

**SMITHS FERRY SR-55 ERDOX AVALANCHE
SMITHS FERRY, IDAHO, U.S.A.**

Snow Fences and Avalanche Protection

Problem

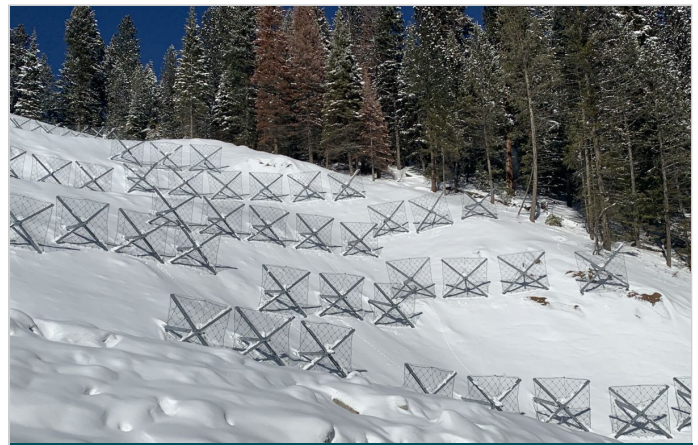
Redesigning the highway alignment outside of Smiths Ferry, Idaho, several slopes were over steepened then covered with rockfall protection mesh. These slopes at 35 to 45 degrees became susceptible to avalanche hazards. With no shoulder and only a guardrail between the highway and the Payette River the Idaho Transportation Department had to stabilize the snowpack on this 'man made' avalanche potential. The design was optimized from over 300 units at 2.5 meters high (2.5 meters wide) to 153 units 3.1 meters (3.6 meters wide). Because of Federal funding these units had to meet the Buy America Act requirements. Only Maccaferri Rockfall had the fabrication potential to meet these requirements and project schedule.

Solution

The Betonform/Maccaferri Erdox single anchor snow stabilization structure was the perfect product for this scenario. The single cable anchors were drilled and grouted on the slope before the Tecco mesh was installed. Production and fabrication was expedited and in November 2023 the first 30 units were assembled and flown onto the slope. Four additional truckloads of Erdox units arrived at the jobsite and were lifted by helicopter onto the slope with the final installation completed mid-December before significant winter snow shut the job down. The site reported no initiation of avalanches during the 2023-2024 winter season.

Client: IDAHO TRANSPORTATION DEPARTMENT**Designer / Consultant:** Avalanche Assessments**Contractor:** APEX Rockfall Mitigation**Products used (Qty.)**

- Snow Fencing 142 Units

Date of construction: 08/2023 - 12/2024[Google Maps](#)[Google Earth](#)

Erdox Snow dK 3.0 Units



Installing Erdox Units on the slope



Assembling Erdox Units at the laydown yard



Assembled Erdox Units waiting to be flown onto the road cut



Erdox Units installed on the slope



Helicopter lifting Erdox into place

Maccaferri Inc. Headquarters
825 Commonwealth Ave. Hagerstown,
MD 21740, USA
Ph: +1 301 223 6910
E-mail: info.us@maccaferri.com