

U.S. National Arboretum Administration Building Roof Replacement

3501 New York Avenue, NE, Washington DC

Approval of Preliminary and Final Site Development Plans

United States Department of Agriculture

Project Summary

Commission Meeting Date: April 1, 2021

NCPC Review Authority: 40 U.S.C. § 8722(b)(1) and (d)

Applicant Request: Approval of Preliminary and Final Building Plans

Session: Review Exception

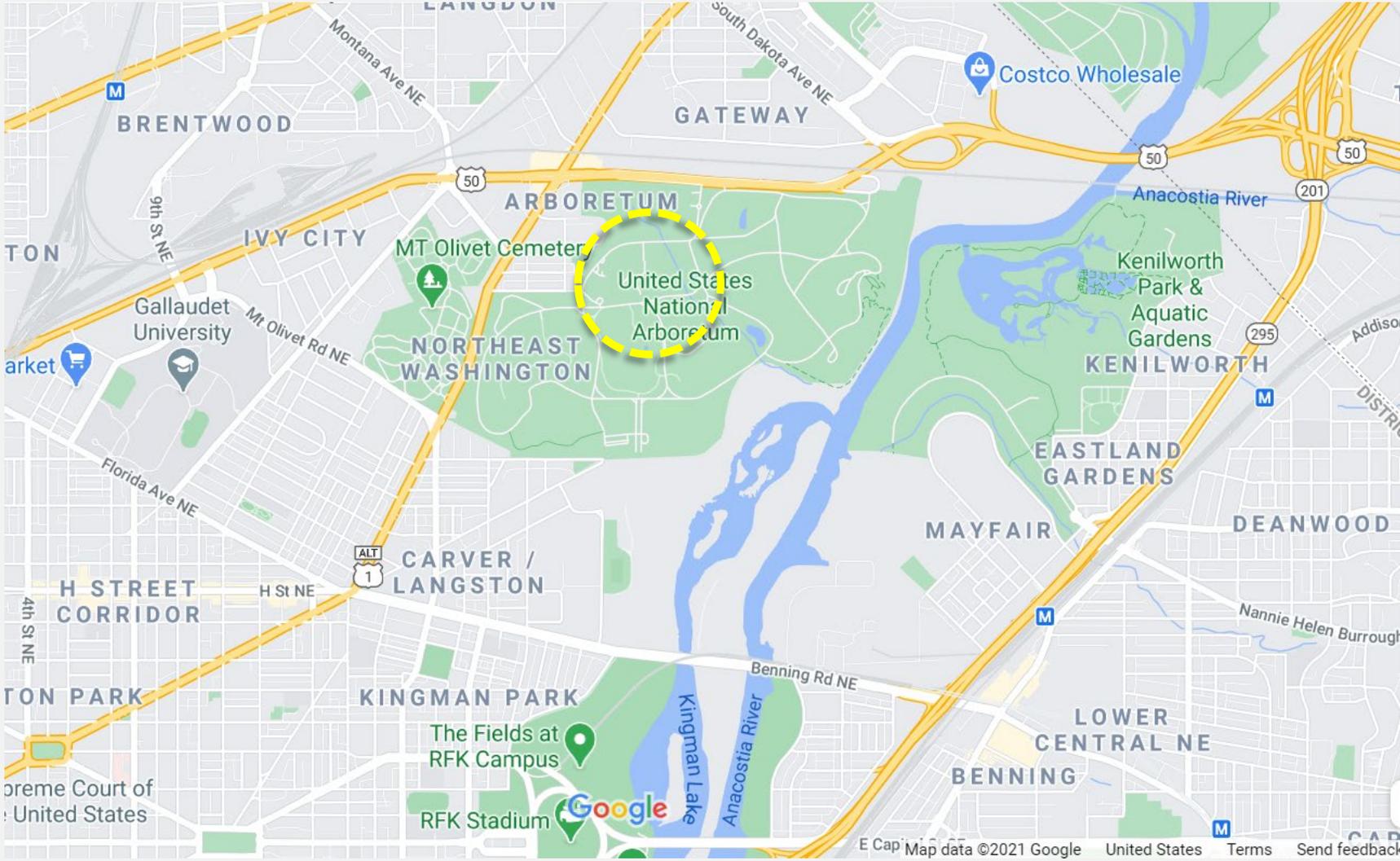
NCPC Review Officer: Matthew Flis

NCPC File Number: 8253

Project Summary:

The Department of Agriculture has submitted preliminary and final building plans for proposed renovations of the National Arboretum Administration Building. The United States National Arboretum (USNA) is a U.S. Department of Agriculture research facility (USDA) in the Northeast Area (NEA) of the Agricultural Research Service (ARS). Established in 1927 by an act of Congress, the existing buildings were constructed after World War II. The Administration Building is a contributing resource to the National Register-listed USNA site. The U.S. National Arboretum (USNA) Administration Building is covered by two types of roofing systems: built-up modified asphaltic roof membranes at the flat roofs (Roofs B, C, D, E, F) and an Ethylene Propylene Diene Monomer (EPDM) single-ply rubber roofing membrane at the folded plate roof (Roof A). All roofing systems appear to be over 25 years old; have reached the end of their useful service life; and are beginning to experience membrane failures resulting in water infiltration and damage to the roofing systems. The goal of this project is replace these existing roofing systems with energy efficient roofing (R-30) while maintaining existing roofing profiles, edges, and copings visible from the ground.

Site Location

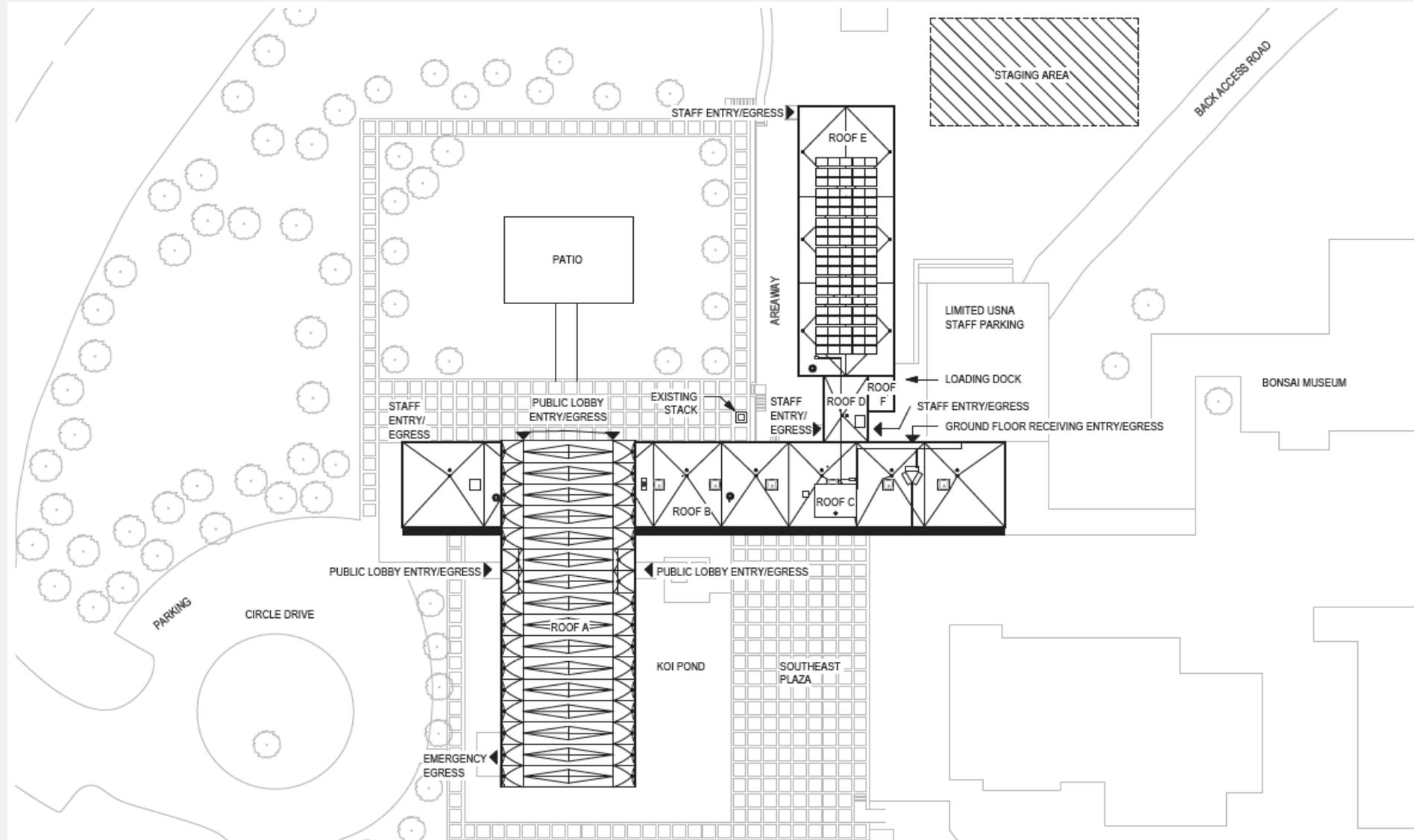


Location Map

Existing Administration Building



Overall Site Plan



Existing Conditions



TYPICAL CONDITION WITH PONDING AND CURLING OF MEMBRANE



EXISTING COPING CONDITION AND FLAT ROOFING SEAMS



EQUIPMENT ON ROOF OF THE OFFICE WING



NORTH SIDE OF THE OFFICE WING ROOF UNDER OVERHANG OF LOBBY WING ROOF



PONDING AND BIOLOGICAL GROWTH ON ROOF OF THE OFFICE WING



ROOF DRAIN CLOGGED AT ROOF OF THE HERBARIUM WING



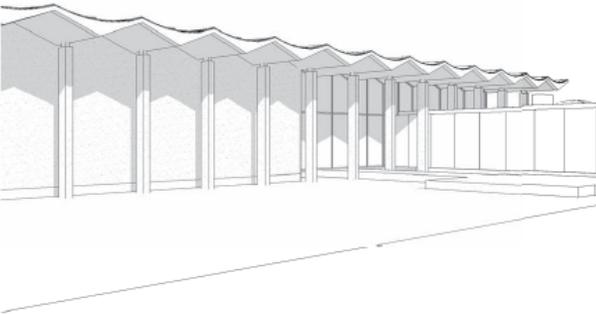
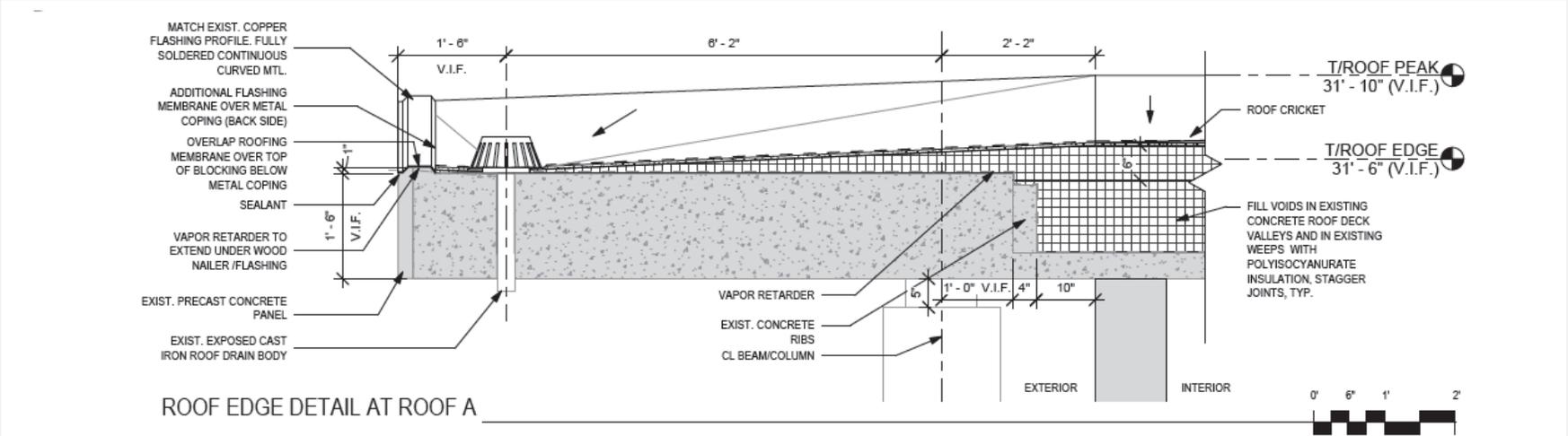
EXISTING SOLAR PANEL ARRAY



ELEVATOR PENTHOUSE ROOF

EXISTING CONDITION PHOTOS

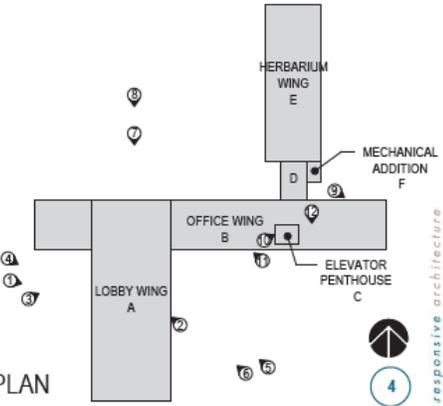
Design Details



5 - ROOF A - PROPOSED VIEW LOOKING NORTHWEST
 ADDED INSULATION IS NOT SEEN FROM GROUND PLANE AND REPLACEMENT ROOFING SYSTEM MATCHES EXISTING EDGE PROFILE



6 - ROOF A - EXISTING EAST SIDE



KEY PLAN

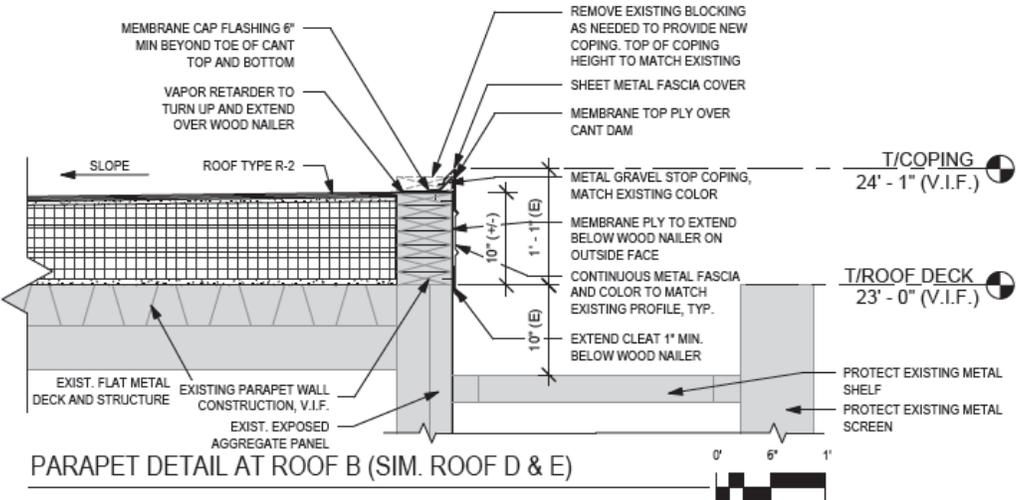
U.S. NATIONAL ARBORETUM - ROOF REPLACEMENT
 NATIONAL CAPITAL PLANNING COMMISSION FINAL REVIEW SUBMITTAL

bailey edward

Design Details



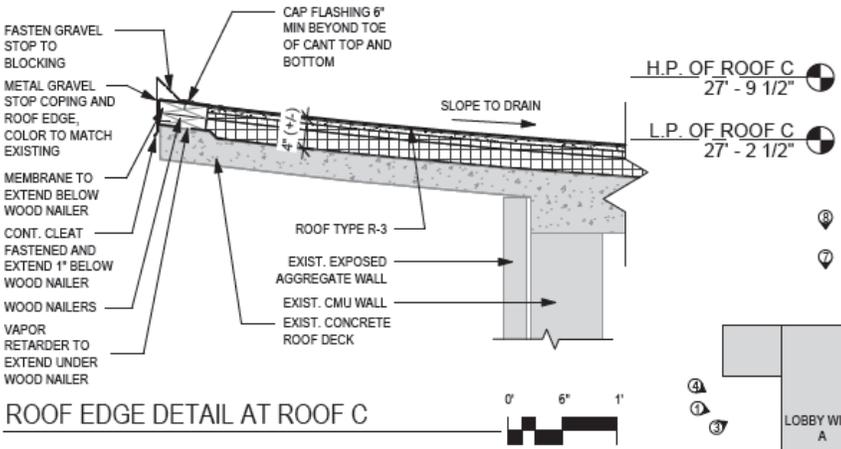
9 - ROOF B - EXISTING COPING PROFILE



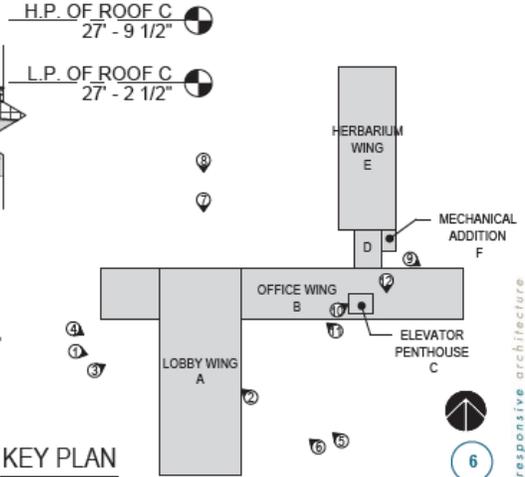
PARAPET DETAIL AT ROOF B (SIM. ROOF D & E)



10 - ROOF C - EXISTING COPING PROFILE

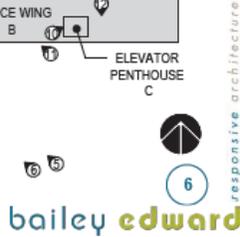


ROOF EDGE DETAIL AT ROOF C

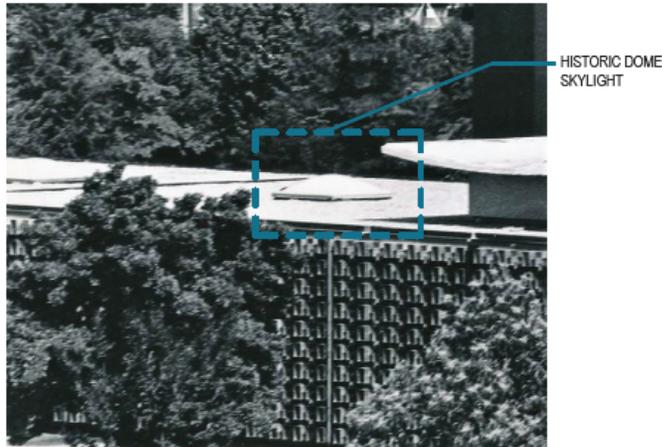


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 NATIONAL CAPITAL PLANNING COMMISSION FINAL REVIEW SUBMITTAL



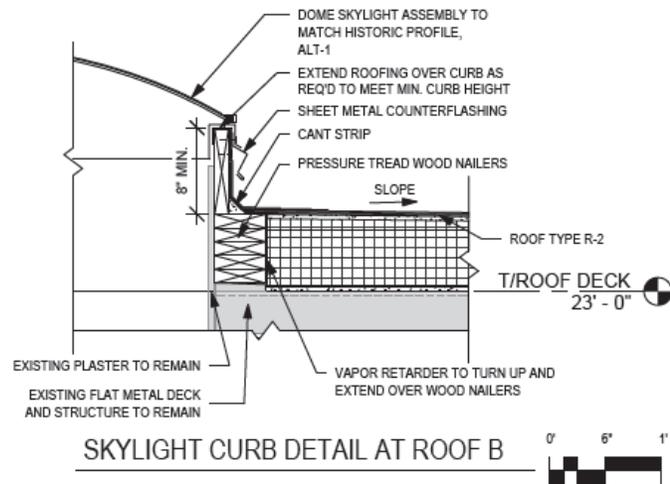
Skylight Replacement



11 - ROOF B - HISTORIC SKYLIGHT PROFILE



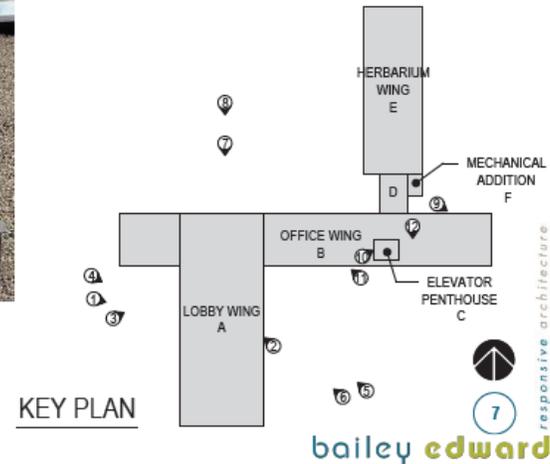
12 - ROOF B - EXISTING SKYLIGHT PROFILE



SKYLIGHT CURB DETAIL AT ROOF B



PROPOSED DOME SKYLIGHT



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