Impression of DC:
Research for Basic Element
of Architecture in Three Dimension

Jie Li

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Marcia F. Feuerstein, Chair

Paul Emmons

Jodi La Coe

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ABSTRACT

For finishing this thesis, I want to rethink the meaning of architecture after studying architecture in these years. I reviewed buildings in the world. In the process of reviewing, I analyzed these buildings by the method which called finite element method.

The finite element method is usually used for analyzing the complex system of structure. In this system, The line is the basic element for a one dimension. The plane is the basic element for a two dimension. By following this logic, the cube is the basic element for the three dimension.

After some researches for cube in architecture and geometry, I found there were a lot of examples for using cube to design. And for cube itself, there were many properties.

Then, I decided to use cube to design the building in my thesis. And in the process for designing, I understood the meaning of architecture and design better than before.

For finishing this design, I related Washington, D.C. with my design. So I designed a multi-function museum for this city to help people to understand how this city was built in the history. As a landmark building, this building, "Impressions of DC," is a result of this thesis study and exploration of the cube.

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GENERAL AUDIENCE ABSTRACT

It is easy to build a building. But for building a city, it is much harder. For building a city, this is a long process. And in this process, many important moments would happen.

The city, Washington, D.C., was also built after many important moments. As one of most important capitals in the world, this city has suffered many disasters and survived in the process of history.

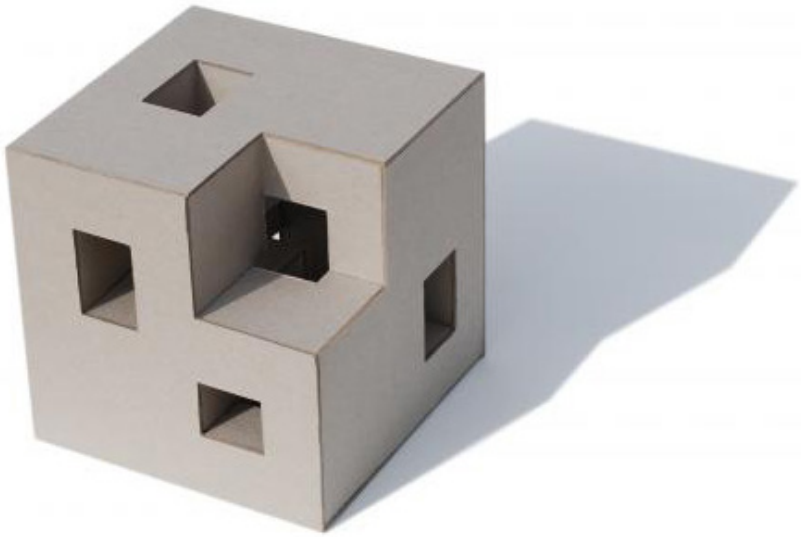
There are many museums in this city to record the history of this country, but there is not a good museum to record the history of this city. So, I decided to design a building for this great city. This building would also become a good place to help people understand this city.

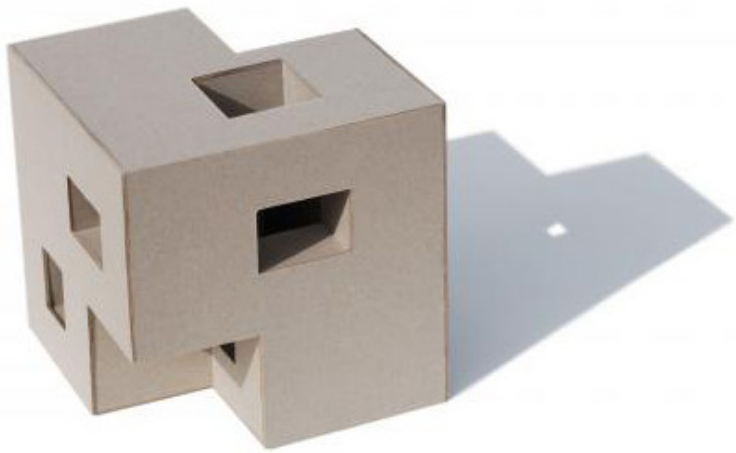
This building would become a new landmark for this city. I decided to design this building in a special site, the Hains Point. This site is close to the Potomac River and Ronald Reagan Washington National Airport. So, it would be easy for that people visit this building. I also want this building become the first impression of DC for people. This is also my thesis title.

I used my architecture knowledge and many people's help to design this cube building, "Impressions of DC".

Contents

Introduction





What is a cube?

A cube is an integer that is equal to some other integer raised to the third power. We refer to raising a number to the third power as cubing the number. For example, 125 is a perfect cube, but 121 is not a perfect cube because there is no integer such that.

How about the perfect cube?

What is a perfect cube?

In geometry, a hypercube is an n-dimensional analogue of a square (n = 2) and a cube (n = 3). It is a closed, compact, convex figure whose 1-skeleton consists of groups of opposite parallel line segments aligned in each of the space's dimensions, perpendicular to each other and of the same length. A unit hypercube's longest diagonal in n dimensions is equal to $\sqrt{n}$.

In the actual world, there is no perfect cube. A perfect cube means that all sides in a cube are totally same. But we could cannot make a perfect cube. No matter how big or small it is, when we try to make or create a perfect cube, there are always mistakes or errors in the process. Even if we could make the number of all six sides as close to the perfect form, it is the same with the development of technology.

So, we can't create a perfect cube, but we can "make" it in our imagination. When we see something that looks like something else, we will understand it as what we think what it is. For example, we could see the picture on the right. We know this is a normal 3D geometric form. Because it looks like a cube, even we don't know the length of each side, we still think it is a cube.

This is the way we can make an imperfect cube into a perfect cube.

Here are the next questions. How do we relate the cube to a building? How can a building reveal the cube? What might this kind of project become?

Washington, D.C.

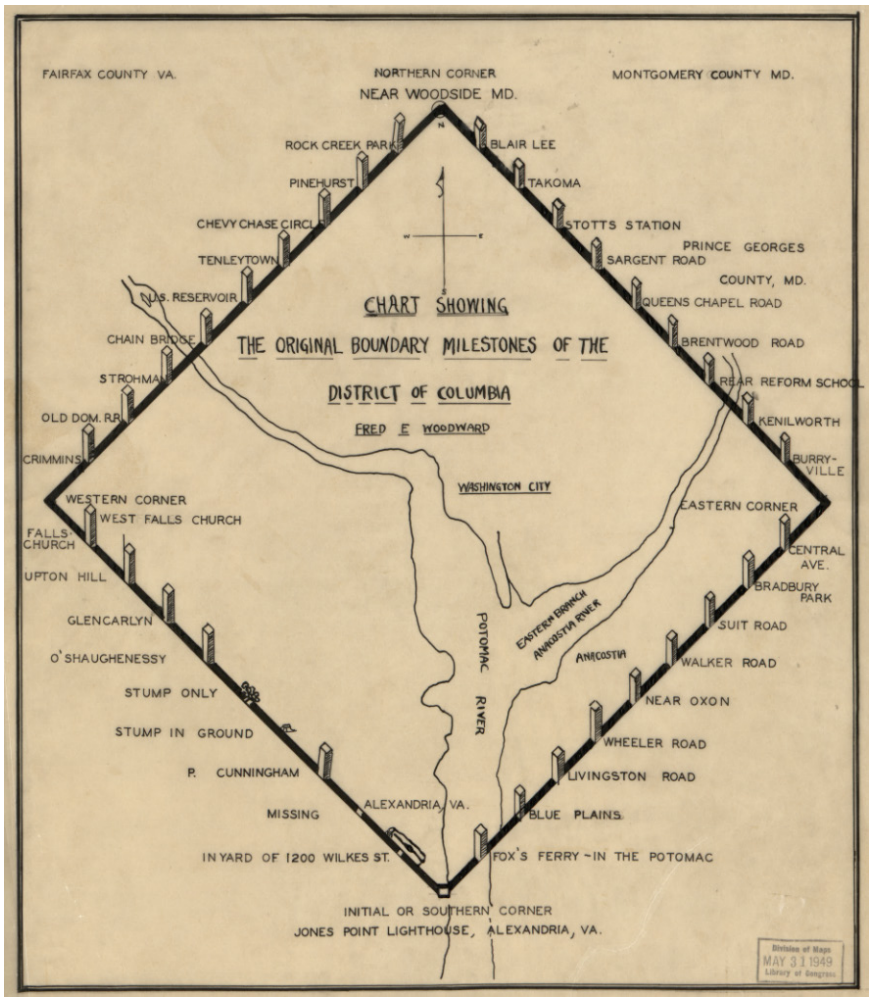
Here is an answer to these questions:
As we know, Washington, D.C. was built by George Washington, the first President of the United States. Once the country was formed, George Washignton, with the support of James Madison, Alexander Hamilton and Thomas Jefferson, created and drew a square on the land around the Potomac River of 10 miles by 10 miles. President George Washington called this city the "Federal City" and it became the Capital of the United States. In 1791, the United States Congress named the city Washington, D.C. in honor of George Washington, the father of the country.

Washington, D.C. is the Capital of the United States. And it is located on a square. This cube would sympolize this special city, Washington, D.C.

Since the city began from a square, this thesis follows a 3-dimensional language of form. How did the city develop from the original square to what it looks like today?

I used the basic element of a Cube to design a museum to provide space for visitors to learn about the history and design of Washington, D.C.

Impressions of Washington, D.C.



The image, above, shows the map of the city square, indicating the location of 10 stones for each mile in every side. Some of these stone markers remain in place today.

Research

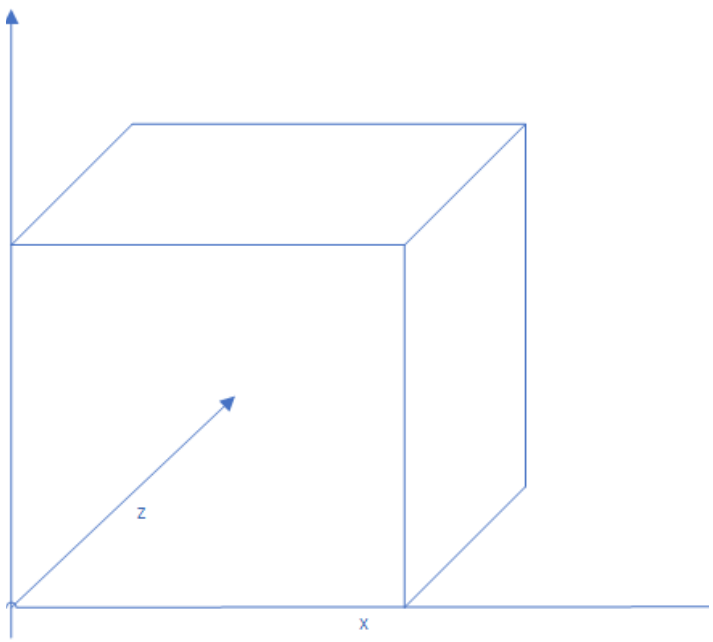
Cube Study

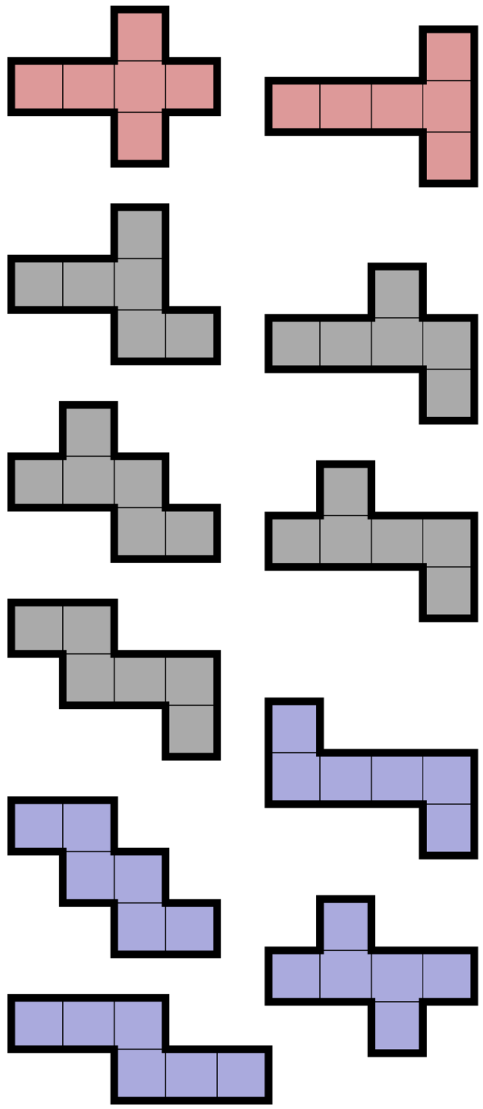
What is a Cube?

A cube is a three-dimensional square. It is the only regular hexahedron and is one of the five Platonic solids. It has 6 faces, 12 edges, and 8 vertices.

How do we draw a cube?

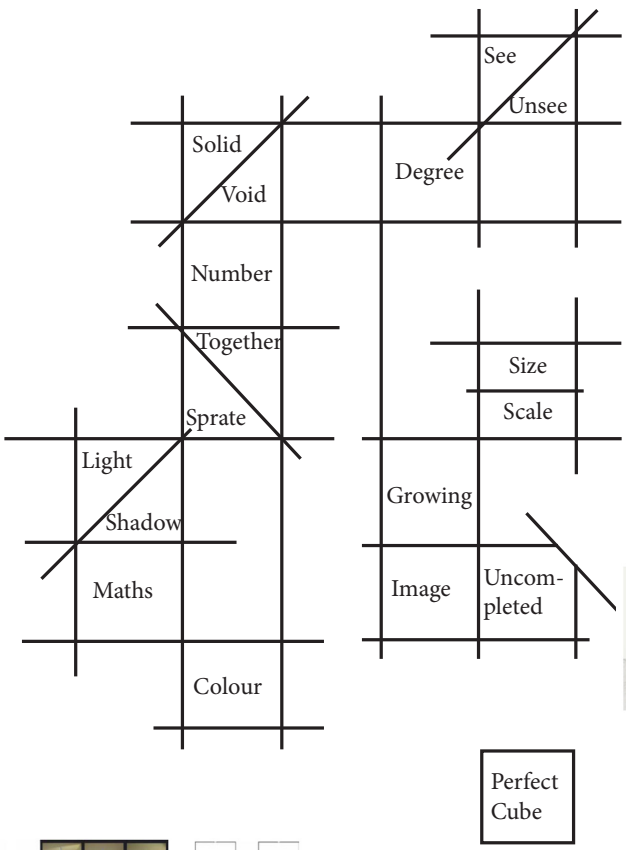
We need the three axis, the x ,y and z axis. Then we draw the same three lengths of these three axis. So, it is simple to draw the cube in the axis.

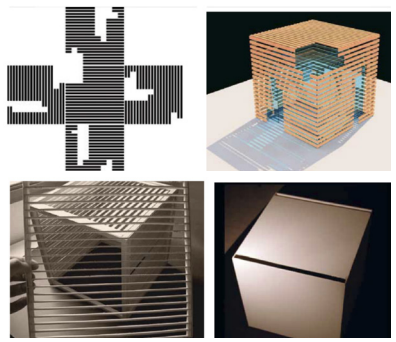


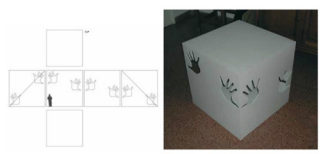


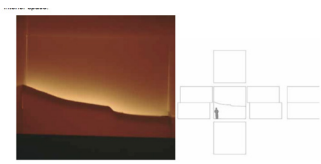
What is the meaning of the Cube in Architecture?

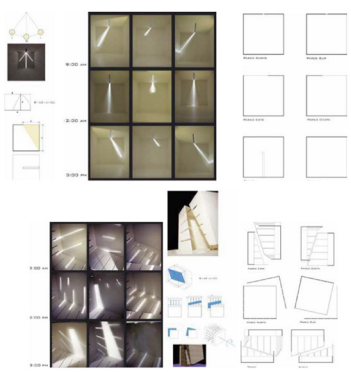
Cube is a good way to learn about architecture and space. Also, the cube is the basic element for a building in our three dimension. The Cube has many properties and there are some interesting forms, which could allow us rethink the architectural forms.

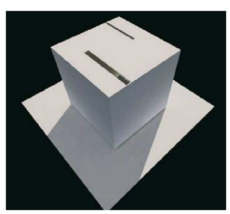


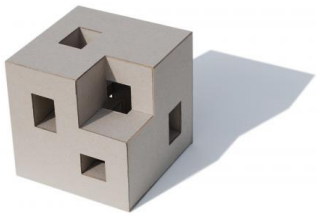


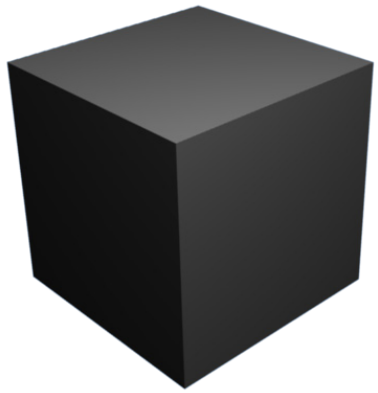


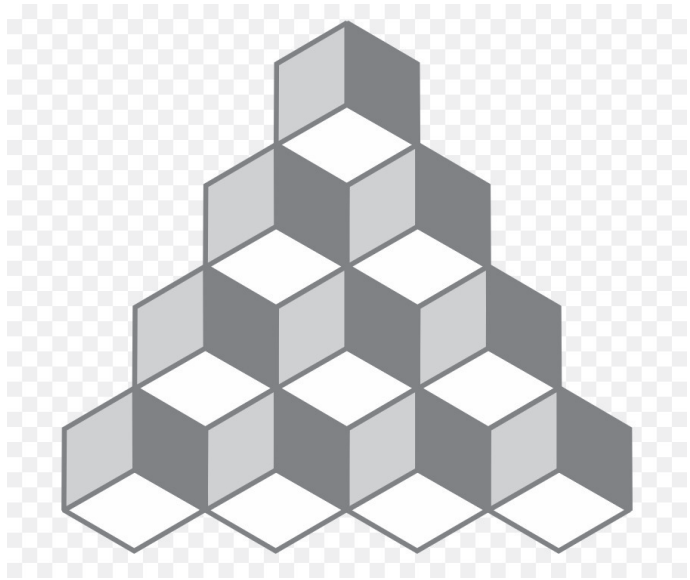


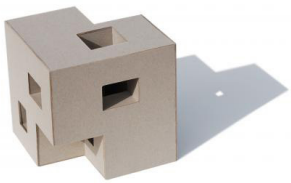


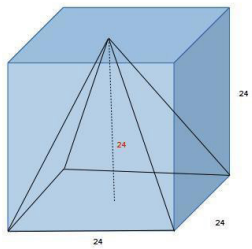








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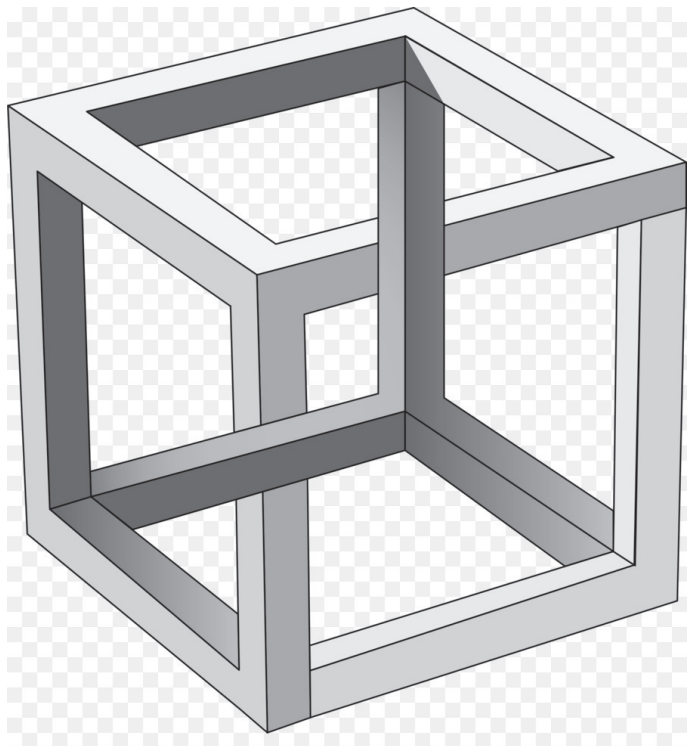

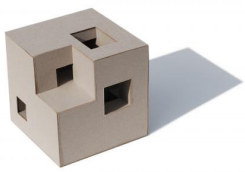

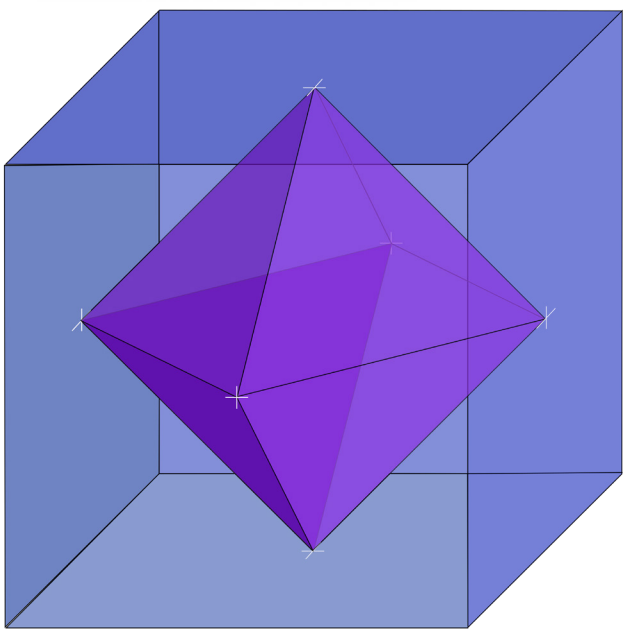

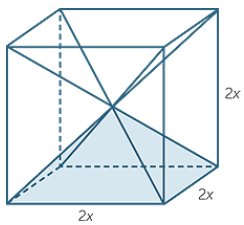
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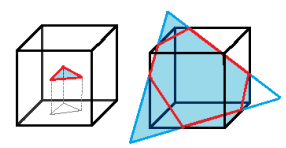
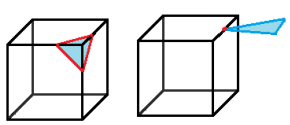


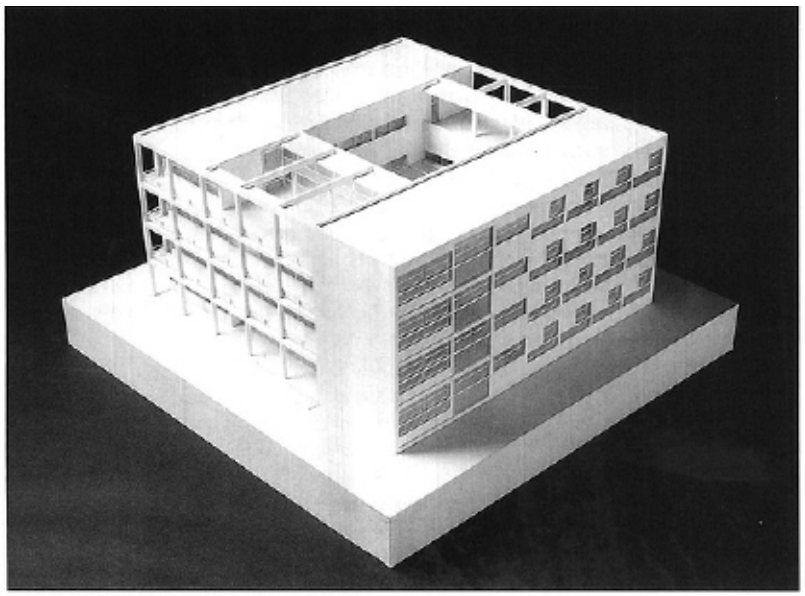


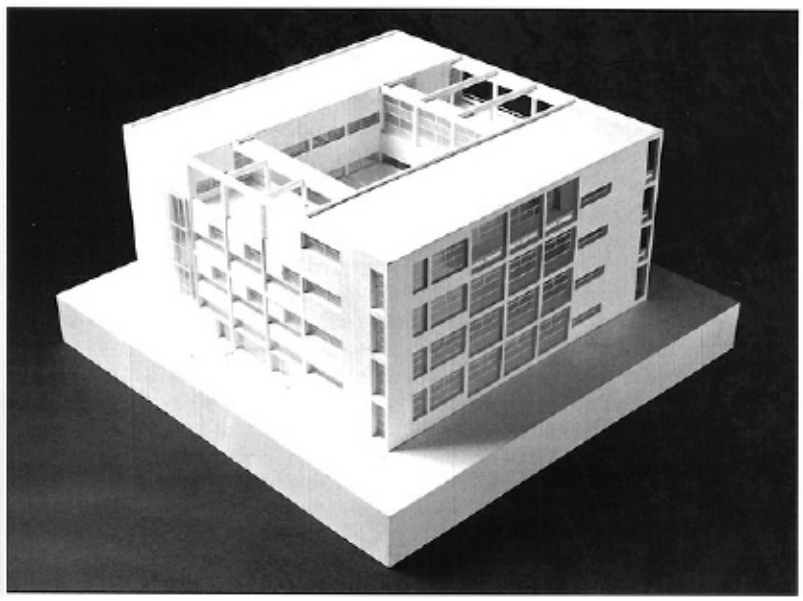
Case Studies

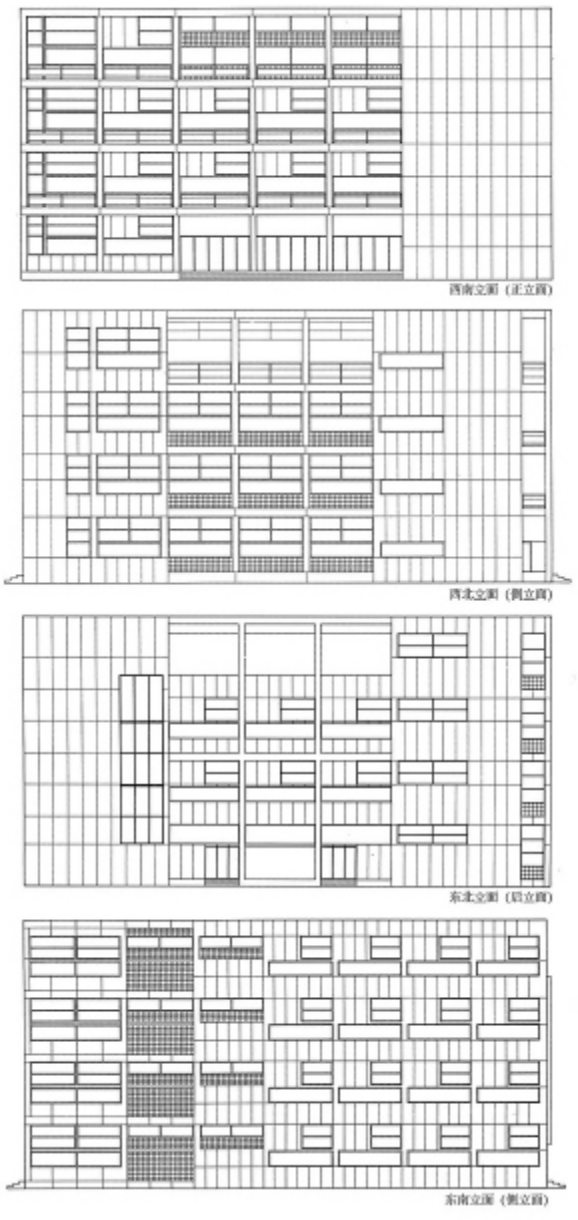
The following case studies reveal a variety of interesting forms of the cube in architecture. These case studies are examples of built and unbuilt projects that are based on geometry, including square and cube.

1. Casa del Fascio

-- Giuseppe Terragni

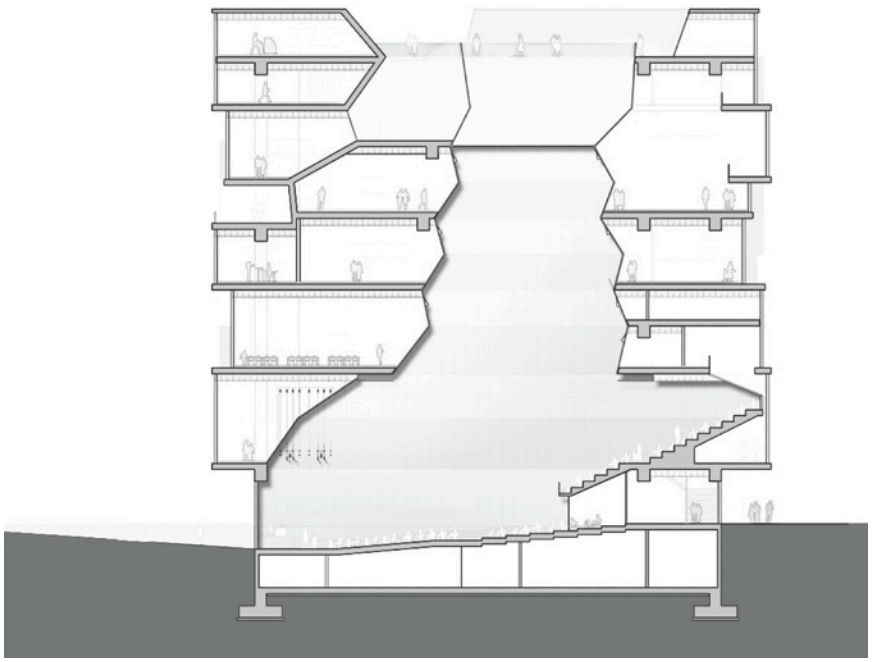


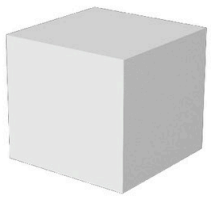


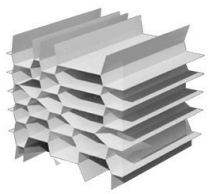


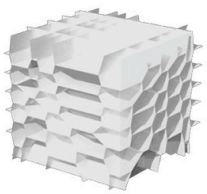
2. UN Memorial / ACME

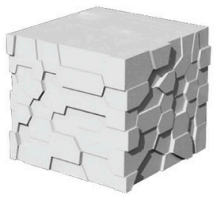
-- ACME

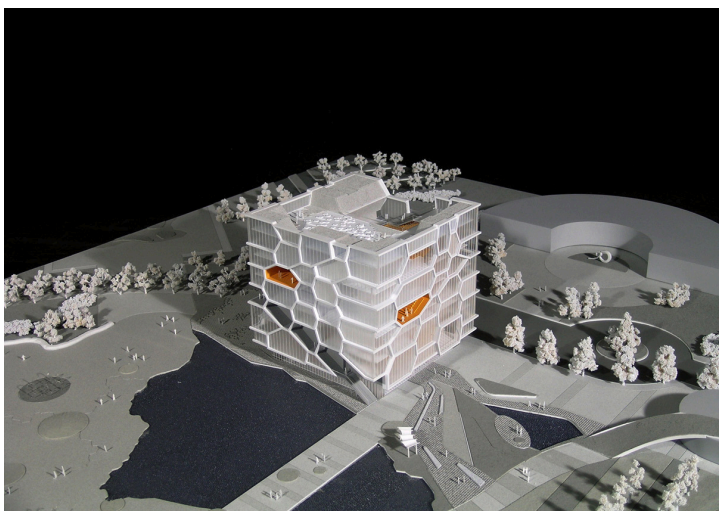


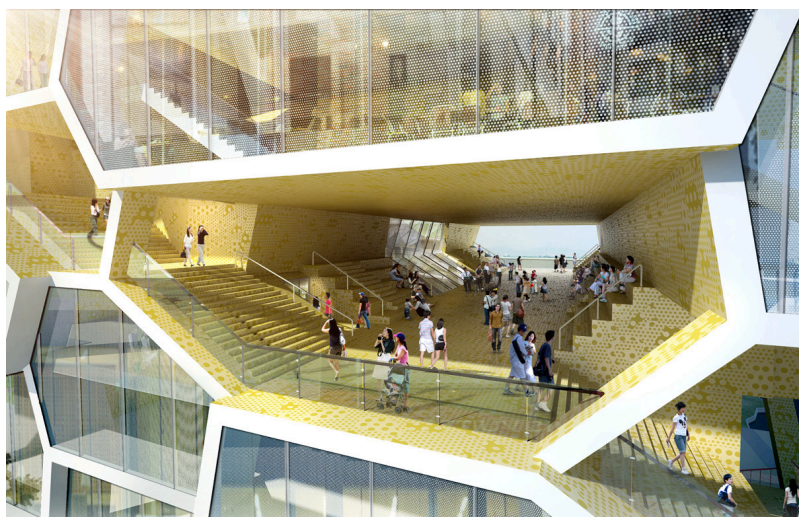






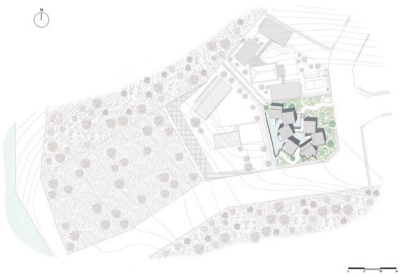


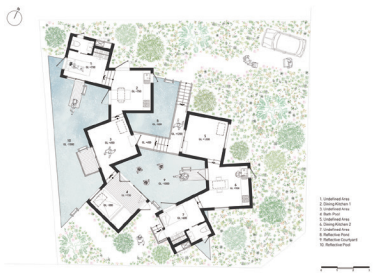


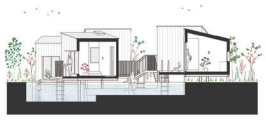


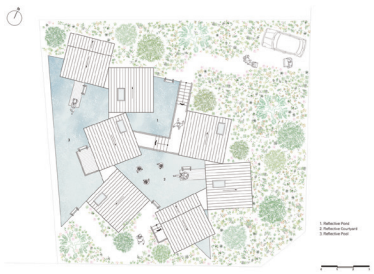
3. Floating Cubes

--- YounghanChung Architects



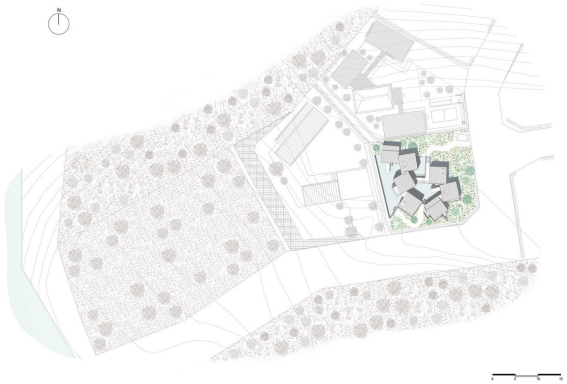


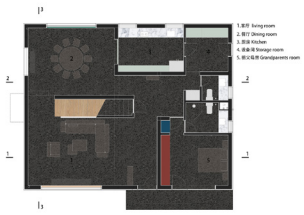


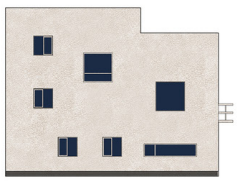


4. Datuan Villa

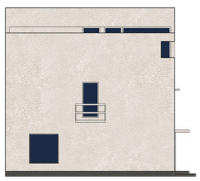
--- OFFICE COASTLINE





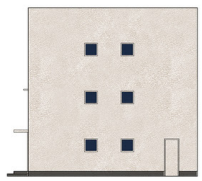


North elevation



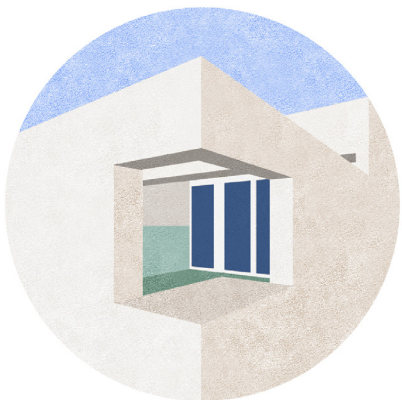
West elevation

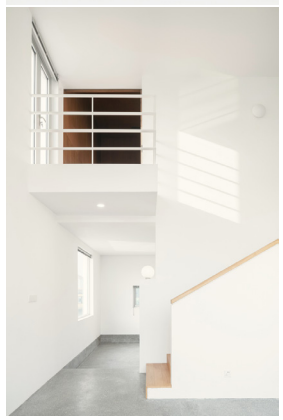
South elevation



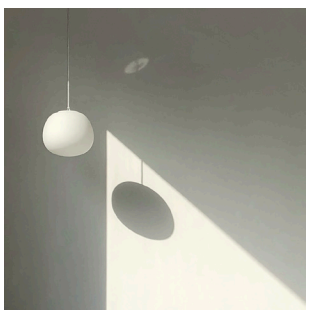
North elevation

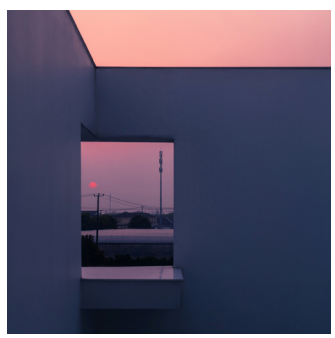
F2 plan





F3 plan

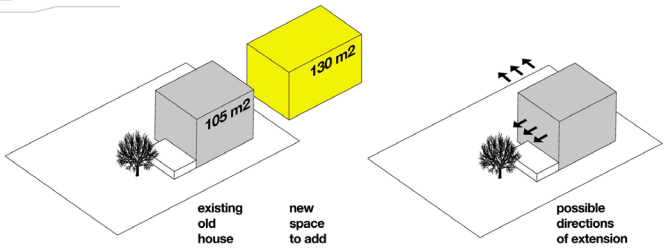


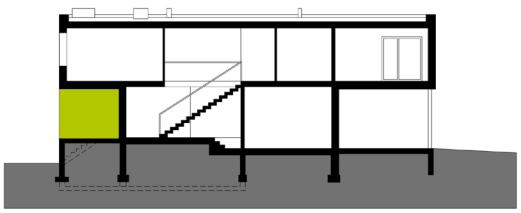


5. Black Cube House

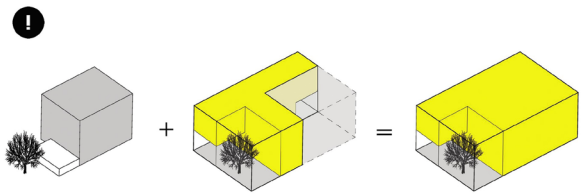
--- KameleonLab

the site and surroundings

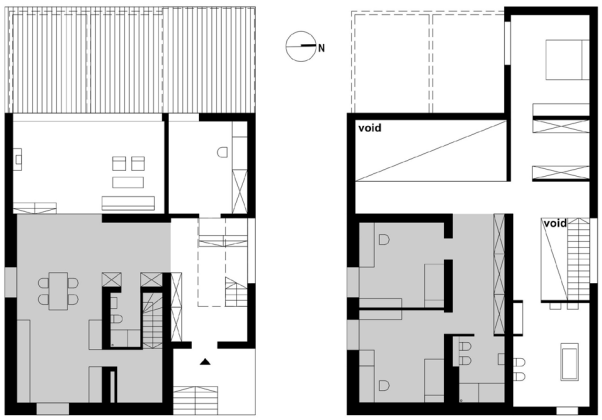




longitudinal section



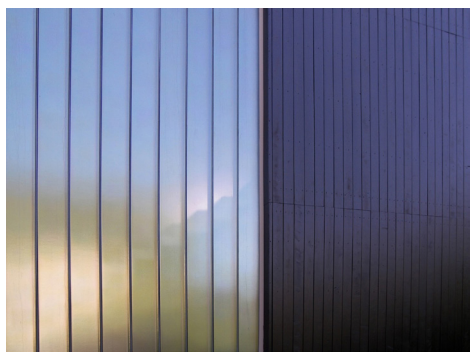
the addition of extra living space



ground floor plan

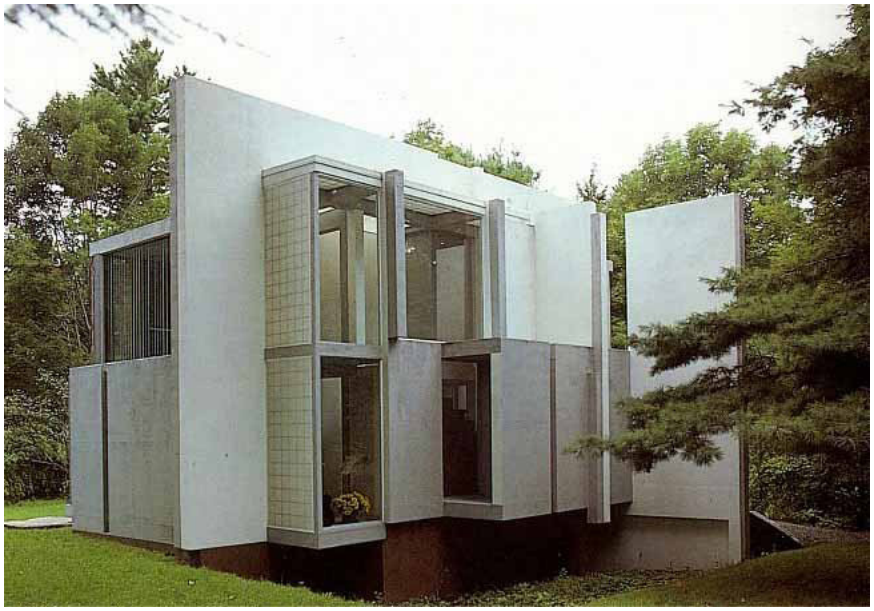
1st floor plan

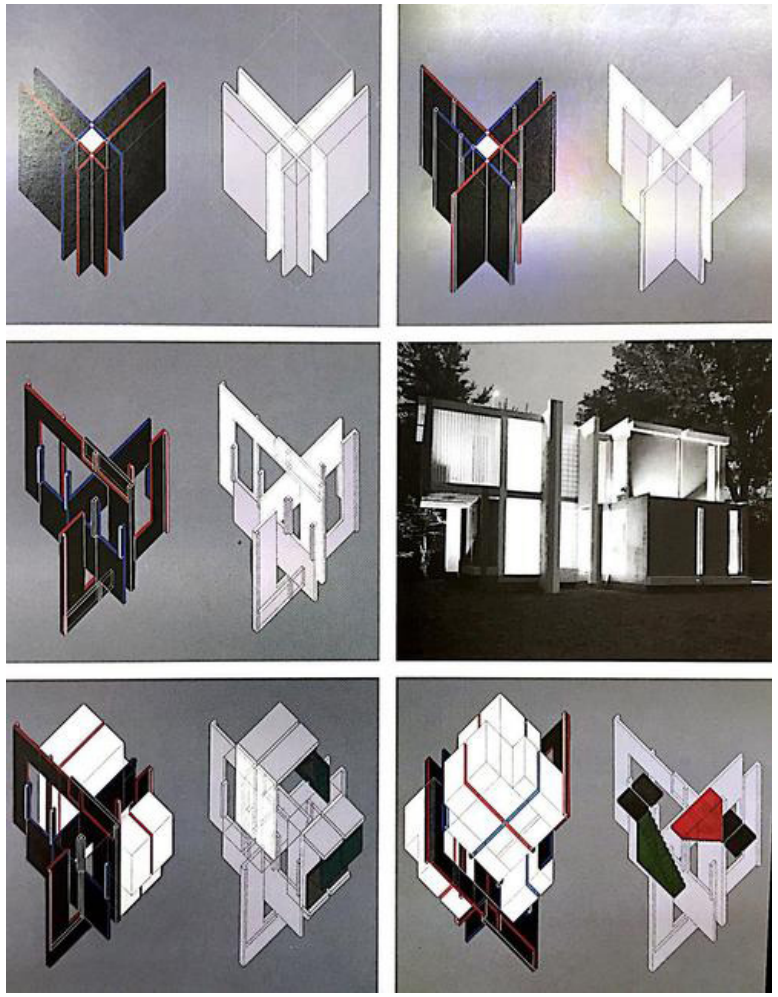
the footprint of the house before the makeover

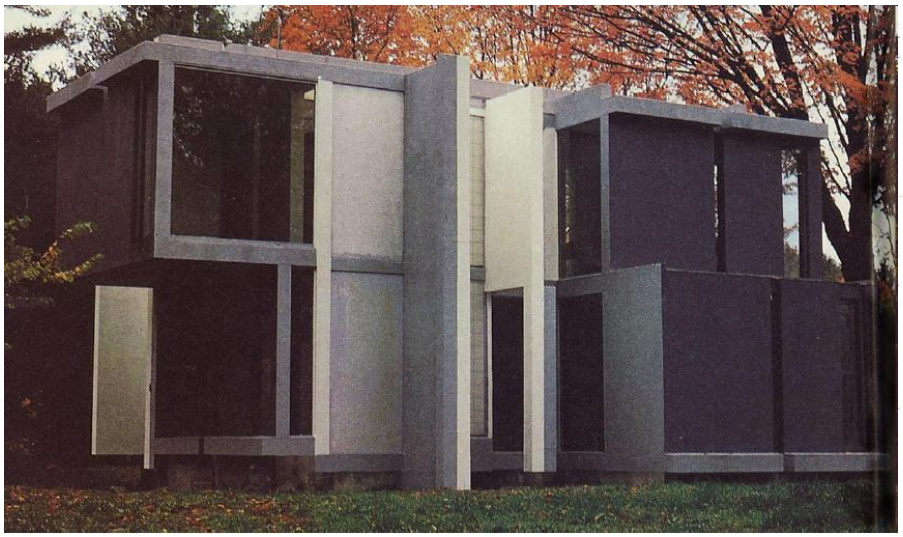


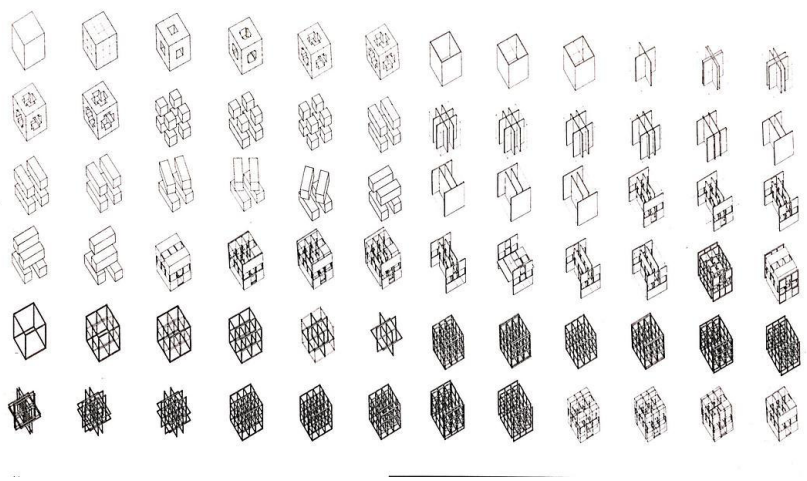
6. House VI

--- Peter Eisenman







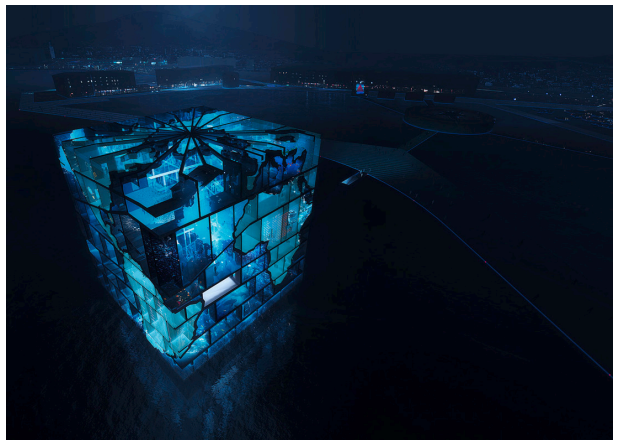


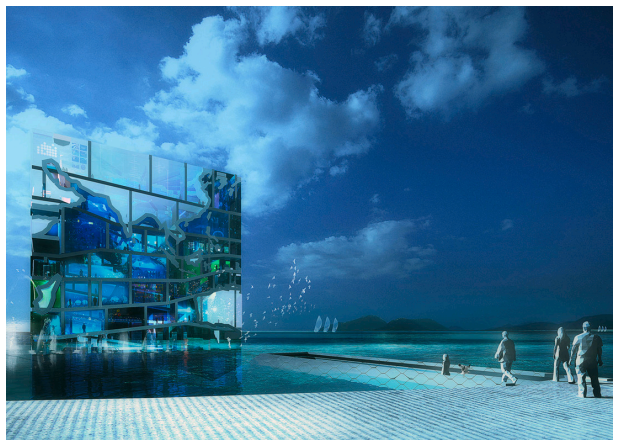
7. Human Fraternity Project in Abu Dhabi

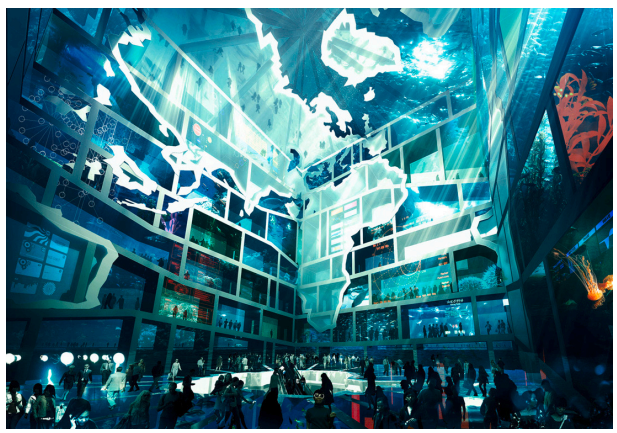
---Adjaye Associates

8. The Water Cube

--- MVRDV







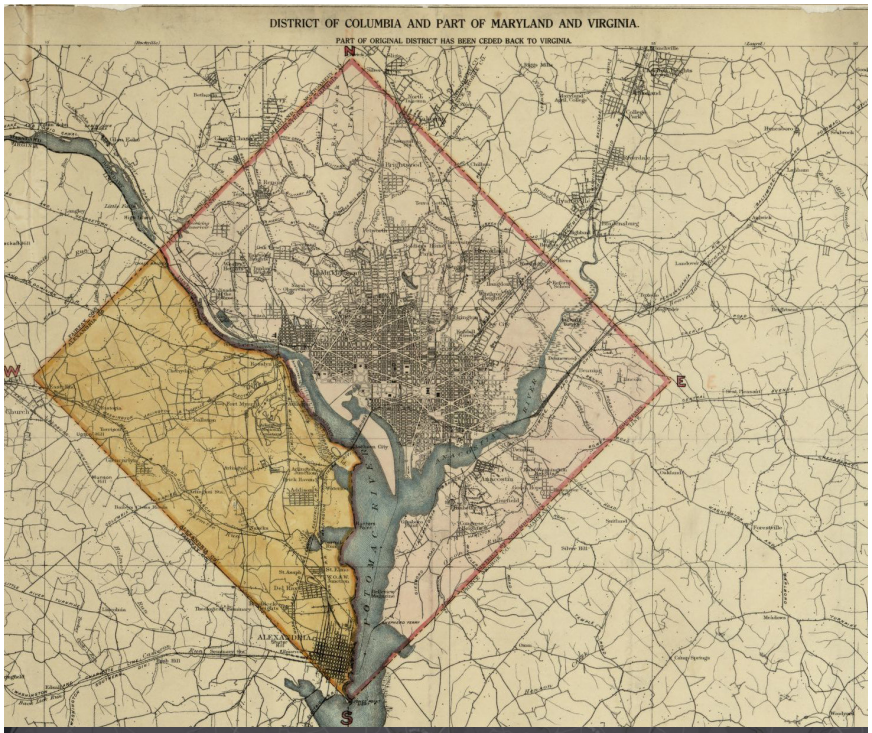
From
All pictures in case studies are from Archdaily.
https://www.archdaily.com/

City Study (Washington, D.C.)

History

Washington, D.C. was built in a 10 mile by 10 mile square as shown in the picture on the right. After 230 years, how has the city changed?

From the image of the map on the bottom,we see that people's activity has extended to the edge of the square nowadays. Rather than the bottom map, we see that peole only live close the river and the zone of the National Mall from the old city map (right).



From
The old map is a map of DC in 1990.
https://www.dcvote.org/inside-dc/historical-and-antique-maps-washington-dc

6 Big Moments for Washigton, D.C.

Building a city needs a lot of work in hundreds of years. For Washington, D.C., it is a younger capital than capitals of other countries. But this city could be built and developed as one of the best cities in the world, there were many big moments that happened in the process of its growth. The following are 6 the most important big moments for Washington, D.C. that allows us to understand the history of how the city was built.

1) (1790) It Started With President George Washington

President Washington chose Washington DC to be the Capital of the United States and specified the exact spot, adjacent to the Potomac and Anacostia Rivers. The District would include a small bit of land ceded by both Maryland and Virginia and would be designed by Pierre Charles L'Enfant, a French Architect and Civil Engineer. L'Enfant's vision was modern and compelling, and included grand boulevards and magnificent ceremonial spaces similar to those in Paris. The entire city would be designed on a grid, with all points

leading to the Capitol Building.

2) (1812) A Major War

It wasn't too long after DC was established that the War of 1812 and enemy forces nearly took it all away. Great Britain's army invaded the city in the midst of the War of 1812 and subsequently set fire to much of the city. The recently completed White House, the U.S.

Capitol Building and the Library of Congress were burned to the ground

3) (1862) Emancipation Proclamation

Resulting from Washington DC's early adoption of the Emancipation Proclamation, the city increased in size when it became an unofficial hub for freed slaves during the Civil War. Because of this, and the fact that abolitionist Frederick Douglass took up residence there, the African American population grew steadily within the city.

4) (1900s) The City Beautiful Movement

After the War of 1812 and the Civil War, even though Georgetown and several surrounding areas that were outside the boundaries of L'Enfant's original designs, neighborhoods developed downtown and around the Capitol and the White House and streetcar lines were expanded adding even more energy to the growth of the city. In the early 1900s, DC was the first city in the United States to undergo urban renewal projects as part of the "City Beautiful" movement. In 1901, the McMillan Plan was proposed as an effort to complete

L'Enfant's vision, which included expanding the National Mall.

5) (1960s) Civil Rights Movement

When civil rights Leader Dr. Martin Luther King, Jr. was assassinated on April 4, 1968, the beautiful city of DC erupted into violence as rioters passionately took to the streets and neighborhoods. Fires destroyed numerous buildings and rioting continued for three days,

only stopping after federal troops were called in.

6) (1973) The Home Rule Act

In 1973, Congress enacted the Home Rule Act which allowed voters to elect a mayor and a city council that would oversee the district. Walter Washington became both the first elected and first black mayor of Washington DC.

From
A Guide To The History of Washington D.C. | Our Nation's Capitol
https://www.trolleytours.com/washington-dc/history

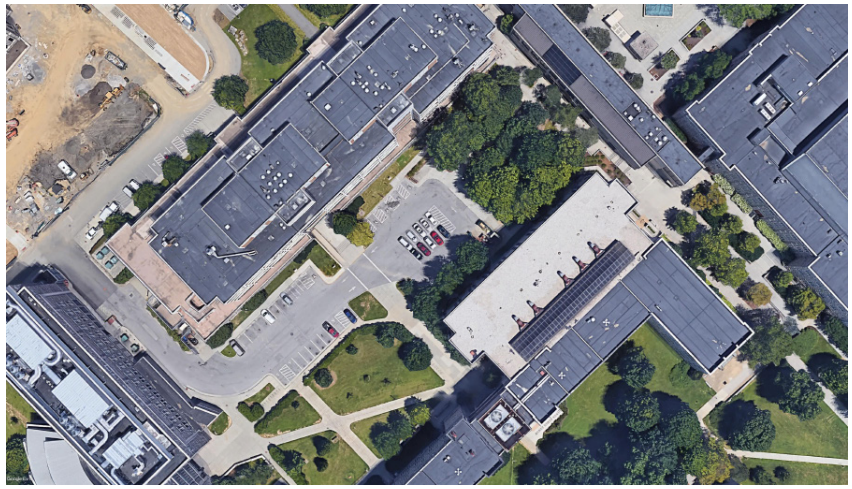
Analysis

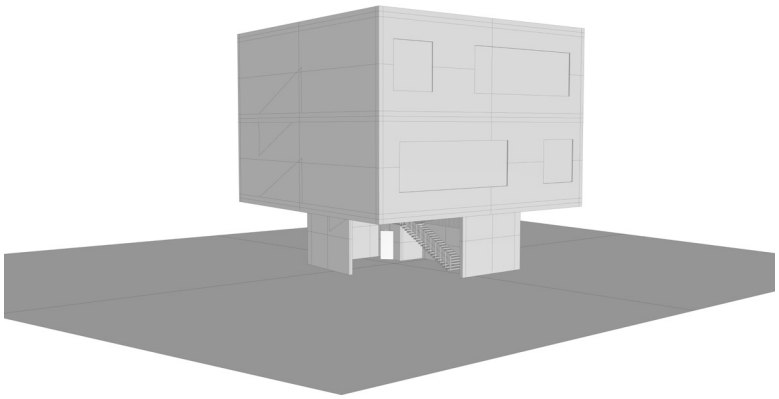
Cube Test

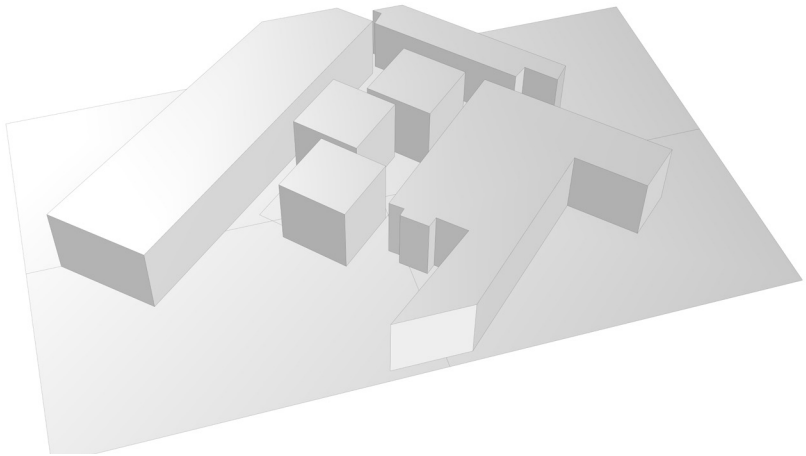
I used a small project to test how to transfer a cube to a building. The site is located in Blacksburg, Virginia.

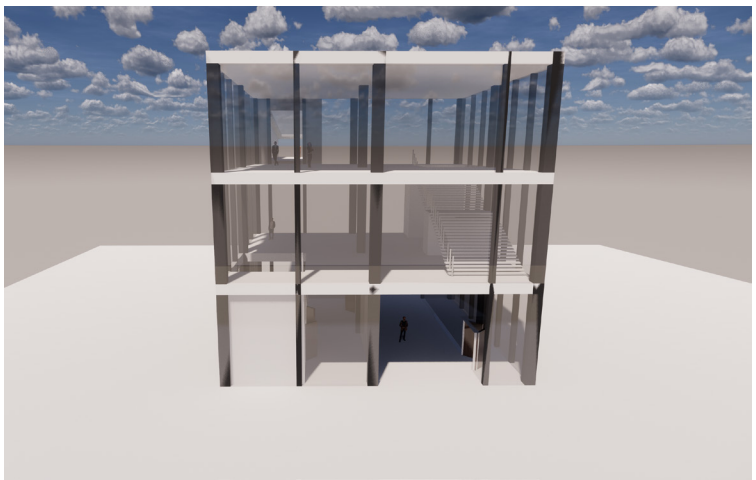
I designed the building using a group of three cubes. Also, I designed these as imperfect cubes and tried to show the perfect cube. I also considered a pathway between these three cubes and the comminication between these three cubes and the buildings around the site.

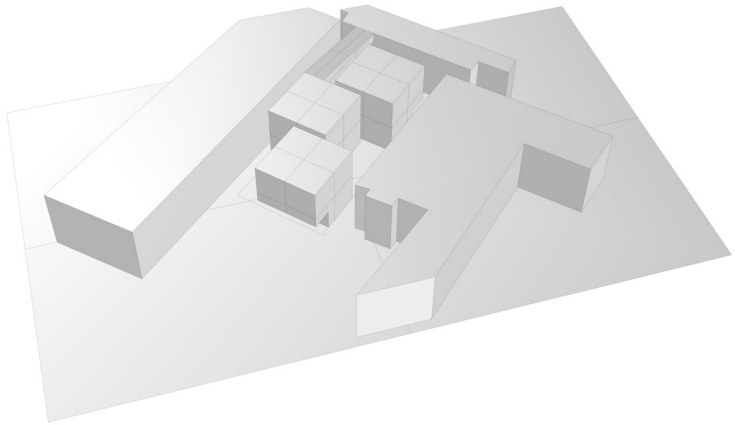
This was a good test for my thesis project.



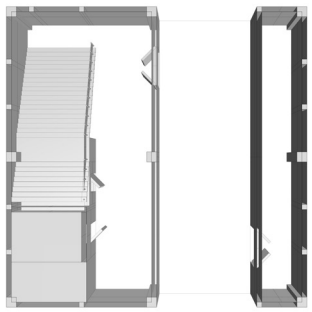


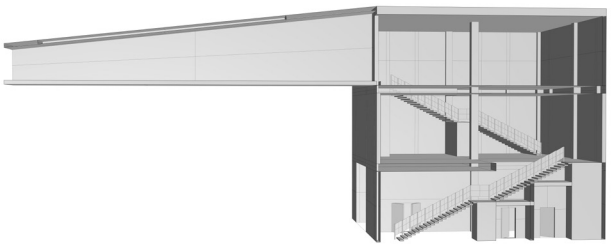


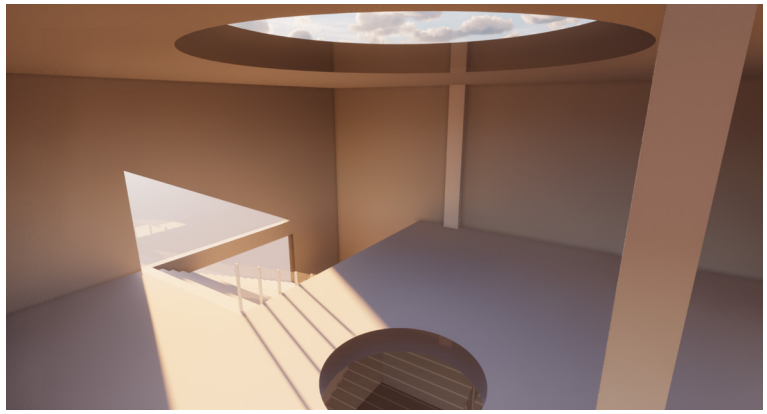


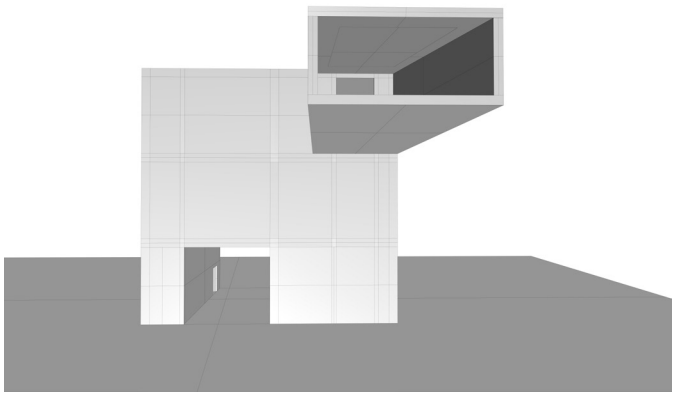


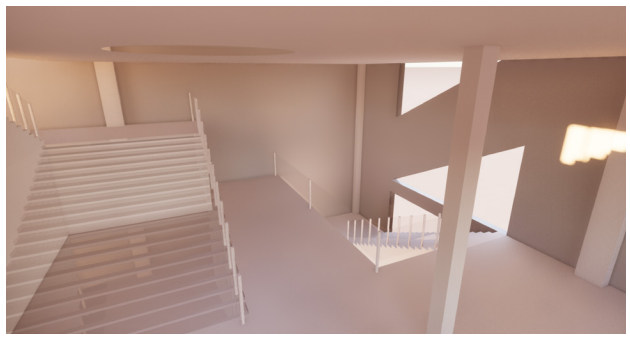
From
The top picture is from Google Earth (Blacksburg,VA)

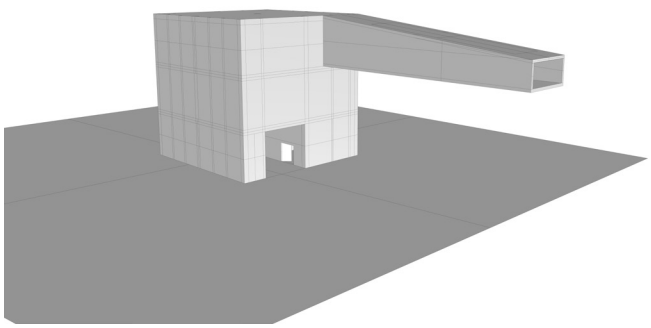












Conceptual Analysis

How to understand a city?

Past

Present

Future

Reality

Spirit

Reading

Watching

Feeling

Past → Past: 6 Big Moments for Washigton, D.C.

Present → Present: What is happening now?

Future → Future: What will happen later?

Reality: → What does this city look like now?

Spirit: → What is the of the meaning for people?

Reading → Reading: Reading history

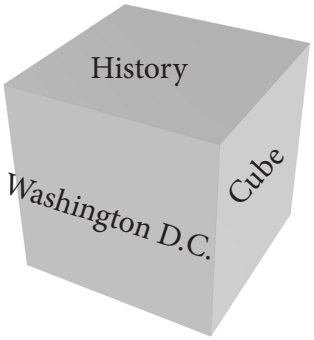
Watching → Watching: Watching history

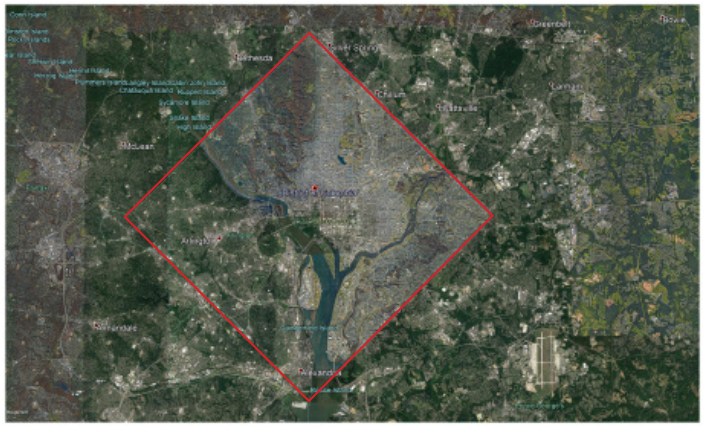
Feeling → Feeling: Feeling history

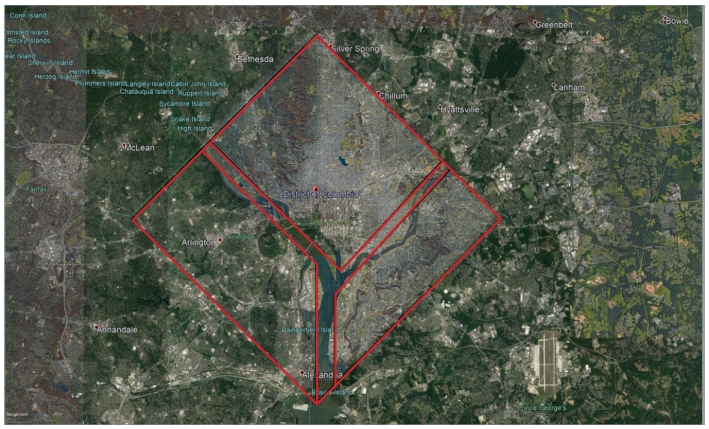
Program

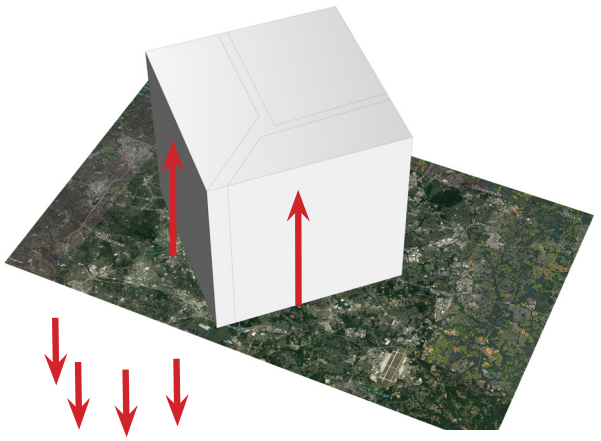
According the “square” of Washington, D.C., one big cube could become three small buildings, as the three ways to understand th is city. Each one of these three buildings has their own function, Reading as Library, Watching as Museum and Feeling as VR House.

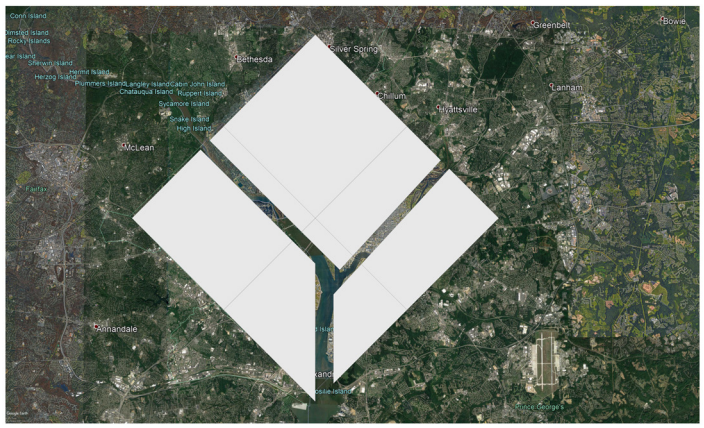
For this project, I combined these three programs together with the cube.

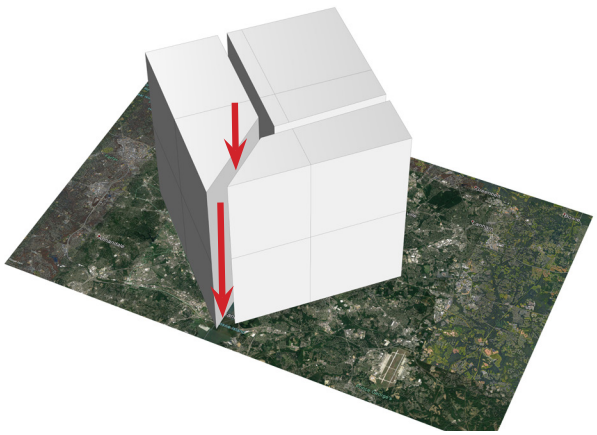










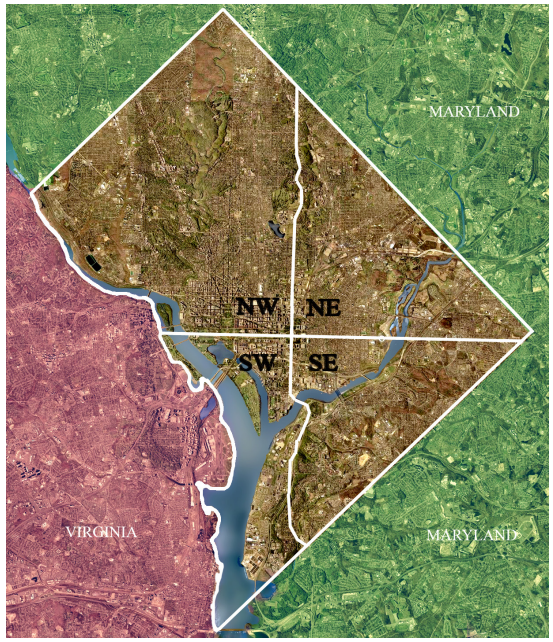


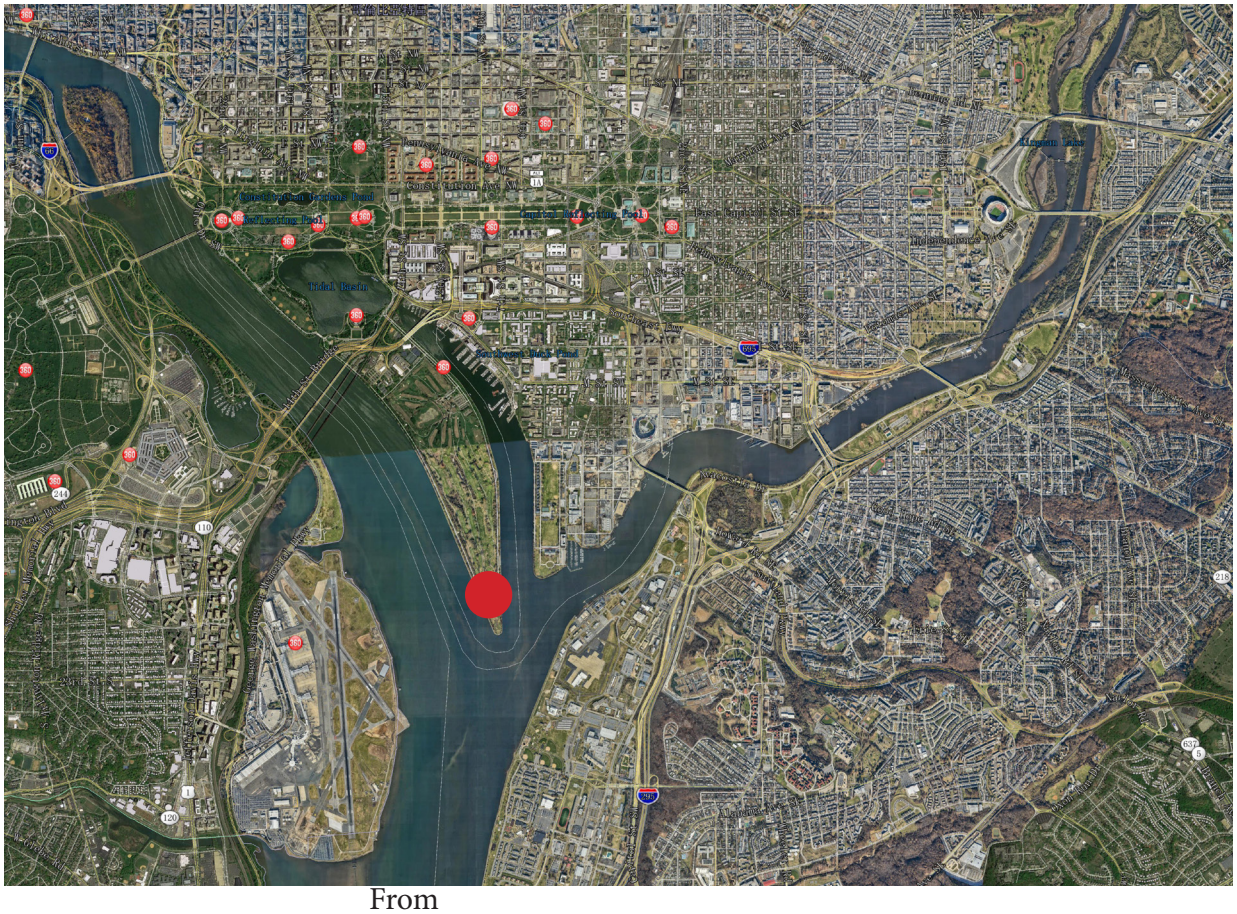
From
The map picture is from Google Earth (Washington, D.C.)

Site Analysis

Before I combined these three programs, I choose a location for the building by developing a site analysis. My analysis initially began by studying the map of Washington, D.C.

From the map, I marked a Red point where the Potomac River separates and branches. This was to be the site for my thesis.





From
The top map is from google map search.
http://ontheworldmap.com/usa/city/washington-dc/
The bottom map is from Google Earth (Washington, D.C.)

The point is called Hains Point.

The land is a flat plane with low green vegetation providing a good site for building. It is also close to the Thomas Jefferson Memorial. As we know, Thomas Jefferson is the 3rd President of the United States. Also, he has another title as an architect. The memorial is located on the north end.

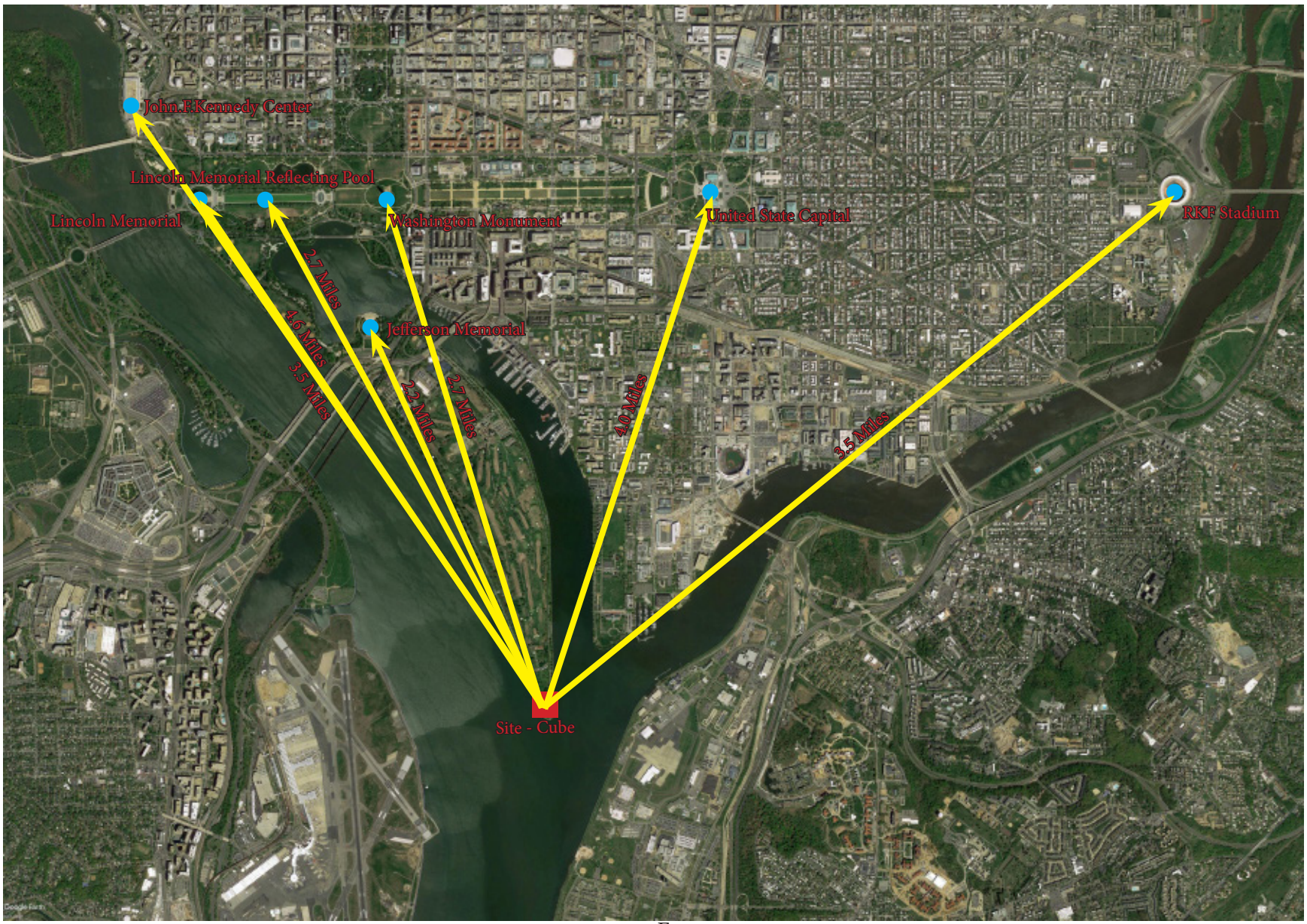
My project will be on the south end, creating a good conversation with Thomas Jefferson Memorial and Architect Thomas Jefferson.

From
The top picture is from Google Earth (Hains Point, Washington, D.C.).
The left bottom picture is from http://ontheworldmap.com/usa/city/washington-dc/hains-point-tourist-map.html
The right bottom picture is from https://en.wikipedia.org/wiki/Hains_Point

Landmarks

Washington, D.C. has a lot of landmarks here. The most famous is the the National Mall. Most of the most important buildings and landmarks are all visible (shown below).

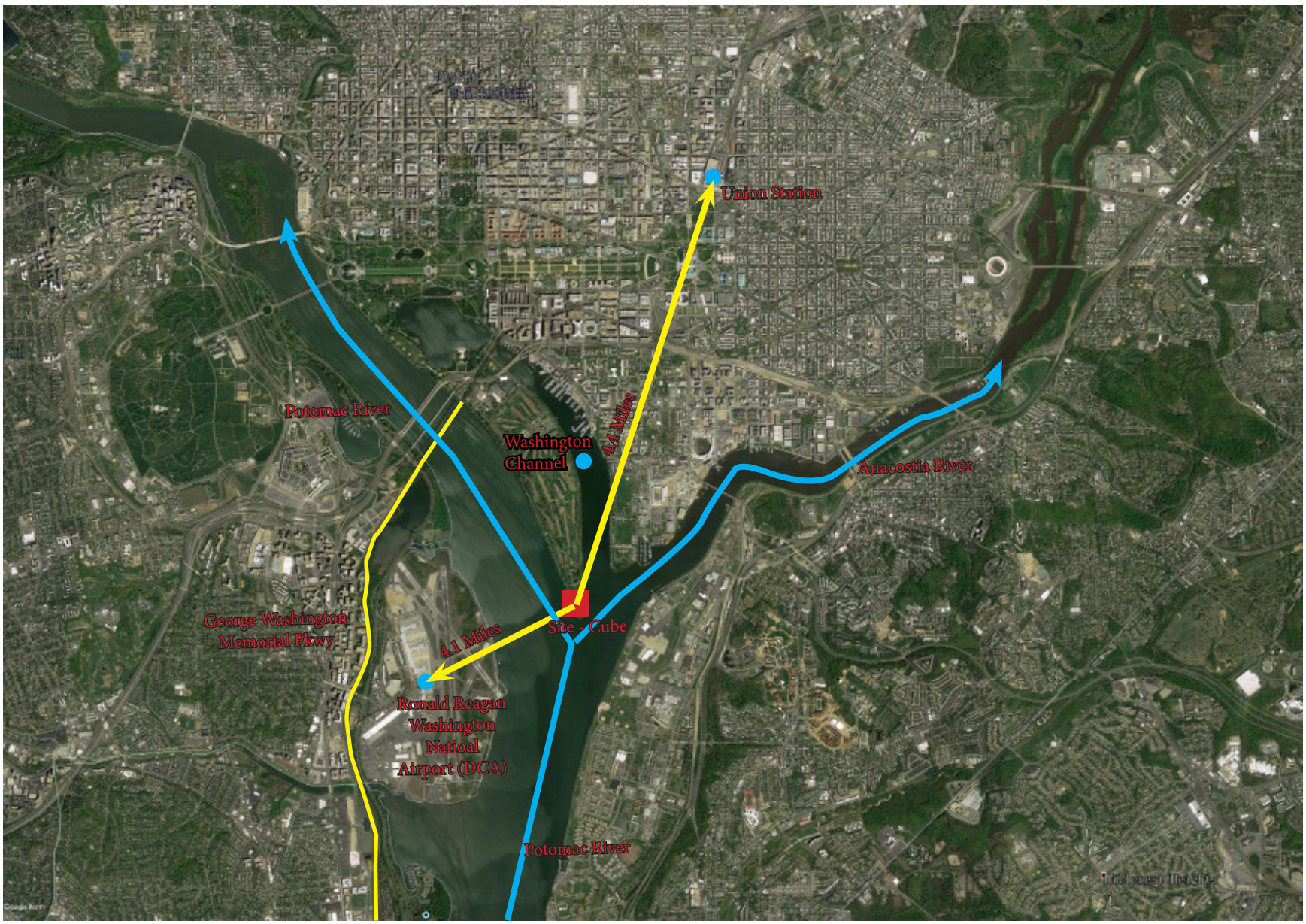
From the site, people can see all these landmarks from this section of the city.



From
The bottom map is from Google Earth (Washington, D.C.)

Traffic

The site is also accessible and visible from the air and by boat. When arriving by airplane to Ronald Reagan Washington National (DCA) the airplane flight pattern passes near the site so that passagers would see the building upon arrival. People could also arrive by boat. When people are close to this city from river, they could see this buildng too. It is also visible from the George Washington Memorial Pkwy as people drive their cars from south to north to Washington, D.C., the project would appear across the river to the east. This building would be their first view and impression upon arrival to DC.

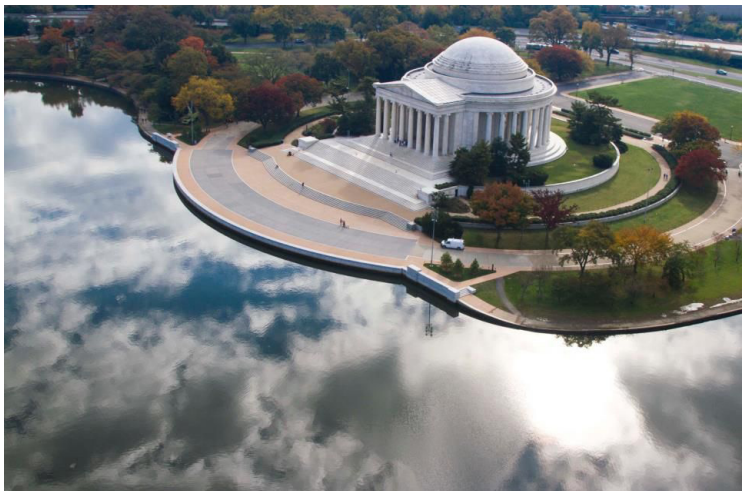


Site Pictures

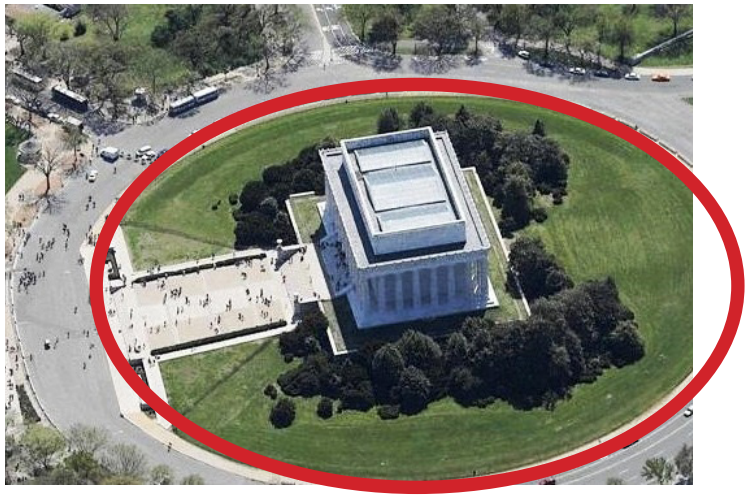
Building Analysis

The Language of Circles/ Ellipses Analysis

Back to the urban design of Washington, D.C., and its landmarks, I discovered the importance of circles of these landmarks. This is included in the site design, which has a deep relationship with circles/ellipses.
So, this thesis follows this language.



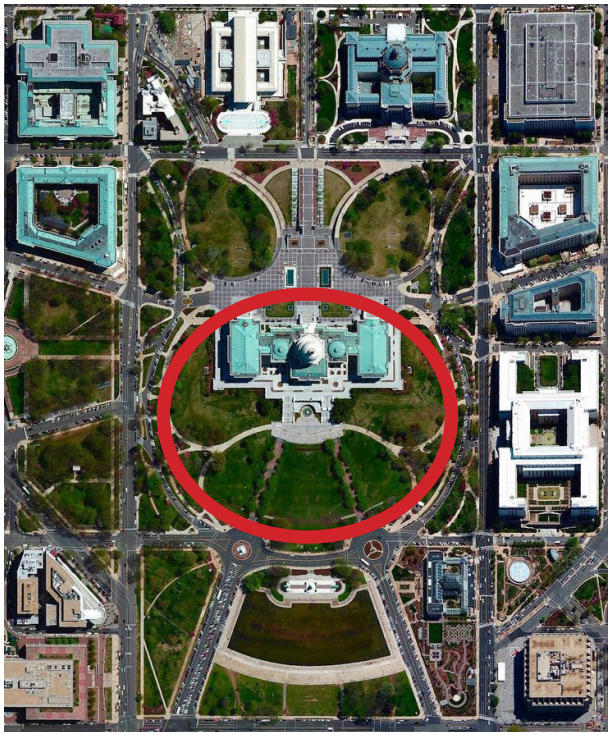
Thomas Jefferson Memoral (Circle)



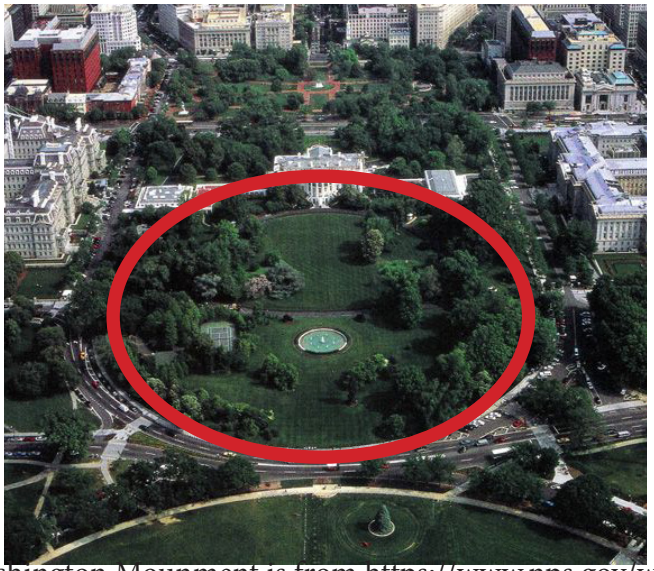
Lincoln Memoral (Circle)

From
The picture of Thomas Jefferson Memoral is from https://www.asla.org/guide/site.aspx?id=36586)
The piture of Lincoln Memoral is from https://www.destinasian.com/blog/news-briefs/d-c-s-most-iconic-film-locations

Washington Monument
(Circle)



Capitol Hill
(Ellipse)



White House
(Ellipse)

From: The picture of Washington Mounment is from https://www.nps.gov/wamo/learn/historyculture/index.htm
The piture of Capitol Hill is from https://en.wikipedia.org/wiki/Capitol_Hill
The piture of White House is fromhttps://pixels.com/featured/aerial-view-of-the-white-house-everett.html

Result & Discussion

Site Design

This is the site on the map. There are two existing roads on the site. The design will include these existing forms within the site.

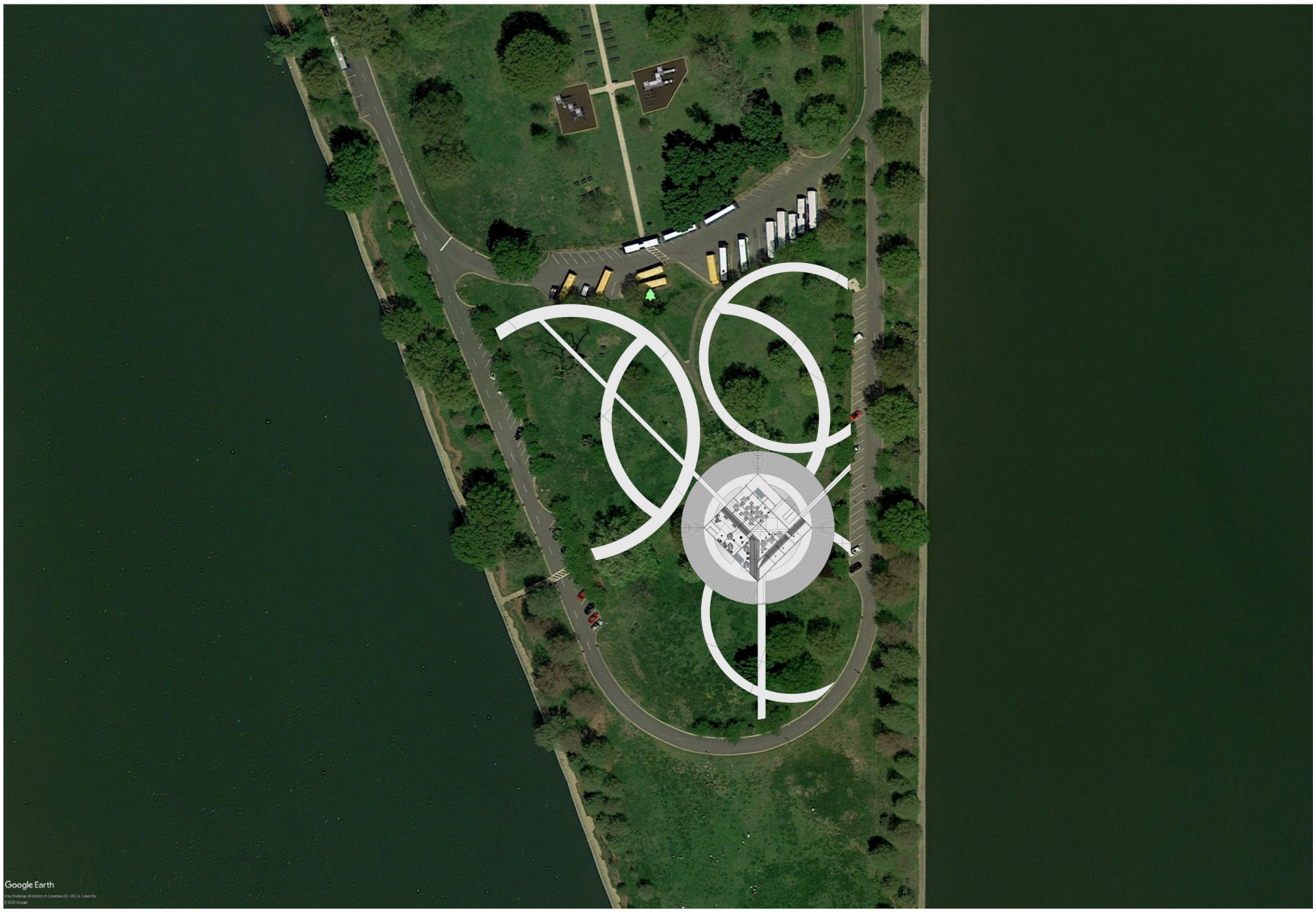
From
The picture is from Google Earth (Washington, D.C.)

The red square is the location of the project. And the red lines inside and outside are the pedestrian pathways.

And we also need to consider the green around the site.

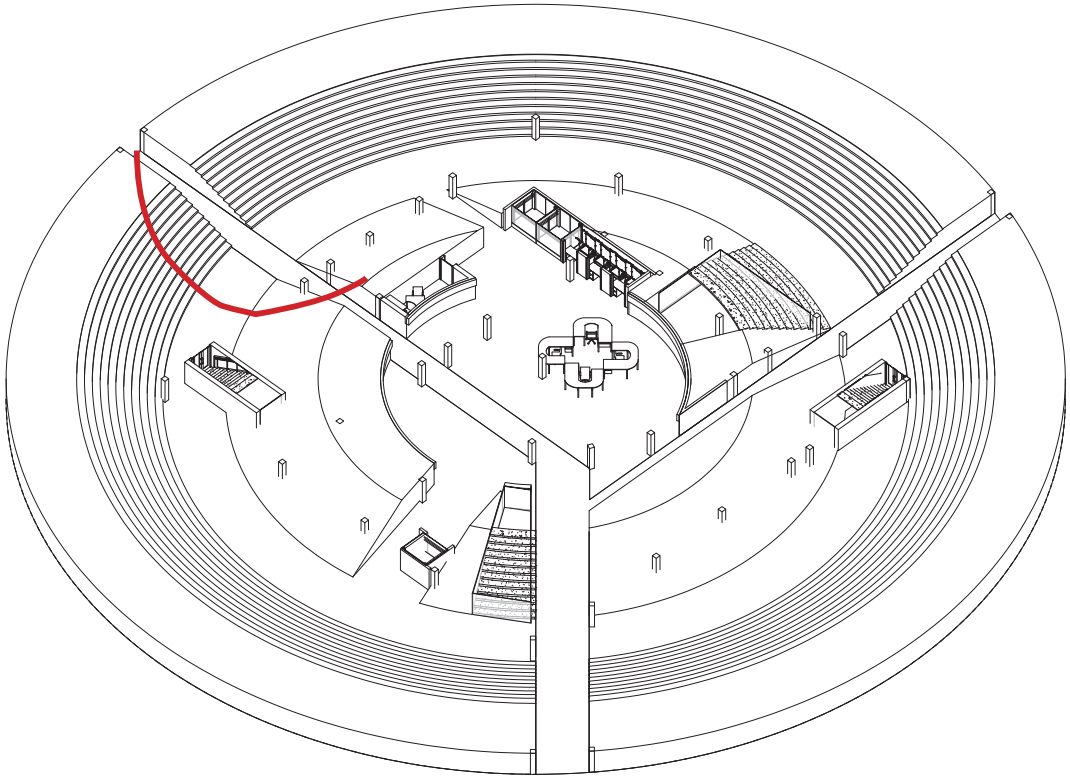
Next, I combined all the following facts, the language of the circle, the location of the building, the pathway, the existing roads and its form on the site.

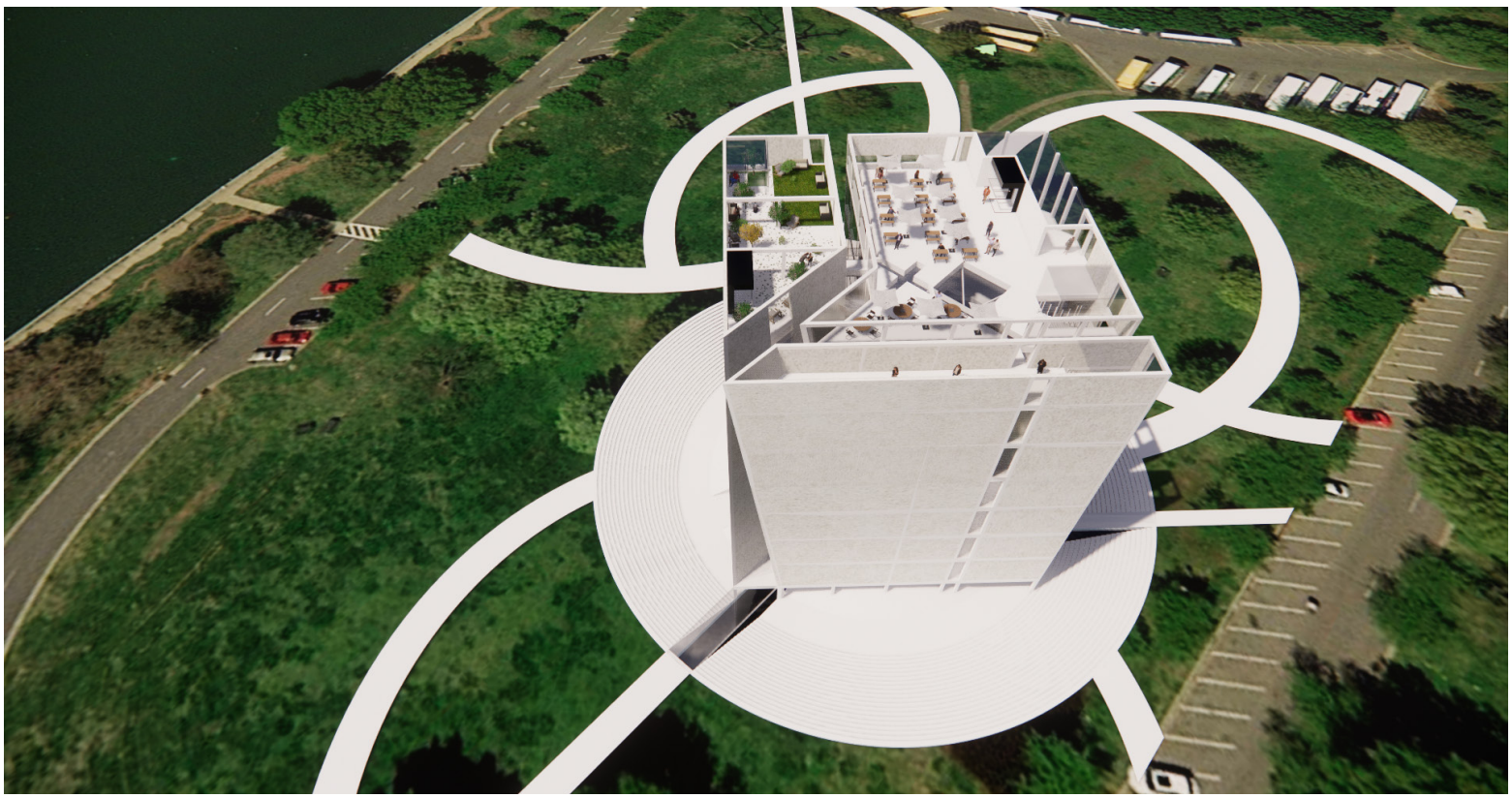
After considering the existing site conditions, the design includes 4 circles and three entrances for the building, as well as the existing parking near the site.



Using the formal language of a square to a cube, the circle transformed from horizontal to vertical. I considered how people get in from the outside, designing the stairs at the bottom to help people go to the underground floor. For the slope of the stairs, I followed the circle language.

The red curve in the right picture is one part of the edge of a circle. The inside sloped wall also follows this language. And the wall is partially used to service the structure as columns.

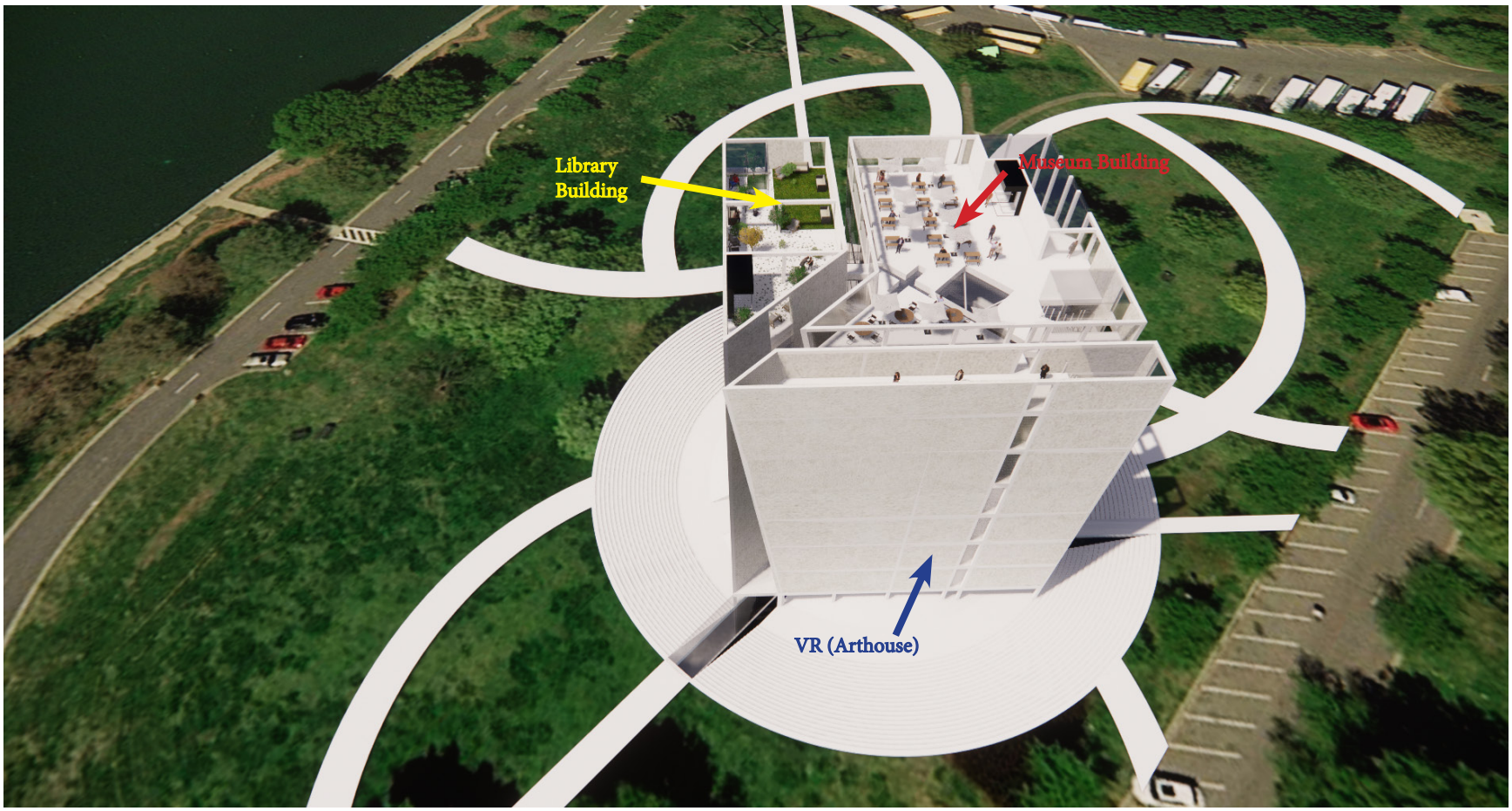




Building Design

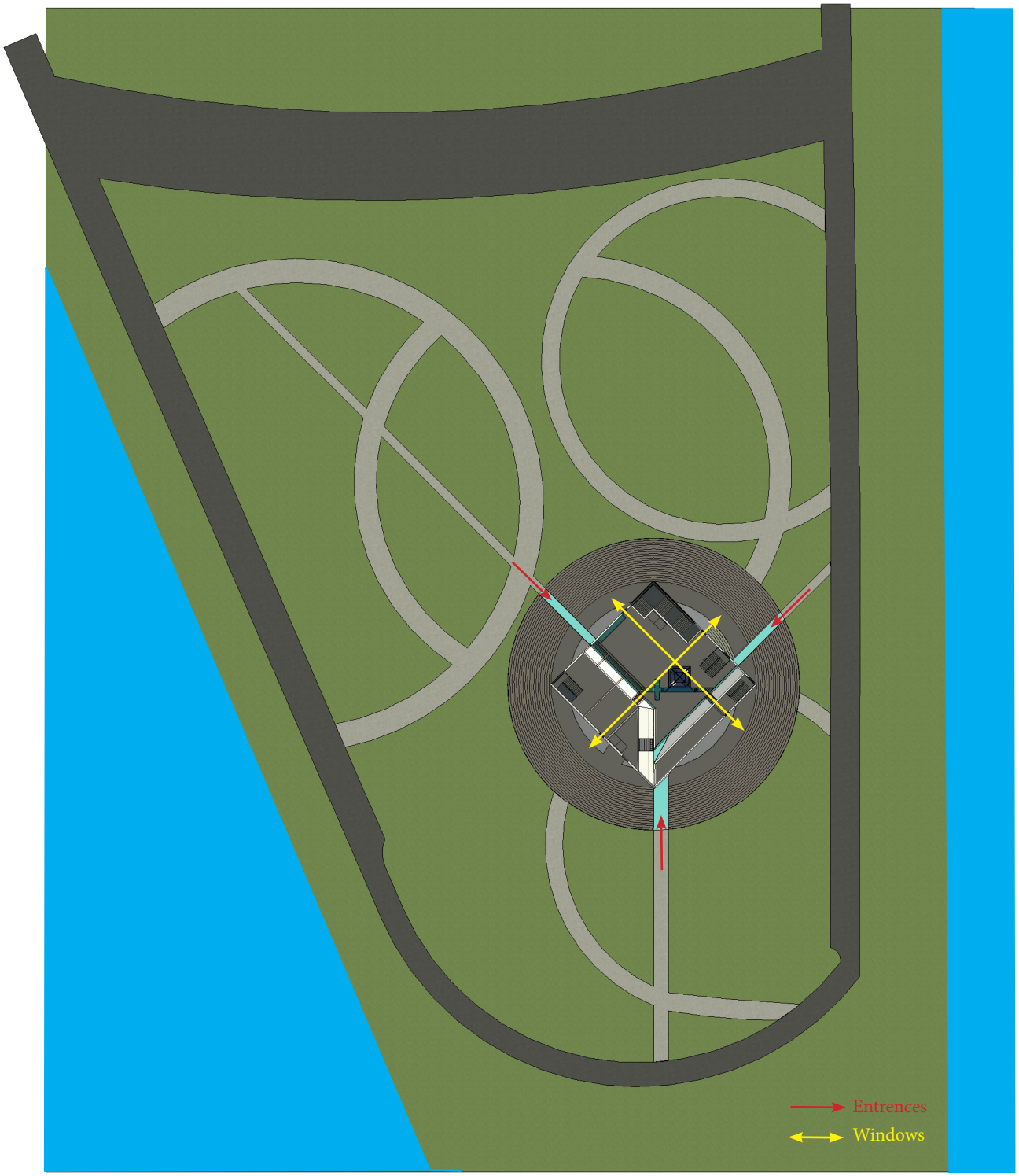
The Building and The Cube

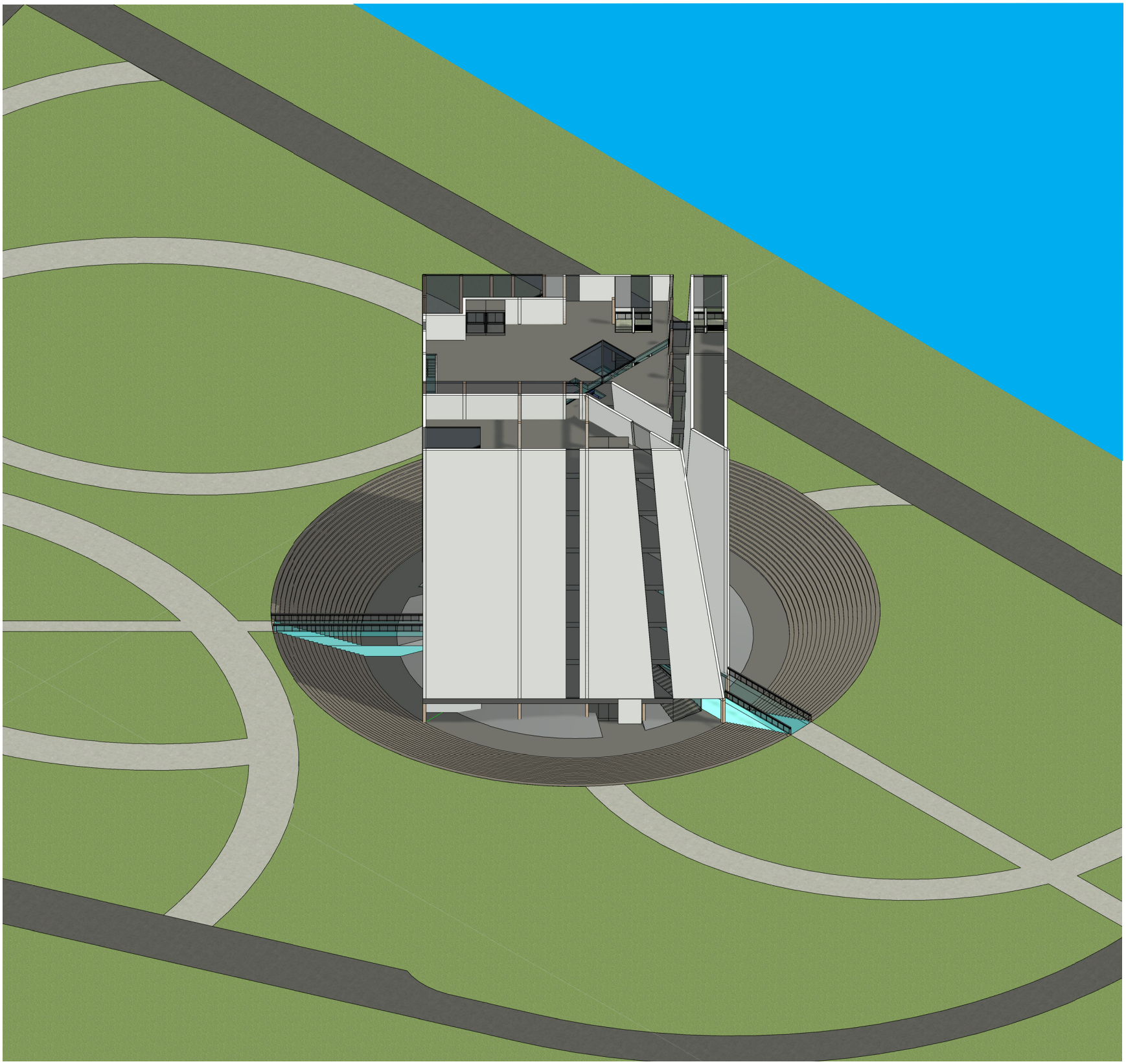
This is a cube building. But I don't want it is as a simple cube. So, I decided to change the slope for each inside wall. The edge of each top wall follows the bottom of the opposite wall. If it is raining, the water would flow down following the wall to prevent infiltration of the rain inside. I also considered the solar situation so developed the slope as a degree less than the degree of sunshine (from zoning data).This allows some sunshine into the bottom of the building.



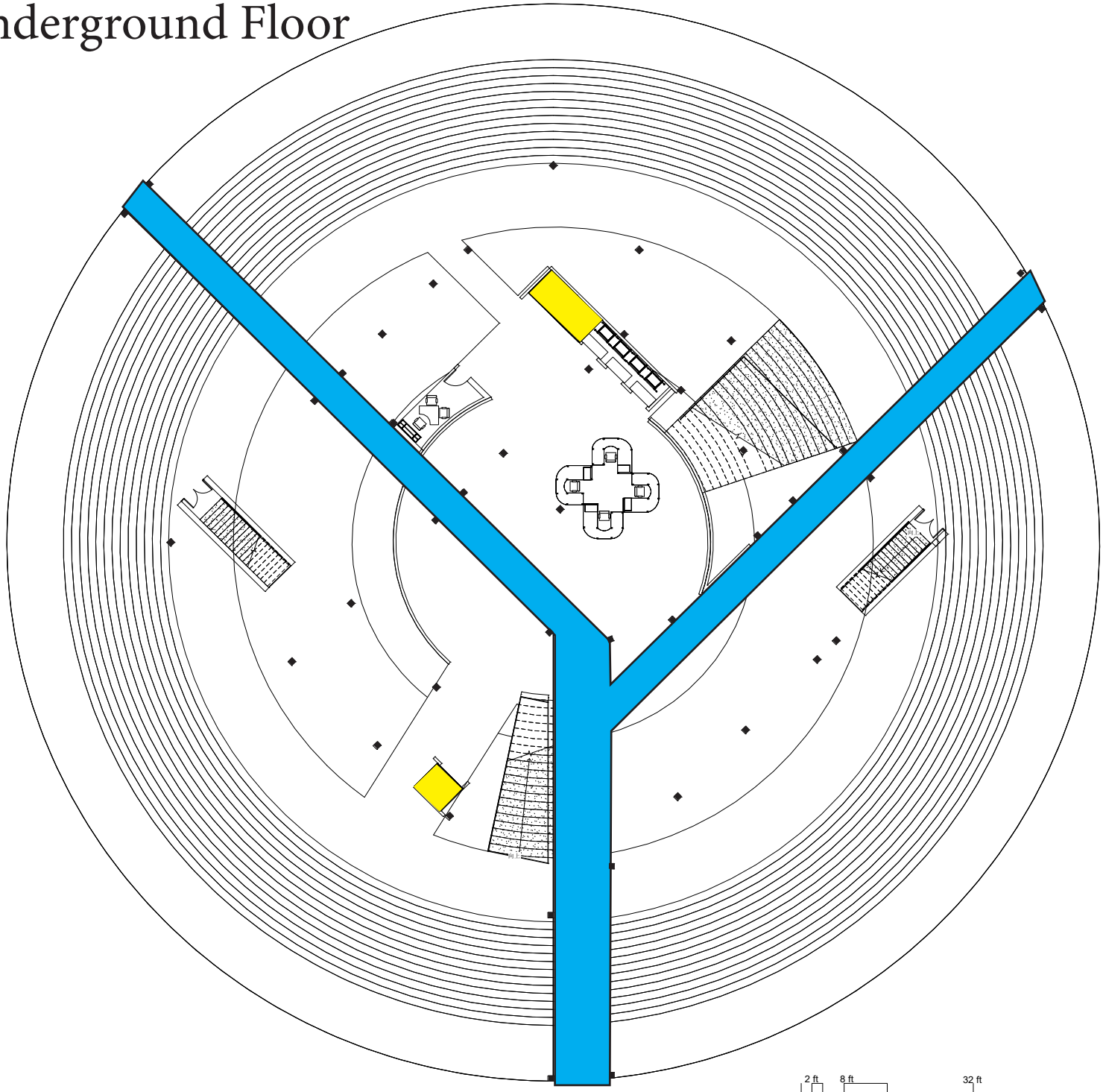
Plans

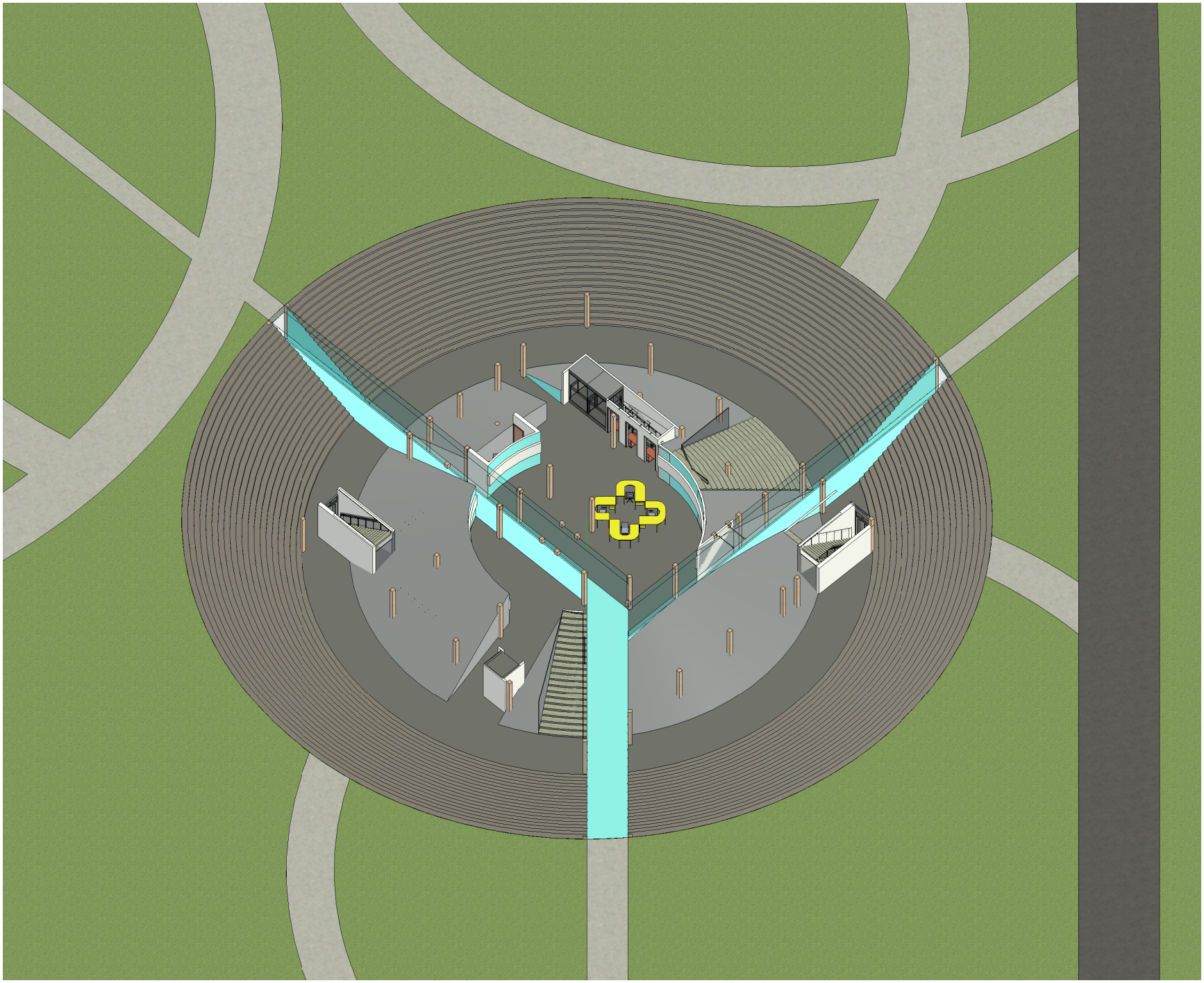
Ground Plan



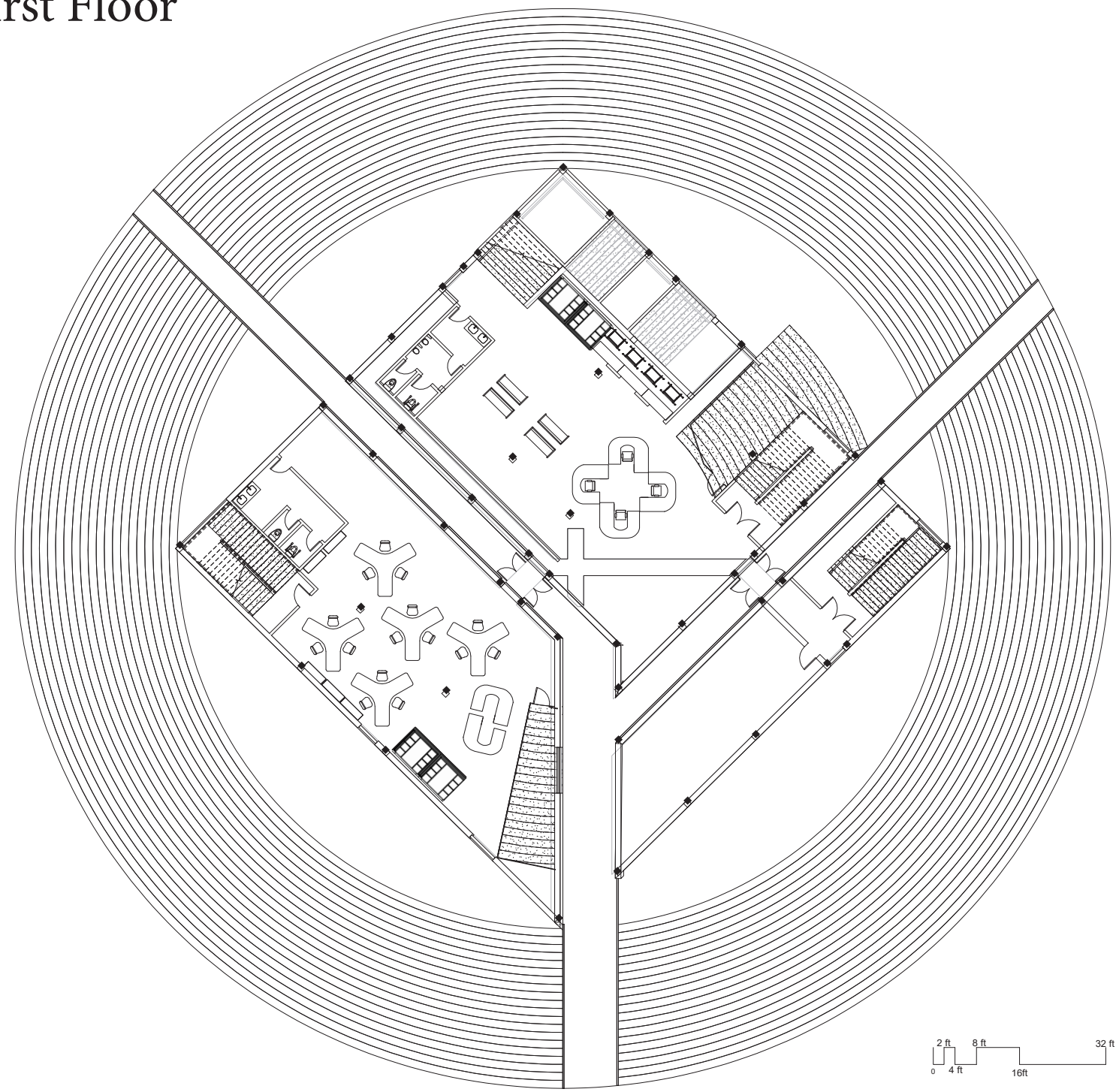


Underground Floor

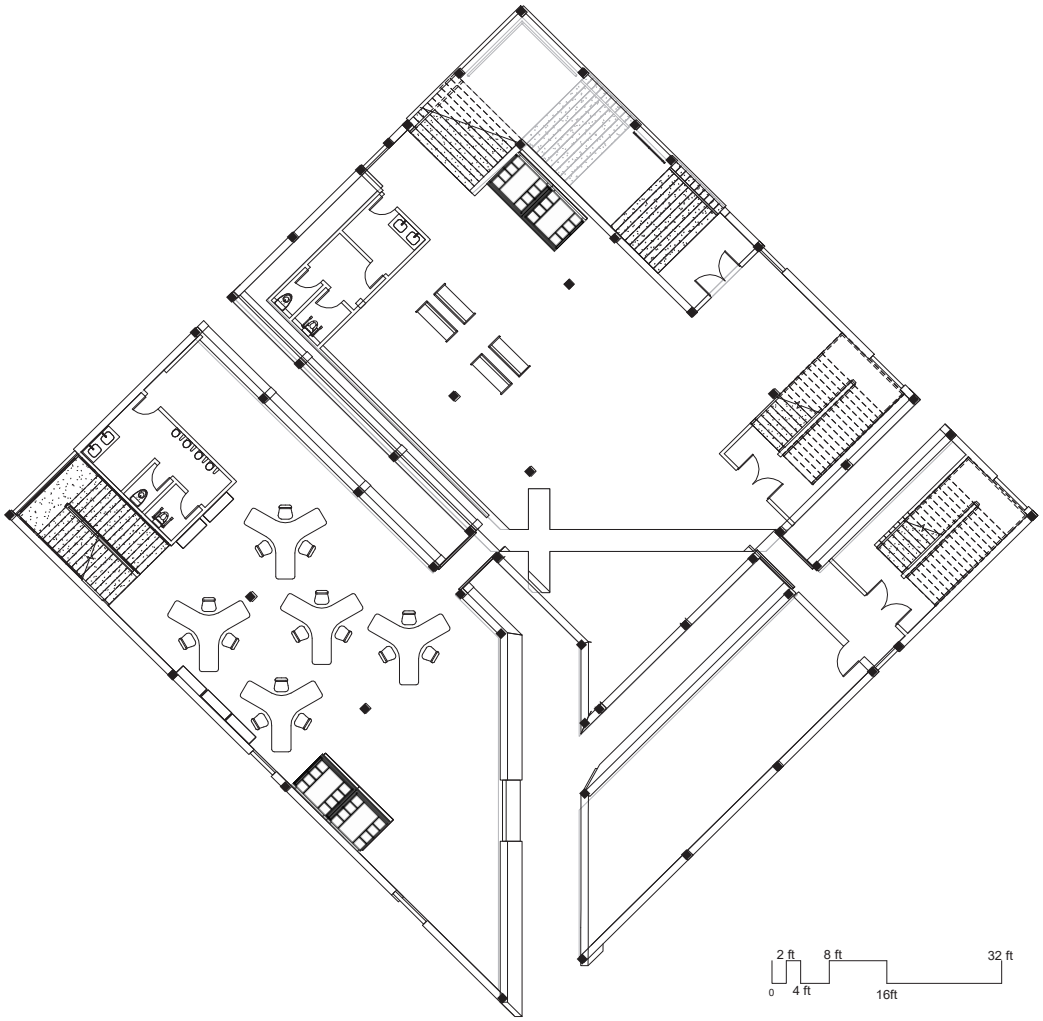




First Floor



Second Floor



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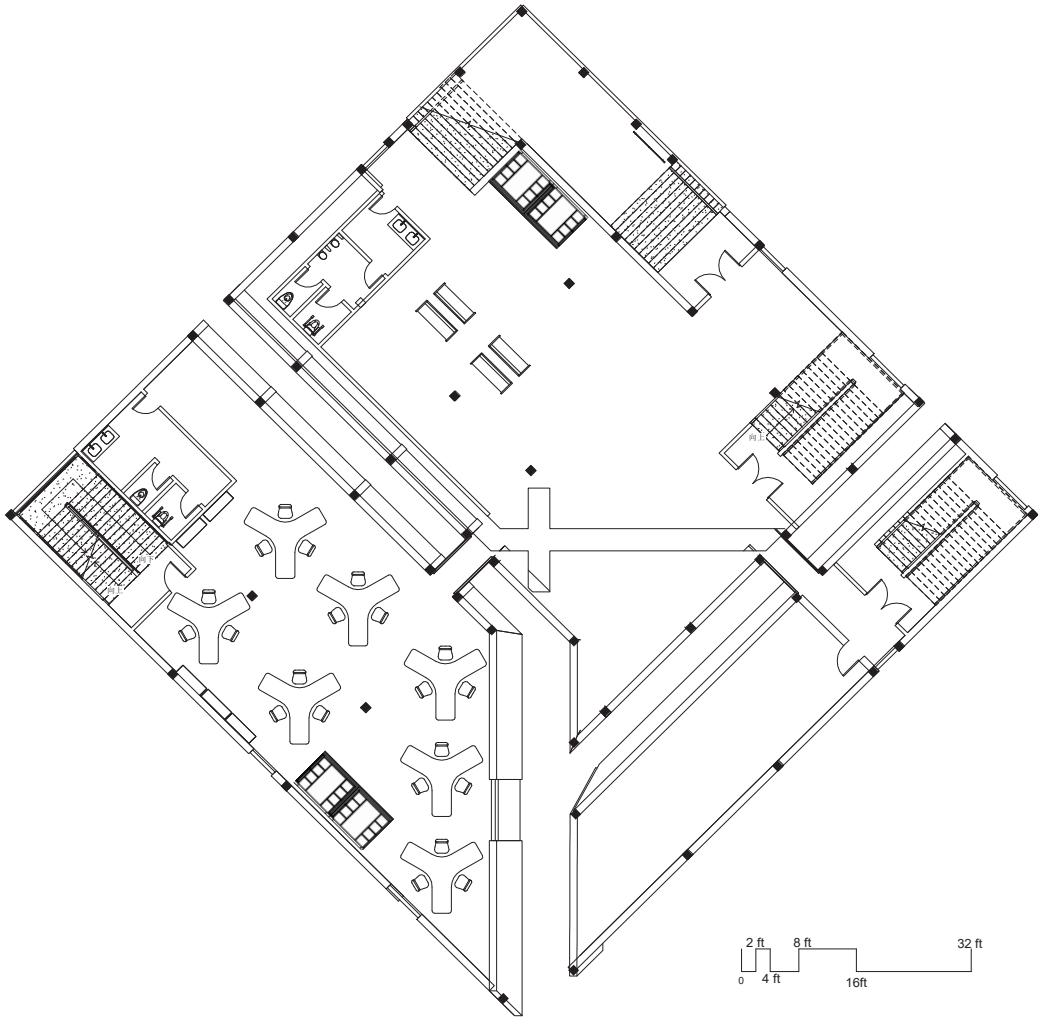

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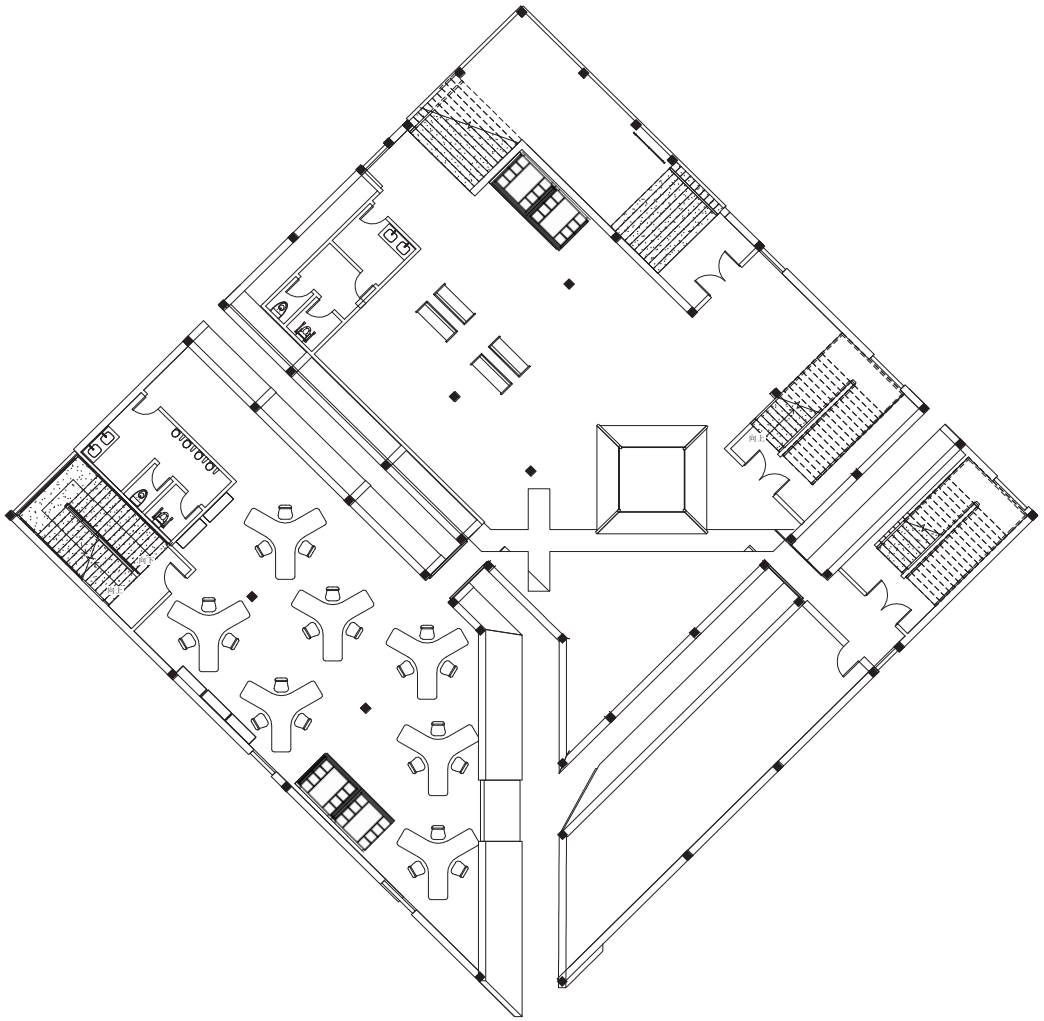
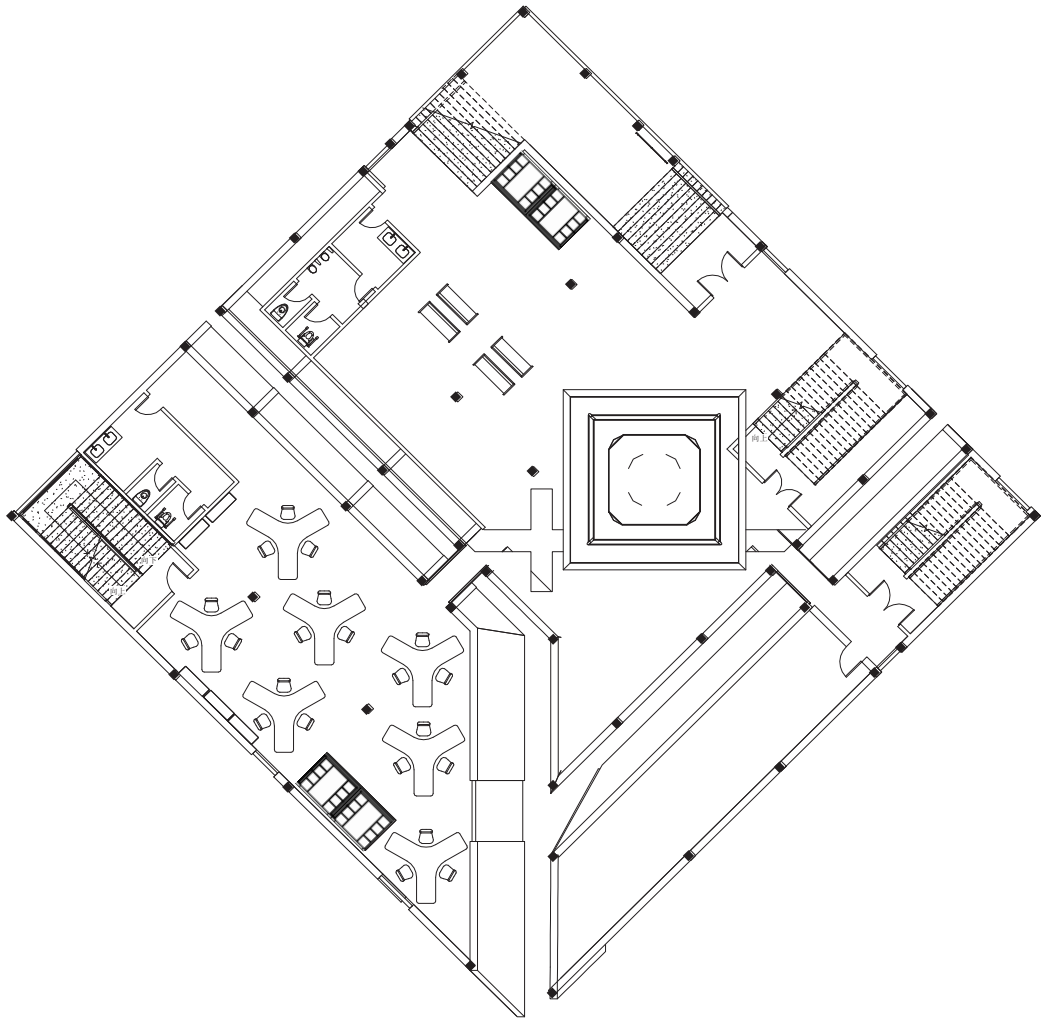


Fifth Floor



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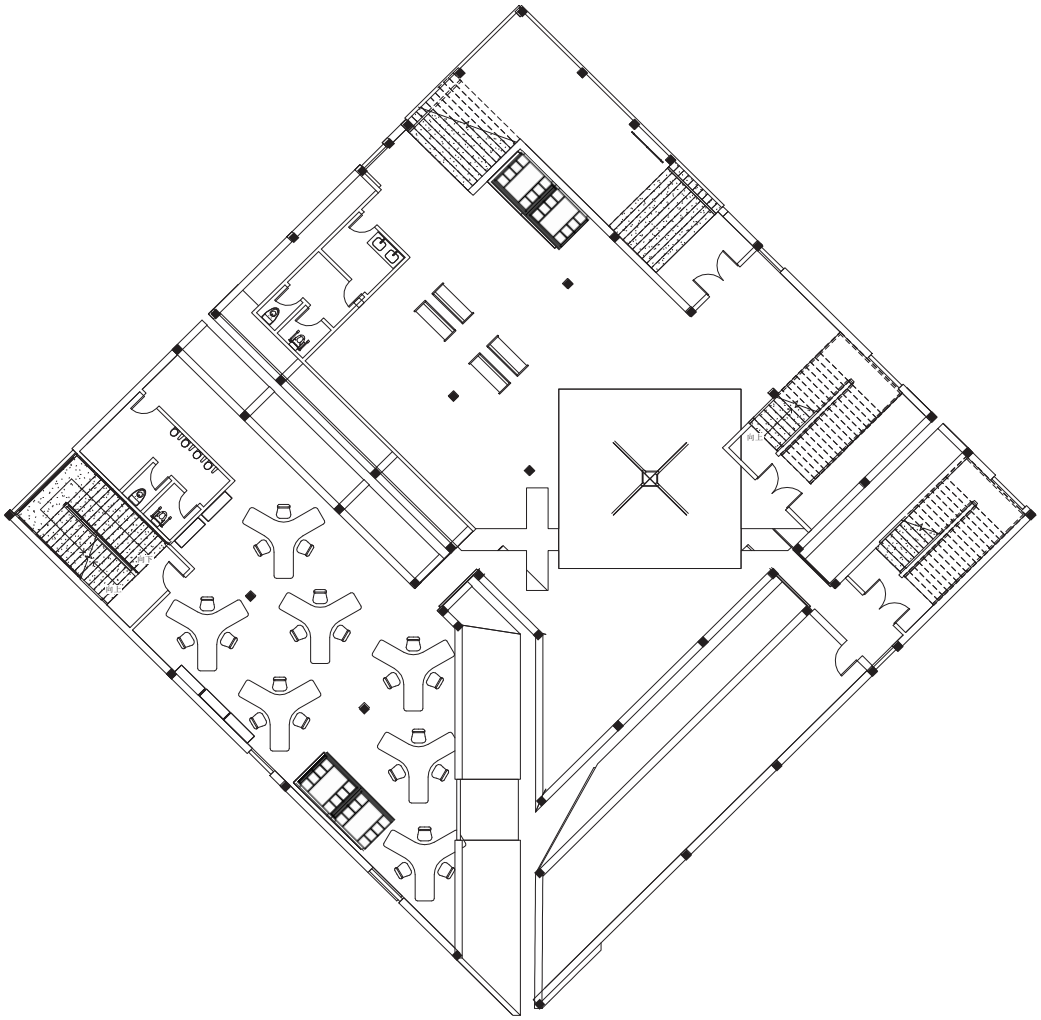
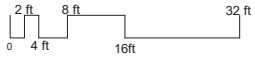
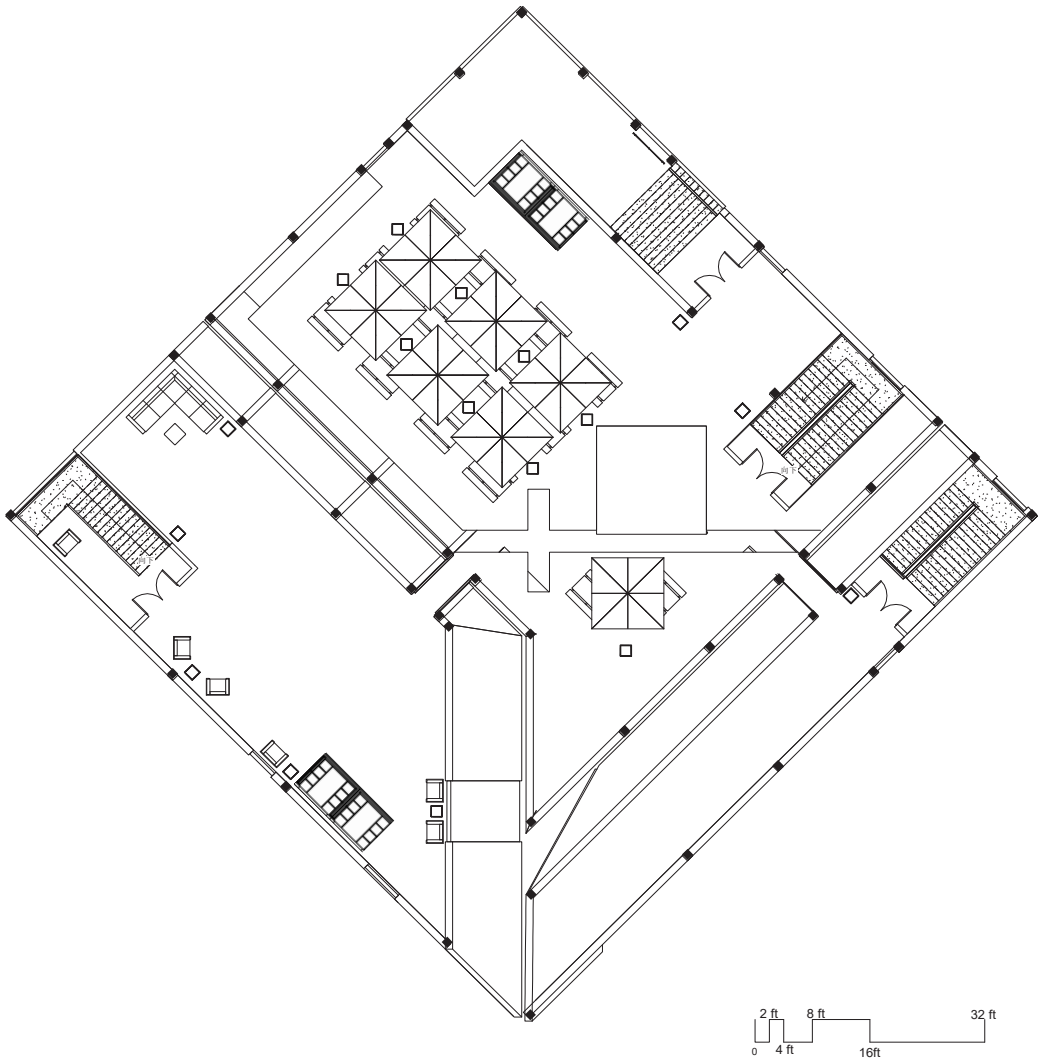
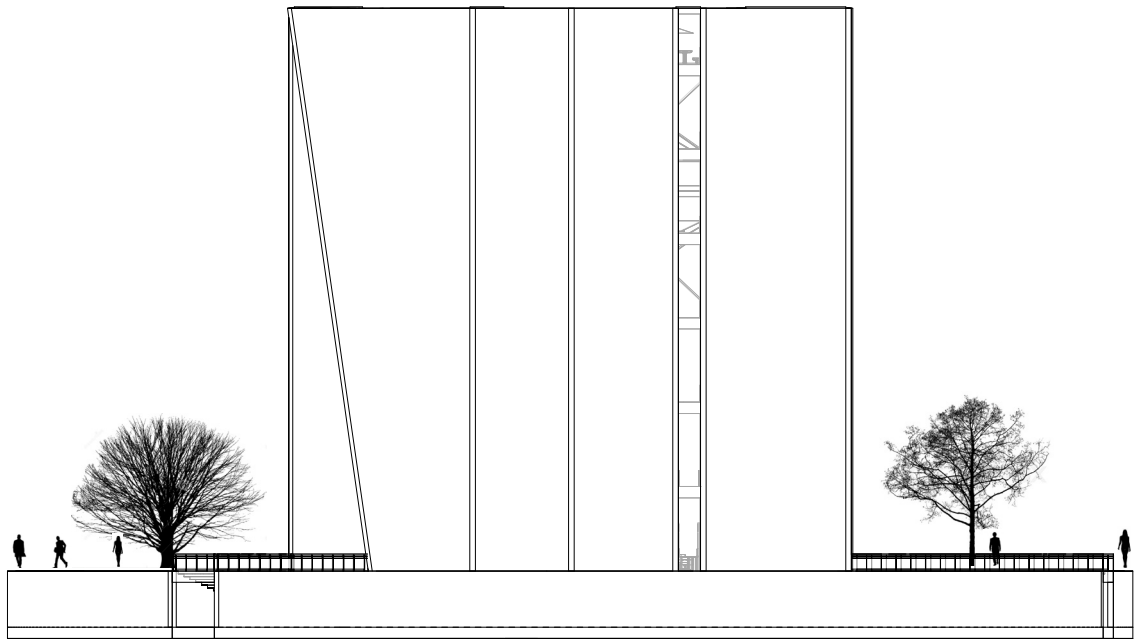




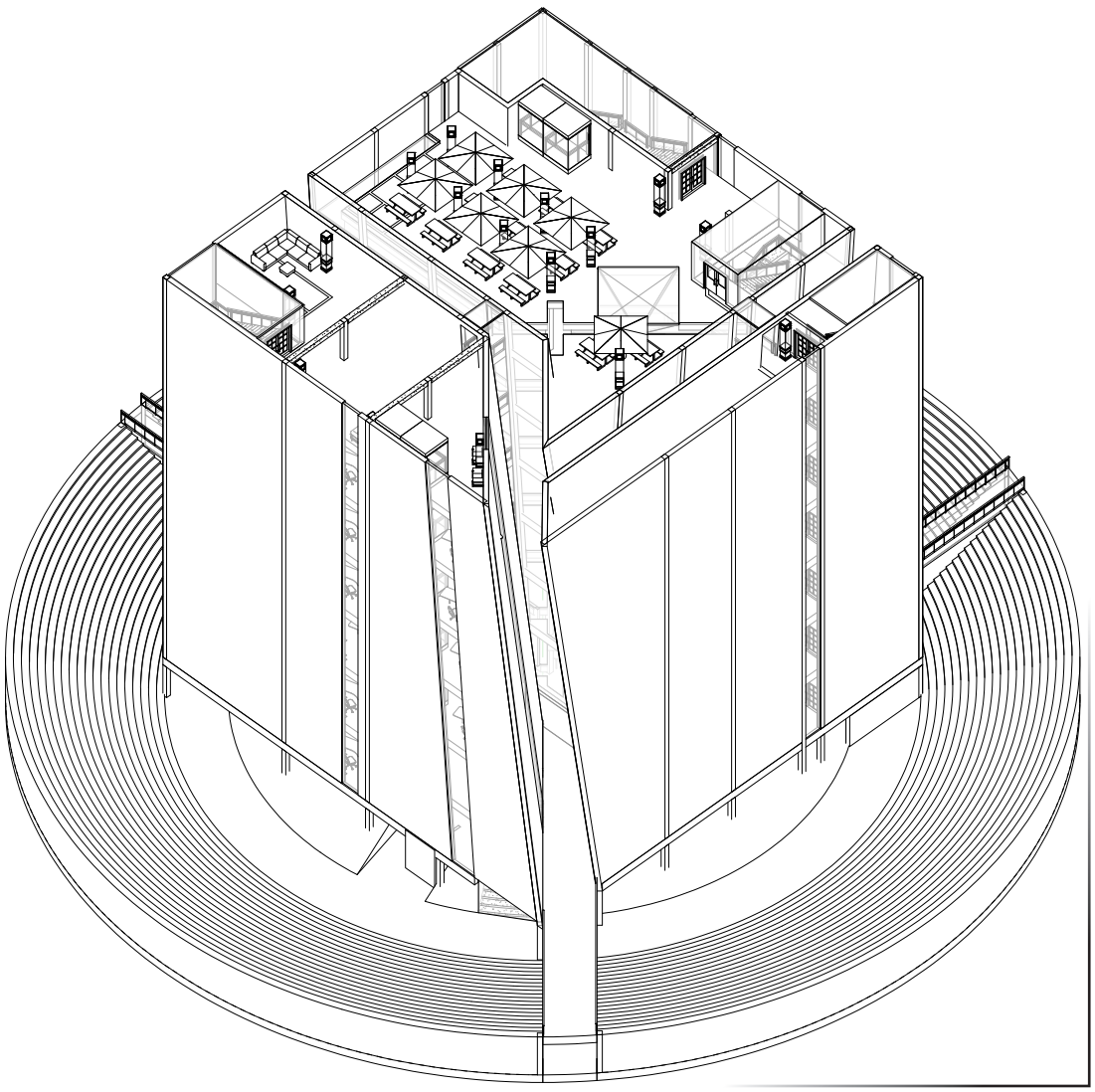
Top Floor



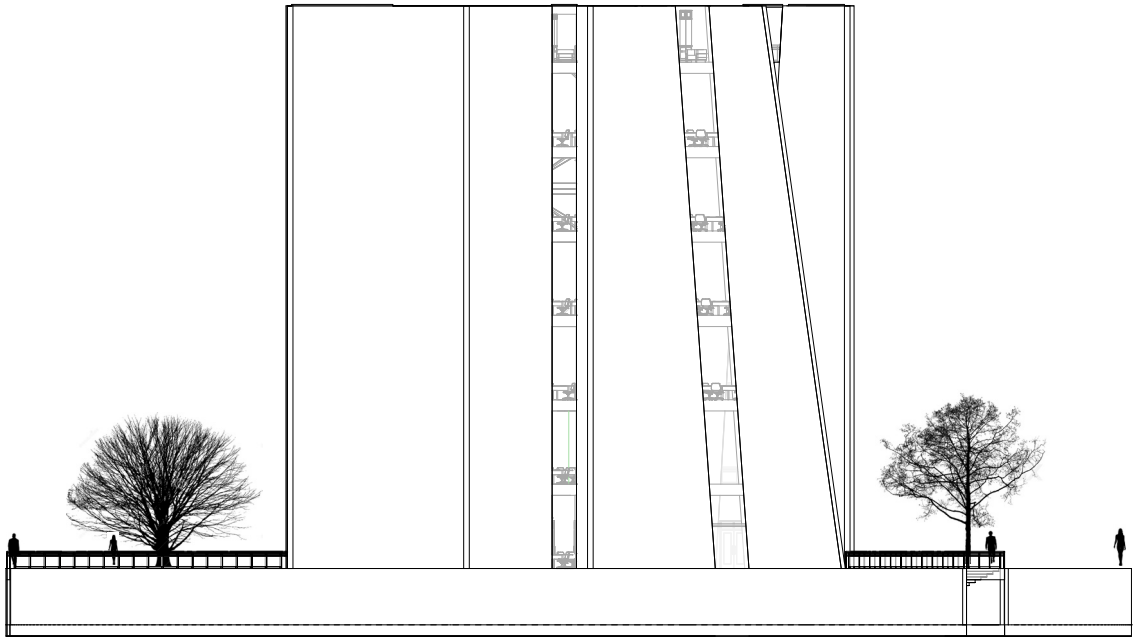
Elevations



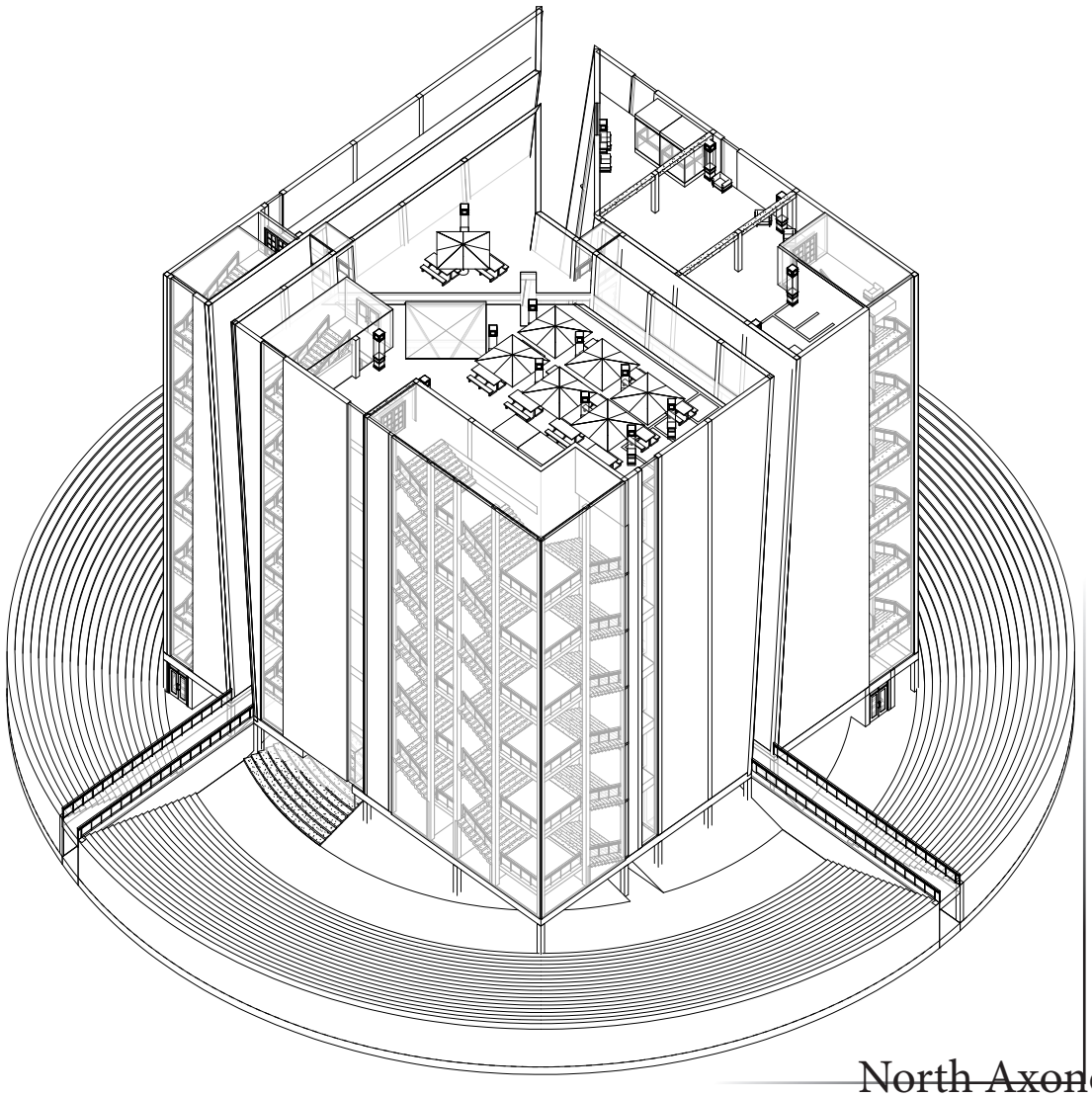
South-East Elevation



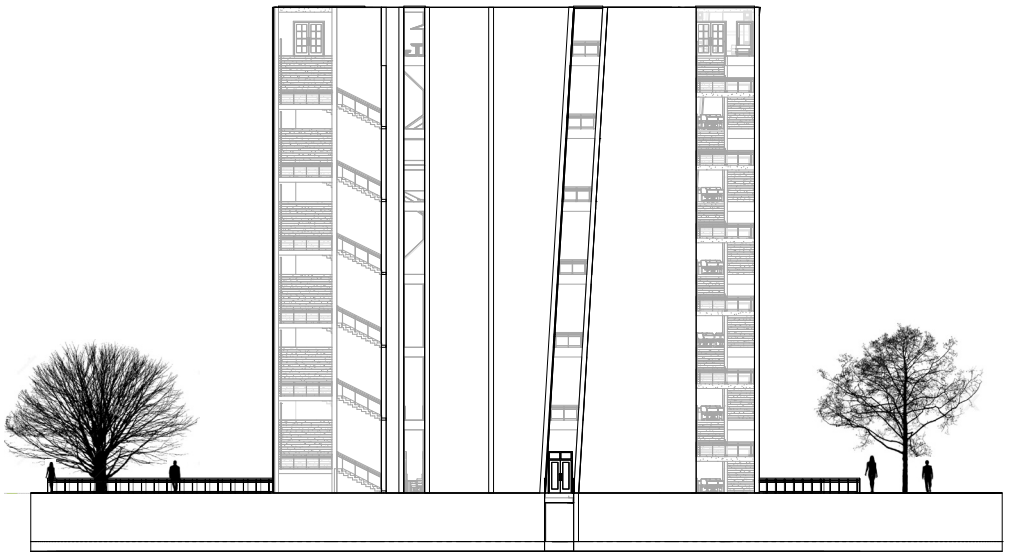
South Axonometric -3D



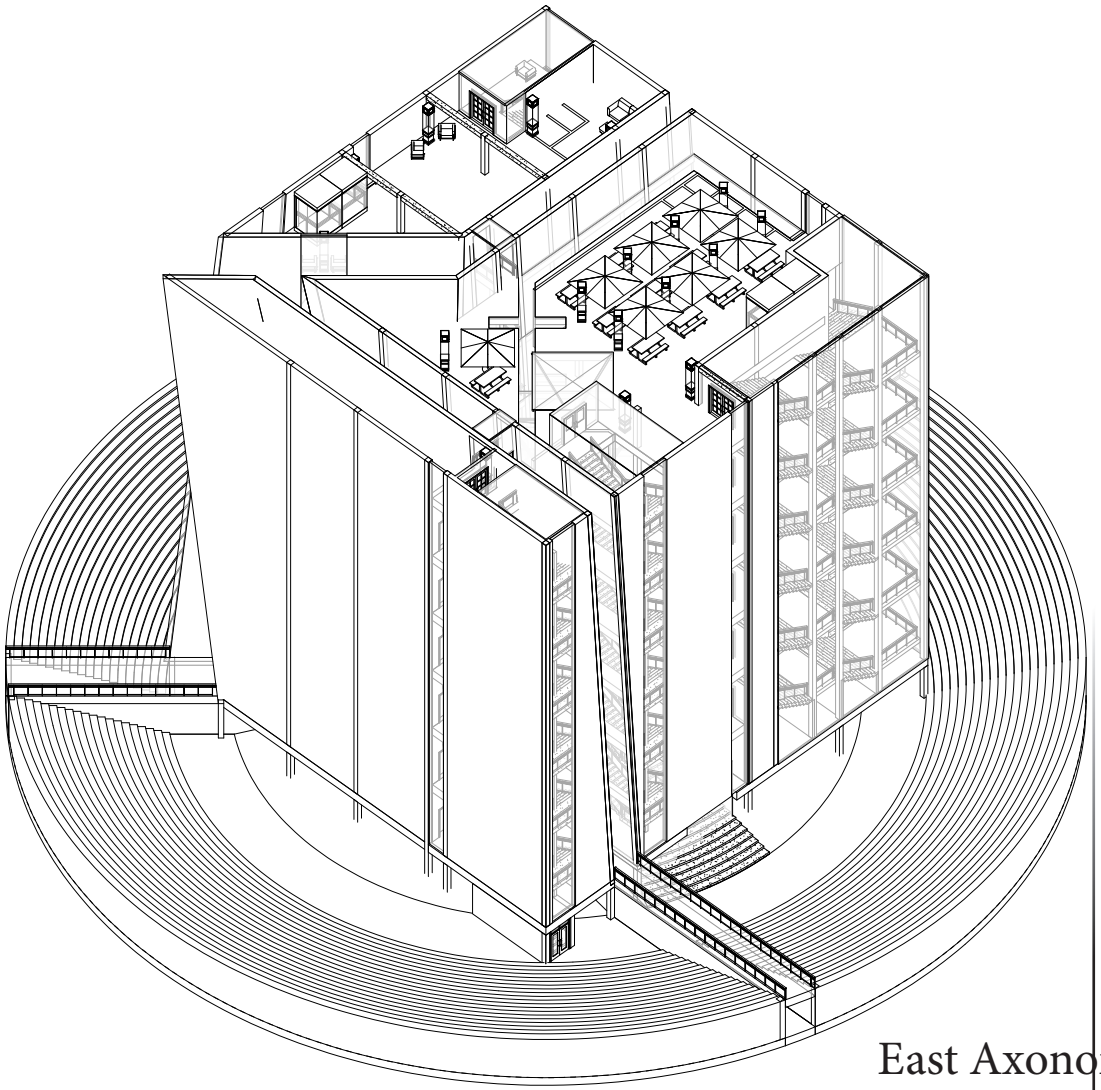
South-West Elevation



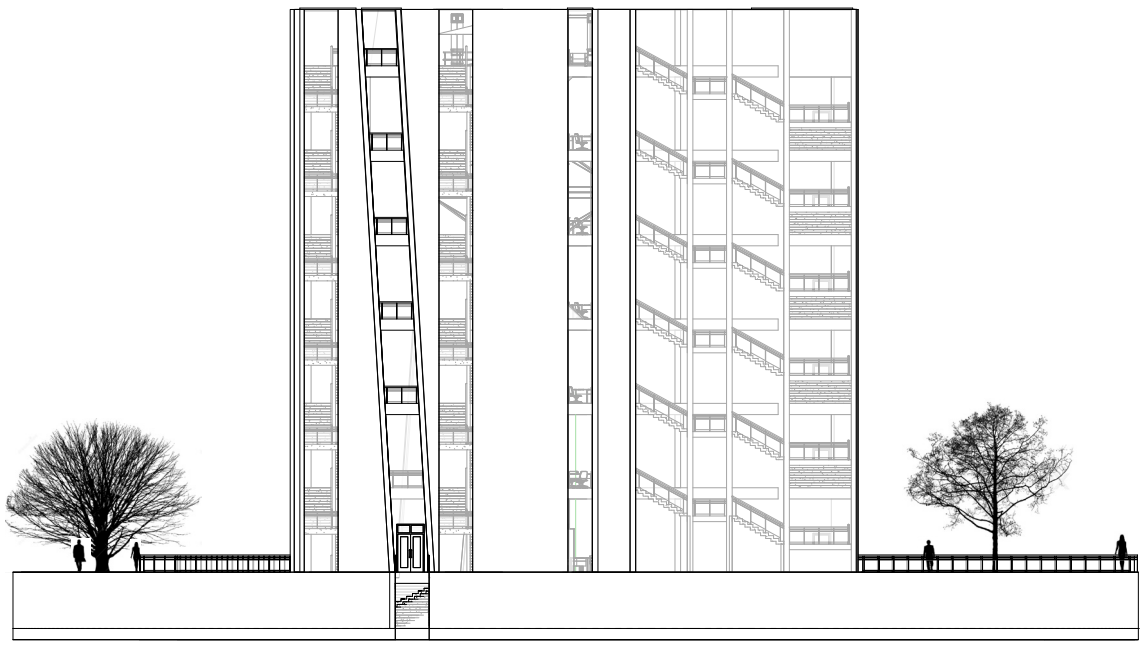
North Axonometric -3D



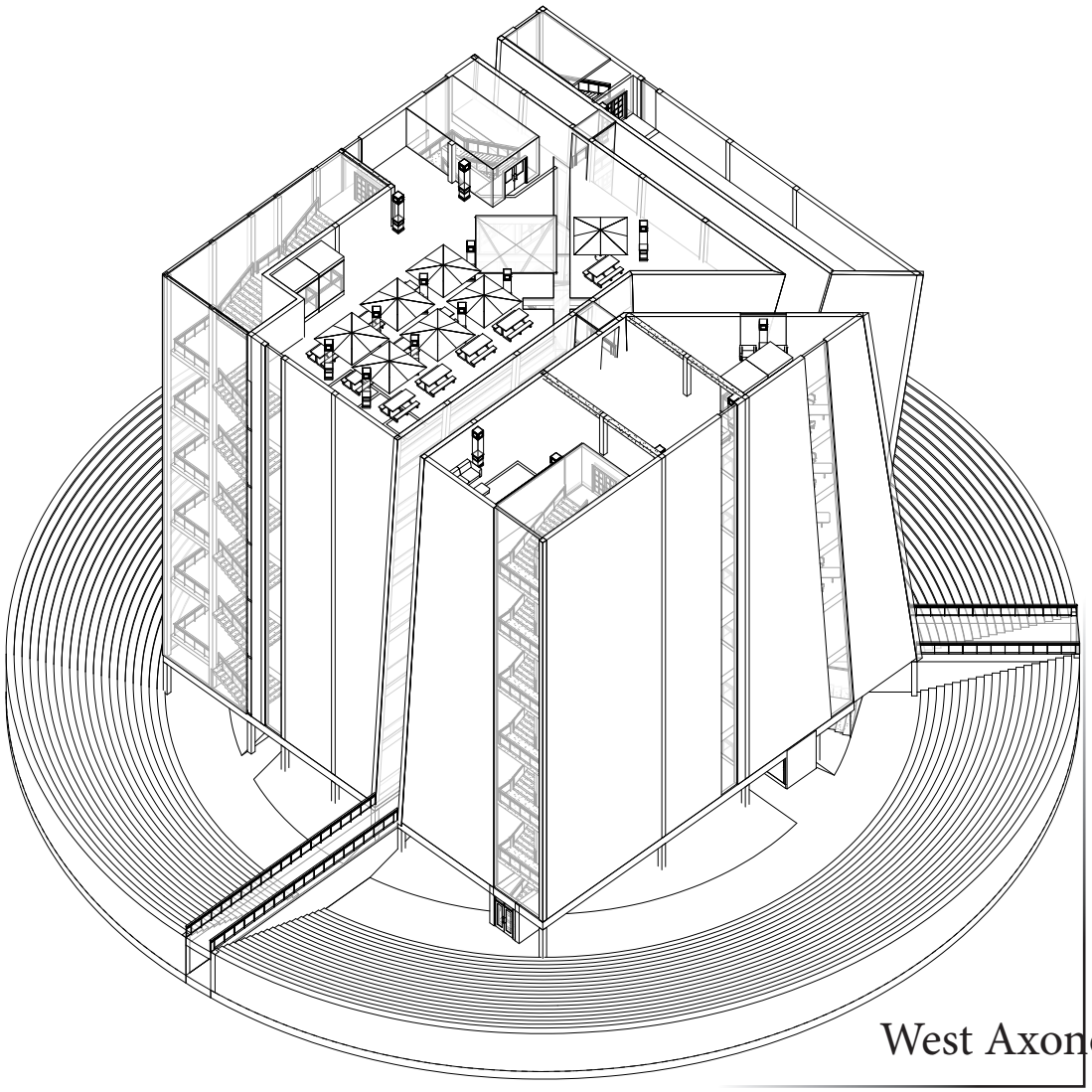
North-West Elevation



East Axonometric -3D

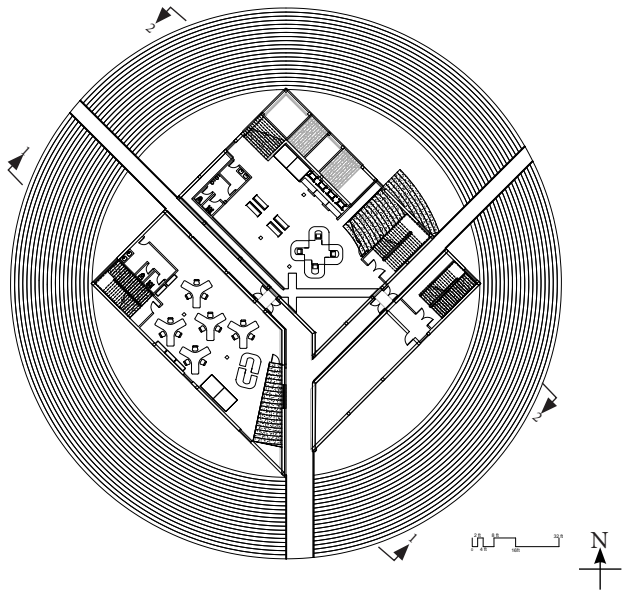


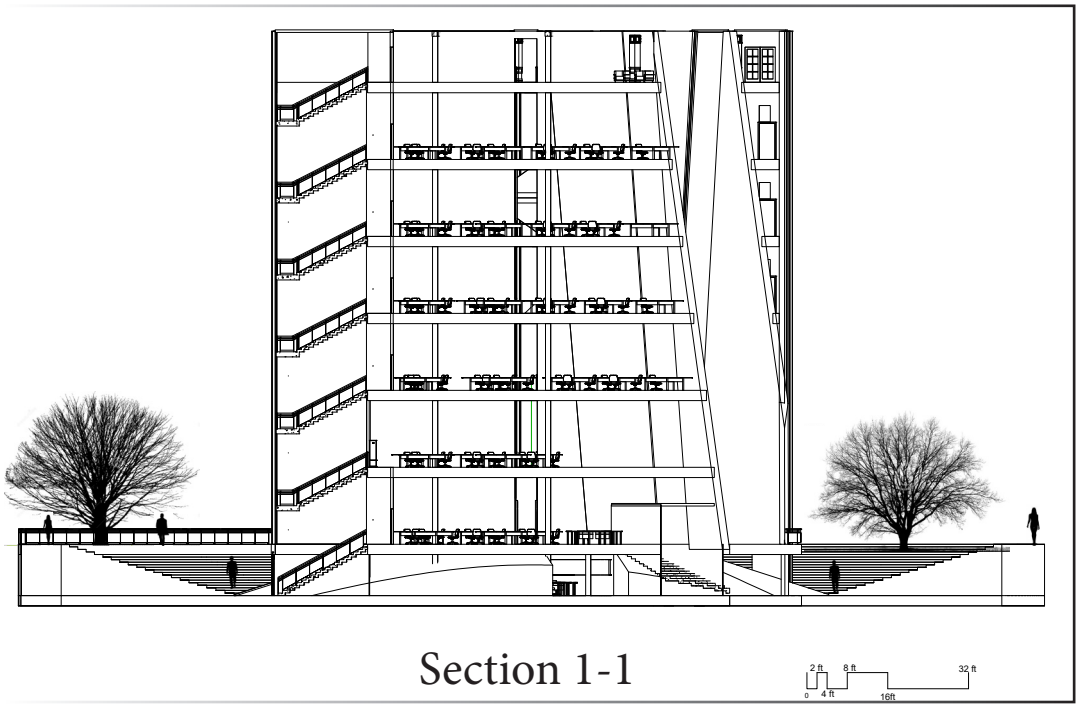
North-East Elevation



West Axonometric -3D

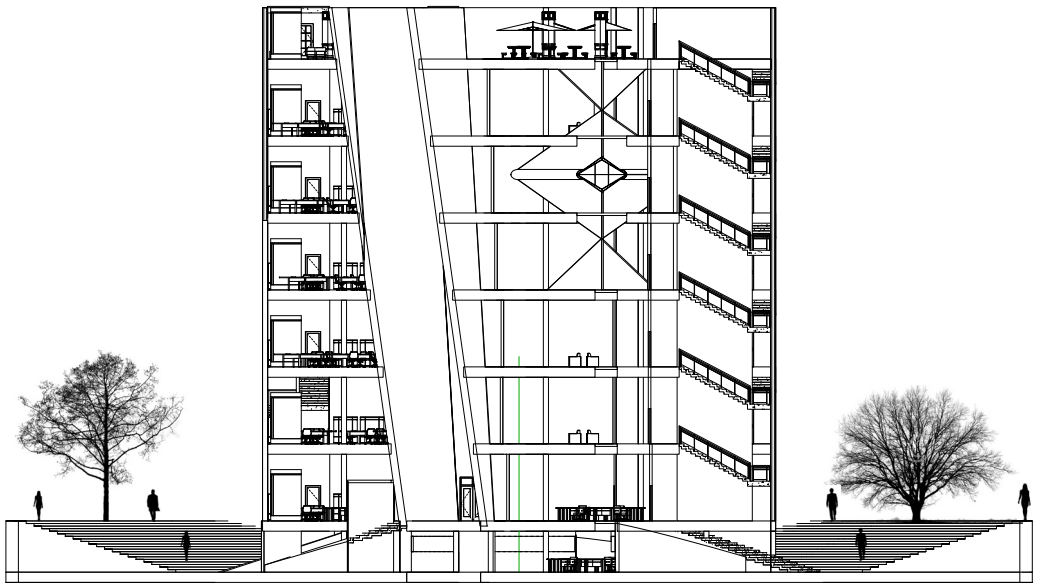
Sections



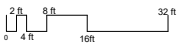


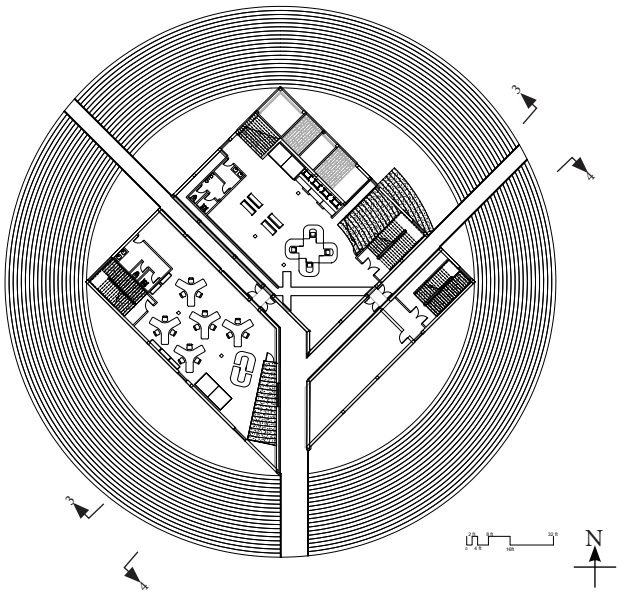
Section 1-1

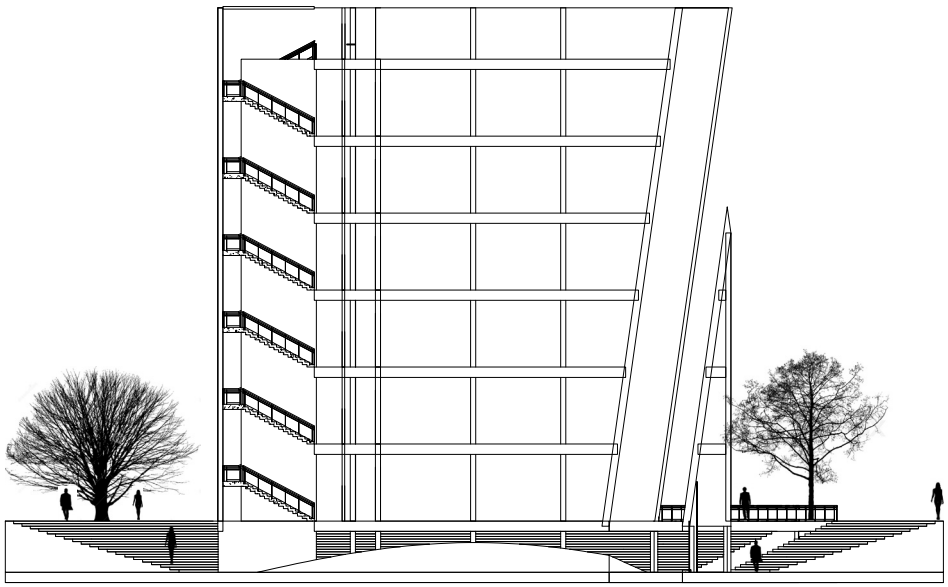
Section 2-2



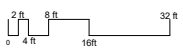
Section 3-3



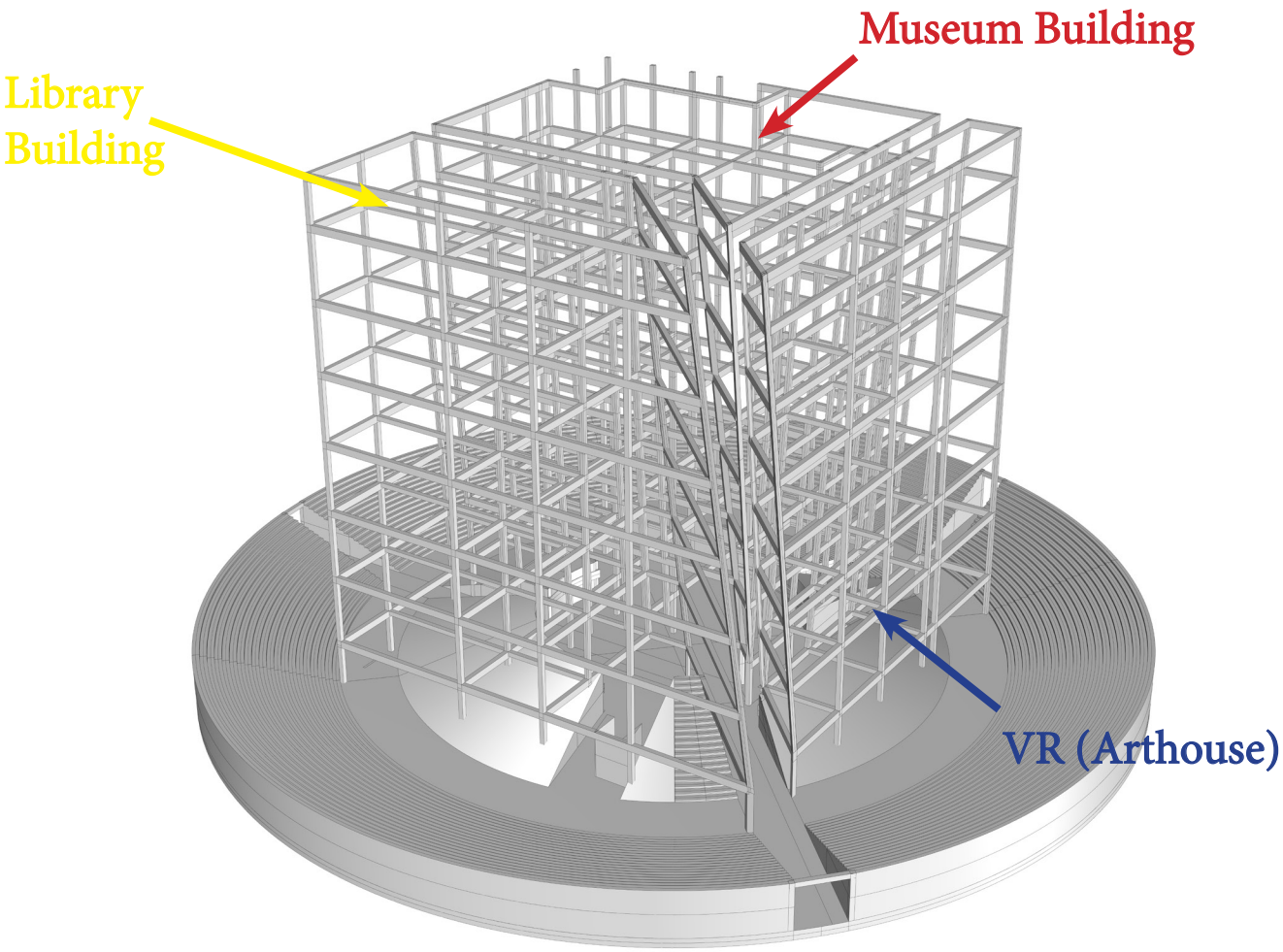


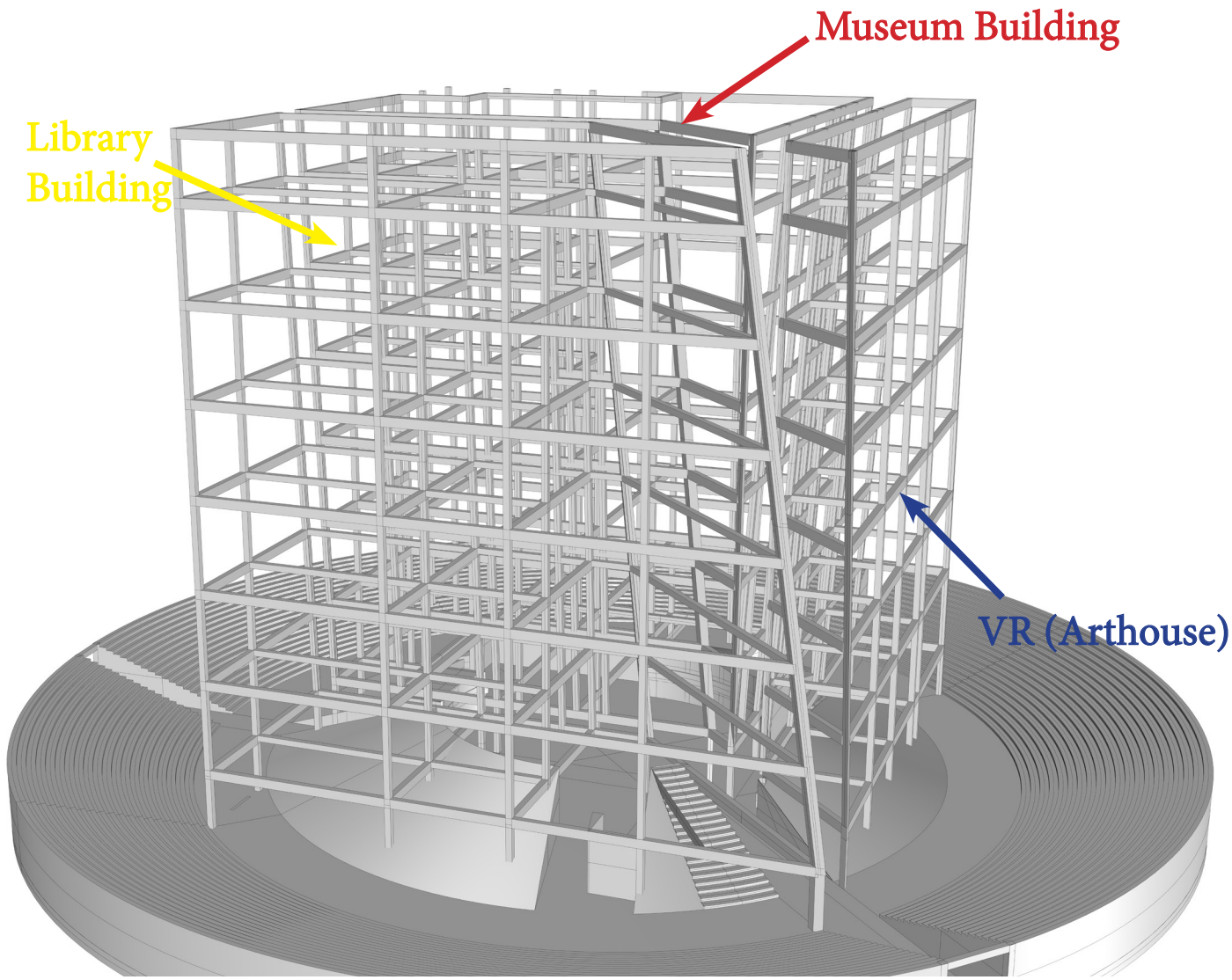


Section 4-4



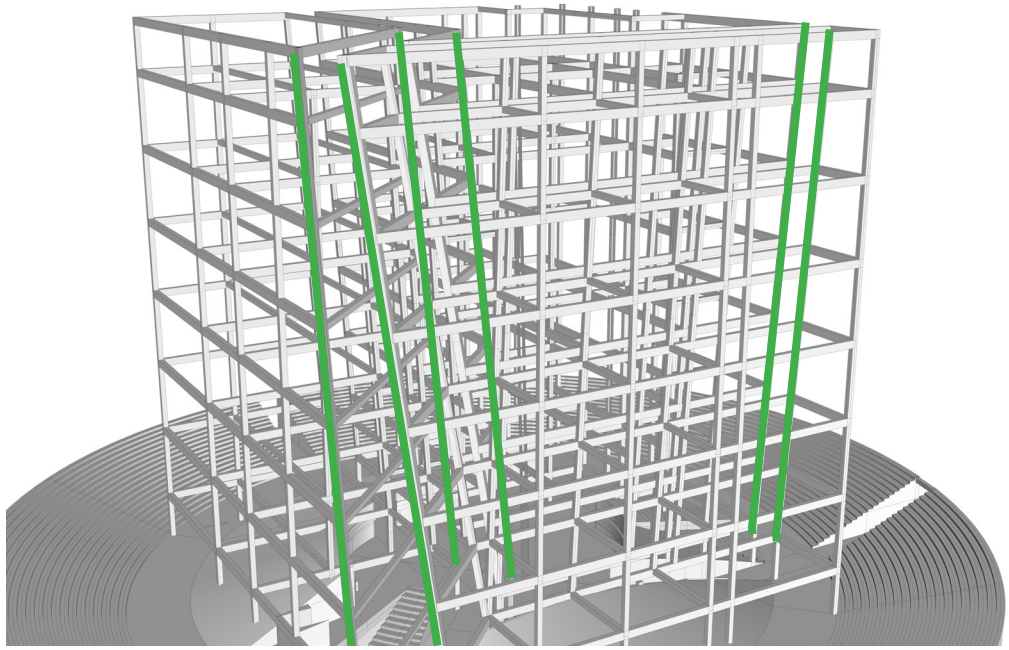
Structure




Museum Building
Library Building
VR (Arthouse)

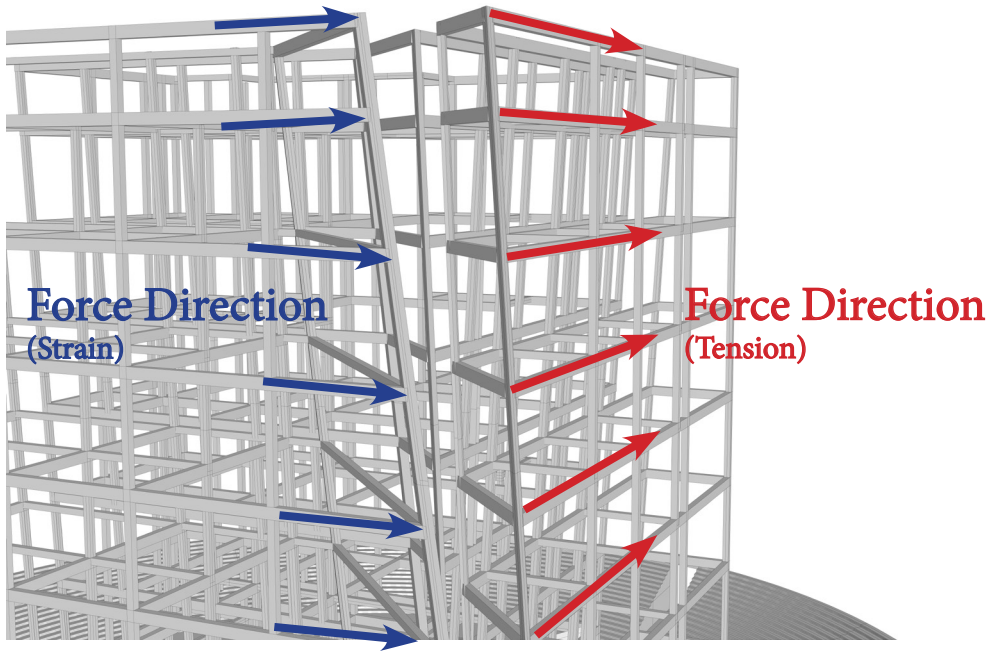
When designing the slope walls, I decided to use reinforced concrete as the main structural system.

Because this is not a high rise building or super high rise building, the form of this building follows the language of the cube. Also, seismic design considerations led to most of the structure of this building to be the most common strong column-weak beam method. The loads would transfer from these slabs, beams, and columns to the underground vertical columns while the loads are finally transfered to the foundation and earth.



At the bottom, the solid part is concrete. It also acts as the shear wall to help support the whole building.

For the slope, I used one additional column to connect the stronger beams to give a tensile force to hold these sloped columns. As the tensile force in the structural system, I use other beams to create resist to these forces.



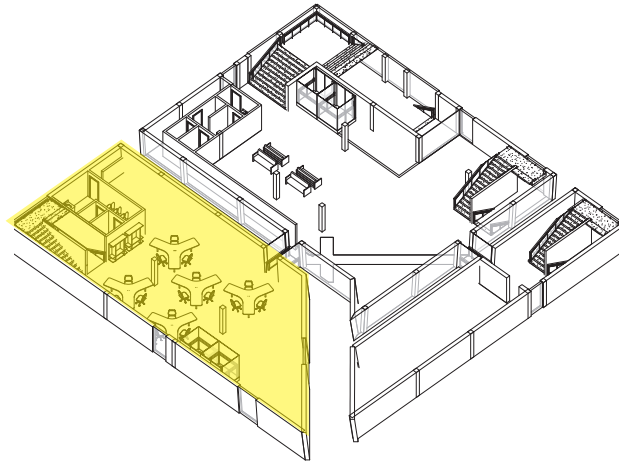
Conclusions & Summary

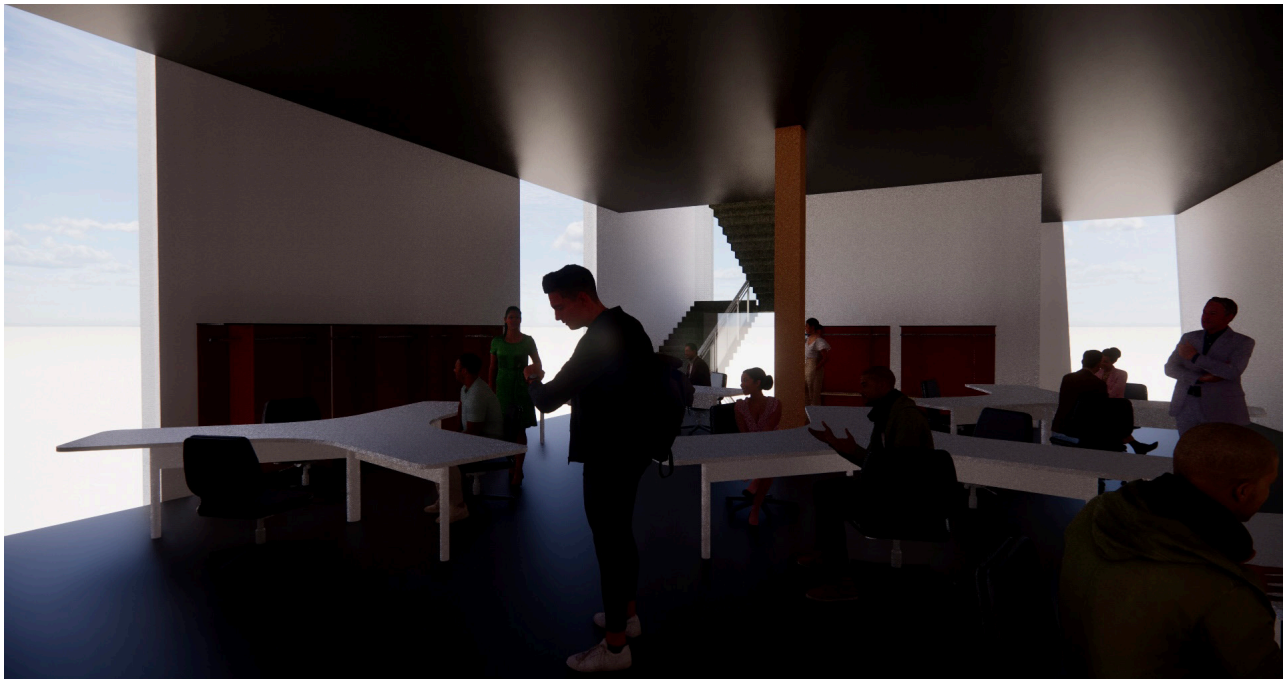
The Library

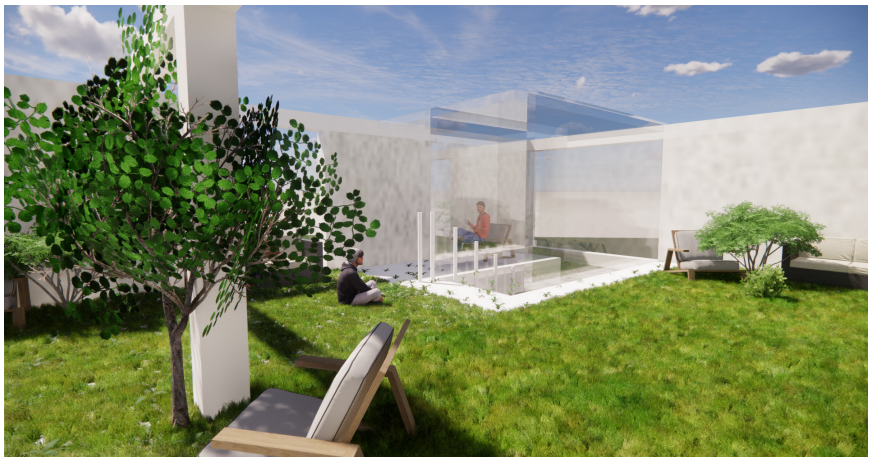
Library Building:

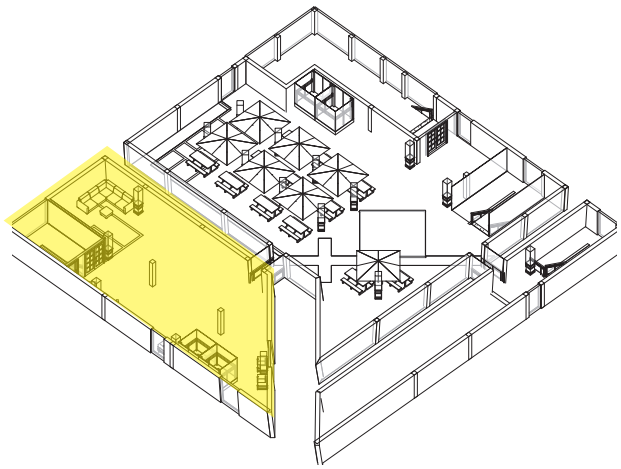
The library is located from the first floor to sixth floor. On each floor, books are related with each big moment from 6 big monments in DC history. So, this is a place for reading how this city was from beginning to present.

After 6 floors, the 7th floor is a roof garden. This is a green and open garden. People could choose reading history inside or outside. They could enjoy nice weather and sunshine while reading on the roof. On the north-west corner of the garden, there is a small glass room. People could enjoy reading in the rainy day or snowy day in a warm situation.





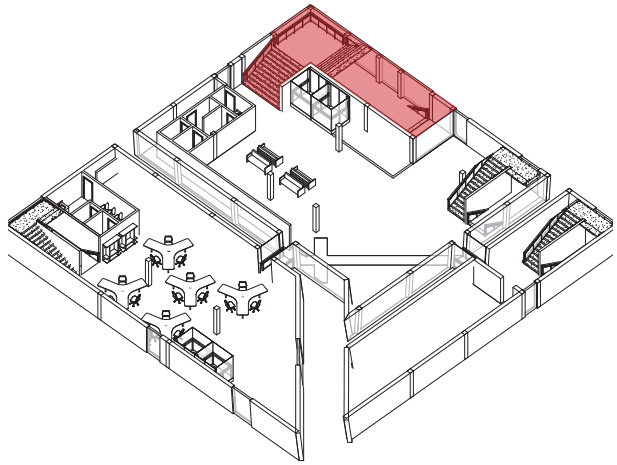




The Museum

Museum Building:

Transparent Glass Covered stairs are on the north corner (red part at the bottom picture and the right picture). Like the library, each floor is related to one of the big moments. For each floor, there is not a lot of windows because many of the storys of these big moments are unfavorable. The dark environment helps visitors to watch these history. But, between each of these 6 historical moments, people need a break. The transparent stairs, covered by glass, provide this break. So, people could still be back in present from each history moment and be ready to the next period. And, after all 6 floors (history moments), people arrive at the top floor. With the end of these 6 historical moments, visitors will come to the last charpter of the history book, the present. People would face the north and see the section of Washington, D.C. This view is what DC looks like right now.



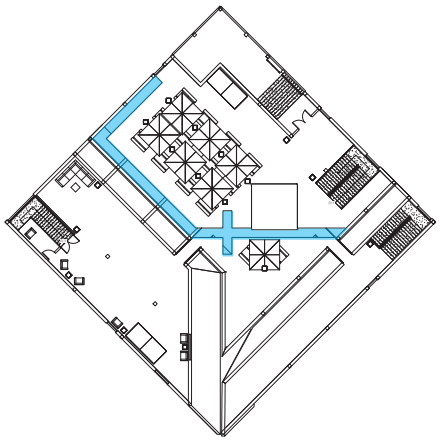
Light Controls

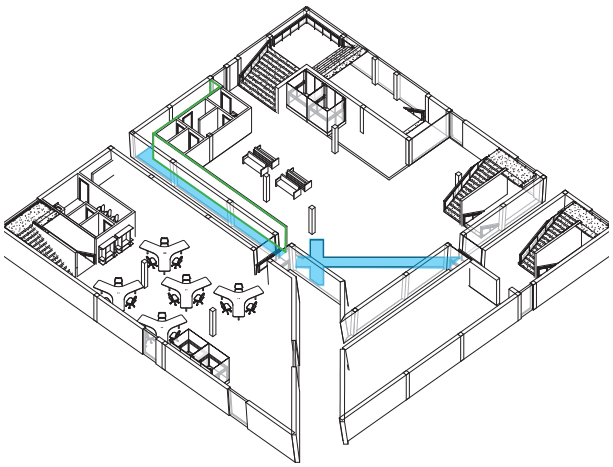
I decided to design a dark environment in the museum building, but it didn't mean there is an absence of light. Instead, I designed some light controls to keep the space dark with some light. The blue part in the picture is the void in each floor. Considered for rainy days and easy-cleaning, this area is on the top floor and the first floor and covered by glass. Except the top and the first floors, there is nothing in other floors to prevent the light from getting in.

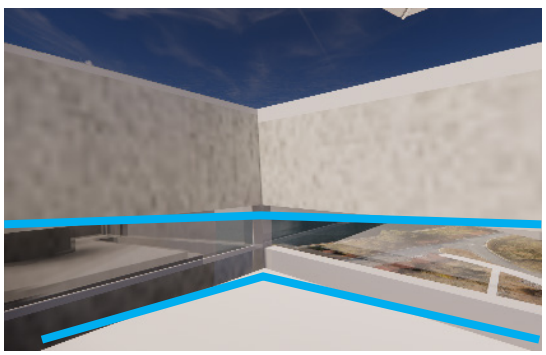
One more step to control light, I added a short wall on each floor to reduce more light from entering into the space and to allow some darkness. Then, shown below, some natural light enters from the top of the wall on each floor. So, the light would change with the sunshine and the time in the year.

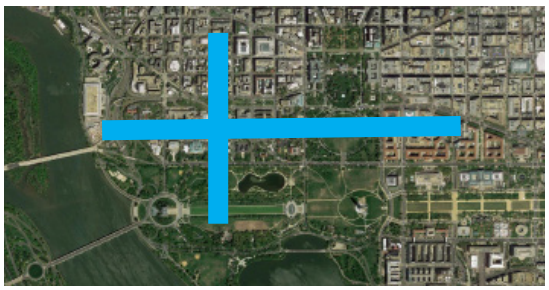
Because this building is from the urban of Washington, D.C., the most famous part of this city is the National Mall. As the center of the city, I also located it in the center of this building.

The center blue part in each floor is covered by glass. Light from top filters through the glass down into the underground floor (with the form of the National Mall.) This light is close to the stairs to provide the stairs with enough light.

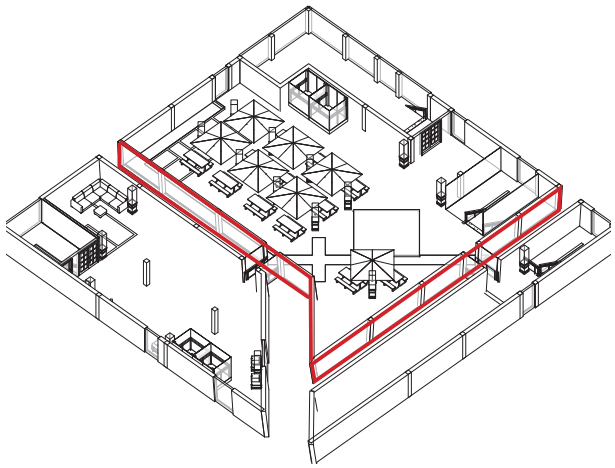


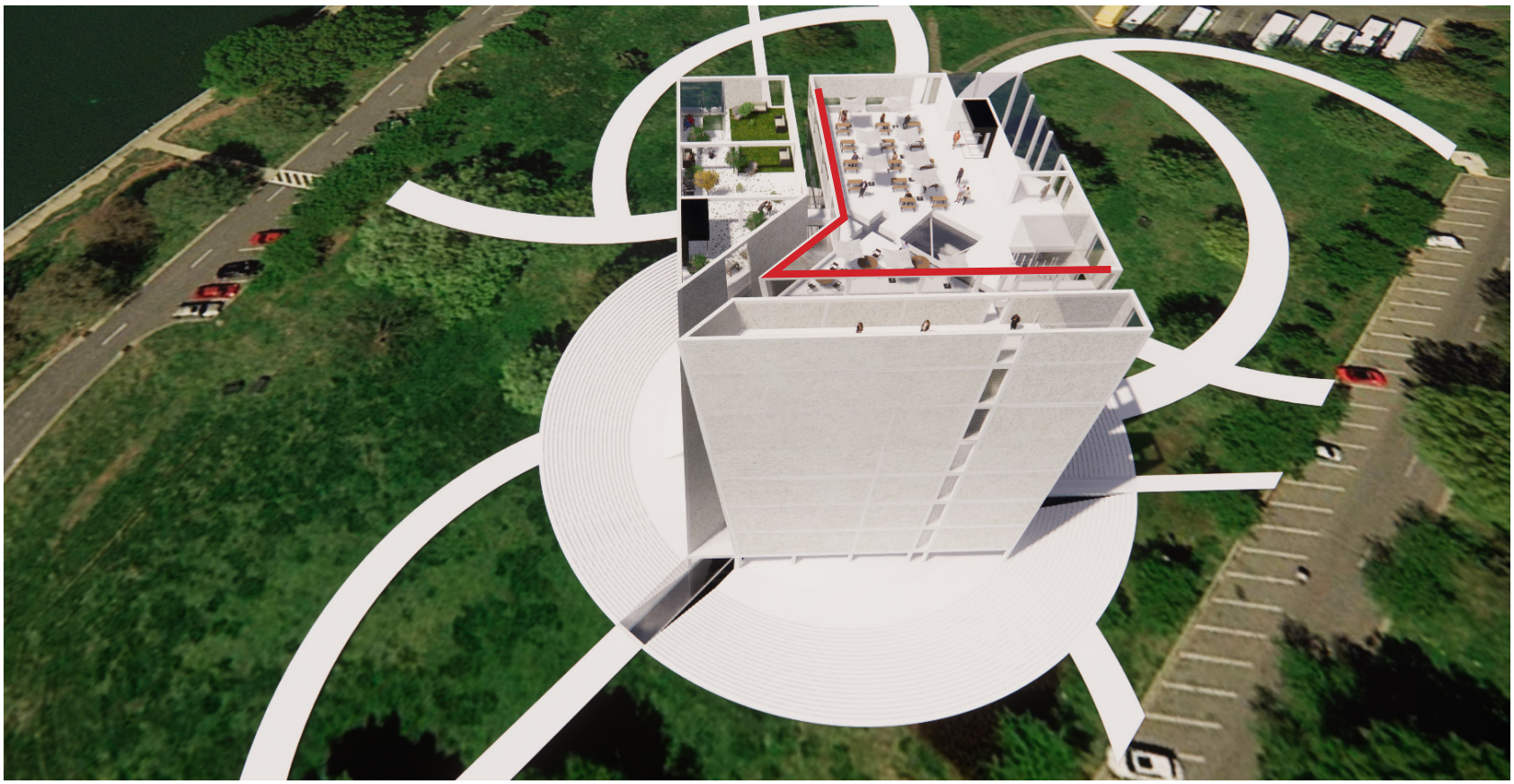


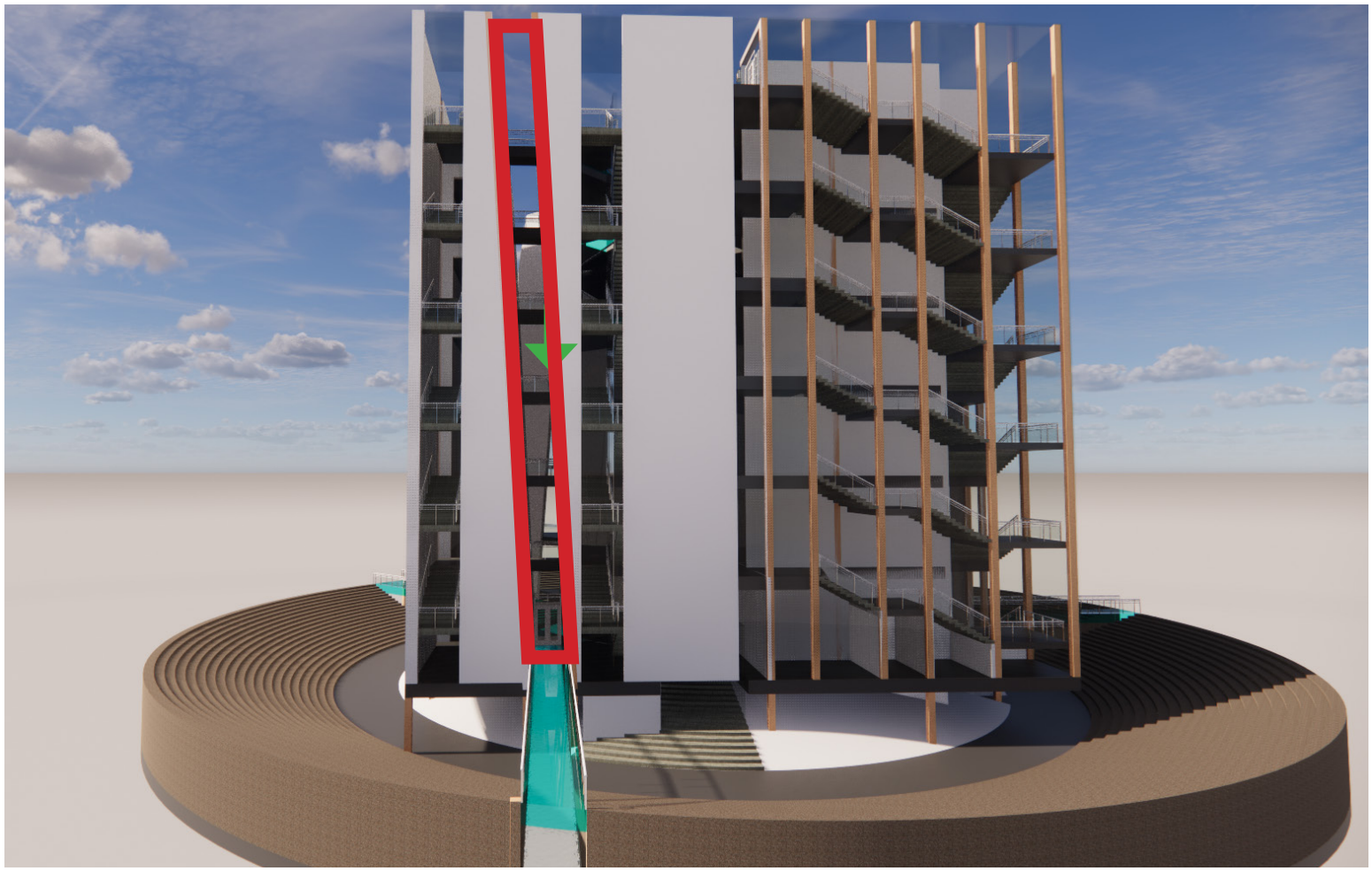




I considered the water (as the river in the urban map) at the bottom for people to see the river more easily from a higher floor, I used glass for the inside wall of the museum. The short wall controls the light to allow visitors to experience and enjoy the dark environment as they visit each floor. And peope see the water (river) on the wall and the bridges which connect each building. After all the light controls work together, the light would also be an important way to allow visitors to watch the history of this city.



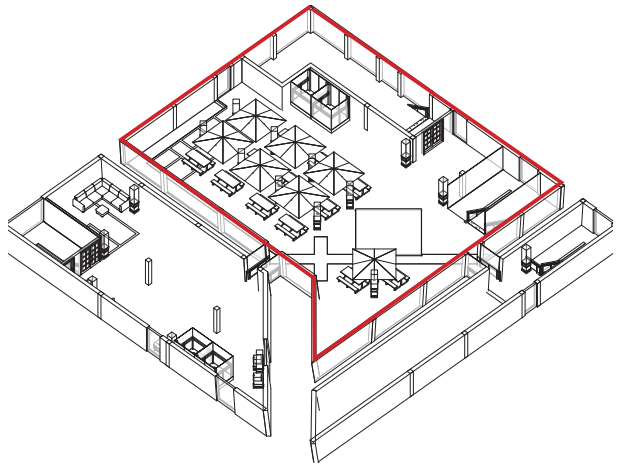




On the top floor is a rest area and cafe. After watching the historic events, visitors come here to relax. Windows face north , the section of the city with the seventh big moment. The title of this floor is the present. This city was built after these 6 big moments that people experienced from the first floor to the sixth floor. Now the city is here, changing and developing, so this moment is going forward towards the future in every minute. We are in the history, the present and the future.

The top floor includes more functions such as watching fire-works or other events in the city.

There is also a small glass room for people to enjoy their time during rainy or snowy days.



The VR House

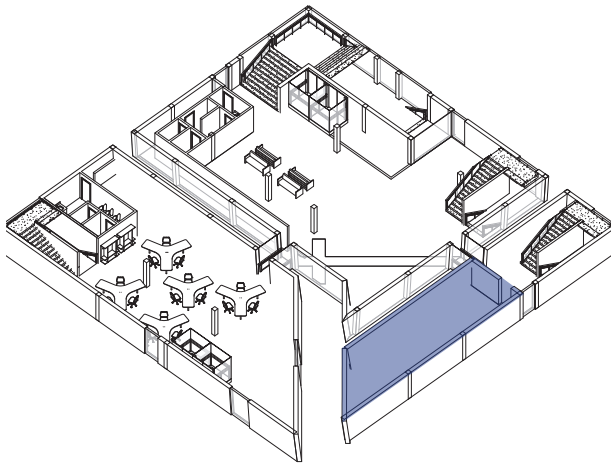
VR (Arthouse):

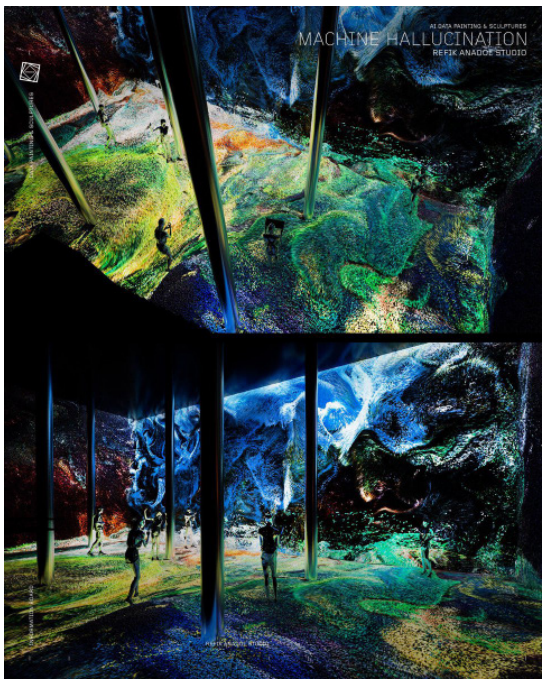
From 1st Floor to 6th Floor of the VR House is used to help people feel the 6 big moments of this city.

In this building, I decided to use the lastest technology: 360 degeree digital art. People could stay here and experience the 6 moments, feeling and becoming a part of DC's history.

So, this building is a special space for visitors. It is also the third way to understnd the 6 big moments.

There is nothing except grass on the top floor (7th floor). After leaving the past, this space allows visitors to rethink and return from the past to the present with sunshine and green.

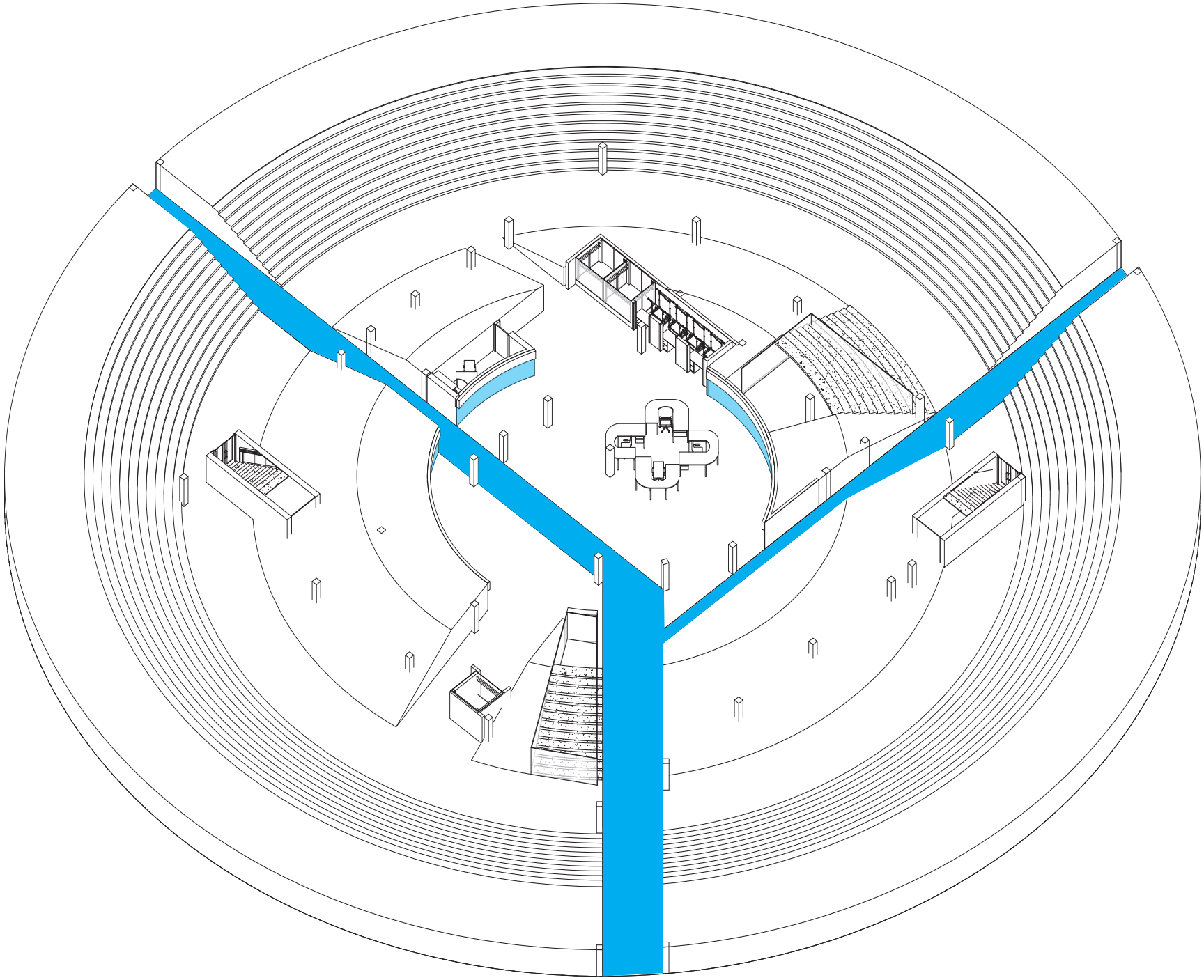




From

The pictures of Artechouse are from https://www.artechouse.com/location/nyc/?gclid=Cj0KCQjw0caCBhCIARIsAGAfuMynGSlL_-xGSjzb9U6tGLncXetf--AOc9_I783f0MrS-qRZk9p3vzcaAnvoEALw_wcB

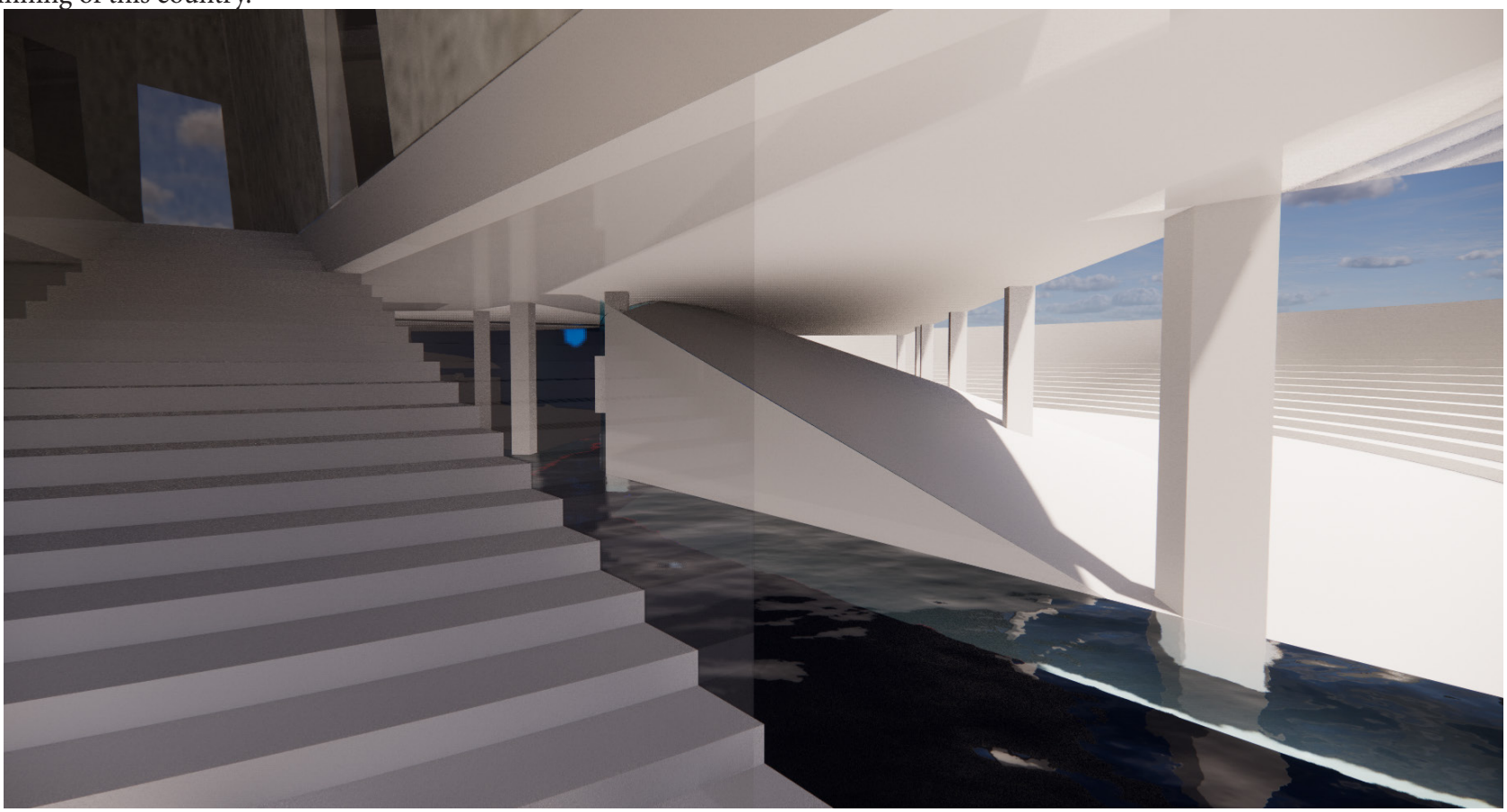
Underground Water



The water in the underground floor has two parts. One is the "rivers". As the urban study, I added a representation of the "Potomac River" here to add more elements in this building. The "river" flows at the bottom. The bridges on the first floor are glass. Visitors see this "river" when they enter the building from the first floor and underground floor. The other water element moves and flows smoothly and slowly. At the wall are some changes in level, the "stoneboards". Because I used the concrete as the main material for this building, this level also use this matrial.

And I would paint white colour on the wall and the "stoneboards". The white and the water would make a clear and realxed situation.

Because the underground floor is part of the foundation of the building, it also refers to Washington, D.C. as the capital of the United States: the foundation of the country. The Presidents are important in the functioning of the country. So, these key changes in level represent what the presidents had done for the country. The falling water flows smoothy symbolizing time that flows from the beginning of this country.



Diamond Heart in Museum

At the beginning of the year 2020, the COVID-19 disaster occurred in the entire world. The whole world is under its shadow which continues in 2021.

This country needs some hope.

Hope for defending the virus.

Hope for winning this war.

Hope for returning to normal life.

This is the hope for the future.

Facing this situation, I began to think how an architect can react to this war against the virus. What could we do?

Use our pencel! Design and show the hope for people.

The Diamond Heart appeared in my mind.

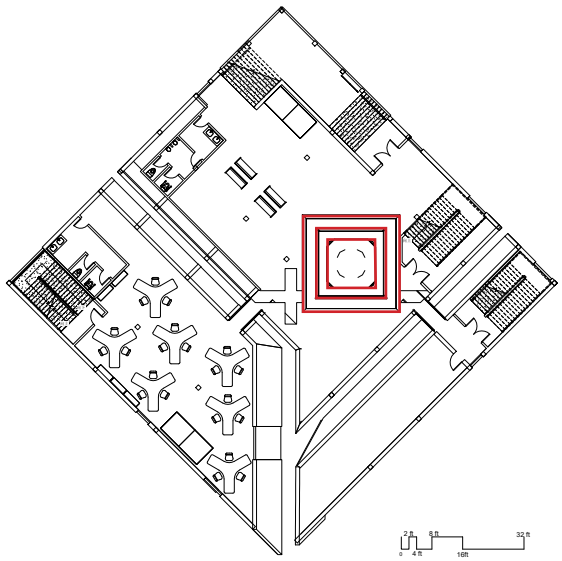
The heart is the most important part for people. The capital is also the most important city for a country. Washington, D.C. is the capital of the United States.

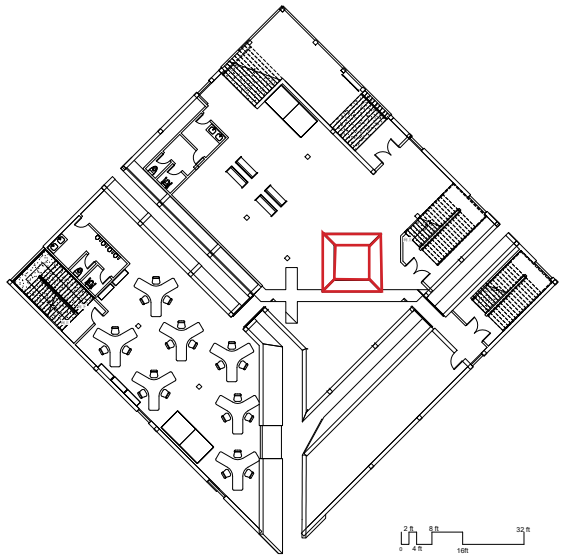
From the map I found DC looked like a heart like the heart location in people's chest, I found this city was located on a similiar part in the map of the United States. And from the map of DC, this heart is located at the center of the DC square. So, this heart is the core of the center.

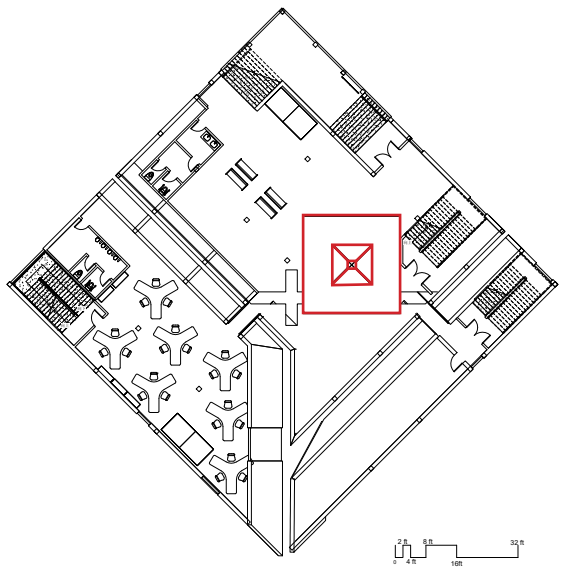
Then, I made a heart for this building, placing it in a similar location in the building in horizonal and the vertical (from 4th floor to 6th floor) view.

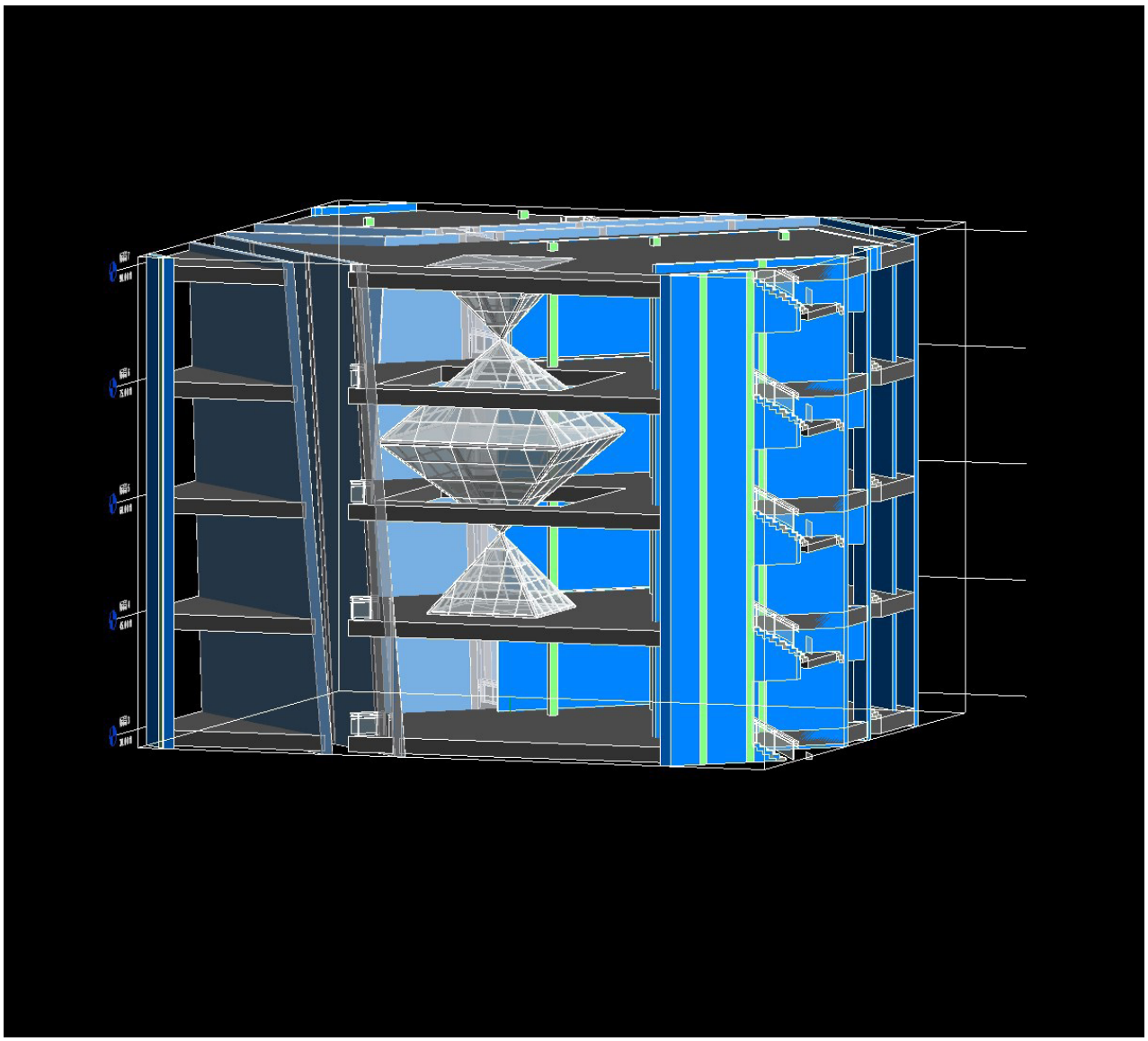
From
The bottom maps are from Google Earth (Washington, D.C.)

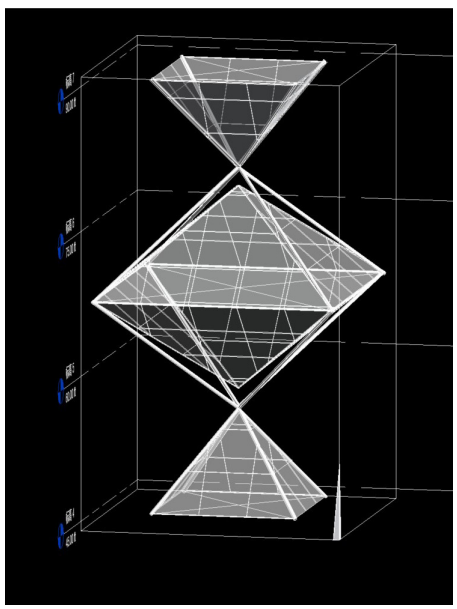
For the heart, I followed the language of the Cube. I rolled the cube, one corner facing up and other corner facing down. And put one more cube in the same way. I seperated it as two pyramids, one at the top and the other one at the bottom for structural function.







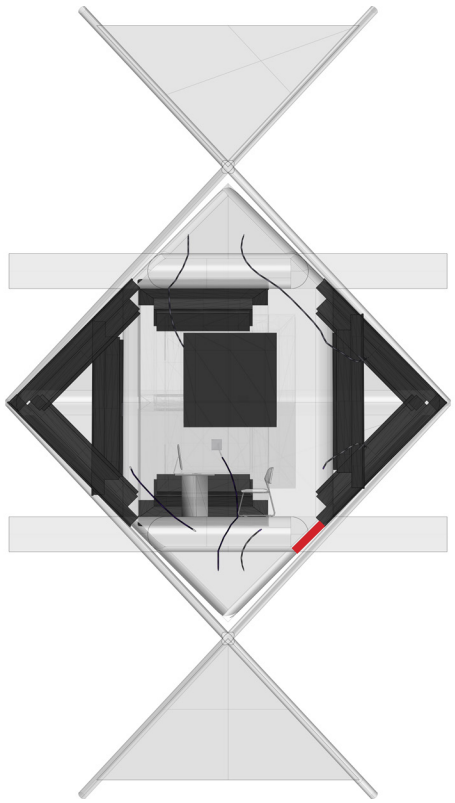




As a heart, it should be alive. So, this diamond heart should also be a alive heart.

As the “heart” of the building?

As the technolgy development, the 3D naked VR has already shown in the world. The most famous example is the “Wave” in South Korea. With curved LED and computer system support, architects and engineers have worked together to create this moving image to allow people to see a moving view in the LED screens. For example, as shown in the pictures on the right, the screen show a “real wave“ in the big box.



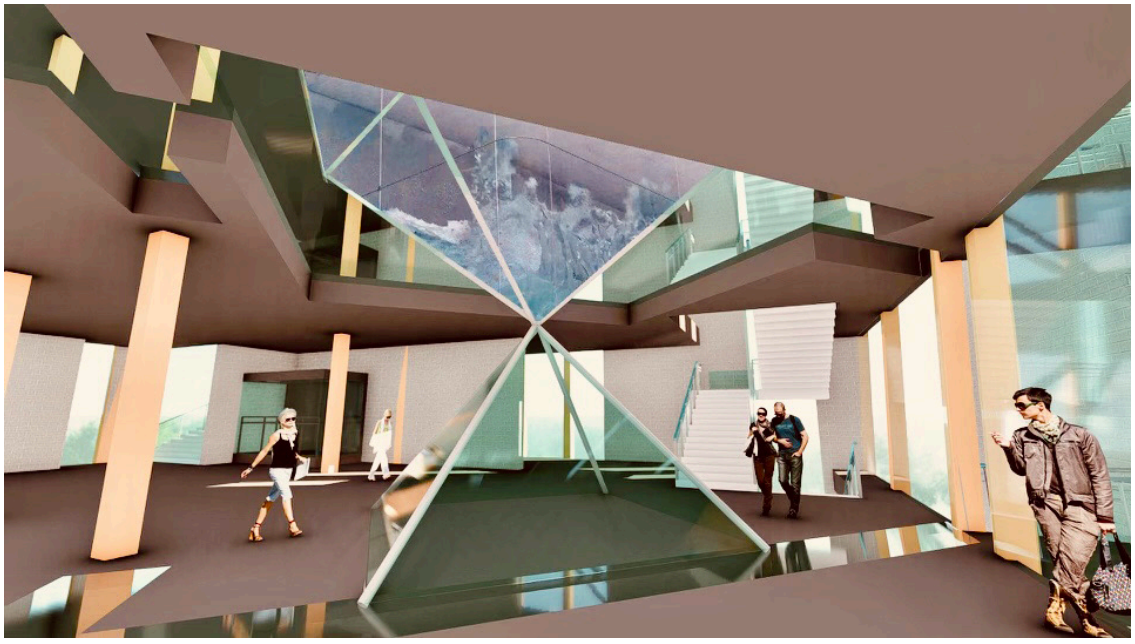
I decided to use this technology in the diamond heart. There would be a control room inside. The staff insde would control what was showing. And the show itself could be chaged depending on what was happening right now or what would happen in the future.

For example, if the heart was showing something about peoples' new life after we beat the COVID-19, this would be the hope. And this hope would give the power to people to win this virus war.

Then, the heart would become the heart for everybody.

Because this heart extends through from the fourth floor to the sixth floor, more people could watch it, I designed a void cube to extend through these two floors. Also I made the void floor part out of glass. So, people could walk on the glass and watch the heart showing through the glass in different floors with different locations and different degrees.

The red line at the right bottom side is the entrance. The technical staff could get through this entrance to get inside. But the staff need a ladder. Because the entrance is higher than the 4th floor, he has to use the ladder to get in from the 4th floor.



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The End