

APPLIED COASTAL

RESEARCH AND ENGINEERING, INC.



766 Falmouth Road, Suite A-1
Mashpee, MA 02649
<http://www.appliedcoastal.com>

Project: Hydrodynamic and Geologic
Sampling in the Hudson River,
Rensselaer, NY, March 27, 2001

Contact: ENSR International
2 Technology Park Drive
Westford, MA 01886
Mr. Tony Silva; 978-589-3191

Applied Coastal was subcontracted by ENSR to provide measurements of water velocity, bathymetry, and sediment characteristics in a localized region of the Hudson River. The data were provided to address permitting issues related to the proposed construction of the Empire State Newsprint Project. Current measurements were collected using a vessel-mounted Acoustic Doppler Current Profiler (ADCP) along four cross-stream transect lines once every hour for 12.4 hours. This effort resulted in high-resolution observations of the spatial and temporal variations in tidal currents throughout the survey area. A bathymetric survey was conducted to characterize the shape of the Hudson River at the proposed project location. Sediment characteristics were obtained using side scan sonar and sub-bottom profiles. Geophysical data were verified by nine (9) sediment cores (maximum recovery of 5 feet) and four grab samples at specific locations. Existing infrastructure and potential obstructions were identified by magnetometer. A comprehensive analysis and report of the current, bathymetric, and geophysical observations was provided to ENSR.

