

**FINAL STATEMENT OF REASONS
FOR PROPOSED BUILDING STANDARDS OF THE
OF THE DIVISION OF THE STATE ARCHITECT – STRUCTURAL SAFETY (DSA-SS)
REGARDING THE 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE
(CALGreen)
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11
(DSASS-CC 07/18)**

The Administrative Procedure Act requires that every agency shall maintain a file of each rulemaking that shall be deemed to be the record for that rulemaking proceeding. The rulemaking file shall include a Final Statement of Reasons. The Final Statement of Reasons shall be available to the public upon request when rulemaking action is being undertaken. The following are the reasons for proposing this particular rulemaking action:

UPDATES TO THE INITIAL STATEMENT OF REASONS:

Government Code Section 11346.9(a)(1) requires an update of the information contained in the Initial Statement of Reasons. If the update identifies any data or any technical, theoretical or empirical study, report, or similar document on which the state agency is relying that was not identified in the Initial Statement of Reasons, the state agency shall comply with Government Code Section 11347.1.

The Division of the State Architect – Structural Safety is relying on the Initial Statement of Reasons regarding specific adoptions, amendments, or repeals to CCR, Title 24, Part 11.

MANDATE ON LOCAL AGENCIES OR SCHOOL DISTRICTS

Pursuant to Government Code Section 11346.9(a)(2), if the determination as to whether the proposed action would impose a mandate, the agency shall state whether the mandate is reimbursable pursuant to Part 7 of Division 4. If the agency finds that the mandate is not reimbursable, it shall state the reasons for the finding(s).

The Division of the State Architect – Structural Safety has determined that the proposed regulatory action WOULD NOT impose a mandate on local agencies or school districts.

OBJECTIONS OR RECOMMENDATIONS MADE REGARDING THE PROPOSED REGULATION(S).

Government Code Section 11346.9(a)(3) requires a summary of EACH objection or recommendation regarding the specific adoption, amendment, or repeal proposed, and an explanation of how the proposed action was changed to accommodate each objection or recommendation, or the reasons for making no change. This requirement applies only to objections or recommendations specifically directed at the agency's proposed action or to the procedures followed by the agency in proposing or adopting the action, or reasons for making no change. Irrelevant or repetitive comments may be aggregated and summarized as a group.

NAME: Ed Pike, P.E., Senior Engineer, Energy Solutions representing CALGreen
EV Infrastructure Support Coalition

Chargepoint
Pacific Gas & Electric (PG&E)
Motiv
California Electric Transportation Coalition (CaIETC)
Electric Vehicle Charging Association (EVCA)
Menlo Spark
Plug In America
EVBOX
EVgo
Coltura
Coalition for Clean Air
NRDC
Southern California Edison
SDGE
Nissan

ITEM #: 3

SECTION: Chapter 3, Green Building

Section 301 General

301.4 Mandatory measures for public schools and community colleges

SUMMARY OF COMMENT 45-DAY: Commenter supports the proposed scoping provisions for electric vehicle charging infrastructure.

DSA-SS RESPONSE: This is a comment in support of the proposed amendment. DSA-SS is proposing no further changes to this section in response to this comment.

NAME: Ed Pike, P.E., Senior Engineer, Energy Solutions representing CALGreen
EV Infrastructure Support Coalition

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Pacific Gas & Electric (PG&E)
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Electric Vehicle Charging Association (EVCA)
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SDGE
Nissan

ITEM #: 5

SECTION: Chapter 5, Nonresidential Mandatory Measures
Section 5.106 Site Development
5.106.5.3 Electric vehicle (EV) charging

SUMMARY OF COMMENT 45-DAY: Commenter supports the proposed technical requirements for electric vehicle charging infrastructure.

DSA-SS RESPONSE: This is a comment in support of the proposed amendment. DSA-SS is proposing no further changes to this section in response to this comment.

NAME: Christopher Uraire, Project Manager II, Energy Solutions representing Statewide Utility Codes and Standards Team

ITEM #: 6

SECTION: Chapter 5, Nonresidential Mandatory Measures
Section 5.106 Site Development
5.106.8 Light pollution reduction

SUMMARY OF COMMENT 45-DAY: As written, Section 5.106.8 contains ambiguities surrounding whether or not the requirements apply to additions and alterations, and is misaligned with other requirements in Title 24, Part 6. Our recommended language update clarifies the requirements for additions and alterations, and aligns with language in Title 24, Part 6. Our comment is relevant to items 1, 2, and 3 in the Building Standards Nine-Point Criteria below.

DSA-SS RESPONSE: DSA-SS acknowledges the commenter's concerns and appreciates their participation in the code development process. However, after further review and coordination with the CEC, no changes to the Final Express Terms were made as a result of these comments. DSA-SS's responses for each comment are addressed below.

1. DSA-SS's 45-day Express Terms for Section 5.106.8 Light pollution reduction added a note 3 to direct the code user to Part 6 California Energy Code which contains regulations for additions and alterations. This amendment was done in response to a recommendation by the GREEN Code Advisory Committee during the GREEN CAC meeting held August 22, 2018.
2. The commenter states that "Section 5.106.5 contains ambiguities surrounding whether or not the requirements apply to additions and alterations, and is misaligned with other requirements in Title 24, Part 6".

BSC consulted with the CEC staff regarding these issues, and BSC received clarification from CEC staff stating that they do not find any direct conflict between Part 6 and Part 11 BUG requirements because:

1. Part 6 specifies that newly constructed buildings must meet BUG requirements that are identical to the requirements in CALGreen.
2. Part 6 specifies that additions or alterations to outdoor lighting that are subject to Part 6 must meet the same requirements as applicable to newly constructed buildings (whereas Part 11 is silent with respect to additions and alterations.)

In summary, Part 11 includes reference to the Exceptions in Part 6, and Part 6 includes reference to the BUG ratings in Part 11. The requirements are for the most part identical. With respect to additions and alterations, the Part 6 requirement that additions and alterations meet the new construction requirements do not contradict any Part 11 provisions.

NAME: Derek Schubert, Coordinator, Trees for Oakland

ITEM #: 7

SECTION: Chapter 5, Nonresidential Mandatory Measures

Section 5.107 Shade Trees

5.107.1 Shade Trees

SUMMARY OF COMMENT 45-DAY: Commenter supports the new provision for shade trees. Commenter recommends that language be revised to indicate: a) specifying the shade requirement as noon on the autumnal equinox instead of the vernal equinox, as some areas of the state do not have full coverage on the vernal equinox to calculate the shade; b) hand watering should be able to substitute for irrigation systems; c) specifying locally appropriate species; d) specifying minimum tree size instead of tree container size; e) specifying the amount of open soil at each tree.

DSA-SS RESPONSE: DSA-SS acknowledges the commenter's concerns and appreciates his participation in the code development process. DSA-SS has amended its proposal to revise the shade requirement as noon on the summer solstice, as shade trees in all areas of the state would have full coverage so as to calculate shade. DSA-SS respectfully declines to amend the proposal to address hand watering, as "irrigation" is defined as "to supply water," and is not specific to hand watering or other methods of irrigation. Any irrigation method supplied must meet the requirements of CALGreen section 5.304.6. DSA-SS respectfully declines to amend the proposal to address locally appropriate species, minimum tree size instead of minimum container size, and amount of open soil at each tree. DSA requires school districts to hire licensed design professionals to perform the work in order to receive project approval. These specifications are in the realm of decision making of the licensed landscape architects that specify the requirements that are locally appropriate and are in accordance California Model Water Efficiency Landscape Ordinance requirements.

NAME: Jeffrey A. Townsend, FASLA, Principal, Jacobs

ITEM #: 7

SECTION: Chapter 5, Nonresidential Mandatory Measures
Section 5.107 Shade Trees
5.107.1 Shade Trees

SUMMARY OF COMMENT 45-DAY: Commenter supports the proposed changes.

DSA-SS RESPONSE: This is a comment in support of the proposed amendment. DSA-SS is proposing no further changes to this section in response to this comment.

NAME: Sharon Danks, CEO, Green Schoolyards America representing a collective response of 16 organizations and 2 individuals:

Bay Tree Design, Inc. – Lisa Howard, Principal
California Outdoor Engagement Coalition – Jenny Mulholland-Beahrs, Director
Canopy – Catherine Martineau, Executive Director
Education Outside – Rachel Pringle, VP Strategy
Environmental Volunteers – Elliott Wright, Executive Director
The Friends of Berkeley Tuolumne Camp – Scott Gelfand, Executive Director
Green Schoolyards America – Sharon Danks, CEO
Groundwork Richmond – Matt Holmes, Executive Director
Ocean Discovery Institute – Shara Fidler, Executive Director
Outdoors Empowered Network – Kyle Macdonald, Executive Director
SALT Landscape Architects – Allen Compton, Founder/Principal
Shawn Maestretti Garden Architecture – Shawn Maestretti, Principal
Ten Strands – Karen Cowe, CEO
The Trust for Public Land – Rico Mastrodonato, Acting Director of CA Govt. Affairs
TreePeople – Candice Dickens-Russell, Director of Environmental Education
Trees for Oakland – Derek Schubert, Coordinator
Bevin Ashenmiller, PhD, Associate Professor of Economics, Occidental College
Marcella Raney, PhD, Associate Professor of Kinesiology, Occidental College

ITEM #: 7

SECTION: Chapter 5, Nonresidential Mandatory Measures
Section 5.107 Shade Trees

5.107.1 Shade Trees

SUMMARY OF COMMENT 45-DAY: Commenter supports the new provision for shade trees. Commenter recommends that language be revised to remove emphasis on planting trees in parking lots where they will shade cars and instead recommends that the shade trees be planted primarily on school playground, so that children will be the main beneficiaries of school districts' investments in tree planting. Commenter also recommends a 25% tree canopy.

DSA-SS RESPONSE: DSA-SS acknowledges the commenter's concerns and appreciates her participation in the code development process. DSA-SS respectfully declines to amend the proposal to remove the requirements for planting trees in parking lots, because surface parking lots without trees are heat islands that negatively impact the environment. The requirements are not specified as a designer choice of providing either trees in parking lots or trees on school grounds. The requirements state positive requirements for both depending on the design project. DSA-SS further respectfully declines to increase from 20% to 25% the shade tree requirement on school grounds, but will investigate further this increase in a future code cycle.

NAME: Sharon Danks, CEO, Green Schoolyards America

ITEM #: 7

SECTION: Chapter 5, Nonresidential Mandatory Measures
Section 5.107 Shade Trees
5.107.1 Shade Trees

SUMMARY OF COMMENT 45-DAY: Commenter supports the new provision for shade trees. Commenter recommends that language be revised to remove emphasis on planting trees in parking lots where they will shade cars and instead recommends that the shade trees be planted primarily on school playground, so that children will be the main beneficiaries of school districts' investments in tree planting. Commenter also recommends a 25% tree canopy.

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NAME: Diana Arend, Office of the State Fire Marshal

ITEM #: 7

SECTION: Chapter 5, Nonresidential Mandatory Measures
Section 5.107 Shade Trees
5.107.1.2 Landscape Areas

SUMMARY OF COMMENT 15-DAY: Commenter identified a grammatical error in the document where the words “shall be” are used twice in succession in section 5.107.1.2.

DSA-SS RESPONSE: DSA-SS agrees that this is a grammatical error in the 15-day Express Terms, and has made the necessary corrections in the Final Express Terms. This change is non-substantive. DSA-SS requests that the Building Standards Commission approve as amended.

NAME: Eric Carbonnier, PhD. Architect, LEED AP BD+C, Associate Principal,
Vice President of Sustainability, HMC Architects

ITEM #: 7

SECTION: Chapter 5, Nonresidential Mandatory Measures
Section 5.107 Shade Trees
5.107.1.3 Hardscape Areas

SUMMARY OF COMMENT 15-DAY: Commenter identified a grammatical error in the document where the words “shall be” are used twice in succession in section 5.107.1.3, and “covered by” is used twice in succession in section 5.107.1.3, Exception.

DSA-SS RESPONSE: DSA-SS agrees that where the same words are used twice is a grammatical error in the 15-day Express Terms, and has made the necessary corrections in the Final Express Terms. This change is non-substantive. DSA-SS requests that the Building Standards Commission approve as amended.

NAME: Eric Carbonnier, PhD. Architect, LEED AP BD+C, Associate Principal,
Vice President of Sustainability, HMC Architects

ITEM #: 7

SECTION: Chapter 5, Nonresidential Mandatory Measures
Section 5.107 Shade Trees
5.107.1 Shade Trees

SUMMARY OF COMMENT 15-DAY: Commenter requests DSA consider changing “surface parking areas” to “hardscape parking areas” and changing “hardscape areas” to “hardscape non-parking areas.” In addition, commenter recommends adding two definitions to Chapter 2, “landscape area” and “hardscape area,” and to consider using the Model Water Efficiency Landscape Ordinance (MWELo) definition for these terms.

DSA-SS RESPONSE: DSA-SS acknowledges the commenter's concerns and appreciates his participation in the code development process. DSA-SS respectfully declines to amend the proposal to make the changes to regulatory language for "surface parking areas" and "hardscape areas." These recommended changes were not made in the 45-day comment period, and are not relevant to the changes in the 15-day comment period. DSA respectfully declines to make these changes in this code cycle, but will consider these changes in the upcoming intervening code cycle.

NAME: Tom Phillips, Healthy Building Research, CHPS

ITEM #: 7

SECTION: Chapter 5, Nonresidential Mandatory Measures
Section 5.107 Shade Trees
5.107.1 Shade Trees

SUMMARY OF COMMENT 15-DAY: Commenter strongly urges DSA to warn designers to select trees that are "climate ready" and suitable for school site conditions. He recommends referring designers to the latest recommendations from the Climate Ready Tree Program at <http://climateredytrees.ucdavis.edu>.

DSA-SS RESPONSE: DSA-SS acknowledges the commenter's concerns and appreciates his participation in the code development process. DSA-SS respectfully declines to amend the proposal because comment was received at 6:12 p.m. on November 29, 2018, which is past the 5:00 deadline for comments.

NAME: Sharon Danks, CEO, Green Schoolyards America representing a collective response of 16 organizations and 2 individuals:

- Bay Tree Design, Inc. – Lisa Howard, Principal
- California Outdoor Engagement Coalition – Jenny Mulholland-Beahrs, Director
- Canopy – Catherine Martineau, Executive Director
- Education Outside – Rachel Pringle, VP Strategy
- Environmental Volunteers – Elliott Wright, Executive Director
- The Friends of Berkeley Tuolumne Camp – Scott Gelfand, Executive Director
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- Ten Strands – Karen Cowe, CEO

The Trust for Public Land – Rico Mastrodonato, Acting Director of CA
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Marcella Raney, PhD, Associate Professor of Kinesiology, Occidental
College

ITEM #: 7

SECTION: Chapter 5, Nonresidential Mandatory Measures

Section 5.107 Shade Trees

5.107.1 Shade Trees

SUMMARY OF COMMENT 15-DAY: Commenter did not see her 45-day comments posted on the website and re-iterated her comments for the 15-day comment period. Commenter provided no additional comments to her 45-day comments in the 15-day comment period.

DSA-SS RESPONSE: DSA-SS acknowledges the commenter's concerns and appreciates her participation in the code development process. DSA-SS respectfully declines to amend the proposal as a result of the 15-day comments, as the comments are not relevant to the proposed amendments.

DETERMINATION OF ALTERNATIVES CONSIDERED AND EFFECT ON PRIVATE PERSONS

Government Code Section 11346.9(a)(4) requires a determination with supporting information that no alternative considered would be more effective in carrying out the purpose for which the regulation is proposed, or would be as effective and less burdensome to affected private persons than the adopted regulation, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provisions of law.

The Division of the State Architect has not identified any reasonable alternatives to the proposed action, and no adverse impact to small business due to these proposed changes is expected.

REJECTED PROPOSED ALTERNATIVE THAT WOULD LESSEN THE ADVERSE ECONOMIC IMPACT ON SMALL BUSINESSES:

Government Code Section 11346.9(a)(5) requires an explanation setting forth the reasons for rejecting any proposed alternatives that would lessen the adverse economic impact on small businesses, including the benefits of the proposed regulation per 11346.5(a)(3).

The Division of the State Architect did not receive or reject any proposed alternatives that would lessen adverse economic impact on small business.