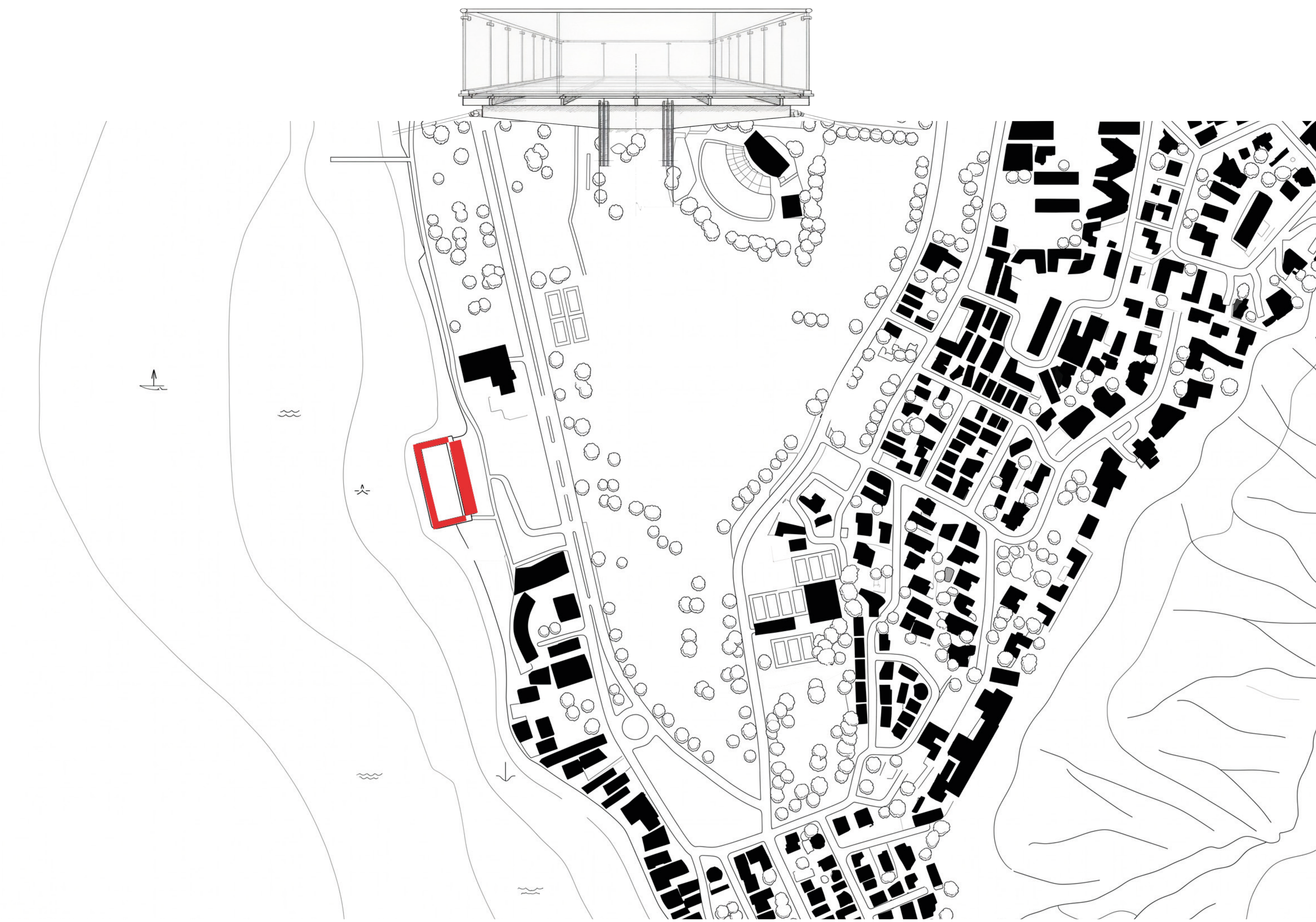


Adaptive Reuse of the Waikiki War Memorial Natatorium in Honolulu, Hawaii



The initial phase consists of studying the Waikiki War Memorial Natatorium historically, structurally, and territorially, in order to understand how a building built as a living war memorial a saltwater basin intended to honour the dead through the ordinary, repeated act of swimming came to be fenced off and forgotten for forty-five years. Listed as a National Treasure yet permitted only to be looked at, never entered, the Natatorium has existed as a ruin separated from the city it was built to serve. The research portion of this work examines the building's layered past, from the indigenous Kawehewehe healing tradition through the 1927 opening to the decades of closure and advocacy that followed, identifying the site not as a relic to be admired from a distance, but as a place whose history was never finished being lived.

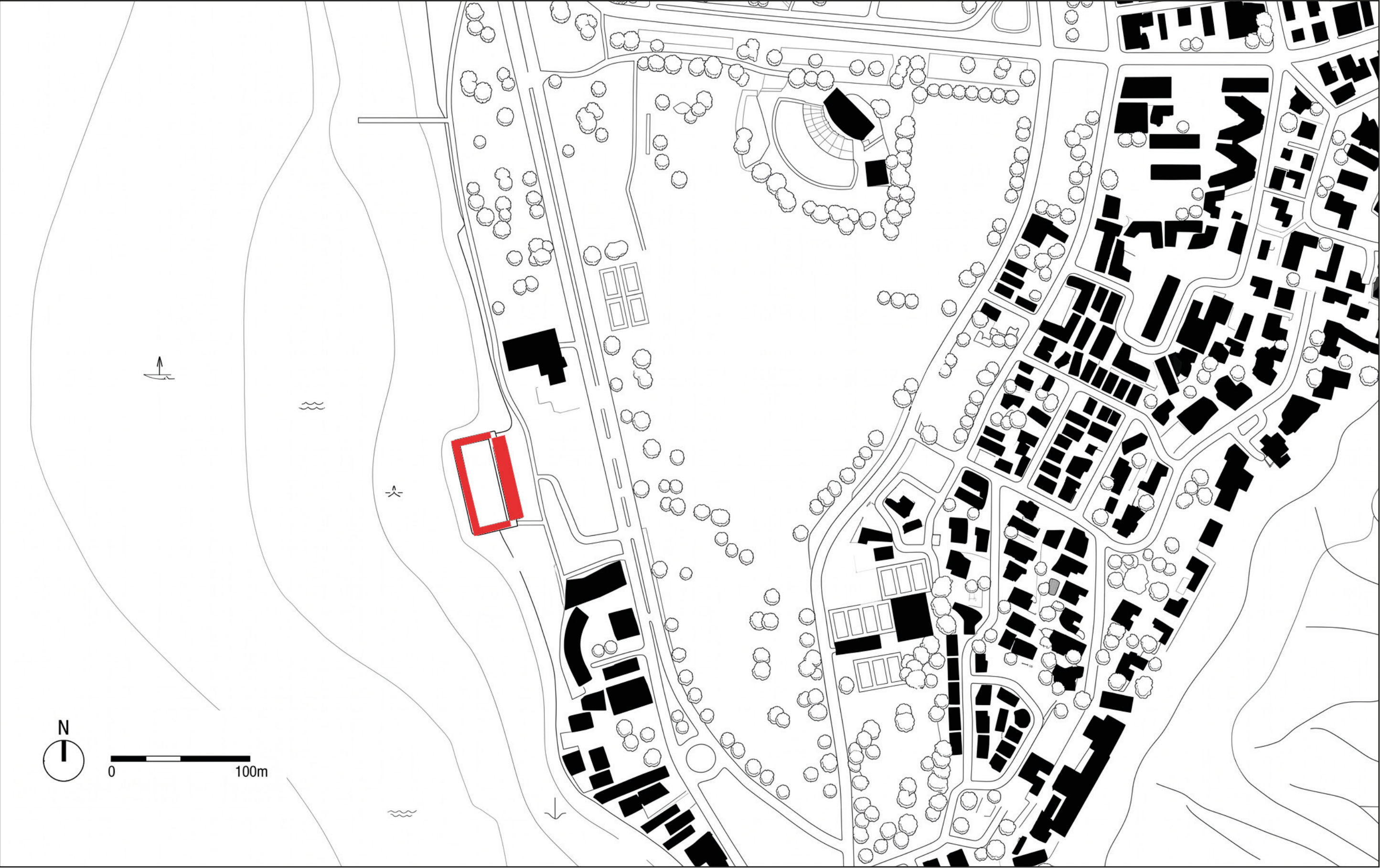
The heart of this project consists of a design framework built on a single conviction: that the way to honour this history is to return the site to use, not to seal it further behind glass and fencing. Every new intervention is therefore designed to meet the original 1927 fabric directly rather than stand apart from it a monument piazza where standing glass boxes inscribed with soldiers' names are arranged in a niho manō triangulation drawn from Hawaiian tradition; an exhibition beneath the historic bleachers where glass art walls and a triangulated floor recreate a mountain ridgeline, narrating the site's full history while remaining visible through to the original concrete standing behind them; and a cantilevered glass walking path that reopens circulation around the entire basin for the first time since 1979, letting the visitor stand directly above the same water the building was always built to hold. By letting new construction touch, rather than avoid, what came before, the final product is a building that earns its place back in the life of the city not as a faithful reconstruction of 1927, but as proof that the surest way to preserve a memorial is to let it be used again.

Project Site Analysis

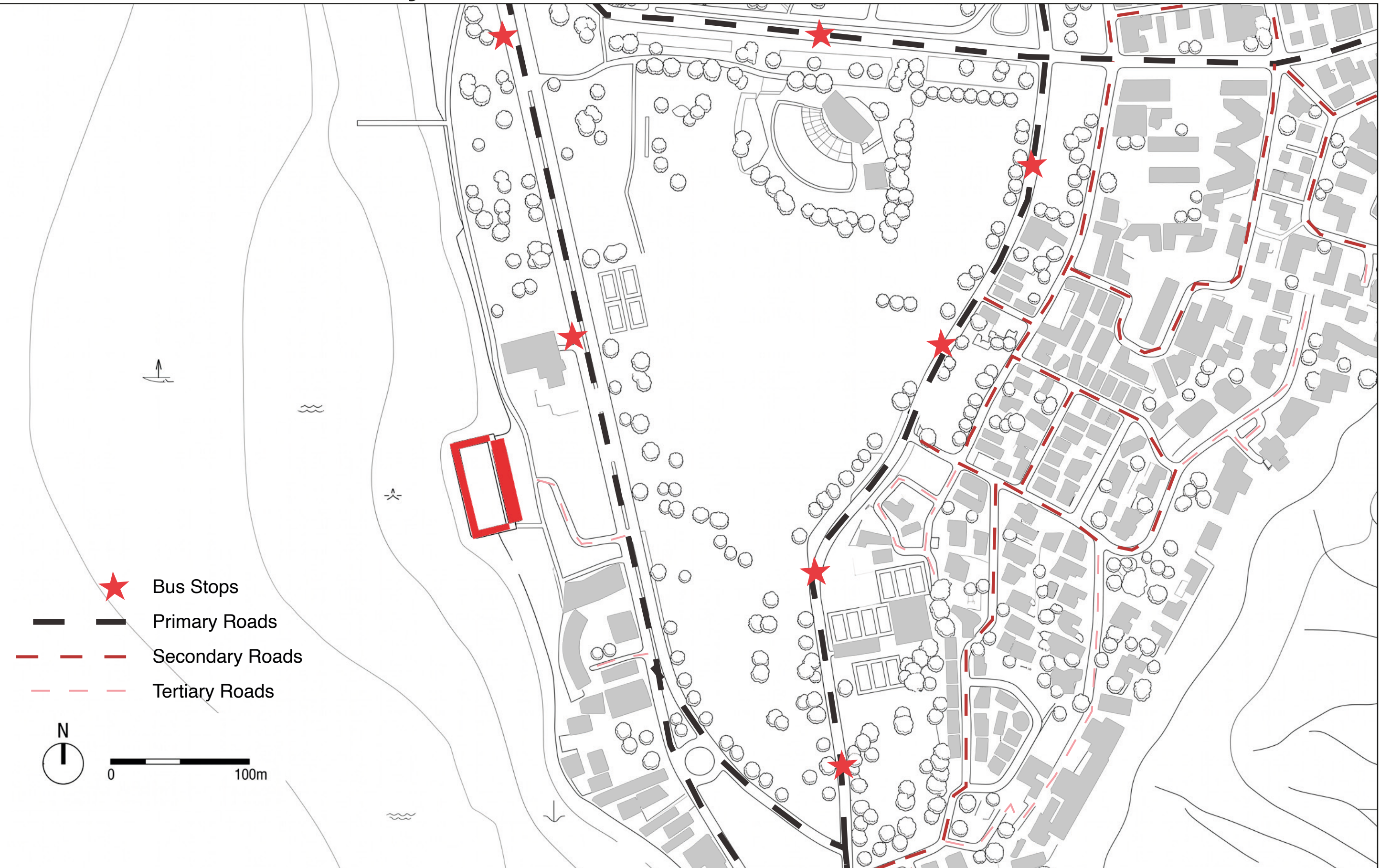
Site Plan



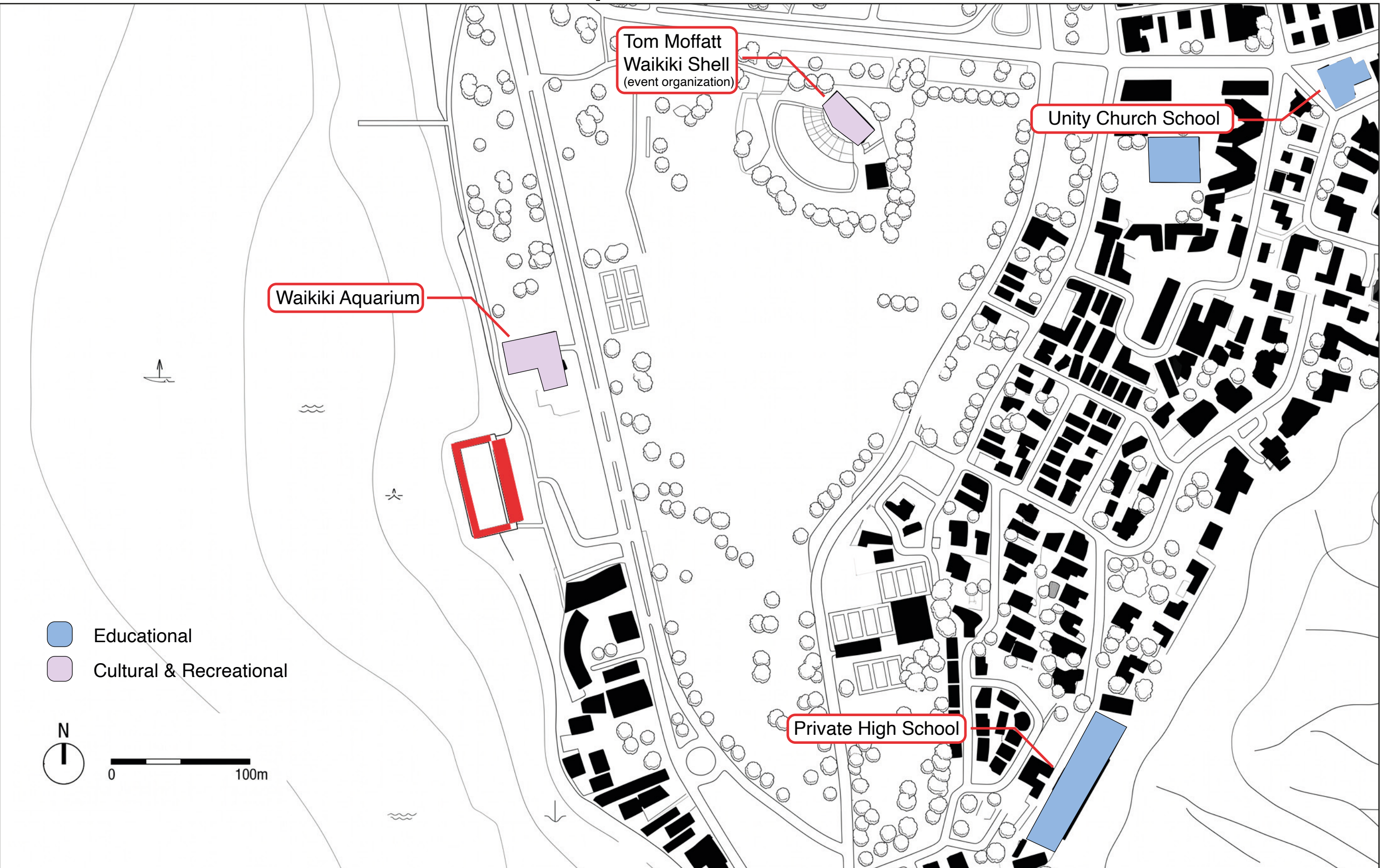
Schwarzplan



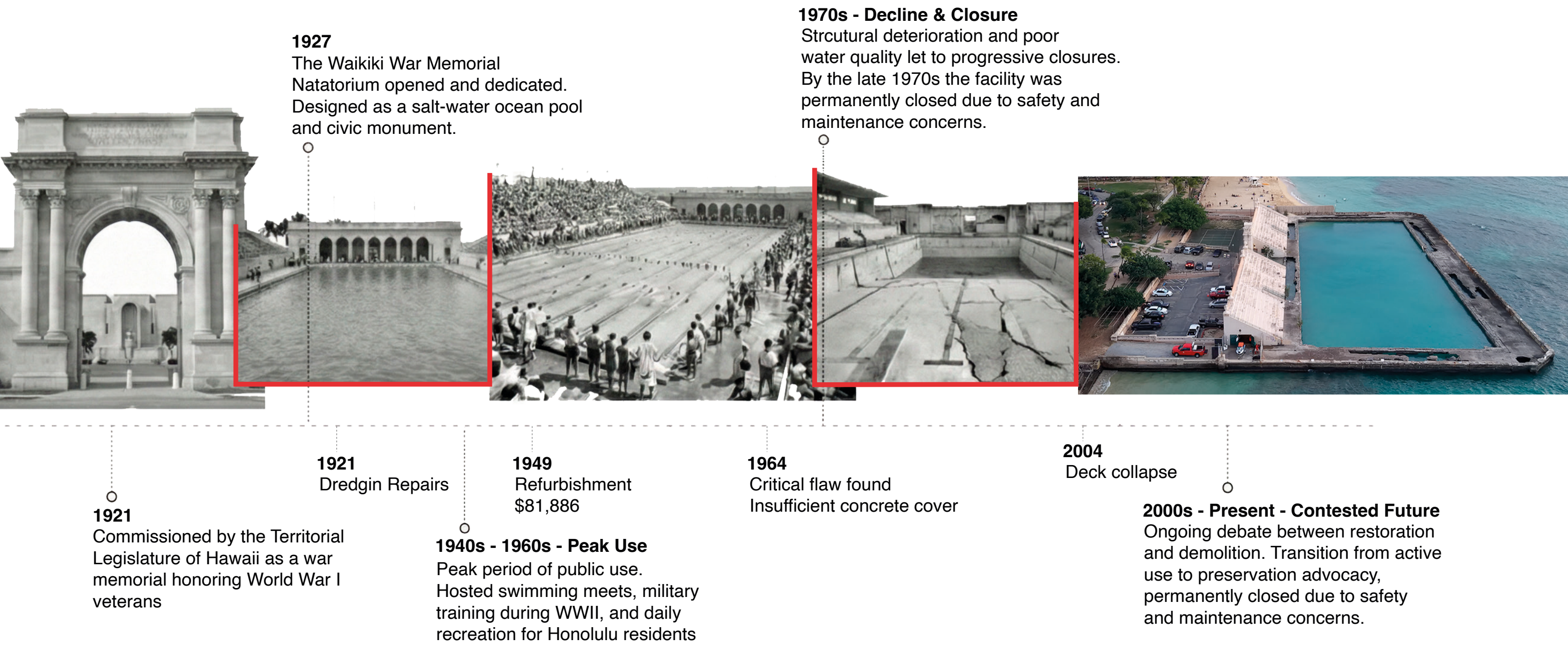
Urban Network Analysis



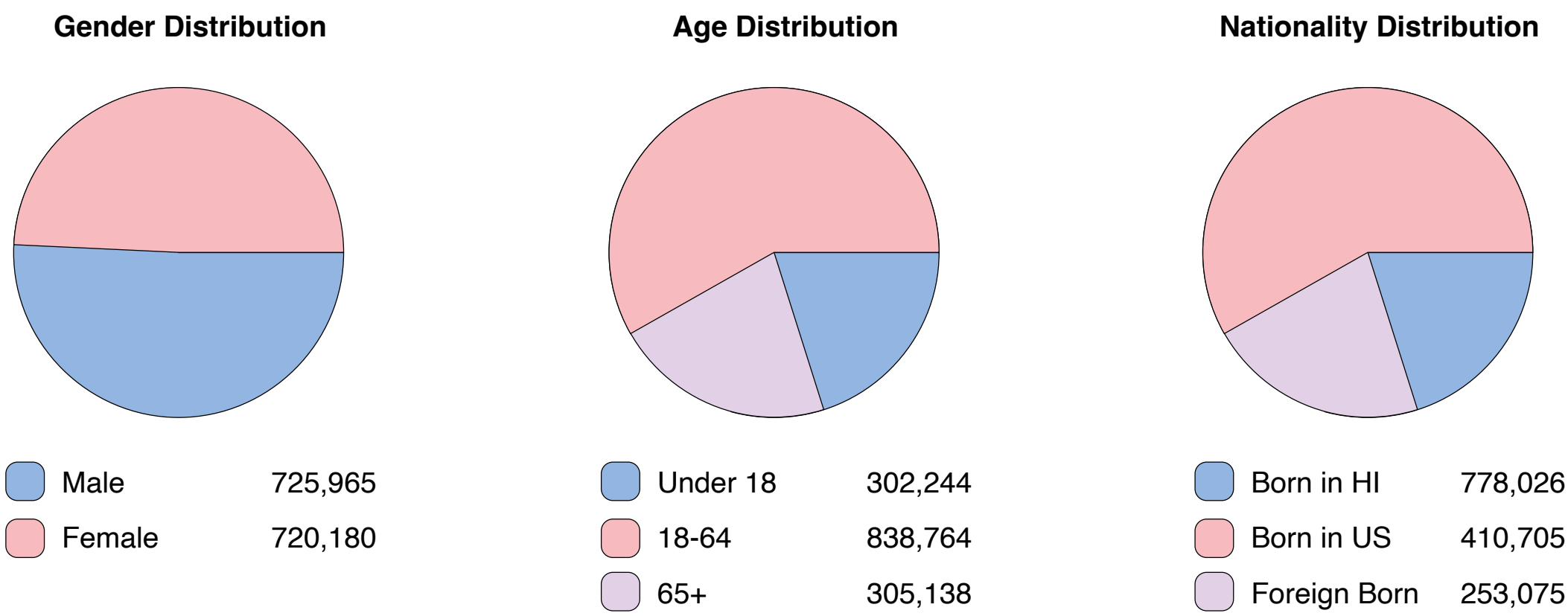
Cultural and Recreational Map



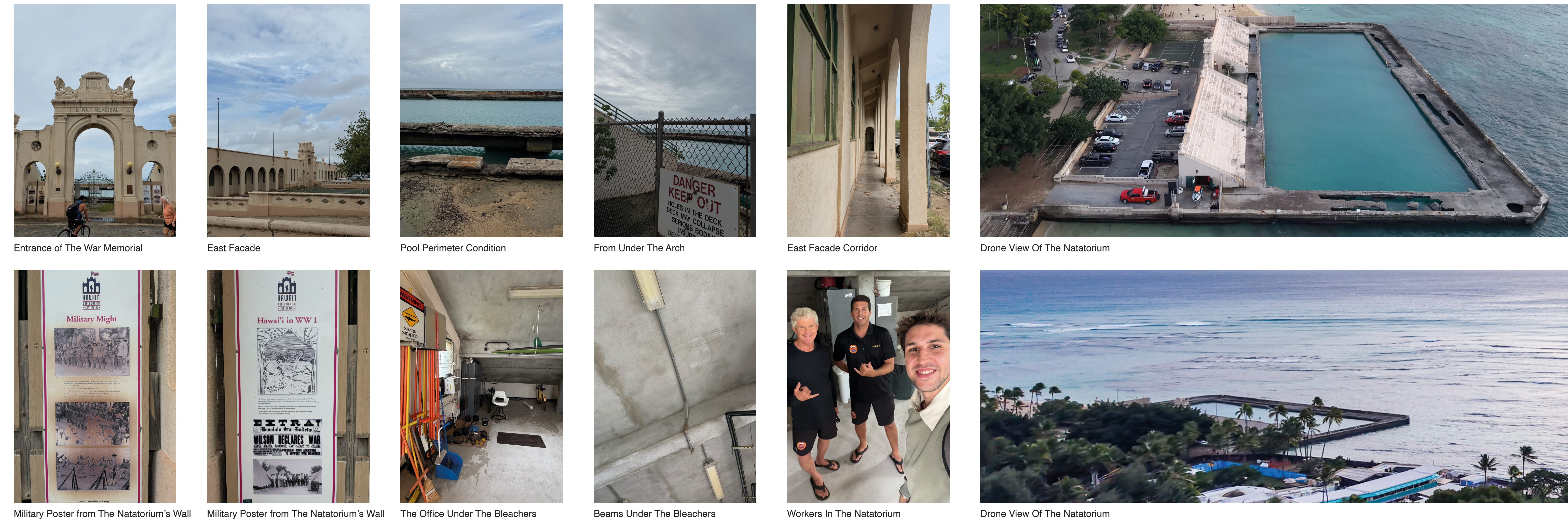
The Waikiki War Memorial Natatorium Historical Process



Demographics



Project Site Investigation



Pool References, Data Analysis and Concept Design

Pool Problems



Bronte's Bath Australia	Storm Damage Ocean Exposure	Water Quality Exchange Failure	Governance Neglect/ Ambiguity	Heritage Tension Modern vs Original	Community As the Rescuer
	2015-2016 Storms Resin Injection + Resurfacing	Wave Over Wall Pumphouse	Waverley Council Plan of Management	Heritage Listing Guided Upgrades	Waverley Residents Drove All Upgrades
Wylie's Bath Australia	1974 Closure Community Rebuilt in 1995	Tidal Valve Zero Chemical	Whylie's Trust 1996 - Community	Greenway Award Sensitive Repair	1000 Petitions Saved The Pool

Strengths of The Site

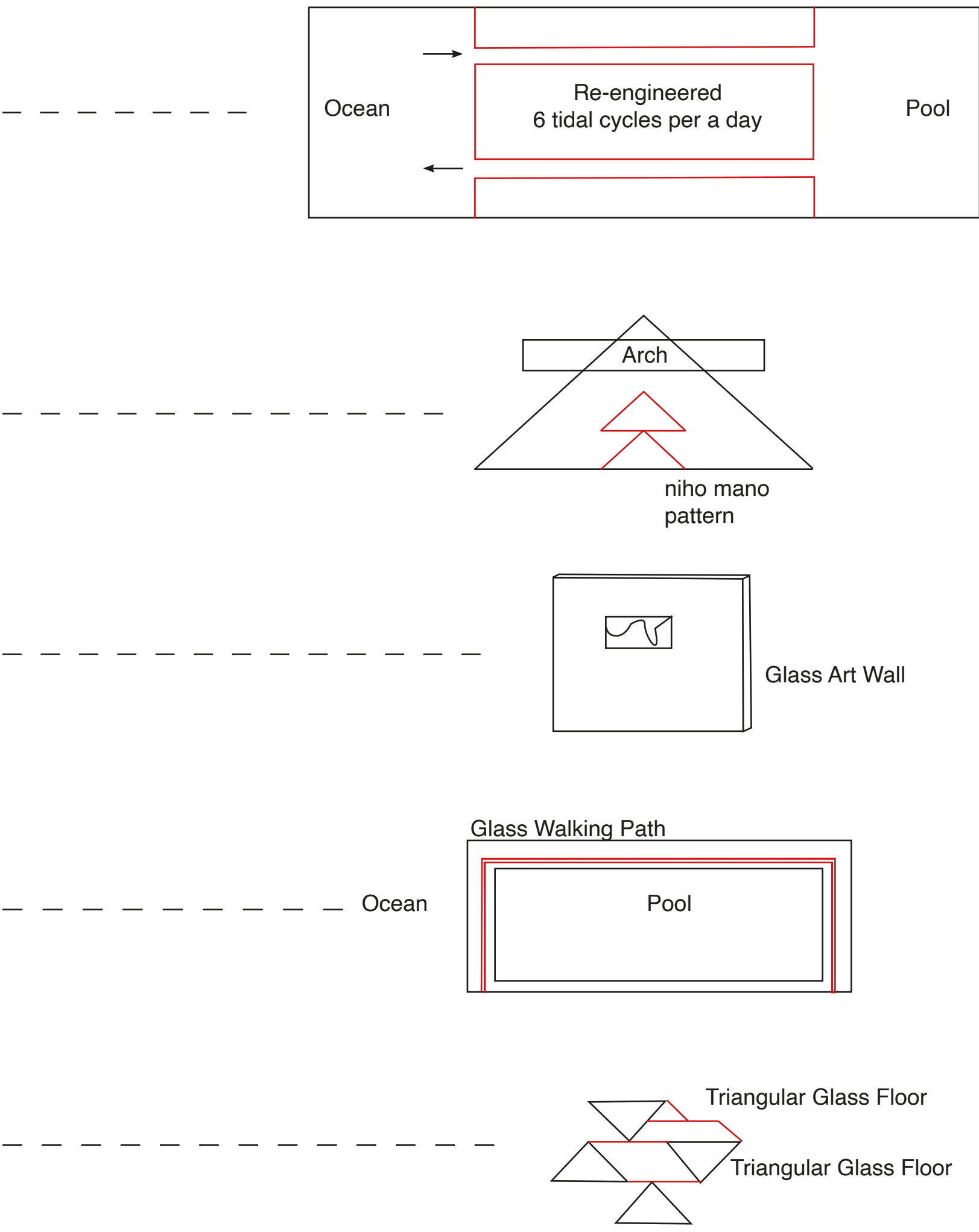
Generic Site No Designation - From Zero	Starting Assets Heritage	Natatorium Site On The National Register
 Pumped, Simulated	Blue Space	 Filled By The Pacific
 Empty Lot - Nothing To Inhabit	Structure	 2,500 Seat Bleacher Intact

Clean Water and Ocean Water Comparison

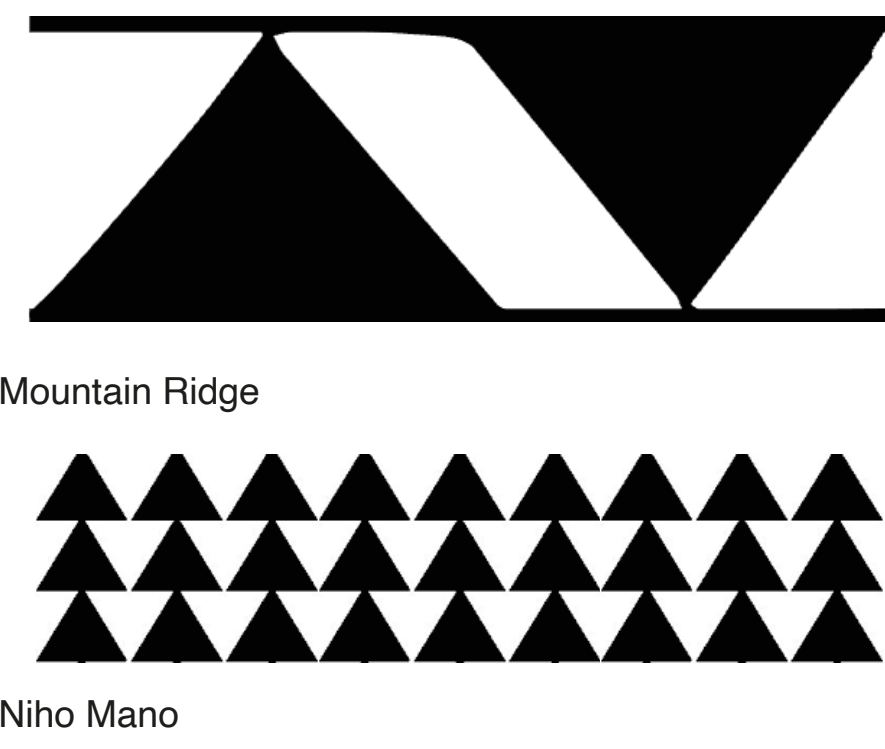
Category	Clean Water	Ocean Water
 Water Clarity + Visibility	Consistently clear controlled visibility year - round	Variable, depends on tide and ocean conditions algae blooms possible
 Maintenance + Infrastructure	Pump, filter, chemical systems required high ongoing cost	Passive tidal exchange no pump or chemicals very low running cost
 Running Cost	High - energy, chemicals staff monitoring, testing required daily	Low - no energy input no chemicals required self-sustaining system
 Health Regulation + Permitting	Straightforward - standard public pool DOH permit well-established process	Complex - caused the 1999 lawsuit. New DOH saltwater rules now exist (2005)
 Storm Resilience	Protected - closed system unaffected by surge or ocean conditions	Vulnerable - surge events can bring debris, seaweed pool closure required
 Swimmer Experience	Predictable, clinical feel disconnected from ocean less authentic to site	Alive, raw, tidal - same water Duke Kahanamoku swam - deeply authentic
 Sustainability	Chlorine / chemicals enter ocean via overflow high energy consumption	Zero chemical discharge zero energy input environmentally aligned

Weakness, Opportunities and Solutions

Weakness	Opportunity	Design Decision
Water exchange failure undersized 1927 openings	Re-engineered exchange basin reopens	Two enlarged openings, calibrated for six tidal cycles per day
Visual barrier fenced wall blocks city-ocean view	Monument piazza civic threshold restored	Glass boxes 2.5m tall, 200mm thick, arranged in niho manō triangulation, no gate or enclosure at street edge
Stabilized but unused bleacher no programme inside	Exhibition galleries glass walls inside original fabric	2m high, 5cm thick glass art walls 1.7m triangle floor units in mountain ridgeline pattern
Failed perimeter deck unrecoverable, condemned	Glass walking path circulation and view restored together	50mm laminated glass, 7m wide, 1m centred retaining wall, 1.3m floor slab,
Indigenous disconnection Kawehewehe not acknowledged	Indigenous reconnection layered into the exhibition narrative	Niho manō geometry at piazza, mountain ridgeline at exhibition floor and walls, both drawn from Hawaiian kapa tradition



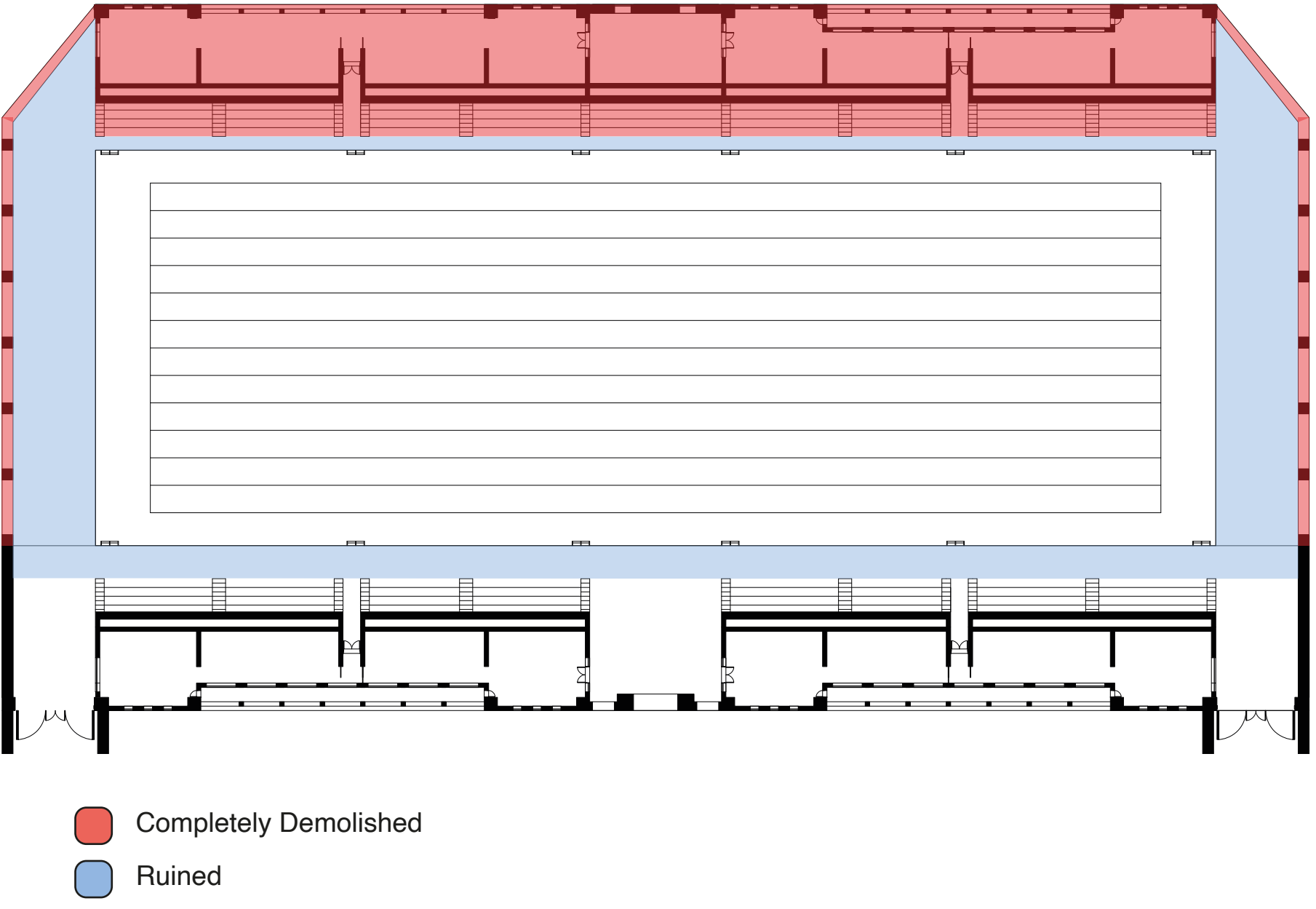
Hawaii Traditional Patterns



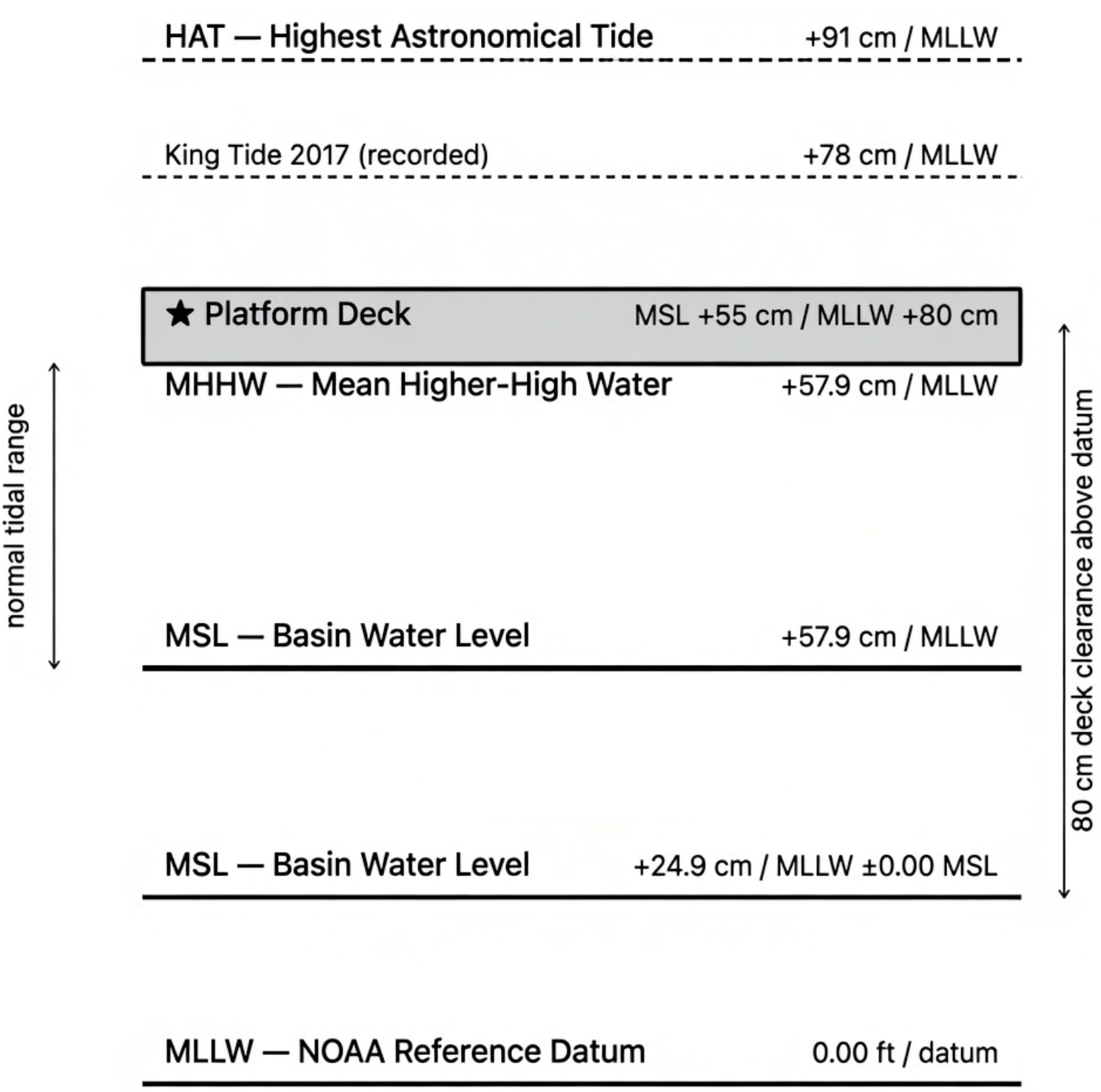
The pattern is a mountain. In Hawaiian cosmology the mountains are places of seclusion, the uplands where the deities dwell, sought by few beyond the kahuna, who left the shore to reach them. Carried into this work, the motif holds the distance of the island home, and holds us to it: to remain true and uncompromising in our culture and our craft.

The stacked triangles form a spear. In ancient Hawai'i the spear carried both life and death: life, because it was the tool of the hunt on land and in the sea, the means by which food was won; death, because it was also a weapon, and warfare was woven into tribal life. We keep the motif for that doubleness. The pork and fish we sell are the life side of the spear, sustenance drawn from the same act the symbol remembers.

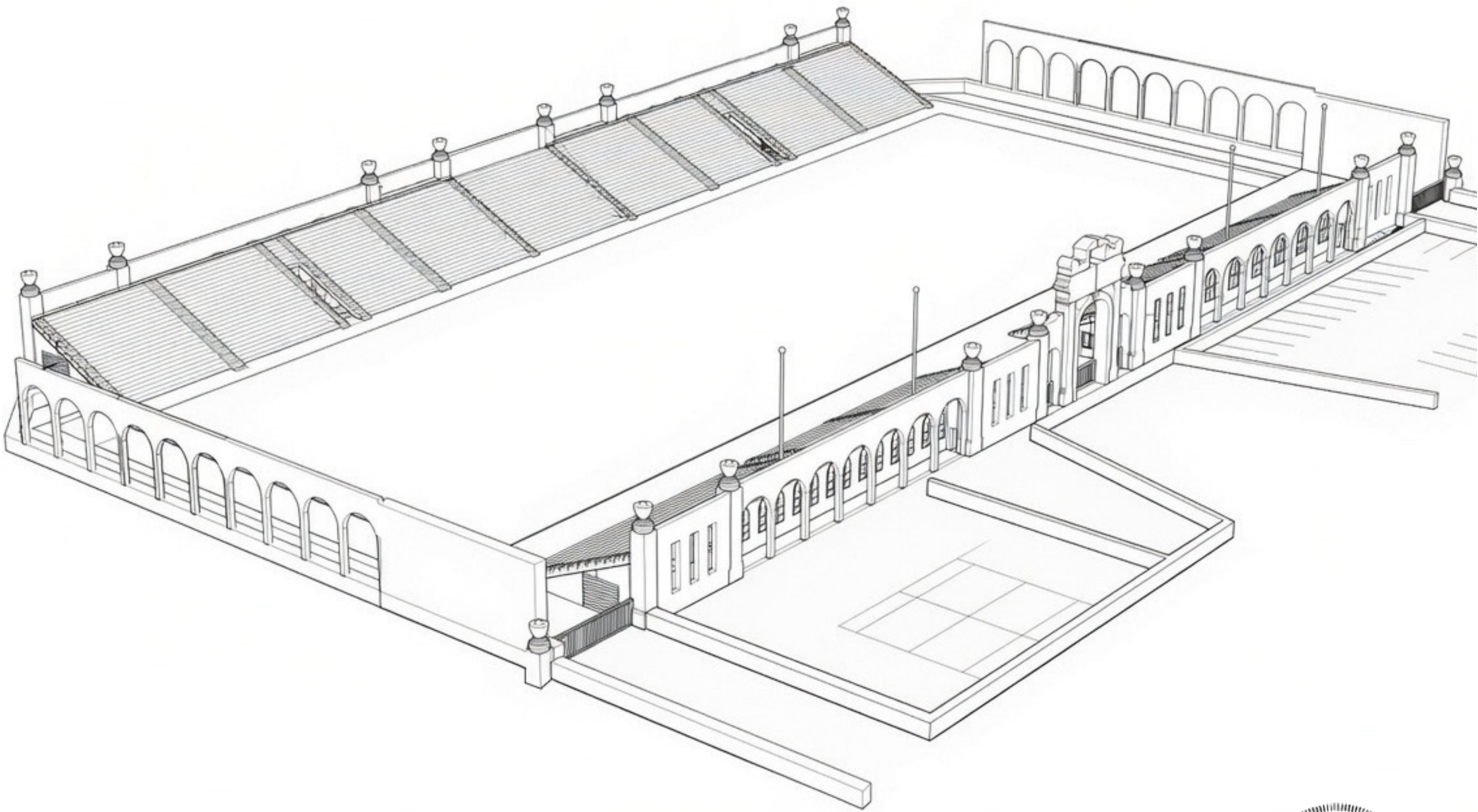
Project Site Evolution



Hawaii Sea Water Level Data Analysis

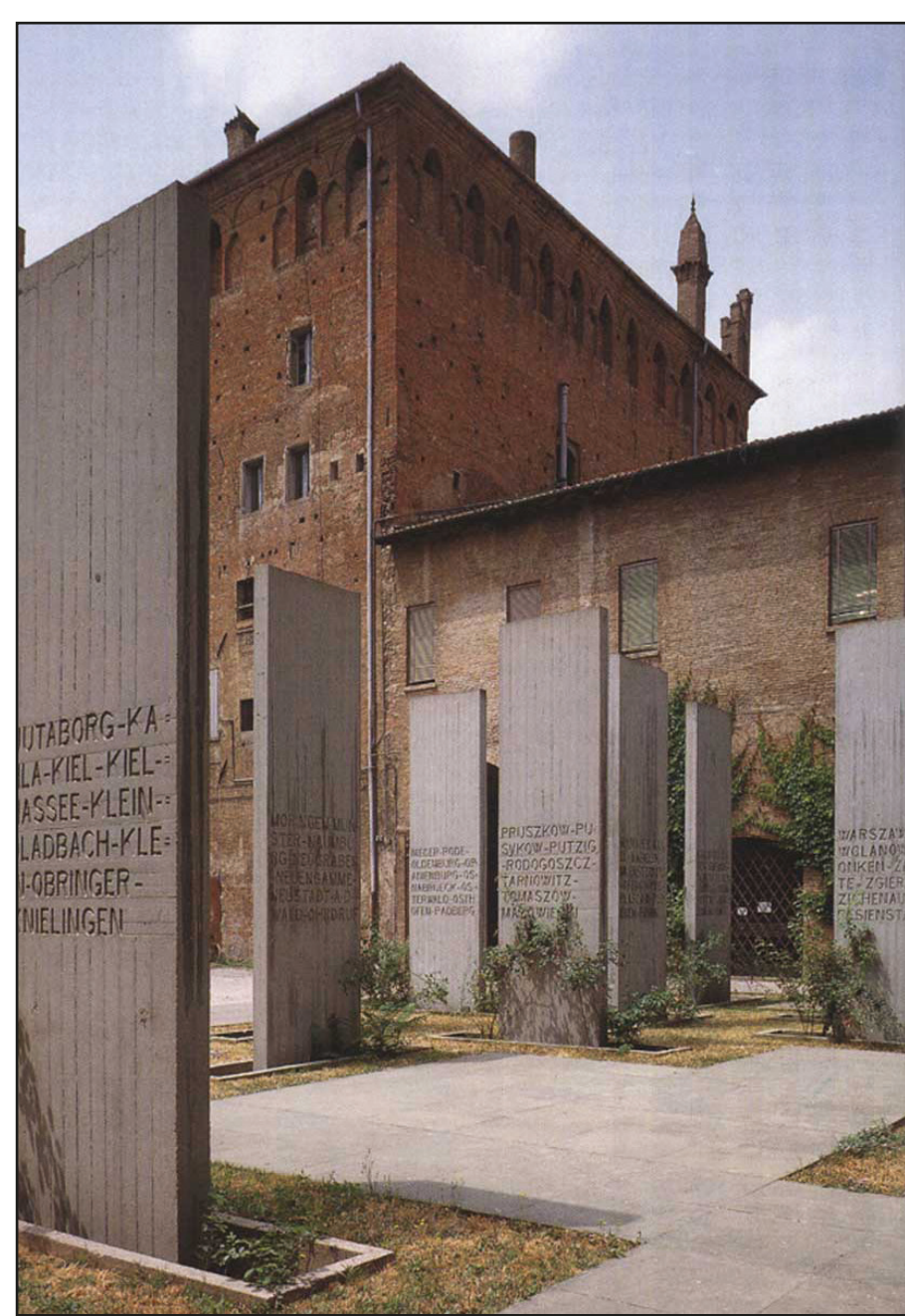


Axonometric View of Old Version of Project Site



Conceptual Development

References



The Carpi Deportee Monument Museum

The Carpi Deportee Monument Museum (BBPR, 1973) establishes a precedent this project draws on directly: names inscribed into architectural surface rather than onto a separate object, so that reading the memorial requires inhabiting it. The monument piazza applies the same logic in glass, each soldier's name held in a standing box the visitor walks among rather than a wall they stand before, turning commemoration from a frontal encounter into a bodily one.



Castelvechio Fondazione Querini Stampalia Carlo Scarpa

Scarpa's interventions at the Castelvechio and the Fondazione Querini Stampalia establish the clearest built precedent for the glass walking path: slender steel and stone structures spanning across water, deliberately distinct in material from the historic mass they serve, never imitating what came before them. Most directly, at the Querini Stampalia, Scarpa refused the conventional instinct to keep the canal water out, instead letting it rise directly into the ground floor, making the water a visible, working presence within the occupied space rather than a threat held at a safe remove. The glass walking path inherits this refusal: rather than replacing the failed concrete deck with another opaque surface that conceals the basin below, the 50mm laminated glass floor brings the visitor into direct visual and structural proximity with the tidal seawater, suspending them above it rather than separating them from it, the same water that feeds the basin made present underfoot, exactly as Scarpa's canal water was made present underfloor.



Memorial Glass Box in Monument Piazza

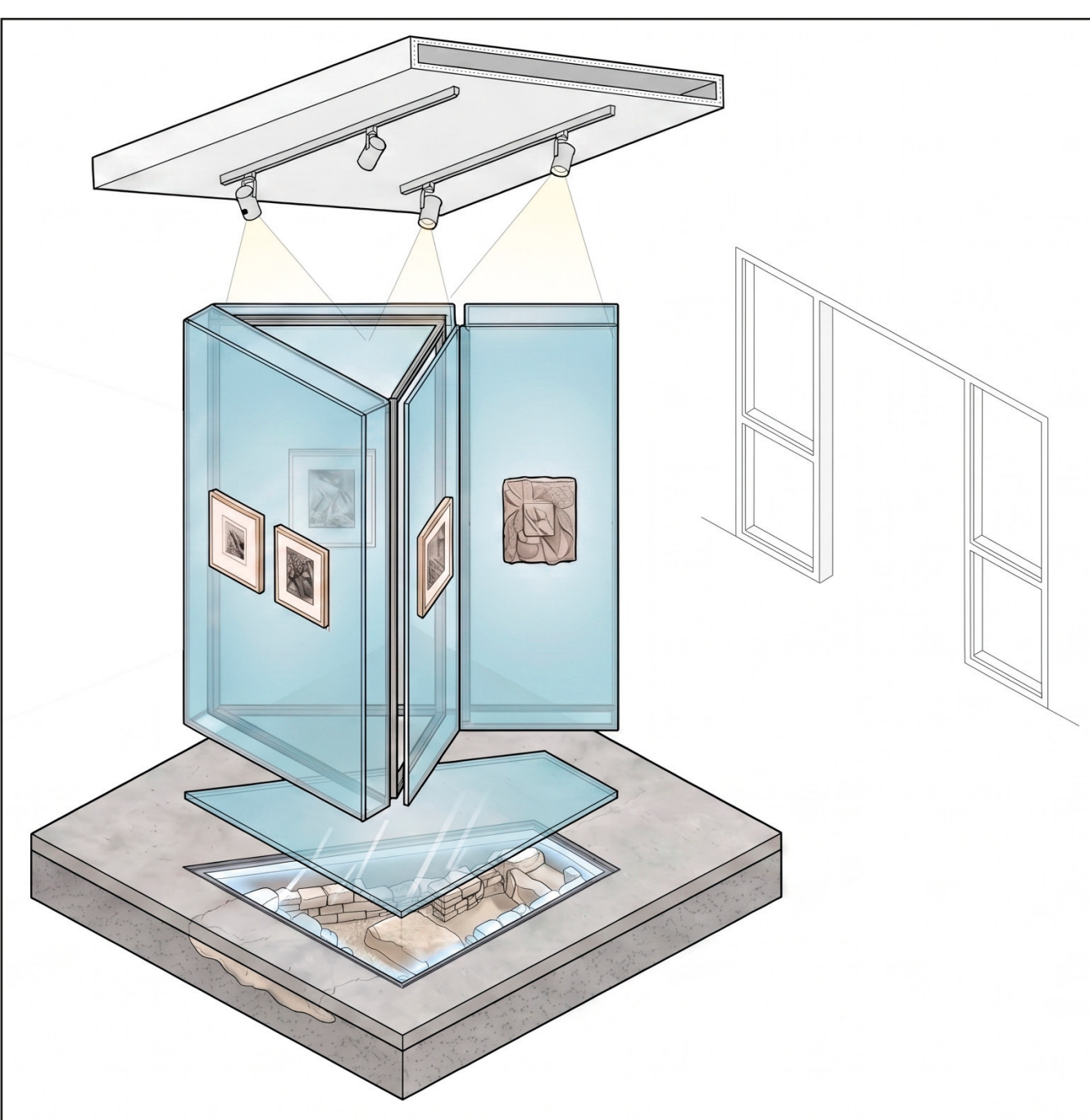
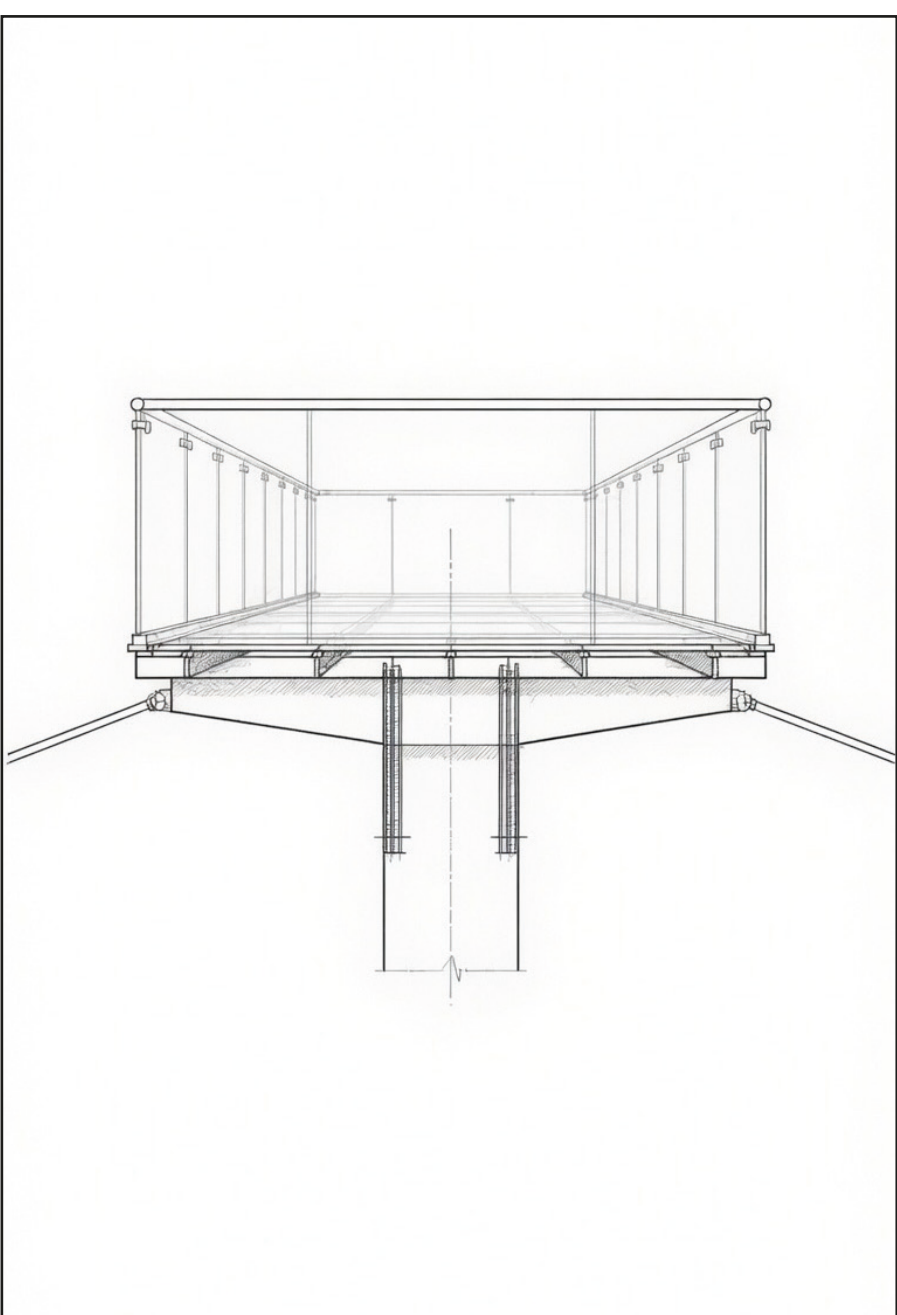


Exhibit Area Glass Art Walls With Glass Pavement

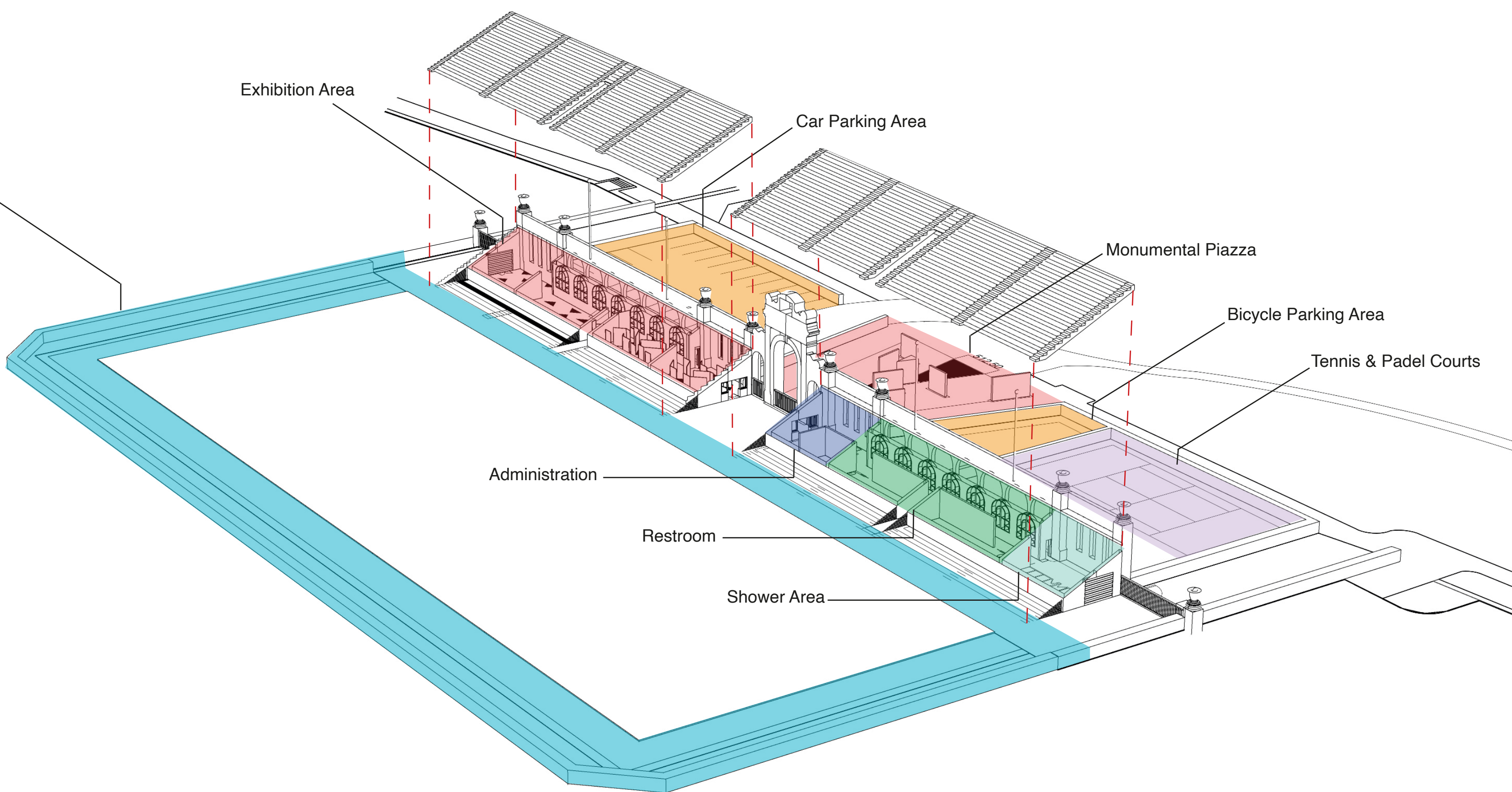
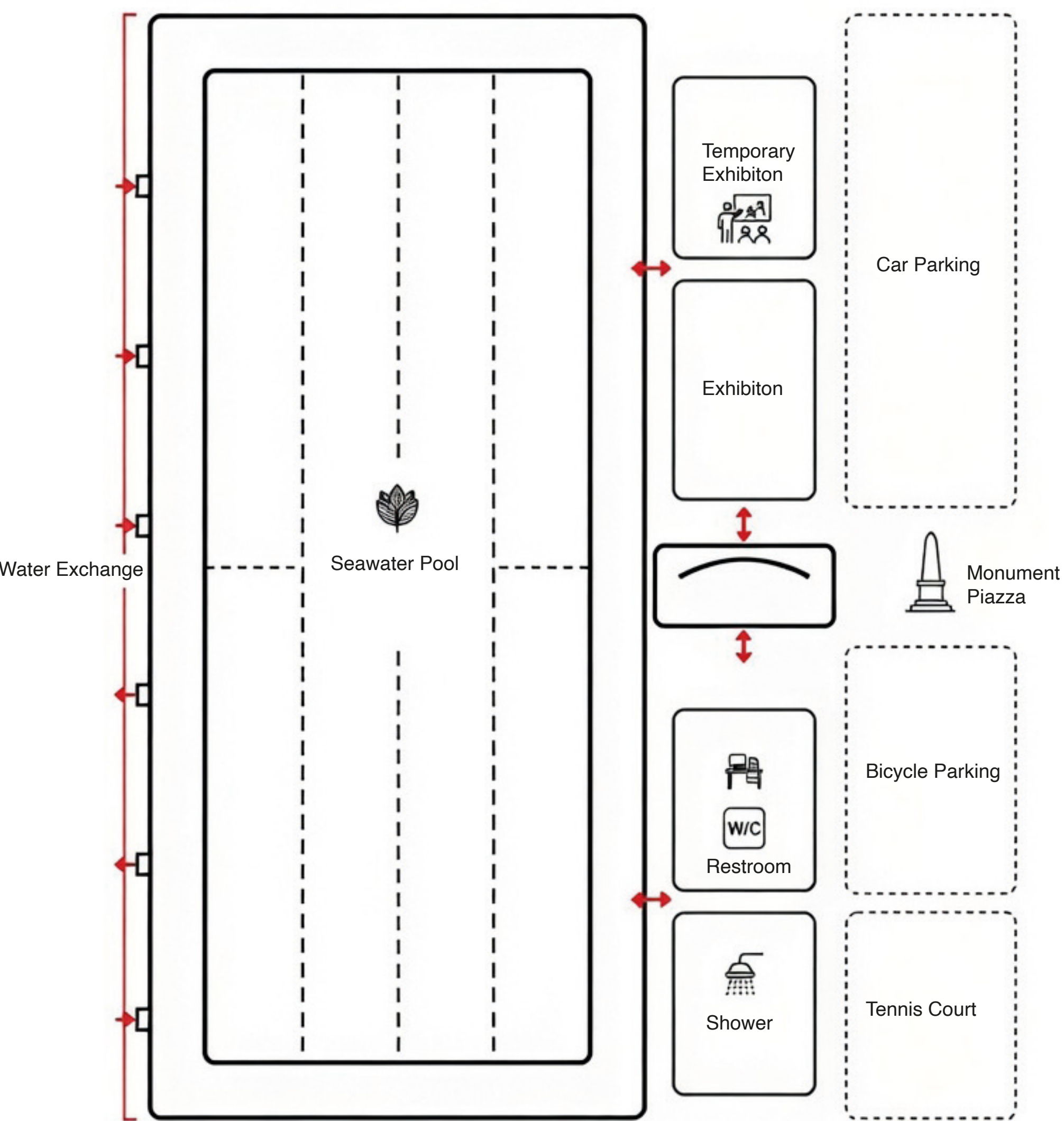


Concrete and Glass Material Composition Representation

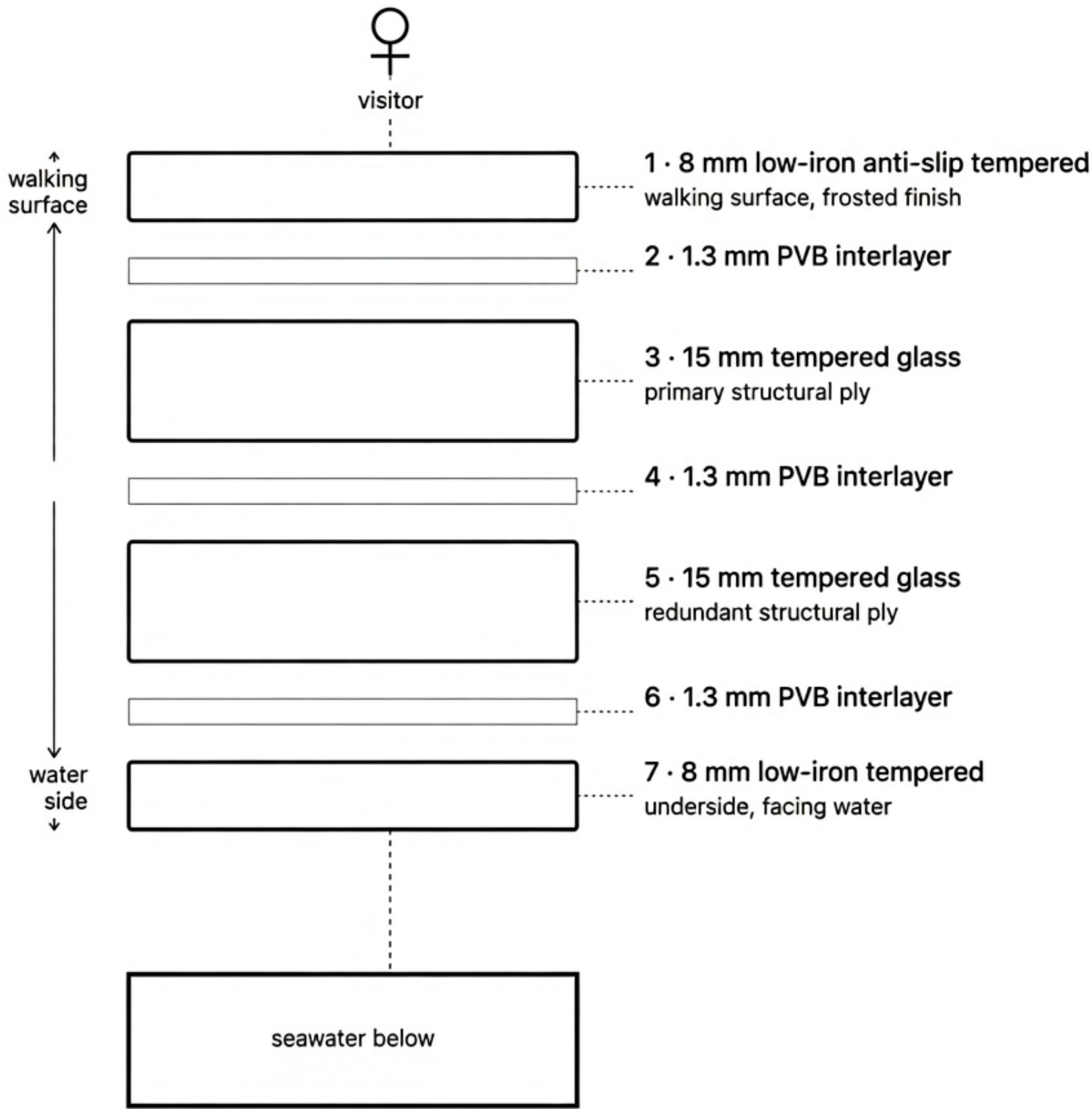


Glass Bridge Section Illustration

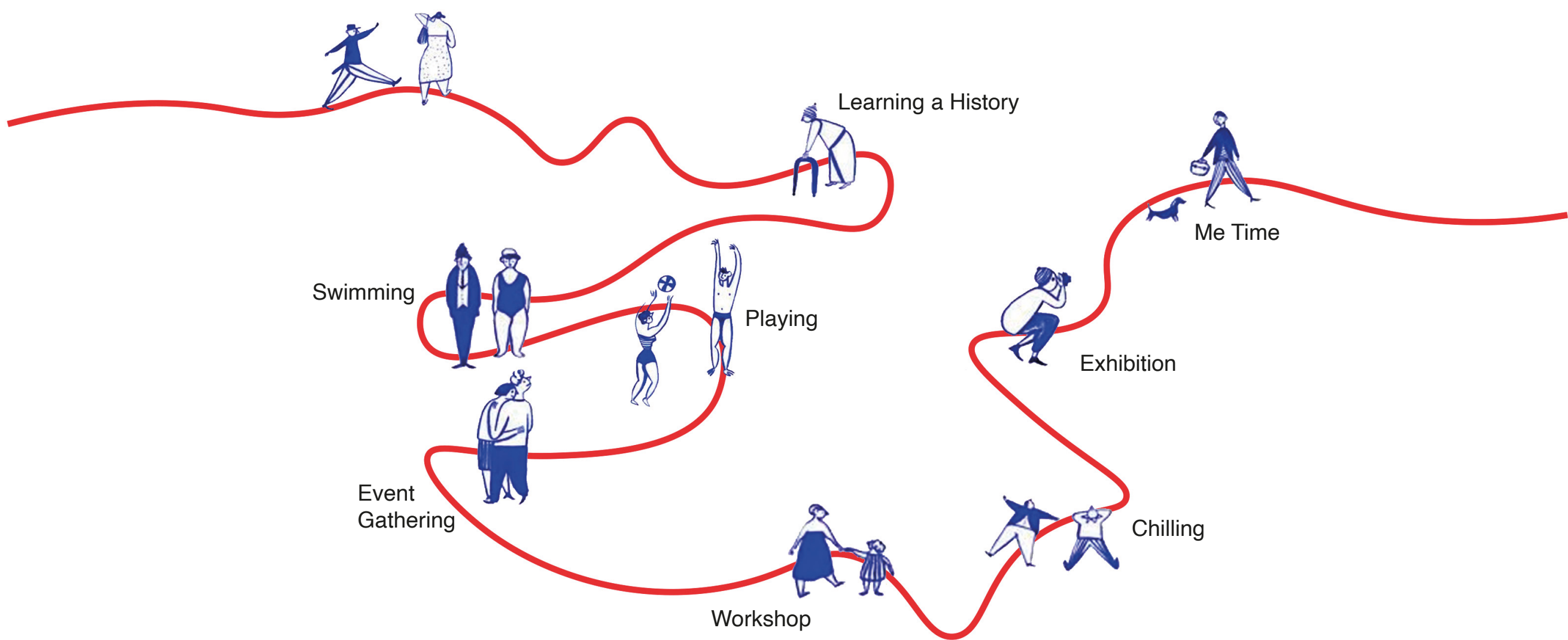
Functional Diagram



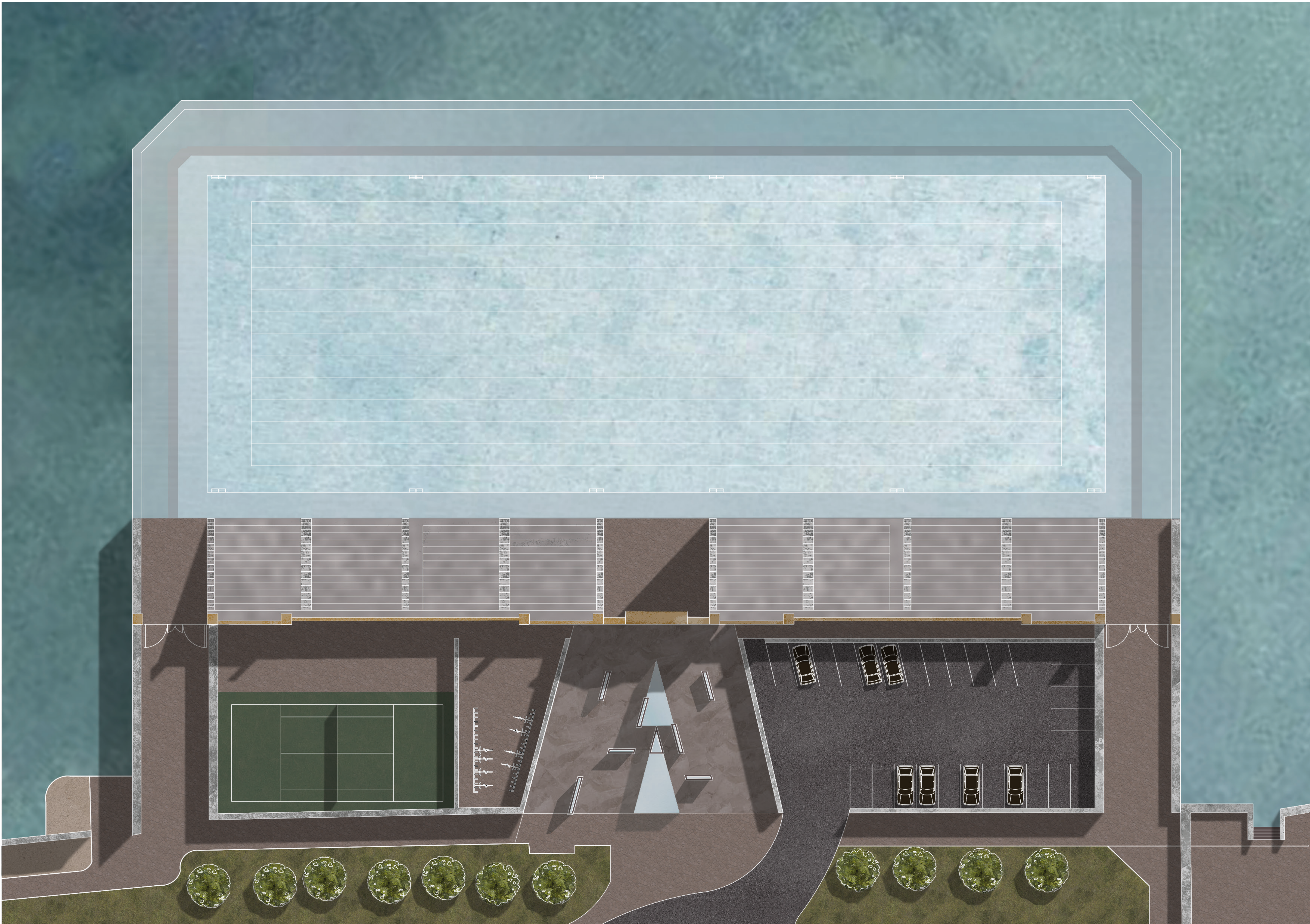
Glass Walking Path Layers Detail



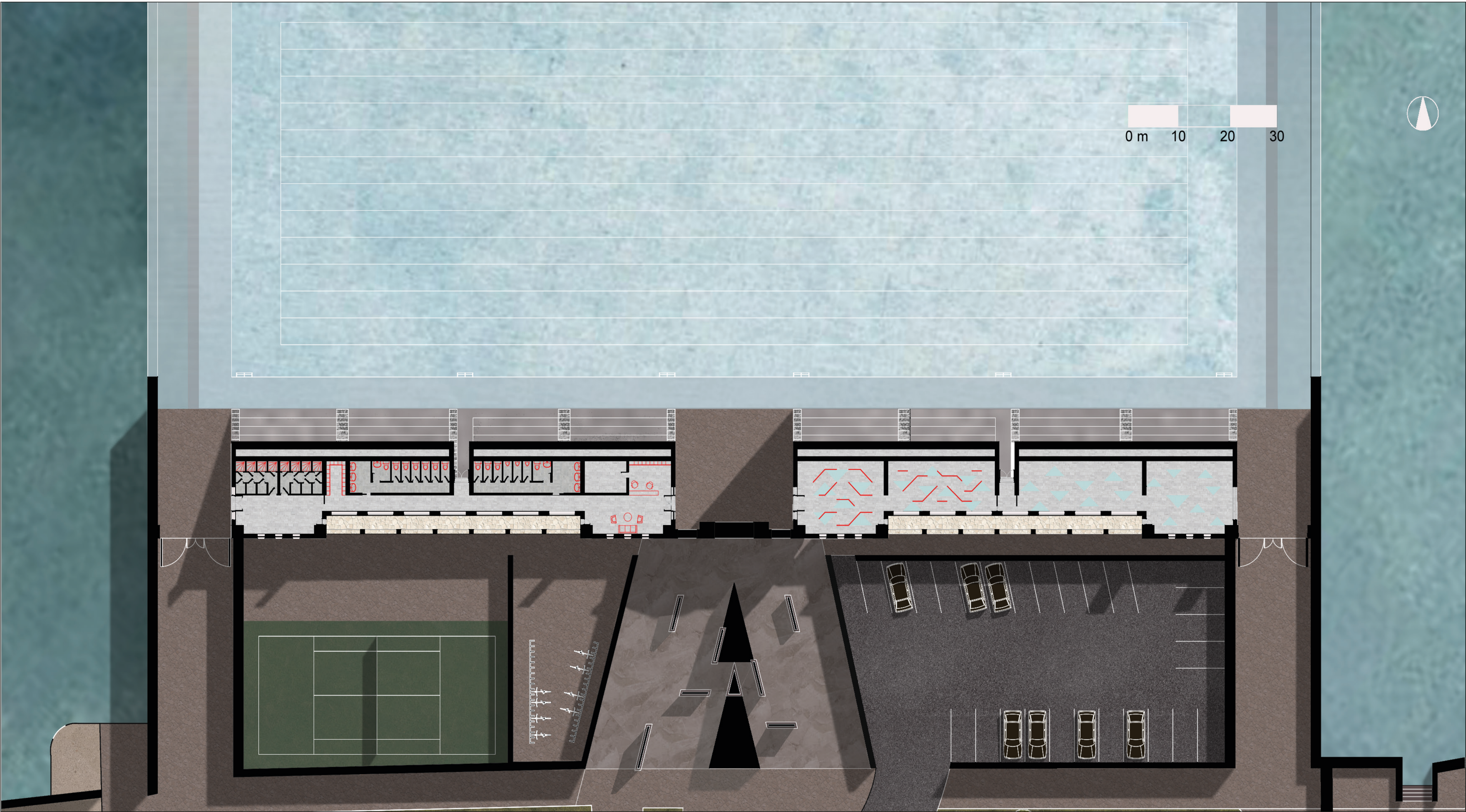
User Scenarios



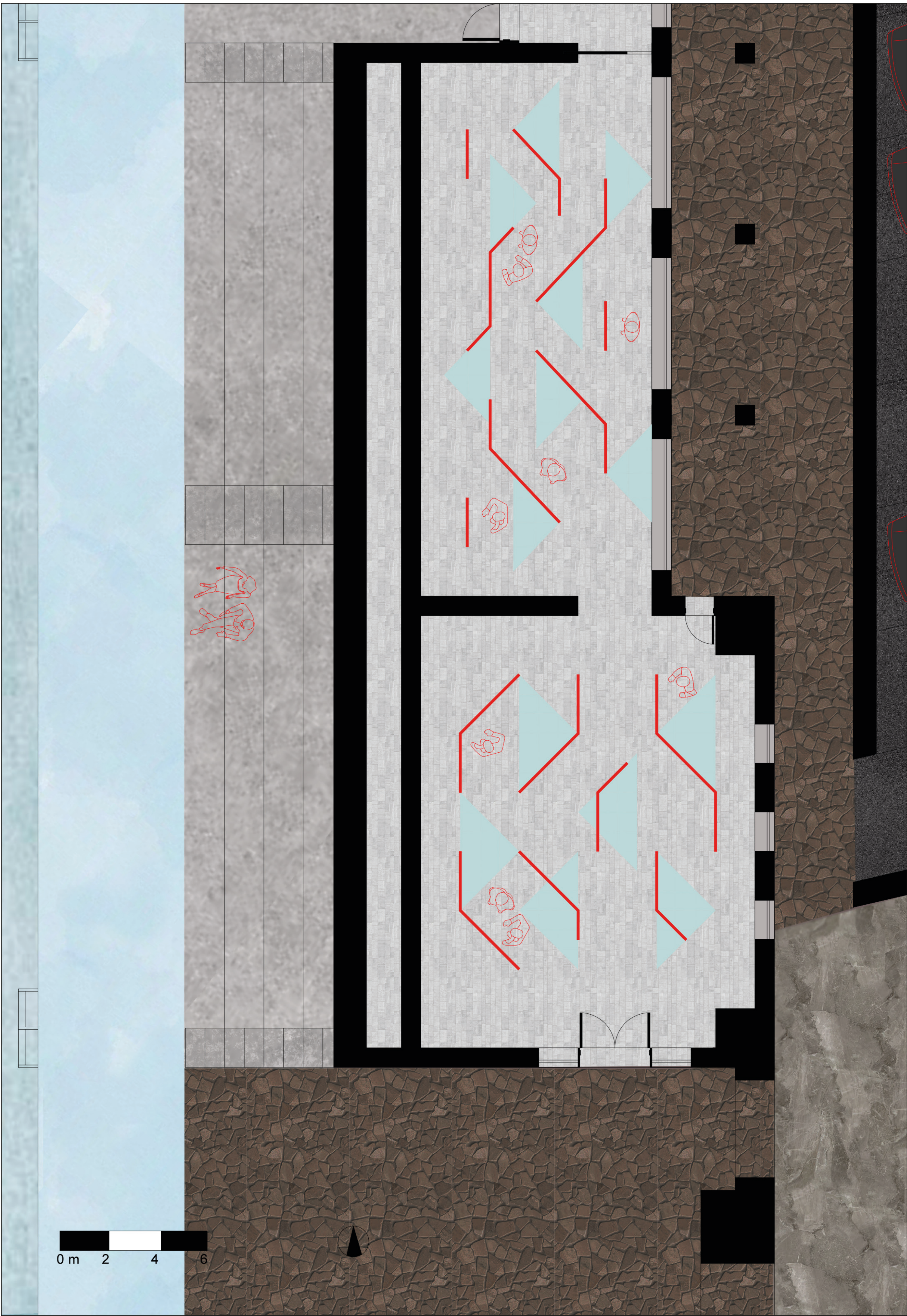
Master Plan



Ground Floor Plan



Exhibition Area Floor Plan



Monument Piazza Floor Plan



Sections & Elevations

