to thank the Planning Board for putting together this group and drafting the charge. Since November, 2021, the Working Group got organized and formalized its charge in alignment with the Town's Climate Roadmap to Net Zero.

We pulled together some current information:

- Number of registered EV's in town;
- An inventory of the EV charging stations in town;
- The building permitting process;
- Surveyed the business community via the Economic Development Committee;
- Took a look at the electric grid capacity;
- Reviewed the zoning bylaws of many other municipalities, near and far;
- Reviewed the Westford zoning standards for parking spaces –
  - For new developments and existing developments that ask for a change in use or site plan changes;
  - Discussed signage and lighting requirements

- ADA compliance
- Availability of funding/grants for charging stations such as the Mass EVIP.

In the early months as we developed possible amendments, town counsel advised that amendments that affected residential uses may not be approved by the MA Attorney General. We immediately concentrated our efforts on commercial uses.

We proposed amendments in the zoning bylaws centered on:

- Definitions
- Appendix A, B, and D.

The Working Group had planned to present a draft of proposed amendments at the Planning Board's July 18<sup>th</sup> meeting. We were to ask for your support to sponsor a warrant article of these for the October Special Town Meeting. Due to timing this July meeting was canceled.

Just as well as the group learned that possibly a new Stretch Code promulgated by the MA Department of Energy Resources would be adopted by the end of this year. As Westford desires to maintain its Green Communities designation we would have to adhere to this new code.

The group submitted a number of constructive comments pertaining to EV charging stations (concisely authored by Tom Teller). The MA Senate Joint Committee on Telecommunications, Utilities and Energy which has oversight of DOER could weigh in with other comments.

Therefore, we feel we best defer further action until we see the new DOER Stretch Code and the Opt-in Specialized Stretch Energy Code.

This delay will allow us to make any changes to our proposals and then include both residential and commercial uses. This would also provide the time to prepare for the Annual Town Meeting should a vote be needed to adopt the Opt-in Specialized Code.

We welcome your comments and/or questions.

Thank you.

## Draft of EV Charging Stations WG Status Report to Planning Board September 19, 2022

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But first I like to take this opportunity to thank the working group, Gerry DiBello, Tom Teller, Bob Shaffer, Jerimy Arnold and Sierra Pelletier, for their tireless efforts these past ten months. They have spent many hours researching EV charging stations and the applicable zoning. We have learned quite a bit.

We wish to thank the Planning Board for putting together this group and drafting the charge. Since November, 2021, the Working Group got organized and formalized its charge in alignment with the Town's Climate Roadmap to Net Zero.

~~We pulled together some~~ Our research yielded the following current information:

- Number of registered EV's in town;
- An inventory of the existing EV charging stations in town;
- The building permitting process (not sure what this means);
- Surveyed Survey data from the business community via the Economic Development Committee;
- Our current ~~Took a look at the~~ electric grid capacity;
- A review of ~~Reviewed~~ the zoning bylaws of many other municipalities, near and far;
- Reviewed the current Westford zoning standards for parking spaces –
  - For new developments and existing developments that ask for a change in use or site plan changes;
  - Discussed signage and lighting requirements
  - ADA compliance
- Availability of funding/grants for the construction of new charging stations such as the Mass EVIP and National Grid grant programs.

In the early months as we developed possible zoning amendments, town counsel advised that amendments that affected residential uses may not be approved by the MA Attorney General. We immediately concentrated our efforts on commercial uses.

We have proposed amendments in the Westford zoning bylaws centered on:

- Definitions
- Appendix A, B, and D.

The Working Group originally had planned to present a draft of proposed amendments at the Planning Board's July 18<sup>th</sup> meeting. We were to ask for your support to sponsor a warrant article of these amendments for the October Special Town Meeting. Due to timing the is July meeting was canceled.

Just as well as the group learned that possibly a new Stretch Code promulgated by the MA Department of Energy Resources would be adopted by the end of this year. As Westford desires to maintain its Green Communities designation ~~we would~~the town will have to adhere to this new code.

The group has submitted a number of constructive comments (concisely authored by Tom Teller) pertaining to EV charging station requirements that are mandated in the proposed residential and commercial Stretch Codes s (~~concisely authored by Tom Teller~~). The MA Senate Joint Committee on Telecommunications, Utilities and Energy which has oversight of DOER could weigh in with other comments.

Therefore, we feel we that it's best to defer further action until we see the new DOER Stretch Code and the Opt-in Specialized Stretch Energy Code.

This delay will allow us to make any changes to our proposals and then include both residential and commercial uses. This approach would also provide the time to prepare for the 2023 Annual Town Meeting should a vote be needed to adopt the Opt-in Specialized Code.

We welcome your comments and/or questions.

Thank you.

# Minutes



## WESTFORD ELECTRIC VEHICLE (EV) CHARGING STATIONS WORKING GROUP Meeting of August 4, 2022

A meeting of the Westford Electric Vehicle (EV) Charging Station Working Group (EVWG) was held at 7:00 PM on August 4, 2022, virtually via Zoom.

The following WG members were present: Chauncey Chu, Gerry DiBello, Bob Shaffer, Tom Teller  
Town Staff present: Sierra Pelletier, Assistant Planner

### 1. Call to Order

- The meeting was called to order at 7:01pm.

*\*Item taken out of order\**

### 3. Discuss Any Comments for Submission to the DOER Updated Stretch Code (Due by August 12), and the Effect, If Any, On Our Report

- Bob commented that we need to create a cover letter to the DOER to explain who we are and why we are submitting comments. With reference to the comment document created by Tom for the DOER, Bob asked Tom why he had said in #2.2 “No changes are recommended.....”. Bob asked the reason for singling out this section to not comment on. Tom responded that the “no comment” was to clarify that we were commenting on just one paragraph of the section and not the second section. Tom agreed that this might be confusing and will change the wording.
- Chauncey asked Tom to create a cover letter to go with our DOER Stretch Code comment submission. Tom will create the cover letter and send it to Bob and Chauncey separately for comment. Once the comments are finalized, they will be sent to DOER and Mike Bender, Chair of the Joint Telecommunications, Utilities, and Energy (TUE) Committee. Chauncey will submit the comments.
- As a courtesy, Gerry will email a copy of our Draft Stretch Code comments to Mike Berlinski, chair of the CEASC, to keep him informed of our group’s actions related to the proposed code.

*\*Item taken out of order\**

### 4. Review and Discuss Any Comments on The Sections for Report to Planning Board

- Bob suggested that we summarize our actions regarding the Draft Stretch Code comments in a report to be presented to the Planning Board. We agreed that the Building Commissioner, Henry Fontaine, should be kept in the loop, and present at that meeting if possible. Bob further recommended that we take no action at this time to create any EV



charging zoning changes that would be presented at the fall town meeting. Part of our report to the Planning Board will be to say why we will be taking no action. After we see the wording in the finalized Stretch Code, we may need to present something at the Spring 2023 Town Meeting. Our next actions will be based on what actually is in the new Stretch Code document pertaining to EVSE when it becomes law in January of 2023.

- Chauncey will present a progress report to the Planning Board at their September 19, 2022 meeting.

## **2. Old/New Business**

- There was a discussion regarding the previously created document titled "Definitions to be added to the Westford ZBL, Section 10.2 General Definitions". Bob suggested some minor wording changes that were reviewed in the document presented on screen. There was unanimous agreement to accept the changes as presented.

*\*Item taken out of order\**

## **6. Approve Minutes July 18, 2022**

- There was no discussion about the minutes. A motion to approve the July 18, 2022 minutes was made by Chauncey and seconded by Bob. Minutes approved unanimously by roll call.

## **5. Set Date, Time, and Scribe for Next Meeting**

- The next meeting is August 25, 2022 at 7:00 pm and will be virtual via Zoom. Jerimy will be the scribe.

## **7. Adjournment**

- A motion to adjourn was made by Chauncey and seconded by Bob. Meeting adjourned at 7:50pm

Respectfully submitted,  
Gerald DiBello  
8/12/2022