



# **MARRINER S. ECCLES BUILDING AND FEDERAL RESERVE BOARD-EAST BUILDING RENOVATION AND EXPANSION**

**NATIONAL CAPITOL PLANNING COMMISSION - PRELIMINARY REVIEW**

AUGUST 28, 2020



**FORTUS**





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# PROJECT NARRATIVE





Figure 1-1: South facade of Eccles Building looking northwest



# I. PROJECT OVERVIEW

## I.1 PROJECT SUMMARY

The Board of Governors of the Federal Reserve System (Board) proposes to renovate and expand the Marriner S. Eccles Building (Eccles Building) at 2051 Constitution Avenue NW and to renovate and construct an addition on the Federal Reserve Board-East Building (FRB-East Building) at 1951 Constitution Avenue NW.

The Eccles Building was constructed between 1935 and 1937 as the headquarters of the Board. While there have been periodic modifications and renovations to the building over its 80-year history, many of the building systems are at the end of their useful life, and the building no longer fully serves the Board’s needs.

The FRB-East Building was constructed between 1931 and 1933 for the US Public Health Service. The building has not undergone a comprehensive modernization in decades and does not effectively serve the Board’s needs in its current condition and configuration.

A comprehensive renovation and expansion of these buildings is needed to address a critical backlog of upgrades, to respond to changes in building codes and regulatory requirements, and to meet requirements for information technology, building security, environmental sustainability, and energy efficiency. The project will also address increased utility demands, a growing building population, and technology not anticipated at the time of the

buildings’ original design.

The proposed project will maintain the historic character of the existing buildings and their surroundings, reflecting qualities of stability, dignity, and security that are sensitive to the Board’s civic responsibility as custodian of the central bank of the United States. It will include new state-of-the-art technology for the buildings’ entire infrastructure, security, and technology systems. The project will also improve code compliance as well as enable the Board to incorporate environmentally responsible design approaches that will help to reduce energy consumption and improve indoor environmental quality.

Ultimately, the proposed project will provide a superior work environment to help the Board attract and retain employees, enhance productivity, and foster improvements in operating practices. A contemporary, technology-rich, and collaborative work environment will support the employees’ ability to work safely and effectively.

## I.2 PROJECT OBJECTIVES

The objectives of the project include:

- Modernizing the Eccles Building and the United States Public Health Service Building (now FRB-East)
- Consolidating 1,750 staff on-site and reduce off-site leases

- Improving collaboration and communication, by connecting the Eccles, Martin and FRB East both and grade and below grade
- Providing a modern, efficient workspace
- Supporting health and wellness initiatives
- Facilitating staff retention & recruitment
- Expanding the Board’s goal of transparency and openness
- Making the buildings more energy-efficient and sustainable.

## I.3 AGENCY DESCRIPTION

The Board of Governors, located in Washington, DC and headquartered in the Marriner S. Eccles Building, is the governing body of the Federal Reserve System. It is run by seven members, or “governors,” who are nominated by the President of the United States and confirmed in their positions by the US Senate. The Board of Governors guides the operation of the Federal Reserve System to promote the goals and fulfill the responsibilities given to the Federal Reserve by the Federal Reserve Act.

### I.3.1 EMPLOYMENT

The Federal Reserve Board currently has a workforce of approximately 3,400 employees with a projected growth of approximately 130 employees through 2028.

The Federal Reserve Board will be consolidating their workforce into a campus that includes the following owned buildings:

- Marriner S. Eccles Building
- Federal Reserve Board-East Building
- 1709 New York Avenue Building
- William McChesney Martin, Jr. Building.

Additionally, the Board is currently housed in two leased buildings including:

- 1801 K Street
- International Square.

The Martin Building is currently being renovated. When complete, the Martin Building will become the swing space for staff in the Eccles Building during the construction phase of the proposed project.

## I.4 NCPC PLANS AND POLICIES

The project is consistent with the 2016 update of the Comprehensive Plan for the National Capital, Federal Elements, and the Monumental Core Framework Plan. The project adheres to the comprehensive plan’s guiding principles by promoting high quality design and development, balancing accessibility and security, preserving historic properties, preparing for the impacts of climate change, and promoting non-auto transportation alternatives, including transit, walking, and bicycling.



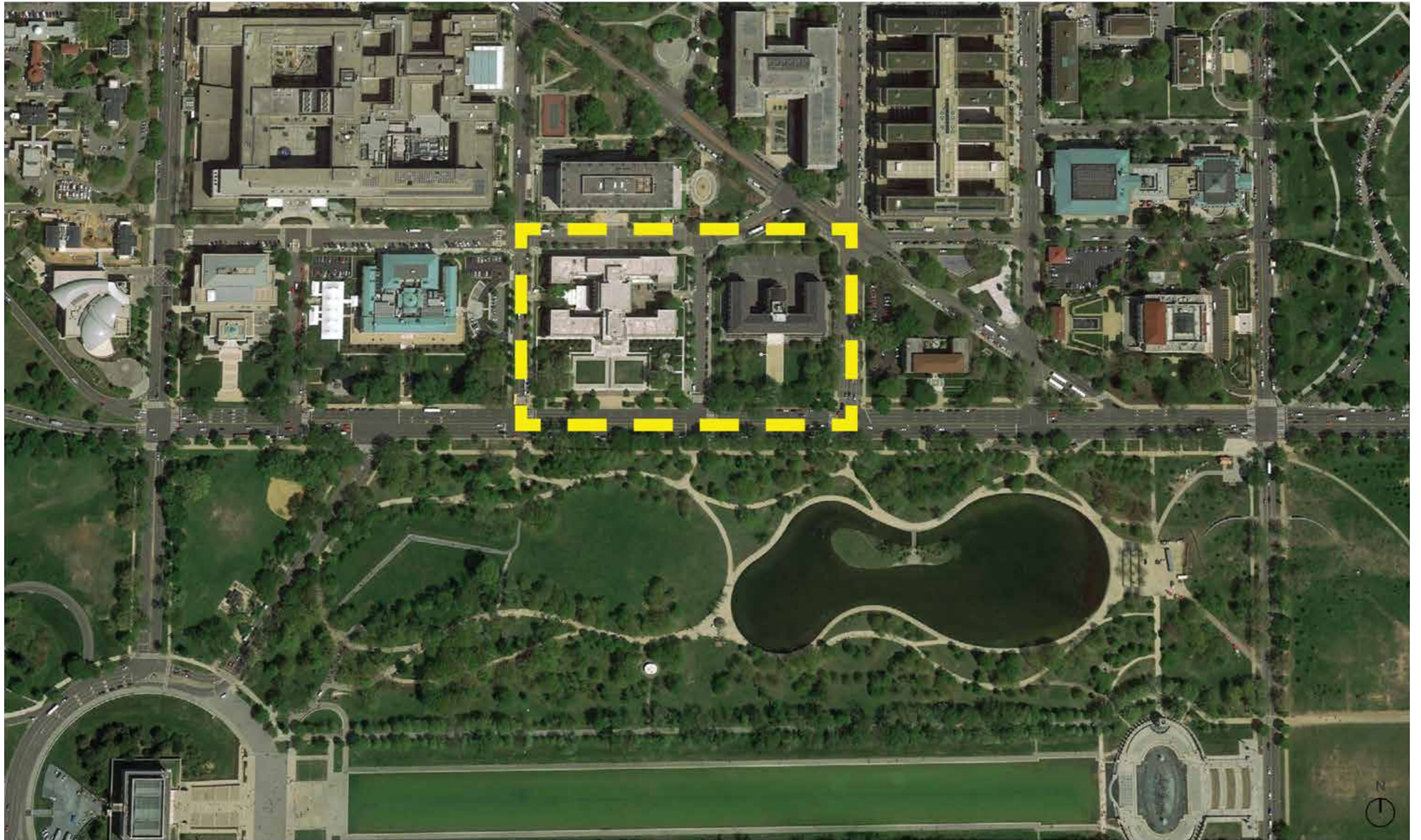


Figure 1-2: Location Map and Site Boundaries



## 1.5 AREA DESCRIPTION

The project area is located in the Foggy Bottom neighborhood of Northwest Washington, DC. Both buildings face south on Constitution Avenue NW, across from the National Mall. The Eccles Building occupies the entire block bounded by 21st Street NW on the east, 20th Street NW on the west, and C Street NW on the north. Directly to the west, the FRB-East Building sits on an entire block bounded by 20th Street NW to the East, 19th Street NW to the west, and C Street NW to the north. Completed in the 1930s, both buildings stand prominently within a group of monumental buildings along Constitution Avenue NW that frame the Lincoln Memorial to the southwest.

Located directly to the north of the Eccles Building and northwest of the FRB-East Building is the Board's William McChesney Martin, Jr. Building, which was completed and dedicated in 1974. The Martin Building will become the primary entrance and security screening area for employees of the Martin, Eccles, and FRB-East Buildings.

## 1.6 BUILDING AREA AND SITE COVERAGE

The approximate existing gross site areas and existing building areas are listed below.

### 1.6.1 ECCLES BUILDING

Gross Existing Building Area: 276,000 square feet  
Gross Site Area: 4.16 acres (181,071 square feet)

### 1.6.2 FRB-EAST BUILDING

Gross Existing Building Area: 126,388 square feet  
Gross Site Area: 3.18 acres (138,512 square feet)

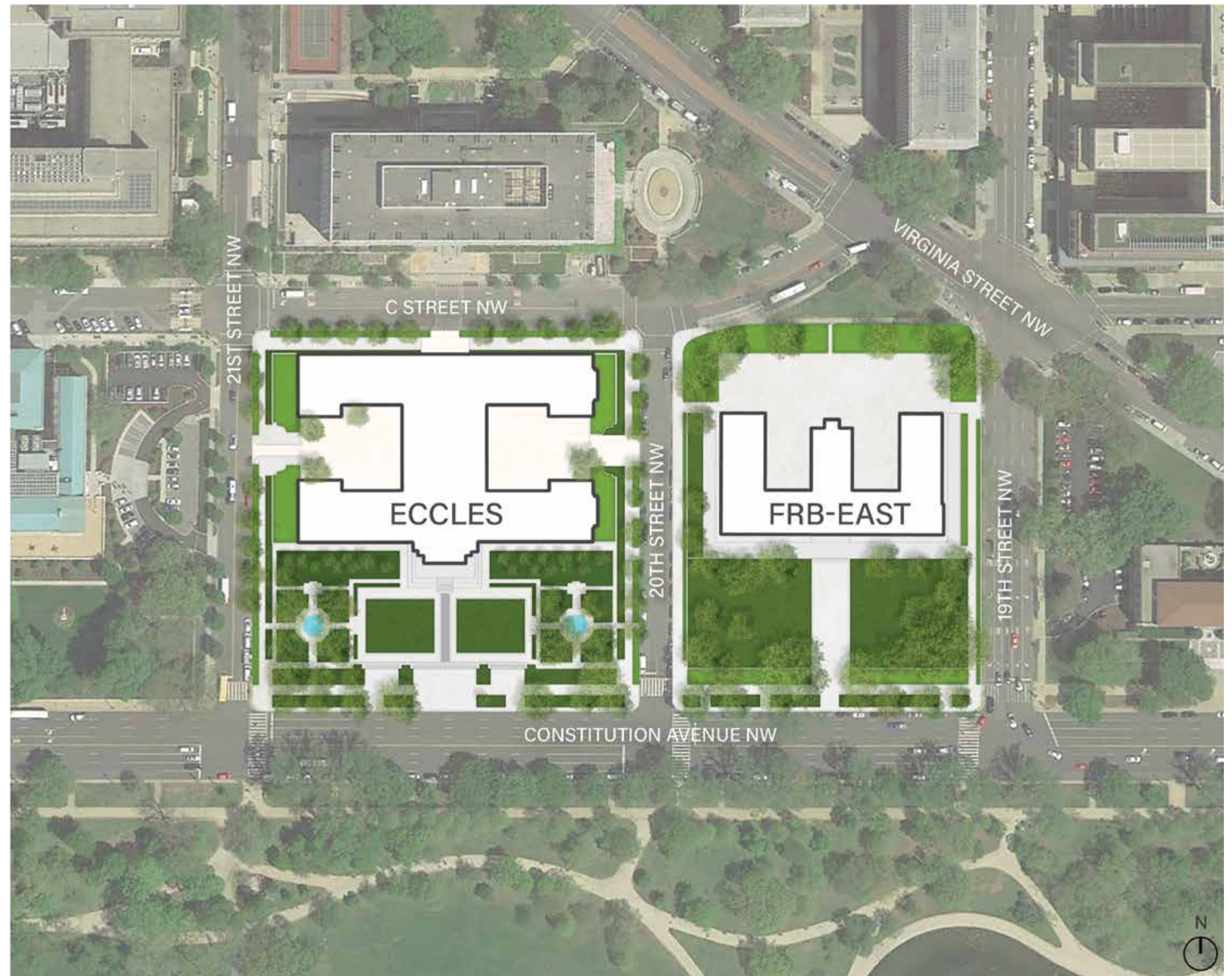


Figure 1-3: Site Map



1.7 DESCRIPTION OF PROPOSED DEVELOPMENT AND ALTERNATIVES

1.7.1 OPTION B (PREFERRED)

Option B will complete a comprehensive modernization and expansion of the Eccles Building and FRB-East Building that will consolidate groups located in leased spaces while also accommodating future organization growth.

At the Eccles Building, Option B will construct five-story infill additions on the east and west sides of the building that will connect the existing north and south wings. An addition will be constructed on the roof of the north wing that will connect with the east and west infill additions to the existing fourth floor offices. The east and west exterior courtyards will be converted into atriums, with the east atrium becoming an entrance to the Eccles Building for staff and VIP's. The landscape between the south building façade and Constitution Avenue will be rehabilitated.

At the FRB-East Building, Option B will add a five-story above-grade addition to the north side of the existing FRB-East Building. The addition will physically connect to the east and west wings of the existing building and will include three levels below grade, which will expand under 20th street, and a mechanical penthouse. A skylight-covered atrium will be created between the existing building and the new addition. The construction of the addition will require the demolition of the center wing of the historic building. The landscape between the south building façade and Constitution Avenue will be rehabilitated.

A new underground tunnel below 20th Street will directly connect the Eccles Building to the FRB-East Building. Currently, the Eccles Building and Martin Building are connected by a tunnel located under C Street.

Option B also includes a four-story below grade 250,000 GSF structure in an L-shaped configuration below 20th Street and the South Lawn in front of the existing FRB-East Building. The structure will provide three levels of parking and meet a parking a ratio of one space for every five employees (1:5). The current Governor's parking garage in the Eccles Building will become space that will accommodate other programs.

The existing site perimeter security of each property will be replaced with a combination of new anti-ram bollards, anti-ram knee and ha-ha walls, and other site elements.

1.7.2 OPTION A (DISMISSED)

The Board considered an alternative that would locate the parking garage in its entirety underneath the south lawn of the FRB-East Building within the property line boundaries and allowable vault projections. The center wing of the FRB-East Building would be maintained and the addition to the FRB-East Building would be a total of six stories above grade. The total new construction area, not including parking, would be approximately 248,000 GSF, with 145,000 GSF attributed to the above grade addition and 103,000 GSF below grade.

Option A would include the careful dismantling, salvaging, and reconstructing of the center wing of the FRB-East Building at a higher elevation to align with Level 1 of the existing building and new addition. Since Option A would maintain the center wing, the floor plate of the addition would be smaller. Although the addition would be six stories, it would not meet the Board's program goal to house 1,750 desks; it falls approximately 180 desks short.

In Option A, the new parking garage would accommodate 243 parking spaces in a 111,520 GSF below grade structure. In order to save heritage trees on the south lawn of the FRB-East Building, the footprint would be very narrow and would be



Figure 1-4: Option B (preferred)



Figure 1-5: Option A (dismissed).



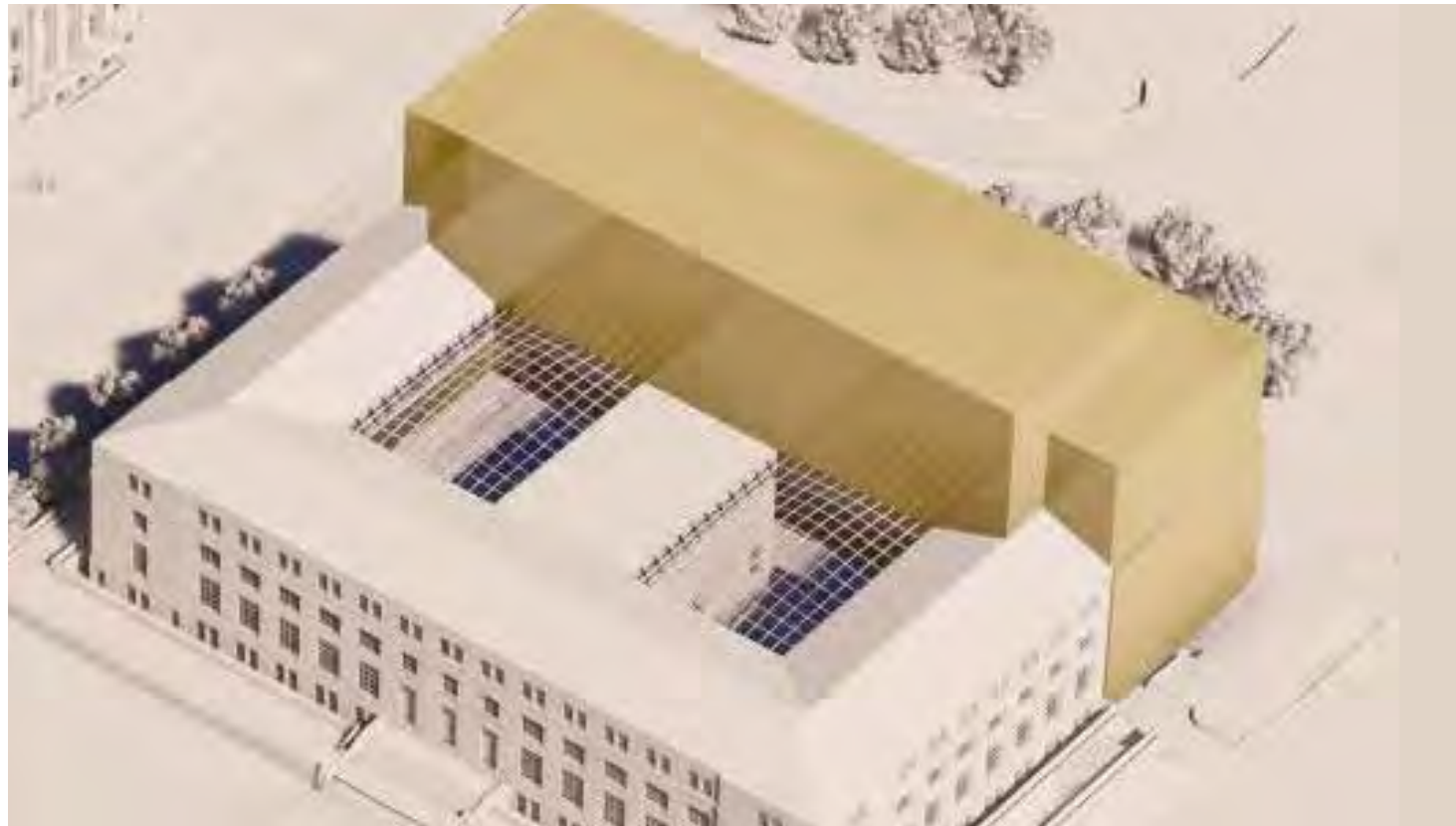


Figure 1-6: Option C (dismissed)

four (4) levels below grade. Both the entrance and exit speed ramps would be located underneath the existing building terraces, requiring modifications similar to Option B. The Board of Governors parking would be maintained in its current location and the entrance to this garage would remain on the west side of the Eccles Building on 21st Street NW.

The Eccles Building infill additions would be constructed to connect the north and south wings similar to Option B. However, only the east courtyard would be converted into an atrium.

Following consultation with CFA and NCPC staff, the Board determined that Option A was not feasible due to the height of the FRB-East Building addition, which would be visible from prominent locations along Constitution Avenue and the National Mall. Additionally, Option A does not meet the Board's program needs of 1,750 desks. Therefore, this alternative was dismissed from further consideration.

### 1.7.3 OPTION C (DISMISSED)

The Board considered an alternative that would maintain the center wing of the FRB-East Building and would not include parking under the south lawn of the FRB-East Building. In this alternative, the addition to the FRB-East Building would be seven stories above grade. A new parking garage would be located underneath the new addition in four below grade levels. The total new construction area, not including below grade parking, would be approximately 210,000 GSF. 183,000 GSF would be attributed to the above grade addition. The penthouse on the FRB-East Building addition would be larger in Option C to accommodate some of the air handling units.

The new parking garage would accommodate 194 parking spaces in a 111,000 GSF structure. Vehicular entrances would be located north of the historic terraces of the FRB-East Building from both

19th Street NW and 20th Street NW. The terraces would be rebuilt with stairs, as parking garage ramps occur within the building and not under the terraces in this option. The Board of Governors parking would be maintained in its current location and the entrance to the garage would remain on the west side of the Eccles Building on 21st Street NW.

The Eccles Building infill additions would be constructed to connect the north and south wings similar to Option B. However, only the east courtyard would be converted into an atrium.

The Board determined that Option C would have significant physical security implications on the FRB-East Building since parking would be located beneath the new addition. Additionally, this alternative would not meet the Board's program requirement of 1,750 desks, as it would only provide 1,533.

Following staff consultation with CFA and NCPC, the Board determined that in addition to not meeting its program and security needs, Option C was not feasible due to the height of the FRB-East Building addition, which would be visible from prominent locations along Constitution Avenue and the National Mall. Consequently, this alternative was dismissed from further consideration.

## 1.8 PROJECT SCHEDULE

The project is scheduled to be constructed beginning mid-year 2021 with an estimated 50-month period of construction.

## 1.9 FUNDING

The project will be funded by the Federal Reserve.





# **2 OUTREACH AND COORDINATION**





Figure 2-1: Photograph of the FRB-East Building south facade, looking northeast.



## 2. OUTREACH AND COORDINATION

### 2.1 ADDITIONAL AGENCY REVIEW

Since May 2019, the Board has held several meetings with federal and local review agencies, including NCPC, CFA, and the DC SHPO. The Board is also coordinating with NPS, DDOT, and DOEE. See 4.0 Environmental and Historical Considerations for a description of meetings with the DC SHPO and consulting parties as part of the NEPA and Section 106 consultation process.

#### 2.1.1 US COMMISSION OF FINE ARTS

The project was presented in an informational capacity to the CFA on 21 November 2019. CFA gave concept approval of the project's general massing and site improvements on 16 January 2020. Additionally, CFA provided concept approval of the overall site/landscape and the Eccles Building on 21 May 2020. CFA gave concept approval of the FRB-East Building on 16 July 2020. CFA final review is anticipated in spring 2021.

#### 2.1.2 DC DEPARTMENT OF TRANSPORTATION

On 8 April 2020, FRB met with representatives from the DDOT and NCPC to initiate DDOT's Comprehensive Transportation Review (CTR) Process and discuss the need for a traffic impact study and CTR. Additional meetings were held with representatives from DDOT to review the proposed parking, elements of the project in public space under DDOT's review, and air rights. DDOT approved the CTR Scoping form on 31 July 2020. The project was presented at the 23 July 2020

DDOT Public Space Committee (PSC) hearing. The preferred parking ramp options and five other options that were studied were presented. While not ideal, the preferred option minimally impacts the historic building and landscape and promotes pedestrian movement at grade between the Eccles and FRB East buildings. The PSC asked the design team to reduce the width of the exit ramp and add landscaping between the sidewalk and the ramp within the public space. The revised option will be presented at the September 2020 PSC hearing.

#### 2.1.3 DC WATER

On 18 May 2020, the design team discussed the actions and coordination needed for the design and construction of the potential sewer heat exchange system with DC Water. On 30 May 2020, the design team and the Board met with DC Water for a Conceptual Plan Review (CPR) meeting to introduce the project and discuss the placement and connections for proposed water and sewer lines and appurtenances as well as life safety issues. A follow-up meeting was held on 15 June 2020 with DC Water and the design team to further discuss water line and life safety issues.

#### 2.1.4 DC DEPARTMENT OF ENERGY AND ENVIRONMENT

The Board and the design team attended a meeting with the DC Department of Energy and Environment (DOEE) on 18 May 2020, to introduce the project, discuss the stormwater management program and permit submission phasing.





3

**DETAILED  
PROJECT  
INFORMATION  
AND DRAWINGS**





Figure 3-1: Eccles Building Garden



# 3. DETAILED PROJECT INFORMATION AND DRAWINGS

## 3.1 EXISTING CONDITIONS

### 3.1.1 ECCLES BUILDING

The Eccles Building is located on three (3) tax lots owned by the federal government that form a contiguous property bounded by C Street NW to the north, 20th Street NW to the east, Constitution Avenue NW to the south, and 21st Street NW to the west. Together, the three (3) lots form a property with a cumulative recorded area of 181,071 square feet (4.16 acres). Approximately 66 percent of the property is impervious area comprising of building structure, driveways, site walkways and hardscape, and fountain plaza areas. The remaining portion of the site is permeable area consisting of turf, landscaping, and vegetation.

The northern half of the property consists of an H-shaped building with two interior courtyards. An elevated landscaped plaza is located on the southern half of the property. Site topography generally slopes down from the north to the south portion of the site, though the building's interior courtyards are lower than the adjacent street elevations. The topography surrounding the Eccles Building ranges between 29-feet above sea level at the northwest quadrant, down to 19-feet above sea level at the southeast quadrant.

The landscape on the Eccles Building site is very well maintained. The grounds have a high exposure to the public given its Constitution Avenue address and the historical significance of the building.

### 3.1.2 FRB-EAST BUILDING

The FRB-East Building is located on a single tax lot that is bounded by an adjacent, National Park Service-owned property to the north, 19th Street NW to the east, Constitution Avenue NW to the south, and 20th Street NW to the west. This property has a recorded area of 138,512 square feet (3.18 acres). Approximately 65 percent of the property is impervious area comprising of building structure, parking lot, site walkways, and hardscape. The remaining portion of the site is permeable area consisting of turf, landscaping, and vegetation.

The northern half of the property consists of an E-shaped building with an asphalt surface parking lot adjacent to the north side. An elevated landscaped plaza is located on the southern half of the property. Site topography generally slopes down from the north to the south portion of the site, though the asphalt surface parking lot is lower in elevation than the adjacent street and green space elevations.

The landscape includes a set-back from Constitution Avenue, raised landscape and building terraces, a formal walkway and stairs axially aligned on the building entrance.



Figure 3-2: FRB-EAST South Facade and Terrace



3.2 SITE CONTEXT - PHOTOS

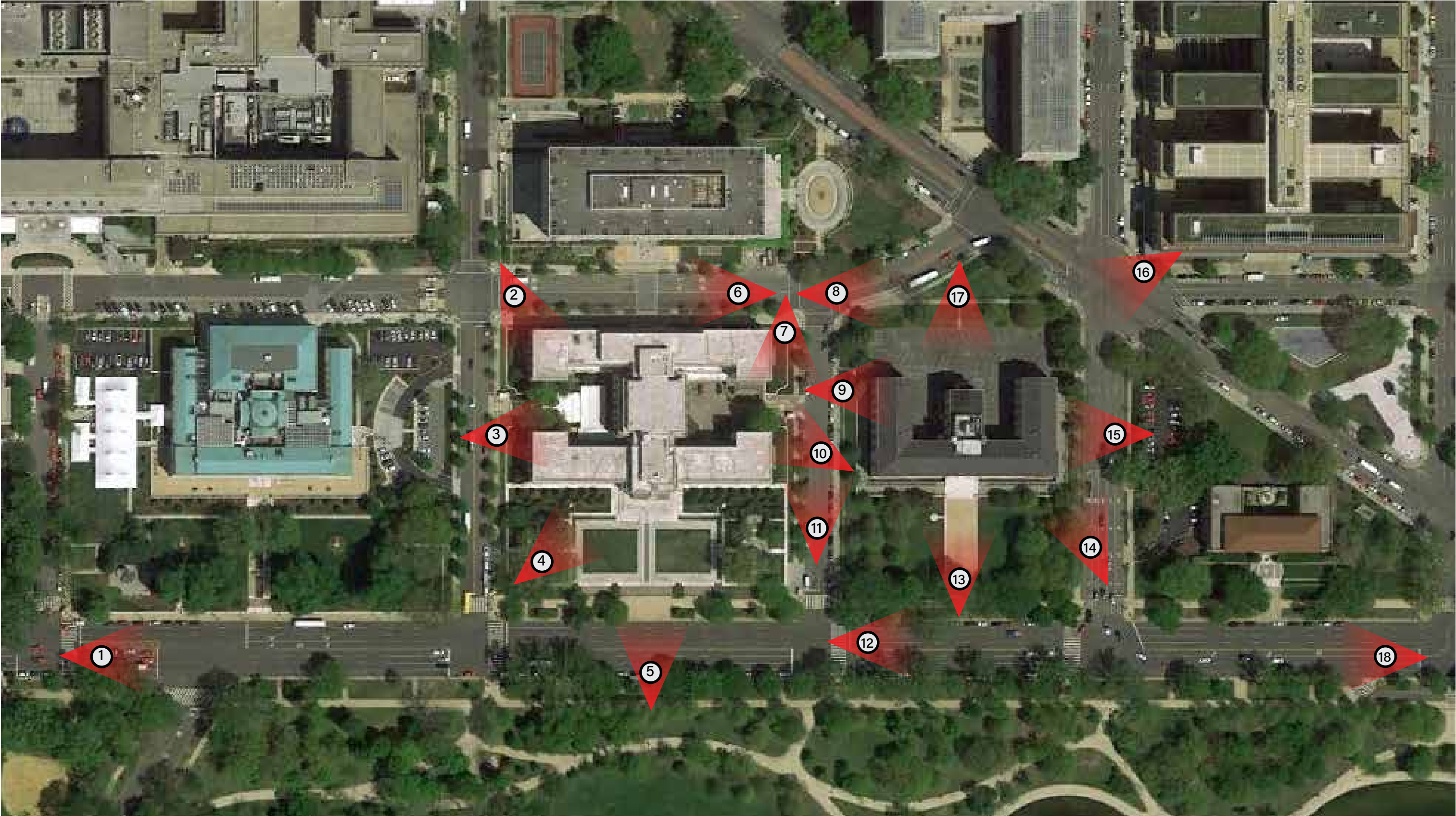


Figure 3-3: Key Plan





1. Constitution Ave View East



2. Eccles Building NW View



3. Eccles Building East Facade



4. Eccles Building Fountain



5. Eccles Building South Facade



6. C St West View





7. 20th St South View



8. C St East View



9. FRB-East Building West Facade



10. Eccles Building West Courtyard Entry



11. 20th St North View



12. Constitution Ave East View





13. FRB-East Building South Facade



14. Constitution Ave View West



15. FRB-East Building East Facade



16. Virginia Ave and 19th St View



17. FRB-East Building North Facade



18. Constitution Ave View West



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# PROPOSED PROJECT



### 3.3 DESCRIPTION OF BUILDINGS

#### 3.3.1 ECCLES BUILDING

The Marriner S. Eccles Building (Eccles Building) was built in 1935-1937 as the headquarters of the Board. French-born Philadelphia architect Paul Phillipe Cret won the design competition to design the building in 1935. The design and construction of the new building followed legislation passed in 1933 that determined that the Board would no longer be chaired by the Secretary of the Treasury and have its headquarters in the Treasury Building. Authorized to acquire land for its new headquarters in 1934, the Board ultimately secured a prominent site along Constitution Avenue, between the National Academy of Sciences Building (1924) and the Public Health Service Building (1933). Cret designed a monumental building of white Georgia marble that combined a classical vocabulary and plan inspired by his training at the Ecole des Beaux Arts and his preference for modernism. Called by Cret as “New Modernism” and subsequently by others as “Stripped Classicism,” the result was a classically proportioned building with spare and austere ornamentation and detailing.

Documentary evidence indicates that as Cret was designing the new building, he was instructed to consider an expansion to accommodate additional staff. Renderings produced by Cret’s office show the 20th Street elevation, one as it was constructed (and much as it exists today), and a second drawing with “infills” connecting the north and south wings. These infill sections on the east and west side were not purely speculative. Foundation plans and recently discovered physical evidence indicates piles and footings for these infill sections were installed at the time of construction. Cret also designed the formal south plaza on Constitution Avenue that fronts the Eccles Building.

Since its dedication by President Franklin Delano Roosevelt in 1937, the Eccles Building

has undergone several small- and large-scale renovations to its interior, exterior, and systems. The building was renovated in the 1970s in response to the construction of the Board’s William McChesney Martin, Jr. Building in 1974, located directly north of the Eccles Building. The offices on each side of the double-loaded corridors were modified with partitions to create office clusters. The staff cafeteria, located on the Fourth Floor of the Eccles Building, was relocated to the new Martin Building and the former cafeteria was retrofitted with office space. In addition, a skylight above the building’s Grand Stair was removed and infilled on the Fourth and Fifth floor levels for additional office space. Although the laylight above the stair was left in place, it was subsequently lit artificially. The 1970s renovation of the Eccles Building also infilled the area between the two Fifth Floor penthouses with new office space. Other improvements and changes to the building and site include perimeter security barriers, a visitor screening facility located in the east courtyard, and the retrofitting of the original windows with internal metal framed windows for blast protection.

#### 3.3.2 FRB-EAST BUILDING

The FRB-East Building was constructed from 1931 until 1933 to house the United States Public Health Service. Washington architect Jules Henri de Sibour designed the building, which was one of several new monumental buildings built along Constitution Avenue at this time. De Sibour designed the new federal building to align with the adjacent Pan American Union Building (1910) to the east and the National Academy of Sciences Building (1924) to the west. The E-shaped building is three stories and features a façade of white Georgia marble with a double-height colonnade of fluted Doric pilasters. De Sibour indicated on the original drawings that the plan allowed for enlarging the building to the north at a future date.

Since its completion in 1933, several government

agencies have occupied the building. The Public Health Service outgrew the building shortly after its construction and although the building was designed for an addition on its north side, funding did not materialize. The Public Health Service vacated the building by 1947. During World War II, the building served as the offices for the Joints Chiefs of Staff and Combined Chiefs of Staff. The building later housed the Atomic Energy Commission, the National Science Foundation, and most recently the Department of the Interior. The Board acquired the building in 2018.

As several different agencies and organizations occupied the building since its construction, the FRB-East Building has been modified numerous times to accommodate each organization’s need. In the 1970s, an additional story was added to the central wing of the building. Original metal office partitions have been modified over the years through the installation of gypsum board or plywood paneling over the original partitions and additional partitions added to create more individual office space. In order to address life safety concerns, wall and fire doors have been installed at certain locations and the main stair hall enclosed with a solid wall. The north ends of the east and west wings have also been reconfigured with additional fire stairs.

### 3.4 PROPOSED

#### 3.4.1 DESIGN PRINCIPLES

The design principles guiding the modernization and addition to both buildings include:

- The new additions should emphasize the Federal Reserve’s civic importance while being modest and restrained.
- Within each building, the additions should be a simple, calm composition that creates a more unified character.
- The additions should respect the historic

character-defining features, built on classical principals but with contemporary materials and technology.

#### 3.4.2 OVERALL DESIGN APPROACH

The overall design concept for the renovation and expansion of the Eccles Building and FRB-East Building is fundamentally based on a strong understanding of Paul Cret’s design intent for the Eccles Building and his approach to the design of civic buildings, as well Jules Henri de Sibour’s design for the FRB-East Building. With its completion in 1937, the Eccles Building formed a new home for the Federal Reserve on the Mall and within the emerging Northwest Rectangle of civic and institutional buildings. Cret viewed civic buildings as a “means to create a place where the interchange among citizens would be advanced within the framework of the republic’s institutions.” His masterpiece of modern classicism, also referred to as stripped classicism, adopted a refined, austere classical language rooted in balance, symmetry, and proportion. Cret’s forward-looking buildings have been described as “calm” and “low-key.”

The proposed infill expansion of the Eccles Building and the addition to the FRB-East Building are intended to be civic in character, befitting this important institution, but quiet and restrained interventions, within the historic character of the existing urban and National Mall context. The infill additions will not draw too much attention to themselves and will allow the original buildings to continue to be read and understood on their own terms. The design concept for the Eccles Building infill and FRB-East Building addition builds on the Federal Reserve’s desire to expand its transparency and openness internally and externally. Transparency in the architectural expression for the infill and addition presents not only the opportunity to juxtapose the solidity of the original architecture in both buildings with a contrasting material but create a literal connection







to the Federal Reserve’s goals for more openness and transparency as an organization. Although the Eccles Building was designed as an office building for a government agency and not a banking institution per se, permanence, stability, and security were symbolically conveyed through the 1937 Federal Reserve headquarters building. The expanded Eccles Building and addition to the FRB-East Building will create a forward-looking group of buildings that link the Federal Reserve’s heritage and historic location on the National Mall with a contemporary architecture and expression that speaks directly to its evolving culture and important role in fostering stability in the nation’s financial systems.

3.4.3 DESIGN CHANGES AND IMPROVEMENTS

Key elements that have changed since the NCPC concept review in 2019 include:

Eccles Building

- Development of the exterior infills and overbuild;
- Development of the existing exterior service courtyards into atriums;
- Development of the skylights over the existing courtyards; and
- Excavation under the building to provide new functional space.

FRB-East Building

- Development of exterior of the addition;
- Development of the atrium between the historic building and the addition; and
- Development of the levels below the south lawn and 20th Street.

Landscape

- Development of the landscape design for both the Eccles and FRB-East Buildings;

- Development of perimeter security; and
- Development of the public realm

3.5 RESPONSES TO NCPC COMMENTS RECEIVED AT CONCEPT REVIEW

NCPC recommends that “*the applicant continue to explore ways to remove the penthouse additions on the south side of the Eccles Building, to minimize impacts to the historic views towards the Eccles Building.*”

- The penthouse height and footprint have been reduced in size from the concept stage to limit their exposure from Constitution Avenue. However, the penthouses cannot be removed entirely, as they extend the building’s existing egress stairs to the top floor (Level 05), providing a necessary means of egress for the building occupants.

NCPC requests that “*applicant explore opportunities to reduce the height of the penthouses on FRB-East Building to minimize any visual impacts.*”

- The penthouse footprint has been reduced in size from the concept stage by approximately 30%., Tthe height of the penthouse has been reduced by 2’-0’ and repositioned to decrease its visual impact on C Street.

NCPC advises that, regardless of the option selected, “*the project is located in an area of the District with a 1:5 parking ratio under NCPC’s current parking guidance, which will be determined based upon the proposed campus population.*”

NCPC requests the Board “*consider options that minimize parking, in consideration of NCPC’s parking guidance, potential impacts to the transportation network, and possible effects on the buildings’ landscapes.*”

- The Federal Reserve Board will comply with the parking a ratio of 1:5 for their properties including the Eccles, FRB-East and the Martin Buildings (see Transportation and Circulation).
- The parking garage is under a portion of the south lawn of the FRB-East Building and 20th street. In order to save the heritage trees on Constitution Avenue, the garage footprint within the south lawn is very narrow.
- The landscape immediately above the garage will be rehabilitated as indicated in the landscape plans (see Landscape and Streetscape Plan). Air intake and exhaust as well as emergency exiting is concealed within the existing areaway between the building terraces and the historic building. With the exception of a proposed exit ramp further up 20th Street, the garage will not be visible within the landscape setting.

NCPC staff recommends the Commission supports “*the applicant’s intent to preserve heritage trees and other landscape features in the front lawns of the Eccles and FRB-East Buildings, and supports the applicant’s intent to provide universal accessibility to both the Eccles and FRB-East Buildings from Constitution Avenue.*”

- The project will preserve all, but one of the heritage trees. The project requires the removal of one heritage tree on the eastern side of property (see Landscape and Streetscape Plan).
- With the transition in grade up to the Constitution Avenue entrances to the existing buildings, it is not possible to provide universal accessibility without a significant adverse effects to the historic buildings.
- Additionally, the lobbies are neither designed to withstand blast or large enough to accommodate the security equipment required. However, the gardens in front of both the Eccles and FRB-East Buildings are being designed to accommodate universal accessibility for the public.



PERSPECTIVE FROM 21ST STREET AND CONSTITUTION AVENUE



PERSPECTIVE FROM 19TH STREET AND CONSTITUTION AVENUE



Early design studies for project were traditional watercolors. This medium permits trees to rendered in transparent manner. The existing trees on the site block the views of these two buildings in summer. It is important to note that while this is major project there is little impact on Constitution Avenue as depicted in these renderings



## 3.6 ECCLES BUILDING

### 3.6.1 SUMMARY

A comprehensive modernization and expansion of the Marriner S. Eccles Building is required to meet the current and future needs of the Board. This modernization is intended to consolidate groups located in leased spaces while also accommodating future organization growth. The proposed project will include the following modifications and expansion of the Eccles Building:

- The existing building will be modernized, and high-character spaces, features, and materials will be preserved to the greatest extent possible.
- The exterior of the historic building will be preserved and upgraded for security (blast mitigation), seismic performance, and energy performance.
- Five-story infill additions will be constructed on the east and west sides of the building that will connect the existing north and south wings.
- A fourth-floor addition will be constructed on the roof of the north wing that will connect the east and west infill additions to the existing fourth floor offices.
- The east and west exterior courtyards will be converted into atria, with the east atrium becoming an entrance to the Eccles Building for staff and VIPs. The east atrium will also contain vertical circulation connecting the C-1 (entrance) level up to the first floor and down to the C-2 level where the existing tunnel between the Eccles Building and the Martin Building is located and new tunnel between the Eccles Building and FRB-East Building will be located. The west atrium will function as a space of respite for Board employees with an interior garden and a flexible event space.
- The natural light shaft will be restored to the

existing laylight over the center wing/grand stair. The 1977 center-wing office additions will be partially removed and a new skylight at the roof level of the penthouse will be installed.

- The addition will expand the C2 level with extensive excavation under the existing building and courtyards allowing for additional program below grade.
- All existing systems within the building will be completely replaced.
- The existing Governors' parking in the Eccles Building will be converted into program space.

### 3.6.2 ECCLES BUILDING WINDOWS

The project includes the preservation of the exterior-facing historic bronze windows and ornamental grilles, replacement of broken glazing in kind, and installation of serviceable blast-resistant interior storm windows throughout the building to meet the Board's design, security, and energy requirements. Select windows will also be ballistic-resistant. The historic bronze windows that will be enclosed within the new atria will be preserved and retrofitted with new low-iron, fire-rated glazing to replace the single glazing. The glazing replacement is necessary to meet the required fire-rated barrier between each new atrium and the adjacent interior spaces.

### 3.6.3 INFILL ADDITIONS

Approximately 110,000 GSF will be added to the Eccles Building with two 5-story infill additions and extensive below grade expansion. The addition will expand Level C2 under the existing building and into the courtyards, infill the north and south wings along 20th and 21st streets, and expand the Level 4 office spaces above the existing building. The east and west exterior courtyards will be converted into atria, with the east atrium becoming an entrance to the Eccles Building for staff and VIPs with a small garden space. The east atrium will also contain vertical circulation connecting the C-1 (entrance)

level up to the first floor and down to the C-2 level where the existing tunnel between the Eccles Building and the Martin Building is located and a new tunnel between the Eccles Building and FRB-East Building will be added. The west atrium will function as a space of respite for Board employees: an interior garden and a flexible event space.

The proposed infill additions for Eccles Building will respond to—and maintain—the civic scale and rhythm of Cret's original design. The intervention will build on the modernity of Cret's stripped classicism. The infill additions proposed on each side of the Eccles Building will create a dialogue with the attic order in the original design and respond to Cret's strong focus on proportion and "restraint in detail." On the east and west elevations of the existing building, Cret achieved a "lightness of touch" with the juxtaposition of the smooth piers with the meander carvings and delicate metal grilles in the balconies. Set back 15 feet from the main facades, with a slightly projecting center section, the infill additions will allow the returns of each wing to be maintained and read as they did historically.

Conceived as ligaments, the glass infills proposed for the Eccles Building will maintain the original massing while connecting the existing wings with a new language of transparency. The interventions will be detailed to echo the restraint of Cret's stripped classicism using large-format glazing and curtain walls to create a dynamic relationship with the marble exterior of the existing building. Vertical mullions relate directly to the 5-foot 8-inch window-wall spacing of the Cret elevations on 20th and 21st Streets, and within the existing courtyard. Sculpted vertical bronze shading fins provide solar control and reference the historic palette of decorative bronze of the existing building.

At the entry elevation on 20th Street, the existing site walls will be slightly widened and lowered to signal entry into the Eccles Building. The recess at the first floor will create a small forecourt between the

infill and site walls and serve as the new threshold into the building. The historic gates will be displayed within the forecourt. The western site wall and gate will be maintained but modified to allow egress to the exterior from the west courtyard.

The infill additions will expand the C-2 level with extensive excavation under the existing building and courtyards allowing for additional programs in the building. This will include installing a new concrete foundation wall three feet outboard of the existing exterior wall face and will require all elements at the perimeter of the Eccles Building, including the area ways and site walls, to be removed and rebuilt with the exception of the main south stairs. All materials will be salvaged or replaced in-kind and reinstalled. The design team continues to study means of reducing—or eliminating—areas of site disturbance due to the extensive excavation beneath the existing building.



PERSPECTIVE ECCLES BUILDING ENTRANCE ON 20TH STREET



PERSPECTIVE FROM 21ST STREET AND C STREET LOOKING EAST















Figure 3-4: Double height bronze windows with Alberene stone spandrel panels



Figure 3-5: Bronze railing detail



Figure 3-6: Cornice (white Georgia marble)



### 3.7 SKYLIGHTS

The existing east and west courtyards—currently used as service courtyards and access to the Governors parking on the east side and occupied by temporary canteen in west will be converted into atria: the east atrium will become a building entrance for staff and VIPs and a circulation node between the Eccles Building, the Martin Building, and the FRB-East Building; the west atrium will become a restorative garden for Eccles Building staff that could also be utilized for Board events. Integrating skylights over the courtyards presents a number of unique challenges. Within the space, these challenges include maintaining the appearance of the center wing of the Eccles Building as a pavilion and keeping the cornice line at the 4th floor with its decorative cast bronze railing. At the same time, it is necessary to minimize to the greatest extent possible the visual impact of the appearance of the skylights along Constitution Avenue. Other challenges include detailing the skylights to provide a proper building enclosure and meet security requirements.

To balance these competing demands, the skylight design will frame the center wing symmetrically, will maintain the bronze handrails and cornice line at the fourth floor, and will push vertical plane on the south side of the atrium into the courtyard. This will minimize the skylights visibility from Constitution Avenue by pinching the space internally. The proposed framing for the skylights is a very a calm, almost ethereal square grid with large format glass that is designed to compliment, but not upstage the walls Cret designed for the courtyard. The renderings illustrate how the large rectangular frame will subdivide this space into twelve equal spaces in salute of the Federal Reserve's branch banks. Each branch bank will be recognized with their name engraved in glass panels. This will pickup up on the spirit of Cret's original design of the center hall of the historic building where the names are engraved in stone above twelve doors on Level 2.

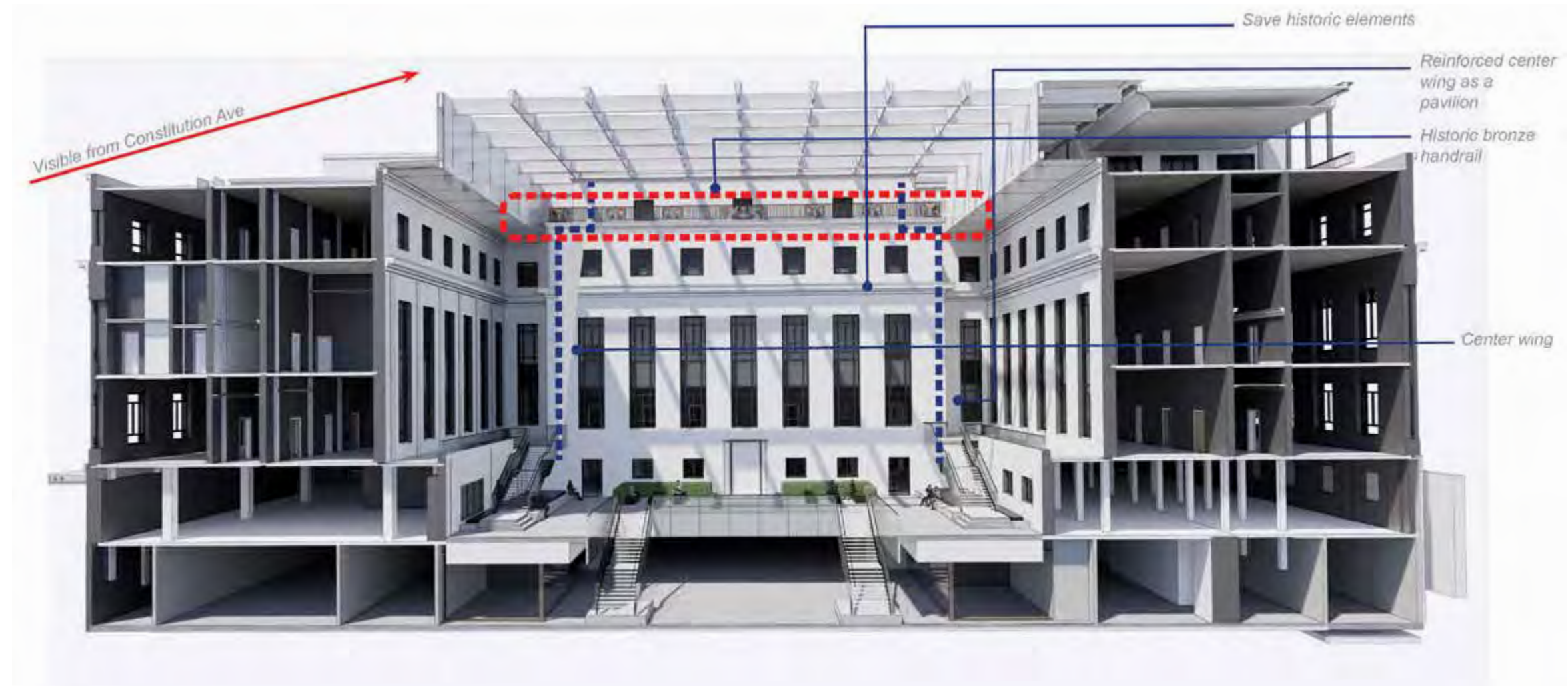


Figure 3-7: Section perspective through East courtyard

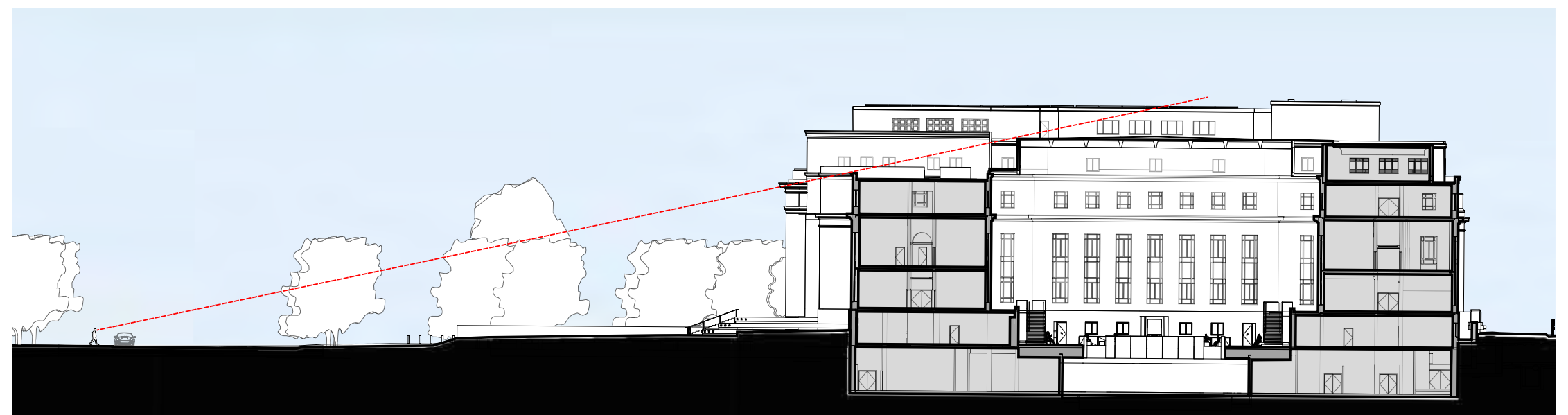


Figure 3-8: Site section from Constitution Avenue through Eccles







## 3.8 FRB-EAST BUILDING

### 3.8.1 SUMMARY

A comprehensive modernization and expansion of the Board’s recently acquired and currently vacant building at 1951 Constitution Avenue (FRB-East Building) is required to meet the current and future needs of the Board. In combination with the work planned at the Eccles Building, this modernization is intended to accommodate and retain future organization growth while consolidating groups located in leased space throughout the city. The proposed project includes the following modifications and expansion of the FRB-East Building:

- The existing building will be modernized, and high-character spaces, features, and materials will be preserved to the greatest extent possible.
- The exterior of the historic building will be preserved and upgraded for security (blast mitigation), seismic performance, and energy performance.
- The center wing of the historic building will be demolished.
- A five-story above-grade addition will be built on the north side of the existing FRB-East Building. The addition will physically connect to the east and west wings of the existing building and will include three levels below grade, which will expand under 20th Street, and a mechanical penthouse.
- A skylight-covered atrium will be created between the existing building and the new addition.
- All existing systems within the building will be completely replaced.

### 3.8.2 FRB-EAST BUILDING WINDOWS

The existing operable aluminum windows will be replaced with high-performance, blast-resistant

fixed aluminum window units to match the existing sightlines and appearance of the existing windows, and to achieve the Board’s design, security, and energy requirements. The existing decorative cast aluminum ornamentation at the window openings will be salvaged, restored, and reinstalled. The existing decorative cast aluminum spandrel panels will remain, and will be restored in place. The existing operable steel windows that will be enclosed within the new atrium will be replaced with new fixed and fire-rated glazed aluminum window assemblies to match the existing window configuration and sightlines.

### 3.8.3 FIVE-STORY ADDITION

Approximately 564,000 GSF total will be added to the FRB-East Building, 158,794 GSF of which is a five-story above-grade addition. The addition will expand three levels below grade underneath the addition footprint and infill the created courtyard area between the existing building east and west wings for another 406,000 GSF of area. The addition will connect to the Eccles Building via an underground pedestrian tunnel located at Level C-2 below 20th Street. The addition will also connect to the existing FRB-East Building at all finish floor elevations so that no grade changes will be required. Below-grade construction will require localized excavation of bedrock.

In order to achieve the most efficient and flexible office floorplate for the new addition, the entire center wing of the existing building will be demolished, which includes exterior skin, windows, roof, structure, and all interior spaces. Selective demolition will be required to partially remove the roof and the walls at the corners of the east and west wings where the new addition ties into the existing building. Existing stone will be salvaged for reuse on remaining elevations with reconfigured openings.

The addition to the FRB-East Building will respond to the architecture of the historic US Public Health Service Building, which is also clad in Georgia White marble. The new five-story addition will align with the fifth floor of the Eccles Building. The mechanical penthouse will be minimized and placed to nearly eliminate views and Constitution Avenue, protecting the row of low marble buildings that frame the Lincoln Memorial on the National Mall. On the east and west sides, the fifth floor of the addition will align with the ridge lines of roofs on the FRB-East Building wings.

The primary goal for the exterior design of the addition to the FRB-East Building is to create a consistent, unified civic expression, while also responding to the architecture of the historic building. The material strategy for the addition continues to maintain the overall white tonality of the Georgian marble in the historic building but uses more contemporary materials.

With the exception of the corners, the historic building has a consistent bay spacing of 3.5-foot-wide pilasters and 8.5-foot-wide window openings. The addition will use a similar cadence, with 3-foot-wide diffusing glazing (referencing the historic building’s pilasters) and 9-foot-wide window openings. The addition will be lined with glazed pilasters. Two-story high, 30-foot-tall openings, similar to the historic building, will be located between the pilasters and articulated to create a civic scale. While the openings in the historic building are recessed by 14 inches, the openings in the addition will project out by 14 inches beyond the face of the wall. The addition’s glazing will be recessed 2 inches from the outside face of the stainless-steel frames. The 2-story-high glazing at the addition will have a pattern acid-etched into the glass that relates directly to important datums from the historic building, including the entablature, the spandrel panel, and the sill.

The pilasters will be composed of 4-inch-thick insulating diffusing glass panels (with sandblasted appearance) that will render the material in a similar tone as the marble in the building. The glass panels will permit diffused daylight into the building during the day and glow softly at night.

At the cornice, the material will be marble laminated within insulating glass. The eave line in the addition will correspond with the eaves of the historic building and the base of the building will be white Georgia marble to match the historic building. The corners in the historic buildings are relatively simple with little ornamentation. To complement this feature, the corners of the addition will be flush glass.



PERSPECTIVE FROM C STREET AND 20TH STREET



PERSPECTIVE FROM C STREET AND VIRGINIA AVENUE













### 3.9 EXTERIOR LIGHTING

Exterior lighting will be updated across the site. Landscape accent lighting would highlight garden features and complement plantings. Street lighting will meet DDOT and Monumental Core Street standards. To more effectively illuminate the site for aesthetic and security-related reasons, the current exterior lighting along the Constitution Avenue frontage will be supplemented with building façade lighting. Façade lights will use precision LED optics to limit coverage to building surfaces, will be lamped with more circadian-and star-gazing-appropriate warm white and very warm white LEDs and will be tuned based on time-of-night (using very warm white LEDs during later hours).

Postlights for lighting of vehicular and pedestrian site access will use precision warm-white-LED optics and will be cut-off type to minimize light pollution and light trespass. Where supplemental security lighting is necessary, precision warm-white-LED optics will be used. Like most of the historic buildings along this section of the Constitution Avenue, the exterior of the FRB-East Building has always been illuminated at night. The current areaway floodlights in FRB-East Building will be replaced with more subtle lighting achieved with two proposed “layers” of warm-white and very-warm-white LEDs reminiscent of incandescent lighting of the original period. One layer positions small luminaires primarily in the areaway to softly graze the lower façade with light fading from bottom to top. A second layer will position miniature luminaires at the base of the upper cornice for a more elegant, yet crisp expression of the linearity of the monumental architecture. Both layers will use LEDs that can be dimmed up and down just like incandescent lighting so that as they are dimmed, the color of the light turns warmer for a very soft effect later in the evening.

The addition to FRB-East Building will not have exterior lights washing the building faces. Interior workplace lighting will be intermittently visible depending on the room function and on one's viewing vantage point. From the pedestrian and vehicular perspective, the DC city street trees will obscure direct vision and only long oblique views will reveal lighted office space. Light levels will not be bright enough to spill out, nor will the addition have a harsh or glary “glowing effect.” Using indirect lighting, ceilings will be softly washed using linear, low-profile sized fixtures. The same lighting concept is used within the historic building. With low-iron glass used through the project and a tunable LED lighting system internally as the day transitions into the evening, the interior lighting color temperature will smoothly transition to warmer color temperature (between 2700 to 3000K). The blend of lighting effects from lighted façade stone to the curtain wall should be very gentle, if not seamless. It will have a soft warm coherent look. By code and for energy conservation, the lighting control system will automatically turn off lights when spaces are unoccupied.

PERSPECTIVE ECCLES BUILDING FROM 20TH STREET NIGHTTIME



PERSPECTIVE FRB-EAST BUILDING FROM 20TH STREET NIGHTTIME





### 3.10 SKYLIGHTS

The existing east and west courtyards will be combined into a single atrium, which will house a food service operation, conference functions, and facilitate primary building circulation. The new atrium at the FRB-East Building will incorporate a custom-fabricated high-performance glazed skylights with a consistent formal and material language, which will deliver design uniformity among the Eccles and the FRB-East Buildings. The FRB-East Building's skylight will be situated at the Level 4 roof elevation to reduce the impact at the existing sloped roof, and to conceal the skylight from view from Constitution Avenue.

Like the skylight in Eccles Building, the formal and material language of the skylights will be simple and quiet—compatible and subordinate to the existing building. Large-format glazing panels (approx. 11' by 11') will be supported by a simple grid of framing, that responds to the structural rhythm of the existing building. For reasons of design continuity, the skylight has similar design expression as the Eccles Building skylights. The glazing panels will incorporate a ceramic frit that will balance the energy performance of the atriums with a desire for daylight levels similar to the existing outdoor space.



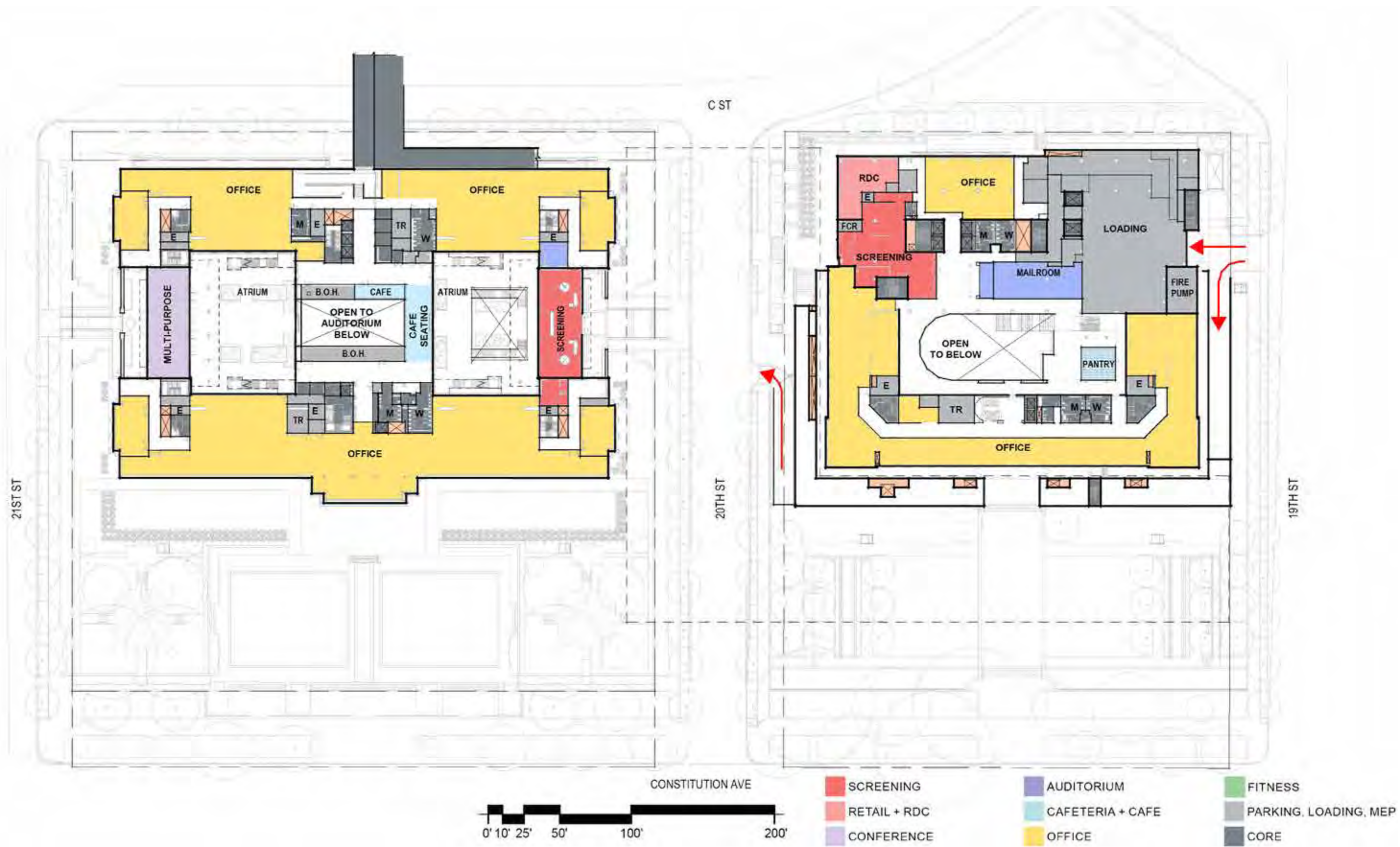




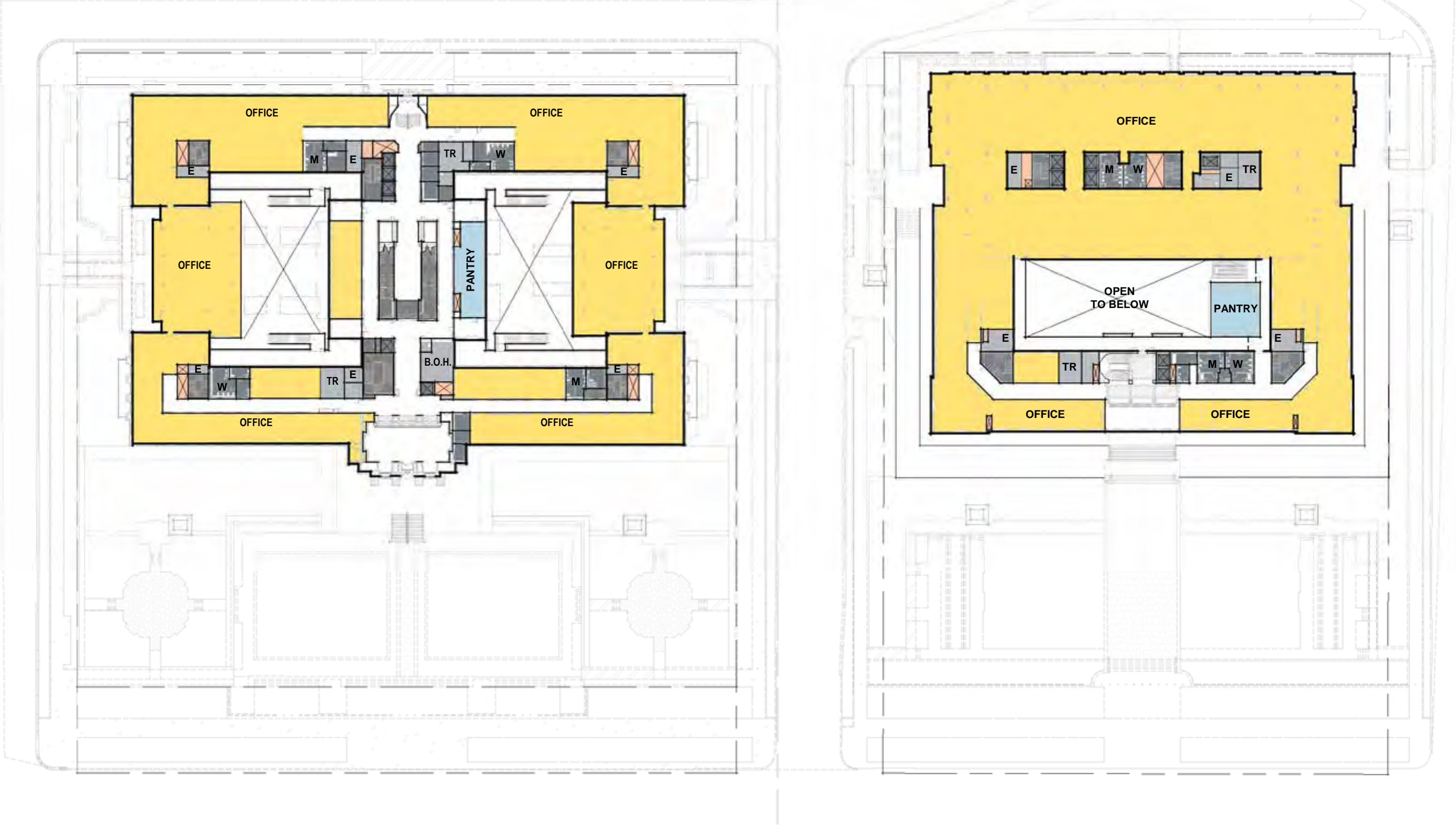


# PLANS & SECTIONS

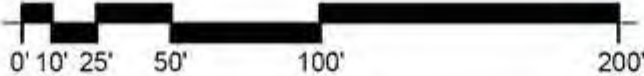
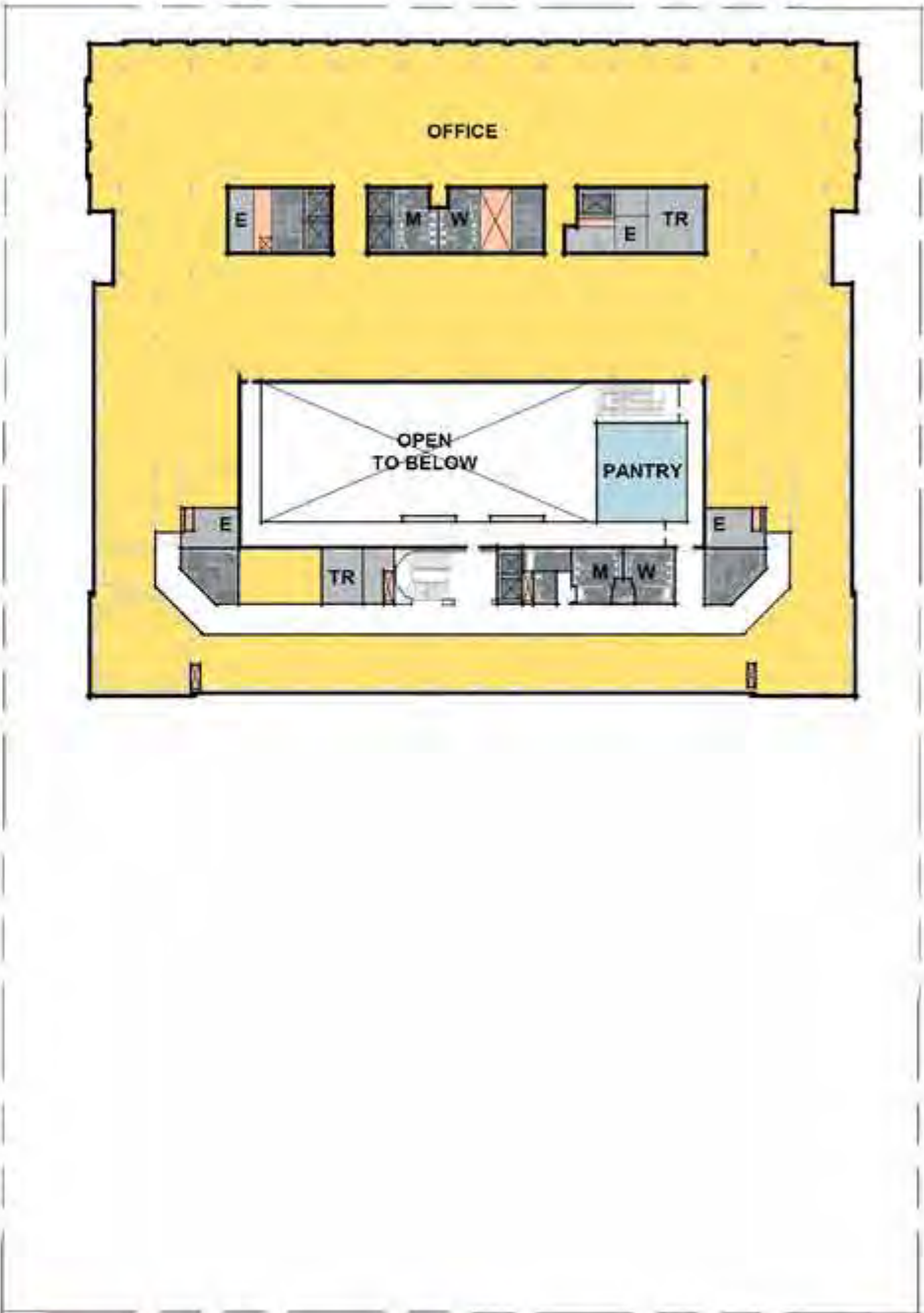
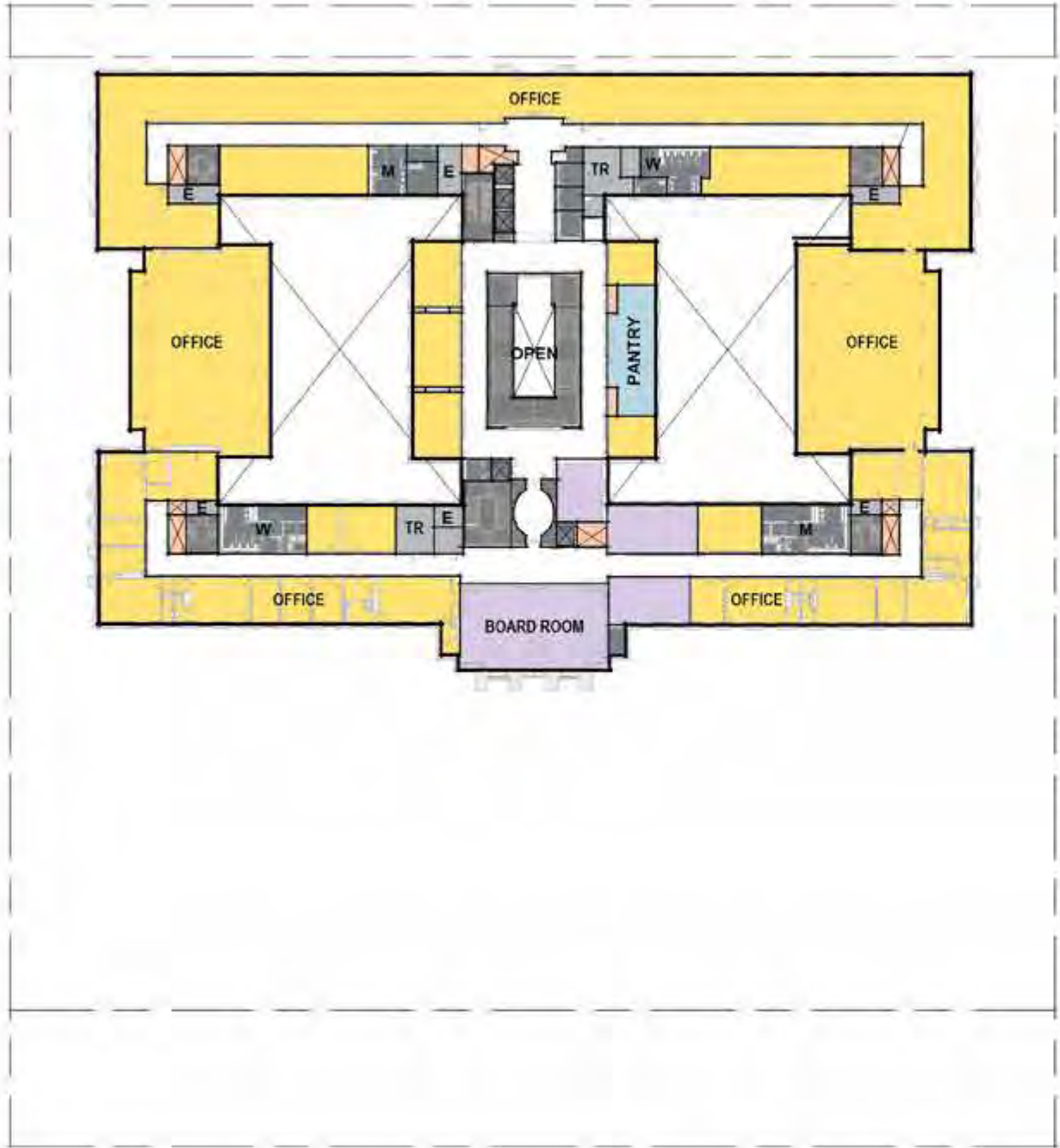






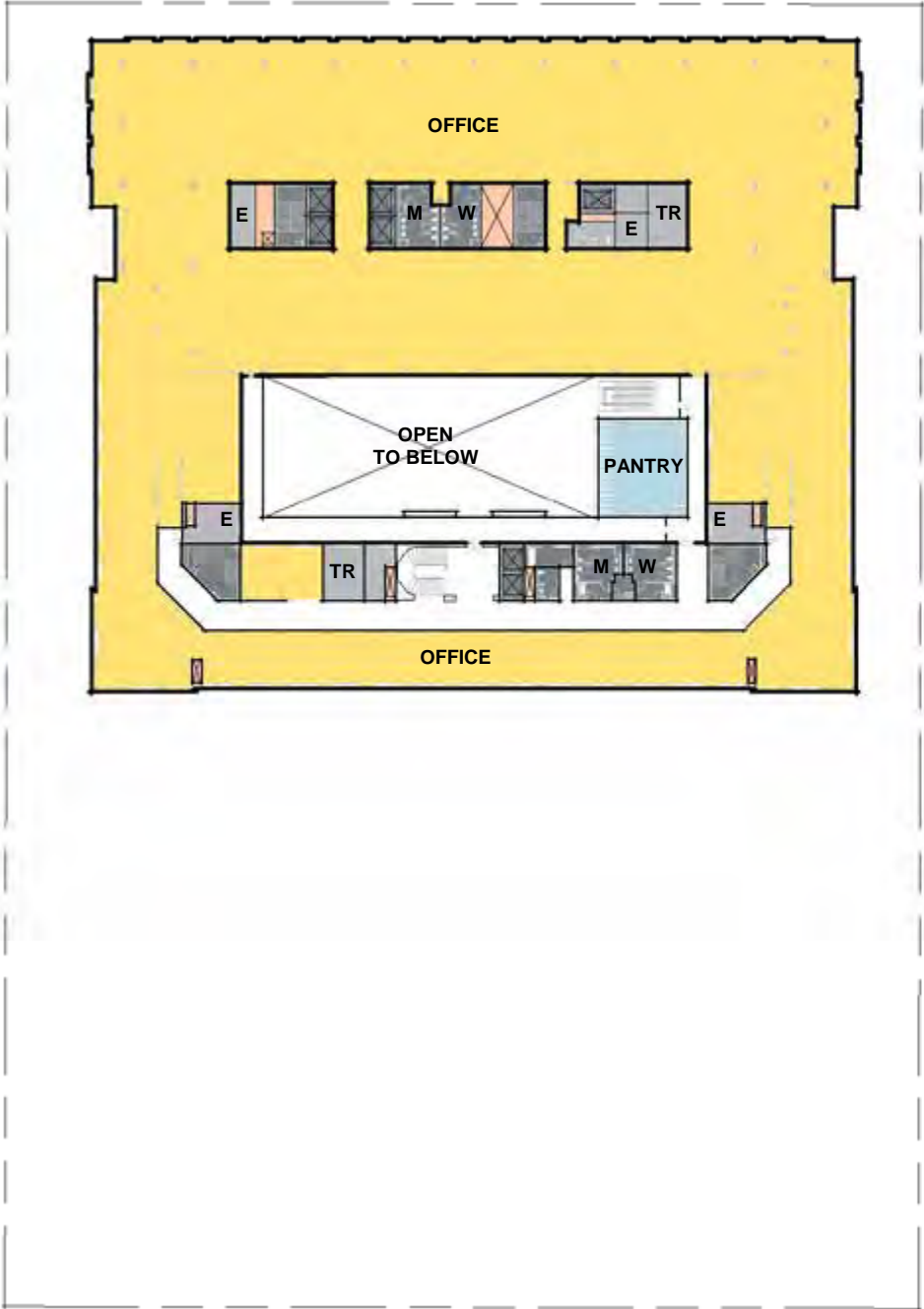
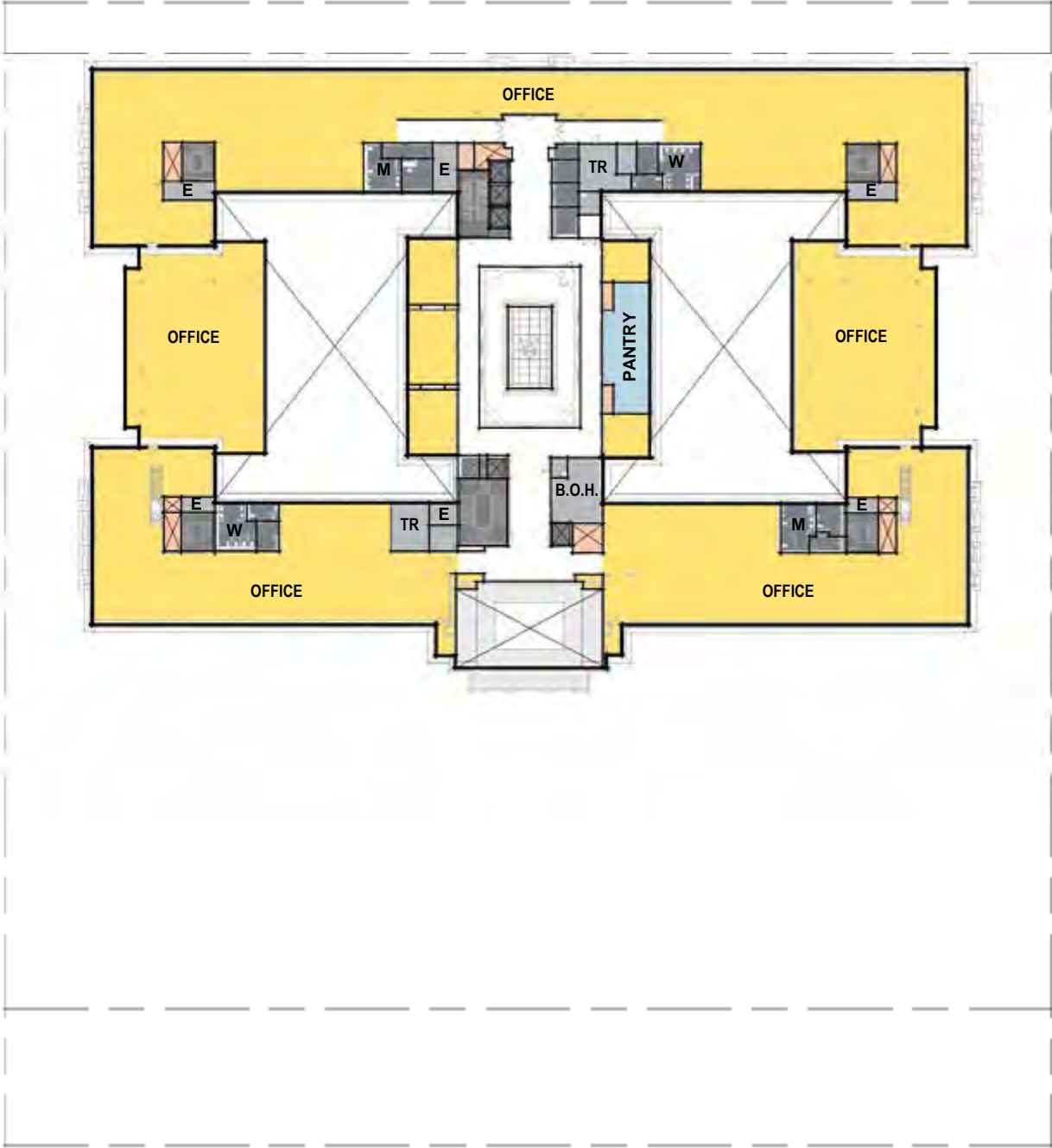




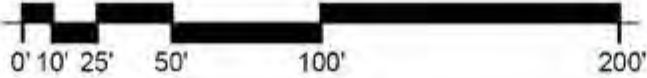
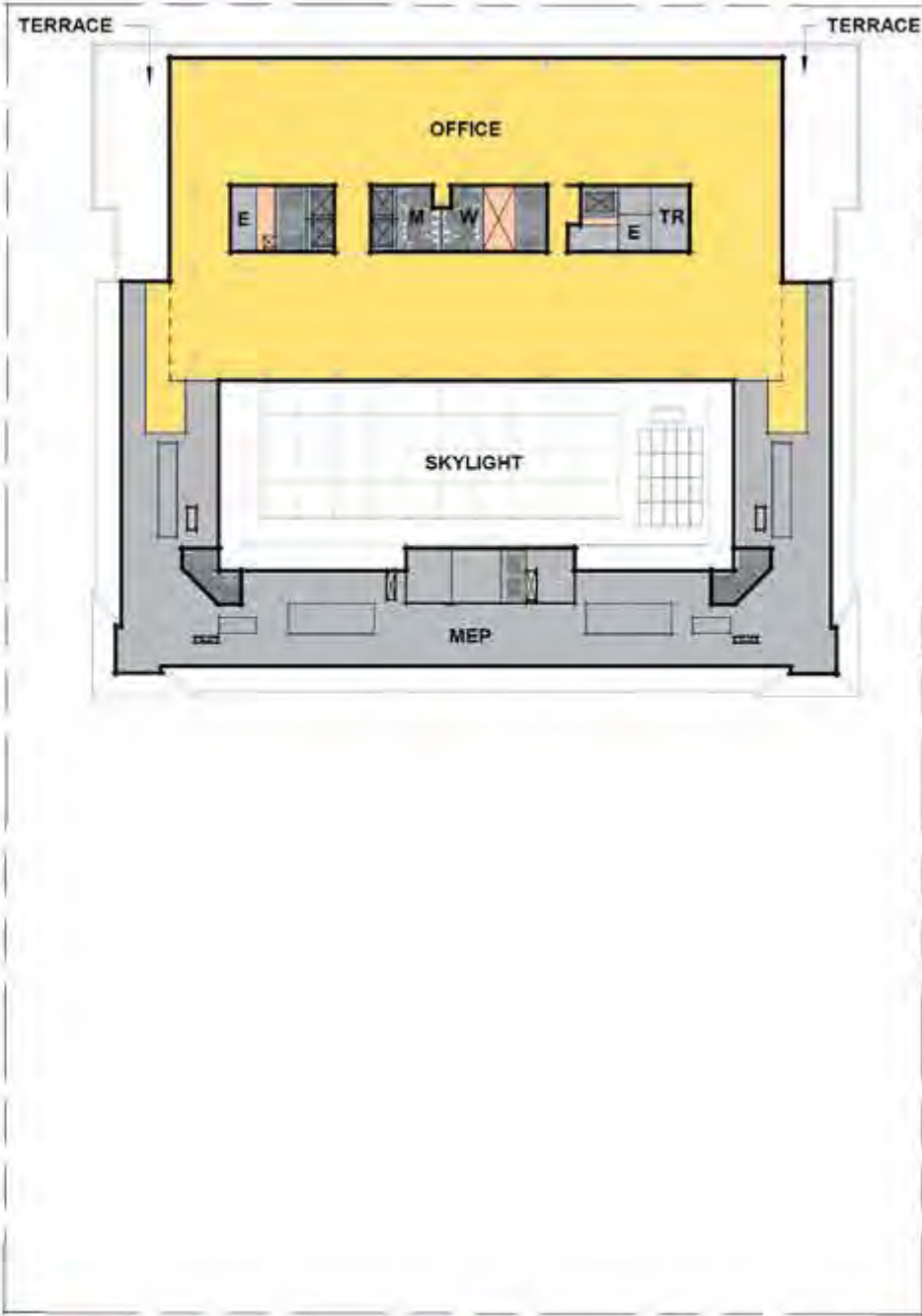
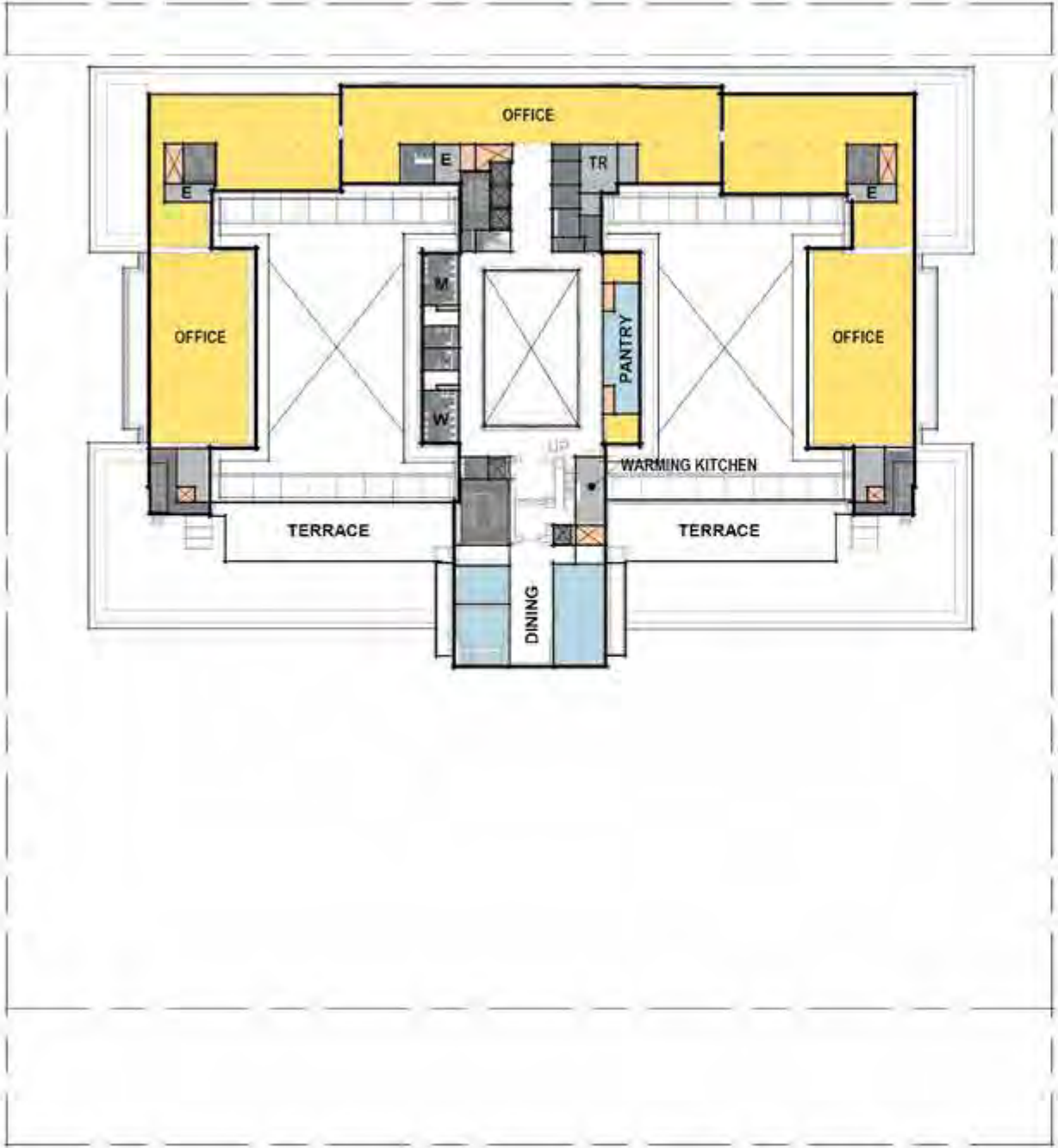


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| SCREENING    | AUDITORIUM       | FITNESS               |
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| CONFERENCE   | OFFICE           | CORE                  |



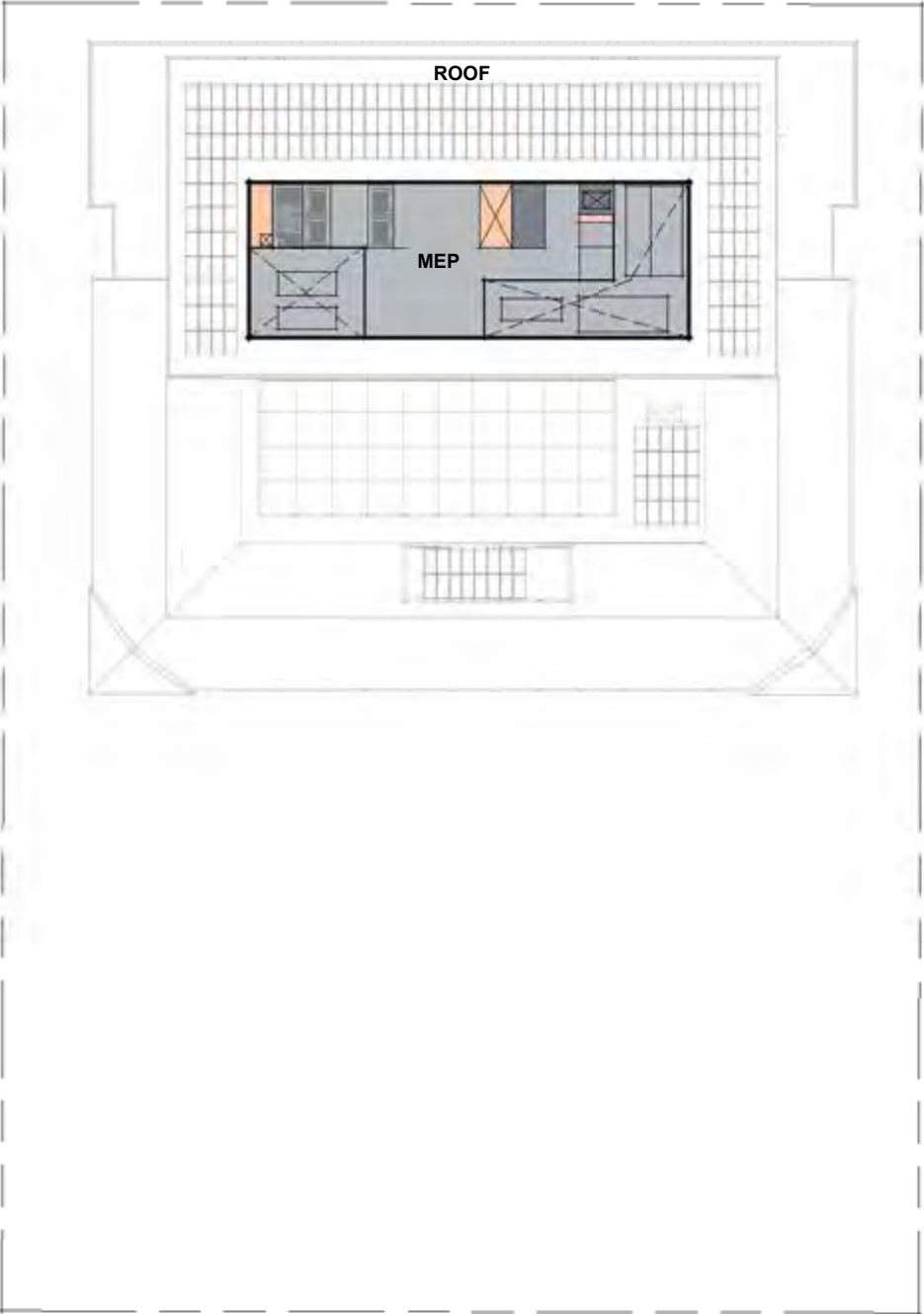
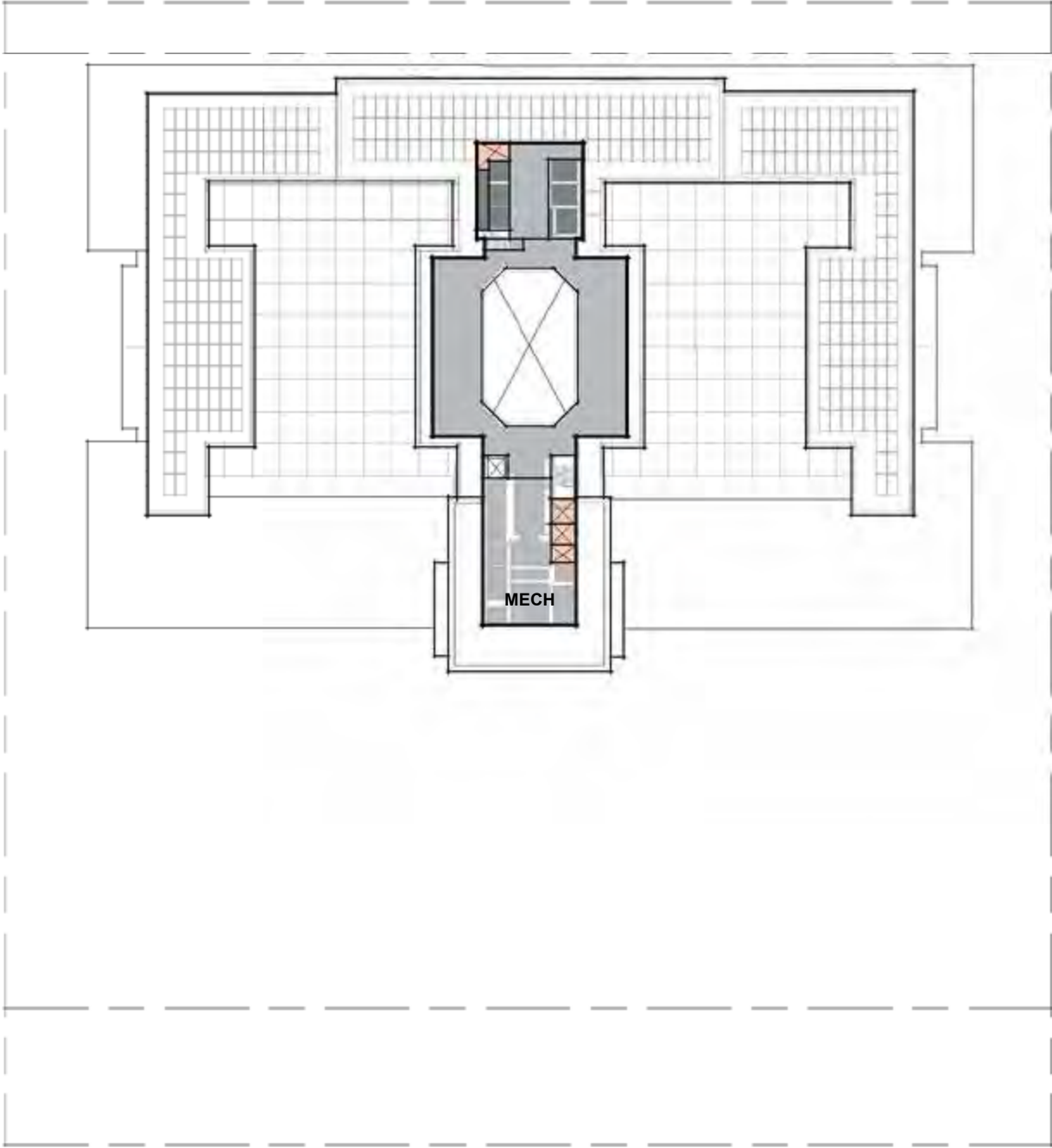






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| CONFERENCE   | OFFICE           | CORE                  |

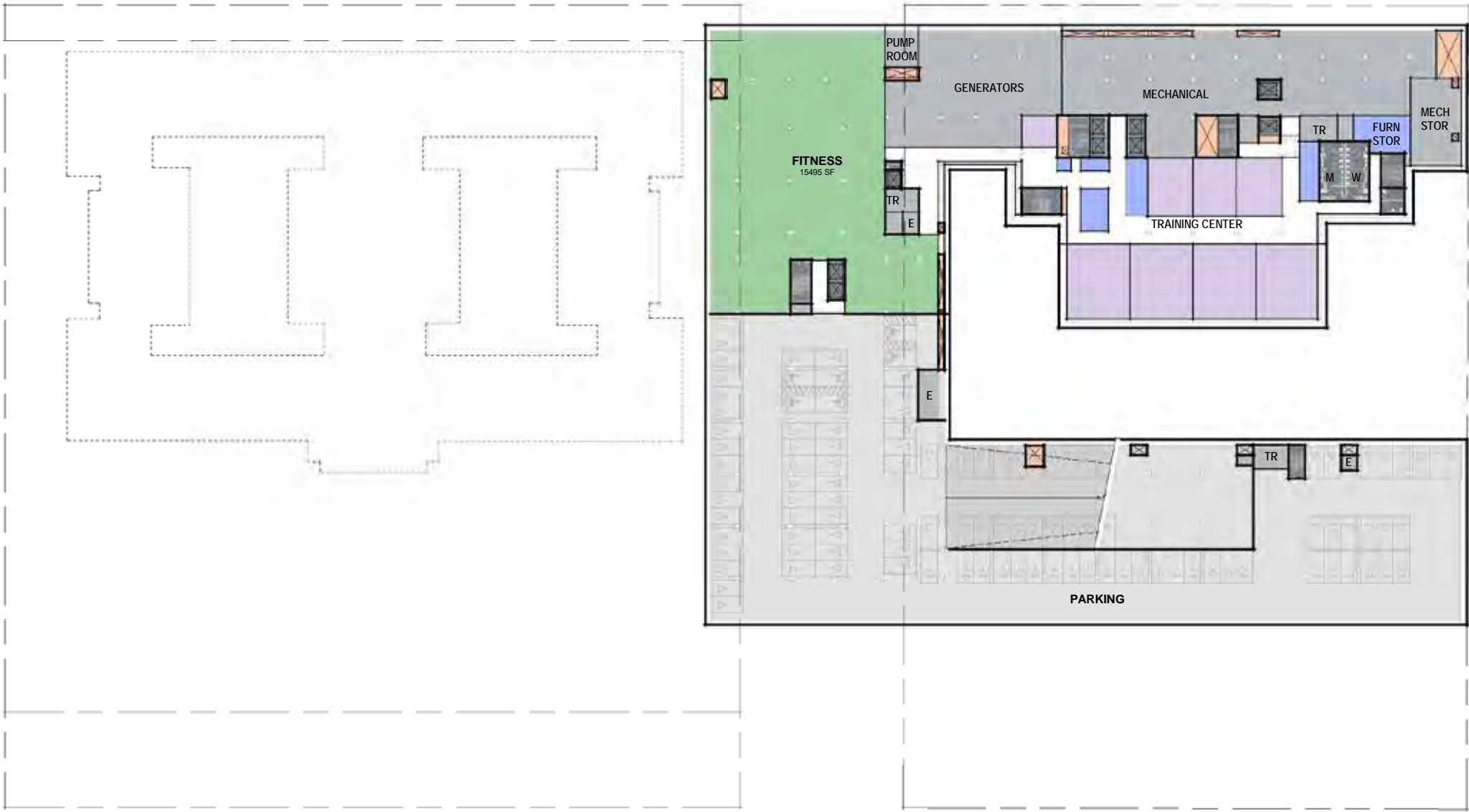




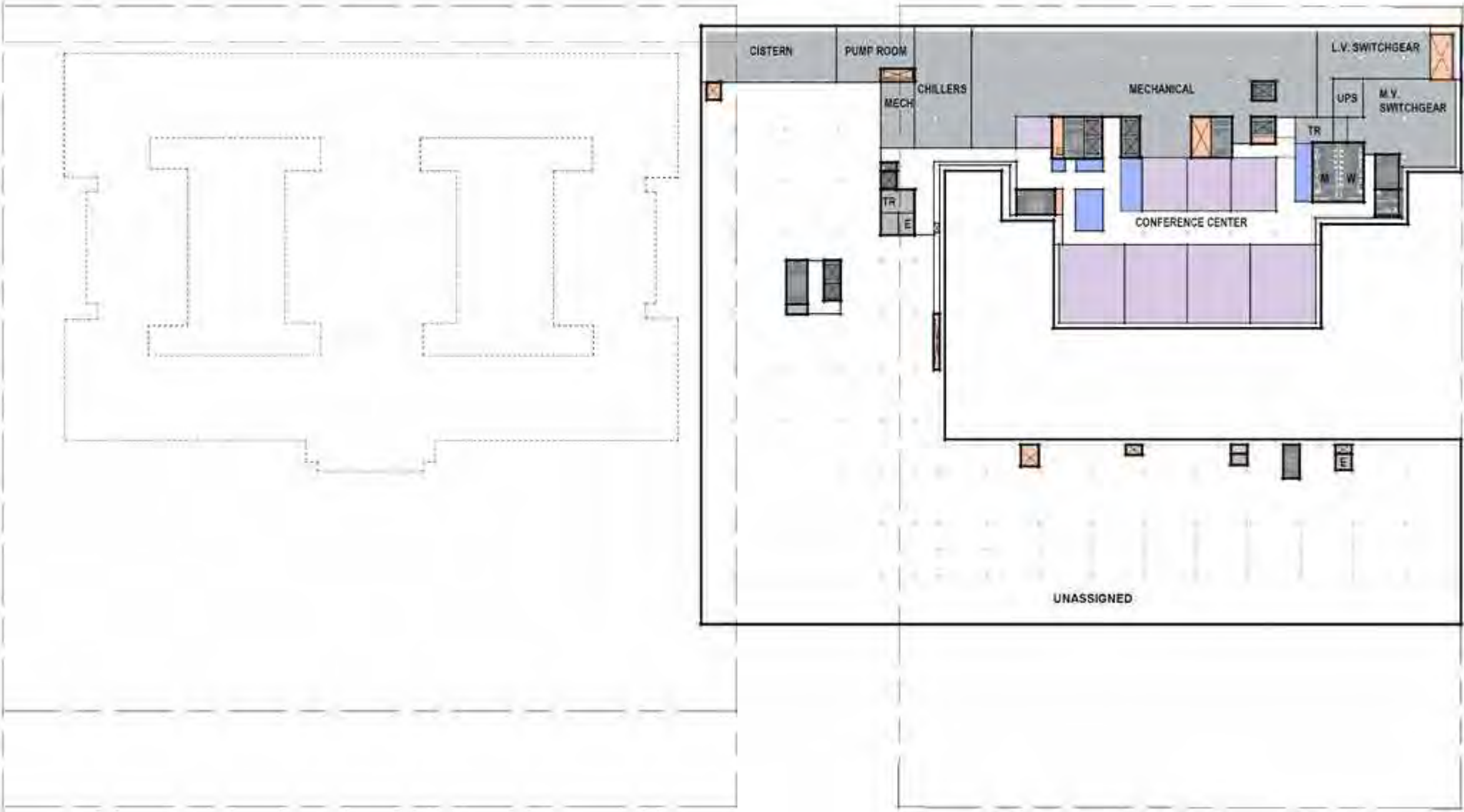










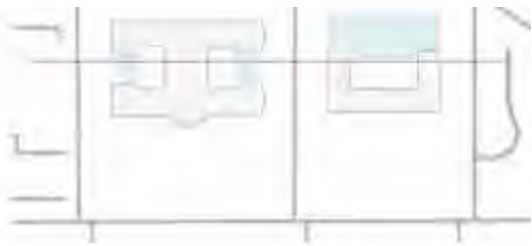


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| SCREENING    | AUDITORIUM       | FITNESS               |
| RETAIL + RDC | CAFETERIA + CAFE | PARKING, LOADING, MEP |
| CONFERENCE   | OFFICE           | CORE                  |

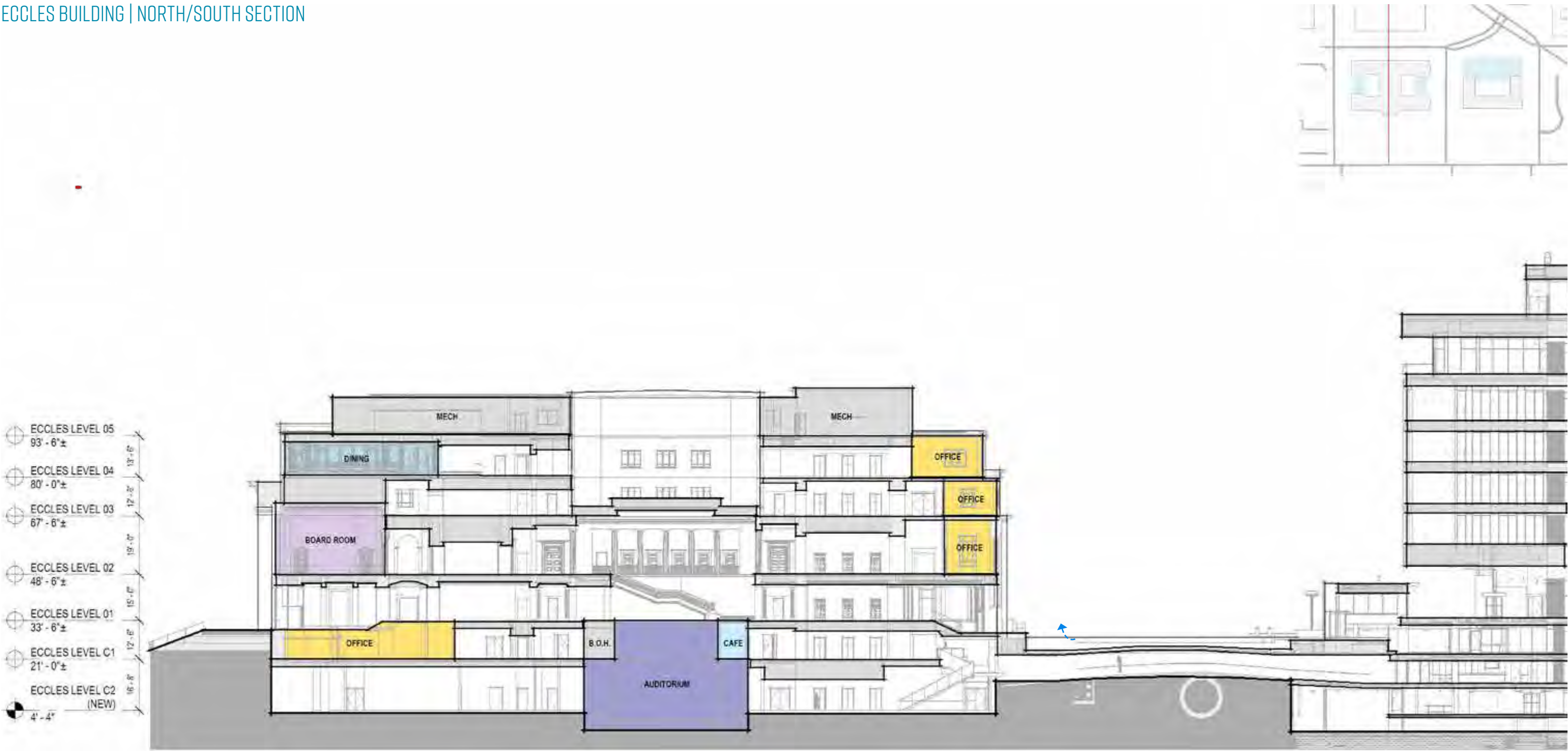




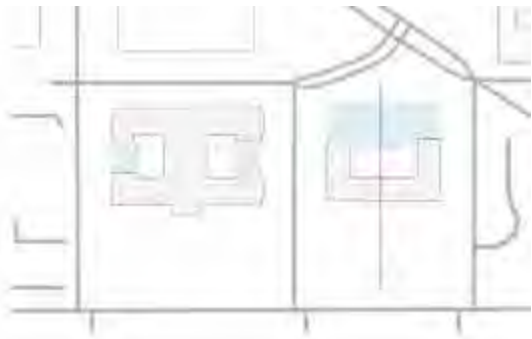














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**ELEVATIONS**



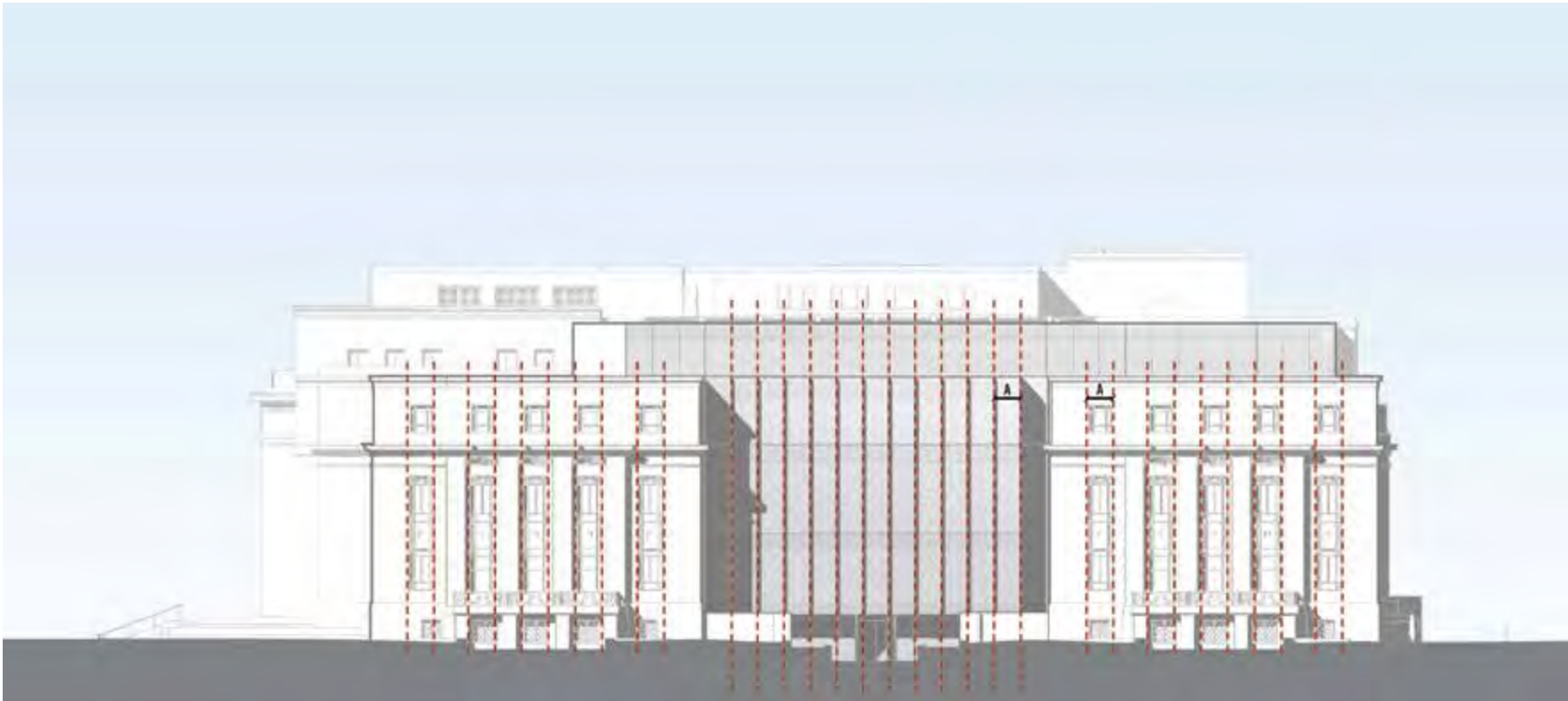


Figure 3-9: Reflecting Proportions of Historic Windows on the Cadence of Eccles Building Infills



Figure 3-10: Aligning with Datum Lines of Eccles Building





Figure 3-11: Continuing Datum Lines and Cadence of FRB-East Building



Figure 3-12: Reproducing FRB-East Building window spandrels through fritted glass



Figure 3-13: Tying new addition into FRB-East Building through the use of white Georgian marble

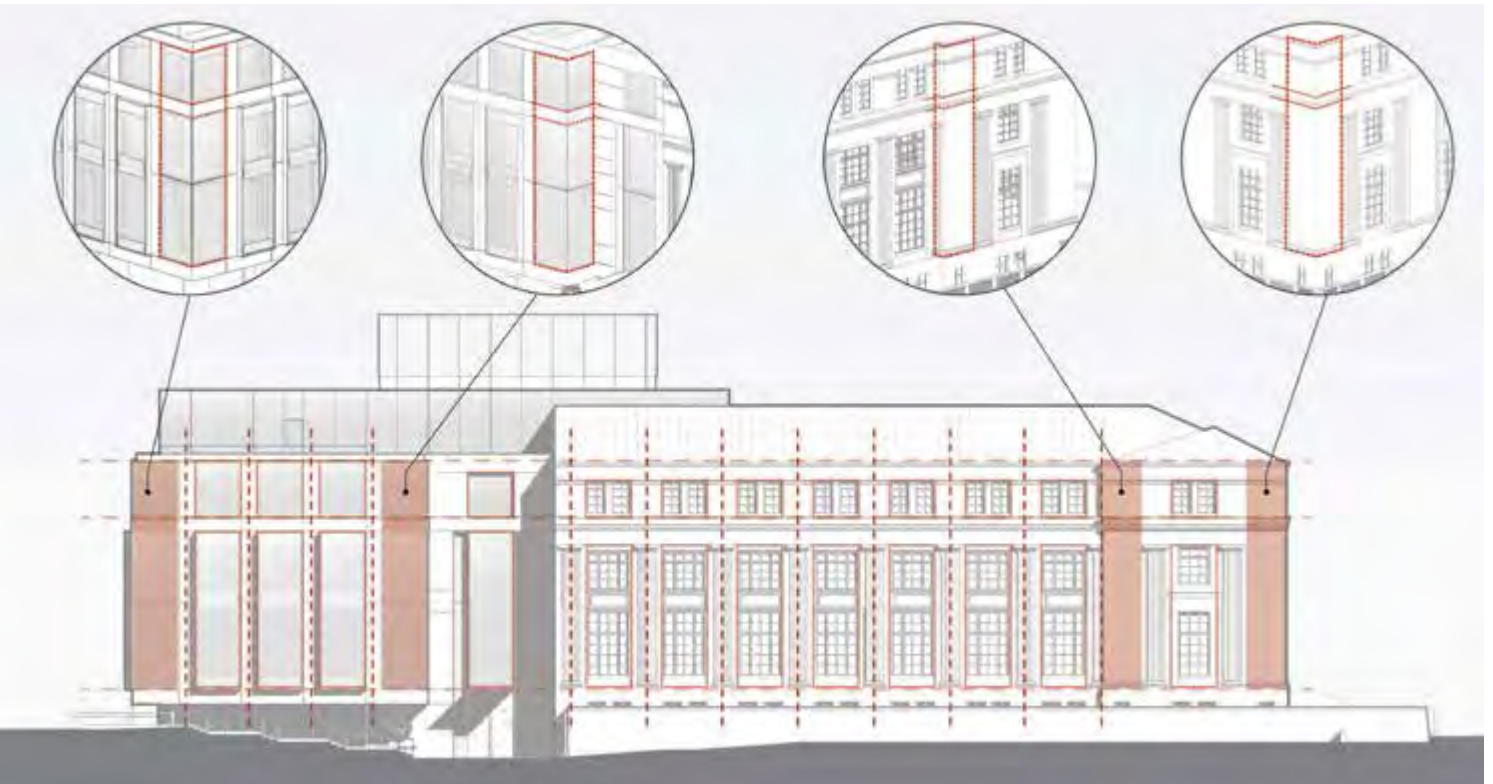


Figure 3-14: Reproducing flush corners of FRB-East Building



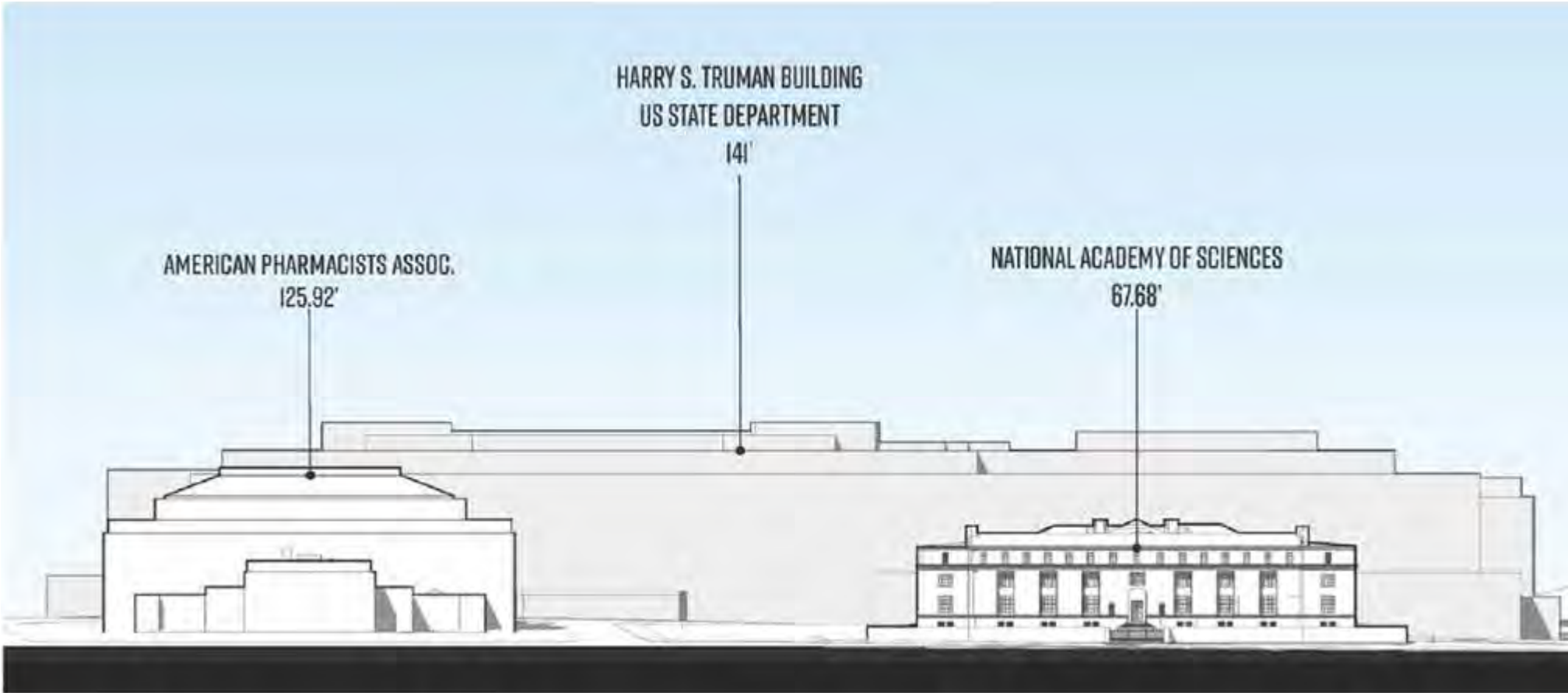


Figure 3-15: Constitution Avenue Elevation

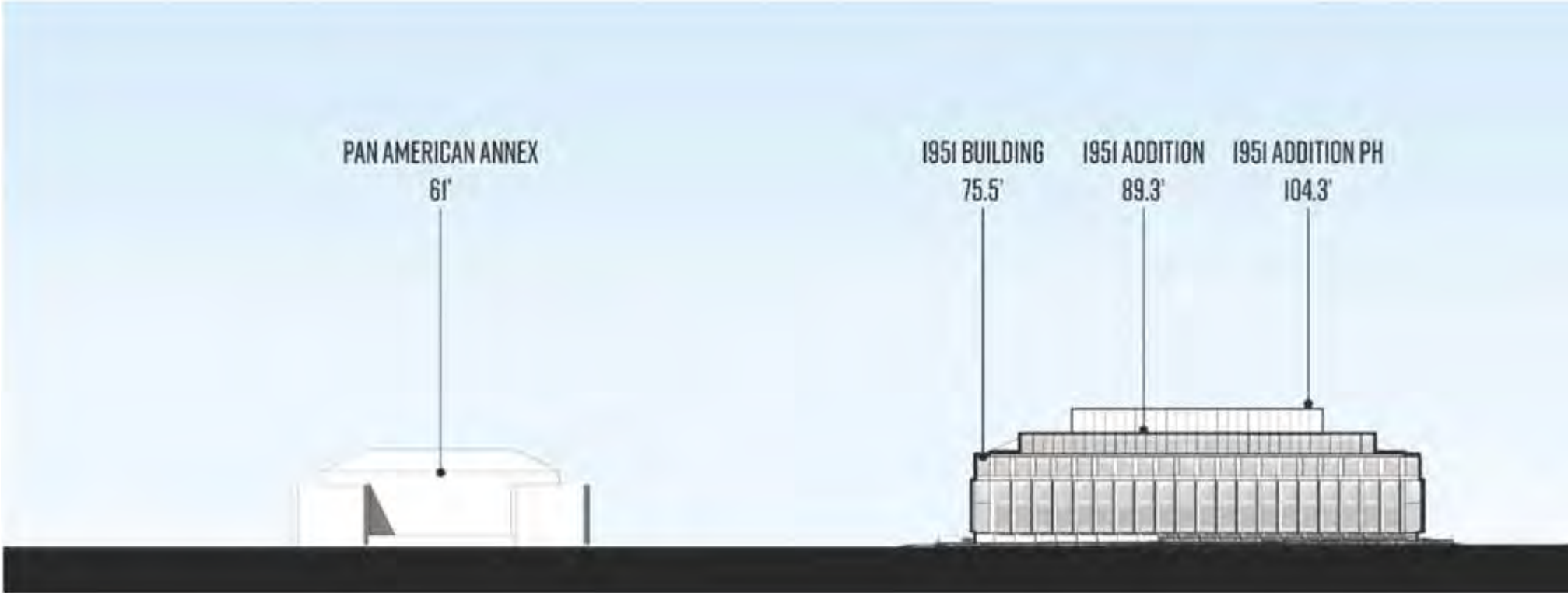
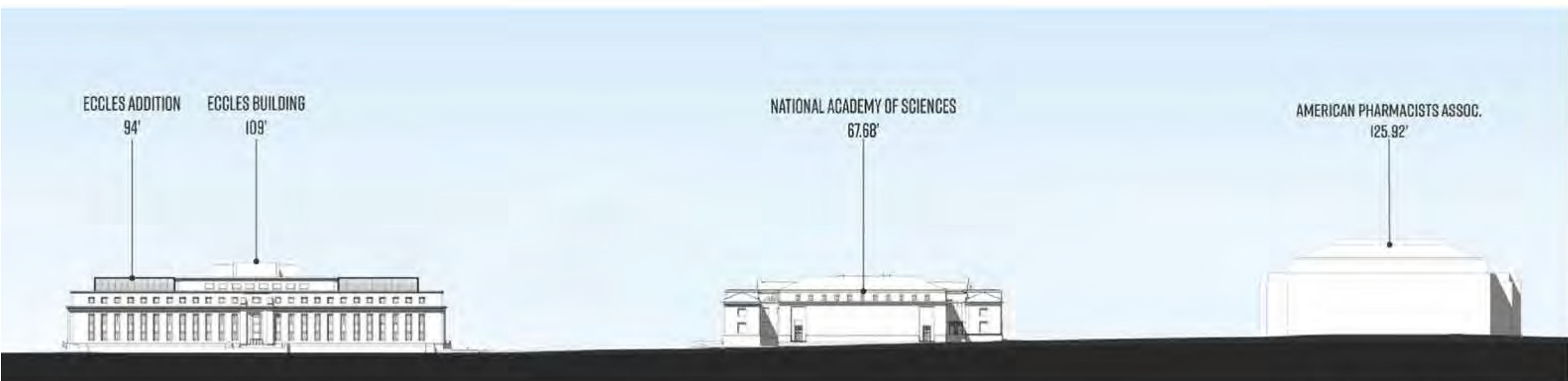
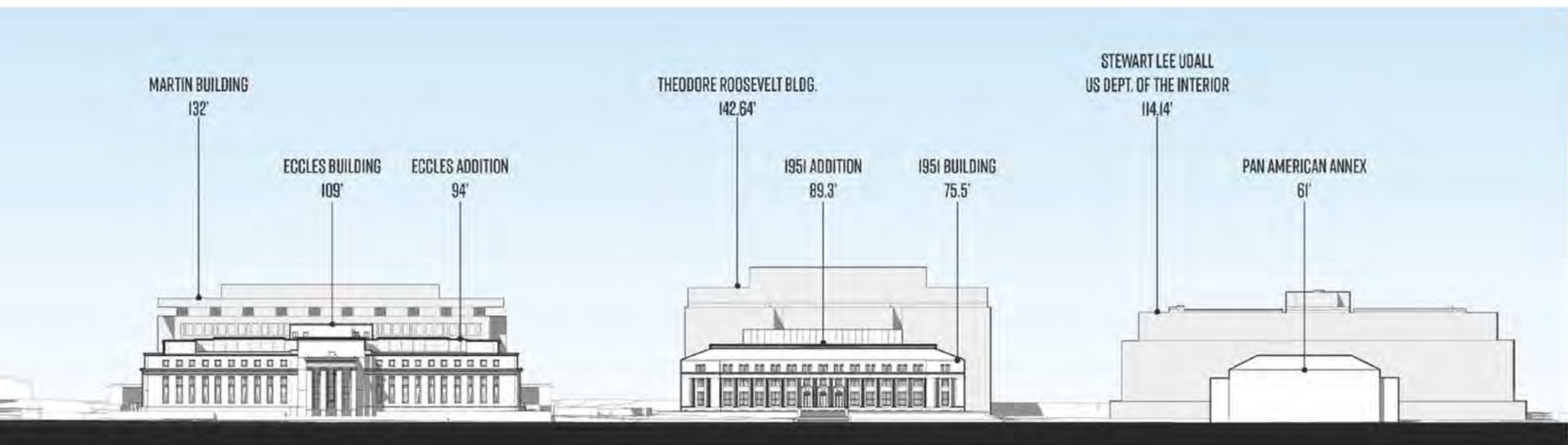


Figure 3-16: C Street Elevation







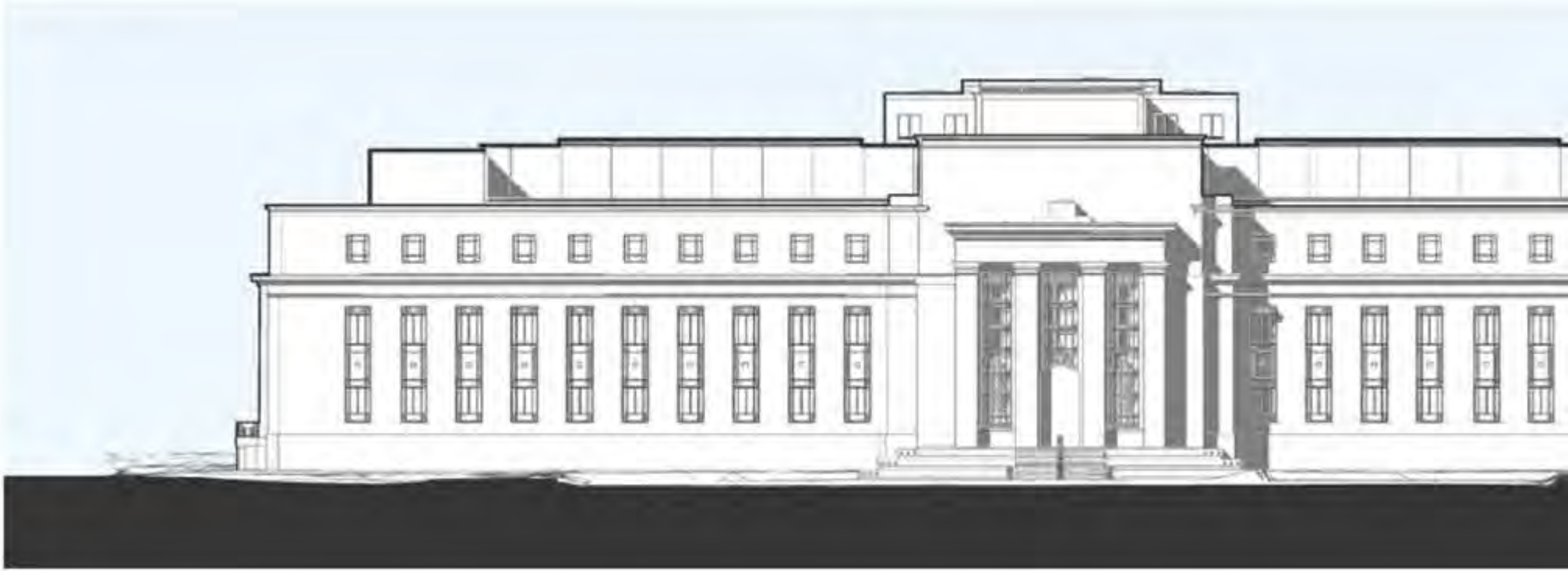


Figure 3-17: South Elevation from Constitution Avenue

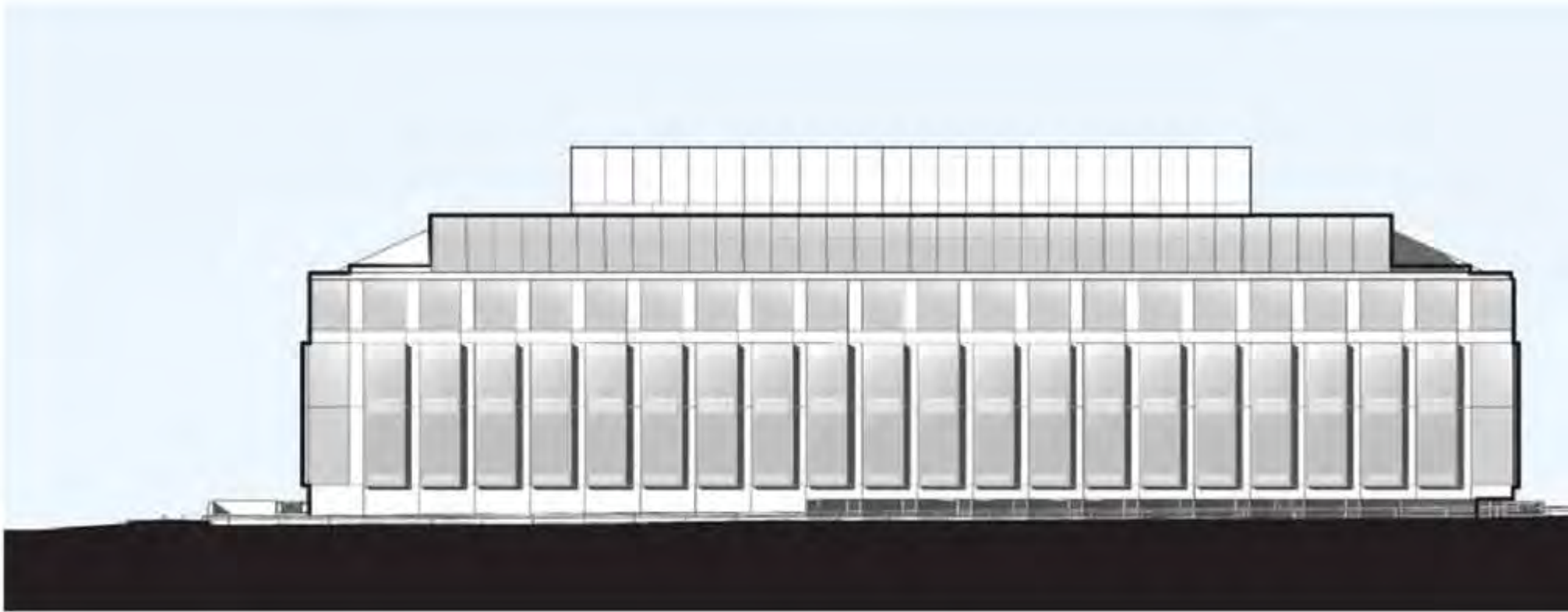


Figure 3-18: North Elevation from C Street



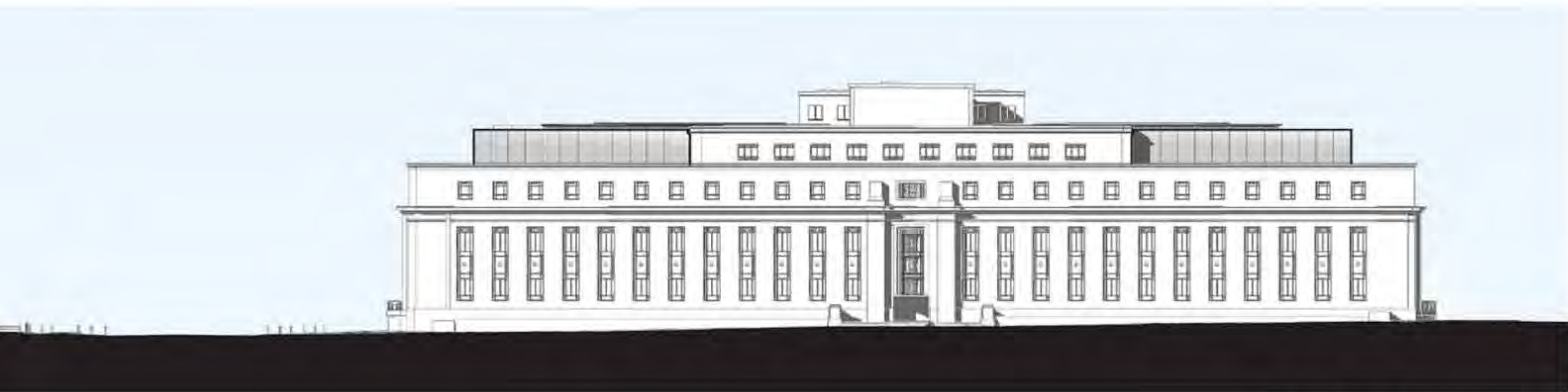
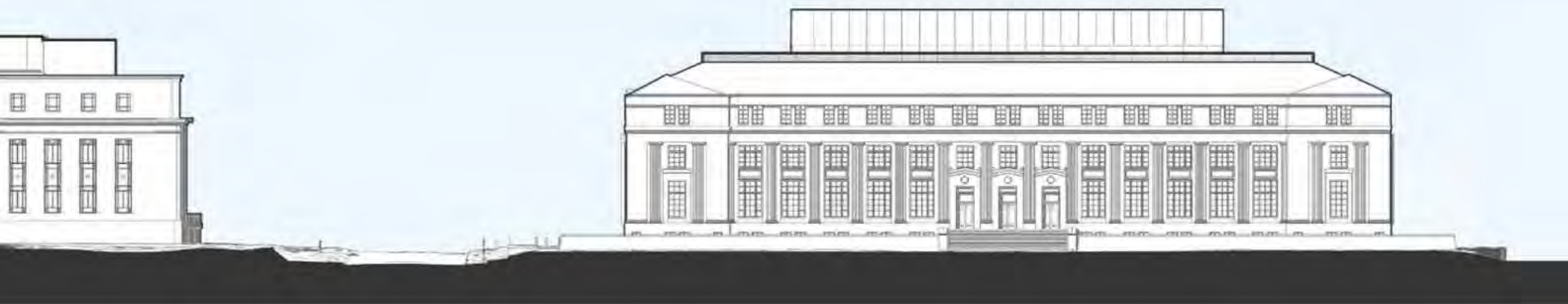






Figure 3-19: West Elevation

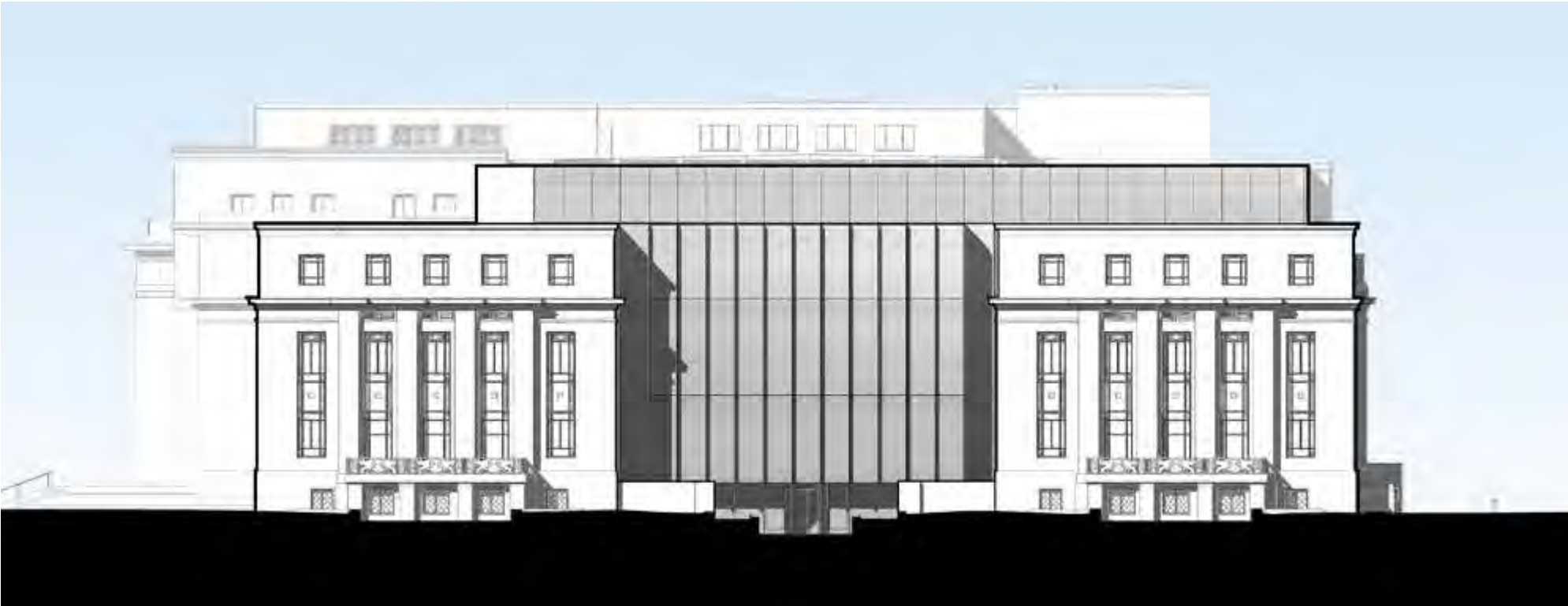


Figure 3-20: East Elevation



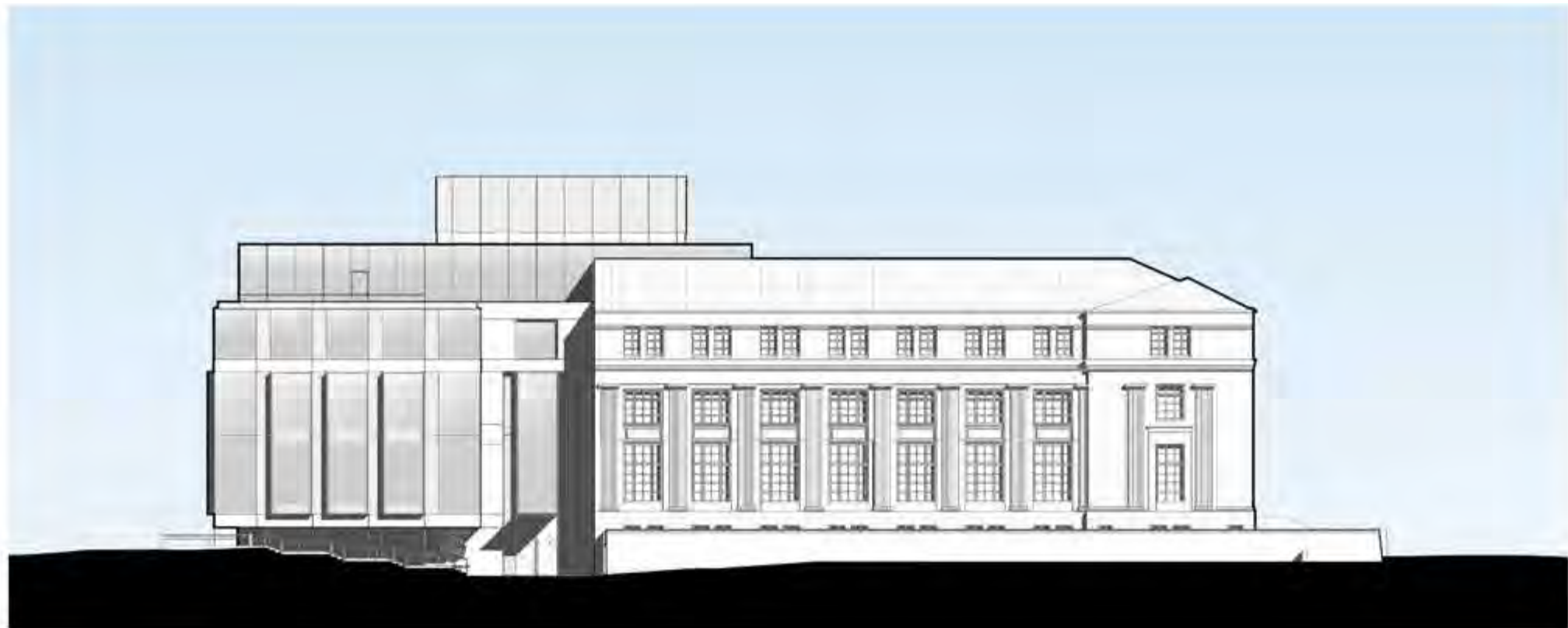
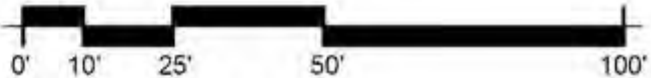
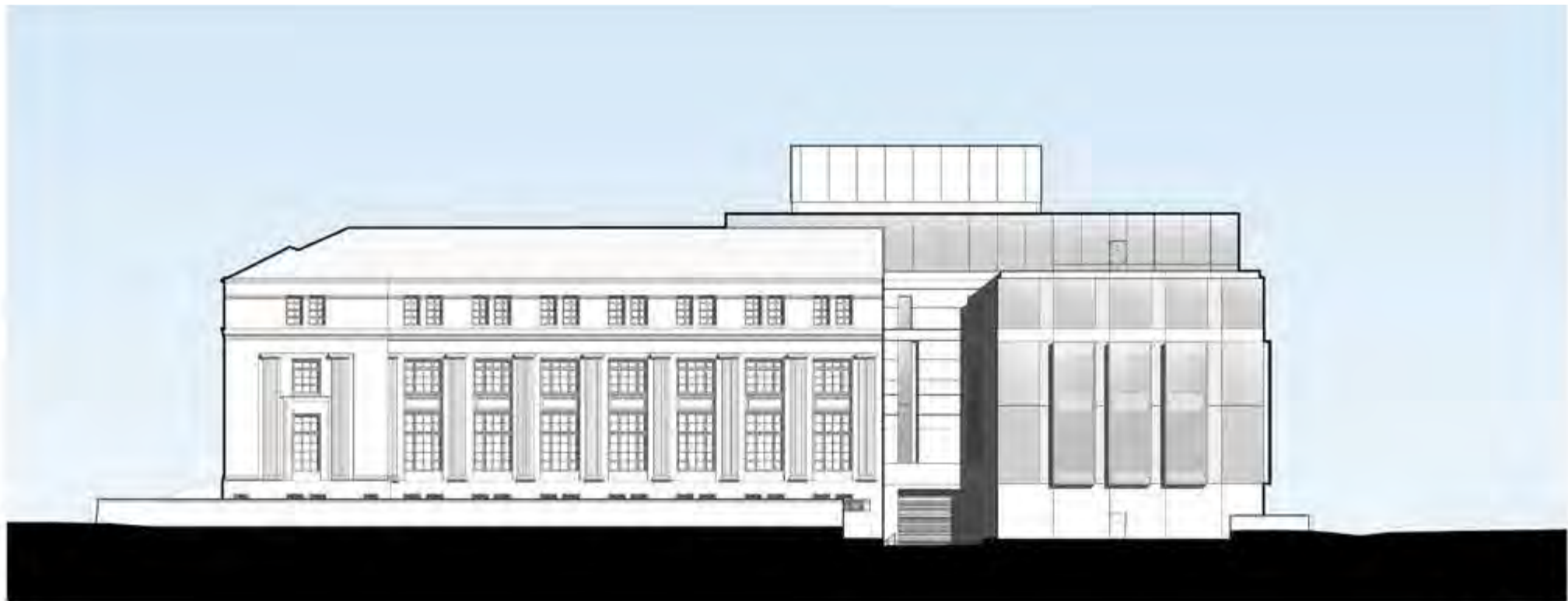


Figure 3-21: West Elevation

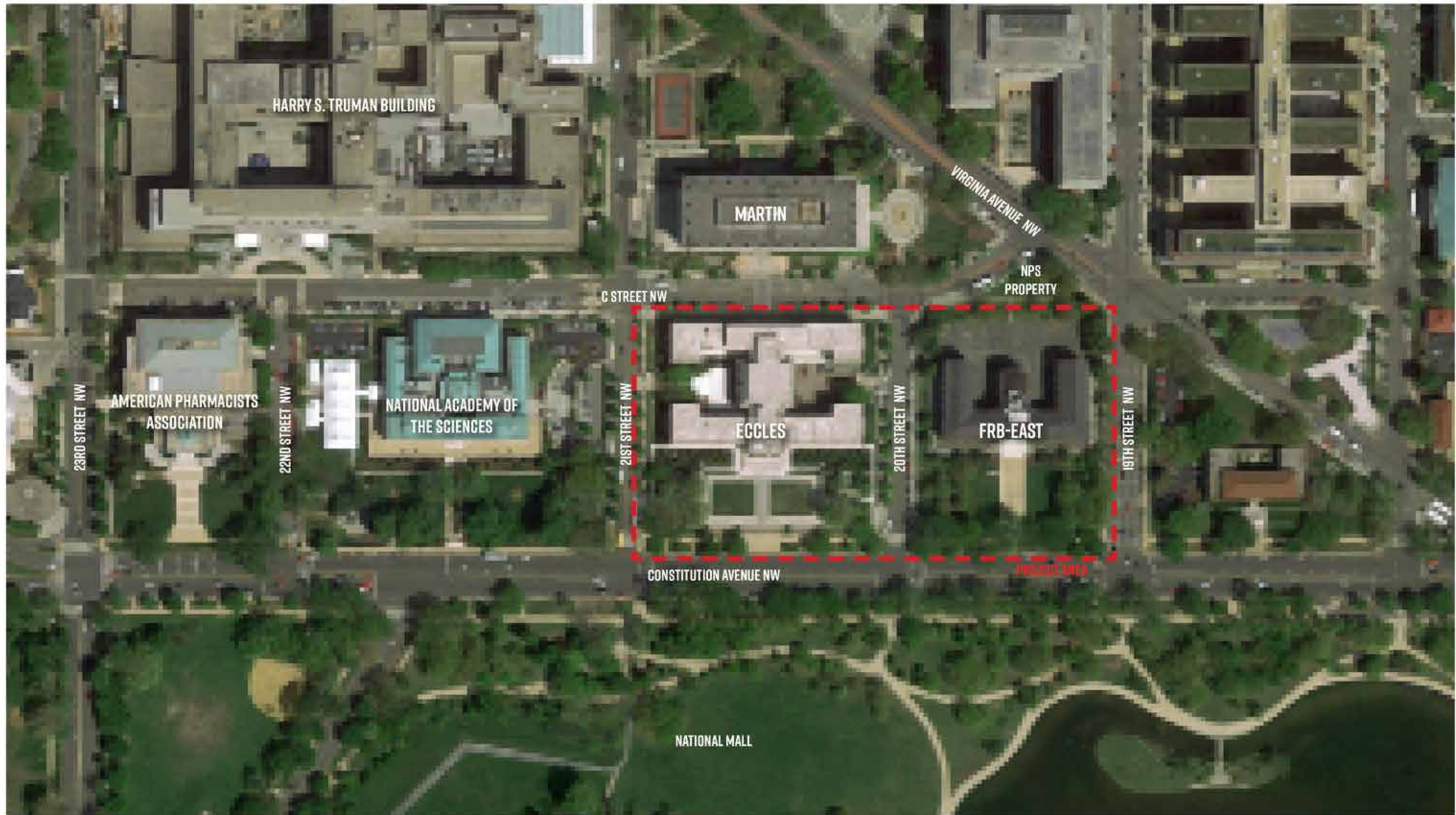




**LANDSCAPE**



SITE CONTEXT





3.II LANDSCAPE

The Marriner S. Eccles Building and FRB-East Building (1951) are both set within classically inspired landscapes along Constitution Avenue, and part of a series of five buildings with similar landscapes fronting the Avenue. Both buildings are also in the Northwest Rectangle Historic District. The rehabilitation of both sites maintains the character defining features of the current symmetrical layout with geometrically ordered gardens on each side of a central walk leading up a flight of steps to the elevated front gardens and up additional steps to the historic main entry of each building.

3.II.I EXISTING ECCLES BUILDING LANDSCAPE

The Eccles Building site design was completed by Architect Paul Phillipe Cret and his studio. He envisioned the building and landscape as one cohesive design. The landscape architecture mirrors the building’s classical style, symmetrical order, and an emerging modernism that emphasized clean lines and sparse ornamentation.

The Eccles Building faces south and is set back approximately 200 feet from Constitution Avenue. The entire site perimeter is protected with security bollards. Vehicular access to two courtyards at the east and west sides of the building, is restricted by retractable security barriers.

The Constitution Avenue frontage creates an imposing composition of terraces and steps that lead up to the main entrance. These terraces are flanked on either side by twin formal gardens with central fountains of black granite surrounded by pebble mosaics and marble borders. The H-shaped building has two private courtyards to the east and west that are enclosed behind stone walls, with decorative

iron gates. The drive lane through the east court provides access to the loading dock, and the west courtyard is a parking entrance for building users. Stone fountains that are integrated with the building façades at the east and west courtyards, provide an axial focal point for the open spaces. The west courtyard has a building at its center.

The original 1930s design is evident in today’s landscape. A characteristic of Cret’s design was the holistic thinking that unified the design for both the landscape and building. Circulation routes, vegetation patterns, and site walls are symmetrical throughout the site, arranged by the strong central axis formed by the building’s main entrance. Walls and paths are perpendicular and parallel to the building’s lines. Vegetation was designed to be in balance with the building, never to obstruct views to the building’s façade, and to balance the weight of it with the large void of the front lawn and tall trees at the edges. The design incorporated multiple scales with characteristics of monumentality and intimacy. Features such as the wide stairs, broad lawn with central walkway, and large stepped granite blocks, attest to the monumental, imposing character of the building and landscape. In contrast, the detailed design of the fountain gardens with mosaic pavements, courtyards with small fountains and detailed plantings, reveal a human-scaled design. The detail found in the metalwork and stonework throughout the site exhibit the original workmanship of the 1930s. Original materials have been retained, including marble walls and benches, black granite fountains, and ornamental stone mosaic pavement in the courtyards.

Changes since the period of significance (1935-1937) are relatively minor, including additions of guard booths, bollards, and vehicular barriers.

The addition of a structure within the center of the west courtyard has diminished the integrity of the courtyard by disrupting the open character of the courtyard and removing original materials. The maturation of original vegetation has outgrown its intended size in some locations (e.g. evergreen shrubs around the west garden terrace), and in other locations plants have been added where none were intended in the original design (e.g. the line of Southern magnolias along the building’s south façade).

3.II.2 EXISTING FRB-EAST BUILDING LANDSCAPE

The FRB-East Building landscape was designed by Robert Wheelwright and Markley Stevenson, who developed a scheme that was integral to the overall design. The classical, symmetrical composition of the landscape, with a series of elevated terraces, combined with details such as cast aluminum lamp posts and railings, unified the landscape and building into a cohesive composition.

The FRB-East Building is located on the north half of the site, set back from Constitution Avenue on a raised terrace. The building terrace is a 9-foot wide marble-paved landing that surrounds the building on three sides. Marble steps descend from the building terrace to a lawn terrace that borders the building on the south, east, and west sides. A formal walkway of exposed aggregate concrete, flanked by low marble curbs connects the building entrance to Constitution Avenue. A small plaza at the south end of the walkway is framed by a pair of low curved walls of white Georgia marble. The north side of the building includes two courtyards, both paved in asphalt and open to a parking lot behind the building.

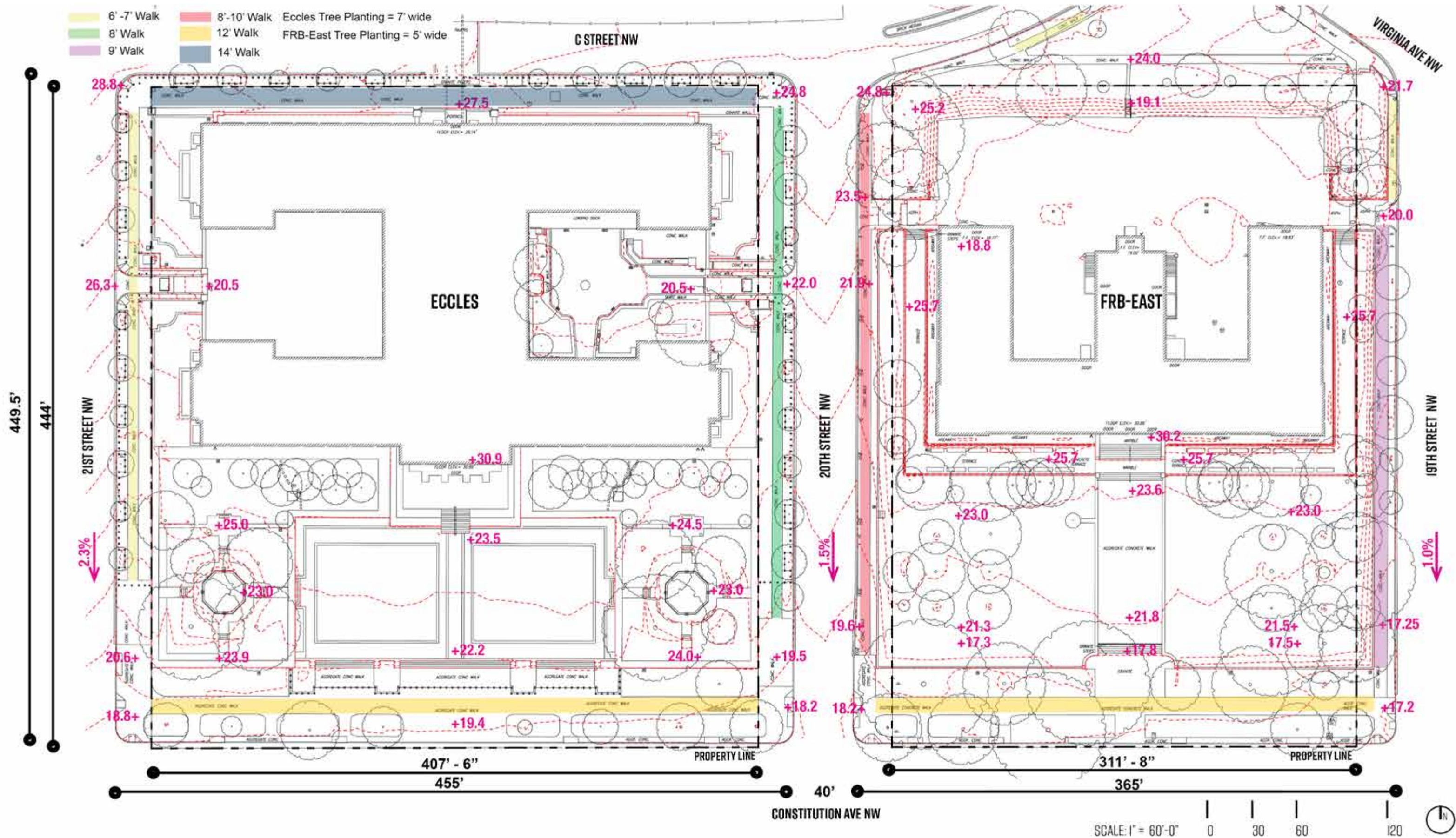
The original design from the 1930s is evident

in the landscape today. Circulation routes and vegetation patterns are symmetrical throughout the site, arranged by the central axis of the building. Vegetation was designed to balance the weight of the building and frame views, with low vegetation along the building’s façade and higher vegetation on the sides. The entire composition was enclosed by a granite curb with an edging of evergreen groundcover. Design details found in the metalwork of the handrails and lamp posts, and the stonework throughout the site exhibit the original workmanship of the 1930s. Original materials have been retained, seen in the marble steps and walls, granite curb, and bronze lamp posts.

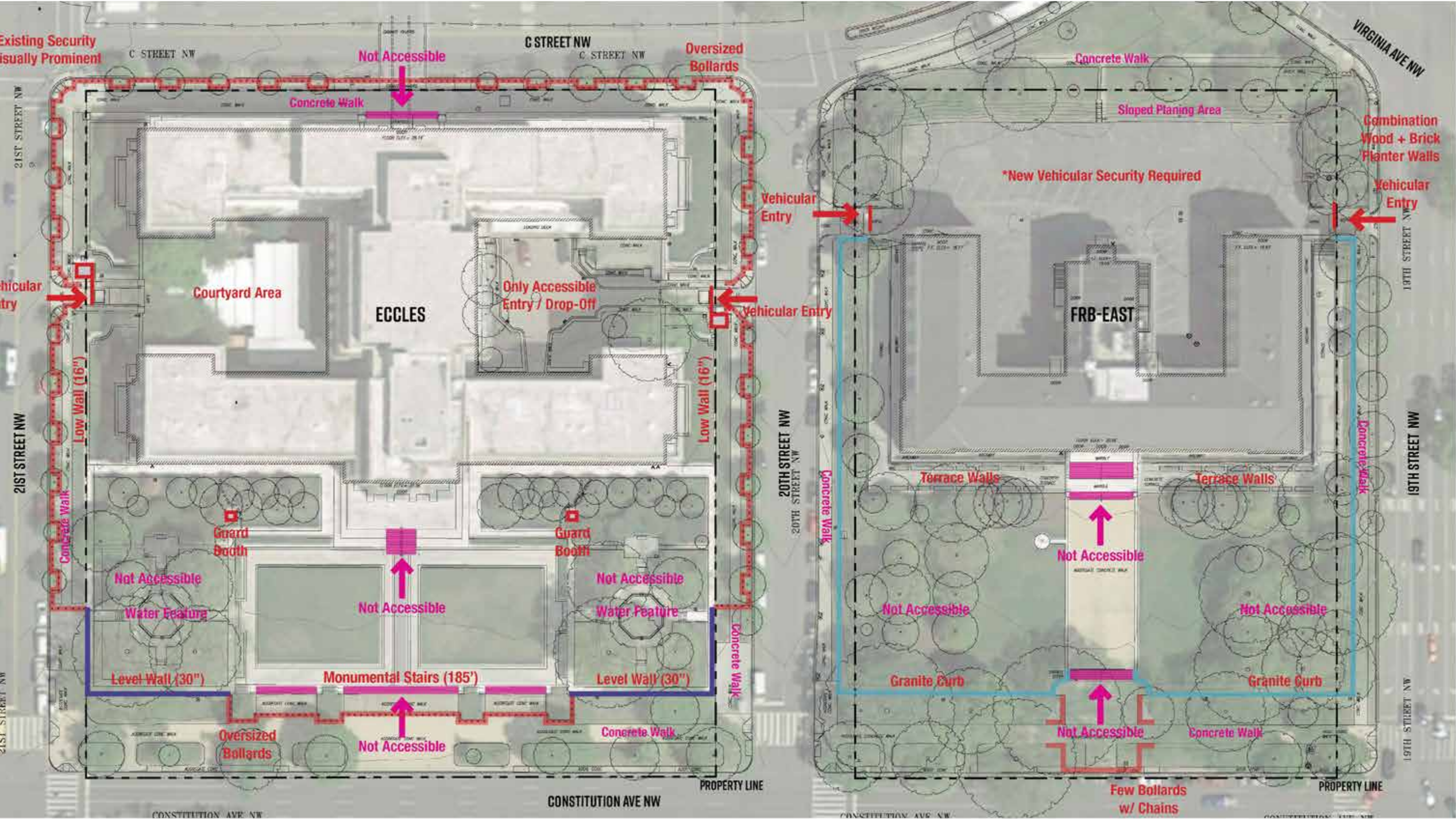
Changes to the landscape since the 1930s are relatively minor, including additions of bollards and vehicular barriers. The variety of plant species has expanded since the period of significance, and shrubs are now located in places where none were intended historically (e.g. underneath the bosques). In the 1960s a flag-pole was added to the left of the central walkway, disrupting the symmetrical design of the front façade. Overall, the landscape remains mostly unaltered from the original design and construction



EXISTING SITE ANALYSIS | SIDEWALK & GRADING

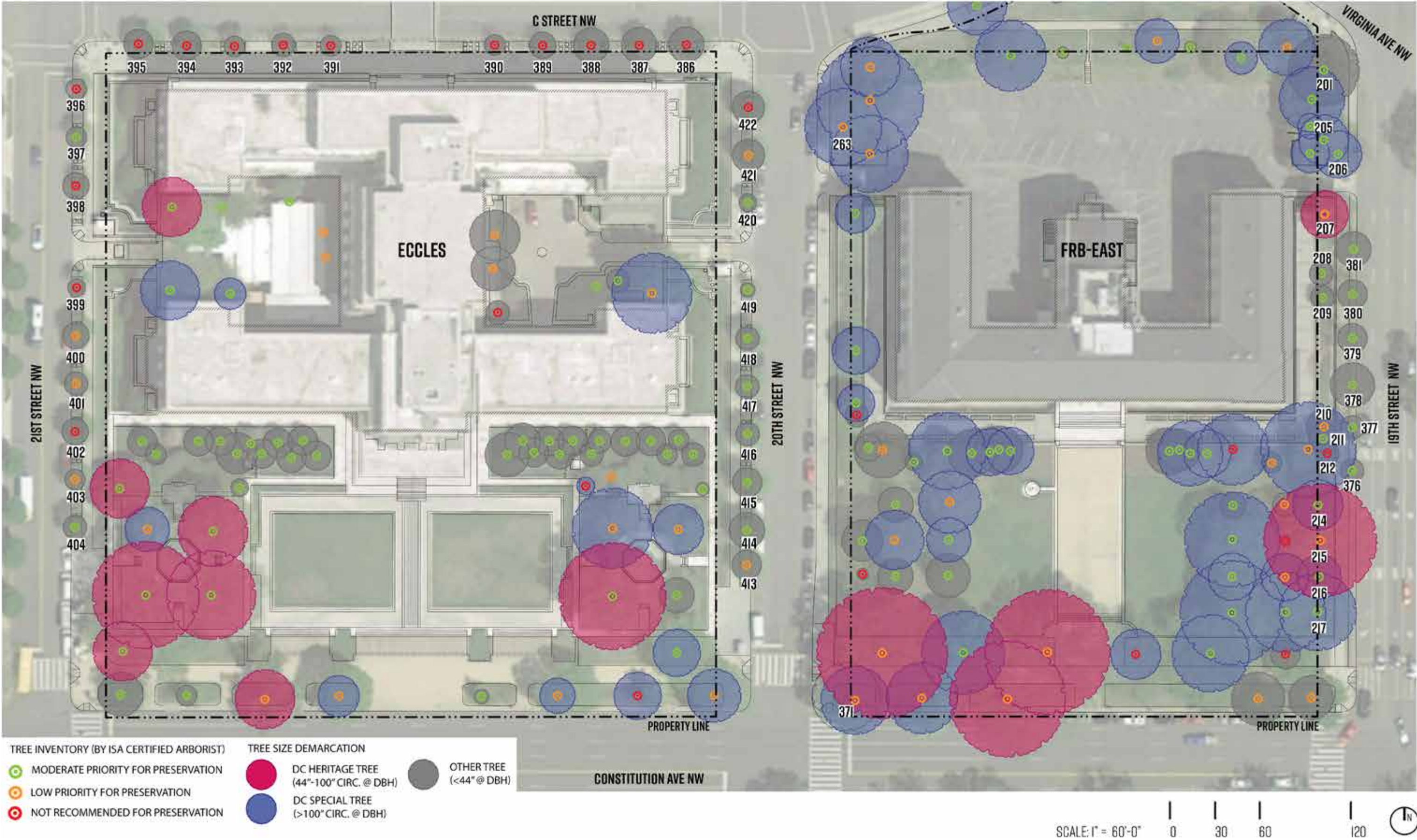






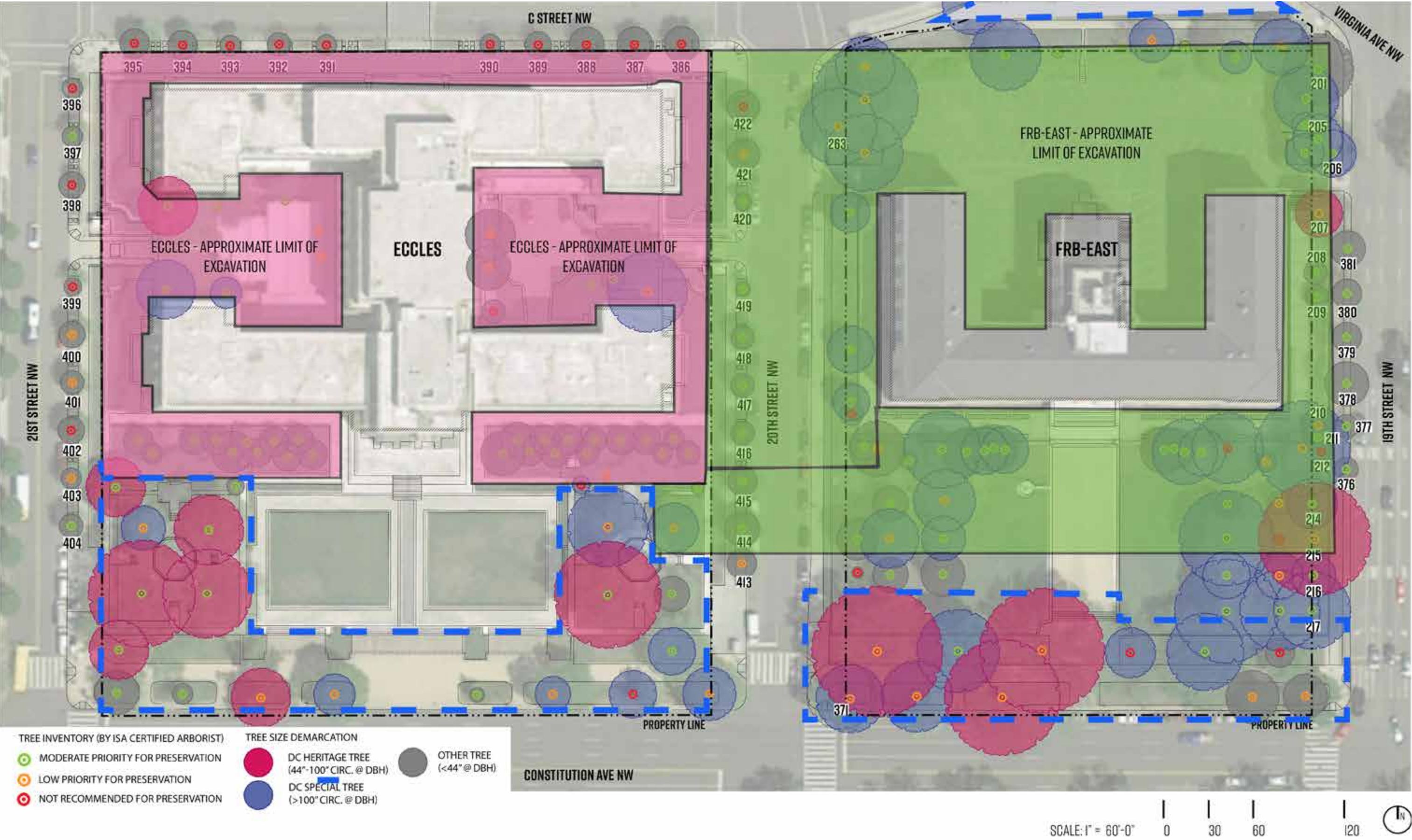


EXISTING TREE ANALYSIS | TREE HEALTH & SIZE





LIMITS OF BUILDING DEMOLITION AND TREES TO REMAIN





EXISTING SECURITY MEASURES & DETERRENTS



Eccles Building | Heavy Bronze Bollards at South Lawn Terrace



FRB-East Building | 20th St NW with No Street Trees or Planting at Curb



Eccles Building | Heavy Bronze Bollards at 20th St NW near Accessible Entrance



FRB-East Building | Sloped Planting Area at Historic Terrace along 19th St NW



EXISTING LANDSCAPE CONDITIONS



*Eccles Building | South Terrace Gardens*



*FRB-East Building | South Lawn Terrace & Gardens*



*Eccles Building | Building/Service Entrance at 20th St NW*



*FRB-East Building | Vehicular Entrance at 20th St NW*





### Street Trees to be removed and replaced

Trees removed: 35 trees (Based on DDOT database)  
 Caliper range: 7" to 12"  
 Average Caliper: +/- 9"  
 Average health: Moderate to poor  
 Typical Condition: Many of the street trees show basal damage, Gloomy scale, and have restricted rooting area.

Figure 3-23: Existing root systems must be carefully considered



Figure 3-24: Street tree health is poor due to restricted root areas

## 3.12 PROPOSED LANDSCAPE AND STREETScape

### Circulation, Sidewalks, and Streetscape

Primary pedestrian access to the Eccles Building will take place from 20th Street NW. Primary visitor access to the Eccles Building will take place from the Martin Building directly to the north. An underground pedestrian tunnel will connect the Eccles and FRB-East Buildings, joining the existing tunnel that connects the Eccles Building and Martin Buildings (see Pedestrian and Service/Utility Tunnels below).

20th Street NW will be completely removed and replaced between Constitution Avenue and C Street to make way for underground garage and tunnel construction. A new raised mid-block crossing on 20th Street NW will connect the main entrance of the Eccles Building with the main entrance of the FRB-East Building. Special paving at this mid-block crossing will provide a gestural connection between the two sides of the FRB campus separated by 20th Street NW. A precedent for this approach exists between the Martin Building and the Eccles Building on C Street NW, which has pavers crossing over the street in front of the main staff entrance to the Eccles Building.

The streetscape and sidewalks will be completely removed and replaced once construction has been completed and the perimeter security. Existing curb lines will be maintained throughout; however, a portion of the curbs at crosswalks will likely have to be repoured. To meet current DDOT standards, the entirety of 20th Street curbs and drainage will be demolished and completely rebuilt.

**Overall Vegetation (Not building specific)**  
 The proposed planting design will include plants selected to thrive in the local/regional site conditions and to increase species diversity while retaining the character of the significant historic landscape. Native

plants will be utilized whenever possible. The design includes a tree preservation strategy that will seek to protect as many healthy existing trees as possible. Tree protection strategies may include fences protecting tree root zones, temporary measures to prevent soil compaction and root damage where tree protection fencing is not practical, pruning, fertilization, air spading, or root pruning. Missing historic trees along Constitution Avenue will be replaced. All existing lawns will be stripped, fine graded and replaced with new sod. Underdrainage systems will be added to the south garden terraces as needed.

New tree plantings within the terraces will utilize large caliper trees, 8- to 10-inch. Overgrown shrubs will be replaced with plants that better match the original design intent and are well adapted to the local environmental conditions.

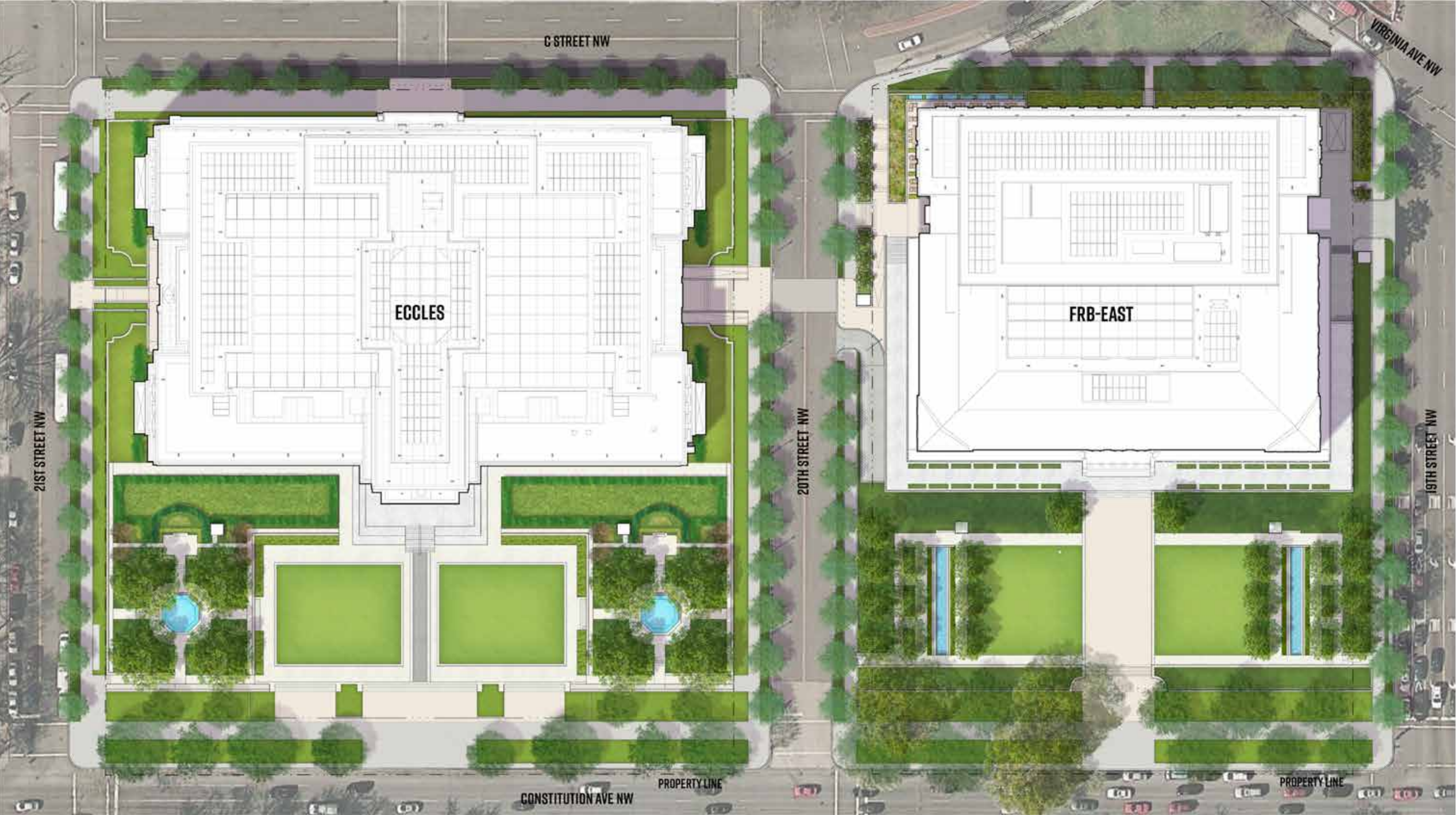
Street tree replacement in the right-of-way will follow DDOT requirements. Removal and replacement of bollards will require replacement of street trees with the exception of very large trees along Constitution Avenue. Street trees not along Constitution Avenue will be replaced with 5- to 6-inch caliper trees. Large elm trees along Constitution Avenue that are not in good condition will be removed and replaced with 10- to 12-inch caliper trees.

Minimum DDOT street tree soil volumes will be met or exceeded by providing structural soil or other suspended pavement systems if required in selected areas. Trees in the right-of-way will be under drained, irrigated, and include aeration systems.

Select large shrubs and trees will be removed and replaced once site security and construction activities related to the garage and vehicular ramps at FRB-East Building) have been completed. Trees will be replaced with 6- to 8-inch caliper trees. Shrubs will be replaced with large shrubs.

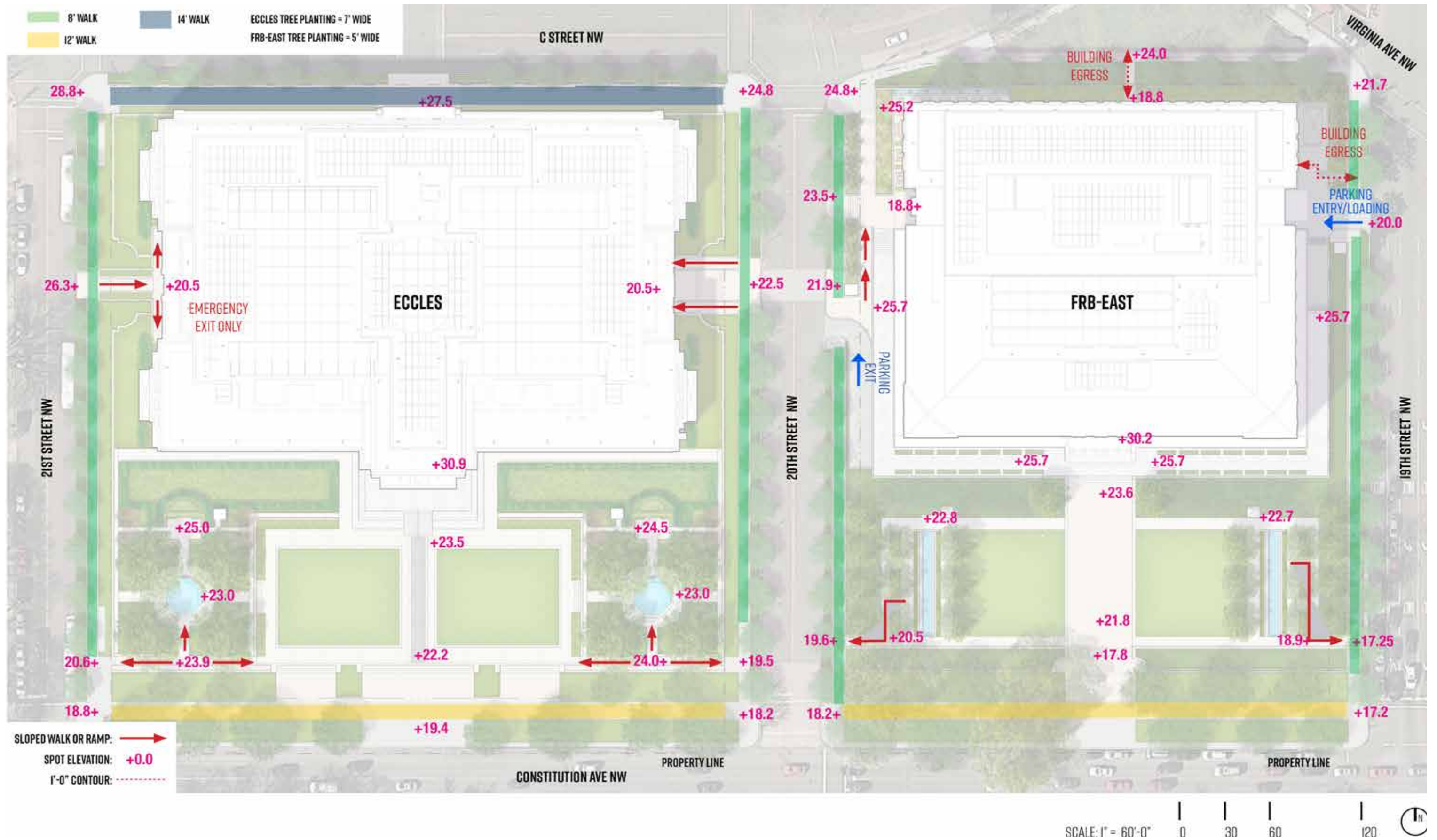


PROPOSED LANDSCAPE PLAN



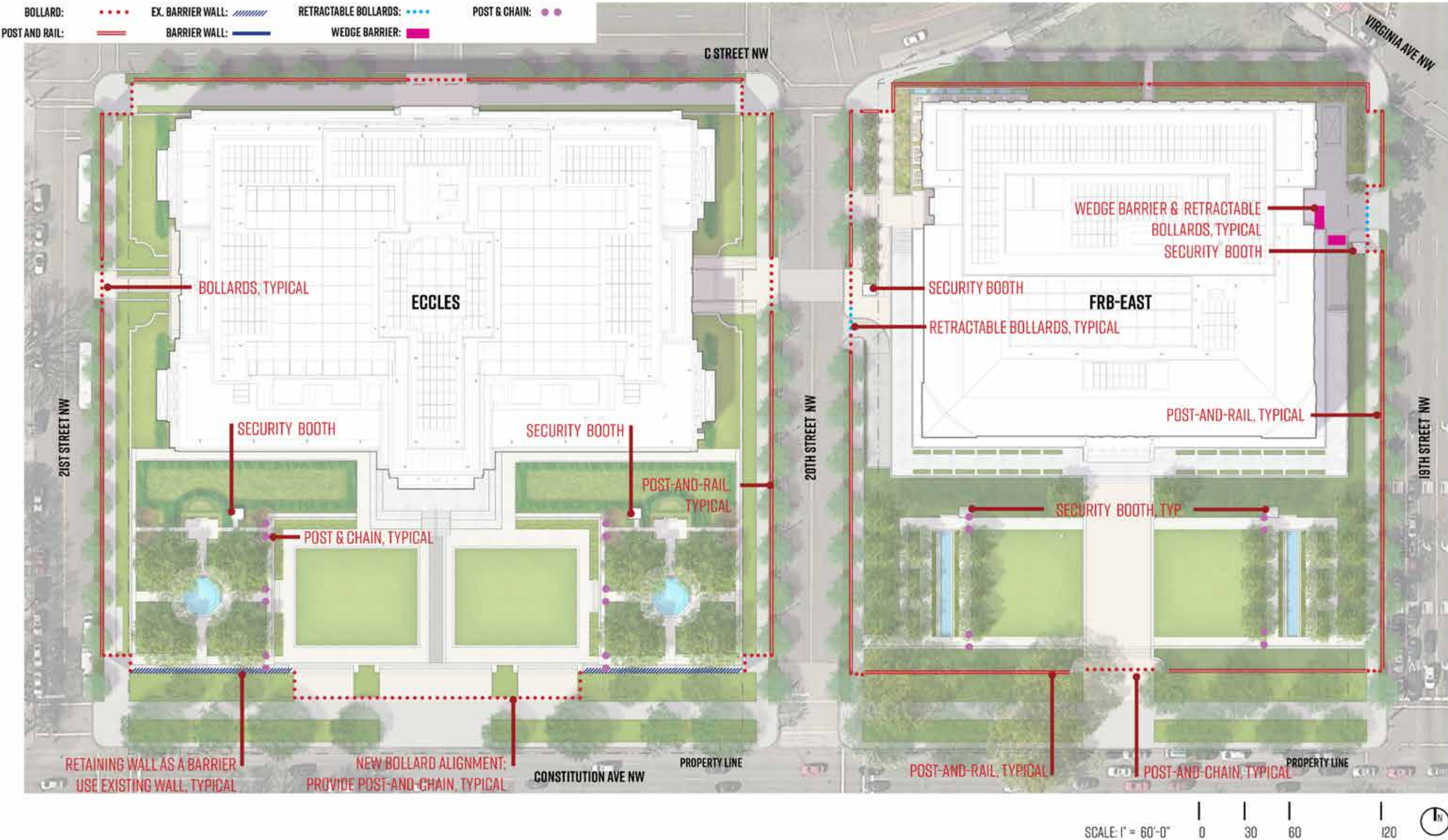


## PROPOSED GRADING AND ACCESSIBILITY





PROPOSED SITE SECURITY DIAGRAM





3.13 PERIMETER SECURITY

The existing bronze-clad perimeter security system around the Eccles Building will be replaced by a cable rail system similar to one installed at the Department of Commerce. It will be more compatible and less onerous than the existing. A new perimeter security system is proposed at FRB-East Building as one doesn't currently exist. The proposed approach to site perimeter security will integrate cable rail with anti-ram bollards at entrances, anti-ram knee walls, and other site elements. The appearance of security barriers around the campus and their effects on the historic integrity of the FRB Buildings will be minimized through screening and softening with planting, incorporation into site amenities, and integration of multiple barrier types.

The proposed perimeter security elements will be consistent for both buildings and simplify the alignment, consisting of either a post-and-rail system with an internal cable located in planting areas, or simpler individual bollards in paving at entry locations or where pedestrian circulation is required. The design team is coordinating with perimeter security consultants to confirm that the appropriate crash-ratings are being met. The intent is to maximize the spacing between the posts and to simply cover the cables between the posts, significantly reducing the visual impact compared to traditional bollards spaced at about 4- to 5-feet apart. All bollards surrounding the buildings will be bronze, and have been tested and certified to meet minimum performance criteria. The post-and-rail design, will be installed at streetscape planting beds. The profiles of the bollards and posts will be minimized to reduce visibility.

Bollards outside of building entrances in areas of paving and adjacent to arrival plazas will be solitary anti-ram structures. Bollards that are not within areas of paving or adjacent to arrival plazas will have a post-and-chain design similar to the National Park Service post-and-chain detail that is present along

Constitution Avenue at Constitution Gardens.

In front of the Eccles Building along Constitution Avenue, the existing marble walls will be retained in place and serve as anti-ram knee walls to protect against a vehicular attack and/or pedestrian access into the site. At the FRB-East Building along Constitution Avenue, the post-and-rail-system will be setback about 15 feet from the north side of the sidewalk. The post-and-rail only penetrates the soil zone every 10 to 11 feet, thus maximizing the preservation of tree root zone.

Retractable bollards that form a sally port around the car for screening and will control vehicular access at the garage entrances. Air-conditioned parking-control guard booths with security systems will be provided at each vehicular sally port.

New air-conditioned guard booths will be provided to replace the existing Federal Reserve Board Law Enforcement Unit (LEU) guard booths in the south garden terraces at the Eccles and FRB-East Buildings. New guard booths will be provided at the east and west side of the FRB-East Building adjacent to the parking garage ramps. Guard booths will be designed to blend in with the landscape and architectural character to the extent possible. The exterior areas at the Eccles and FRB-East Buildings screening entrances will be designed with high-quality materials that match the character of the architecture and landscape. The plazas at the screening entrances will include a building overhang to protect from the elements. Drop-off and pick-up for persons arriving by vehicle on 20th Street NW are anticipated but have not specifically been designed, as the roadway curbs and lanes will remain intact.



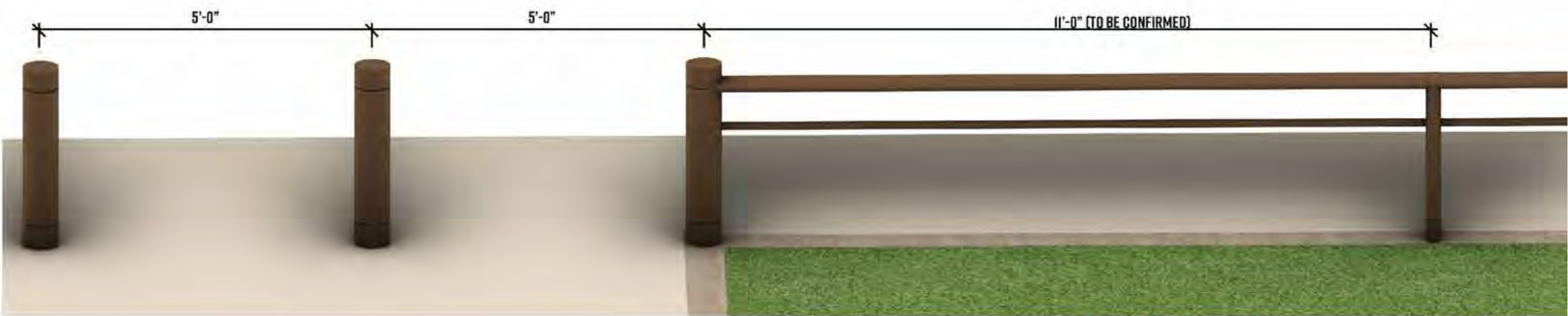
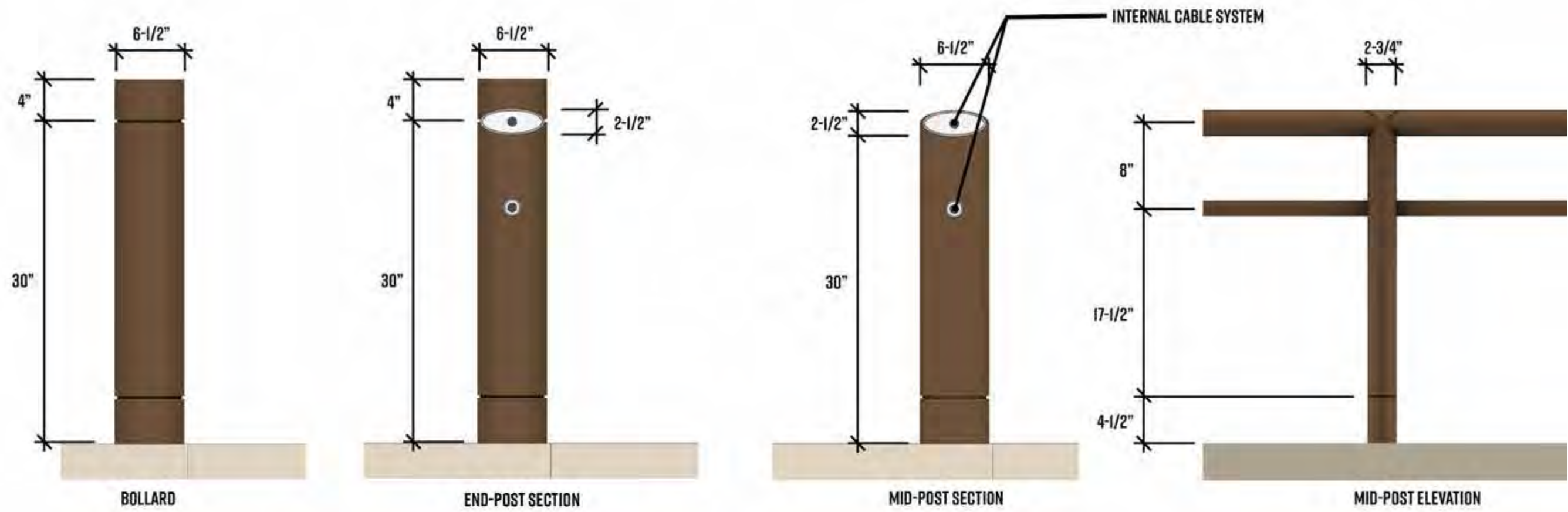
Figure 3-25: Existing Site Retaining Wall as a Barrier



Figure 3-26: Post-and-Rail Precedent



PROPOSED POST-AND-RAIL VEHICULAR BARRIER





PROPOSED POST-AND-RAIL VEHICULAR BARRIER

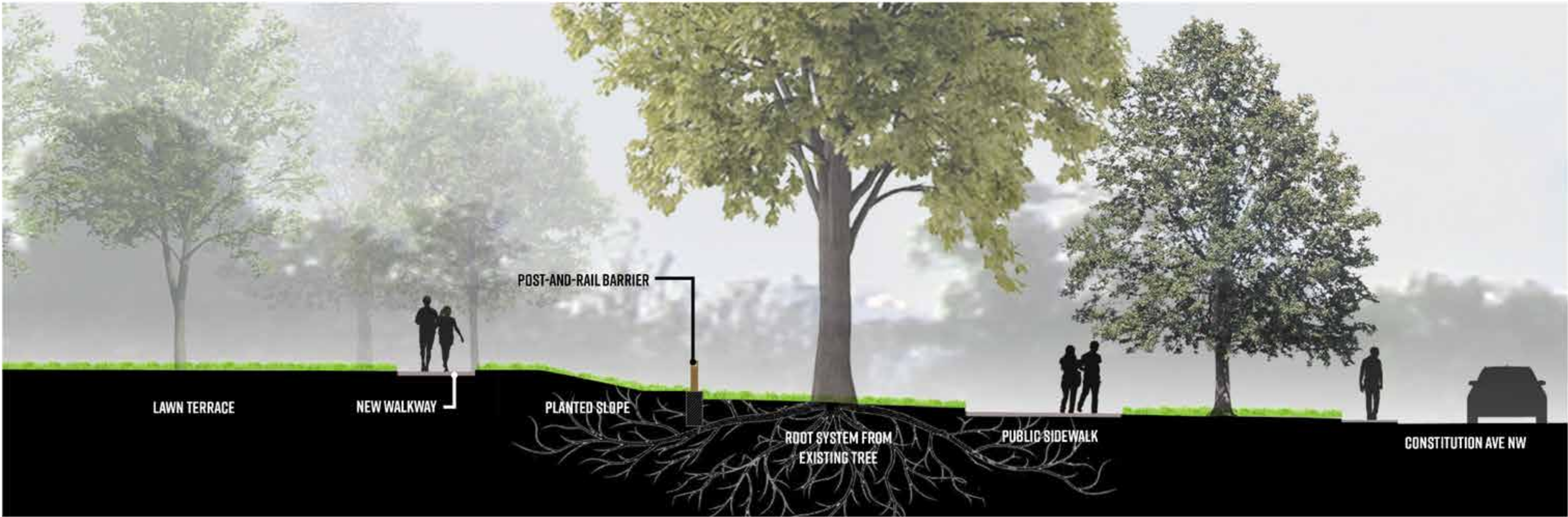


EXISTING CONDITIONS





FRB-EAST BUILDING CONSTITUTION AVE NW SECTION - NORTH/SOUTH | PROPOSED SITING OF BOLLARDS AND RAILS





PROPOSED TYPICAL STREET TREE PLANTING DETAIL

STREET TREE PLANTER SOIL VOLUMES

Typical Tree 7' wide planter (max)  
Average soil volume = 1600 cu ft (850 cu ft uncovered, 750 cu ft covered)  
7' wide planter (4.5' deep) + 7' extended planting soil area (4' deep)

- DDOT soil volumes
- Large trees: 1500 cubic feet of soil within a R27'
  - Medium trees: 1000 cubic feet of soil within a R22'
  - Small trees: 600 cubic feet of soil within a r16'

\*Soil volume is calculated as: (Area of Open Soil x Depth of Soil) + (Area of Covered Soil x Depth of Soil).





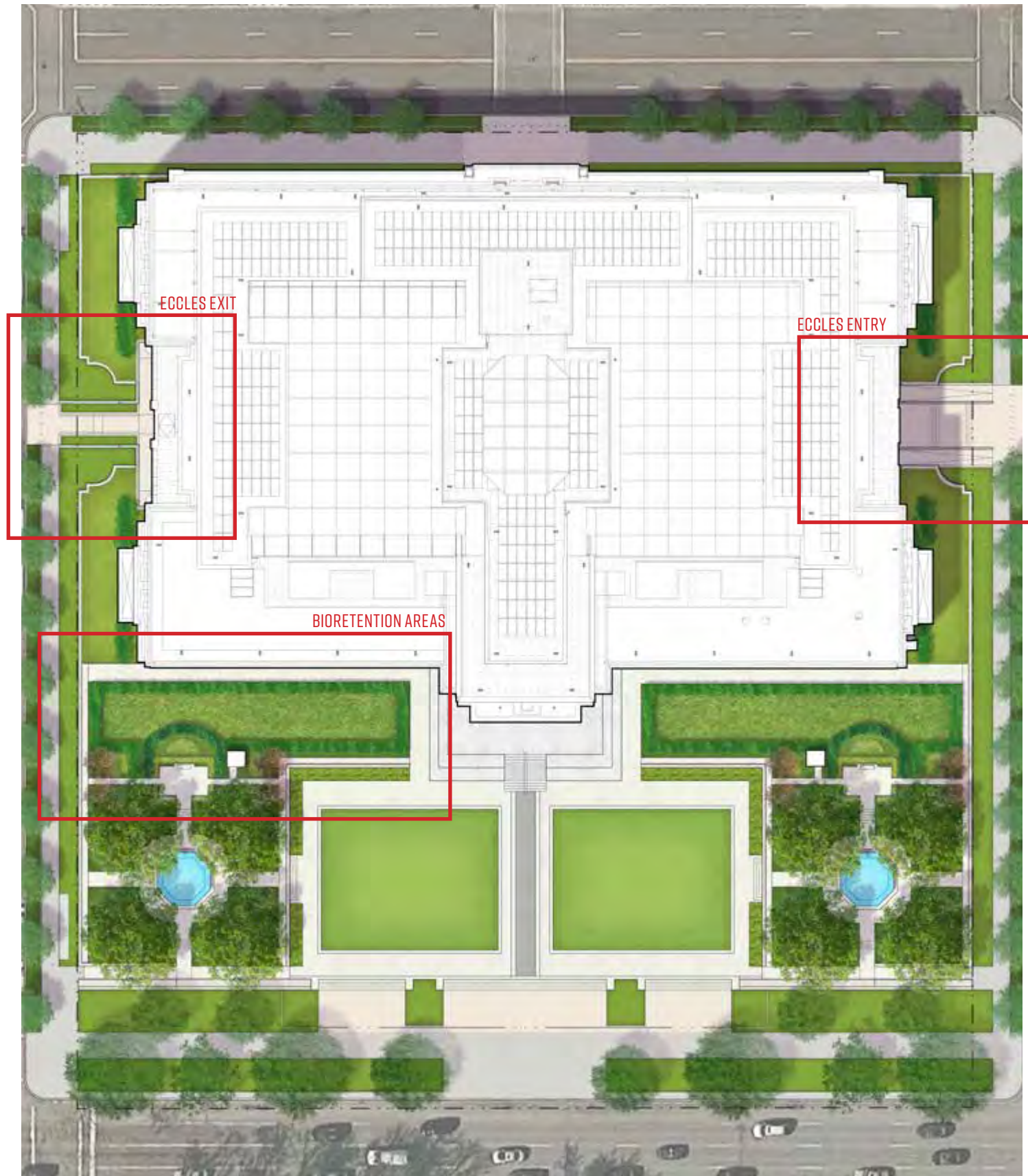


Figure 3-27: Eccles Proposed Rendering

### 3.14 ECCLES BUILDING LANDSCAPE

#### Eccles Building Site

The project will preserve some landscape character-defining features of the Eccles Building landscape while rehabilitating circulation to create universally accessible routes, improving perimeter security (described in the perimeter security section), modifying the east and west courtyards, and a portion of the fountain gardens. The proposed design retains a symmetrical site layout with geometrically ordered gardens on each side of a central walk leading up a flight of steps to elevated front gardens.

Pathways will provide access to the lawn and garden terrace from the southwest and southeast corners with new sloped walks. The two fountain gardens will both be accessible by sloped walks from the south that will remove existing stairs. The existing historic pebble stone mosaic paving surface material may not meet ABA requirements, and the new pathways will improve the accessibility into garden.

Other landscape elements will be removed, salvaged, and rebuilt in original locations. Portions of the east fountain garden will have to be removed and rebuilt due to the extent of underground work. Both fountains will undergo repair work. The marble walkway at the edge of the building's south façade will be salvaged and rebuilt to accommodate the below-grade foundation work on the building. A bioretention area is proposed south of the marble walkway in place of the row of magnolias that will be removed to help satisfy stormwater requirements. An evergreen hedge will be installed surrounding the bioretention areas based on the historical design. Other landscape elements that will be salvaged and rebuilt include the marble curb at the east side, the areaways on the east, west, and north sides, and the marble steps and bronze light fixtures at the north entrance.

Bioretention areas will be located a minimum of 10 feet from the west and south sides of the Eccles Building. Planting in bioretention areas will include native species that tolerate higher levels of saturation as well as dry conditions. More traditional shrub will be planted at the perimeter of the bioretention areas to maintain consistency with the historic views from Constitution Avenue.



## ECCLES BUILDING | PROPOSED STAFF ENTRANCE PLAN ENLARGEMENT

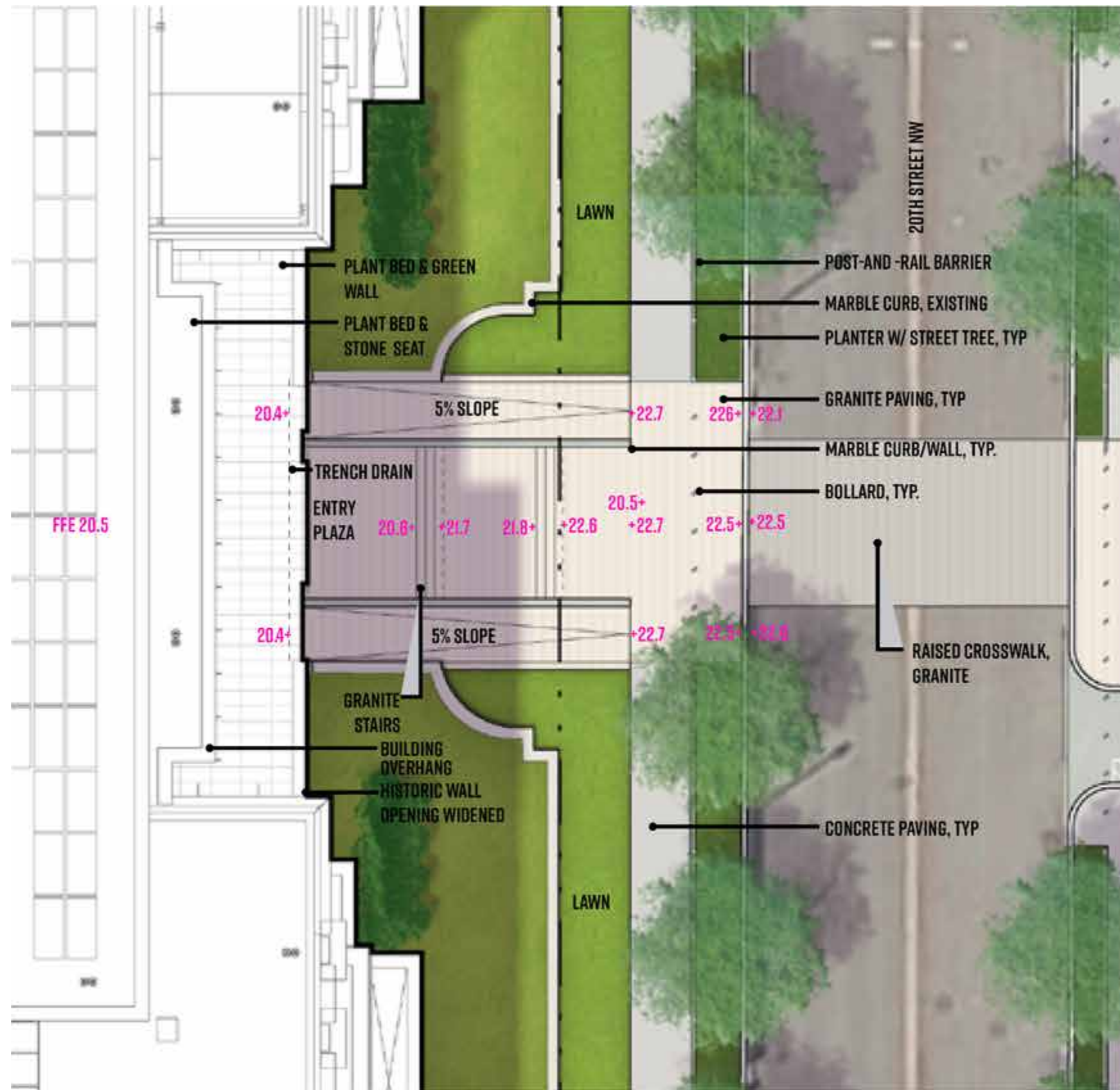


Figure 3-28: Plan Enlargement

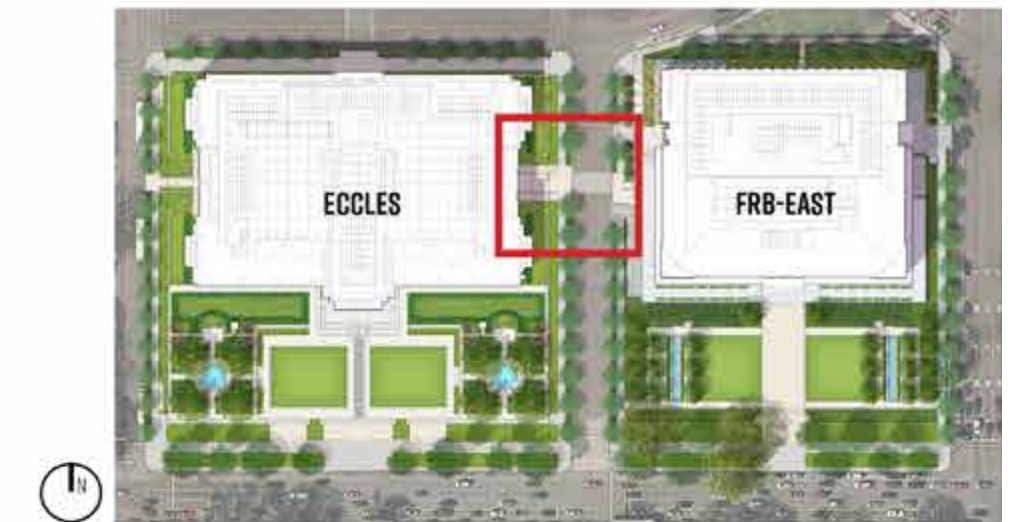


Figure 3-29: Raised Mid-Block Crosswalk between Eccles and Martin Buildings



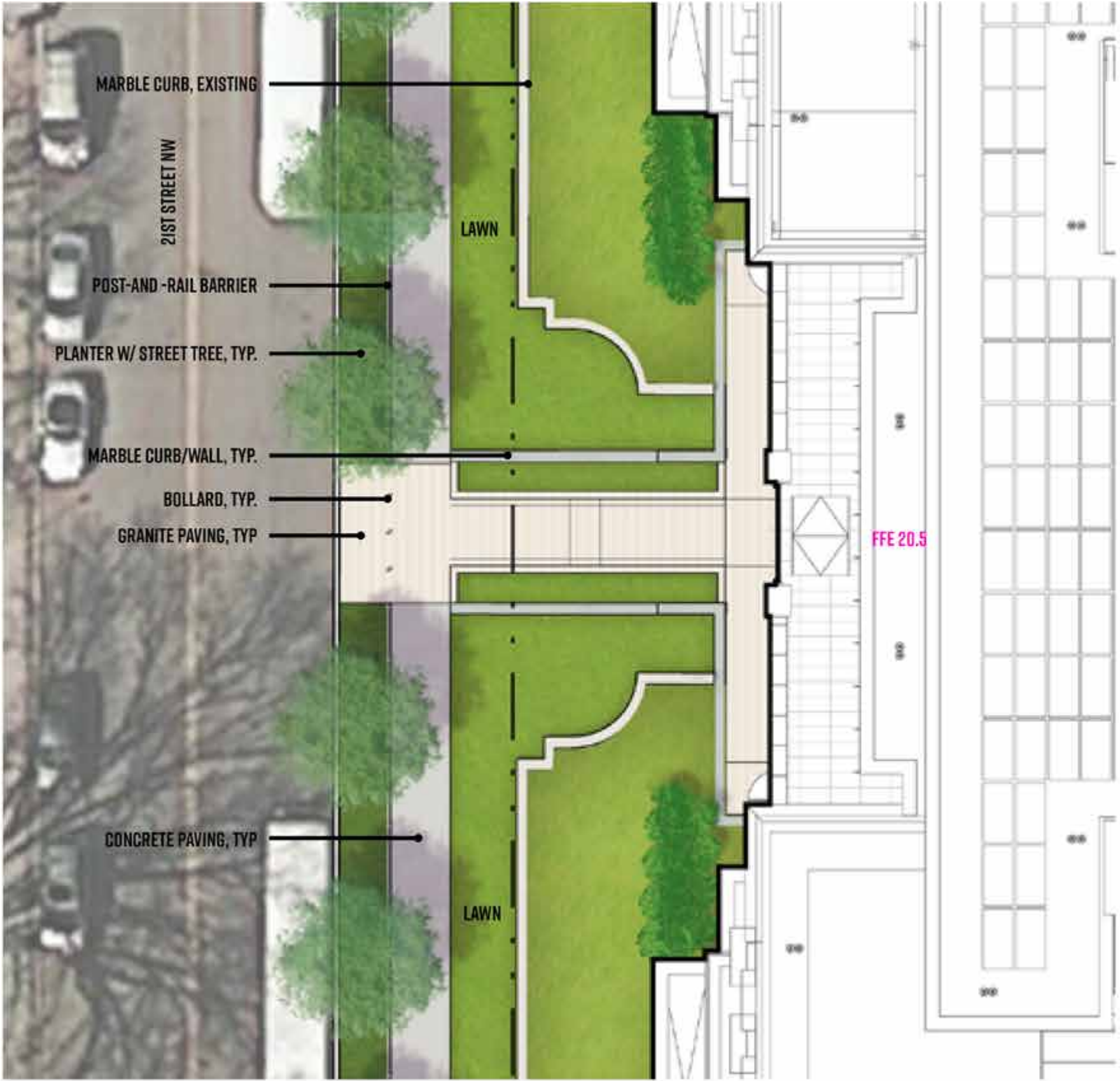
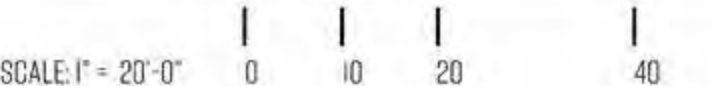


Figure 3-30: Plan Enlargement

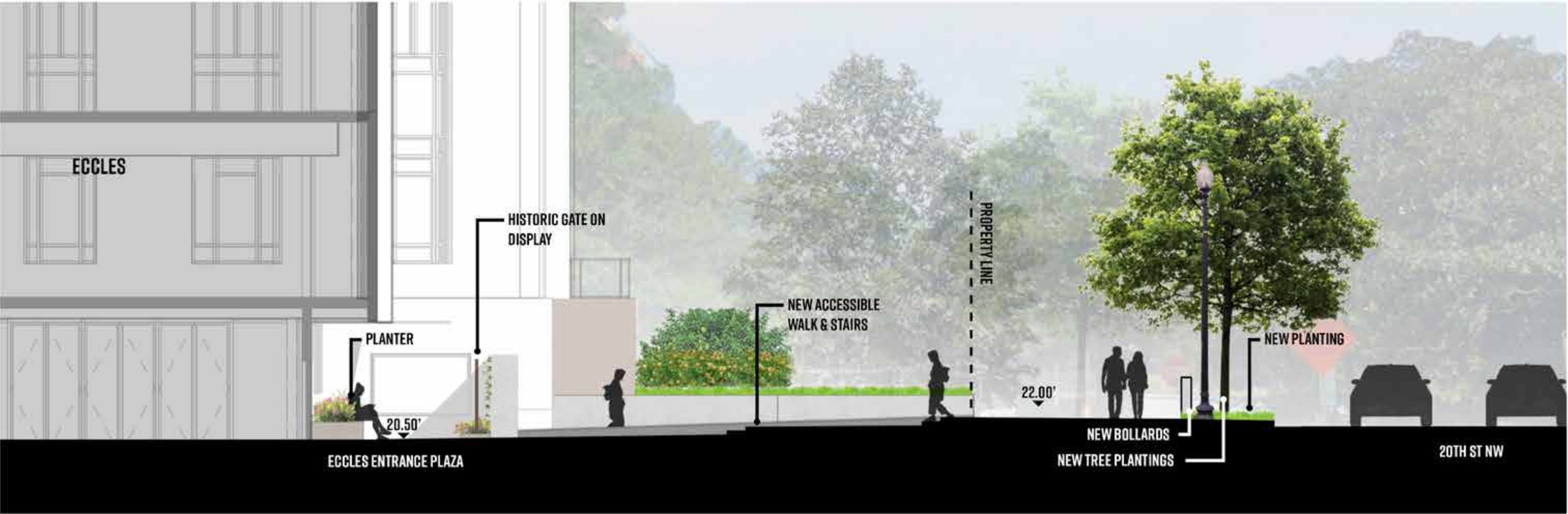




ECCLES BUILDING | PROPOSED STAFF ENTRANCE ELEVATION AT 20TH ST NW









PROPOSED BIORETENTION MEASURES SOUTH OF ECCLES BUILDING

PROPOSED PLANT PALETTE

WEST - LAWN

KENTUCKY BLUEGRASS  
TALL FESCUE AND FINE FESCUE MIX  
ANNUAL RYE



SOUTH - BIORETENTION

SOFT RUSH  
TUSsock SEDGE  
SWITCHGRASS



EXISTING GARDEN

HEMLOCK HEDGE  
WEEPING CHERRY  
AZALEA



Figure 3-31: Plan Enlargement



PROPOSED BIORETENTION SOUTH OF ECCLES BUILDING



Figure 3-32: Perspective Rendering



### 3.15 FRB-EAST BUILDING LANDSCAPE

The proposed landscape design reflects the formality and symmetry of the historic design, while addressing program needs related to creating a new main building entrance, improving universal accessibility, and addressing site security needs. Included are the replacement of the building terrace and the south lawn and improvements to the garden spaces. Within the garden spaces, two water features are proposed on either side of the lawn. An accessible route will connect to each feature and garden via a sloped walk/ramp at the SE and SW corners of the site.

#### FRB-East Building Entry

A new sunken outdoor terrace in the northwest corner of the site for employee use, adjacent to the entry, will help activate the corner of 20th Street and C Street. The terrace will have movable furniture and will be bordered by a linear water feature on the north side that faces south toward the glazed lobby space. The water feature will be subtle and inward facing so it will not compete with the more monumental fountains along Constitution Avenue.

#### FRB-East Building Gardens Terrace

The South Garden Terrace sits above a new underground parking garage. Much of the existing garden terrace within the limit of the new garage will be completely demolished and reconstructed. Historic site and building materials shall be cataloged, salvaged, protected and cleaned and reinstalled. Some modifications are required due to the existing garage ramps and utility routing. An accessible route will be provided by creating a sloped walk/ramp at the SE and SW corners of the site to get up to the existing garden terrace elevation. Small walls are required to manage existing grades. Walkways will occur on the north and south sides of the lawn to provide continuous pedestrian access to the central walk into the garden spaces. The historic Wheelwright and Stevenson landscape plans included twin fountains, however

they were never constructed. In the spirit of the historic design two new water features are proposed in the garden spaces on either side of the lawn. New large tree plantings will be installed in the garden areas to replace the trees bosque that was removed in a the spirit of the original tree configuration.

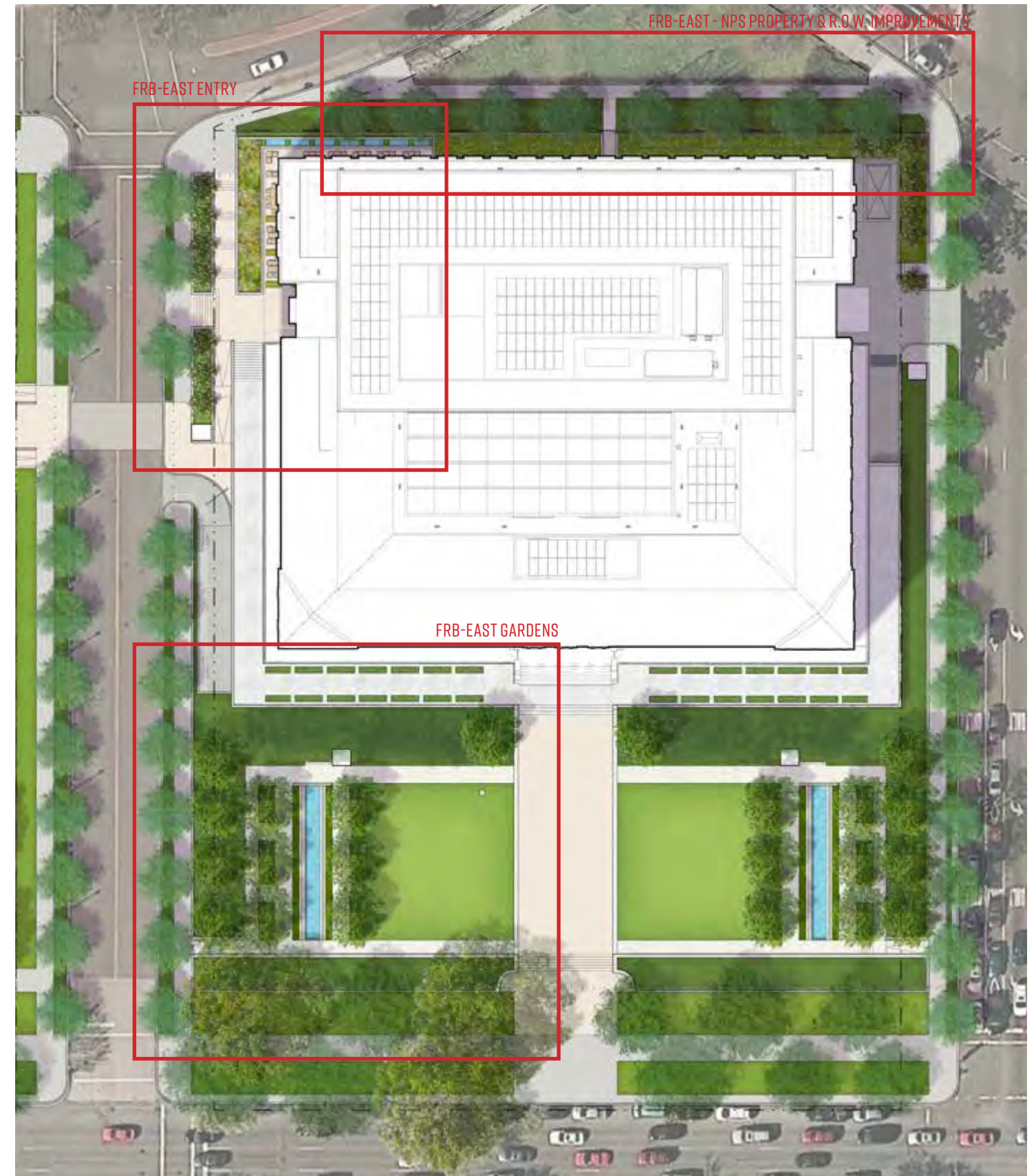
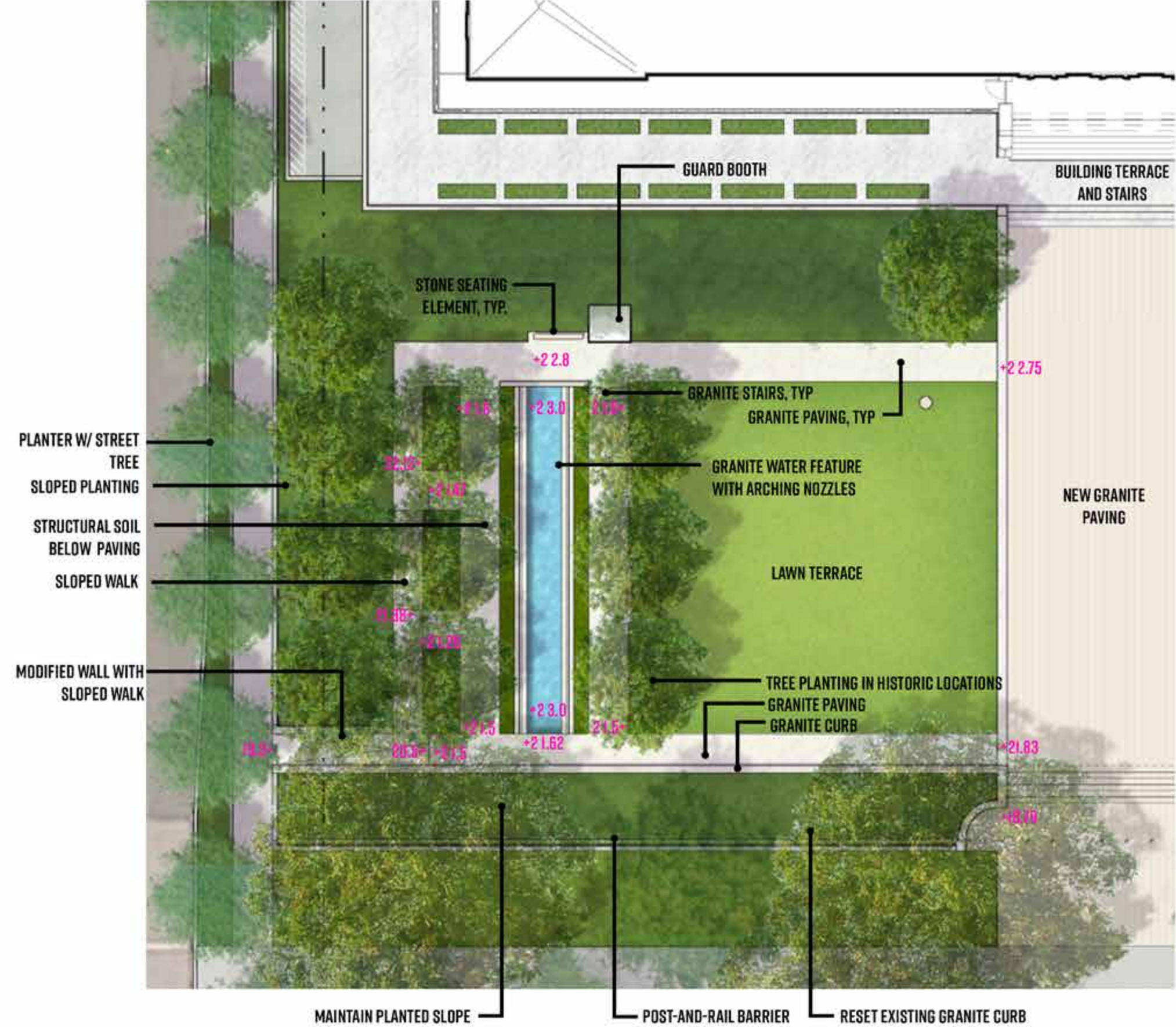


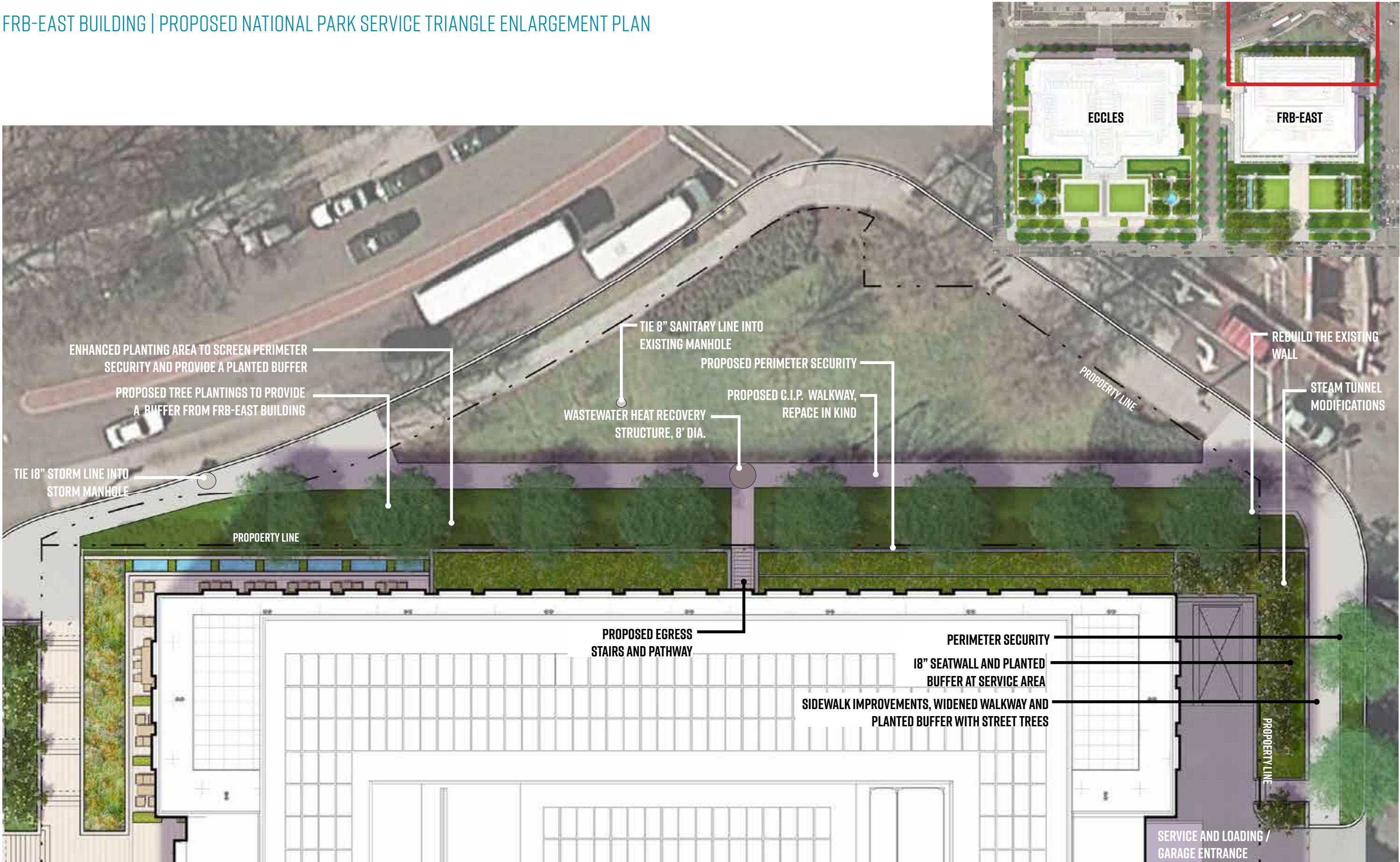
Figure 3-33: Renderings of Proposed Landscape Improvements



FRB-EAST BUILDING | PROPOSED GARDEN TERRACE ENLARGEMENT PLAN









3.16 NATIONAL PARK SERVICE (NPS) TRIANGLE

NPS Property Impacts & Improvements

North of the 1951 addition, the property is owned by to the National Park Service (NPS). The building addition related construction will directly impact the property in a few ways, however, the design team is proposing several improvements to mitigate those impacts to both the NPS property and to the adjacent R.O.W. Impacts to the NPS property include the excavation related to building addition foundations, installation of perimeter security system and corresponding foundations (described in the perimeter security section), utility improvements including a proposed wastewater heat recovery system, steam tunnel related alterations and an emergency egress path from the north facade of the building in place of the existing circulation from the existing parking area. These improvements will disturb the existing tree root systems and walkway along the edge of the property, so the design team proposes to remove and plant a new row of trees and install a continuous planting buffer at the ground plane on the NPS’s property to minimize visual impacts as well as to create a buffer between the two properties. The row of trees will align with the C Street street trees between the 21st and 20th Streets reinforcing the historic roadway alignment and framing views to the future memorial site. These trees could potentially be removed at a later date should the NPS decide to make property improvements, however, the design team will be working with the National Park Service to review and coordinate all improvements. The design team will install a new east-west walkway to replace the existing walk that is currently in poor condition.

R.O.W. Improvements

Currently the sidewalk at the intersection of 19th Street NW and Virginia Avenue NW is constricted and inaccessible due to existing traffic lights, a fire hydrant, and curb ramps crossing the sidewalk as

seen in Figure 3-34. The improvements also include installing a widened universally accessible sidewalk with a continuous planter strip along 19th Street to create a vegetated buffer from vehicular traffic.

Utility Infrastructure

See Figure 3-35 for the Utility Routing Diagram that shows the utility impacts to NPS property. Below is a brief description of each utility. Wastewater Heat Recovery (WWHR) will connect to the 11’-3” existing brick sewer on NPS property and includes an 8’ diameter wet well and 16” piping for supply and return. The location is pending flow tests for 11’-3” brick sewer.

Sanitary Sewer

An 8” sanitary pipe will connect to an existing manhole and outfall to 11’-3” existing brick sewer on NPS property

Stormwater

One 18” pipe and two 10” pipes will connect to a manhole outside of NPS property, however, new stormwater lines will cross the NPS property.

Telecom Line

A telecom ductbank may traverse NPS property to connect to a telecom manhole within Virginia Ave. Size, route, and connection point of the ductbank is subject to coordination with the service provider and final engineering.



Figure 3-34: Existing Conditions at Virginia Ave NW and 19th St NW

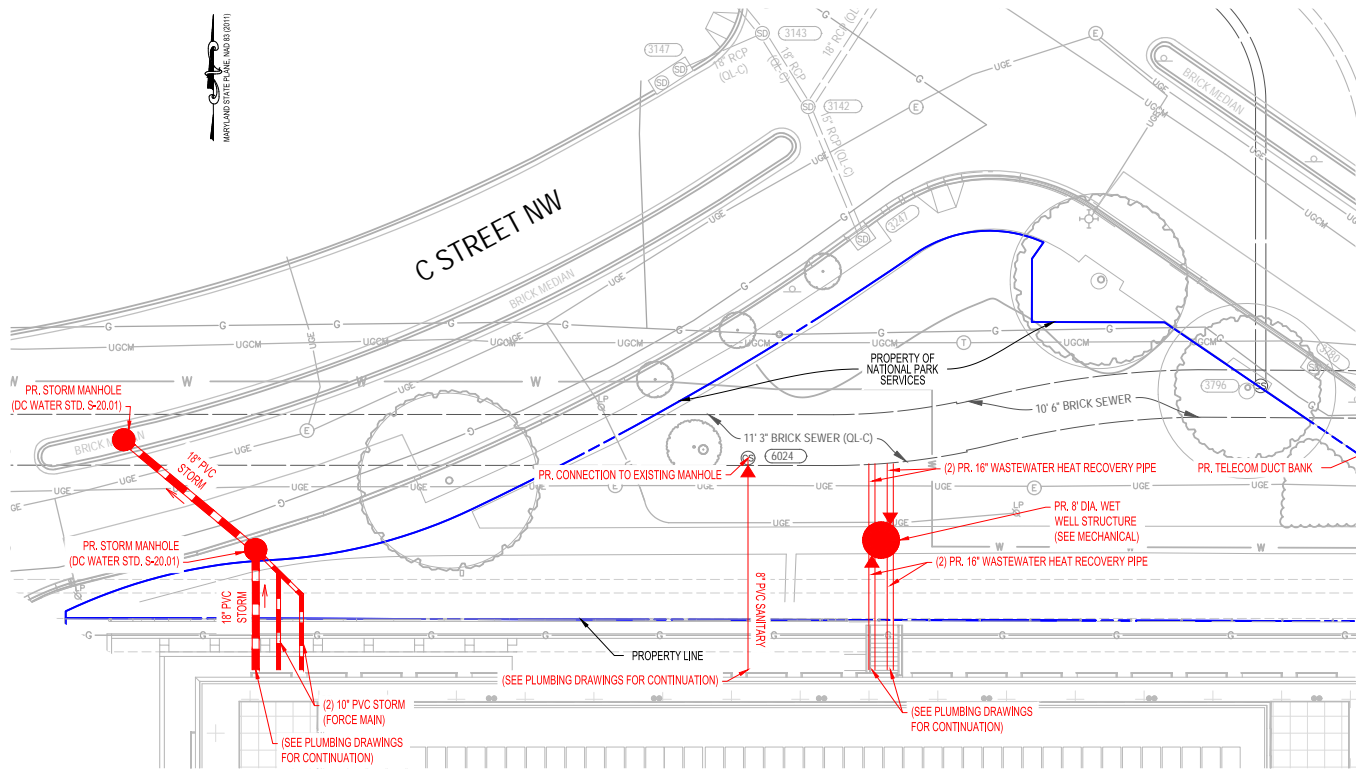


Figure 3-35: Utility Routing Diagram







FRB-EAST BUILDING | PROPOSED ENTRANCE PLAZA ENLARGEMENT AND SECTION

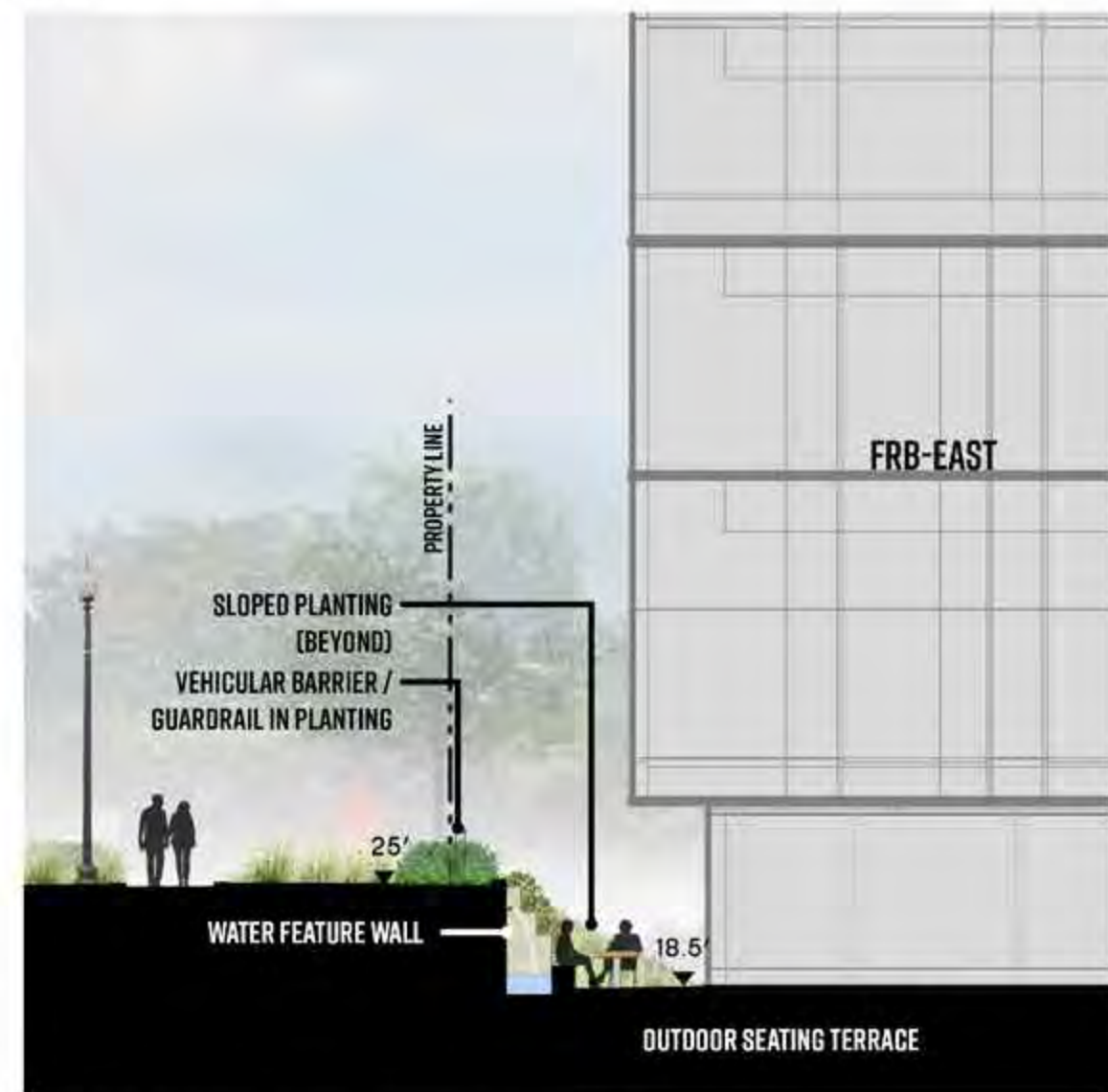
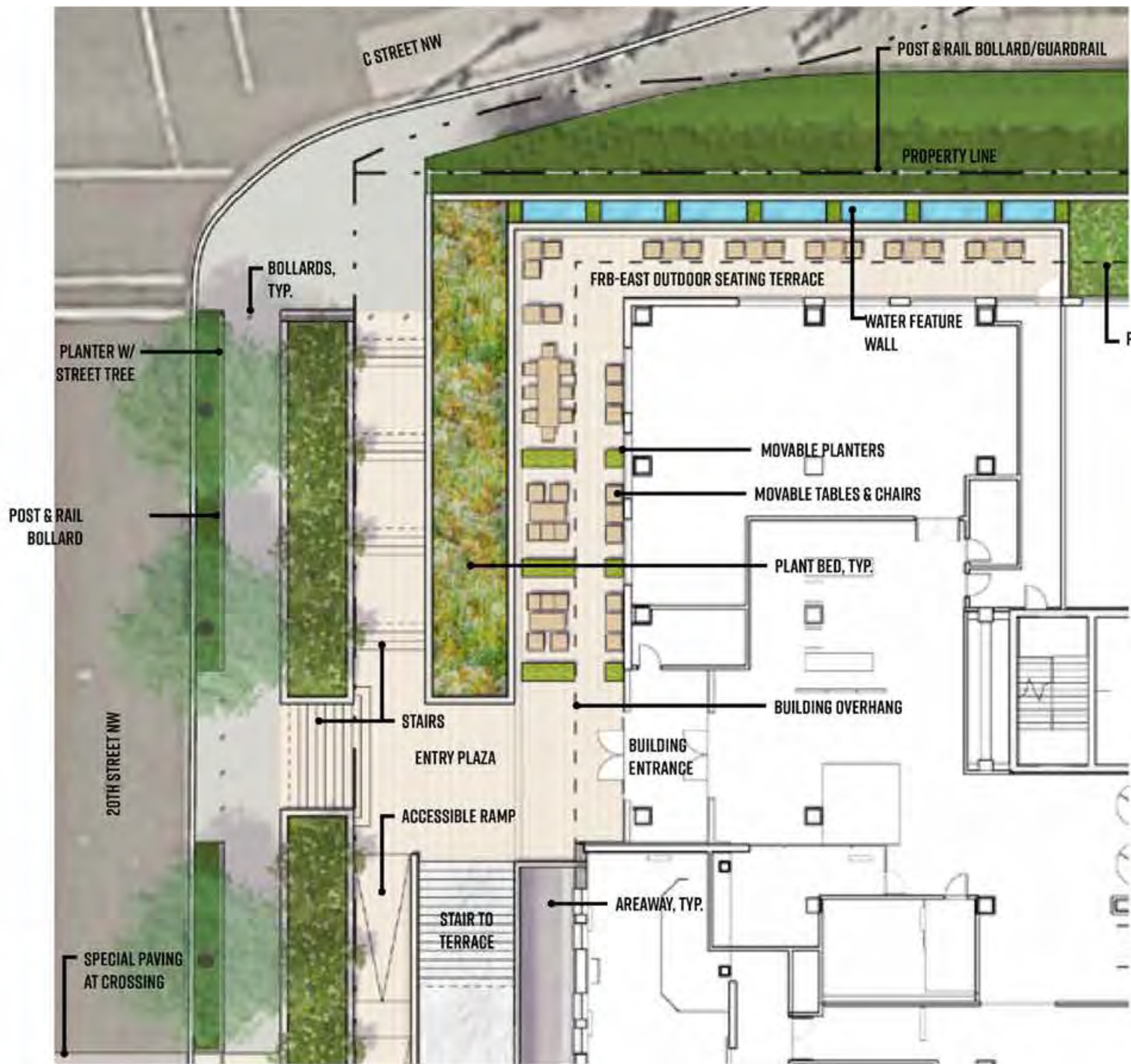


Figure 3-36; FRB-East Building | Section North of Building Looking East



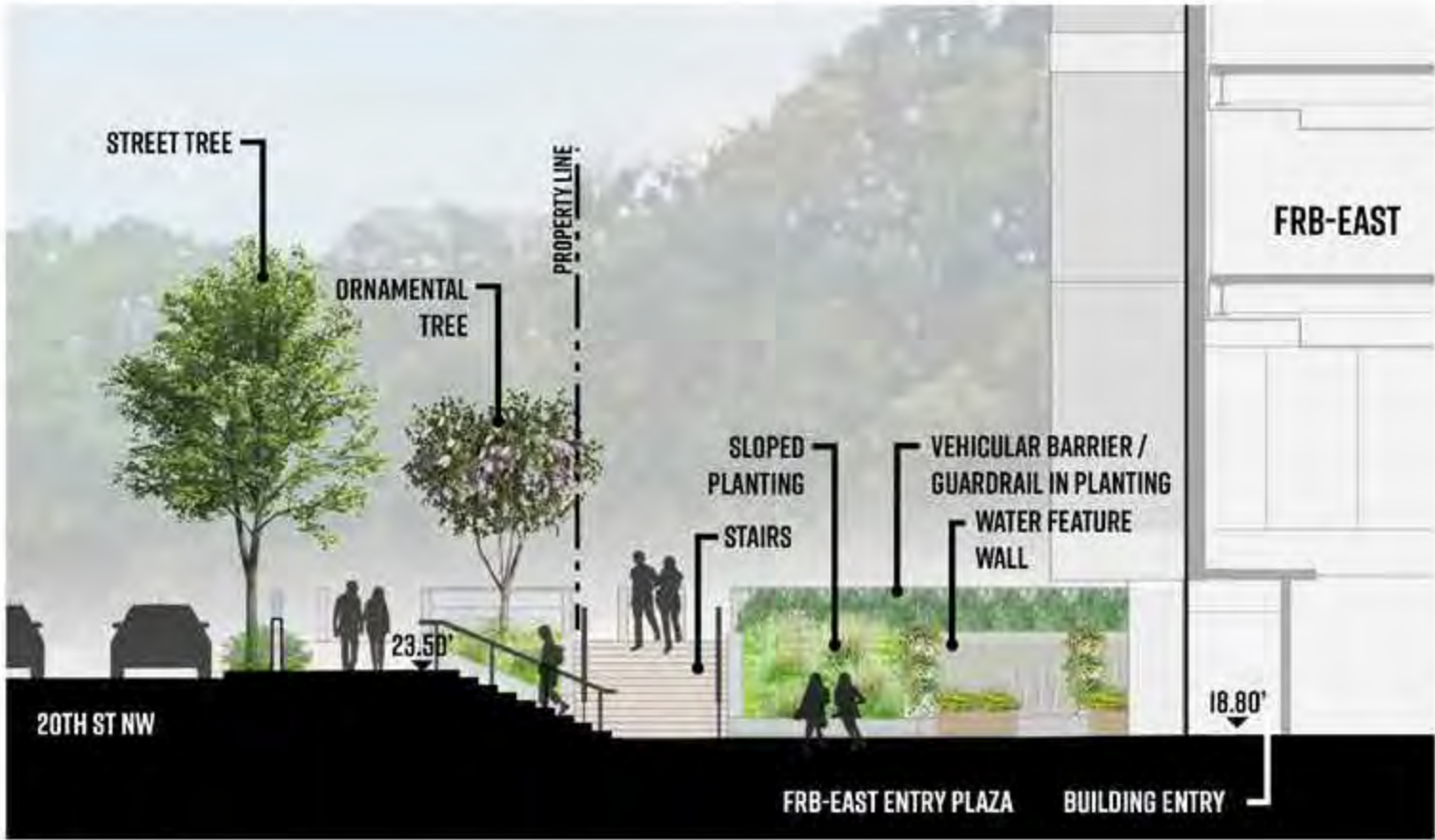
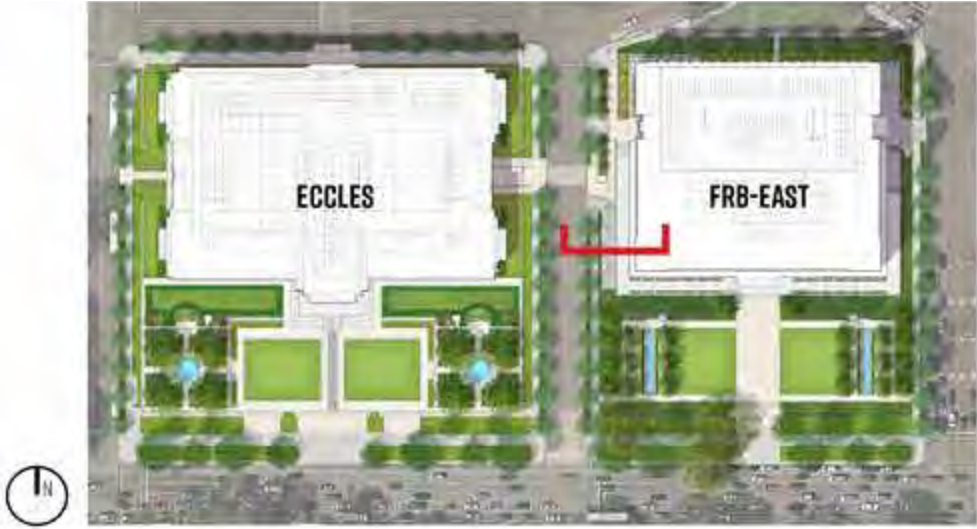


Figure 3-37: FRB-East Building | Section at 20th St NW Looking North

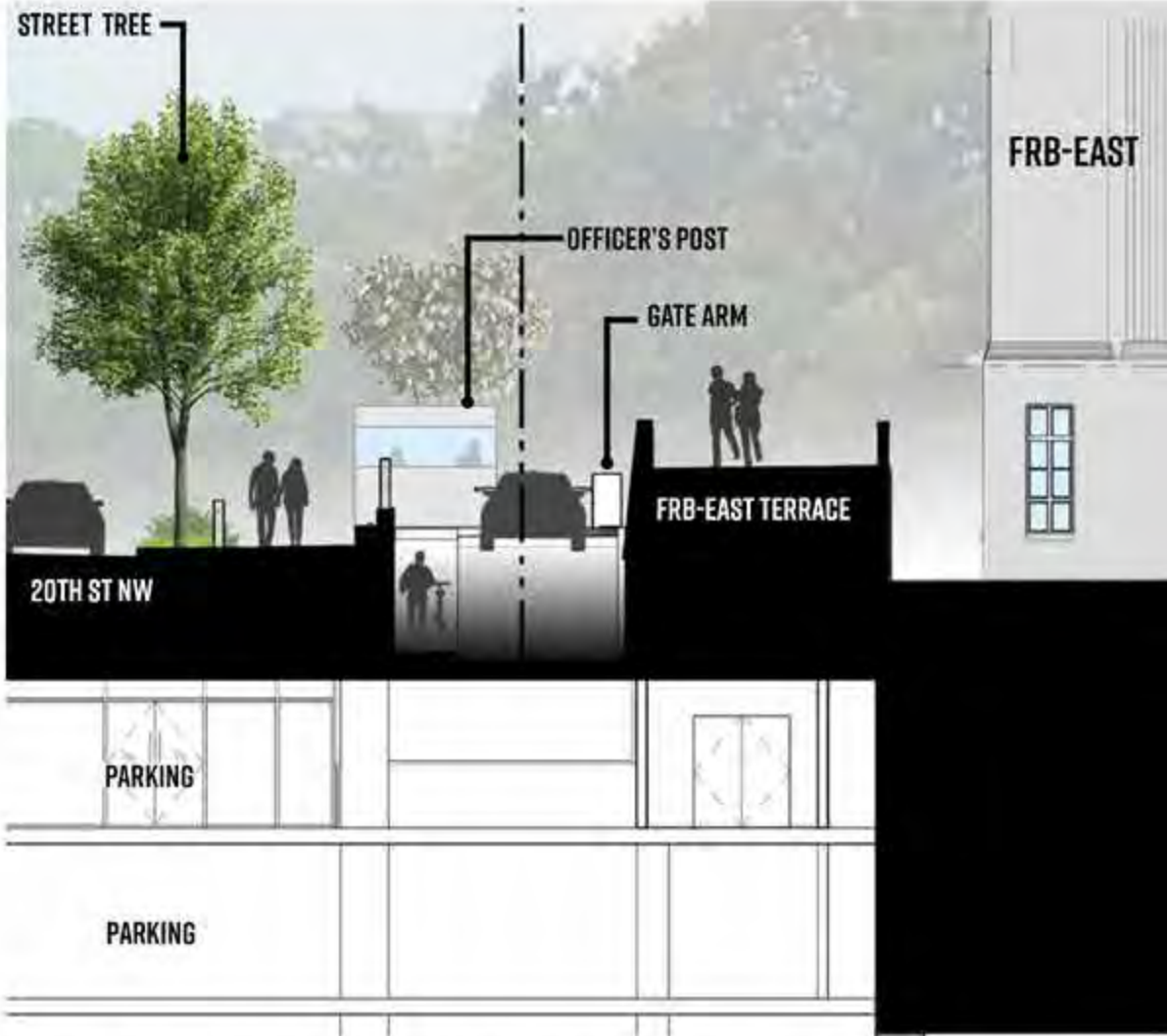


Figure 3-38: FRB-East Building | Section at 20th St NW Looking North at garage exit ramp



FRB-EAST BUILDING | PROPOSED MAIN ENTRANCE ELEVATION - NORTH/SOUTH



Figure 3-39: FRB-East Building | Signage at 20th St NW Connection / Building Entry



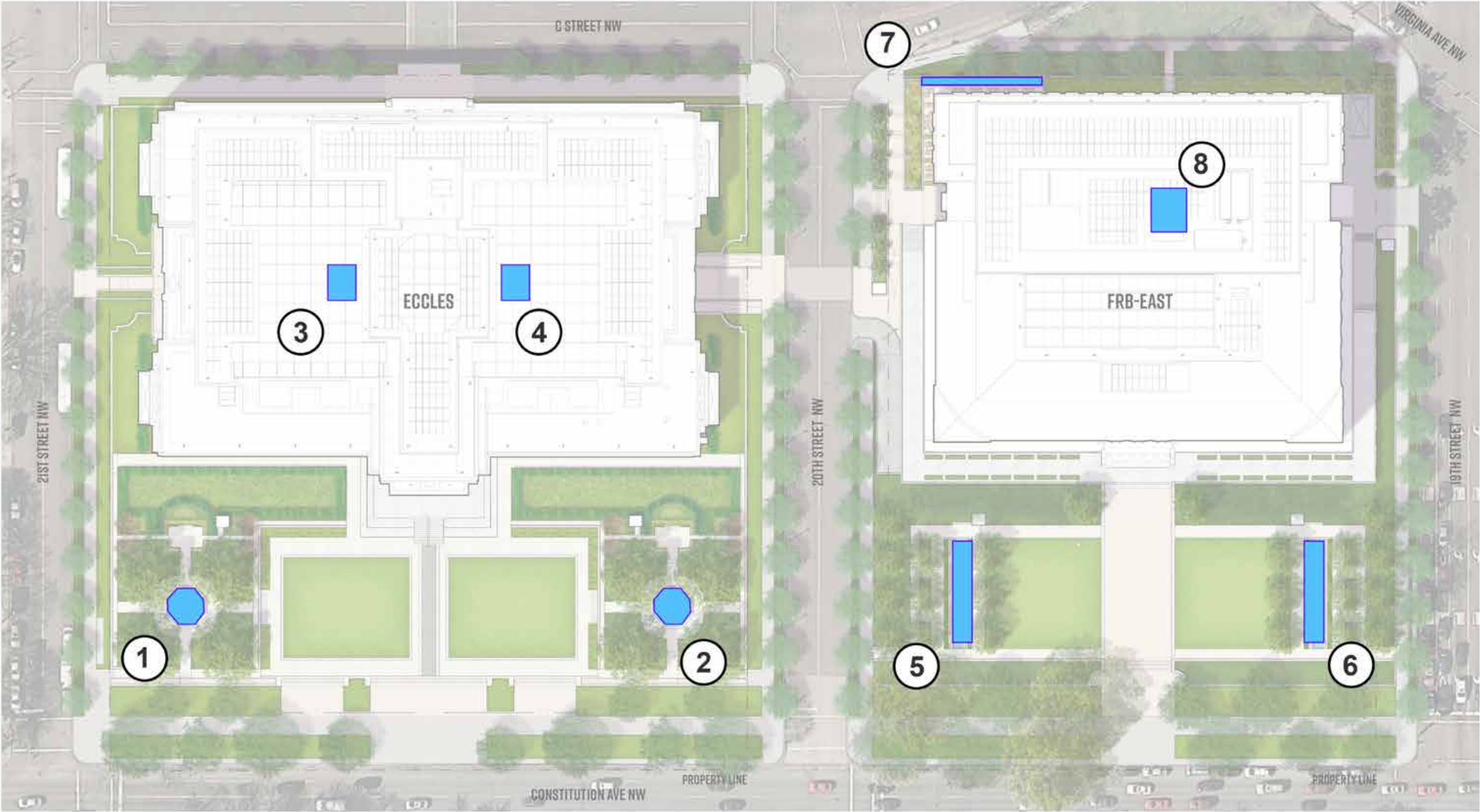


FRB-EAST BUILDING | PROPOSED ENTRANCE PLAZA PERSPECTIVE VIEWS





PROPOSED OVERALL WATER FEATURE PLAN





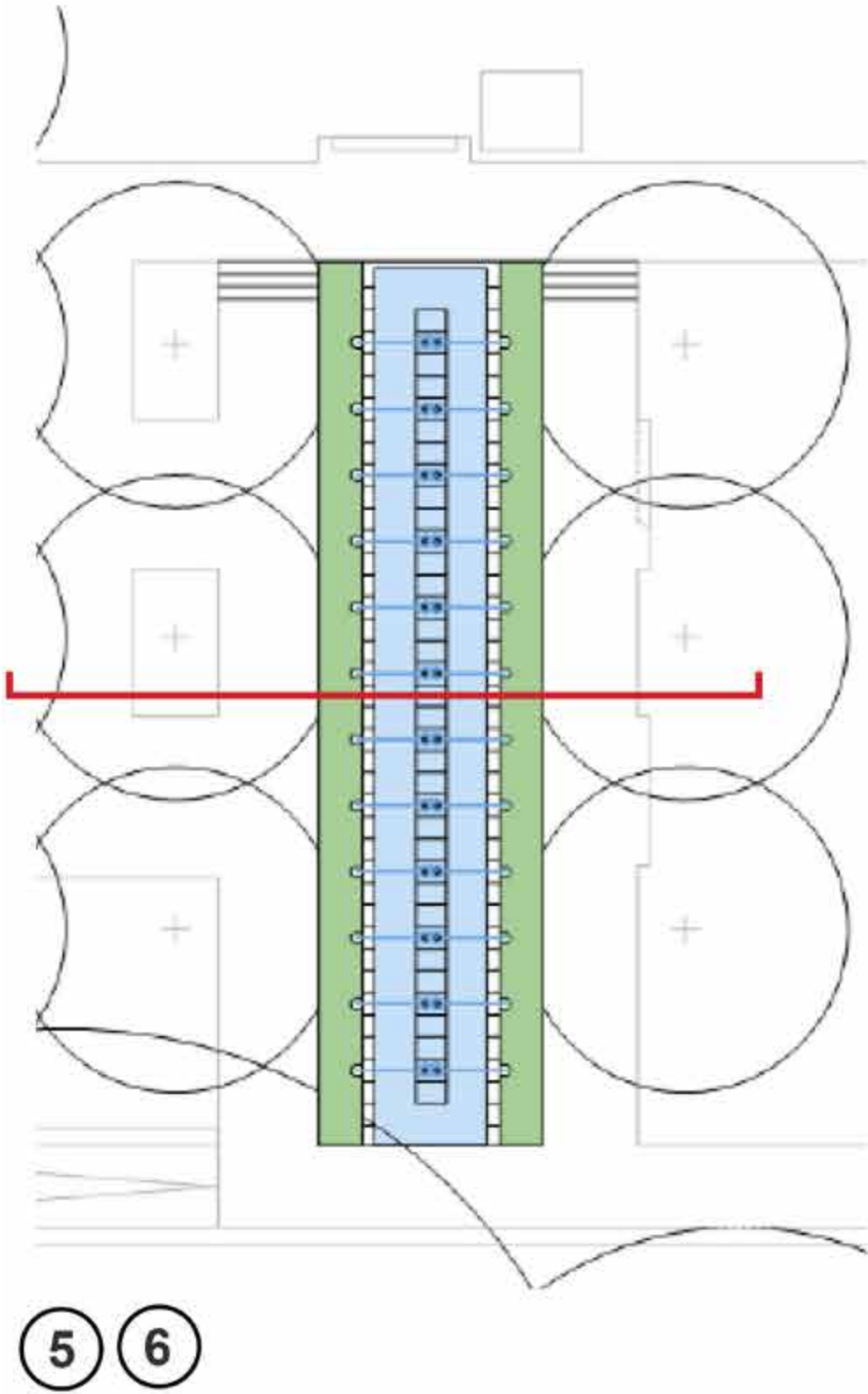


Figure 3-40: Simple Rectangular Basin



Figure 3-41: Series of Water Jets

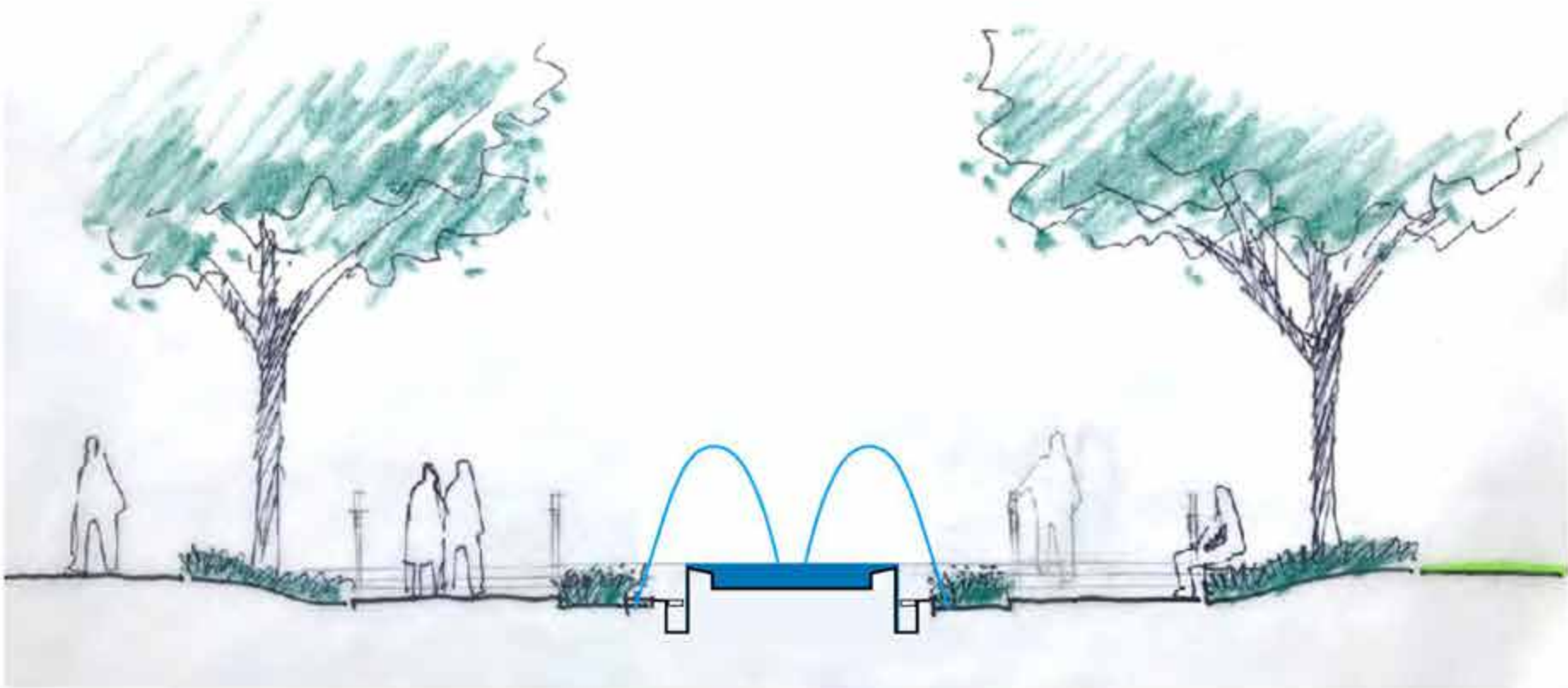


Figure 3-42: Section Sketch



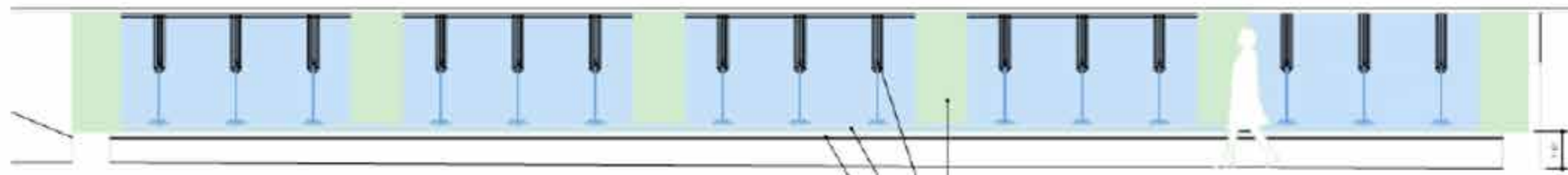


Figure 3-43: Elevation

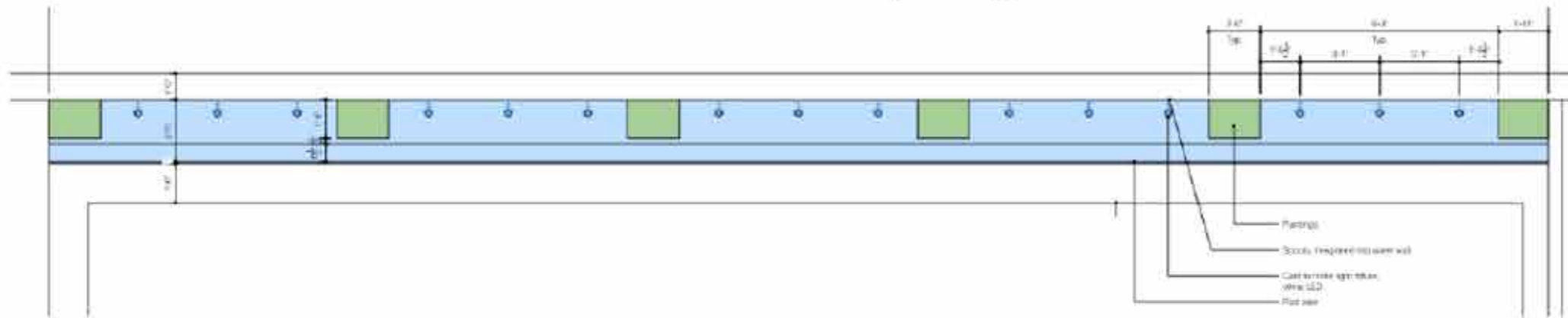


Figure 3-44: Plan

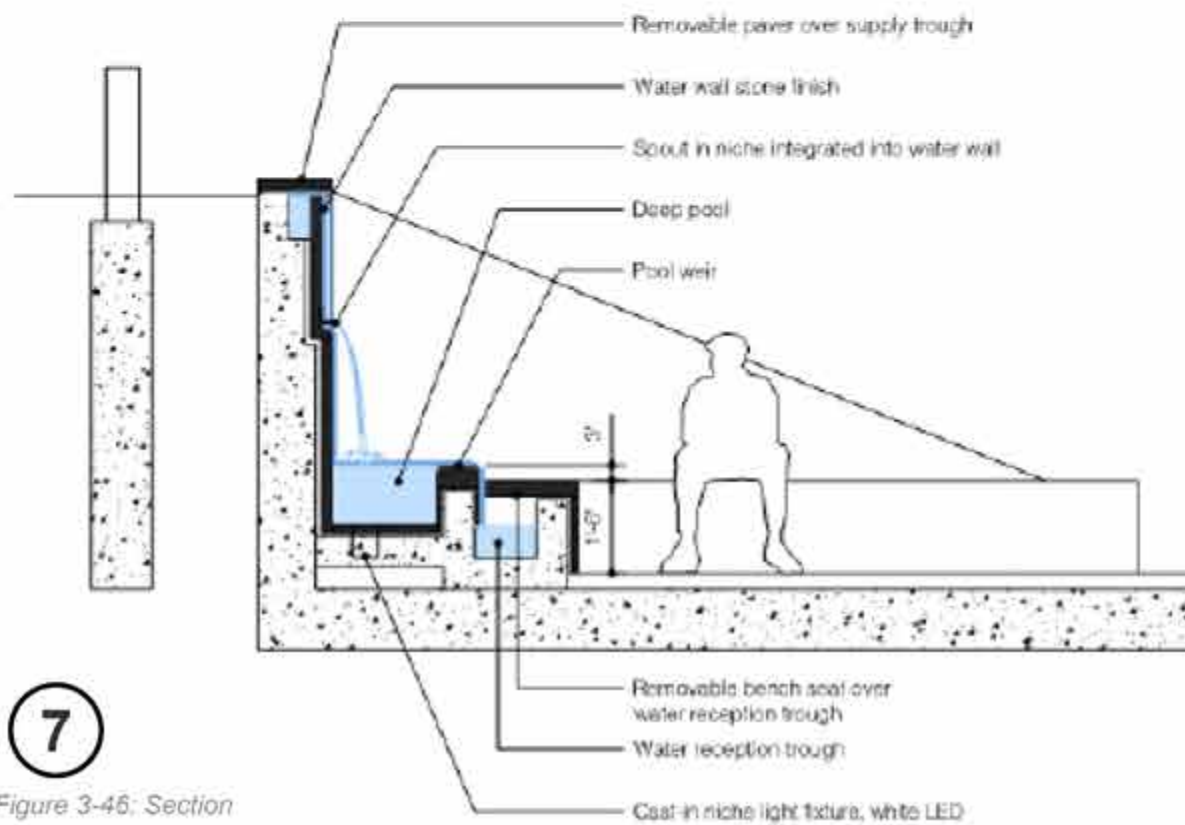


Figure 3-46: Section



Figure 3-47: Spout Details



Figure 3-45 Contemporary Water Spouts from Wall with Planting



Figure 3-48: Historic Precedent for Water Spouts in Wall



3.17 VEGETATED ROOFS

An intensive to semi-intensive system will be provided to support a vegetated roof terraces with an average of 7 inches of soil. Roof plantings will maximize planting diversity of native and well-adapted species that are drought tolerant and can support urban wildlife and pollinators.

Eccles Building Vegetated Roof

The Eccles Building will have two pairs of vegetated roof spaces. To the north the east and west spaces are limited to a simple rectilinear planting area that is not accessible to building users. The pair to the south will be much larger with more intricate planting and occupiable space. Paved areas created by using a suspended paver system will be furnished with moveable tables and chairs and planters. Planted areas will be supported by an extensive to semi-intensive vegetated roof system.

FRB-East Building Vegetated Roof

The FBR-East Building will have one pair of linear vegetated roof spaces along the northeast and northwest corners of the building addition. Both roof terraces will be accessible and will seek to create useable outdoor space for building users. Occupiable paved areas created by using a suspended paver system will be furnished with moveable tables and chairs and planters. Planted areas will be supported by a extensive to se mi-intensive vegetated roof system.

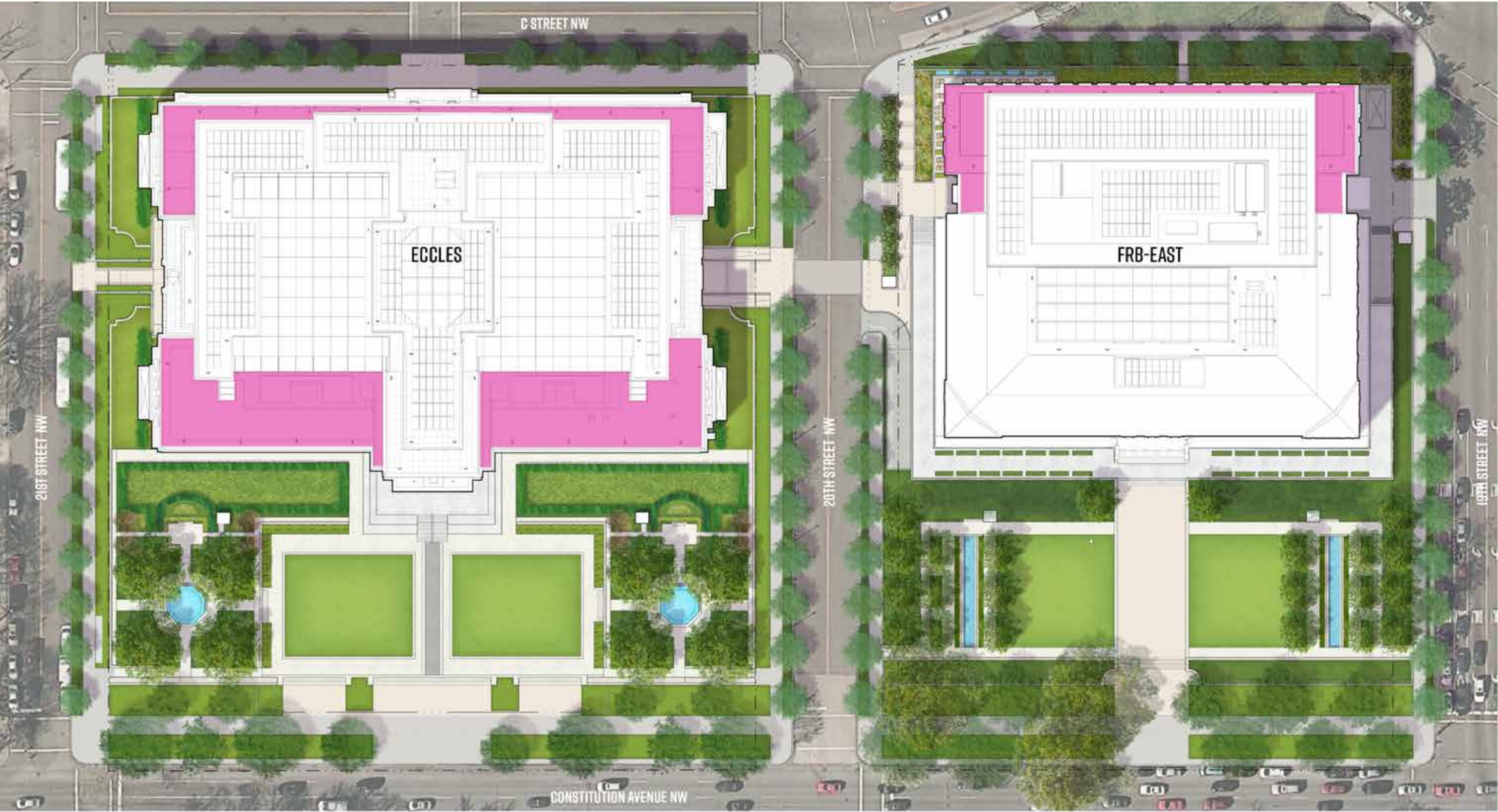
The south garden terrace and underneath above the proposed underground garage will function as a vegetated roof and soils depths and volumes will support the growth of large canopy trees, shrubs, perennial plantings and lawn.



Figure 3-49: Vegetated Roof Views



SITE PLAN | PROPOSED VEGETATED ROOF ASSEMBLY LOCATIONS

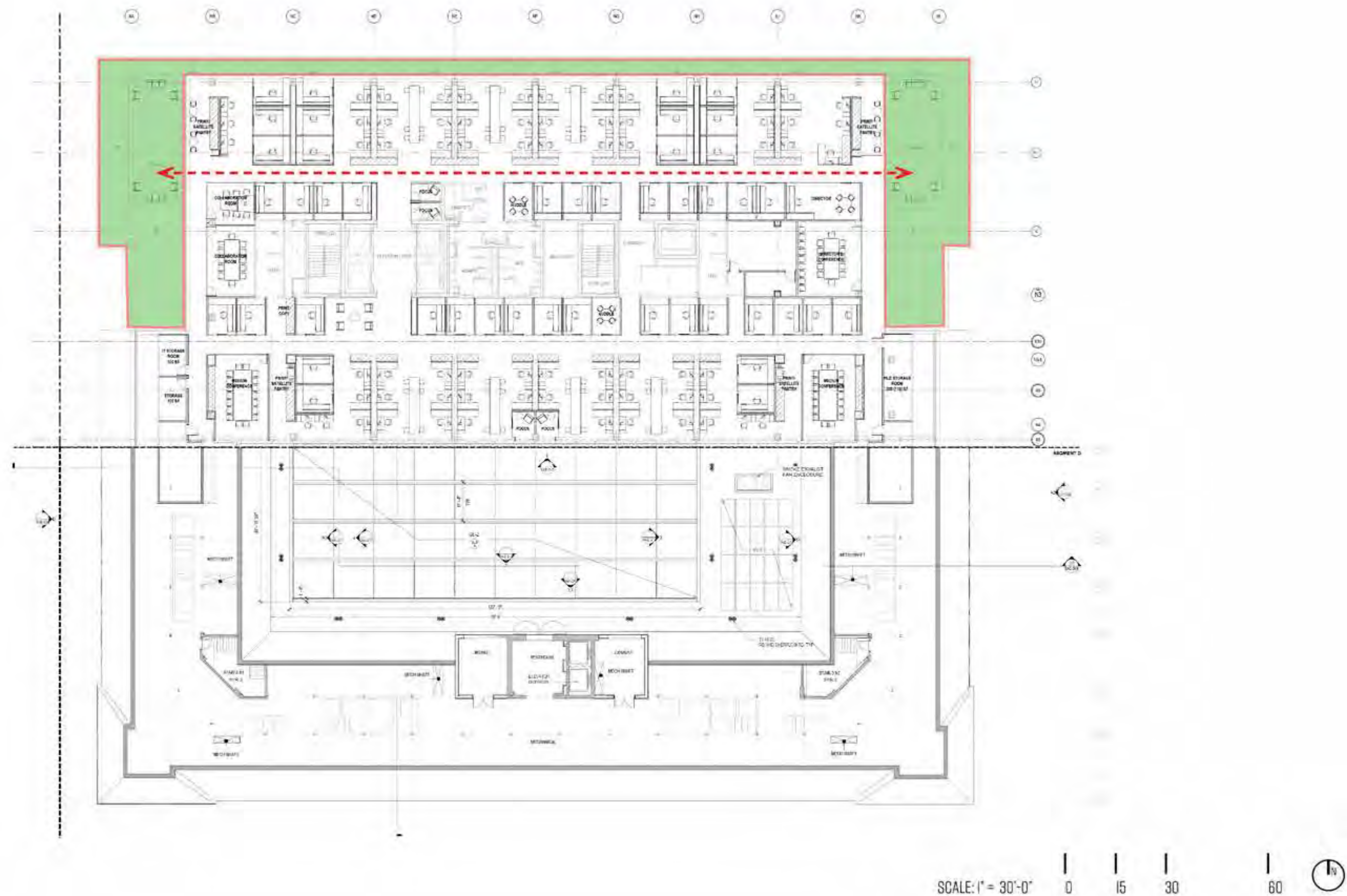




Architectural floor plan of the second floor of a building. The plan shows a central corridor system with multiple rooms, including offices, a conference room, a reception area, and restrooms. Large green areas represent outdoor spaces or courtyards. The plan is oriented with North at the top. A scale bar at the bottom right indicates 1 inch equals 30 feet. The drawing is labeled 'SECOND FLOOR' and includes various room numbers and dimensions.

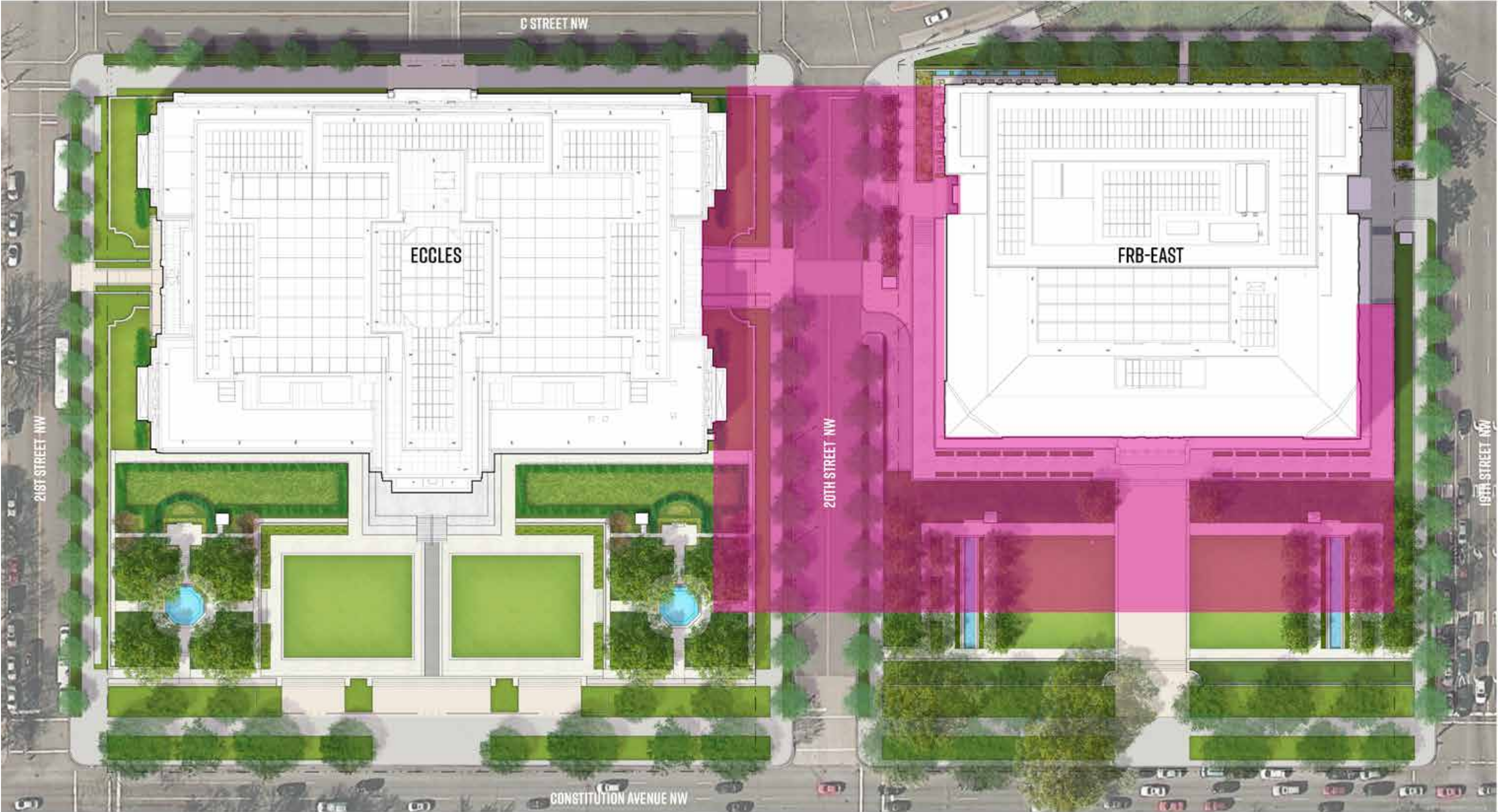


FRB-EAST BUILDING PROPOSED VEGETATED ROOF AREAS





SITE PLAN | PROPOSED VEGETATED ROOF - OVER GARAGE STRUCTURE

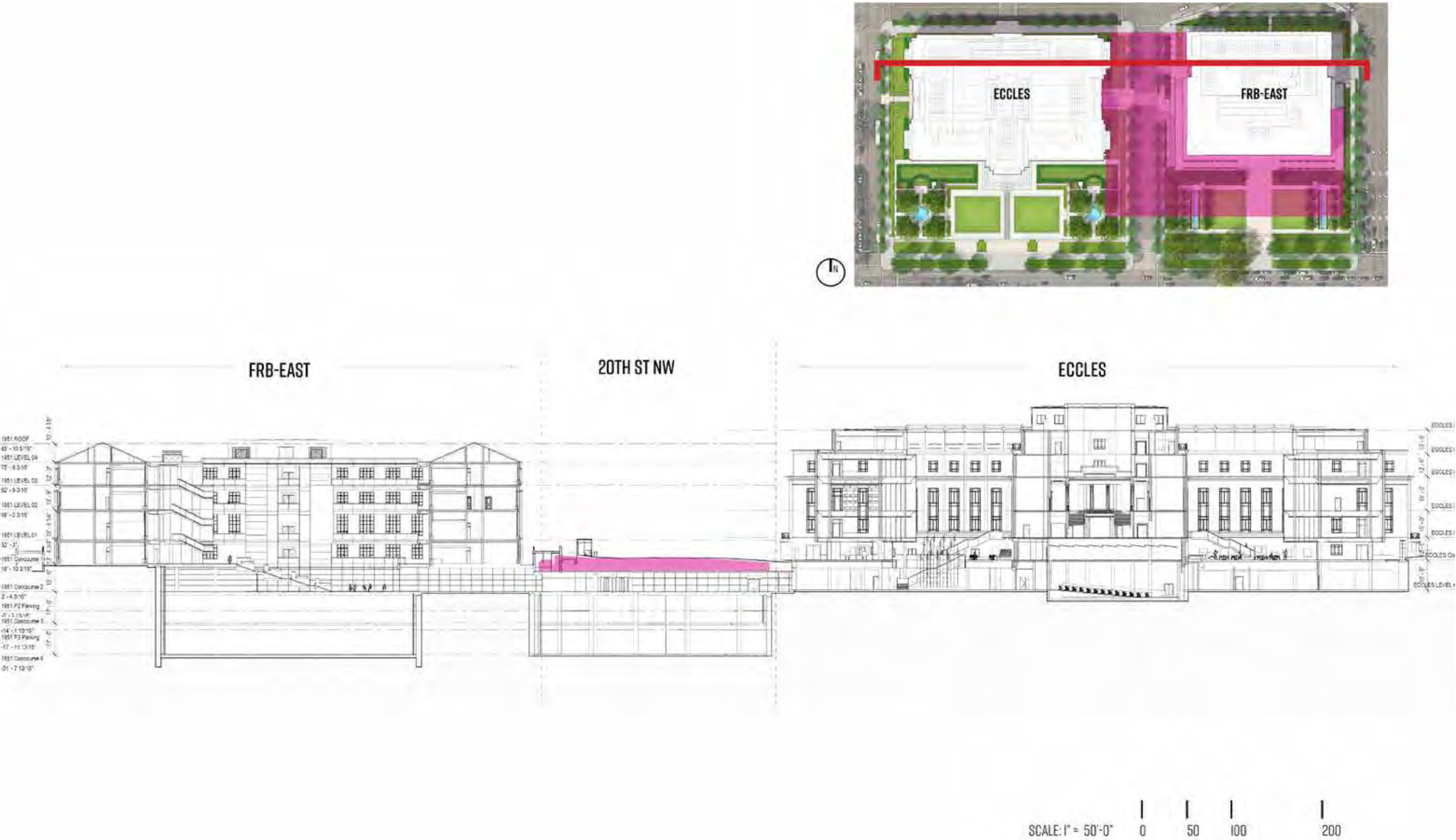


VEGETATED ROOF ABOVE GARAGE



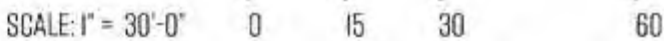


PROPOSED OVERALL BUILDING SECTION - LOOKING SOUTH



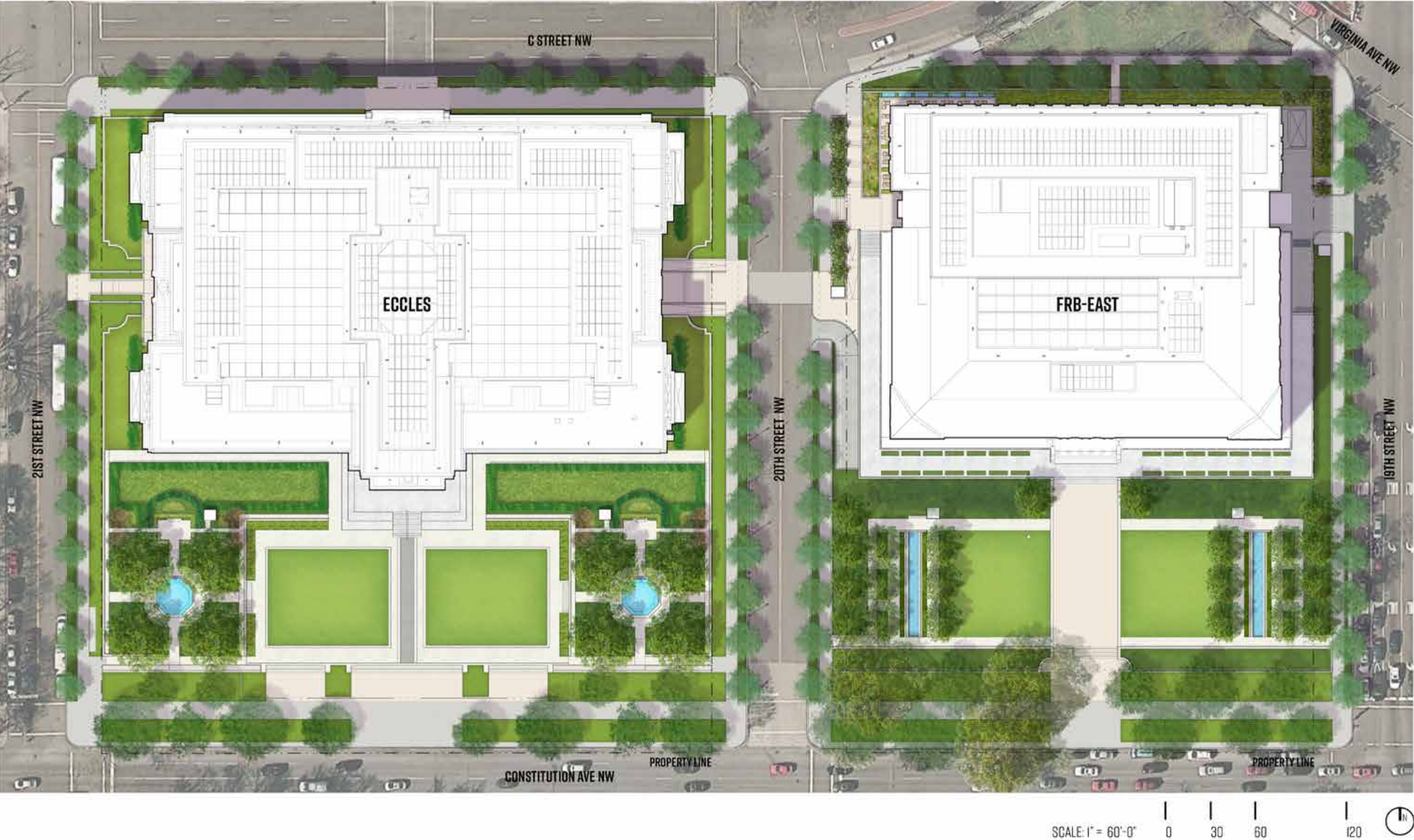


## PROPOSED FRB-EAST BUILDING SECTION - LOOKING EAST





PROPOSED LANDSCAPE PLAN





**CIRCULATION**



### 3.18 PEDESTRIAN AND SERVICE/UTILITY TUNNELS

At the street level, the Eccles Building and FRB-East Building are separated by 20th Street NW. Below grade however, both buildings will be connected by a new pedestrian and service/utility tunnel. There will be a new underground passage below 20th Street that directly connects the Eccles Building to the FRB-East Building. Currently, the Eccles Building and Martin Building are connected by a tunnel located under C Street. The new pedestrian tunnel will connect all three buildings and facilitate communication, permitting staff and escorted visitors to move freely between buildings without having to go through security screening at each building. The tunnels will intersect in the new atrium space within the Eccles Building's east courtyard, which will become the hub for the three buildings. A new entrance for staff and VIP visitors will allow entry into the atrium at grade level and a new set of monumental stairs within the atrium will provide a connection from the entrance to Paul Cret's existing, monumental stair and the new pedestrian tunnel below.

A below-grade service and utility tunnel will connect the loading dock, located on the northeast corner of the FRB-East Building addition, to all three buildings and can be accessed via a service elevator. The new service and utility tunnel will connect the Eccles and FRB-East Buildings and tie into the existing utility tunnel between the Eccles Building and the Martin Building.

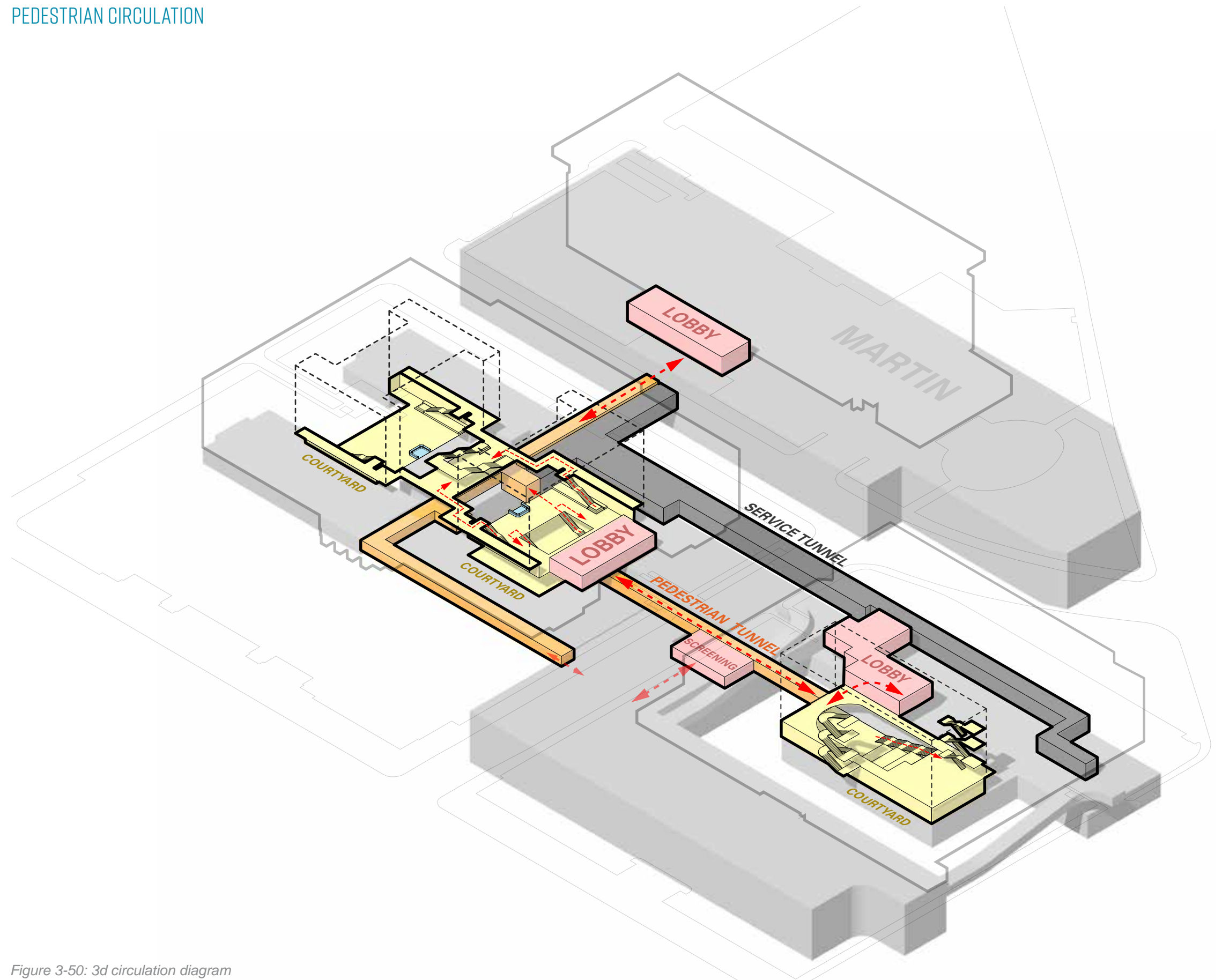


Figure 3-50: 3d circulation diagram



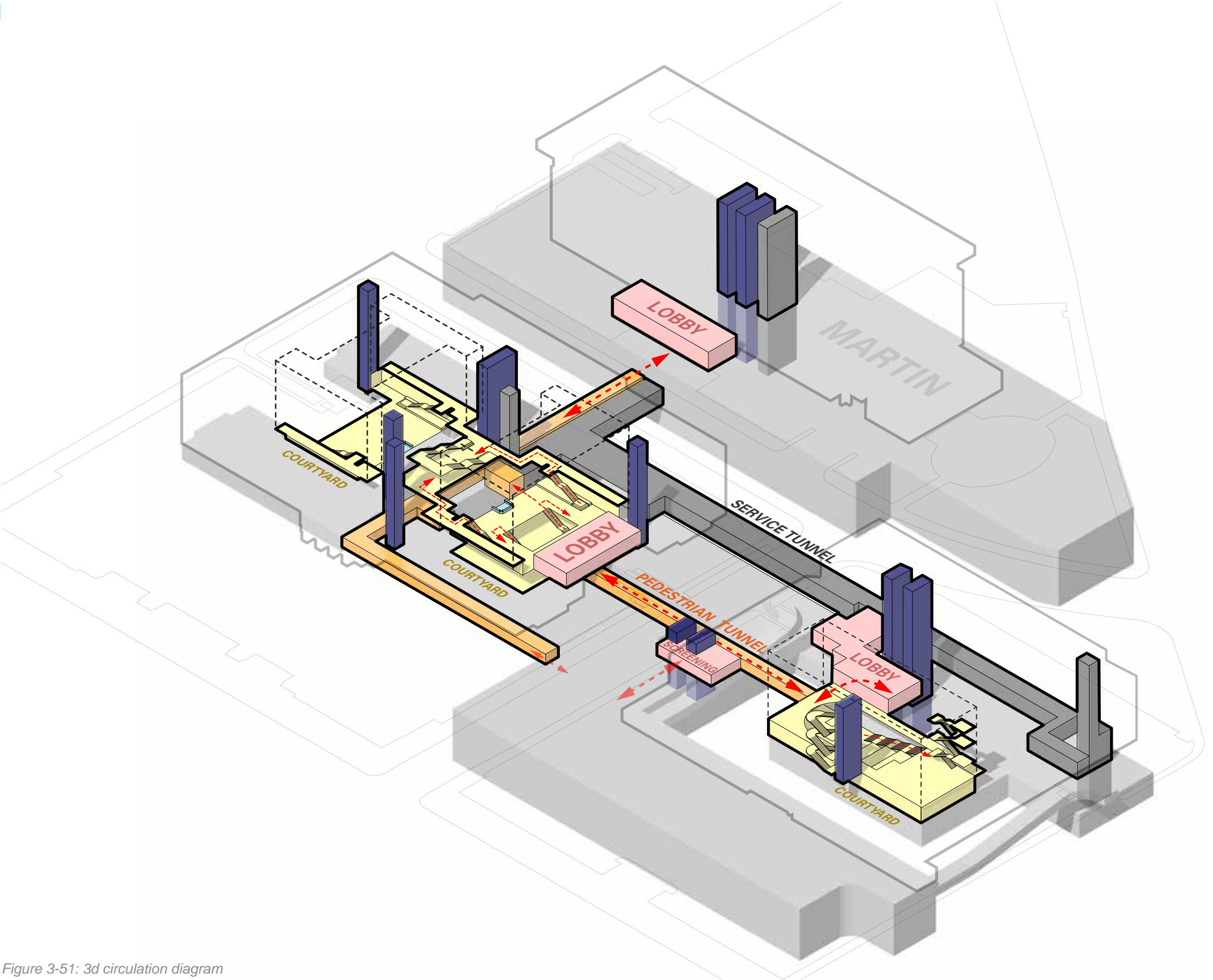
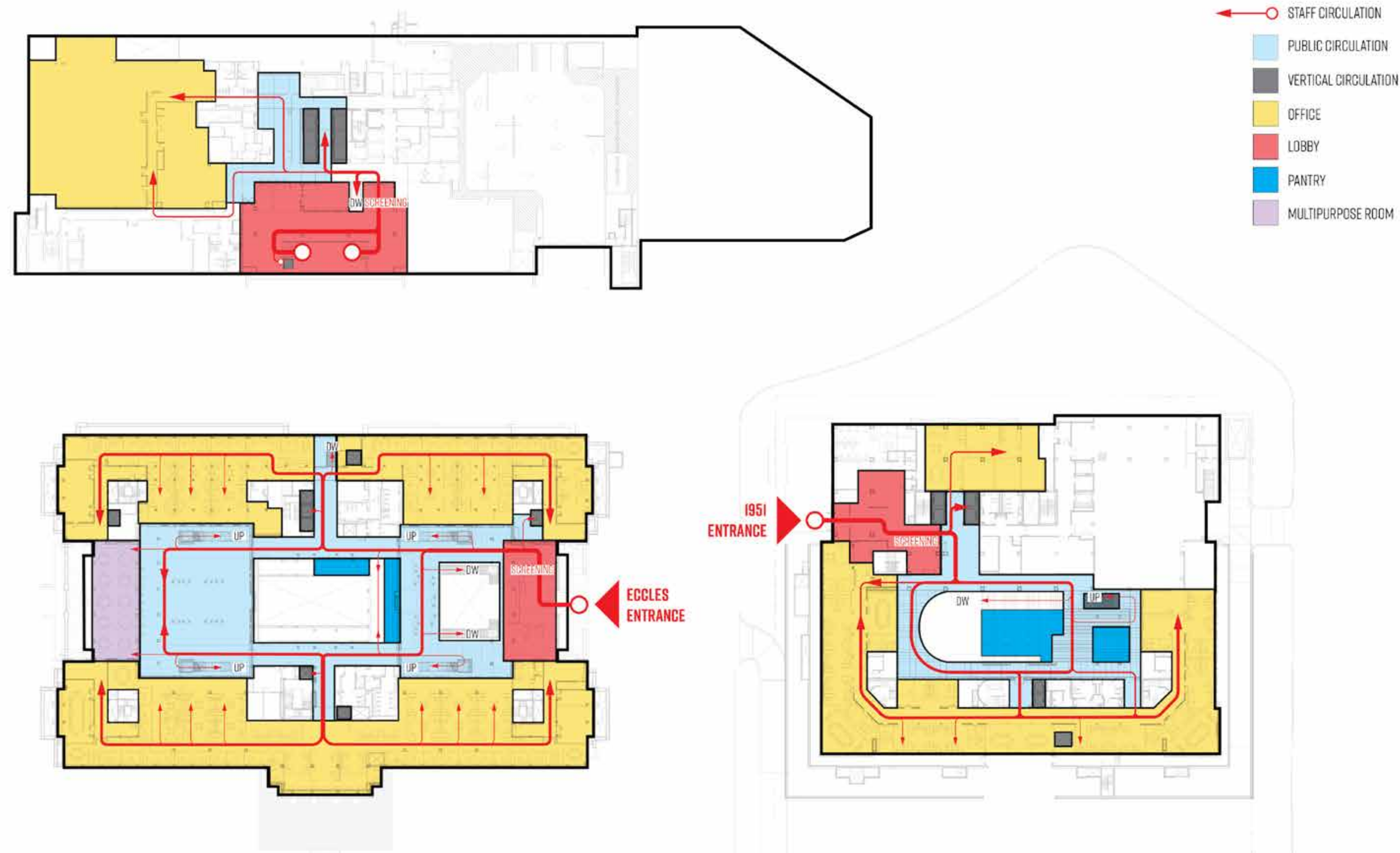
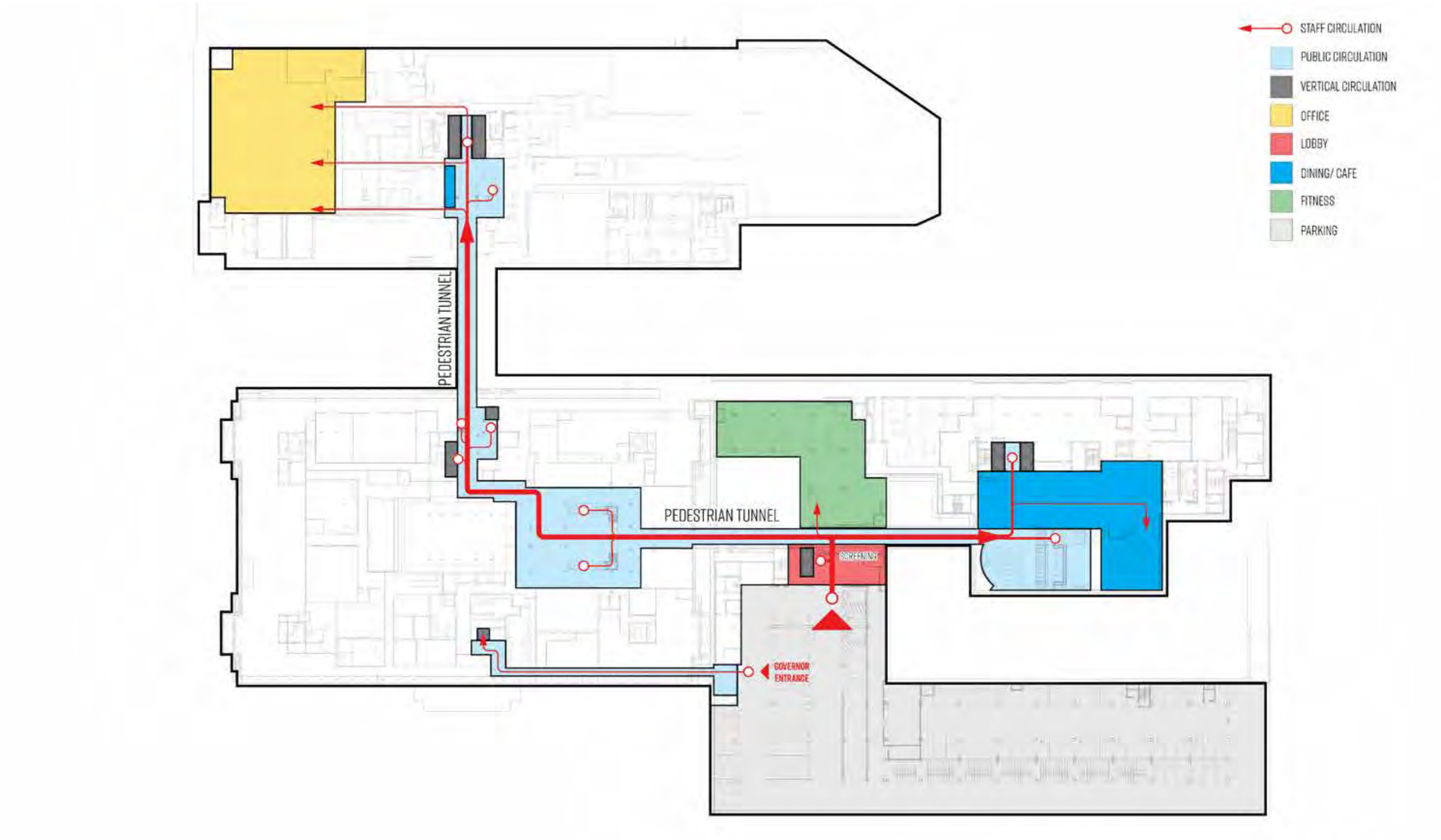


Figure 3-51: 3d circulation diagram

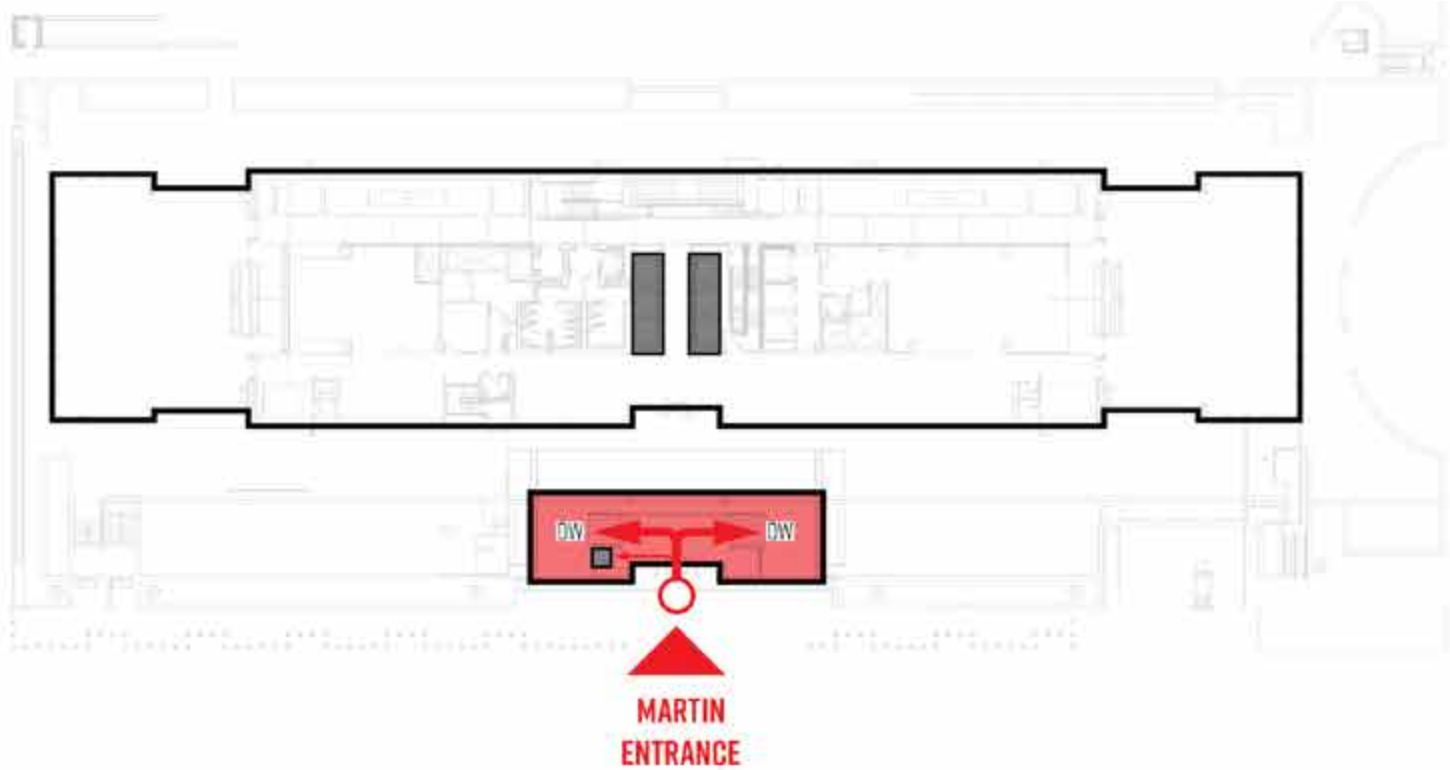




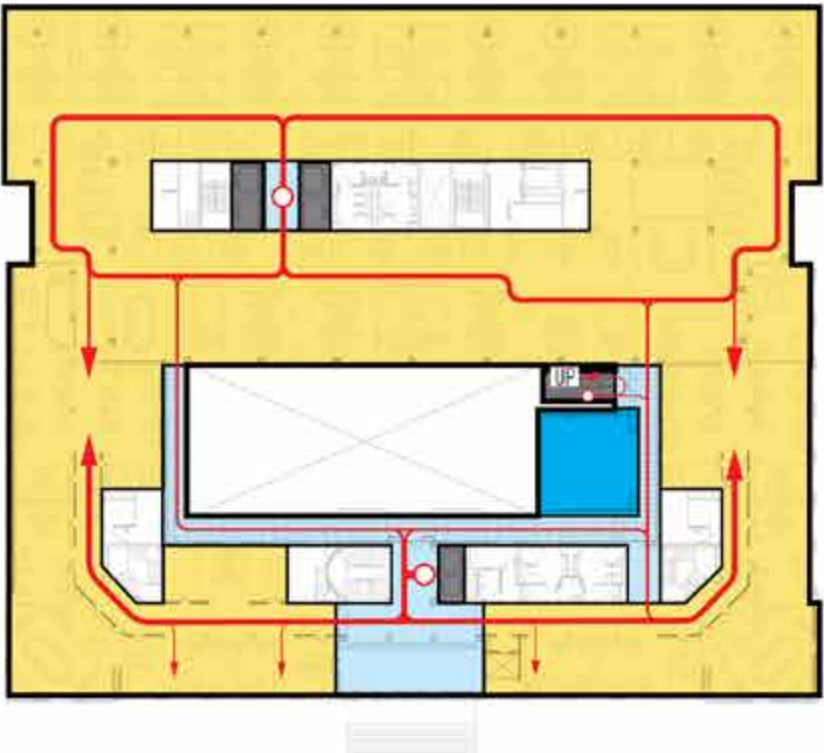
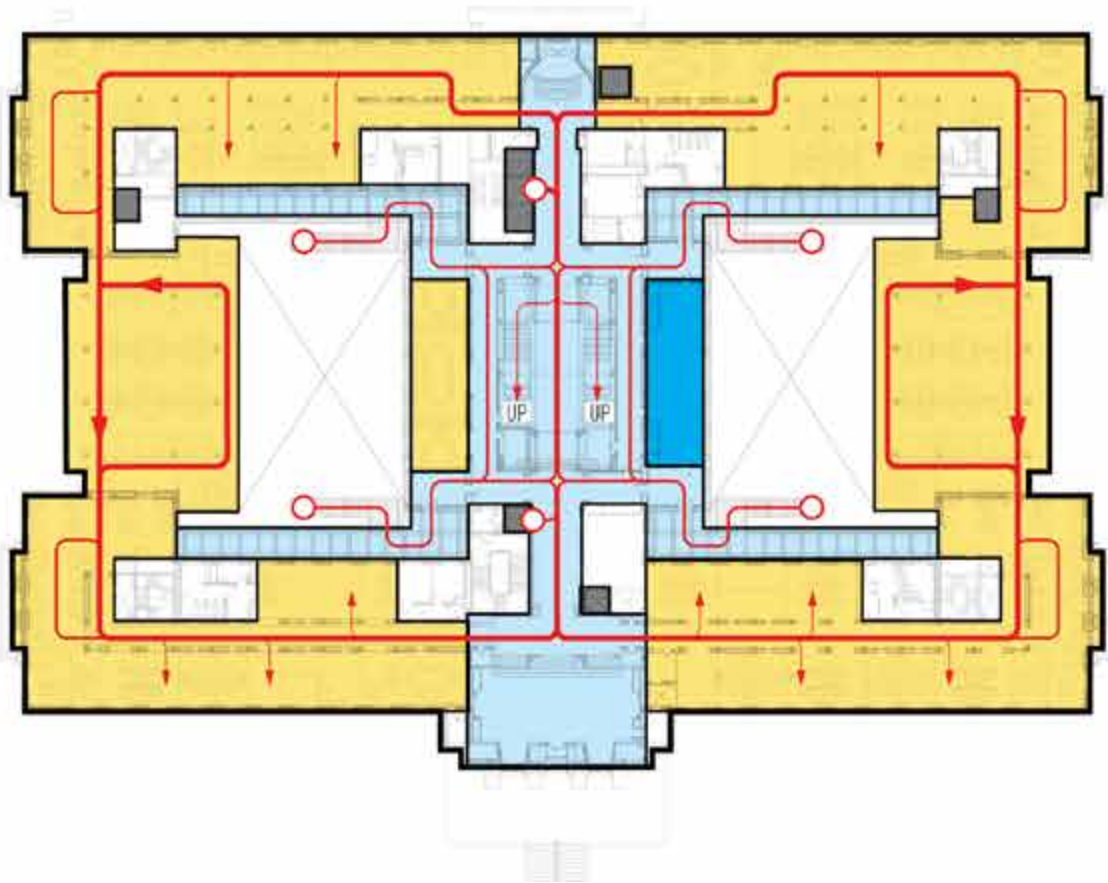




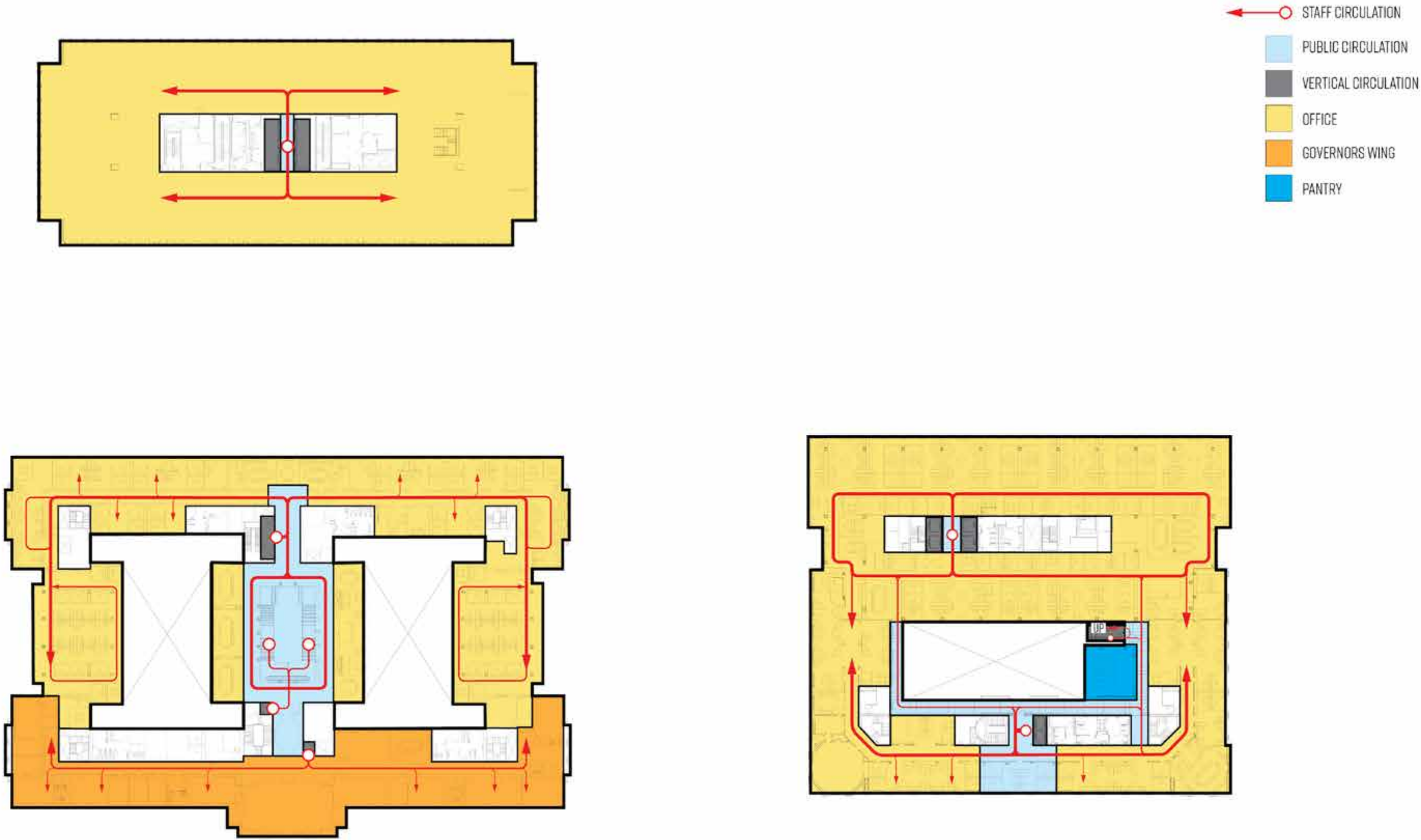




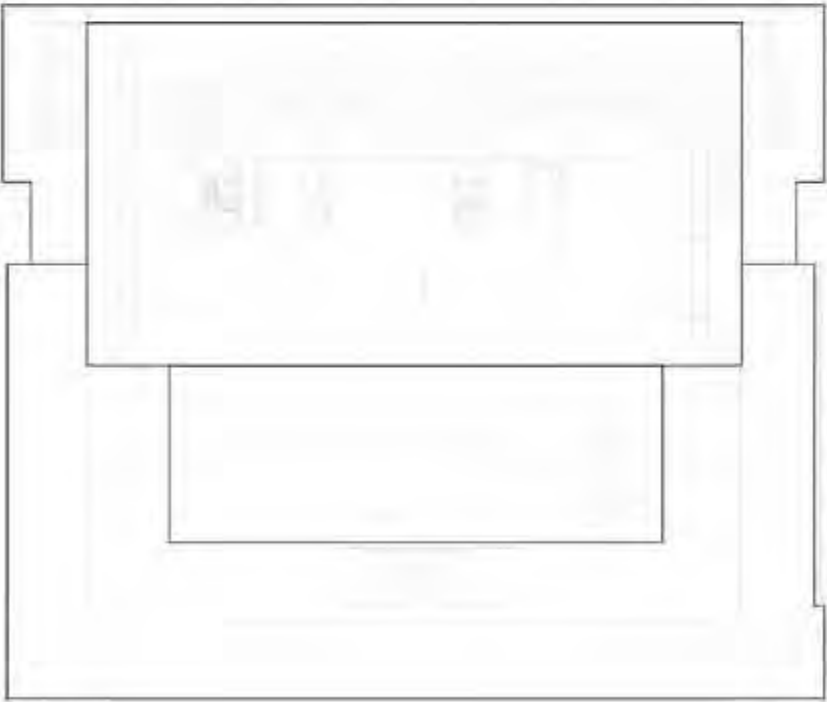
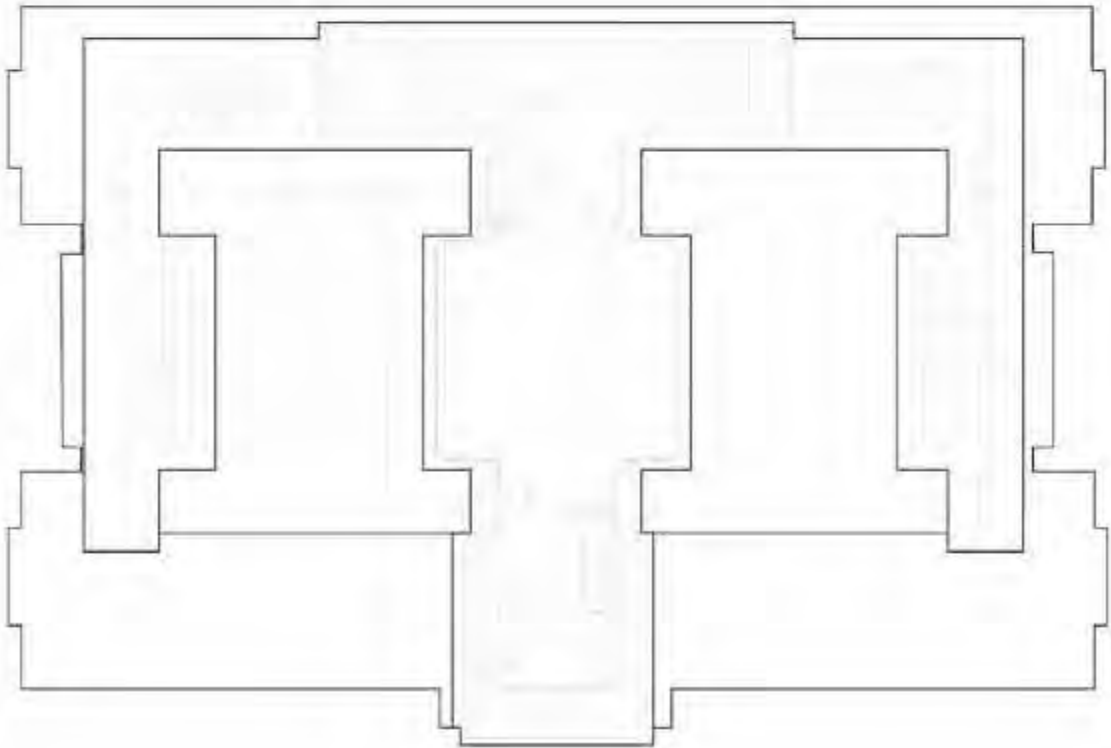
- STAFF CIRCULATION
- PUBLIC CIRCULATION
- VERTICAL CIRCULATION
- OFFICE
- LOBBY
- PANTRY



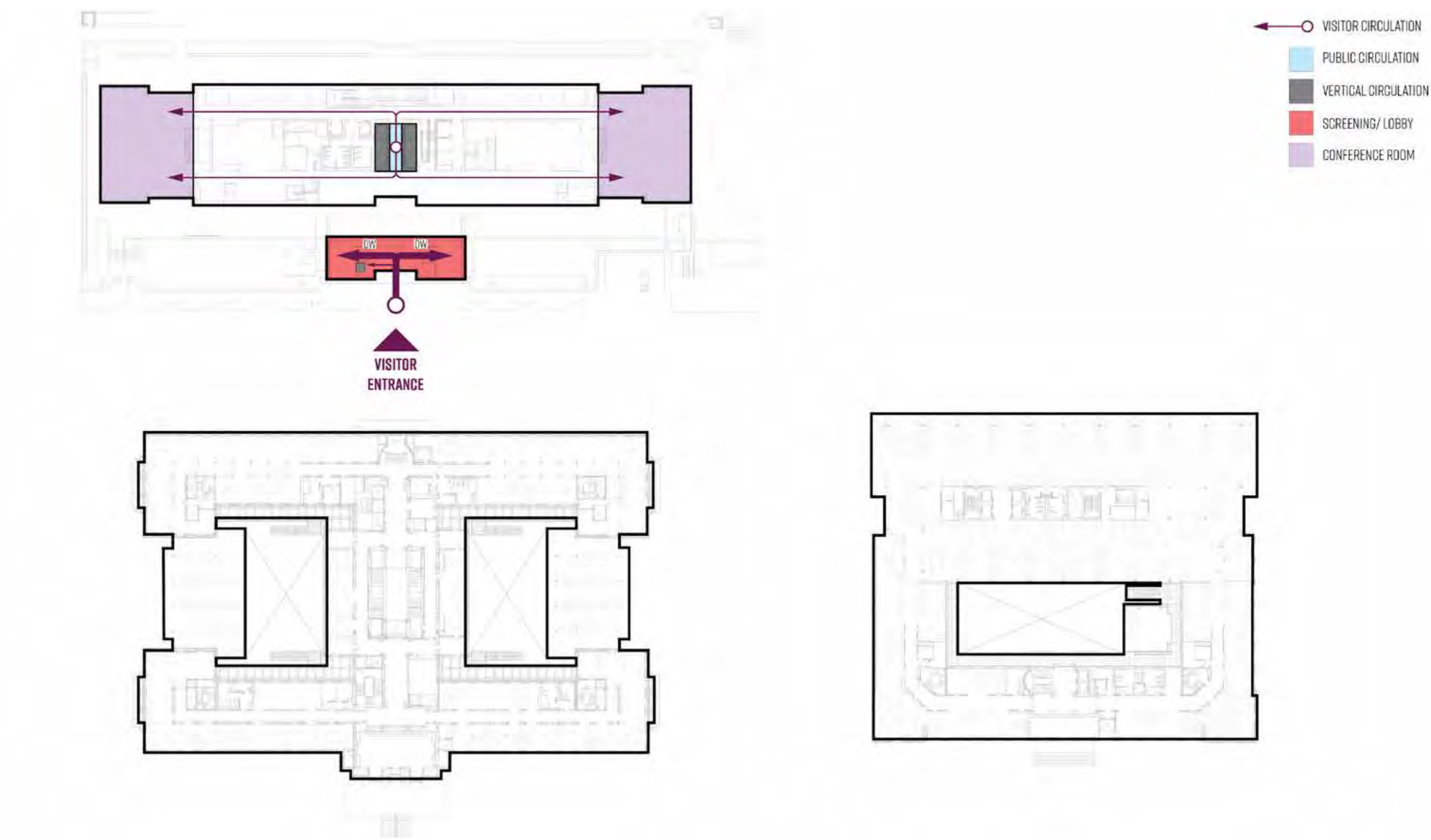




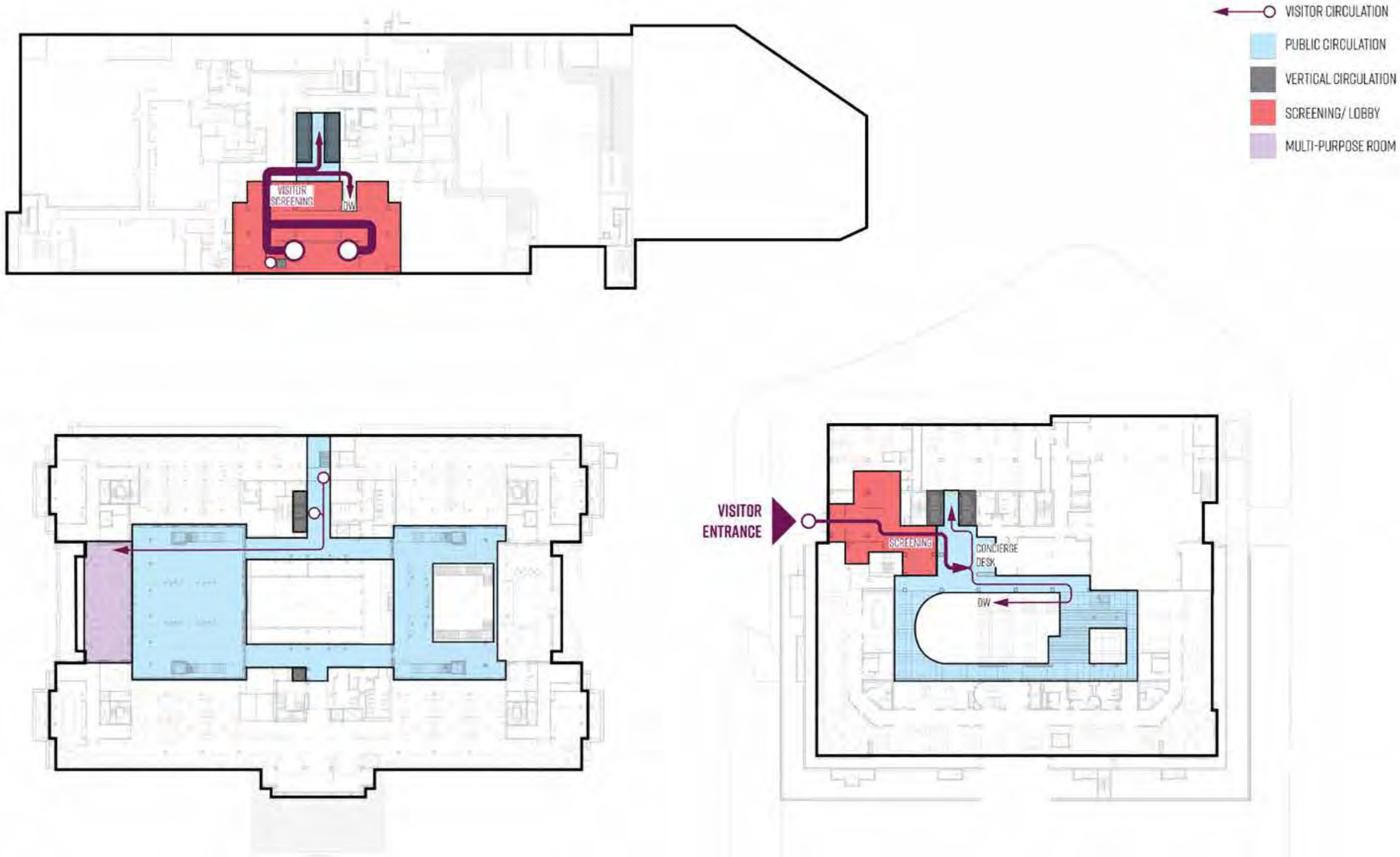




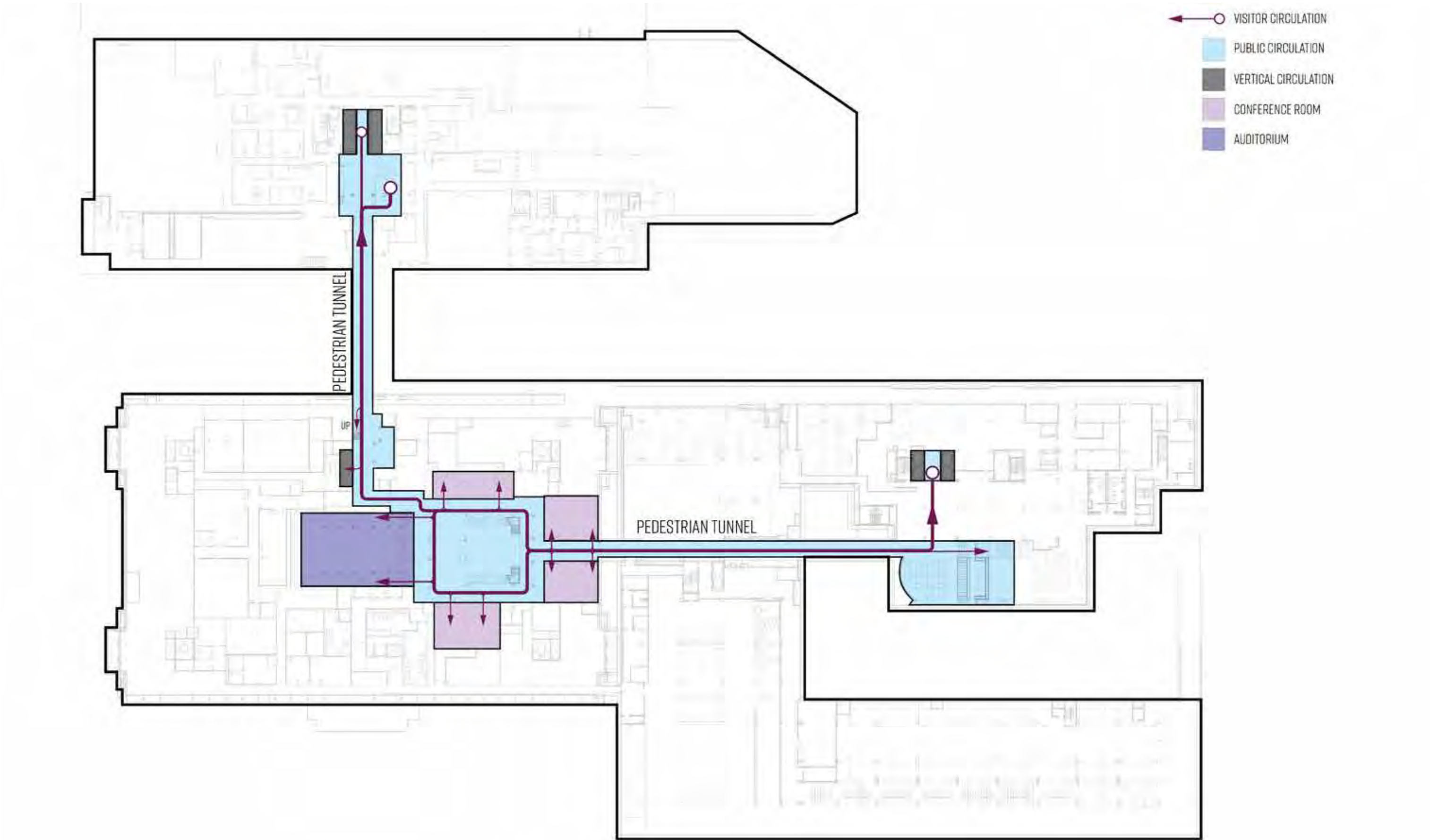




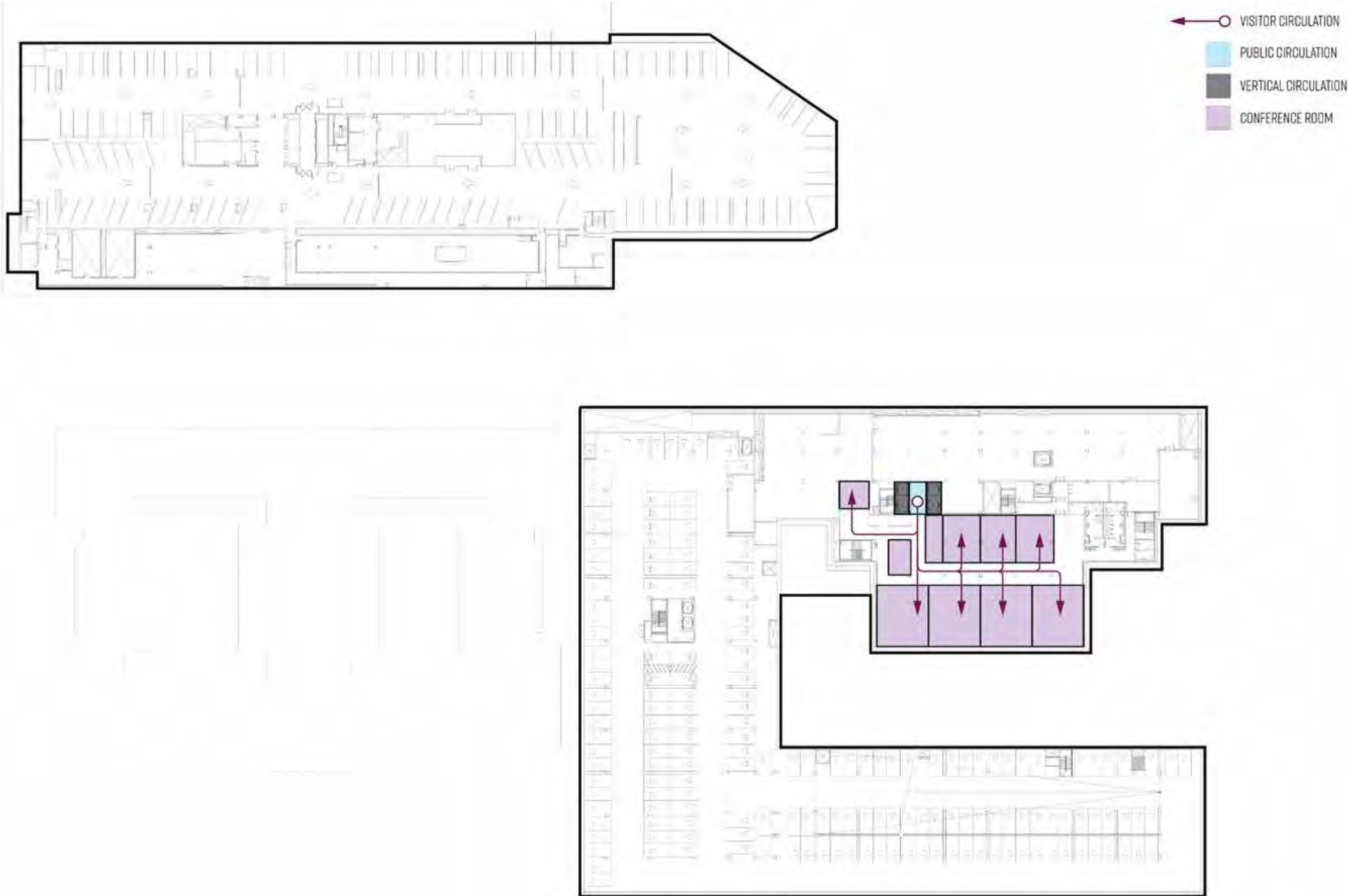




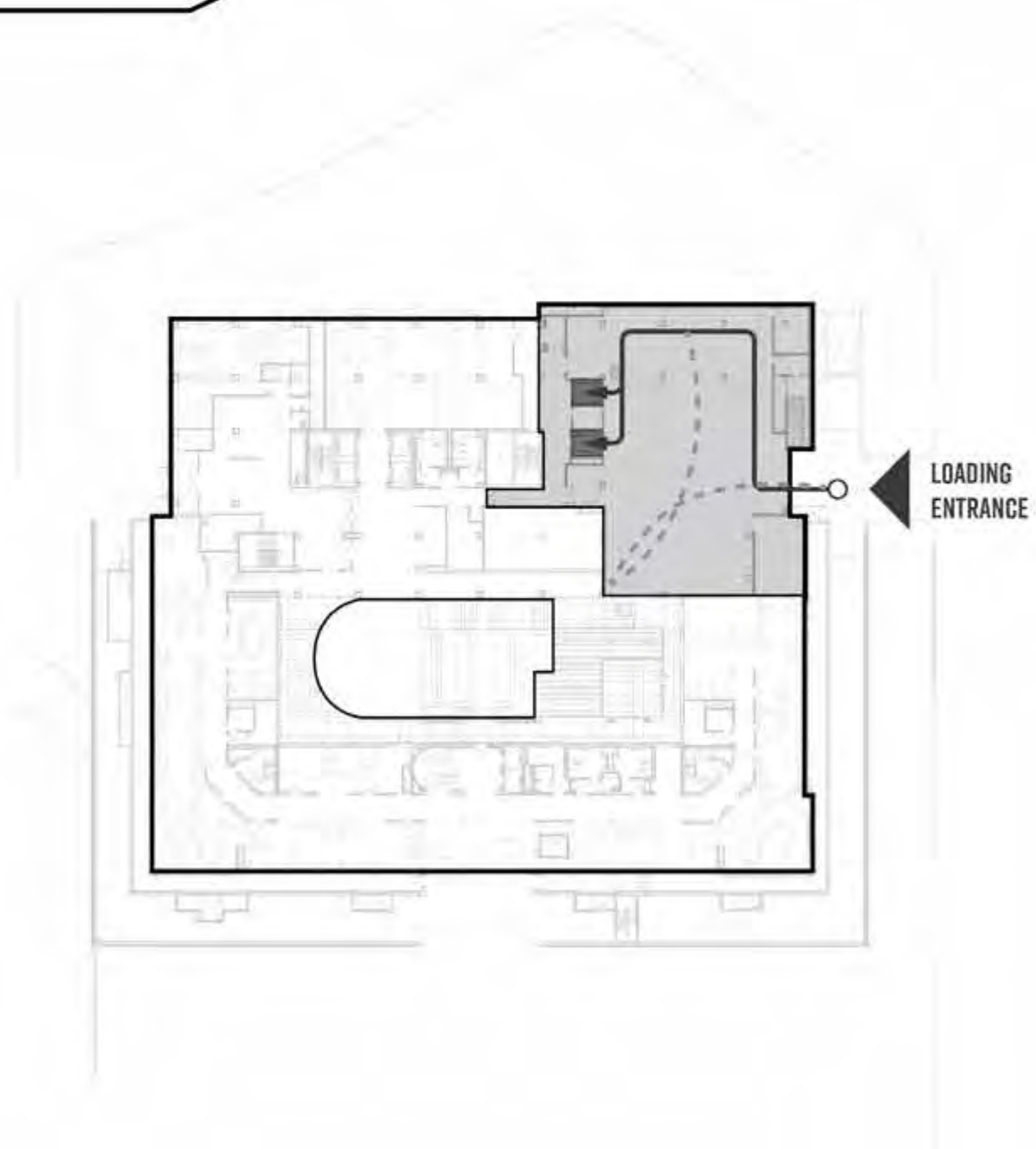
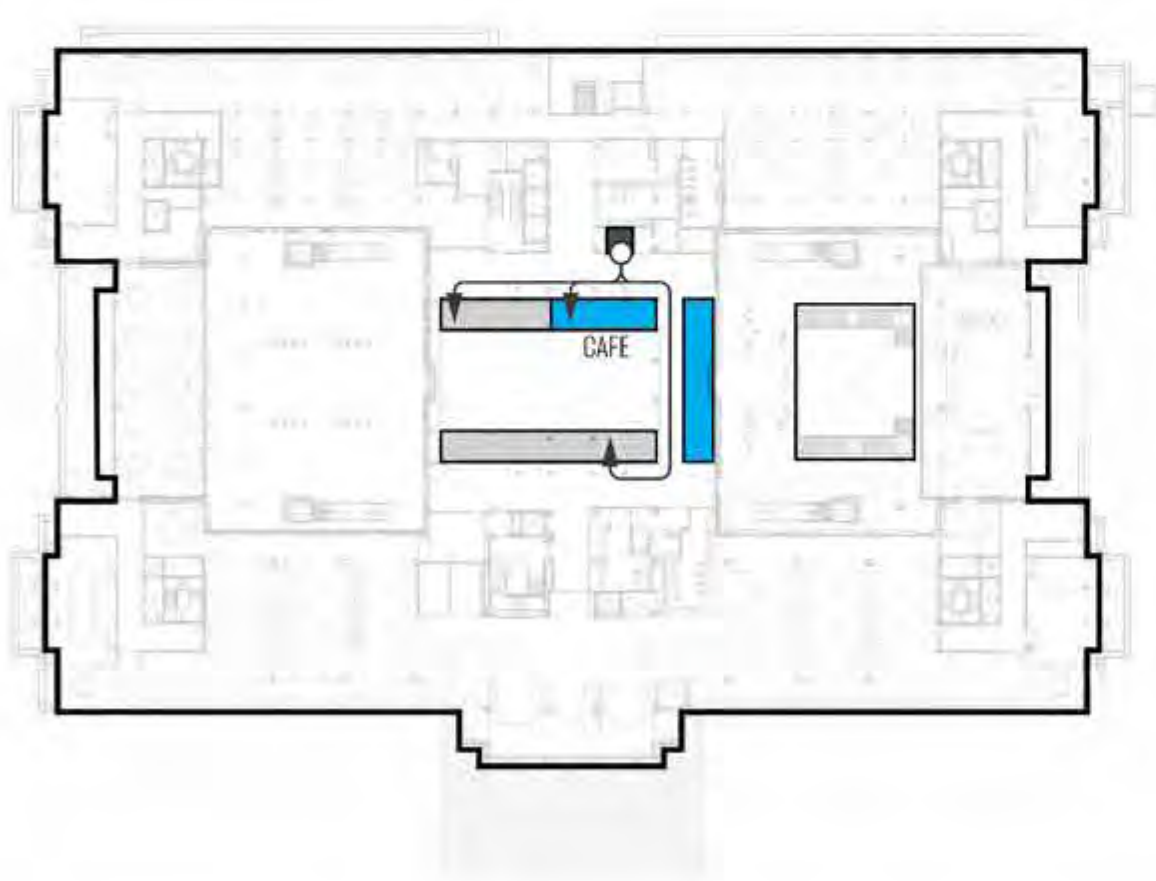
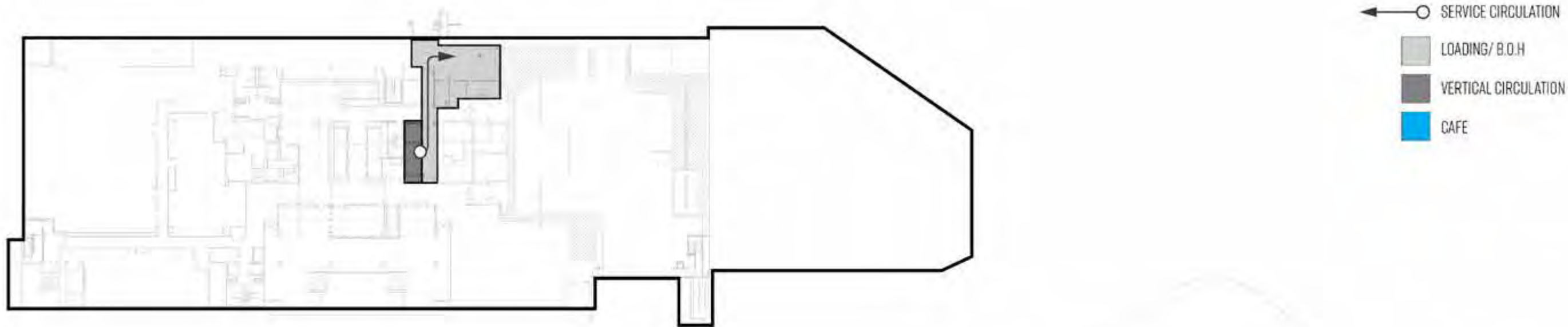




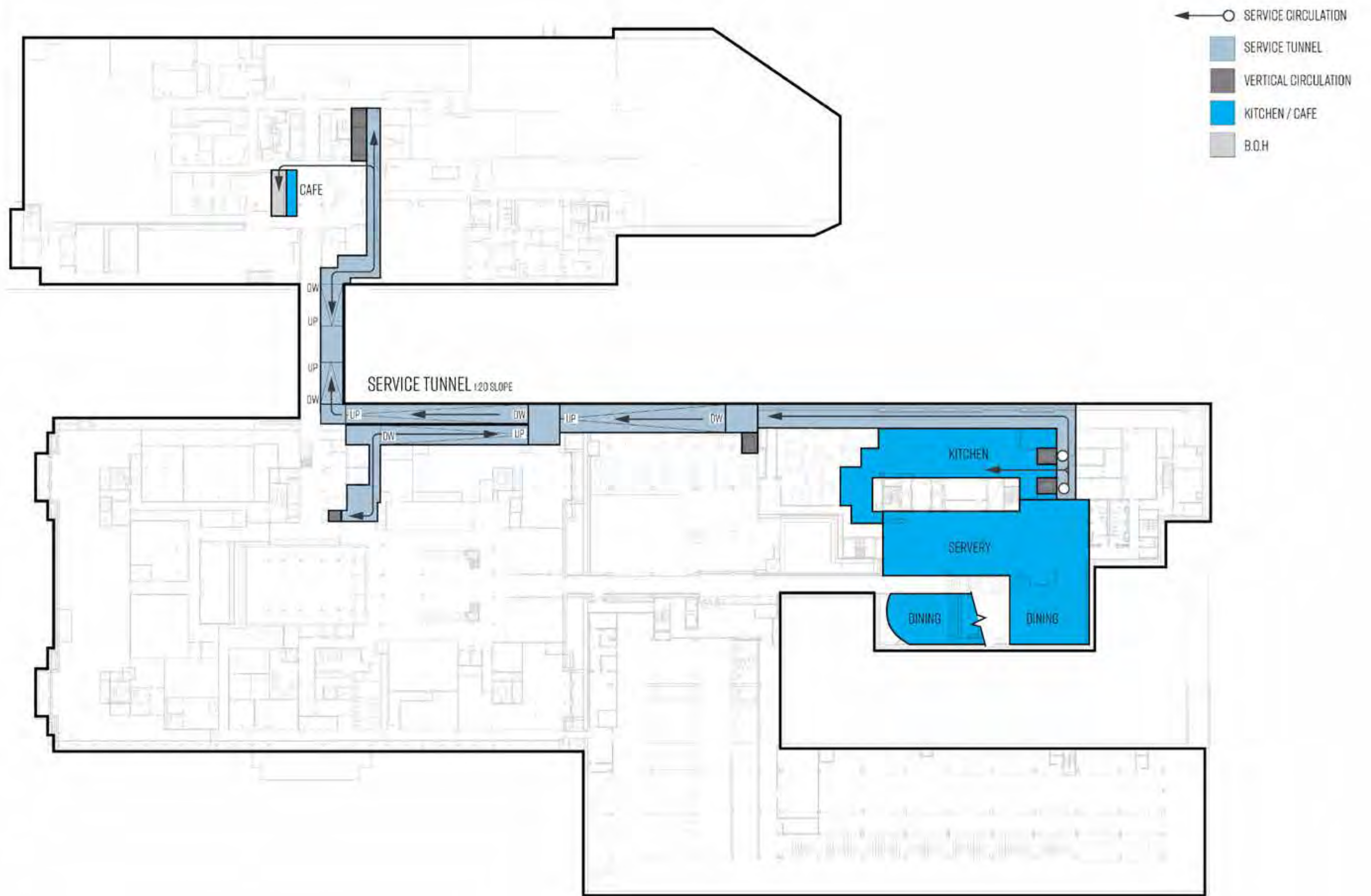














**PARKING**



3.19 PARKING GARAGE

The project includes a four-story below-grade, 250,654 GSF structure of which three stories will be dedicated to parking. The structure will have a L-shaped configuration below 20th Street and the south lawn in front of the existing FRB-East Building. The structure will meet a parking a ratio of one space for every five employees (1:5). The current Governor’s parking garage in the Eccles Building will become space for future program. The new parking garage will contain a secure section dedicated to housing the Governor’s parking and security vehicle fleet that will be displaced from the Eccles Building.

To remove parking underneath the Eccles Building curb cuts will have to be removed as well as 21st and 20th Street will no longer be serving parking uses. Access to the parking garage will be provided through single lane ramps that will be integrated into the existing historic building terraces of the FRB-East Building. The entry ramp will be accessed from 19th Street via an existing but expanded curb cut that combined merges immediately south of the proposed loading dock driveway. This curb cut is being expanded to accommodate both the entrance to the parking garage and the loading dock. 19th Street is southbound and has relatively has light traffic in the morning when cars will be entering the garage.

The exit ramp will ascend on 20th Street, which is a quiet city street. It is two-way street that will easily allow cars to move south towards Constitution Avenue and north up to Virginia Avenue. Six different options were studied as possible locations for the exit ramp. The preferred option exits out of the garage in a landscape zone that straddles property owned by the Federal Reserve Bank and public space. It is within an existing landscape zone located between the historic terrace and the sidewalk. While it is not a perfect solution, it solves more design issues than the other options. Unlike options 1,2 & 3, it has minimum impact on the

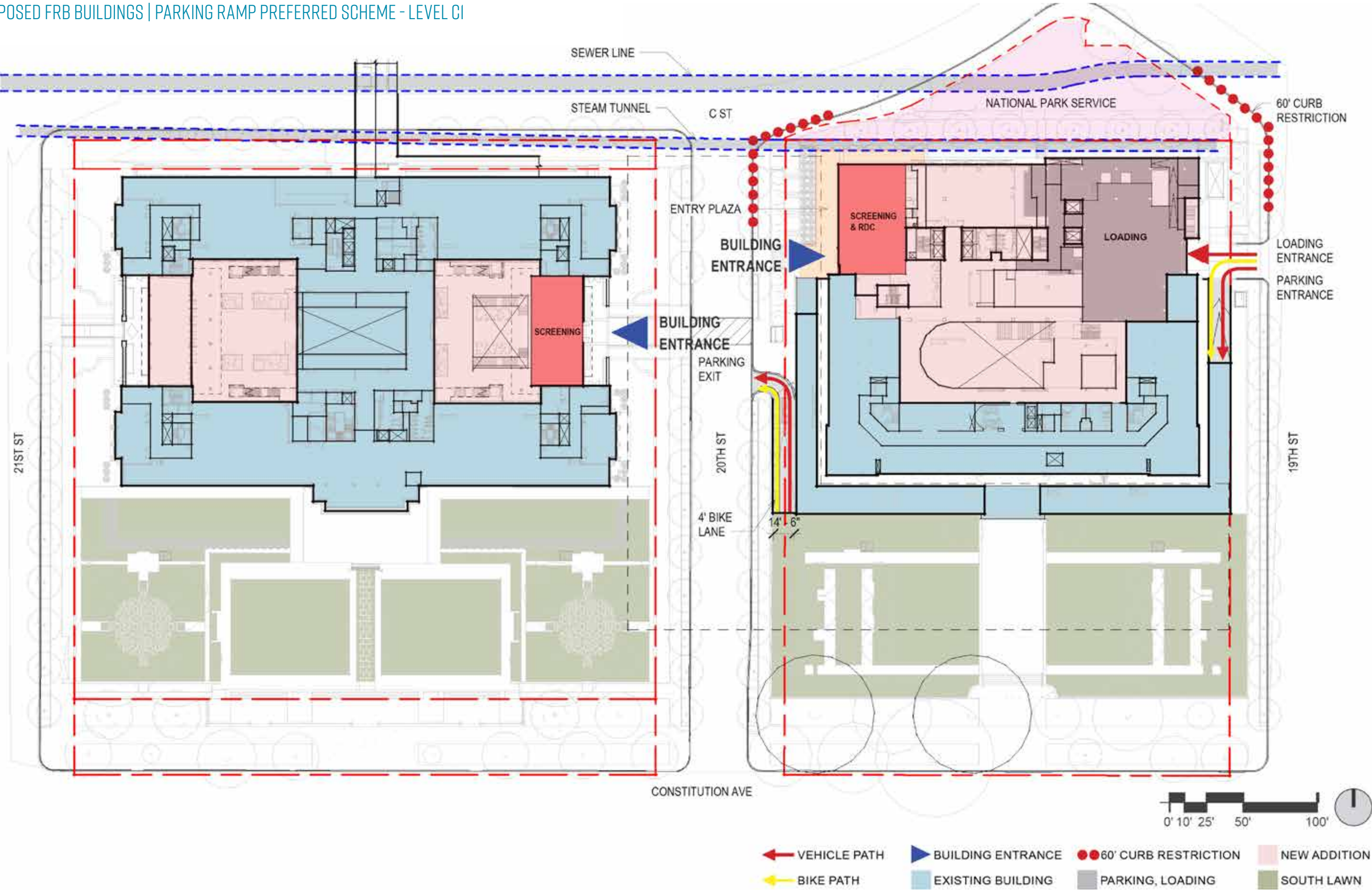
historic building and landscape. One of the project goals is to encourage the pedestrian movement at grade crossing between the Eccles, FRB-East, and Martin Buildings. The preferred ramp option that goal, whereas option 5 does not. While the exit ramp is close to the crosswalk between the two buildings, there will be a Law Enforcement Officer controlling the drop arm out of the garage, ensuring the safety of pedestrians.

To construct the parking garage, including the entrance and speed ramps, egress pathway, and ventilation, and slurry walls supporting the below grade program, the historic building terrace and area way of the FBR-East Building will need to be removed. In addition to the existing terrace, the marble steps and landing, and granite steps to the east and west of the terrace will be removed. The terrace and areaways will be rebuilt in the same location. Where possible, the existing stone will be salvaged and stored during construction. The east sides of the terrace will be shortened to accommodate the vehicular ramps that will access the below grade parking area. The western building terrace will be connected to new building’s western entrance plaza. Localized excavation of bedrock will be required to reach the proposed C4 level elevation of the parking garage. Because of the water table, slurry wall construction are needed to support the perimeter walls below grade. To cut off the water below grade those walls will be driven into bedrock underneath. It results in four levels below grade of available volume. The top three levels will be primarily for parking, the lowest level is unprogrammed space at this time.

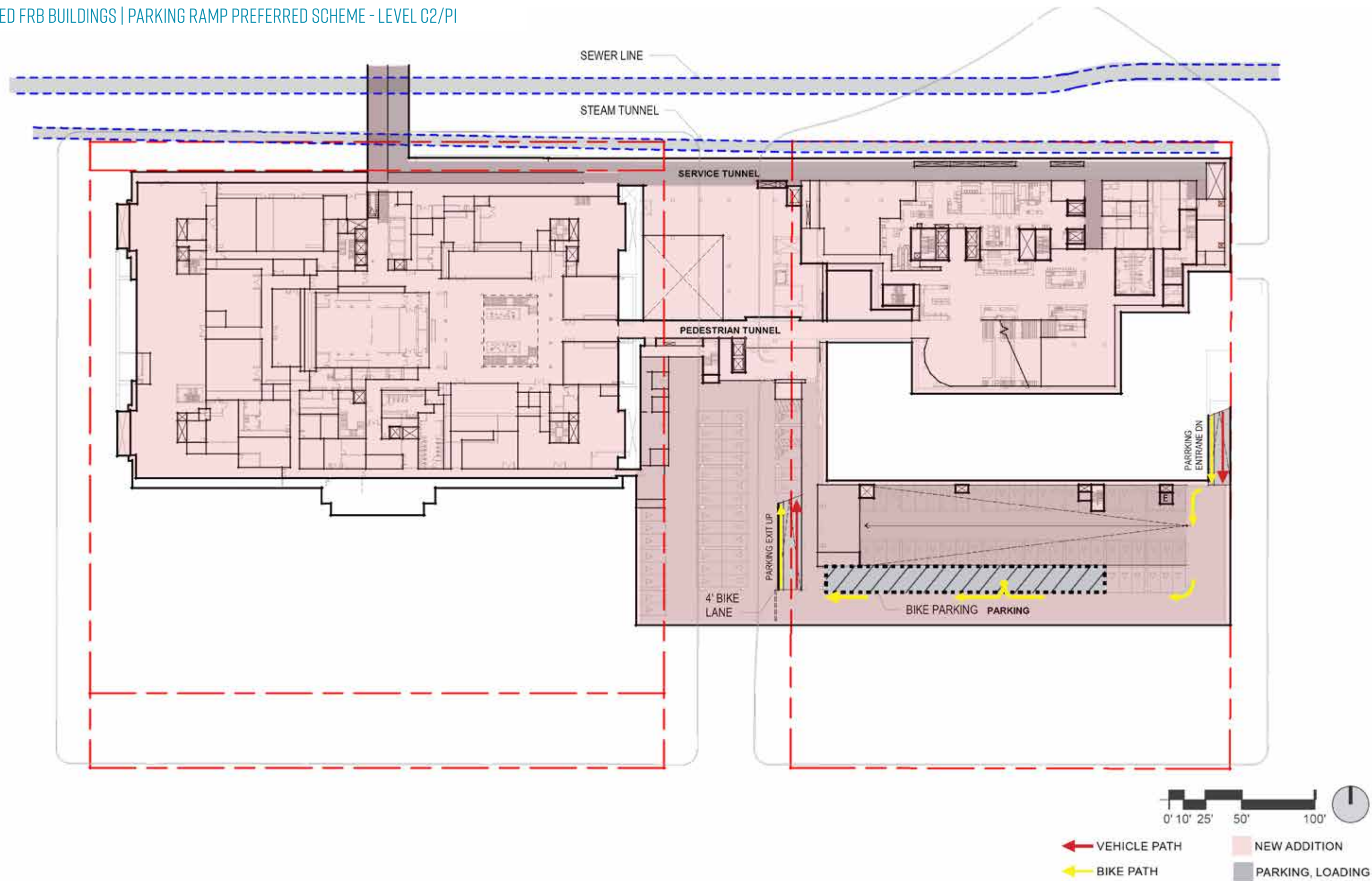
Work on the existing FRB-East Building terrace is anticipated to include the following: restoration of cast aluminum and marble terrace railings; new construction steel center handrail at main entrance stairs; reconstruction of main entrance stairs and east secondary stairs; and replacement of the terrace floor with concrete bed and exposed aggregate finish to match the original.

The slurry wall and excavation at the western edge of the parking garage approach on the eastern edge of the Eccles Building. These actions will require the removal and replacement of the existing landscape and site elements at the east side of the Eccles Building, with the exception of the existing eastern porches. Where possible, materials will be salvaged or replaced in-kind and reinstalled.











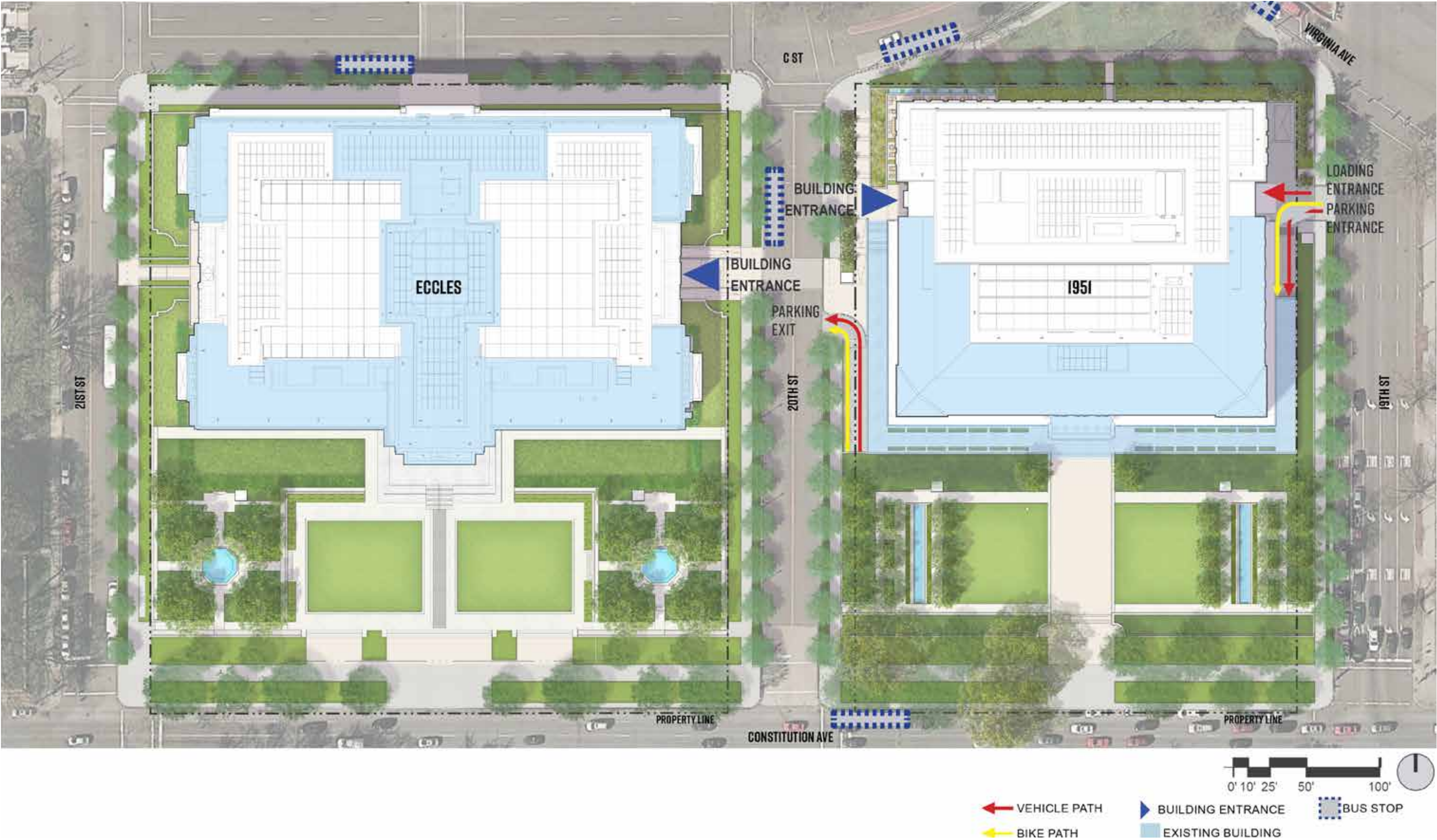


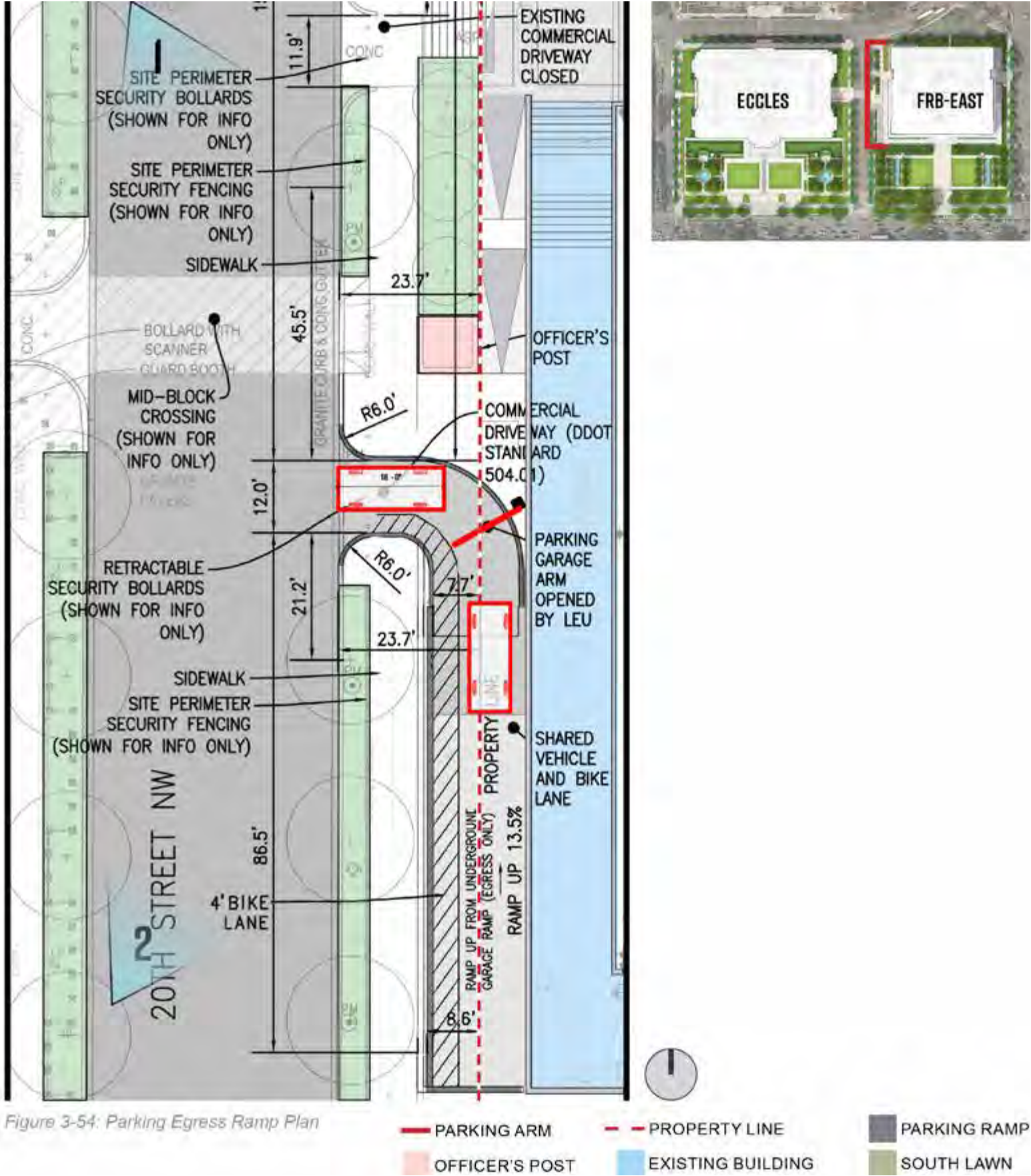




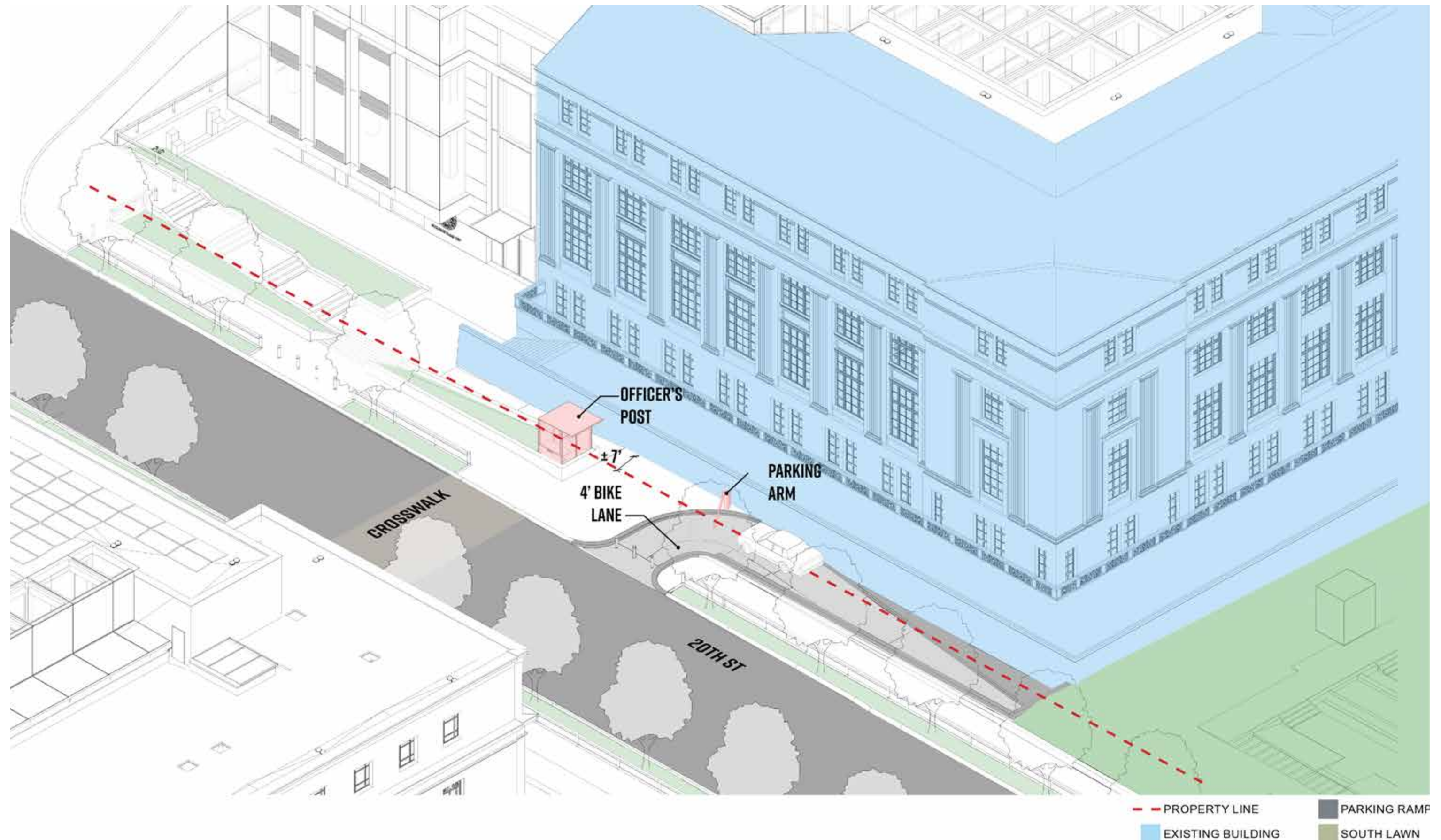
Figure 3-52: View 1 from 20th Street looking south



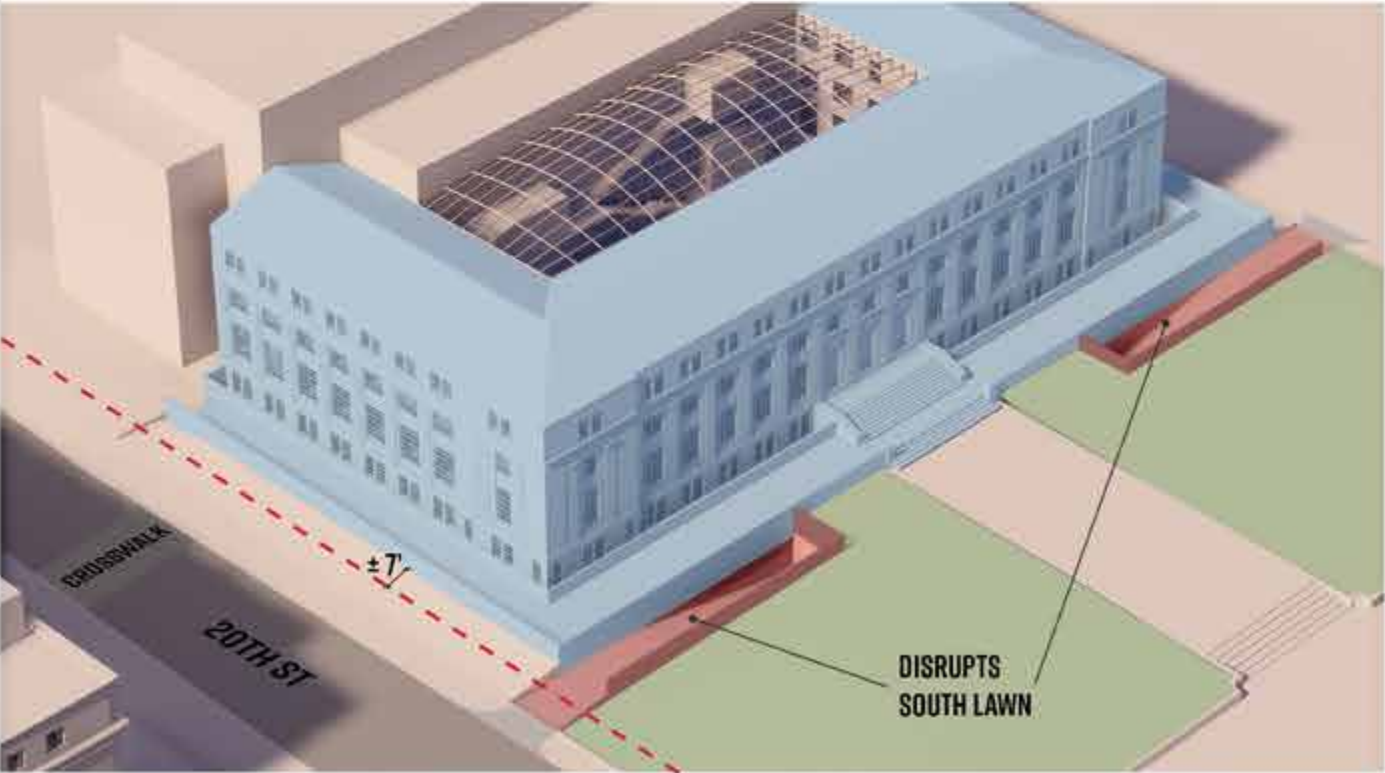
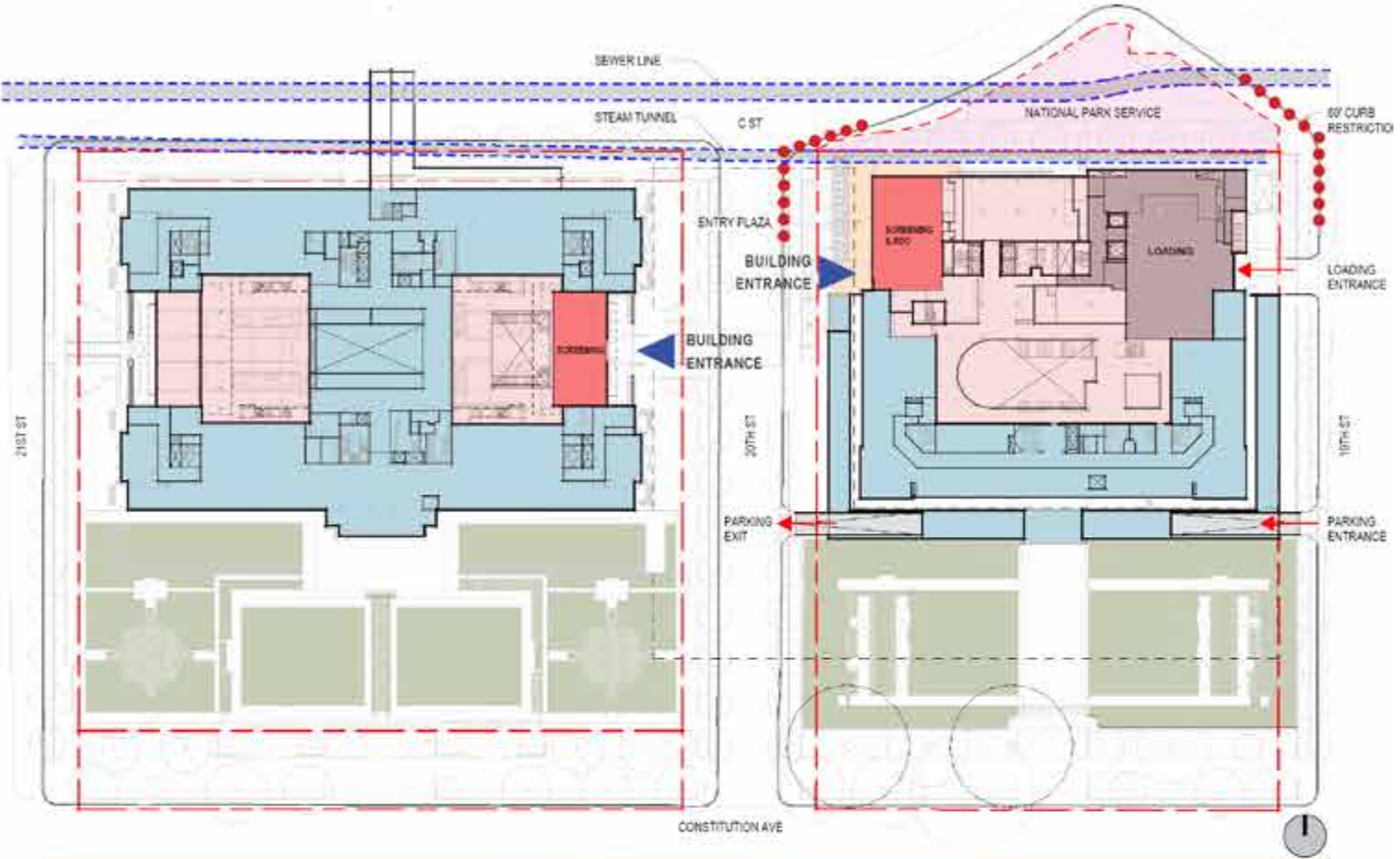
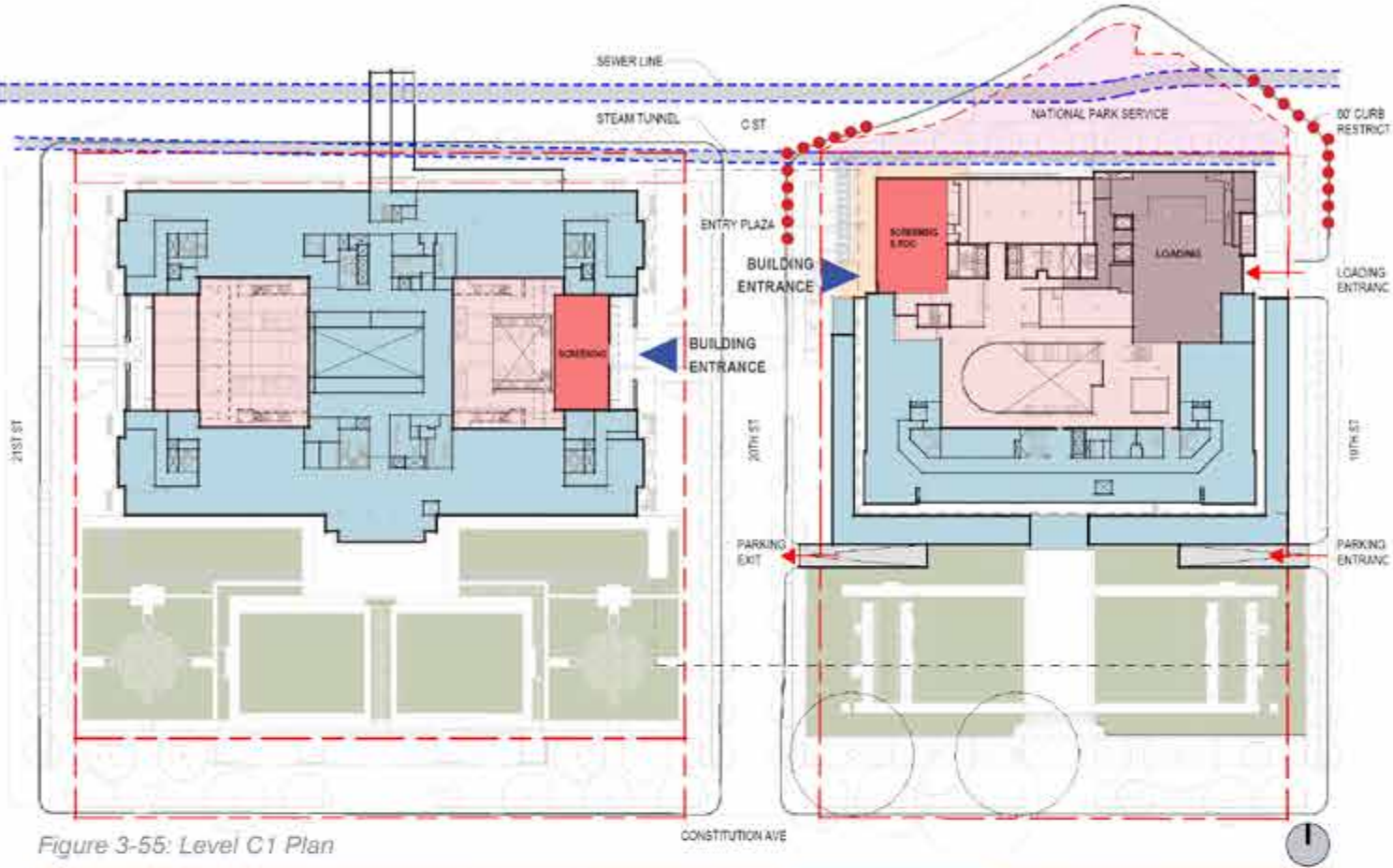
Figure 3-53: View 2 from 20th Street looking north











- ▶ BUILDING ENTRANCE
- 60' CURB RESTRICTION
- NEW ADDITION
- EXISTING BUILDING
- PARKING, LOADING
- SOUTH LAWN



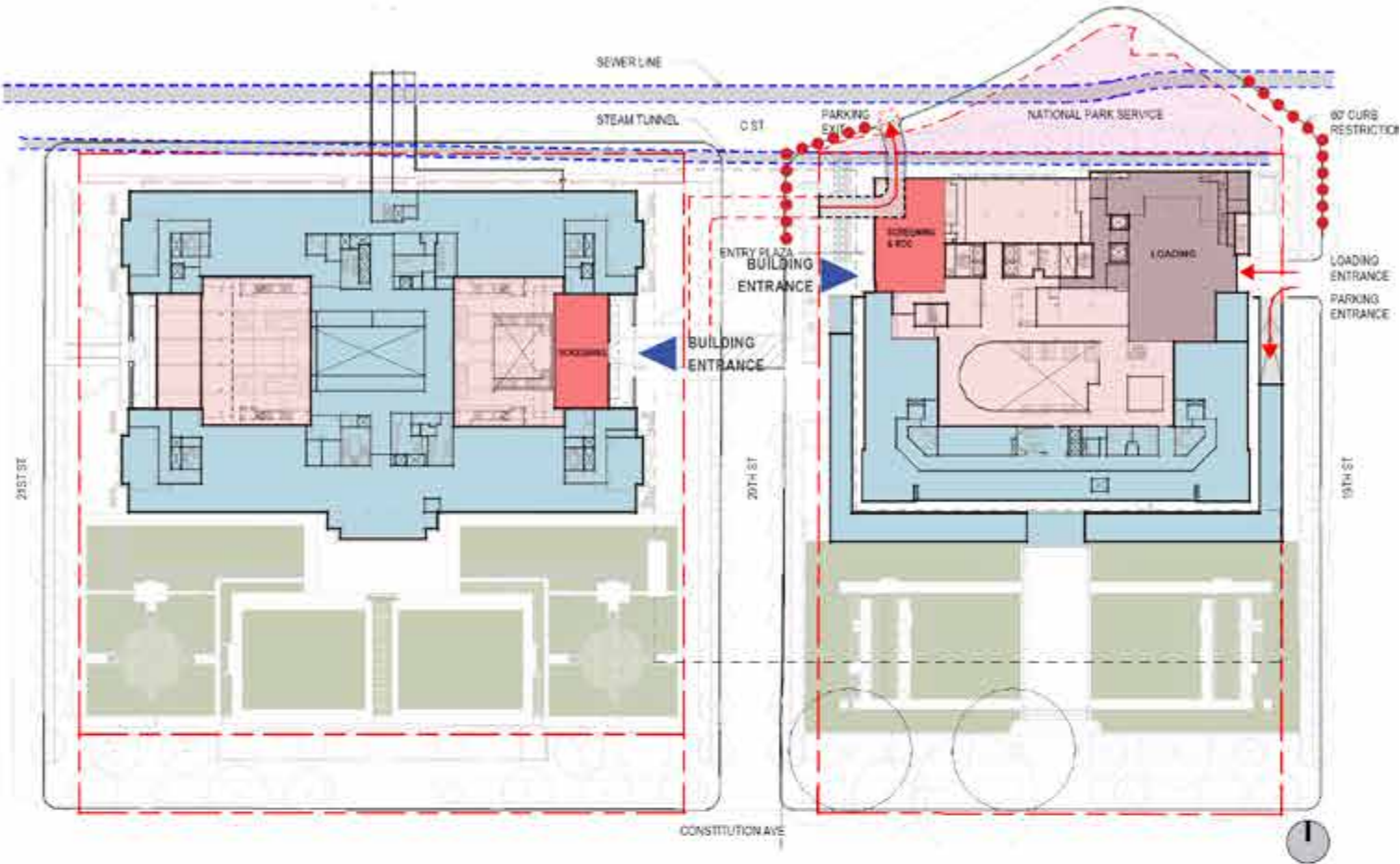
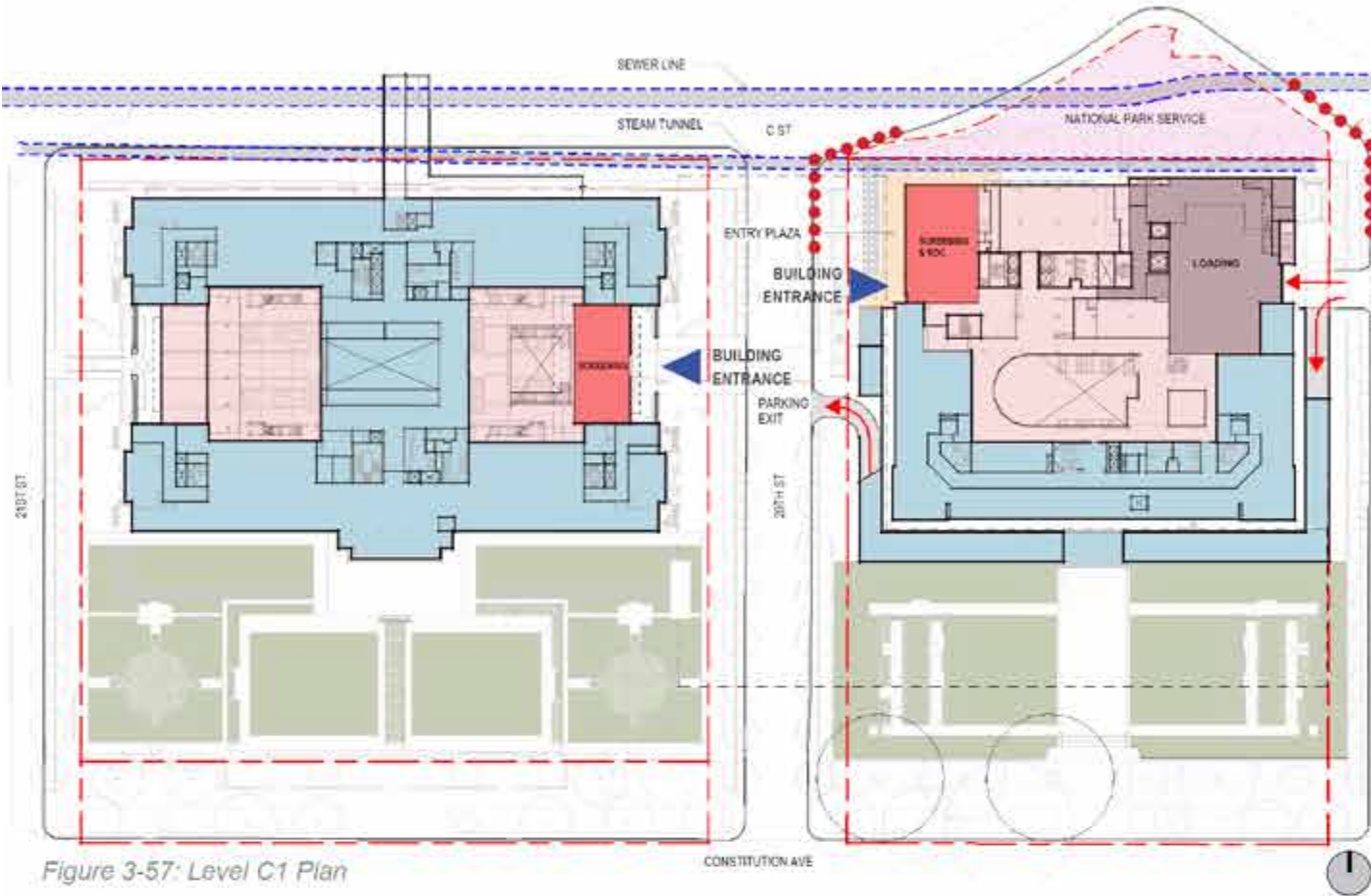


Figure 3-57: Level C1 Plan

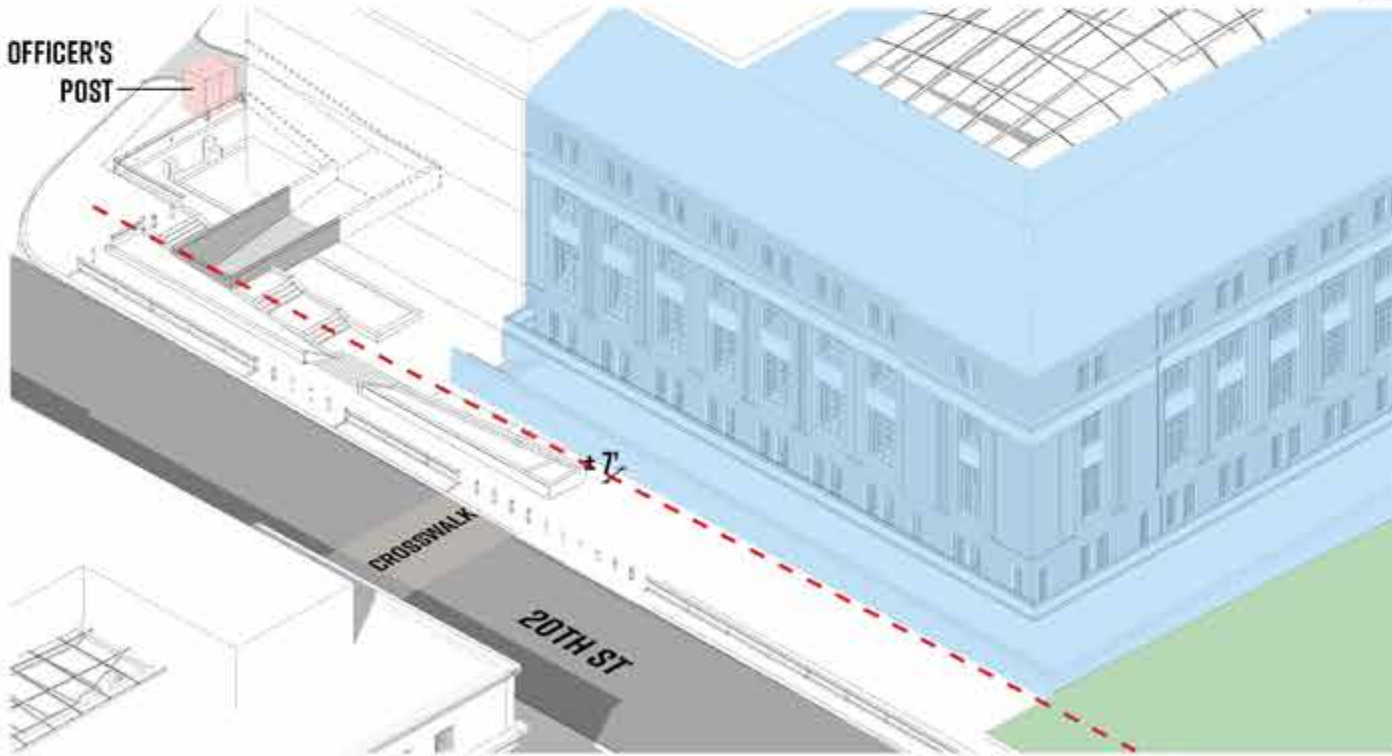
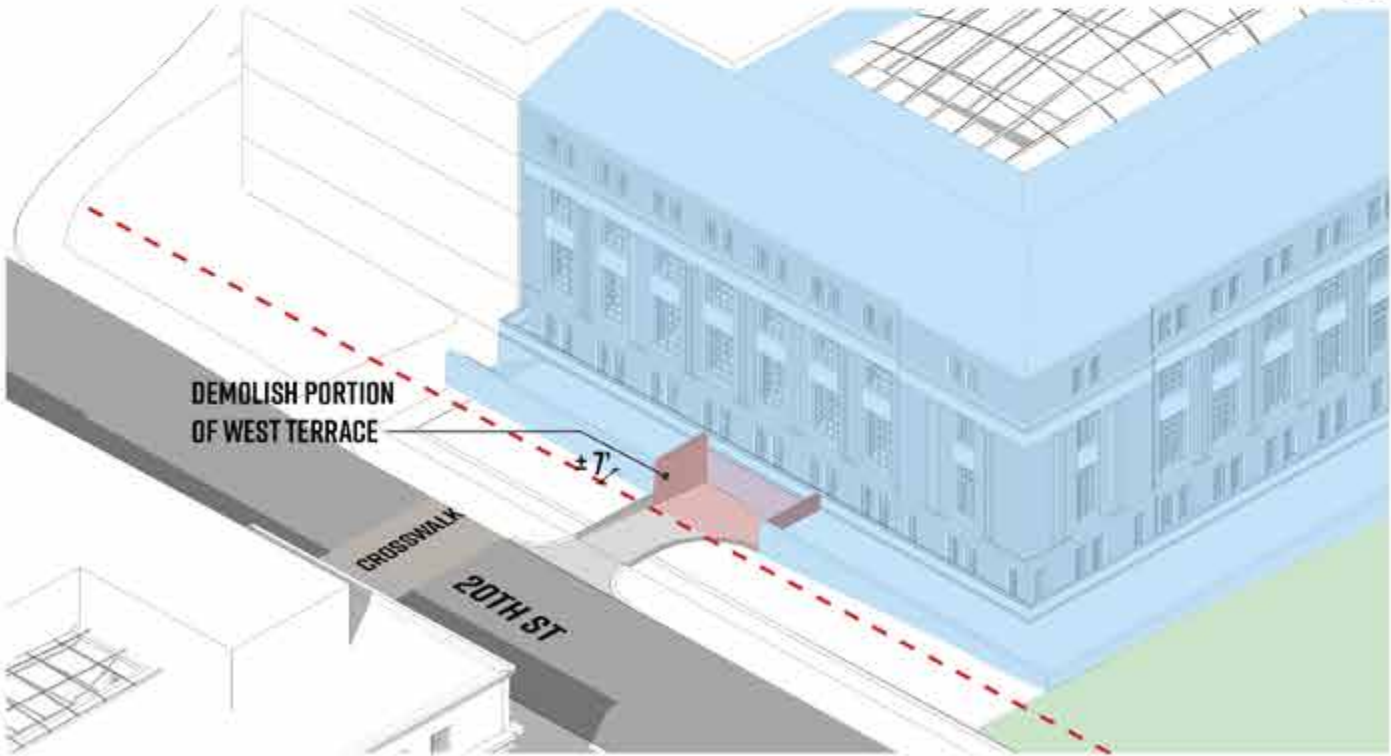


Figure 3-58: SW Aerial

- ▶ BUILDING ENTRANCE
- 60' CURB RESTRICTION
- NEW ADDITION
- EXISTING BUILDING
- PARKING, LOADING
- SOUTH LAWN



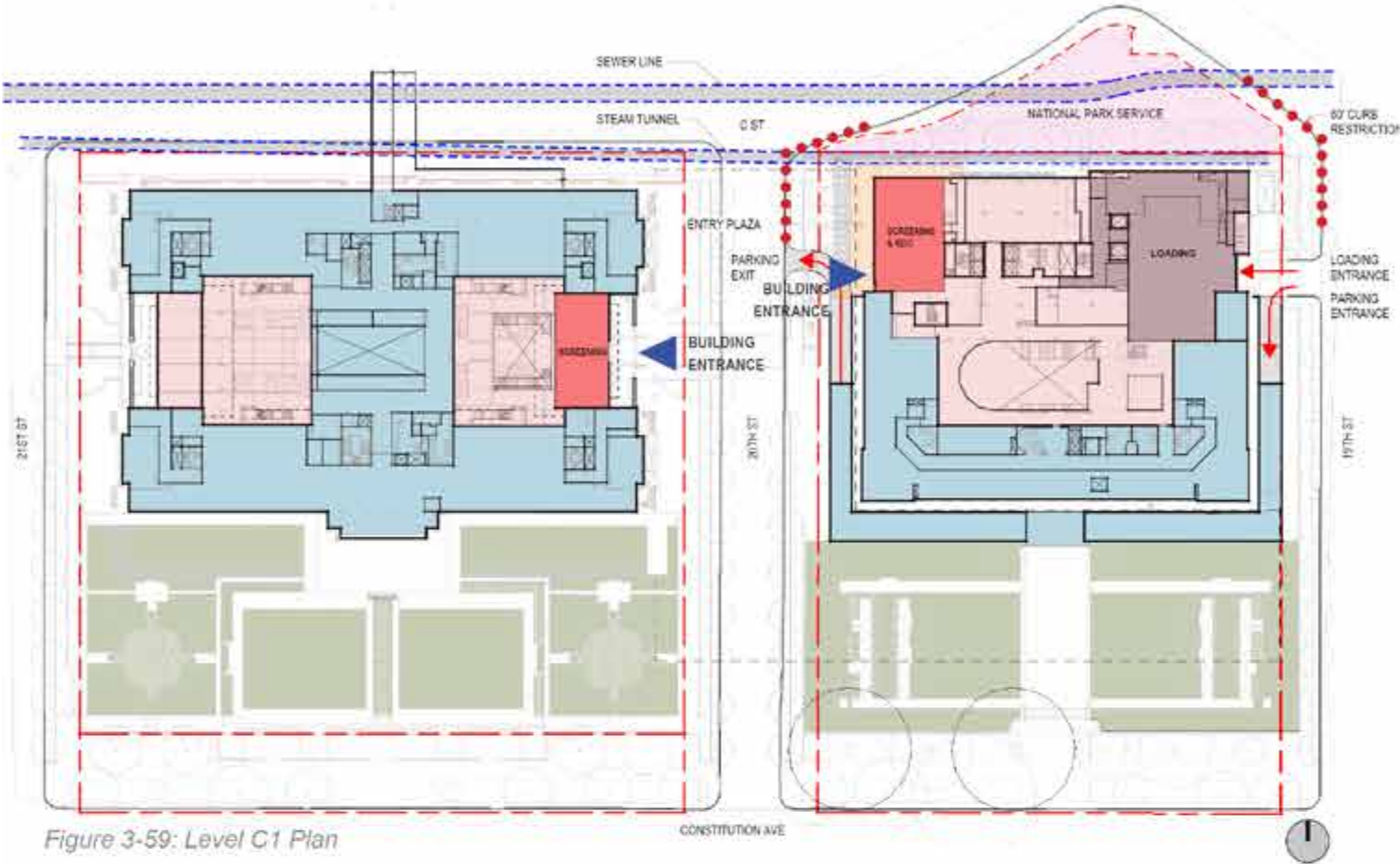


Figure 3-59: Level C1 Plan

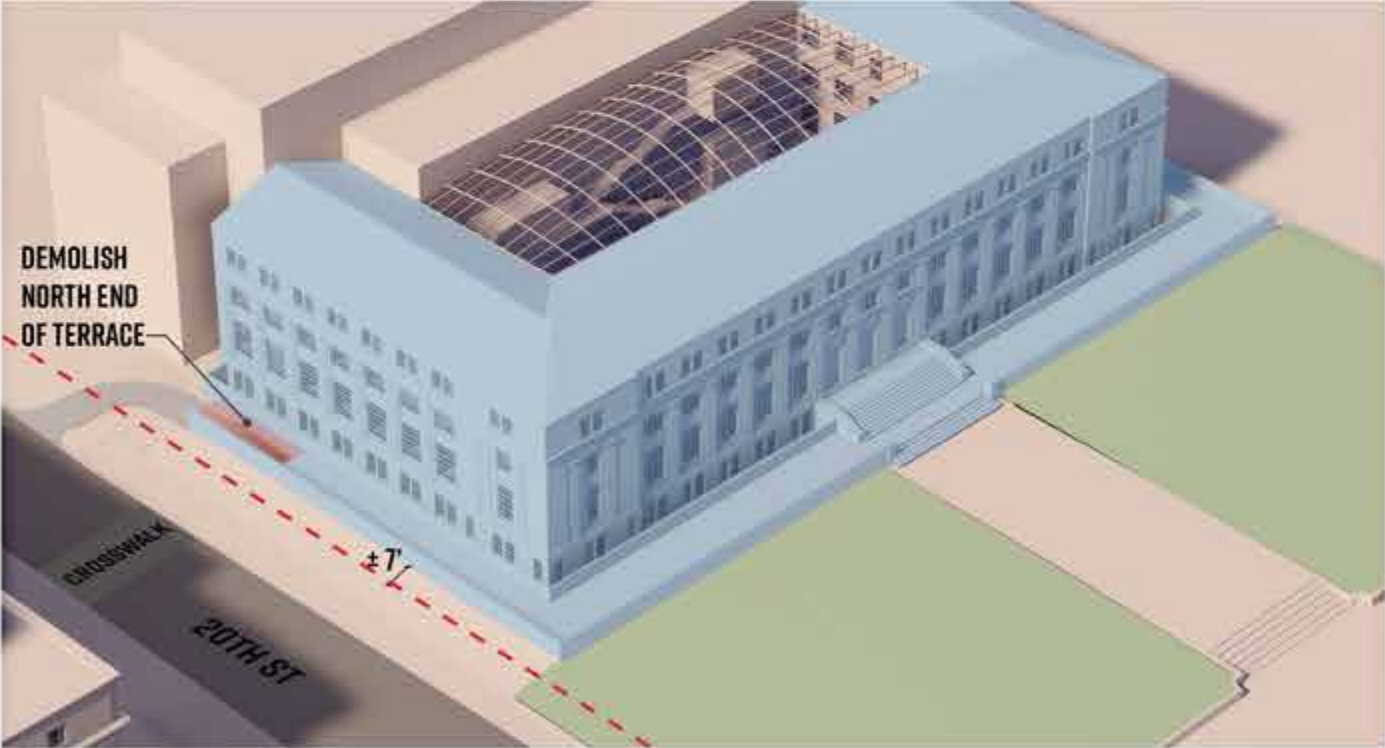


Figure 3-60: SW Aerial

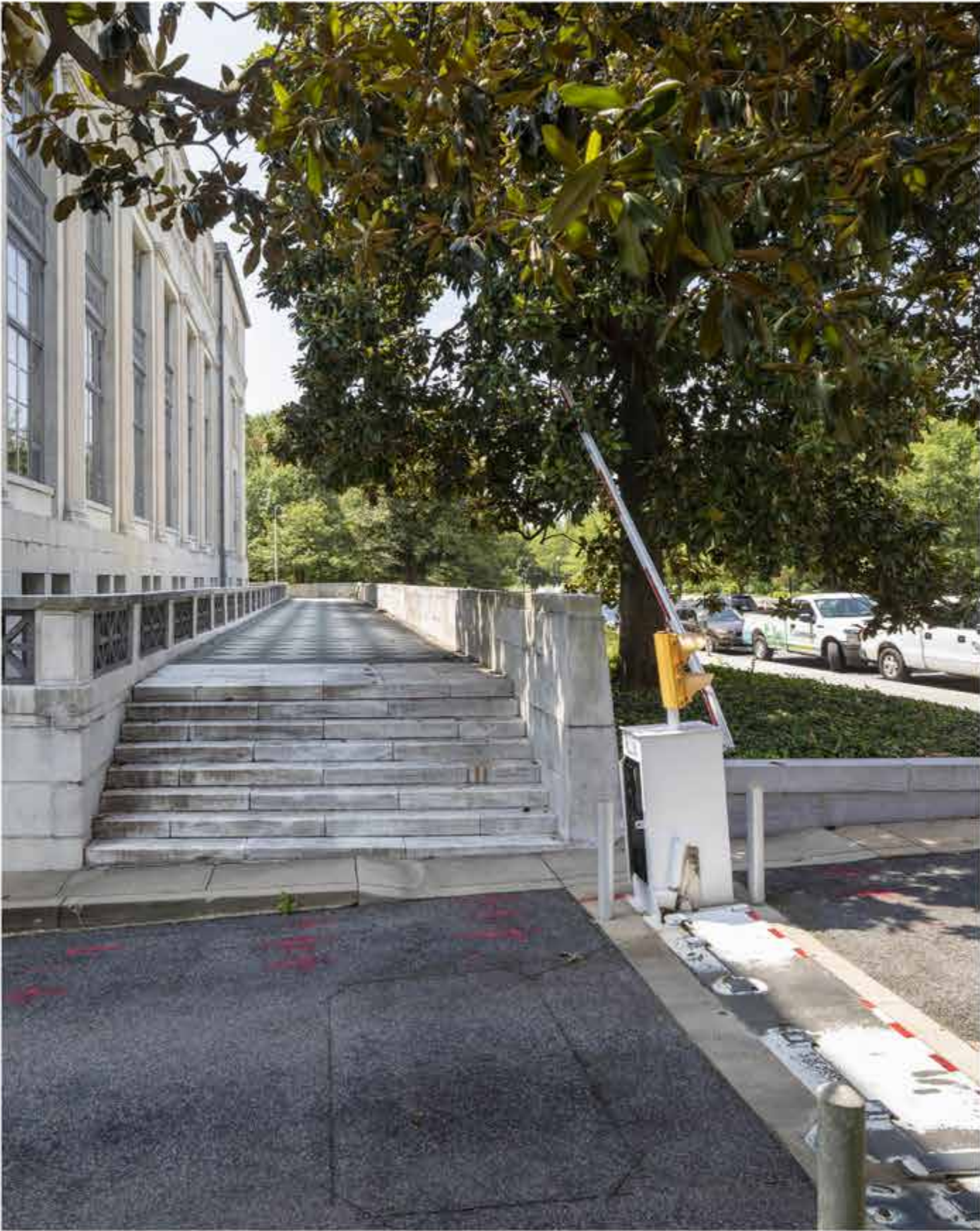


Figure 3-61: West Terrace Existing condition

 BUILDING ENTRANCE	 60' CURB RESTRICTION	 NEW ADDITION
 EXISTING BUILDING	 PARKING, LOADING	 SOUTH LAWN



**WAYFINDING**



3.20 WAYFINDING

The goal of the wayfinding strategy is to identify and develop appropriate exterior signage and wayfinding elements that emphasize the Federal Reserve’s civic importance. These elements will complement the campus exterior by remaining sensitive to the design, materiality and finishes of each building’s façade.

Guided by the existing and newly designed architecture, the exterior signage will use contemporary materials and processes that respect the historic features of each building while creating a more unified appearance and signage system throughout the campus.

Anticipated sign types consist of a building name and Federal Reserve Board seal at the main entries of both Eccles Building and FRB-East Building, supplemental pedestrian directional signage at the previous Eccles Building entry, supplemental vehicular directional signage at the 19th street parking entry of the 1951 building, and inlaid typographic paver bands at the stairs leading to the main entries of both Eccles Building and FRB-East Building.



Figure 3-62: Existing architectural details of Federal Reserve Board buildings



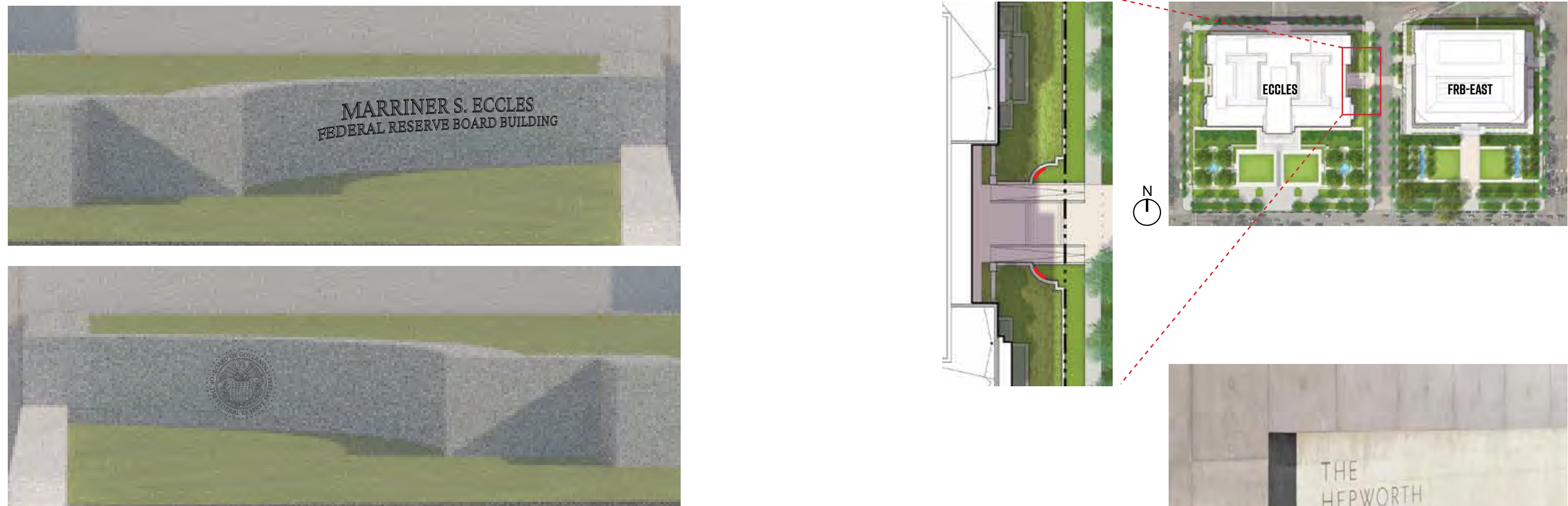


Figure 3-63: Eccles Building- Signage At 20th Street Connection / Building Entry  
Letters And Seal Etched Into Stone Wall. Option To Fill Etched Surface With Dark Bronze Paint Or Metallic Leaf

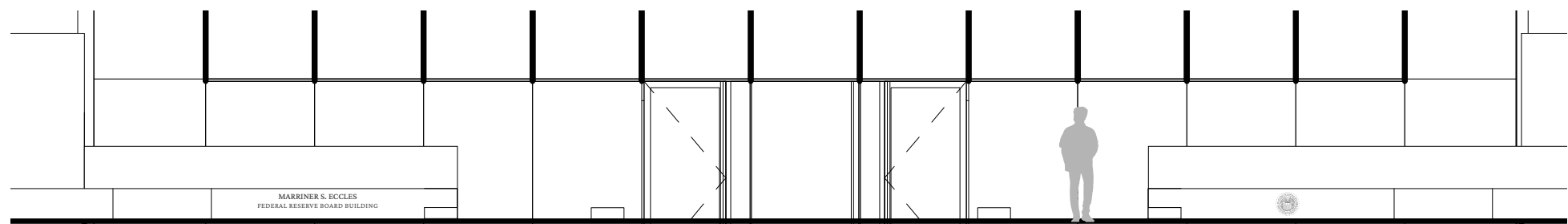


Figure 3-64: Eccles Building - Signage At 20th Street Connection / Building Entry  
1/8" = 1'-0"

# MARRINER S. ECCLES FEDERAL RESERVE BOARD BUILDING

Figure 3-65: Detail View



Figure 3-66: Inspiration Imagery



## PROPOSED ECCLES BUILDING MAIN ENTRY -FEDERAL RESERVE SEAL

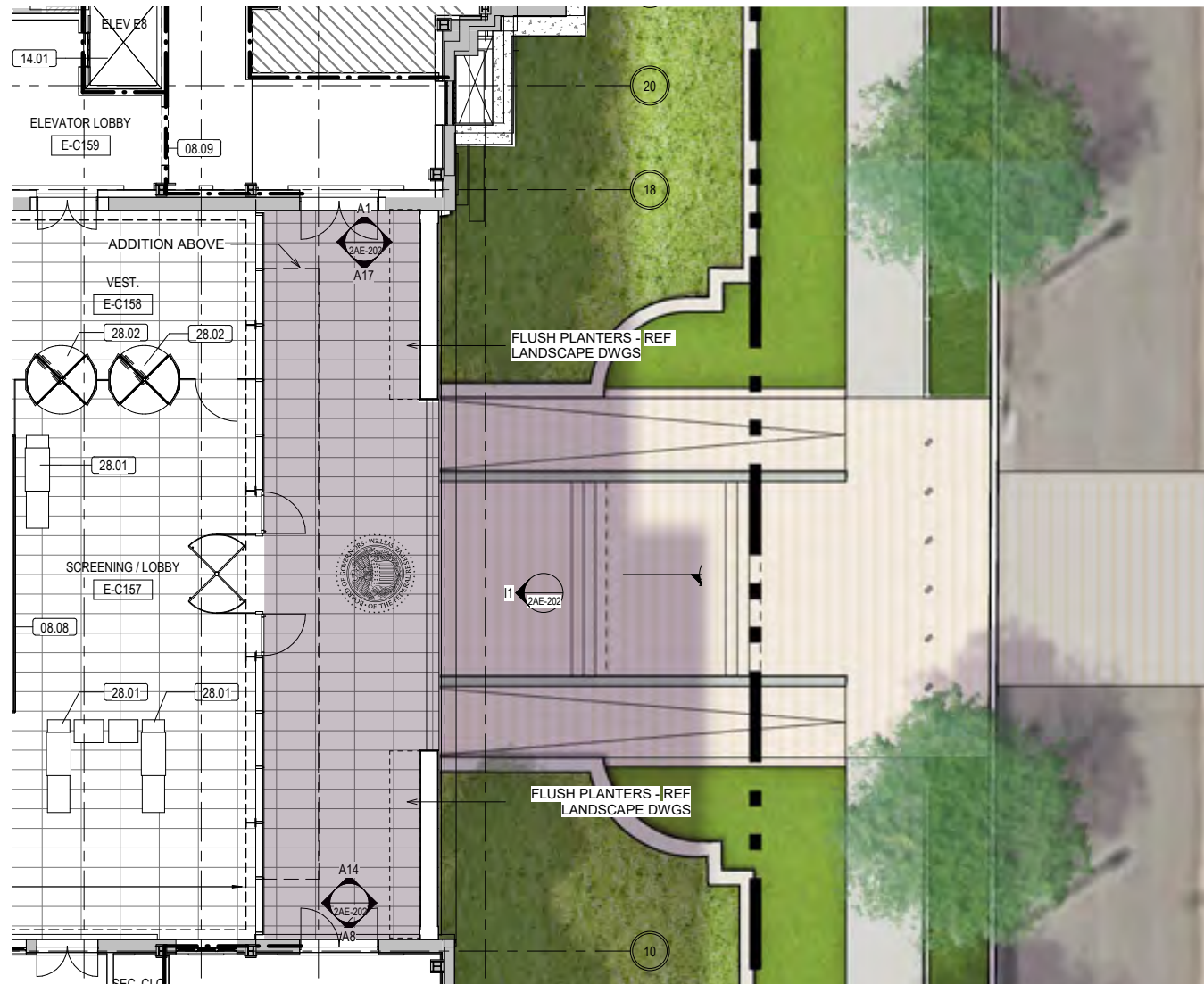


Figure 3-67: Plan View Of Sign Location



Figure 3-68: Section View

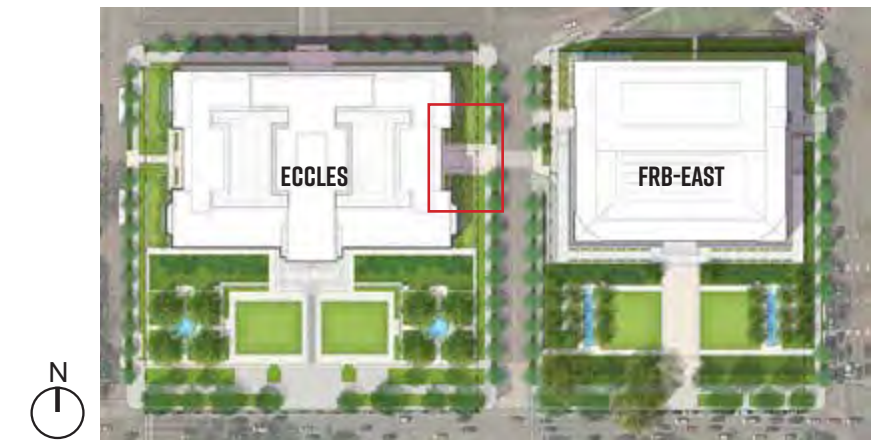


Figure 3-69: Inspiration Imagery



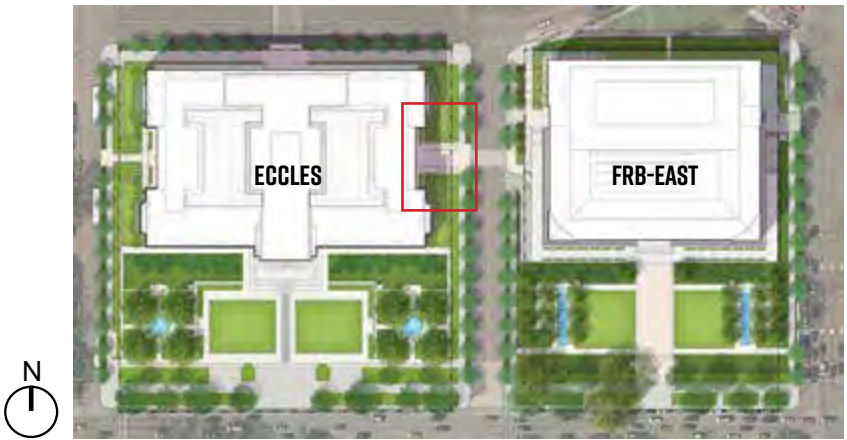
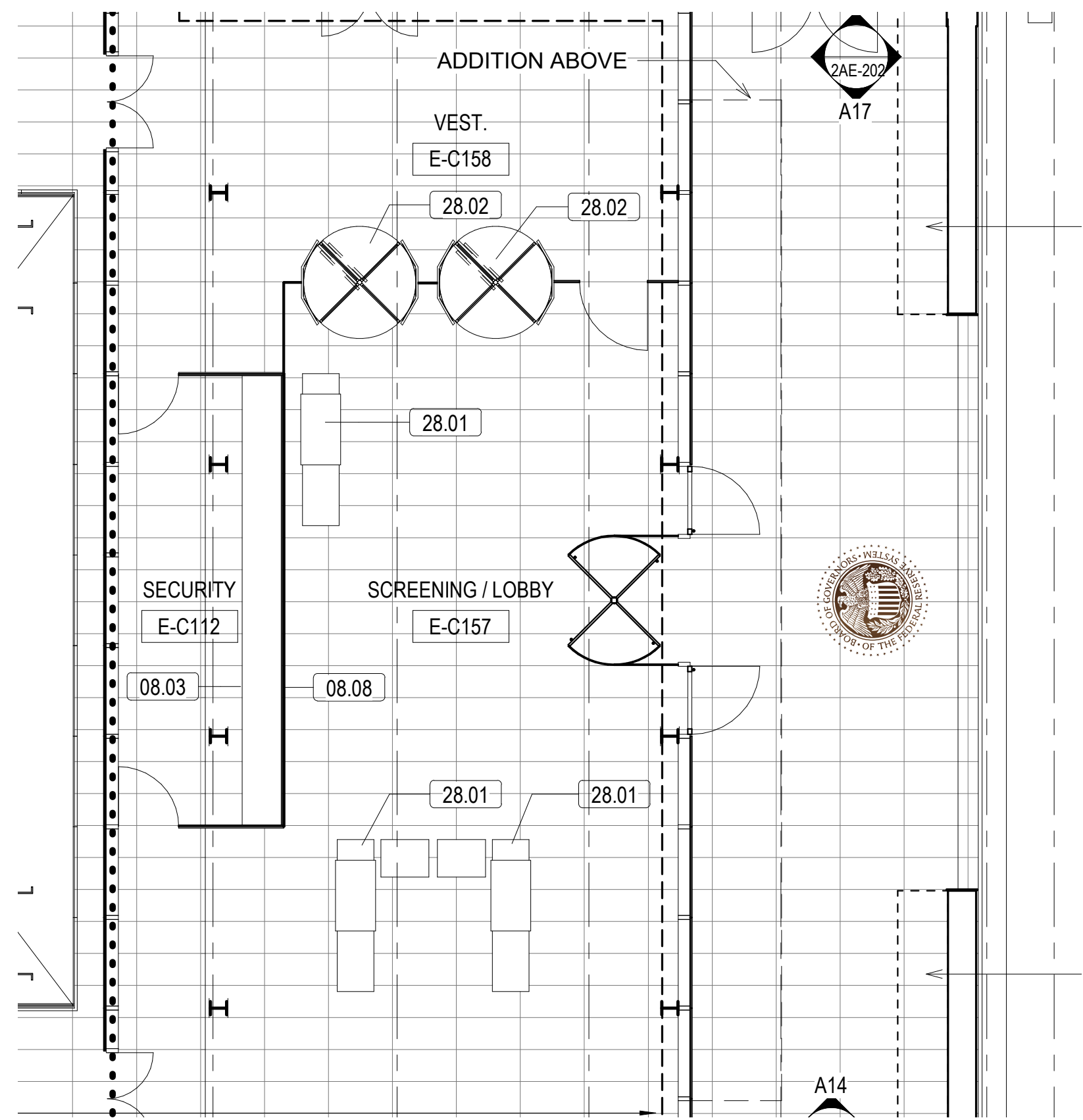


Figure 3-70: Plan Detail





Figure 3-71: Detail Option 1  
Seal Fabricated Entirely From Dark Bronze Metal Inlaid Into Stone Pavers



Figure 3-72: Detail Option 2  
Seal Eagle And Lettering Fabricated From Dark Bronze Metal Inlaid Into Stone Pavers With Decorative Line And Star Borders Etched Into Stone Pavers



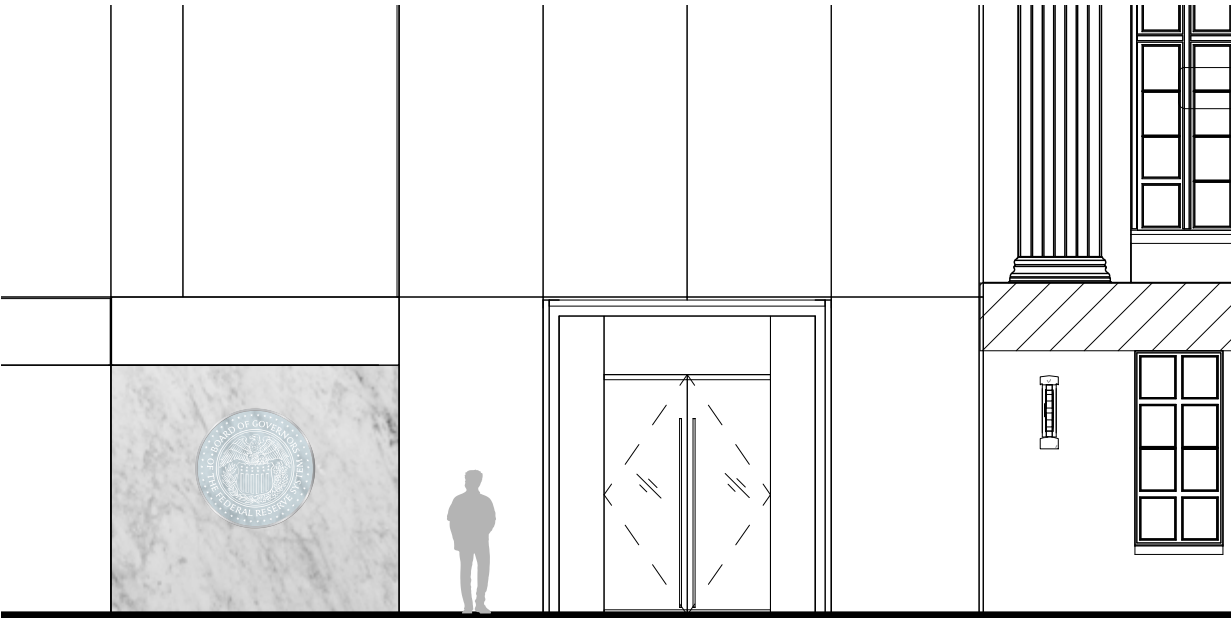


Figure 3-73: FRB-East Building -Signage At 20th Street Connection / Building Entry  
1/8" = 1'-0

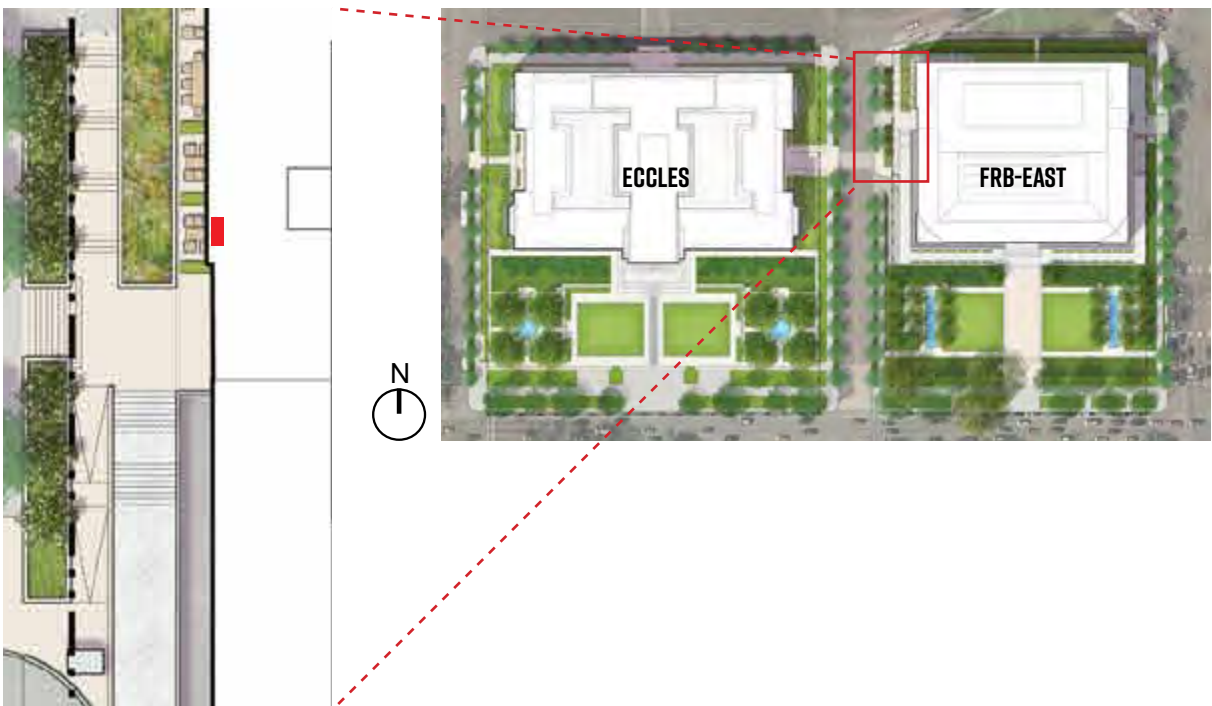


Figure 3-74: Detail  
Fabricated As Stainless Steel Lightbox With Etched Glass Seal



Figure 3-75: Night View  
Edge Lighting To Create Glow Effect On All Etched Elements



Figure 3-76: Side  
View



Figure 3-77: Inspiration Imagery





Figure 3-78: FRB-East Building - Signage At 20th Street Connection / Building Entry



Figure 3-79: Detail  
Dimensional Letters Fabricated From Stainless Steel With Directional Bead Blast Finish And Pin Mounted

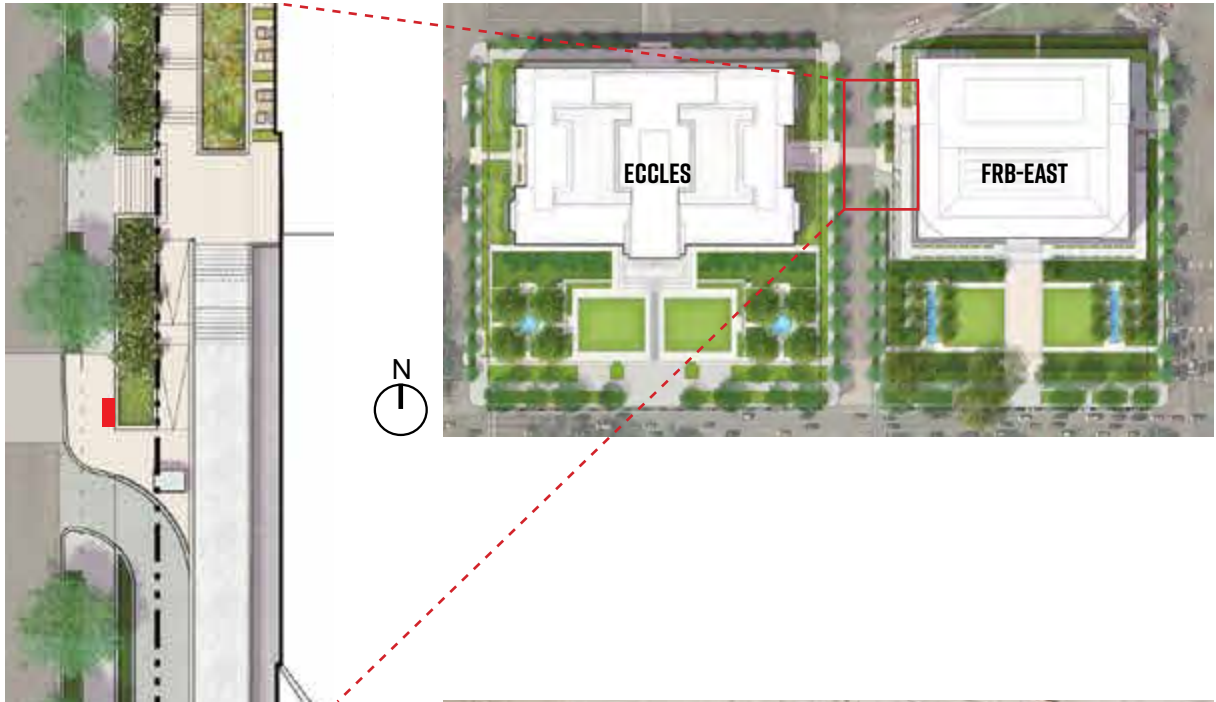


Figure 3-80: Inspiration Imagery



PROPOSED ECCLES BUILDING PREVIOUS ENTRY -DIRECTIONAL SIGNAGE

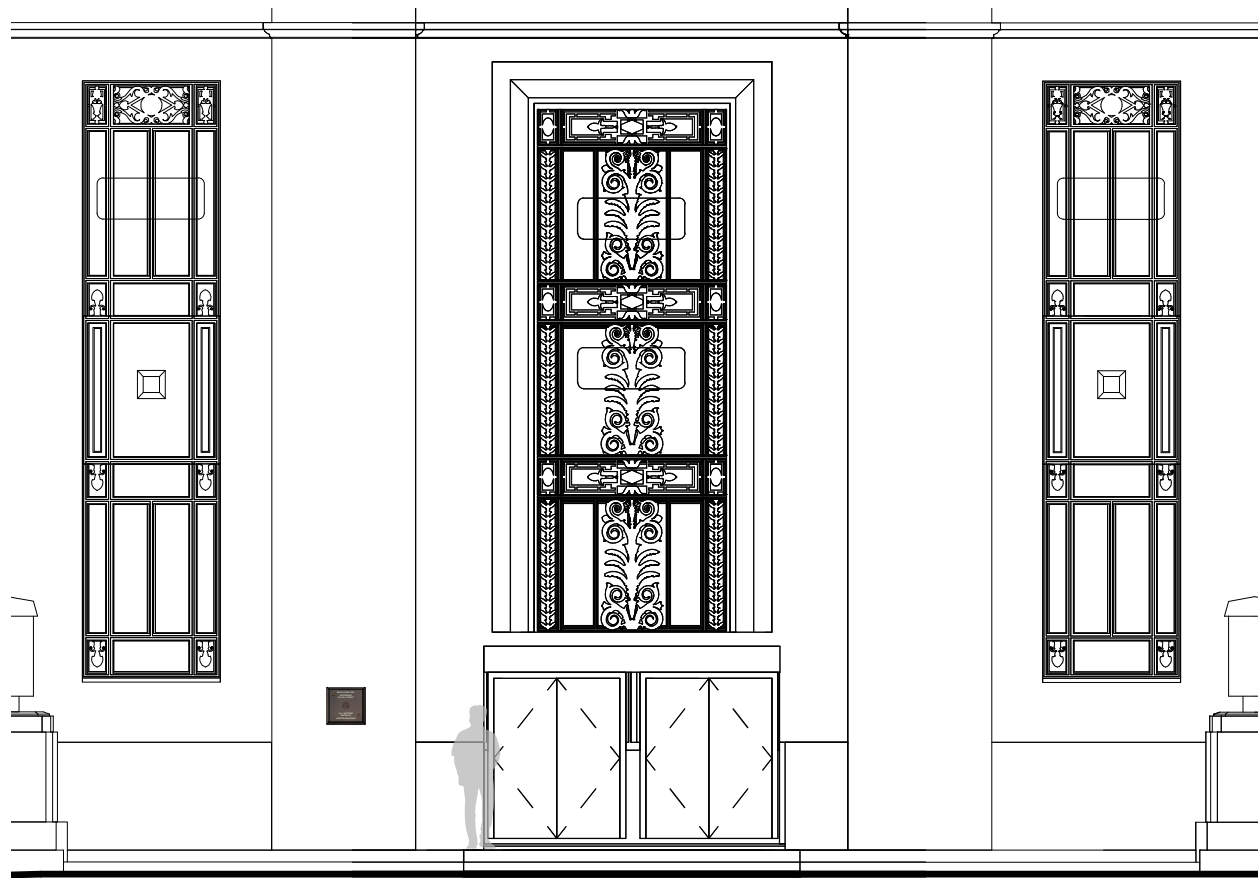


Figure 3-81: Eccles Building -Proposed Directional Signage At The Previous Entry On C Street  
1/8" = 1'-0

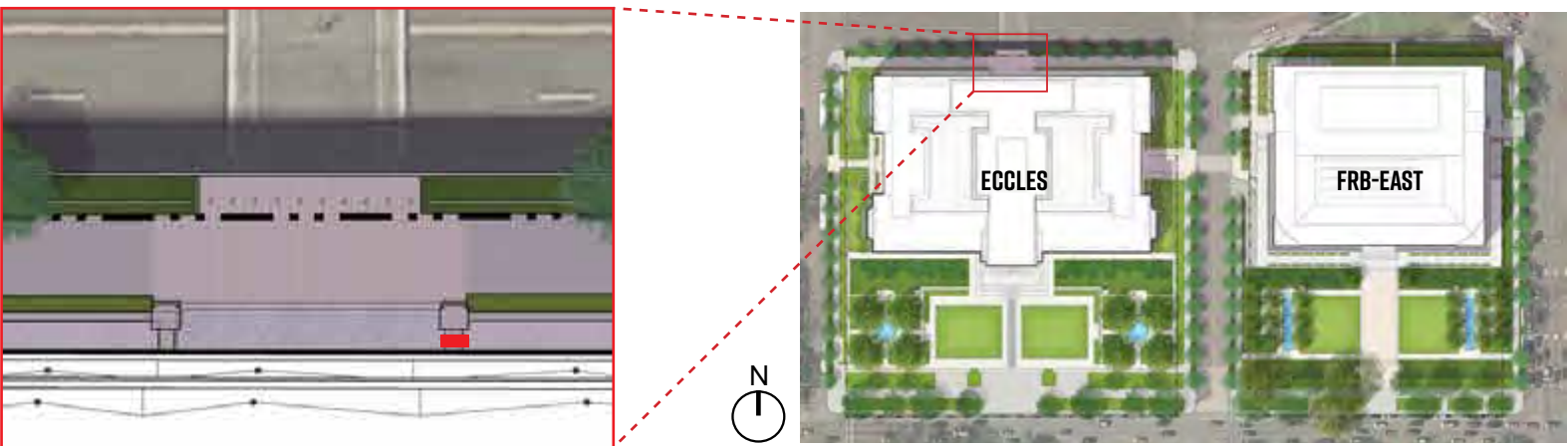


Figure 3-83: Inspiration Imagery



Figure 3-82: Detail  
Minimal Dark Bronze Plaque With White Applied Text And Etched FRB Seal.  
Plaque Attached Directly To Existing Facade



PROPOSED ECCLES BUILDING - TYPOGRAPHIC PAVER BAND

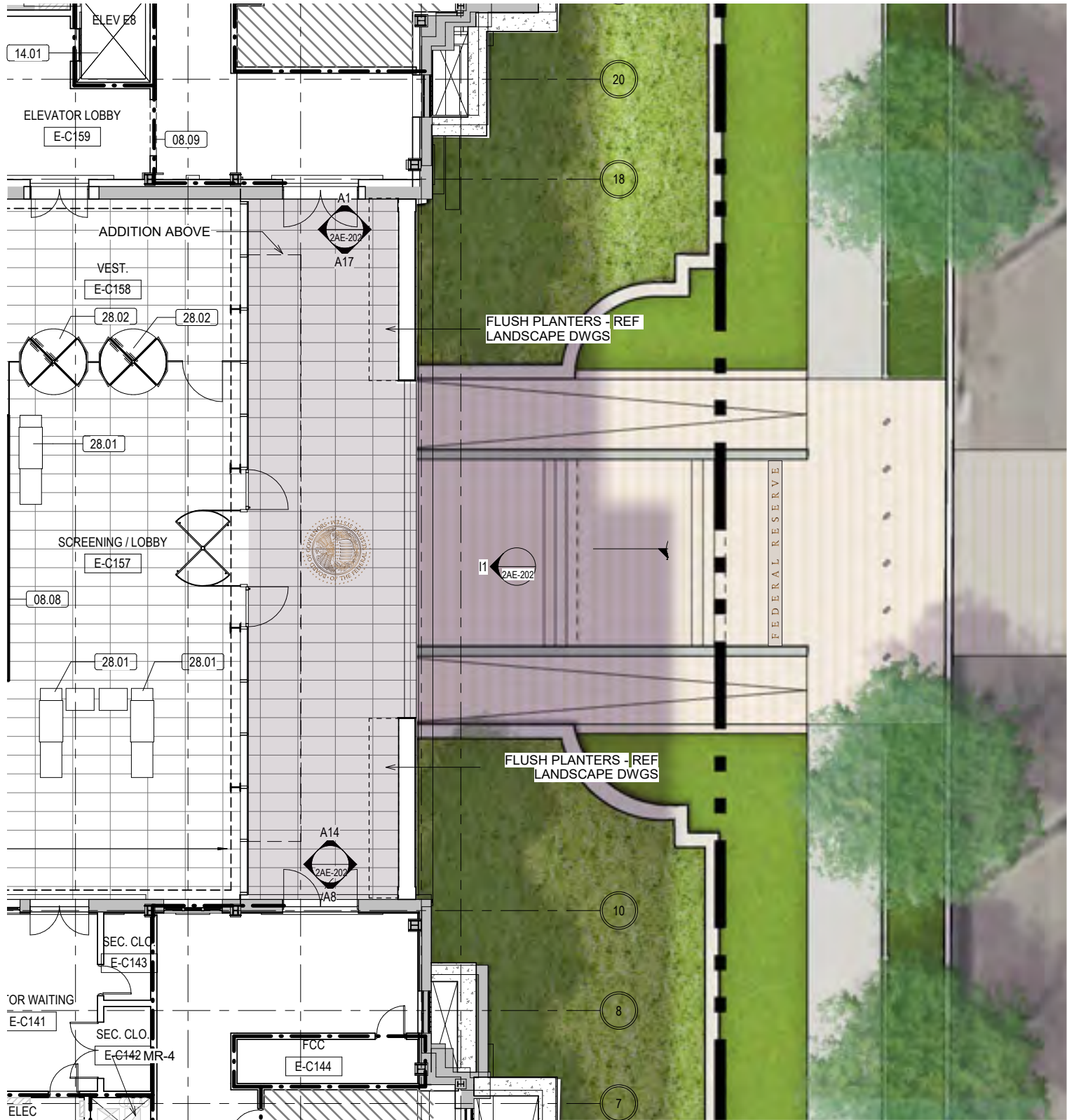


Figure 3-84: Plan View - Inlaid Typographic Paver At Eccles Main Entry Provides Campus-wide Branding For FRB Entrances NTS



Figure 3-85: Inspiration Imagery

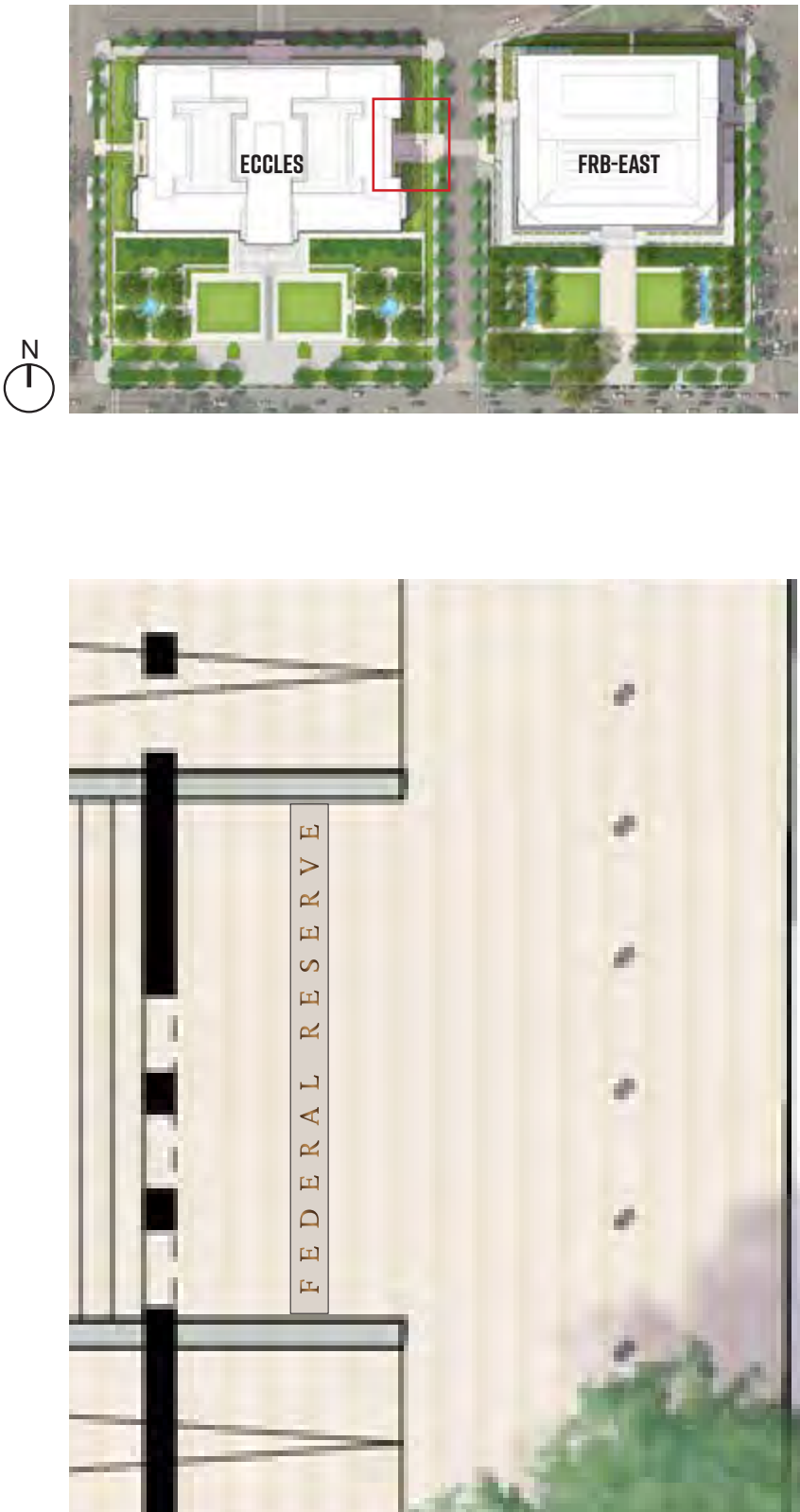


Figure 3-86: Detail Dark Bronze Text Inlaid Into Custom Stone Paving Band

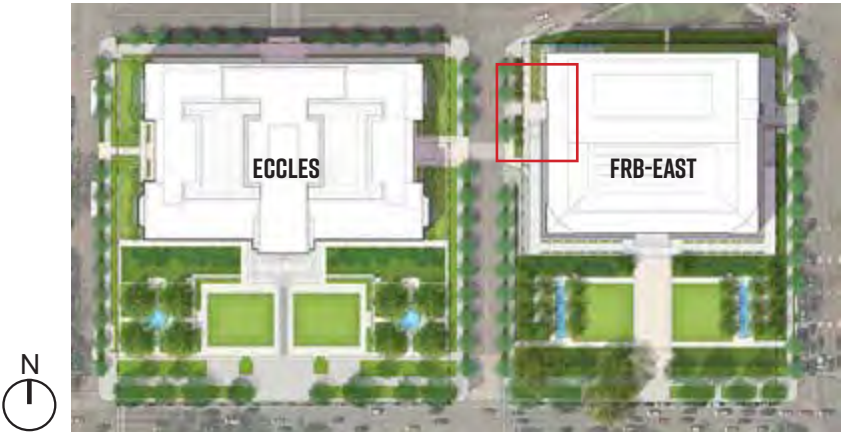




Figure 3-87: Plan View - Inlaid Typographic Paver At FRB-East Building Main Entry Provides Campus-wide Branding For FRB Entrances  
NTS



Inspiration Imagery



Key Plan

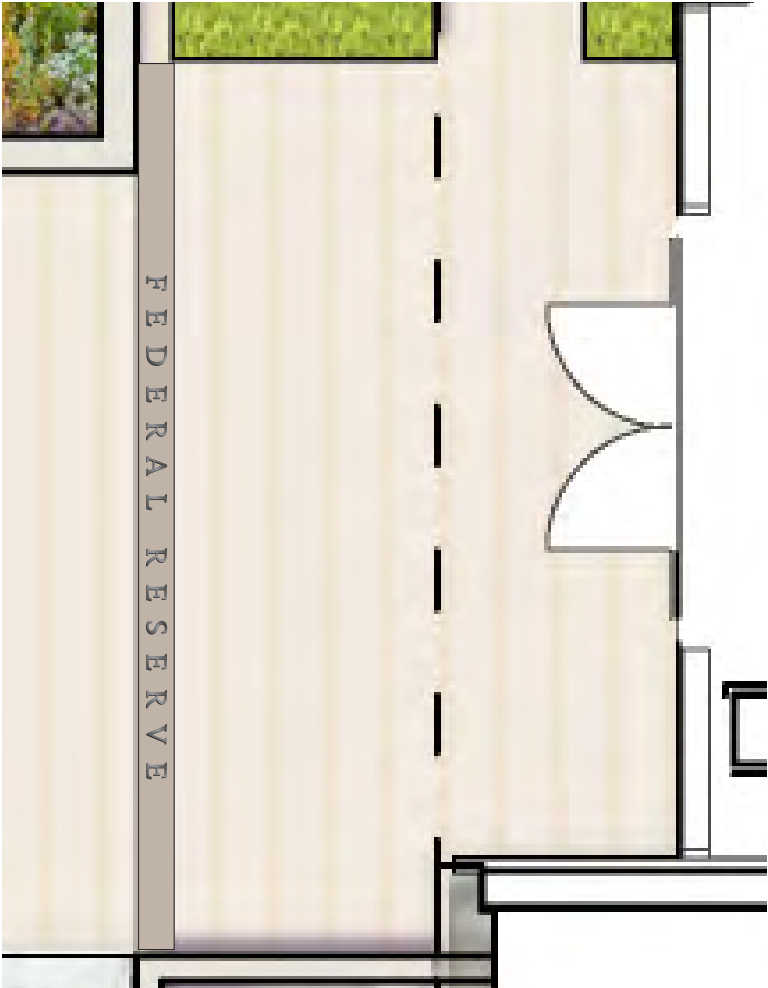


Figure 3-88: Detail  
Stainless Steel Text With Bead Blast Finish Inlaid Into Custom  
Stone Paving Band



**TRANSPORTATION**



3.21 EXISTING CONDITIONS

The Marriner S. Eccles Building is located at 2051 Constitution Avenue and the FRB-East Building is located at 1951 Constitution Avenue. Both buildings are located in the Northwest quadrant of the Washington, DC and are separated by 20th Street. The two (2) buildings are bordered by 21st Street to the west, 19th Street to the east, C Street to the north, and Constitution Avenue to the south.

- The proposed modifications to the two buildings include the following:
- The expansion of the Eccles Building will result in an additional 120,000 square feet of space and an additional 146 employee seats, totaling 776 employee seats within the building.
  - The renovations of the vacant FRB-East Building will result in up to 270,000 square feet in additional space, adding up to 962 employee seats.
  - Combined, the two (2) buildings will house up to 1,750 seats for employees, guests, and visitors.

The project site is located 0.7 miles from both the Foggy Bottom-GWU and Farragut West Metrorail stations (served by the Blue, Orange, and Silver Lines). The Blue Line connects the City of Alexandria with Largo, Maryland while providing access to the District core. The Orange Line provides service from Vienna in Fairfax County, VA, to New Carrollton in Prince George’s County, MD. The Silver Line provides service from Reston in Fairfax County, VA, to Largo, Maryland.

The Metrobus system provides local transit service in the vicinity of the site, including connections to several neighborhoods within the District and Metrorail stations. The site is serviced by three bus lines with stops within walking distance: the 7Y, H1, and L1 run along Constitution Avenue. In addition to the 7Y, H1, and L1, more bus lines run along Virginia Avenue, 19th Street, and 18th Street. The

bus lines available within a quarter-mile walk to connect nearby Metro Stations and other areas of the District, Maryland, and Virginia. An employee shuttle bus provides service to and from the Farragut North and Farragut West Metrorail stations, and other federal buildings. Although the development will be generating new transit trips, existing facilities have enough capacity to accommodate growth in ridership.

The site is connected to a pedestrian network with excellent pedestrian access and circulation facilities. Most roadways within a quarter-mile radius provide sidewalks and curb ramps, particularly along the primary walking routes, such as Constitution Avenue (towards the National Mall) and 19th Street (towards Farragut West station).

The site is integrated into the bicycle network and can be reached by bicycle from all directions. The site is adjacent to bicycle trails that run along the National Mall and Constitution Avenue. These trails provide east-west connectivity to Union Station and the Rock Creek Trail. In addition to bicycle facilities, there are multiple Capital Bikeshare stations in the vicinity of the site. On-site bicycle facilities are proposed to remain as part of the renovation and expansion plans. FRB works in close collaboration with the employees’ bicycle group. Bicycle facilities will continue to be provided within the FRB-East Building garage and will meet the expected demands of the employees.

Several principal and minor arterials such as Constitution Avenue (US-50), Virginia Avenue, and the E Street Expressway provide vehicular access.. The site is directly served by a local vehicular network that includes several principal and minor arterials such as Virginia Avenue, 21st Street, and 19th Street. These roads connect with regional thoroughfares, such as Connecticut Avenue and the E Street Expressway (Interstate 66). The vehicle access at 20th Street leads into an inner courtyard and provides direct access to a 29-space

underground parking garage in the Eccles Building. Loading facilities are located in the east courtyard, accessible from 20th Street only. The proposed plan will remove parking from the Eccles Building and convert it to office space. All parking and loading operations will take place from the FRB-East Building.

Existing vehicle access to the FRB-East Building is from 20th Street with outbound vehicles exiting onto 19th Street. Currently, 60 spaces exist on a surface parking lot in the rear of the building. The renovation and expansion plans will reverse access for the FRB-East Building, with entry from 19th Street and exit to 20th Street. The surface spaces will be removed with and up to 318 spaces are proposed underneath the south lawn of the FRB-East Building and under 20th Street to serve both buildings. Loading facilities for both buildings will be provided in the FRB-East Building, adjacent to the garage entrance on 19th Street. In addition, the loading facilities in the FRB-East Bbuilding will also serve the Martin Bbuilding.

The Eccles Building currently has 29 parking spaces. The Martin Building will have 370 parking spaces when the current renovation project is completed. Prior to the renovation, the Martin Building had 567 parking spaces for Board employees. Thus, the renovation of Martin will result in a net loss of 227 spaces for Board employees.

3.22 PREFERRED ALTERNATIVE

The access configuration for the preferred alternative includes the following elements:

- Removal of the western and eastern driveways at the Eccles Building.
- Reversal of the access points at the FRB-East Building, flipping the entry from 19th Street and exit from 20th Street.

The Total Future traffic volumes will consist of current traffic volumes and future increased volumes due to background developments, the inherent growth on the study area roadways, and site-generated trips of the proposed project.

Current mode splits were derived using survey data provided by the Board employees who currently work at the Eccles Building, New York Avenue, International Square, and 1801 K Street offices. Of the 3,373 employees who responded, approximately 20% drive alone, 5% carpool or vanpool, 57% use transit, and 18% indicated “other”. The “other” results represent employees that telework or work an alternative week schedule. Additional survey data indicated that 37% telework at least once a week and 32% work an alternative week schedule (AWS). These percentages were supplemented with zip code data providing an estimate of employees who walk or bike. Per the survey conducted by the Board, 49% of employees live in ZIP codes lying entirely outside the Beltway.

The vehicular traffic associated with the proposed development program of 1,750 desks is expected to generate 199 morning peak hour (170 inbound and 29 outbound) trips and 197 afternoon peak hour (31 inbound and 166 outbound) trips.

The vehicular capacity analysis concluded that one (1) study intersection operates at capacity for Existing, No Action and Total Future projections. However, given the urban nature of the area and the negligible impact from site-routed trips, based on the analysis performed, no mitigation is needed. Constitution Avenue is a heavily traveled commuter route; therefore, signal timing changes would disrupt commuter traffic and are not recommended. Westbound Constitution Avenue is a heavily trafficked arterial with nearly 2,000 trips in the peak hour. The delay observed under the Total Future Conditions for the southbound approach increases by less than five (5) percent when compared to the Background projections. As such, no physical



roadway or signal timing mitigations are needed at this location.

### 3.23 TRANSPORTATION MANAGEMENT PLAN

Transportation Demand Management (TDM) is the application of policies and strategies used to reduce the demand of single-occupancy, private vehicles during peak period travel times or on shifting single-occupancy vehicular demand to off-peak periods. The Board currently implements these principles with the following strategies:

- Operate a robust shuttle bus program, which connects the Eccles Building to the Farragut West Metro station. The shuttle service operates during regular business hours.
- Offer employees a monthly transit subsidy of \$270.
- Offer employees an alternative work schedule (AWS), where employees may either work four 10-hour days or nine nine-hour days, resulting in one less day traveled to work on a weekday. Approximately 1,064 employees (32%) across the Board’s existing locations in Washington, D.C. use an AWS.
- Provide teleworking capabilities to employees. Across the FRB locations, 1,260 employees (37%) telework at least one day a week.
- Provide designated carpool spaces for employees. There are 52 organized carpools across the FRB locations.
- Provide vanpool services, linking employees with routes that travel near their home destination. There are 10 vanpools across the FRB locations.

The strategies implemented by the Board have proven to be successful in achieving significant non-driving mode share percentages for a majority of the FRB population. Based on the employee survey

results, 20% of the FRB employees employed at the Eccles Building, New York Avenue, International Square and 1801 K Street locations drive to work alone. This percentage is considerably lower than that of employees in the immediate surroundings of the Eccles and FRB-East Buildings.

Given that the current TDM strategies have been successful in achieving mode share percentages that are primarily non-driving for a majority of the FRB population, National Capital Planning Commission (NCPC) employee parking policy for federal agencies located in the Central Employment Area acts as the ultimate TDM goal. NCPC has identified in the Comprehensive Plan for the National Capital: Federal Elements that the project location is **subject to a maximum parking ratio of 1 space for every 5.0 employees (0.2 spaces per employee).**

A Transportation Management Plan (TMP) was developed to address the impacts associated with the project. The TMP detailed the FRB’s active program to encourage more efficient employee commuting patterns by minimizing single occupant vehicle (SOV) trips related to federal agency worksites. The TMP was mandated by federal air quality regulations, local trip reduction ordinances, and NCPC planning requirements.

As part of the preferred alternative and as detailed in the project TMP, the FRB is proposing to provide an employee parking supply of 318 spaces in the newly constructed garage adjacent to the FRB-East Building. Parking in the Martin, Eccles, and FRB-East B-uildings will meet , the NCPC maximum parking ratio goal of **1 space for every 5.0 employees (0.2 spaces per employee)**, not including government owned vehicles.







# **4 ENVIRONMENTAL AND HISTORICAL CONSIDERATIONS**





Figure 4-1: Photograph of the FRB-East Building south lawn and facade, looking northeast.



# 4. ENVIRONMENTAL AND HISTORICAL CONSIDERATIONS

## 4.1 HISTORIC PRESERVATION DOCUMENTATION

### SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT COMPLIANCE

The Board’s proposed renovation and expansion of the Eccles and FRB-East buildings is a federal undertaking; therefore, the project must comply with Section 106 of the National Historic Preservation Act and consider its effects on historic properties.

The Board initiated Section 106 with the DC Historic Preservation Office (DC SHPO) on 15 August 2019. A combined public scoping meeting and Section 106 consulting parties meeting was held on 17 September 2019, to introduce the project. An additional combined public and consulting parties meeting was held on 16 October 2019, to review the undertaking and the proposed area of potential effects (APE), introduce the project alternatives, and discuss potential effects from the proposed undertaking. A third consulting parties meeting was held on 17 March 2020 to provide an update on the project and the design components of the preferred alternatives and to present the potential adverse effects from the implementation of the proposed undertaking. A fourth consulting parties meeting occurred on 24 June 2020 to provide an update on the project, present the findings of the draft Assessment of Effects, and discuss potential mitigation strategies. The Board will continue to consult with the DC SHPO and the consulting parties to identify, assess, and resolve adverse effects on historic properties.

### ECCLES BUILDING

The Eccles Building was listed in the DC Inventory of Historic Sites in 1964, the year of the inventory’s establishment. The Eccles Building was one of the initial 289 buildings designated. An inventory form was not prepared for the building at the time. Although not formally evaluated for listing in the National Register of Historic Places, the building is being treated as eligible, with significance under Criterion A, Government and Community Development, as the first permanent headquarters of the Federal Reserve Board of Governors and as part of the development of monumental buildings along Constitution Avenue in accordance with the McMillan Plan in the early decades of the 20th century. The property also meets National Register Criterion C, Architecture, as a significant example of Paul Cret’s stripped classicism style for a monumental federal building. The building contributes to the National Register-eligible Northwest Rectangle Historic District.

### FRB-EAST BUILDING

The FRB-East Building, historically the United States Public Health Service Building, was listed in the DC Inventory of Historic Sites and the National Register of Historic Places in 2007. The property meets National Register Criterion A, for its association with the growth of the US Public Health Service and as part of the development of monumental buildings along Constitution Avenue built in accordance with the McMillan Plan in the early decades of the 20th century. The FRB-East Building is also listed under

Criterion C, as an excellent example of classically inspired federal architecture in the 1930s. The building contributes to the National Register-eligible Northwest Rectangle Historic District.

## 4.2 HISTORIC PRESERVATION GOALS

This project proposes the most comprehensive renovation of the Eccles and FRB-East buildings since their original construction. The ambitious project goals and extensive scope of work require the careful consideration of potential effects to these historically significant properties. The proposed renovation and expansion aim to avoid or minimize the impacts to historic fabric across the project and sensitively manage change to significant spaces. The overall treatment approach for the project, following the Secretary of Interior’s Standards for the Treatment of Historic Properties, is rehabilitation.

The preservation goals of the project are:

- Comply with the Secretary of the Interior’s Standards for the Treatment of Historic Properties for the overall project to the extent possible.
- Preserve and maintain high-character spaces, features and materials to the greatest extent possible.
- Restore the Eccles Building skylight.
- Accommodate more change in the FRB-East Building to permit higher levels of

preservation (“light touch”) in the Eccles Building .

- Manage change to significant spaces sensitively.

## 4.3 AREA OF POTENTIAL EFFECT

The Area of Potential Effect (APE) for this project was delineated in consultation with the DC Historic Preservation Office and other consulting parties. The Area of Potential Effect includes the cultural resources that could be impacted as a result of the undertaking, as well as the area from which the project site is readily visible, particularly along major streets and vistas. The APE is roughly bounded by E Street NW on the north, 18th Street NW and 17th Street NW on the east, the Lincoln Memorial Reflecting Pool on the south, and 23rd Street NW on the west. The APE is illustrated in Figure 4.1.

## 4.4 HISTORIC PROPERTIES LOCATED WITHIN THE APE

Section 106 regulations define a historic property as “any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places [NRHP].” The identification of historic properties within the APE was conducted through a review of existing documentation and consultation with the DC SHPO. The project is located in a dense urban setting or primarily federal and semi-public institutions that has been well documented through



Table 4.1: Historic Properties within the APE

NAME OF PROPERTY	LOCATION	DESIGNATION
Marriner S. Eccles Building	2051 Constitution Avenue NW	DC
US Public Health Building (FRB-East Building)	1951 Constitution Avenue NW	DC, NRHP
Northwest Rectangle Historic District	Constitution Avenue, 17th, E, and 23rd Streets NW	NRHP-Eligible
L'Enfant Plan of the City of Washington		DC, NRHP
National Mall Historic District	Capitol Grounds on the east, Independence Avenue/Potomac River on the south, the Potomac River to the west, and Constitution Avenue on the north	DC, NRHP
East and West Potomac Parks Historic District	Potomac River from Constitution Avenue to Hains Point	DC, NRHP
Seventeenth Street Historic District	17th Street NW, west side between New York and Constitution avenues	DC
American Pharmacists Association	2215 Constitution Avenue NW	DC, NRHP
National Academy of Sciences	2101 Constitution Avenue,	DC, NRHP
Harry S. Truman Federal Building (US Department of State Building)	2201 C Street NW	NRHP Eligible
Reservation 378	Virginia Avenue between 20th Street NW and 21st Street NW	NRHP Eligible
General Jose de San Martin Memorial	Reservation 106 (Virginia Avenue and 20th Street NW	NRHP
Office of Personnel Management (Theodore Roosevelt Federal Building)	1900 E Street NW	NRHP-Eligible
US Department of the Interior (New Interior Building)	1849 C Street NW	DC, NRHP
Pan American Union Administration Building (Annex)	1801 Constitution Avenue NW	NRHP-Eligible
Van Ness House Stables	18th & C Streets, NW	DC, NRHP
Organization of American States (Pan American Union)	17th Street and Constitution Avenue NW	NRHP
Vietnam Veterans Memorial Lincoln Memorial	West Potomac Park	NRHP
Lincoln Memorial	23rd Street NW	NRHP
Virginia Avenue Cultural Landscape	Virginia Avenue NW between 8th Street NW and New Hampshire Avenue NW	NRHP-Eligible
Constitution Gardens Cultural Landscape	Constitution Avenue and 17th Street NW	NRHP-Eligible



Figure 4-2: Marriner S. Eccles Building, 1955



Figure 4-3: FRB-East Building, ca. 1940



historic resource surveys and National Register documentation. Table 4.1 provides a list of identified historic properties within the APE. .

4.5 ASSESSMENT OF EFFECTS

The draft Assessment of Effects determined that the implementation of the project will result in an adverse effect to the Eccles Building and the FRB-East Building properties as character-defining features of the buildings and landscapes will be altered or removed, which will diminish their integrity. In addition, the project will have an adverse effect on the Northwest Rectangle Historic District as it will change the character of the district and the contributing physical features of the district's setting and introduce visual elements that diminish the integrity of the district's historic features.

4.6 ENVIRONMENTAL DOCUMENTATION

NATIONAL ENVIRONMENTAL PROTECTION ACT (NEPA) COMPLIANCE

The Board has prepared a draft Environmental Assessment (EA) to consider the proposed project's impacts on environmental resources under the National Environmental Protection Act (NEPA). A public scoping notice was sent to interested parties on 3 September 2019, announcing the public scoping period and a combined public scoping meeting and Section 106 consulting parties meeting was held on 17 September 2019. The draft Environmental Assessment will be issued for public review in September 2020.



Figure 4-4: Area of Potential Effect

KEY

- National Register of Historic Places (NR), DC Inventory of Historic Sites (DC), and/or National Historic Landmark (NHL)
- APE Boundary
- Project Site
- L'Enfant Plan Streets
- East and West Potomac Parks Historic District
- Seventeenth Street Historic District
- Northwest Rectangle Historic District
- National Mall Historic District

INDIVIDUAL LANDMARKS

1. American Pharmacists Assn (NR & DC) 2215 Constitution Ave NW
2. National Academy of Sciences (NR & DC) 2101 Constitution Ave NW
3. Harry S. Truman Federal Building (NR Eligible) 2201 C St NW
4. Reservation 378 (NR Pending) Virginia Ave btwn C St & 21st St, NW
5. Marriner S. Eccles Building (DC) 2051 Constitution Ave NW
6. US Public Health Service Building (NR & DC) 1951 Constitution Ave NW
7. Gen. Jose de San Martin Memorial (NR & DC) 511 20th St NW
8. Theodore Roosevelt Federal Building (NR Eligible) 1900 E St NW
9. Department of the Interior (NR & DC) 1849 C St NW
10. Org. of American States Annex (NR Eligible) 1801 Constitution Ave NW
11. Van Ness House Stables (NR & DC) 18th & C Streets, NW
12. Pan American Union (NR & DC) 200 17th St NW
13. Vietnam Veterans Memorial (NR) 5 Henry Bacon Dr NW
14. Lincoln Memorial (NR & DC) 2 Lincoln Memorial Cir NW



## 4.7 NATURAL RESOURCES

There are a number of trees on the FRB-East Building site that are significant due to their size. Four (4) trees on the site have been identified as Heritage Trees (trees 100” in circumference or greater) and 31 trees have been identified as Special Trees (trees with a circumference between 44” and 100”). The three Heritage Trees along Constitution Avenue are American elm trees that likely date back to the FRB-East Building’s original landscape. The single Heritage Tree along 19th Street is a scarlet oak that also likely dates from the original landscape. The proposed project will avoid impacts to the Heritage Trees along the periphery of the site. One heritage tree will be removed as part of the project.

## 4.8 ENERGY AND SUSTAINABILITY

The Federal Reserve Board is committed to sustainable design practices, conservation of resources, and creating healthy workplace environment. Early in the design, five guiding sustainability principles were established. These include:

- **Energy/Carbon:** Optimize energy performance through passive and active design strategies that minimize the load, maximize opportunities for renewables, prepare the building for the future clean energy market of DC, and plan for whole building life cycle carbon reductions.
- **Water:** Decrease building demand for potable water and decrease the generation of wastewater.
- **Access to Nature:** Provide access to a natural environment reflective of the regional native systems.
- **Workplace Experience:** Create an environment that will enhance employee wellness and experience, resulting in greater productivity and retention.

- **Resilience:** Be prepared to address the current and future risks associated with climate change.

These commitments and guiding principles are reinforced by third party sustainable certifications. The proposed project is pursuing the Leadership in Energy and Environmental Design (LEED) v4 for New Construction and Major Renovations Gold certification through the US Green Building Institute. It is also pursuing Parksmart certification, also through the US Green Building Institute, for the parking garage areas. Additionally, to enhance and exemplify the health and wellness goals the project is pursuing WELL v2 certification through the International WELL Building Institute.

Executive Order 13693 (EO 13693), Planning for Federal Sustainability in the Next Decade, sets project targets for increased energy efficiency and improved environmental performance. Improvements to federal operations and reduction of agency greenhouse gas emissions support preparations for the impact of climate change and establish more resilient federal facilities. On-site renewable energy production is being evaluated as it contributes to the Executive Order goals, reduces the building’s energy needs, and improves the building’s resiliency. High performing energy, water, and waste targets and resiliency planning measures contribute to supporting the goals of Executive Order 13693.

The Clean Energy DC (CEDC) Omnibus Amendment Act of 2018 establishes a new Building Energy Performance Standard (“BEPS”) for existing privately-owned and District government buildings, the first of its kind in the country. Beginning in 2021, the DC DOEE will conduct building energy performance assessments on all applicable buildings every five years. This standard will be no less than the median ENERGY STAR score for that type of building. In 2021, this will apply to all DC owned buildings of at least 10,000 square feet

and private buildings of at least 50,000 square feet. Although it is not mandated for federal buildings, the project would substantially exceed the ENERGY STAR thresholds. Additionally, the bill mandates DC’s Renewable Portfolio Standard on electricity to be from 100% renewable sources by 2032, meaning all electric buildings in DC would be Net Zero Carbon in 2032 when DC power sources are 100% renewable. The design of the project systems and fuel sources are evaluated for efficiency, cost, and, greenhouse gas emission impact with the intent to provide reliable service and flexibility now and in the future.

The project is pursuing sustainability targets above and beyond regulatory or LEED requirements. Sustainability is seen as an integral part of the design and a value deliverable. Strategies and criteria will be investigated throughout design to pursue all opportunities to demonstrate leadership and value that aligns with the Board’s mission and project goals.

## 4.9 FLOOD PLAINS AND STORMWATER MANAGEMENT

### 4.9.1 FLOOD PLAINS

The Eccles and FRB-East buildings are outside of the 100-year (1% Annual Chance) and the 500-year (0.2% Annual Chance) flood hazard areas according to FEMA flood insurance rate map (Map Number 1100010018C dated 9/27/10). The FEMA 500-year flood plain is located approximately 150’ from the property. This project does not impact a wetlands area.

Though the project area is not located within a FEMA mapped floodplain area (100-year, 1% annual chance of flood), it is understood that the frequency and intensity of storm events are expected to increase. Proposed stormwater management practices will significantly reduce existing flows to the sewer infrastructure, reducing flooding risk

due to overtaxed infrastructure during heavy storm events (see Stormwater Management below). Backflow preventers will be installed at potable water lines to prevent contamination of the line during the flood event. The Eccles Building will have a complete perimeter of below grade positive side waterproofing. The Eccles Building will also have subslab drainage, a double slab system at the C2 level with waterproofing below the lower slab, and no penetrations of the waterproofing system. The existing FRB-East Building C1 level slab will be replaced with subslab drainage and waterproofing. The FRB-East Building addition and parking garage will be encircled by slurry walls from grade down to 10’-0” below the surface of bedrock forming a nearly impervious bathtub to keep out ground water. Subslab drainage, foundation perimeter drains, garage drains and garage/loading dock entry points will be piped to redundant sumps at the lowest level of the garage each with redundant/paired sump pumps. Sump pumps will be on back-up power and pumping capacity of 4x the calculated water influx will be provided.

### 4.9.2 STORMWATER MANAGEMENT

Currently, both the Eccles and FRB-East sites generally have little uncontrolled stormwater surface runoff due to a comprehensive system of French drains and inlets. However, the properties do not have a stormwater management program in place to treat and reduce stormwater runoff.

The project will involve measures to reduce stormwater runoff, improve stormwater quality, and will adopt strategies to support a sustainable and resilient site. These strategies also support local stormwater code requirements, reduction in stormwater runoff, and may support achieving LEED benchmarks. Specifically, the stormwater management practices may be sized to manage runoff for the 80th percentile storm event which contributes to meeting LEED benchmarks.



A rainwater harvesting tank will capture rainwater to be reused for irrigation and cooling tower makeup. Stormwater management also includes vegetated roofs, incorporated into the new and structurally upgraded roof areas. Additionally, the open space over the below-grade parking structure will be utilized as vegetated roof using turfgrass that will be indistinguishable with the rest of the lawn. Bioretention areas are proposed to the south of Eccles building and will be oversized to control larger storm events. The proposed stormwater management plan includes the use of permeable pavement within 20th Street. Porous asphalt pavement and pervious concrete pavement are proposed to best match existing conditions. This stormwater management approach is subject to the District Department of Transportation (DDOT) approval.

DOEE considers tree preservation and planting a stormwater retention practice. A large number of trees are assumed to be preserved on site, many of which are heritage and special trees. In addition, tree plantings are planned along 20th street and within the Eccles and FRB-East south lawns.

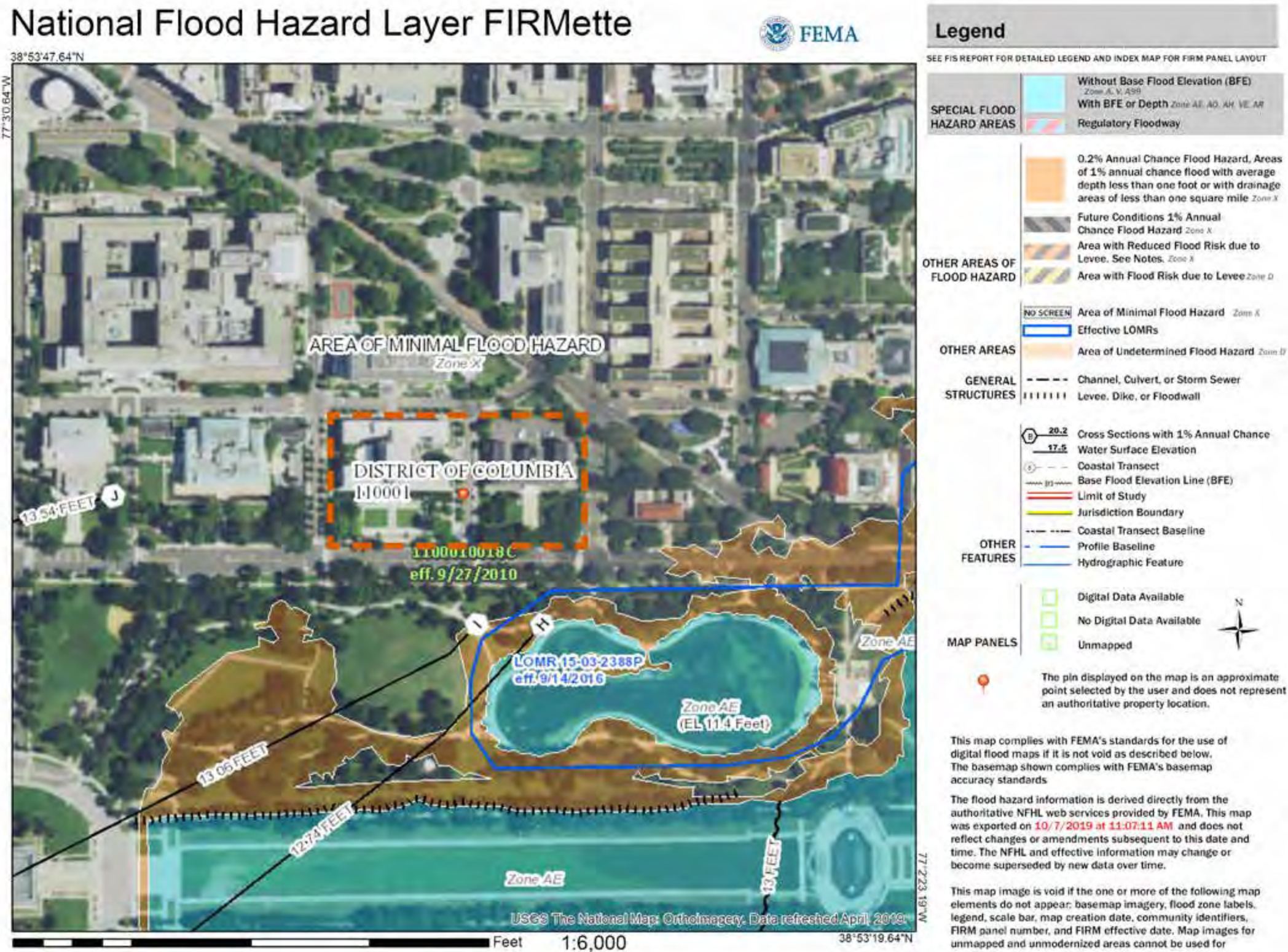


Figure 4-5: FEMA 500-Year Flood map, 2019



4.10 PUBLIC REALM AND VIEWSHEDS

New construction as part of the project will be minimally visible from Constitution Avenue and the National Mall and will not change the appearance and feeling of marble monumental buildings, fronted by spacious gardens, lining the National Mall. The buildings will continue to frame views from the Lincoln Memorial and the new additions to the building will not obstruct these views.

Views northwest and southeast from Virginia Avenue and east and west along C Street will not be obstructed as the new five-story addition to the FRB-East Building will respect the alignment of other buildings on C Street and the streetscape.

The new additions will be respectful to the scale and materials of the existing buildings within the project vicinity and will reflect their civic nature. The height of the five-story addition on the FRB-East Building, although taller than the existing building, will be in keeping with the buildings constructed along C Street NW in the 1960s and 1970s as well as subsequent additions to existing buildings, including the annex to the American Pharmacists Association building, completed in 2009.

Exterior lighting will continue to illuminate the historic buildings, as they have been historically, maintaining consistency with other historic buildings along this section of Constitution Avenue. Replacement of existing flood lights with more subtle lighting will create effects more consistent with historic lighting. Avoidance of exterior lights washing the faces of building additions and design of interior workplace lighting to avoid spilling out or creation of a glowing effect will minimize visibility effects to the historic setting. Upgrading of street lighting to meet DDOT and Monumental Core Street standards will be consistent with the surrounding area. At the Eccles Building, new security bollards and guard booths will replace existing. At both properties, new bollards will be more minimal in

profile and size than the existing and have a bronze finish that is compatible with the historic finishes of the Eccles Building. Perimeter security will be consistent with security features of other federal buildings within the vicinity of the project area.

The project will require the removal of numerous street trees. However, the street trees that line Constitution Avenue will be preserved, and additional street trees will be added to the perimeter streets to continue the pattern of green, tree-lined streets.





Figure 4-6: Key plan



Figure 4-7: Existing view looking northeast along Constitution Avenue from 23rd Street toward project area.



Figure 4-8: Simulation looking northeast along Constitution Avenue from 23rd Street toward project area.





Figure 4-9: Key plan

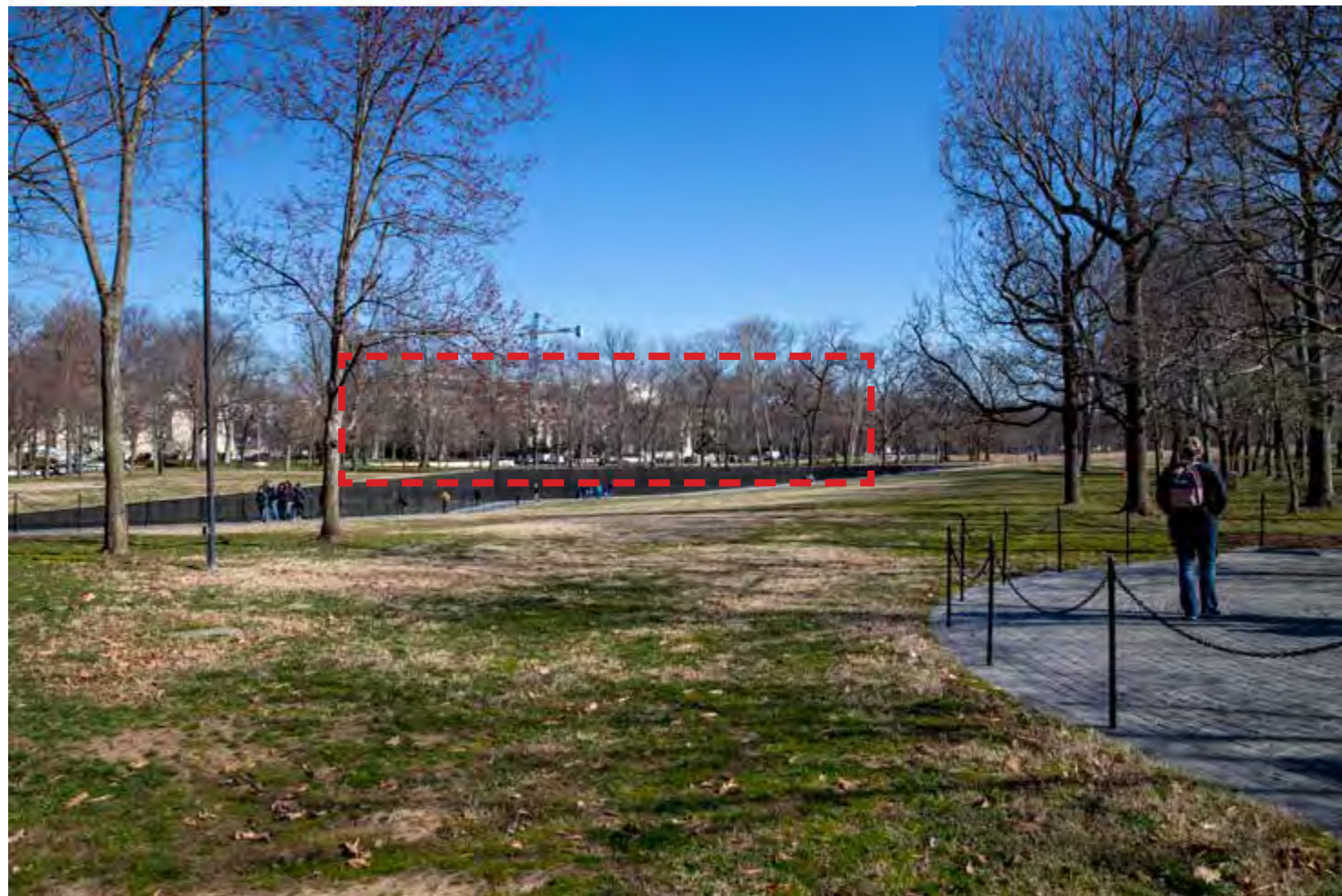


Figure 4-10: Existing view looking northeast toward project area from the Vietnam Veterans Memorial.



Figure 4-11: Simulation looking northeast toward project area from the Vietnam Veterans Memorial.





Figure 4-12: Key plan



Figure 4-13: Existing view looking northeast toward project area from Constitution Gardens.



Figure 4-14: Simulation looking northeast toward project area from Constitution Gardens.





Figure 4-15: Key plan

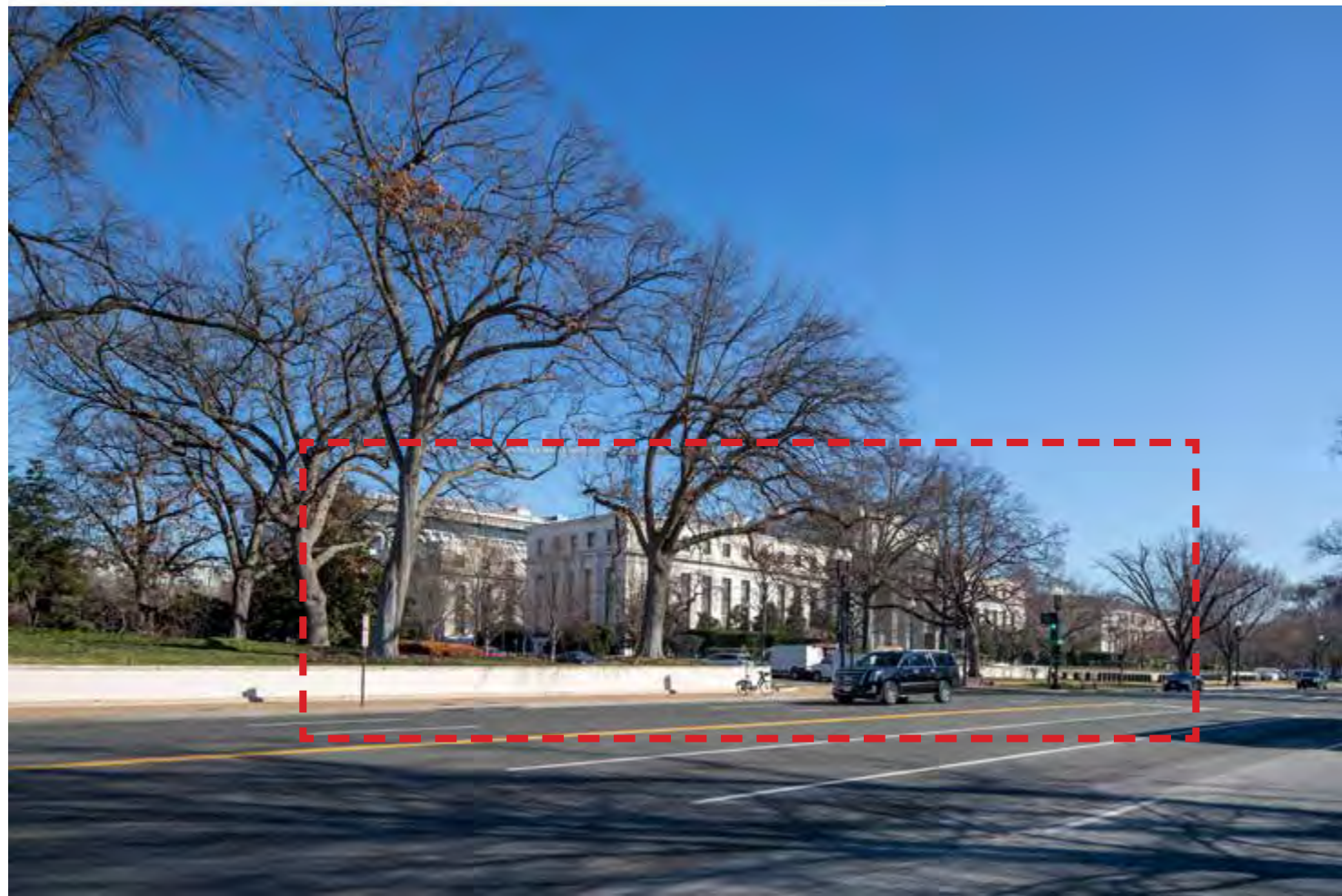


Figure 4-16: Existing view looking northeast toward project area from 21st Street and Constitution Ave NW.

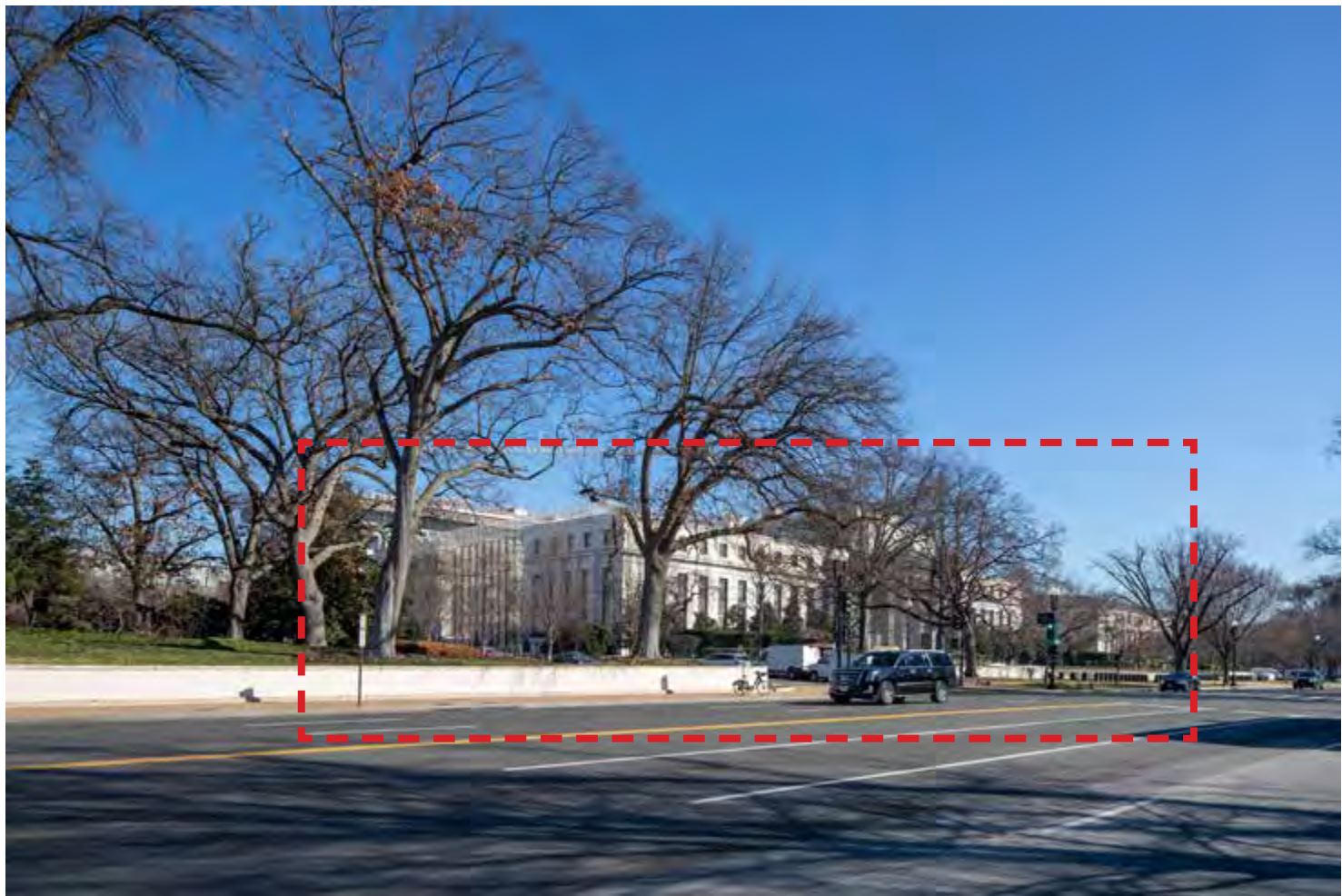


Figure 4-17: Simulation looking northeast toward project area from 21st Street and Constitution Ave NW.





Figure 4-18: Key plan



Figure 4-19: Existing view looking northeast from the top of the Lincoln Memorial toward the project area.



Figure 4-20: Simulation looking northeast from the top of the Lincoln Memorial toward the project area.





Figure 4-21: Key plan



Figure 4-22: Existing view looking northwest along Constitution Avenue from 17th Street toward project area.



Figure 4-23: Simulation looking northwest along Constitution Avenue from 17th Street toward project area.





Figure 4-24: Key plan



Figure 4-25: Existing view looking northwest toward project area from 20th Street and Constitution Av.

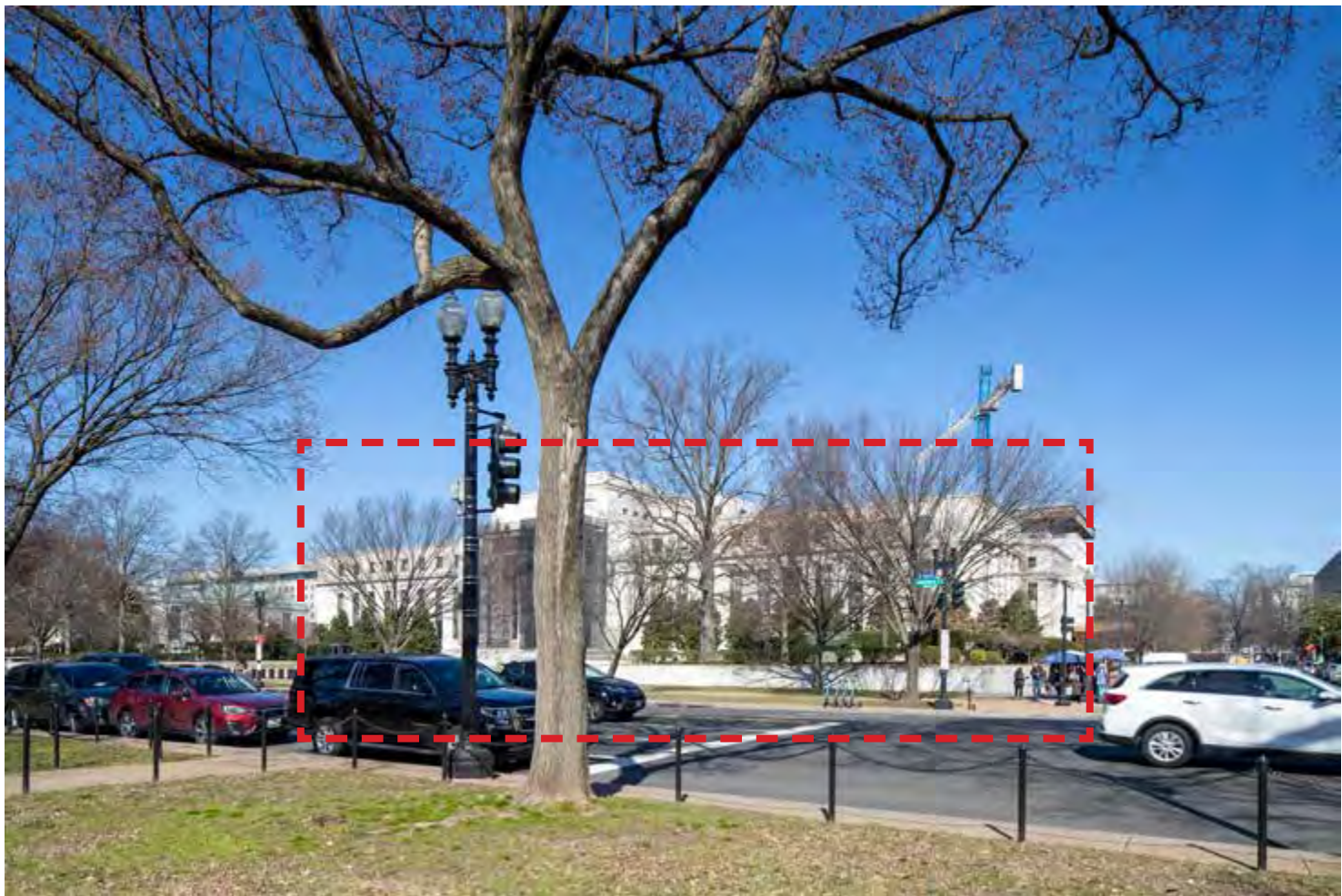


Figure 4-26: Simulation looking northwest toward project area from 20th Street and Constitution Ave.





Figure 4-27: Key plan



Figure 4-28: Existing view looking southwest toward project area from 19th Street and Virginia Ave NW.

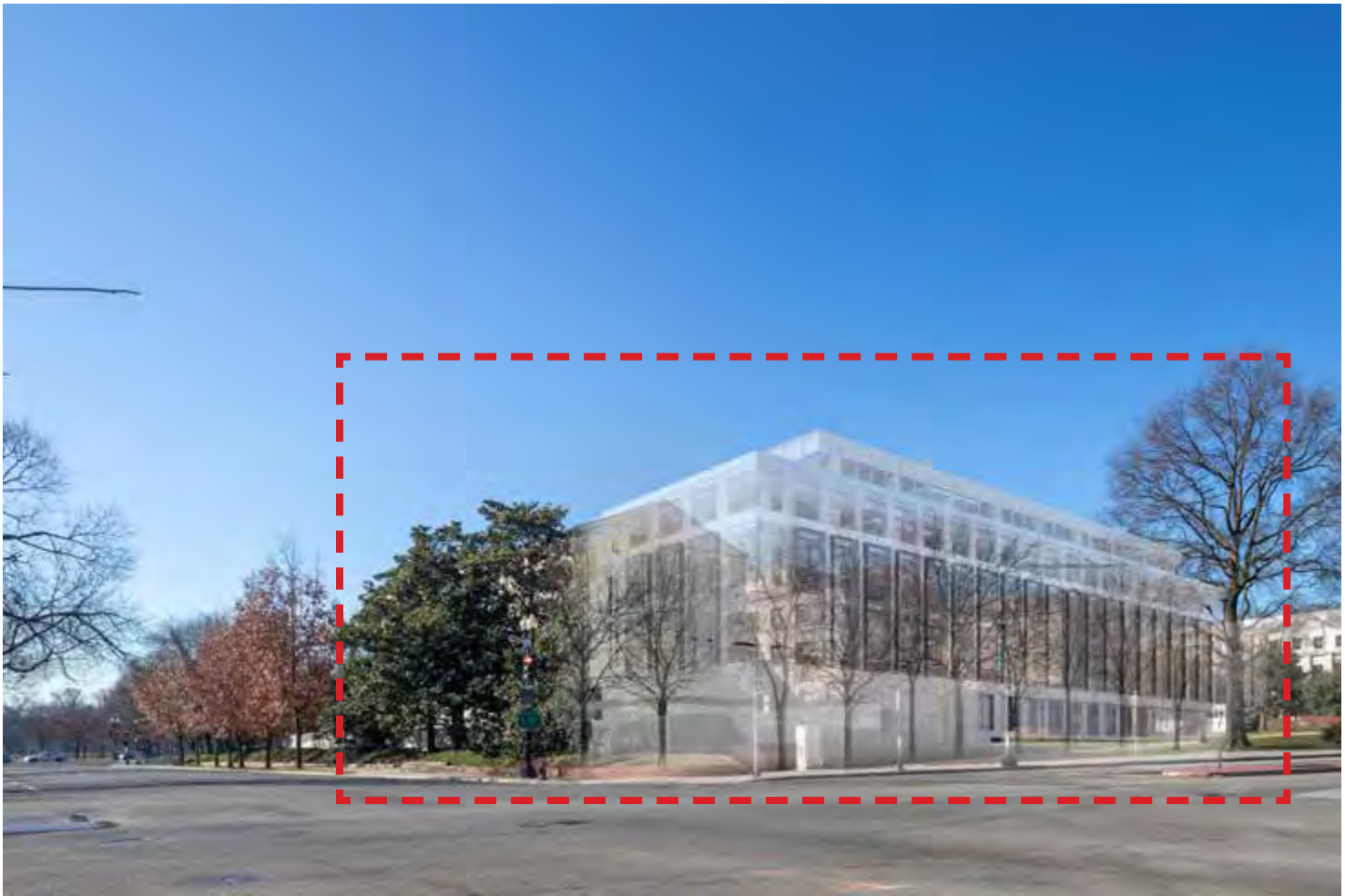


Figure 4-29: Simulation looking southwest toward project area from 19th Street and Virginia Ave NW.





Figure 4-30: Key plan



Figure 4-31: Existing view looking west from the top of the Washington Monument toward the project area.



Figure 4-32: Simulation looking west from the top of the Washington Monument toward the project area.



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