



# New Jersey Executive State House Project Overview

Tuesday, April 25, 2017

 **NEILSON**  
PDP



# Historic Evolution of the State House

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## Historical & Cultural Significance

- The Executive State House is the second oldest, continuously occupied state house in the United States.
- It is a valued cultural resource that is a contributing structure to a Historic District on the National Register.
- The history of a State is invariably tied to the history of its principal building.
- The State House represents many faces of the many faceted social, historical, political, and moral attitudes of the people of New Jersey.
- It is a source of pride to the state of New Jersey and an asset to the history of this nation.





STATE CAPITOL OF NEW JERSEY AT TRENTON.  
BUILT, 1794 — ALTERED & ENLARGED 1845 & 46.

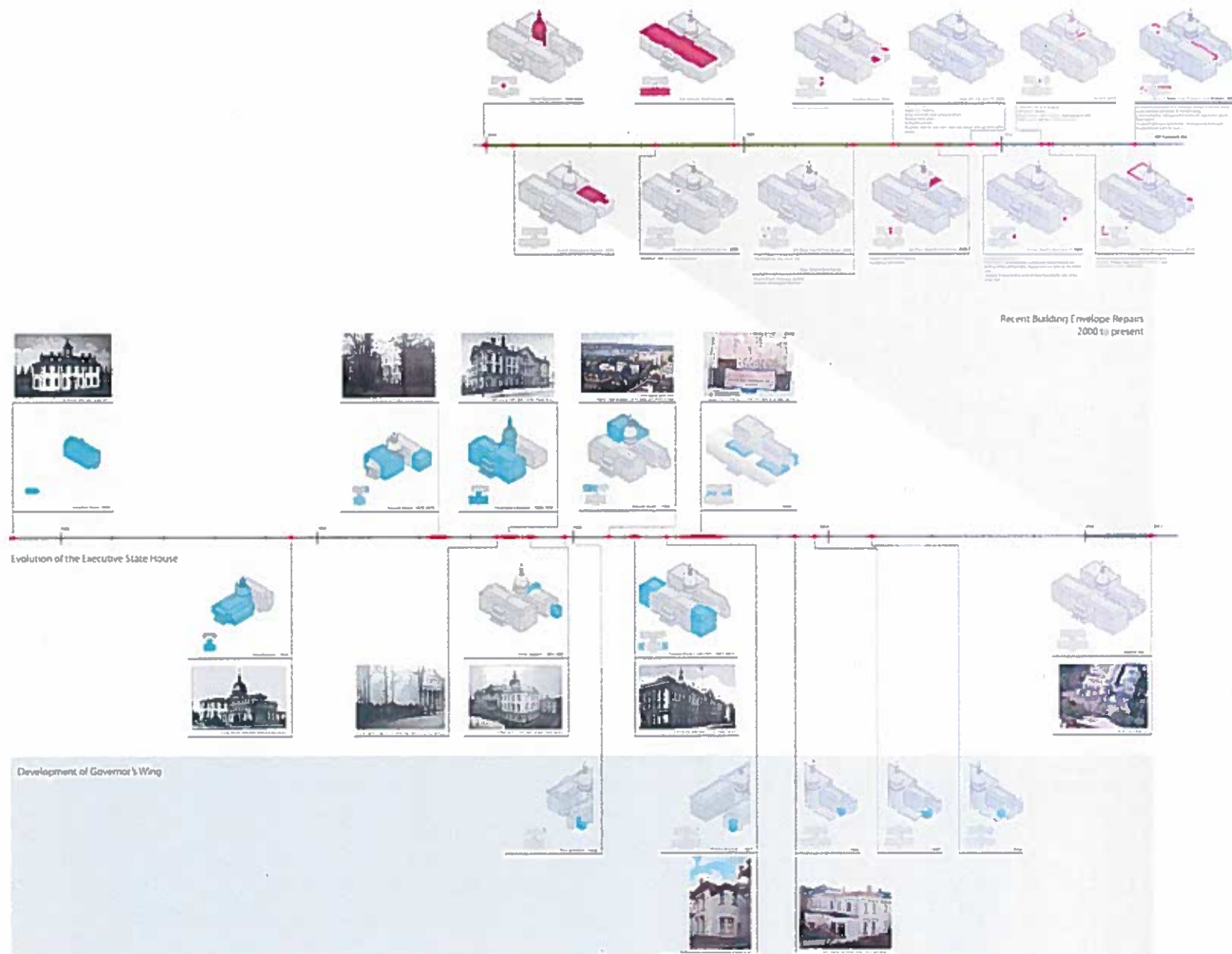




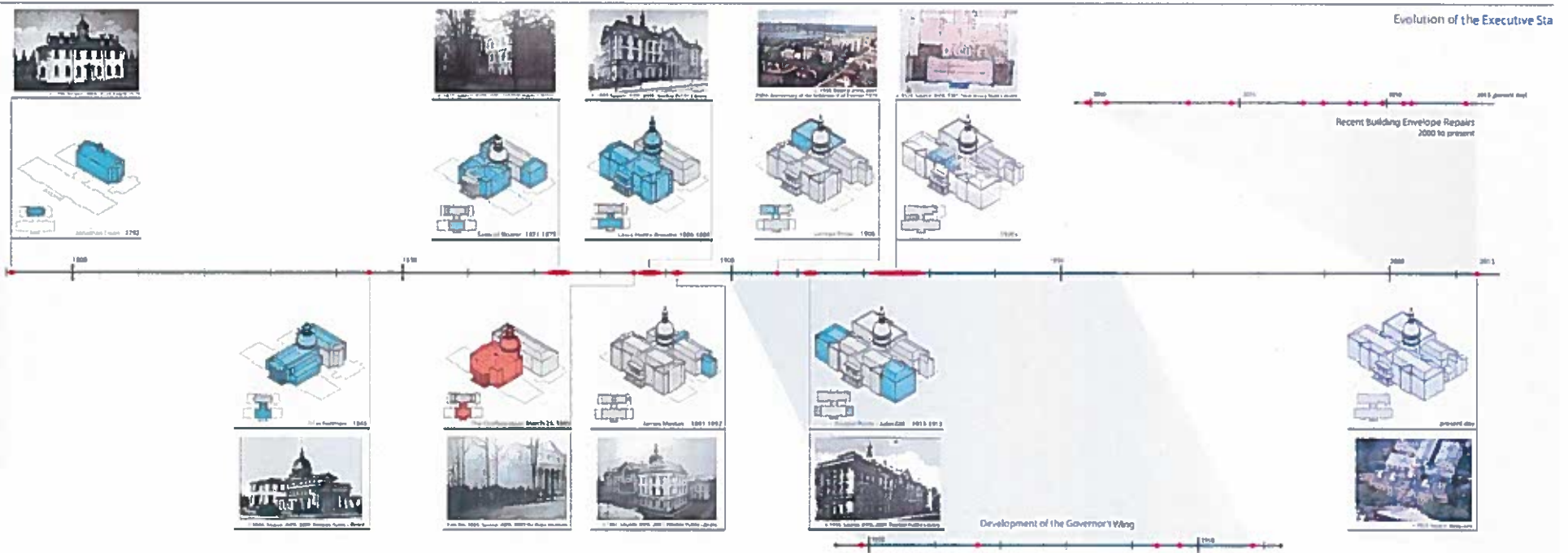




# Historic Evolution of the State House

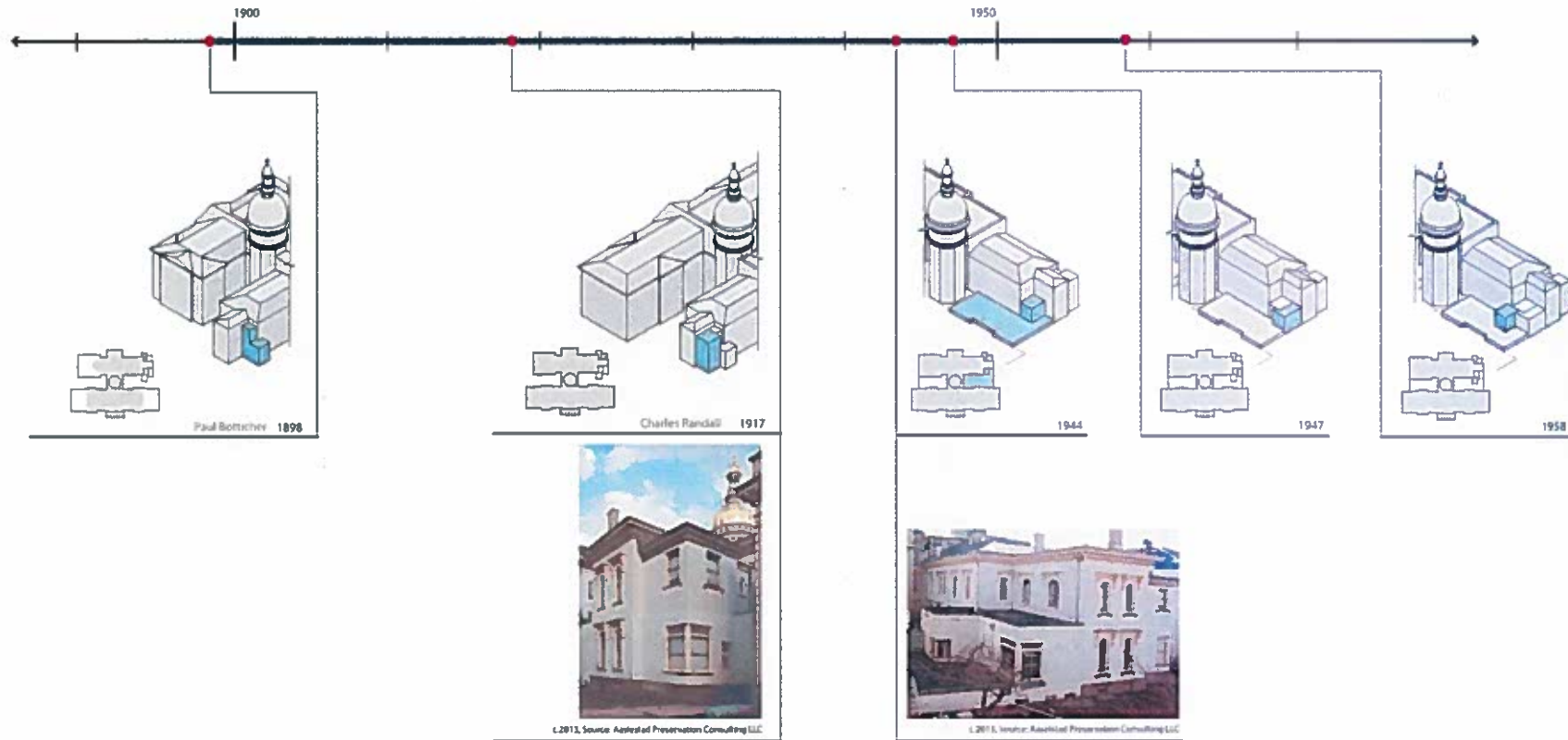


## Historic Evolution of the State House





# Historic Evolution of the State House – Governor's Wing

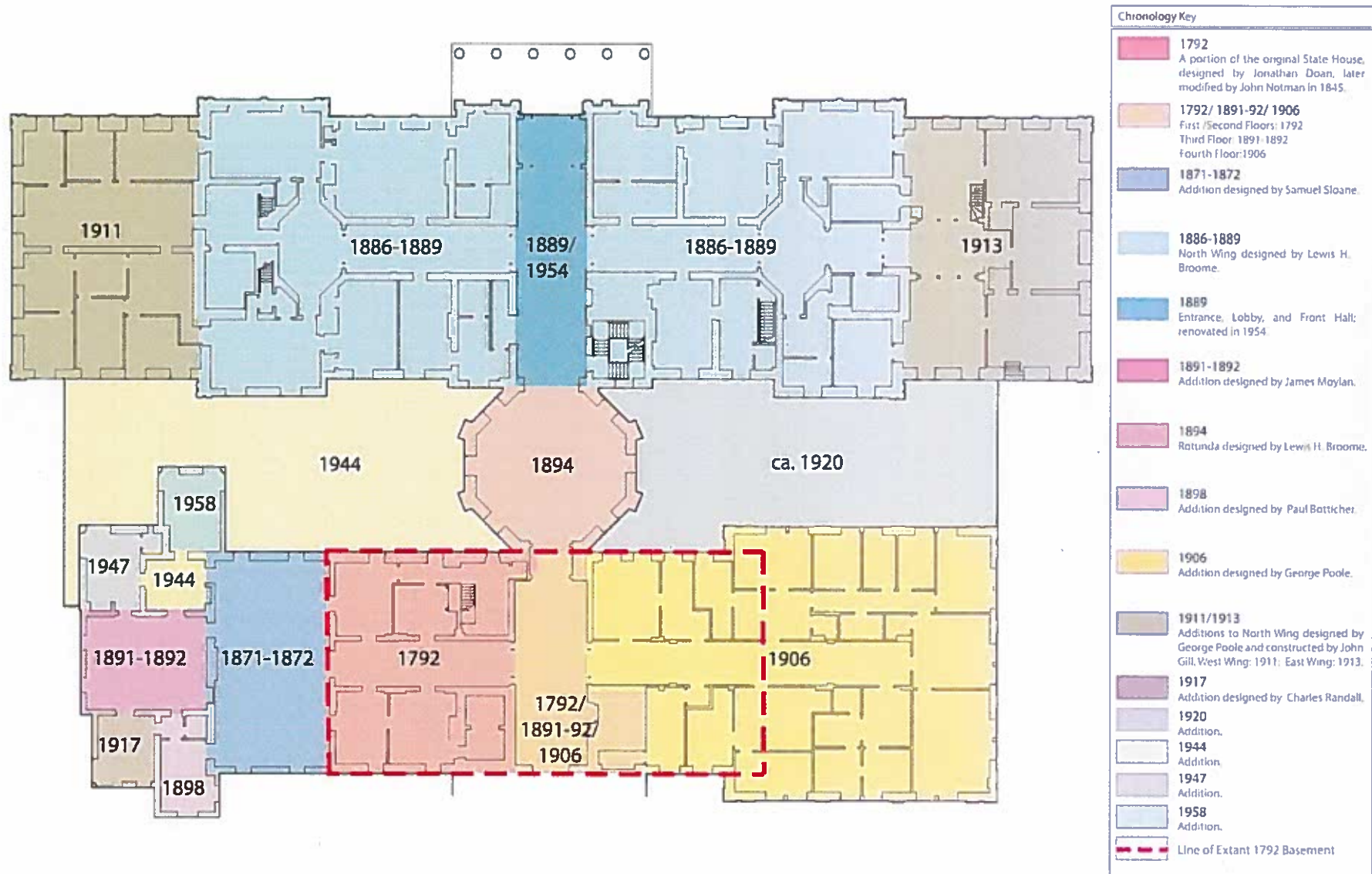


## NELSON PDP





# Chronology Diagram



## Process & Discovery

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### What did we learn through this process?

- The Executive State House [ESH] was developed over **17 Separate Building Campaigns**, possibly more than any other State House / Capitol in the US.
- **It is a very complex building.**
- The last major building campaign was completed in the early 1910's.



**The building has not received a comprehensive renovation or retrofit for at least 60 years.**



## Process & Discovery

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### **DPMC A1150-00 Exterior Envelope Repairs**

- |                                 |                   |
|---------------------------------|-------------------|
| • Prequalification submission   | August 9, 2012    |
| • Technical proposal submission | October 4, 2012   |
| • Interview                     | October 24, 2012  |
| • Final Fee proposal            | January 10, 2013  |
| • Authorization to Proceed      | January 29, 2013  |
| • Schematic Design Submission   | June 28, 2013     |
| • Design Development Submission | November 12, 2013 |

## Full Team Experience – Monumental Historic Landmarks

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### Selected Team

- Nelson [formerly H2L2]
- Preservation Design Partnership, LLC
- Silman
- Loring
- Jensen Hughes [formerly Aon]
- International Consultants, Inc.

Prime Architect

Design & Preservation Lead

Structural Engineering

MEP Engineering

Code & Risk Consultant

Cost Estimator

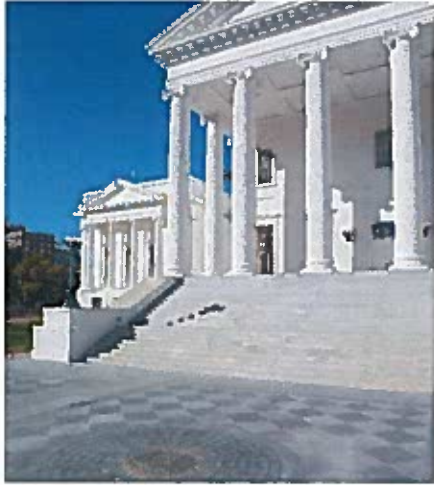


## Strengths of the Project Team

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- Leadership of the team has been involved in over **20** planning, design & comprehensive restorations involving **monumental National Historic Landmark buildings**.
- Has an on-going collaboration spanning over 20 years.
- Has developed a methodology & approach.
- Produce reliable cost estimate based on actual market data collected over several years of specialized practice.

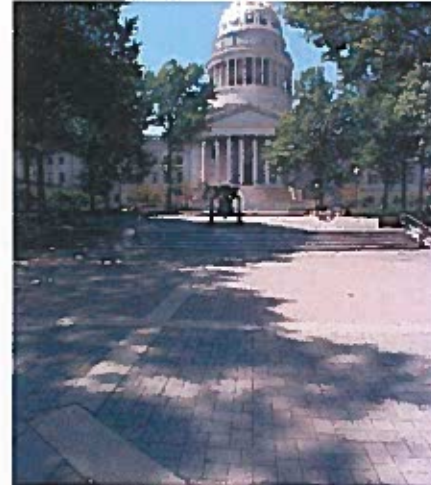
## Nelson / PDP Team Experience – Monumental Historic Landmarks



- Virginia State Capitol



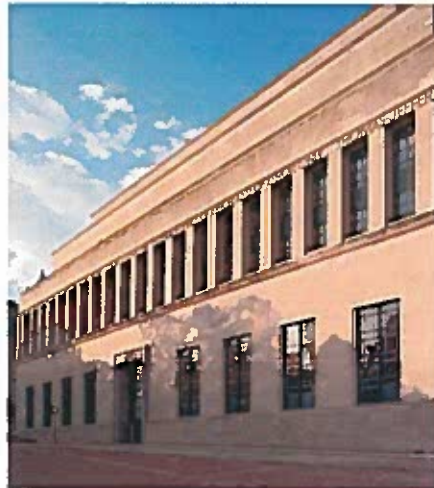
- United States Supreme Court Building



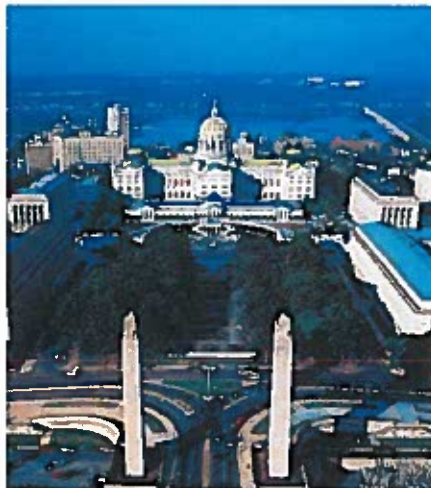
- West Virginia State Capitol



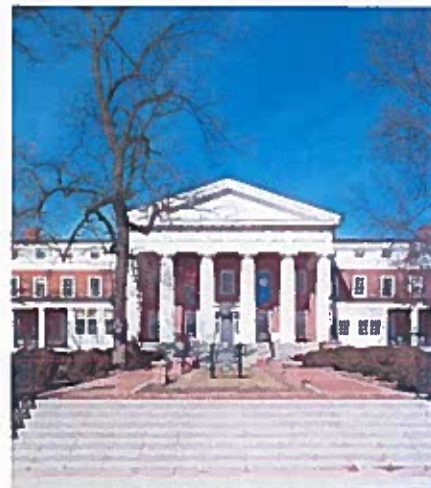
- Independence Hall



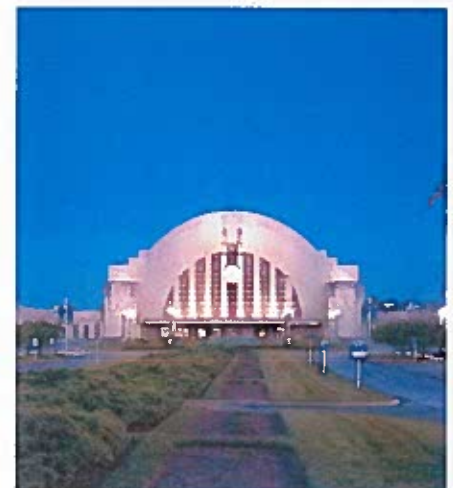
- Patrick Henry Building



- Pennsylvania State Capitol Complex



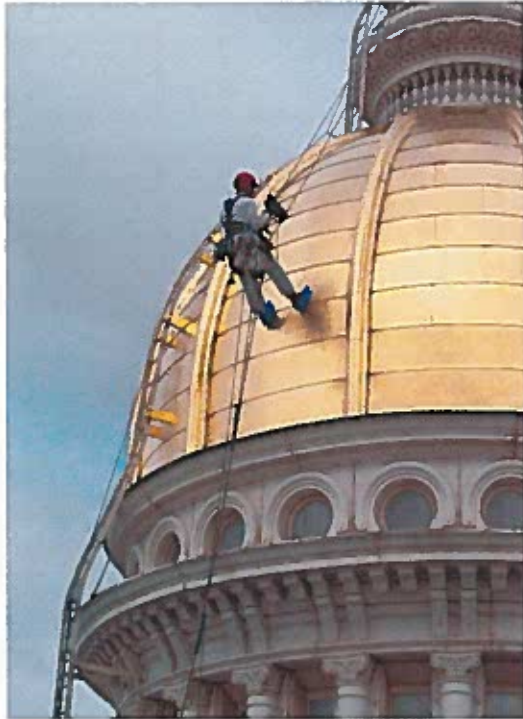
- Virginia School for the Deaf and Blind



- Cincinnati Museum Center

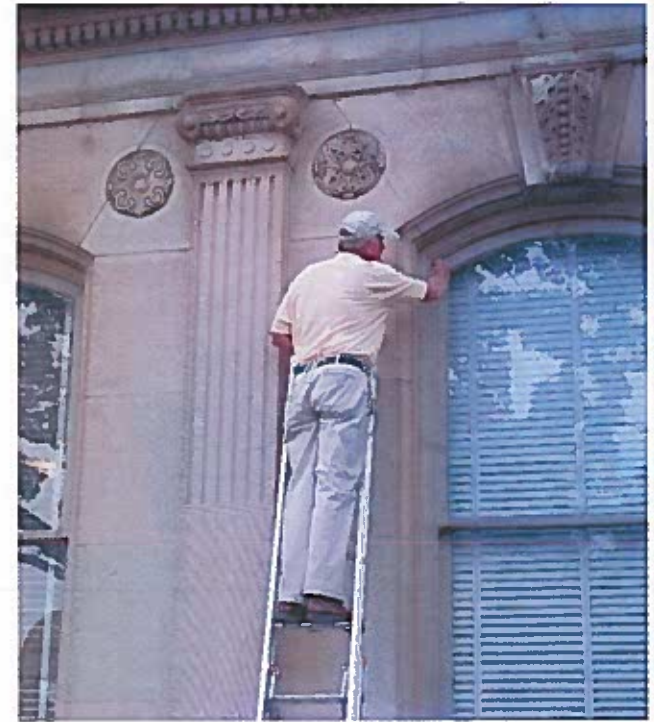
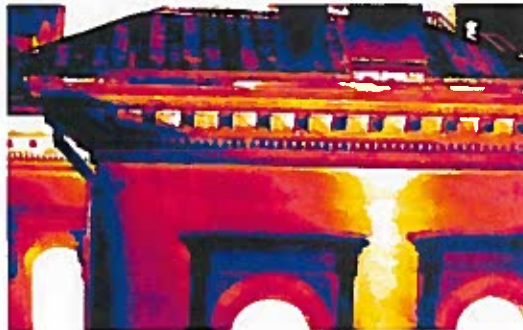


# Process & Discovery - Methodology



## Exterior Building Envelope Restoration Project Approach:

- A Comprehensive Visual Assessment
- A Systematic Non-Destructive Evaluation Program [NDE]
- Probes and Selective Exploratory Destructive Examination
- Analytical Testing of Materials and Systems
- Microscopic Analysis of Finishes
- Laser Scanning, Digital Photogrammetry and Orthophotography

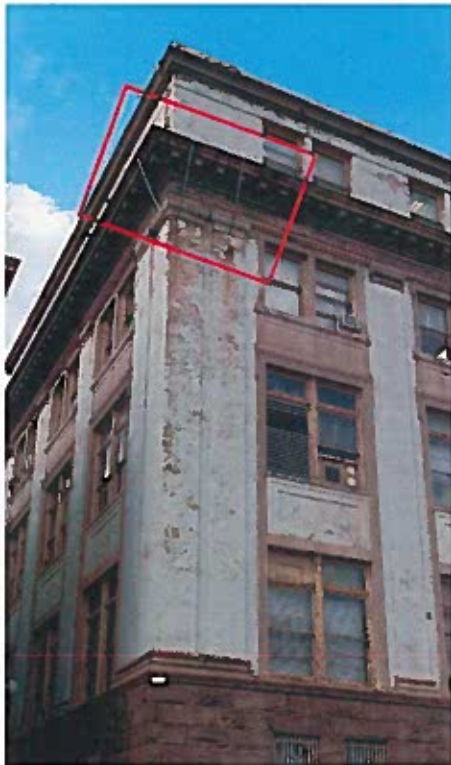


## NELSON PDP





## Summary of Findings – Significant Deterioration





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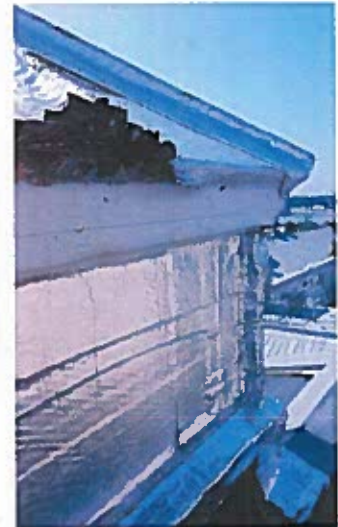
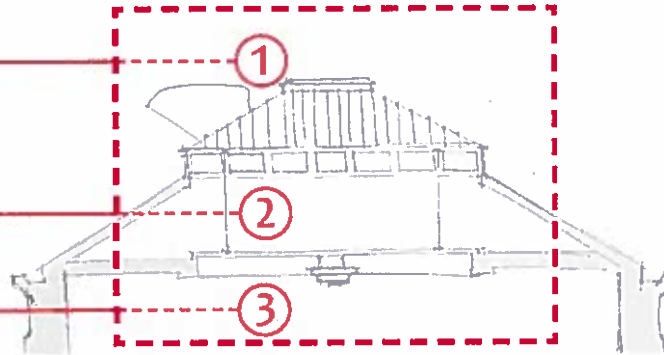


## Summary of Findings – Significant Deterioration





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## Summary of Findings – Significant Deterioration



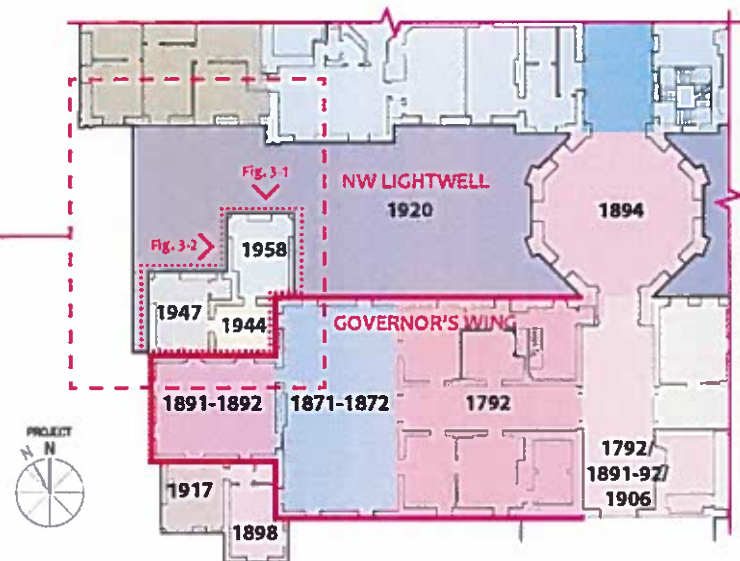
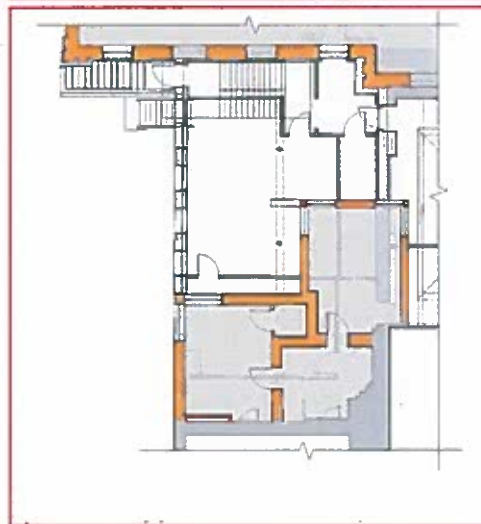
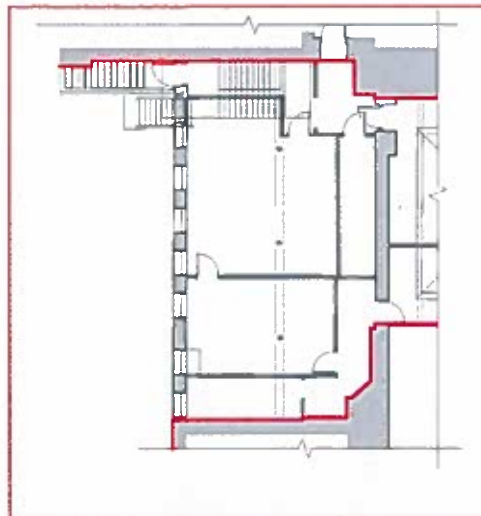


## Summary of Findings – Significant Deterioration

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## Summary of Findings – Significant Deterioration



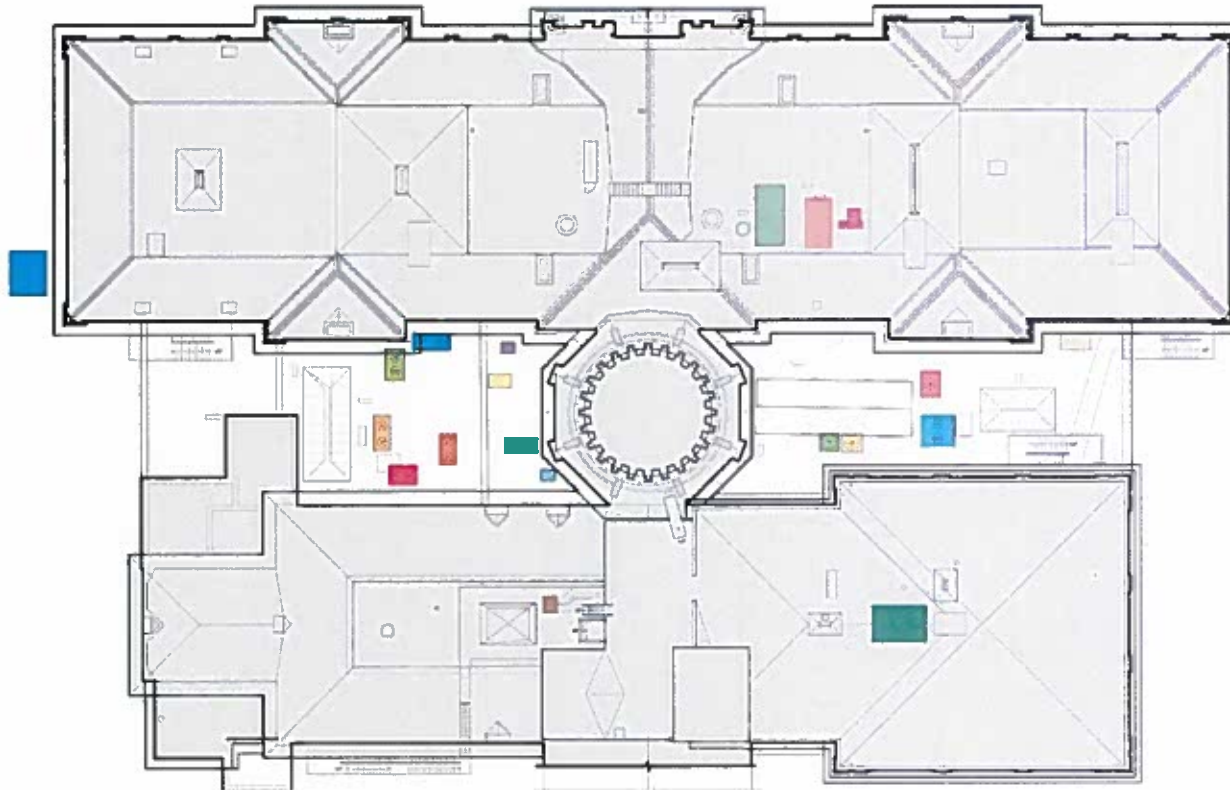


## Summary of Findings – Obsolete & Incomplete Infrastructure



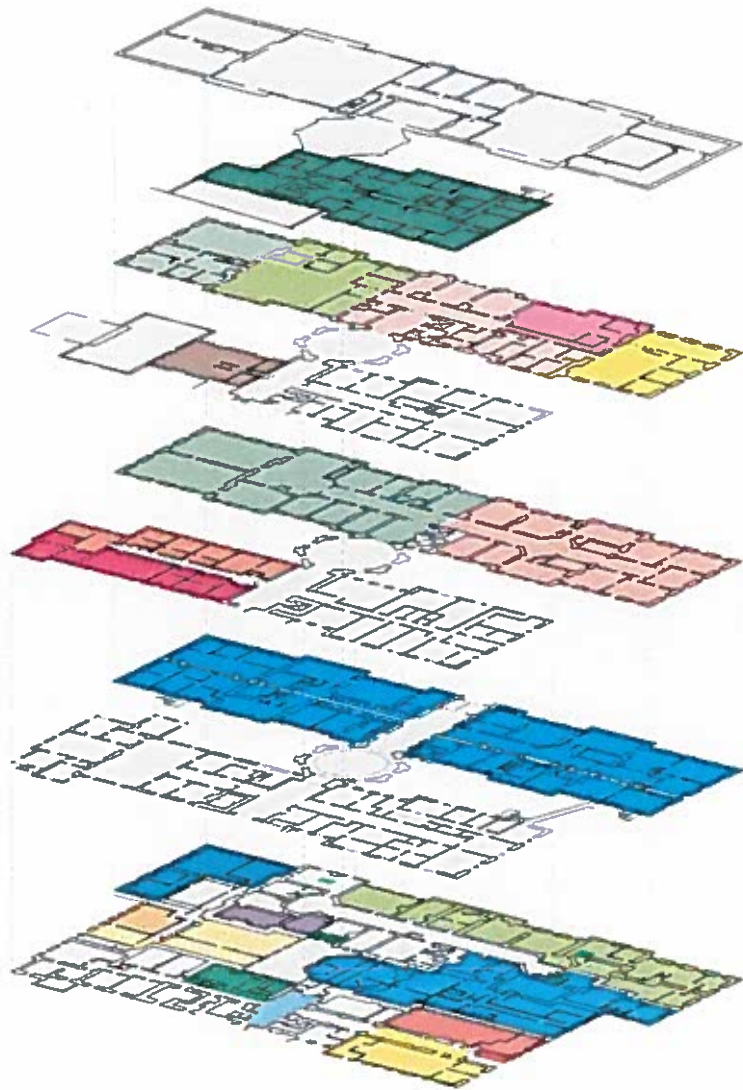
## Summary of Findings – Obsolete & Incomplete Infrastructure

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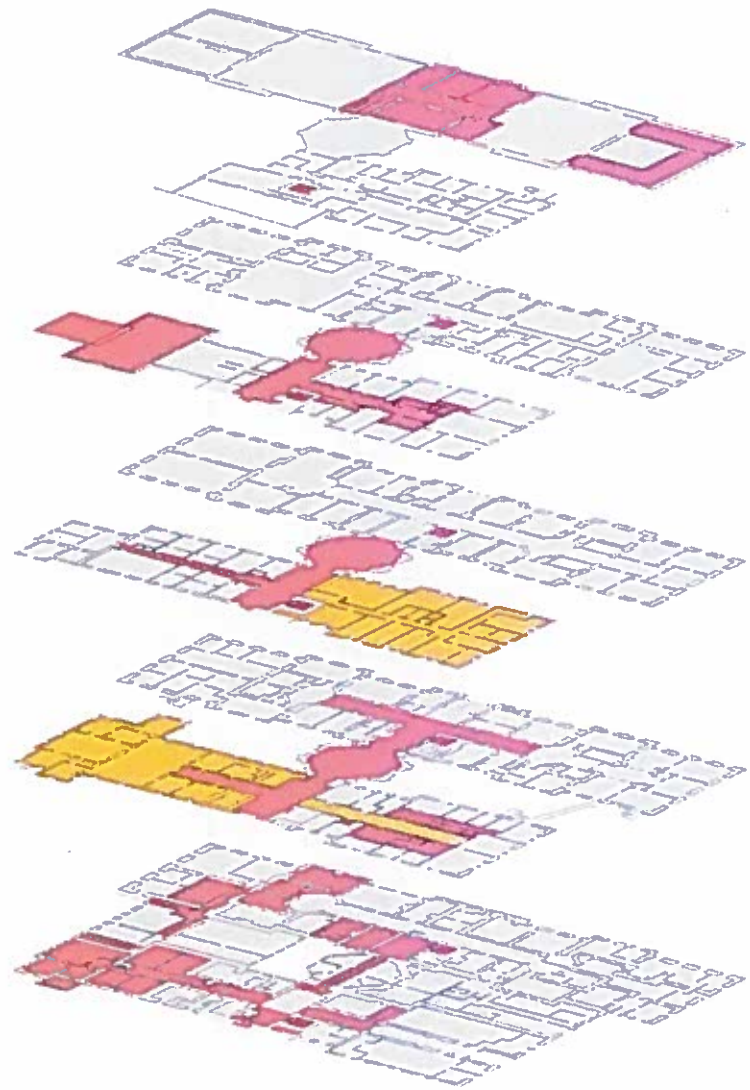




# Summary of Findings – Obsolete & Incomplete Infrastructure



Each colored area corresponds to a different piece of envelope-mounted equipment [previous slide].



Areas not served by HVAC equipment [red]  
or not in scope [orange].



## Summary of Findings – Project Budget and Funding is Misaligned

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- The scope of exterior repairs exceeds available funds.
- There are significant sunken costs in repairing the envelope without addressing the interfaces with building systems.
- Construction on an occupied building would be extremely disruptive and not provide occupants with any added value to the work spaces.

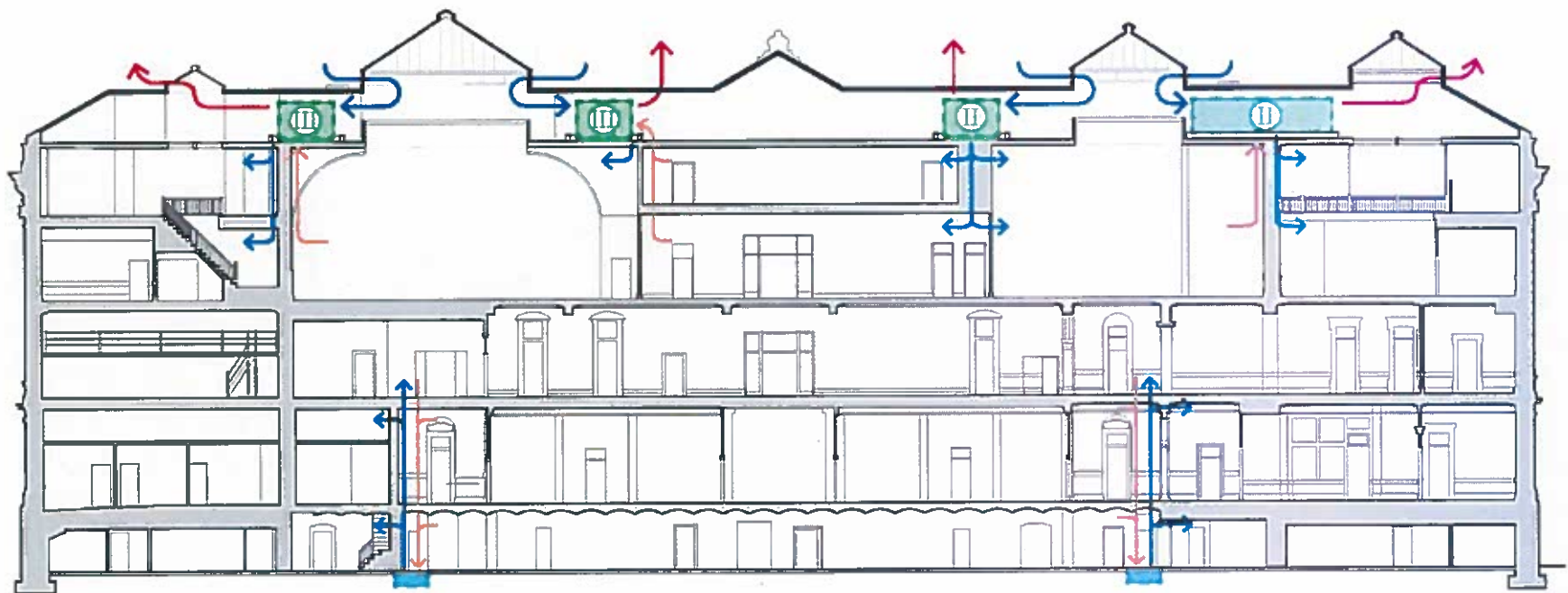
## What is the Correct Project to Undertake?

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- The major intervention must be to the HVAC and building systems.
- All other systems follow:
  - Electrical & Data
  - Plumbing
  - Life Safety
  - Occupant Equipment
  - Finishes
- The goal is to open the building only once for these improvements to infrastructure.
- Occupants must move out and the renovation is implemented in a single phase.



# Integrated Design for the Executive State House



# Integrated Design for the State House Complex

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## **PROPOSED SCOPE OF WORK FOR THE LEGISLATIVE STATE HOUSE**

Goal: Allow for the Executive and the Legislative State House to Communicate Seamlessly as One Building

- Security Enhancements
- Tele-data Enhancements
- Building Systems' Controls



# Project Budget for the State House Complex

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## PROPOSED STATE HOUSE PROJECT BUDGET

Executive State House Restoration and Renovation	\$173,000,000
Legislative State House Infrastructure Improvements and Upgrade	\$20,000,000
Artwork Conservation	\$1,000,000
Design Services	\$19,000,000
<b>Subtotal</b>	<b>\$213,000,000</b>
Construction Management	\$15,000,000
Permits	\$3,000,000
NJ Affirmative Action (N.J.S.A. 10:5-31 and N.J.A.C. 17:27)	\$1,000,000
<b>Subtotal</b>	<b>\$232,000,000</b>
Project Contingency	\$55,000,000
<b>TOTAL PROJECT BUDGET</b>	<b>\$287,000,000</b>





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