



## Retaining Wall Replacement Springfield State Office Building 100 Mineral Street

Springfield, Vermont

### PROJECT MILESTONES

Project Estimate: \$600,000.00

Permitting: March 2018

Final Design: March 2018

Construction Bid: TBD

Construction Start: TBD

Estimated Completion: TBD

The retaining wall is actually an original foundation wall from the dye building of the old slack mill factory. Movement of the wall has been monitored by BGS Operations and Maintenance for a number of years. After a heavy spring melt in 2017 the wall showed additional signs of movement.

An engineer was hired to survey the wall. The engineer submitted schematic options with a variety of temporary and permanent solutions and associated cost estimates. Exploratory test pits were excavated to further determine feasibility of the solutions and to more accurately estimate costs. The engineer determined that the wall is in failure. There is a horizontal crack extending through the wall in the southwest corner, among other problems. The conclusion of the exploratory work determined that replacement of the wall is the best solution. A steel frame was installed to attempt to temporarily stabilize the wall until replacement can occur.

We are currently nearing the end of the Design Development Phase. The current design will keep the current wall in place and use it as a “coffer dam” during construction of the new wall behind it. Once the new wall is complete, the existing wall will be cut short and used as scour protection to protect the new wall from damage. This saves money and simplifies the permit process.

Full failure would be the collapse of the wall into the river, and the high likelihood of losing part of the parking area into the river as well. Surprise failure would result in the additional cost of removing the wall and other foreign materials from the river and an emergency repair to the wall and parking lot.

