

R A N D

Sidewalk Vault Replacement

73 Worth Street



One of the largest sidewalk vault replacement programs for a residential condominium in New York City, the two-story subterranean vault along Worth and Church Streets was still largely supported by the original 1850s' cast iron structural framing.

PROPERTY

7-story, 30-unit condominium at 73 Worth Street built circa 1920 in the Tribeca East Historic District of Manhattan. The two-story subterranean sidewalk vault, built in the 1850s, is close to the A, C, and E subway lines.

PROJECT OVERVIEW

Sidewalk, vault, and roadway replacement and related vault repairs along Worth and Church Streets, one of the largest sidewalk vault replacement programs for a residential condominium in New York City history.

SCOPE OF WORK

RAND specified and administered the following work items:

- New sidewalk vault composite structural slab system with new steel beams and columns, new granite curbs, and a new wearing slab over a new waterproofing system
- Replacement of defective brickwork and repointing mortar joints along the vault's masonry walls
- Sprinkler and branch piping installation within the storage rooms
- Steel lintel installation
- Fire alarm system reinstallation

Prior to implementing the design, RAND performed an extensive analysis of the vault's existing structural system, and obtained work permits from the New York City Department of Buildings, the Metropolitan Transportation Authority, the Department of Transportation, and Landmarks Preservation Commission.

ARCHITECT/ENGINEER

RAND Engineering & Architecture, DPC

CONTRACTOR

Central Construction

CONSTRUCTION COST

\$1.65 million