



PROJECT DATA SHEET:

43 MacDougal Street

ANSWERING A COMMUNITY'S CALL FOR HISTORIC PRESERVATION



***Masonry Solutions
International, Inc.***

10815 Beaver Dam Rd, Suite D
Cockeysville, MD 21030 USA
Tel: 877-815-7906 Fax: 410-771-1942

Repair and enhance without changing the aesthetics.



43 MacDougal Street

Location: New York, NY

Age: Built 1846

Key Topics: Historic stabilization,
GS Anchors, adaptive reuse, NDE,
CIF injection

Project Background:

- An 1846 Greek Revival rowhouse (and fabled mafia hangout) located in the Charlton-King-Vandam Historic District, which was once the site of George Washington's headquarters during the Revolutionary War
- Was left in disrepair for several years by a previous owner, one of the first to be sued by the City of New York for "demolition by neglect" of a landmarked property. This motivated the sale of the historic property, paving the way for a full restoration
- New owners answered years of community activists and NY Landmarks Preservation Commission calls to preserve the historic facades instead of rebuilding them



Challenges Presented:

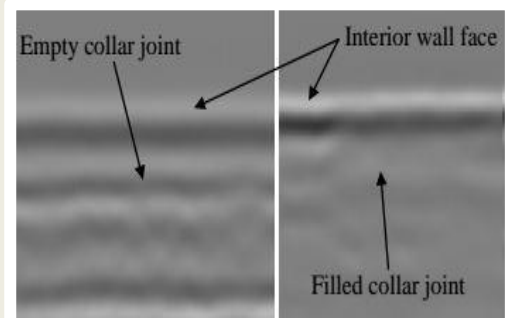
- Lime based mortar had severely deteriorated in both the visible mortar joints and collar joints inside of the wall to the point where the mortar was like sand
- Building façade plane continued to the neighboring property causing facades to separate from the party wall
- The masonry shell was in such bad condition that project members expressed concerns over a possible collapse



Repair and enhance without changing the aesthetics.

Services and Solutions:

- Masonry Solutions first thoroughly evaluated the facades at 43 MacDougal using Non-destructive evaluation to determine a safe method of intervention and uncover detailed information on its current condition
- Masonry Solutions laboratory engineers then determined a compatible injection material that was sympathetic to the host's particular characteristics
- Façade walls were partially shored to prevent any movement and two entire facades were injected using low pressure Injection
- This injection project presented a number of challenges, including the creation of an isolation barrier that would keep injection material from flowing into non-prescribed neighboring areas
- CIF Injection took place from the building interior, with safety risks such as missing floor boards and extremely loose masonry requiring a high degree of precaution
- Next, MSI technicians carefully drilled 4-5ft through the facades and embedded stainless Gruenstark fabric anchors into the party walls to firmly secure the façade to the rest of the building.
- Further NDE demonstrated the solidity of the masonry units, thus confirming stabilization of 43 MacDougal's facades
- The neighboring community and preservation advocates everywhere could breathe a sigh of relief knowing this valuable piece of history was now in stable condition



Pre-Injection

Post-Injection