



Foothills Parkway Bridge No. 2

Smoky Mountains, Tennessee

Owner: U.S. National Park Service

Designer: Corven Engineering, Inc.

Contractor: Bell and Associates Construction

Years of Project: 2010—2012

Total Project Cost: \$23 million

Client Reference: John Corven, P.E.
(850-386-6800)



Project Highlights:

Part of the “missing link,” an approximately 1.6-mile section of the Foothills Parkway that has been awaiting completion for years, Bridge No. 2 is a 790 foot long five-span precast post-tensioned segmental box girder structure located near the Great Smoky Mountains National Park. In addition to special design and construction techniques, Bell included significant attention to reducing site disturbance, maintaining site preservation, and final landscaping to minimizing impact on the site from construction activities, as well as providing a finished look to the project that blends with the surrounding landscape.

- Site geology is predominantly sandstone and conglomerate of various degrees of weathering, folding, metamorphism, and deformation.
- Bridge piers are founded on groups of 20 rock socketed micropiles.
- Rock anchors were utilized at two of the piers and both approaches to mitigate slope stability hazards.
- To erect the bridge, Bell and precast subcontractor VSL used a temporary trestle and gantry system also supported on micropiles.



Photo Credits: U.S. National Park Service; Dan Brown and Associates, PC.