



## **The Hell & High Water House**

*When Collective Housing tackles Social, Economic, Environmental, and Political issues on Low-Lying Coastal Land nearing abandonment by Insurance Companies.*

*“I am a god and I am not a god. Either way,  
you are my creatures. I keep you alive. [...]  
Someday I will eat you. For now, I feed you.  
Beware my regard. Never look at me.”*

The Sun

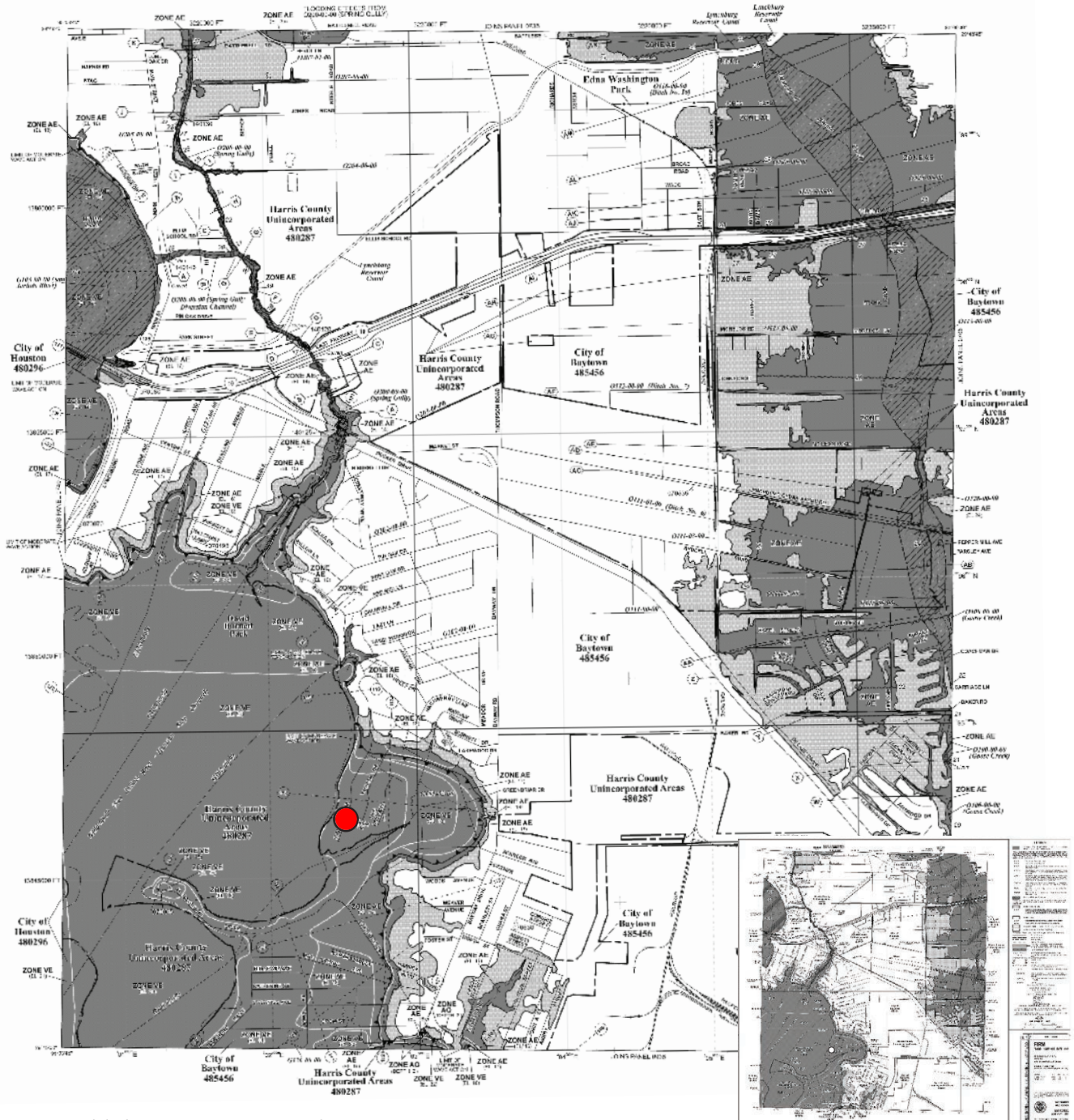
Kim Stanley Robinson, *The Ministry for the Future*

Raising atmospheric temperatures doesn't conceal the concept of a given world but results from an anthropogenic one. We live in a world where lower coastal regions face drastic weather patterns, sea levels rise, and the spread of malaria and dengue increases. Natural disasters amplify inequality among people and their landscapes. The Anthropocene also shapes a world where environment, economy, and politics intertwine. Consider Greater Houston, especially Baytown, under a dystopian—yet very near—future scenario: a Category 1 storm like Hurricane Beryl making landfall on July 8, 2024, causing a blackout lasting 2-3 weeks, combined with a wet bulb temperature of 42°C and a dew point of 35°C under a burning sun over flooded areas. Still, you know how to manage your meso-environment; you have learned to cultivate your garden and shelter yourself against “Hell and High Water.” The multi-unit housing project, the Hell ‘and’ High-Water House (H&HWH) transforms the phrase “hell or high water”—which defies nature—into a goal of living in alliance with nature despite impending natural shocks.





As environmental disasters increase, insurance companies are reducing their presence in disaster-prone areas or raising premiums, challenging property owners by denying home coverage or increasing prices by up to 27% (such as in Texas from 2022 to 2023), followed by banks declining loans. These companies often show a lack of clear standards about resilient architectural features, burdening consumers with higher deductibles, excluding risks like hail and wind, and offering less comprehensive coverage for rebuilding. Some areas are more vulnerable to tropical storms and flooding within Greater Houston than others. While Houston's downtown has an average elevation of 50 feet above sea level, Baytown is at a maximum of 34 feet, with its coast designated as a special flood hazard area. This situation intertwines politics, economics, and the environment, turning climate change into a matter affecting domestic finances. While society faces challenges from tropical climate threats, wealth secures uplands, power, and vaccines. As societies resist hail and high water, what type of domestic architecture results from the mediation between Earth's disturbed systems and human needs—what we call here 'Gaia Device' scores high in avoiding insurance penalties, allowing the economy to flow smoothly between banks, property owners, and the Anthropocene landscape of the collective housing project The Hell and High-Water house.



National Flood Insurance Program NFIP, Map Number 48201C0745M

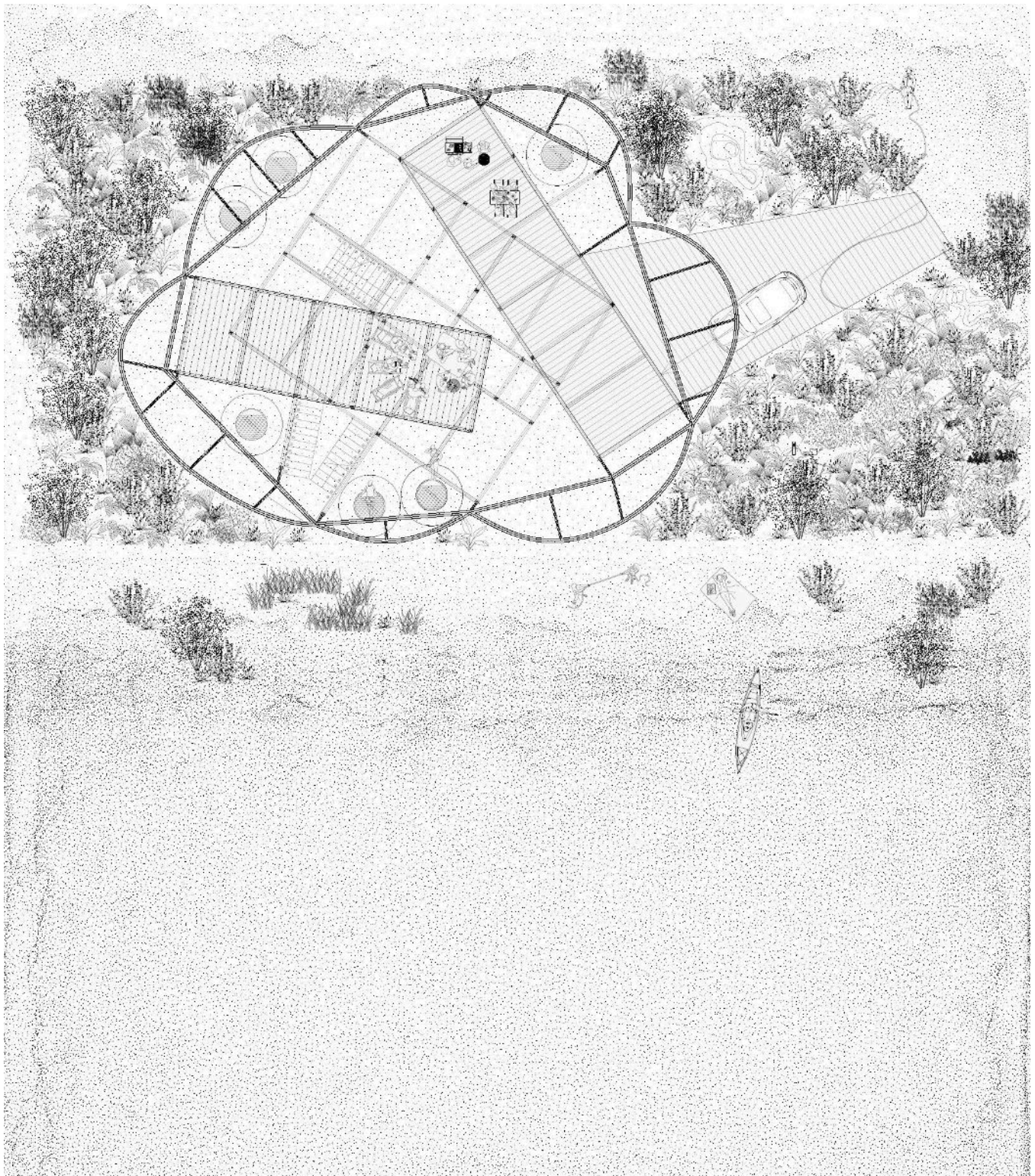
In the Galveston Bay Feral Delta Urbanism insurance accessibility, allows the economy to flow from the bank to the owner and from the owner to the landscape of the Hell and High-Water house.

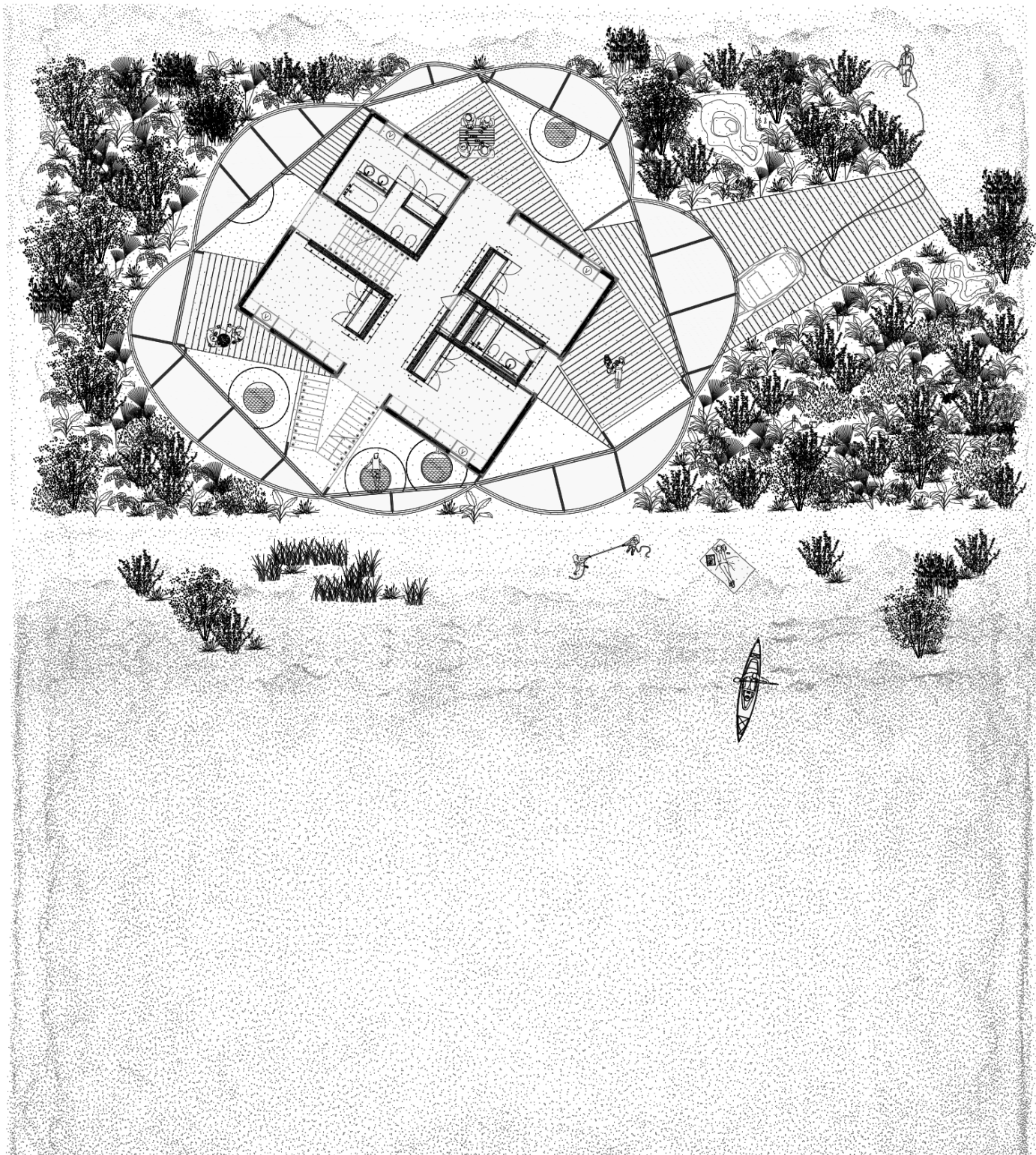
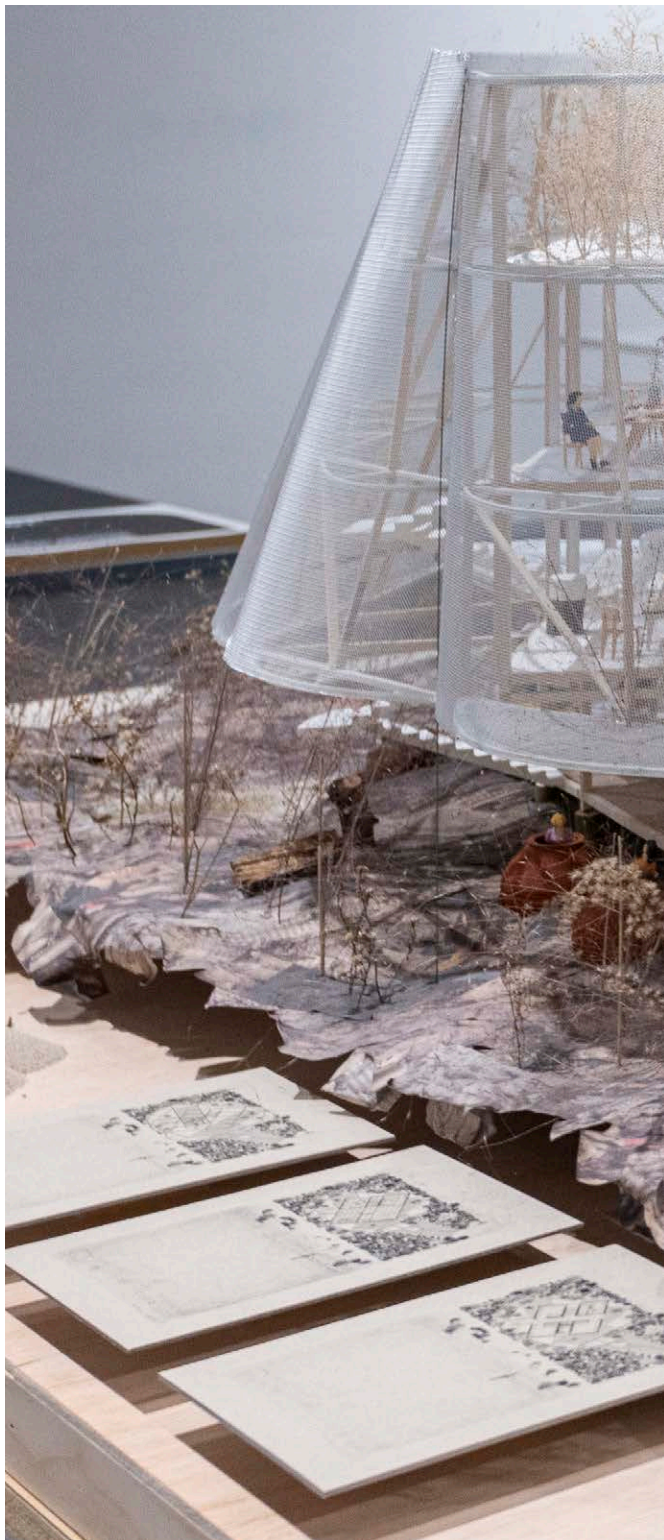


A breathable pyramidal undulating skin, in which mosquito repellent, shading, and climbing jasmine, lavender, citronella geraniums, catnip, lemongrass, ageratum, horse-mint, marigold, and basil grow, tempers the inner rooms by combining ventilation and convection effects driven by thermal radiation differences and prevailing wind frequencies. The skin presses east and west while spanning north and south, redirecting low-speed dominant wind frequencies to circulate upward within the skin's interior. The temperature drops to 10 °C on the ground floor before air flows to the upper levels, speeding up and cooling further before reaching the open rooftop garden, where the air smells of jasmine, mosquitoes never arrive, and residents harvest vegetables and aromatic herbs. A series of designated wet-bulb zones on the floodable ground floor—equipped with clay cisterns and filled with floodwater—are located beneath the skin's shade, where temperature decreases due to accelerated convection—if the water level is high, the speed increases because of the Venturi effect.

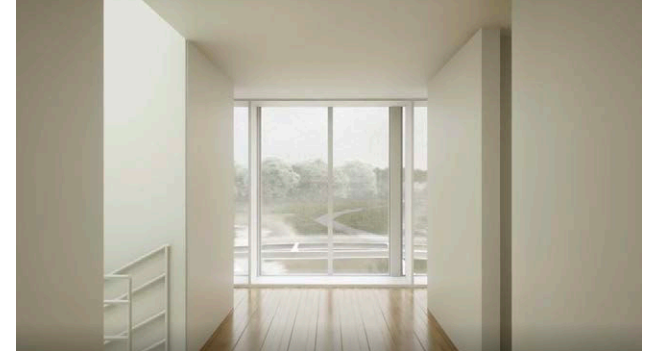
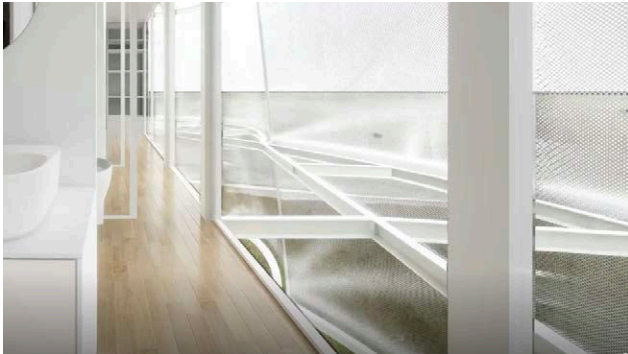
The modular structure is built from overlapping truck-length industrialized apartments covered in mirror-like steel to maximize reflected light inside. The curved surfaces increase the structure's strength, protecting it against hazardous materials from hurricanes, tornadoes, or hail. The structure is reinforced from top to bottom to ensure stability against high-speed winds.











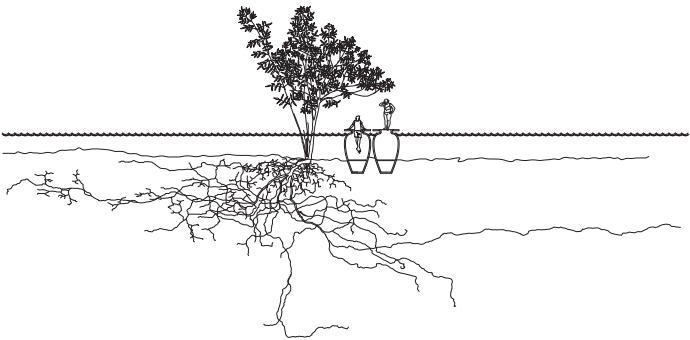




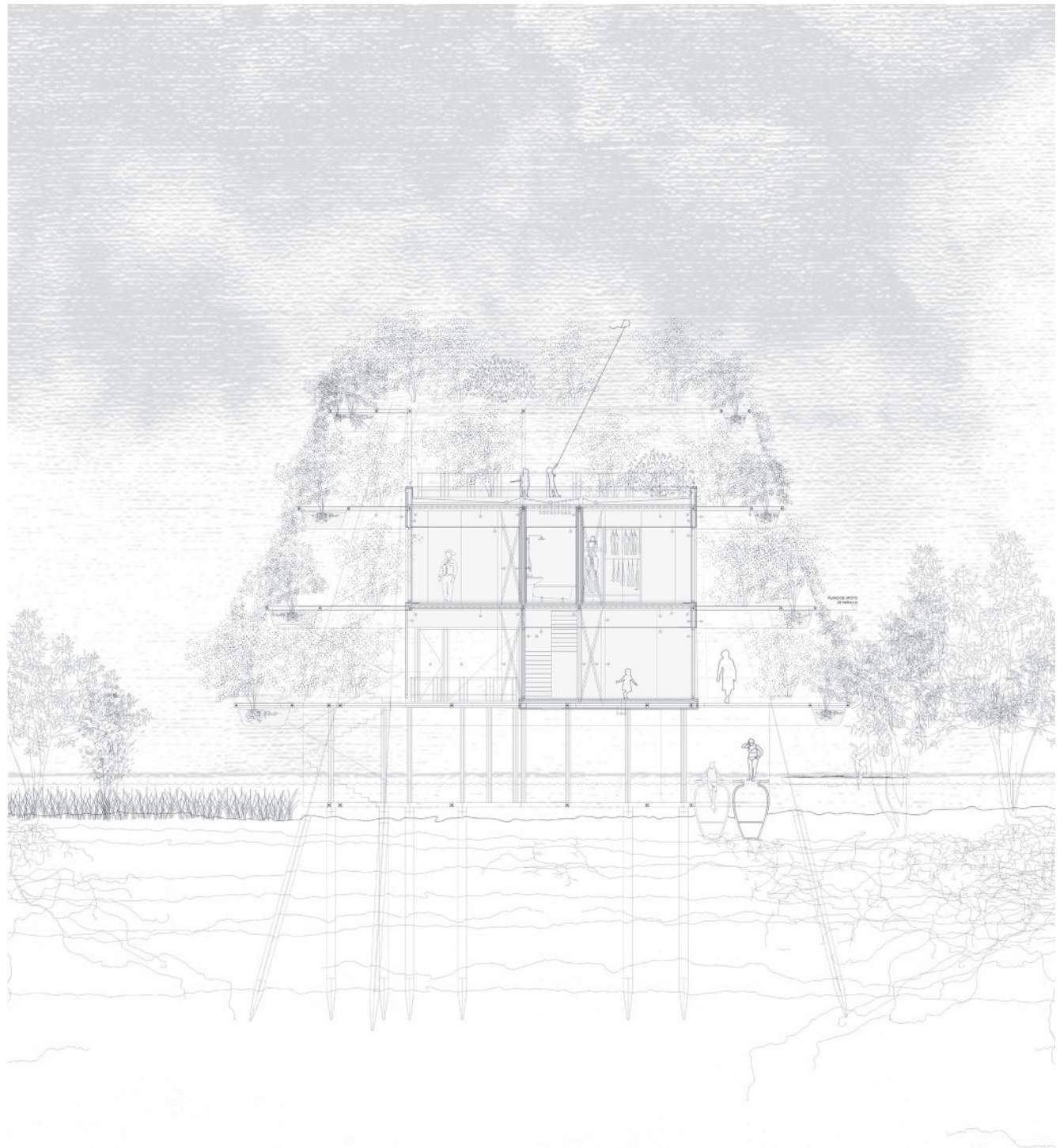
Consider within Greater Houston, Baytown City under the dystopian prospect when combining a category 1 storm (as the July 8, 2024 landfall of hurricane Beryl),



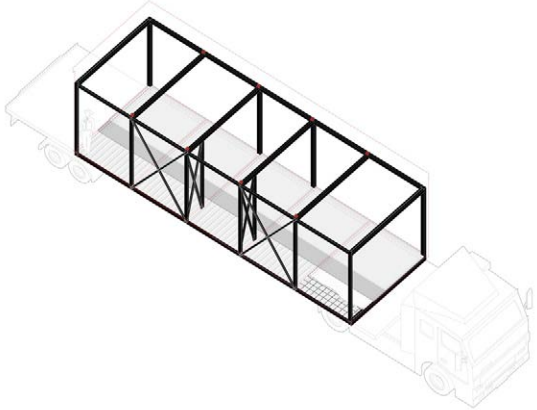
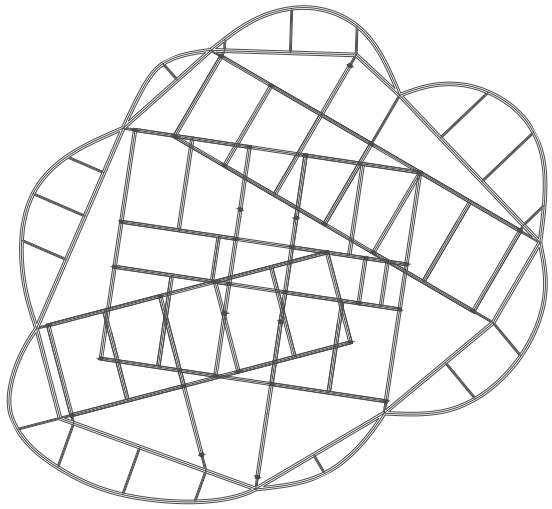
a blackout that extends for 2-3 weeks, and a wet bulb (a temperature of 42oC and 35oC dew point) builds under a burning sun over miles of flooded areas.



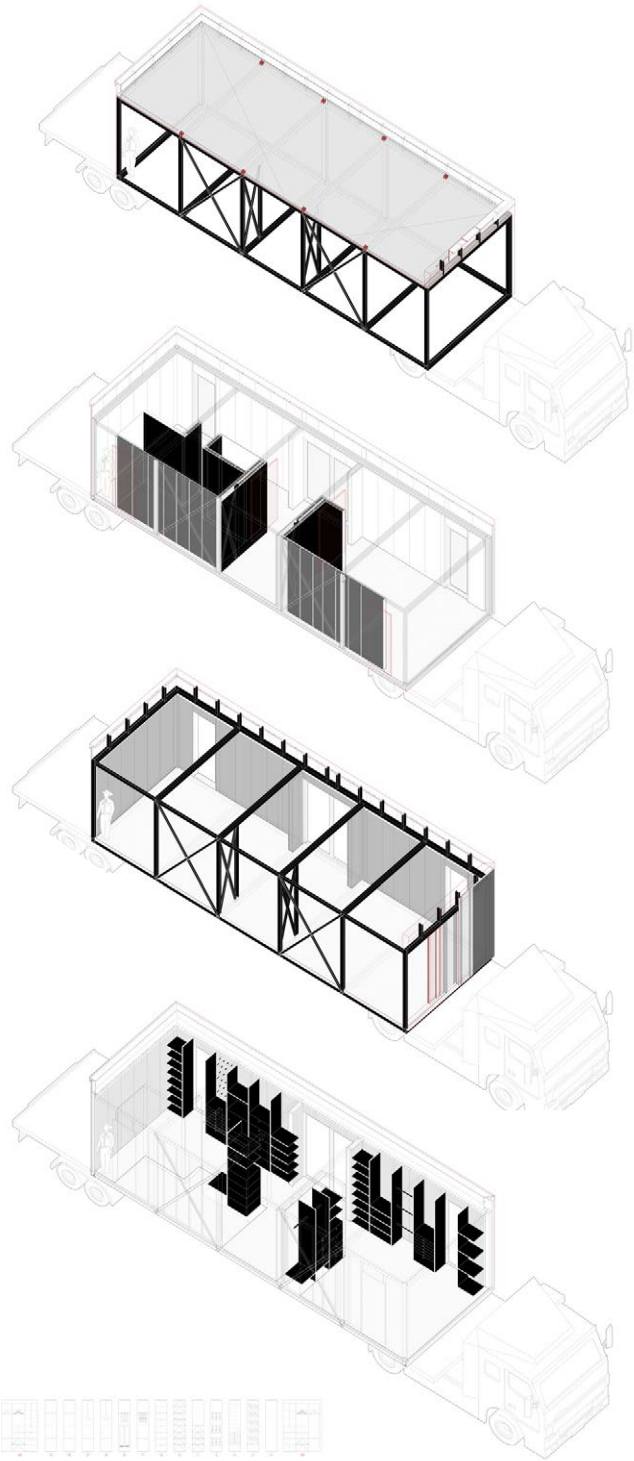
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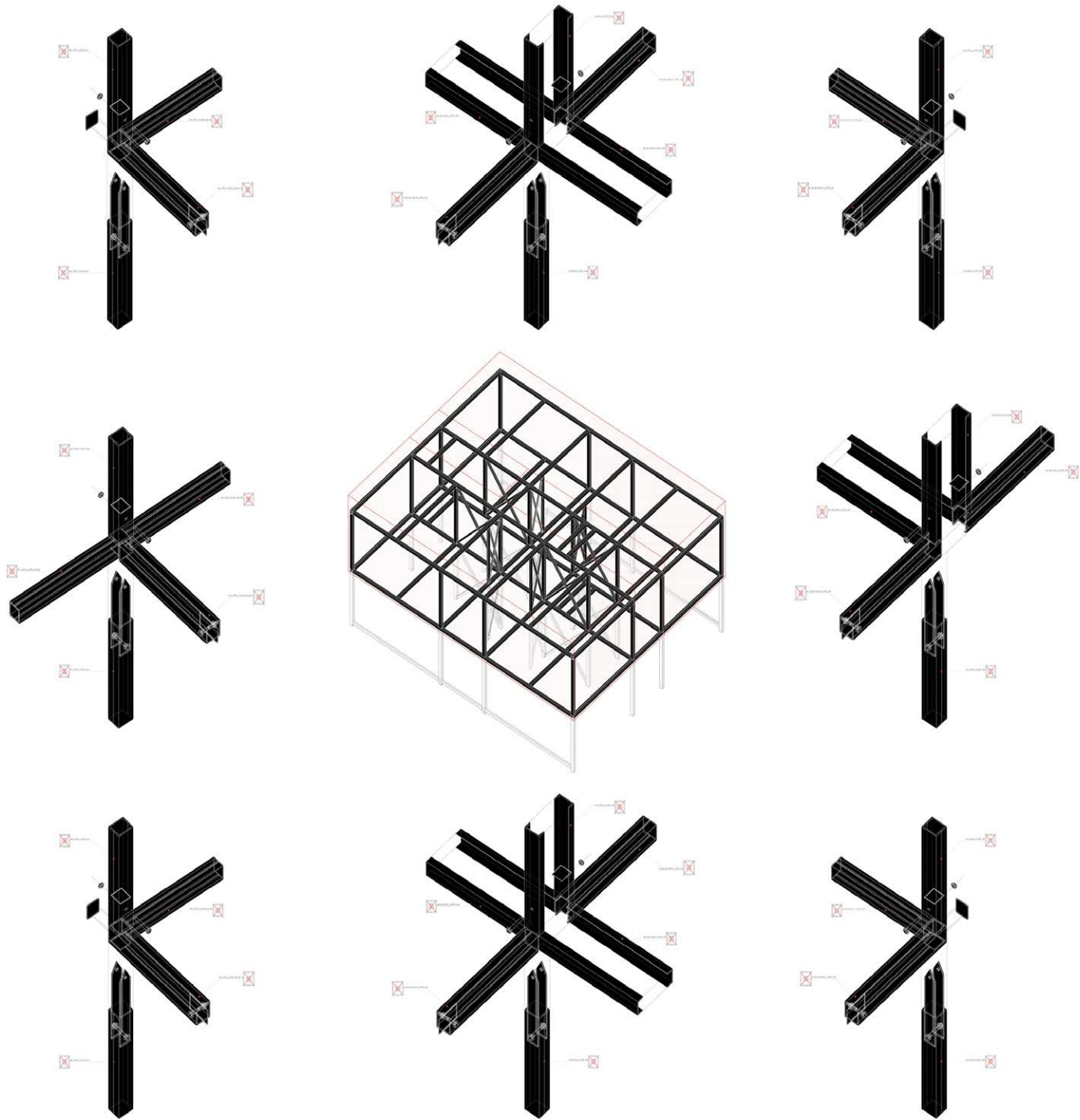
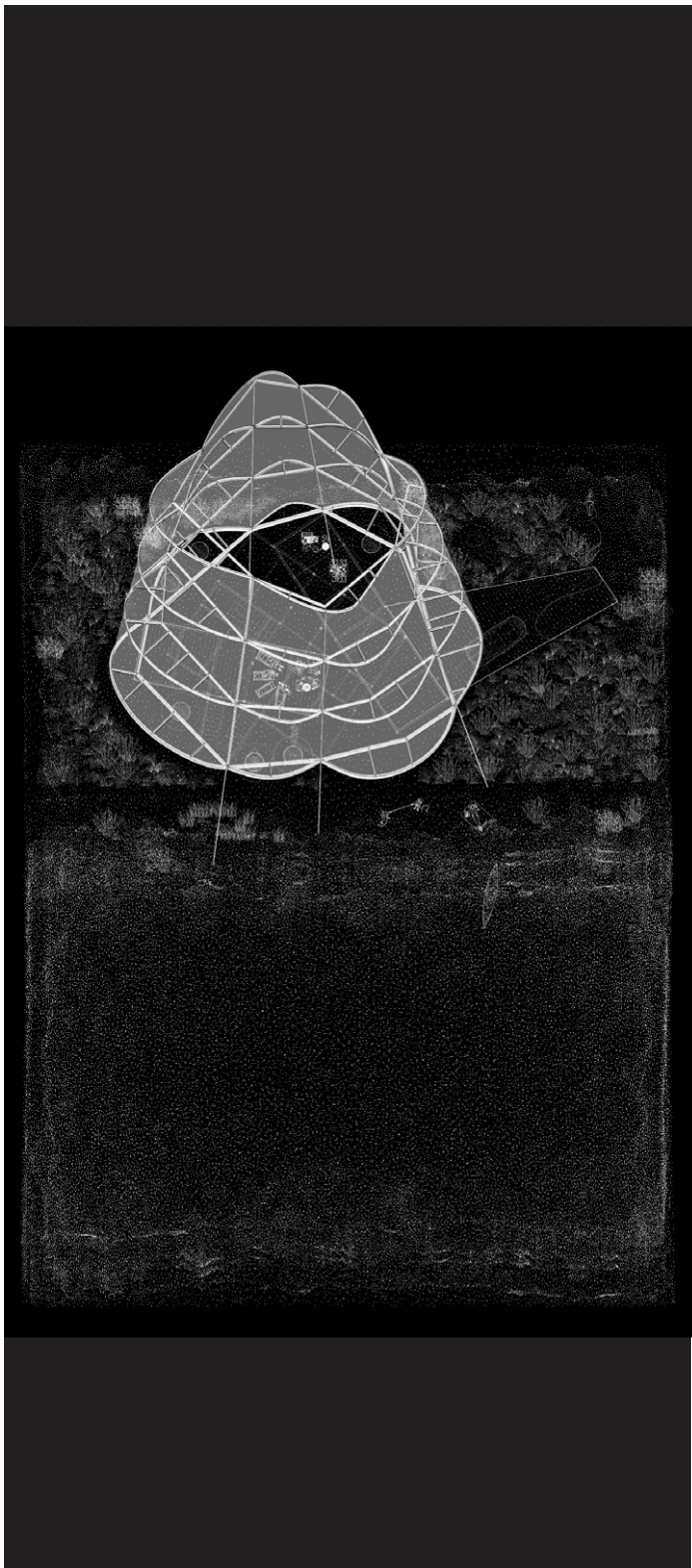












Assemblies of U Channels

