The Governor’s Executive Order B-16-2012, dated March 23, 2012, requires all State entities under the governor’s direction and control to support and facilitate the rapid commercialization of zero-emission vehicles (ZEV’s). The California Department of Transportation (Caltrans), after consulting with local agencies, the public, and the Governor’s Office of Planning and Research will amend the California Manual on Uniform Traffic Control Devices (CA MUTCD). Changes include six new signs, one new header plaque, two new optional pavement markings, deleting two existing signs, and updating content in various sections, figures and tables of the CA MUTCD. These policy and specification updates provide regulatory and general information signs and pavement markings to guide and regulate road users who operate ZEV’s. The purpose of this directive is to implement Governor’s Executive Order B-16-2012, update existing administrative law, and to provide detailed specifications for uniform use by State and local government agencies, as well as use by private entities at facilities open to public travel.
Pursuant to the authority granted to Caltrans in section 21400 and 21401 of the California Vehicle Code (CVC), the following new signs and pavement markings shall be included (or deleted) in Parts 2 and 3 of the CA MUTCD, dated January 13, 2012.

<table>
<thead>
<tr>
<th>California Code</th>
<th>MUTCD Code</th>
<th>Title of the sign, plaque or pavement markings</th>
<th>CA MUTCD Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>R112(CA)</td>
<td>None</td>
<td>Electric Vehicle Charging Station Tow-Away</td>
<td>2B.46</td>
</tr>
<tr>
<td>R113(CA)</td>
<td>None</td>
<td>No Parking EXCEPT FOR EV CHARGING</td>
<td>2B.46</td>
</tr>
<tr>
<td>R113A(CA)</td>
<td>None</td>
<td>No Parking EXCEPT FOR ELECTRIC VEHICLE CHARGING</td>
<td>2B.46</td>
</tr>
<tr>
<td>R114(CA)</td>
<td>None</td>
<td>__HOUR EV CHARGING - __AM TO __PM</td>
<td>2B.46</td>
</tr>
<tr>
<td>R114A(CA)</td>
<td>None</td>
<td>__HOUR ELECTRIC VEHICLE CHARGING - __AM TO __PM</td>
<td>2B.46</td>
</tr>
<tr>
<td>G66-21B(CA)</td>
<td>None</td>
<td>Electric Vehicle Charging Station symbol</td>
<td>21.03</td>
</tr>
<tr>
<td>G66-21C(CA)</td>
<td>None</td>
<td>FAST Electric Vehicle Charging Station (header plaque)</td>
<td>21.03</td>
</tr>
<tr>
<td>None</td>
<td>D9-11b</td>
<td>(DELETED) Electric Vehicle Charging</td>
<td>21.02</td>
</tr>
<tr>
<td>None</td>
<td>D9-11bP</td>
<td>(DELETED) ELECTRIC VEHICLE CHARGING (plaque)</td>
<td>21.02</td>
</tr>
<tr>
<td>Figure 3B-108(CA)</td>
<td>None</td>
<td>Electric Vehicle Charging Station Pavement Marking Details (optional for 12” and 6” high word messages)</td>
<td>3B.20</td>
</tr>
</tbody>
</table>

**IMPLEMENTATION**

In this section, for purposes of clarity, italic text is used to denote text that is being added to the CA MUTCD. All other formatting as defined under the Definitions section of this Policy Directive is still applicable.

The following policies shall be included in the CA MUTCD, as follows:

**Section 2B.46 Parking, Standing, and Stopping Signs (R7 and R8 Series)**

**Electric Vehicle Charging Station Signs**

**Standard:**

\[84\] If used, the Electric Vehicle Charging Station Tow-Away (R112(CA)) sign shall be placed immediately adjacent to, and visible from, the charging station stall or space, or at each entrance to an off-street parking facility to inform motorists that their vehicles will be towed away if parked in designated stalls or spaces without being connected for electric charging purposes. The sign shall include the address where the towed vehicle can be reclaimed and the telephone number of the local traffic law enforcement agency. Refer to CVC 22511.

**Option:**

\[85\] Local agencies may, at their discretion, include CVC Section 22511 or local municipal code section, or ordinance number on the Electric Vehicle Charging Station Tow-Away R112(CA) sign.
IMPLEMENTATION (continued)

Section 2B.46 Parking, Standing, and Stopping Signs (R7 and R8 Series)

Electric Vehicle Charging Station Signs

Standard:

86 If used, the No Parking (symbol) EXCEPT FOR EV CHARGING (R113(CA)), or the No Parking (symbol) EXCEPT FOR ELECTRIC VEHICLE CHARGING (R113A(CA)) sign shall be placed immediately adjacent to, and visible from, each charging station stall or space.

87 If used, the __HOUR EV CHARGING __AM TO __PM (R114(CA)), or the __HOUR ELECTRIC VEHICLE CHARGING __AM TO __PM (R114A(CA)) sign shall be placed immediately adjacent to, and visible from, each charging station stall or space to identify the allowable time limit where electric vehicles may be connected, depending upon what time limitations for charging apply to each charging station.

Section 2I.03 General Service Signs for Freeways and Expressways

Electric Vehicle Charging Station Signs (G66-21(CA), G66-21A(CA), G66-21B(CA), G66-21C(CA))

Guidance:

34 To avoid misleading the road user, those services that are more than 0.5 mile from the access point on the major route to the service, should have a Distance with Arrow (G66-21A(CA)) plaque installed below the service sign.

Option: (in Paragraph 41, subpart #13)

13. Where hydrogen (HYD) fuel is available, the Hydrogen (G66-22G(CA)) symbol sign and HYDROGEN (G66-22H(CA)) supplemental plaque may be used within 3 miles of a State highway and be available to the public at least 16 hours a day, in addition to the other appropriate signs.

Option:

43 The Electric Vehicle Charging Station (G66-21B(CA) symbol sign, or the ELECTRIC VEHICLE CHARGING STATION (G66-21(CA)) sign may be used for Electric Vehicle Charging Stations within 3 miles of a State highway and be available to the public at least 16 hours a day.

Standard:

44 Follow-up signing, if necessary, shall be placed by local agencies before signs are placed on the State highway.

Option:

45 The Distance with Arrow (G66-21A(CA)) plaque may be used to supplement the G66-21(CA), or G66-21B(CA) sign to provide distance and directional information to the motorist. It may also be used with other general service signs (See Paragraph 34).

45a The FAST (G66-21C(CA)) header plaque may be used to supplement the G66-21(CA), or G66-21B(CA) sign to indicate that a Fast Electric Vehicle Charging Station is located off the State highway.

Support:

45b A Fast Electric Vehicle Charging Station is where the rate of battery electric charging is at least 20 kWh in a 30-minute period. Fast charging stations include direct current (DC) fast charging and battery switching.
IMPLEMENTATION (continued)

Section 3B.20 Pavement Word, Symbol, and Arrow Markings

Electric Vehicle Charging Station Markings

Option:

Electric vehicle charging stations in off-street locations may be marked with white EV CHARGING ONLY, or ELECTRIC VEHICLE CHARGING ONLY pavement markings (See details in Figure 3B-108(CA)) to supplement Electric Vehicle Charging Station signs in Section 2B.46 and 2I.03.

For regulatory sign thumbnail graphics and sign codes added to Figure 2B-24(CA), and new entries to Table 2B-1(CA), see Attachment #1. For pavement markings Figure 3B.108(CA), see attachments #10 and #11.

The proposed changes will require deletion of two existing national MUTCD signs, shown in Figure 2I-1 and in Table 2I-1. Currently there is no existing policy language for these two signs. Figure 2I-1(CA) will be edited to include G66-21B(CA) and G66-21C(CA) thumbnail graphics and new sign codes, and Table 2I-1(CA) will be amended to include the following new entries:

<table>
<thead>
<tr>
<th>Sign or Plaque</th>
<th>Sign Designation</th>
<th>Section</th>
<th>Conventional Road</th>
<th>Freeway or Expressway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric Vehicle Charging</td>
<td>D9-11b</td>
<td>2I.02</td>
<td>24 x 24</td>
<td>30 x 30</td>
</tr>
<tr>
<td>Electric Vehicle Charging (plaque)</td>
<td>D9-11bP</td>
<td>2I.02</td>
<td>24 x 18</td>
<td>30 x 24</td>
</tr>
<tr>
<td>Electric Vehicle Charging Station</td>
<td>G66-21B(CA)</td>
<td>2I.03</td>
<td>24 x 24</td>
<td>30 x 30</td>
</tr>
<tr>
<td>FAST (header plaque)</td>
<td>G66-21C(CA)</td>
<td>2I.03</td>
<td>24 x 6</td>
<td>30 x 8</td>
</tr>
</tbody>
</table>
DELEGATION

No new delegations of authority are created under this policy.

BACKGROUND

The revision of existing signs and inclusion of new signs and markings in the CA MUTCD is a common practice based upon need. Caltrans, pursuant to CVC Section 21400; must conduct public hearings before it can revise existing policies for traffic control devices and approve new signs for use on public roadways. The California Traffic Control Devices Committee (CTCDC) is the forum used to satisfy this requirement.


Agenda Item 12-23, Zero Emission Vehicle Signs and Pavement Markings, was presented as an action item to the CTCDC on December 6, 2012 in Santa Cruz, California. Per discussion at the public hearing, the CTCDC recommended adoption of the electric vehicle signs as proposed in the agenda, with minor suggestions. First, make the use of these signs as optional, which means it is up to local agencies whether they want to install signs or not. The sign specification for the Tow-Away sign will list CVC 22511 or local ordinance on the sign. Second, spell out “ELECTRIC VEHICLE” so agencies have the option to use the “Acceptable Abbreviation” EV (per CA MUTCD, Table 1A-1) or ELECTRIC VEHICLE on both regulatory signs and optional pavement markings. The adopted new policy language provides both the abbreviated and spelled-out language on signs and pavement markings.

DEFINITIONS

When used in this Traffic Operations Policy Directive, the text shall be defined as follows:

1) **Standard** – a statement of required, mandatory or specifically prohibited practice. All standards text appears in **bold** type. The verb **shall** is typically used. Standards are sometimes modified by Options.

2) **Guidance** – a statement of recommended, but not mandatory, practice in typical situations, with deviations allowed if engineering judgment or engineering study indicates the deviation to be appropriate. All Guidance statements text appears in **underline** type. The verb **should** is typically used. Guidance statements are sometime modified by Options.

3) **Option** – a statement of practice that is a permissive condition and carries no requirement or recommendation. Options may contain allowable modifications to a Standard or Guidance. All Option statements text appears in normal type. The verb may is typically used.

4) **Support** – an informational statement that does not convey any degree of mandate, recommendation, authorization, prohibition, or enforceable condition. Support statements text appears in normal type. The verbs shall, should and may are not used in Support statements.
ATTACHMENTS

1. 2012 CA MUTCD edits to include regulatory sign thumbnail graphics, sign codes and sizes:  
   **Figure 2B-24(CA). Parking and Standing Signs and Plaques (R7 Series), & Table 2B-1(CA). California Regulatory Sign and Plaque Sizes**

2. Sign specification R112(CA)  
   Electric Vehicle Charging Station Tow-Away sign

3. Sign specification R113(CA)  
   No Parking EXCEPT FOR EV CHARGING sign

4. Sign specification R113A(CA)  
   No Parking EXCEPT FOR ELECTRIC VEHICLE CHARGING sign

5. Sign specification R114(CA)  
   __HOUR EV CHARGING __AM TO __PM sign

6. Sign specification R114A(CA)  
   __HOUR ELECTRIC VEHICLE CHARGING __AM TO __PM sign

7. Sign specification G66-21B(CA)  
   Electric Vehicle Charging Station symbol sign

8. Symbol grid G66-21B(CA)  
   Electric Vehicle Charging Station symbol sign

9. Sign specification G66-21C(CA)  
   FAST header plaque

10. 2012 CA MUTCD edits to include new pavement marking detail:  
    **Figure 3B-108(CA) Electric Vehicle Charging Station Pavement Marking Details**  
    “EV CHARGING ONLY” in 12-inch high letters

11. 2012 CA MUTCD edits to include new pavement marking detail:  
    **Figure 3B-108(CA) Electric Vehicle Charging Station Pavement Marking Details**  
    “ELECTRIC VEHICLE CHARGING ONLY” in 6-inch high letters
Attachment #1: 2012 CA MUTCD edits to include regulatory sign thumbnail graphics, sign codes & sizes:

**Figure 2B-24(CA). Parking and Standing Signs and Plaques (R7 Series)**

![Parking and Standing Signs and Plaques (R7 Series)](image)

**Table 2B-1(CA). California Regulatory Sign and Plaque Sizes**

<table>
<thead>
<tr>
<th>Sign or Plaque</th>
<th>Sign Designation</th>
<th>Section</th>
<th>Conventional Road</th>
<th>Expressway</th>
<th>Freeway</th>
<th>Minimum</th>
<th>Oversized</th>
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<td></td>
<td></td>
<td>Single Lane</td>
<td>Multi-Lane</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric Vehicle Charging Station Tow-Away</td>
<td>R112(CA)</td>
<td>2B.46</td>
<td>*</td>
<td>*</td>
<td>-</td>
<td>-</td>
<td>24 x 24</td>
</tr>
<tr>
<td>No Parking EXCEPT FOR EV CHARGING</td>
<td>R113(CA)</td>
<td>2B.46</td>
<td>*</td>
<td>*</td>
<td>-</td>
<td>-</td>
<td>12 x 18</td>
</tr>
<tr>
<td>No Parking EXCEPT FOR ELECTRIC VEHICLE CHARGING</td>
<td>R113A(CA)</td>
<td>2B.46</td>
<td>*</td>
<td>*</td>
<td>-</td>
<td>-</td>
<td>12 x 18</td>
</tr>
<tr>
<td><em>HOUR EV CHARGING AM TO PM</em></td>
<td>R114(CA)</td>
<td>2B.46</td>
<td>*</td>
<td>*</td>
<td>-</td>
<td>-</td>
<td>12 x 18</td>
</tr>
<tr>
<td><em>HOUR ELECTRIC VEHICLE CHARGING AM TO PM</em></td>
<td>R114A(CA)</td>
<td>2B.46</td>
<td>*</td>
<td>*</td>
<td>-</td>
<td>-</td>
<td>12 x 21</td>
</tr>
</tbody>
</table>

* Note: Electric Vehicle (EV) Charging Station regulatory signs are for off-street EV charging station use, per CVC 22511 and local ordinance.

**ADA Notice**
For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 653-3657 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS89, Sacramento, CA 95814.
UNAUTHORIZED VEHICLES NOT CONNECTED FOR ELECTRIC CHARGING PURPOSES WILL BE TOWED AWAY AT THE OWNER’S EXPENSE
RECLAIM TOWED VEHICLES AT
(Insert Address)
OR BY TELEPHONING
(Insert Telephone Number)
CVC 22511

R112 (CA)

NOTES: Specify address, telephone number, and optional CVC/ordinance information when ordering.
Use R107 GRID (CA) for TOW AWAY symbol.

COLORS: BORDER & LEGEND - RED (RETROREFLECTIVE)
BACKGROUND - WHITE (RETROREFLECTIVE)
ADDRESS, TELEPHONE NUMBER, & OPTIONAL CVC/ORDINANCE LEGEND - BLACK

3/14/13
**R113 (CA)**

ENGLISH UNITS

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>J</th>
<th>K</th>
<th>L</th>
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<td>.25</td>
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<td>3</td>
<td>6E</td>
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<td>4.5</td>
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COLORS: BORDER, CIRCLE, DIAGONAL & LEGEND - RED (RETROREFLECTIVE)  
LETTER - BLACK  
BACKGROUND - WHITE (RETROREFLECTIVE)

3/14/13
EXCEPT FOR ELECTRIC VEHICLE CHARGING

R113A (CA)

ENGLISH UNITS

<p>| | | | | | | | | | | | |</p>
<table>
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COLORS: BORDER, CIRCLE, DIAGONAL & LEGEND - RED (RETROREFLECTIVE)
LETTER - BLACK
BACKGROUND - WHITE (RETROREFLECTIVE)

3/14/13
NOTE: Specify number of hours and times when ordering.

R114 (CA)

ENGLISH UNITS

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<thead>
<tr>
<th>A</th>
<th>B</th>
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<th>D</th>
<th>E</th>
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<td>1.75C</td>
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COLORS: BORDER & LEGEND - GREEN (RETROREFLECTIVE)
BACKGROUND - WHITE (RETROREFLECTIVE)

3/14/13
NOTE: Specify number of hours and times when ordering.

R114A (CA)

ENGLISH UNITS

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<tr>
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<th>C</th>
<th>D</th>
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</table>

COLORS: BORDER & LEGEND - GREEN (RETROREFLECTIVE)
BACKGROUND - WHITE (RETROREFLECTIVE)

3/14/13
* Optically space the “EV” letters vertically with the charging unit.

G66-21B (CA)

ENGLISH UNITS

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COLORS: BORDER & SYMBOL - WHITE (RETROREFLECTIVE)
LEGEND & BACKGROUND - BLUE (RETROREFLECTIVE)

3/14/13
G66-21C (CA)

ENGLISH UNITS

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COLORS: BORDER & LEGEND - WHITE (RETROREFLECTIVE)
BACKGROUND - BLUE (RETROREFLECTIVE)

3/14/13
Figure 3B-108 (CA). Electric Vehicle Charging Station Pavement Marking Details (Sheet 1 of 2)
Figure 3B-108 (CA). Electric Vehicle Charging Station Pavement Marking Details (Sheet 2 of 2)