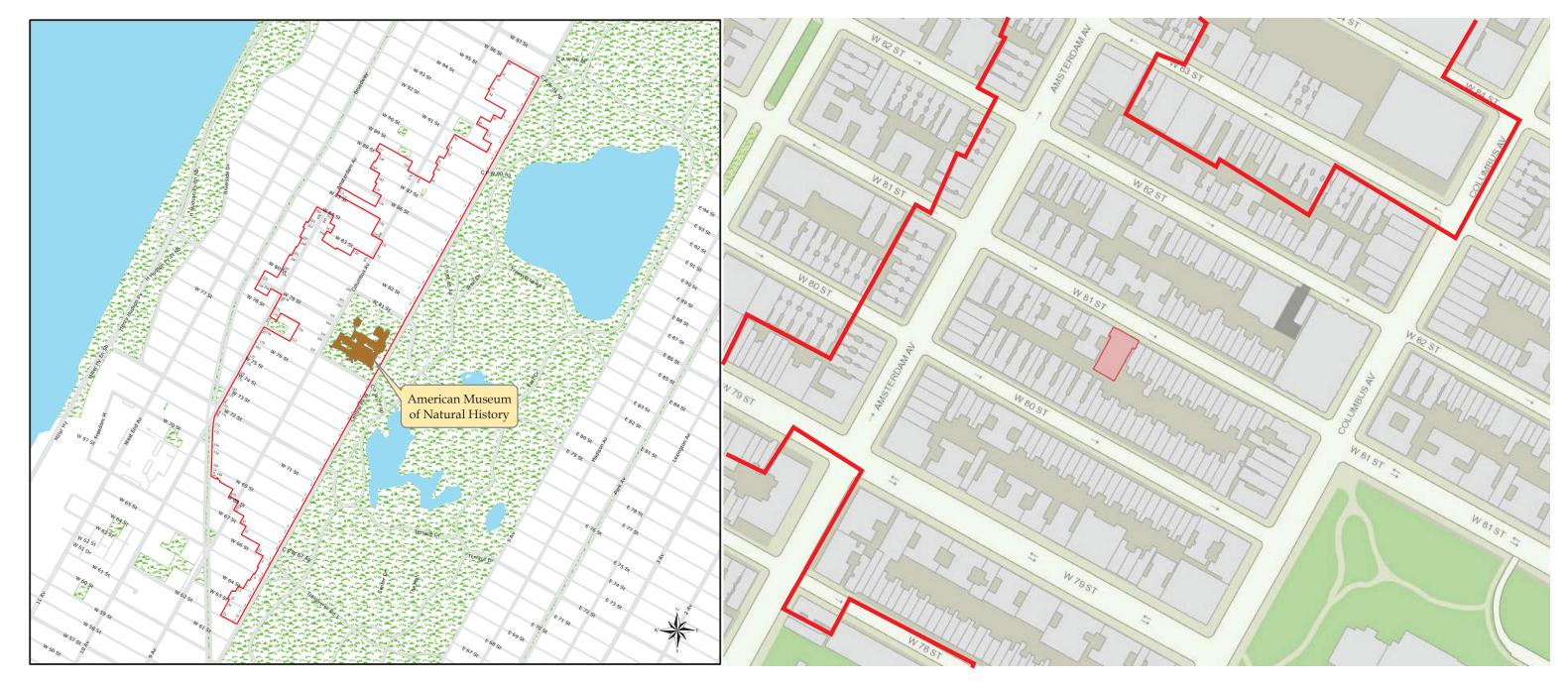


DXA studio 140 W 81 STREET June 08, 2023

PROPOSED KEIM MINERAL STAIN SCOPE OF WORK: LPC PACKAGE

# **PROJECT INTRODUCTION**



HISTORIC DISTRICT MAP: UPPER WEST SIDE/CENTRAL PARK WEST

SITE PLAN



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# 140 WEST 81ST · HISTORIC DISTRICT MAP + SITE PLAN

SCALE CLIENT PROJECT NUMBER 13.39 DATE



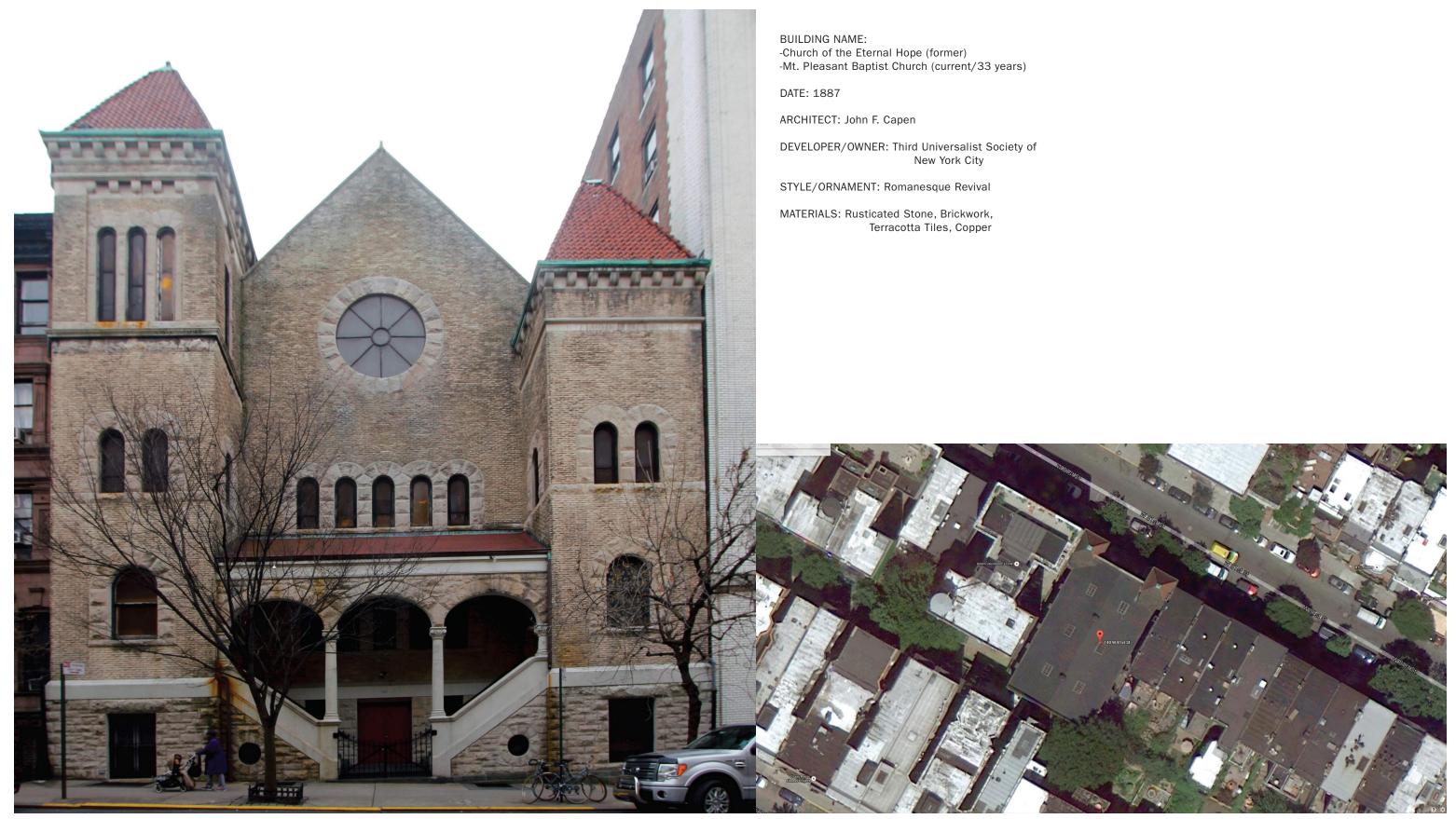


PHOTO DATED 12/06/2014 (NOT REPRESENTATIVE OF CURRENT MASONRY CONDITIONS, SEE PAGE 06)



## 140 WEST 81ST · SATELLITE LOCATION & PROJECT PHOTO

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# 140 WEST 81ST · LPC-APPROVED PROPOSAL

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# PROPOSED KEIM MINERAL STAIN



PHOTOS DATED 04/12/2023 SHOWING GYPSUM, LIME, AND COPPER DEPOSITS THROUGHOUT MAIN (NORTH) FACADE



140 W 81 STREET — CURRENT MASONRY CONDITIONS

SCALE CLIENT PROJECT NUMBER 13.39 DATE



ARCHITECTURAL CONSERVATORS

### **MEMORANDUM**

To: Sando Thordarson DXA studio 894 6th Avenue, 5th Floor New York, NY 10001

Sent via email: st@dxastudio.com

From: Edward G. FitzGerald Jablonski Building Conservation 40 West 27<sup>th</sup> Street, 12<sup>th</sup> Floor New York, NY 10001

Date: March 27, 2023

140 W 81<sup>st</sup> Street – Façade Coating Recommendations Re:

Mr. Thordarson,

JBC recommends that a coating be applied to the façade brickwork to mask soiling that cannot be removed and provide an even appearance that is in-keeping with the original appearance of the masonry.

In 2016, JBC tested 16 different chemical cleaning agents as well as micro-abrasion and water misting to clean the rock-faced brick and limestone façade. We found that it was very difficult to remove soiling without altering or damaging the brick. We determined that water misting followed by limited chemical spot treatment was the gentlest, most effective cleaning method and that complete soiling removal would not be possible. We specified this procedure for the full-scale work, believing that it would reduce the soiling sufficiently to provide a more even appearance.

On March 24, 2023, we visited the site to review a large-scale mockup of the specified cleaning procedure. The contractor reported misting the mockup area for four days, followed by spot treatment of heavily soiled areas and rust staining. While the cleaning procedure removed some of the soiling, the area continued to have a very uneven appearance (Figures 1 to 3). Unfortunately, we do not believe it is possible to remove the remaining soiling. Our previous tests demonstrated that more aggressive cleaning methods will either etch the brick or cause it to discolor. Further, we note that JBC's initial cleaning recommendations were based on small-scale tests performed in another location. Owing to inherent variation in soiling conditions across the façade, it was always possible that the recommended procedure would not be effective in all locations.



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Figure 1. Cleaning mockup (indicated) after completion, from 20' away.



Figure 2. Cleaning mockup after completion.

140 W 81 STREET — JBC REPORT DATED 03/27/23 NOTING CLEANING ATTEMPTS AND KEIM MINERAL STAIN RECOMMENDATION



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Figure 3. Detail of soiled bricks after cleaning.

The project team has now exhausted available cleaning options, and we understand that the uneven appearance of the treated area is unacceptable. Therefore, we now recommend that the brickwork be coated to conceal the soiling and provide an even appearance. A potassium silicate coating, such as those manufactured by Keim or Beeck, should be used as these have the highest permeability ratings of any masonry coatings on the market. Silicate coatings also have a matte sheen that is similar to the existing brick surface. The coating should be custom color-matched to a cleaned surface of the existing brick within the portico. This small area of brickwork was protected from the heaviest soiling and retains much of its original appearance. The limestone portions of the façade have been cleaned effectively and should not be coated.

Note that, while on site, JBC observed numerous corroding scaffolding anchors abandoned in the brickwork after the previous scaffolding was removed. These anchors and anchors from the current scaffold should be removed and the remaining holes should be patched and coated. If these anchors are not removed, they will continue to corrode and may damage the masonry and cause rust staining.

As the brickwork was not previously coated, it is necessary to seek the approval of the LPC prior to any coating application. Please feel free to contact me should you have any questions or require further assistance.

Regards,

Edward G. FitzGerald, AIC PA Senior Associate & Senior Conservator



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140 W 81 STREET — JBC REPORT DATED 03/27/23 NOTING CLEANING ATTEMPTS AND KEIM MINERAL STAIN RECOMMENDATION

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KEIM S119 SWATCH (PREFERRED), SHOWN NEXT TO A REMOVED MAIN FACADE HISTORIC BRICK

KEIM S117 SWATCH (ALTERNATIVE), SHOWN NEXT TO A REMOVED MAIN FACADE HISTORIC BRICK





# 140 W 81 STREET — PROPOSED KEIM MINERAL STAIN COLORS

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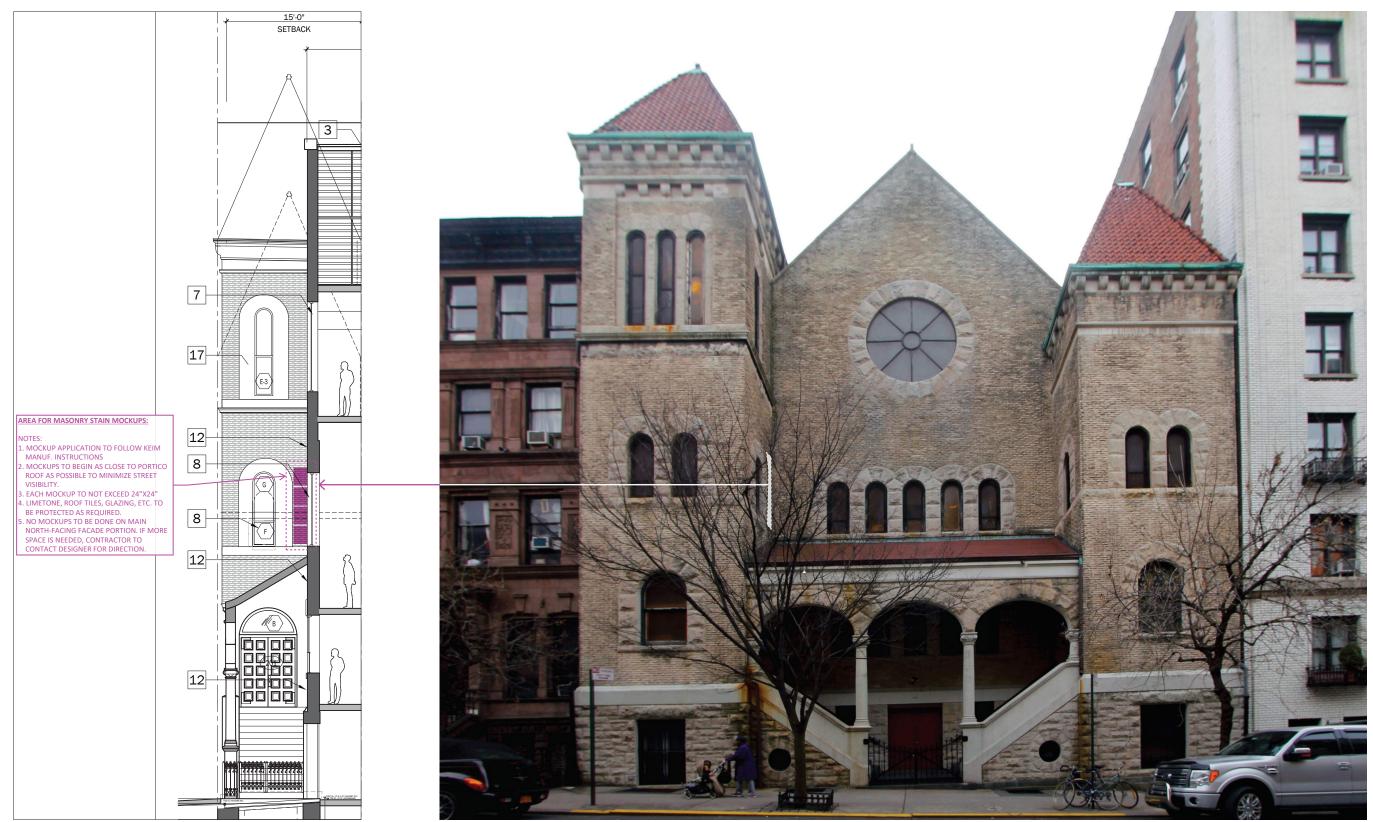


PHOTO DATED 12/06/2014 (NOT REPRESENTATIVE OF CURRENT MASONRY CONDITIONS, SEE PAGE 06)



# 140 W 81 STREET — KEIM MINERAL STAIN MOCKUP LOCATION (LPC-APPROVED)

SCALE CLIENT PROJECT NUMBER 13.39 DATE



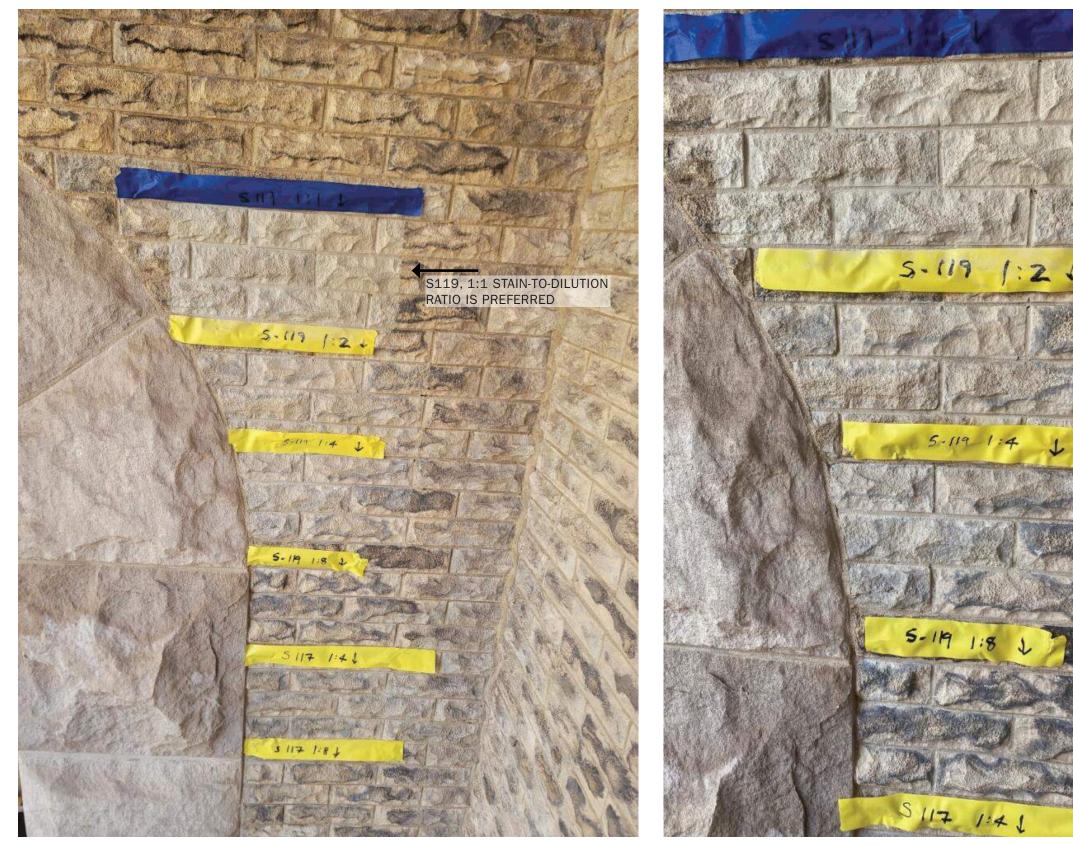


PHOTO DATED 05/25/2023





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### S119, 1:1 STAIN-TO-DILUTION RATIO IS PREFERRED

# 140 W 81 STREET — PROPOSED KEIM MINERAL STAIN MOCKUP PHOTOS

SCALE CLIENT PROJECT NUMBER 13.39 DATE





PHOTO DATED 05/25/2023

140 W 81 STREET — PROPOSED KEIM MINERAL STAIN MOCKUP PHOTOS: CLOSEUP OF S119 1:1



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PHOTO DATED 12/06/2014



140 W 81 STREET — PROPOSED KEIM MINERAL STAIN MOCKUP PHOTOS: CLOSEUP OF S119 1:1

# PHOTO DATED 06/07/2023

SCALE CLIENT PROJECT NUMBER 13.39 DATE



# THANK YOU