

THE MET

THE METROPOLITAN MUSEUM OF ART

1000 FIFTH AVENUE
NEW YORK, NY

WING J ROOF OVER
ANCIENT NEAR EAST AND CYPRIOT
GALLERIES

MOODY•NOLAN

3/4/2024 SUBMISSION TO LANDMARKS
PRESERVATION COMMISSION

5/8/2024 REVIEW



PROJECT OBJECTIVES

- Address deterioration of existing skylights
 - Replace skylights with monel standing seam roof
 - Maintain visual continuity and symmetry of existing facade
 - Improve energy efficiency of the building
-



WING J ROOF OVER ANCIENT NEAR EAST AND CYPRIOT GALLERIES

SUBMISSION TO
NYC LANDMARKS
PRESERVATION
COMMISSION

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DESIGN TEAM

NADAAA
Design Architects

Moody Nolan
Architect of Record

Silman
Envelope Engineer

Facade Forensics
Facade Consultant



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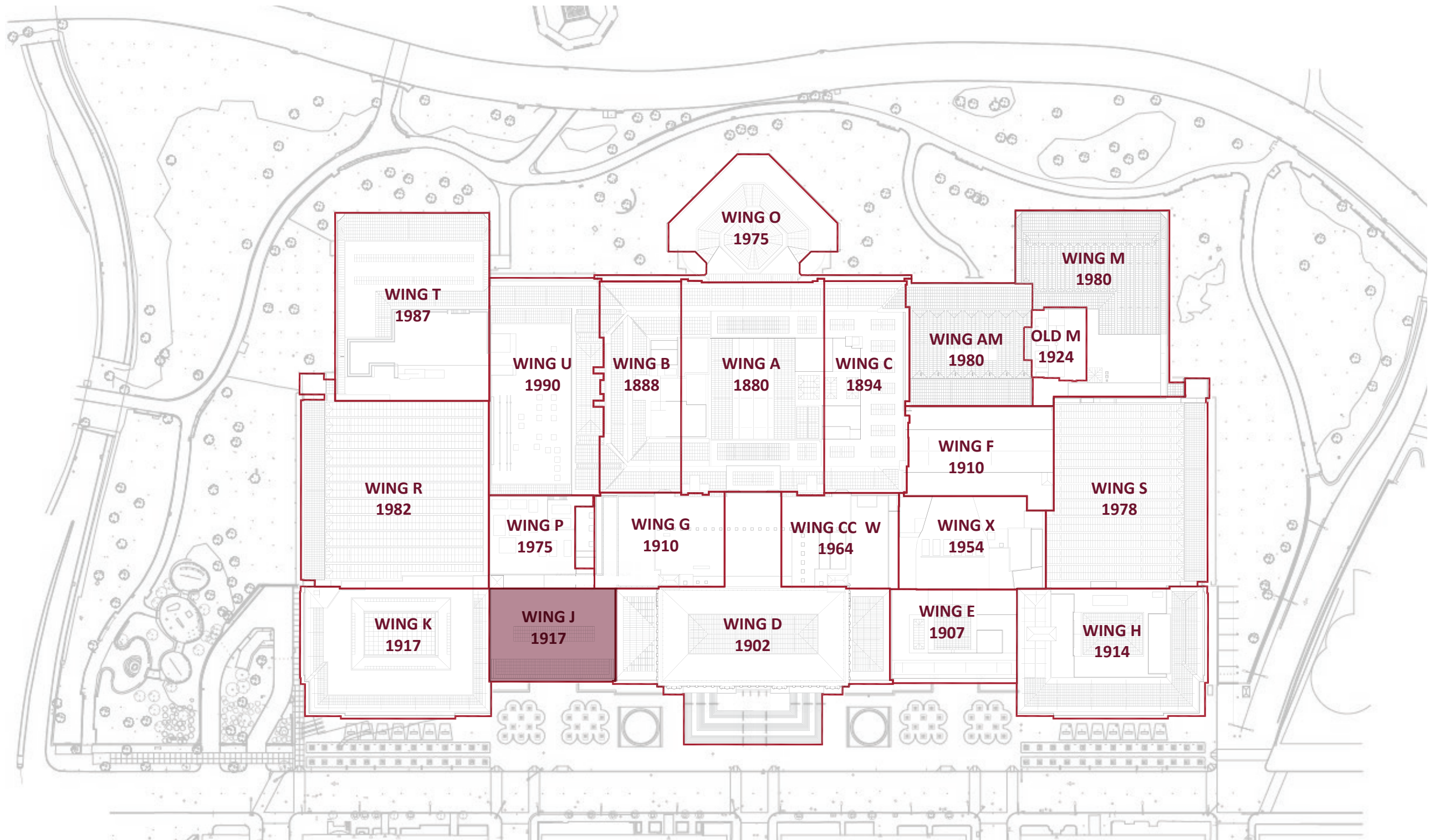
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01

Historic Background

Historical growth of the MET Site Plan



■ Wing J Constructed in 1917

HISTORICAL GROWTH OF THE MET SITE PLAN

02

Context and Existing Conditions

Project Location

Aerial View from Southeast

Existing Second Floor Plan

Existing Second Floor Plan Project Boundary

Existing Roof Plan Project Boundary

Existing Building Sections and Elevation

East Building Elevation

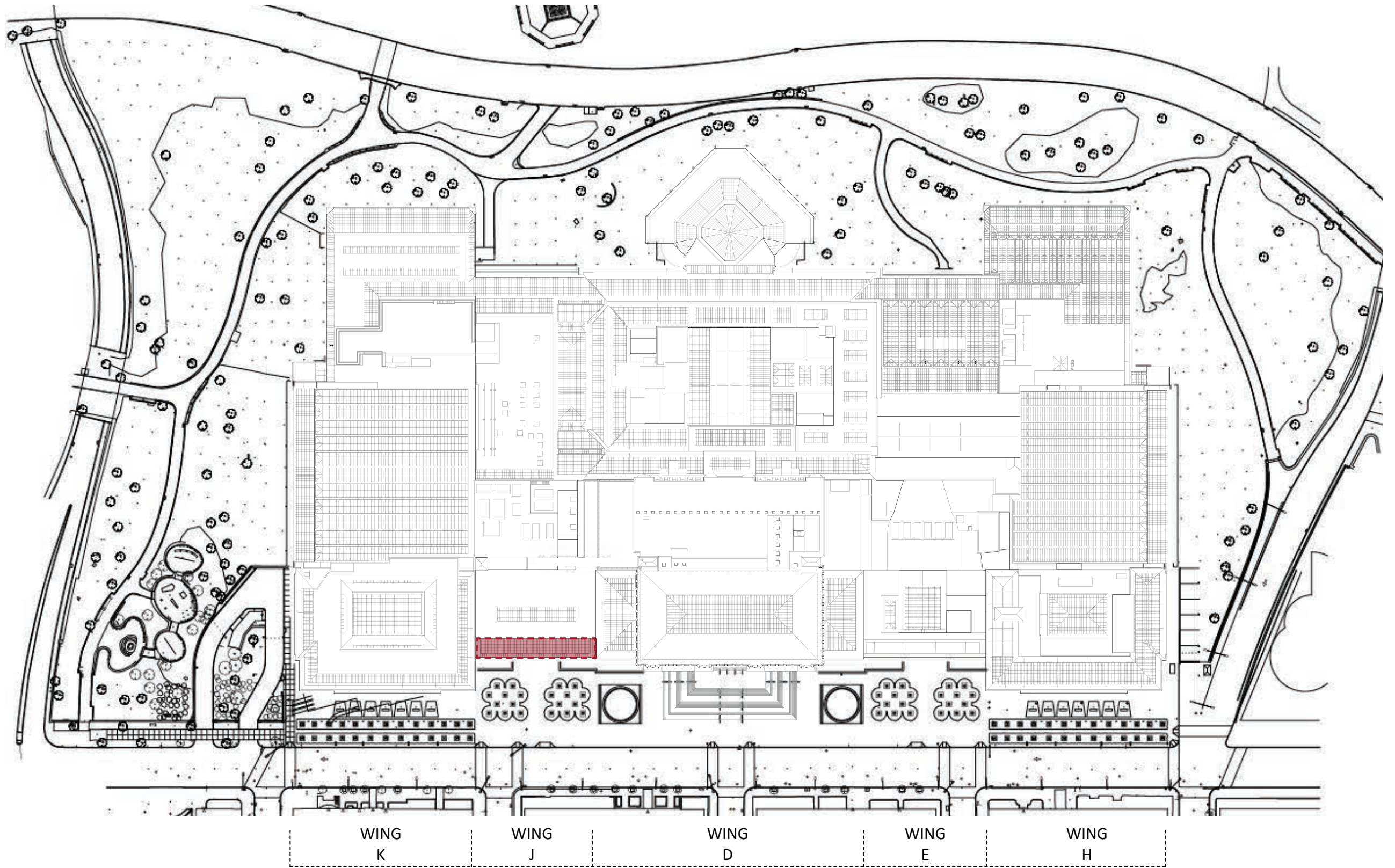
Existing Condition Wing E

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 Area of Roof Above Project

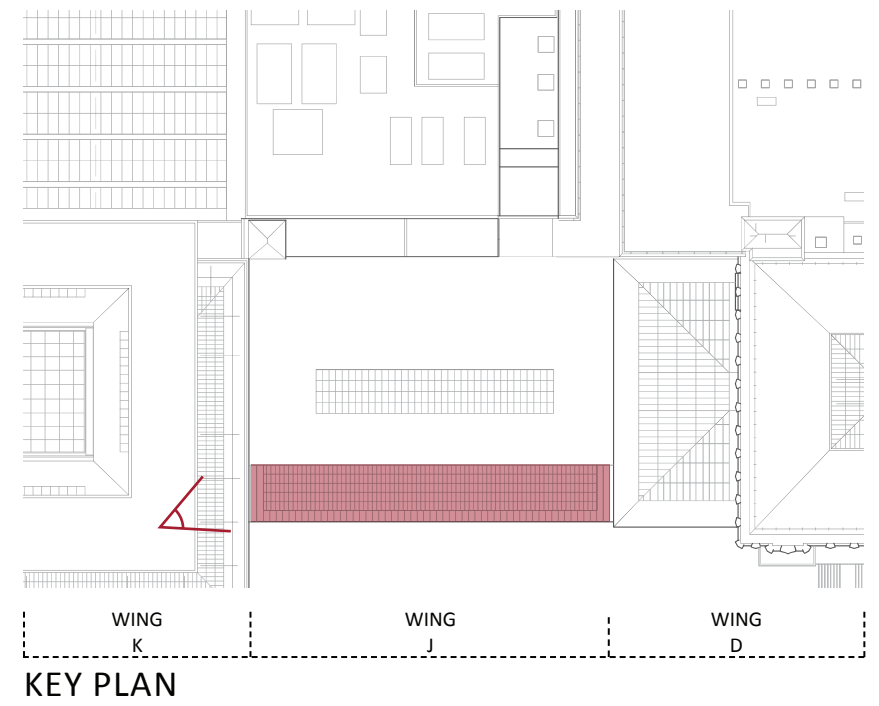
METROPOLITAN MUSEUM ROOF PLAN
PROJECT LOCATION



AERIAL VIEW

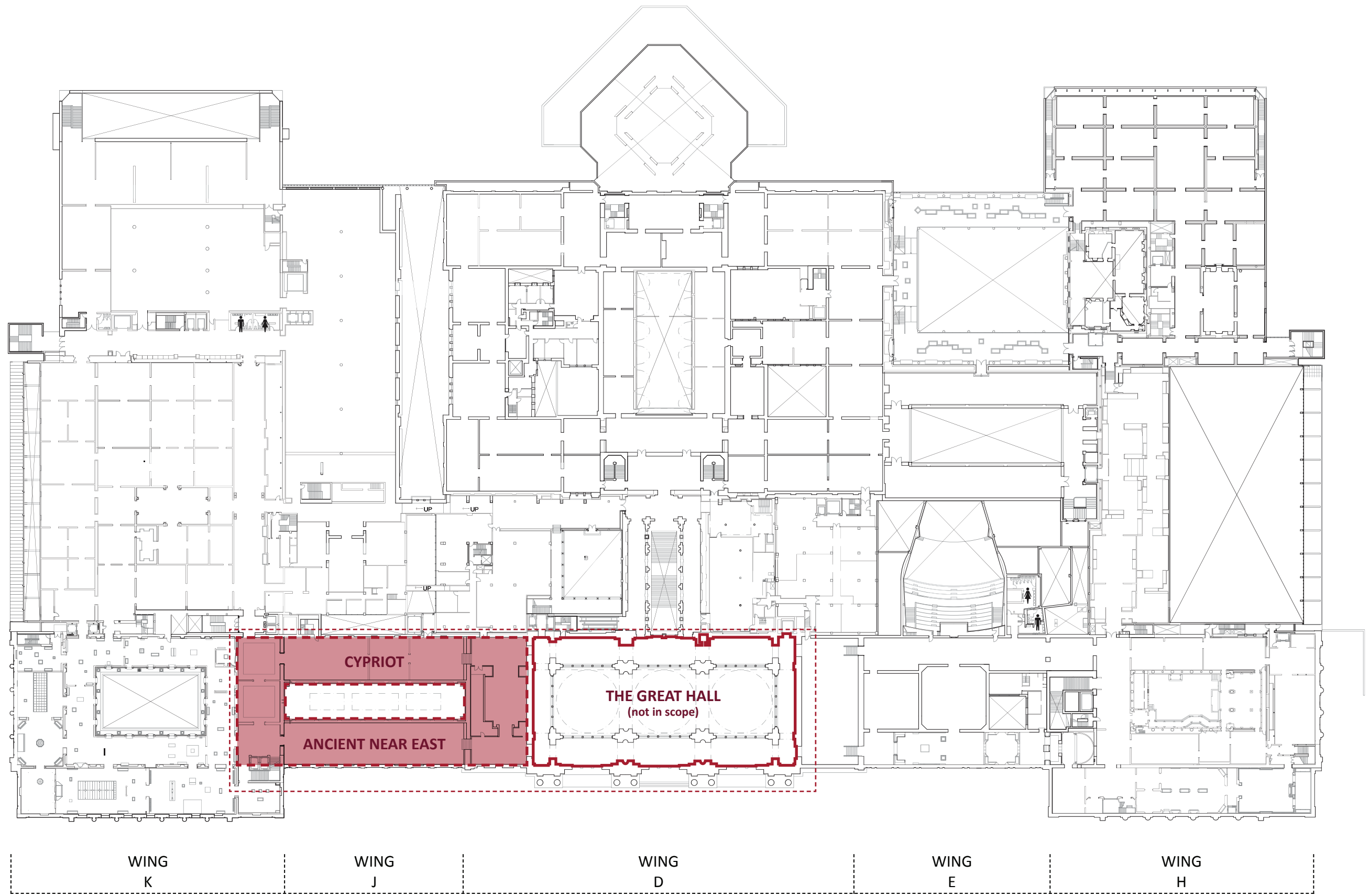
■ Area of Roof Above Project

WING J: REPLACE WITH MONEL
(SKYLIGHT TO OPAQUE ROOF)



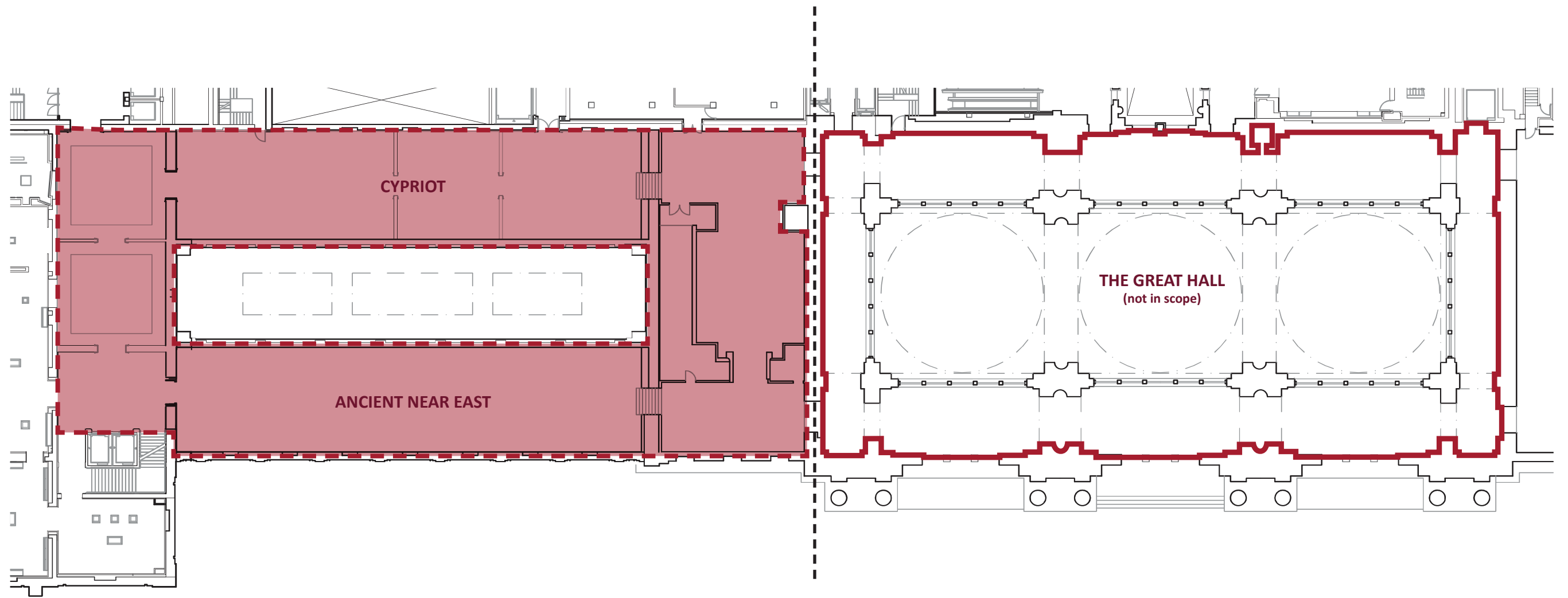
KEY PLAN

AERIAL VIEW FROM SOUTHEAST



- Boundary of The Great Hall
- Area of Work

**EXISTING SECOND FLOOR PLAN
PROJECT LOCATION**



----- BOUNDARY OF THE GREAT HALL

WING
K

WING
J

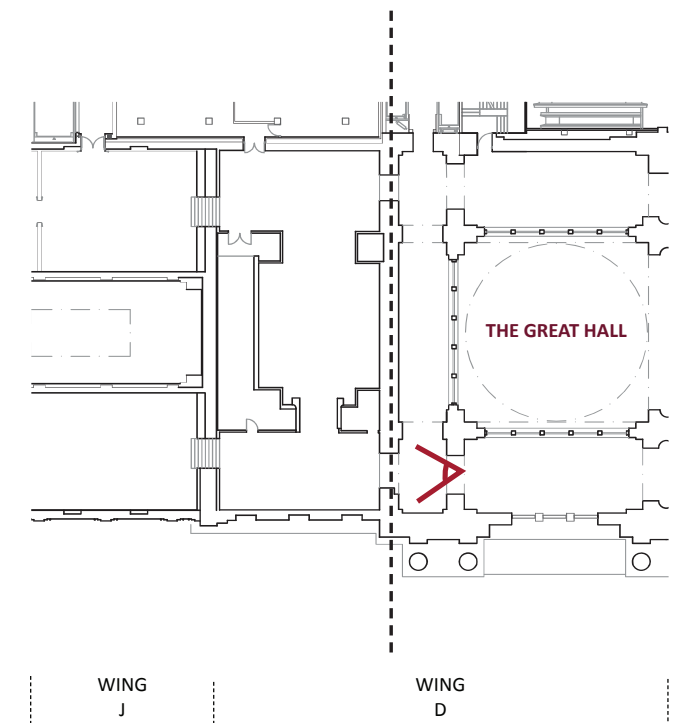
WING
D

- Boundary of The Great Hall
- Area of Work

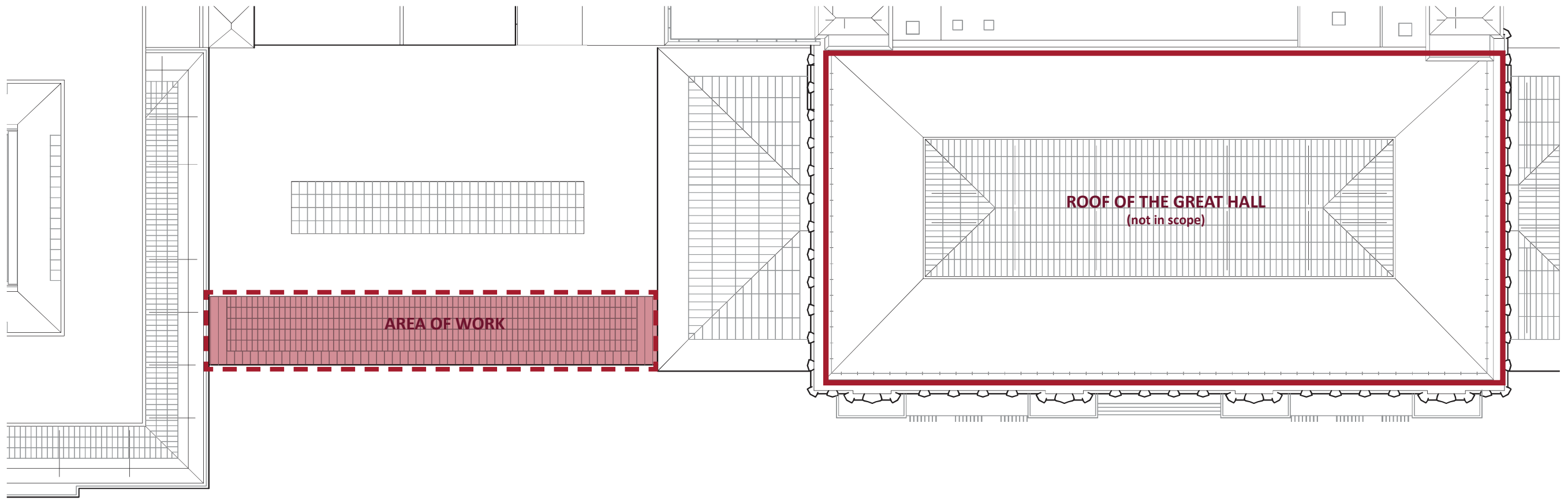
WINGS D & J ANCIENT NEAR EASTERN ART
SECOND FLOOR PLAN



FROM GREAT HALL BALCONY LOOKING SOUTH TOWARDS WING J



VIEW FROM INTERIOR LANDMARKED SPACE



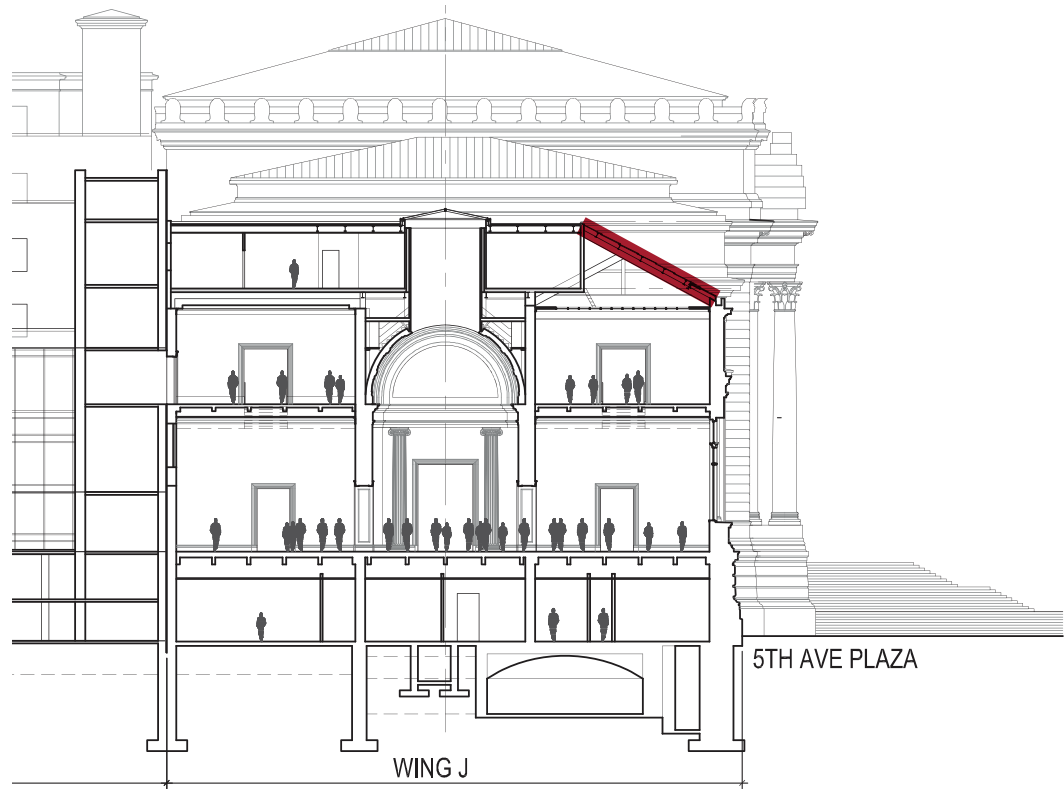
WING
K

WING
J

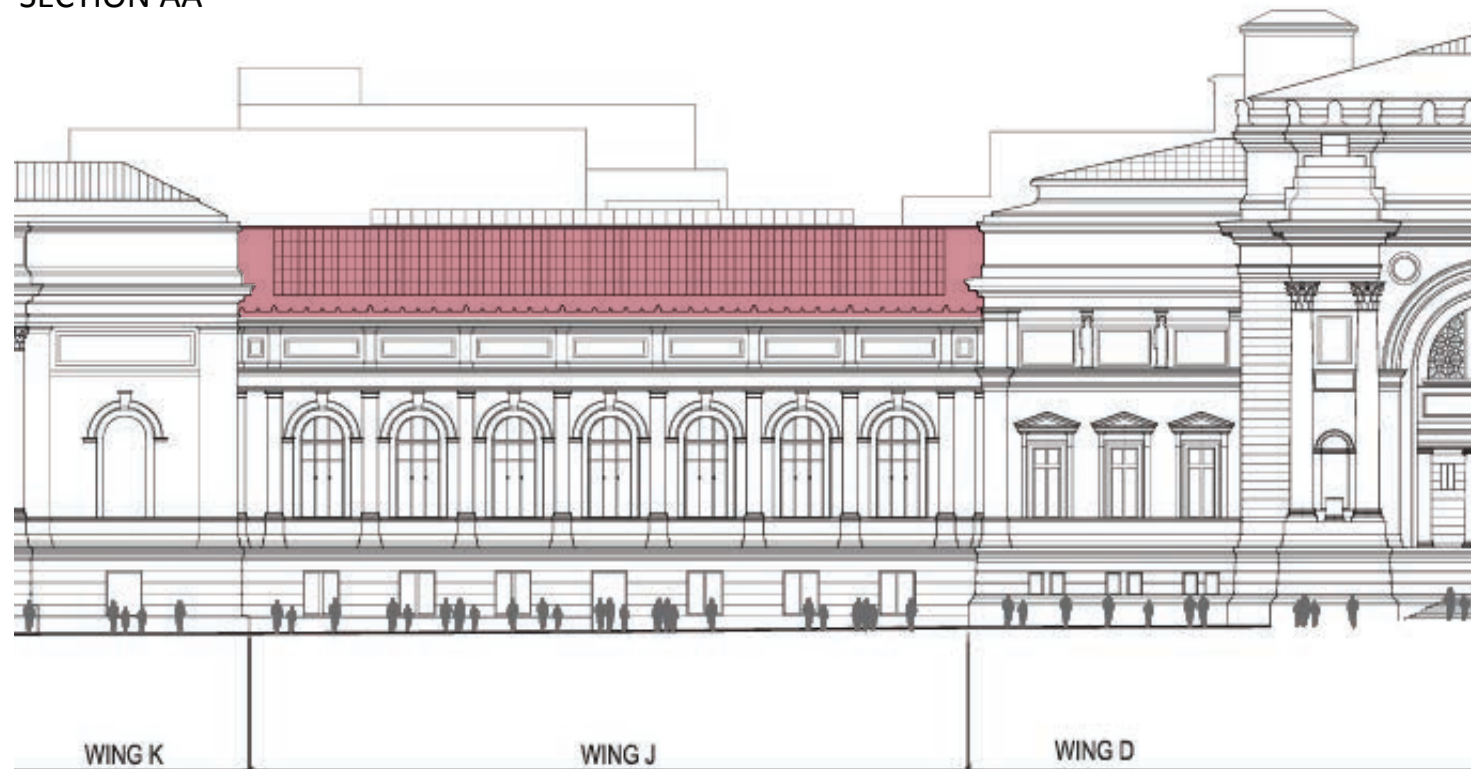
WING
D

- Boundary of The Great Hall
- Area of Work

WING J ANCIENT NEAR EASTERN ART
ROOF PLAN



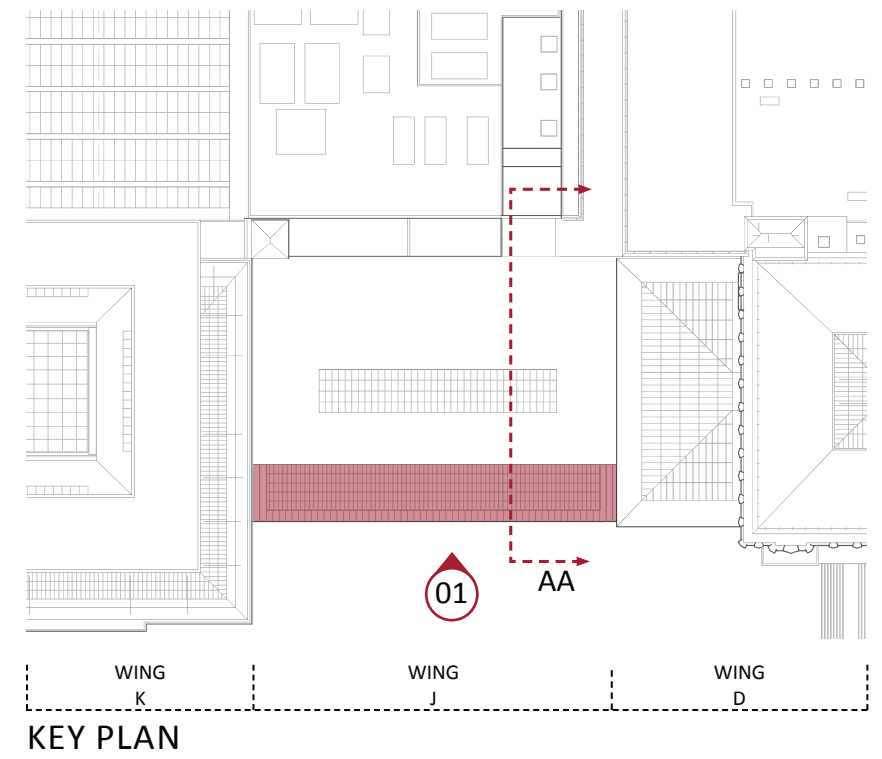
SECTION AA



01 EAST ELEVATION

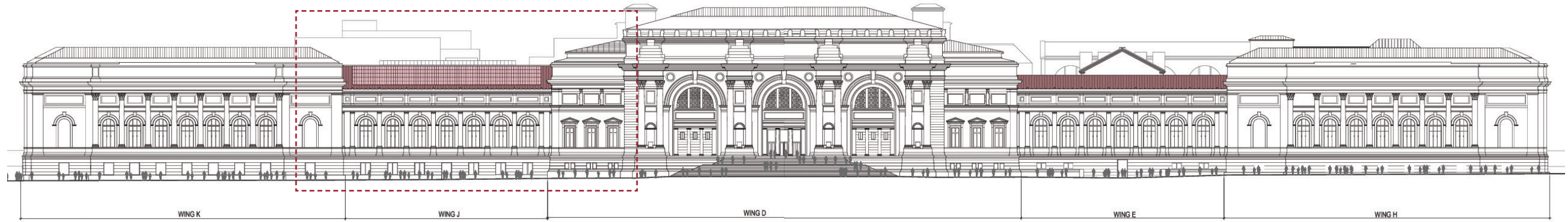
■ Area of Work

EXISTING CONDITIONS

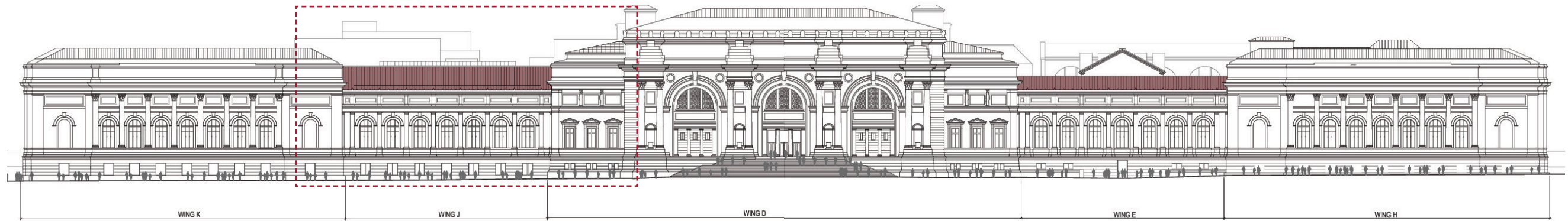


KEY PLAN

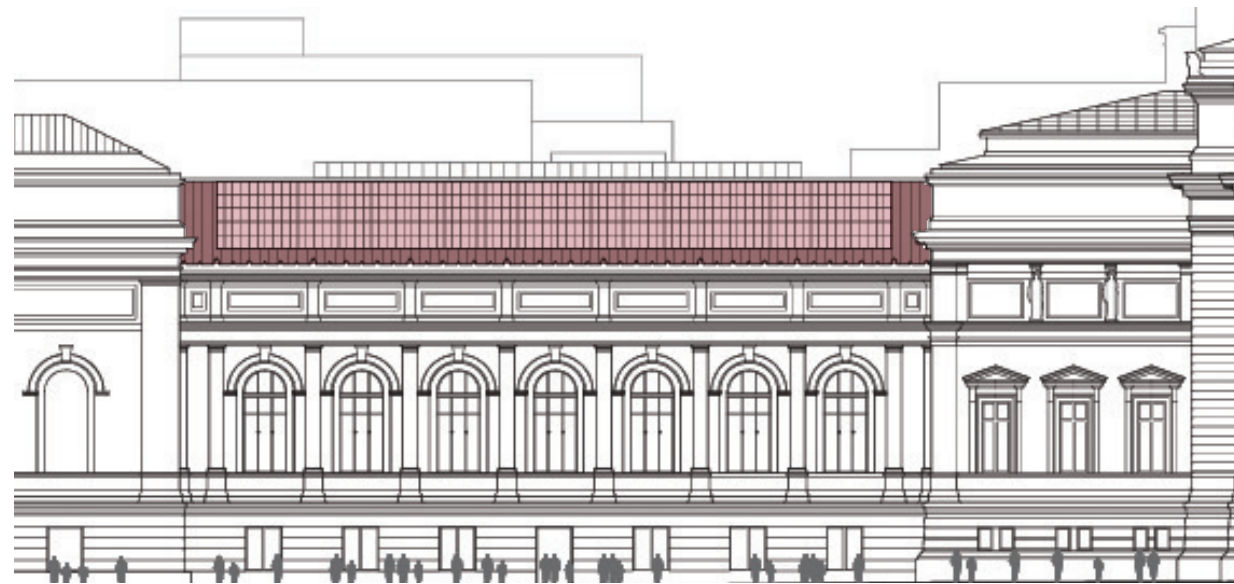
BUILDING SECTION AND ELEVATION - EXISTING



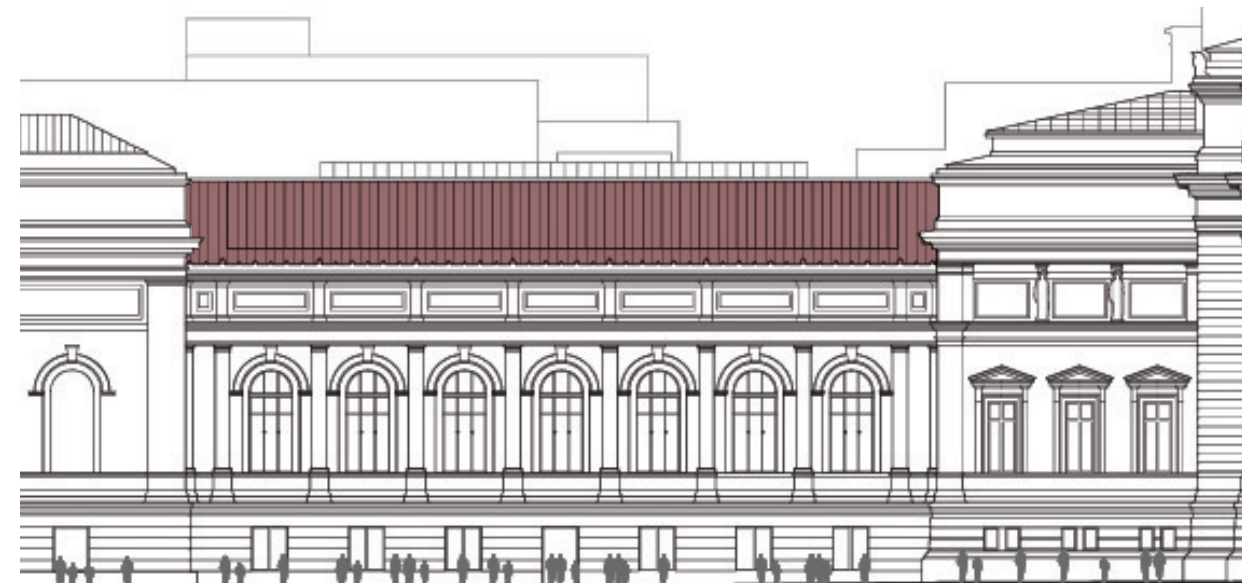
EAST ELEVATION EXISTING



EAST ELEVATION PROPOSED



EXISTING SKYLIGHT



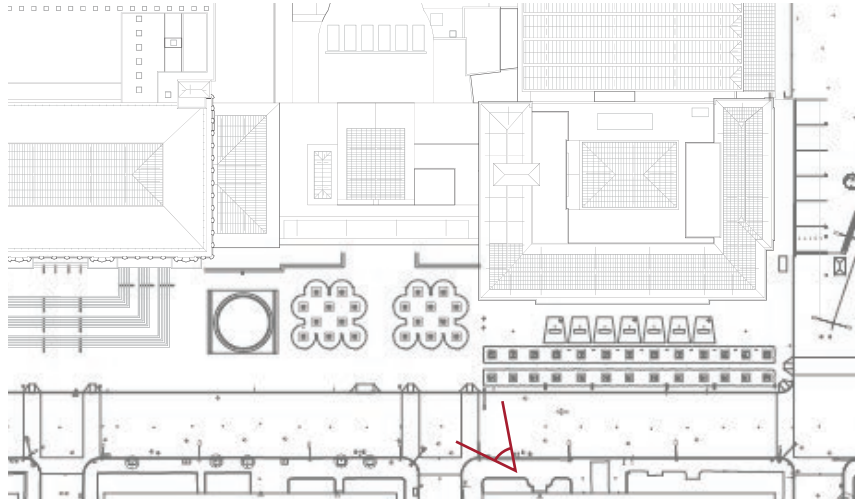
PROPOSED MONEL

- Existing Corrugated Glass
- Monel

EAST BUILDING ELEVATION



EXISTING CONDITION PHOTO - WING J EXTERIOR

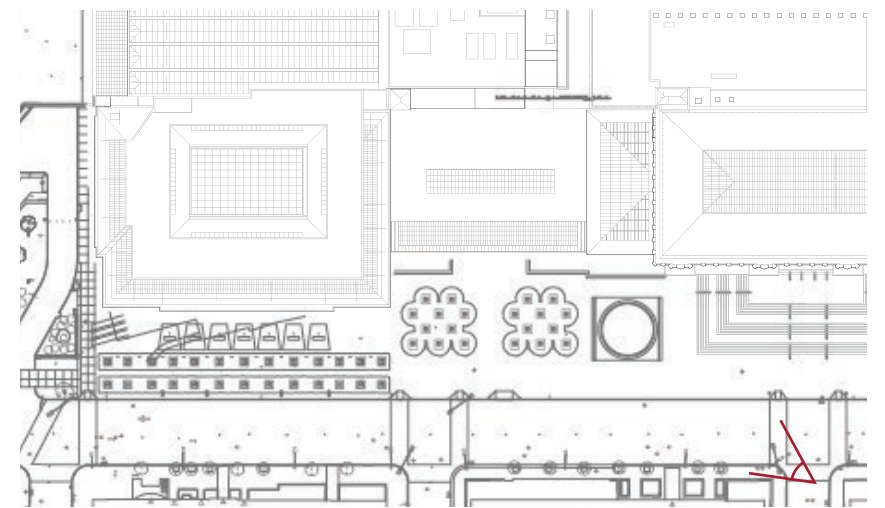


KEY PLAN

EXISTING CONDITION WING E



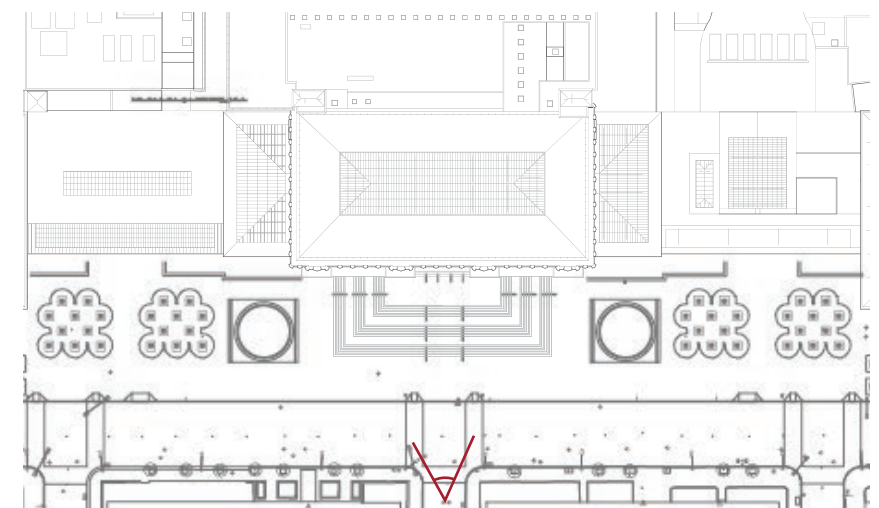
EXISTING CONDITION PHOTO - WING J EXTERIOR



KEY PLAN



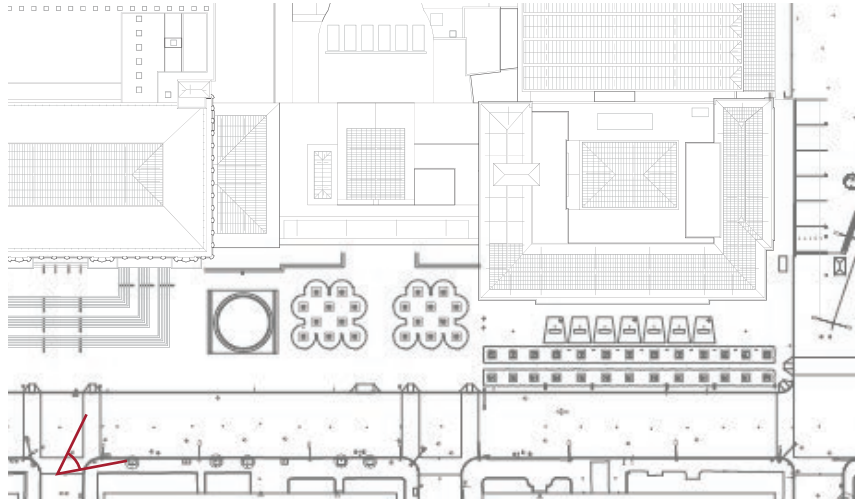
EXISTING CONDITION PHOTO WINGS J AND E



KEY PLAN



EXISTING CONDITION PHOTO - WING E EXTERIOR



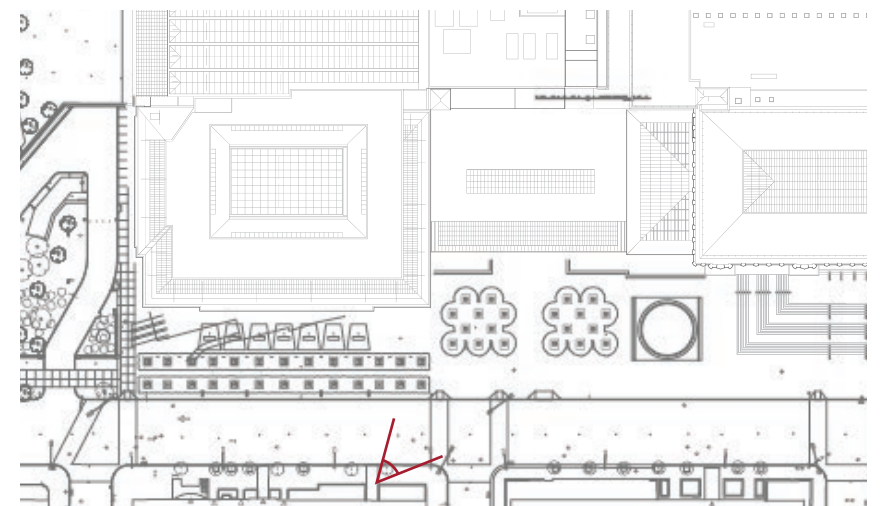
KEY PLAN



EXISTING CONDITION PHOTO - WING J SKYLIGHT



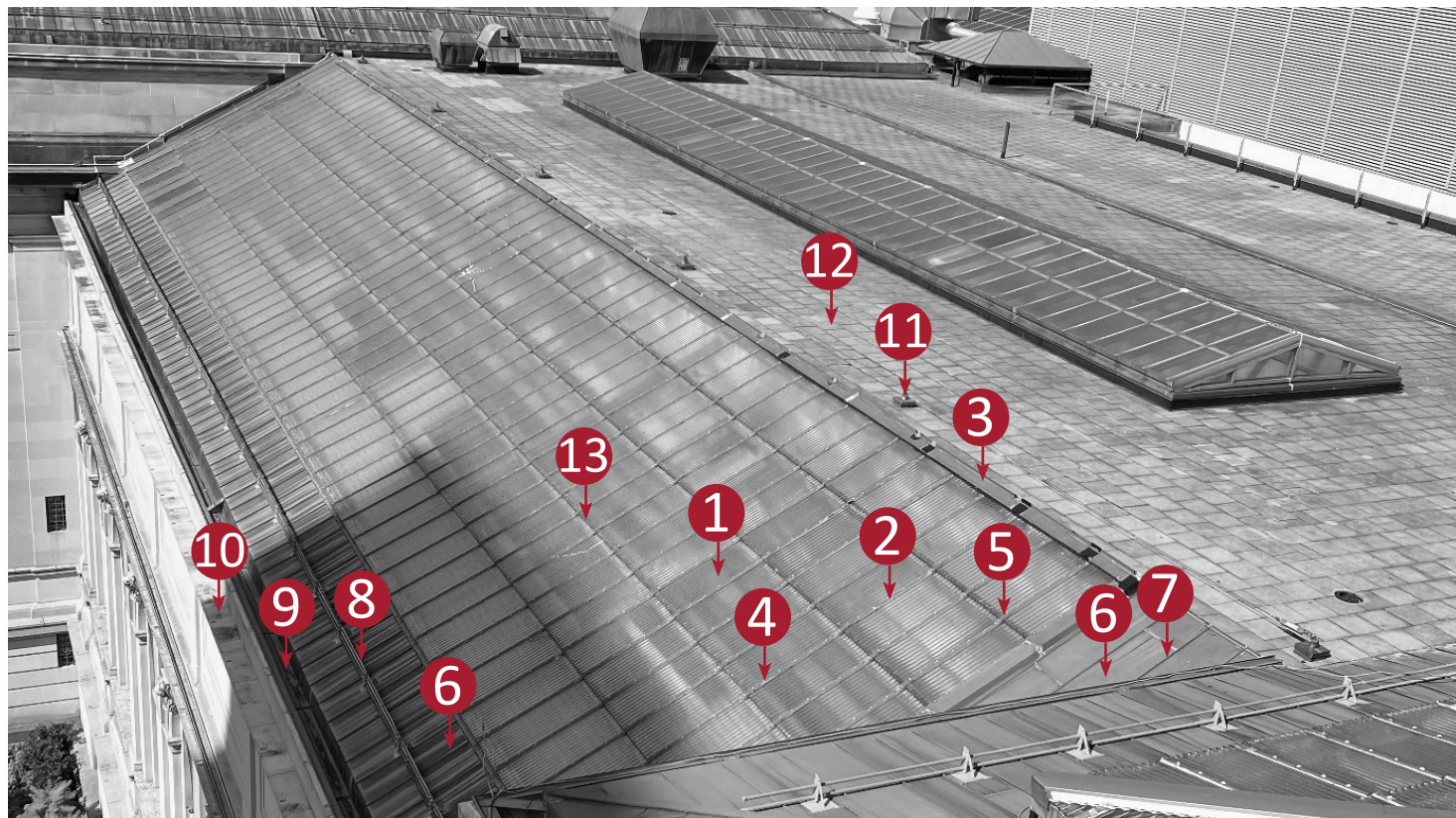
PHOTO MONTAGE WITH PROPOSED NEW OPAQUE ROOF



KEY PLAN

RENDERING OF EXISTING VS PROPOSED FACADE

**EXISTING
SKYLIGHT
AND ROOF
CONDITIONS**



VIEW OF SKYLIGHT J LOOKING NORTH

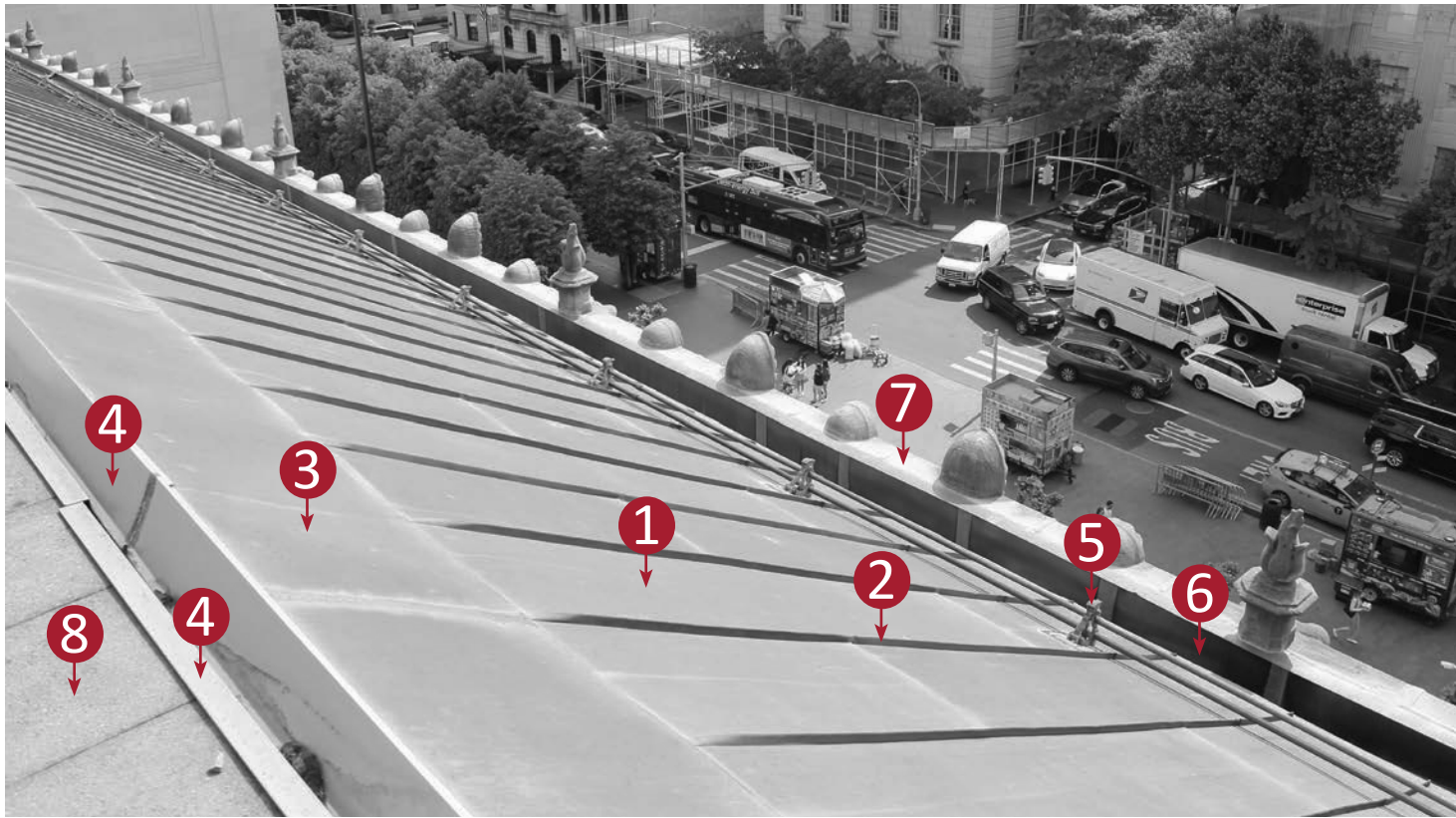
KEYNOTES

- 01. Corrugated Wire Glass Skylight
- 02. Cover Cap
- 03. Monel Metal Ridge
- 04. Reinforcing Clip
- 05. Off-set Nose on Cover Cap
- 06. Monel Metal Roofing
- 07. Standing Seams
- 08. Snow Guards
- 09. Monel Metal Box Gutter
- 10. Parapet
- 11. Ladder Anchor
- 12. Metal Roof
- 13. Sealing Strip in Glass Flap



KEY PLAN

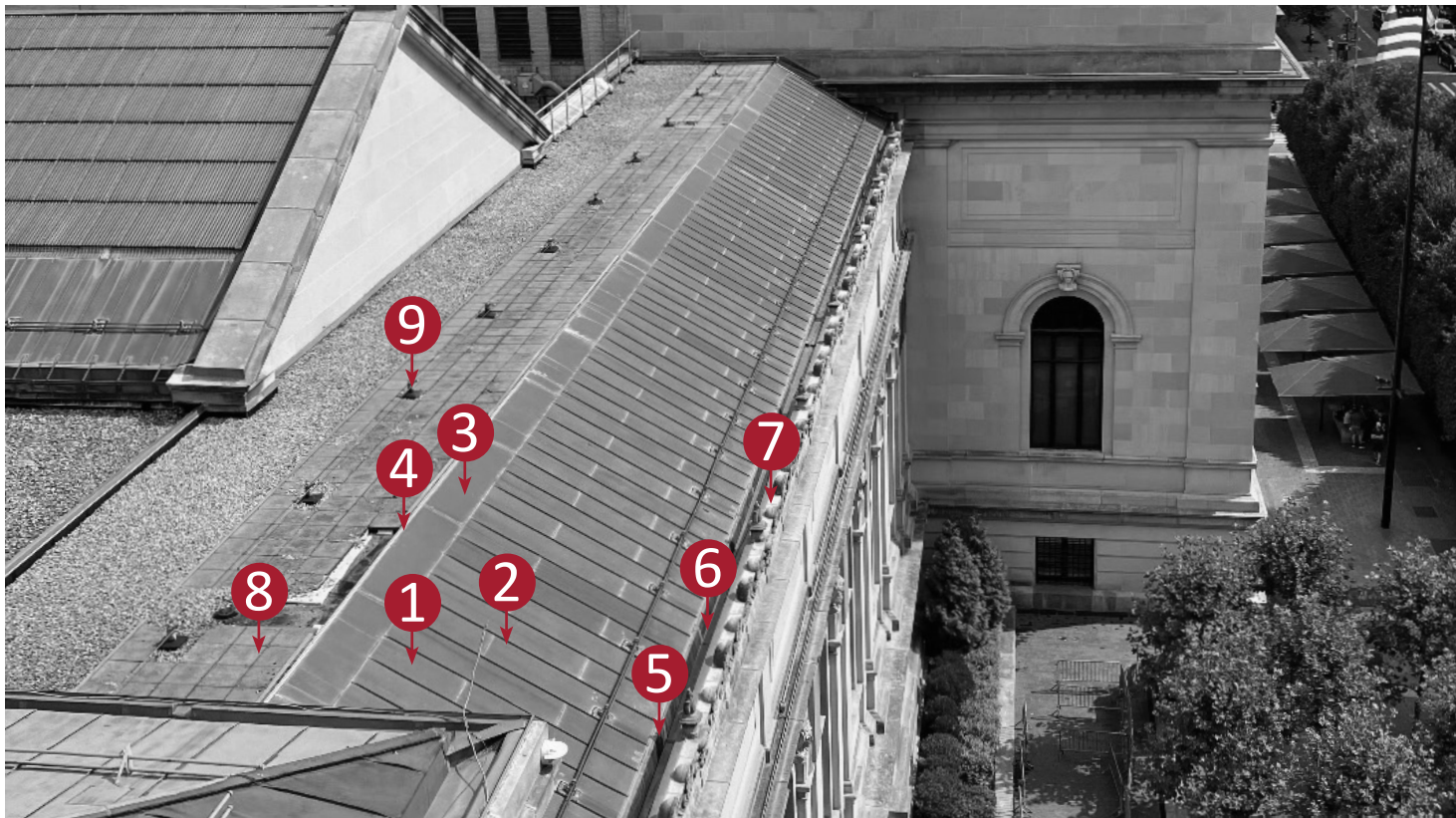
EXISTING CONDITIONS - WING J



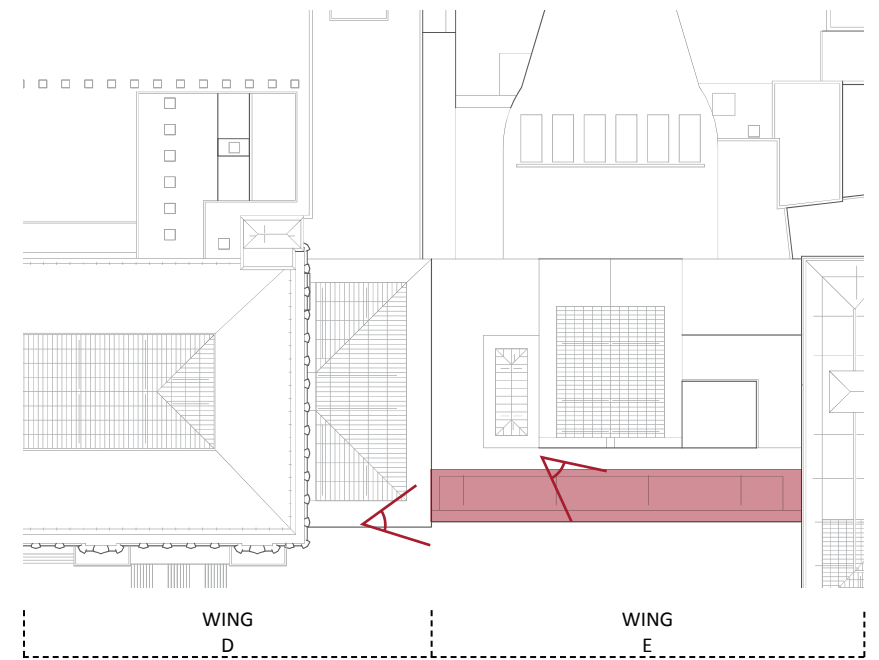
1 VIEW OF WING E ROOF LOOKING NORTH

KEYNOTES

- 01. Monel Metal Roof
- 02. Standing Seams
- 03. Monel Metal Ridge
- 04. Monel Metal Flashing
- 05. Adjustable Monel Metal Pipe Snow Guard
- 06. Monel Metal Gutter
- 07. Parapet
- 08. 5 Ply B.U Roofing
- 09. Ladder Anchor



2 VIEW OF WING E ROOF LOOKING NORTH



KEY PLAN

EXISTING CONDITIONS - WING E



1 EXISTING WING J SKYLIGHT DETAIL SHOWING RUST DUE TO LEAKS

EXISTING WING J SKYLIGHT CONDITION

The Wing J skylight consists of shingled panels of corrugated wire glass supported from steel purlins that span between steel trusses. The existing skylight is a non-insulated single plane system, and a single line of sealant at the joint serves as the only weather and water barrier between the interior and the exterior.

The existing sealants have severely deteriorated due to age, and have resulted in constant water infiltration into the attics, despite continuous efforts to repair and replace the sealants.

The current non-insulated skylight design also creates a greenhouse effect that is highly energy inefficient, and the deteriorating louvre shading system is ineffective at reducing solar heat gain.



2 EXISTING WING J ATTIC LOOKING SOUTH

EXISTING CONDITIONS - WING J ATTIC

03

Proposed Design

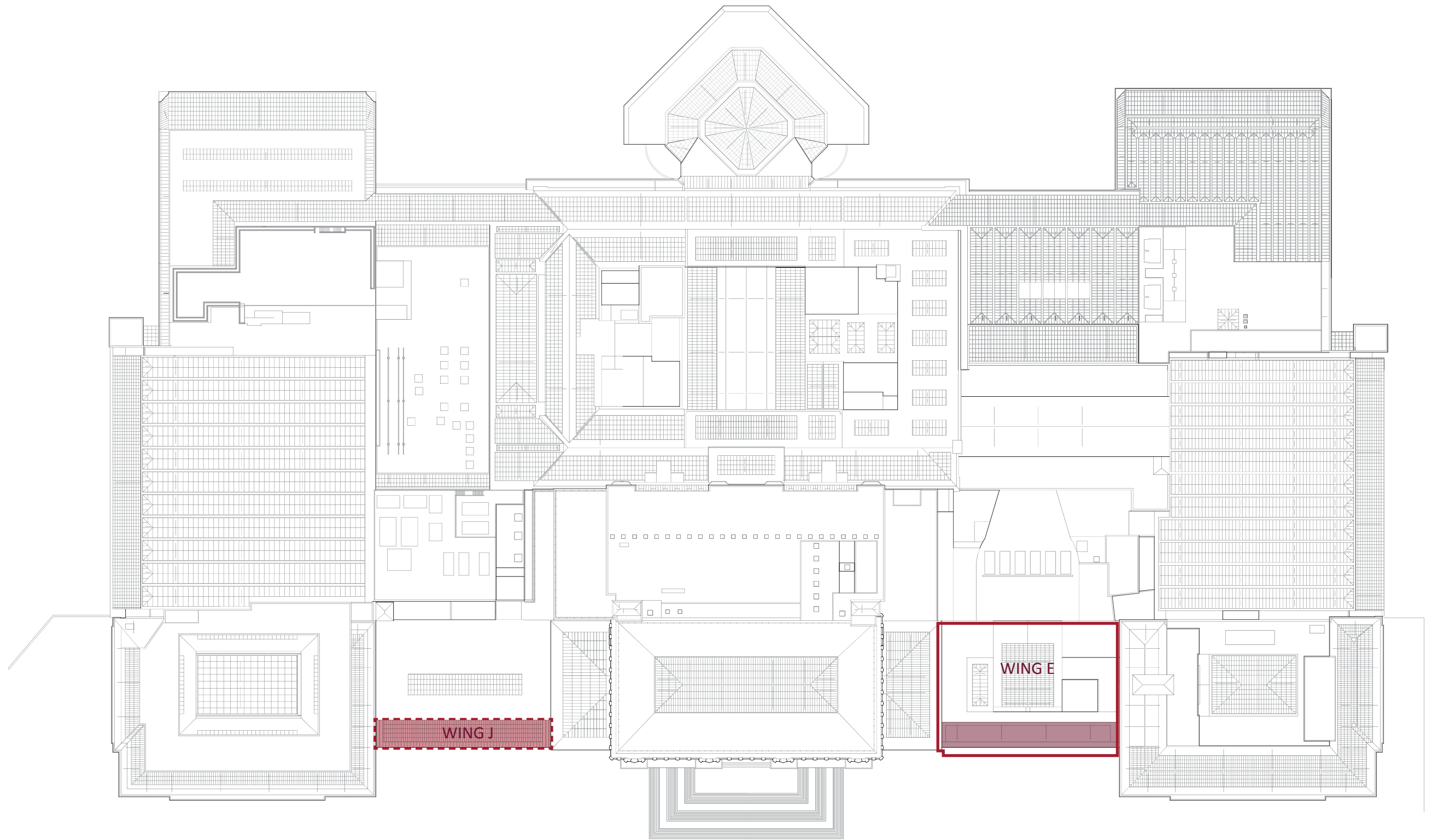
Wing J Roof: Precedents

Wing J Opaque Roof Systems Plan

Wing J Opaque Roof Systems Axon

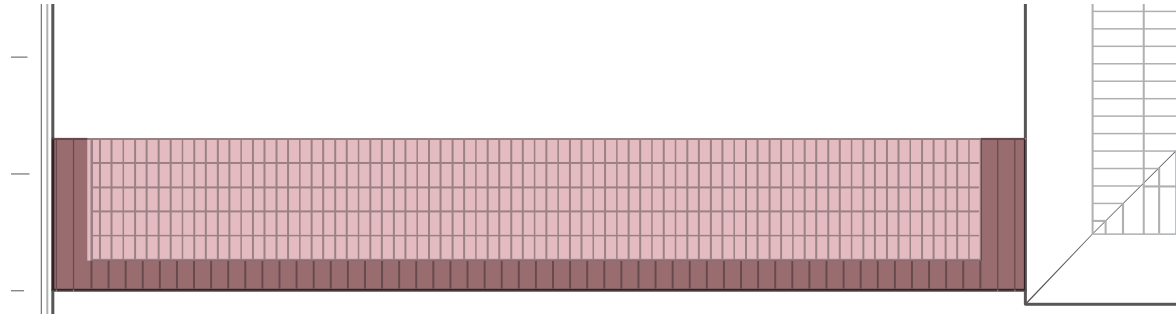
Wing J Systems Details - Proposed

Wing J Systems Details - Existing

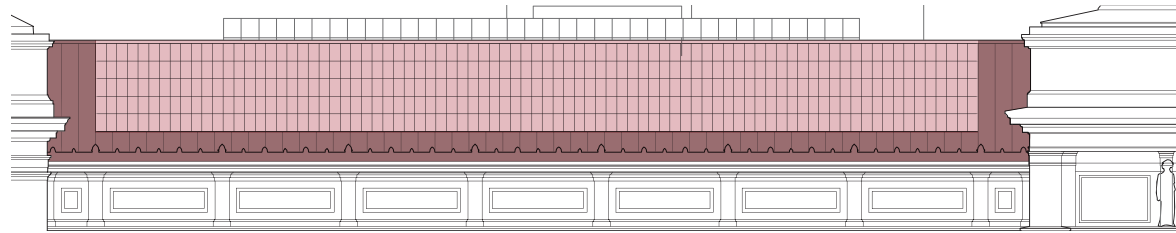


- Boundary of Wings
- Monel Roof installed in 1957
- ▤ Area of Work

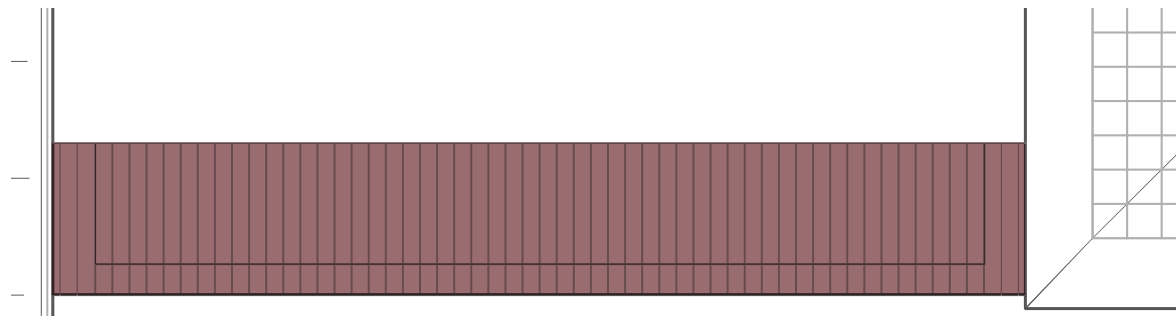
WINGS J ROOF: PRECEDENTS



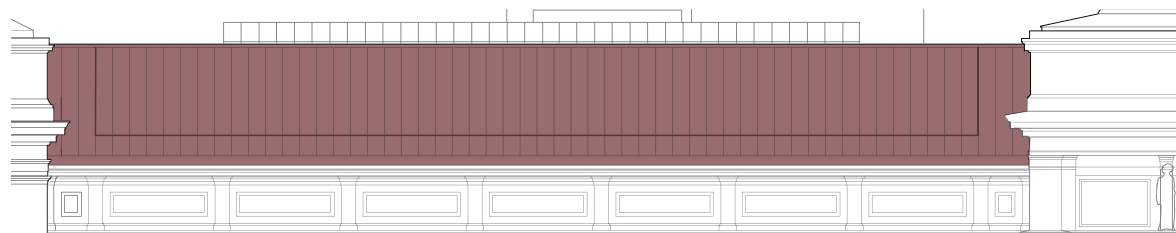
WING J ROOF PLAN EXISTING



WING J ELEVATION EXISTING



WING J ROOF PLAN PROPOSED



WING J ELEVATION PROPOSED

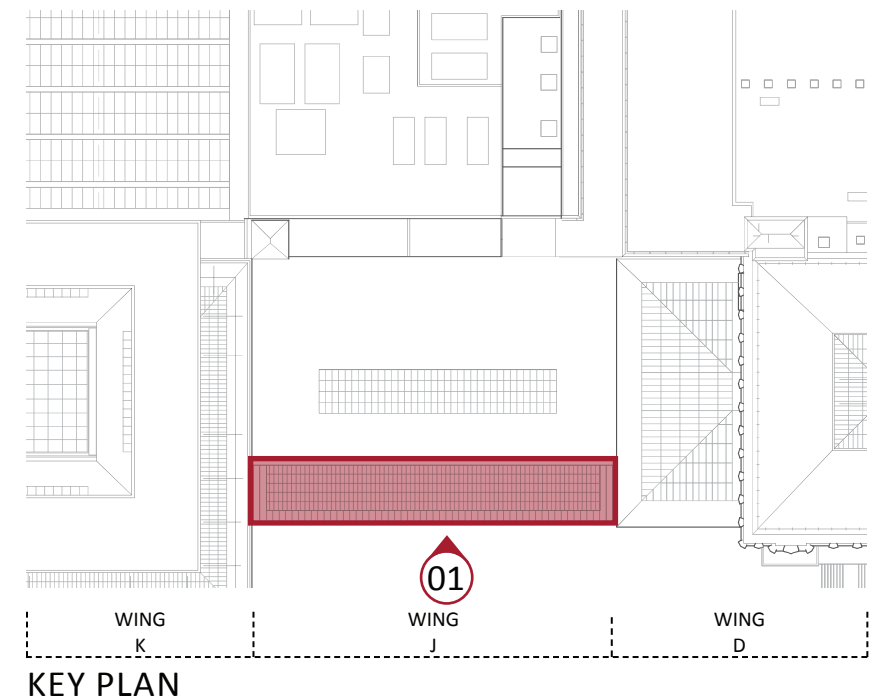
- Existing Corrugated Glass
- Monel

**EXISTING
WING J**

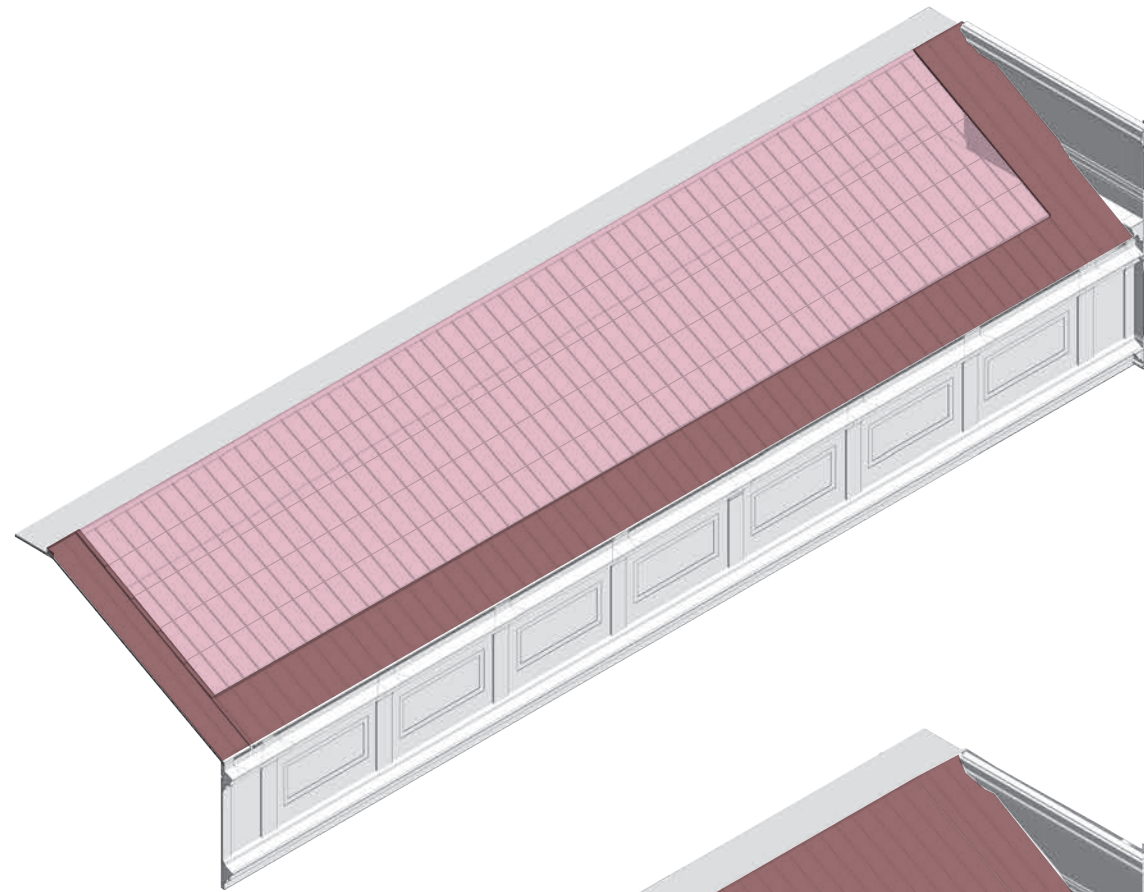
The Wing J skylight consists of shingled panels of corrugated wire glass supported from steel purlins that span between steel trusses. The apron surrounding the skylight is clad in Monel metal panel supported from the plank deck below, with aluminum flashing. The existing skylight ceiling is obstructed, and no daylight is transferred from the skylight through to the galleries below.

**PROPOSED
WING J**

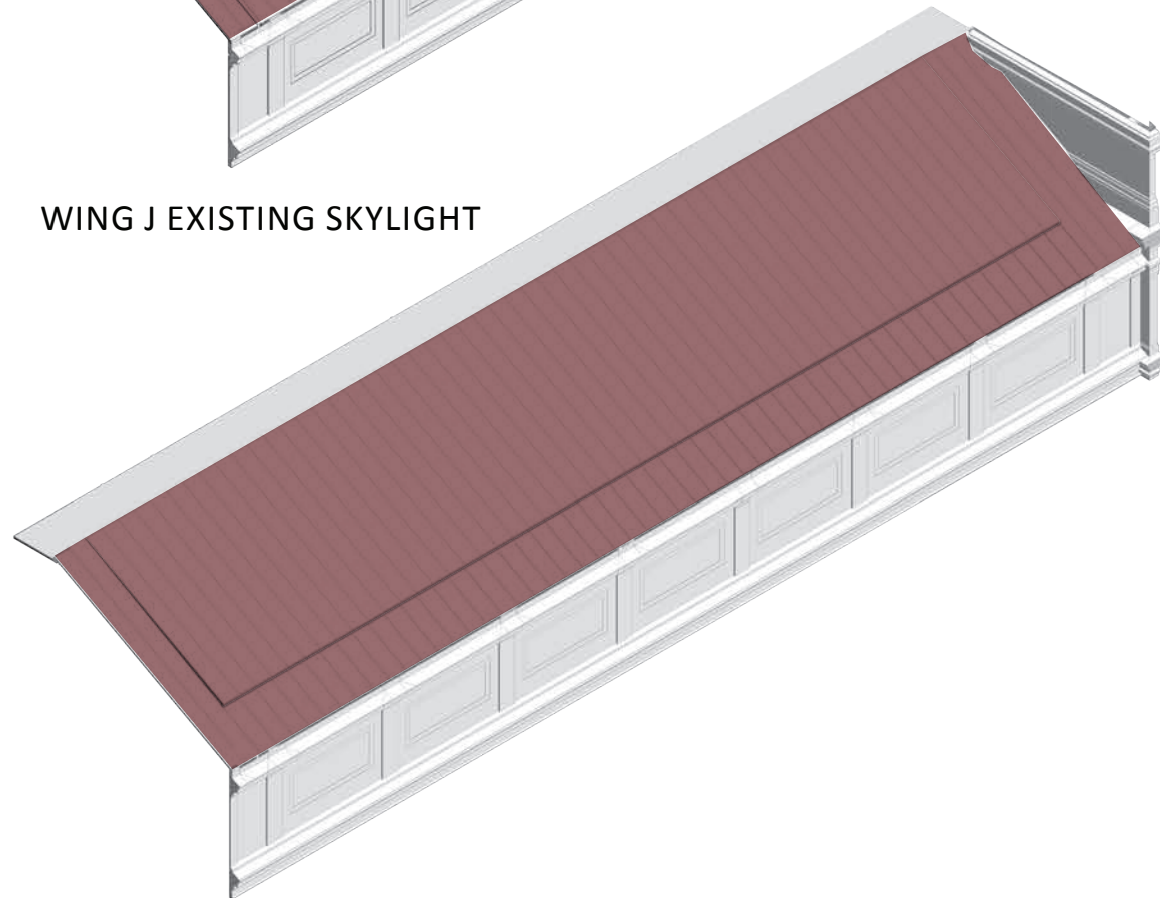
The proposal is to replace the existing skylights with an insulated standing seam Monel roof cladding supported from a corrugated steel structural deck. The existing Monel metal roofing is proposed to remain except for local replacement at the aprons. As Wing J does not functionally need a transparent roof, an opaque roof is being proposed for increased energy efficiency. The new Monel panelization will match the existing Wing J Monel apron, and mirror the existing roofing at Wing E. This will provide visual continuity and reinforce the symmetrical composition of the 5th avenue façade.



WING J OPAQUE ROOF SYSTEMS PLAN



WING J EXISTING SKYLIGHT



WING J PROPOSED OPAQUE ROOF

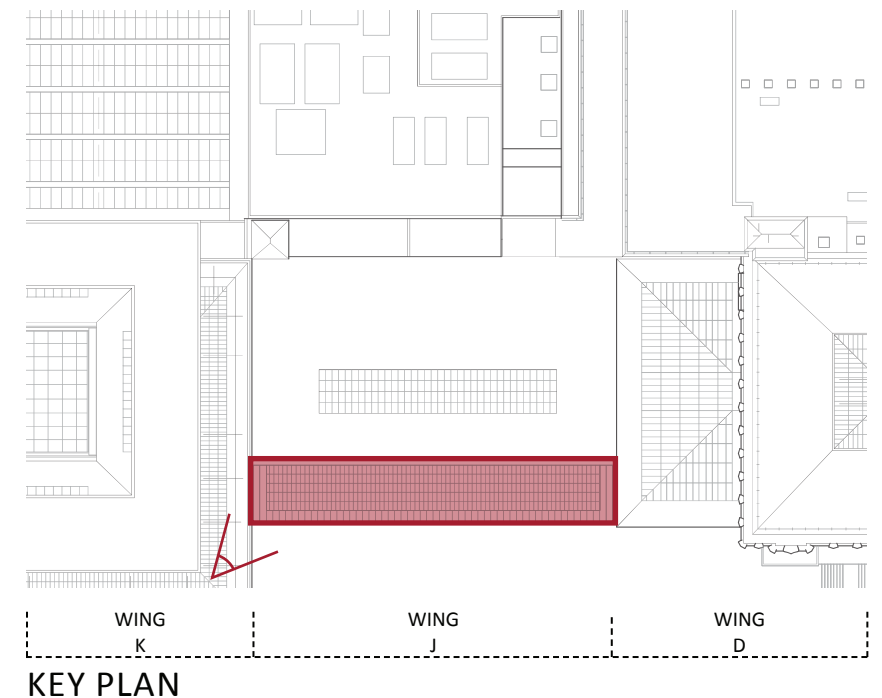
- Existing Corrugated Glass
- Monel

**EXISTING
WING J**

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**PROPOSED
WING J**

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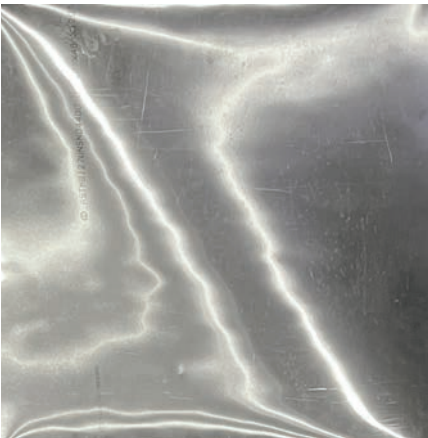
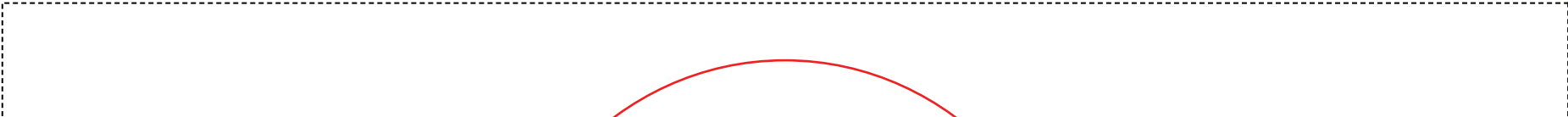


WING J OPAQUE SYSTEMS AXON



EXISTING WING E MONEL ROOF

PRE-INSTALLATION



NEW MONEL



PALM-SANDED

MET RECOMMENDED OPTION



JAX FINISHED



30-YEAR AGED MONEL

MONEL PRE-AGING TREATMENT OPTIONS



27 YEARS OLD

EXECUTIVE WING ROOF

EXISTING MONEL AT THE MET

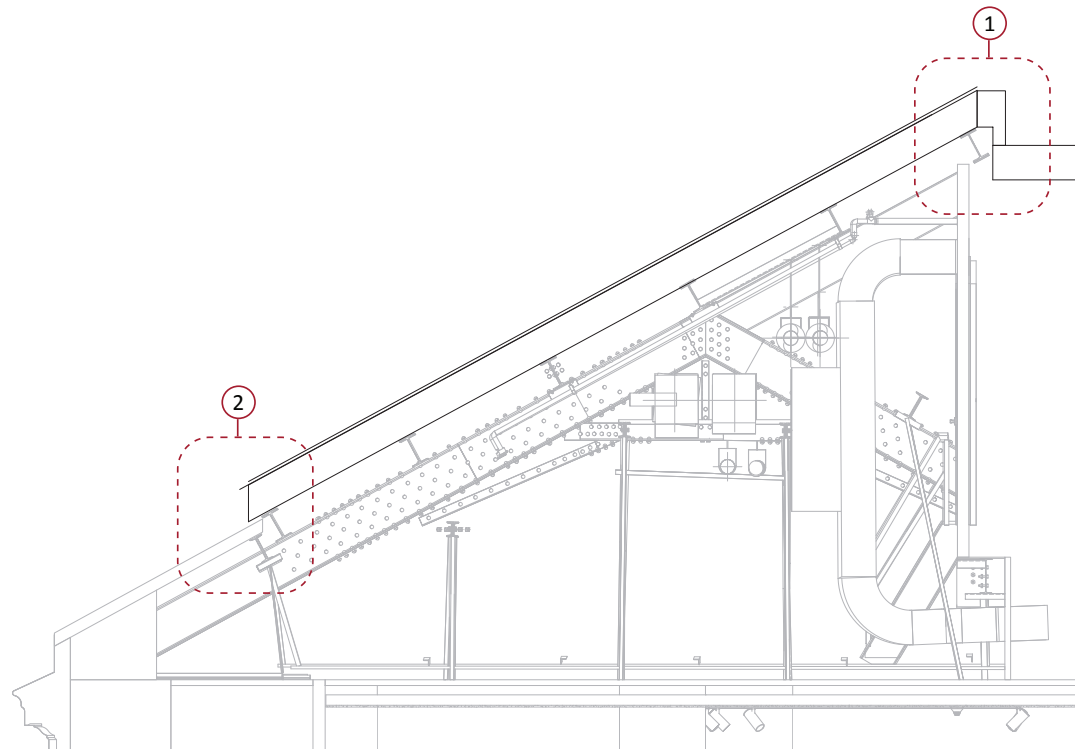


12 YEARS OLD

85 YEARS OLD

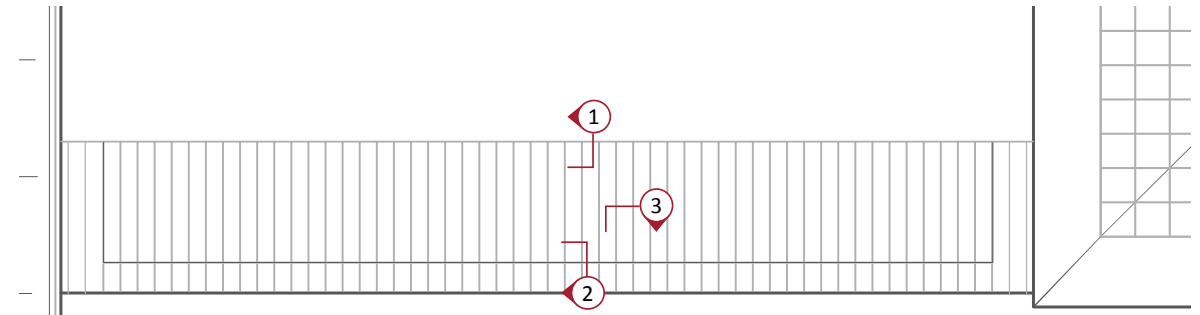
WING K ROOF

EXISTING MONEL AT THE MET



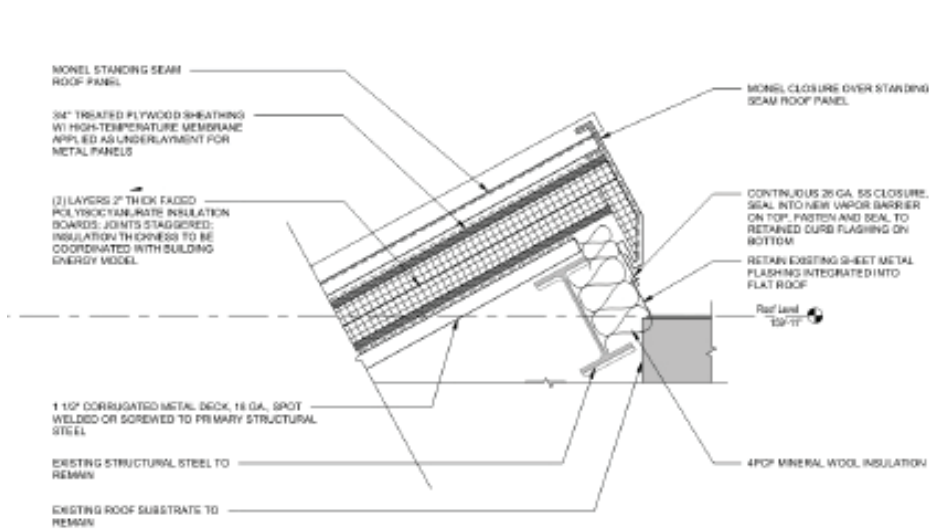
SECTION - WING J NEW OPAQUE ROOF

*N.T.S



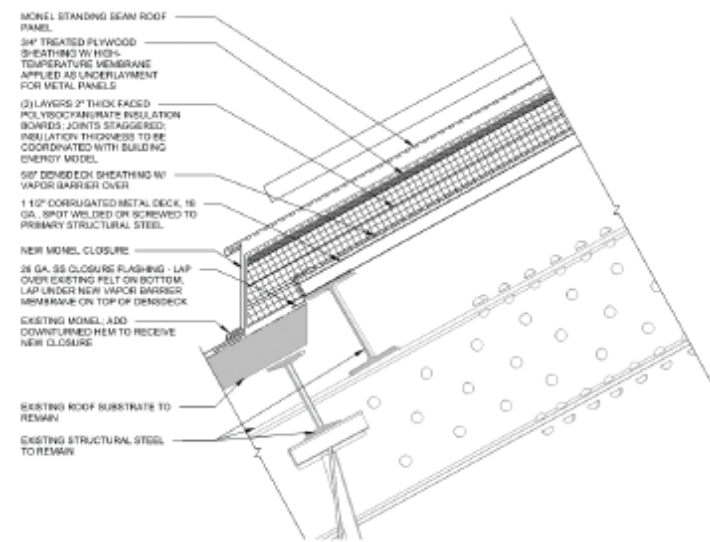
PLAN - WING J NEW OPAQUE ROOF

*N.T.S



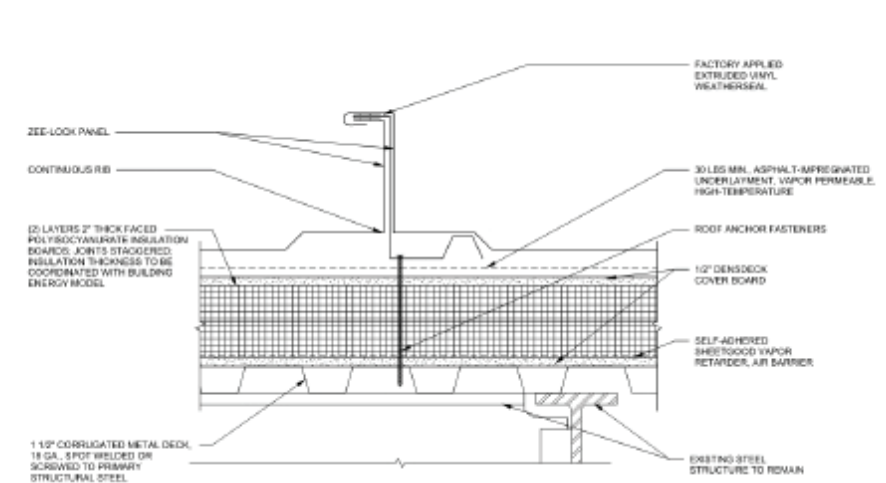
1 DETAIL - RIDGE AT NEW STANDING SEAM ROOF

*N.T.S



2 DETAIL - STANDING SEAM JOINT AT NEW STANDING SEAM ROOF

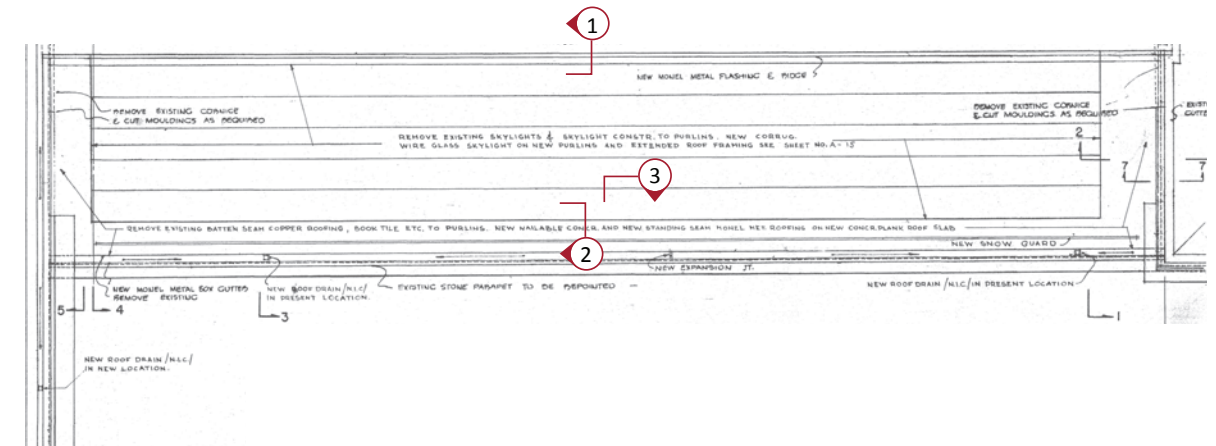
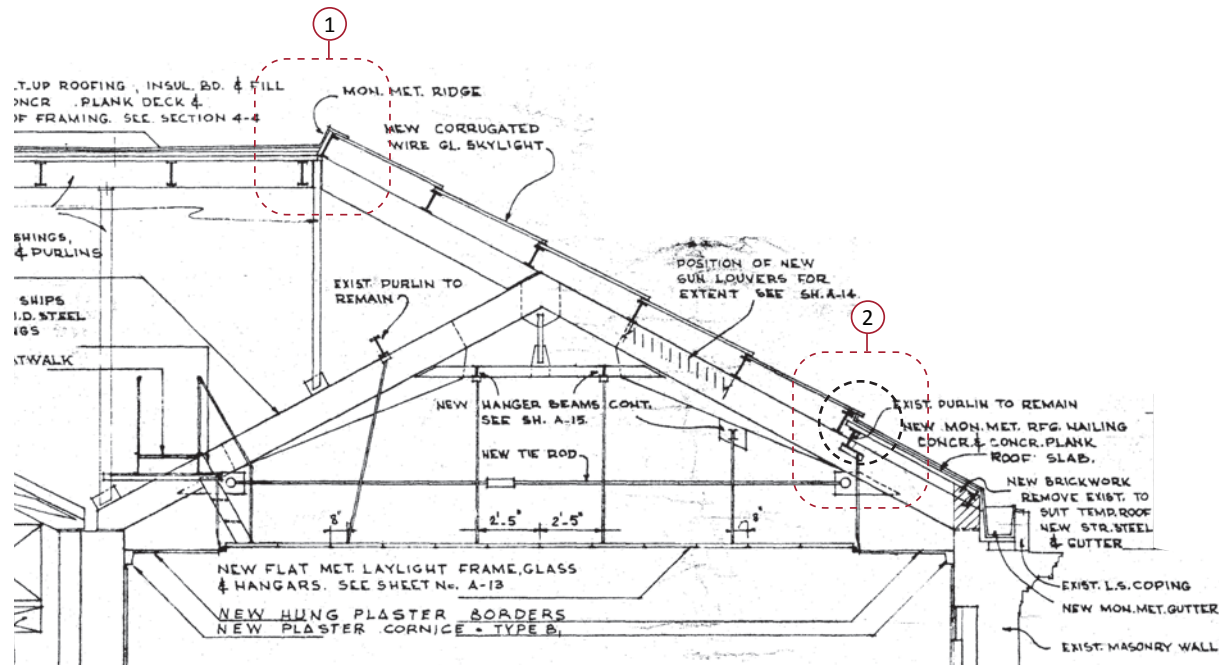
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3 DETAIL - NEW STANDING SEAM ROOF AT ROOF J

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WING J SYSTEMS DETAIL - PROPOSED

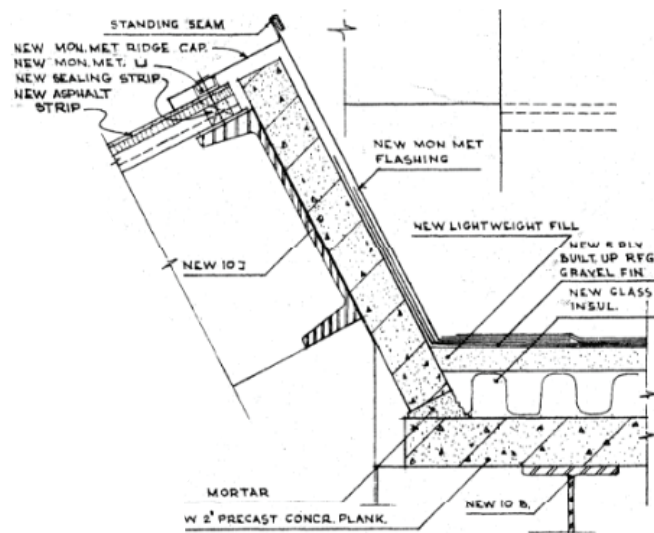


SECTION - WING J EXISTING SKYLIGHT

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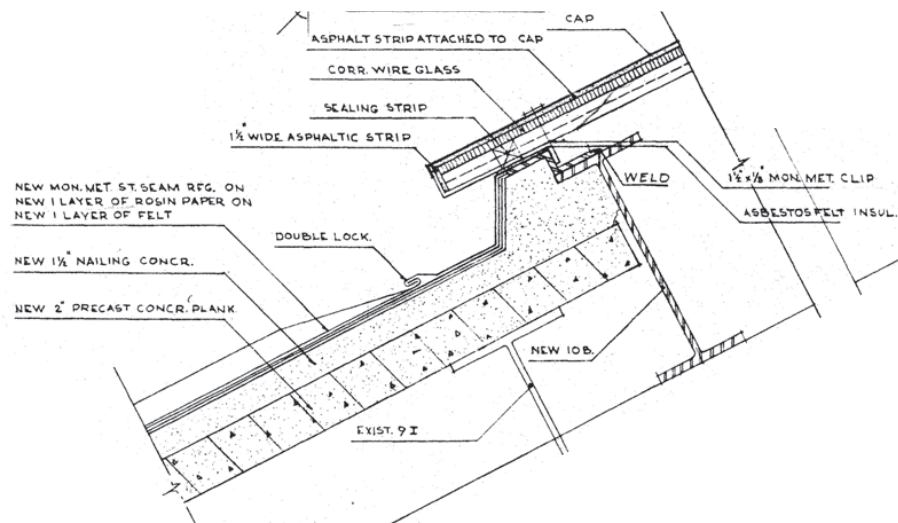
PLAN - WING J EXISTING SKYLIGHT

*N.T.S



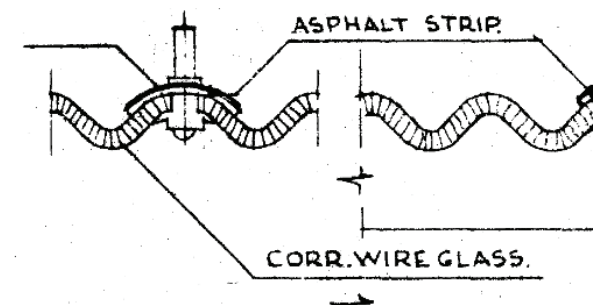
1 DETAIL - RIDGE AT STANDING SEAM ROOF

*N.T.S



2 DETAIL - STANDING SEAM JOINT AT STANDING SEAM ROOF

*N.T.S



3 DETAIL - SEAM AT ROOF J

*N.T.S

WING J SYSTEMS DETAIL - EXISTING