Rockfall Protection

Problem

T. Hill Construction was asked to build a segmental block retaining wall atop of a blasted bluff. This was to facilitate piers and the erection of a lighted billboard to face Hwy I-44 in western St. Louis County, Missouri. As they moved towards construction and during mobilization, it was feared that the construction activity could dislodge rock on the face of the bluff, leaving the car wash and it’s patrons below at risk of falling rock. Jeff Pullen, Project Manager of T. Hill Construction, called his local sitework solutions provider and described the problem and opportunity. After visiting the site, Maccaferri’s technical team was contacted. Within 24 hours, a solution was designed including panel layout, anchor installation and construction details.

Solution

The Maccaferri Rock Mesh Galvanized M4000 Drapery Kit and rock anchors were selected for the possible rock fall capture system. The bluff is separated in two tiers and measured approximately 180’ in length and a total height of 90’. The rock mesh drapery systems were installed on each tier. The rock anchors were drilled 6’ in depth at 24’ centers the length of the bluff and grouted in place. Next, the attachment of the mesh panels to the cabled anchors took place and side panel connections were made using a pneumatic Spenax Ring tool. The system was a cost effective alternative and provided the insurance and safety that DDI Media desired for their neighbors below.

Client

DDI MEDIA
Main Contractor
T. HILL CONSTRUCTION
Designer
MACCAFERRI, INC.
Products Used
MACCAFERRI GALVANIZED ROCK MESH M4000 DRAPERY KIT
Date of Construction
NOVEMBER 2011
Rock Mesh Installation on second tier

Completed Project