

Educational Building

70 Fifth Avenue

Landmarks Preservation Commission
Public Hearing

Bacon Lane Architects - Architect of Record

Acheson Doyle Partners Architects - Preservation Consultant

Cribstone Engineering - Structural Engineer

I. Introduction & Existing Conditions

II. Cornice Reinstallation & Overview of Preservation Approach

III. Details of Preservation Approach

IV. Appendix

Educational Building 70 Fifth Avenue

Building Information

Address: 70 Fifth Avenue (2-6 West 13th St.)
New York, NY, 10011

Cross Streets: Fifth Avenue & 13th Street

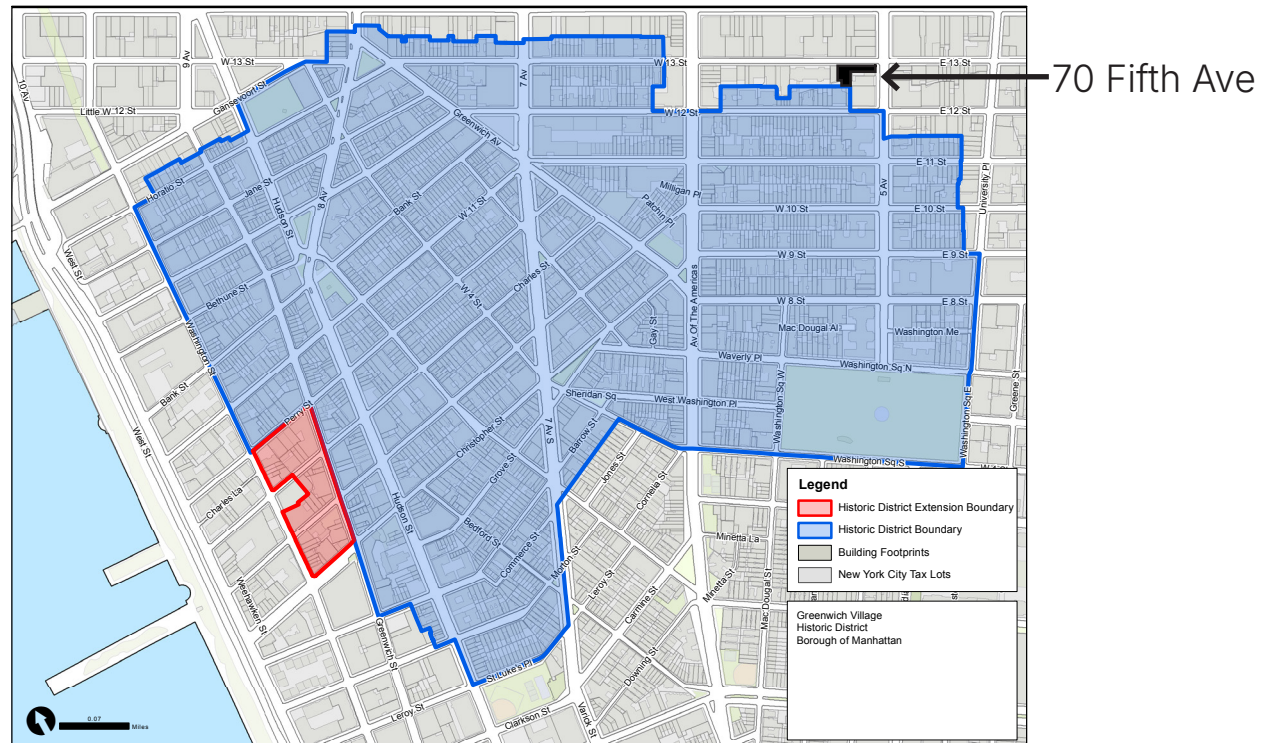
Built: 1912-1914

Architect: Charles Alonzo Rich

Style: Beaux-Arts

Facade Materials: White brick, terra-cotta, & cast stone

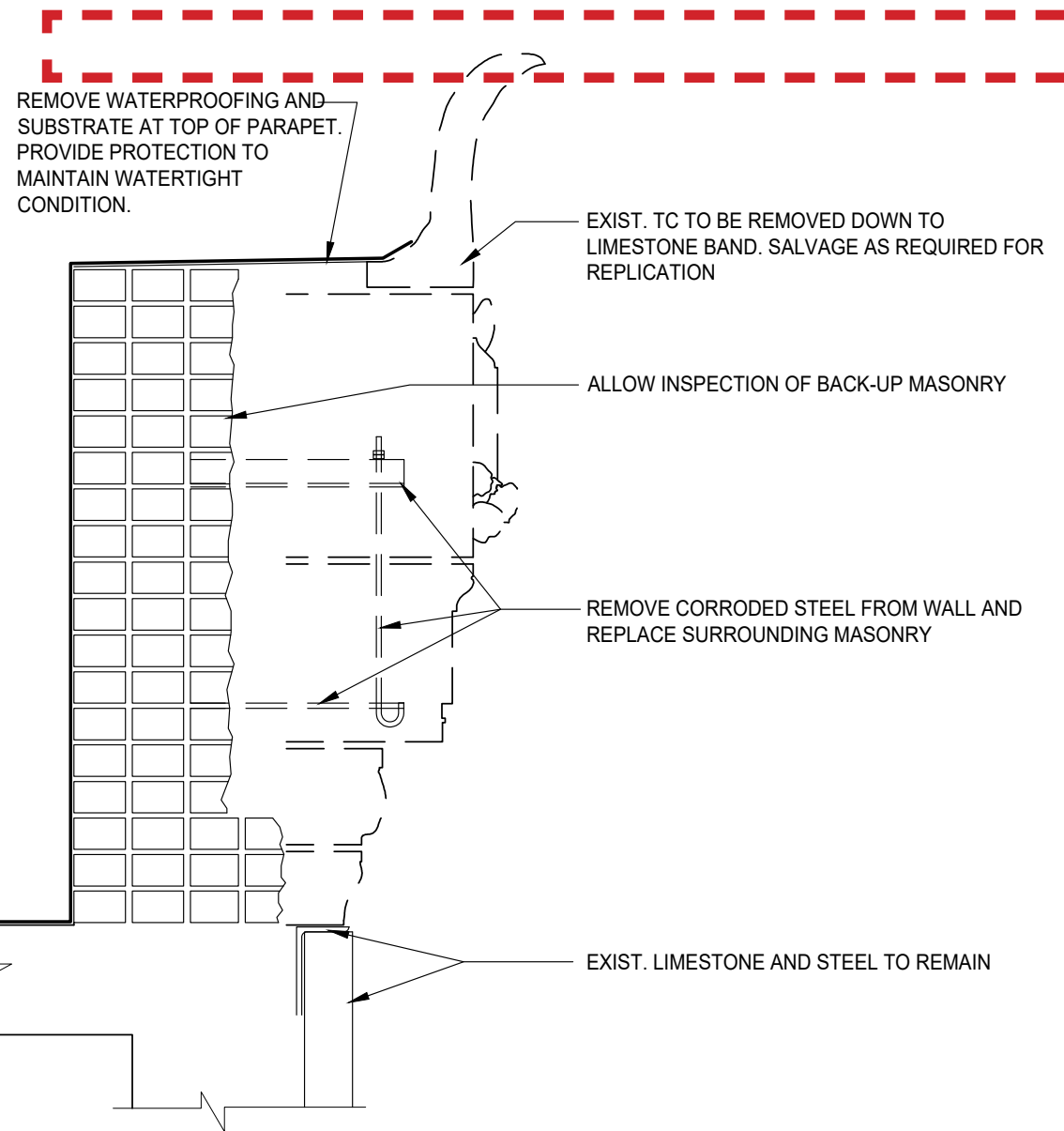
Landmark Status: Individual Landmark



ca. 1940

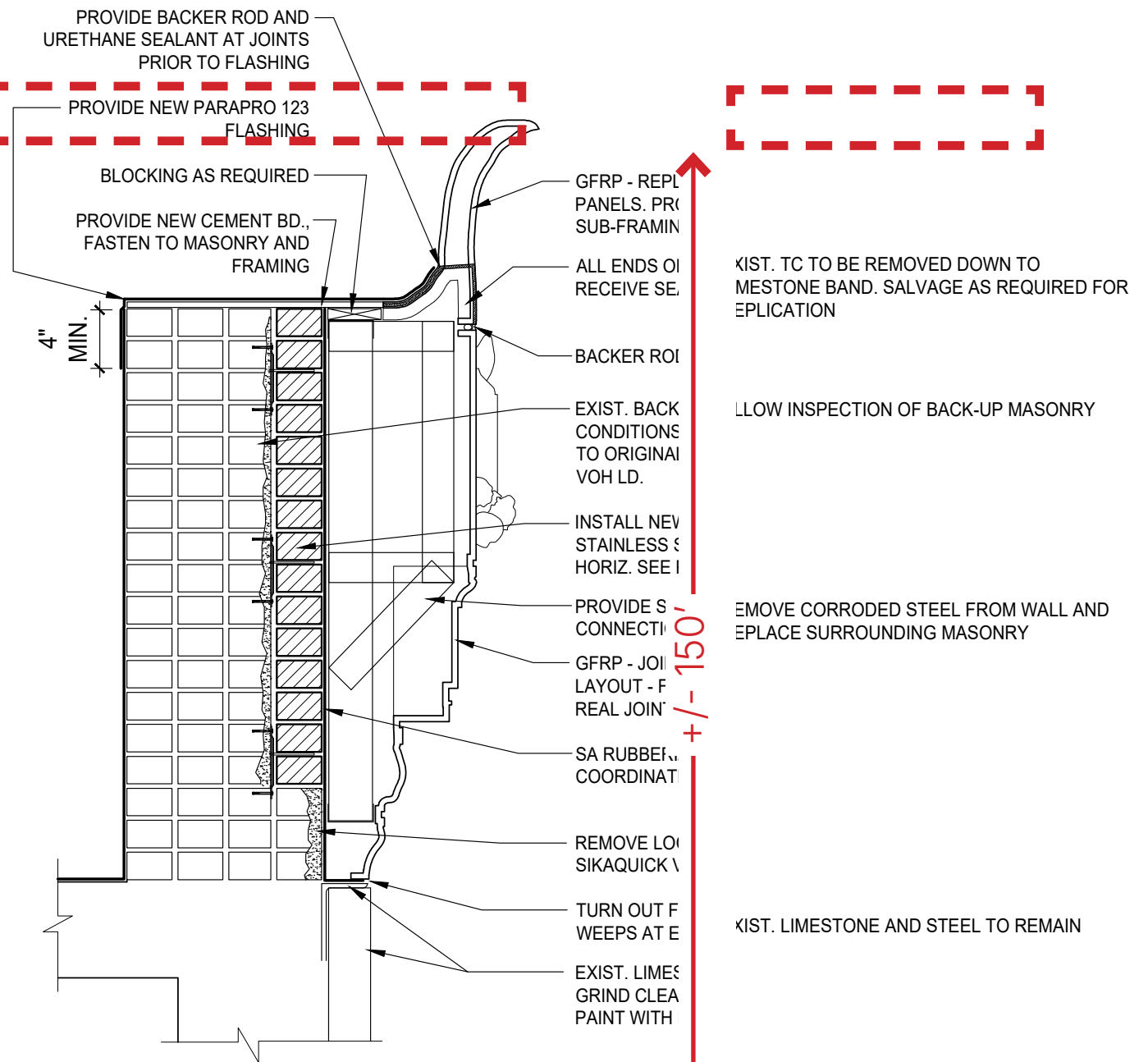


ca. 2021



A CORNICE DEMO
SCALE: 1" = 1' - 0"

North Elevation



B CORNICE REBUILD
SCALE: 1" = 1' - 0"

East Elevation

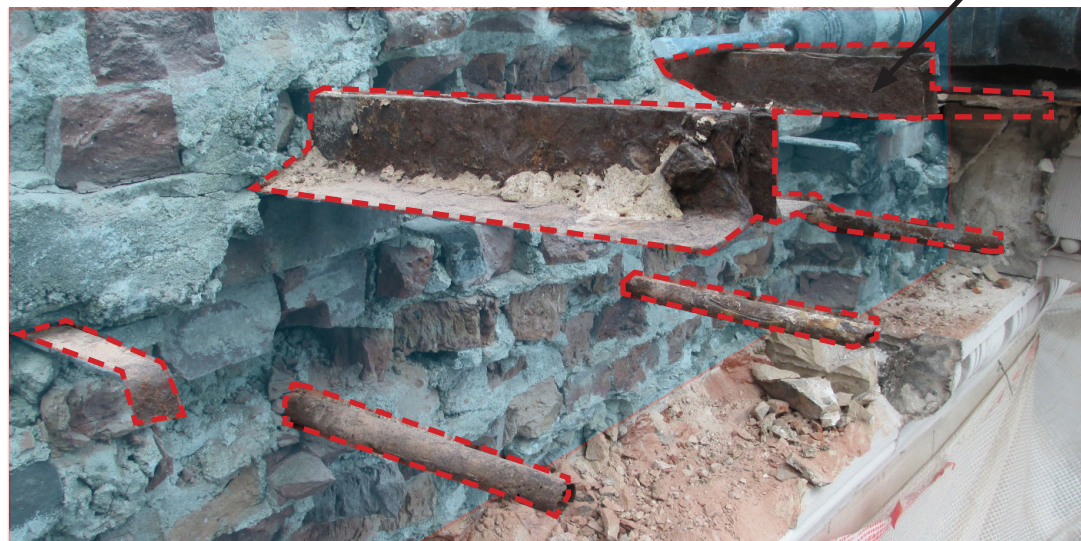
Area of Focus: Cornice Line

Introduction & Existing Conditions



View of parapet cornice
(Image from NYC LPC Designation Report)





EXISTING CRACKING
TERRACOTTA
CORNICE

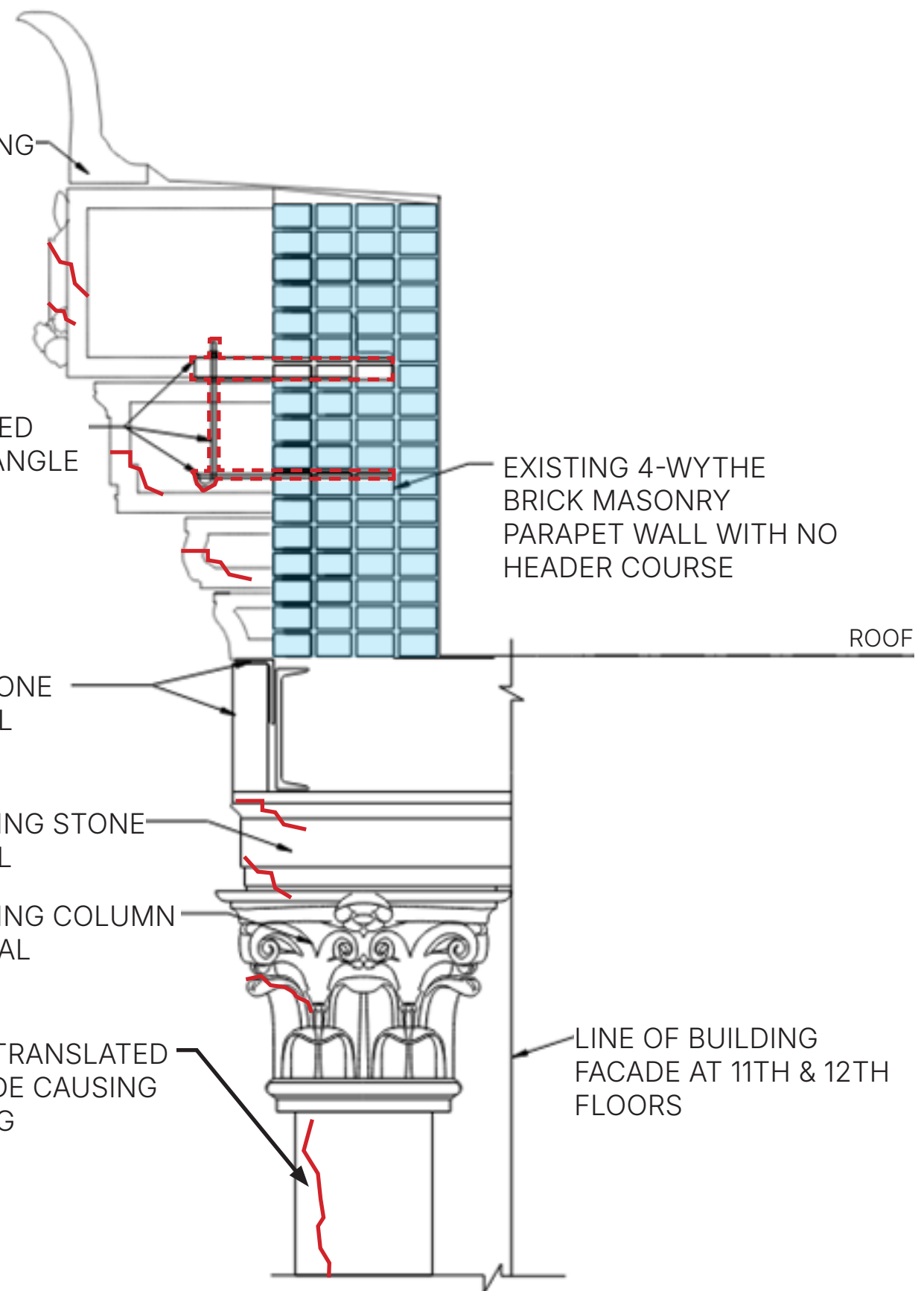
HEAVILY CORRODED
STEEL TIE-BACK ANGLE
AND RODS

EXISTING LIMESTONE
AND STEEL ANGEL

EXISTING STONE
LINTEL

EXISTING COLUMN
CAPITAL

WEIGHT TRANSLATED
TO FACADE CAUSING
CRACKING



EXISTING 4-WYTHE
BRICK MASONRY
PARAPET WALL WITH NO
HEADER COURSE

ROOF

LINE OF BUILDING
FACADE AT 11TH & 12TH
FLOORS

Structural Components of Cornice Parapet

Introduction & Existing Conditions



Deterioration of steel anchor embedments



Separation between face brick and back-up brick masonry back up wall due to lack of header course

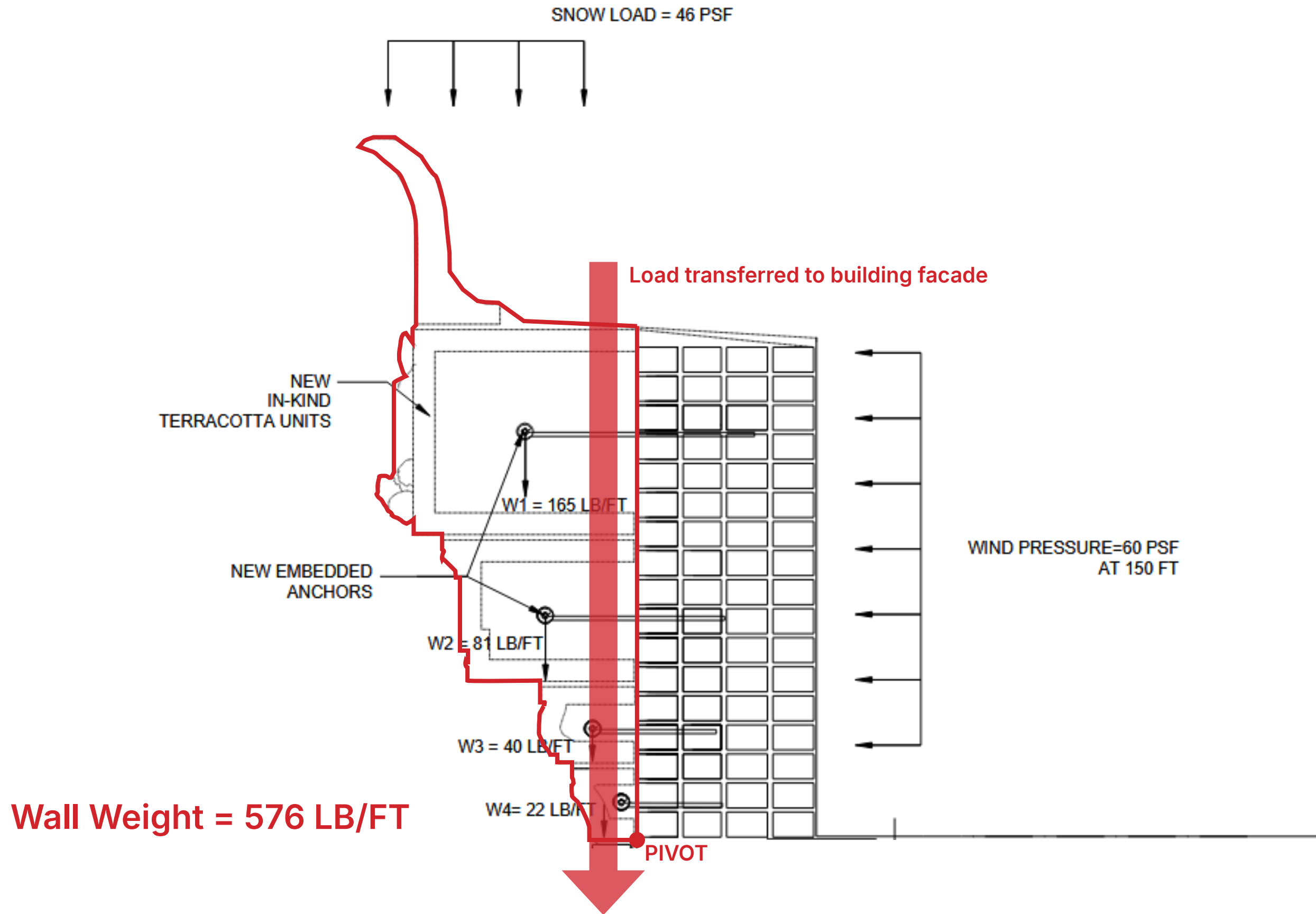


Continuous vertical cracking at limestone due to compression forces

Deteriorated and Cracking Conditions

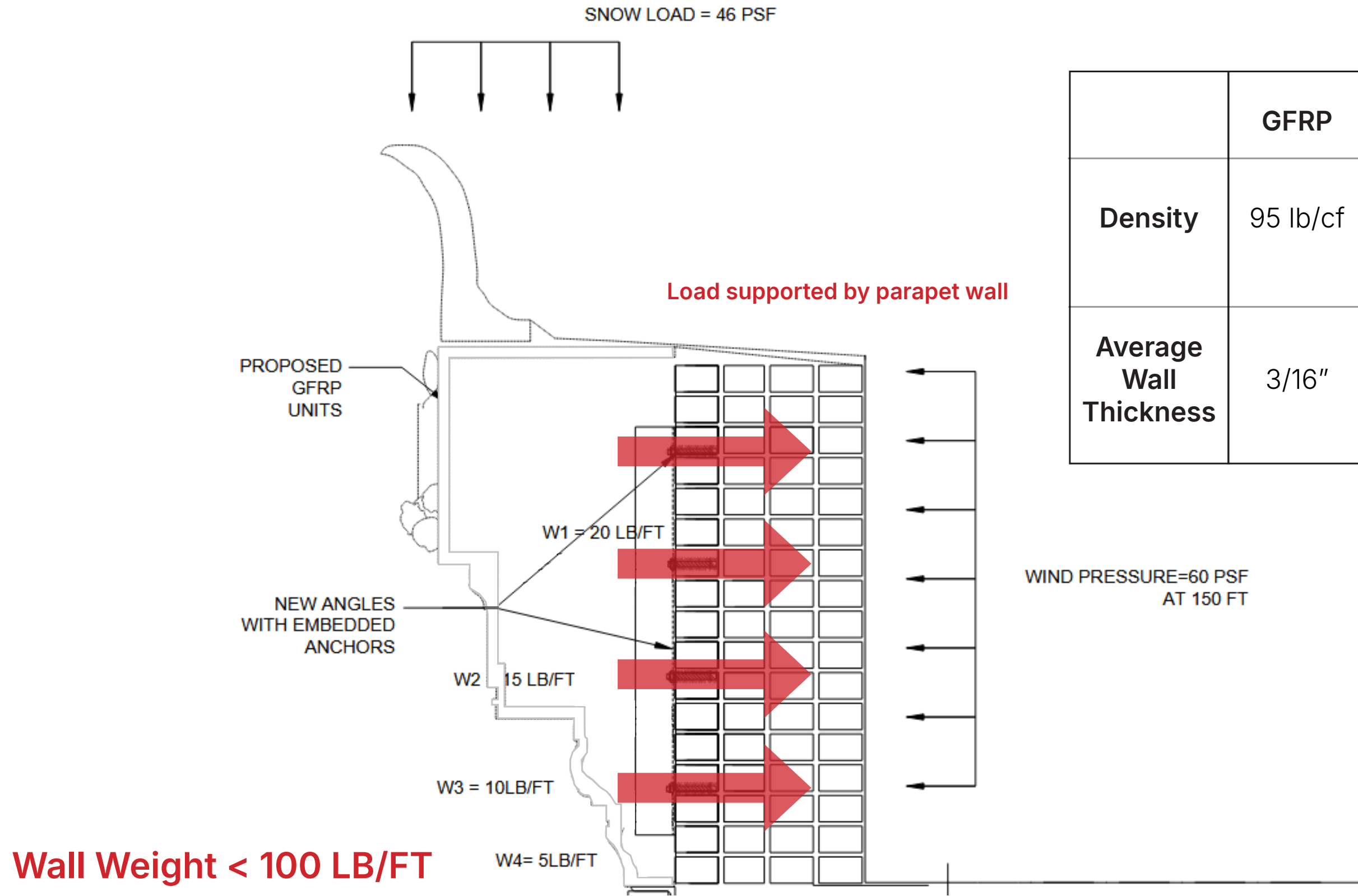
Introduction & Existing Conditions

II. Cornice Reinstallation & Overview of Preservation Approach



New Terracotta Units Load Diagram

Cornice Reinstallation & Overview of Preservation Approach

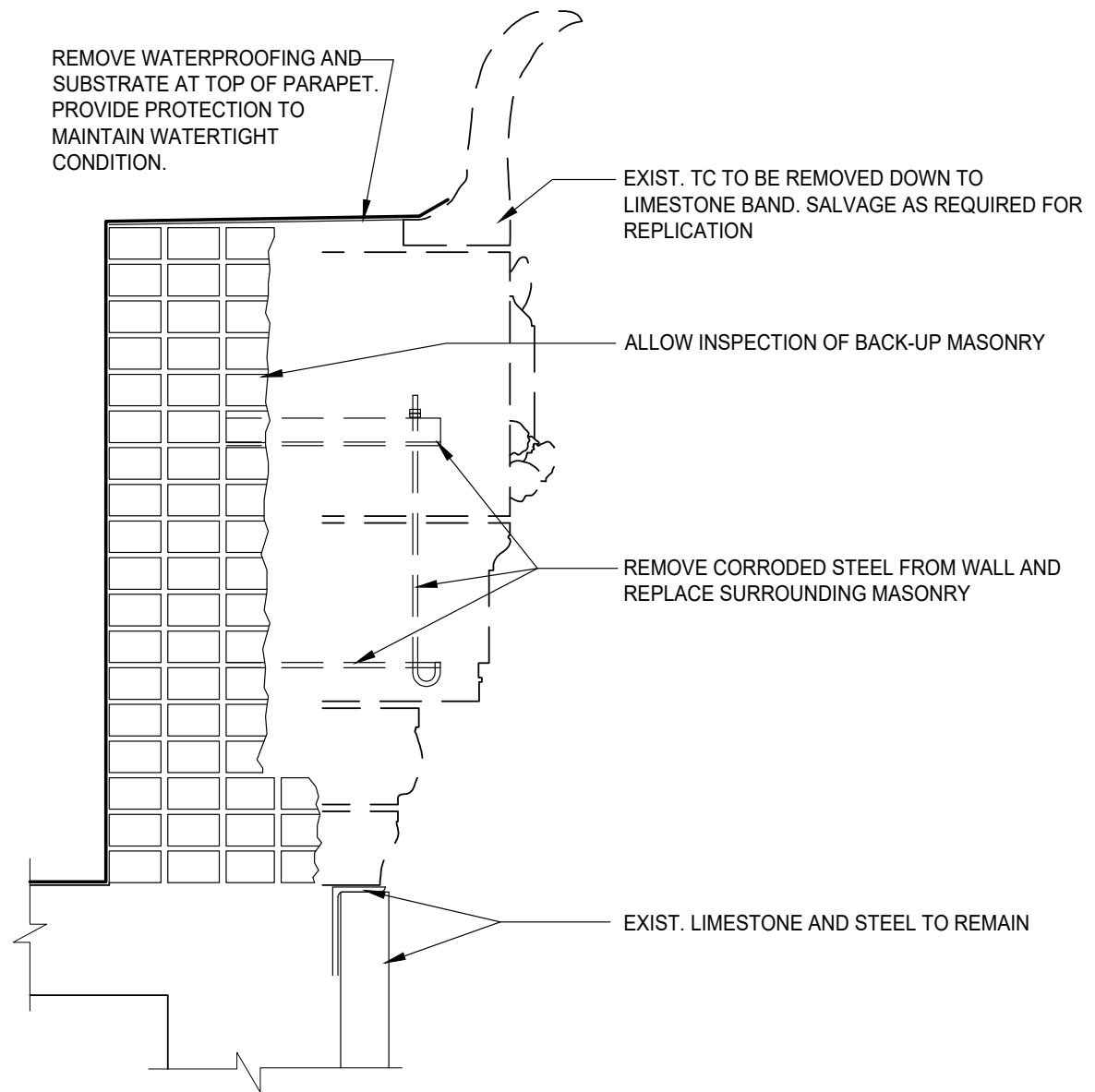


| | GFRP | Terracotta |
|------------------------|----------|--------------|
| Density | 95 lb/cf | 135 lb/cf |
| Average Wall Thickness | 3/16" | 1.25" - 1.5" |

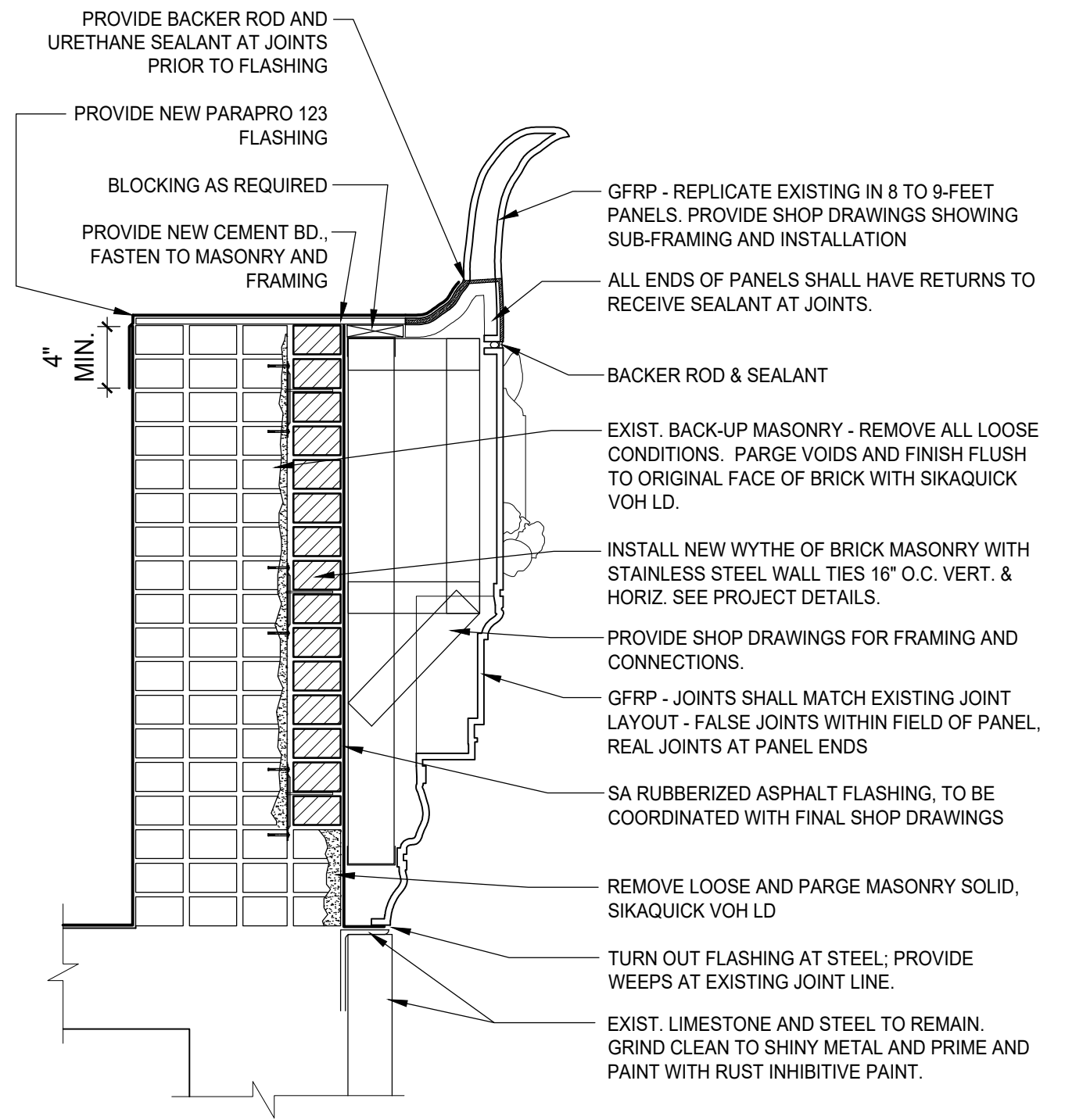
Proposed GFRP Panel Load Diagram

Cornice Reinstallation & Overview of Preservation Approach

III. Details of Preservation Approach



Cornice demolition



New cornice

Proposed Cornice Replacement

Details of Preservation Approach



Seal Reinforced Fiberglass, Inc.
GFRP Replaced Terracotta Cornice



Terracotta



Uncoated GFRP sample

Coating color & sheen to match terracotta sample

GFRP Cornice Fabrication

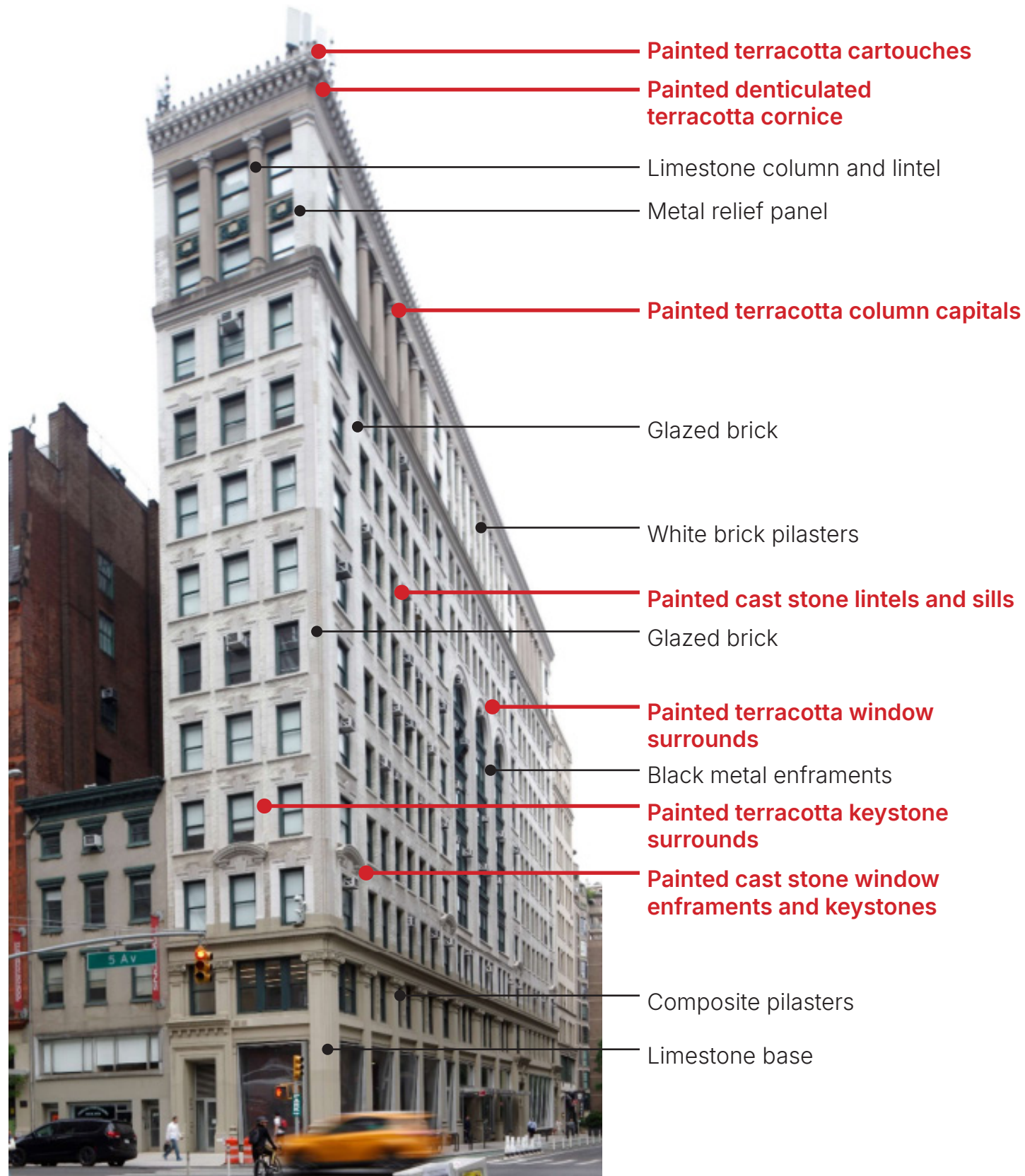
Details of Preservation Approach



— NEW SEAM LOCATIONS TO ALIGN WITH EXISTING

GFRP Cornice Seams

Details of Preservation Approach



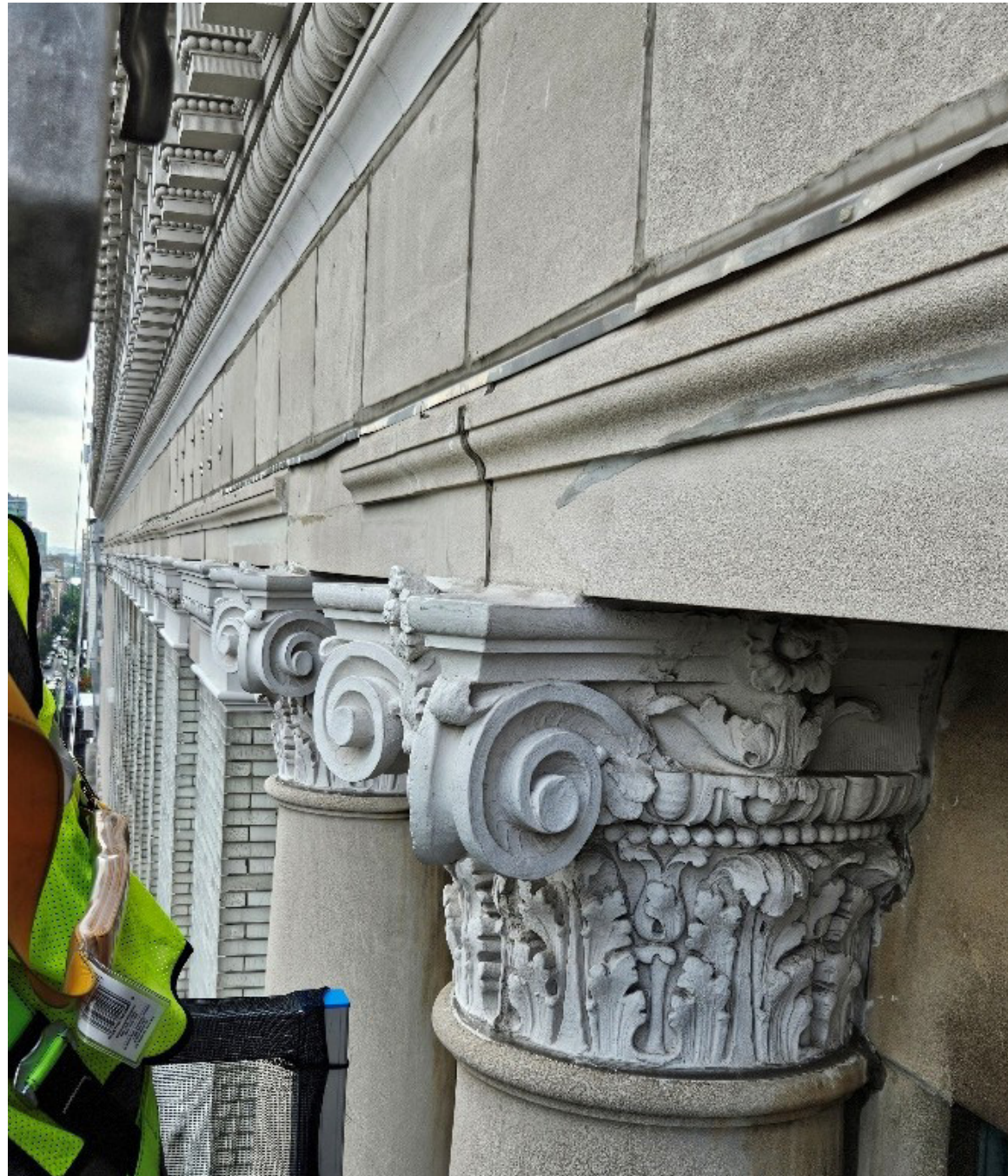
Terracotta cornice probes



Custom coating to match existing Edison Coatings Inc. Aquathan breathable coating

Existing Building Finishes

Details of Preservation Approach



Painted column capital



Painted window surrounds

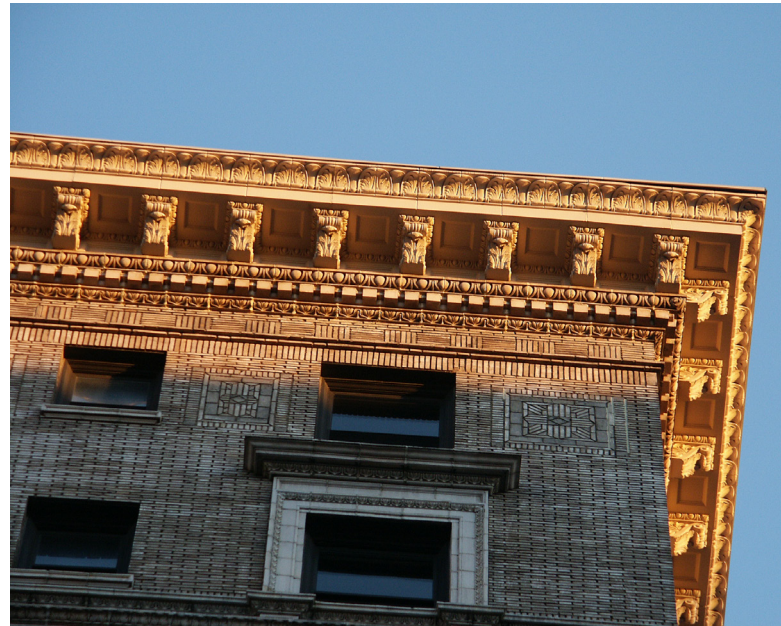


Painted cornice



Existing Terracotta Finish

Details of Preservation Approach



949 West End Avenue, NYC
Riverside-West End Historic District Extension II



490 West End Avenue, NYC
Riverside-West End Historic District Extension I



327 Central Park West, NYC
Central Park Historic District

LPC Approved GFRP Cornice Replacement

Details of Preservation Approach

Summary

1. Existing parapet does not have sufficient capacity to support the terracotta cornice, causing the load to be transferred to the building facade.
2. Reducing the cornice load allows the parapet to adequately support the remaining loads.
3. Removing compressive forces from the facade reduces stress, assisting in preventing future cracking to preserve the building.



IV. Appendix



East parapet roof dunnage



East parapet roof dunnage



North parapet conduit chase



North parapet conduit chase

Existing Rooftop Conditions

Appendix