

ERMAN AKYOL

2020 - 2023
Selected Works

Resume

ERMAN AKYOL

Telephone : (437)771-9305
E- mail: ermanakyol@yahoo.com
Website: www.ermanakyol.com

EDUCATION

March - 2020-2023
John H. Daniels Faculty of Architecture, Landscape and Design
University of Toronto

MDes - 2018-2020
Inclusive Design
Ontario College of Art and Design (OCADU)

COMPUTER SKILLS

Rhinoceros, AutoCAD, SkechUp, Revit, 3DMax (Basics), Solid-works, Keyshot, Lunion, Enscape, V-ray, Adobe Photoshop, Illustrator, InDesign, After Effects, XD, Figma, Animate, XD, WordPress, Cargo

OBJECTIVE

Transforming research and need into practical implications, leveraging intricate challenges as sources of creative inspiration for pioneering solutions. By seamlessly integrating technology, my aim is to enhance well-being and elevate the overall quality of life through design.

COMPETENCIES

I excel in generating innovative concepts, identifying market trends, and devising strategic plans to meet evolving needs. Proficient in CAD software, I bring analytical problem-solving skills to every project. My expertise extends to both qualitative methods like interviews and participatory design, as well as quantitative approaches like surveys and crowd-sourcing. These skills enable me to create well-informed, user-centered designs that address complex challenges and contribute to enriched architectural experiences.

SCHOLARSHIPS & AWARDS

Ontario Place: On-to-our Next Adventure OAA challenge (2021)
1st degree in Pueblo Science Hackathon (2019)

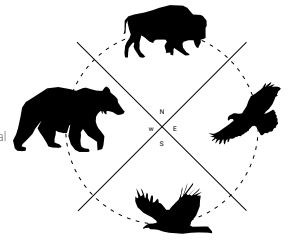
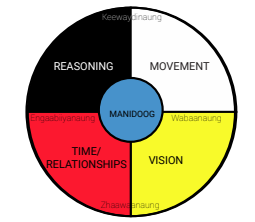
Table of Content

01	Nurturing Indigenous Future
08	Collect/Connect
13	Ontario Place: On-to-our Next Adventure

Nurturing the Indigenous Future

Instructor: Shane Williamson
Indigenous Advisory: Elder Dorothy Peters, Amos Key Jr. Trina Moyan, James Bird

The focus of my thesis is demographic transition, specifically emphasizing knowledge sharing between aboriginal elders and the young. I want to explore how early childhood education might serve to maintain cultural identity in an urban environment which threatens to absorb and overwhelm it. I wanted to investigate how a child care center in an urban setting should be designed and equipped to serve indigenous-led early learning, including the involvement of elders. My concept reflects the indigenous existence in a post-colonial urban setting, a native culture finding ways to accommodate itself to the strictures imposed by colonial practices. The design aims to create a welcoming and nurturing space that facilitates teaching indigenous traditions and practices, including language immersion and ceremonial rituals. I envision it as a place where indigenous children can nurture a sense of pride in themselves and their people to serve them when they return to the world outside its doors.



NORTH
Group - Elders
Aspect - Spiritual
Colour - White
Animal - White Buffalo
Medicine - Sweetgrass

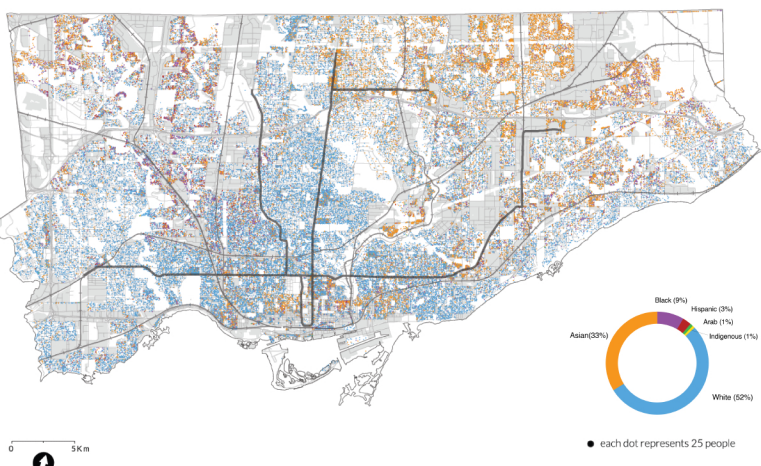
WEST
Group - Adult
Aspect - Physical
Colour - Black
Animal - Bear
Medicine - Sage

SOUTH
Group - Adolescent
Aspect - Emotional
Colour - Red
Animal Red Tail Hawk
Medicine - Cedar

EAST
Group - Infant - Toddler
Aspect - Mental
Colour - Yellow
Animal - Eagle
Medicine - Tobacco

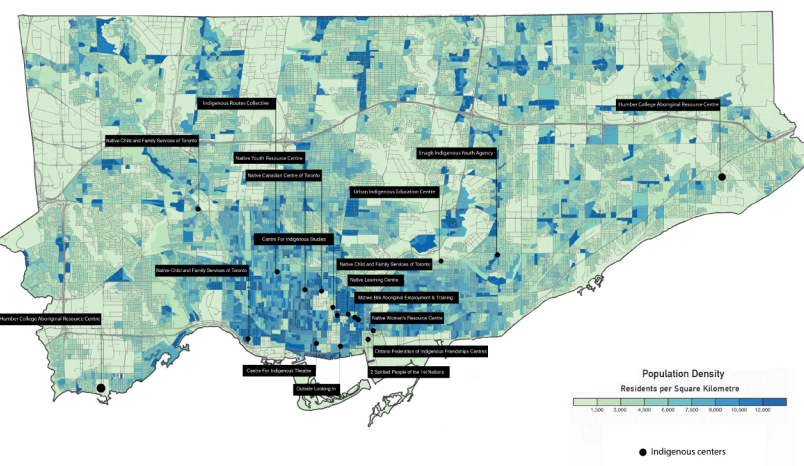
The medicine Wheel holds spiritual symbolism throughout teachings in Anishinaabe culture. It presents a holistic understanding of the interconnectedness and cyclical nature of life from the four seasons to seven sacred directions.

Toronto Race & Ethnicity

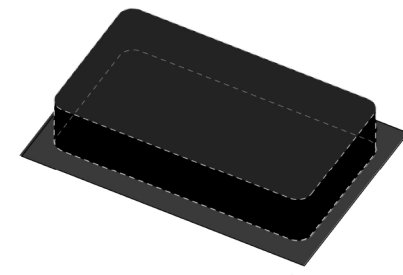
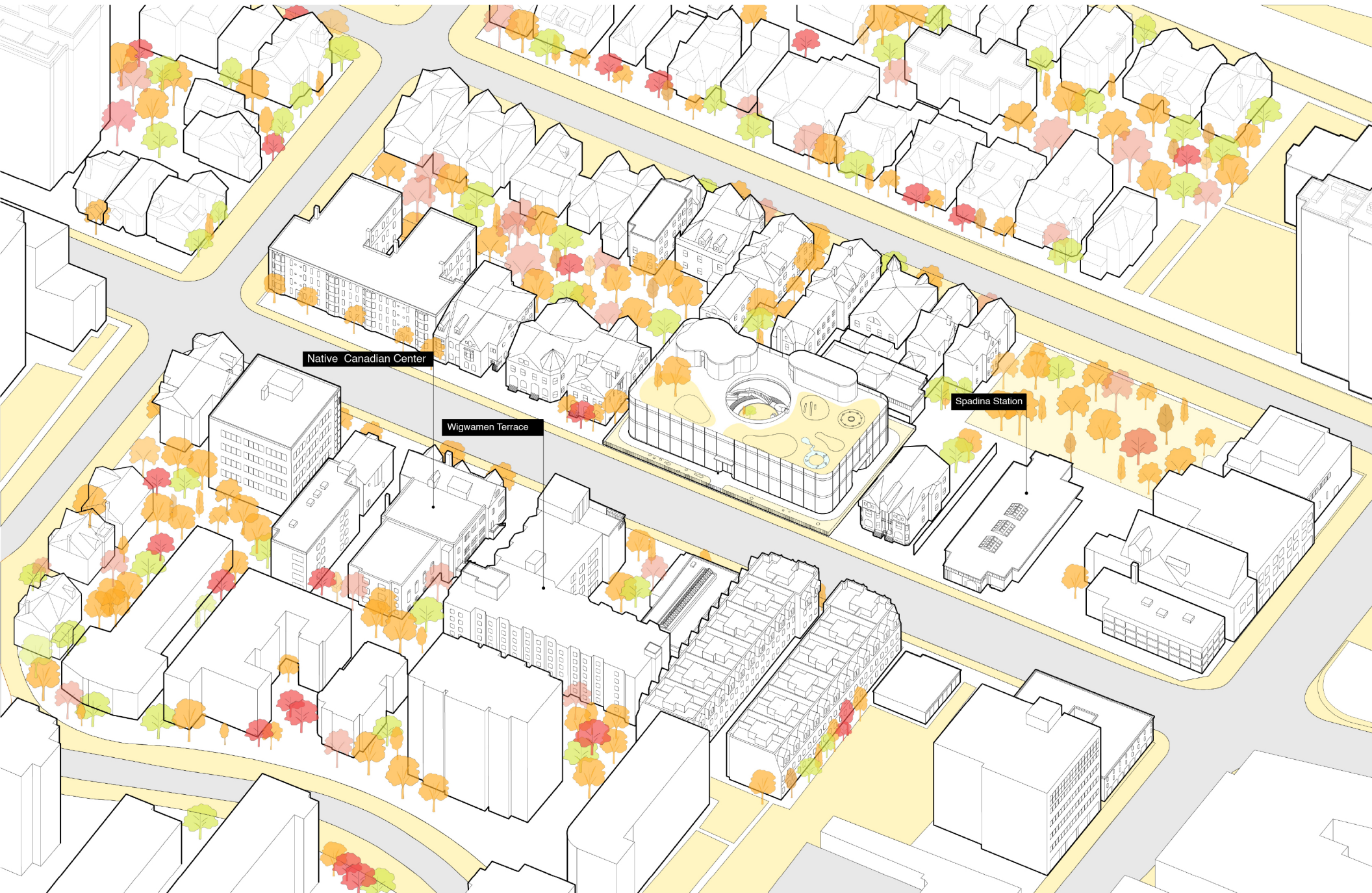


Toronto has the largest Indigenous population in Ontario and the 4th largest in Canada. According to Canada's 2016 Census Metropolitan Area statistics, the Indigenous population in Toronto went from 36,995 to 46,315, an increase of 25 per cent. This number is increasing rapidly in uToronto.

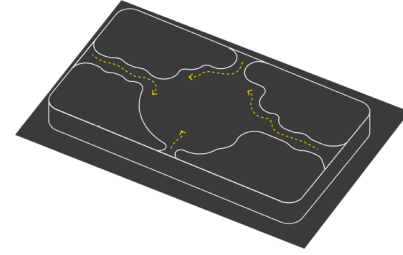
Indigenous Centers in Toronto



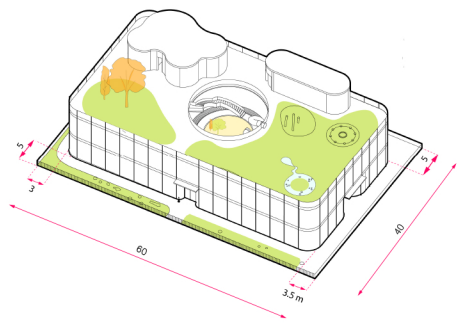
While the population of Toronto represents only 1% of the general population, there lacks a concentrated area where this community can reside together. Our search for a suitable site led us to explore various educational and cultural community centers. After careful consideration, we identified Spadina and Bloor as an ideal location, offering access to a multitude of centers and convenient transportation options for the residents.



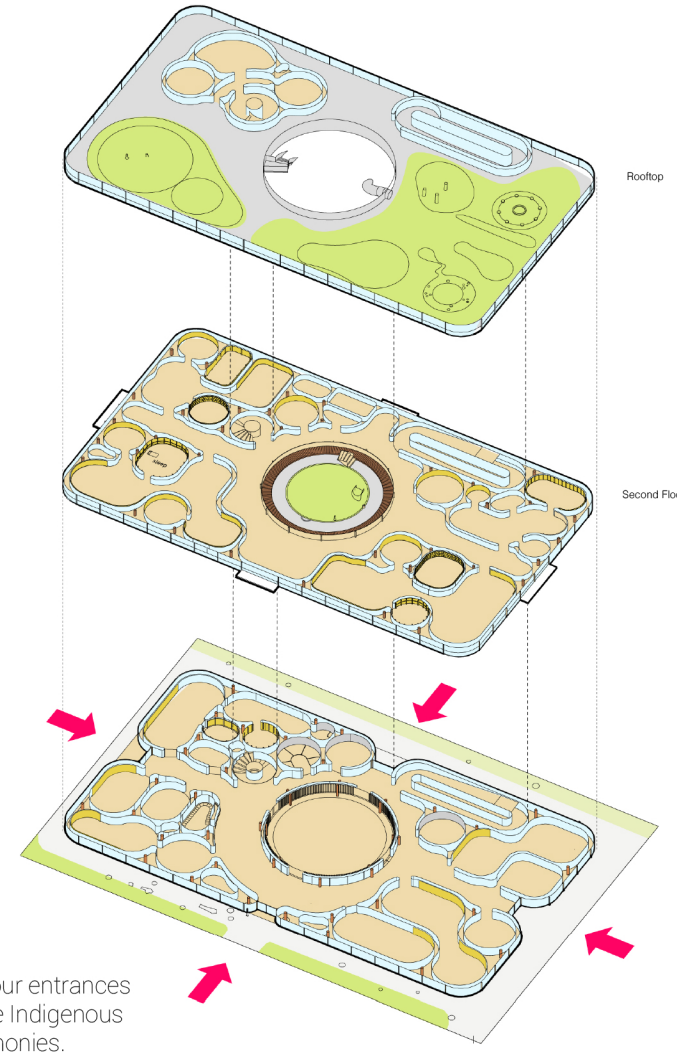
My concept represents the indigenous existence in a colonial urban setting. The massing strategy follows the colonial property lines and forms a rectangle-shaped massing.



The contrast between the colonial exterior and the Indigenous interior is formed with curvilinear lines and swerves which create a sense of flow and harmony that is spiritual and inviting. Curvilinear lines and swerves are often used in Indigenous architecture as they reflect the organic shapes found in nature and are believed to create a sense of harmony and balance in the built environment.



This organic design approach could be seen in indigenous traditional dwellings, art and design, and modern architecture. The more organic design is chosen to create a welcoming, entertaining, and nurturing environment for children.

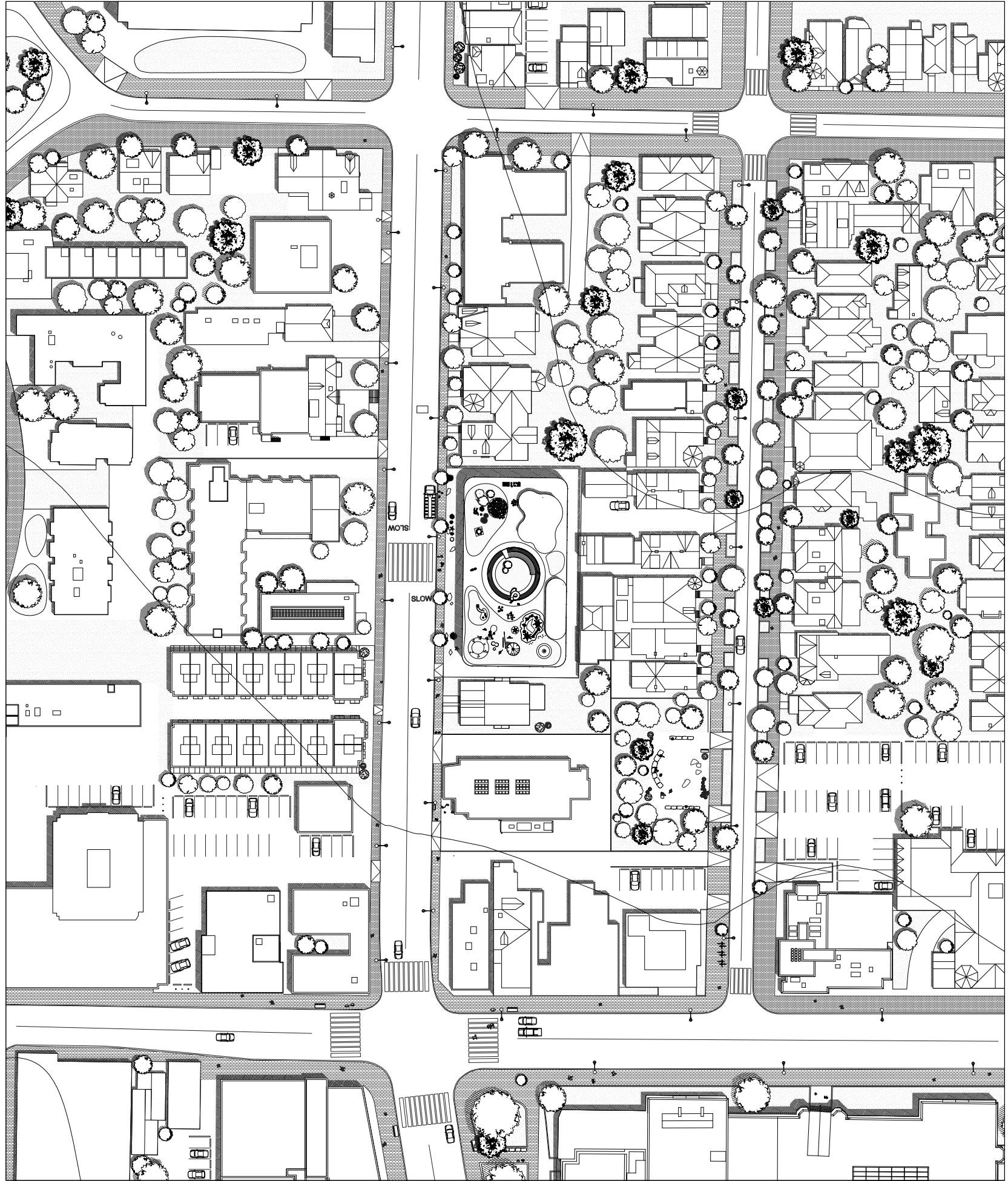


It incorporates four entrances to accommodate Indigenous rituals and ceremonies.

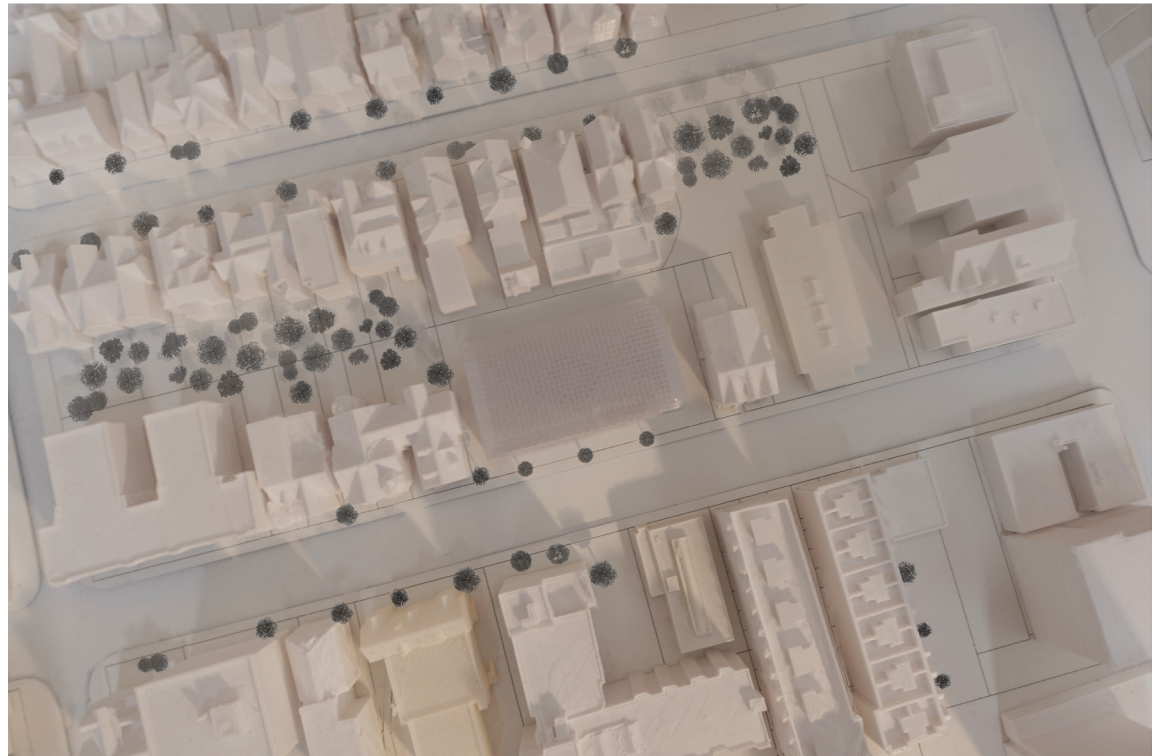
This kindergarten design combines a contemporary architectural structure with a traditional design approach, particularly emphasizing the interior of the building and its functional usage.

The Annex is one of Toronto's oldest neighborhoods. The site measures 60x40 meters and is currently utilized as a public car park. It is next to the Spadina Station. It is situated across from the Native Canadian Center of Toronto and Wigwamen Terrace. The Native Canadian Center serves as a community hub, while Wigwamen Terrace accommodates over 200 Indigenous elders.



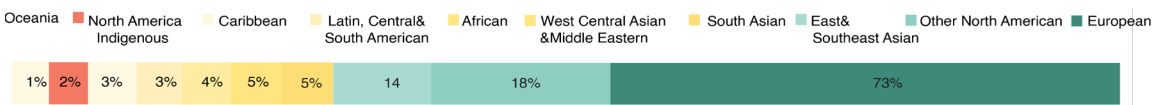


Site Plan



Total population (2016)	30,526
Growth (2011-2016)	4.6%
Density (people/km²)	10,863

Despite the presence of Wigwam Terrace and the Native Canadian Center, the Indigenous population residing in this neighborhood constitutes only around 2%, approximately 600 individuals.

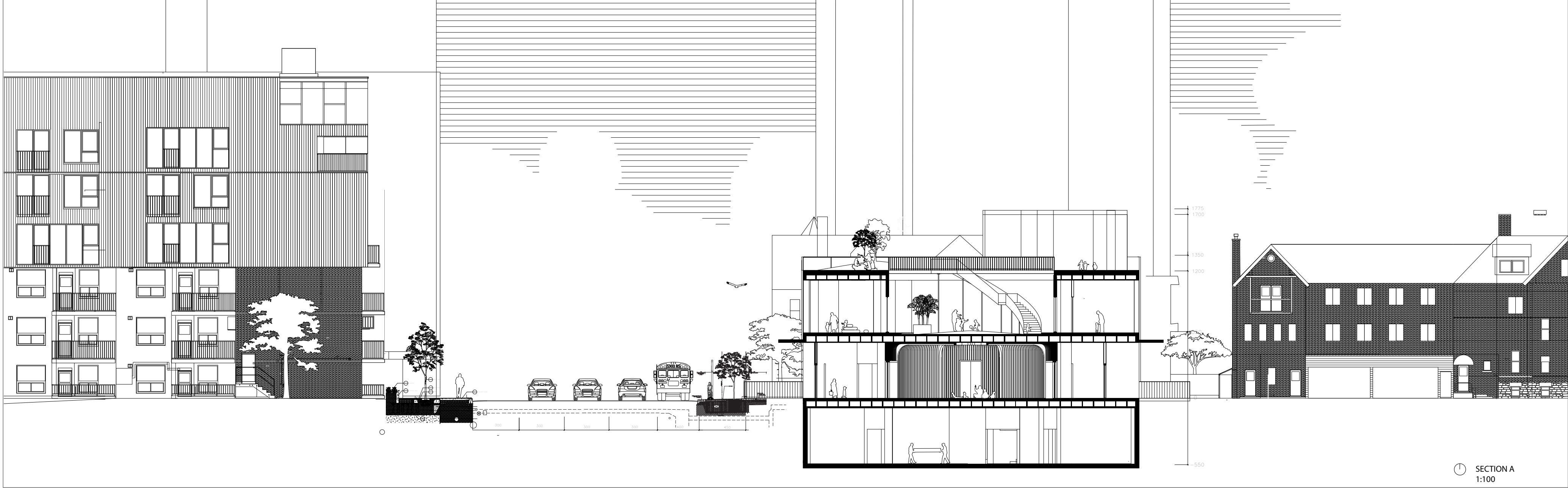


The strategic location of the project enhances accessibility to schools, with two Montessori Schools within the same block and a Waldorf School situated 1 km to the north. The Annex also hosts numerous private and public schools, making it an attractive prospect for Indigenous families seeking quality education options.

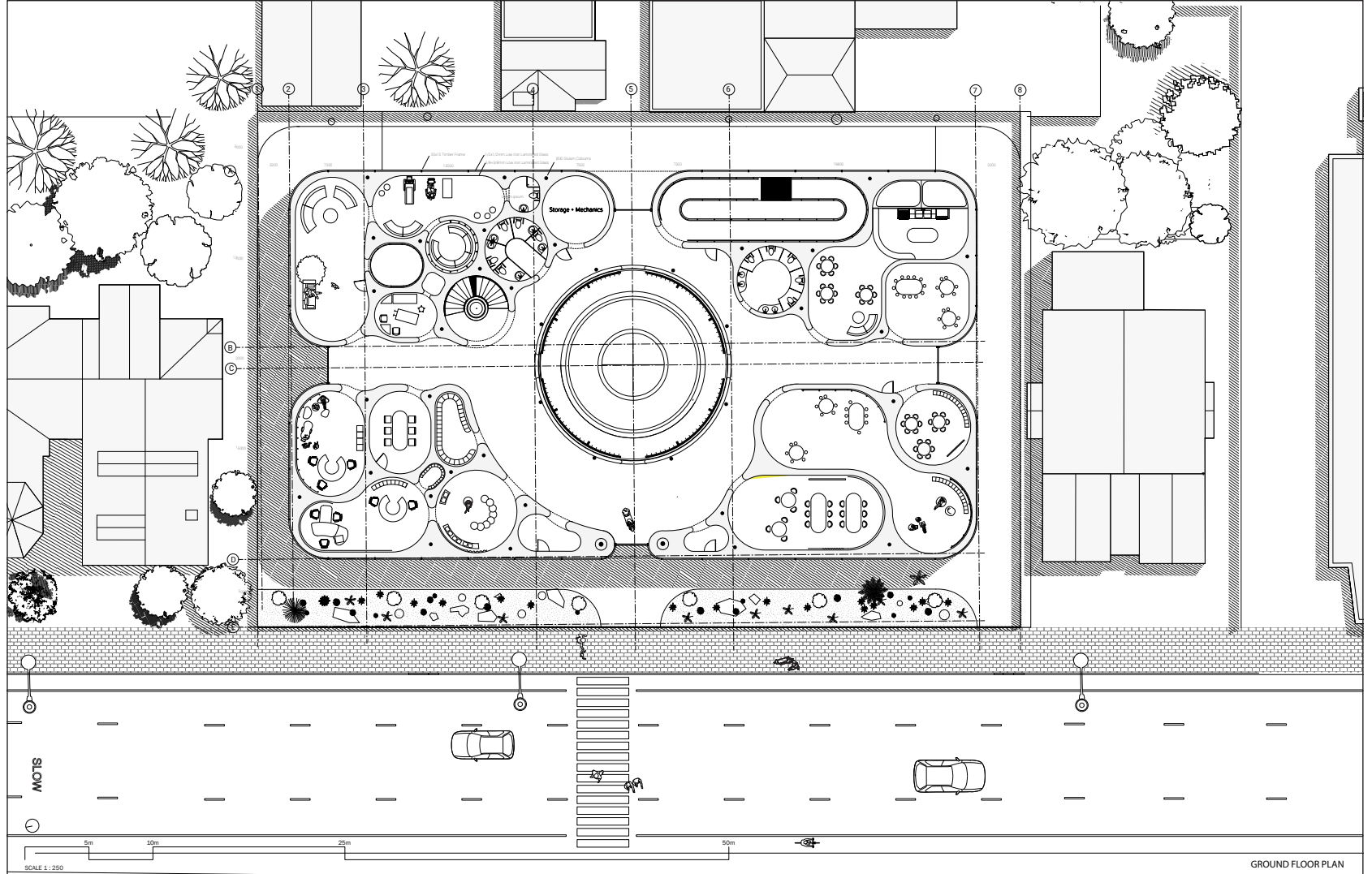
This locale holds particular appeal for families with Indigenous roots. Presently, third-generation Indigenous parents are actively seeking ways to reconnect their children with their cultural heritage and language. The project's proximity and the cultural sensitivity it embodies align well with this pursuit, offering a nurturing environment for fostering a deeper connection with ancestral traditions and languages.

The project is situated within one of Toronto's oldest neighborhoods, The Annex. This historic area boasts a diverse array of housing styles, such as Victorian and Edwardian houses, mansions, semi-detached and row houses, converted homes, contemporary residences, coach houses, laneway homes, and meticulously restored heritage houses. Notably, the neighborhood is witnessing a rise in contemporary and taller structures, a trend that harmonizes with the Indigenous project.

The Indigenous project encompasses four entrances, each carefully integrated to facilitate Indigenous rituals and ceremonies. The building comprises four floors: the basement, ground floor, second floor, and rooftop. The ground floor hosts key spaces, including the main activity room, offices, cafeteria, and an elder's room. On the second floor, children's classrooms and a garden create a nurturing environment. The rooftop is dedicated to an activity room, a greenhouse, and an outdoor activity area. Lastly, the basement is designed for storage and versatile multipurpose activity rooms, completing the comprehensive layout.



SECTION A
1:100



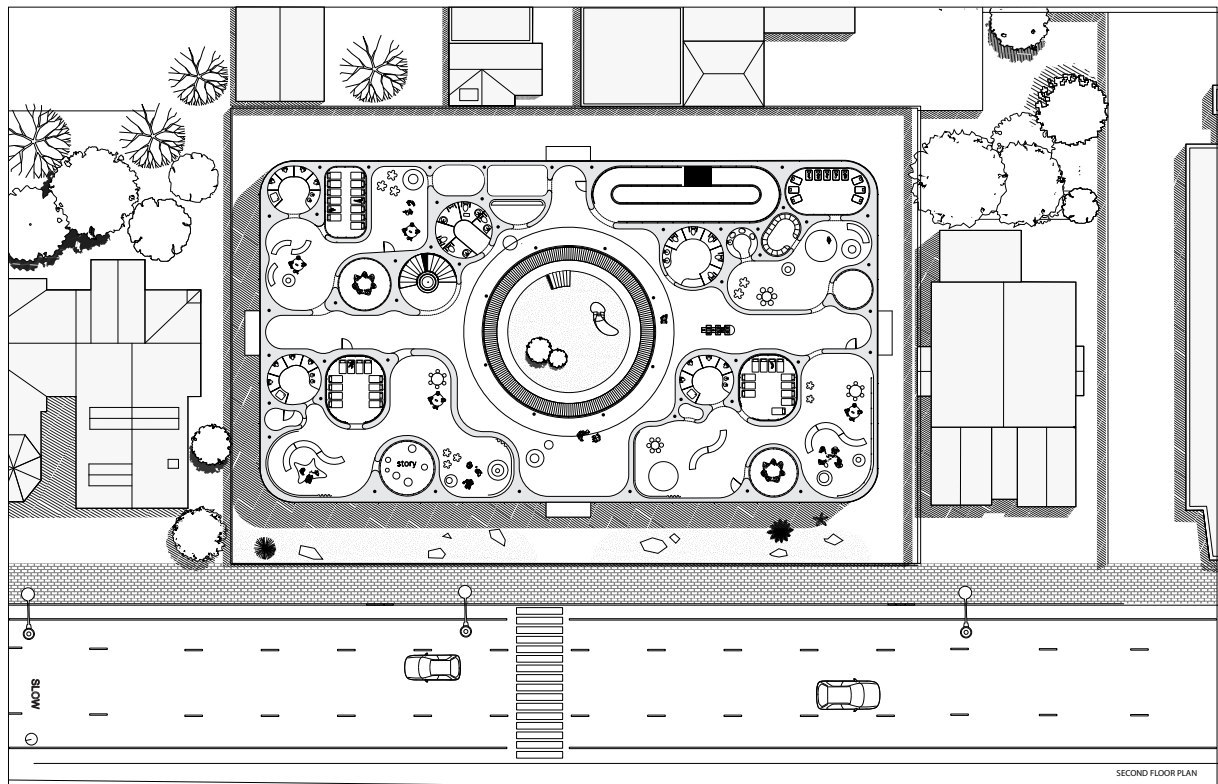
The ground floor layout is meticulously designed around the concept of four gates and interconnected corridors, a decision that profoundly influences the spatial arrangement. At its heart lies a multipurpose room, versatile enough to host ceremonies, cultural engagements, artistic pursuits, leisure, and sports activities. The primary entrance, facing Spadina Road, acts as a focal point for visitors. Upon entering, a leftward path leads to the offices and waiting rooms. Adjacent to this area is a tranquil space reserved for elders' relaxation and socializing, offering not only respite but also housing a health clinic along with spiral stairs and an elevator. Positioned in the southeast corner is a cafeteria kitchen, strategically placed for easy access from the main gathering room, where ceremonies are held. This proximity facilitates seamless service during gatherings. Continuing in the southeast direction, a dedicated space is allocated for workshops and classrooms. These flexible areas have a dual purpose: they can serve as venues for parents' training sessions and also cater to educational and leisure activities for children. In essence, the ground floor layout ingeniously revolves around the four gates and corridors concept, fostering a fluid and purpose-driven arrangement to support a wide spectrum of ceremonial, cultural, educational, and communal activities.



The lobby area serves as a convenient space where parents can drop off and pick up their children, as well as engage with the staff.



The main gathering hall is a focal point for ceremonies, providing a space where children can witness and actively participate in various rituals.

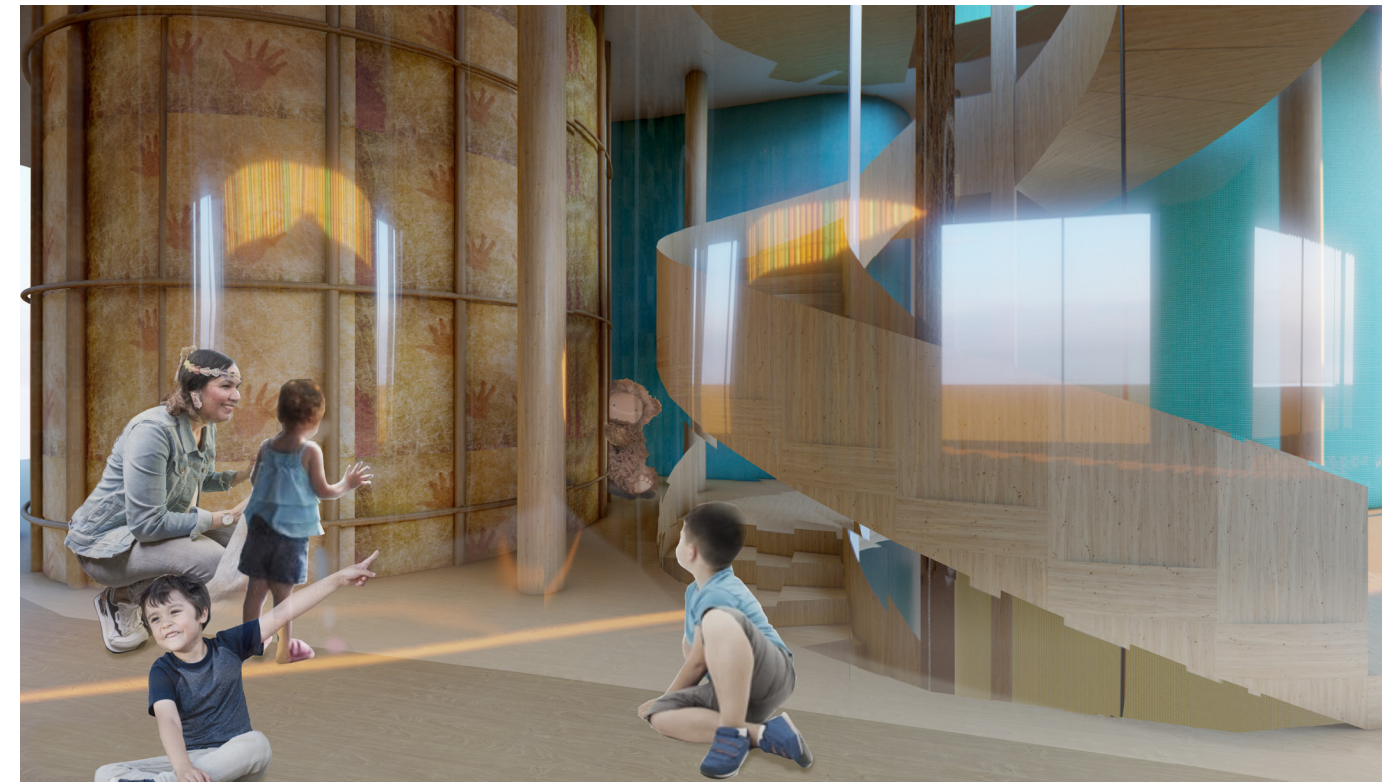


The second floor serves as the primary level for the kindergarten, hosting a wide range of children's educational activities. The layout closely resembles that of the first floor, centered around a courtyard. This courtyard not only provides a connection to nature and weather but also acts as a focal point, bordered by a circular corridor where children can engage in play or participate in various class activities. This design encourages interactions among children of different ages and backgrounds, fostering a sense of community.

A distinct section -South East- is dedicated to infants, recognizing their unique daily routines and supervision requirements. However, the design promotes interaction between different age groups through various shared activities. Additionally, individual rooms are allocated for children learning specific languages, catering to diverse linguistic needs and enhancing language skills within a nurturing environment.



The courtyard and its encompassing hall stand as a central hallmark of our design, forging a secure and delightful haven for children. This arrangement ensures that, even during class activities, they remain connected to the natural world, experiencing its presence firsthand. Seizing every available surface as a chance for cultural and traditional enrichment, our design incorporates animal prints on the floor and narrates creation stories through intricate symbols adorning the walls.



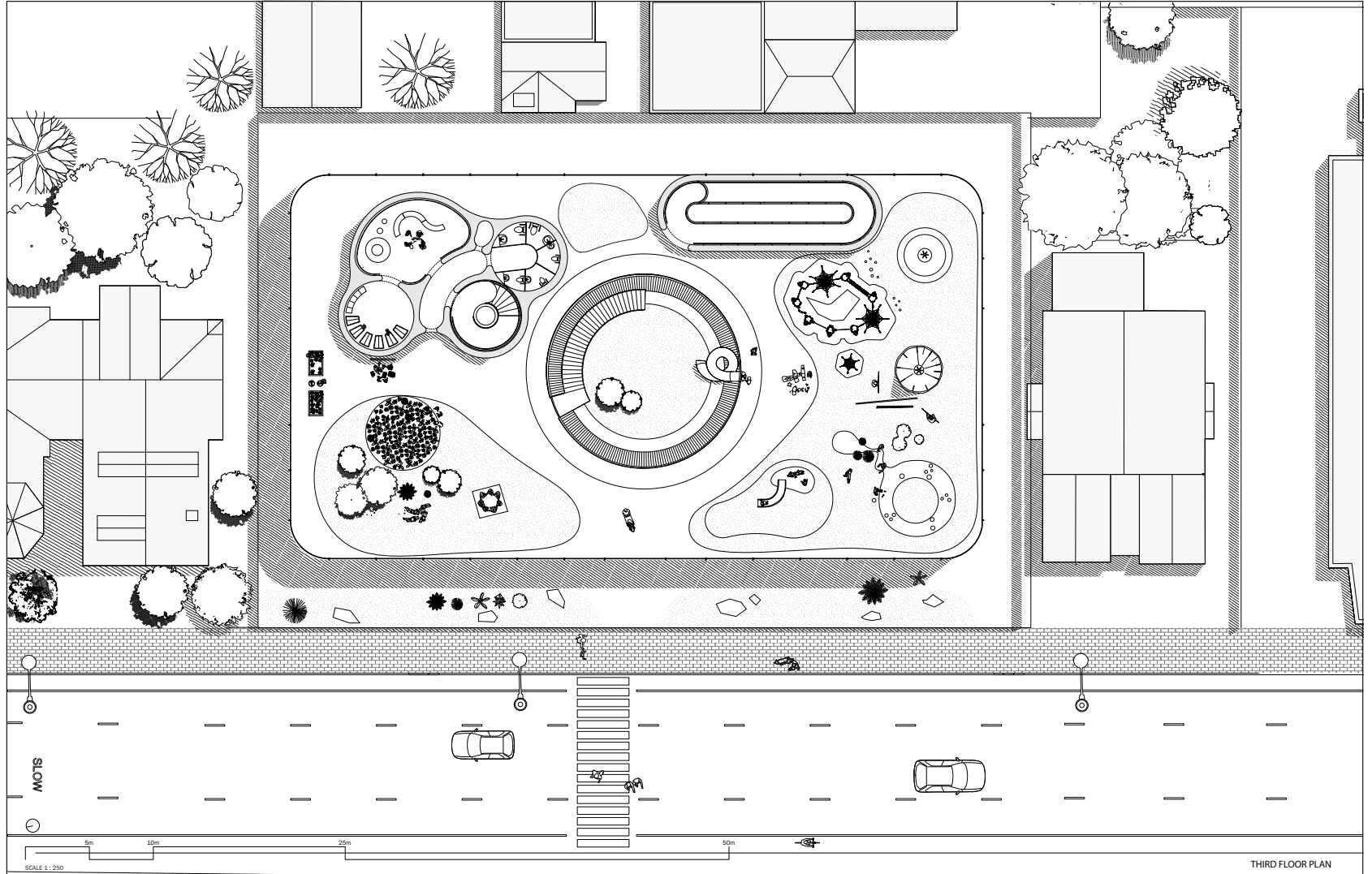
Glass walls play a central role in my design, acting as a pivotal element that captures and reflects light, colors, and textures, thereby fostering a dynamic interplay of visual effects within the interior space. This design choice enables children to observe concurrent activities and the outdoor environment.



The rooms are constructed using an array of traditional materials like wood, reeds, leather, bark, beads, and fabric. The application of diverse paint techniques further enhances the aesthetic. These carefully selected materials not only establish a compelling visual connection but also serve as instructive tools, offering valuable insights into traditional construction methods and craftsmanship.

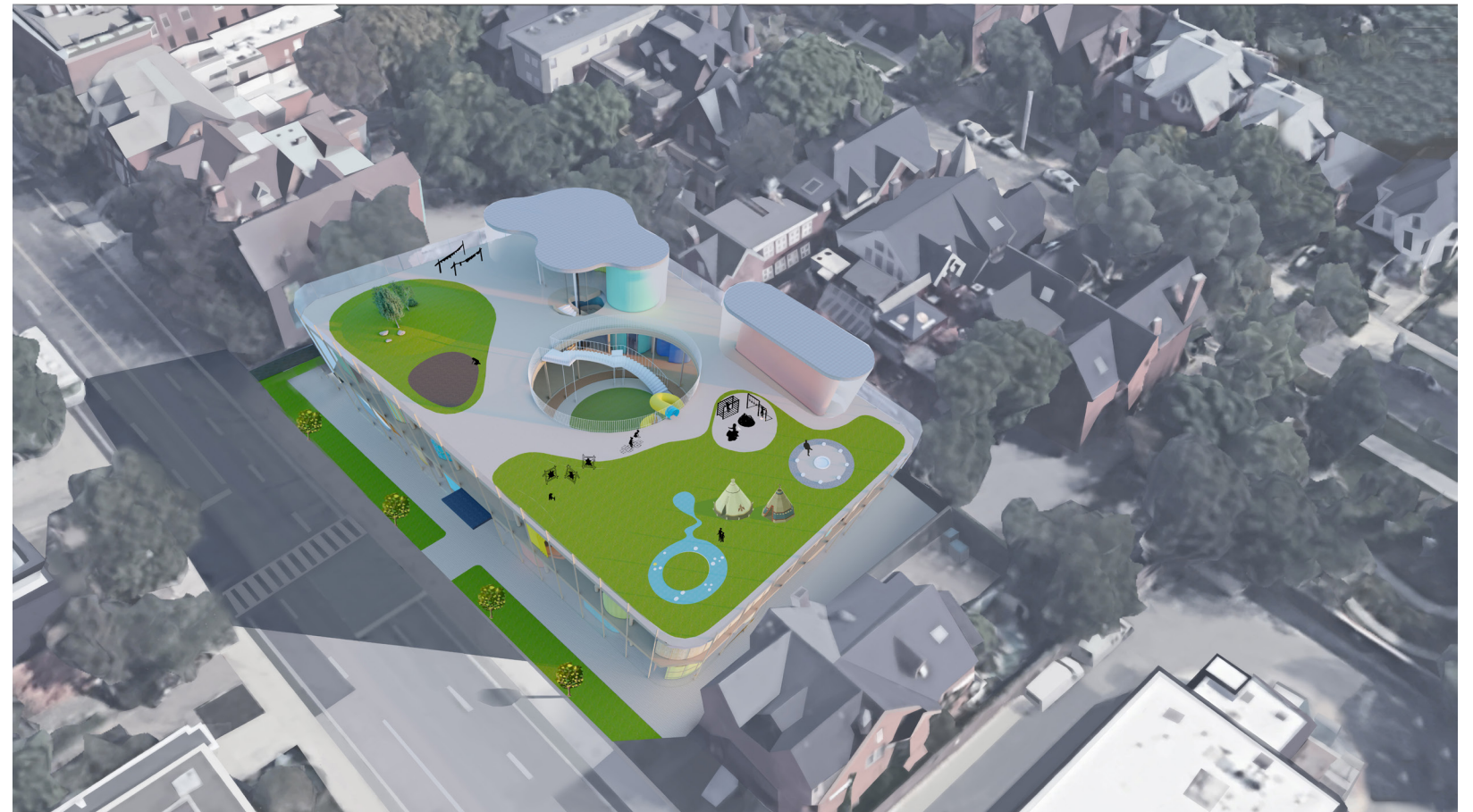


The classrooms harmoniously combine traditional and contemporary aesthetics, segmented into distinct areas for physical, mental, spiritual, and emotional engagement. This setup seamlessly integrates art, music, mathematics, AR/VR storytelling, and play, creating a dynamic environment that nurtures a wide range of activities.



The third floor, designed as a rooftop space, serves as a hub for numerous outdoor activities within the building. It is seamlessly connected to the second floor through a staircase and slider that extends from the courtyard. Enclosed within this area, one can find a versatile multipurpose room and a greenhouse. This offers individuals the opportunity to nurture plants both indoors and outdoors.

Enriching the environment are elements such as a small woodland, sacred gardens, and ponds, all contributing to the serene ambiance. Playgrounds are thoughtfully incorporated, allowing children to engage in traditional sports, games, and crafts. The rooftop also offers a unique glimpse of nature, providing an authentic experience. Additionally, under adult supervision, children can partake in activities like setting up fires or constructing tents, further fostering a sense of connection with nature and valuable life skills.



The rooftop provides a captivating vista. Children can actively engage in outdoor activities, absorbing valuable lessons from nature while being immersed in the soothing embrace of verdant tree-filled panoramas.



Activities like playing drums, learning fire-building techniques, and constructing shelters using basic materials are all facilitated in this safe and nurturing space.

Collect/Connect

Instructor: Eiri Ota
Course: Comperhansive Studio

This project takes places in New York City. The city's urban structure, density, culture and endless transformation is the ultimate triumph of cpitalism. At the same time, and perhaps as a result, it is acity of extreme climate vulnerabilty and social inequities. It has been the stage of some of the most spectacular recent global climate events, the super storm Sandy in 2012, Ida in 2021 and also, in 2019, the site of the NYC Climate strike, led by Greta Thunberg.

Located in the South Street Seaport area of Manhattan's Financial District at 250 Water Street, the site embodies the Magnitude and urgency of the climate threat and the need for a new civic institution to help us transition into a decarbonized world.

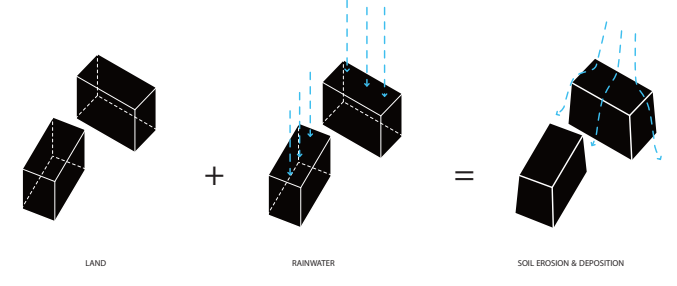


Our design celebrates the vital and power of water. Our approach situates water as the driving force of how spaces can be used and experienced. This gives the user and visitors of the spaces a unique, sensorial and visual experience of the poethic and power of water. Rainwater that is collected is dripped or leaked into spaces, which overtime, can accumulate into small ponds and puddles. The collected water will help sustain the surrounding landscape, empasizing the seamless relationship between land and water.

Water also has incredible reflective qualities which we want to incorporate as a strategy to utilize natural and passive daylighting into the building.

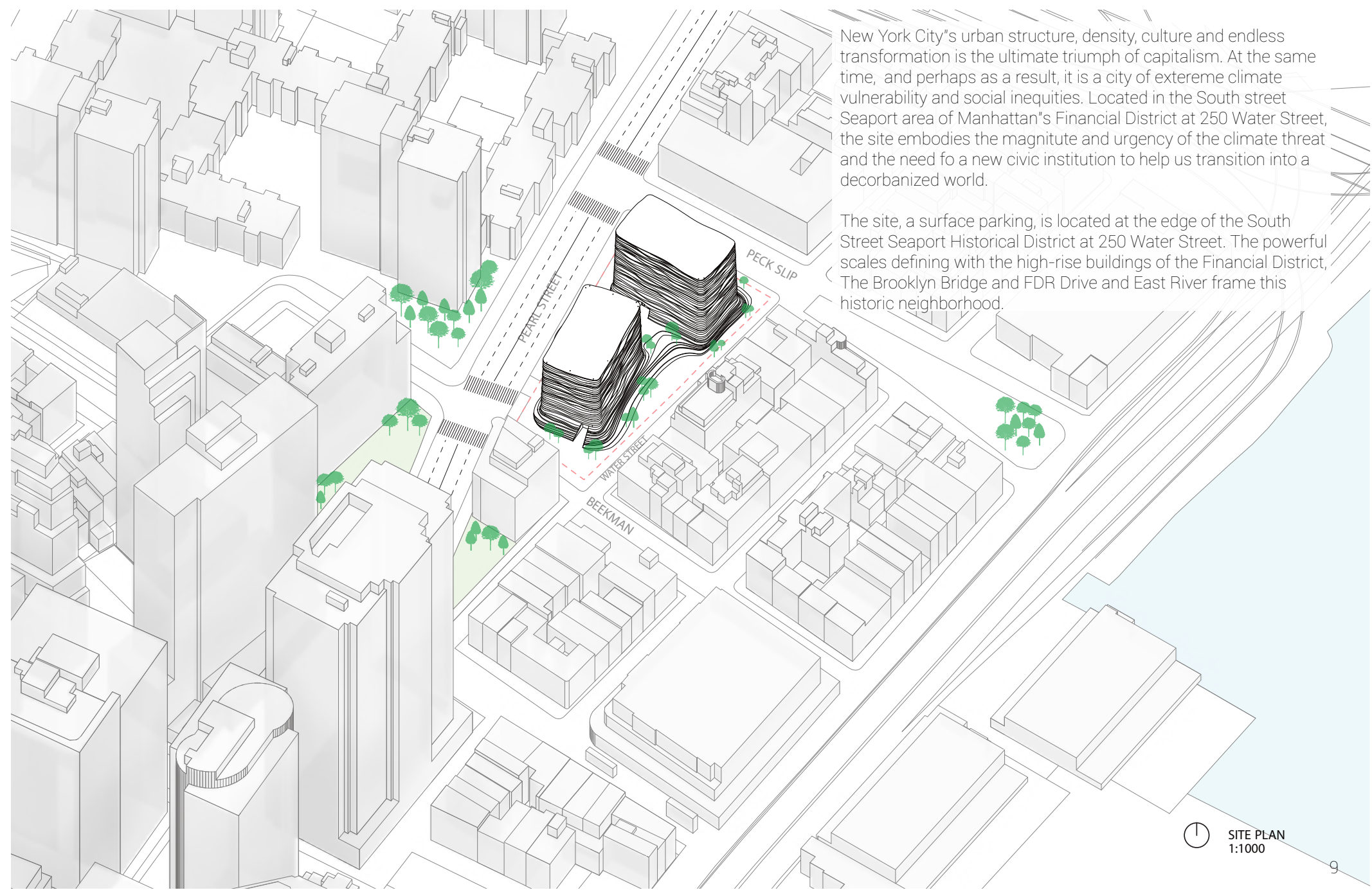
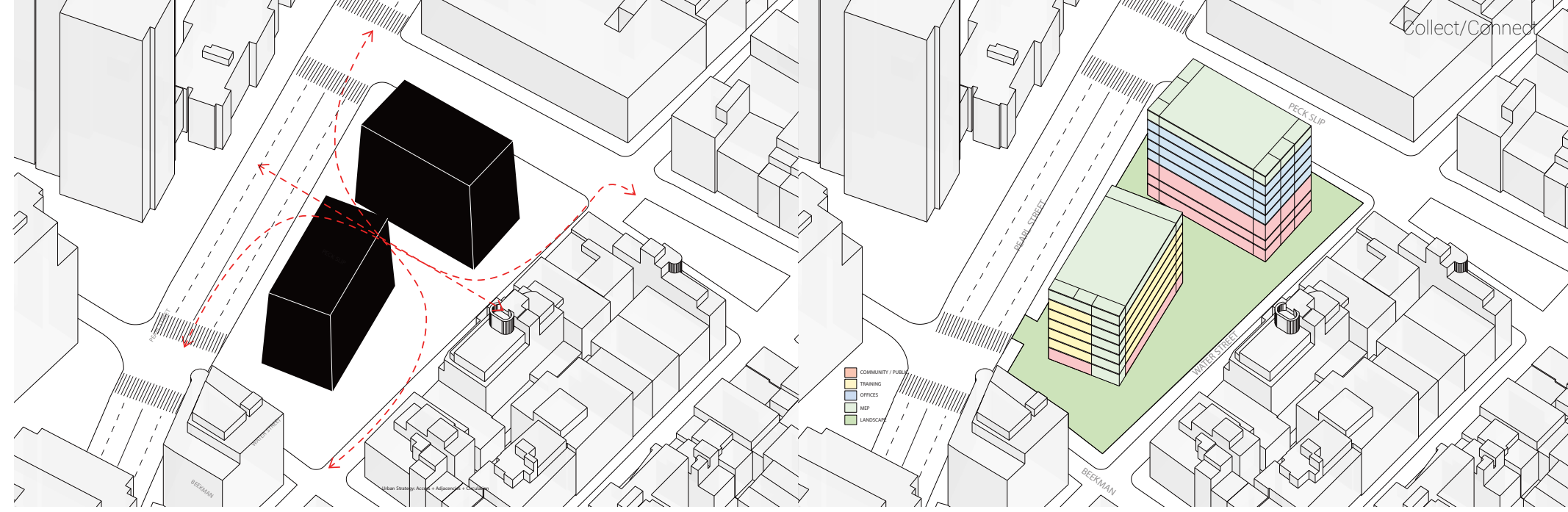


GREAT CANYONS
Arizona



Our design celebrates the vital and power of water. Our approach situates water as the driving force of how spaces can be used and experienced. This gives the user and visitors of the spaces a unique, sensorial and visual experience of the poetic and power of water. Rainwater that is collected is dripped or leaked into spaces, which overtime, can accumulate into small ponds and puddles. The collected water will help sustain the surrounding landscape, empassizing the seamless relationship between land and water.

Water also has incredible reflective qualities which we want to incorporate as a strategy to utilize natural and passive daylighting into the building.



New York City's urban structure, density, culture and endless transformation is the ultimate triumph of capitalism. At the same time, and perhaps as a result, it is a city of extreme climate vulnerability and social inequities. Located in the South Street Seaport area of Manhattan's Financial District at 250 Water Street, the site embodies the magnitude and urgency of the climate threat and the need for a new civic institution to help us transition into a decarbonized world.

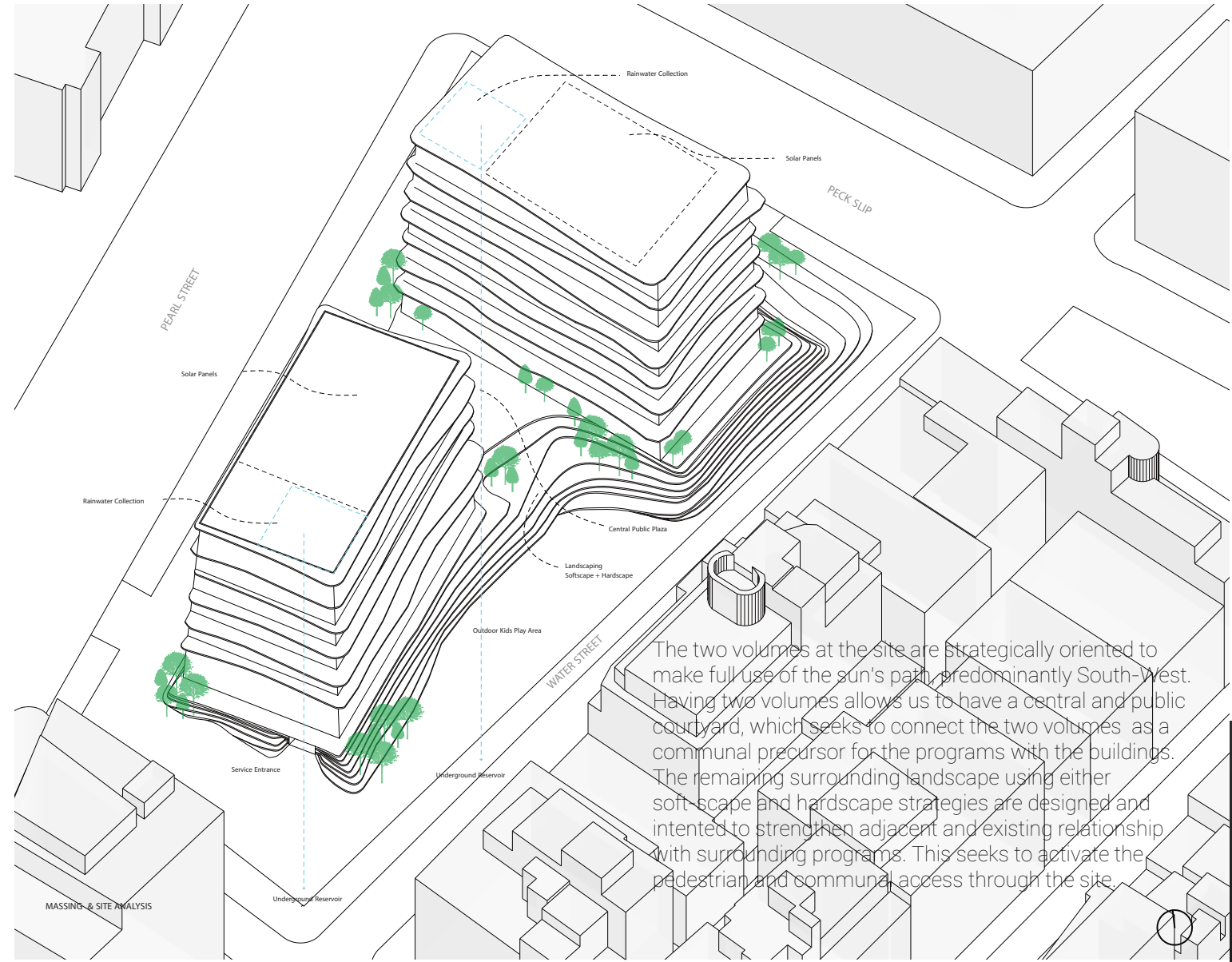
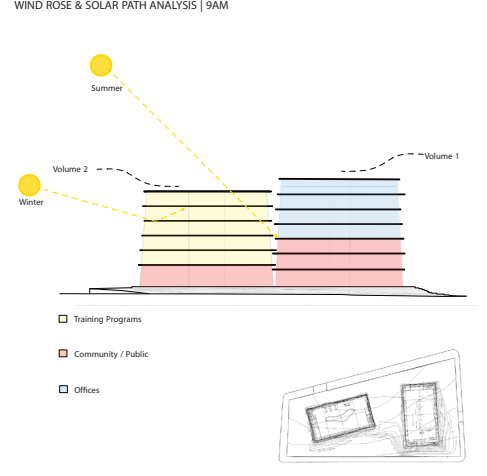
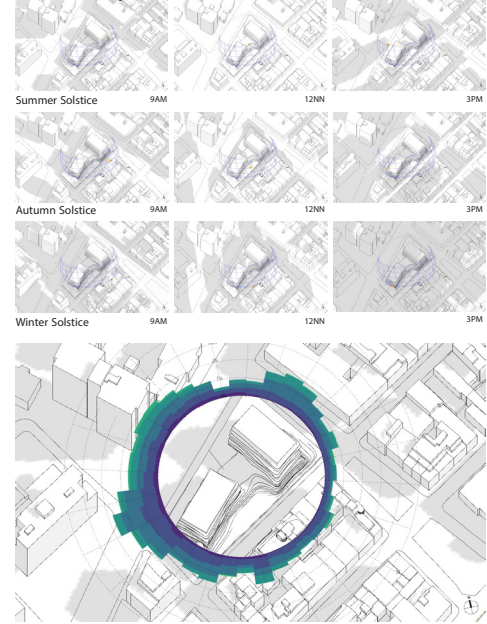
The site, a surface parking, is located at the edge of the South Street Seaport Historical District at 250 Water Street. The powerful scales defining with the high-rise buildings of the Financial District, The Brooklyn Bridge and FDR Drive and East River frame this historic neighborhood.



DANISH PAVILION
Venice Biennale 2021

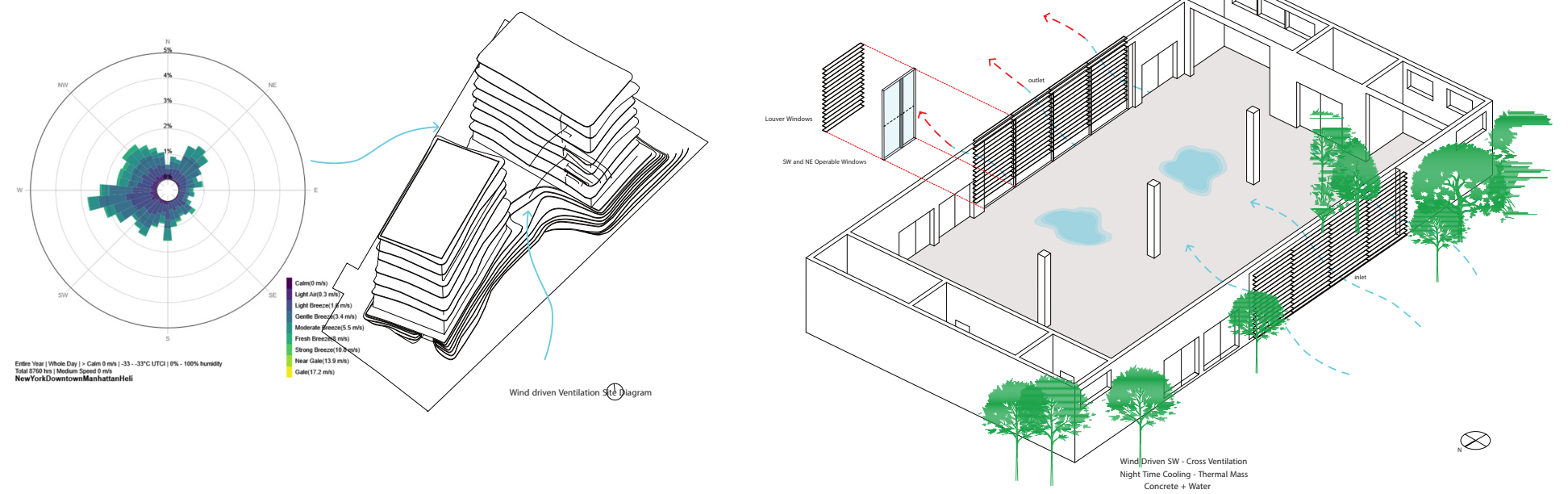


Erman Akyol

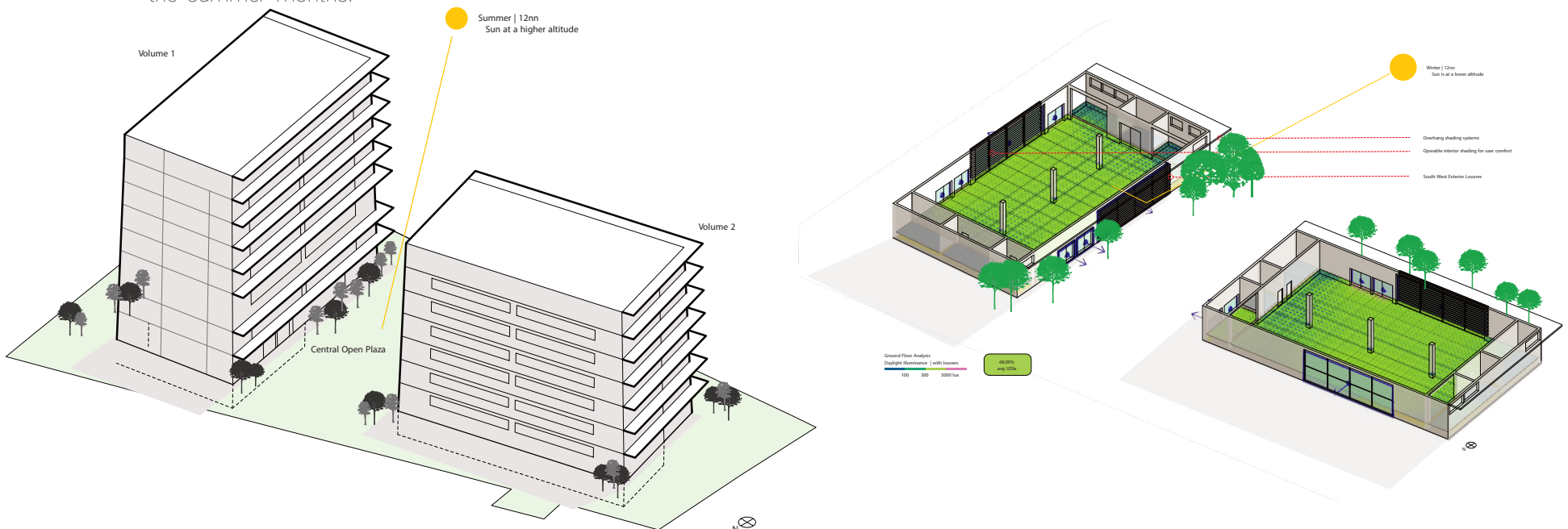


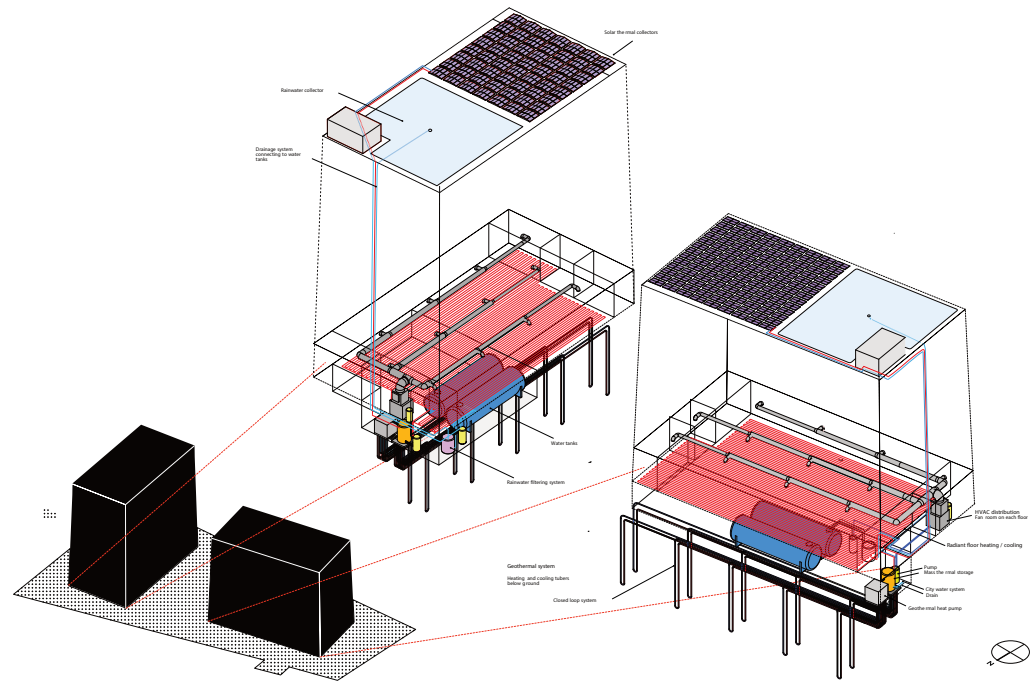
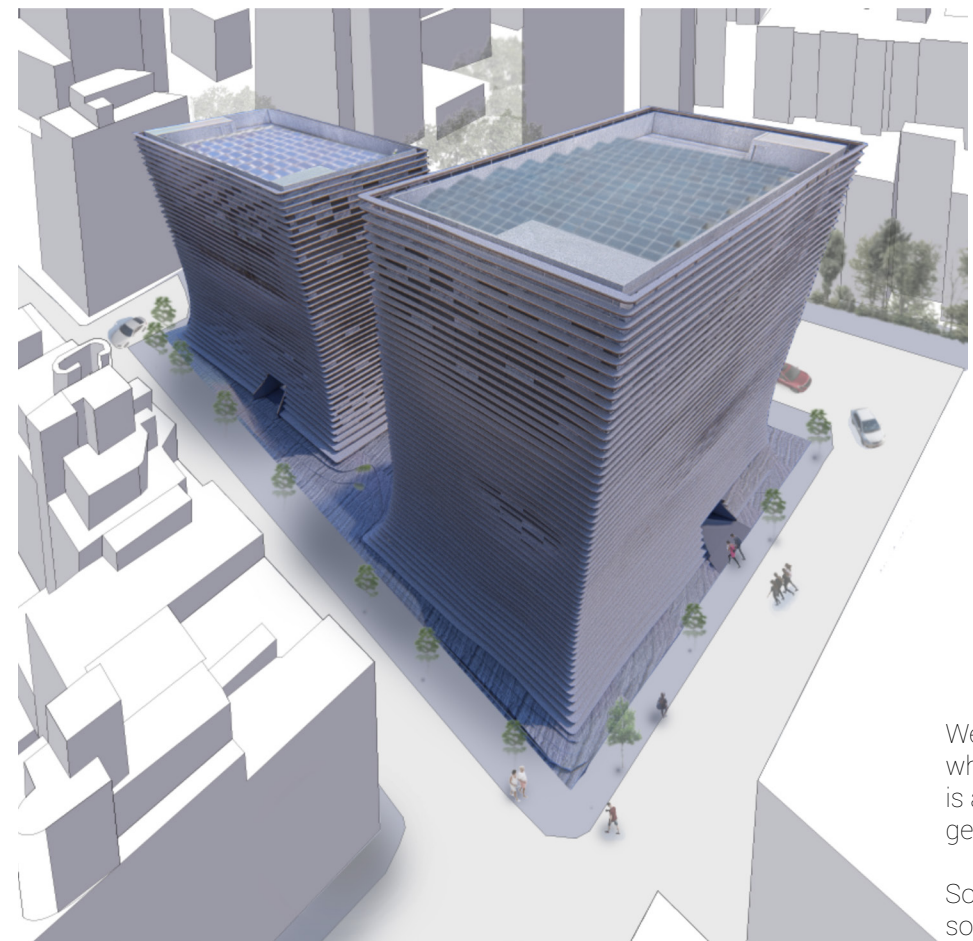
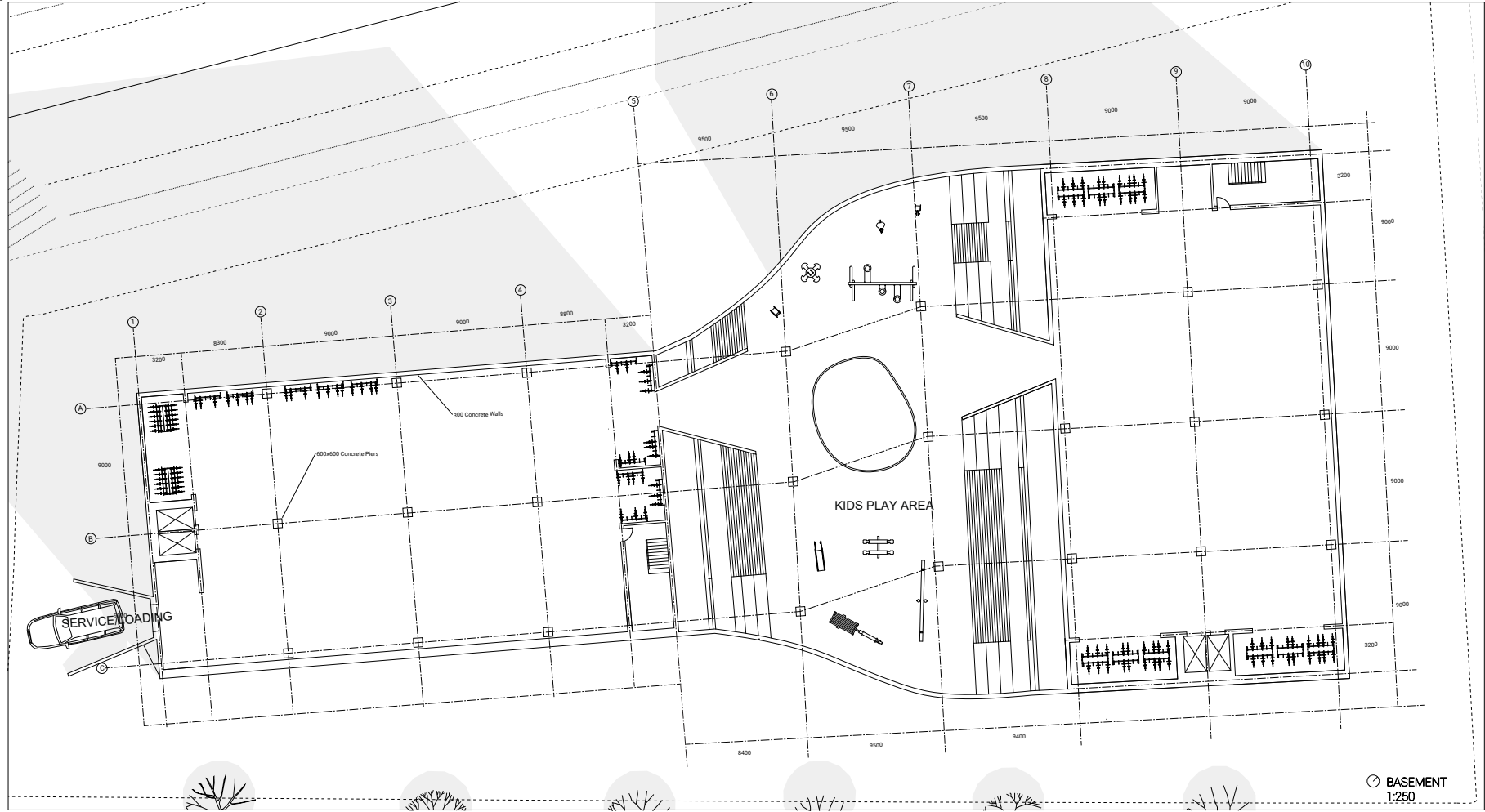
The two volumes at the site are strategically oriented to make full use of the sun's path, predominantly South-West. Having two volumes allows us to have a central and public courtyard, which seeks to connect the two volumes as a communal precursor for the programs with the buildings. The remaining surrounding landscape using either softscape and hardscape strategies are designed and intended to strengthen adjacent and existing relationship with surrounding programs. This seeks to activate the pedestrian and communal access through the site.

Wind is naturally driven South-West all throughout the year at the site. Our design strategy seeks to maximize and utilize this natural wind driven ventilation into our buildings as well as to passively cool them. Throughout our volumes, windows located at the South-West and North-East facades are at least forty percent user and schedule operable to accommodate fresh air into the spaces. We also intend to use night time cooling strategy, which makes use of the thermal mass and materiality of concrete, in conjunction to our overall concept of incorporating water as an integrated passive strategies for evaporative cooling during the summer, and radiant heating during winter.



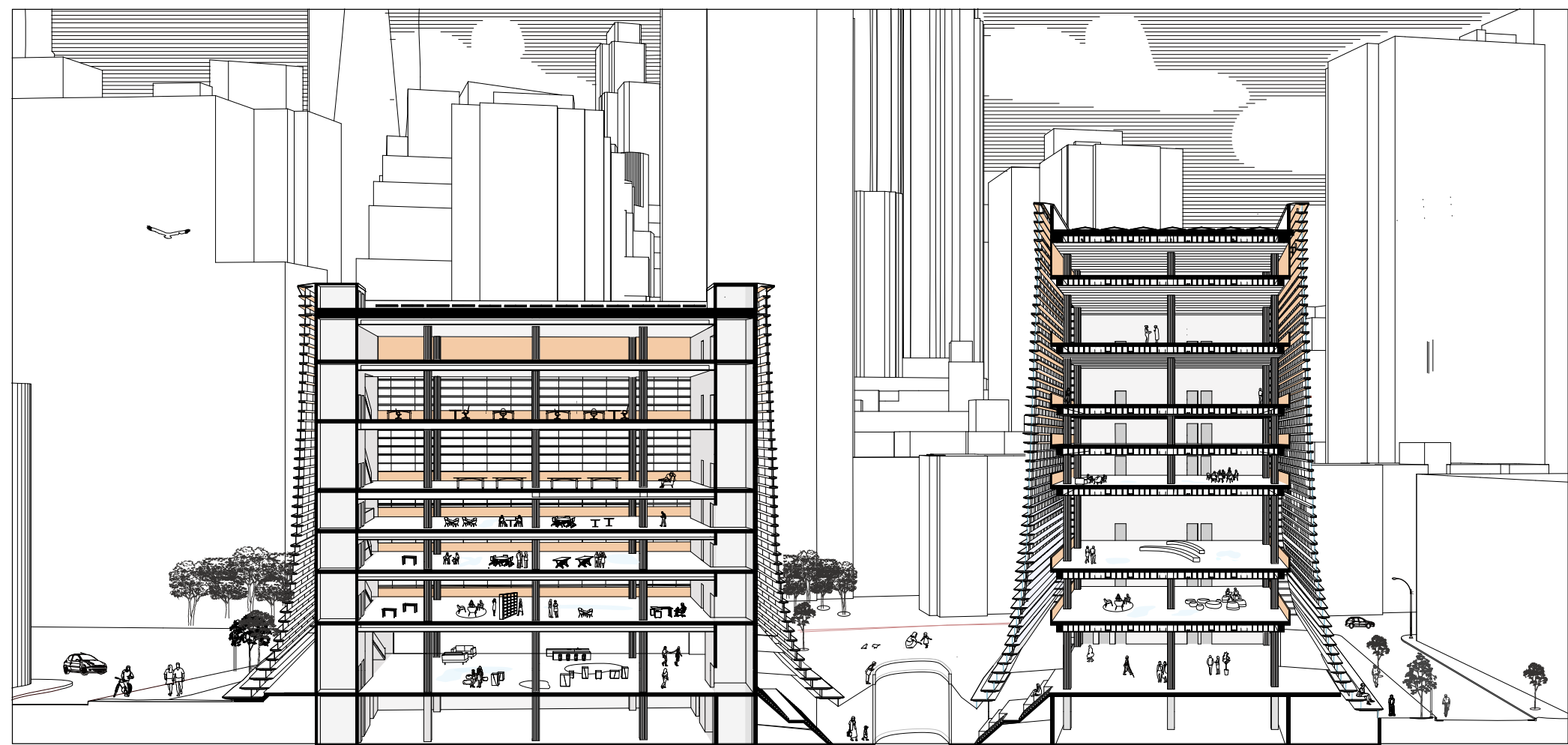
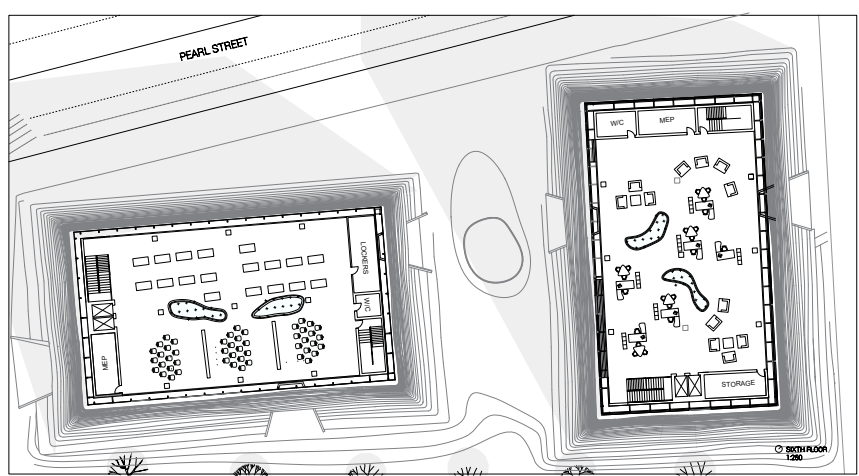
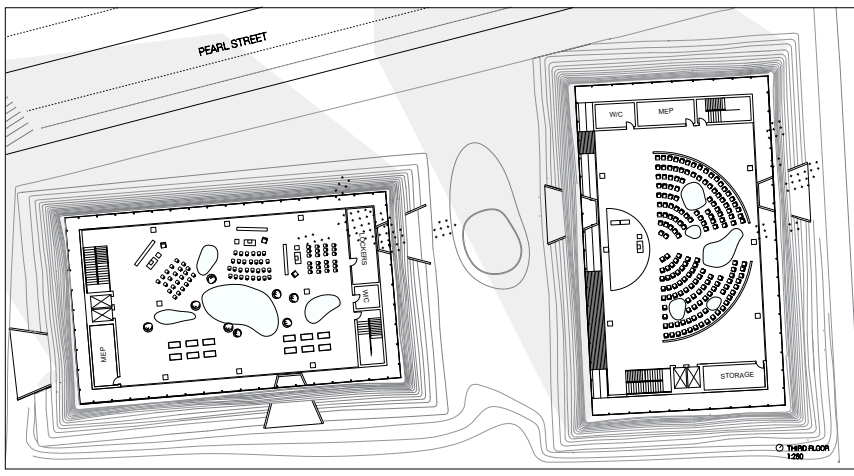
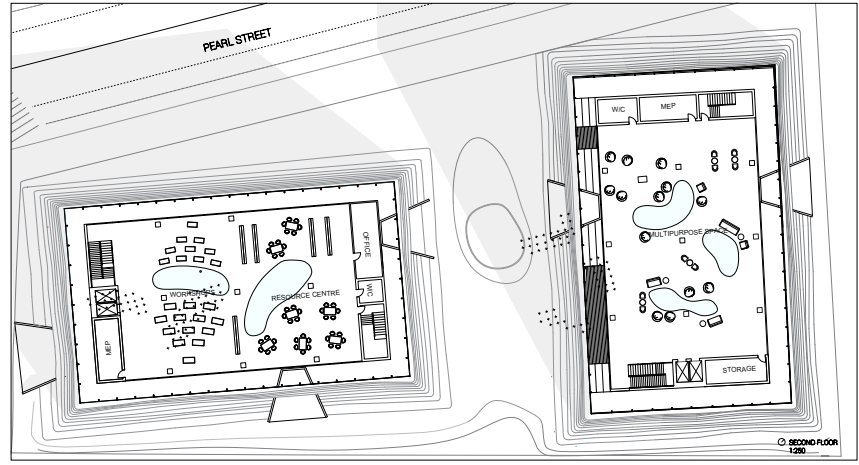
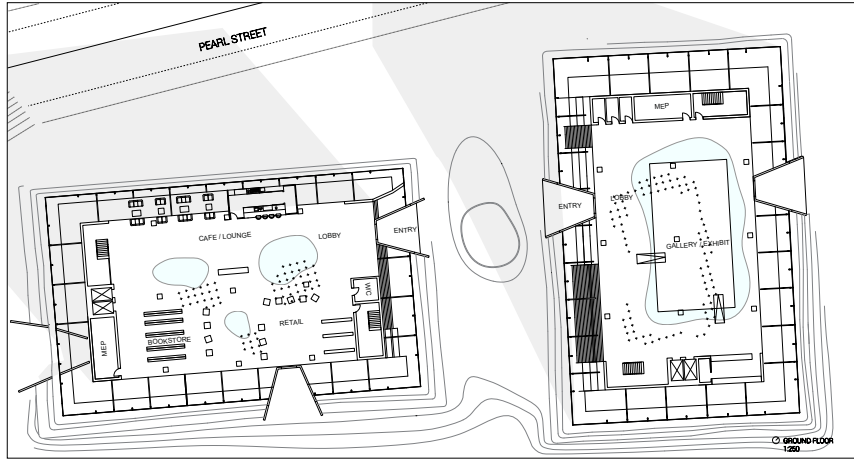
Based on the solar and site analyses, we've strategically placed South-West facing glazing to maximize natural daylighting into our buildings. The two massing have varying heights and orientation, taking into consideration that both volumes receive equal and ample natural daylighting. During Summer, as the sun's altitude is high, shading systems can help mitigate and repel excessive solar insolation. While in Winter, the sun's lower altitude can penetrate through the South-West glazings and contribute to natural heating and daylighting. Exterior shading devices are integrated through overhangs and louvers, especially at the South-West facades where excessive daylight illuminance and glare can occur particularly during the summer months.

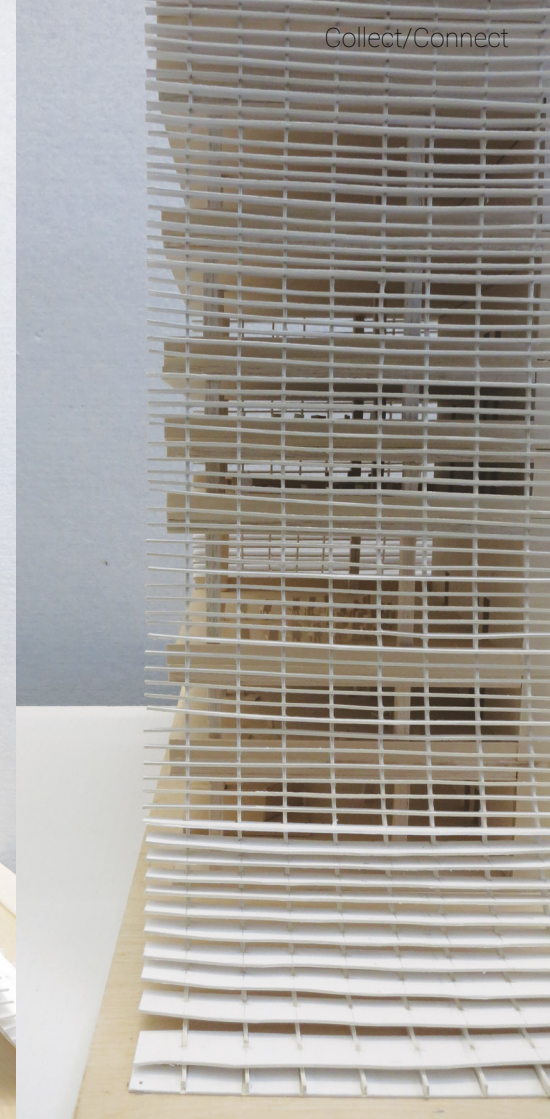
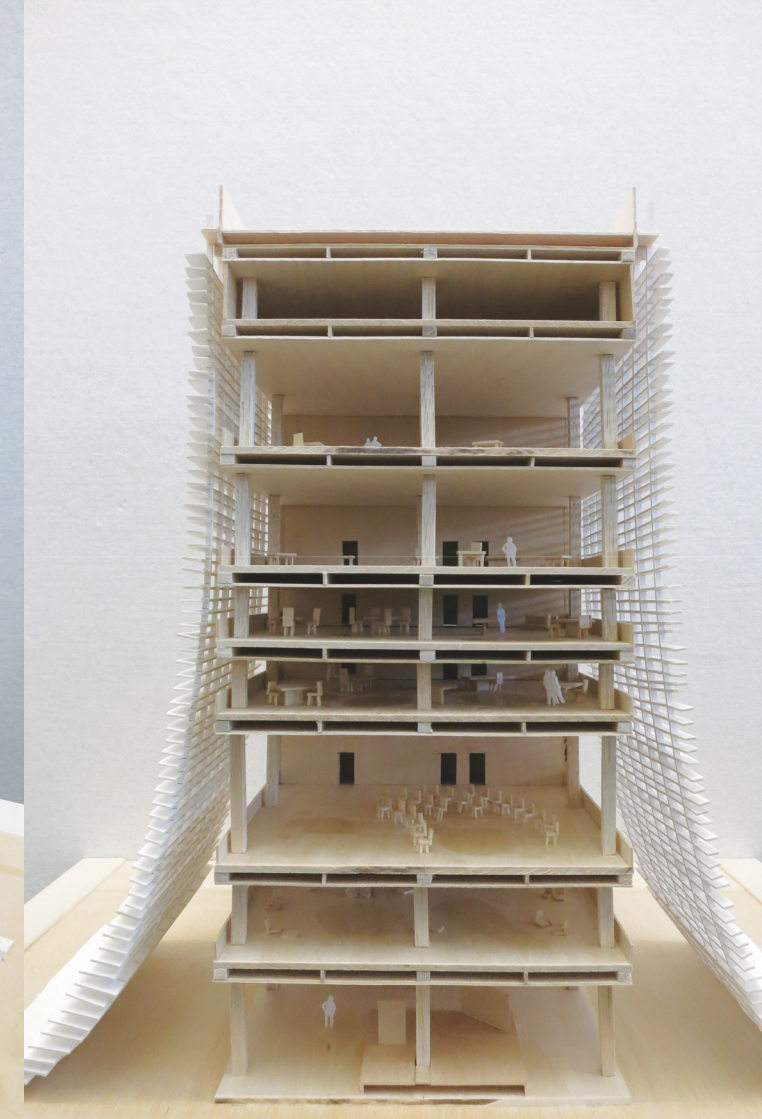
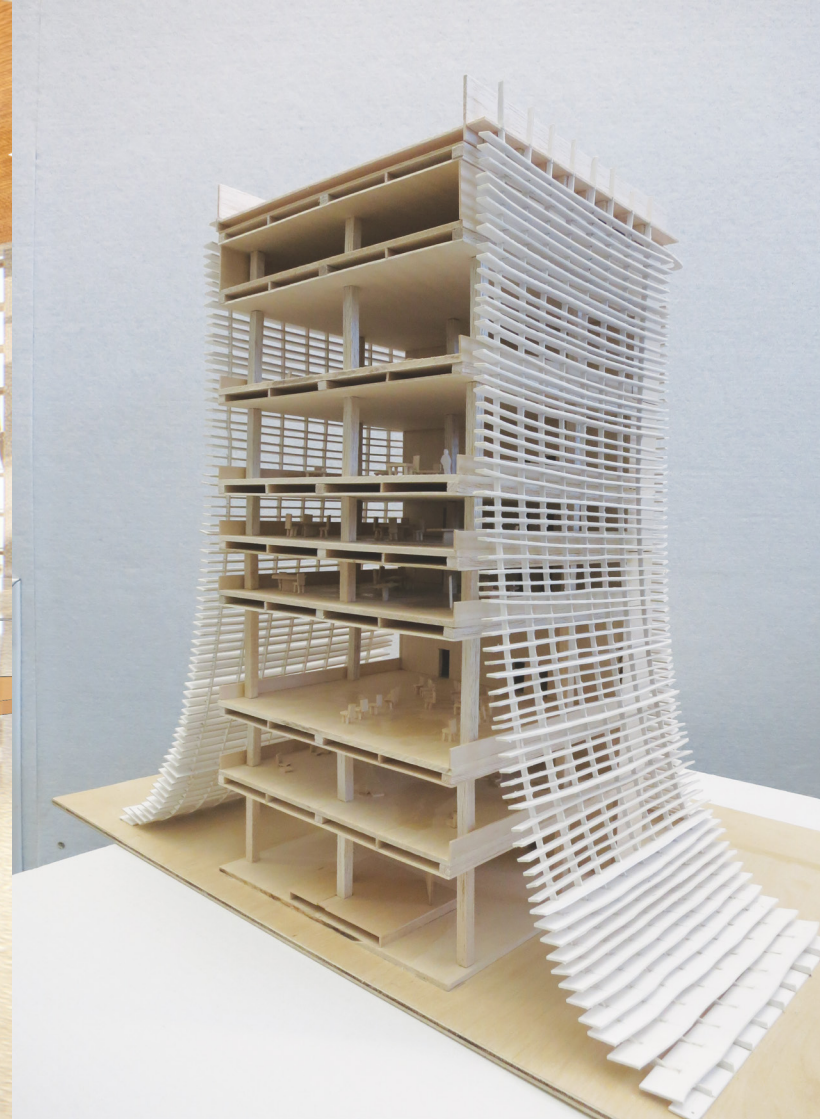




We have hybrid system for heating and cooling our buildings. It includes geothermal, solar systems which are connected to HVAC and radiant floor heating and cooling systems. Mass thermal storage is at the center providing hot or cold water to the radiant floor systems and HVAC fan rooms. The geothermal closed-loop system provides a natural heat exchange underground.

Solar panels are preferably located on the roofs, oriented South-West to maximize the predominant solar path.





At 29.5 metres high, with eight levels in total (six storeys with an added mezzanine, plus penthouse), WIDC is a milestone project for tall wood construction worldwide.

A showcase for local wood technology and design, includes four different types of mass timber products, an all-wood stairwell and elevator shaft and a wide range of interior and exterior wood treatments such as a charred-cedar cladding and a red-stained plywood feature wall.

All wood used in the project was produced in BC, sustainably harvested from BC forests.

WIDC's structural concept is that of "dry construction"—using custom, prefabricated structural wood components—which virtually eliminates the use of concrete above the foundation, except for the floor in the mechanical penthouse. This concept also allows for the wood to be elegantly and purposefully exposed as the finish throughout the building. The primary structure consists of an innovative combination of post-and-beam construction and built-up cross-laminated timber (CLT) floor panels. Glue-laminated timber (glulam) beams frame into glulam columns, both of which were chosen for their exceptional structural performance. Laminated veneer lumber (LVL) was used for the window mullions, entrance canopy, feature stairs, and other applications. Parallel strand lumber (PSL) beams were used in concealed locations to transfer column loads over the main level lecture theatre and research lab



Ontario Place: On-to-our Next Adventure

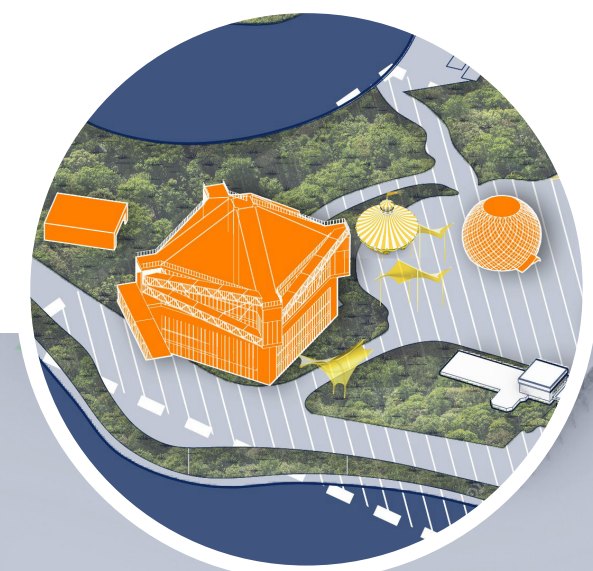
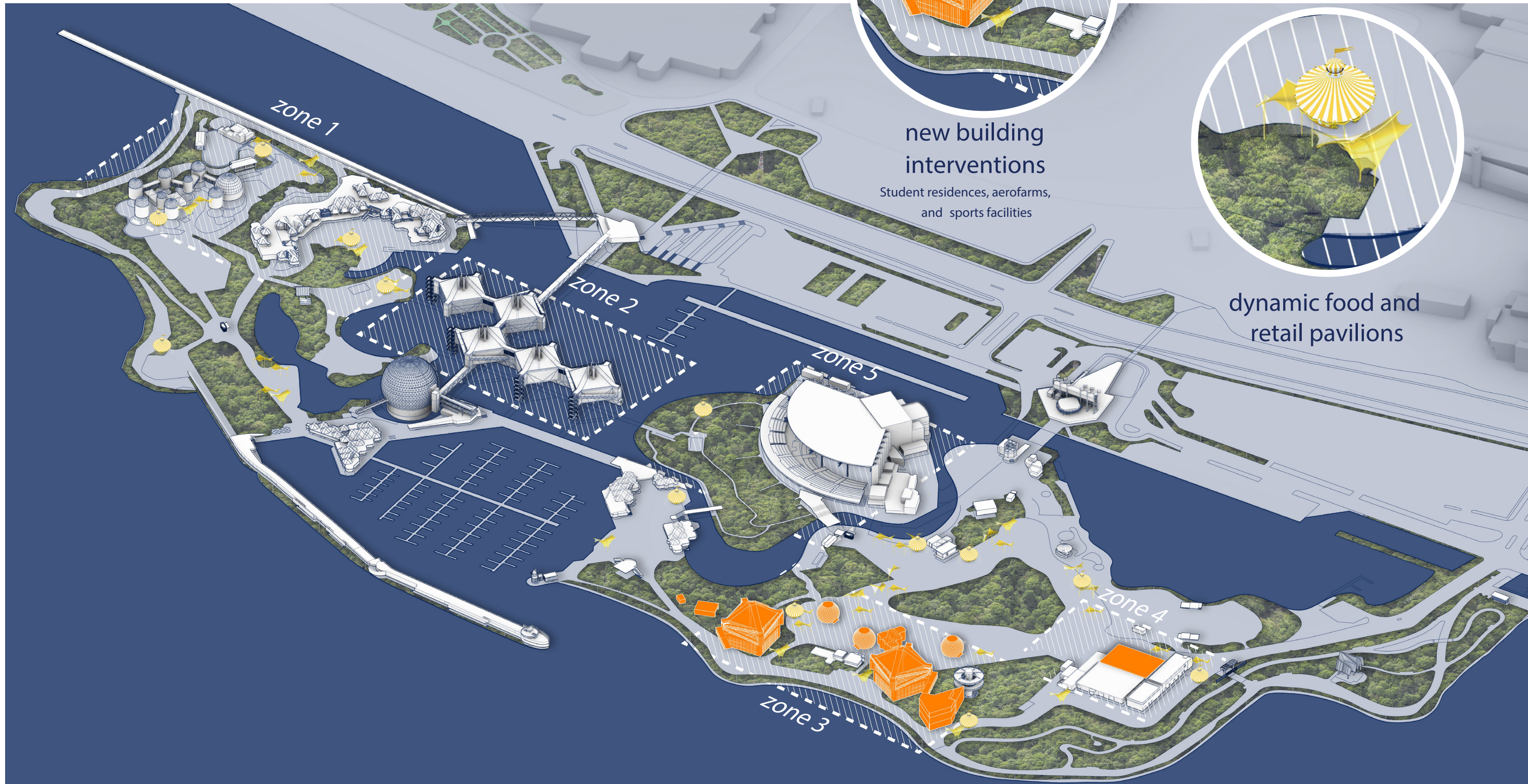
REIMAGINING A LANDMARK PUBLIC
SPACE FOR A NEW GENERATION

ERMAN AKYOL, VICTORIA CORDOSO, EUGENIA WONG

Ontario Place is an expression of our rich cultural and architectural history. Its future should contribute to the liveability and appeal of our multicultural, sustainable, and equitable province. The site suffers from poor management resulting in several architectural elements being demolished, a decrease in visitors, and degradation of a sense of community.

Taking full advantage of its location, our plan proposes to conserve and enhance this historic site while suggesting opportunities for contextually appropriate growth. To emphasize Ontario Place as a symbol of change and adaptability, we recommend converting the site into an innovation hub-- a joint effort amongst various Ontario universities and colleges to develop ideas for studies such as environmental biology, aquatic ecology, and limnology. The existing pods are repurposed into public venues, focusing on new cultural programs. As a local cultural icon and nostalgic memory for many generations, we have the responsibility to preserve this Modernist ingenuity and adapt it to fit our contemporary society. Its architectural styling is unique and well celebrated, thus having the potential to serve as a film setting for Toronto entertainment industries. With perpetual flow of business opportunities and services, the economic burden as such will not fall under the shoulders of casual visitors.

We also recognize Toronto's need for indoor and outdoor recreational spaces; thus, we introduce newly amalgamated programming that supports existing functions. To achieve better external public access, year-round TTC, GO transit services, and connection to the Toronto Islands must be enhanced to improve connectivity to the city and integrate with the current social fabric.



new building interventions
Student residences, aerofarms, and sports facilities



dynamic food and retail pavilions

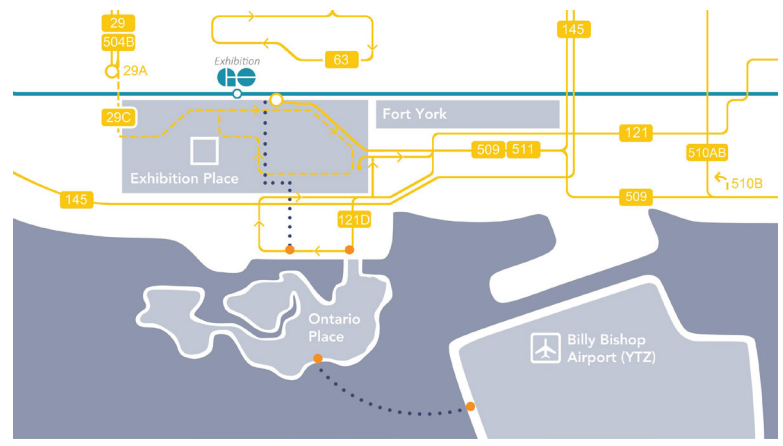


Fig 1. Available bus routes and proposed travel routes

To access and use the site efficiently, several adjustments are needed. In the short-term, additional bus routes connecting to the site are necessary to attract visitors. Our ecofriendly approach to this project would place an emphasis on electrical or human-powered vehicles. And in the long term, a driverless monorail could be implemented to provide faster and more direct transportation.

Design Principles

- Easy external access
- Improved internal mobility
 - Shorter walking distances
 - Additional bicycle paths

Proposed ideas

- Add a year-round bus line stopping at Remembrance drive
- Add a bus stop for express bus line 145 on Lake shore Blvd.
- New bicycle paths
- Water-based transit could be used for recreational and commuter purposes.
- Move surface parking underground and replace it with landscaping
- Supply electric car charging stations in the underground parking area
- Electric transit vehicles serving Ontario Place



Public transit bus stop in close proximity to the Ontario Place entrance



Fig 3. Section cut through existing modular buildings in Zone 1



zone 1: play

Featuring indoor and outdoor play space, Zone 1 designates a place that encourages fun and child-friendly recreation. By repurposing the larger existing buildings, new dynamic indoor spaces are created for children to enjoy year-round. The smaller spaces can offer food services and special vendor space to generate revenue and keep visitors on the island for the full day.

Waterfront space is kept open and free to the public wherever possible to allow visitors to enjoy the most unique feature to the island; lake-front access.

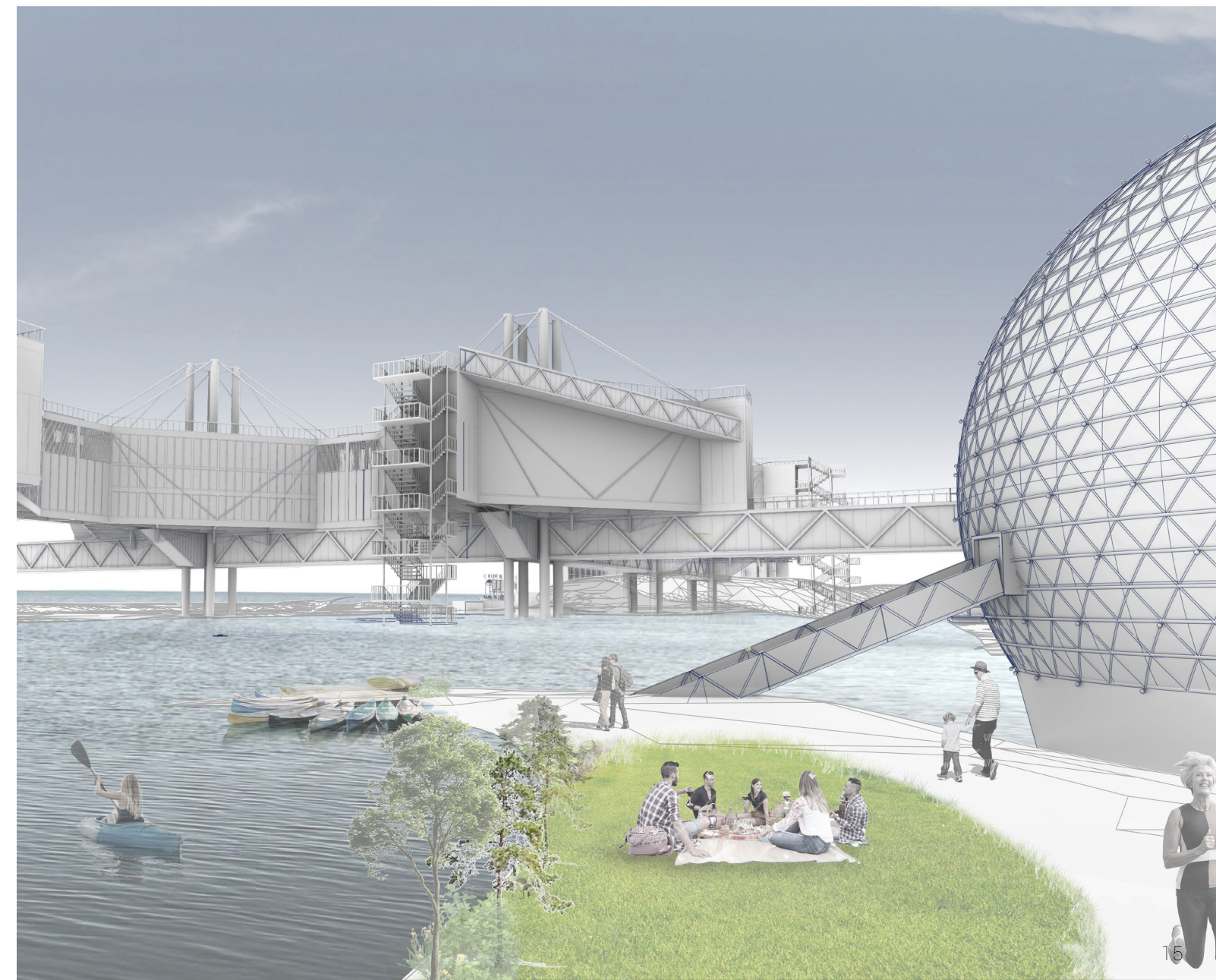
Program here is broad, readily open to adaptation. It consists mainly of beach, boardwalk, and greenspace interactions with the shoreline.



zone 2: exhibit

Zone 2 designates space for exhibition on themes pertaining to what is generated on the island and relevant to Ontario Place. Each pod has a designated program

- Pod 1 - Kids Fun Education**
 - Science center collaboration for full learning on topics such as freshwater ecosystems
- Pod 2 - Multipurpose Event Space**
 - Dynamic space available for rent that changes depending on event needs
- Pod 3 - Exhibition Hall**
 - Featuring temporary art-design-science related showcases
- Pod 4 - Cultural Campus**
 - Space for Indigenous teachings and the History of Ontario Place
- Pod 5 - Digital Arts Museum**
 - Multi sensorial digital arts museum





zone 3: innovative

Through introducing space for innovation, Ontario Place is able to develop its own identity that it can grow into and improve overtime. We propose two major interventions for innovation, AeroFarms and live-in residences. The AeroFarms serve as space to conduct research on sustainable food practices as well as produce food to sell locally.

The live-in residences serve to partner with science research facilities of various Ontario college and university programs such as Environment Biology, Aquatic Ecology, and Limnology.

These residences will create space for students, researchers, artists, and other short-term residents of the island to live while serving the many businesses and research programs offered.

Residence buildings in similar architectural language to the floating pods

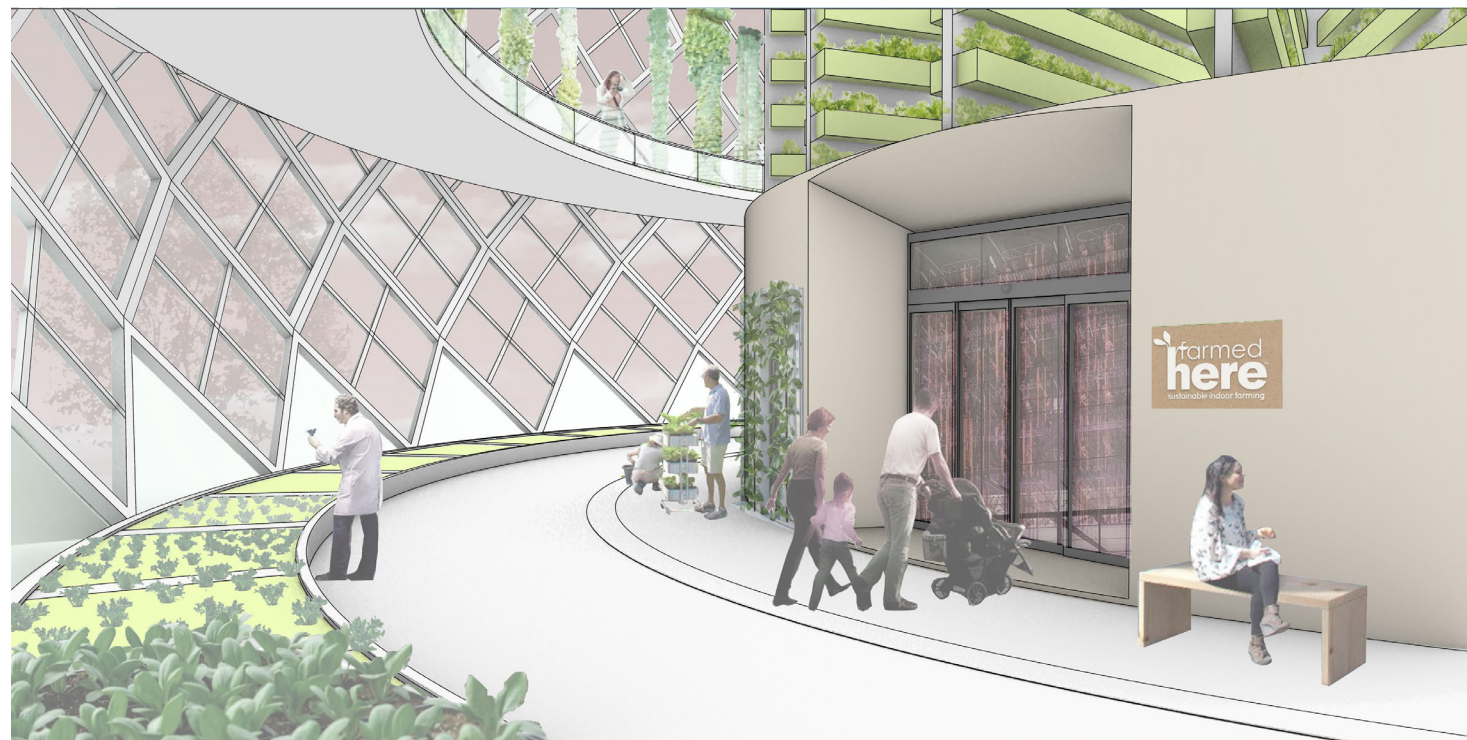
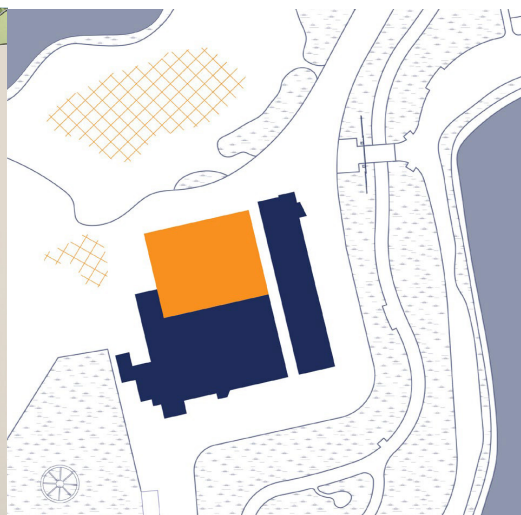


Fig 7. Interior view of an AeroFarm



zone 4: sport

Toronto has a constant need for green and recreation space. Recognizing this issue, we propose to include a designated recreation and sport facility on the east island. This sport facility will provide year-round indoor recreation space, partnering with already existing sports programs in Toronto and giving them a space to run their lessons and tournaments.

This indoor facility also works with the many outdoor recreation spaces proposed for the site such as kayaking, canoeing, skating, hockey, and summer field sports like soccer.

