

University of Cape Town

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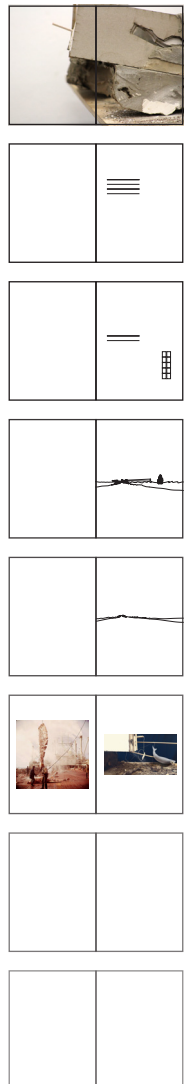
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BLIND MAN'S BLUFF _ cruel revelations through the study of architectural artefacts
DARREN BERLEIN
M.ARCH DISSERTATION 2018
sCAPES

NIC COETZER
KEVIN FELLINGHAM

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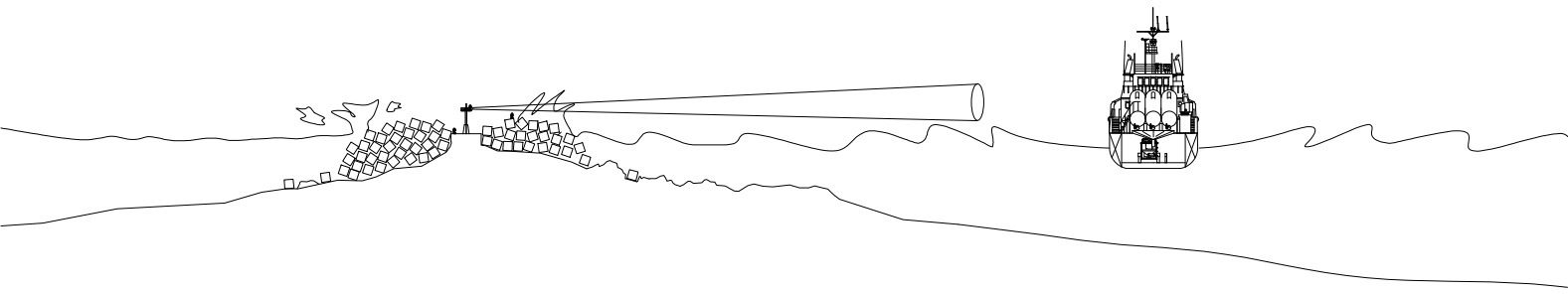


fig. 2 what might be at the bluff?

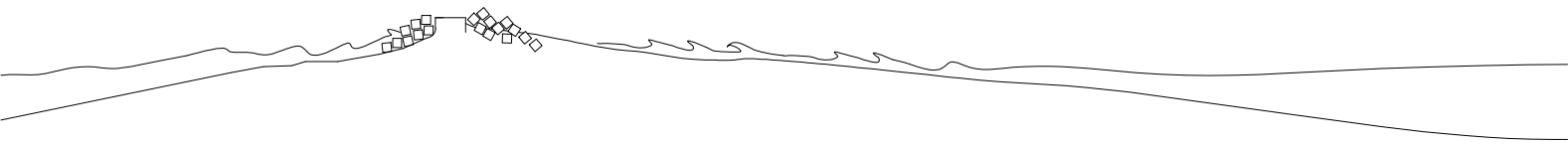


fig. 3 what might be at the bluff?

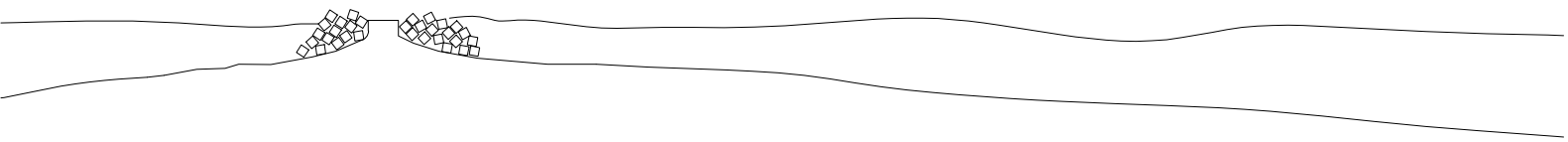


fig. 4 what might be at the bluff?

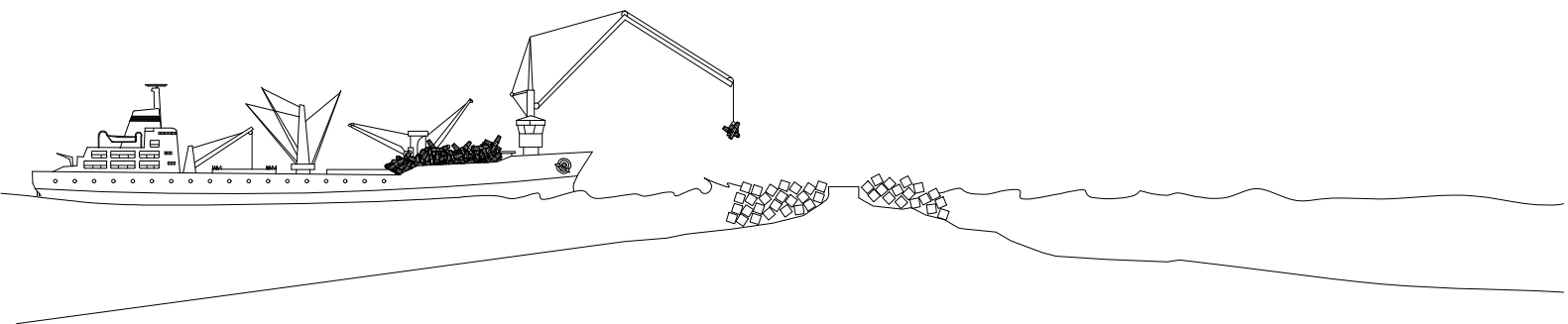


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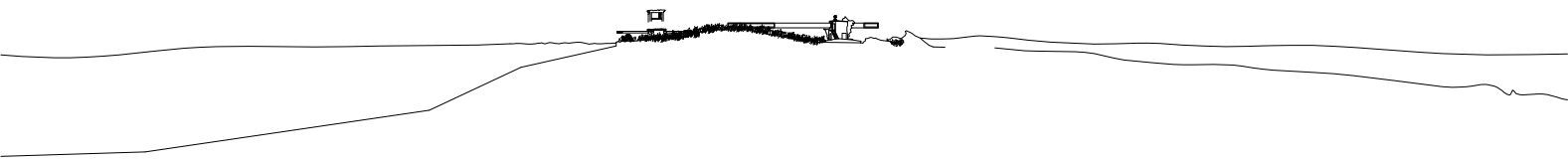


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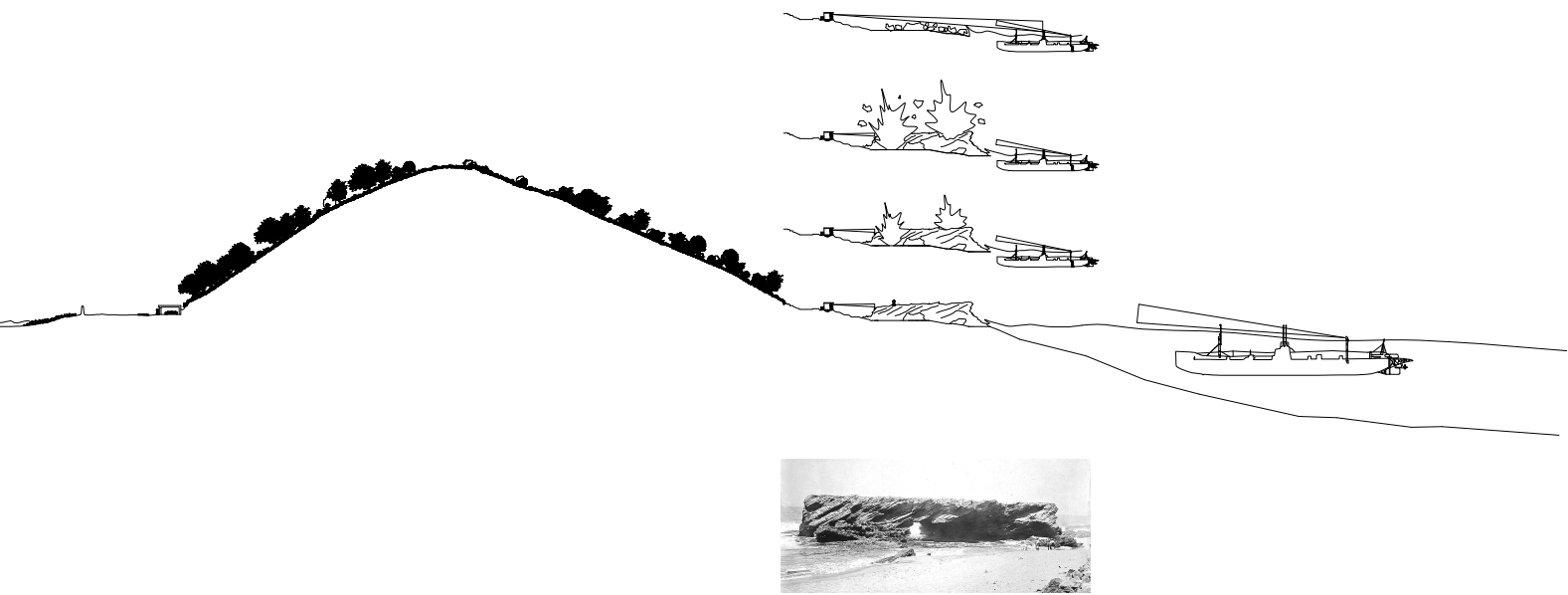


fig. 7 what might be at the bluff?

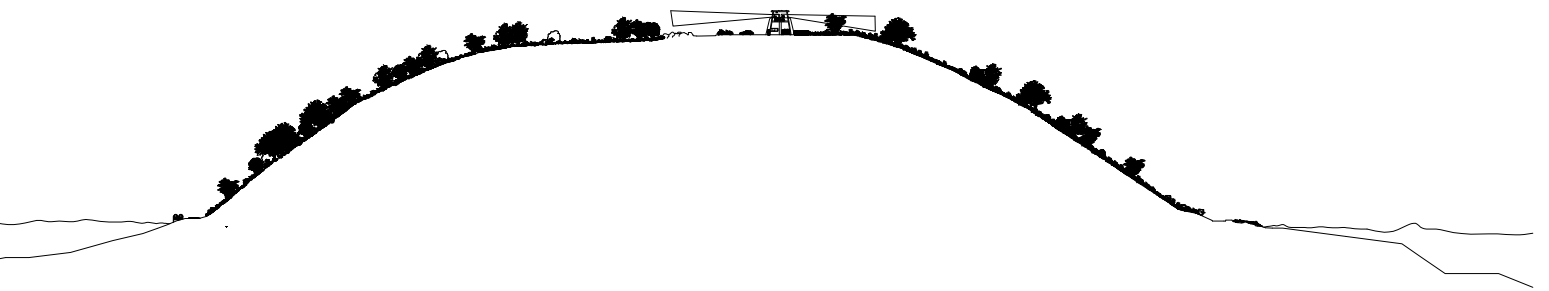


fig. 8 what might be at the bluff?

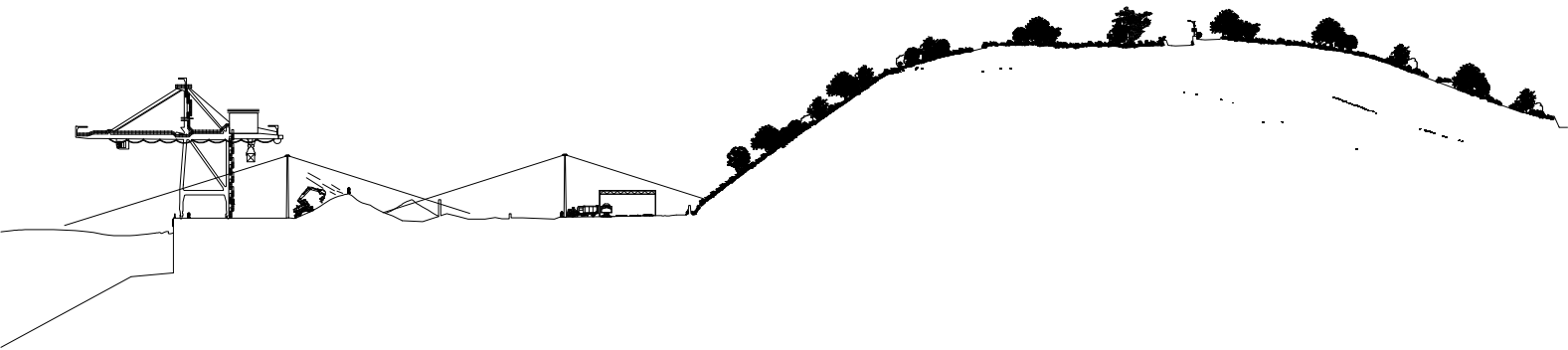


fig. 9 what might be at the bluff?

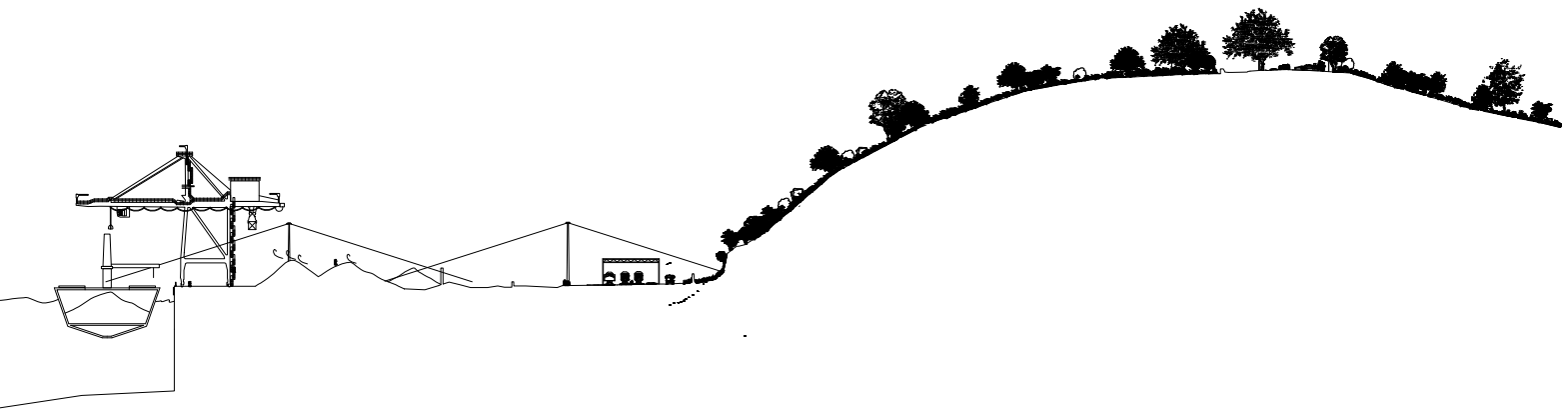


fig. 10 what might be at the bluff?

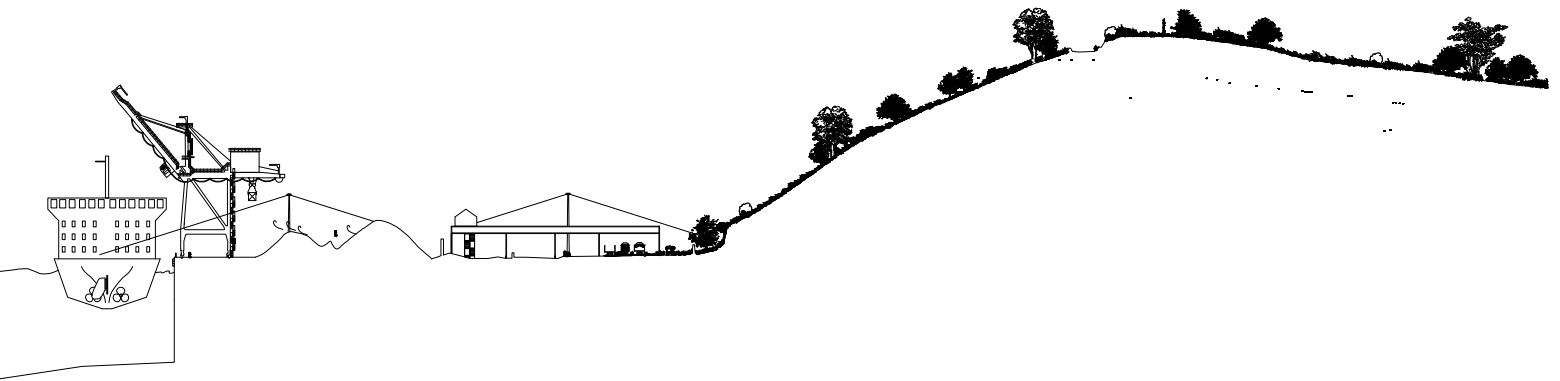


fig. 11 what might be at the bluff?

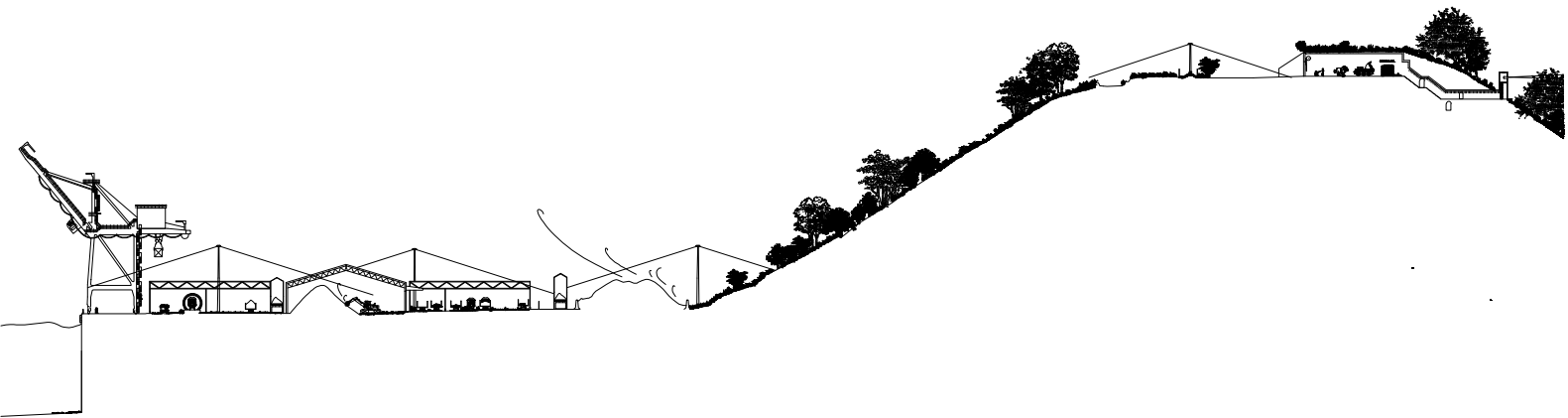


fig. 12 what might be at the bluff?

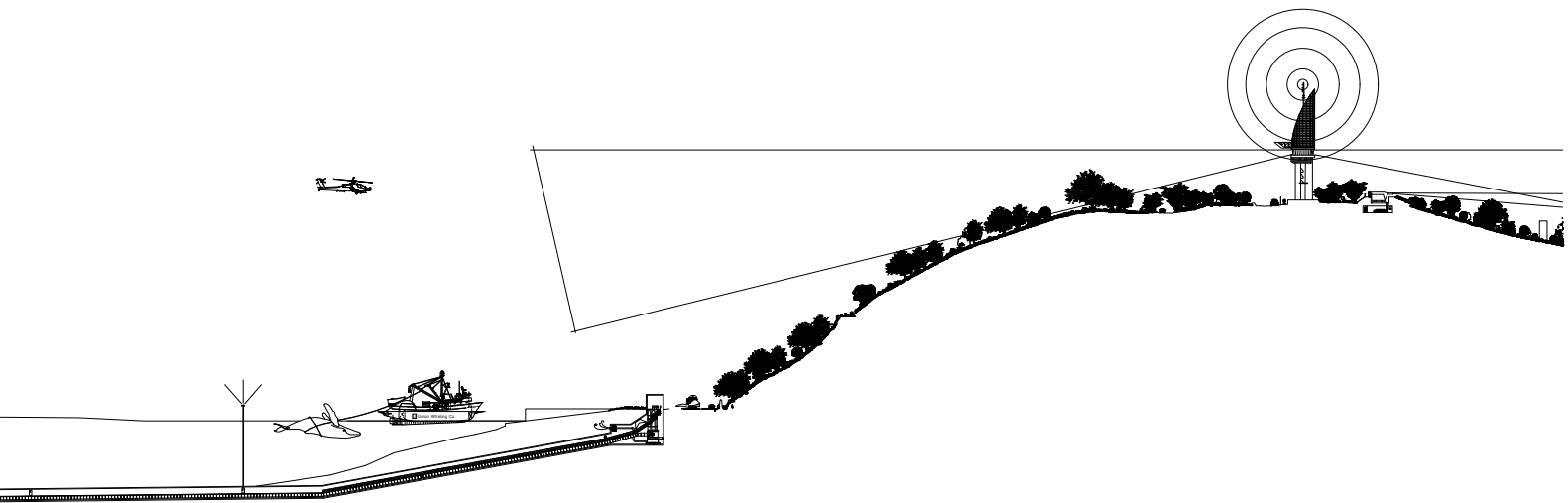


fig. 13 what might be at the bluff?

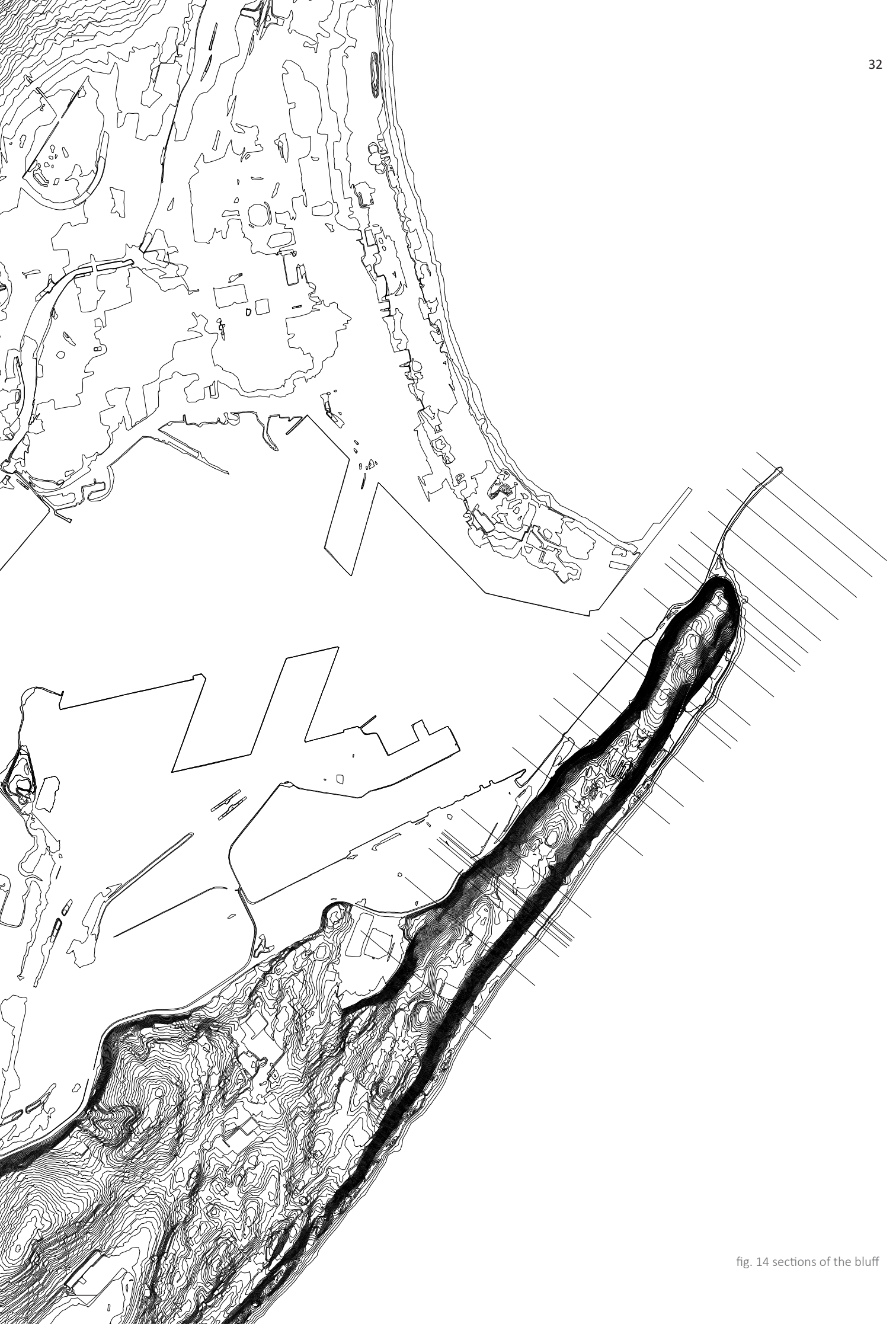


fig. 14 sections of the bluff

acknowledgements

To my beautiful Mother, Mom, Mumma, Veena Berlein it has been too soon. You have given me all the strength I have needed to finish this dissertation. Your continuous sacrifice to see your children explore their passions is unmeasured. I could not have completed it without out you. Thank you for all you have taught me in life and have grown me into the person I am today. I am forever indebted and grateful for you. I love and miss you

To my Dad, Brian Berlein, you have inspired me to persevere through failure and to continually test in all that I do, because that is what you do.

To my sister, Alexa Berlein, you have been a continuous support and encouragement for my passion.

To Nic Coetzer and Kevin Fellingham, thank you for allowing my creativity to be boundless and to flourish. I am grateful for all your guidance and support.

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abstract

This dissertation is an attempt to understand the Bluff Headland of Durban by uncovering its hidden systems and ideas. By studying the abandoned built fabric visible on site including a whaling station, the ideas that once embedded themselves within those structures reveal much larger societal notions and hidden systems. The Bluff is of a particular interest in its relation to modernity as it is framed as a blind spot hidden in the development of Durban. Many of the artefacts found on site today are abandoned and owe themselves to particular epochs that have faded such as the abandoned World War 1 bunkers and the abandoned whaling station. However, Durban Central Sewage Treatment Works nestles itself in between these abandoned structures away from any engagement with the city anonymously pumping sewage into the ocean. This dissertation explores the horrors that once nested themselves in these structures through multiple modes of making, in particular the use of the camera and the body, as method of engaging with site artefacts cross-referenced with archival-research. The design project attaches itself to the ruined whaling station and manifests itself as a space of remembrance for the past systems that have once occurred. It also looks to the future of human impact on its environment by initially opening a counter memorial that allows the building to later mature into a museum through the passage of time. The natural action of the waves wash away the sand formwork that is used to cast the museum. Additionally visitors to the counter memorial are also invited to flense and wash some of the sand away to understand timescales of the natural world. These erosive processes will then allow the space to open to its full capacity, in time, taking direct influence from the process of whaling.



I shall lie quiet, quiet
 On either hand a son,
 And wait in timeless patience
 Till time's long night be done.
 As in the days of living
 They'll lie close by my side,
 And time shall be forgotten
 And space, wherein they died.
 And in the sightless darkness
 My yearning hands shall reach
 To make sure of their nearness,
 And take my love to each.
 I shall not draw them closer
 Nor stir their slumber deep,
 For fear a flash of memory
 Might stab the dark of sleep.
 I shall lie quiet, quiet
 One knowledge in my breast
 That close beside me, sleeping
 Lie my two sons, at rest.



fig. 15 leslie and charles grave stones seen in belgium

preface

The sparks to this dissertation were revealed many years ago as a child with my first 1:50 scaled model aeroplane of an English Spitfire. The many hours I had spent detailing the model from its paintwork to its decals opened the door to the rich military history of the World Wars but also uncovered a more personal story, to this day still encapsulates and enthrals my being. (Of course, after the completion of the Spitfire, I had to make the oppositions plane a German Messerschmitt. Having both German and English descent I could not decide how to hang the models so they were hung parallel to each other as if they were mere friends.)

Aside from my interest in making, the personal story that was uncovered came from an Englishman Andrew Tatham who contacted us about our relatives Charles and Leslie Berlein. To me they are my Great Grandfathers who fought and died in World War 1 in Belgium. Andrew spent many years researching each individual of the group photograph of the 8th Battalion in the Royal Berkshire Regiment because it was led by his own Grandfather and in that photo was young 18-year-old Leslie. His research has placed emphasis not on the numbers and facts of the war but people as living, breathing beings and how life can be so fragile especially at war. The title of his research, 'Before, Now and in-between' looks at how war has shaped successive generations and how war has rippled through time affecting and altering families.

Both Leslie and Charles died within days of the First World War and was remembered by their mother Elizabeth Berlein through a poem alongside



fig. 16 abandoned military emplacement at the harbour entrance on the bluff

introduction

The basis of this design project is inspired by the writings of philosopher Paul Virilio. He argues 'historical phenomena of dramatic moments in contemporary history are stripped of their functions and removed from topical contexts [where] these works bespeak of an unknown meaning'(Virilio, 1994). The seaward side the Bluff in Durban is littered with many abandoned structures from the eras of whaling and World War One & Two. This visible detritus reveal historical epochs and societal ideas that once ensued - one could surmise by analysis of the built structures but deeper investigations reveal much broader notions established by global systems. As Heidegger states, 'when combat ceases, it does not disappear, the world turns away'(Virilio, 1994) continuing the submerging and concealment of these systems. These processes and activities that once activated them have all disappeared, revealing major shifts in thought, desires and needs.

This design project studies the seaward strip of the Bluff as a blind spot in the development of Durban, which in turn has become the city's backyard because of its location on the periphery and its great-vegetated sand dune hiding the horrors beyond. The horrors that once existed on site are only understood through deeper research both through the study of the physical architecture and archival research. What exists on site today is only a hint at the magnitude of operations that used to occur but reveal even more events that are sinister and epochs that society has stepped out of, in which we are able to look back at to review their effects in the natural world.

The design latches itself onto the whaling station through various alterations and additions that aim to reveal its once sinister past. By engaging the new architectural intervention intersecting and layering it with the old, the design aims to engage the user in memory by narrating it through 'things' both in their presence and in the absences. Through the lens of Bill Brown, 'we look through objects to see what they disclose about history, society, nature, culture - above all, what they disclose about us'(Brown, 2004). In partial, the design understands the whaling station and whaling as a phenomenon of modernity that has resulted in this particular kind of system that supplies a particular set of needs. Additionally, the design merely sees whaling as a springboard for design influence. The design itself becomes an engagement to the many systems that have once occurred and to the systems that are currently active and aims at bringing our current state of being into direct question through the reactivation of those systems in what is essentially a counter-memorial, which, through time transforms into a museum.

A thorough investigation into the process of whaling at the whaling station on the Bluff exposes South Africa and the world as a society driven by consumption. The placement of the whaling station on the hidden edge of the Bluff conceals the malicious acts of slaughter but produces a clean product rid of any process. To consumers, these commodities seem autonomous, ahistorical and discrete from human production (Leslie, 2000). Any traces of production in objects are repressed, as Theodor Adorno says, 'the occultation of production', making their reception a spectacle or a kind of magical apparition (Dixon, 2000). For constructivist Aleksandr Rodchenko, the material object should be an 'active almost animate participant in social life' (Kiaer, 2005) refuting a commodity under capitalism which negates the process of production. This dissertation tackles those hidden systems by exposing their true realities and the impacts it may have for the future commodity through a building that is both constructed and deconstructed through the passage of time. Throughout the building's life, parts of it will be accessible; sand from the beach is used to cast the form of the building, which is released, back into the ocean by the natural motions of the tides as well as the physical engagement of the user aiding in its removal. The act of direct engagement with the removal of the formwork engages the user directly with the building, similarly acting as an animate participant for the user to understand time scales of the natural world and the evolution and production of a process into a product.

The corpse, that which has irremediably come a cropper, is cesspool, and death; it upsets even more violently the one who confronts it as fragile and fallacious chance. A wound with blood and pus, or the sickly, acrid smell of sweat, of decay, does not signify death. No, as in true theater, without makeup or masks, refuse and corpses show me what I permanently thrust aside in order to live. These body fluids, this defilement; this shit is what life withstands, hardly and with difficulty, on the part of death.

There, I am at the border of my condition as a living being.
Julia Kristeva

(Kristeva, 1982)



fig. 17 union whaling station circa 1970's



fig. 18 premier whaling station circa 1940's



fig. 19 abandoned ww2 military bunker on bluff



fig. 20 sewage and train infrastructure

if thou gaze into [the] abyss, the abyss will gaze into thee

Pilgrimages are often associated with a quest for healing, for the discovery of history and the vast amounts of time spent with your own body. The profound experience of engaging your body in a ritualistic event is linked to discovering something beyond oneself (Peelen & Jansen, 2007). Temporary event structures that pilgrimages offer allow people to separate from their day-to-day lives, experiencing something deeper, a psychologically emotive experience.

The existing whaling train line along the beachfront of the Bluff which starts on the city side is synonymous to a pilgrimage as it allows for a direct engagement with the artefacts from the days of whaling, in fact direct engagement to the entire sequence of events that occurred on land once a whale was hauled from the ocean. This sequence sees the embedded steel slits in the whaling slipway, the twisted, decaying whaling train line, rusting flatbed train carts, and only a portion of the whaling station itself. This sequential journey however is strongly interjected by other artefacts of World War 2 military bunkers, Durban's sewage works and the present sight of decay evident in these relics. This journey and route situates your body on the line between the littoral and the terrestrial as Virilio describes 'the coalescence between the air space, the oceanic expanse and the continental limit of the land' (Virilio, 1994).

However, vast distances between these objects allow time for reflection and these past 'interactions create mnemonic assemblages and the future fossils that tell the stories of our lives'(Virilio, 1994). The constant ebb and flow of the ocean and the decaying landscape prompts an engagement out into the ocean, and as Nietzsche argues if thou gaze long into [the] abyss, the abyss will also gaze into thee(Nietzsche, 1990).





fig. 22 oblique image of the bluff looking north west stitched together with 450 high res images and presented at scale (4x2m), eastern edge of the bluff in the foreground

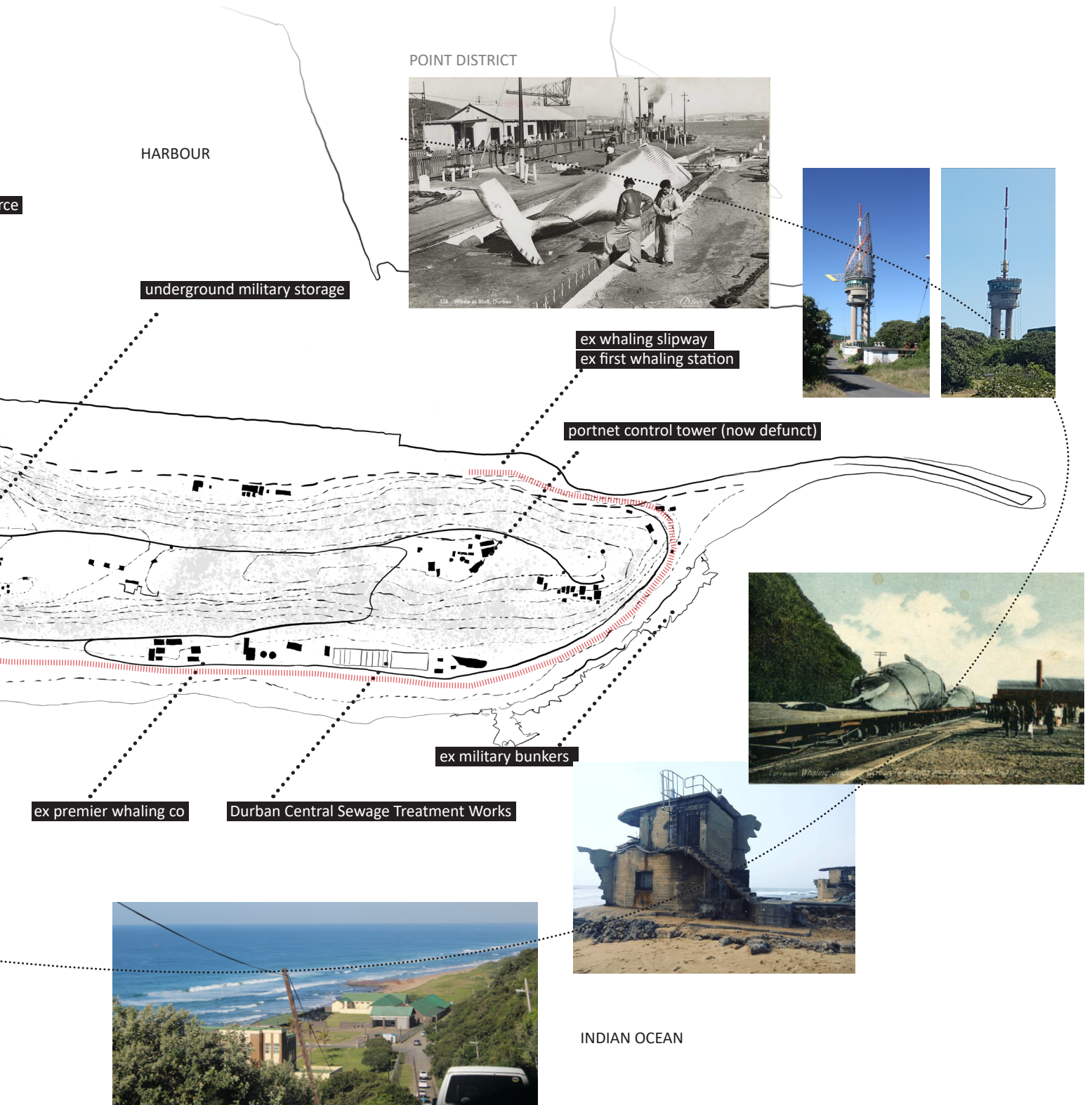






fig. 23 the littoral of the bluff

DURBAN CBD



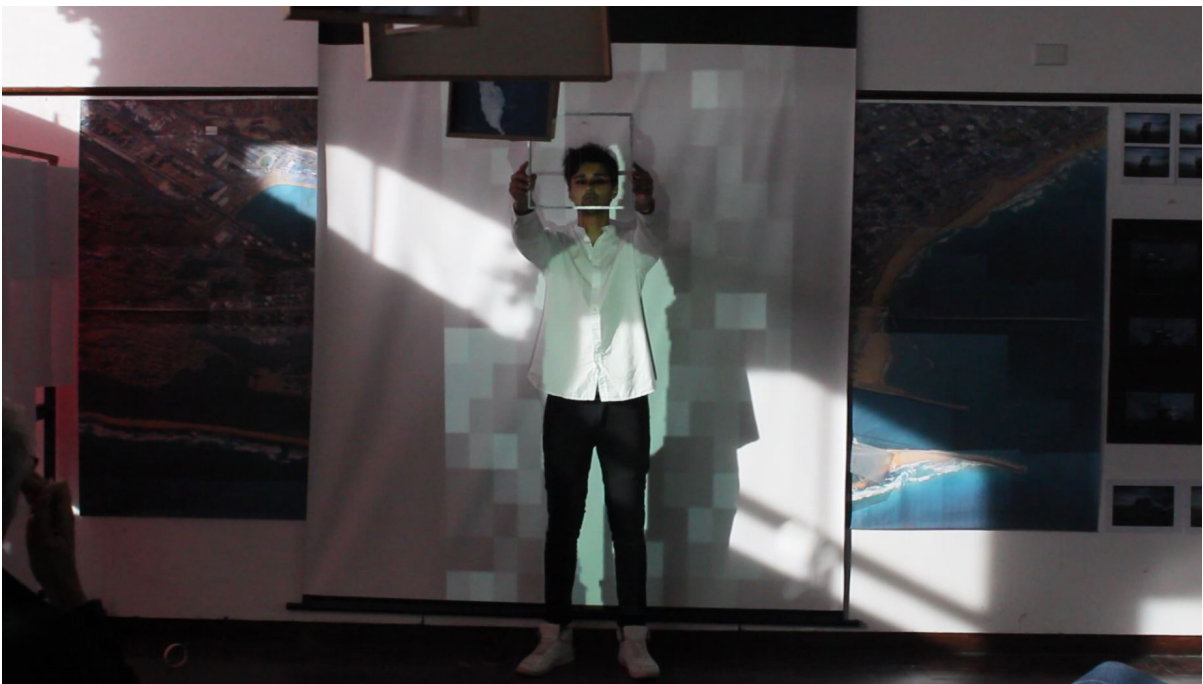


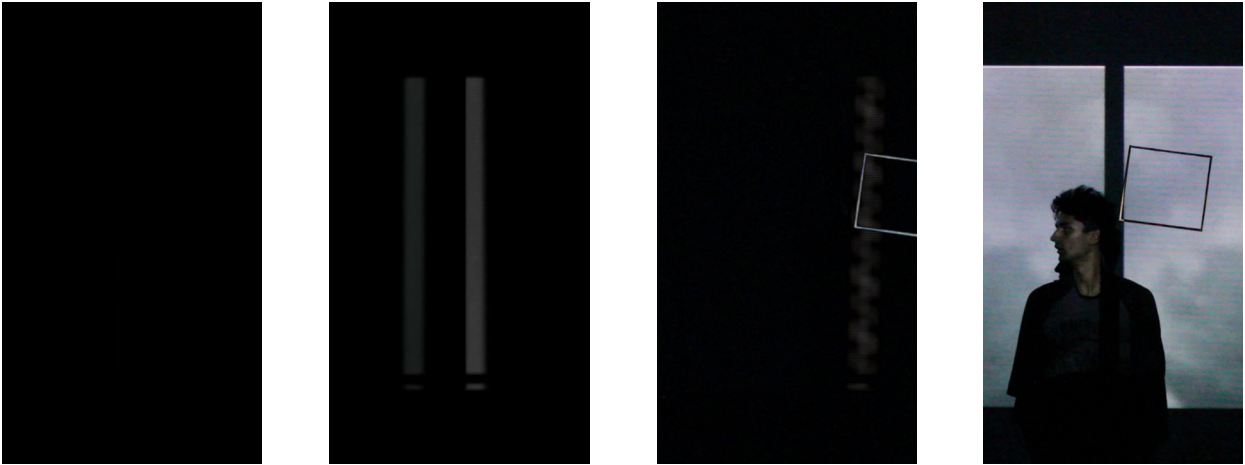
fig. 24 the body in the
landscapeperformative
piece to the audience
embodying experiences on
the bluff

a body, a lense, a landscape

As part of my own pilgrimage along the whaling train line, engagement with the site was made through various drawings (seen at the beginning of this document) but a curated film captured the complexities that extend further than those drawings. I subjected my own body into the film and embodied this experience of the Bluff as a pilgrimage and as the body of the whale that moved by train along the shoreline to its final resting place as a full entity. These experiences range from the psychological to the physical - disconnecting, connecting, and extending experiences beyond the literal visual of being at the Bluff. The overlay of my own body onto the film was the process in pulling the direct bodily experience from site into the abstract world by subjecting myself to the mechanical eye of the camera and the eyes of the audience.

This duality of both the audience and the camera are two elements present at the site of the Bluff, when in reference to Walter Benjamin's theories. In Benjamin's *The Work of Art in the Age of Mechanical Reproduction*, a unique experience of engaging with the Bluff, such as an audience member in a theater, is authentic and creates an aura to your perception which is present in both space and time. However, the filmic experience numbs and alters the audience members' perceptions into an absent-minded one, negating a true haptic experience of place in space and time, reducing the first-hand experience (Benjamin, 1936). The film overlaid my body with images of site questioning the positioning of these infrastructures and how it falsifies the production of commodities that appear to people. It is the reproduced artwork or commodity that the reality of experience and its uniqueness are present but when searching deeper for its actual making the phenomena that is presented by these realities is truly revealed.

act 1



jake chudnow - carlin dream

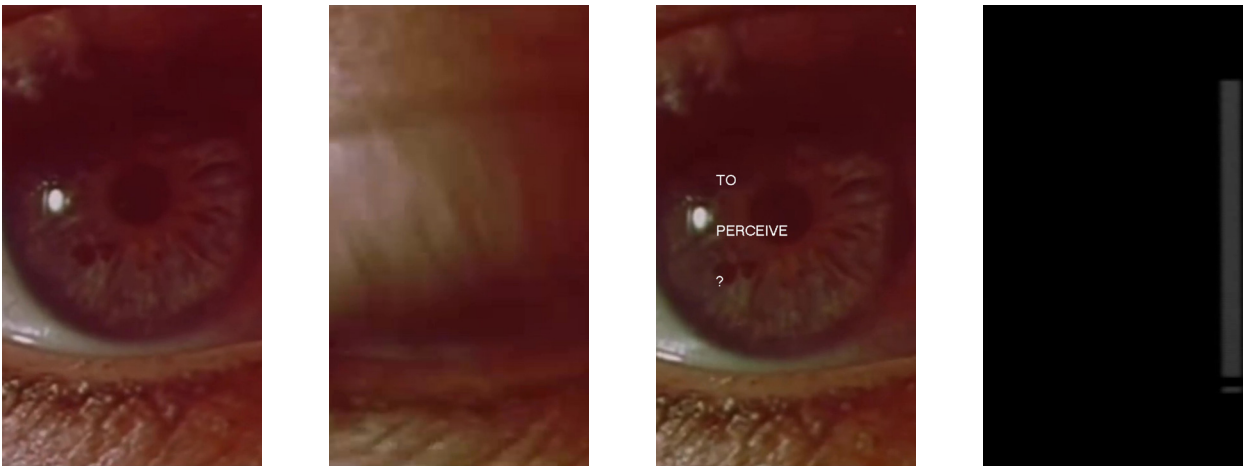
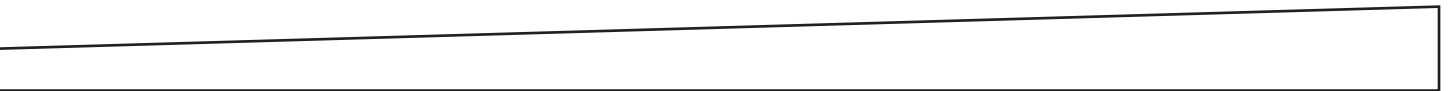
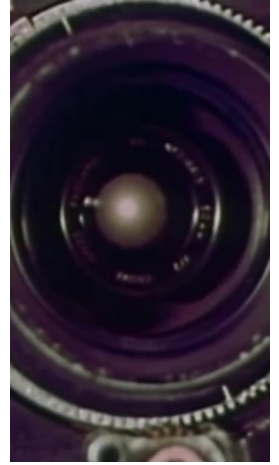
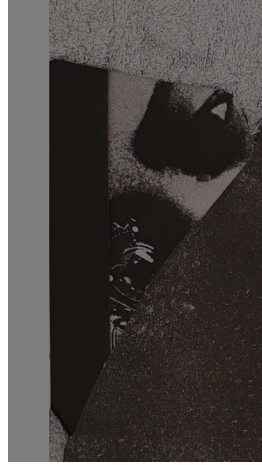
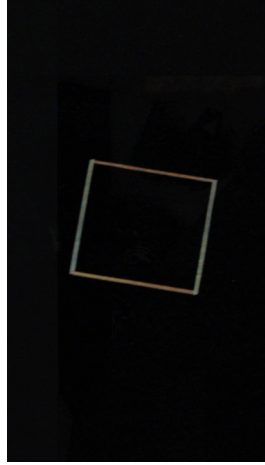


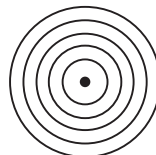
fig. 25 film stills the eye and the audience



silence



radio interference



sonar ping

silence

act 2

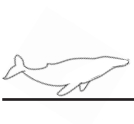
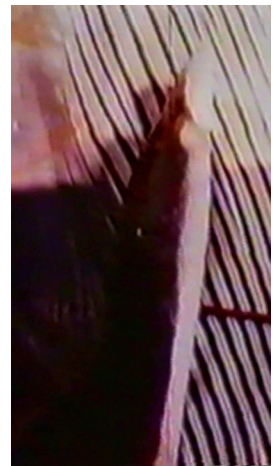
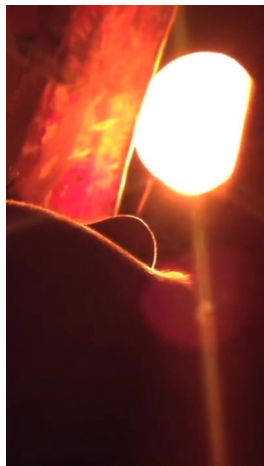
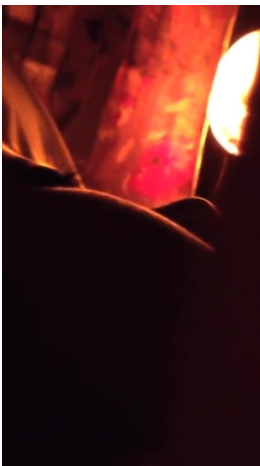
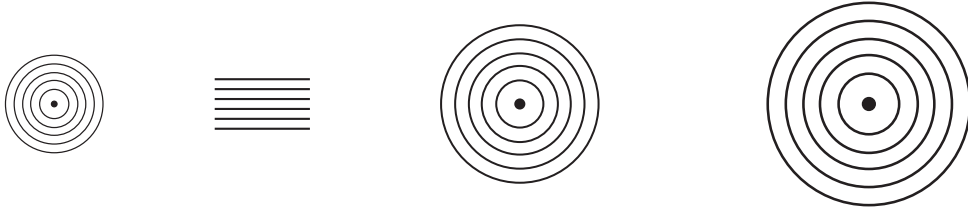
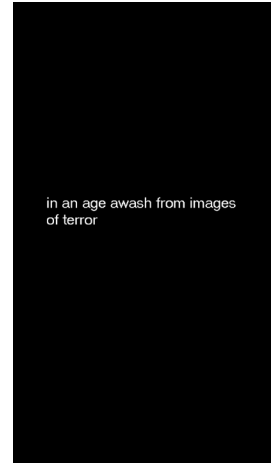
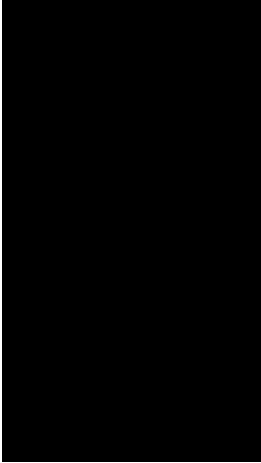


fig. 26 film stills images of terror



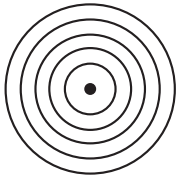
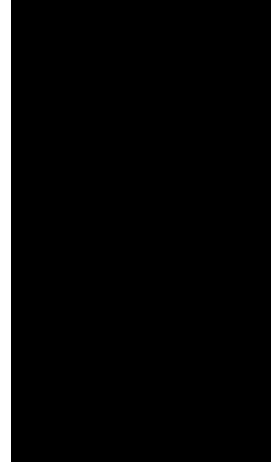
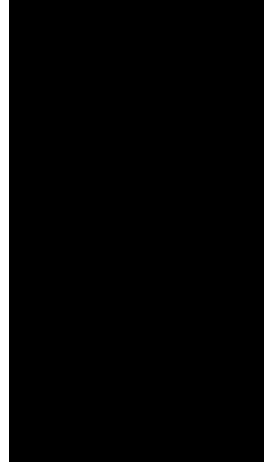
the glory of south african
whaling is forgotten

the whaling station
the largest in the world.

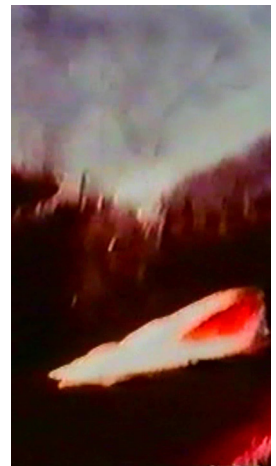
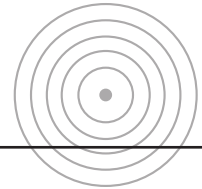
hidden
behind the barrier of the bluff which
contains the city on the other side,
concealed.

protected by the military today

reminds us of the scale of operation
and its demand



whale song



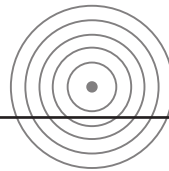
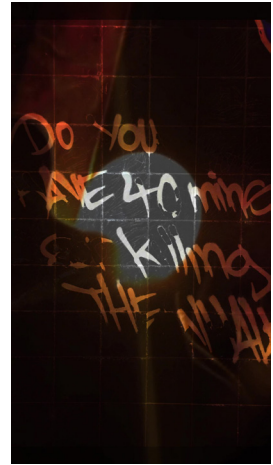
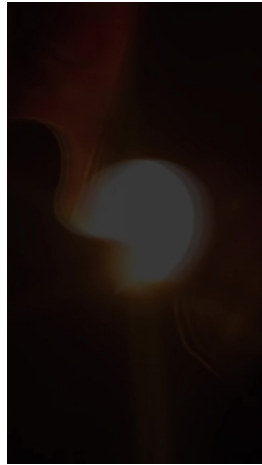
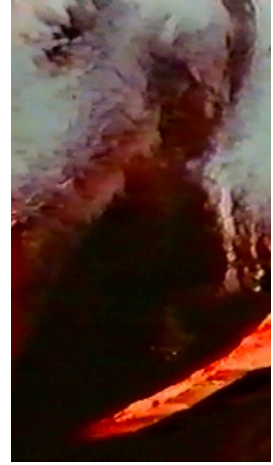
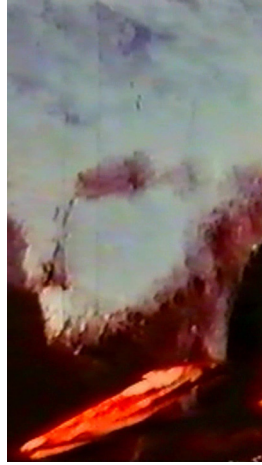
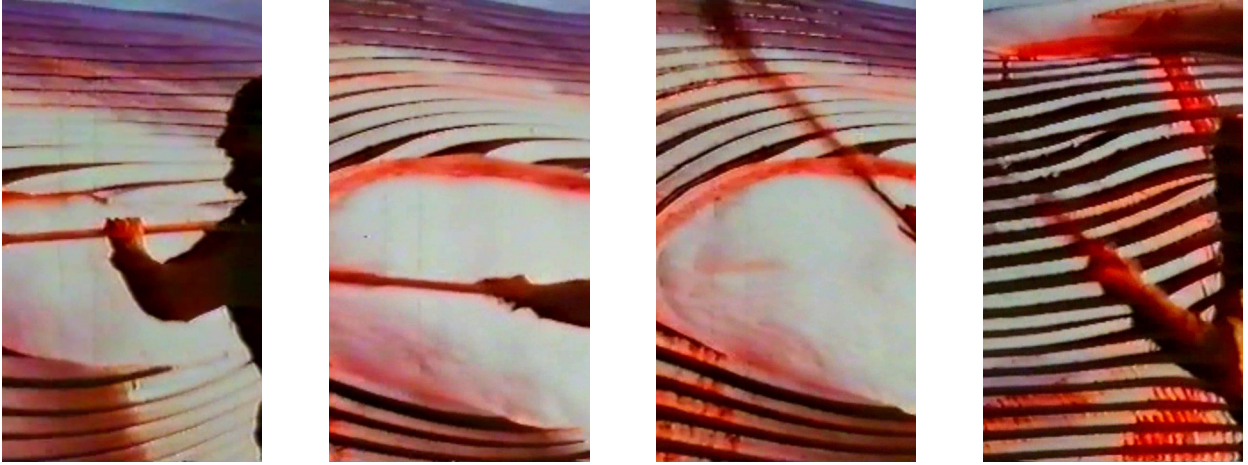


fig. 27 film stills



The interest in representation through film allowed the reality of site readings at the Bluff to be tailored through multiple fragments which were assembled together, merging the systems of whaling and the military emplacements (the visible), with the reasons for their existence in this particular landscape. The built fabric on the Bluff reveals the detritus left over from historical events where societal ideas have ensued and through its placement on the periphery of the city, it is hidden from our consciousness and remains as a reminder of those past transgressions. The people and the processes that activated these built remains reveal almost no indication of their activities and histories because 'things do not exist without being full of people' (Latour & Graves-Brown, 2000). To engage a sense of aura between people and objects, a glance of the past, or a glance of memory is required for a relationship to occur (Freeman, Nienass & Daniell, 2016). As Susan Stewart writes, 'the body as agent of sense-impression also becomes the body as object of sense-impression' (Stewart et al., 1999). Moreover, these glances of memory are not just observed they are also felt through sensory encounters with the past through things which heighten the aura of an appearance or a being' (Freeman, Nienass & Daniell, 2016).

act 3



conrad asman - one lingering quasar (flute and piano)
uct school of music



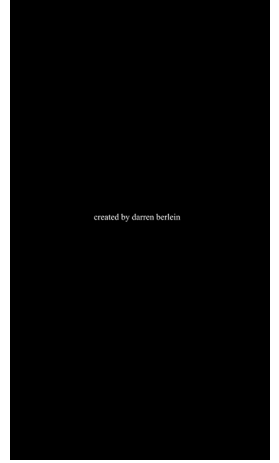
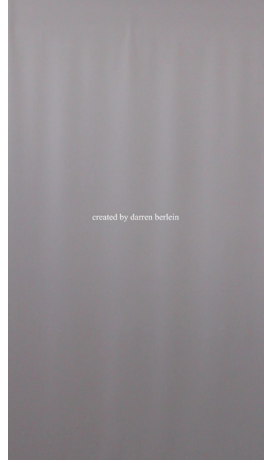
fig. 28 film stills questioning forms of reality





conrad asman - one lingering quasar (flute and piano)
 uct school of music

These remnants on the Bluff reveal epochs that have occurred and act as mnemonics to active systems whose momentums are just too great to be seen from an outside perspective. However, the reality is that we have to be a part of some kind of system, whether it is capitalism, the unknown effects of radio waves, genetically modified organisms or the solid waste works at the tip of the Bluff... only until we test it and have stepped outside of its forward momentum can we thoroughly review its effects in the natural world. The system of the global economy requires that processes such as whaling be invisible to the people for it to function - to continue without any opposition and to maximise profits and various ideals (Andreotti & Lahiji, 2017). These remnants also reveal that history does not go away, the past is what it was and the aura that Benjamin describes is 'not only named the most precious facet among other types of experiences [but is] irrevocably in decline, to be grasped only through their historical erosion'(Duttlinger, 2008).



2018
physical remnants of the
whaling operations

1930
keeping the bluff as a
military zone, allowing
for full development of
whaling operations

circa 1910
proposed housing
plots on the bluff over
existing military at the
same time whaling was
initiated in durban


 whaling sites through its
active and inactive days



fig. 30 the bluff through time

a landscape in ruin

The remnants of the whaling station used to be part of a much larger field of buildings, which stretched as far as two kilometres along the coastal edge. In fact, it was the largest whaling station in the world by processing capacity and in place infrastructure. On tour to the whaling station led by Peter Froude, the last factory manager who worked for over seventeen years stated that the station had stretched along the entire coast and currently only the brick buildings remain (Froude, 2018). Additionally, historic planning maps of the Bluff have demarcated this entire strip as ‘whaling sites’, confirming and strengthening the Bluff’s ties to the global capitalist system of maximum profit and exploitation. The other structures that formed part of the whaling station were constructed out of steel components so after the whaling station was abandoned the structures were left to the natural forces of the ocean as well as its easy disassembly being salvaged for use elsewhere (Froude, 2018).

The remaining structures of the whaling station, constructed from concrete frame and brick infill have also succumbed to the beating of the ocean. The mortar that binds the brick have beautifully remained whilst the bricks slowly melt away, in time leaving a mortar mesh in the running bond pattern as a kind of screen, only able to be constructed in this manner. The constant attack by the wind and the water bombarding the last remaining structures of the Bluff reveal the abrasive power of natural elements reminding us of its constant action of decay, ultimately embedding the fourth dimension of time. Jeremy Till describes such buildings attempt to freeze time into a state of the sublime and glory denying its relationship to disintegration and change (Till, 2009). In addition, at the time scale of the universe, earth is malleable, forever in a constant evolving perpetuity. Robert Smithson’s Spiral Jetty connects these cosmic dimensions with the intervention placed between the ocean and the shore. As such, ambiguities such as of the land OR of the water are dissolved having no reason to classify and categorize them since the uncontrollable and uncertain rates of time removes any kind of linearity but rather multiple if not infinite possibilities (Loe, 2017). Similarly, our perception of form is challenged through works like the Spiral Jetty which reveal a whole host of ambiguities and classifications that are disintegrated through time.

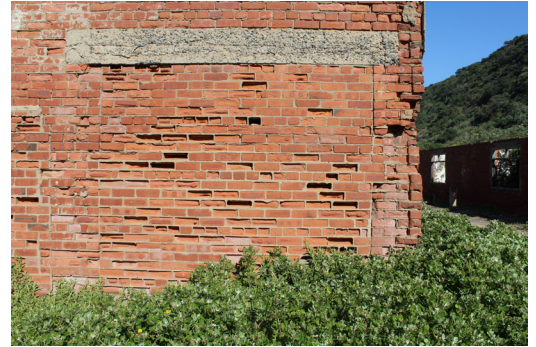


fig. 31 whaling station brick decay



fig. 32 erosive forces present on site



fig. 33 spiral jetty eroding away

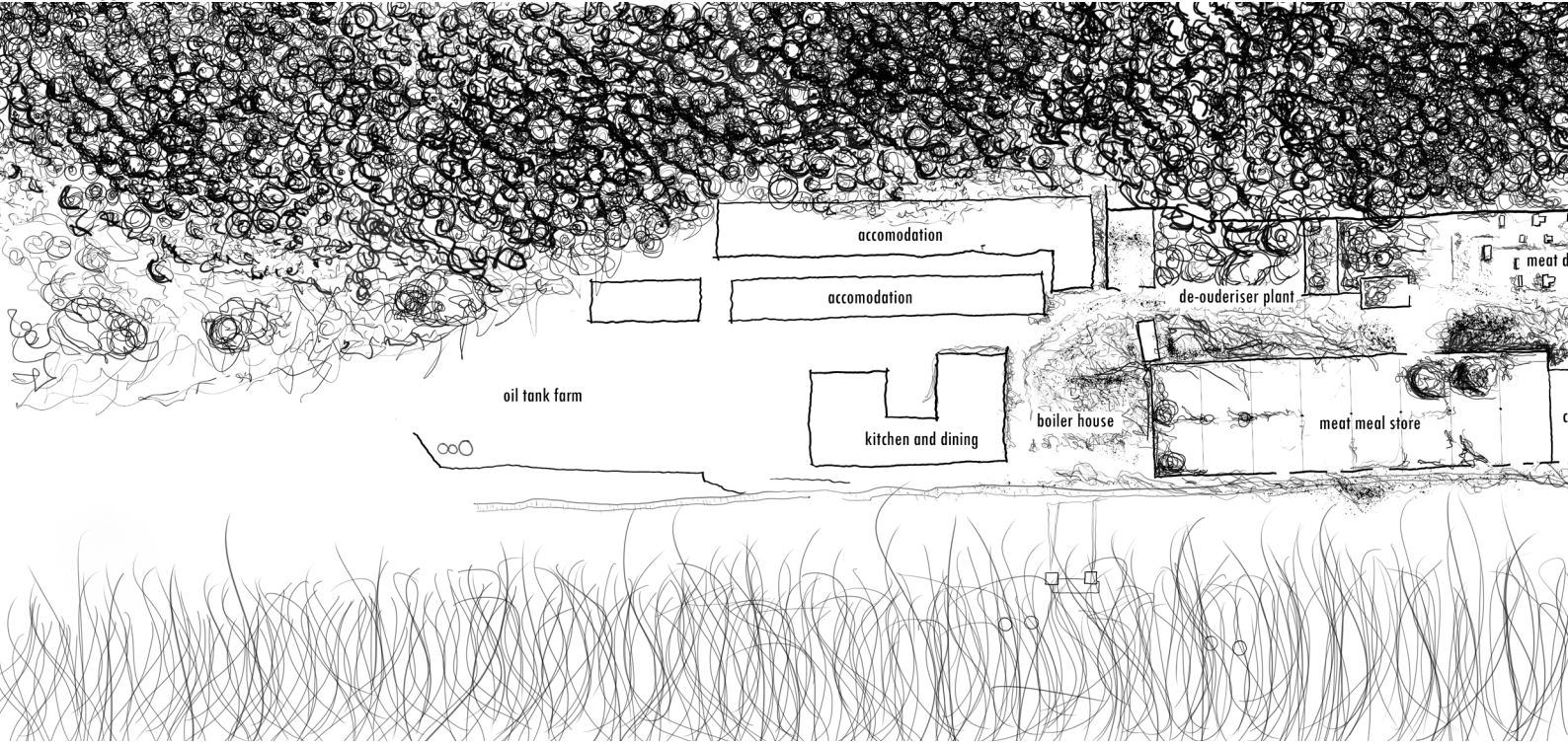


fig. 34 meat meal store



fig. 35 meat meal store decay

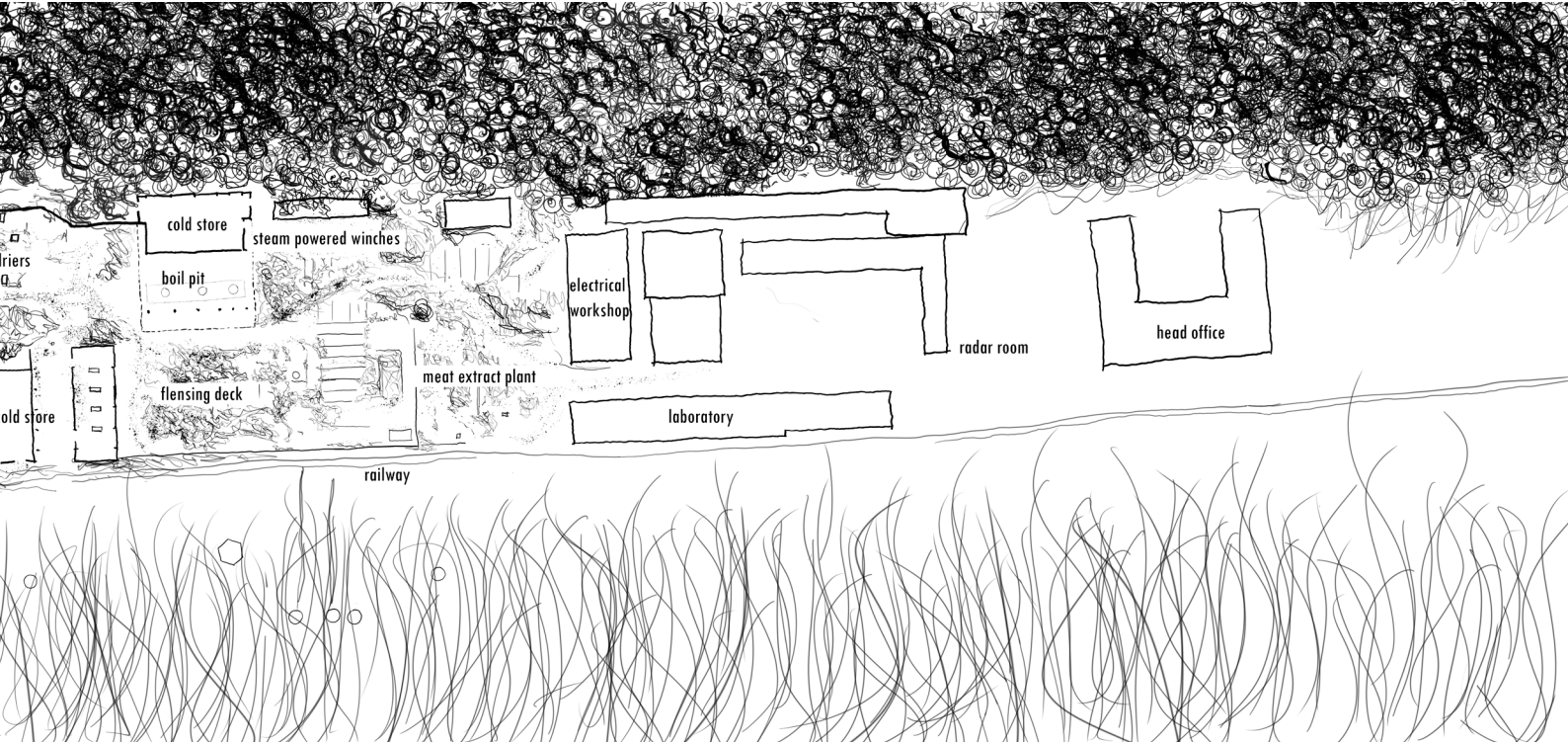


fig. 37 organised tour to the whaling station by sodurba tourism, led by the last factory manager peter froude, indicating the structures that used to fill up the open spaces



fig. 38 meat meal store circa 1960's



fig. 39 meat meal store in 2018



fig. 40 the implosion of an underground nuclear bomb

we control the landscape, physically and absolutely

Relatively the Bluff's relationship and ties to the nuclear age and the cold war reveal incredible similarities, which can be seen through the intensive study of the left over artefacts found on site. These artefacts do remind us their spatial positioning which concealed processes away from any direct engagement by the public. Similarly nuclear tests performed in Nevada were situated deep underground minimising the harmful amount of fallout that would occur but this buried the spectacle, the iconic, the commodity, the mushroom cloud on the horizon that the masses fetishize, however still leaving an indication and depression on the landscape (Lopresti, 2016). Similarly, the Bluff's artefacts are the nuclear implosions that remind us of the impending doom that possibly awaits. Both the Bluff's artefacts and the nuclear implosions have lasting remains, they have not disappeared and their presence on the landscape still control; 'we are here, we control the landscape, physically and absolutely. If necessary we are willing to raise it from the ground' (Lopresti, 2016).

Our contemporary visual culture *lacks* the images of terror such as the mushroom clouds, the malicious processing of whales, the intensive military activities and the sewage processing works. In order for us to resolve our dissimilarities with death [or images of terror] it is through representation, an image, a picture of death, whether visual or verbal [or aural. But] ... the representation of death is not the representation of a presence, an object of perception or intuition - we cannot draw a likeness of death, a portrait, a still life or whatever' (Critchley, 2005). Our interaction with the horrific is not one that should be through denial but expressed through wonder, which will affirm our value of living and the essence of our very being. Adorno argues 'poetry after Auschwitz is barbaric' and it is through these words our interaction with these horrors is embodied through a 'linguistic silence' to which we learn from and proceed into the future (Rowland, 1997).

The film focuses on the familiar, everyday sights and sounds - elements that we are comfortable with which are extracted from the profoundness experienced on the Bluff: the camouflage of the military bunkers and the incredible histories of both the whaling station and the military activity. The Bluff was an incredibly active site employing over one thousand people at the whaling station (Froude, 2018) but now a sight(site) of complete ruin. The film subjugates the audience member to relate to the familiar sounds and images, before overlaying them onto scenes that are unexpected but still relate deeply. The sonar ping, with no visuals puts

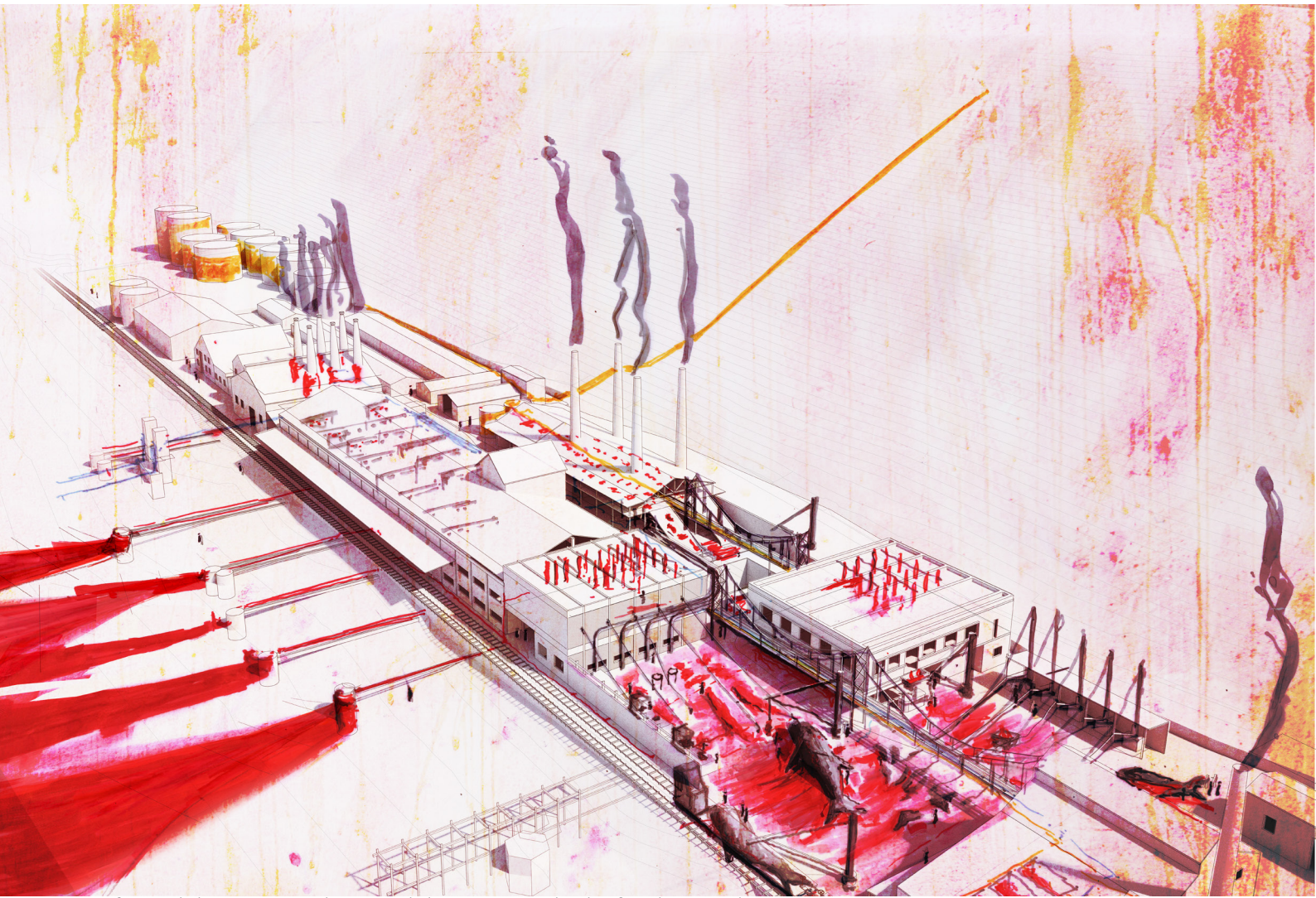


fig. 41 whale processing at the union whaling station at its height of production and operation



fig. 42 durban's only factory whaling ship *abraham larsen*



fig. 43 cast model study, site of transfiguration?



fig. 44 titian, madonna with saints and the members of the pesaro family



fig. 45 titian, detail of boy

you in the belly of the submarine/whale, have you been detected or has someone else detected you? A moment later, the eerily beautiful sounds of whale vocals are blended between the sonars ping. Are you the hunter or the hunted? The reality however is the visually shown: the cutting of whales on the flensing deck, the beauty of it being its ease and precision. Is it perhaps your living body about to be sliced up? As discussed before, the subterranean nuclear explosions do not make themselves known; they are hidden from the lens of a camera that could expose it to the masses. The film tries to tackle this less brave world by exposing the true realities and the impacts it may have for the future. It also ties the presence of military on the site to the destructive impact sonar has on whales.

Titian's painting, *Madonna with Saints and the members of the Pesaro family* was another major influence in the curation of the film. This artwork questioned the realities of the internal world of the painting versus the viewer of the artwork. The confines of internal reality was broken with the son of the Pesaro family staring directly out toward the onlooker completely oblivious to the events before him where everybody else is absorbed within the confines of the painting (Janson, 1977). His awareness of the viewer is profound because the reality of the viewer-painting relationship has blended, the viewer becomes a part of the scene and both realities are questioned. When this idea is placed in comparison to the subterranean nuclear tests it essentially raises the detonation above ground for all the masses to see, to fetishize, an exposure of the reality, the boiling systems which are about to breach its container.

War is beautiful because it establishes man's dominion over the subjugated machinery by means of gas masks, terrifying megaphones, flame throwers, and small tanks. War is beautiful because it initiates the dream-of metallization of the human body. War is beautiful because it enriches the flowering meadow with the fiery orbits of machine guns. War is beautiful because it combines the gunfire, the cannonades, the cease-fire, the scents, and the stench of putrefaction into a symphony. War is beautiful because it creates new architecture, like that of the big tanks, the geometrical formation fights, the smoke spirals from burning villages, and many others...

Filippo Tommaso Marinetti

(Buck-Morss, 1992)

The beautiful is just the first degree of the terrible.

Rainer Maria Rilke

(Armitage, 2000)

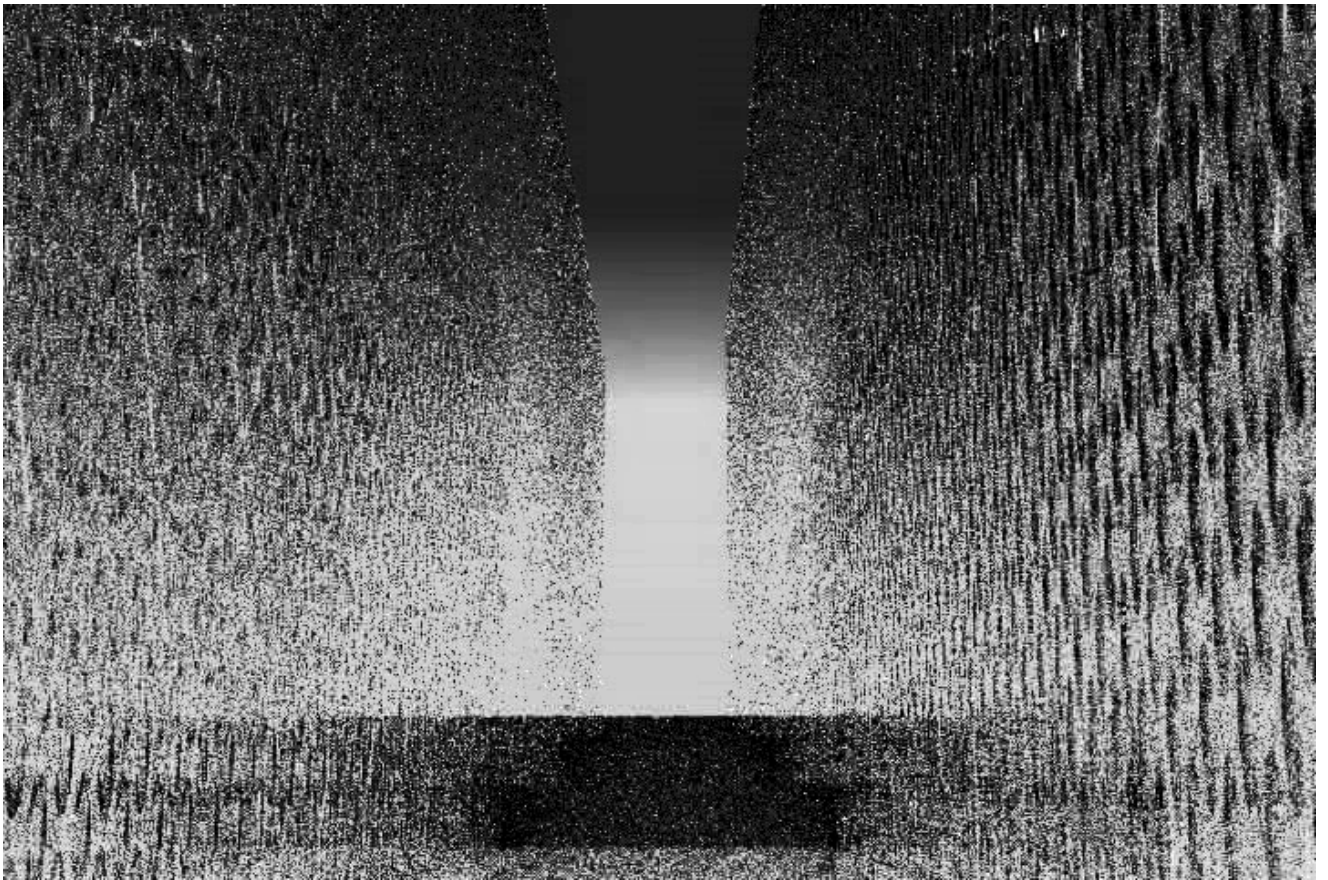


fig. 46 study of perception through ideas from radar, whaling and nuclear



fig. 47 what is that emerging? (as seen on page 87-88)



fig. 48 study of perception through ideas from radar, whaling and nuclear

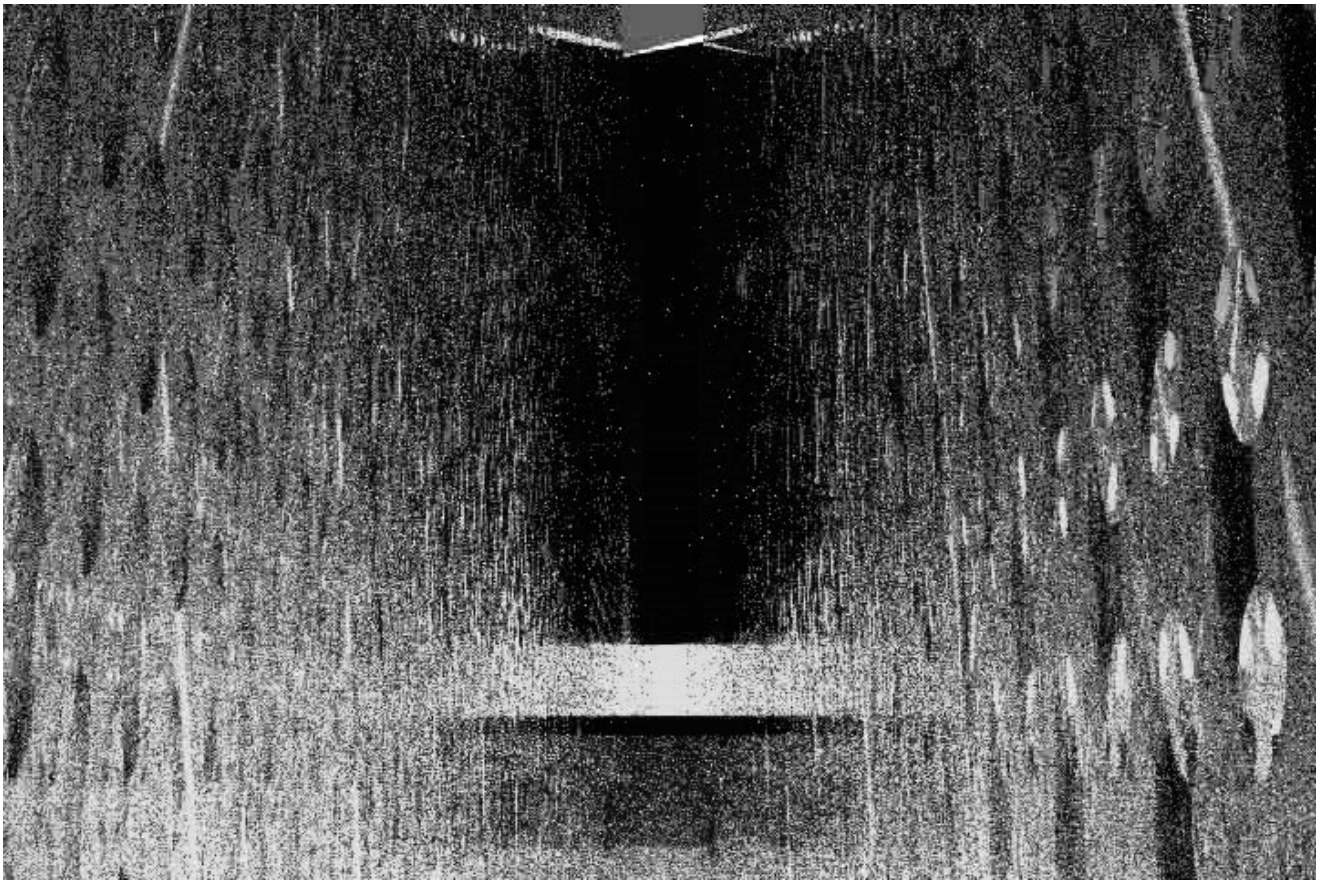


fig. 49 study of perception through ideas from radar, whaling and nuclear

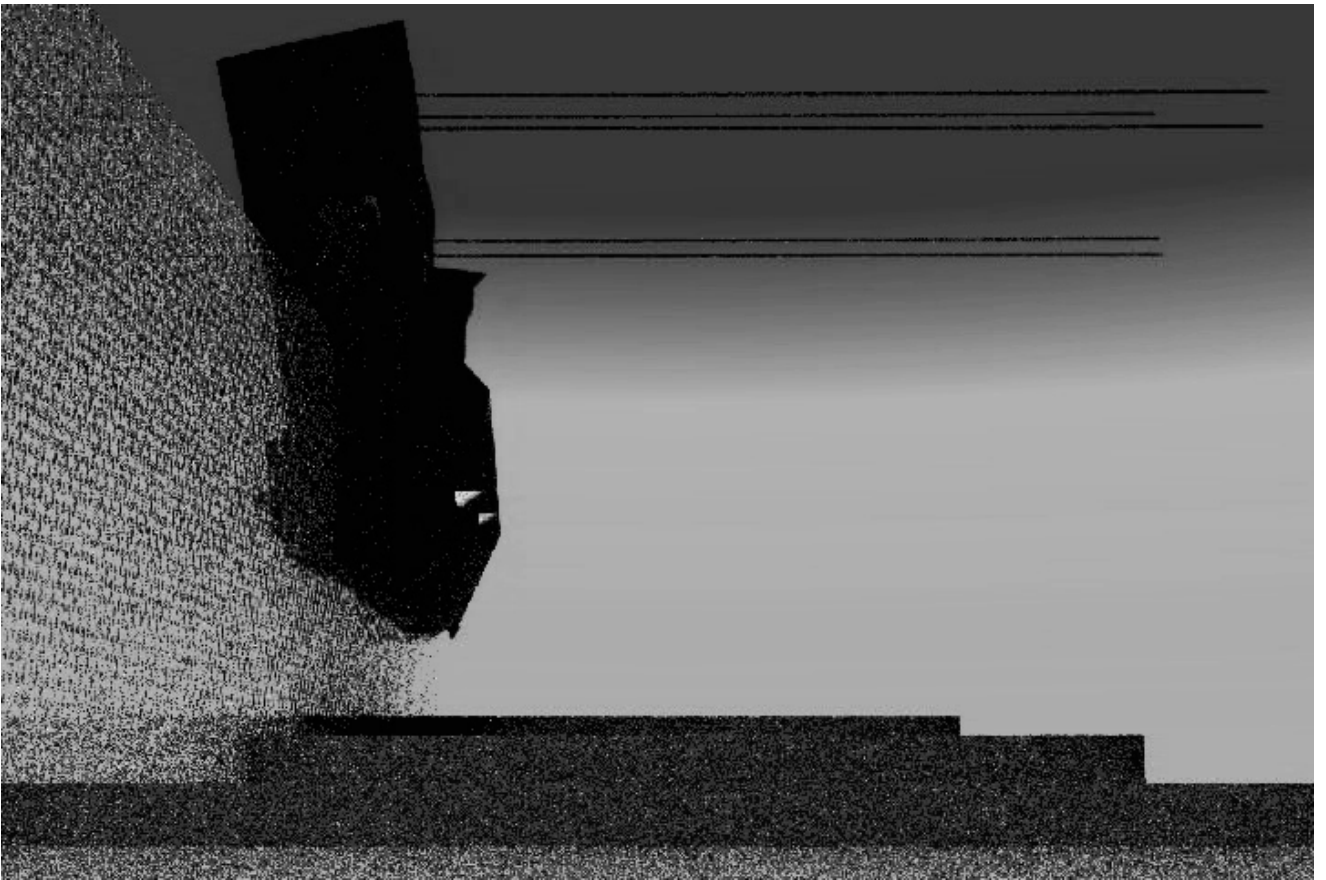


fig. 50 study of perception through ideas from radar, whaling and nuclear

space was at last, homogenised

Vitruvius, in his Ten Books on Architecture understood that technology rules in warfare (Lahood, 2011) and ‘in every epoch the attempt must be made anew to wrest tradition away from a conformism that is about to overpower it’ (Leslie, 2000). The conventional interpretation of conformism ensnares traditional methods often tailored by the rulers over writing histories that were once the norm. Walter Benjamin’s fascination with technological advancements relates deeply to the erosion and decay prevalent in sites such as the Bluff and the Atlantic Wall in which Paul Virilio studied. Benjamin’s prediction by reading historical trends similarly to Vitruvius’s rules on military architecture more than two thousand years before sees Benjamin be slightly pessimistic but truthfully real about the future post World War 1. ‘Troops will be immeasurably more sadistic and bloodthirsty [because] of new technological means’ breaking the stalemate of old technologies (Leslie, 2000).

The Atlantic Wall is undoubtedly the perfect example to compare with to the Bluff as a conceived landscape of deceit. This present moment allows us to review the abandoned, disused structures that lay at the shore’s edge. Only after these operations are disbanded do these artefacts become archaeological and only time allows us to analyse the emplacement of these structures. The construction of South Africa’s coastal fortifications was driven through the declaration of war against Germany, the axis powers (Italy and Japan) and the imminent threat posed by their military, specifically the U-Boats (Undersea Boat/submarine). The fortifications, instructed by Jan Smuts of the South African Party, were to be built along the entire coastal edge of South Africa protecting the global sea route to the east and making a defensible edge against its land. Similarly, the Atlantic Wall ordered by the fuhrer, Adolf Hitler, stretched the entire coast of France and Norway that edged onto the North Sea in defence against the allies; its sheer size committed to murder on an industrial scale (Lahood, 2011). However, the technologies that ensued the landscapes of the Atlantic Wall did not suffice in the advancements of new technologies that Benjamin predicted - rendering Hitler’s fortified wall a failure as warfare became three-dimensional; Benjamin’s assessment of technological advancement proved correct and warfare surpassed the limiting two dimensionality of the ground. Advanced aeroplanes and radio communication were invented, effectively extending the battlefield across hundreds of kilometres, disintegrating the physical boundary that Virilio had identified. ‘Space was at last homogenised, absolute war had become a reality and the monolith was its monument’(Virilio, 1994).

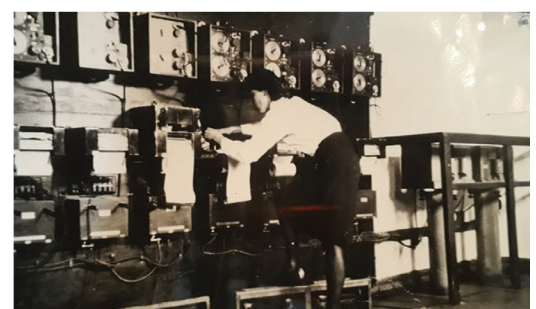


fig. 51 my grandmother, patricia and her sister eileen in the south african women’s auxillary navy services (swans) on robben island during ww2 scanning for enemy threats in the ocean and air using radar surveillance.

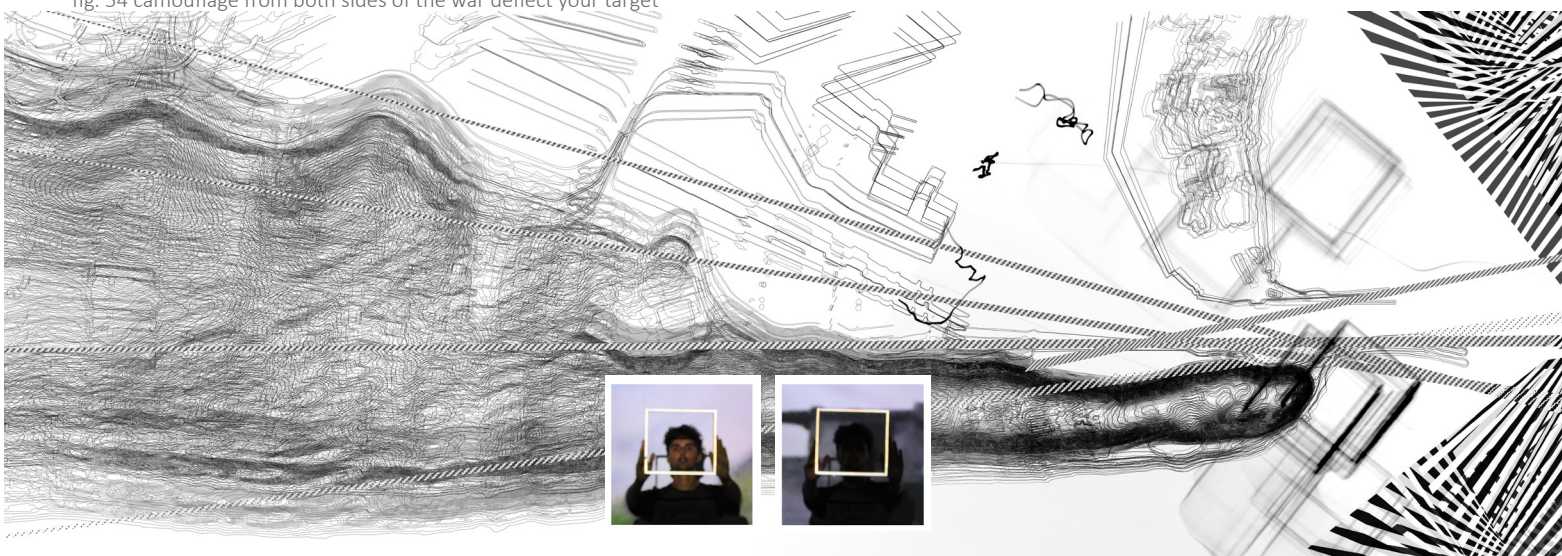
The battlefield in World War 1 was largely based on the ground - walking... observing... scanning... (Lahood, 2011). As a result, this mode of hunting (perception) the enemy was largely constructed on range, position and course. Galileo, revolutionised our distances to which our naked eyes can see through the invention of the telescope. By taking us as far as the stars, his tools were translated to the battlefield where our perceived space increased vastly, allowing combat to occur from much greater distances.

'It thus prefigured a symptomatic shift in target-location and a growing derealisation of military engagement' (Virilio, 1994)

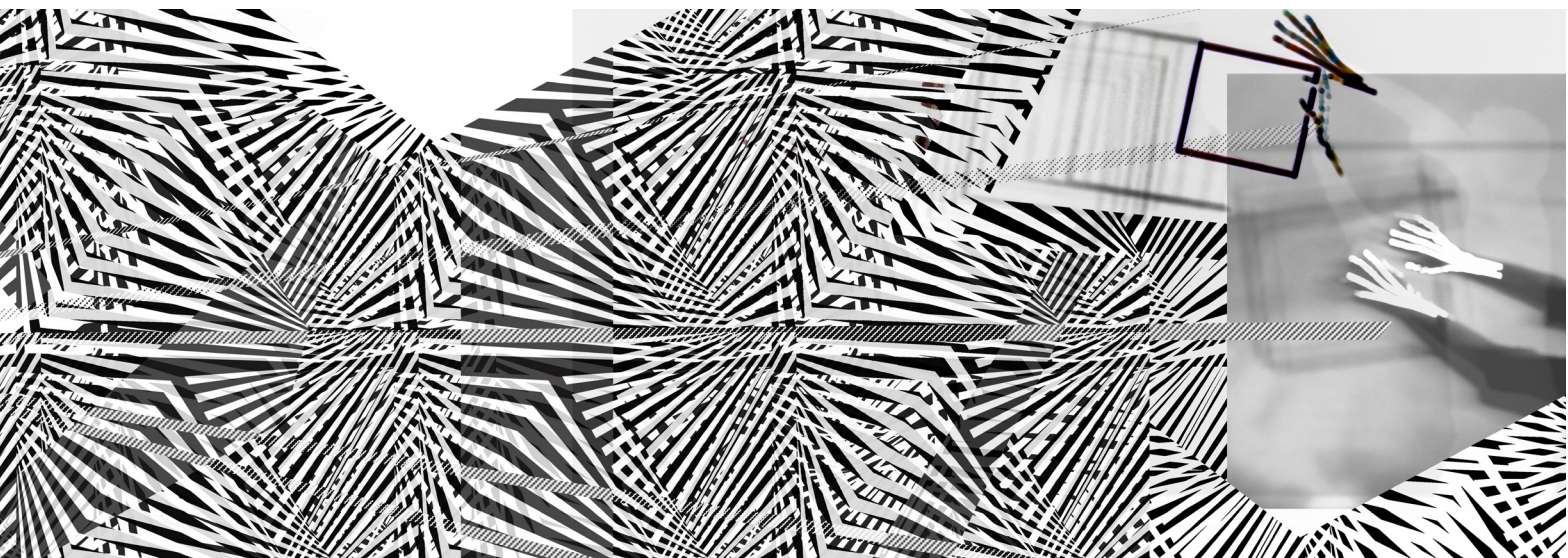
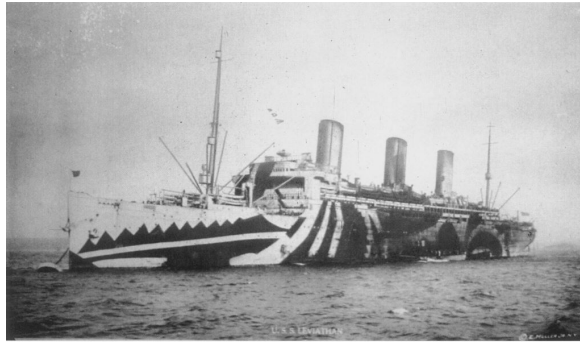
As a result, dazzle camouflage sought to disrupt the vision of the German U-boats who relied on accurate vectors of their target for a successful attack because their ability to see was critical to the success of their militaristic ambition. (Virilio, 1994)



fig. 52 (above) to see as the bunker sees
 fig. 53 (above right) dazzle camouflage in ww2 painted by the british
 fig. 54 camouflage from both sides of the war deflect your target



Captain Schmidt at the periscope
You need not fall and faint
For it's not the vision of drug or dope,
But only the dazzle-paint.
And you're done, you're done, my pretty Hun.
You're done in the big blue eye,
By painter-men with a sense of fun,
And their work has just gone by.
Cheero!
A convoy safely by.
G. Frederic Norton,
[a poem to the German enemies]
(Behrens, 1999)





In relation to the World War 2, bunker emplacement designs employed on South Africa's coastline were direct translations of the dazzle camouflage incorporated by the Allies. Seen in Durban (The Bluff), Cape Town (Signal Hill) and Port Elizabeth (Algoa Bay) designs featured prominent free-form profiled parapets, angled buttresses and fins that break up the square form of the buildings ultimately disguising its true form as seen from the sea with the background of the bush and rocks (Tomlinson, 2011). Additionally, roofs and footpaths were also designed for camouflage against air surveillance, but later during the cold war, South Africa's hidden nuclear program was uncovered through air surveillance by the USSR as military spy technology had surpassed the visual realm. Alternative methods in sensing became a reality as technological advancements within the Cold War/nuclear age increased rapidly. This discovery of South Africa's nuclear program was exposed to the world and subsequently disbanded.



fig. 55 (top) ww2 gun emplacement in port elizabeth, curved parapets to disguise its form
 fig. 56 (above) ww2 gun emplacement on the bluff, designed to blend from air surveillance
 fig. 57 study of disguise through moire pattern

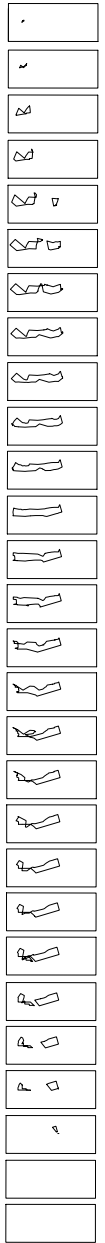
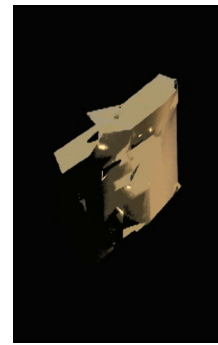
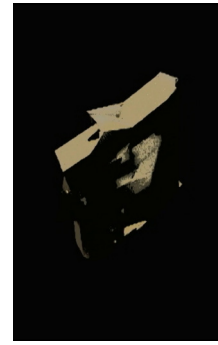
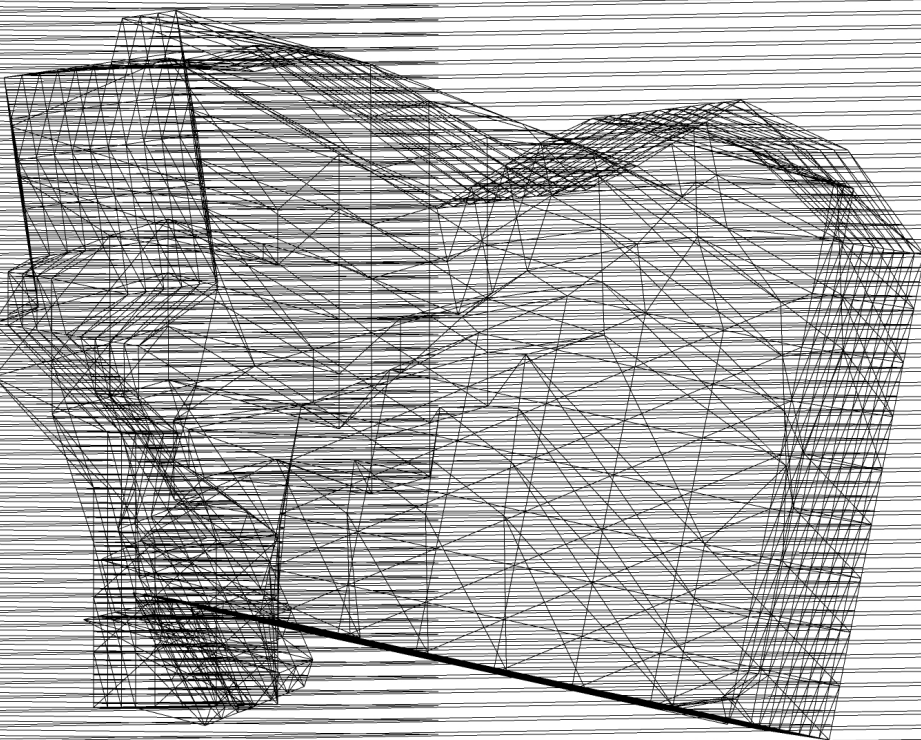


fig. 58 depection of form
fig. 59 (right) abstract
form, as sections from
moire study



In Men and Whales, Richard Ellis writes that, until the beginning of the twentieth-century, whaling was considered an admirable occupation. "...it is only through the lens of hindsight that the whale man's job becomes malicious or cruel...Oil was needed for light and lubrication; baleen was needed for skirt hoops and corset stays. Whales had to die to provide these things which is a fact of seventeenth-, eighteenth-, and nineteenth-century life..."
(Ellis, 1991)

The placement of the whaling station is crucial to understanding the desires of Durban as city that fits within the global capital system. However, this section will not delve deeply into the city itself but rather explore the whaling station as a productive site of commodities that arise from this practice, exposing Durban's deep ties to this system.

In business efficiency, cost of production, profit and public perceptions are major factors that influence the structuring of a business and the products that are produced. The main concern of whaling companies was not to produce oil but rather to sell it (Tonnessen, 1982). As the whales in the Northern hemisphere were on a major decline, almost to extinction, the Lever Brothers, presently known as Unilever, moved their interests to the south acquiring the Premier Whaling Co.'s whaling station situated at the Bluff. (The other station further down shore was known as Union Whaling Co.). Oil was originally used for lighting and machinery but as technology and public perceptions shifted, the business model had to adapt and by-products had to be produced, so as little waste would occur. The entirety of the whale was utilised.

The whaling station on the Bluff is said to have been the most profitable in the world. Apart from good business practice, its hidden placement would have aided vastly in its capital turnover (Tonnessen, 1982). Its position allows for an unhindered operation and production of whale products. Infrastructures such as train lines were placed around the Bluff to move whale bodies to their processing plants. Pipes were buried into the ground across the bluff for whale oil to be pumped directly into ships for transporting (Froude, 2018). Research has pointed toward the whalers knowing that Durban's coast would be highly lucrative, as such; the initial whaling station, which fronted the city, was often met with opposition (Pirn, 2009). In 1910, the whaling operations were moved to the seaward side (the eastern strip of the bluff), hidden from view of the city where it would last and flourish for another 65 years before the International Whaling Commission banned all whaling operations around the world (Jolly, 2010).

鯨はこんなに役にたつ

は 大洋漁業

鯨は地球上でいちばん大きな動物です。その体からは、たくさんの油や肉がとれるのをはじめ、すみずみまで役にたつて、私たちの生活をゆたかにしてくれます。

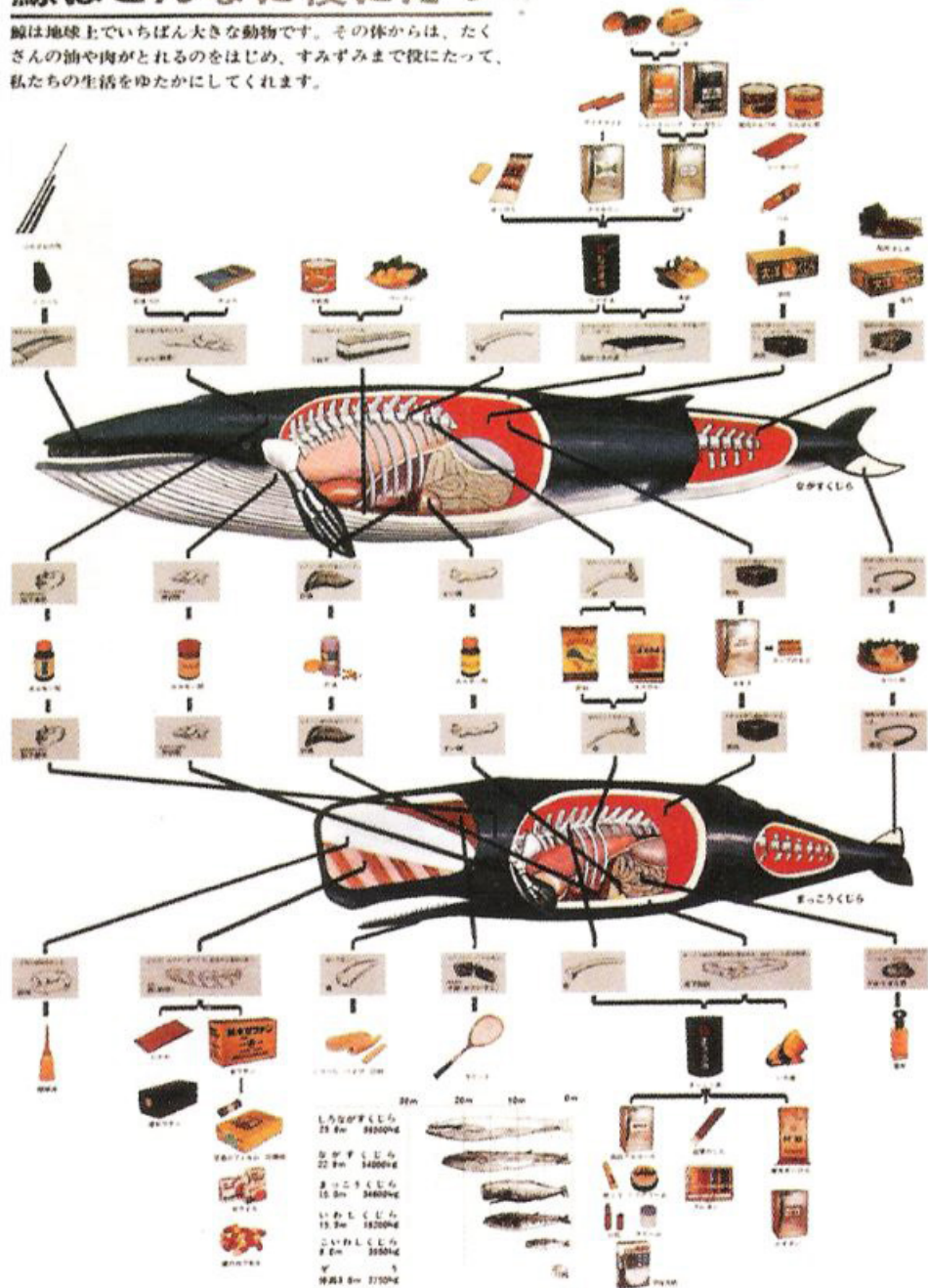


fig. 60 objectified whale

Durban's land-based whaling station meant that the whale routes were close to the shores and hunting would fit in a day's worth of work. Whales are even visible from the station itself. On tour to the whaling station, standing on the flensing deck, Peter Froude, points out to a whale on the horizon, a slightly surreal moment.

Whales must be processed within hours of its capture else, the meat would go off (Procknik, 2011). The whaling season in Durban lasted from March to September since whales would migrate northward past Durban at the start of the Antarctic winter and pass again on their way back south (Findlay & Best, 2016). In these months the whalers could reap a rich harvest of whales without having to sail much further than 250 km.

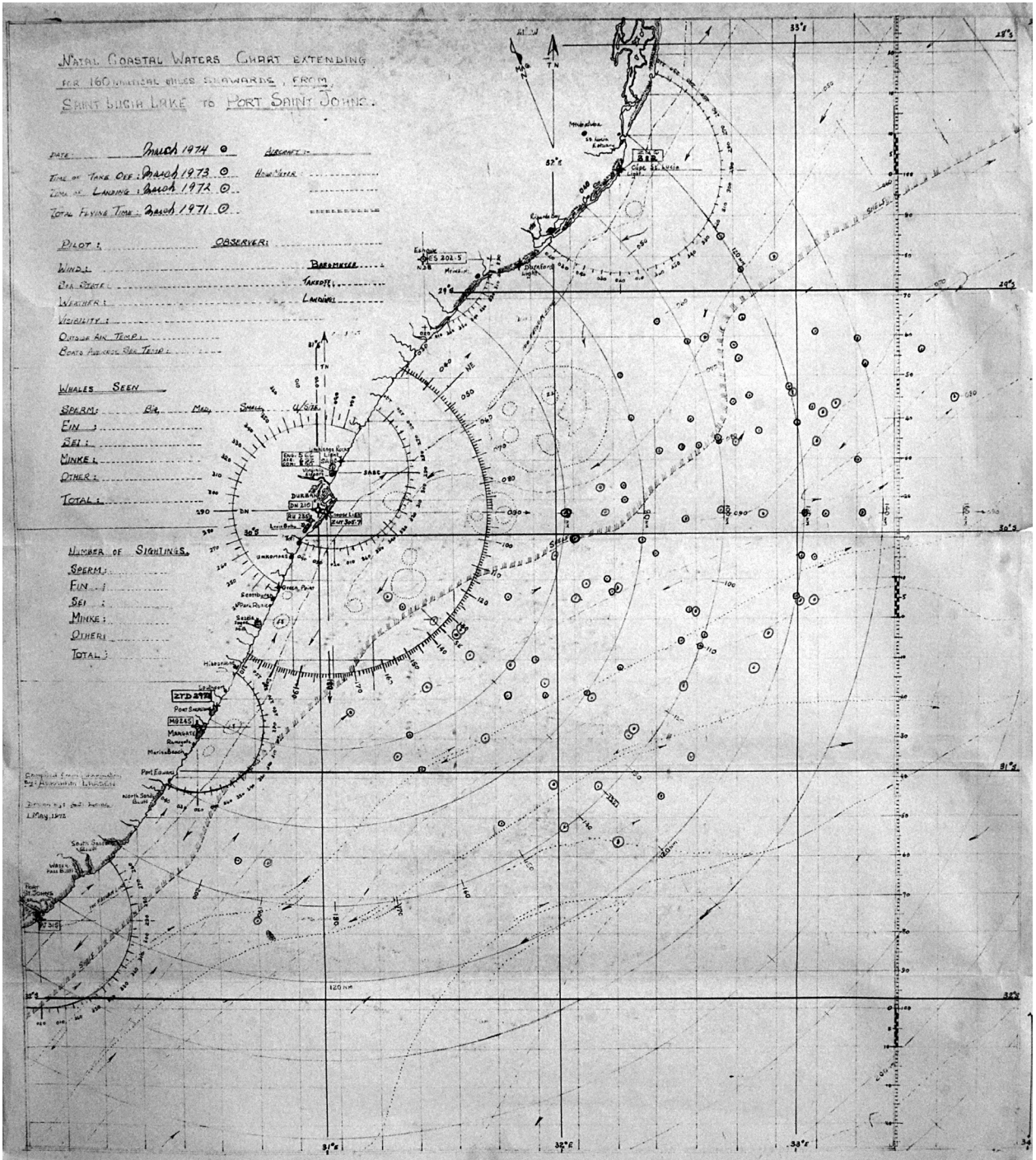


fig. 61 whale catch register, march 1974, union whaling co., bluff at center of circles

Whales were spotted from the mast on a whale catcher across the horizon as far as twelve kilometres. Spotters would look for spouts of water from the whale and could generally tell what whale it was. Two spouts of water meant it was a black whale, and one spout meant the high chance of a sperm whale. Post-World War Two the method of spotting whales completely changed with the introduction of aeroplanes and the invention of radar and radio communication which turned the whales own ability of echolocation against itself (Procknik, 2011). This primary mode of spatial awareness determines their relative position to other animals and surrounding objects in the sea. Vision is second to echolocation and is less relied on, while not blind, their eyes are compromised by its biological makeup. Similarly, submarines are blind when submerged. The method of echolocation used by the submarines is called passive sonar. Rather than sending out a signal and waiting for the ping of the object back, it would simply lurk and listen, as the enemy cannot detect any incoming signals. Passive sonar was as accurate as determining routines on other submarines if followed close enough. Submarines have a listening cone that extends forwards away from its noisy engine, allowing a predator to literally swim right behind it. If the USSR suspected anything, they would perform a crazy Ivan, which would swing the submarine 180 degrees, allowing the following submarine enough time to switch off its engines and lay still. *It is a meeting of the enemy, ear to ear, with one side deaf to the transaction* (Sontag, 2000).

Processing of whales were of course much more technical and engineered. Boil basements, cutting platforms, misting plants are all the many different processes that occurred to turn a whale into a commodity. Over the many years of operation, the types of methods of processing changed as it made more by-products. The essentials needed for whaling processing is a fire and a container. Blubber is boiled for roughly 3 hours and the oil is then siphoned off. However, in a contemporary capital-driven society processing plants efficiency and high turnover of product were essential. Whales were shot with harpoons and would often put up a major fight, dragging the whale hunting boat for many kilometres. Over time, as the harpoons became more lethal (blunter, stronger and attached with explosives) whales stood very little chance. Whales have come to the surface to breathe and can only hold their breath for about twenty minutes. Similarly diesel powered submarines had to resurface every 12 hours potentially exposing themselves to the enemy (Sontag, 2000). However, when a sperm whale has been threatened its instinct is to dive

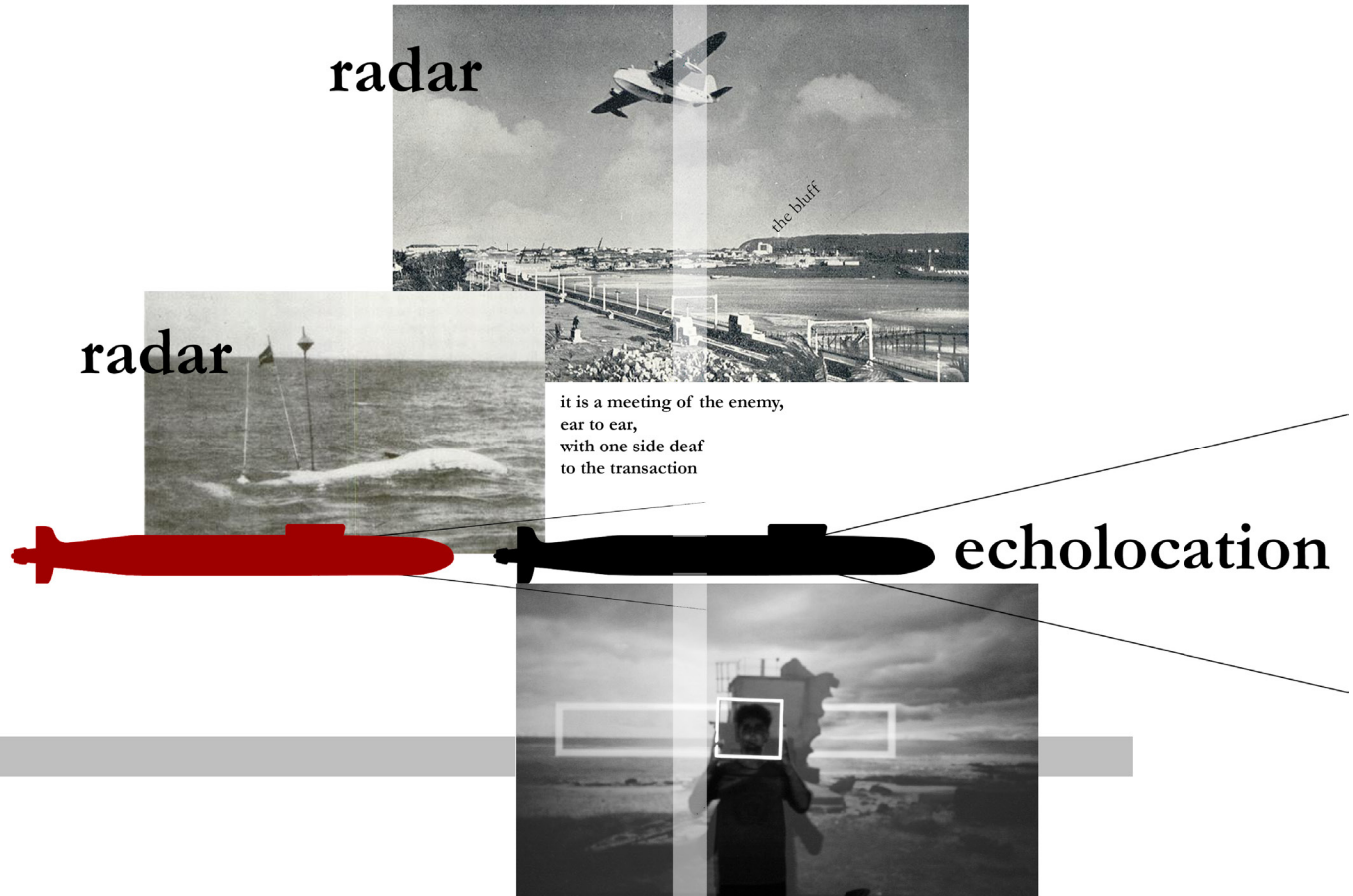


fig. 62 ww2 military bunkers were designed for a horizontal scan of the abyss, but failed to recognise the advancements in technology which included the sky with both aeroplanes and the invention of radar, effectively extending the perceptive realm three-dimensionally. The link to the whales are both plane spotters which find whales from the sky but also used radar to track whales, of course, whales themselves use sonar a similar method of detection.

*gasping for its final breath,
debilitated,
it will grant its life over to the patient whalers*



fig. 63 cast study

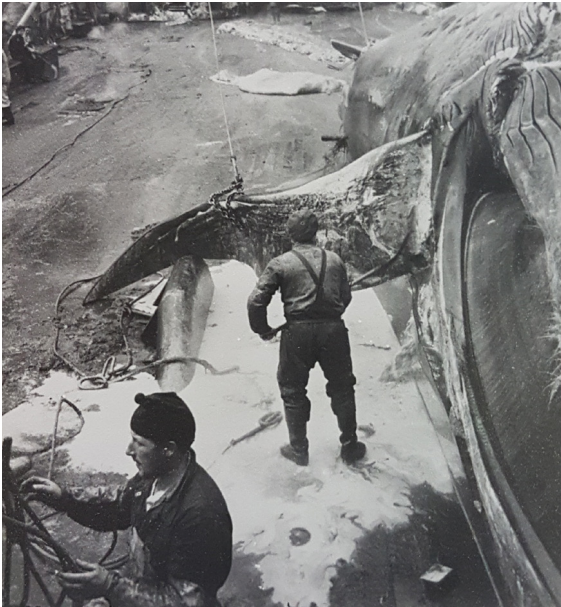


fig. 64 durban flenser aided by steam powered gantries



fig. 65 flensing deck, gantries, gutters, blubber, knives, cables, hooks, boil pits

gasping for its final breath, debilitated

deep underwater and can remain there for as long as two hours, tugging and fighting the whaleboat. Its open wound oozes red blood from its black flesh rich in myoglobin proteins, which store all its oxygen. Once the whale loses all its oxygen stores its only choice is to resurface, gasping for its final breath, debilitated, it will grant its life over to the patient whalers. Whales were pumped with compressed air for it to float; they were then tagged with an incision (of the whaling boat) and a flag with a radio transmitter (Tonnessen, 1982). Whales were then tethered with hooks up to the original slipway on the Bluff. The slipway that was originally used in the first whaling station was used to haul the whales up by winches (Thekwini Metropolitan Council, 2001). Steel strips are embedded within the slipway for the whale to slide up freely. Whales are then lowered and packed onto flatbed train carts, which could transport about 15 whales at a time.

Once whales were transported to the station, they were pulled off the train onto the flensing deck with strong steam powered gantries. Flensing knives were long, up to 50 cm in length and on a 1,5m shaft, cutting the blubber in long strips. Incisions of 50 cm in width would be sliced along the body of the whale and at the end of the strip a hole was cut and a hook was fastened with a strong steel wire to the same steam powered winch. It pulled the strip as the flense would aid in cutting the blubber from flesh. The harpoon was also removed from the body as it was generally left in the whale after hunting.

After the blubber and the whale bones were removed, the remainder of the carcass, i.e. flesh and bones were cut up into smaller pieces with mechanical machinery and some by hand. They were conveyed in waggons running on rails to the try works or meat-loft. Within the meat-loft, nine basement openings would boil the meat, blubber and bones. Depending on what part of the whale was being boiled each opening was designed slightly differently and were up to 4 to 5 meters deep (Froude, 2018). *Tides were crucial* in getting waste material from the whaling station out as far as possible. Red plumes were visible along the surface of the water as the tides dragged the blood further from shore. The same process of the tides was reversed to get water into tanks that were used for cooling, production and cleaning of the machinery.

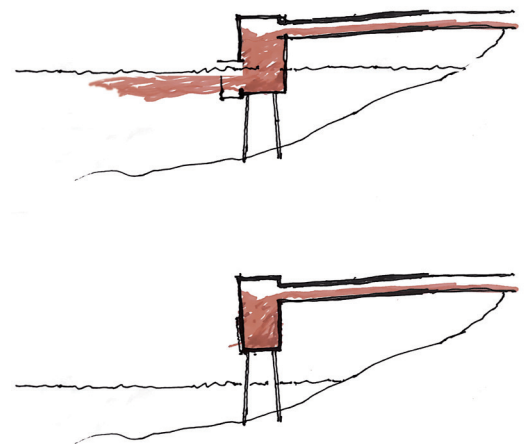


fig. 66 waste was removed from the whaling station through containers that would open at when high tide was shifting to low tide. This would pull the waste furtherest away from the station

negating the spectacle

Contemporary practice in architecture has been reduced to a hegemony of visual sense. This ocular centrism smothers other senses that humans and animals can perceive (Levin, 1993). When comparing the gaze, as introduced by Paul Virilio in the previous sections, to the un-ocular-centric-ness of how we perceive, we can then further understand how the Atlantic Wall failed because it only focused on the vision neglecting the development in technology as Benjamin analyses, the 'other senses' (Leslie, 2000). By critically analysing our contemporary visual culture, the power of the eye over other sensory realms has constructed architecture into a kind of spectacle. Immediate response and persuasion through smooth surfaces, homogenous lighting..., all induce a sedative experience of the architecture in question as well as sensory deprivation of your entire body, through all your senses (Pallasmaa, 2000). Casting using beach sand as formwork has been used in the design as this methodology aimed at negating the spectacle in architecture, prolonging the instant gratification of our visual culture (Pallasmaa, 2000). These studies, expose the production and process - taking hints from the sequence of whaling, revealing an exposed carcass, a museum, through an undefined period, as the formwork the sand is removed through natural processes visible on site.

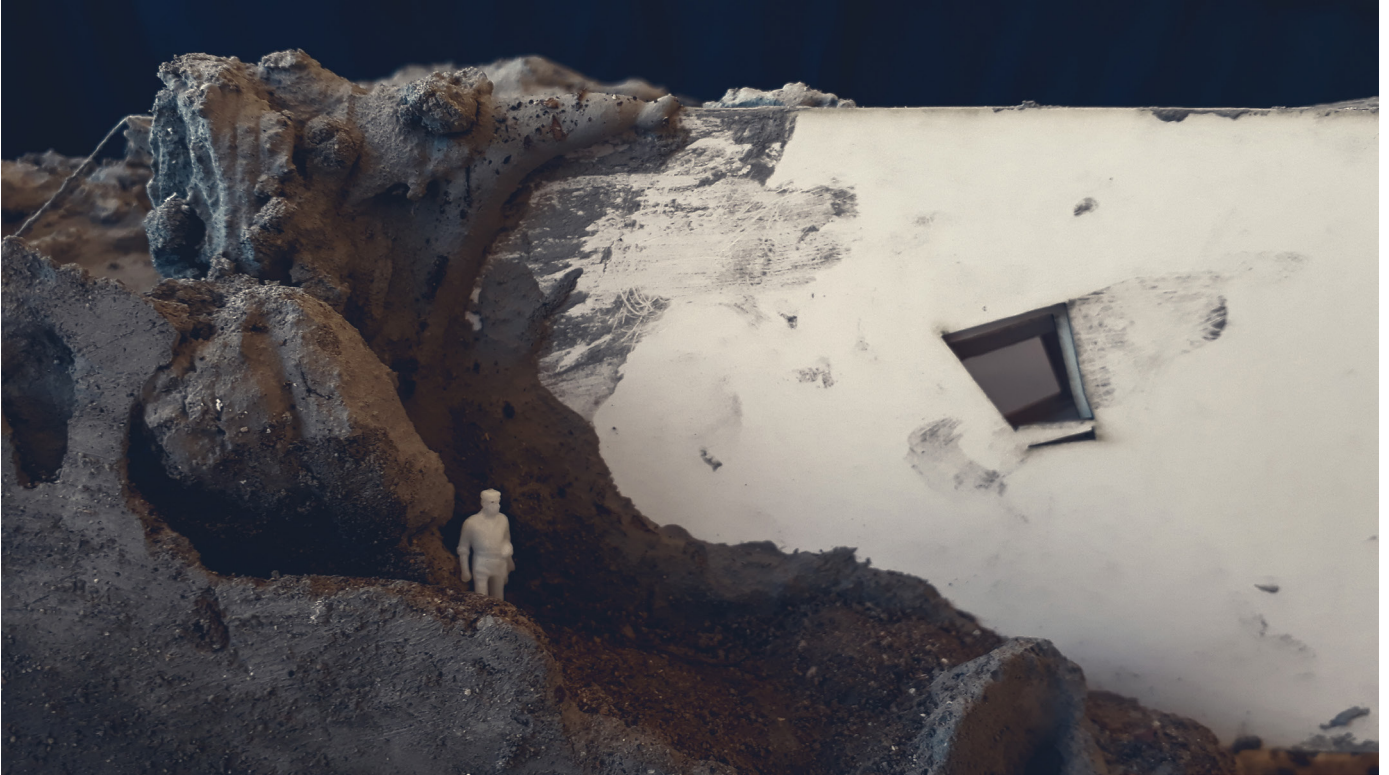


fig. 67 the future says a lot about the past



fig. 68 whale organs

a submarine death tomb becomes a passage to life

Ensamble Studio's Truffle House and Tippet Rise Art Centre are both examples of projects that make use of formwork that are removed through a laborious intensive act. House Truffle's broad idea cast an object from concrete with the interior negative form out of hay, which a calf would eat and grow over time (Ensamble Studio, 2010). Similarly, at the whaling station, in my intervention, the constant attack of the ocean on the shoreline is the calf, slowly eating away the sand formwork, depositing the remains back into the ocean. The spectacle in this architecture is its constant evolution revealing new surfaces and spaces, defined by the sands removal. In *Jonah and the Whale*, Jonah's submarine death tomb becomes his passage to life (Amery & Young, 1996); the process of removing sand and revealing a 'product' is symptomatic of transforming a whale into a commodity through the release of its remains back into the ocean.

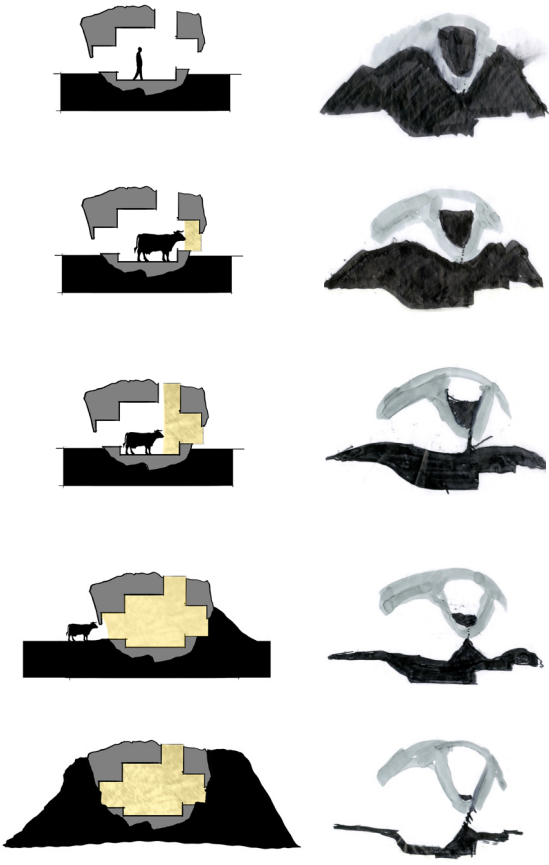


fig. 69 eating // bleeding
method of exposing the carcass through using the natural tides of the ocean

fig. 70 cast study



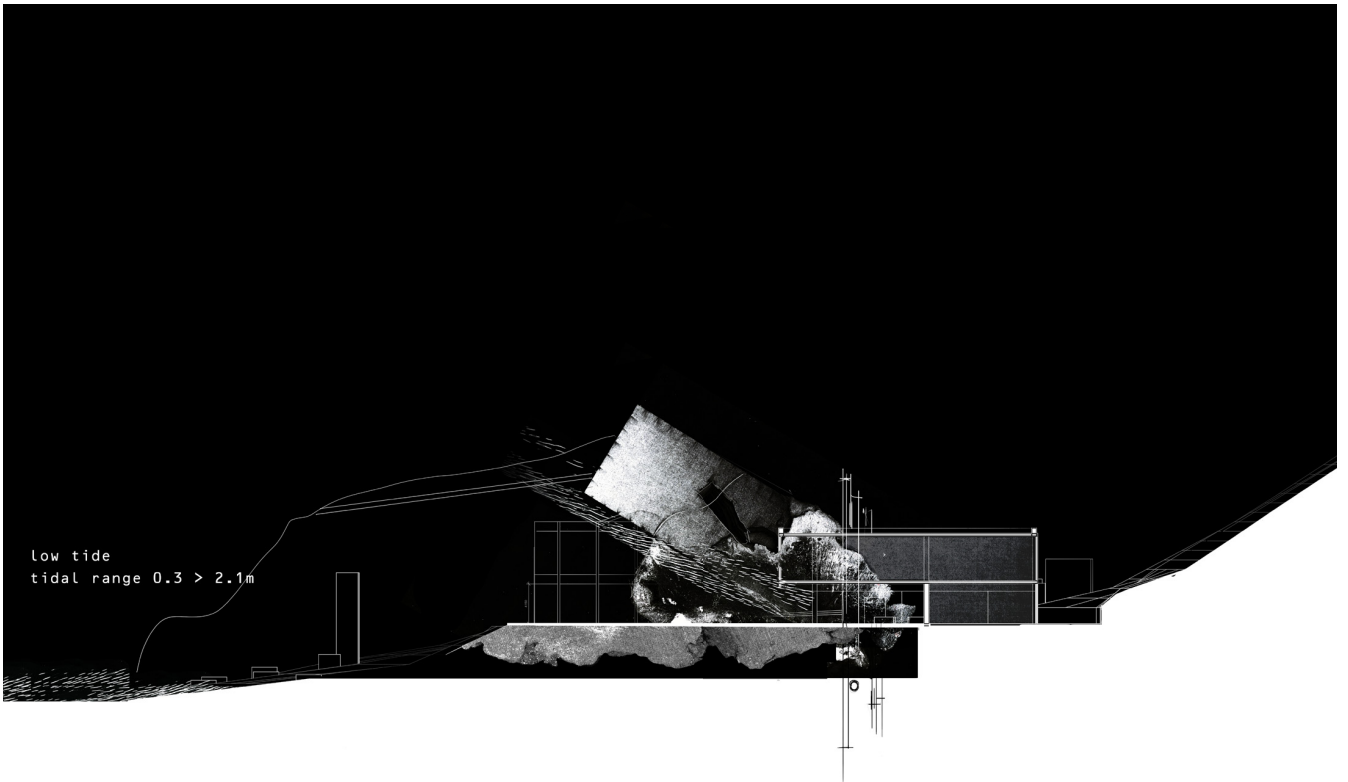


fig. 71 directly placing the cast object into a section of site and its relation to the tides

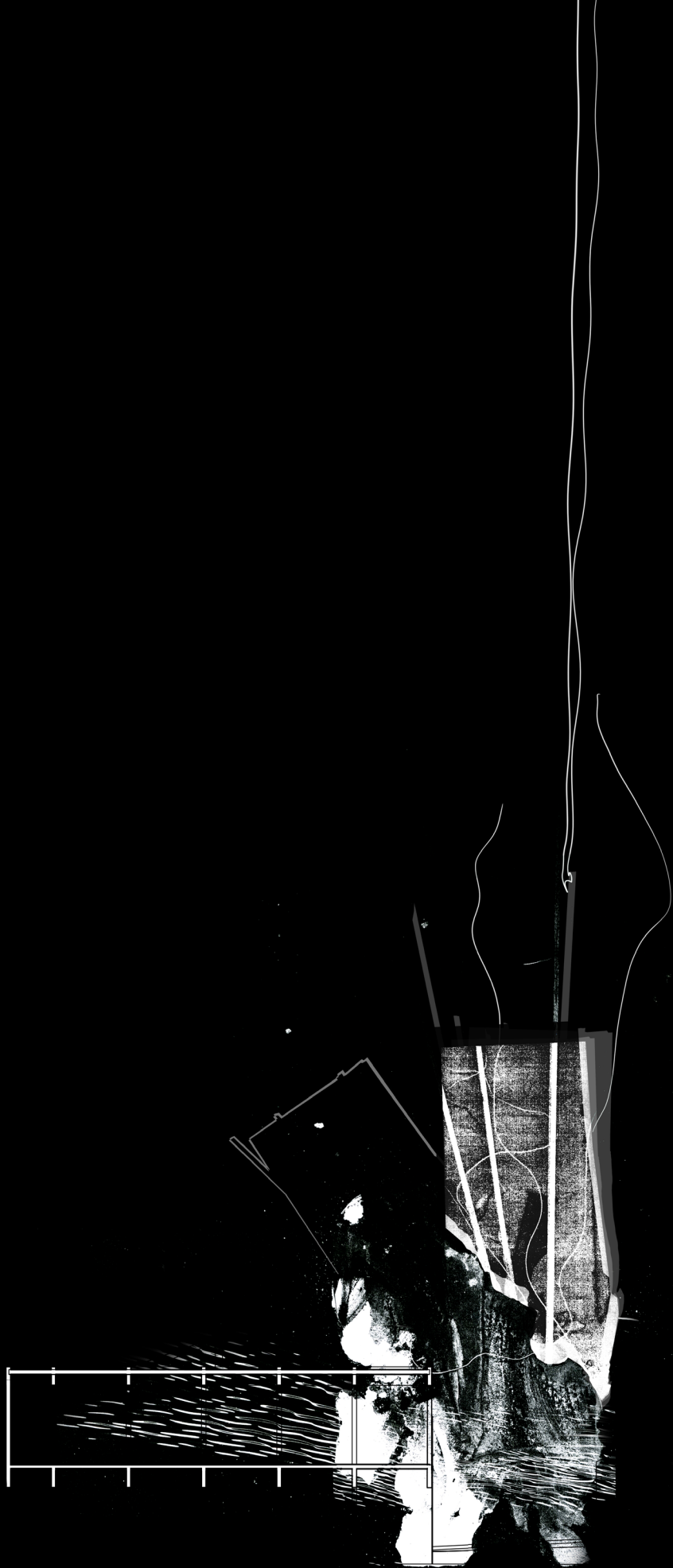


fig. 72 freezer room section at union whaling station

only time will tell

Sand has quite specific properties that result in particular kinds of formal generation. Technically the grain size of sand determines its angle of repose, or the maximum angle at which the loose material lies without movement. Any steeper than its defined angle and the sand is most likely to slip. Beach sand is defined as fine grain and generally has an angle of repose of 35 degrees (Meadows, 2016). This already constrains the architecture in a particular manner; however, if the sand is slightly damp the angle of repose changes considerably allowing other forms to be moulded. The damp sand allows sufficient time to cast over the sand and whilst the bio-concrete sets, it will draw up any remaining water, allowing it to cure properly. Once the sand is dry, it can move much more freely, as it is undermined through the waves. Oversaturation of the sand will not hold its form allowing the body of sand to be moved, similar to sinkholes, and mass movements of land. Once the bio-concrete (discussed further ahead) is cast, the original whaling sluice gates will open to allow for the bleeding and washing away of the sand formwork.

This process allows the cast object to be shored up by the existing whaling station using it as a framework. Depending on the exact location of the intervention, sand will be stocked up either side of the existing whaling station to hold the existing walls and structure in place under the immense weight of the cast. The new architecture engulfs intersects, layers, conceals and reveals parts of the whaling station, enriching both interventions through its form and materiality.

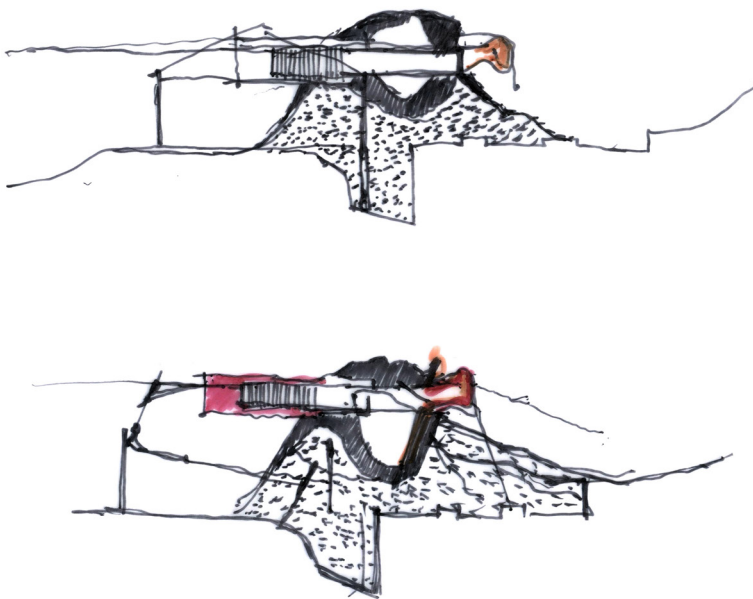


fig. 73 using the existing whaling station as formwork sand is to be filled either side of the existing walls to maintain even pressure as the concrete is cast over

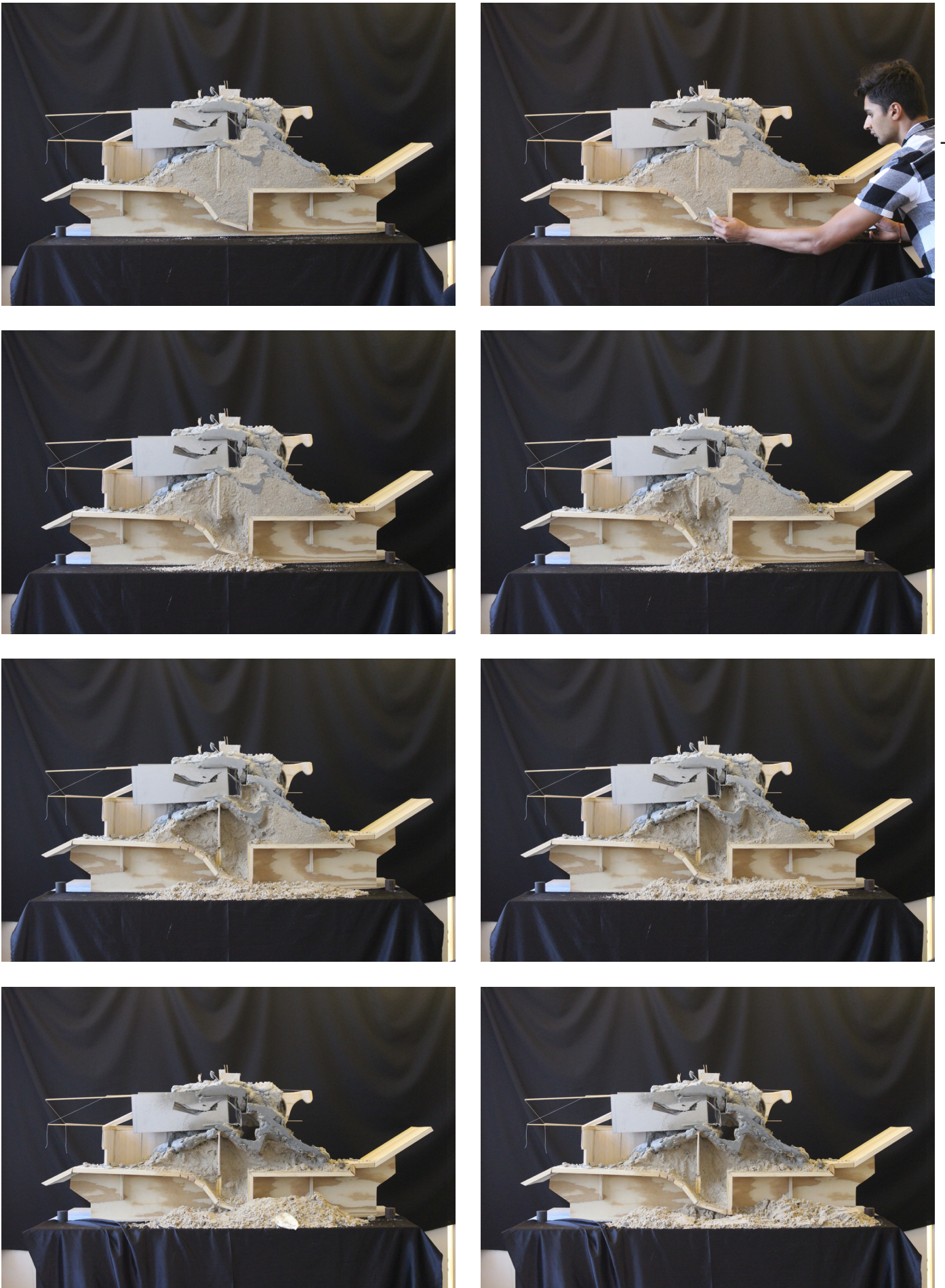
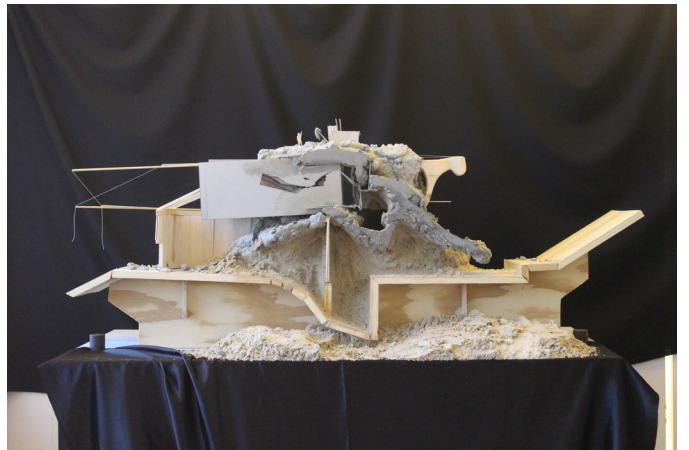
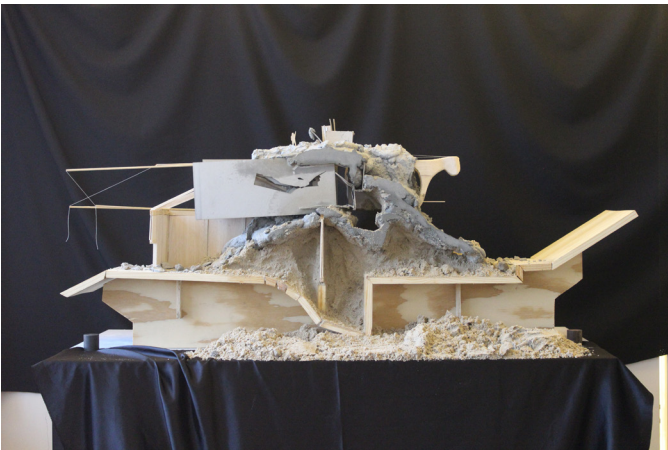
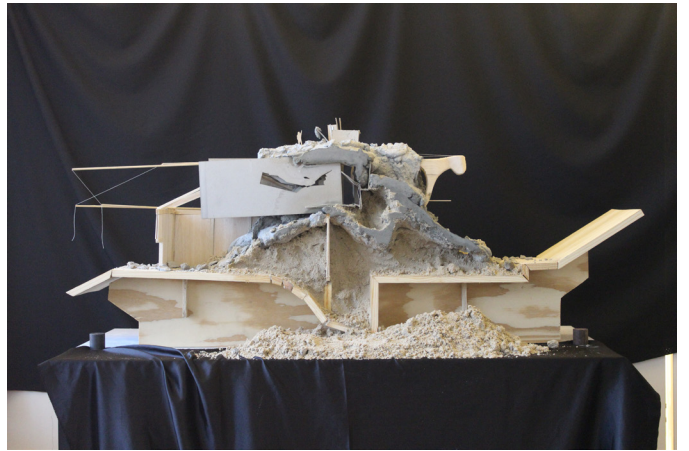
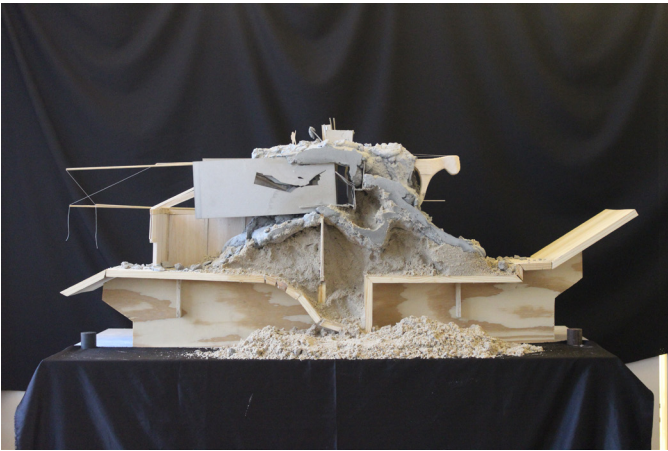
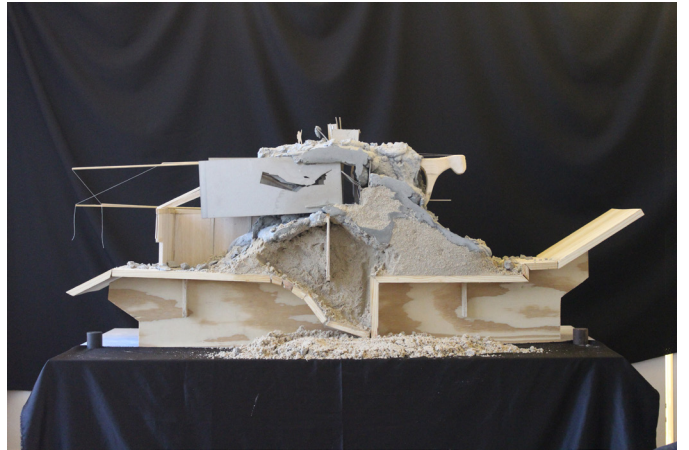
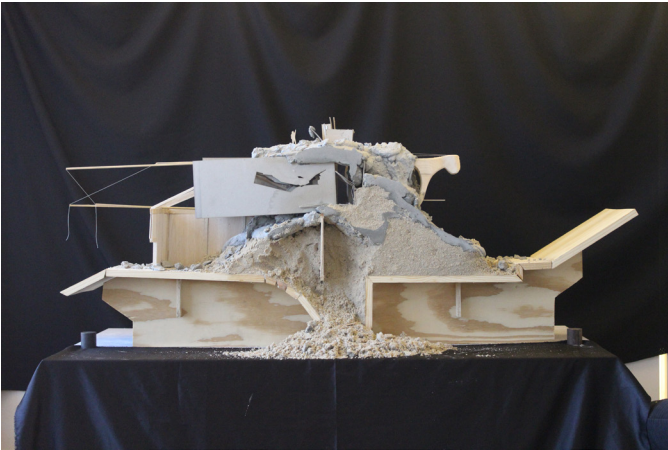
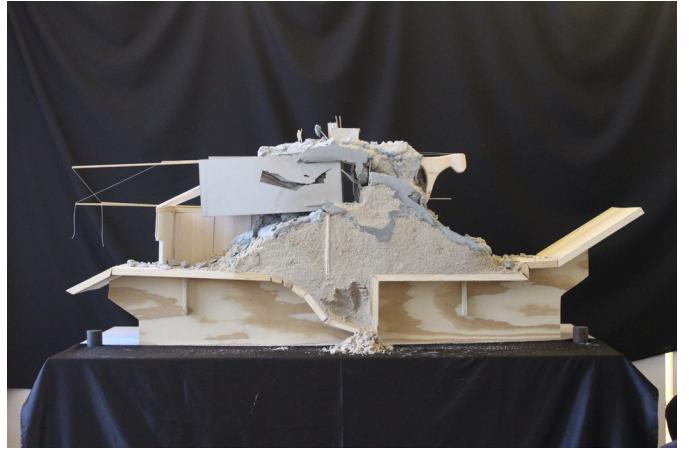
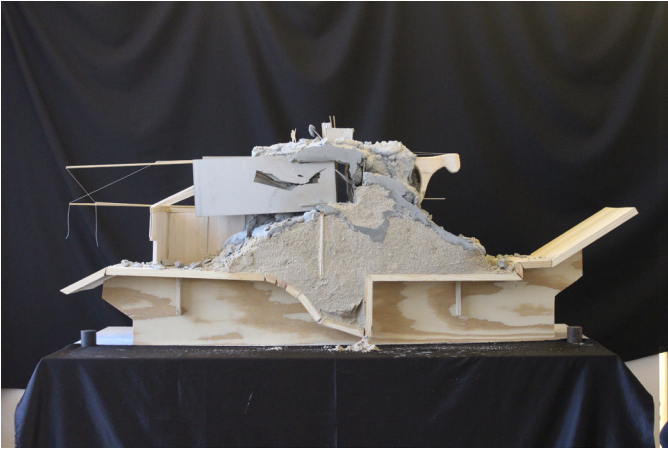


fig. 74 bleeding the perceptive machine through the natural movement of the tides





stalactites, urine and whales

Another important hidden condition of the Bluff is the active processing that occurs at the sewage works where waste is pumped directly into the ocean, which has harmful effects on the natural environment. Studies have shown that urea extracted from urine combined with beach sand and a binding agent can be made into a bio-concrete and set as strong as concrete with the similar reinforcing (Seifan, Samani & Berenjian, 2016). Although this has not been done on a large scale, the possibilities and research are pointing in this direction as a viable alternative to concrete in the near future. The idea of using this locally sourced construction material is to engage these hidden processes and reveal them.

As Andreas Huyssen writes, 'Remembrance as a vital human activity shapes our links to the past, and the ways we remember define us in the present. As individuals and societies, we need the past to construct and to anchor our identities and to nurture a vision of the future' (Ware, 2008). Memory is continually affected by a complex spectrum of states such as forgetting, denial, repression, trauma, recounting and reconsidering, stimulated by equally complex changes in context and changes over time. The activation of both these abandoned and active systems on the edge of the Bluff will actualise the project into a counter memorial.

fig. 75 peter trimble, *microbial manufacture*, using urea as construction material

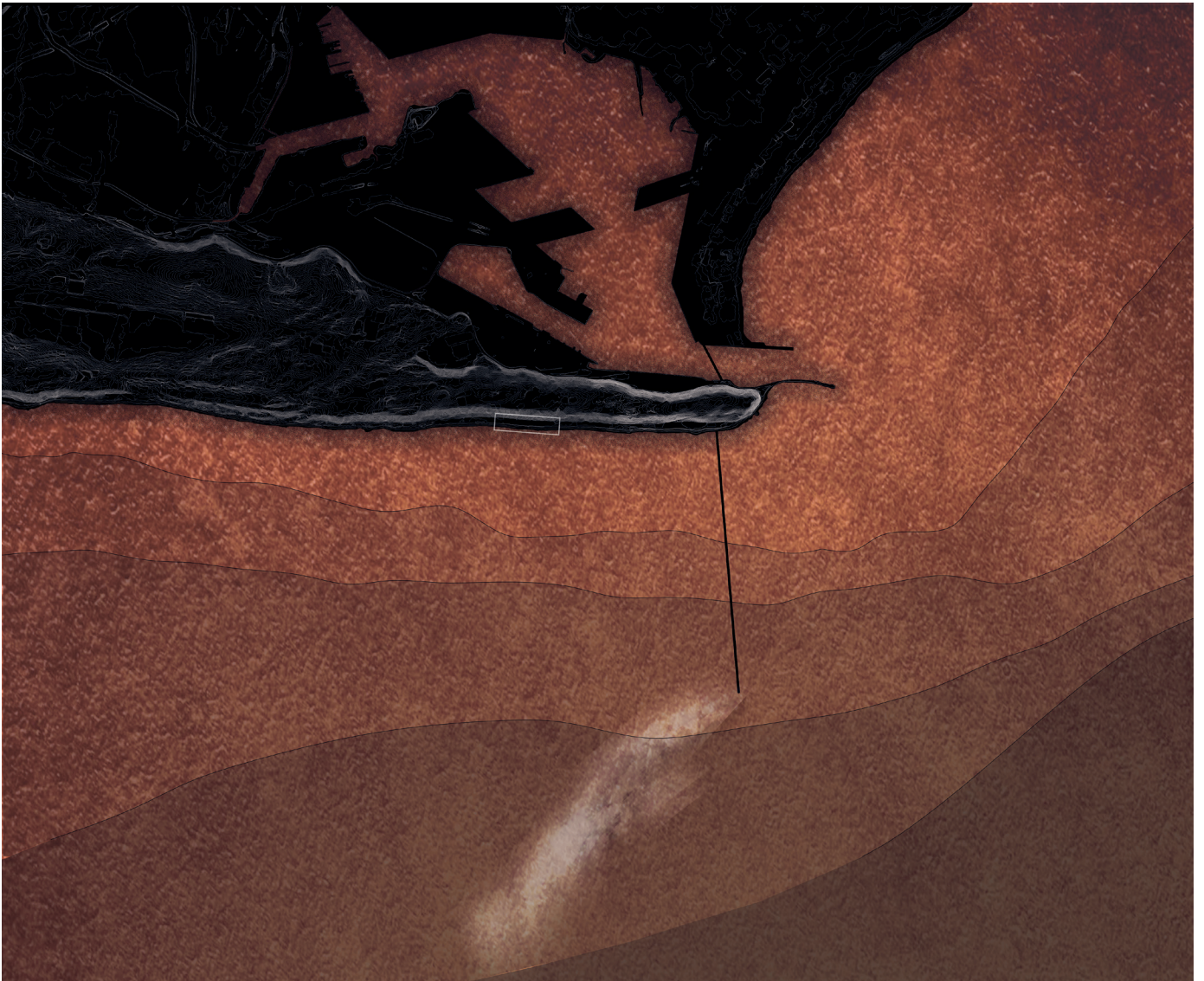


fig. 76 durbans central sewage works pumps all its waste 3km out into the ocean from the bluff

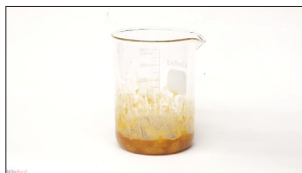


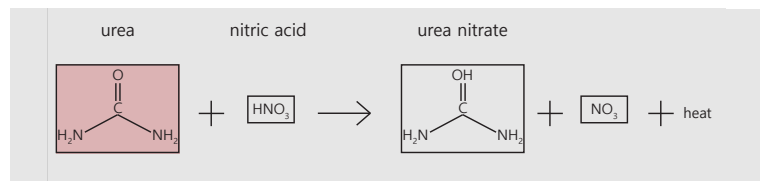
fig. 77 extracting urea from urine

66 million liters of effluents are passed through Durban’s solid waste treatment works at the Bluff (eThekweni Municipality, 2012). 3% of all urea passed through the Bluff central sewage per day works amounts to 19800 kg or 19,8 tonnes. The abundance of urea near site allows for the production of new materials through the process of microbiologically induced calcite precipitation or biological cementation. *This is a natural process just as the formation of stalactites and stalagmites.* In the production of the bio-concrete - every ton of sand only requires 2 kg of urea. This process occurs at room temperature naturally which bonds as strong as concrete and in a similar manner to its regular counterpart. The counter memorial at the Bluff will roughly have a footprint of about 100 000 m³. Roughly, half of the intervention is the sand that will be removed through water and wave action. 1m³ of concrete requires the use of about 700 kg of sand and if the footprint of the design is 50 000m³ then the total amount of sand used within the mixture will be 35 million kg or 35000 tonnes. The mixture will then require only 1% of urea, which amounts to 2000 kg of urea, 10% of what is passed through the sewage works within 1 day.

urea extraction process from urine

boil water out of the urine

add **nitric acid** to bind to the urea to extract it from the other minerals



convert **urea nitrate** into **urea** by mixing in **potassium carbonate**

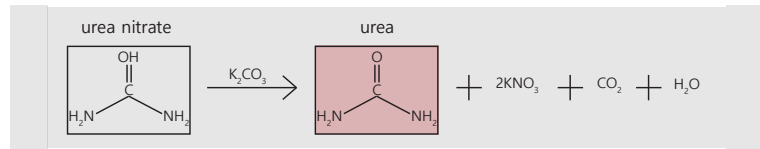




fig. 78 the process of bio-cementation is naturally occurring

readily available at site as the bluff central sewage works is situated at the shores edge

energy for the bacillus pasteurii to induce a reaction between calcium chloride and beach sand to form calcium carbonate which binds the grains together

bacteria can be harvested, as long as it is supplied with urea. It has the ability to precipitate calcium carbonate and solidify sand when in the presence of urea and calcium

the calcium is removed in the process of **biological cementation** and forms part of the calcium carbonate molecule

water contains the bacillus pasteurii and lubricates the mixture to form a slurry mix

the sand has gone through the reaction and cemented through the process of biological cementation

the only downfall to this process is the by product of ammonia which is poisonous in the environment. However, it can be captured and used elsewhere as it does have major uses in the industrial and agriculture sector

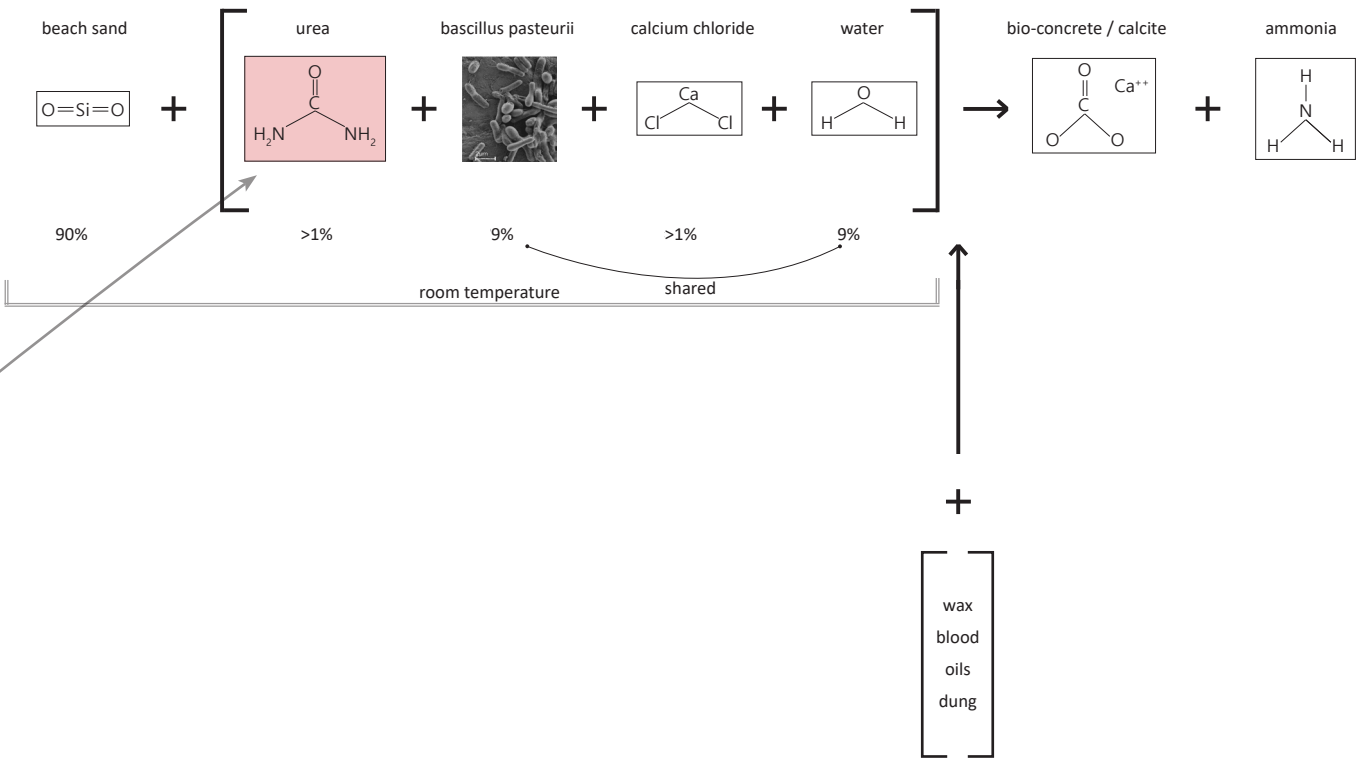




fig. 79 the perceptive machine



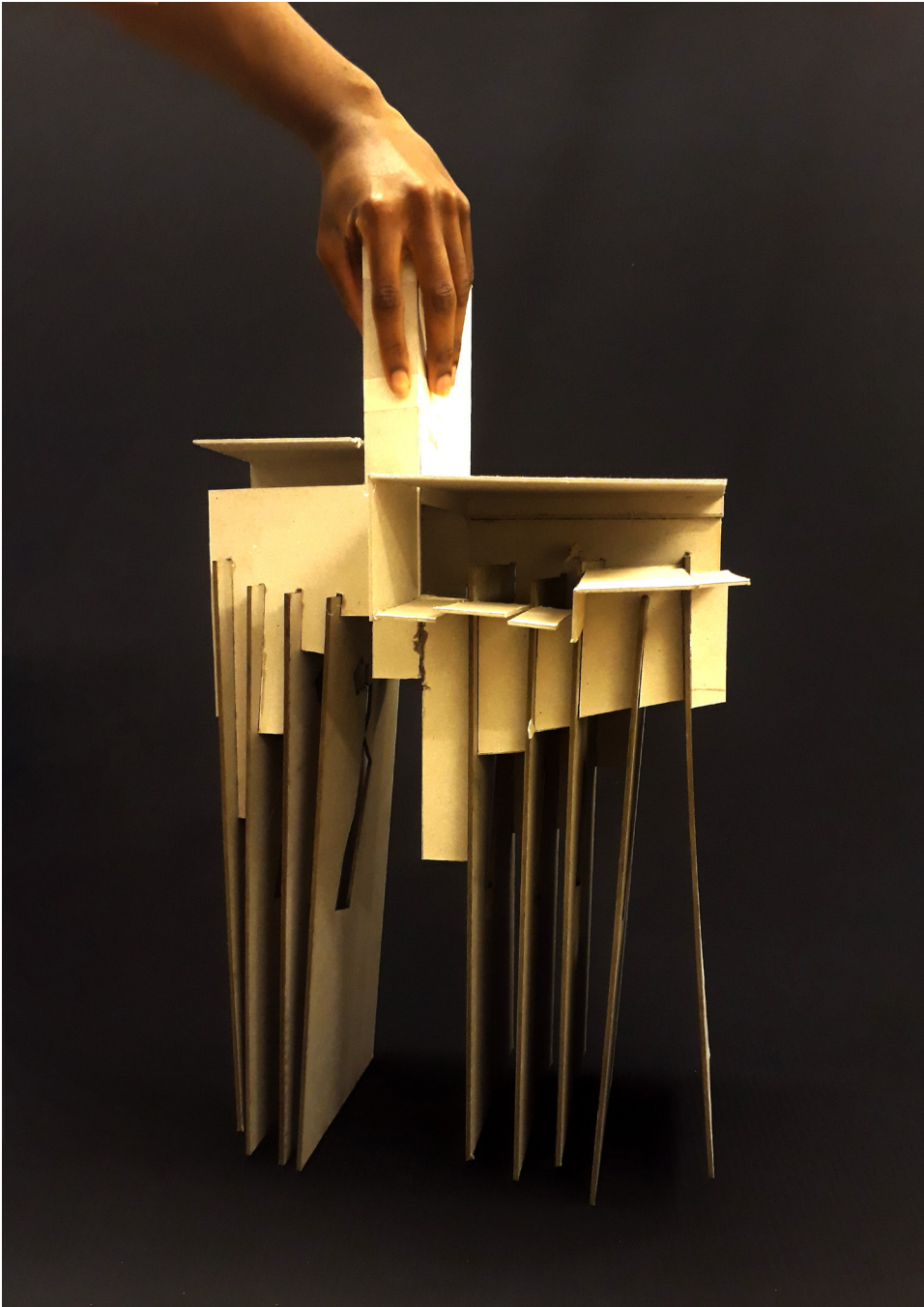


fig. 80 the machine piece

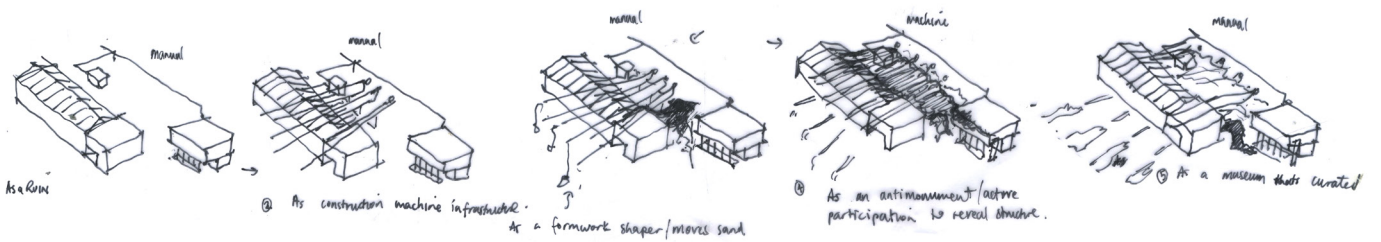


fig. 81 ruin > counter memorial > museum

bleeding

Perpendicular to the cast are intersections of machinic pieces that are in reference to whaling processes and the imposition of calculated, mechanistic, coldly and efficient machine in nature. The counter-memorial in which is the precursor to the museum is the machine in which users to the design first engage. The cold machine refers back to the previous studies of the military found on site and how increasing technological advancements alter our perceptions and interactions with the landscape and the natural world. The machines interactivity allows for performance and engagement into the erosive processes that bleed the sand formwork out of the building maturing the counter-memorial into a mature museum.

In this theatrical mode of interaction, it engages forces of *becoming* as well as those of *vanishing*. Performance arises 'in between the signifiers of self and other, subject and object, actor and character, fact and fiction, mind and body. The being-caught-in-between, the performance alive between the snap of being there and not there...living on the borderlines between life and death' (Reinelt & Roach, 2007) . In these dualities and other similar accounts we meet a presence of vanishing and becoming, temporal moments of performance in which the user will engage with as they interact and learn with the counter-memorial. It challenges our prior forms of perception that are embedded through our cultural signifiers by seeing physical work done alter the space in which you are present.

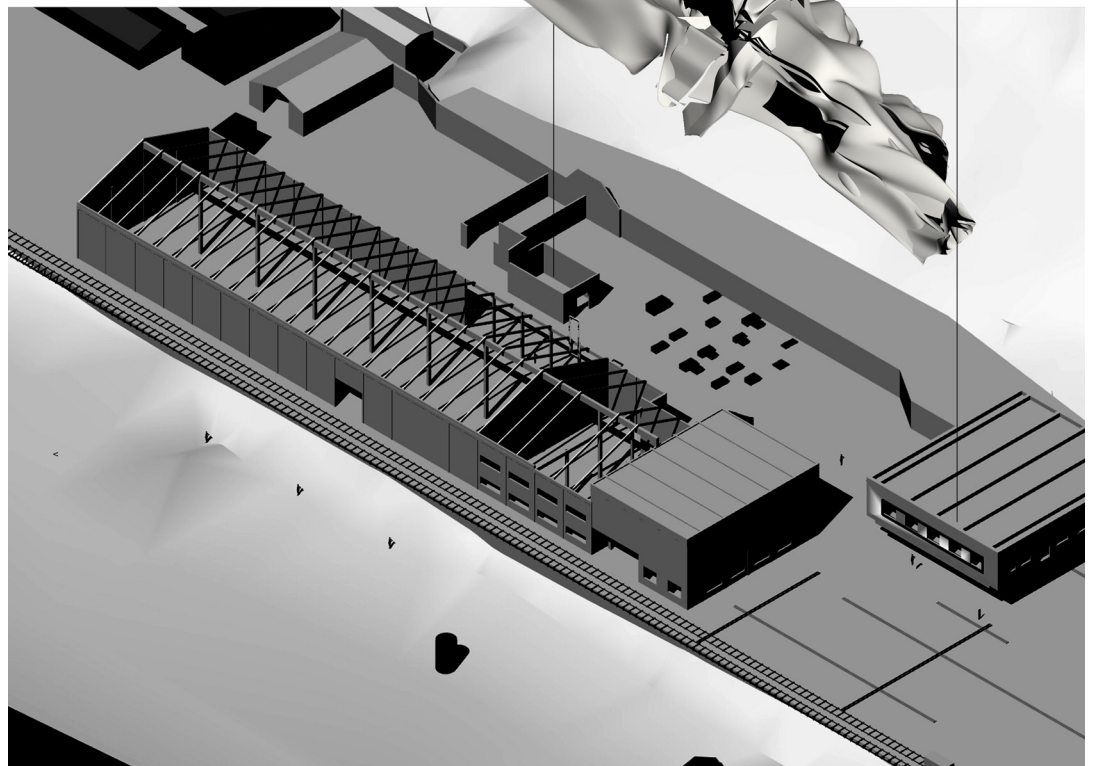


fig. 82 axo of pieces

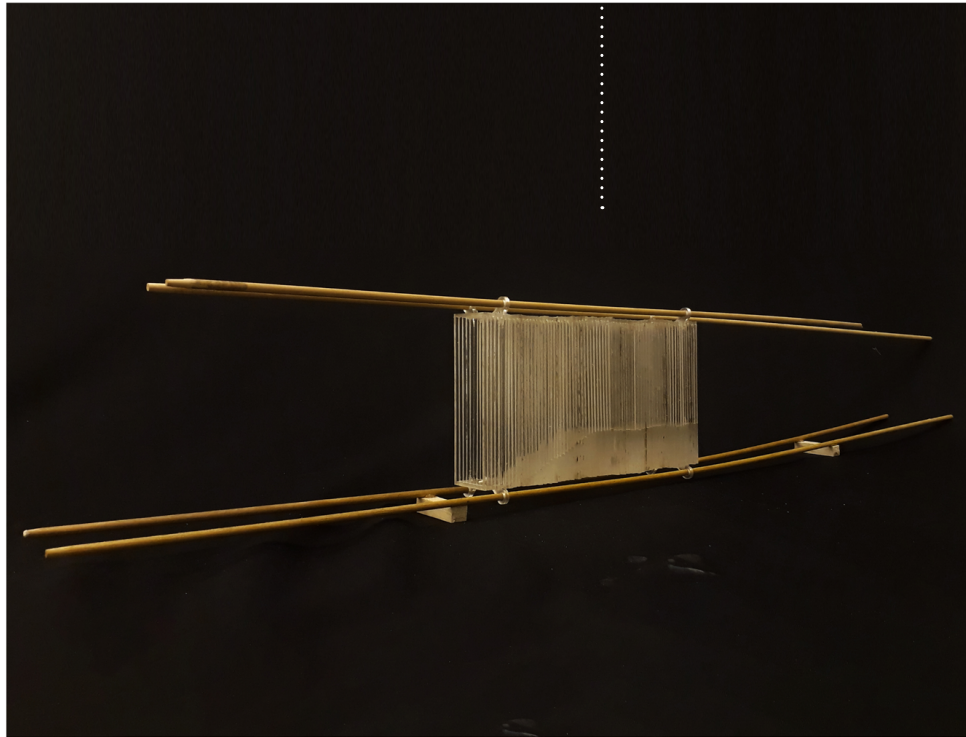
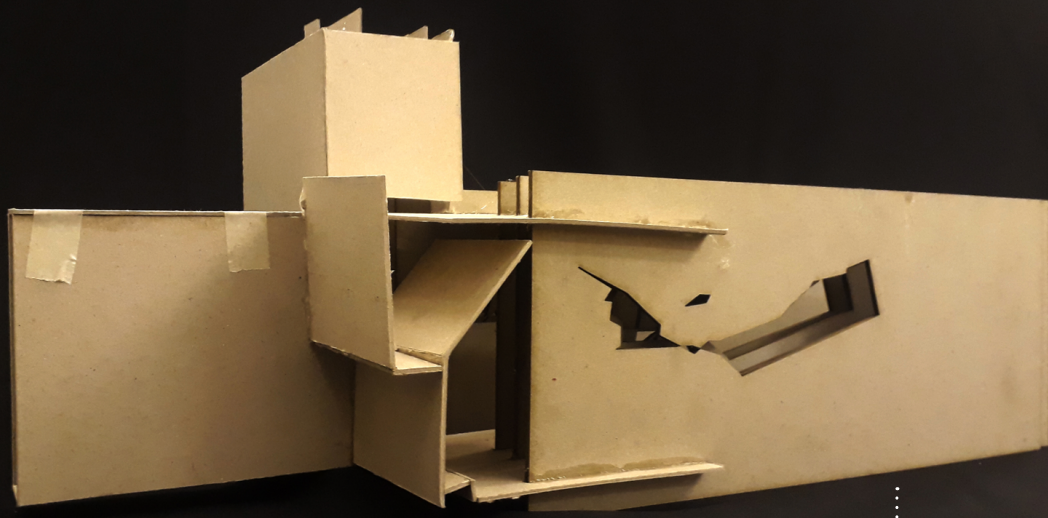


fig. 83 machine components



fig. 84 the machine before it is engulfed by the concrete cast

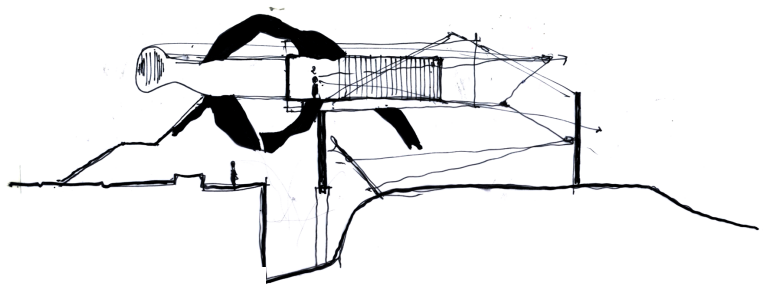
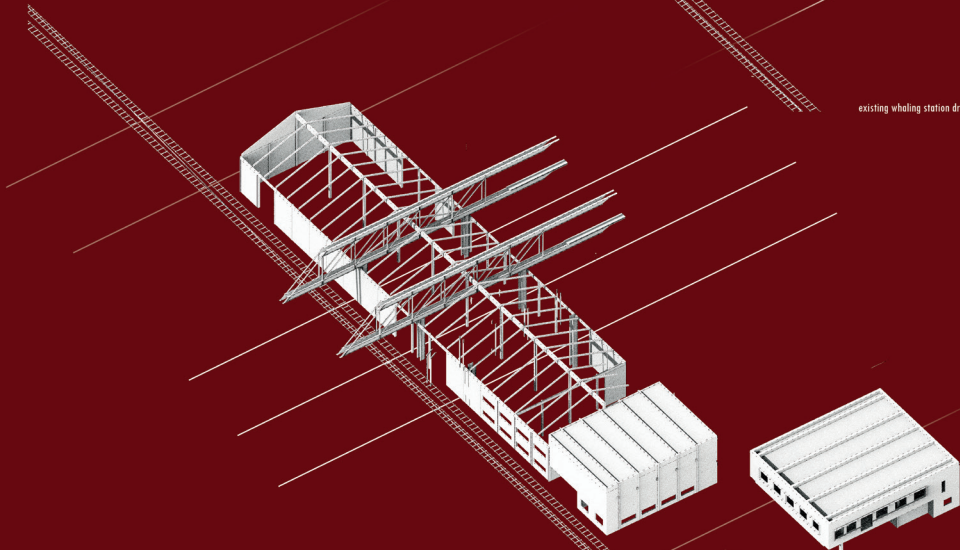
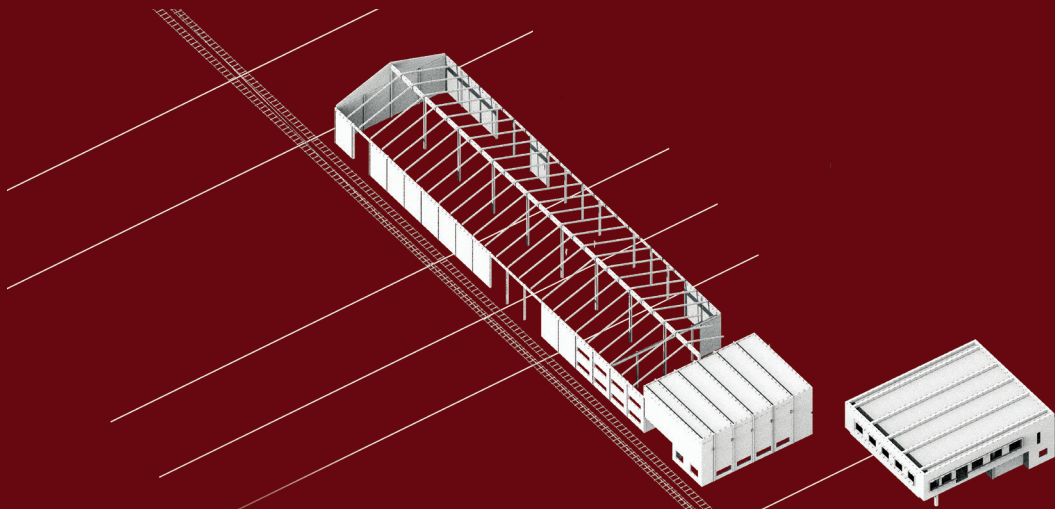


fig. 85 the machine cast within the existing whaling station



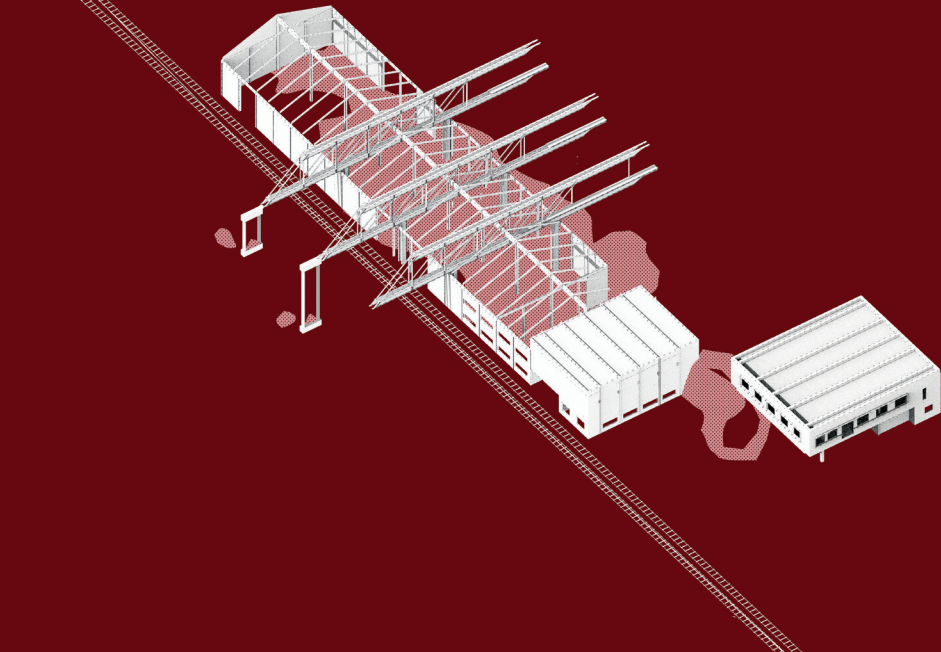
① fig. 86 the head of terror



existing whaling station drainage and pump network

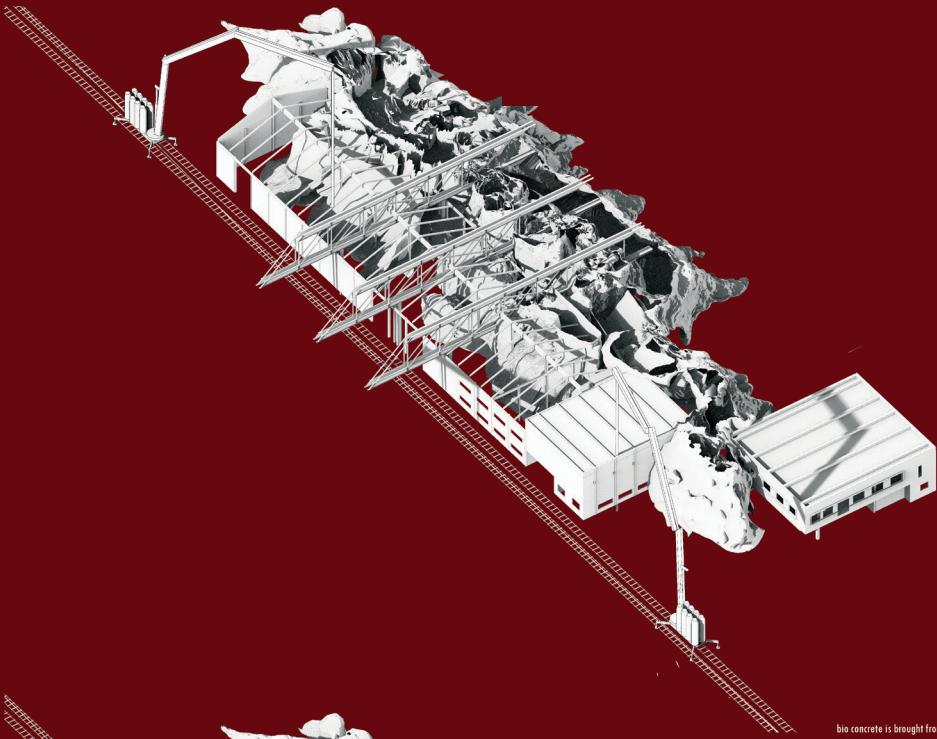


situate cranes on existing network

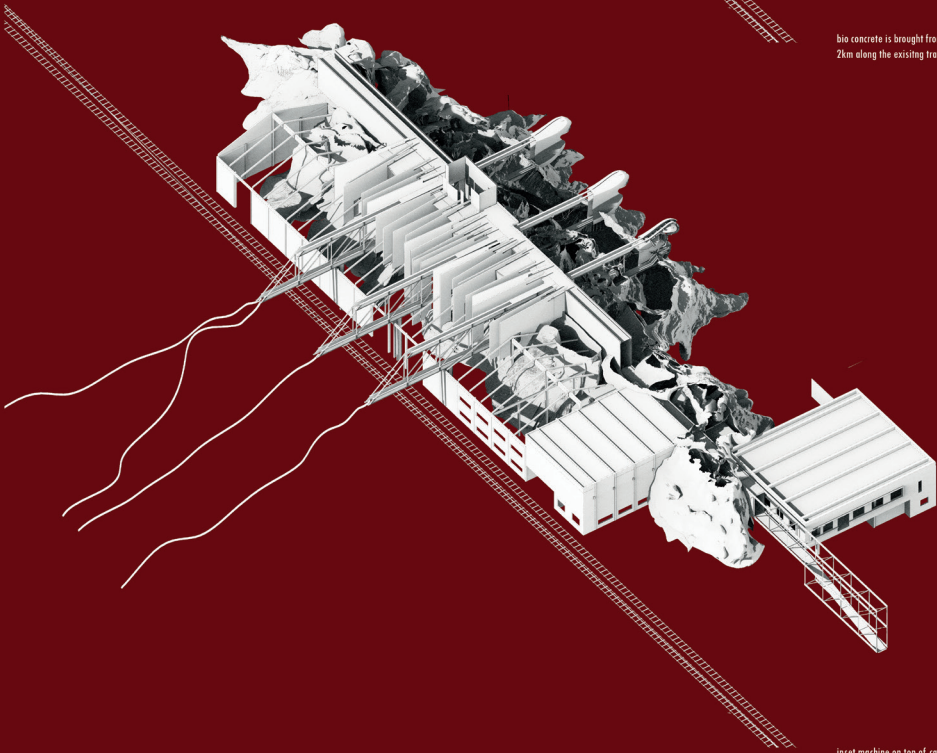


cranes transport beach sand into whaling station and moulded in preparation for cast

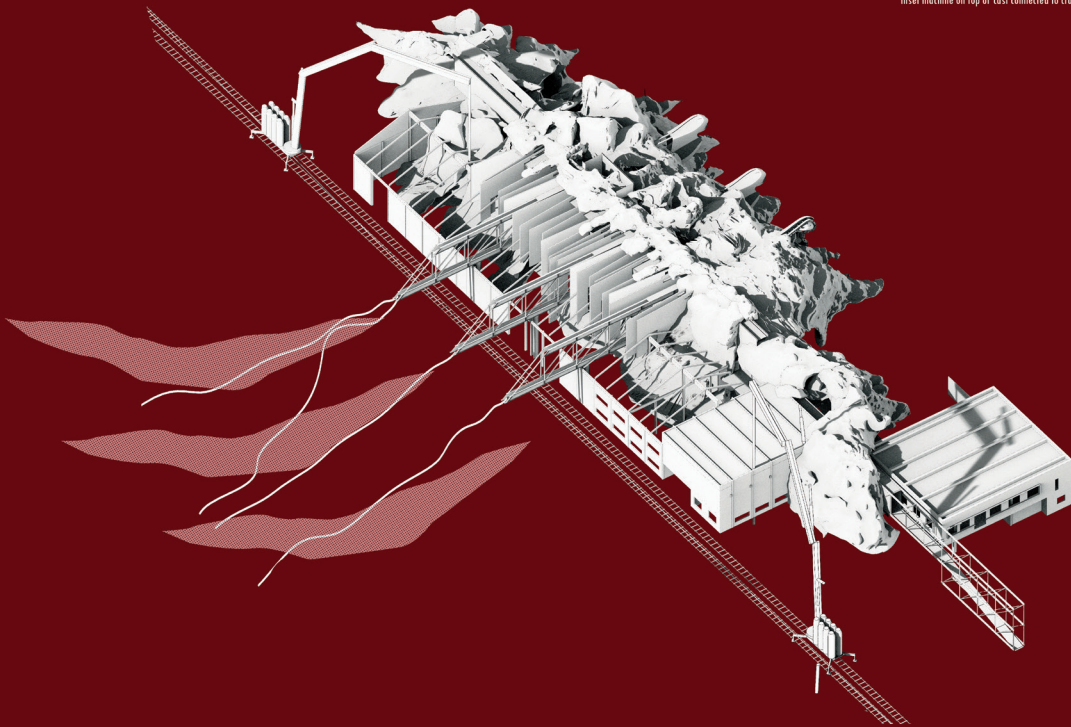
fig. 87 process of construction and bleeding of building



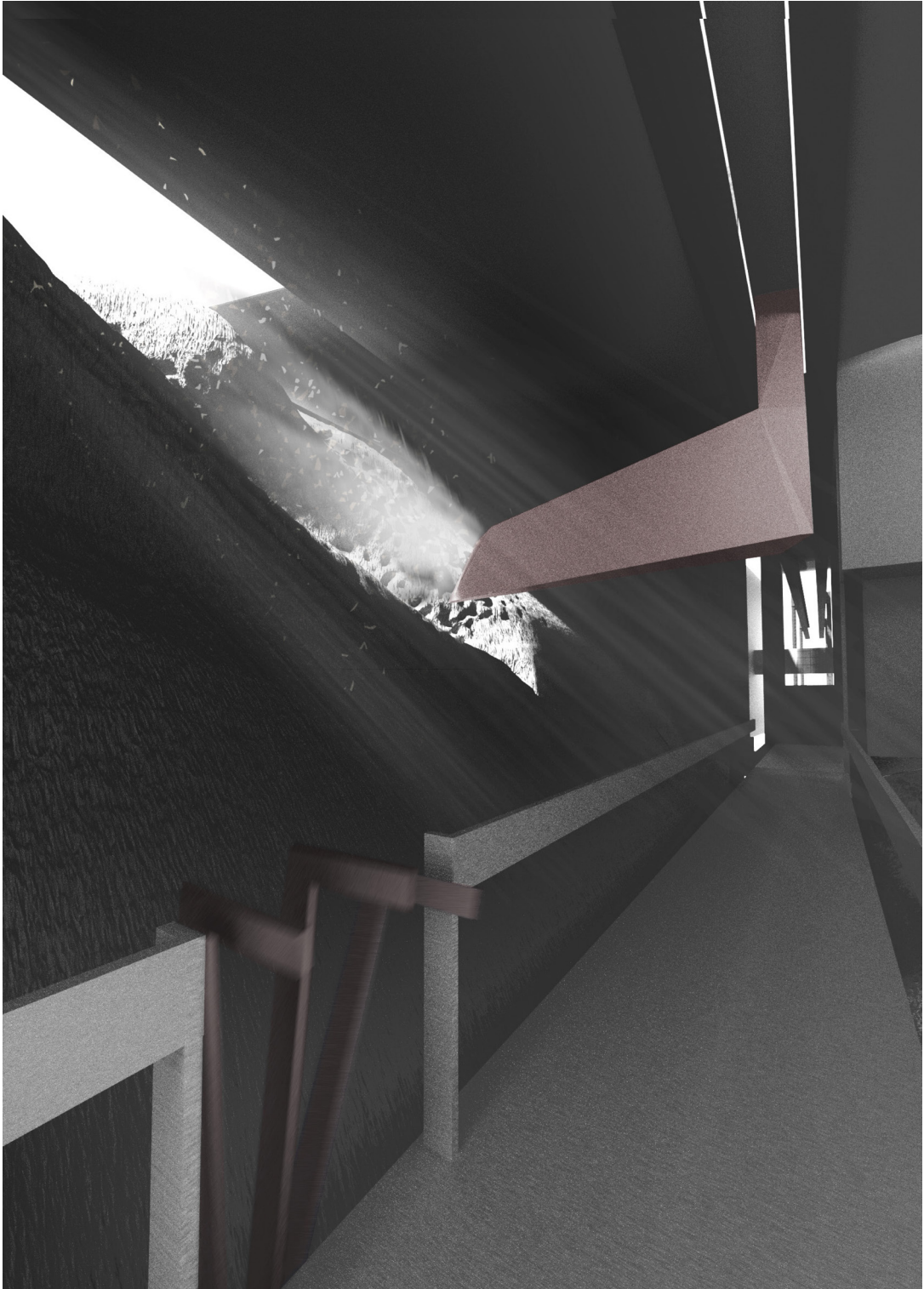
bio concrete is brought from durban's sewage works
2km along the existing trainline



inset machine on top of cast connected to crane structure



The material object should be an 'active almost animate participant in social life'
Aleksandr Rodchenko (Kiaer, 2005)



② fig. 88 slicing the sand formwork away by driving the machine



fig. 89 machine components



fig. 90 perceptive machine (see pages 74-82)

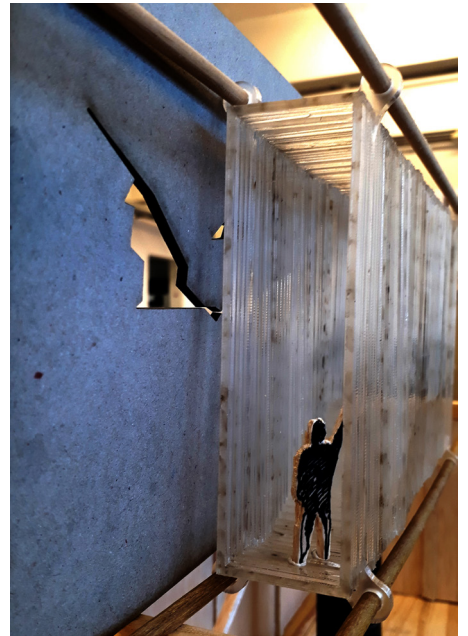


fig. 91 perceptive machine

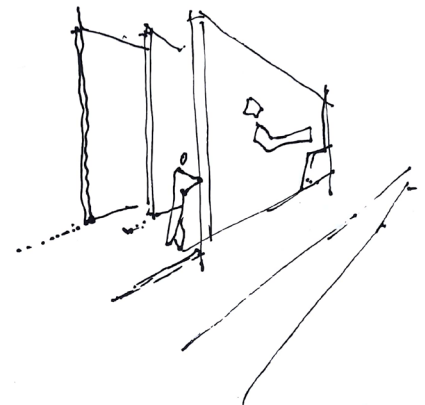
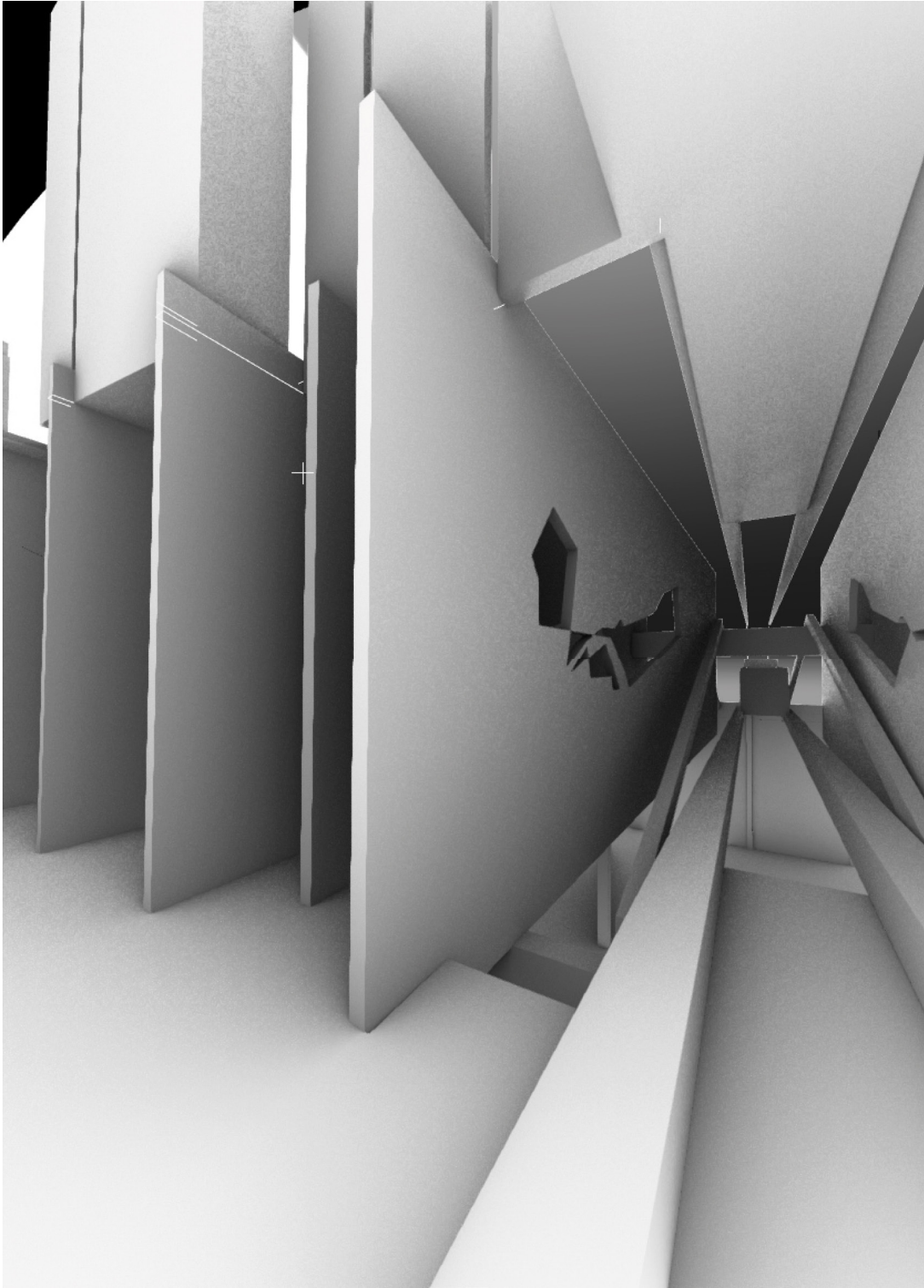


fig. 92 flensing for knowledge by sliding the metal fin



③ fig. 93 remnants of the machine and its imposition within the existing whaling station





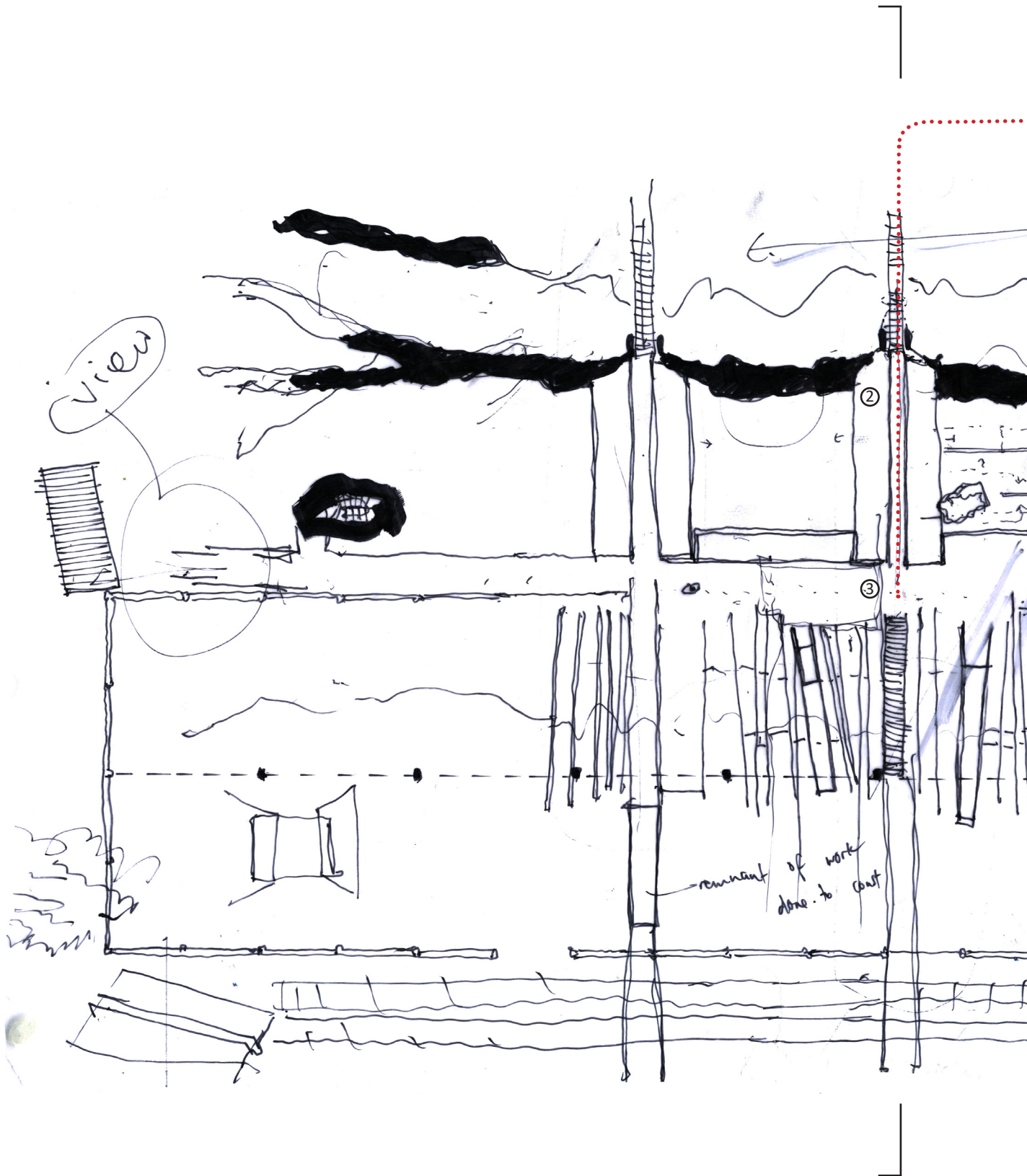
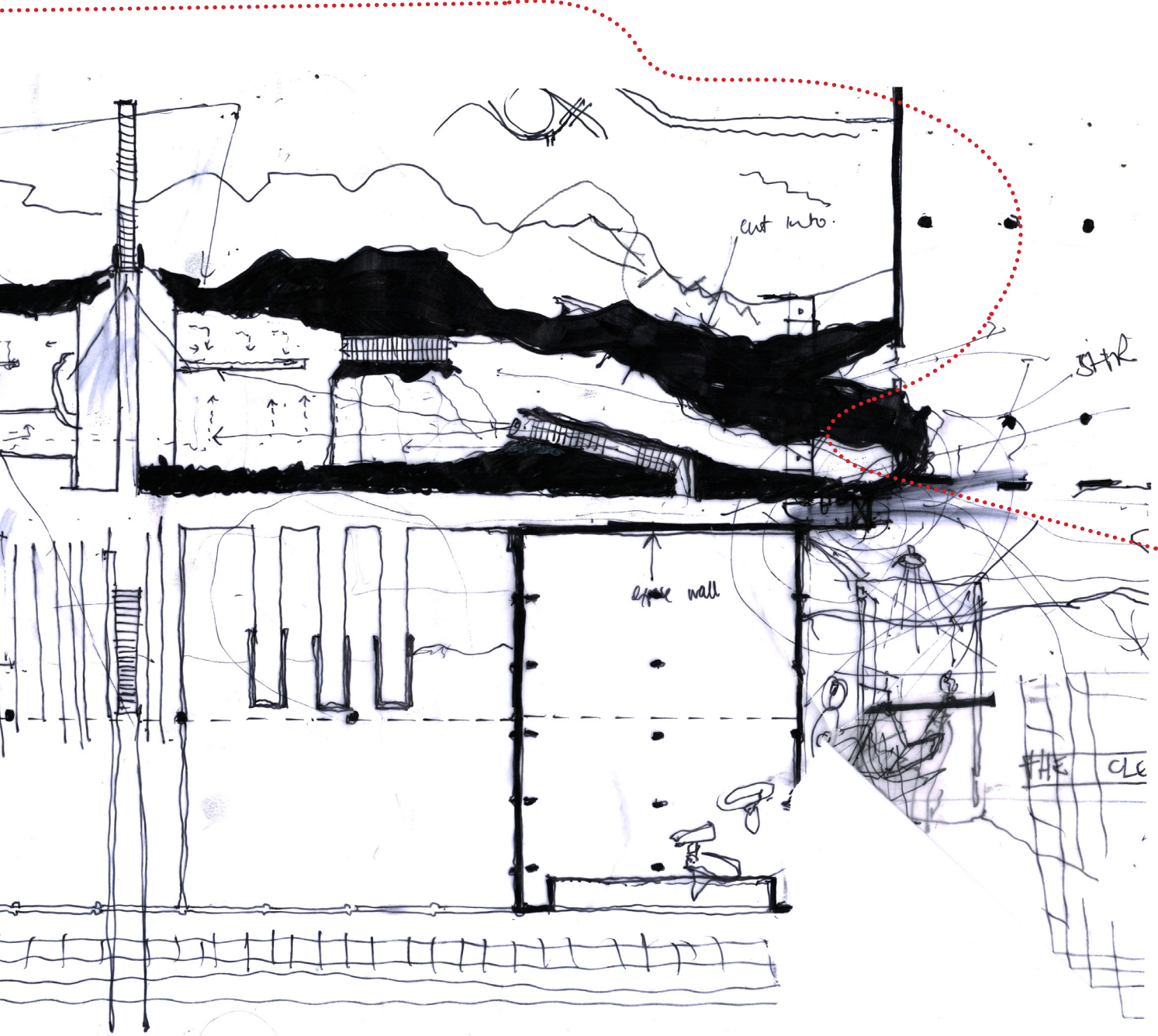


fig. 94 machine plan

①



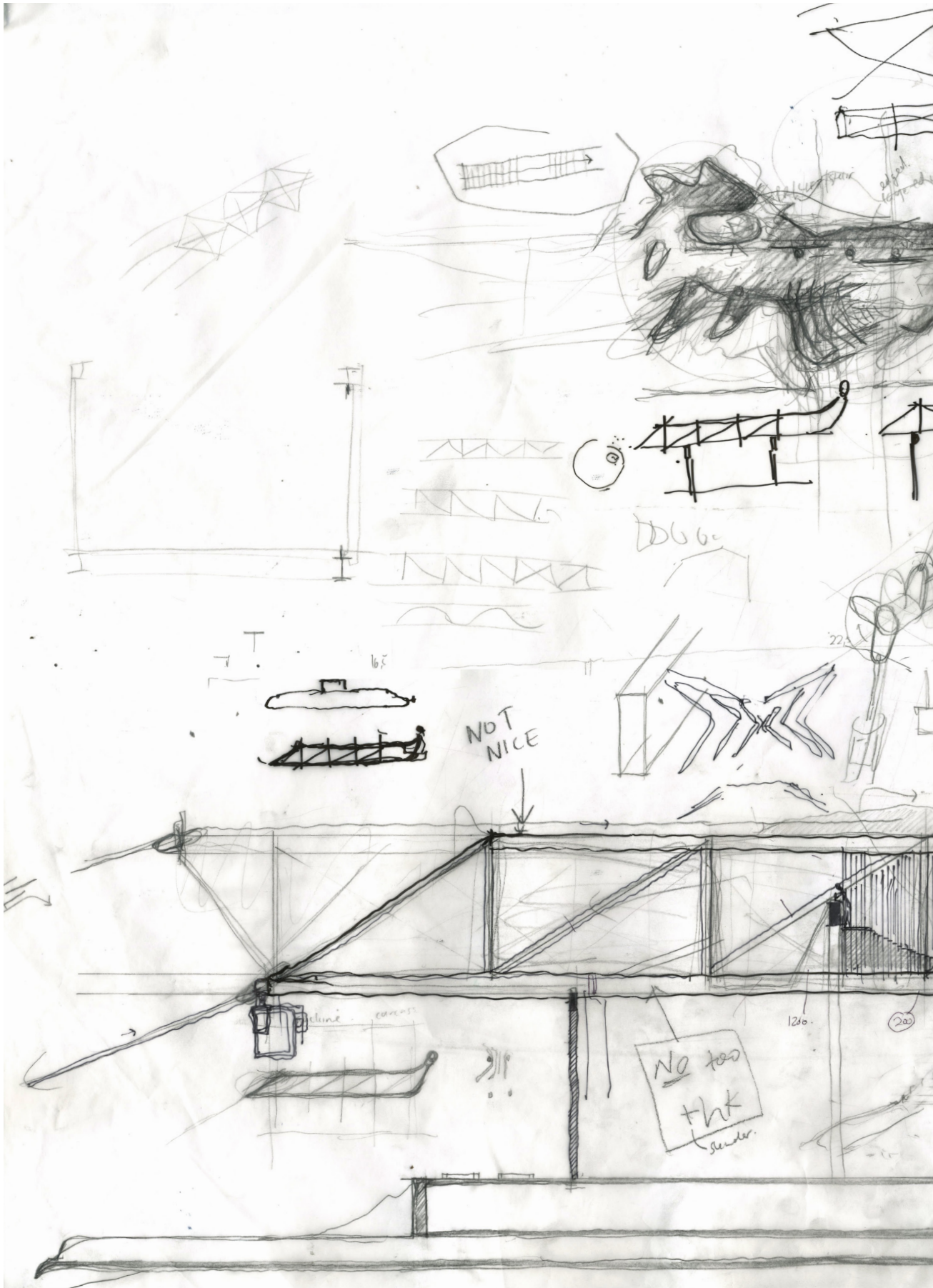
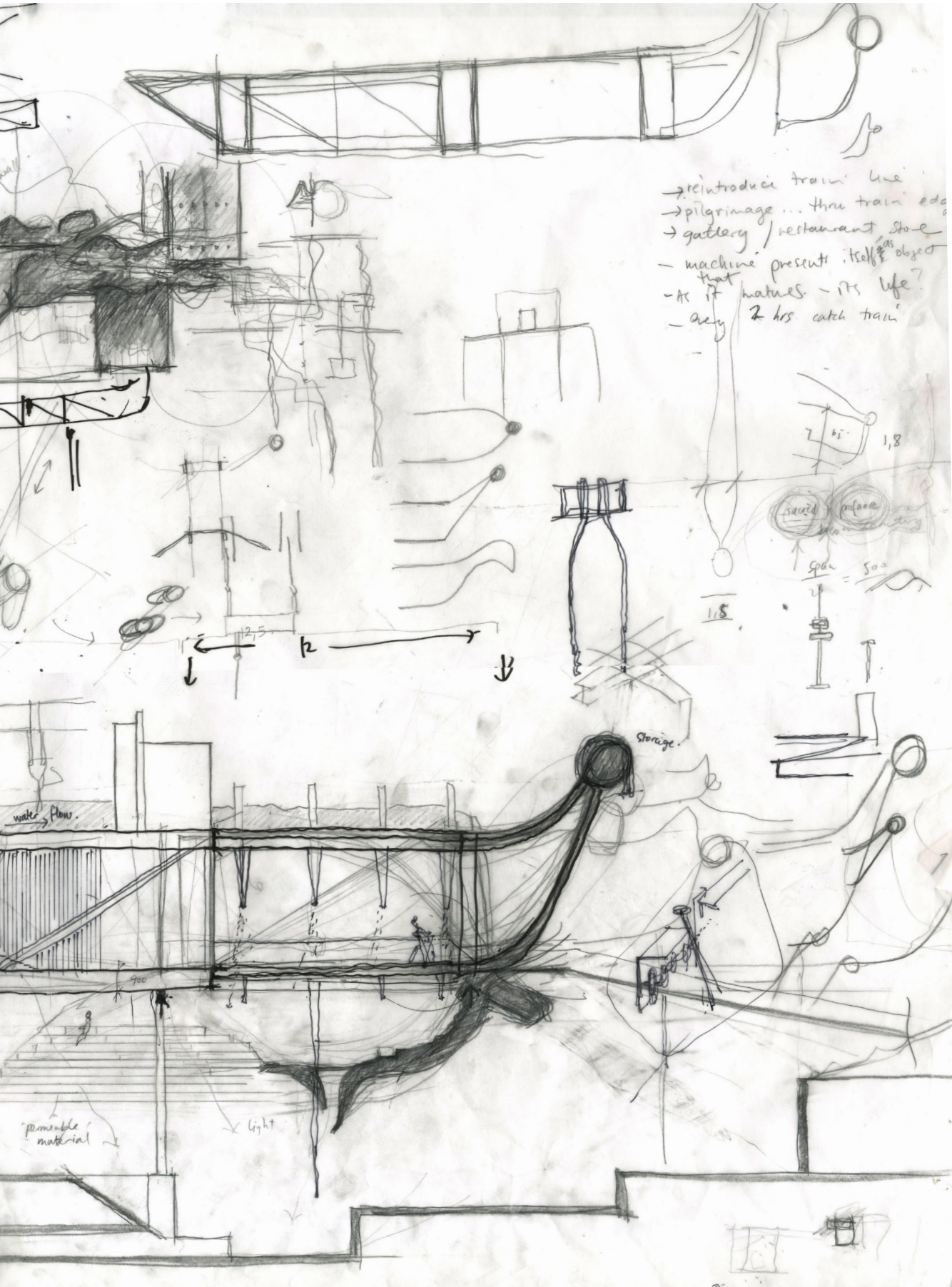


fig. 95 section through machine component which is both a remnant of the machine and imposition within the existing



→ reintroduce train line
→ pilgrimage... thru train edge
→ gallery / restaurant store
- machine presents itself as object that
- As it matures - its life?
- every 2 hrs. catch train

water flows

removable material

light

Storage

12,5

1,8

1,8

1,8

500

700

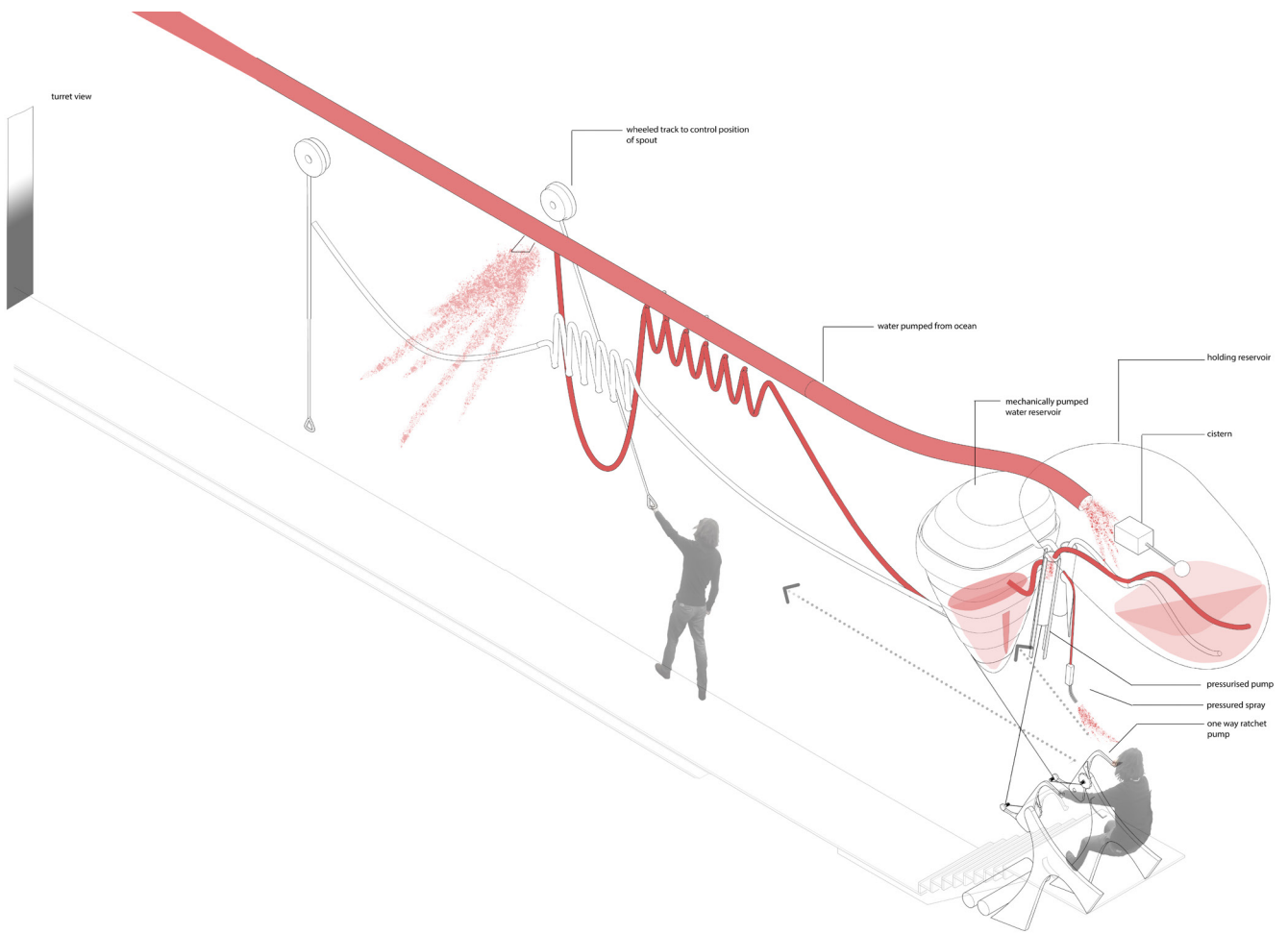


fig. 96 the head that allows you to cleanse the building, manually, through a machinic device (final presentation drawing)



fig. 97 machine organs (final presentation drawing)

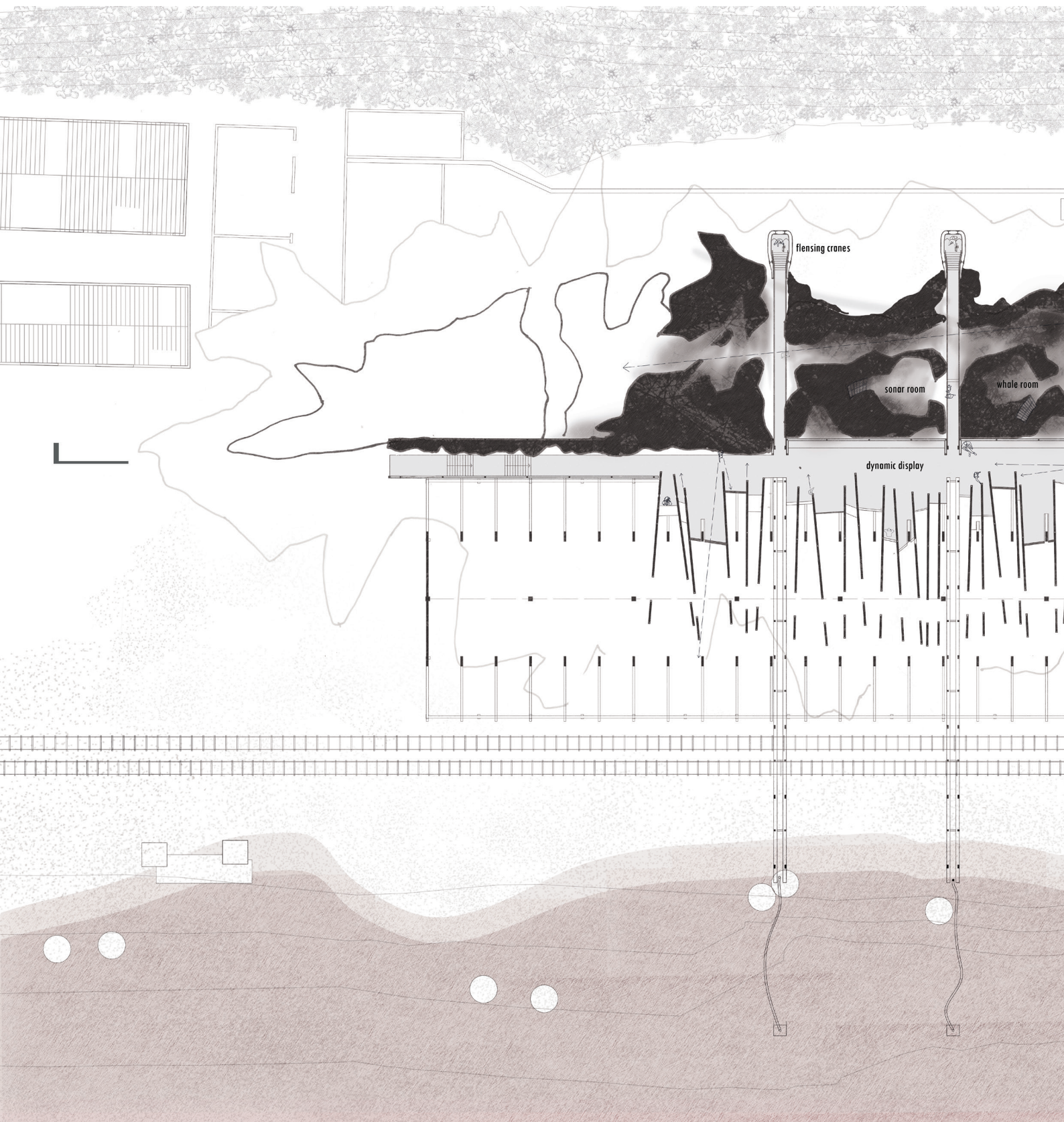
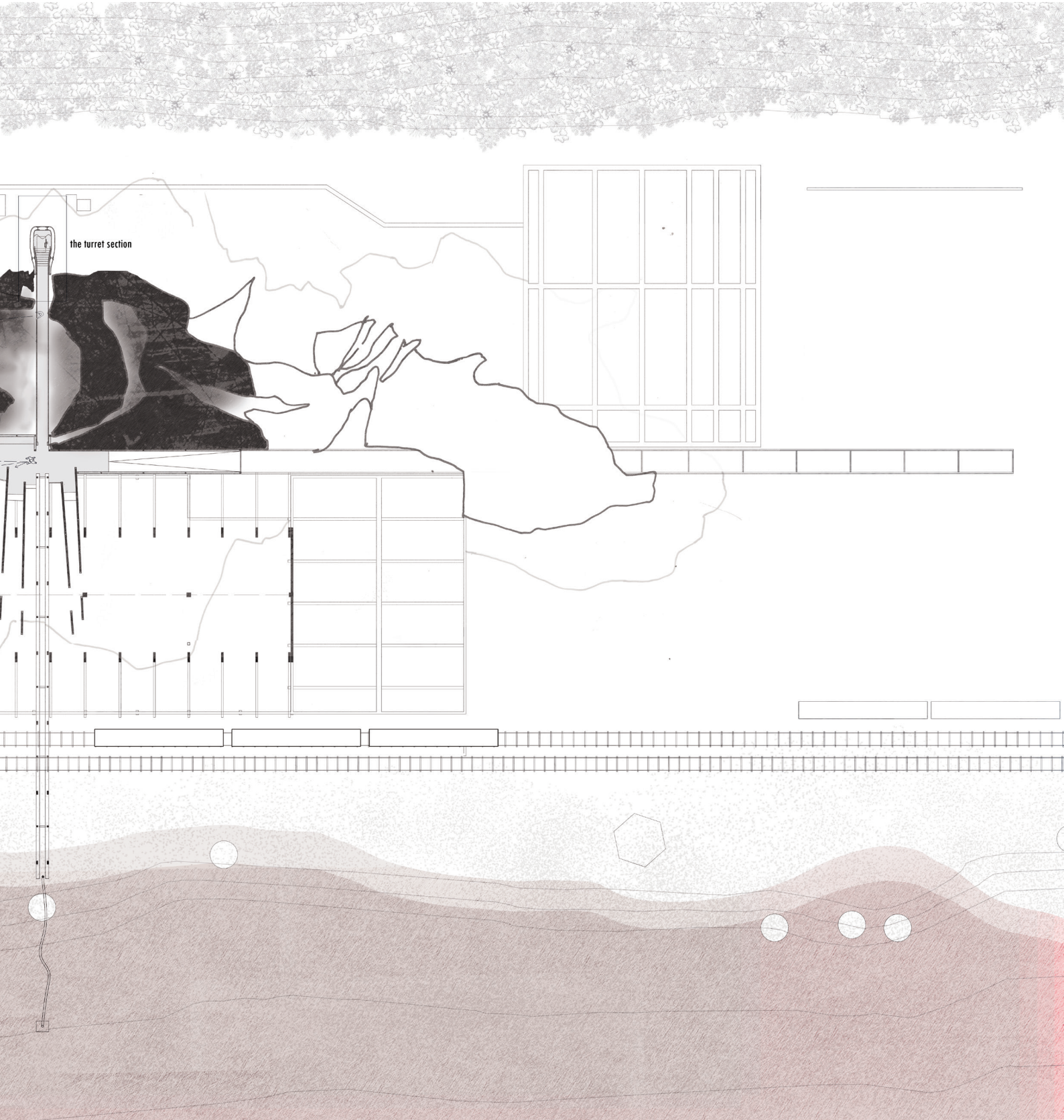


fig. 98 the counter memorial, pre-bleeding, (final presentation drawing)



a lost connection

The Bluff's has been divided by infrastructures as Durban has developed such as the harbour and the active military base along its top, which limits the amount and kinds of visitors. This however has been in constant talk by the city to re-engage the Bluff's access to the public, mainly through a tunnel beneath the harbour entrance connecting the greater Durban coastline. Ferries used to transport people across the harbour, to which seems much more economical requiring no engineering and mass civil works. Perhaps the city has not introduced the underground tunnel because of this costly fact and the coalescence of all affected sectors (Ethekewini Municipality, 2015). Either way a new connection will therefore re-activate the Bluff on which this dissertation basis its greater urban plan.

*the bluff from
joint district*



on the bluff



*under the harbour in
the sewage pipeline*

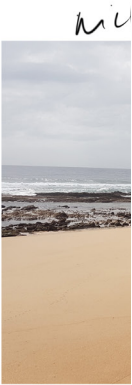


fig. 99 the greater urban scheme and pilgrimage one needs to traverse in order to get to the whaling station

The route and pilgrimage described in the earlier section describes the route in which both access to the Bluff is achieved from the city as well as the same route in which captured whales were transported along the whaling train line. Reintroduction of the train line and its refurbishment will transport people slowly across this site from the existing whaling slipway and approach the museum by stopping at the flensing deck essentially allowing the users to engage both with the landscape and pilgrimage, or as the whale experienced its first encounter on land. Visitors are belted onto the train of flatbed carts which will only leave once a day limiting the amount of visitors returning sometime later. The journey by train does not stop an approach by foot, rendering a different interaction with the landscape, your body and your experience.



*Steel strips embedded
original slipway*



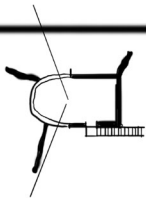
hi

military encounter.



Durban central sewage works -
waste pumped 3km into ocean

DURBAN
CBD





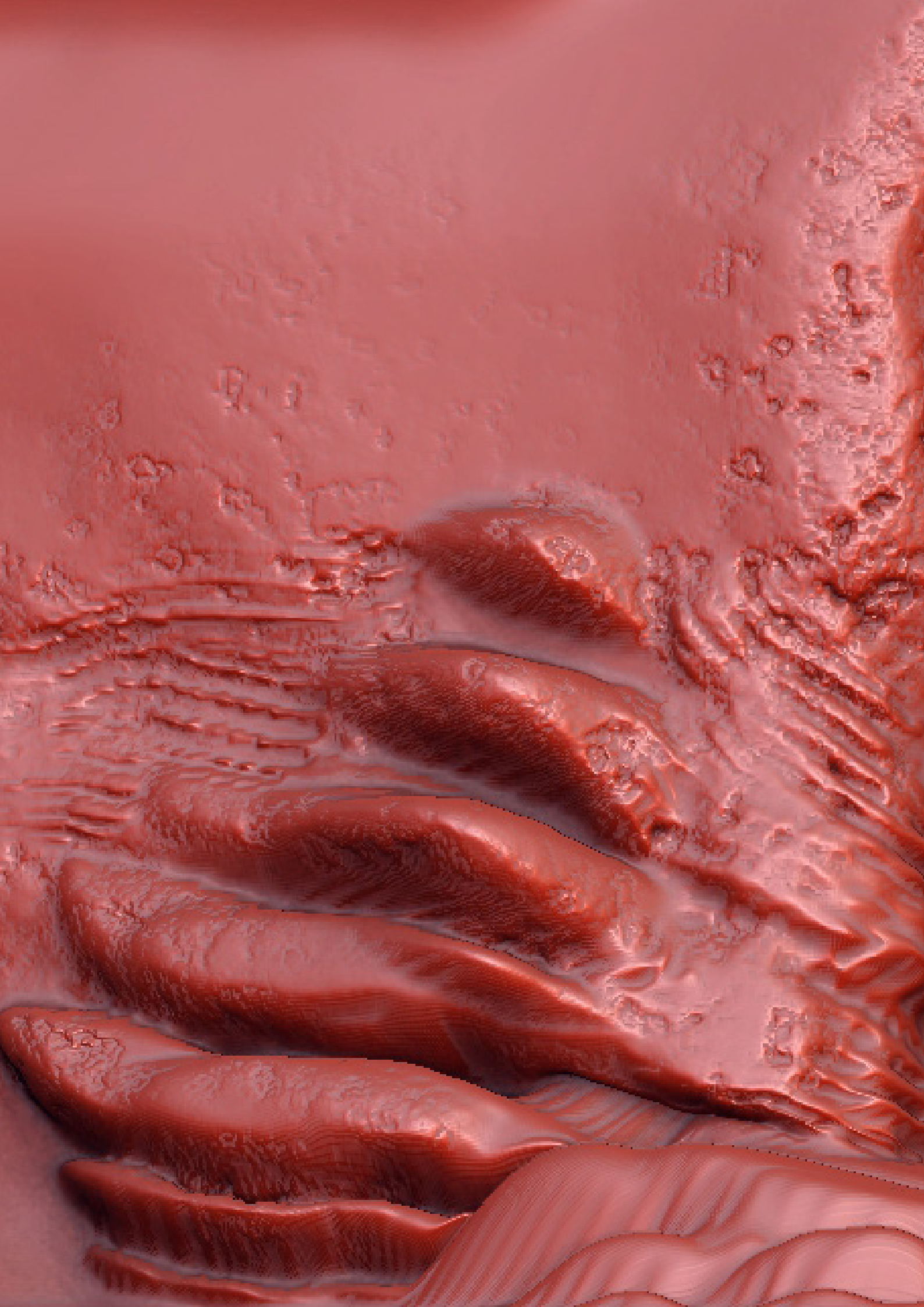




a carcass

On entrance to the museum, visitors are admitted to an existing building at the whaling station, the freeze room, which is curated explaining them to be part of a group who are to engage in the removal of the sand formwork. By bleeding the building through time, the constant evolution of surfaces and spaces is in direct relation to the methods utilised in the whaling process and its removal of waste into the ocean. Until all the sand has been removed, the museum open to its full capacity.

As the building matures, interaction with the interior cast of the concrete is possible. The museum will allow you to revisit the trauma to understand the horrors of the events that occurred. The tormenting experiences, will allow you to empathise with how cruel those processes were. Two curated spaces situated in existing buildings will be for curated and exhibited works. There will be no paintings and manuscripts on the concrete cast but rather for the architectural experience as a transcendence of a moment within the revisiting of the trauma. The living body, the person that engages within this architecture does not experience an architecture derived from program or a specific use but rather a through a collection of phenomenological experiences that are strongly connected to both the military and whaling processes. These phenomena are engaged through their textures and abstract forms that aim to frame and contrast the original whaling station. These textures encourage touch, which will polish and wear away certain surfaces over time. As Merleau-Ponty argues, 'my perception is not a sum of visual, tactile, and audible givens: I perceive in a total way with *my whole being*. I grasp a unique structure of the thing, a unique way of being, which speaks to all my senses at once'. Through this argument the additives used within the concrete mix, such as wax, oil, and blood will enhance the variable ways of perceiving as a whole being.



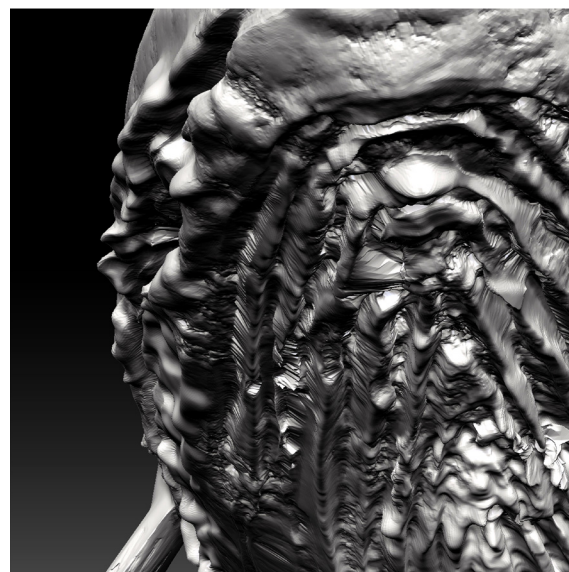
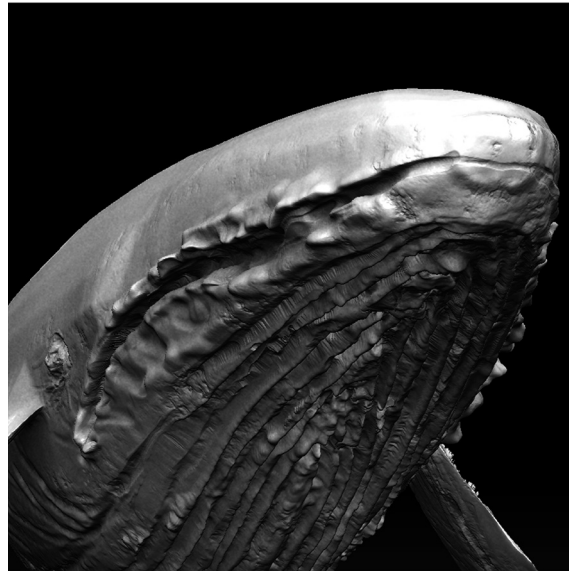


fig. 101 the objectified whale, digitally sculpted in zbrush
fig. 102 (right) revealed surfaces post bleeding of the building, digitally sculpted in zbrush







④

fig. 104 revealed surfaces post bleeding of the building, physical clay model



⑤

fig. 105 whale organs

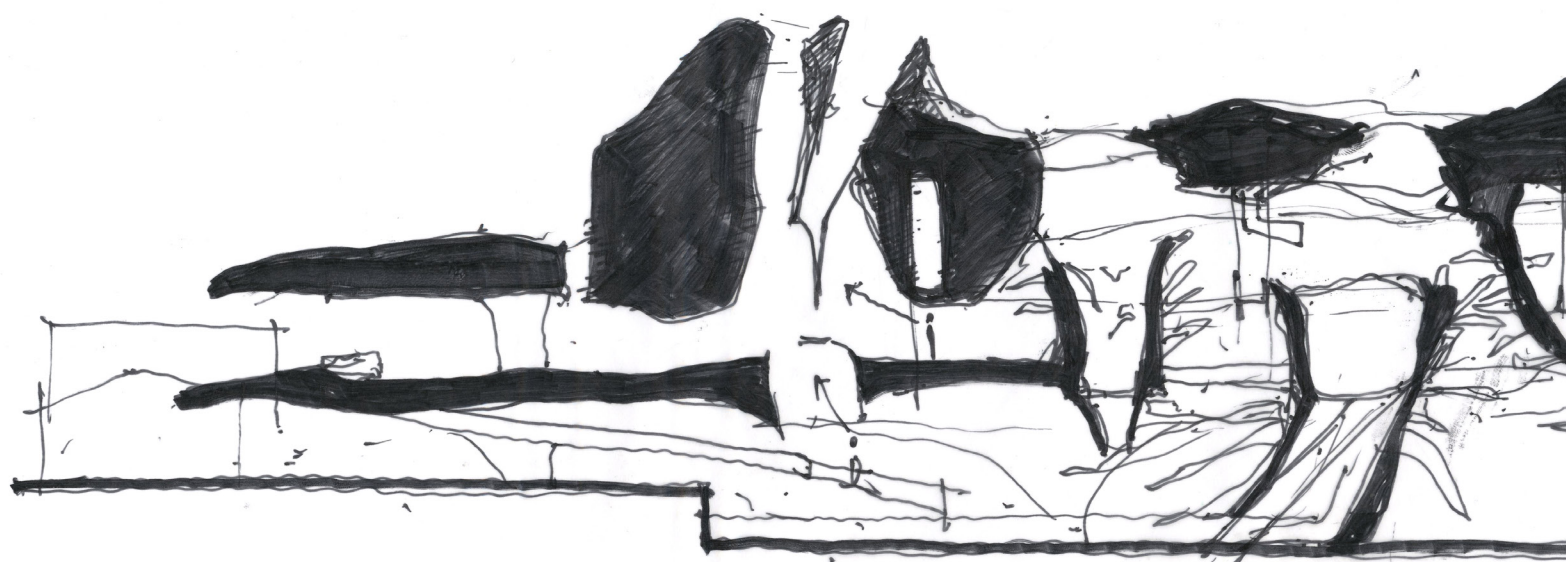
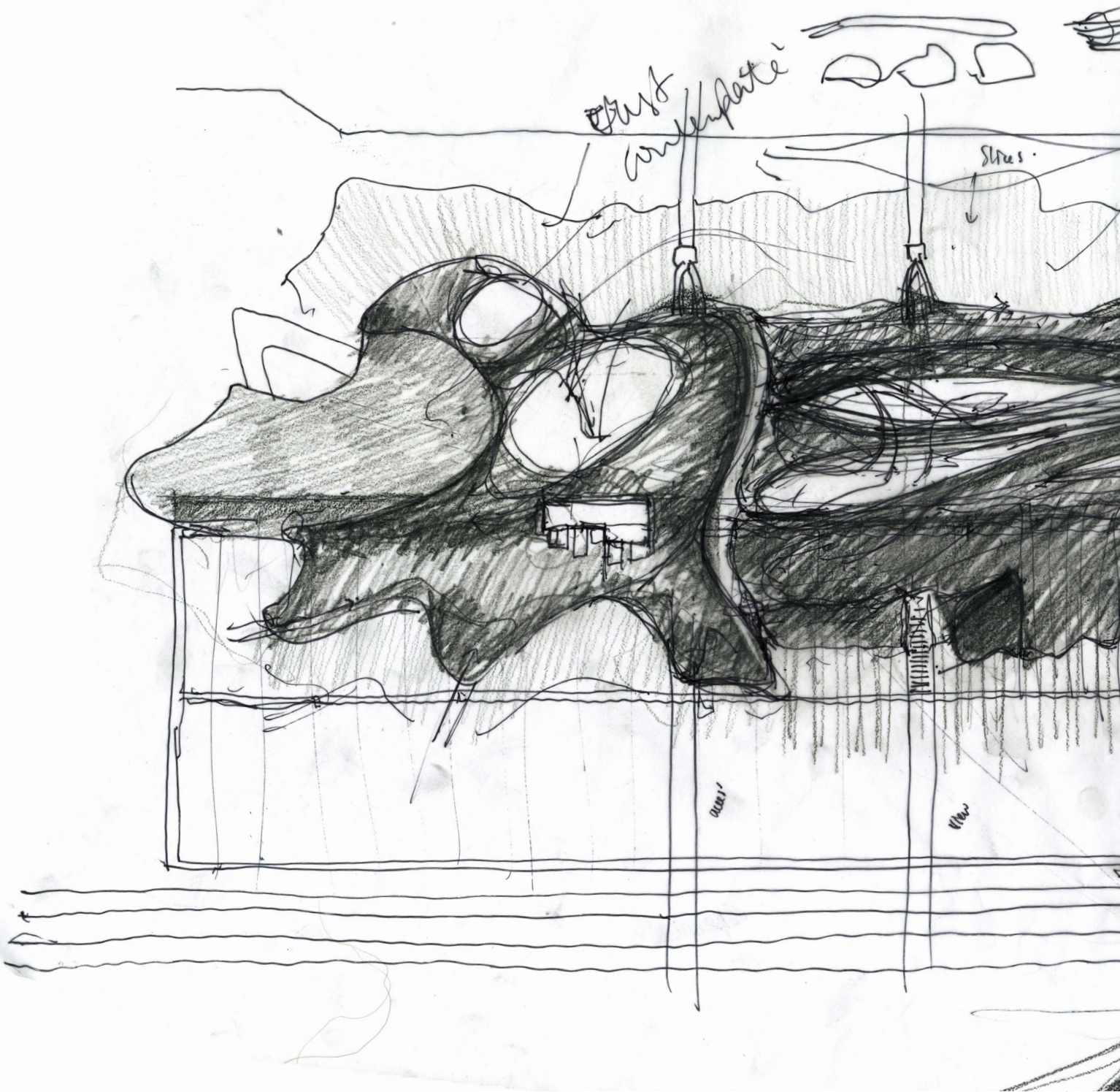
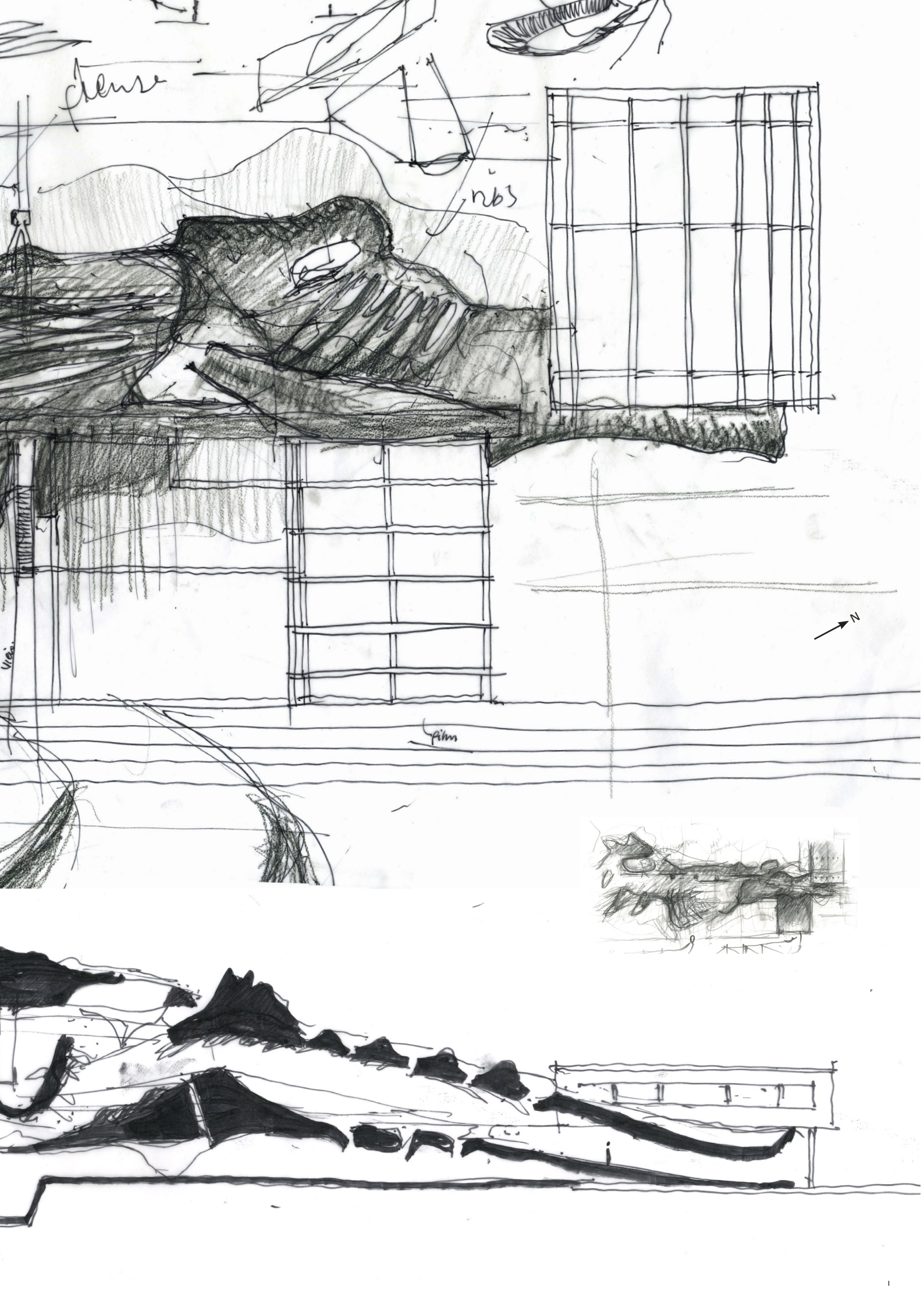


fig. 106 the enclosure of the roof
fig. 107 whale section post bleeding



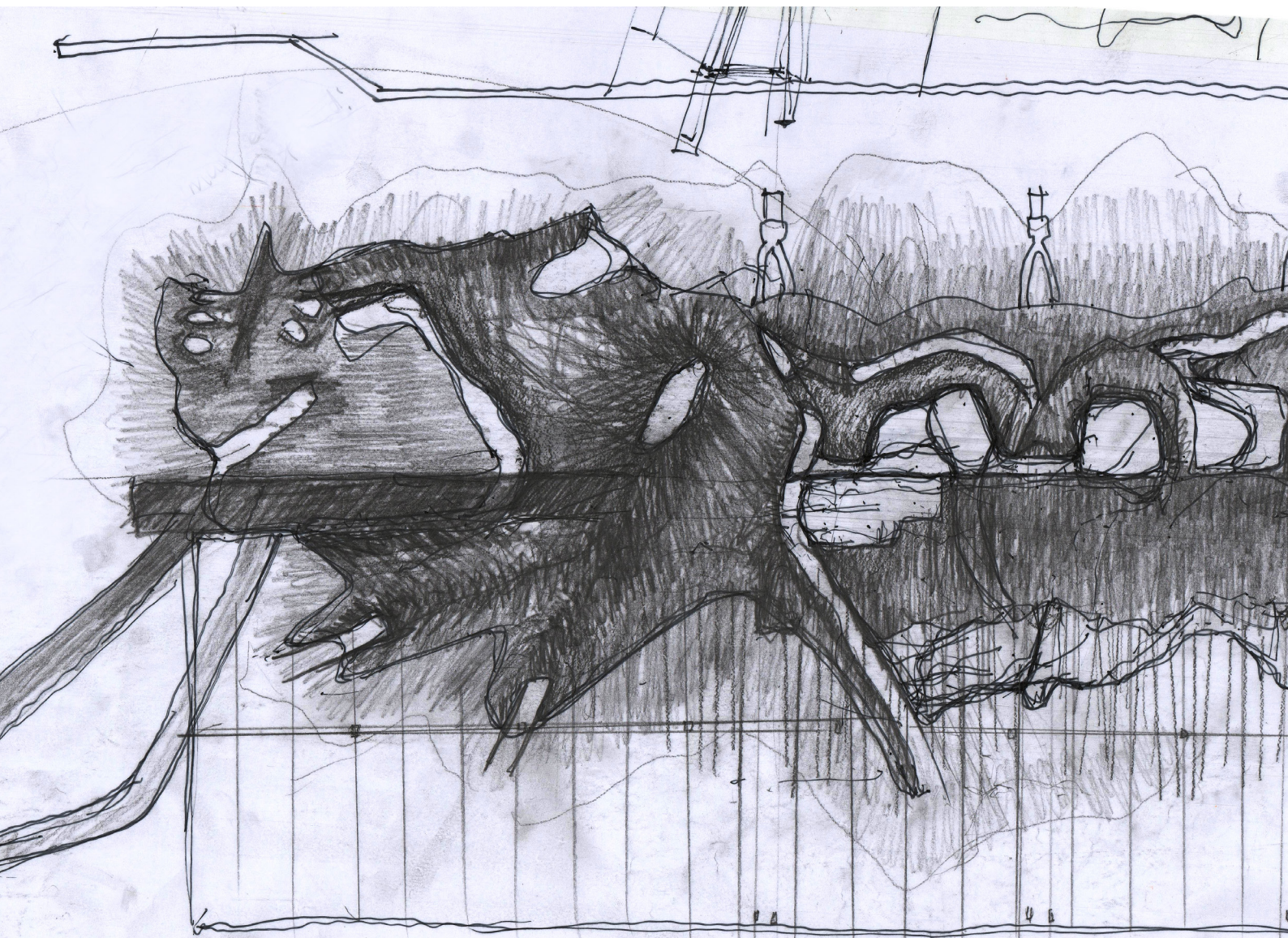
fence

nbs

view

film

N



cut down too
not just
top -

being flensed!!
cuts not
basic openings

BASIC cuts must be flensed!

skin under tension
cut.

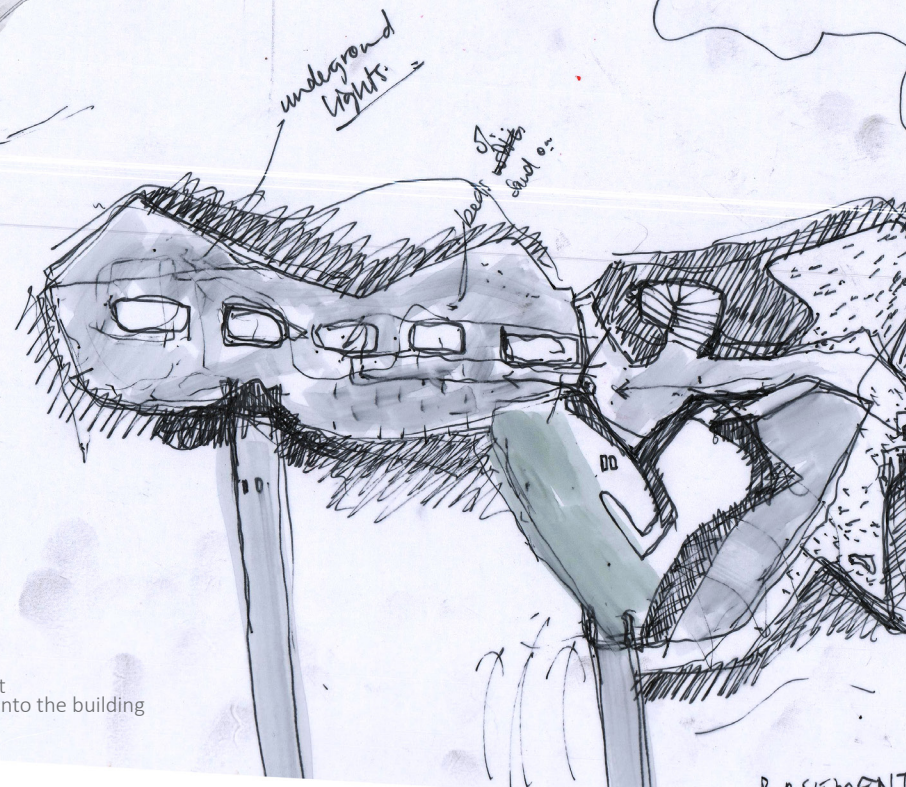
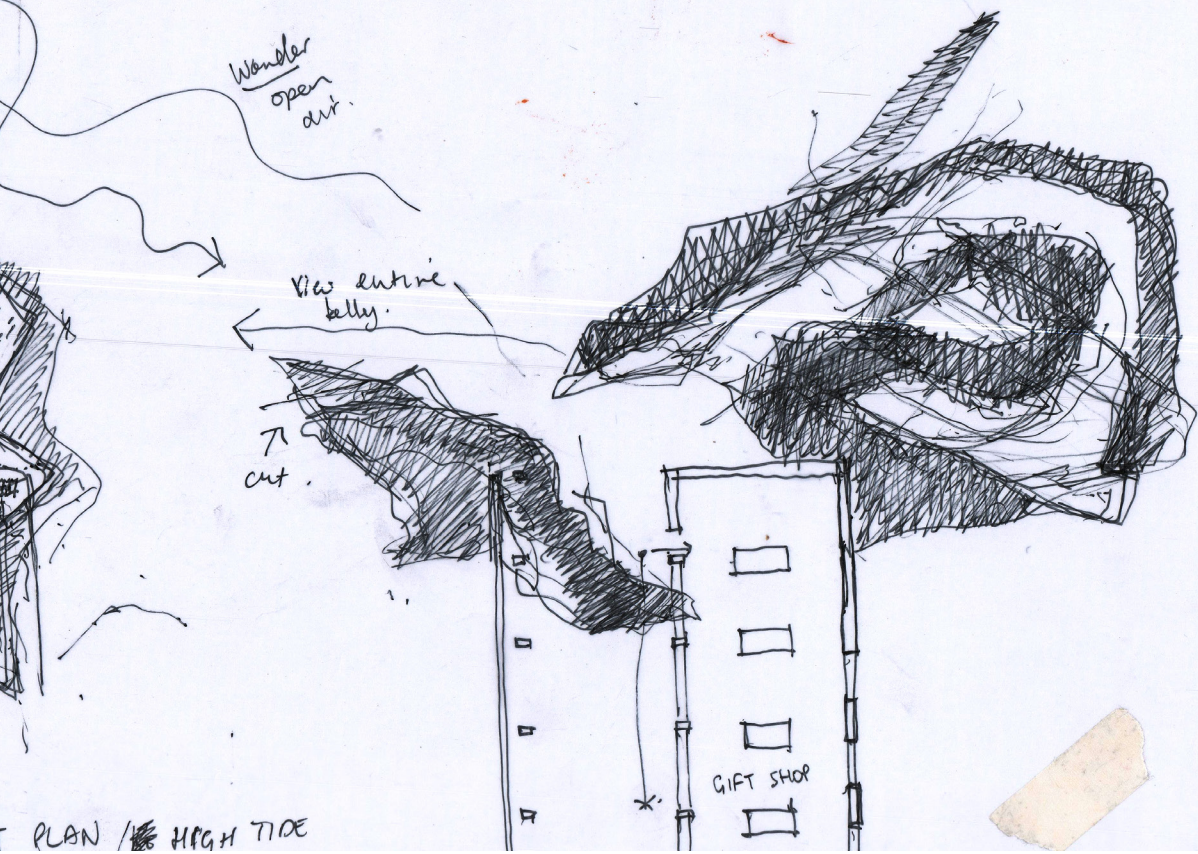
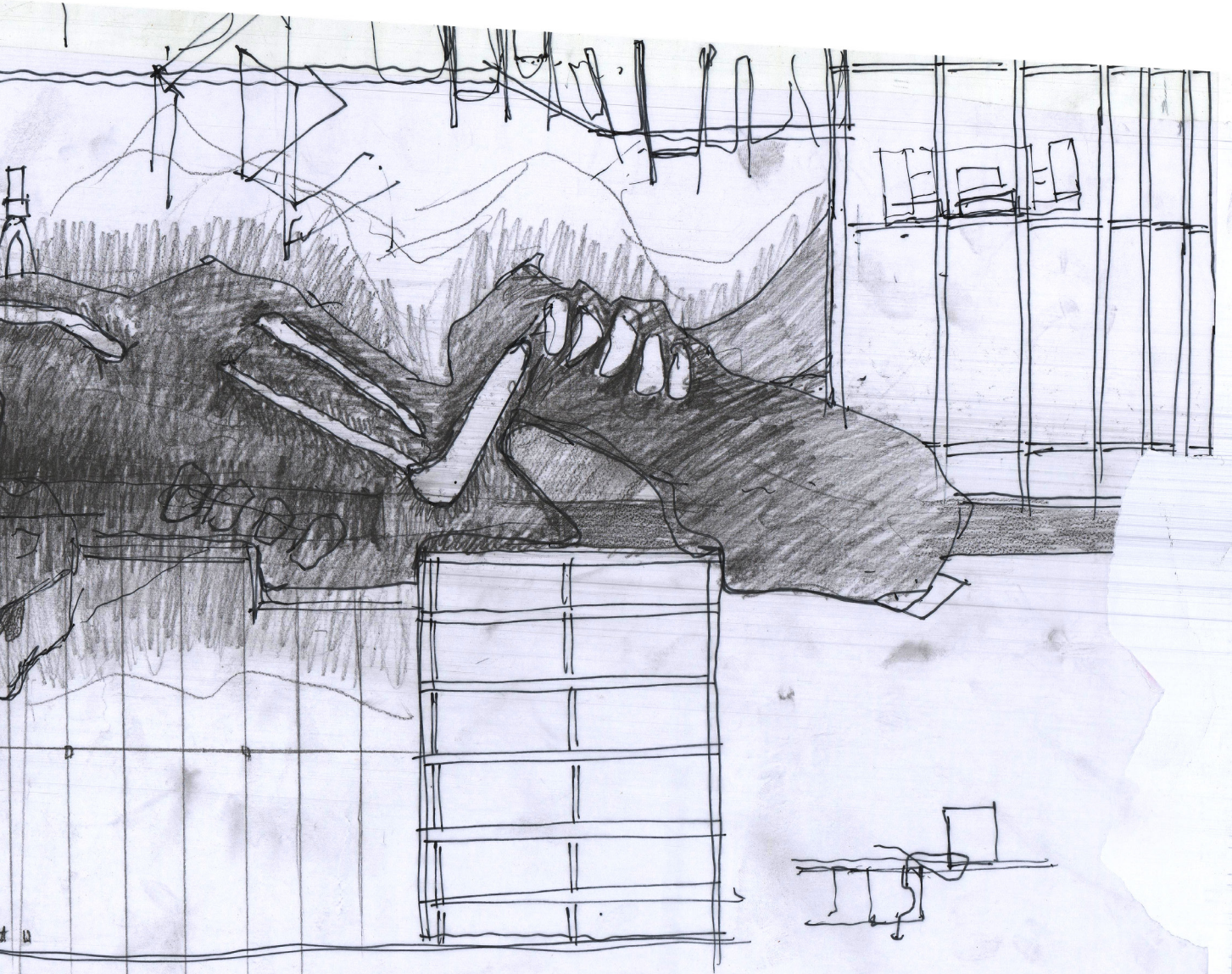


fig. 108 the enclosure of the roof, continued design development
fig. 109 basement plan, the level at which the ocean can sweep into the building



PLAN / HIGH TIDE



PLAN : 1:200

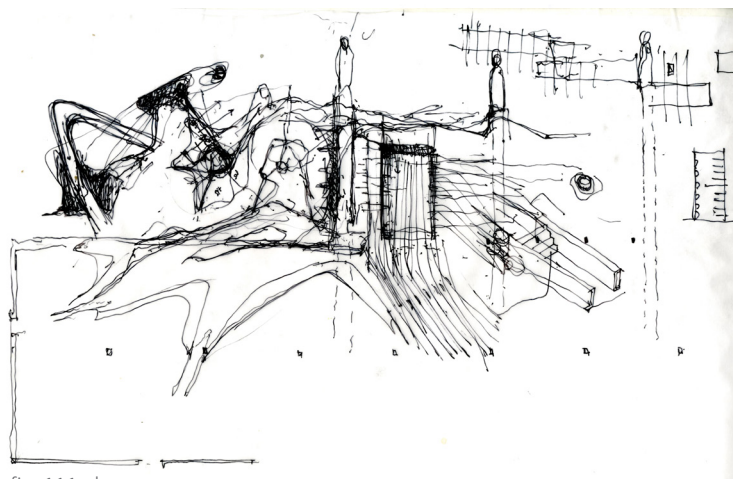


fig. 111 plan



fig. 112 section

fig. 110 (top) the revealed museum post bleeding

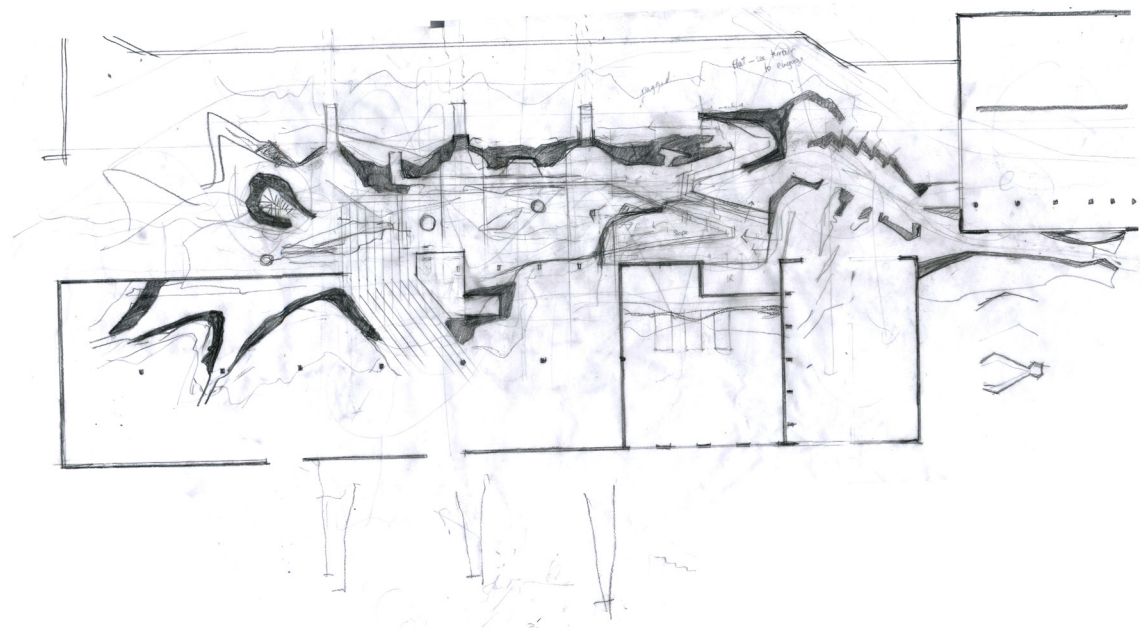
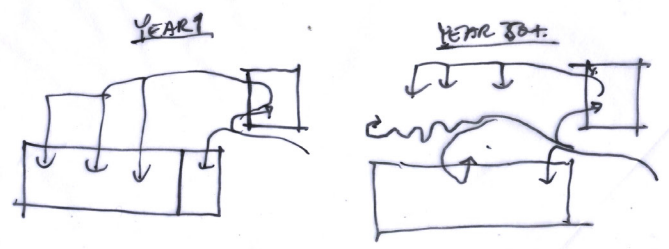
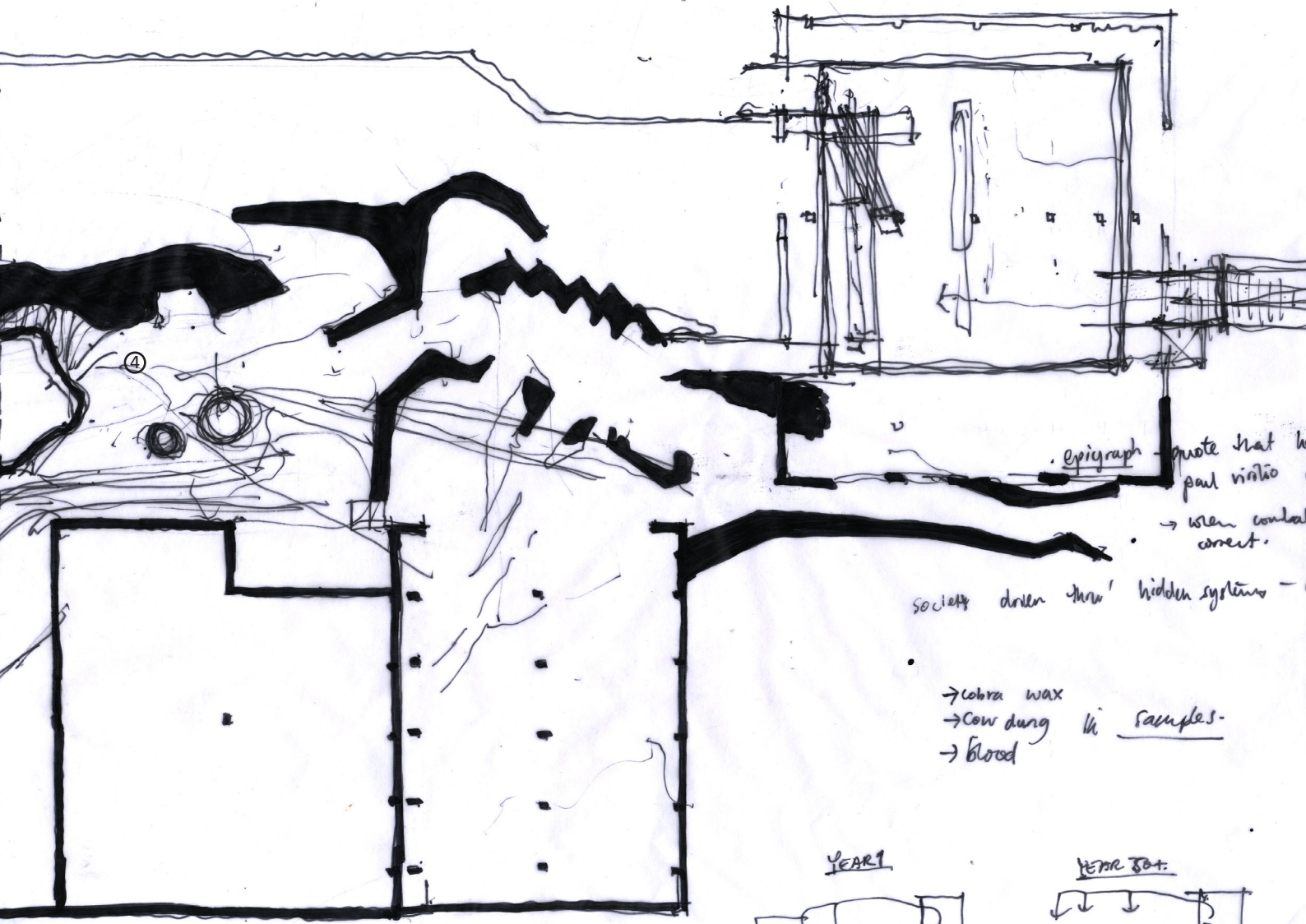


fig. 113 post bleeding

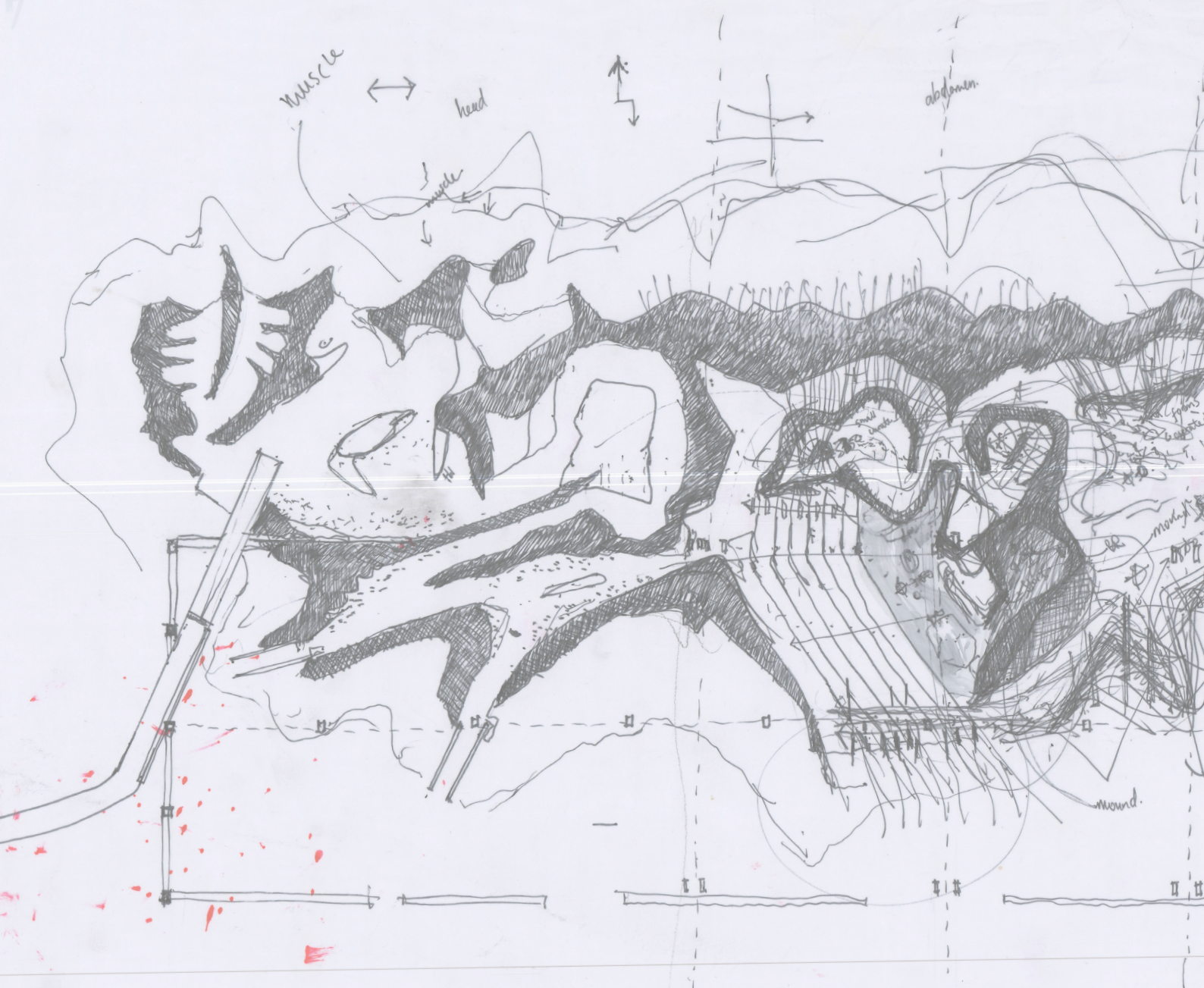
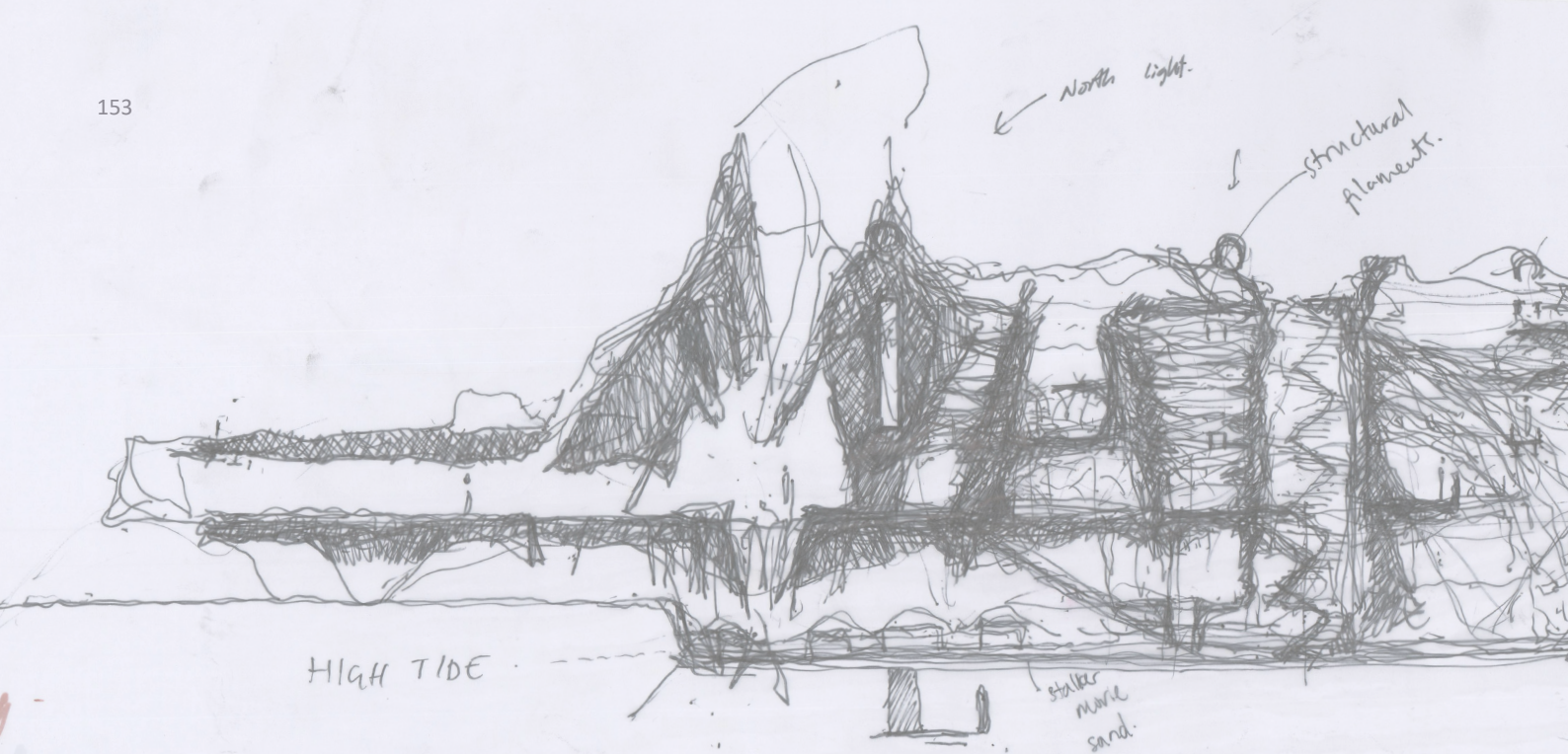
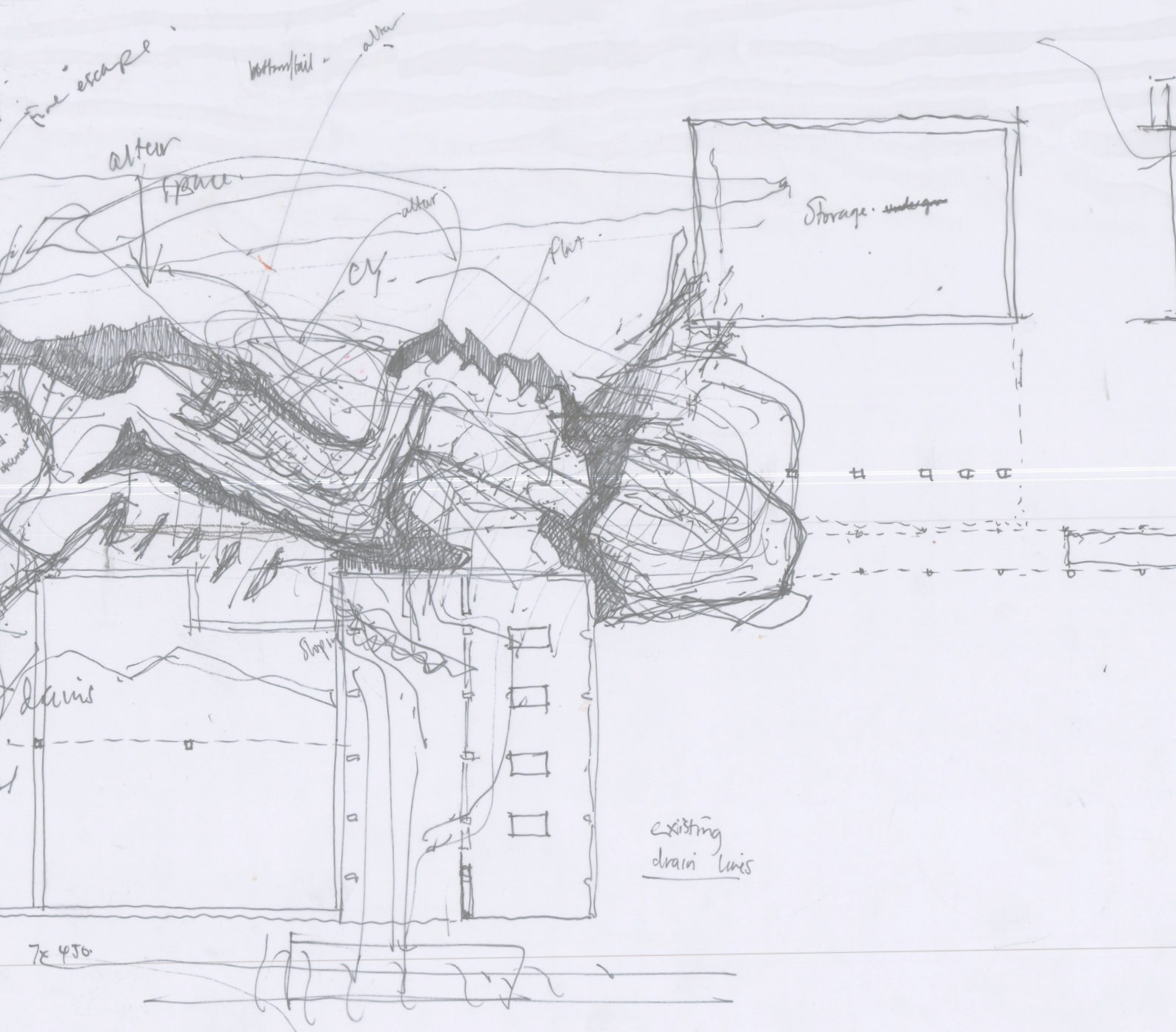
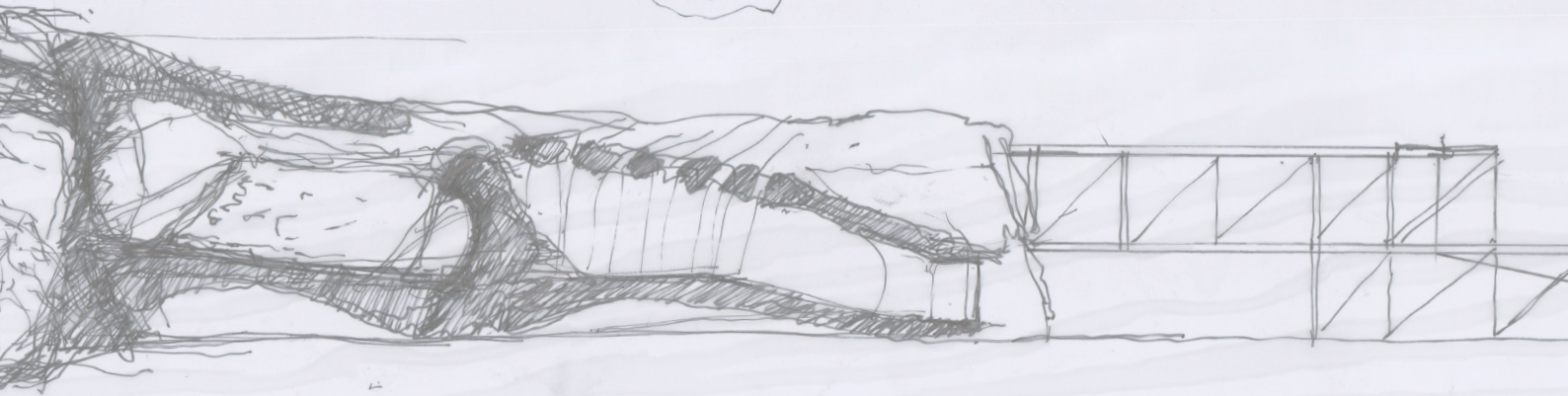
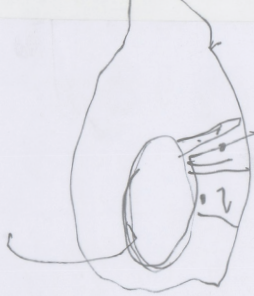


fig. 114 whale section, post bleeding, continued design development
fig. 115 revealed museum, post bleeding, continued design development

head

stomach



fire escape

bottom/tail - alter

alter
fence

cy -

flat

Storage - underground

drains

Sloping

existing
drain lines

7x 450

bottom

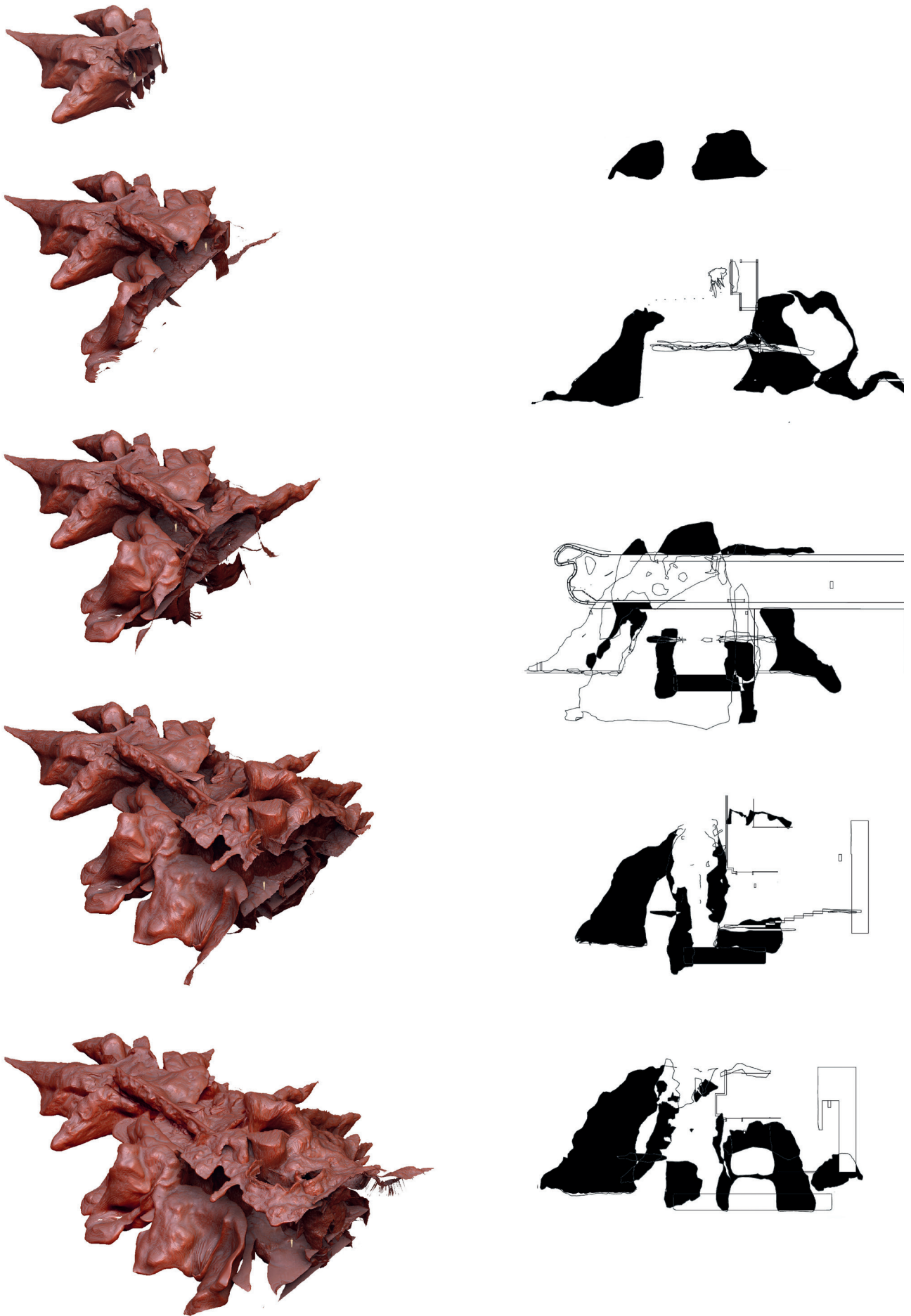


fig. 116 revealed surfaces and spaces (final presentation drawing)

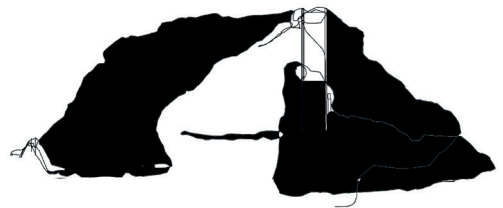
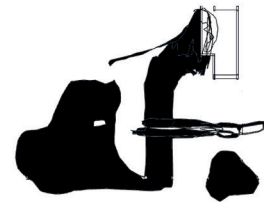
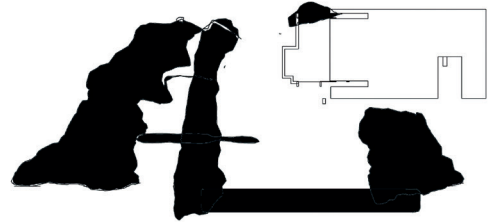


fig. 117 revealed surfaces and spaces (final presentation drawing)

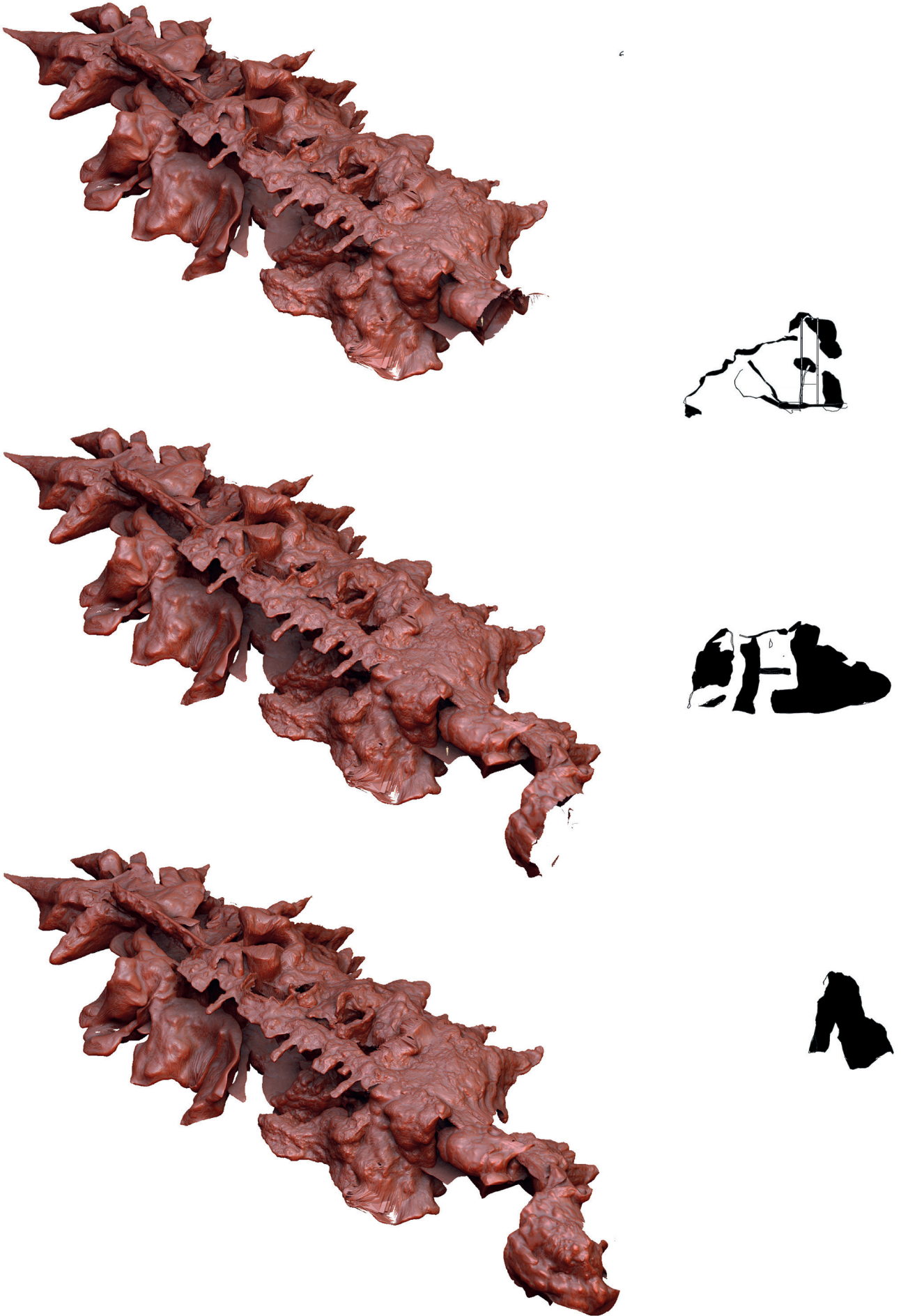


fig. 118 revealed surfaces and spaces (final presentation drawing)

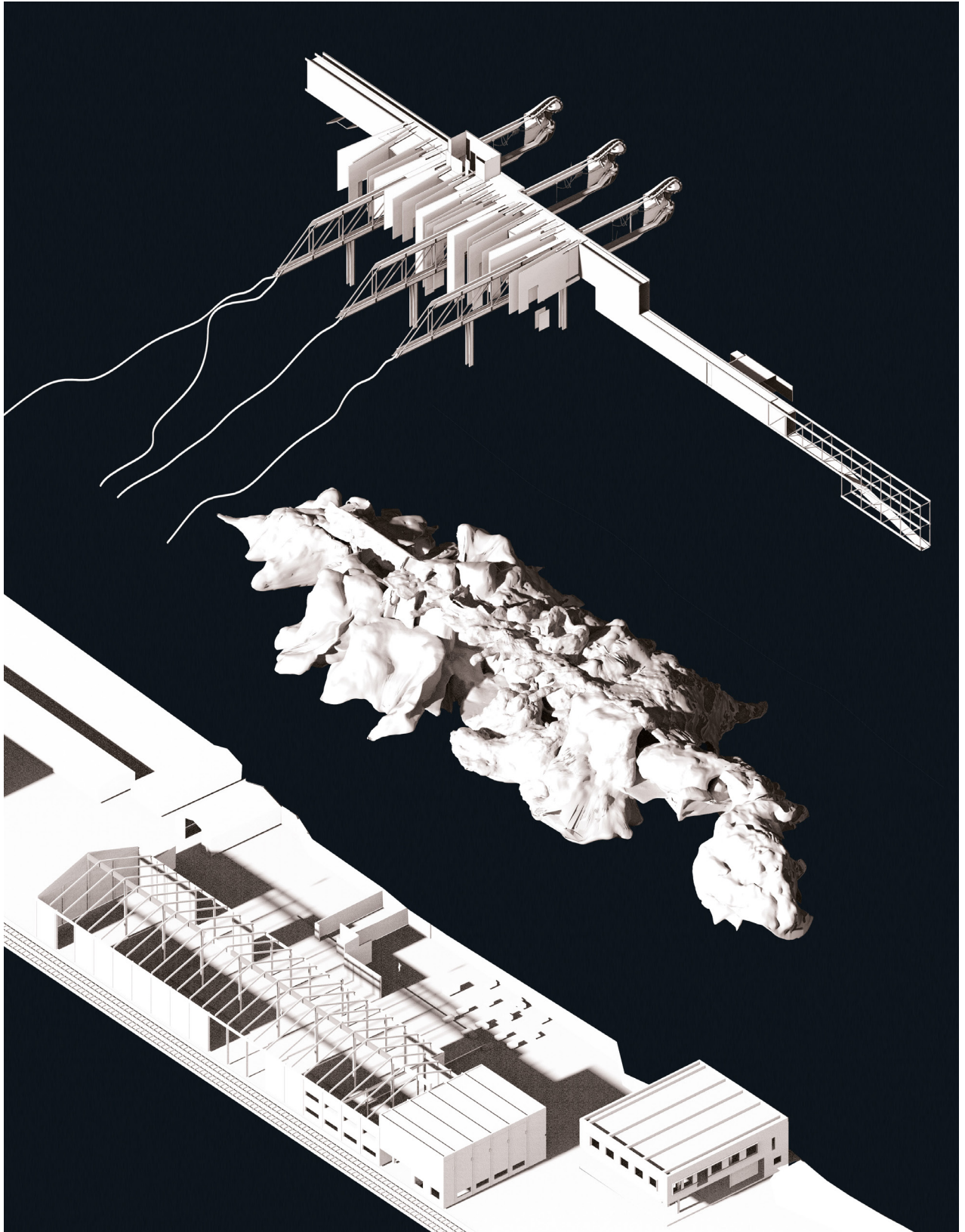
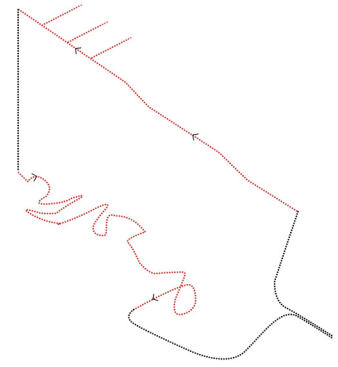


fig. 119 components, the machine and the whale

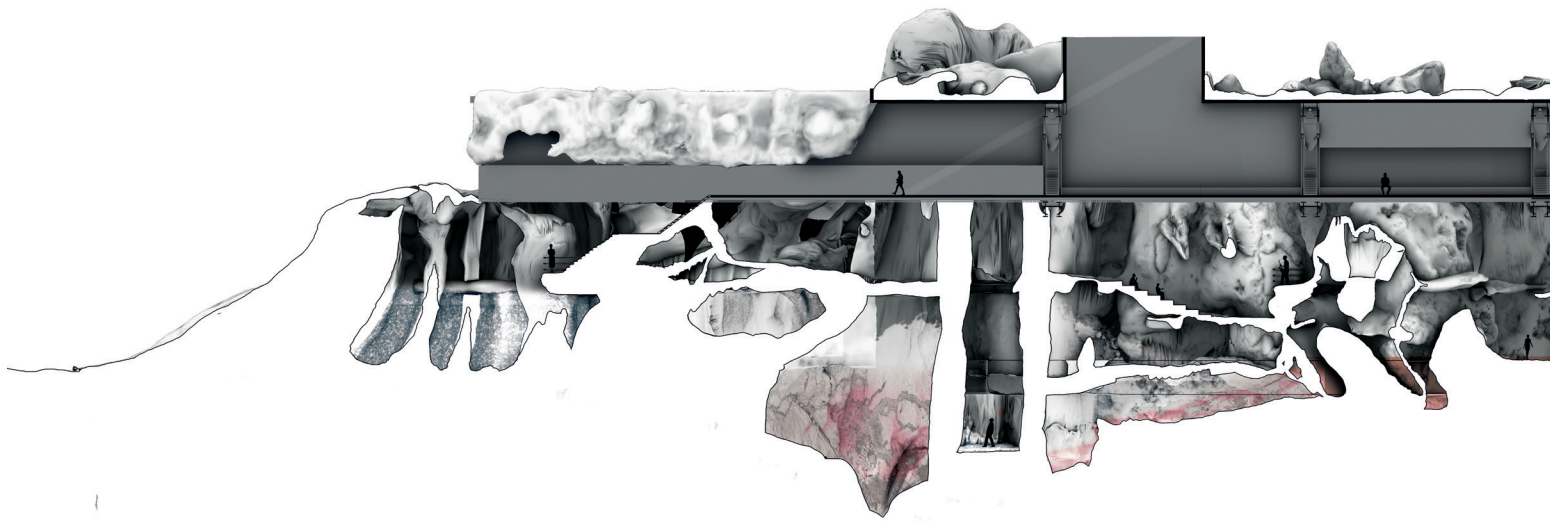
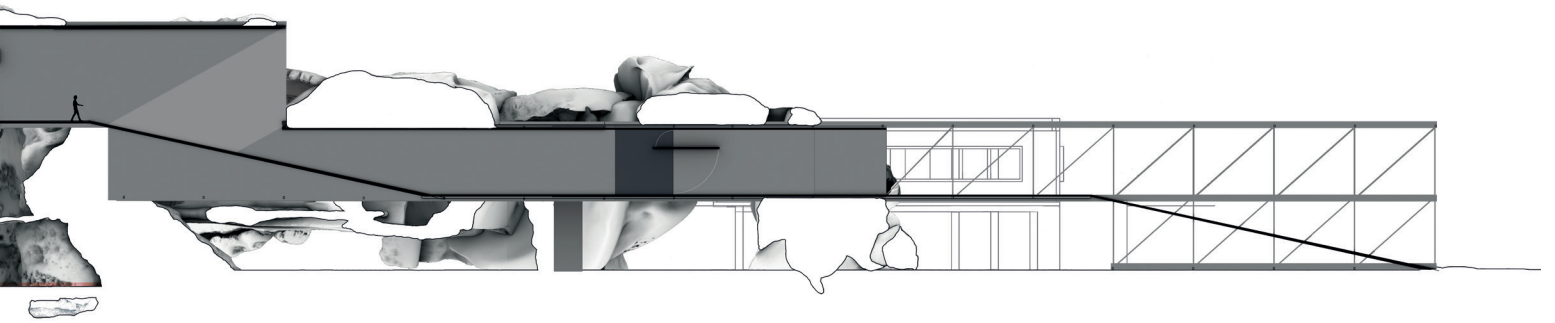


fig. 120 long section through machine (final presentation drawing)



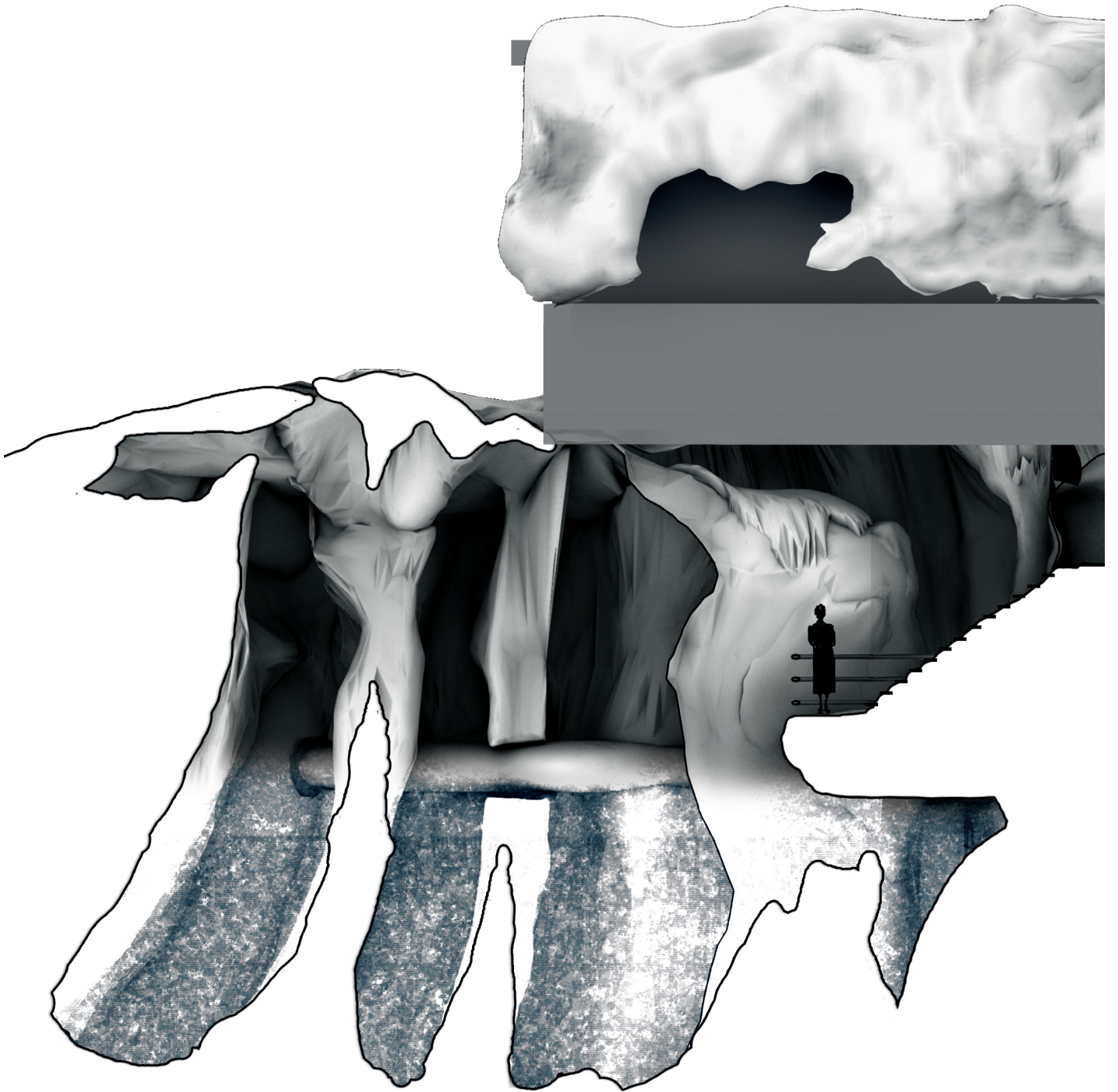


fig. 121 long section (detail)



fig. 122 long section (detail)



fig. 123 long section (detail)

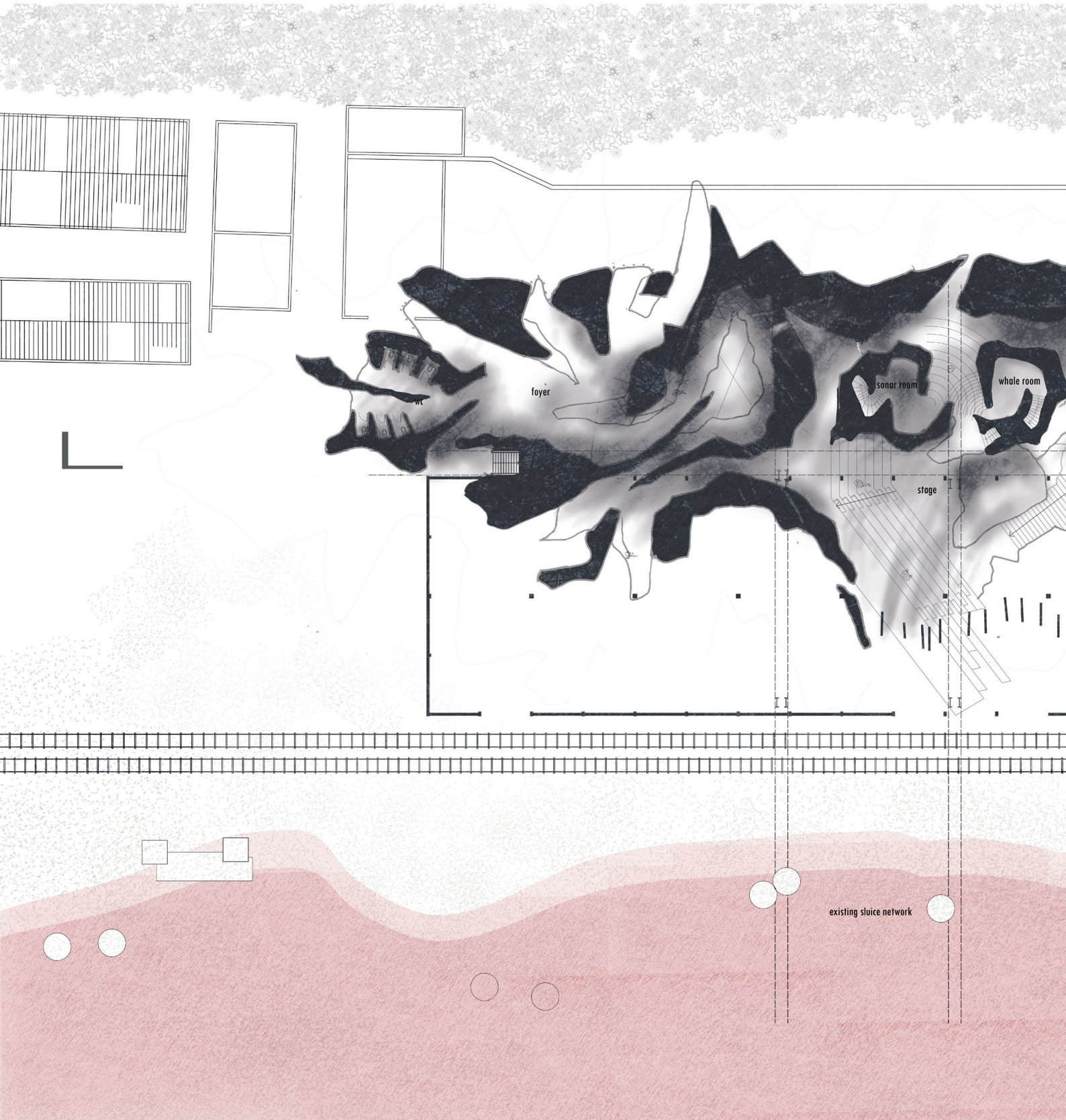
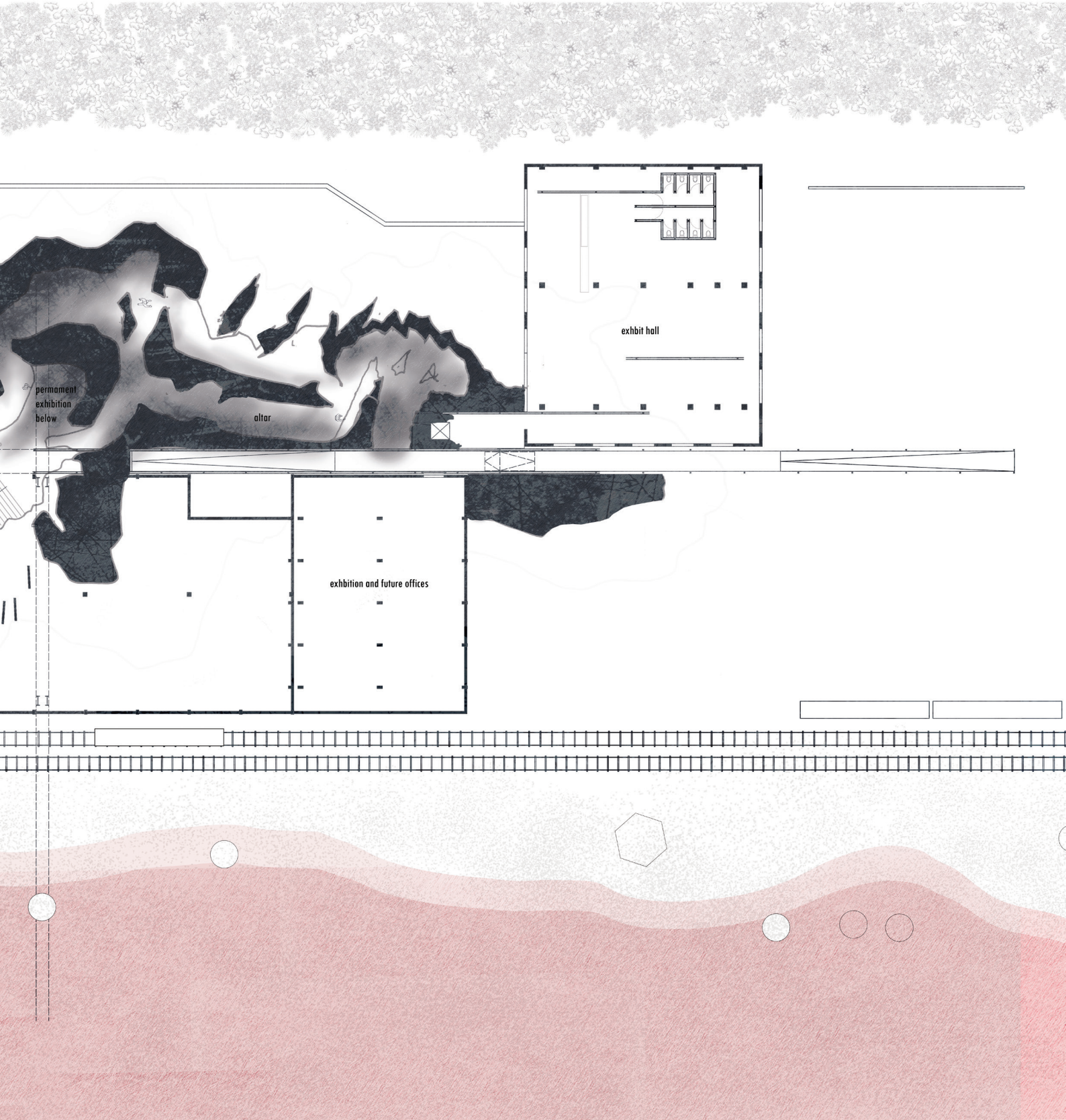


fig. 124 revealed museum, post bleeding, final presentation drawing



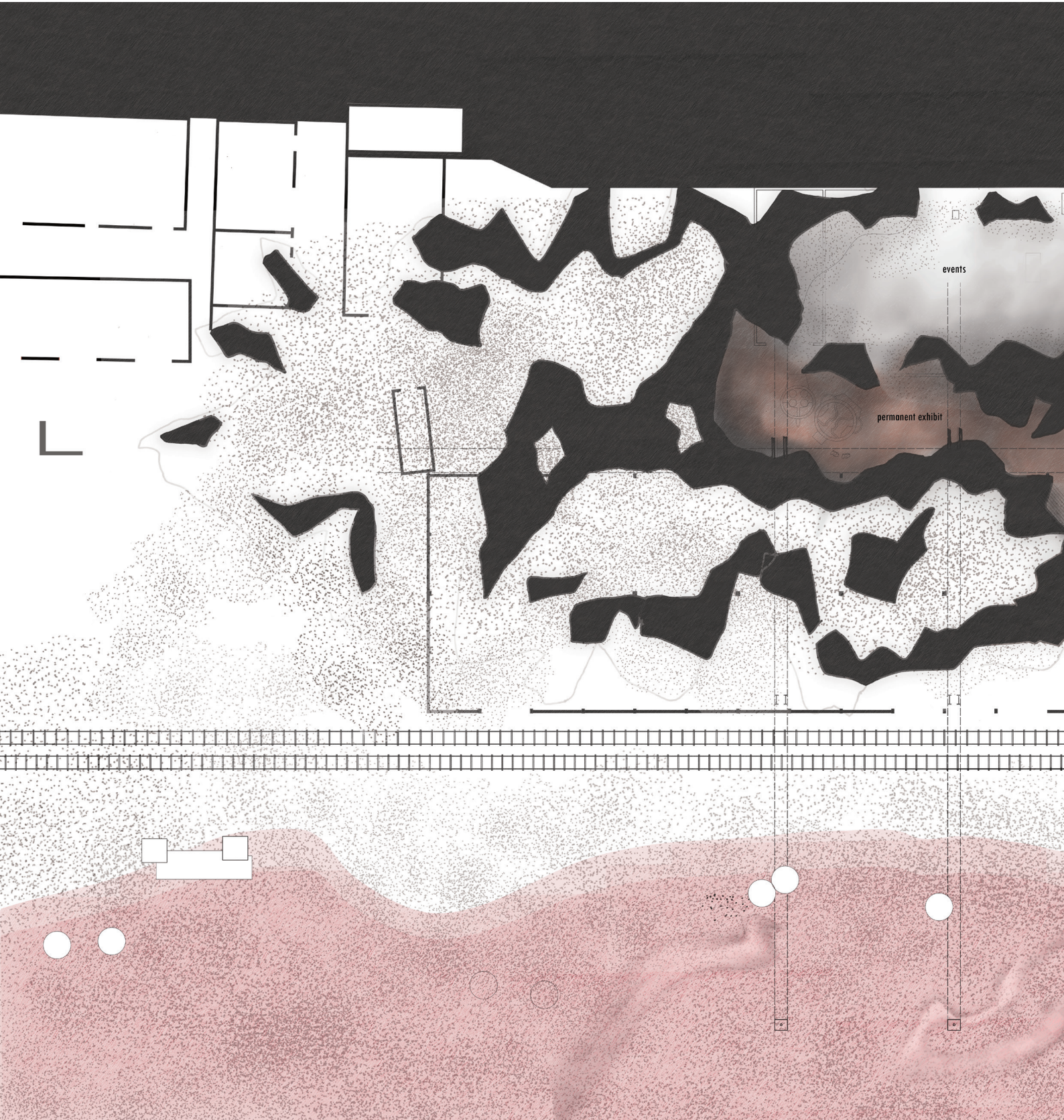


fig. 125 revealed museum (ground and basement), post bleeding, final presentation drawing



existing sluice containers
removing snod

water pumps

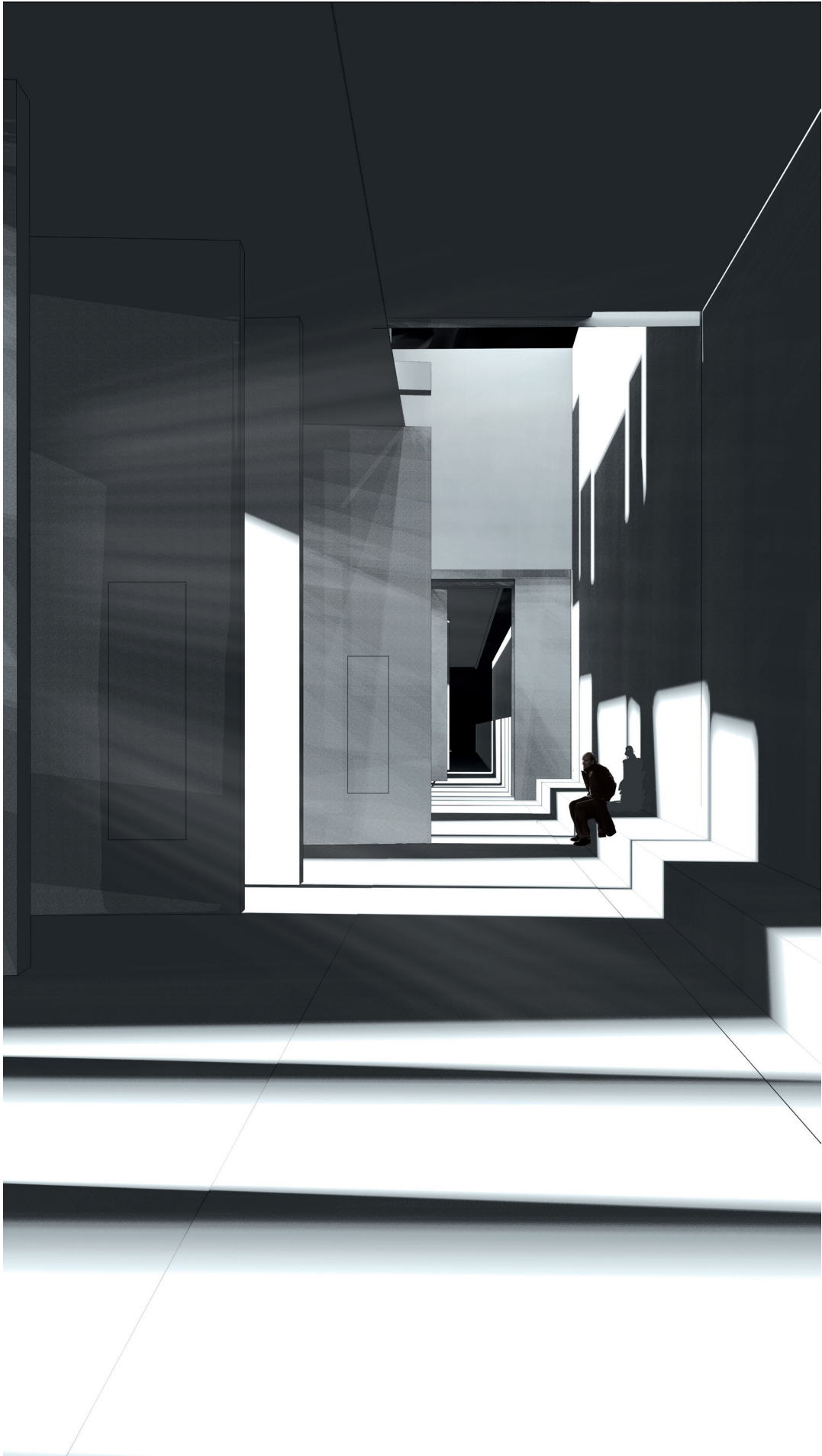


fig. 126 the machine (final presentation drawing)

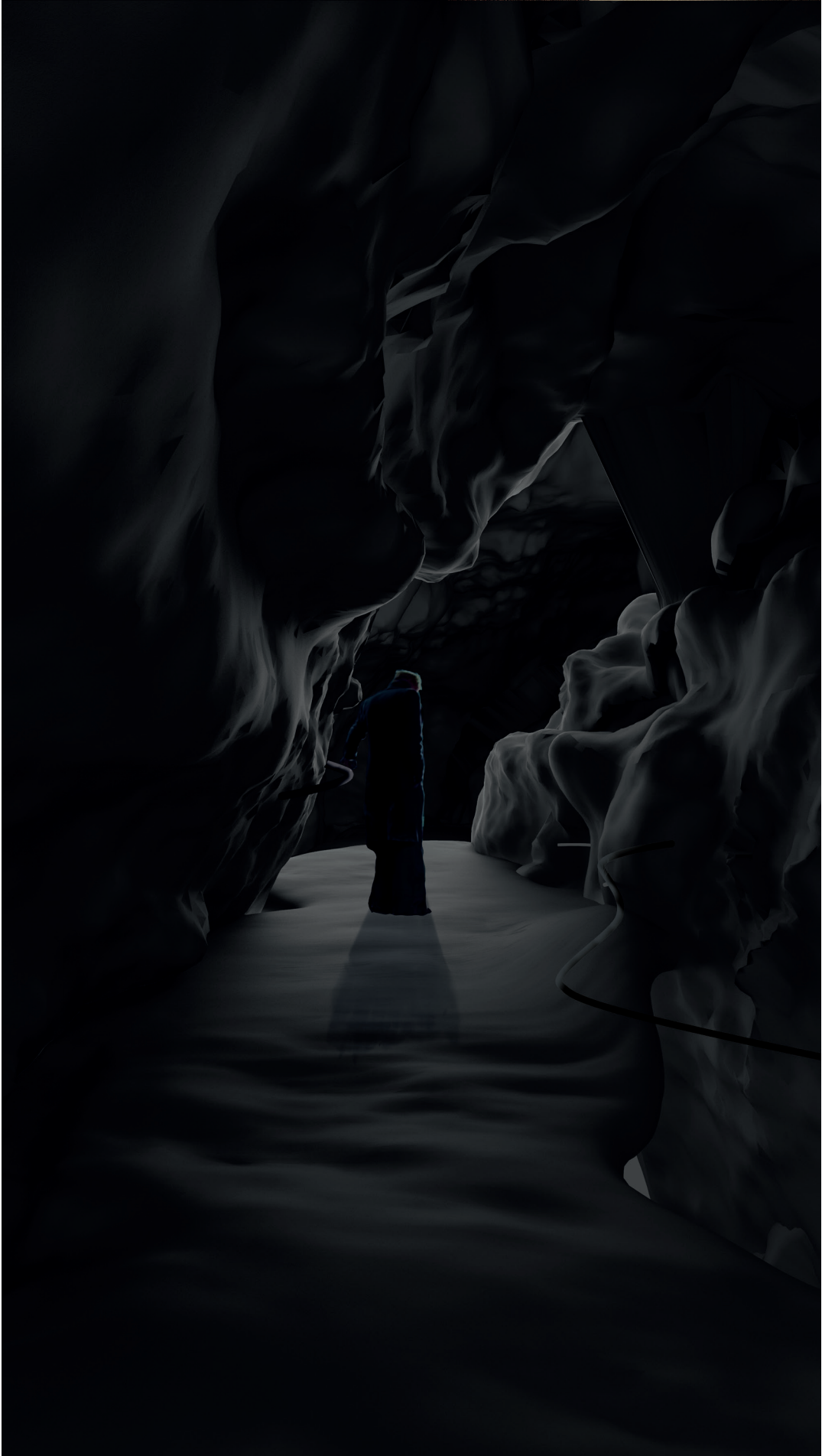


fig. 127 the internal carcass (final presentation drawing)

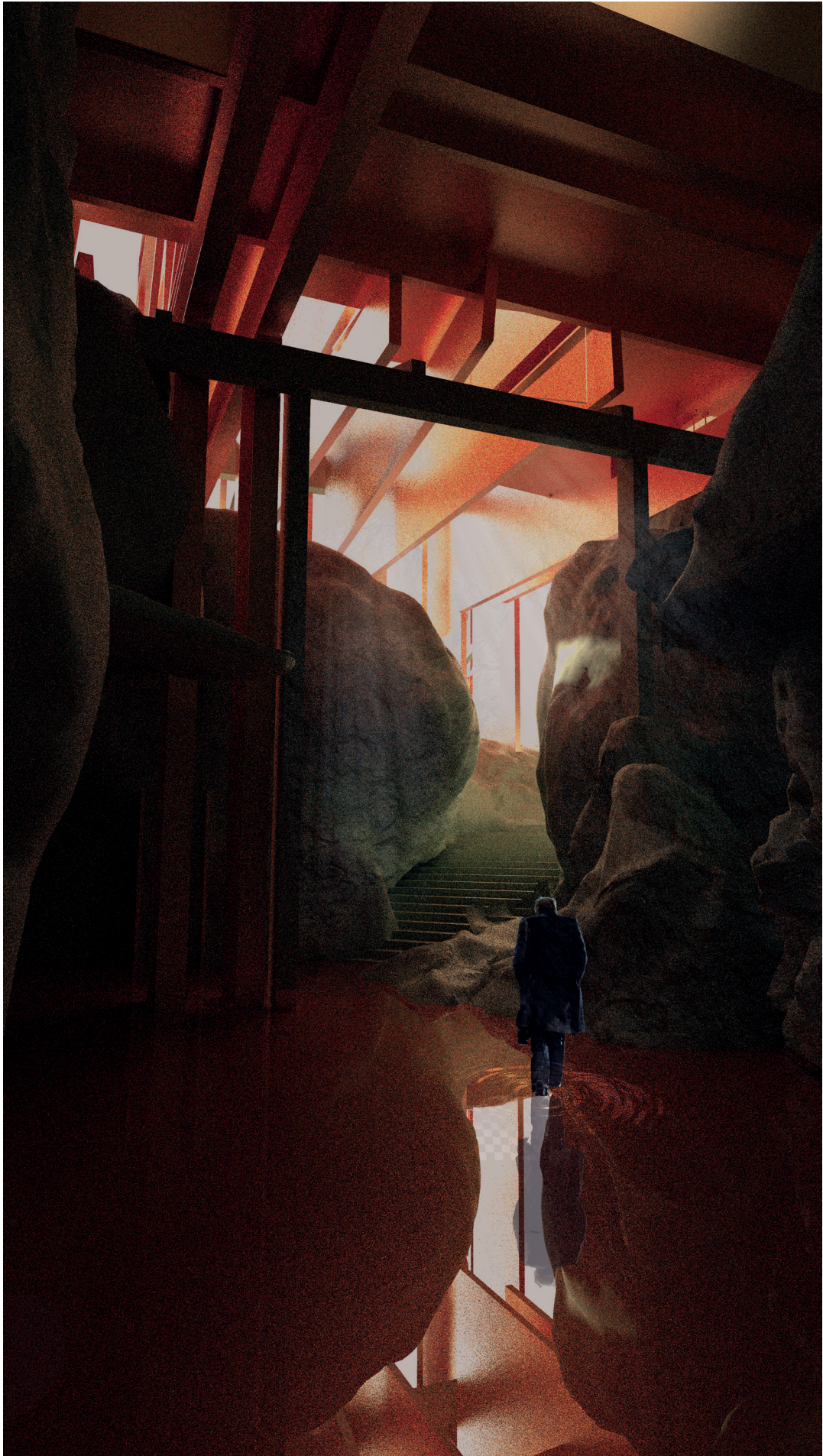


fig. 128 from the basement (final presentation drawing)

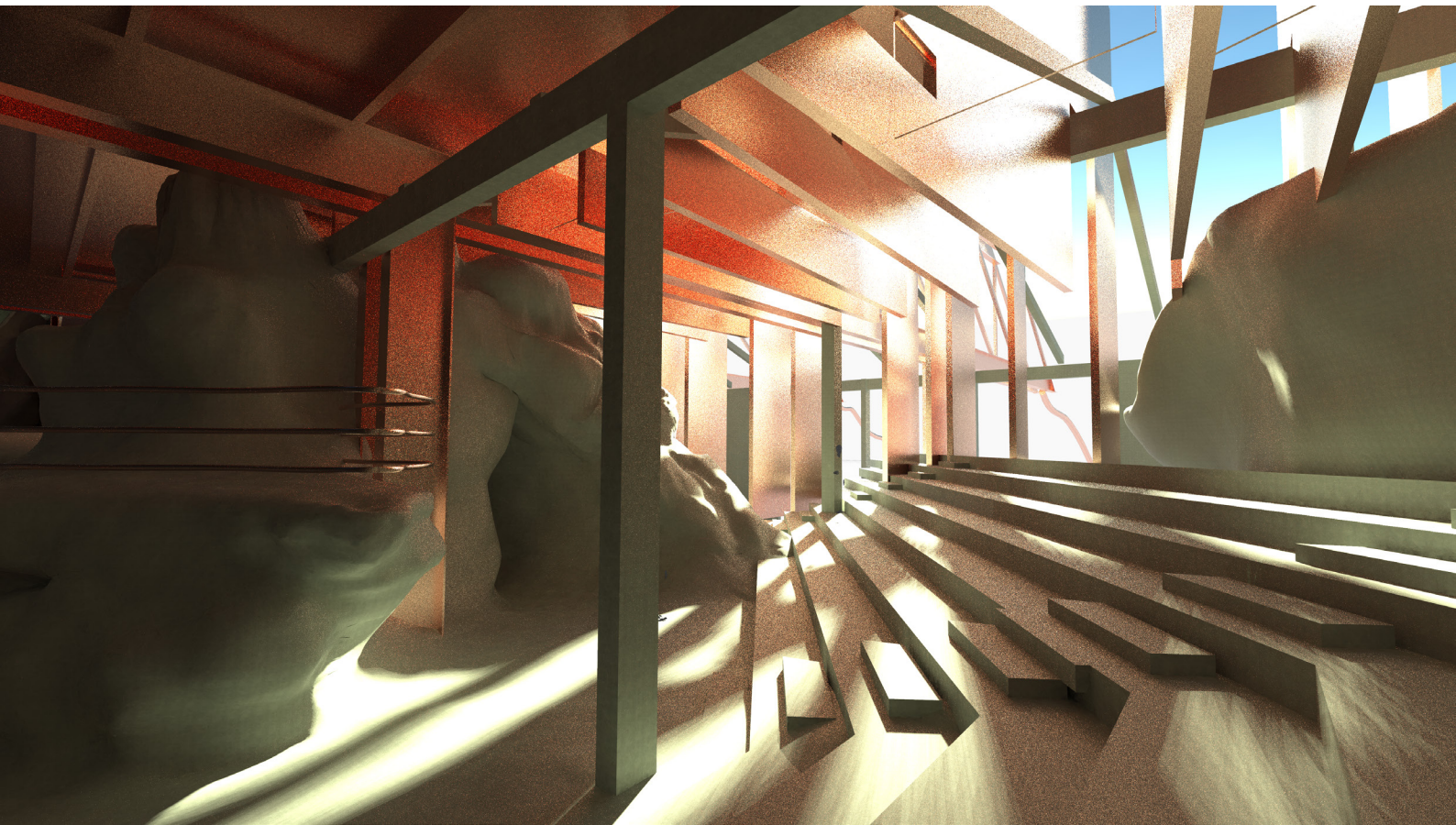


fig. 129 the stage





fig. 130 1:250 model carved from obeche wood



fig. 131 1:250 model carved from obeche wood



fig. 132 1:250 model carved from obeche wood



fig. 133 1:250 model carved from obeche wood



fig. 134 1:250 model carved from obeche wood



fig. 135 1:250 model carved from obeche wood

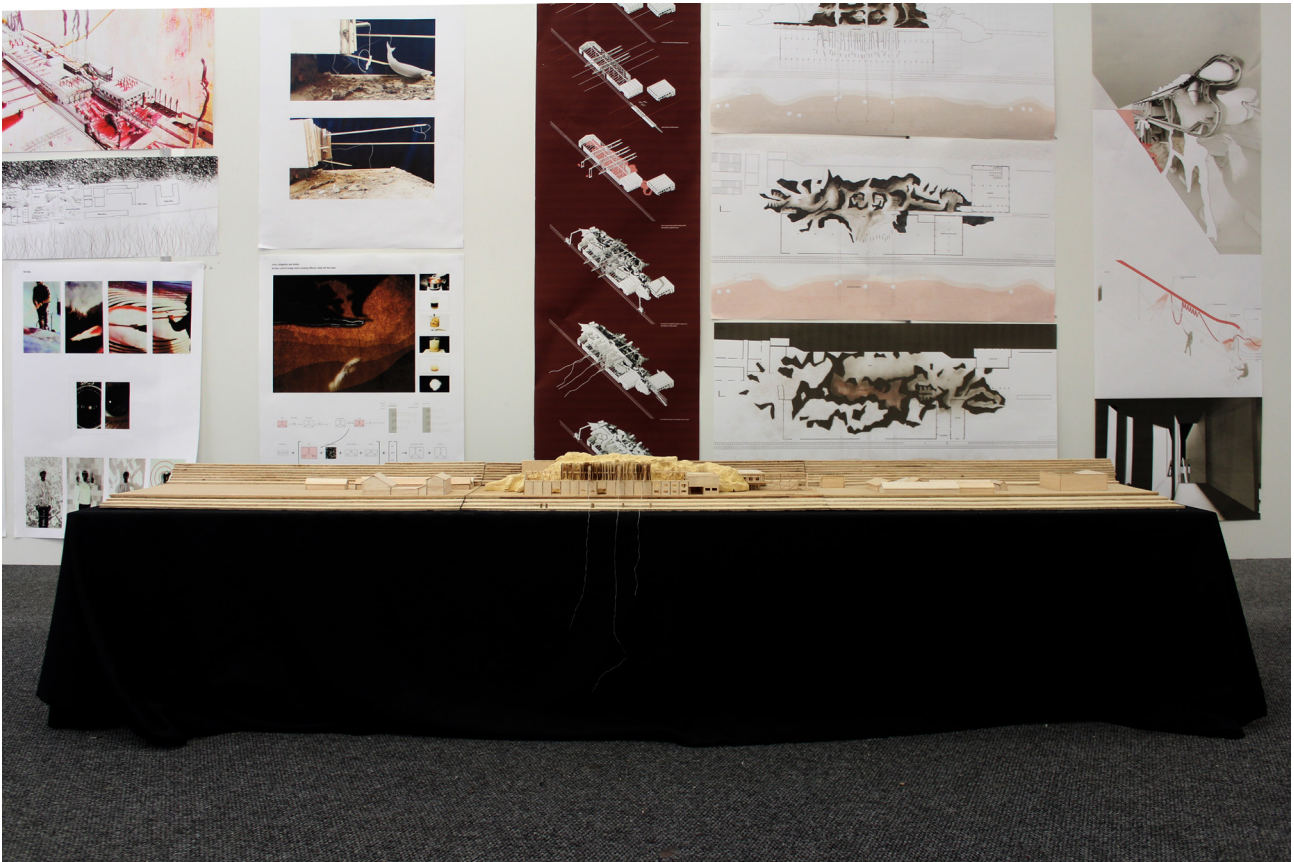


fig. 136 final presentation

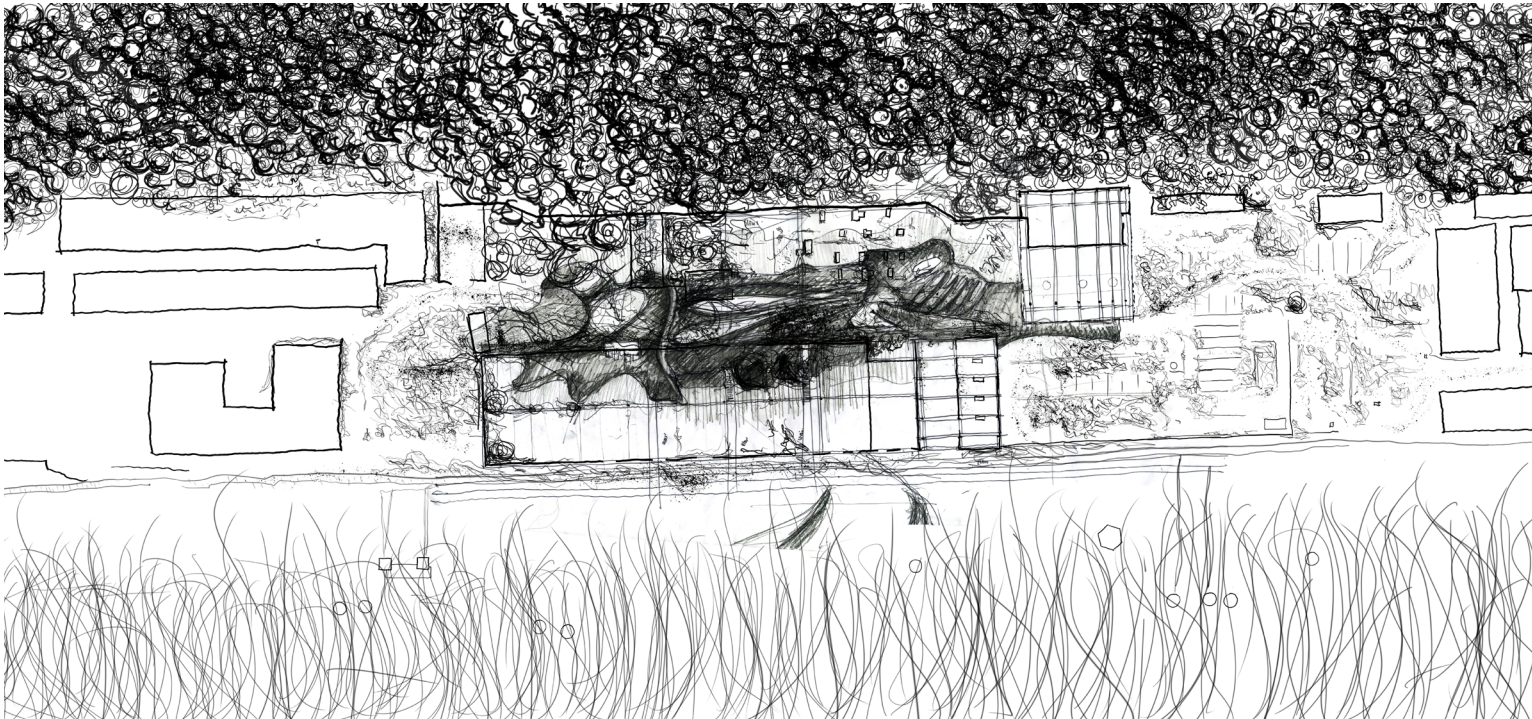
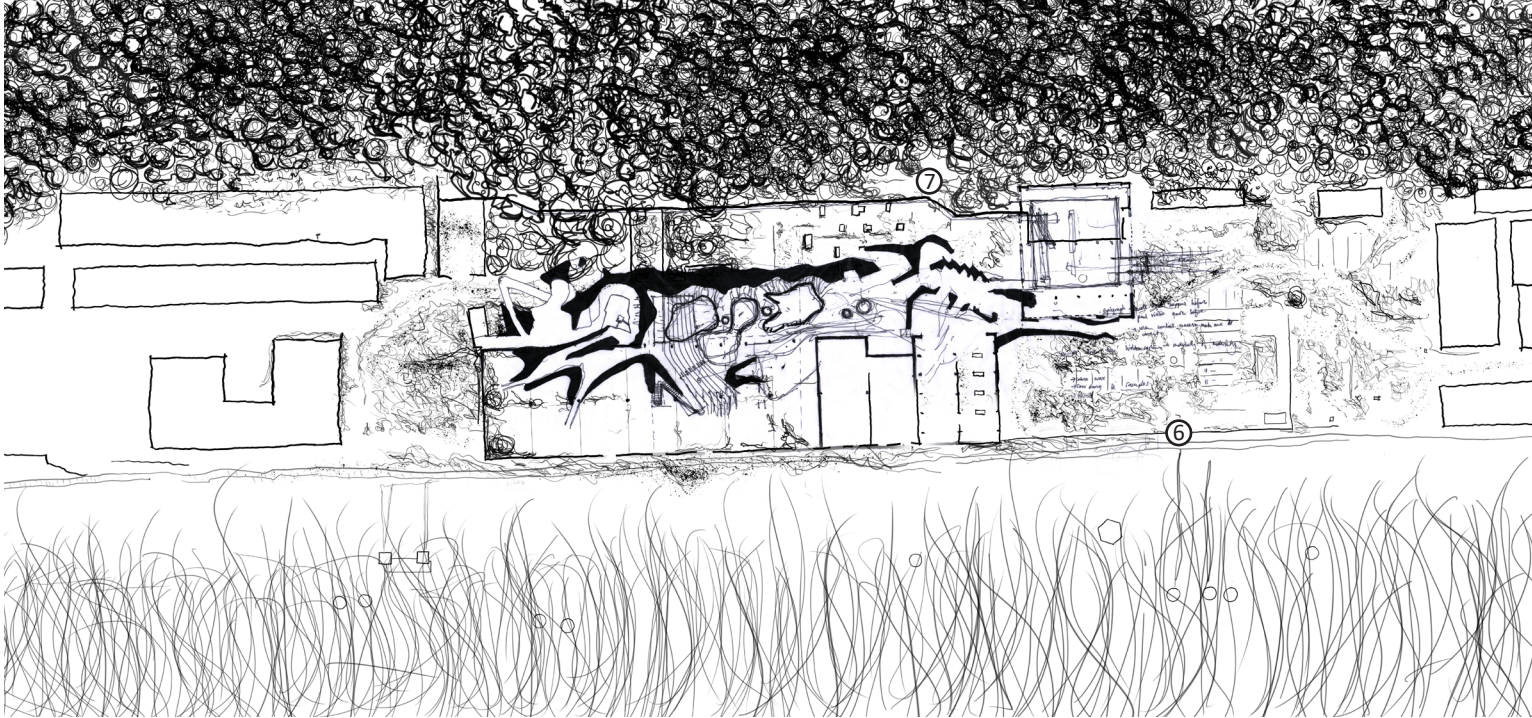
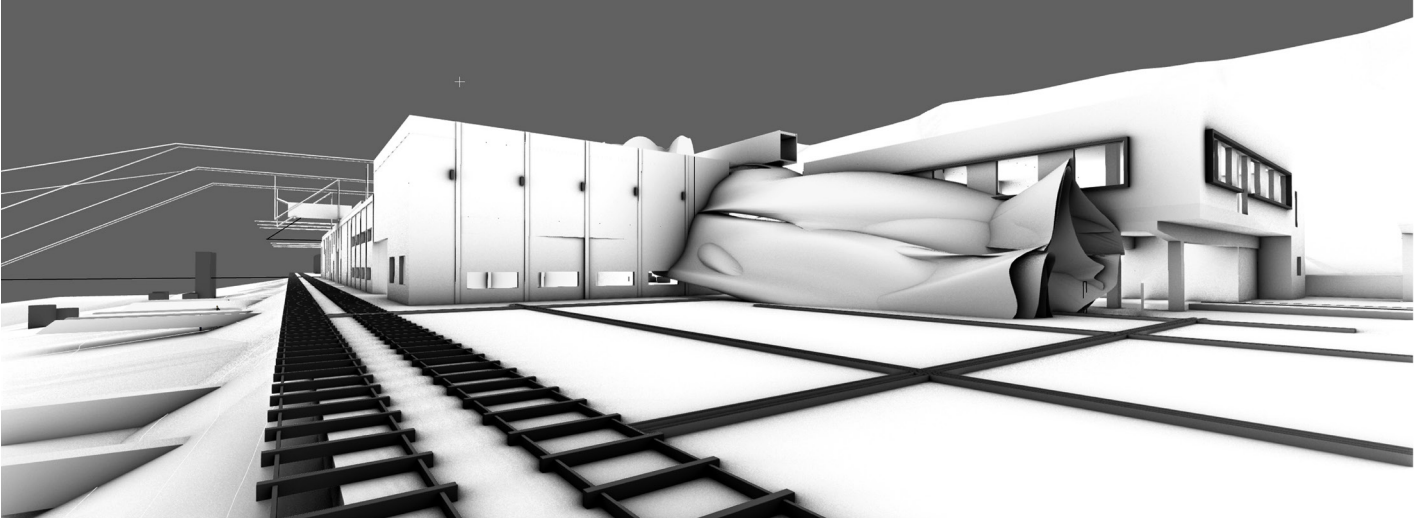
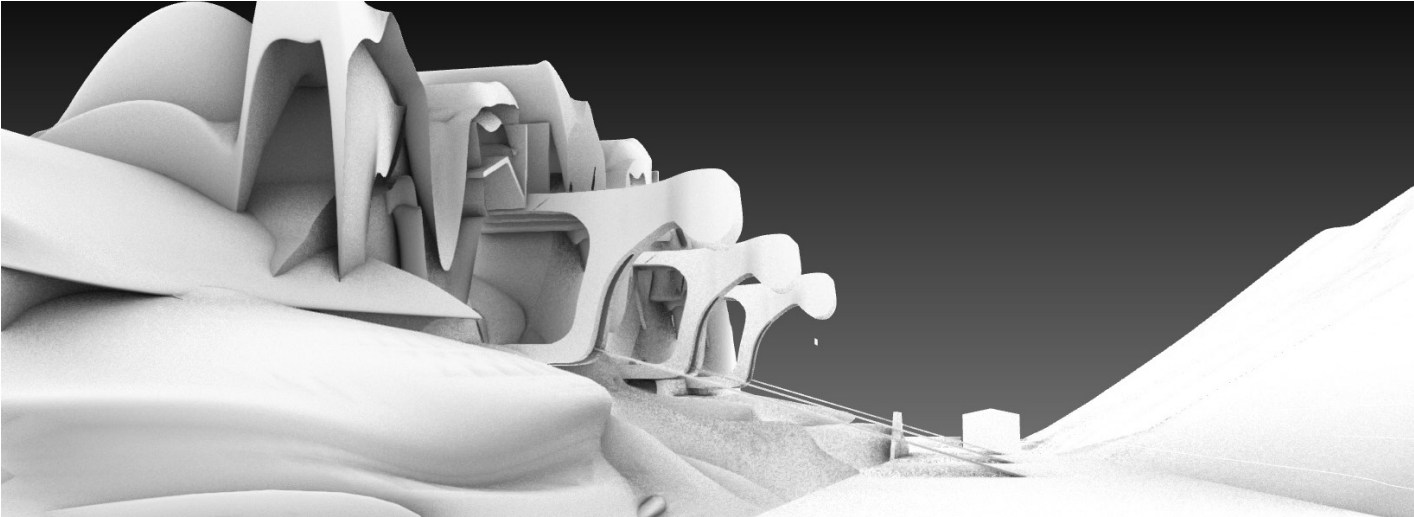


fig. 137 site plan post bleeding
fig. 138 roof plan



⑥



⑦

fig. 139 (above) the last place a whale was a full body, the flensing deck
fig. 140 the heads of terror

final thoughts

This dissertation confronts our society driven by commodity through the utilisation of nature and its natural processes as a method of negating the instant. The design places emphasis on our relationship with nature and accepts that architecture must be seen in continuity with natural forces, as it is destructive and constructive through its own acts. Through the studies of the architectural artefacts on site, the systems that are revealed framed the Bluff as Durban's backyard to which these cruel acts could occur in full force. The artefacts each reveal impulses within society as ideas shift. Moreover, their decaying bodies as ruins reveal a higher dimensionality in space and time to the permanence to which they were originally designed for. These ocular centric artefacts originate in a single moment of time and evoke experience of flattened temporality, whereas a haptic experience evokes the experience of a temporal continuum and the inevitable processes of ageing and weathering.

The pilgrimage of engaging with the Bluff along its coast is not linear; it is fragmented by these artefacts which open up multiple and alternative interpretations to the body. The study of site through film engaged both Benjamin's theories on film and theatre and Andrei Tarkovsky's films that deliberately lessen the emphasis on a continuous narrative intentionally weakening the logic of the story. These films engage the viewer who is made an active participant accepting moral responsibility for the progression of the events by creating alternate interpretations to the field of associated images.

The proposed design merely uses whaling as springboard to which the intervention takes its hints from. The whaling industry, both callous and malicious is an epoch that humans have stepped out of, and only recently. Whaling has been a part of human culture for thousands of years but only now has its momentum come to a grinding halt. As such, we are able to step outside of this epoch and review its effects in the natural world, applying it to the many other systems and epochs that are in full motion. The maturation of the design from a counter-memorial into a museum will bring forward this natural interaction through the inclusion of site and whaling specific engagements to the landscape. This intervention aims bring our interaction with the environment to the forefront of our consciousness.

“each of those worlds [out in space] is as real as ours and every one of them is a succession of incidents, events, occurrences which influence its future. Countless worlds, numberless moments, an immensity of space and time. Our small planet at this moment, here we face a critical branch point in history, what we do with our world, right now, will propagate down through the centuries and powerfully affect the destiny of our descendants.”

Carl Sagan, Cosmos

(Malone: 1980)

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All images are my own unless otherwise specified

Fig. 15. Tatham, A. 2015. Charles and Leslie Berlein. In Flanders Fields Museum Publishing. Ieper

Fig. 21 Aerial photo of the Bluff and Durban. Photo credit: Mayankh Ramasar

Fig. 33 George Steinmetz, (1970), Spiral Jetty [ONLINE]. Available at: <https://www.diaart.org/visit/visit/robert-smithson-spiral-jetty/> [Accessed 3 July 2018].

Fig. 38 Meat Meal and Meat Freezing Plant 1971. Old Court House Museum Archives. Durban. January 2018.

Fig. 40 Eric Lopresti, (2016), Underground Nuclear Test Video [ONLINE]. Available at: <http://artfcity.com/2016/06/21/img-mgmt-land-artand-the-nuclear-landscape/> [Accessed 28 June 2018].

Fig. 42 Durban's factory ship, Abraham Larsen. Port Natal Maritime Museum. Durban. April 2018.

Fig. 44 Titian, (2014), Madonna and Child Enthroned with Saints and the Pesaro Family (The Pesaro Altarpiece) [ONLINE]. Available at: [http://www.artchive.com/web_gallery/T/Tiziano-Vecellio-%28Titian%29/Madonna-and-Child-Enthroned-with-Saints-andthe-Pesaro-Family-\(The-Pesaro-Altarpiece\).html](http://www.artchive.com/web_gallery/T/Tiziano-Vecellio-%28Titian%29/Madonna-and-Child-Enthroned-with-Saints-andthe-Pesaro-Family-(The-Pesaro-Altarpiece).html) [Accessed 26 June 2018].

Fig. 51 SWANS. South African Naval Museum. Simonstown. May 2017

Fig. 53 Covert, C.T. 2007. British Dazzle Ships. [Picture]. Available from: Covert, C.T. 2007. Art at War: Dazzle Camouflage. Art Documentation: Journal of the Art Libraries Society of North America. 26(2):50-56. Available: <http://www.jstor.org/stable/27949469> [27 June 2018].

Fig. 55 R Tomlinson, (2002), Plate 3: Day BOP at Brooke's Hill with the Artillery Radar Building behind [ONLINE]. Available at: <http://samilitaryhistory.org/vol123rt.html> [Accessed 1 July 2018].

Fig. 56 BeSet, (2017), Gun Emplacement on the Bluff [ONLINE]. Available at: <http://www.askashe.com/2017/10/besetdurban-a-whale-of-a-time/> [Accessed 4 July 2018].

Fig. 60 Stacey Kerr, (2017), Bluff Aerial [ONLINE]. Available at: <https://www.rom.on.ca/en/blog/who-sings-for-blues-how-blue-whales-became-ingredients-in-everyday-products> [Accessed 2 October 2018].

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Fig. 78 Multiple, (2015), Natural Arches [ONLINE]. Available at: <https://www.naturalarches.org/> [Accessed 22 August 2018].

plagiarism declaration

Blind Man's Bluff

Darren Berlein

Supervisors: Nic Coetzer, Kevin Fellingham

This dissertation is presented as part fulfilment of the degree of Master of Architecture (Professional) in the School of Architecture, Planning and Geomatics, University of Cape Town

15 October 2018

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Department	Architecture						
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