Roux Associates was commissioned to perform a feasibility study, conceptual design, final engineering design and construction management of a multi-phased stormwater treatment wetland for four areas along a creek and pond in Glen Cove, New York. The treatment objective was the removal of sediment, nitrogen, phosphorus, and trace metals during the first flush of storm events.

Pre-design elements of the project included the review of stormwater studies of the 12 square mile contributing watershed; the compilation of United States Geological Survey water quality and flow data; the evaluation of storm-water treatment methods and best management practices; and the selection of the optimal site along the waterway.

Roux Associates' prepared detailed technical specifications and drawings for the following design

- elements:
 - Sedimentation forebay;
 - High and low marsh planted cells;
 - Shallow channels and deep pools;
 - Micropool;
 - Flow deflectors, check dams and berming; and
 - Stormwater control structures.



The surface water quality benefits to be gained by the project allowed for significant grant funding through the New York State Department of State's Long Island Sound Coastal Management Program and the New York State Department of Transportation. The wetland mitigation benefits



will play a major role in the environmental impact assessment of proposed waterfront revitalization efforts in the City of Glen Cove.

Roux Associates was also responsible for obtaining the required freshwater wetlands permits for the project. Final design and construction of the first 1.8-acre unit was completed in the spring of 2000. Roux Associates provided full time construction management during the installation. The final design of the second phase, a three-acre pond restoration, was completed and constructed in 2001.

