

<i>Project Title</i> <b>SPR-3(072) Strength and Deformation of Mechanically Stabilized Earth (MSE) Walls at Working Loads and Failure</b>		<i>Agmt./Task No.</i> <b>SPR-3(072)</b>	<i>Item No.</i>	<i>Agency Bgt. No.</i>
<i>Research Agency</i> <b>Royal Military College of Canada</b>		<i>Start Date</i> <b>12/1/99</b>	<i>Estimated Completion</i> <b>04/30/04</b>	<i>Revised Completion</i> <b>12/31/08</b>
<i>Principal Investigator(s)</i> <b>Richard Bathurst</b>		<i>Technical Contact</i> <b>Tony Allen (360) 709-5450</b>		
<i>WSDOT Program Manager</i> <b>Kim Willoughby (360) 705-7978</b>		<i>FHWA or Other Technical Contact</i> <b>Sidney Stecker (360) 753-9555</b>		
<i>Funding Source</i> <b>WA, NY, ID, CA, WY, ND, MN, OR, AZ, AK</b>		<i>Schedule Status</i> <input type="checkbox"/> On schedule <input type="checkbox"/> Ahead of schedule <input checked="" type="checkbox"/> On revised schedule <input type="checkbox"/> Behind schedule		
<i>Research Area</i>				
<i>Original Estimated Cost</i> <b>\$360,104</b>	<i>Revised Cost</i> <b>\$550,000</b>	<i>% Funds Expended</i> <b>67%</b>	<i>% Work Completed</i> <b>75%</b>	
<i>Objective</i> <b><i>Develop a design procedure for the internal stability of MSE walls, especially those reinforced with fabrics.</i></b>				

**Project Progress:**

Phases 1, 2, and 3 have been completed. A large database of full-scale geosynthetic walls (16 fully instrumented, full-scale geosynthetic walls and 14 walls with limited measurements) and 24 fully instrumented, full-scale steel reinforced wall sections were utilized to develop a new design methodology based on working stress principles, termed the K-Stiffness Method. This simplified design method has been described in three published papers and numerous journals, the most recent report can be found at: <http://www.wsdot.wa.gov/biz/mats/Geotech/>.

The proposal for Phases 5 and 6 have been submitted and reviewed by the TAC members. Work has been done to get the contract in place and signed so that work on Phase 5 can start this summer.

**New Period Proposed Activity:**

The final report for Phase 4 will be completed and distributed. Also, the contract for the first series of testing using marginal soils for backfill (Phase 5) will be initiated this quarter.