



## CHASTAIN PARK PLAYGROUND

Wall Systems and Permeable Pavers Combine to Provide Improved Function and Cost Savings for Community Playground

### LOCATION:

Atlanta, Georgia

### PRODUCTS:

Retaining Wall: Mega-Tandem™ Mass Segmental Retaining Wall (MSRW)® System Pavers: Urbana Stone® Pavers used as PICP, Color: Belgian Stones

### COLORS:

Retaining Wall: Avondale  
Pavers: Belgian Stone

### INSTALLED AREA:

Retaining Wall: 3,500 sq. ft.  
Pavers: 8,300 sq. ft.

### CIVIL ENGINEER:

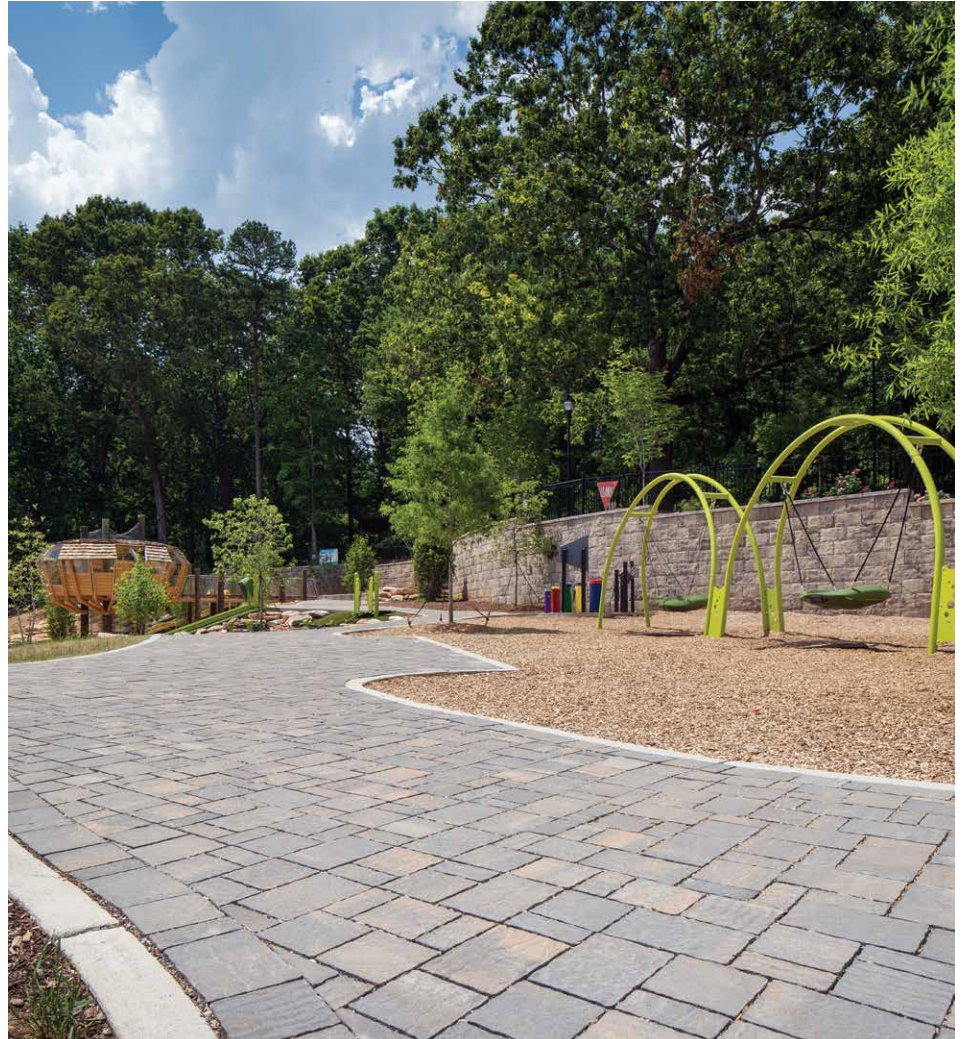
W.L. Jorden, PE

### GENERAL CONTRACTOR:

Astra Group

### LANDSCAPE ARCHITECT:

Bill Caldwell, Harrison Design



### Background

The only public playground serving the 85,000 school-age children within a five-mile radius, the Chastain Park Playground had not been renovated since 2000 and was in dire need of an upgrade. The existing playground had numerous deficiencies, primarily in that it only appealed to a small demographic (ages 5-12). Most of the play structures were too dangerous for smaller children, yet not challenging enough for older children.

### The Challenge

While the Chastain Park Conservancy worked with play consultants and community school children to design all of the playground's play structures, Landscape Architect Bill Caldwell was tasked with creating a site design that would make the most of the available space. To achieve this, Caldwell contracted renown Water Resources Engineer Consultant, Bill Jorden, to help develop the stormwater management plan to meet all of Atlanta's

stringent ordinances for stormwater runoff quality and quantity. "Our goal was to not create a detention pond on a beautiful site of rolling hills and historic oak trees," explained Caldwell. "I also didn't want to have to convert the flat spaces currently used for open play.

### The Solution

Belgard® products helped Caldwell and his team avoid the traditional stormwater

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management strategies used in most projects and ultimately achieve its goals. With the help of Belgard Urbana Stone® installed with permeable aggregates and Mega-Tandem™ Mass Segmental Retaining Wall (MSRW®), the team was able to conserve land, meet the stormwater requirements, and save a significant amount of money in the process.

"Because the playground was being built into a hillside, the project required substantial retaining walls, which initially called for poured concrete," said Caldwell. "We got two Mega-Tandem walls for the price of one poured concrete wall. Also, using the Mega-Tandem allowed us to value-engineer the restroom pavilion and reduce the amount of poured concrete needed for the foundation. Overall, we saved over \$200,000 on the project, factoring the cost savings on both the pavilion and the site walls." In addition, more than 8,000 square feet of permeable walkways control the amount of rainwater runoff that rolls downhill, which alleviates erosion problems. "An impervious system would have caused a concentration of water flow to the lower elevations, which would have generated more runoff than the original site," Caldwell said.

**I love the fact that we took a hillside with a 12- to 15-degree slope that was basically non-functional and turned it into a one-acre parkland that is a highly functional and usable space, and has become a high value component of the park.**

*Bill Caldwell  
Landscape Architect - Harrison Design*

## The Result

Caldwell also notes that the Belgard pavers and retaining walls allowed him to create the playground out of what was formerly unusable space. "I love the fact that we took a hillside with a 12- to 15-degree slope that was basically non-functional and turned it into a one-acre parkland that is a highly functional and usable space, and has become a high value component of the park," he said. "We created something out of nothing." And what Caldwell considers the best part... this playground was designed by kids for kids, regardless of age or abilities. The entire playground is ADA compliant, with multiple handicap accessible play elements.

"Even the texture of the paver walkway adds a sensory element for children with sensory disabilities, which is not something they would get with a smooth poured concrete sidewalk. Addressing disabilities of multiple spectrums was always part of the discussion from the beginning," he said.

### About Belgard Commercial®

Belgard Commercial, part of Oldcastle® APG, offers a complete collection of paver and wall products for plazas, terraces, parking areas, roadways, rooftops and retaining walls. Available in a range of styles, premium Belgard Commercial products have been found in the nation's finest developments and award-winning commercial and retail properties since 1995.

Oldcastle APG is part of CRH's Building Products division. As the largest building materials company in North America, CRH provides a single-source solution for commercial construction projects with a full portfolio that also includes structural masonry, masonry veneers, dry mix products, hardscape jointing sands and sealants, stormwater management systems, concrete infrastructure, architectural glass, lawn & garden products, and composite decking.

