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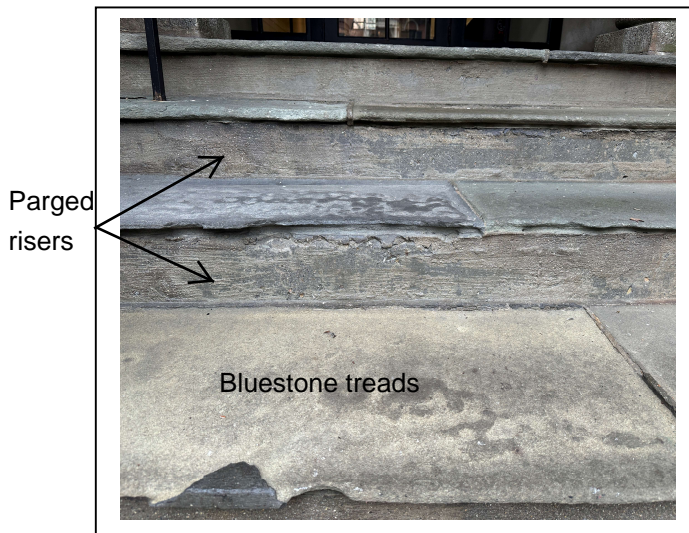
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70-72 Mt Vernon Street, Boston, MA

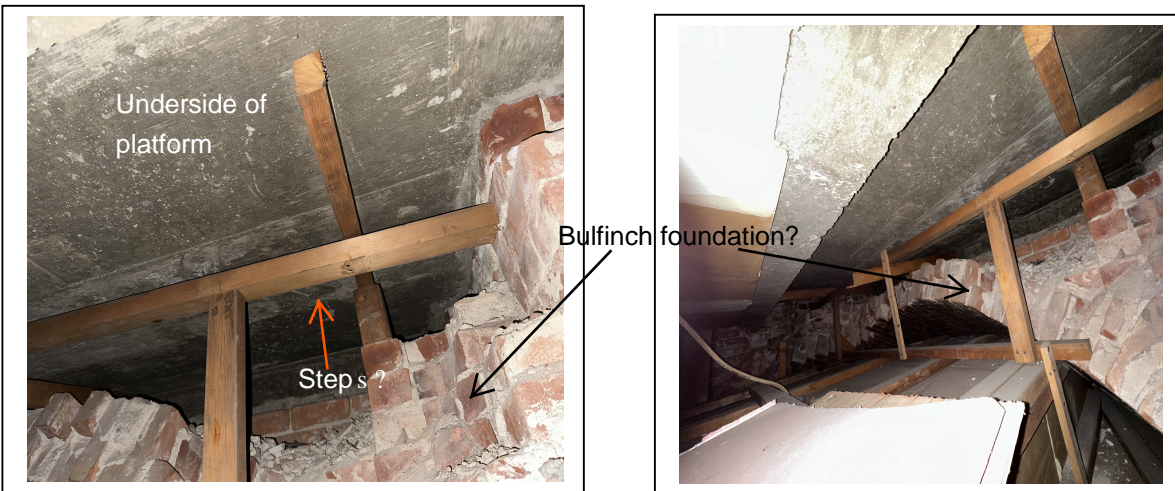
Investigation of Entry Steps and Platform

February, 2024

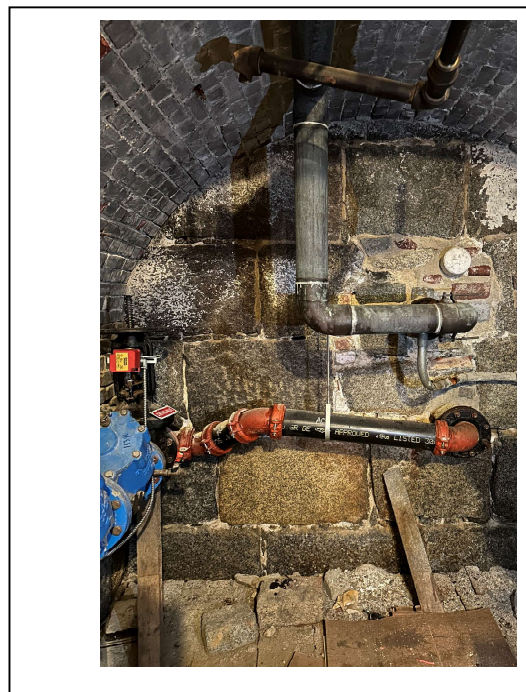
The twin houses at 70-72 Mt. Vernon Street were originally built c. 1840; they were raised two stories c. 1860 and they expanded upward again when converted to condominiums c. 1965. It is said that these houses were built on the foundation of a large barn and dairy complex behind a large mansion house on Chestnut Street and that those buildings were Beacon Hills most monumental buildings when constructed according to the design of Charles Bulfinch. Although it is unclear if the existing buildings on Mt. Vernon have the same footprint as the Bulfinch building, it does appear that portions of the basement and cellar (lowest level, below basement) retain masonry from the Bulfinch period, c. 1815. The 1840 design is by Richard Upjohn, major alterations were made when it was BU's school of Theology. The entry steps, landings and side walls of the 70-72 entries show deterioration which presents a very poor appearance and a tripping hazard. Currently the steps have bluestone treads and the risers are parged over an unknown substrate. The sidewalls are brownstone with some exfoliation and poorly done patches. The mortar joints on the upper platform have become raised due to erosion of the bluestone surface.



The goal of the current project is to replace the steps and platform surface with granite. In order to better understand the conditions/supporting structure under the steps, a site visit was made to review accessible spacers below the steps. Drawings from the 1965 condo documents suggested that these spaces might still be visible/accessible in the final construction. On January 25, 2024, assisted by building superintendent Lazlo Santos, the courtyard and basement under 72 steps was partially accessed as well as what is believed to be the basement under the space under the 70 entry. Note that the courtyard level is below grade at Mt. Vernon Street and the basement is the lowest level; the basement is identified as "cellar" on the condominium subdivision drawings and the courtyard referred to as "basement".



The courtyard level photos above appear to show that the current steps are founded on a concrete base and that portions of an older vaulted structure/foundation remain. Further, when the mat at the entry platform was lifted, a concrete surface was observed. At the lower cellar level, the likely remains of the Bulfinch building granite foundation is noted with a brick vault above.



Cellar level (lowest level)

At least partly, based on 2/1/24 investigation from the top at least some of these findings strongly suggest that the entry steps were substantially redone as part of the 1965 work and that the foundation for the steps is concrete and that the observed risers are just parging over the concrete and that the bluestone treads overlay the concrete. It was anticipated that the support of the steps would be some form of stringers and that there would be solid steps, and not just thin threads over the concrete. brick before the investigation

Treads vary 13"-17"
Risers vary 5"-7"

Drilling observations

Rise -
7 X 6 = 42" rise

STEP 7

Concrete under

STEP 6

Concrete

STEP 5

Concrete

STEP 4

Concrete void
after 8"

STEP 3

some possible
brownstone under?

STEP 2

Possible
some brownstone under?

STEP 1

Not drilled



On February 1, 2024 additional observation was made of the underside (courtyard level) of 72 and it appears that much of the Bulfinch area vaulting remains and that rubble from demolition of brownstone steps (?) remains stored within the brick vaulting. Aided by David DiBlasio, an experienced historic mason with extensive Beacon Hill experience, probes were made into the treads and risers of the 72 entry steps. The results were unexpected. While the lower three steps appear to have some brownstone underlying the surface, the upper steps appear to be on concrete and at one location a hollow was uncovered under the concrete. Most steps were drilled, at the far right edge, beyond the railing, and the holes later filled. Thus, it appears that the foundation under the steps and platform is not uniform and that the lower part may be built-up on top of remaining Bulfinch area materials - including possibly brick vaults. It is clear that the full condition underlying the steps will only be known when full demolition is completed. Observed conditions are noted on the photo above.

Project Scope:

1. Replace existing non-historic stairs and platform surface with granite stairs and platform surface matching existing dimensions. The goal of the project remains to provide as many full granite steps as possible, but it may be necessary to retain existing concrete at the upper treads and landing to avoid substantial demolition and to not disturbing the concrete or early vaulting. Where full steps cannot be provided, granite treads will be used. The bluestone on the platform will be replaced by granite units of like dimension.
2. Remove non-matching in color or profile existing patches on the stair side walls with color, texture and profile matched Jahn (or similar) repair. Provide limited repair to additional stair side wall stones showing deterioration.

End of Report

