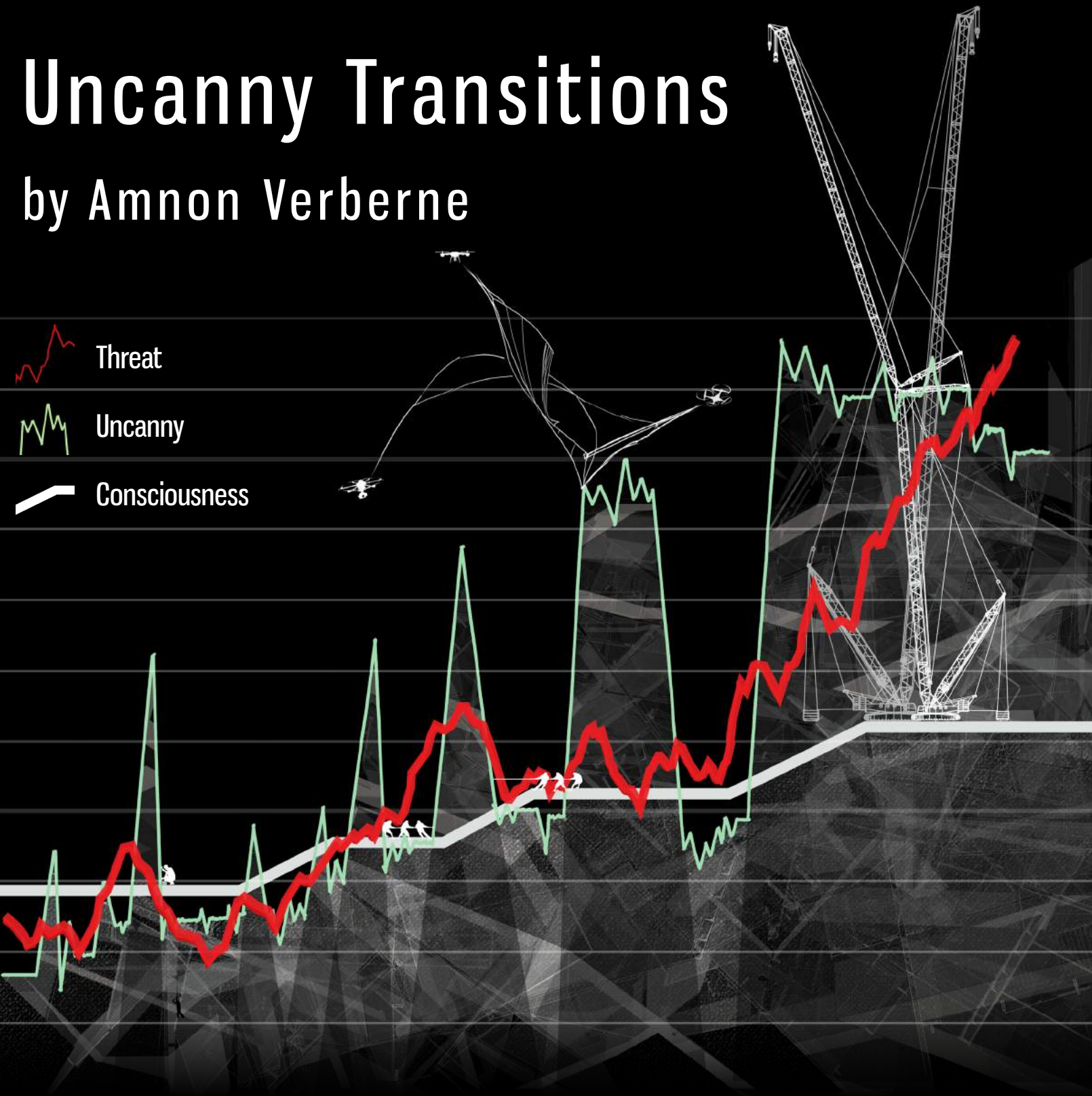


Uncanny Transitions

by Amnon Verberne



“The Uncanny, the *Unheimlich*, or the Unhomely, is a specific class of dread, which rises from the transformation of something that once seemed homely into something decidedly not so.”

- Anthony Vidler, an Architecture critic, and historian, at Cooper Union.

According to Vidler’s reading - there were three historical manifestations of the Uncanny. According to the project’s reading, we are currently experiencing the 4th.

I - A bourgeois kind of dread

18th Century
The Contrast between a safe and homely place and the intrusion of an alien presence

Painting by Edward Lamson Henry



II - Congestion and Estrangement

19th Century
When the city became a metropolis:
The alienation felt by the individual towards the radically changing environments

Berlin Alexanderplatz, 1903



III - Deconstructed Structures

Peak during the late 1980’s
Architecture claims a critical role, stirring and exposing ‘hidden’, ‘authentic’ layers in space, one that are otherwise hidden

Coop Himmelb(l)au, Rooftop remodeling Falkenstrasse, 1993



The destructive impacts related to climate change are increasing. A link seems to exist between these impacts and the way in which we form our built environment. Yet, there seems to be an inadequacy to adapt accordingly, a collective repression of the ongoing shift. This layer of repression is occasionally punctured by flashes of startling awareness, when spatial disturbances are formed, stirring us momentarily. During these periods we feel the environmental transformation. That which was once homely and secure becomes hostile. The project aims to harness these uncanny glimpses of awareness as a tool. It seeks to explore a scenario in which architecture adapts to the impacts of climate change by exposing their existence, and addressing the existence of such layer of repression, possibly contributing to its undoing.

IV - The Uncanny of Climate Change

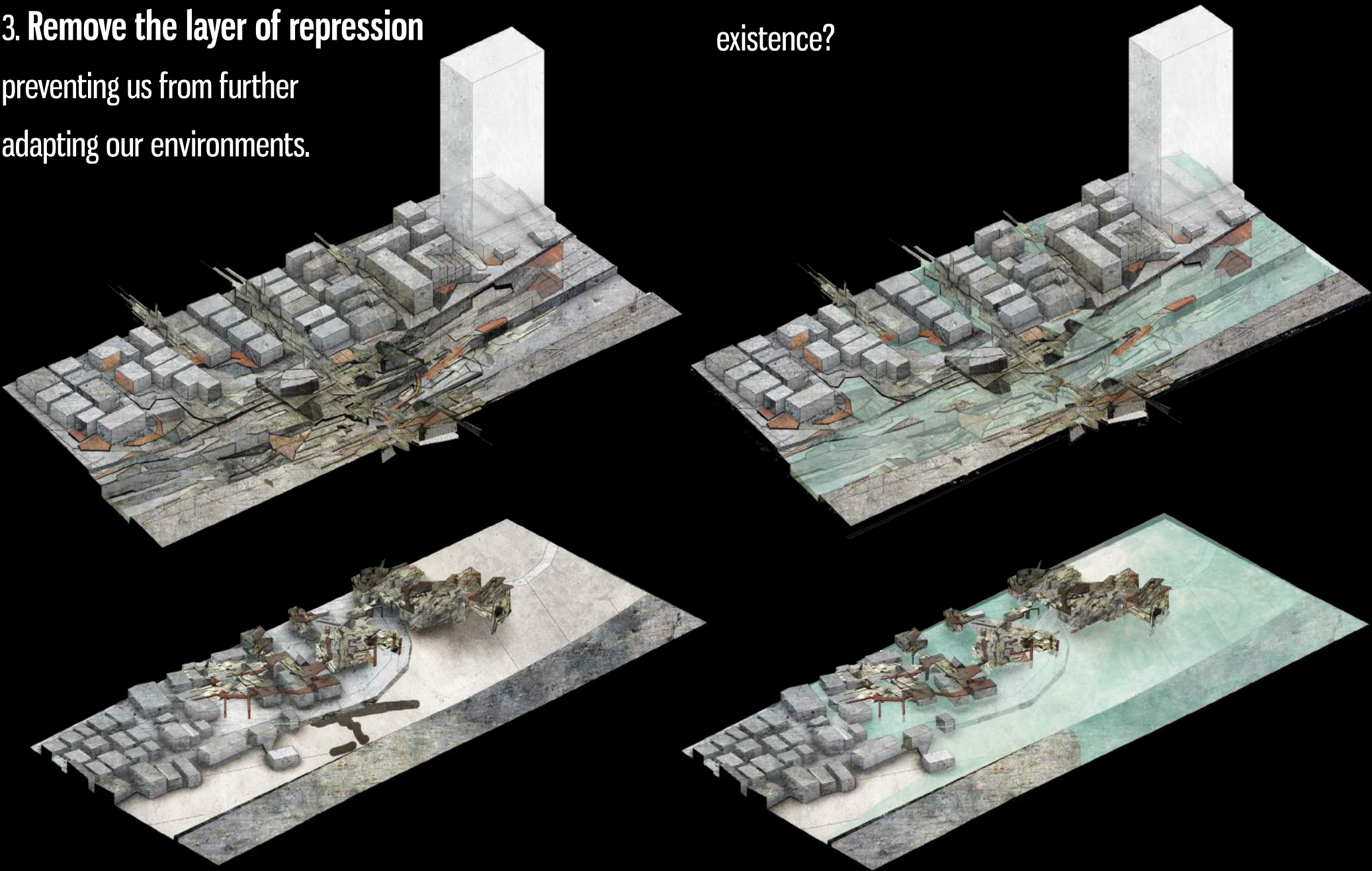


Present day
Gradual transformation
of our environments

The Uncanny - Harnessed

The project presents a reading in which the Uncanny may be harnessed, as a tool used to -

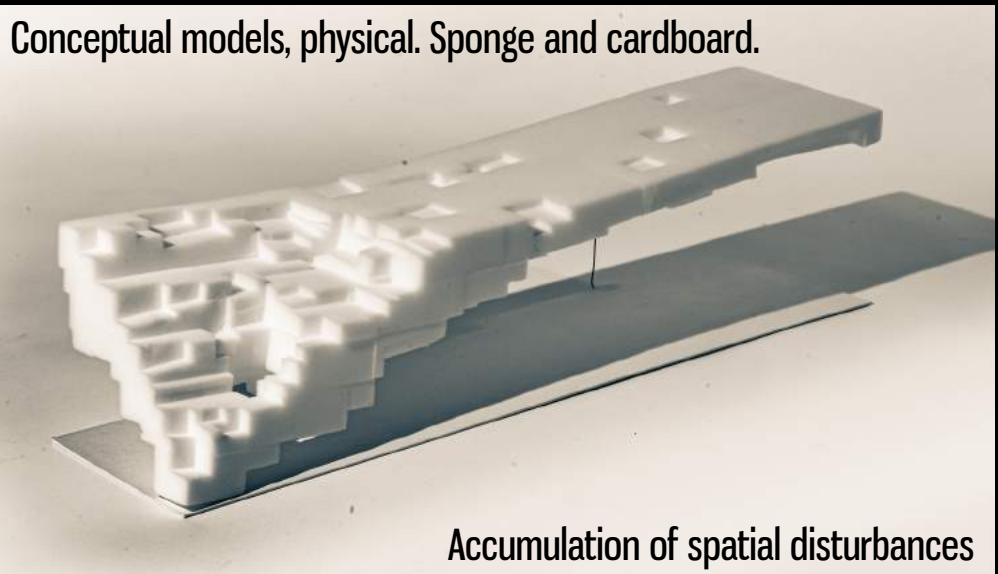
1. Spatially **Adapt** to unhomely phenomena
2. **Expose** the uncanny transformations that our environments are undergoing.
3. **Remove the layer of repression** preventing us from further adapting our environments.



“Uncanny rises from the transformation of something that once seemed homely to something decidedly not so.”

- Vidler on Freud’s interpretation of Schelling, in *The Architectural Uncanny*

Conceptual models, physical. Sponge and cardboard.



Accumulation of spatial disturbances



Gradual spatial transformation

Conceptual exploration

Environments carrying the imprints of the impacts of climate change. As an alternative to our symptomatic, standard reactions - What if our cities would have been adapted, shaped by a reaction to these impacts in a way which exposes their existence?

Gradual Environmental Transformation

Weather patterns are shifting, the climate is changing and the environmental conditions are becoming harsher. The two most severe impacts in our local context, are **urban flooding** and the **increasing heat** in urbanized areas, as determined by the Tel-Aviv-Yafo's Climate Change Preperation Plan, 2020.



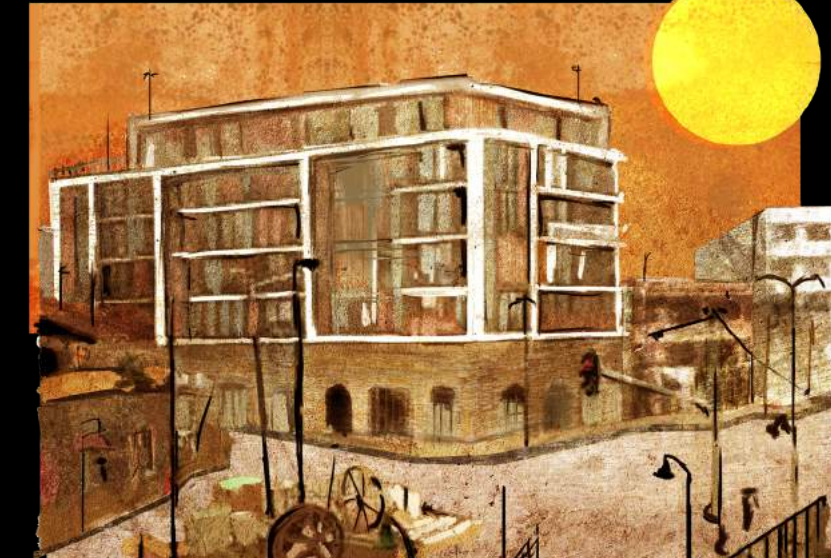
Most reactions are symptomatic, under-ground and thus under-consciousness



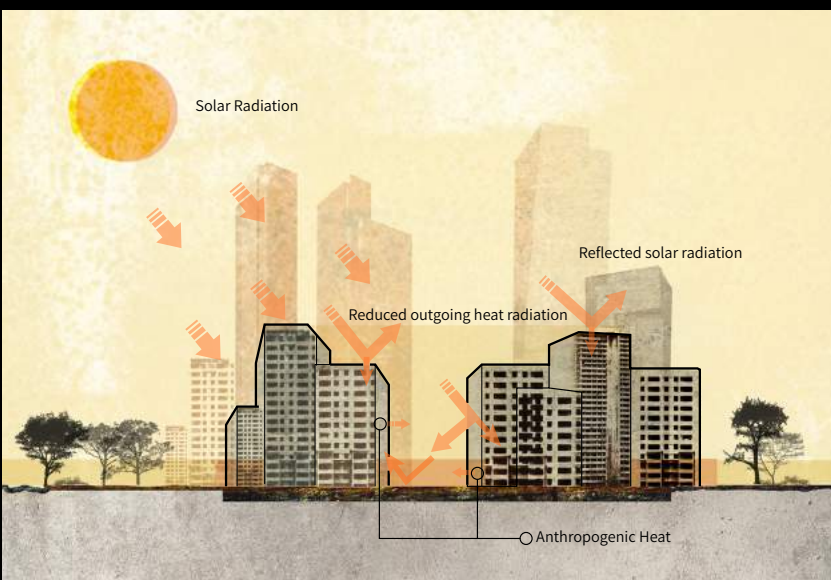
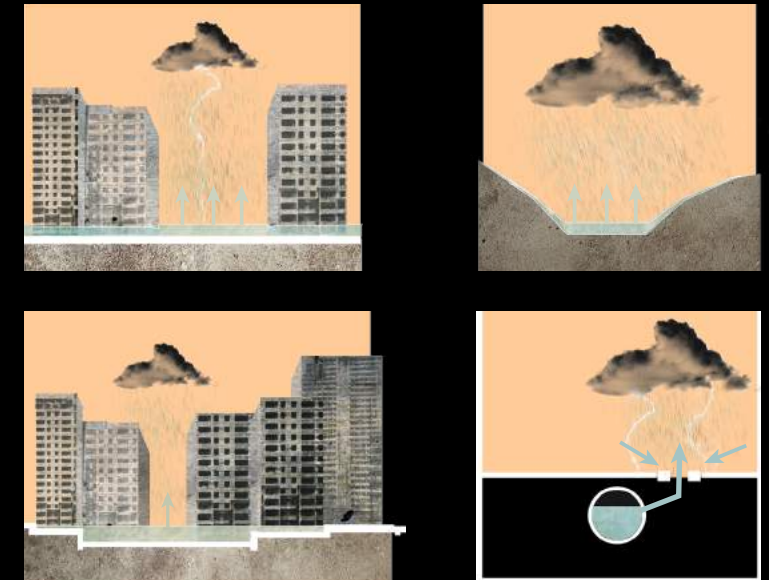
The rain, a symbol of prosperity, a blessing in a desert land, becomes an unwanted and a menacing presence



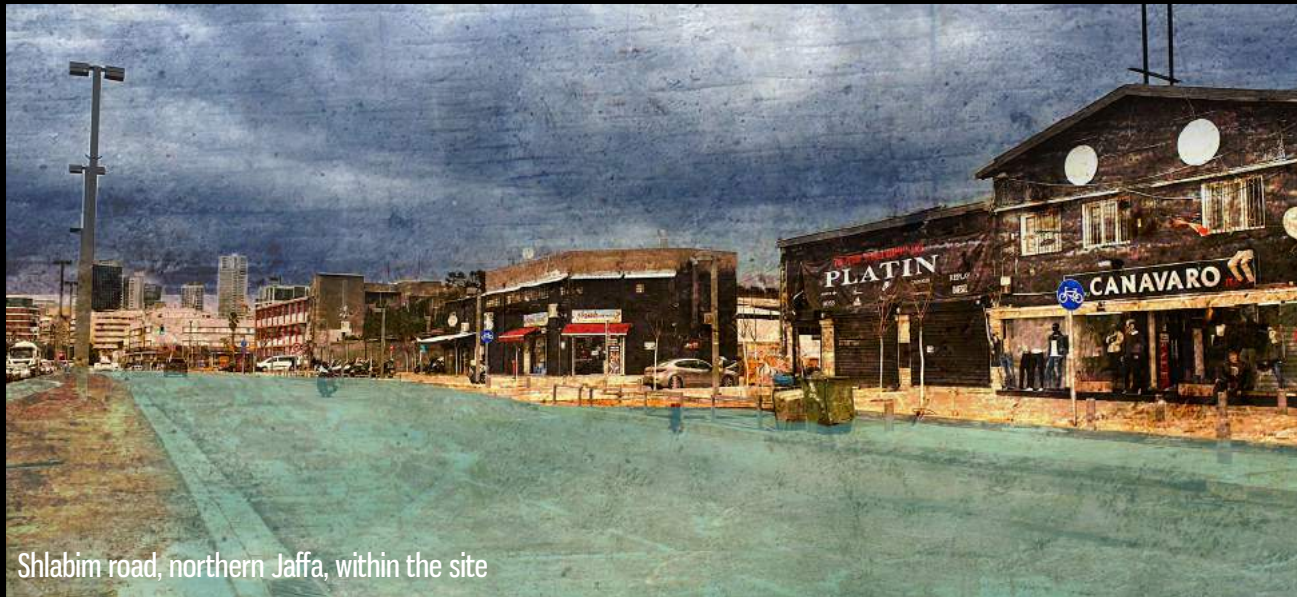
'Urban deserts' of concrete are especially susceptible to urban flooding, as they lack permeable soil.



They also generate urban heat islands due to their physical characteristics



Urban desert, large swathes of concrete, generating a urban heat island and preventing runoff water absorption



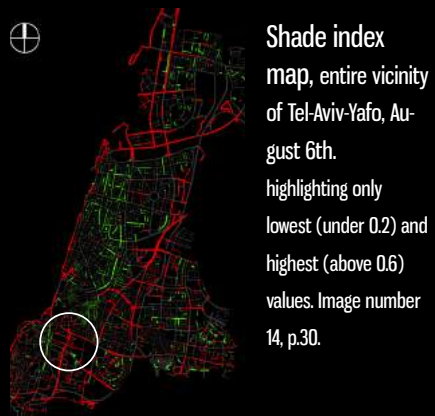
Shlabim road, northern Jaffa, within the site

Jaffa's Swamp

Al-Bassa and its surrounding area in Jaffa were once a seasonal pond, a swamp, and are now an urbanized area covered in concrete and asphalt, that absorbs and emits heat. It is an area to which runoff water from across the Jaffa Basin drains and accumulates.



Bloomfield stadium, Shlabim road and Groningen park - repeatedly flooded area, Photo owned by Sport5, IL, January 2020



Maps by Dr. Arch. Or Aleksandrowicz, LA Shachar Zur, Arch. Yonatan Lebendinger, Dr. Yoav Lerman, Shade Maps for Climatic Urban Planning in Tel Aviv-Yafo, study's summary report, Liebling Haus, July 2019

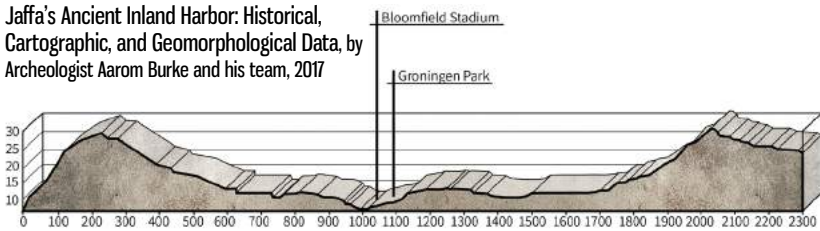


Shade index by neighborhood, August 6th, image 19, p. 35

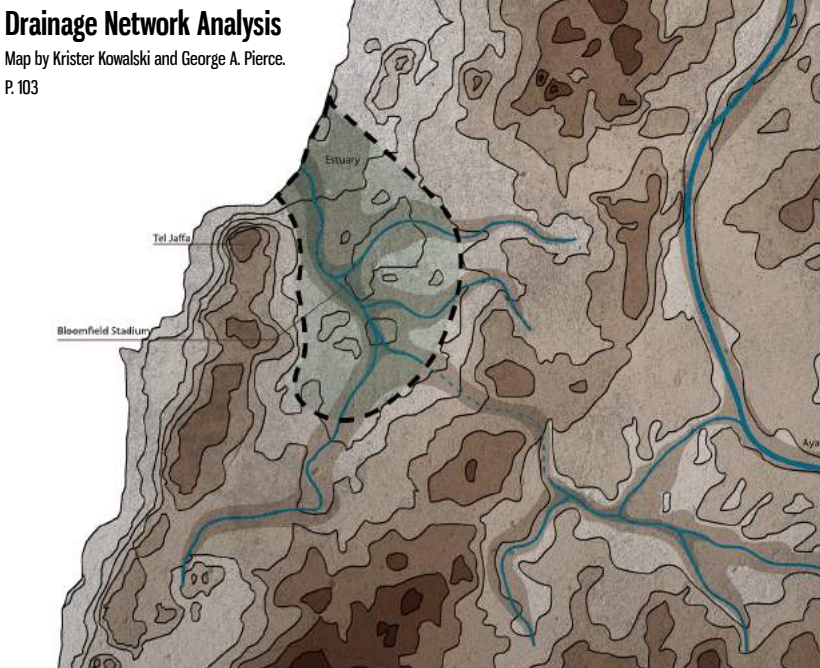


Using the Rational Method for design flood events to calculate runoff water volumes in various scenarios

This area's natural and man-made characteristics make it susceptible to two major climate-related impacts – **the increased heat** in urban areas and **urban flooding**. Those impacts are projected to escalate as the climate gets warmer, as our cities expand and as we cover the remaining permeable soil.

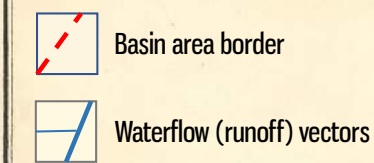


West to east elevation profile of ridges and depressions based on DEM data. Map by Krister Kowalski.



Jaffa's Basin. Urban Basin number 08

Water drains to the lowest area, Al-Bassa. The underground drainage system fail to drain the water in time - the result is **urban floodings**, projected to increase both in frequency and in magnitude.



Runoff management document, Tel-Aviv Municipality and URBANOF studio, 2013



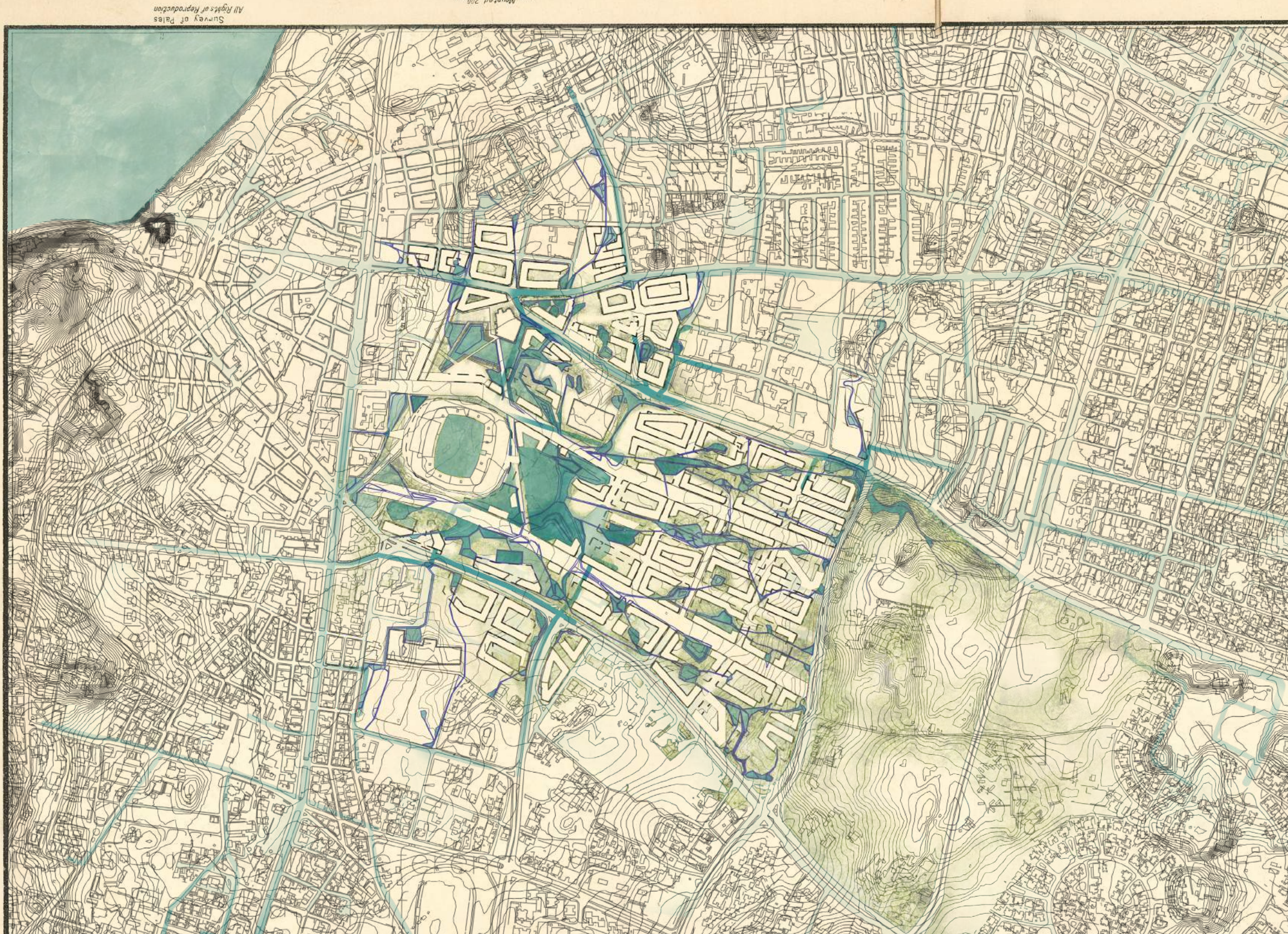
A Basin's Bottom

The site, Al-Bassa, the swamp, pre-urbanization. as seen from the first aerials of palestine. 1917.



Jaffa as portrayed in one of David Roberts' paintings, 1839. A hint for the dry alluvial plain to the left of both Tel Yafo, which lies on the kurkar ridge, and the continuation of the ridge in the foreground. Burke, p. 98





The proposition consists of several major actions. Firstly, the liberation of the ground. Peeling off and disposing of major hindrances such as parking-lots, ramshackle commercial buildings, and asphalt roads

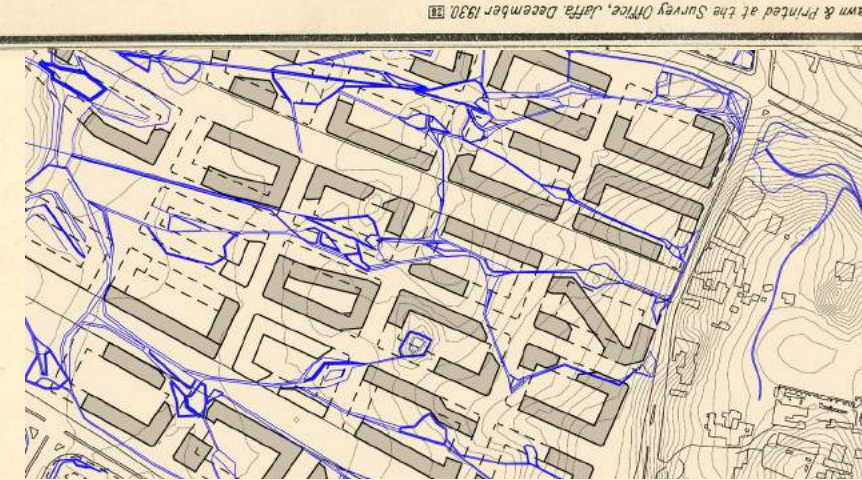


Thirdly, reimagining the future-plans within the intervention area
Above: Existing area, floodmap

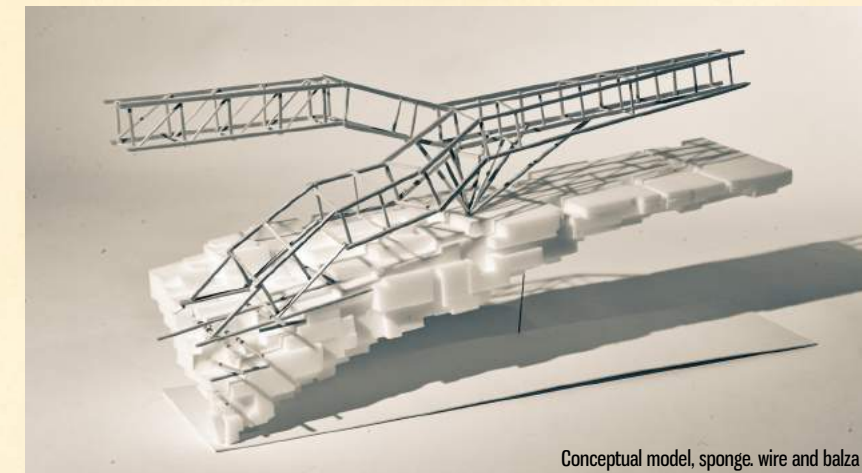
Secondly, remolding the surface area. A series of stereotomic actions conducted on the ground surface create paths to divert the water to the heart of the basin



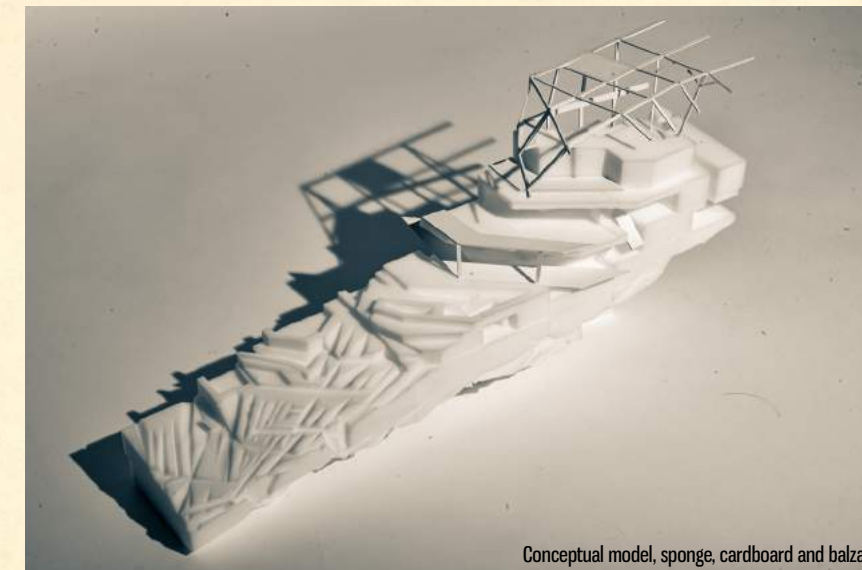
They will be summed and replanned in an urban grid, in an attempt to mend and stitch together the unraveled urban fabric



Superposition of the regular closed blocks and the irregular stereotomic remodeling of the ground. A contrast exposes the forming reality, yet both layers co-exist



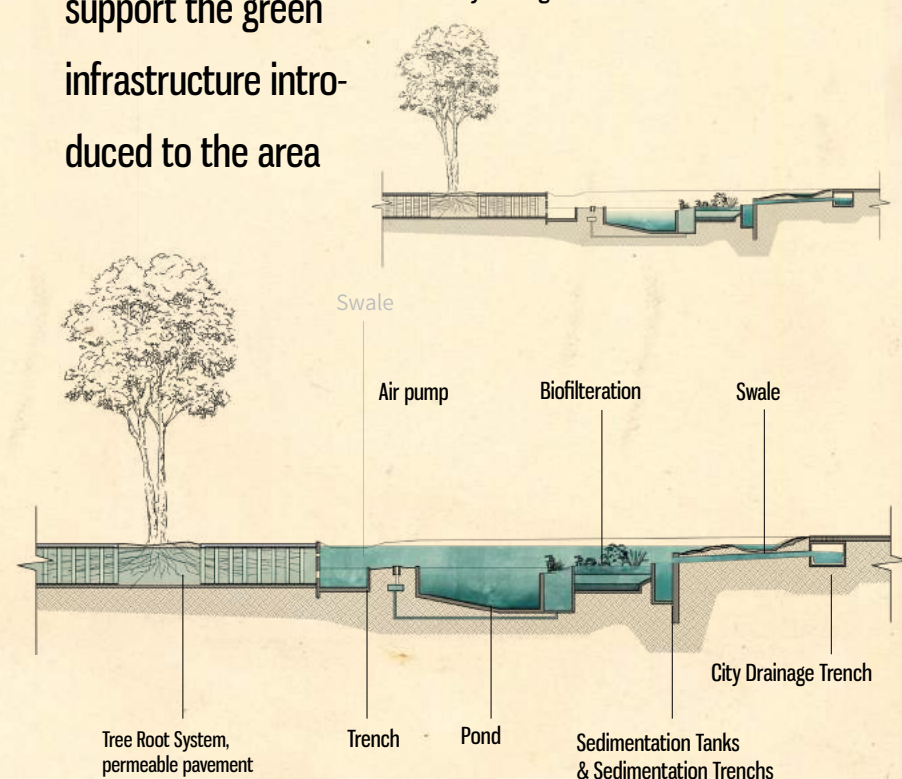
Increased surface area and built additions



Stereotomic actions mold the exposed soil. Buildings are molded to provide shade

The water is used to support the green infrastructure introduced to the area

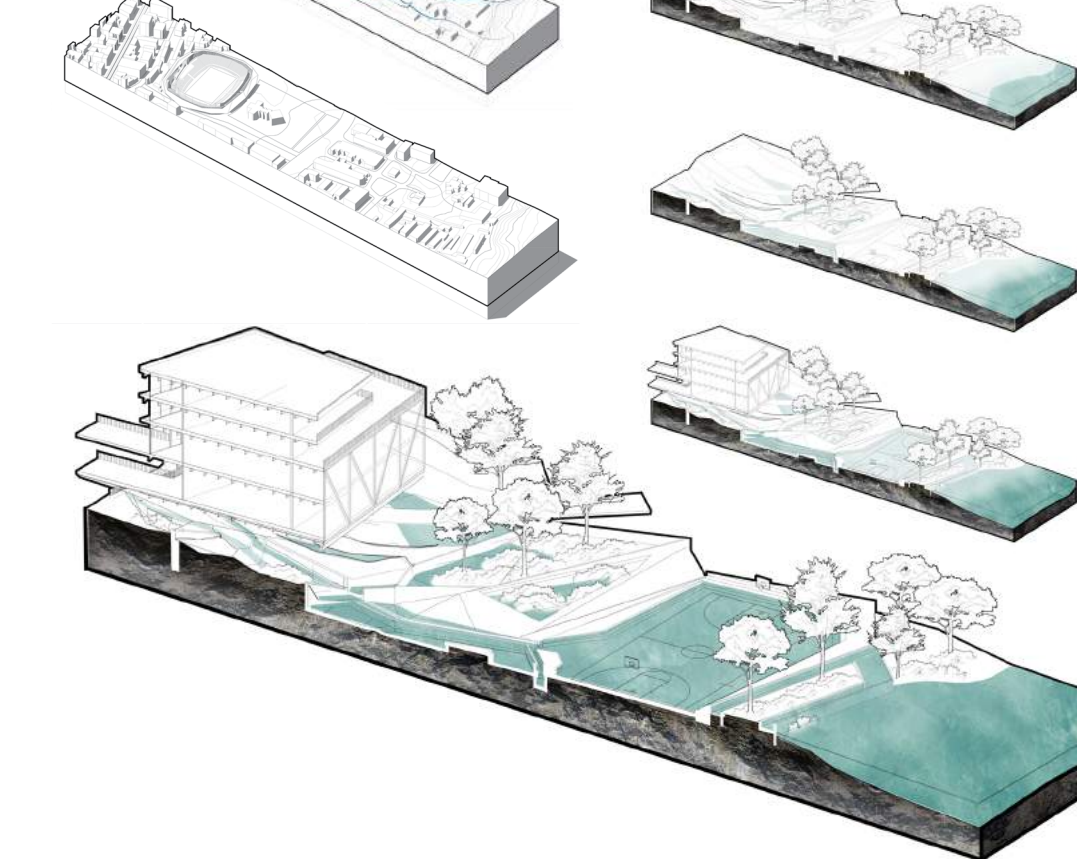
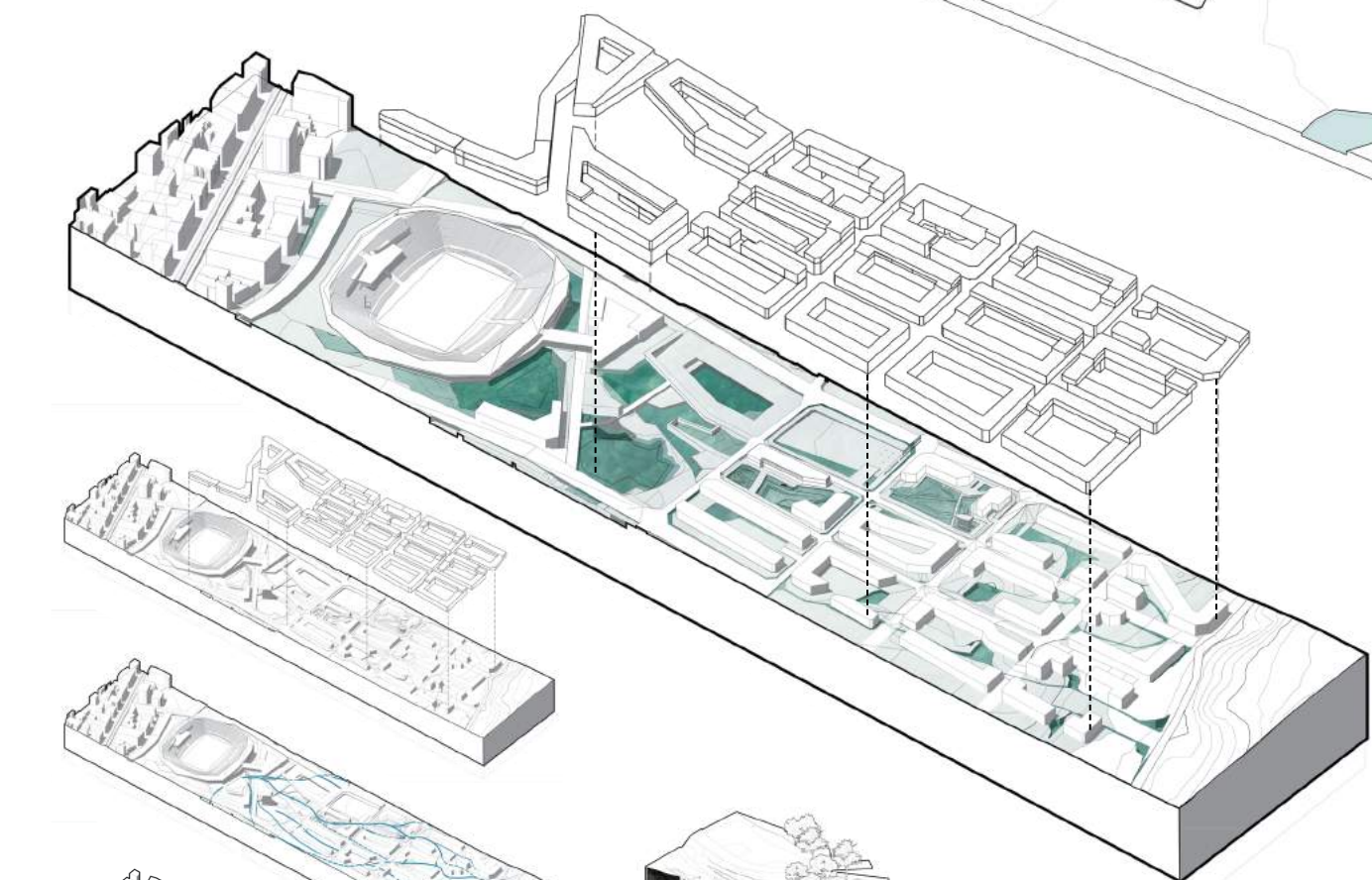
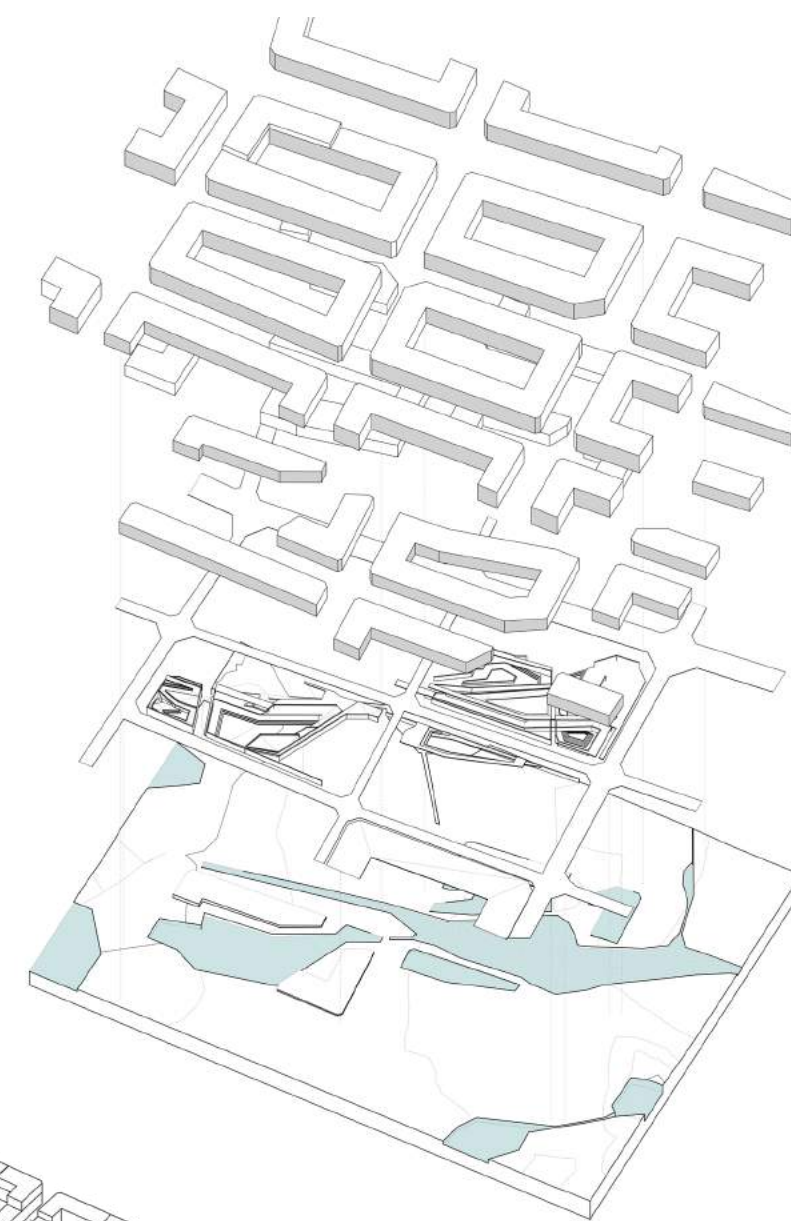
It cools and shades the urban fabric, thus mitigating the heavy heat generated in urbanized areas.



Strategy: Adapt and Expose

The area is redesigned as an 'urban sponge' that absorbs and mitigates the destructive impacts that the area currently generates and suffers from.

The sponge is an urban area capable remaining unharmed even when flooded – it makes use of the stormwater runoff to indirectly mitigate the impacts of excessive sun radiation. The whole area is molded to lead and contain the water flowing in the basin during varying scenarios, such as everyday rain, normal cloudbursts, as well as extreme precipitation events.

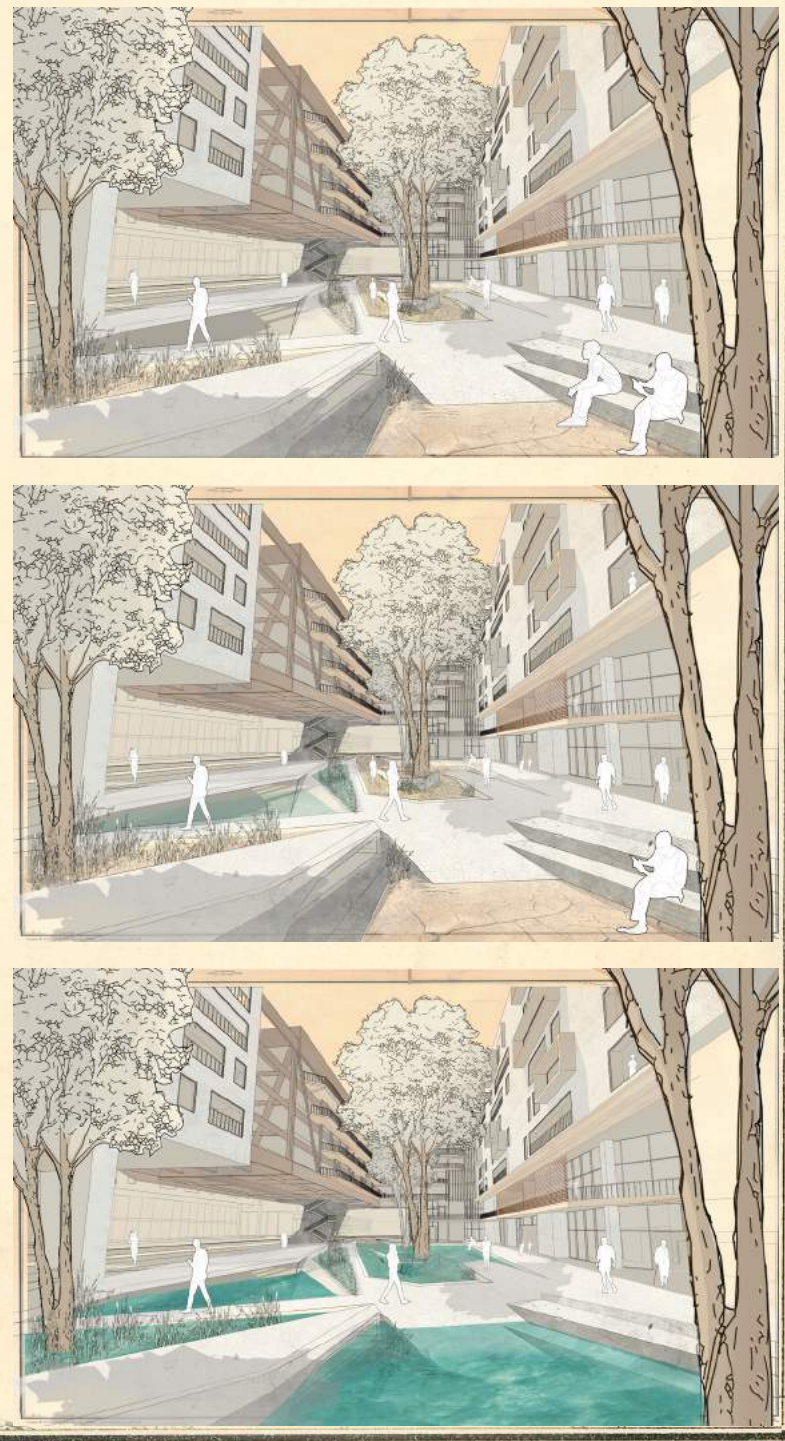
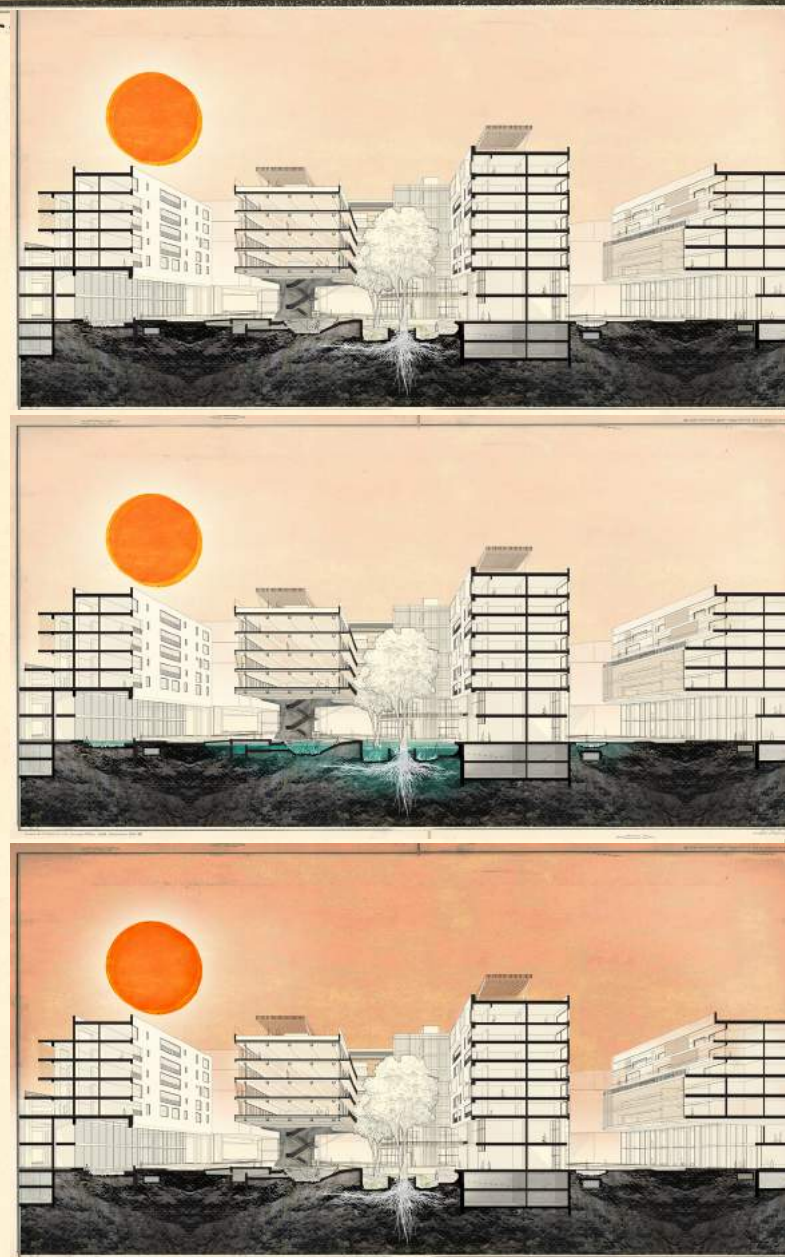


The surface-area of the ground is increased and molded as various volumes where runoff water may accumulate and linger in plain sight.

Further from the waterpaths, on streets devoid of them, where trees aren't planted, the built mass itself deforms in order to create shade.



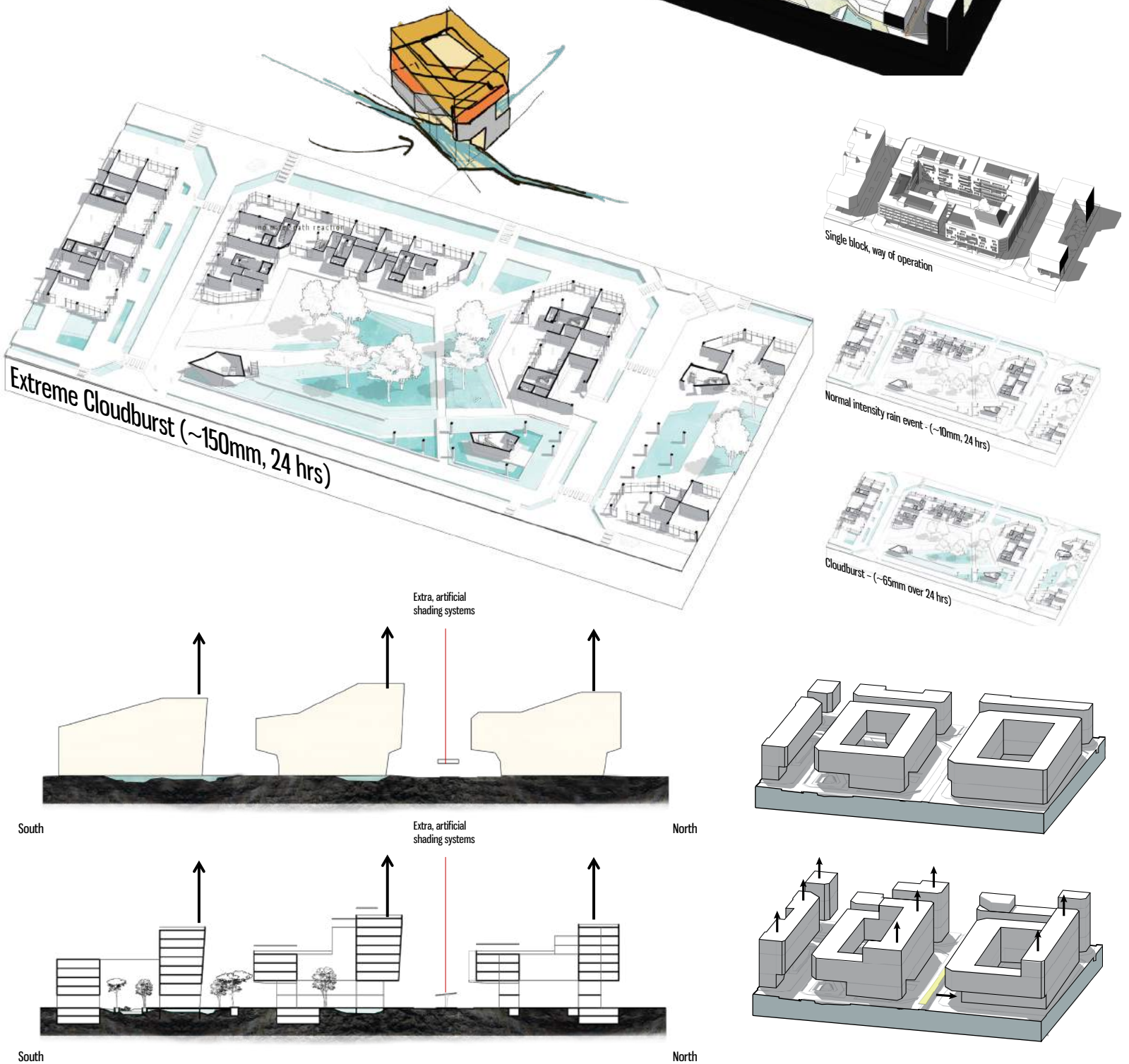
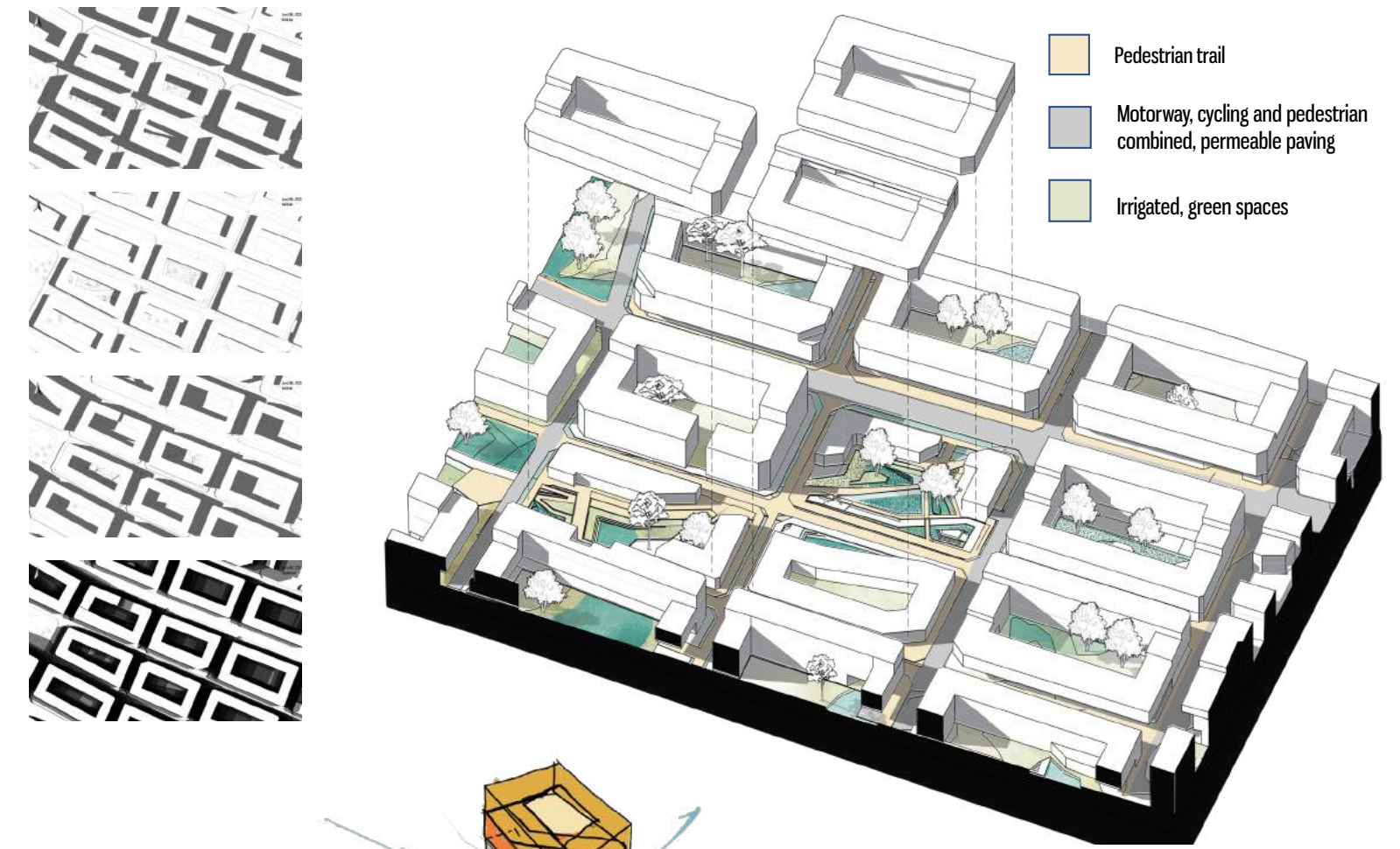
The built environment deforms and dissolves along and above the water paths, letting the water pass, and creating shaded outer spaces



Typology

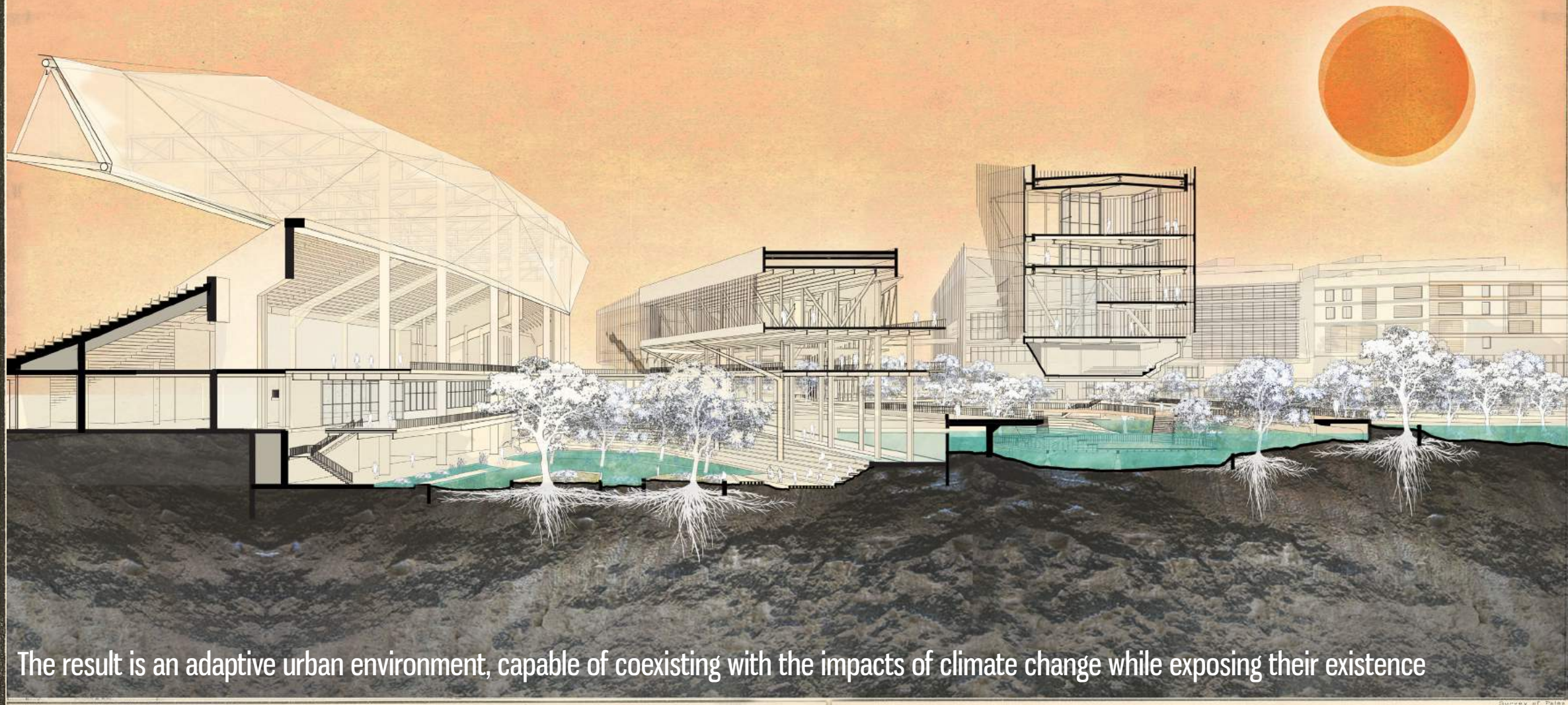
The planned elements in the vicinity, including the built mass, are designed to provide large patches of continuous shade over the public spaces, allowing it to maintain its function even during the warmer days of the coming future.

The blocks' orientation aims to shade the public space, as well as provide the most optimal conditions for the indoor spaces, with stretched out Northern and Southern sides

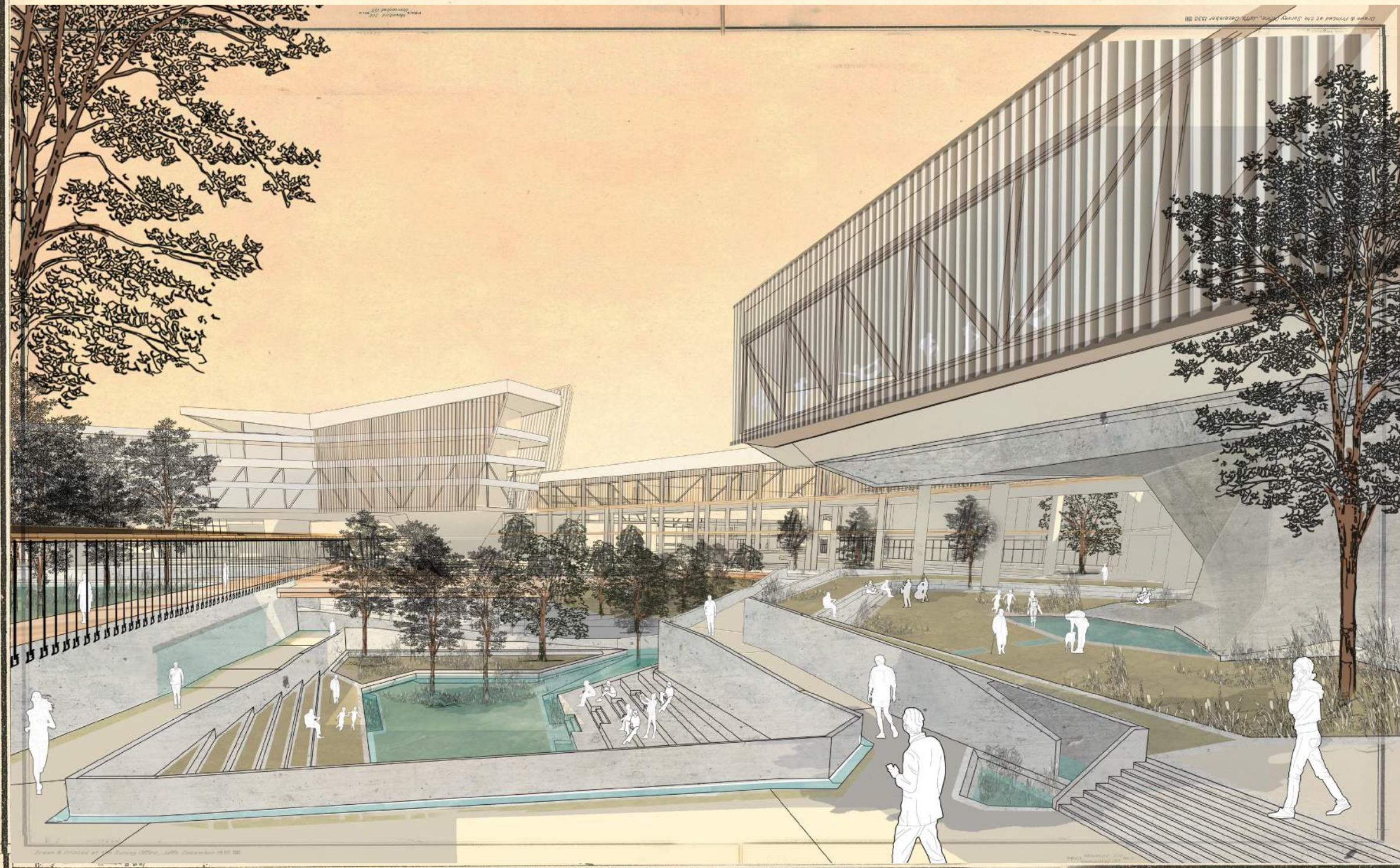


"The Uncanny is something which ought to have remained hidden but has come to light."

- Vidler's read of Freud on Schelling, The Architectural Uncanny



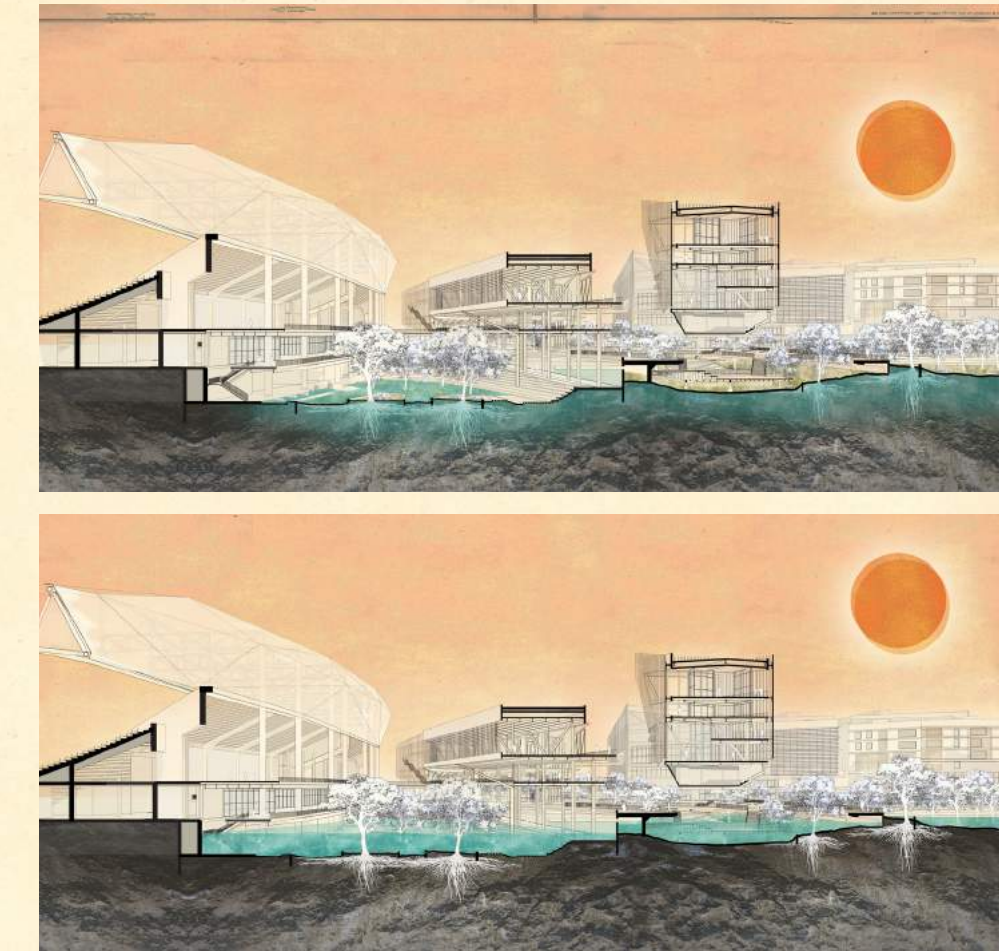
The result is an adaptive urban environment, capable of coexisting with the impacts of climate change while exposing their existence



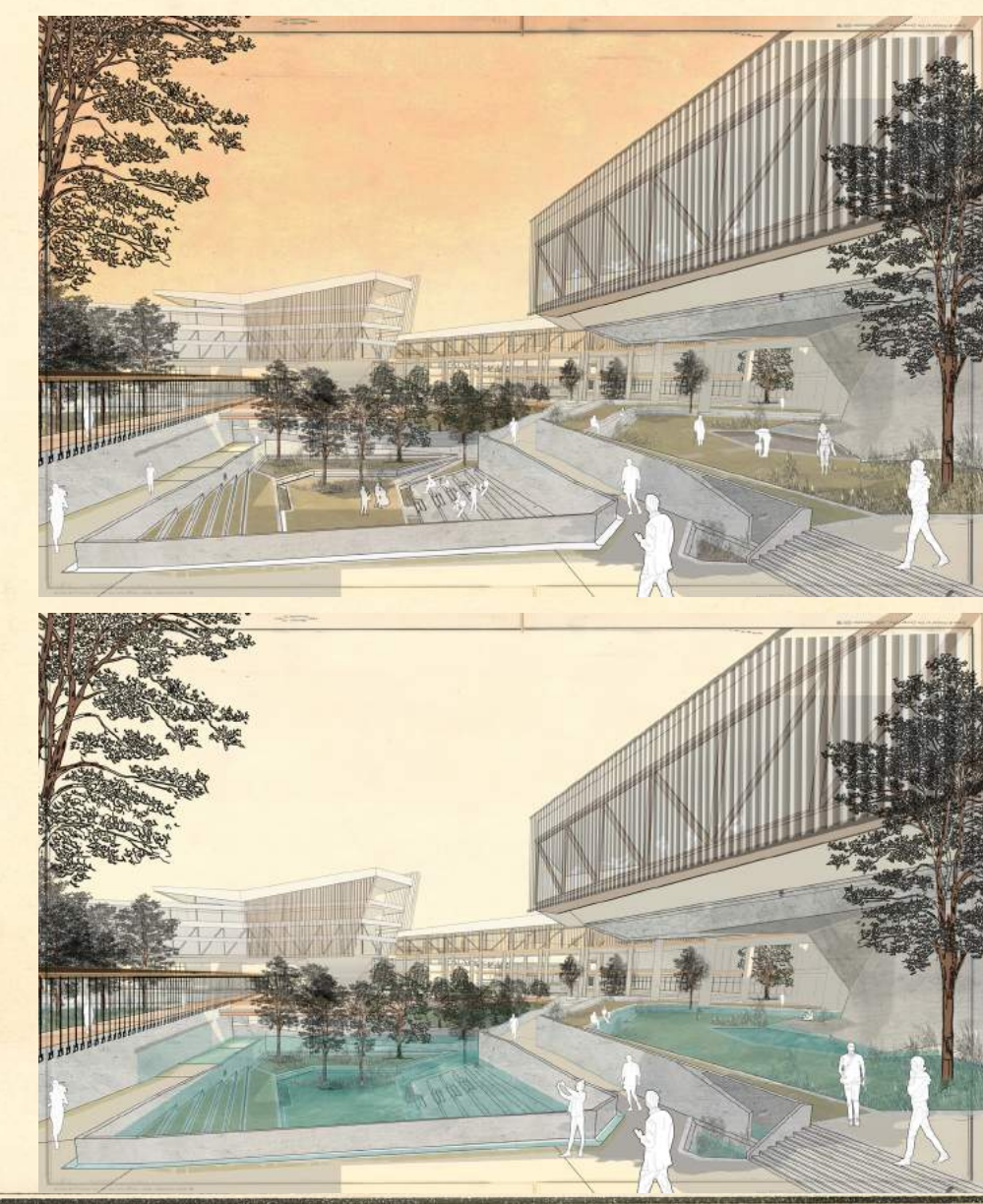
Drawn & Printed at the Survey Office, Jaffa, December 1930. 100

Basin's Bottom, Revised

In this area, the buildings act as an integral part of the eco-system, complimenting the shade produced by the trees, and creating "shade pools" over the water pools.



The project raises the possibility of using spatial tools to create architecture that adapts to the changing conditions presented to us by reality as well as shape consciousness, enhancing the connecting between humans and their surroundings.



Drawn & Printed at the Survey Office, Jaffa, December 1930. 100



Disturbance's climax calls for the most prominent spatial reaction. The area is adapted to mitigate and co-exist with excessive heat and urban floodings