LESTATE

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Facts & Figures

Owner: Savoy Associates, LLC, which includes Russell Development, Boston, MA; The Hamilton Company, Boston, MA; and Sea-Dar Construction. Roston MA Type of Project: New condominiums using an existing building's facade Architects: Leavitt Associates. Watertown, MA (architect of recordi: Hacin + Associates, Inc.

Boston, MA (design architect) General Contractor: Sea-Dar Construction, Boston, MA Engineers: Simpson, Gumpertz &

Heger, Inc., Waltham, MA: Fitzmeyer & Tocci, Woburn, MA Size: 26.820 square feet (salable): 35,000 square feet (total) Cost: \$13 million (including land,

construction and soft costs) Construction Time: October 2000 - Areil 2002

The Need: Creating a 13-unit condominium complex from an abandoned storage building in the South End historic district

The Challenge: Demolishing the existing building while protecting and restoring its 114-year-old



Photo courtesy of Rick Mandelkorn

Boston, Massachusetts

The Savoy

Those involved with the conversion of The Savoy - a 114year-old, four-story brick row house building - into a six-story condominium development faced a steep challenge: demolishing the majority of the structure while preserving the two facade walls that faced the historic district, per the request of Boston's South End Landmarks Commission.

Concerned about the two walls' frailty and limited by space, workers hand-demolished the rest of The Savoy to the facade's first bearing line. Crews used multiple bracing angles - connected through windows to prevent the need to drill - to bolster the facade. After a stepped-down foundation was created, the team "threaded the permanent

columns, beams and metal deck panels through the jumble of braces to support the floors, poured concrete, and attached the walls to the new concrete floors," said Jean Abouhamad, president of Sea-Dar Construction, the project's general contractor and a member of Savoy Associates, LLC, the project's owner.

Because traditional de-leading processes could compromise the facade's structural integrity, crews used repeated application and removal of chemical sheets to absorb toxins in the facade's lead-based paint. Slip-connections were put in place to join the facade's walls to the new portion of the building, bringing the walls up to code for vertical and seismic loads.

"These historic facades have been carefully restored to their former glory, but with a twist: a new, loft-like brick building rises behind them, running much of the length of Savoy Street," said David Hacin, president of Hacin + Associates, Inc., the project's design architect. "This building integrates itself into the surrounding industrial district of the South End, while providing an exciting new backdrop" for the original building.

Prior to undertaking the project, the team met with community groups for input. In addition to preserving the facade, another request was to recreate the original building's roofline. Using the only available reference - one



photograph — crews combined historically accurate mortar colors, copper domes and parapet coping made of concrete precasters to accurately replicate the design.

Also challenging was providing a maximum footprint while taking a close neighboring structure into account. "A design feature that is important to the overall project was the use of steel-braced frames as a lateral load resisting system," said James Parker, principal for Simpson, Gumpertz & Heger, Inc., one of the project's engineers. "This allowed the building to be stiff enough so as to minimize



Photos courtesy of Hacin + Associates, Inc



the distance the building had to be held away from the property line."

Three other major construction projects in the area, along with the renovation of Washington Street and its sidewalks, contributed to congestion around the site. The project team coped by renting a neighboring rooftop and lawn for staging activities, coordinating the arrival of heavy equipment with the

other projects' builders, and moving equipment off site after hours.

"The project underscored the value of exhaustive preconstruction planning," said Abouhamad. "By convening the entire team early in the process we were able to understand the total challenge and plan accordingly."

- Cortney Dueweke



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SEA-DAR CONSTRUCTION

46 Waltham Street, floor 2A Boston, Massachusetts 02118 617.423.0870 617.423.0872 fax www.seadar.com