



July 13, 2015

Ms. Cassie Riggan, P.E.  
Great West Engineering  
115 North Broadway, Suite 500  
Billings, Montana 59101

**Subject: Preliminary Proposal for Rockfall Remediation along Stillwater River Road,  
Stillwater County, Montana**

Dear Ms. Riggan:

GeoStabilization International (GSI®) is pleased to offer this preliminary proposal to perform rockfall remediation services along Stillwater River Road approximately 20 miles west of Absorokee, Montana. GSI conducted a site reconnaissance with you and Mark Shreiner of Stillwater County on June 26, 2015. We have also reviewed the geotechnical reconnaissance report prepared by SK Geotechnical on June 15, 2015.

**Scope of Work**

The GSI rockfall group analyzed the data obtained during our reconnaissance as well as information provided in the SK Geotechnical report. The most critical portion of the slope is approximately ¼ mile long, and can be separated into two remediation plans. An approximate 200 lineal foot portion of the slope contains significant, immediate rockfall hazards that should be mitigated by rock scaling. This is the portion that had the recent rockfall event and presents the largest threat to the travelling public and homes across the river. A temporary rockfall ring net catchment system will be employed to mitigate rock debris deposition into the river; however, an environmental, hydrological, and/or biological assessment of material deposition in the river should be completed.

A flexible rockfall barrier, installed at the base of the lower angle slopes on either side of the scaled portion, is recommended for the remaining ¼ mile. This section is considered less critical and should be looked at as lower priority than the scaling operation. The flexible rockfall barrier will arrest larger rockfall events to prevent deposition on the road surface or within the Stillwater River.

It is further recommended that the rockfall remediation budget contain an allowance for rock dowel/bolt installation. The rock dowels/bolts are installed to anchor rock formations that can not be removed safely with scaling techniques, but are too large to be arrested by the flexible rock

barrier. The dowels/anchors would be installed as needed during the scaling operation and the budget may or may not be fully required.

**Cost**



**Schedule**

GSI can have the scaling crew on site within 3 weeks of receiving the notice to proceed. An exact schedule would be determined after additional collaboration with Stillwater County and Great West Engineering.

**GSI Includes or Excludes the Following Items as Indicated**

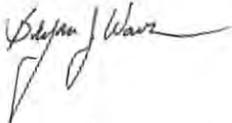
	Exclude	Include		Exclude	Include
Manual Scaling	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Construction Permits, if required	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rock Bolt Installation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Flexible Rockfall Barrier	<input type="checkbox"/>	<input checked="" type="checkbox"/>
One Mobilization	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Hauling of Scaled Materials	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Traffic Control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Construction Surveying, if required	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- The work is assumed to progress as one continuous operation.
- Any retainage is to be released 30-days after the completion of GSI's work.
- Reasonable access to Work area will be provided to GSI at all times during construction for equipment and materials delivery.
- All work will be based on a work schedule of Monday through Saturday, 10 hours per day as daylight and safety permits.
- All invoices are due, in their entirety, upon receipt. Amounts due and unpaid over thirty days shall accrue interest at the rate of 1.5% per month. Owner shall be liable for all costs of collecting amounts due and unpaid, including reasonable attorney's fees.

This preliminary proposal is contingent on the site not changing significantly prior to our mobilization. If significant change occurs we should be contacted to potentially modify the scope of this proposal.

This offer expires 30 days from the date transmitted. GeoStabilization International is confident that we can construct a quality stabilization system in an efficient manner. This proposal is conditional upon entering a mutually acceptable contract between GSI and the Stillwater County.

Sincerely,  
**GeoStabilization International**



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