

LINCOLN MEMORIAL REHABILITATION:
NATIONAL CAPITAL PLANNING
COMMISSION

JUNE 5TH, 2020

PREPARED BY:
QUINN EVANS

FOR:
THE NATIONAL PARK
SERVICE

NATIONAL MALL AND
MEMORIAL PARKS

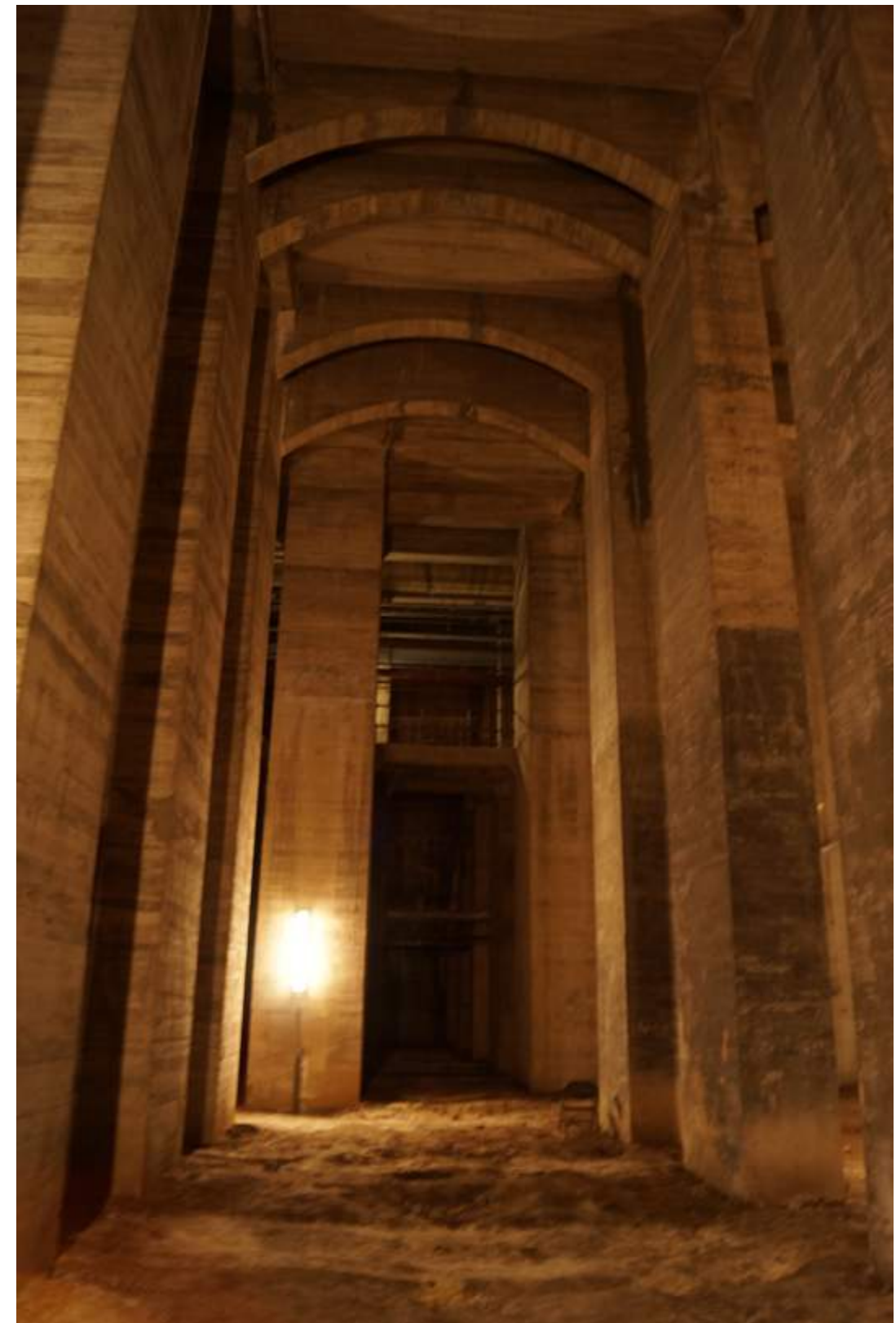




TABLE OF CONTENTS

PAGE

3	Introduction & Scope, Project Schedule
4-6	Vicinity Map and Site Plans
7-8	Site Evolution
9-13	Existing Conditions
14-15	Concept Drawings
16	Code Diagram
17-19	Proposed Undercroft Entry Widening
20-21	Proposed Gates - Computer Visualization
22-23	Proposed Gates - Option A - Stone Lintel
24-25	Proposed Gates - Option B- Bronze Lintel
26	Proposed Gates - Gate Jamb Details
27	Proposed North Exit - North Door Exiting Plan
28-31	Proposed North Exit
32	Proposed North Exit - Computer Visualization

PROJECT TEAM

1. Civil and Landscape Architect: Vanasse Hangen Brustlin, Inc.
2. Architect: Quinn Evans
3. Structural Engineers: Robert Silman Associates
4. Mechanical, Electrical, Plumbing Engineers: Affiliated Engineers, Inc.
5. Architectural Lighting: Gary Steffy Lighting Design
6. Acoustician: Acoustic Dimensions
7. Cost Estimator: Kirk Value Planners
8. Hazmat: Terracon



SUMMARY

BACKGROUND

Located within the National Mall and Memorial Parks (NAMA), the Lincoln Memorial anchors the National Mall on its western end and is one of three major components that define the Mall, along with the United States Capitol at the eastern end and the Washington Monument in the center.

The Lincoln Memorial is one of the most recognizable and beloved buildings in the United States. Originally conceived as a place to honor and contemplate Abraham Lincoln and his achievements, the Lincoln Memorial has also become a symbol of the struggle for civil rights in America. The Memorial is open 24 hours a day and is one of the most visited sites in the National Park Service system. It was designed by Henry Bacon and was dedicated in May of 1922.

MEMORIAL DESIGN

Henry Bacon envisioned that the Memorial is an open-air pavilion raised on a plinth that is accessed from the Reflecting Pool up a series of stairs and terraces. Within the Memorial, the space is separated into three chambers; the central chamber holds the statue of Abraham Lincoln, designed by Daniel Chester French, while the side chambers hold simple, yet elegant, engravings of the Gettysburg Address and Lincoln’s second inaugural address. In the corners of the Chamber are rooms where services for the Memorial are located, including a small retail store and access to the existing elevator, which was installed in 1974.

The exterior of the Memorial is constructed of Colorado Yule marble and it is surrounded by 36 fluted Doric columns. Inscribed on the frieze above the colonnade are the names of the 36 states in the Union at the time of Lincoln’s death.

The marble temple sits atop a concrete retaining wall with a Milford Pink Granite facade above grade. The entire Memorial is built on a concrete foundation supported on very large concrete columns. This colonnade of foundation columns is known as the Undercroft. The Undercroft is divided into three areas – the Statuary Chamber Undercroft, Raised Terrace Undercroft, and Approachway Undercroft. Within the Undercroft, a mezzanine level wraps around the perimeter of the Statuary Chamber Undercroft. It is the view of this construction that will be the highlight of the Undercroft visitor experience.

UNDERCROFT ACCESS

Originally only two openings, ventilation grilles on the north and south sides, existed in the granite terrace retaining wall. These openings are simplistic in form; comprising of only a single “missing” course of granite with a metal grille installed for ventilation. In the original 1913 drawings by Henry Bacon, the interior Undercroft mezzanine extended to these vents, possibly as entry and exit points for construction; these extensions were never built.

Shortly after the Memorial opened, it became apparent that toilet facilities were lacking and “comfort stations” (restrooms) were installed in 1928. Two single door openings were made in the east terrace retaining wall on either side of the main stair. Similar to the vent openings on the north and south sides, these door openings are free of embellishment and reflect the unadorned design of the Terrace base. Entry into the “comfort stations, was down steep ramps immediately inside the doorway.

In 1974, the southeast restroom area was renovated to include a Visitor Center and an elevator to the Chamber level. In order to provide an accessible entry at grade level, a new floor slab was constructed. . The northeast door, also installed for the 1928 restrooms, serves as another entry point to the Undercroft, but currently is only used by staff for access to storage, mechanical services and the main Undercroft space. The southeast door was widened in 1974, while the north door remains at its original width. The visitor’s center was renovated in 1994. Today, visitors enter the Lincoln Memorial Chamber by the stairs at the east side of the Memorial and by the elevator, located in the southeast corner.

SITE ACCESS

Access to the site and circulation within the site are important to understanding how the Memorial functions in its context. The site is split on its north-south axis; the west is dominated by cars, while the Mall facing east is reserved for pedestrian access. The primary access for visitors arriving by vehicle is from the south on Daniel French Drive. From these points visitors make their way around the Memorial Circle to the eastern Approachway stairs and ramps. The accessible entry is located in the southeast terrace retaining wall, and serves as the only accessible path to the Chamber. The low retaining wall surrounding the Lincoln Memorial Circle was added in 2005, emphasizing the east as the entrance to the circle.

The landscaping around Memorial Circle at the north, west and south sides, acts as a barrier that limits visitor approach to the Memorial. The vegetation within the Lincoln Memorial Circle has remained mostly in place, with the biggest change being the removal of planting at the east elevation in the location of the accessible paths to the southeast and northeast doors. When the south and north doors were introduced to the structure in 1928, the vegetation was kept in place to camouflage the openings. As accessible paths were added to the south and north plazas, landscaping was removed, revealing the bronze doors within the terrace retaining wall.

PROJECT SUMMARY

The Lincoln Memorial Rehabilitation project renews this American icon for the next 100 years on the National Mall and has been broken into two phases.

Phase 1: Roof Revitalization – *completed in 2019.*

Phase 2: Undercroft Revitaliation - *current project*

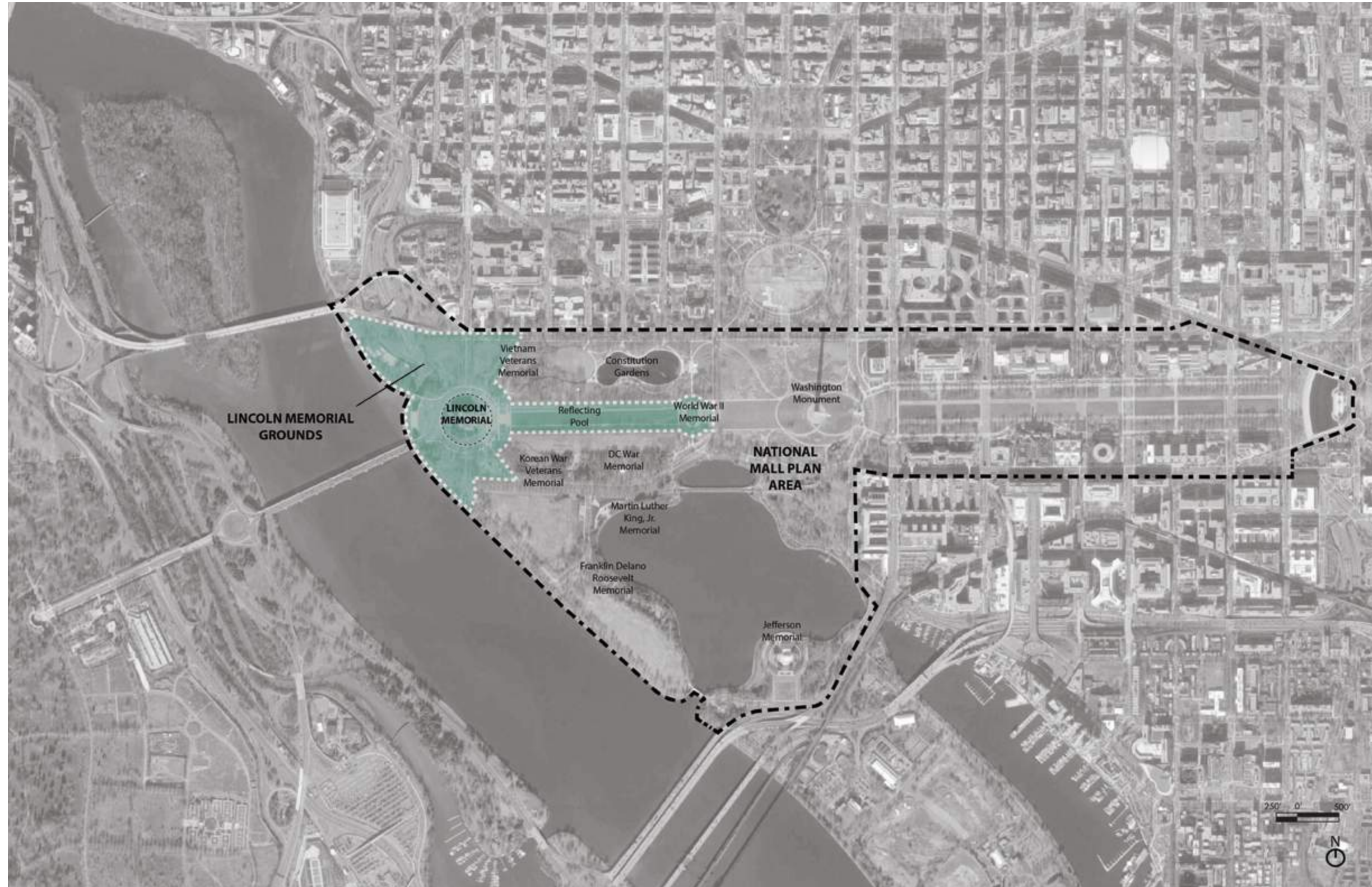
- ~ Interpretive Center - Renovate and expand the interpretive experience in the Undercroft to provide the public a richer understanding of the Memorial’s construction, as well as the symbolism of the Memorial around the world.
- ~ Code compliant egress – Access to the Undercroft is being increased to allow for safe ingress and egress of visitors and staff from the interpretive area. The existing east entrances are being widened and a new emergency exit is being provided on the north side of the building to meet modern egress codes.
- ~ Enhanced Accessibility - Replacement of the existing elevator and the addition of a second elevator to provide continual access to the Chamber for all visitors.

PROJECT SCHEDULE

TIMEFRAME	MILESTONES
JUNE 2017	INITIAL NCPC REVIEW
JULY 2017	INITIAL CFA REVIEW
OCTOBER 2017	INITIAL SD SUBMISSION
DECEMBER 2019	REVISED SD SUBMISSION
JUNE 2020	CFA & NCPC REVIEW SUBMISSIONS
JULY 2020	DESIGN DEVELOPMENT SUBMISSION
APRIL 2021	CONSTRUCTION DOCUMENTS ISSUED FOR BID

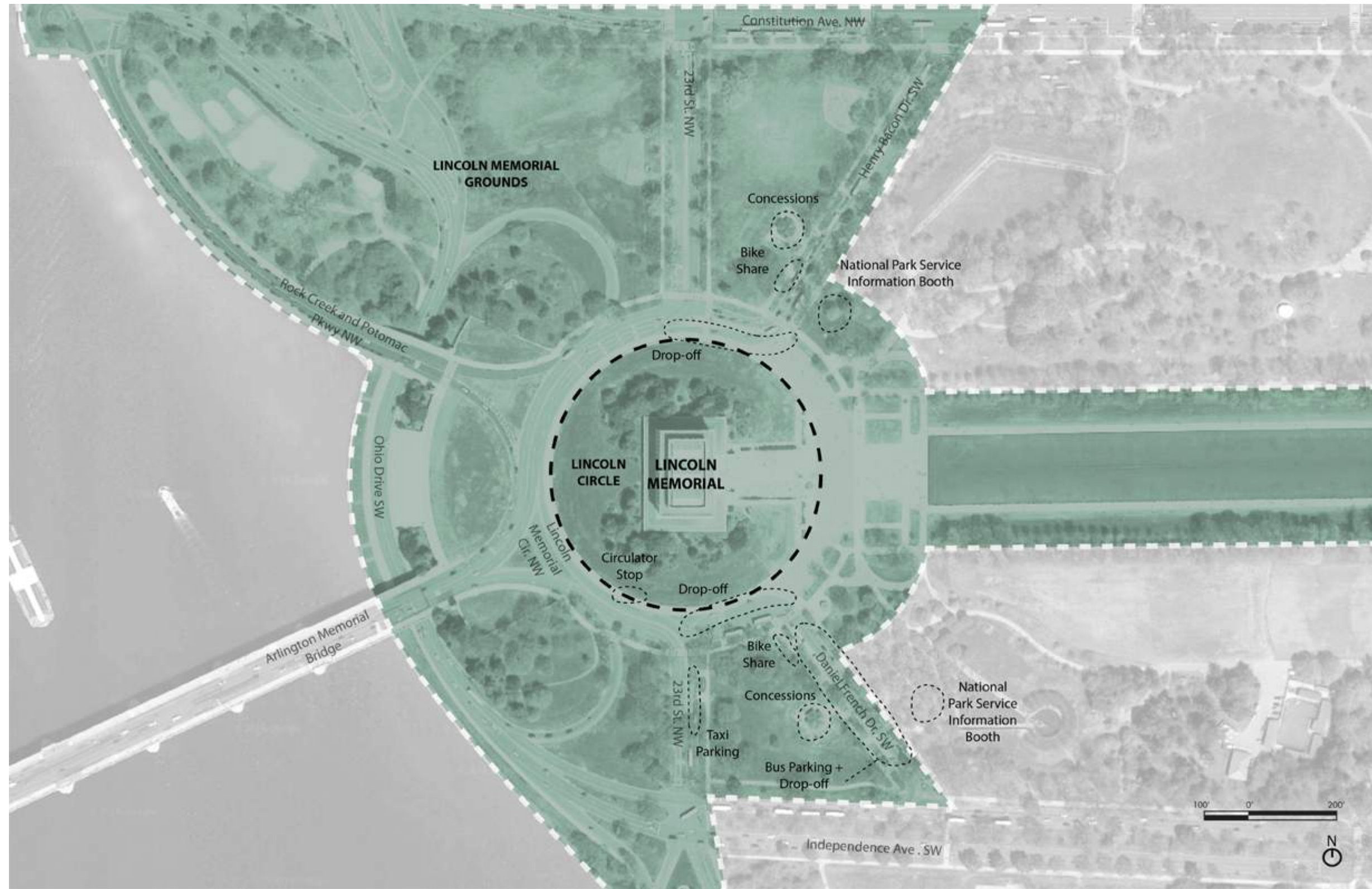


LINCOLN MEMORIAL GROUNDS



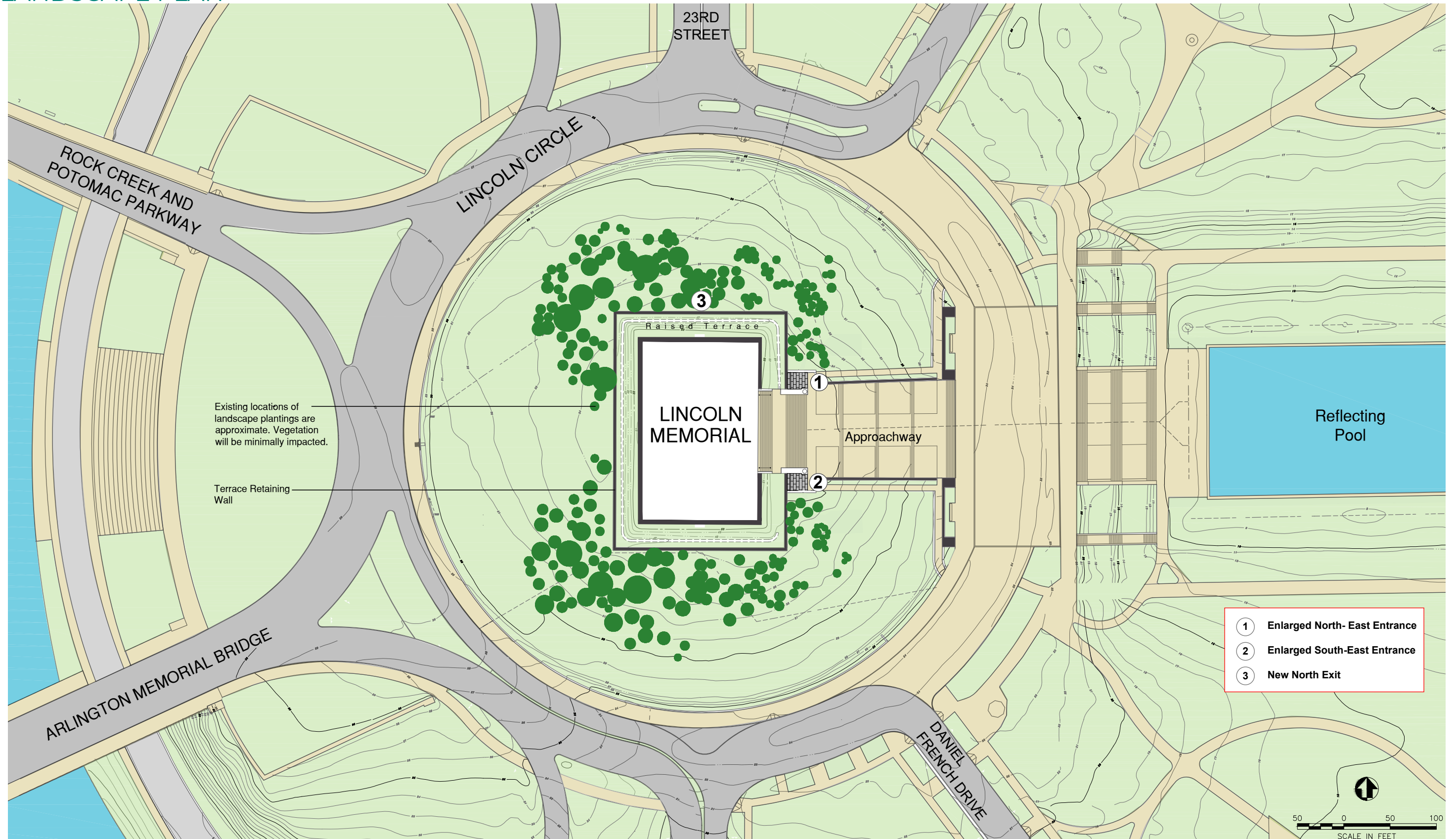


LINCOLN MEMORIAL GROUNDS











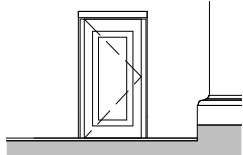


LANDSCAPE PLAN

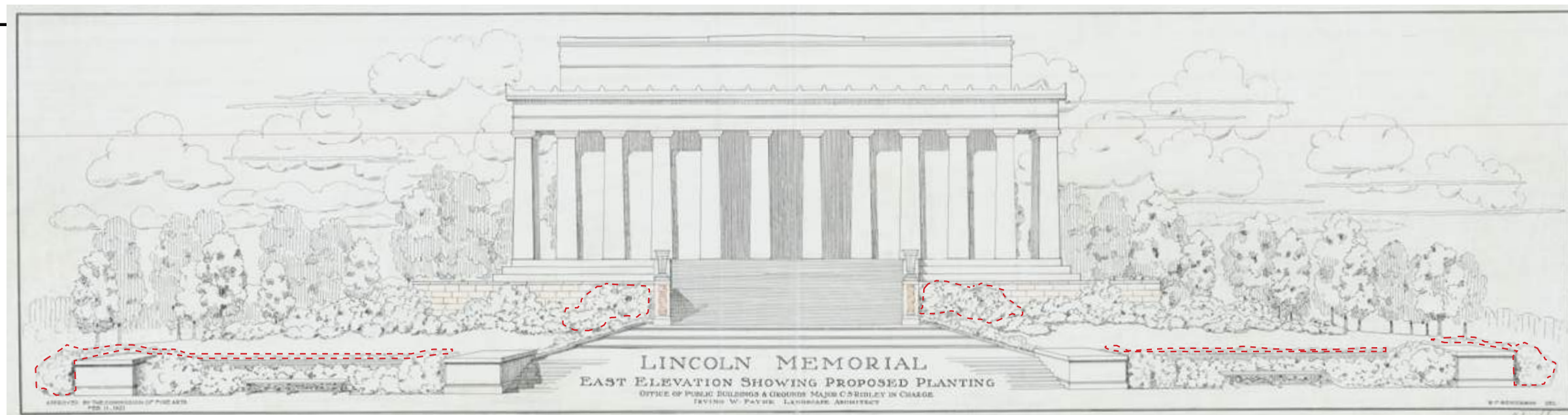


- ① Enlarged North- East Entrance
- ② Enlarged South-East Entrance
- ③ New North Exit



TIMELINE

	 <p>EAST ELEVATION - 1927</p>	 <p>NORTH-EAST ELEVATION - 1927</p>	 <p>EAST ELEVATION - 1992</p>	 <p>SOUTH RAMP</p>				
	 <p>SOUTH DOOR - 1928</p>	 <p>NORTH DOOR PATH - 1927</p>	 <p>EXISTING SOUTH-EAST DOOR MODIFIED IN 1974</p>	 <p>LINCOLN CIRCLE - SOUTH EAST EDGE</p>				
<p>1914 Cornerstone is laid.</p>	<p>1922 Memorial Dedication.</p>	<p>1927-1928 Installation of two Comfort Stations, on either side of the stairs, designed by Bacon with the creation of two new openings in the terrace wall. The bronze doors are installed. The vegetation in front of the doors is maintained, sheilding the doors.</p>  <p>1927 DRAWINGS FOR COMFORT STATIONS - SOUTH & NORTH DOORS</p>	<p>1966 Recommendations are made to redesign the sidewalks to the restroom, the walk is too narrow and the black slate slippery when wet, in addition to inadequate drainage.</p>	<p>1974-1976 Modifications are made for accessibility. Extending the upper plazas and installing 6' wide ramps along the approachway on the other side of the Yew vegetation. The South bronze door is widened, shortened and replaced. The North door is no longer accessible to the public. The introduction of the upper plazas means the removal of the existing vegetation, making the doors more visible.</p>	<p>1994 The terrace roof is repaired and modifications to the terrace roof drainage is added.</p>	<p>1995 The ramps, added in 1974, are altered to comply with ADA requirements. They are also widened from 6' to 9'.</p>	<p>2002 The Lincoln Circle stone edge is added to the North, South and West perimeter of the circle and the road at the East is pedestrianized.</p>	<p>2019 The roof is fully replaced and repairs are made to the stone parapet.</p>

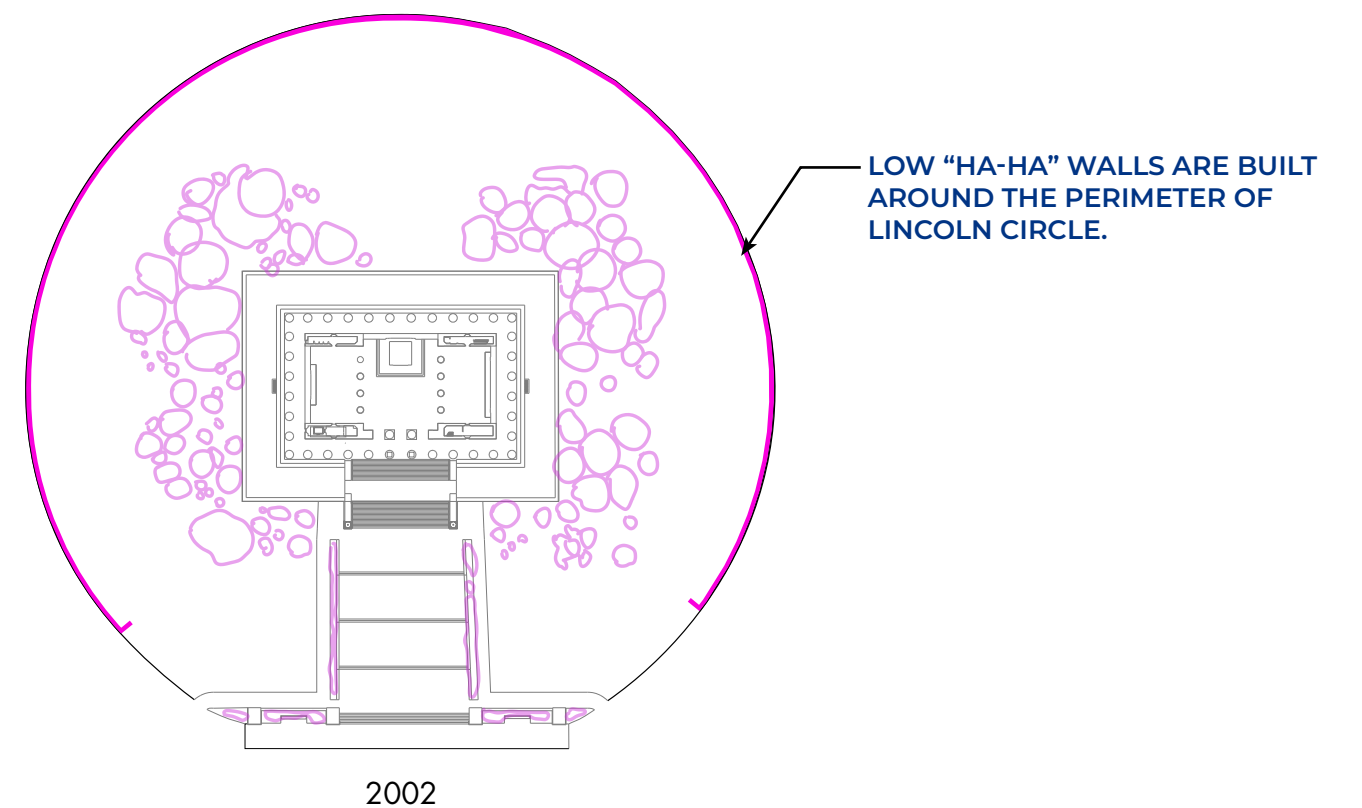
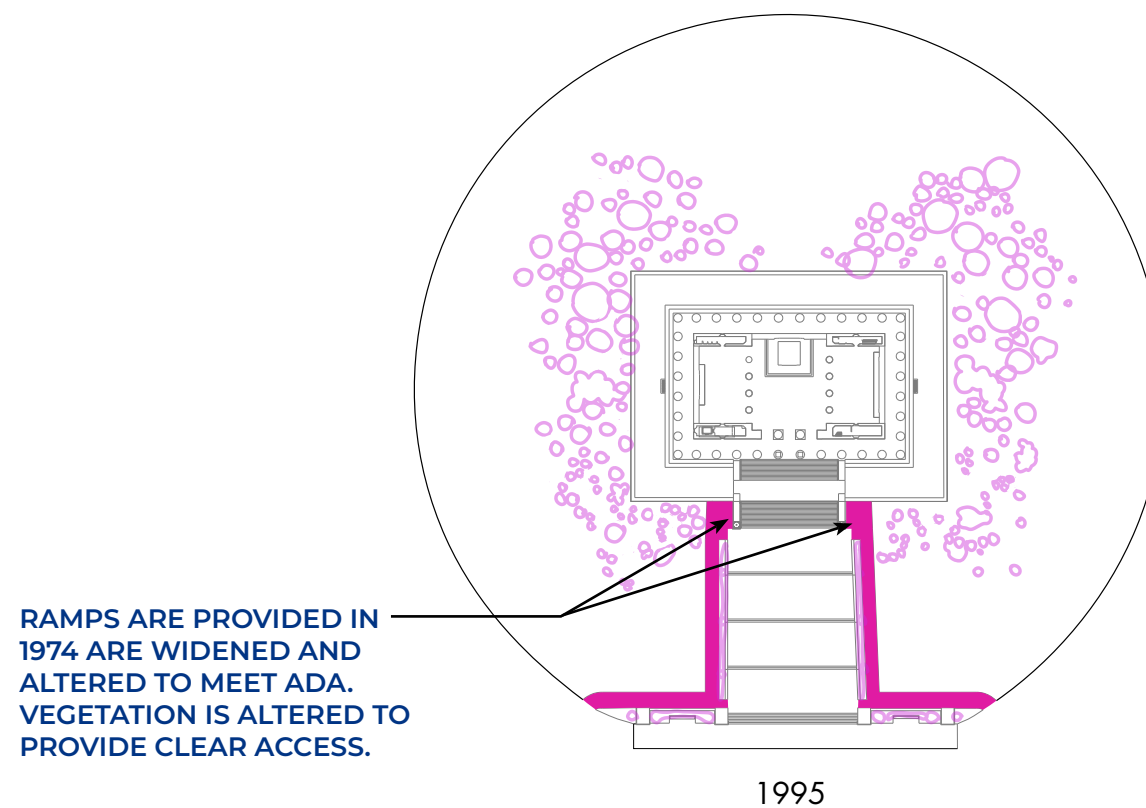
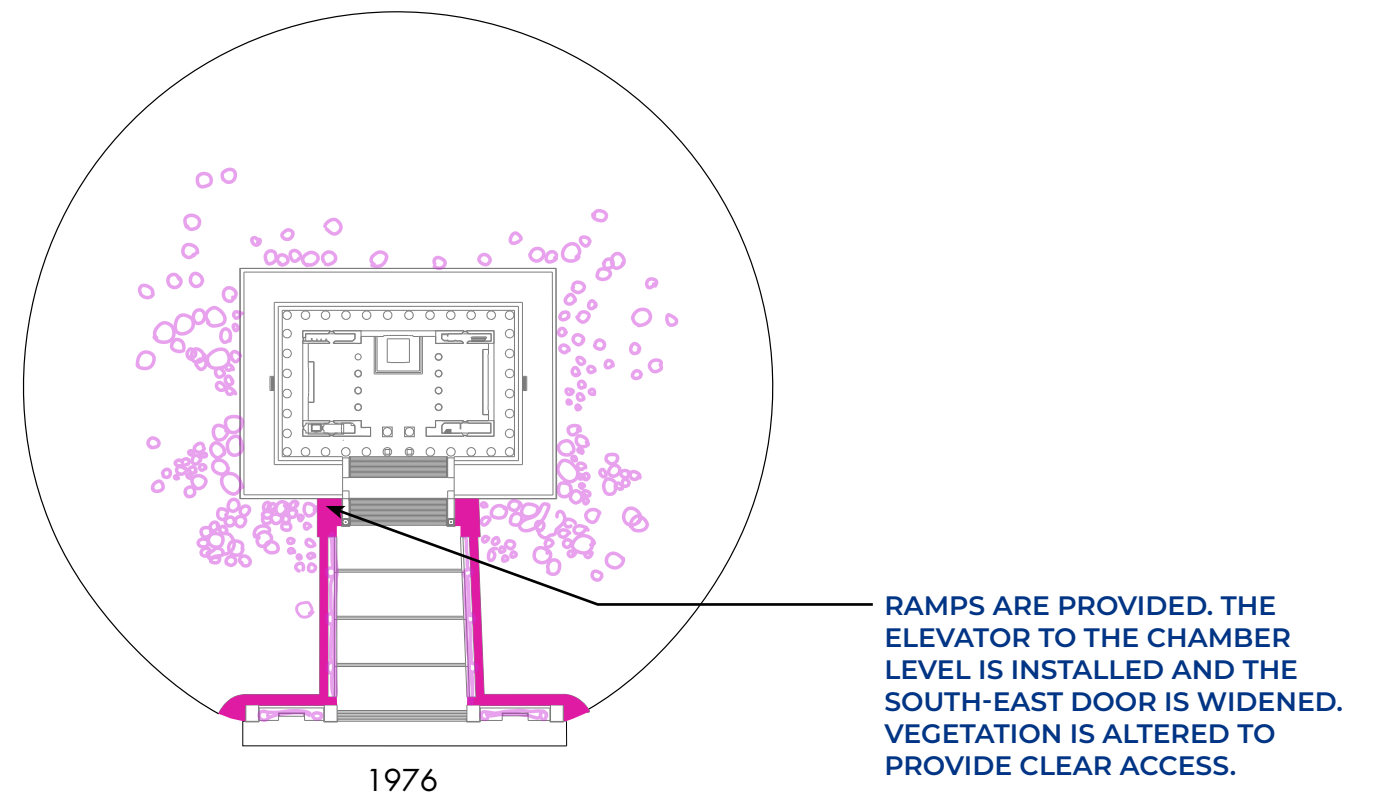
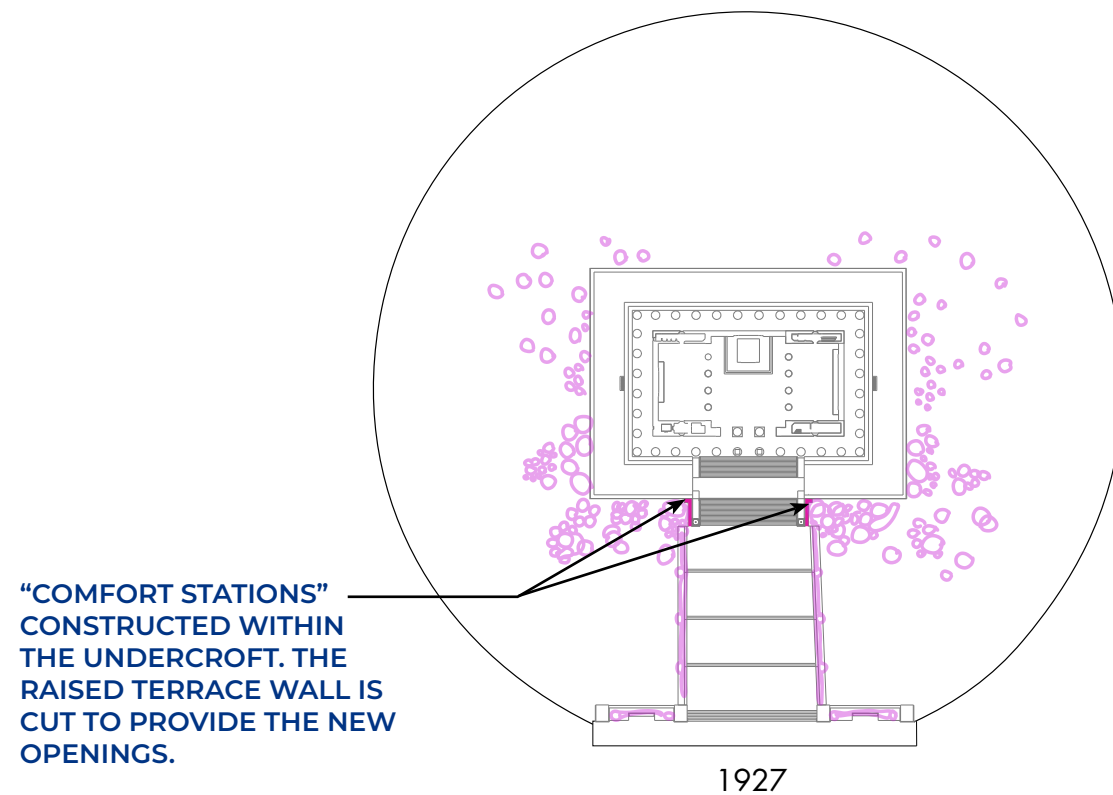


1921 APPROVED PLANTING PROPOSAL

- - - - - Vegetation removed due to modifications to the East exteriors, 1974 onward



LANDSCAPE AND HARDSCAPE DIAGRAMS



EXISTING CONDITIONS



LINCOLN MEMORIAL EAST FACADE



1- VIEW FROM REFLECTING POOL



2 - VIEW FROM REFLECTING POOL



3 - VIEW FROM APPROACHWAY



PHOTO KEY PLAN



4 - SOUTH-EAST UNDERCROFT DOOR



5 - NORTH-EAST UNDERCROFT DOOR



NORTH AIR INTAKE GRILLE



1 - EXISTING VENT



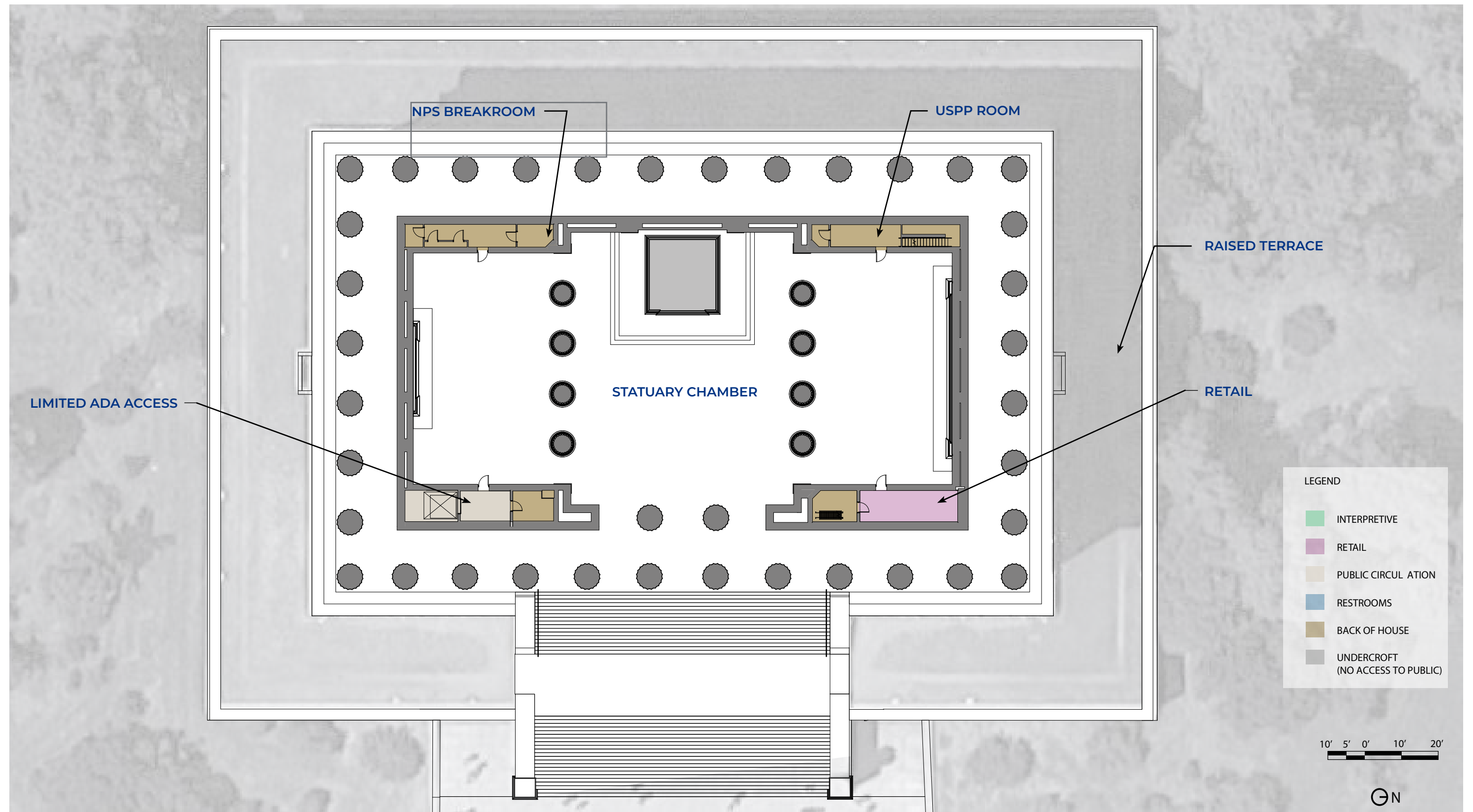
2 - EXISTING VENT



PHOTO KEY PLAN



CHAMBER PLAN





VISITOR SERVICES PLAN





LINCOLN MEMORIAL UNDERCROFT



1 - VIEW OF THE EXHIBIT



2 - SOUTH-EAST ENTRANCE/EXIT



3 - ELEVATOR TO THE CHAMBER LEVEL



4 - VIEW OF THE CHAMBER UNDERCROFT



PHOTO KEY PLAN



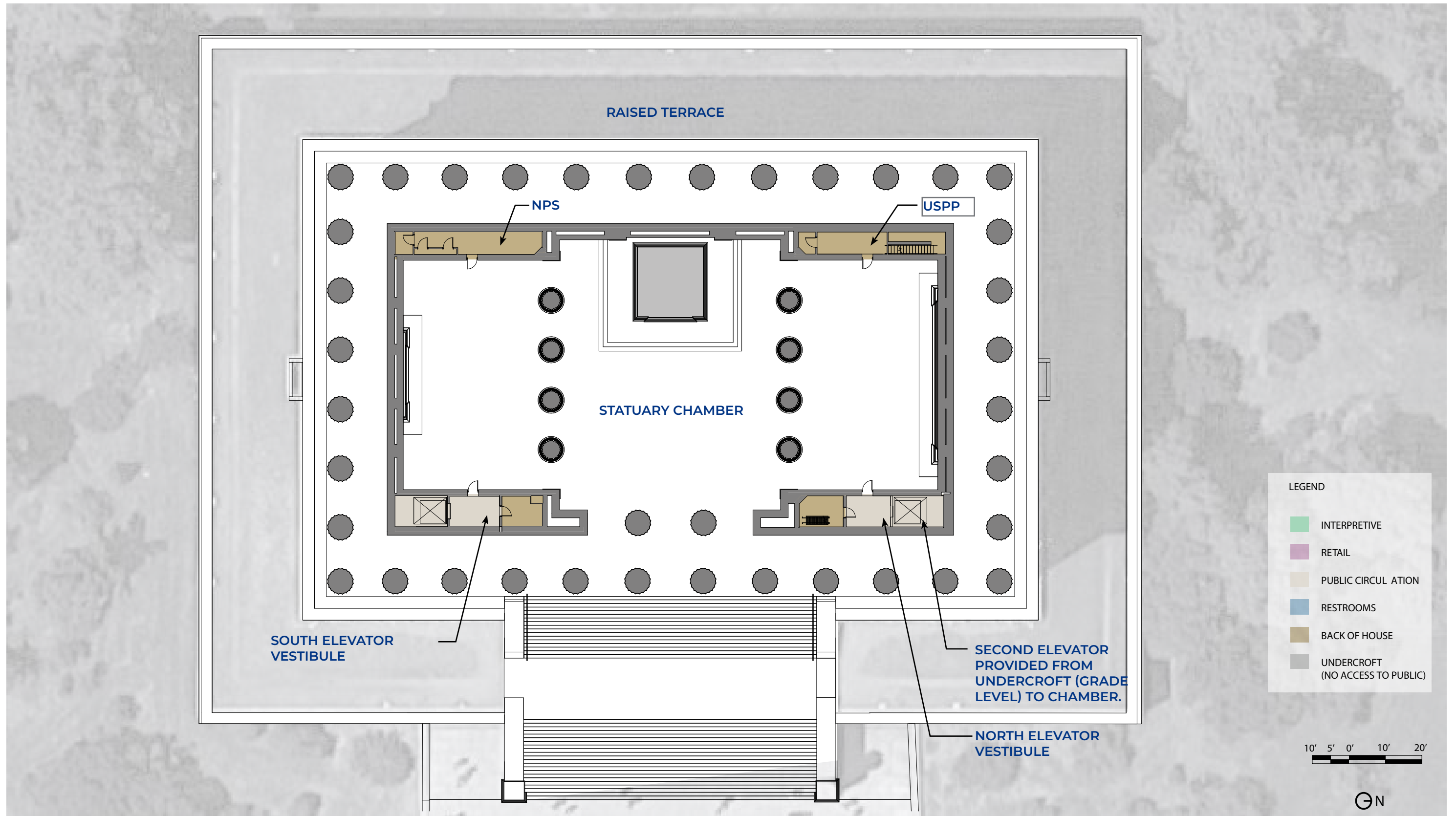
5 - VIEW INTO THE STATUARY CHAMBER UNDERCROFT FROM THE MEZZANINE



6 - VIEW OF THE RAISED TERRACE UNDERCROFT



CHAMBER LEVEL PLAN



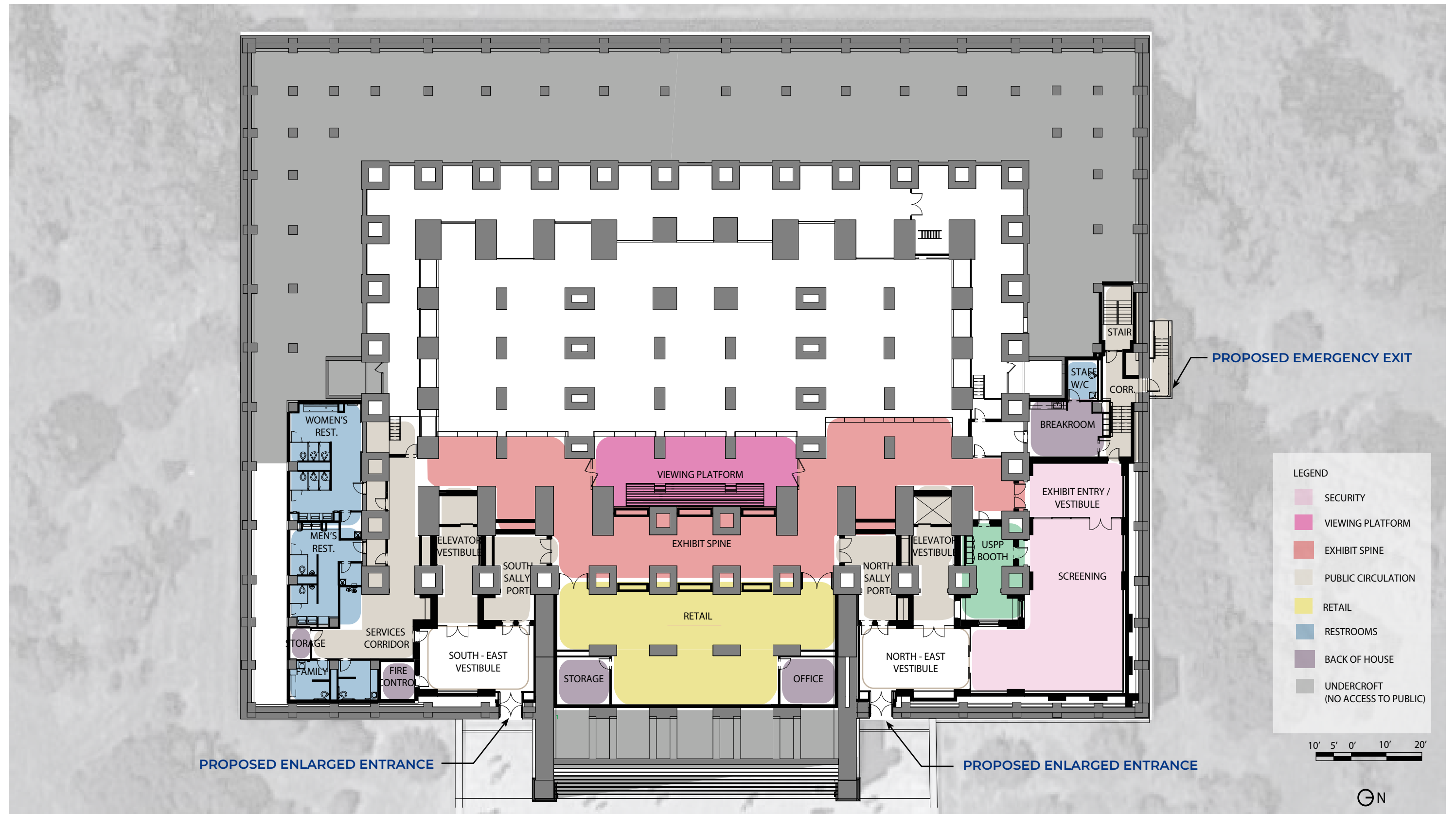
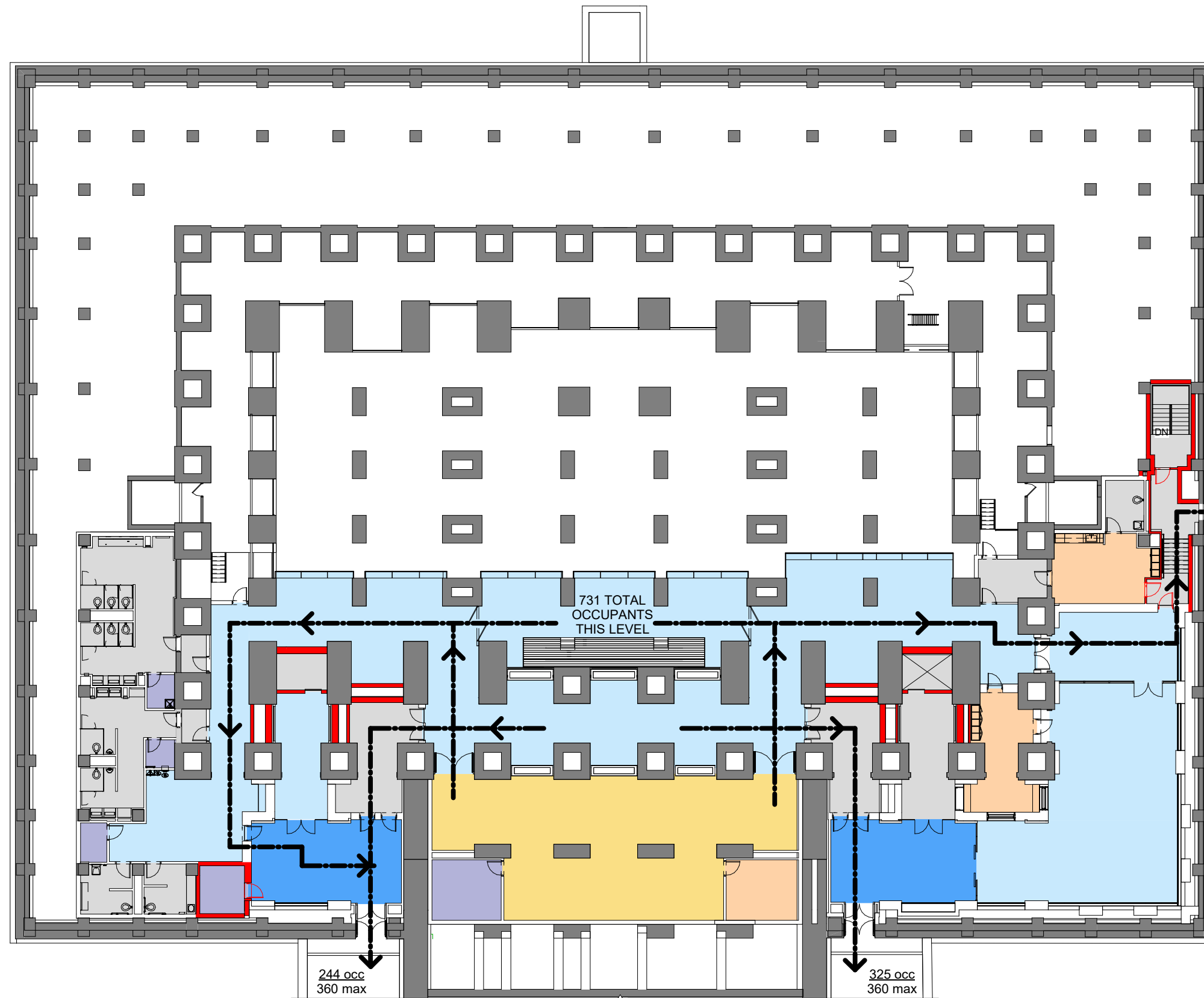




EXHIBIT LEVEL PLAN



OCCUPANT EGRESS

The openings to the Undercroft require enlargement in order to meet the egress requirements of the occupied space. The width of the existing openings in the east facade are being enlarged. To address the number of exits required for the assigned occupant load, a third exit will be added at the existing vent location in the north facade. This opening will not be a main entrance and serve as exit only in the event of an emergency.

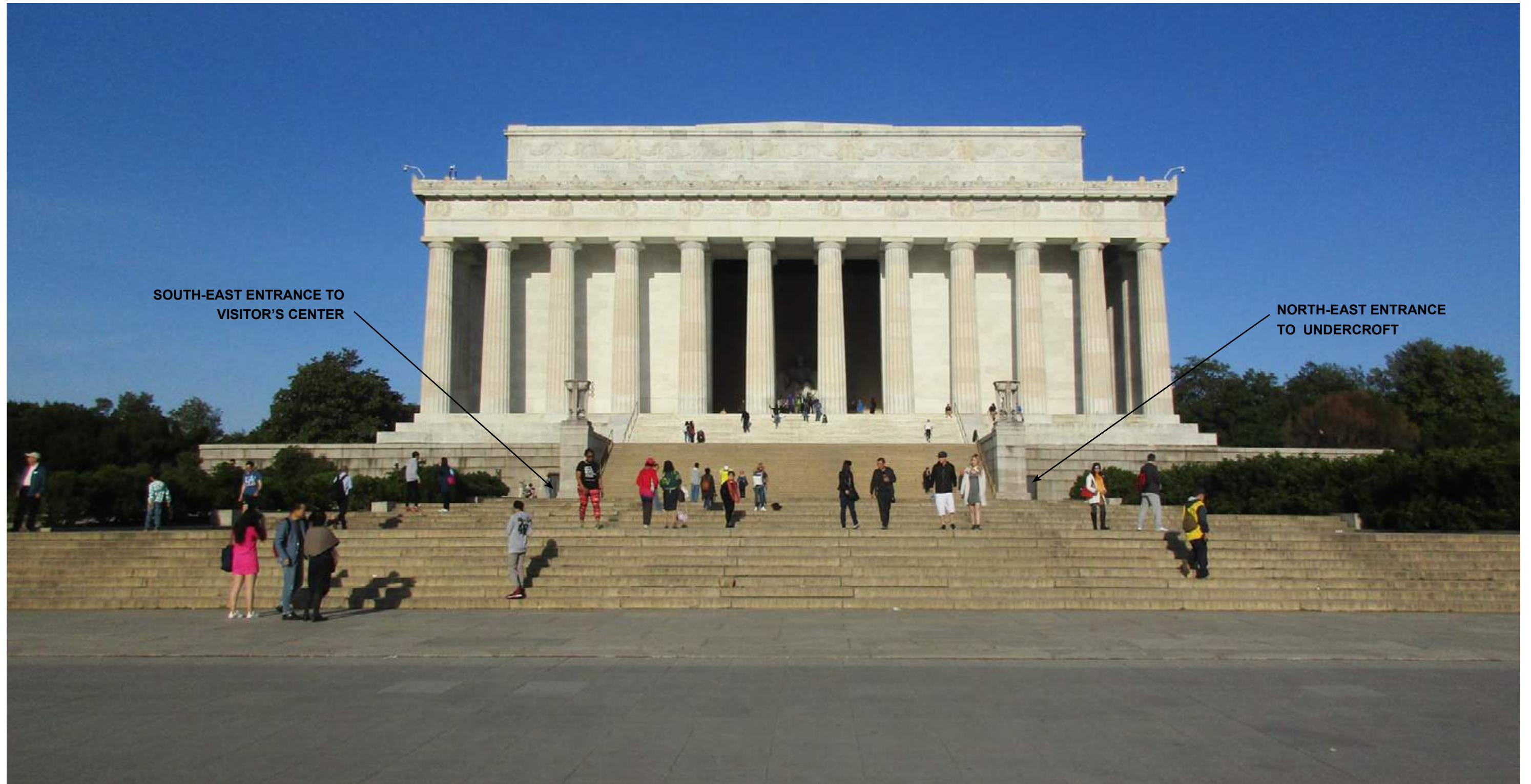
OCCUPANCY TYPE (as determined with the AHJ)

- A ASSEMBLY (14.9 SF PER PERSON)
- A(7) ASSEMBLY (7 SF PER PERSON)
- B BUSINESS (100 SF PER PERSON)
- M MERCANTILE (30 SF PER PERSON)
- N/A NOT LOAD APPLIED (0 SF PER PERSON)
- S STORAGE (300SF PER PERSON)

PROPOSED UNDERCROFT ENTRY WIDENING



EXISTING CONDITIONS - VIEW OF EAST FACADE



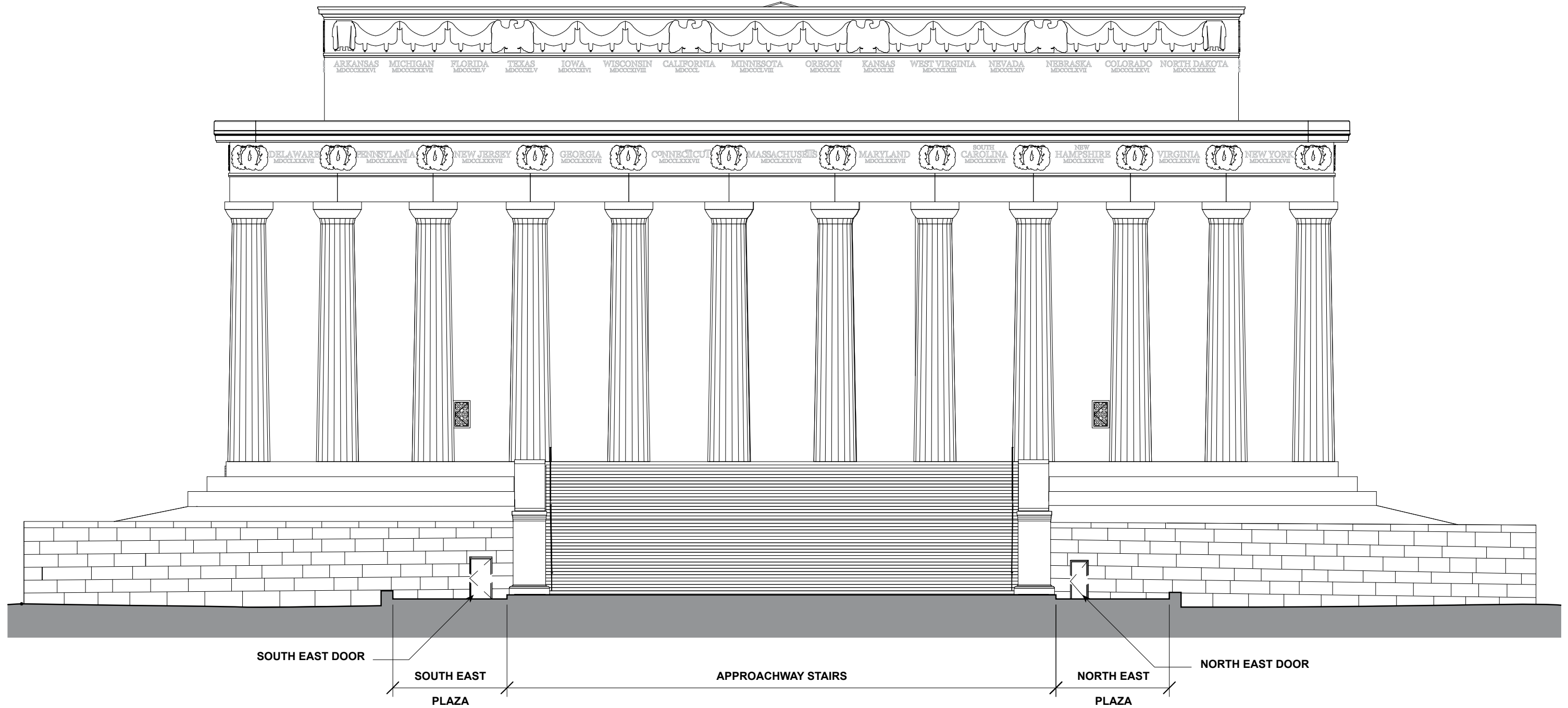
SOUTH-EAST ENTRANCE TO
VISITOR'S CENTER

NORTH-EAST ENTRANCE
TO UNDERCROFT

PROPOSED UNDERCROFT ENTRY WIDENING



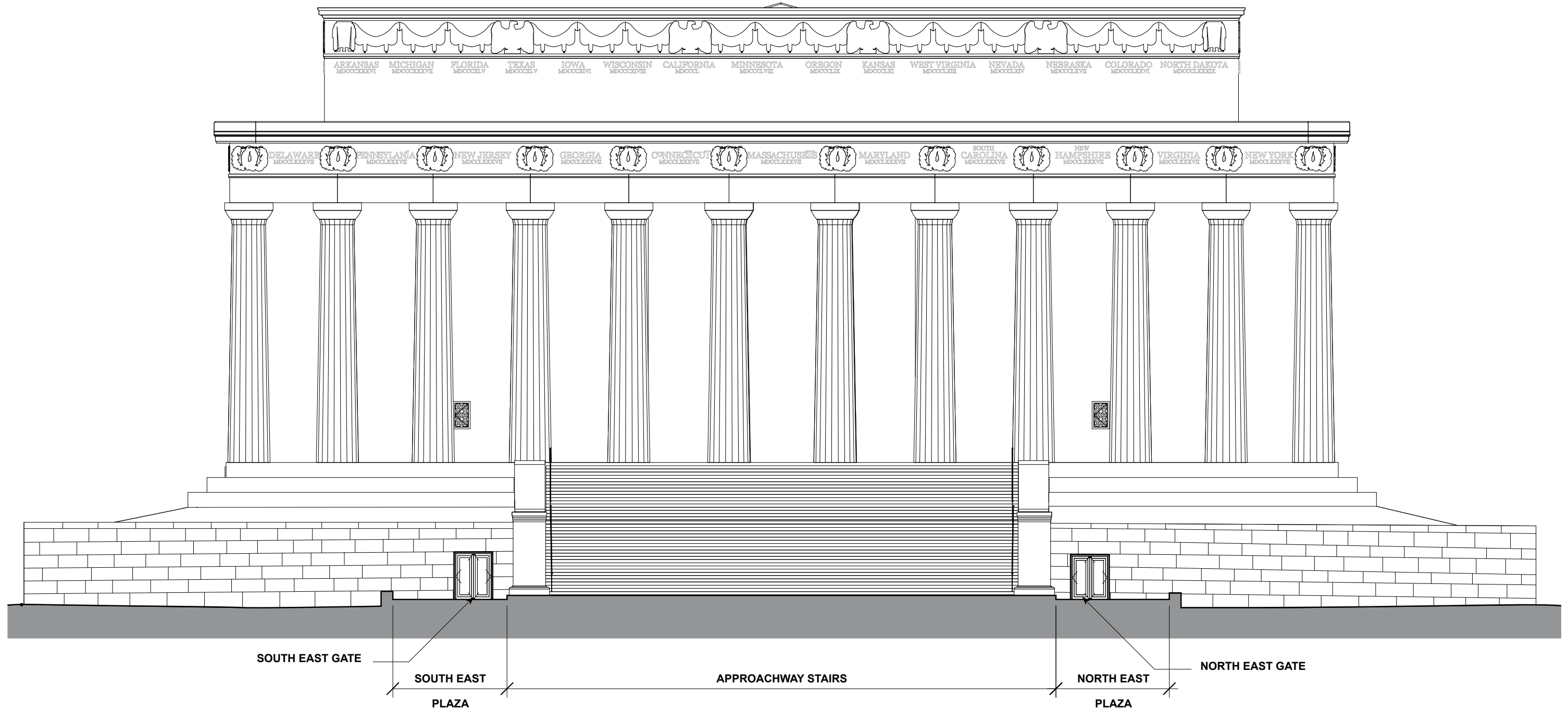
EXISTING CONDITIONS - EAST ELEVATION



PROPOSED UNDERCROFT ENTRY WIDENING



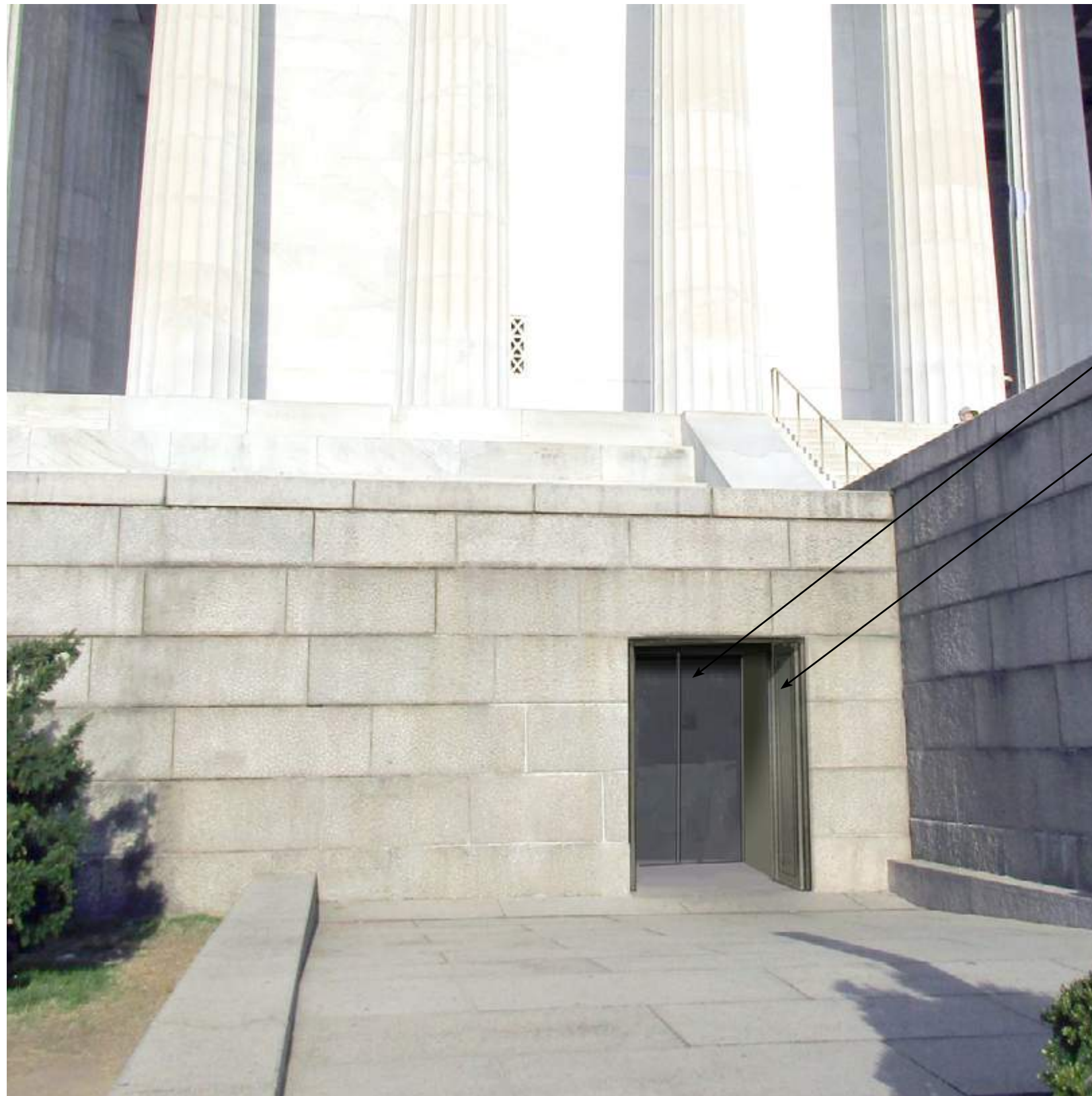
NEW WORK - EAST ELEVATION



PROPOSED GATES

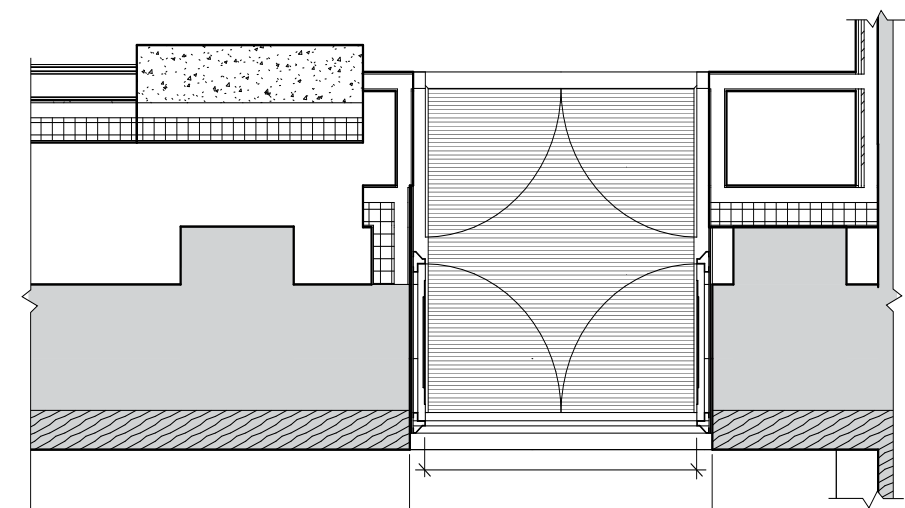


COMPUTER VISUALIZATION - GATES OPEN



GLASS DOORS BEYOND

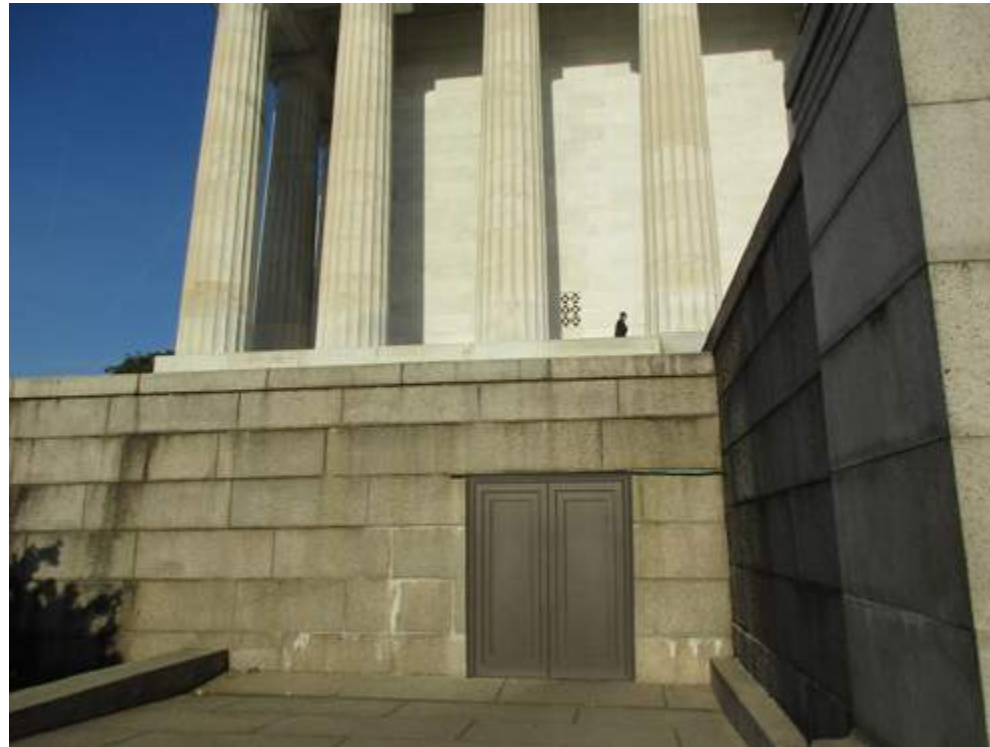
BRONZE GATE LOCKED
IN OPEN POSITION



SOUTH-EAST UNDERCROFT ENTRY GATES WITH GLASS DOOR VESTIBULE

PROPOSED GATES

COMPUTER VISUALIZATION - GATES CLOSED



1 - SOUTH-EAST UNDERCROFT GATES



2 - NORTH-EAST UNDERCROFT GATES



3 - VIEW FROM APPROACHWAY

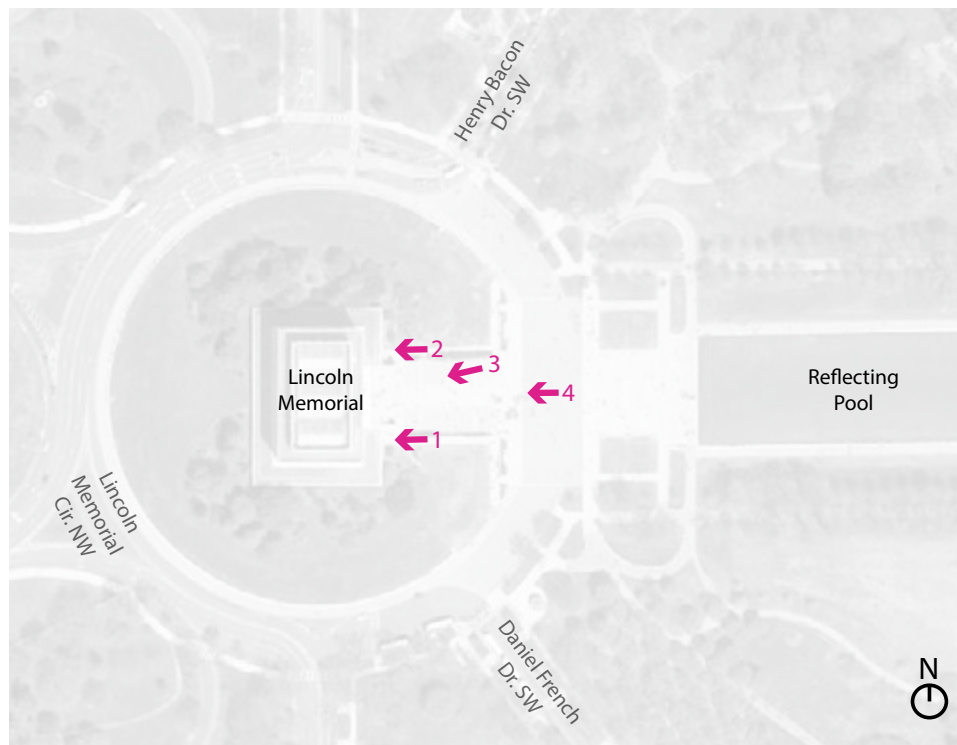


PHOTO KEY PLAN

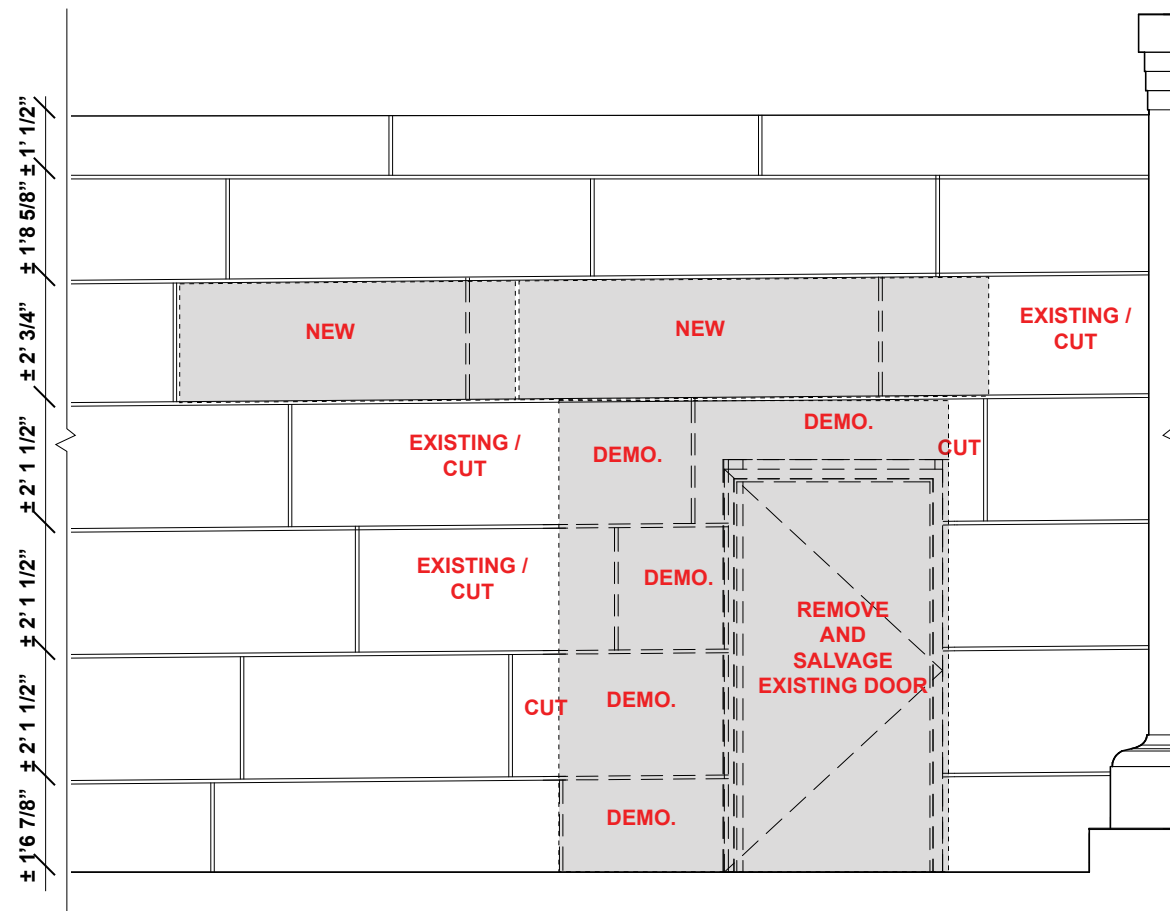


4 - VIEW FROM MEMORIAL CIRCLE

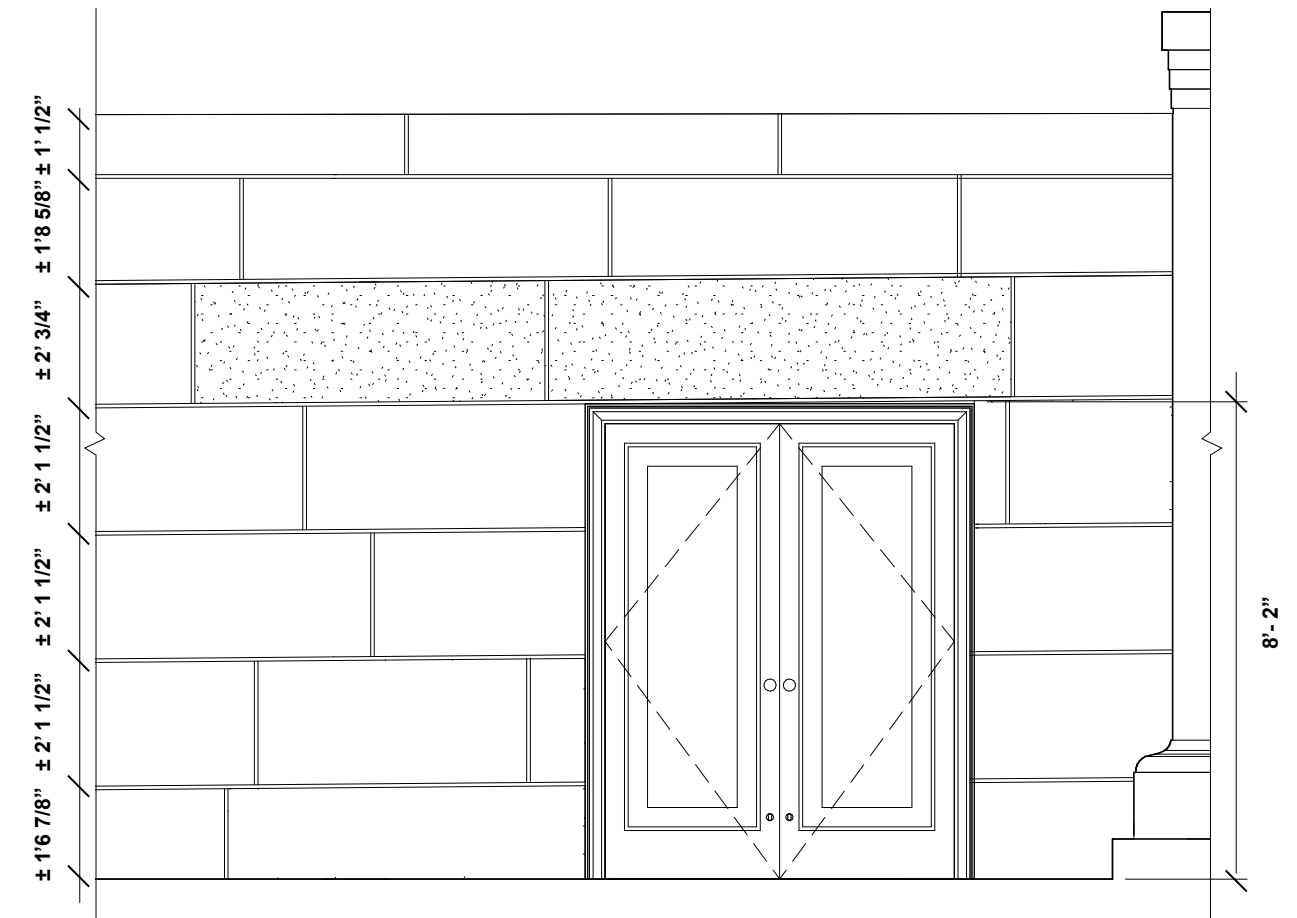
PROPOSED GATES



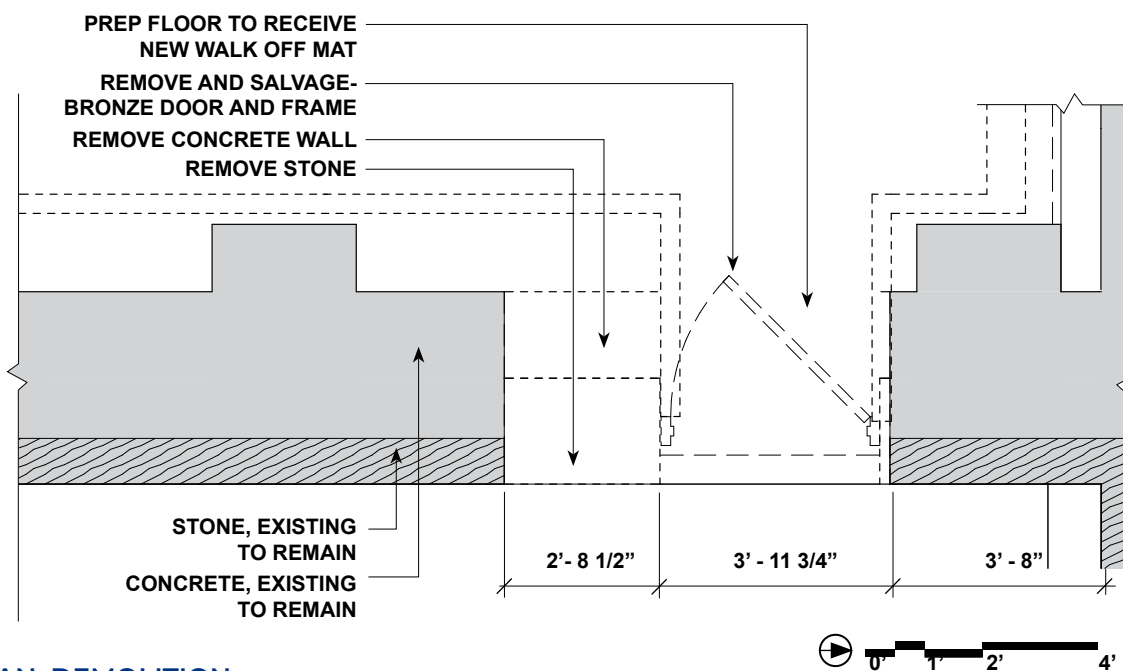
ENLARGED ELEVATION AND PLAN - SOUTH EAST GATES - OPTION A (STONE LINTEL)



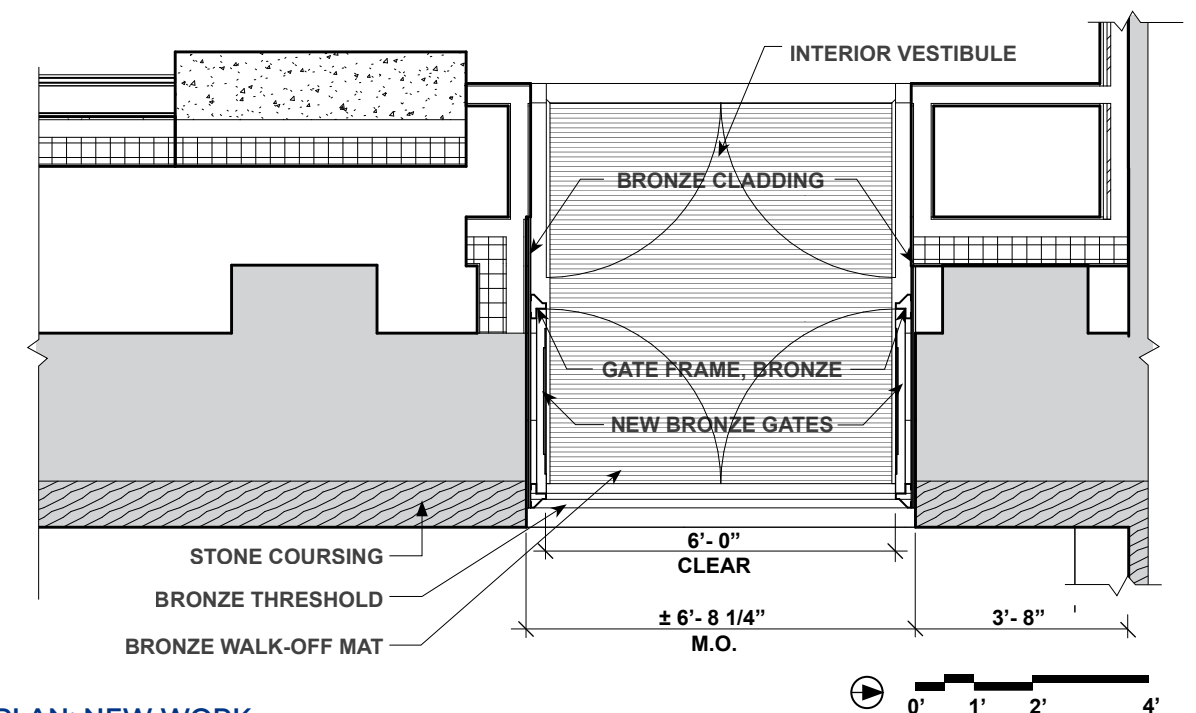
ELEVATION: DEMOITION



ELEVATION: NEW WORK



PLAN: DEMOLITION

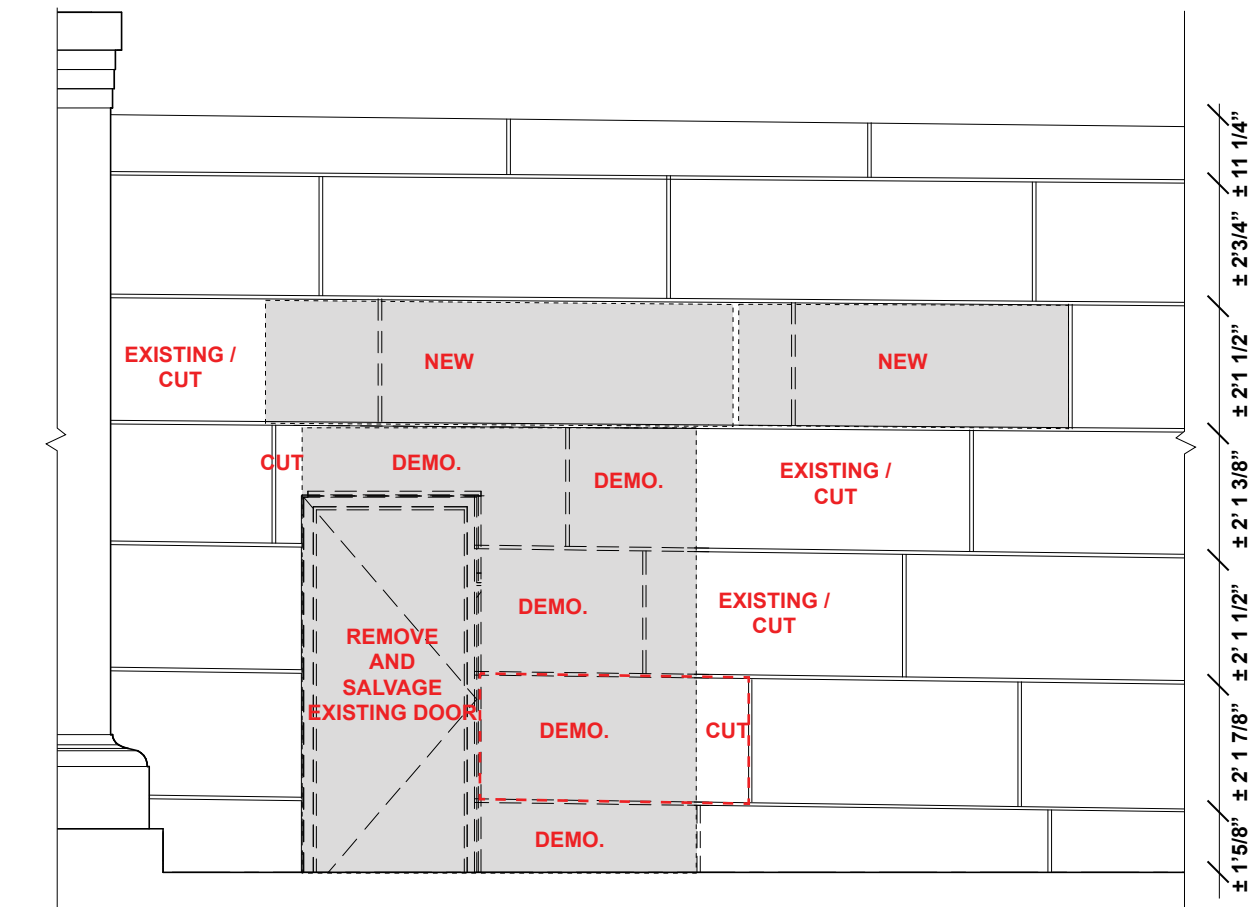


PLAN: NEW WORK

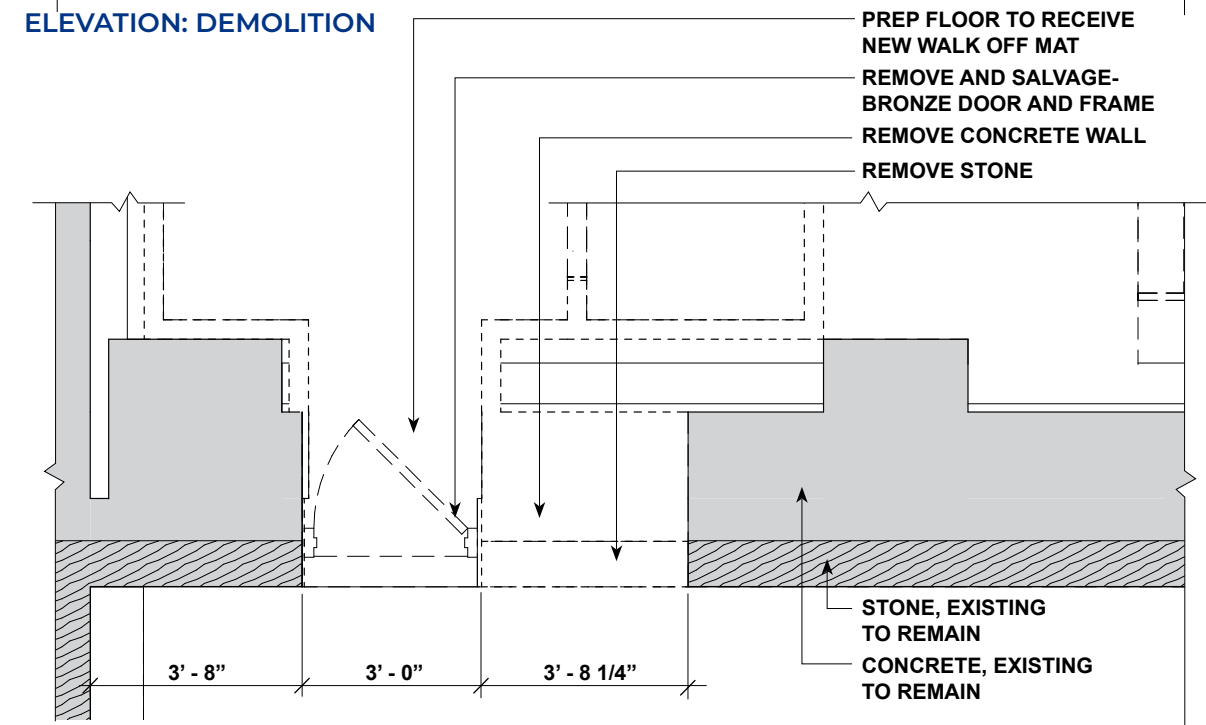
PROPOSED GATES



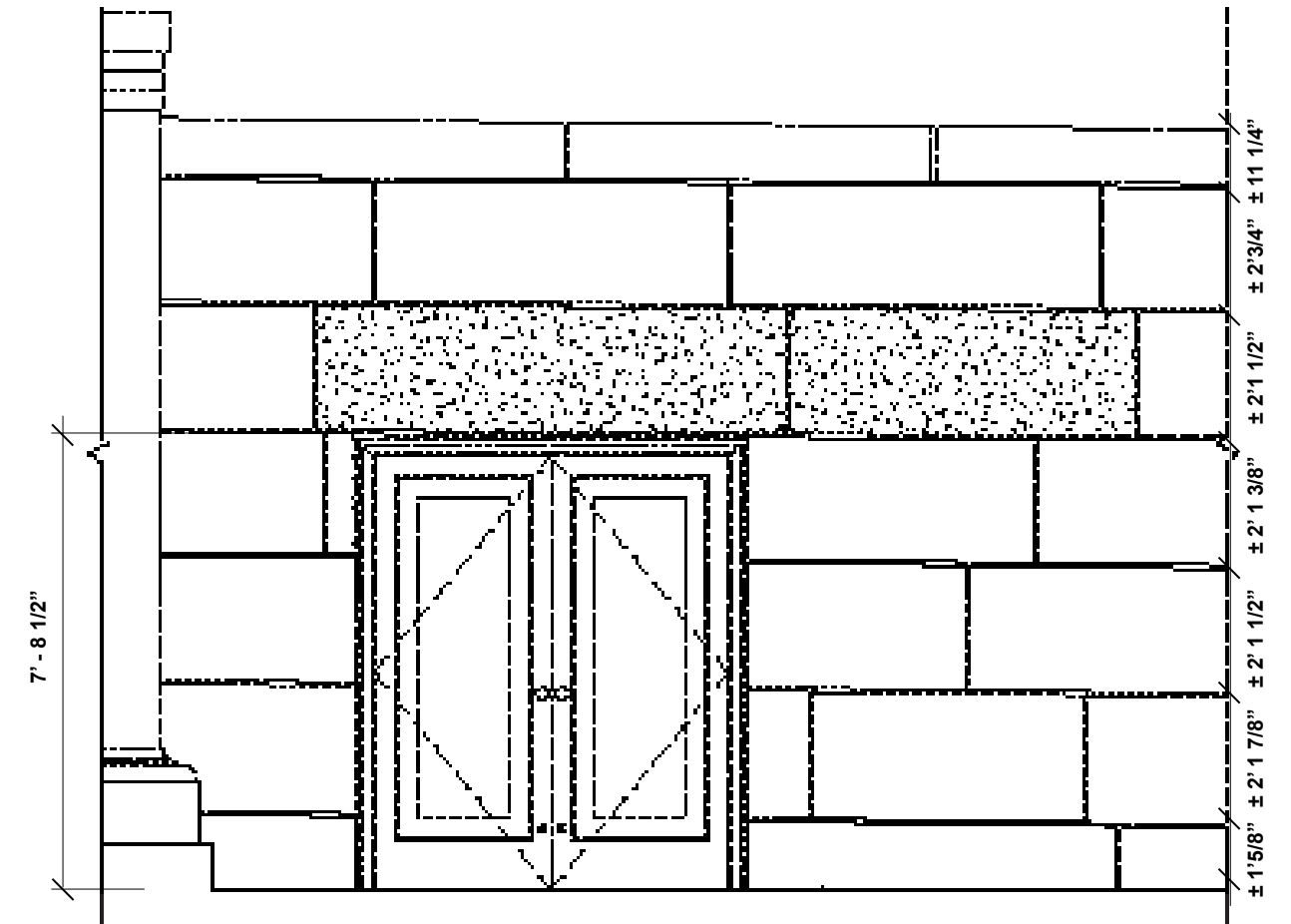
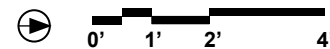
ENLARGED ELEVATION AND PLAN - NORTH EAST GATES - OPTION A (STONE LINTEL)



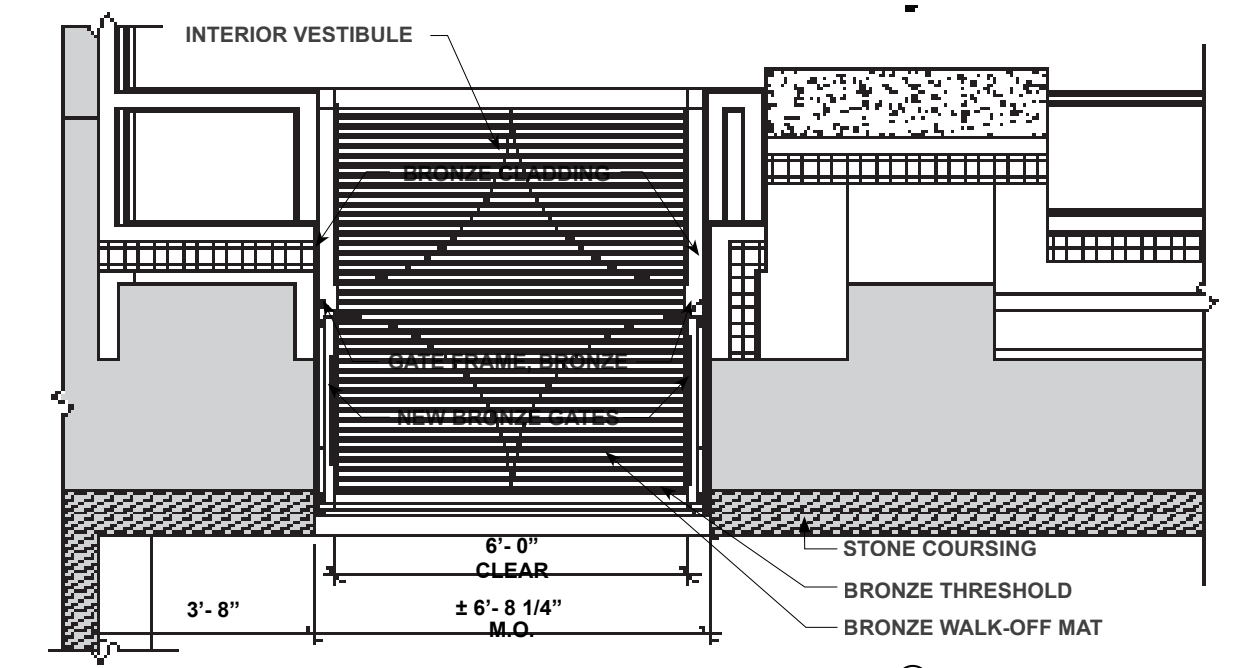
ELEVATION: DEMOLITION



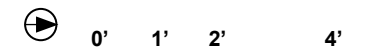
PLAN: DEMOLITION



ELEVATION: NEW WORK



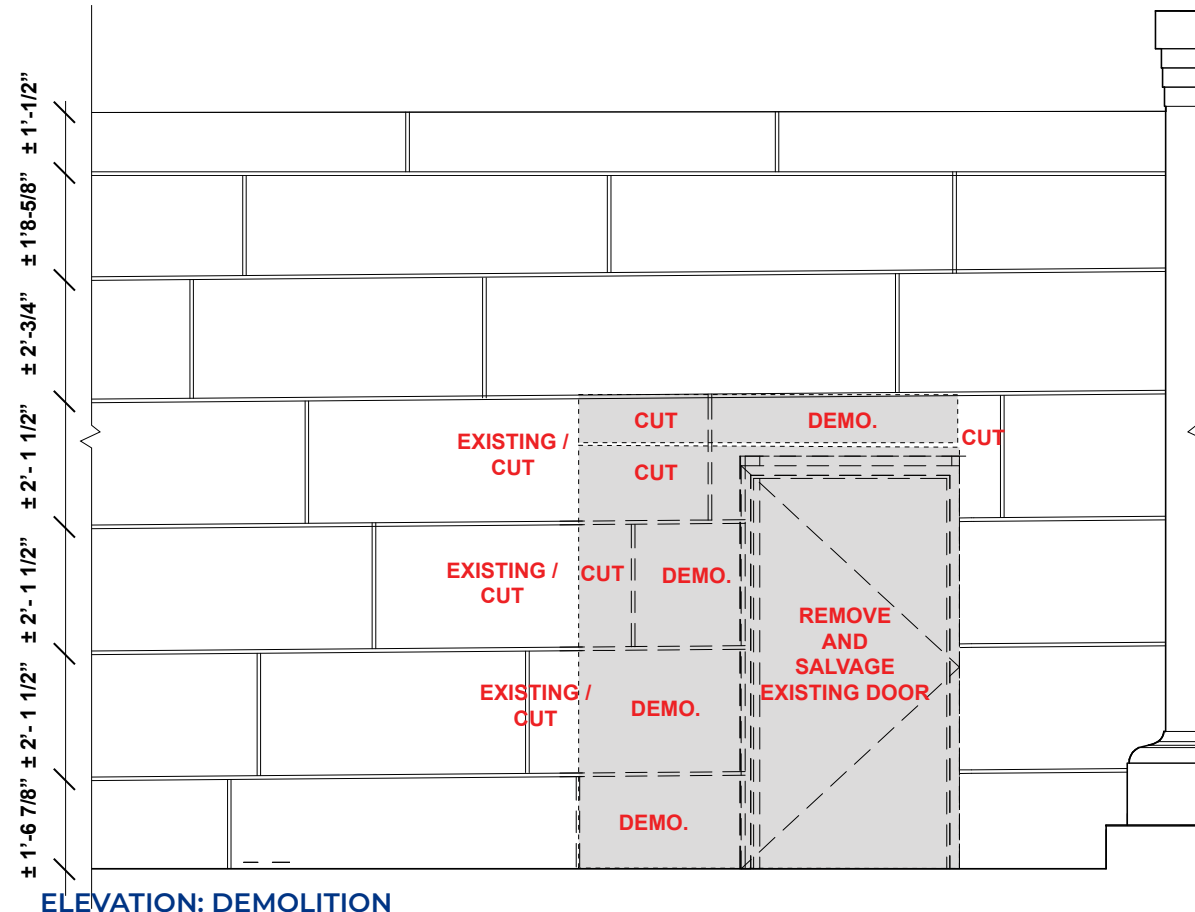
PLAN: NEW WORK



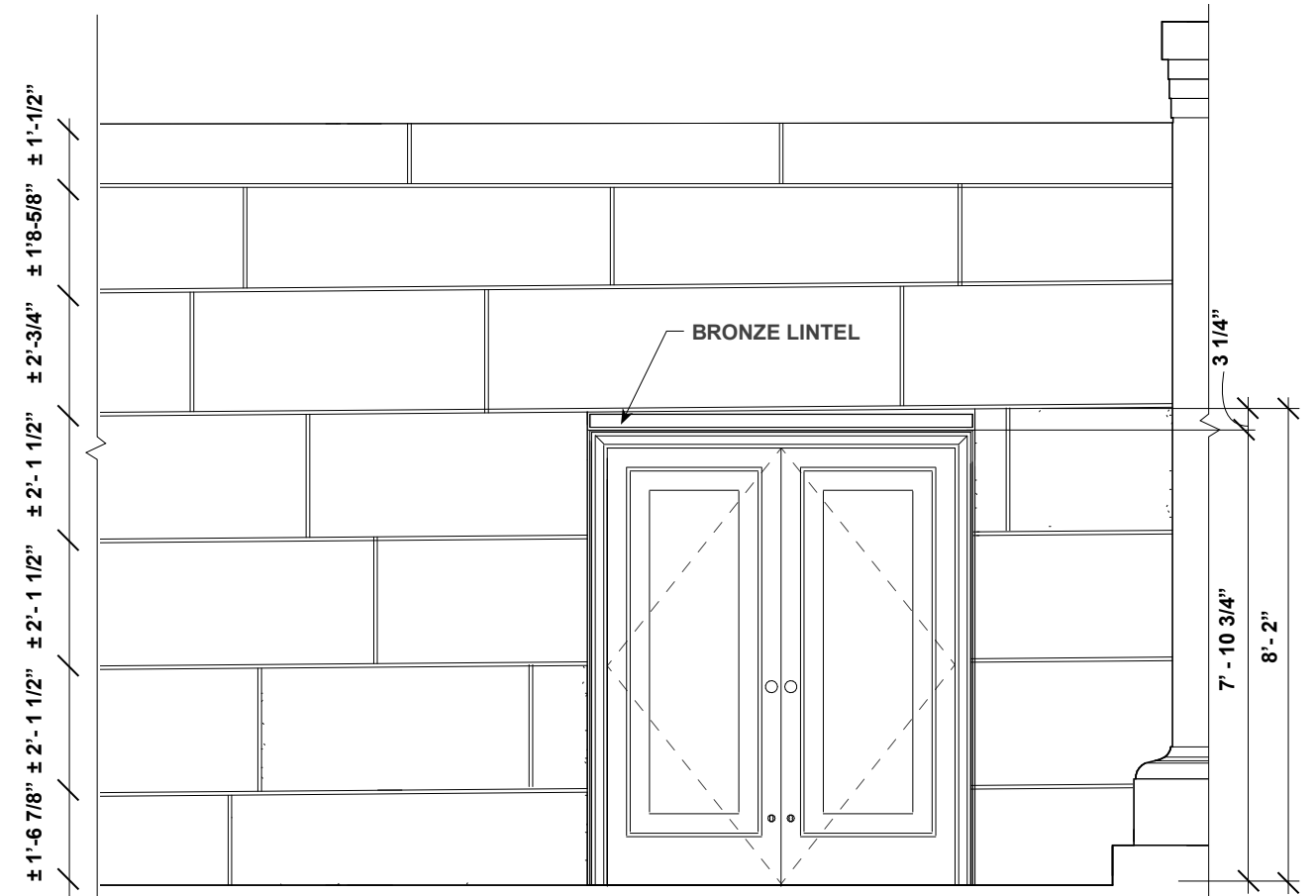
PROPOSED GATES



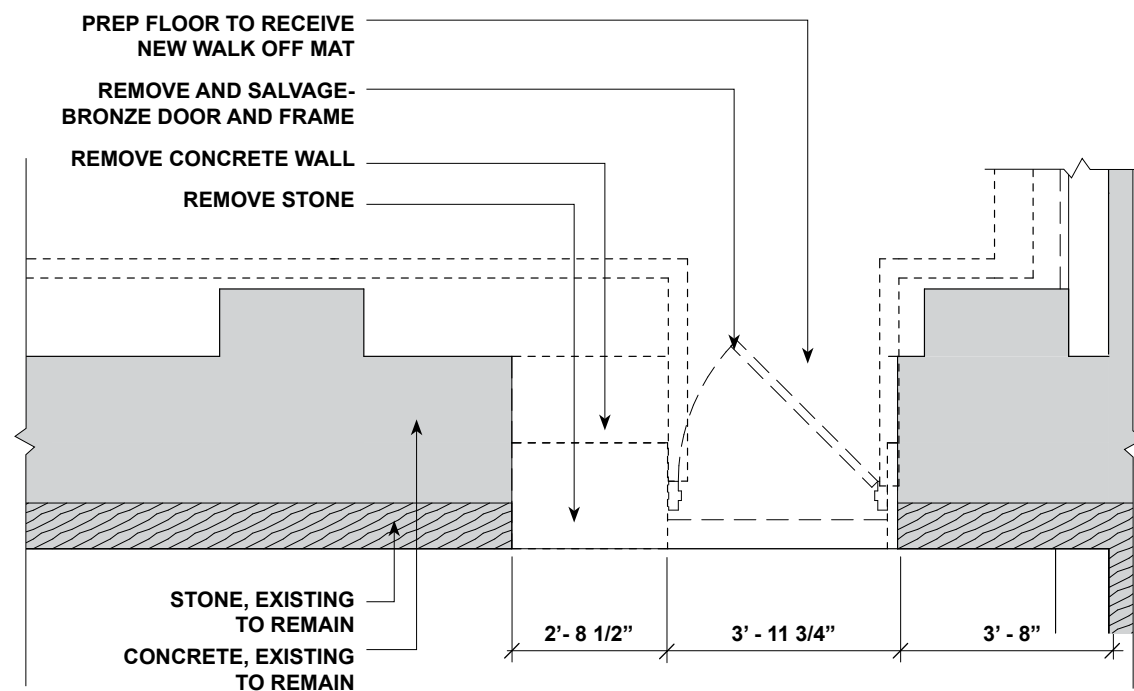
ENLARGED ELEVATION AND PLAN - SOUTH EAST GATES - OPTION B (BRONZE CLAD LINTEL)



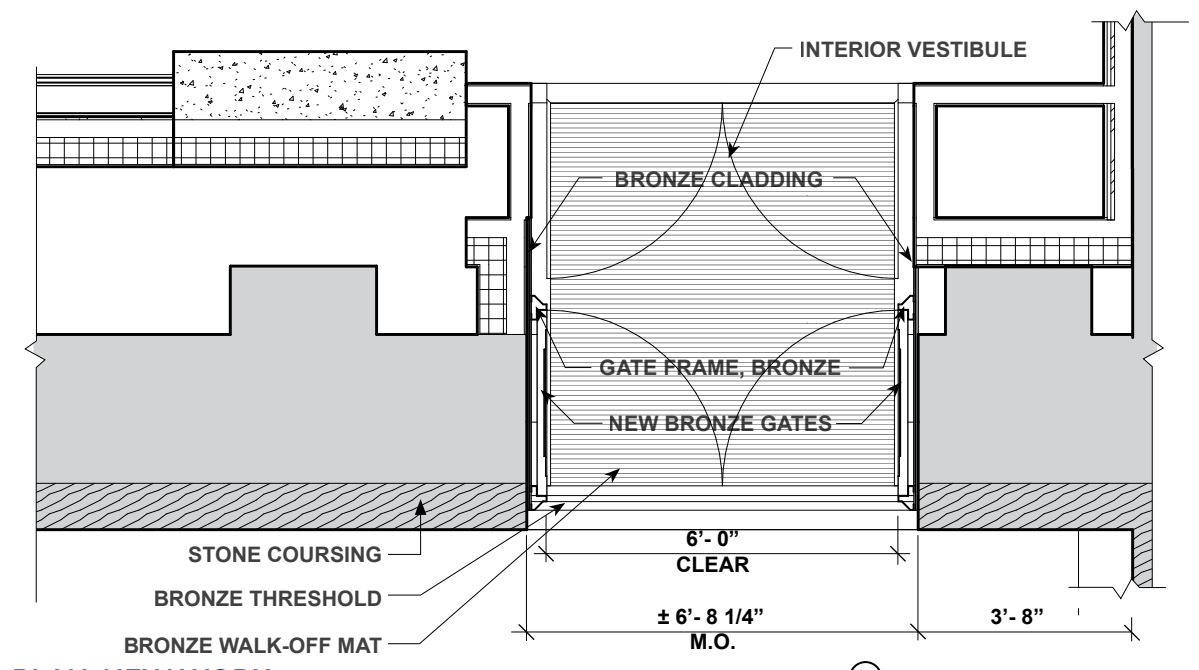
ELEVATION: DEMOLITION



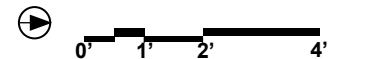
ELEVATION: NEW WORK



PLAN: DEMOLITION



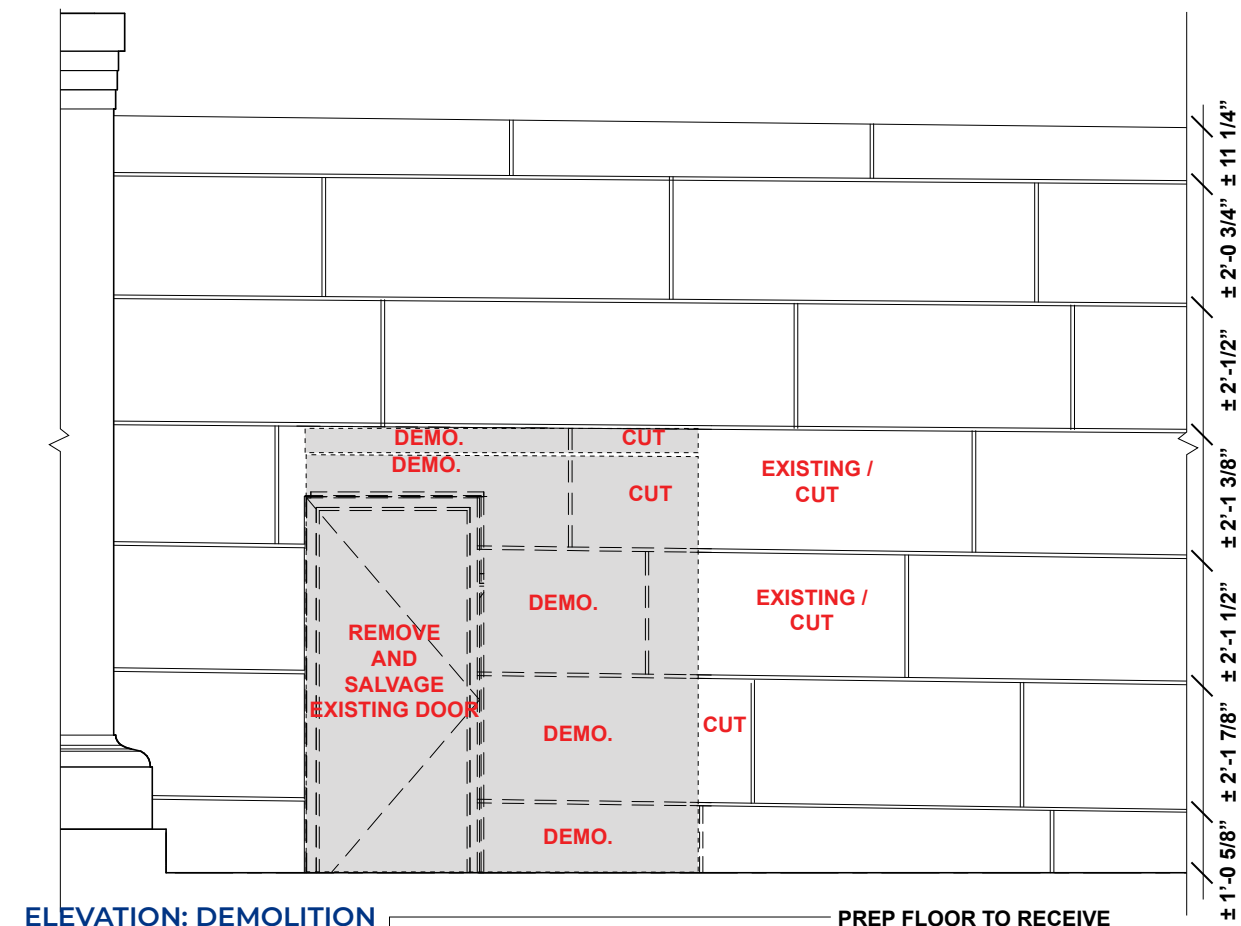
PLAN: NEW WORK



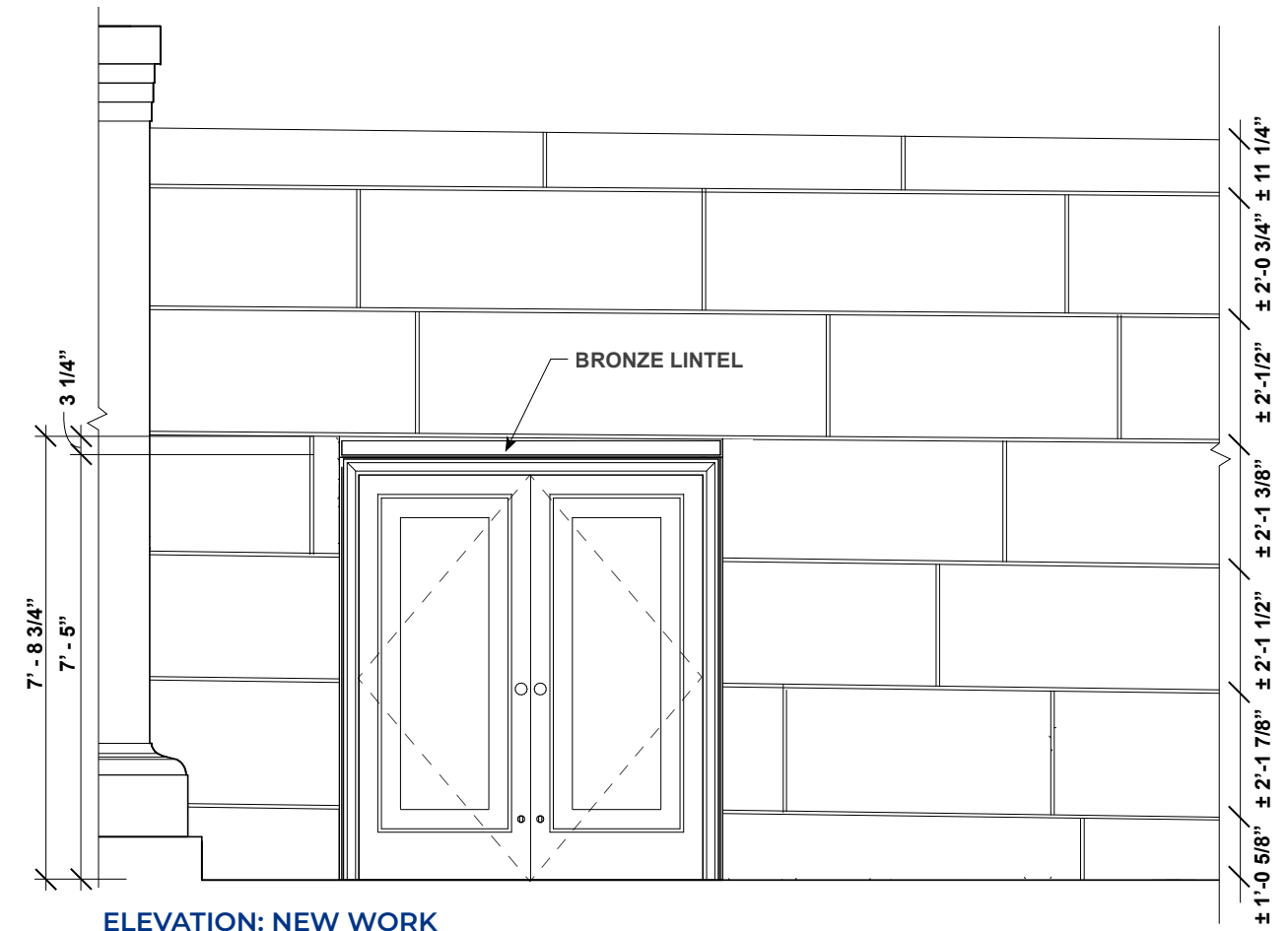
PROPOSED GATES



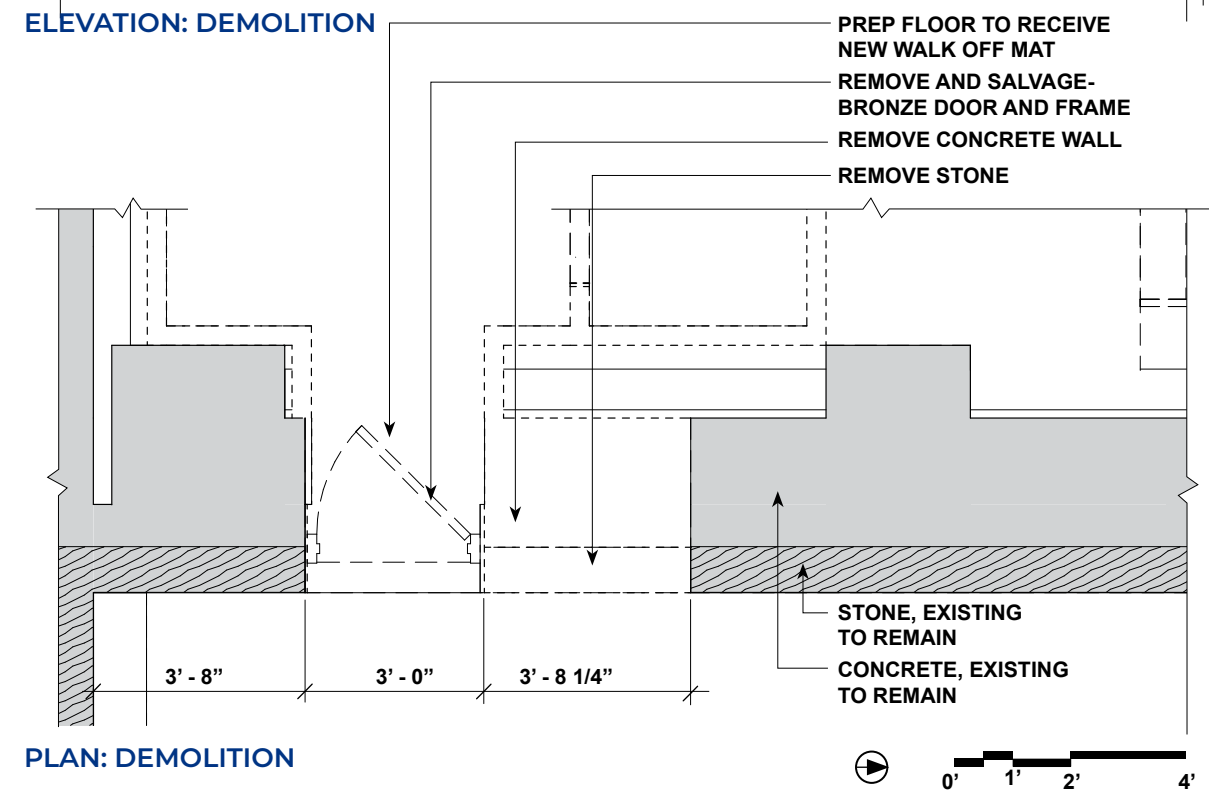
ENLARGED ELEVATION AND PLAN - NORTH EAST GATES - OPTION B (BRONZE CLAD LINTEL)



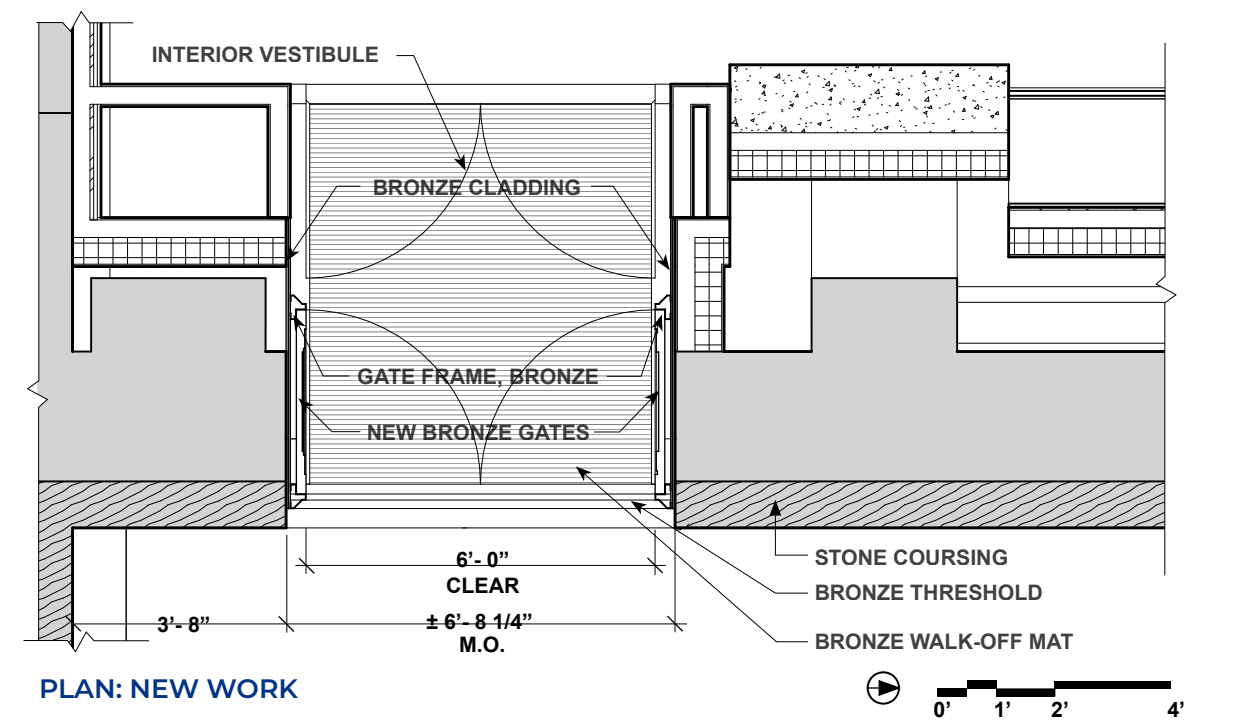
ELEVATION: DEMOLITION



ELEVATION: NEW WORK



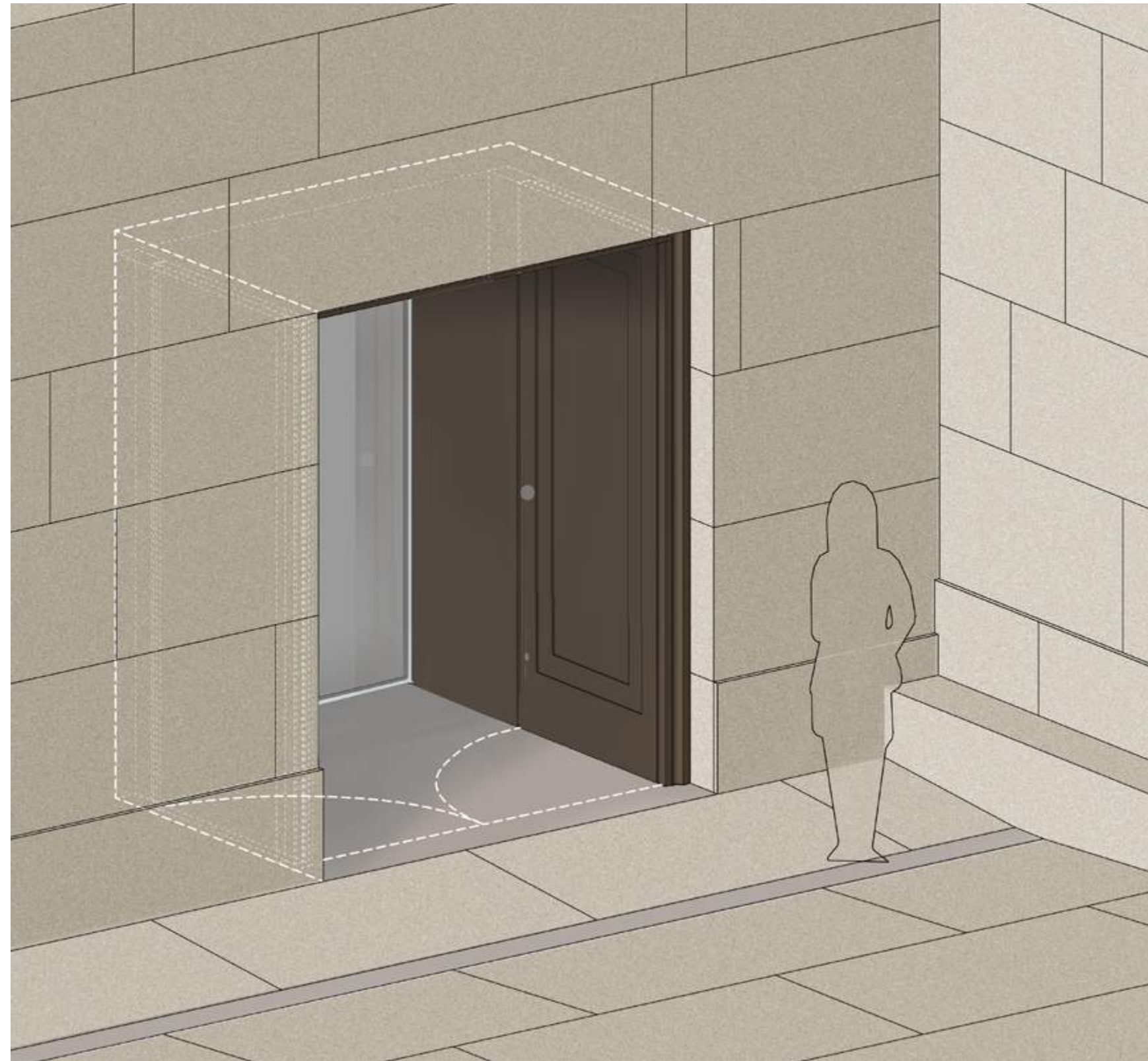
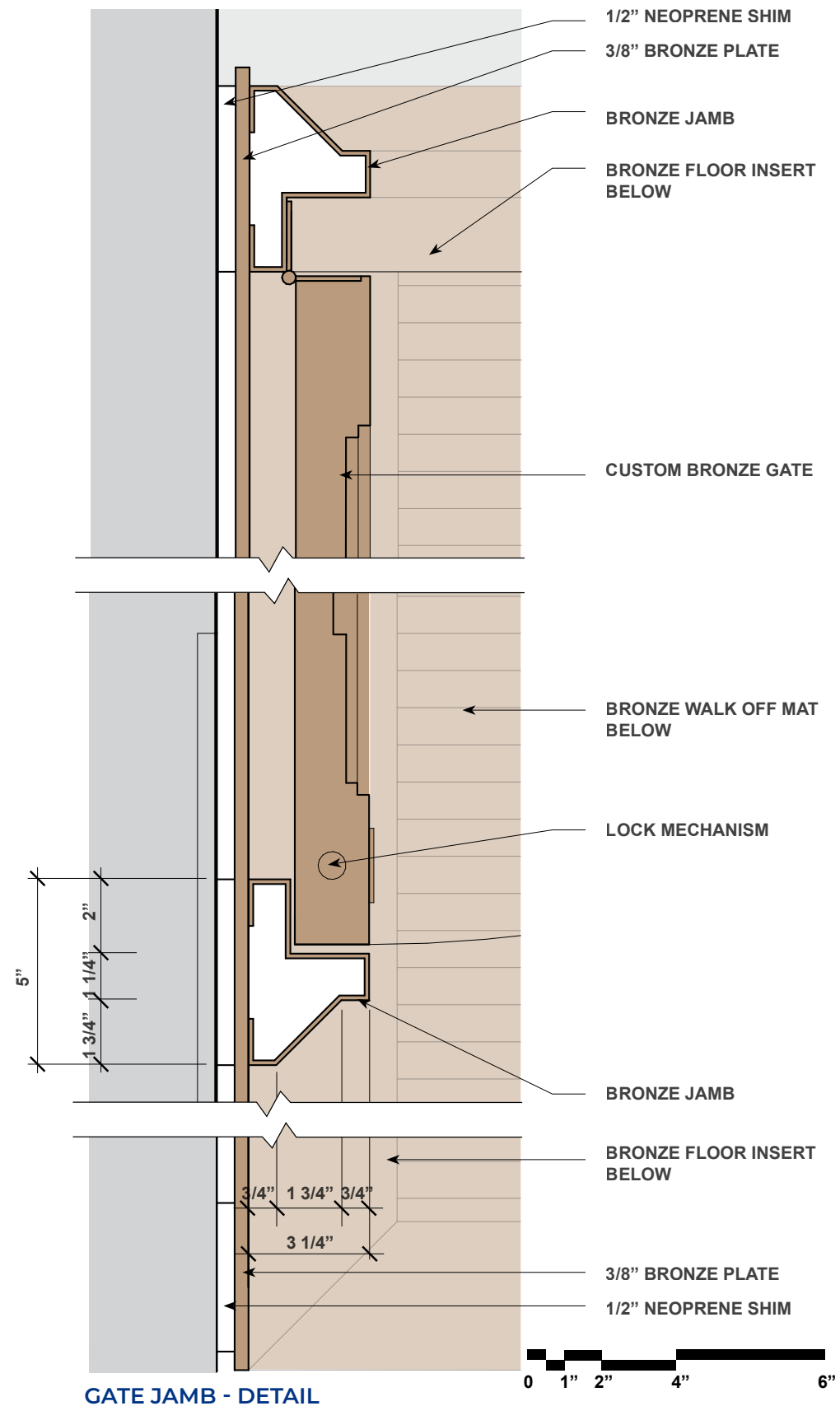
PLAN: DEMOLITION



PLAN: NEW WORK



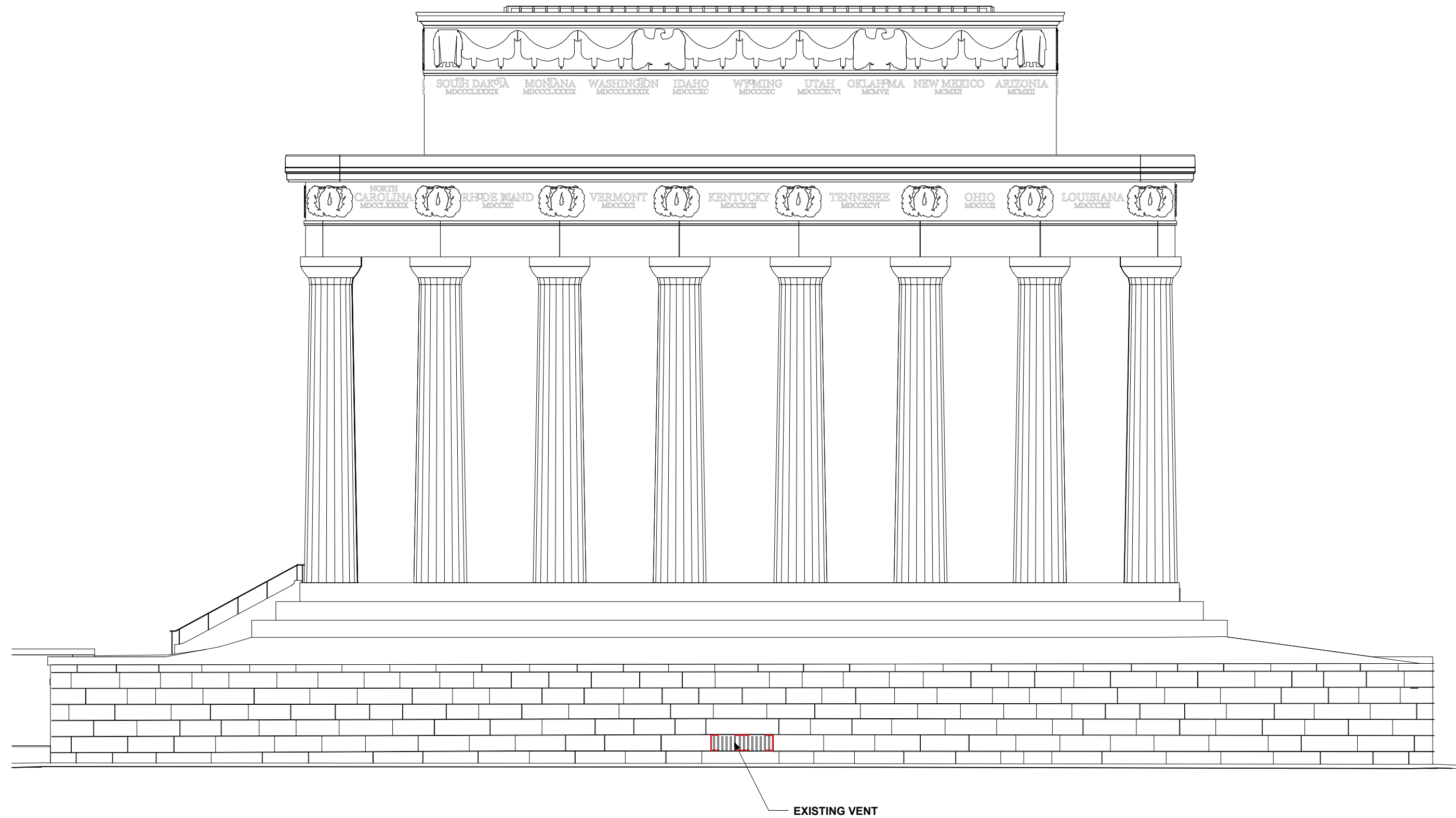
GATE JAMB DETAILS



PROPOSED NORTH EXIT



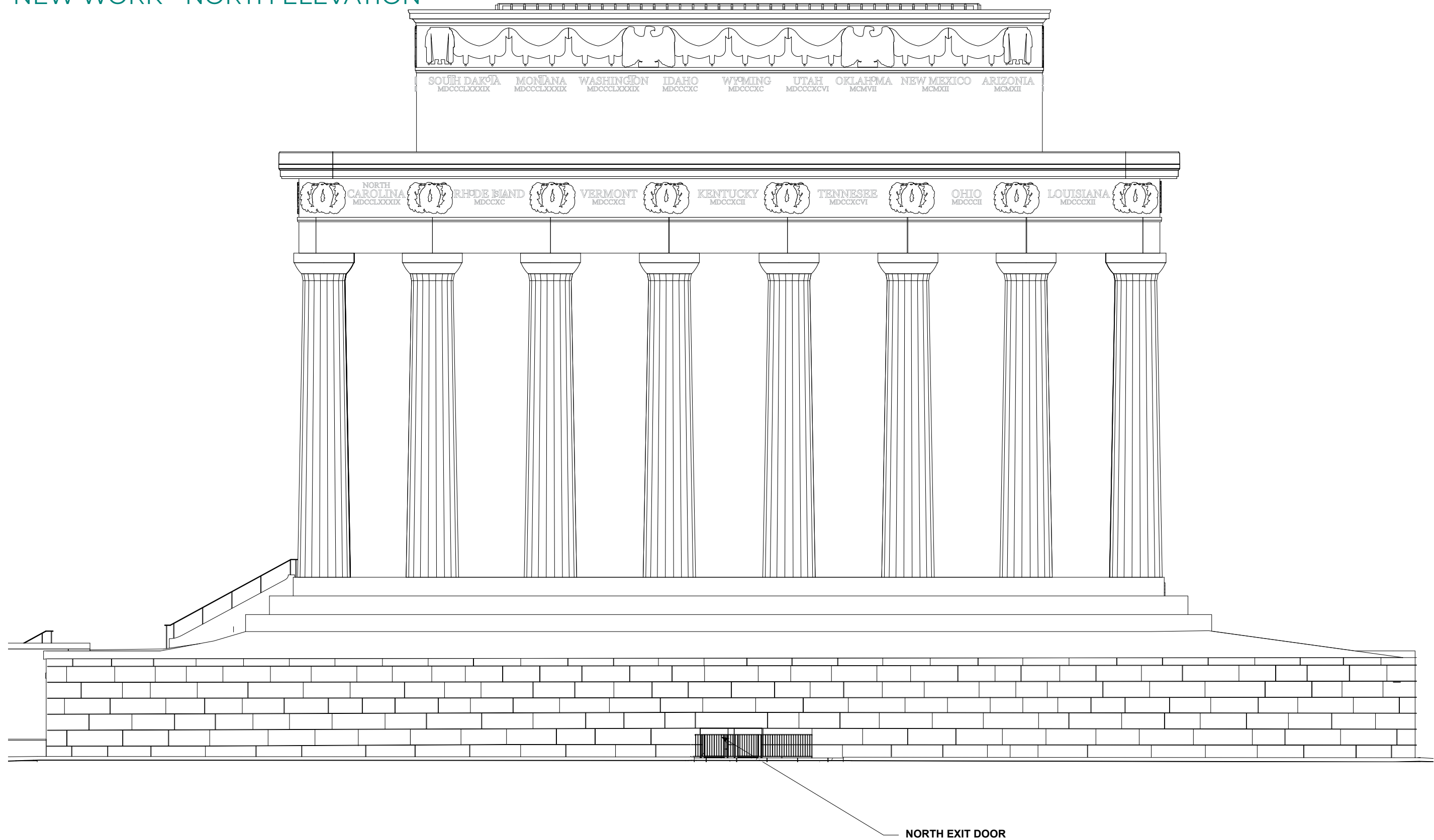
EXISTING NORTH ELEVATION



PROPOSED NORTH EXIT



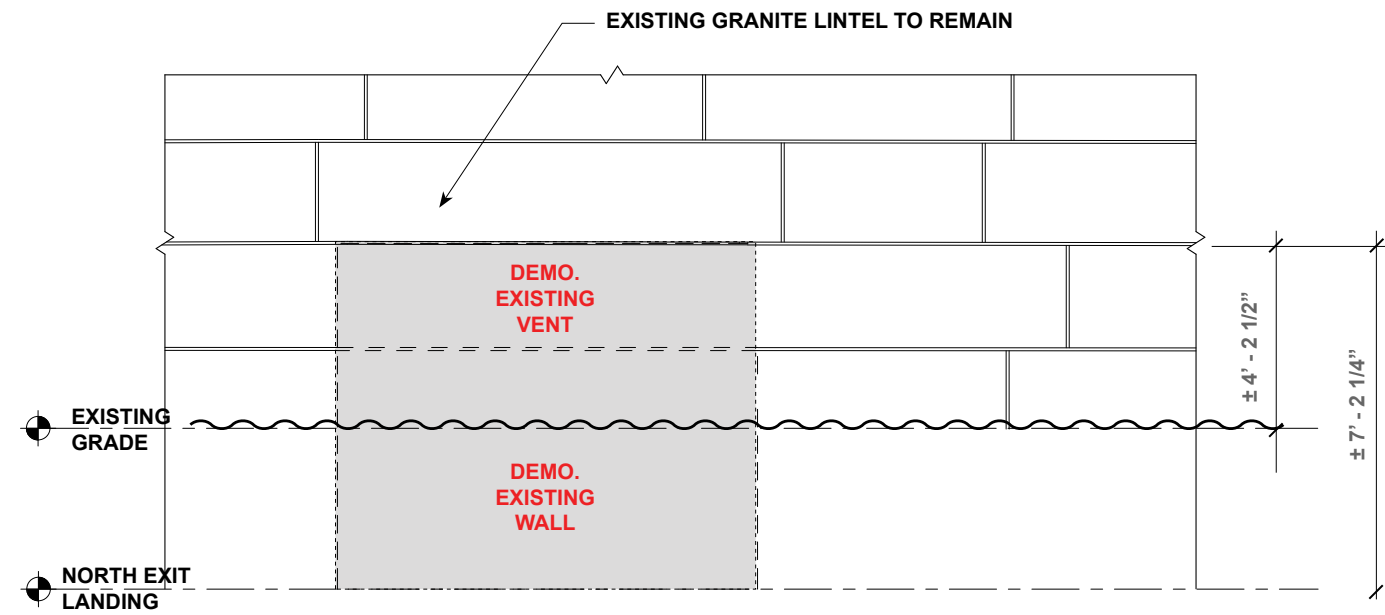
NEW WORK - NORTH ELEVATION



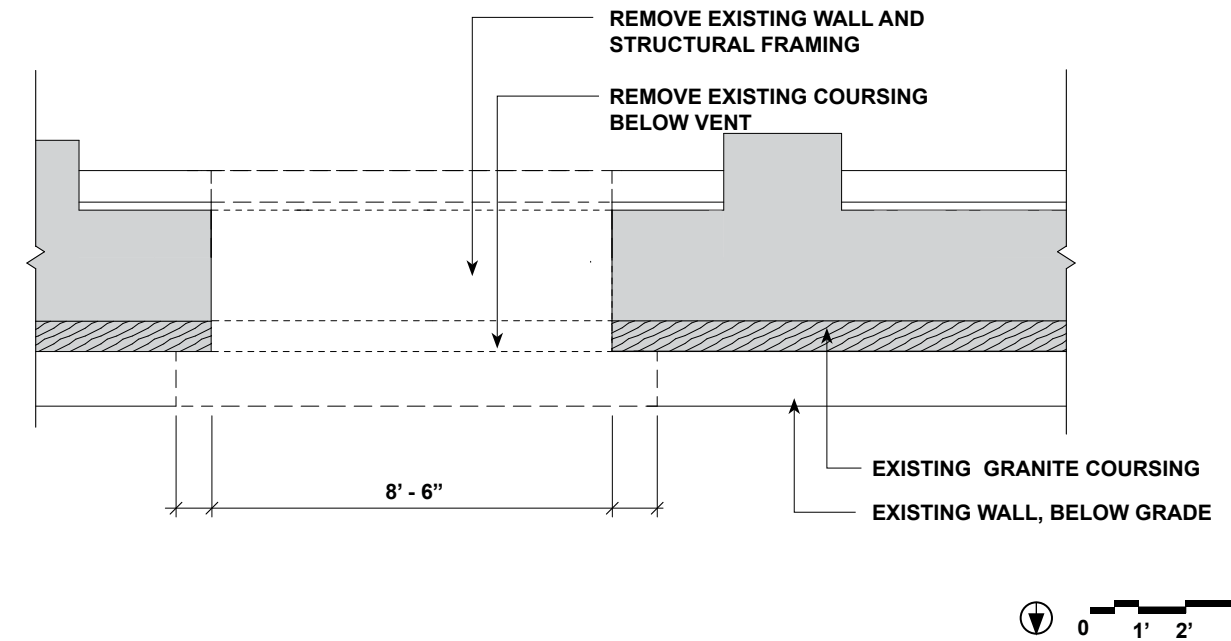
PROPOSED NORTH EXIT



ENLARGED ELEVATION - DEMOLITION - NORTH EXIT DOOR



ELEVATION - COURSING DEMOLITION DIAGRAM



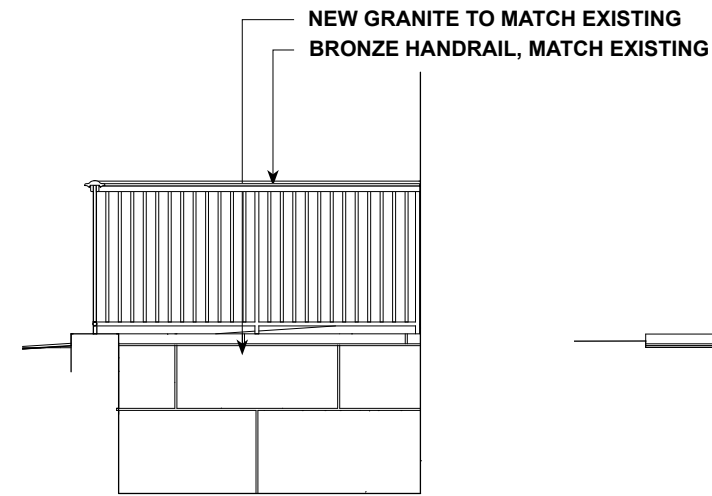
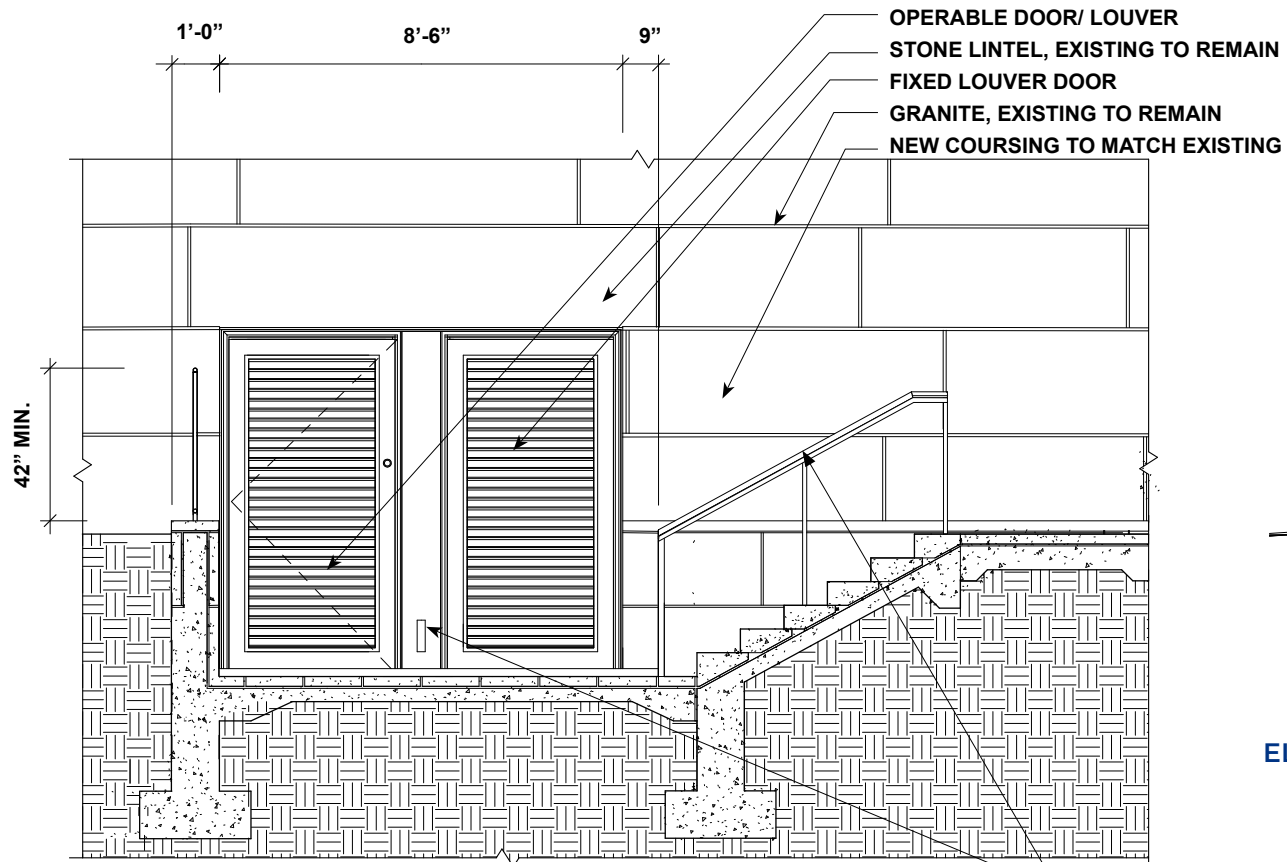
PLAN - NORTH DOOR DEMOLITION



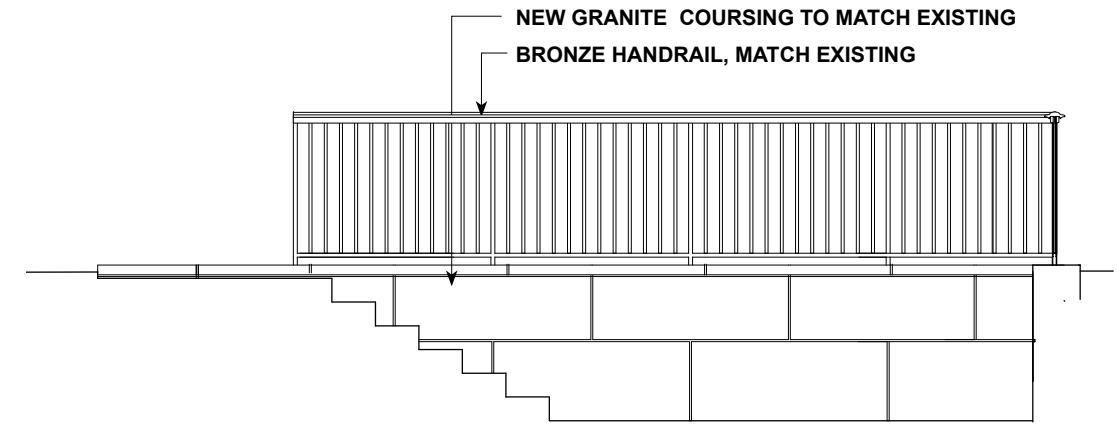
PROPOSED NORTH EXIT



ENLARGED ELEVATION AND PLAN - NEW WORK

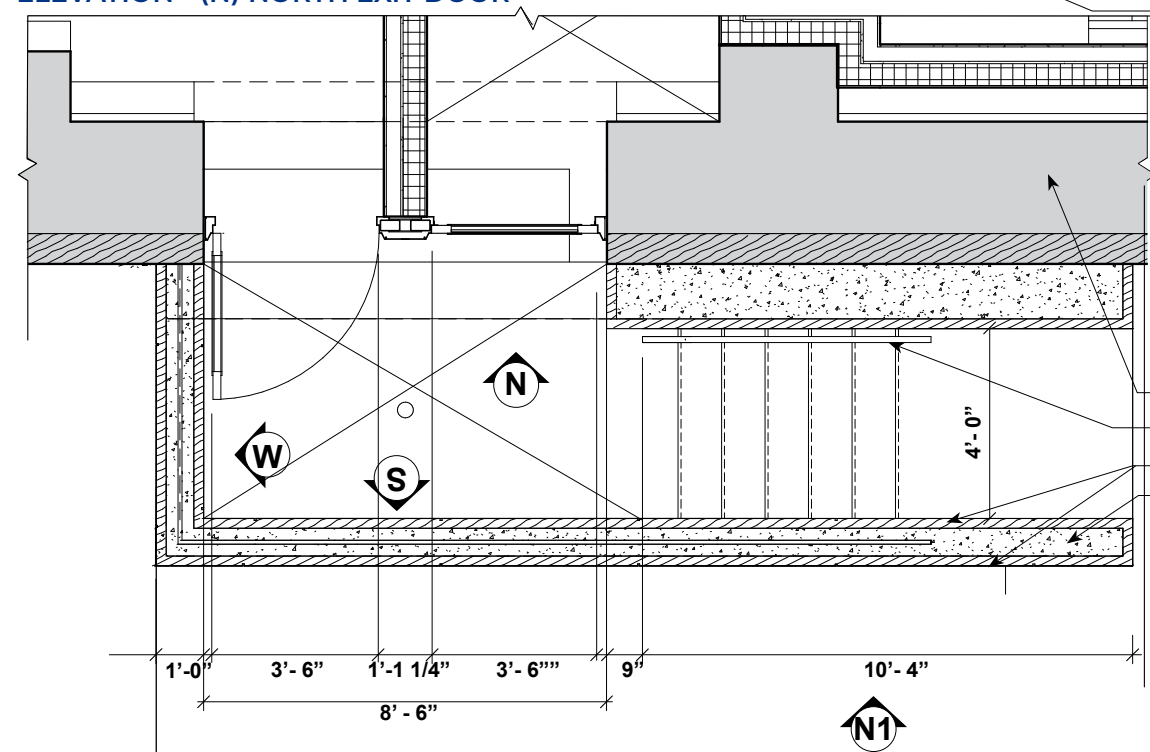


ELEVATION - (W) WEST



ELEVATION - (S) SOUTH

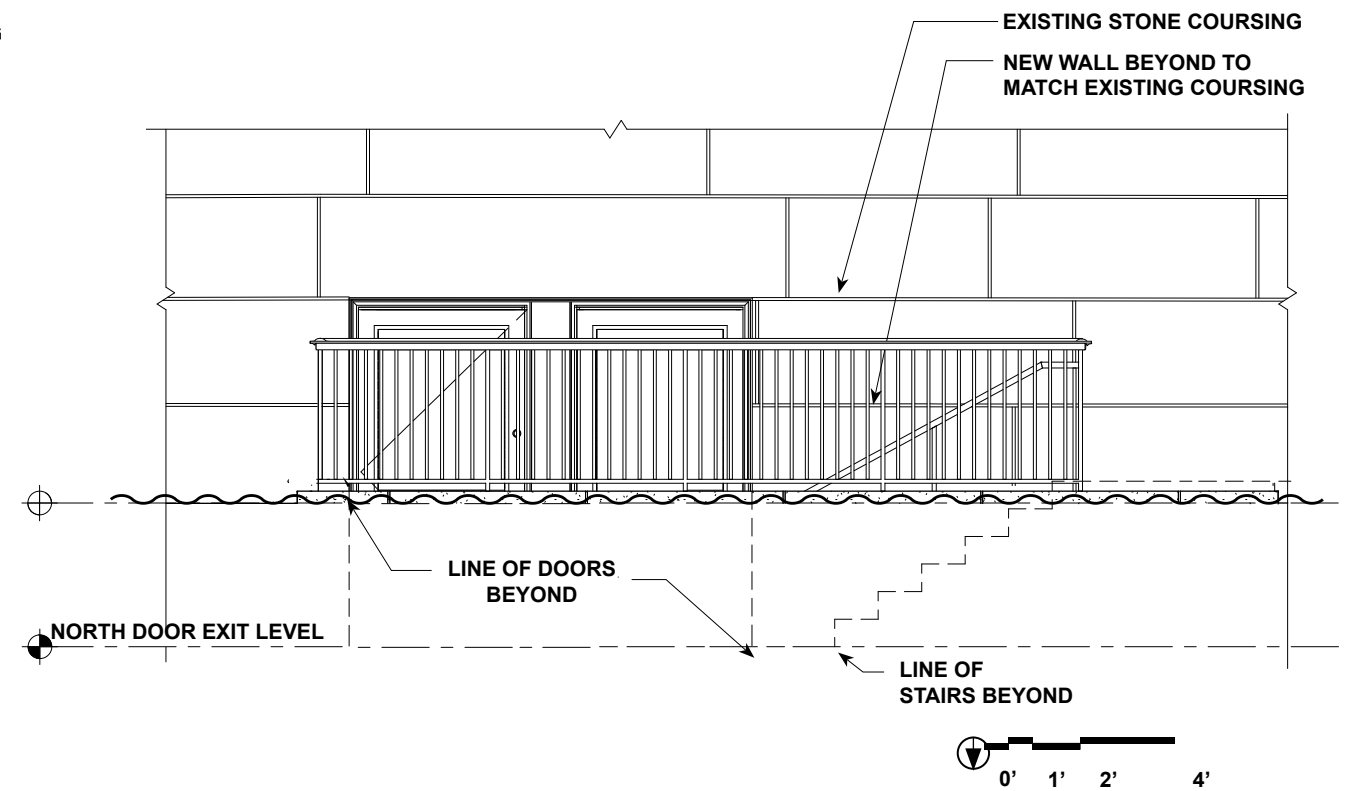
ELEVATION - (N) NORTH EXIT DOOR



BRONZE HANDRAIL, MATCH EXISTING
LIGHT FIXTURE

EXISTING WALL
BRONZE HANDRAIL, MATCH EXISTING
GRANITE, MATCH EXISTING
CONCRETE

PLAN - PROPOSED NORTH EXIT DOOR



ELEVATION - (N1) ELEVATION AT GRADE



COMPUTER VISUALIZATION

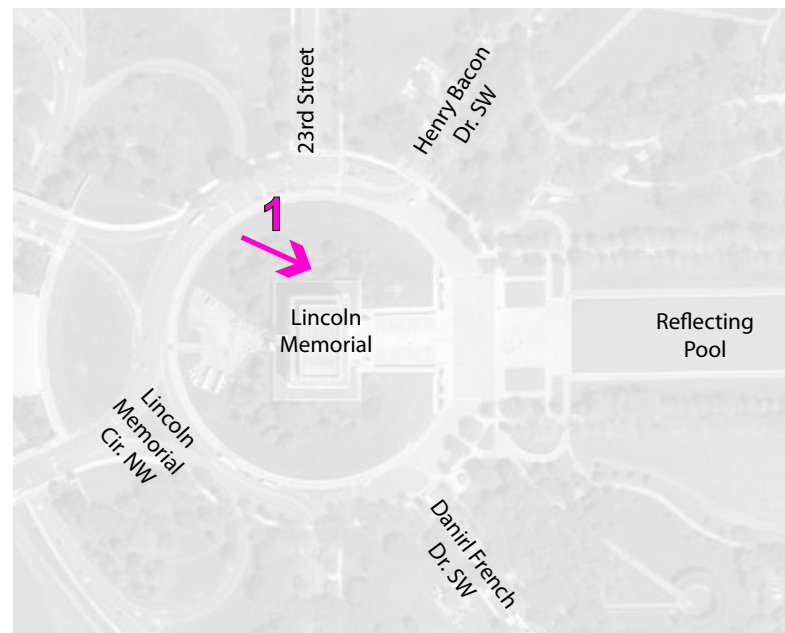


PHOTO KEY

PROPOSED NORTH EXIT DOOR VISUALIZATION