

# Multi-layer Geogrid Provides Stabilization for Montana Railway

**PROJECT NAME:** Bull Mountain Railway

**LOCATION:** Brodview, MT

**PRODUCTS:** Multi-layer Geogrid MS330

**ENGINEER:** AMEC

**DATE:** 2009



In order to facilitate economic transport of some 340 million tons of hi-grade coal reserves from its remote mine 52 miles northeast of Billings, Montana, the owners and operators of the Bull Mountain Coal Mining Company decided it was necessary to build a 35 mile long rail spur to tie into the main line of the Burlington Northern Santa Fe Railroad. They contracted Morrison Maierle Engineers and AMEC to provide engineering services for the project.

Due to the fact that the rail spur was crossing over varied terrain including farm and ranch land, many soil conditions were encountered. One particular area of bottom land approximately 10

miles east of Broadview Montana was of particular concern. Due to the heavy loading of coal cars and the necessity to maintain a gradual grade of a rail line, the embankment foundation in places was in excess of 55 feet in height and the support footprint approximately 90 feet wide. The engineers determined that a high strength geogrid would provide adequate stabilization and support over this and other soft areas.

The contractor, Ames Construction's Salt Lake City, UT office selected MS330 based on meeting the project criteria, price, and rapid delivery to the site. The use of MS330 allowed the contractor to meet his demanding schedule and place the foundation with minimal interruption, considering fill material at times was transported in excess of 10 miles using the railroad foundation as a haul road.

The implementation of this rail spur will allow Bull Mountain mine at full production to increase the state.

*Multilayer Geogrids are manufactured by Tenax Corporation, 4800 E. Monument Street, Baltimore, MD 21205; represented exclusively by SynTec, LLC*

