



PROJECT BRIEF

Betsy's Cove Retaining Wall

PROJECT PROFILE

CLIENT:
Brooksville Harbor Committee

LOCATION:
Brooksville, ME

VALUE:

- Lowered project construction costs with design improvement recommendations for stability

SERVICES PROVIDED:

- Field investigation in tidal zone with limited access
- Engineering analysis of retaining wall including slope stability
- Recommendations for retaining wall in marine environment
- Specialized lab testing on soft clay of Presumpscot Formation

“Geocomp engineers performed analysis for the proposed retaining wall, including a stability analysis and geotechnical recommendations for construction of a replacement wall.”



STABILITY ANALYSIS RECOMMENDATION & TESTING

Geocomp coordinated and completed the boring program in the tidal influence zone of Betsy's Cove as well as specialized laboratory tests on undisturbed samples of soft clay. Geocomp engineers also performed analysis for the proposed retaining wall, including a stability analysis and geotechnical recommendations for construction of a replacement wall.



BACKGROUND

Betsy's Cove retaining wall is located in the town of Brooksville, Maine supporting Coastal Road or RT 176. The existing slope is protected by granite blocks placed at 1H:1V slope. The rip-rap measures about 10 feet high and 140 feet long. The existing rip-rap slope has shown some signs of distress such as settlement along the edge of the existing parking lot, and pavement damage due to voids behind the rip-rap slope. The rip-rap slope is proposed to be replaced with a retaining wall using the existing granite blocks as well as additional redi-rock blocks to supplement the on-site material. New roadside parking areas will be built on top of the backfill supported by the new retaining wall. The geotechnical challenges include retaining wall supported on soft clay of Presumpscot Formation, construction below sea level, sloping bedrock, and exposure to sea water.