

# LEVER HOUSE RENOVATION & RESTORATION

INDIVIDUAL LANDMARK, 1983.

LANDMARKS PRESERVATION COMMISSION

PUBLIC HEARING JULY 20, 2021

Waterman**CLARK**

**Brookfield** Properties

SOM



**HIGGINS QUASEBARTH & PARTNERS, LLC**  
CONSULTANTS IN THE PRESERVATION AND REHABILITATION OF HISTORIC PROPERTIES







“Lever House spawned a host of imitators but has been rarely equalled. It remains outstanding for its spatial clarity, scale, and beauty of form.”

*Designation and Analysis,*  
Landmarks Preservation Commission, November 9, 1982





“Its slim tower occupies only one-quarter of the lot, leaves light and air for buildings around it. There are no stores on the street level. Instead, a pleasant innovation is the open ground floor with its garden and landscaping.”

*Welcome to Lever House, Brochure, 1952*





“[Lever House] also introduced the concept of opening a portion of the ground floor to public use and of providing an open courtyard at its base.”

*Designation and Analysis,*  
Landmarks Preservation Commission, November 9, 1982

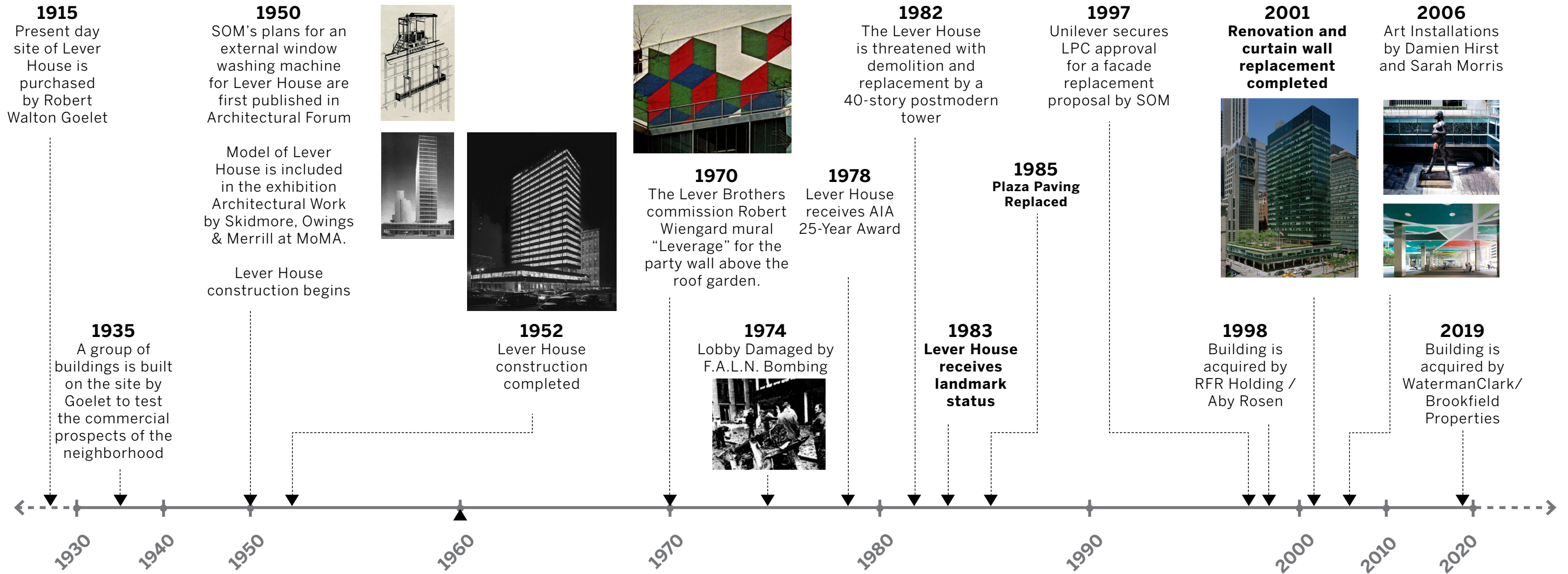




“The building’s curtain wall, its technical excellence, and its material presence instantly became the touchstone for modernism and American business.”

Nicholas Adams, *Gordon Bunshaft and SOM: Building Corporate Modernism*, 2019





# Timeline



























# Project Scope

## **Ground Floor - Alteration**

1. Replace Non-Original Plaza Paving
2. Replace Non-Original Plaza Bases
3. Black Limestone Wall Openings
4. New Signage

## **Restoration**

1. Stone Restoration
2. Metal Restoration
3. Ceiling Restoration

## **Level 3 Terrace - Alteration**

1. Non-Original Paving Replacement
2. Aluminum Panel Storefront Replacement
3. Non-Original Glass Storefront Alteration



---

Ground Floor



# Original Plaza Paving

An integral part of the design of the open courtyard is the paving which echoes on a different plane the rhythm of the columns."

*Designation and Analysis*, Landmarks Preservation Commission, November 9, 1982



# Interior - Exterior Continuity





# Original Plaza Paving

Photograph from 1982



Areas of Replacement



# Existing Condition

Non-Original Paving (Installed 1985)



Photo © Lucas Blair Simpson / SOM



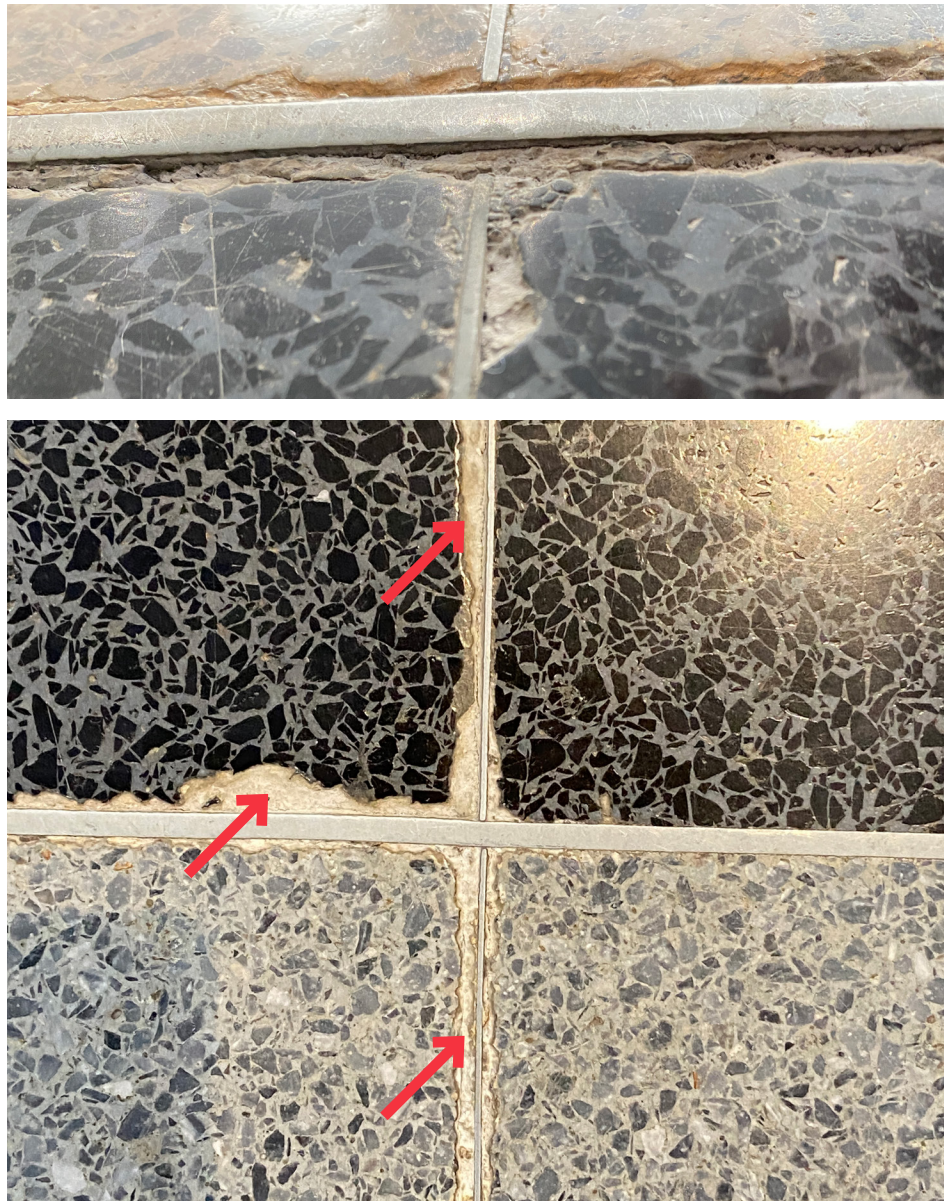
# Existing Condition

Non-Original Paving (Installed 1985)





# Interior Terrazzo



Material Loss at Metal Joints

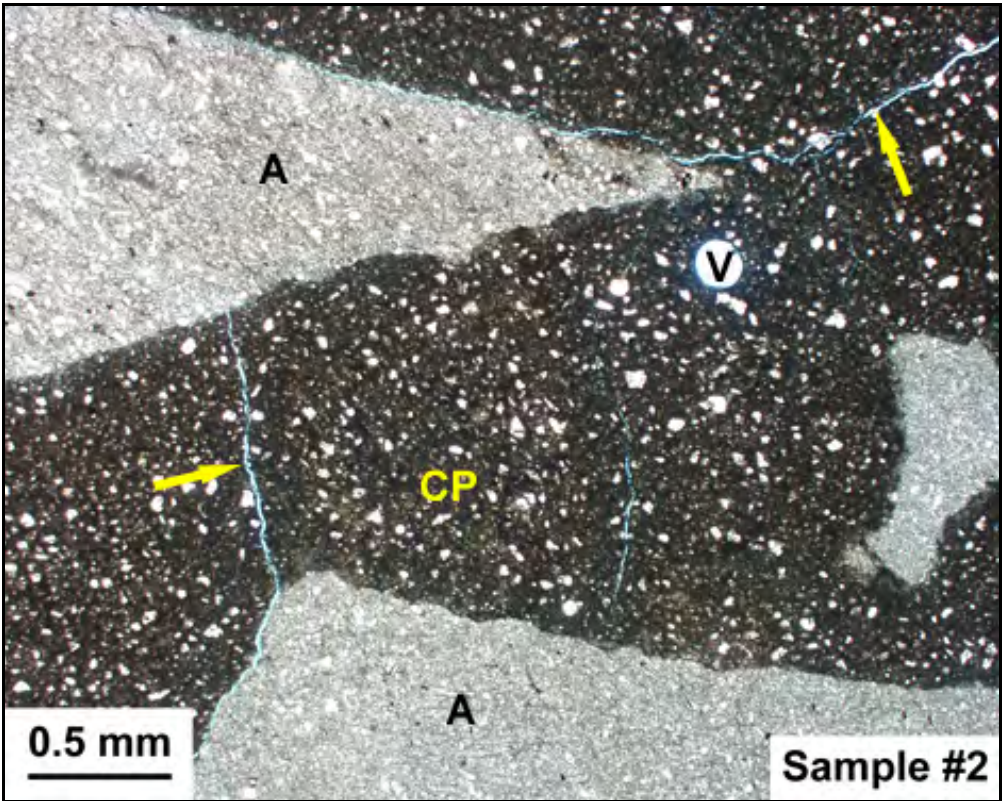
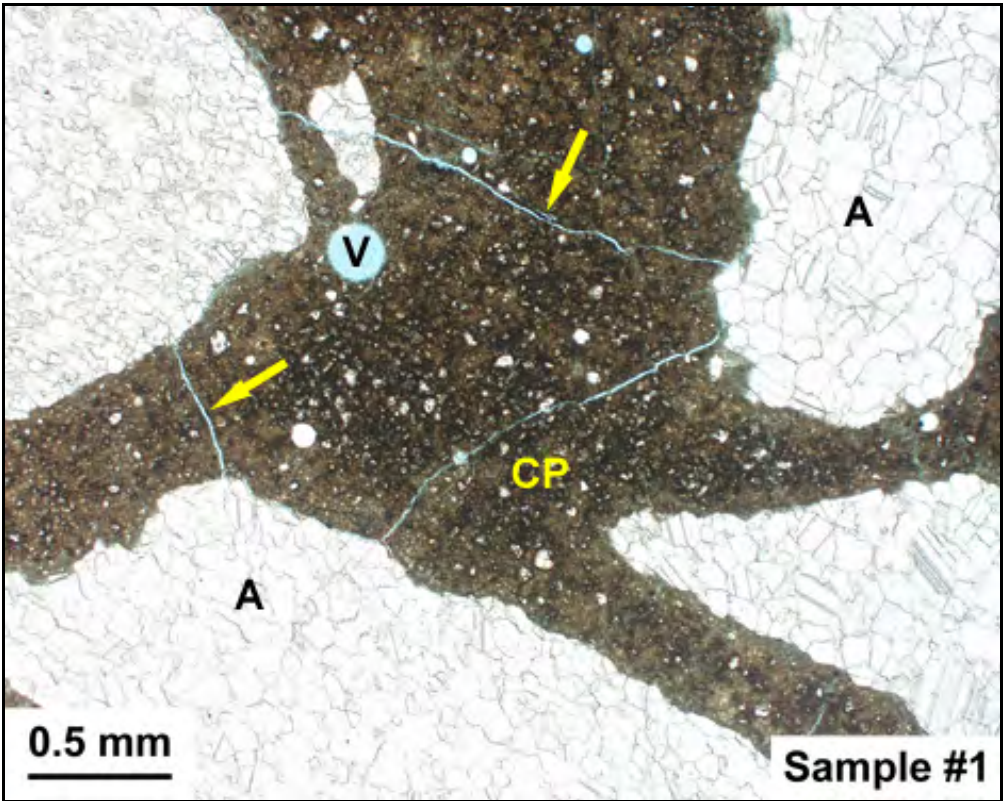
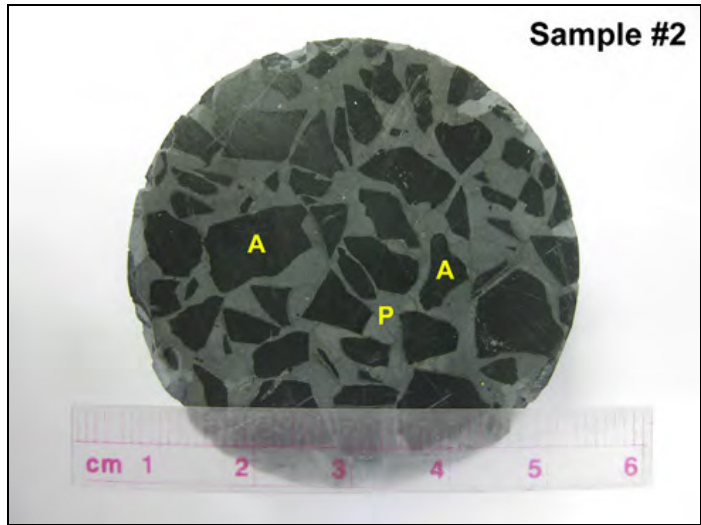
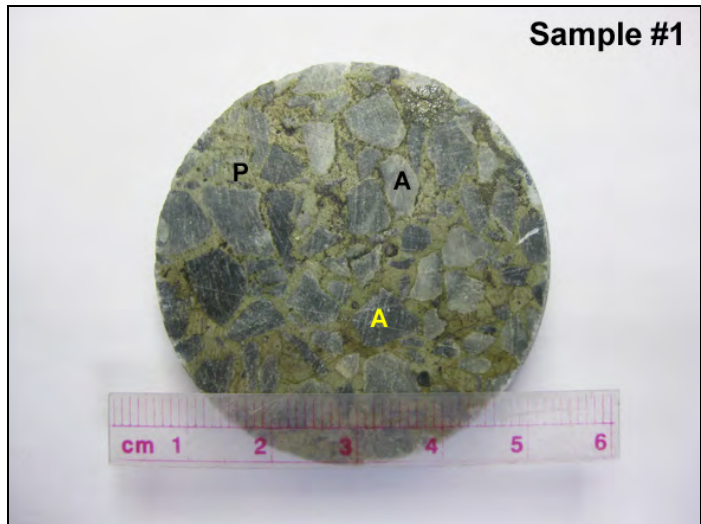


Cracking within Panels



# Plaza Paving Aggregate Matching

## Terrazzo Petrography Report



**Figure 4:** PPL photomicrographs illustrating the microtexture of the terrazzo mixtures. The aggregate (A) is well-spaced. Note that there is no sand within the hydrated cement paste (CP). The paste is uniform and dense. Air-voids are uncommon (V). The arrows indicate drying shrinkage microcracks that are found throughout the full depth of each terrazzo layer.



# Plaza Paving Specification

Original Specification  
Cementitious Terrazzo

**MATERIALS:**

Gray Cement shall be standard grade Portland cement of any standard brand, complying with the requirements of the A.S.T.M. Standard Specification C-150, latest edition.

White Cement shall be Atlas Waterproof White Portland cement or approved equal.

Sand shall be clean, sharp and washed.

Water shall be clean and fresh, suitable for drinking.

Marble Chips shall be sound, hard, dense marble, selected and mixed in the proportions hereinafter noted. No. 1 chips shall pass a No. 3 screen and be retained on a No. 10 screen. No. 2 chips shall pass a No. 2 screen and be retained on a No. 6 screen.

**NON-SLIP AGGREGATE:**

Non-slip aggregate to be used only for exterior terrazzo where called for as an alternate for cement, shall be an oxide aluminous abrasive in crystalline formation ceramically bonded and vitrified, and shall be of color to match color of marble chips as nearly as possible. It shall be equal to Alundum Terrazzo Aggregate as made by Norton Company, Worcester, Mass.

Proposed Specification  
Cast in Place Concrete with Hand Seeded Aggregate

**Materials:**

Gray Cement

With alkaline stable pigments.

Achieve 4000 psi in 25 days, Resistance to freeze/thaw cycling & salt crystallization addressed with use of air entraining & other admixtures.

White Cement

Same Specification as above

Sand

Water

Marble Chips:

Dark Aggregate: Raven Black B90

Light Aggregate: 50% Blue Bardiglio G70, 50% Dark Bardiglio G75

**Finishing:**

Surfaces are ground wet, with 40 Grit abrasive pad to grind and 80 Grit diamond abrasive pad to hone.

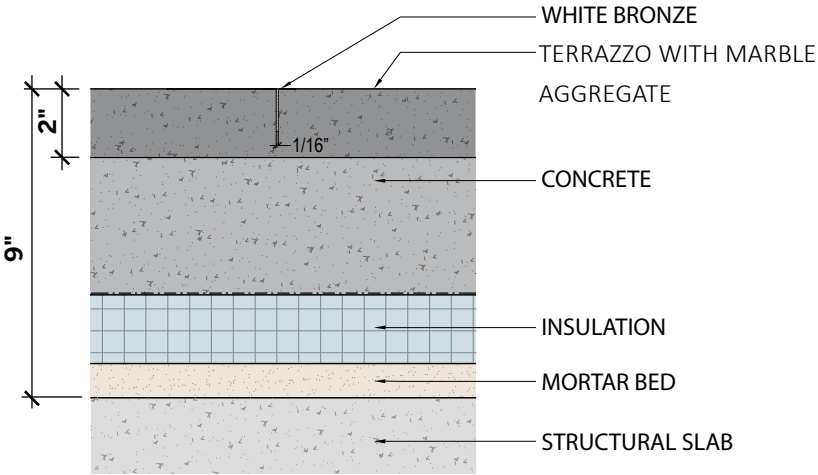
Surfaces are sealed with Concrete deck sealer with integral abrasive applied to surface after concrete finish has cured.



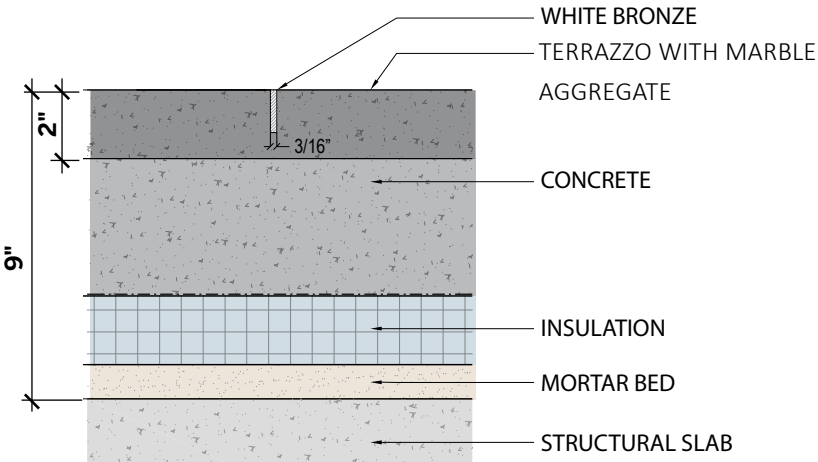
# Replace Plaza Paving

## Paving Details

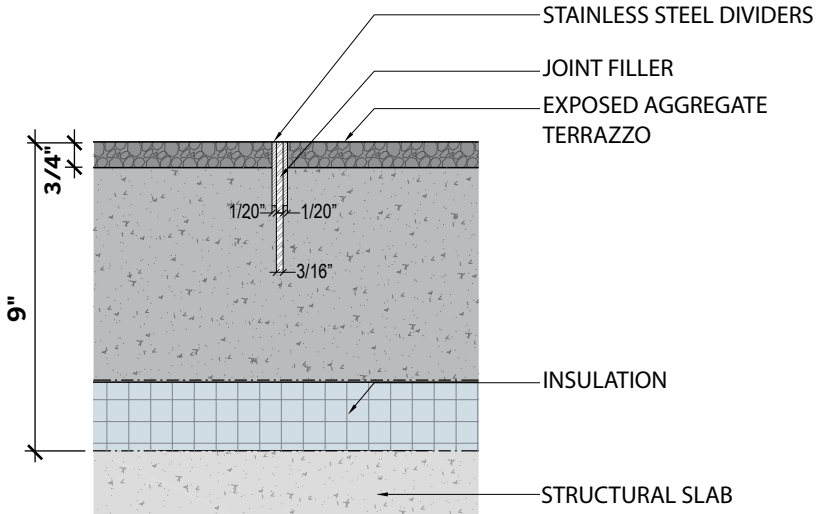
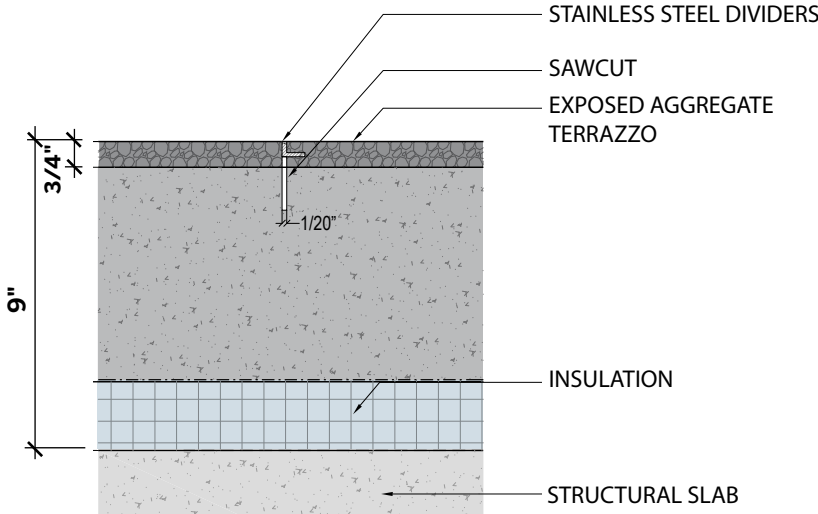
NARROW



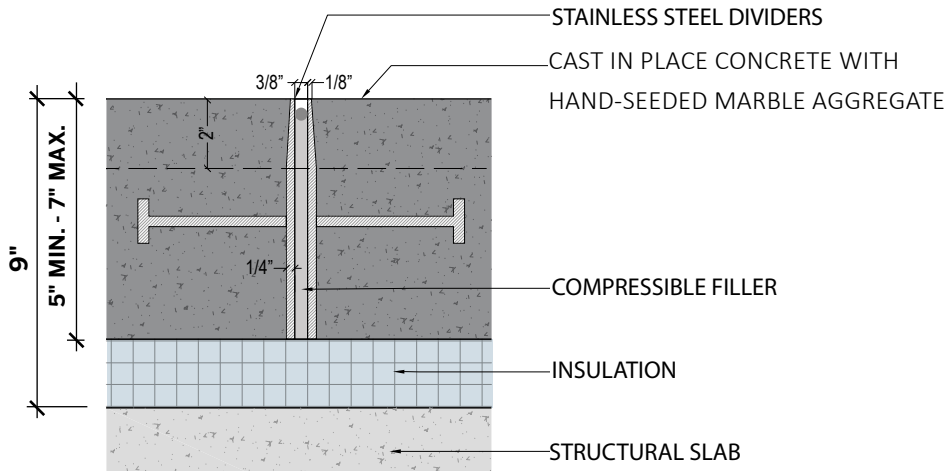
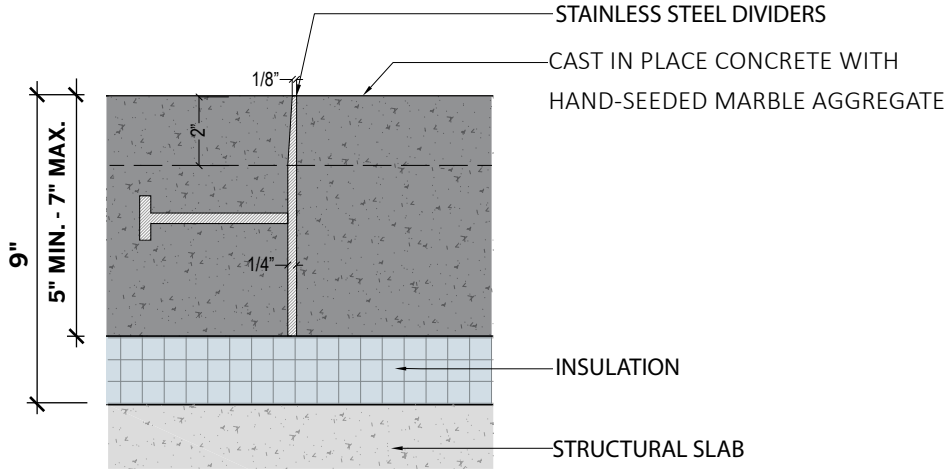
WIDE



Original



Existing

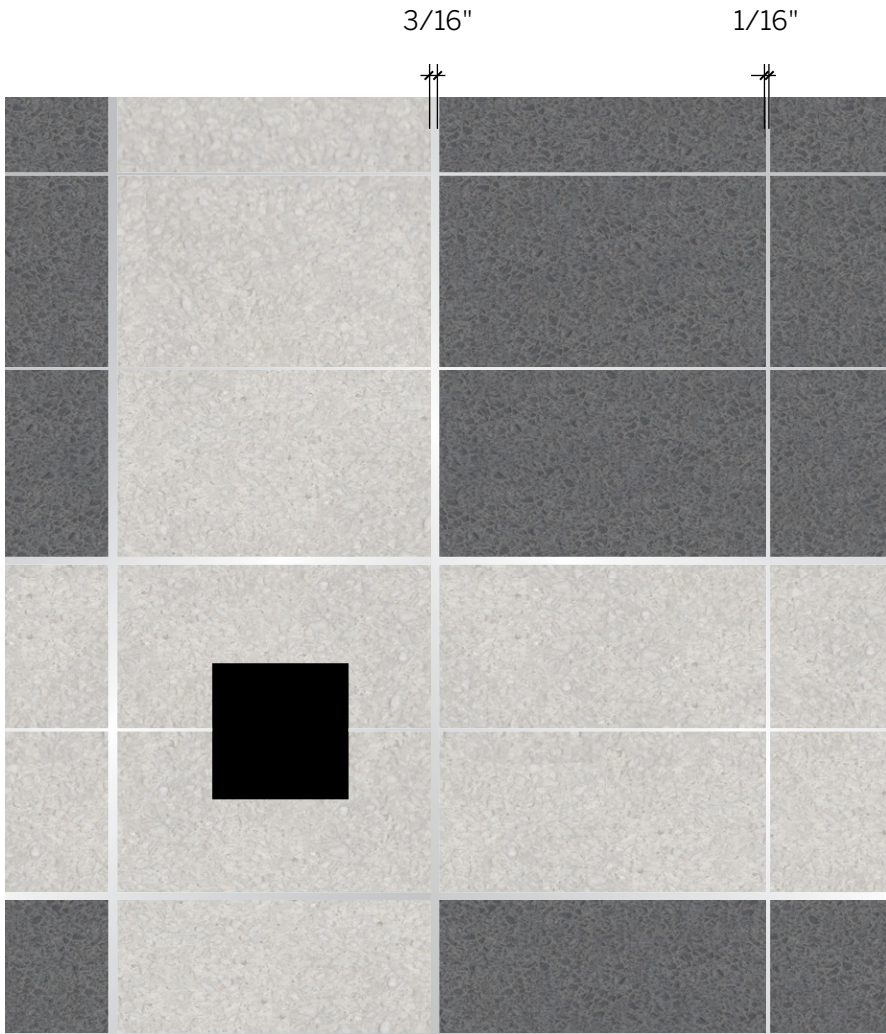


Proposed

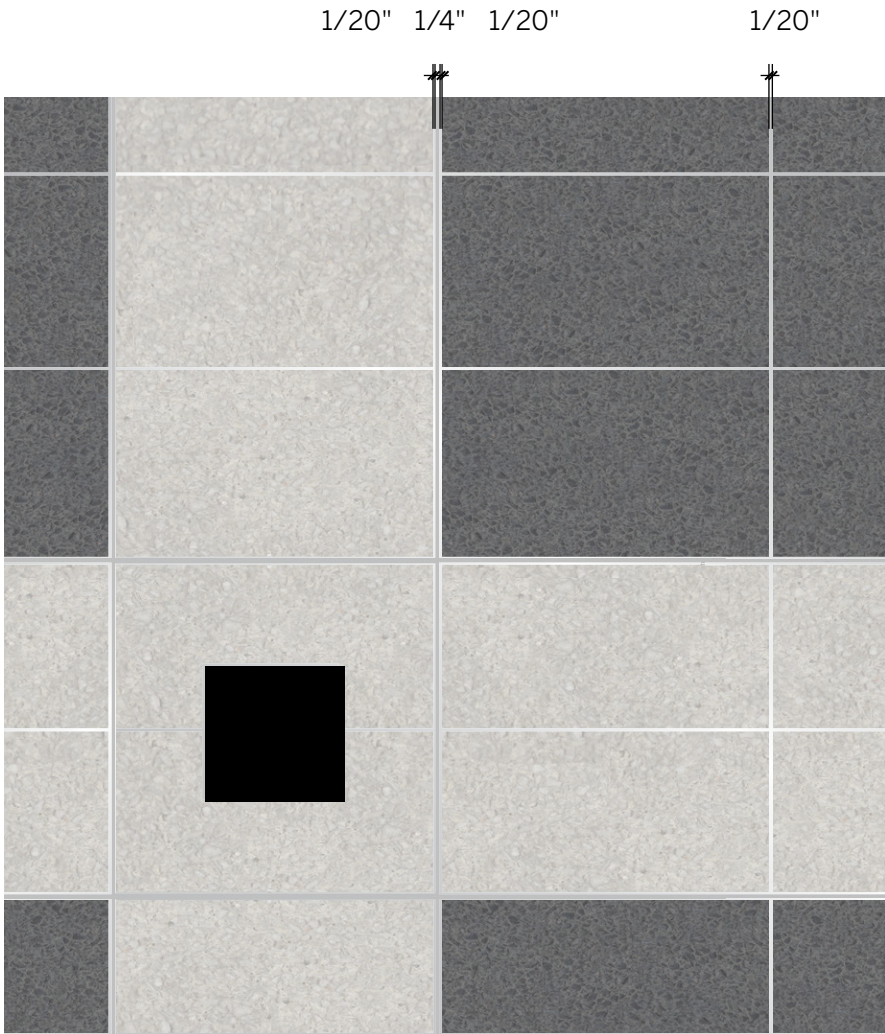


# Proposed Plaza Paving

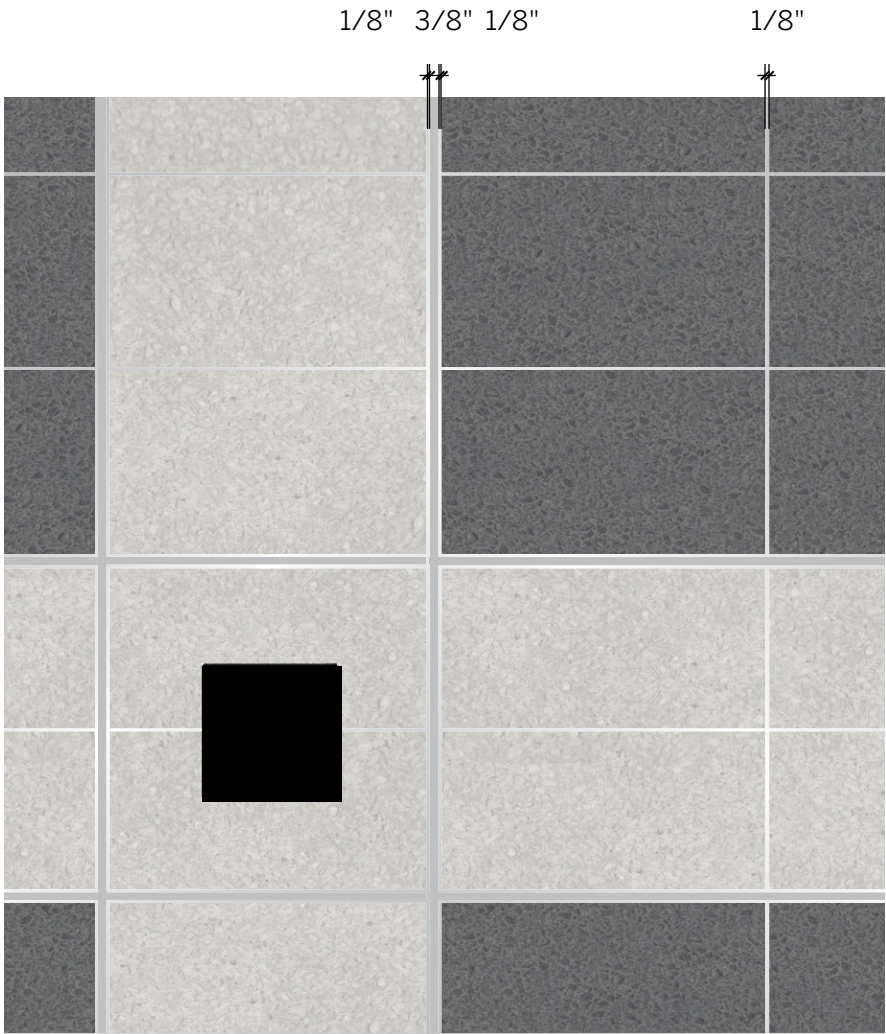
## Divider Strips



Original



Existing



Proposed

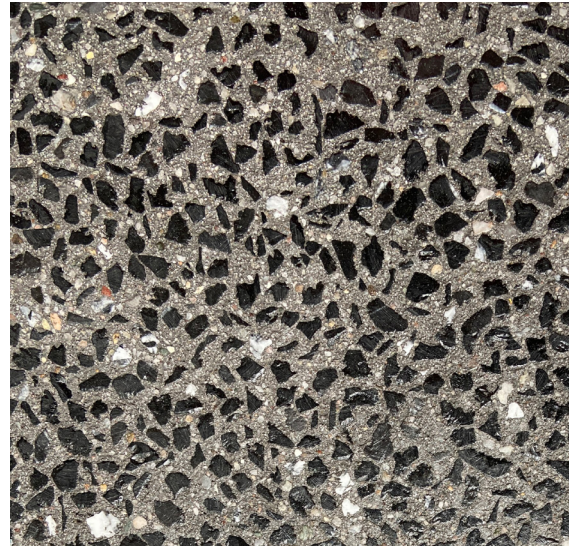


# Proposed Plaza Paving

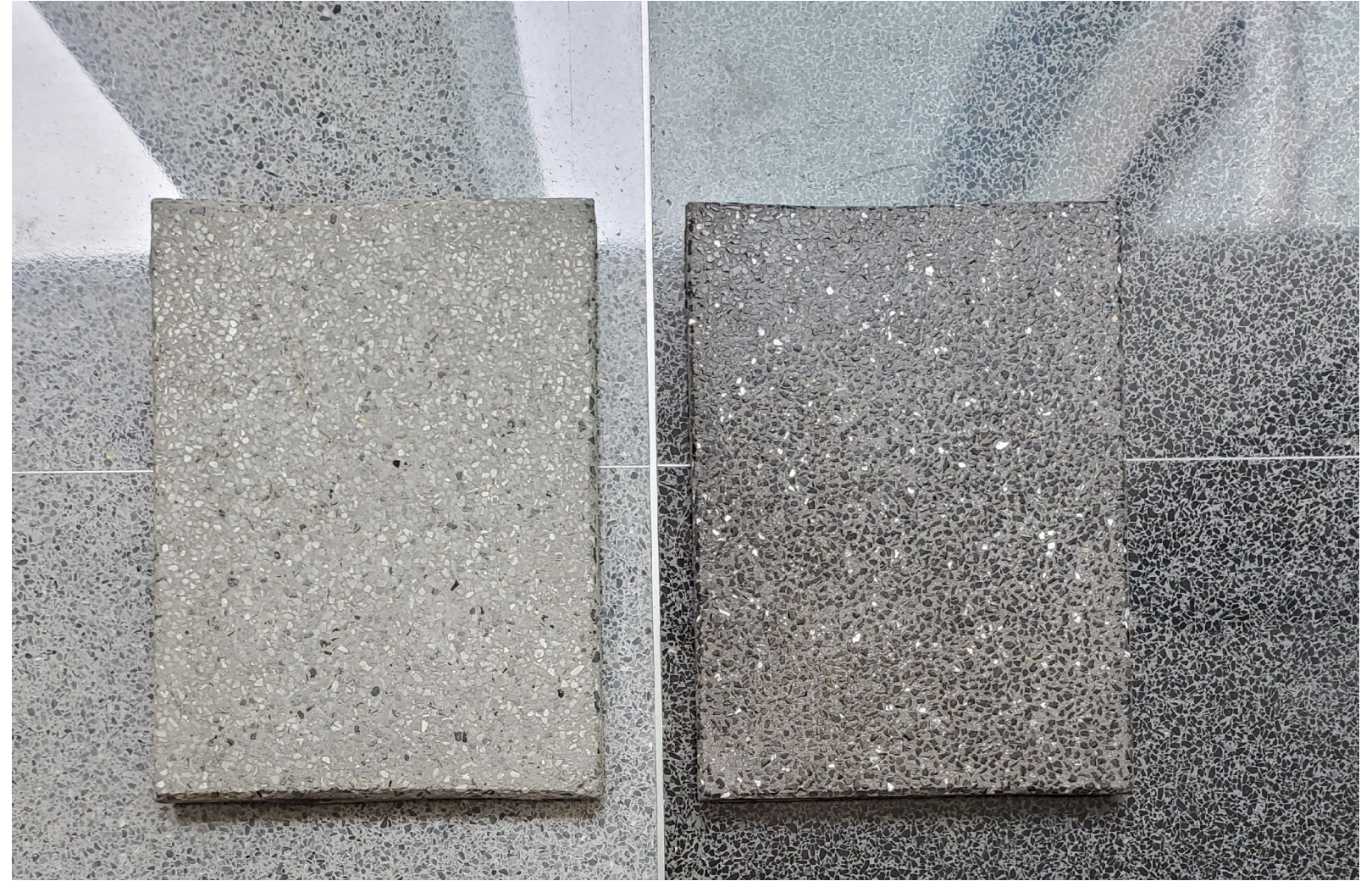
Cast-in-place Concrete with Hand-Seeded Aggregate



Light Sample



Dark Sample



Proposed Concrete Terrazzo Pavement with Decorative Aggregate  
on Existing Lobby Terrazzo Floor



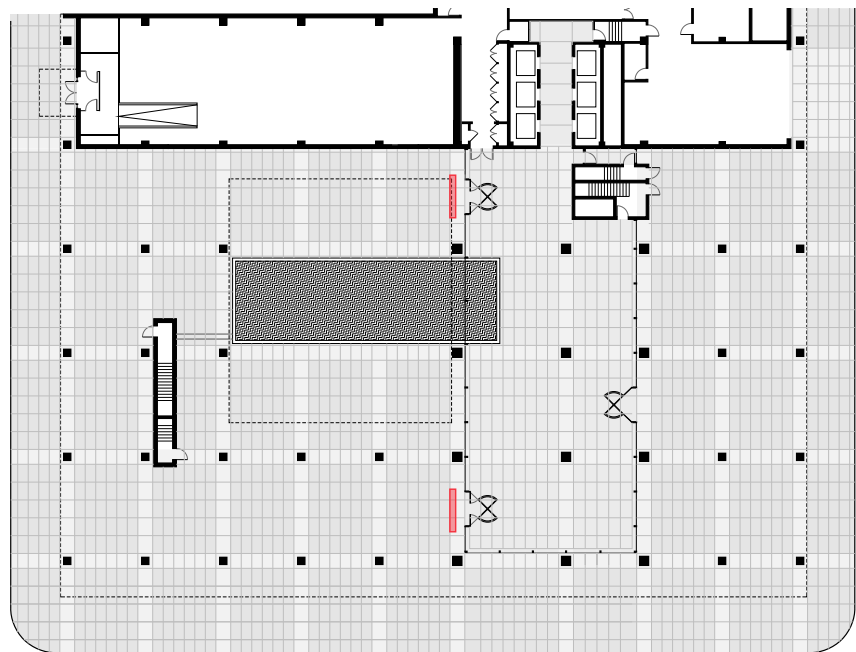
# Original Sheen



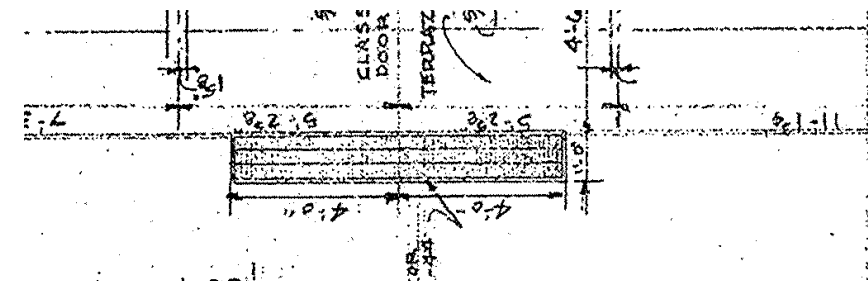


# Plaza Drains

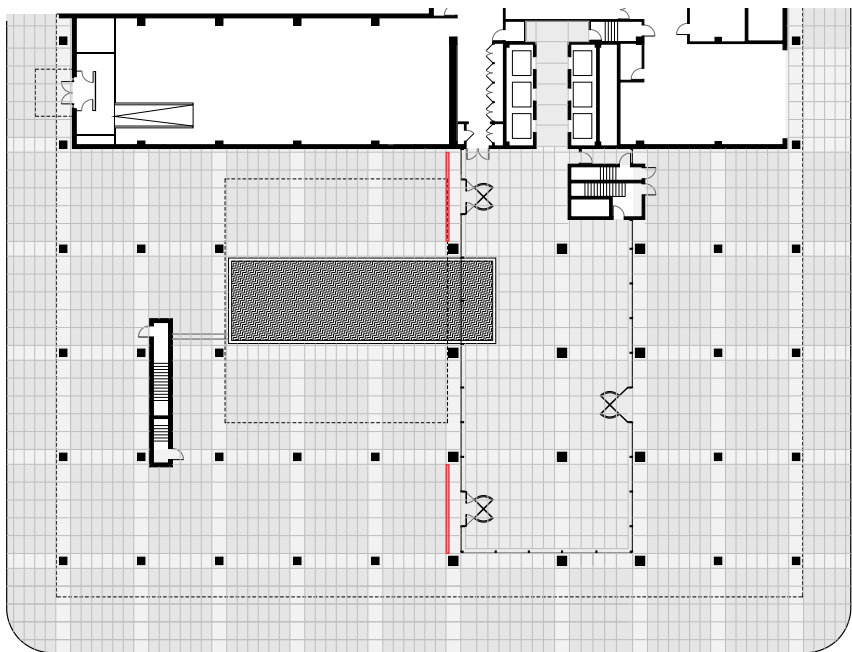
## Plans



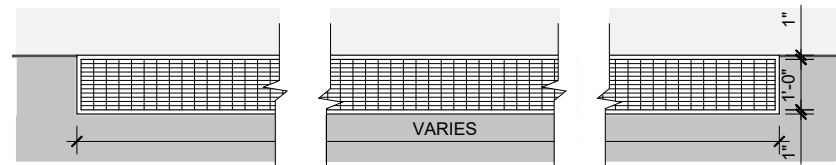
Original Drain Locations



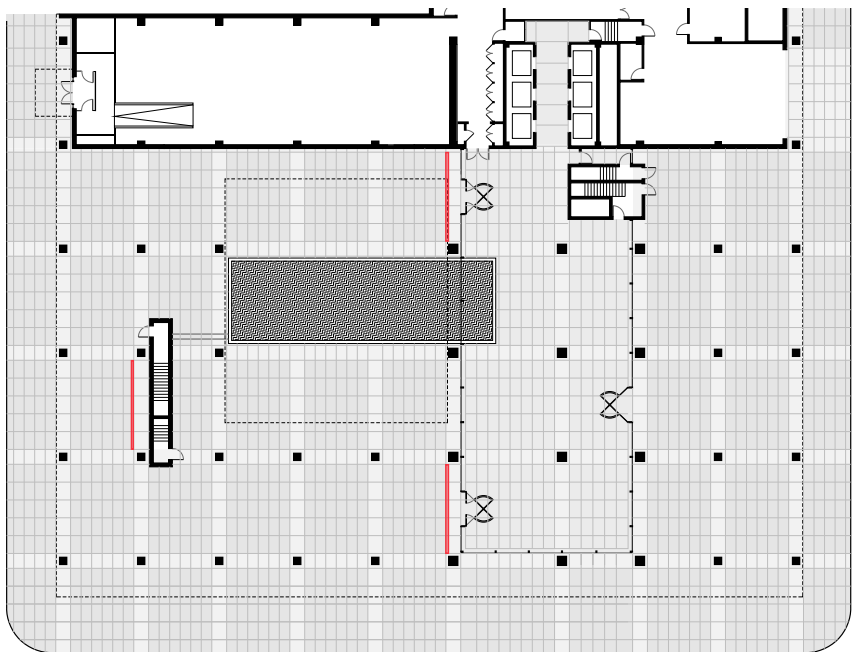
Original Drain Plan



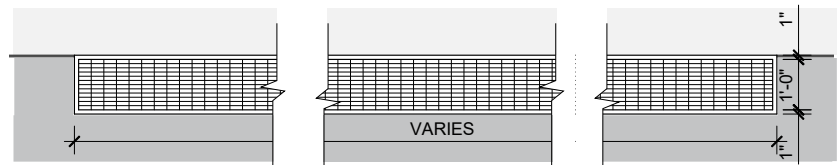
Existing Drain Locations



Existing Drain Plan



Proposed Drain Locations

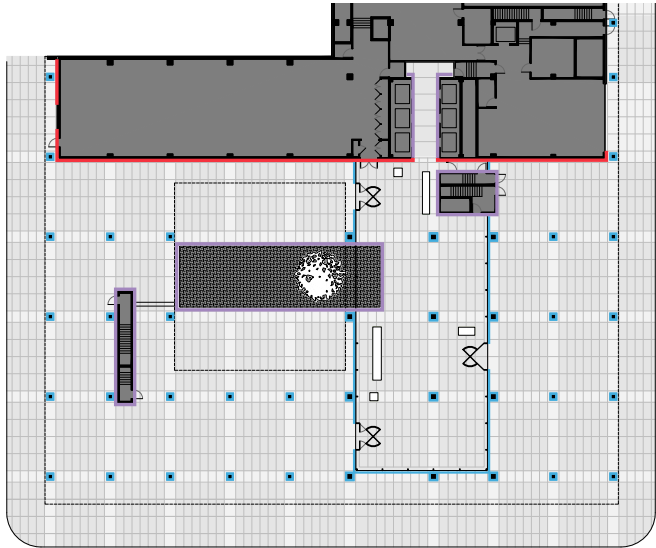


Proposed Drain Plan

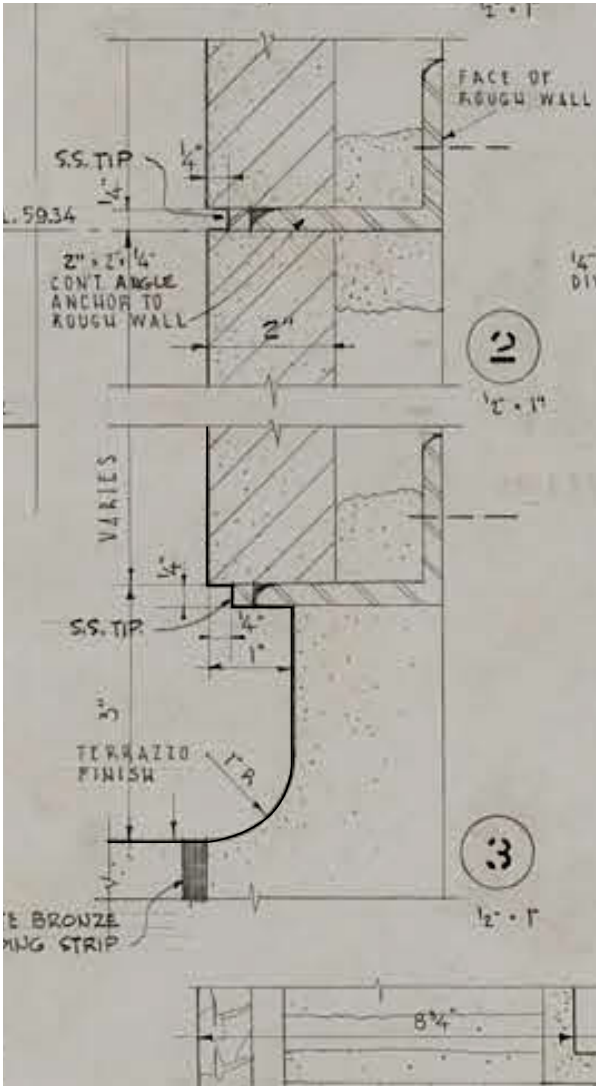


# Plaza Base

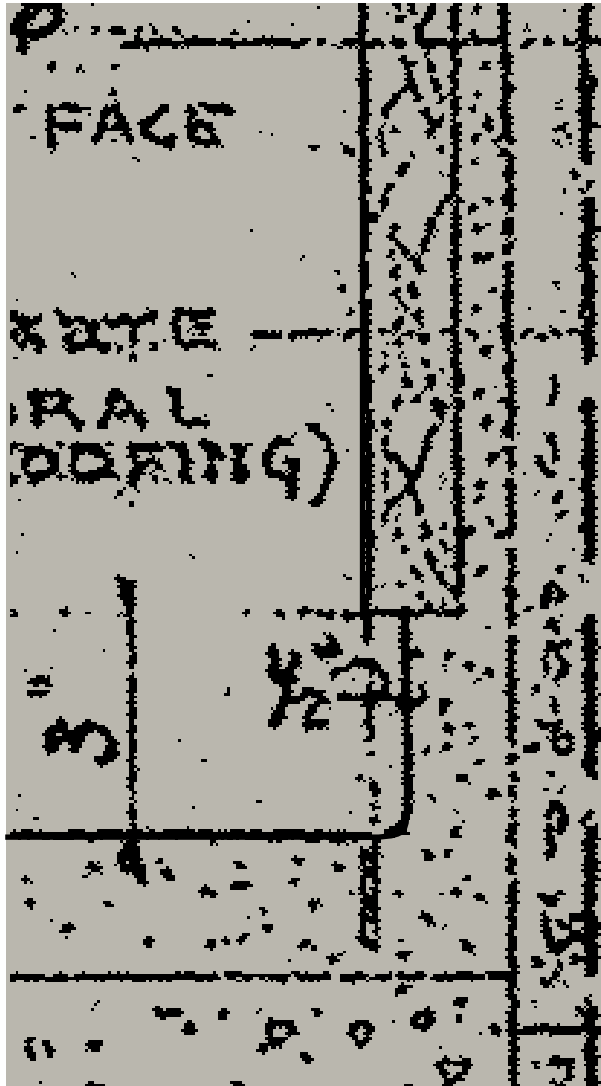
## Original Details



- 1 - At Black Limestone
- 2 - At White Marble
- 3 - At Stainless Steel/Storefront



1 Black Limestone

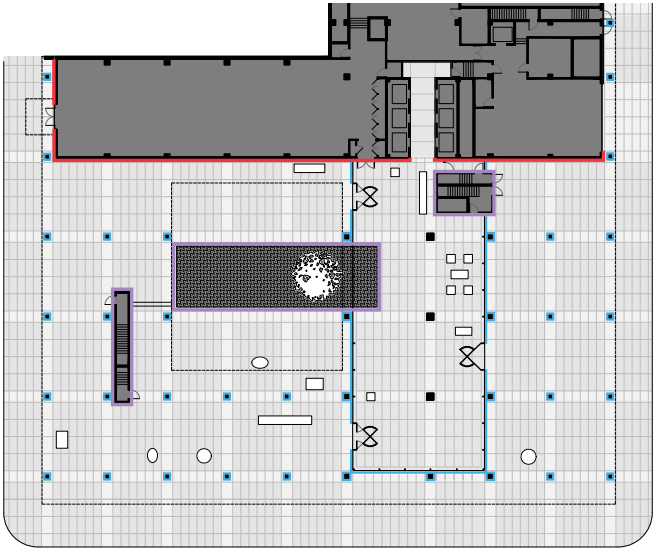


2 White Marble (Planter Shown)



# Plaza Base

## Existing Non-Original Bases



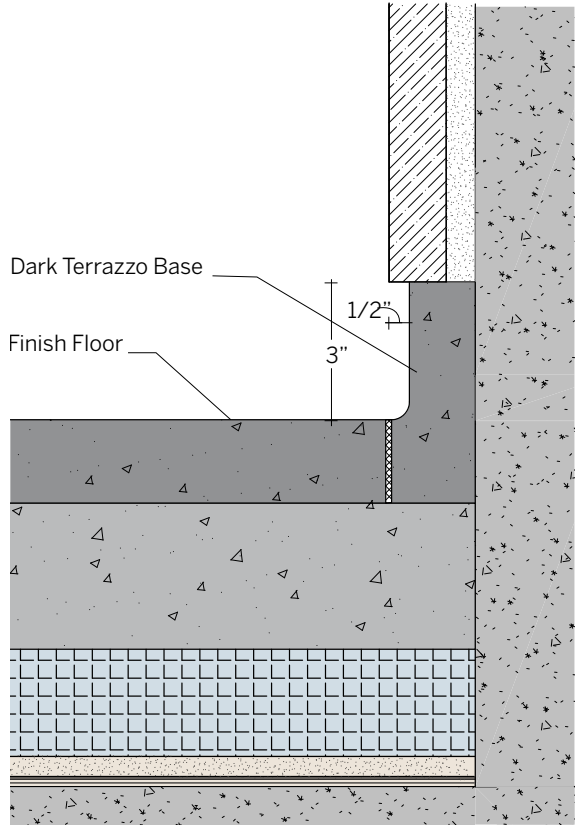
- 1 - At Black Limestone
- 2 - At White Marble
- 3 - At Stainless Steel/Storefront



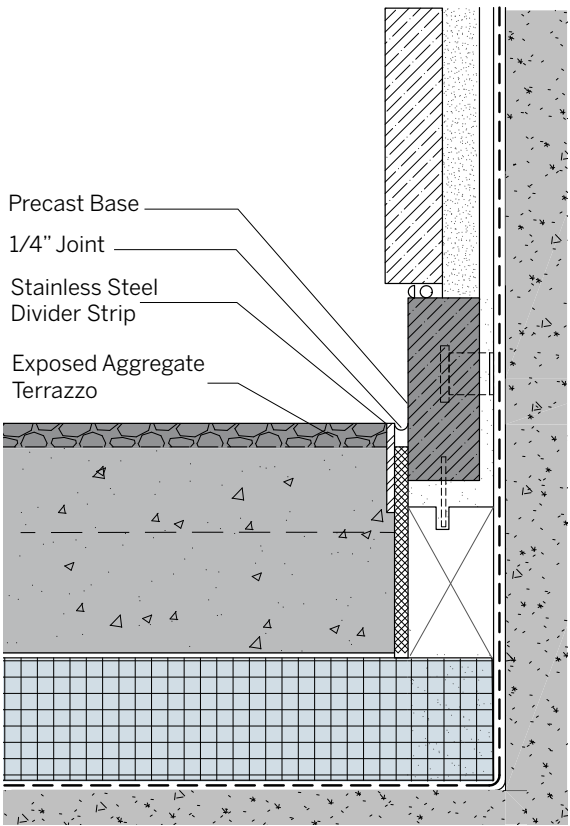


# Plaza Base

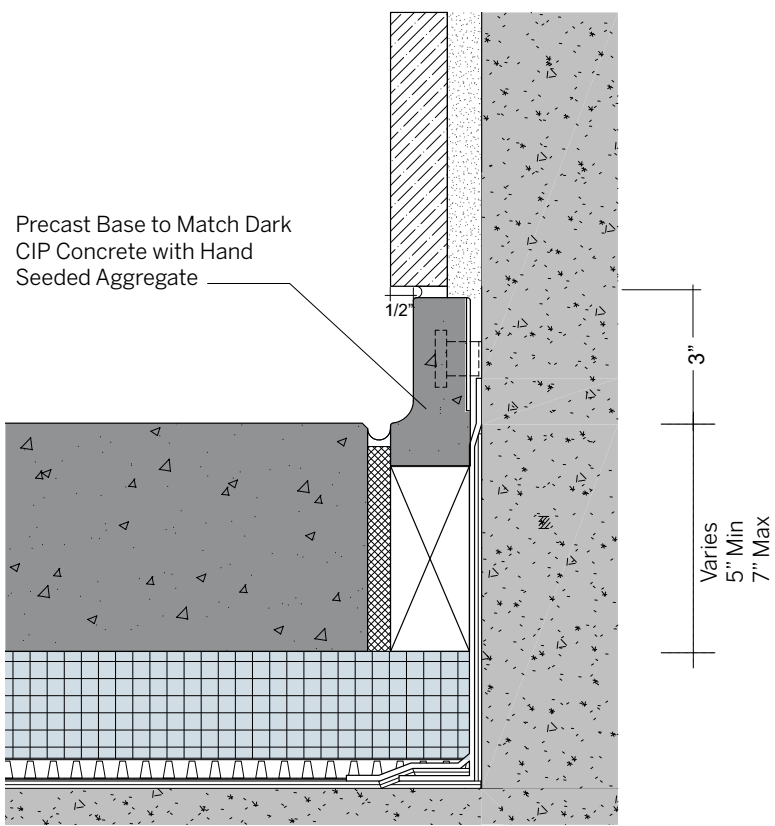
## Base Condition



Original Base Detail



Existing Base Detail



Proposed Base Detail

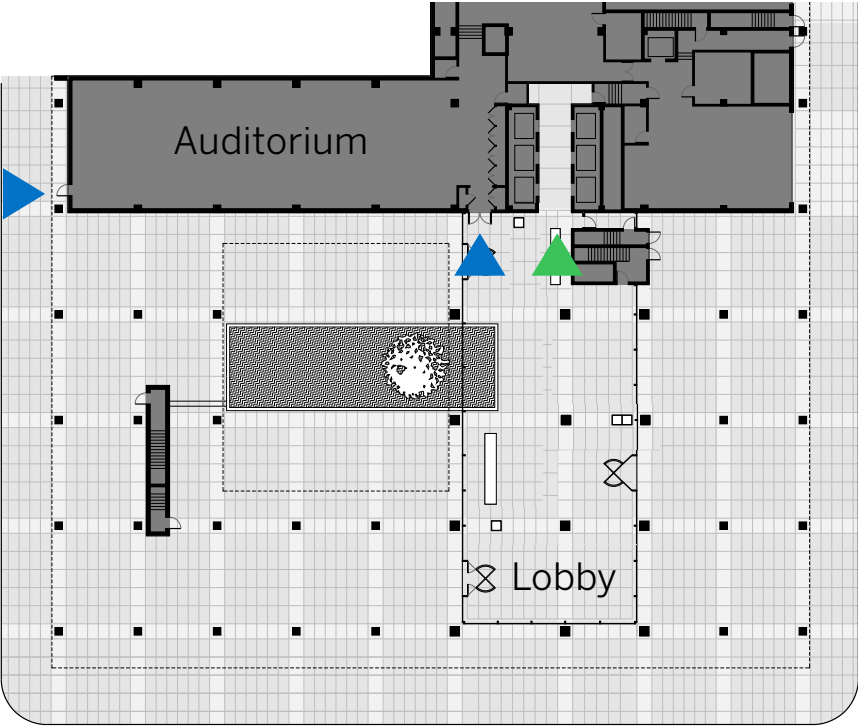


# Black Limestone Wall Openings

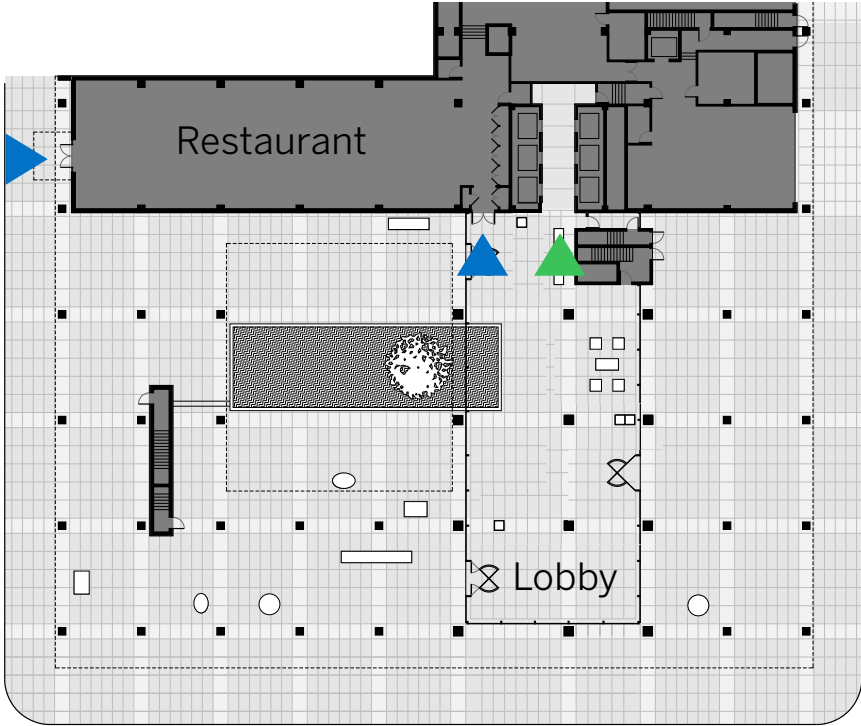




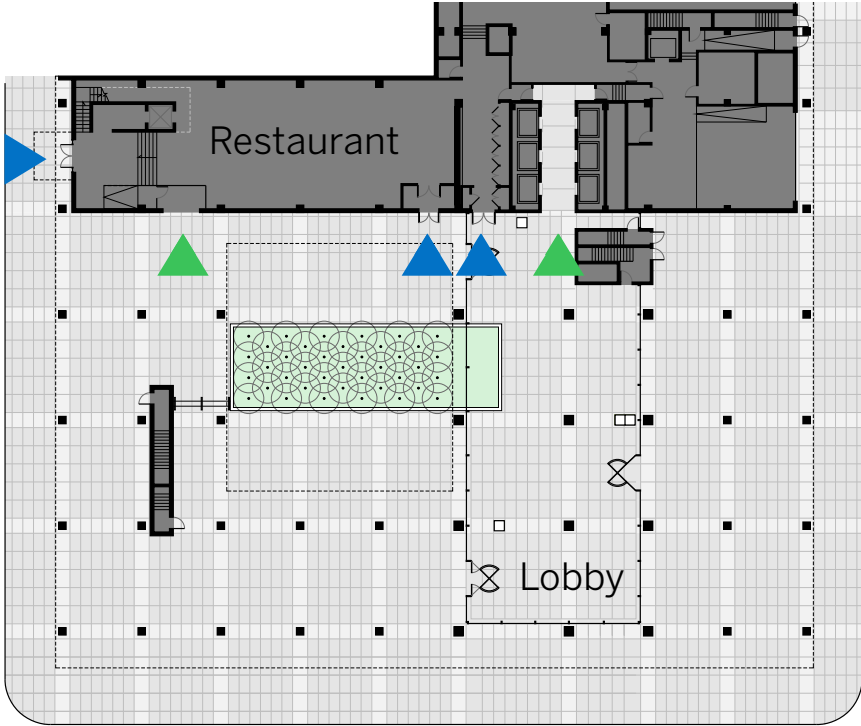
# Black Limestone Wall Openings



Original



Existing



Proposed

- ▶ Stainless Steel Doors
- ▶ Opening



# Black Limestone Wall Openings

Program Change



Original - Display Kitchen and Auditorium



Existing - Restaurant



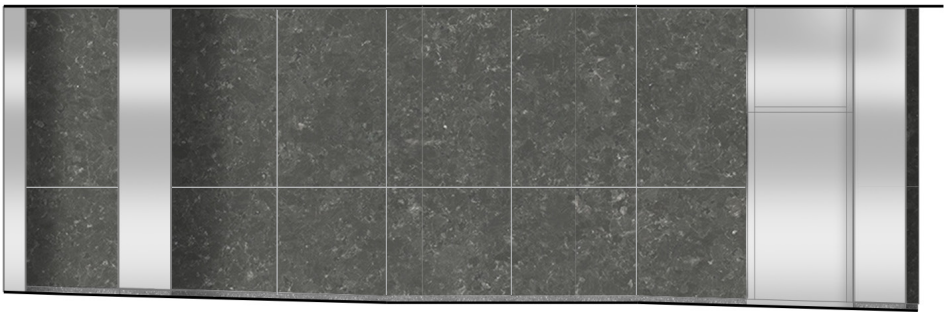
# Black Limestone Wall Openings

Previously Approved

Certificate of Appropriateness issued 5/9/2002  
COFA 02-6346



Existing Photo at 53rd Street



Original Elevation at 53rd Street



← 2 Panels →

Existing Elevation at 53rd Street



# Black Limestone Wall Openings

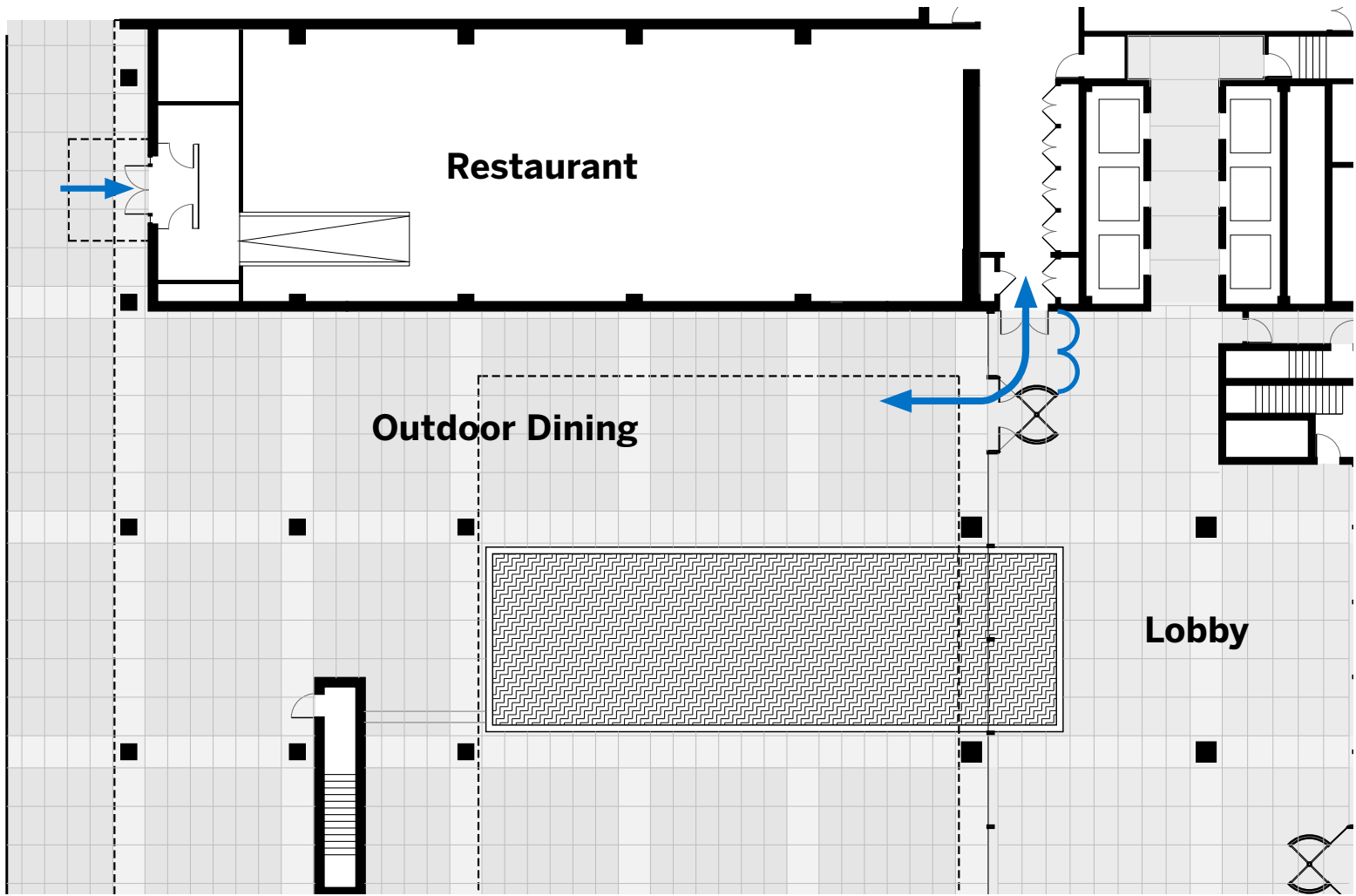
Existing Plaza Outdoor Dining





# Black Limestone Wall Openings

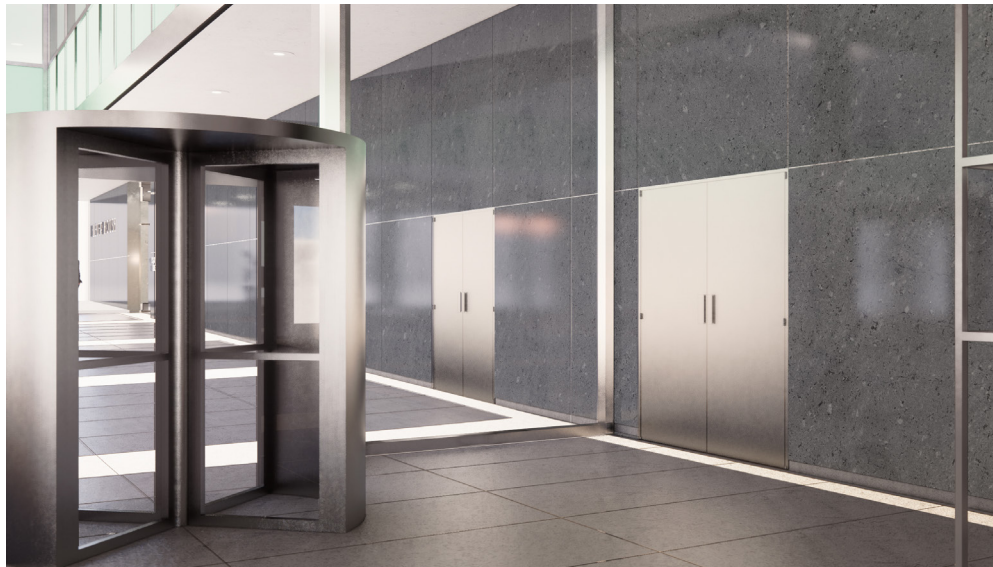
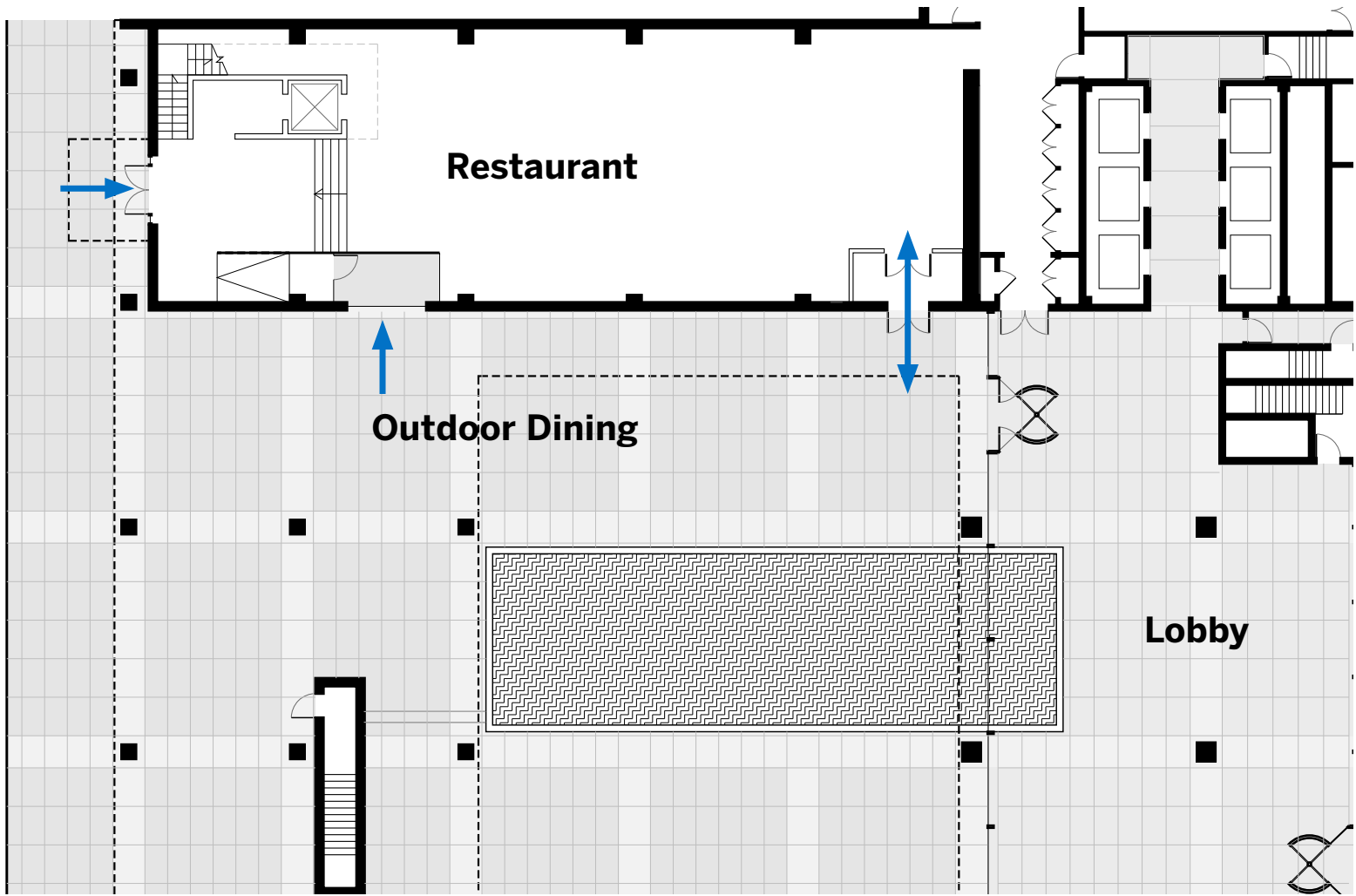
Existing Restaurant Service Path





# Black Limestone Wall Openings

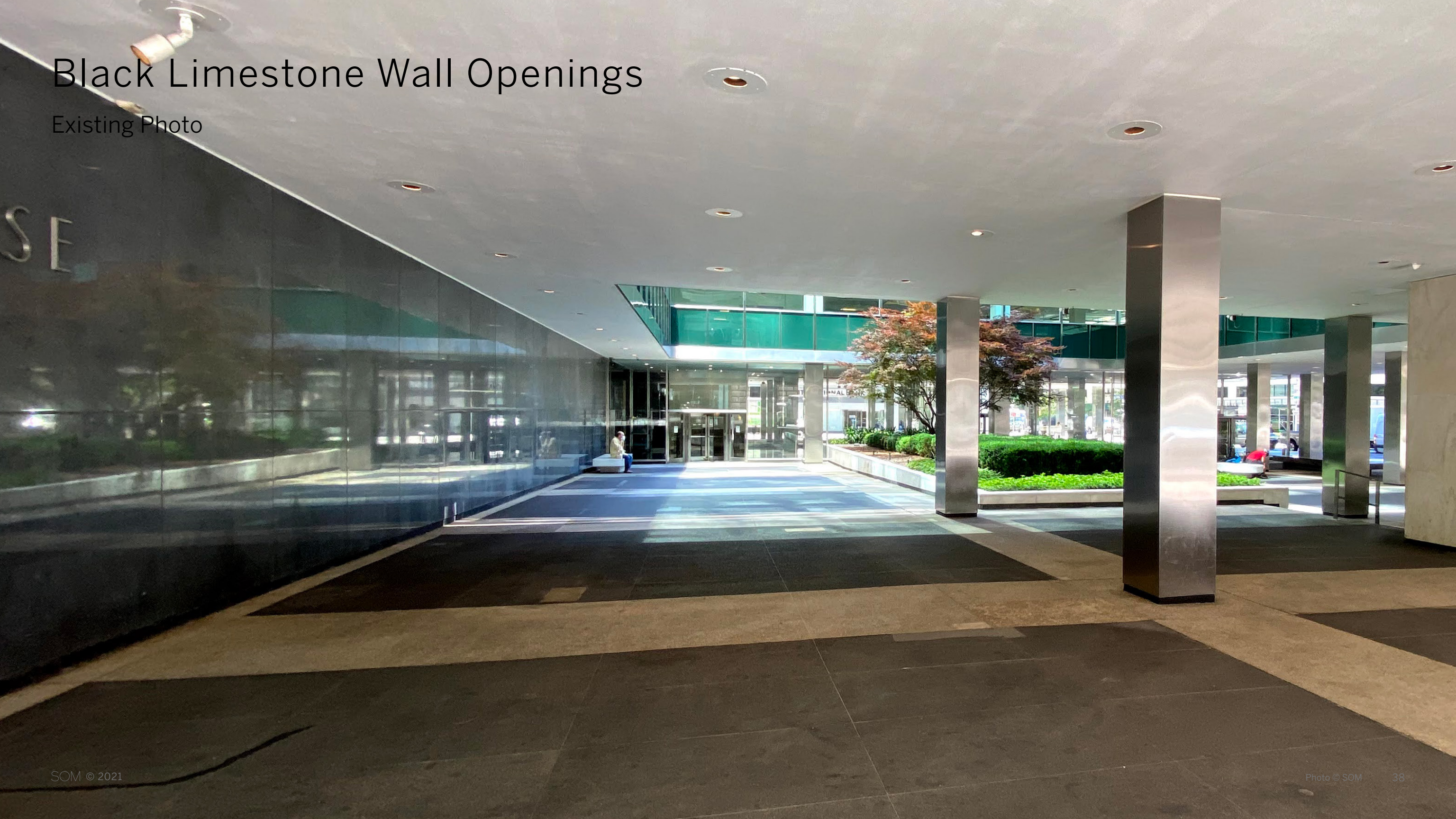
Proposed New Connection to Restaurant





# Black Limestone Wall Openings

Existing Photo





# Black Limestone Wall Openings





# Black Limestone Wall Openings





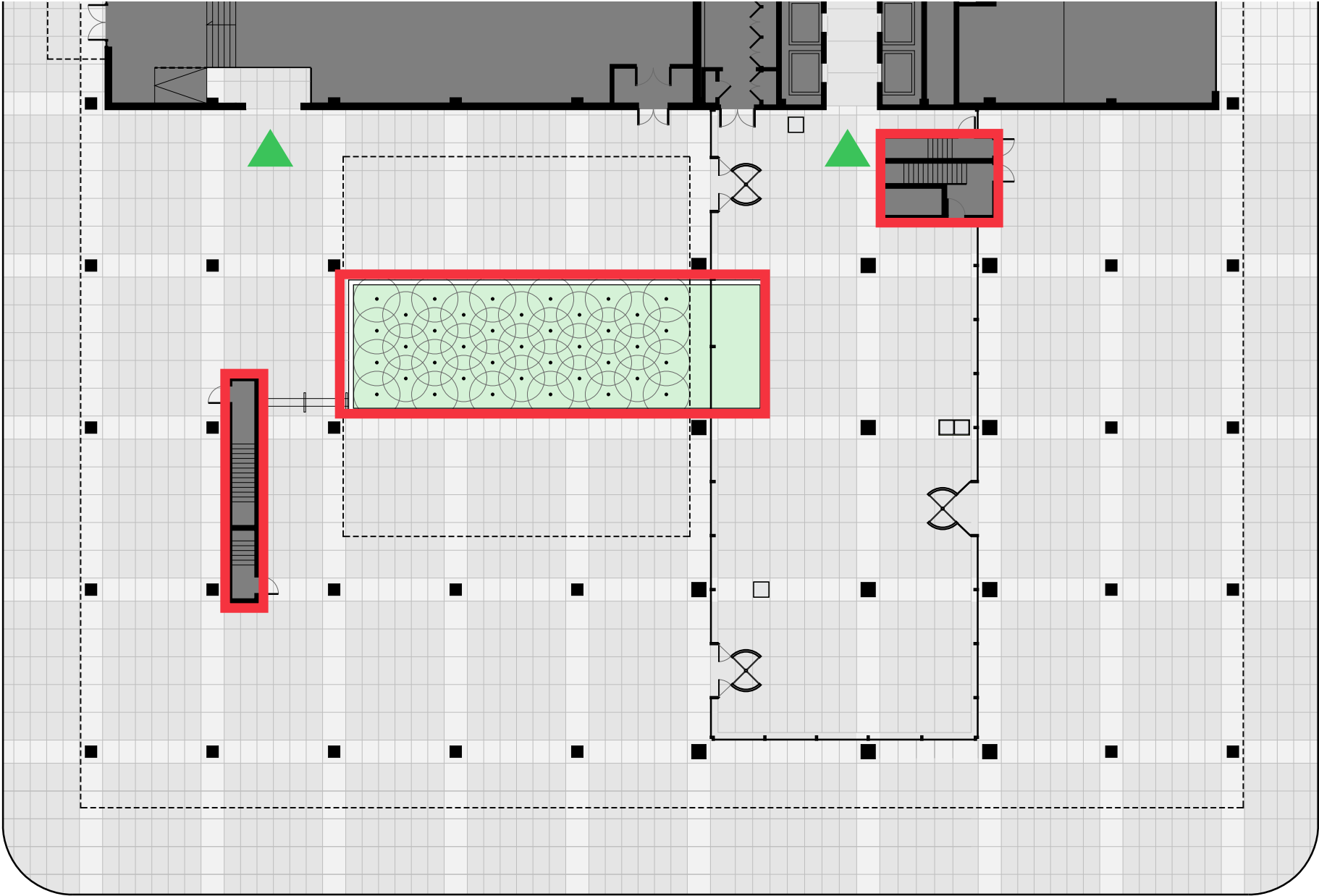
# Black Limestone Wall Openings





# Black Limestone Wall Openings - Full Height

Proposed Location



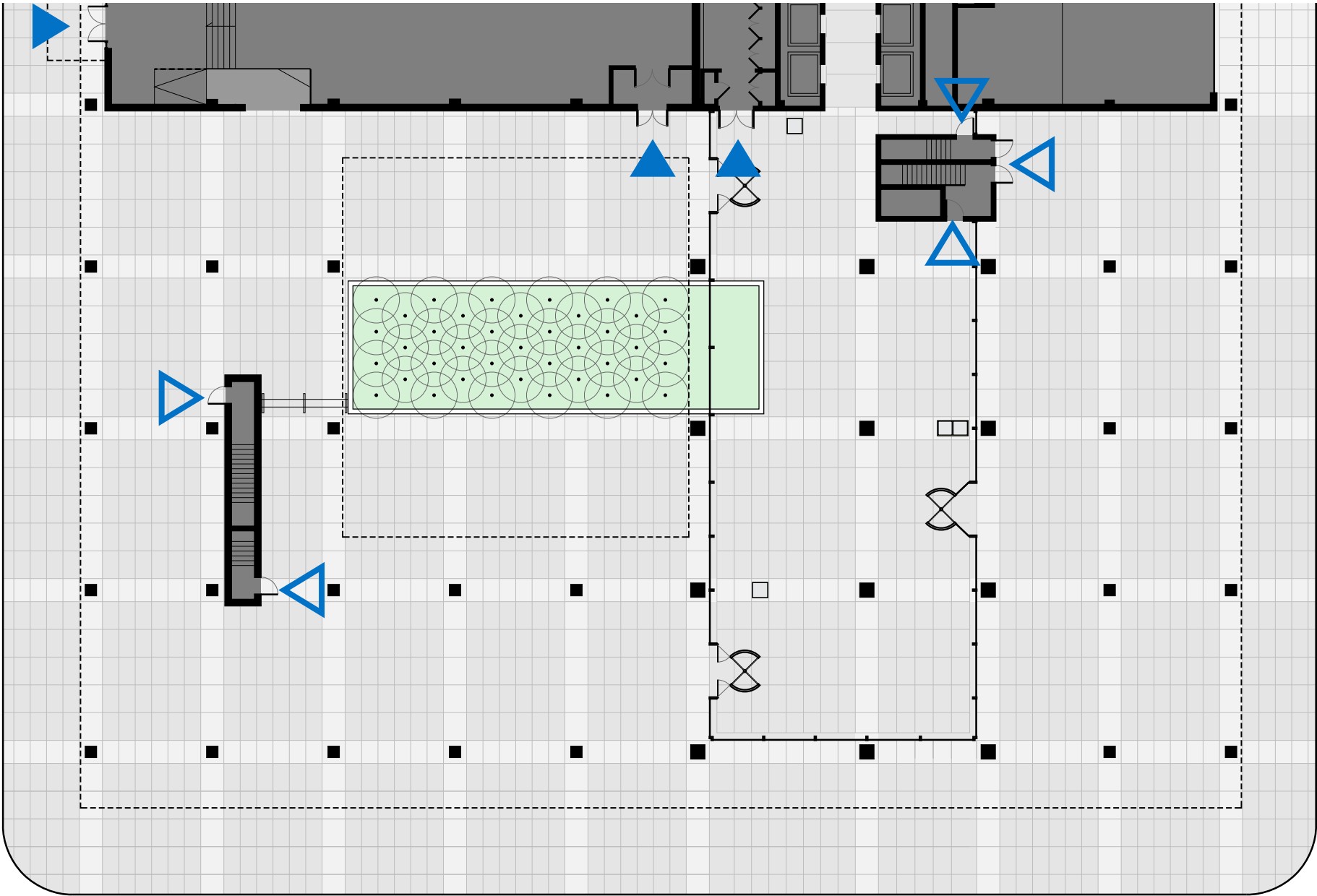
- ▶ Stainless Steel Doors at Black Limestone
- ▶ Stainless Steel Doors at White Marble
- ▶ Opening



# Black Limestone Wall Openings - Stainless Steel Doors

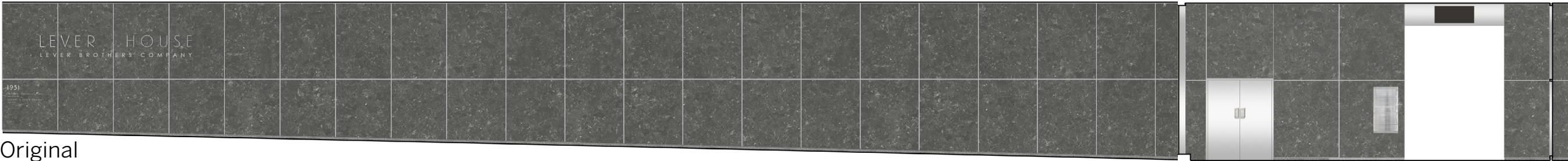
Proposed Location

- ▶ Stainless Steel Doors at Black Limestone
- ▷ Stainless Steel Doors at White Marble
- ▶ Opening

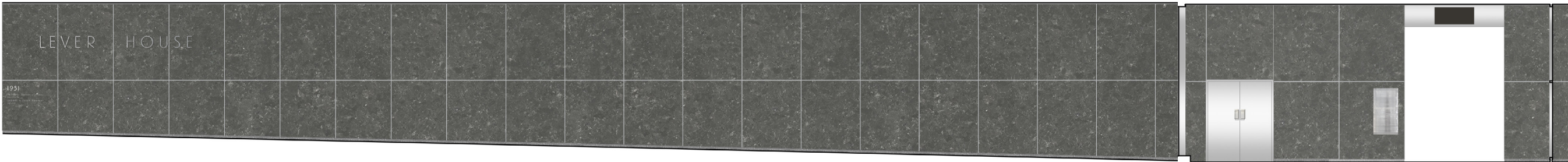




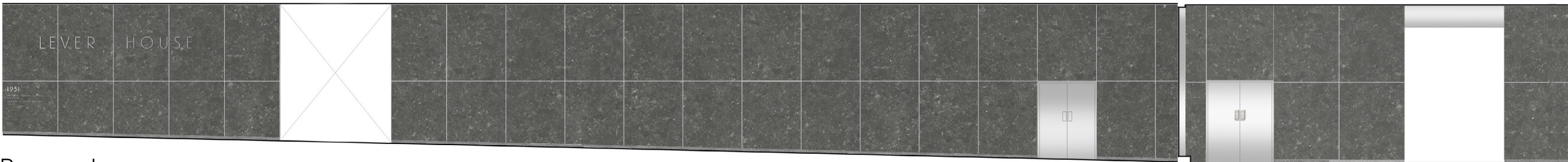
# Black Limestone Wall Openings



Original



Existing



Proposed

← 2 Panels →  
└ 5'3" ─ 5'3" ┘

← 1 Panel →  
└ 5'3" ┘



# Black Limestone Wall Openings

Existing Photo

















# Black Limestone Wall Openings

Existing Photo





HOUSE



# New Signage

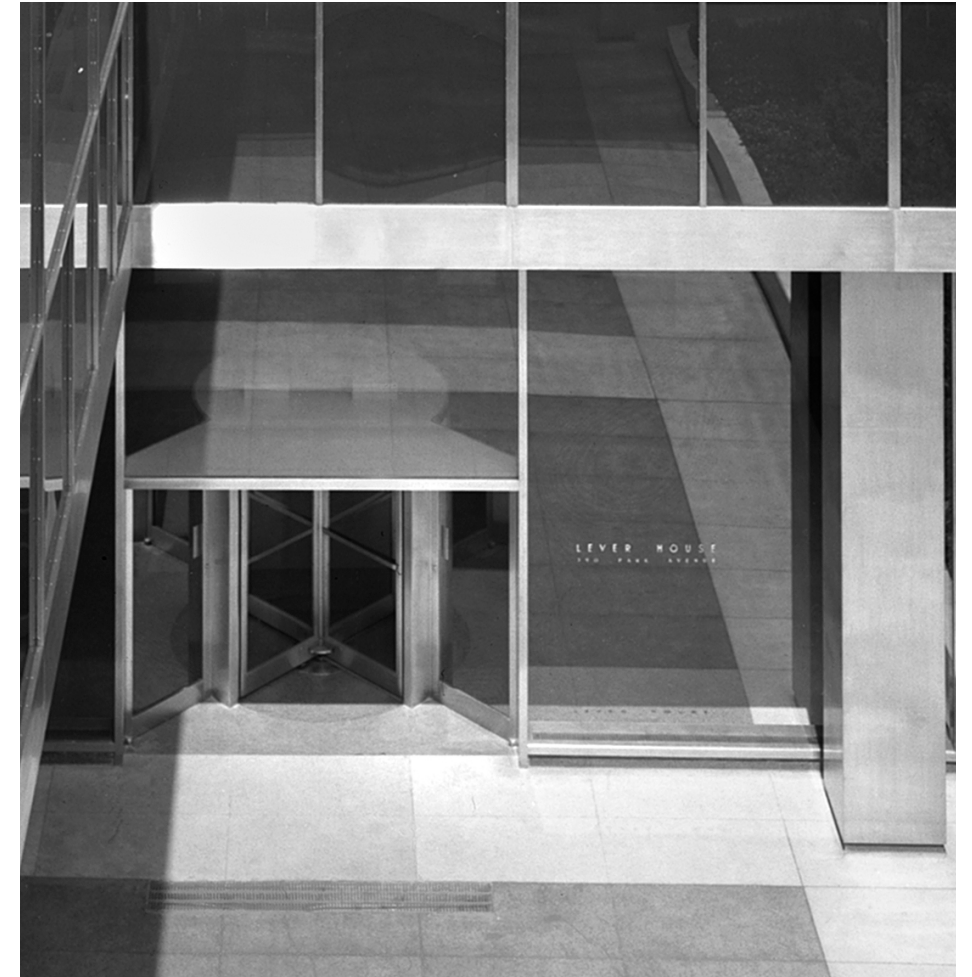
Original Signage



At Black Limestone Wall



At Park Avenue Facade



At Southwest Revolver



# New Signage

## Existing Signage



At Black Limestone Wall

At Park Avenue Facade

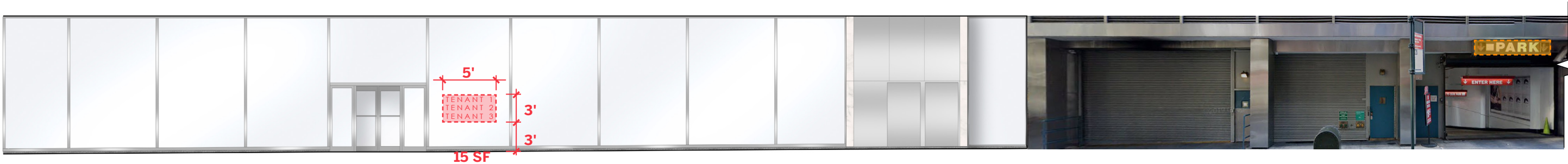
At Southeast Revolver

At Restaurant

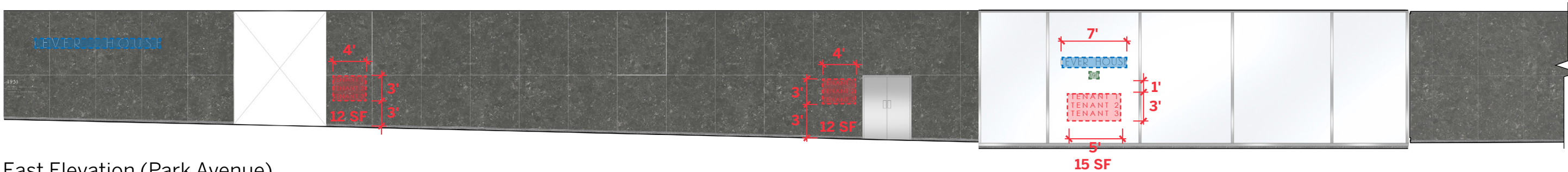


# New Signage

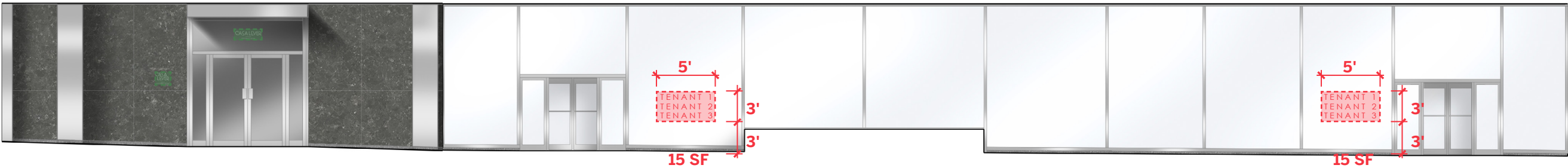
## Proposed Signage



North Elevation (54th Street)



East Elevation (Park Avenue)



South Elevation (53rd Street)

- Original Existing Signage
- Non Original Existing Signage
- New Signage
- Existing Signage to be Replaced



# New Signage

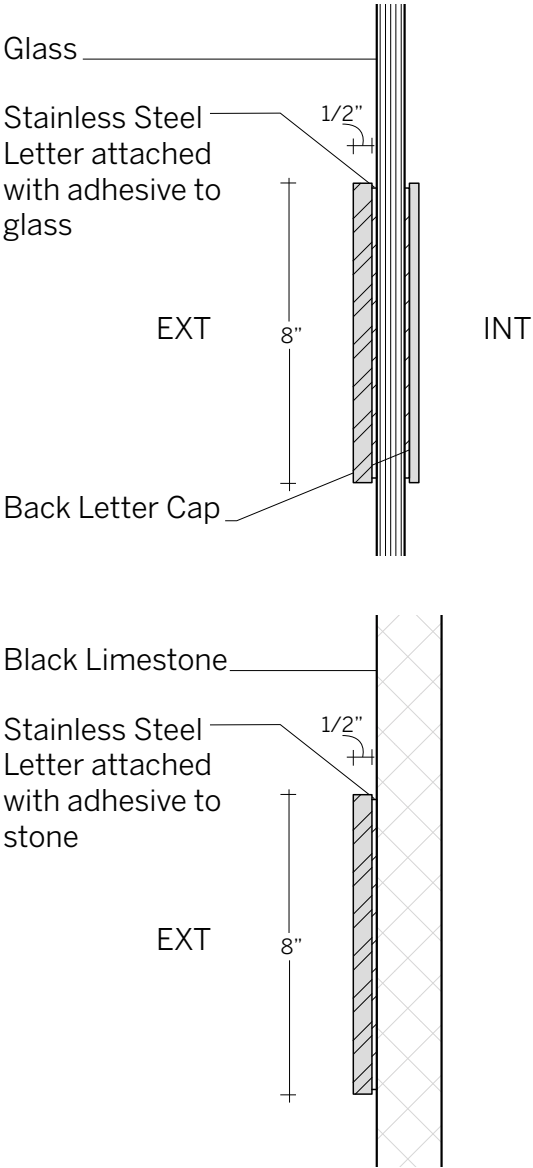
Proposed Signage



Park Avenue



Adjacent to Entrances



Mounting Details

\*New Signage will be Adhesive Mounted Stainless Steel Letter Forms in "Lever House" Font.



---

# Restoration Work



# Stone Restoration



Black Limestone - Existing Condition



Black Limestone - Restoration Mockup



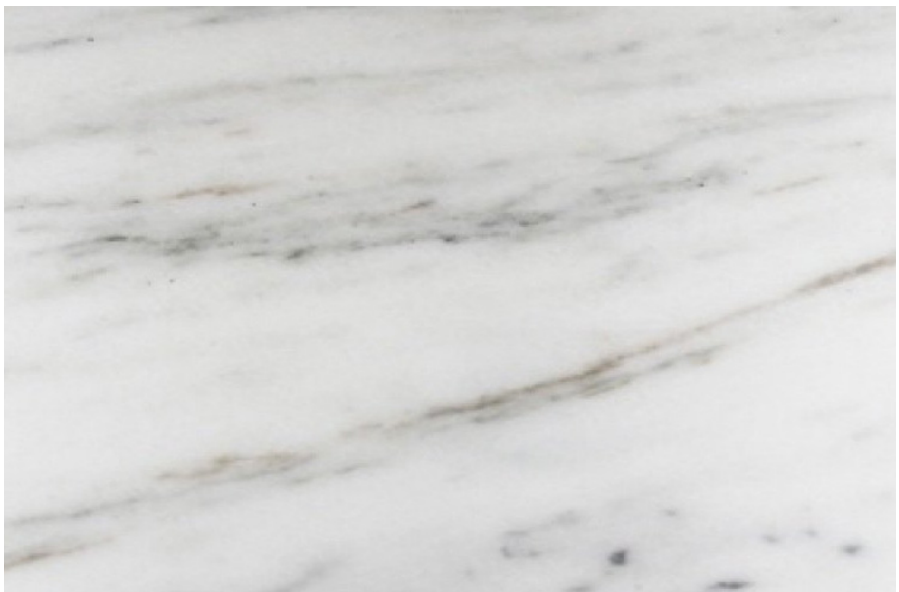
White Marble at Stairs - Existing Condition



White Marble at Stairs - Restoration Mockup



White Marble at Planter - Existing Condition



White Marble at Planter - Replacement in Kind  
Imperial Danby Sample

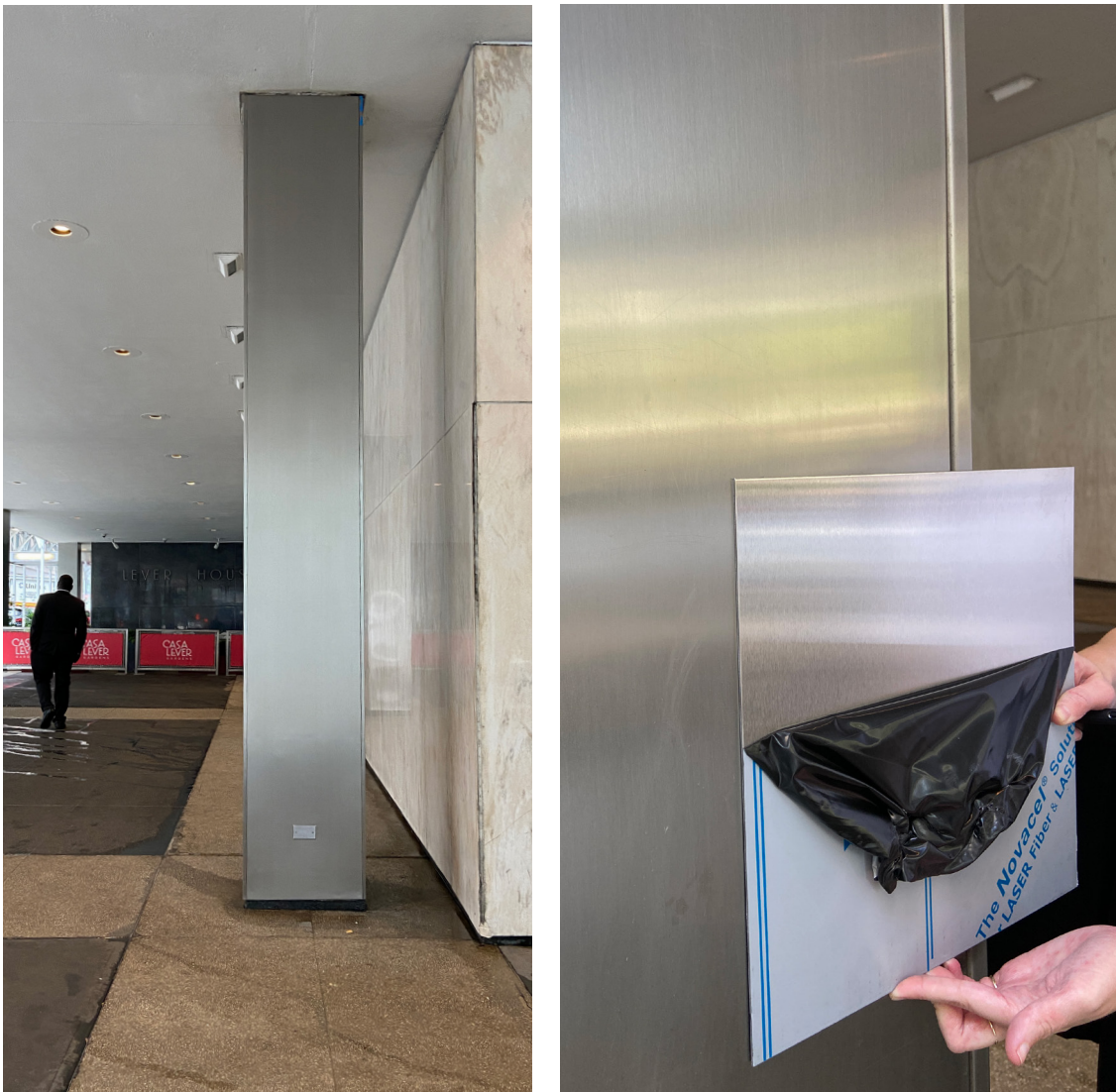


# Stainless Steel Restoration



Stainless Steel Column - Existing Condition

Stainless Steel Storefront - Existing Condition



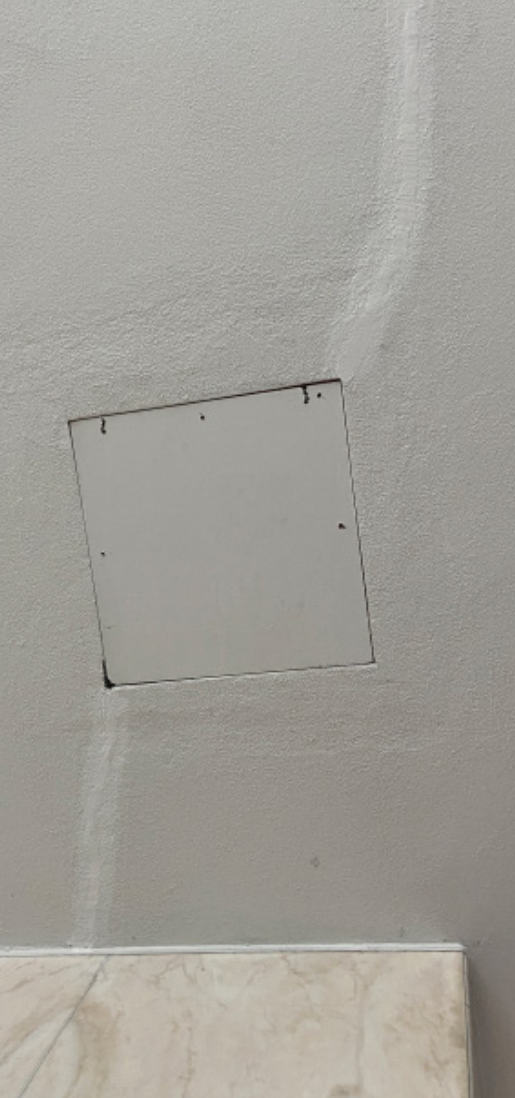
Stainless Steel - Restoration Mockup



# Plaza Ceiling Restoration



Plaza Ceiling - Existing Condition





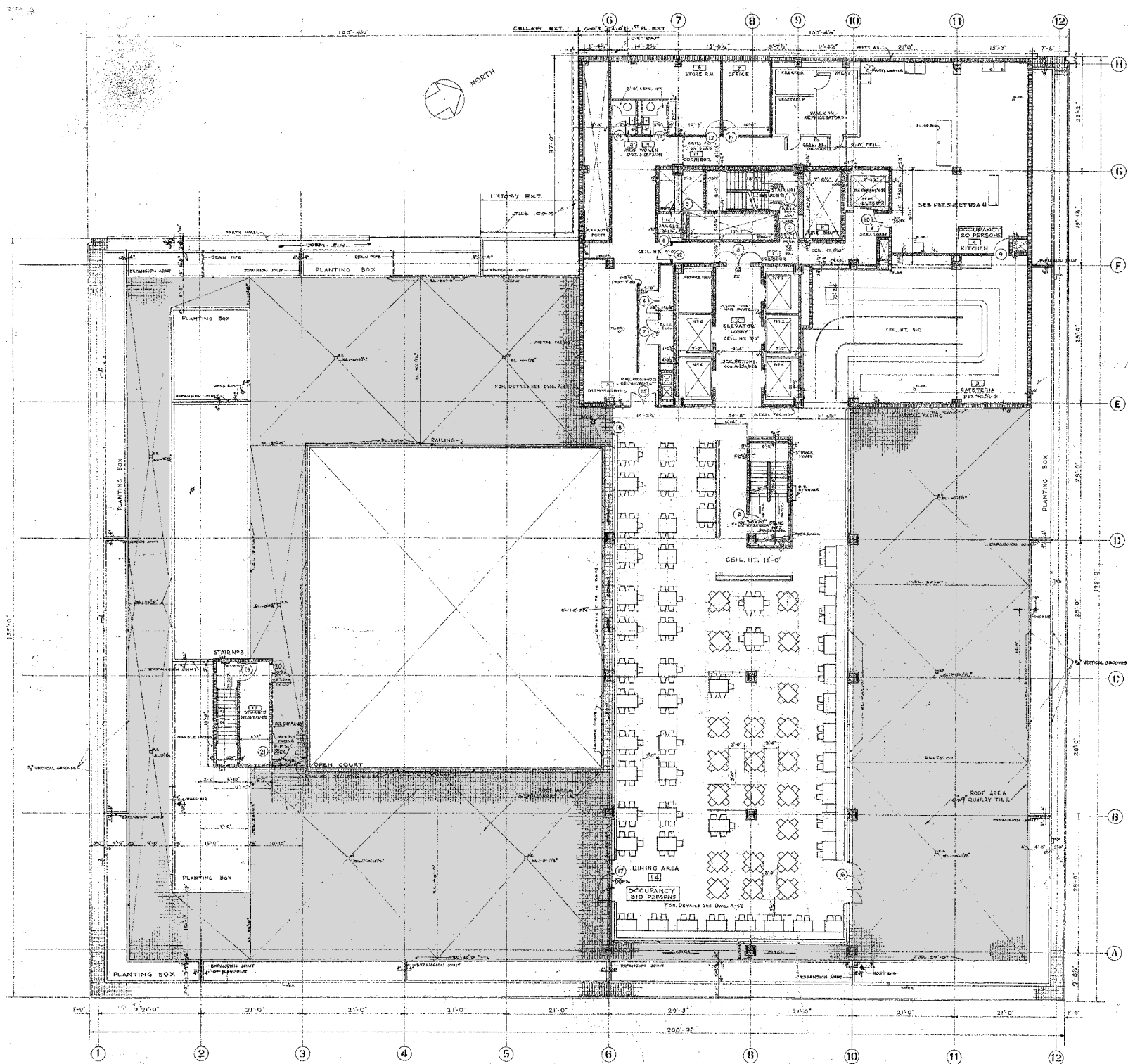
---

## Level 3 Terrace



# Level 3 Terrace

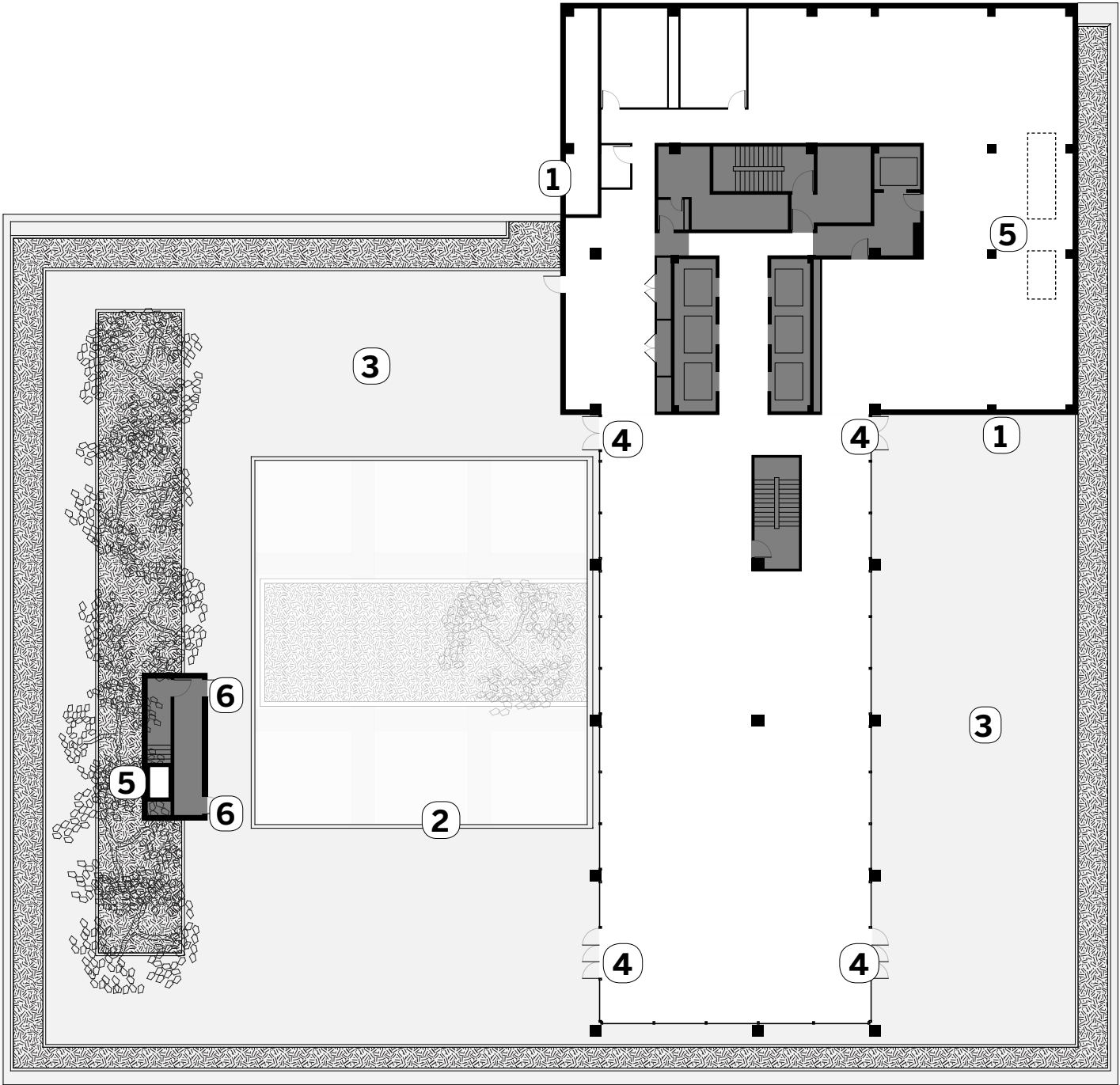
## Original Plan





# Level 3 Terrace

Existing Plan



- 1 - Non Original Fritted Glass Facade
- 2 - Non Original Glass Infill & Base Detail
- 3 - Non Original Paving
- 4 - Non Original Doors
- 5 - Non Original Skylight
- 6 - Non Original Exit Sign



## Original Condition 1950's





# Original Condition, c. 1952



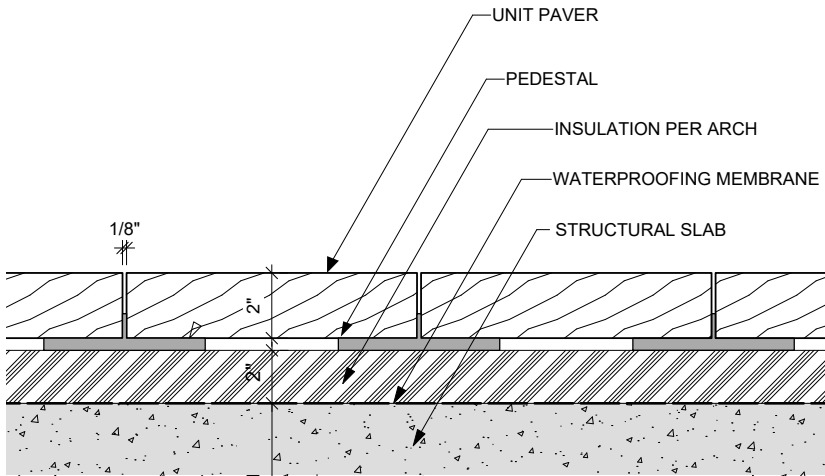
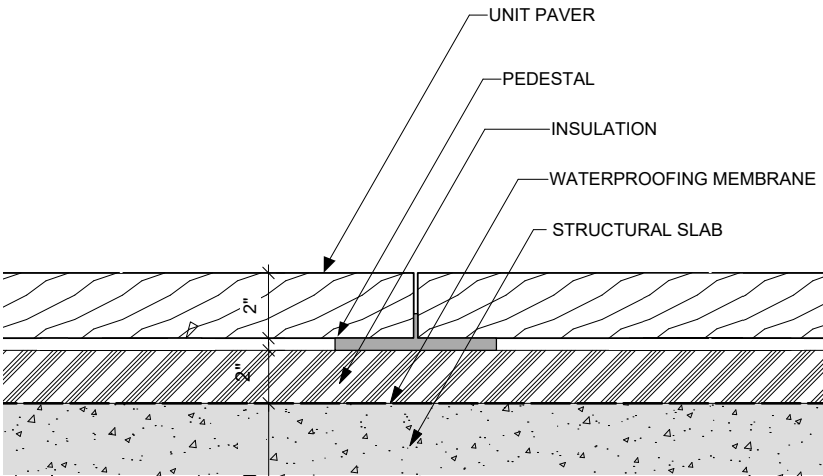
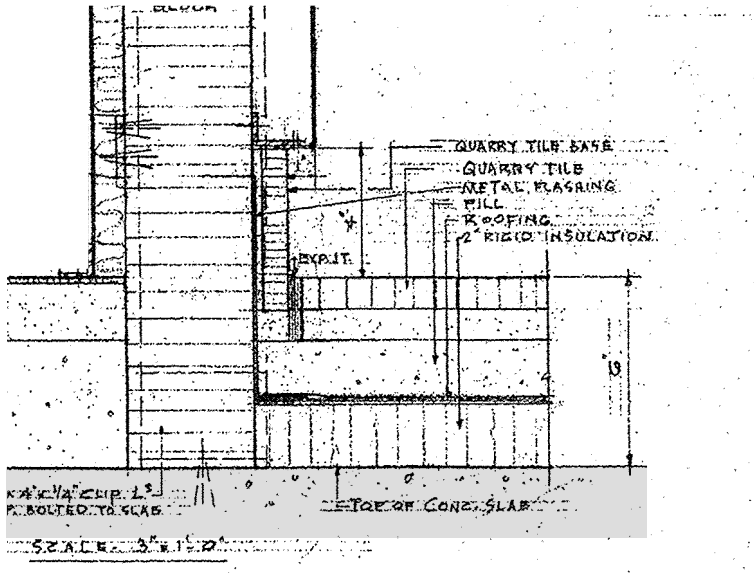


# Existing Condition





# Non-Original Paving Replacement



Original Quarry Tile



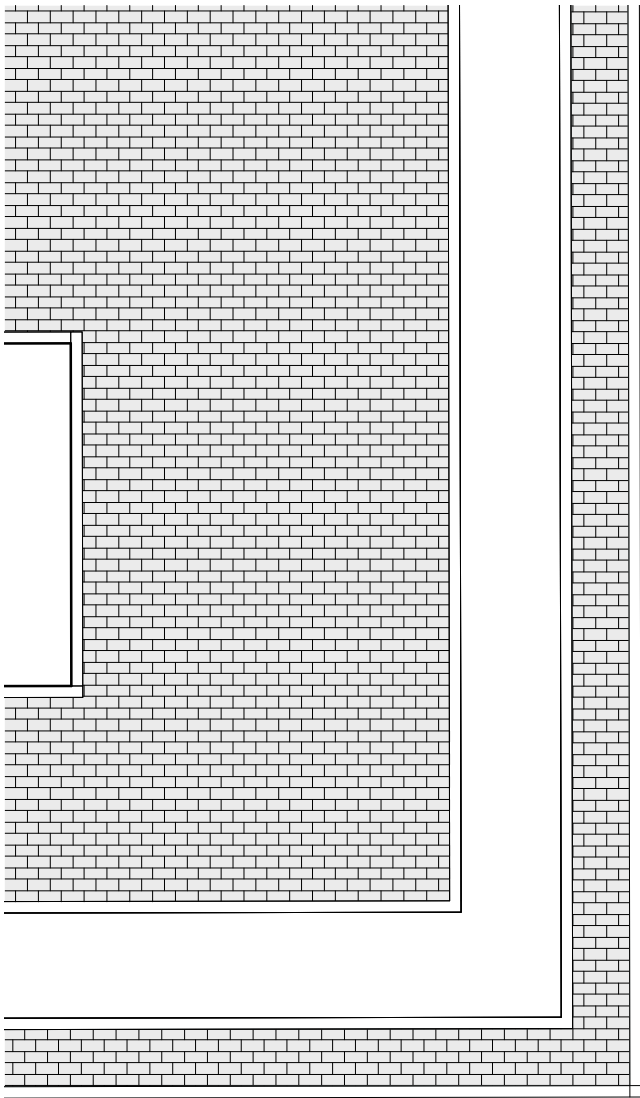
Existing Precast Pavers



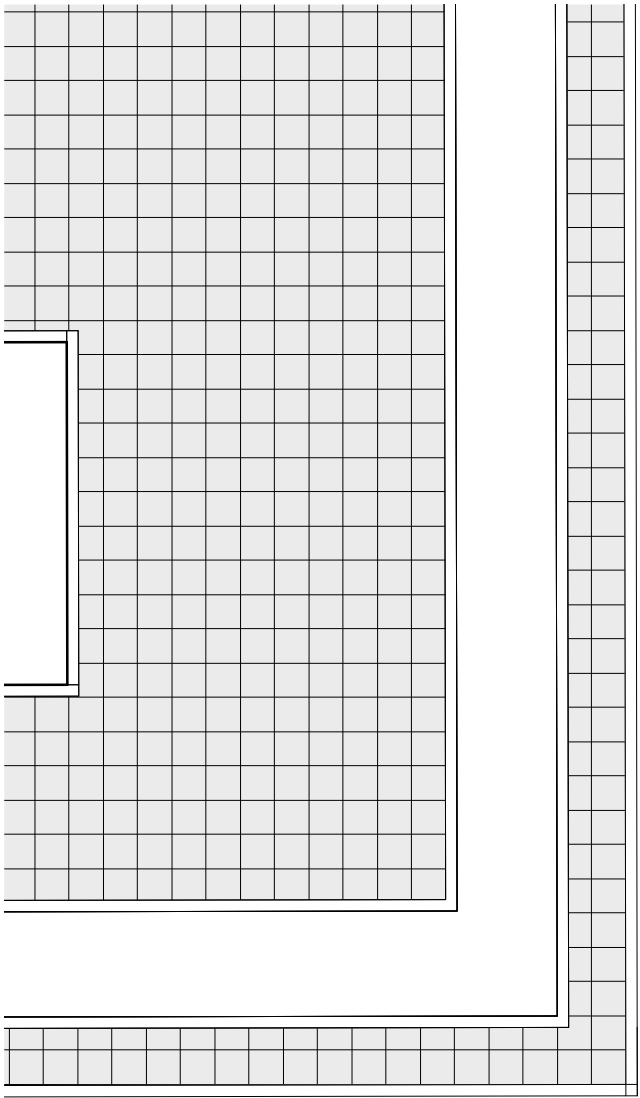
Proposed Precast Pavers



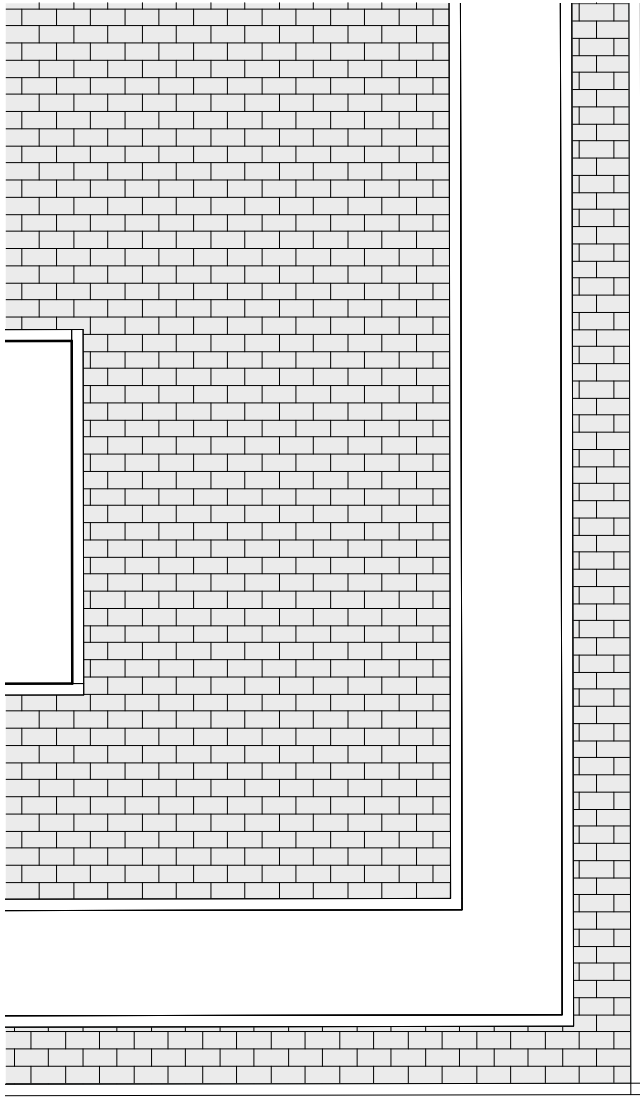
# Non-Original Paving Replacement



Original 6" x 9" running bond



Existing 18" x 18" stack bond



Proposed 9" x 18" running bond

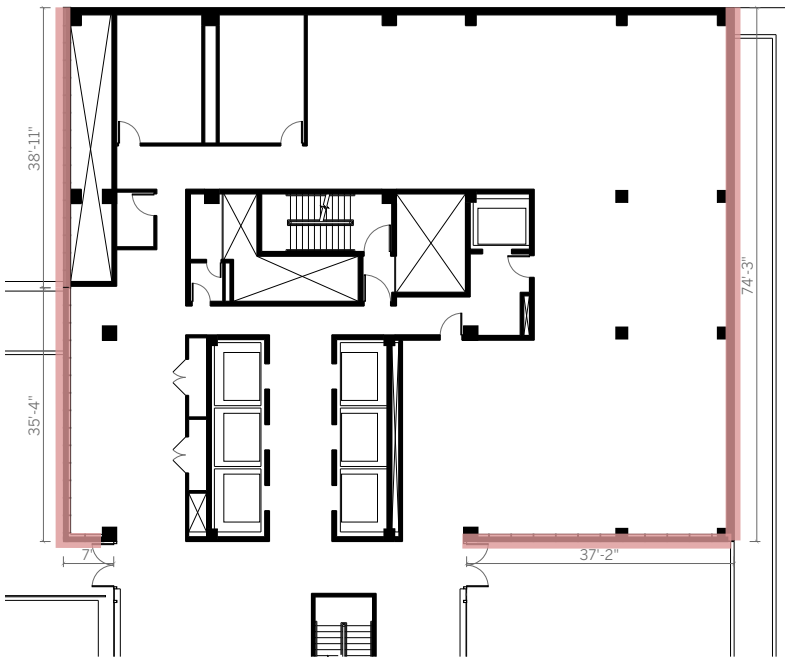






# Aluminum Panel Facade Replacement

Original Condition



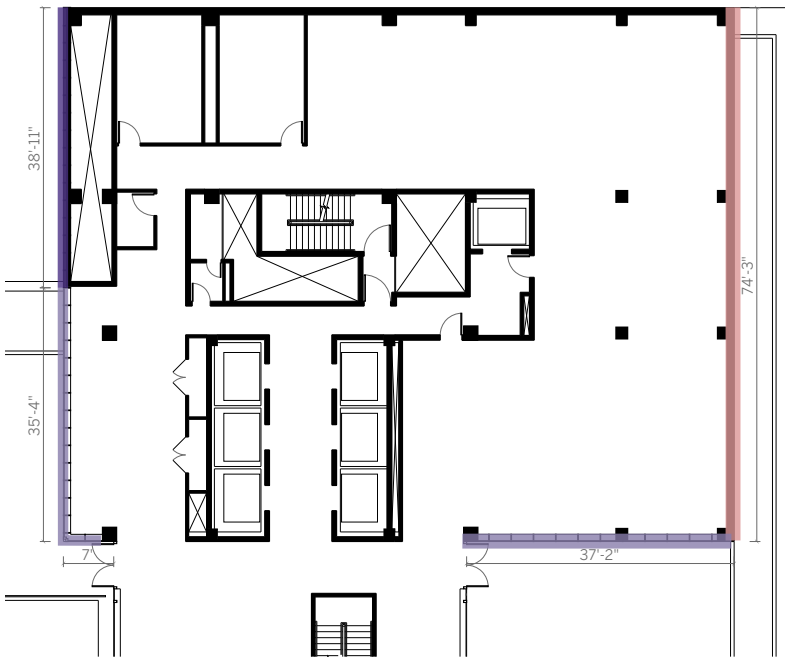
Original Aluminum Panels





# Aluminum Panel Facade Replacement

Existing Condition - Aluminum Replaced with Glass in 2001



- Existing Fritted Glass
- Existing Fritted Glass with Shadow Box
- Existing Aluminum Panels

Fritted Glass Approved by LPC  
COFA 04-6045, docket #04-5448

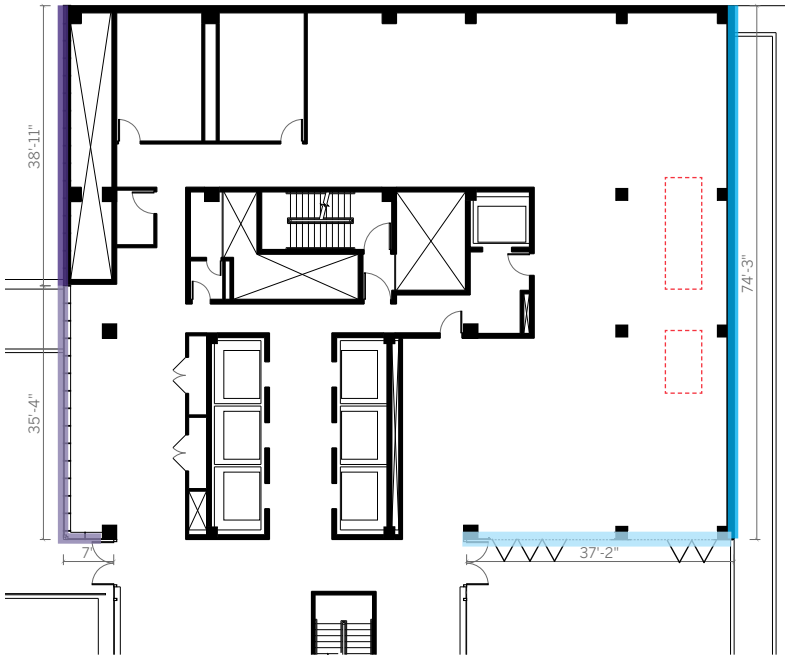


Original Facade Not visible behind Perimeter Planting

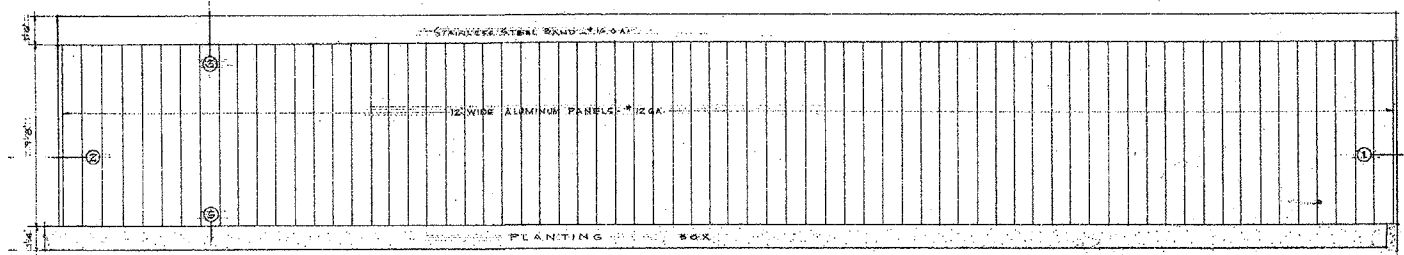


# Aluminum Panel Facade Replacement

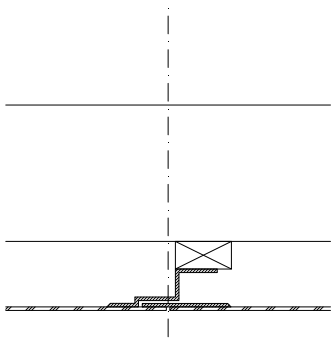
## Proposed Fritted Glass



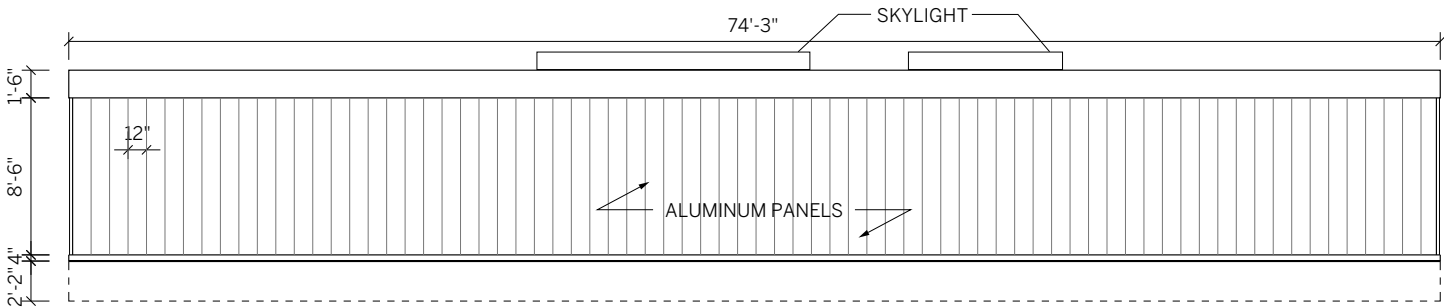
- Existing Fritted Glass
- Existing Fritted Glass with Shadow Box
- New Fritted Glass
- Alteration to Existing Fritted Glass Wall
- Skylight to be Removed



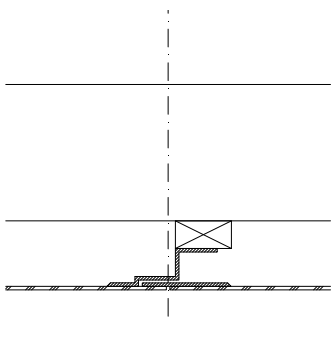
Original North Elevation



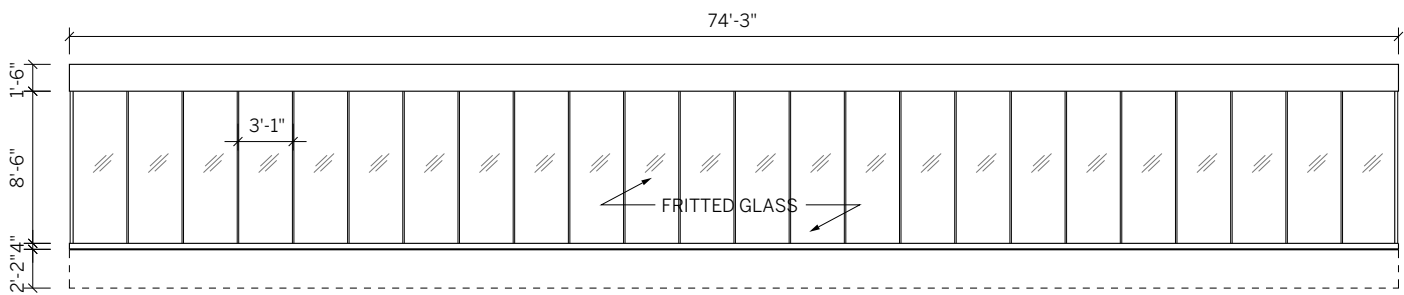
Original Plan Detail



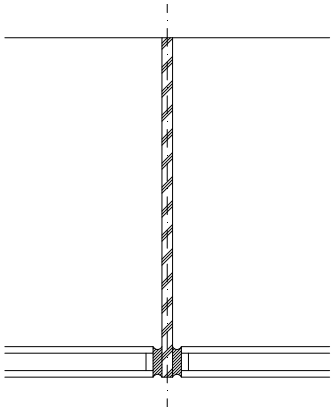
Existing North Elevation



Existing Plan Detail



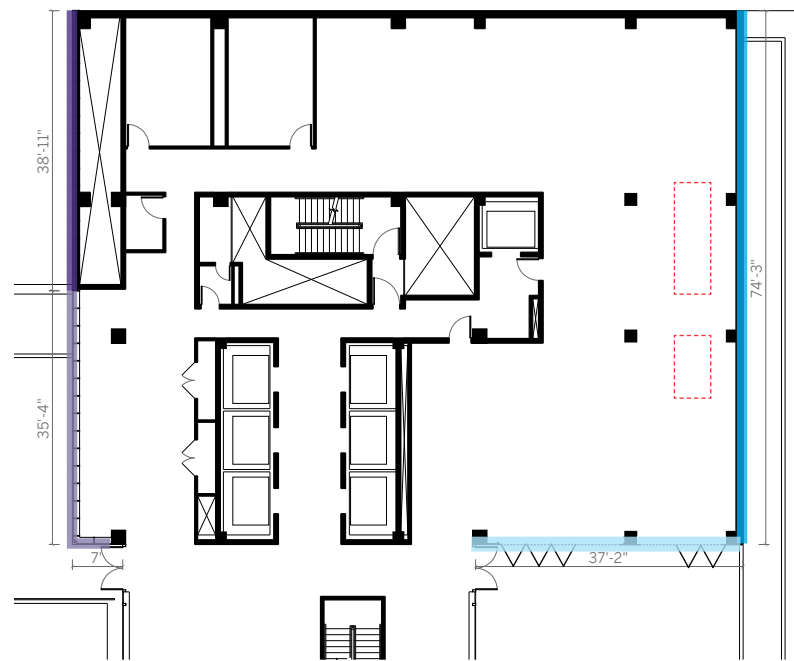
Proposed North Elevation



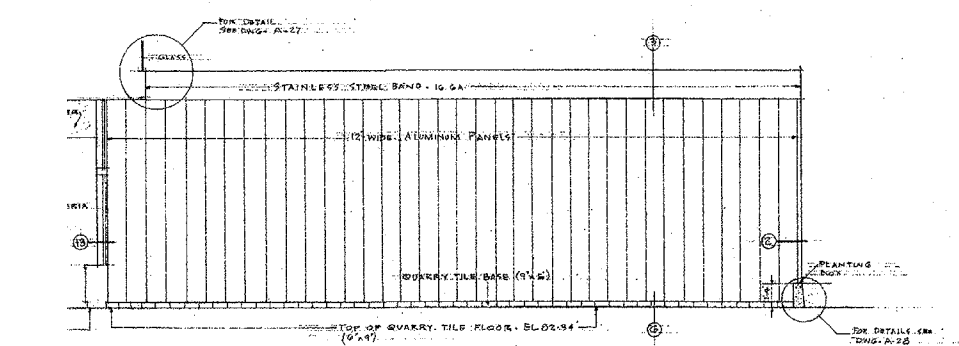
Proposed Plan Detail



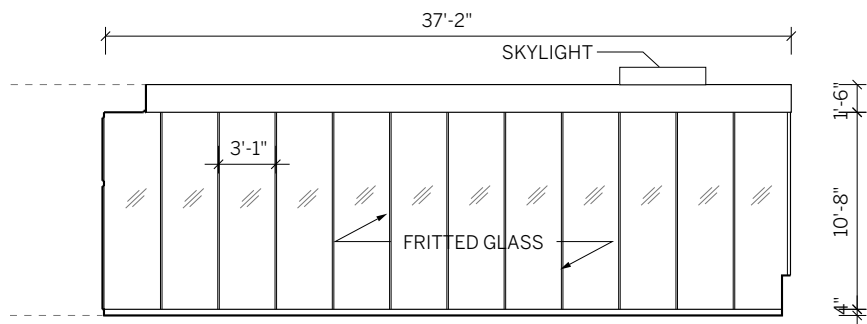
# Non-Original Fritted Glass Facade Alteration



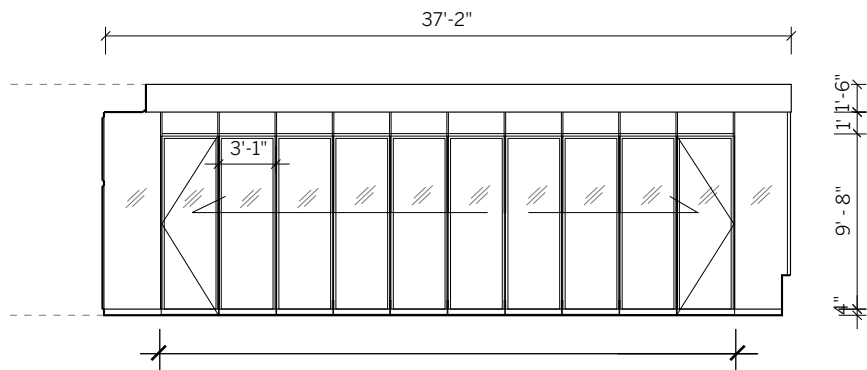
- Existing Fritted Glass
- Existing Fritted Glass with Shadow Box
- New Fritted Glass
- Alteration to Existing Fritted Glass Wall
- Skylight to be Removed



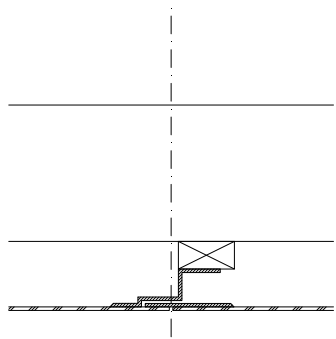
Original East Elevation



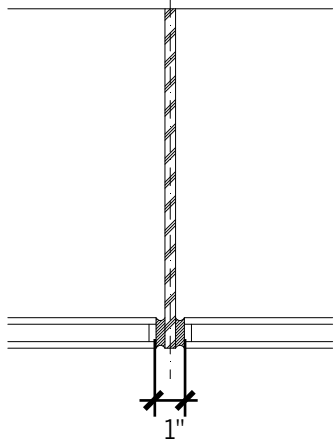
Existing East Elevation



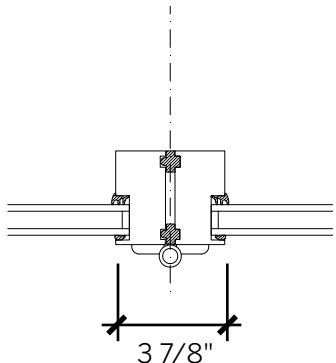
Proposed East Elevation



Original Plan Detail



Existing Plan Detail



Proposed Plan Detail



# Fritted Glass

View from NorthWest



Original



Existing



Proposed















Waterman**CLARK**

**Brookfield** Properties

SOM



HIGGINS QUASEBARTH & PARTNERS, LLC  
CONSULTANTS IN THE PRESERVATION AND REHABILITATION OF HISTORIC PROPERTIES