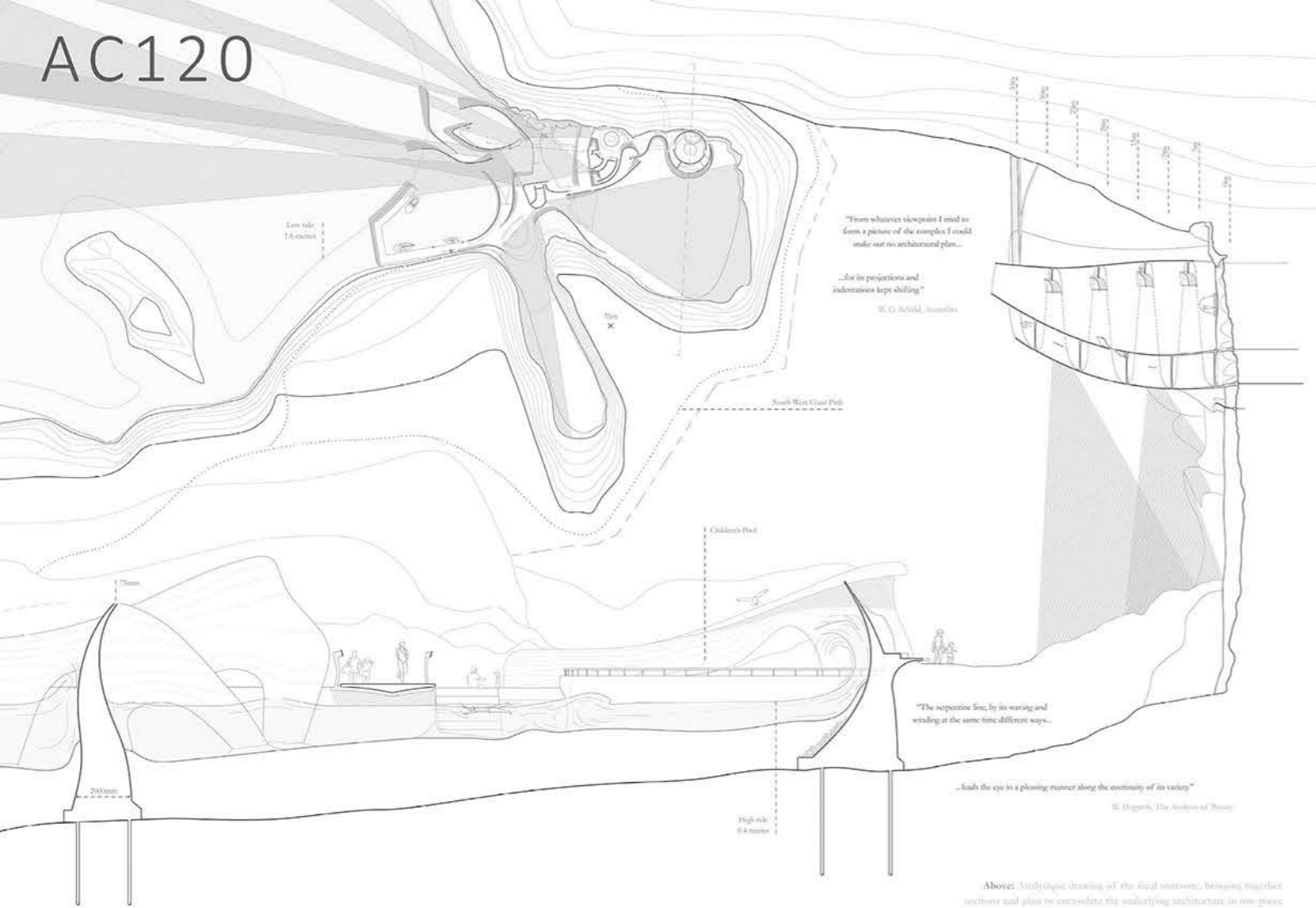


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Above: Analytical drawing of the final outcome, bringing together sections and plan to encapsulate the underlying architecture in one piece.

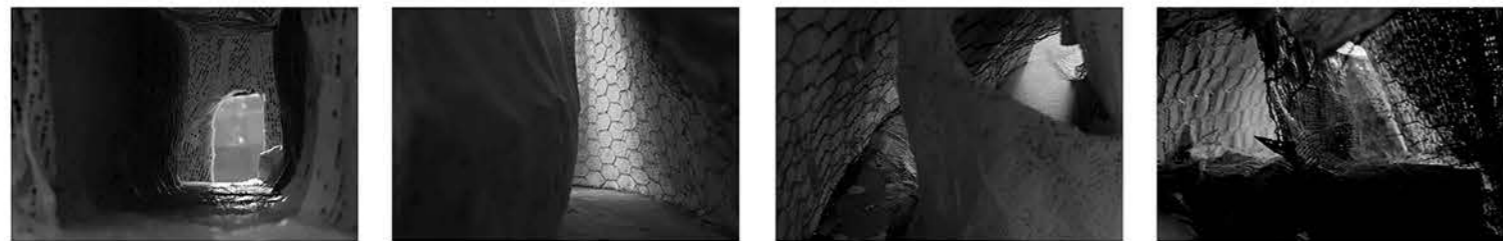
Defensive Architecture as Landscape

Utilising ferrocement construction to calibrate the coastal landscape

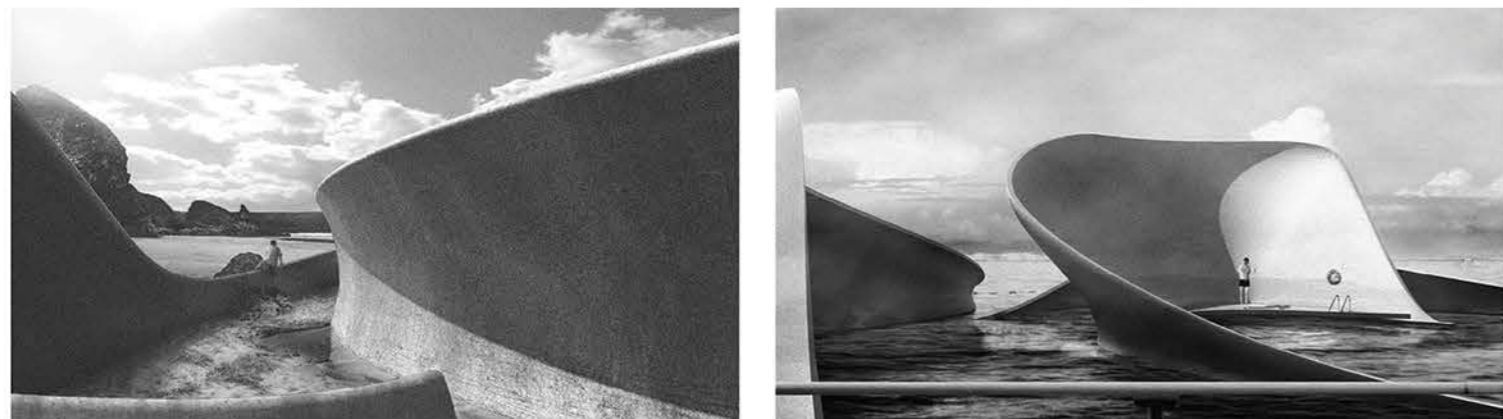
The beauty of form and function in the ruins of military architecture conceals the historical value that lies in the design of the fortification, specifically in relation to the landscape in which it holds. Defensive Architecture as Landscape is the product of an exploration of two streams of architectural interest: a response to material and a calibration of landscape, condensing into a modern adaptation of techniques to survey an environment into a consecration of architecture becoming landscape. The first stream stemmed from a response to the destructive use of concrete in the Atlantikwall, as found by Vitellio, forming how we might instead find strength in biological structures rather than

brutal thickness. The specification of ferrocement construction enabled the proposed landscape to adopt an elegant thinness that adapted the experiential qualities of the bunkers, in harmony with the site below the cliff. Ferrocement is the manual application of a concrete mix to a thin structure of layered mesh, this technique was initially used for the construction of boat hulls, but is also what led to the invention of reinforced concrete. However, because of the proportional properties of ferrocement, it has many of its own advantages that still deem it useful within construction. Ferrocement today can be seen through a different lens, one with an environmental conscience. The

material's use can extend far beyond its structural properties, to achieve a vast reduction in carbon emissions when compared to its heavier counterpart in the built environment. The second stream regarded the calibration of 'the edge', meaning the line where the land ends. 'The edge' moves constantly, shifting through interpretation and the reality of time. The design process allowed for an exploration of how architecture has surveyed, controlled, rejected and respected the landscape throughout history, reflected in the final proposal. This represents a modern, ecological attitude towards our natural environment, enhancing the function of the architecture in the space it creates.



Above: Within the design process, the medium of modelmaking was utilised to explore the atmospheric qualities of the design. In reference to historical fortifications, specifically the bunker typology, the use of ferrocement was a solution that mimicked these experiential spaces, however achieved in a way that held a deeper connection to landscape and environmental construction. These models were created in the spirit of ferrocement construction, using chicken wire (reinforcement) and plaster mudoox (concrete application).



Above: The final outcome was envisioned through the programme of a coastal sea pool, orchestrated by the sweeping forms of this fortification. These logs of these lines were a response to landscape and a calibration of 'the edge', acknowledging that it is better in motion.

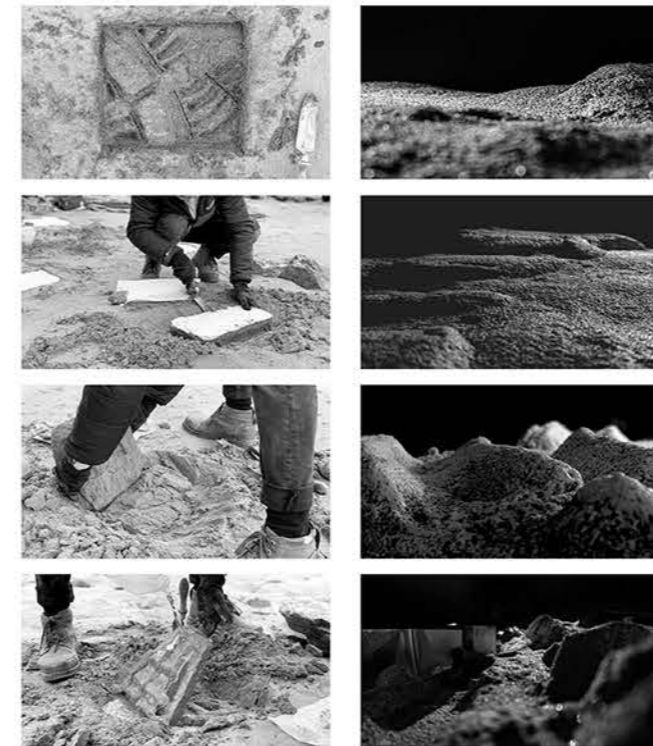
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Constructing Landscape

Investigating the impact of temporal and permanent architectures in the passing of time

The development of the investigation of the landscape was followed by the construction of a declining dune landscape on the north coast of Cornwall, UK. In doing so, it also explores the notion that by implementing permanent and temporary architectures into the landscape, we orchestrate specific consequences in the shifting ground to define the architecture as both landscape and time. Materials and connections live beyond their conception on-site, even beyond their eventual destruction. They exist through memory and the lasting impact of their existence. By understanding this, the investigation enables the proposal of architectural interventions that with considered but very little means, bring about the consequent construction of a landscape that factors the natural formations of surface to build space through the incremental passing of time.

In the Cornish village of Porthtowan, the dune system can no longer naturally support its own existence. The purpose of constructing this landscape is to prevent the loss of a dune habitat and establish a relationship between its continued existence and the community's social and cultural functions. It is by understanding the landscape that we will have the largest impact using the smallest footprint. In time, both architect and the environment shall become a singular author of the subsequent landscape, forever in a state of reformation.



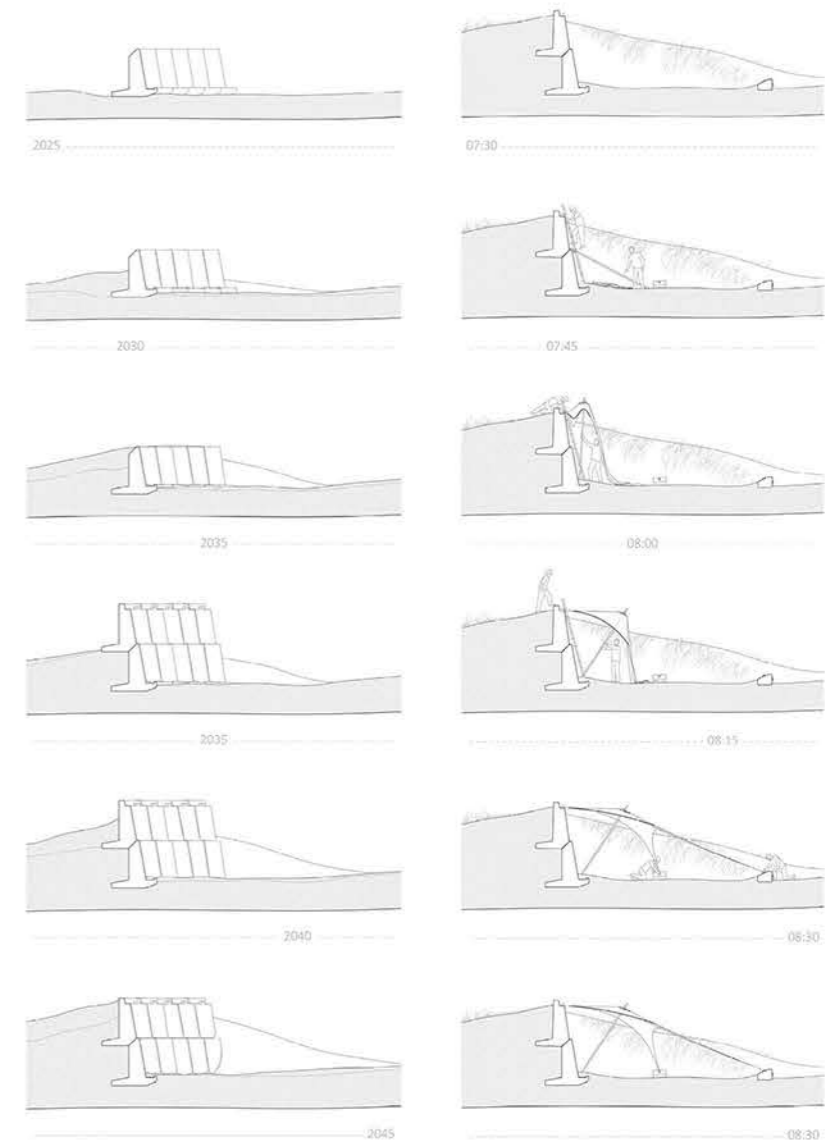
Above: The constructing of landscape was developed in the landscape itself, used to create examples of the proposal.



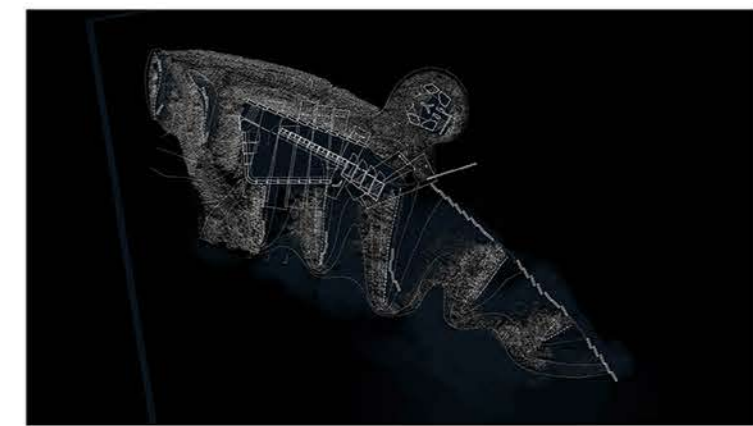
Above: Solid casting: a method entailing the excavation of volume to create a form-work, suggesting an approach to construction.



Above: Visualisation of the approach to the changing room facility, which uses a shell-roof structure constructed of ferrocement.



Above: The increments of time embedded within the work was articulated using the GIF format, illustrating the consequences of the interventions.



Above: Plan of the proposed landscape, encapsulating the formations of accumulated sediment surrounding the changing room facility.



Above: Visualisation of the interior atmosphere of the changing room facility, which in time, moves as part of the shifting landscape.