letters

Folded Plate System Enhancement Suggestions

Dr. Azizinamini has presented a very nice concept for short-span bridges (September 2009 MSC, p. 53). In Illinois, where precast deck beams are almost failing everywhere due to corrosion of HTS wires, this concept will be extremely useful so as to take advantage of precast prefabricated construction. However, the following issues should be attended to as the author makes future presentations.

- 1. Steel type and grade
- 2. Cold forming using full length plate
- 3. Section geometry and properties
- 4. Cold forming costs
- 5. LRFD design for HL 93 loading
- 6. Load distribution per beam
- 7. Cross continuity
- 8. F type parapet and overhang
- 9. Load tests for deflection
- 10. Bearings details and integral abutments
- 11. Pigeon protection

Manhar Thakkar Ph.D., P.E., S.E.

Bundle Up To Go Inside?

I couldn't agree with more with your Editor's Note on over-air conditioning (September 2009 MSC, p. 6). We are in our 70s and I am retired now but my wife always reminds me to take a jacket or sweater when we go to the opera, a movie or an office building. Once at a restaurant I had to get a towel from the car to be comfortable. I now keep a sweater and a jacket in the car. Although the sweater or jacket in the car may not always be appropriate, at least I can be warm.

It is such a waste of resources! Thanks for calling attention to this problem.

Richard Huff

Questions About Building in the Woods

These questions are in reference to the article in the October 2009 MSC about the Mercer Slough Environmental Education Center. Many building codes worry about the "Urban Wildland Interface" and often require the brush and trees to be cleared in a relatively large area around any buildings. This was apparently not done in this case, which is most of what makes it look neat. How did the architect not have to follow this code requirement?

The second question is of much less importance, but is more of a personal wonderment. In the photo on page 20, the tree appears to be very close to the building—the roof is even notched for it. How do you keep the tree trunk from hitting the building when it sways on windy days?

Tim W. Elder

Author Marjorie Lund, P.E., S.E., replies:

The Bellevue fire department required removal of all plantings below the buildings and within 5 ft of the building perimeter. Quarry spalls were used under the buildings to eliminate vegetation and keep people from using the space.

The Douglas Fir tree is 2 ft, 6 in. clear of the building, although the photo certainly makes it look closer. The arborist who analyzed the trees for health and pruned dead limbs from the canopy advised that a fir of that size will sway up to two feet. The architect and landscape architect carefully planned the building locations with the intent of saving as many of the existing trees as possible. The close proximity of the trees is important to the treehouse feel of the classrooms.