

November 6, 2009

To: Building Standards Commission

From: Laura Knauss, AIA, REFP, LEED AP, Principal

**RE: Proposed California Green Building Standards Code, Part 11, Title 24**

By way of introduction: I am a LEED accredited professional, 23 year school architect in California and dedicated to bringing sustainable, high performance design into every project regardless of budget or scope. I would even admit that creating “code” to promote sustainable design is perhaps a good idea. However, this code as written today is not only unclear and incomplete, but requires a level of post-occupancy validation, operational expertise, on site inspection and documentation that I’m confident has not been anticipated for its implementation.

***Voluntary measures do not belong in code;*** they belong in a “Best Practices Manual” or other recognition program similar to LEED or CHPS. In place of the CALGREEN voluntary labels, a simple adoption of LEED or CHPS would have saved the state both time and money. It is hard to envision how “the public interest requires the adoption of the building standard” when the standard is voluntary.

***“It is the intent of CBSC to integrate these standards into their respective parts at a future date”.*** This recognition in the *Statement of Reasons* all but acknowledges that these “green” standards should be part of an integrated design program, not isolated in their own code. Mastering another code in the already complex maze of public building in California is cumbersome and likely to slow processes and cost public owners additional fees.

***“The proposed building standard is not necessarily ambiguous or vague.”*** This point, from the BSC’s own nine point criteria analysis is likely the most problematic of the entire code. To date, the DSA response to areas that were shown to them to be “vague” has been to acknowledge that those items would have to be worked out in an “Interpretation of Regulation” or IR. The IR process is laborious. Additionally, the standard remains in place while the IR is being developed and is left to the discretion of plan check personnel at the Division of the State Architect. This interpretation is seldom consistent with the ultimate resolution in the IR. Additionally, these code issues add significant time and oversight to the process. Some specific examples:

- ***“A5.104.2.1.1 Site survey. Survey existing site features for preservation and site the building minimizing its footprint and avoiding disruption of existing ecosystems.”*** How is “minimized” measured? How is disruption avoidance measured? This would have to be clarified and documented.

- “A5.105.1.3 Salvage. Salvage additional items in good condition...” What standard is used to determine “good condition” of salvage items? Likely an IR will have to be written and an inspector will have to verify and confirm on the project site and with written documentation submitted for DSA verification.
- “A5.213.1 Steel Framing. Design for and employ techniques to avoid thermal bridging.” No standards are outlined to measure this avoidance. Again, an IR will have to be researched, written and employed.
- “5.304.2.2 Landscape Design. Landscape design criteria may include the following...” May include the following? Do you receive credit toward the voluntary standards if it may include the following?

The Division of the State Architect has acknowledged in multiple forums that it is their goal to move the voluntary measures into the mandatory measures over time. These few examples (and there are many more) highlight the likely problems with that implementation. Voluntary recognition programs like CHPS and LEED have spent countless hours and high level expertise working through the standards and fine tuning them. This effort at the state level is redundant at best; no indication of implementation strategy has been proposed to date.

**Operational Issues in Code** Management of a building project, post-occupancy, is also part of the green building code. For example: “A5.106.7.1.2 Implementation and documentation of programs that encourage occupants to carpool, ride share or use alternate transportation.” This is an excellent goal; however is the design team required to submit this as part of its plan submittal? Is there a monitoring plan required and enforced by an agency? The codifying of these operational issues is likely to result in costly side affects that are yet unidentified.

**Unfunded Mandates** The complexity and intensity of California’s codes and regulations continue to place an undue hardship on California’s schools. With the mandatory measures in this code, they are forced to perhaps choose bicycle storage and changing rooms (5.106.4) over classrooms or computers. They are forced to choose electric vehicle parking accommodation (A5.106.5.2.1) over high quality, low maintenance building materials.

Arguably, this Green Building Standards Code takes positive steps toward the greater goal of an environmentally responsible future for California’s public buildings. However, as currently conceived, the Code has impacts that could not possibly have been considered or analyzed including design, construction and operational cost impacts as well as the inevitable increase of bureaucratic oversight and validation. Had those issues been well vetted, this Code would likely have been reconsidered.