The Stonebriar Centre is an example of how a traditional, regional shopping mall can be a dynamic public space that serves as a major local landmark. The finishes above the public areas of the complex are nearly exclusively exposed structural steel, which is used to highlight and identify major spaces. The defining characteristic of the project is “light,” both in terms of natural lighting and lightness of structure.

The central concourse is defined by a 1,500’-long raised slit in the roof, modeled as though a gentle sine-wave curve had been cut into a flat roof and

Read more about Stonebriar Centre in the July 2002 issue of *Modern Steel Construction*. 
then raised up along its edges. Constructed using a series of king-post trusses assembled from wide-flange steel top chords, HSS compression struts, tension rods, and steel rod bracing, the undulating roof bears lightly on a diagonal HSS truss framing the clerestory glass.

Secondary spaces are defined by a variety of truss systems. One area incorporates an HSS “bicycle wheel” truss that appears to float above the floor and supports a truncated cone-shaped roof. At the main entry, access from the upper-level parking deck is across a pedestrian bridge supported and covered by a leaf-like structure of steel and glass. The roof structure above the children’s carousel is an inverted carousel of steel tubes and rods.

The intricate detail of the exposed structural steel elements of this center was achieved through close collaboration between the architect and the structural engineer.