

Agenda Date: August 16, 2018
Agenda Placement: Regular
Estimated Time: 10 Minutes
Continued Item: No

Board Agenda Item

TO: Air Pollution Control District Board

FROM: Aeron Arlin Genet, Air Pollution Control Officer

CONTACT: Alex Economou, Air Quality Specialist (961-8894)

SUBJECT: Electric Vehicle Charging Station Infrastructure Program

RECOMMENDATION:

Establish the Fiscal Year 2018-19 Electric Vehicle Charging Station Infrastructure Program spending limit at an amount not to exceed \$135,000 that includes:

- a) Grants for public entity projects; and
- b) Grants for private and nonprofit entity projects located at multi-unit dwellings with 20 or more units.

BACKGROUND:

Air pollutants emitted from mobile sources such as passenger vehicles, transit buses, trucks and school buses are generally outside of the District's regulatory scope. However, the District has actively pursued a variety of programs to reduce emissions from these sources. One such program is the District's Electric Vehicle Charging Station Infrastructure Program (EVCS Program), which has been implemented since 2011 with a goal of accelerating the adoption of zero emission vehicles by offering more and convenient vehicle fueling options. At the state level, Governor Brown signed Executive Order B-48-18 in January 2018, setting a target of at least 5 million zero emission vehicles on California roads by 2030 and installation of 250,000 electric vehicle charging stations by 2025. Currently there are over 400,000 electric vehicles on the road and approximately 4,500 public charging stations in California¹. In Santa Barbara

¹ Electric vehicles: www.veloz.org/. Charging stations: U.S. Department of Energy Alternative Fuels Data Center, www.afdc.energy.gov/stations/#/find/nearest.

County there are currently approximately 2,200 electric vehicles on the road, and close to 100 public charging stations.

The District has been involved in several collaborative planning efforts to promote electric vehicle adoption in the tri-counties area. One such effort that the District is a part of is Plug-in Central Coast (PCC), which was initiated in 2011 as the regional plug-in electric vehicle council for Santa Barbara, San Luis Obispo and Ventura Counties. In 2014, the PCC steering committee obtained grants from the U.S. Department of Energy and the California Energy Commission to prepare a Plug-in Electric Vehicle Readiness Plan for the Central Coast in order to guide the development of electric vehicle charging infrastructure for the tri-counties area. Building off of that readiness plan, PCC is currently collaborating on another California Energy Commission grant entitled Central Coast Go-Zero: Zero Emission Vehicle Readiness Implementation in the Tri-Counties. These planning efforts have coincided well with the EVCS Program over the years, helping to guide the District's outreach efforts and identify locations with the greatest need for EVCS infrastructure.

DISCUSSION:

On December 19, 2011, your Board established the EVCS Program with an initial budget of \$100,000 to be expended on projects with public entities. On December 17, 2015 your Board adopted Resolution No. 15-26 to delegate authority to the Control Officer to enter into grant agreements to provide funding to public entities, tax-exempt nonprofit organizations, and private entities for the EVCS program. At that time, an additional \$200,000 was authorized by the Board for the EVCS program, with not more than \$50,000 to be expended on private entities, not more than \$100,000 to be expended on private and nonprofit entities combined, and up to \$200,000 to be expended on public entities. For private entities, the maximum funding amount was set at \$7,500 and \$15,000 towards the purchase and/or installation of a Level 2 or Level 3 charging station, respectively. For nonprofit and public entities, the maximum funding amount was set at \$10,000 and \$20,000 towards the purchase and/or installation of a Level 2 or Level 3 charging station, respectively. The District also established station siting requirements, including location and 24/7 accessibility. Resolution 15-26 includes the grant program requirements and is included as Attachment A, for reference.

Since its inception in 2011, the EVCS program has provided funding to 25 electric vehicle charging stations throughout Santa Barbara County. A summary of the EVCS program grants issued to date is included in the table below. This table demonstrates that the \$100,000 limit for private and nonprofit entity projects was expended.

EV Charging Station Program Summary			
Grantee	Type	Equipment	Amount
City of Santa Barbara (SB Harbor)	Public	Level 2 (2 stations, 2 ports)	\$ 7,949
UCSB (Lot #18 / Lot #22)	Public	Level 2 (4 stations, 8 ports)	\$ 16,344
Peabody Charter School	Public	Level 2 (1 station, 2 ports)	\$ 19,295
City of Goleta	Public	Level 3 (1 station, 2 ports)	\$ 17,283
UCSB (Lot #10)	Public	Level 2 (4 stations, 8 ports)	\$ 34,364
City of Guadalupe	Public	Level 2 (1 station, 2 ports)	\$ 6,292
US Green Vehicle Council: Buellton Sideways Inn	Nonprofit	Level 2 (1 station, 2 ports) Level 3 (1 station, 1 port)	\$ 30,000
US Green Vehicle Council: Lompoc Embassy Suites	Nonprofit	Level 2 (1 station, 2 ports) Level 3 (1 station, 1 port)	\$ 30,000
US Green Vehicle Council: Santa Maria Travelodge	Nonprofit	Level 2 (1 station, 2 ports) Level 3 (1 station, 1 port)	\$ 30,000
BMW of Santa Maria	Private	Level 3 (2 stations, 2 ports)	\$ 10,000
Goleta Water District	Public	Level 2 (1 station, 2 ports)	\$ 10,000
Santa Barbara MTD	Public	Level 2 (1 station, 2 ports)	\$ 4,000
SBCC (Lot 5-4)	Public	Level 2 (2 stations, 4 ports)	\$ 20,000
Balance			\$ 235,527

Over the past few years, staff has received significant interest in grant funding from private and tax-exempt nonprofit owners of multi-unit dwellings. According to the U.S. Department of Energy, drivers of electric vehicles do more than 80% of their charging at home (www.energy.gov/eere/electricvehicles/charging-home). Increasing the availability of electric vehicle charging stations at multi-unit dwellings provides Santa Barbara County residents with more transportation fueling options and allows for additional reductions of mobile source emissions. This provides a direct community health benefit, and also helps achieve the District's clean air goals.

The Board-approved budget for Fiscal Year 2018-19 includes a total of \$135,000 earmarked for the expansion of electric vehicle infrastructure throughout the region. Today, staff proposes that the prior EVCS Program spending limit be replaced with a new limit that is equal to the \$135,000 budgeted amount. Staff proposes that this funding be allocated to public entity projects, and also to private and tax-exempt nonprofit entity projects as long as those projects are located at multi-unit dwellings with at least 20 units. All program requirements, including individual grant amount limits and the requirement for charging stations to be publicly accessible on a 24/7 basis, will continue to apply.

FISCAL IMPACT:

The fiscal impact to expand the EVCS program is an amount not to exceed \$135,000, and was included in the Fiscal Year 2018-19 budget approved by your Board at the June 21, 2018 meeting. This program utilizes local mitigation funds.

ATTACHMENT:

- EVCS Infrastructure Program Board Resolution No. 15-26

**RESOLUTION OF THE BOARD OF DIRECTORS OF
THE SANTA BARBARA COUNTY
AIR POLLUTION CONTROL DISTRICT**

IN THE MATTER OF ELECTRIC
VEHICLE CHARGING STATION
INFRASTRUCTURE PROGRAM
MODIFICATIONS

APCD RESOLUTION NO. 15-26

RECITALS

WHEREAS, the Board recognizes that an Electric Vehicle Charging Station Infrastructure Program will provide an incentive to expand the use of electric vehicles and thus reduce emissions of air pollution; and

WHEREAS, the Board is to retain authority over the Electric Vehicle Charging Station Infrastructure Program parameters and spending authority; and

WHEREAS, the Board in Resolution 09-14 has delegated authority to the Air Pollution Control Officer to enter into and approve certain grant agreements for emissions reduction projects within specified parameters; and

WHEREAS, the Board waives the requirement to meet a cost-effectiveness criteria for projects funded pursuant to the Electric Vehicle Charging Station Infrastructure Program; and

WHEREAS, the Board in Resolution 11-05, dated May 19, 2011, delegated authority to the Control Officer to enter into grant agreements with public entities for electric vehicle charging station grants provided the individual grant did not exceed one hundred thousand dollars (\$100,000) and no more than \$10,000 was granted for any one electric vehicle charging station; and

WHEREAS, the Board intends to repeal and replace Resolution 11-05 with the adoption of this Resolution.



U.S. Department
of Transportation
Federal Highway
Administration

Memorandum

Subject: **INFORMATION:** Regulatory Signs for
Electric Vehicle Charging and Parking
Facilities

Date: JUN 17 2013

From: Jeffrey A. Lindley
Associate Administrator for Operations

In Reply Refer To:
HOTO-1

To: Division Administrators
Directors of Field Services
Director of Technical Services
Resource Center Director

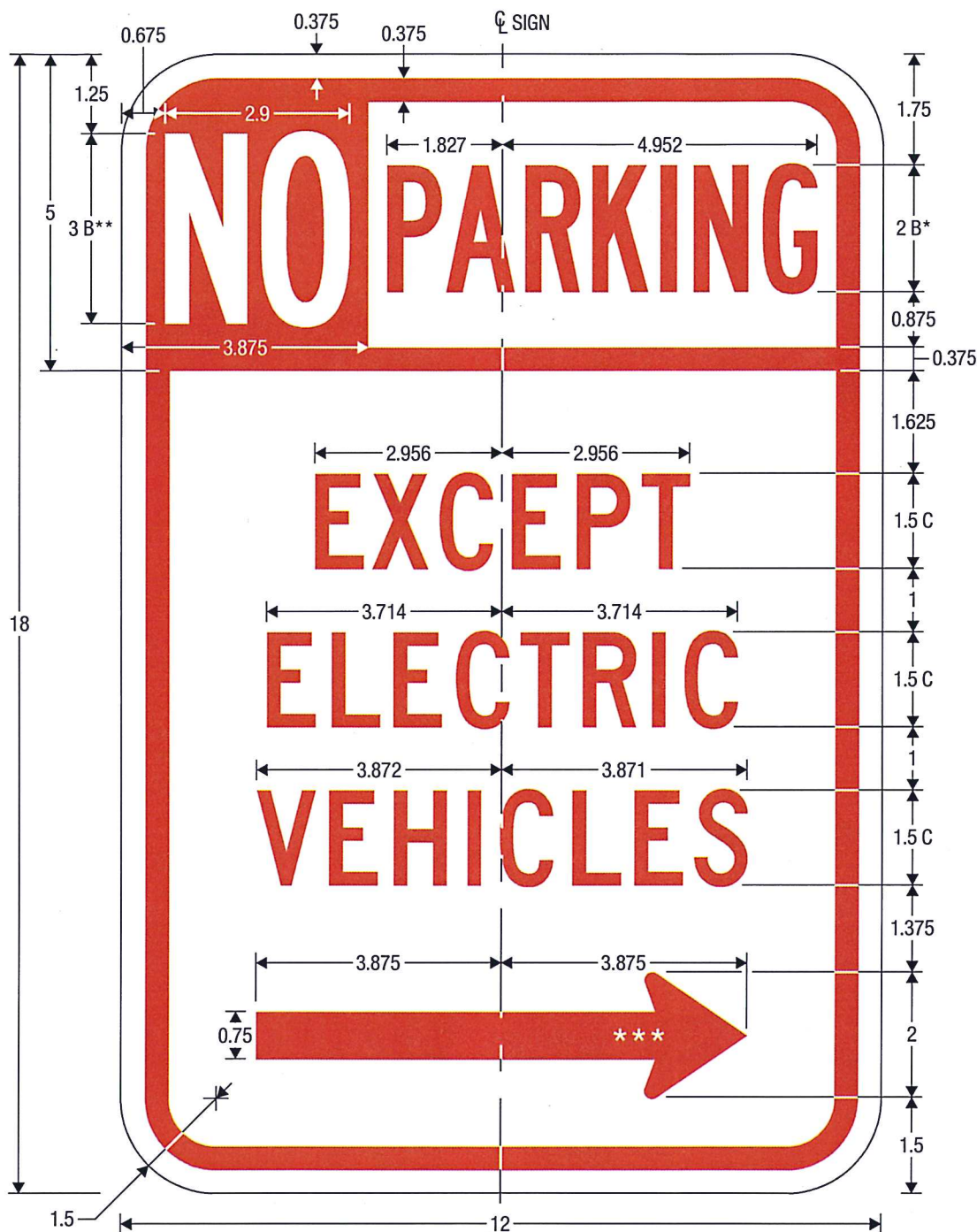
A number of agencies are installing electric vehicle charging facilities at on-street parking locations as electric vehicles become more prevalent in the vehicle fleet. Due to variations in local regulations, and the lack of standard signing for such a condition in the current *Manual on Uniform Traffic Control Devices for Streets and Highways* (MUTCD), there are extreme variations in the legends and formats of the official traffic signs being installed.

While signs with word legends not currently in the MUTCD are allowed to be developed by transportation agencies without the need for official experimentation under the MUTCD provisions, this Policy is intended to promote a level of uniformity among the regulatory signing for on-street electric vehicle charging and parking sites. The Federal Highway Administration intends to include standard regulatory signing for this purpose in the next Notice of Proposed Amendment to the MUTCD. Until such time as a proposal is published, the signs and optional plaques detailed in the attached are recommended for use at on-street electric vehicle charging and parking sites. The optional plaques address variations in local regulations where posting of those regulations is required.

To date, no symbol has been developed that can effectively convey regulations associated with electric vehicle charging or parking facilities, including the Electric Vehicle Charging symbols specified for use on a General Service directional sign found in the MUTCD and the Interim Approval dated April 1, 2012. Symbols that have not been adopted in the MUTCD for use in a specific application cannot be used in untested applications without approved official experimentation that includes the requisite human factors evaluation for comprehension and legibility. Accordingly, regulatory signs for electric vehicles and vehicle charging facilities display only word legends to convey the specific requirements or restrictions.

Please share this information with State and local transportation agencies. For more information or questions regarding this matter, please contact Mr. Kevin Sylvester, Office of Transportation Operations, at Kevin.Sylvester@dot.gov.

Attachments



R7-111

NO PARKING EXCEPT ELECTRIC VEHICLES

UPPER LEFT SECTION

COLORS: LEGEND, BORDER — WHITE (RETROREFLECTIVE)
 BACKGROUND — RED (RETROREFLECTIVE)

UPPER RIGHT SECTION

COLORS: LEGEND, BORDER — RED (RETROREFLECTIVE)
 BACKGROUND — WHITE (RETROREFLECTIVE)

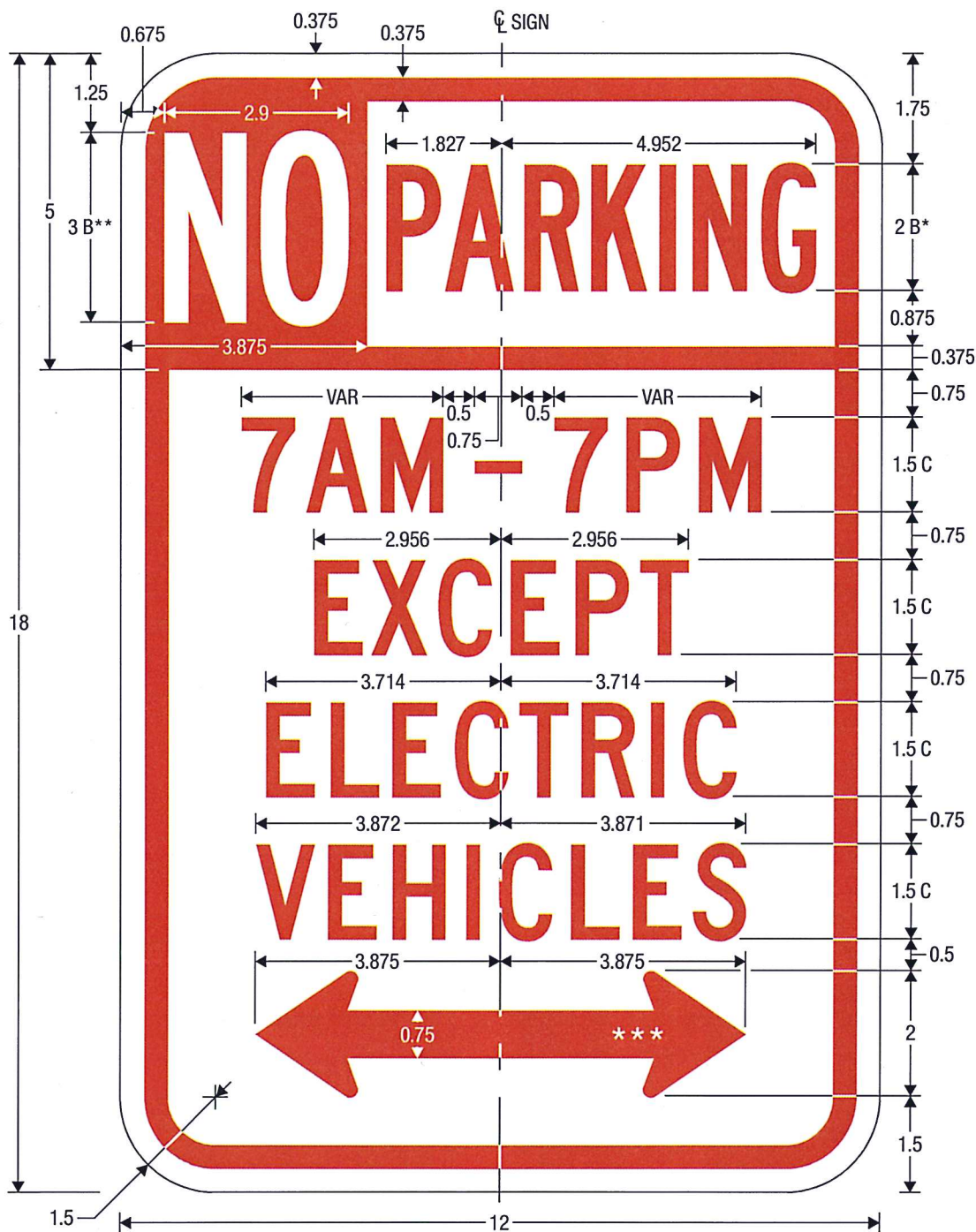
* Reduce character spacing 40%.

** Reduce character spacing 60%.

*** Type D Arrow.

LOWER SECTION

COLORS: LEGEND, BORDER — RED (RETROREFLECTIVE)
 BACKGROUND — WHITE (RETROREFLECTIVE)



R7-111a

NO PARKING EXCEPT ELECTRIC VEHICLES (PART-TIME)

UPPER LEFT SECTION

COLORS: LEGEND, BORDER — WHITE (RETROREFLECTIVE)
 BACKGROUND — RED (RETROREFLECTIVE)

UPPER RIGHT SECTION

COLORS: LEGEND, BORDER — RED (RETROREFLECTIVE)
 BACKGROUND — WHITE (RETROREFLECTIVE)

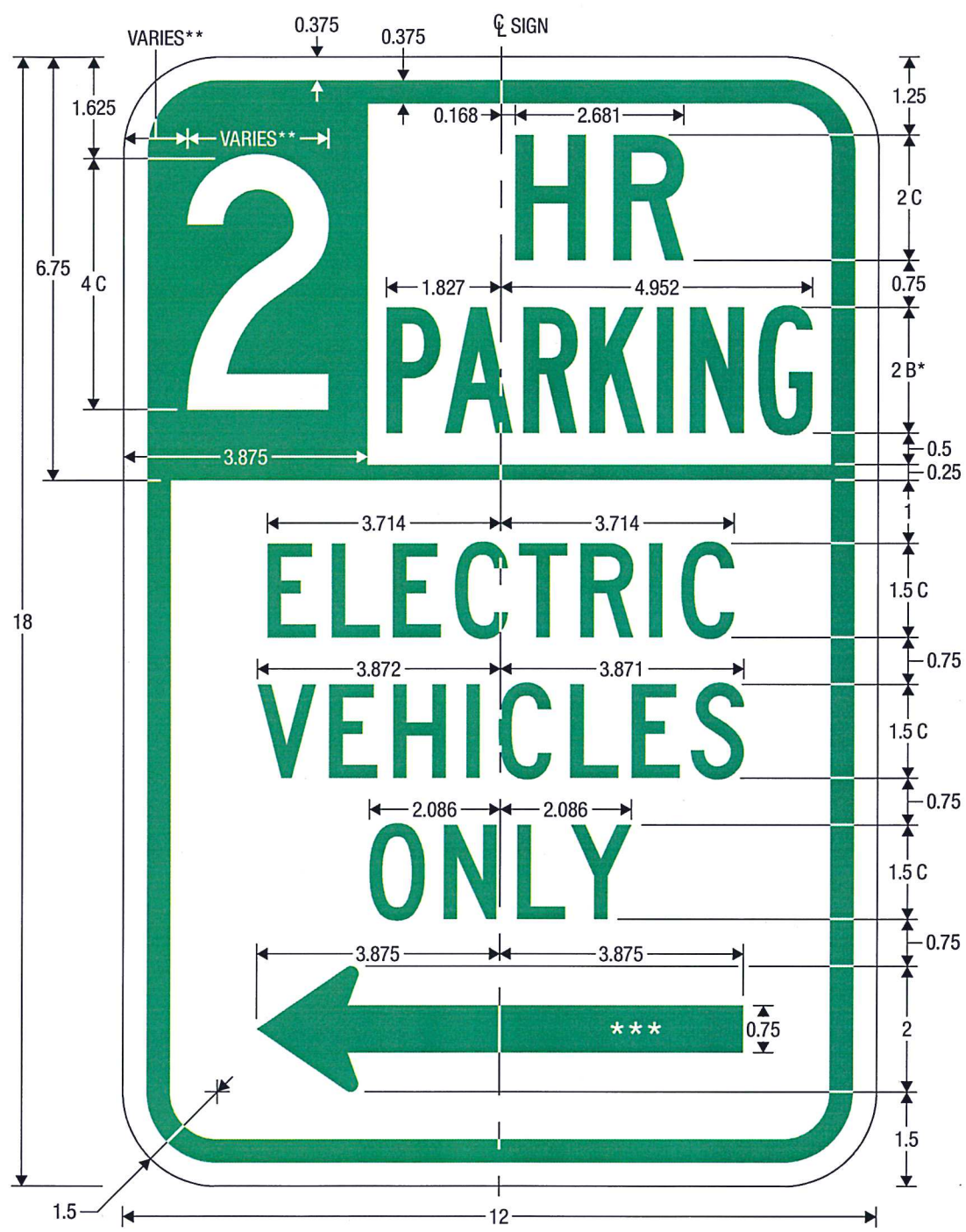
* Reduce character spacing 40%.

** Reduce character spacing 60%.

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LOWER SECTION

COLORS: LEGEND, BORDER — RED (RETROREFLECTIVE)
 BACKGROUND — WHITE (RETROREFLECTIVE)



R7-112

ELECTRIC VEHICLE PARKING (TIME LIMIT)

UPPER LEFT SECTION

COLORS: LEGEND, BORDER — WHITE (RETROREFLECTIVE)
 BACKGROUND — GREEN (RETROREFLECTIVE)

UPPER RIGHT SECTION

COLORS: LEGEND, BORDER — GREEN (RETROREFLECTIVE)
 BACKGROUND — WHITE (RETROREFLECTIVE)

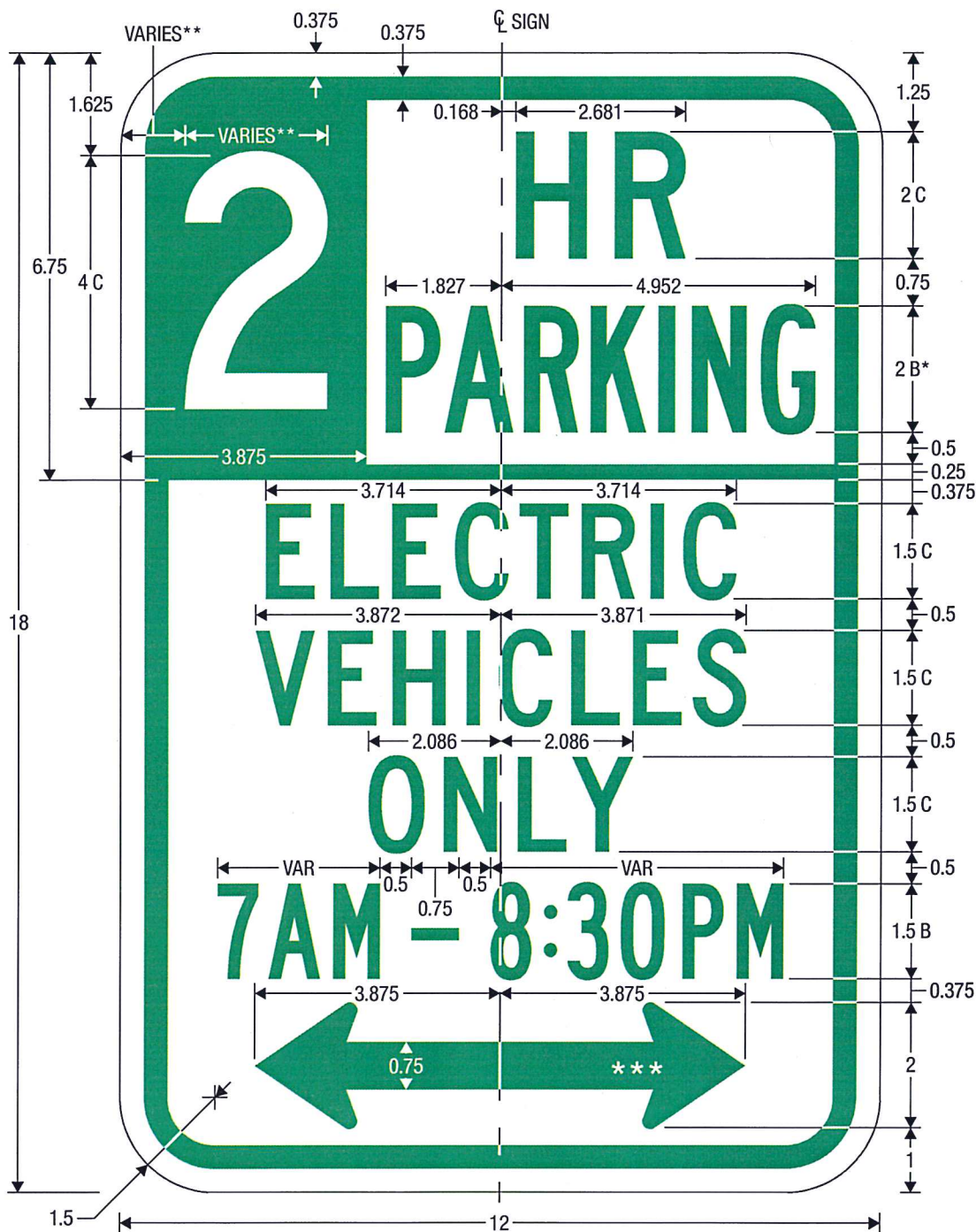
* Reduce character spacing 40%.

** Optically space numeral.

*** Type D Arrow.

LOWER SECTION

COLORS: LEGEND, BORDER — GREEN (RETROREFLECTIVE)
 BACKGROUND — WHITE (RETROREFLECTIVE)



R7-112a

ELECTRIC VEHICLE PARKING (TIME LIMIT, PART-TIME)

UPPER LEFT SECTION

COLORS: LEGEND, BORDER — WHITE (RETROREFLECTIVE)
 BACKGROUND — GREEN (RETROREFLECTIVE)

UPPER RIGHT SECTION

COLORS: LEGEND, BORDER — GREEN (RETROREFLECTIVE)
 BACKGROUND — WHITE (RETROREFLECTIVE)

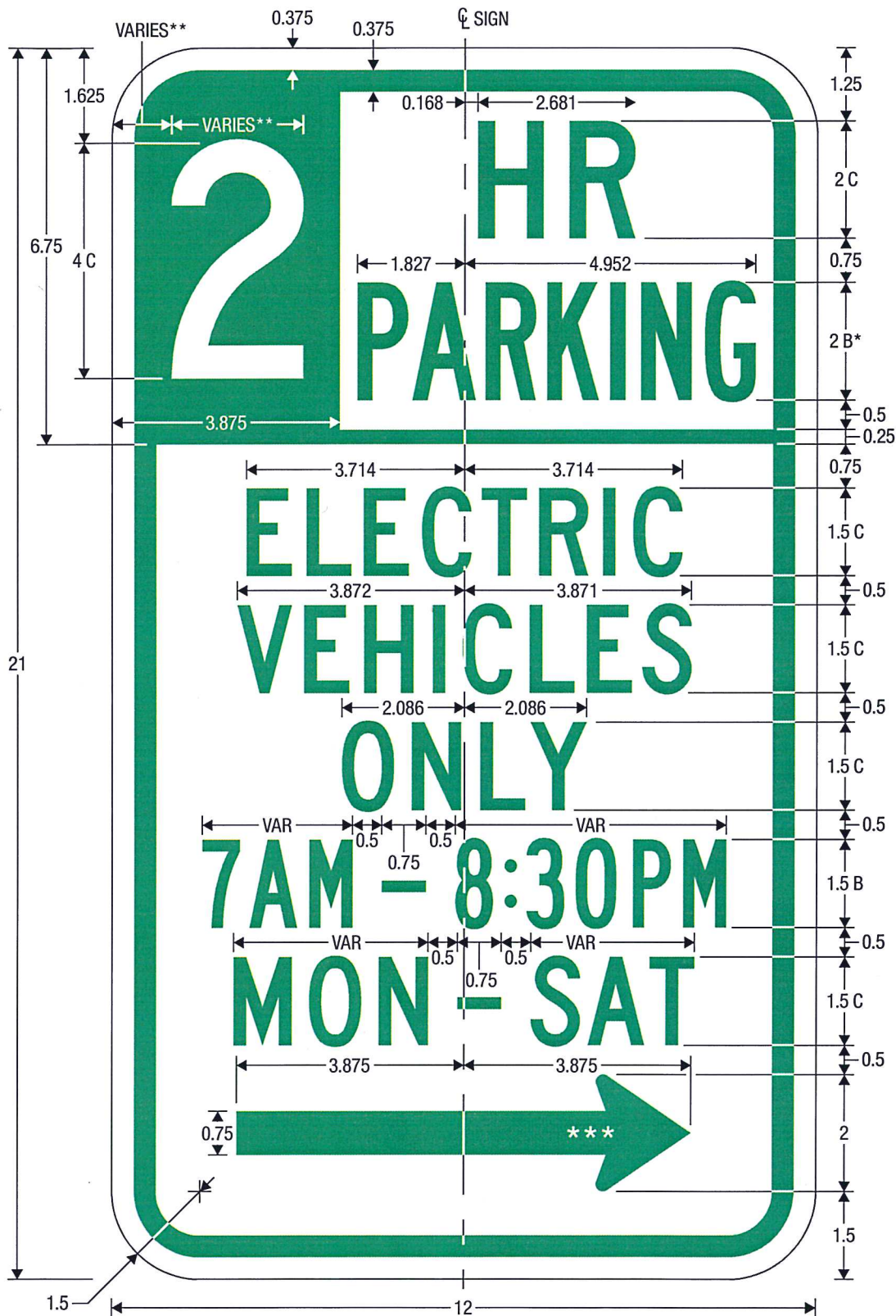
* Reduce character spacing 40%.

** Optically space numeral.

*** Type D Arrow.

LOWER SECTION

COLORS: LEGEND, BORDER — GREEN (RETROREFLECTIVE)
 BACKGROUND — WHITE (RETROREFLECTIVE)



R7-112b

ELECTRIC VEHICLE PARKING (TIME LIMIT, PART-TIME)

UPPER LEFT SECTION

COLORS: LEGEND, BORDER — WHITE (RETROREFLECTIVE)
 BACKGROUND — GREEN (RETROREFLECTIVE)

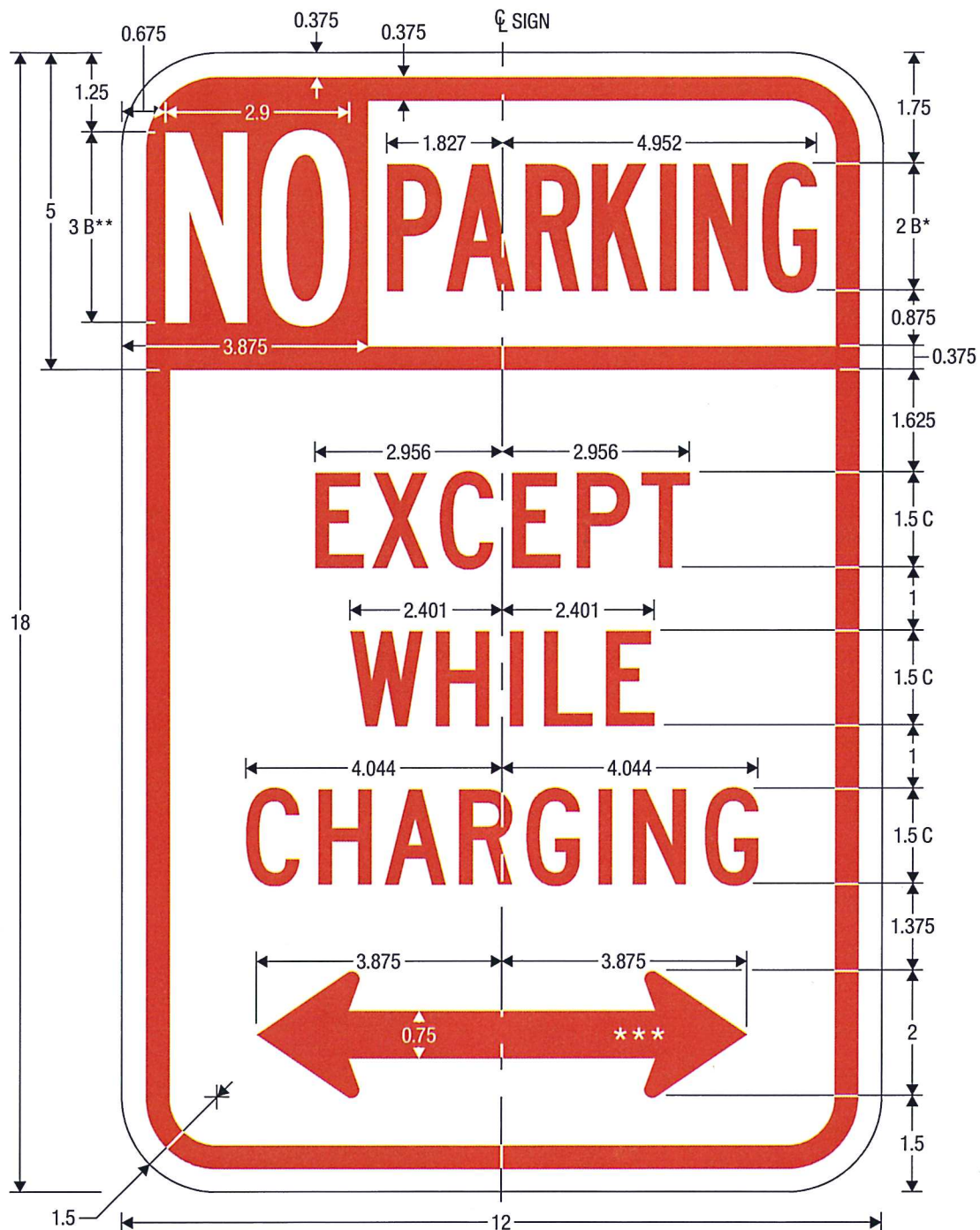
UPPER RIGHT SECTION

COLORS: LEGEND, BORDER — GREEN (RETROREFLECTIVE)
 BACKGROUND — WHITE (RETROREFLECTIVE)

LOWER SECTION

COLORS: LEGEND, BORDER — GREEN (RETROREFLECTIVE)
 BACKGROUND — WHITE (RETROREFLECTIVE)

- * Reduce character spacing 40%.
- ** Optically space numeral.
- *** Type D Arrow.



R7-113

NO PARKING EXCEPT WHILE CHARGING

UPPER LEFT SECTION

COLORS: LEGEND, BORDER — WHITE (RETROREFLECTIVE)
 BACKGROUND — RED (RETROREFLECTIVE)

UPPER RIGHT SECTION

COLORS: LEGEND, BORDER — RED (RETROREFLECTIVE)
 BACKGROUND — WHITE (RETROREFLECTIVE)

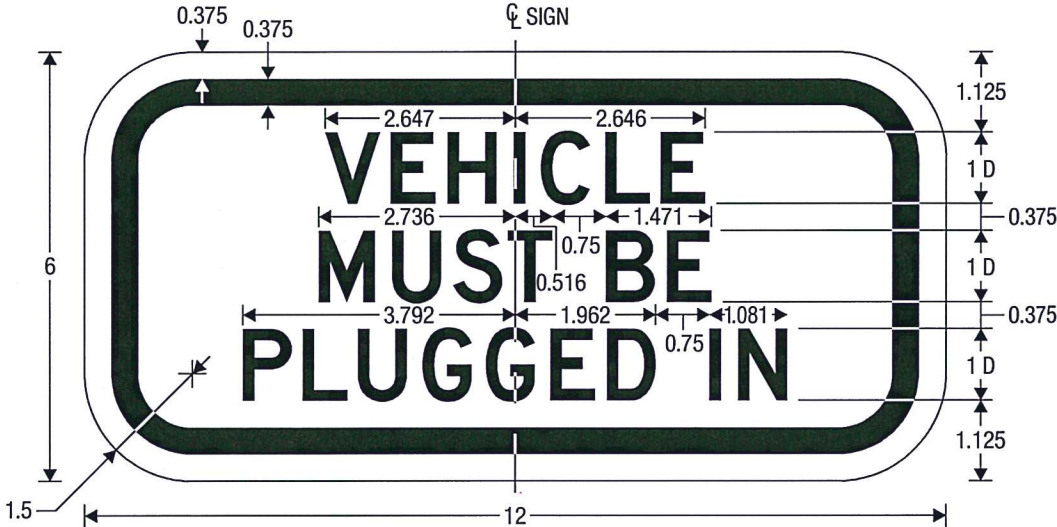
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** Reduce character spacing 60%.

*** Type D Arrow.

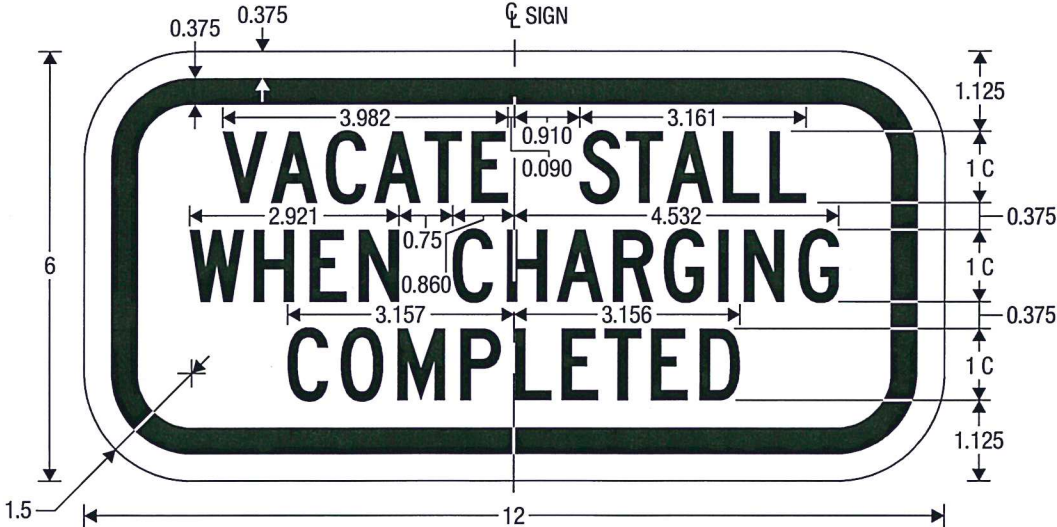
LOWER SECTION

COLORS: LEGEND, BORDER — RED (RETROREFLECTIVE)
 BACKGROUND — WHITE (RETROREFLECTIVE)



R7-113aP

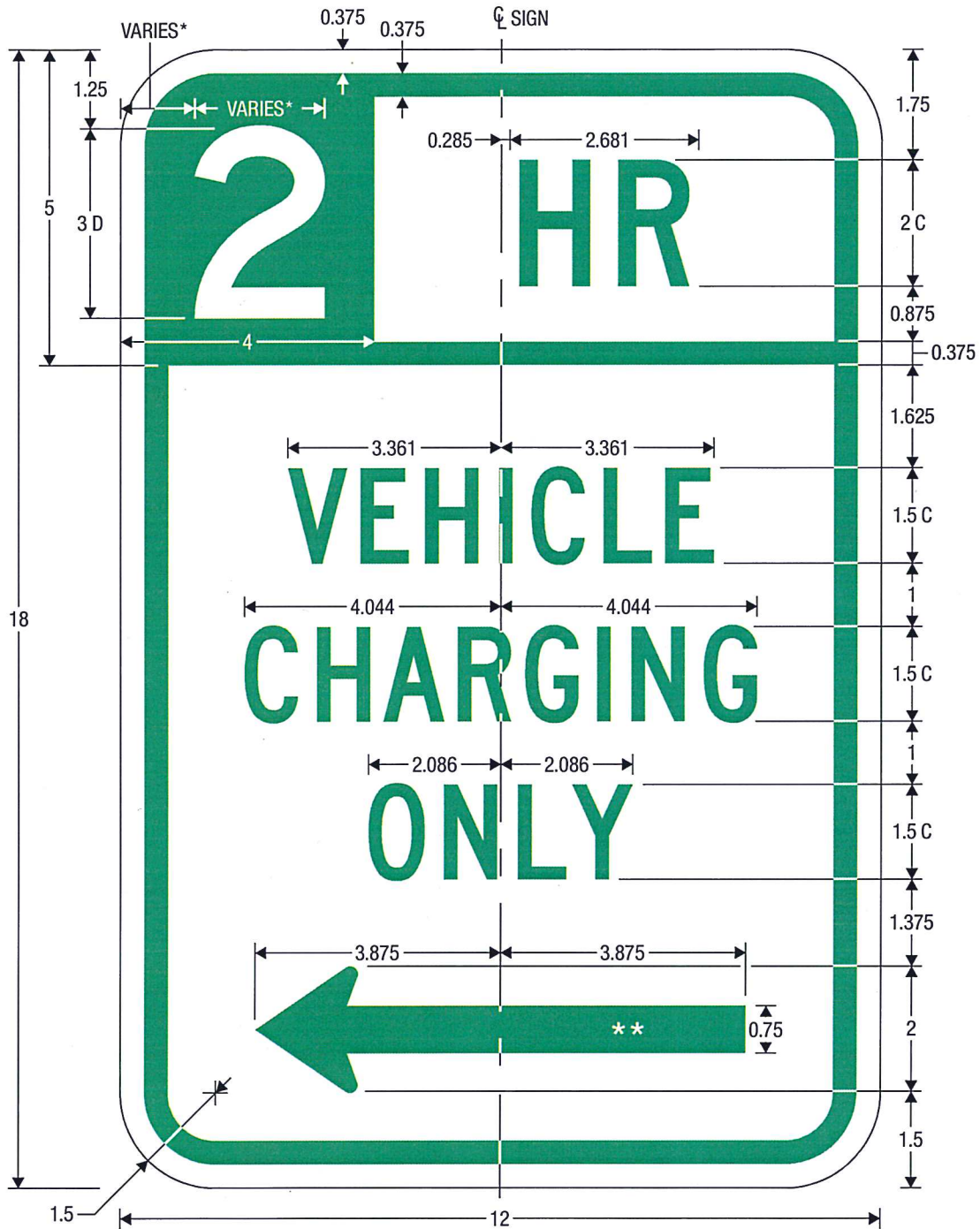
VEHICLE MUST BE PLUGGED IN (Plaque)



R7-113bP

VACATE STALL WHEN CHARGING COMPLETED (Plaque)

COLORS: LEGEND, BORDER — BLACK (RETROREFLECTIVE)
BACKGROUND — WHITE (RETROREFLECTIVE)



R7-114

VEHICLE CHARGING ONLY (TIME LIMIT)

* Optically space numeral.
 ** Type D Arrow.

UPPER LEFT SECTION

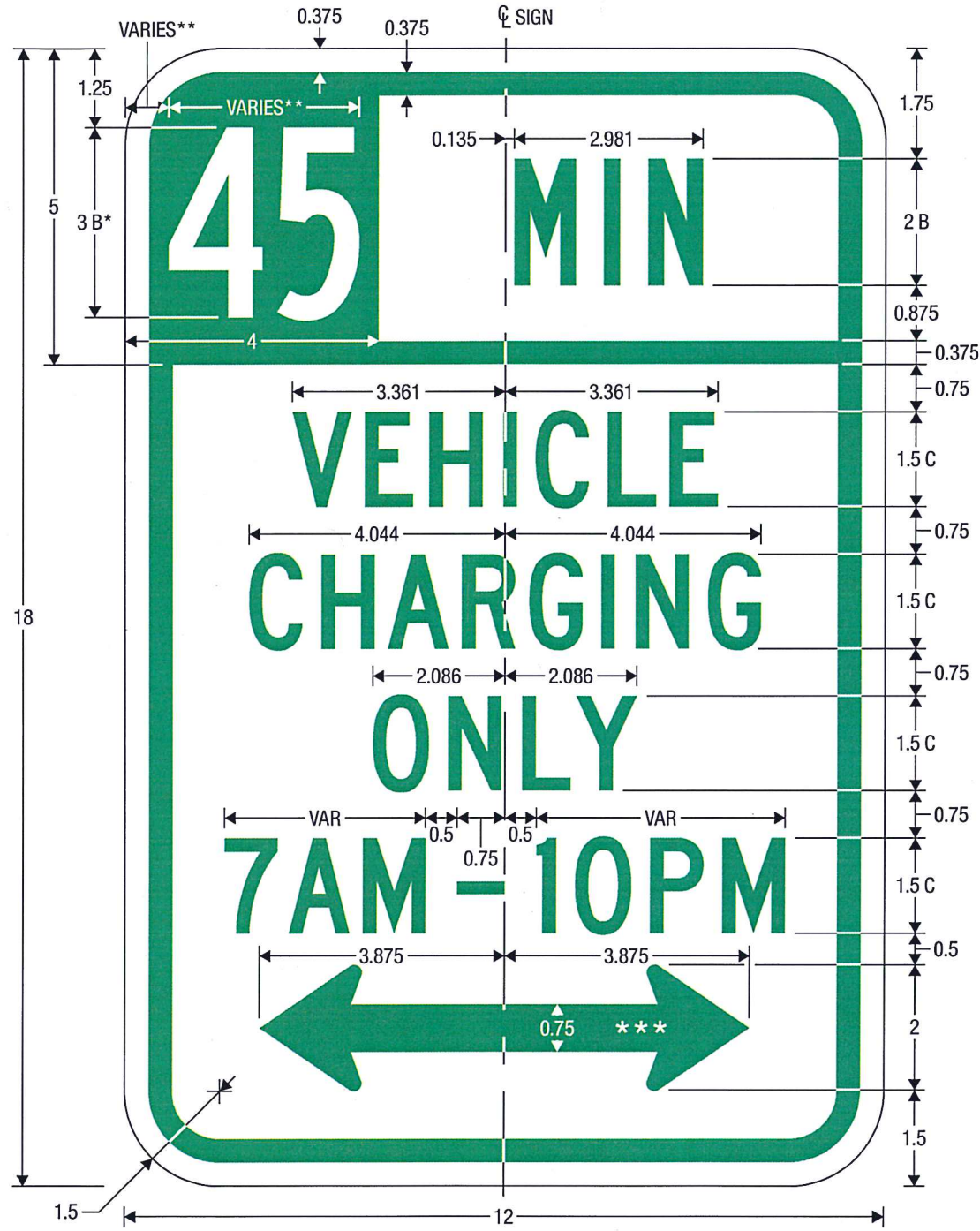
COLORS: LEGEND, BORDER — WHITE (RETROREFLECTIVE)
 BACKGROUND — GREEN (RETROREFLECTIVE)

UPPER RIGHT SECTION

COLORS: LEGEND, BORDER — GREEN (RETROREFLECTIVE)
 BACKGROUND — WHITE (RETROREFLECTIVE)

LOWER SECTION

COLORS: LEGEND, BORDER — GREEN (RETROREFLECTIVE)
 BACKGROUND — WHITE (RETROREFLECTIVE)



R7-114a

VEHICLE CHARGING ONLY (TIME LIMIT, PART-TIME)

- * Reduce character spacing 50%.
- ** Optically space numerals.
- *** Type D Arrow.

UPPER LEFT SECTION

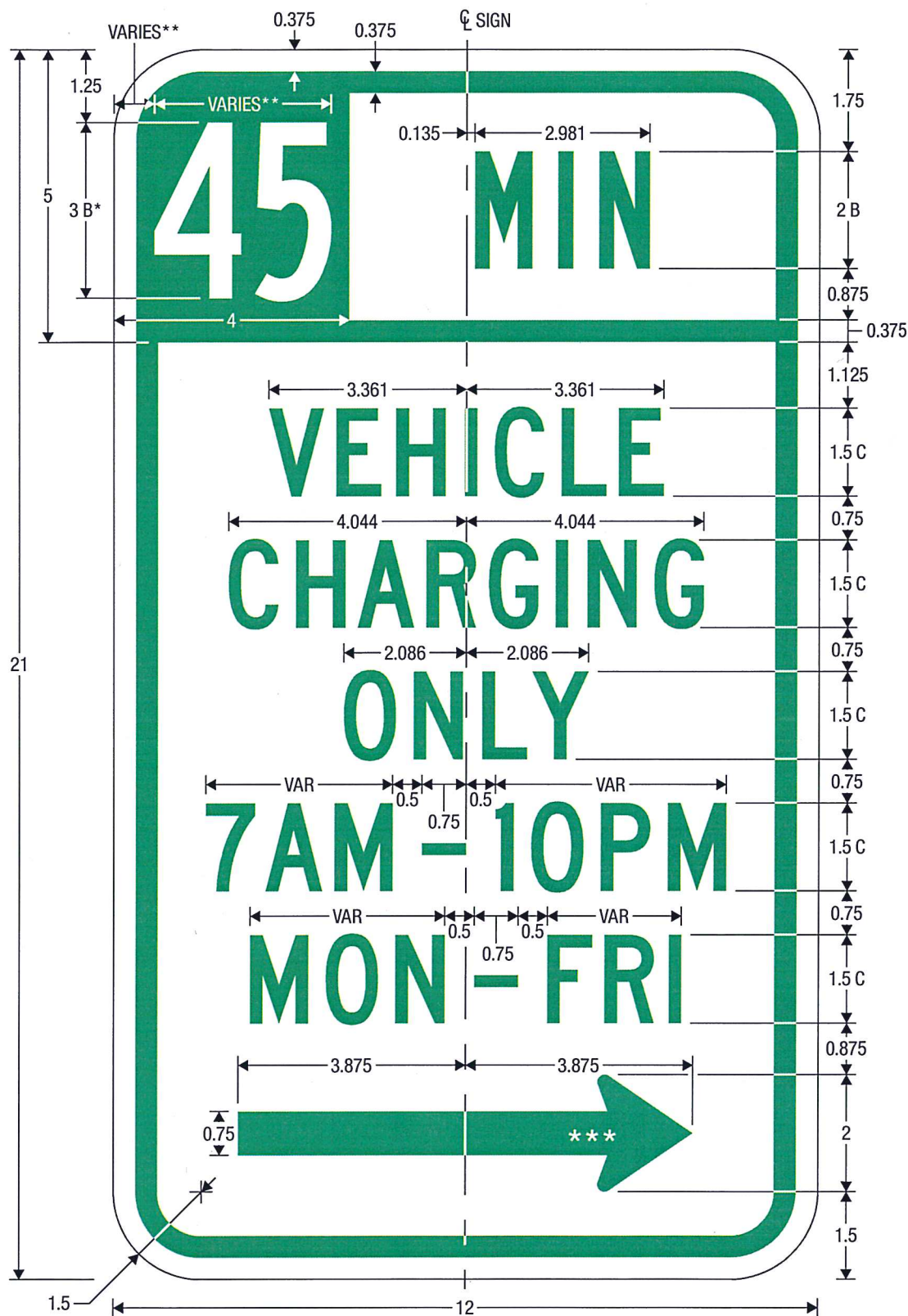
COLORS: LEGEND, BORDER — WHITE (RETROREFLECTIVE)
 BACKGROUND — GREEN (RETROREFLECTIVE)

UPPER RIGHT SECTION

COLORS: LEGEND, BORDER — GREEN (RETROREFLECTIVE)
 BACKGROUND — WHITE (RETROREFLECTIVE)

LOWER SECTION

COLORS: LEGEND, BORDER — GREEN (RETROREFLECTIVE)
 BACKGROUND — WHITE (RETROREFLECTIVE)



R7-114b

VEHICLE CHARGING ONLY (TIME LIMIT, PART-TIME)

UPPER LEFT SECTION

COLORS: LEGEND, BORDER — WHITE (RETROREFLECTIVE)
 BACKGROUND — GREEN (RETROREFLECTIVE)

UPPER RIGHT SECTION

COLORS: LEGEND, BORDER — GREEN (RETROREFLECTIVE)
 BACKGROUND — WHITE (RETROREFLECTIVE)

LOWER SECTION

COLORS: LEGEND, BORDER — GREEN (RETROREFLECTIVE)
 BACKGROUND — WHITE (RETROREFLECTIVE)

- * Reduce character spacing 50%.
- ** Optically space numerals.
- *** Type D Arrow.