



the living narrative

2021

brittany martinez

living narrative

the
living
narrative

britteny martinez

dedication

To the family, friends, and loved ones
that have continuously supported me
through my endeavors. I did it.

To my parents

I am so blessed to have been given
a life full of love, joy, and support.
I would not be where I am today
without you. Thank you for your
unwavering and unconditional love.



abstract

Architecture is the canvas for the stories of our lives. It adapts and fulfills the needs of those around us, dispersed throughout cities that are constantly growing. Yet, as the world evolves and technology advances, architecture preserves the everlasting significance of the past. Architectural forms create usable space that can change and evolve through time. My research began when I questioned if there was a depletion in the demographics of architecture regarding the function of a building. Libraries have been a timeless foundation to knowledge are known to hold a significance in preserving the past through books, manuscripts, photos, documents, and other archives. My interest in how the space could change through the evolution of technology ultimately made me wonder how architecture can redefine the roles of a library of the future? The concept of a library is still useful for the growth of knowledge, but the space needs to evolve to incorporate the use of technology and all the things that come with it.

When looking at the future of libraries, we see that libraries that were once totally physical are now becoming virtual. The individual focus has turned to community focus. Libraries once made for collection are now becoming spaces for creation and collaboration. Instead of presenting everything for everyone, it is becoming a presentation of more niche topics that are currently relevant (Rainie, 2018). With this understanding of the developing ideas of the future of libraries, I wanted to focus on a concept used throughout history and modernize it. The living narrative is a nontraditional library guided by the past with visions towards the future. Its mission is to enhance individuals' and communities' engagement in history and culture through storytelling; these stories will celebrate and bring awareness to the collective history of the world. The living narrative provides the opportunity to advance commerce in society through knowledge of the importance of the written word.

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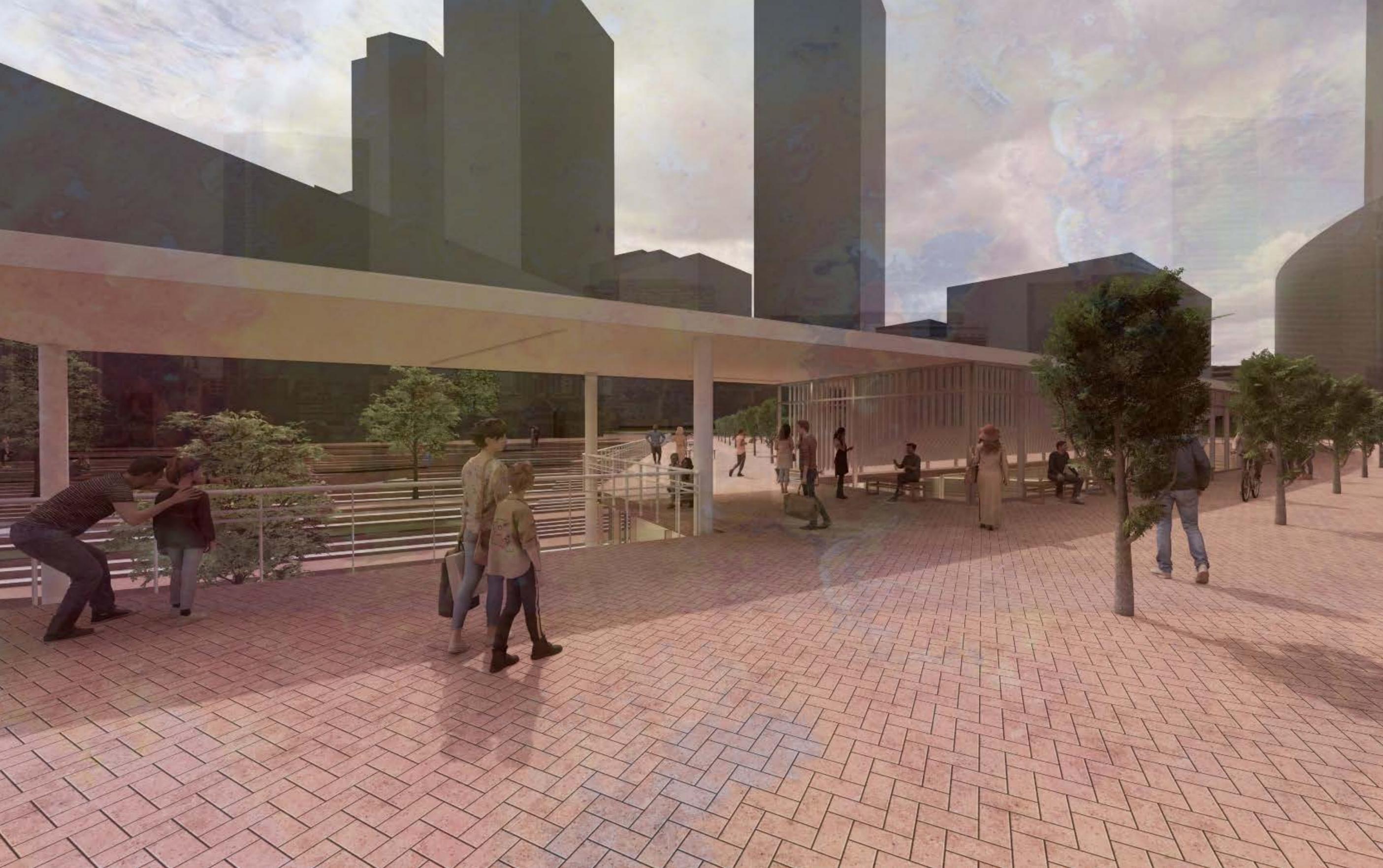
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storytelling

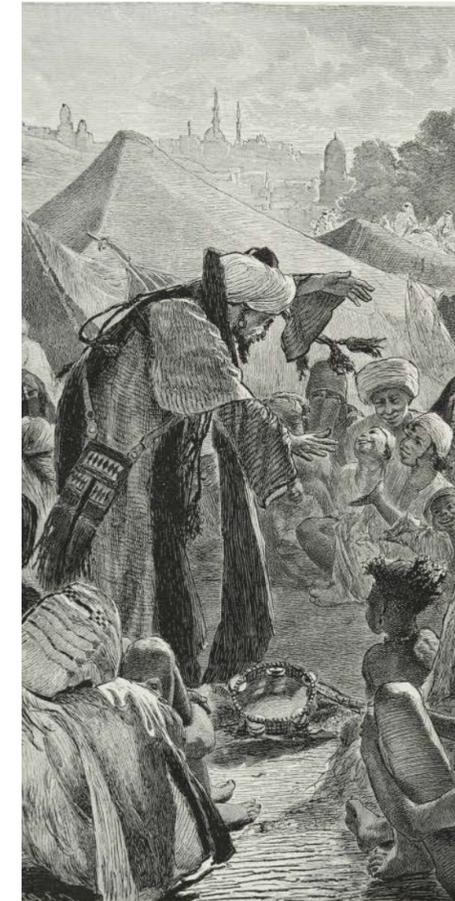
narrative

Storytelling is a powerful tool that can change the forefront of media consumed and generated by older and newer generations of everyday people. It can be defined as a narrative of words derived from memories and social and cultural experiences. It entices the listener to engage and encourages the imagination. Today there is an abundance of resources that can be obtained through the internet. Just as libraries want to include the community, storytelling can unlock a larger network of engagement through personal and virtual interaction, taking history and making it immediate and current. "Storytelling consists of a logical system; it is edited to transfer a message following a communicative logic, and

it is actually very important for every kind of media" (Molinari, Bigiotti, 2016). There is a process of storytelling that is conveyed through the cognitive understanding and refinement of memories in such a way that leads one through a journey. The origin of storytelling through visual reenactment and cave drawings transitioning to oral lore(literature) and traveling storytellers has guided history to what we know today through books and media. Storytelling is a visual and spatial link between the past, present, and future. These connections exhibit how architecture acts as a medium through which people share and enrich their lives in a physical space that absorbs their memories.



cave drawing



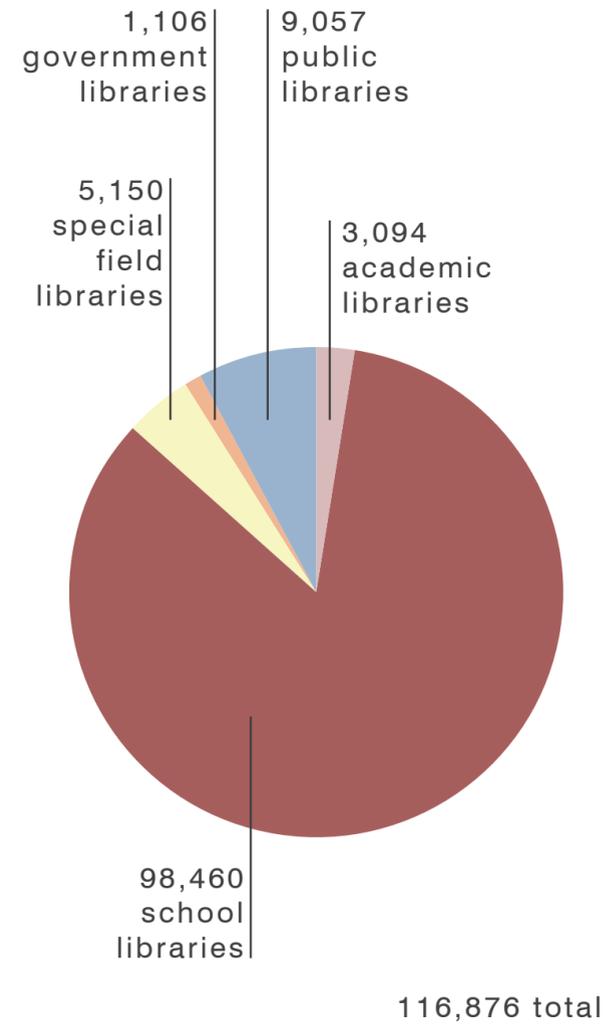
travelling storyteller



modern day books

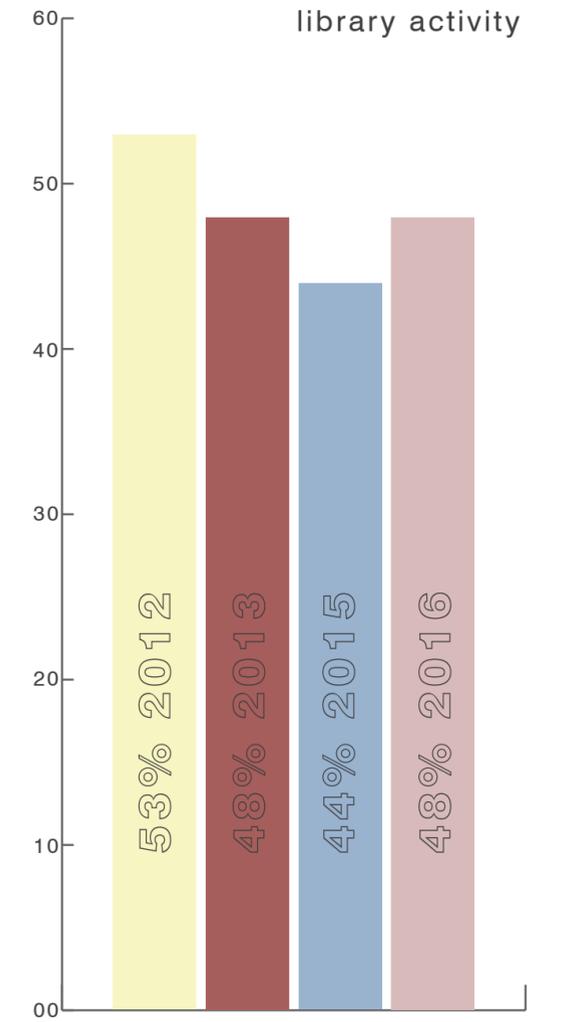
libraries

Architecture is responsible for the creation of many libraries. According to the American Library Association (ALA), as of June 2019 there were 116,867 libraries in the United States. (2019) This number does include several variations of libraries such as academic libraries with 3,094, school libraries with 98,460, special libraries in regard to medicine, law, and religion with 5,150, and armed force and government libraries with a combined 1,106. Public libraries are responsible for the remaining 9,057. The documents and literature they possess recount timelines of significant events, provide a fountain of knowledge for people to learn from, and supply entertainment through a world of books.



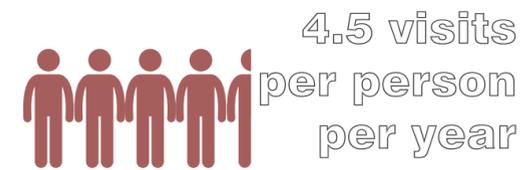
relevance

When investigating the relevance of libraries in today's society, I was surprised by the data supporting the steady numbers of library activity. In a study done to see how many individuals went to a library within the past year, 53 percent of people above the age of 16 said yes. The following years proved to have similar consistency with 48 percent in 2013, 44 percent in 2015, and 48% in 2016. However, I did notice that libraries are becoming a new type of resource to the community providing much more than a shelf with books. In a study done to see "where libraries fit in" The Pew finds that libraries serve as a model for trusted information, a place of social gathering, and a source to fill in "market holes" or adapt niches of learning a new trade. (Raine, 2018) It was found that the activities happening in a library have evolved from just borrowing print books to using 3D printers and high-tech devices.



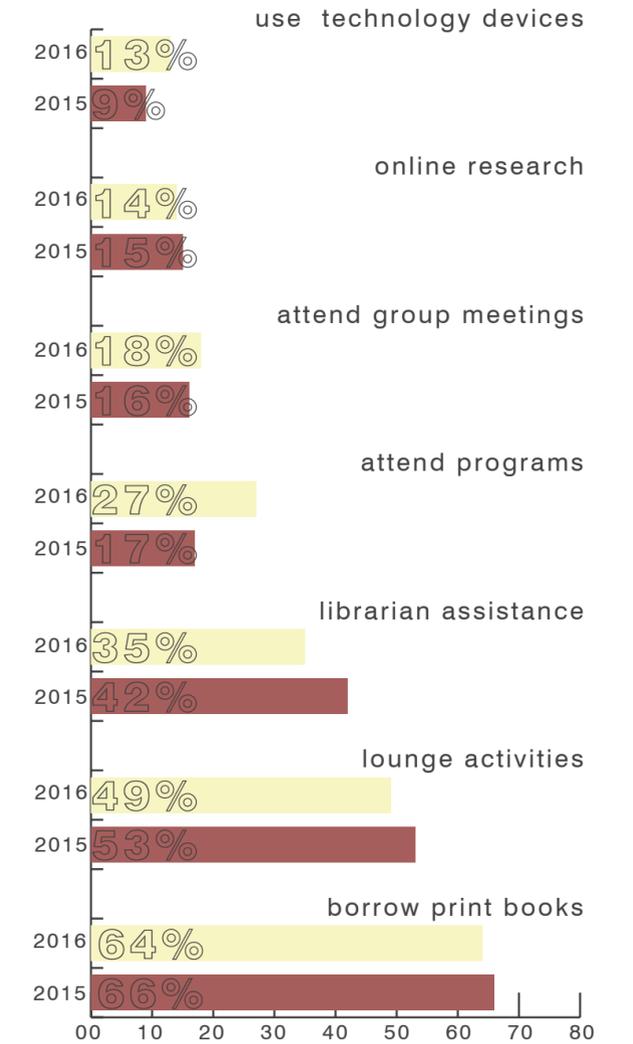
statistics

In a study conducted in 2015, it was said that 311 million Americans lived within a public library service area, with 1.39 billion visits to a library. Though this seems to be many visits, that only results in about 4.5 visits per person in one year. (People Visited Public Libraries, 2018) The idea of getting people to veer from their busy schedule to visit a building out of their usual routine poses another challenge. With technological advances today, finding a book, information on how to hone a skill, or any new experience is just a few keystrokes away. There is a disconnect between how libraries were initially designed and their effectiveness today. The possibilities of how technology can be used are unfathomable, yet there is so much more room for incorporating it into our libraries to restore the role they play in society and help them bring history to life.



library activity

Even as modern-day libraries are successful, the ways users interact virtually through access to e-books, digital and video, and audio material has increased. This allows people to utilize libraries as more of a reference service. In a study based on user activities in a library, it was discovered that though users still attend libraries for traditional purposes, there is a new era of technology that influences the growth of program within a library function. With this data, I created a library with the capability to host these functions in a way that adapts with the growing influences of technology.

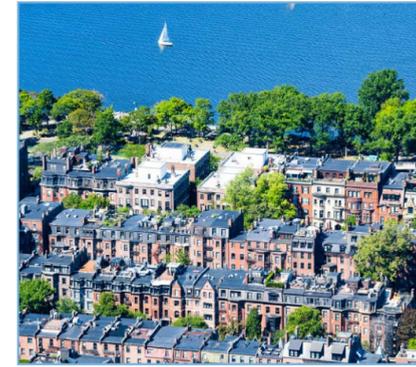




locality

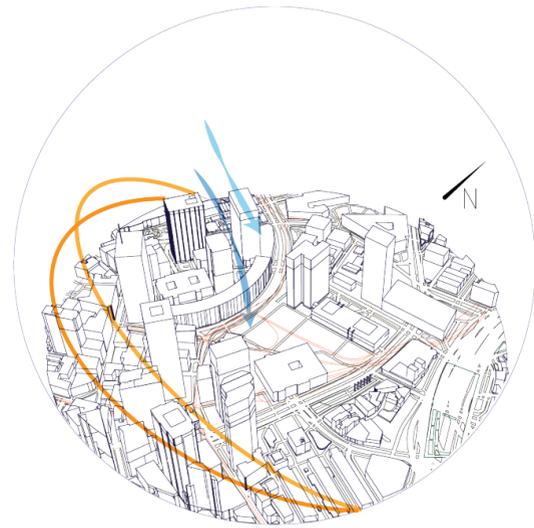
boston, massachusetts

Boston is a beautifully diverse location with rich culture and history. The City Hall Plaza is located in the heart of downtown Boston, Massachusetts. The seven-acre plaza is one of the largest urban public spaces in the Metropolitan area and a social hotspot for gathering during large political rallies, sporting celebrations, and cultural festivals. Boston is well known for its historic roots and diversity. Connecting a library, the ultimate advocate of history, to City Hall and the oldest subway system in America would attract people of all ages and from different walks of life to pass through and gather around the site. With my design, I explore the aspects of cutting through a major hub of subway transportation and inserting the library into the lives of those passing through it. I propose to incorporate a concept called The Living Narrative into libraries as the gateway of knowledge and culture by implementing storytelling as a new medium through which people can teach and inspire others.



location

The Government Center Boston Transit subway and public hub of downtown resides below the site with a curtain wall exterior hut to provide public access. The subway line tracks along the outer edge of Cambridge Street and Court Street. This stop accommodates the blue and green line and is widely used as a form of commute in and around the area. The tallest structure next to the site is the US Immigration Court and John F. Kennedy building. This introduces an important connection between historical and current events that recognizes immigration struggles and offers an opportunity for these individuals to voice their experiences. The events that occur in these buildings could feed information, knowledge, and experience through The Living Narrative to create system between these buildings, the values they hold, and the history that resides inside the walls.



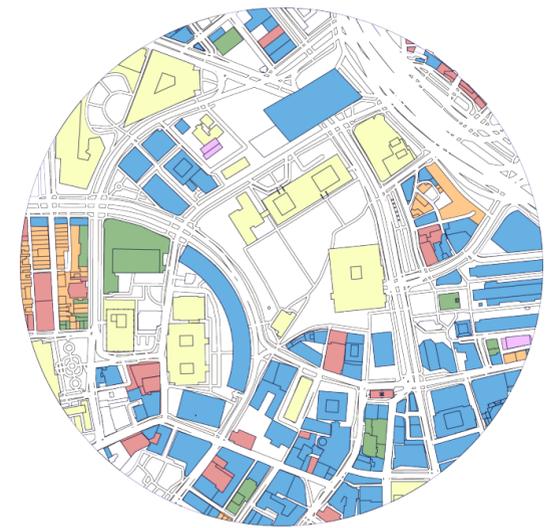
- direction
- winds
- summer sun
- winter sun
- underground



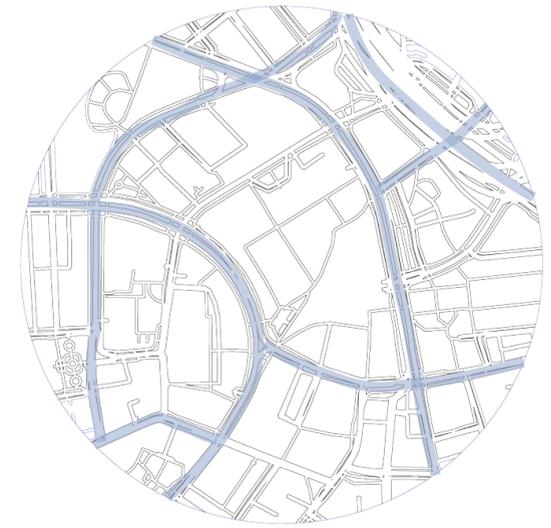
- nollimap

surroundings

The buildings adjacent to the site primarily serve governmental functions which I find to have correlation to the program of The Living Narrative through the ability to bring awareness and relevance to current topics, especially the plaza above the library. The plaza was originally designed in the late 1960's as an urban renewal project. The plaza is without vegetation aside from a few trees along the plaza's edge. The downtown area is well-known and heavily populated with daily commuter traffic and tourists visiting from around the world.



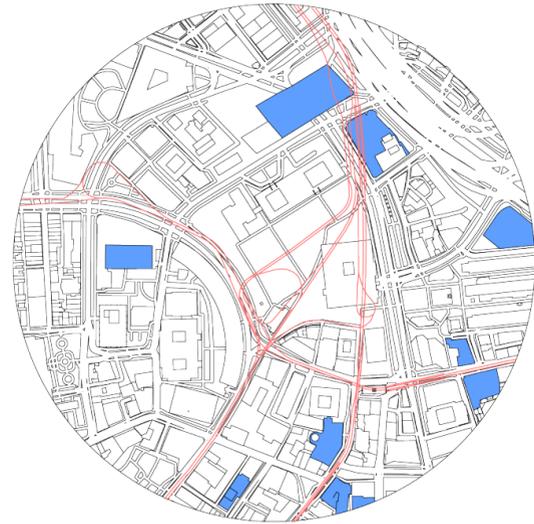
- commercial
- government
- residential
- industrial
- mixed-use
- institutional



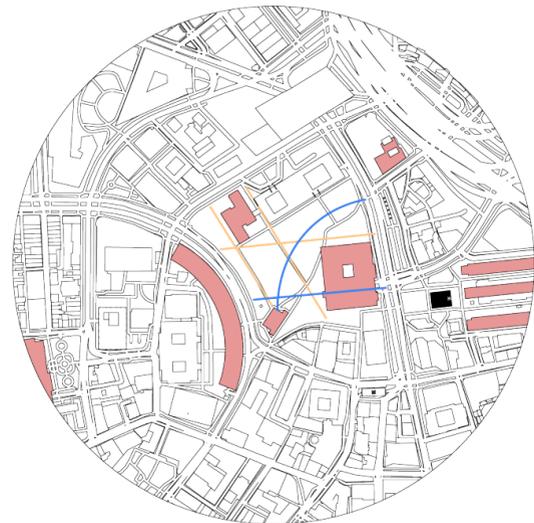
- major roads

connection

The site is a place used for gathering but has the potential to be an inviting space filled with enriching experiences throughout the design. The centrally located site is easily accessible to guests visiting the site or using the subway system below. The points of interest are easily identifiable and are common to the area. The historical aspect of local buildings surrounding the site help give The Living Narrative purpose to tell the story of the people.



- railway
- parking garage



- points of interest
- major pedestrian paths
- minor pedestrian paths

topography

The site is located on a terrain with a 30 foot elevation change from the bottom of Congress St. to the top of Cambridge St. The space underground the site is unique to Boston as well. Not only is it the location to the subway, but it's a central landmark to the growth of the city. In the efforts to grow the peninsula, Boston was destined to establish harbor and port improvements along with new railroads and depots. This called for man-made land that was based on backfill sometimes contaminated with landfill as a compacting source. My site resides just within the perimeter of the original peninsula land. Considering my site conditions, understanding what was happening below the soil was significant to the success of my project.



- 60 feet
- 50 feet
- 40 feet
- 30 feet
- 20 feet
- 10 feet



- 1630 + fill
- 1630 land

concept

The Boston subway system resides below ground while the City Hall sits upon the plaza that is open to the public. With my design, I intrigued the aspects of cutting through a node of subway transportation to create a space to explore non traditional approaches to a modern day library.

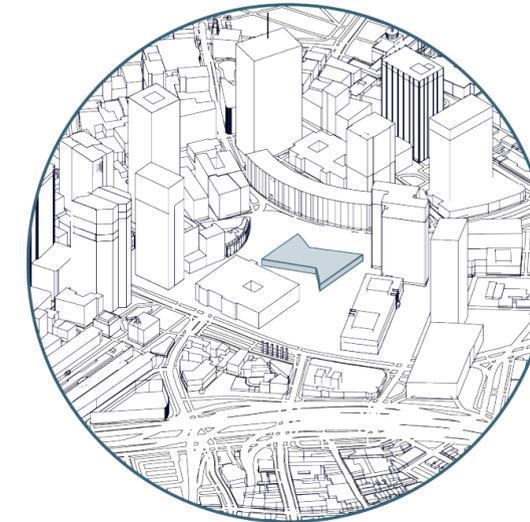
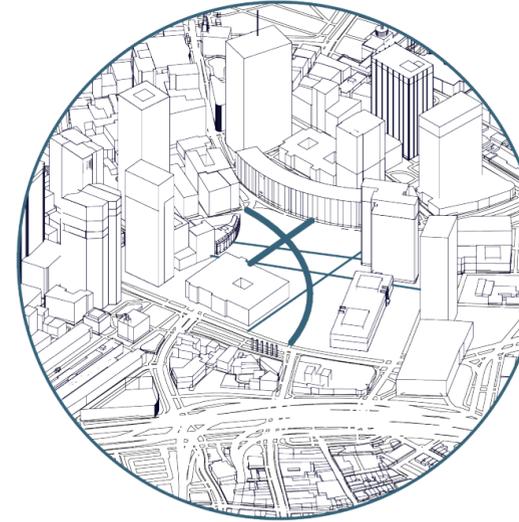
Initially my concept started with mapping out the paths of travel as people walk around the site to nearby locations. Among the straight paths from one point to another across the site, there was a large arc that carves through the plaza around the City Hall and ends at the entrance to the subway.

I used the intersections of the remaining simulated paths to form a boundary, developing a form that supports the main public functions of the library, museum, gallery,

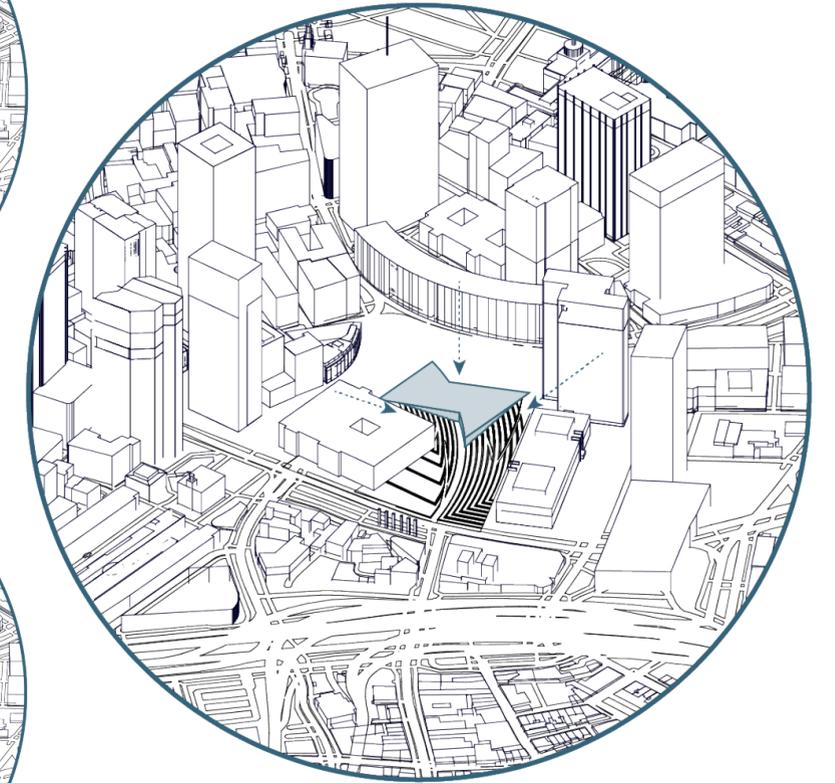
installation spaces, public auditorium, and reading rooms. Incorporated throughout the space are stations to record and listen to others' stories.

To create a passageway that connects the functions of the plaza, city hall, and subway together, I interposed my building within a central inlet to generate a network between the spaces on the site. Moving underground influences the possibilities for event functions and public gathering, to create a semi-private space in an urban setting, and ultimately form a connection between significant architectural landmarks along a vertical and horizontal plane. The art of connectivity could be described as an airport that branches off to terminals. The Living Narrative was designed as a pathway through rich culture, place, entertainment, and transportation to embody a library that is on the go.

paths



form



carve



storytelling
through
architecture

site plan

The lower region of the seven-acre plaza is the large brutalist styled City Hall that serves civic and town council duties. On the exterior facade there are varying ledge details and concrete ornamentations. Within resides a network of offices, conference rooms, public rooms, and listening rooms. The Living Narrative includes a public access portal that connects through the City Hall allowing public a protected pathway through the site and a public lobby that connects underground to the library and subway, acting as an antidote to people passing through this area. These two opportunities of public passage and access are elements to entice the user to interact with both facilities. It will reapply fundamental traits to revitalize the way people perceive and use libraries immersed in a transverse urban setting, specifically how to transform the library into a living structure where history can be experienced through storytelling.



plaza top

sculpture

story room

coffee shop

book bot

auditorium

creation room

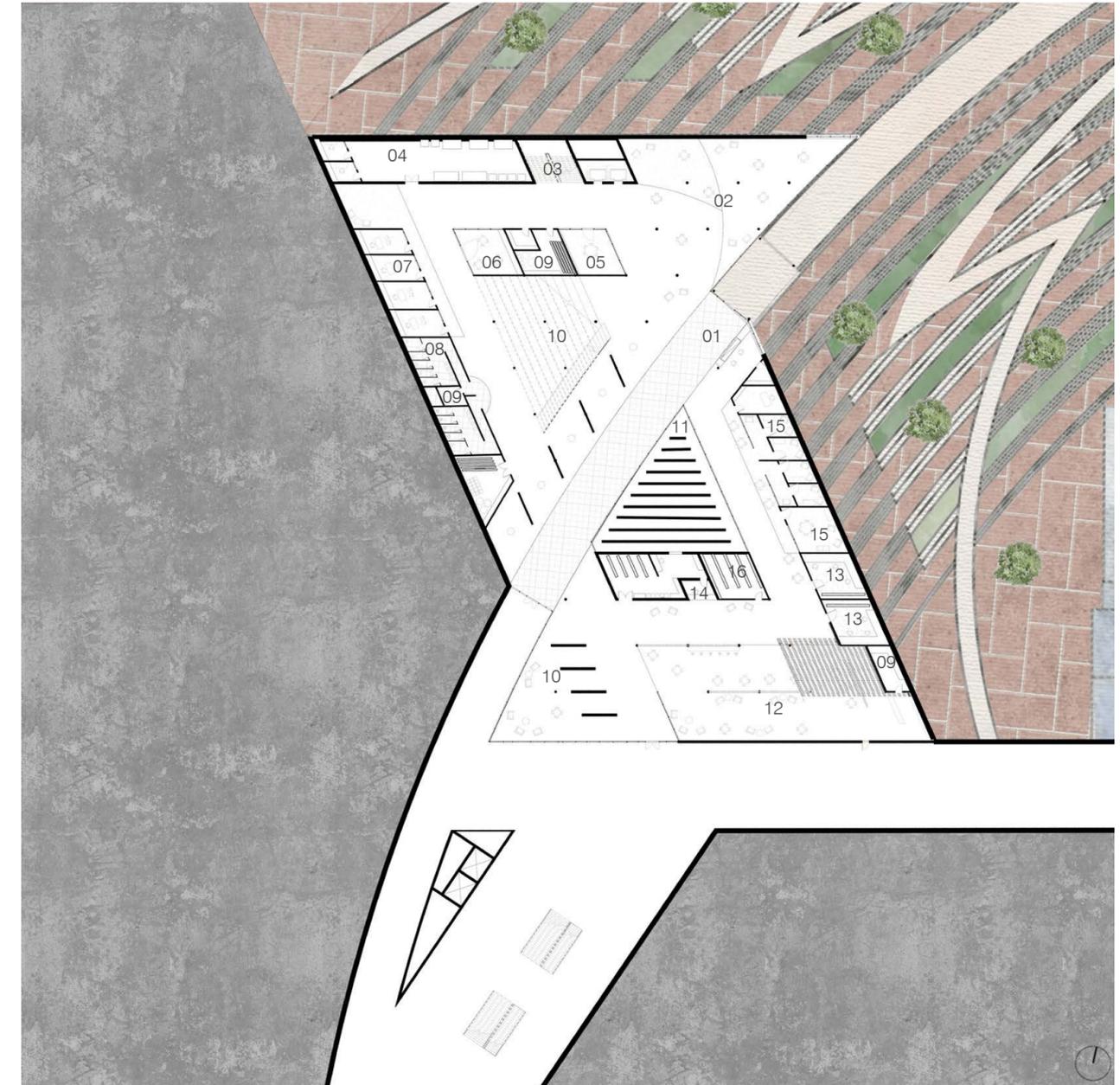
listening room

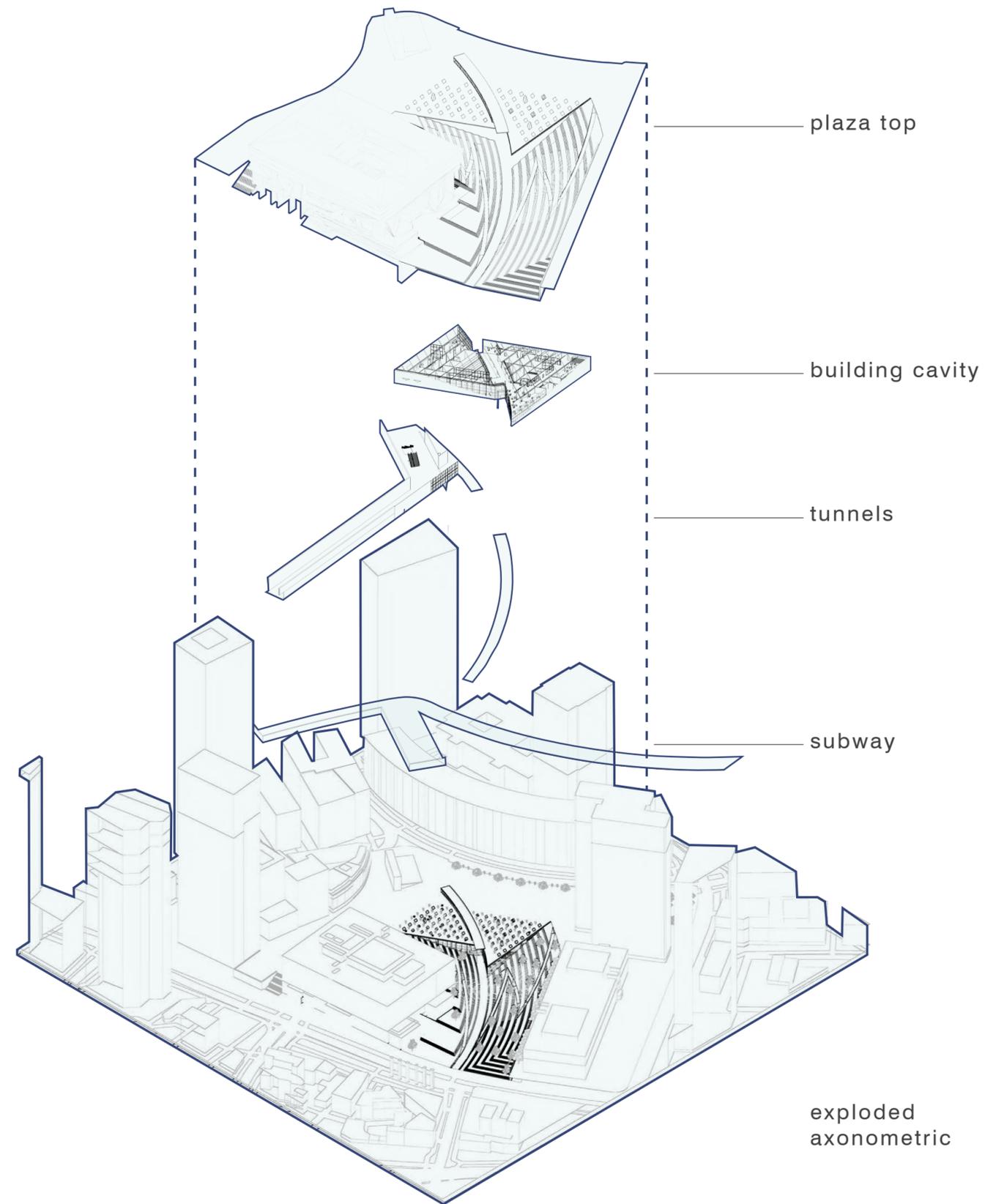
office



main plan

- 1. main lobby
- 2. reading lounge
- 3. vertical circulation
- 4. back of house
- 5. conference room
- 6. staff lounge
- 7. office
- 8. restroom
- 9. storage
- 10. gallery space
- 11. book bot
- 12. coffee shop
- 13. data archive
- 14. book distribution
- 15. recording room
- 16. i.t. room
- 17. mechanical room





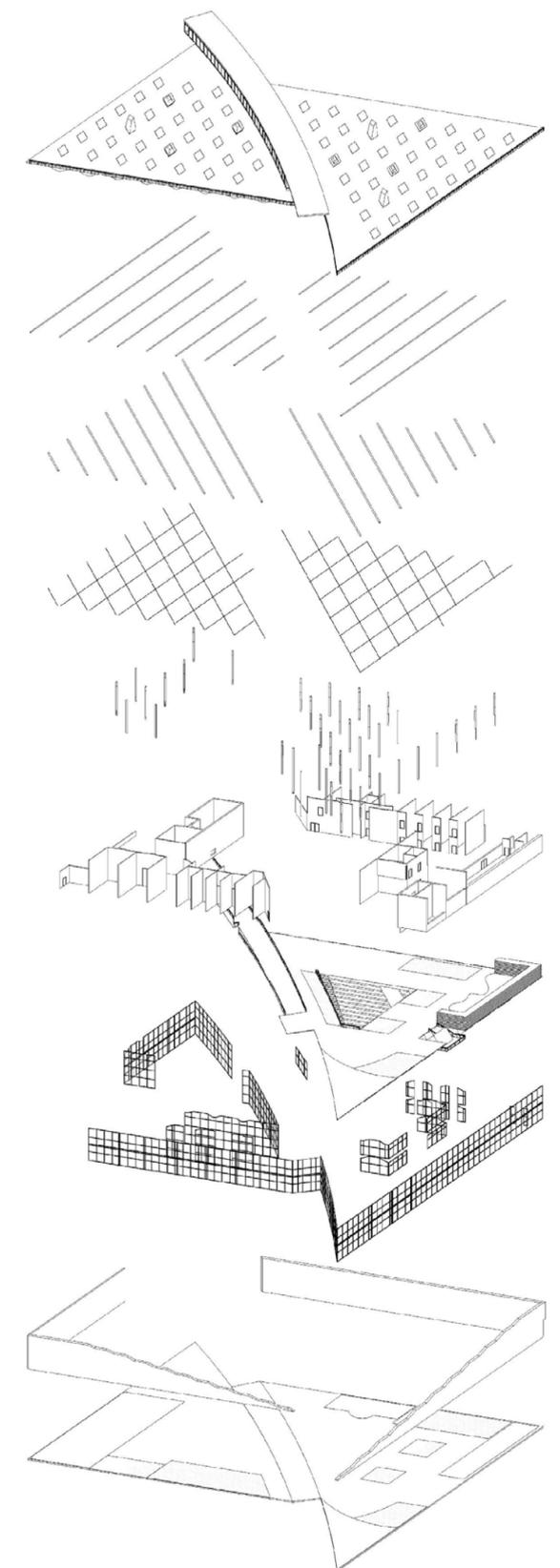
structure

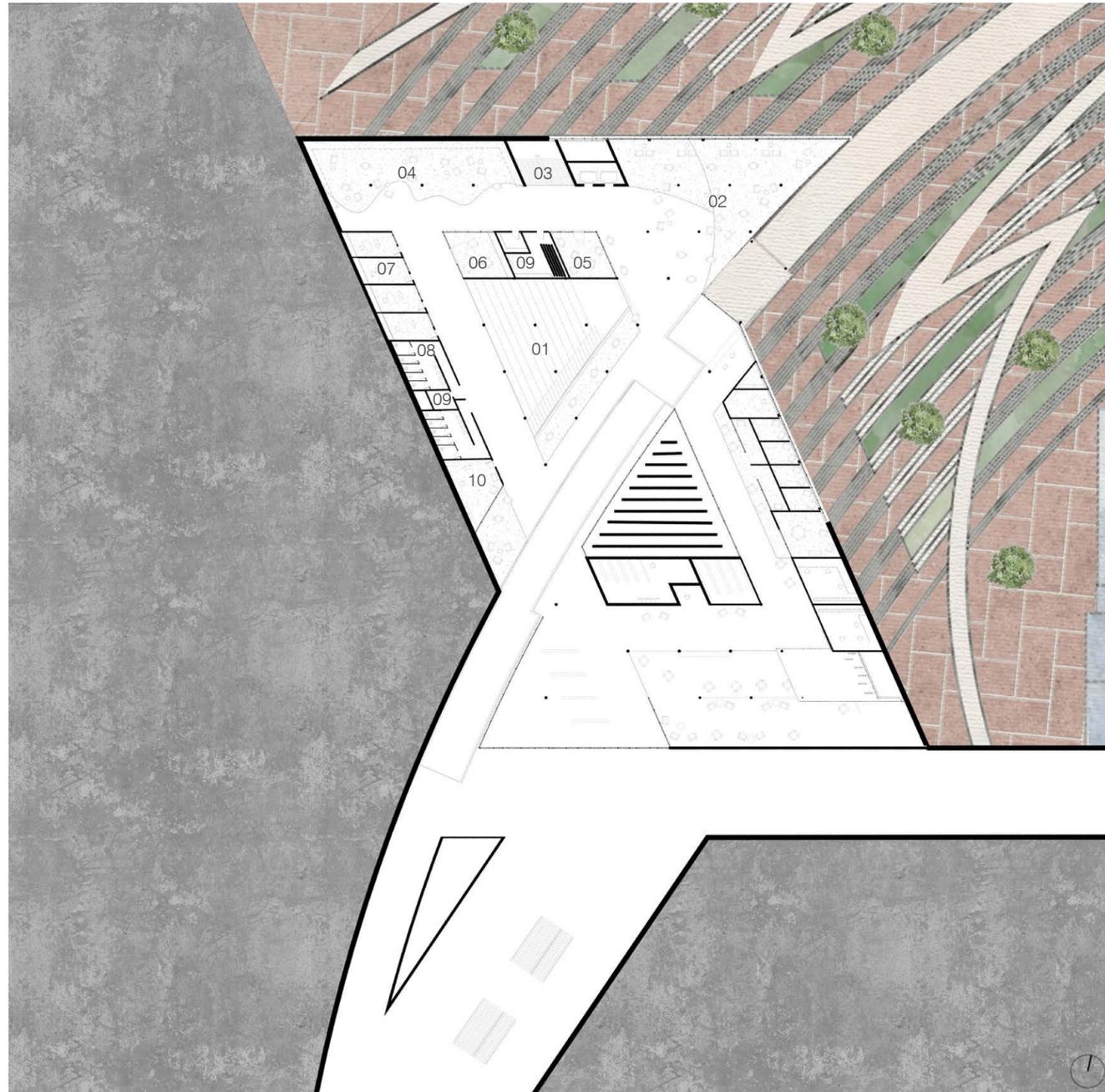
The structure of the building is formed with both precast and site cast concrete elements to support the underground space in a nontraditional way.

The plaza was crafted with a tetrahedron model inspired to puncture through the spaces above and below the plaza surface to create an interaction with these planes.

The model was created using a twenty foot by twenty foot grid system shifted on its x axis to create a 60 degree angled parallelogram space naturally derived from the intersection of paths originally used to form the underground space.

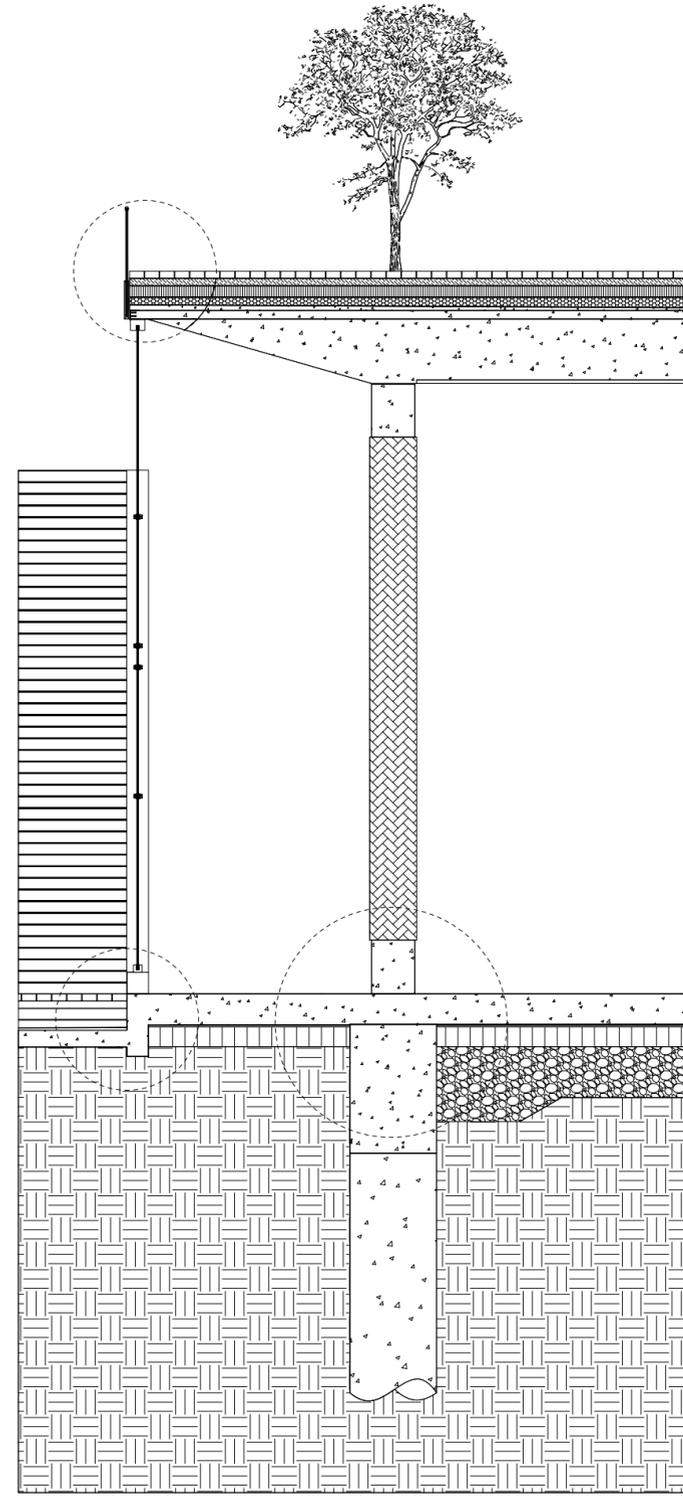
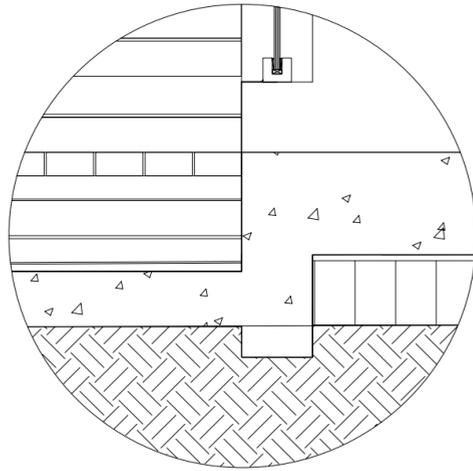
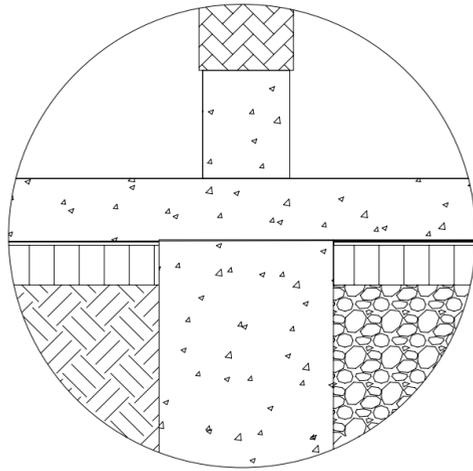
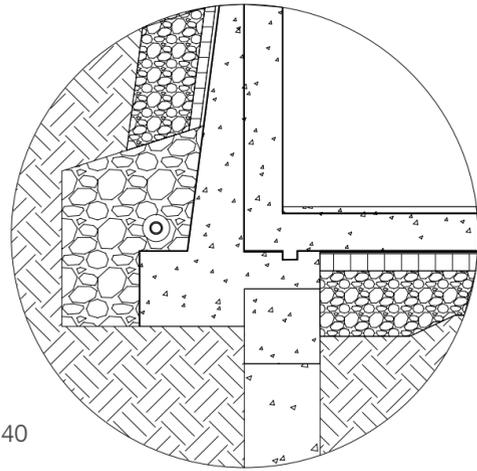
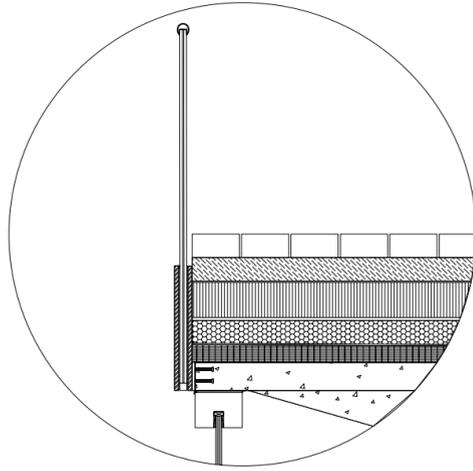
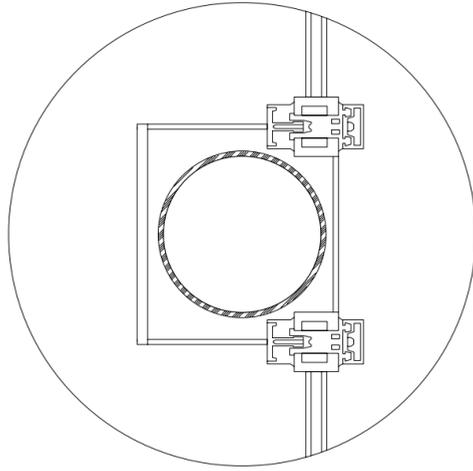
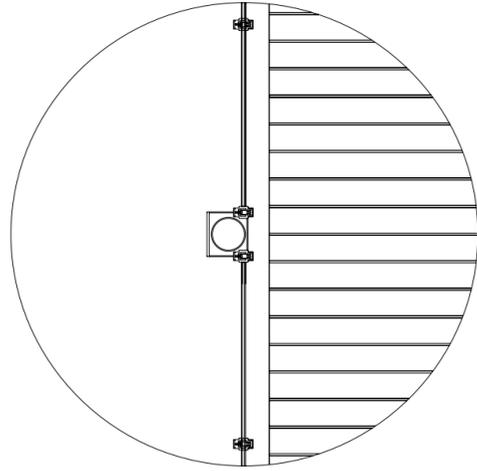
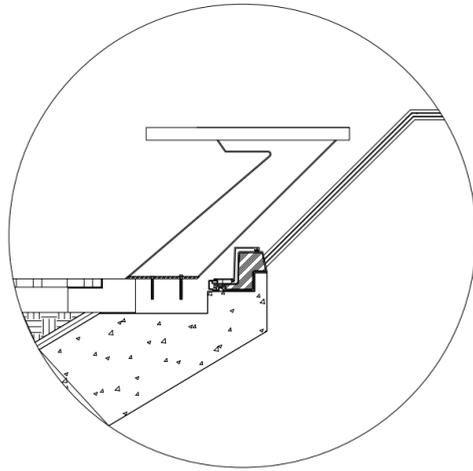
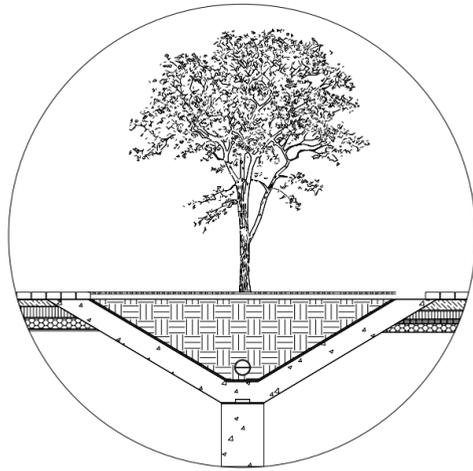
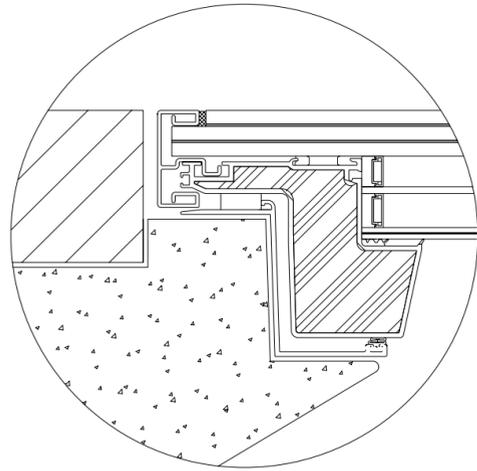
At the point of every twenty foot grid intersection resides a column cap the supports the cavity of a tree, root system, and controls its water supply through a strategically placed drainage system that spans the distance of the building.





secondary plan

- 1. open auditorium
- 2. reading lounge
- 3. vertical circulation
- 4. open study
- 5. focus room
- 6. staff lounge
- 7. office
- 8. restroom
- 9. storage
- 10. creation room

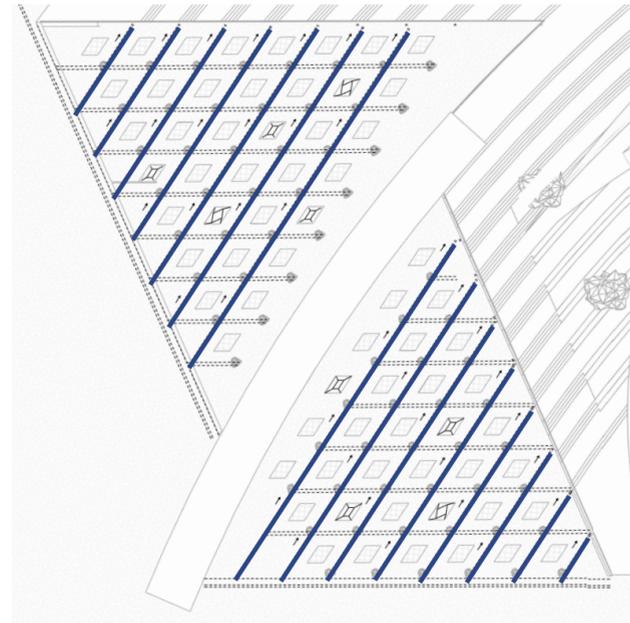


wall section

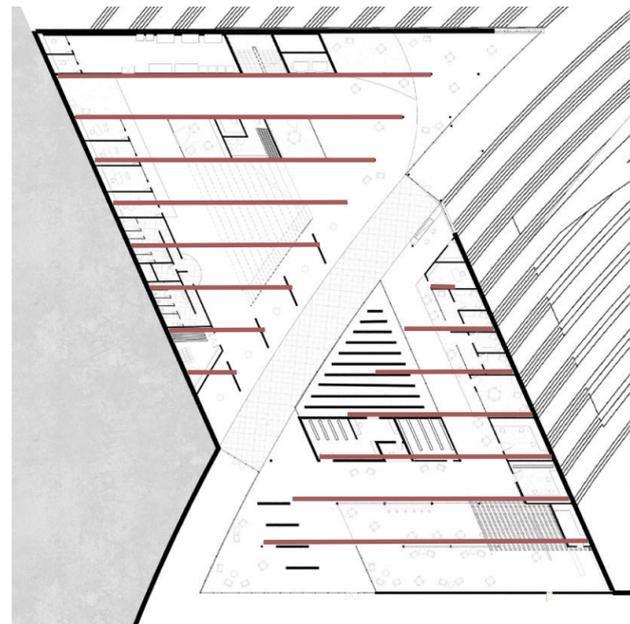
- 01. 4" brick paver
- 02. 4" setting bed
- 03. geotextile filter fabric
- 04. 6" xps insulation
- 05. hydroduct drainage board
- 06. 100ml epdm
- 07. membrane
- 08. sloped concrete fill to drain
- 09. steel plate & trim
- 10. weld plate
- 11. setting block
- 12. caulking
- 13. structural deck
- 14. shim
- 15. glazing tape
- 16. 1" curtain wall glazing
- 17. 1/4" laminated glass

systems

The shifted grid of my structural model played a large role in the organization of the hvac and drainage system in my building and the surrounding site. With an integral portion of the plaza residing above the building footprint, water drainage was important to not only protect the interior spaces, but also to help nurture and maintain the vegetation above and surrounding the site. The drainage system removes water by scaling the side of the front of the building through a double mullion system that helps navigate water away from the building and towards the plaza's edge.



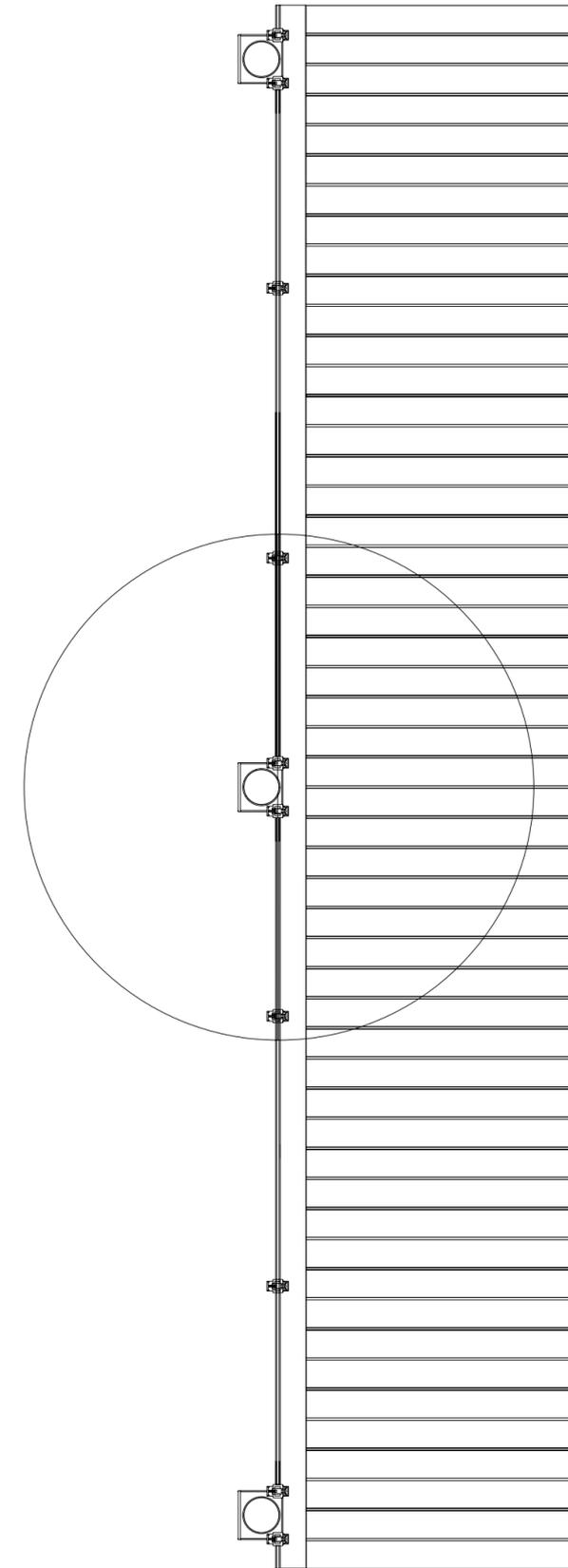
drainage plan

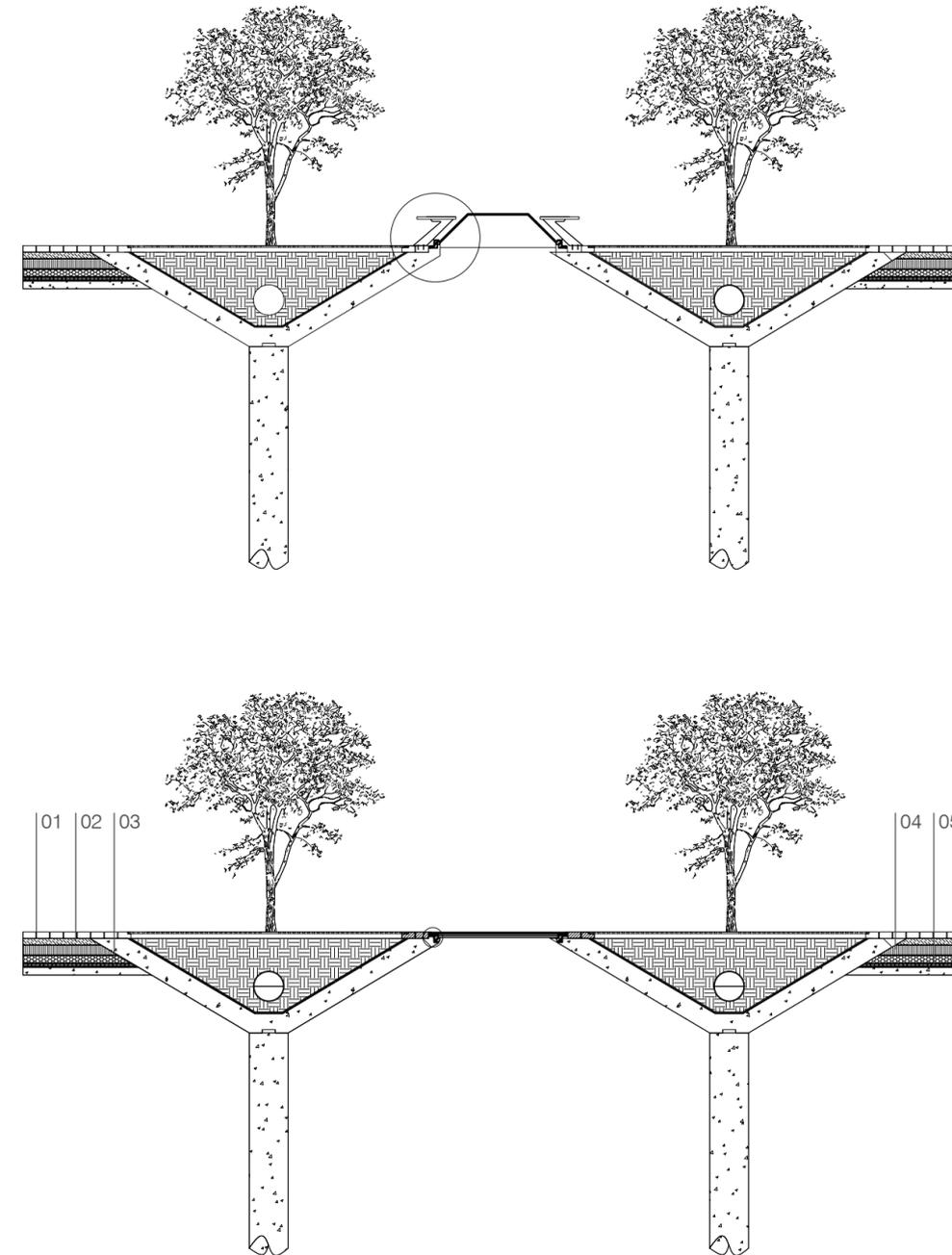
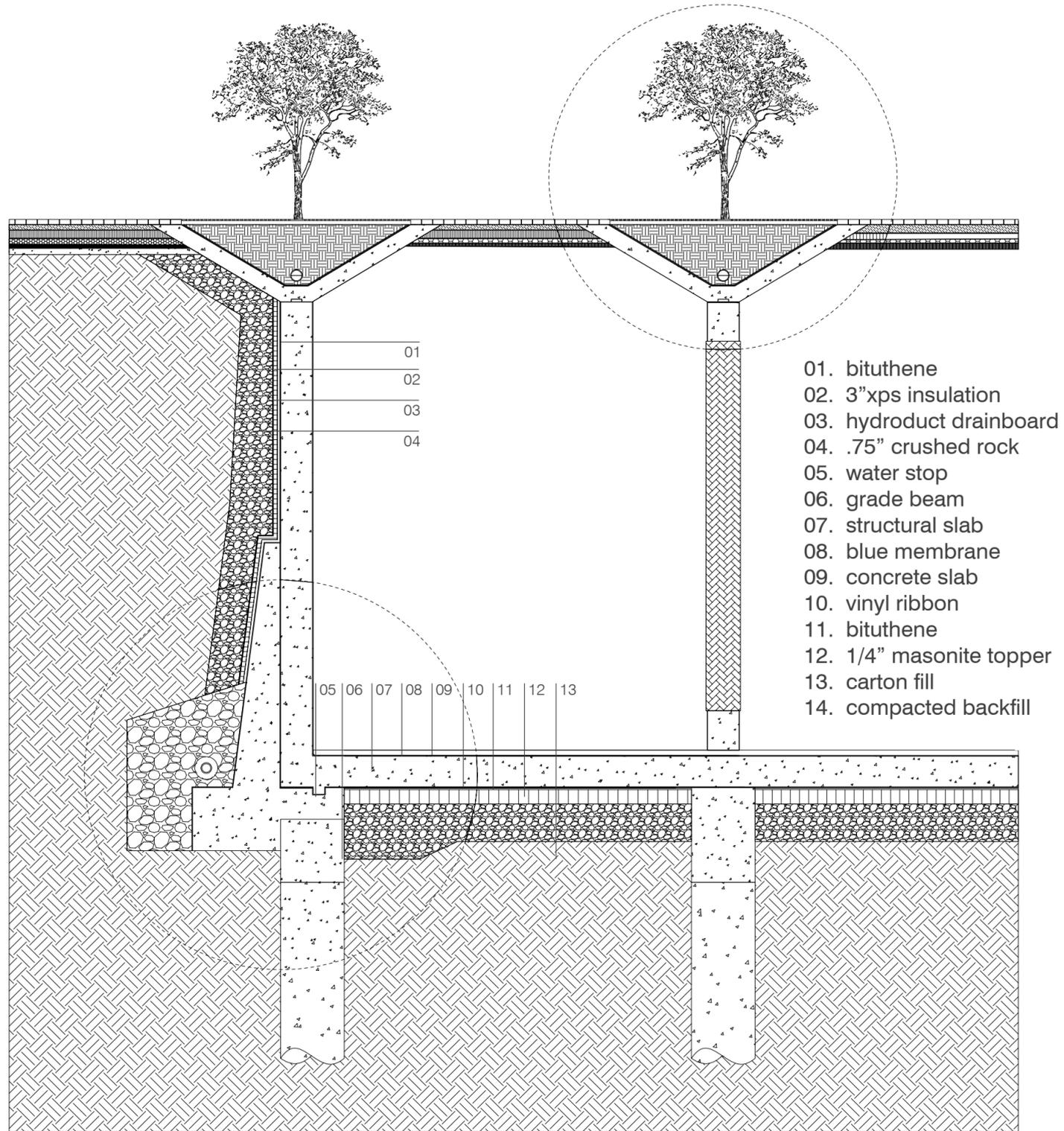


hvac plan

mullions

The double mullion system is created from a typical mullion grid spaced five feet on center. Every twenty feet in accordance with the structural column grid of the building, there are two mullions spaced one foot apart to house a casing for an eight inch drainage system to filter water through to below grade where water will be displaced in the ground.

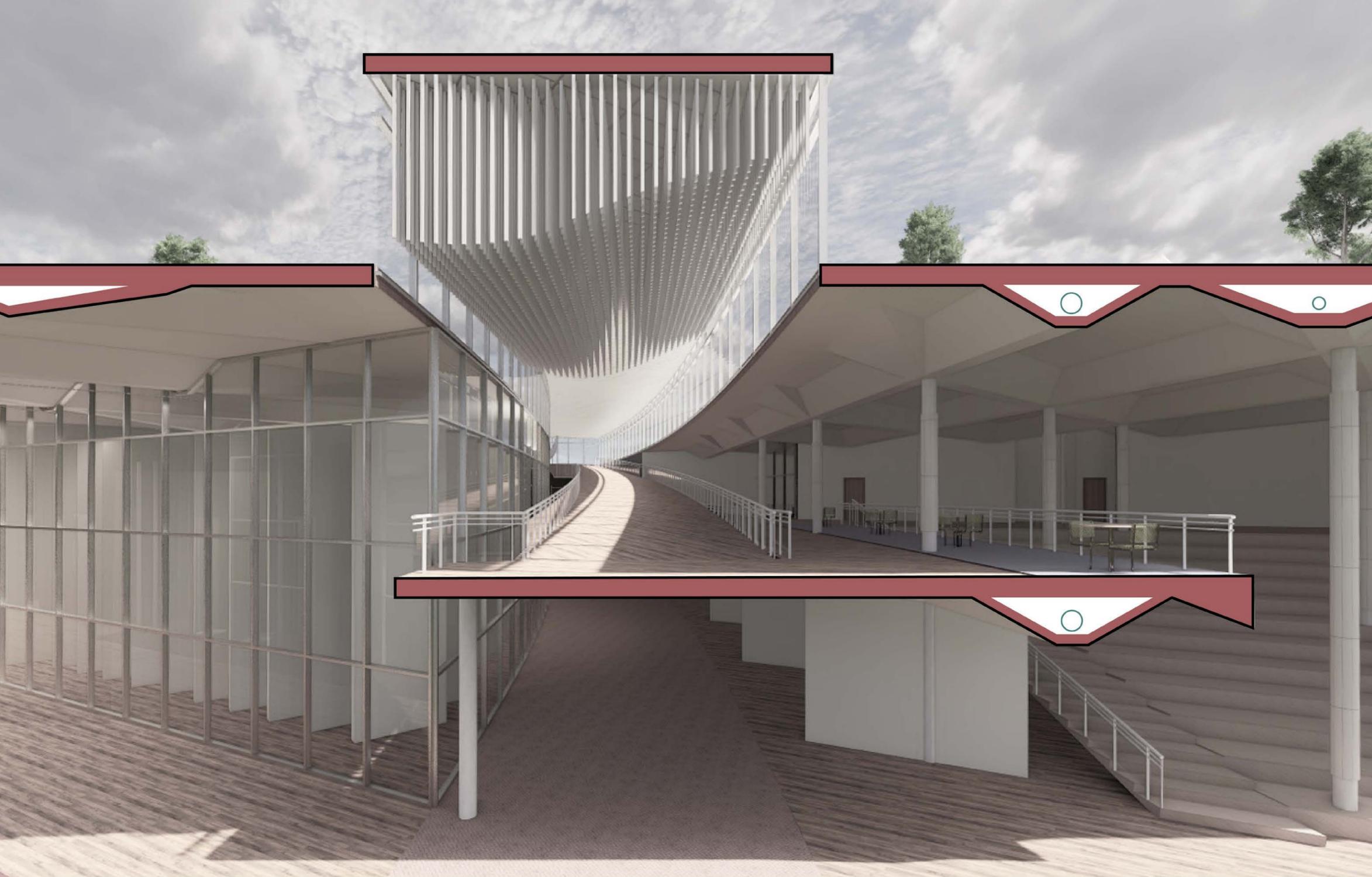




skylights

The undulating surface of the plaza gives guests the opportunity to interact and connect visually to the spaces above and below through a crafted series of skylights that are strategically inserted in the void of every twenty foot grid intersection. In a traditional library, light is strategically filtered to disperse light in a formal condition to prevent books from solar damage. In the instance of the book bot, each book is encased within a shelving compartment that provides optimal solar protection.

- 01. 4" brick paver
- 02. sand
- 03. filter fabric
- 04. setting bed slope to drain
- 05. subbase



sculpture

This monumental sculpture made from aluminum extruded square tubing with led screens fixed upon the end of each rod was created to evoke life and purpose and help The Living Narrative to tell it's story from within. The wave-like sculpture encapsulates a main entry point that punctures through the plane of the plaza. The sculpture was carefully crafted along the central spine of the building.

Guests are mesmerized as they can interact with the sculpture from above and below with the help of the extruded ramp that intrigues guests to enter and experience the space from the inside. Once a guest records their story. The video and narrative will be locally archived within the database. The information can then be projected throughout the wave of screens and connect to individuals passing through the space.



building
narrative

lobby

This is the entry point from the bottom of the plaza. Upon entry guests are greeted with the opportunity to filter through the building down the central spine to the subway access point or explore the other sculptural and intriguing programs located within the library.



auditorium

This space was designed to challenge the norms of quiet zones in a library. The location of the auditorium influences participation and interaction with motions of experience through the space.





coffee shop

The coffee shop underground is unique and slightly shifted as the column grid reflects pedestrian pathway intersections from above. Delicately integrated with the top of each column is a structural coffer inverted in a shape that intertwines throughout the ceiling. Each coffer holds a tree from the plaza above, bonding the plaza and the library together through the ground. There is a natural sense of warmth and comfort to a space that is otherwise disconnected from other dining locations.



central hall

story rooms

This is a place to record your story and fully express yourself through life experiences. Guests are introduced to the rooms through a monumental door to symbolize the importance of the moment in time. This narrative is then projected through out the building as an homage to history.

book bot

Centrally located within the building as a monumental focal point and homage to traditional libraries. This storage and retrieval system utilizes technology and verticality for easy access and maximum storage to strategically accommodate new variations of spaces.



reading lounge

The reading lounge is a neutral space to sit, focus, read, chat, or be online, while completely immersed in the context of the site. This corner of the building peeks out from under the plaza top but cascades over the stairs to the layers below. Designed to encapsulate light to filter through the building, this multi-use space is versatile and adaptive.

gallery

This open space was designed to be the mediation between spaces and provide the opportunity to showcase art, sculptures, and other forms of media to display around the library in designated areas. Guests will be curious to interact on the series of levels and forms of live art.



transition

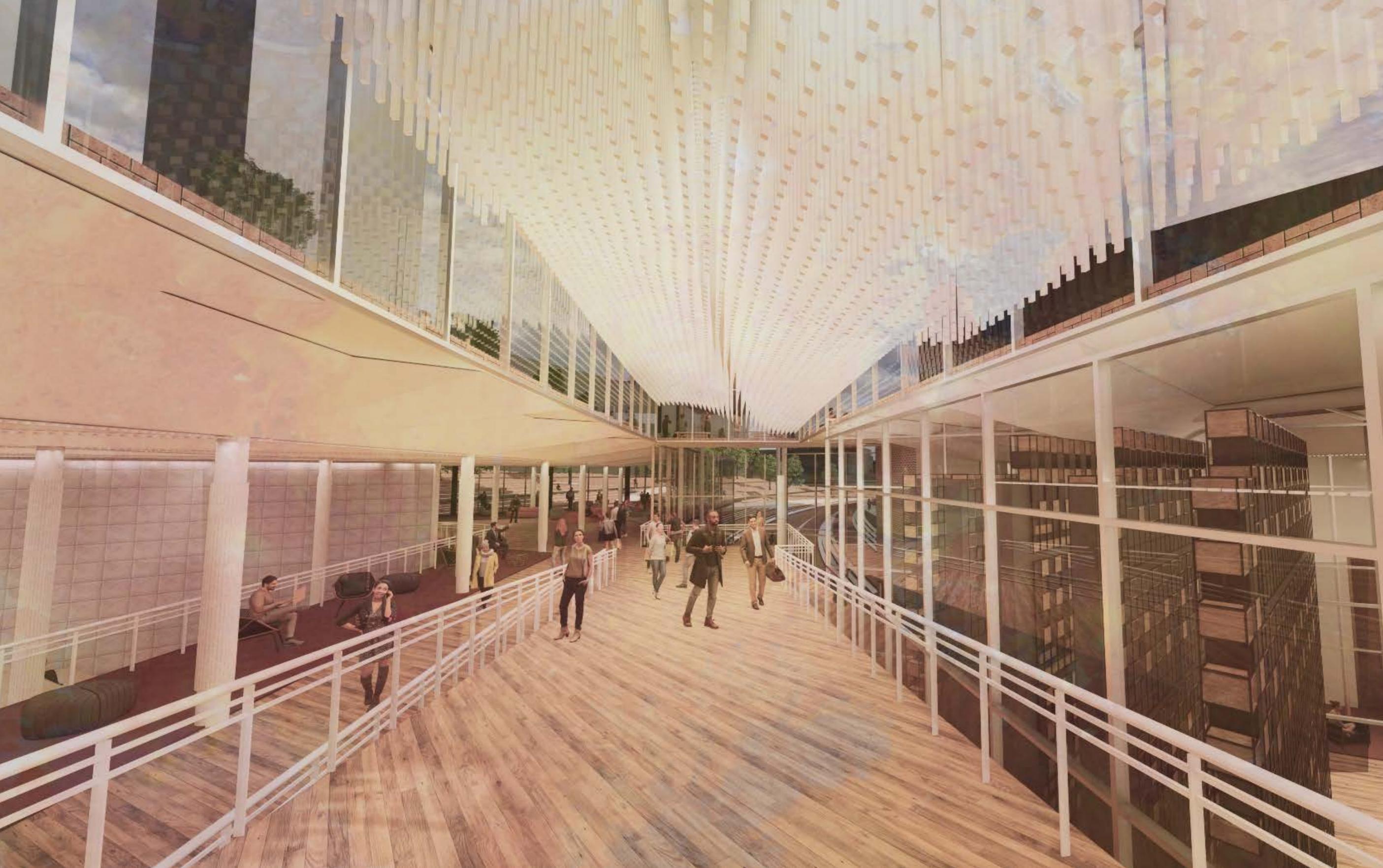
In order to connect the plaza top to the library, there is a large entrance ramp from above that penetrates the plaza through the main curve of the building. The library then connects to the subway and underground pedestrian lobby of the City Hall through a series of tunnels. The building peeks out of the ground but only in moments to keep the primary function of gathering in the plaza undisturbed.





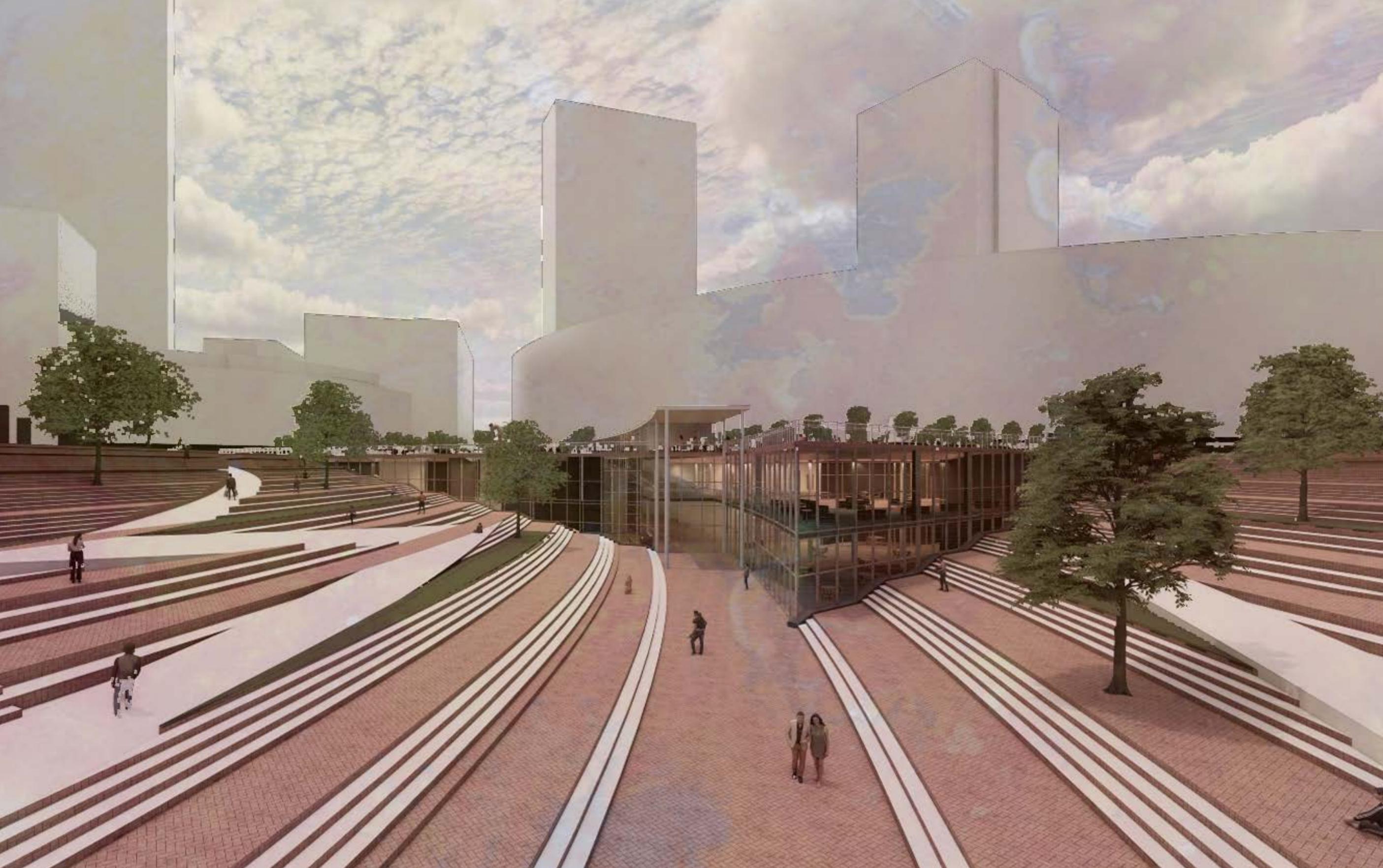
subway entry

The intention of this spine was to carve a transition through the library to bring the user on a journey as they travel to and from such a large transportation hub. People of all age, race, and identity will filter through the building creating a cultural diversity that is less seen in libraries today. Regardless the form of interaction with the spaces within the library, guests are immersed in a form of history through storytelling.

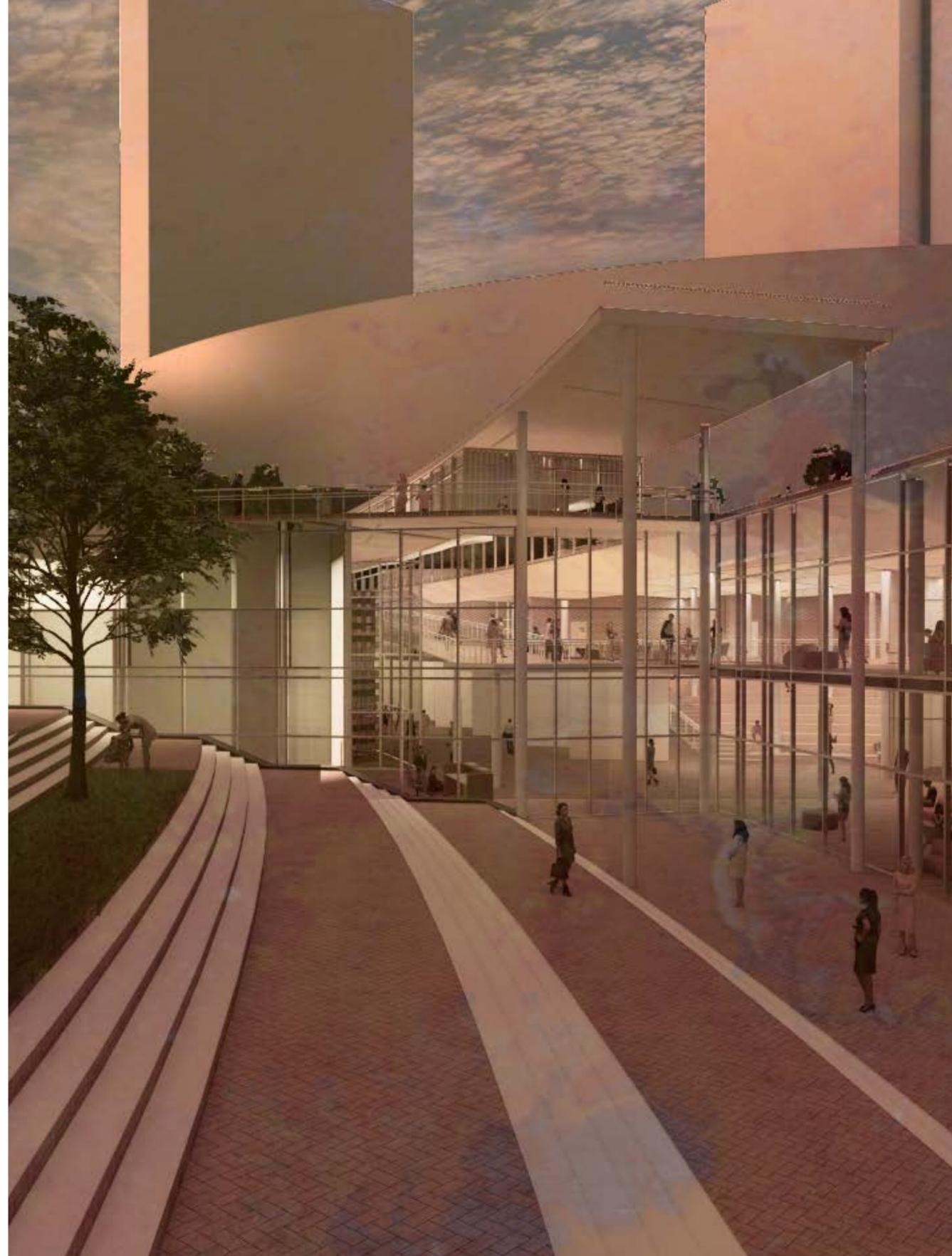


plaza ramp

This moment of fascination is what draws people in from the plaza top as they peer into the building through the light well. The narrative sculpture carves through the building cavity as images dance below the sculptures surface. Soft, loud, powerful, and often emotional words are spoken throughout the building to bring awareness and bring a sense of historical remediation.

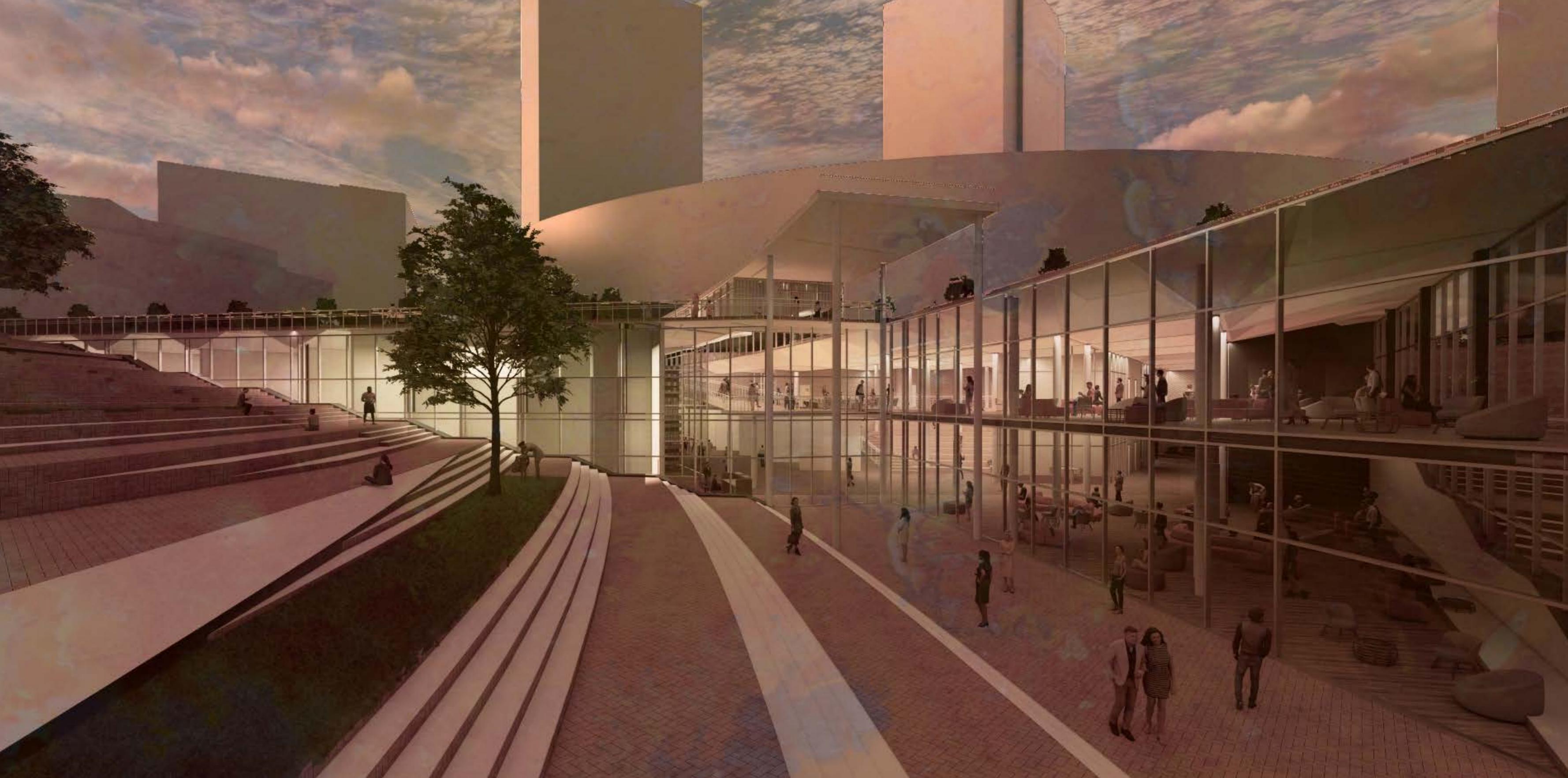


index



conclusion

Libraries are recognized as a platform for social gatherings and housing important information. They have evolved slowly through time to become an infrastructure that provides more than just housing books. Through my exploration, I challenged the norms of libraries and designed a facility that encompasses how an individual could interact with a modern library and learn history through personal experience. This urban library will serve the community and bring life and culture from around the world to my project. The Living Narrative is a place, a passage, and a journey to experience. Bringing storytelling to life, The Living Narrative will integrate history of the past with the technological infrastructure of today to develop a building adapted to focus on the future.



acknowledgment

To my committee, I would not have accomplished this without you. Your constant support for my intentions has been overwhelming and I am grateful that I have been able to share this experience with you.

Professor Ko, you have been a constant source of knowledge, inspiration, guidance, and support along my journey this past year. You are always full of ideas and have provided me an opportunity to experience Boston through exploration and design.

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