CLANTON & ASSOCIATES

LIGHTING DESIGN AND ENGINEERING

23 June 2011

Association for the Advancement of Sustainability in Higher Education (AASHE)
213 ½ N. Limestone
Lexington, KY 40507

RE: Letter of Affirmation for the innovative exterior lighting at CSUCI

This letter describes the innovative nature of the exterior lighting at the CSU Channel Islands campus. The first goal of “Provide good nighttime visibility” as listed in the masterplan is actually achieved by implementing all of the remaining goals. As an example, by not overlighting, adaptation is increased which achieves good visibility and nighttime sense of security. Conventional lighting designs often floods excessive light to exterior areas in the hope of people seeing better and feeling safe. In reality, this conventional approach creates a lot of glare, harsh shadows that feel unsafe, and adaptation problems when moving from very bright to very dark portions of the campus. This conventional approach “sprays” light everywhere while consuming a lot of energy and spilling wasted light into nearby buildings and the night sky.

The alternative approach implemented by CSUCI effectively applies light onto vertical surfaces as well as horizontal pathways with the actual light sources concealed as much as possible within the luminaire itself or integrated with the architecture. The installed parking luminaires are fully shielded with the light source located within the housing above a flat lens. Courtyard lighting is created by soft façade lighting located under porch and walkway roofs. Such vertical illuminance identifies the architecture, creating inviting outdoor spaces and rooms. Reflected light from the buildings highlights pedestrians in a soft, glare free manner and destinations are clearly identified.

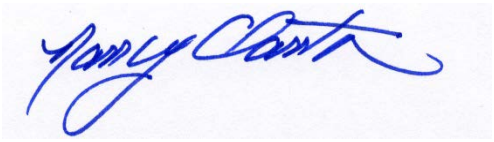
By minimizing glare throughout the campus, overall light levels can be reduced. Because our eyes always adjust to the brightest source in our field of view, a bright floodlight causes dim spaces to feel even darker by increasing our visual adaptation. Eliminating glare and providing more uniform levels of light allows the total overall light level to be reduced across the exterior spaces. This approach lowers overall lighting energy consumption. The use of controls on the lighting either by photocells or time switches further reduces energy use.

Long life sources such as the induction lamp (100,000 hours of operation) minimize the lamp replacement and disposal. Warm color temperatures create a soft visual environment and render the mission style architecture well.

Perhaps most importantly, CSUCI documented the design strategies in a masterplan rather than just applying these concepts to a single project. This will allow the same innovative approaches to be used on the campus as it expands or as future renovations take place.

Sincerely,

Nancy Clanton



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