### REPAIR AND RESTORATION OF THE MOTHER CHURCH



BLC PRESENTATION
NOVEMBER 2019

### THE FIRST CHRUCH OF CHRIST, SCIENTIST

**OWNER** 

JACK TRAIN & BROOKE TEN EYCK

### **COLLIERS INTERNATIONAL**

OWNER'S REPRESENTATIVE

JOHN SADOWSKI

### **FINEGOLD ALEXANDER ARCHITECTS**

ARCHITECT/INTERIOR DESIGN

JAMES ALEXANDER & REGAN SHIELDS IVES

### **SIMPSON GUMPERTZ & HEGER**

**BUILDING ENCLOSURE & FOUNDATIONS** 

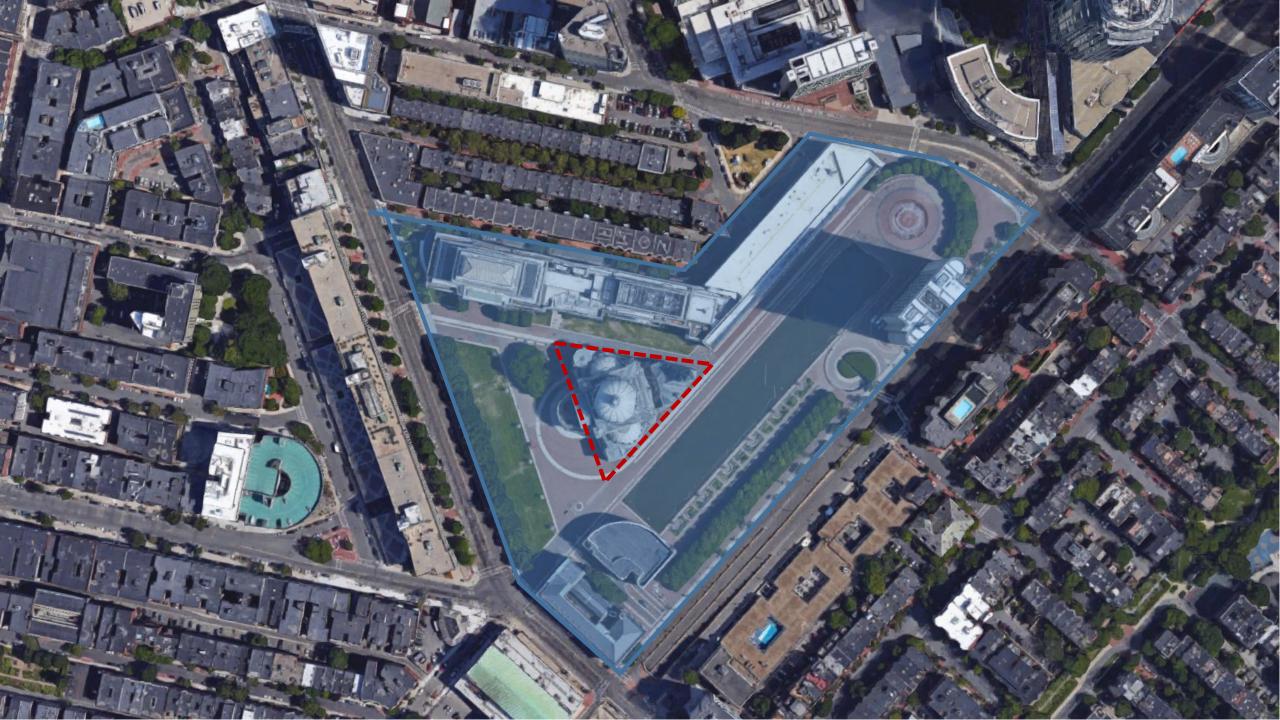
SUSAN KNACK-BROWN & CASEY WILLIAMS

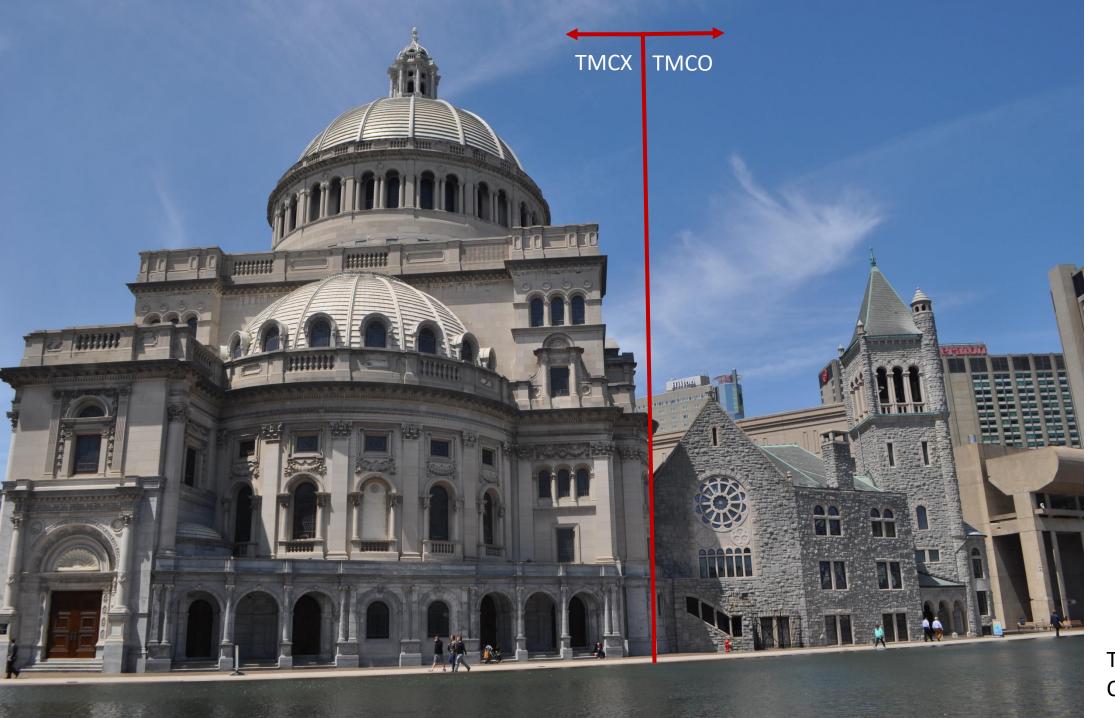
### OTHER TEAM MEMBERS

SHAWMUT DESIGN AND CONSTRUCTION CONSTRUCTION MANAGER

ARUP

LIFE SAFETY ENGINEER AND CODE CONSULTANT





THE MOTHER CHURCH

### **1894 Construction of The Original Mother Church (TMCO)**

- Designed by Franklin Welch
- Romanesque Revival style
- New Hampshire granite exterior with slate roof
- Constructed in only 13 months



TMCO





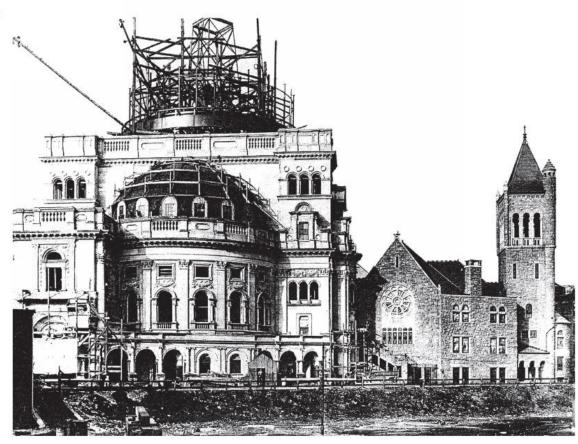


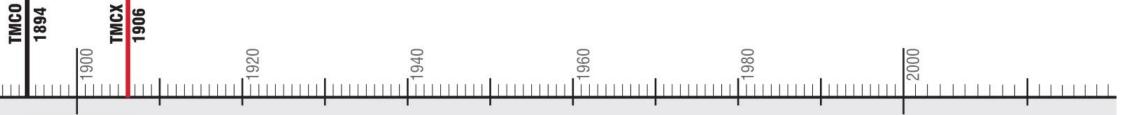




### 1906 Construction of The Mother Church Extension (TMCX)

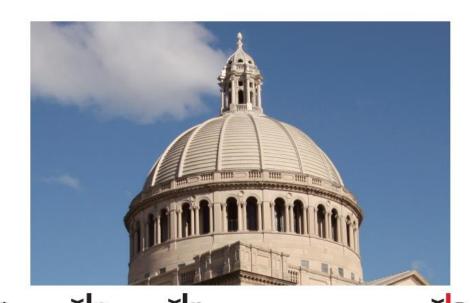
- Designed by Charles Brigham & Charles Covery of Boston and Solon Beman of Chicago
- Neoclassical style with Byzantine elements
- Limestone and granite exterior with terracotta
- Constructed in 23 months

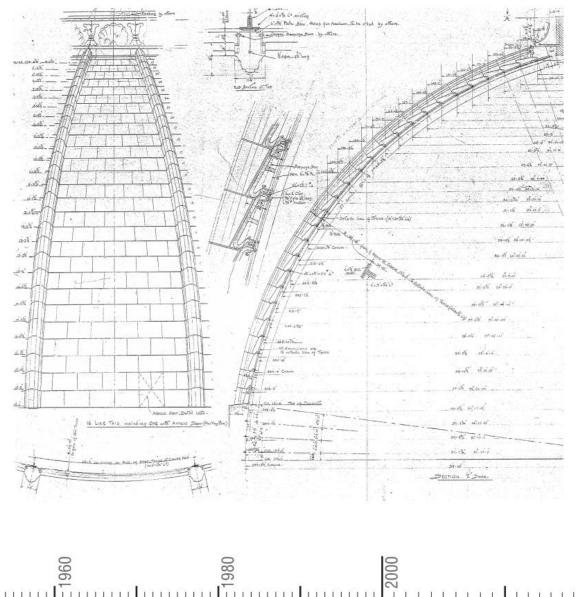




### **1950 TMCX Dome Restoration**

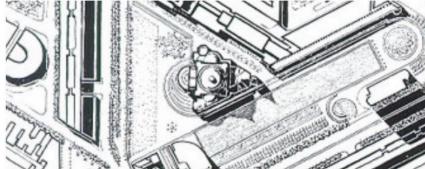
- The material of the terracotta cladding on the central TMCX dome systemically failed
- The cupola and all terracotta on the main dome were removed and replaced





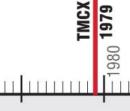
### **Master Plan and 1979 Stone Portico Addition**

- Designed by Araldo Cossutta
- Part of the Pei Cobb Freed master plan to provide the world headquarters of the Christian Science Church with a more open and welcoming environment
- Creates grand entrance plaza in gap left by demolition of original Christian Science Publishing House.









2000

1990-1996: Manual for Maintenance and Monitoring of Exterior Conditions at TMCO and TMCX

Visual Inspection of complete envelope

 Limited destructive testing of masonry and roof materials and cleaning techniques

• 1990-1991: Roof repairs and restoration

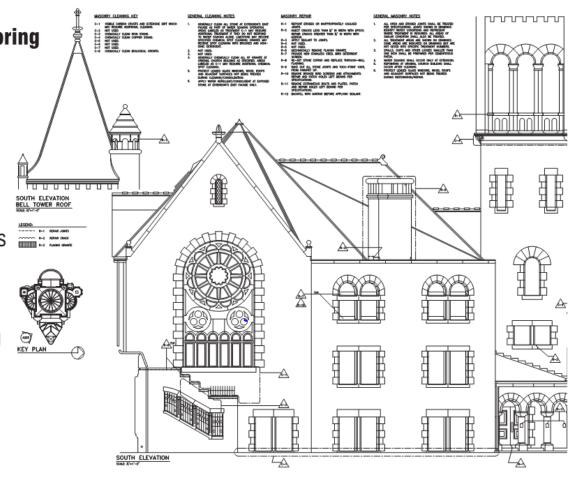
• 1992-1993: North facade and semi-dome repairs

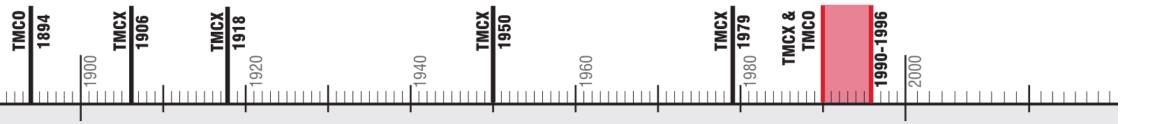
• 1994: TMCO masonry and roof flashing repairs

• 1994: South facade masonry repairs

 1995: West facade and portico repairs, including removal of water staining

 1995-1996: Central dome and cupola repair and repointing

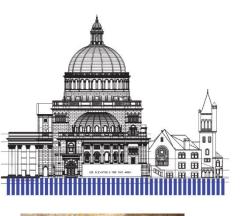












## Foundation



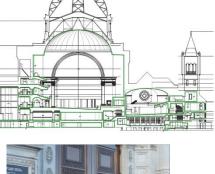










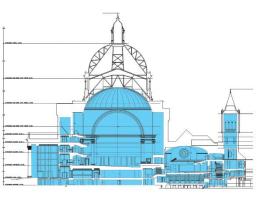


# Code/Life Safety

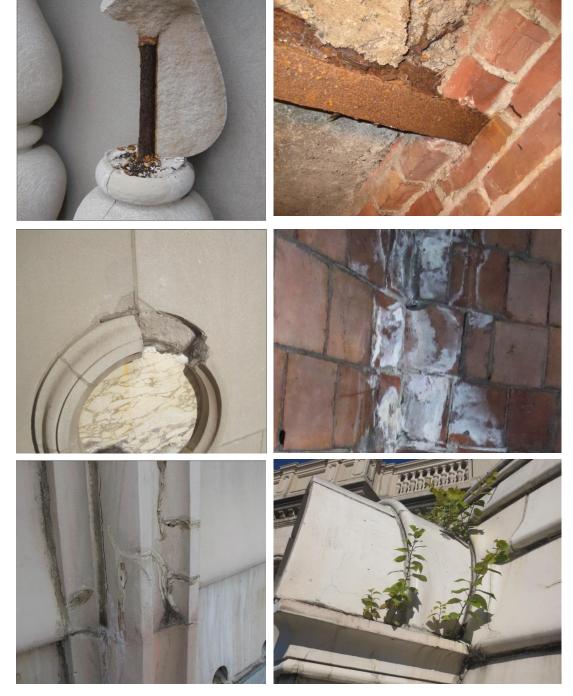




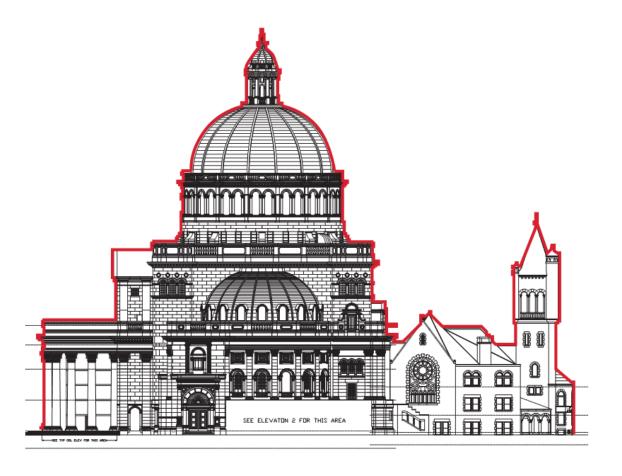




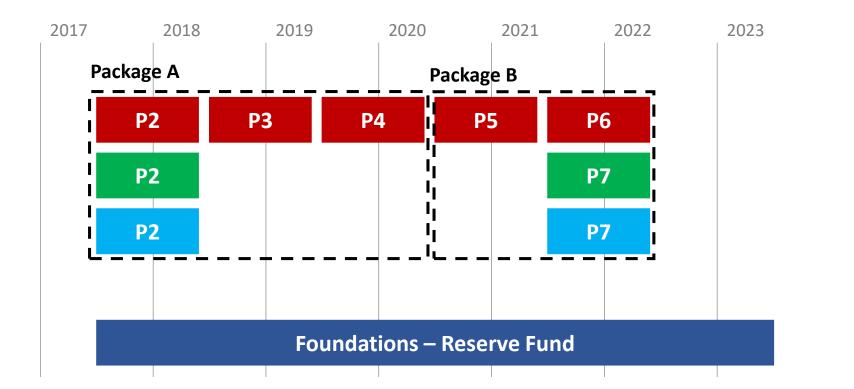
### Interior



# Envelope



### PROJECT PHASES









PACKAGE B PHASES



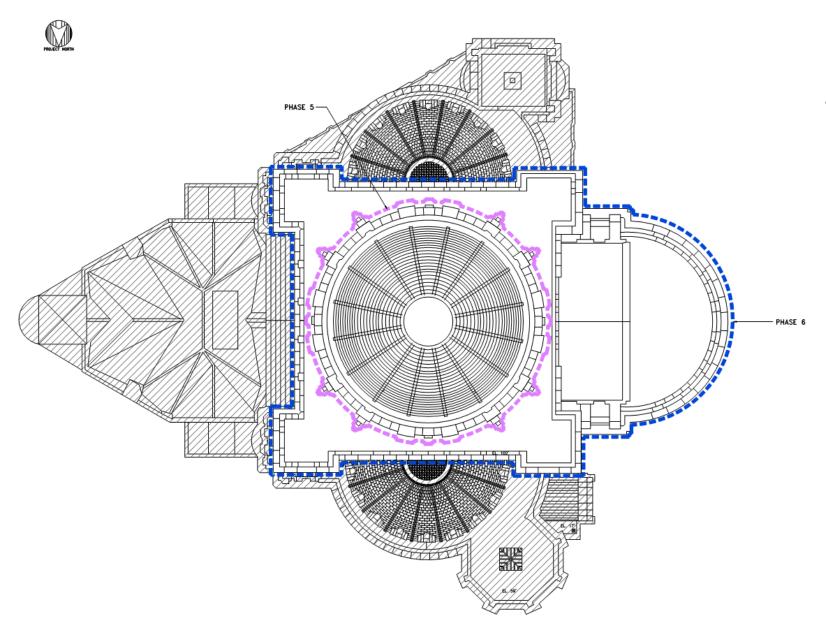








Foundation

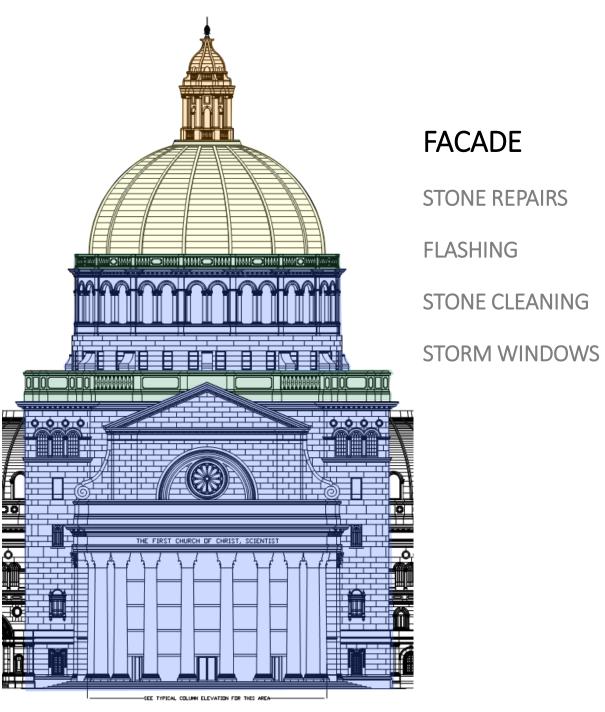


PACKAGE B

APPROX. 2020 - 2022



1 PHASING KEY PLAN



**FACADE** 

**BALUSTRADES** 

MAIN DOME

STONE REPAIRS

**REBUILD AS CAVITY WALL** 

TERRA COTTA REPAIRS AND JOINT TREATMENT

**FLASHING** 

STONE REPAIRS

BASE OF WALL REPAIRS

STONE CLEANING

**FLASHING** 

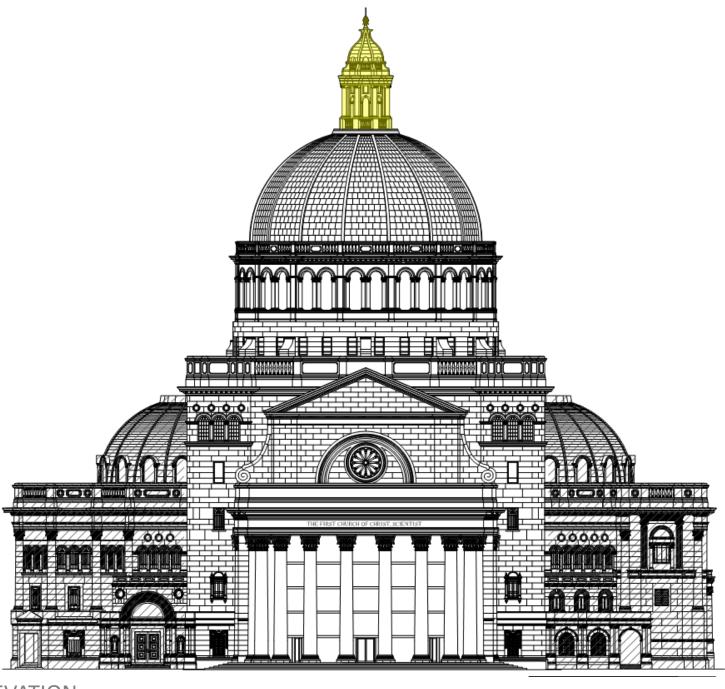
STRUCTURAL REPAIRS

**CUPOLA** 

REBUILD CUPOLA

**ROOFS** 

REPLACE ROOFS -**COMBINATION OF COPPER** AND PVC



### **CUPOLA**

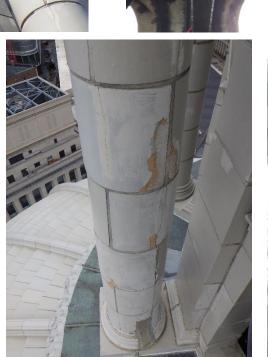
REBUILD CUPOLA WITH TERRA COTTA OR GLAZED CAST STONE AND REPLACE STRUCTURE

PACKAGE B



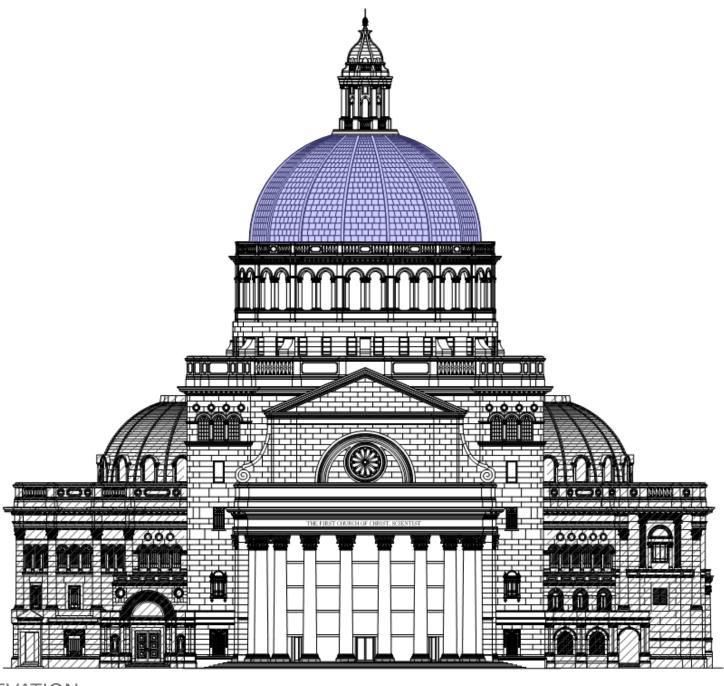












### MAIN DOME

REMOVE MORTAR JOINTS AND PROVIDE SEALANT.

PACKAGE B

### MAIN DOME ROOF

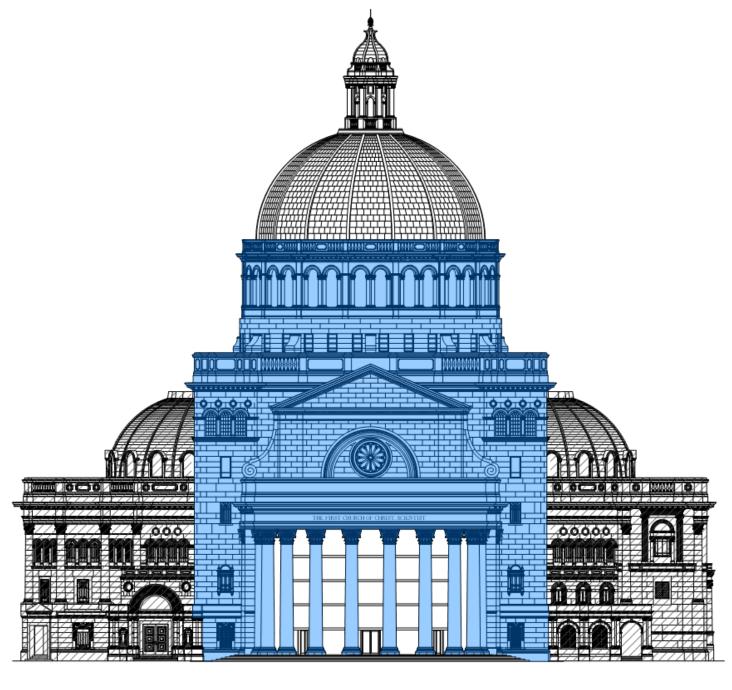










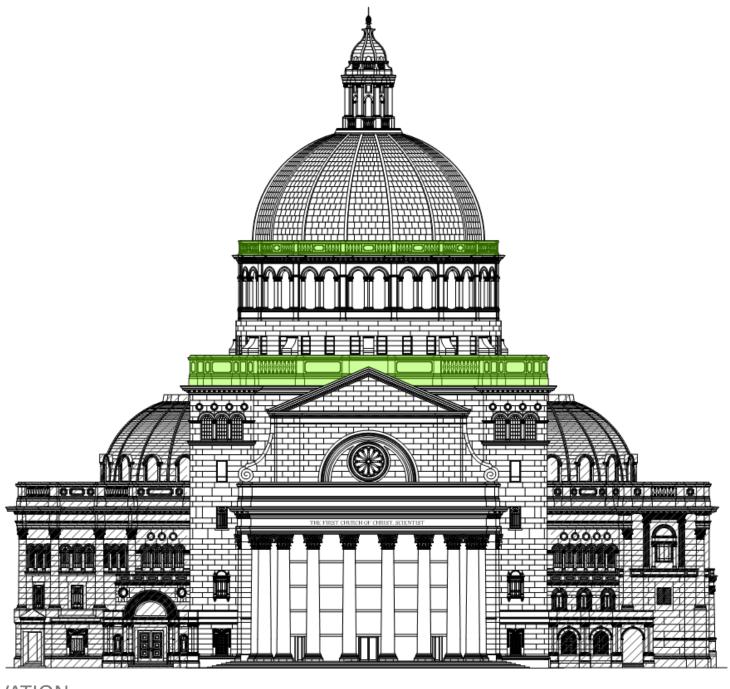


### TYPICAL FACADE

STONE REPAIRS

**FLASHING** 

STONE CLEANING



### **BALUSTRADES**

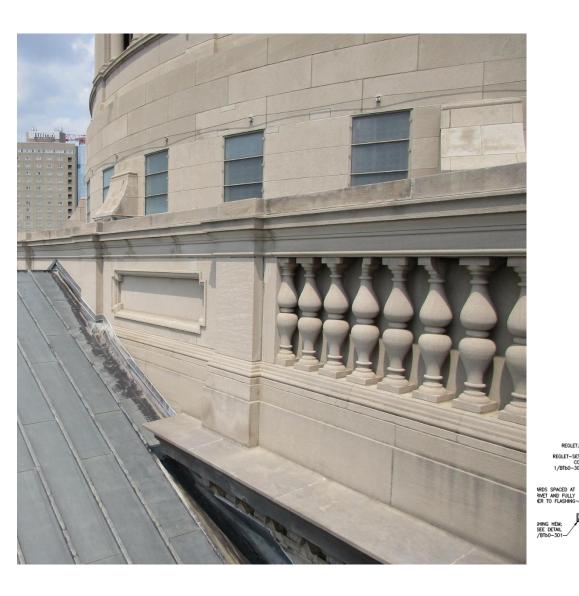
**REBUILD AS CAVITY WALL** 

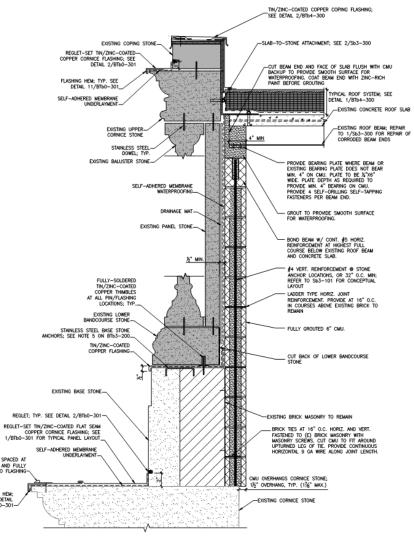
STONE REPAIRS

FLASHING

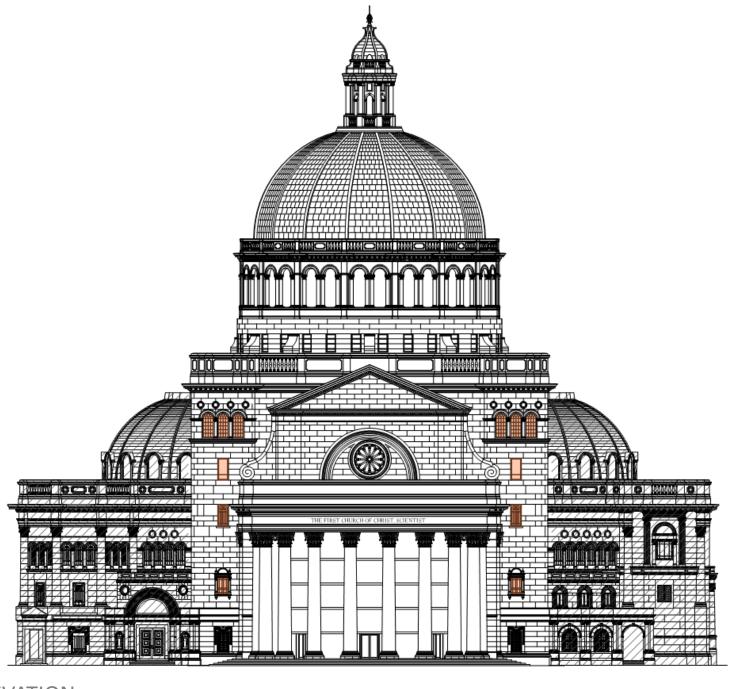
STRUCTURAL REPAIRS

PACKAGE B





### 6<sup>TH</sup> & 8<sup>TH</sup> FLOOR BALUSTRADES



### PROTECTIVE GLAZING

PROVIDE PROTECTIVE GLAZING

REPAIR EXISTING PROTECTIVE GLAZING

PACKAGE B









DETERIORATED WOOD

PEELING PAINT

**FRAME** 



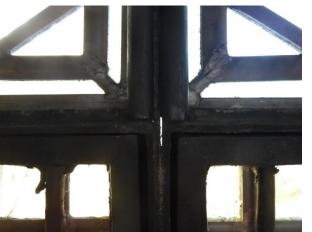
CRACKED GLAZING

REMEDIAL SEALANT

SPLIT CAMING

**EVIDENCE OF LEAKS** 

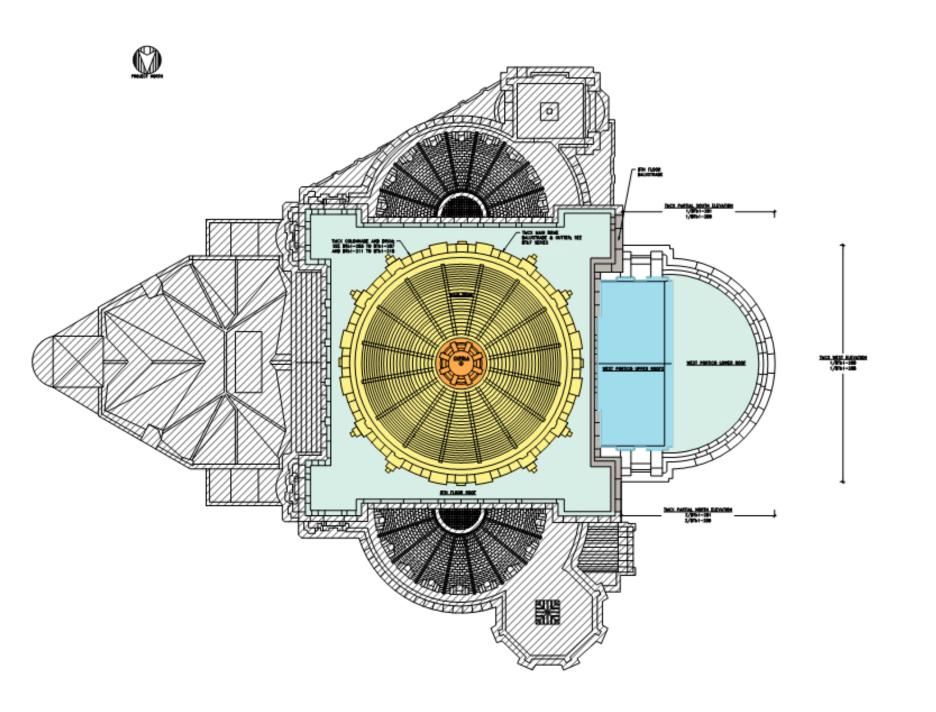












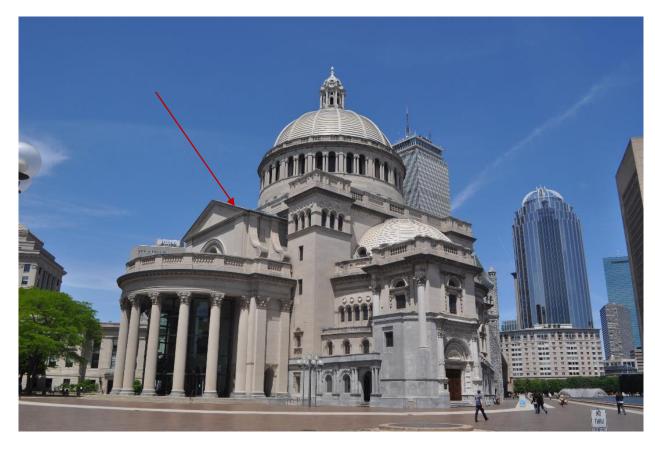
### **ROOFS**

**WEST PORTICO** 

MAIN DOME

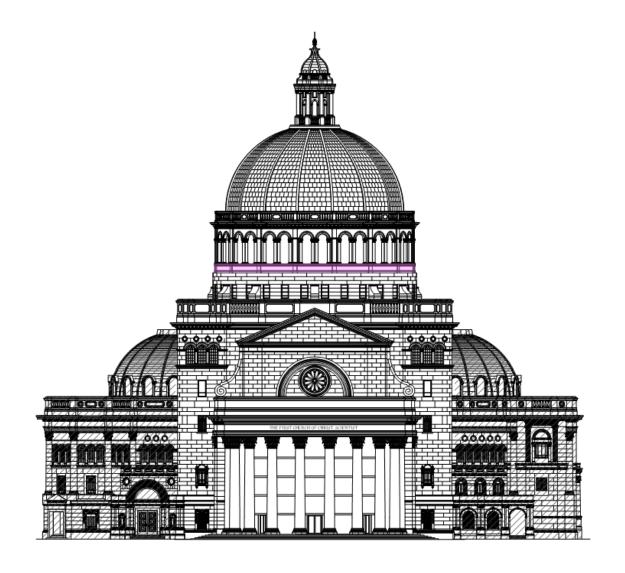
**COLONNADE** 

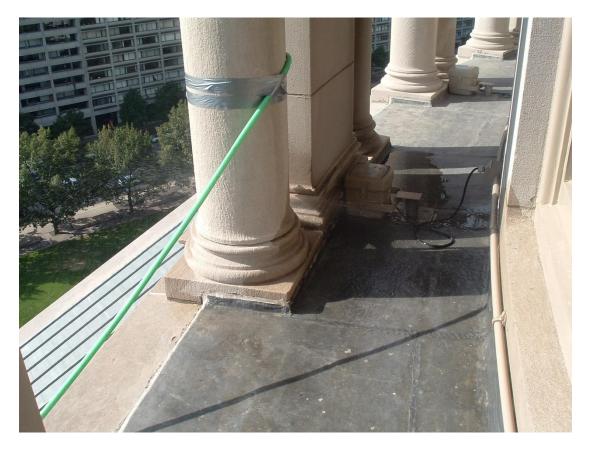
### WEST PORTICO UPPER ROOF

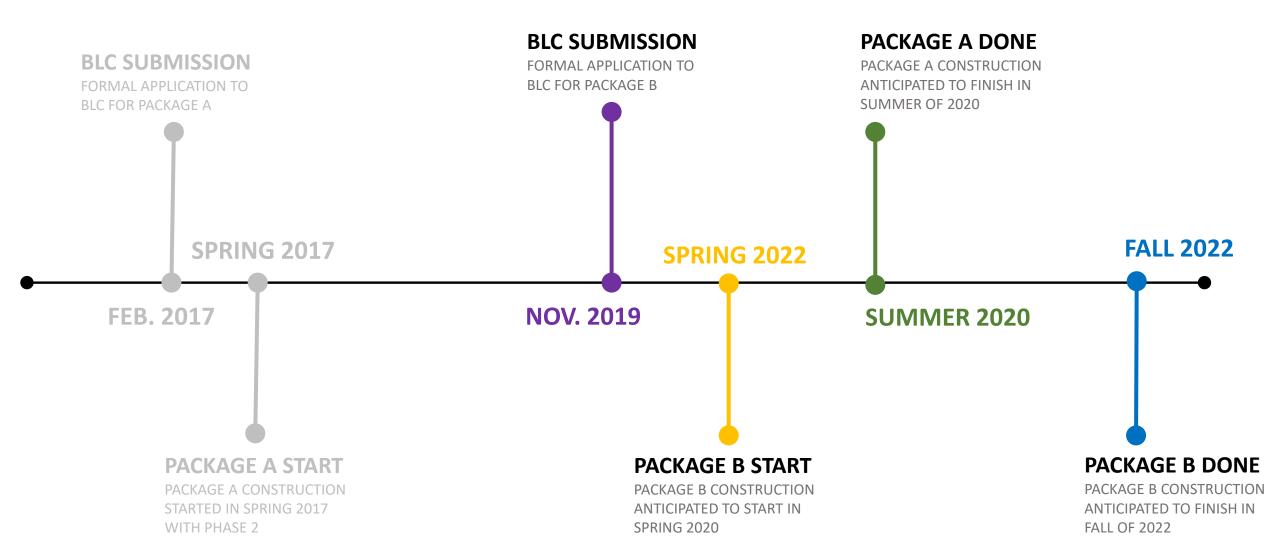




### **COLONNADE ROOF**









### REFERENCE SLIDES (IF NEEDED)



SOUTH AND WEST ELEVATIONS



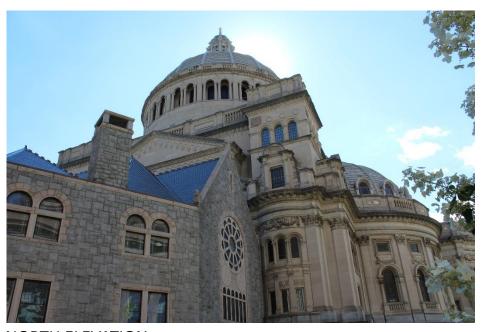
SOUTH ELEVATION



SOUTH ELEVATION



SOUT AND EAST ELEVATIONS



**NORTH ELEVATION** 



NORTHWEST CORNER



NORTH ELEVATION



NORTH ELEVATION