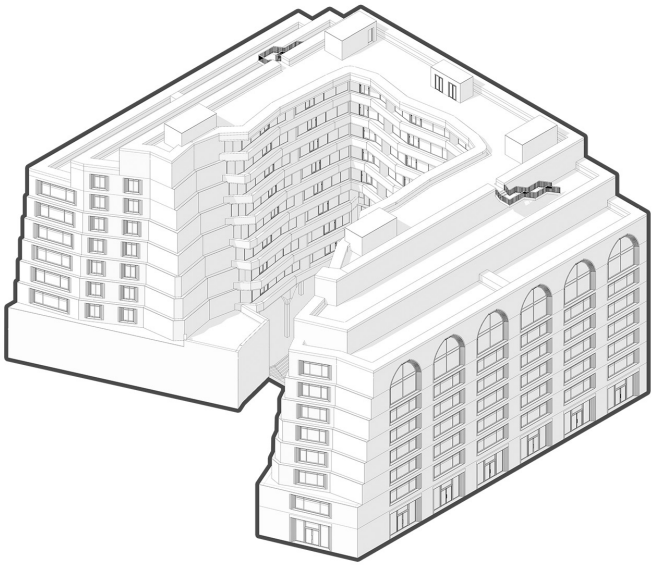
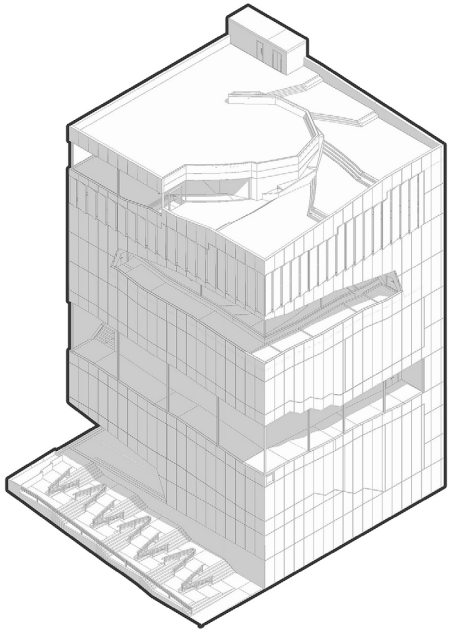
ARCHITECTURAL PORTFOLIO

LUIS RENDON



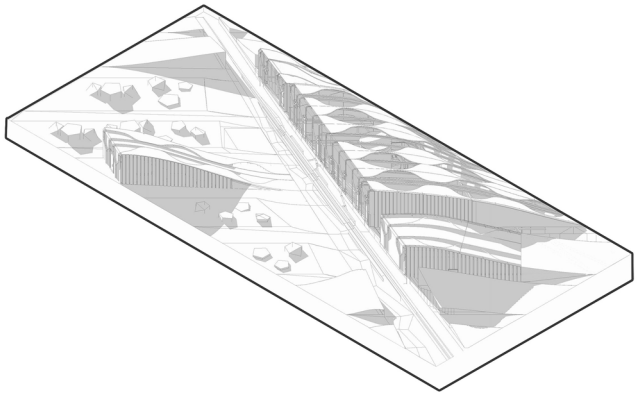
01 CANYON HEIGHT DWELLINGS

DESIGN 6 | 2023 | PG. 04 - 13



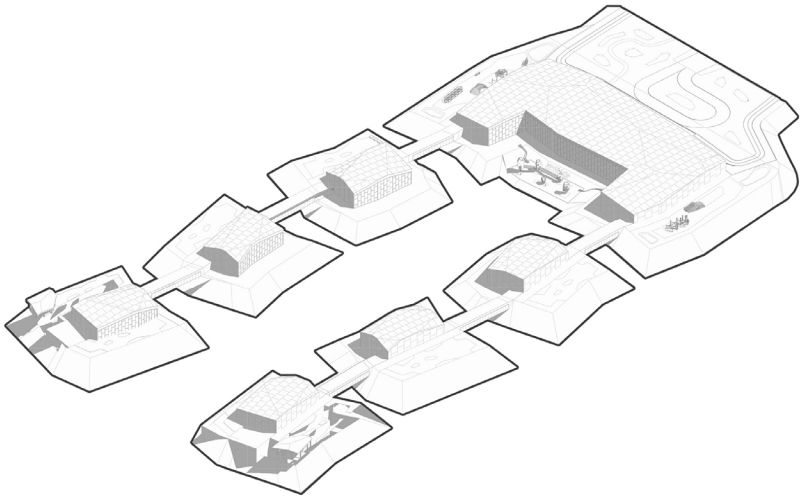
02 AMERICAN HISTORY OF IMMIGRATION MUSEUM

DESIGN 4 | 2022 | PG. 14 - 23



03 SUBMERGING PATHWAYS COMMUNITY CENTER

DESIGN 3 | 2021 | PG. 24 - 33



04 CANAL STONE ELEMENTARY

DESIGN 9-10 | 2024 | PG. 34 - 43

CANYON HEIGHT DWELLINGS

LOCATION: CROWN HEIGHTS, NY

AREA: 28,660 SQFT

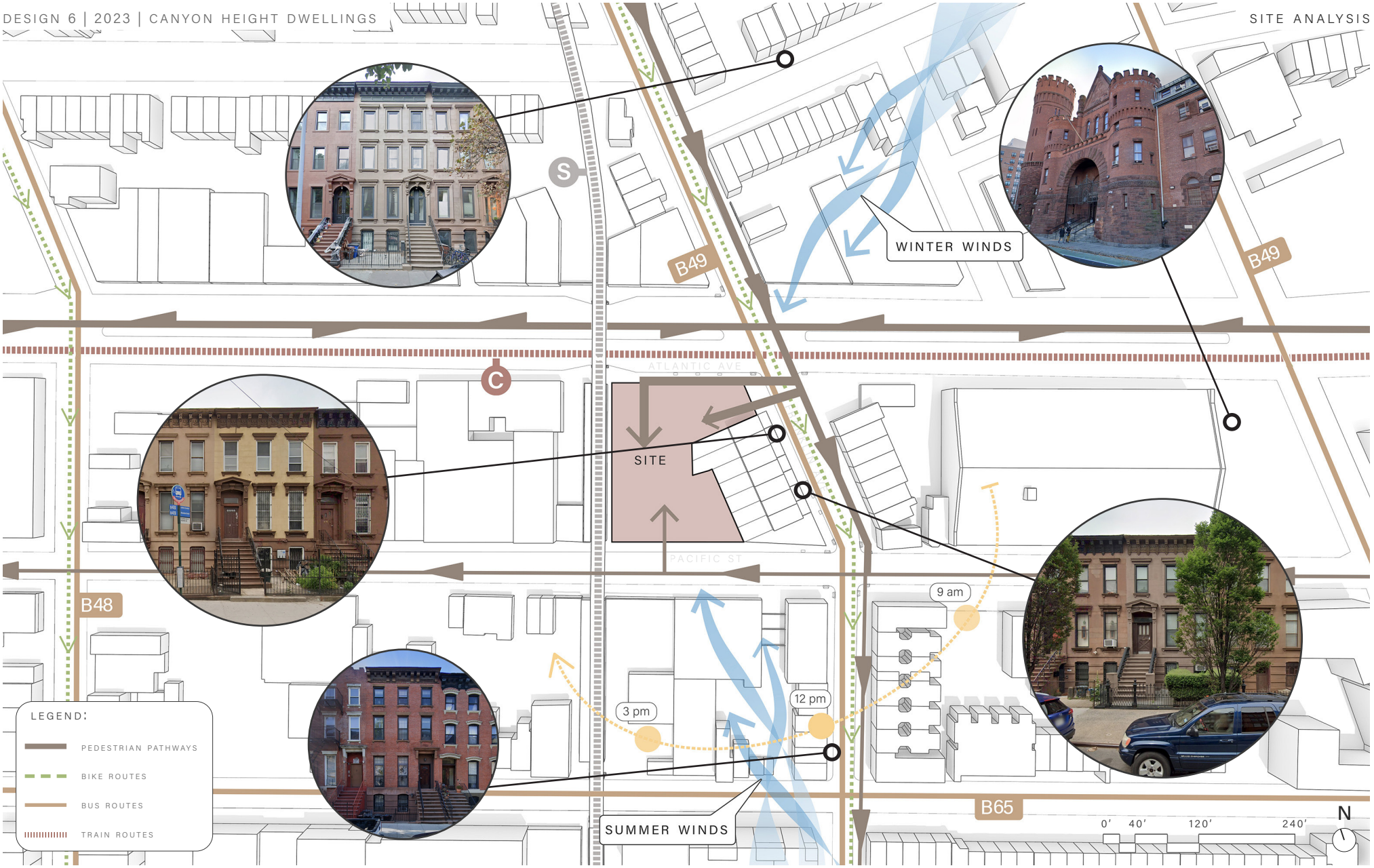
TYPE: MIXED-USE HOUSING

LEVEL: 3RD YEAR

YEAR: 2023

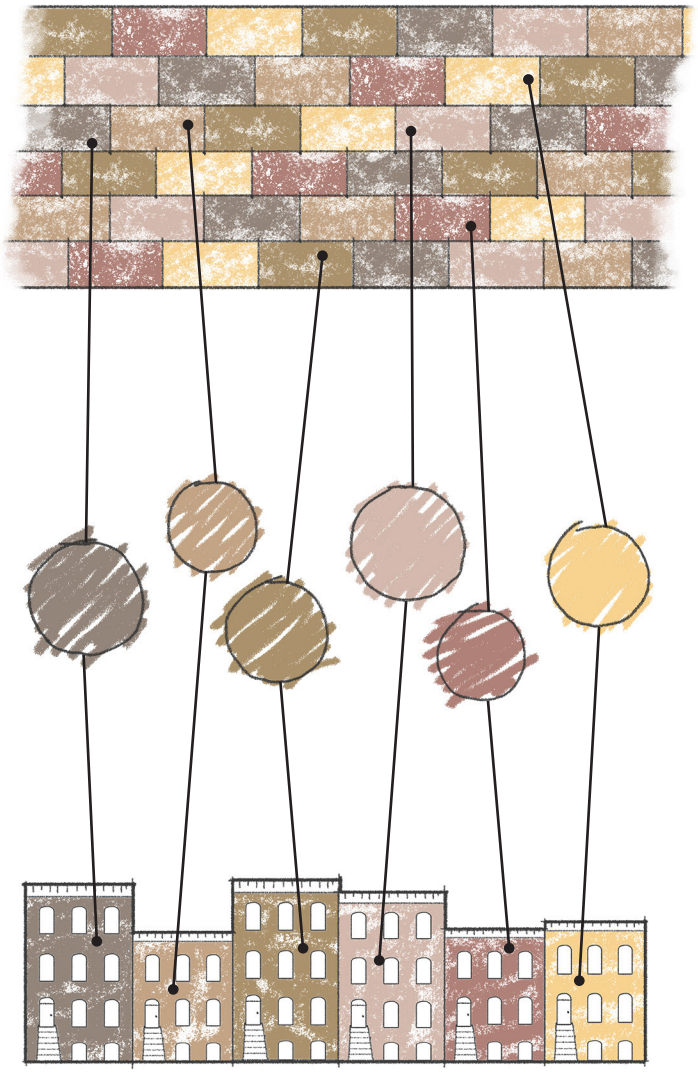
The project is a mixed-use residential building that offers affordable housing but also help activate the site with additional amentiy spaces and programs for both residents and local commmunity. Crown Heights is an evolving neighborhood filled with beautiful historical buildings featuring brownstone and brick apartments, boasting a rich mix of cultures of African Americans and Hasidic Jews. With the neighborhood being a hidden gem, not known for being a location of attraction, yet still containing many wonderful conditions and communities, this inspired the concept behind the project which is "A Hidden Gem", with the focus of hidden beauty/value that's revealed. And with this mindset, the mixed-use residential building will focus on looking inward by creating a spatial arrangement that'll have amenities and highlight moments of the building that will slowly be revealed to the residents as they travel further into the site, with the building blending with the neighborhood by re-representing the urban fabric of brownstones, brick, and cast iron through the building finishes. And with the metaphor of the Grand Canyon, it will help physically represent the concept because simular to the Grand Canyon, steep-sided gorge carved by the Colorado River, will be applying the similar conditions by looking inward, where the special moments are happening internally within the structure, creating this hidden gem of a building.





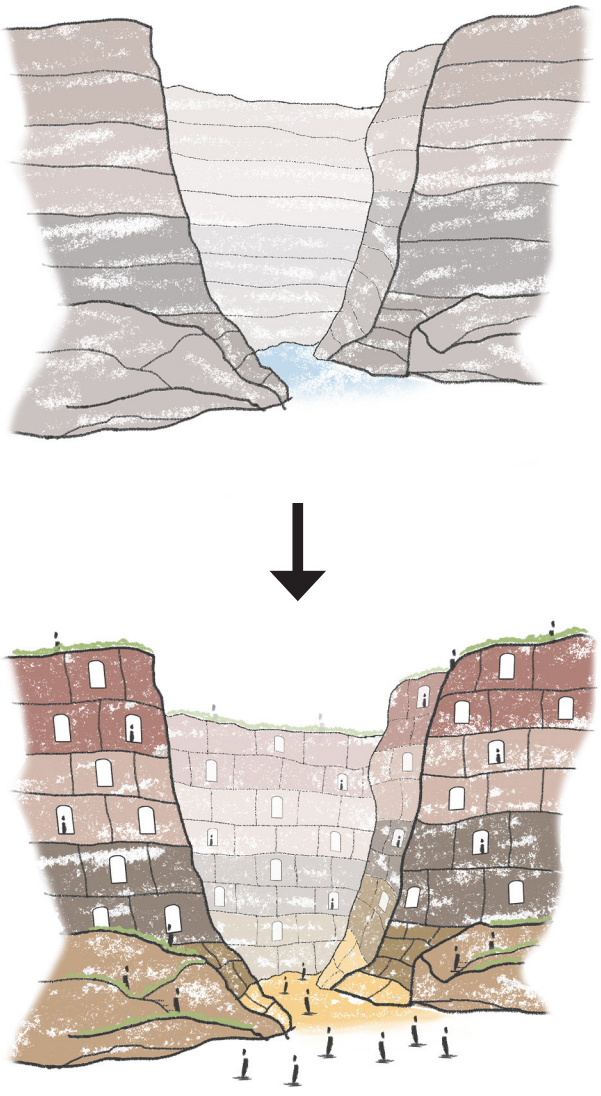
After anaylzing the surrounding context of the site we'll find the existing surrounding buildings being made up of brownstones and brick with different color variations, painting the picture of the urban fabric and for how we can utilize this fabric to help further blend into the local neighborhood. In addition are the weather conditions that can help us understand the best orientation for maximized daylight as well as natural cooling by creating potential openings for summer winds to enter. Another take away is its circulation with a large portion of transportation and circulation by foot is happening along the north side of the site with the south side low activity, possibly indicating use for mainly locals while the north side is used by the general public which can help determine the location of entrys for residents and commercial stores along the ground floor of the site.

2. RECYCLED BRICK



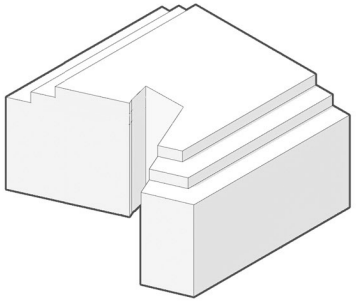
1. URBAN FABRIC

3. GRAND CANYON

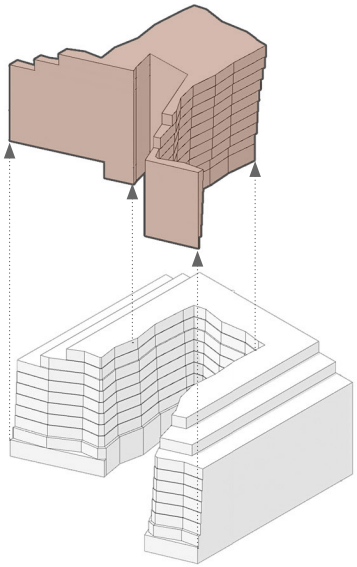


4. A HIDDEN GEM

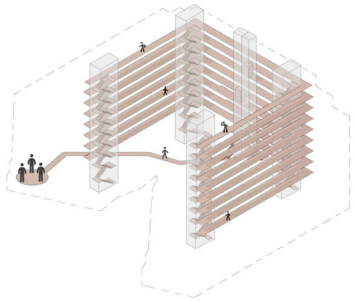
CONCEPT DIAGRAM



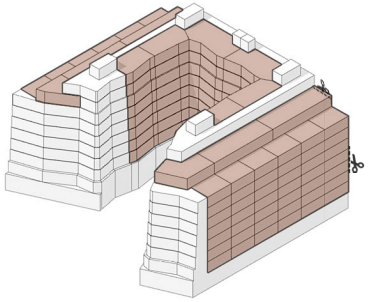
1. INITIAL MASSING



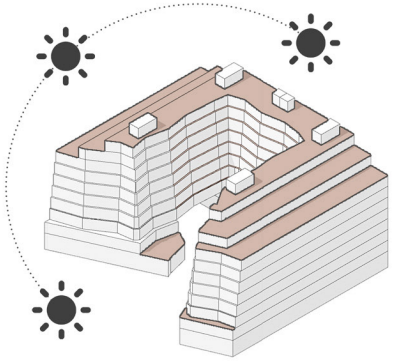
2. ERODED VOID



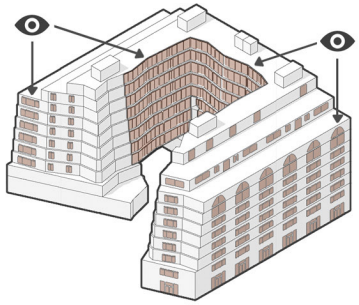
3. CIRCULATION



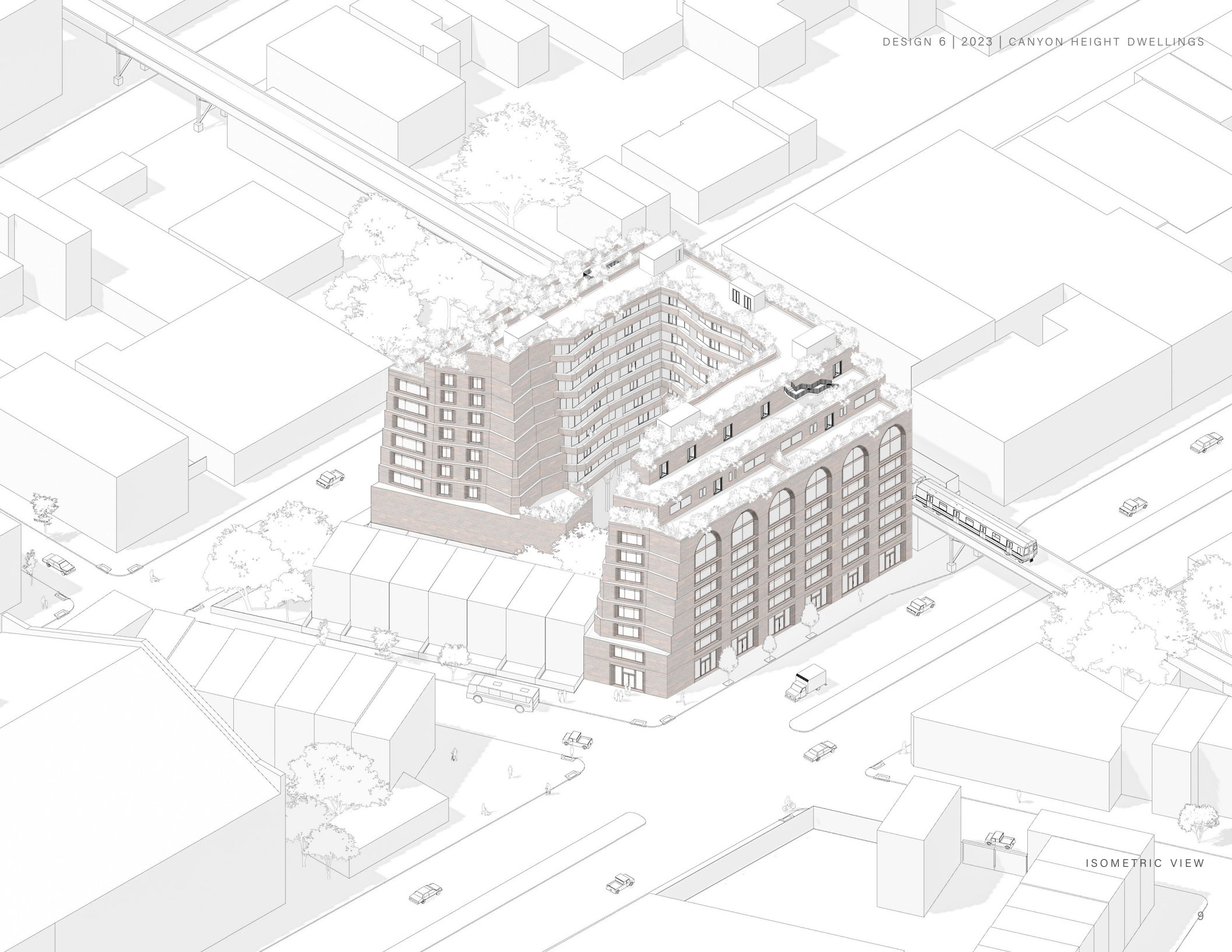
4. HOUSING UNITS



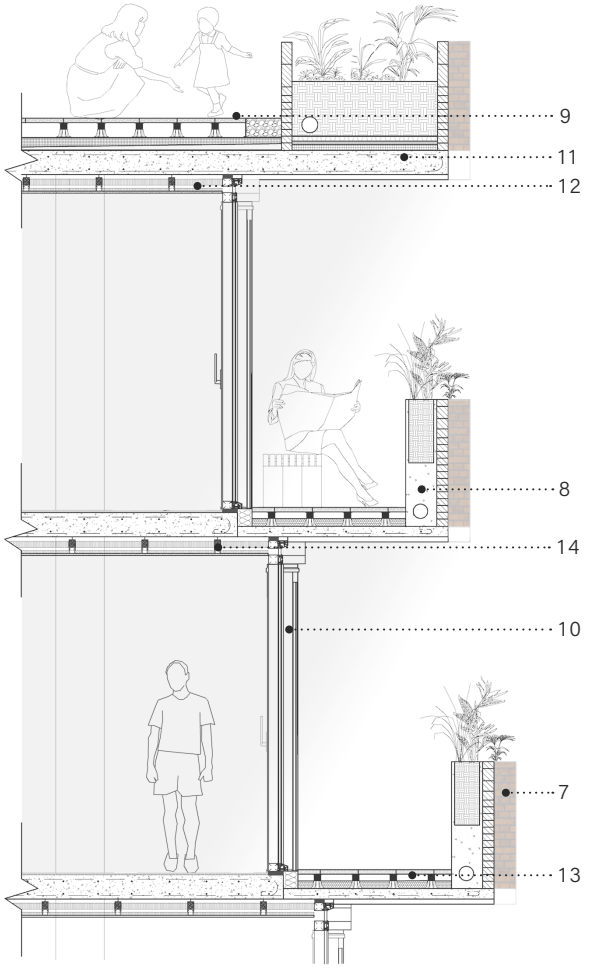
5. VEGETATION



6. TRANSPARENCY



ISOMETRIC VIEW



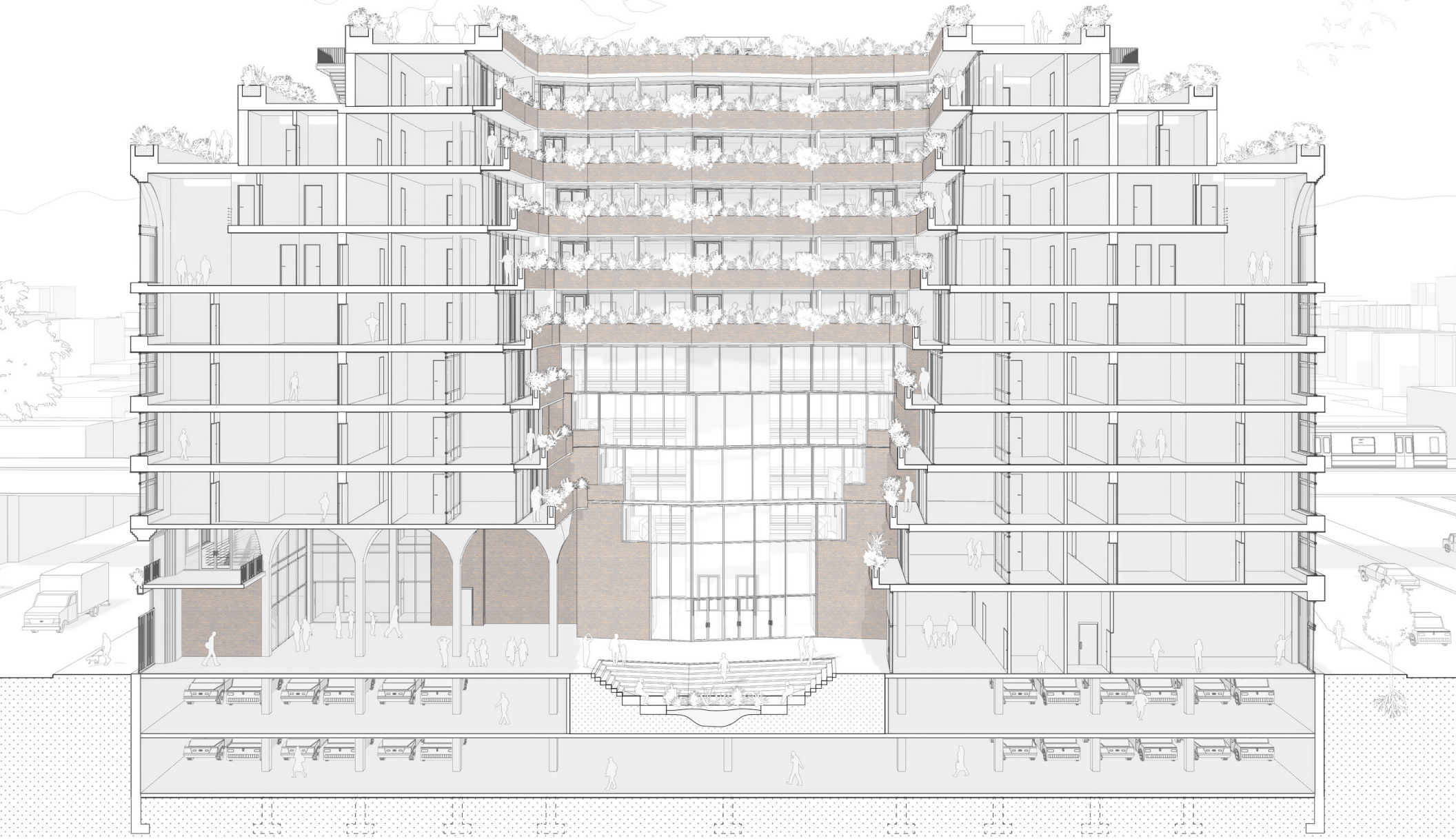
SECTION DETAIL

LEGEND:

1. TWO BEDROOM UNIT
2. STUDIO UNIT
3. ONE BEDROOM UNIT
4. LAUNDRY ROOM
5. OFFICE SPACE
6. TRASH ROOM
7. RECYCLED BRICK
8. PRE-CAST CONCRETE PLANTER
9. GREEN ROOF SYSTEM
10. TIMBER GLAZING SYSTEM
11. 8" CONCRET SLAB
12. INSULATED DROP CEILING
13. 4"INSULATED PAVERS
14. VIBRATION ISOLATION HANGER



TYP. FLOOR PLAN



SECTION PERSPECTIVE





COURTYARD BALCONIES

AMERICAN HISTORY OF IMMIGRATION MUSEUM

LOCATION: BROOKLYN, NY

AREA: 12,500 SQFT

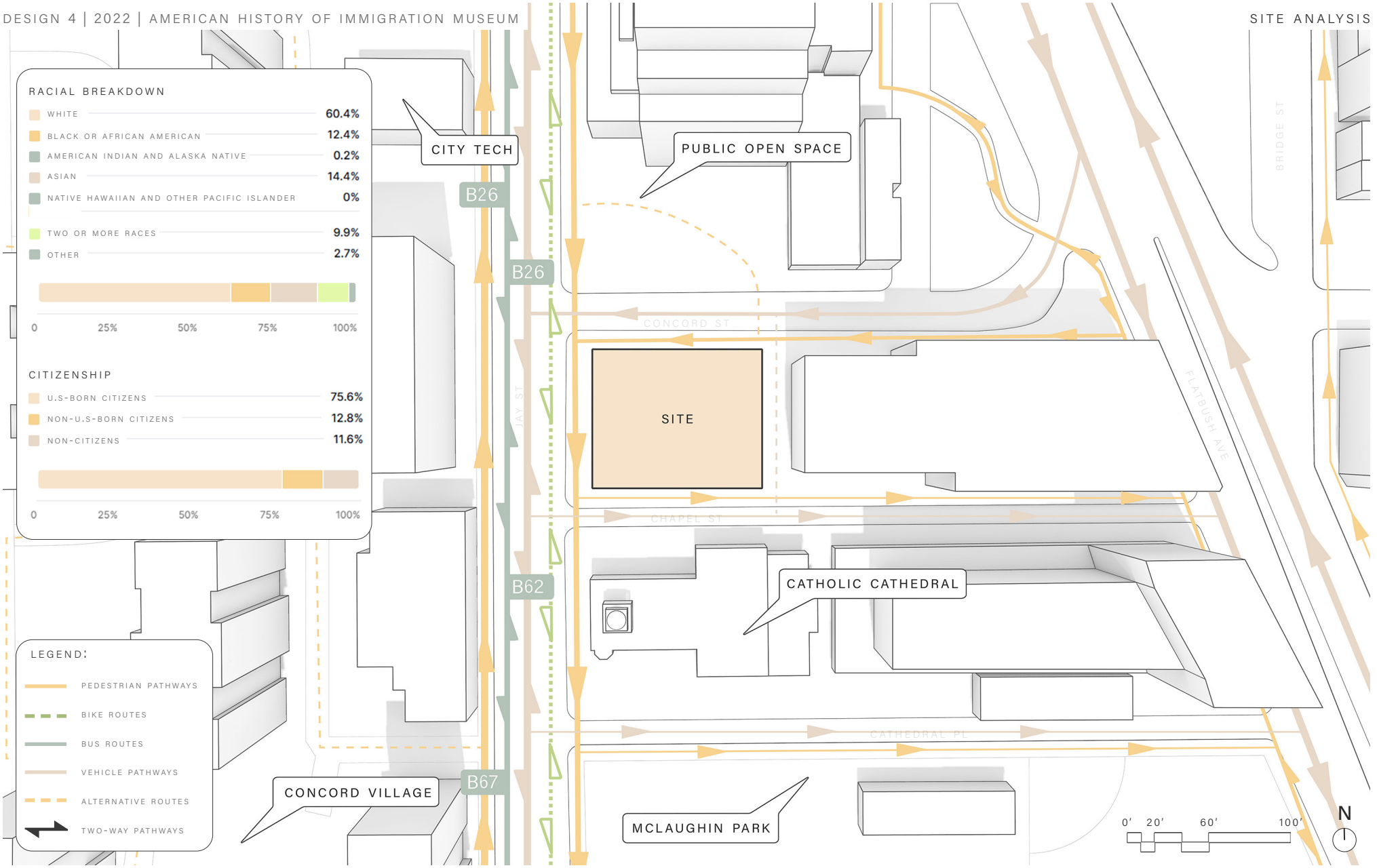
TYPE: MUSUEM

LEVEL: 2ND YEAR

YEAR: 2022

The museum will be exhibiting the history of immigration within America. Visitors are exposed to opportunities to learn about the origins and history of American immigration throughout the exhibition spaces, going through a time of transition. The focus is on capturing the sense of migration as people are circulating the building through an establish hierarchy, moving from the small exhibition to the main exhibit, and finally reaching the cafe' to settle down after their adventure to the top. People from the outside are also able to gain a visual experience of the transition with the use of the translucent concrete panels and seamless glazed facade that display visitors, circulating the museum, inspired by immigrants having to journey and go through a time of transition when moving from one country to America.





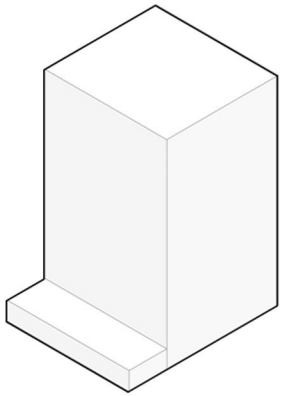
With circulation, the biggest key takeaways are main circulation along Jay St and low traffic along concord and Chapel St, helping us determine us the best form of entry and transparency would be along the west side of the site as Buses and bike routes as well as majoryity of foot traffic happen's along Jay St. Based off this analysis we can also conclude a diverse group of audience with visitors being students, residents from Concord Village, and families visiting Mclaughin Park. Digging in deeper, it's revealed that roughly 40% of Downtown Brooklyn residents are of other races, with almost 25% being citizens outside the U.S, showing a strong representation of immigrants and racial diversity. From this data, we can infer that Downtown Brooklyn has undergone significant changes throughout the years, and it is something the museum can draw inspiration from.

CONCEPT COLLAGE

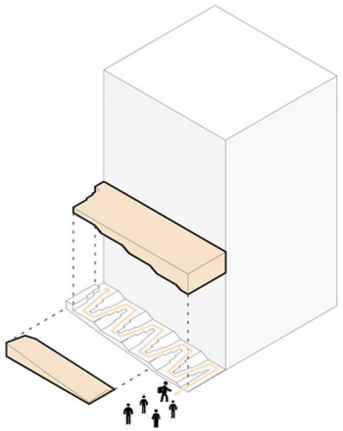


MIGRATION

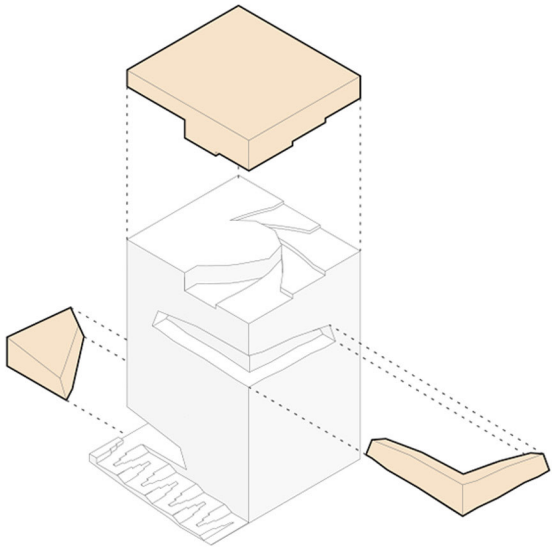
Downtown Brooklyn has changed throughout the years, going from a local commercial neighborhood that consisted of housing projects with historical buildings to a movement of a large commercial center filled with high-rise condominiums. The collage explores the concept of “Migration” through the inspiration of the site (Downtown Brooklyn) as it becomes a new ground for work and living, resulting in people from different backgrounds moving in.



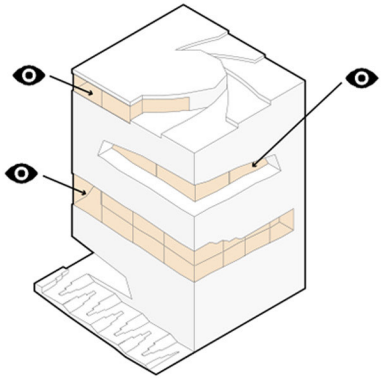
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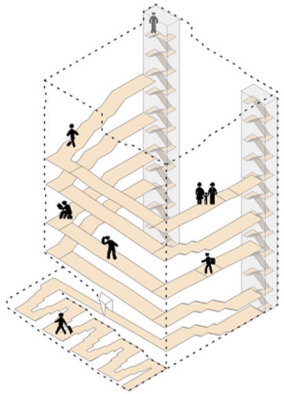
2. MAIN ENTRANCE



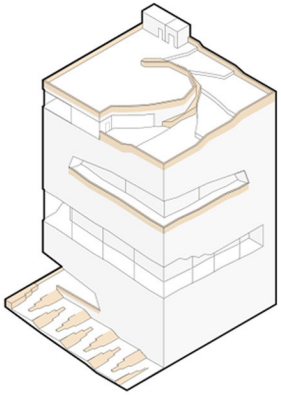
3. OPEN SPACES



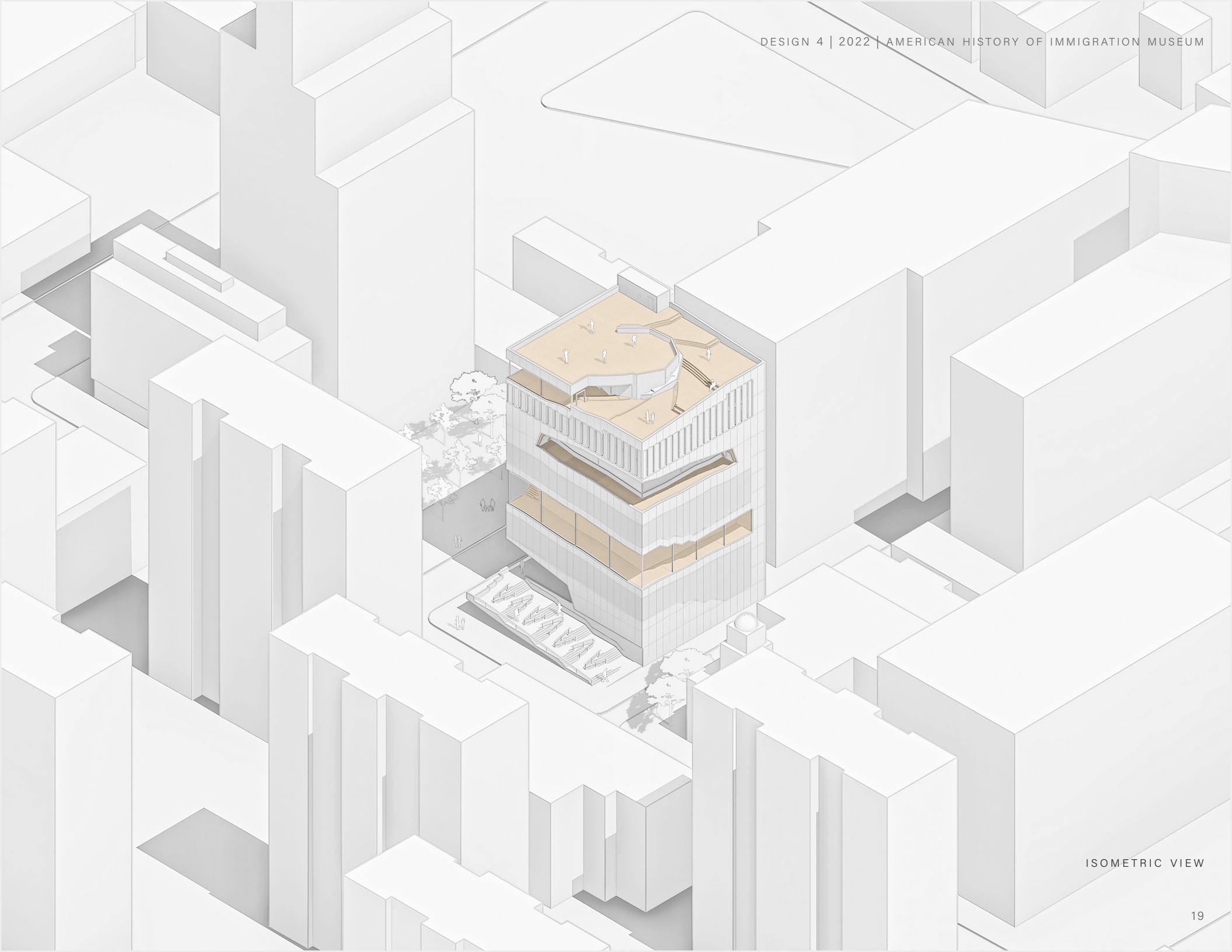
4. TRANSPARENCY



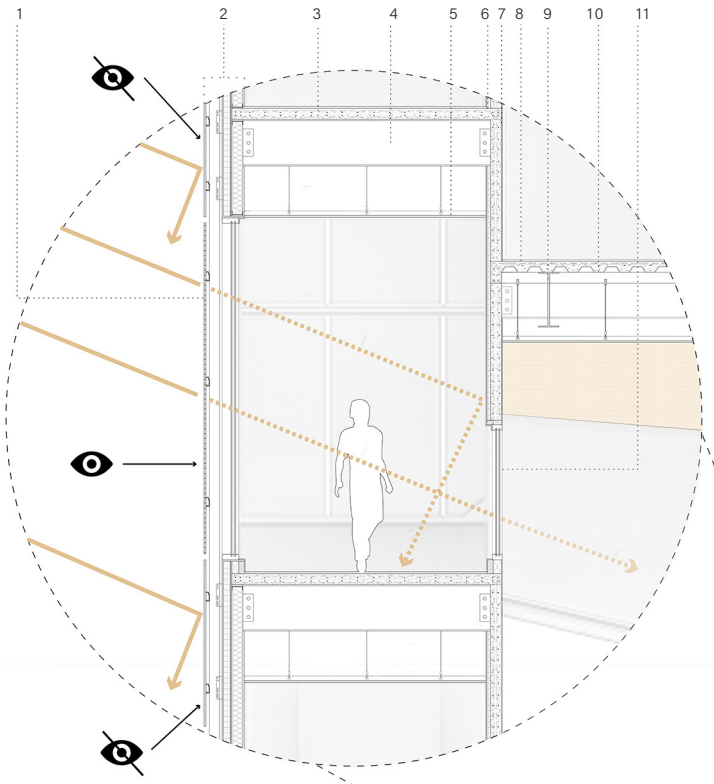
5. CIRCULATION



6. GREEN AREAS



ISOMETRIC VIEW

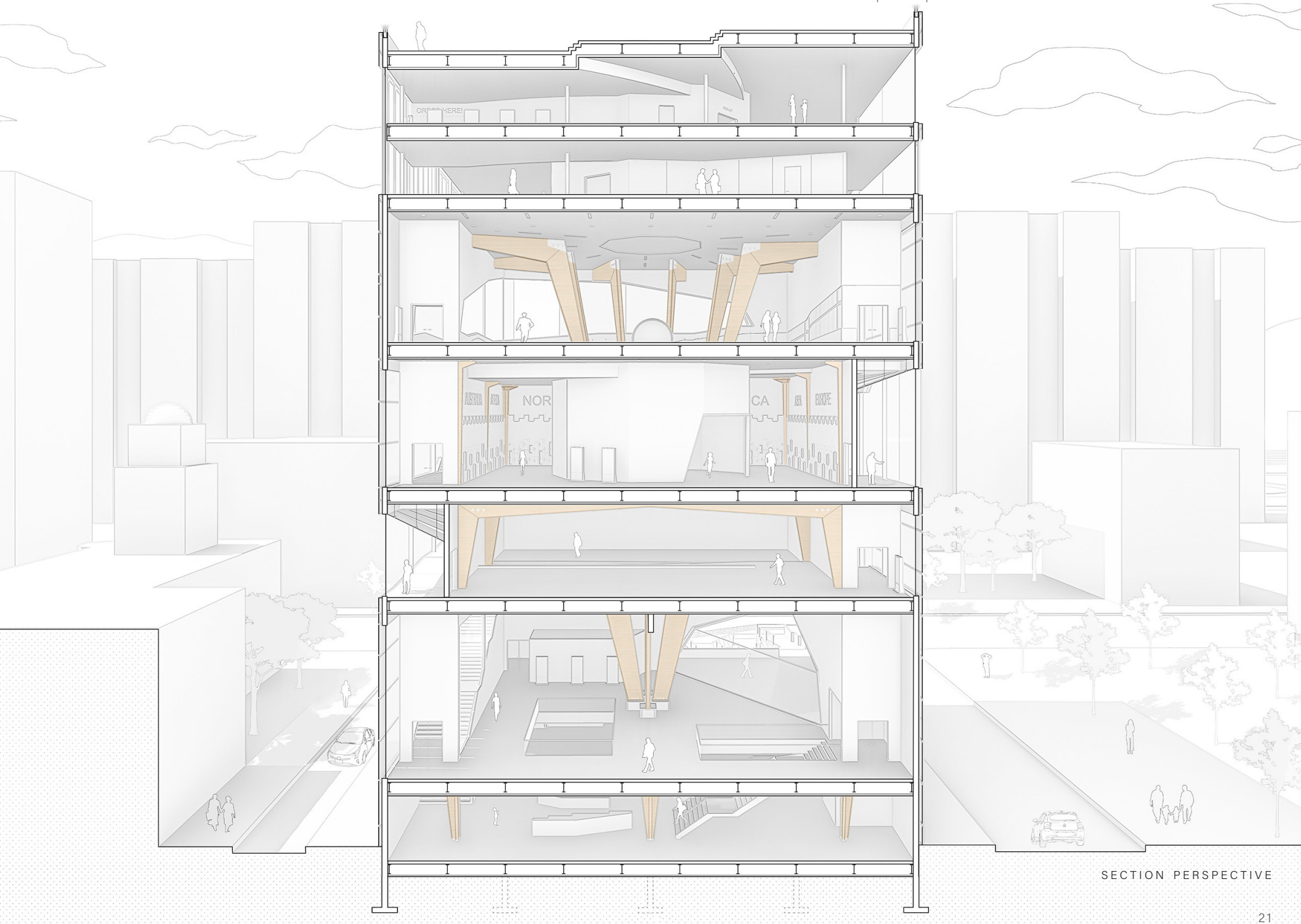


WALL SECTION

LEGEND:

1. TRANSLUCENT CONCRETE PANEL
2. FIBER CEMENT CLADDING SYSTEM
3. 6" CAST-IN-PLACE CONCRETE
4. STEEL BEAM
5. DROP CEILING
6. CONTINUOUS INSULATION
7. 1/2" FIRE-RATED GYPSUM BOARD
8. 3/4" FLOOR FINISH
8. 3/4" FLOOR FINISH
9. STEEL GIRDER
10. 6" COMPOSITE SLAB W/ METAL DECKING
11. INSULATED GLASS UNIT

CROSS-SECTION



SECTION PERSPECTIVE


2022



MAIN EXHIBITION ROOM

SUBMERGING PATHWAYS COMMUNITY CENTER

LOCATION: RED HOOK, NY

AREA: 18,400 SQFT

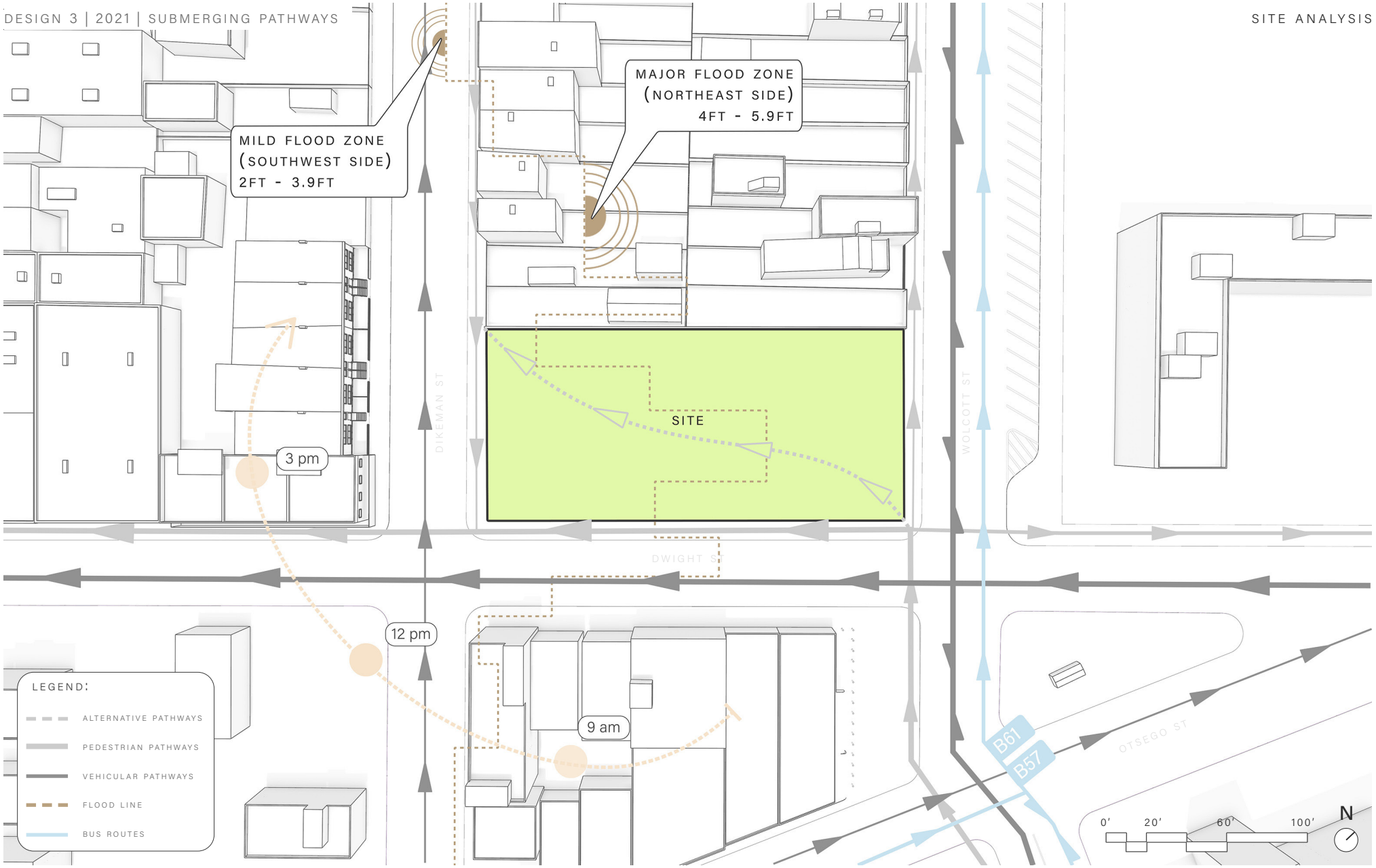
TYPE: COMMUNITY CENTER

LEVEL: 2ND YEAR

YEAR: 2021

With the mission to help spread awareness of sea levels rising, we created a space that reflects the notion of flooding while creating a solution to prevent flooding within the site, due to the location existing in a major flood zone, resulting in the development of extruded curved massing for the design that surrounds visitors and creates pathways to move between the site spaces. The massing also gives a chance to give back to the community with moments of greenery that help collect runoff water, which in turn provides filtered water to the community center from the water filtration system. At this site, people also have the opportunity to learn about the global issue of sea levels rising, where they'll be educated to different methods to prevent flooding within the site's program,s as people are allowed to interact and explore different levels of the site as and walk along the public rain garden, given a chance to also view the mechanical filtration system.





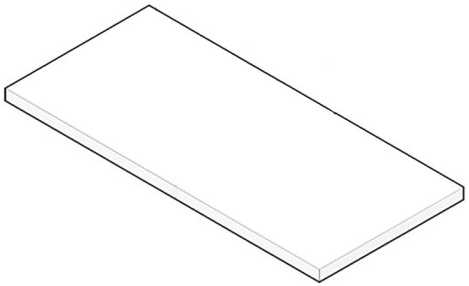
Located in the Brooklyn neighborhood of Red Hook, we find the site sandwiched between Dikeman St and Wolcott St. There is clearly more activity occurring along Wolcott St, where both locals and visitors are circulating. The narrow route of Dikeman St is more suited for locals, which we can infer is likely the circulation pattern within the site. Beyond the circulation, we identify the major and mild flooding zones, emphasizing the importance of raising awareness of rising sea levels, as it clearly has a direct impact on the site. And after determining the direction of the sun, we can appropriately determine the orientation of transparency for the community center and design the site to capture the heavy traffic flow, distributing circulation throughout the community center. Meanwhile, we can strategically design the landscape to prevent flooding based on the flood zones.



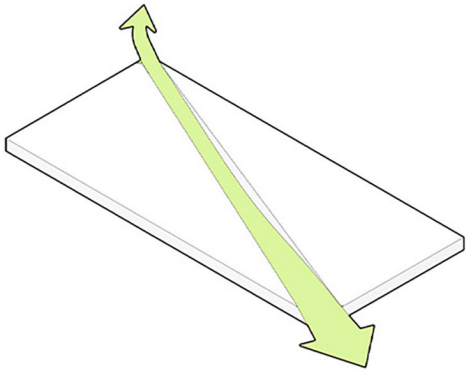
NARRATIVE

With the concept of "flooding", I began developing a concept model that helps capture the feeling of engulfment and the notion of submergence by the rising seas, inspired by Red Hook continuously receiving floods. Using Bristol paper, chipboard, and basswood strips, helped also capture the sense of movement to represent humanity having to relocate due to storm disasters. Through this process, we have the chipboard act as the base, representing the site lot with Bristol paper cut out into strips that gradually peel upwards to reflect characteristics of water submerging land, as the basswood helps keep the model's overall shape. This concept model can help act as a guideline for how we can potentially design the community center and landscape to better physically represent the concept of flooding.

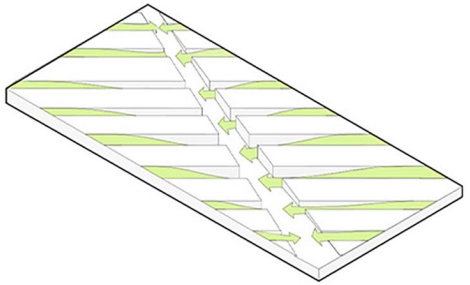
CONCEPT MODEL



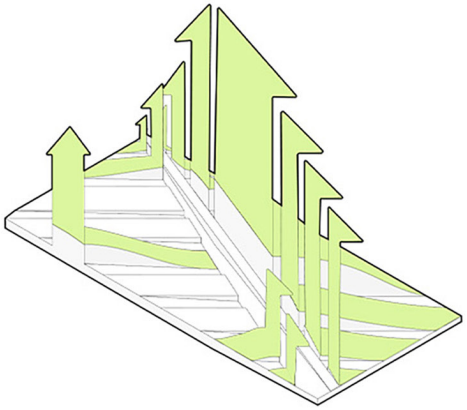
1. BASE



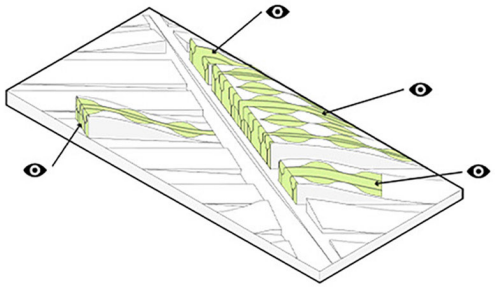
2. DEPLETION



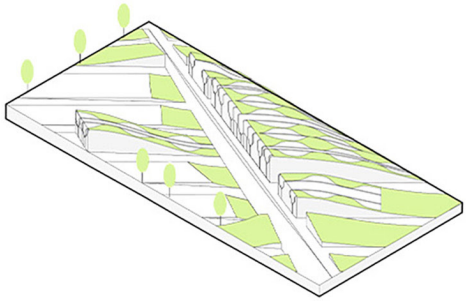
3. PATHWAYS



4. EXTRUSION



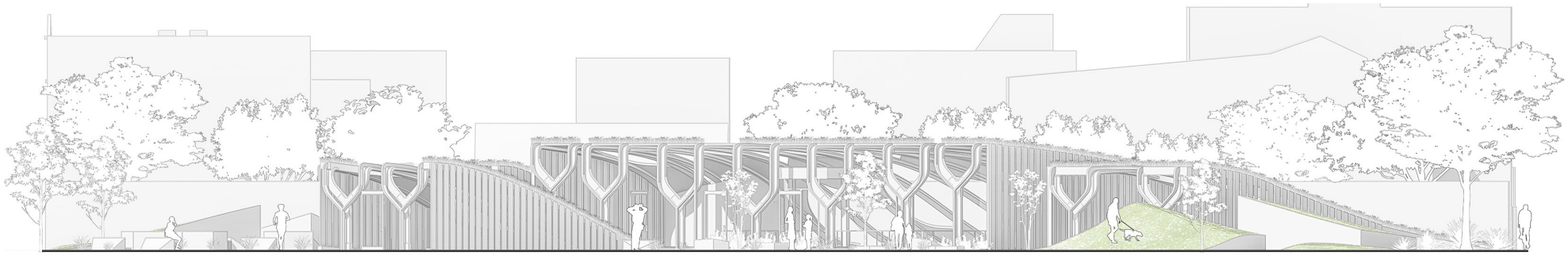
5. TRANSPARENCY



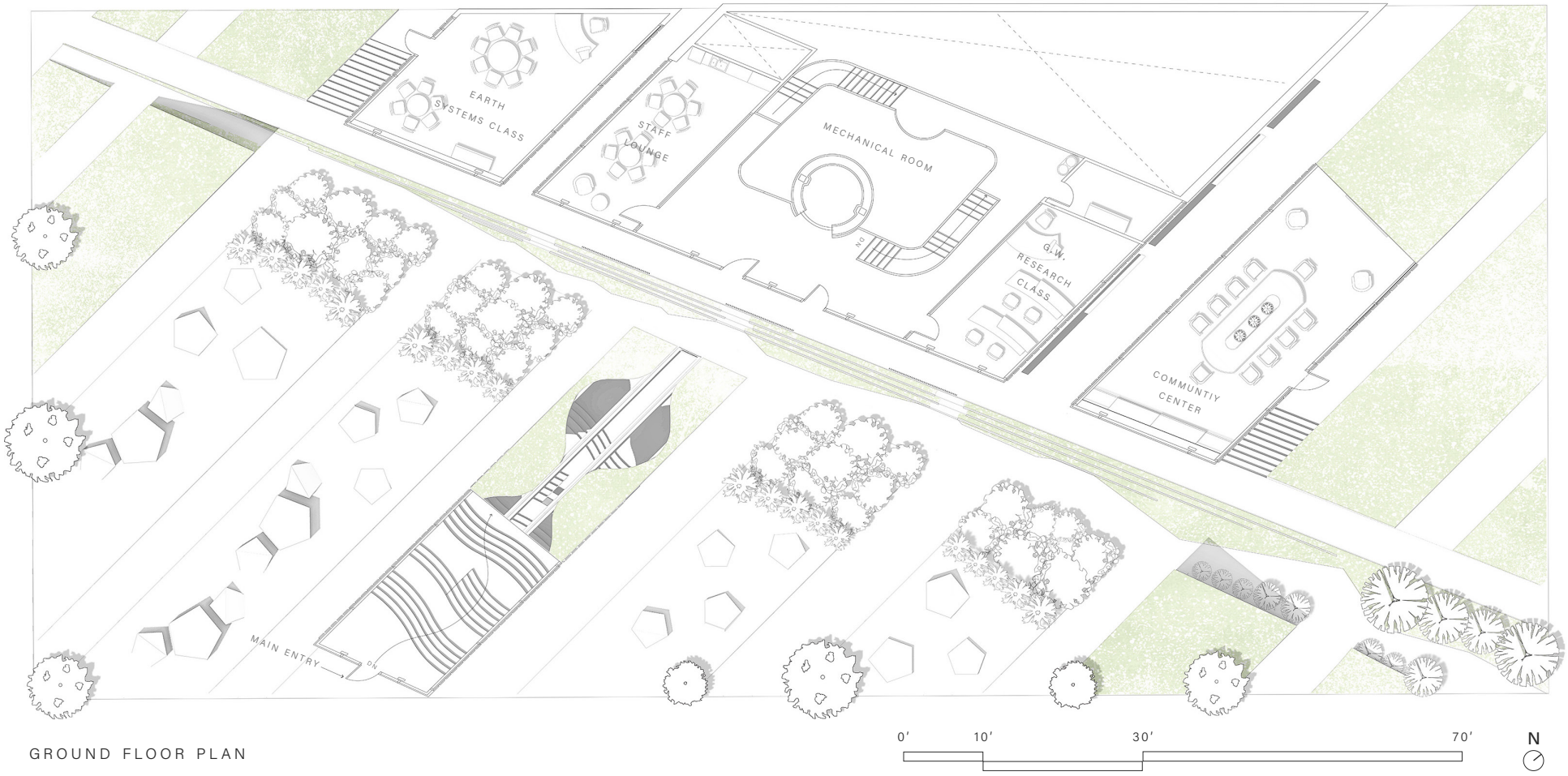
6. GREEN AREAS



ISOMETRIC VIEW



FRONT ELEVATION



GROUND FLOOR PLAN



1. RAIN GARDEN
2. GUTTER SYSTEMS
3. VORTEX FILTER
4. FILTRATION SKID TANK
5. WATER STORAGE TANK
6. PUMPS

SECTION PERSPECTIVE





OVERALL EXTERIOR

CANAL STONE ELEMENTARY

LOCATION: SUNSET PARK, NY

AREA: 47,450 SQFT

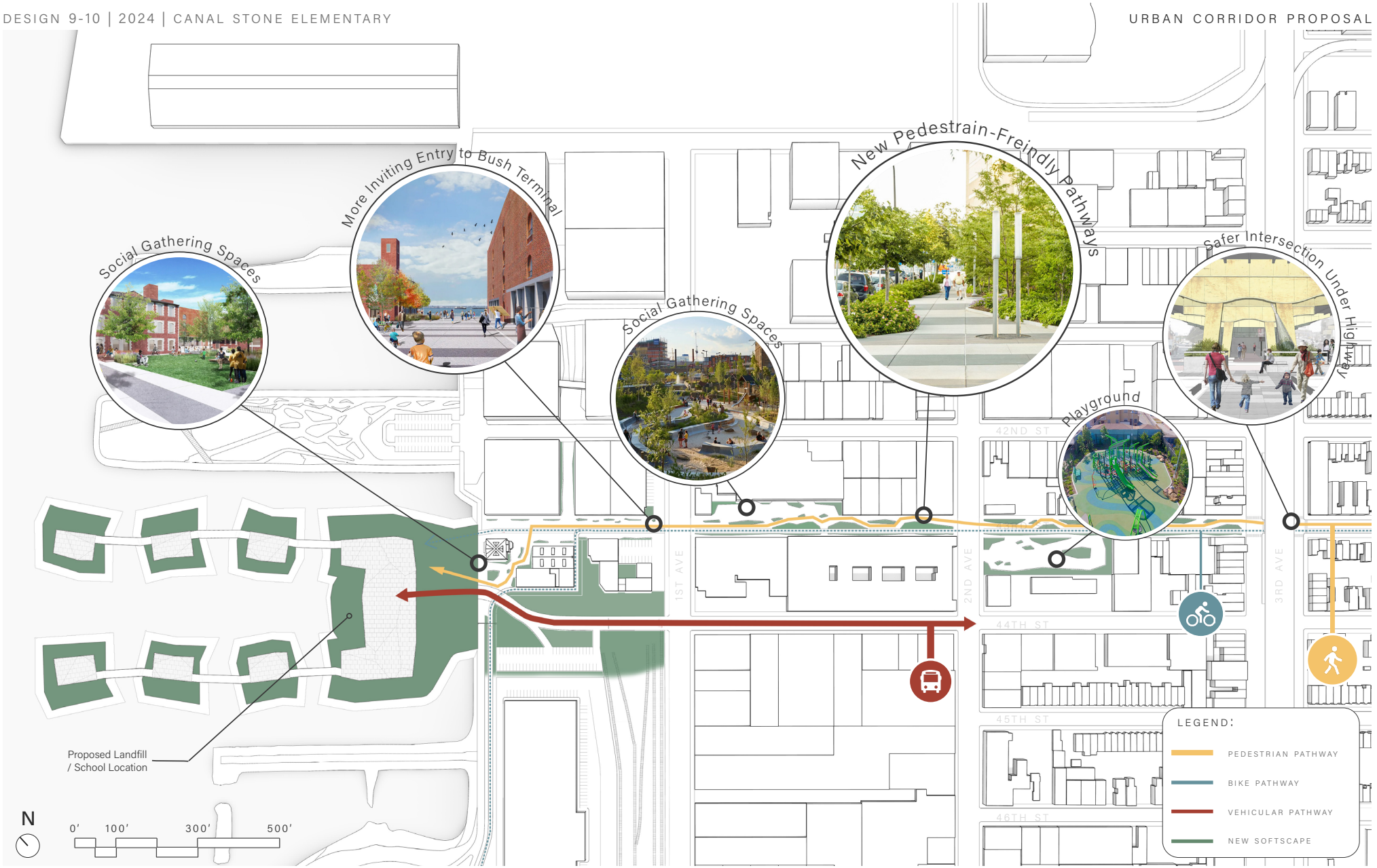
TYPE: INSTITUTIONAL FACILITY

LEVEL: 5TH YEAR

YEAR: 2024

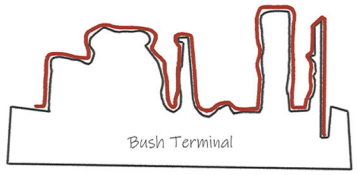
Sunset Park, a diverse NYC neighborhood, struggles with a hidden challenge: immigrant children aged 5-10 lacking access to mental health support due to parental barriers including language differences, demanding work schedules, financial constraints, and cultural perspectives on mental health. With most local children coming from immigrant families, a trauma-informed elementary school could address their mental health needs without placing additional burdens on parents. The school can serve as a haven where children can escape difficult home circumstances, feel safe, and discover themselves. By creating an environment that emphasizes safety, independence, and personal choice, we can help these children adapt, develop their identities, and foster genuine growth and education free from the burdens they experience at home as we build a community. From which we propose a neighborhood corridor that bridge the connection between the community and the school as the design language draw's Inspiration from rip rap stones (parti), resembling a stronghold to reflect safety as we foster growth and education.



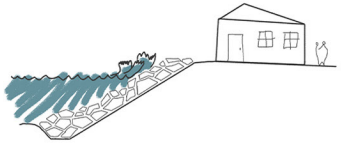


By proposing an urban solution we can resolve the disconnection between the school location within Bush Terminal and the residents of Sunset Park by designing a pedestrian-friendly pathway with multiple public amenities, that'll allow easy entry for parents to walk or bike their children to school while also creating a secondary entry for vehicles to prevent conflict between vehicles and pedestrians. This will allow parents with cars and school buses to drop off students while also providing easy parking for faculty. Developing this, "Neighborhood Corridor" will not only encourage parents to enroll their children in this newly proposed school but also give back the streets to the community of Sunset Park, activating Bush Terminal as a whole, and encouraging future development along 1st & 2nd Ave.

CONCEPT DIAGRAM



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1 - RETREAT

The inspiration of rip rap stones drew from it's existince along Bush Terminal barrier of rip rap stones, seperating the site from the Ocean Bay which can be a great place for the children of Sunset Park to associate as a place for retreat, escaping from their difficult circumstances.

2 - SAFETY

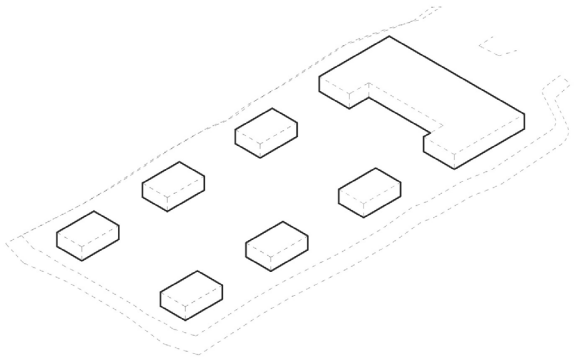
taking a step closer we see that rip rap stones act as a barrier from the ocean bay while also preventing erosion from waves, currents, and ice, maintaining the land soil & neighboring structures. It's these usages we wish to achieve as well by creating a space that helps children feel just as safe and secured as the land guarded by rip rap stones.

3 - GROWTH

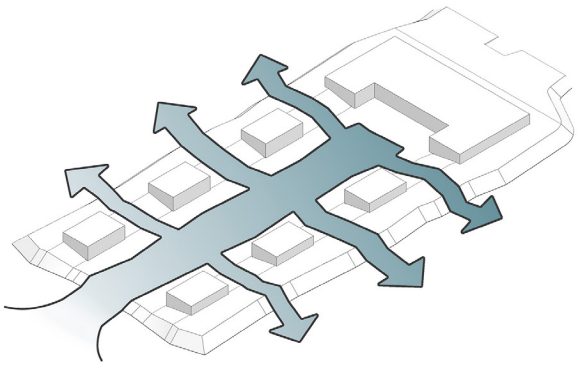
When looking even closer you'll realize that rip rap stones aren't just a form of protection but also a place for growth and preservation that allow's room for vegation to grow along the cracks and moss to colonize the exposed moisture areas, all while being protected by rip rap stones from the currents of the water. It's through these moments of growth and preservation can children feel encouraged move beyond thier trauma and mental health issues that can then be an enviroment for community and expression.

4 - A NURTURING HAVEN

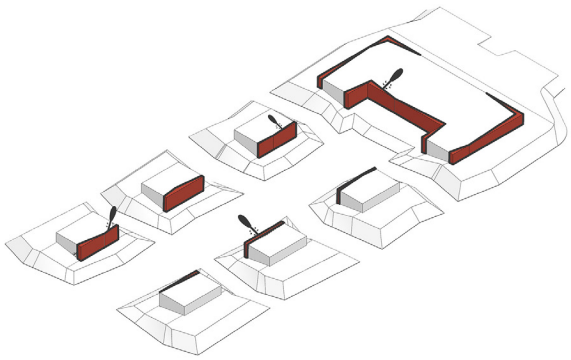
When culminating togethor the different aspects of rip rap stones, from it's existence along the site, to the security and proction these stones provide, to the growth & preservation these stones offer, all togehtor can offer a place that fosters growth and education where the children of sunset park can find prosperity and heal from their difficult circumstances and mental health issues.



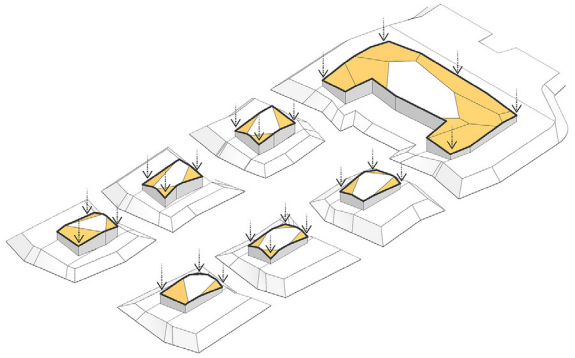
1. PROPOSED SITE



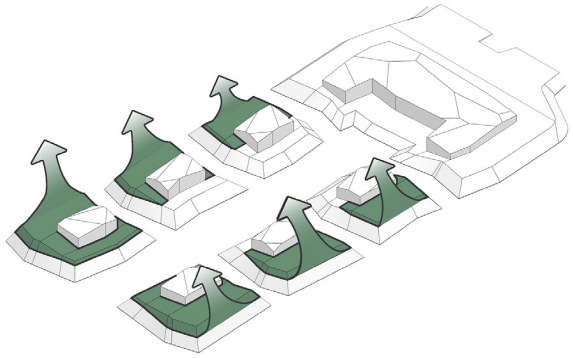
2. INFILTRATION



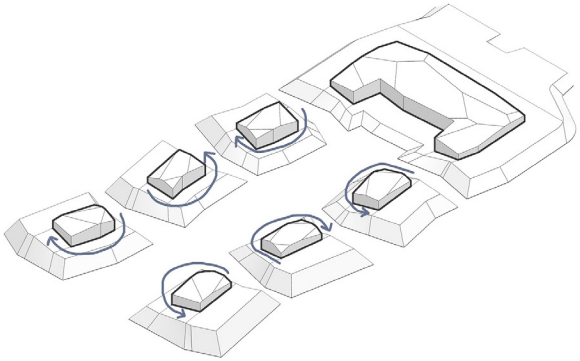
3. CARVE



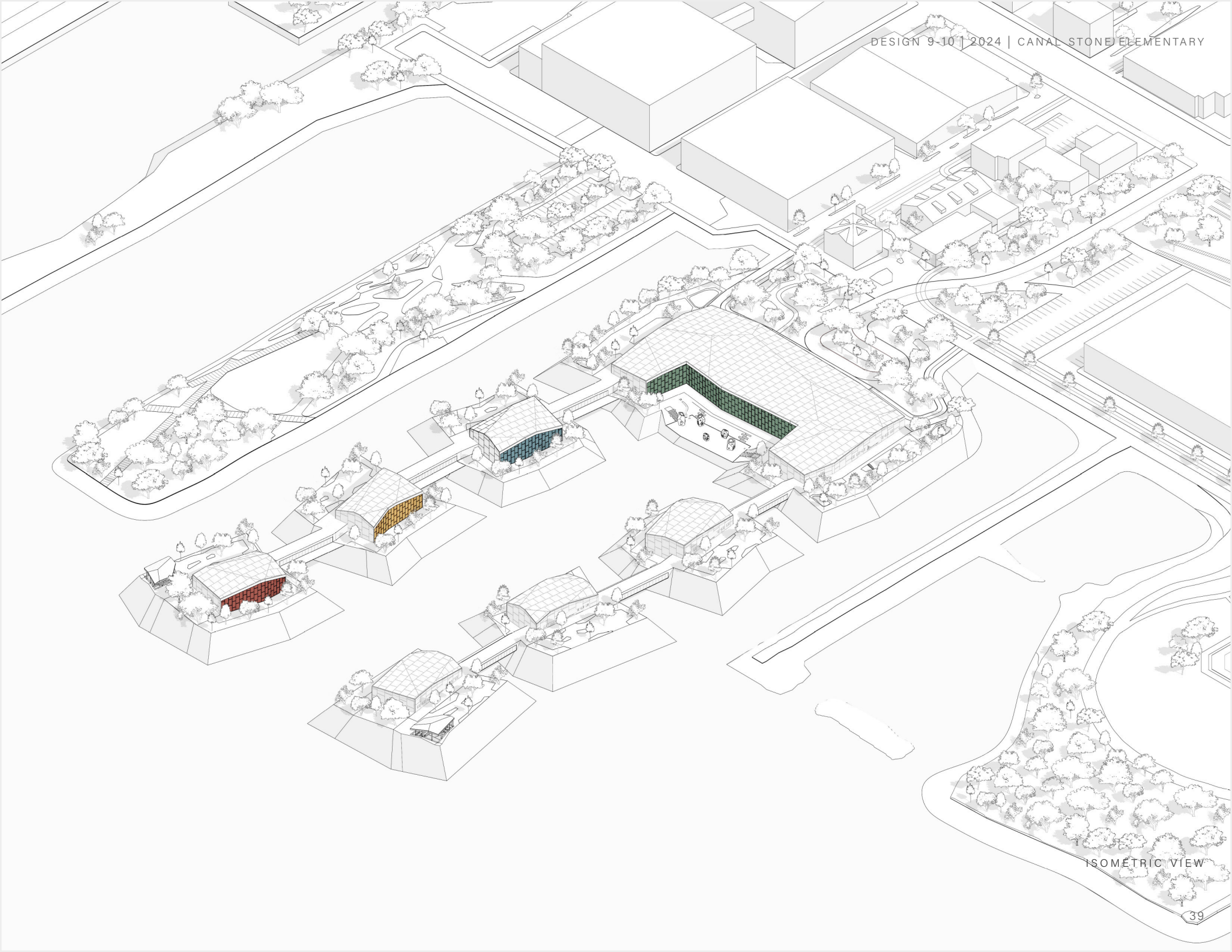
4. FRAGMENTATION



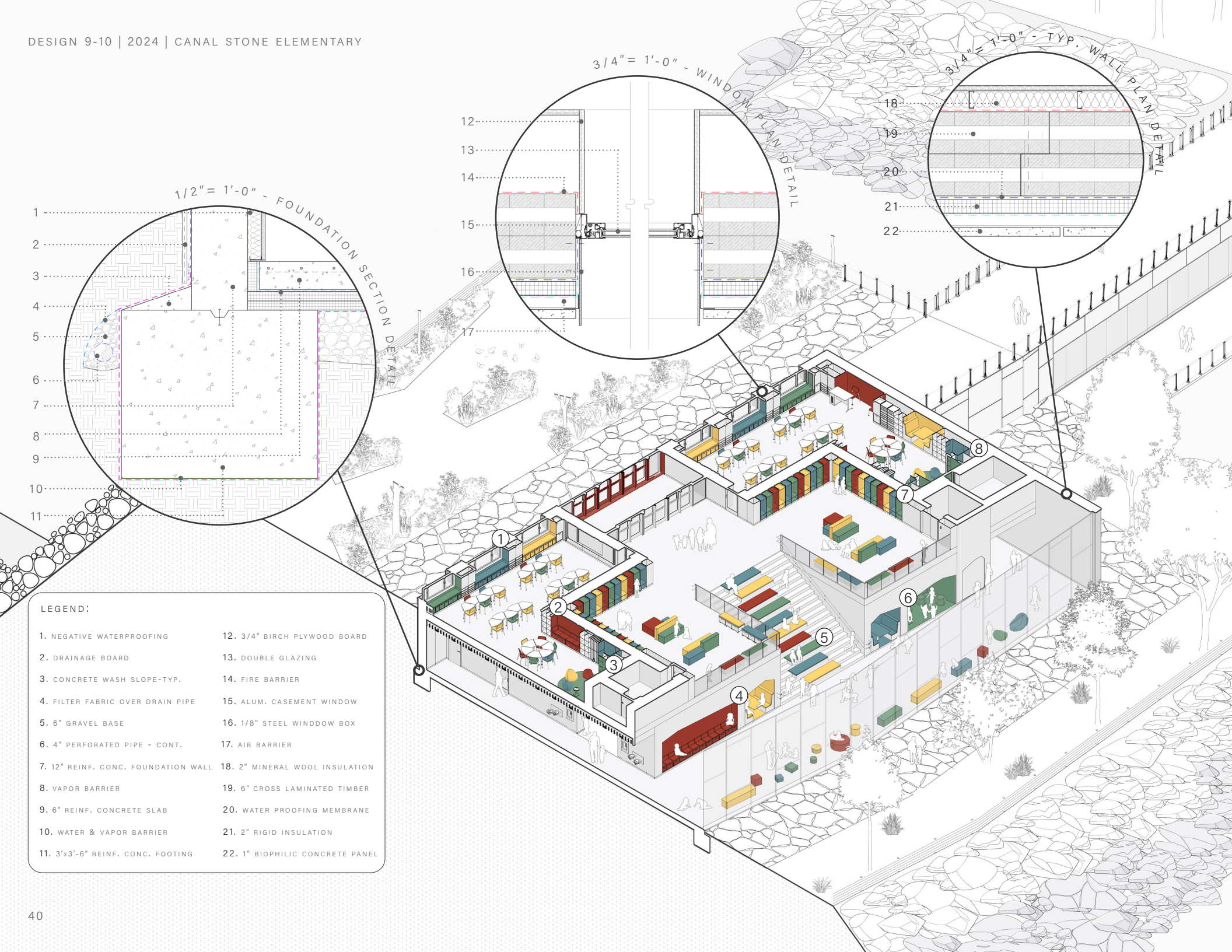
5. RISE



6. ROTATION

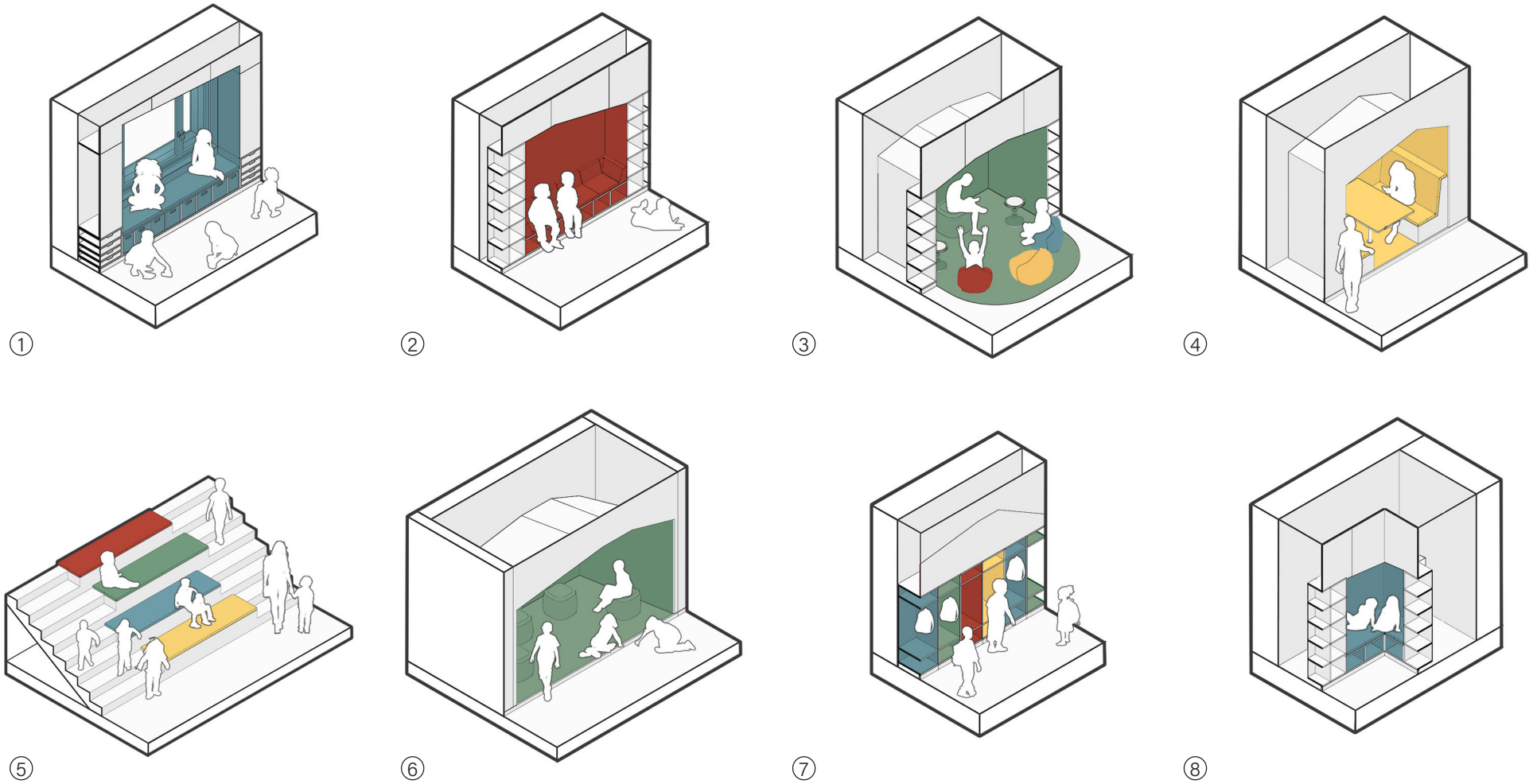


ISOMETRIC VIEW



LEGEND:

1. NEGATIVE WATERPROOFING
2. DRAINAGE BOARD
3. CONCRETE WASH SLOPE-TYP.
4. FILTER FABRIC OVER DRAIN PIPE
5. 6" GRAVEL BASE
6. 4" PERFORATED PIPE - CONT.
7. 12" REINF. CONC. FOUNDATION WALL
8. VAPOR BARRIER
9. 6" REINF. CONCRETE SLAB
10. WATER & VAPOR BARRIER
11. 3'x3'-6" REINF. CONC. FOOTING
12. 3/4" BIRCH PLYWOOD BOARD
13. DOUBLE GLAZING
14. FIRE BARRIER
15. ALUM. CASEMENT WINDOW
16. 1/8" STEEL WINDDOW BOX
17. AIR BARRIER
18. 2" MINERAL WOOL INSULATION
19. 6" CROSS LAMINATED TIMBER
20. WATER PROOFING MEMBRANE
21. 2" RIGID INSULATION
22. 1" BIOPHILIC CONCRETE PANEL



The school is designed to prioritize the children's sense of familiarity through trauma-informed principles, creating an engaging environment that also offers the students choices on how they wanna learn and create intuitively navigable spaces as we foster comfort. After determining the overall design of the site & school, we take a step closer to one of the six buildings/educational hubs (the 7th building being the community hub, containing common spaces such as cafeteria, gymnasium, and auditorium) that contains classrooms and necessary support spaces. Each educational hub features its own sensory garden, offering children an outdoor scenery as well as an interactive experience as children are allowed to explore beyond the classrooms, allowing them to interact with different breakout hollows and niches to create their own learning enviroments to better their educational growth as it also offers social engagment with peers, building a sense of familairty resulting in growth and comfort. Beyond just spatial design, we've brought attention to materiality as well to create a sustainable biophilic structure that'll not only be an efficient building but also be a building that provides security and engagement through its tactile elements, such as a biophilic concrete facade and birch plywood finish.





TYP. CLASSROOM