

# Make your Way :

Navigating the hospital campus  
through Moana-Nui-a-Kiwa  
methods of way-finding

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MArch Thesis, 2023

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Make your Way: Navigating the hospital campus through Moana-Nui-a-Kiwa methods of way-finding

Research question: Can Moana-Nui-a-Kiwa concepts of navigation provide a means of establishing much improved way-finding and an improved urban environment at the Greenlane Clinical Services Centre?

Emma Wilson

*All unannotated photography is credited to the author of this document.*

*I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.*

# Research Question.

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Can Moana-Nui-a-Kiwa concepts of navigation provide a means of establishing much improved way-finding and an improved urban environment at the Greenlane Clinical Services Centre?

**Supporting Question:**

Can collaging methods act effectively to analyse, explore and represent experiences of navigating and journey?

# Abstract.

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This thesis embarks on a journey through design-led research to bridge intuitive way-finding practices and landscape architecture to enhance the user experience of the Greenlane Clinical Centre. By looking at Moana-nui-a-kiwa traditional methods of oceanic navigation, this research proposes a method of thinking about way-finding holistically and intuitively rather than relying on text based signage to navigate a landscape. The primary methodology for this research is design with a focus on using collage to reveal physical and intangible site conditions. Additionally utilising a strong visual language to familiarise the viewer with the context of the Greenlane Clinical Centre and effectively generate a sense of journey through propositional design. This project acknowledges that the speculative nature of designing for a complex site requires liberties to be taken in the proposal of any additions or changes to the existing landscape, thus the proposed design interventions are a suggestion of what an optimistic future for the landscape could be represented as. By investigating traditional intuitive navigation techniques, parallel to landscape architecture precedents, this research proposes an enhanced sense of arrival for the Greenlane Clinical Centre that invites users to self direct their healthcare journey and position themselves with certainty in the landscape. This thesis offers a transformative approach, intending to enrich the healthcare experience by fostering a deeper connection between users and their environment.



# Project range and scope.

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The scope of this research project encompasses an exploration into the potential transformation of the landscape at Greenlane Clinical Centre. Through a speculative lens, this project envisions an optimistic future for the site that integrates ideals and hopes to create an environment that is more accessible, legible and appropriate for the local context. By drawing upon the insights gathered from key knowledge streams, this research aims to unravel the practical strategies for redesigning the site. The design methodology used involves a creative approach of layering through collage. This technique forms a structured framework for the pragmatic design process, to exemplify how design can be justified and employed during future developments on the site.

This research seeks to develop a master plan that considers the dynamic and ever changing nature of the site. Suggesting a way-finding framework and reasoning that can be referenced when considerations are made to develop the landscape between the buildings. This project is not a development of a definitive solution but a highly propositional optimistic suggestion. By acknowledging that the identity of healthcare continues to develop, the site itself can prepare and welcome the future adaptations of this context. This middle landscape between site entrance and front door is the connecting force that is experienced by all users of the site and has an important impact on the users health journey.



# Introduction.

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The Greenlane Clinical Centre campus reflects the ongoing changes and advancements in healthcare. The land and buildings' relationship to each other has become increasingly estranged with the additions and demolitions that have occurred in the hospital's lifetime. This research considers the relationship between land health and the well-being of users navigating the hospital, that the environment should reflect the values of accessibility, legibility and land as taonga.

The way that well-being of hospital users is perceived in a healthcare context has changed over the time Greenlane Clinical has functioned as a hospital. With budgets for the building environment focusing on the built form as an extension of the medical machinery that it houses. It could be said that the architecture of modern medical Centres embodies the axiom "form follows function", with many hospitals appearing to have no discerning qualities that place them in their environmental context.

This research project begins in conjunction with Ara Manawa, an interdisciplinary design studio that operates within Te Toka Tumai Auckland. Their creative team develops solutions through design at Auckland City Hospital and Te Whatu Ora. Ara Manawa recognises the challenges within the healthcare sector and generates solutions that are evidence-based, reality-grounded and consider future implications.<sup>1</sup> While embracing diversity, equity inclusion and sustainability. Ara Manawa's introduction to Greenlane Clinical as a healthcare precinct was an important facet of this research. Their involvement with our tutorial group at the beginning stages of topic development, underscored the benefit of utilising students' innovation to propose solutions that are not constrained by real-world limitations. In turn demonstrating that engagement with design students may lead to the cultivation of innovative solutions.

In this thesis I will propose a method for designing enhanced way-finding applications for the Greenlane Clinical Centre. Using concepts of Moana-Nui-a-Kiwa navigation to function as a foundation for treating the landscape as a component of the user's healthcare journey. Using design as my primary methodology, In this research I use collage to express and explore the experiential qualities of moving through the journey, as well as a design tool to express potential navigational design responses. Collages become ways to represent and explore the agency and effect of the landscape in the site and in this navigational design context.

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<sup>1</sup> Ara Manawa, "Who we are."

## Chapter 1.

# Site Analysis.

214 Green Lane West, Epsom, Auckland

This research focuses on the Greenlane Clinical services Centre, this ADHB campus is situated in the suburb of Epsom, Auckland. The site is located in a civic area of Auckland, directly adjacent to Cornwall Park and across from entertainment and racecourse venue Alexandra Park. The site's proximity to Cornwall park makes it an extension of the local maunga, Maungakiekie. The following analysis conducts research into the past and current condition of the site. The approach allows for a comprehensive positioning of the site within the Auckland community and environment context.

## 1.1 Greenlane Clinical Centre

### *Zoning: Community scale*

The Greenlane Clinical Centre is situated in a 'Special Purpose Zone' as a healthcare facility and hospital. Immediately to the left of the health centre is Cornwall park, which is zoned as Open space 'Informal Recreation' and 'Conservation Zone'. To the immediate right of the Greenlane Clinical Centre is land nearly entirely zoned as 'Residential Terrace Housing and Apartment Buildings'. When visiting the site it is clearly sat between two very contrasting environments, densified housing and reserved open space. The suburban land South of Greenlane Clinical quickly moves into a combination of residential mixed housing and single house zones. The densification of housing is notability condensed along the main transport routes, Pah Road, Manukau Road and Greenlane West, typically behind a business allocated zone.

### *Site scale: Existing Buildings and Entrances*

The Greenlane Clinical Centre has two main access points to the North and South of the Site. access by cars and pedestrians via the north entrance is off Greenlane West Road and access via the Southern entrance is off Claude road, a residential street. Access to the site is also achieved via minor entrances off of Greenlane West directly outside the eye clinic, this is also the location of the staff shuttle bus drop-off. This particular car park is adjacent to the heritage listed buildings, The Costley Block and The Infirmary Ward for Incurables.

The Greenlane Clinical Centre itself is an amalgamation of architectural styles, reflective of the periods in which they were erected on site. The Greenlane clinical centre has a long history of being a healthcare site, beginning with the construction of the Costley Block initiated after the death of Edward Costley. Costley was a wealthy Auckland colonist who's death-bed philanthropy funded charitable insti-

tutions across Auckland.<sup>2</sup> Through to the present day with the demolition of the Cheste Annexe and 1965 Nurses Accommodation, making room for car parking and greenfield (or in this case brownfield due to asbestos contamination) space for future additions respectively.

### *Building condition*

The ministry of health conducted a National Asset Management Programme for district health boards to assess the current state of hospitals and health centres in 2020. The Findings in reference to Greenlane Clinical Centre address the condition of Building 4, West, and the Boiler House, as well as the general condition of the buildings on site. Hospitals were scored on a 5 point scale of very good to very poor condition.<sup>3</sup>

*"Generally, the buildings are in average condition with the internal fabric of the clinical building being better than its exterior. There appear to be deficiencies with some fabric components, particularly roofs and windows.*

*Building 4, West – This has several HVAC issues with the central plant in poor to very poor condition. The cooling distribution and the building management systems scored average to poor. The windows and doors scored poor and the roof scored average to poor.*

*Building 2, The Boiler House – This has several fabric issues. The windows, doors, walls, cladding, and internal roof fabric scored average to poor. The building management system scored average to poor."<sup>4</sup>*

<sup>2</sup> Tennant, "Elderly indigents and old men's homes 1880-1920," 8.

<sup>3</sup> Ministry of Health, *The National Asset Management Programme for district health boards*, 6.

<sup>4</sup> Ministry of Health, *The National Asset Management Programme for district health boards*, 11.

The overall condition of the site was deemed average, with the redeeming features of the campus being the interior conditions.<sup>5</sup>

Walking the site as a visitor entering from Greenlane West, you notice the shadow of the Main building overhead. At the time of our site visit in March of 2023, construction barriers and safety tape directed you towards the temporary access to the main building's front door. This was via modified shipping containers, protecting pedestrians from the construction above. To the right of the main entrance, where the 1924 Nurse's home Expansion once stood, there is now a spacious grassy area. We were informed by members of Ara Manawa that the land had been contaminated with asbestos, but was being considered as the site for a future transfusion centre.



Fig. 1 Photo of Building 16 courtyard from road. Car painted over to show general volume of vehicals in line of site at human scale.



Fig. 2 Photo of Building 15 facade from car park. Cars painted over to show general volume of vehicals in line of site at human scale.



Experiential site map of Greenlane Clinical Centre.

All car-centric and tar-sealed areas have been whited out with paint. Prominent existing green space is hatched out in blue. Buildings have been outlined in blue. The purpose of this map is to illustrate the extent to which the site serves vehicles. It is also clear that there is no discernible connections between buildings that is by traversing the car-centric space. The basalt wall that divides the campus with Cornwall park runs directly down the eastern boundary line.

5 Ministry of Health, *The National Asset Management Programme for district health boards*, 6.

## 1.2 Work done for way-finding thus far at Greenlane Clinical by Ara Manawa

The aim of the way-finding strategy designed by Ara Manawa is to align all future and ongoing work to the same way-finding program. Setting standard constraints to make finding decisions more streamlined.

The methodologies for establishing this are use of predetermined typeface, iconography, information and colour standards to form a guideline. Diagrams are used in the proposal to make sense of different scenarios and challenges such as:

- The purpose of the document
- The way-finding program
- The experience of the user

The document establishes that the way-finding experience encompasses the patient's entire journey and should be consistent across mediums. Informational graphics, mapping, temporary and permanent signage, external and internal signage are all mediums that influence the patient's experience.

The document considers scope. Establishing parameters and the limitations of the project is key to resourcing the relevant programs. In Ara Manawa's Proposed wayfinding strategy for the Auckland District Health Board<sup>6</sup> the technical specifications of the signage elements are established as out of their scope.

User centred design in the context of healthcare facilities is defined by Auckland DHB in this report, highlighting accessibility as the guiding principle.

*"...the system must simultaneously cater for first time users, users with low mobility and mild visual and/or cognitive impairment."*<sup>7</sup>

<sup>6</sup> Lab DHW, ADHB, *Way-Finding Strategy* 1.0, 6.

<sup>7</sup> Auckland District Health Board, *Open Board Meeting*, 171.



The principles of way-finding that are important to the project are<sup>8</sup>:

- User Centred Design
- Accessible
- Simple, clear, consistent design
- Flexible and easy to update
- Appropriate use of Te reo Māori

The strategy document goes on to establish definitions to these principles, and who the types of users are, and what considerations need to be taken when designing for these different types.

The basis for much of Ara Manawa's Guidelines is the National Health Service 2016 Way-finding guidelines,<sup>9</sup> published by Health Facilities Scotland. This 136 page document titled, *Effective way-finding and signing systems guidance for healthcare facilities*, describes way-finding as such;

*"Many factors affect how people orientate themselves and find their way, but way-finding is essentially a series of inter-related decisions influenced by personal and environmental factors and also the availability and understandability of information."*<sup>10</sup>

This is to mean that the objective of good way-finding is to understand the user's process in orienting themselves and to design for optimal intuitive environmental engagement.

8 Auckland District Health Board, *Open Board Meeting*, 193.

9 Health Facilities Scotland, *Way-finding: Effective way-finding and signing systems guidance for healthcare facilities*.

10 Health Facilities Scotland, *Way-finding: Effective way-finding and signing systems guidance for healthcare facilities*, 14.

The main objectives outlined in the executive summary of this report are<sup>11</sup>:

- Enhance way-finding Systems
- Address way-finding Factors
- Develop Comprehensive Strategies
- Evaluate and Improve

This 2016 publication focuses on internal way-finding strategies and relies heavily on signage and language to direct visitors around a healthcare campus. There is an opportunity to design a unique program that utilises the same key goals as this report, and apply them to the external landscape within the Greenlane Clinical environment context based on the principles established by Ara Manawa.

11 Health Facilities Scotland, *Way-finding: Effective way-finding and signing systems guidance for healthcare facilities*, 3.



# 1.3 The history of Greenlane Clinical Centre

1883

Edward Costley passes away

1890-91

The Costley Home for the Aged Poor

Designed by Auckland architect Edward Bartley, the Costley Ward was the first building erected on the Greenlane site. This building was for a time the largest charitable institution in New Zealand during the nineteenth-century.<sup>12</sup>

Fig. 3 Photo of Costley Home for the Aged Poor, April 1918.<sup>13</sup>



1898

More structural additions to the site

1901

Cornwall Park

230 acres of One Tree Hill 'gifted' to the public by John Logan Campbell and to be known as Cornwall Park.<sup>14</sup>

1906-07

Infirmiry ward for Incurables

This building was constructed separately to the Costley Ward and underwent modification to include a second story in 1917. The building was designed in a Queen Anne revival style and marked an important move in healthcare towards the treatment of the aged population separately from the general ill population.<sup>15</sup>

Fig. 4 Photo of Infirmiry Ward for Incurables (left) adjacent to the costley home for the aged poor (right) April 1918.<sup>16</sup>



12 Heritage New Zealand Pouhere Taunga. "Greenlane Hospital. 202-214 Green Lane West, Epsom, AUCKLAND."

13 Author Unknown, "Greenlane Hospital, Auckland. Costley Home," from Sir George Grey Special Collections, fig. 3.

14 Te Ara, "Story: Campbell, John Logan."

15 Heritage New Zealand Pouhere Taunga. "Greenlane Hospital. 202-214 Green Lane West, Epsom, AUCKLAND."

16 Author Unknown, "Greenlane Hospital, Auckland. Costley Home (right) and the Infirmiry Ward for Incurables straight ahead." from Sir George Grey Special Collections, fig. 4.

1924

Renamed Auckland Infirmiry

his reduced the stigma associated with recipients of charitable aid in healthcare.

1924

Nurse home opened (expanded in 1946)

1938-39

First Labour Government

The introduction of a progressive Social Security act, to make free healthcare universally accessible for New Zealanders.<sup>17</sup>

1942

Renamed Greenlane Hospital

1943

The Main building

The six-story main building was designed in a functionalist style and was opened by then prime minister Peter Fraser. Construction was completed by Fletcher construction, on a not for profit basis due to shortages implicated by WWII.<sup>18</sup>

1953

Cheste Annexe (Amalgamated from former tuberculosis shelters)<sup>19</sup>

1958

First open heart surgery performed in New Zealand

1959

Boiler House Constructed

1964

National Women's Hospital opened

Fig. 5 Opening of National Womens hospital extension 1964, by Governor-General Sir Bernard Fergusson<sup>20</sup>



1964-65

Construction of Administration Building

1965

Additional Nurses Accommodation

1970

Stage two of Main building. Addition to the East Wing

17 The New Zealand Social Security Act, 1939

18 Heritage New Zealand Pouhere Taunga. "Greenlane Hospital. 202-214 Green Lane West, Epsom, AUCKLAND."

19 Bryder, "Hospitals - Spas, sanatoriums and surgery."

20 Auckland Weekly News, "Opening of National Women's Hospital, 1964." From Auckland Weekly News, 26 February 1964, fig. 5.

## 1.4 Cornwall park and Maungakieie

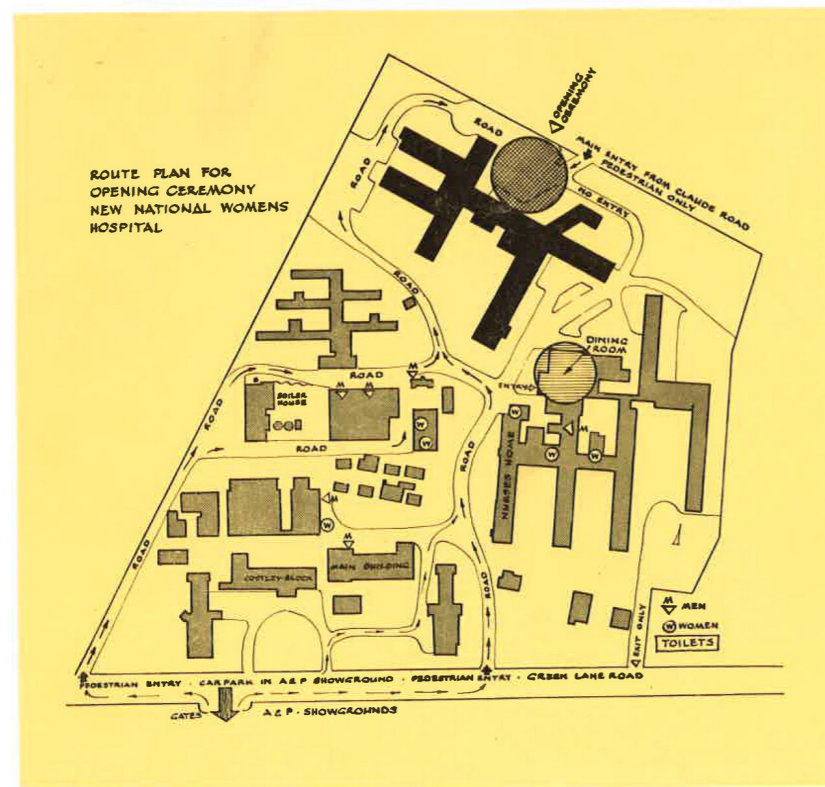
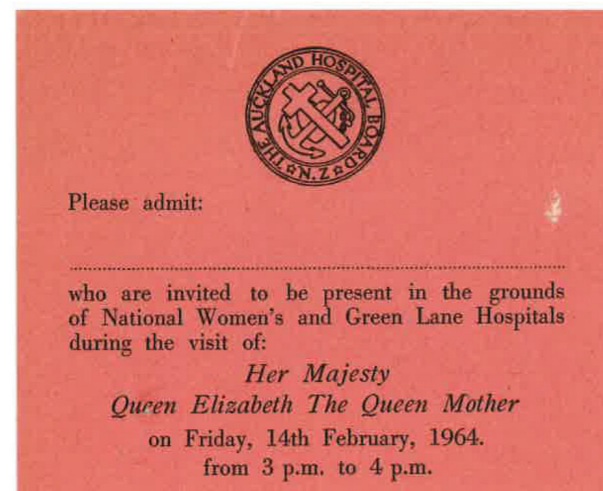


Fig. 6 Invitation and Opening ceremony route. 21

Invitation to the opening of the National Women's Hospital in 1964. Although Queen Elizabeth The Queen Mother was to open the facility, she was taken ill and Governor-General Sir Bernard Fergusson opened in her stead. A map of the route plan for the opening ceremony is shown in yellow. Crucially this map indicates which buildings were standing on the site in 1964. This includes the Cheste Annexe, the site of which today makes up the primary parking area in front of the main building.<sup>22</sup>

21 Archives New Zealand, *National Women's Hospital Opening (1964)*, from Archives New Zealand Rua Mahara o te Kawanatanga, fig. 6.

22 DigitalNZ A-Tihi o Aotearoa, "National Women's Hospital Opening (1964)."

The history of Maungakiekie pre-colonial settlement is deeply significant and reveals the importance of the land as a cultural landmark. The occupation of the Maungakiekie subsequently changed through various migrations and invasions of indigenous tribes throughout the mounnga's history as a Pā site. A significant example of this taking place is that of the Kaipara people, part of the Ngati Whatua tribe, accomplishing the conquest of the Tamaki isthmus around 1760 A.D. This involved the capture of Maungakiekie, and the driving of the Waihua people southward into the Waikato.<sup>23</sup>

Pre-colonial occupation saw the Pā site hold great ceremonial and cultural significance. Serving as a tribal base and residential area for prominent chiefs. As a matter of course, the land played a key role in the setting of ceremonies and rituals that were only performed in places of high mana.<sup>24</sup>

The land on which Greenlane Clinical Centre stands is at the very foot of Maungakiekie, separated only by the basalt wall that runs along the Northwest edge of the park. It is suggested that the historic significance of basalt walls in this area, as they were utilised as a crop growing technique, brought to Aotearoa by early Māori.<sup>25</sup> However, it is recognised that such tropical crops that were used to warmer climates such as kumara and taro, would be planted along in close proximity to rocks like this in order to benefit from the passive heating from the sun to support crop growth.<sup>26</sup>

23 Fairfield, "MAUNGAKIEKIE. One Tree Hill, Auckland. Description of Some Ethnological Discoveries." 102.

24 Fairfield, "MAUNGAKIEKIE. One Tree Hill, Auckland. Description of Some Ethnological Discoveries." 102.

25 One Tree Hill Borough Council, *In the shadow of Maungakiekie*, 19.

26 Barber and Higham, "Archaeological science meets Māori knowledge to model pre-Columbian sweet potato (*Ipomoea batatas*) dispersal to Polynesia's southernmost habitable margins," 2.

In essence, the cultural significance of Maungakieie is reflected in the complex relationships, migrations, and practices of Māori that had existed for 100's of years prior to European invasion. After the arrival of European settlers in 1973 the Pā stood abandoned for decades.<sup>27</sup> The Maunga represents a place of paramount significance, as it has stood to witness the triumphs and transformations of the indigenous population of Tamaki Makaurau. Today, the mountain stands as a reminder of this emotional history.

27 One Tree Hill Borough Council, *In the shadow of Maungakiekie*, 19.

## 1.5 Findings

This exploration into the multifaceted site context reveals a weaving of historical influences and the site adaptability. The site's response to a growing demand for specialised healthcare facilities is evident in the layers of built additions and demolitions. The importance of an inclusive way-finding strategy is emphasised by the effect the site's condition has on the user at the human scale. The importance of a user-centric approach, cultural inclusivity, and accessibility is laid as a foundation in Ara Manawa's guidelines for an effective way-finding system that enhances the visitor experience and navigational ease. This analysis presents a comprehensive positioning of the site and an understanding of the architectural identity, historical roots, and vital role within the local community.

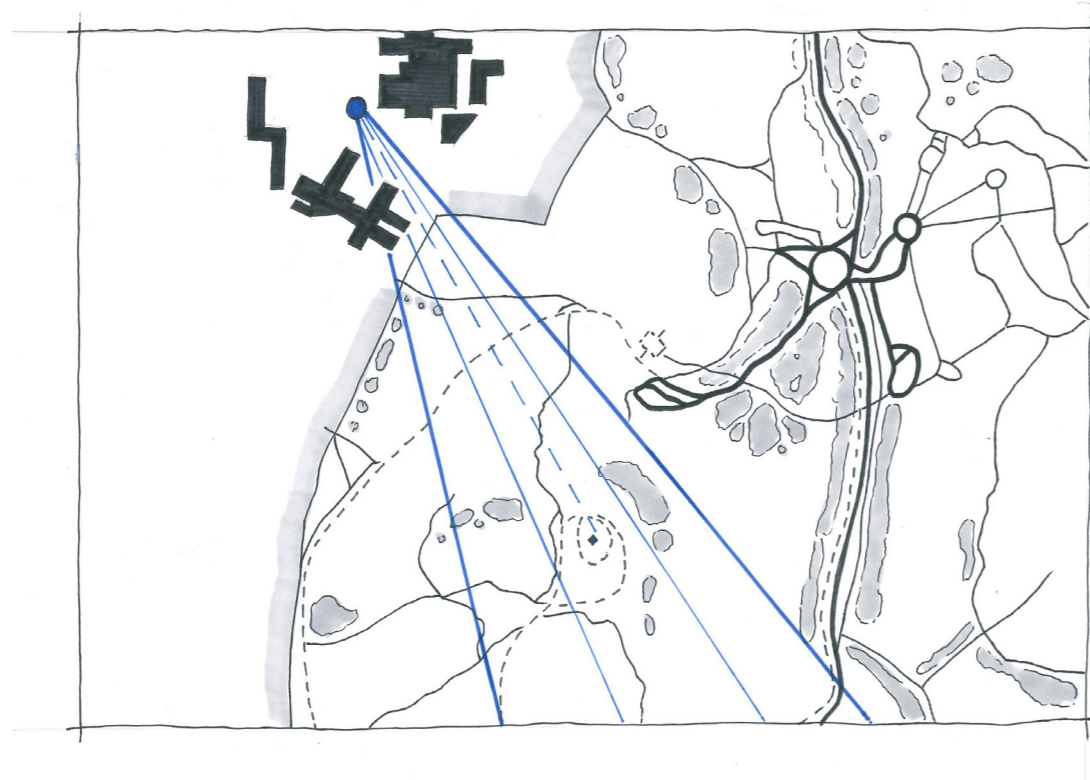


Fig. 7 Initial concept drawing, mapping the line of site relationship between Greenlane Clinical Centre and Maungakiekie.

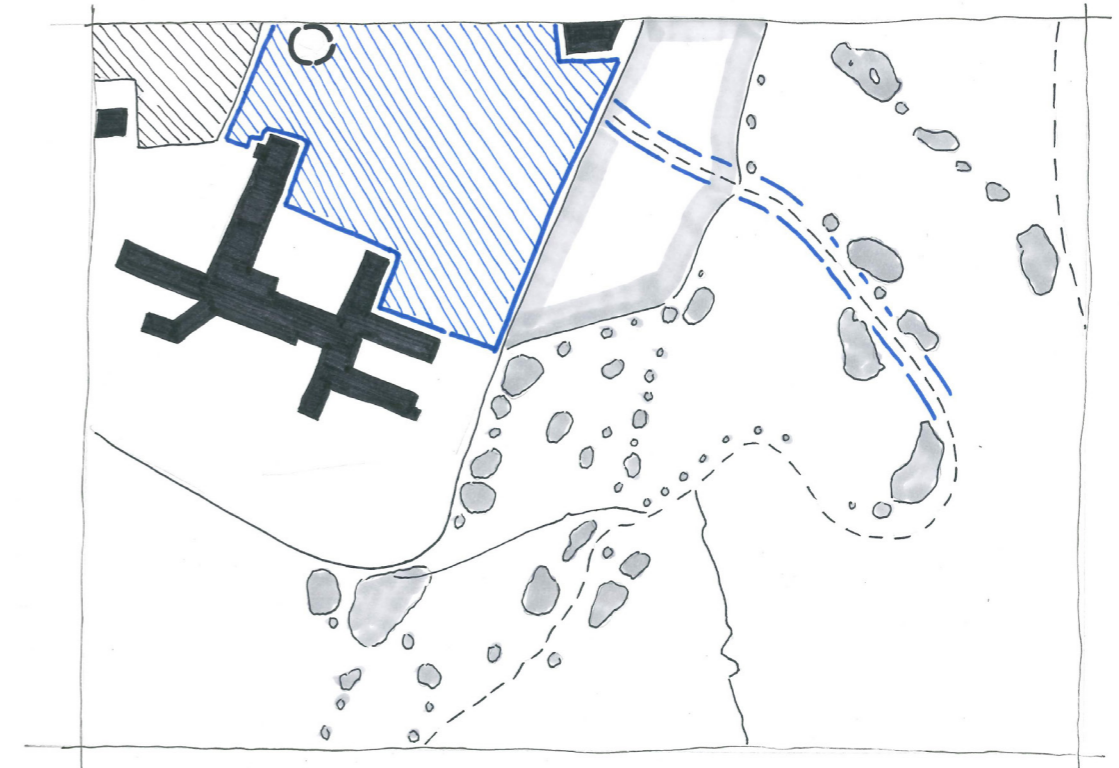


Fig. 8 Drawing analyses the immediate connection between Greenlane Clinical Centre and Cornwall park. Existing walking access through basalt wall shown in dashed blue from hospital car park.

## Chapter 2.

# What is Landscape?

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This chapter aims to emphasise the unique Māori perspective on land health and well-being in Aotearoa. exploring how Mātauranga Māori, has been integrated into environmental policies, underpinning the importance of an indigenous worldview. Here, we introduce landscape architecture as a discipline that deals with the link between people and natural systems and the role landscape architects play in addressing environmental challenges, protecting natural spaces, and collaborating with Mana Whenua iwi.

## 2.1 Importance of land health and well-being

Here, we seek to demonstrate how perceiving land as a living entity can contribute to the improved well-being of the land's inhabitants when the health of the land is considered. Health of land in the Aotearoa context is unique, in te ao Māori the land and sky are the bodies of Papatūānuku and Ranginui. These entities are maternal and paternal figures that give us land to sustain us and the air we breathe. Mātauranga Māori has been incorporated into Environmental policy in Aotearoa to add value to our resource management system.<sup>28</sup> The importance of the Māori world view and indigenous knowledge frameworks has been embraced as standard for being equitable treaty partners under the Te Tiriti o Waitangi.

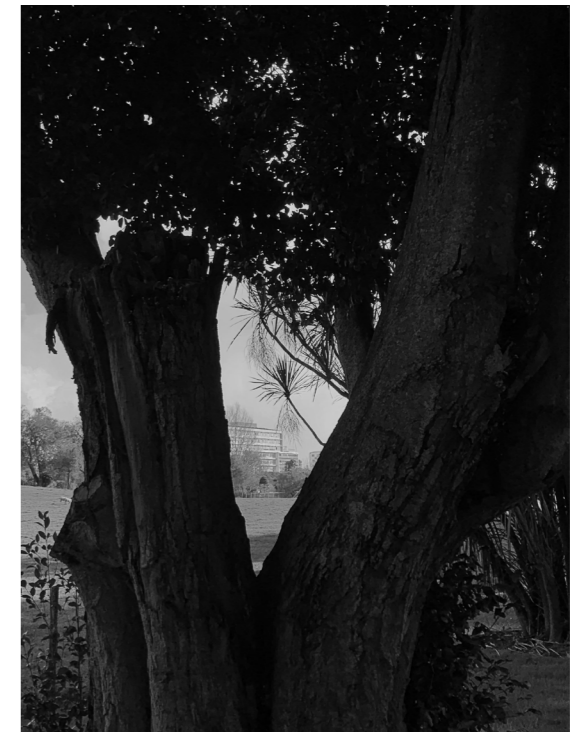


Fig. 9 Photo taken by author looking to Greenlane Clinical Centre from Cornwall park. Showing relationship at human scale.

28 Ministry for the Environment (Manatu Mo te Taiao), "Mātauranga Māori and the Ministry."

## 2.2 What is landscape architecture?

Tuia Pito Ora (New Zealand institute of Landscape Architecture) defines landscape architecture as being about everything outside, urban and rural, at the interface between people and natural systems.<sup>29</sup> Landscape architects are tasked with important roles in addressing increasing complex environmental issues including the protection of the natural environment, creating livable landscapes and working closely with Mana Whenua iwi to make appropriate contributions to the New Zealand landscape.



Fig. 10 Photo taken by author looking to Obelisk that sits at the summit of Maungakiekie.

29 Tuia Pito Ora New Zealand Institute of Landscape architects. "What is a Landscape Architect?"

## 2.3 Landscape in the Aotearoa context

The powerful connection between landscape and people cannot be understated. Respect for the land and what it means to give and take from the earth are very sacred concepts. In Aotearoa the land is held as taonga by her indigenous people and the connection to Papatuanuku as kaitiaki delivers a sense of unity and place to Māori.<sup>30</sup> Ancestral lands have had their natural ecosystems dismantled to provide pastoral land for farms and space for western urbanisation since colonising peoples began arriving on the shores of Aotearoa.

Commentary on the preservation of land has been recorded as far back in New Zealand's colonised history as 1890's. Parliamentary debates taking place in this time lead to the passing of The Scenery Preservation Act in 1903.<sup>31</sup> However, this act was more conscious of identifying the cultural value that would draw tourism to Aotearoa, and in protecting certain areas from being transformed into farmland, there were attractions that would give longevity to the new tourism industry in Aotearoa.<sup>32</sup>

Attitudes towards environmental preservation can be identified in this period as preserving native lands for the benefit of travelling European tourists and the economic implications of preserving the pure New Zealand reputation. Areas selected to be protected by this act were considered easy to travel to and were accessible tourist destinations. The Scenery Preservation Act had a clear objective to boost the nation's tourism sector. Sir Joseph Ward, who served as the Minister overseeing the Tourist and Health Resorts Department, was the key figure behind this legislation. Ward saw the economic value scenic beauty had in drawing wealthy tourists to New Zealand.<sup>33</sup>

30 Arihia Reweti, F. Ware, and H. Moriarty, "A tangata whenua (people of the land) approach to conceptualising Māori health and well-being," 14.

31 The Scenery Preservation Act, 1903.

32 Geoff Park, Theatre Country "A moment for landscape," 196-203.

33 Dingwall and Nightingale, *Our Picturesque Heritage: 100 years of scenery preservation in New Zealand*, 24.



Fig. 11 Water colour painting by author. layering colour and exploring the texture of ranranga.

## 2.4 Middle Landscapes: Relevance of land health and well-being

In Geoff Park's essay "A moment for landscape" he identifies middle landscapes as special character areas in Aotearoa that do not hold the same legislative protections as our national parks and reserves. He uses the Waitakere ranges as an example, as the suburban landscape of Auckland slowly creeps to the region's borders more of the development permanently changes the terrain of this middle landscape. Park observes that the landscapes that are protected should not be preserved for their tourist attracting ability. Respect for the land should not be to see it benefit the visitor or admirer but for whom it is home sustaining the land is to cherish it.<sup>34</sup>

Artist Colin McCahon is quoted,

*"This is a shockingly beautiful area - I do not recommend any of this landscape as a tourist resort. It is wild and beautiful; empty and utterly beautiful..."*<sup>35</sup>

McCahon's love and admiration for the Murawai coast and indeed the land as scenery, is evident through his painting. In recognising that the beauty of the land is not founded in fact it can be touched and enjoyed by anyone who encounters it, a notion that could only occur through a lifelong attachment and understanding of the land's value as more than property. In making this statement there is a connection to the whenua, a heart connection is made.

It could be speculated that land redevelopment and the destruction of native ecosystems is in part due to a lack of connection to the land by western inhabitants for more than its economic benefits. By asking what landscape means and how we chose to engage with it, a connection has the opportunity to be made.

34 Geoff Park, Theatre Country "A moment for landscape," 196-203

35 Brown, Colin McCahon: Artist, 109.



Fig. 12 Water colour painting by author. Looking at landscapes between buildings as oceanic connectors. Historic basalt wall shown to separate the site from Cornwall Park.

## 2.5 Findings

The connection between people and land is emphasised through the Māori perspective on environment health and well-being. The integration of Mātauranga Māori into environmental policies, and landscape architecture are practices of valuing whenua. We are encouraged to reevaluate the relationship between land and the built environment and consider the well-being of the people to be an extension of the health of the environment. In the context of Greenlane Clinical , the surface and space are limited, therefore if there are additions there must be subtractions. The land has seen many iterations of healthcare in Aotearoa and will continue to contribute to the wellbeing of healthcare users. When anticipating the future of the site, we should let the land tell the story of the past so as to maintain this grounding connection between people and land.



Fig. 12 Water colour painting by author using the Star Compass to position the Greenlane Clinical Centre in relation to Maungakiekie.

## 2.6 Landscape Design Precedents

The following landscape projects that are built in the local context are important precedents as they explore sustainable and culturally considered methods of design. This research also investigates designing with sensory engagement in mind through analysing components of Japanese stroll gardens. Combining the nature of these precedents to discern what way-finding looks like in the context of an urban park, maunga, and considered garden. text Working under a "One Wynyard" design ethos, this project in the Northwest corner of the CBD overlays a new hierarchy to an industrial area that has begun to become predominantly more commercial over time. To make the landscape more appropriate for the surrounding context, LandLAB curates a network of public transportation elements, green infrastructure and pedestrian accessible elements to increase connectivity.

### 2.6.1 CASE STUDY 1: Daldy Street Linear Park

The linear park runs parallel to Daldy street and intersects Qaunt Street, and is a 'green link' between Victoria park and the Wynyard business district. The park is a contribution to the area that represents an ongoing attempt to ensure the city is accessible for pedestrians and encourages people to linger in the space. In effect slowing down the city by removing cars as the central user and cnetring bodies as the primary method of transportation.<sup>36</sup>

Described as imaginative and user friendly by the NZILA<sup>37</sup>, it connects the industrial area of Wynyard quarter ultimately to the Waitemata harbour. A softening of the built environment regenerates a connection between land and sea.

The key issue identified when designing this project was to connect the local residential community back to the water's edge. This was not without functional constraints such as ground contamination, flooding detention measures, and pump station infrastructure being integrated into the park.

Legibility was a design consideration when printing the park; there is a continuous visual connection from North to South, positioning the visitor and giving them the tools to navigate the channel. Daldy Park is a beginning phase for what will ultimately be a 15 year project to repair and reinvigorate the damaged landscape, with an envisioned extension intended to turn the ex-petro-chemical "tank farm" at the edge of Silo Park into green space.<sup>38</sup>

<sup>36</sup> LandLAB, "Amey Daldy Park\_."

<sup>37</sup> Tuia Pito Ora New Zealand Institute of Landscape architects, "Amey Daldy Park + Daldy Street Linear Park"

<sup>38</sup> Brett Kelly, "The Detail: \$300m plan to transform toxic wasteland into Auckland's new waterfront park."

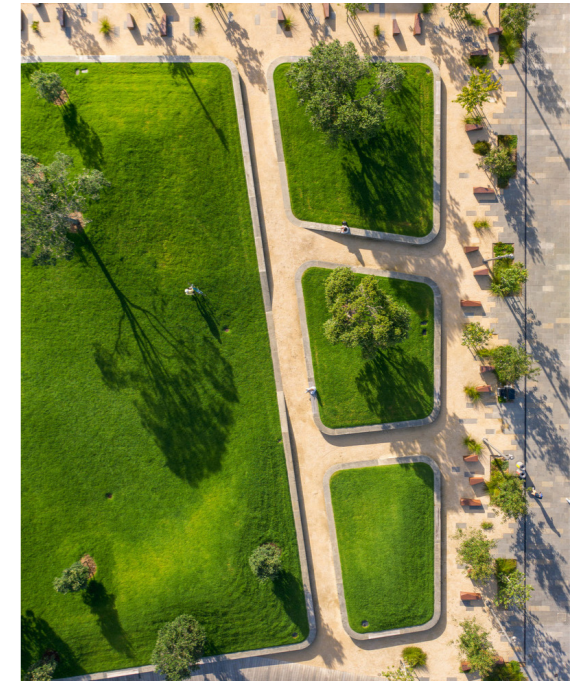


Fig. 13 LandLAB, Drone image of Amey Daldy Park, Photograph, 2020, (LandLAB, Auckland), <https://landlab.co.nz/amey-daldy-park>.



Fig. 14 LandLAB, Looking north along the Linear Park, Photograph, 2020, (LandLAB, Auckland), <https://landlab.co.nz/amey-daldy-park>.

## 2.6.2 CASE STUDY 2:

### Ancestral Mountain. Maungawhau Tīhi. (Mount Eden Boardwalk)

Isthmus worked closely with the Tūpuna Maunga Authority, to create a low impact structure to replace the track that had been forged by high foot traffic over a significant number of years. It is evident that the amount of visitors that walk the maunga had 'scarred' the site and the aggregate track had a network of rough surfaces that were prone to erosion. The design intent appears to be a way of facilitating the continuous use of the maunga as a walking track but also prevent further damage.<sup>39</sup>

The design incorporates a viewing platform at the peak and walking tracks that climb up and around the Rua along the edge. The design is terraced in the way it rises up the maunga, with timber underfoot and handrails that do not confine the user to the boardwalk. This is an interesting decision as it means that users can still go 'off track' and walk across the land, however this could be due to the importance of being able to physically connect with the maunga and the land.

The structure itself is also removable to ensure the lowest impact possible to the land. Members were hand carried to avoid invasive earthworks and further changes to the natural environment.

Working primarily in plan iterations of the track would show mapping of the site and identifying existing pathways, and where placement of timber, mesh and gravel would be incorporated. The actual mapping of the land is crucial in understanding how a structure could co-exist with the land and not become another form of invasive architecture.

Materials selected for this project based on recyclability and weatherability. Allowing them to become a part of the natural environment by changing with the elements.

The design prioritises views and takes a historical approach to the placement of the winding track. The track follows where the houses and roads of the Pāonce stood.



Fig. 15 Isthmus, *Extent of works Stage 1*, Pen on paper, 2020, (Isthmus, Auckland), <https://isthmus.co.nz/project/maungawhau-boardwalk/>



Fig. 16 Isthmus, *The boardwalk is founded on steel screw piles*, Digital Drawing, 2020, (Isthmus, Auckland), <https://isthmus.co.nz/project/maungawhau-boardwalk/>



Aerial photo shows how the boardwalk is seated in the landscape of Mangawhau. Sensitively tracing the ridge-line and integrating with its surrounding environment.

Fig. 17 Isthmus, *Aerial of Maungawhau Boardwalk*, Photograph, 2020, (Isthmus, Auckland), <https://isthmus.co.nz/project/maungawhau-boardwalk/>

<sup>39</sup> Isthmus, "Ancestral mountain. Maungawhau Tīhi."

## 2.6.3 CASE STUDY 3: Traditional Japanese Stroll Gardens

Design principles utilised in traditional Japanese stroll gardens look at the concept of journey as an experience rather than a task to be undertaken. Journey recognises that the user experience is not solely determined by reaching a destination. It is shaped by interactions, emotions, encounters and ideas.

Curved Pathways	Meandering paths and curves are featured in the stroll gardens tyle to create a sense of discovery and anticipation. This is achieved by being unable to perceive the entire landscape from a single vantage point. This also encouraged users to continue exploring.
Hidden Views	To maintain an engagement with the environment only parts of the landscape are revealed. Such as water bodies, pavilions, courtyards and boardwalks.
Shakkei	The concept of framing and borrowing scenery. This idea intentionally frames external elements to generate a seamless junction between the designed landscape and the surrounding environmental context. Integrating the designed landscape into its surroundings extends the visual experience and makes the journey feel more connected to the broader environment. <sup>40</sup>
Landscape variety	Densification of the landscape within the designed environment contributes to a sense of transition and progression. Variation in landscapes should be relevant to the environmental context and could include forest, bush, wetlands, hills and water bodies.
Places of Rest	The strategic placement of focal points, such as courtyards, seating areas, or pavilions provide an opportunity to rest and immerse yourself in the surroundings.
Materials and textures	To add an element of tactility to the journey, engage the touch sense. Sensory variation can give further indication to a progression through space. Examples of this include stone, gravel, wood, and grass.

<sup>40</sup> Fowler, Michael, "Unfolding Architecture, Enfolding Landscape: The Shakkei at Geppa-rō Pavilion,"

Building on these design principles, the expressed intentions in the landscape design lead to various desired outcomes for the users of the space.

Engaging senses: A design approach that is multi sensory engages the user to experience the space not just in the visual capacity but to facilitate a deeper connection with their environment through smell, touch and sound.

*Emotional connection:* The feelings that are evoked through anticipation and discovery help to make the designed environment more memorable and ultimately more familiar for visitors returning to the site.

*Evoke contemplation:* A connection with nature and the user's own thoughts is encouraged in spaces which are intended for pause and rest.

*Enhanced well-being:* a design approach that is focused on the journey rather than the destination is to promote relaxation, safety and stress reduction in order to contribute to user well being.

Japanese stroll gardens have been recreated across the world for their unique approach to mass and proportion to achieve a zen quality. This is achieved through the miniaturisation of traditionally larger scale environments. To make the user feel unconfined and serene in their environment. Major elements that define this style of landscape include water, rock/stone/pebble/sand, islands, plant life, bridges and pavilions. To translate the key ideas of these stroll gardens into the Tamaki Makaurau context, defining natural features should be considered to recognise the identity of the local environment.

## Chapter 3.

# Moana–Nui–a–Kiwa.

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## Traditional Oceanic Navigation

Moana-Nui-a-Kiwa, the great ocean of Kiwa is a traditional name for the Pacific ocean that was crossed by great navigators for generations. Kiwa is an ancestor with famed stories of great ocean exploration. He is understood as a master navigator responsible for guiding a waka on its voyage from Hawaiki to Tūranga (the Gisborne region). The area is sometimes referred to as Tūranga-nui-a-kiwa in reference to Kiwa's role as an important ancestor.<sup>41</sup>

Jeff Evans's testimonial publication *Reawakened: Traditional Navigators of Moana-Nui-a-Kiwa* shares the lived experiences of master navigators from islands across the Pacific, including Hawai'i, Aotearoa, Tahiti, and the Cook Islands. The reader gets to experience the resurgence of traditional methods of oceanic voyaging from the perspectives of navigators who learned their craft under the guidance of master navigator (Pwo) Mau Piailug.

Motifs and methods are shared through the unique approaches to way-finding by the individuals who learned to voyage using celestial and oceanic techniques. Processes that are implemented before the waka has left shore are crucial to a successful voyage, the falling of the tree and the building of the vessel are sacred activities that form important community connections. Charles Nainoa Thompson describes an affiliation that drew him to navigating, having beliefs "...service to place, service to community, service to nature."<sup>42</sup> Reinvigorating the art of oceanic navigation is described as having a positive impact on society.

41 Orbell, A Concise Encyclopaedia of Māori Myth and legend, 59-60.

42 Evans, *Reawakened: Traditional Navigators of Te Moana-nui-a-Kiwa*. 56.

## 3.1 Reflection and Reading the Environment

Milton Bertelmann shares the action of reflection as a grounding tool while learning from his mentor Piailug. Observing the techniques and considering their application before responding with immediate queries.<sup>43</sup> Furthermore, the reflection at the end of the journey revealed that much had been learned by the mentees in the process of actually voyaging. This underpins the importance of journey rather than simply destination. In the context of reflecting on a health journey, this would be an opportunity to reflect on the progress of wellness. Further to this, reflecting on a healthcare journey would be a tool for setting priorities and strengthening motivation. An individual's healthcare journey is rarely linear and patients encounter unexpected circumstances. Reflection contributes to building resilience by giving insight in adapting to challenges and navigating towards wellness goals.

## tohu. (noun)

Tohu (signs), can be translated to English as a sign, omen, mark, cue, directions, distinguishing feature.<sup>44</sup> These can be visual, auditory, or involuntary. Some principles from te ao Māori describe tohu as indicators of what is to come.<sup>45</sup> In the context of wayfinding, this would broaden our understanding of signage past the implementation of written directives to a method that engages the senses of the user.

43 Evans, *Reawakened: Traditional Navigators of Te Moana-nui-a-Kiwa*. 48.

44 Te Aka Maori Dictionary, "Tohu."

45 Hikawera Mitira, *Takitimu*, 257.

## 3.2 Ocean as a connector

The vast body of ocean known as Moana-Nui-a-Kiwa can be described as a connecting force rather than a dividing void. The resurgence of non-instrumental oceanic navigation holds an important significance for healing the colonial impact on Pacific nations. This revival represents a reclamation of cultural heritage, ancestral knowledge, and oral traditions. Fijian writer and anthropologist, Epeli Hau'ofa, offers an optimistic perspective on the reliance of the oceanic people in the face of the Pacific diaspora in his article titled "Our Sea of Islands".<sup>46</sup> The Pacific ocean is described as a unifying link between indigenous Pacific people who have travelled from their homelands. Hau'ofa makes the analogy that,

*"wherever Pasifika people travel, be it to Australia, New Zealand, Hawai'i, the mainland United States, Canada, Europe, and elsewhere, they can expand their kinship across the ocean, as the ocean is theirs and will always be their home."*<sup>47</sup>

This beautiful sentiment is an example of the connectivity the Pacific ocean provided both physically and spiritually.

Mau Piailug's critical influence in allowing the knowledge to live on through his pupils is described in an article written in the Honolulu star-advertiser by navigator Chad Baybayan,

*"For his pupils he generously shared his time with, Mau viewed and treated us as an oceanic 'ohana, defined not by an ocean that separated us, but rather an ocean that joined us around common traditions and a passion for an island lifestyle."*<sup>48</sup>

Piailug's legacy does not only impart navigation skills but also solidifies the notion that the vast ocean binds communities

46 Hau'ofa, "Our Sea of Islands." 148–61.

47 Hau'ofa, "Our Sea of Islands." 155.

48 Baybayan, "Piailug's greatest lesson is that we are a single people."

together through shared traditions as well as an affinity for protecting and nurturing an art form that was nearly lost.



Fig. 18 Monte Costa, Hokule'a Off of Windward O'ahu, Photograph, 1997, In *Reawakened: Traditional Navigators of Te Moana-nui-a-Kiwa* (Auckland: Massey University Press, 2021), 26.

## 3.3 Significance of the Southern Cross

The technical significance of the southern cross is that it can be used to estimate position, it is a prime example of a group of stars that points north and south when they are standing up right in the sky.

*"When the lower star (Acrux) is as high above the horizon as it is beneath the upper star (Gacrux), the observer is at 21 degrees North, the latitude of Hawai'i!"*<sup>49</sup>

Accounting for factors such as time of year, the star's ability to assist with positioning and trajectory is a scientific method and is illustrated to be the most reliable way of navigating the ocean. The stars are key positioning markers that aid crucially while navigating at night.



Fig. 19 Jeff Evans, Te Aurere, Bay of Islands, Photograph, 2001, In *Reawakened: Traditional Navigators of Te Moana-nui-a-Kiwa* (Auckland: Massey University Press, 2021), 194.

49 Evans, *Reawakened: Traditional Navigators of Te Moana-nui-a-Kiwa*. 60.

### 3.4 Star Compass: Instrument of Navigation

The star compass consists of 32 points around a circumference, it is a crucial tool introduced to oceanic navigator students. As part of their way-finding studies they are required to learn how to build and use the instrument.<sup>50</sup> Four opposing points mark the cardinal directions, North, South, East and West. The 28 points that are spread equally between these points make up what is referred to by Nainoa Thompson as “Star Houses”.

*“The star compass is used to organise any clues a navigator might see or sense that will help him keep track of progress on a voyage”<sup>51</sup>*

This is achieved through the memorisation of habits of the moon and stars. The sun will change positions in the sky based on seasonal factors, whereas the stars do not change in relation to each other, this makes them an ideal and reliable tool for navigating. The non-moving anchors provide a spatial awareness that supports the navigator through their journey. Certain stars will rise and set within the different houses that make up the circumference of the star compass, providing a structural framework for the methodological positioning of the waka in the ocean.

The use of the star compass as a tool for navigation is a highly technical skill that requires an in-depth understanding of constellations and their travel patterns across the pacific night sky. The design of the Micronesian compass has been criticised for its technicality as the 32 segments do not align equally with the stars that they reference.<sup>52</sup>

Variations of the star compass are found in cultures that have different positions in relation to the celestial bodies that they use to navigate. For example, barings

50 Evans, *Reawakened: Traditional Navigators of Te Moana-nui-a-Kiwa*. 112.

51 Evans, *Reawakened: Traditional Navigators of Te Moana-nui-a-Kiwa*. 64.

52 Frake, “A Reinterpretation of the Micronesian ‘Star Compass,’” 152.

from Tuapia’s chart are associated with Carolinian guiding stars, having variations between the 32 points ranging from 2° - 23°.<sup>53</sup> This highlights the importance of accessibility for non-experts when navigating.

The celestial star compass, and its variations, serve as an essential tool for traditional navigators. It offers a structured framework to interpret the natural environmental indicators to guide voyagers across Moana-Nui-a-Kiwa. The reliance on the unchanging position of the stars makes it a reliable tool, however, the technical knowledge required to master it is clear. Variations in the design of a celestial compass across environmental contexts highlight the adaptability of the compass as a tool.

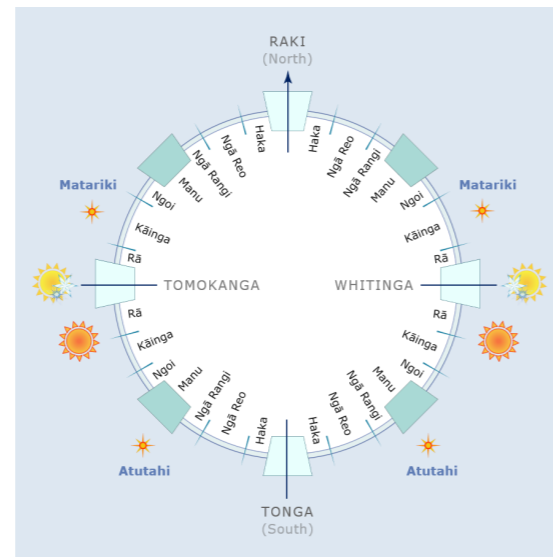


Fig. 20 Rāwiri T., Māori star compass, 2023, in *Te Ara - The Encyclopedia of New Zealand*. (Auckland), <https://teara.govt.nz/en/diagram/2222/maori-star-compass>

53 Di Piazza, “A Reconstruction of a Tahitian Star Compass Based on Tupaia’s ‘Chart for the Society Islands with Otaheite in the Centre,’” 386.

### 3.5 Journey - Where you have come from and where you are going

*“The culture of way finding and voyaging is one of passing on information, and collaboration, between navigator and student, captain and crew, and elders and community. For generations our ability to wayfind, motivated by our curiosity to explore by going to sea on our voyaging canoes, has propelled us to distant horizons, confident in where we are going, but always remembering where we have come from”<sup>54</sup>*

Revered Hawaiian voyager Chad Kālepa Baybayan expressed this analogy in an email to Jeff Evans emphasising the cultural significance of oral traditions that transfer tacit knowledge through generations. The correlation between curiosity and exploration is also highlighted, particularly by Pacific cultures who have a profound connection to the sea.

This strong voyaging history instils a confidence in ability to navigate the unknown. By keeping a vision of where you are going in your mind and using the grounding knowledge of where you have come from to guide your journey. In the context of way-finding in landscape, journey for a non-expert navigator is made uncomplicated by clear anchors (landmarks) and lines of sight from the beginning of their voyage. When navigating to the destination is clear, the user can feel comfortable to explore and participate in the landscape.

54 Evans, *Reawakened: Traditional Navigators of Te Moana-nui-a-Kiwa*. 113.

## 3.6 Essential insights for navigators

Natural signals (tohu) are the primary tools used in non-instrumental way-finding when voyaging across bodies of water. These tools listed to the right are used to find direction and maintain direction. Nainoa Thompson describes a hierarchy of the natural features to utilise in the navigation process.

“The sun is number one and the moon is number two. The reason for that is that they are big and bright, and you can see them easily at the horizon when you are trying to align your course within the star compass. The stars are number three, because if you learn your star lines you can use them to the same end. Number four is the long swells, number five is the local swells and the final one is the wind.”<sup>55</sup>

The way that Thompson breaks down the methods of positioning while on the open ocean can be separated into two categories, finding directions and maintaining direction. It is important to recognise that there is a necessity for a deep existing knowledge to be able to maintain direction based on the behaviour of natural elements such as wind and swells. However, these principles of using cues and intuitive signals to direct position can be applied to way-finding in a landscape context.

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<sup>55</sup> Evans, *Reawakened: Traditional Navigators of Te Moana-nui-a-Kiwa*. 113.

1. Sun

2. Moon

3. Stars

4. Long swells

5. Local swells

6. Wind

Translating these insights for this research project, we can consider how the elements of the sun, moon, stars, long and local swells, and wind might relate to the potential qualities of the site. For instance, the seasonal nature of the site could correspond to the changing positions of the sun and moon. The stars could represent non-moving anchors within the landscape. Rushes of people during the day might equate to the long swells, while the site's daily ebb and flow could mirror the local swells. Lastly, understanding which way one is “blown” by the wind could provide valuable insights into site dynamics.

Sun & Moon	Seasonal nature of the site
Stars	Non-moving Anchors
Long swells	Tidal rushes of people during the day
Local swells	Loudness of the day and quietness of the night
Wind	Which way you are being pushed/pulled towards

## 3.7 Applying the oceanic approach

Using the framework outlined for navigating the ocean, an approach to directing way-finding on land may look like:

- Landmarks (Anchors)
- Local context and cultural cues
- Materiality and texture
- Environment sensing
- Efficiency and exploration

This hierarchy also reflects the knowledge foundations required to navigate a space from the clear to the intuitive. There is an expectation, often, that when a user visits a space for the first time, that they come equipped with some tools for finding their way. Examples of this would be, arriving with the building name or number they are seeking out, following a crowd or flow of people, not diverging from a direct path towards a landmark structure, or seeking out information from a central point and continuing their journey from there.

## 3.8 Findings

Researching the concept of traditional oceanic way-finding has revealed that tangible and intangible tools are engaged to orient voyagers across the Pacific. However the knowledge frameworks, dexterity and years of experience the navigators are equipped with are the true methods of Moana-Nui-a-Kiwa navigation.

The fundamental principles of traditional open ocean navigation, as described by Nainoa Thompson<sup>56</sup>, offer insights that are not restricted by the context of ocean voyaging. They provide a nuanced understanding of positioning within unfamiliar environments, and underpin the importance of landmarking, environmental context and local awareness. As visitors engage with these cues they can draw on their own existing knowledge to propel them through a space. This approach can transform way finding used in the landscape environment to employ a holistic approach to seeking out destinations and simultaneously embracing their surroundings.

Visitors to Greenlane Clinical Centre can engage with these same principles as they are translated from an oceanic approach to wayfinding in a landscape. Architectural features of the site can be recognised by patrons as landmarks, existing on the site now is the Boiler House which features a chimney that stands taller than the 9 storey main building. Materiality and texture of surface is a strong indicator of direction, telling visitors that they remain on the path they started on, or if they have diverged and begun a new journey. Environment sensing and exploration work in tandem to encourage visitors to trust their instincts when navigating space, that although you have a set path there is opportunity to traverse.

<sup>56</sup> Evans, *Reawakened: Traditional Navigators of Te Moana-nui-a-Kiwa*. 171.

## Chapter 4.

# Interconnections.

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## Exploring the Link Between Journey, well-being, and Environmental Health at Greenlane Clinical Centre

This chapter seeks to explore the links between journey, well-being and the environment. Journey, as highlighted in the previous chapter, is a process that involves establishing clear position and destination to ensure ease of navigation. When these two points are achieved, the navigator can explore and interact more freely with the landscape. How people can connect with the land that they are traversing is a uniquely Māori concept, that weaves holistic and sustainable approaches to achieve a synergistic relationship. Looking to this world view we can reveal the benefits of supporting land health at Greenlane Clinical Centre.

## 4.1 Journey and well-being in relation to physical health

The journey of a user through a physical space has a significant impact on physical and internal well-being. Multiple factors frame the experience that leads to effects on well-being. Factors that influence the physical well-being of a space's user include, activity, access to green space, safety, air quality, and accessibility to name a few. Social factors that have an effect on a user's internal well-being are what is experienced while utilising the physical environment, these include social interactions, privacy, natural light, and psychological and cultural factors.<sup>57</sup>

Through a local lens the cultural factors that connect individual's well-being and the environmental context can be highlighted in the Māori world-view. The interconnectedness of indigenous knowledge and kinship with the environment is akin to the process of raranga or Māori weaving. Where the different strands of knowing are interwoven, creating a holistic understanding of well-being in the Māori health context.<sup>58</sup> The land provides physical and spiritual nourishment through the important connection between body and land. When considering the treatment of land and the intended effect it has on the users of a space, intentions need to be set for the beneficitation of both. The weaving of knowledge streams to form a narrative of environmental connection strengthens the notion that the health of the land around us is an influential factor of the well-being of spatial users.

<sup>57</sup> National Research Council (US); Institute of Medicine (US), "Panel on Understanding Cross-National Health Differences Among High-Income Countries," 193.

<sup>58</sup> Reweti, A., F. Ware, and H. Moriarty, "A tangata whenua (people of the land) approach to conceptualising Māori health and well-being," 13.

## 4.2 Effect of environmental factors on well being

Chapter 7 of “U.S. Health in international Perspective: Shorter Lives, Poorer Health”<sup>59</sup> explores the impact of built and social environmental factors on the users health. The chapter discusses how various factors of the physical environment, as well as social aspects, can affect the well-being of individuals.

*“Increasing attention has focused on the implications for health behaviors and social interactions that are created by the built environment. The built environment refers to the presence of (and proximity to) health relevant resources as well as to aspects of the ways in which neighborhoods are designed and built (including land use patterns, transportation systems, and urban planning and design features)”<sup>60</sup>*

### *Social Environment*

Stress stemming from the conditions of our local environment, particularly our neighbourhoods, is another critical factor affecting both our physical and mental health. This highlights that the appearance and maintenance of our surroundings have a direct influence on the well-being of individuals who interact with them.

### *Built environment*

The influences of the built environment include the mixed use of land, street connectivity, and transportation networks as well as preferred paths. These are design elements that shape pedestrian routes and are also believed to impact the overall layout of the urban landscape. These factors influence a site’s “walkability” and are suggested to influence the physical activity levels of the users. Preferred paths are design features that influence walking patterns and are also suggested to influence the urban design of the landscape. Overall, though many complex factors play a part in impacting users’ well-being, the site condition is a key factor in shaping the health journeys of the visitors to a site. Treatments of land, air and built environment culminate in the overall user experience.

<sup>59</sup> National Research Council (US); Institute of Medicine (US), “Panel on Understanding Cross-National Health Differences Among High-Income Countries.”

<sup>60</sup> National Research Council (US); Institute of Medicine (US), “Panel on Understanding Cross-National Health Differences Among High-Income Countries,” 193-194.

## 4.3 Findings

This chapter explores the interconnections between a user’s journey through physical space and the impact that has on their overall well-being in my physical and internal aspects. This intricate relationship is influenced by numerous factors. The Māori world view exemplifies these intricacies, highlighting the vital connection between the body and the land. Acknowledging the historical and cultural importance of the Greenlane Clinical Centre and its potential for healing and rejuvenation is paramount. This recognition aligns with the Centre’s primary objective of improving the physical well-being of its patients. Embracing indigenous knowledge systems and respecting the connections between the land, culture, and history of the site can lead to the design of spaces that nurture both physical and internal well-being. The result optimistically being harmony between people and the land that they inhabit.

## Chapter 5.

# Collage as a method.

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This research's primary methodology is design, using collage making as a method to organise and analyse the opportunities for the middle landscape at Greenlane Clinical Centre. This chapter delves into the process of revealing conditions of the site that have existed in the past and how they can be preserved as part of the landscape's history. Beginning with abstract interpretations of experiencing the site from a human scale, these collages lay a foundation for the current state of the campus landscape. In this research I use collage to express and explore the experiential qualities of moving through the journey, as well as a design tool to express potential navigational design responses. Collages become ways to represent and explore the agency and effect of the landscape in the site and in this navigational design context.

Within this exploration of making, this chapter looks to case studies of practitioners who employ collage as a way of integrating multiple functions into built form. This aids in gaining insight into how collage has the potential to extend beyond combining just physical layers, but intangible histories and functions. Combining these streams of research will further enrich the understanding of how existing and past site conditions can be organised to make the landscape more intuitively navigable for users of Greenlane Clinical Centre.

## 5.1 Process of making: Translating drawings into form

Translating a concept to form is the basis on which architecture declares its value, as described by Borden in *Process: Material and representation in architecture*;

*"The translation of drawing into built form engages materiality."*<sup>61</sup>

By this we are meant to understand that at the conceptual stages of design the chosen methodologies are beginning to dictate the final form. This is particularly important to consider when designing for the landscape at Greenlane Clinical Centre, as the existing site components (ground, buildings, roads, footpaths) are a collage of the site's healthcare journey. Thus, when we integrate imagery and materiality of the existing site into a design, we decide that the final form will acknowledge the site's history. When we consider designing without removing anything from the site, and only introducing intentional interventions, we pursue the benefit of organising the site without changing the distinctive role of Greenlane Clinical as a historical place of healing.

<sup>61</sup> Borden, *Process: Material and Representation in Architecture*. 10.

## 5.2 Practitioners who use collage as a methodology

### KWY Studio

Play Contract - Superflex and KWY Studio

This playground project by KWY studio in conjunction with Superflex (an urban design collective) is founded on rules set by the users of the playground around what play means and how it is enacted. Time is not a constraint and imagination is a necessity to generate a story for the type of play that is performed. The design was developed with 12 children from the Billund in Denmark, their playful lego models lead the designers to the types of topologies that are desired in play, both in the collective act and individual.

Different experiences were identified, such as rest and exercise. From these actions are found; Swim, climb, Jump, Read, eat, sit, slide, swing, and draw.<sup>62</sup> The incarnation of these movements are what lead to the formal design of the play areas. The design features iterations of steps, gateways, bridges, walls, decks, pavilions, pyramids and towers. The process that led to the final design was giving the children 10,000 legos bricks to design freely and with the data gathered analysing the forms and collaging the effects to create monolithic structures that are situated along the edge of a stream in Billund, Denmark.<sup>63</sup>

Collage is used here in the intangible sense that multiple actions have been amalgamated into a form to diversify the way children can interact with the structure. Additionally the design process consisted of layering concepts put forward by the children as to what would be the most desirable play outcomes, hence the design having multiple playful opportunities for interaction.



Fig. 21 KWY Studio and Superflex, "Children's Lego Models," 2021, KWY Studio Website. (Denmark), <https://www.k-w-y.org/Play-Contract>



Fig. 22 KWY Studio and Superflex, "Monolithic play structure," 2021, KWY Studio Website. (Denmark), <https://www.k-w-y.org/Play-Contract>

62 KWY Studio, "Play Contract".

63 KWY Studio, "Play Contract".

### Office MMX

Home Services - Reimagining the service station

A project entry for the nation infrastructure commission in response to the proposed rail link connection along the Cambridge Oxfords Corridor in The United Kingdom. The brief seeks to establish placemaking as a method of resolving NIMBYSM (Not in my backyardism) that so often occurs when government direction makes changes in rural areas. The infrastructure that would be integrated into this country setting, however, seeks to be a welcome addition that considers the obstacles of landscape and ecosystem damage, added pollution and view disruption.<sup>64</sup> The United Kingdom's government plans to lower carbon emissions by petrol and diesel vehicles by ending sales in 2030.<sup>65</sup> The service station will need to adapt either to serve the electric vehicle or prepare for a lower demand in fuel and provide other means of servicing travellers and the community in which it exists.

Conversely, this firm uses collage to visually represent their projects. The strong visual language is most effective in conveying non-built projects and concepts. This is an example of how collage is used to style a design in a persuasive way that can adjust the reality of a project to evoke feeling and generate conceptual clarity. Collage is used here to tell a story that may otherwise be limited by the real world constraints of a built project. This is relevant for the designing of landscape at Greenlane, as this speculative project need not be restricted by budgetary or legislative limitations.

64 Office MMX, "Home services- Reimagining the Service Station".

65 GOV.UK, "Government takes historic step towards net-zero with end of sale of new petrol and diesel cars by 2030."

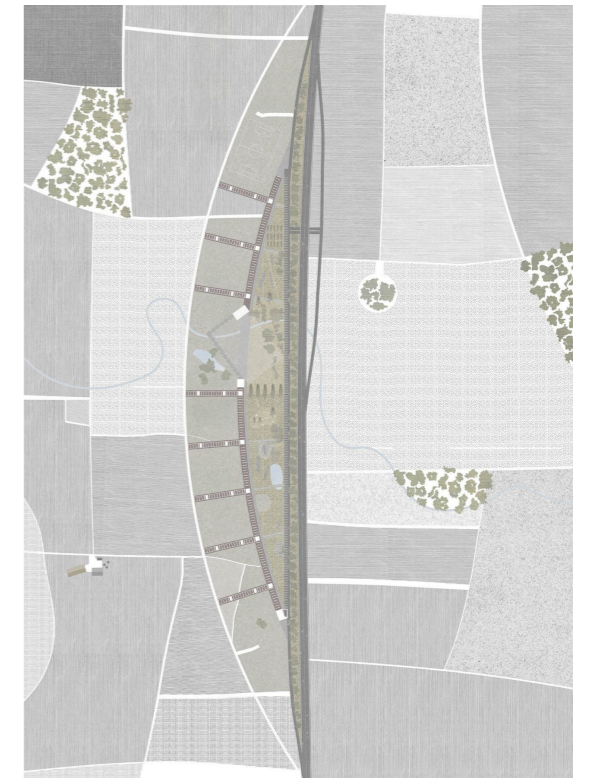


Fig. 23 Office MMX, "Site plan of Proposed Infrastructure," 2017, Office MMX. (U.K.), <https://www.officemmx.com/project/homeservices>

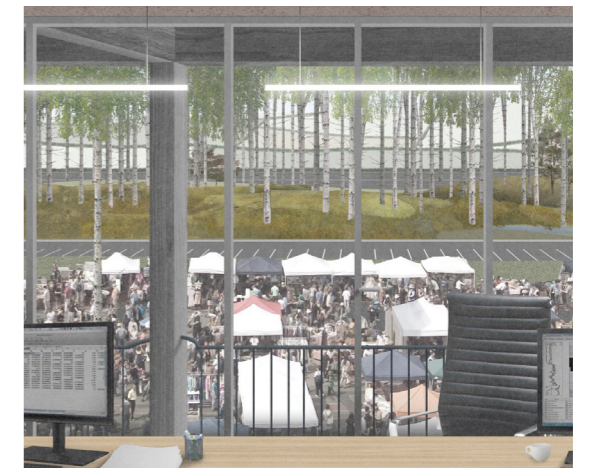


Fig. 24 Office MMX, "Internal collage visualisation," 2017, Office MMX. (U.K.), <https://www.officemmx.com/project/homeservices>

## 5.3 Findings

This chapter focuses on design as a methodology that employs collage to represent layers in the landscape and to reveal the possibilities for improved way-finding at Greenlane Clinical Centre. Preservation of site history is key to expressing the site's existing role as a healthcare facility, but acknowledging the reordering of forms can contribute to an improved navigation experience for users. Practitioners who engage collage are cited as examples of implementing a design method in a multidimensional way. Collage is used here as both a visual and intangible design process. This method, implemented into this design research has the potential to generate impact on the representation, preservation and enhancement of the Greenlane Clinical landscape.

Chapter 6.

# Methodology.

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Making discoveries and designing to reveal layers



Fig. 25 Site photographs taken by author. Collaged to create a section of the site from a human scale. Photos in this section are ordered as the visitor walk through the front entrance from Greenlane West then around the National Women's Hospital Building and then to the entrance of the Main Building. Finishing the journey looking to the nurses accommodation across the greenfield space.

## 6.1 Initial photo discoveries

In March of 2022 our tutorial group, accompanied by members of Ara Manawa design collective, visited the Greenlane Clinical Centre for our first site visit. We entered through the Greenlane West entrance on foot and followed the road through the hospital grounds. We observed the surrounding buildings from a human scale. Circling the Auckland regional public health building we noted the rear entrance to the site from Claude road. It was pointed out to our group that this entrance was high traffic for staff entering the site, due to the free parking in the surrounding suburban streets. We reconnected to the main car park area between the two main buildings and then entered the main hospital building via the porte cochere entrance.

Key observations made in my second visit to the Greenlane Clinical Centre revealed the poor level of walkability of the site and generally unhelpful signage that was placed sporadically on the sides of buildings. The footpaths were not wide and were built around the roads that weave between the buildings. I observed that the primary pathways between buildings included pedestrian crossings and medians. The raised medians are incredibly inaccessible, with signs and street lighting blocking the paths that pedestrians have to take.

Painting over the carparks and blocking out the vehicles from the photos taken of the site visit showed how much space is taken up in a person's vision by modes of transportation.

Painting satirical signs which I felt would not seem out of place on the site, I playfully exaggerated the specificity of the signage. Drawing a caricature of the directions on the signage I could remove the hostility of the language and take away the weight of being directed by a sign that has not been maintained.



Fig. 26



Fig. 27



Fig. 28



Fig. 29



Fig. 30



Fig. 31



Fig. 32

Painted photographs, satirising the existing site signage. Playfully highlighting the 'unhelpful-ness' of the language and medium used to direct visitors.

## 6.2 Mapping Experience

The figure to the right is an experiential map showing the influencing site components that make up the Greenlane Clinical. The route highlights the nonlinear nature of the site's roads and footpaths, many times they diverge and traverse across each other. Points of interest are identified in the clusters of visual information shown in the map. Here we see the rationalisation of areas on the site, and a justification of what areas are key to the navigational experience.

Here primary areas are identified as The front entrance of the Main Building, the middle landscape between the Main Building and the National Women's Hospital and the central roundabout. By diagramming the site in this way, I have simplified the complex terrain into a series of opportunities that can become the basis for further designing.

### *Nature of Surface*

The behaviour of users interacting with surfaces can either be intentional, designed by the space's creator, or unintentional, resulting from other site activities. An example is how safety is ensured for pedestrians and vehicles sharing the same space. Measures include speed bumps, rumble strips, colours, zebra crossings, and decals signifying shared usage.

Unintentional or natural surface features that discourage use include damaged footpaths, weather-worn ground, and overgrowth. Any condition hinting at discomfort or danger discourages certain routes. Elements that further deter interaction encompass components seemingly forbidding access, like hostile signs, cordoned areas, road cones, and construction tape.

An examination of Greenlane Clinical walkable topology reveals layered surfaces stemming from user-created paths, sheltered walkways, and demolition remnants. Like a collage, these layers narrate the origins of the site's current state.

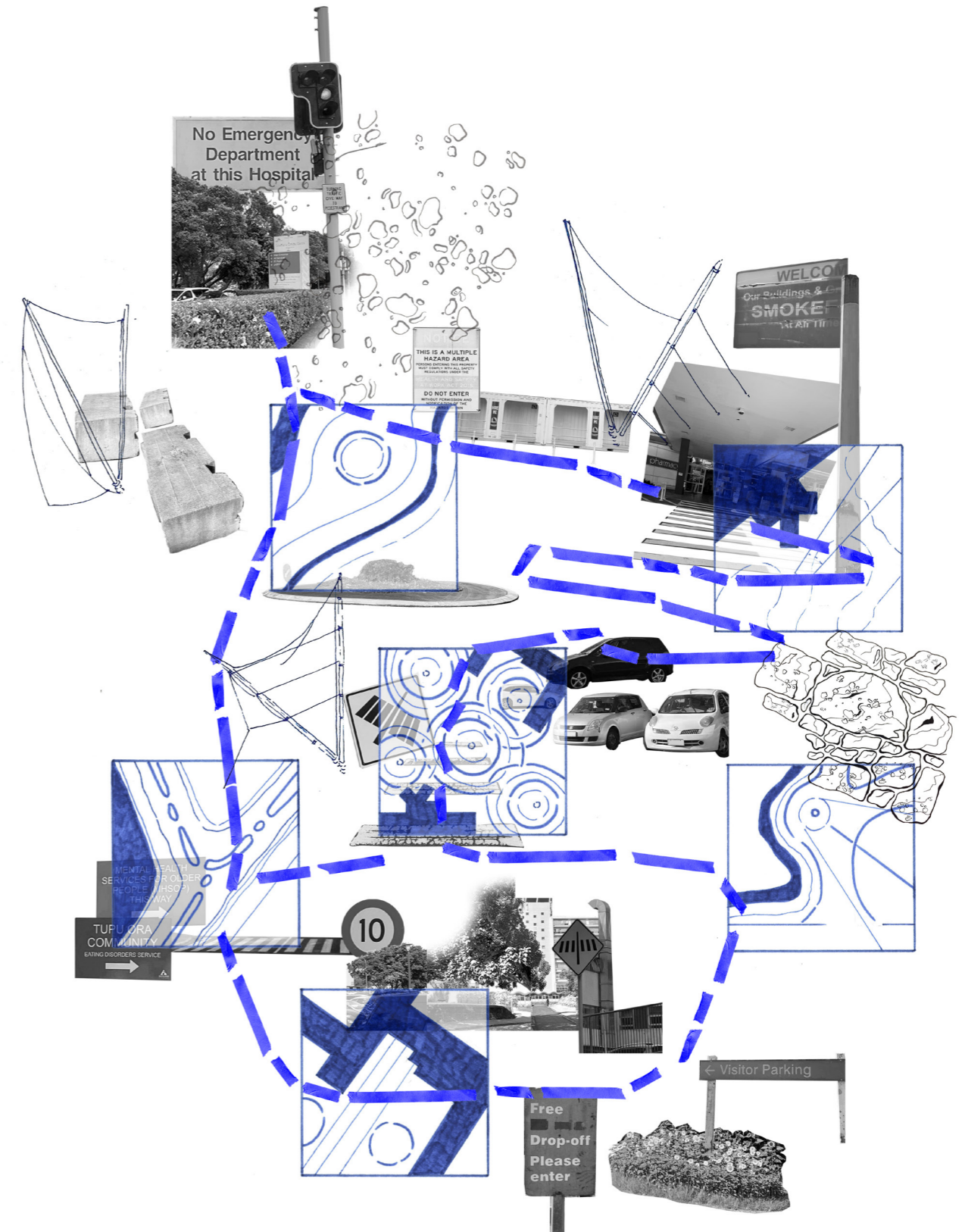


Fig. 33  
Experiential map of Greenlane Clinical  
Centre from the perspective of the  
author.

## 6.3 Pragmatic Mapping and cross mapping

Mapping to identify potential connections for analysis is a foundational method for generating context appropriate design. Mapping can create powerful visual and spatial analysis that are significant to supporting findings in research.<sup>66</sup> The maps of the greater Greenlane and Epsom areas reveal the layers of infrastructure that exist on the site today as well as the state of the current natural environment. This importance of mapping these complex topologies, is to support decision making when speculating as to how the site can be transformed.<sup>67</sup>

66 Stewart, "Counter-mapping Heritage: Memory and Significance in Places of Racialised Land Dispossession: The Case of Lower Claremont, Cape Town," 684.

67 Lukez, *Suburban Transformations*, 51.



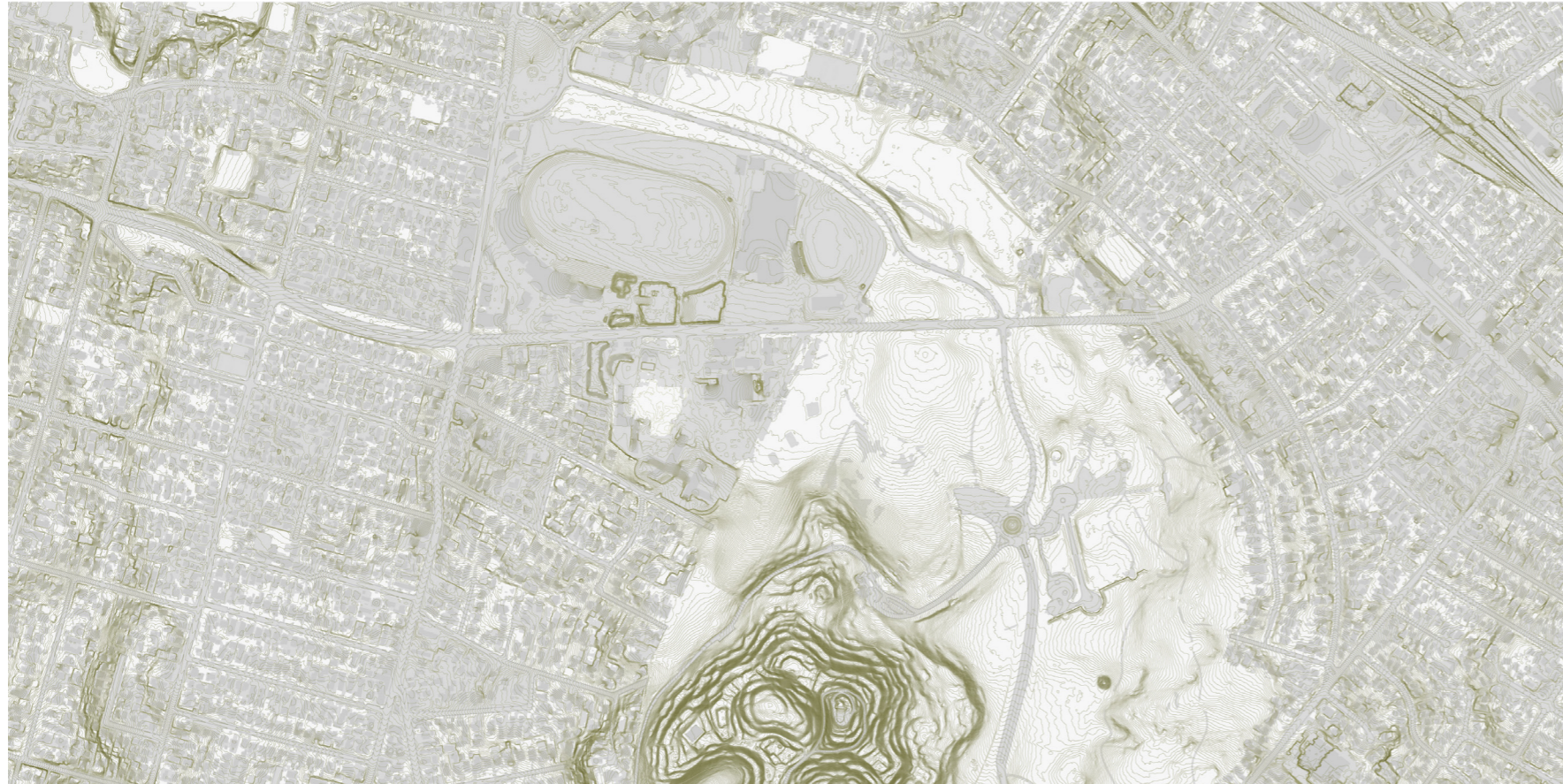


Fig. 34 Contours and Impervious Surfaces

What can be seen from the combining of these maps is the impact the natural environment has had on urban development. Particularly in relation to the contours of Maungakiekie, the urban environment wraps around the eastern peripheral of the park. The viewer can imagine what the expanse of the maunga may have looked like before European settlement. The suburban encroachment seems to create a diaspora for the parts of the maunga that are separated by the western basalt wall.



Fig. 35 Contours and Building Footprints over Hochstetter map

The historical Hochstetter map of Auckland was first published in 1865-66 by German geologist Ferdinand Hochstetter. Hochstetter and artist/surveyor Charles Heaphy examined the geology of the Auckland isthmus in 1859, recognising the clear volcanic features of the land.<sup>68</sup> Lava flows that extrude from the summit of Maungakeikei reveal the fierce nature of the land. There exists a duality between comfort and discomfort when revealing the history of the land that suburbia has been constructed upon.

<sup>68</sup> Smith, Lowe and Ian Wright, "Volcanoes - Cone volcanoes and volcanic fields."

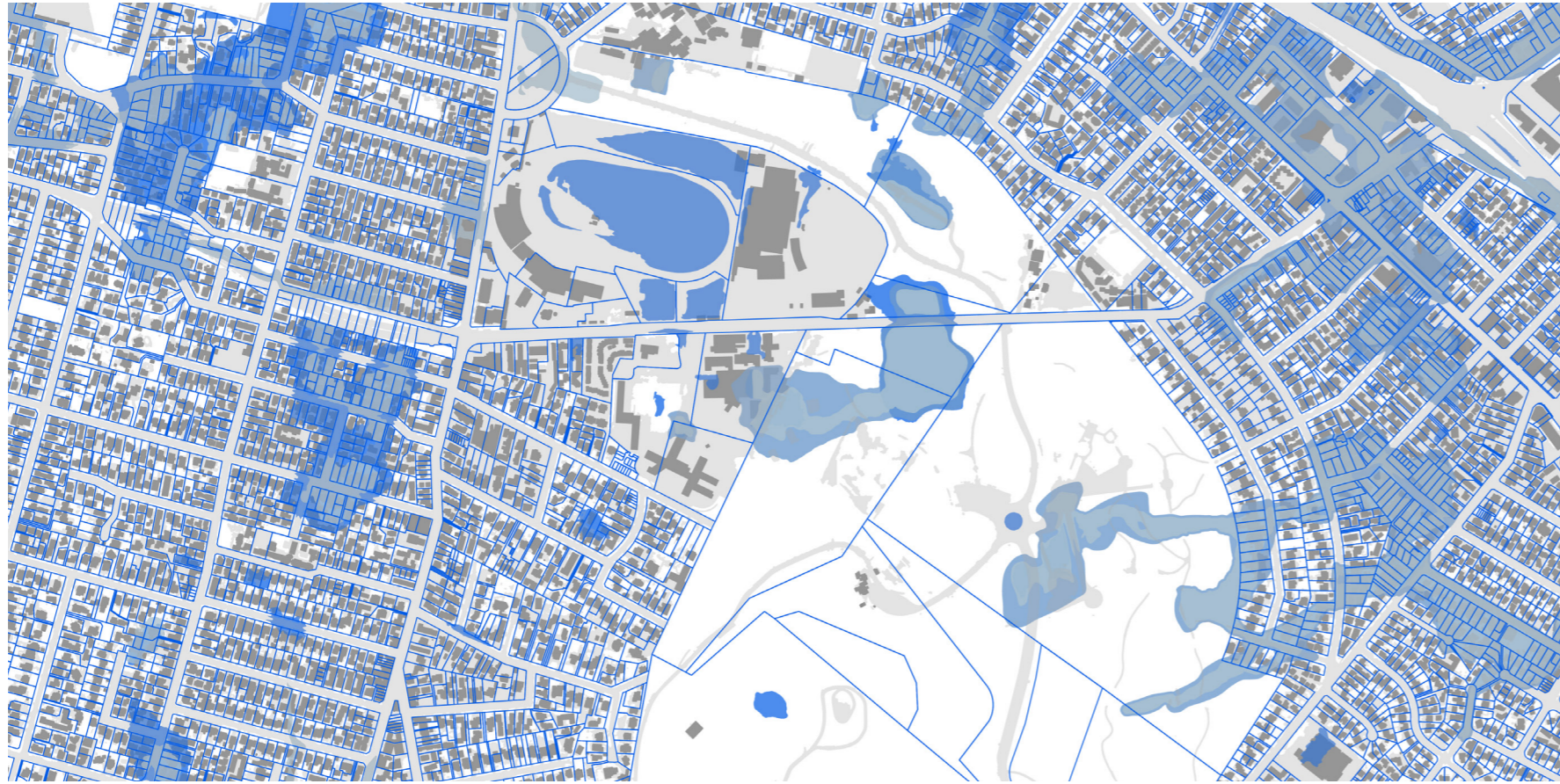
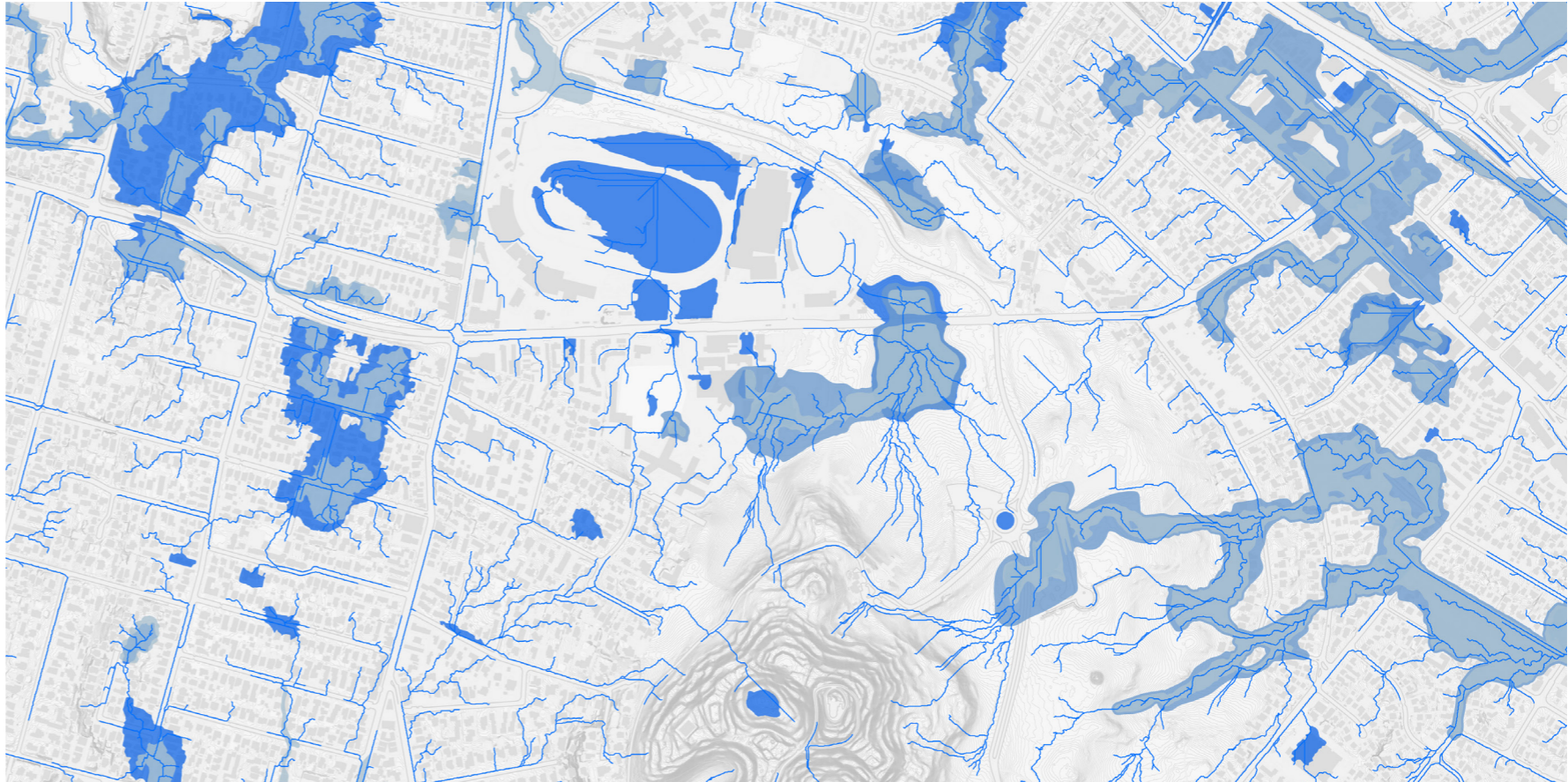


Fig. 36 Impervious surfaces, Building Footprints, Ownership and Floodplains

This combination of maps exhibits a municipal perspective of the land and its use, however, it also reveals a hierarchy of land occupation. With the informal recreation and conservation zone of Cornwall Park being the primary occupier of the map. If we consider collective spaces to be sites that are accessible to the public for periods of time or unique reasons, then Greenlane Clinical Centre, Alexandra Park and the Farro Epsom shopping vicinity are indicators of a community precinct.

Fig. 37 Overland Flows and Floodplains

Mapping the overland flows and floodplain of the greenlane area, highlights the risk of building in flood prone areas, however, also shows opportunities for integrating natural water flows into a design. In this particular map we can identify two major floodplains in the vicinity of the Greenlane CLinical Site as well as an overland flow that passes in between the two main buildings.



## 6.4 Navigating Unwelcoming Terrain: Exploring Hospital Campus

These collages are an interpretation of what it was like to navigate the hospital campus from the perspective of someone who had never been to the site before.

The buildings that make up the campus loom overhead, and are an amalgamation of the site's history as a healthcare precinct. The remaining buildings are an indicator of the history of the site, and further information provided by research and Ara Manawa revealed that buildings have been demolished from the site leaving room for upgraded facilities and new additions.

As our journey was on foot, it became clear that if you were unfamiliar with the site's layout you would need to look for or seek out the blue signage which was scattered across the facade of buildings. The signage was in varying states of presentation, and text was to many different scales. Much of the signage was directed to the human scale, meaning if you were navigating from inside a vehicle you may not be able to read the directions without vacating your car. With a large portion of the site being car centric, it seemed counter initiative to have many small signs and minimal signage that spoke directly to drivers.

The signage also seemed to be directed at certain groups of people, if you were unsure of where you were going, you may not know if a certain action was directed at you. For example the "Free Drop-off Please Enter" is unclear whether it is directed at staff or patients as the entrance via Claude Road is a fair distance from the main entrance of the main building.

To accompany the signage as an unhelpful navigation experience, the landscape of the site seemed as though it had not had the chance to heal from the years of change and growth the hospital had experienced. The footpaths along the main entrance road faltered and had obstructions that blocked the pedestrian from making a safe journey along the

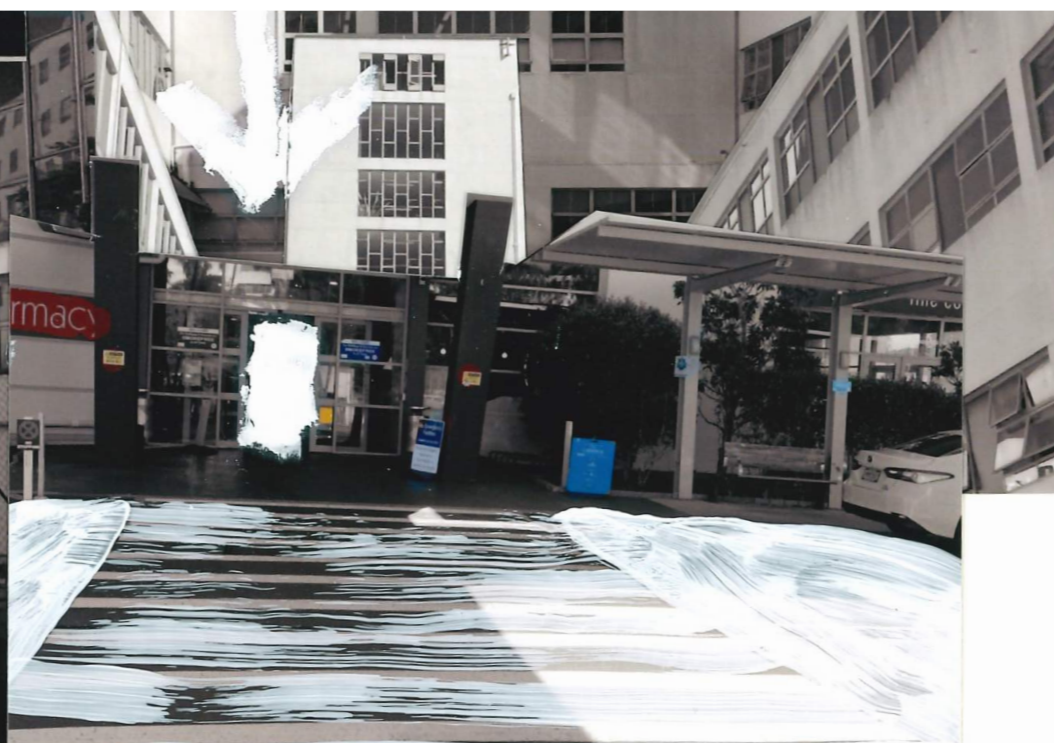
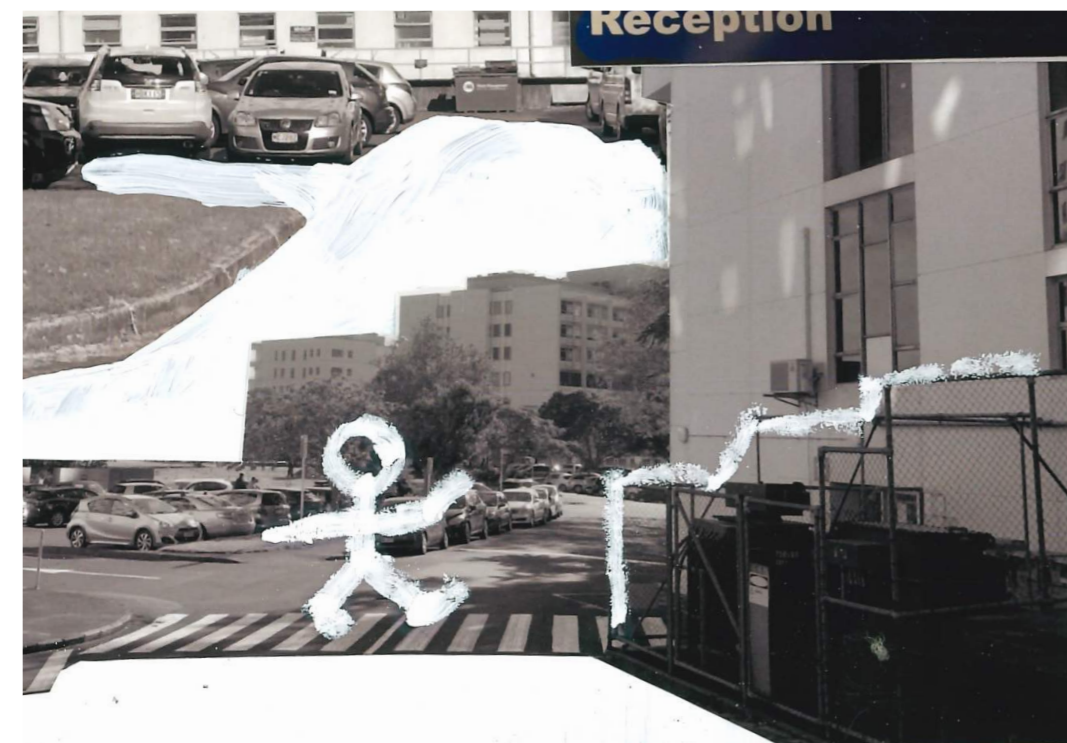
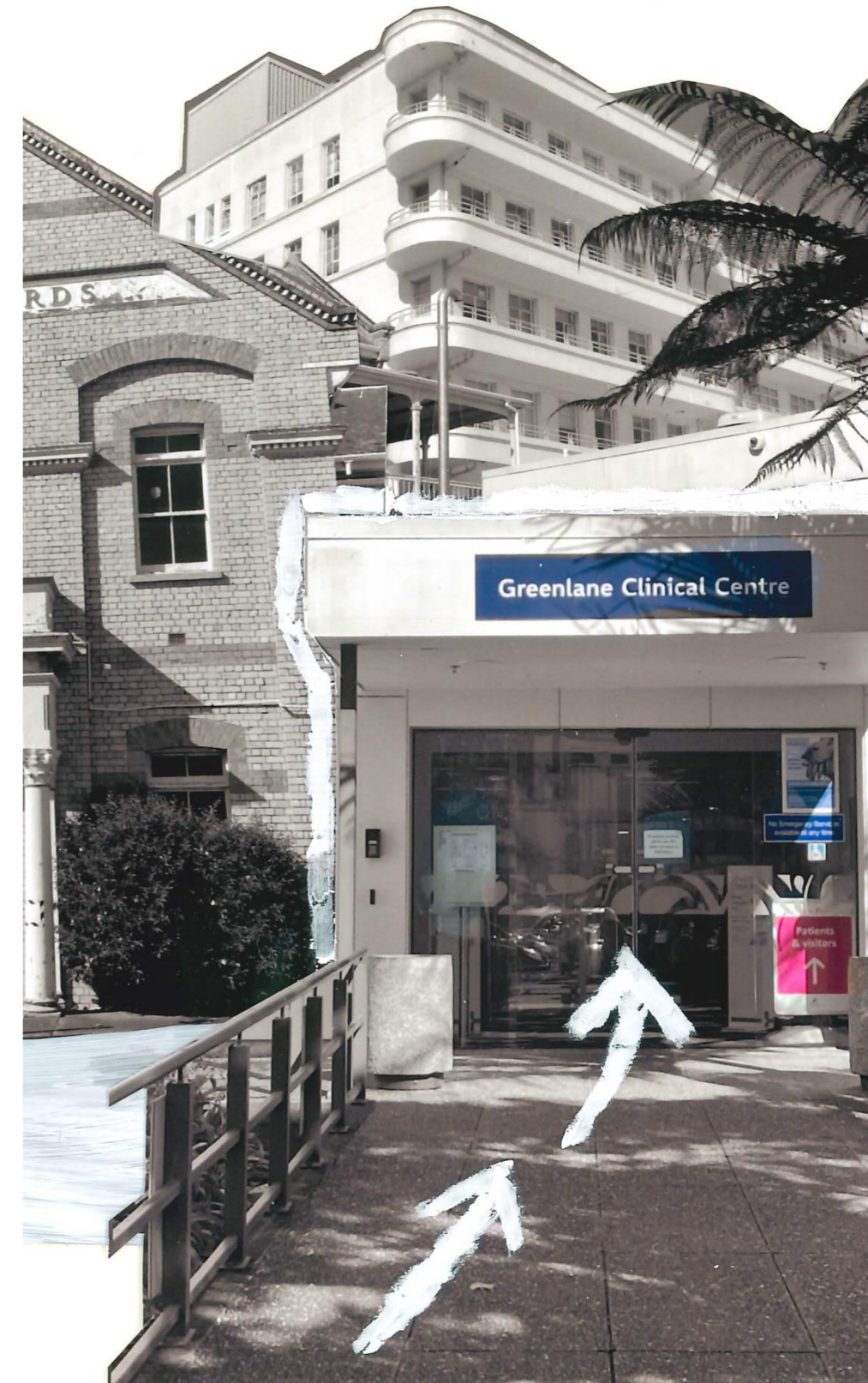
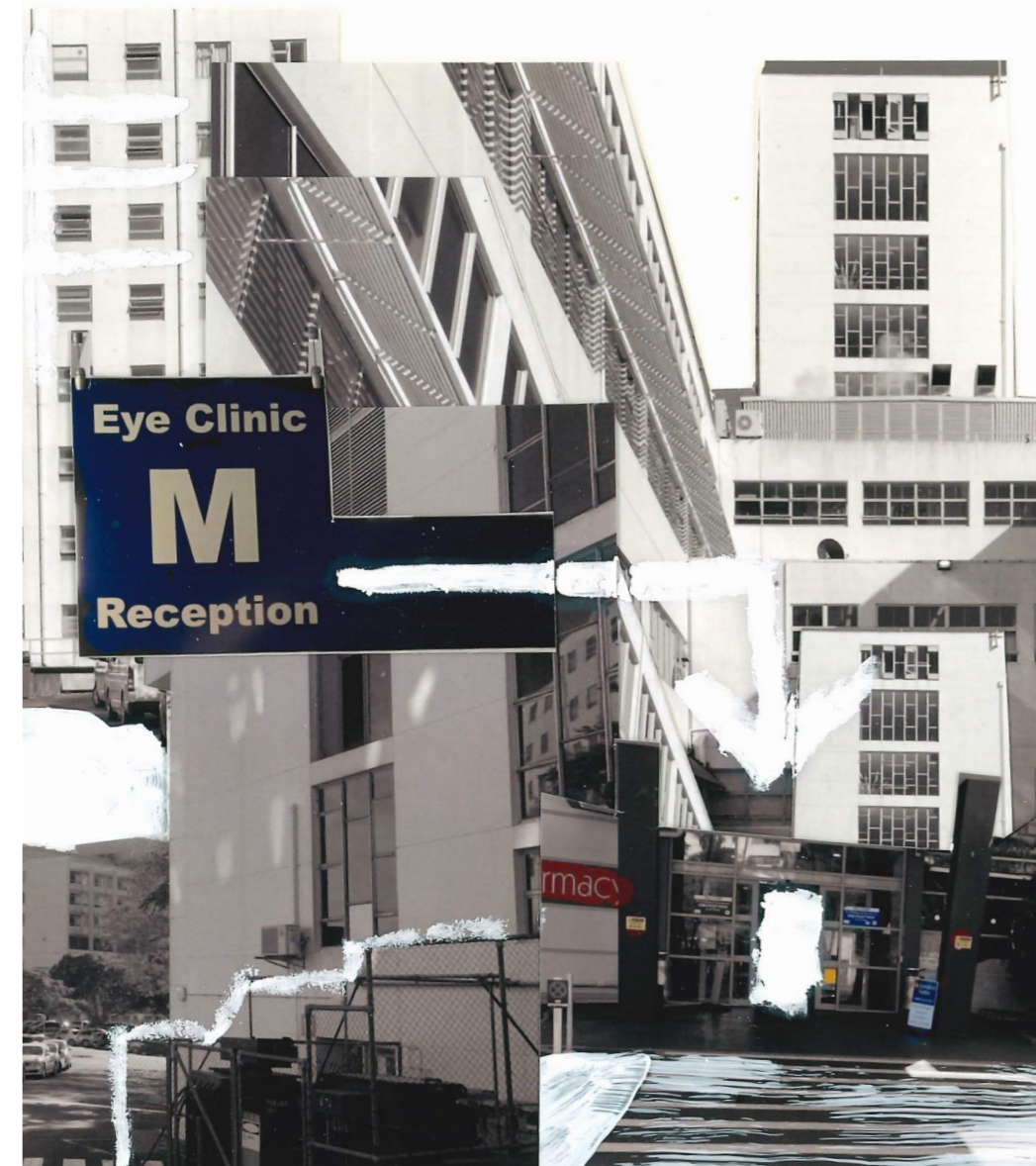
roadside.

From this series of collages I identified the way-finding capabilities of the site as lacking, and inaccessible to the average person let alone a patient or loved one who's prerogative is to receive treatment and must first traverse the car centric landscape. The hostility of the derelict heritage buildings, the makeshift walkway of shipping containers and the obstructed footpaths culminate in an experience that leaves the visitor feeling unwelcome or at the very least uncomfortable.



Fig. 38  
Collage of photos taken by author,  
manipulated to convey the uncertain  
and worn out visual language of the site  
and its buildings.

Fig. 39  
Collages of photos taken by  
author, manipulated to convey  
the uncertain and worn out  
visual language of the site and  
its buildings.



## 6.5 Perspectives of Place: Exploring Site Relationships

The smaller series of collages feature materials that I had on hand and photographs taken from the site. These fast iterations focus on the topography of the site and its connection to the Maunga, at the foot of which the hospital resides. Creating these collages without any intention to prove any connection between the land, hospital and maunga allowed me to see different perspectives of what the relationship between these factors may look like.

The contrasting textures and elevated piles with foam board create visualisations that can be interpreted as plans or elevations. The differing textures can be seen to represent elements of the landscape's topography. The sandpaper is seen here to represent the ridgeline of Maungakiekie, the transparent paper shows a section of the landscape's topography and the many layers of the Mountain that overlook Greenlane Clinical. I overlaid the plans of the existing buildings to create a negative space in the composition. The photographs I included I found to be an important component in placing the arrangement. The arrows from the signs point to the natural forms expressed through the foam. Key terms such as "Access", and "Auckland Public Health", "Free Drop Off Please Enter" can be seen in the imagery.

From these collages I found that there are spaces in the topography where connection to the land and the existing buildings can be found. Small gaps where the lines of sight can be identified and highlighted. This would become a focus for future collaging.



Fig. 40

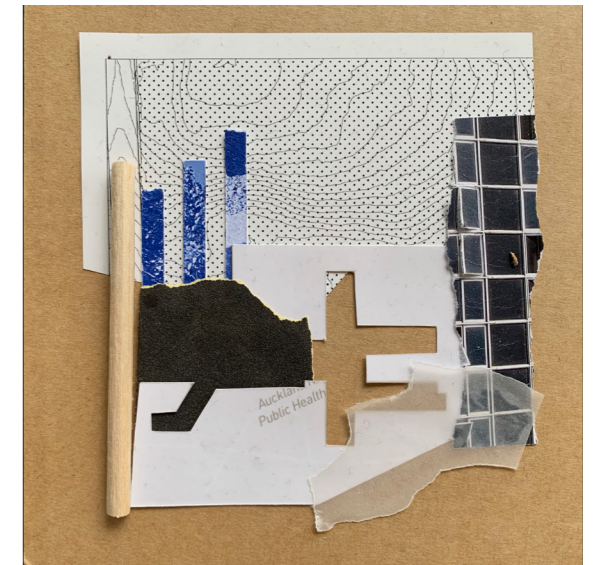


Fig. 41

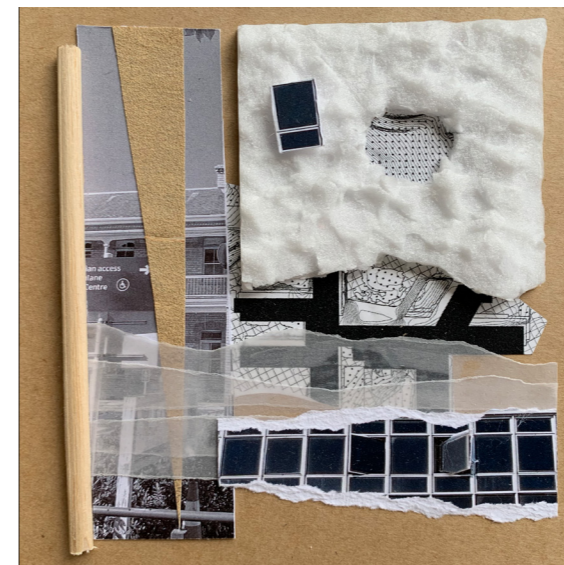


Fig. 42

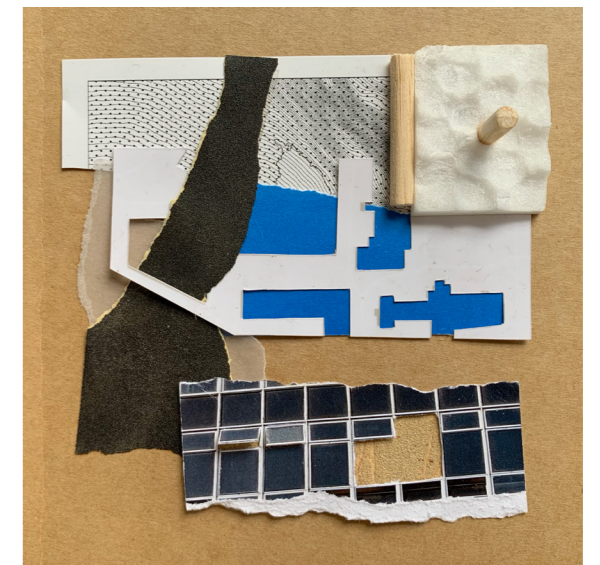


Fig. 43

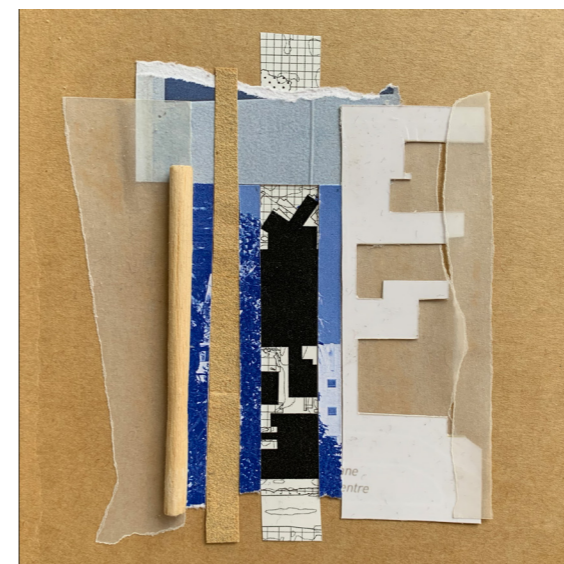


Fig. 44

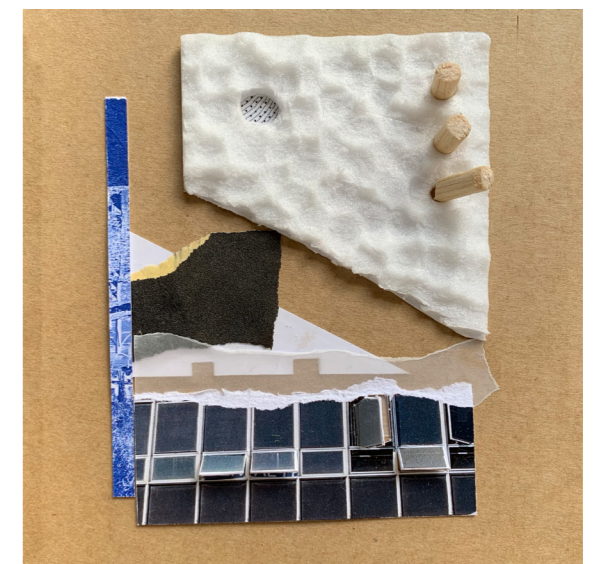


Fig. 45

## 6.6 Manipulating Perspectives: Exploring Landscape Relations

By investigating my collage discoveries from the Perspectives of Place series, I enlarged the images and continued to manipulate them to see how the outputs relate even to the landscape.

In image 1 the arrow that points toward the topography of Maungakiekie and seems to traverse across a natural pathway created by the sandpaper. By enlarging the image, there becomes a focus on the shapes created, hard lines combined with rough edges of different materials shows the malleability of the materials. The use of different fabrics to generate forms makes it even more clear that there are no limitations to the materials that can be used in the design of the landscape.

In image 2 I overlay the ridgeline of Maungakiekie and show the obelisk monument at the peak. The existing buildings footprint can be read in plan and section as it appears to carve out an underground fortress below the maunga. Photographs of the Ground at Greenlane Clinical rise up out of the maunga form, creating lanes and pattern differentiation. An interpretation of this image could influence pathways and routes across the Clinical landscape, with a clear indication of the maunga as the landmark. The top of the image shows the Mouanga as the overarching form looking out over the references of the hospital.

Image 3 looks directly across the farmland of One tree hill towards the hospital. This scale is an important perspective to analyse as the prerogative of this way-finding project is to enhance the human user's experience of the landscape. Creases from the photo ripped and layered over the existing buildings plan show a channel that appears to lead to a ridgeline reminiscent of the wide hillscape when standing on MaungaKiekie. Direct lines of sight to the hospital from between the treeline of Campbell Park and into the campus can be seen here broken up into different factions and windows. It was

important for me to show different types of perspectives, plan, section and elevation to generate perspectives not constrained by a single visual interpretation.



Fig. 46

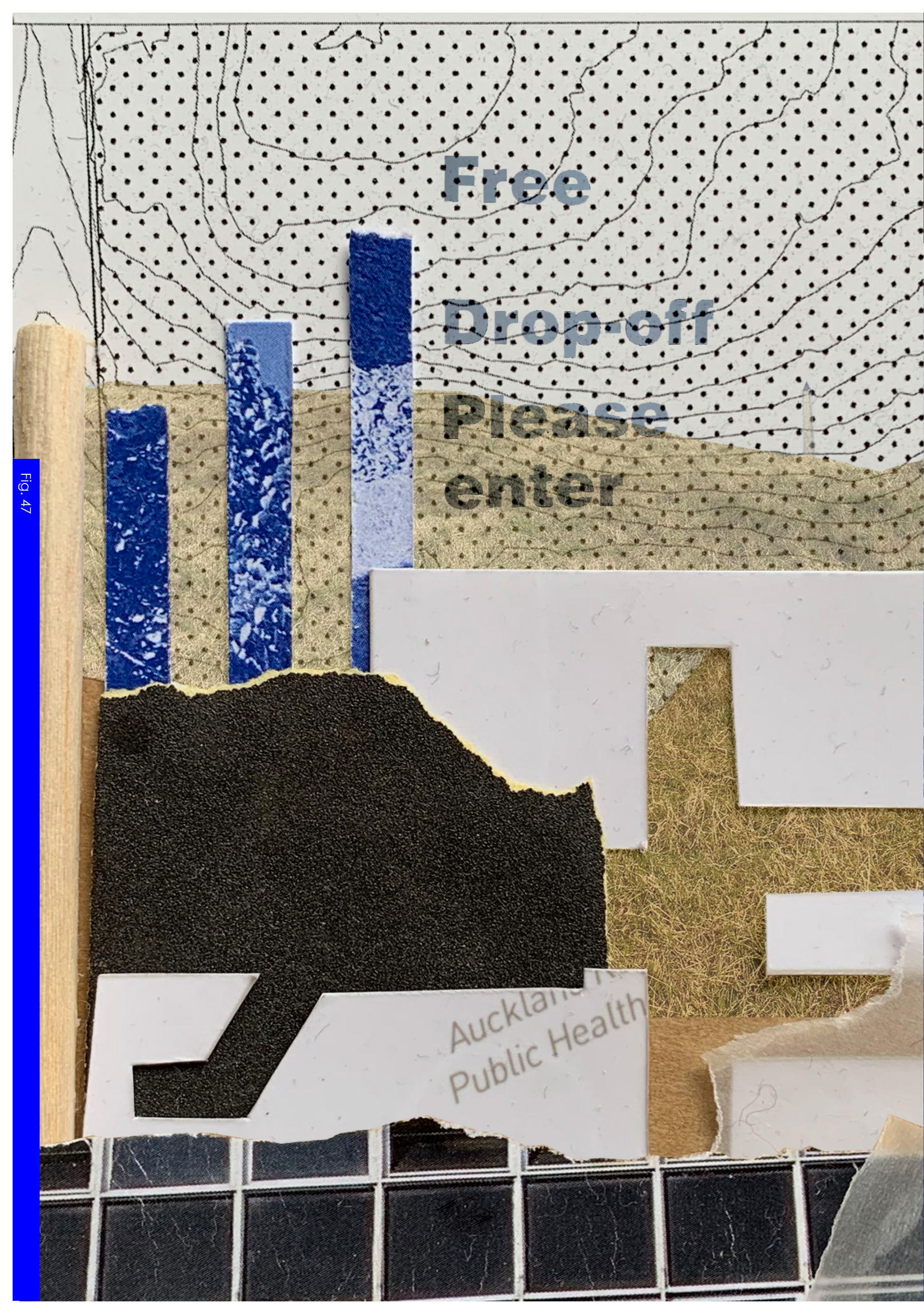


Fig. 47

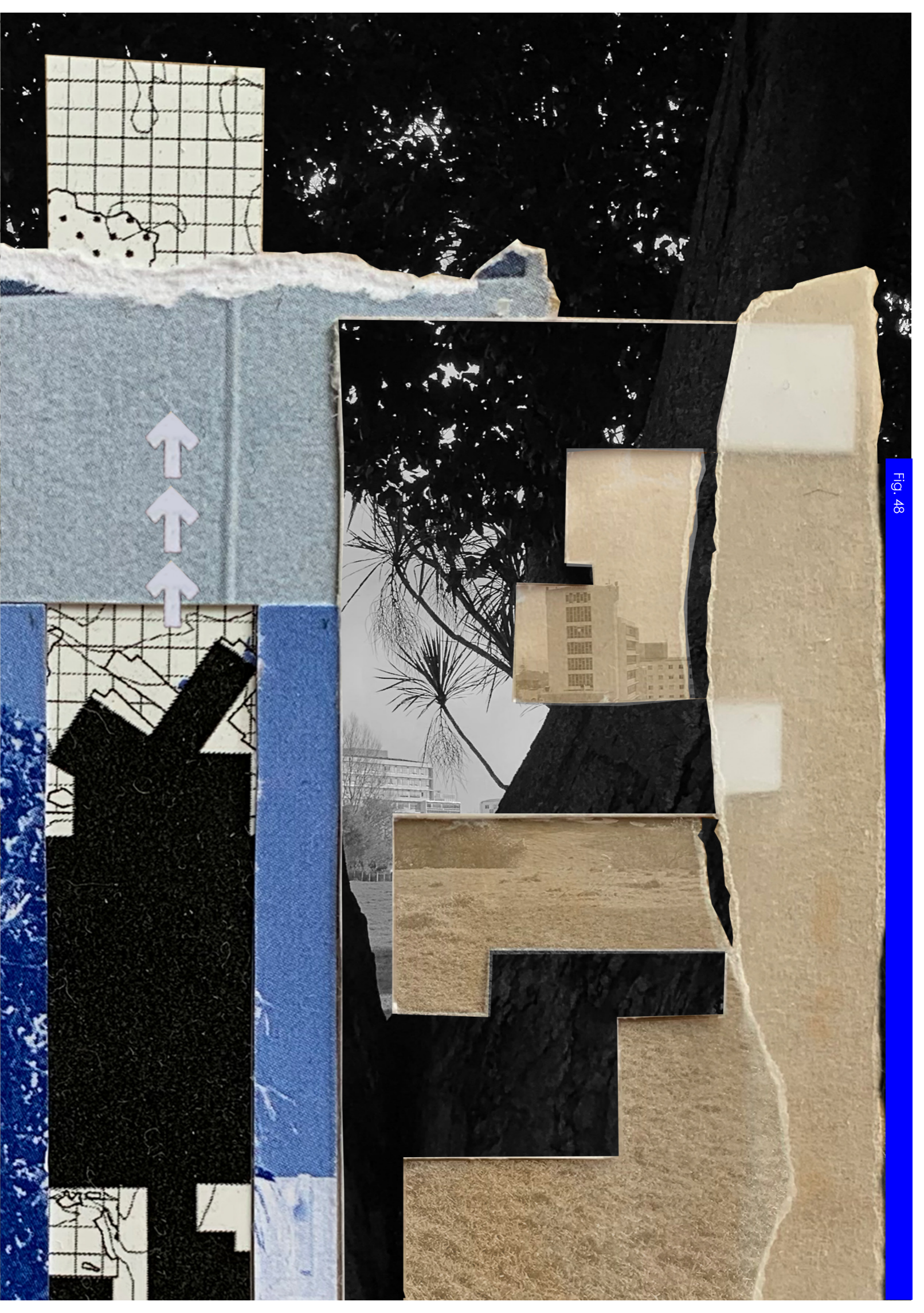


Fig. 48

## 6.7 Layers of Greenlane Clinical: Ground to Optimistic Future

This collage outlines the research conducted thus far in relation to the landscape and what the design intentions are for the fabric of the Greenlane Clinical campus. Using drawing collage and weaving to general an axonometric extrusion of the site.

Here the foundation of the site is pulled apart to show the ecological nature of the ground. Maungakiekie last erupted 17,000 years ago, forming a largely basalt foundation with relatively thin layers of volcanic tuff and scoria. The eruption forms a valley of a large-volume lava flow.<sup>69</sup>

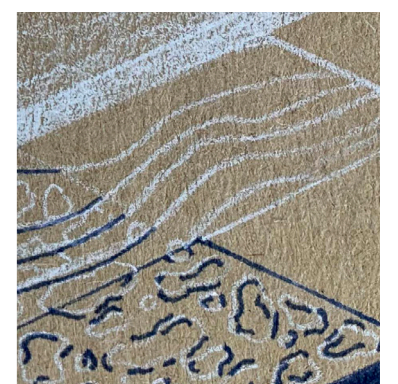
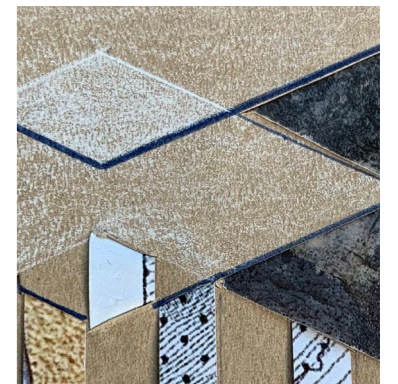
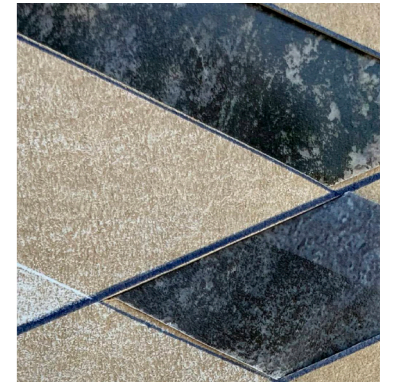
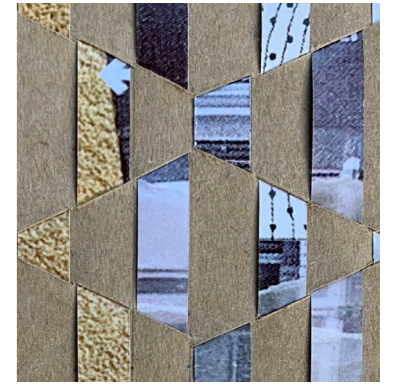
The middle section is woven with photographs and topology of the current built environment of the Greenlane Clinical Centre. The discerning quality of this section is that the imagery, like the signage, is hard to read and only small fragments can be made sense of. The negative space suggests that there is room for change and improvement. The use of weaving in this collage references the technique of raranga, weaving the images up through the collage.

The top three layers of the extruded collage show the optimistic future of the site. The printed tracing paper has the texture of the basalt wall that separates the site from the maunga, overlaid with the photographs of the perspective of Greenlane Clinical from beyond the wall. This section also suggests phases of implementing layers of design intervention to progress from the current state to an improved environmental landscape.

69 Hopkins et al., "Auckland Volcanic Field magmatism, volcanism, and hazard: a review," 214.



Fig. 49



## 6.8 Model studies - Perspective and Surface

### Perspective

With the temporal connection between Maungakiekei and the Greenlane Clinical Centre being an important facet of establishing their relationship, these crafted models seek to explore the perspective of the maunga. They study the line of sight and aim to look inward at the hospital campus. As a viewer circling the site, this lens takes the point of view of the maunga and greater Cornwall Park.



Fig. 50  
Close up photographs of line of site models. Capturing suggestions of the site the healthcare campus that is beyond the maunga.



Fig. 51



Fig. 52

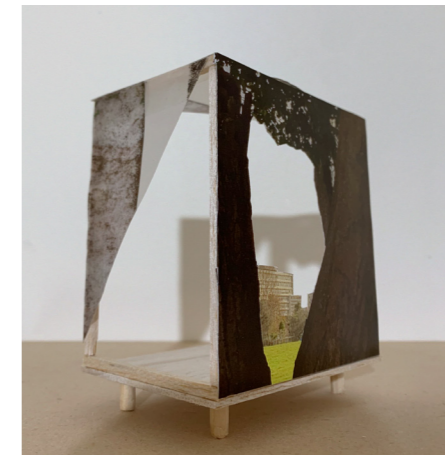


Fig. 53



Fig. 54

## Surface

Here I explore the existing material condition of the site, using casting plaster as a medium. Through my own perspective, I have assigned prominent conditions of the land that were key to defining my experience when visiting the site. The process of casting in and of itself is the placing of something with intention to remove it in time. This is not the same thinking when constructing most built environments, however, the land of Greenlane Clinical Centre has been cast and remoulded many times over the course of the site's lifetime. Revealing how car centric the landscape has become.

Fig. 55  
The Clinical and uniform nature of the existing buildings facades.

Fig. 56  
Texture underfoot, and the notion that something once belonged here but has since been taken away, leaving a footprint.

Fig. 57  
The basalt wall and curbs of the site are a key indicator that the site is situated in a volcanic landscape. The wall that separates Greenlane Clinical from Cornwall park is also a major historical component of the site that has been a witness to the way the campus has adapted over its lifetime as a health campus.

Fig. 58  
Natural features of the site, such as the trees that front the old National Women's Hospital building. One of which was planted by Mr John Quinn on his retirement as forman gardener to the hospital from 1964-1982. The timber is also representative of the decaying natural materials that are scattered along the walkable areas of the site.

Fig. 59  
The aggregate and generally extensive use of concrete and tarseal throughout the landscape in between buildings. Revealing how car centric the landscape has become.

Fig. 60  
The walking experience of the footpaths is that of being squeezed from the safety of the roadside, onto the road itself to make any sort of journey between buildings. Texture shown here alludes to the uneven nature of the walking experience.

Fig. 55

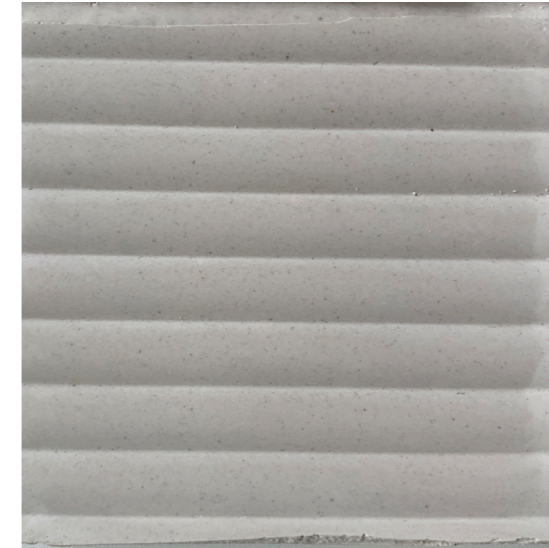


Fig. 56

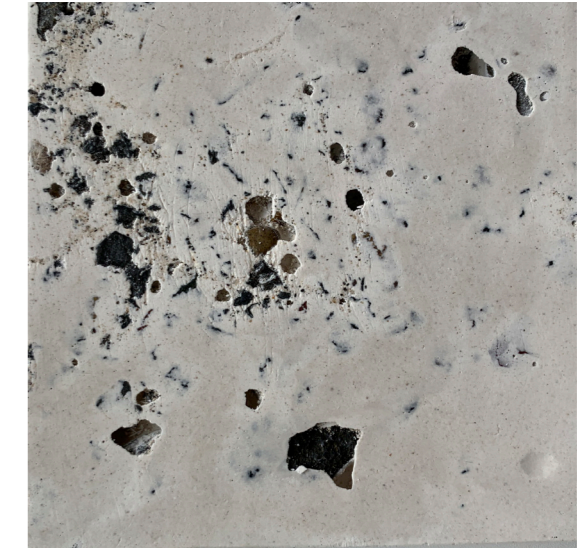


Fig. 57



Fig. 58

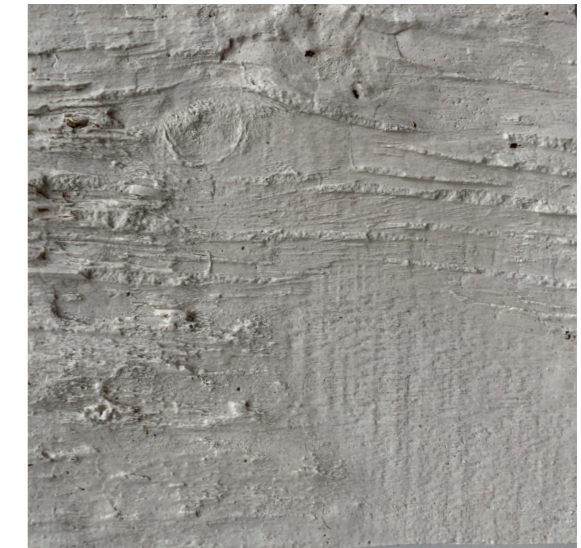


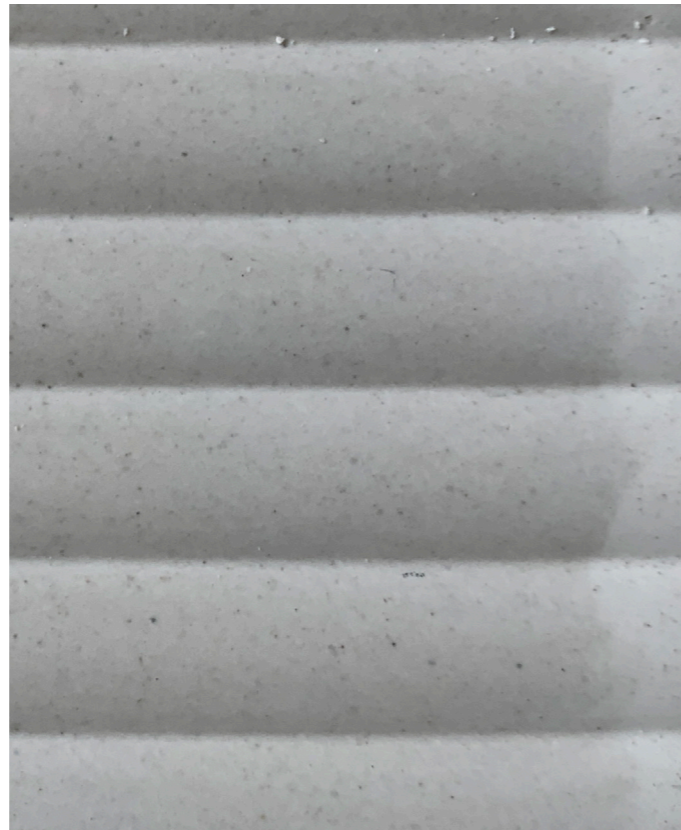
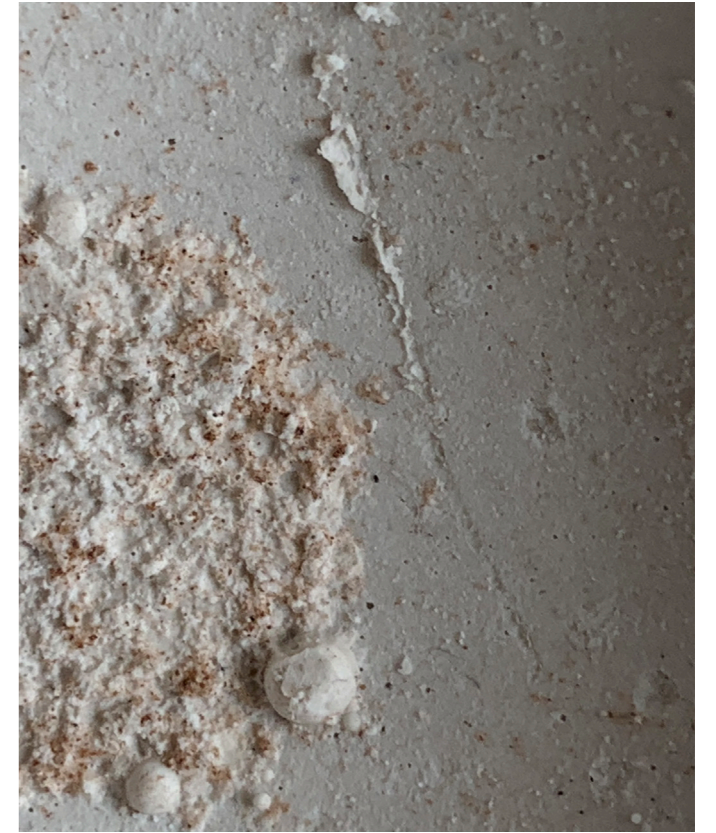
Fig. 59



Fig. 60



Fig. 60  
Enlarged photographs  
of cast textures.



## 6.9 Tapestry of Greenlane materiality and section of Maungakiekie

This collage investigates the site's ability to reorganise and proposes the site in plan and the maunga in section. Layers are transposed representing surface, texture, topography and sight lines. As we begin to consider what is important for the reorganisation of the site to better the way-finding capabilities of the landscape, it is crucial to position the maunga as a primary anchor. Thus, the section of Maungakiekie is the grounded image in this collage, with the other components being movable and simply pinned in place.

Here we see what exists on the site and we can ask, what is contributing? What can be moved? What should remain? What is limiting the site?



Fig. 61  
Enlarged photograph of  
overall collage.



Fig. 62

## 6.10 Findings

During this exploration of the Greenlane Clinical Centre's site condition, the most clear revelation is the importance of recognising intrinsic value with the existing built environment. This urges us to prioritise reorganisation rather than a complete re-designing and demolition.

Initial discoveries that shed light on the site's challenges revealed that the walkability and pedestrian access is shrouded by the overwhelming presence of transportation based surface, this compels us to reconsider their spatial dominance.

The historic fabric of the site is made up of layers, comprising the site's journey as a lava flow field, Pā site, colonial settlement and to its current identity as a healthcare precinct. By acknowledging the lifetime of the site, layers can be peeled back strategically to reveal a narrative. This narrative is one of endurance and evolution.

The tapestry of Greenlane Materiality places Maungakiekie as an anchor, this resolution sets a foundation for design to take place in a position of knowing where you are and what has come before. The maunga is a key component of the site's identity, thus its integration into landscape design should be of the utmost importance.

Collage has been used to unveil the existing site elements and suggest potential connection and opportunities for a reorganising intervention. The malleability of collage provides a method for manipulating the site's materials and design possibilities to enhance the landscape for better way-finding, concurrently acknowledging its enduring nature.

Overall the process of using collage as a method for design, has revealed that partial elements of the site should be focused on and connections between them reveal pathways for increasing the way-finding capabilities of the site.

Furthermore, intuitive wayfinding practices made clear through researching Moana-nui-a-kiwa navigation techniques, can be utilised to create distinct links to the anchored (unmoving) features of the site. Moana-Nui-a-Kiwa methods also urge the designer to consider the tidal nature of the site, and how the space is utilised during high and low tide (busy and quiet) periods. Tracing the movement of users and the areas they are directed enlightens us to the site components that would benefit from a re-organisation and the areas that would benefit from re-allocation of function. In essence, these findings reflect our commitment to a reorganisation of Greenlane Clinical Centre, wherein the existing elements contribute their rich history and significance to the emerging landscape. The integration of Moana-Nui-a-Kiwa methods of intuitive navigation acknowledges and respects the wisdom of the land and its cultural heritage, guiding us towards a harmonious and informed design approach.

Fig. 63

*Grid diagram revealing layers of site.*

This grid diagram examines the ground condition, contours and relationship between the maunga and Greenlane clinical Centre. The images of collage and painted photographs, position the challenges in relation to their scale on the site. It is revealed that overall, the small gestures that make up the site experiences are the most important as they dictate how the user feels when interacting with the site. These moments are crucial considerations for designing with people in mind.

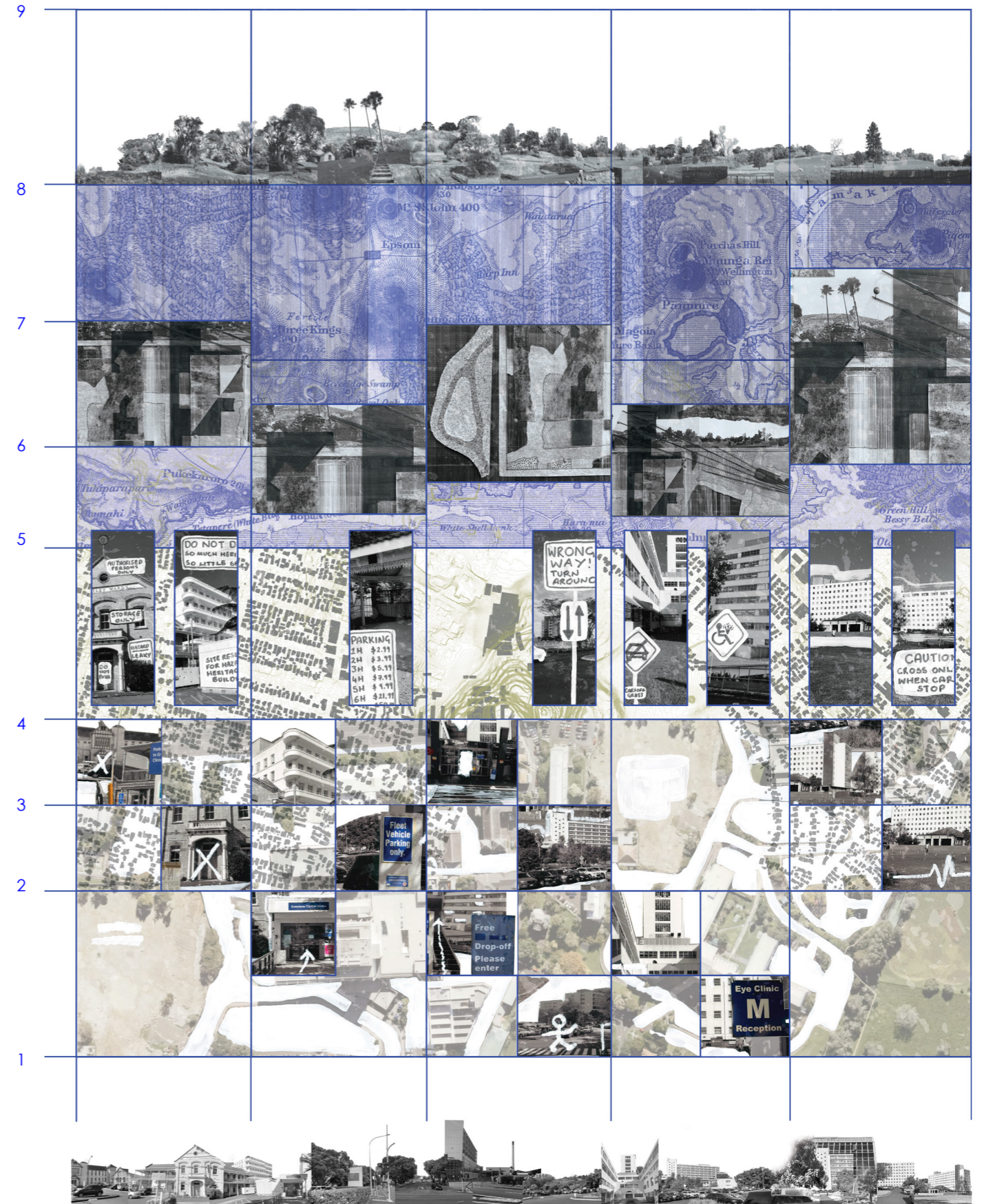


Fig. 63

## Chapter 7.

# Designing.

### Finding your way

The design lead component of this research has shed light on the opportunities to integrate intuitive way-finding practices and landscape architecture to enhance the user experience of the Greenlane Clinical Centre. In this chapter we implement the findings from the methodology studies and generate a masterplan design of the Greenlane Clinical Centre landscape between the Main Building and the Old National Women's hospital. This space is frequented by pedestrians and vehicles alike, to access the main building and as a primary car parking space. This area was formerly the Cheste Annex, a building amalgamated from tuberculosis units. The ghost of this building is a part of the site's history as a health precinct and is the last iteration of architecture on the middle landscape before it was cleared to make space for the increasing need for motor vehicle parking.

The design attempts to reflect on the past surfaces of the site and strategically reveal layers in a way that allows users to more effectively engage with land. To better the way-finding capabilities of the urban environment, Moana-Nui-a-Kiwa insights for navigators are employed to generate a more intuitive way of moving through the landscape. This is done through identifying critical anchors and sight lines to bridge the gap between arrival and destination. The ensuing journey is intended to consider the well-being of the users by making the voyage paths clear, while encouraging an autonomous decision making of how to play, rest and explore.

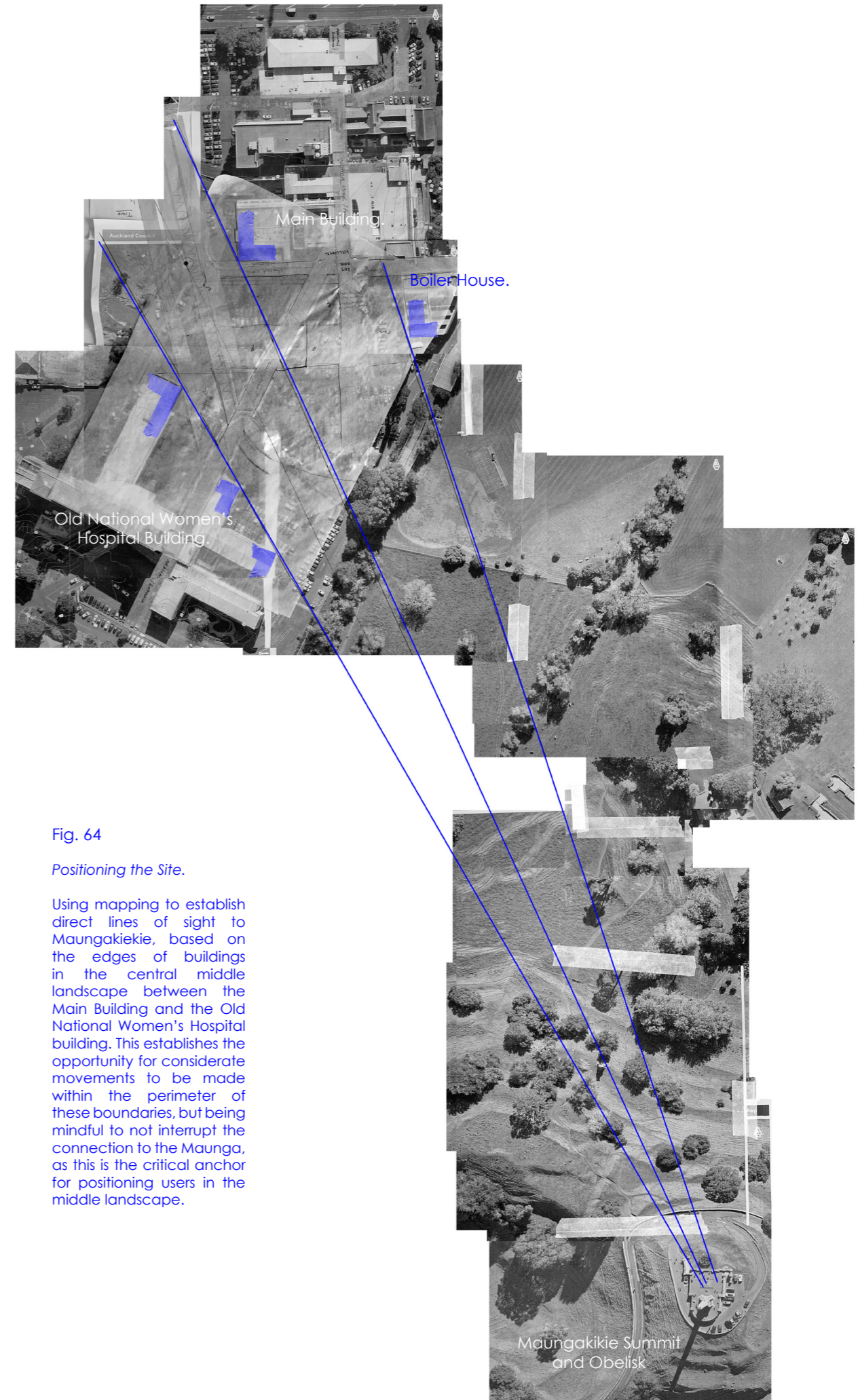


Fig. 64

#### *Positioning the Site.*

Using mapping to establish direct lines of sight to Maungakie, based on the edges of buildings in the central middle landscape between the Main Building and the Old National Women's Hospital building. This establishes the opportunity for considerate movements to be made within the perimeter of these boundaries, but being mindful to not interrupt the connection to the Maunga, as this is the critical anchor for positioning users in the middle landscape.

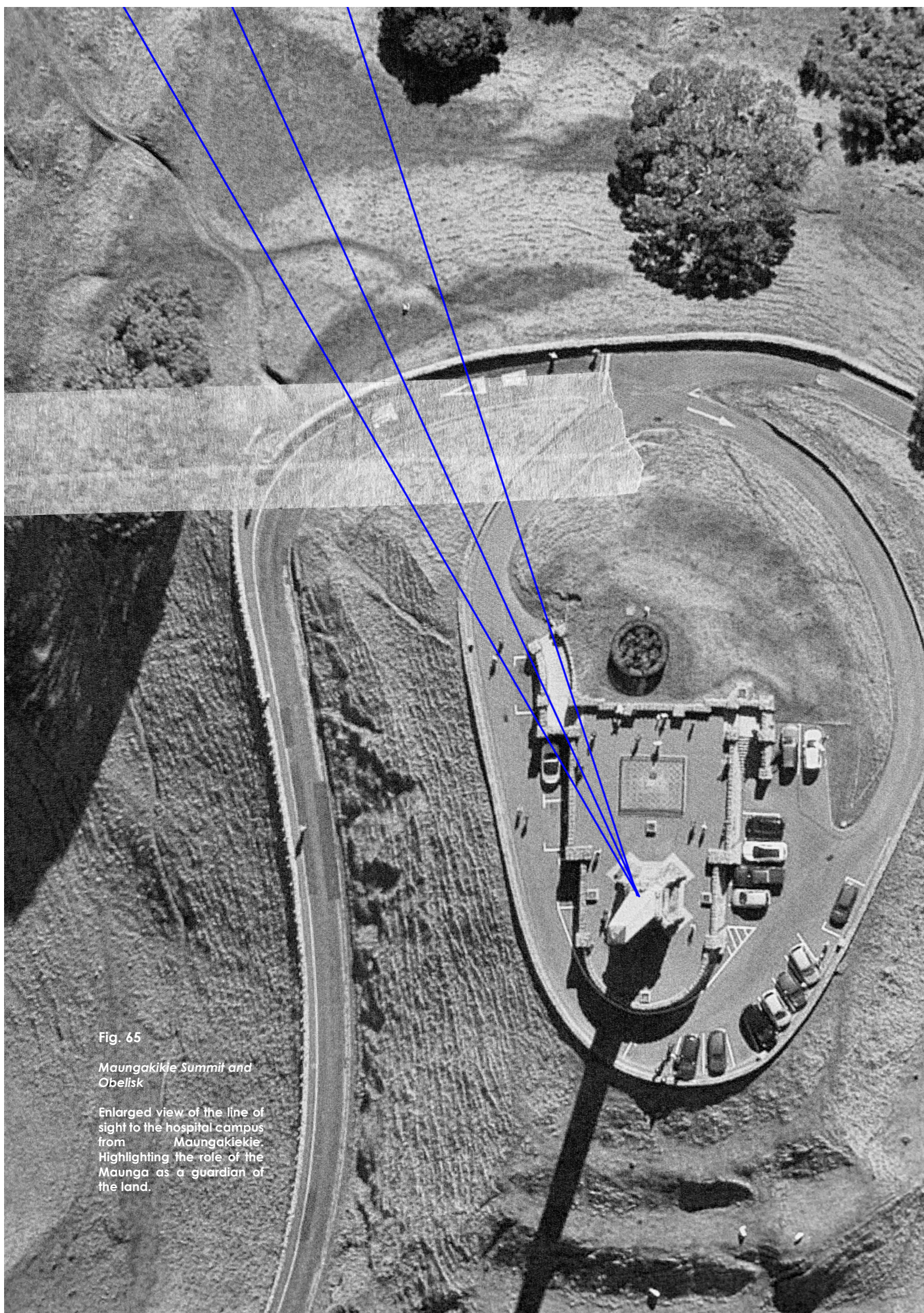


Fig. 65

Maungakikie Summit and Obelisk

Enlarged view of the line of sight to the hospital campus from Maungakikie. Highlighting the role of the Maunga as a guardian of the land.

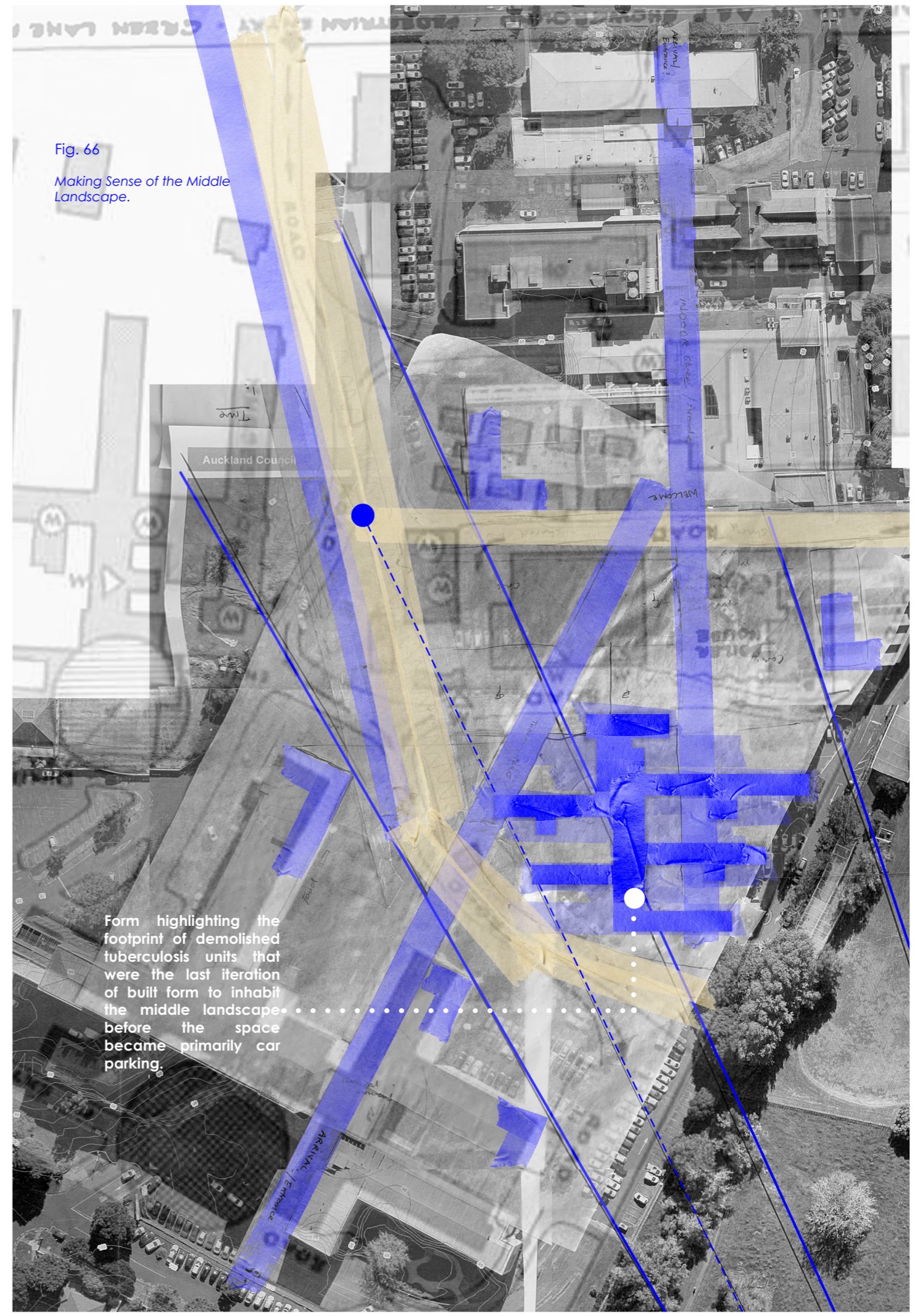
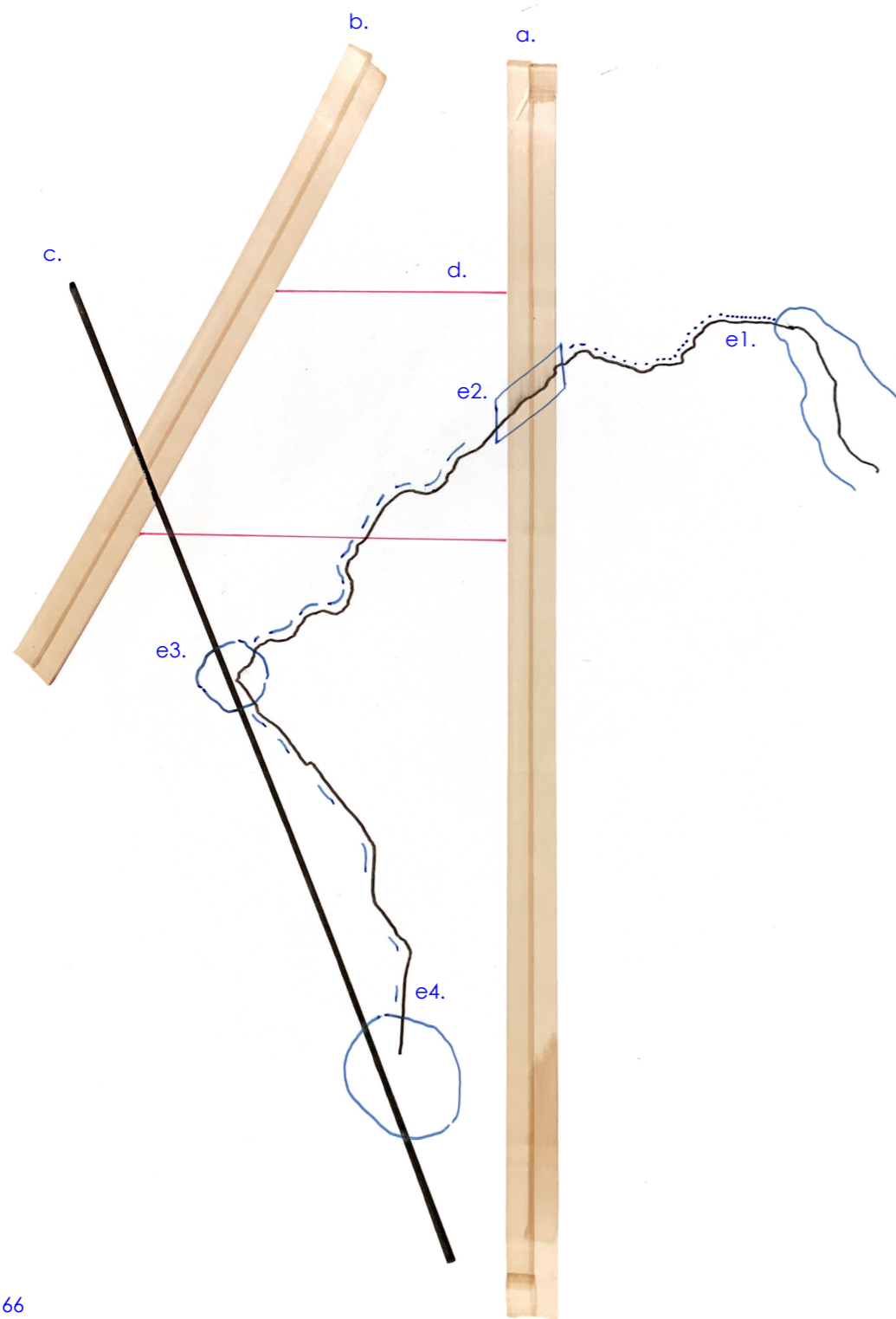


Fig. 66

Making Sense of the Middle Landscape.

Form highlighting the footprint of demolished tuberculosis units that were the last iteration of built form to inhabit the middle landscape before the space became primarily car parking.



- a. Extending the primary corridor of the main building out into the landscape. This elongation of the main artery of the building intends to extend the experience of the healthcare journey beyond the internal clinical space, to receive the benefits of connecting with whenua and the external environmental context. Additionally, removing an abrupt feeling of being suddenly shut off from receiving care when you step out of the hospital building.
- b. Efficiently connecting the main building to the national women's hospital building, this foot path makes the experience of human scale traversing of the landscape safer and more coherent for healthcare users and staff alike.
- c. Line of sight Maungakekie from the existing central roundabout. This is the first direct visual connection experienced by users arriving by vehicle, that positions them in relation to the main building, the national womens hospital and the Maunga. This is a crucial point of arrival in the landscape.
- d. The landscape between these key determined lines, is an opportunity to reveal layers of site history, and critically determine what would remain unchanged, and what would benefit the site by bringing to the surface. In this instance car parking will remain in some areas for convenience of patient and family parking. While in some areas the land is revealed to offer a break in the surface condition, and allow the land to breathe a restorative force into the landscape.
- e. Overland flow path.
- e1. The low point of the site which when rain accumulates will allow the water to pool in a permeable bed, which during dry spells functions as a dry river.
- e2. Opportunity for the water flow and alternative surface condition to interact passively with the walking experience of the footpath.
- e3. A point in the design where the forces of water will be in the same line of sight towards the Maunga.
- e4. The highpoint of the site where water can accumulate and flow into the proposed terrace structure. This is also the high point of the terrace, having a sense of destination featuring opportunities for rest and reflection.

Fig. 66

The organisational structure of the middle landscape

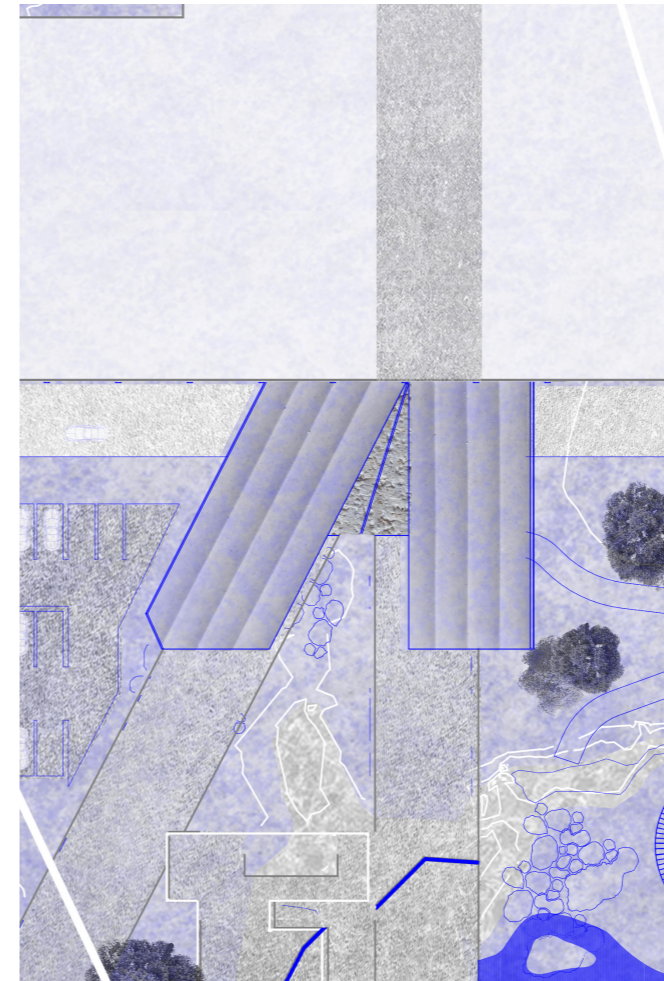
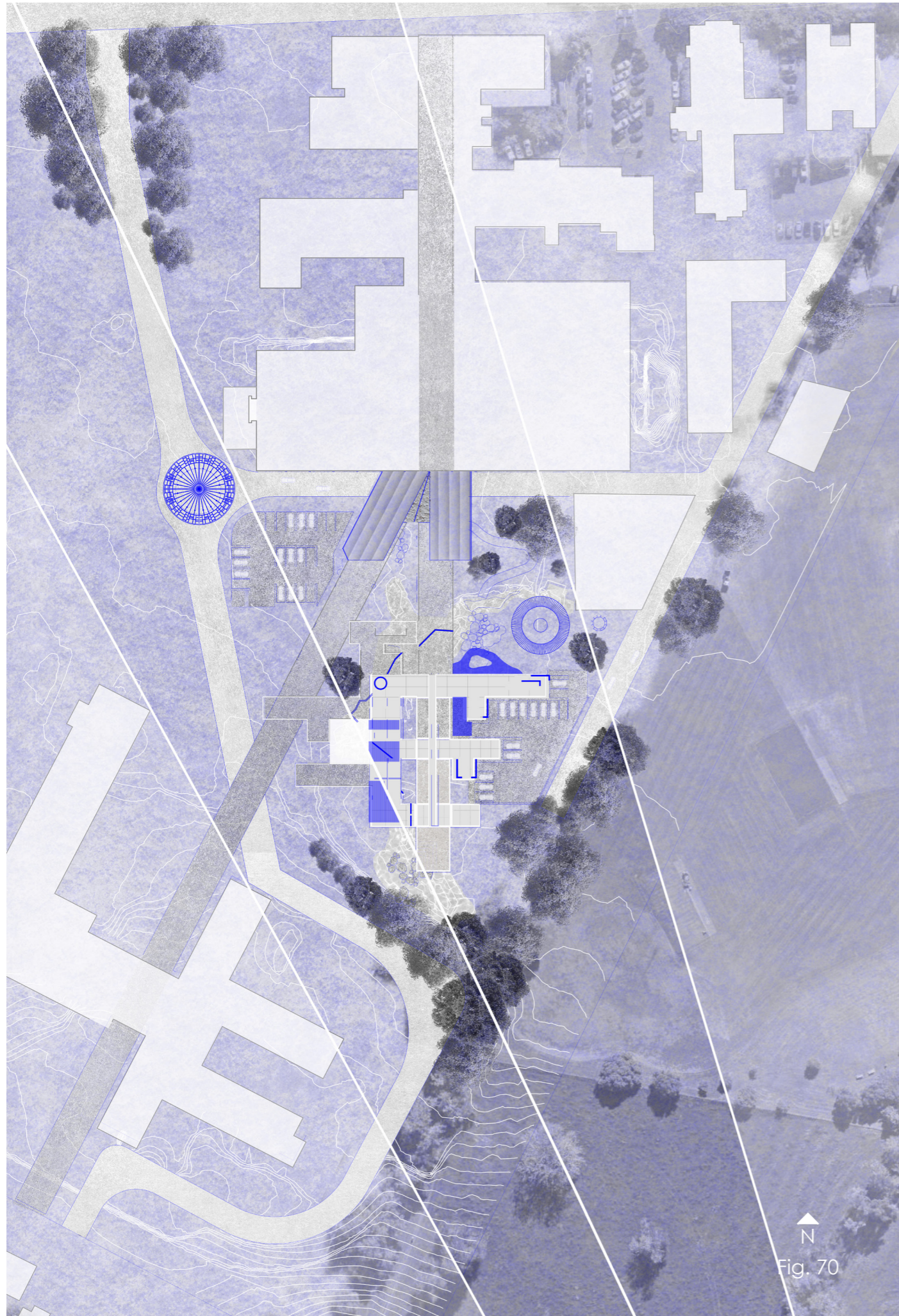


Fig. 68

1:1000 (A2) Enlarged Entrance Plan

The reconsidered porte cochère entrance to the main building, follows the direct channels across the landscape. The water catchment at the centre of the two eaves channels rain water into the overland flow path.

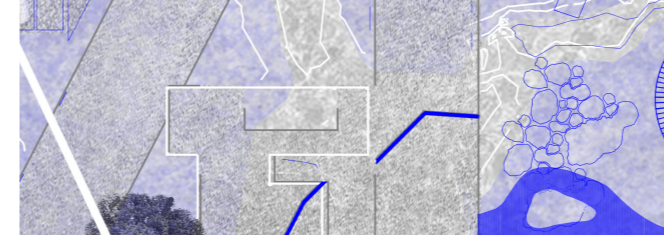


Fig. 69

1:1000 (A1) Enlarged Terrace Plan

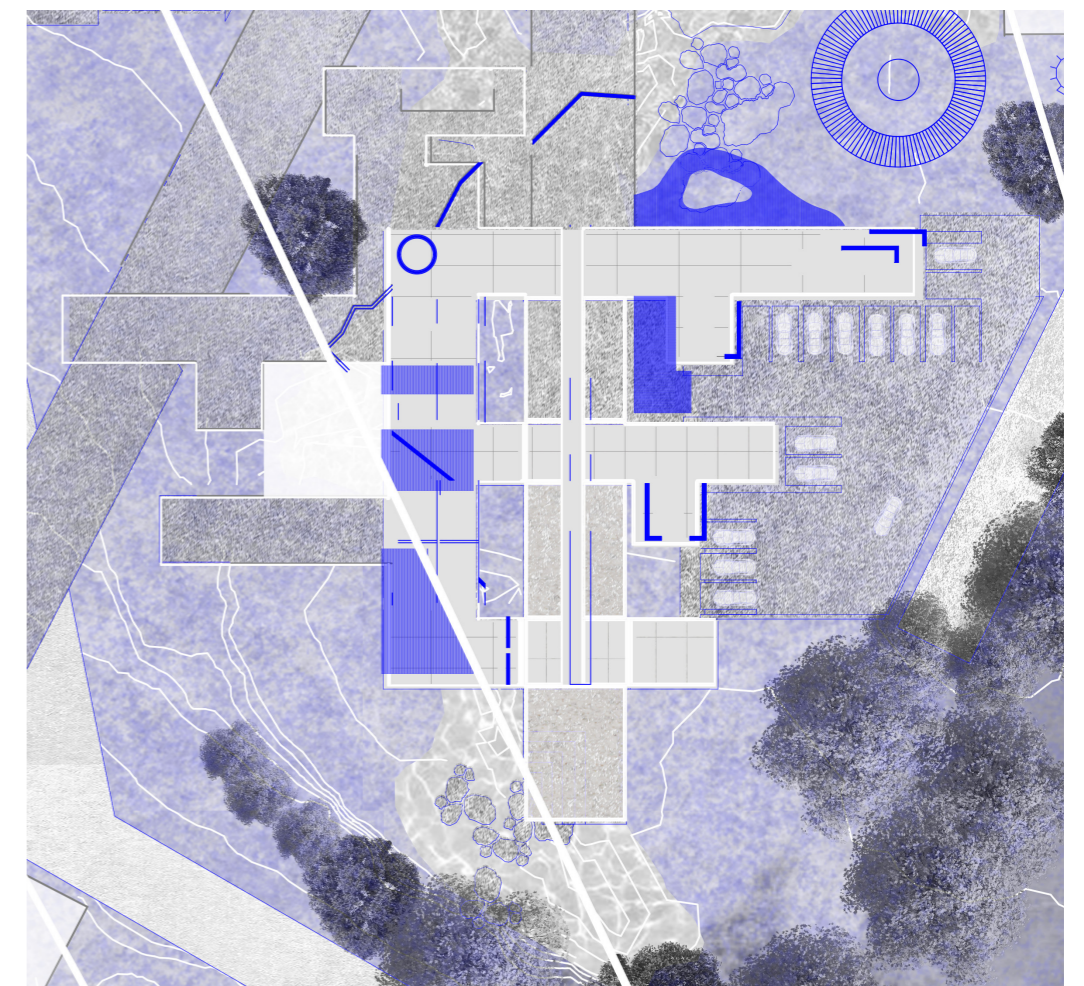
The footprint of the demolished Cheste Annex building is used here to reveal past functions of the landscape. The form is staggered to varying heights.

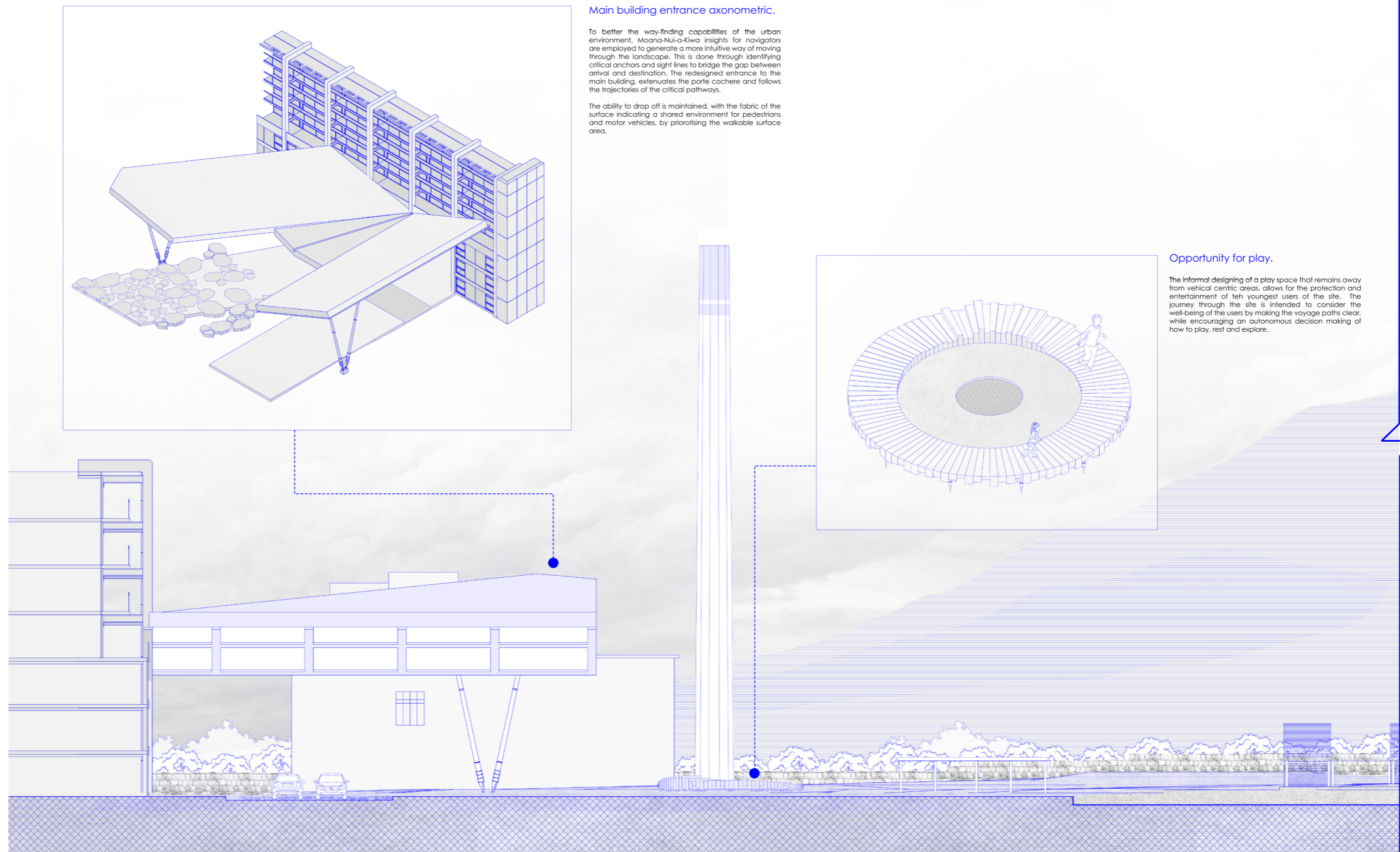
Fig. 67

1:500 (A1) Site Plan

Showing the middle landscape of the Greenlane Clinical Centre that has been transformed into a connecting force between the Main Building and the old National Women's Hospital Building.

The lines of sight to Maungakiekie set the perimeter of the landscape.





**Main building entrance axonometric.**

To better the way-finding capabilities of the urban environment, Moana-Nui-a-Kiwa insights for navigators are employed to generate a more intuitive way of moving through the landscape. This is done through identifying critical anchors and sight lines to bridge the gap between arrival and destination. The redesigned entrance to the main building, extenuates the porte cochere and follows the trajectories of the critical pathways.

The ability to drop off is maintained, with the fabric of the surface indicating a shared environment for pedestrians and motor vehicles, by prioritising the walkable surface area.

**Opportunity for play.**

The informal designing of a play space that remains away from vehicular centric areas, allows for the protection and entertainment of the youngest users of the site. The journey through the site is intended to consider the well-being of the users by making the voyage paths clear, while encouraging an autonomous decision making of how to play, rest and explore.

Section b. | Greenlane Clinical Centre Landscape | 1:100

Fig. 70

1:500 (A1)

The reimaged entrance is fitted onto the existing facade, redirecting the entrance towards the national women's hospital and the direct path towards terraces and its features. Inviting the users to explore, rest and play. The original structure's porte cochère style is maintained, however, the receiving of visitors is pushed inside the building, offering an enhanced sense of welcome and a clear perception of arrival.

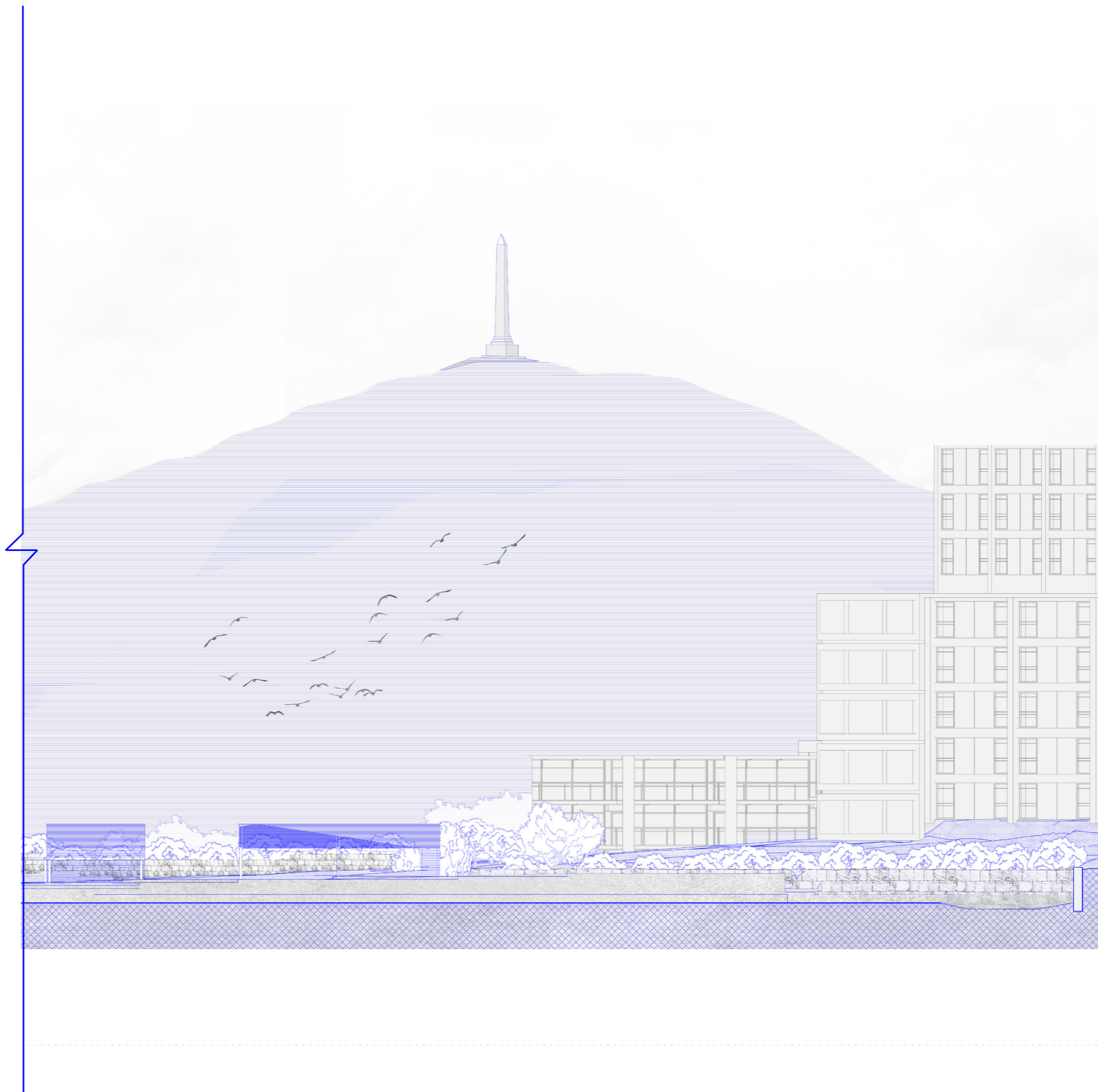


Fig. 70

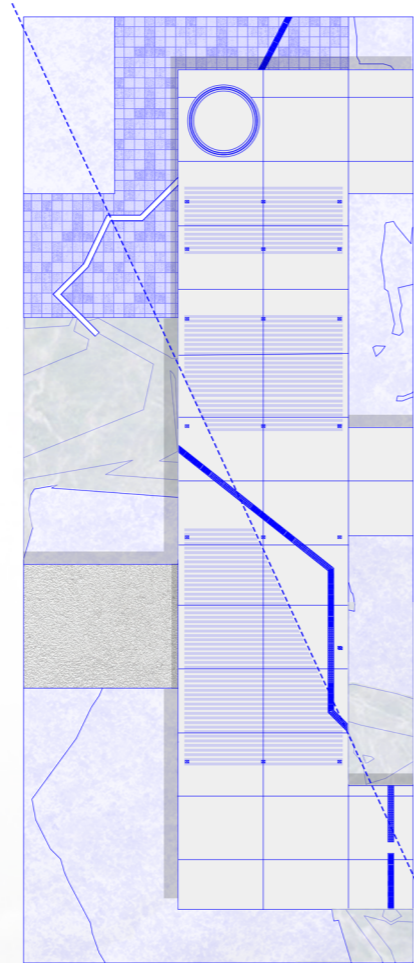
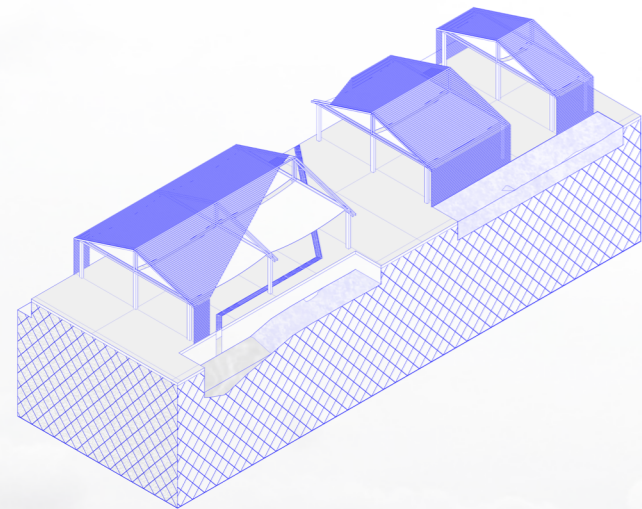
1:500 (A1)

This primary terrace structure features a meandering incline which is composed of differing surface treatments indicating changes in space without insinuating separation. The branches of the terraces can be utilised as spaces for having difficult conversations about health outcomes, or wait and rest away from the clinical and sterile environment of the hospital interior.

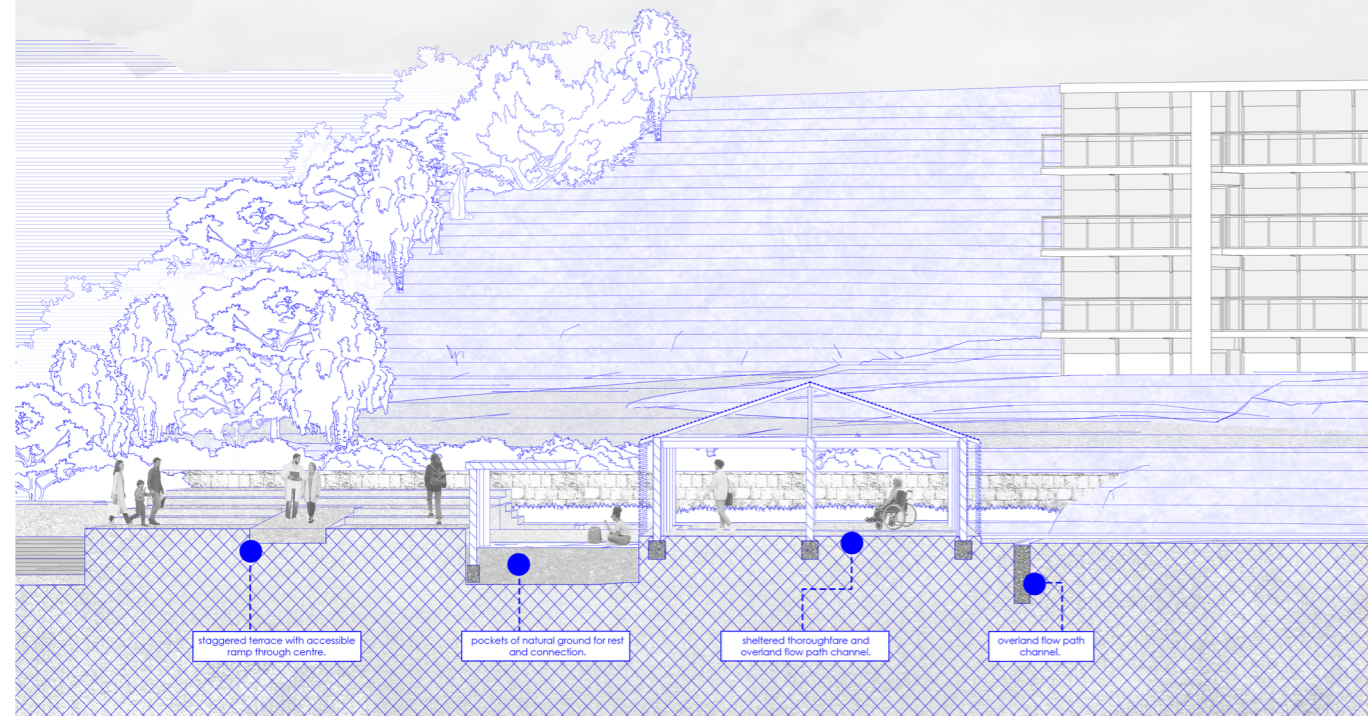
## Shelter.

The surface of the roof is cut so as to not interrupt the direct line of sight to Maunagkekei. Layers of key features, such as view points, water flow, and staggered ground can be recognised in the various treatments to the surfaces.

The overland flow path is traced into the ground surface allowing water to continue to pass through the terraces. This natural resource can be heard and seen integrating a sensory experience to the shelter environment. This is to maintain a metaphysical connection to the natural environment, and generating design that is considerate of naturally occurring landscape features.



Shelter plan | 1:200

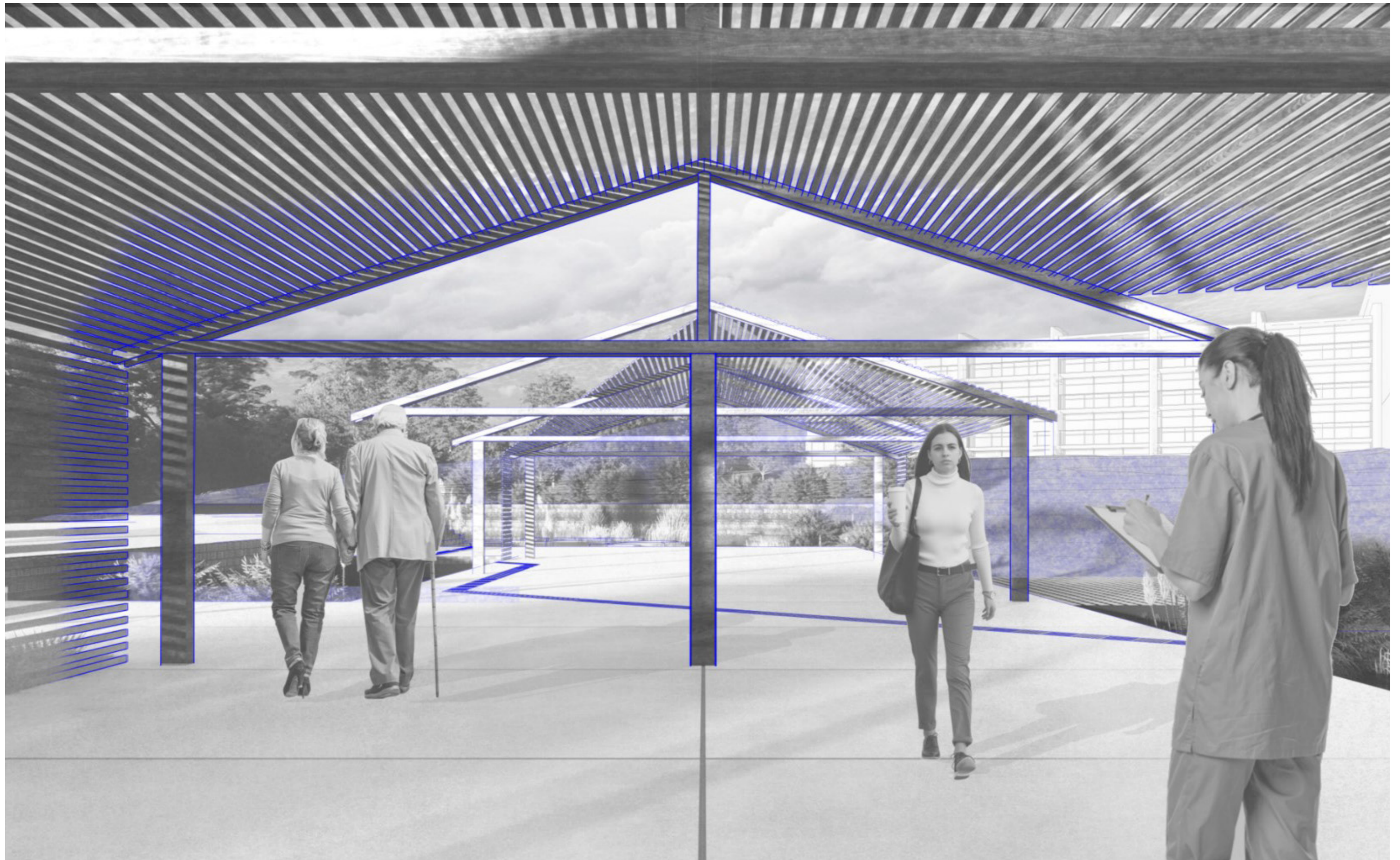


Section a. | Greenlane Clinical Centre Landscape | 1:500

Fig. 71

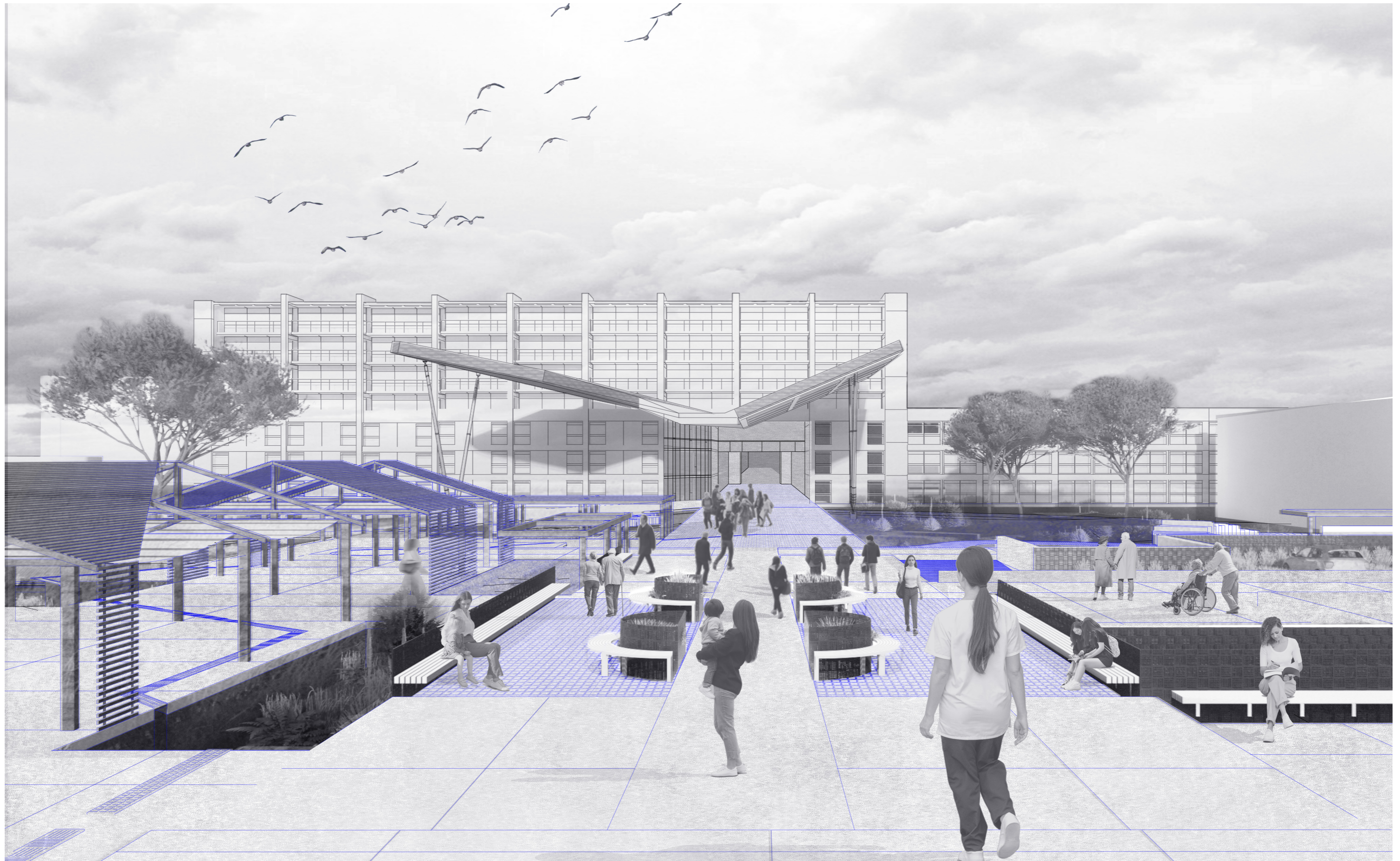
1:500 (A1)

The overland flow path that runs from north to south on the site, is experienced in a new way. Removing the impermeable surface to allow it to become an integrated feature of the landscape. It is uninterrupted as the path is allowed to flow through the terraces and is revealed in varying degrees to be seen and heard, engaging a sensory experience of water and reaffirming the connection to the natural environment of the site. The flow path is integrated into the terrace surface, and flows through the shelter structure. The line of sight to the Maunga is also uninterrupted through the roof pitch providing a sense of certainty of position and connection to the land.



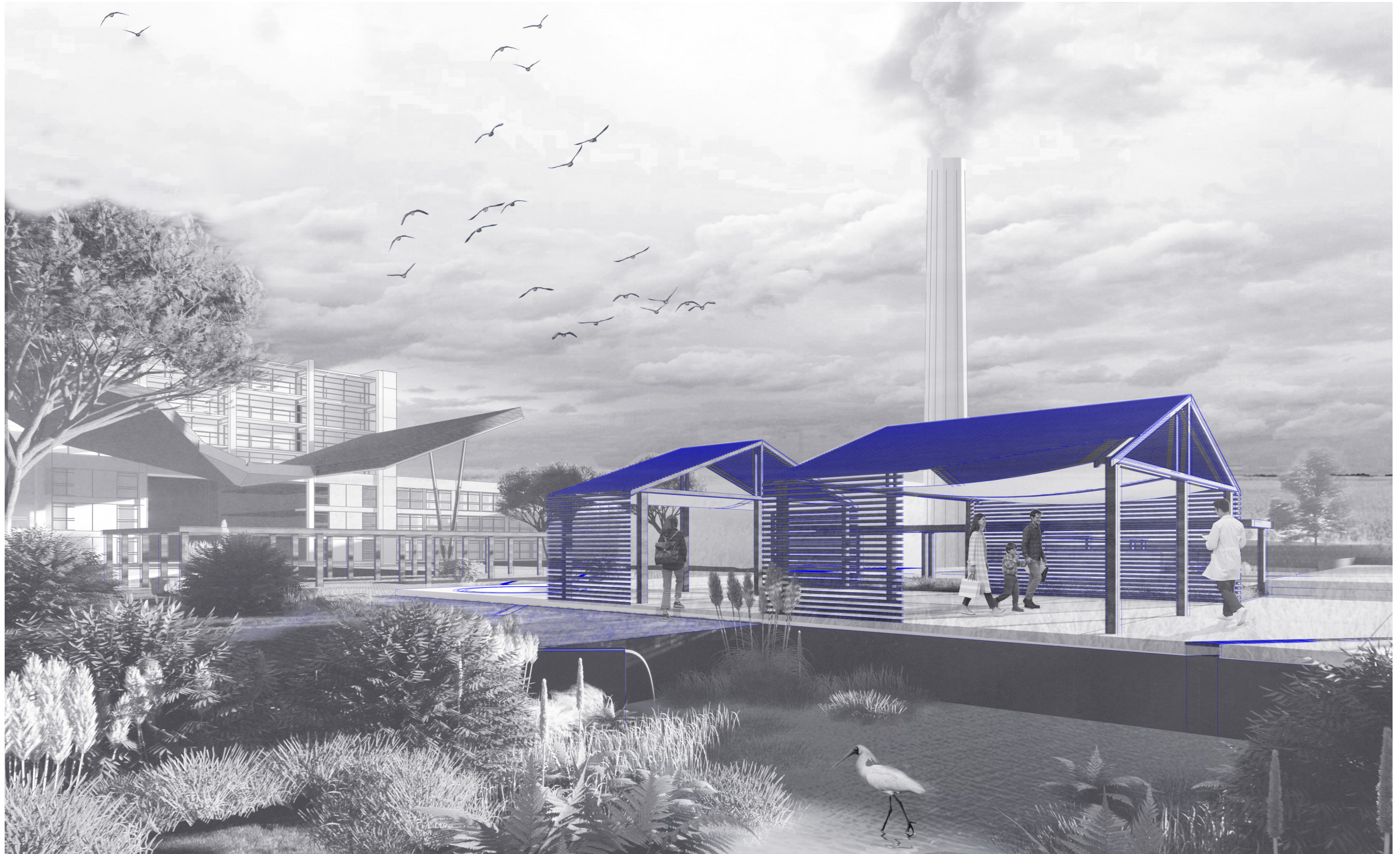
Shelter interior.

The nature of the shelter's roof is to not disrupt the direct line of sight to Maungakeikei. The overland flow path is revealed in the surface, without disrupting this path water can be heard and seen passing underfoot through the grate.



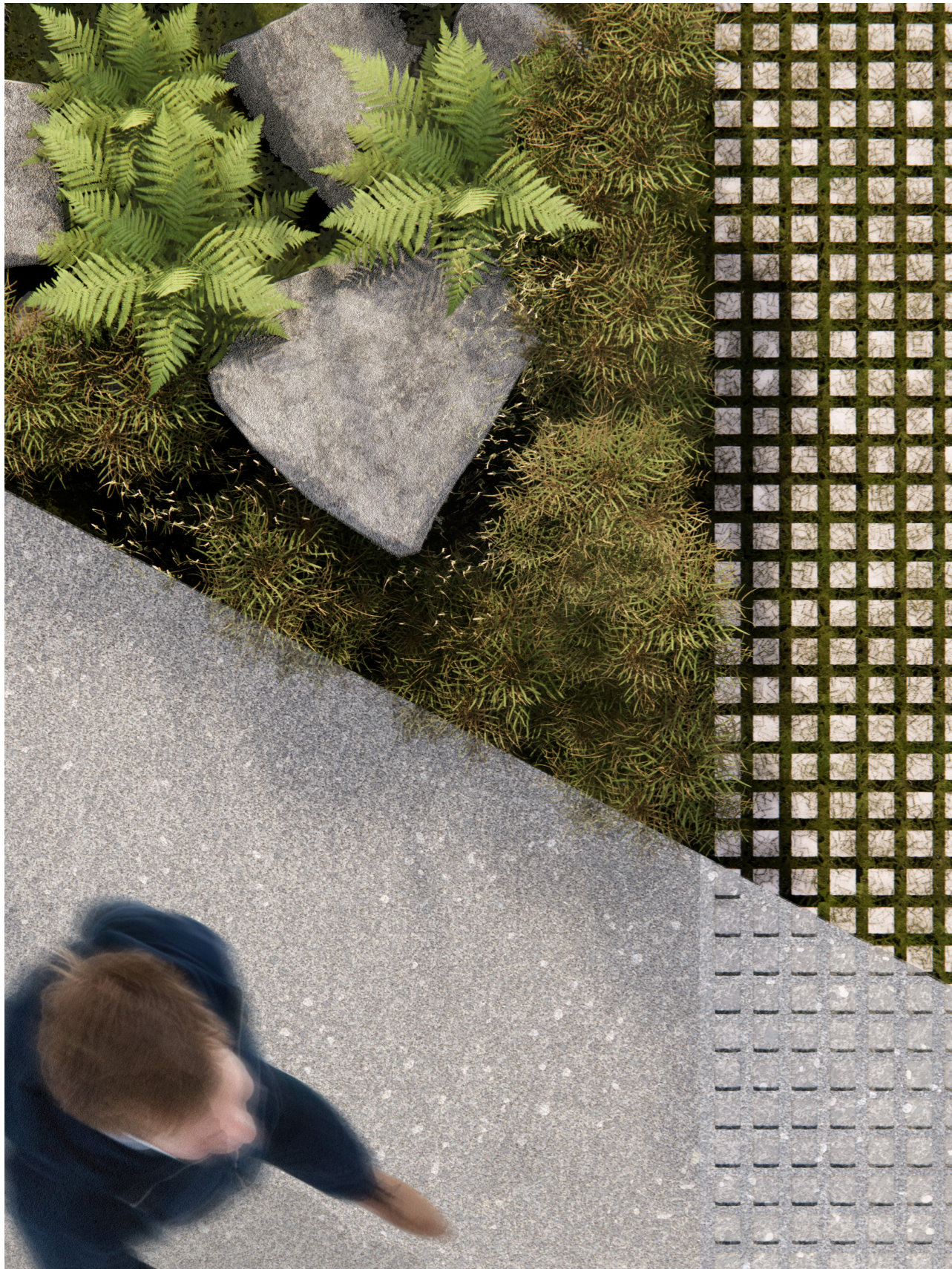
Terraces to redesigned entrance.

The terrace steadily inclines to allow for positioning of the individual with certainty in the landscape. The entrance becomes the focal point, allowing visitors to recognise the main building whilst maintaining the options of exploration, rest and play.



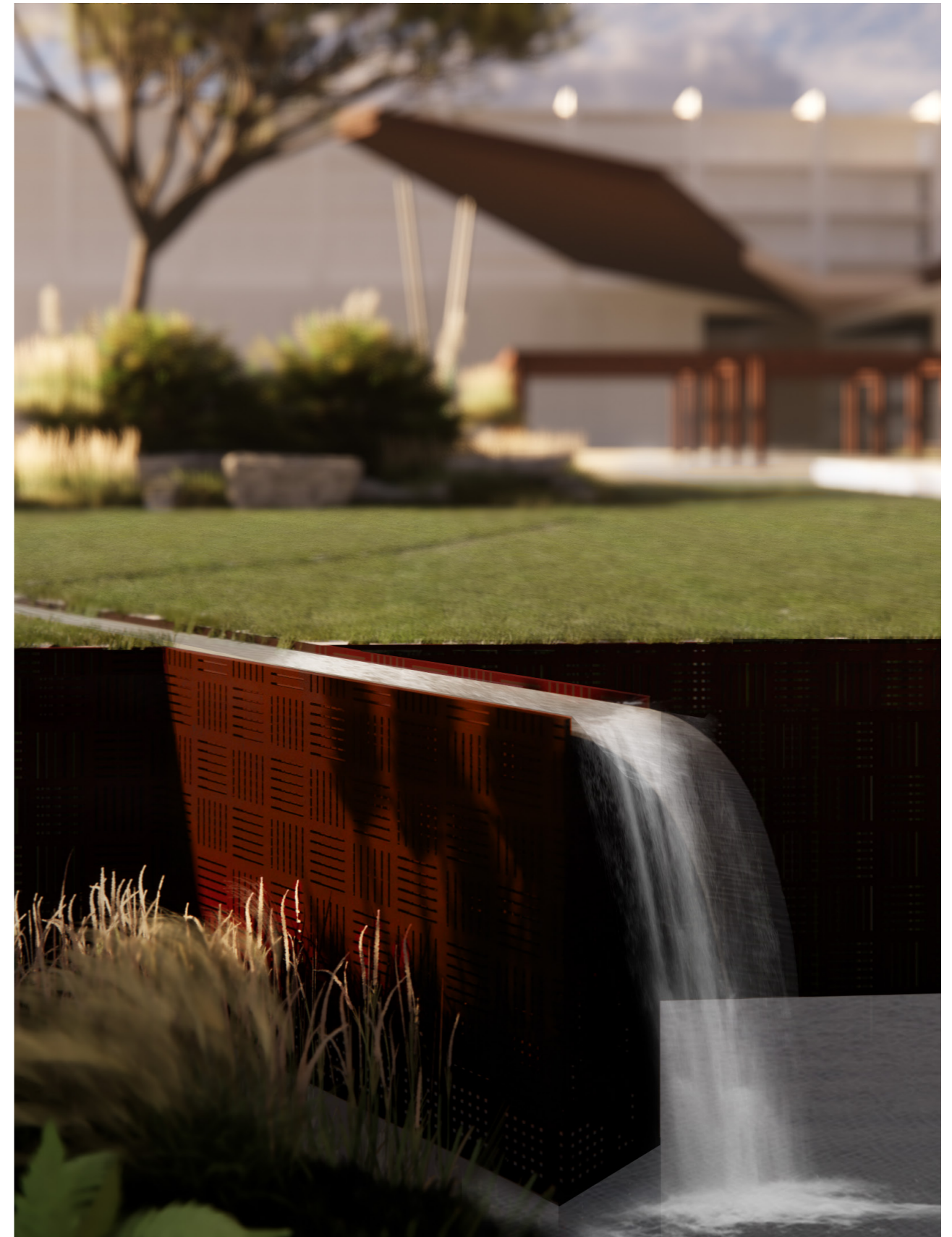
[The re-imagined landscape.](#)

This image is to shown to exhibit the key landmarks that exist on the site in conjunction with the re-imagined features. The revitalised landscape introduced biodiversity into the once concrete laden environment. The shelter component offers a point in the right direction, with opportunities to engage with the natural environment.



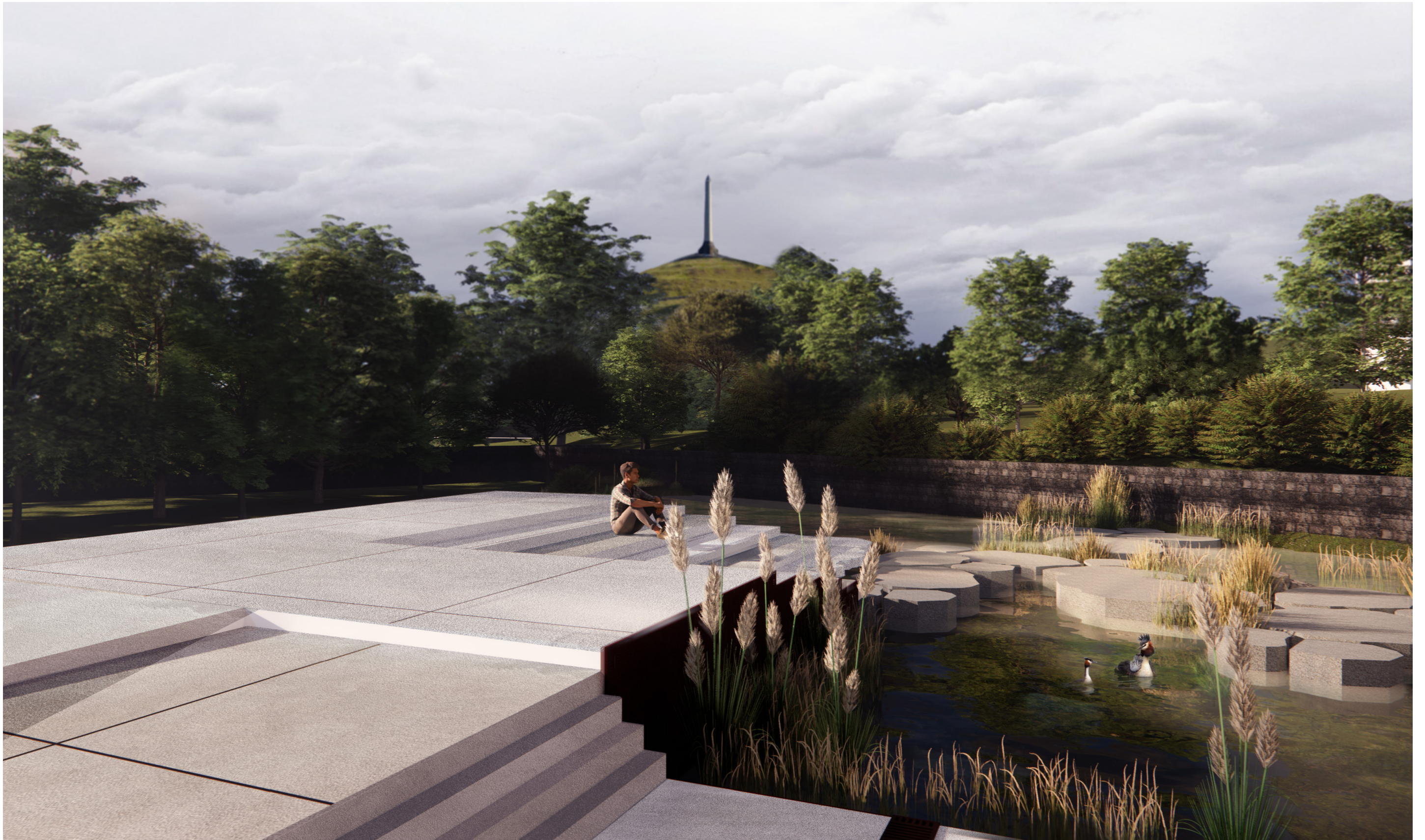
#### Surface.

Exhibiting the utilisation of the concrete components of the existing site, creating an aggregate for the new underfoot surfaces.



#### Overland flow.

Embracing the overland flow path that runs through the middle landscape. This component supports and prioritises a natural feature of the site and allows run off to collect in a controlled environment.



Culmination of terrace.

Positioning the user between the maunga and the site, the terrace disperses into the regenerated landscape.

# Discussion.

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The rationalisation of the site based on the principles of Moana-Nui-a-Kiwa traditional way-finding was the key to outlining the design and discovering what opportunities were possible within the existing fabric of the landscape. This design faced challenges in determining what were the most important opportunities to focus on and resolve. To delve into each moment for resolution into fine detail would go beyond the scope of this project. Rationalising the site into the central pathways and establishing the connecting lines between Greenlane Clinical Centre and Maungakiekie was the defining moment that drew a boundary around what was the most critical area for this project to intentionally reorganise. In this instance it is the middle landscape, central to the primary buildings and the critical intention was highlighting the importance of connection to whenua.

Justification for the reorganisation of the site's landscape is made clear, as we see in the landscape how the health journey of Greenlane Clinical Centre has changed direction overtime. Therefore this project has sought to realign the site with holistic well-being considerations; positive mental health, engagement with nature, observing the relationship between people and land. These new important attributes are integrated into the landscape through a recognition of past service to the site. For this research, that range was surface treatment for motor vehicles, arrival space that no longer supports the scale of use, and the reintegration of a past building footprint that served the population of Auckland during a time of more wide-spread tuberculosis contraction.

The design phase of this project has revealed that the user experience and utilisation of space are the defining authority in determining the success of landscape adjustments for enhancing the well-being of those who use the Greenlane Clinical Centre site. Yet still, the well-being of individuals in a diverse population of healthcare users is hard to quantify. This masterplan is only a projection of opportunities for landscape, the success of which could be accessed over time.

# Conclusion.

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The use of Moana-Nui-a-Kiwa principles of way-finding are used to inform the rationalisation of the urban environment's organisation rather than objectively direct the reorganisation of the landscape. This has resulted in a transformative design that takes a holistic and intuitive approach to way-finding, by enhancing the sense of arrival at Greenlane Clinical Centre. This project proposes an optimistic future for the site through the master planning of landscape, that bears the principles of intuitive exploration. User's are able to position themselves with certainty upon arrival and self direct their journey in the healthcare landscape.

Collage has been used in a material and immaterial capacity to analyse the fabric of Greenlane clinical centre and to expose layers of site history. In doing so the materiality and surface nature of the site could reveal themselves organically and become a natural part of the site design. This method has deepened my understanding of what site analysis means and the benefits of acknowledging the past to help inform design.

The key finding of this research is that navigation is a process unique to individual users, and that as a designer you have the ability to support their desire for clarity, security and exploration. By considering people and employing interventions that allow them to direct their own journey with autonomy and certainty, we can foster an enhanced user experience.

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