

New York Public Library

Investigation and Exterior Restoration
New York, New York



CLIENT

The New York Public Library

CHALLENGE

The New York Public Library retained WJE to investigate the building's exterior, design needed repairs, and monitor construction on a schedule for the building's centennial celebration planned for 2011. The challenge was to document in detail the varying existing conditions over the entire facade, including the masonry, bronze doors and windows, roof, and sculpture, and to develop appropriate and effective conservation treatments for this historic landmark and the surrounding plazas.

STRUCTURE

The firm of Carrère and Hastings, winners of an 1897 design competition, designed the original main branch (now the Stephen A. Schwarzman Building) of the New York Public Library. Construction began in 1903, and the building was dedicated in 1911. The exterior masonry is constructed of White Mountain marble quarried in Dorset, Vermont. The library was designated a New York City landmark in 1967.

SOLUTION

Documentation of the existing condition of all building components was facilitated by means of a comprehensive tablet-computer-based field survey. Evaluation of many alternate masonry treatments was supplemented by a detailed materials testing program in WJE's laboratory. In addition, field trials were used to evaluate various stone treatments and cleaning techniques under consideration.

Based on research into the original construction and maintenance history and on the extensive field documentation and field and laboratory testing, we developed and estimated the impact of alternate repair design approaches. After discussing the options with the client, we prepared design documents for bidding. After assisting with the selection of contractors, we provided field support during the execution of the restoration work.