Rock engineering

Our unconventional approach, rooted in technical excellence, brings efficiency and safety to your rock engineering projects.

Rock engineering design is critical to avoid dangerous rockfall events near roadways, existing structures, or within rock excavations. In serious incidents the effects can go far beyond project delays or debris cleanup: it can include blocked roadways, damaged rail lines, damaged infrastructure, or — the worst case-scenario — personal injuries or casualties. When managing rock excavation and rockfall mitigation projects, other complex challenges you may encounter include difficult site access, unconventional construction techniques, environmental issues, diverse stakeholders, regulatory complexity, and the potential for escalating project cost and risk.

Haley & Aldrich's engineering geologists and rock/geotechnical engineers approach each rock engineering and rockfall mitigation project with efficiency in mind. We work closely with you to understand the attributes of your specific site and project objectives. We then evaluate mitigation measures, prioritize your project's high-risk areas first, and utilize

observational and monitoring approaches for lesser hazards. Through this efficient approach to rockfall engineering, we anticipate problems before they occur, ultimately reducing future rockfall hazard risks and cost.

At Haley & Aldrich, we stand out among rockfall mitigation companies by looking for ways to provide the greatest value at less cost. We do so by relying on our foundation of technical excellence and ability to develop unconventional solutions when necessary. For example, our certified remote UAS pilots-use drones to survey and evaluate rock characteristics, and access hard-to-see construction elements as part of our evaluation, design, and construction inspection work. This approach gives us access to areas not accessible by foot, reduces costs, and is safer.

Talk to our service expert

Scott Goldkamp

Program Manager, Geotechnical Engineering

Christopher Eddy

Technical Expert

Service highlights

- Construction monitoring of rock stabilization elements
- Post-tensioned rock anchors design
- Rock blasting and vibration monitoring
- Rock mechanics analyses
- Rock slope mitigation design
- Site characterization and geological mapping
- Support of excavation design in rock excavations
- Unmanned Aerial System (UAS) survey