



Council Report

For the Meeting of July 23, 2020

To: Council **Date:** July 8, 2020

From: Karen Hoese, Director, Sustainable Planning and Community Development

Subject: **Electric Vehicle Readiness in New Construction: Technical Bulletin Endorsement**

BACKGROUND

On July 23, 2020, Council will consider approving Zoning Regulation Bylaw, Amendment Bylaw (No. 1210) – No. 20-001 and the Zoning Bylaw 2018, Amendment Bylaw (No. 5) – No. 20-075 for electric vehicle readiness in new construction in Victoria.

The two bylaw amendments reference technical requirements that are contained in the Electric Vehicle Charging Infrastructure Technical Bulletin (2020). These technical requirements ensure that parking spaces are equipped with a level 2 energized electric vehicle outlet and sufficient charging capacity is available where electric vehicle energy management systems are used.

These technical specifications are contained in the Technical Bulletin instead of the zoning bylaw for ease of updating, as technical requirements can change over time. The Technical Bulletin will be reviewed by staff regularly against industry standards.

RECOMMENDATION

Should Council approve Zoning Regulation Bylaw, Amendment Bylaw (No. 1210) – No. 20-001 and the Zoning Bylaw 2018, Amendment Bylaw (No. 5) – No. 20-075 for electric vehicle readiness in new construction in Victoria, that Council also endorse the Electric Vehicle Charging Infrastructure Technical Bulletin (2020).

Respectfully submitted,

Handwritten signature of Robyn Webb.

Robyn Webb
Community Energy Specialist
Community Planning Division

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Karen Hoese, Director
Sustainable Planning and Community
Development Department

Report accepted and recommended by the City Manager:



Date: July 9, 2020

List of Attachments

- Attachment A: Electric Vehicle Charging Infrastructure Technical Bulletin (2020).

In this Bulletin, underlined terms are defined in the City's *Zoning Regulation Bylaw*.

Energized Electric Vehicle Outlet Requirements

1. All energized electric vehicle outlets must provide, at a minimum, a Level 2 electric charging level as defined by Society of Automotive Engineers (SAE) International's J1772 standard.
2. Energized electric vehicle outlets must be labelled for their intended use for electric vehicle charging only.
3. An energized electric vehicle outlet must be assigned to an individual vehicle parking stall and must be located no further than 1.0m from that stall.
4. No more than one energized electric vehicle outlet may be assigned to an individual vehicle parking stall.

Requirements #2 and 3 do not apply to single family dwellings, two-family dwellings or semi-attached dwellings.

Performance Requirements for Electric Vehicle Energy Management Systems

Where an electric vehicle energy management system is installed, the electric vehicle energy management system must meet the following performance requirements:

1. A baseline performance standard of at least 12kWh per electric vehicle over an eight hour period is required when all electric vehicles are charging simultaneously (i.e. allocate at least 8A per electric vehicle on a 208V or 240V circuit, if all electric vehicles are sharing power equally). Greater allowable levels of sharing are appropriate beyond 80A, given the greater diversity of electrical loads possible at these higher amperages.
2. The allowable maximum number of electric vehicles per circuit breaker amperage is as follows:

Circuit Breaker Amperage	Maximum Number of Electric Vehicles
20	1
30	2
40	4
50	5
60	6
70	7
80	8
90	10
100	11
125	14