

What a day... But this amazing view take my stress away---

Wow, I am much taller than Washington Memorial now!

I can tell you are still in the office lol.

See those birds? They stop by in front our home everyday when the sun is going down.

I would like a drink before I go back to my apartment

Yup, I go to Georgetown University, its right there, across the river

I always want to try the cafe here, the view is amazing!

I am from West Coast, I wish we had such beautiful stairway by the Golden Gate Bridge

Hurry up! The wafer taxi is coming!

# Rosslyn Waterfront Complex

Bridge the city and the river architecturally

Rosslyn Waterfront Complex - Bridge the City and the  
River Architecturally I Manting Wang

Thesis submitted to the faculty of the Virginia Polytechnic Institute and  
State University in partial fulfillment of the requirements for the degree of  
Master of Architecture  
in  
Architecture

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Sept 29th, 2017  
Alexandria, VA

Keywords:

hotel, apartment, high-rise, vertical community, air garden

## Abstract

Rosslyn has become an important economic hub in northern Virginia. With its strategic location and fast-growing economy, many companies move in or set their headquarters in Rosslyn. The places around the central business district become watering holes for smart, collaborative talent. But people design the skyscrapers and the transportation system in the area, they barely consider Potomac River to be an important part of their daily lives. Apparently it is really difficult for the locals to reach the river from the urban area.

I think it is time for us to look back into the past and come up with a solution for the Rosslyn people to get access to the Potomac River better. From my perspective, since the highways and high-rise buildings are the reason why people cannot access to the river easily then we should take advantage of what we already have and design a better urban infrastructure for Rosslyn and Potomac River.

My thesis design is about how to solve the existing problem of Rosslyn and connect the city and the river creatively.

## General Audience Abstract

I consider that either walking along the riverbank or floating down the river by boat and enjoying the journey by interacting with nature is a fundamental human right. Wandering in the concrete jungle, humming while beat boxing, dancing and skateboarding can also be great pleasures. However, as cities increasingly cover over nature with urban constructions, highways for instance, they deprive people's right to access the river by erecting a barrier between city and nature.

Citizens are the reason that cities exist. So many vivid social activities happen in the concrete jungle every day. Yet, our urban lifestyles belittle nature as it is obscured by the city. It would be much more beautiful, inspiring, and healthy if we can find ways to develop cities in harmony with nature, allowing citizens to bring our urban textures to the ever-flowing river.

In my thesis, I explore the possibilities of bringing the city and the river, architecturally.

## Acknowledgement

To my parents, Thank you for giving me everything that I need and supporting me to chase my dream. I am very happy to share the story of my thesis here with you.

To my committees,

Paul, you are like a walking library and a compass. You always try to help fulfill my idea, listen carefully and explain poetically for me and my audience. Thank you for inspiring me with your attitude towards details, footprint and spacial quality.

Susan, you are so practical that always bring my thought of design to the human needs. I will not be able to start my thesis and finish my study without your help. I cannot explain how grateful I am, but I hope you find this book satisfying.

Jaan, you are to the WAAC as the column and cantilever to architecture. Thank you, for giving me chances and time since the very first conversation we had.

To my friends at the WAAC,

Ezgi, Thank you for helping me with my studio project and thesis, especially that endless thesis journey when I always thought I was about to pass the finishing line.

Jodi, thank you for being my tutor when I start my first studio project and my thesis project, which mean a lot to me.

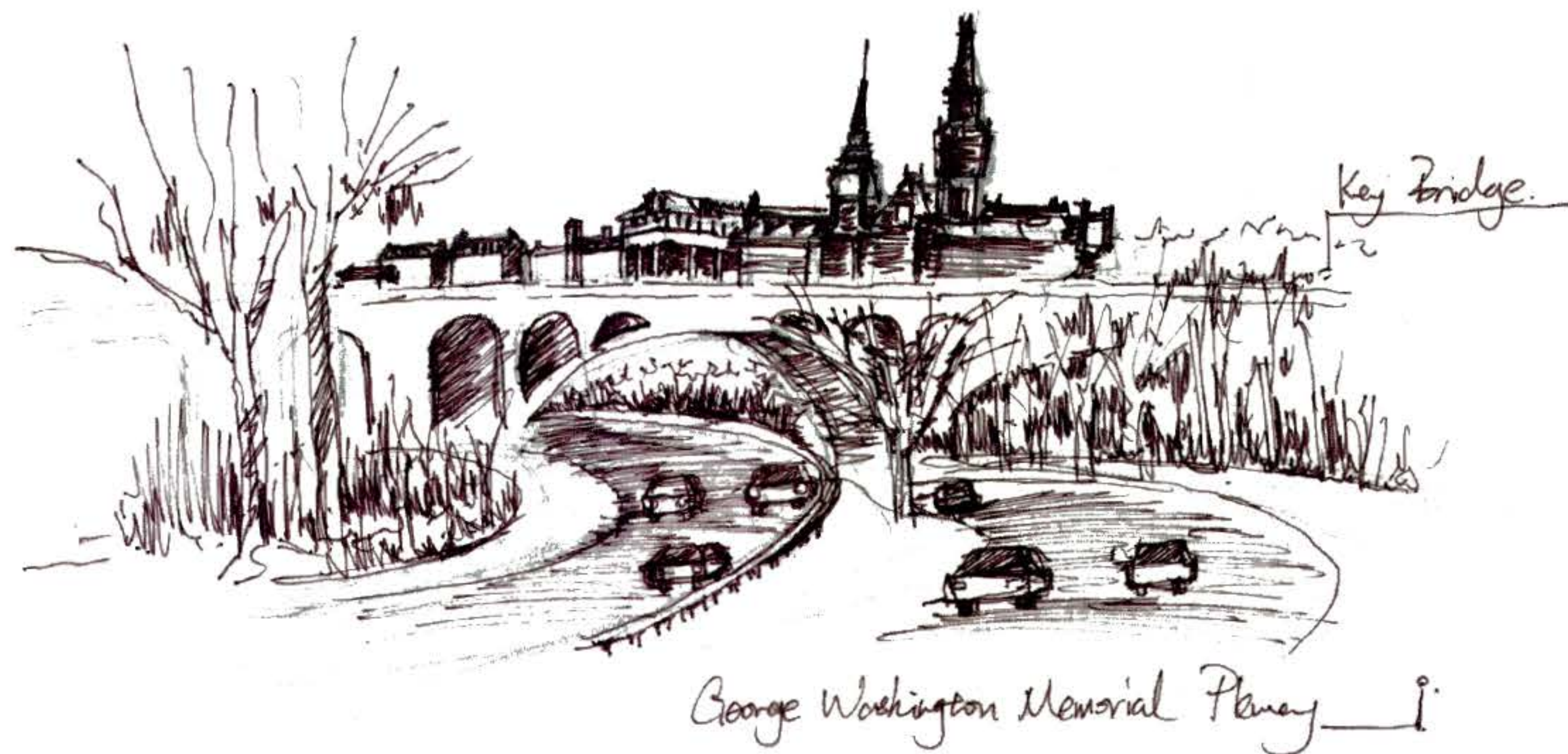
Yaminah, thank you for introducing yourself to me in my first class and congratulation to me for my thesis defense. Wonkyu, thank you for being the best GTA and help me with my study and many other things. Cassandra, it's always a pleasure to see you at school and run away from the stressful things together. To Tamiko, Zhewei, Laura, Zach, Jeff and many other good friends of mine, thank you for being in my life, being awesome.

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Rosslyn Waterfront Complex | Development of the area



Sketch of George Washington Memorial Parkway, Key Bridge and Georgetown from Potomac Heritage Trail, Feb, 2016

## Concrete jungle, parkway, and the river passing by

When living in Alexandria, Washington D.C Metropolitan area as a student for about a year and a half, I had never considered Rosslyn to be a destination. I knew of Rosslyn because I would transfer there while taking public transportation to Dulles Airport.

Passing by Rosslyn Metro Station so many times, I would barely slow down and take a good look at this concrete jungle. For me, Rosslyn is a good place for working and learning. It is a strong economic engine but not a pedestrian-friendly neighborhood.

I could see from a distance Rosslyn is so bright and attractive at night, but it turns into a completely dead end when you get closer to the waterfront area. Apparently there is a huge difference between the vivid and lively Georgetown Waterfront and the silent Rosslyn Waterfront.

I started to look into the history and present condition of Rosslyn, Georgetown, the Potomac River and the George Washington Memorial Parkway. Hoping I was able to come up with some solutions to improve the current situation of the Rosslyn Waterfront area.

## City, River, Transportation

- 1830 In order to support the fast development of [Georgetown](#), Congress negotiates with Alexandria Canal Company to see if they can build up an aqueduct bridge over the [Potomac River](#), connecting the [Chesapeake and Ohio Canal](#).
- 1843 Major William Turnbull of the United States Topographical Engineers applied to the Major of Georgetown to use the lower part of 35th Street for the abutment site. Major Turnbull proposed that would be good for the town to unite with Alexandrians in constructing a roadway upon the piers of the aqueduct. They eventually fix the abutment adjacent to the west edge of the extension of 36th Street. 1843, the construction of the [Aqueduct Bridge](#) was finally completed. The bridge used to haul coal and other goods between [Washington D.C.](#) and [Virginia](#).

The Aqueduct Bridge was about a quarter of a mile long and its piers was founded on solid rock, below 35 feet of water and mud. The bridge was considered to be one of the most spectacular engineering projects by then. By carrying water across the top, citizens consider it to be reminiscent of the Augustan Porta Maggiore in Rome.

- 1857 During the American Civil War, the Aqueduct Bridge was under the protection of the 38 earthen forts in Virginia. The forts, the Chain Bridge, the Aqueduct Bridge and the Long Bridge formed what was called the Arlington Line. Part of this defense perimeter was Fort Corcoran, a bastion for 576 yards in circumference, built on a hill above Rosslyn to protect the Aqueduct and the road from Falls Church (now Wilson Blvd). Aqueduct Bridge no longer satisfied the needs of the locals as time went by. Citizens envisioned railroad might crossing the bridge.
- 1860 William Henry Ross, who said to be married to Carolyn Lambden, named the farm that he received from his father-in-law "[Rosslyn](#)". Another saying was that "Lyn" and "Lynn" were obsolete spellings of linn, a word that means waterfall or a ravine with precipitous sides. Later on, the location of Aqueduct Bridge, Rosslyn, became the gateway to Arlington.

Almost at the same time, the [Alexandria, Loudoun, and Hampshire Railroad](#) (today's Washintgon & Old Dominion Railroad) began passenger service between Alexandria and Ashburn.

- 1866 After the Civil War, Congress authorized the Alexandria Railroad and Bridge Co. to erect a highway bridge. Original Queen-post truss bridge was removed. The new bridge had two layers, with the lower chord of the truss supporting the canal and the upper one supporting the toll road.

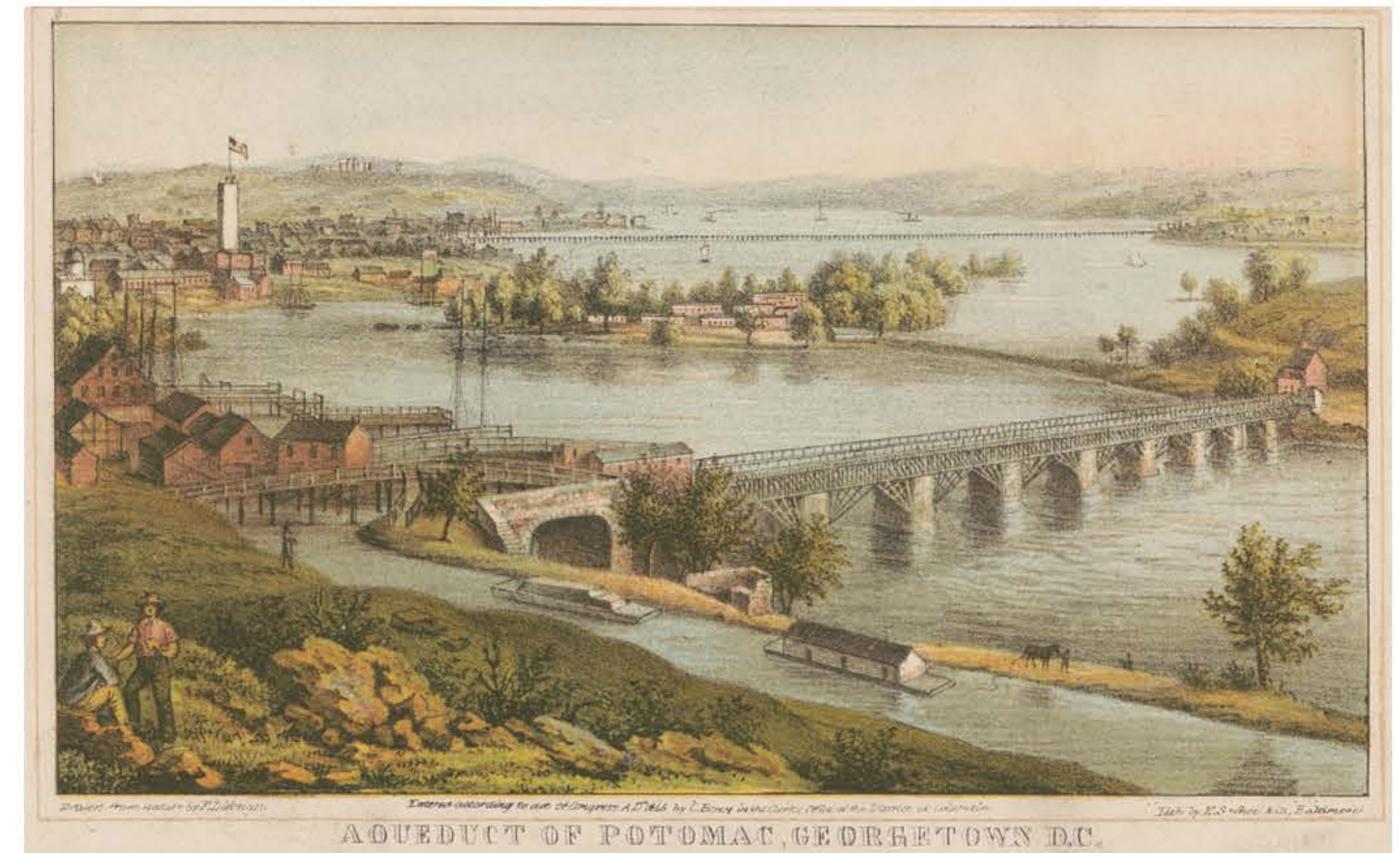


Figure 1 1866, Aqueduct of Potomac, Georgetown, D.C. / drawn from nature by F. Dielman

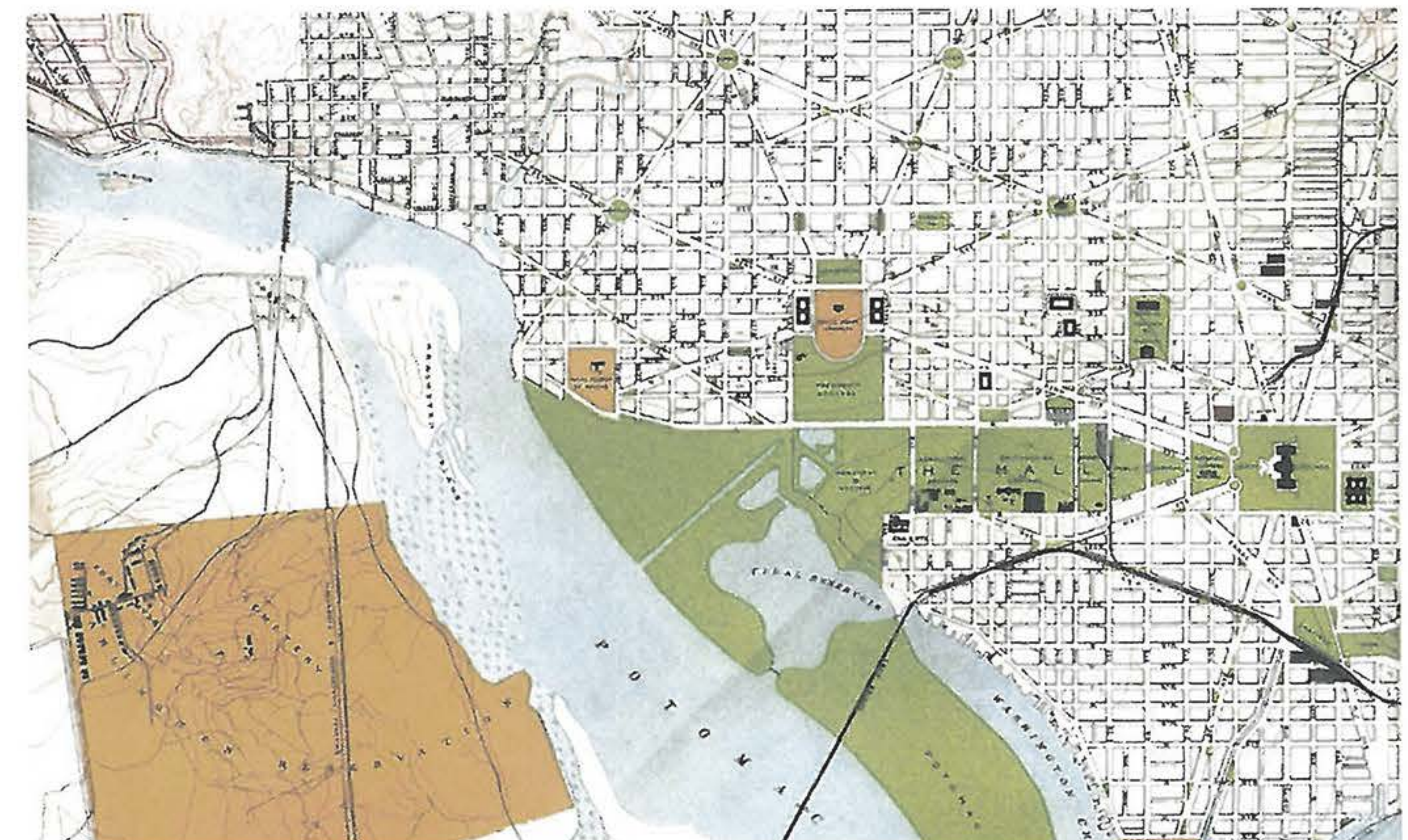


Figure 2 1901, Map of Washington D.C. and the Rail lines. Perry-Castañeda Library Map Collection 4

## City, River, Transportation

1870s-1890s For a very long time, the Rosslyn neighborhood was considered to be home to numbers of brothels and bars, most of which were open all day. The Arlington officials were said to be bribed to maintain the locals' gambling and vice activities. Meanwhile, the Arlington farmers did not get the protection from the officers when they sold their products and came back from Washington D.C. What was worse, many people were murdered in this area. And that is why people called Rosslyn 'Dead Man's Hollow'. In general, it was uneasy for the citizens to settle down and make a good living in Rosslyn back that time. But still, Rosslyn was an important transportation hub.

1900s-1940s In 1902, Members of the McMillan Commission proposed a parkway system that connected the parks in Washington D.C. and surrounding area. They suggested drives along the palisades of the Potomac above Georgetown to Great Falls and down the River to President George Washington's home at Mount Vernon. The parkway commemorates the first president, preserves the natural setting, and provides a quality entryway for visitors to Washington D.C., the nation's capital.

From the McMillan Commission's perspective, parkways or ways should through or between the parks, distinguished from highways or ordinary streets by the dominant purpose of recreation rather than movement; restricted to pleasure vehicles, and arranged with regard for scenery, topography and similar features rather for directness.

National Park Service, the Bureau of Public Roads, the Fine Arts Commission, and the Planning Commission coordinated their opinions so that the parkway could actually fulfill. Eventually, they took the advice of Gilmore D. Clarke to design the parkway with two lanes in each direction. This was done because the rugged terrain lends itself more suitable for the construction of two narrow roads rather than one wide one. Meanwhile, such a design would not only preserve the landscape better but also provide citizens a greater view of the surroundings through creating a height difference.

When opened to the public in November 1932, George Washington Memorial Parkway was 15.2 miles length with 9.7 miles in Virginia.



Figure 3. Brothels, Bars and Gambling Parlors, N. Moore at 19th Street, near the current location of Crandal Mackey Park



Figure 4. Aerial view of picnic area looking north, George Washington Memorial Parkway



## City, River, Transportation

1900s-1940s In 1904, Commonwealth of Virginia Judge Candal Macke and Chairman of the Civic Federation Committee Rober N. Anderson, were trying very hard to change the situation of the existing government. They led a series of raids to “clean up” Rosslyn and rid the area of its illegal speakeasies, gambling, and brothels. Also, they encouraged citizen to vote for their representative to develop Rosslyn. Meanwhile, they proposed adding an extra license tax on every automobile and every merchant doing business in the county.

In 1916, the famous architect Nathan Wyeth was hired to design the Francis Scott Key Bridge to replace the Aqueduct Bridge, since the old bridge no longer meets the need of the citizens. The new bridge was under construction between 1917 and 1923. The new superstructure comprised of reinforced concrete, with eight arches. Five of which span over the river, while the other three span land on the ground.

Francis Scott Key Bridge consisted of a 70' wide road deck with two 16' traffic lanes, a center lane for trolley tracks and two 8' wide sidewalks. The original superstructure also consisted of a cornice which projected 2' on each side and supported a 4' high, 12" thick concrete parapet with 6' long recessed panels on each side. On top of the parapet at 40' intervals cast iron light standards were placed, each 7'1" high decorated with a griffin leg and winged shield at the base. In 1933, the removal of the old Aqueduct Bridge significantly changed the landscape of Rosslyn.

In 1935, Colonial Village, one of the nation’s first garden-apartment complexes and the first large-scale rental project began to construction between Lee Highway and Wilson Boulevard.

In 1939, the Bureau of Public Roads, National Park Service, and National Capital Park and Planning Commission approved the parkway to pass beneath Key Bridge to Spout Run. The 8th Arch was constructed over the George Washington Memorial Parkway. Citizens used the Arlington Memorial Bridge and the parkway to alleviate congestion on Francis Scott Key Bridge.

Much evidence revealed the development of the parkway enriched the residential and commercial environment of Rosslyn. Especially the entire construction process was under the regulation of Central Intelligence Agency headquarters and the Federal Highway Administration offices. In this case, the area between Key Bridge and Roosevelt Bridge became one of those best locations for the agencies to move in.

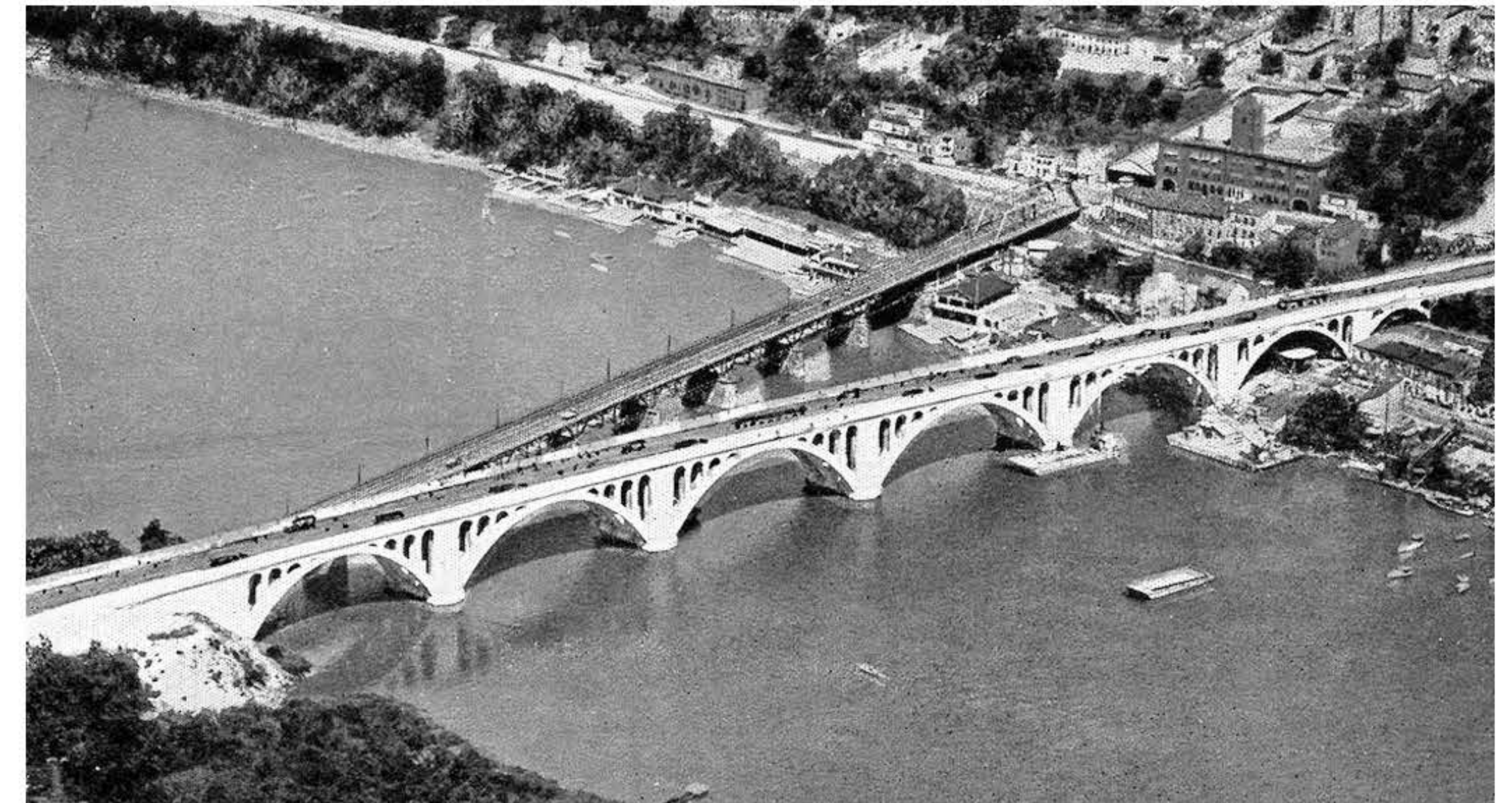


Figure 5. View of Key Bridge before Aqueduct Bridge was removed



Figure 6. The Arlington Trust Company, Landmark of N. Moore St and Lee Highway 8

## City, River, Transportation

1940s-1960s From the 20s to 40s, Arlington was considered to be a suburb area, with some office development and slow population growth. A few completed large-scale infrastructures along the George Washington Memorial Parkway changed the city's status. In 1941, Ronald Reagan Washington National Airport opened to public right before the country got involved in World War II. 1943, Pentagon finished construction, accommodated almost 30,000 defense workers with more than 17 miles of corridors. In 1955, the operation of "Mission 66" improved the construction of parkway and many other city infrastructures. In 1959, Marriott International opened their first hotel off Lynn Street, right next to Francis Scott Key Bridge. By the end of the 60s, Arlington County has 7.5 million square feet office space, 97,505 job opportunities and 71,230 housing units.

1960s-2000s The trolley lines were gone. With the completion of the highways and the operation of the new metro system, Arlington became an economic center in the late 70s. Featured by the Rosslyn-Ballston Corridor (Orange line) and the Jeff Davis Corridor (Blue and Yellow lines), citizens were able to travel underground instead of running on the highway. From the early 1970s to early 2000s, 12 million square feet and 20 million square feet office space were created in Jeff Davis Corridor and Rosslyn-Ballston Corridor. The two corridors occupied 92% of the office space in Arlington County and connected in Rosslyn, the gateway to Washington D.C.

For Rosslyn-Ballston Corridor, the residential units raised from 6,036 units in 1970 to 21,813 in 2001. The ratio of residential - office area was gone up from 36% to 43%. The employment of R-B Corridor in 2000 was around 2.5 times as many as it was in 1970. However, population and household increased on a very small scale. In order to preserve the green space, Arlington County tried to maintain the neighborhoods in low-density outside corridor.

Survey data showed in the early 2000s, 17.8% of the households in Arlington had no car and less than 25% have 2 or more. 39.3% of the citizens used transit to commute to work, 10.5% prefer to walk or bike and 2.3% just work at home.

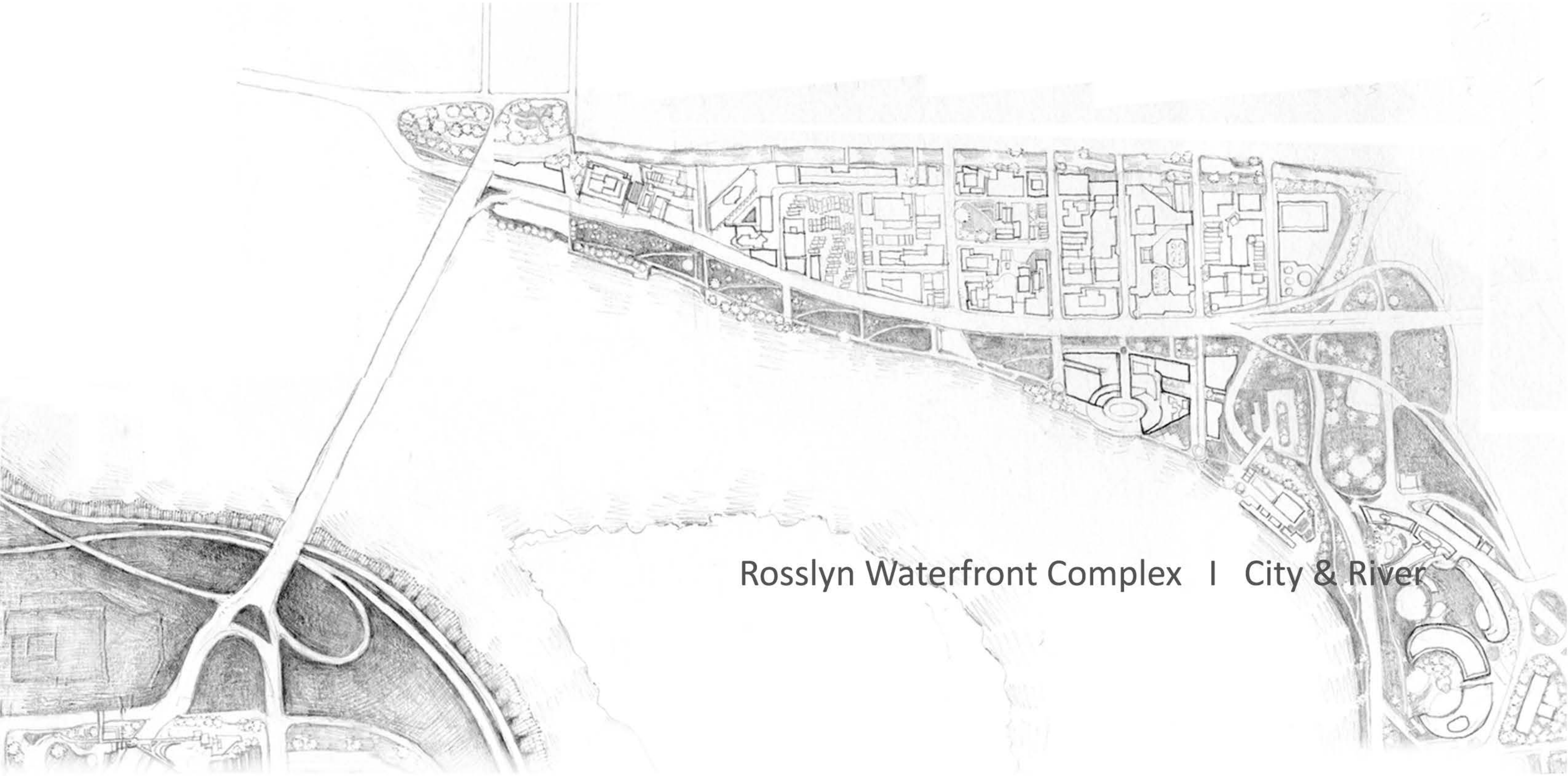
Based on its strategic location, Rosslyn had fulfilled much of its potential. Most citizens see Rosslyn as a place to work, a stop-over during travel to points north and south, east and west. However, I see Rosslyn as a riverside city presenting a characteristic American downtown style. Unfortunately, when I focused on the development of the office buildings and the transportation system, I see we forgot to provide a path for the citizen to walk to the Rosslyn waterfront.



Figure 7. Circa 1943 View of Rosslyn



Figure 8. Circa 1960 Looking up N. Fort Myer Drive towards the Key Bridge Marriott 10



Rosslyn Waterfront Complex | City & River

### Strategic Location

Rosslyn looks like a grey stone surrounded by the deciduous trees during the day, a shining black tourmaline gemstone at night. Flanked by the Potomac River; facing Georgetown University, the Washington Memorial and the Kennedy Center from west to east; connecting Reagan National Airport, the Pentagon, Arlington Cemetery in the south, who can really question its status?

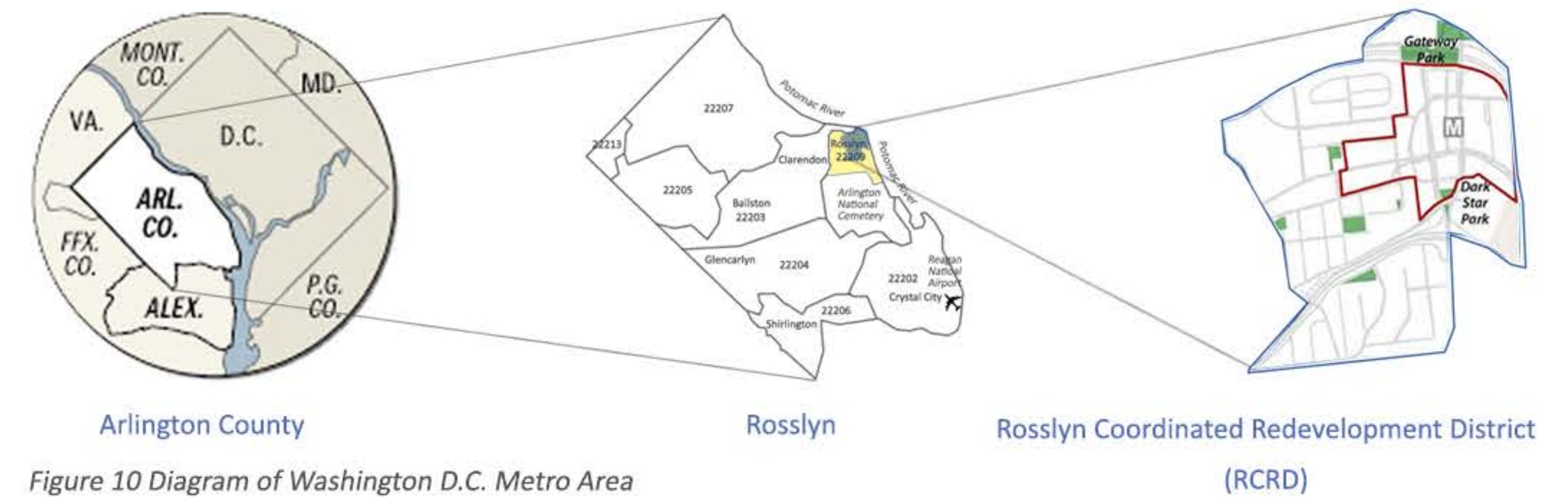


Figure 10 Diagram of Washington D.C. Metro Area



Figure 9. Aerial View of Rosslyn



Figure 11. Rosslyn and Key Bridge at night

Center Business District

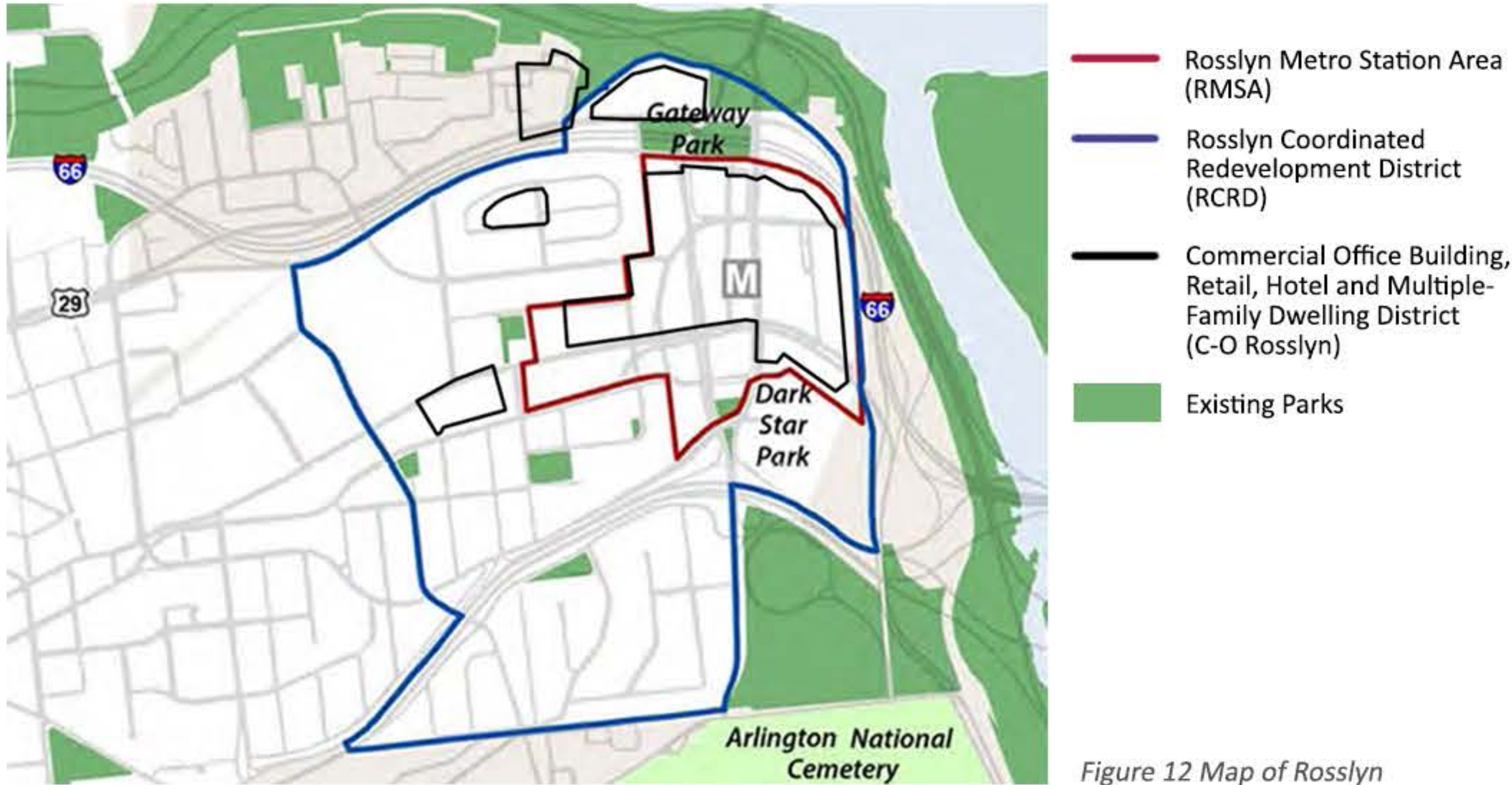


Figure 12 Map of Rosslyn

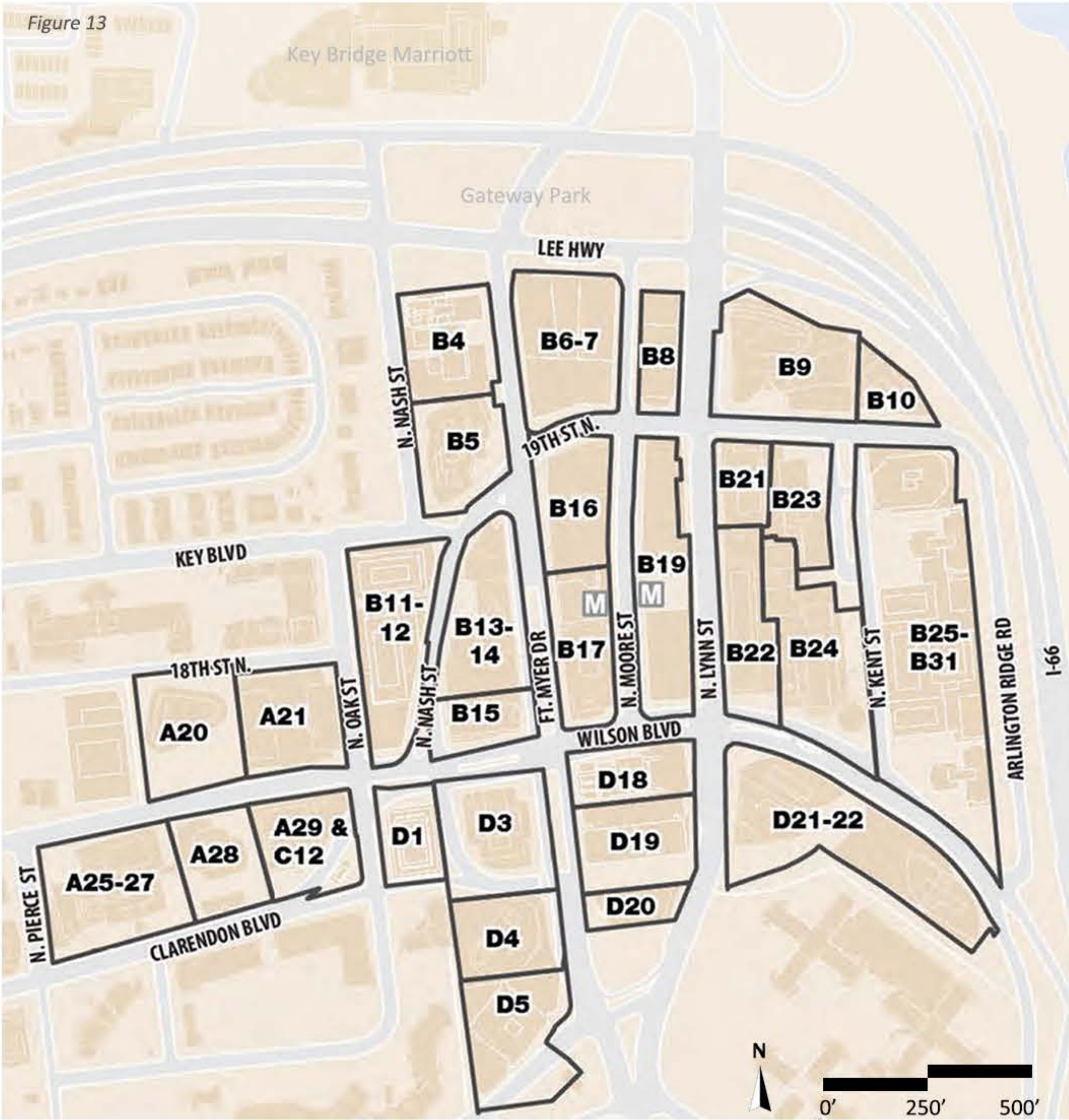
According to Rosslyn Sector Plan, the Rosslyn Coordinated Redevelopment District (RCRD) is the high-density mixed use portion of the Rosslyn Metro Station Area (RMSA). While the RMSA is approximately 300 acres in size, the RCRD comprises an area of 65 acres closest to the Rosslyn Metro station.

The RCRD accounts for over 95 % of the office development in Rosslyn and almost 75% of the retail development. In contrast, a significant portion of the residential development is located outside of the RCRD. Only 7% of the residential units in Rosslyn are located in the RCRD.

Most of the high-rise buildings were located around the Rosslyn Metro Station and near the George Washington Memorial Parkway by the waterfront, like 1812 N Moore (Height:384’), Turnberry Tower (Height: 300’), Central Place (Height: 388’) and 1401 Wilson Blvd (Height: 322’).

The zoning ordinance of the area kept changing over the decades. For now, sites located within the RCRD and designated “High” Office-Apartment-Hotel could typically be developed at densities up to 3.8 floor area ratio (FAR) for office/commercial and hotel uses, and up to 4.8 FAR for residential uses. On sites designated “High” Residential, sites could typically be developed up to 4.8 FAR for residential and 3.8 FAR for hotel uses. Additionally, applicants could seek rezoning of properties within the RCRD to “C-O Rosslyn” (Commercial Office Building, Retail, Hotel and Multiple-Family Dwelling District ), where they could

13 pursue building heights up to a maximum of 300 feet and densities up to a maximum of 10.0 FAR.



A20	1525 Wilson Blvd	B8	Rosslyn Building East (RCA)	B19	Central Place	D4	Noland Building
A21	Art Associates	B9	Waterview	B21	The Smart Building	D5	Xerox Building
A25-A27	Millcourt/1550/1533 Wilson	B10	Potomac Tower Office	B22	International Place	D18	Key Building
A28	1530 Wilson Blvd	B11-12	1401 Wilson Blvd/1400 Key Blvd	B23	Pomponio Plaza East	D19	Berkeley Building
A29&C12	A-M Building	B13-14	Ames Building/Temple United	B24	Gannett Foundation Building	D20	Park Place
B4	Holiday Inn	B15	Hyatt Hotel	B25-B31	Rosslyn Plaza	D21-22	Arland Towers
B5	Turnberry Tower	B16	1812 North Moore/substation	D1	Architect’s Building		
B6-B7	Rosslyn Gateway	B17	Rosslyn Center	D3	Commonwealth Building		

## Transportation Hub

The second time I went to Rosslyn was because I need to go to Dulles International Airport, caught my flight to Chicago the day after Christmas in 2014. When I walked out of the Rosslyn Metro Station, I saw the bus stop right in front of me. Based on the time table, the shuttle 5A arrived at metro station every about 40 minutes and it takes about 60 minutes to get to the airport. 10 months later, when I came here and to try to catch the same bus again; I found out that due to the construction of Central Place, the new landmark of Rosslyn, the bus stop changed its location. For some reason the 5A bus came at least 10 minutes earlier than it supposed to be. Without realizing the situation, the other passengers and I kept waiting about another hour for the next bus. Unfortunately, Dulles Airport was so busy that morning that I missed my flight to Detroit.

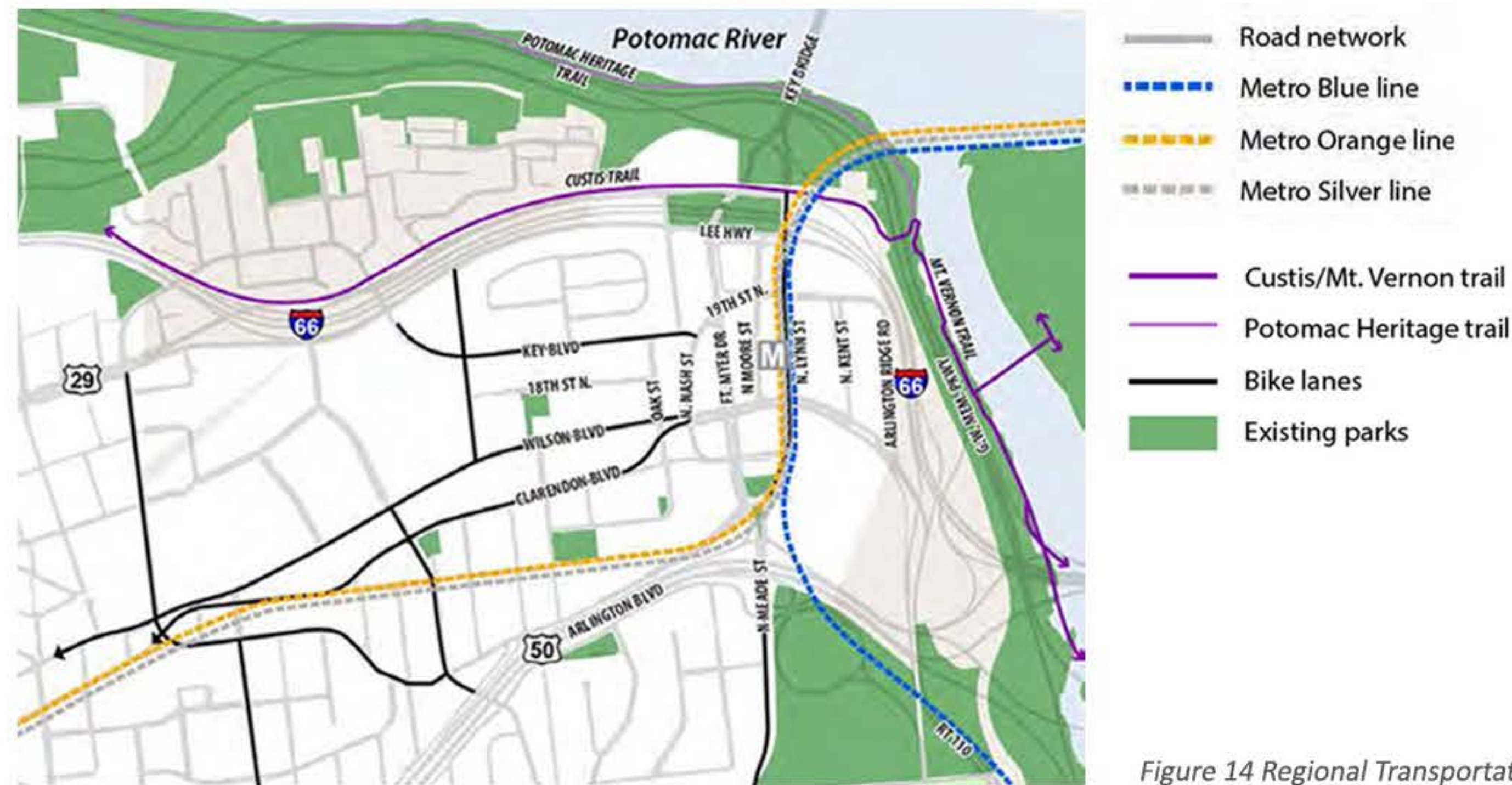


Figure 14 Regional Transportation

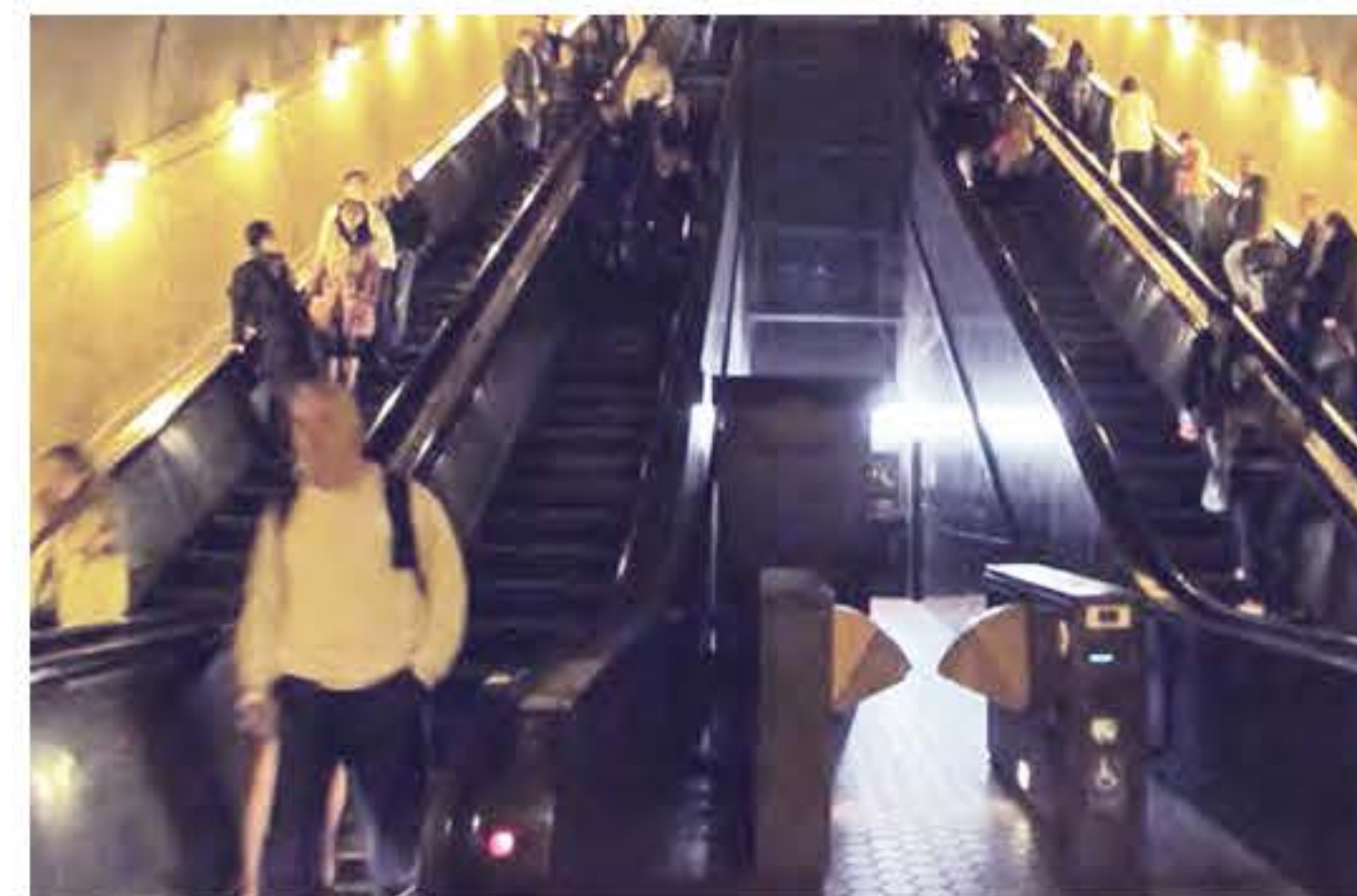


Figure 15 Rosslyn Metro Station



Figure 16 Rosslyn Street View

Finally, I had a chance to consider Rosslyn to be my destination in early February 2015. I was doing research with my classmates for the studio project. It was freezing and hard for us to find a shelter while we were wandering on the street. The sidewalk was narrow and wet, and the dirty snow got piled up between the sidewalk and the driveway.

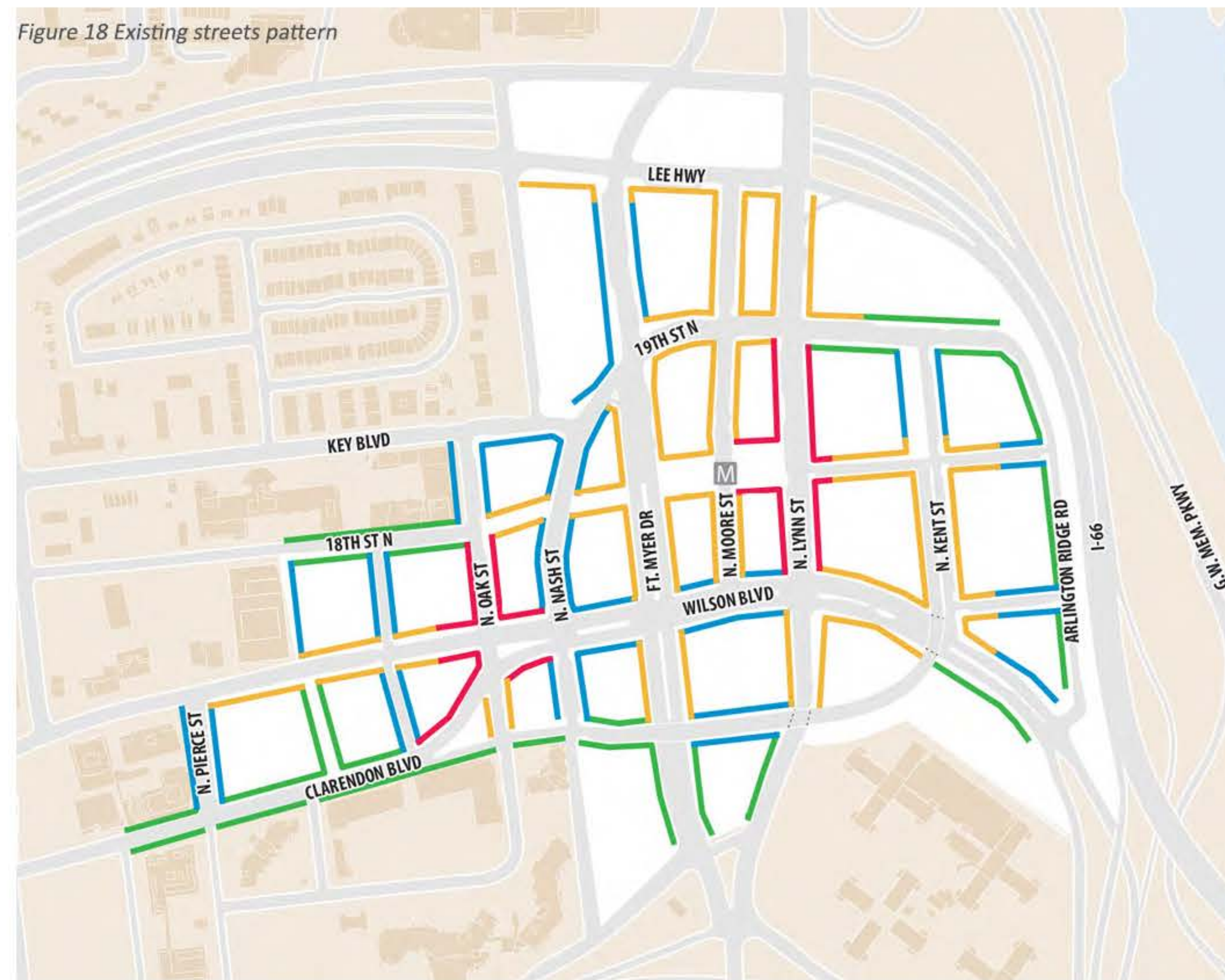


It seemed the construction of the Railroads decades ago influenced the texture of the city heavily. The existing blocks were organized irregularly, and the streets do not meet each other very well. With the high density of the area, it is hard for us to find the destination and a parking spot.



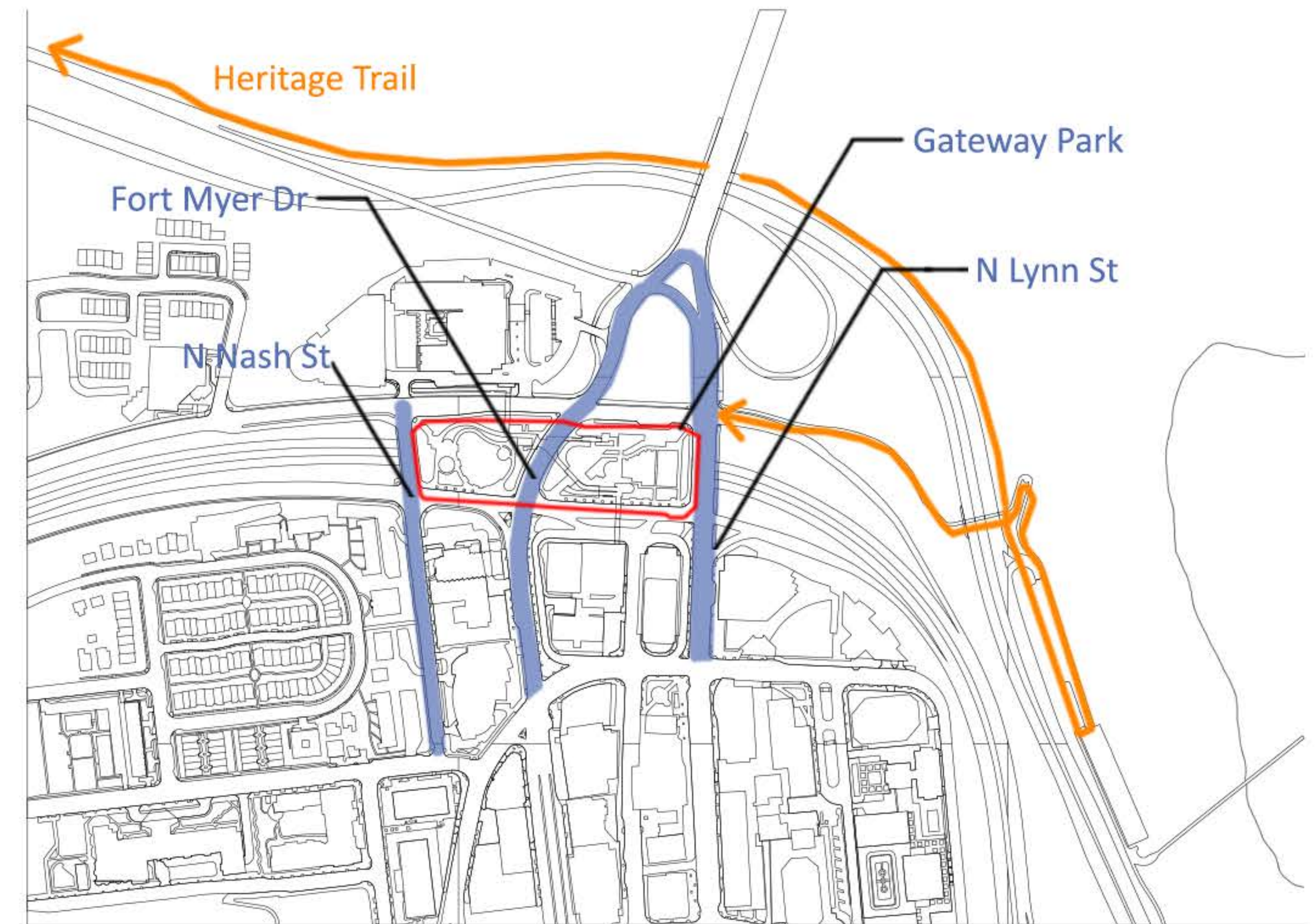
Figure 17 Existing blocks and streets pattern 16

## Local Road Network



Potomac River

Key Bridge



I did not feel like the streets in Rosslyn are suitable for road traffic since the irregular streets and blocks pattern highly reduce the traffic efficiency. But those skinny sidewalks along the drive ways, circle one or two buildings in its own block, claiming their territory but being friends with each others. I saw two sky bridges almost till the end of N Moore Street. One connect two building in two different blocks, the other across the Lee Highway connect a building with the Gateway Park. I got a picture in my head, what if all these high-rise buildings are connected by the sky bridges and the white collars are able to walk from side to side without actually touch the ground. Cars are able to get into the underground of the area directly from I-66 and GWM Parkway without using the local road network. As for the original drive ways, concrete pavements are replaced by the smooth ceramic brick and the flowering shrub. The entire ground floor becomes the pedestrian friendly transfer floor of the underground traffic and the upper 17 office/hotel/residential area.



Figure 19 Fort Myer Dr



Figure 20 N Lynn St 18

## Highway & Parkway

Gateway Park is said to be Rosslyn's largest and most prominent park. However, I find it really difficult to reach from the other side of the I-66. First, the entrance of the sky bridge is not that noticeable; second, it's not that comfortable for pedestrians to use the Nash St/Lynn St to cross the heavy traffic.



Figure 20 Gateway Park, March, 2016

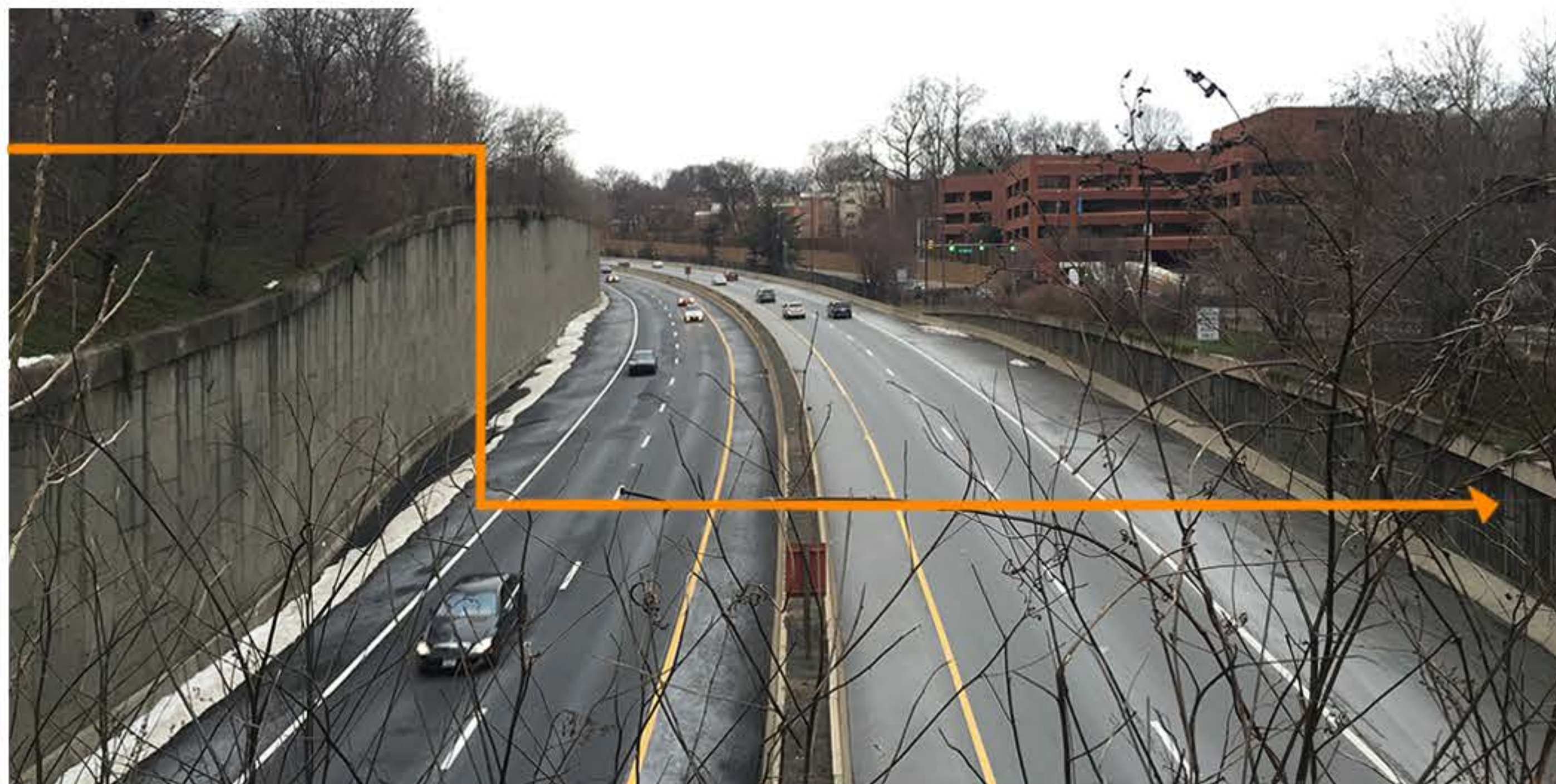


Figure 21 View of I-66 from N Nash St next to Gateway Park, February, 2016

I got confused when I walked to the edge of the city. I-66 and GWM Pkwy now become the biggest barriers for pedestrian to reach the waterfront.



Figure 22 View of Marriott Hotel and Rosslyn Waterfront from Key Bridge, August, 2016



Figure 23 View of GWM Pkwy from Heritage Trail, February, 2016



### Park & Trail

When I walked on the Gateway Park, I was hoping that there would be a platform at the end of the skybridge. There would be a path that allow people to overlook the Healy Hall in Georgetown University and walk all the way down to the Potomac River.

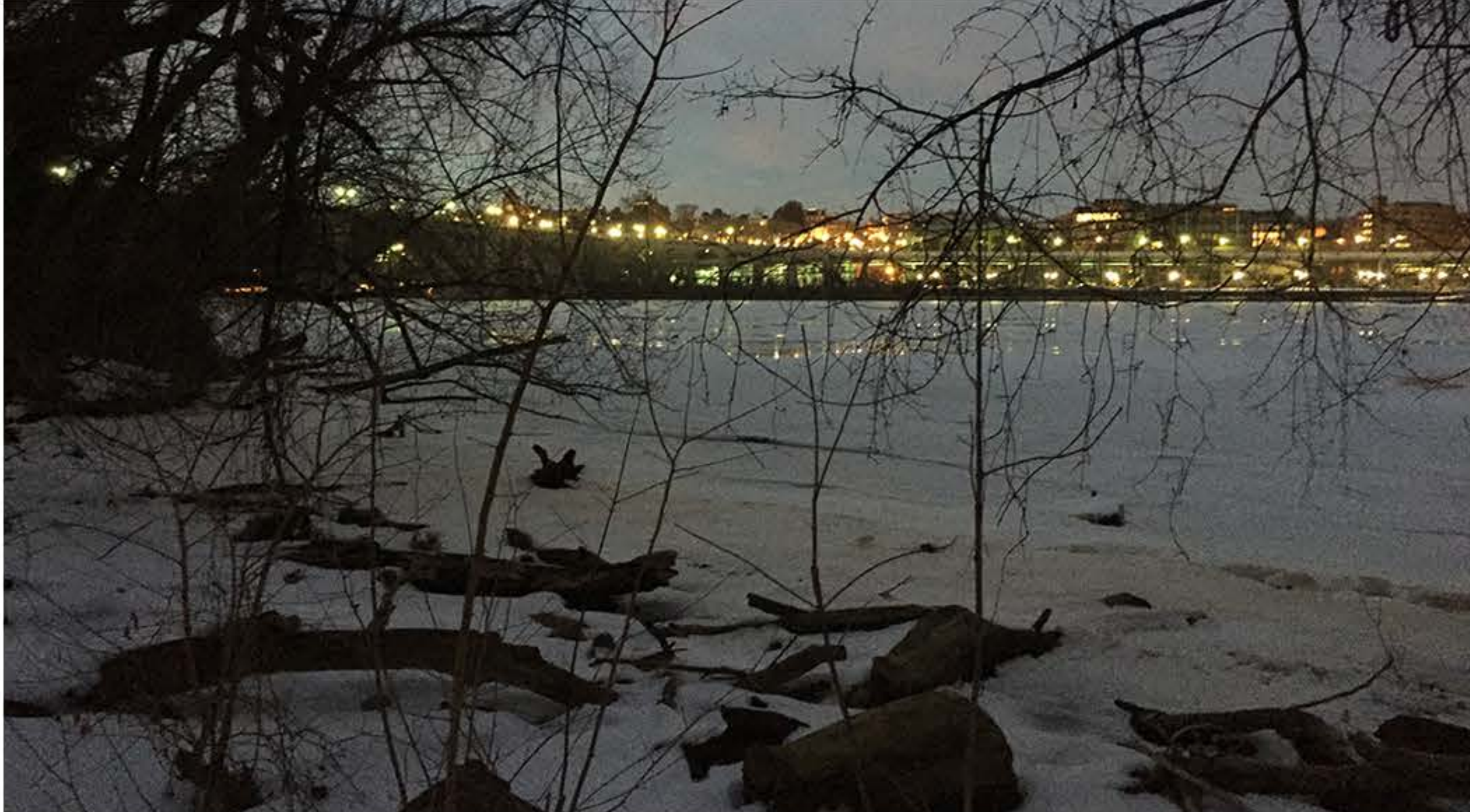


21 *Figure 29 View of Marriott Hotel and Rosslyn Waterfront from Gateway Park, August, 2016*



*Figure 23 Heritage Trail, Rosslyn Waterfront, August, 2016*

Rosslyn waterfront does not actually have a path for people to get closer to the Potomac River. The Potomac trail is however very rough and rocky terrain that is only suitable for the most audacious runners. Work out along the river become dangerous since waterfront area cover with trees and heavy snow during winter.



*Figure 24 Heritage Trail, Rosslyn waterfront, February, 2016* 22

## Down by the riverside

Rosslyn is on the Potomac River, like Washington, D.C., citizens don't interact with each other near the waterfront like what they do in Georgetown or Washington harbor. Instead of being a place to relax or communicate, the waterfront is more like just a border between the cities.

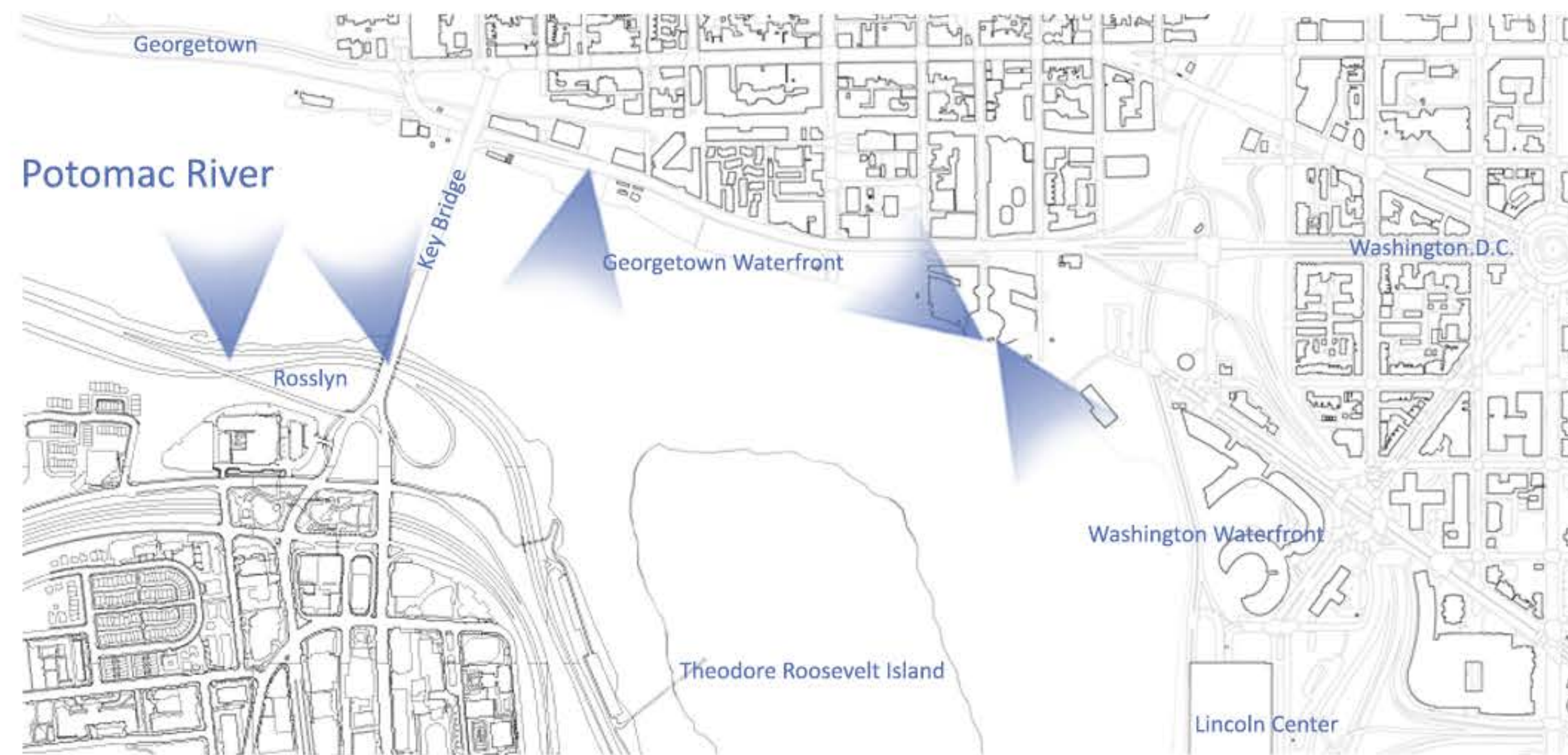


Figure 26 View of Potomac River and Georgetown from Key Bridge, February, 2016

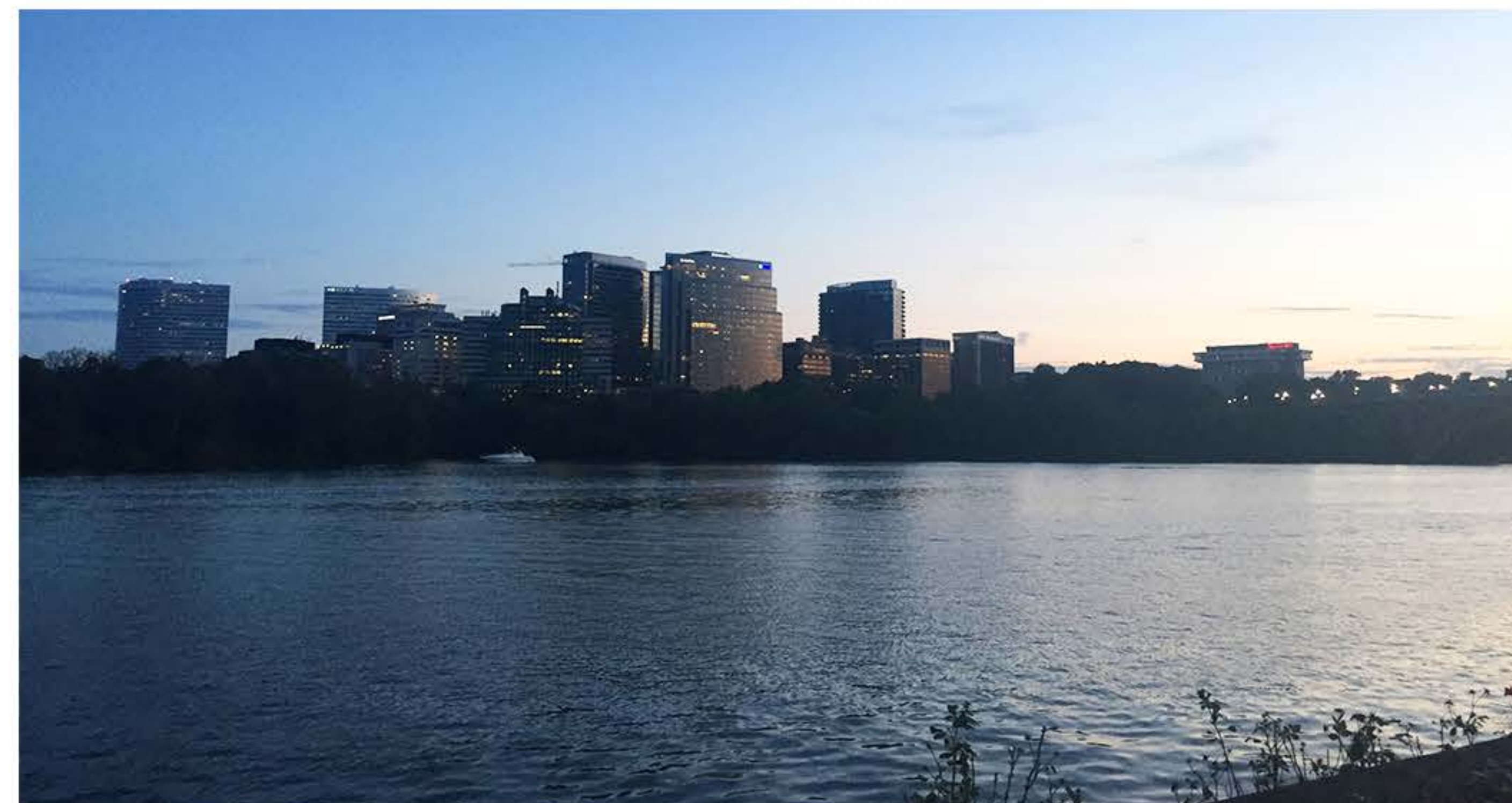


Figure 25 View of Potomac River and Rosslyn from Georgetown waterfront August, 2016



Figure 27 View of Potomac River and Georgetown from Rosslyn waterfront, August, 2016

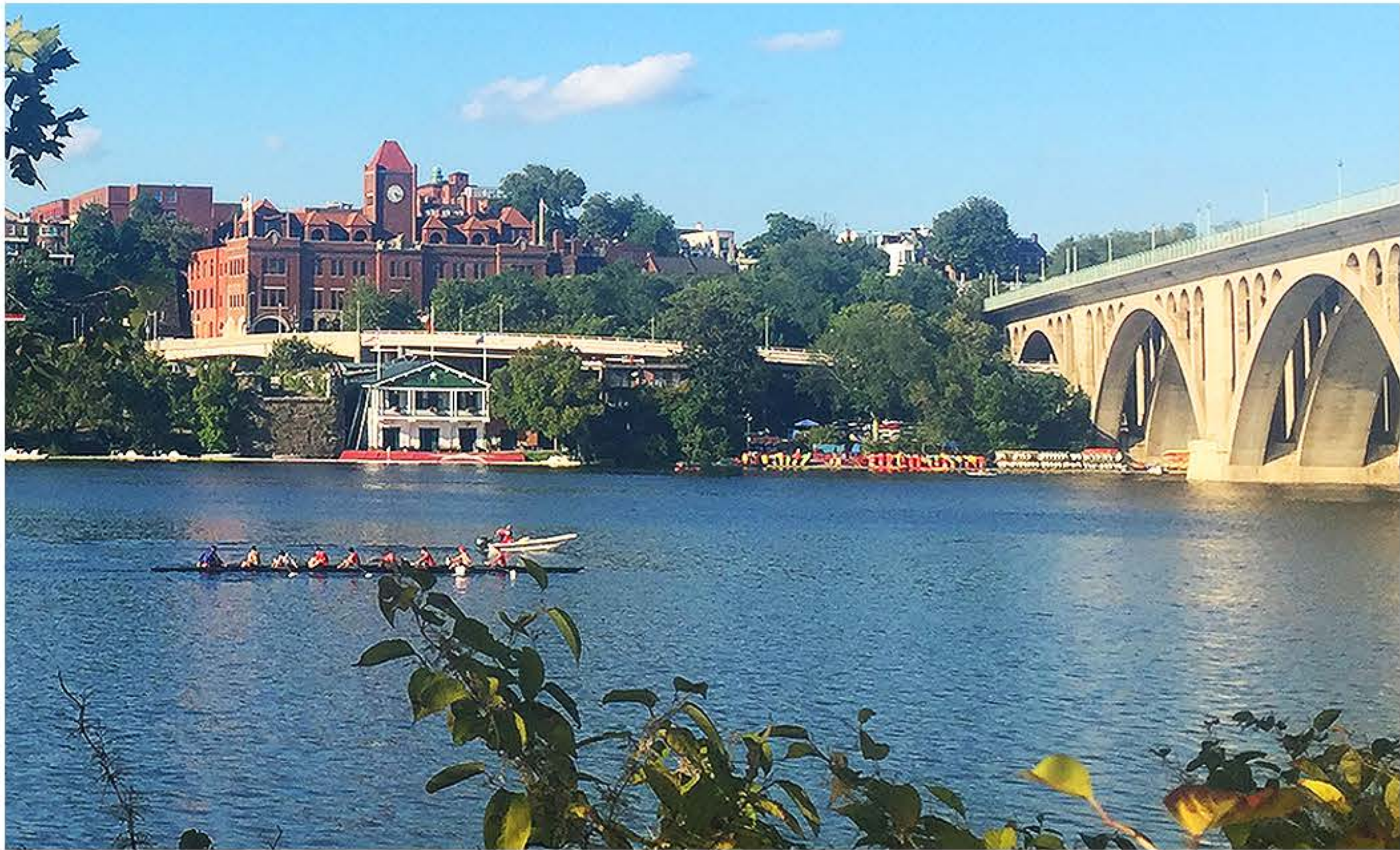


Figure 28 View of Potomac River and Key Bridge from Rosslyn Waterfront, August, 2016



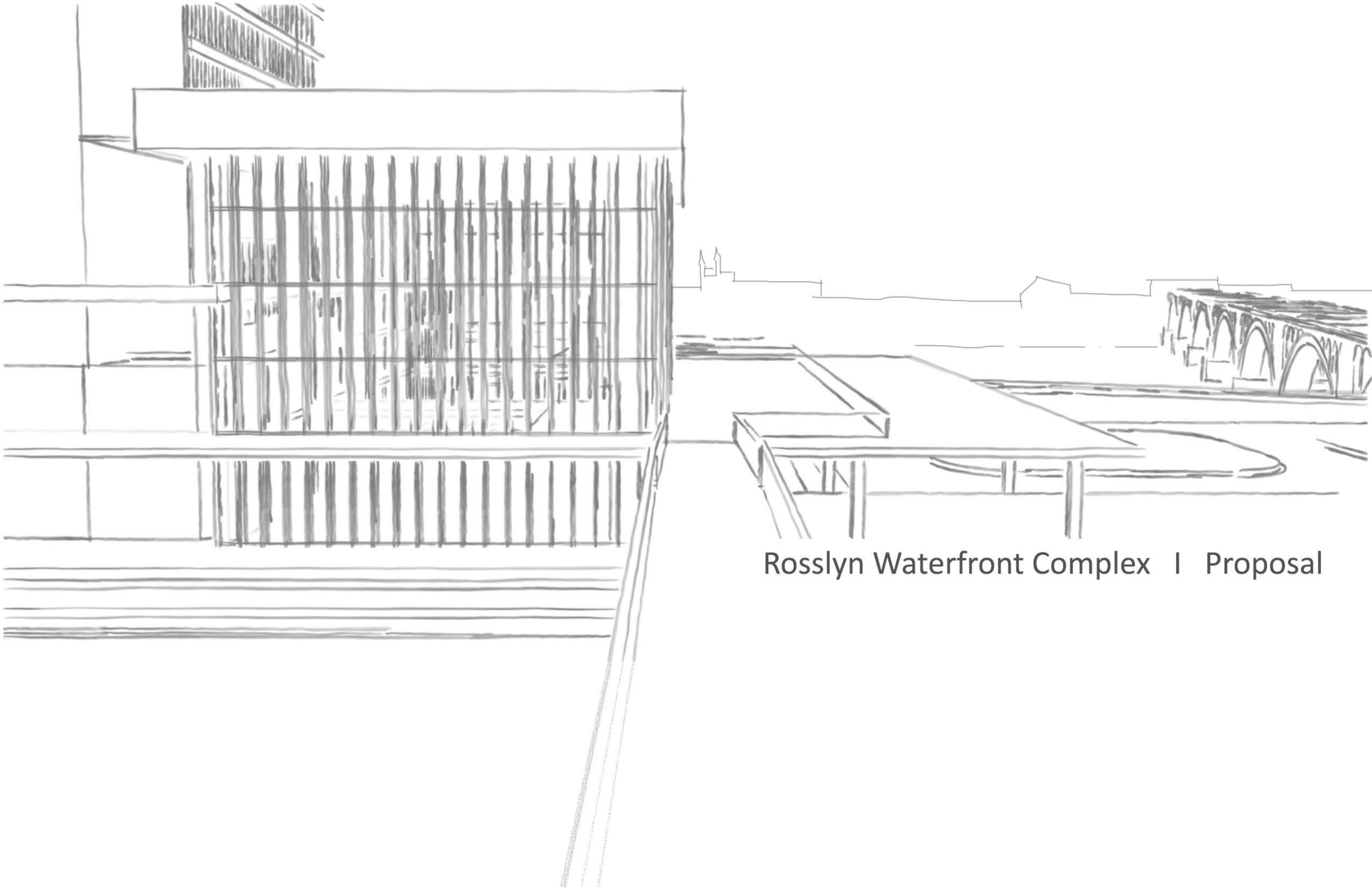
Figure 30 View of Potomac River and Lincoln Center from Georgetown waterfront, August, 2016



Figure 29 Georgetown waterfront, August, 2016

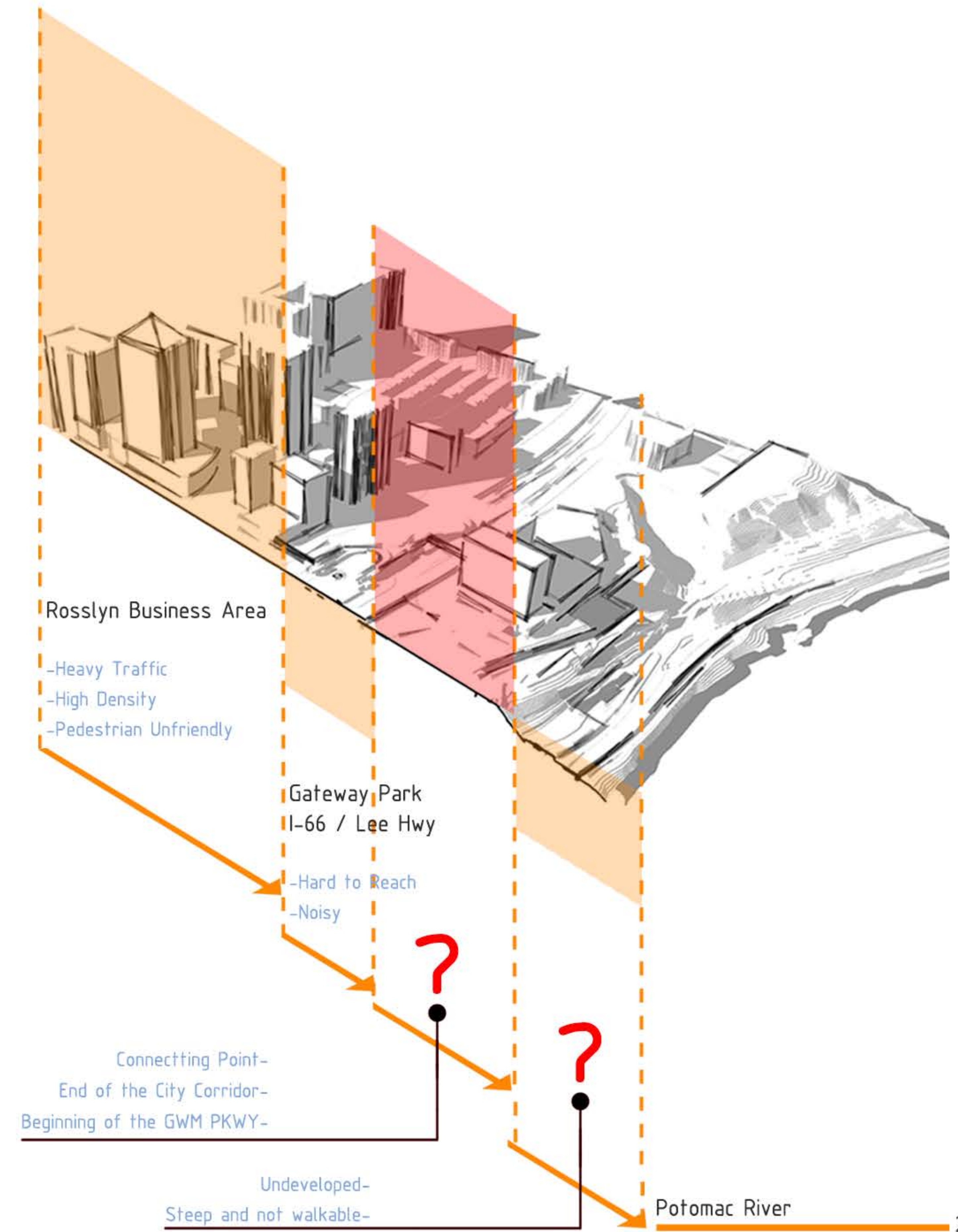
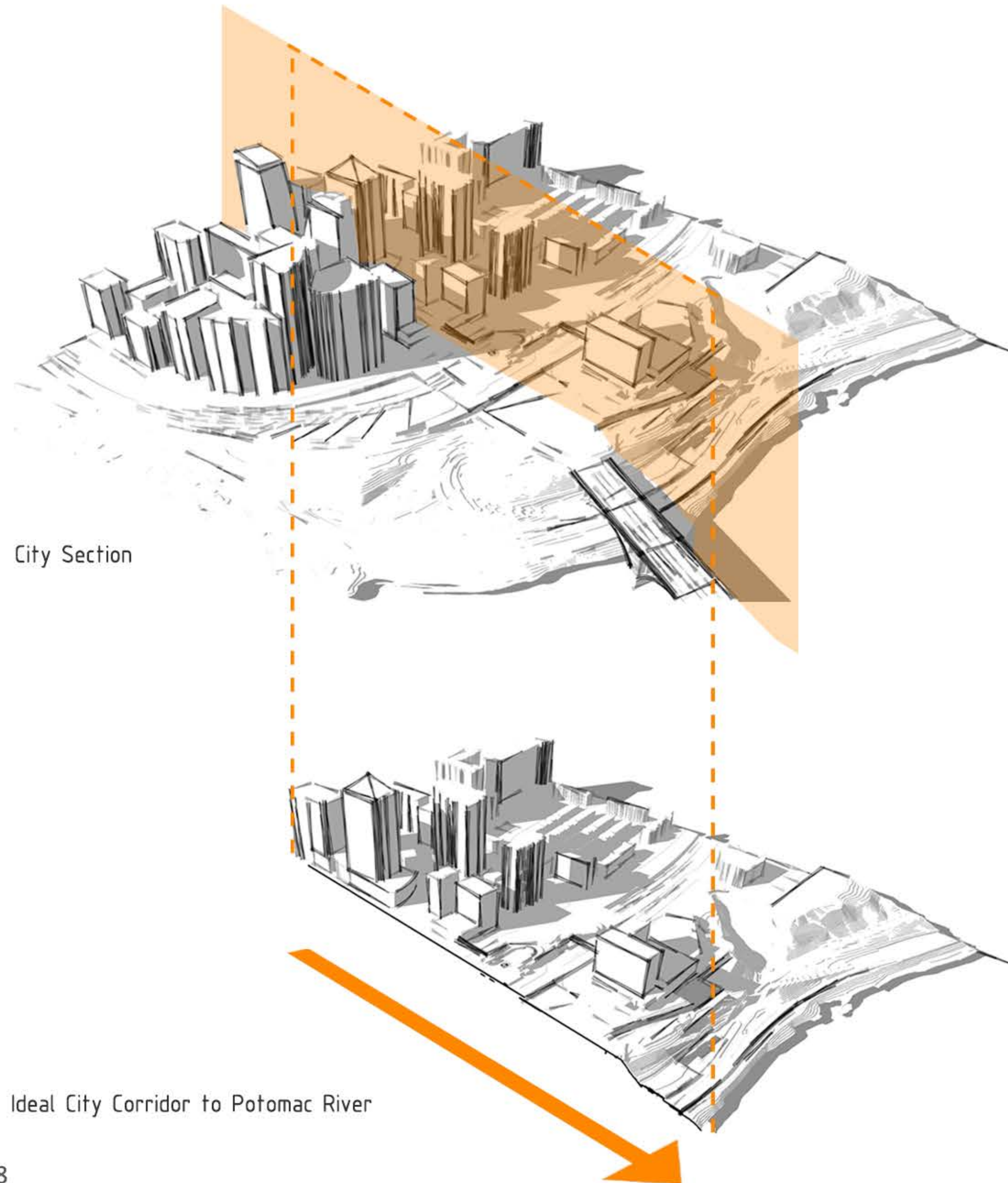


Figure 31 Georgetown waterfront, August, 2016

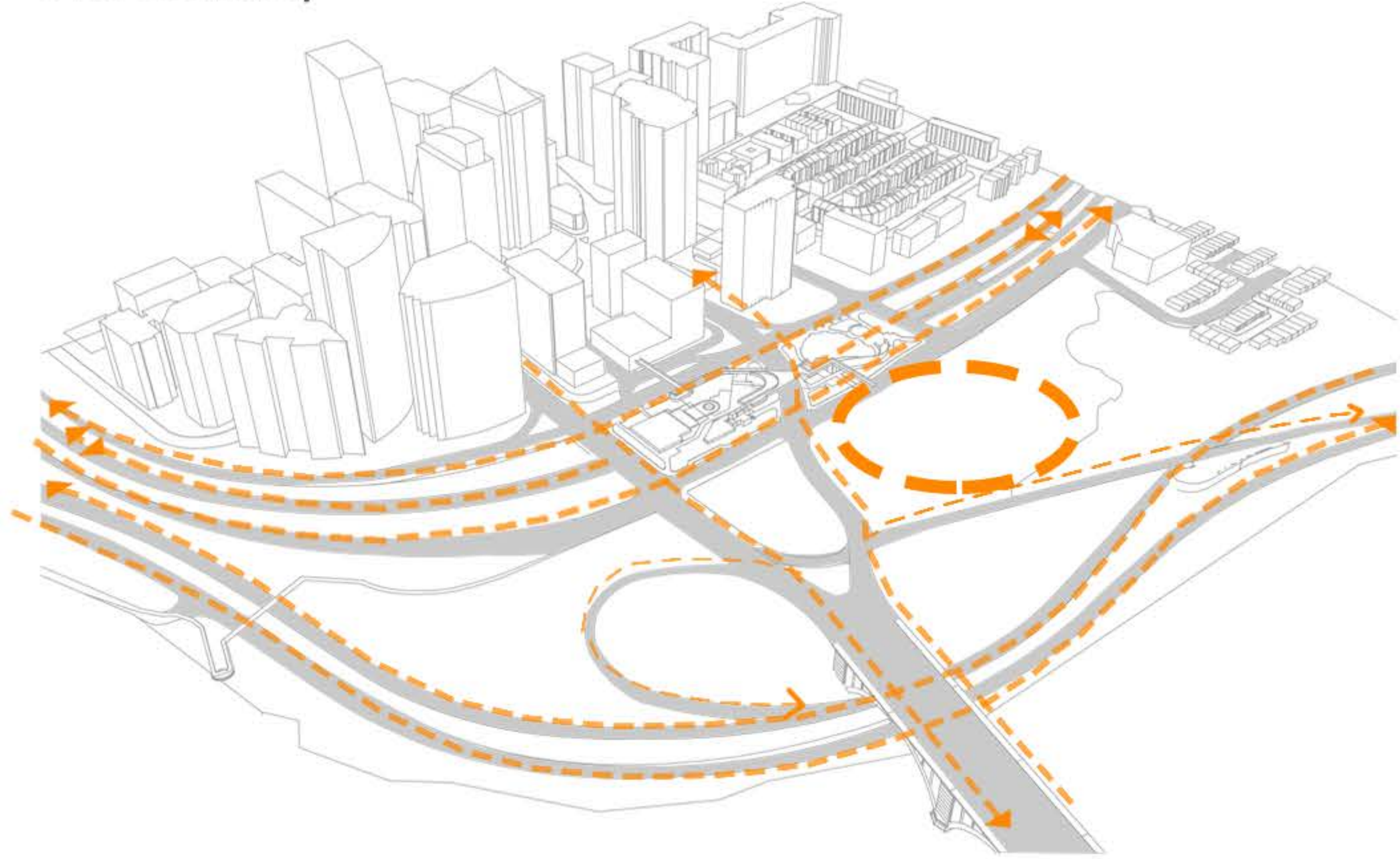


Rosslyn Waterfront Complex | Proposal

### City Corridor for Pedestrian

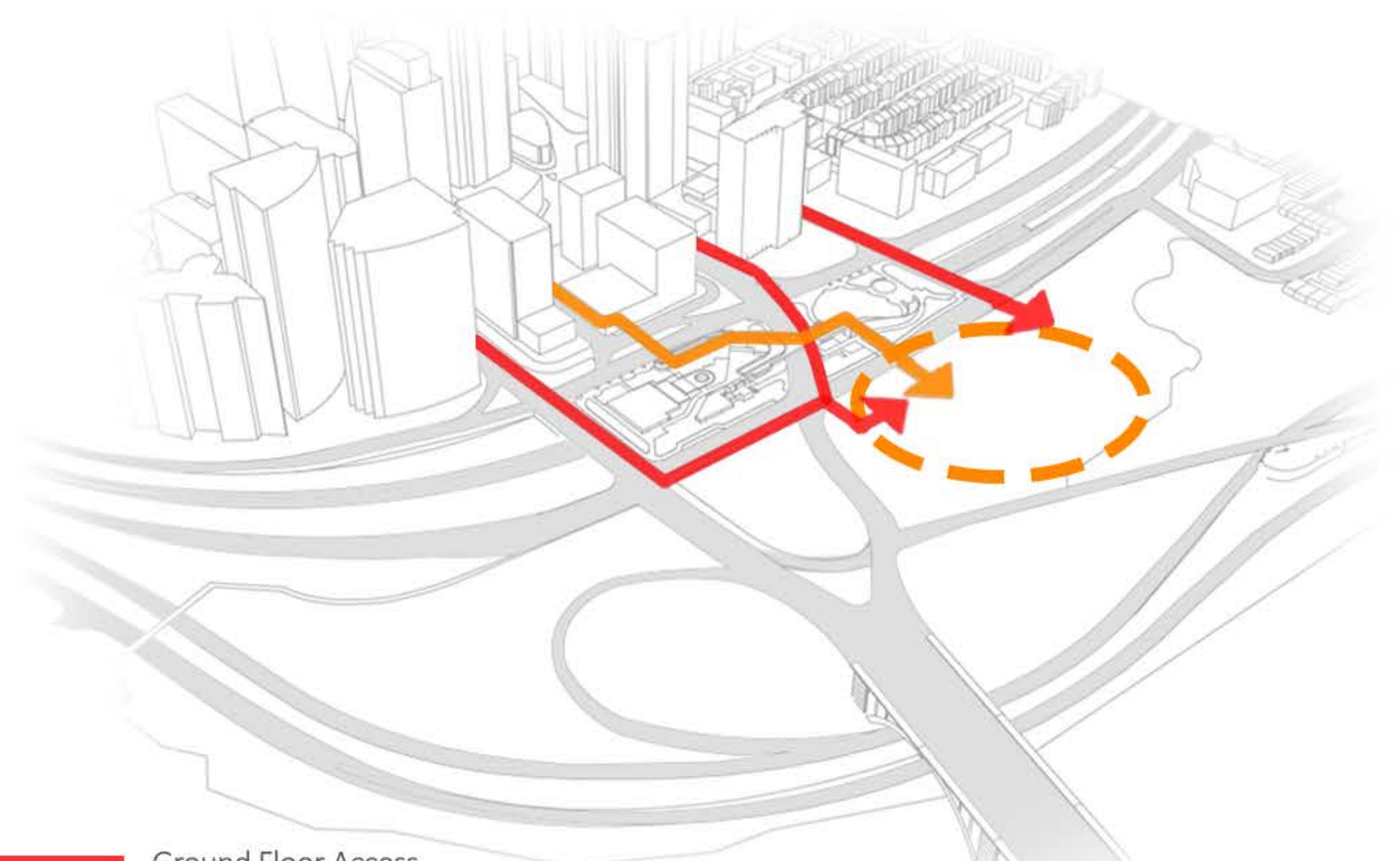


Accessibility



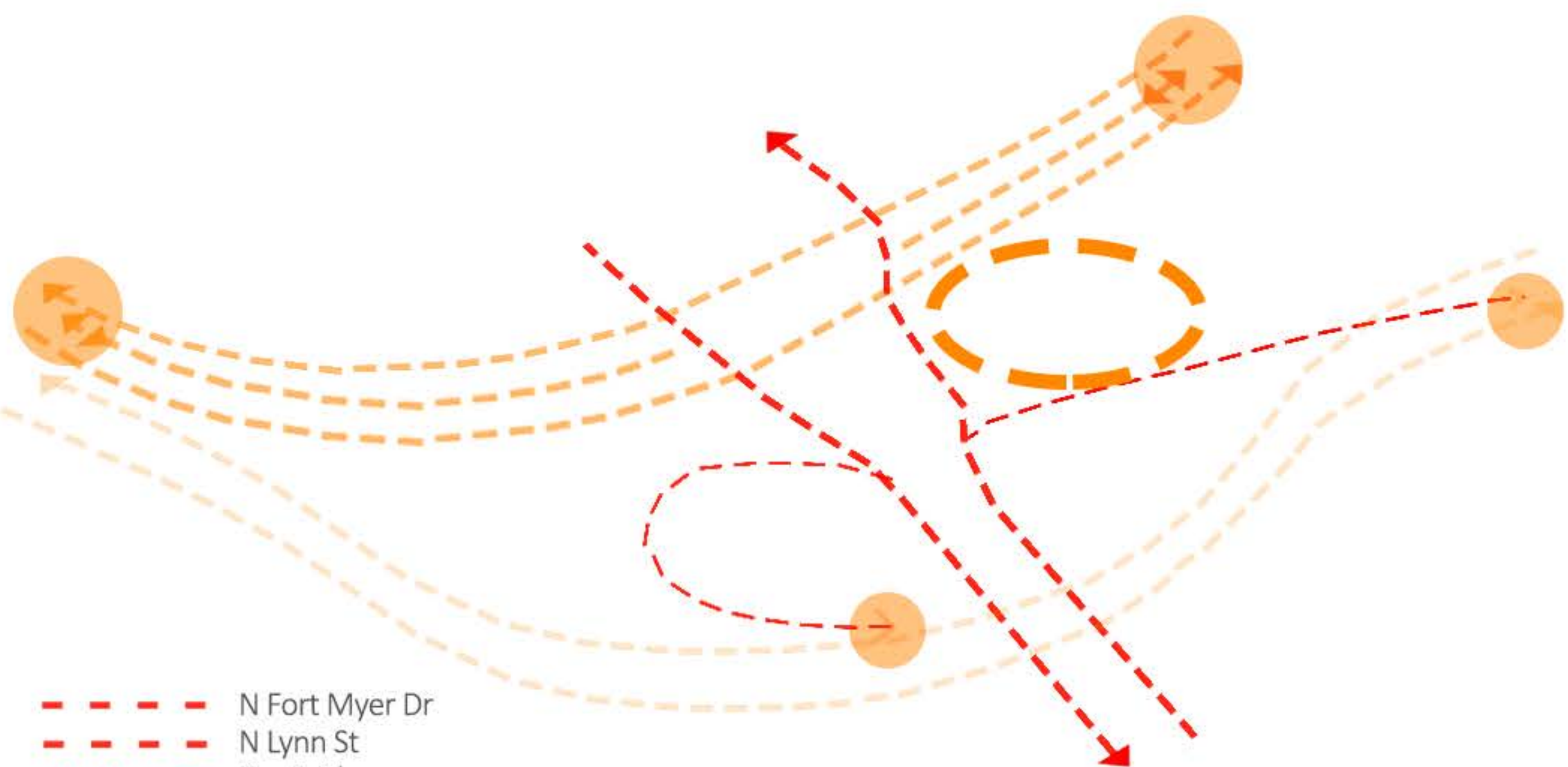
- → → → → N Fort Myer Dr
- → → → → Key Bridge
- → → → → Lee Hwy
- → → → → I-66

Vehicle Access to the Site



- Ground Floor Access
- 2nd Floor Access

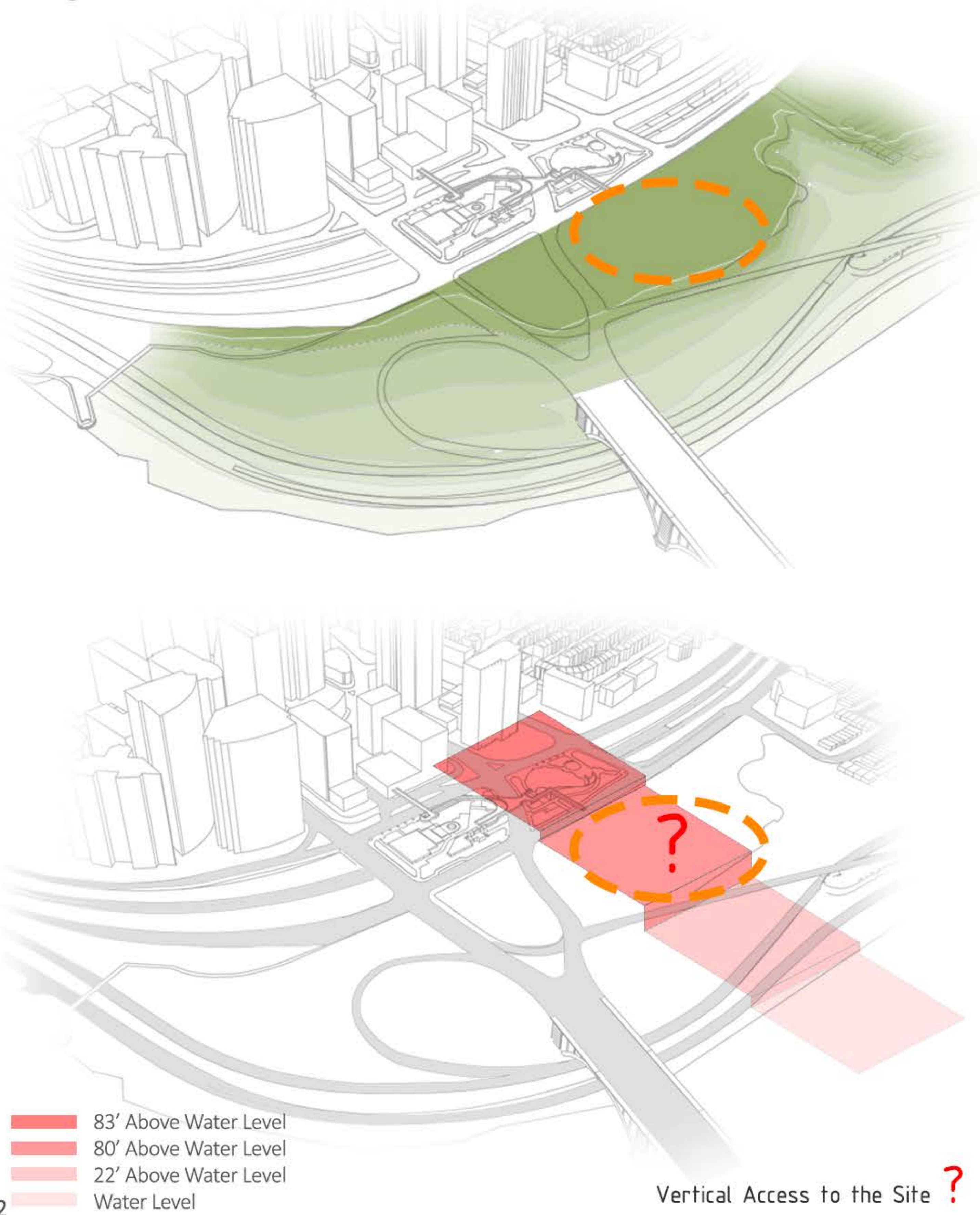
Pedestrian Access to the Site 31



- - - N Fort Myer Dr
- - - N Lynn St
- - - Key Bridge
- - - Lee Hwy
- - - I-66
- - - GWM Pkwy
- Traffic Node

Urban Transportation and Road System

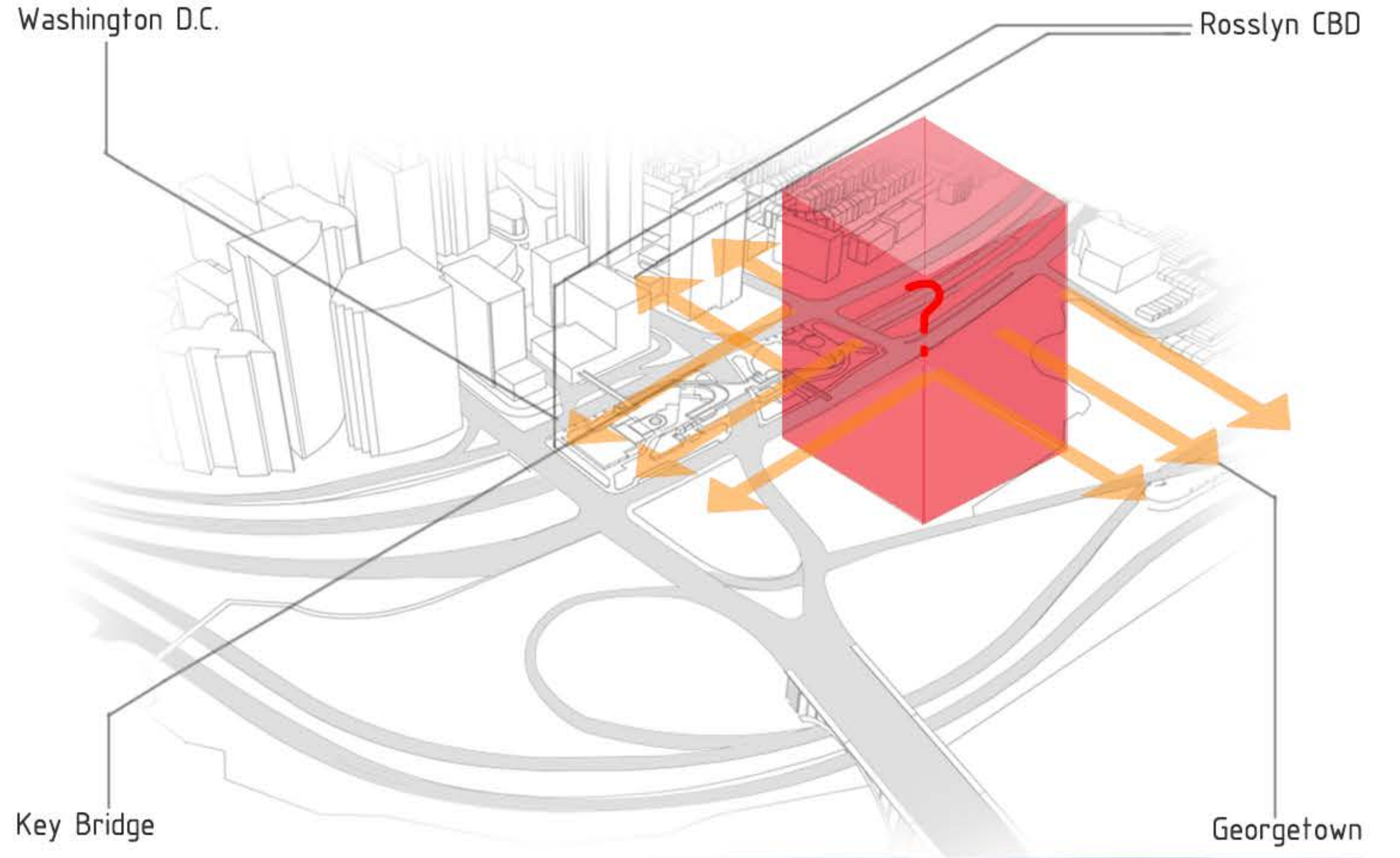
Height & Views



Washington D.C.



Rosslyn CBD



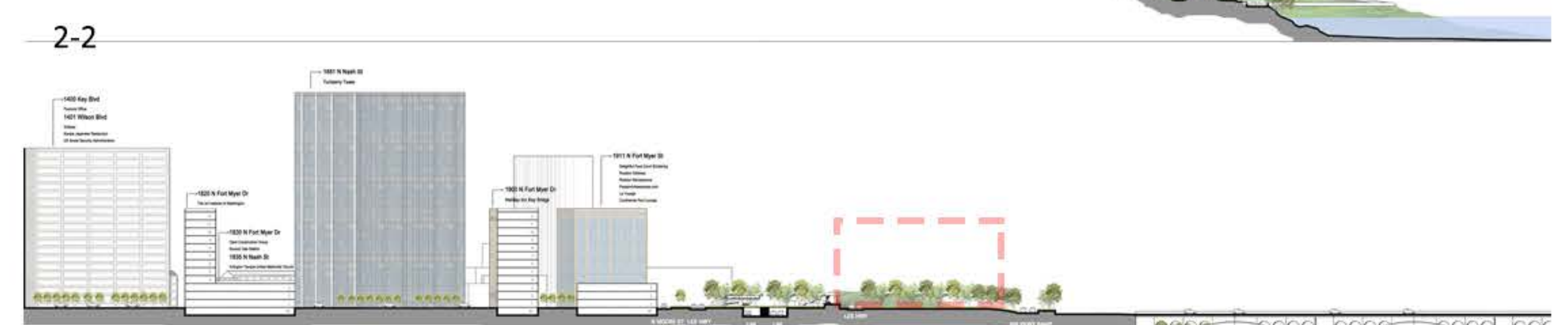
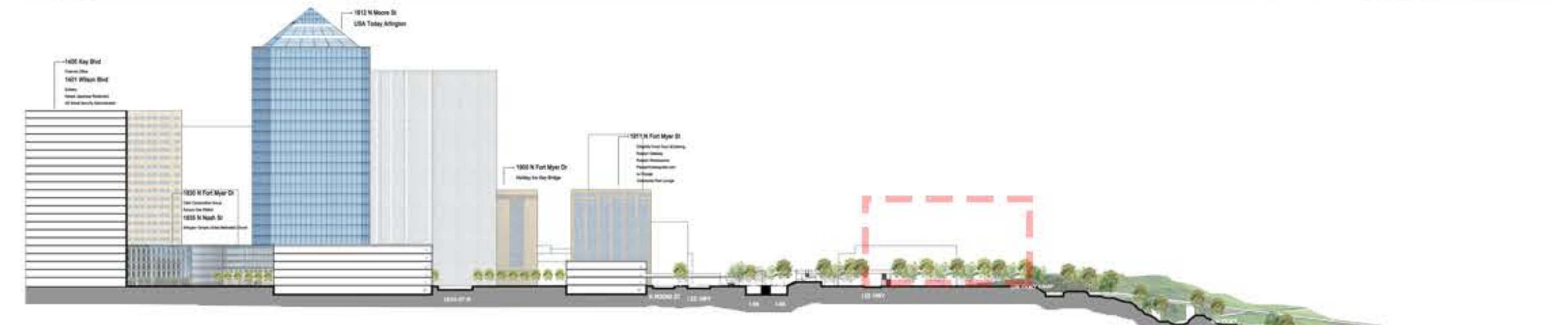
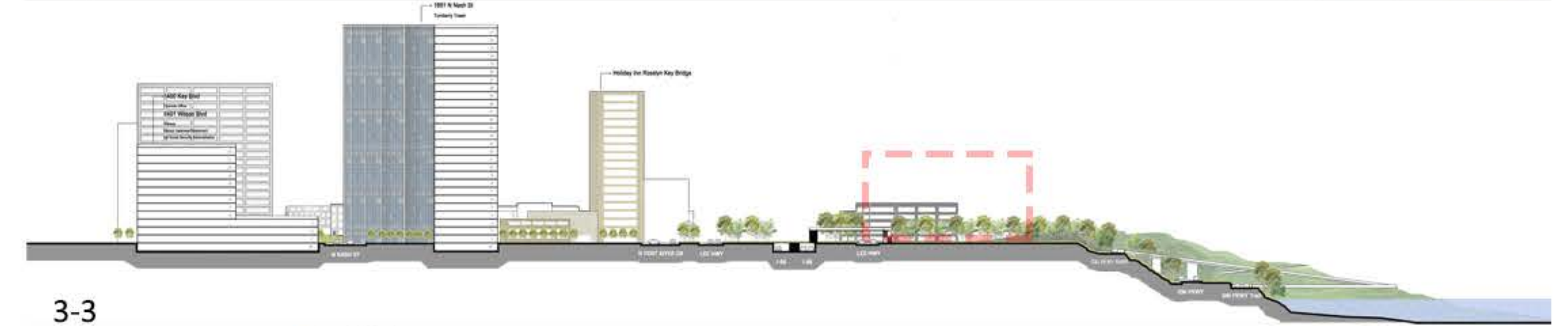
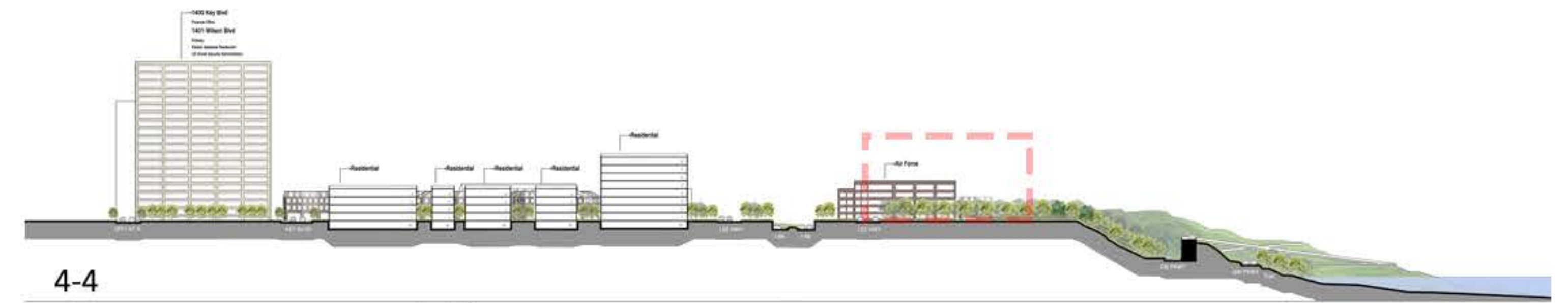
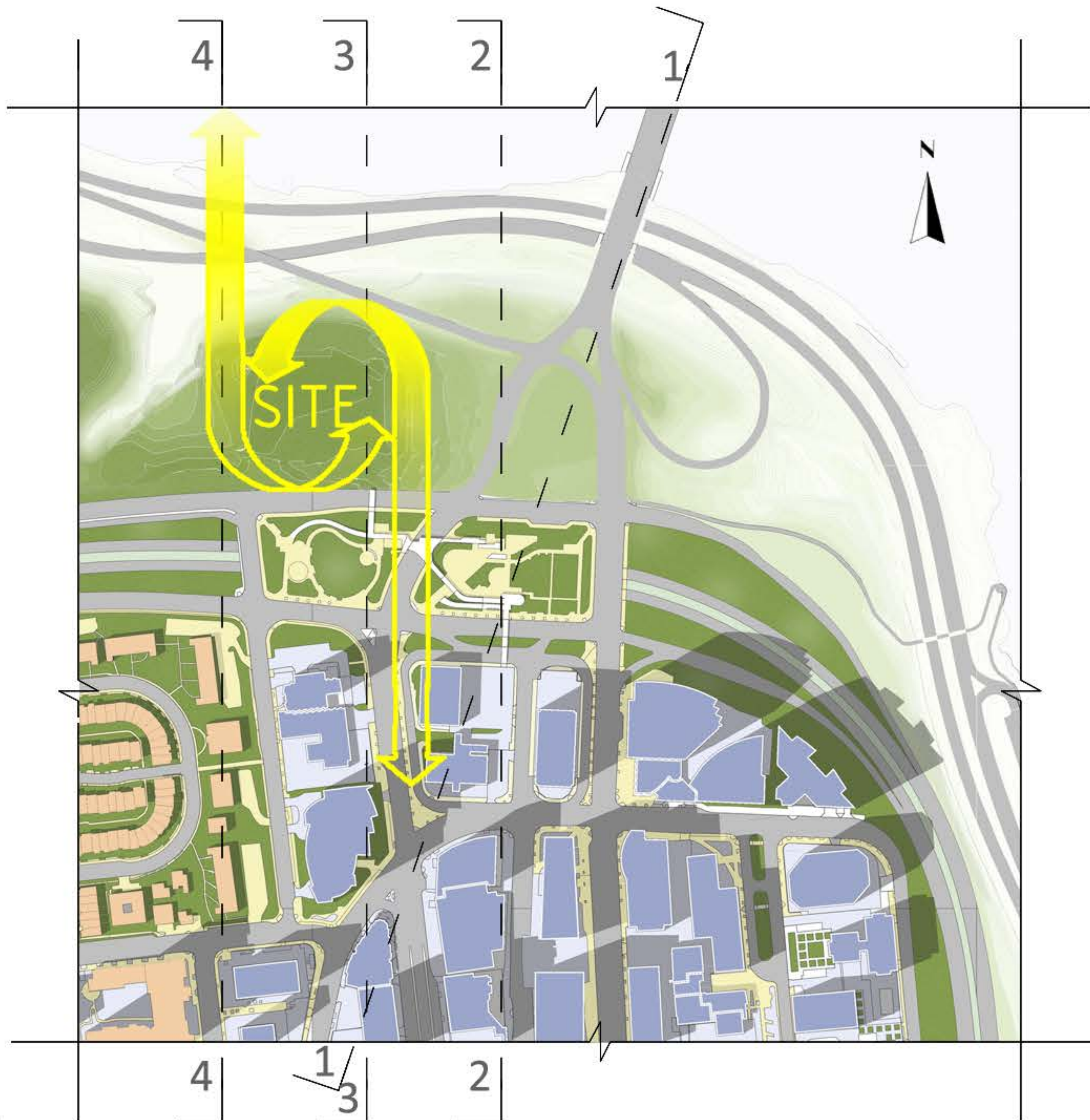
Key Bridge

Georgetown



## Site and City Skyline

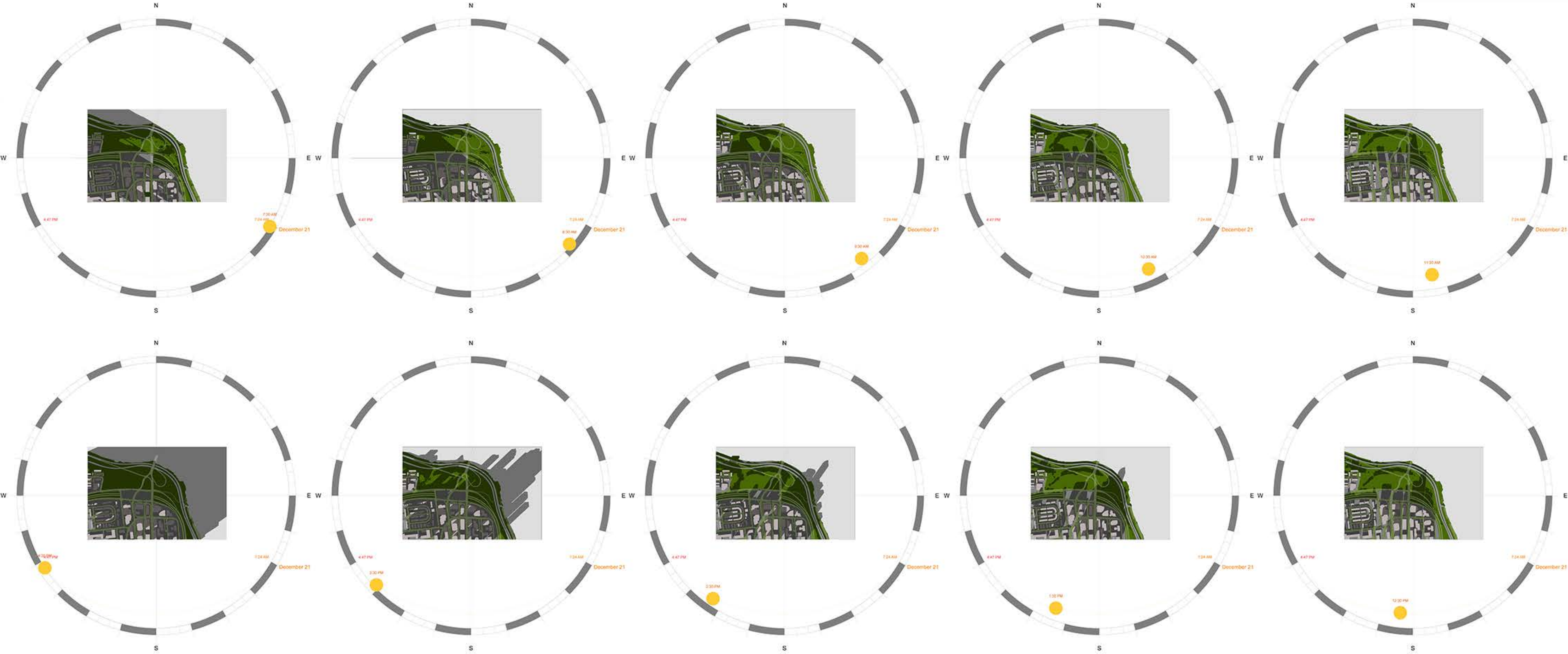
Based on the current condition, I propose reprogramming the waterfront area. Take advantage of the strategic location of Hotel Marriott, enhance the function of residential, introduce more public and commercial activities into the site, and modify the walking environment of the Heritage Trail. We should consider turn the Rosslyn waterfront area become a vibrant and diverse vertical community. Such community allow people to live, work, visit and play together.





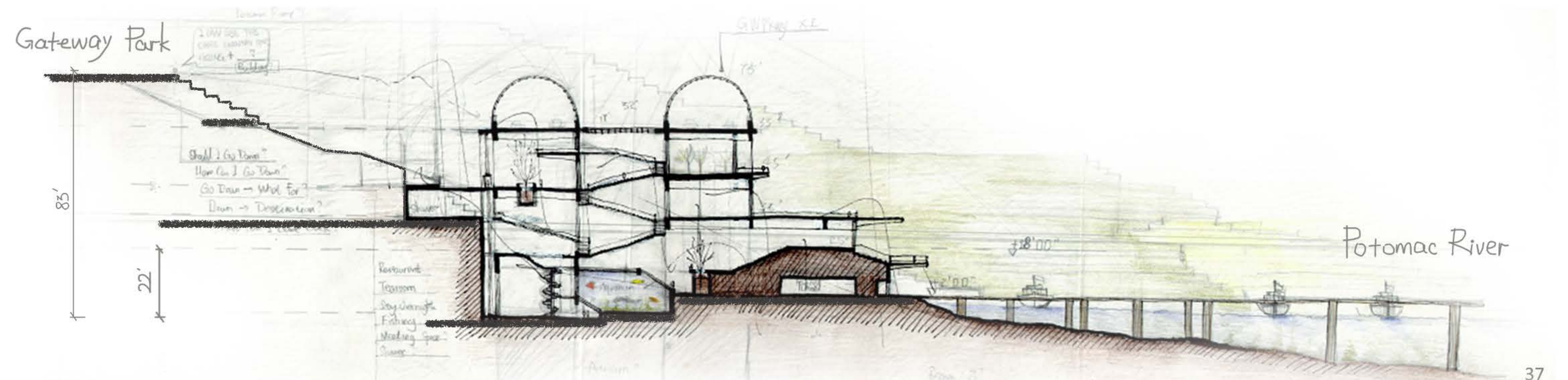
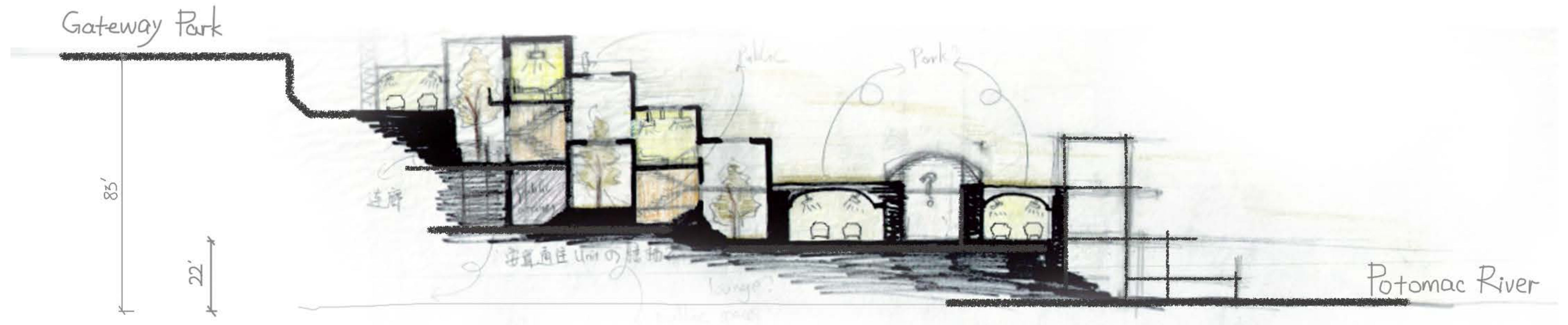
# Solar Study - Winter Solstice

From the solar studies, we can see the shadows from the skyscrapers adjacent impact the Rosslyn waterfront area.

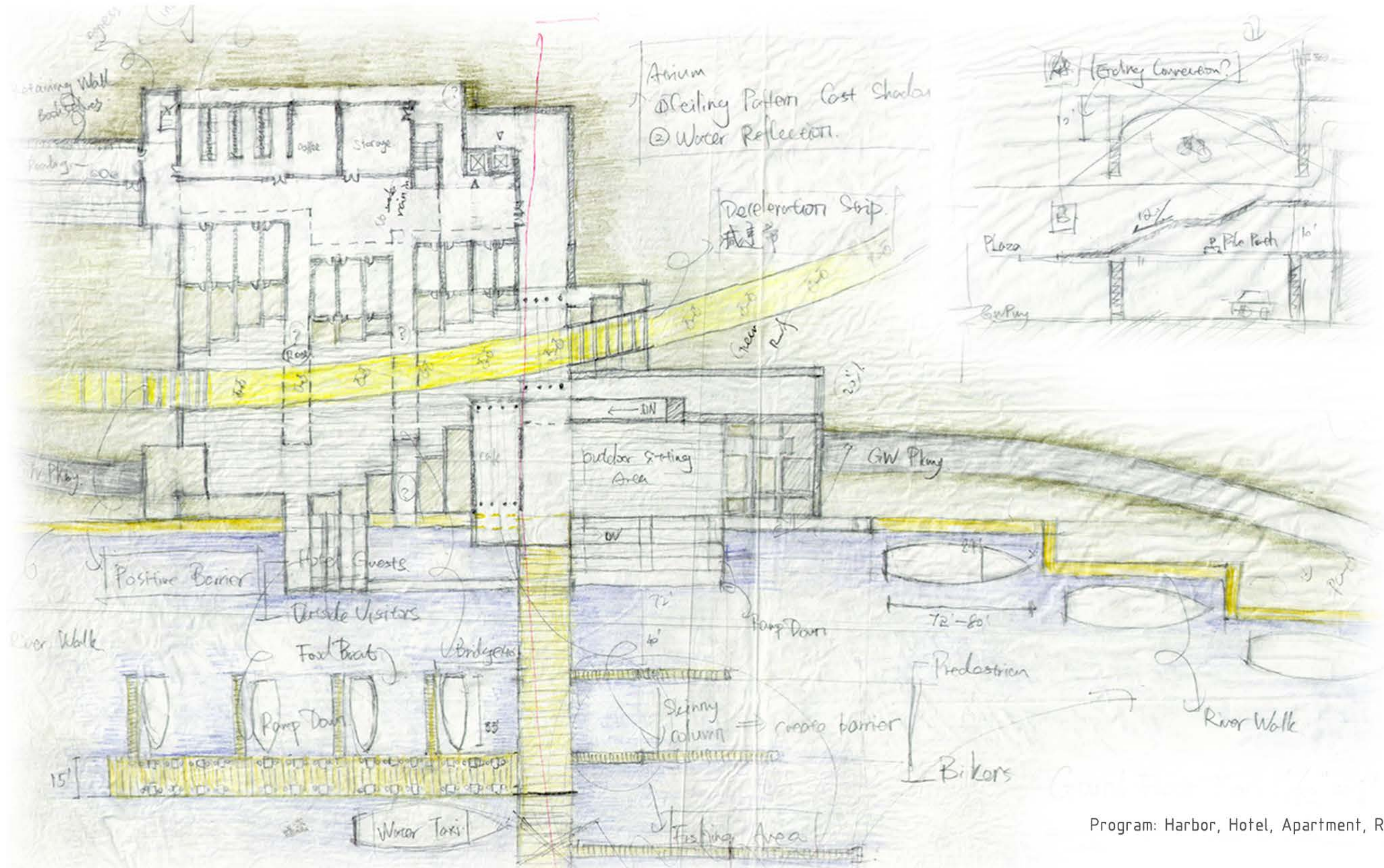


## Path from Gateway Park to Potomac River

Height difference and the heavy traffic are the biggest challenges for people to get to the Potomac River. If we take advantage of the terrace and the trees surrounded the parkway, it is likely for us to create another elevated park just like Gateway Park.



### Path and Activities

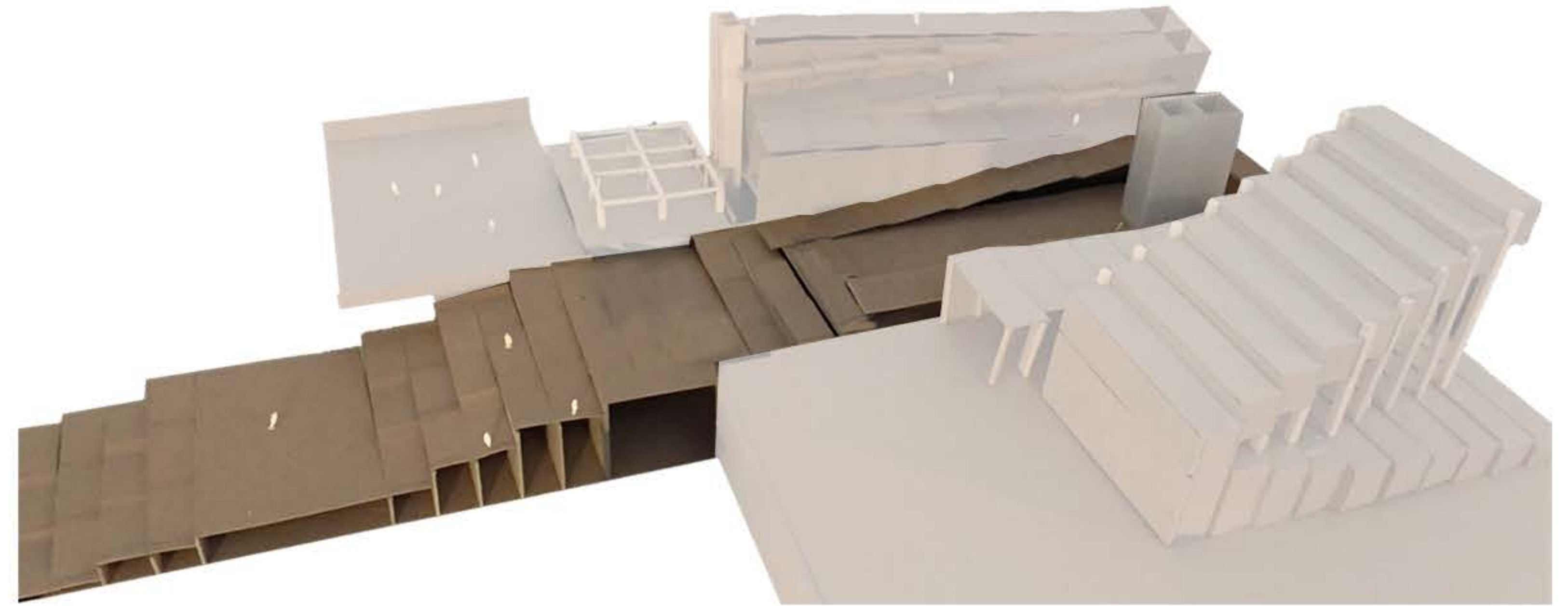


Program: Harbor, Hotel, Apartment, Restaurant

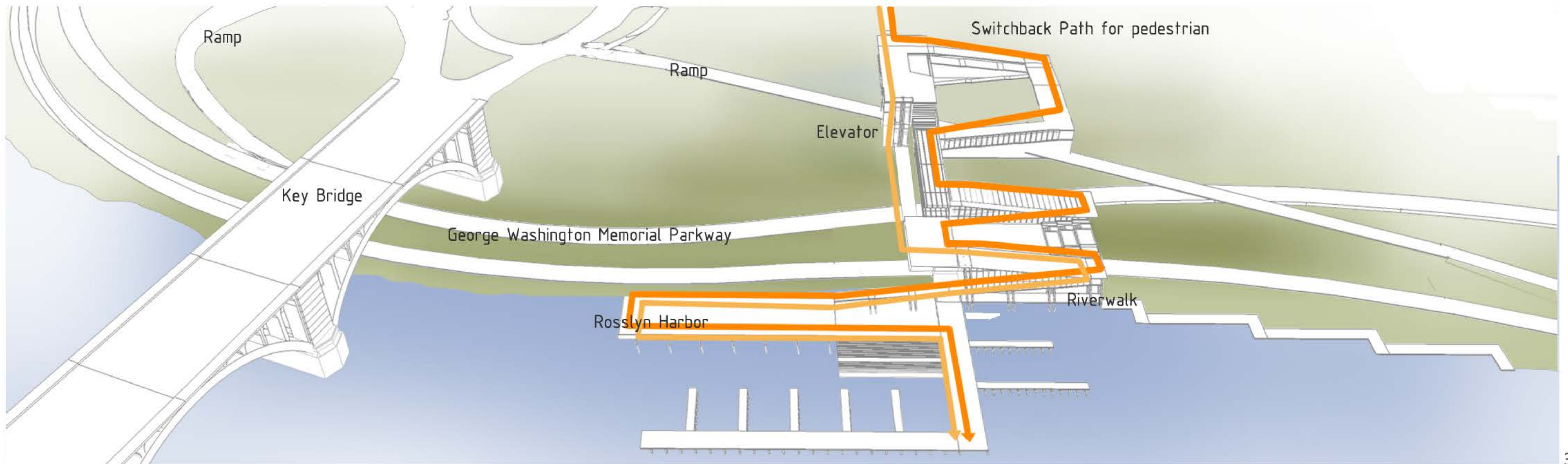
### Path and Activities



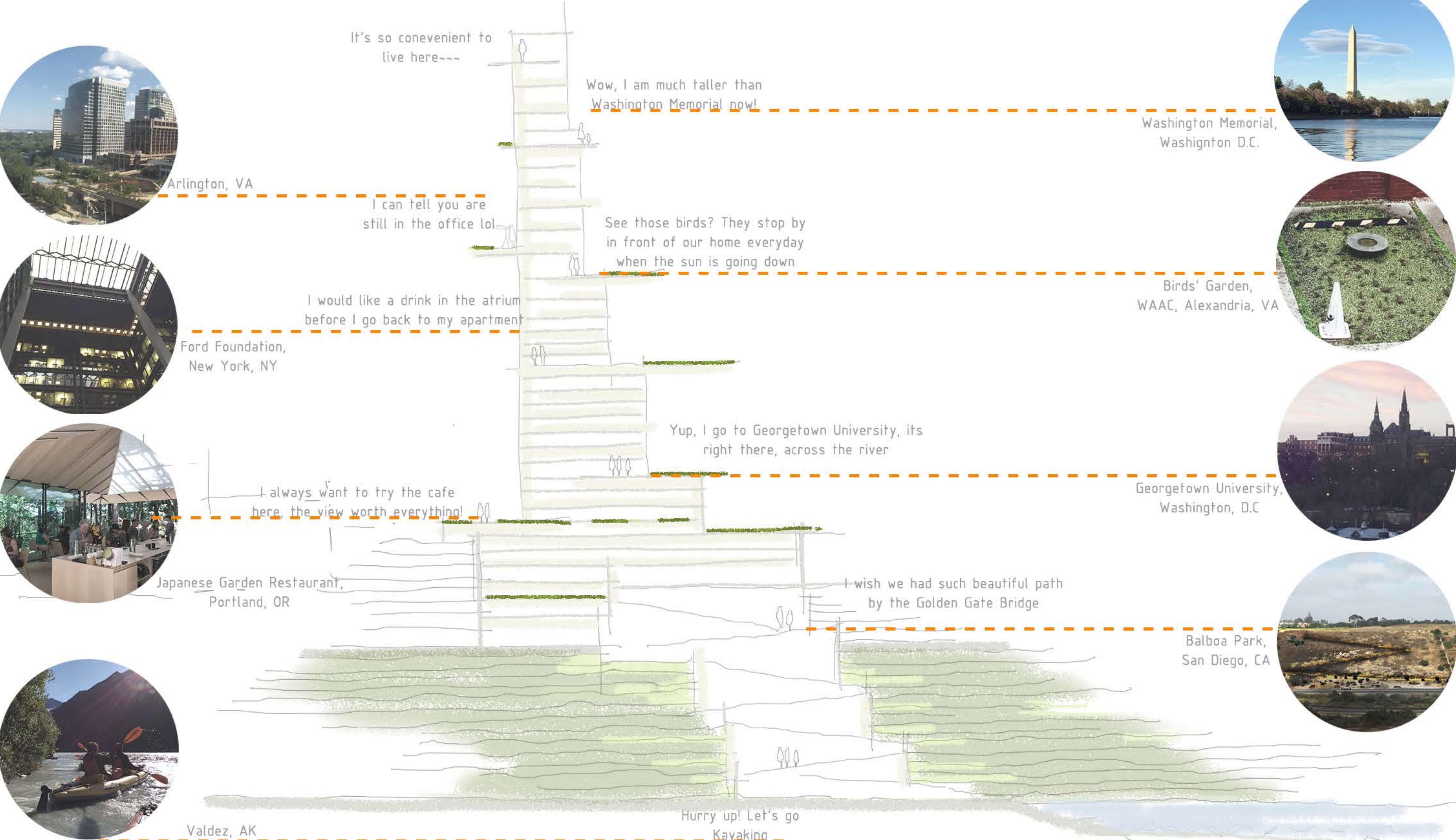
Boat House + Tea House



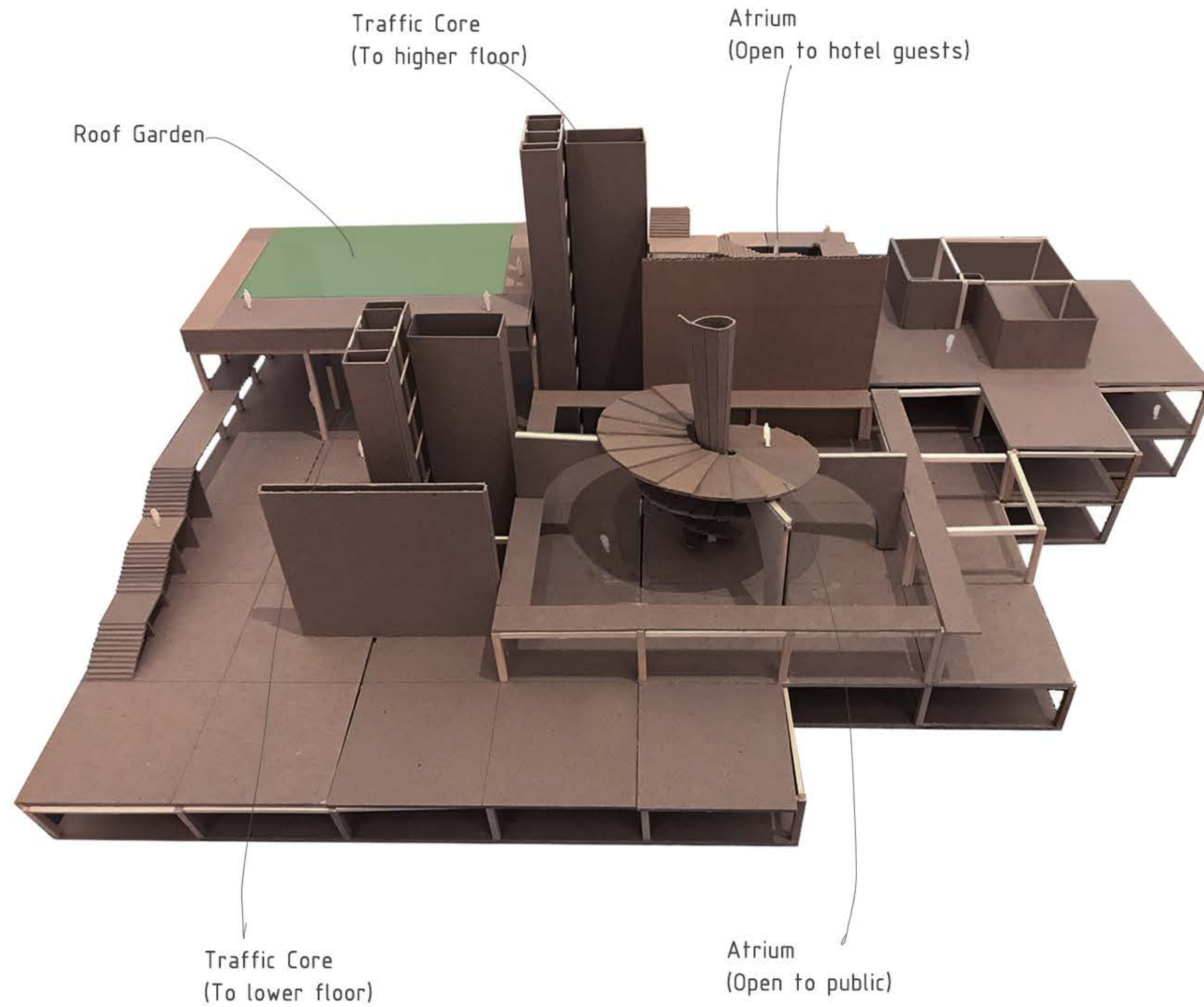
Switchback



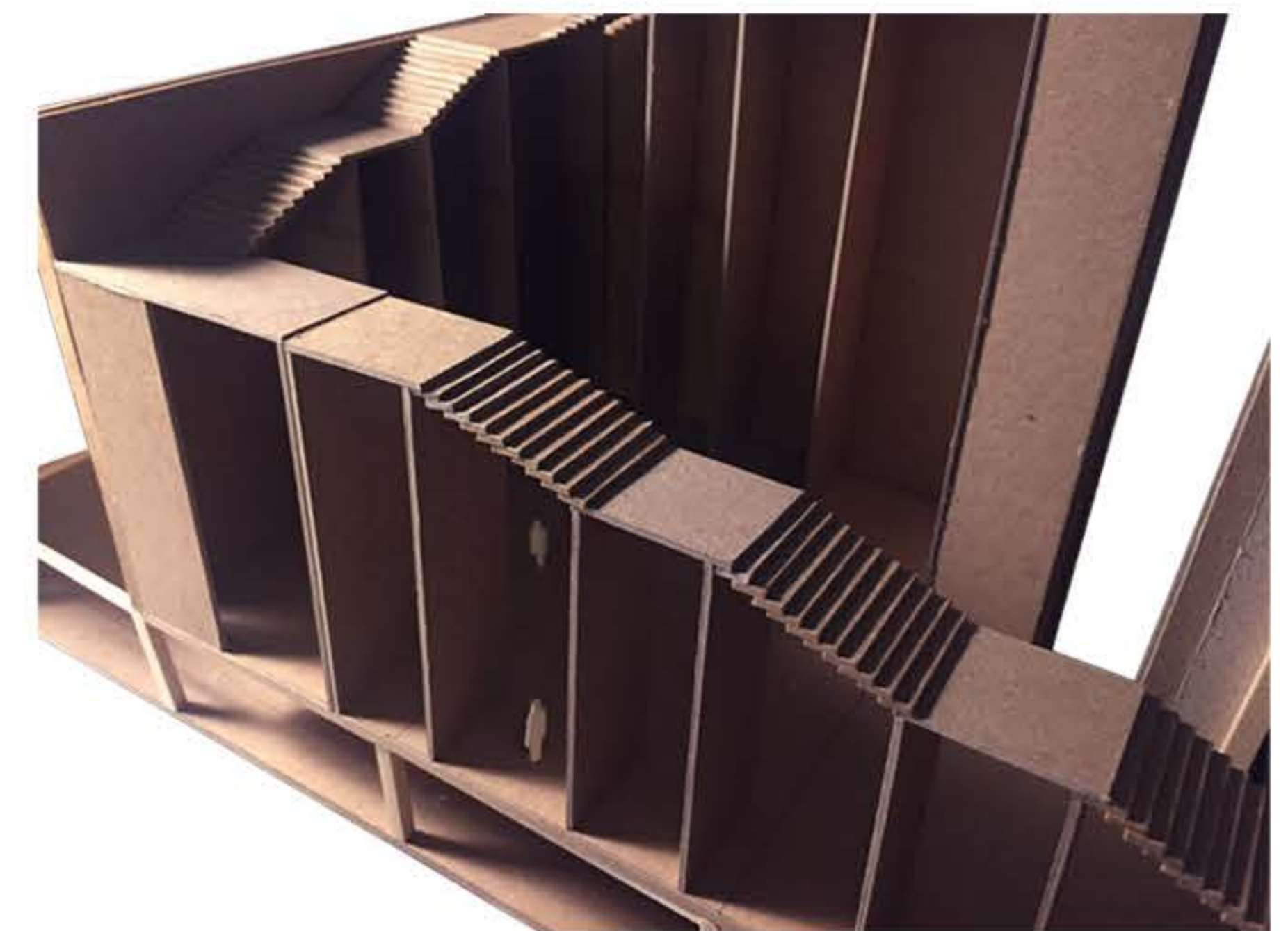
Vertical Neighborhood



# Study models

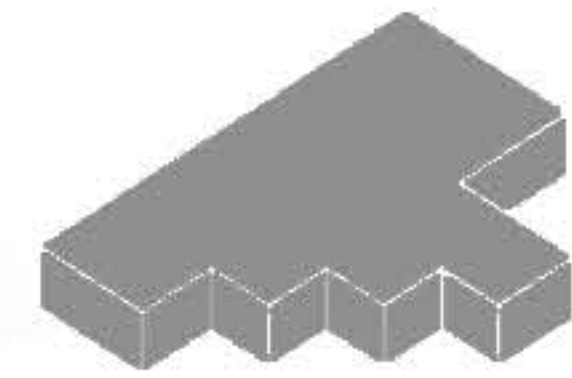
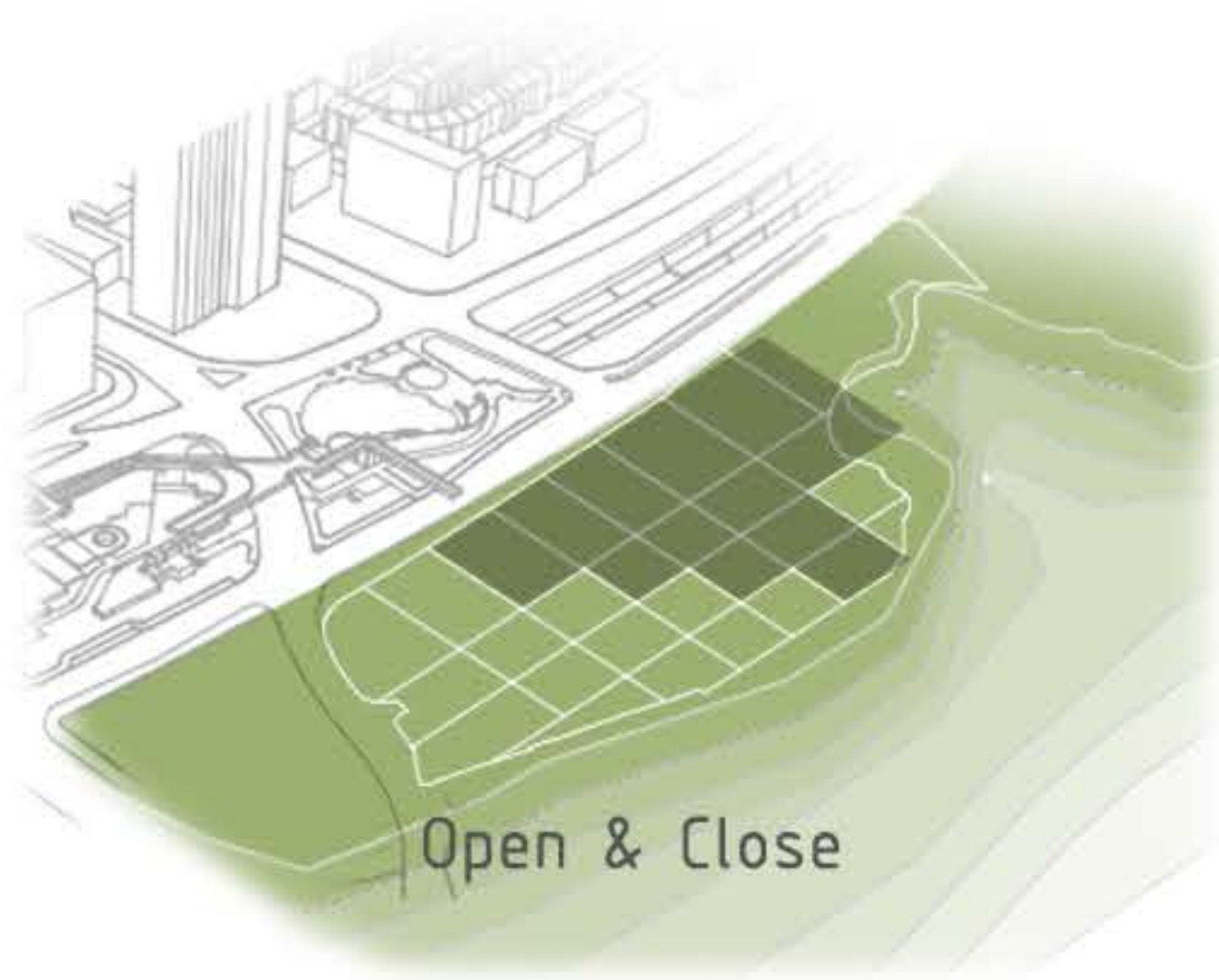


Sculpture staircase for public?

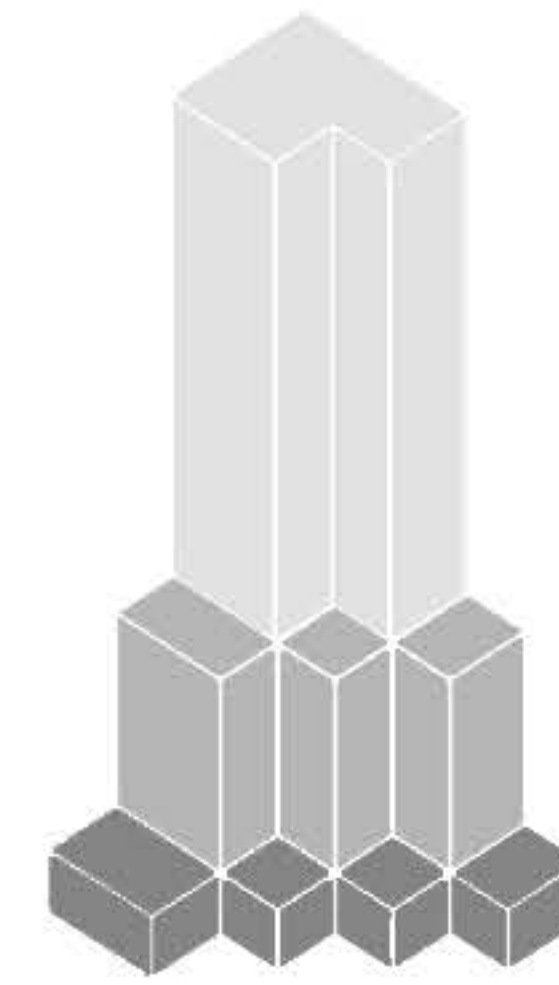


Atrium with staircase surround?

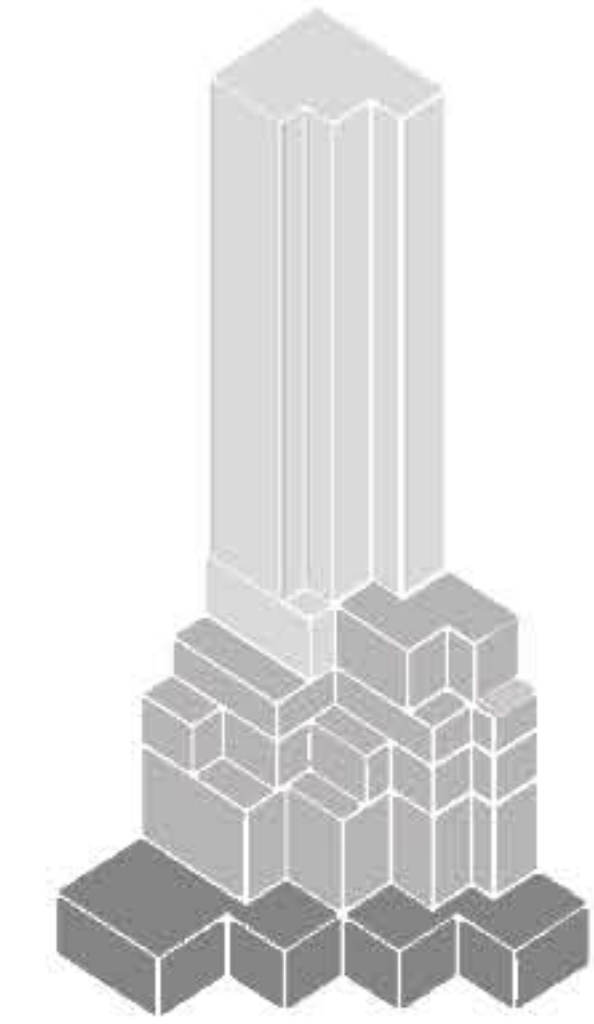
Volume & Function



Massing  
 ■ Public Space

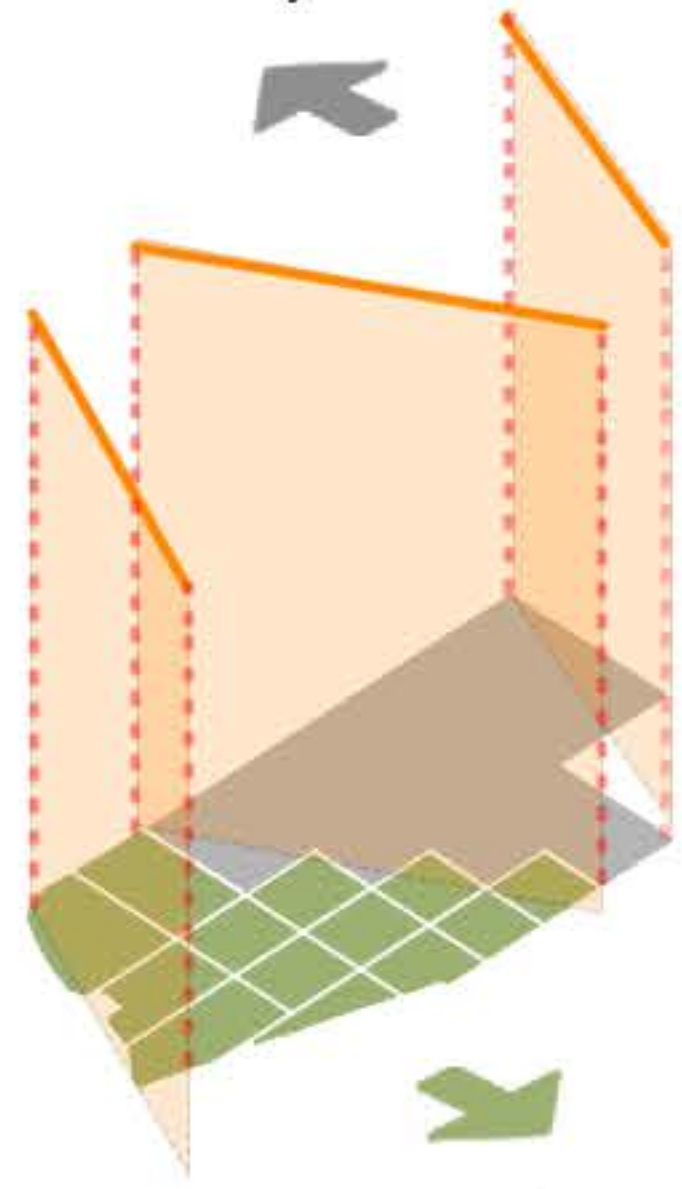


Set back & Overlay  
 ■ Public Space  
 ■ Hotel  
 ■ Apartment



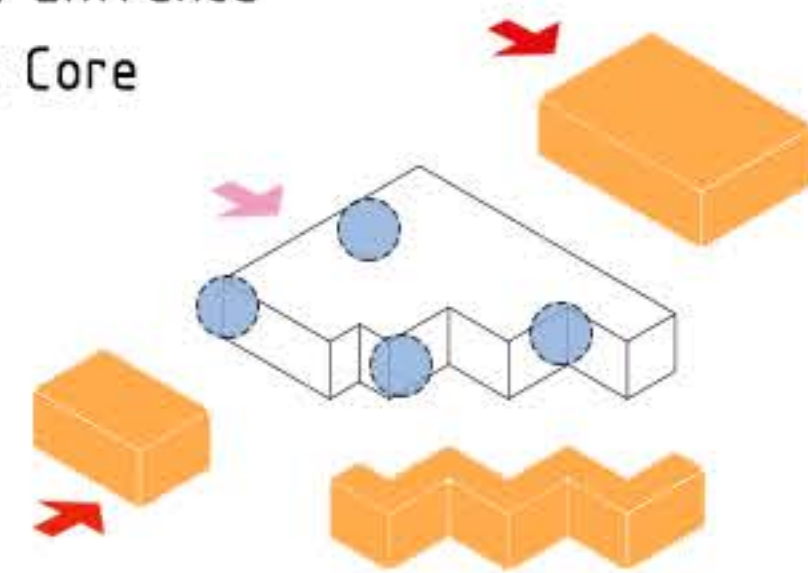
Transformation  
 ■ Lobby, Office, Dining, Gym, Ballroom  
 ■ Hotel Rooms, Atrium  
 ■ Apartments, Atrium, Private Bar

Building open to the City

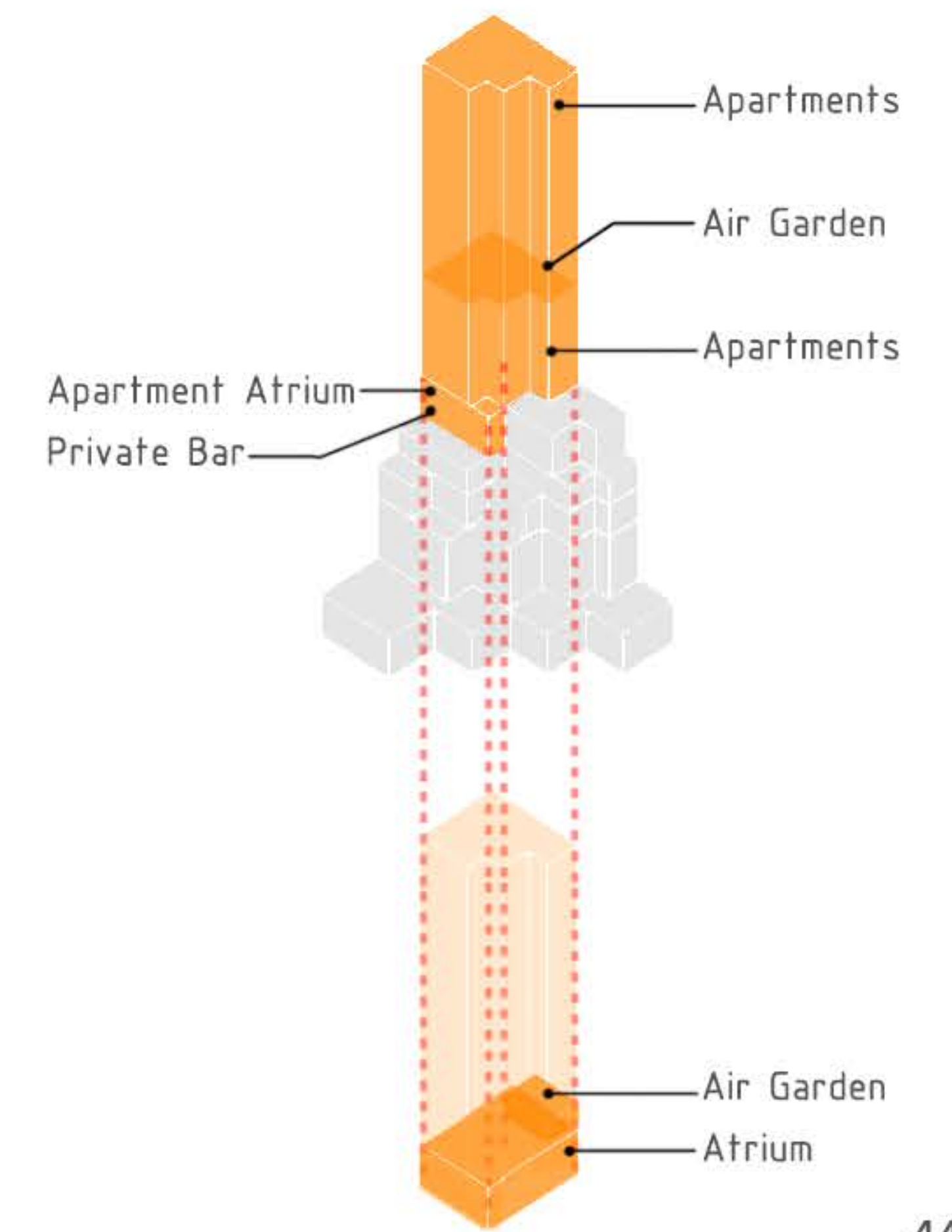
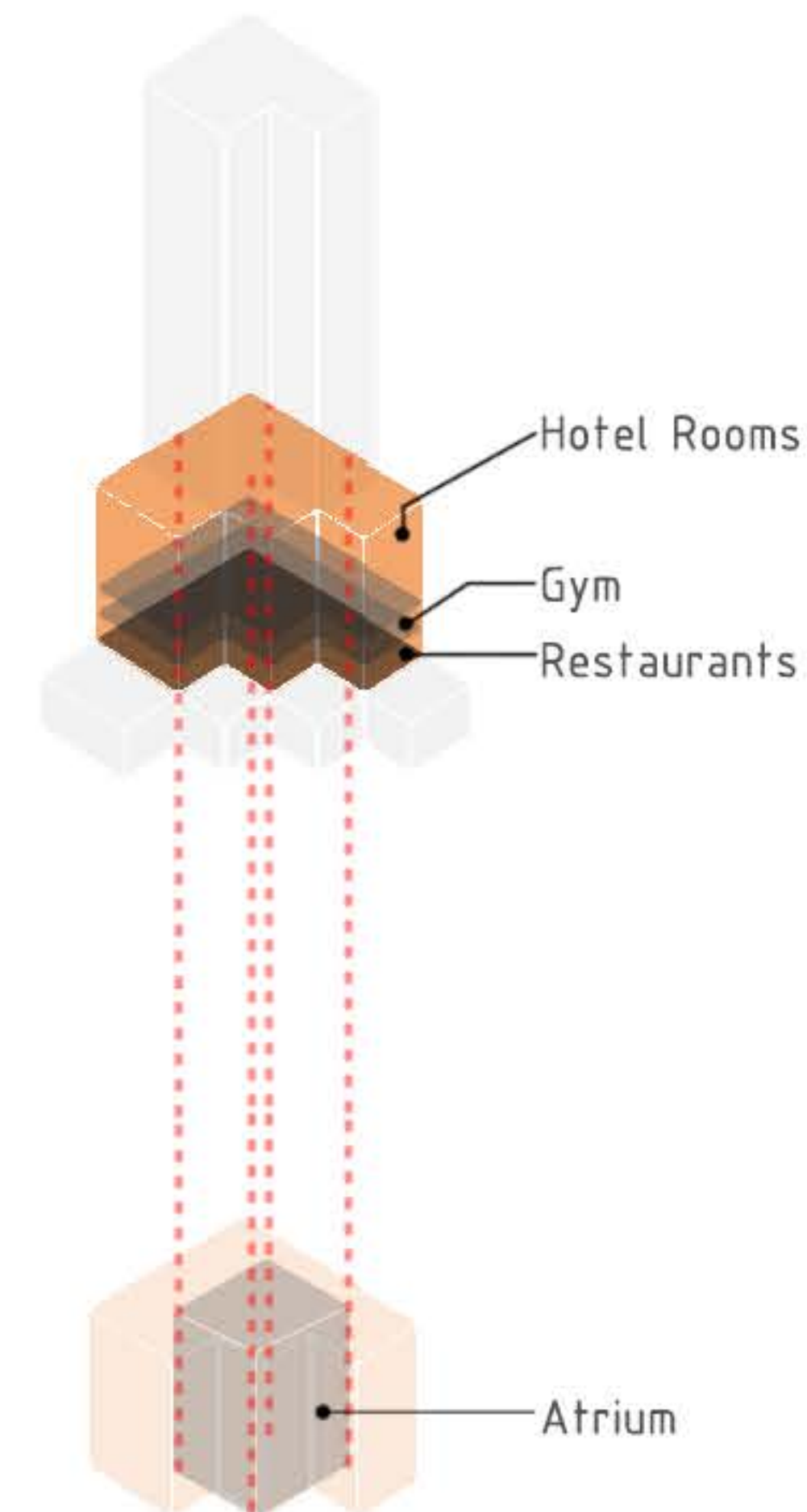


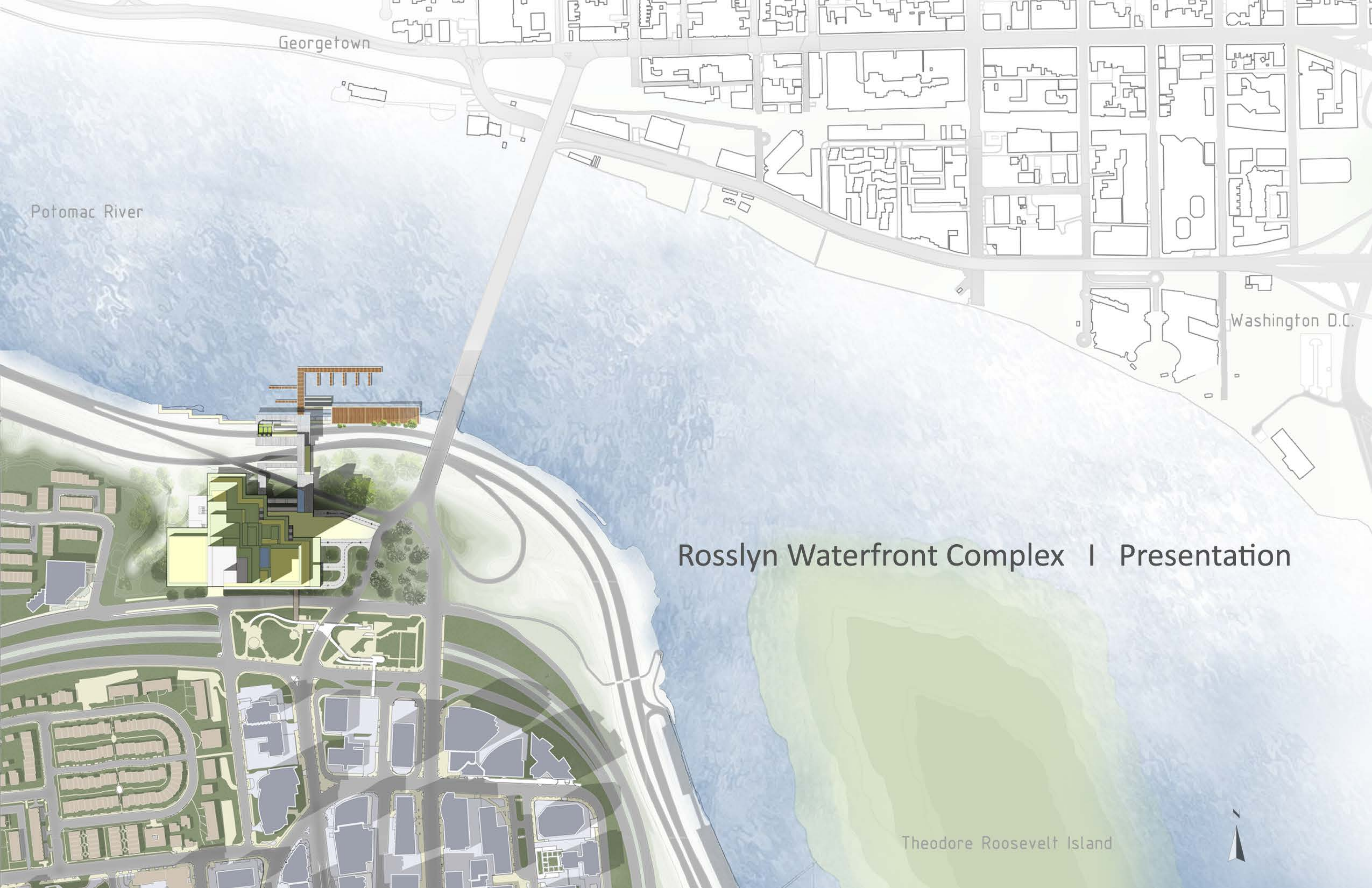
Plaza open to the River

- ➔ Public Entrance
- ➔ Private Entrance
- Traffic Core



- Apartment Lobby
- Hotel Lobby
- Public Lobby
- Entrance Transition
- Ballroom
- Prefunction
- Support Space
- Office
- Entertainment
- Dinning





Georgetown

Potomac River

Washington D.C.

# Rosslyn Waterfront Complex | Presentation

Theodore Roosevelt Island





Master Plan

SCALE IN FEET

20' 40' 100' 200'

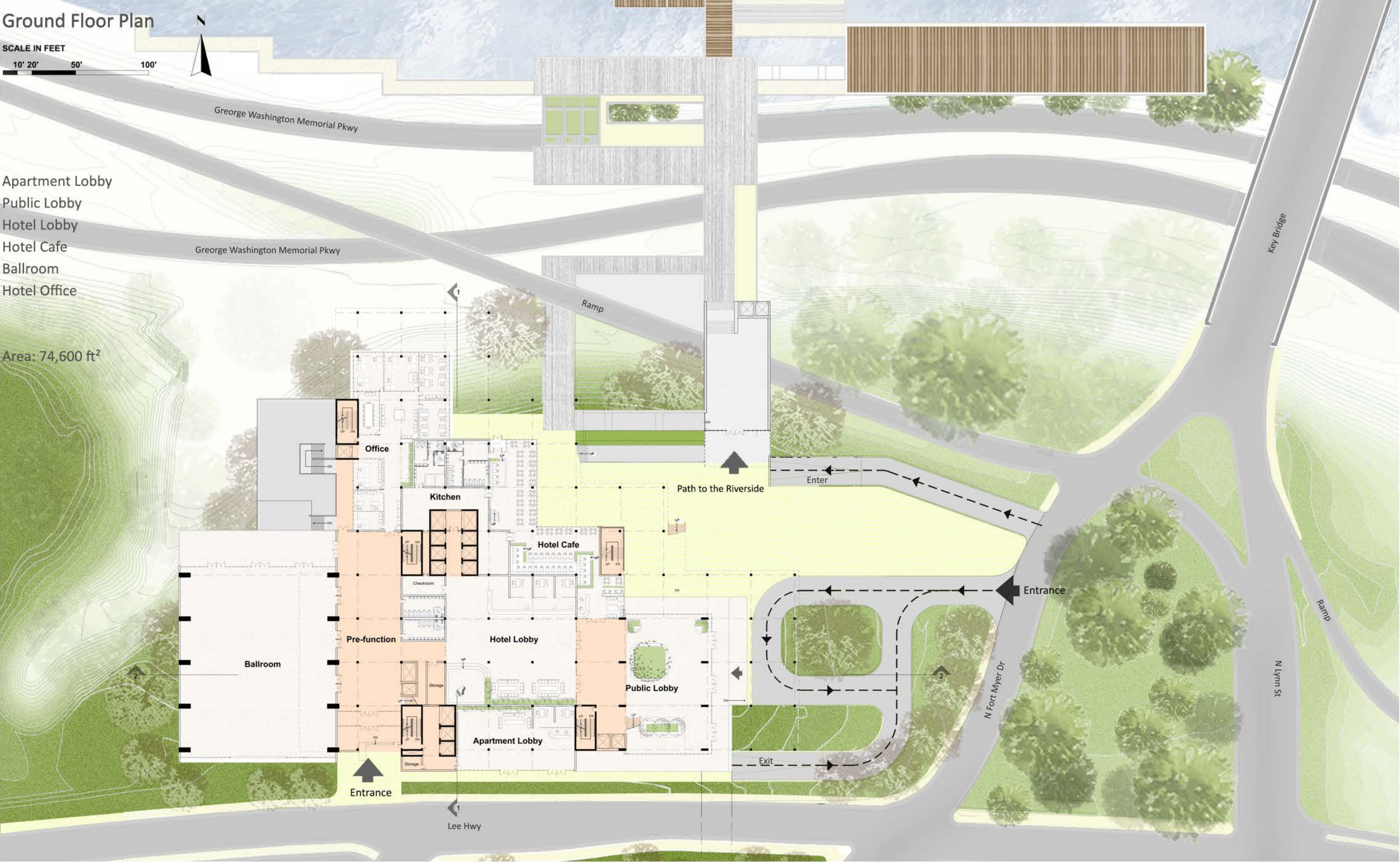


### Ground Floor Plan

SCALE IN FEET  
10' 20' 50' 100'

- Apartment Lobby
- Public Lobby
- Hotel Lobby
- Hotel Cafe
- Ballroom
- Hotel Office

Area: 74,600 ft<sup>2</sup>



### 2nd Floor Plan

SCALE IN FEET



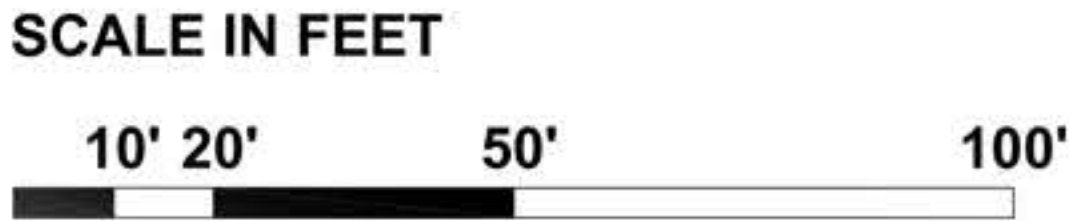
Public Area-

Hotel Cafe  
Ballroom Mezzanine

Area: 58,910 ft<sup>2</sup>

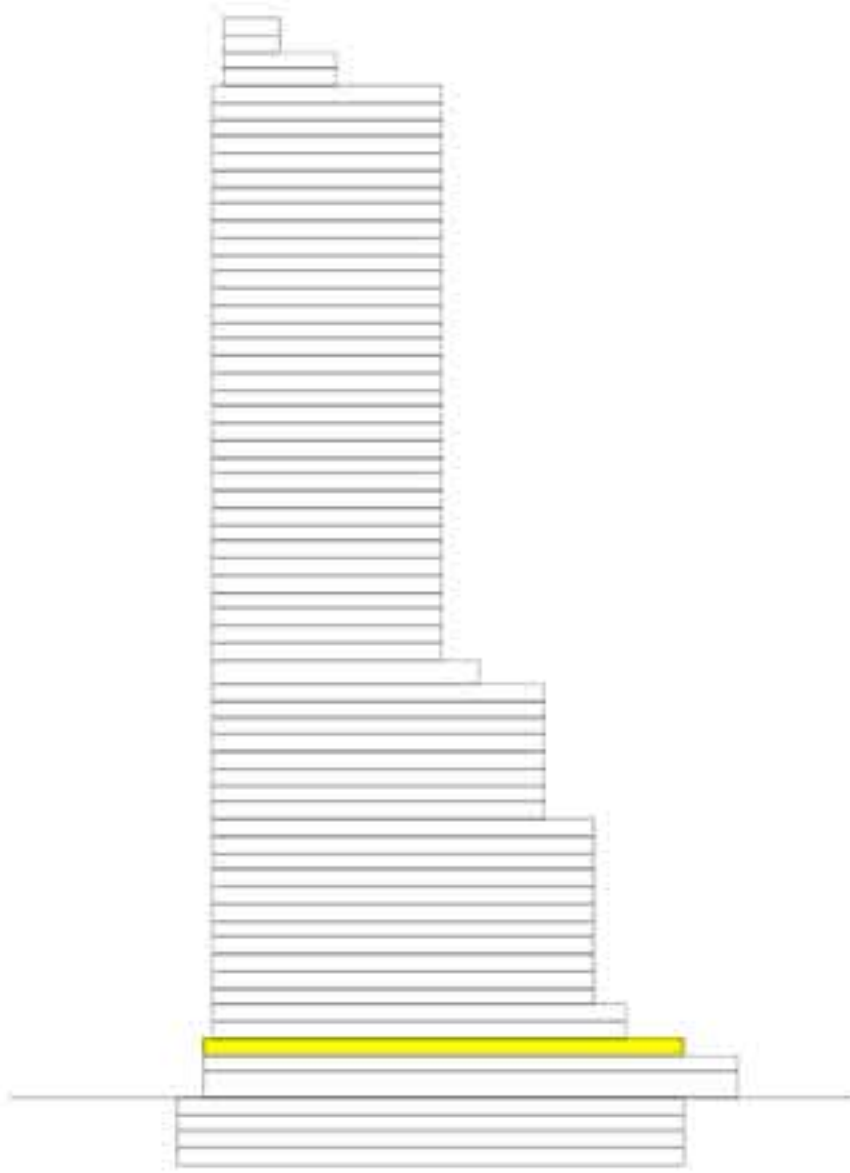


### 3rd Floor Plan

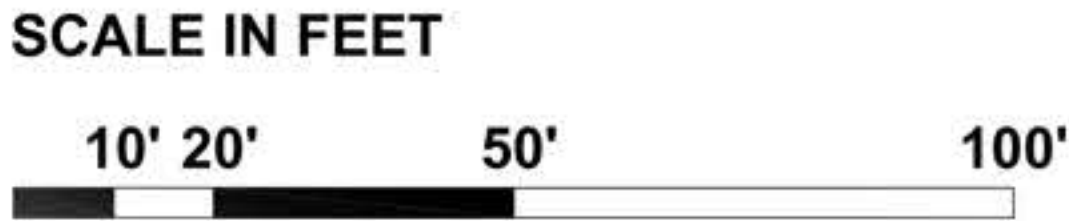


Gym  
Apartment Office

Area: 66,917 ft<sup>2</sup>



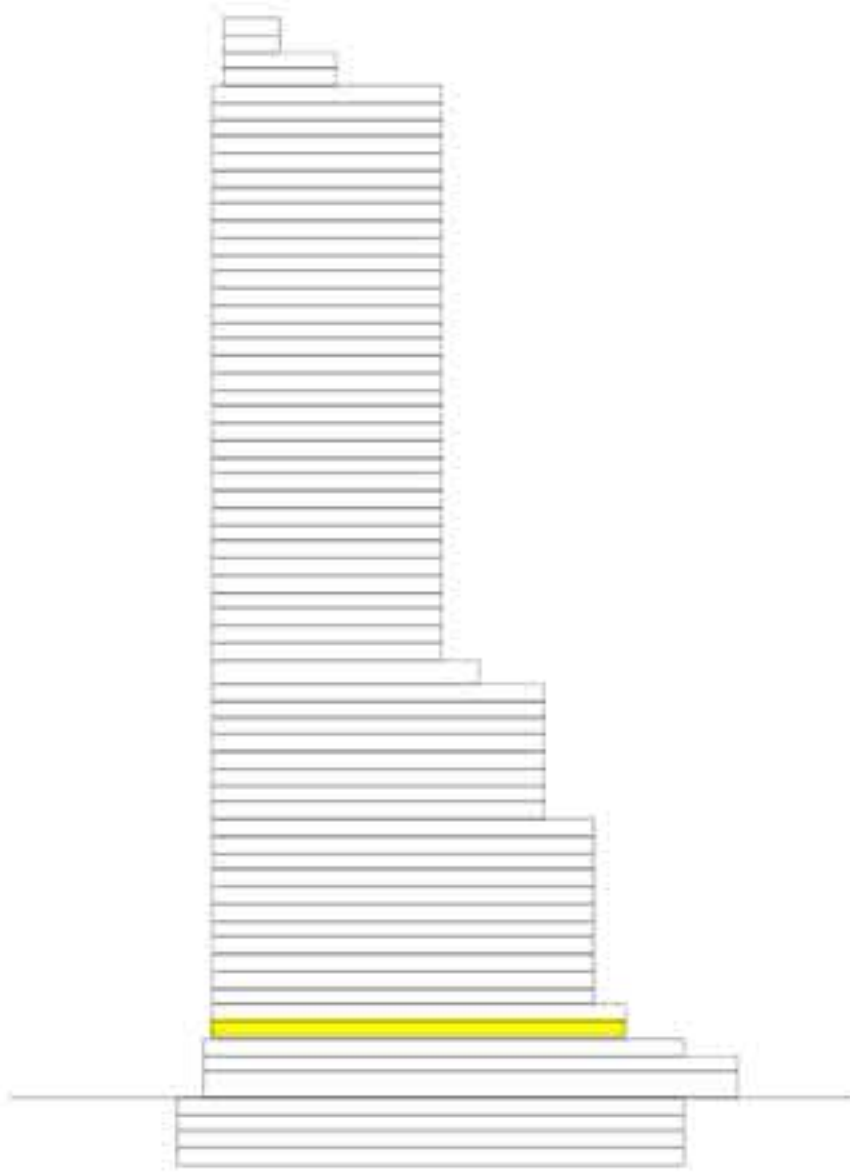
### 4th Floor Plan



Public Area-

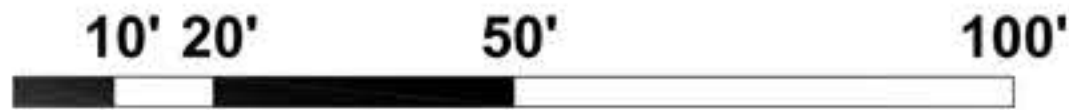
Gallery  
Green Roof

Area: 47,380 ft<sup>2</sup>



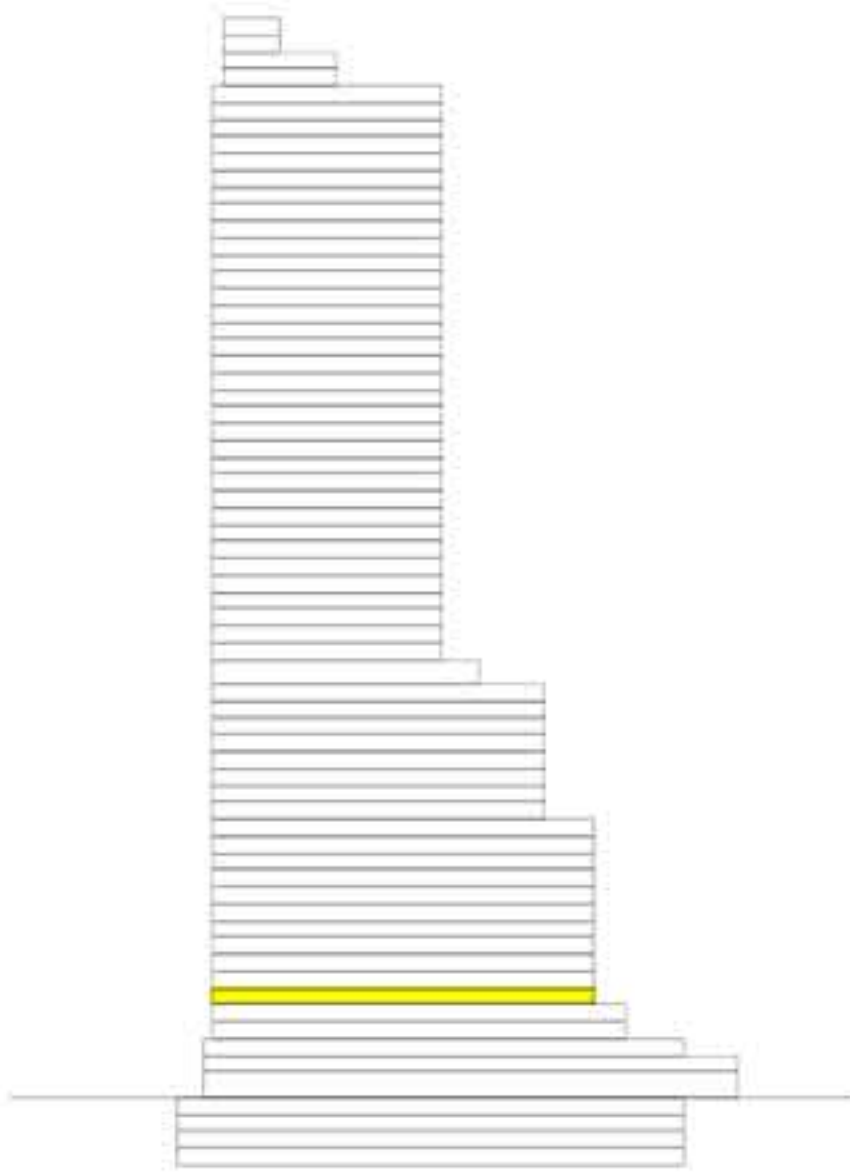
### 6th Floor Plan

SCALE IN FEET



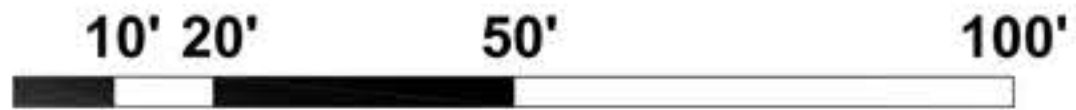
Hotel Restaurant  
Rooftop Garden

Area: 62,520 ft<sup>2</sup>



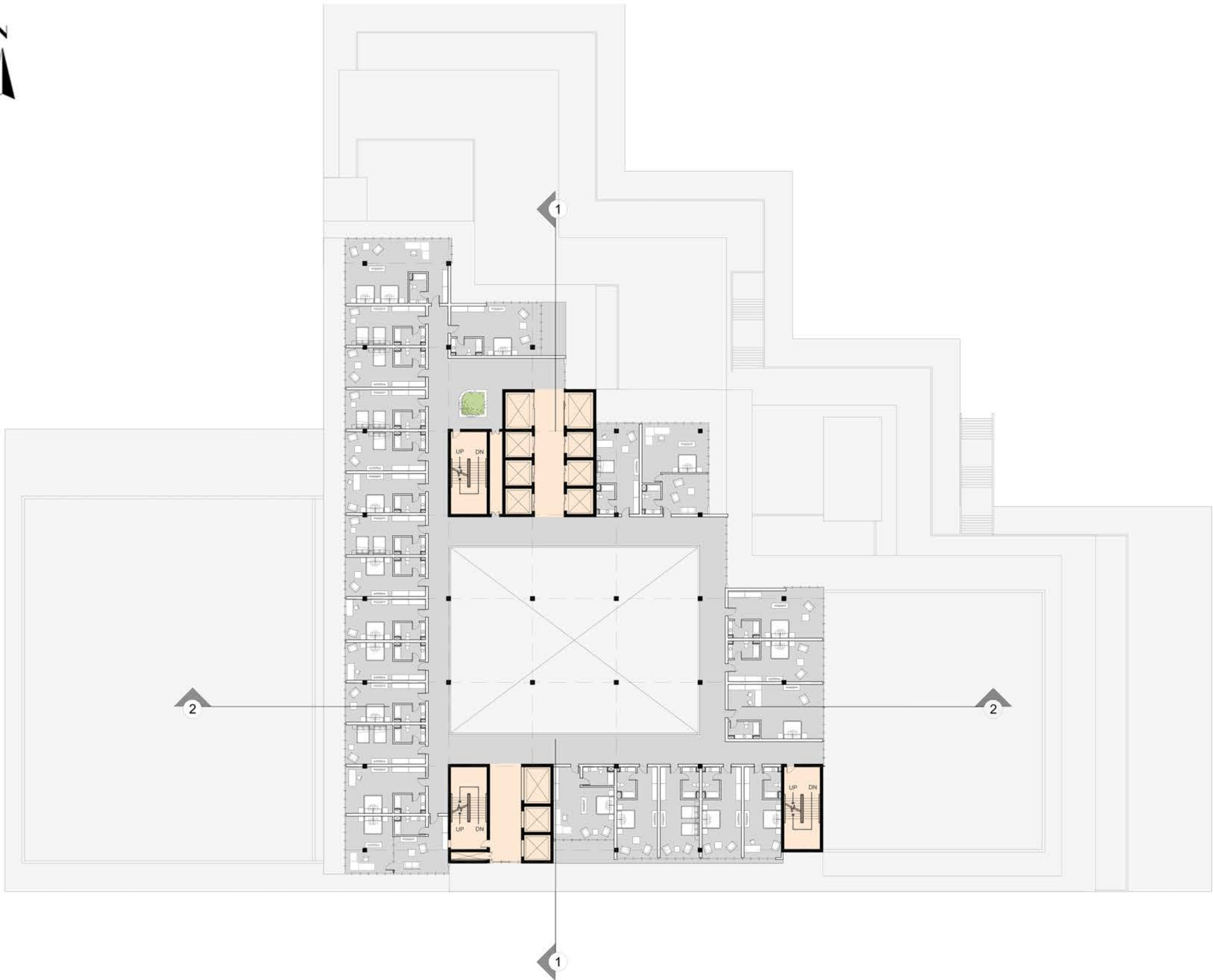
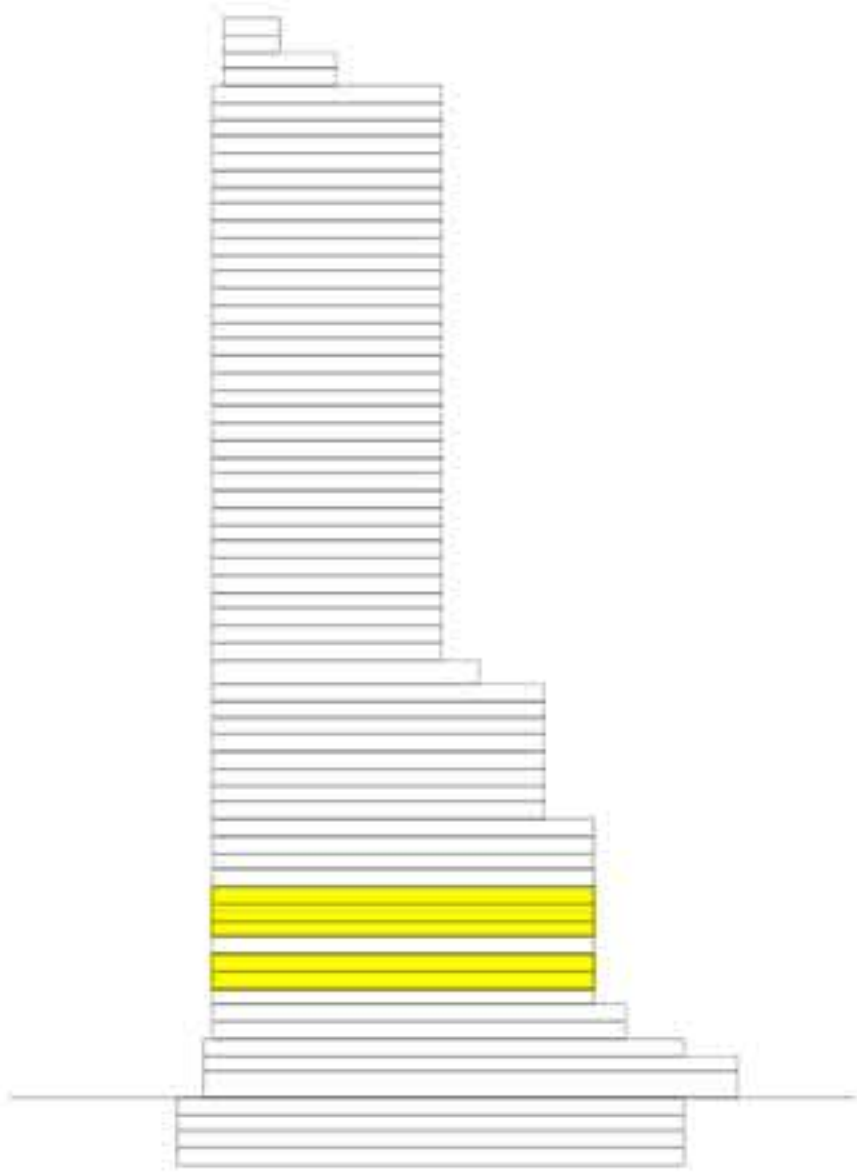
### Plan for floors 7-8,10-12

SCALE IN FEET



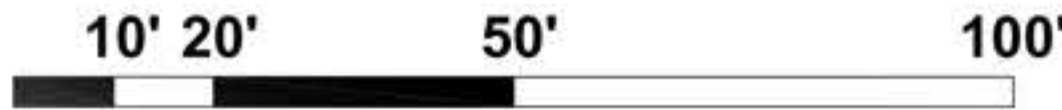
Hotel Guest Rooms: 25

Area: 23,940 ft<sup>2</sup>



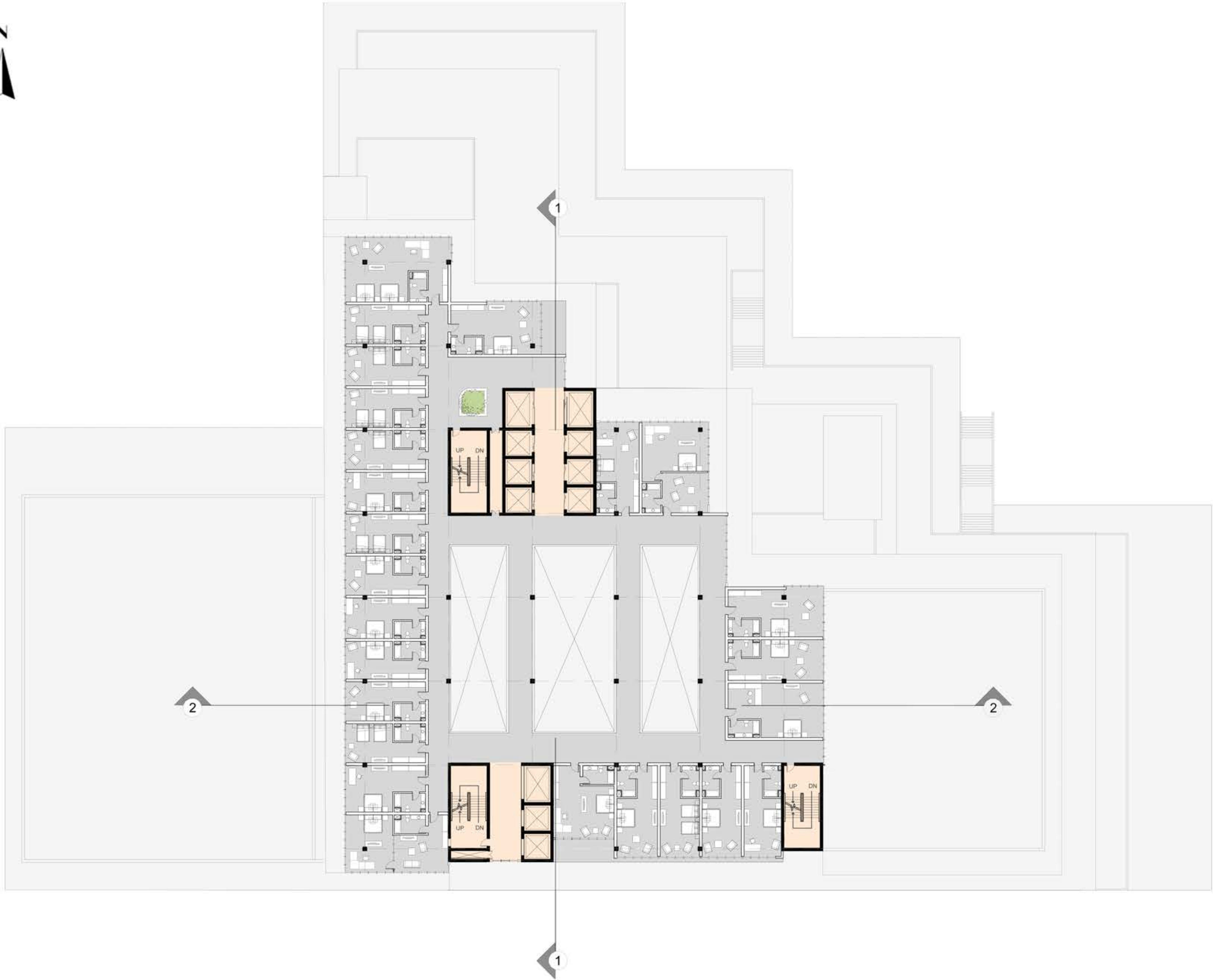
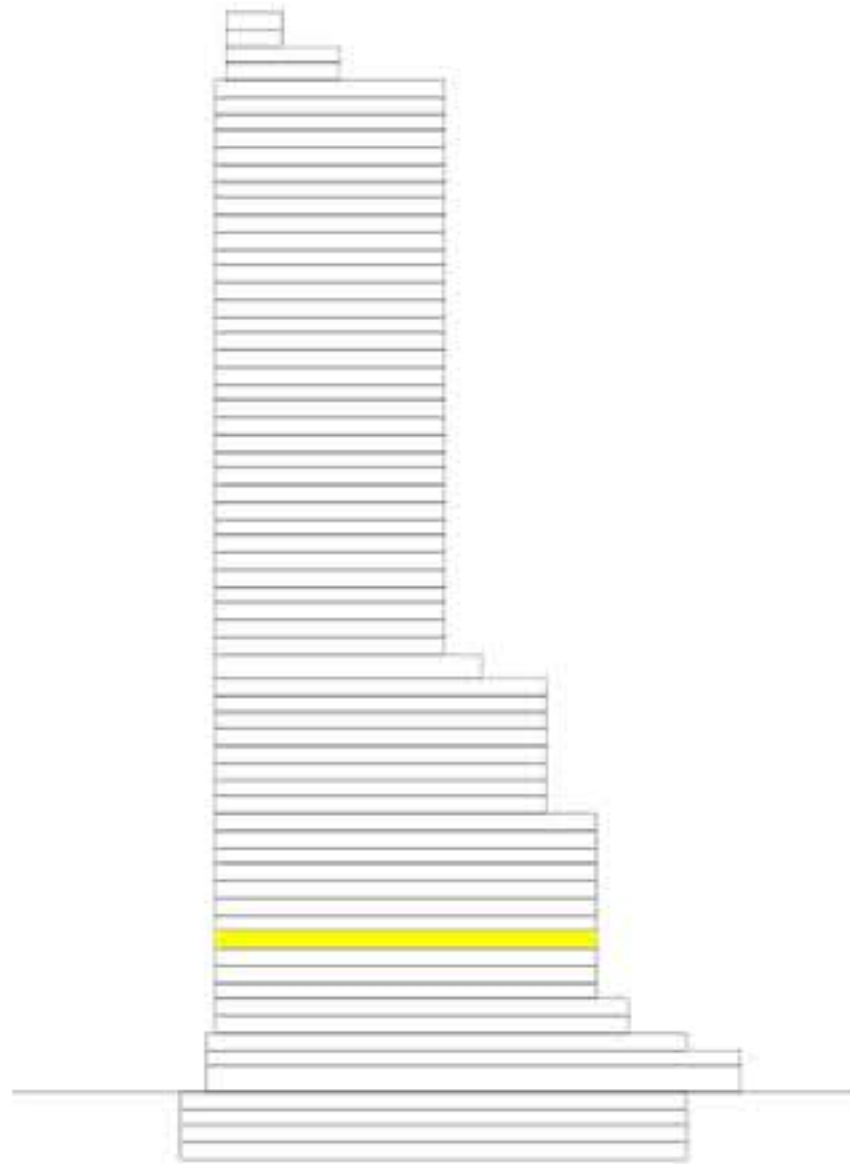
# 9th Floor Plan

SCALE IN FEET



Hotel Guest Rooms: 25

Area: 24,390 ft<sup>2</sup>





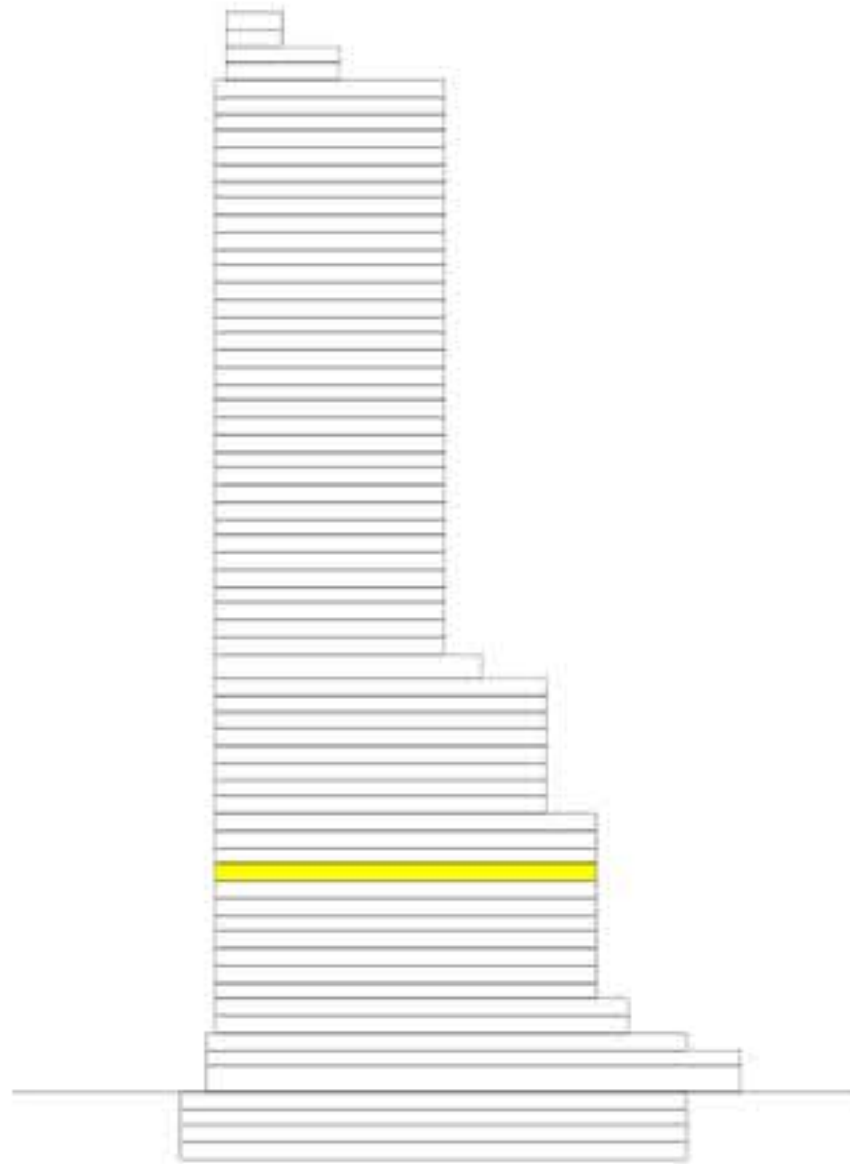
# 13th Floor Plan

SCALE IN FEET



Hotel Guest Rooms: 23  
Green Roof

Area: 27,070 ft<sup>2</sup>



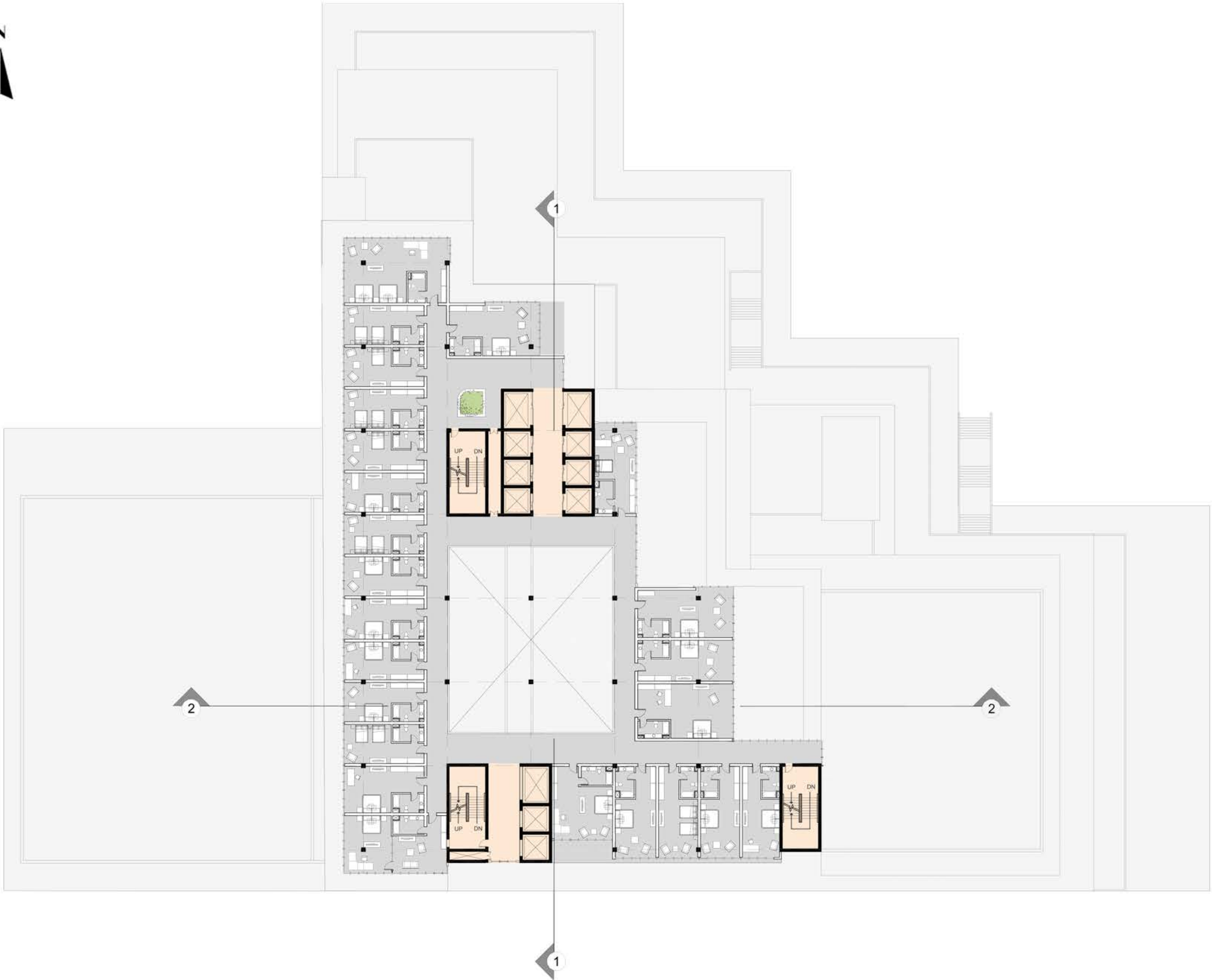
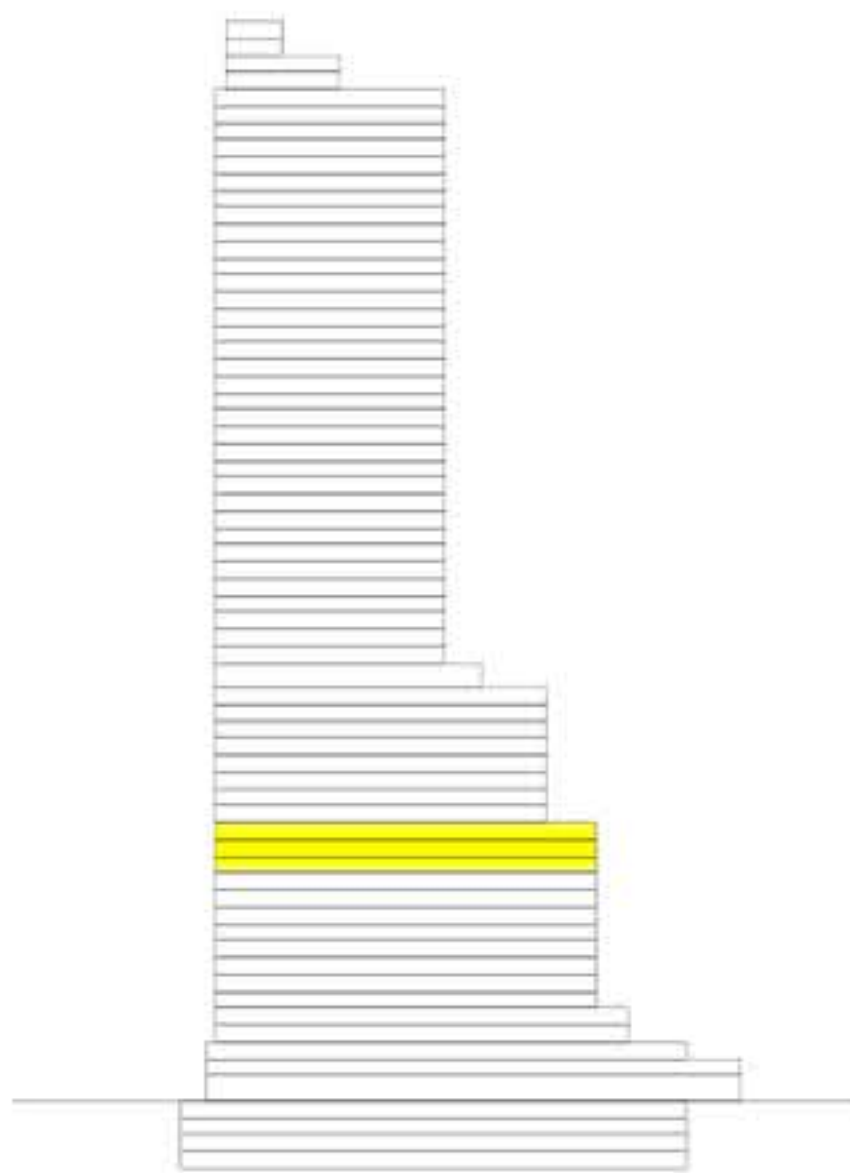
### Plan for floors 14-16

SCALE IN FEET

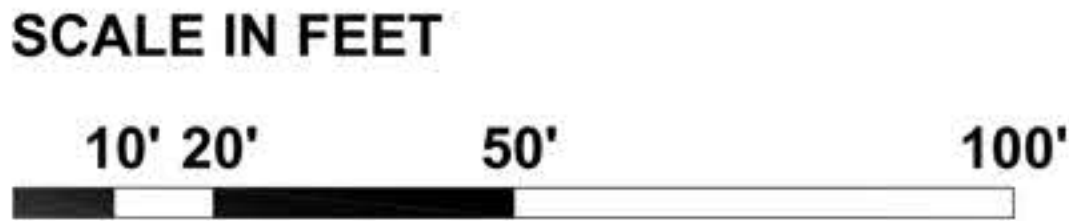


Hotel Guest Rooms: 23

Area: 22,310 ft<sup>2</sup>

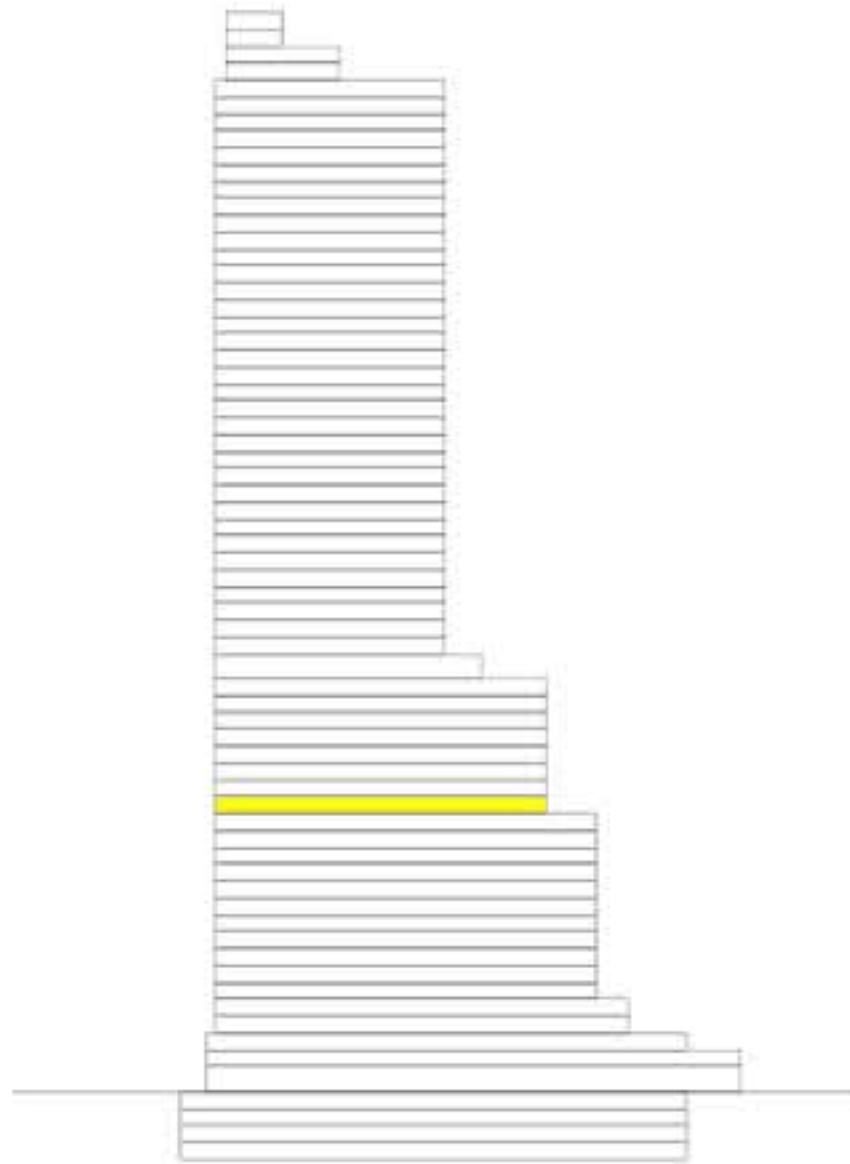


# 17th Floor Plan



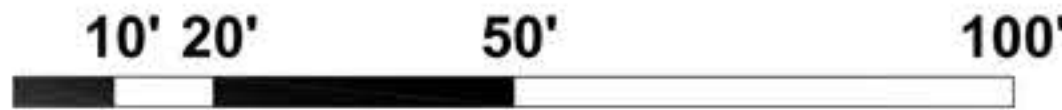
- Hotel Guest Rooms: 9
- Aprtment Public Area-  
Bar
- Air Garden

Area: 30,270 ft<sup>2</sup>



# 18th Floor Plan

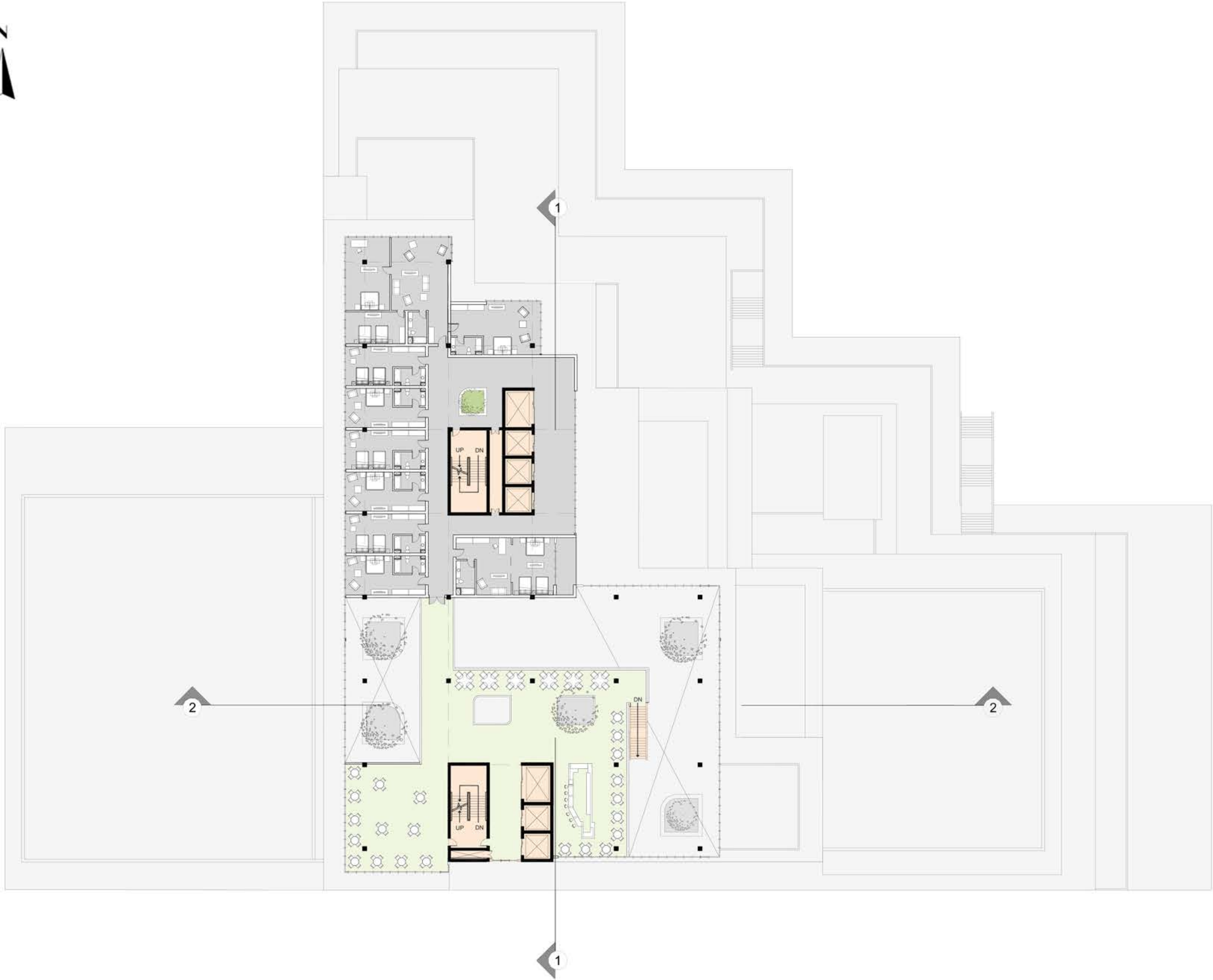
SCALE IN FEET



Hotel Guest Rooms: 9

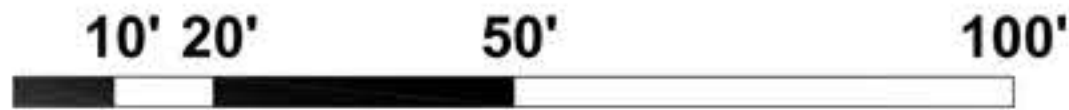
Aprtment Public Area-  
Bar

Area: 16,510 ft<sup>2</sup>



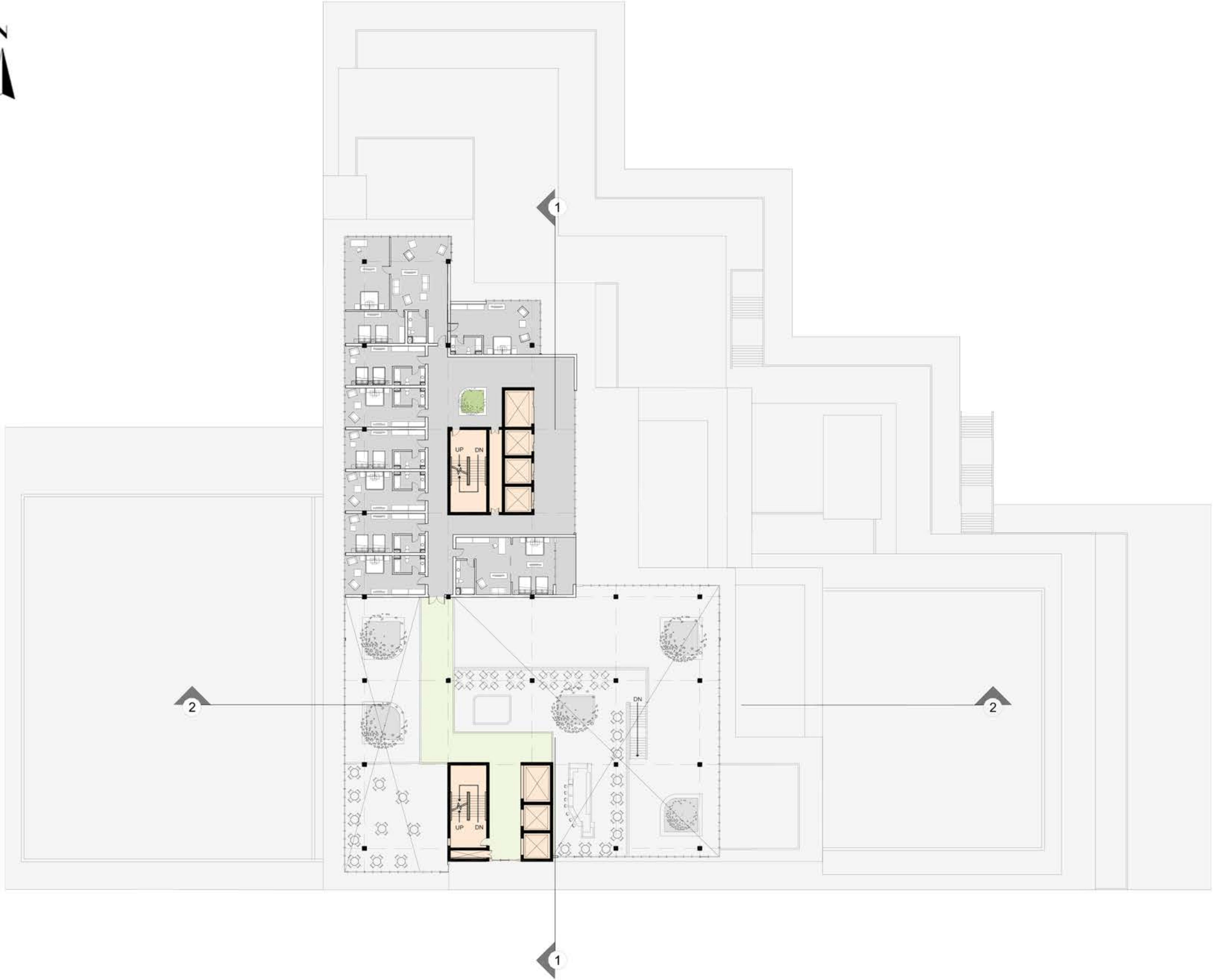
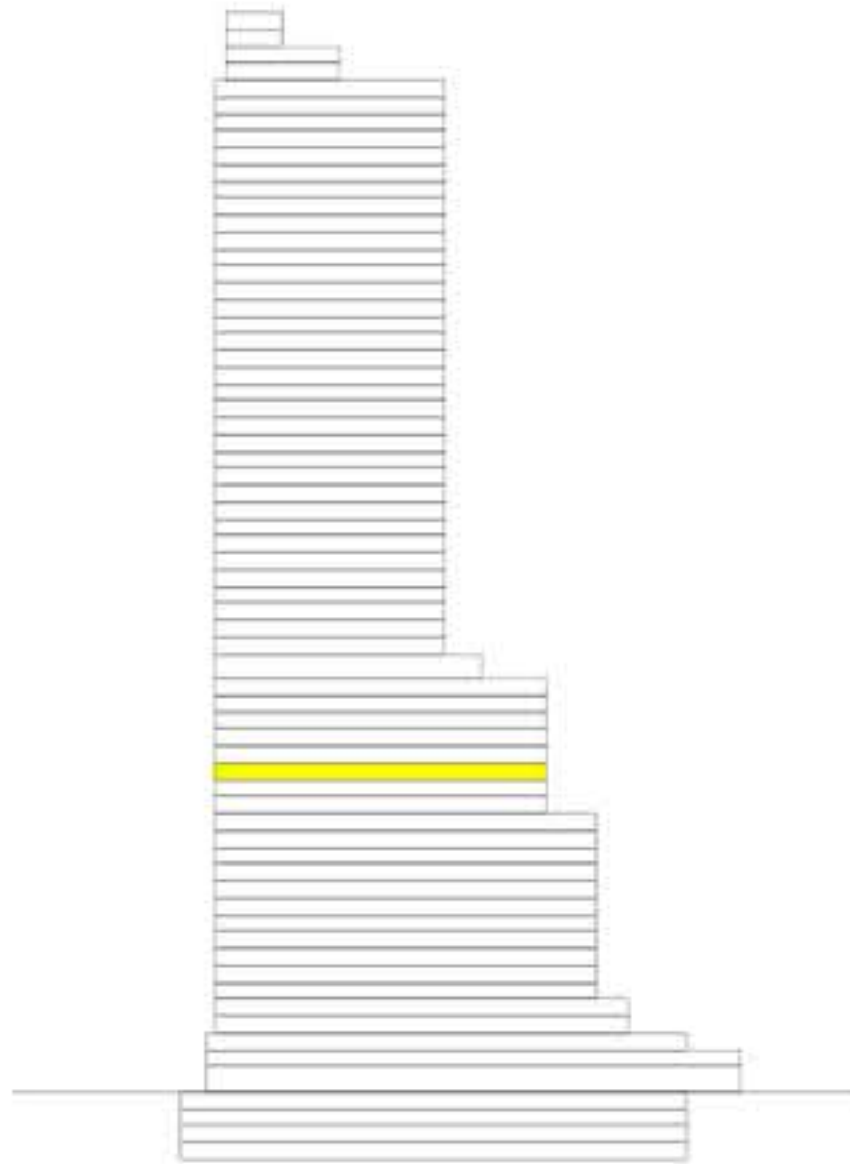
# 19th Floor Plan

SCALE IN FEET



Hotel Guest Rooms: 9

Area: 12,390 ft<sup>2</sup>



# 20th Floor Plan

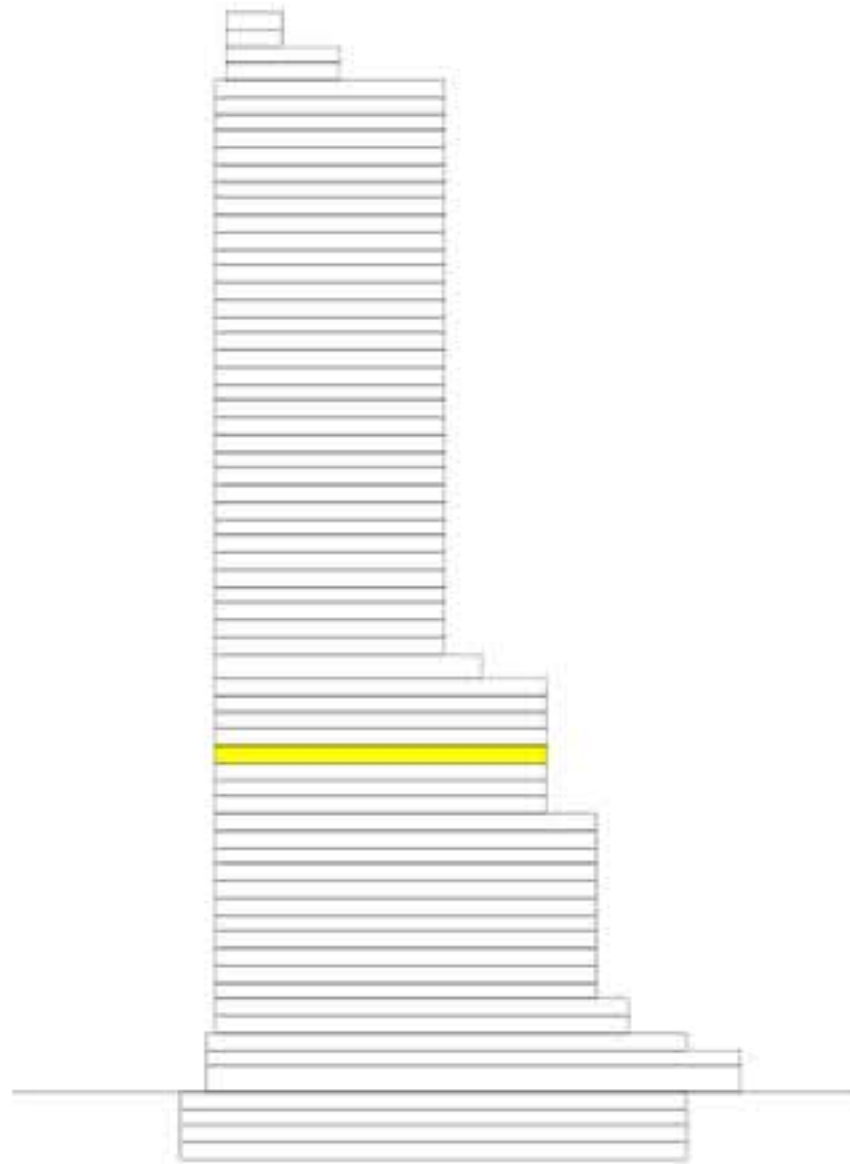
SCALE IN FEET



- Apartments: 7
  - 1 Bedroom: 3
  - 2 Bedrooms: 3
  - 3 Bedrooms: 1

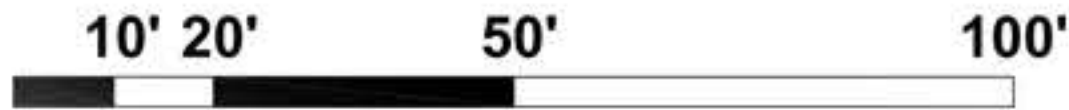
Air Garden

Area: 26,216 ft<sup>2</sup>



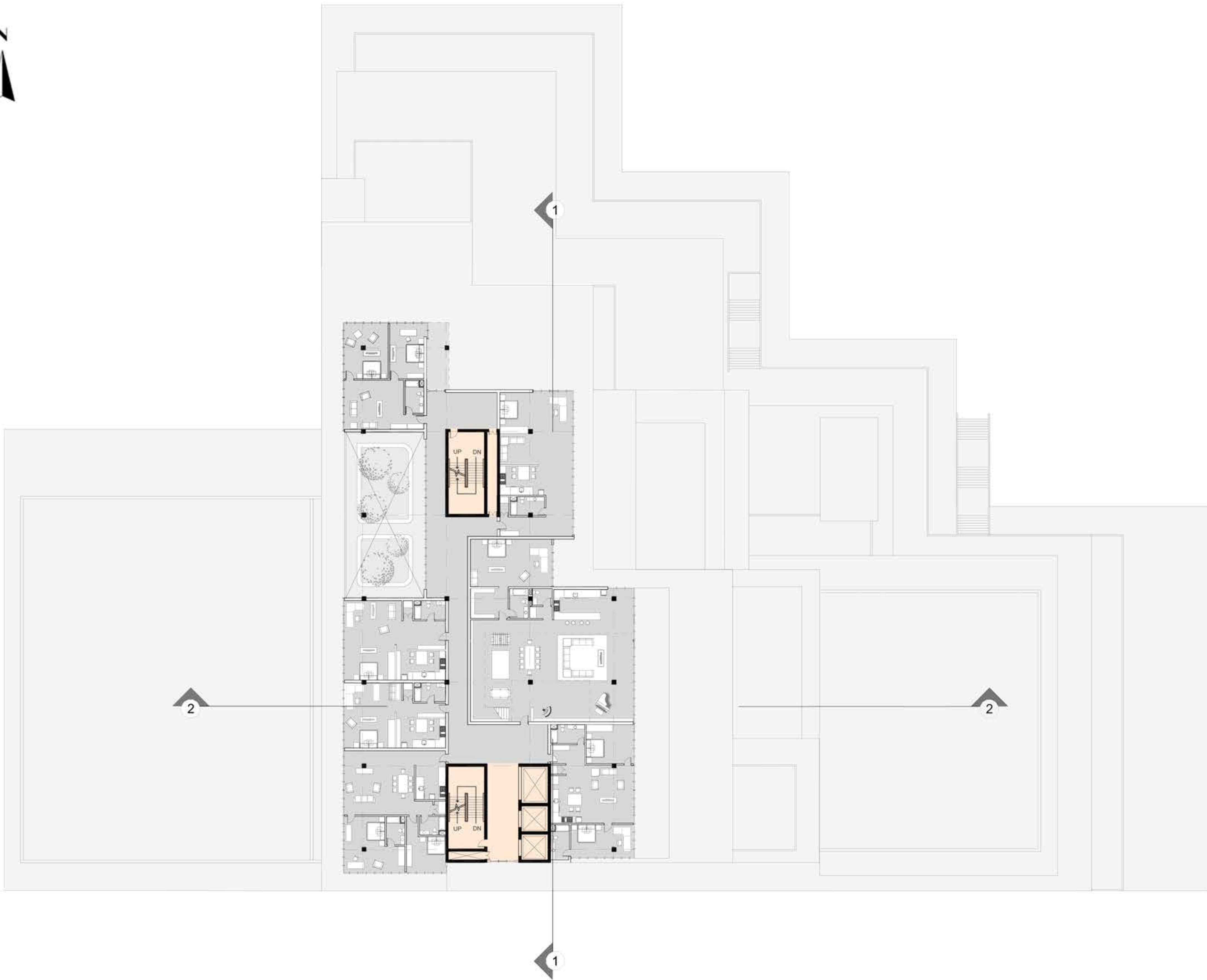
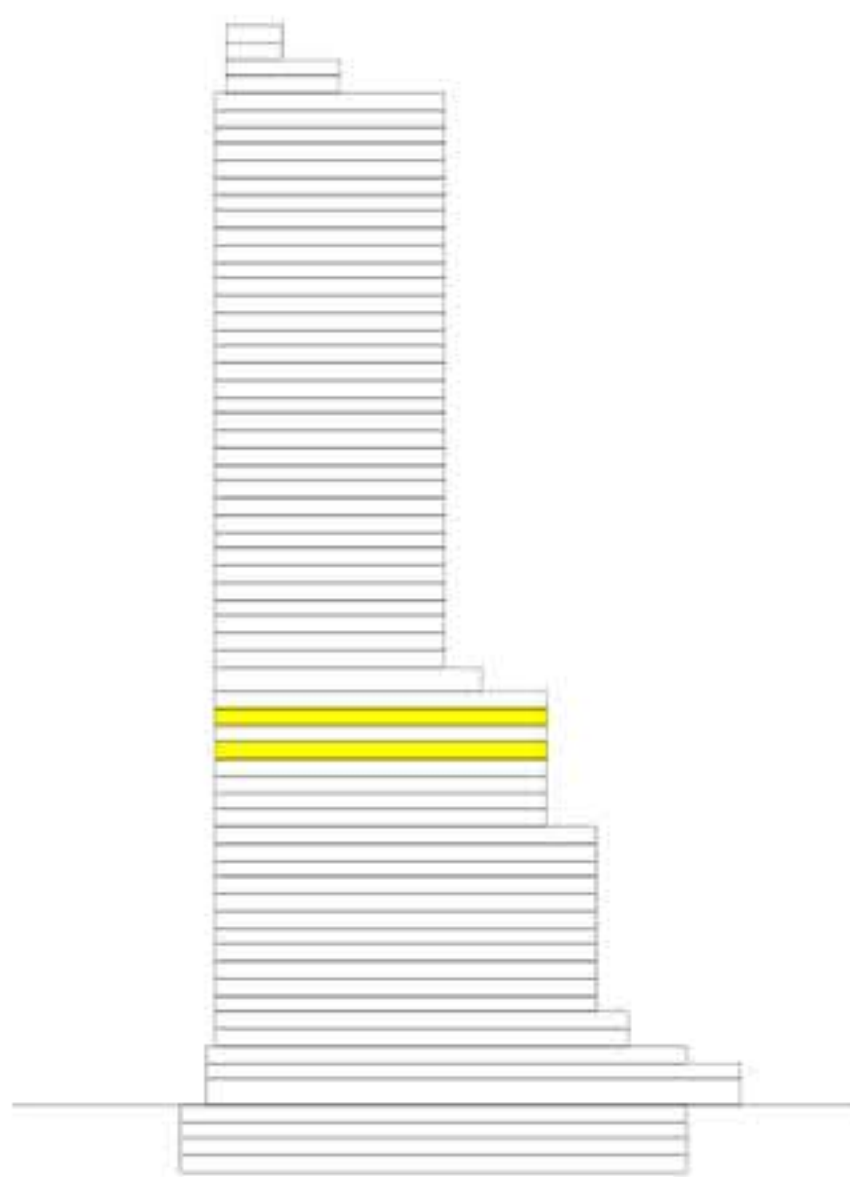
### Plan for floor 21 and 23

SCALE IN FEET



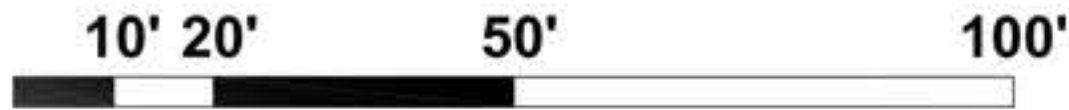
- Apartments: 7
- 1 Bedroom: 3
- 2 Bedrooms: 3
- 3 Bedrooms: 1

Area: 27,880 ft<sup>2</sup>



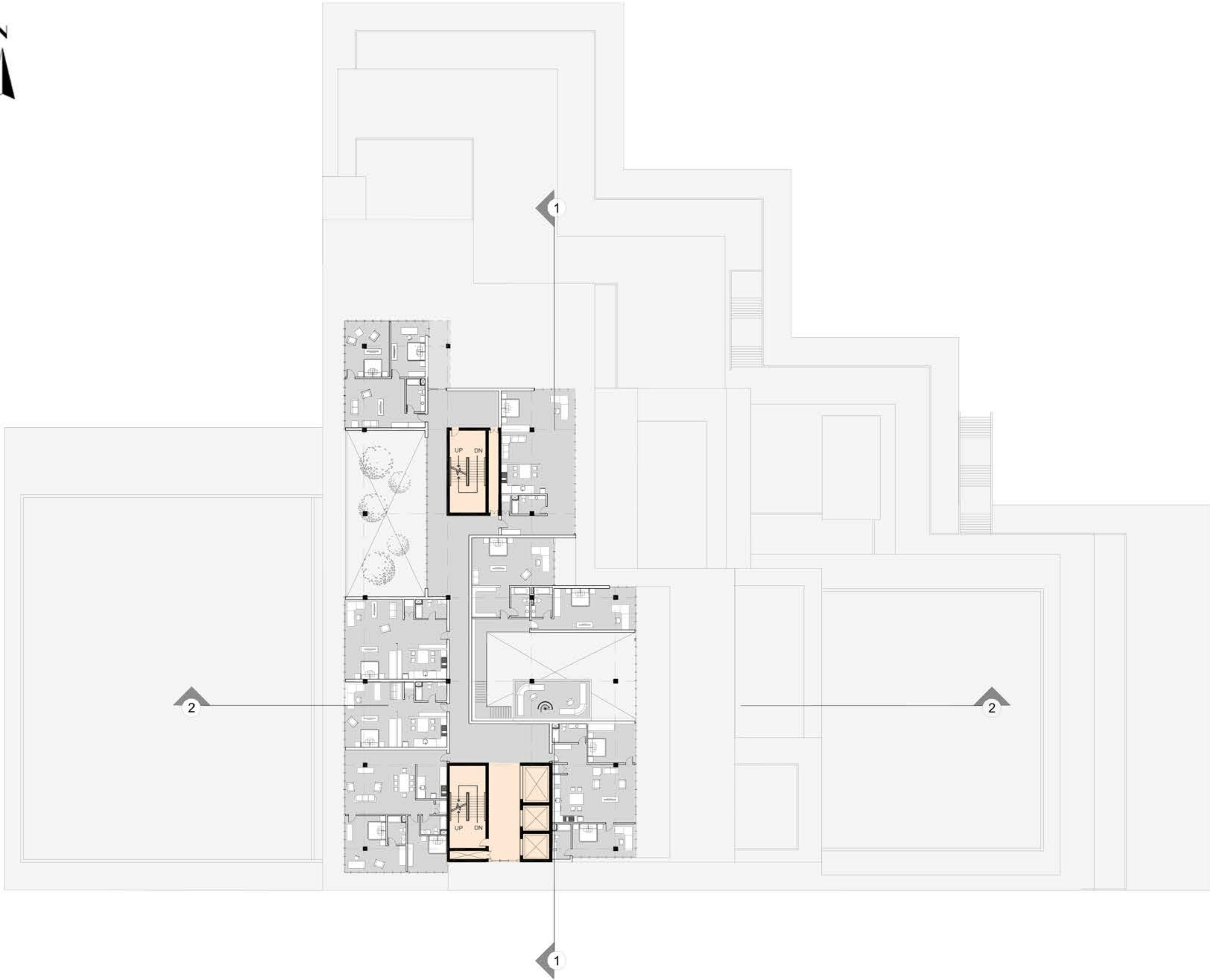
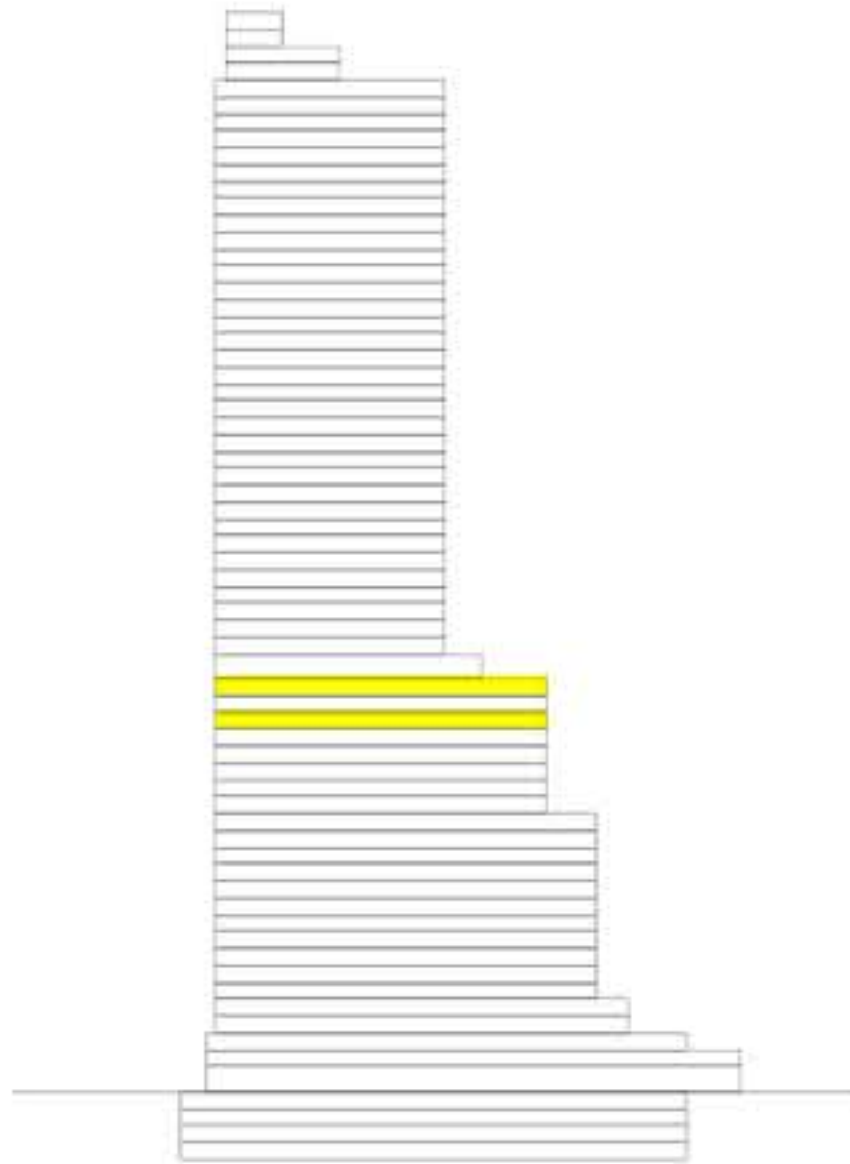
### Plan for floor 22 and 24

SCALE IN FEET



Apartments: 6  
1 Bedroom: 3  
2 Bedrooms: 3

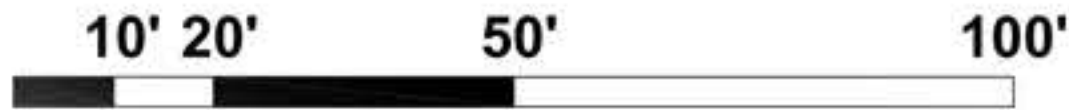
Area: 14,100 ft<sup>2</sup>





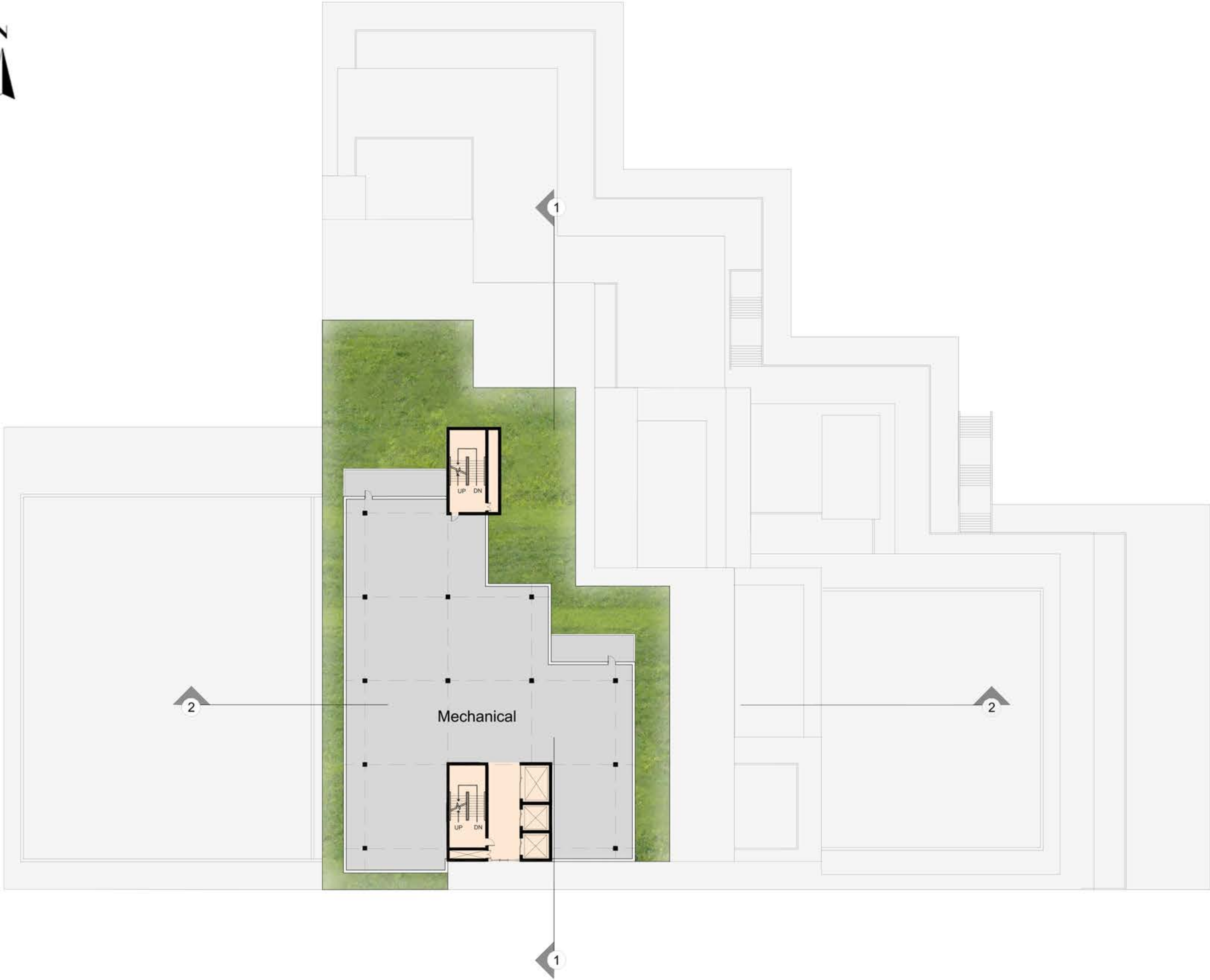
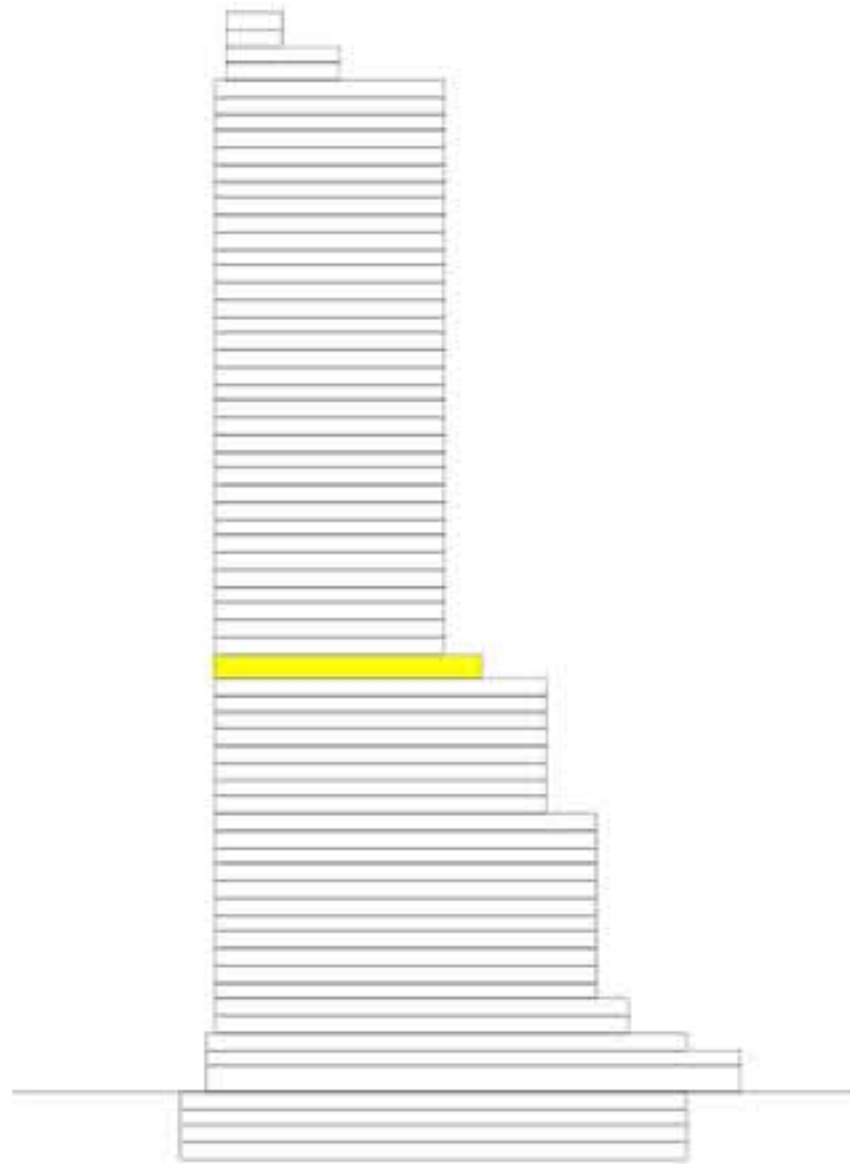
# 25th Floor Plan

SCALE IN FEET



Mechanical / Refugee Floor

Area: 20,460 ft<sup>2</sup>



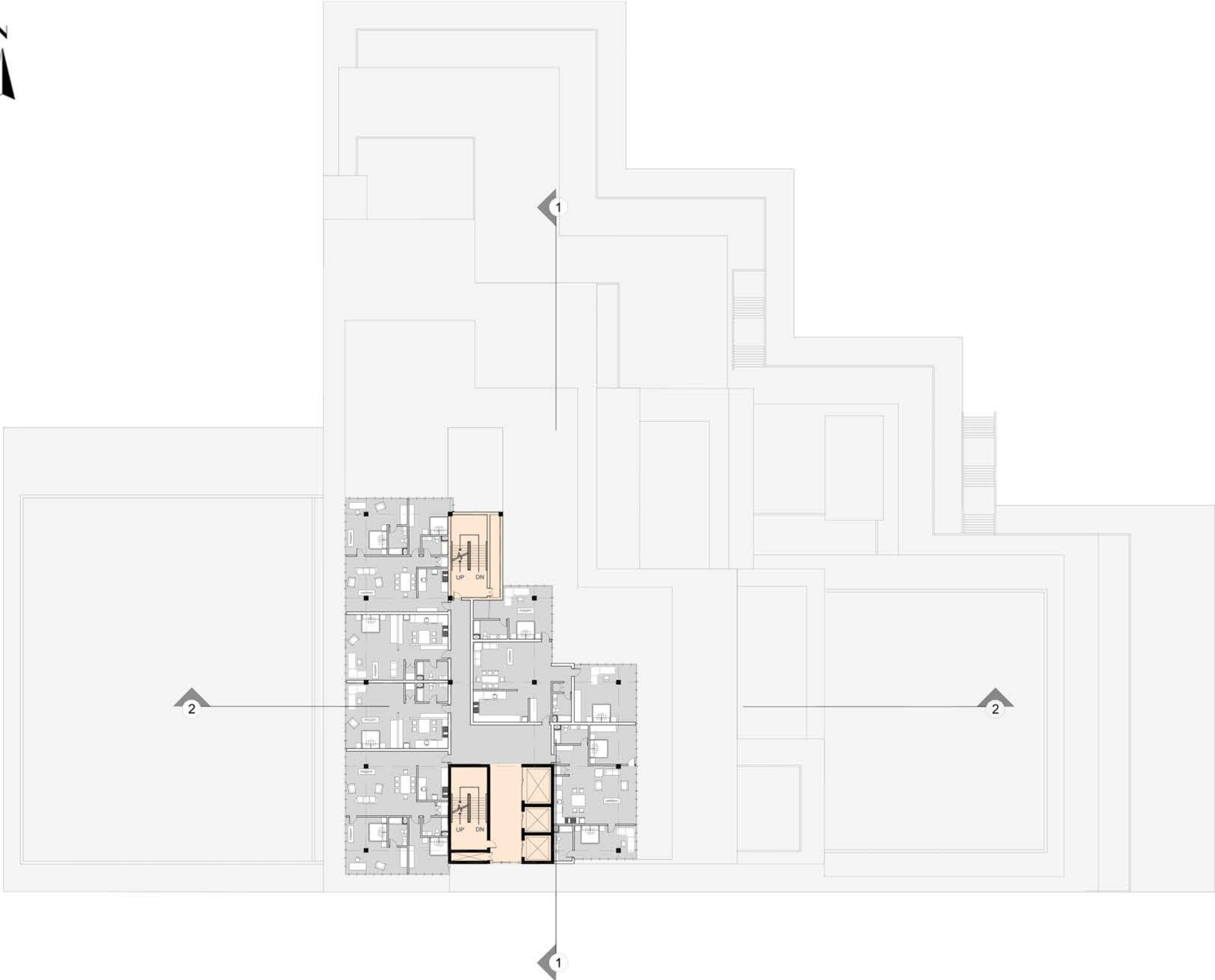
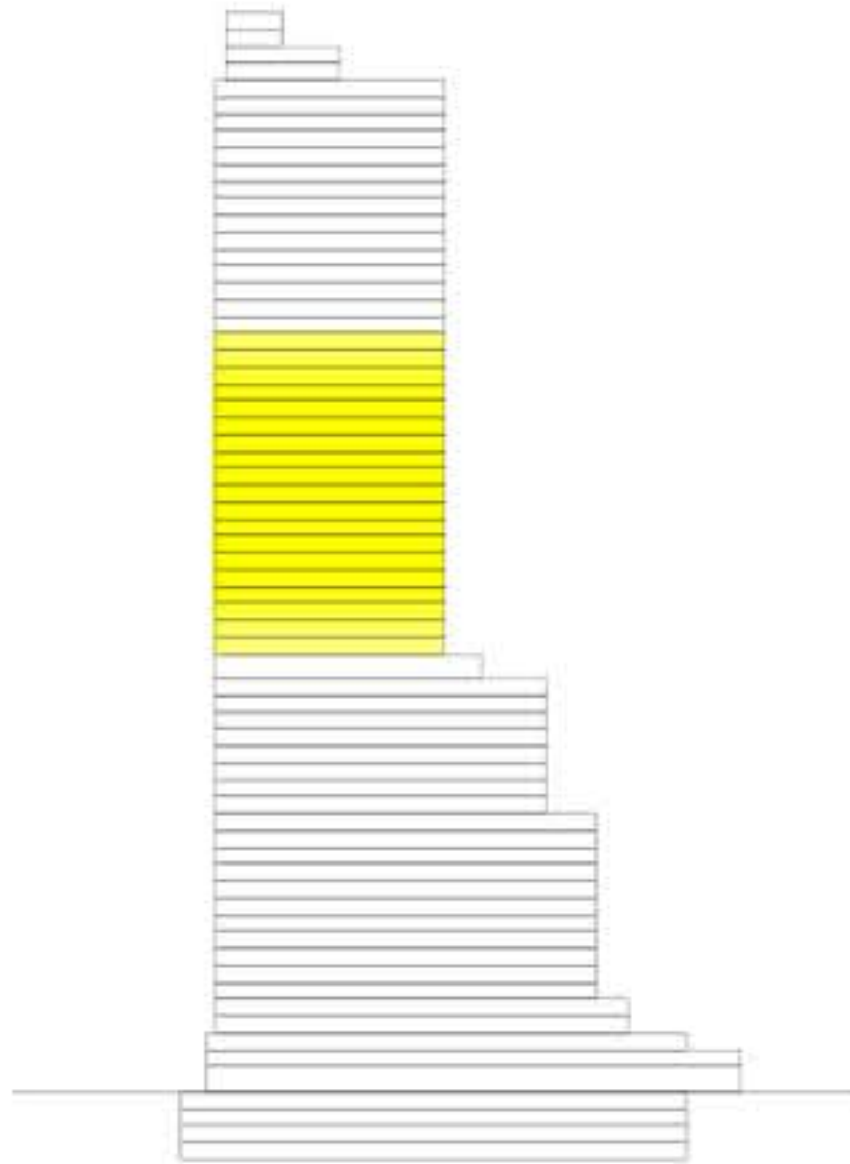
### Plan for floors 26-44

SCALE IN FEET



Apartments: 6  
1 Bedroom: 2  
2 Bedrooms: 4

Area: 11,280 ft<sup>2</sup>



### Plan for floors 46-60

SCALE IN FEET

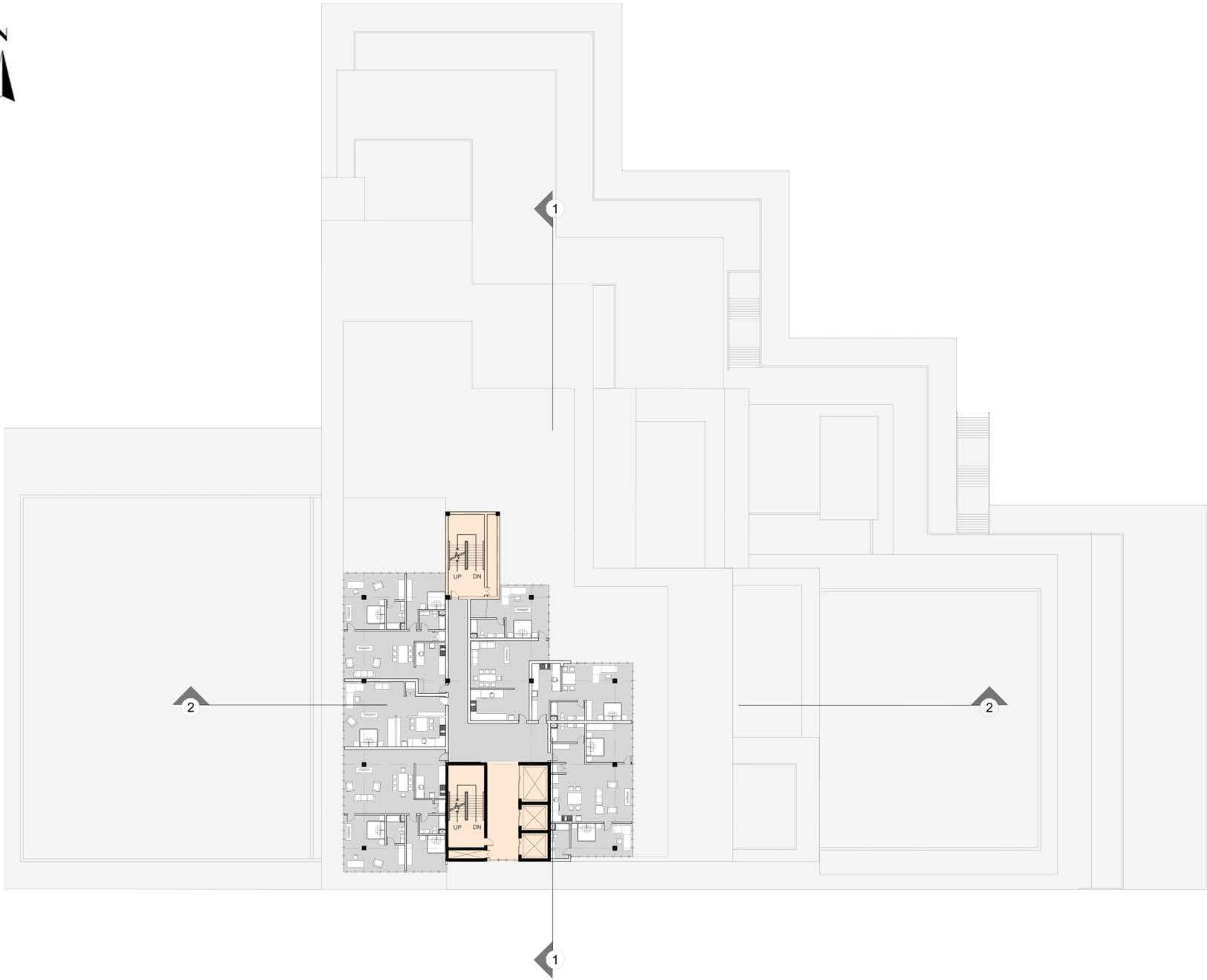
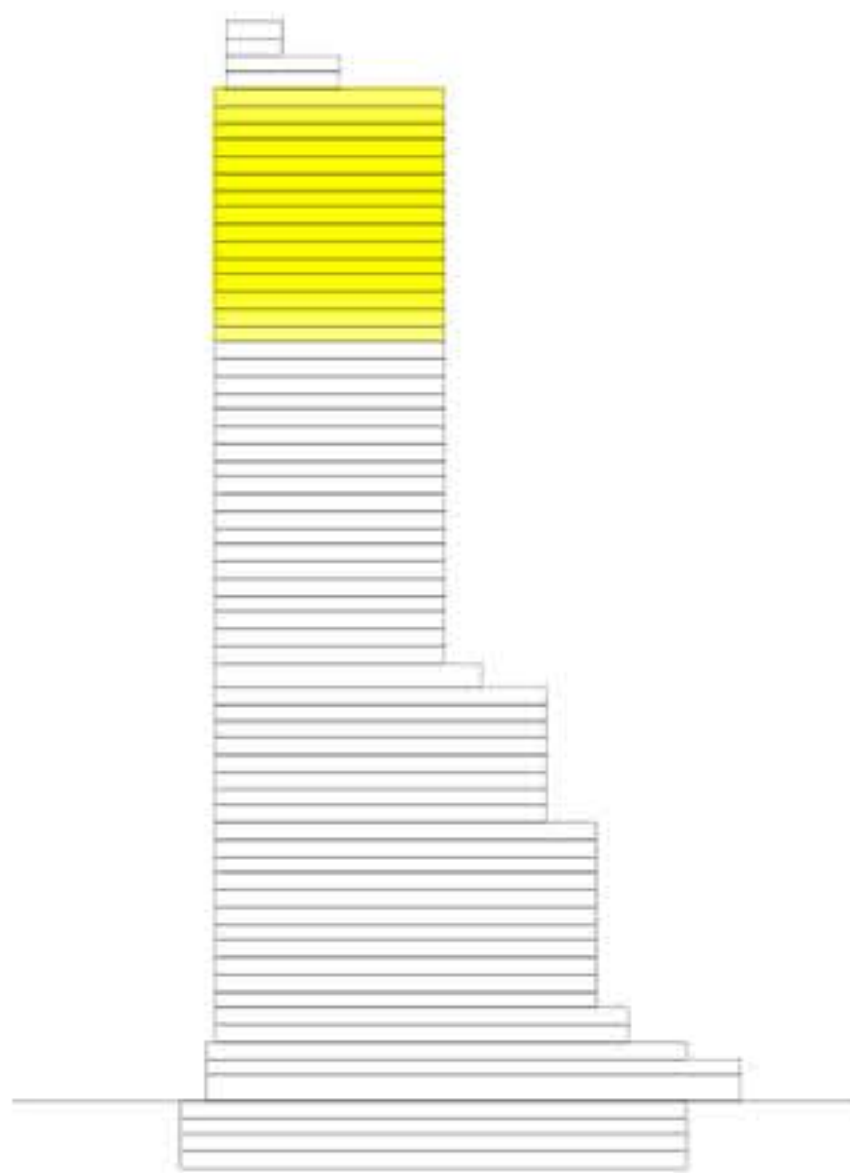


Apartments: 6

1 Bedroom: 2

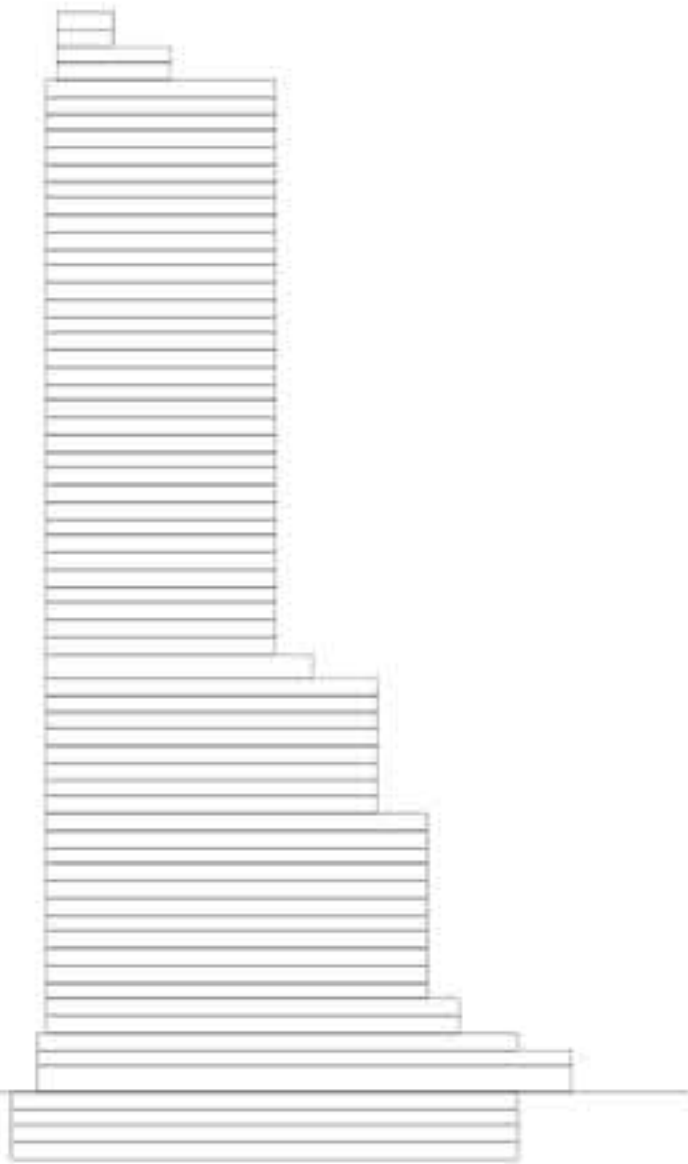
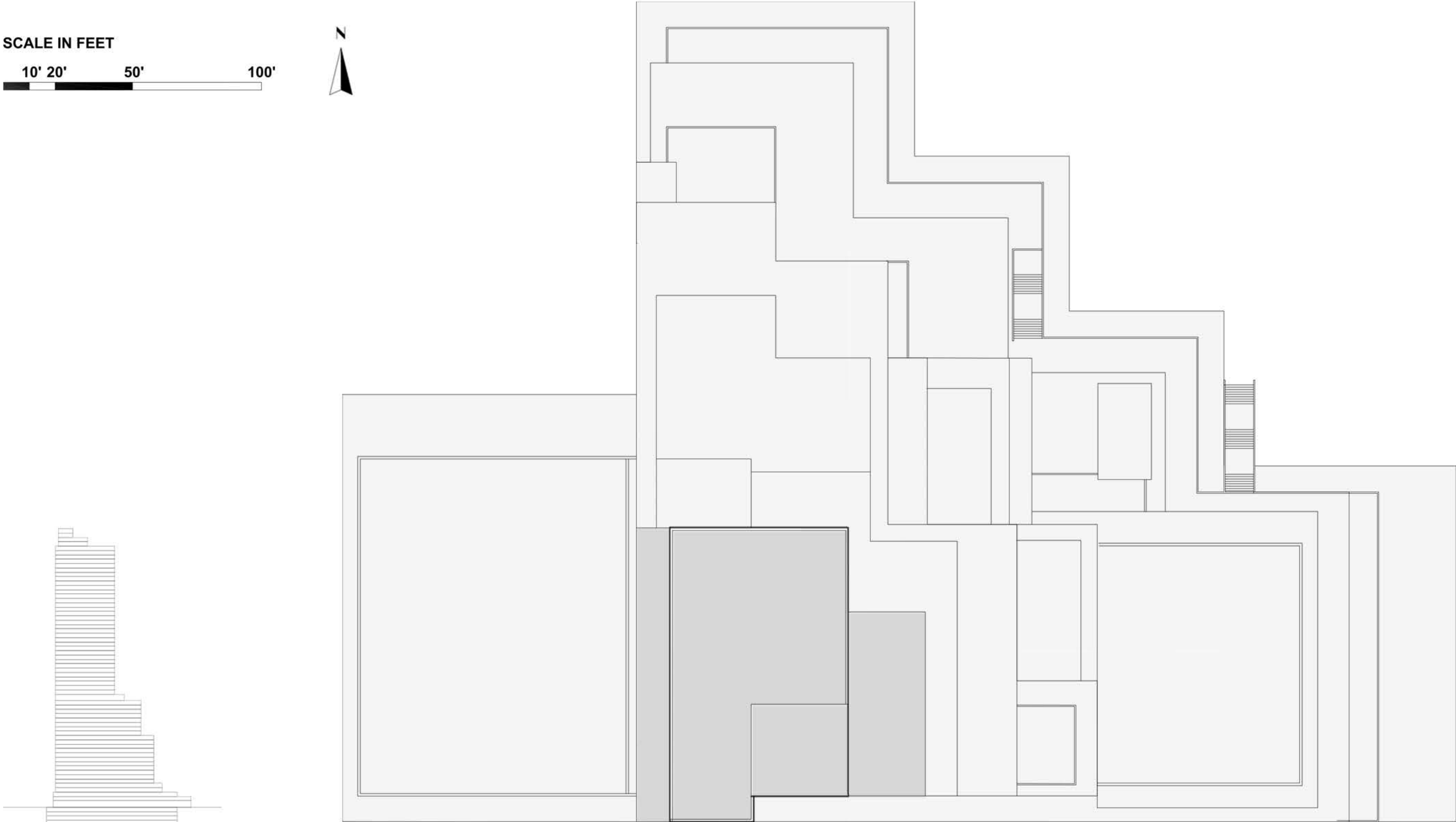
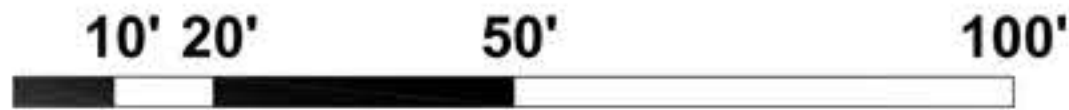
2 Bedrooms: 4

Area: 10,270 ft<sup>2</sup>



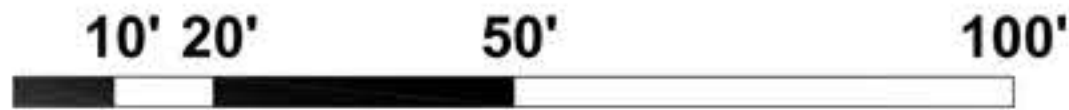
# Roof Plan

SCALE IN FEET



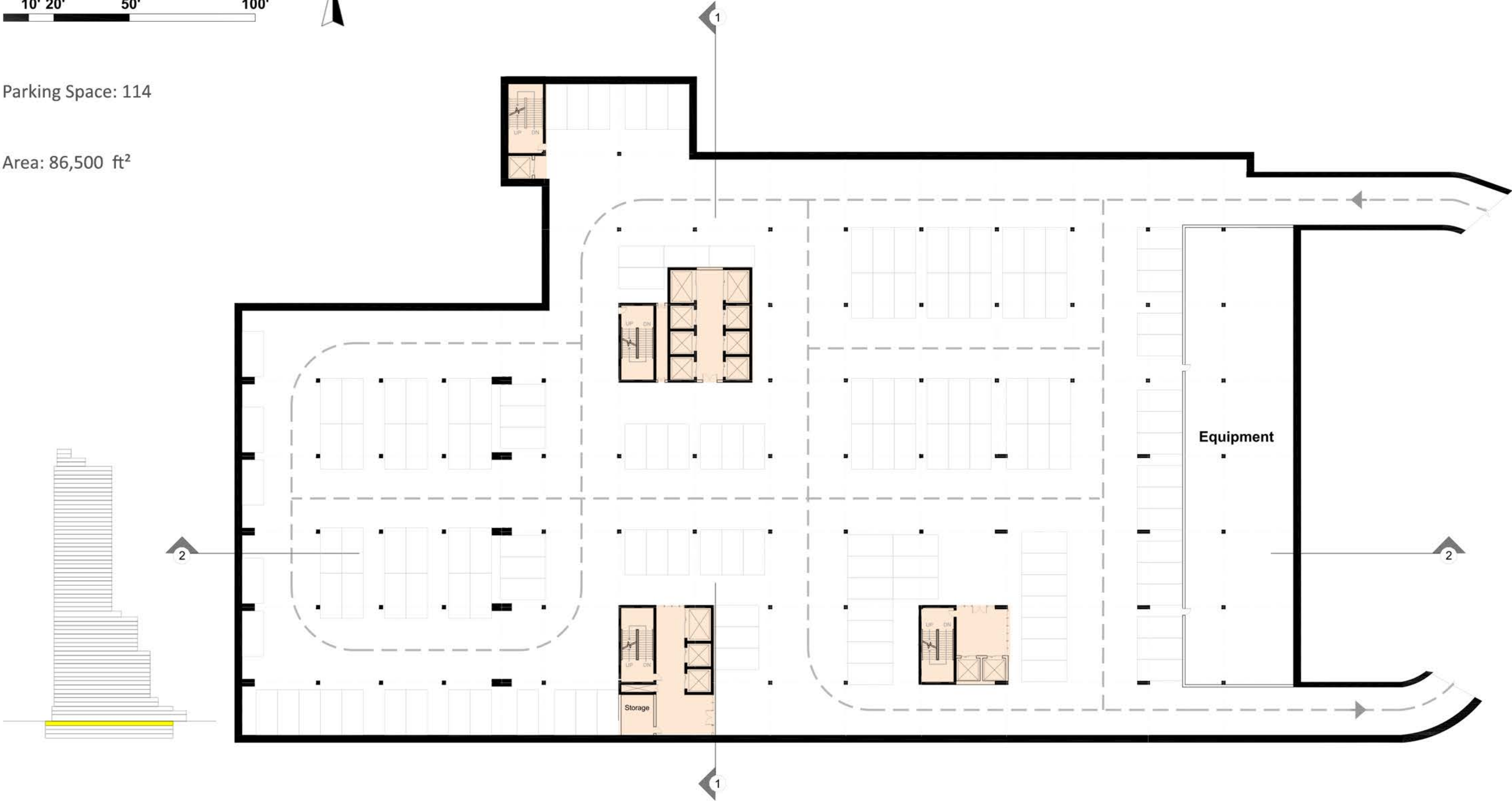
# Underground Parking

SCALE IN FEET



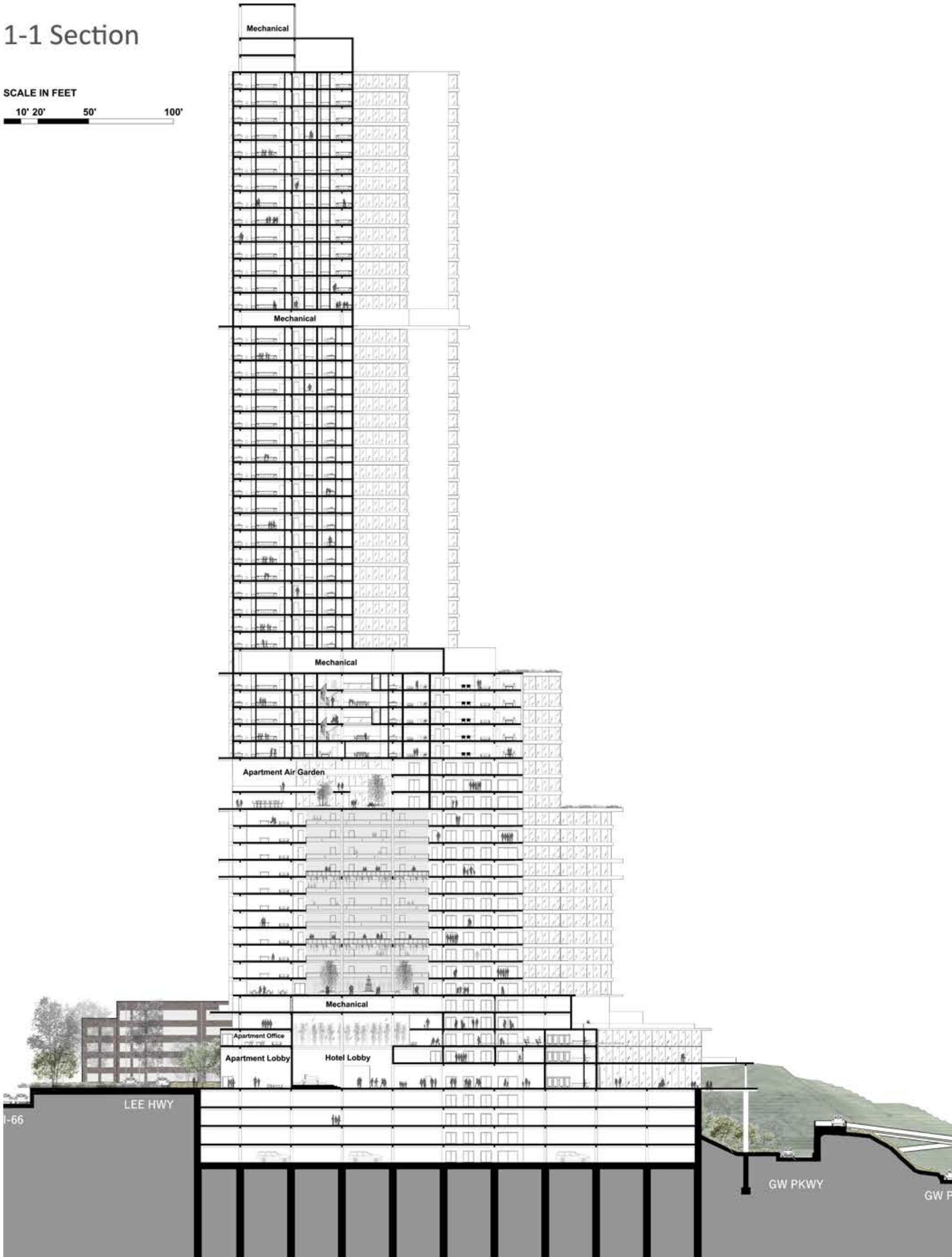
Parking Space: 114

Area: 86,500 ft<sup>2</sup>



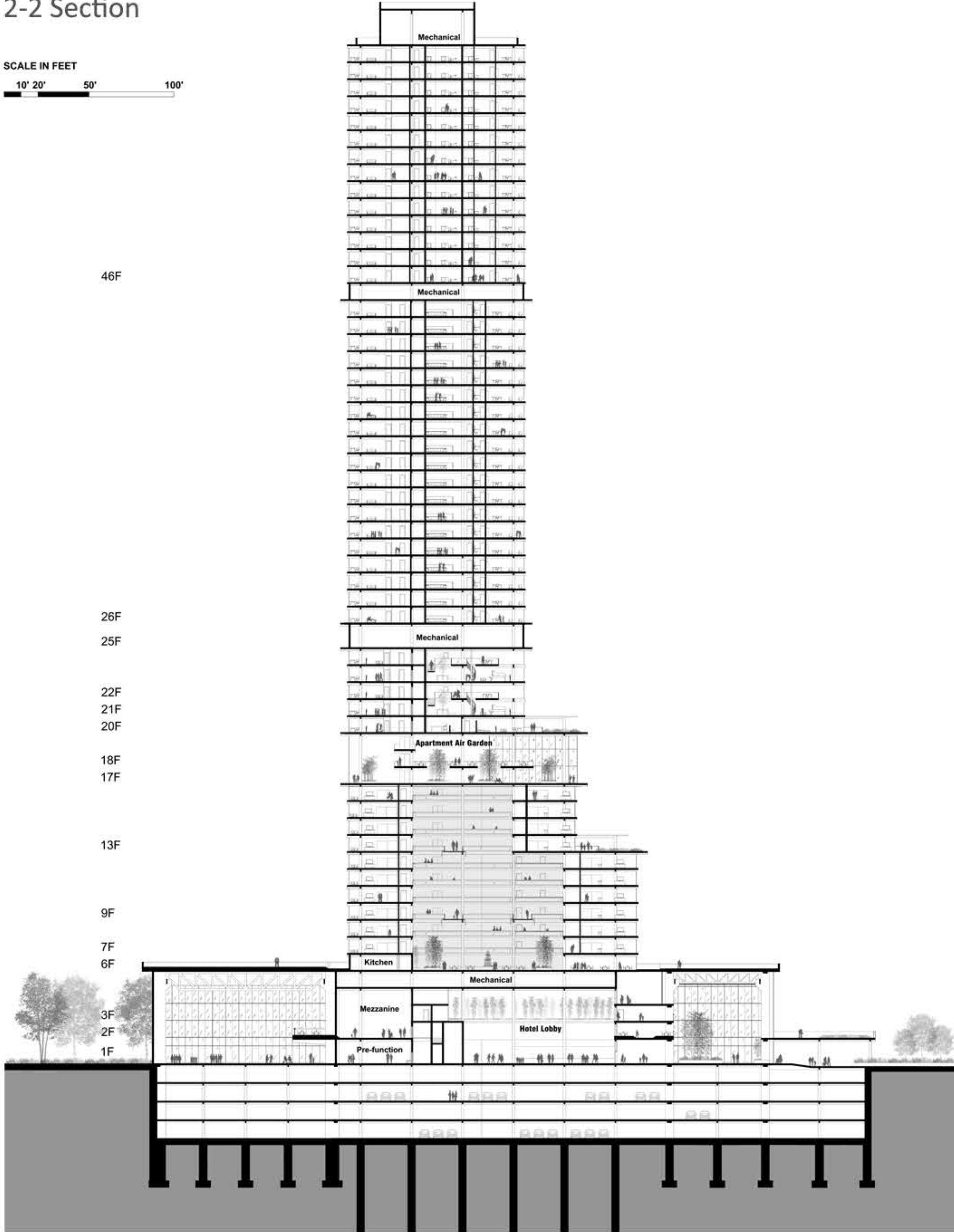
1-1 Section

SCALE IN FEET  
10' 20' 50' 100'

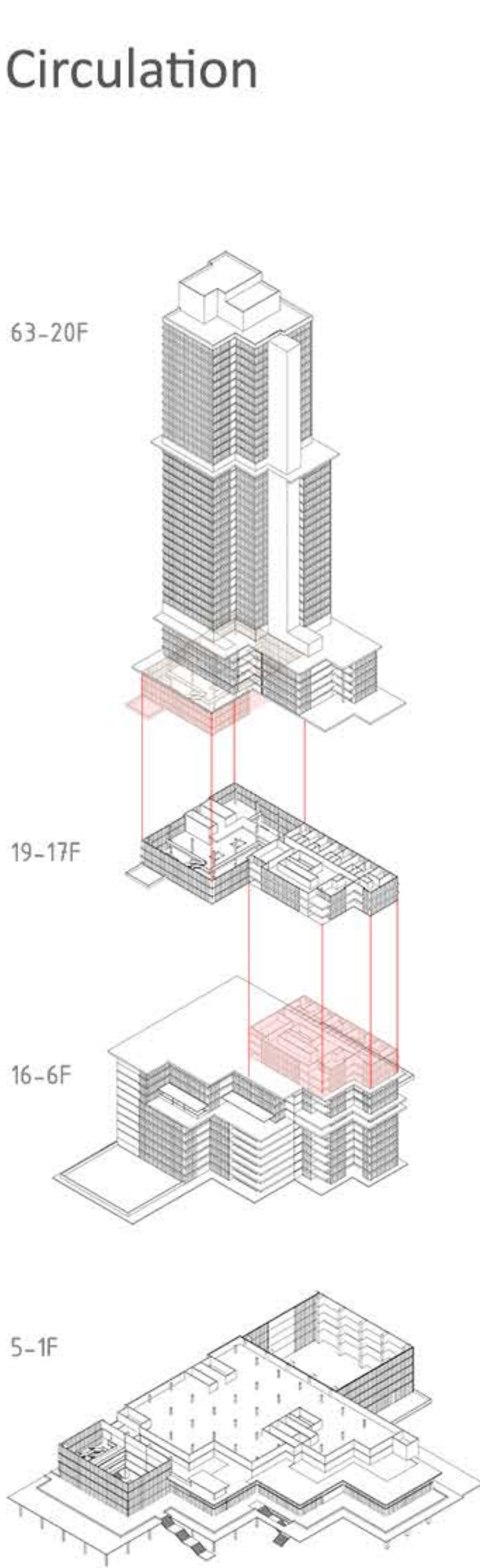


2-2 Section

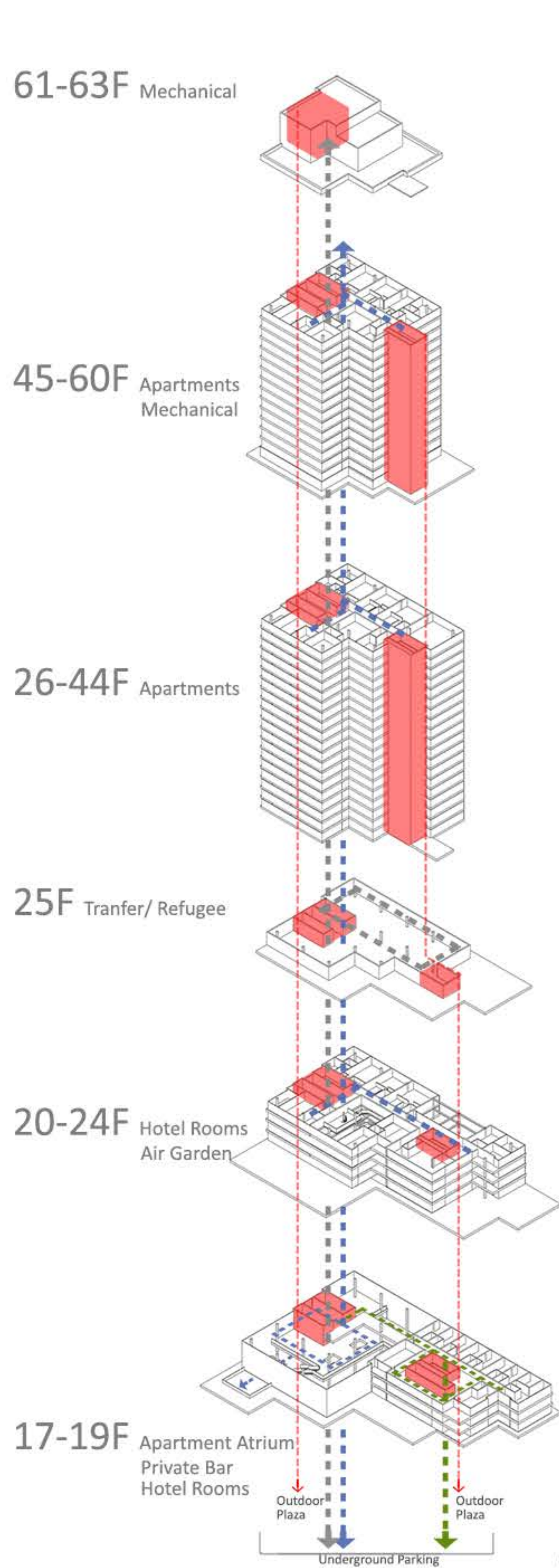
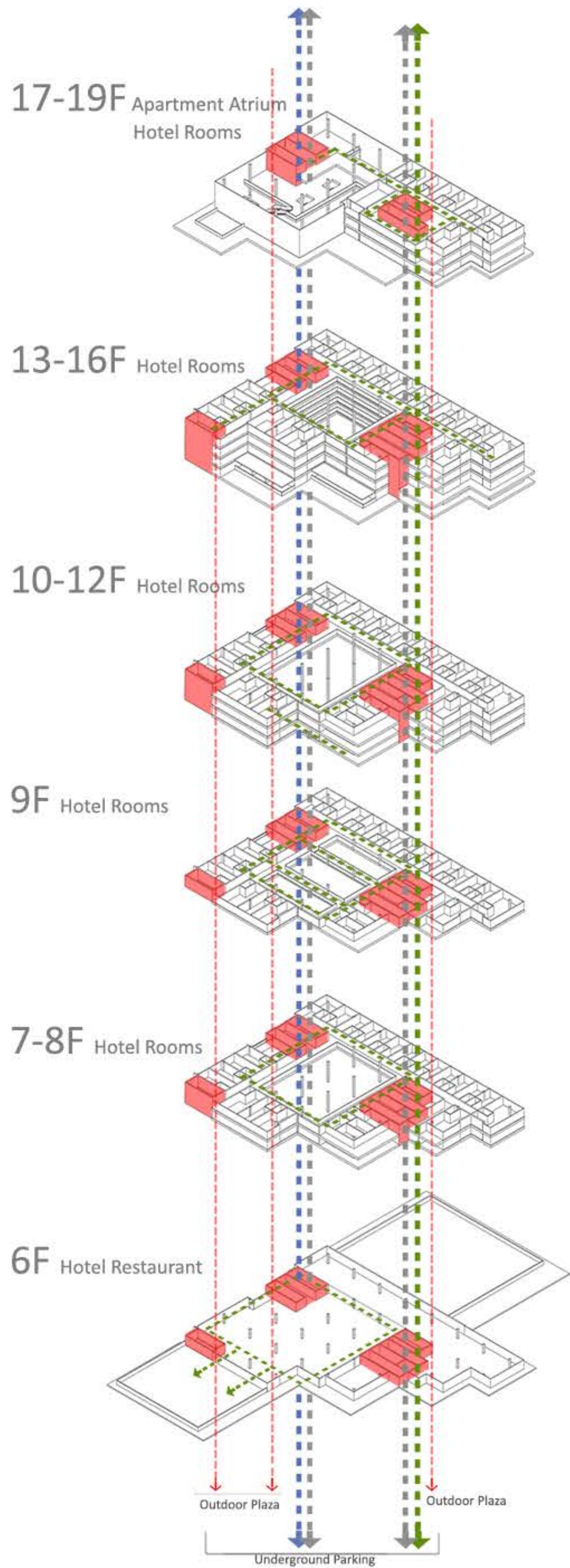
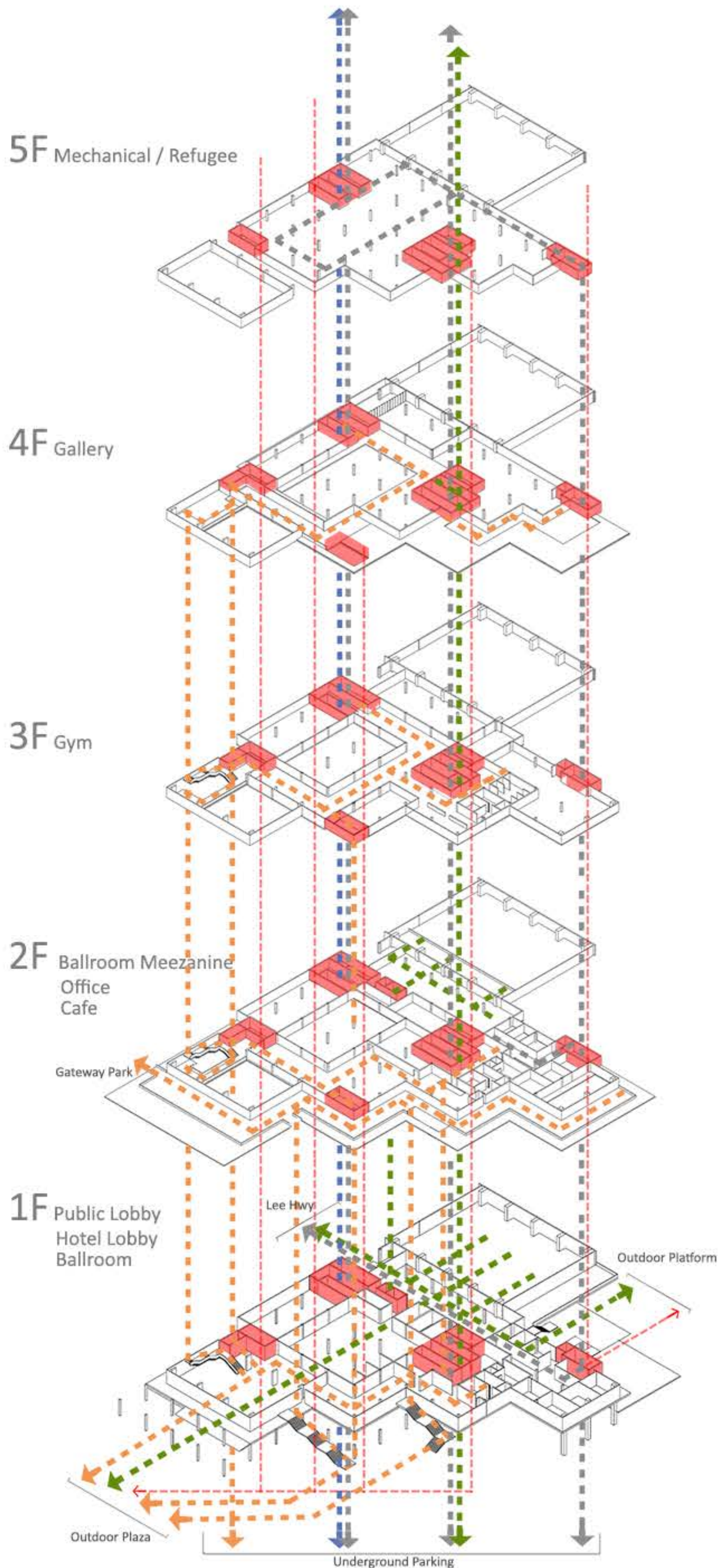
SCALE IN FEET  
10' 20' 50' 100'



Circulation

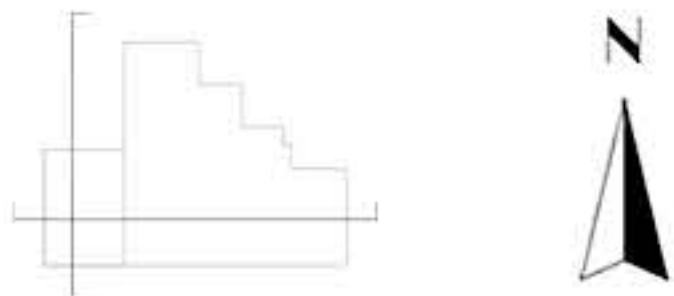
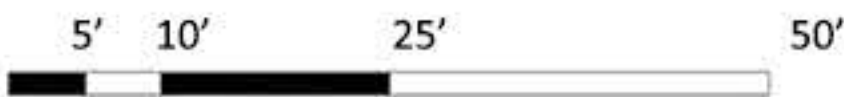


- - - Public Access
- - - Hotel Guest
- - - Apartment Residence
- - - Admin/Service
- - - Egress
- Traffic Core

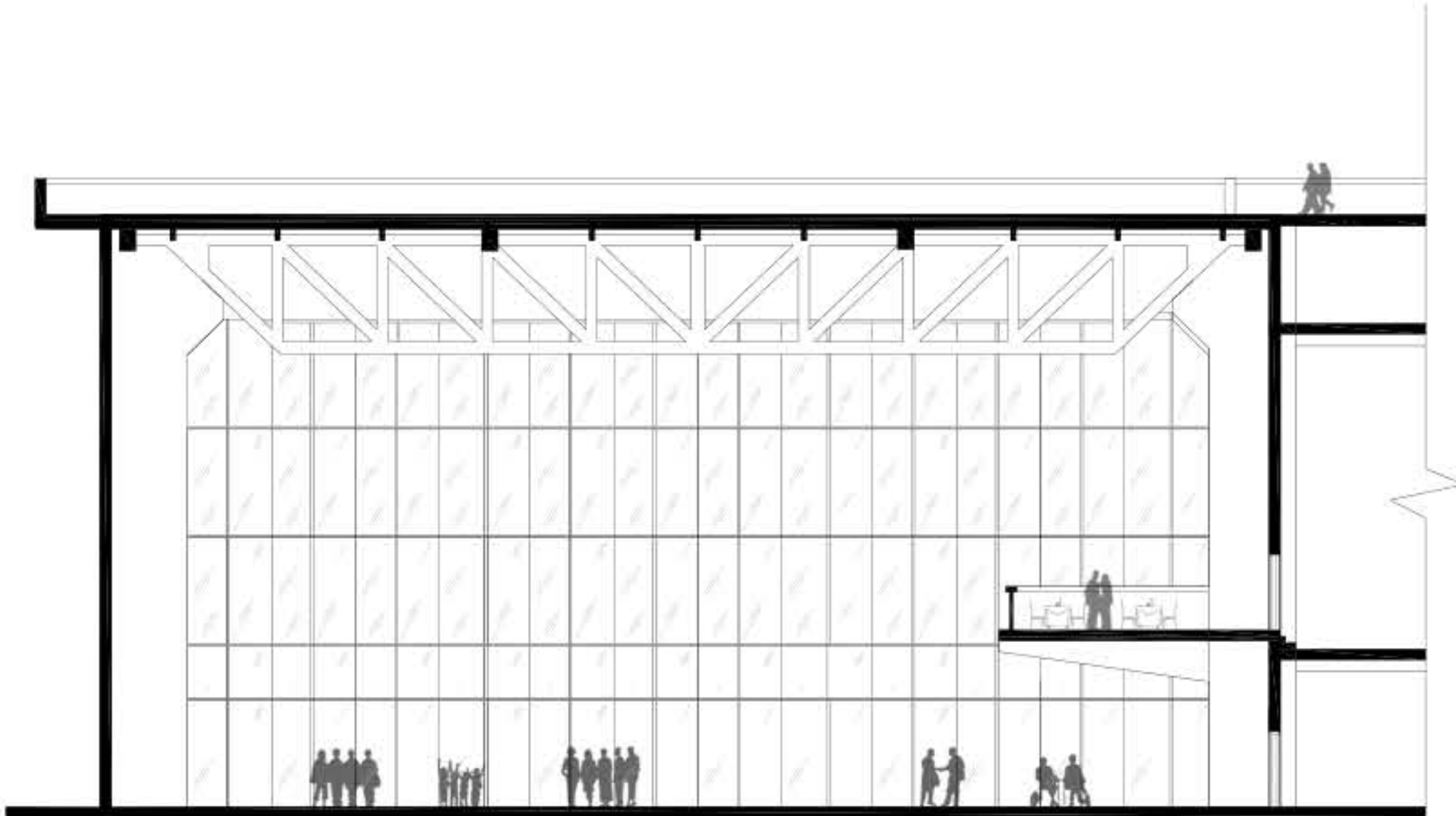
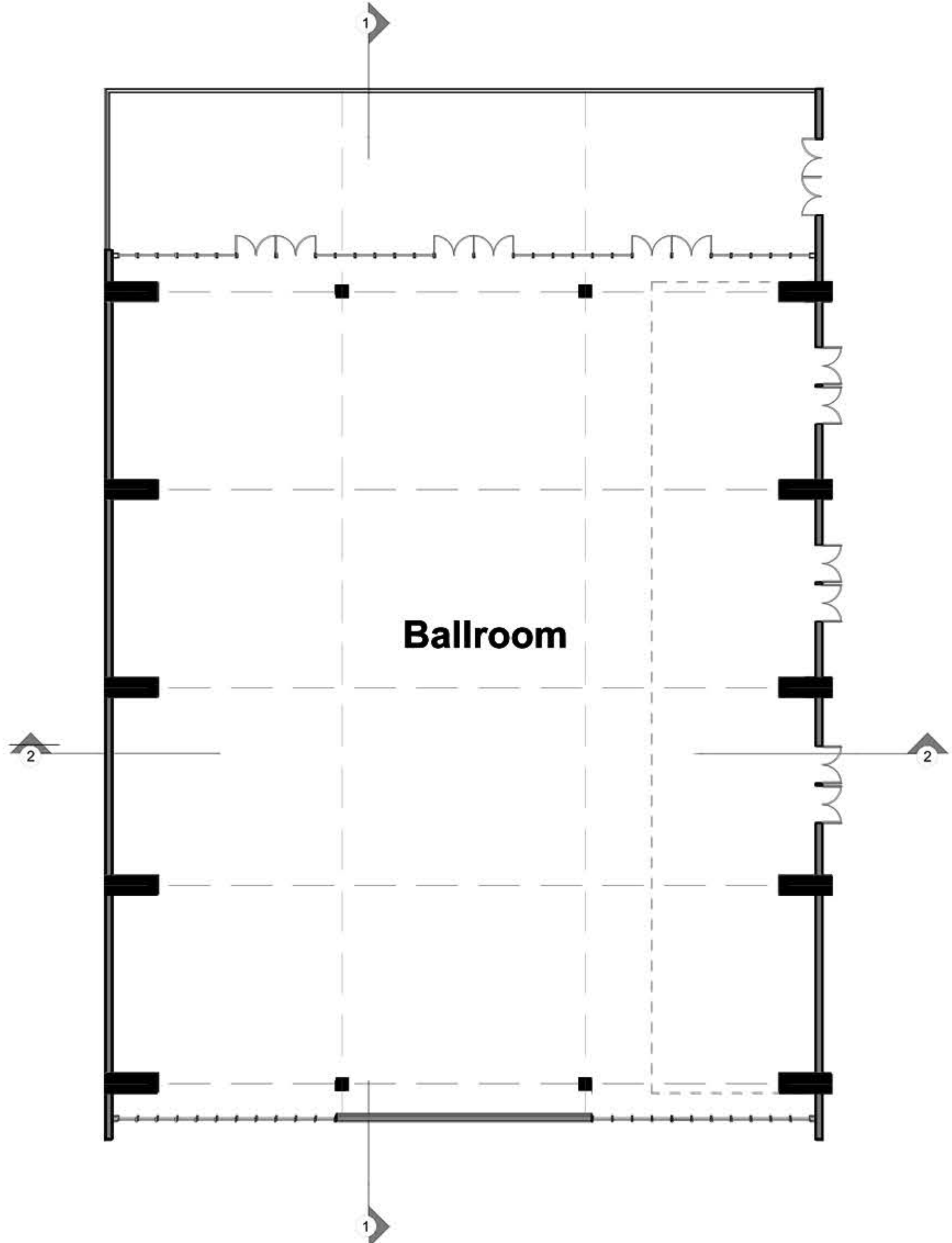


# Ballroom

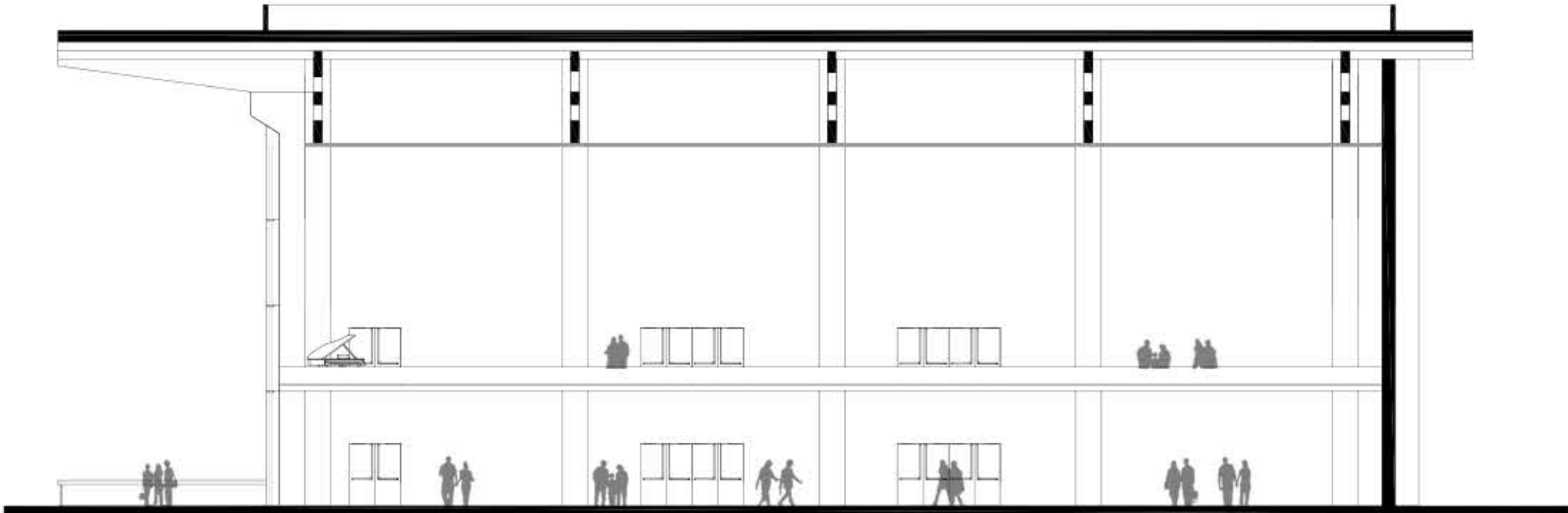
SCALE IN FEET



With its own exclusive entrance from Lee Highway, the ground-floor Ballroom is entered through a spacious, welcoming pre-function area with natural light. Also, facing Potomac River and Georgetown University, the five stories high Ballroom offer visitors an amazing view.



2-2 Section

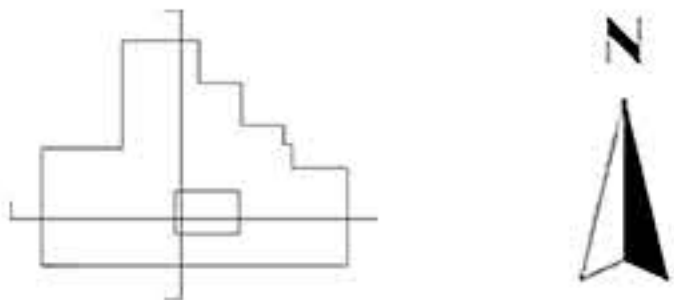
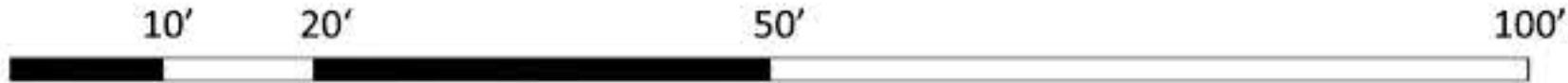


1-1 Section 71

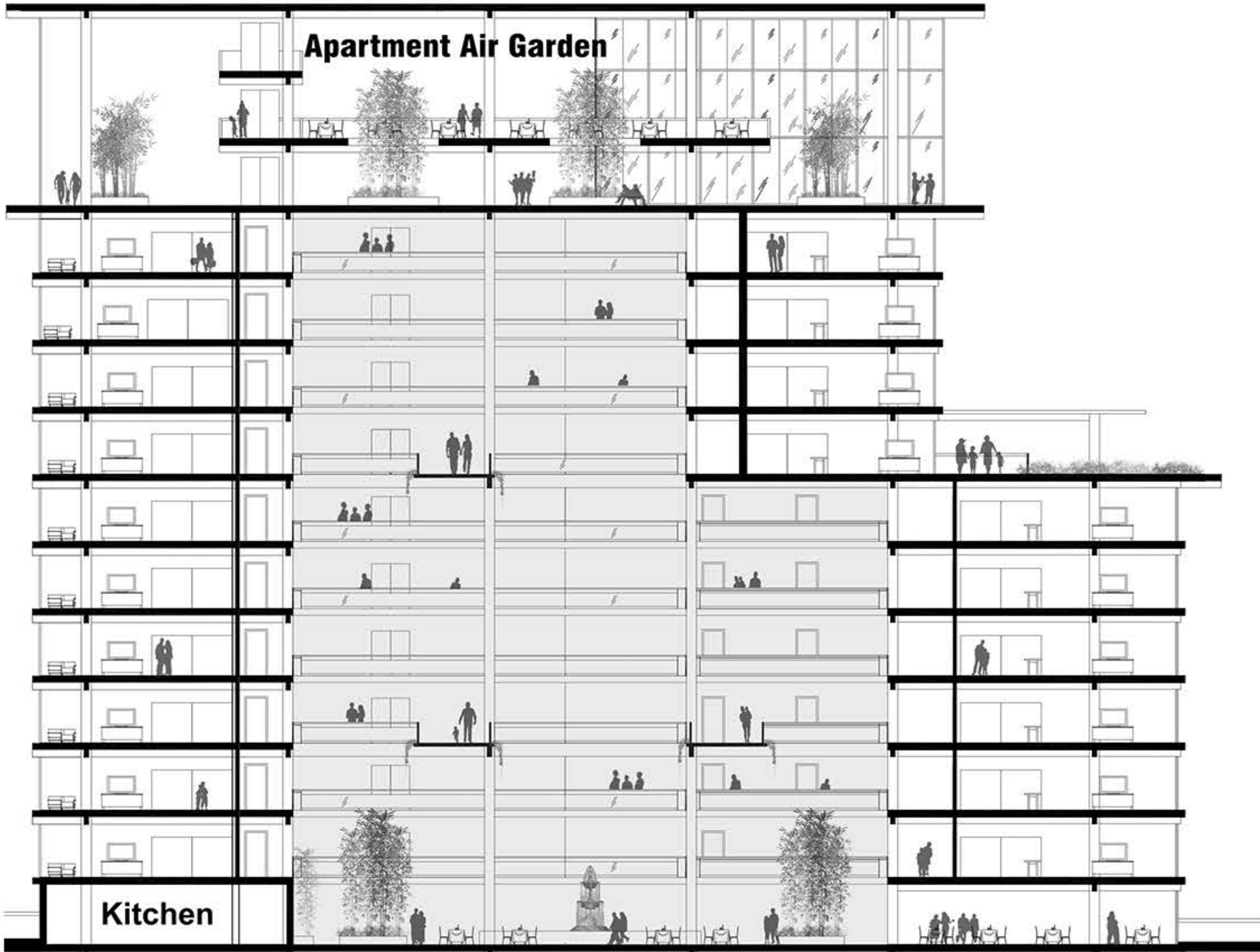


# Hotel and Apartment Atrium (7th Floor - 19th Floor)

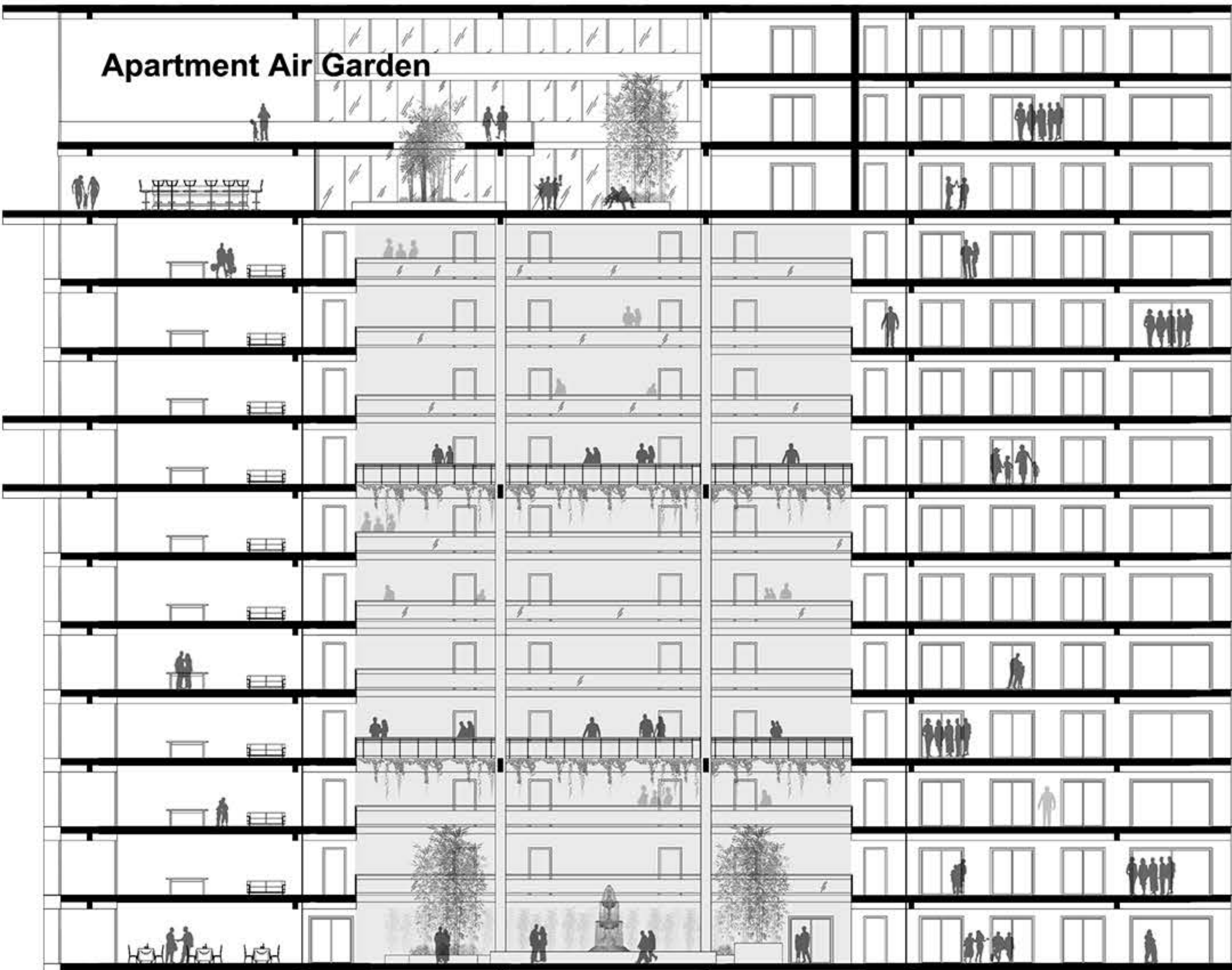
SCALE IN FEET



Hotel Atrium is open to the hotel restaurant and the apartment atrium is right above the hotel atrium. However, the apartment atrium and the hotel atrium are completely separate. When having breakfast on 7th Floor, hotel guests are able to enjoy the morning sunshine through the glass curtain wall. As for the residents of the tower, they can have a drink at the bar on 17th Floor after work.



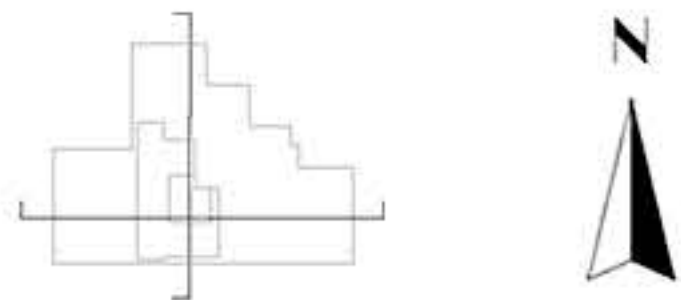
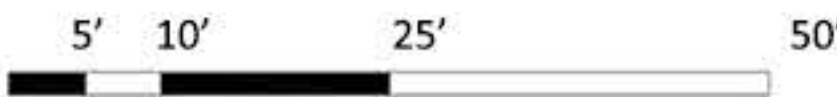
1-1 Section



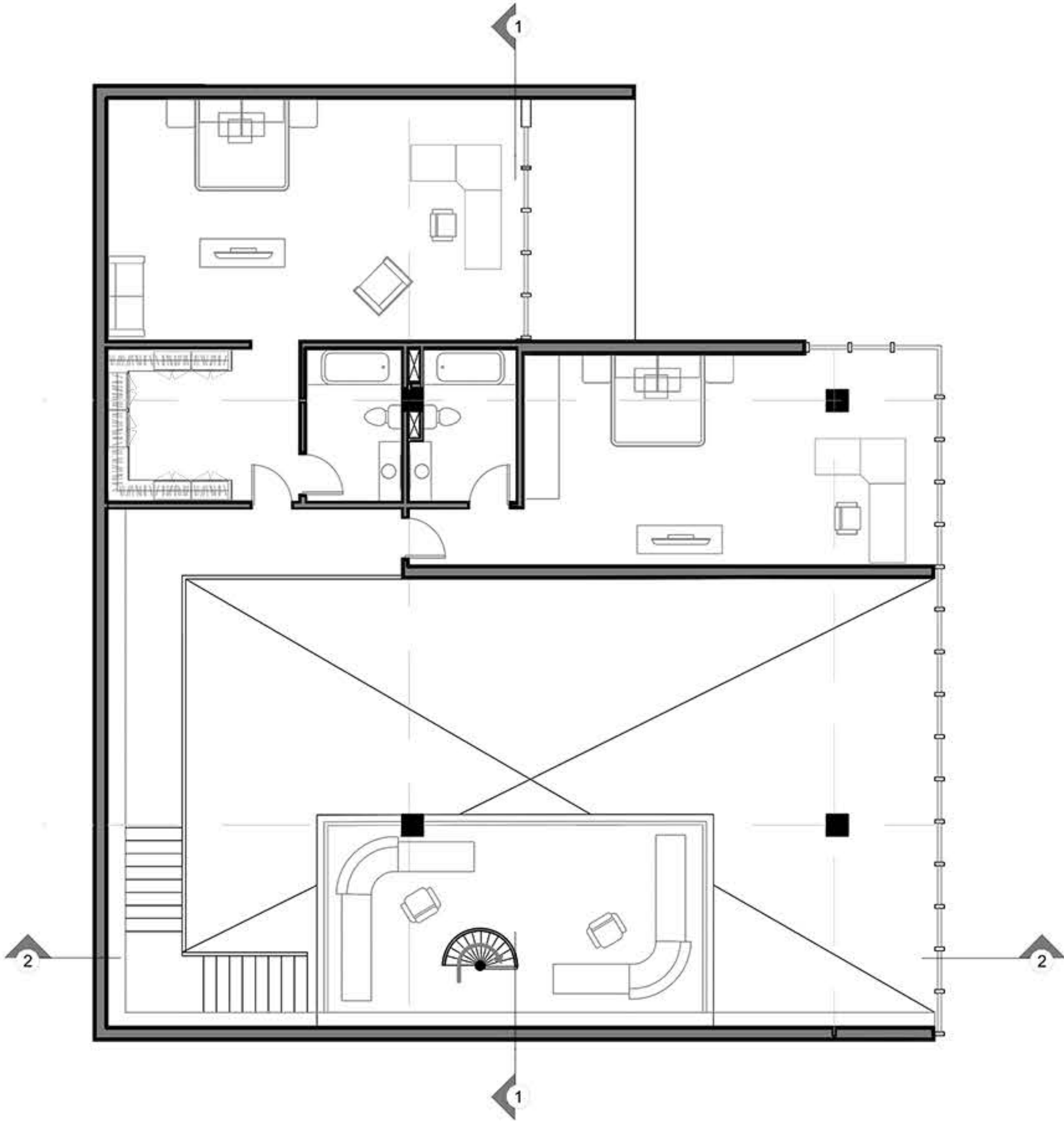
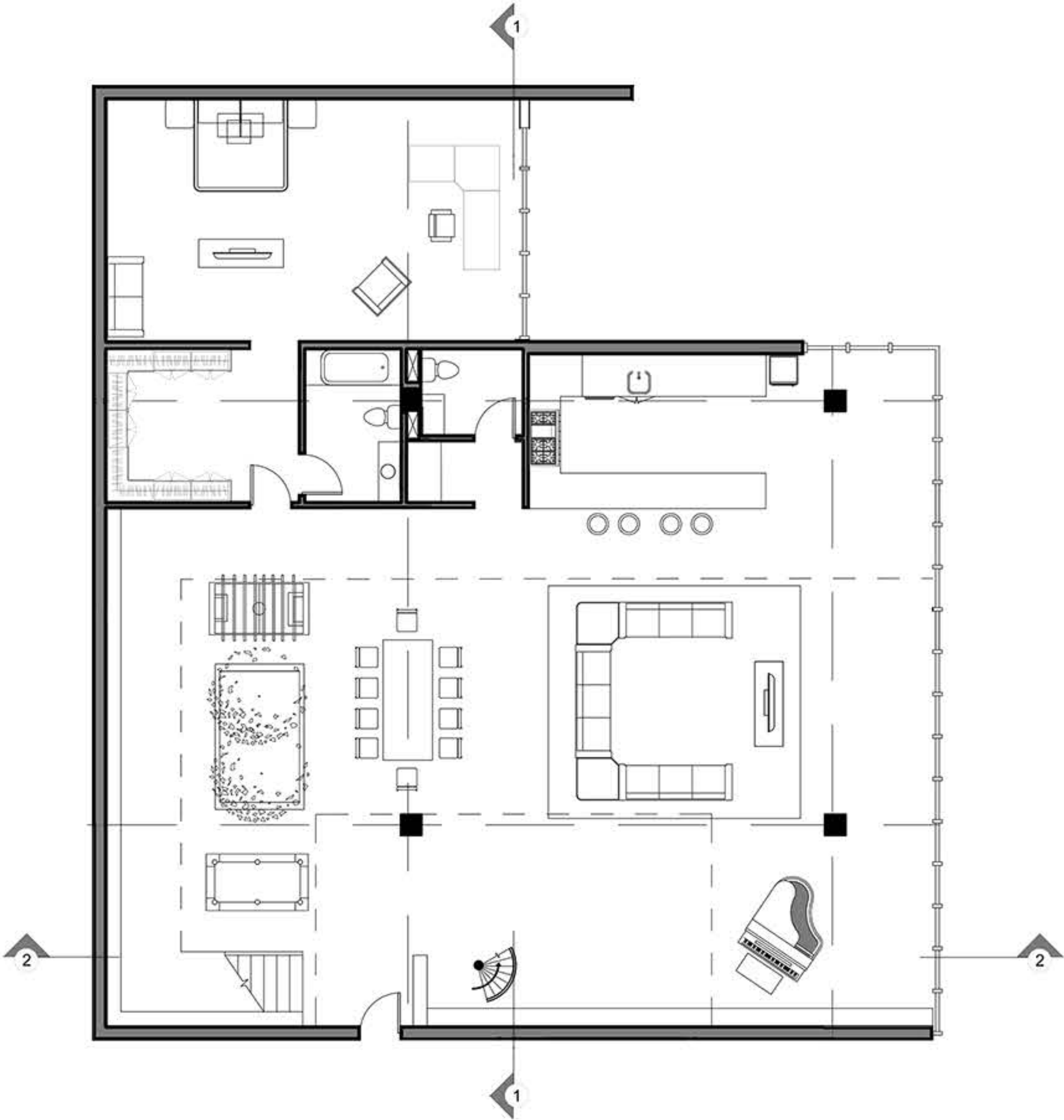
2-2 Section

# East Side Apartment, Unit 2202

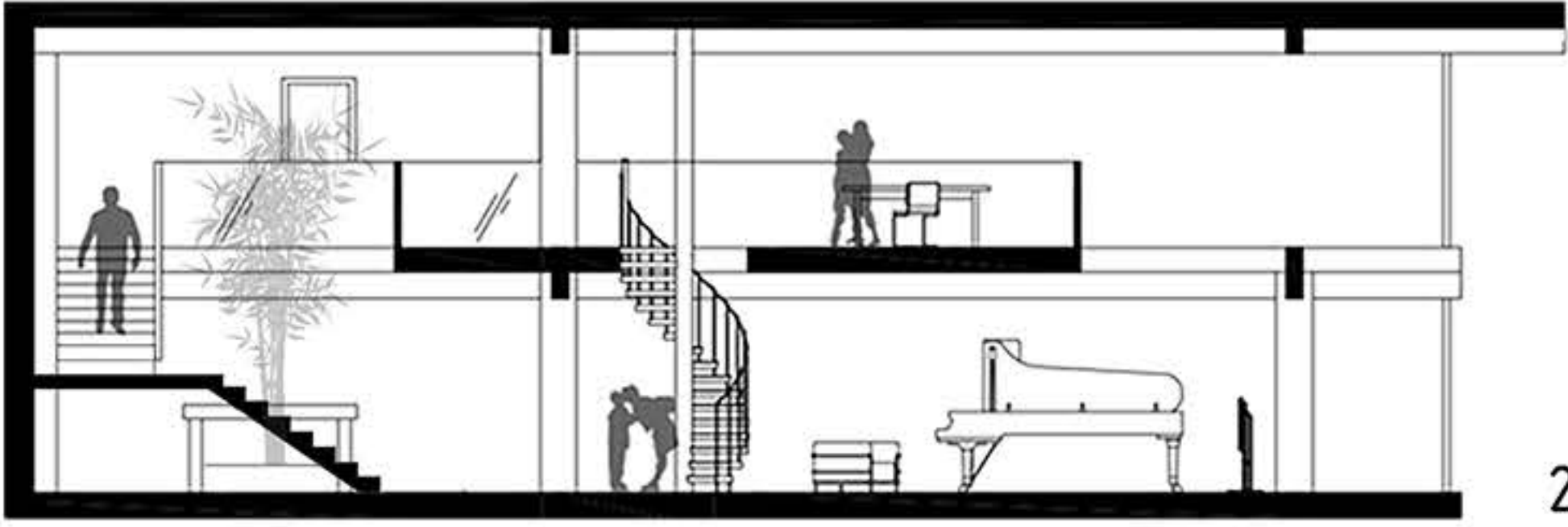
SCALE IN FEET



This unit provide the residents commodious and homie space, yet it offer occupants a great view of Rosslyn, Potomac River and Washinton D.C.



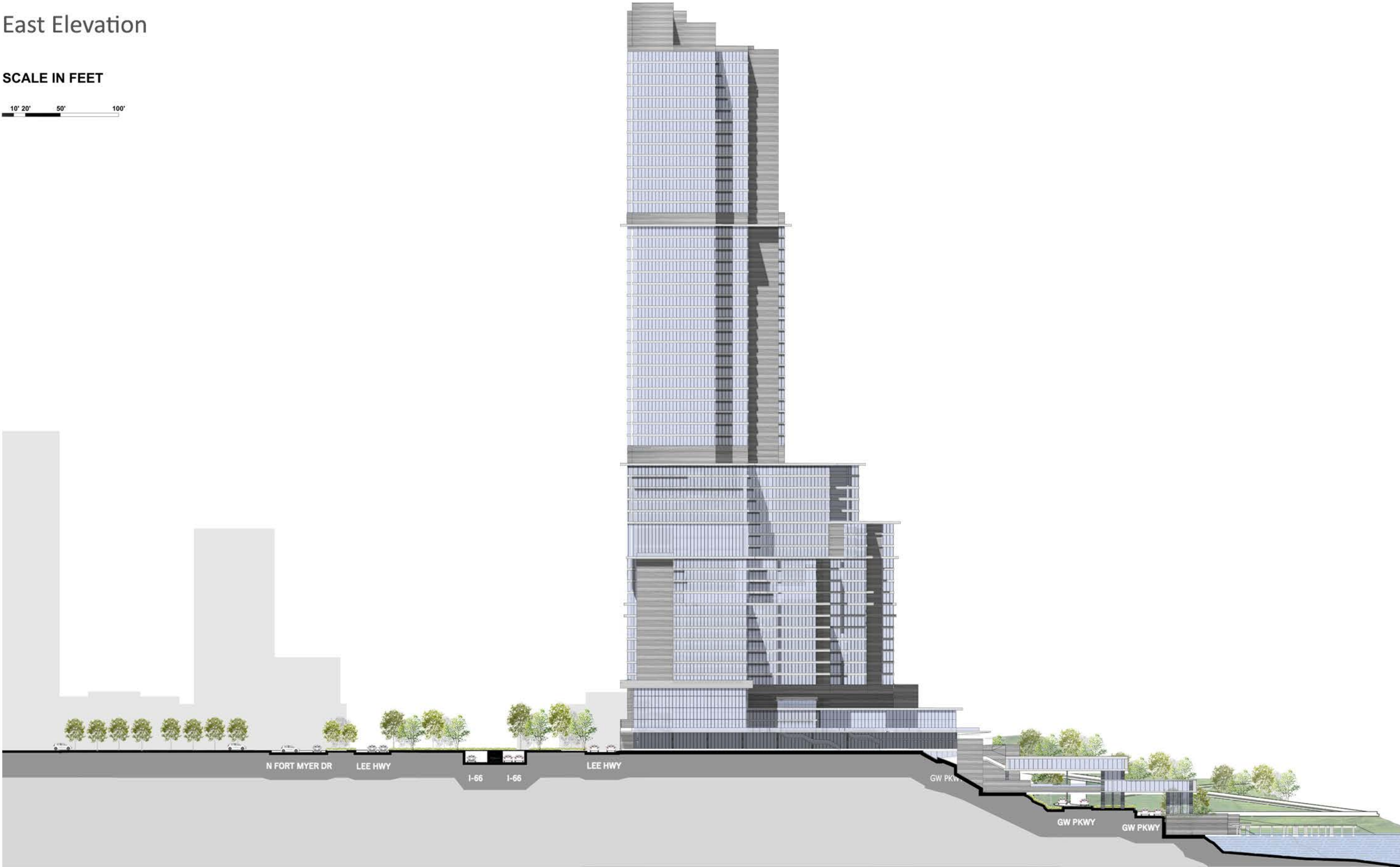
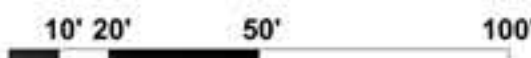
1-1 Section



2-2 Section 75

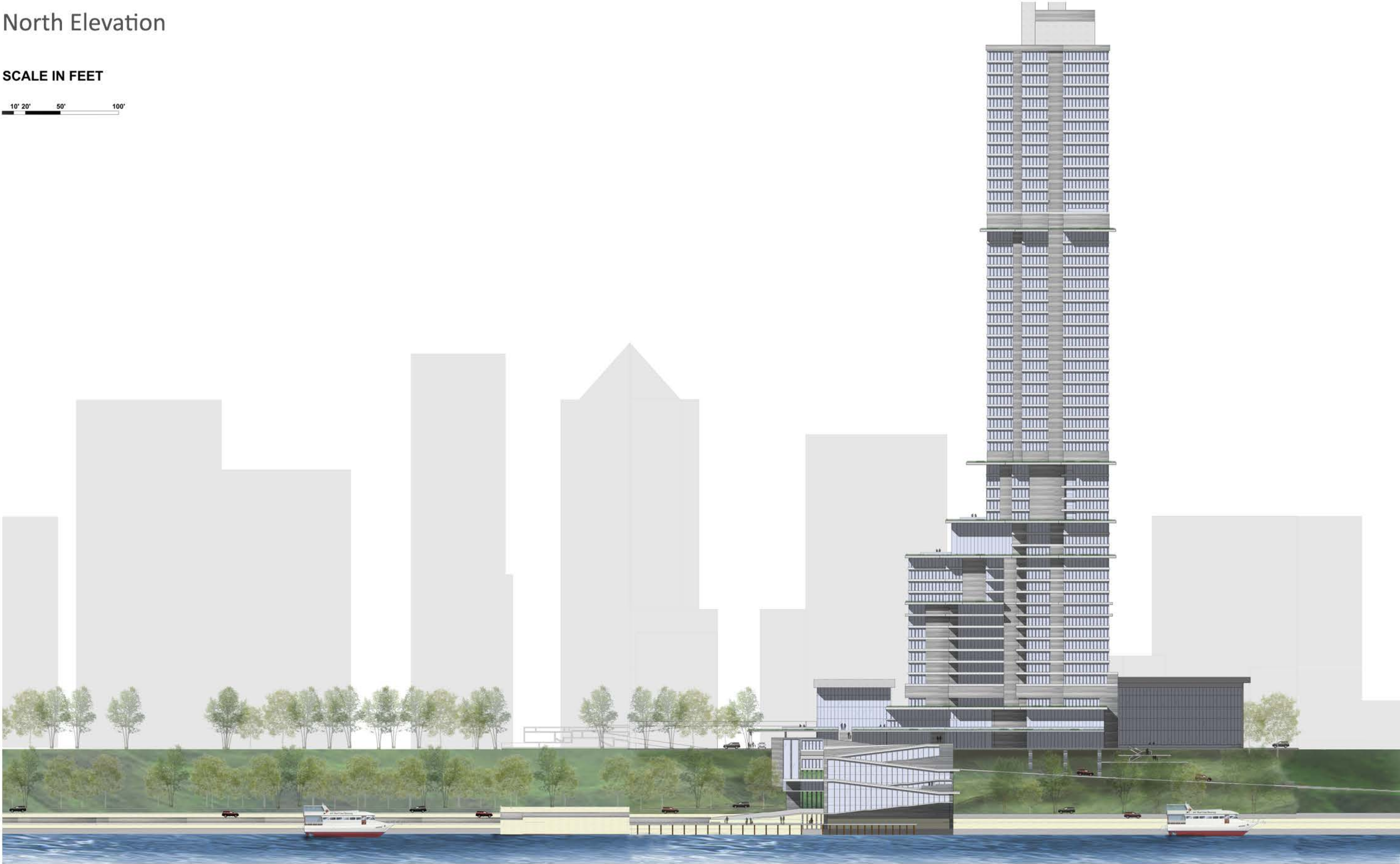
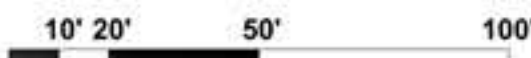
# East Elevation

SCALE IN FEET



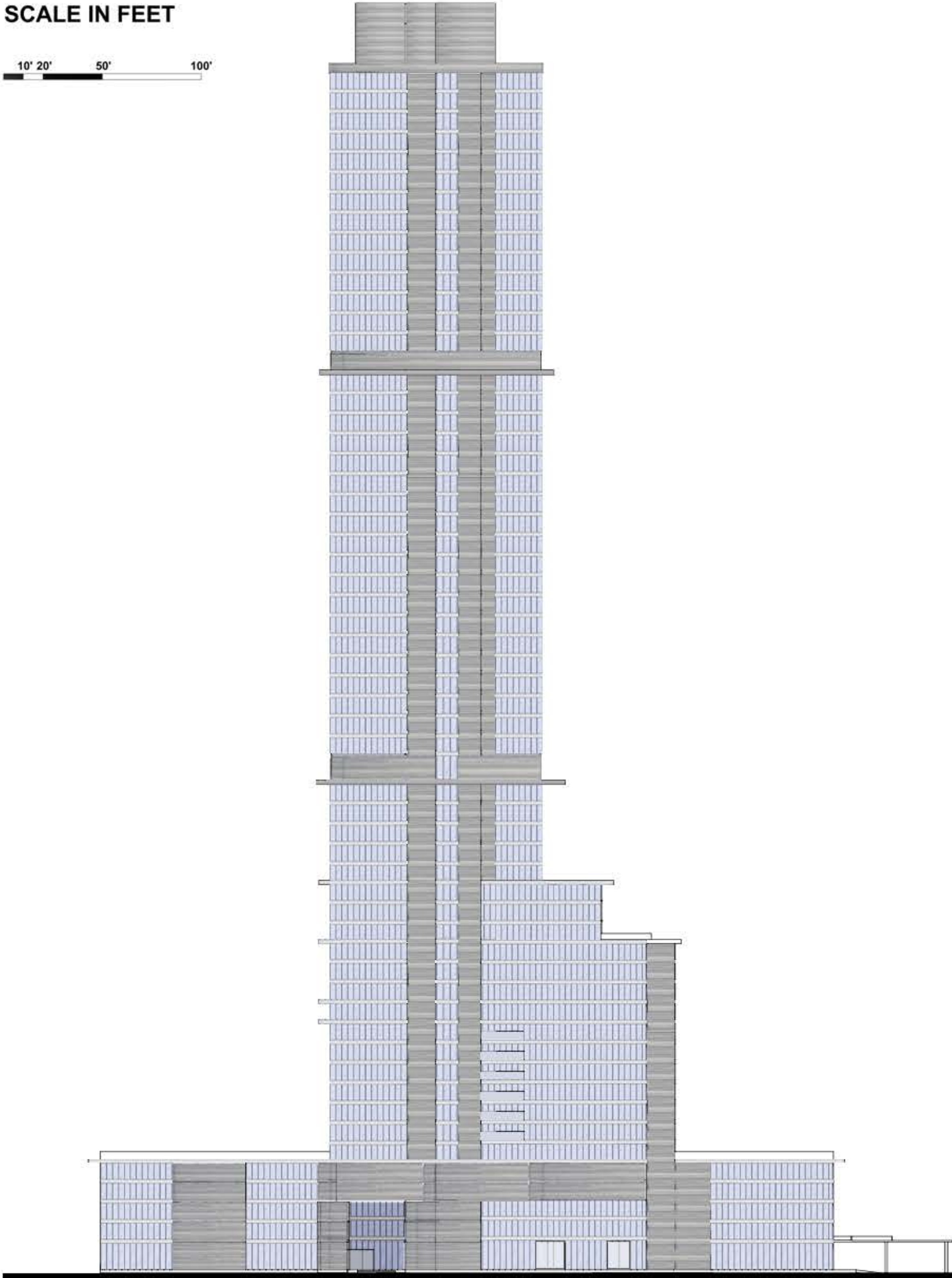
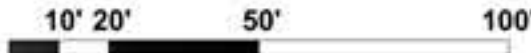
# North Elevation

SCALE IN FEET



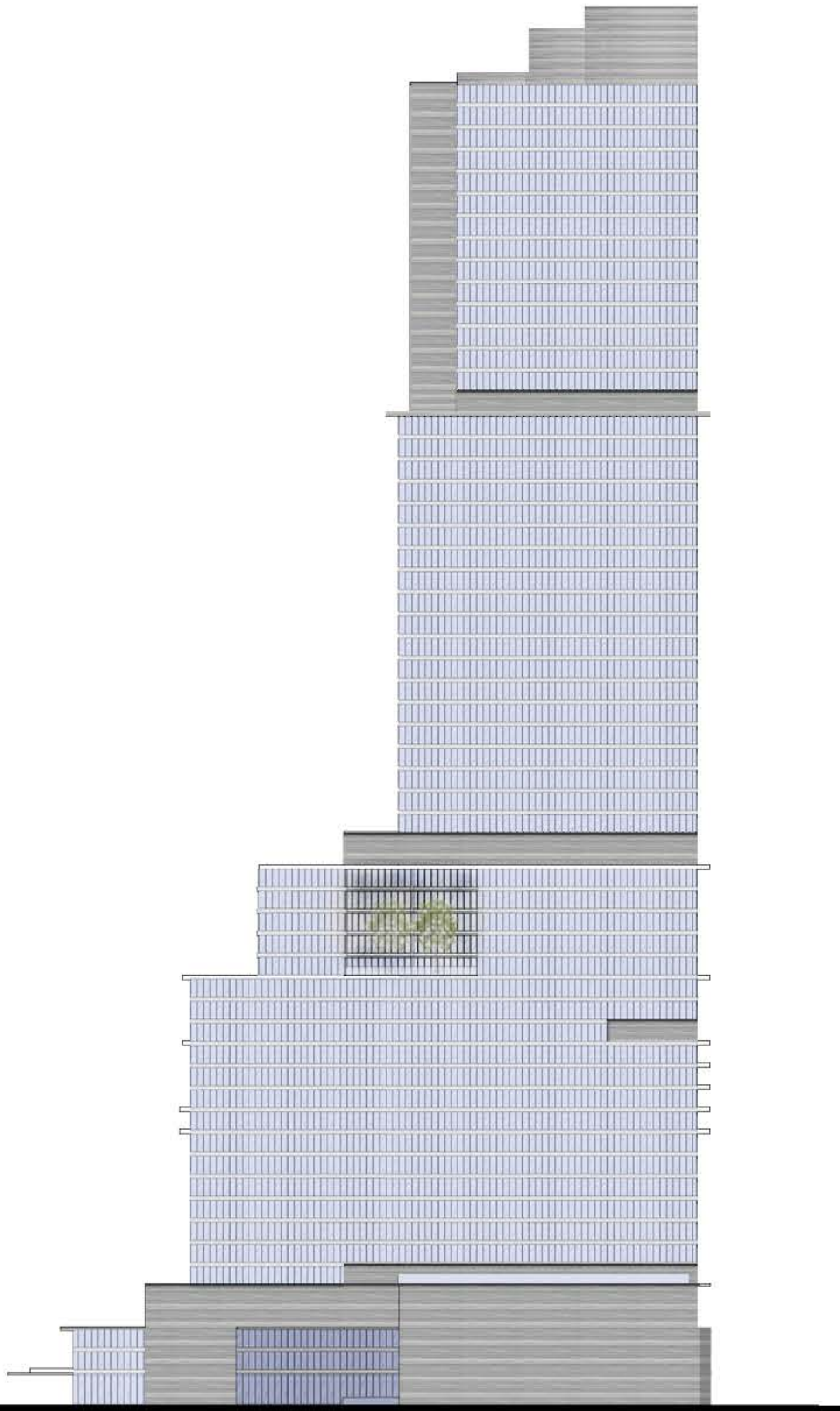
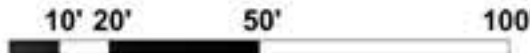
South Elevation

SCALE IN FEET



West Elevation

SCALE IN FEET



### Spacial Experience

Entrance View: Rosslyn Harbor  
Fort Myer Dr  
Gateway Park

Feature Space: Public Lobby  
Hotel Lobby  
Gymnasium  
Hotel Restaurant  
Hotel Atrium  
Apartment Atrium  
Apartment Unit 2202



Rosslyn Harbor Visitors can come to the waterfront by boat or water taxi, yet they can fishing and kayaking.



Ground Floor / Fort Myer Dr Entrance    Visitors may be picked up and dropped off in front of the public entrance. Underground parking is also provided.





**Public Lobby** When people walk into the building, the first thing they will see is a welcoming indoor garden. The grand staircase allows people access to the second floor viewing platform.



2nd Floor/Gateway Park Entrance

When coming from North Moore Street, people can take the Gateway Park sky bridge to the viewing platform. The diaphanous volume opens up to the surrounding landscape while the grand stairs express openness and accessibility for everyone.



Hotel Lobby Whenever the guests are busy checking in or waiting for their companions, they can find themselves surrounded by bamboos, ivies and bushes.



Ground Floor Office The employees of the waterfront complex can enjoy the great view of Georgetown by just sitting in their spacious office.



Hotel Restaurant The guests will also find the hotel restaurant is actually more like an indoor garden



**Hotel Atrium** The structural elements exposed themselves in the atrium and the sky bridge add vitality to the void volume.



**Apartment Atrium** The 30' height air garden on 17th floor is open to the apartment residents. When coming back from work, people can meet each other and have a drink at the bar before going back home.



Apartment Atrium For those residents that prefer to work at home, the atrium provide them a better place to communicate take a break.



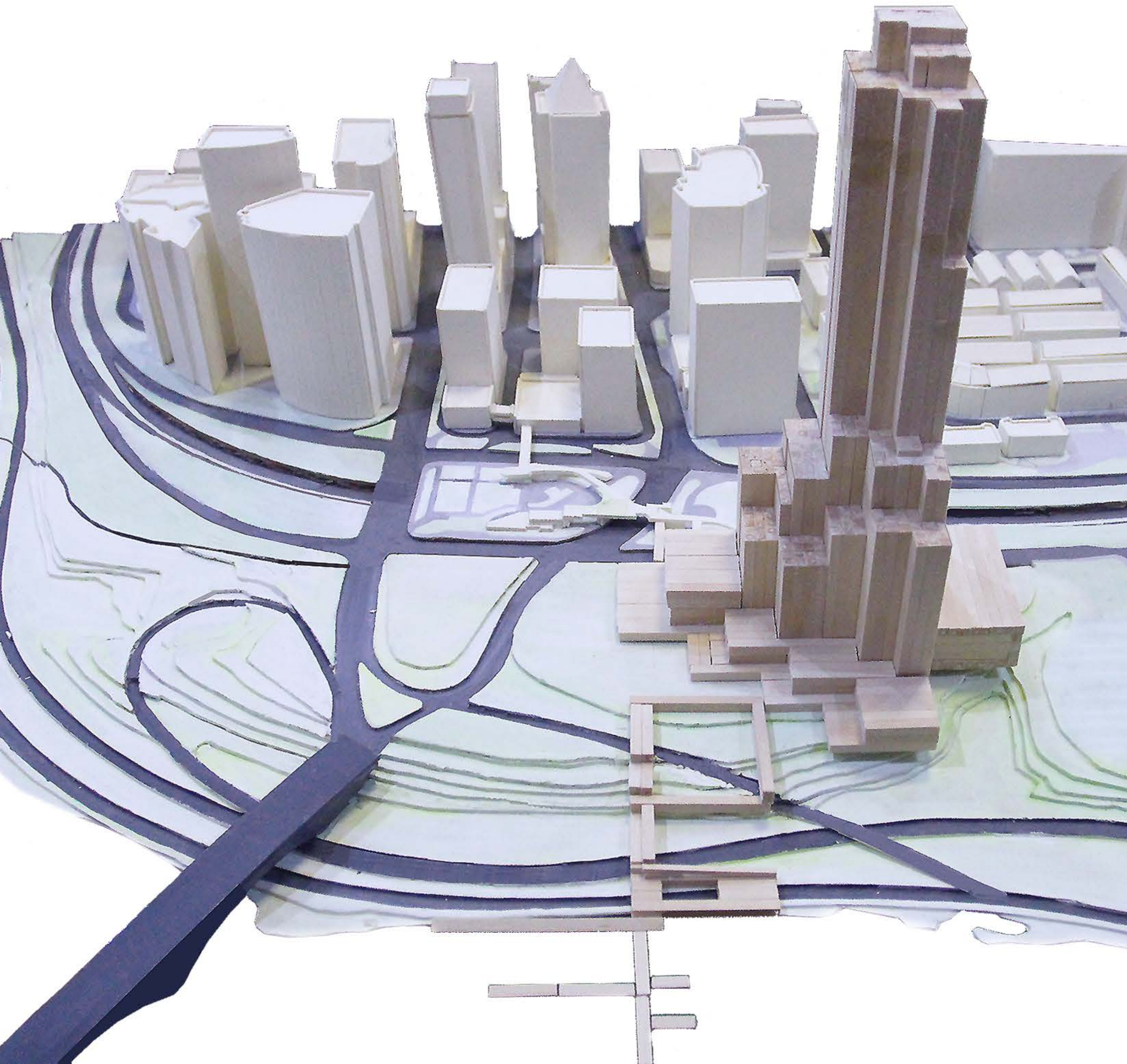


East Side Apartment, Unit 2202 Even in their own apartments, the building allow residents to build up a small indoor garden.



East Side Apartment, Unit 2202 What is more, the view of Rosslyn at night is really fascinating.





## Conclusion

I start the thesis project with a path that connect the Rosslyn urban area with the Potomac River and ends with a vertical neighborhood.

It took me a while to study the waterfront, yet that's when I find out the unlimited potential of the area. When people walk all the way down to the Rosslyn harbor, they can encounter the others that come by boat, water taxi or kayak. The switchback path and the new elevated park allow visitors to cross the highway while enjoying the natural landscape.

The high-rise building is more like the modular vertical extension of the landscape. Those large public spaces are decorated with bamboos, bushes and flowers, as if it is a summer garden. Many large space inside the building, such as public lobby, hotel restaurant, gym and apartment atrium allow their visitors appreciated the unique scenery of Rosslyn, Washington D.C. and Potomac River.

Rosslyn finally become a gateway for people to reach the Potomac River.

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p.6 Figure 3 Rosslyn Business Improvement District. Rosslyn's History, n.d. Rosslyn, VA. <<https://www.rosslynva.org/feature/rosslyn-history>>.

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p.10 Figure 7, Rosslyn Business Improvement District. Aerial view of Rosslyn, n.d. Rosslyn, VA. <<https://www.rosslynva.org/about/history-of-rosslyn>>.

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p.10 Figure 8, Rosslyn Business Improvement District. Looking up N Fort Myer Dr towards the Key Bridge Marriott, n.d. Rosslyn, VA. <<https://www.rosslynva.org/about/history-of-rosslyn>>.

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