

## Route 262 CSX Crossing Staunton, VA



### PROJECT OVERVIEW AND CHALLENGES

Bradshaw Construction installed a 10'Ø Hand Mined Liner Plate tunnel under CSX Railroad in Staunton, Virginia. The tunnel was excavated from a portal through Boulder Fill in the embankment of the railroad. Due to the voids in the fill, a cementitious grout curtain was pumped over the tunnel alignment before mining. In order to mitigate the risks settlement and the danger of mining through boulders, the tunnel heading was bulk-headed, and more grout was pumped ahead of mining upon completion of each mining shift. 84" RCP was installed in the tunnel for storm drainage.



### PROJECT INFORMATION - 443

**OWNER:**

Virginia Department of  
Transportation  
Alan Tucker  
(800) 586-8905

**ENGINEER:**

Virginia Department of  
Transportation  
Alan Tucker  
(800) 586-8905

**CONTRACTOR:**

Fairfield Skanska

**COMPLETION DATE:**

6/3/2006

**GEOLOGY:**

Boulder Fill

**EXCAVATION METHOD:**

Hand Mined Liner Plate

**MINING DIMENSIONS:**

75' x 120" Ø

**FINAL LINING:**

84" Reinforced Concrete Pipe

**FOR MORE INFORMATION:**

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Refer to Project 443