Built in the name of luxury, LakeEdge Apartments relied on segmental retaining walls to enhance the property for tenants and to make room for a fire lane road that accesses an underground parking garage. The apartment complex sits on the shore of Lake Monona in Madison, Wis. The building plans called for a patio area on the backside of the building that would give tenants an unmatched view of the lake and a space to relax. The immensity and challenge of this project led two contractors to walk away even before starting the project. TMS Landscape of Muskego, Wis. stepped up to the challenge.

The contractor first built the fire lane wall because it would open up the only access to the back area. The expansive fire lane wall proved a challenge—the structural integrity of the 14-ft. wall was vital because of its large size and the weight it had to hold. The contractor installed steel I-beams behind the wall to help support the weight and prevent washout. In addition, the contractor install geogrid in layers behind the wall for added soil reinforcement.

Although completion of the fire lane wall gave the contractor access to the back, the narrow lane made transporting material and machinery to the back a challenge. In addition, the tight area between the apartment and the lake gave the contractor little room for working and moving materials, plus the contractor knew that as the project developed they would lose even more space. To work around the issue of losing space, the contractor began construction on the far end of the apartment and worked towards the fire lane.

The building owner gave the contractor free reign on the wall design. The contractor designed a two-tiered wall with a curved theme throughout. The contractor specified the Integrity Retaining Wall System for the project because their larger size made the units ideal for the scale of this wall project. Not only could crews lay more square footage at a time, Integrity units are suited for supporting large quantities of earth. The color Serenity was selected because it subtly matches the apartment’s brown brick, and red and orange features.

With the use of backhoes and additional machinery the upper wall was constructed simultaneously with the bottom walls. This challenging process was done to help expedite the construction process. The outside portion of the patio area had a curved two-course wall topped with a cap unit, matching the rest of the project. The second tier included patio space, with the rest of the areas used for decorative planters and trees. Thanks to the efficiency of the Integrity Retaining Wall System, the 3,400-sq. ft. of retaining wall used throughout this project was installed in only three short weeks.

**Project Background**

**Products Used:** Integrity™ Retaining Wall System  
**Location:** Madison, WI  
**Contractor:** TMS Landscape