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Zǎotáng

A Bathhouse in Cyrildene

A phenomenological
approach
to the design
of a bathhouse
in
Johannesburg

University of the Witwatersrand
Master of Architecture (Prof)
Research Report
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2021



Declaration

I, [Alan Kow, 535203] am a student registered for the course ARPL7003 in the year 2020. I hereby declare the following:

I am aware that plagiarism (i.e. the use of someone else's work without permission and/or without acknowledging the original sources) is wrong. I confirm that the work submitted for assessment for the above course is my own unaided work except where I have stated explicitly otherwise. I have followed the required conventions in referencing thoughts, ideas, and visual materials of others. I understand that the University of the Witwatersrand may take disciplinary action against me if there is a belief that this is not my unaided work or that I have failed to acknowledge the source of the ideas or words in my own work.

Date: 2021/02/11

Signed:

A handwritten signature in black ink, appearing to be 'Alan Kow', written in a cursive style.

Acknowledgements

To my family, thanks for your patience and support through not only this year, but throughout this entire process. Your constant belief in me has gotten me this far in life and for that I shall always be eternally grateful.

To my supervisor, Dr Gerald Chungu, the man, the myth, the legend, thanks for your guidance throughout this year. This report would not be where it is today without your constructive feedback and positive motivation.

To my friends, both old and new, thanks for being the pillars of support that have kept me sane and motivated. Without each of you, life would certainly be very dull.

To the OG and OG OG midnight crew, thanks for being the positive stress I needed to complete this year. Working during the day was always too mainstream so thanks for being there when the sun went down.

To the translators who helped me this year... Thanks for the translations.

My gratitude for having you all in my life cannot be measured.

Finally to myself for proving that I could do it all along. Thanks Alan, you worked your butt off this year.

Reflections

Reflection

This was an intense year. I thought I knew what I was signing up for when I made the decision to come and complete this Masters but it was definitely not as simple as I had thought it would be.

Yes, let's first get the elephant out of the room. Covid definitely was one of the wrenches that completely broke the wheel for a bit. Learning to work from home was an adjustment and it was especially devastating when we didn't get to see our friends, families and colleagues. In terms of architecture, not being able to confide and engage with your fellow sufferers really made me feel quite isolated. This is when I truly understood the importance of studio time and its role in the education of future architects. Thankfully due to the plethora of online chatting services(Discord, Skype, Teams, Zoom) we were able to overcome this obstacle and I can say for sure that without these services, you would not see the amount of work that is present here today.

Reflecting on the Research Process

They say Honours prepares you for the work you'll be doing in Masters. I can definitely confirm that but I will say that I was still a bit unprepared for the year. It was as if I was learning to walk again, doing research in an academic environment took some time getting to terms with. Even now I don't believe I have a full grasp of the nuances in getting a Masters but I definitely have learnt a lot of the mechanics in terms of how one should go about researching. Having said that I believe that my research could have been focused a bit more and to have reached a more conclusive conclusion yet sadly I only realised that too late in the process. The idea of nudity within phenomenology also came quite late but I feel like it was the most interesting topic that I spoke about in the research. I would have definitely liked to explore that aspect a bit more. I definitely feel more excited about future research(Should I ever choose to pursue that path) now that I understand a greater amount of what I expected within the academic field.

Reflecting on Design Process

I've always struggled with the design process but this year I felt really comfortable the entire process. The fact that I was designing something that I wanted to do instead of having a brief given to me really made me enjoy and understand the process a lot more. This in addition to having a supervisor who you could convey your thoughts to and to converse with really made me appreciate the process. Processing theory into the architecture itself was probably the biggest factor that made me design the way that I did and so I am thankful for being in this process of research <-> design.

Abstract

In Johannesburg, there is a lack of global bathhouse typologies. They either don't exist or are in a form which caters to a niche subculture. Bathhouse culture has been around for hundreds of years and many people around the world take advantage of it as a form of communal bonding, relaxation and general hygiene. In addition to this, when done correctly, it has the effect of stripping away of social class and distinction as well as providing a safe and entertaining environment for those within its walls. This study aims to bring my personal experience of an East-Asian bathhouse into Cyrildene, a predominantly Chinese neighbourhood, that is slowly losing its cultural identity. Building on existing data on historic bathhouses from around the world, it asks: How can the concept of phenomenology be used to guide the design of an Asian style bathhouse in order to enhance the Asian/Chinese cultural experience and help in the revitalisation of Derrick street as a distinct cultural hub In Johannesburg? The main methodologies that will be used in this report will be from literature reviews on historical analysis of bathhouses around the world but more specifically in Eastern Asia. One on one interviews with the residents and shop owners living in Cyrildene as well as the owner/s of a spa. Observations based on mapping and photography will also be employed. The last will be the use of auto-ethnographic data from my own experiences. The main hypothesis of the report will be seeing if the bathhouse typology through the use of a variety of different programs that range from bathing to eating to sleeping in addition to the application of architectural phenomenological theories helps make it suitable for Cyrildene and thereby revitalise and strengthen the areas existing cultural identity.

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A bathhouse in Cyrildene

A phenomenological approach to the design of a bathhouse in Johannesburg

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Date 2020/09/21

CHAPTER 1

Introduction



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Intro | 1.1 | Background

In 2016, I was attempting to find temporary accommodation to stay in the city of Seoul, South Korea. I did not have much money at the time and so could not afford the expensive hotels in the area. I did not know many people either and so could not ask for a place to stay for the night. Luckily, I remembered a conversation with a person earlier in the week who mentioned the ‘**찜질방**’ (Jjimjilbang) or Bathhouse in English. This is where I learnt of the Korean bathhouse and saw that it was more than a place for bathing. The process one goes through when visiting a Jjimjilbang is very similar to that of the Japanese sentō. One can bath, socialise, eat, use recreational facilities such as getting a massage, use one of the many sauna rooms or something as simple as watching the movies on the latest Samsung TVs and finally spend the night within semi-public sleeping ‘pods’ or for those more comfortable with the experience on a random spot on the heated floors as one lets their tired and stress filled day come to an end – all for an affordable fee. What truly impressed me about this was how safe I felt within its walls. Even when naked in the baths and surrounded by strangers in a city completely foreign to my own, there was a comfort that the space provided. Ever since that initial experience I have been enthralled with the Jjimjilbang. Whenever I would travel within the country, my first thoughts when it came to accommodation would not be that of a hotel or Airbnb(a popular app for finding rented spaces of local people) but to find the nearest Jjimjilbang. To date I am sure that I have visited no less than 20 different versions within the country. Fast forward to the present that memory of the Jjimjilbang was still ever-present in my thoughts. I even went to the extent of searching for bathhouses in Johannesburg only to find that, to my dismay, there were none and the few I could find were much different from my experience in South Korea. This leads me to question what was the condition or role of public bathing in a contemporary Johannesburg context?

Bathing extends from the privacy of people’s homes to public spaces as per my experience in South Korea. Bathing has always been an instrument that has evolved with its culture in parallel. As we have advanced through the ages, so has our need for different forms of bathing. Bathing may be practiced for personal hygiene, religious ritual or therapeutic purposes.

These different ways of bathing practices could be in the form of personal hygiene, religious rites and rituals or for healing therapeutic purposes. It is not limited to the rich or the poor, nor does it discriminate between the elderly or the youth. It is something that everyone can participate in(Blakemore, 2017). It can take place within a private bathtub or within nature by a river, lake, pool, or sea. Any situation where water is present is an opportunity for bathing to take place. Different practices over time have given the act of bathing a multitude of names or terms. For instance, when used recreationally terms such as ‘swimming’ or ‘relaxing in the hot tub’ exist. Or perhaps when looking at religious purposes the terms ‘immersion’, ‘baptism’ or ‘spiritual cleansing’ can be seen. It even has been known as a way of healing through the terms of ‘hydrotherapy’ or ‘water treatment’.

This study is about the design of a Public Bathhouse in Derrick Street, Cyrildene, Johannesburg. Using the concept of phenomenology, influenced by the east Asian bathhouse and the local context, the proposed bathhouse will be an additional layer of cultural and recreational experience of Chinatown.



Fig 1.1 Author enjoying a Korean bathhouse experience



Fig 1.2 Entrance to a Korean traditional Jjimjilbang(bathhouse)

Motivation | 1.2 | Intro



Fig 1.3 Hustle and bustle of the 'New Chinatown'

From the late '90s, Cyrildene emerged as a second China town with the movement and relocation of the Chinese community from Commissioner street – the 1st Chinatown. Concentrated along Derrick street it evolved as a distinct Chinese Cultural hub which attracted a diversity of people to enjoy and experience Chinese culture through mainly its culinary culture, fresh food, shopping and some hair and massage salons. The area came to be seen as a part of the tourist itineraries for both local and foreign with Jozi tourism listing is as one of the must-see tourist destinations in Johannesburg. (Cyrildene – Gauteng Tourism Authority, 2020) With its proximity to OR Tambo, it became an arrival place for many Chinese immigrants, a place where they could find familiarity in an otherwise alien place. In the last few years, the area has experienced a decline as many of its early Chinese residents have moved out. This is due to several concerns raised by the residents which include crime, overcrowding, illegal parking, building, businesses and dumping. (Bodasing, 2014)

Recognising Cyrildene as a cultural hub and tourist destination the City of Johannesburg commissioned a precinct plan which was completed by Local Studio in November 2016 (Cyrildene UDF, 2016)

In addition to that the local community seeking to promote its stature as a Chinese cultural hub commissioned and contributed towards the construction of two gates in typical Chinese architectural styles on both the north and south end of Derrick Avenue. The gate acting as markers for a distinct Asian culture.

Other than the food and culinary culture and the occasional and annual celebration of Chinese cultural events, the street does not have a diverse mix of cultural experiences.

As such this study intends to, as a way of revitalising the area, add additional layers of new spaces of cultural experiences beyond the Chinese food and culinary culture Cyrildene is well known for.

Intro | 1.3 | Problem Definition

To address the problem of cultural diversity and raise Cyrildene's stature as a Chinese cultural destination and experience in Johannesburg, this study proposes the development of a Bathhouse on Derrick Street to contribute to the revitalisation of the area as a cultural destination.

Intro | 1.4 | Research Question

In line with the above and leading to a design intervention, the following question is explored

How can the concept of phenomenology be used to guide the design of an Asian style bathhouse in order to enhance the Asian/Chinese cultural experience and help in the revitalisation of Derrick street as a distinct cultural hub in Johannesburg?

To address the above main question the following sub-questions are explored.

- What is the role of the bathhouse in communities?
- How can the concept of phenomenology be used to create a unique social and cultural experience?
- How can we use an average person's understanding of phenomenology to adapt the Asian bathhouse to Johannesburg.
- How can an additional socio-cultural typology help to enhance the cultural hub of Cyrildene as a recreation/tourist destination?

Intro | 1.5 | Design Intentions

By applying phenomenological theories in an architectural context such as the use of materiality, space and light to help shape a person's experience, the bathhouse typology through a variety of different programs help make it suitable for the local context of Cyrildene and thereby revitalise the area's cultural identity.



Fig 1.4 Discovering the existing phenomenological elements within Cyrildene

Objectives/Design Proposition | 1.6 | Intro

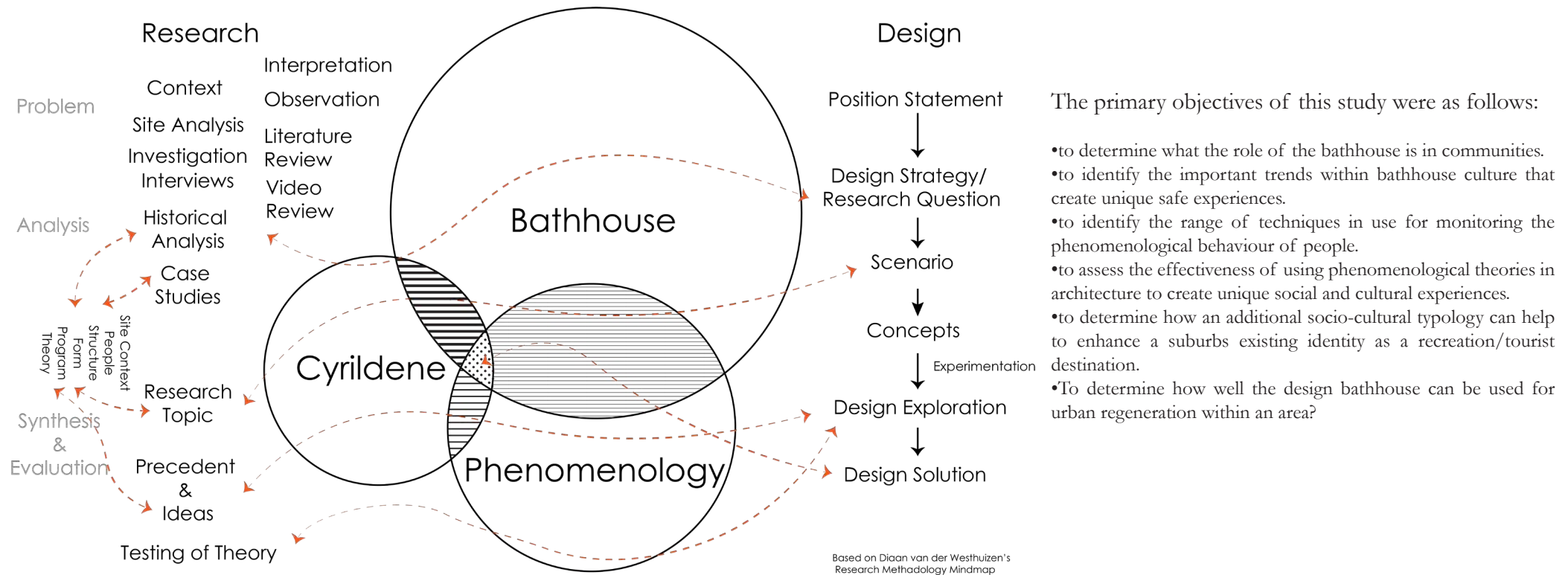


Fig 1.5 Early Research Mindmap

Intro | 1.7 | Methodology

Creative research through design is a combination of inductive reasoning, interpretation and imagination linked to various themes, constraints (such as technological considerations, building site, client and user groups) and precedents (urban and architectural). The creative research process in terms of discourse and design alike, take on an iterative (inductive-deductive), non-linear, cumulative, cyclical, and open-ended exploration to achieve its creative outcomes. The research combines qualitative and quantitative approaches to knowledge and argumentation, whilst the creative component translates the same into a defensible architectural proposition. Beginning my methodology requires me to look in-depth into my original question.

Interview

To answer the questions posed, it is best to use the one on one interview as one of the methods to gather the data. This method allows for interpretation, contextualisation and gaining in-depth insight into the specific concept of phenomenology and of personal experiences within Cyrildene that is required.

The interviews will be semi-structured.

Selection of the participants to be interviewed will be based on whether they have operated in the street or along the street for a long time.

Residents who frequent the street often will also be identified and interviewed

People who are not from the area but enjoy coming to the street for recreation or food or shopping will be considered as well.

Ethnography

I also aimed to use ethnographic techniques such as on-site observation and mapping as to produce real world contextualised knowledge about the behaviours and shared beliefs of the people within my study.

Observation and Mapping

Observation will cover the entire street of Cyrildene

Mapping will occur where points of interesting behaviour occur by the different groups of people.

Observation and mapping will occur where people are comfortable or where they gather.

Observation and mapping will occur where people try to avoid.

Observation and mapping will occur during multiple times of the day to capture the flow of traffic and activity within the area.

The observations will be noted down on a printed-out map and then formally mapped at a later stage.

Photography

I will make use of photography to try and capture moments within the environment that can't be represented with just words. Any people within these photos will have their faces blurred out of respect for the anonymity unless given permission.

Auto-ethnography

The final method I will be employing is the auto-ethnography. This will be based on my own personal experiences as I have lived in the area of study for most of my life. I also have experiences in Asia that have allowed me a greater understanding of the subject I am attempting to research.



Fig 1.7 Proposed Site in Cyrildene



Proposed Site | Intro

Cyrildene's Derrick Avenue

- Erf 733

Ease of access to the airport

- With Cyrildene being one of the tourist hubs in Johannesburg, having my intervention close to the airport allows users to quickly and easily travel to my site.

Urban connection

- The site is in an area that allows for urban intervention and interaction with the broader community.

Asian connection

- The building typology that is being implemented is much more readily accepted within the boundaries of the Asian community.

Cultural Identity

- Having an already established cultural identity makes it so that visitors and residents are already comfortable with being in the space.

Intro | Expected Outcomes

The outcome of this study should result in a proposed design where the East-Asian bathhouse, influenced by phenomenological theories and culture, is able to revitalise Cyrildene's Derrick Avenue.

The proposed project represents a major step toward the understanding of using the design of bathhouses to act as hubs for cultural revitalisation. Overall, the study will broaden our understanding of phenomenology within the built environment. For residents living within Cyrildene, this project will revitalise the area through the increased traffic and subsequently will be a focus for the local municipality to keep up the maintenance and enforcement of the rules within the suburb. For shop owners, this project will benefit them from the increased traffic of people

coming to enjoy the experiences offered. For those coming to Cyrildene as tourists, there will be an additional level of culture to be experienced. It also provides an additional form of short-term accommodation that isn't a hotel or an Airbnb close to the airport.

Outline of Programme

The program will primarily cater to the people who seek out Cyrildene as a cultural hub of activity. This may include people from outside the country here for tourism, to people from neighbouring suburbs coming to do some shopping or even as simple as the residents and shop owners of Cyrildene.

The program will include the design of a multifunctional bathhouse that has recreational facilities.

The program will be broken down from these four categories.

Bathhouse – Bathing Facilities

Recreation

Entertainment

Resting and Relaxation

Intro | Scope and Limitations of the Study

Scope

The scope of the research will consist of the following:

- The study will look at the suburb of Cyrildene and in particular the street of Derrick Avenue as the main area of study.
- This study will only consider those above the age of 18 that are residents or shop owners of Cyrildene, as well as tourists and people who visit Cyrildene as a place to experience a different culture as the end-users.
- This study will sample between 5-10 residents or people that are within the Cyrildene area when interviews are being conducted.
- This study will sample +-3 owners' or operators of spas.
- The study and most of the data collection will be conducted within 1 university semester.
- This study will focus on phenomenological theories based on relevant literature and applied to bathhouse architecture.

Limitations

- 1) Fluency in language - With Cyrildene being a predominantly Chinese area I believe that there will be a language barrier problem between myself and the residents. This is where I will employ a translator, however, this will mean I will be subjected to his understanding of the language during translation
- 2) Self-reported data – Could be limited by the fact that data can be independently verified. I have to take what people say at face value. Why this could be a problem is that self-reported data can contain potential sources of bias through selective memory, telescoping, attribution and exaggeration. How I will attempt to limit this is by carefully crafting my questions so that they allow for no or at least minimal bias interference.
- 3) Time available – There are outside factors that could influence my ability to manage the amount of work I can complete within the given time frames.



Fig 1.8 Participant faces are blurred for privacy reasons. The owner of Simplicity Coffee Shop.

Intro | Ethical Considerations

This study aims to be both ethical and lawful. This research proposal along with the ethics forms has been submitted to an ethics committee and only upon acceptance did the research begin. Subjects were invited to participate, and consent was asked for before any data was collected. Consent and Information sheets were given out to all subjects and upon acceptance, participation status was confirmed. I anticipate a minimal risk (no sensitive questions) to both the participant and myself. Subjects were allowed to decline or discontinue without any sanction. Confidentiality and anonymity of individual information was maintained throughout the data collection process as well as in the final report. Hard copy data was locked away in my locker, any soft-copy records were stored in my password-protected computer. All data will be destroyed 24 months after final report submission.

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Fig 1.3: City of Johannesburg, n.d. Hustle And Bustle Of The 'New Chinatown'. [image] Available at: <<https://1prbjt3glkot4d10re3edh59-wpengine.netdna-ssl.com/wp-content/uploads/2016/03/Cyrildene-5.jpg>> [Accessed 1 September 2020].

Fig 1.4: Kow, A., 2020. Discovering the existing phenomenological elements within Cyrildene. [image]

Fig 1.5: Kow, A., 2020. Research Mindmap. [drawing]

Fig 1.6: Kow, A., 2020. Observing Cyrildene. [image]

Fig 1.7: Kow, A., 2020. Proposed Site in Cyrildene. [drawing]

Fig 1.8: Wilson, G., 2018. Participant Faces Are Blurred For Privacy Reasons. The Owner Of Simplicity Coffee Shop.. [image] Available at: <https://dizzylexa.files.wordpress.com/2018/01/img_0042.jpg?w=736> [Accessed 1 September 2020].



CHAPTER 2

The Bath Saga

CHAPTER 2 | The Bath Saga

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The Bath Saga | 2.1 | Bathhouses and Experiences of Bathing

Bathing has quite a few definitions, but they all have a similar theme in common and that is the act of immersing oneself within water or an aqueous solution.

There are many purposes for this immersion of the body into water. This could be in the form of bathing as a means of personal hygiene, where the bather bathes in order to cleanse their body of dirt, dead skin cells, sweat and other grime that has accumulated throughout their time during the day, week or months. (Larson, 2001)

Or bathing as a form of a religious ritual where the bather is immersed in water as a means of purifying and transitioning to the next section within their lives. This can be seen today when we look at Christian Baptisms, Jewish Mikvahs or the act of Ghusl in Islam. (Promeeet, 2007).

People also use bathing for therapeutic and healing purposes. This is where the bather uses the baths inherent natural properties to heal the body, spirit and mind. (Seligson, 2016)

The final example of how bathing is used within the real world would be that of bathing as a form of recreation which could be argued to be a branch of bathing as a form of therapy. Through the act of playing around in the water people can develop deeper relationships with their friends, families, and even random strangers. It can also be a form of exercise where the bather works up a sweat due to the intense heat of the surrounding waters or in a cold pool for laps.



Fig 2.1 Bathing for hygiene



Fig 2.2 Bathing used for religion



Fig 2.3 Bathing used as therapy

The Bath Saga | 2.2.1 | Public bathing and the bathhouse in history

“The bath and its purposes have held different meanings for different ages. The manner in which a civilization integrates bathing within its life, as well as the type of bathing it prefers, yields searching insight into the inner nature of the period.” - Siegfried Giedion

The earliest findings of bathing in a bathhouse type scenario show that they have been around since the Neolithic Age, where people used hot springs as a form of relief against the frigid colds. (Suemedha, 2012). This practice showed that as a species we have been, whether consciously or not, bathing together since the times of our ancestors.

Roman Thermae

Although Bathing culture had been around for years past, used by the Neolithicans, or by citizens of the Indus Valley (present-day Pakistan) or even the Greeks circa 1700BC, the one civilization to have truly taken bathing and the bathhouse to its most influential form were the Romans. The Romans circa 300BC used bathing as a form of social cohesion. Bathing was seen as a major portion of daily routine. “The status of bathing reveals a cultural attitude towards bodily relaxation; it is the measure of the extent to which individual well-being is regarded as an indispensable way of life.” (Giedion 1971:238) The Thermae (Roman Baths) was a location where they spent most of their spare time relaxing socialising and discussing business and politics. This was done in total nudity where both the rich and the poor were allowed to be in the same space. (Wilkinson, 2018).

The Romans built baths wherever they settled (Ross, 2002). The baths developed and consisted of a complex progression of open-air swimming pools, and rooms of varying temperatures, progressing from cold to super-heated, for steaming and sweating. Where one could also get a massage and exercise if they so chose. They used highly advanced technology at the time such as the hypocaust, a system of radiant floor heating, to keep the pools and the spaces heated. (Yegül, 1992).

There was a general set of rituals one had to follow once in the Thermae. You would start at the Apodyterium, the dressing room, where they would get undressed. They would then entrust their clothing to their slave or servant or if you were not of the upper class would simply leave them on the floor. They would then visit the Palaestra, the Gymnasium, where they could exercise or workout before your bath. This is also where they would get oiled up and massaged. The next room would be the Frigidarium, the cold room, which contained a cold pool of water where they would take a quick dip into before visiting the Tepidarium, or warm room, to recover. They would then enter the final room which was the Caldarium. This room was a mix of a sauna and the baths that we know of today. Romans would spend their time within the hot plunge baths or be sitting outside of the pools relaxing or getting the oil scraped off their skin with a special tool called the strigil. Once they were done, they would visit each of the rooms again but this time in the opposite direction finally arriving back at the Apodyterium where they would get dressed and head home. This would then be repeated with their fellow Romans the day after. (Devilleir, 2006).

The Romans put great emphasis on the bathhouse both as a symbol of power and as a way of providing for the state of the physical and spiritual well-being of the Roman people. “The baths were once lavishly decorated with mosaic and marble floors, marble wall veneer, gilded stucco, and glass mosaic vaults, and numerous statues and marble columns.” Delaine (2015) describes the Thermae of Caracalla, one of the largest thermae in the Roman empire. These were spectacular buildings, grand in scale and appearance, built to emphasise the wealth of the nation and the importance the Romans placed in the idea of bathing itself.

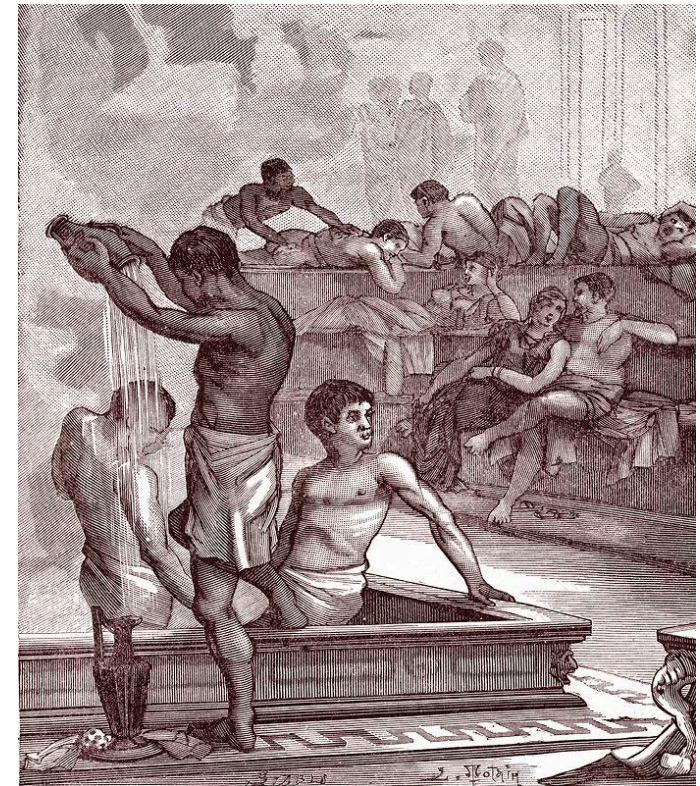


Fig 2.4 Slaves attending to Romans who are bathing

Within the Roman society, the inclusive nature of bathing epitomised a democratic ideal where people from all sects of society were catered for. Where communal and the personal well-being of the population was an accepted responsibility by the state.

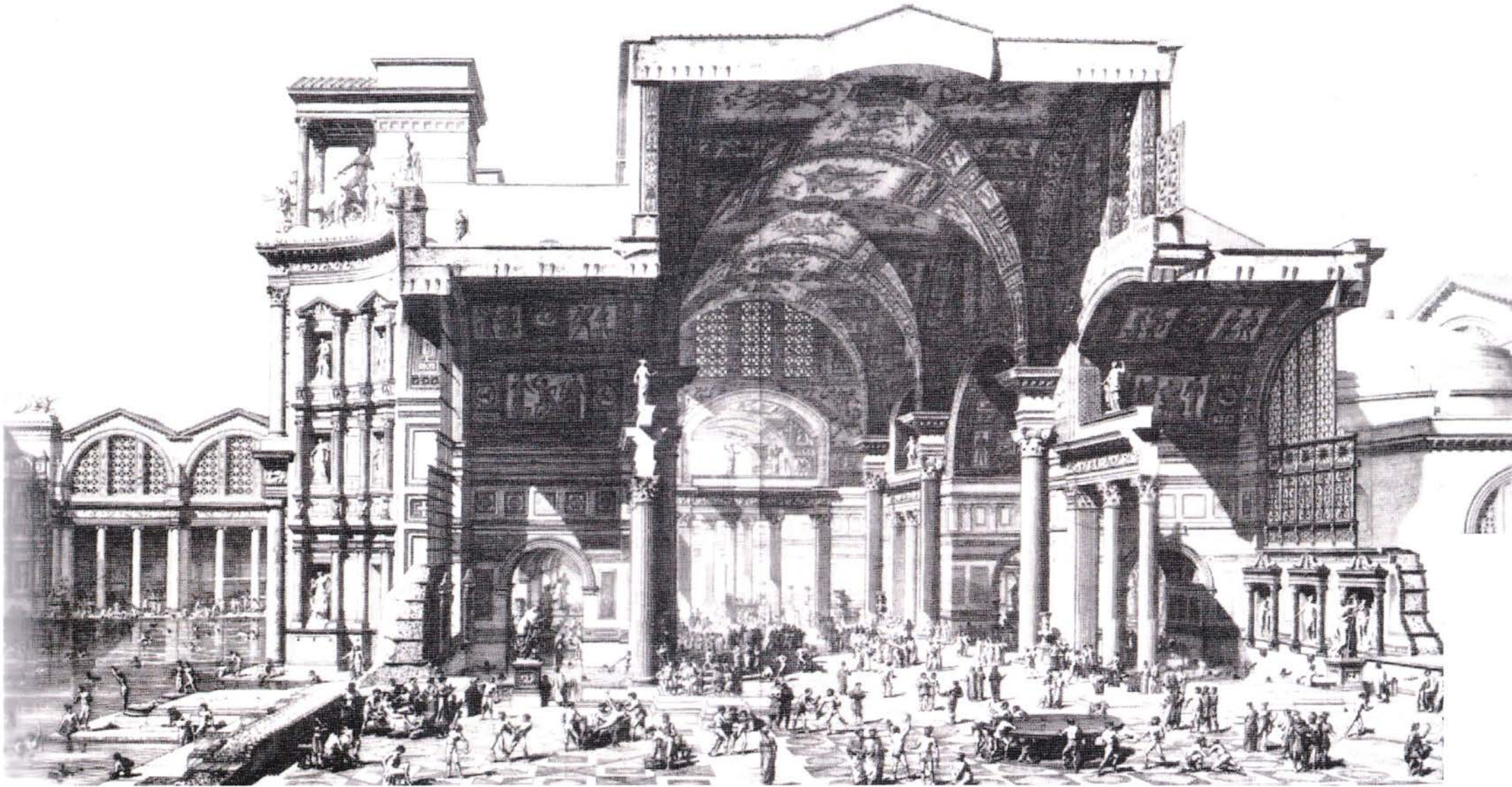


Fig 2.5 Reconstructed perspective of the Imperial Thermae of the Diocletian in Rome 298-306AD

The Bath Saga | 2.2 | Public bathing and the bathhouse in history



Fig 2.6 Bathhouses around the world

The Bath Saga | 2.2.2 | Public bathing and the bathhouse in history

Turkish Hammams

Bathing was not just limited to the Romans though, long after the fall of that empire arose another that took its place. The Ottomans were also ruled by those who had interests in the desires of the world. They adopted the bathhouses of other past cultures, most notably the Romans, and reinterpreted them to serve the Islamic faith and its people. (Wilkinson, 2018).

Traditional Ottoman Baths or the more popular term of Turkish Baths, also known as Hammams, were highly influenced by Roman Society. They were also spaces of social gathering for all sectors of society. Bathing rituals were also incorporated into major life events as a means of celebration such as weddings and births. Bathing in the facilities provided was reserved for each gender at different times of the day. When it was time for the women to bathe a cloth was draped over the entrance as notice. (Ross, 2002). Wilkinson(2018) states that after Napoleon's Eastern campaigns, hammams became a subject of much intrigue for the Western Europeans of the time. They were intrigued by the exotic beauties being scrubbed by their African slaves. Paintings done by Ingres and Gérôme depict oceans of flesh exposed in stimulating proximity. However, in truth hammams were a place where women could socialise unmolested, this of course further deepened male Western Europeans desires to discover them.



Fig 2.7 Hammam massage table

Hammams are still a common gathering space for socialising and relaxing today. When entering a hammam, visitors may be given a towel, a pair of sandals and a keşe, an abrasive cloth, meant for exfoliating the skin. (Suemedha, 2012). A difference in the way Romans baths was used where the emphasis is placed on alternating hot and cold temperatures, Turkish baths rather focused on vigorous purification of the body through heat. The bathing process would take individuals through 3 main areas, the first being a hot steam room with a large marble stone at the centre. This was where bathers would lay as the tellaks, bathing attendants, would scrub them and administer massages. The second area would be a warm room that was used for the actual bathing and then the final room would be a cooler room that was used for resting as fans blew cold air over the body to close the pores and return bathers to normality. (Ross, 2002).

The architecture of a hammam and Islamic architecture at the time was some of the most extravagant expressions of beauty that even holds up to today's standards. The use of 'elephant eye' dome lights within the hammam gives the user a sense of natural light and comfort in the otherwise dimly lit spaces. A lot of the earlier hammams also used local stone materials for their columns and bathing tables. Some of the more modern-day ones make use

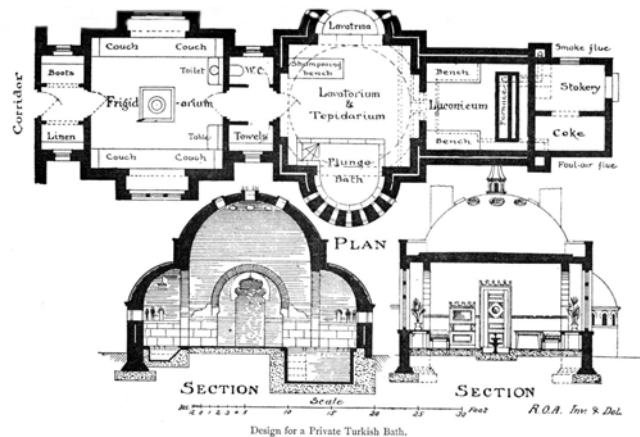


Fig 2.8 The general layout of a Hammam in section & plan



Fig 2.9 Turkish Hammam transition space

of luxuries stone such as marble and granite for their göbektaş (a heated surface normally in the middle of the hammam) within the large volume domed area. The spaces were elaborate and elegant, extremely clean and pure, a homage to the physical manifestation of the Muslim faith. (Aaland, 2018).

The Ottomans revived bathing culture within the European setting and if it were not for them the likelihood of Roman bathing culture would've long been forgotten in the annals of history books. The conversion from simply being an inclusive space to one where religious beliefs were brought to the forefront is evident when one goes through the rituals and the physical exploration of the hammam.

Fig 2.10 Female activities within a Hammam



The Bath Saga | 2.2.3 | Public bathing and the bathhouse in history

The role of bathhouses in East Asia.

While a lot of bathing culture has roots in the West. I do think it is interesting to note how bathhouses have also developed in the Far East. Perhaps the most obvious of these cultures to look at is none other than that of the Japanese. The culture of bathing there has evolved with the times, from the popular Onsen, bathhouses located in natural hot-springs around the country, to the current day Ofuro, also known as private bathtubs. As anthropologist Scott Clark writes, "...To take a bath in Japan with an understanding of the event is to experience something Japanese. It is to immerse oneself in culture as well as water." (Clark, 1994). As we go through this chapter I hope to show how bathing culture is very much entwined with Japanese identity.

The earliest recorded literature of Japanese communal bathing was founded in the Kojiki, an 8th century chronicle of Japanese times — also the Earliest Japanese published text.(Wynn, 2014). This shows that bathing culture managed to develop on this archipelago even though it was quite separated from the West. In the Kojiki, bathing was first explored through the religion of Shintoism. They would use bathing in a ritualistic manner as a way of emphasising purity both in physical and spiritual cleansing.

Later on there would be a shift in the viewpoint of bathing when Buddhism arrived, from bathing as a bridge between the physical and spiritual to one centred more on the improvement of the physical body itself. This was when baths would also be used as outdoor therapies for the elites. Here bathing is introduced as a way of healing the body, which are also supported by claims from traditional East Asian medicine with allusions to Chinese culture and Daoism, for things like treating imbalances in yin and yang or even much later in the 18th century when Europeans would use the term 'hydrotherapy' that claimed bathing in hot water would properly flush out stale fluids and any obstructions in the body by means of sweating or excretion. (Daidoji , 2010). A good example of this being used in Japan is through their Onsens , which are various hot springs located around Japan due to the formation of thermoactive volcanoes in the area. Well established newspapers

such as the Japan Times, scientific journals such as the American Journal of Science (Silliman 1839, p.88) and similar studies have investigated and validated the claims that hot springs are able to treat various ailments such as "neuralgia, myalgia, rheumatism and dermatosis, high blood pressure and arteriosclerosis" due to their heat and mineral compositions. (Nakata, 2008). Later on this would be given the term of 'balneotherapy', the specific treatment of various diseases and infections through the use of heated water on the body, the effects of minerals within the water and the psychological benefits of the spa environment itself. (Talmadge, 2006). This was not the only thing that Buddhism brought upon its entrance. Due to the nature of Buddhism being about helping others as a way to progress towards Nirvana, Buddhists would often hold charity baths for the poor at the temples. Scores of people would come to these baths for a chance to be cleansed. (Wynn, 2014).



Fig 2.11 Japanese woodblock painting showing bathhouse etiquette in Edo period.

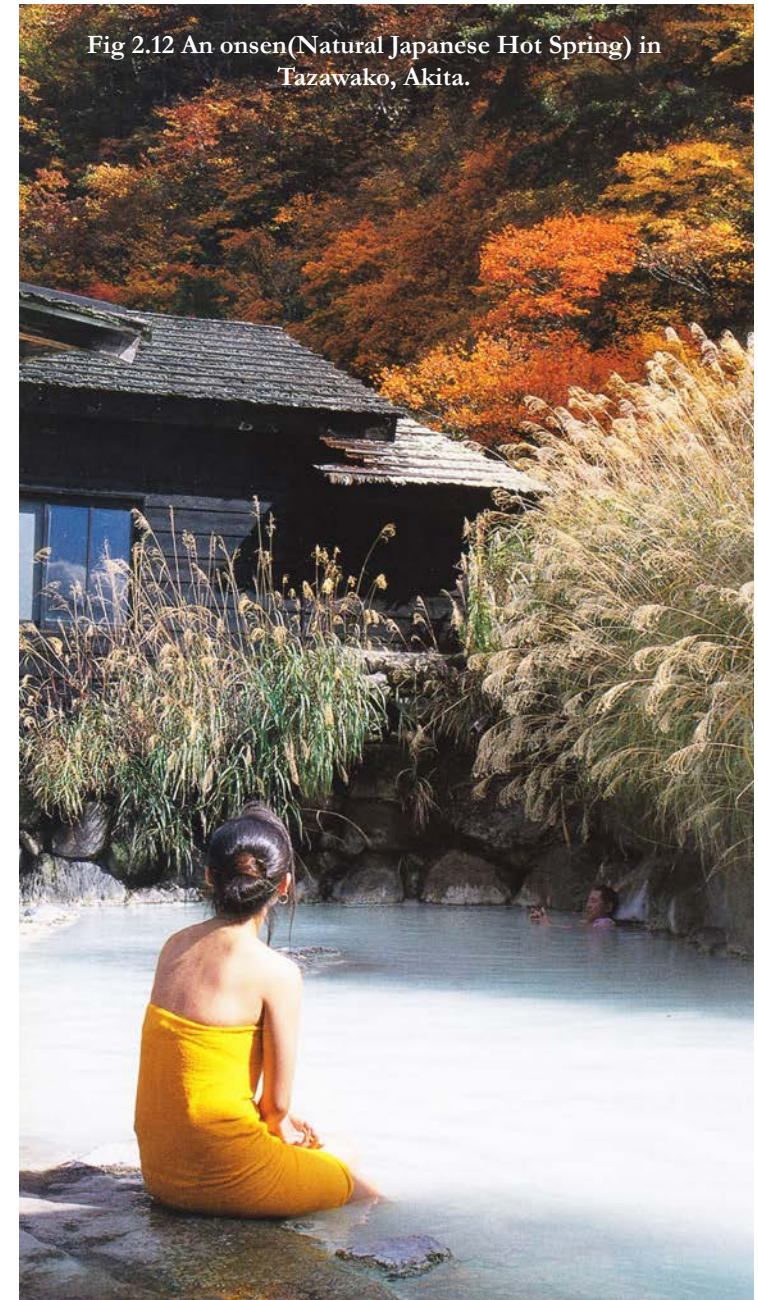


Fig 2.12 An onsen(Natural Japanese Hot Spring) in Tazawako, Akita.

The Bath Saga | 2.2.4 | Public bathing and the bathhouse in history

The advent of the sentō

Shinto and Buddhist reasoning was later abandoned for commercialised communal bathing which emphasised even more on the hygiene and social interaction aspects.

What arose from this shift in policy is the arrival of the sentō. Sen in Japanese relates to ‘coin’ or ‘money’(also referring to the original sen currency used in feudal times) and the tō can mean ‘hot water’ or ‘bath’. While this alludes to the money-making aspect it is also colloquially known today as the public bathhouse. Naturally to enter a sentō, one needs to pay a fee at the entrance. Nowadays the fee for the average sentō is around ¥470, about R80 as of April 5th 2020, with a discount for the elderly and children below a certain age. (Ota City Sento, 2016). For ordinary Japanese citizens this is an extremely affordable cost in terms of living expenses with the average Japanese worker earning around ¥4.14million annually or ¥345 000 monthly(In our current economy this equates to around +-R60 000) and even those that earn well below the national average are able to afford going to sentōs nightly. (GaijinPot, 2019). The process of using a sentō can differ from bath to bath but normally involves the following: you enter, get greeted by the owner or manager and then pay your entrance fee. From there you are given a key for your locker, which is normally a water proof chain that can be worn within the baths themselves, and then directed to the appropriate gender changing room(Most sentō practice gender-separated areas but you can still find some of the older ones that allow mixed-gender bathing). Once within the changing room, you remove your clothing, stow away your valuables, and head off to the baths. Often regulars will bring their own bathing amenities(such as shampoo, conditioner, shaving cream, razors, etc.) to these public baths but guests that aren’t familiar with this practice are able to purchase the necessities they need within the change room. Once you enter the bathhouse itself you are expected to sit down on plastic stools and basically lather, scrub, and then rinse yourself thoroughly. If you have friends or a close relative, they normally assist with the hard to reach areas. From there you may choose to use any of the assorted baths within the bathhouse. This is where the regulars would strike

up conversations and make small talk. This is especially the case if they are part of the regular neighbourhood clientele. (Ota City Sento, 2016). There are also scrubbing beds where attendants/masseuse will, for an additional fee, scrub you down till you are pink, from head all the way to your fingers and toes. While the feeling might be a bit painful at first, it with time dissipates. It is extremely beneficial as the scrub removes a lot of your dead skin cells leaving you soft and feeling invigorated for days afterwards. (Talmadge, 2006).

This is where the journey would normally end in the more traditional sentō bathhouses but recently a trend called the ‘super sentō’ has arisen. The super sentō takes all the qualities of its predecessors and basically upped the formula by a magnitude of 10. Within a super sentō you can find an additional number of varying facilities and services once you have finished taking your bath in the open-air outside bath(a rotenburo) or perhaps within a bubbly massage bath. You can go check out the multitude of different beauty treatments on offer or sample their high tech saunas then maybe go for some light refreshments or tea and then relax with a game of ‘shogi’ or ‘go’ whilst discussing their everyday happenings.(Wynn, 2014). As Time Out Tokyo, a famous website that helps people find fun and unknown activities within Tokyo, states, “The so-called super sentō has emerged to engage younger demographics, evoking imagery more in line with the electric Tokyo cityscape than traditional or neighbourhood bathhouses.”(Time Out Tokyo, 2015). It is no wonder why this still remains such a popular activity today even amongst the rise of private bathrooms(ofuro). Not only are you being hygienic, but you are also getting a great experience that has a social factor for a very affordable price.



Fig 2.13 The interior of a 1929 sentō at the Tokyo Open Air Architectural Museum.



Fig 2.14 A sento in Isaka Japan, 1910.

The Bath Saga | 2.2.5 | Public bathing and the bathhouse in history

To bathe in China

The earliest records of public bathhouses in China date as far back as the late Song dynasty, approximately 960-1279 CE. (Yau, 2019). One such example was depicted in the painting *Along the River During the Qingming Festival* by 12th Century artist Zhang Zeduan. Although most of the oldest bathhouses in China have long since been demolished due to China's rapid move towards Modernity, the typology itself still exists and if anything has been upgraded to cater towards the people of today. (ibid.) Modern public bathhouses today are split into two general groups in China, the first being the 澡堂 (zǎotáng), the more affordable bathhouse that is used by most locals in the community and secondly there is the more upmarket spa-style bathhouse, the 洗浴 (xǐyù). There is little to differentiate the two they both generally offer the same facilities you would find in any bathhouse but what you're paying for in the xǐyù is the greater ambiance and the size of the space in the establishment. Architecturally speaking, what differentiates a Chinese bathhouse from others is the sheer grandioseness of its

interiors. There is an element of decadence and luxuriousness to the spaces that would even impress royalty. You would often find expensive materials such as marble or faux gold and silver located at every turn. The height of the internal volumes within most of these bathhouses give a sense of being in a shopping mall, as if you weren't cooped up in a steamy wet room with a bunch of other random people. A recent trend is the adding of artistic murals whether they be paintings on the walls or pictographic tiles in the baths themselves. This has been seen as a way to make it seem as if you are away from the city and to distract the mind. One other aspect that I picked up within the baths is that they allow natural light and ventilation to come through via high placed windows. Thus, the need for mechanical ventilation in these areas seems to be non-existent. Some xǐyù go further and provide personal attendants to their customers. These attendants show their guests around and help undress and provided waited services at any moment. Bathhouses in China can also cater to niche audiences,

for example in some xǐyù you can even find prostitutes lined up in the arrival lounge who provide the same services as a normal attendant and for an additional fee provide sexual relief to those who seek it. (Arcaro, 2006). That is however more of an outlier than that of the mainstream where most people would simply go and use a zǎotáng due to its availability and cheaper cost. Xiong Zhizhong, a resident of Beijing, describes why he uses the local zǎotáng, "We come from a rural part of Jilin, where people don't have bathing facilities at home. In winter we filled a basin with water to take a bath at home. In summer we washed ourselves by jumping into the village fish pond." (Yau, 2019). Nevertheless it is increasingly becoming more popular for the younger generations to discover and use the bathhouse. It can be a location where young Chinese couples go for a date or where you just meet up with your friends after a stressful week to gather and chat. (Muir, 2012).



Fig 2.15 Customers using a traditional zǎotáng.



Fig 2.16 The interior of a xǐyù with attendants.

The Bath Saga | 2.2.6 | Public bathing and the bathhouse in history

The state of bathing in Gauteng

Like previously discussed, the Japanese evolved from using bathing for a spiritual/ religious purpose in the form of Shinto rituals to today most homes owning their own Ofuro, wet bathrooms where the act of bathing has been privatised. So, the question becomes what form has bathing or public bathing taken on in a Johannesburg or South African context. If we look at a traditional African context, a lot of bathing pre-colonialism, takes its form where pools of water are normally located, specifically lakes and rivers. This is by no means an African only idea, if anything you could argue that humans at the start of every civilization used this method. That is the founding of settlements in territories and areas that contain water. As animals, plants and other vegetation need water to survive too, this makes it an ideal location for human settlements. (Balek, 1977) Once settled Africans would use these

ivers, watering holes or other places of large amounts of water to drink, wash their clothing, play in the river to cool off from the harsh African climate and wash and cleanse themselves. (ibid.) This also extends to religious/spiritual purposes as African traditional healers also use the river as a form of cleansing, healing and to introduce themselves to River Spirits. You can also use that same water to sprinkle around the house to ward off the evil spirits. (Mboweni, 2016). Moving forward to today, whilst you may still find the odd township or settlement using the river in these past forms here and there, the form of bathing has evolved with the times. This is due to a much more educated society that has learnt from imported cultural norms and from the arrival of modern-day technology like plumbing which has drastically reduced the need for settlements to be placed near rivers anymore. ("History

of Water and Sanitation in South Africa," 2009) Most townships in Gauteng have benefited from this evolving world. You will find that the informal housing that normally is piled upon each other with no respect to boundary lines actually works in favour in terms of bathing. What often happens is that due to the lack of proper infrastructure in these settlements, a lot of communal sharing has evolved. You will find a communal tap located on the edge of one street where all the residents from that street go to collect water for example. The informal houses that are not lucky enough to own their own privatised bathrooms make use of communal areas specifically dedicated to bathing or using the loo. (Jacobs et al., 2014) This cuts down on the need for better infrastructure and allows most of the residents an opportunity to clean themselves.



Fig 2.17 Lack of adequate water infrastructure within the township of Alexandra.

The Bath Saga | 2.2.7 | Public bathing and the bathhouse in history

Spas, Gyms, Saunas. The emergence of modern-day luxury bathing.

The advent of technology has also allowed the public bathing scene to evolve and adapt with the times too. Today, in Johannesburg you can find ‘mini-baths’ located in your everyday gym or spa. The ritual is slightly different from that of an authentic public bathing experience but there are definite similarities one can find when investigating. For instance, in the gym, after a sweat-filled workout you would head into the locker room, strip naked and head into one of the shower stalls to clean yourself. Some gyms even offer steam and sauna rooms that you can use to sweat even more calories away. Conversations about daily on goings can happen within these shower rooms or the actual locker room itself. Some people use the gym shower rooms instead of visiting the ones in their own home due to the simple fact that it saves them money and time. (Larson, 2017). As author John Kelly writes, “Leaving the gym sweaty is never very appealing. A shower leaves you feeling fresh and relaxed and washes away the sweat and waste matter you secrete during a workout.” (Kelly, 2014).

Spas have developed in such a way that they are also a branch of the bathing evolutionary tree. People head into spas to relax by getting a massage, steaming within the saunas, de-stressing in hot tubs or a plethora of other services on offer, although they are much pricier than that of their public bathhouse origins. (Okech, 2014). There are also social aspects about heading within a spa itself, such as going with a few friends or your significant other to enjoy the experience much like that of going into a traditional bathhouse.

These are all sub-branches of bathhouse culture but the one that is most close to that of the original bathhouse itself within Johannesburg is probably the gay bathhouse. Gay bathhouses represent a subculture, often belonging to those of the LGBTQ communities. Whilst South Africa is one of the most progressive in terms of constitutional rights for the LGBTQ community there still exists negative stigma surrounding them. (Almack and Henderson, 2016). This has led to the subculture having

very private and closed communities and businesses. The public bathhouse has been one of the forms for these communities to express themselves and so the bathhouse has taken the social image of that community within Johannesburg. This means that even though public bathhouses do exist within Johannesburg, they are seen as places that only cater to that of the LGBTQ communities. Their characters are personified by the community and often lead non-LGBTQ people to believe that they are not understood, shady and dangerous and so they would prefer not to involve themselves with that. (Halkitis et al., 2017). This means that in order for bathhouse culture to be accepted within Johannesburg, the perception of bathhouses needs to change.



Fig 2.18 The Recroom, Jozi is a gay bar and sauna.

Fig 2.19 Modern day gym facilities offer pools and saunas





Fig 2.20 Spas offer a similar experience to past bathhouses.

The Bath Saga | 2.3 | Perception and Experiences

2.3.1 Phenomenology

The term phenomenology is a complex theory that first came along in the study of humanities and in particular philosophy. To understand the theory of phenomenology I'd like to examine an opposing theory and that is Cartesianism. Cartesianism boiled down to its essentials is a form of rationalist thinking. It is the thought that through science and logical deductive reasoning the world can be understood. Any ideas or emotions or any other cracks in our understanding of the world are to be considered distractions from the truth. Modern day scholars of the subject like to interpret Cartesianism similar to how academia is depicted, that of a joyless and slightly emotionless undertaking and interpretation of the world.(Nicholas, 2018). However, our experience of the world is not completely scientific or logical. Our senses play a pivotal role in the interpretation of the world around us before any of those semiotic ideals develop. And so, at a very basic level phenomenology is the theory that suggests that meaning in the world can only come into existence through the use of our senses, emotions, and consciousness.(ibid). Phenomenologists like to argue that the meaning for something to exist can only exist once it is experienced through a person or that our awareness of our own consciousness eventually influences our understanding of the world around us.



Fig 2.21 Phenomenology can be experienced through multiple forms. What emotions does this image of freshly made dumplings evoke within yourself?

2.3.2 Architectural Phenomenology

Architectural phenomenology later emerged as a post war-ideal that brought to light the study of using architecture as a means to present itself through the mode of human experiences. Therefore, successfully combining the fields of both philosophy and that of architecture. How this was done, for example, was through the use of perceptions of light and shadow, feelings of roughness and smoothness, bodily orientation of up and down. Architects would use real life materials and environments in their designs to convey these feelings of space that previously were seen as simply ornaments in the background. Architectural phenomenology for the first time could be perceived as a way to interpret how the end user could be guided through a complex adventure of subconsciousness and emotions simply by being in a space. However while the theory at the time was quite exciting, the fad quickly became a target of theoretical ridicule. As author Jorge Otero-Pailos, in his chapter titled Architectural Phenomenology and the Rise of the Postmodern, puts it, “Others emphatically reject it – typically the history and theory faculty – as a soft type of history and theory at best, and at worst as a dangerous form of de-theorized history and de-historicized theory, which takes the critical bite out of intellectual work in order to operatively legitimate architecture’s status quo.” (Otero-Pailos, 2010). Thankfully architectural theorists such as Jean Labatut, Charles Moore, Christian Norberg-Schulz and Kenneth Frampton established through decades, the collective discourse that allowed architectural phenomenology to continue to survive till today.

It is through their efforts that the people of today can choose to look at it positively as something with potential. Done through the continued use of architectural phenomenology as a design aid of recognising distinct patterns within buildings or to signify the role that sensory experience plays in peoples understanding of architecture. This is why I'd like to focus on one of these people and how he and his team used architectural phenomenology as a means to create a building that not only disproved the naysayers but also as a means to understand how human experiences, consciousness, emotions and perception can provide great architecture.



Fig 2.22 The light through the use of architecture helps create special moments within the Turkish hammam.



“There was something serene, primeval, meditative about it that was utterly enthralling. The rays of light falling through the openings in the starry sky of the cupola illuminate a room that could not be more perfect for bathing: water in stone basins, rising steam, luminous rays of light in semidarkness, a quiet relaxed atmosphere, rooms that fade into the shadows; one can hear all the different sounds of water, one can hear the rooms echoing”
— **Peter Zumthor**

Fig 2.23 A model of the Therme Spa that highlights the experiential aspect of the building

The Bath Saga | 2.4 | Precedents

This quote taken from his co-authored book titled, Peter Zumthor - Therme Vals, the architect expresses the very essence of architectural phenomenology and its possibilities. Through location, connection to the locality, materiality, light, shadow and water he is able to bring out a building that allows individuals to explore and experience the bath and not merely be an spectator to the activities within.

Hotel und Thermalbad Vals AG commissioned Zumthor and his team to design a stand-alone thermal bath and wellness centre. The commissioners wanted it to be a solitary structure built into the slope and loosely connected to the hotel itself. Perhaps the most important factor was that the building was a project that held the interest of the local community and so it was important to make it an important contribution towards tourism within the area.

The concept from the start, only revealed itself along the way, was discussed, discovered, and defined in the process of realization. Zumthor and his team produced many sketches throughout this time that only through a step by step analysis unveiling how the final building came to be.

The use of materiality has an important effect on the way humans perceive spaces. A rough material that is cold to the touch may invoke a feeling of negativity or where one feels uncomfortable. On the opposite side of the spectrum a material that is bright or smooth can invoke a feeling of welcoming and safety. Materiality plays a big part in the way Zumthor and his team design the baths. The main material that is used is from the local Val mountains is called Val Gneiss, which became popular worldwide after the great reception that Zumthor's building received after it was built. Zumthor didn't initially think of using this stone as the material

but through continual engagement with the local community he saw that the use of the stone could be beneficial in his vision for what he wanted. Stone is unyielding in its form only through lots of processing does it conform to the desires of its sculptors. The stone also invokes a sense of heaviness and is often cold to the touch when no outside factors are involved. It is after discovering these qualities that Zumthor decided to use stone as his main material. The building uses masses of stone collected from the mountains, in the shape of slabs, in the shapes of external cladding, and in the shapes of giant blocks to inform the spaces within. These stones are an integral part of the understanding one experiences when journeying through the bathhouse. When you walk within you are instantly greeted with the feeling that you are isolated. There is no set path for one to take, you are on a journey of not only the internals of the bathhouse but of self-discovery. For architects you start understanding how the use of mass and

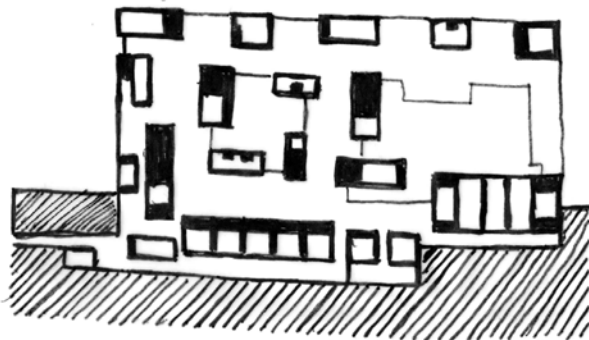


Fig 2.24 Diagram showing solid forms, static spaces and movement spaces.

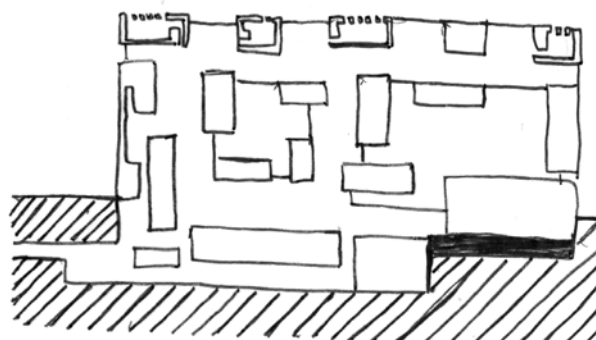


Fig 2.25 Diagram showing arrangement of the stone blocks.

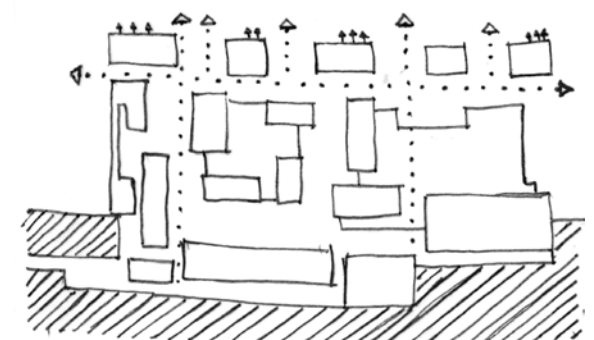


Fig 2.26 Views that look out into the natural swiss landscape.

The Bath Saga | 2.4 | Precedents

hollowness, openness and compactness, rhythm and disruption, repetition and variation lends to the experience. The blocks of stone strategically placed so that light enters within certain angles or so that you get a framed view of the external valley landscape. How this material when left alone is cold but when introduced to the warm waters take on the properties of that water and its warmth. Every room curated to a different experience all due to this one material.

Stone isn't the only material that is present within the bathhouse. When you first enter the bathhouse you are invited into an antechamber which acts as the changing room before you enter into the actual baths themselves. This room is clad in a red panelled timber. Timber is a material that has great insulation properties, is versatile in its use, has great strength when appropriately applied and has an appealing soft aesthetic that provides a feeling of warmth and comfort. The room acts as a break room, it allows the user to feel relaxed before releasing them into the very different world that is outside its walls and once a traveller has adventured into that wilderness and seeks refuge, it provides a safe haven for their return. Zumthor says he got the inspiration for the room when he visited a Turkish Hammam, where the large domed

spaces within the baths act as an area where a person is received, where they are able to change their clothes, where they are able to rest and relax after bathing, where they are able to drink tea and converse. All these factors stirred Zumthor and his team to design a room where one was able to take off ones clothes with a similar atmosphere of warmth and welcome but in keeping with a westernised cultural context.

The way one makes use of water can also provide many health benefits to the mind and the body. Zumthor makes use of water in different ways within the building. He tries to use all material forms of water to direct the experience of users. Whether it be using the natural cold and frigid ice and snow from the outside to subconsciously guide the user away from that territory and into an area that provides them warmth and shelter. Or when looking at the different pools that he has created, for instance the 'Fire Baths' are a 42 degree Celsius set of steam filled pools that are not used for cleansing but for relaxing. That is the act of relaxing the weary body and the tired mind which is contrasted by the 'Ice Pool', a chilly 14 degrees Celsius, pool of water that one jumps into to cool off, become alert and reinvigorate the mind. These pools also make use of colours and light to further deepen ones

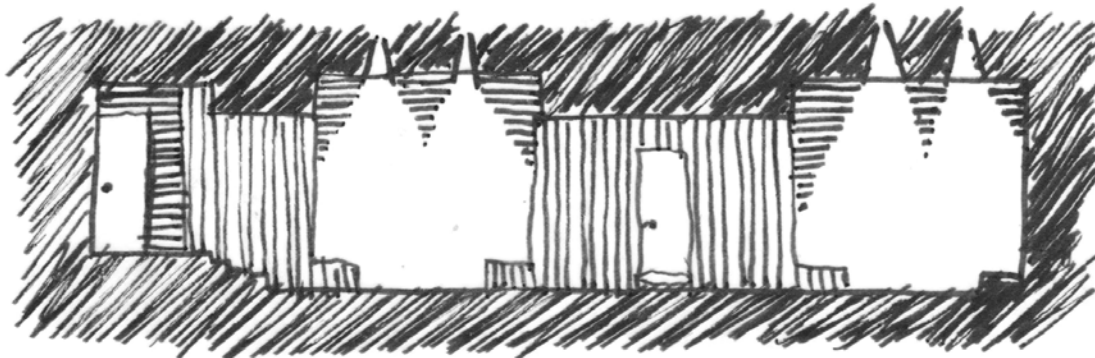


Fig 2.27 A section through the anteroom showing the use of light and the playing of different levels.

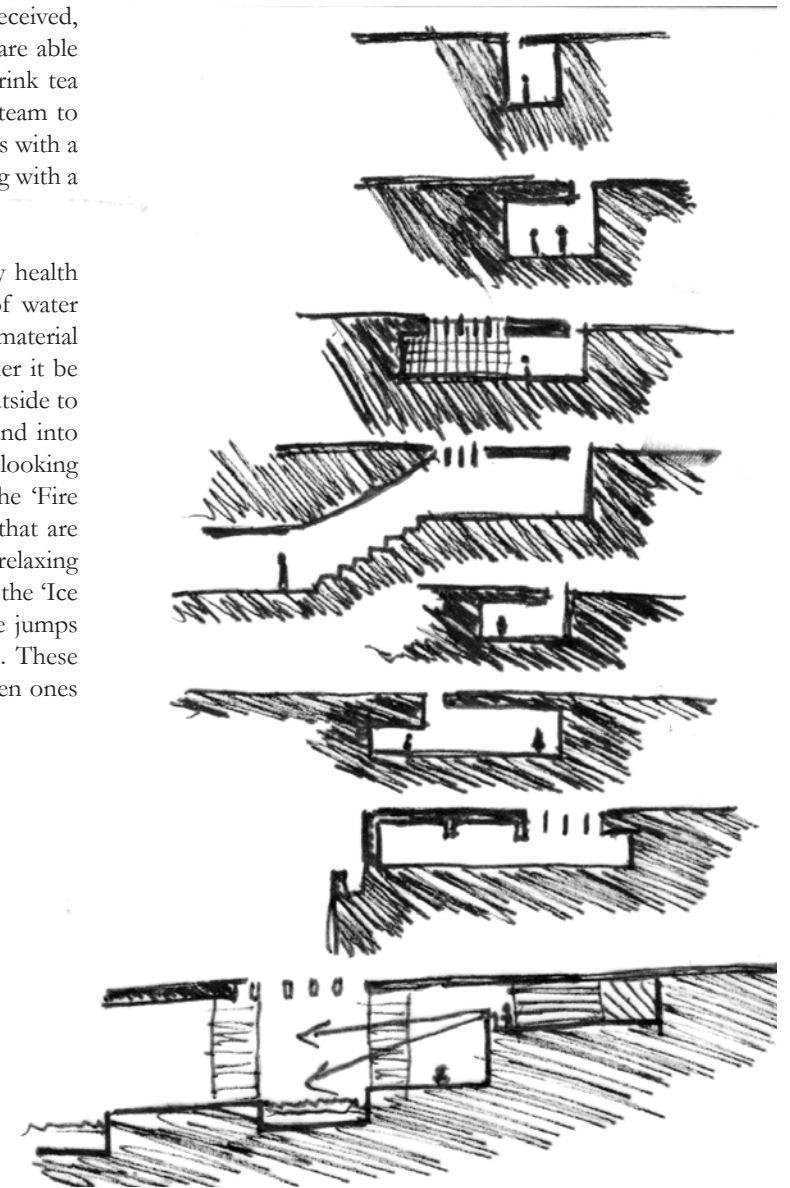


Fig 2.28 Different sections through the building showing the different spatial conditions.

The Bath Saga | 2.4 | Precedents

2.4.1 Therme Baths

experience. For instance the colour blue symbolises cold, water, air and the infinite which so happens to illuminate the 'Ice Pool' and similarly the colour red which symbolises hot, passion, warmth and comfort illuminates the 'Fire Baths'. There is also the 'Flower Bath', that infuses warm water in conjunction with the fragrant smells of elder blossom, rosemary, chamomile and sweet clover amongst other things to provide the feeling of being lost outside in nature — a sure fire way to relieve ones mental stress.

Within the 'Sounding stone' chamber, a small enclosed area surrounded by the Val stone, is a singular bath that completely isolates the user. Within you hear nothing, as if the noises of the outside world have been switched off. As you sit in the darkness surrounded by nothing but water that reaches up to your neck you are reminded how simple life is away from the busy distractions and on goings of life on the outside. Within you are only left with your own thoughts, a place for true tranquillity. Mr Nejati, an academic who has visited the baths, describes his relationship with the sounds within, "Listening to the music of water from a silent situation such as a calm and tranquil lake, to the most clamorous condition similar to the tides of the sea and falling water can present diverse mood and feelings." (Nejati, 2011).

The final aspect that I'd like to talk about is Zumthors use of light. Light brings clarity, sincerity and purity to space. The use of light can relay feelings of joy, hope and happiness to an otherwise dark space. Zumthor carefully directs where lights should be presented and thus completes the users end experience.

Combining all these elements is what architectural phenomenology should aim to achieve – to bring the end-user on a journey. In the end, Zumthor describes it best, "Contained within the blocks of stone are intimate spaces that are reserved for bathing, cleansing or relaxing — each a separate world that holds its own surprise... The wish to ensure a delight in experiencing water at different temperatures and in different spatial situations with variations in the lighting, the colours, the climate, the materials, and the sound; close contact with stone and water; immersing oneself in water for relaxation, as a ritual. Purification. Peace. Serenity. No noisy attractions, no intrusive stimulation, only the sensation of one's own body undergoing subtle change."

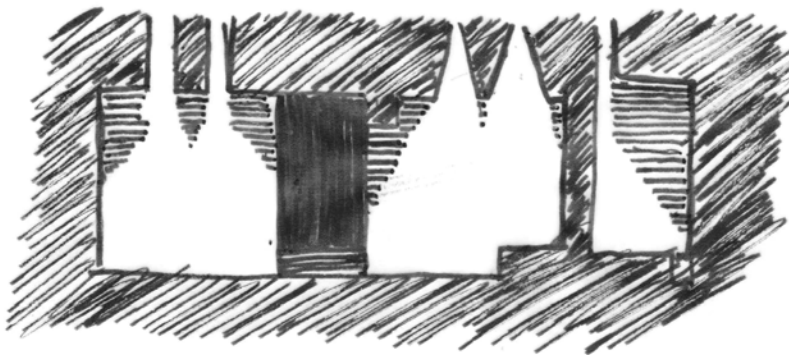
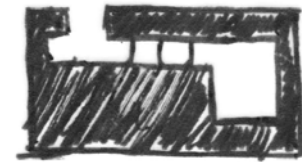


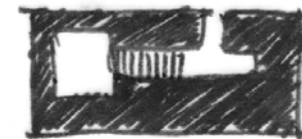
Fig 2.29 Section through a bath showing the use of light wells.



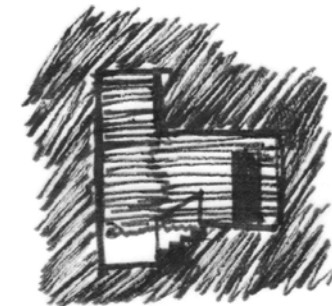
Plan



Section



Plan



Section

Fig 2.30 Plans and sections through different baths within the bathhouse

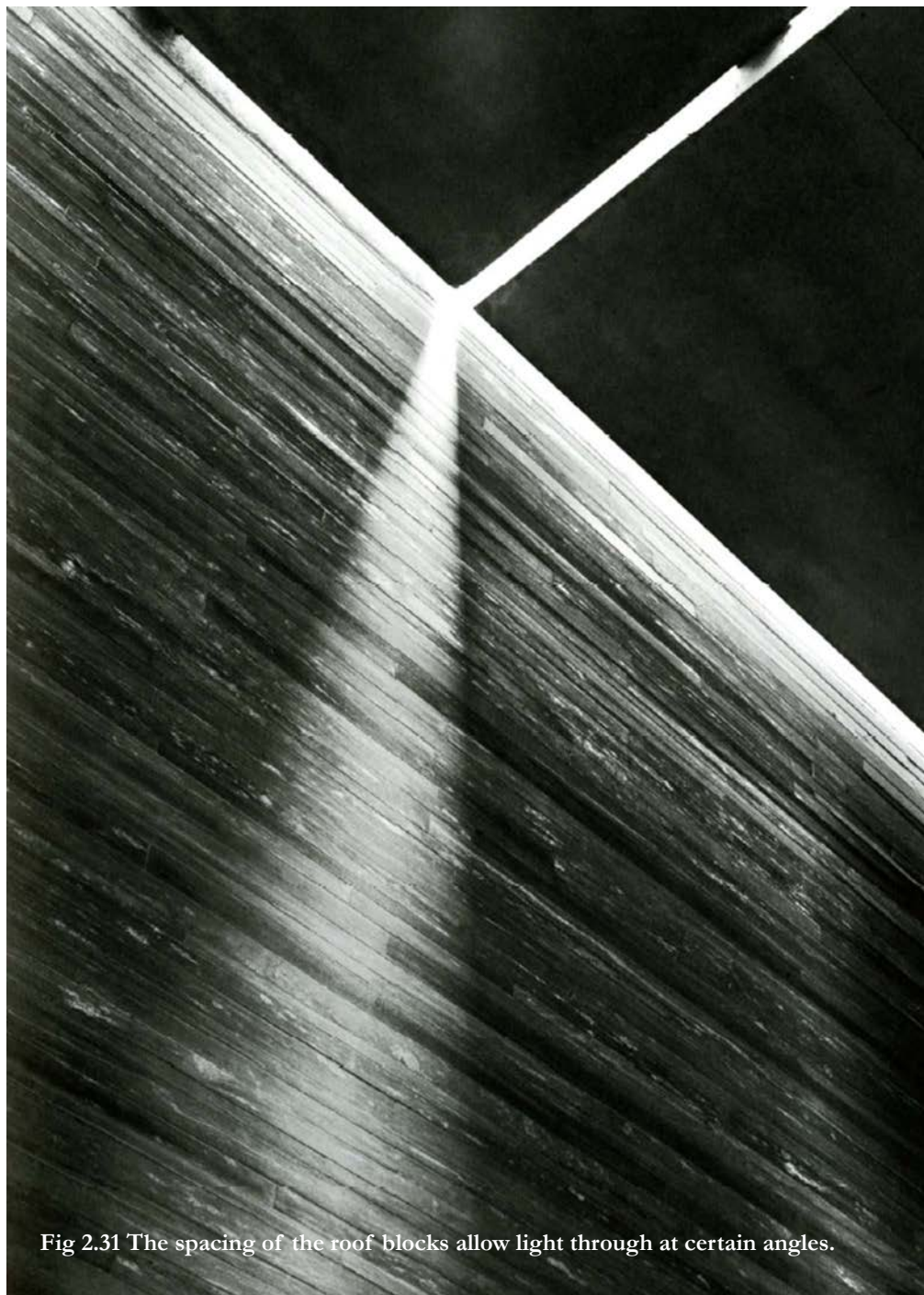


Fig 2.31 The spacing of the roof blocks allow light through at certain angles.

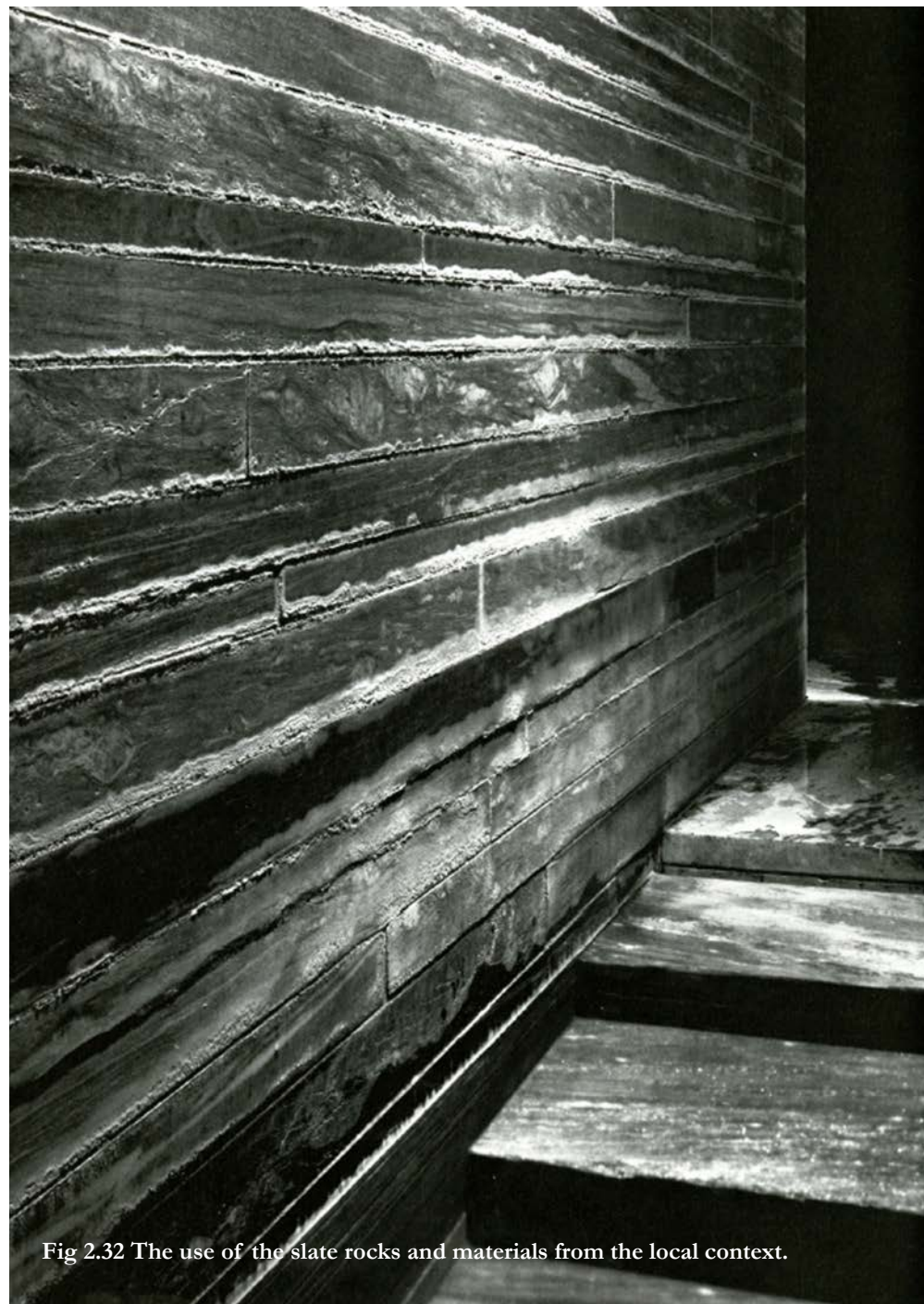


Fig 2.32 The use of the slate rocks and materials from the local context.



Fig 2.33 The transition from one level to another.

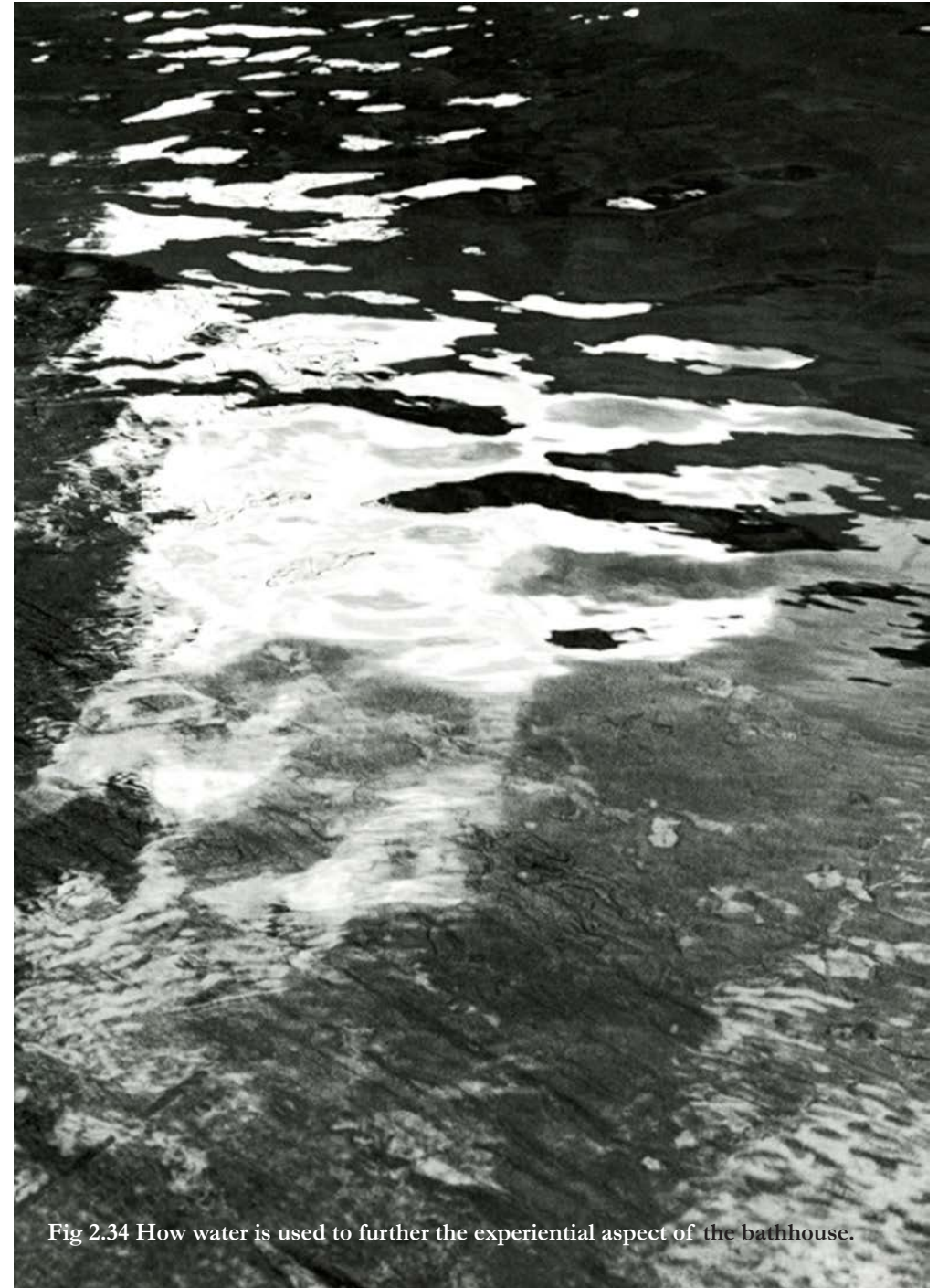


Fig 2.34 How water is used to further the experiential aspect of the bathhouse.

The Bath Saga | 2.4 | Precedents

2.4.2 Ofuro Ousama Ebina

The 'Ofuro Ousama' or translated 'King of Baths', Ebina branch is the next precedent I'd like to talk about. Ofuro Ousama is a chain of affordable sentō type bathhouses located in and around Japan. Their core ideal revolve around the acknowledgement of Japan as a society that values the nuclear family with an increasing amount of aging population. That their nation is also promoting an ethos that is discouraging the interaction of families and local residents. In such an era, "Ofuro no Ou"(shortened version of Ofuro Ousama) originally opened a unique store for Japanese bath lovers, and not only enjoy the bath, but also "beauty, health, and contact". They promote 3 beliefs in all their bathhouses. The first being a facility that enhances local cohesion, contact and healing. One of the ways that they achieve this is every month, they hold unique events for each bathhouse that promote local unity and build relationships within their local neighbourhoods. The second being a facility that can support the beauty of mind and body. This is achieved through the offering of different body-care, shavings, and beauty treatments as one of the in-house services. Through doing this one is able to support their body and mind, forgetting about their daily routines and enjoying their lives as soon as they leave. The third and last of their values is that each facility should be aiming for health promotion and preventive medicine. This is achieved through their actual bathing facilities that are specifically made to promote fatigue recovery and erase fatigue.

For instance this can be seen in their high-concentration carbonated springs, which are recognised for their health and medical benefits. I have specifically chosen to look at their Ebina branch.

Programme

The programme of this bathhouse shows the plethora of different bathing options for the user that one can achieve within a bathhouse. They have separated the genders and therefore have similar bathing facilities for both. However, each gender seems to have a unique facility made for them. I do believe that this is a bit bias as it seems the better facilities(View of outer city bath and the medicinal steam sauna) are more skewed towards the males which

is probably an indication of the patriarchal society that they live in but that is another essay altogether. They have also included a restaurant that is attached to the bathhouse so that they are able to serve food which is also quite interesting.

Circulation

The general circulation for the building seems to go as follows:

- Arrival in the parking lot
- Go through the front yard
 - Option 1: Go to the baths
 - Option 2: Go to the restaurant
- This shows that while both of these typologies are part of the same building, that they can function alone as well as together.
- With either option you are then greeted by a front desk, from here it the bathhouse has a bit more diversity when compared to the restaurant.
- After paying at the front desk reception you are then split based on gender. Each gender has similar facilities, so the circulation is more or less the same. You first enter a 'Change Room' where you proceed to take of your clothes and shoes. After you are supposed to go to the 'Wash-room' to scrub yourself clean from all the impurities that are on your body. From there you are allowed to enjoy the myriad of bathing options. Skipping straight from undressing to bathing is not allowed and extremely frowned upon.
- After enjoying the bathing you can then redress yourself and then head to the restaurant for a meal or you can go straight to your car.



Fig 2.35 The entrance takes you through a comfy courtyard



Fig 2.36 A front elevation of Ofuro Ousama

The Bath Saga | 2.4 | Precedents

Operations

For a bathhouse to be successful you have to look at how they operate. In the case of this precedent you can see how they run a successful business. They charge relatively affordable prices(+-R120-R160) for entry, cheaper on the weekdays and more expensive on the weekends. This includes your entry fee to the baths and most of the facilities. They start charging for extras like towels or hygiene toiletries if you don't have one on your person. However, this is not where they make most of their money. I believe that the main source of their money comes from the other paid extras which include body care, foot care, facials, full body scrubs and finally haircuts. The prices of these services can range from the 100's to the 1000's of equivalent Rands. This is then also offset by the selling of food in the restaurants which brings even more cash-flow into the business.

Photo Analysis 1 – The surroundings

The front desk of the restaurant is shown with a lot of Asian signs. When ordering food you need only pay the machine for what you want and then people will bring you your order when you sit. This saves on costs as it means you don't have to employ extra staff. You can see in the background of the same photo that people are dressed in their everyday wear. This shows us that people go from here to the bathhouse or when they've finished bathing change and then come here to eat. The picture with the lockers show us that you are required to take off your shoes before entering the bathhouse. The bottom picture shows the key that you keep on your person at all times to access your personal locker. The picture with the restaurant shows the general architecture of the space within the restaurant. Catering to both traditional and today's seating standards. There is a clear influence of Japanese architecture with the expressions of timber on the floors and ceilings, however it has a contemporary feel to it due to the suspended ceiling that hides the air vents and also the thin steel columns and beams. The overall interior is a good expression of nature and warmth.

Photo Analysis 2 – The baths

The second photo analysis shows the actual bathing facilities within the bath. They advertise at least 23 different types of baths or water facilities which is impressive to say the least. The outside baths have water pumped directly from natural hot springs which is something that is not possible within my site. However the photos of the internal baths, which are baths that aren't connected to natural hot springs, show that they aren't lacking in any form as compared to the outer baths. It is also easier to maintain and clean the baths on the interior as opposed to the exterior due to the different process required when having constructed the two. However, they do explore the possibility of using artificial means to create a bath outside which can be seen when looking at the 'sleeping water' bath. They have created facilities that are specifically for females or males however I think these are a bit superficial and rather an afterthought in the original design. The baths on the interior are mostly constructed with a stone masonry type material, tiles, and galvanised steel. Of course all other materials within are probably water proof or at least have a high resistance to water and bacterial growth. The area seems that it has slightly larger than a normal volume of space. On the exterior is where you can see a clear expression of the Japanese Onsen architecture which as we know tries to imitate nature or make one feel as if they are in a natural environment. Therefore the materials used on the exterior are mostly left exposed or kept in their natural forms as much as possible.

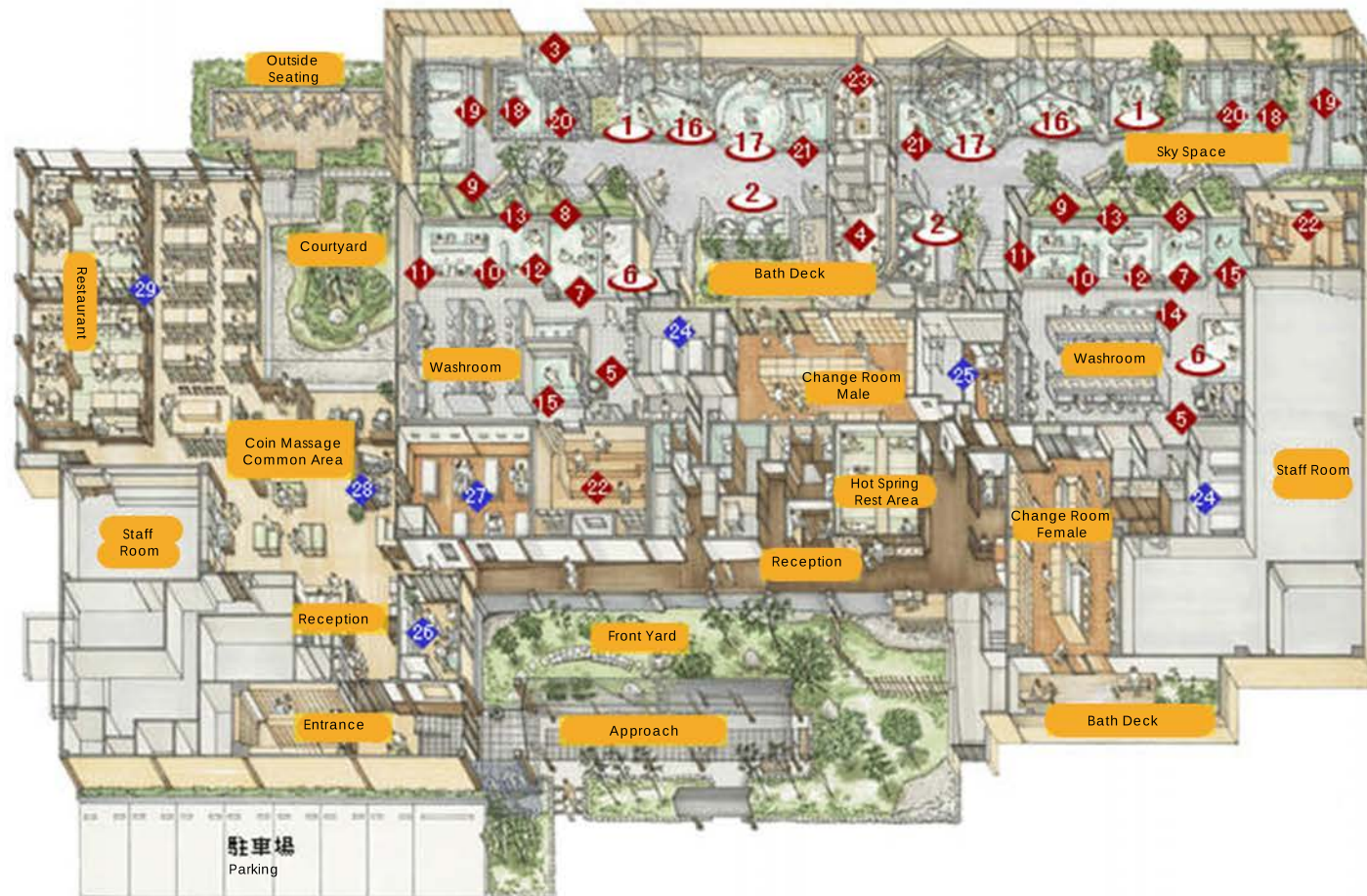


Fig 2.37 Corridors are long but the negative feeling is negated by large windows that look into a garden.

Precedent Study - Ofuro Ousama

Ebina Branch

Programme Analysis



Main Bathhouse

- 1 Kokochi Hot Water Bath
- 2 Pot bath
- 3 View of Outer City(Men Only)
- 4 Salt Sauna(Women only)
- 5 Kakeyu
- 6 Carbonated Natural Hot Spring
- 7 Hot water whirlpool jacuzzi
- 8 Electric Drum(bath)
- 9 Seat Massage
- 10 Relaxation Bath
- 11 Jet Bath
- 12 Shape-up Bath
- 13 Super Jet Bath
- 14 Hot Water Bench
- 15 Water Bath
- 16 Natural Hot Spring for Circulation
- 17 Natural Hot Spring More Circulation
- 18 Sleeping Bath
- 19 Sleeping Hot Water
- 20 Health Walking Bath
- 21 Cool Water Foot Bath
- 22 Dry Sauna
- 23 Medicinal Herb Steam Sauna (Men only)

Refresh facility/ Restaurant

- 24 Glossy Skin Zone
- 25 Beautiful Skin Zone(Women Only)
- 26 Hair Salon
- 27 Healing Relaxation Room
- 28 Foot Relaxation Area
- 29 Restaurant

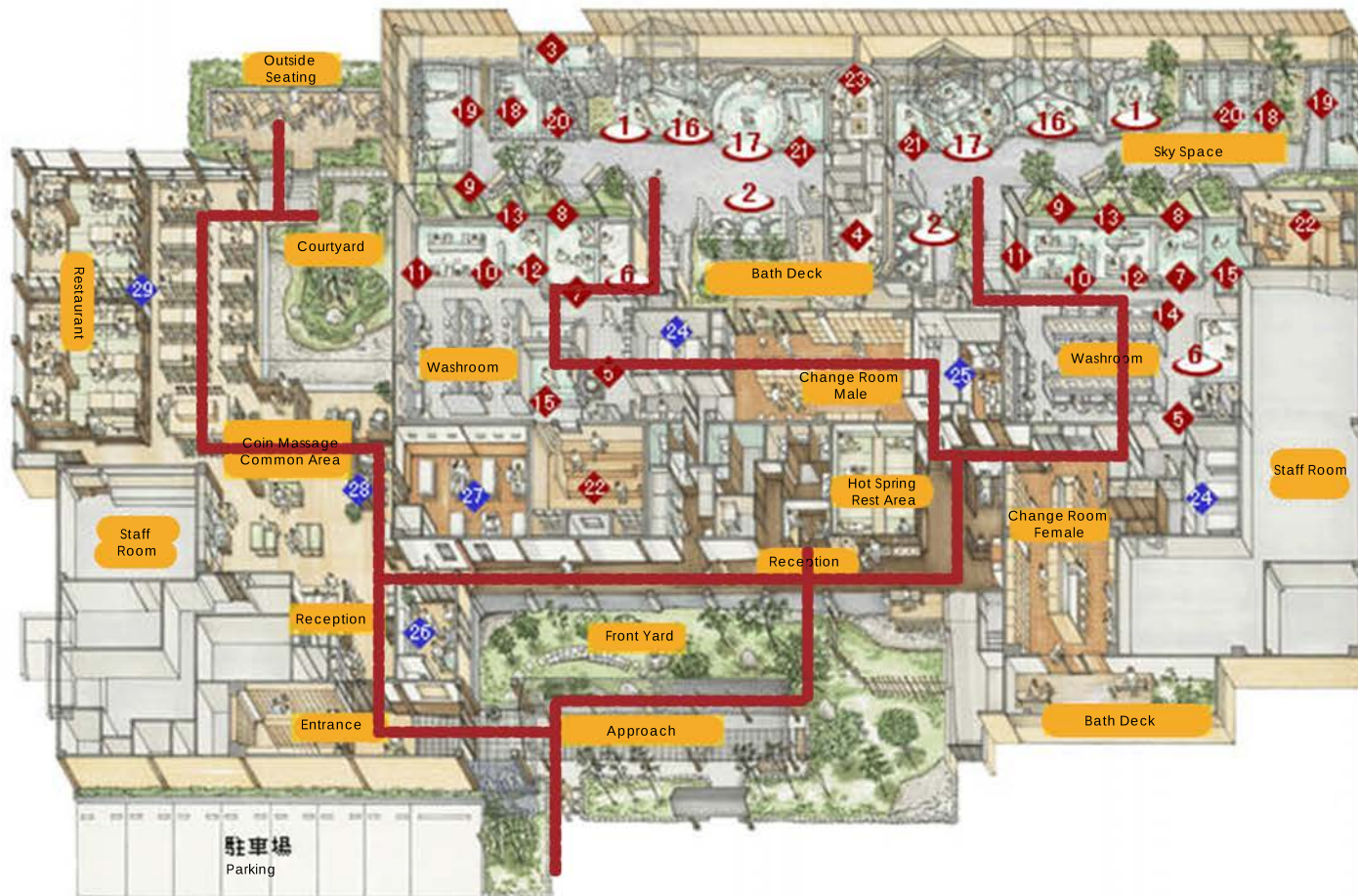
Fig 2.38 An analysis of the overall program within the bathhouse

For more information refer to <https://www.ousama2603.com/> with Google Translate on

Precedent Study - Ofuro Ousama

Ebina Branch

Circulation Analysis



Main Bathhouse

- 1 Kokochi Hot Water Bath
- 2 Pot bath
- 3 View of Outer City(Men Only)
- 4 Salt Sauna(Women only)
- 5 Kakeyu
- 6 Carbonated Natural Hot Spring
- 7 Hot water whirlpool jacuzzi
- 8 Electric Drum(bath)
- 9 Seat Massage
- 10 Relaxation Bath
- 11 Jet Bath
- 12 Shape-up Bath
- 13 Super Jet Bath
- 14 Hot Water Bench
- 15 Water Bath
- 16 Natural Hot Spring for Circulation
- 17 Natural Hot Spring More Circulation
- 18 Sleeping Bath
- 19 Sleeping Hot Water
- 20 Health Walking Bath
- 21 Cool Water Foot Bath
- 22 Dry Sauna
- 23 Medicinal Herb Steam Sauna (Men only)

Refresh facility/ Restaurant

- 24 Glossy Skin Zone
- 25 Beautiful Skin Zone(Women Only)
- 26 Hair Salon
- 27 Healing Relaxation Room
- 28 Foot Relaxation Area
- 29 Restaurant

Fig 2.39 A diagram of the overall circulation within the building.

For more information refer to <https://www.ousama2603.com/> with Google Translate on

Precedent Study - Ofuro Ousama

Ebina Branch

Operations

Admission fee

		Member fee	General rate
grown up	Weekday	750 yen	850 yen
	Saturdays, Sundays, and holidays	850 yen	950 yen
child	Weekday	300 yen	
	Saturdays, Sundays, and holidays	300 yen	
Coupon (10 sheets spelled)		7,000 yen	*The expiration date is one year.

* Adults (junior high school students and above)/children (elementary school students). Free for elementary school students and younger.

* Tickets are sold only to members.

* The price shown includes consumption tax.

* We are refusing to use this service only for children under elementary school age. We kindly ask that an adult accompany you.

Rental towel set	280 yen * A set of face towel and bath towel.
Membership fee	100 yen * Baths and meals are available at the member price. * Body Care and Akasuri have the same price.

Optional Extra Paid Services

- Body Care
- Foot Care
- Facials
- Akasuri (Full Body Scrub)
- Haircuts

Favorite set menu-whole body + foot pot set-

course	Fee
75 minutes course ■ Reservation only course for 1 minute Recommended course with the lowest unit price/combination example (45 minutes for whole body + 30 minutes for foot pot)	3,910 yen (tax excluded) 4,300 yen (tax included)
120 minutes course ■ Combination example (90 minutes for whole body + 30 minutes for foot pot, 75 minutes for whole body + 45 minutes for foot pot)	6,300 yen (tax excluded) 6,930 yen (tax included)
90 minutes course ■ Combination example (60 minutes for the whole body + 30 minutes for the foot pot, 45 minutes for the whole body + 45 minutes for the foot pot)	4,750 yen (tax excluded) 5,220 yen (tax included)
15 minutes extension	1,000 yen (tax excluded) 1,100 yen (tax included)
Nomination fee: 500 yen (tax included)	Men and women nomination: 200 yen (tax included) Change clothes: 0 yen

Business Hours: 10:00-24:00 (Last Reception 23:00) Teanyra-Resort (2020/2/10)

Fig 2.40 A compilation of aspects that are critical to the overall life operations of the bathhouse.

Restaurant



For more information refer to <https://www.ousama2603.com/> with Google Translate on

Precedent Study - Ofuro Ousama

Ebina Branch

Photo Analysis 1



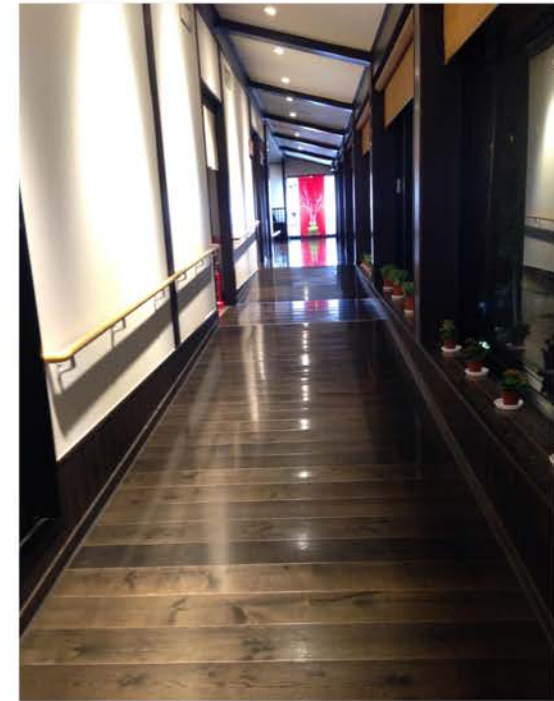
(Tripadvisor, 2015)



(Tripadvisor, 2015)



(Tripadvisor, 2015)



(Tripadvisor, 2015)



(Tripadvisor, 2015)

Fig 2.41 Compiled Photos showing the non-bathing facilities within the building.

For more information refer to <https://www.ousama2603.com/> with Google Translate on

Precedent Study - Ofuro Ousama

Ebina Branch

Photo Analysis 2 - Baths



Kokochi hot water bath



Hot Water Bench



Hot Water Pots



Indoor Baths



Medicinal Herb Steam Dry Sauna



Dry Sauna



Sleeping Water



Natural Hot Spring



Salt Sauna(Ladies Only)



View Bath(Men only)

Fig 2.42 Compiled Photos showing the bathing facilities within the building.

For more information refer to <https://www.ousama2603.com/> with Google Translate on

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Fig 2.38: Kow, A., 2020. An analysis of the overall program within the bathhouse. [diagram]

Fig 2.39: Kow, A., 2020. A diagram of the overall circulation within the building. [diagram]

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CHAPTER 3

Phenomenology of the bathhouse

3

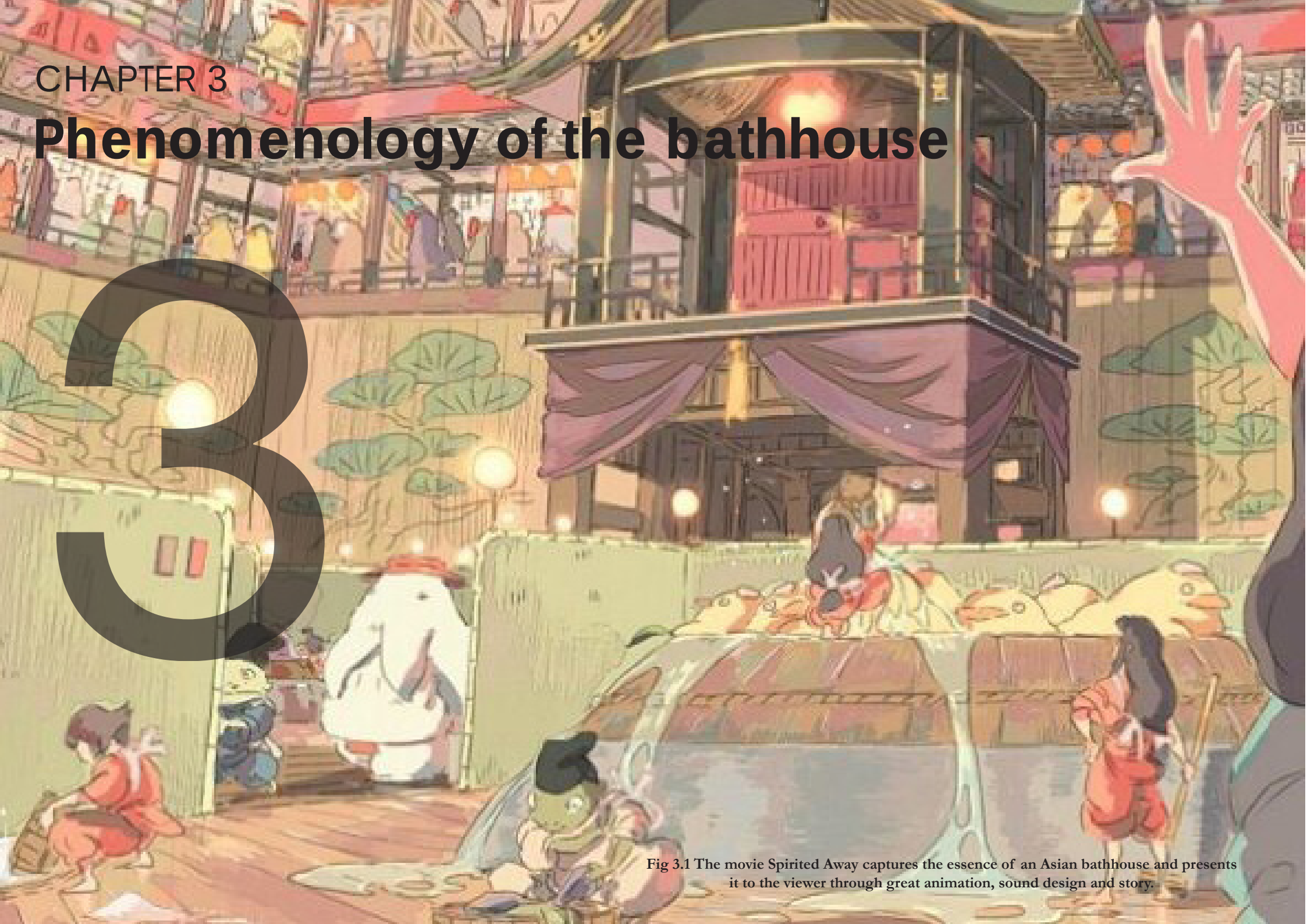


Fig 3.1 The movie Spirited Away captures the essence of an Asian bathhouse and presents it to the viewer through great animation, sound design and story.

CHAPTER 3 | Phenomenology of the bathhouse

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Phenomenology of the bathhouse | 3.1 | The suburb of Cyrildene

3.1 The suburb of Cyrildene

Cyrildene is an Eastern suburb within Johannesburg. The name Cyrildene was brought about after the key land developer, Mr Cyril Cooper, who bought the rights to the land from members of the Bezuidenhout family who had intended to call the area 'Northcrest' instead (Raper, 2014). The area is surrounded by the suburbs of Linksfield, Observatory and Bruma and is most notably known as being the location of the 'New Chinatown', with its predecessor (now aptly named 'Old Chinatown') located in the inner city on Commissioner Street. The area has the advantage of being close to the 'Ring Road' highway that surrounds most of the greater Johannesburg area and is relatively close to the O.R. International airport making it an ideal location for new travellers to come and visit. However, Cyrildene also has a much deeper history with some records showing it already being an established neighbourhood by the 1930s with a strong middle-class Jewish heritage that still exists today (Doucakis, 2007). In an article by Kathy Munro writes, "It was a beautifully laid out suburb with winding roads and curious turns and link points. It was a consciously green suburb from the start with the nearby Harvey Nature Reserve, Oldroyd Park at the top of the hill, a small park on Cyril Crescent and Dixon Park off Aida Avenue." (Munro, 2019) A very walkable area that she enjoyed taking strolls through when she and her husband had the time. A feature that can still be enjoyed today albeit with caution due to the rise in crime over the past few decades.

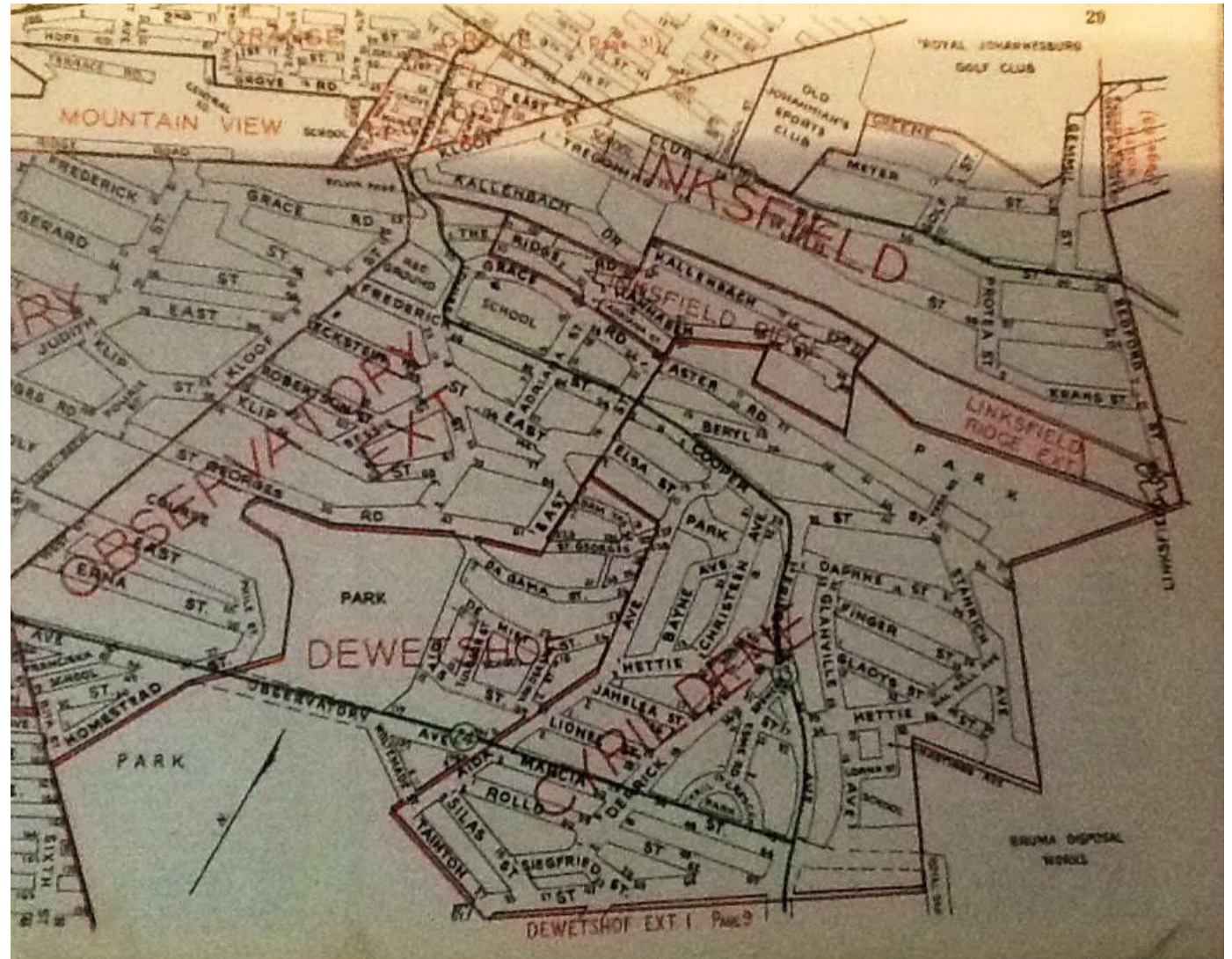


Fig 3.2 An early undated map showing the initial town planning within the area.

Phenomenology of the bathhouse | 3.2 | Phenomenology within Cyrildene

3.2 Phenomenology within Cyrildene

Phenomenology can be analysed through different forms. It can be experienced through the way the residents of different backgrounds interact with each other. These people could be from the Jewish community within the neighbourhood which have vastly different life experiences as compared to the current Chinese residents as compared to the locals who are from neither community but have made this area their home. The sounds of the children playing soccer within the Jewish school on Aida Avenue or the smells of fresh Chinese cuisine on Derrick Avenue or the tranquillity of the neighbourhood parks are all phenomenological factors that could be explored within Cyrildene. The history of Cyrildene also leaves behind remnants of past experiences. Evidence of this can be seen through the residential buildings within the area. Most of the properties are medium to large and have very spacious yards which show that people back then appreciated having a space to enjoy the sunlight touching their skins or perhaps listening to the sounds of nature. When asking some of the residents the question of whether or not they felt safe being in closed environments approximately 75% of the answers were 'Yes'. This shows that the feeling of safety is an important factor if one were to experience a space. People more often than not enjoy spaces that bring them a sense of comfort and that is what these 'secure' spaces provide. Another aspect that is linked to this secureness and phenomenology is the comfort that is provided by being able to walk the streets. Being able to see your neighbour and having an active street front allows users within those areas to not only experience a certain freedom but also provides an experience that not a lot of spaces within Johannesburg provide. These factors more often than not create a positive imprint within our minds and as such acknowledging that these factors exist and are pertinent to explore is part of why phenomenology is such an important design driver.



Fig 3.3 The houses are built on a steep slope allowing great views towards the east.

Fig 3.4 Cyrildene Shul still serves the Jewish community



Phenomenology of the bathhouse | 3.3 | Life within Derrick Avenue

3.3 Life within Derrick Avenue

Derrick Avenue is a street located within Cyrildene. It is one of the main attractions of Cyrildene because it is the home of the 'New Chinatown'. This Chinatown holds great cultural interest within Johannesburg due to the multitude of East Asian influence contained within its boundaries. For instance, one activity that can be found within is the selling and buying of imported oriental foods and products at affordable prices or perhaps one would like to have an authentic taste of China or even a bit of Thailand through the abundant array of restaurants and street food vendors. Derrick Avenue is also home to some affordable rentable spaces that are often exclusively available via word of mouth. These spaces are inhabited by family members and friends of the existing community within the neighbourhood, thereby creating this cycle of self-sustainability and growth. You can also find the odd massage parlour, tea house and karaoke spot if you know where to look or if you don't, the locals within the area are always happy to help provided you make an effort to communicate past the language barriers. All is not sunshine and roses in the area though. Numerous complaints are raised within community meetings about the area which include crime, overcrowding, illegal parking, illegal building, and dumping. (Bodasing, 2014). Although this has led to a rather negative attitude even going so far as to promote the departure of residents to other areas within Johannesburg, there has been a recent trend from within the Chinese community itself to combat this.

Efforts such as the establishment of a private Chinese policing forum have made it so that not only is there an increase in the safety factor within the neighbourhood but also that there has been an increase in the communication between the local community and the local government. Through this forum, dialogue and diplomatic endeavours are more easily and readily realised within the neighbourhood.

("Chinese community shares challenges with President," 2013).



Fig 3.5 An assortment of activities happen within the street ranging from shopping, eating or perhaps even getting your hair done.

Phenomenology of the bathhouse | 3.4 | Bathhouse in Cyrildene

3.4 A bathhouse in Cyrildene imagined

As mentioned previously Cyrildene is currently suffering a degeneration due to factors such as illegal building (Mbavhalelo, 2018), lack of maintenance etc. (Vilakazi, 2016). One of the problems of this has led to residents and business owners leaving the neighbourhood for other areas such as Rivonia or Sandton. Although this is but one of the problems that the area faces, the strong cultural presence found within the neighbourhood seems to be the factor that always brings people to it again. Due to the efforts of the current community within Cyrildene, this effort to preserve the cultural presence has largely remained up kempt. Examples of this are the creation of the private community policing forum and the community-funded gates that exist on both sides of Derrick Street. The pair of these 2 gates or arches, costing approximately R2.4 million for the both of them, were privately funded by the community within Derrick Avenue.

(Ho, 2013) As such these gates are a cultural representation of the community's ideals. They are "bold, ornate and deliberately over the top" (Ho, 2013), providing a bit of insight into the mindset of the community itself. From it we can see that there is a proudness of the Chinese heritage, an invitation to others but also a proclamation stating that you've now entered an area that is distinctly its own. To this end one would think that these efforts are enough to combat the current urban deterioration that is happening within the neighbourhood. Looking at the current demographic of people who visit Chinatown you can easily see the split of who uses the spaces provided within, that being the store owners, restaurant owners who buy their daily ingredients, current residents, tourists, Chinese/Thai residents who've just arrived and seek temporary accommodation and Johannesburg locals looking for an East Asian meal or shopping experience. And so, any new

design or intervention in the area should at least cater to most if not all of these current user groups. Looking at the map of the area one can see that there is an abundant number of restaurants and food stores, a reasonable amount of East Asian supermarkets and a few other typologies that currently make up the cultural amalgamation within. The activities include eating, shopping and then going home. Not much other recreation happens within and so there is a sort of lethargy when you look beyond the veil of a busy high street. For example, the stores in the area close fairly early once business is done for the day, people don't go visiting others, you don't get drunkards shouting around in the street after a night of partying, as soon as the lights of the last restaurant go out the neighbourhood becomes quiet.



Fig 3.6 Even though it is known as the 'New Chinatown' of Johannesburg, residents from other cultures enjoy the commercial aspect of the neighbourhood. This is the case for Anong Thai restaurant and spa which has flourished in recent years.

Fig 3.7 The community funded Chinese gates on either end of Derrick street beckon users to come in and enjoy a distinct cultural experience.



Phenomenology of the bathhouse | 3.5 | Cultural identity as a means of urban regeneration

3.5 Cultural identity as a means of urban regeneration

The implementation of a bathhouse does not only benefit the current migrant community though. There are a multitude of other positive factors that can be achieved by introducing this new bathhouse typology.

For instance, the expansion and reinforcement of the existing cultural identity neighbourhood could help promote greater pride in one's community which in turn could start reversing the effects of the natural regression that is witnessed now. People would start looking to return to Cyrildene instead of moving away, or with a greater conscience of the community pride, people would stop throwing away their rubbish everywhere and instead opt to make sure their streets are well maintained. This is not a hypothetical situation though as if we analyse the existing scene today, we

can see that this type of urban regeneration through cultural and community-based dialogue already exists as seen through the efforts of the community-based policing forum or through the creation of the traditional Chinese gates that tower over the area on either end of the street, all privately funded by the community itself. These efforts show that even the slightest bit of attachment to one's culture can bring out feelings of pride or a sense of belonging and so people are more willing to invest their own time and money.

Another great example of this is the formation of 'The Chinese Association'(TCA) within Johannesburg. The association has deep roots within the Chinese community in Johannesburg going all the way back to 1903 when it was first formed. It is through

this organisation that the voices of most of the South African Chinese can be heard. By purposefully aligning themselves to their culture they are able to create this sense of unity. It is through that unity that they are able to organise funding, provide assistance, and be the voice for the Chinese community done through their different divisions such as the business and crime forums, the women's federation or the youth division to name a few. Without organisations such as these the Chinese identity within Johannesburg and possibly Gauteng as a whole would be much weaker than its current day form, to the point for example where popular events such as the Chinese New Year Celebrations within the different Chinese nodes probably wouldn't exist in the form they are today.



Fig 3.8 The Chinese Association of Gauteng based on Commissioner Street.

Phenomenology of the bathhouse | 3.5 | Cultural identity as a means of urban regeneration



Fig 3.9 The dragon statues placed in old Chinatown on Commissioner Street are an example of trying to tie culture to urban regeneration.

This can further be backed by research done by scholars such as Norsidah Ujang and Khalilah Zakariya who in their 2015 Journal Article in the *Procedia-social and behavioural sciences* titled, “*The Notion of Place, Place Meaning and Identity in Urban Regeneration*”, speak about how urban regeneration within traditional settings has transformed places and constructed meanings embedded in existing social and cultural settings. They mention the use of psychology and sense of place as a key aspect of allowing urban regeneration to happen. This paper while not making mention of phenomenological aspects is great at explaining what positive outcomes could occur when user experiences that are not just physical but also psychological are allowed to form the basis of urban regenerative place-making. For example they talk about how the influence of familiarity can be used as a means to understand how a person’s attachment is greatly affected by how familiar they are with a location, which can range from how long one has been in habitation of that particular area or through important events or through the frequency of visits. Using these drivers, we are able to pinpoint elements within neighbourhoods that could induce these factors. For instance, through the creation of a memorable space an individual would thereby increase their rate of visitation to that space and therefore the link of familiarity is established. The idea of culture is another example that is explored in this paper. Culture when explored through mental activities such as seeing, hearing, smell, interpreting, beliefs, and attitudes along with other behavioural activities towards their environment can be a key design driver when looking to regenerate an area. By purposefully using these drivers, one is able to again pinpoint and manipulate the cultural factor within a neighbourhood. Ideas such as these are something that need to be explored when developing

the bathhouse. The design of the bathhouse should, therefore, inspire the existing citizens within the community to take further pride in their area. After achieving that, positive benefits will naturally occur.

Through the interviews with some of the community members earlier I have discovered that there is some discontent within the neighbourhood. This also reaffirms what I already know of the area due to my own knowledge and experiences. One of the issues that came up was the fact that there was a lack of entertainment within the neighbourhood. The area would benefit with the addition of more activities to increase its vibrancy and diversity compared to what is currently on offer.

This is where I believe the introduction of the bathhouse will greatly benefit the area. The bathhouse can act as a nexus for the local community. Giving the storeowners and customers alike a place where they can discuss the daily on goings of their lives whilst enjoying the various health and therapeutic services available. It can be a place where the general populace of Johannesburg could visit for a day with their friends and families or simply tourists from other places wanting to experience the depth of the city. As discussed in an earlier chapter the bathhouse is not simply a place for hygiene. In Asia specifically, it is a place where multiple activities are conducted alongside the bath such as indoor spa facilities or saunas for the adults or game and cinema rooms for the children. This all adds to the recreational aspect that it can deliver. Naturally, this is another reason why the implementation of an East Asian bathhouse would work as it caters to most of the people in today’s societies as opposed to a select few just going.

Phenomenology of the bathhouse | 3.6 | Food, taste and memory

3.6 Food, taste, and memory

The phenomenological idea of taste, sight and smell is yet another design driver to look at. The best way this could probably be explored is perhaps through the biggest influence within the neighbourhood and that is of food. From street pedlar that sell fruits and vegetables to the supermarkets that supply the Asian ingredients to most of Johannesburg and finally to the restaurants that cook up the best of local Asian cuisine, the influence of food is deeply embedded within the neighbourhood.

Before one even enters a restaurant or place, you are influenced by your senses. For instance, when walking along the street, the smells of Sichuan hotpot drifting through the air for some can influence the mind. Perhaps triggering memories of home or simply to cause intrigue to swell up, drawing one's attention towards it. Another example is the sight of large (and often foreign) titles and menus that draw your eyes to a location. Again, causing intrigue or perhaps to steal attention away from other places. All this before you even enter a place or restaurant. How space is interpreted can also be negatively affected by these senses. For instance, in the case of smell, if you are instead greeted by the aroma of garbage that has been sitting in the sun for a week, most people would feel disgusted and would try and avoid the area. Similarly, if your

signage is worn down and not legible that also affects the way you feel. Therefore, it would be in one's best interest to make use of the factors in a positive light rather than a negative one.

When eating foods, the taste of the food can invoke certain emotions and feelings. Feelings of comfort, nostalgia and sensuality are but a few that have been identified by people when chatting about their experiences with food. (Holtzman, 2006). The effect of taste can cause one to remember an embodied experience from the past. For example, a flavour profile could link back to the memory of your grandparents cooking. That linkage to memory brings out those past feelings of that moment and places it within your current state thereby affecting your experience in the present. (Holtzman, 2006). But what if you have no history with the taste? What if the taste is completely new to you? Does the matter of taste not mean anything at all then? Taste can also be a factor that brings people together or pulls them apart. Some cultures enjoy spicy food for example and so naturally people from those cultures will go out and seek the tastes and foods that they are most familiar with. Finding a person who hates spicy food searching for the hottest curries is highly unlikely to occur. People gather around experiences that they enjoy and are most comfortable with.



Fig 3.10 The negative influence of the bad signage is countered by the delicious aromas wafting from the cake shop.



Fig 3.11 Looking at the vegetables laid out like this brings out a feeling of nostalgia within myself.

Phenomenology of the bathhouse | 3.7 | Food as an ethnic identifier

3.7 Food as an ethnic identifier

The categorization of people into boxes of culture or other identifying labels is what I am talking about when I use the term ethnic identifier. One's ethnicity is important to take into account when dealing with people of different cultures. Cyrildene is a neighbourhood with a diverse amount of different cultures and people and so it is important that one does not simply lump everyone into the same box. Each person is unique and therefore should be treated as such. Bringing everyone to the table allows for a much more diverse set of opportunities to occur. This can be achieved by identifying these opportunities through a person's ethnicity or culture.

In this way food is able to be the bridge that allows one to experience another's culture. When eating another culture food you are learning a little bit about that cultures traditions and norms. An example of this is using chopsticks instead of knives and forks to eat your Chow Mein. This small adjustment in how one eats their food already provides a glimpse into a culture that is foreign. Food is and can be identified by its ethnic background. When you mention for instance the word 'pizza' what springs to mind is Italy or if you mention 'sushi' you immediately think of Japan. Each nation and subsequently its people have great pride in the foods that they produce. This is one of the factors that helps bind the people and Derrick Avenue With the majority of the street being filled with Chinese and Thai restaurants, it is an accessible resource to look into. So, by tapping into this as a design factor one could be able to grow the cultural significance in the area as well as increase the personal pride of the local community.

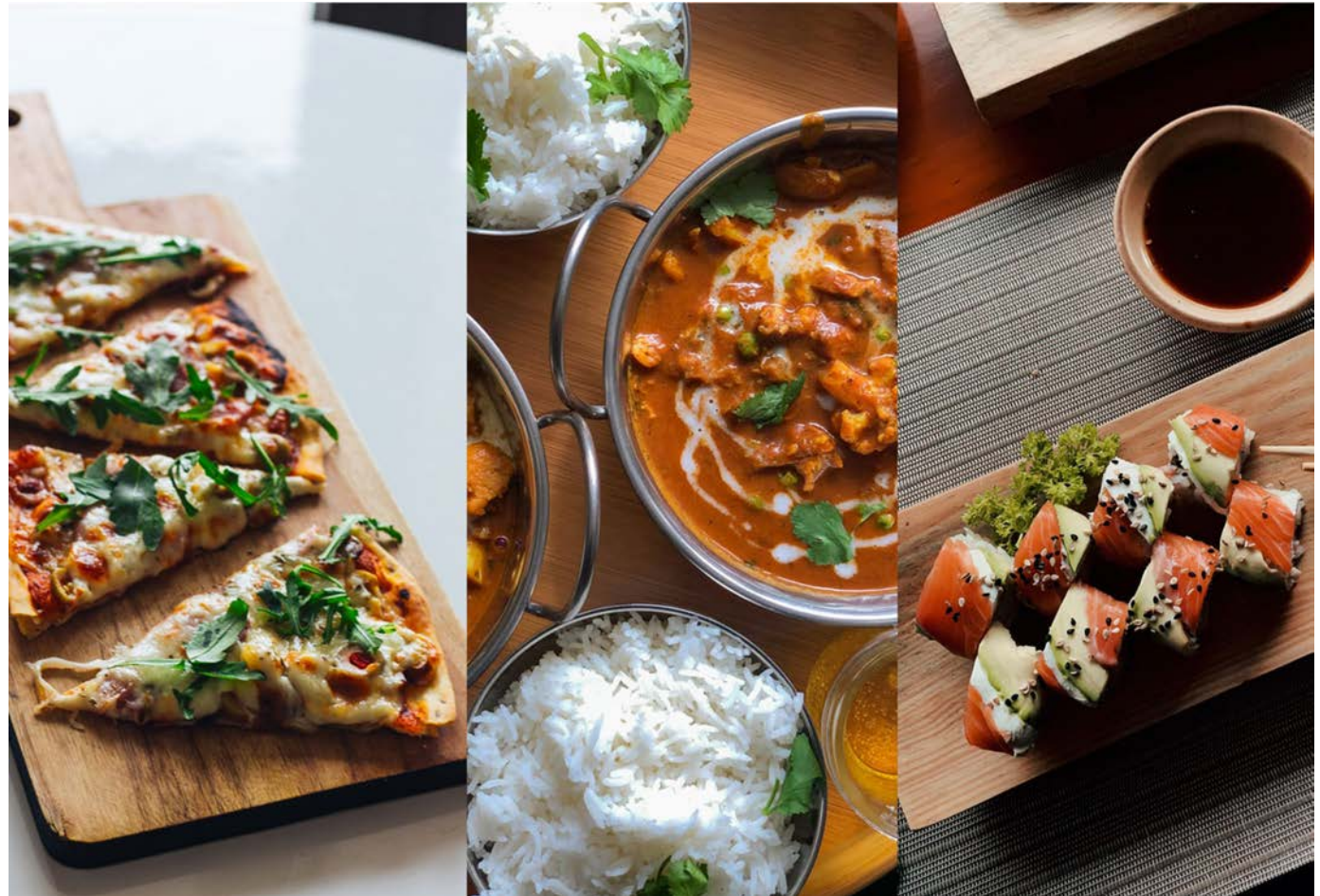


Fig 3.12 These foods are signature foods from different cultures.

Phenomenology of the bathhouse | 3.8 | Experiencing Phenomenology through Nudity

3.8 Experiencing phenomenology through nudity

An aspect within phenomenology that often makes appearances within the academic realm is the issue of touch. Physical contact from the skin to a surface or from material to material or between one thing and another has always been one of the strongest design ideals we can pull from phenomenology. The exploration of how one uses their physical body to interact with the everyday world has always produced interesting theories. It is through touch and in particular the notion of how nudity or nakedness is perceived and the experiences that are naturally tied to it that this next section will be explored.

The concept of nudity

Nudity is the idea of being completely exposed to the environment around oneself. To be in this state, humans often forgo the wearing of clothing or specifically not covering the genitals.

“Nudity quickly becomes unremarkable when generally practiced.”

– Martha C. Nussbaum



Fig 3.13 Being naked is a natural aspect when taking a bath.

When referring to bathhouses, one must remember that one of functions of the original practicing of communal bathing began as a means to cleanse oneself amongst your neighbours. This of course was done in the nude, exposing yourself to your fellow man. Complete nakedness is intrusive and confusing to the senses. Paradoxically, it both reveals and diminishes identity. It puts one into a position of vulnerability, but I argue that it is because of that vulnerability that you are also more susceptible to learning about your surroundings and in particular to learning about another person's culture. Due to that vulnerability, you are more aware of what is going on around you, your phenomenological/sensory experience becomes more heightened and thus in that exposed state, your ability to absorb those experiences is increased. However, suddenly being bombarded with all these emotions and experiences can have a negative effect. As author Neil Leach states, “If you're overwhelmed and bombarded by your sense, you actually start to shut down”. (Leach, 1997). Therefore this nude experience needs to be one that is directed and focused exposing only certain elements so that one can achieve balance.

Phenomenology of the bathhouse | 3.8 | Experiencing Phenomenology through Nudity



Fig 3.14 Zumthor's bathhouse allows users to interact with the spaces whilst still being clothed.

Through reading and analysing Peter Zumthor's work on his Therme spa in Switzerland we are able to ascertain some clues as to the perceptions of people within a bathhouse. Zumthor's Therme Spa is a building that doesn't guide the user through its spaces and as such experiences of people can vary from person to person. A common factor however is that these people, although lost in the discovery of their own experiences, are all wearing swimsuits whilst experiencing these spaces. They are not truly exposed to the spaces and environments as they have clothing that acts as a shield against the weary eyes of the other users. This allows the mindsets of the users to truly be at ease and therefore they are not as vulnerable and open to new experiences as compared to a person who is completely nude.

So, in this way, bathing is not used as a form of hygiene per se but more as a recreational activity. If people are clothed, then are they truly washing themselves? When trying to interpret the reasoning behind it, what I found was that he tried to achieve something that didn't cater completely to the commercial aspect of a bathhouse but more based on the actual phenomenological effects that could be achieved through architecture and good space making. This can be seen in the way he designs the overall circulation of the building and where he strategically places these stone rectangular rooms which act as places of solitude within the building but also as markers to guide the user in an otherwise unguided experience. One possible theory to why he has chosen to allow users to have clothing on whilst experiencing the baths is that he chose the route of allowing all genders to experience the spaces together instead of having a separate bath for each gender and due to that he had to

provide a safe and comfortable space. Being safe and comfortable can arguably be said to be subjective in the way that one perceives those feelings but there are common ideals when looking at the topics from a broader perspective. For instance, in certain places like nudists beaches around Europe, you would find people who are quite liberal and open to the idea of nudity, for them, there is a notion that being nude is quite natural, and that there is no harm in being naked amongst others. They are quite content with safety and comfort whilst being in that state. Contrast this to the more conservative societies in the world such as our very own South Africa. Every public swimming pool, water feature, and beach you will find people wearing some sort of clothing to hide their modesties. To these people, the mentality is a complete 180 to the previous example. Instead of being comfortable surrounded by naked bodies, there is apprehension and discomfort. For these examples, the idea of safety and comfort happens within the solace of their clothing. So, then the question becomes, "What can we derive from these two extremes in terms of safety and comfort?"

When looking at the Korean Jjimjilbang the genders are separated into male and female. Through this separation, whilst still uncomfortable, it provides an opportunity to be naked whilst surrounded by your fellow gender. This finding allows us to see that, in East Asia at least, most people seem to be semi-comfortable/more comfortable when not in the presence of their opposite genders and are thus more willing to try new experiences. This is my conjecture though so what are some of the hard-proven facts that can help us determine what is needed for comfort or not?

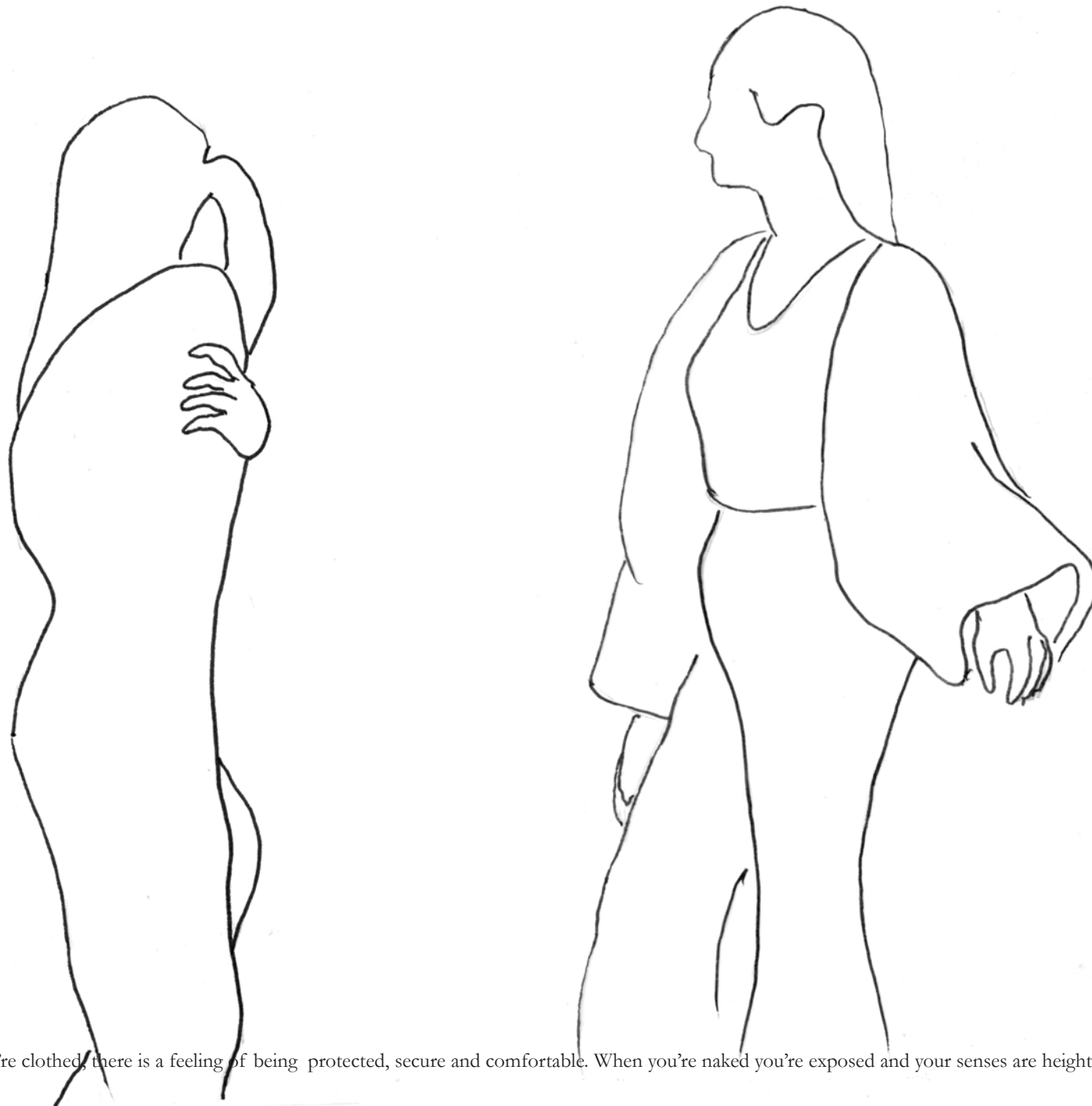


Fig 3.15 When you're clothed, there is a feeling of being protected, secure and comfortable. When you're naked you're exposed and your senses are heightened.

Phenomenology of the bathhouse | 3.9 | Approaching water

3.9 Approaching water

This section will explore the feeling of the skin interacting with water and the psychological feeling of being wet. What kind of atmosphere is created when this happens and how can we use it as a design aid?

According to the Oxford dictionary definition, the word: 'Wet' is an adjective and can be defined as, "Covered or saturated with water or another liquid."

The skin on our bodies makes up 15 per cent of our body weight, has 5 different types of receptors that respond to pain and touch and is capable of renewing itself every 28 days. ("Forefront Dermatology," 2017). These are but a few of the facts that are known about our skins but I'd like to explore more importantly how skin interacts with wet surroundings.

When water is added to our skin, it can have different effects depending on the way water is used. For instance, in terms of temperature, very different things can happen to your body. If water is too hot at high temperatures, we can suffer burns of varying degrees which results in extreme pain both physically and psychologically. It is an unbearable feeling that leaves a negative imprint and a warning to our future selves to stay away from such situations. Subsequently, when interacting with water in cold temperatures our minds instinctively reel back. The coldness of the water can cause a psychological feeling of negativity to occur (Mooventhana and Nivethitha, 2014). For instance, when one is suddenly thrust into a swimming pool in the middle of winter the general first thoughts are normally not ones of happiness and sunshine but rather that of un-comfort, regret and possibly anger. At what point do the different aspects of the temperature of water become so that they allow us to be comfortable and are most beneficial to ourselves? The answer lies when the water is between these two extreme points, when our skin becomes accustomed to the cold or where the water is not burning us alive but instead comfortably heated that it puts our bodies into a natural relaxation

stasis. Our experiences are naturally tied to these conditions. Instead of these horrible experiences we are now embedded with memories of warmth, comfort, and joy, thereby making our future selves less apprehensive of such experiences in the future.

To reinforce this position, we can take another look at a different aspect of water. For instance, the physical state that water is in when it is applied to the skin. By physical state, I mean whether the water is in its solid, gas or liquid phase. For each of these phases, your skin will again react differently which then could impact the experience. How the body reacts when water is in its liquid form is different from when it's in its gaseous state. They have a connection to the temperature of the water, for instance for water to be in its gaseous phase the water itself needs to be heated to at least 100 degrees Celsius which means the temperature is relatively hot and subsequently for water to be in the solid phase it needs to be below 0 degrees Celsius which means the temperature is relatively cold.

When in the presence of these different forms of water the body and mind react in different ways. For instance, when we are talking about the physical benefits, when water is in its gaseous state otherwise known as water vapour it causes the pores on our skin to open up and helps loosen any build-up of dirt for a deeper cleanse. Through a combination of steam and perspiration, it allows the body to dilate the blood vessels and cause increased circulation. (Dang, 2018). When talking about it from a psychological point of view, water vapour can cause one to be in a state of relaxation and calm which is the result of a decreased amount of cortisol and an as well as an increase in the number of endorphins, the hormones responsible for 'feeling good' and stress. (Johnson, 2017). This, in turn, leads back to our previous point. If we create an environment that can mimic these conditions and interactions between the skin and water, we can craft experiences that people positively remember.

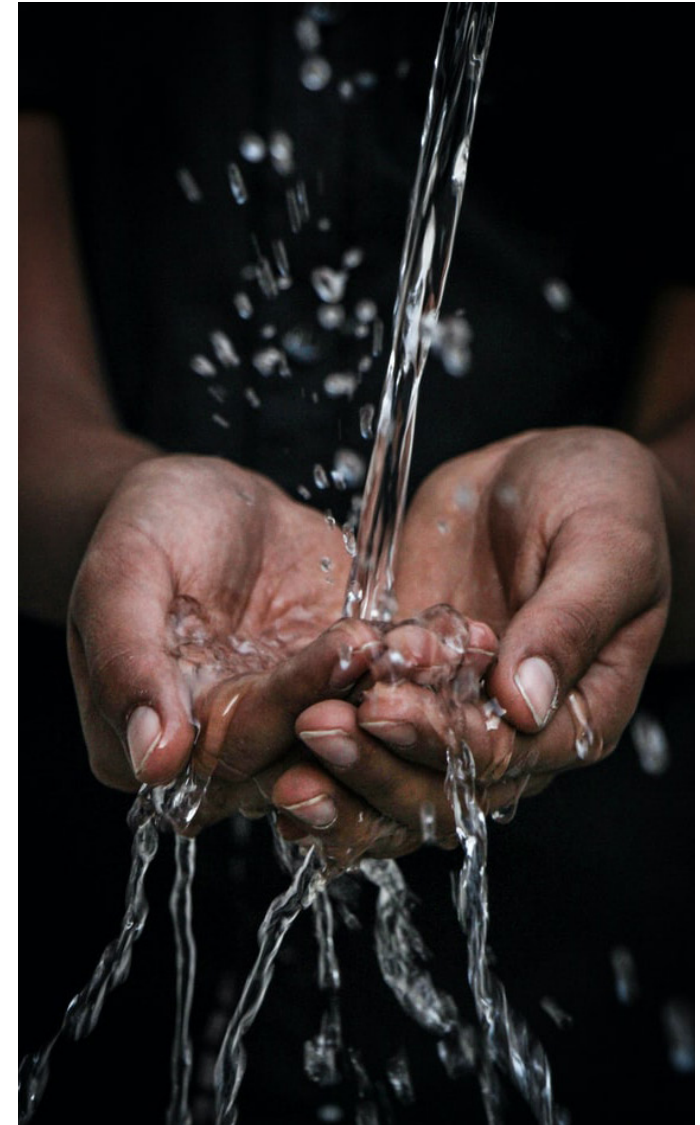


Fig 3.16 Water has different qualities that affect our skin in different ways.

Phenomenology of the bathhouse | 3.10 | Being Multicultured in a Monocultured World

3.10 Being Multi-cultured in a Mono-cultured World

Europe and Asia are places that are backed up by years upon years of culture and history. The history of South Africa as a country is still relatively young when compared to that of other nations such as America or Britain. When examining it further I found a relevant factor that came out of the research and that is the idea of being ‘Mono-cultured’ vs one that is ‘Multi-cultured’. A monoculture according to the Merriam-Webster definition is, “a culture dominated by a single element: a prevailing culture marked by homogeneity” whilst a multi-culture, on the other hand, is, “of, relating to, reflecting, or adapted to diverse cultures”. If we look at the countries above and apply them to these terms, we can start noticing interesting differences between them. I have summarised some of them in to Fig 3.17.

The table to the side shows that there are some major differences between South Africa and countries such as Italy or South Korea. For instance, South Africa is a country where multiple ethnic groups end up living and growing with each other. Communities are often composed of multiple ethnic groups. When comparing this to Italy or South Korea. We see that they are normally a singular ethnic group that has evolved to be the majority within their countries. This difference already shows the gap between the two countries/situations. Both allow a very different environment to exist within them.

Monocultural countries such as Italy or South Korea have deep histories. As such a monocultural society’s traditions and norms are backed by hundreds or even thousands of years’ worth of experience and understanding. On the other hand when looking at

a multi-cultural nation such as South Africa whose histories only go back a few hundred years, in addition to the inherent fact that the nation embodies not one culture but multiple cultures, shows how relatively young and inexperienced the nation is as a whole. It is important to point this out because whilst monocultures still exist, due to the inherent effects of colonization and globalisation diversity amongst nations is becoming the new norm.

If we then look into current-day South Africa and talk about multiculturalism and diversity. I believe a unique opportunity presents itself because even though people are separated into their micro-communities within the country, due to our willingness to accept new cultures and our inherent history we can import

experiences from within monocultures quite easily. Thus, using Cyrildene as a cultural hub or any other micro-community with South Africa, we can create experiences that fit within a culture but can be experienced by everyone. Traditions and norms from around the world are just a quick walk or drive away and so there is the opportunity to create a cultural phenomenological experience within a monocultural community and not shunning away others within a diverse cultural mix. This experience is a chance for other cultures and groups within the country to learn about others.

Italy or Korea or similar countries	South Africa and other similar countries
One ethnic group/One cultural group.	Multiple Cultural Groups.
Traditions and norms understood by all.	Traditions understood by those within their multicultural group.
Lack of Foreign Presence.	Many foreign groups interacting with each other.
Less tolerant/understanding of other cultural groups.	Higher tolerance to other cultures. Willing to engage with other cultural groups and share experiences.
Generally have existed for much longer than their diverse counterparts.	Relatively part of the youngest nations on this planet.

Fig 3.17 Table of differences between a mono-cultured society and a multi-cultured society.

Phenomenology of the bathhouse | 3.11 | Naked Architecture

3.11 Naked Architecture

The term “Naked Architecture” (Mosco, 2012.) is the title of the book of the same name by author Valerio Mosco where he describes a phenomena of how buildings in recent times have returned to a period where the structure of architecture is undressed or how architecture has returned to a state where the structure is laid bare, as if architecture today is in the pursuit of showing how it is has been made. Subsequently this next section will be an exploration of how the making of a building as well as the materiality involved could influence architecture and the spaces we create.

In the charette, I used photography to help explain the term of nudity, honesty, and pureness through the use of materials. These photos are simply a study on the way materials can invoke certain feelings within a person. Nude architecture can be seen as a way of dealing with concepts of structure, cladding, and decoration. Often nudity within architecture is seen as a way of expressing anti-decorative design and can also be seen as primitive, frugal and for only essentials. (Andrea, 2012.) For instance, the wall can be exposed showing its bare essence of bricks and mortar what Mr Mosco refers to as the ‘nakedness’ or the wall can be covered up with plaster. It can be laid in a form that pays homage to its traditional routes and in keeping with its honesty or it can take on completely foreign forms.

Mr Mosco seeks to offer scientific motivation for the attraction of nude architecture, leading on to cite research carried out on the cerebral cortex that allows us to understand the phenomenon of why we get emotions that invoke certain feelings when looking at random everyday objects. Through the demonstrations seen within the research, just by seeing an object, a material and subsequently a work of architecture, the brain signals in us a feeling of having felt and touched it. The ‘nakedness’ of a material can also invoke other feelings for instance when a wall is untainted and pure it can give a sense of certainty and comfort. However, that same wall can

Fig 3.18 Dry concrete block wall vs a wet concrete wall.



Honesty



Ruined

Fig 3.19 Dry masonry brick wall vs a wet masonry brick wall.



Certainty and
Comfort



Uncomfort

be defiled. For instance, with the addition of a splash of water, the psychological feeling of myself tells me that the wall becomes unsettled and disturbed. No longer is the pureness there, it is tainted with the streaks of water running down its sides or perhaps it is due to the shading of it becoming a darker colour. These factors, no matter how minute, all play a role in the psychological aspect of how we perceive things within the world. I'd like to point out here that I am not talking about a material or object that is built to be intentionally affected by others (for example the walls within a bathhouse are designed to eventually be wet), rather I'm talking about an object or material that is taken out of its natural surroundings and part of it becomes tainted or ruined.

“Each object solicits, therefore, the hedonistic and emotive centres of our brain, unleashing that whole series of sensations that place us in symbiosis with space” (Mosco, 2012.)

Phenomenology of the bathhouse | 3.11 | Naked Architecture



Fig 3.20 A material slowly becomes less natural as it gets processed, slowly losing its true essence.

Natural➡ Semi Tainted➡ Tainted

Phenomenology of the bathhouse | 3.11 | Naked Architecture

When looking at architecture, a building in its simplest of forms can allow one to see and understand the sincerity of the space but when you add additional layers it becomes more and more convoluted until you get to a point where it becomes completely foreign to your original senses. For instance, nudity in its most literal form can be seen when looking at the skeletal structure of a building, the beams and ties that make up the foundation of a roof, the layers upon layers of mortar, bricks and reinforcing ties, the concrete foundations one can see the purity of the architecture. When it is in this primal form is when the nudity of a building is most easily seen. As you add more and more layers to that you eventually get to a product that deceives the eyes, there is no longer the honesty of what it once was and so the nudity is lost and covered up.

The building can incorporate these elements of nudity. For instance, by exposing the building in certain areas one can experience the nakedness and rush of heightened senses and emotions and then subsequently other areas can also be hidden away allowing the experience to not overwhelm the user.

The building becomes this balance of where there is this complete nudity or the complete revealment of Chinese culture and space vs where it is held back and concealed. To ensure that there is a comforting way to being exposed with everything. The final point I want to get across is that there is a comfort in nudity, the way a material or object is by itself without the addition of others can invoke a sense of comfort and becomes more unfamiliar when combined with others.

Fig 3.21 A building in its simplest naked form can be seen in its use of columns, beams and the roof structure.



Phenomenology of the bathhouse | 3.12 | The bathhouse, its function, and spatial characteristics

3.12 The bathhouse, its function, and spatial characteristics

Taking into consideration all the above, we can start envisioning what the bathhouse within Cyrildene would start looking like. The bathhouse should be one that caters to multiple user groups. There should be an emphasis placed when thinking about how to make this as inclusive as possible. This should be done in a manner that enriches the current cultural aspect within the suburb. This has the added benefit of attracting tourists and locals alike thus ensuring that the business stays successful. In line with this thinking, the spaces created should take note of space making principles from an East Asian perspective. For example, we can use the Chinese

space making principle of the Siheyuan(courtyard design) which talks about how hierarchy was achieved within the design of the buildings and internal structures. Or this can be shown in the way that genders are perceived in said East Asian cultures. In this example you could have separate spaces catering to the general interests of each gender. The spaces should be a place to enforce positive memories through its aesthetics, its spatial planning, the people involved and of the functional mechanisms that make it work. Materials should be expressed in such a way that they don't lose their true essence. It is through their true nature that one can achieve honesty and purity in the spaces. The interaction between our bodies and water plays an important role in achieving this honesty and purity. Thus, the spaces made should always have this

interaction in mind when being designed. The different aspects in the way in which water can be explored should benefit the human body. An example of this would be that the outer pools should have temperatures that are comfortable or that there are sauna and or ice rooms so that water can be experienced through its different forms. Food is another major factor that is embedded within the neighbourhood thus this should also be included in the program. By extracting the positive essences of taste, sight and smell the bathhouse experience can further be enriched. In terms of space making, this could involve the inclusion of aroma filled rooms or just having pleasant décor to view. Other factors can be considered however the above mentioned are the main drivers of the design.



Fig 3.22 The Chinese principle of Siheyuan(courtyard design) can be explored in the design.

Phenomenology of the bathhouse | 3.13 | Conclusion

3.13 Conclusion

The exploration of how phenomenology can be interpreted within the daily on goings of everyday life is an integral part to the way we can use it in our designs. Achieving this is done through means of targeting cultural values and identity, the interactions of the body with water and finally how we perceive and interpret nudity. These are the types of experiences that need to be brought out within the design of the bathhouse so that the embodied memories and experiences of the users remain positive, bringing them back to enjoy the space a subsequent time or perhaps recommending the experience to a friend or family. This ends up benefiting the neighbourhood as it provides a new way to experience culture, further strengthening itself and providing an opportunity for people to look at the neighbourhood in a different light.



Fig 3.23 Identifying and strengthening the existing cultural experience within the neighbourhood.

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- Fig 3.6: Kow, A., 2020. Even though it is known as the 'New Chinatown' of Johannesburg, residents from other cultures enjoy the commercial aspect of the neighbourhood. This is the case for Anong Thai restaurant and spa which has flourished in recent years. [image]
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- Fig 3.19: Kow, A., 2020. Dry masonry brick wall vs a wet masonry brick wall. [image]
- Fig 3.20: Kow, A., 2020. A material slowly becomes less natural as it gets processed, slowly losing its true essence. [image]
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- Fig 3.23: Kow, A., 2020. Identifying and strengthening the existing cultural experience within the neighbourhood. [image]

An aerial photograph of a suburban neighborhood, showing a dense grid of residential streets, houses, and green spaces. A large, semi-transparent number '4' is overlaid on the left side of the image, spanning from the top to the middle. The number is white with a slight transparency, allowing the underlying aerial imagery to be visible through it.

4

CHAPTER 4

Mapping & Site Analysis

Fig 4.1 Greater Aerial view of Cyrildene



CHAPTER 4 | Mapping & Site Analysis

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Mapping and Site Analysis | 4.1.1 | Macro Site Analysis

Johannesburg Regions

Region A

Diepsloot/Midrand

Region B

Northcliff/Randburg/Rosebank/Parktown

Region C

Rodepoort

Region D

Soweto/Diepkloof

Region E

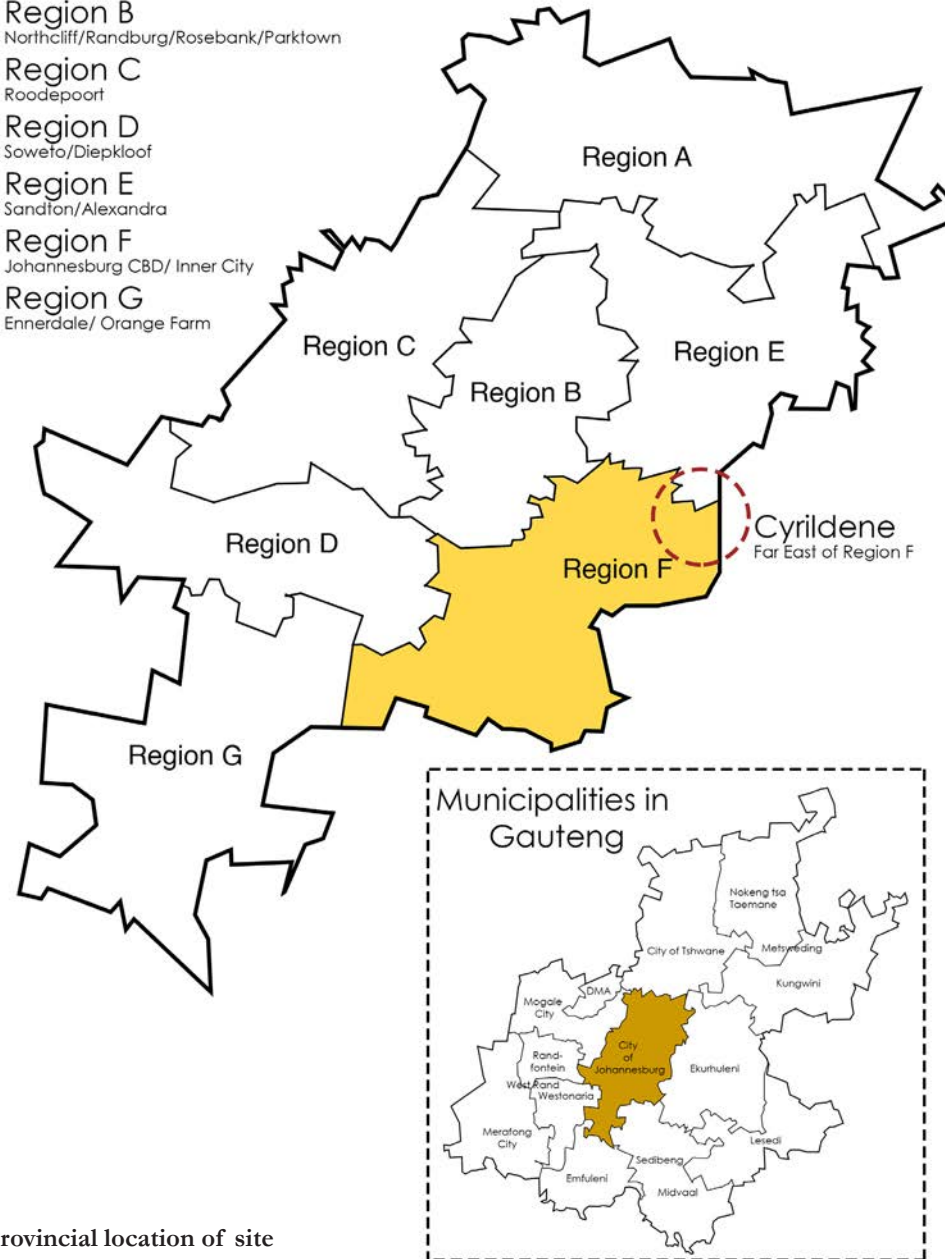
Sandton/Alexandra

Region F

Johannesburg CBD/ Inner City

Region G

Ennerdale/ Orange Farm



Site

The site is located within Gauteng, South Africa. Within Gauteng there are approximately three metropolitan municipalities, the City of Tshwane, the city of Ekurhuleni and the City of Johannesburg. Gauteng also has 2 district municipalities, which are further subdivided into six local municipalities. Gauteng is also known as the economic heart of the country with approximately 34.8% of the country's GDP coming from the province. ("Gauteng Municipalities," 2012).

The city of Johannesburg is further divided into 7 sub regions represented by the letters A to G. My site sits in Region F, the current location of the Johannesburg Central Business District(CBD) and its furthest extents. The suburb of Cyrildene is considered to be on the most north-eastern edge of the region and borders the Municipality of Ekurhuleni.

Fig 4.2 Provincial location of site

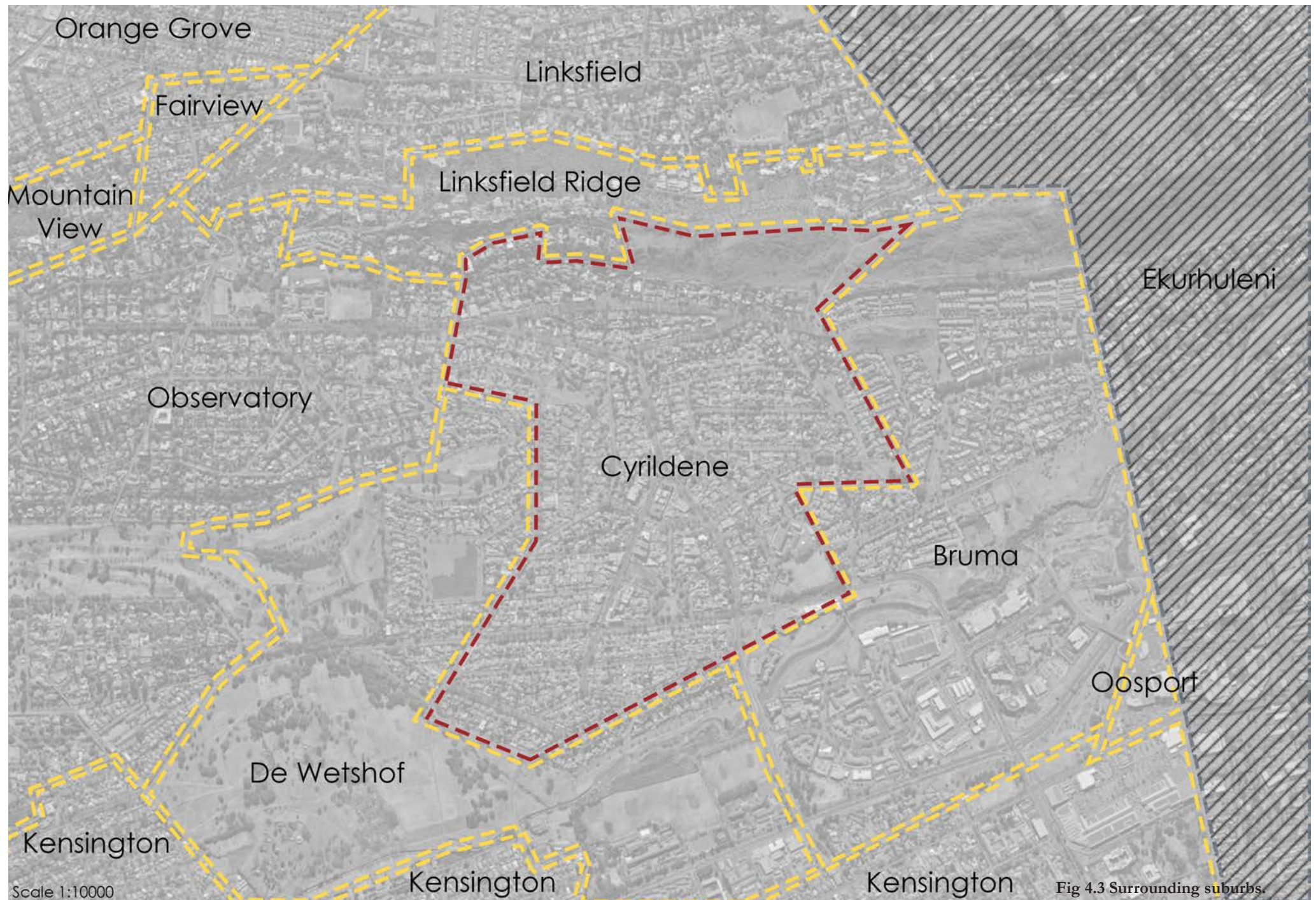


Fig 4.3 Surrounding suburbs.

Fig 4.4 Aerial view of Derrick Avenue



Mapping and Site Analysis | 4.1.2 | Suburbs

The Suburb of Cyrildene

The suburb of Cyrildene is surrounded by the areas of Bruma, Linksfeld, Kensington and Observatory. Cyrildene is notable for its previous prominent Jewish community and most famous for its local Chinatown located on Derrick Avenue.

ERF 733

My site specifically sits on ERF 733. ERF 733 is currently the only vacant piece of land within Derrick Avenue. The ERF was previously 5 different ERFs consolidated into this huge piece of land. However due to the heritage restrictions placed on the site (due to the illegal demolition of the 5 properties), no work has proceeded on it for the past few years.

The site itself extends all the way from the main street edge on Derrick Avenue to the other side on Cyril Crescent Road by the park.

The approximate square meterage of the site is around 6384m².

Site Information

Street No	26
Street Name	Derrick
Stand No	733
Area(m ²)	6384
Township Name	Cyrildene
Current Owner	Sangricom Pty Ltd
Market Value	R3 880 000
Zoning	Business 3
Ward Name	118
Region Name	Region F
Stand SG Code	T0IR0158000000007330000000

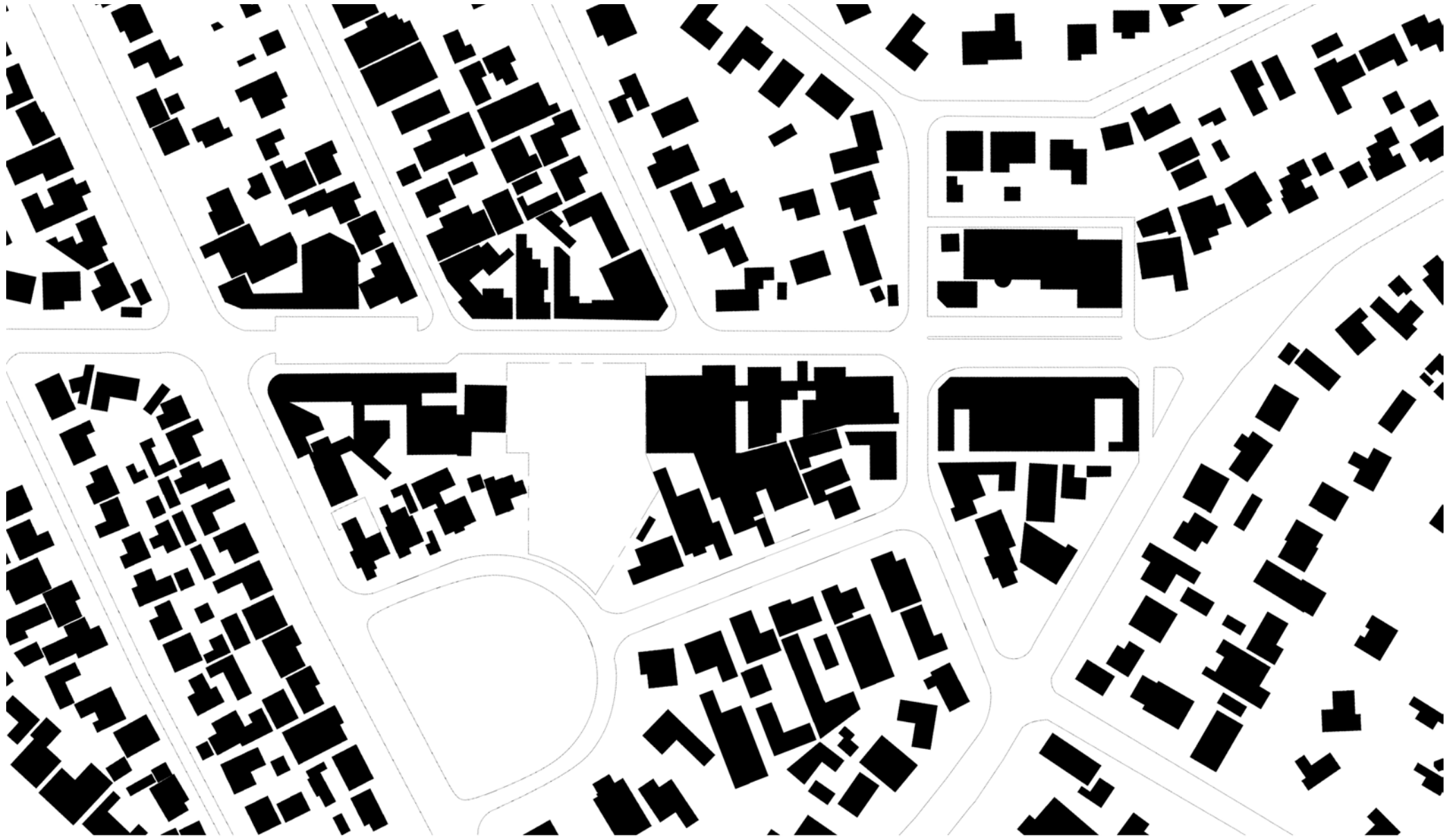


Figure Ground
Cyrildene



Fig 4.5 Figure Ground

Mapping and Site Analysis | 4.1.3 | Suburb Surroundings



Fig 4.6 Surrounding Mapping 1

Mapping and Site Analysis | 4.1.3 | Suburb Surroundings

Suburb Mapping

The most bottom map is showing a aerial photo view of the general area.

The middle map is showing, the typical vehicular movement and general activity. The main arterial routes that take people into the area are red which show that they contain the most vehicles and are always busy from morning to evening. Derrick street is seen as yellow which means it is semi busy. It has different vehicular traffic at different times of the day and is generally busy during the day but the activity completely dies during the night. The rest of the suburb is in the green colour which shows that the activity and movement through those areas are generally quiet throughout the day.

The third map shows the most notable locations within the area. It also shows the main parks as well as the Obervatory Golf Course, the oldest golf course in Johannesburg, within the area in green and the yellow shows the most notable areas such as Eastgate Shopping Mall, Queens High School and of course the location of the Cyrildene Chinatown. From this we can see that Cyrildene is surrounded by an ample amount of schools, walkable park spaces and shopping districts that the residents of the area are able to take advantage of.

The top map is a contour map showing the overall slope of the area. The Cyrildene area exists on the higher slope of the land, giving great views towards the eastern edge of Johannesburg. Observatory the suburb next door is the highest point in Johannesburg.

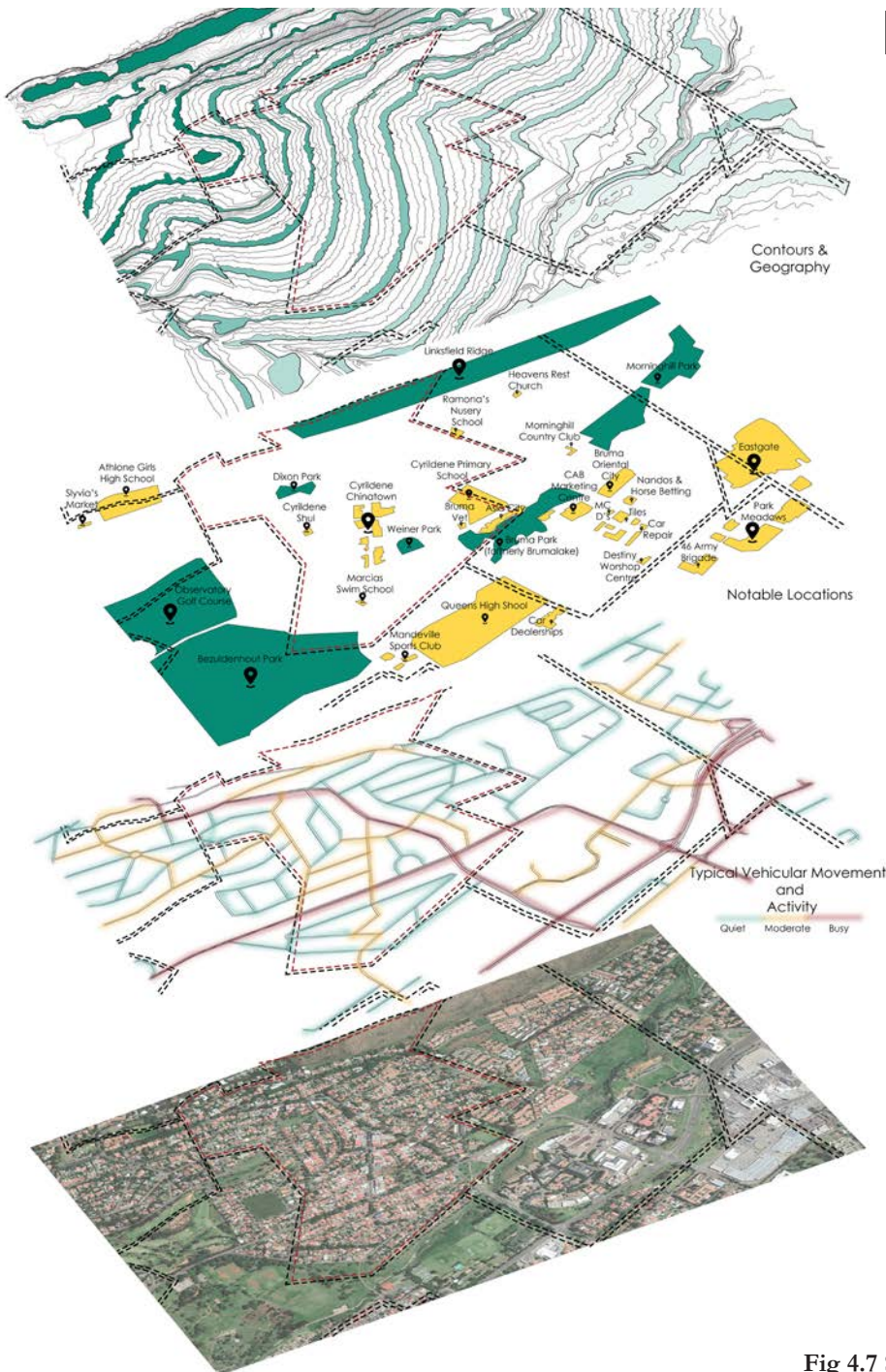


Fig 4.7 Surrounding Mapping 2

Mapping and Site Analysis | 4.1.4 | Corridors of Freedom

Corridors of Freedom Brief

The Corridors of Freedom is Johannesburg's spatial vision to promote spatial inclusion to bring people closer to places of economic opportunities, better quality of life and ease of commuting from places of residence to their workplace and schools ("Corridors of Freedom," 2014).

The Corridors of Freedom aims to readdress lifestyle inequalities, improve the quality of life of all and add valuable hours to the days of commuters, who currently spend much of their time in transit to and from work.

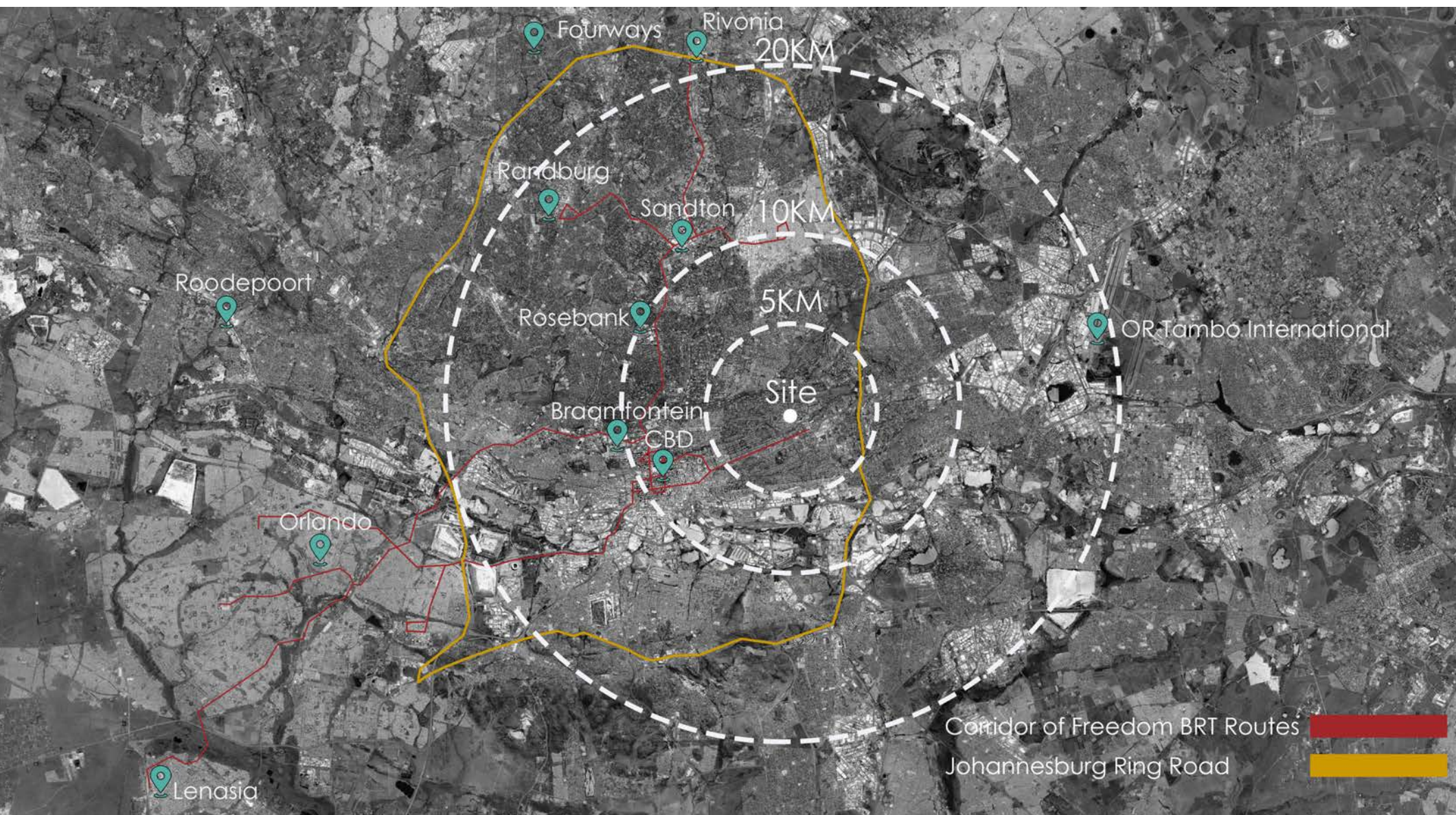
This program is aligned to a transit oriented system that aims to develop areas along a public transport (Rea Vaya BRT) route linking key economic and social nodes. Developments such as high density, mixed-income housing, retail, office buildings exist along the Corridors of Freedom. ("Corridors of Freedom," 2014).

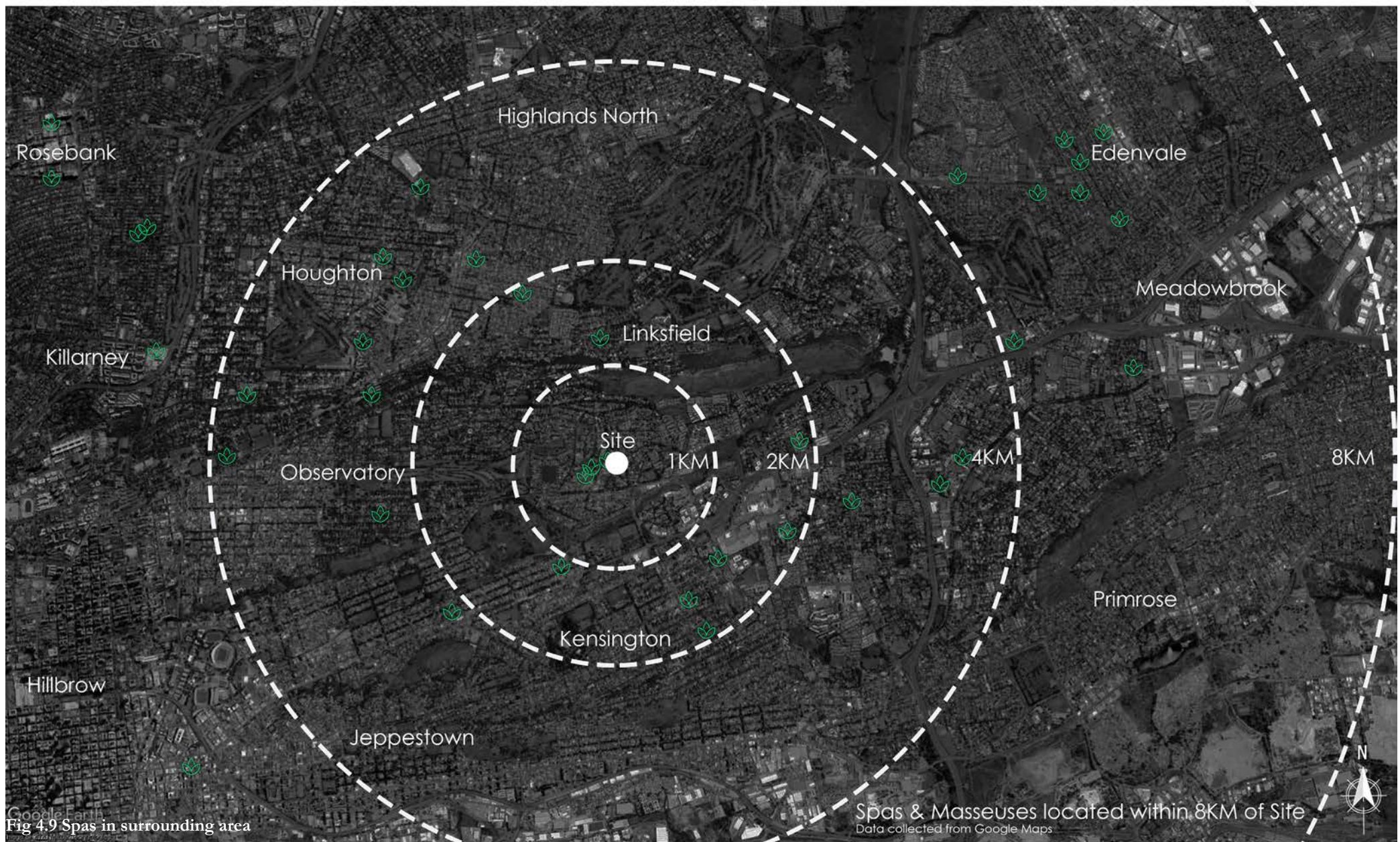
Accessibility in Cyrildene

One of those BRT routes are located relatively close to the area of my site. In this way the ability to access these other economic and social nodes is easily available. By evaluating Cyrildene as an important space within the city, we are able to encourage further development of the Corridor within the area, making it an even more accessible space for the rest of the residents of Johannesburg.



Fig 4.8 Corridors of Freedom Accessibility





Mapping and Site Analysis | 4.1.5 |

Spas located around the site

Spas located around the site

The closest equivalent to a bathhouse in Johannesburg is the spa. It in some ways is an evolution of the bathhouse, an offshoot from the main branch. Therefore this map, is dedicated to showing how many spas are located in the area. This tells us the amount of interest and the central distance from Cyrildene. For example around 1KM of Cyrildene itself only has 3 spas, these spas are not full fledged spas but are more like small rooms within a house offering some massage and facial services. Most of the spa services are located around a 2-4KM radius around the site. The most popular location for spa treatments is located within 8KM of the site to the east by Edenvale a short 10-15minutes drive away. Cyrildene would be an ideal location for an additional spa service. It can be a place where a proper spa service is located. This in addition to the bathhouse and pools makes it easily accessible to the residents within the area. Pushing a new typology for others to experience.

Migration of people to the north

In the early days of Johannesburg's history the small and often forgotten Chinese community resided in and around the 'Old Chinatown' on Commissioner Street. From the late 1990's to the early 2000's the Chinese community started to disperse themselves all over Johannesburg but the main heart of the Chinese community moved itself to Cyrildene, establishing the 'New Chinatown' within the city. Nowadays however due to the varying factors of degradation and societal issues (Bodasing, 2014) discussed previously in Chapter 3.3 a new trend of movement has arisen. People have started to move towards the supposed richer and more safe northern communities such as Bryanston and Rivonia. If this trend continues the same situation that currently befalls the original Chinatown could again happen within Cyrildene. Therefore it is important to recognise this urban decay as a factor that could be addressed.

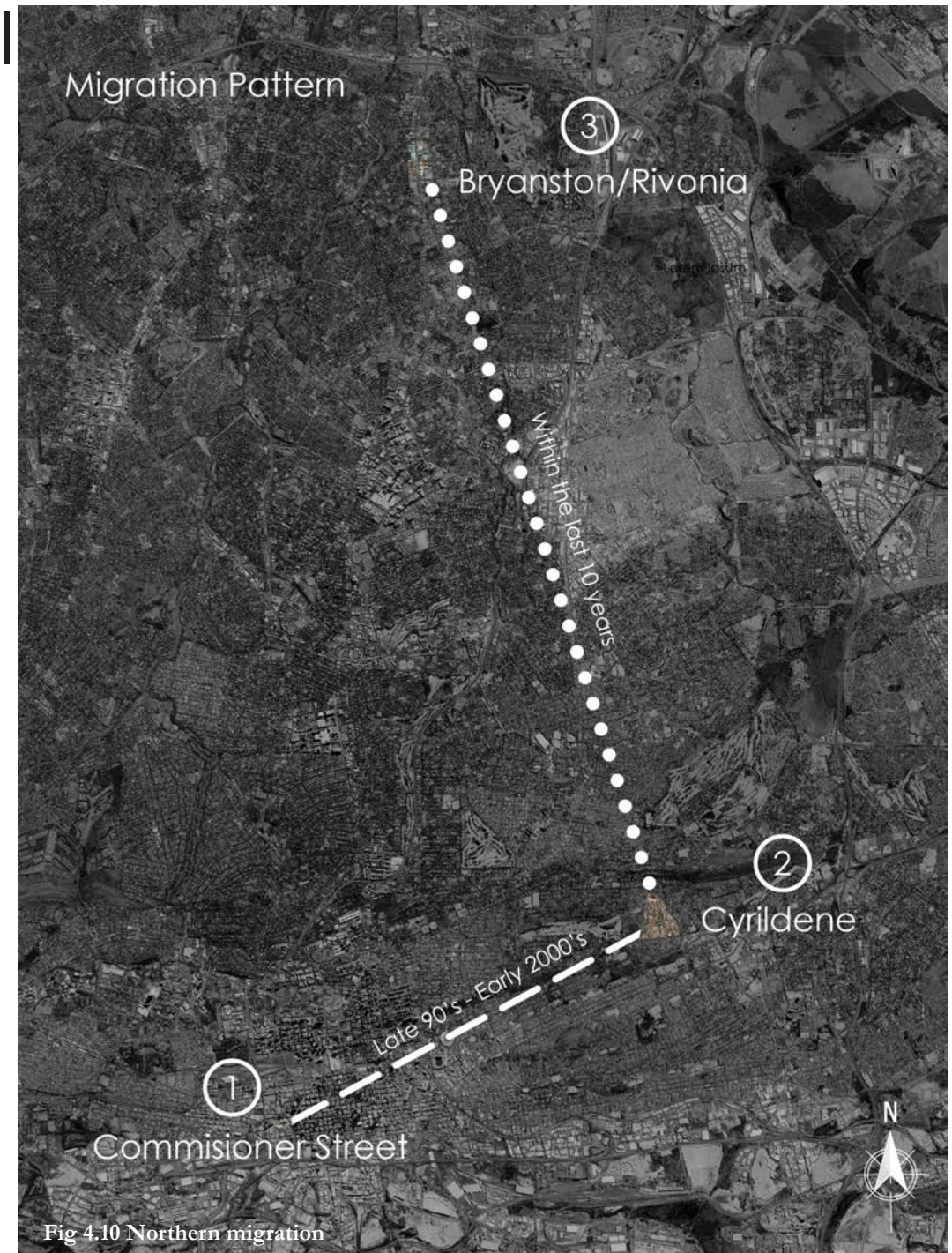


Fig 4.10 Northern migration

Mapping and Site Analysis | 4.2 | Meso Site Analysis

Fig 4.11 Isometric Aerial View of Derrick Avenue



CYRILDENE
Chinatown

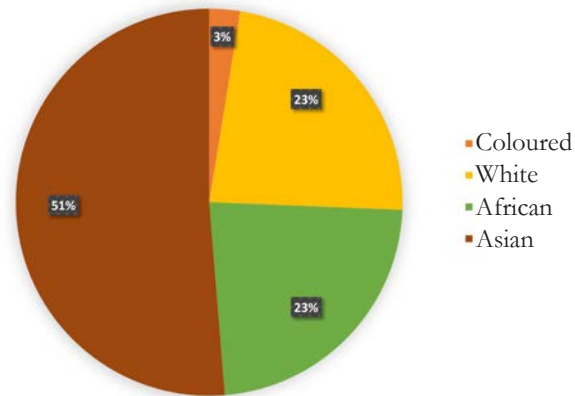
Mapping and Site Analysis | 4.2.1 | Statistics

Shop Ownership in Derrick Avenue



Fig 4.12 Shop ownership based off Hybrid Urbanism. (2017)

Population in Derrick Avenue



Population in the larger Cyrildene context

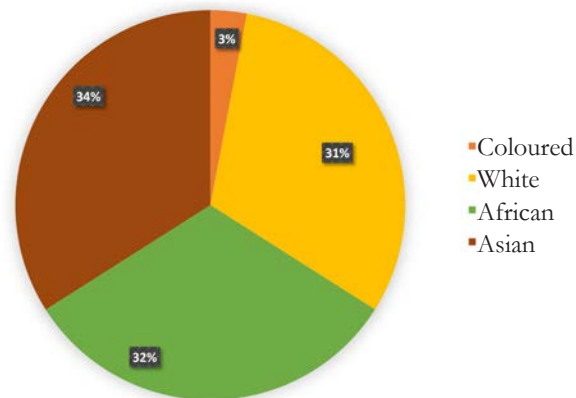


Fig 4.13 Census data visualisation based off SA Census Stats. (2018)

Permanence



30%

Intend to move back to home country



38%

Intend to stay where they are



12%

Intend to stay in Cyrildene



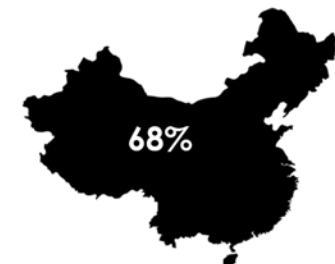
20%

Intend to stay elsewhere in Johannesburg

Global vs Local

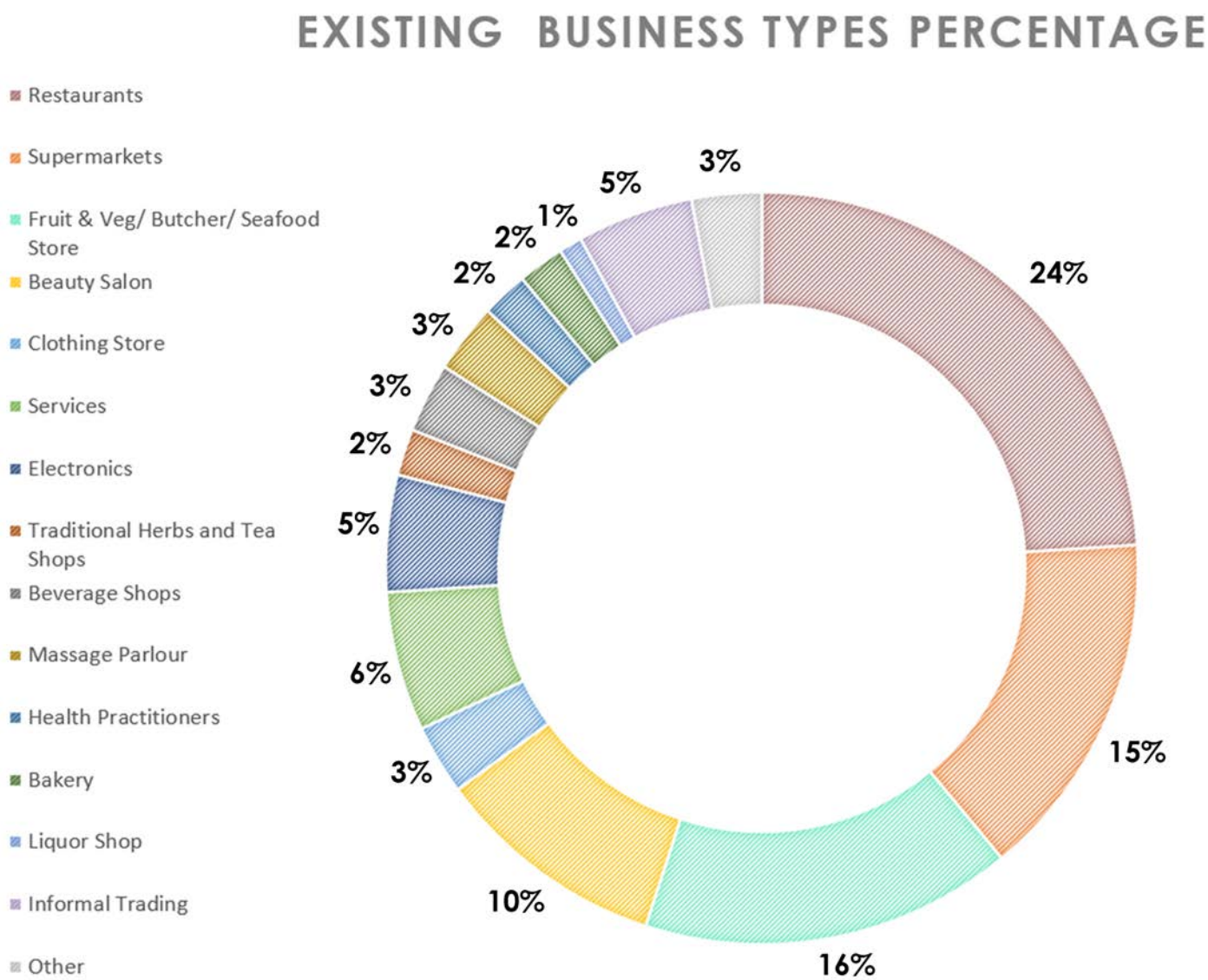


Cyrildene occupants born in South Africa



Cyrildene occupants born outside of South Africa

Mapping and Site Analysis | 4.2.1 | Statistics



Stats Analysis

The suburbs residents are mostly employed and are within the middle-income earning category. Therefore there is the possibility of having more disposable income within their households and therefore residents are able to spend on less necessities and more luxuries.

If you look at the shop ownership within Cyrildene you'll find that most of the shops are owned/leased by the Chinese population. In recent years however due to the migration to the north as discussed earlier, residents from other South Asian, Thai and Indonesian communities have took up ownership of or leased some of the stores within the street. We can also see that Cyrildene is very much a migrant community with over 68% of it's residents coming from outside of the country and only 32% having been born in South Africa according to the 2018 Census data.

The existing businesses within Derrick Avenue show a heavy emphasis on restaurants, supermarkets, raw ingredient shops and beauty salons. As you can see from the data there is basically nothing here that can be offered as a form of entertainment or recreation besides the Massage Parlour.

Fig 4.14 Existing Business Types within Derrick Avenue based off Hybrid Urbanism(2017).

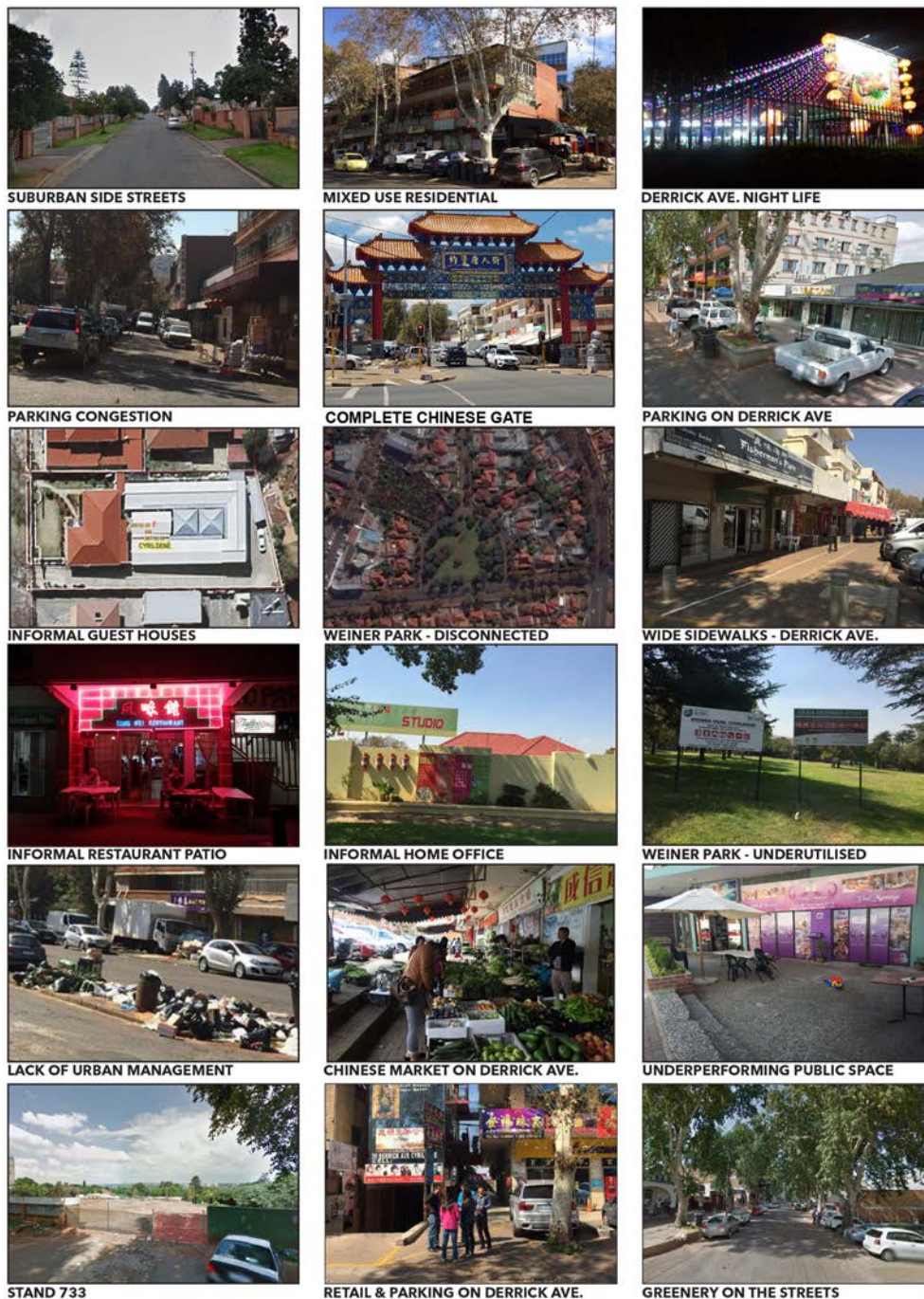


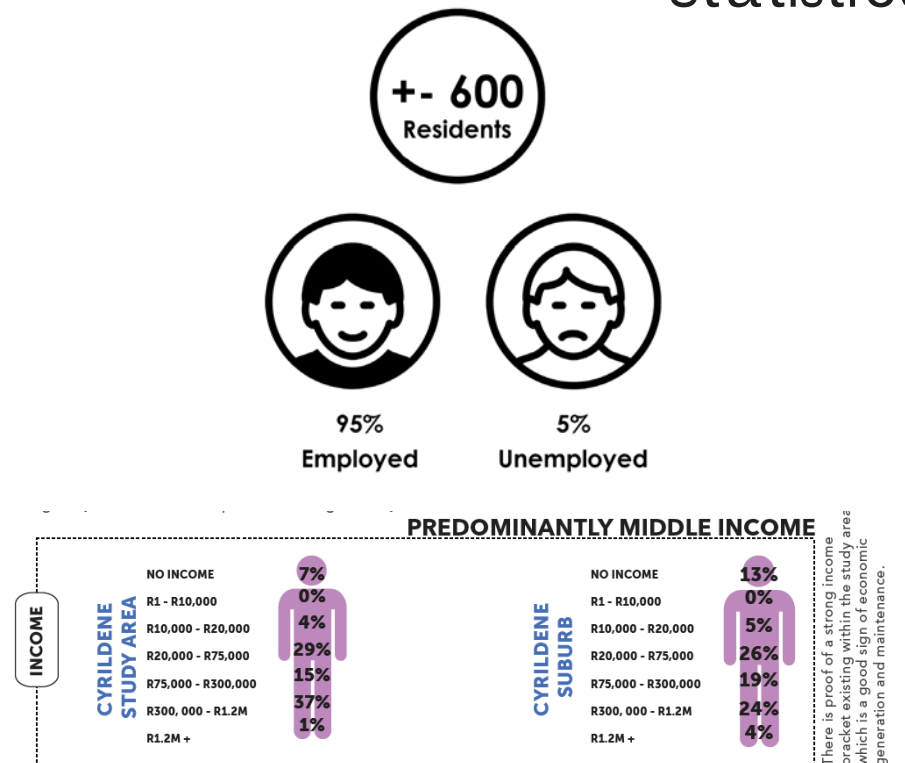
Fig 4.15 Existing site conditions from Cyrildene Urban Development Framework.(2016)

Fig 4.16 More Statistics visualisation based off Cyrildene Urban Development Framework. (2016)

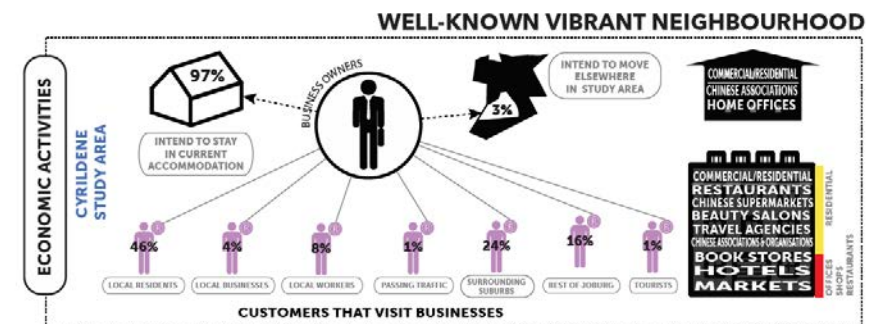
Mapping and Site Analysis

| 4.2.1 |

Statistics



Statistical Info Graphic on Income Brackets Cyrildene UDF(2016)



Statistical Info Graphic on Economic Activities Cyrildene UDF(2016)



Fig 4.17 Photo Analysis: Chinese Culture and Symbolism 1



Mapping and Site Analysis | 4.2.2 | Street Views and Sections

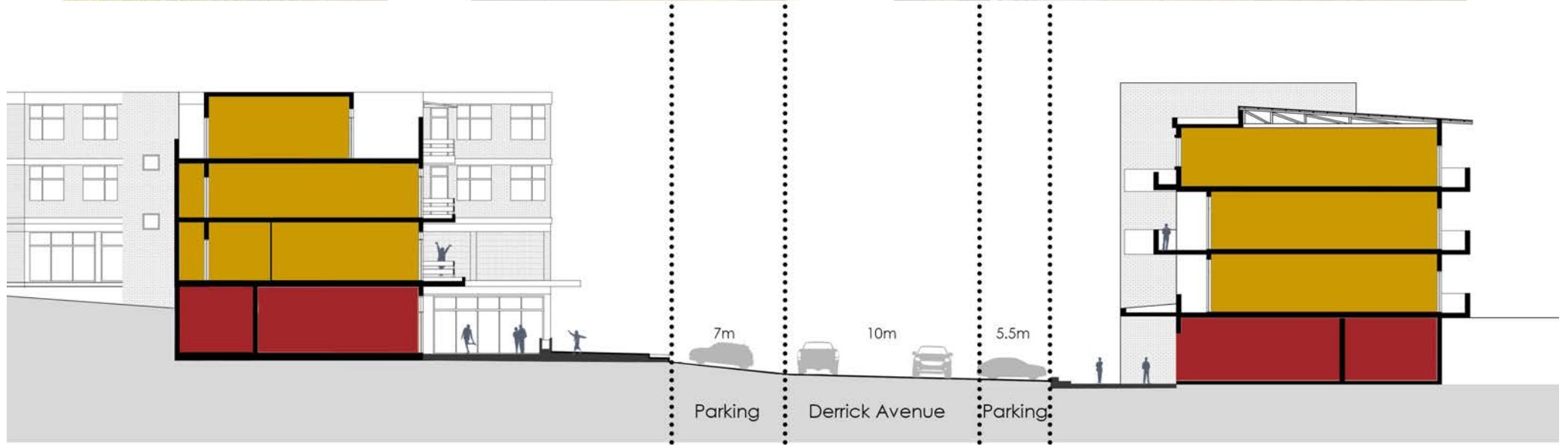


Fig 4.19 Section A-A

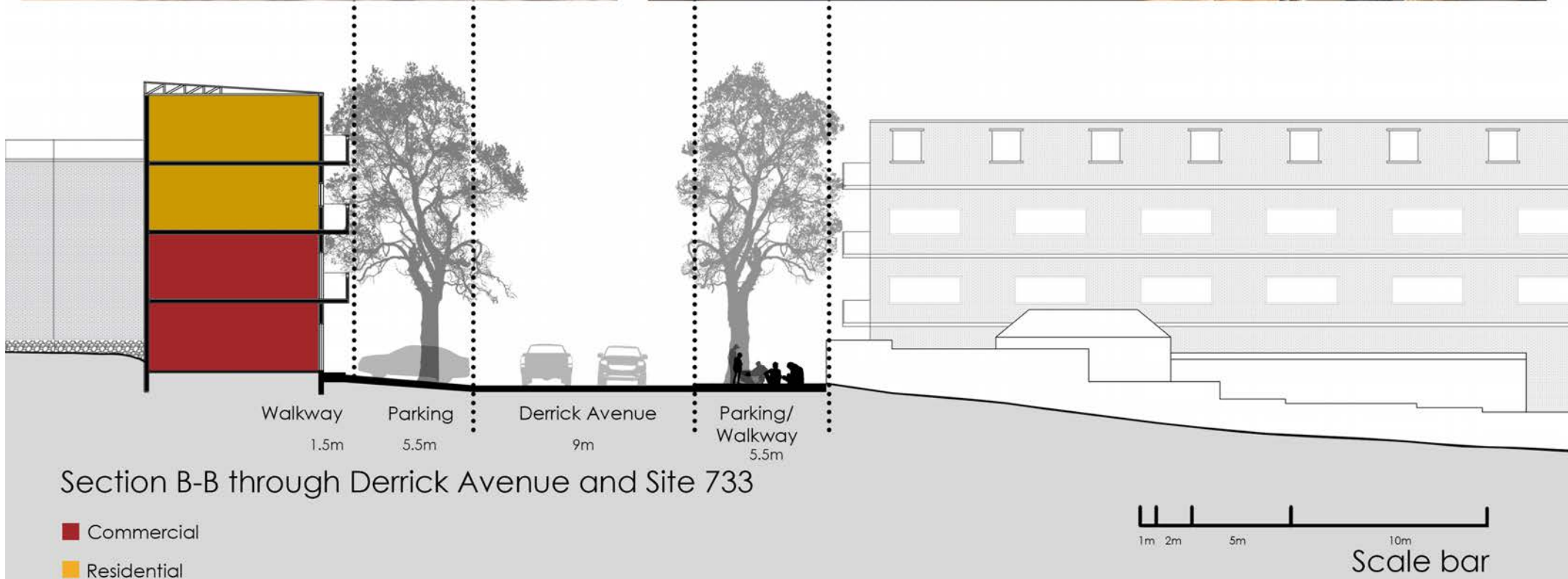
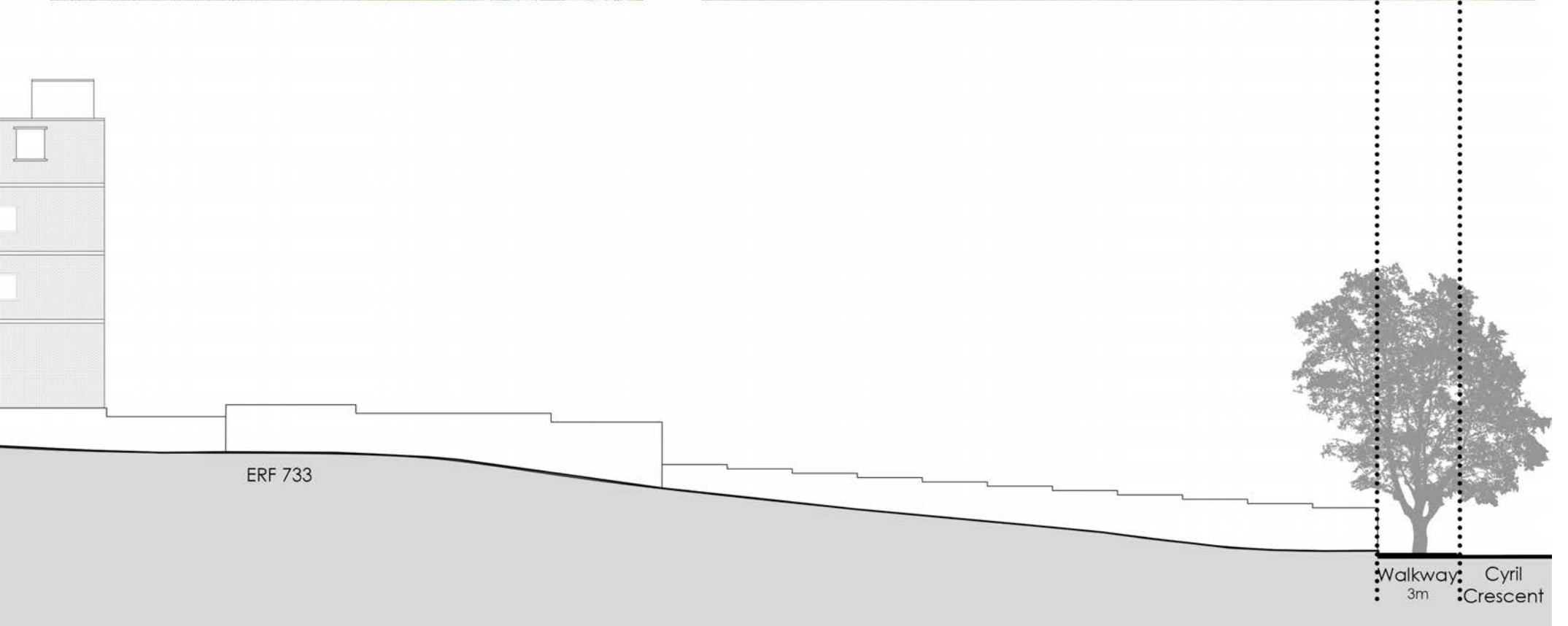
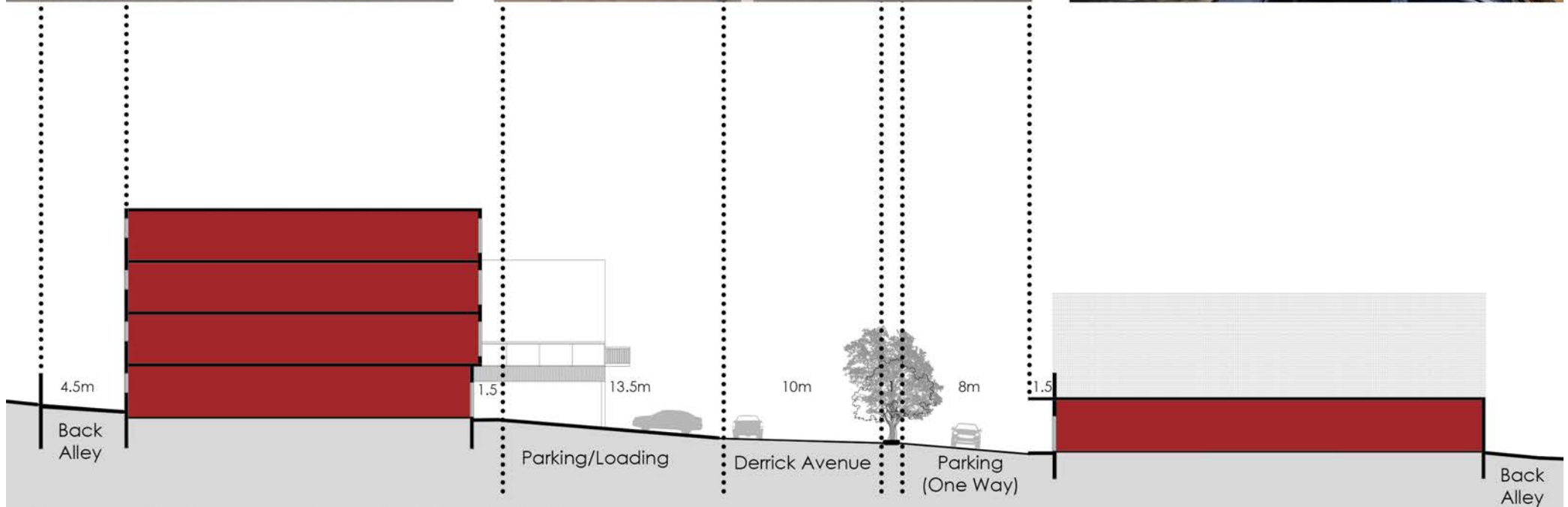


Fig 4.20 Section B-B





Section C-C through end of Derrick Avenue

- Commercial
- Residential

Fig 4.21 Section C-C

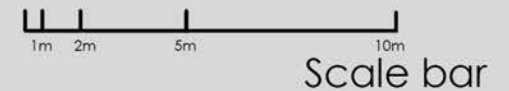




Fig 4.22 Photo Analysis: Chinese Culture and Symbolism 2

Mapping and Site Analysis | 4.2.3 | High Street and Street Interaction

High Street and Street Interaction

Arguably one of the most successful high streets within Johannesburg can be found within Derrick Avenue. The buildings are a mix of different typologies but the most prominent being the mixed housing. On ground level you have shops that open to the street frontage. This aspect is repeated throughout the whole street creating a very successful high street frontage where customers and residents are able to sense the cultural aspect of the neighbourhood by simply walking past the stores. Some of the stores and restaurants are quite colourful which often attract the eye. That same eye is then attracted to the internal aspect of the shop or restaurant browsing through the different foods or wares replicating the standard window shopping experience. Parking can be found in front of most of the stores which creates yet another threshold to the street frontage. The floors above normally have some businesses or that is where the apartments are separating the commercial and the residential.



Fig 4.23 High Street



Fig 4.24 High Street Section Example

Mapping and Site Analysis | 4.2.4 | Building Heights

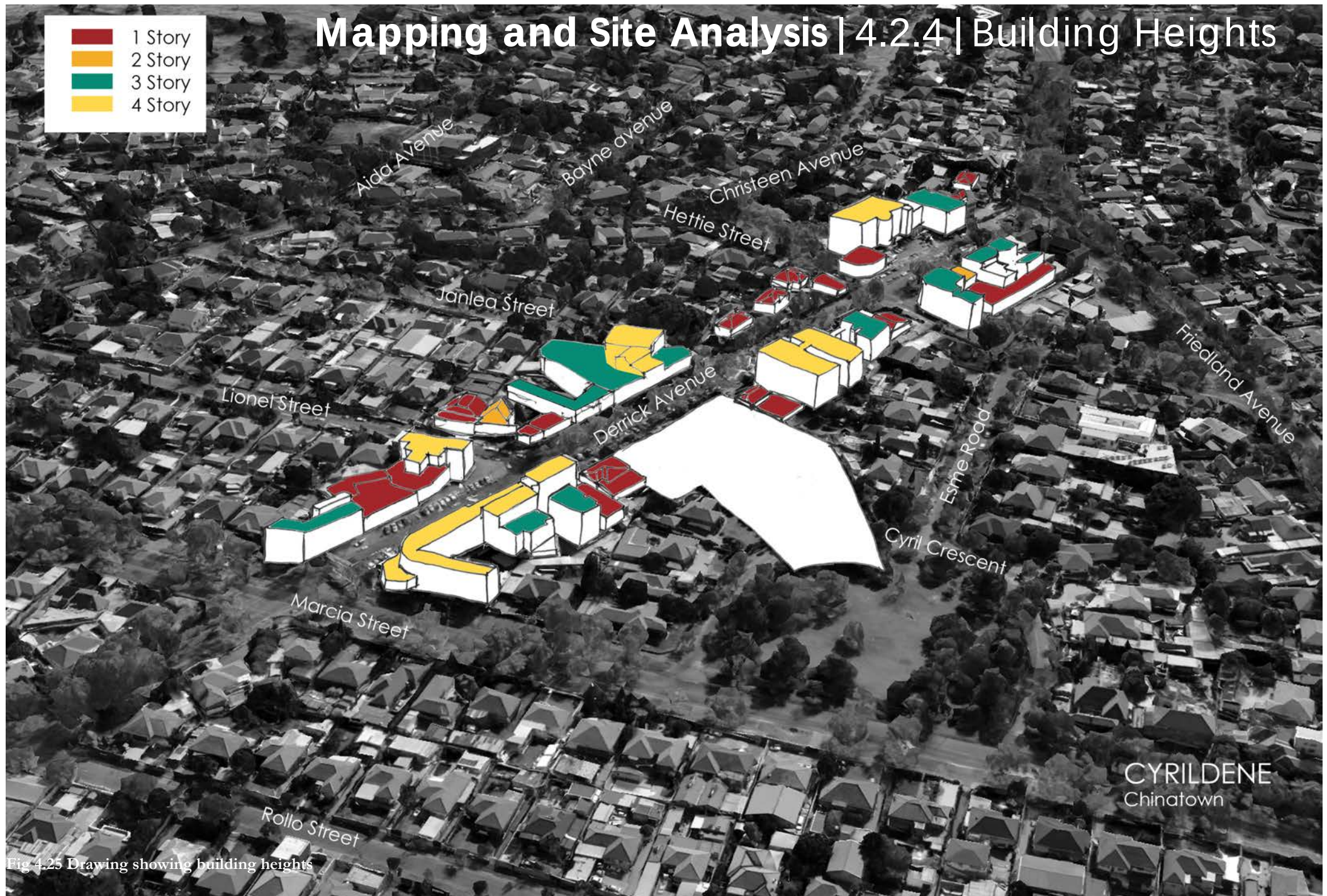


Fig 4.25 Drawing showing building heights

Mapping and Site Analysis | 4.2.4 | Building Heights

Building Heights

With Cyrildene originally being a residential area most of the building typologies within the neighbourhood are your standard one or two story bungalows or houses. This in addition to the three to four story flats or apartments can be found throughout the neighbourhood.

Derrick Avenue has evolved by using these existing typologies and then transforming them into mixed used systems. Most of the houses along the street have been converted to some sort of business or store whilst the three to four story apartments have been converted so that the ground floor caters towards the street frontage creating a successful high street. The new buildings in the area have been built to maximise the existing height restrictions of three to four stories as well as provide more of the mixed use typologies that exist in the street. This trend is expected to continue as the area still has a few buildings that could be converted into greater density units.

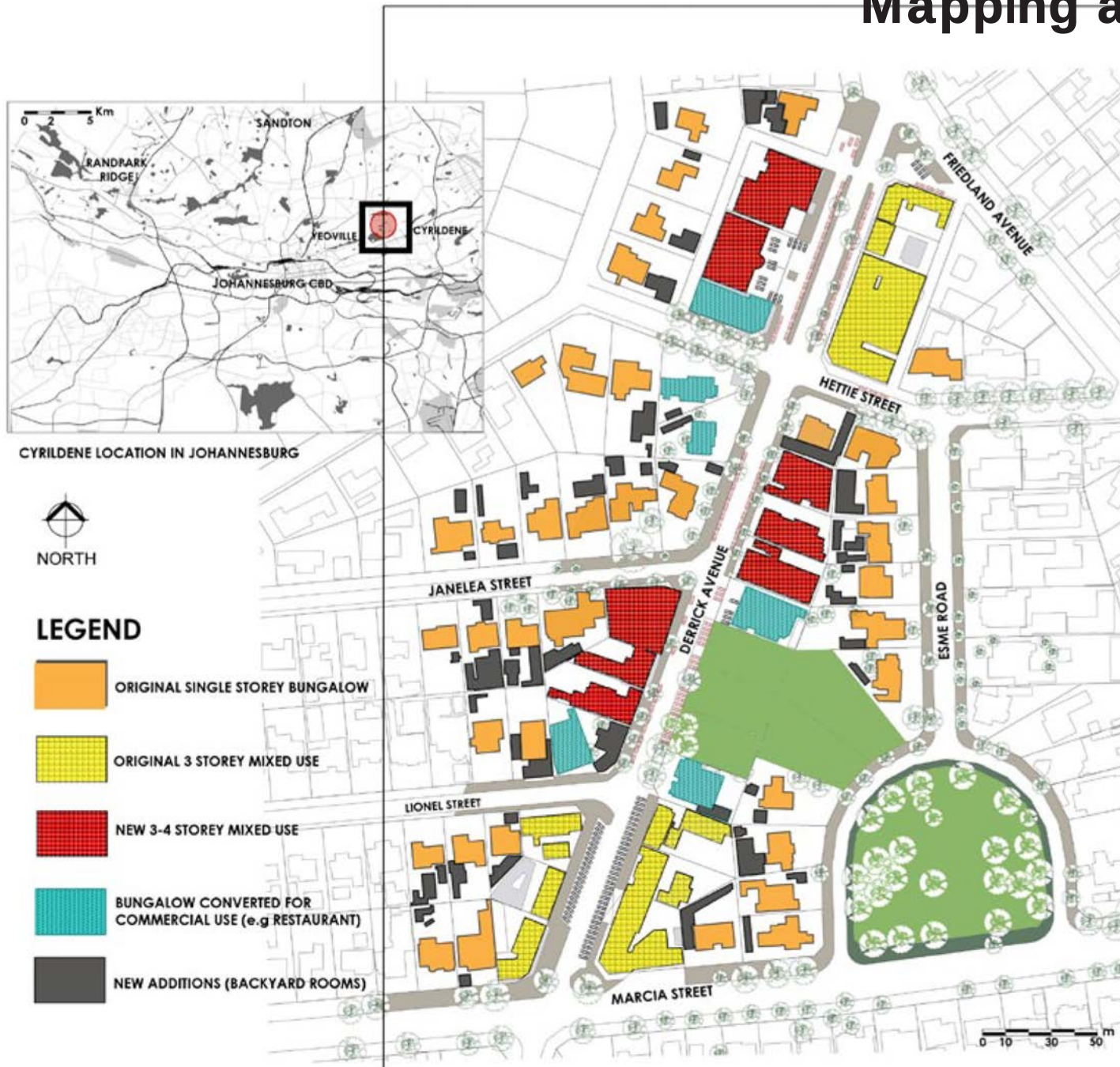


Fig 4.26 Building typologies from China Perspectives. (2020)



Fig 4.27 Photo Analysis: Chinese Culture and Symbolism 3

Mapping and Site Analysis | 4.2.5 | Signage Analysis



Fig 4.28 Signage locations on Cluster A

Translated Signage Legend

East Side

- 1 Jin Wei Seafood
- 2 Profession
- 3 Fong Mei Restaurant
- 4 China Town Chinese Sorority
- 5 Tattoo Studio
- 6 Dragon Garden
- 7 China Town Chinese Sorority
- 8 Hong Kong Street Food
- 9 Love Internet Cafe
- 10 Pin Xiang Bakery
- 11 Joung Hwa Meat
- 12 Yat Kee Chinese Supermarket
- 13 China Town Restaurant
- 14 Li Restaurant
- 15 Da Tang Vegetable Wholesale
- 16 SA Star Diamond Jewellery
- 17 Trade Up Front Liquors
- 18 Creative Private Photography
- 19 SA Lotto International Agency
- 20 Fresh Wonton, Self Made Frozen.
- 21 SA Star Diamond Jewellery
- 22 SA Lotto International Agency
- 23 Southern Flavour Chinese Restaurant
- 24 Ping An International Express
- 25 Dental Clinic
- 26 Southern Flavour Chinese Restaurant
- 27 Chunhui Supermarket
- 28 K.K Supermarket, Takeaway and Butchery

West Side

- 29 Mongkok Chinese Restaurant
- 30 Suliman's Clinic
- 31 Donggan Salon
- 32 Xiao Wang Wholesale Distribution
- 33 Convenient Services, Cars
- 34 Meixin Bakery
- 35 Meixin Bakery
- 36 Zubi Cellular
- 37 Meixin Cake Shop
- 38 Chinese Cooking Classes
- 39 Mr Wang Vegetable & Fruit
- 40 Da Sung Hung Supermarket
- 41 Northern Dumplings
- 42 Cyrildene Chinese School
- 43 New Style Korean Medical Beauty
- 44 Da Dong Farm Supermarket
- 45 Aasia Halaal Meat and Fish
- 46 Simplicity Tea and Coffee Shop
- 47 Emperor Diamond
- 48 Say Fan Technology
- 49 Vu's Beauty Studio
- 50 Salon
- 51 ASTV communications

Cluster A East Side



Cluster A West Side



Mapping and Site Analysis | 4.2.5 | Signage Analysis



Fig 4.29 Signage locations on Cluster B

Translated Signage Legend

East Side

- 1 Lao Xiang Seafood Market
- 2 Lao Ren Farm
- 3 Happyman Yongsheng Restaurant
- 4 Fuzhou Restaurant
- 5 China-SA SF Express Delivery
- 6 Ron Cheung Restaurant
- 7 Perm Dye Shi Jia Hair Salon
- 8 New Store Description + Discounts
- 9 Mao Shao Restaurant

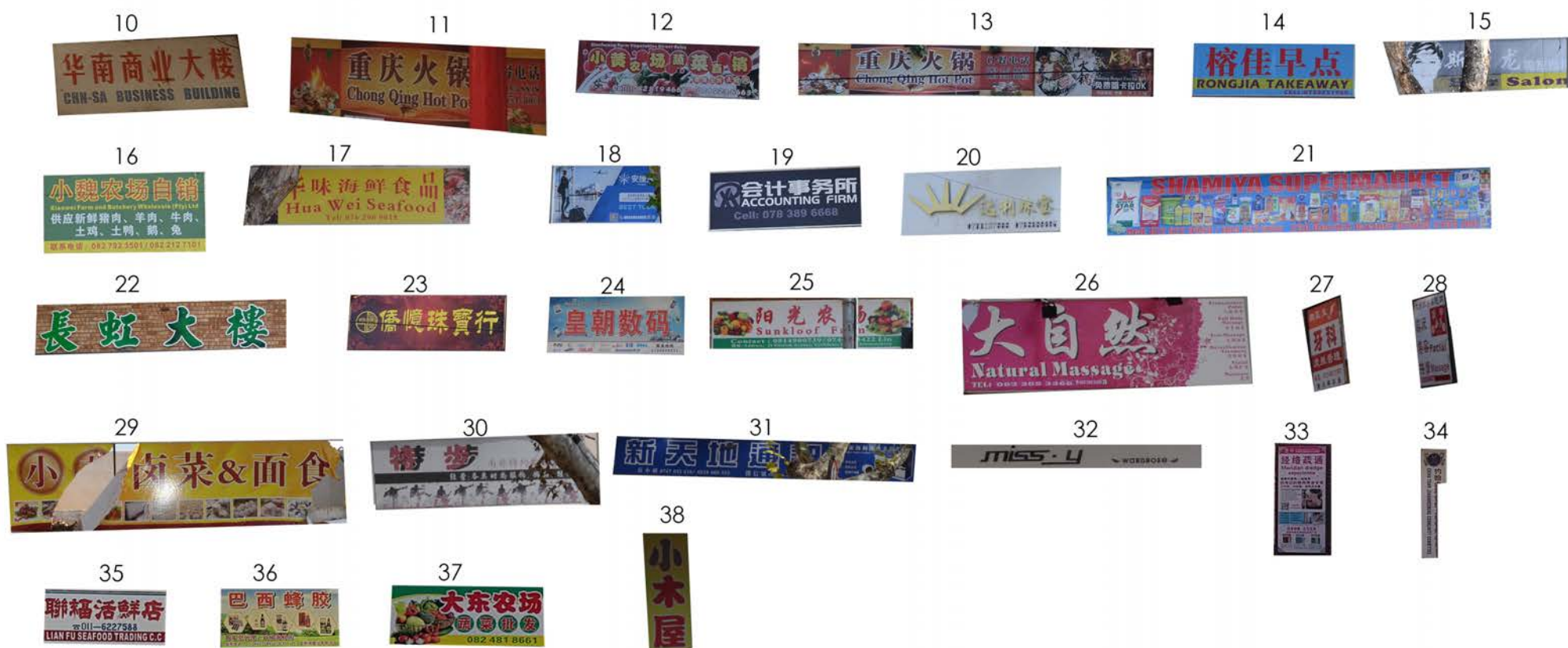
West Side

- 10 China-SA Business Building
- 11 Chong Qing Hot Pot
- 12 Xiaohuang Farm Vegetables Sales
- 13 Chong Qing Hot Pot
- 14 Rongjia Takeaway
- 15 Salon
- 16 Xiaowei F & Butchery Wholesale
- 17 Hua Wei Seafood
- 18 Explore your dream destiny Best Tour
- 19 Accounting Firm
- 20 Da Li Jewellery
- 21 Shamiya Supermarket
- 22 Chung Bung Building
- 23 Chiao Yi Jewellery
- 24 Huang Chao Digital
- 25 Sunkloof Farm
- 26 Natural Massage
- 27 Description Dentist, Skin, Nail
- 28 Da Xi Ren Beauty Real Bed
- 29 Small Something Restaurant
- 30 Tou Bu Clothing Store
- 31 Xing Tian Di Communication
- 32 Miss Y Wardrobe
- 33 Meridian Dredge Experience
- 34 Chinatown Community Committee
- 35 Lian Fu Seafood Trading C.C
- 36 Brazilian Propolis
- 37 Da Dong Farm
- 38 Cabin

Cluster B East Side



Cluster B West Side



Mapping and Site Analysis | 4.2.5 | Signage Analysis

Translated Signage Legend

East Side

- 1 Xin Xin Apartments
- 2 Tian Yu Communications
- 3 BY Supermarket
- 4 Diao Yu Dao Restaurant
- 5 Sheng Tang Business Guest
- 6 BY Supermarket
- 7 Jin Yuen Jewellery
- 8 Jia He Beauty and Star Salon
- 9 Jin Yuen Jewellery
- 10 Qun Tun Brothers
- 11 Jia He Beauty and Star Salon
- 12 Jia He Beauty and Star Salon
- 13 Jia He Beauty and Star Salon
- 14 Jia He Beauty and Star Salon
- 15 Rainbow Jewellery moved downstairs
- 16 Wan Li Da Clearance Exchange
- 17 Delicious Casserole Food
- 18 World Cup
- 19 Shun De Cantonese Morning Tea
- 20 Rainbow Jewellery
- 21 China furniture city
- 22 Yi Pin Tian Xia Hot Pot
- 23 Cabin - Delivery Express Chn->SA
- 24 Yi Ren Flower Celebration
- 25 Chn SA immigration services
- 26 Tianyi Advertising Company
- 27 Tianyi Advertising Company
- 28 Rainbow Jewellery
- 29 Shun De Cantonese Morning Tea
- 30 Peng Chung Building
- 31 Momo Tea
- 32 Zhong Qiao Supermarket
- 33 Bai Zao Tang Pharmacy
- 34 ERM Travel

West Side

- 35 Anong Thai Restaurant and Spa
- 36 Lin Ji Barbeque
- 37 Dong Lai Xin Hotpot
- 38 Roasted Lamb



Fig 4.30 Signage locations on Cluster C

Cluster C East Side



Cluster C West Side



Mapping and Site Analysis | 4.2.5 | Signage Analysis



Translated Signage Legend

East Side

- 1 Friends Thai Supermarket
- 2 Sun Fat Chinese Restaurant
- 3 Guang Dong Salon
- 4 Long Sheng Market
- 5 Photograph services
- 6 International Telephone Agency
- 7 Chinatown Taxi Stand
- 8 Min Ni Tan Beauty Salon
- 9 Taipei Ren Supermarket
- 10 Tai Bei Ren Supermarket
- 11 Diaspora Finance Company
- 12 CJ Supermarket
- 13 Wan Fu Lai Seafood Meat Store
- 14 Wan Fu Lao Farm Vegetables
- 15 CJ Supermarket
- 16 Fang Ye Apparel
- 17 Heng Tai Jewellery
- 18 Feng Ye Apparel
- 19 Maple clothing store
- 20 Thai Lanna Trading
- 21 Thai Ran Beauty

West Side

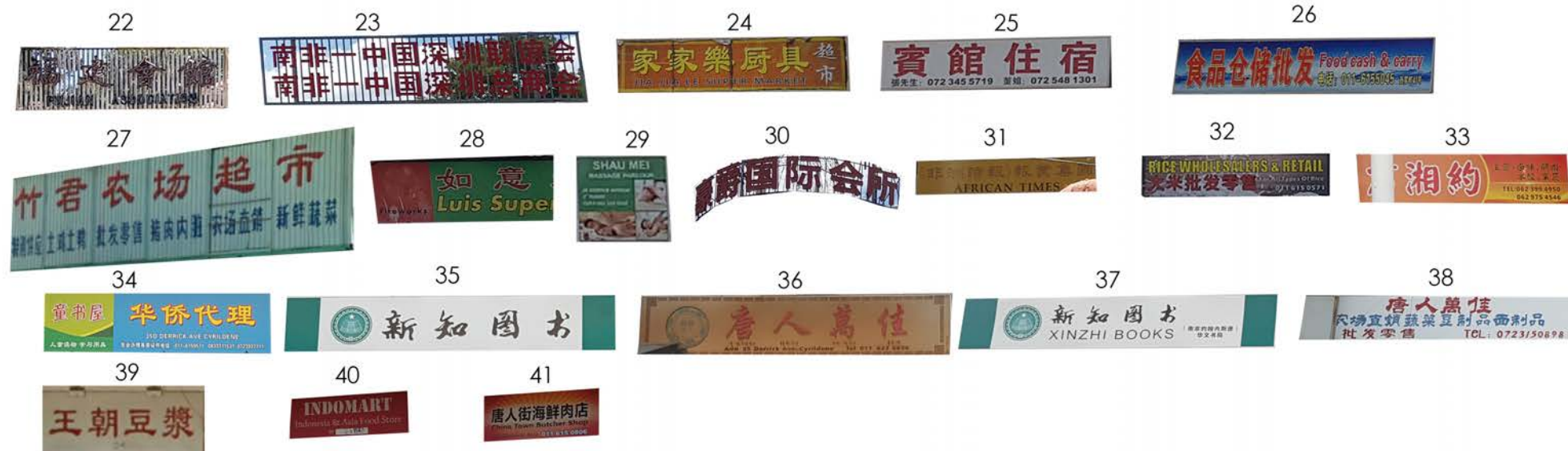
- 22 Fujian Association
- 23 SA-CHN Shun Jun Chamber of Commerce
- 24 Jia Jia Le Supermarket
- 25 Hotel
- 26 Food, cash and carry
- 27 Zhu Jun Farm Supermarket
- 28 Luis Supermarket
- 29 Shau Mei Massage Parlour
- 30 Xia Jue International Club
- 31 African times
- 32 Rice Wholesalers and Retail
- 33 Xiang Restaurant
- 34 Childrens books/Overseas Chinese Agent
- 35 Xinzhi books
- 36 Tang Ren Wan Jia
- 37 Xinzhi books
- 38 Tang Ren Wan Jia
- 39 Wang Chow Soya Milk
- 40 Indomart - Indonesia and Asia Food Store
- 41 China Town Butcher Store

Fig 4.31 Signage locations on Cluster D

Cluster D East Side



Cluster D West Side



Mapping and Site Analysis | 4.2.6 | Building Uses

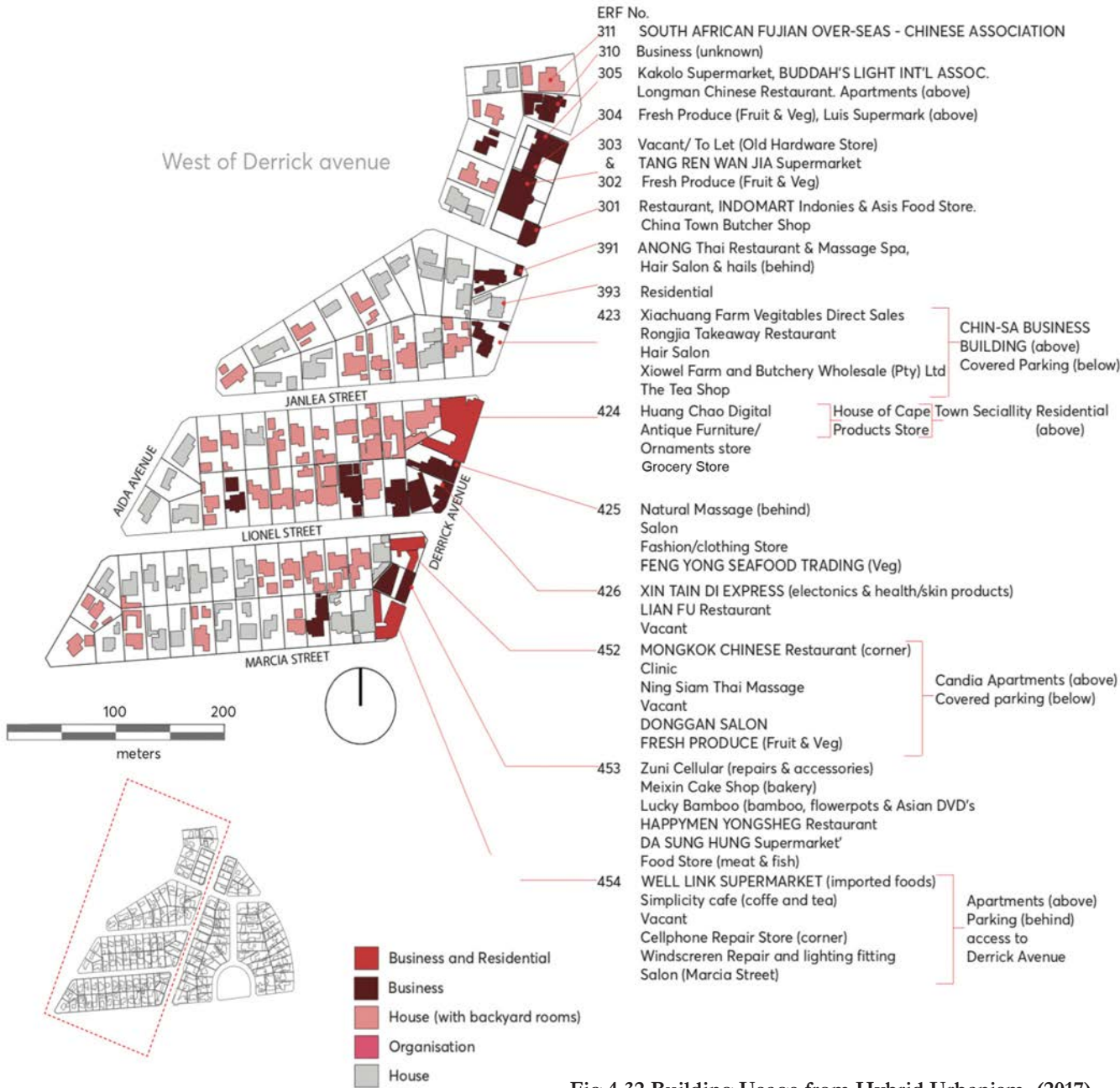


Fig 4.32 Building Usage from Hybrid Urbanism. (2017)

Fig 4.32 Different stores and shops along the road



Mapping and Site Analysis | 4.2.6 | Building Uses

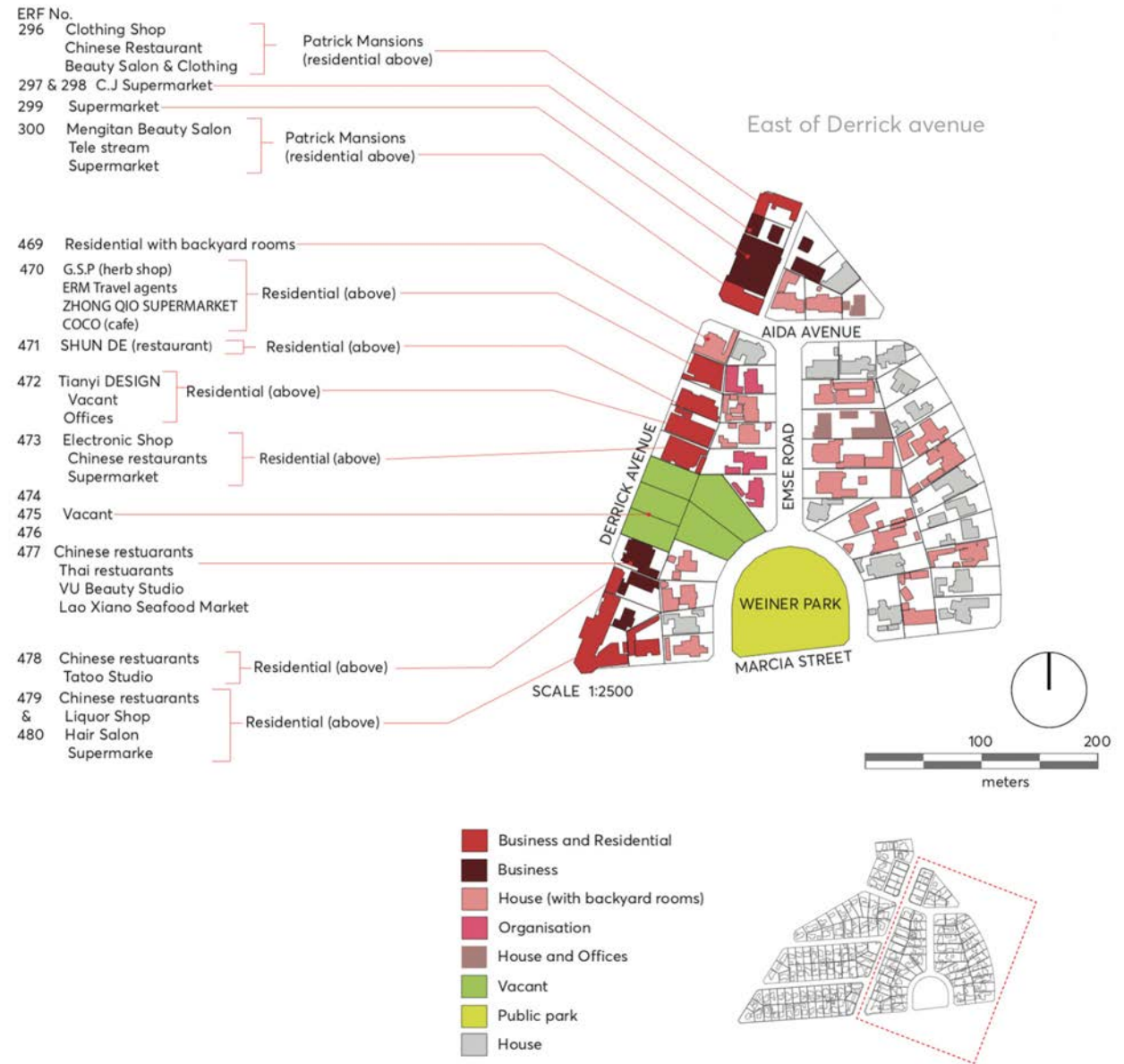


Fig 4.33 Building Usage from Hybrid Urbanism. (2017)



Fig 4.34 Photo Analysis:
Chinese Culture
and Symbolism 4

Mapping and Site Analysis

| 4.2.6 |

Building Uses

Building Usage

We can see how the commercial aspect of the neighbourhood has taken form within Derrick Avenue. The houses surrounding Derrick Avenue still remain residential for the most part but we can see that the residential plots in the immediate outer vicinity of Derrick Avenue are slowly being bought out and being transformed into small businesses further developing the China Town narrative.

This map also shows how the mixed use typology comes into play with most of the 3-4 story buildings catering to the commercial retail, commercial offices and residential aspects. Most of the commercial retail is located on the ground floor and that is where most of the street activity happens. The residential and offices are kept in the floors above. Some offices take up whole residential bungalows though.

The last thing of note is that the street really caters to the commercial aspect within the community. This happens in the form of restaurants, supermarkets and other similar stores and shops. It is however missing the recreation aspect which could also be a form of commerce needed within the community.

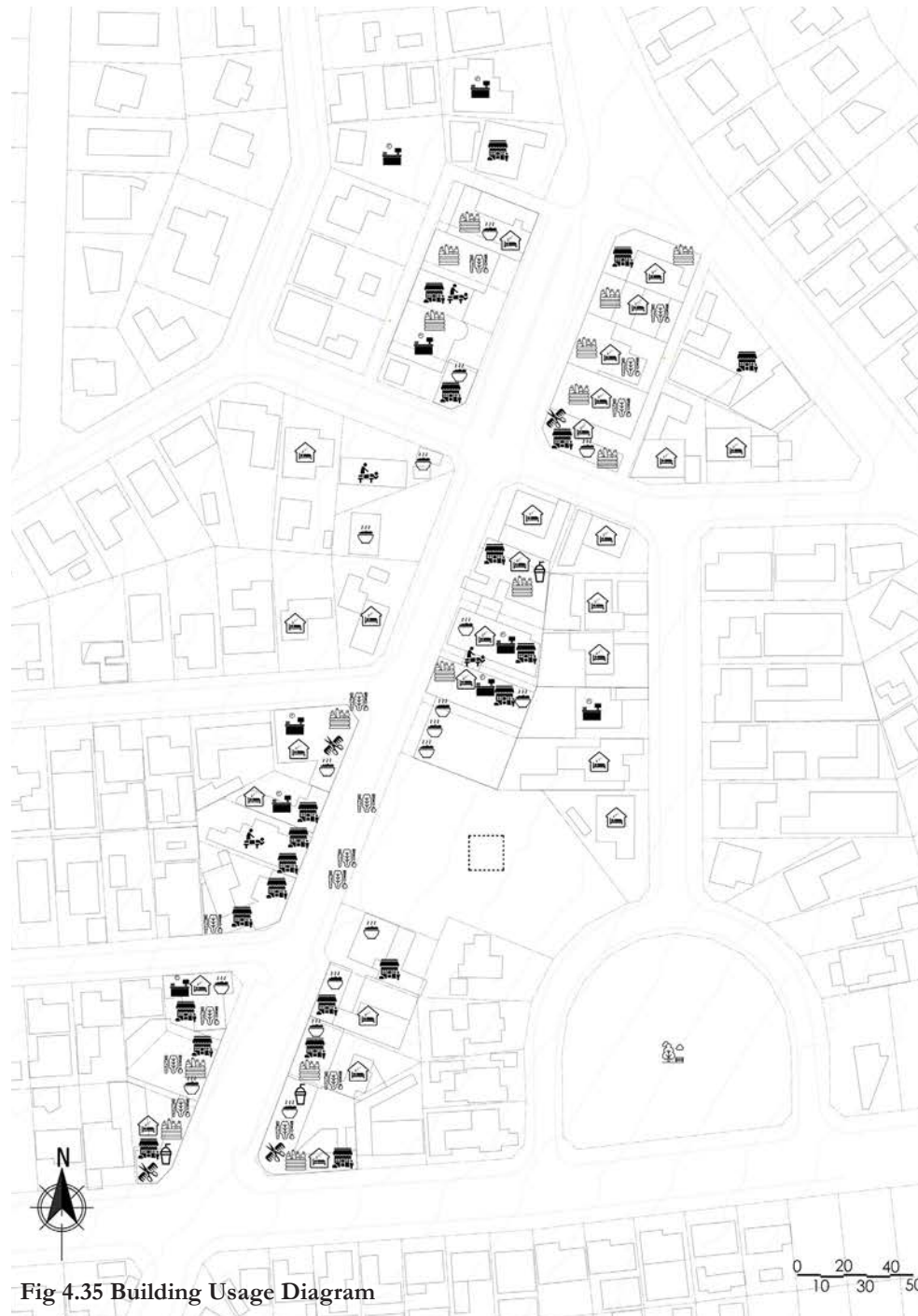
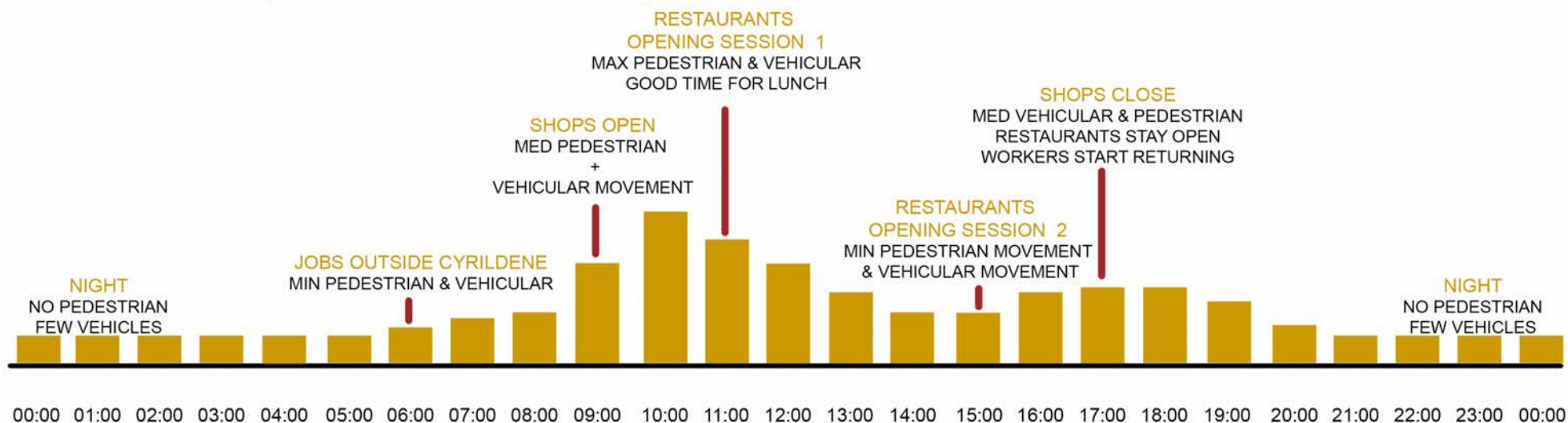


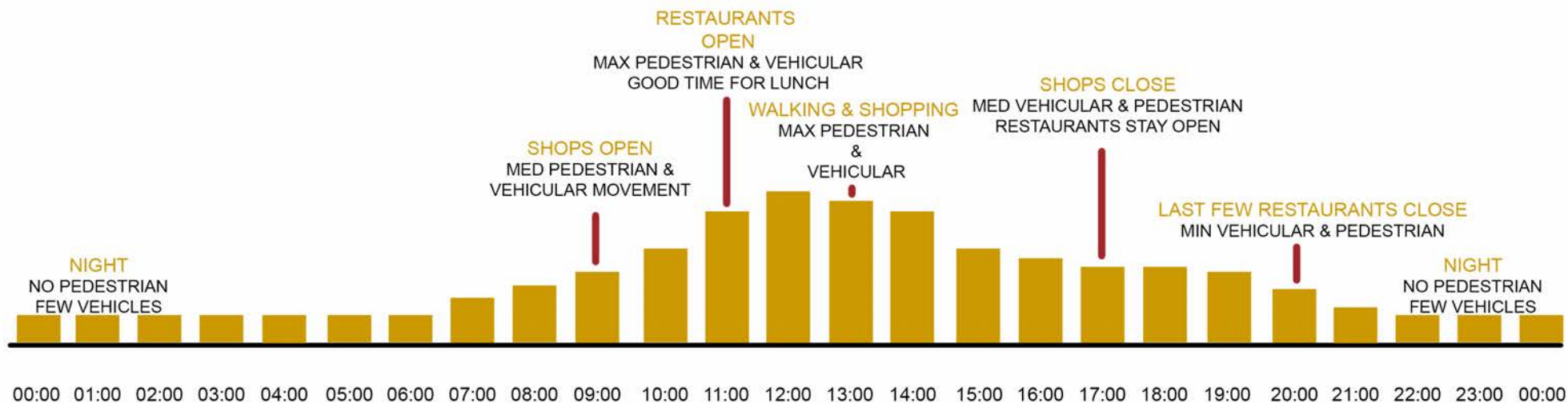
Fig 4.35 Building Usage Diagram



Fig 4.36 Photo Analysis:
Chinese Culture and Symbolism 5



MOVEMENT INFORMANTS THROUGHOUT WEEKDAY*



MOVEMENT INFORMANTS THROUGHOUT WEEKEND*

Fig 4.37 Movement Patterns 1

*OBTAINED THROUGH SITE VISITS AND TRAFFIC OBSERVATIONS VIA GOOGLE MAPS

Mapping and Site Analysis | 4.2.7 | Movement patterns within Cyrildene

In Figure 1, I've drawn up a visual analysis showing the aggregated vehicular and pedestrian movements that happen during a typical week within Cyrildene. I've separated it into weekdays and weekends because there is a clear differentiated user base.

During weekdays, the earliest risers are the ones that are residents of Cyrildene but have to then go to work outside of Cyrildene in areas such as the China shopping malls or Bryanston. This normally occurs around 6AM - 8AM depending on their final travel location. From 9AM, most shops, supermarkets and small stores start opening and so there is an increased amount of movement happening in this time. This continues to escalate until about 11AM, this is due to shop and restaurant owners coming into Cyrildene to buy their ingredients for the day and it is also the time when the supermarkets are busy loading up their trucks that are bound for deliveries to the rest of Johannesburg. From about 11AM the restaurants within Cyrildene open and this is the time

where most of the shop owners take a break to go eat lunch until about 12PM/1PM. Restaurants temporarily close and take a break when the last customer finishes their meal till they open again later in the afternoon for a second session of food serving. Most shops close around 4-5PM, this is also the time when traffic from outside Cyrildene starts to arrive, as people want to grab some dinner/groceries on their way home. Workers that reside in Cyrildene will also start making their way home from this time. Restaurants will stay open until around 7/8PM or until their last customer for the night and then close their stores. The streets become dark and very quiet from this moment onwards and so most residents don't venture outside this time.

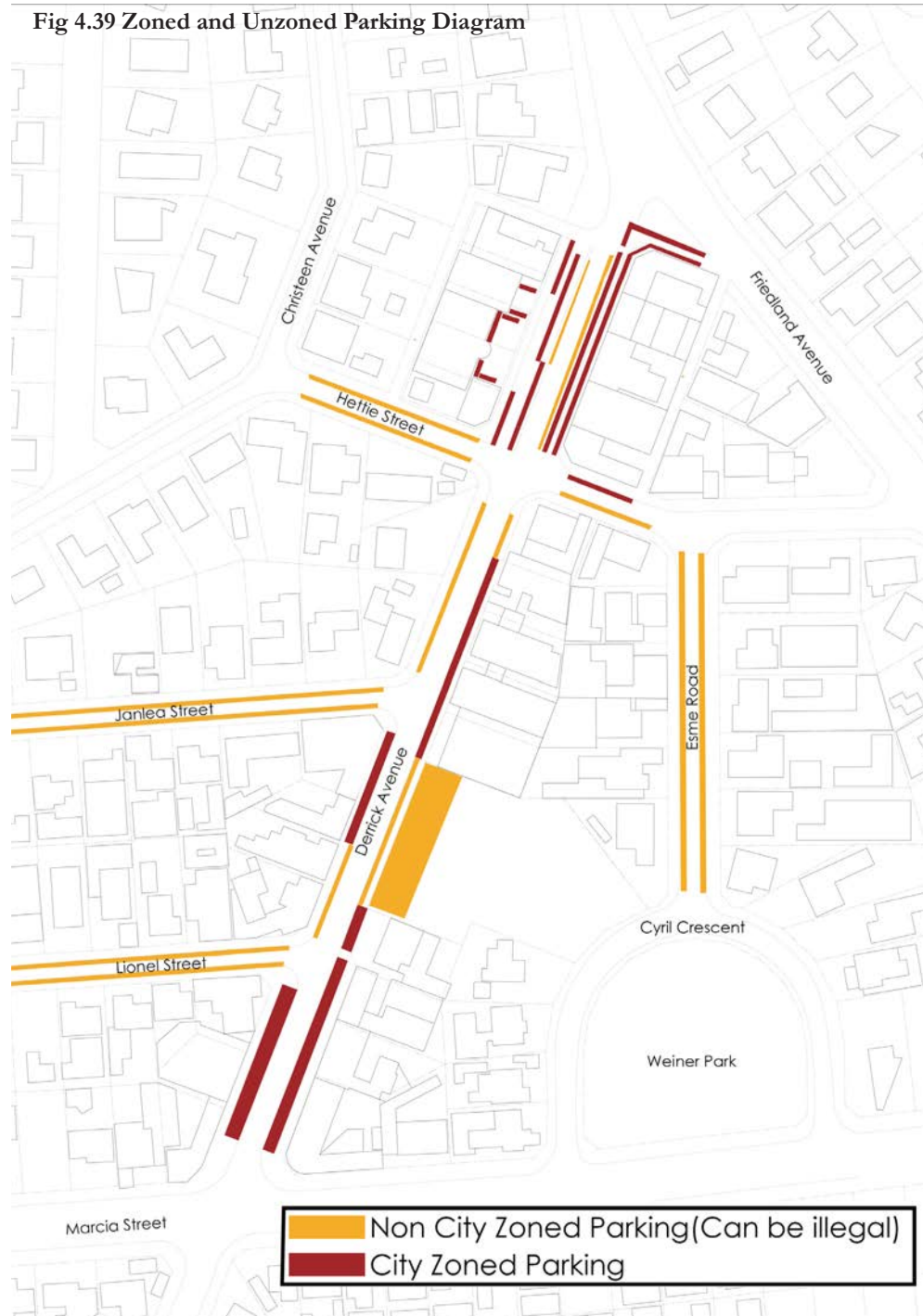
This is slightly different when it comes to weekends. The workers that normally have to wake up early to carpool to their jobs in the greater city can sleep in during the weekend and so the mornings are not as busy as weekdays. Shops, supermarkets and other stores

still open at 9AM though. When the restaurants start opening their doors at around 11AM is when the area starts to get really busy. This is due to people who don't have time to come to Cyrildene during the weekdays visiting the area during the weekends. So the first stop when visiting Cyrildene is normally to have a brunch session with your friends and family. Parking is very limited during this time. After lunch at about 12-2PM people normally go and do some grocery/miscellaneous item shopping, get a haircut or simply walk around the area to exercise the food out of their bodies. Visitors from outside Cyrildene start returning to their homes shortly after that. There are still an above average amount of people from that time to about 5 when shops start closing. Again most restaurants stay open to cater to those who want to eat dinner or order take-out. It does seem to be more active during weekends till a later time but eventually becomes dark and quite.



Fig 4.38 Movement Patterns 2

Fig 4.39 Zoned and Unzoned Parking Diagram



Mapping and Site Analysis | 4.2.8 | Parking

Parking

Parking is one of the main points to address within Cyrildene. The original layout of the street was made to accommodate the residents of the original apartments built along Derrick Avenue. However, due to the rapid change in the urban fabric of the neighbourhood, from being this very middle-class residential Jewish neighbourhood to one that is a middle-class commercial Chinese one, problems have started to occur.

If you look to the map on the left you will find that in red the parking that the city permits and the yellow is where people simply park due to there being no space for other parking. The change in the urban fabric was fast, however the laws and regulations lagged behind leaving the current state of the street today. You will quite often find the metro police issuing tickets for illegal parking. This is due to the city failing to account for the change in typology of the area.

The parking spaces are taken up by the middle-class residents during the night and during the day when the residents are at work, you will find customers of the shops and restaurants parked in their spaces. When no space can be found to park they will then start parking on the adjacent side streets or if they are lazy will simply parallel park next to a no stop sign or double park over a few parking bays. Whilst this may be efficient, it is a great problem for the street itself as often these cars make it less safe for the natural pedestrian activities to occur.

Therefore if parking can be addressed, the current neighbourhood can be a much more urban friendly and safer zone.

Mapping and Site Analysis | 4.2.8 | Parking



Fig 4.40 Drone shot of parking conditions on Derrick Avenue



Fig 4.41 Photo Analysis: Chinese Culture and Symbolism 6



Mapping and Site Analysis

| 4.2.9 |

The sounds of the street

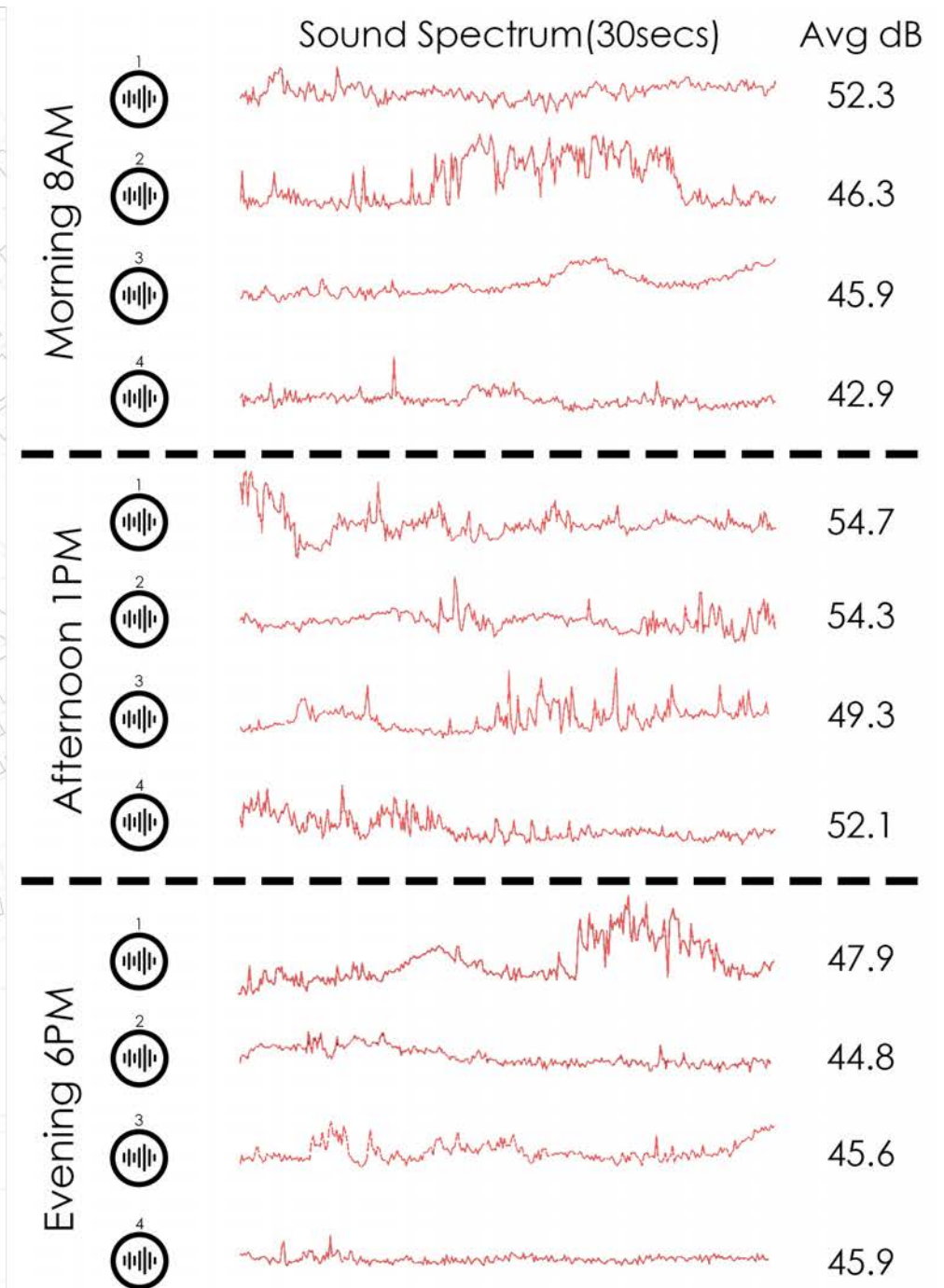


Fig 4.42 Sound Mapping

Mapping and Site Analysis | 4.2.9 |

The sounds of the street

The sounds of the street

An aspect of phenomenology that isn't talked about much is the use of sound. Sound plays a pivotal role in our perceptions of our surroundings. In a library, silence fills the halls of books and even the tiniest of noises can make a person feel annoyed. Or perhaps in a park where the birds are chirping and the fountains are running, further strengthening the thoughts of calm and peace.

This map is intended as a means to describe and understand the way the sound of the street can be deciphered and therefore understood and analysed as a means to create similar experiences .

From this map, we are able to tell that the street itself is quite quiet during the evenings and the mornings with only the occasional bird chirping or person closing/opening their shop but comes alive in the period between those two times.

The sounds of the street are more active during the afternoons with cars driving past, people chatting to each other, the bargaining of goods and lastly people simply walking around from one store to the next. All of this becomes an amalgamation of accumulated noises that create the essence of the street.

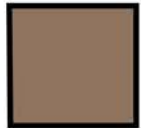


Fig 4.43 Windchimes creating ambience within location

Average Colour



Top 5 Colours



Outlier Colours

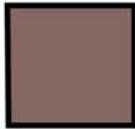


Fig 4.44 Colour Analysis

Mapping and Site Analysis

| 4.2.10 |

Colouring Derrick Avenue

Colouring Derrick Avenue

I took 100 photos of different spaces within Derrick Avenue. I then used Photoshop to get the average colour in each photo, spliced them into thin strips and laid them out next to each other to create the map you see on the previous page.

Using this map I wanted to see what the general colour scheme of the street was. This was important for me because I feel that colour is also a great influence in the way we see and experience things. This is even more so in Cyrildene where rich colours of the Chinese heritage are proudly displayed and decorated outside each shop.

Using the map I was then able to determine the colours that most represented the neighbourhood. Using these colours within the design would provide a good template to extend the Derrick Avenue experience.

Mapping and Site Analysis

| 4.2.11 |

Material Palette

Material Palette

As discussed previously in the theory, looking at random everyday objects and materials causes us to invoke certain feelings and emotions. Therefore it is important to explore the different materials that exist within the street itself. These materials are also a part of what makes the essence of the street.

Using a collage I mapped the common materials within the street.

The most common material within the street is definitely masonry specifically clay bricks. There is also a significant use of plaster or paint that is used to cover some of that brickwork. The brickwork doesn't only exist in the construction of most of the buildings but also as paving as well as decoration.

The 3-4 story buildings also employ the use of concrete but mostly for the floor slabs and are bordered up with the brickwork. Some of these buildings also have standard flat roofs. Some other prominent roof types that make an appearance are your standard gabled pitched roof as well as some mono pitched roofs all clad with clay tiles.

In the buildings that were built in the traditional Chinese style I believe they used timber and concrete for some of the structure but all painted and decorated in very Chinese colours.

You can see that glass is mostly used for the windows of the buildings.

Fig 4.45 Material Collage



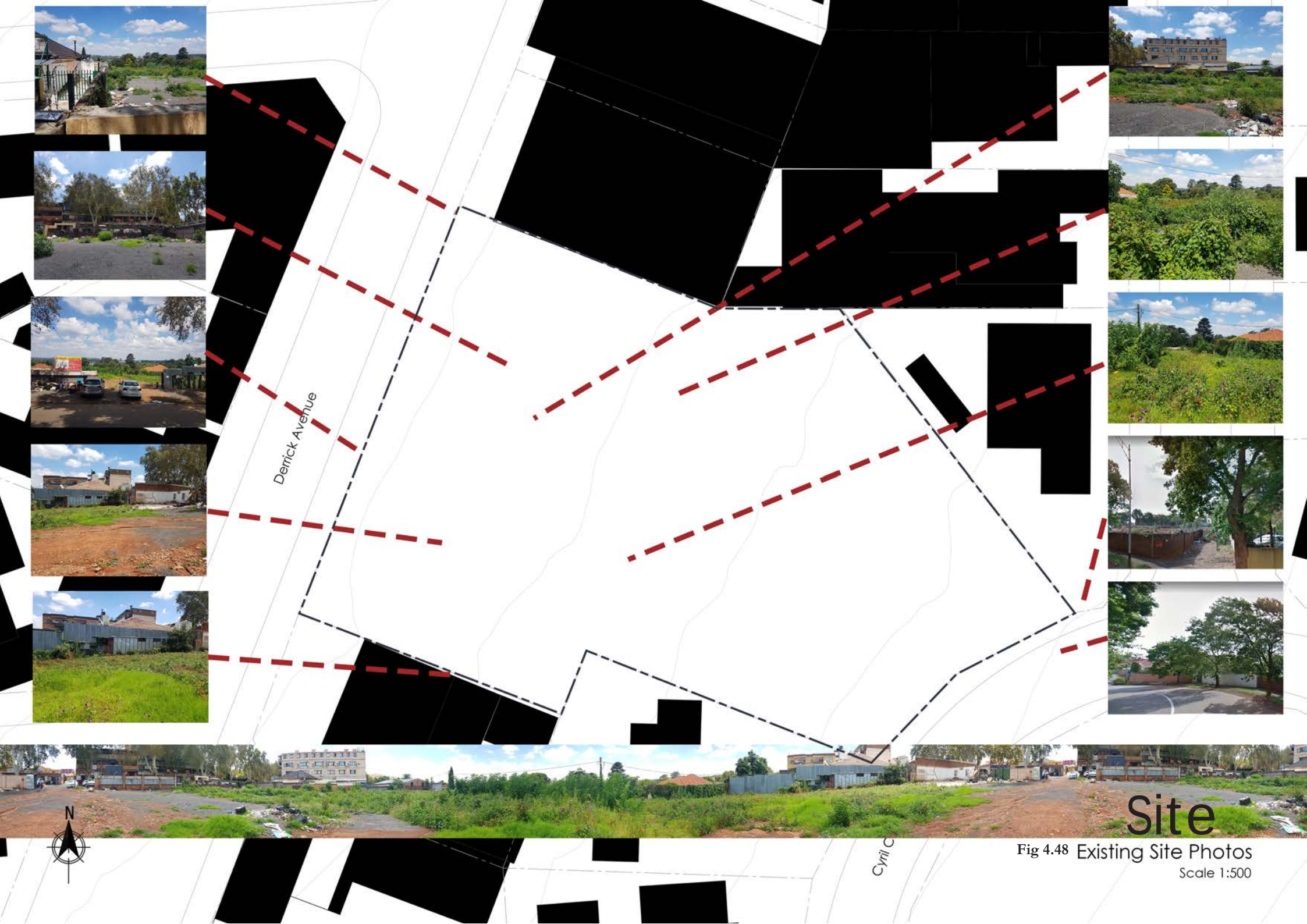


Fig 4.46 Photo Analysis: Chinese Culture and Symbolism 7

Mapping and Site Analysis | 4.3 | Micro Site Analysis



Fig 4.47 ERF 733



Derrick Avenue

Cyril C

Site

Fig 4.48 Existing Site Photos
Scale 1:500

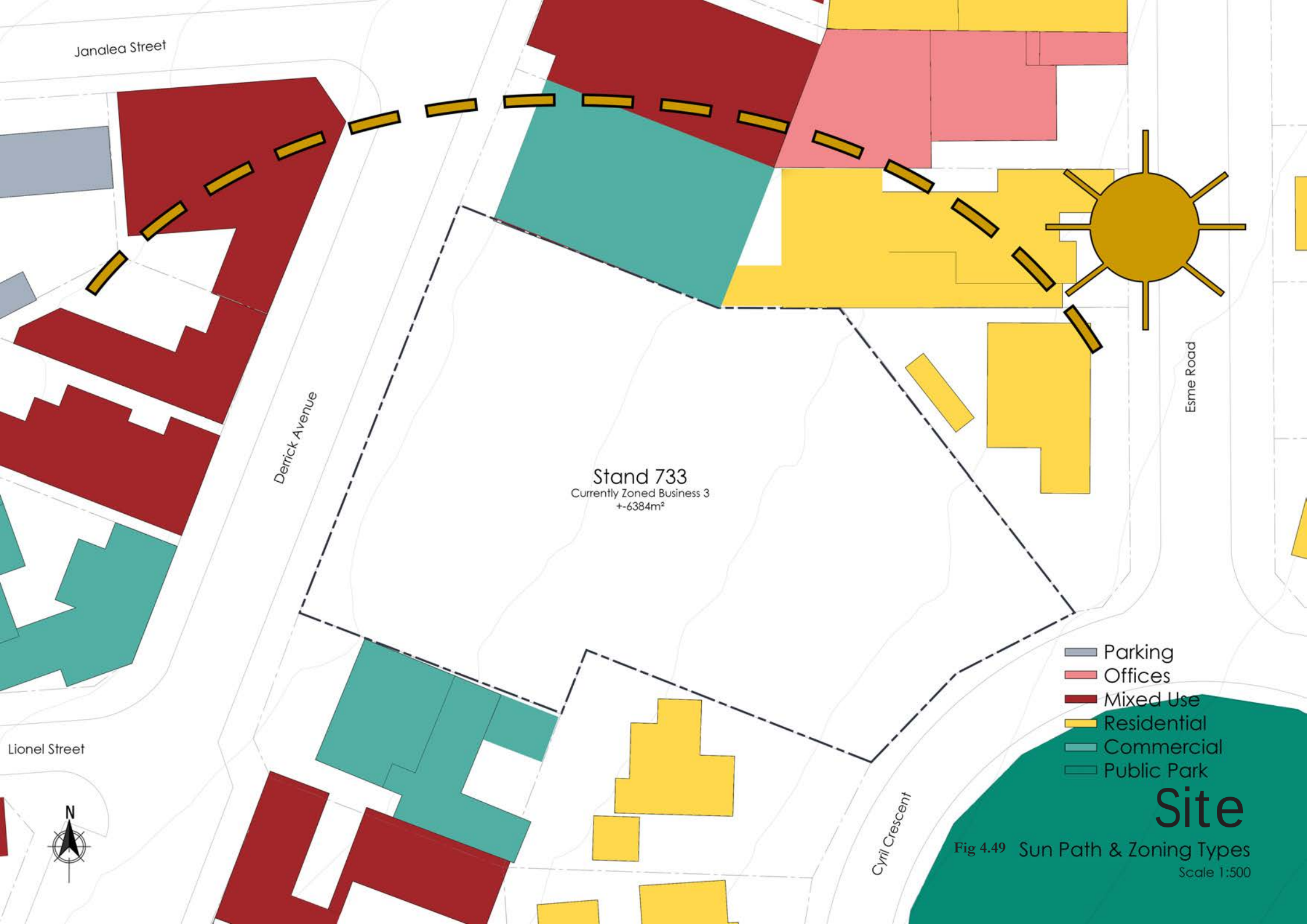
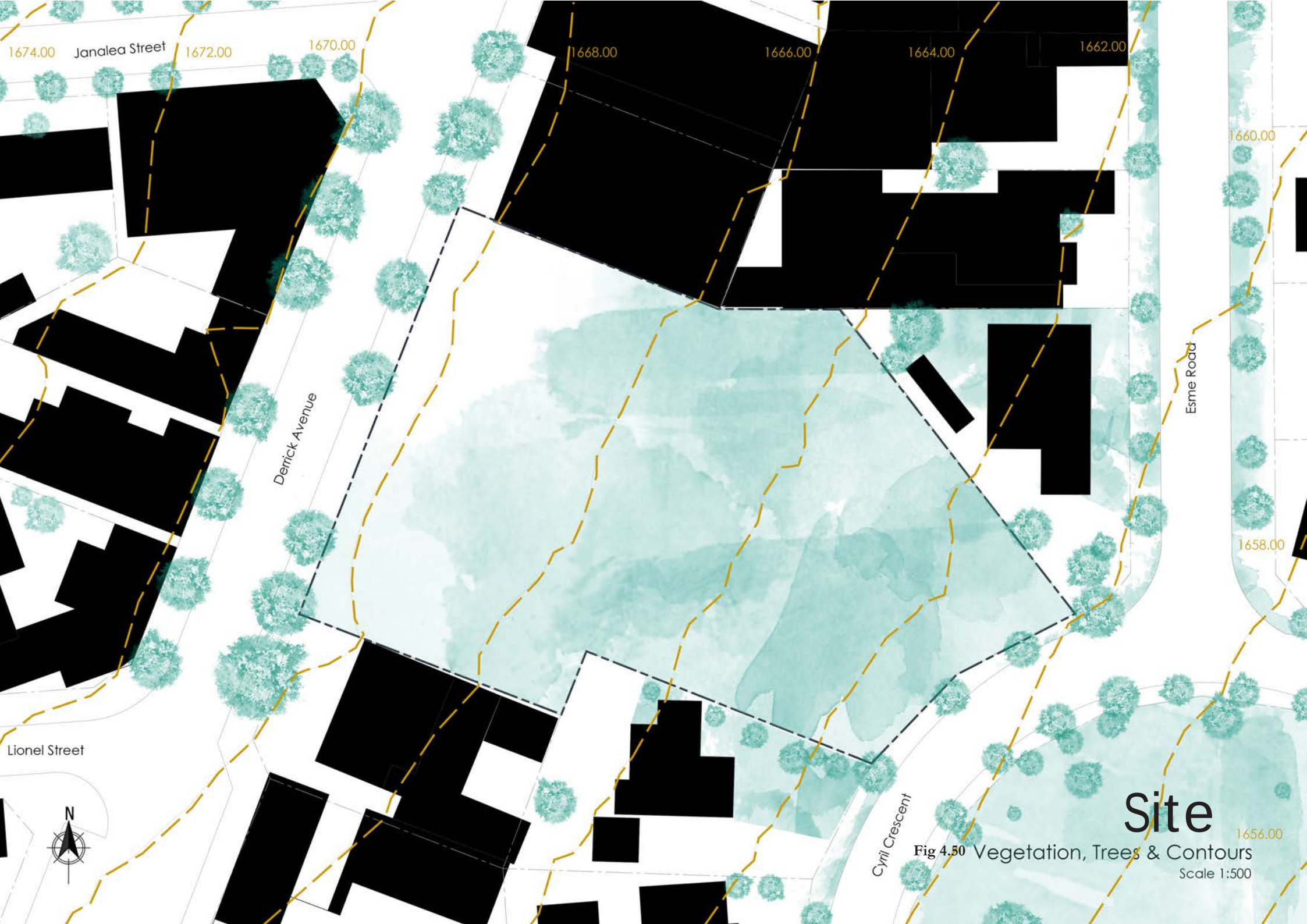


Fig 4.49 Sun Path & Zoning Types
Scale 1:500



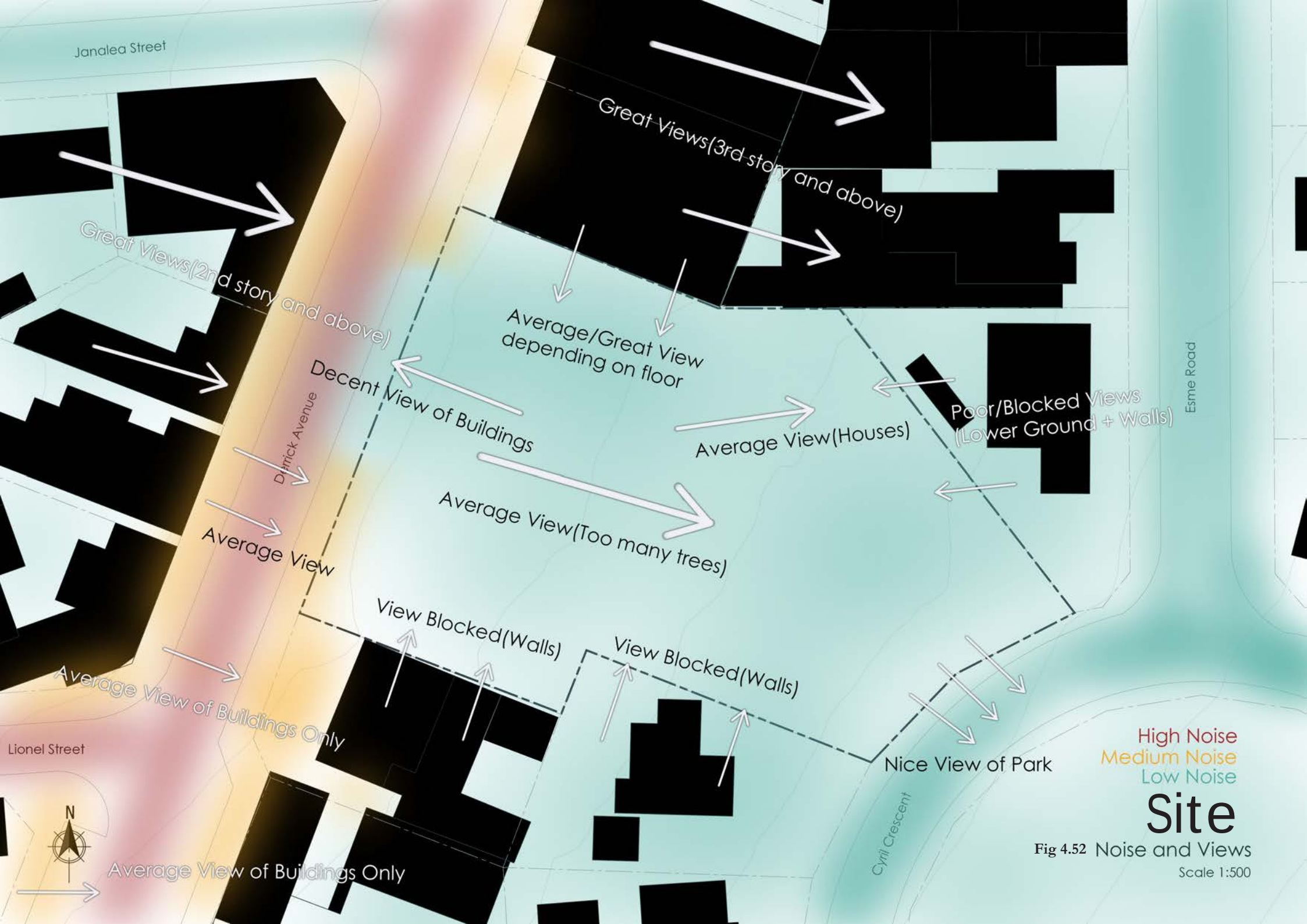
Site

Fig 4.50 Vegetation, Trees & Contours

Scale 1:500



Fig 4.51 Vehicular and Pedestrian Movement
Scale 1:500



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CHAPTER 5 | Design Process

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Design Process | 5.1 | Design Objectives

Design Objectives

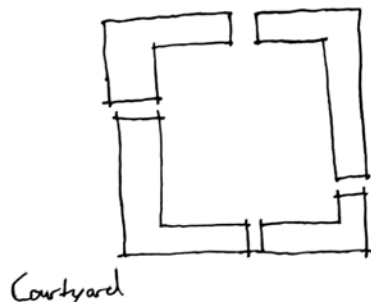
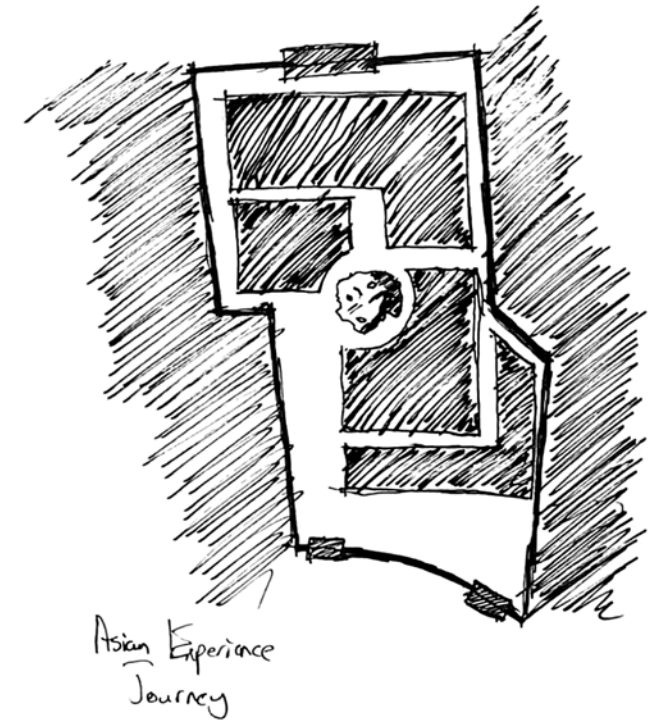
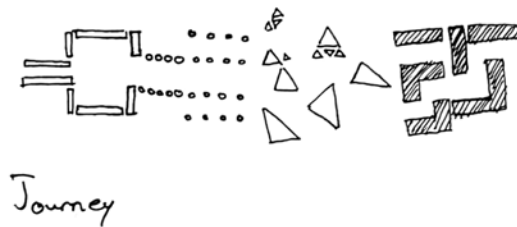
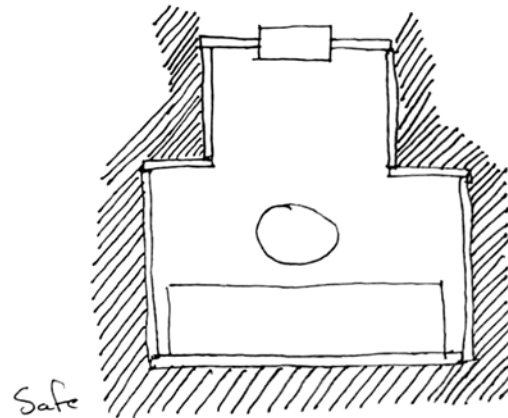
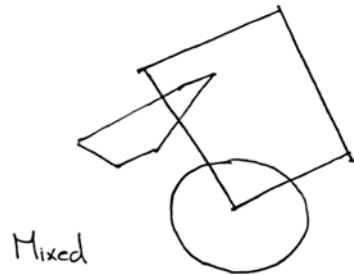
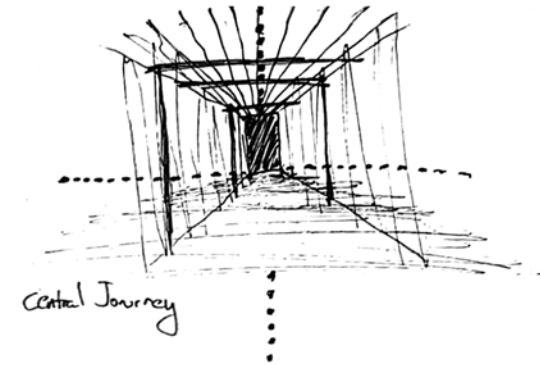
The creation of a public bathhouse within the neighbourhood of Cyrildene. This bathhouse is a new typology in South Africa and so it needs to cater towards the South African people and context. Having said that this bathhouse will be heavily influenced by the cultural underpinnings of Derrick Avenue, more commonly known as 'Chinatown'. As such elements of Chinese architecture and space making will be incorporated.

The next big objective is the inclusion of phenomenological elements within the design. How we can create unique experiences using the idea of nudity, materiality, light, sound and smells within the bathing experience. This can happen within the baths themselves but also takes into account the journey before and after the baths.

The design needs to be commercially viable and feasible. Therefore portions of the design need to specifically cater to the existing commercial aspect happening within Derrick Avenue.

To use phenomenology to design a bathhouse in Cyrildene's Derrick Avenue (Chinatown) that will enhance and promote the Chinese cultural experience.

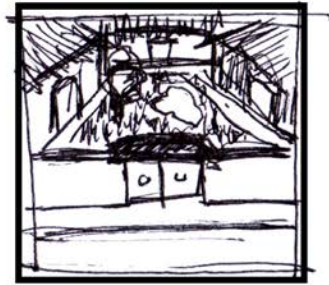
Design Process | 5.2.1 | Design Concepts and Drivers



Design Process | 5.2.1 | Design Concepts and Drivers



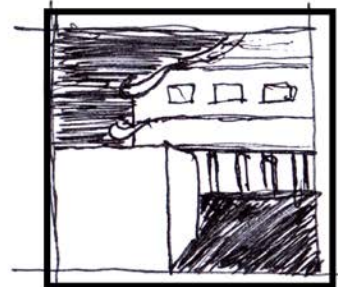
Journey



Courtyard
Thresholds



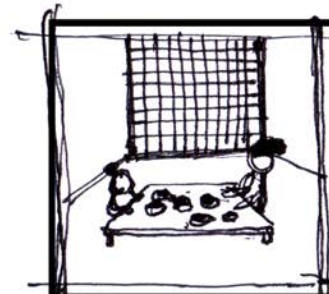
Transition



Concealed



Concealed



Revealed

Nakedness

Exploring phenomenology through nudity. This can be done through the concealment and revelation of spaces. When you are clothed, you feel protected and comfortable. That comfort is what leads people to often ignore the lesser details in life. When you are naked you are exposed and therefore are completely invested in your surroundings.

Chinese Culture

Extending the existing Chinese culture from Cyrildene into the bathhouse. Strengthening the existing Chinese identity and acting as a means of urban regeneration.

Commercial

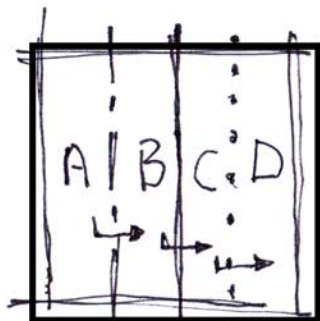
Derrick Avenue is a very commercialised street. This needs to be taken into the design of the building. It needs to cater to the commercial aspect of the street.

Journey/Experience

Phenomenology needs to be explored in different ways to create an amazing experience for the end user.

Baths

Its a bathhouse.



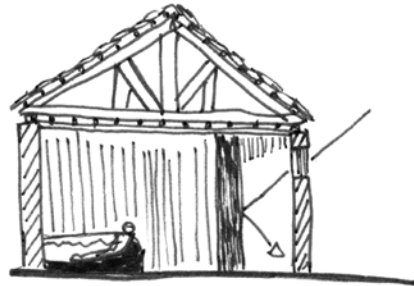
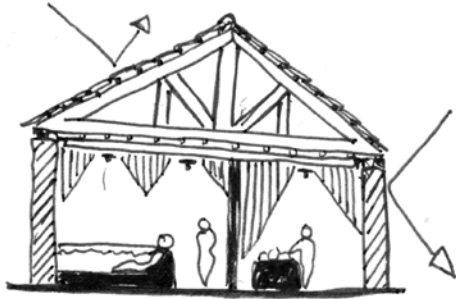
Focus



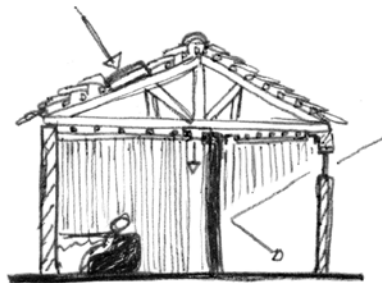
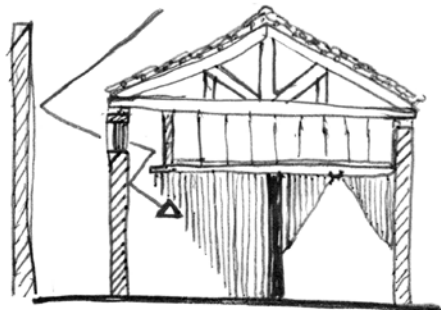
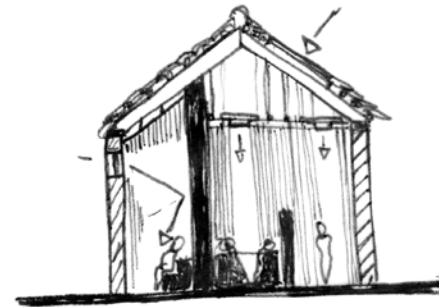
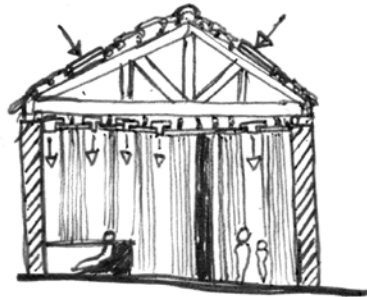
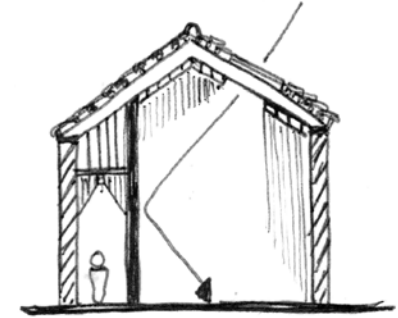
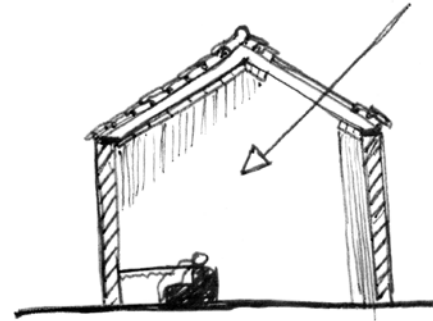
Bombarded

Design Process | 5.2.2 | Design Concepts and Drivers -Light

Standard Truss



Portal Frame

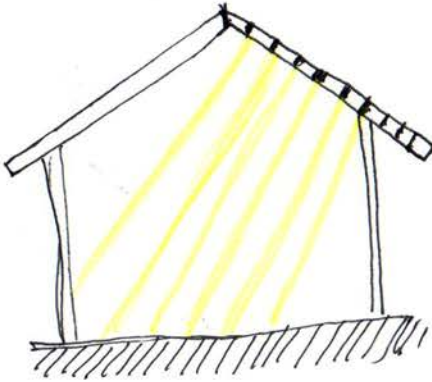


Light

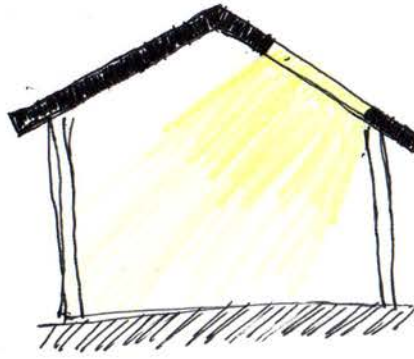
The use of light is an important part of how one experiences a space. Zumthor's Therme spa was the perfect example of how light could be used within a bathhouse to extend a users experience. I hope to do the same with my bathhouse. Taking light into account will be different in my case due to being in a different context and due to the difference in form.

Design Process | 5.2.2 | Design Concepts and Drivers -Light

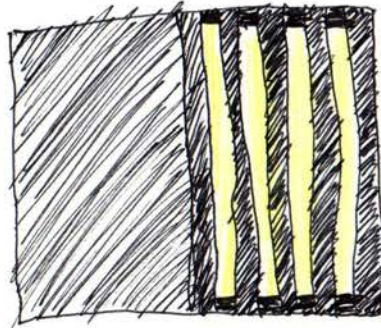
Skylights via slits



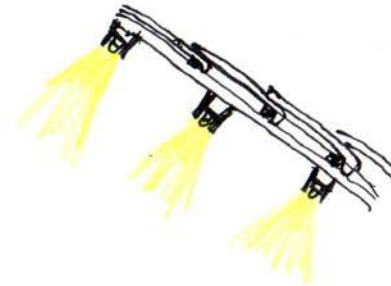
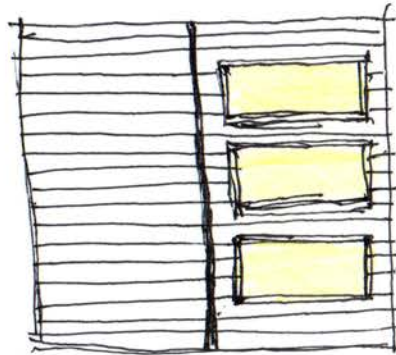
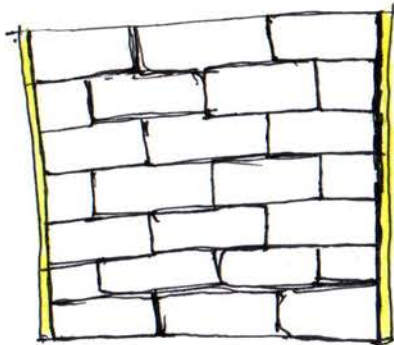
Traditional skylights



Lights hidden within structural I beams



Using the ceiling boards to allow light through



Changing the ceiling to guide the user through light

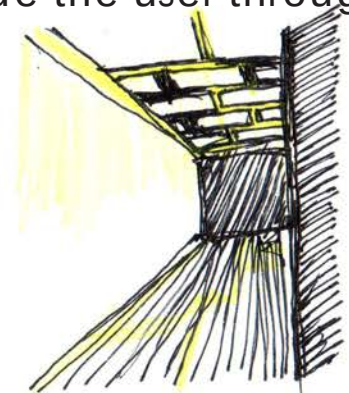
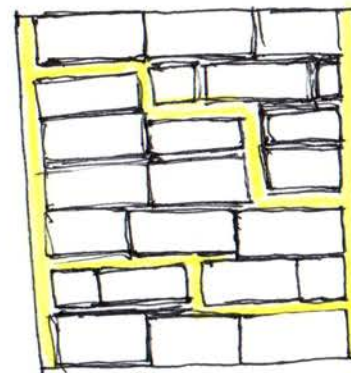
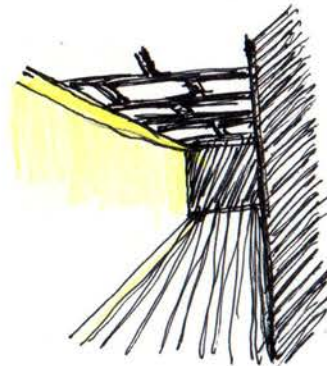


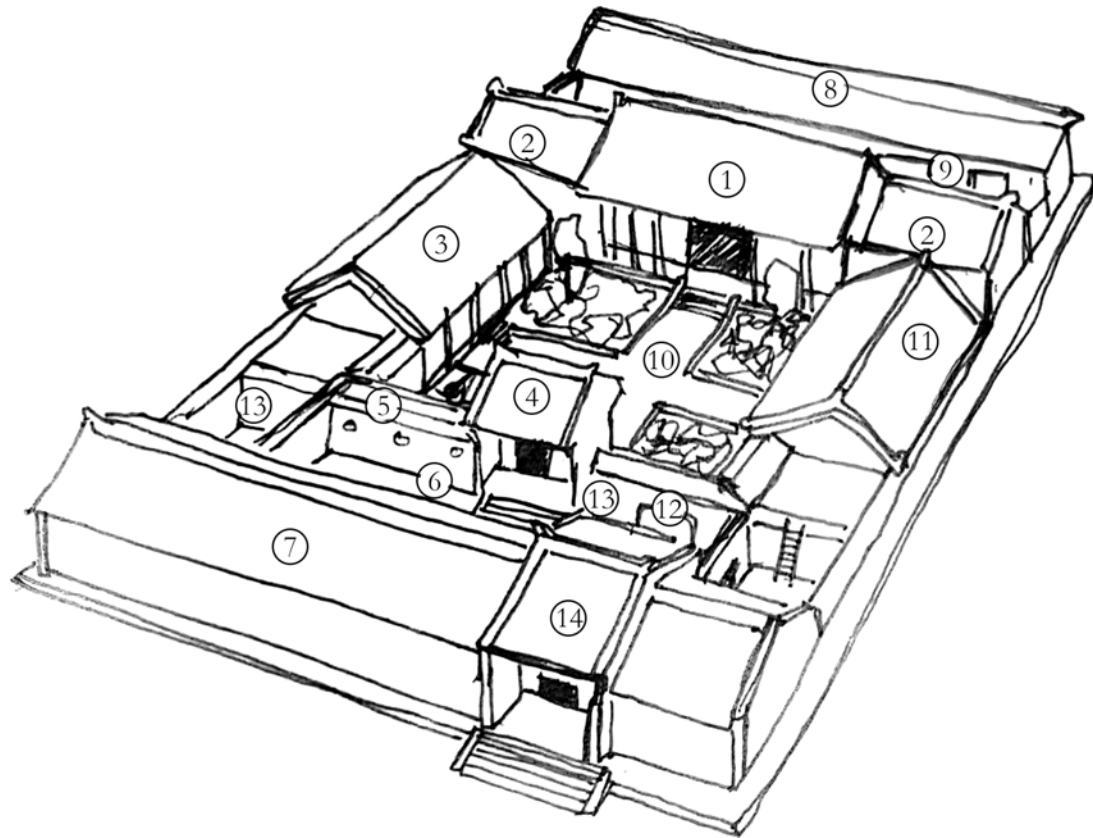


Fig 5.1 Light from ceilings of Therme Spa

Light enhancing experiences

In Peter Zumthor's Therme Spa he speaks about how light is able to enhance the experience of the user. Through his use of the surrounding Therme rocks he was able to carefully dictate how light penetrated through his bathhouse. The seams between the individual stones allows light to expose itself adding a new form in which the end users experience can be magnified.

Design Process | 5.2.3 | Design Concepts and Drivers - Siheyuan



- ① Zhengfang - Master Residence or Wing
- ② Erfang - “ear” room, utility or storage room
- ③ Xixiangfang - West Residence
- ④ Ermen, Chuihuamen - Second Gate, “Flower-hung gate”
- ⑤ Zoulang - Corridor
- ⑥ Waiyuan - Outer Courtyard
- ⑦ Daozuofang - “Reverse-facing” Rooms
- ⑧ Houzhaofang - North hall or Backside Building
- ⑨ Disanjinyuan - Rear or Third Courtyard
- ⑩ Neiyuan - Inner or Second Courtyard
- ⑪ Dongxiangfang - Eastern Residence
- ⑫ Yingbi - Spirit Screen
- ⑬ Pingmen - Entranceway or Small Gate
- ⑭ Damen - Main gate

“

大门: Front gate, a siheyuan only has one front gate, with scale depending on the status and wealth of its owner. Normally, a richer owner's siheyuan would have a larger front gate with more exquisite ornaments on the wooden door, and almost always protected by two stone lions. In wealthy homes, there would even be a gatekeeper's room next to the gate.

影壁: A spirit screen, also called a spirit wall, is a shield construction that can be either positioned on the outside or the inside of the gate in traditional Chinese architecture. Its function is to protect the front gate.

倒座房: A reverse-facing room, beside the front gate. Since the reverse-facing rooms faced north, with poor lighting, they usually served as servants' rooms.

二门/垂花门: Ermen/Chuihuamen, literally meaning second gate or flower-hung gate in Chinese. This is an inner gate separating the first from the second courtyard. Across from the Ermen are the private quarters of a family. The decorations on the Chuihuamen usually indicate the status of the family head.

厢房: Xiangfang are also called side houses. The Chinese traditionally thought that the eastern xiangfang were better than the western xiangfang in respect of fengshui (invisible forces). The eastern xiangfang are usually used as married sons' accommodation. Western xiangfang are usually unmarried daughters' rooms or kitchens.

正房: The main house of the siheyuan is normally positioned along the north-south and west-east axes. The house faces south

and is regarded as the best house in a siheyuan complex, since it has shelter from the wind and also has good lighting. It usually served as elders' accommodation.

耳房: Erfang, literally meaning ears' rooms. They are so called because the two rooms on either side of the main house are like ears. Erfang were used as children's or servants' quarters, and storage or cooking rooms.

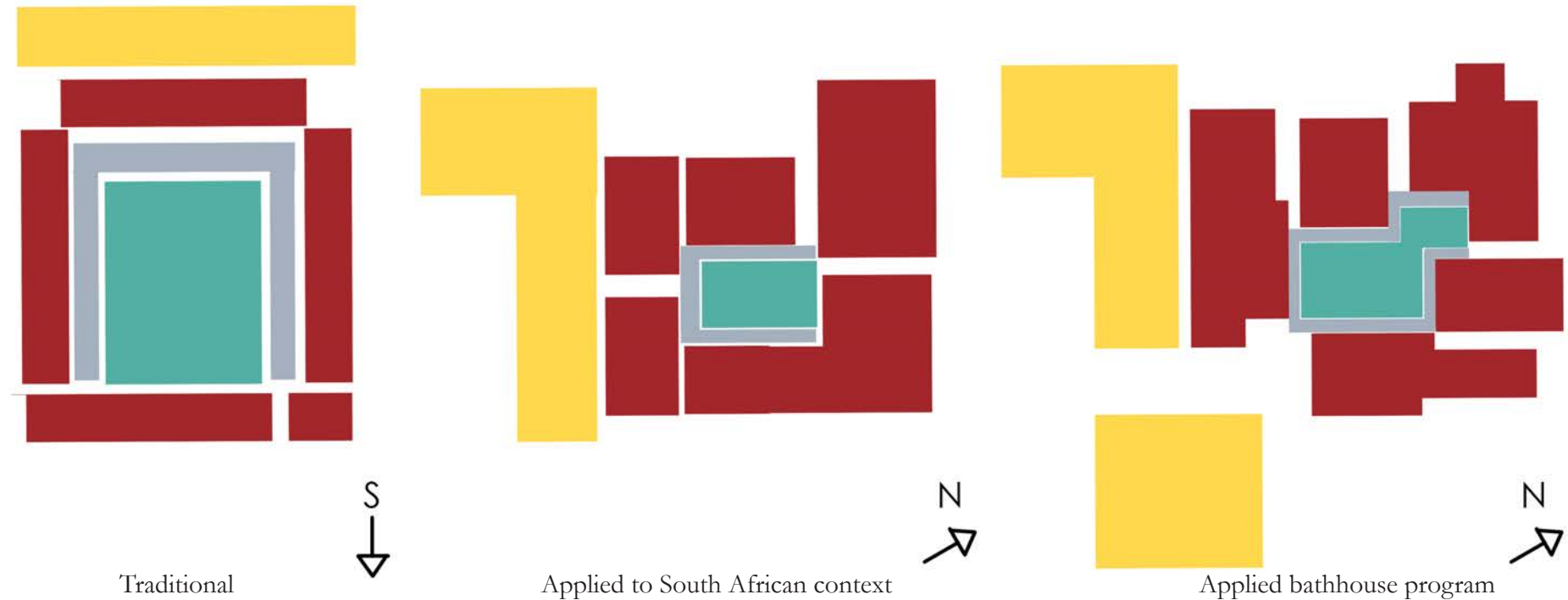
后罩房: Houzhaofang only exist in those siheyuan with more than three courtyards. Since the houzhaofang are located at the back of the siheyuan and have private space, they are usually used as unmarried daughters' or female servants' rooms.

(Siheyuan, Famous Chinese Courtyards Examples, 2020)

”

Design Process | 5.2.3 | Design Concepts and Drivers - Siheyuan

Reinterpreting the Siheyuan to accommodate the bathhouse typology



Siheyuan

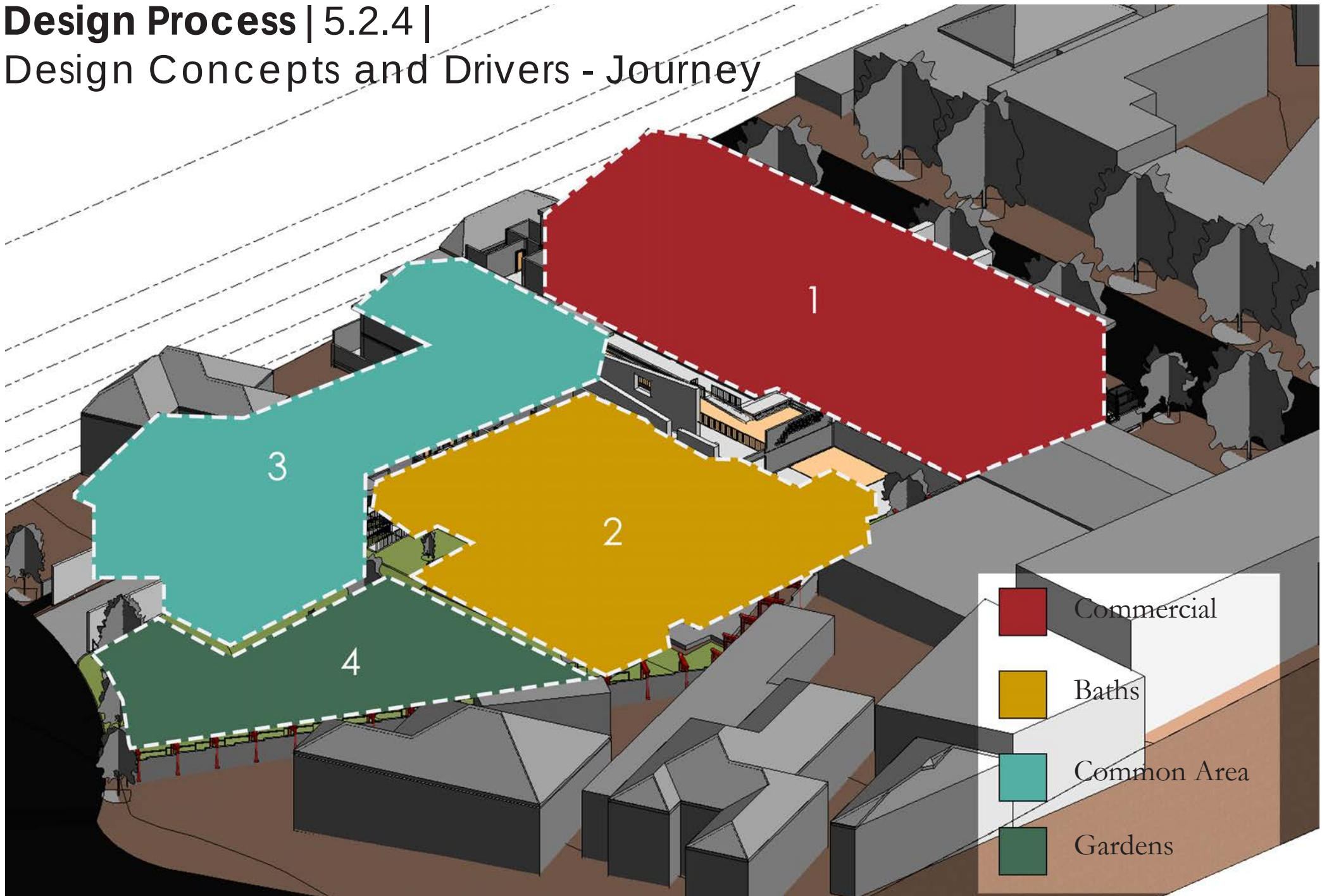
The siheyuan (literal meaning: quadrangle) refers to a common traditional Chinese compound. The compounds have historically been the template for a lot of traditional Chinese architecture. There are some negatives within the siheyuan's living conditions such as overcrowding and lack of private toilets.

The architecture of a Siheyuan normally include single-story pitched rooms surrounded by an open courtyard. They are orientated in terms of hierarchy with North-South being the most important buildings normally containing the head of the family or the unmarried daughters. The back building is normally

the only building allowed to be 2 or 3 stories because of the importance of the unmarried daughter. The East-West buildings normally hold the married sons family.

I've chosen to use the siheyuan as one of my design drivers. Using the siheyuan, I hope to reinterpret its traditional roots by adapting it to become this new bathhouse typology. By grounding it in its traditional Chinese roots, I hope to instil a sense of pride to the residents of Derrick Avenue thereby strengthening the existing cultural aspect within the neighbourhood reversing the affect of the urban decay.

Design Process | 5.2.4 | Design Concepts and Drivers - Journey



Design Process | 5.3 | Programme



Programme

This programme was developed based on the research done on the previous chapters and the precedent studies that were analysed.

The bathhouse

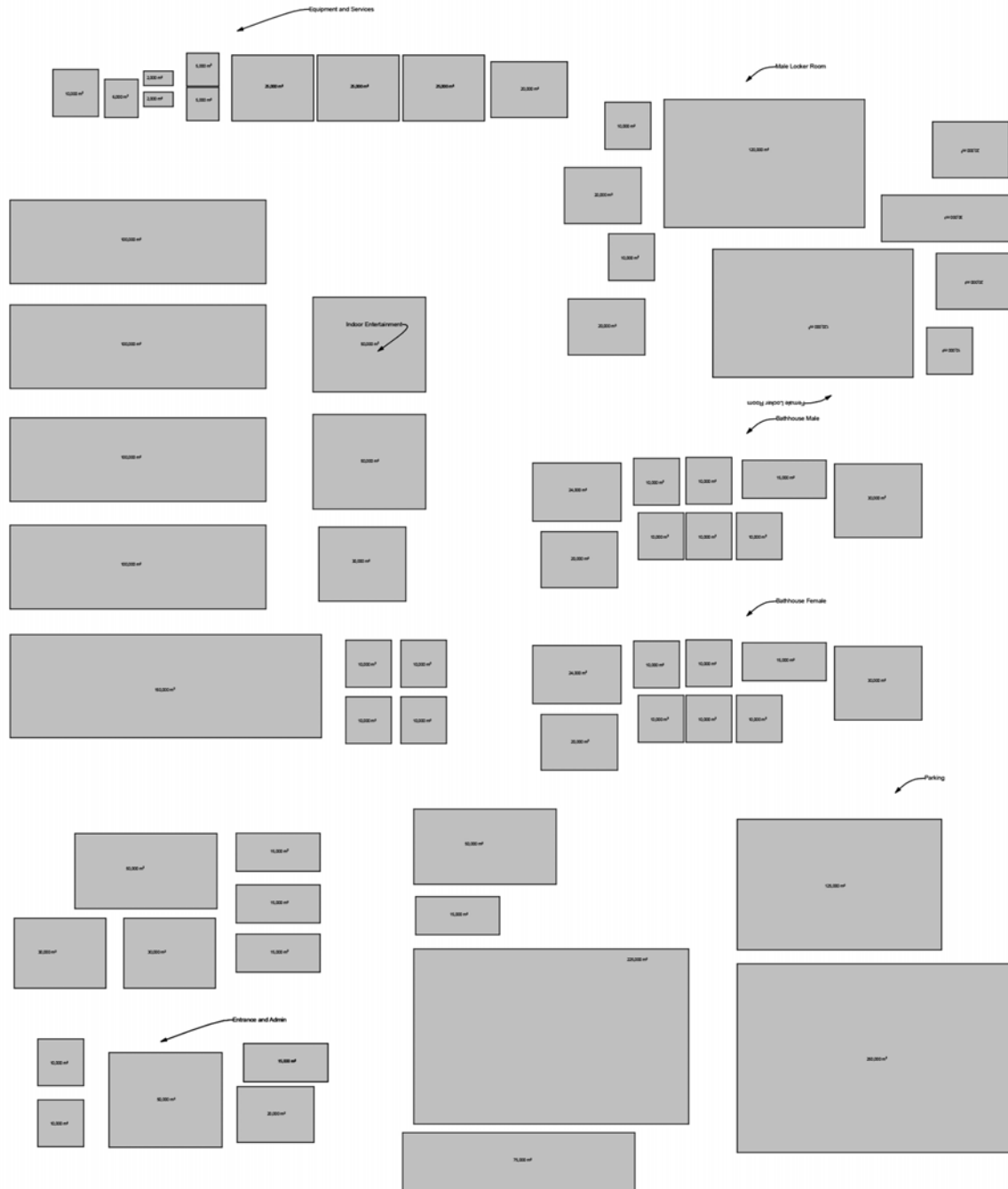
The essence of the bathhouse can be split into 3 major categories. The first being a business. This bathhouse is not one that runs for free. It is one that fully embraces the commercial aspect of Cyrildene. In order for it to thrive, it requires funds for its maintenance, for its staff and for the continued great experience that the bathhouse should offer.

The second category is that of experience. This bathhouse should offer an experience that extends from Derrick Avenue into the building itself. It should be something that is completely new and should make the user be lost in wonder. The experience should take the user through a positive journey so that the user can recommend it to others and return again.

The third category is relaxation and recreation. The bathhouse is a completely unique experience offered nowhere else in Johannesburg. It should mimic the services and atmosphere that spas currently provide with the addition of all the other services a bathhouse requires. It should provide an outlet and an additional activity within the community that isn't simply eating or shopping.

With that being said, this programme was developed in the hopes of achieving all the above.

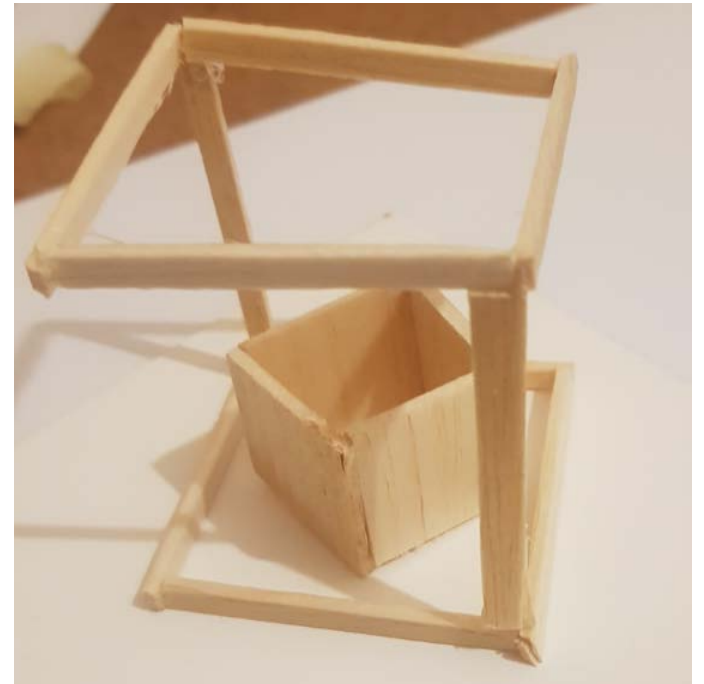
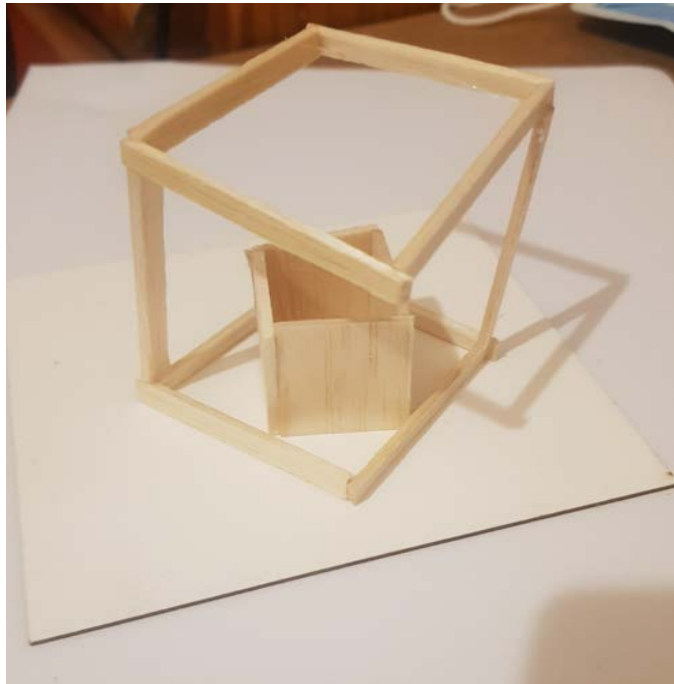
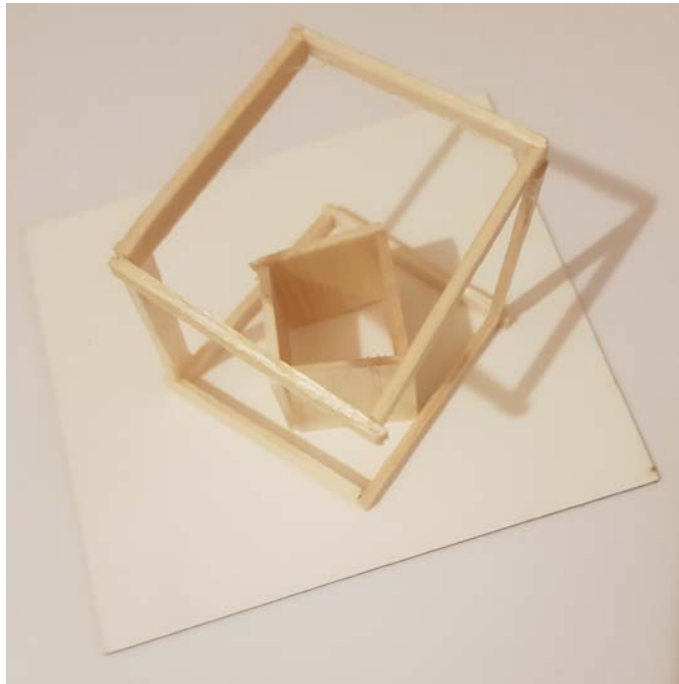
Design Process | 5.3 | Programme



Programme Feasibility					
Space	Unit Area	Quantity	Total Area m²	Rand/m²	Total Cost
Entrance & Admin					
Traditional Chinese Front Gate	±10m²	1	10	R8 600,00	R84 000,00
Courtyard	±50m²	1	50	R100,00	R5 000,00
Reception	±20m²	1	20	R9 000,00	R180 000,00
Manager's Office	±15m²	1	15	R8 200,00	R123 000,00
Staff Lounge	±30m²	1	30	R8 200,00	R246 000,00
Staff Toilet	±5m²	2	10	R12 500,00	R125 000,00
Equipment and Services					
Rainwater tank	±3m²	2	6	R7 900,00	R47 400,00
Filtration and Water Treatment	±2m²	1	2	R7 900,00	R15 800,00
Water Pumps	±5m²	1	5	R7 900,00	R39 500,00
HVAC & Mechanical Systems	±25m²	1	25	R7 900,00	R197 500,00
Electrical Substation	±25m²	1	25	R7 900,00	R197 500,00
Photovoltaic Battery Room	±25m²	1	25	R7 900,00	R197 500,00
Maintenance Room	±5m²	1	5	R7 900,00	R39 500,00
Janitor's Closet	±1m²	2	2	R7 900,00	R15 800,00
Bath Cleaning Storage	±10m²	1	10	R7 900,00	R79 000,00
General Storage	±10m²-20m²	1	20	R7 500,00	R150 000,00
Semi Private Areas					
Male locker room containing:					
Lockers for 150 people(Subject to Change)	±0,8m²	150	120	R10 000,00	R1 200 000,00
Vending Area	±10m²	1	10	R10 000,00	R100 000,00
WC	±5m²	4	20	R12 500,00	R250 000,00
Antechamber for bathhouse	±20m²	1	20	R10 000,00	R200 000,00
Barbers quarters	±10m²	1	10	R8 200,00	R82 000,00
Female locker room containing:					
Lockers for 150 people(Subject to Change)	±0,8m²	150	120	R10 000,00	R1 200 000,00
Vending Area	±10m²	1	10	R8 200,00	R82 000,00
WC	±5m²	6	30	R12 500,00	R375 000,00
Antechamber for bathhouse	±20m²	1	20	R10 000,00	R200 000,00
Hair and Nail Salon(Might move to public area)	±20m²	1	20	R8 200,00	R164 000,00
Bathhouse Area					
Showers	±2m²	12	24	R12 500,00	R300 000,00
Steam Room/Sauna	±10m²	1	10	R12 500,00	R125 000,00
Paid Scrub Area	±15m²	1	15	R12 500,00	R187 500,00
Mineral Bath 1 (Jade Pool)	±10m²	1	10	R12 500,00	R125 000,00
Mineral Bath 2 (Mudworth Pool)	±10m²	1	10	R12 500,00	R125 000,00
Mineral Bath 3 (Seasalt Pool)	±10m²	1	10	R12 500,00	R125 000,00
Hot Bath	±20m²	1	20	R12 500,00	R250 000,00
Low Temp bath	±10m²	1	10	R12 500,00	R125 000,00
Cold Bath/Pool	±30m²	1	30	R12 500,00	R375 000,00
Parking					
Bays Staff Parking	±12,5m²	10	125	R600,00	R75 000,00
Bays Public Parking	±12,5m²	20	250	R600,00	R150 000,00
Shared Areas					
Common Area	50	1	50	R9 000,00	R450 000,00
Cafeteria/Restaurant/Eating Area	225	1	225	R8 200,00	R1 845 000,00
Kitchen	75	1	75	R12 500,00	R937 500,00
Snack Vending Area	±15m²	1	15	R8 200,00	R123 000,00
Sauna Rooms					
Traditional Hardwood Kiln	±15m²	1	15	R12 500,00	R187 500,00
Ice room	±15m²	1	15	R12 500,00	R187 500,00
Pinetree Firewood	±15m²	1	15	R12 500,00	R187 500,00
Crystal Sun Salt Room	±30m²	1	30	R12 500,00	R375 000,00
Jade Meditation Room	±30m²	1	30	R12 500,00	R375 000,00
Hinoki Forest Room	±50m²	1	50	R12 500,00	R625 000,00
Spa Area					
Massages	2	5	10	R8 200,00	R82 000,00
Bodycare	2	5	10	R8 200,00	R82 000,00
Skincare	2	5	10	R8 200,00	R82 000,00
Footcare	2	5	10	R8 200,00	R82 000,00
Overnight stay					
Heated floor sleeping area(Mixed)	50	3	150	R12 500,00	R1 875 000,00
Sleeping Cube Rooms(Mixed)	100	1	100	R7 900,00	R790 000,00
Bunk beds sleeping area:					
Male	100	1	100	R7 900,00	R790 000,00
Female	100	1	100	R7 900,00	R790 000,00
Recreation					
Kids Play Area	50	1	50	R8 200,00	R410 000,00
Cinema/Indoor Entertainment Room	50	1	50	R13 000,00	R650 000,00
Arcade Games Room	30	1	30	R8 700,00	R261 000,00
Health					
Gym	100	1	100	R8 200,00	R820 000,00
Total					
Total Area m²			2394	Total Cost	R19 567 000,00

Design Process | 5.4.1 | Design Development - Charette

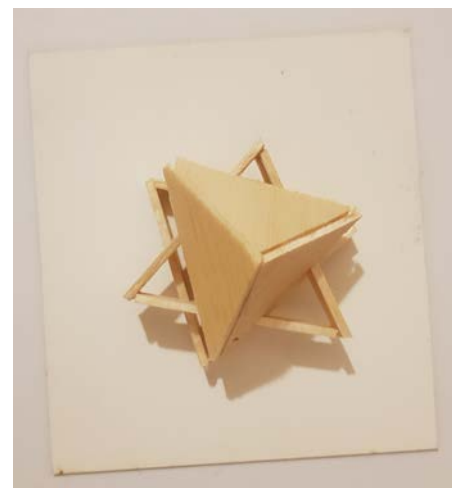
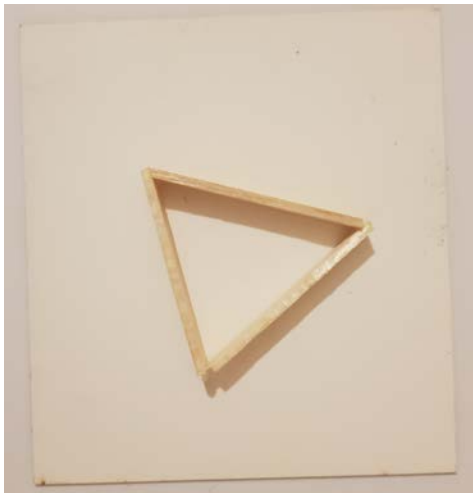
Charette Model 1



This conceptual model being framed vs solid. The simplicity of the building shown through its intimate parts. Only achieved once a building is undressed.

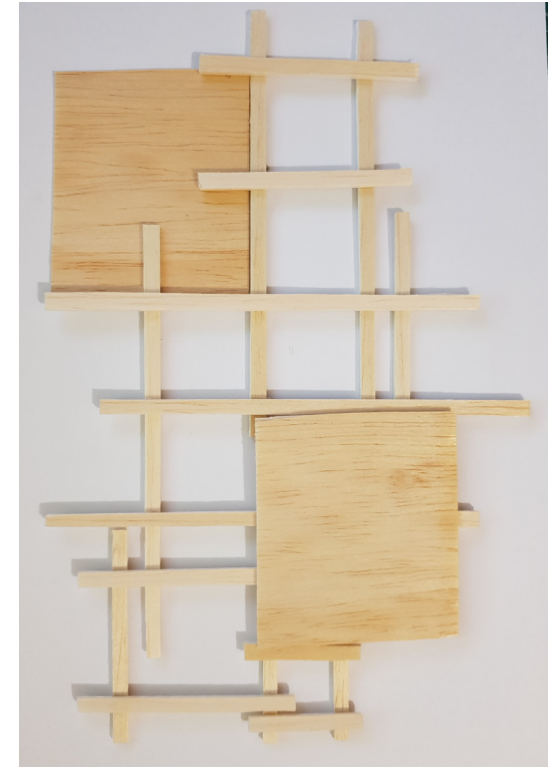
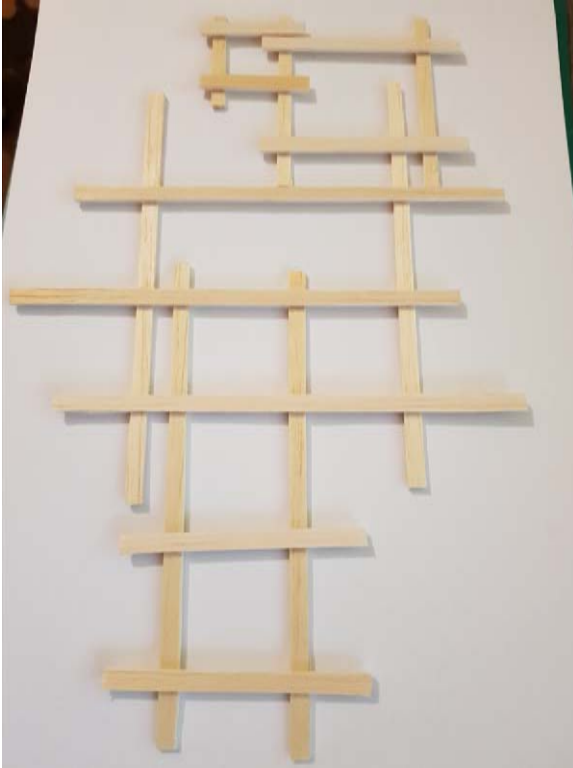
Design Process | 5.4.1 | Design Development - Charette

Charette Model 2



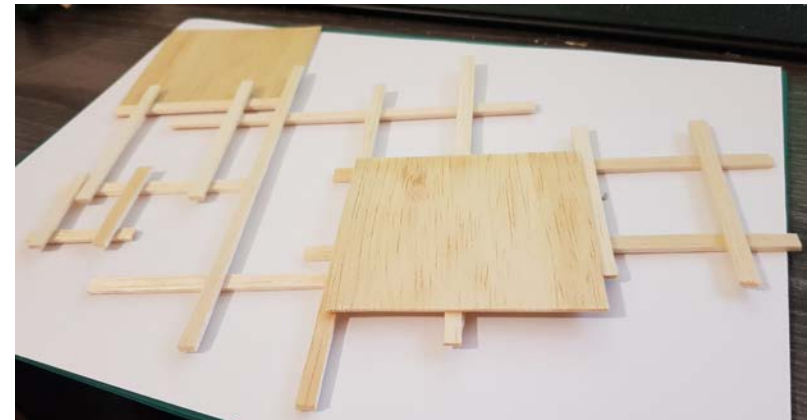
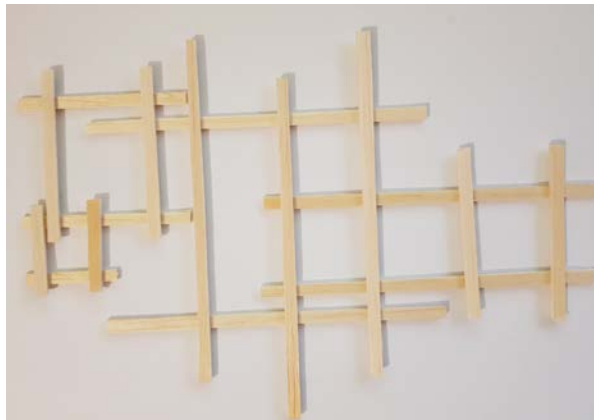
In this model I was attempting to show that in this simplest of forms you can clearly see and understand the sincerity of the space but when you add additional layers it becomes more and more convoluted until you get to a point where it becomes completely foreign to your original senses.

Design Process | 5.4.1 | Design Development - Charette



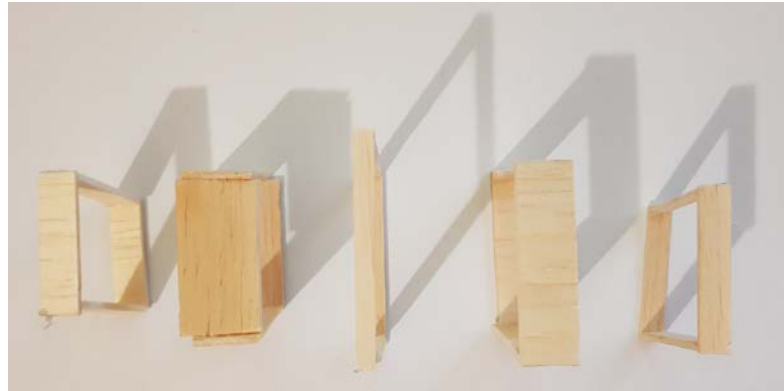
Charette Model 3

This model shows how skeletal structure show a sense of incompleteness or of it being still under construction. When architecture is in its most primal form is when its nudity is most easily seen.



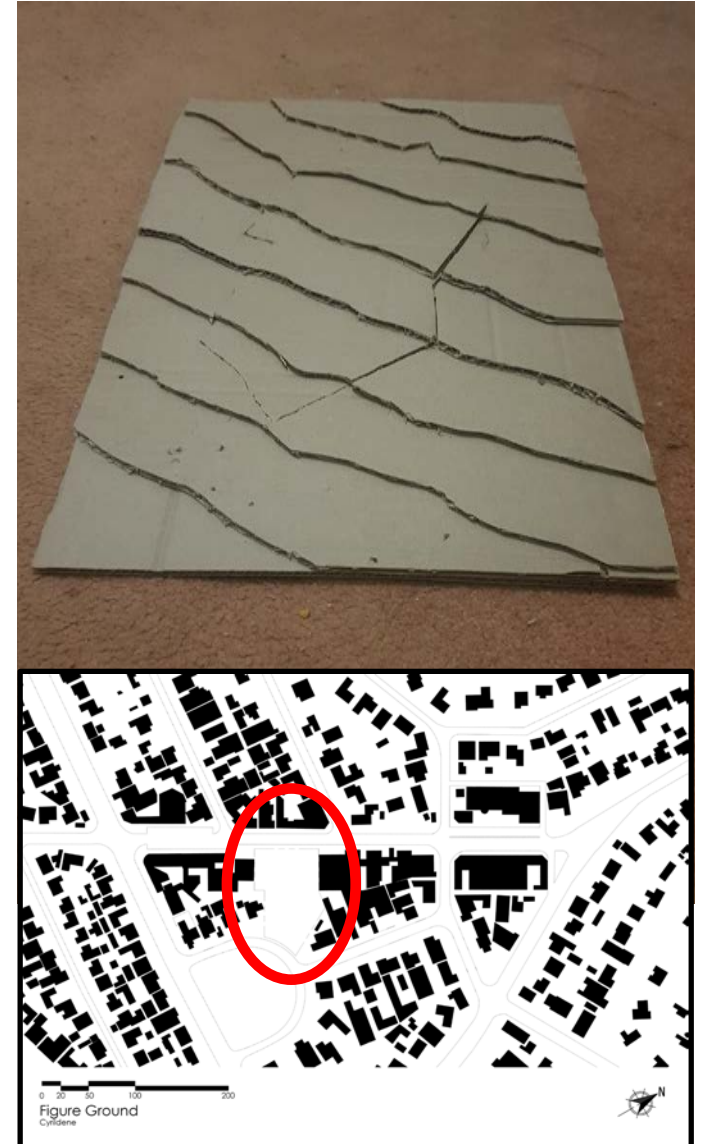
Design Process | 5.4.1 | Design Development - Charette

Charette Model 4

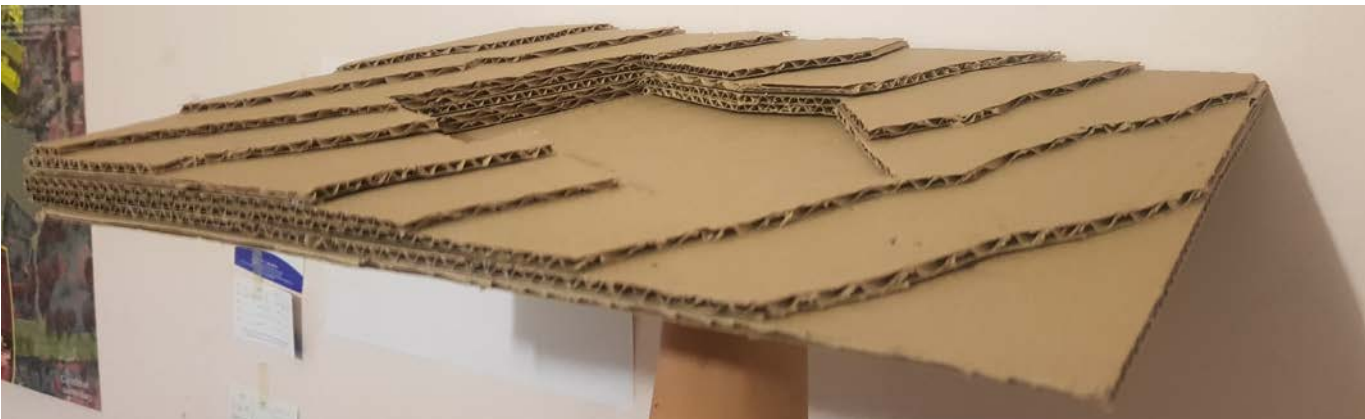


Different shapes and sizes create an atmospheric and tactile quality. Much like humans, we are all unique in our own ways.

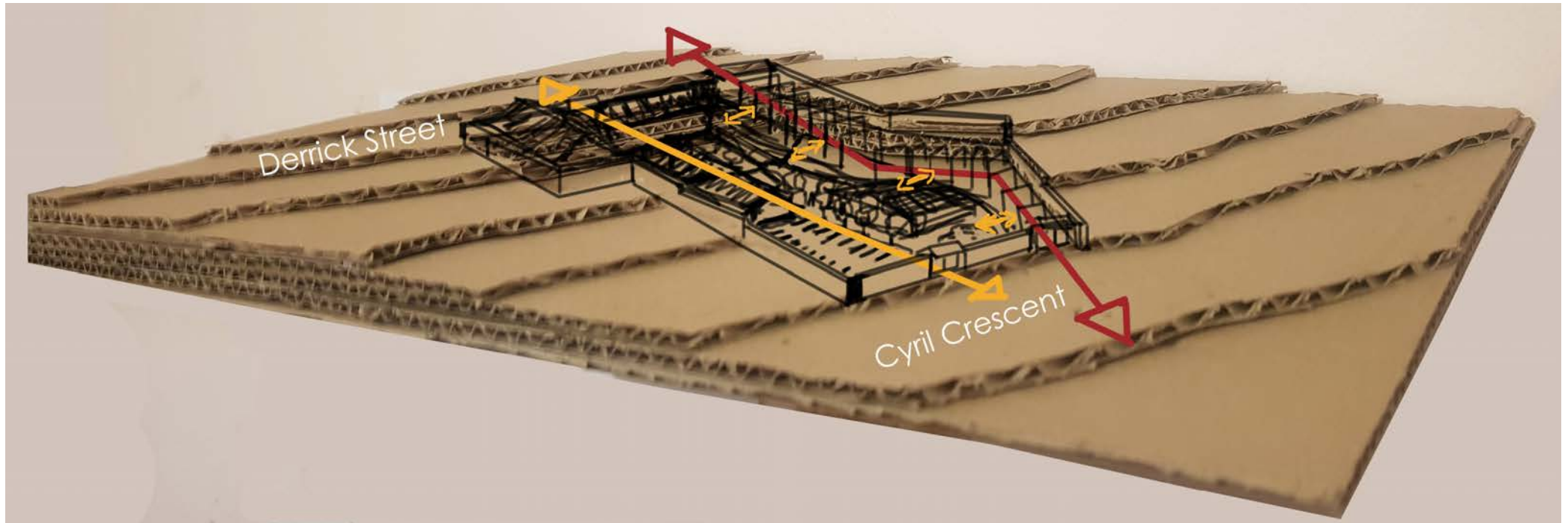
Design Process | 5.4.2 | Design Development - Rough Site Model



Design Process | 5.4.2 | Design Development - Rough Site Model



Design Process | 5.4.2 | Design Development - Rough Site Model



Using this site model as a base for drawings and other smaller concept models to be built.

Design Process | 5.4.3 | Design Development - Possible Urban Planning Changes

Urban Planning Adjustments

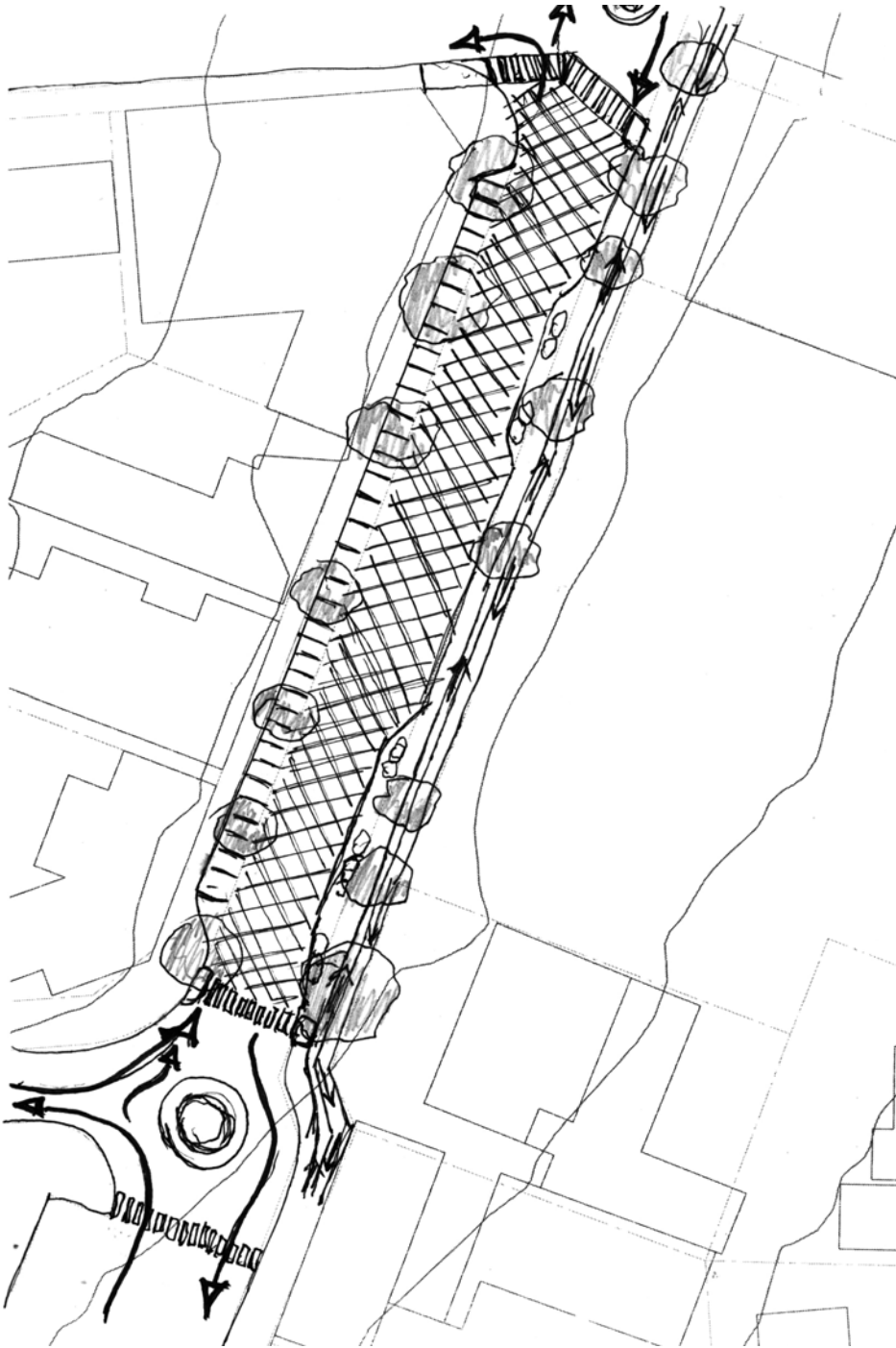
Certain adjustments need to be made to the urban planning of the street to make it more of a pedestrian friendly zone.

This rough sketch shows the ideas that could be implemented.

The addition of traffic circles at every intersection between Derrick Avenue and its adjoining roads. This in addition to the paving of the street to a different material other than the normal tar would provide vehicle users more time to take into account their surroundings and reduce the overall speed going through.

The parking can be kept on the Western edge of the road but on the Eastern edge I propose a completely pedestrian friendly path that winds its way through the edge passing the existing trees as to make it a zone where no cars are able to park as well as a place where people are able to rest, throw away their rubbish into allocated bins and also have public decorations celebrating the cultural narrative in place.

There should be a dedicated bus stop area allocated but probably on one of the adjoining streets or on Cyril Crescent. Should not be placed on Derrick Avenue as this will increase the already heavy vehicular load existing on it.



Design Process | 5.4.4 | Design Development - Circulation

Circulation

The circulation along with the program are extremely important elements within my bathhouse. How one is guided through the spaces will be how I will be expressing my architecture and phenomenology. For instance when you arrive you are fully clothed, protected and impervious to your surroundings. However once you get to the baths you slowly start shedding away those layers of protection revealing a more sensitive side. One that starts understanding how vulnerable you are, where you start taking notice of the environment and the things that you had glanced over before without second thought. Then back to being clothed where you've experienced both and are now aware of the differences between the two states so that you can appreciate the final spaces.

Now talking quite generally the bathhouse circulation will be based on your typical zaotang/ jjimjilbang/ sento/ Asian bathhouse.

Circulation through a narrative

John walks down Derrick Avenue to his favourite restaurant to grab some dinner. After dinner he heads off to the gym to work off the fat he just gained by eating all that delicious Chinese food. After the gym he is quite sweaty and tired and would like nothing more than to rest in a nice hot bath, so he heads off towards the bathhouse section of the compound. John gets greeted at the reception where he pays his fee and gets handed his male garments that he can later change into after the bath. From there he removes his shoes and goes into the change-room to remove the rest of his clothing and to pack away his possessions. After stripping to his birthday suit he heads off towards the baths but not before going through the anteroom to grab a scrub towel and some toiletries. He then enters the baths where he first scrubs himself down to get rid of the excess dirt and dead skin before finally jumping into the aroma bath where he soaks away his tired and fatigued muscles. John meets a few of his buddies in the bathhouse and they decide to hang out for a bit so they get up go back through



Clothed



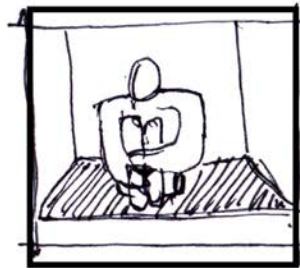
Arrival



Semi-Nude



Nude



Vulnerable



Acceptance



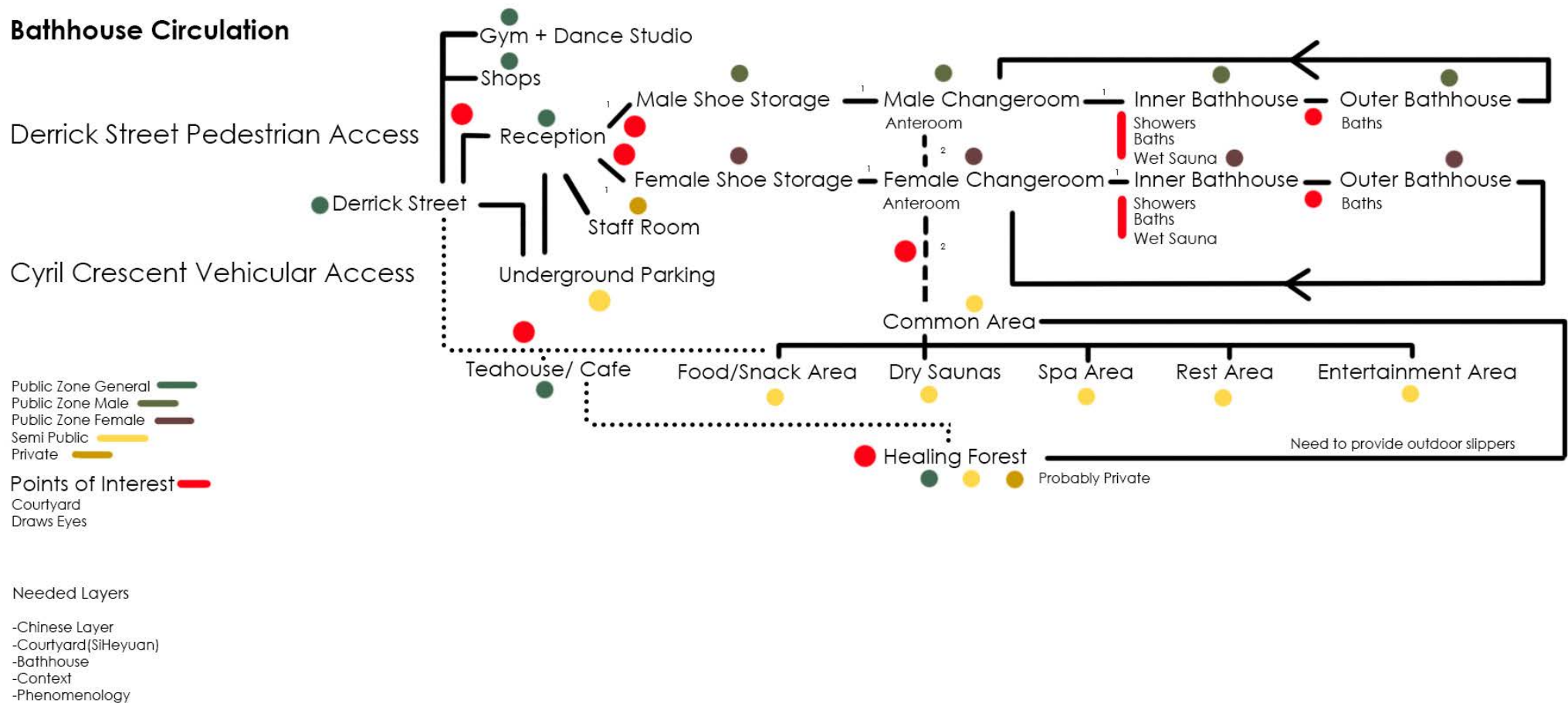
Exploration



Comfort

Design Process | 5.4.4 | Design Development - Circulation

Bathhouse Circulation

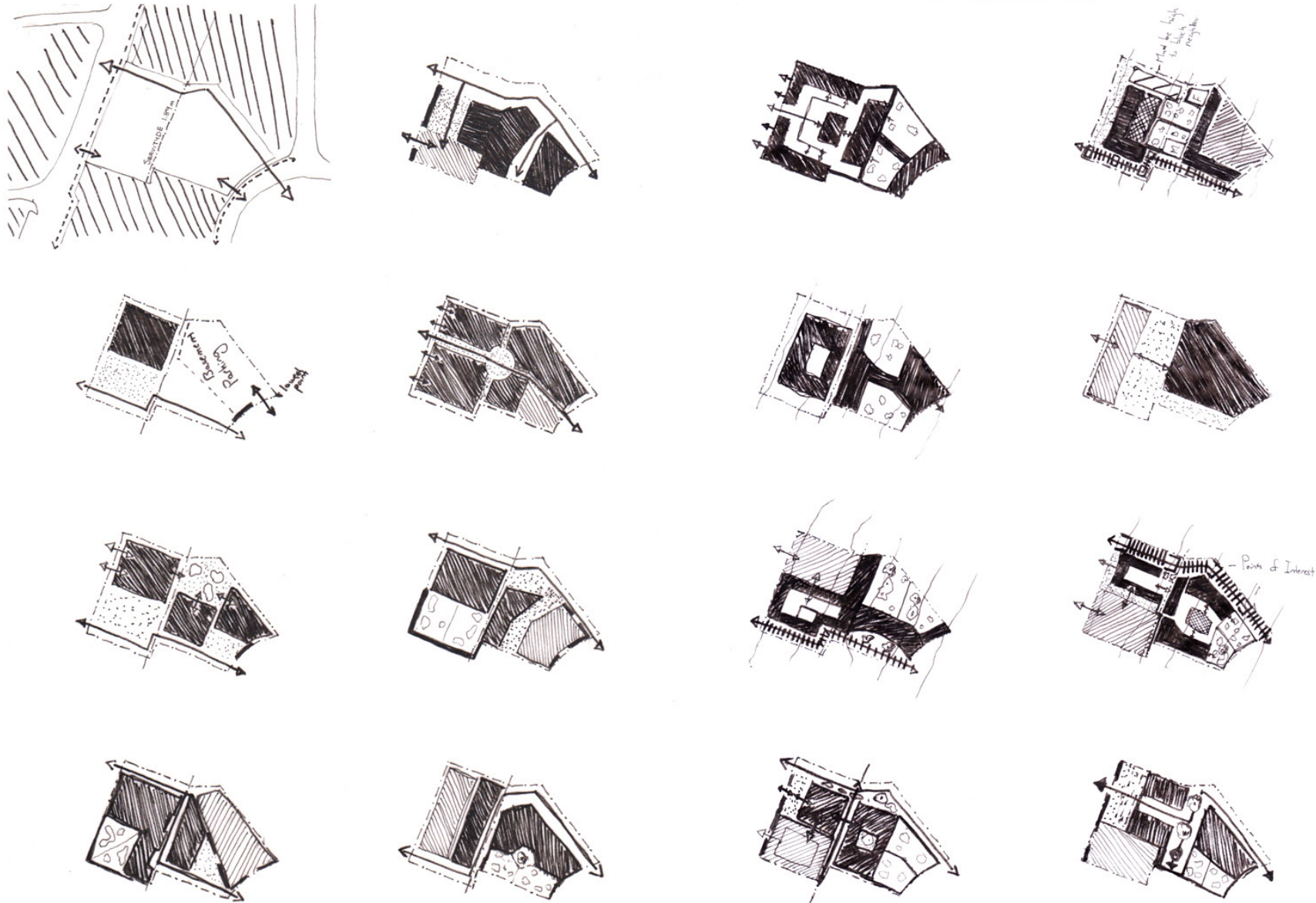


to the anteroom where they dry and moisturise themselves. From there its off to the change-rooms where the change into the garments they were given earlier. Once everyone has changed they head off towards the common area but along the way they notice a beautiful courtyard which they take some time to admire. When they arrive in the common area compound, John meets the wives of his buddies and they all decide to chat in one of the dry saunas

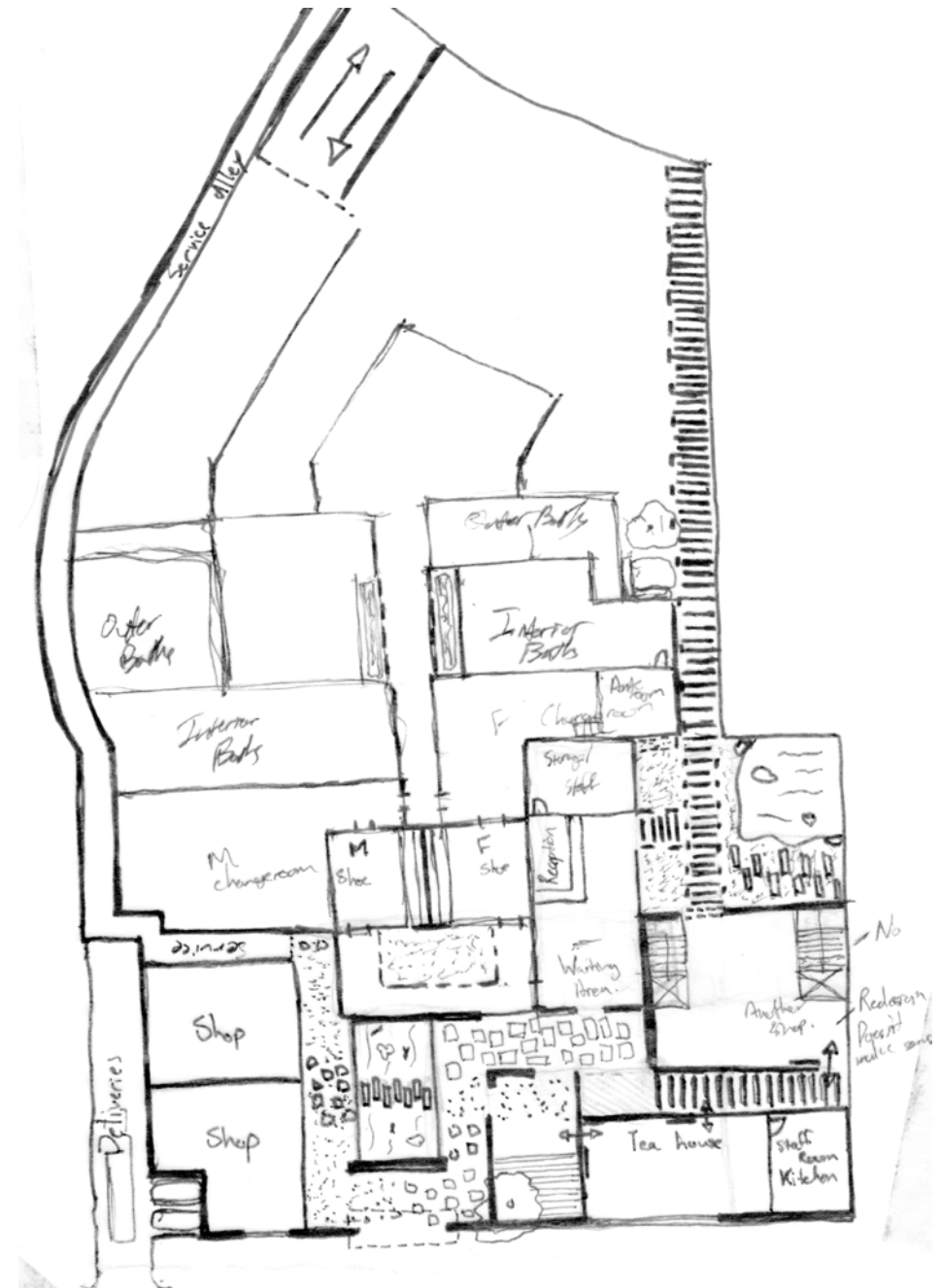
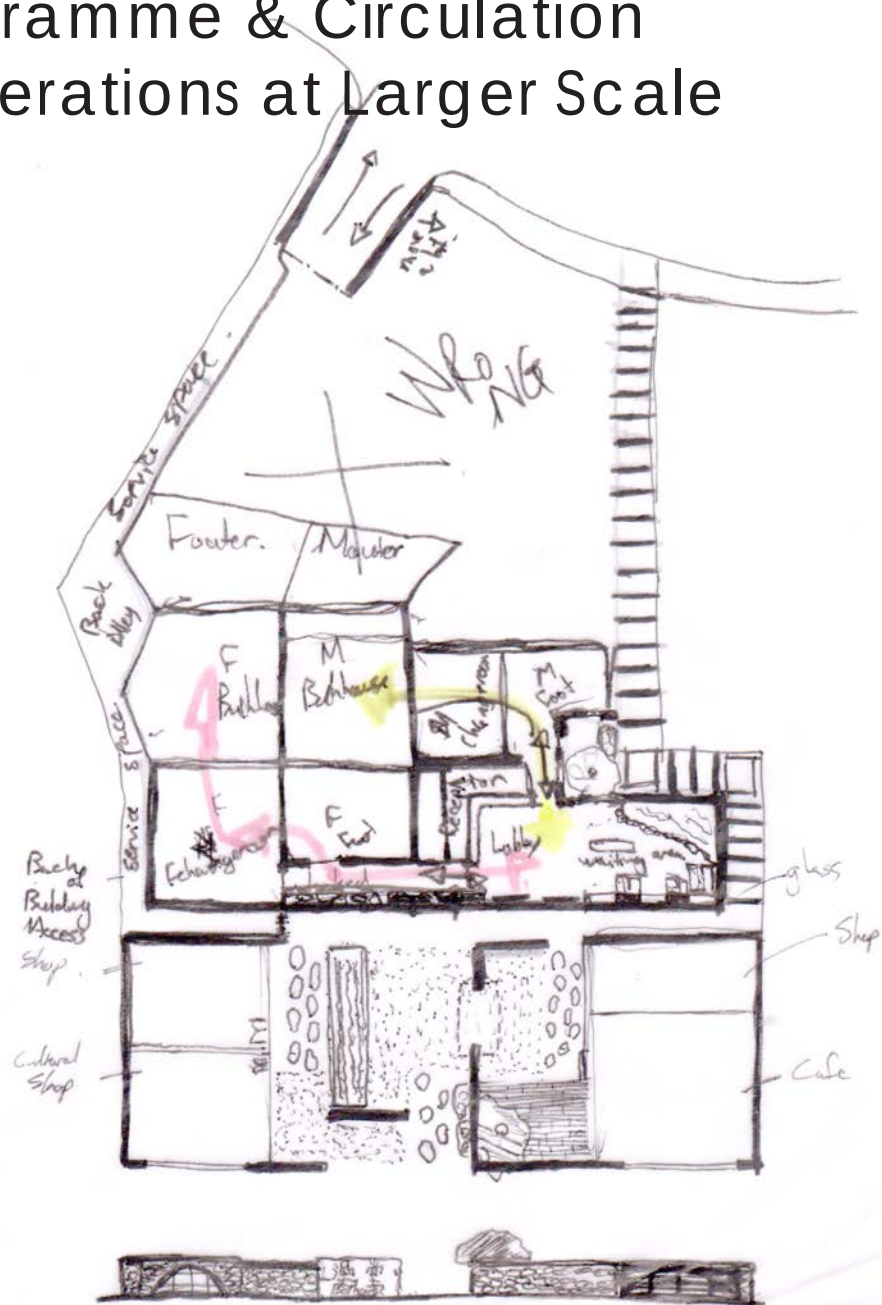
for a bit. One of his pals decides to head off to the spa above to get a massage for that stiff neck he's been feeling. They decide to meet up later. After going through the different dry saunas they head off to the snack bar to grab some refreshments. They then head up to the second floor to enjoy those refreshments whilst admiring the tranquil landscaped gardens on the outside. Two of John's buddies decide to call it a night and head off to the allocated

sleeping areas within the building. John still feels like he has a bit of energy left so he heads out to the tranquil gardens to take a night walk where he enjoys the peace, safety and quiet it provides. After saying goodbye to the last of his friends he heads back to the change-rooms to get back into his own clothes then heads out to his car thinking about what a great time he had that evening.

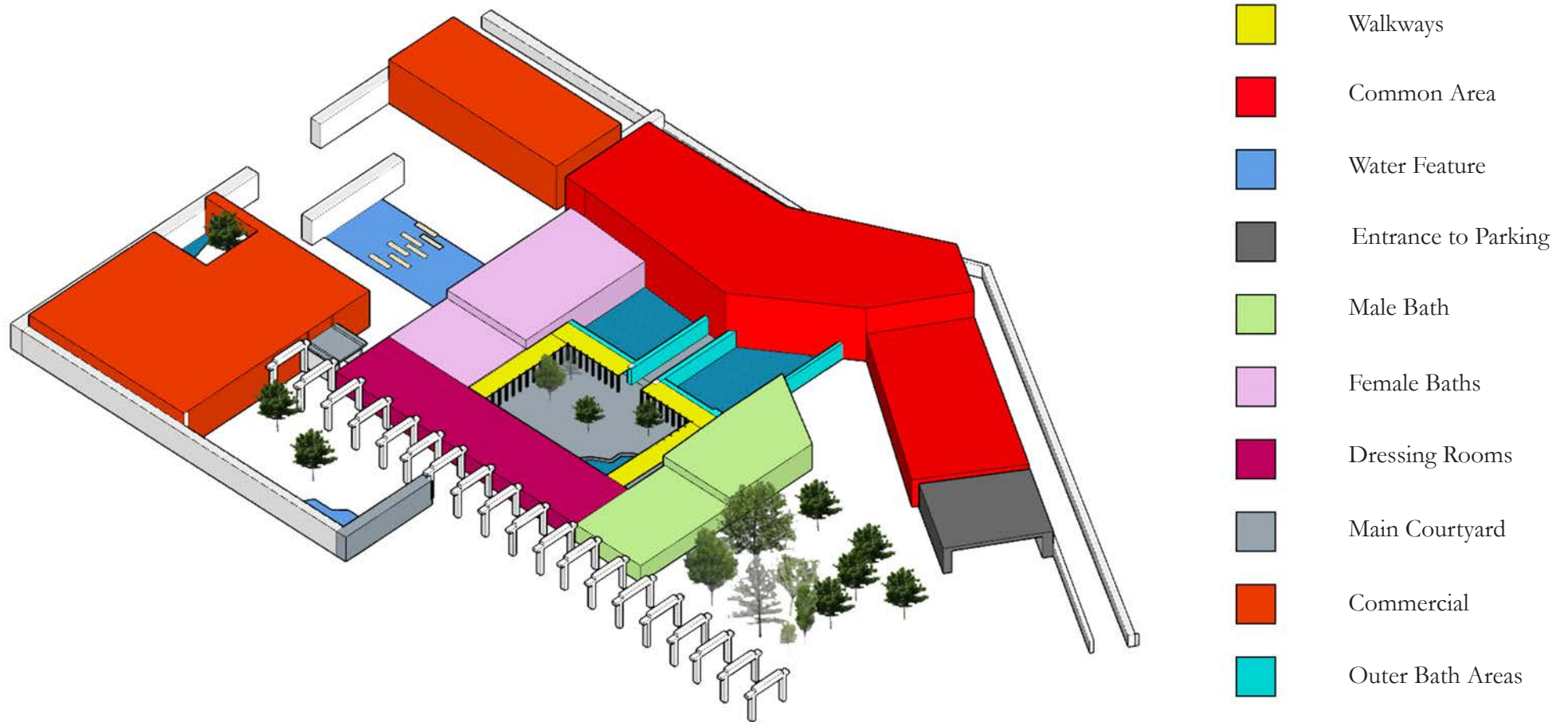
Design Process | 5.4.5 | Design Development - Programme & Circulation 1st Iterations



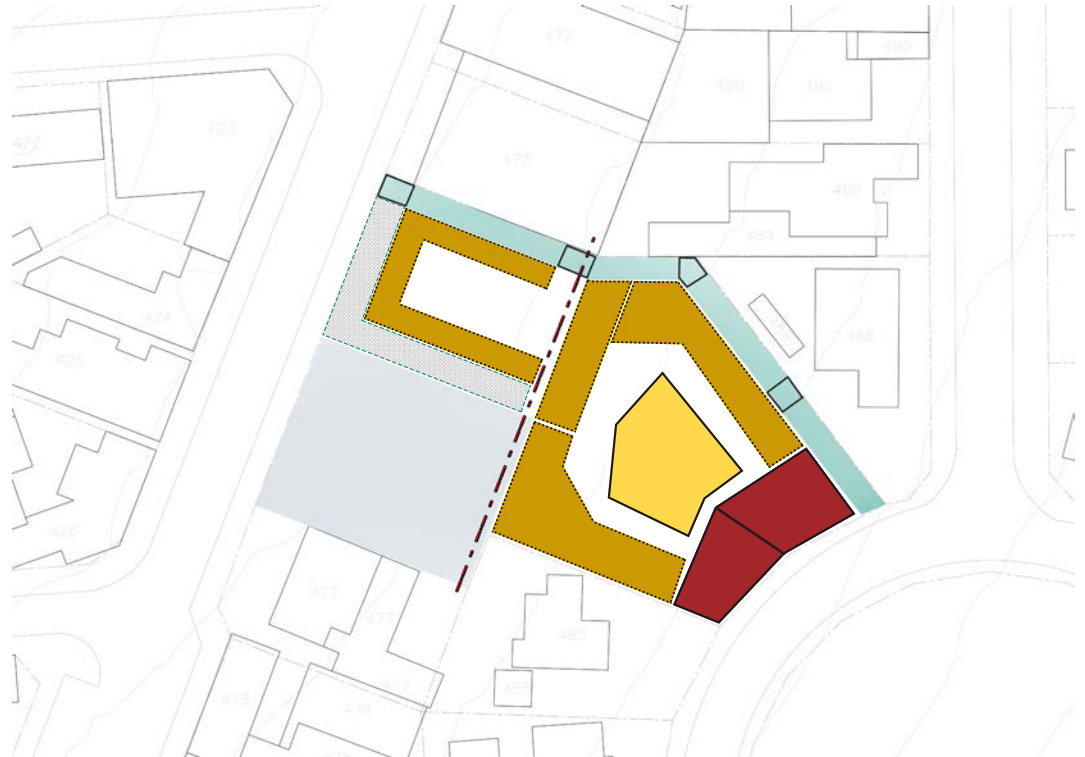
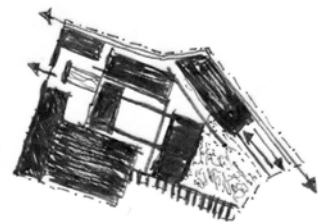
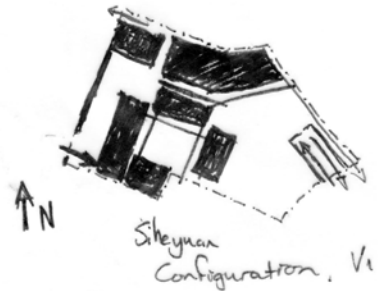
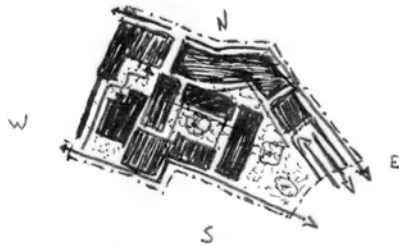
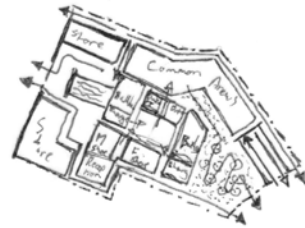
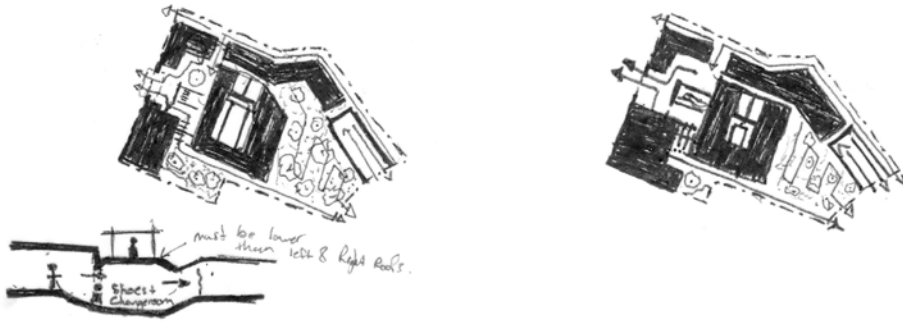
Design Process | 5.4.5 | Design Development - Programme & Circulation 1st Iterations at Larger Scale



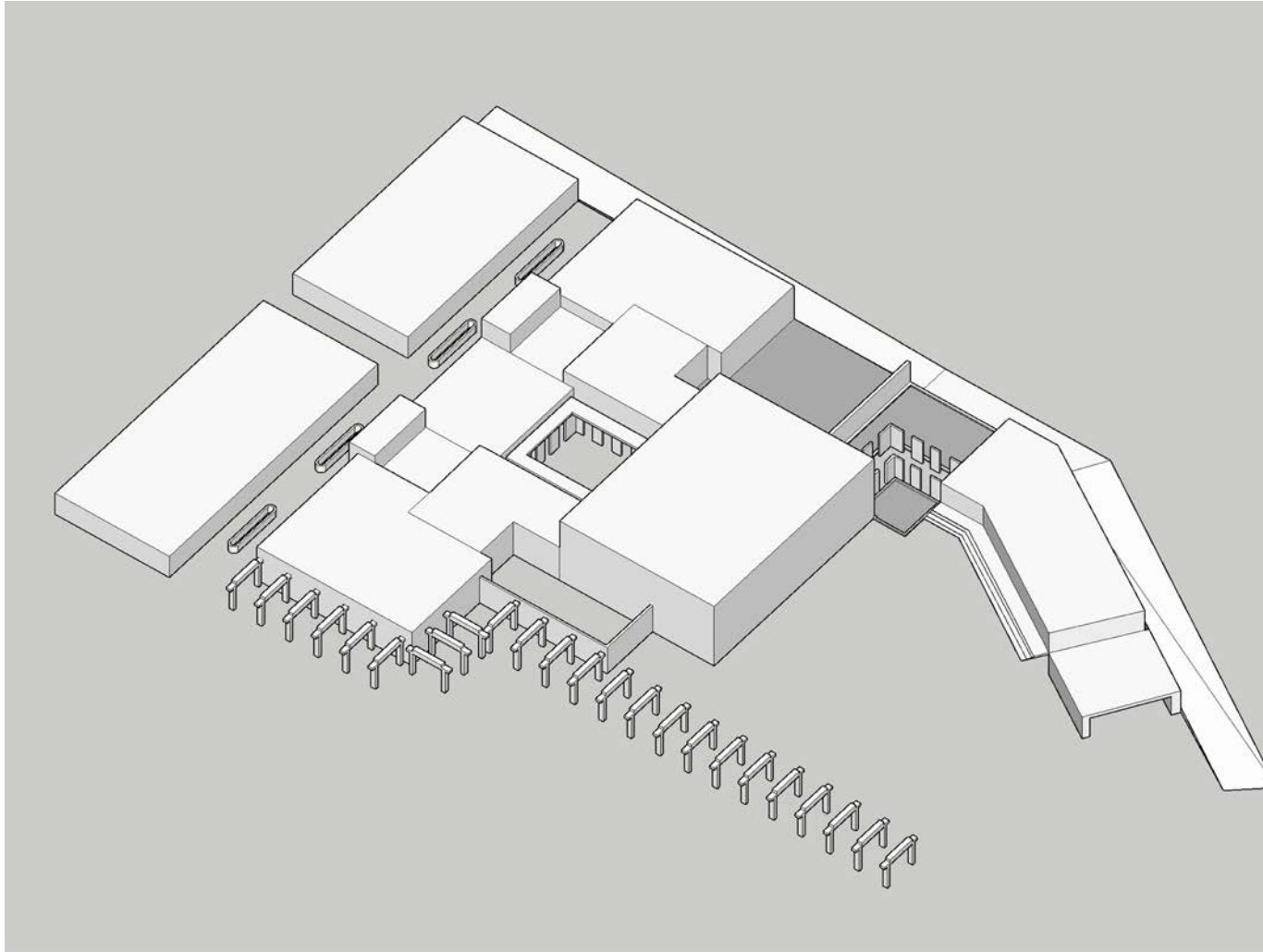
Design Process | 5.4.5 | Design Development - Programme & Circulation 1st Iterations Massing



Design Process | 5.4.6 | Design Development - Programme & Circulation 2nd Iteration



Design Process | 5.4.6 | Design Development - Programme & Circulation: 3rd Iteration



Programme and Circulation: 3rd Iteration

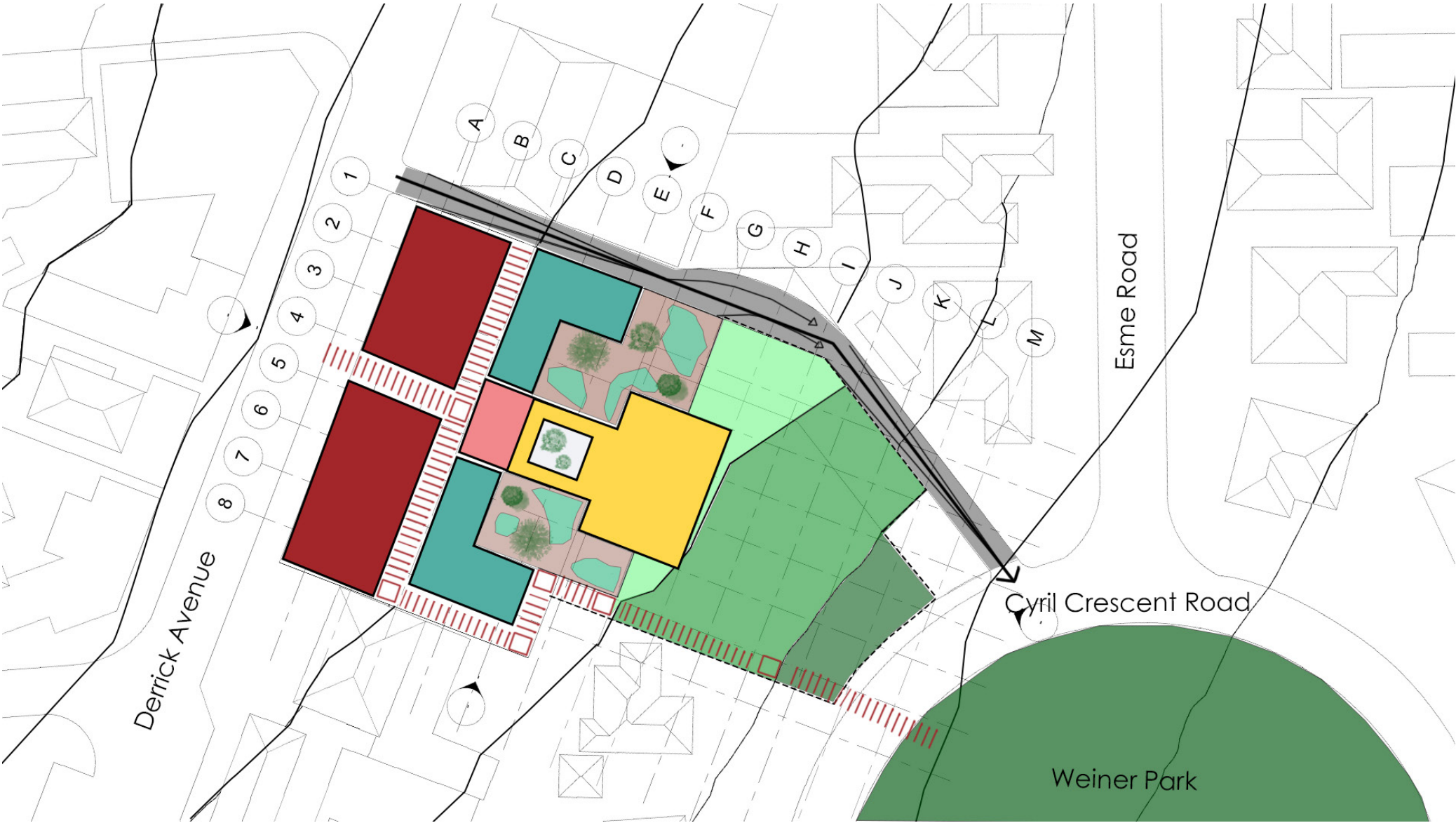
For the 3rd iteration I started the process of thinking about how the design was going to plan out. This of course involved the programme and circulation and so I started to draw some diagrams at a larger scale to see how one would move from one space to the next before finally deciding on a configuration that I could take through for the review.

The initial idea of this design is to have the commercial aspects facing Derrick Avenue. This keeps the current language of the architecture of the area intact as well as takes advantage of the street front where a lot of the activity happens. There would be a path that leads to the park at the back thereby activating that road and making the park more widely used. The bathhouse and reception section is quite symmetrical as I wanted to separate the genders into male and then female. Once both genders have bathed the goal was to provide a common space building at the back that was 3-4 stories high that would be the icon that would cement the image of the building. The outer baths were placed to the side but problems quickly arose due to privacy and so the idea was shelved. Completing this design was the spa and tea shop and cafe along the edge which would face onto the tranquil forest tying into the park below.

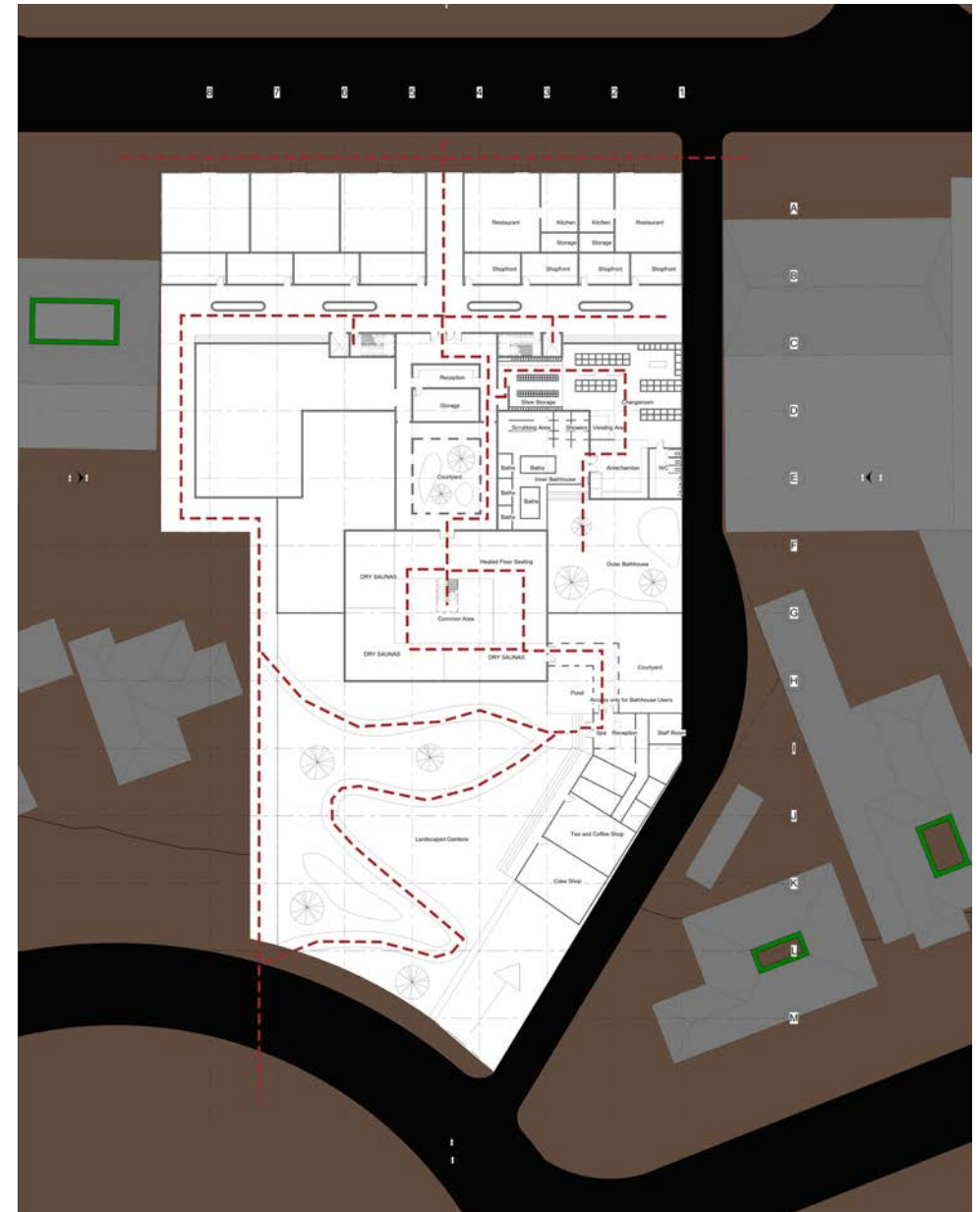
Design Process | 5.4.6 | Design Development - Programme & Circulation: 3rd Iteration



**Design Process | 5.4.6 | Design Development -
Programme & Circulation: 3rd Iteration**



Design Process | 5.4.6 | Design Development - Programme & Circulation: 3rd Iteration



Design Process | 5.4.6 | Design Development - Programme & Circulation: 3rd Iteration



Design Process | 5.4.7 | Design Development - 4th Iteration



Design Process | 5.4.7 | Design Development - 4th Iteration

Latest Draft Iteration

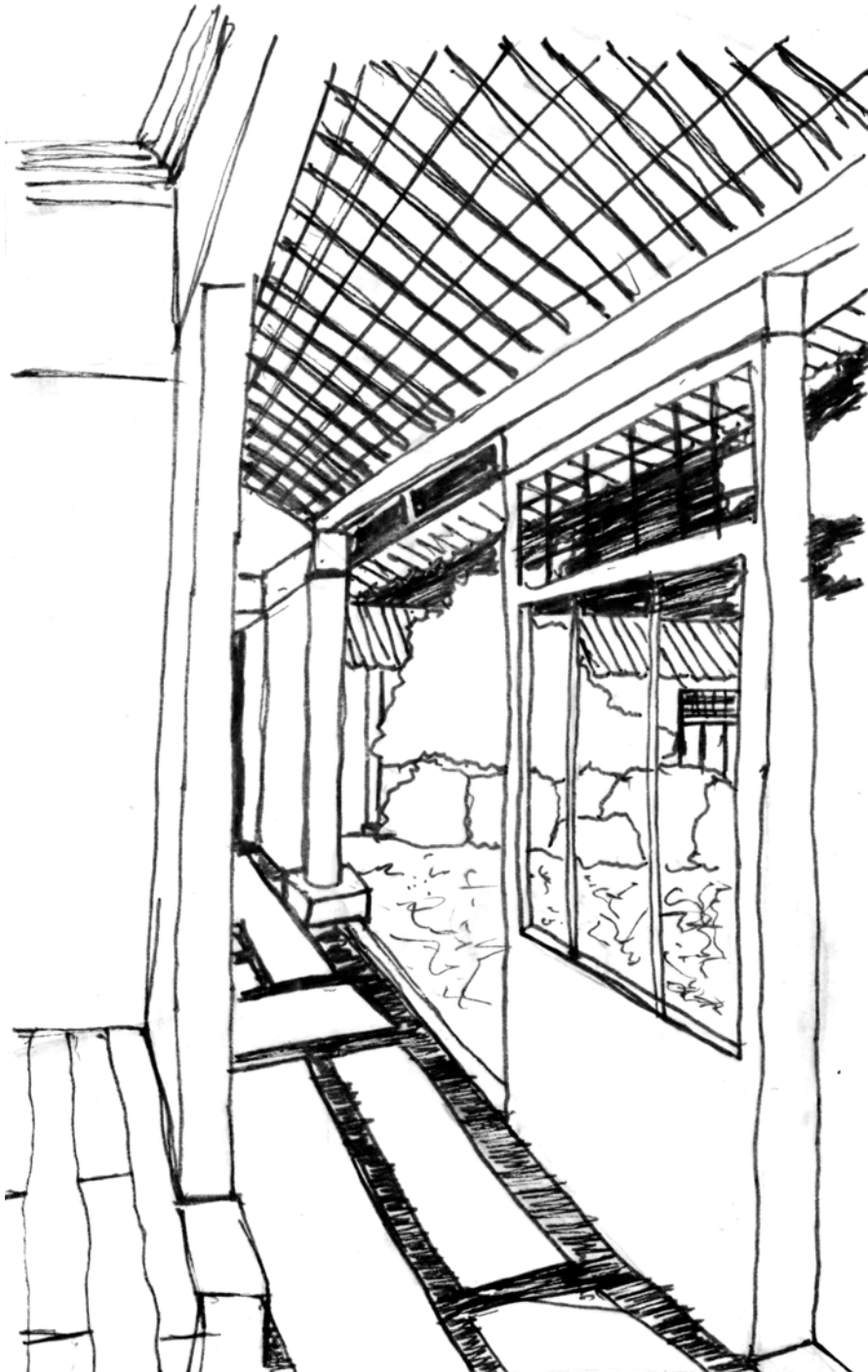
In my latest draft iteration of my design I decided to work on the phenomenological aspect of my building. The area where it would most likely be brought out is within the bathing section of my compound.

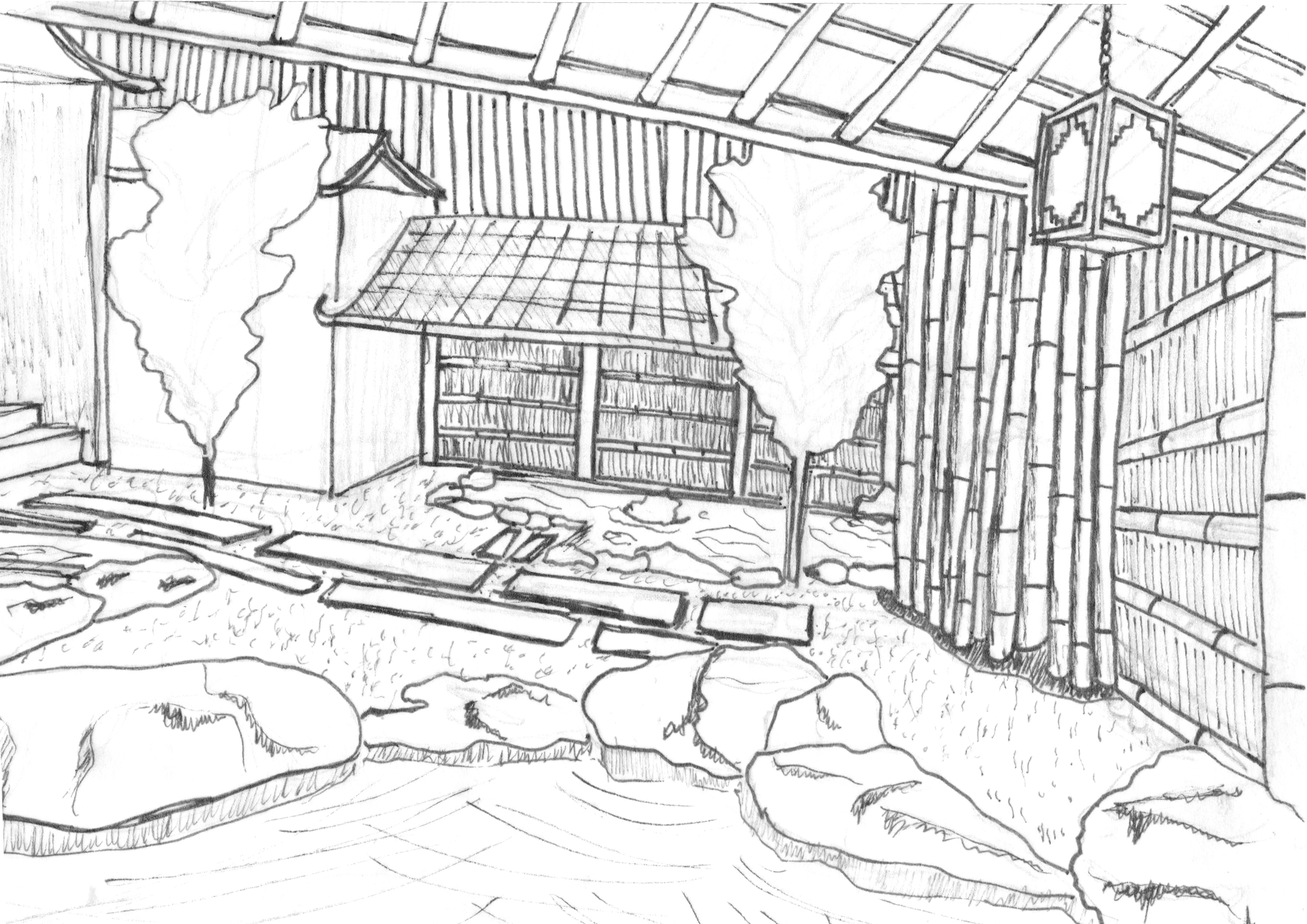
I started off with some sketches of what I believed the final design should start resembling. Transition spaces that make you take a break and pause to look around, to appreciate the beauty of nature and the architecture.

I went through multiple iterations of plan designing to make sure that the circulation between each of the spaces created an experience. This could be done in the changing of height, the use of different materials, the playing of light, smells and of course in the end the kind of mineral water used as well. All of this to create moments of experience and because you are naked you are more susceptible to all these changes.

One of the diagrams talks about how the water would flow throughout the building with some of the water eventually filtered through a grey water system to be used in the gardens at a lower topography. Thereby utilizing the existing differences in height to make a gravitation fed system instead of relying on pumps.

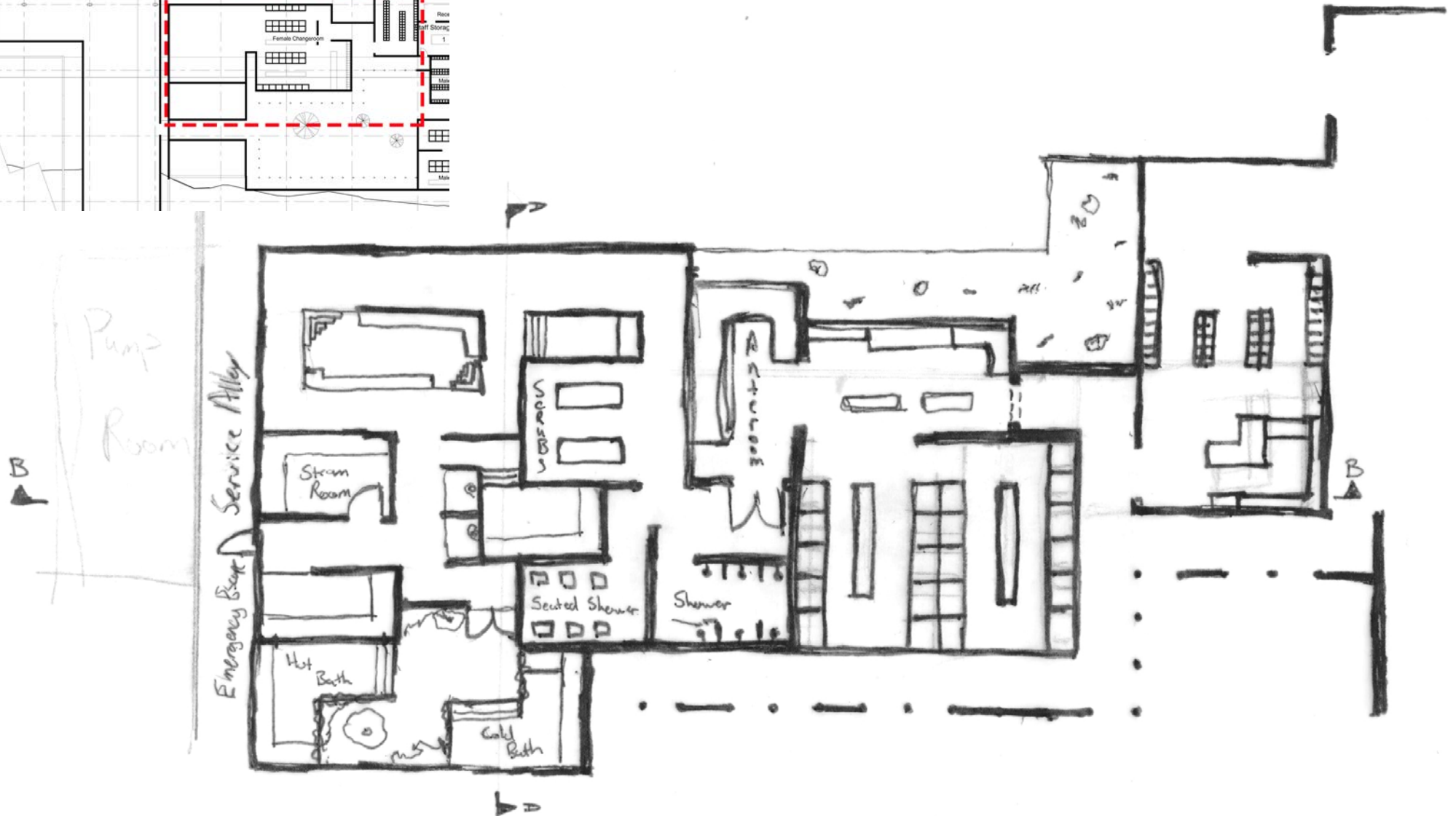
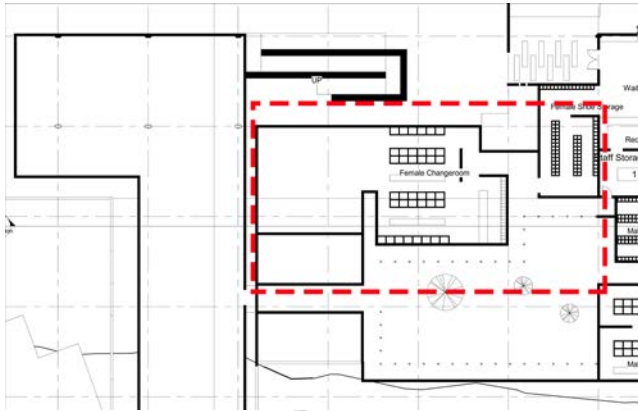
Overall a lot more needs to be resolved but I am definitely happy with the final planning of my baths.





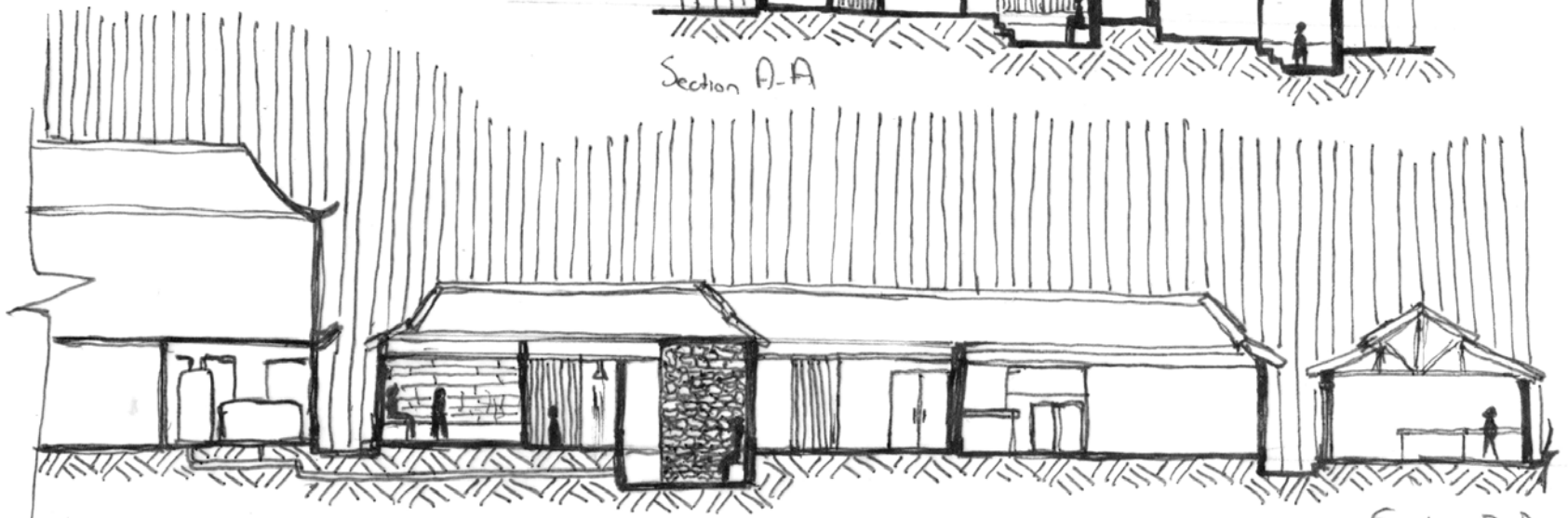
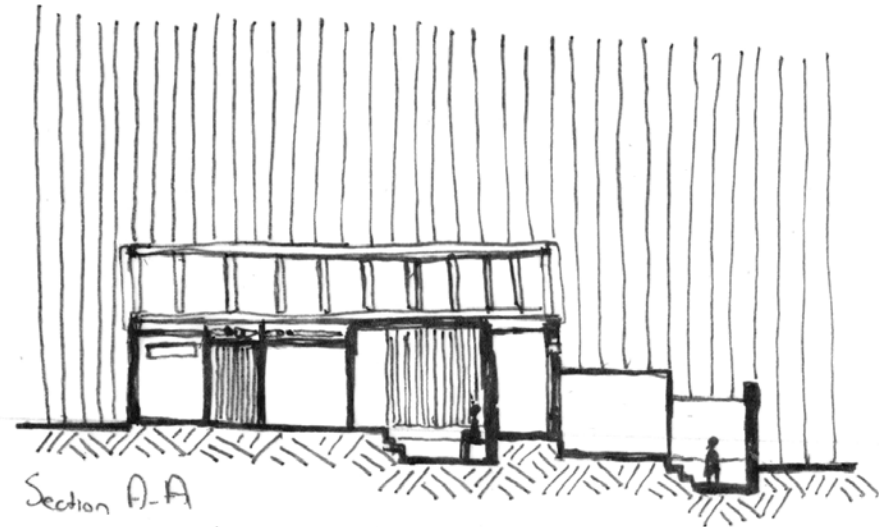
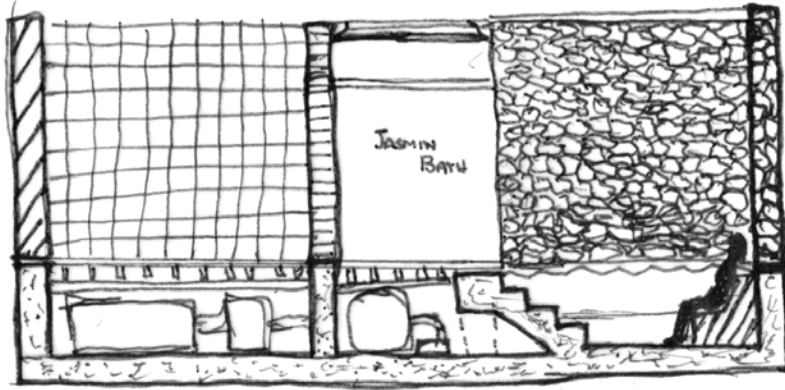
Design Process | 5.4.7 |

Design Development - 4th Iteration: Designing the baths



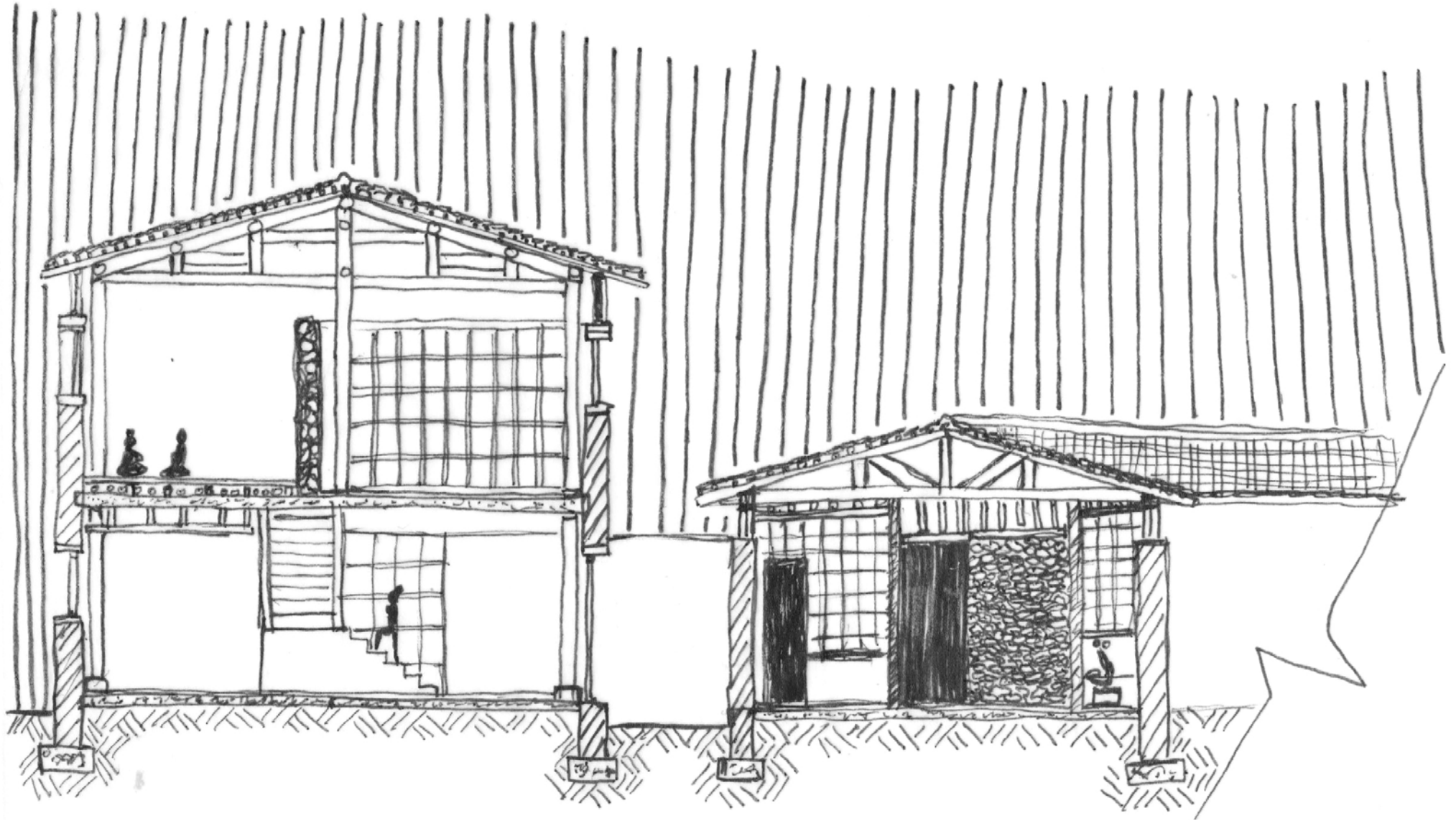
Design Process | 5.4.7 |

Design Development - 4th Iteration: Designing the baths



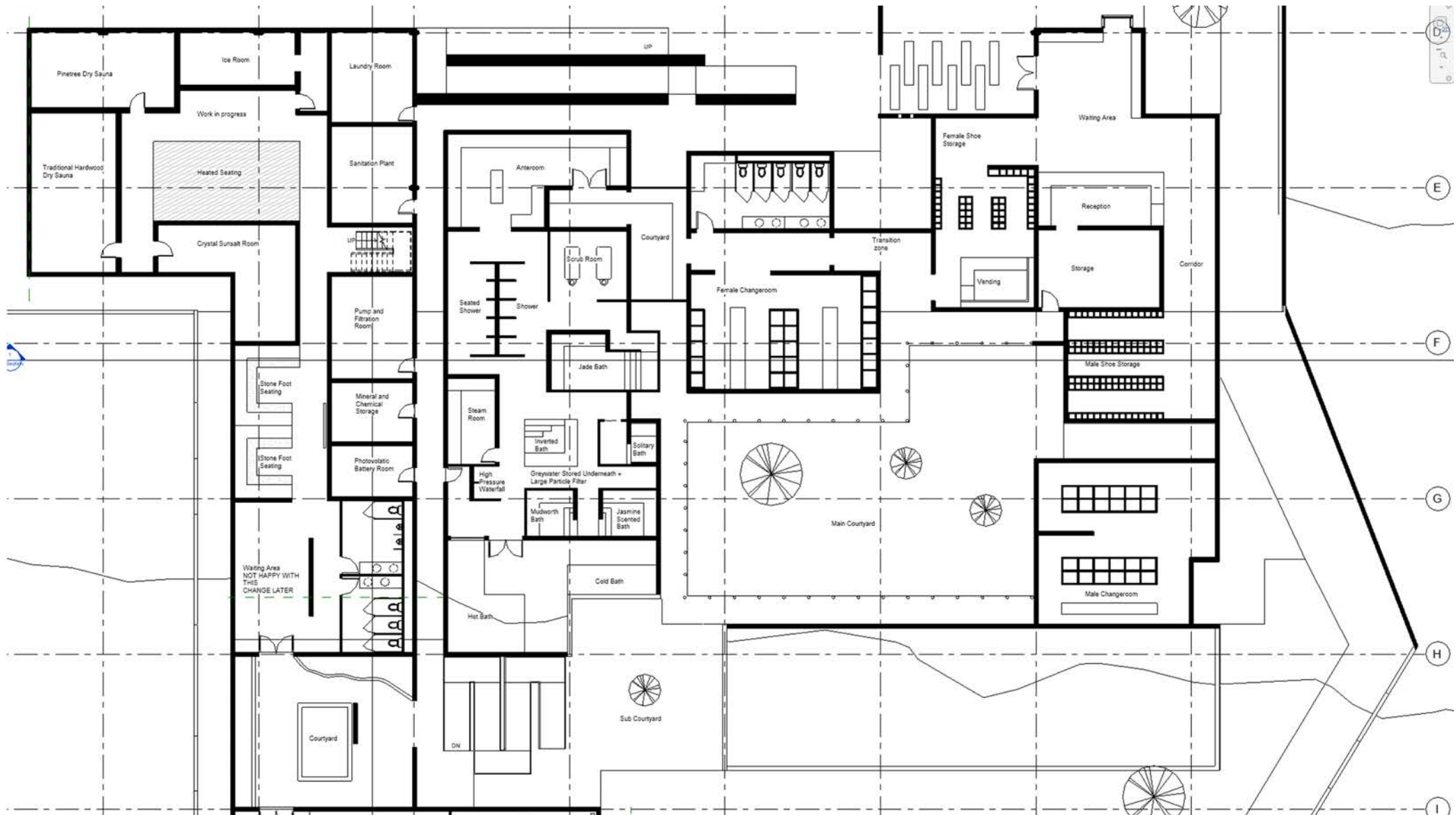
Design Process | 5.4.7 |

Design Development - 4th Iteration: Designing the baths



Design Process | 5.4.7 |

Design Development - 4th Iteration: Designing the baths



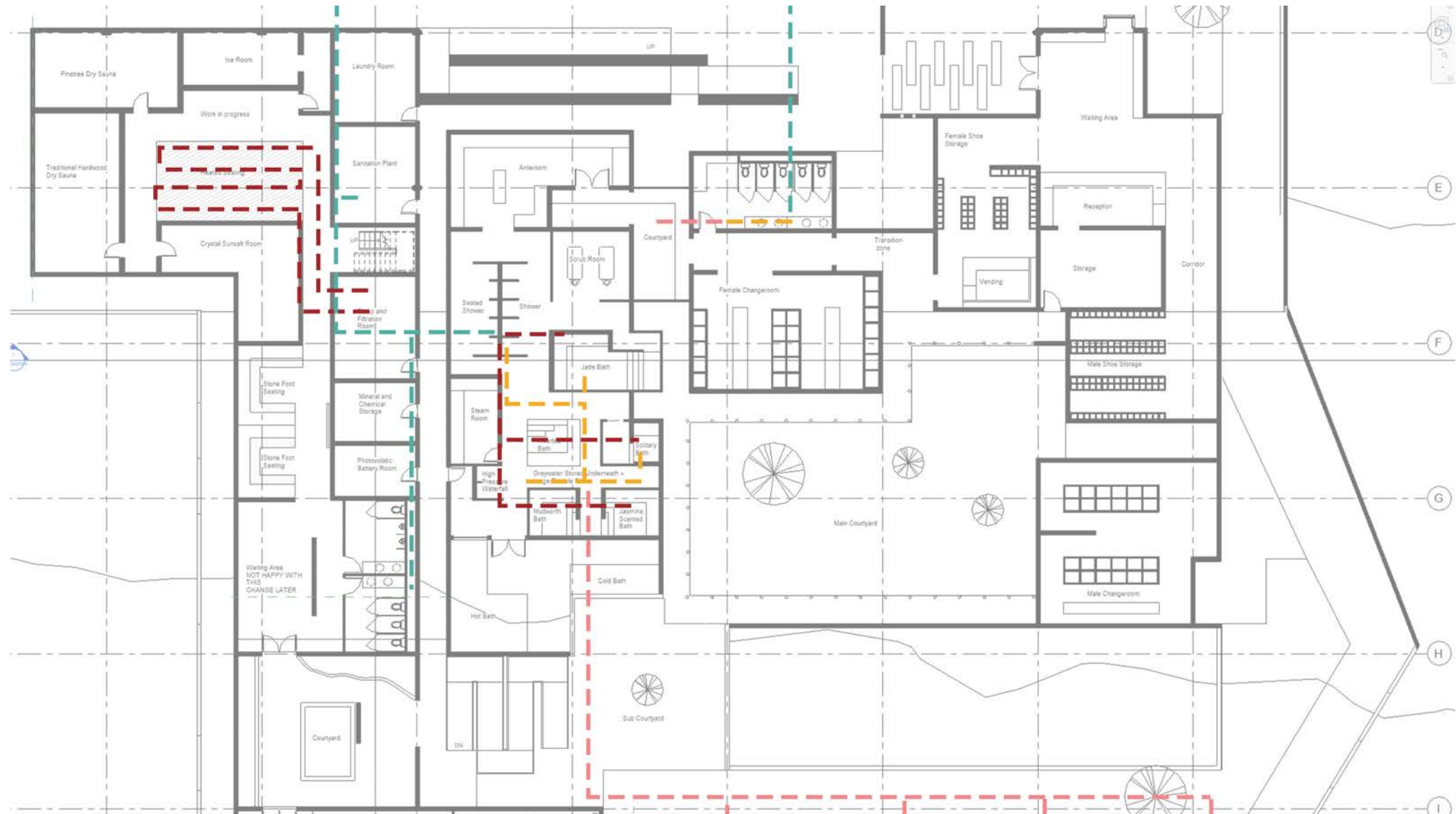
Design Process | 5.4.7 |

Design Development - 4th Iteration: Designing the baths



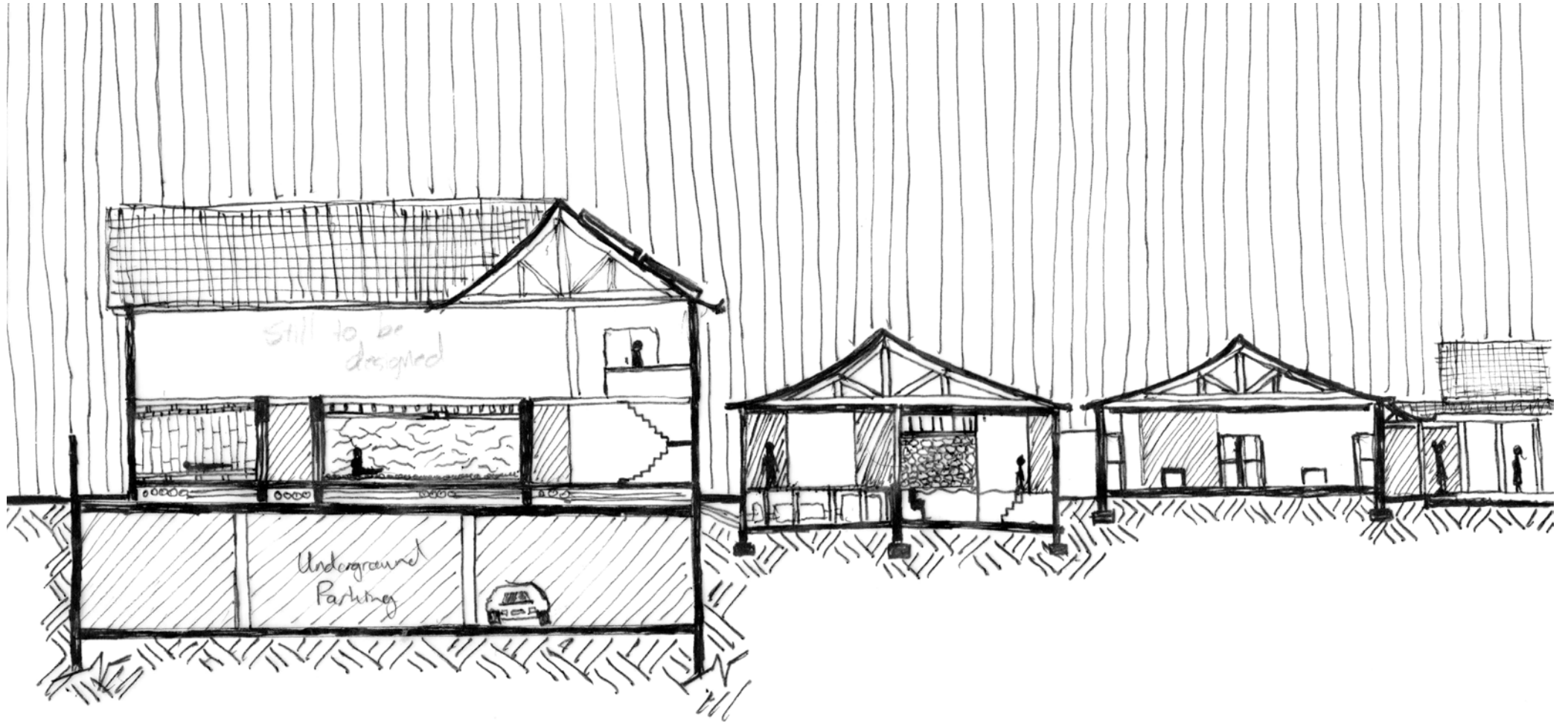
Design Process | 5.4.7 |

Design Development - 4th Iteration: Designing the baths



Design Process | 5.4.7 |

Design Development - 4th Iteration: Designing the baths



Design Process

| 5.5 |

Final Drawings



Derrick Avenue Street Front

Design Process | 5.5.1 | Final Drawings - Site Plan





Commercial Building Street Front

Design Process | 5.5.2 | Final Drawings - Commercial Building Elevations (NW & SE)



Street Elevation(NW) - Derrick Avenue



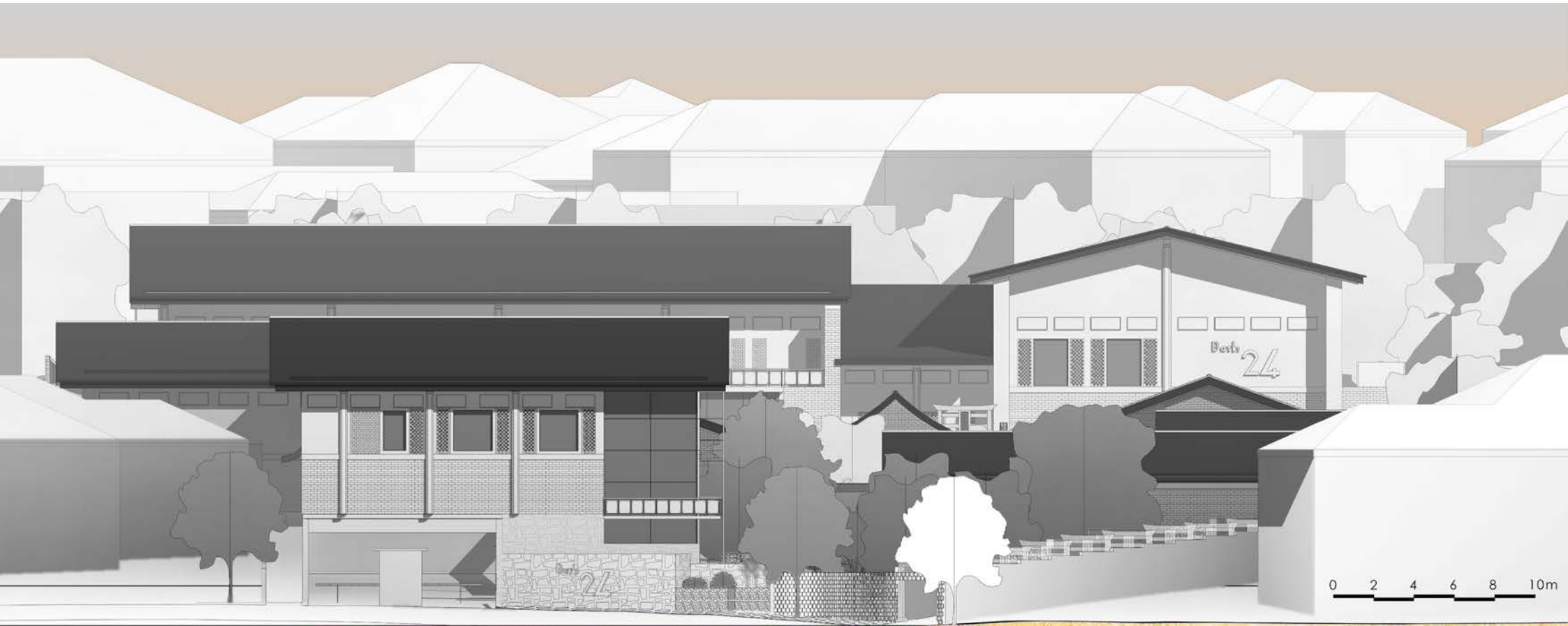
Commercial Back Elevation(SE) - Derrick Avenue



Spa catered commercial back facilities

Design Process | 5.5.2 |

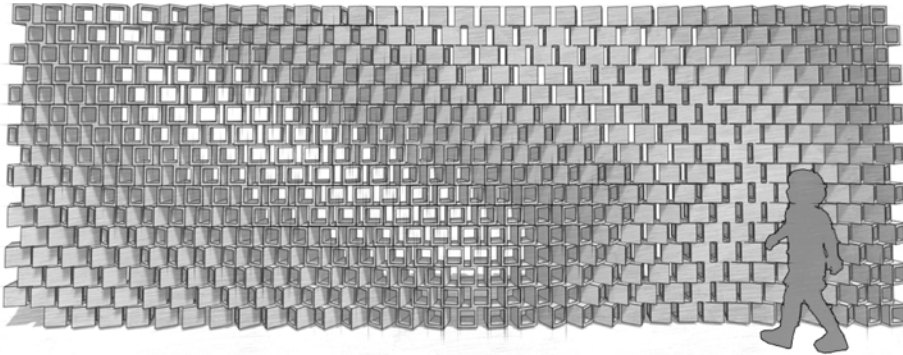
Final Drawings - Cyril Crescent Street Elevation(SE)



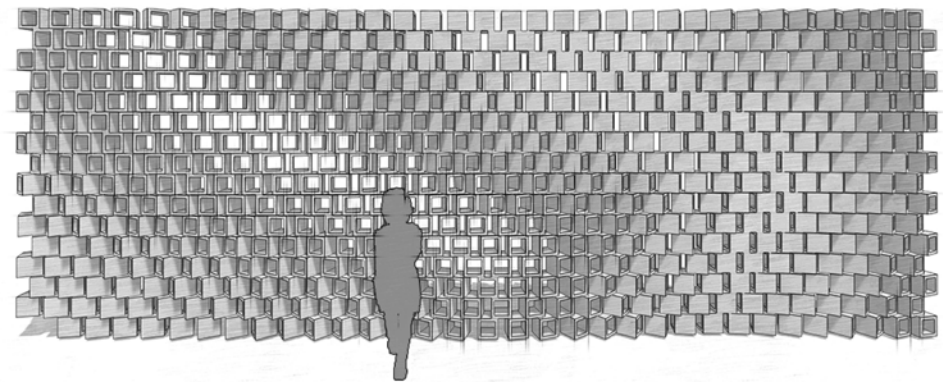
Street Elevation (SE) - Cyril Crescent Road

Design Process | 5.5.3 | Final Drawings - Experiential Wall

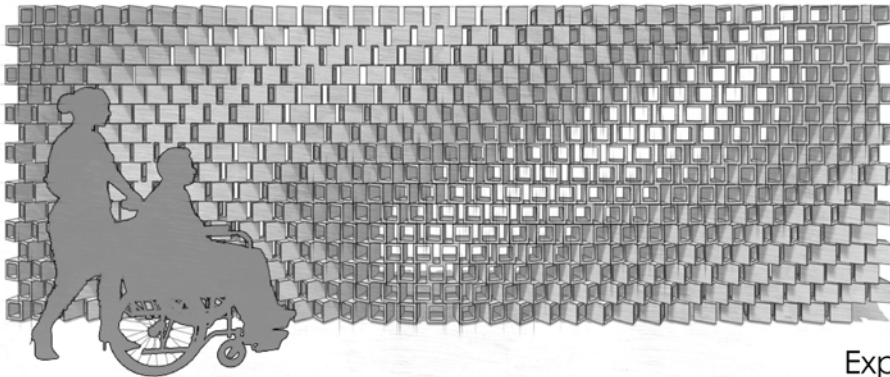
Wall of nudity (Experiential Wall)



Protected and Habitual
SO
More unaware of the everyday
ongoings of the world

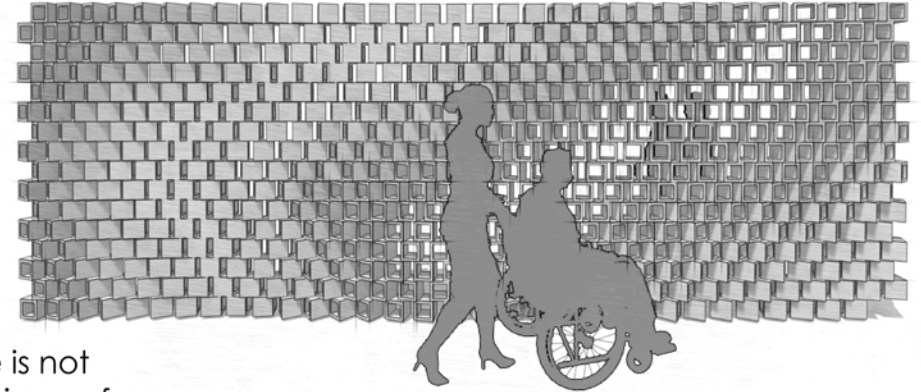


Exposed and Vulnerable
BUT
Much more aware of surroundings



Clothed

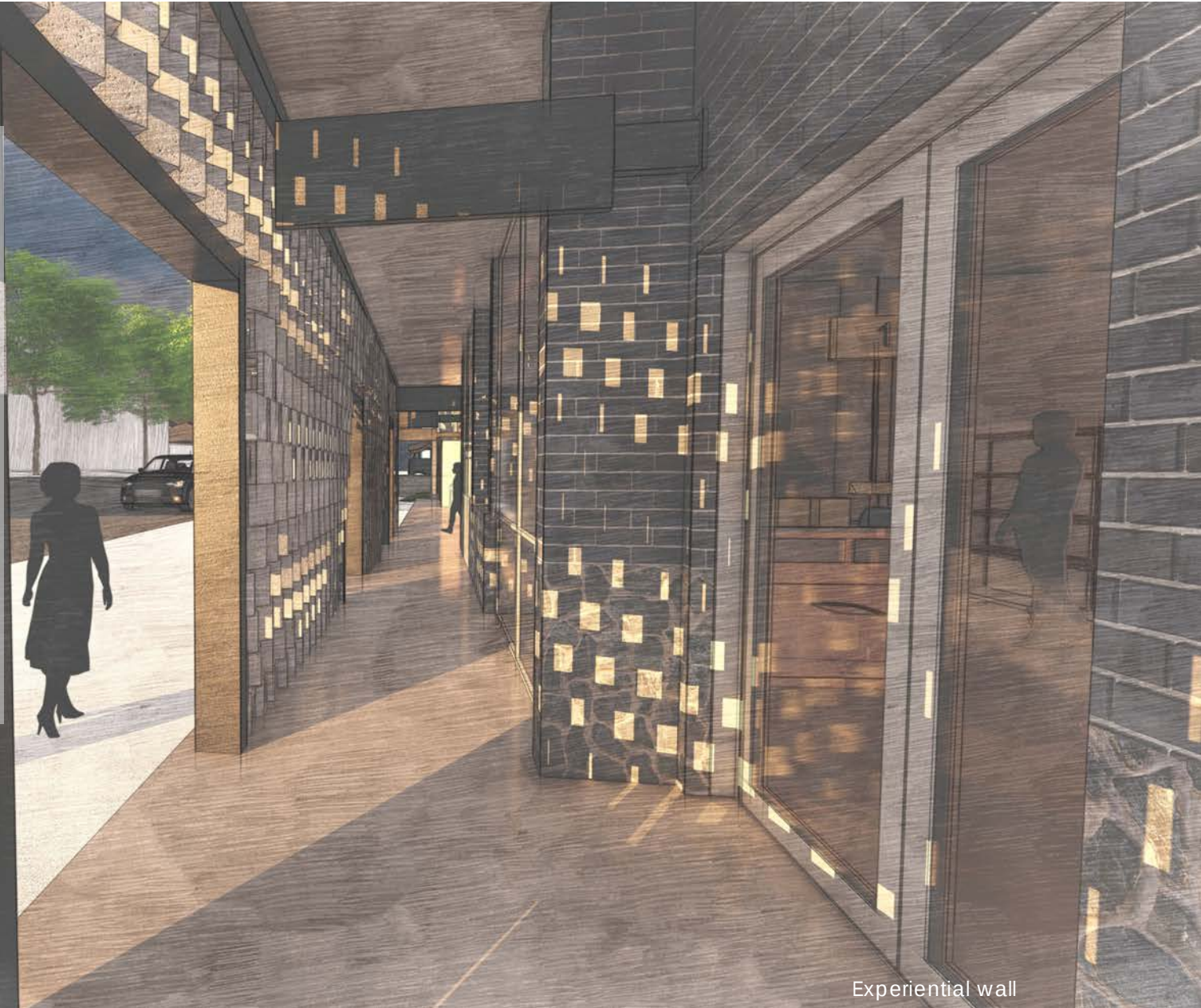
Experience for one is not
the same as the experience for
another



Naked

Concept Wall

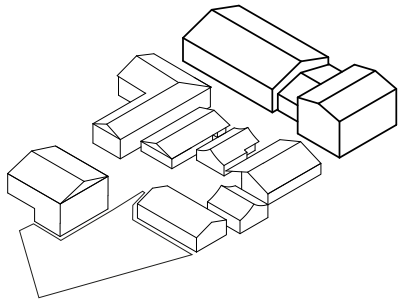
For instance, in certain areas of the compound I've crafted these experiential walls which were based on the idea of nudity vs the idea of being clothed. In one area for instance the wall would be closed off and the vision to the other side would be limited. This represented the idea of being clothed as when you are clothed you feel protected. You are more unaware of the world around you however as you walk along the wall it starts opening up, you start to see what happens on the other side. Every time you move along the experience becomes different as you are slowly exposed to the other side. This represents the idea of nudity. You start to understand how vulnerable you have become but it's through this vulnerability that you become much more aware of your surroundings and therefore you start to appreciate the little things(materiality/space/light) that you would otherwise normally just ignore.



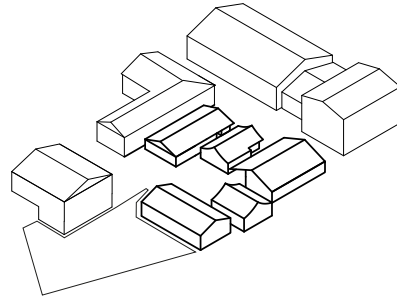
Experiential wall

Design Process | 5.5.4 | Programme Diagram

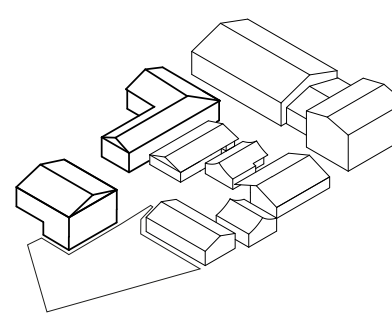
Programmes in buildings providing differing experiences



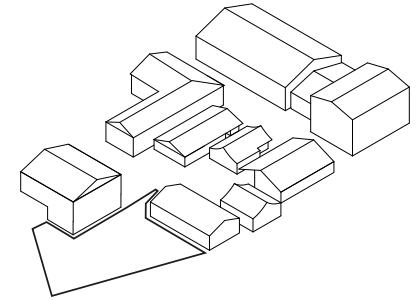
Experience 1
Street Commerce



Experience 2
Baths



Experience 3
Group Activities

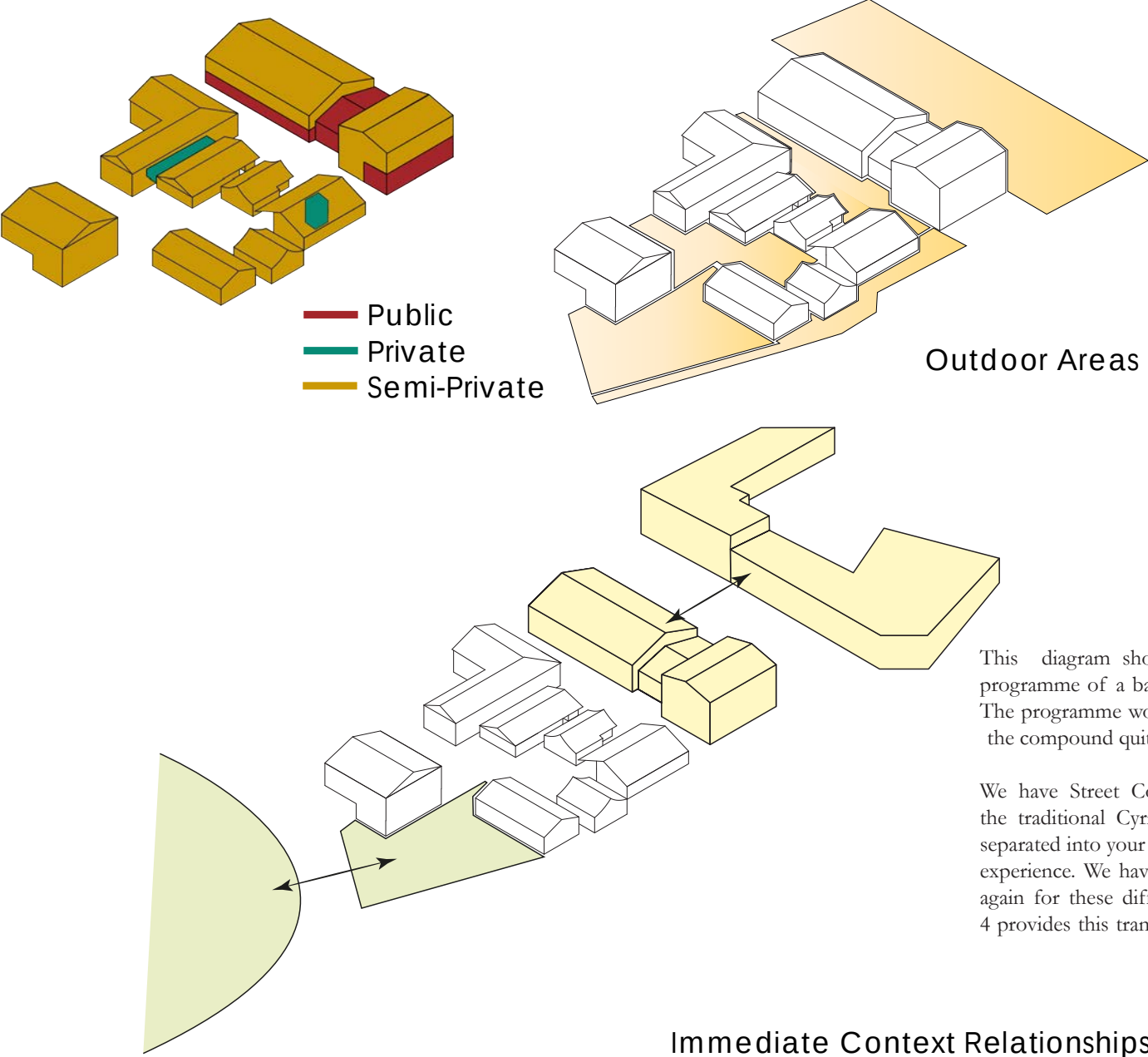


Experience 4
Secret Gardens

This diagram shows how we could use the circulation and programme of a bathhouse to guide the experience of the user. The programme works out quite interestingly in that it separates the compound quite nicely into 4 different zones of experience.

We have Street Commerce which is the building that offers the traditional Cyrildene experience, the baths where you get separated into your specific gender and have a very individualistic experience. We have experience 3 which brings people together again for these different group activities and finally experience 4 provides this tranquil garden experience where you can be left alone with your thoughts.

Design Process | 5.5.4 | Public relationship Diagram



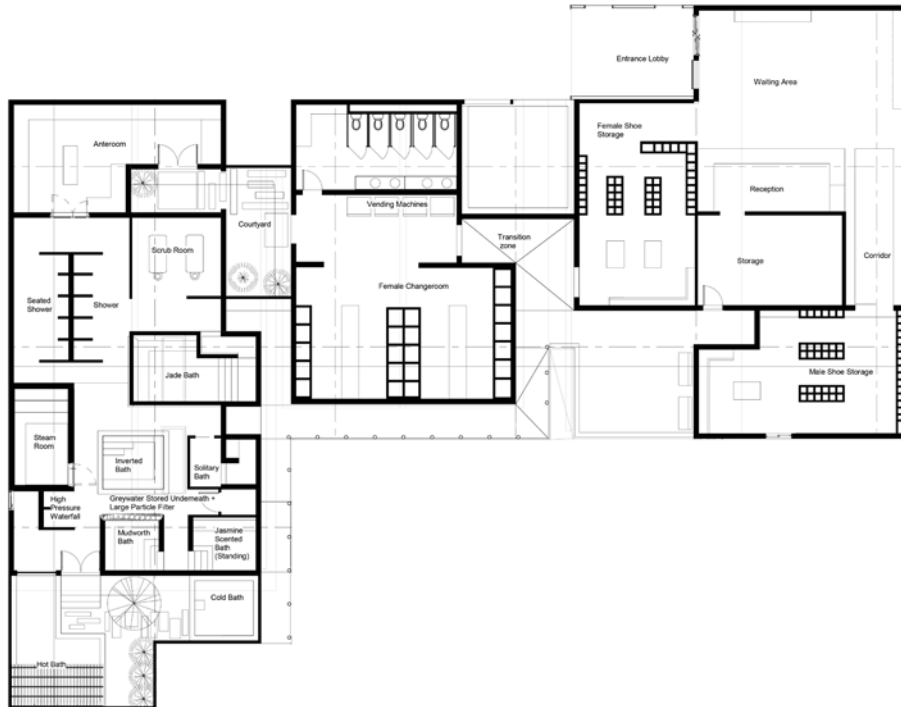
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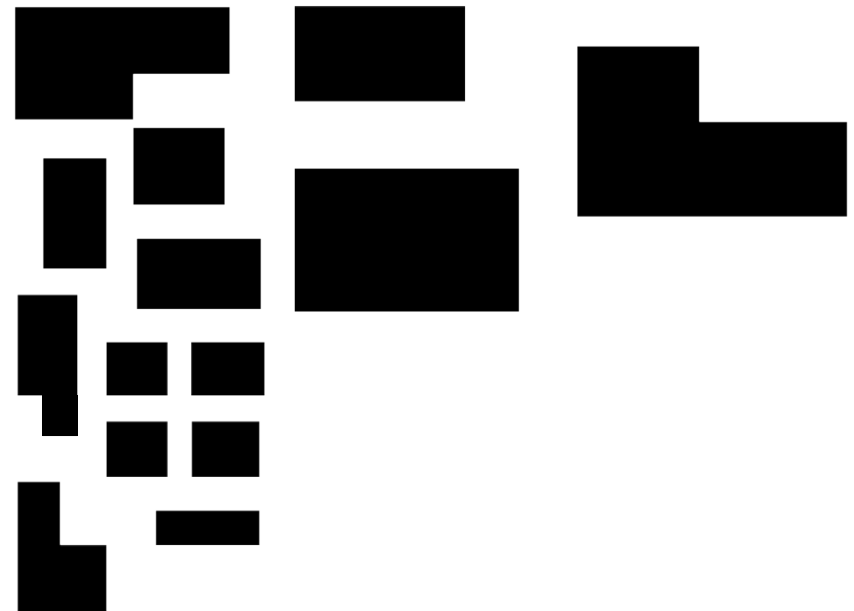
Design Process | 5.5.4 | Figure Ground Circulation Diagram

Figure Ground Bath Building Diagram

The use of circulation can also be seen in this figure ground of one section of the baths. You can see clearly how the program is sequentially broken down into smaller pieces which allows more possibilities for the end user to explore and thereby more opportunities for them to craft their own experience.

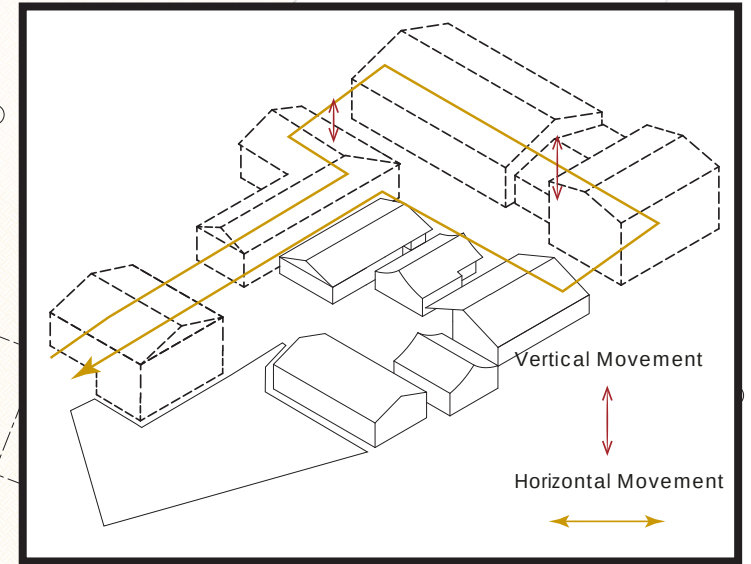


Program of gender seperated baths



Circulation provides more chances for exploration and unique experiences by breaking program into smaller spaces

Design Process | 5.5.5 | Plans

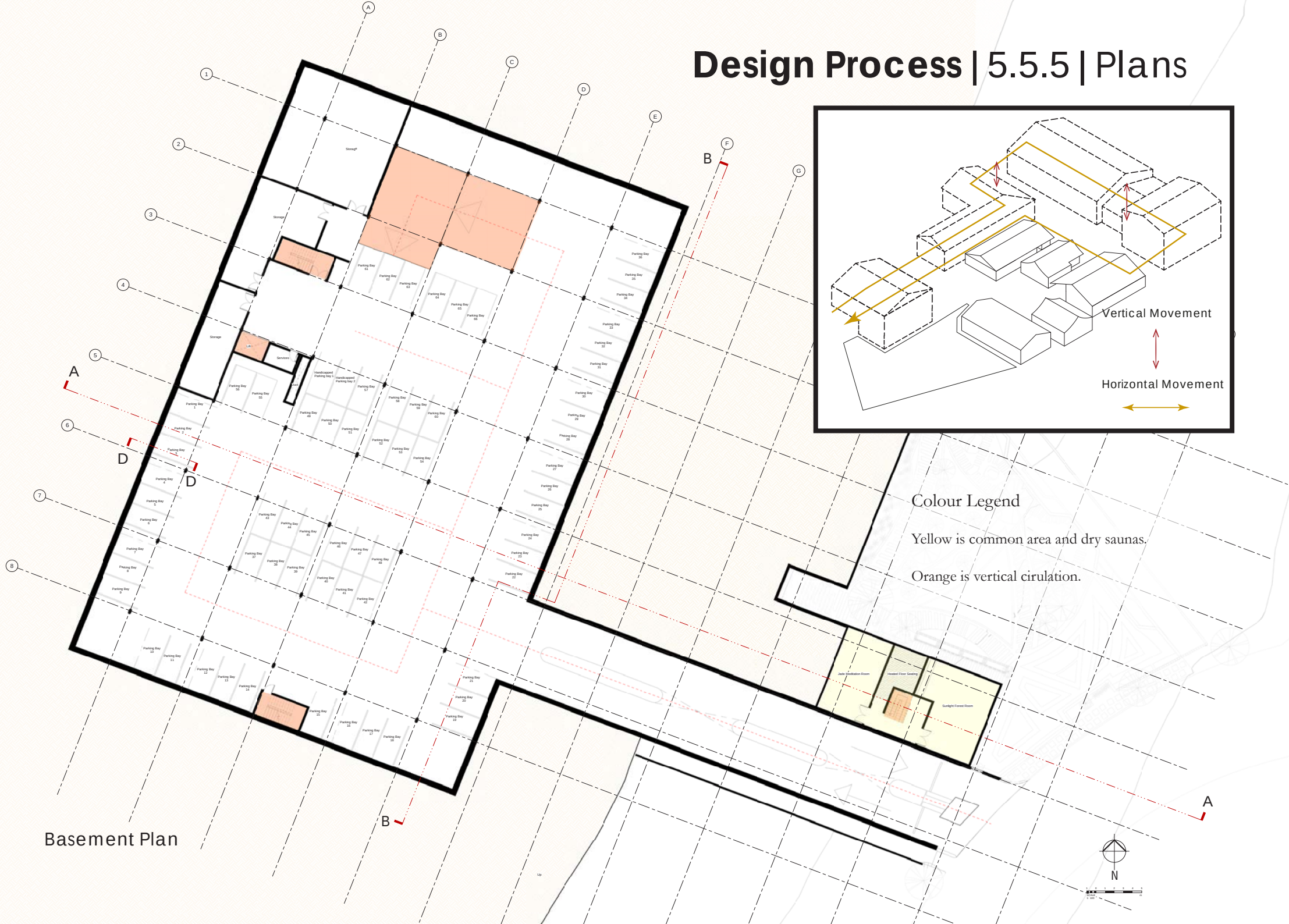


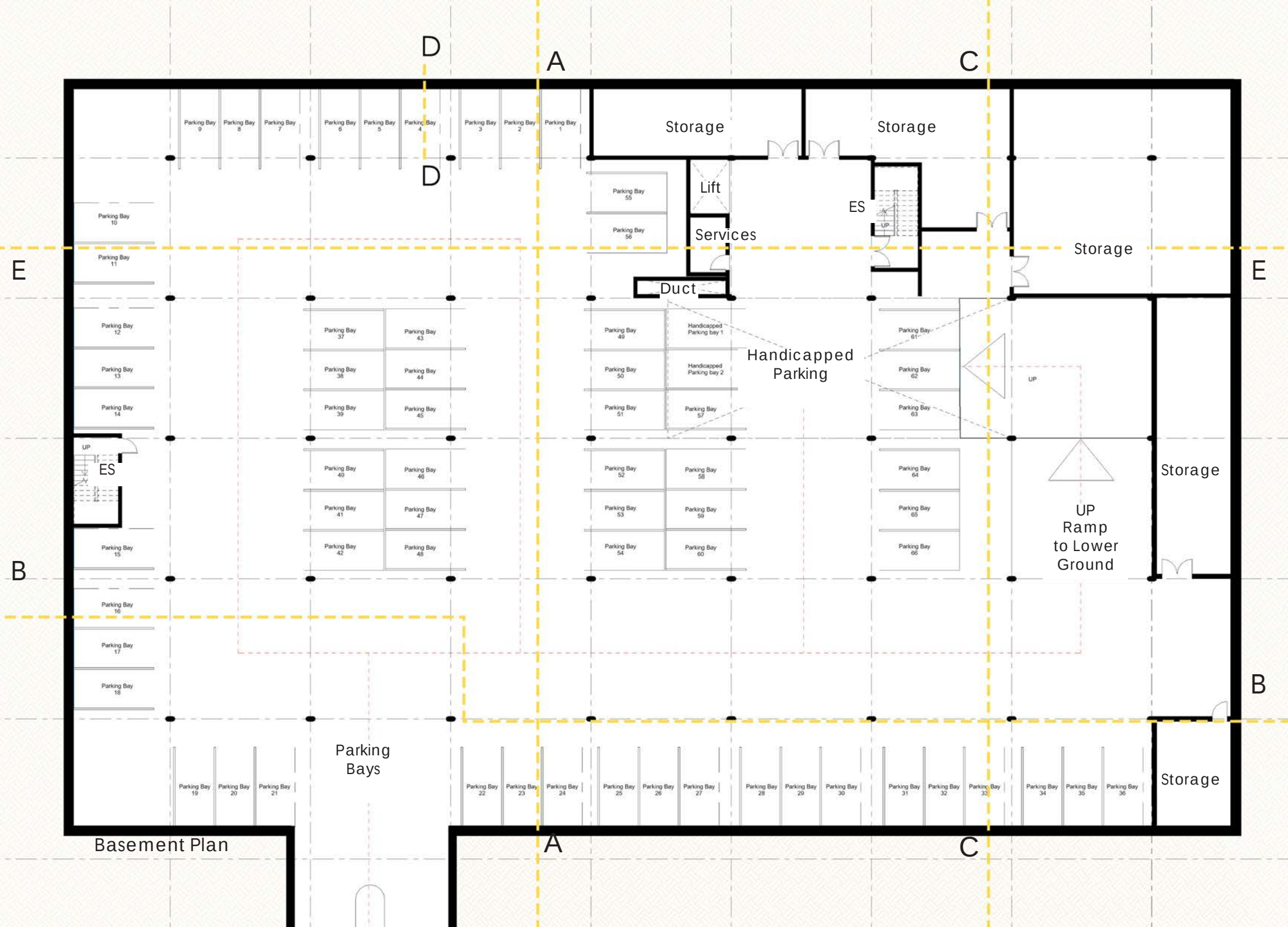
Colour Legend

Yellow is common area and dry saunas.

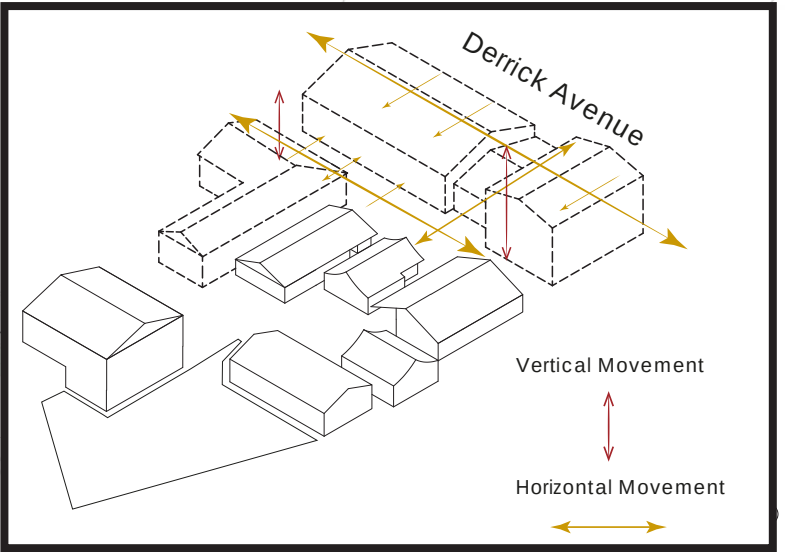
Orange is vertical circulation.

Basement Plan





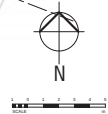
Design Process | 5.5.5 | Plans

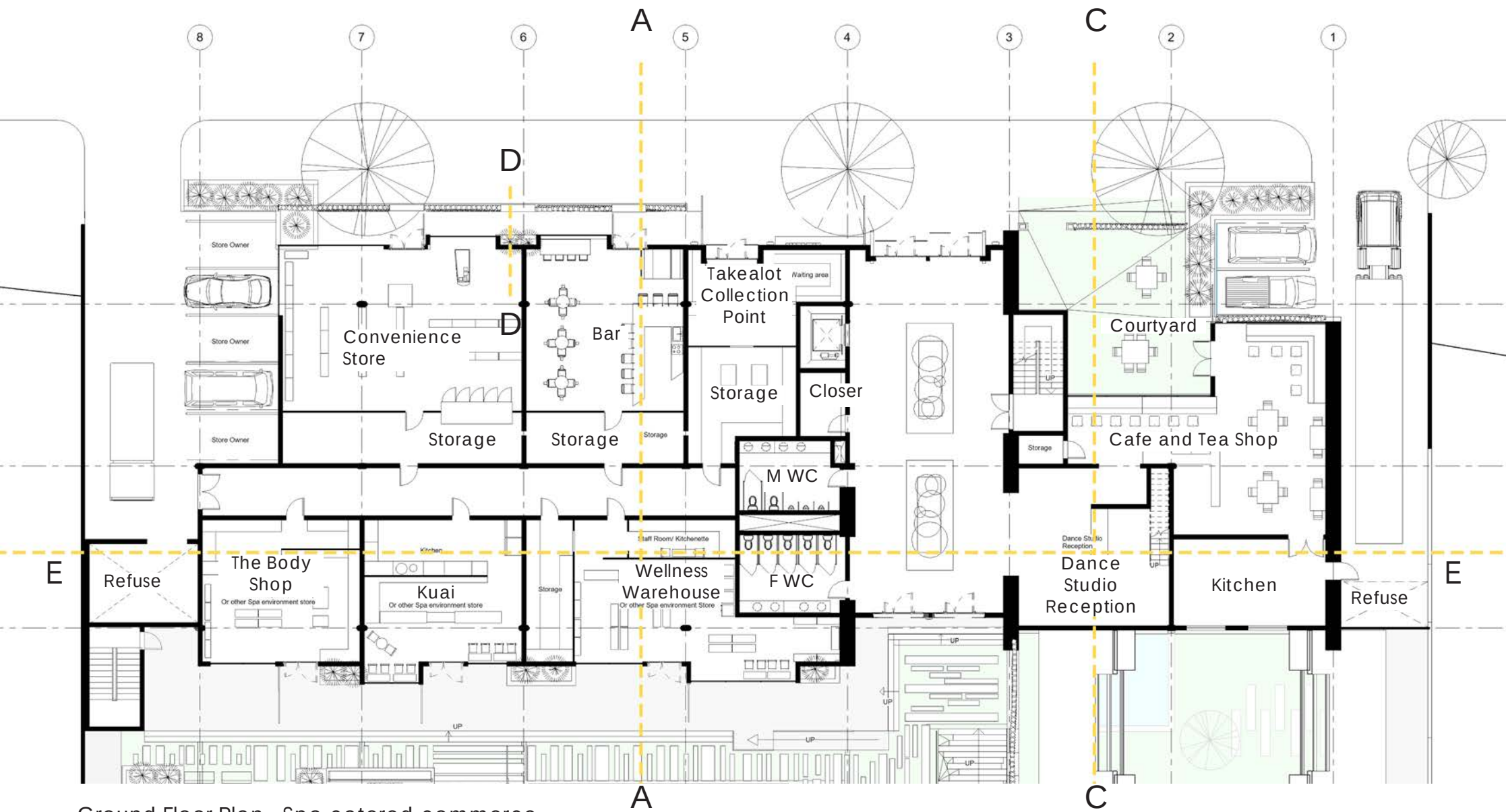


Colour Legend

Orange for vertical circulation.
Yellow shows the resting and napping area.
Green shows the green spaces.
Red shows the traditional street commerce.
Blue shows the commerce that caters towards the spa, bath and wellbeing facilities.

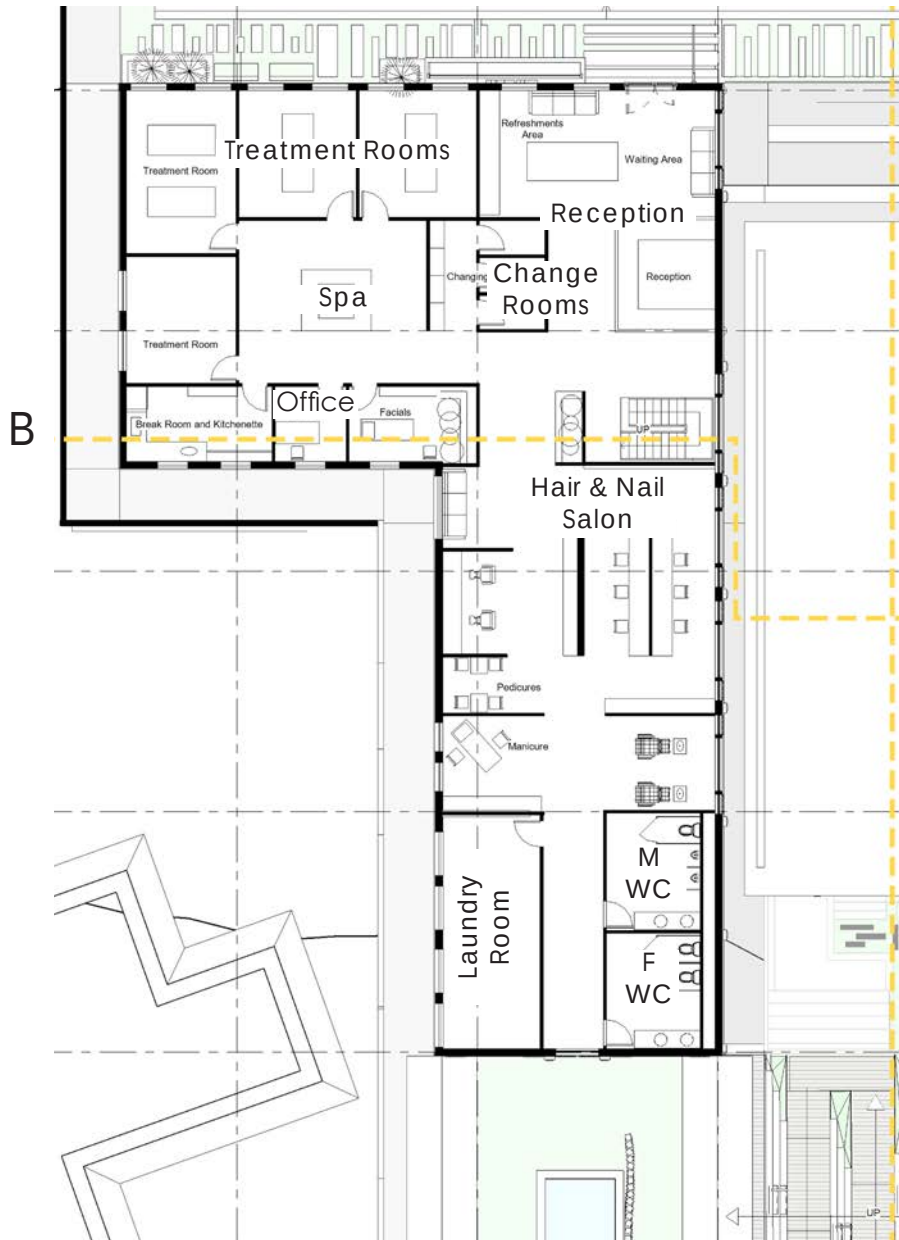
Ground Floor Plan





Ground Floor Plan - Spa catered commerce

A



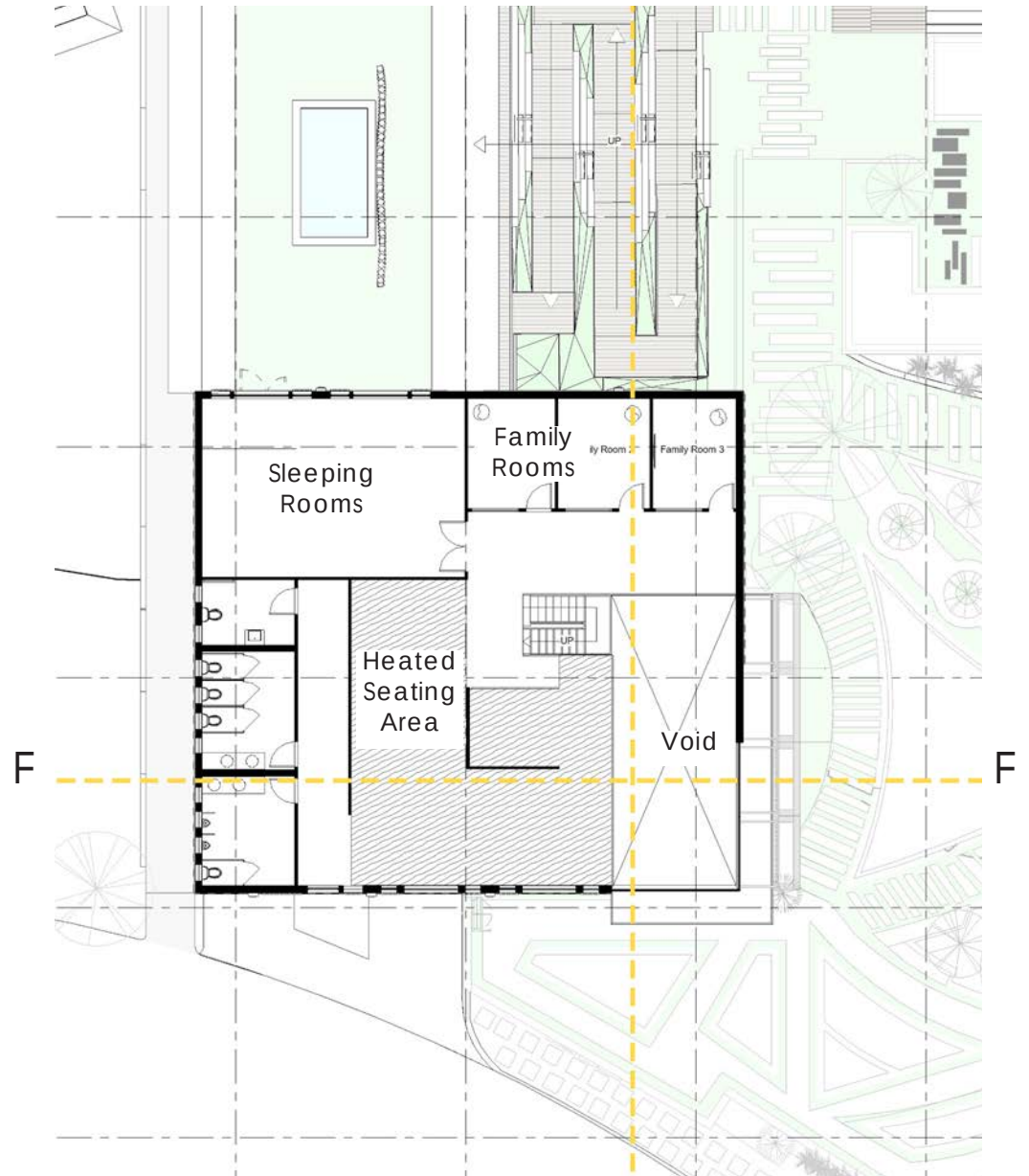
B

B

Ground Floor Plan
Spa & Hair & Nail Salon

A

A



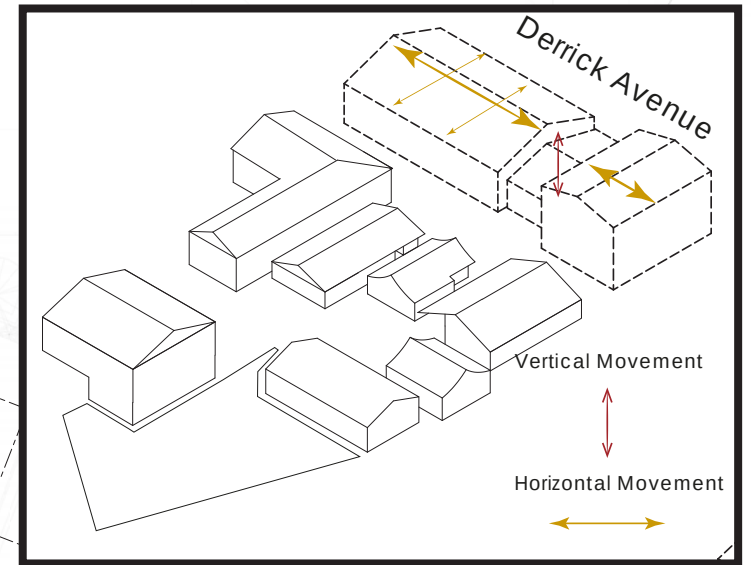
F

F

Ground Floor Plan
Community Area - Resting

A

Design Process | 5.5.5 | Plans

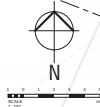


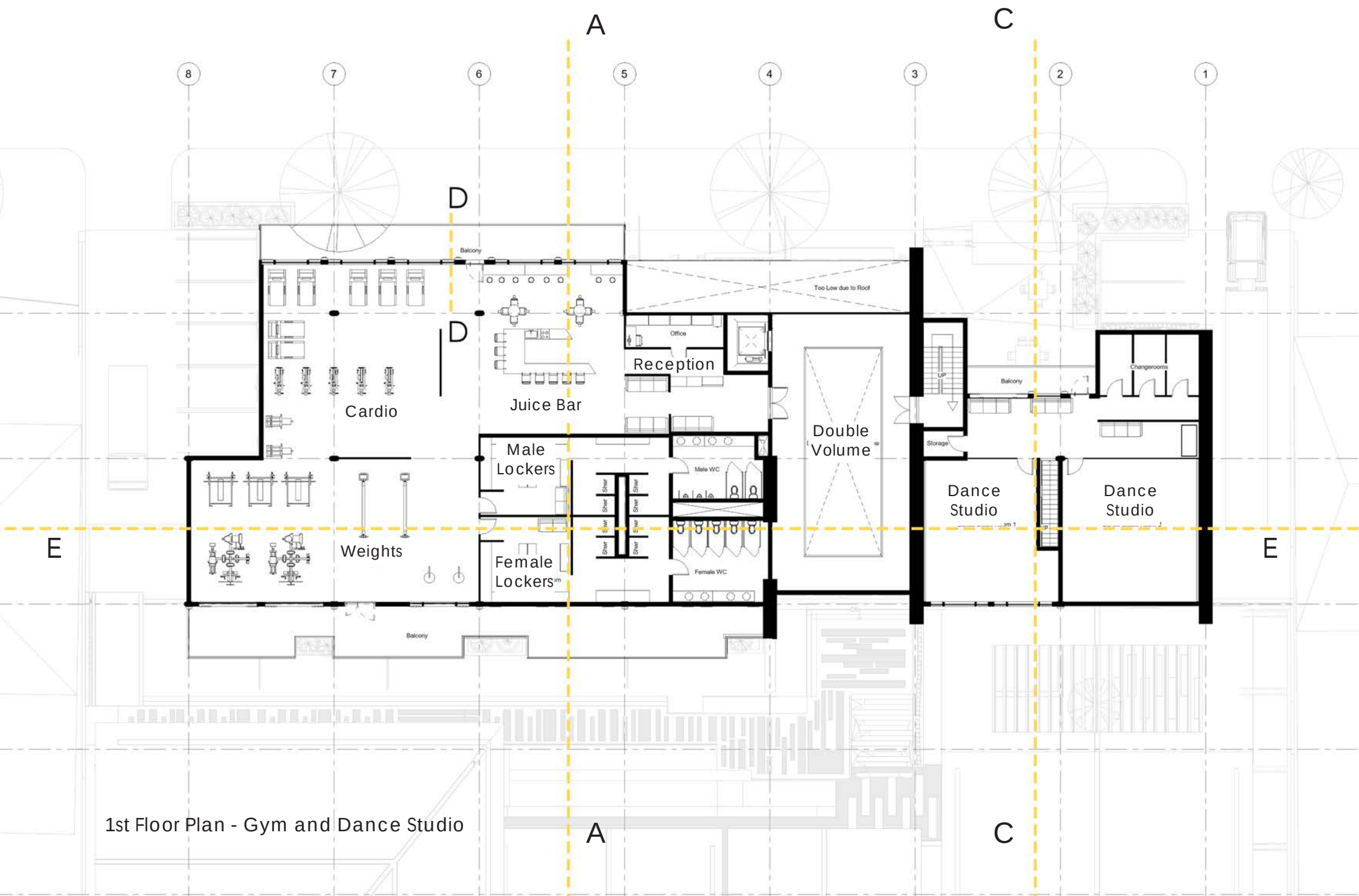
Colour Legend

Red is the dance studio.

Orange is the gym.

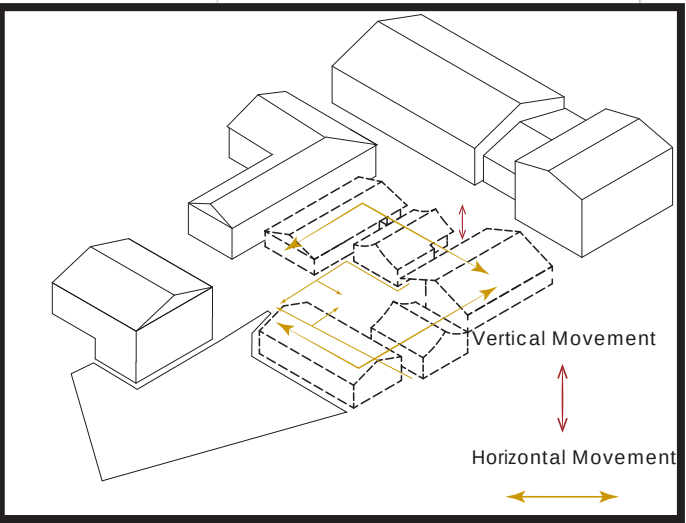
1st Floor Plan





1st Floor Plan - Gym and Dance Studio

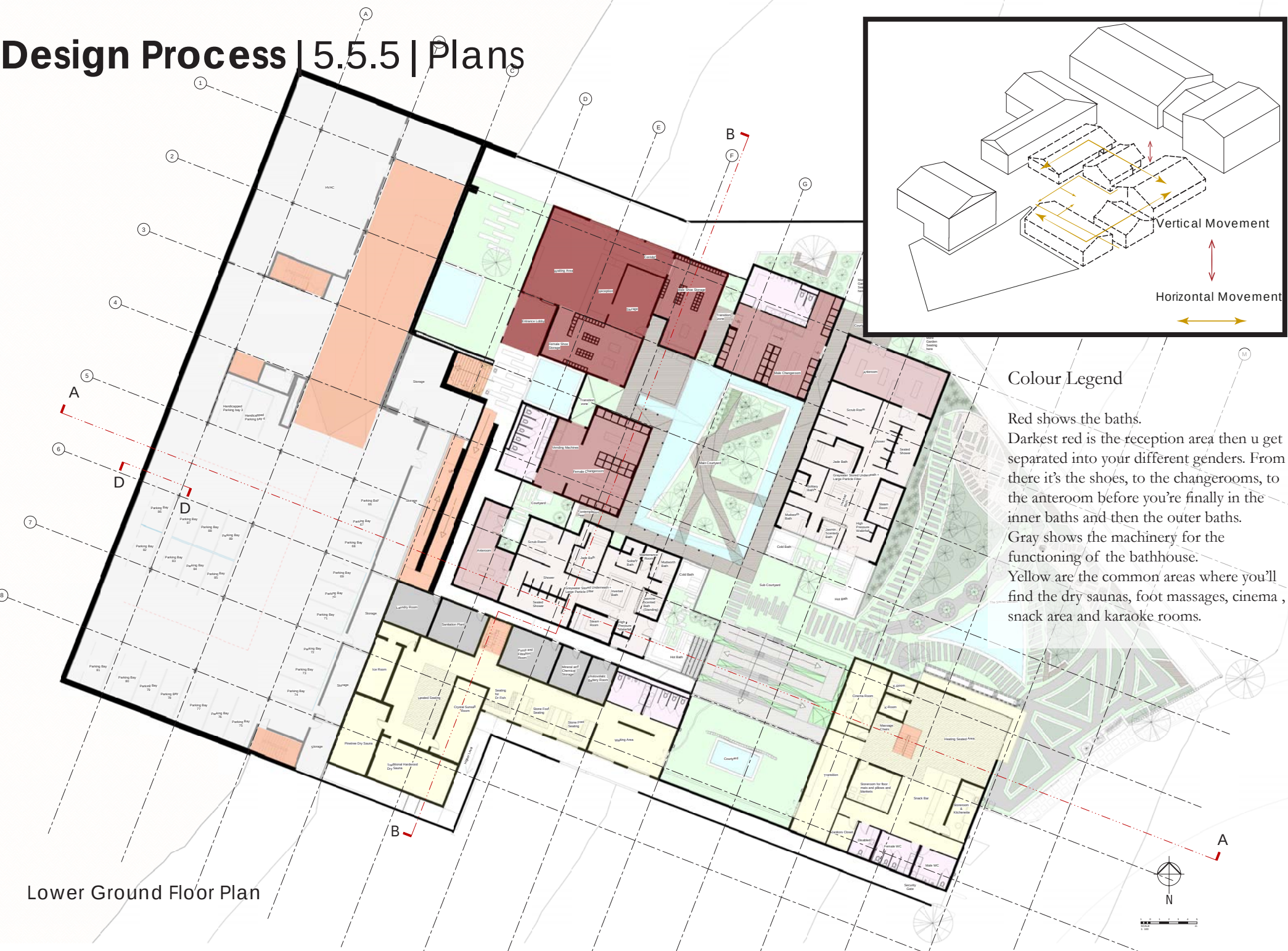
Design Process | 5.5.5 | Plans

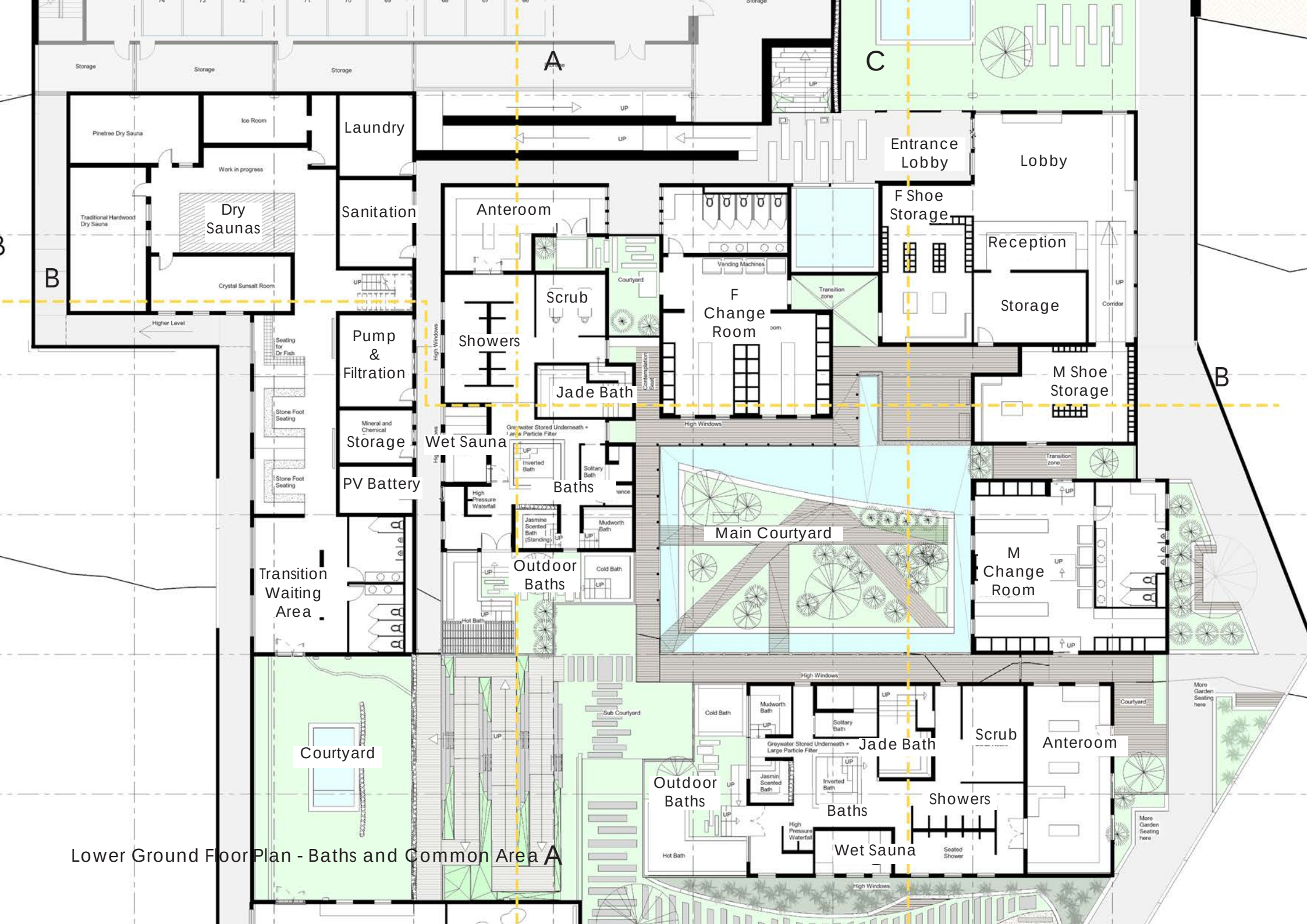


Colour Legend

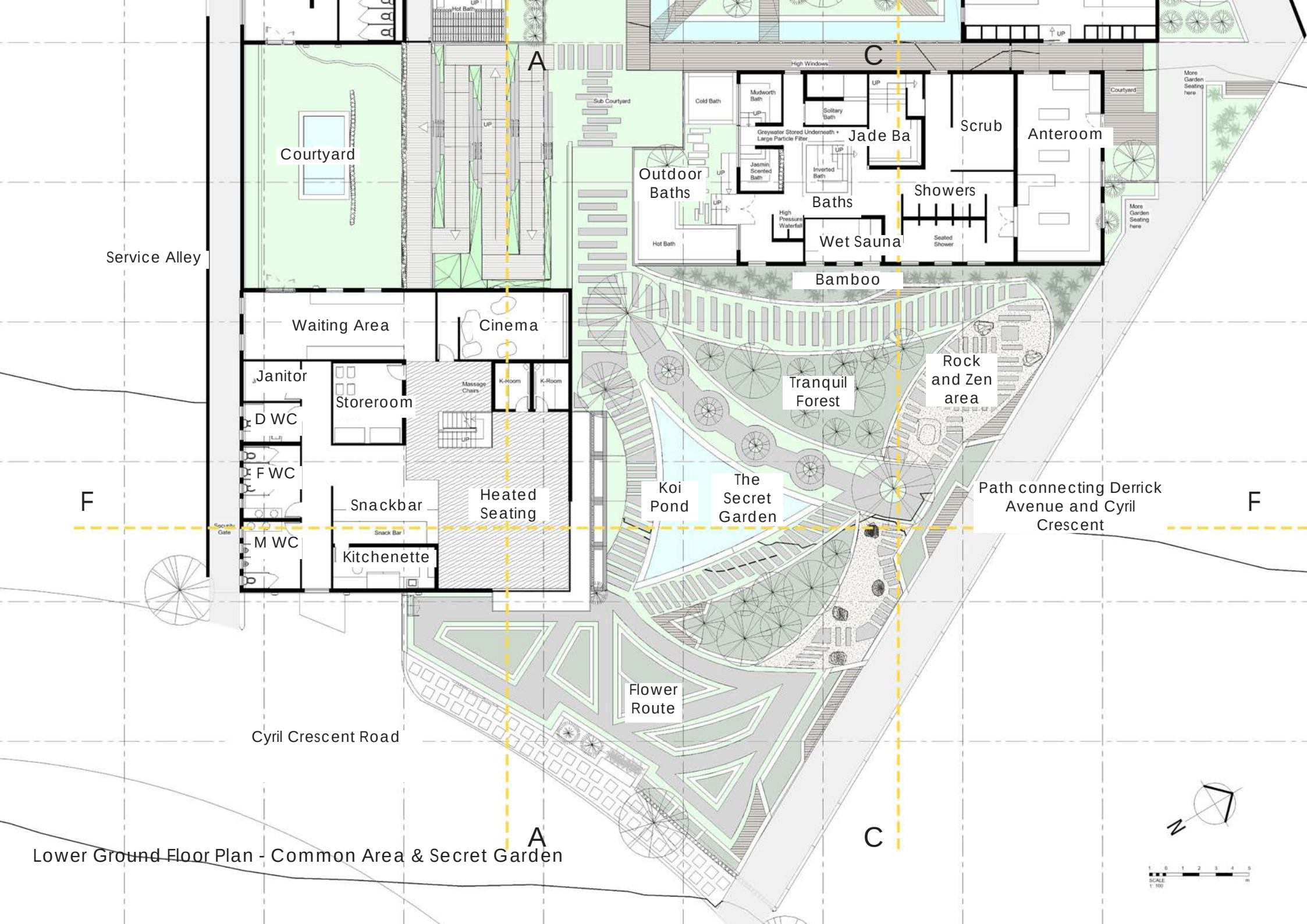
Red shows the baths. Darkest red is the reception area then u get separated into your different genders. From there it's the shoes, to the changerooms, to the anteroom before you're finally in the inner baths and then the outer baths. Gray shows the machinery for the functioning of the bathhouse. Yellow are the common areas where you'll find the dry saunas, foot massages, cinema , snack area and karaoke rooms.

Lower Ground Floor Plan





Lower Ground Floor Plan - Baths and Common Area A



Design Process | 5.5.6 | Sections

Section A-A



1	Derrick Avenue	17	Shower Area
2	Balcony overlooking Derrick Avenue	18	Sauna Room
3	Juice and Nutrition Bar	19	High Pressure Waterfall
4	Gym Reception	20	Greywater Recycling System Storage
5	Male Changeroom	21	Outdoor Baths
6	Female Changeroom	22	Stair and Ramp landscaping
7	Bar	23	Family Room 2
8	Storage	24	Resting and Heated Seating Area
9	Service Corridor	25	Cinema Room
10	Wellness Warehouse (Or other Spa related commerce)	26	Massage Chairs
11	Parking Lowerground Level	27	Heated Seating Area
12	Storage	28	Jade Meditation Room
13	Storage	29	Heated Seating Area
14	Parking Basement Level	30	Sunlight Forest Room
15	Service Alley	31	Secret Garden
16	Anteroom	32	Cyril Crescent Vehicular Entrance

Design Process | 5.5.6 | Sections

Section B-B

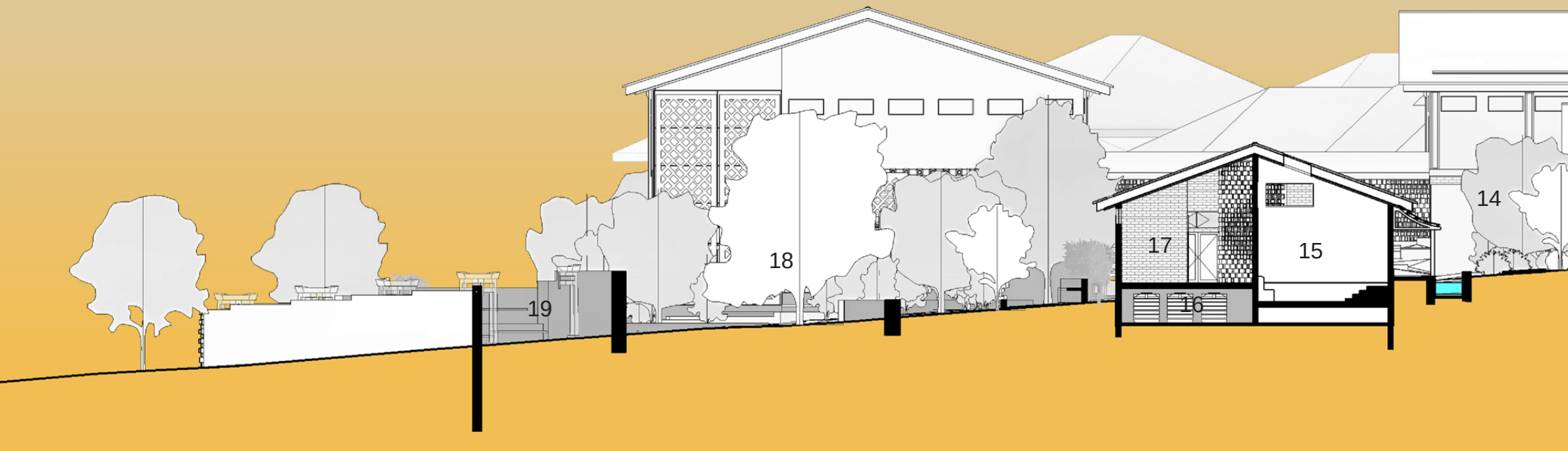




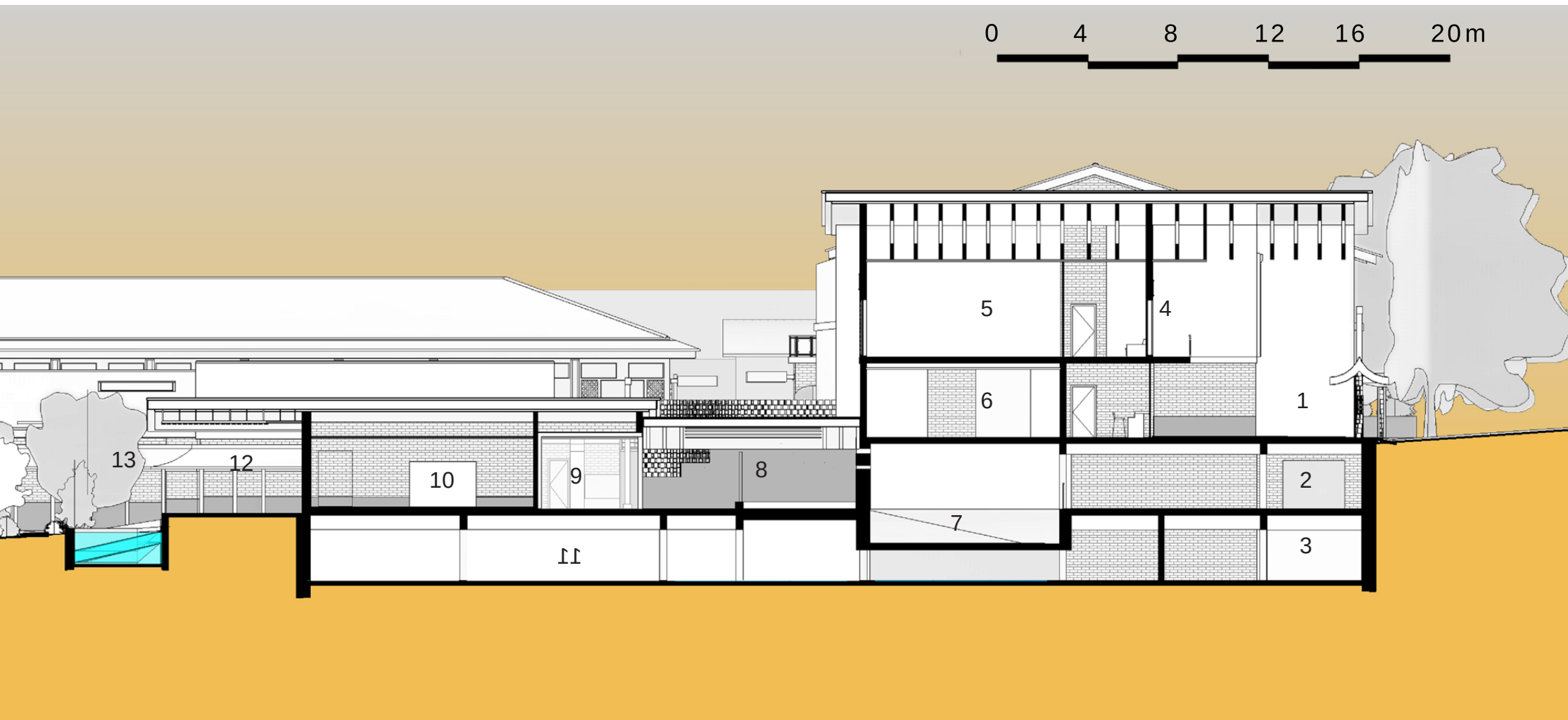
- 1 Kitchenette
- 2 Office
- 3 Facial Room
- 4 Passageway towards Salon
- 5 Spa Reception
- 6 Traditional Hardwood Dry Sauna
- 7 Crystal Sunsalt Room
- 8 Transition Zone
- 9 Emergency Staircase
- 10 Parking Basement
- 11 Greywater Recycling System Storage
- 12 Shower Zone
- 13 Jade Bath
- 14 Female Changing Room
- 15 Zoulang - Traditional Corridor
- 16 Timber Deck viewing area
- 17 Male Changing Room
- 18 Walking pathway from Cyril Crescent
- 19 Service Alley
- 20 Service Alley

Design Process | 5.5.6 | Sections

Section C-C



- | | |
|----|--|
| 11 | Parking Basement Area |
| 12 | Main Courtyard High Vantage Point |
| 13 | Courtyard Pond |
| 14 | Courtyard |
| 15 | Male Baths(Jade Bath) |
| 16 | Graywater storage and other water utilities |
| 17 | Bathhouse |
| 18 | Secret Garden |
| 19 | Pedestrian Walkway from Cyril Crescent to Derrick Avenue |



- | | |
|----|------------------------------------|
| 1 | Derrick Avenue |
| 2 | Storeroom (Lower Ground) |
| 3 | Storeroom (Basement) |
| 4 | Balcony overlooking Derrick Avenue |
| 5 | Dance Studio |
| 6 | Dance Studio Reception |
| 7 | Ramp to Lower Ground Parking |
| 8 | Outdoor Meditating Area |
| 9 | Entrance to bathhouse compound |
| 10 | Shoe Storage (Male) |

Design Process | 5.5.6 | Perspective Section

This section shows how the land drops from Derrick Avenue towards Cyril Crescent as well as the different levels within the building. Here you can see the suspended floor under which a greywater system that reuses the bathwater for watering the plants at the secret garden.

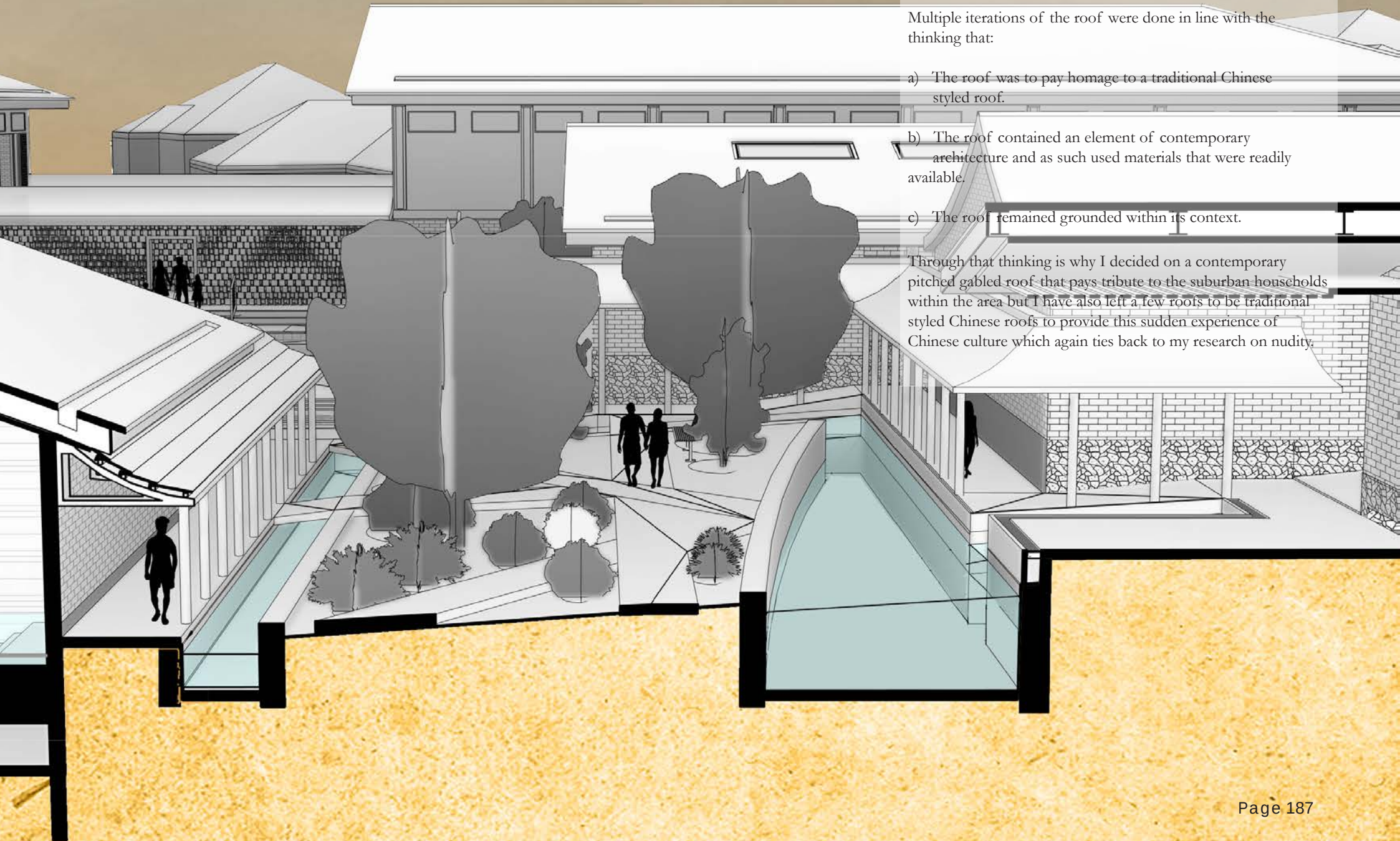


Choosing a roof

Multiple iterations of the roof were done in line with the thinking that:

- a) The roof was to pay homage to a traditional Chinese styled roof.
- b) The roof contained an element of contemporary architecture and as such used materials that were readily available.
- c) The roof remained grounded within its context.

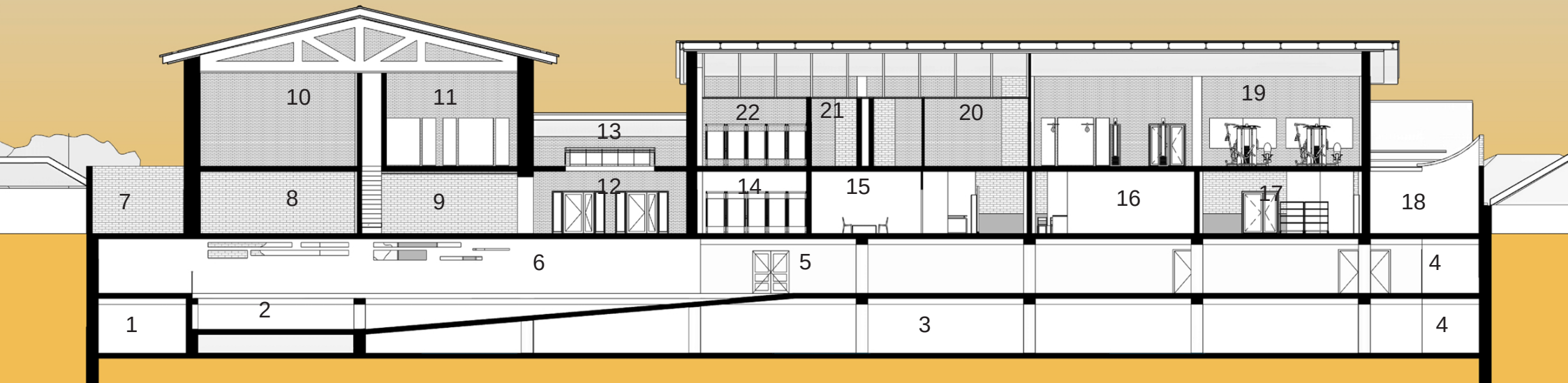
Through that thinking is why I decided on a contemporary pitched gabled roof that pays tribute to the suburban households within the area but I have also left a few roofs to be traditional styled Chinese roofs to provide this sudden experience of Chinese culture which again ties back to my research on nudity.



Design Process | 5.5.6 | Sections

0 4 8 12 16 20m

Section E-E



- | | | | |
|----|--|----|---|
| 1 | Storage | 12 | Main Passage towards baths(Double Volume) |
| 2 | Ramp between Basement and Lower Ground | 13 | Access to Gym and balcony |
| 3 | Parking Basement | 14 | Bathrooms |
| 4 | Emergency Staircase | 15 | To Let Shop(Take a lot collection point) |
| 5 | Storage and Parking Lower Ground | 16 | To Let Shop(Bar) |
| 6 | Semi-open ventilation | 17 | To Let Shop(Convenience Store) |
| 7 | Parking For Cafe and deliveries | 18 | Deliveries and staff parking |
| 8 | Cafe | 19 | Gym Equipment |
| 9 | Dance Studio Reception | 20 | Changeroom |
| 10 | Dance Studio A | 21 | Showers |
| 11 | Dance Studio B | 22 | WC |

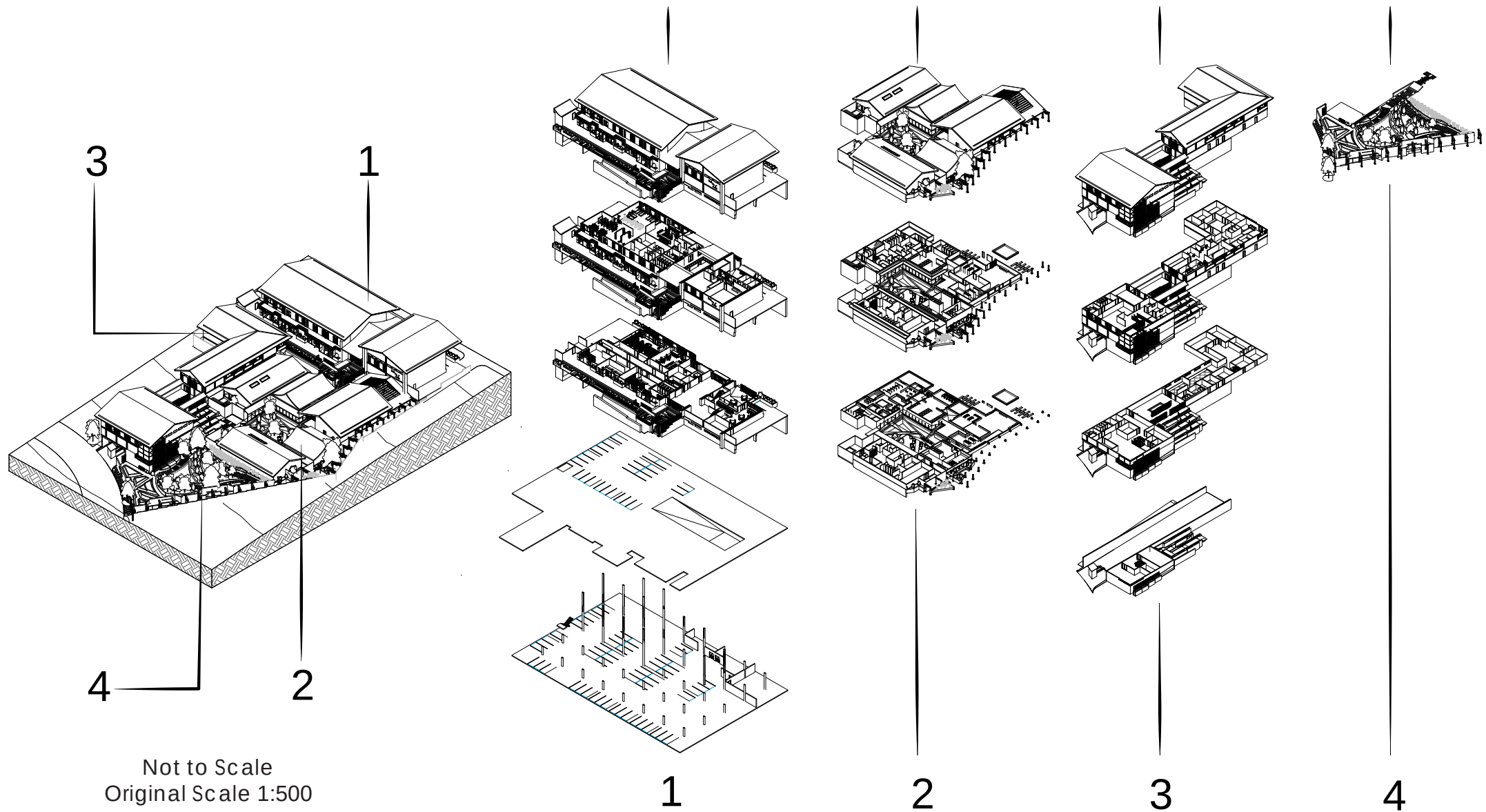
Design Process | 5.5.6 | Sections

Section F-F



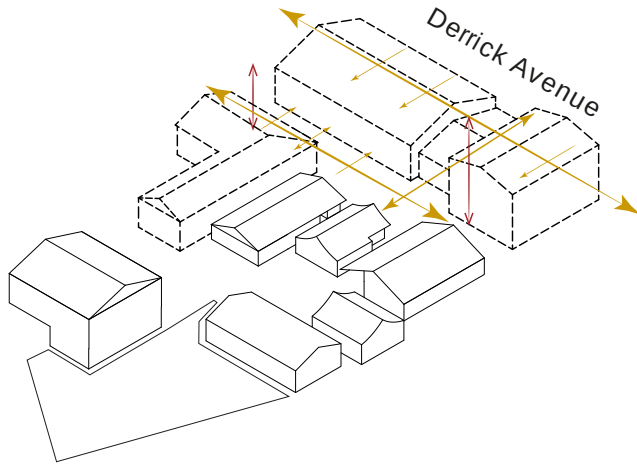
- | | | | |
|---|--|----|---|
| 1 | Service Alley | 8 | Group Sleeping Area |
| 2 | Entrance to Parking Basement(Cyril Crescent) | 9 | Common Area Chilling Area Upper Floor |
| 3 | Dry Saunas | 10 | Private Family Rooms |
| 4 | WC | 11 | Balcony Glass Facade with Planter & Trellis |
| 5 | Common Area Storage and Snacks | 12 | Secret Garden(Pond) |
| 6 | Common Area Chilling Area | 13 | Secret Garden(Stone Garden Area) |
| 7 | Karaoke Rooms | 14 | Pedestrian Pathway from Cyril Crescent to Derrick |

Design Process | 5.5.7 | Axonometric Experiences



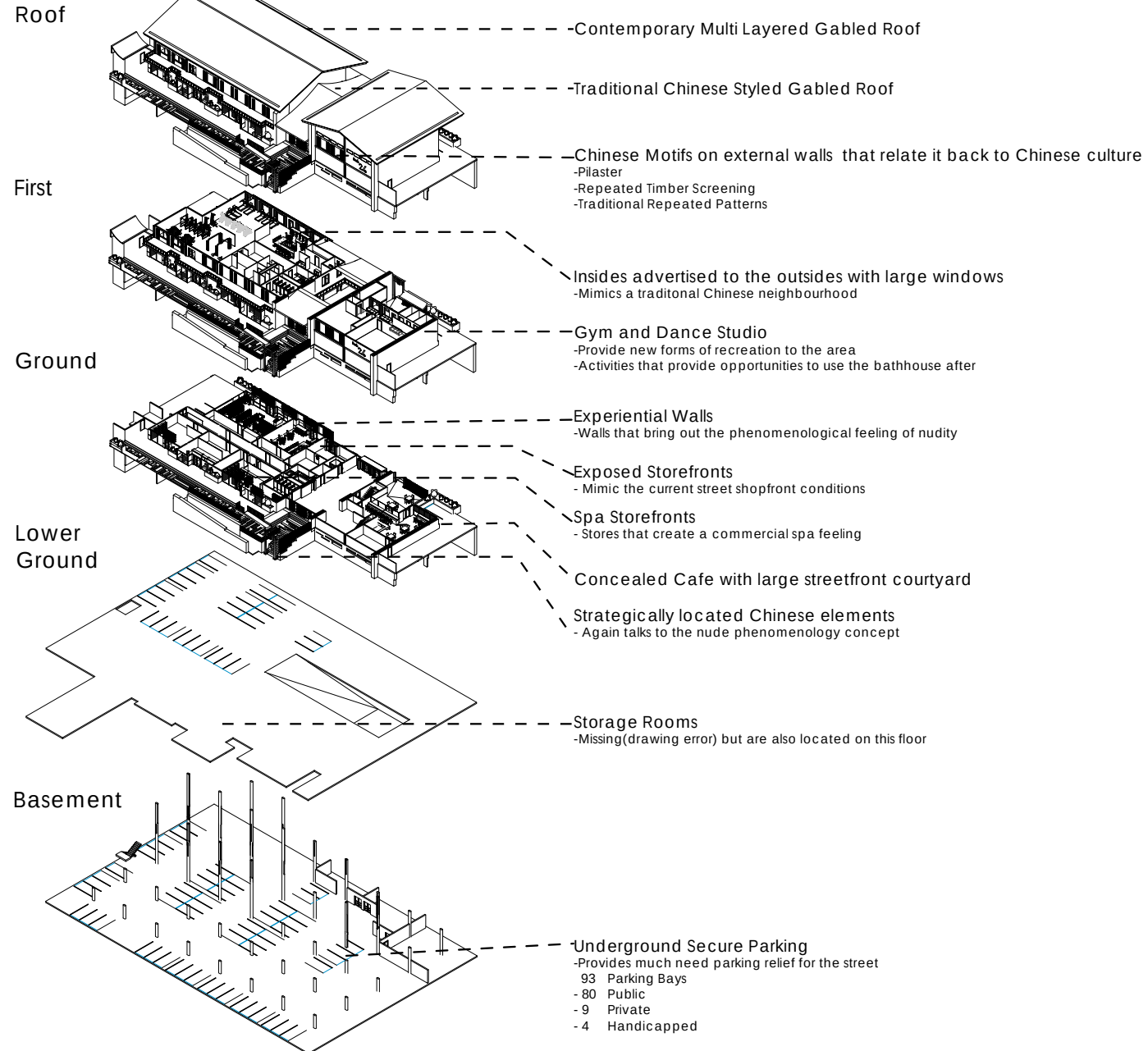
Design Process | 5.5.7 | Axonometric Experiences

Experience 1 Street Commerce



The ground floor is how the pedestrian side of the compound is accessed. In addition to being the main access from Derrick Avenue there is a relationship between the Spa facilities and the possible commercial shops that could be included. Most of the building is dedicated to the commercial aspect of Derrick Avenue with shops lining both the front and the back of the building. You also have a smaller courtyard which leads to the coffee shop. This deals with the idea of this sudden change in environment which forces the user to slow down and appreciate what is around.

This is also where the dance studio and gym are located. The gym has accessible balconies on both sides each offering differing experiences in terms of views. One side you have this very busy active edge where you see the activities of the street and the other a complete juxtaposition where you overlook the park and the rest of the eastland providing a sense of peacefulness. The line of reasoning for the addition of these two programs is because I wanted to provide an opportunity for these users to experience something after sweating and overexerting their bodies. Naturally the progression would be some place to relax and get clean. Thus the baths would be a great followup.

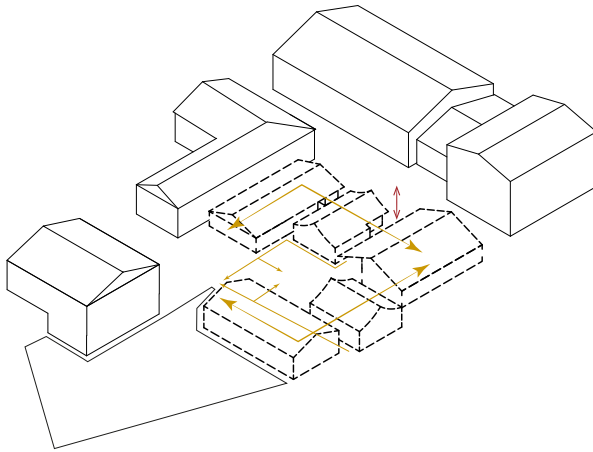


Café with recessed courtyard



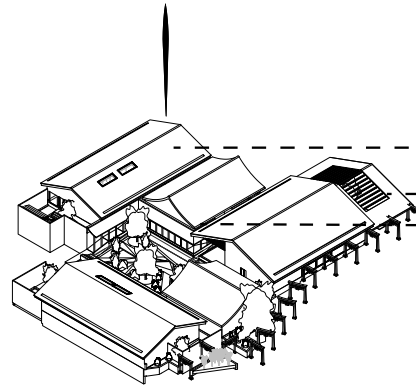
Design Process | 5.5.7 | Axonometric Experiences

Experience 2 Baths



Heading down from ground is where you'll find the actual bathhouse section of the compound. One enters the reception and is greeted by the employees, from there you are sorted by your gender and head to the relevant paths. The first step after being separated is to remove ones shoes, from there you head off to remove your clothes and finally the last step is to go to the baths. After one has finished bathing they return to the anteroom to dry off and put on their various creams and other ointments before finally getting dressed in gowns that were provided to them back at the changerooms. From there people are able to walk outside along the main courtyard before the path finally reunites with the opposite gender. Both male and female facilities are mirrored as best as possible as a gesture of equality between both sexes.

Roof

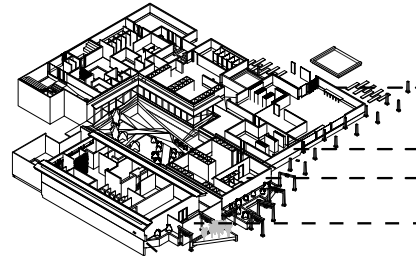


- Contemporary Multi Layered Gabled Roof
- Skylights to provide bath experience
- Solar Panels should also be installed on these surfaces

- Roof with void
- Provides experiential space below

- Traditional Chinese Styled Gabled Roof
- Relates to nude phenomenology experience

Ground



- Entrance and Main Reception
- Waiting area
- Paying for access
- Splitting of genders

- Shoe Lockers

- Changerooms
- Transition from fully clothed to naked

- Transition zones
- Break spaces between each room resetting thoughts

- Anterooms
- Fresh Towels, Hair Dryers, Mirrors, Creams, etc.

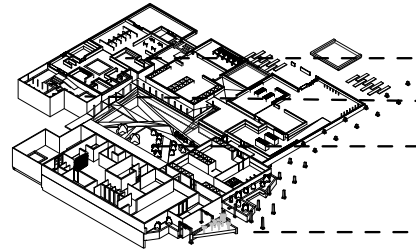
- Inner Baths
- Shower to scrub off dirt first
- Different bathing areas that provide different experiences
- For example: The Solitude bath - A solo bathing experience in the dark where you are alone to gather and contemplate your thoughts in luke warm waters.

- Outer Baths
- Provide a different experience to the inner baths.

- Main Courtyard
- Landscaped land that provides strategic angles of viewing experience surrounded by Koi pond

- Connection from Cyril Crescent
- Back landscaped path that directly connects pedestrians from Cyril Crescent to the bathhouse and subsequently Derrick Avenue

Lower
Ground





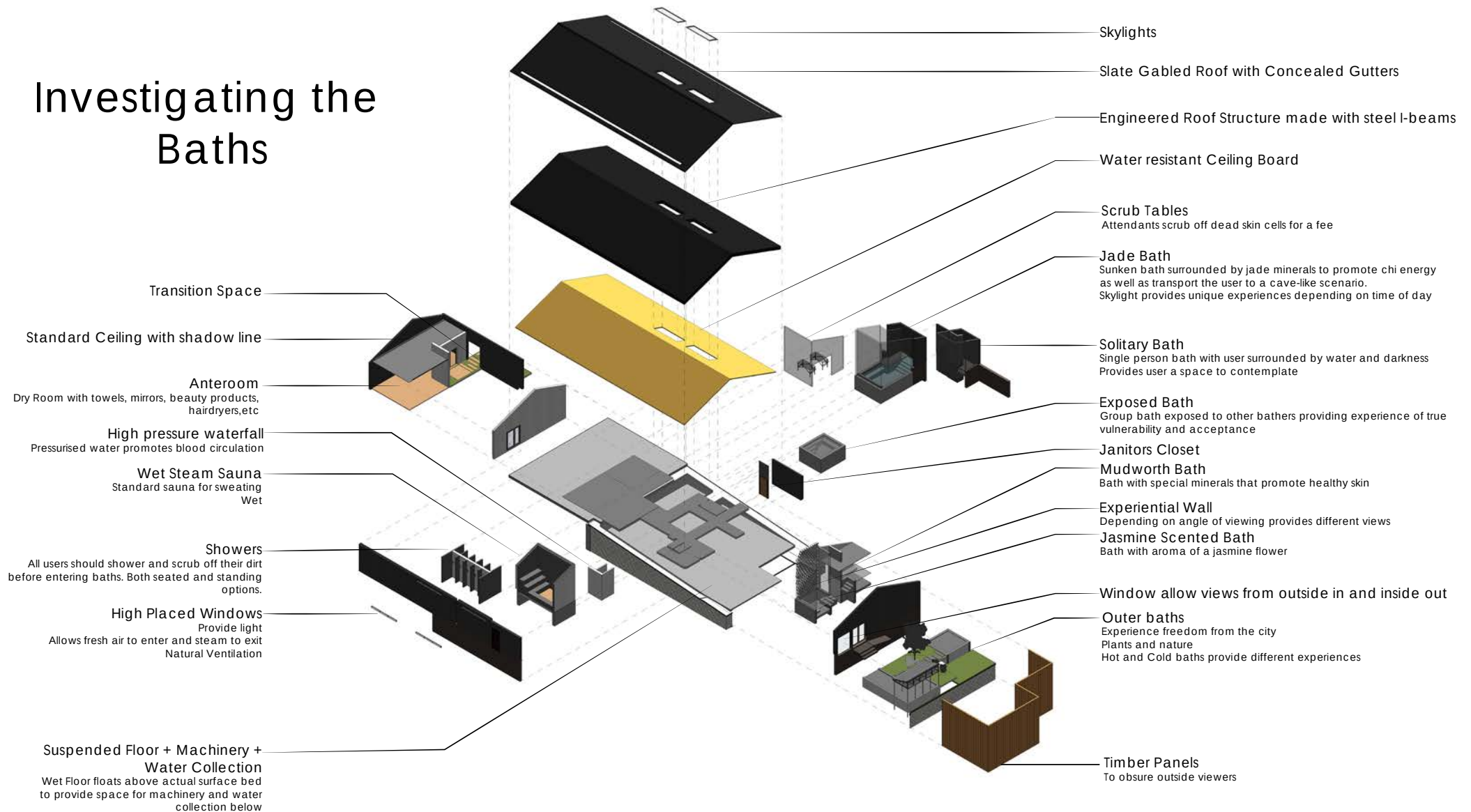
Entrance to bath building



Overlooking the central courtyard

Design Process | 5.5.7 | Axo Investigating the Baths

Investigating the Baths

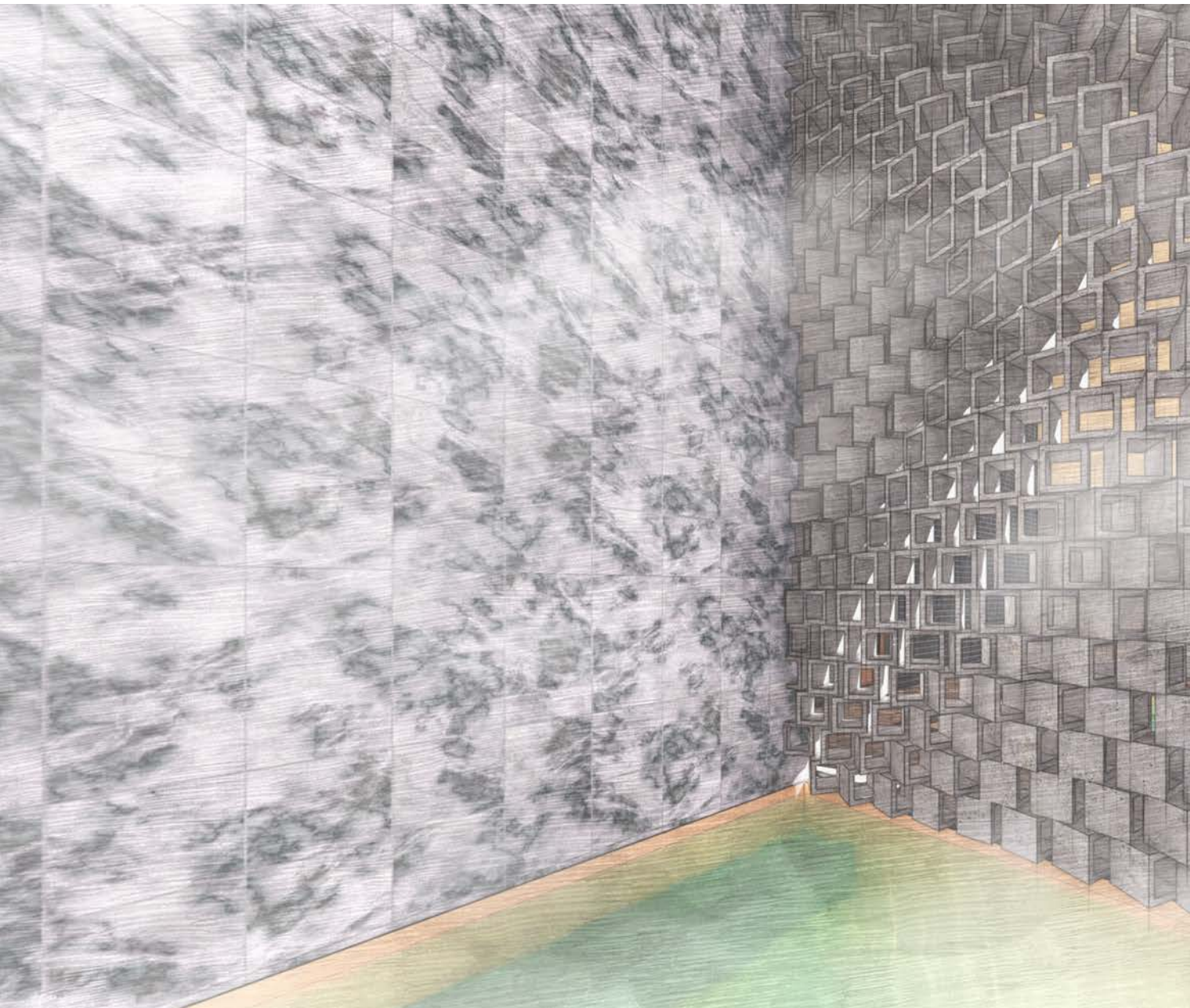




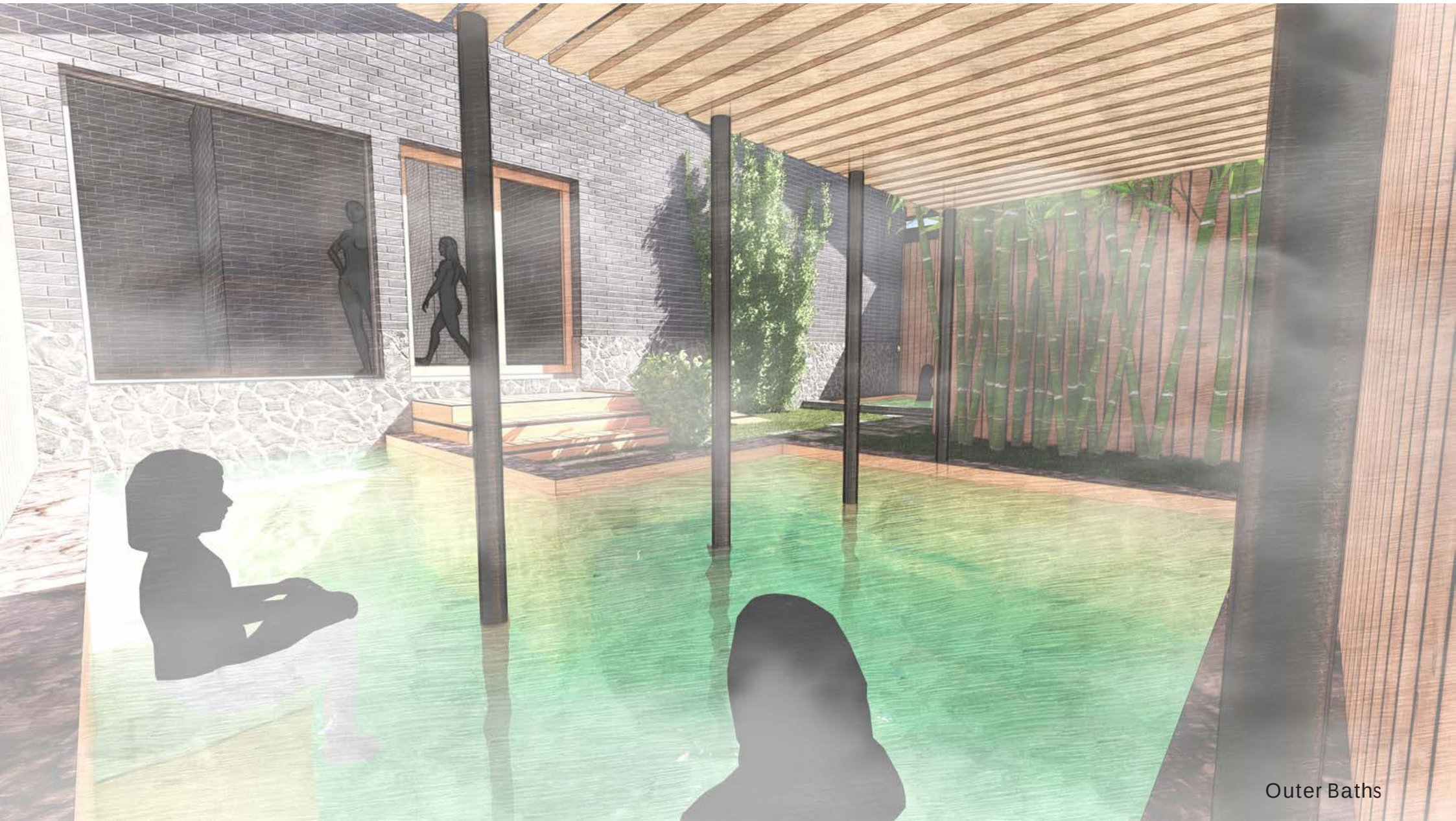
Light enhancing experiences



Wet Sauna



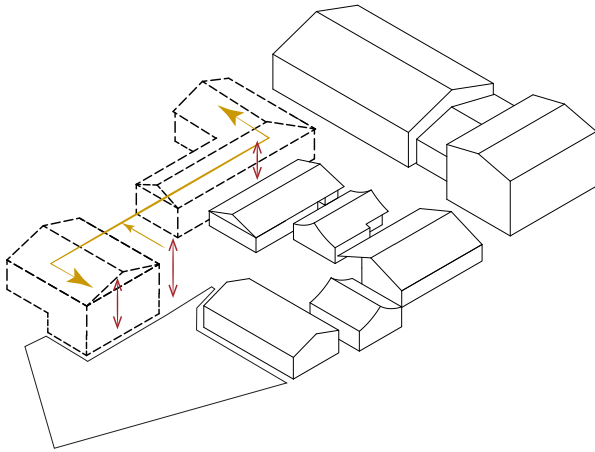
Jasmine Aroma Bath



Outer Baths

Design Process | 5.5.7 | Axonometric Experiences

Experience 3 Group Activities



From there people head off to the final buildings where group activities happen. If you head to the right building you are able to access the spa facilities on the upper floors or meditate in the dry sauna rooms below or perhaps relaxing your feet on natural stones whilst catching up on the news.

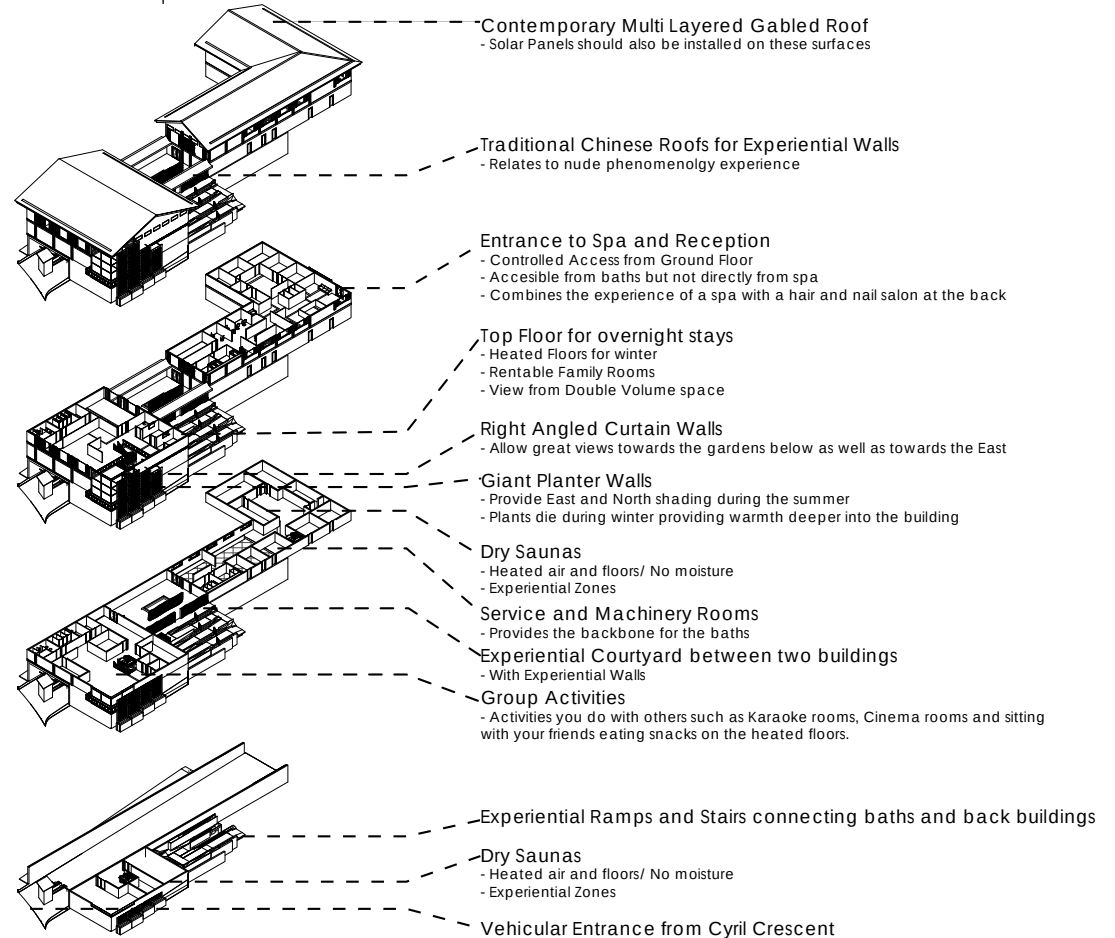
If you head off to the left building though you'll be able to access the inbuilt cinema room, karaoke rooms, snack area, and the seated floor area(which can be heated during the winter) making a great space for socialising with your friends and family whilst enjoying the views of the secret garden below. If your family has decided to stay the night you are able to book one of the family rooms but if you're solo you are also able to simply sleep it out in the general sleeping area. Right at the bottom are two more dry sauna rooms that provide yet again chances for one to mingle or meditate.

Roof

Ground

Lower
Ground

Basement



3



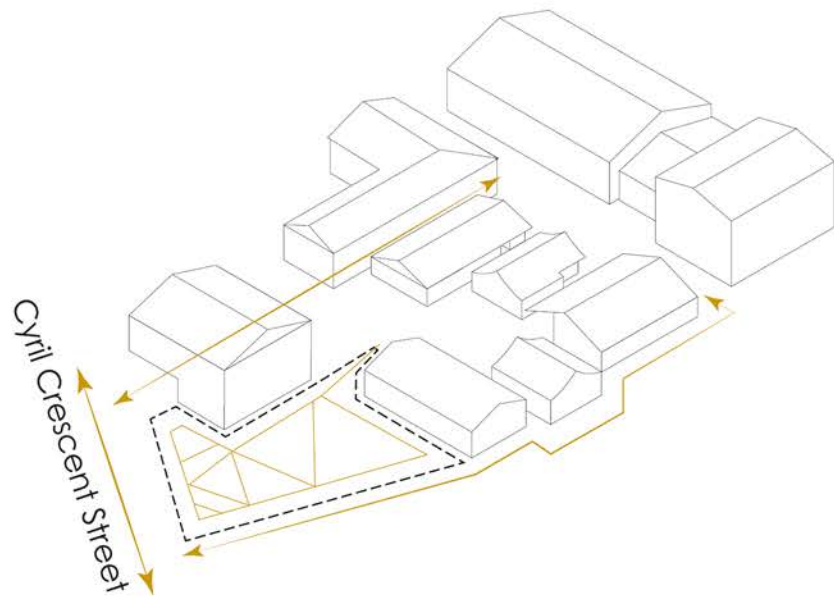
Entrance to Group Activity Area



Socialising and Resting

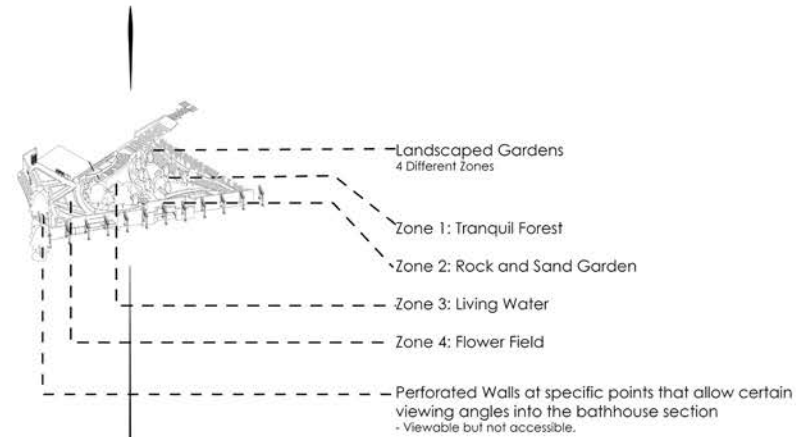
Design Process | 5.5.7 | Axonometric Experiences

Experience 4 Secret Garden



The final area of interest is the secret garden. This landscaped garden is also separated into multiple mini zones that provide different experiences as well. You could traverse the shaded forest or admire the tranquil waters of the pond, perhaps you'd want to feel the sand beneath your feet at the rock gardens or smell and take pictures of the different indigenous flora. The paths also were crafted from visual connections at certain points again providing the opportunity for great curated shots of the gardens and other areas.

Lower
Ground



4



Design Process | 5.5.7 |

Landscaping principles for the courtyards and Secret Garden

Indigenous plants

- Require Less Water
- Improve Biodiversity

Visual Connections

- Outside to inside and vice versa

Different Biomes/Experiences

Indigeonous Plants to be planted



Buddleja saligna
Photo: SA Green Fingers



Celtis africana
Photo: Ross Nevette



Dietes grandiflora
Photo: Marie Viljoen



Chondropetalum tectorum
Photo: SM Growers



Acacia xanthophloea
Photo: UBC Botanical Garden



Kiggelaria africana
Photo: E. van Jaarsveld



Erythrina humeana
Photo: Witbos Nursery



Aloe Arborescens
Photo: Geoff Nichols



Hen and chicken



Agapanthus



Garlic lily



Plumbago



Star jasmine



Thatching reed



Aloe



Aptenia



Aloe



Vygie



Succulent

Succulent Plants to be planted

Indigeonous Trees to be planted



Tree Wisteria



Caral tree



Prunice



Bottle brush



Secret Garden - Entrance



Secret Garden - Flower Field



Secret Garden - Rock Garden



Secret Garden - Chinese New Year

Design Process | 5.5.8 | Applications from tradition

Traditions retained or lost

Whilst the project has evolved over the time, the fundamental values involved within have managed to stay the same. For example if we look at how the design of the Chinese courtyard was thought of. One would notice that in the design from an initial viewpoint, it is very different from what a traditional Chinese courtyard is. The shape is not the same, the layout is different and the functionality seems very different from being a pure residential archetype. However if we take a deeper look into how the design managed to interpret and use the typology, we can start to notice the clues that have left themselves within the process that take its cues from the original.

For instance the important buildings within the Chinese courtyard are normally positioned along the North-South axis. This related to amongst other things, hierarchy and the position of the sun.

How the emperor or the head of the house would look down upon his servants or those beneath his status. This is one of the reasons why the orientation of the building is the way it is. We live in the Southern Hemisphere whilst this typology comes from the Northern Hemisphere, therefore an adjustment needs to be made there. If we start looking at it from this viewpoint we can see that whilst I do have many varying compounds with differing uses, at the heart of the design the most important spaces are along that North-South axis, namely the bathhouse section and the communal area.

We can also look at how in the Chinese courtyard the building in the back was reserved for the unmarried daughter and traditionally was the only building that was allowed to be more than one story. This can be represented through the common areas. The building

itself is the highest point within the design and overlooks the rest of the compound.

Or if we look at how the entrance to the bathhouse was designed, as a large entrance corridor with two sets of doors, which again alludes to the past where the second set of doors acted as a spirit barrier or spirit wall that protected the rest of the compound.

It is through thorough examination of every element that the viewer is able to see the nuances of the design.

The design may have started with the idea of the Chinese courtyard but has now evolved and adapted into something that is much different. At it's heart it retains the core values that were set out in its initial precedent.



Aerial view of the bathhouse in its entirety

6

CHAPTER 6 Technical Studies



CHAPTER 6 | Technical Details

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6.2.1 Feature Wall Detail (Experiential Wall)

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6.2.2 Perimeter Section D-D

231

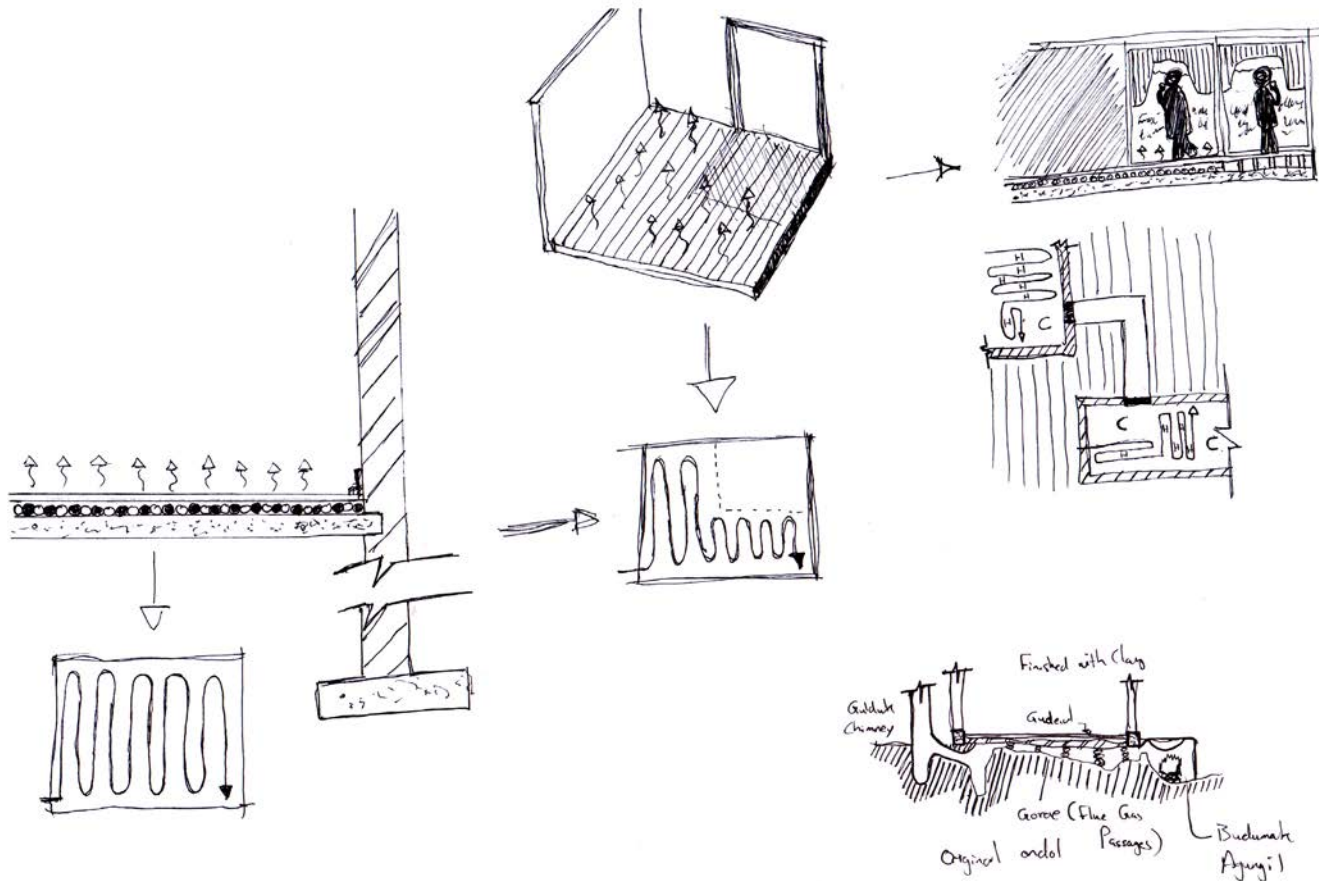
6.2.3 Adaptive Traditional Chinese Roof

235

6.2.4 Bathhouse Section

236

Technical Details | 6.1.1 | Radiated Water Heating System



Radiated Water Heating System

This is a system I discovered whilst living in South Korea. Every house and occupied building has what they call the 'ondol'. Basically a radiated underfloor heating system that uses water to increase the temperature of the room.

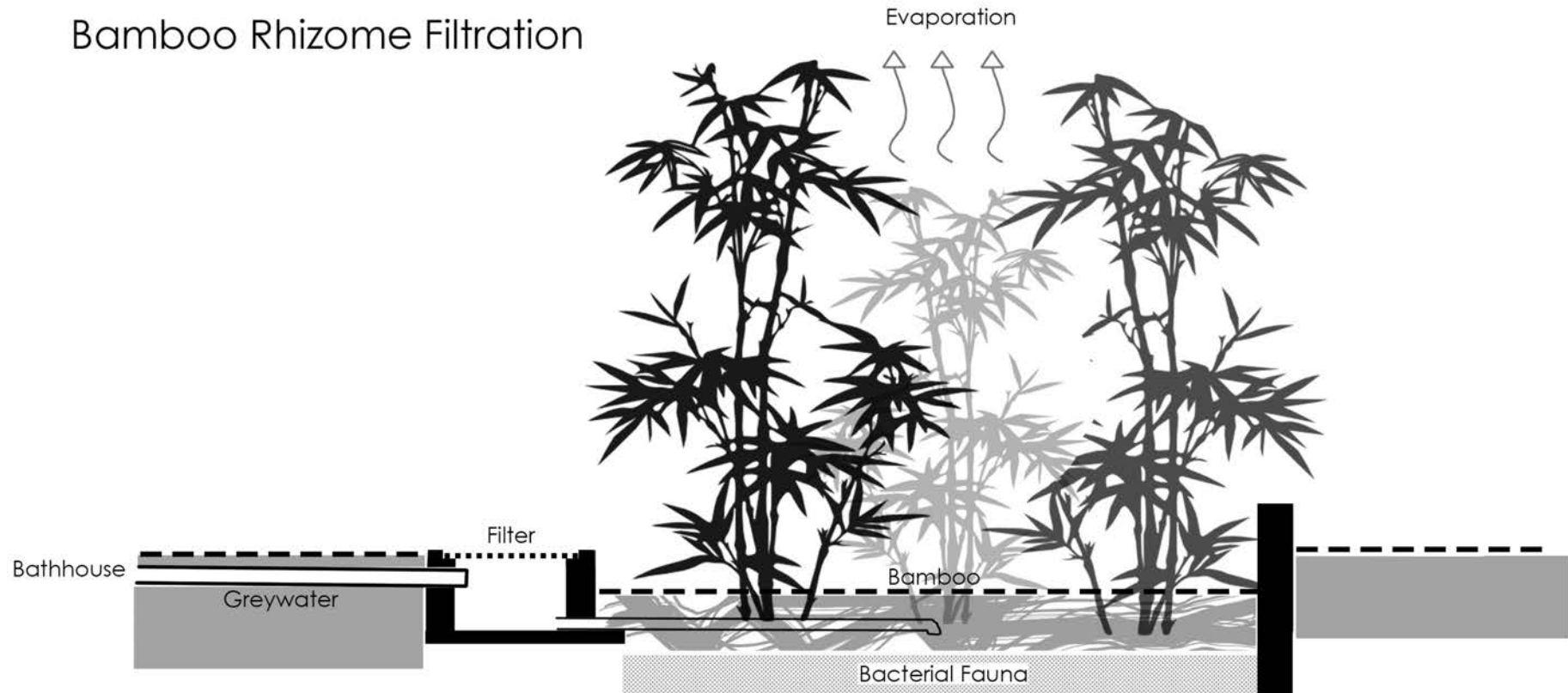
I want to bring that system here so that it can be used in conjunction with the baths. The idea is to heat the water and whilst it is still in the pipes, heat certain areas of the common areas whilst it is waiting to be transferred to the hot baths further down.

Using this system I will be able to create another form of experience where you have heated floors vs cooled floors and how that can affect a person's psyche.

For now it hasn't been detailed but hopefully I can show this later.

Technical Details | 6.1.2 | Bamboo Rhizome Filtration

Bamboo Rhizome Filtration

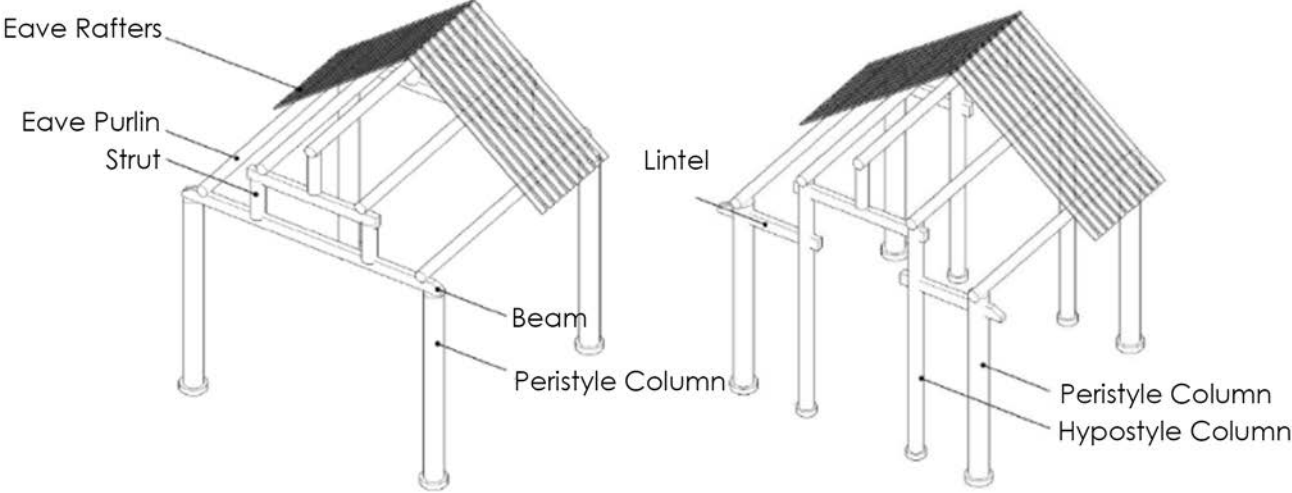


Bamboo Rhizome Filtration

This is one of the ways in which the gray water can be used efficiently. The graywater is taken from the bathhouse and stored away for the night and to allow the water to cool down. That water then gets filtered to remove the larger debris such as hair and other see able objects. From there it travels to the bamboo gardens where it gets absorbed by the bamboo.

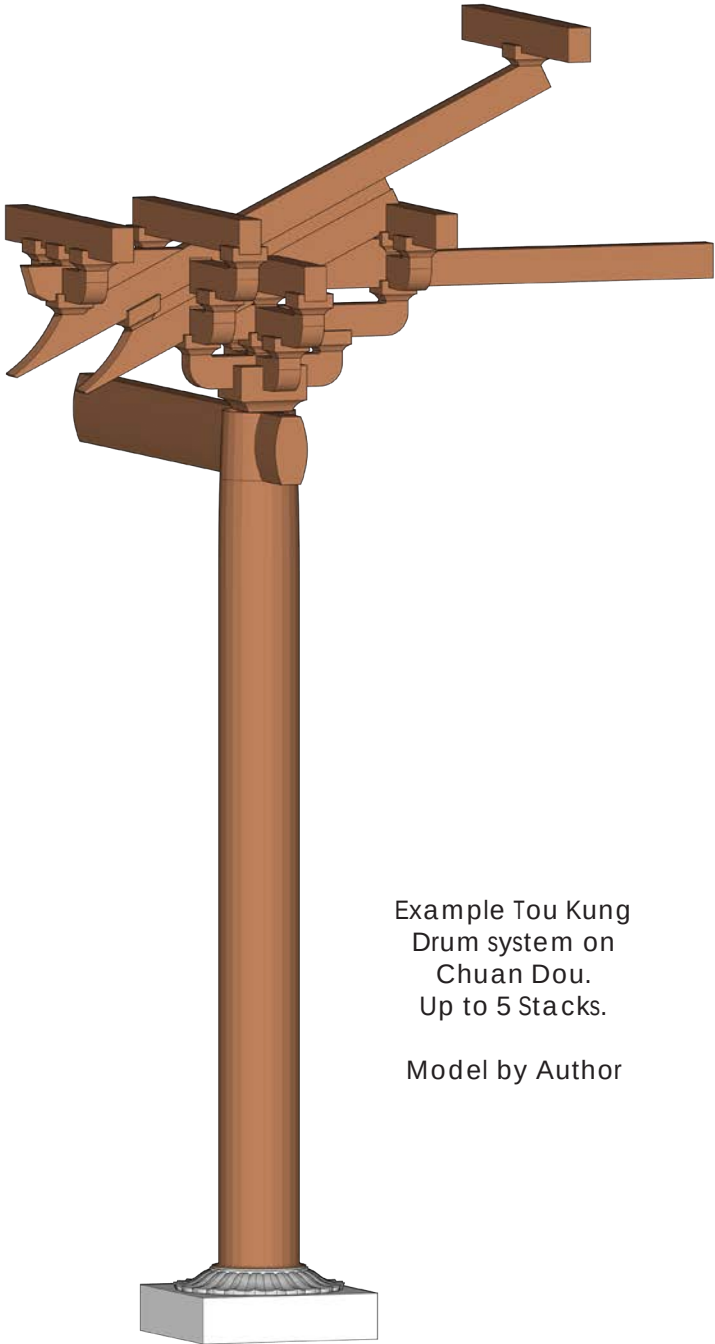
Bamboo contain certain Rhizomes that create bacterial fauna. This bacterial fauna allows the water to filter the remaining harsh substances within gray water so that the plants can grow healthily

Technical Details | 6.1.3 | The Tou Kung Roof



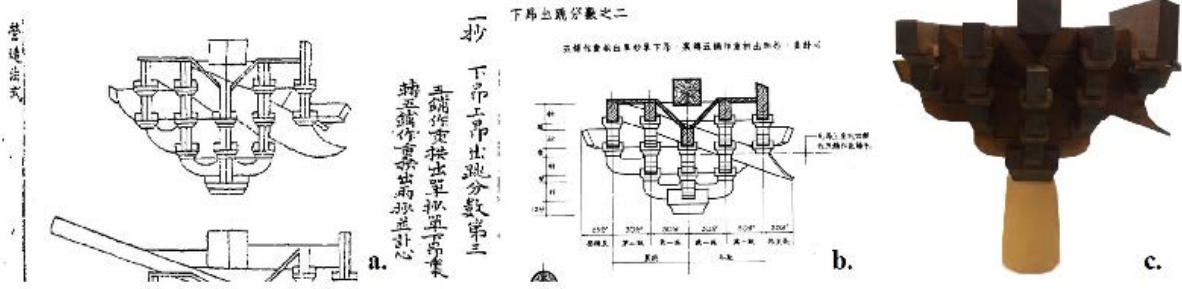
Tai-Liang(to the left) and Chuan-dou(to the right)

(Wang *et al.*, 2017).



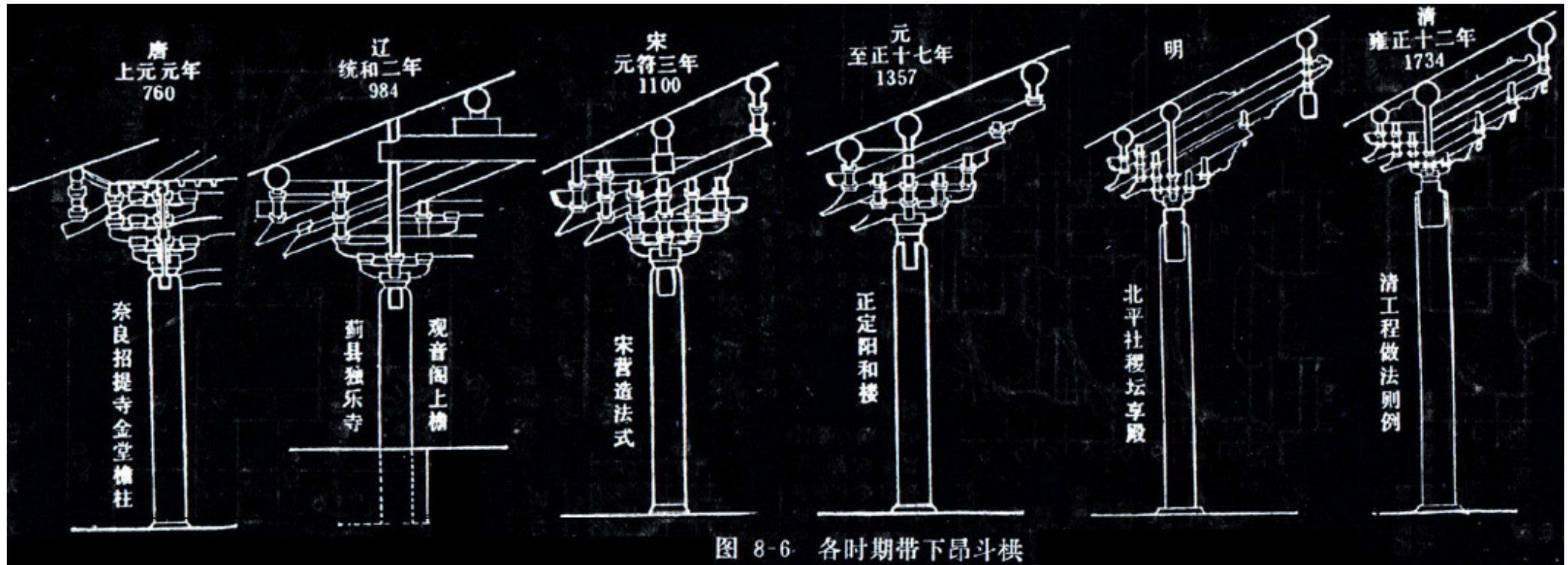
Example Tou Kung Drum system on Chuan Dou. Up to 5 Stacks.

Model by Author



(Chen *et al.*, 2018).

Technical Details | 6.1.3 | The Tou Kung Roof

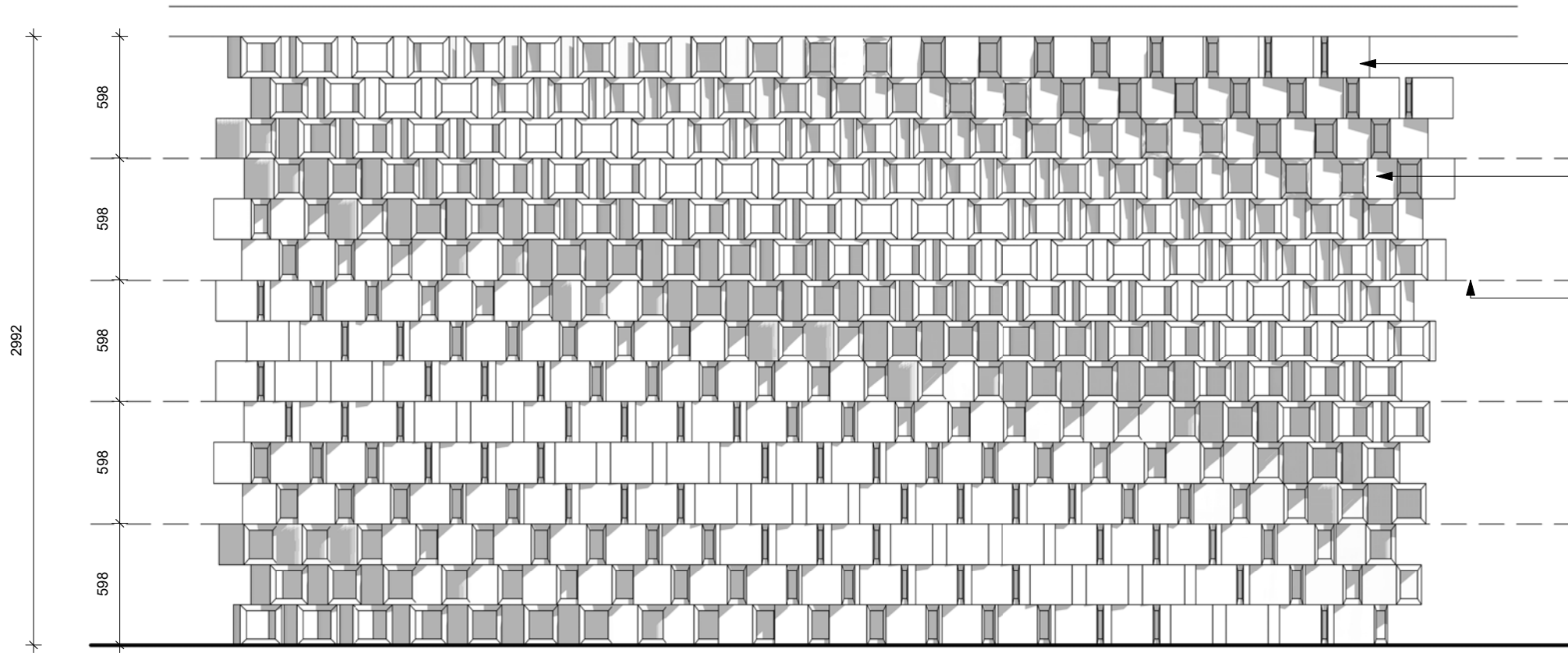


(Qiu, 2001).

The Tou Kung Roof

I am trying to push for a standard gabled pitched roof but this could be a nice alternative.

Technical Details | 6.2.1 | Feature Wall Detail



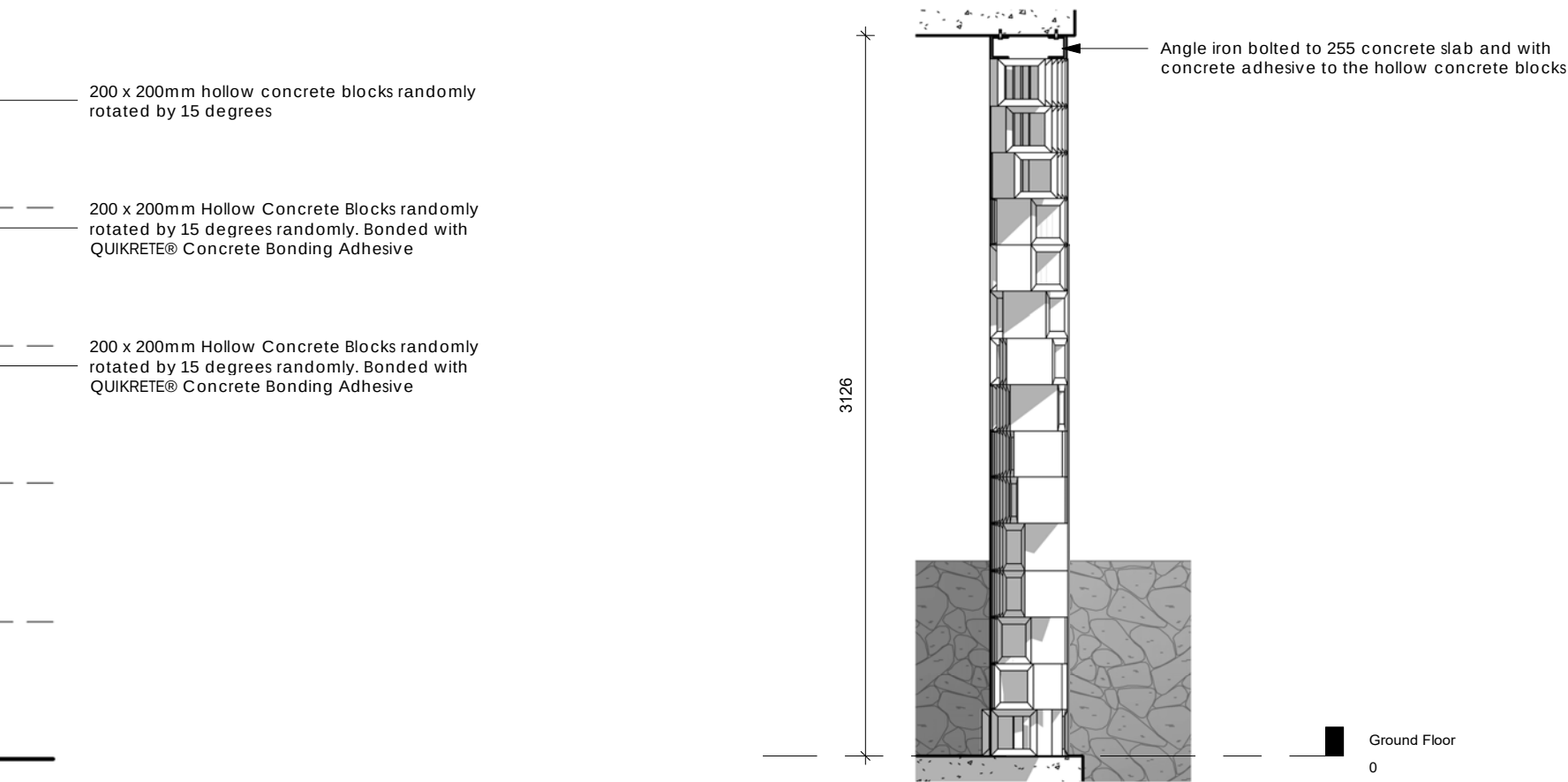
Not to
Scale

1

Feature Wall Frontal

1 : 25 Original Scale

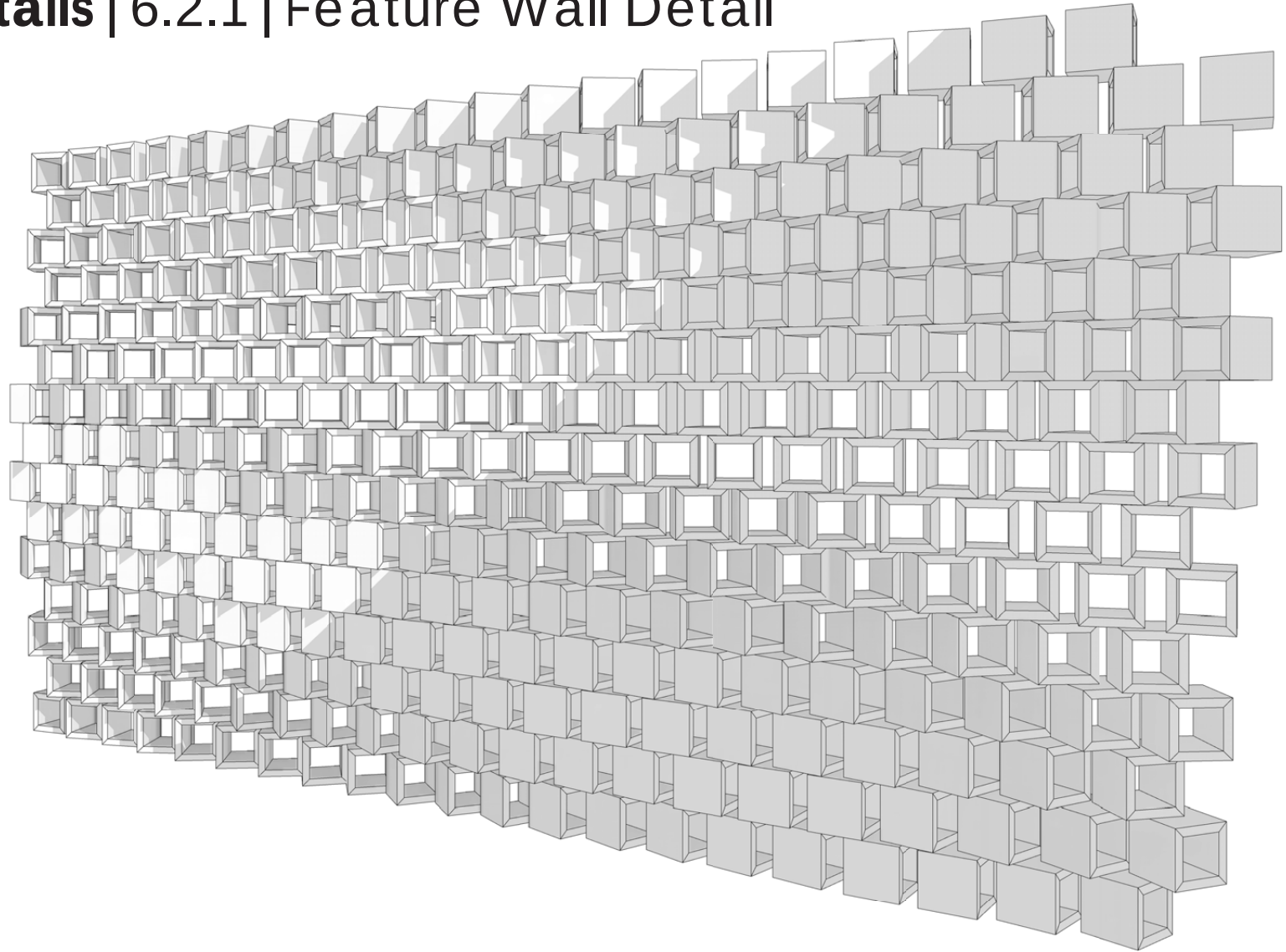
Technical Details | 6.2.1 | Feature Wall Detail



Not to
Scale

2 Feature wall details
1 : 25 Original Scale

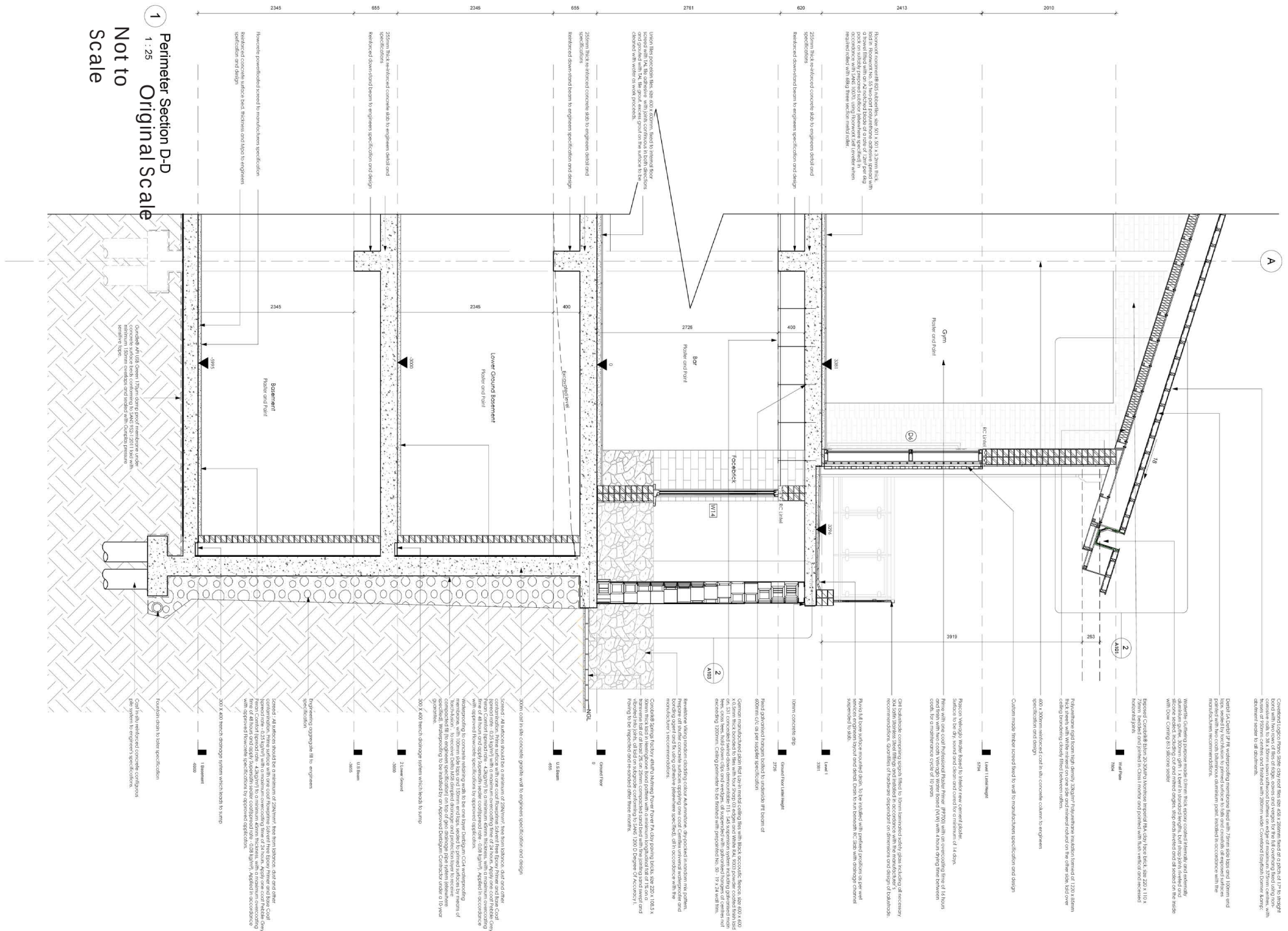
Technical Details | 6.2.1 | Feature Wall Detail



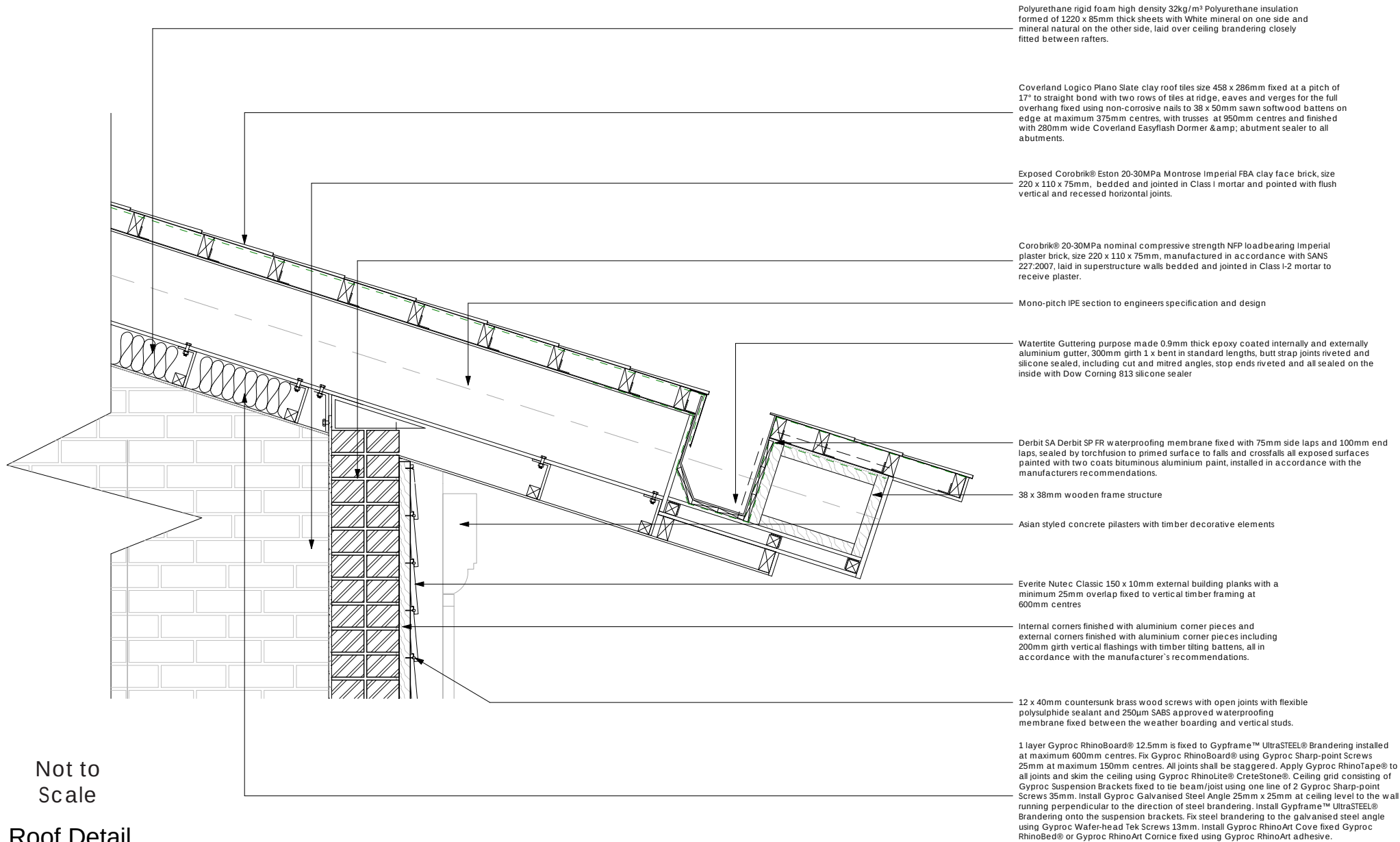
3

Feature Wall 3D

Technical Details | 6.2.2 | Perimeter Section D-D



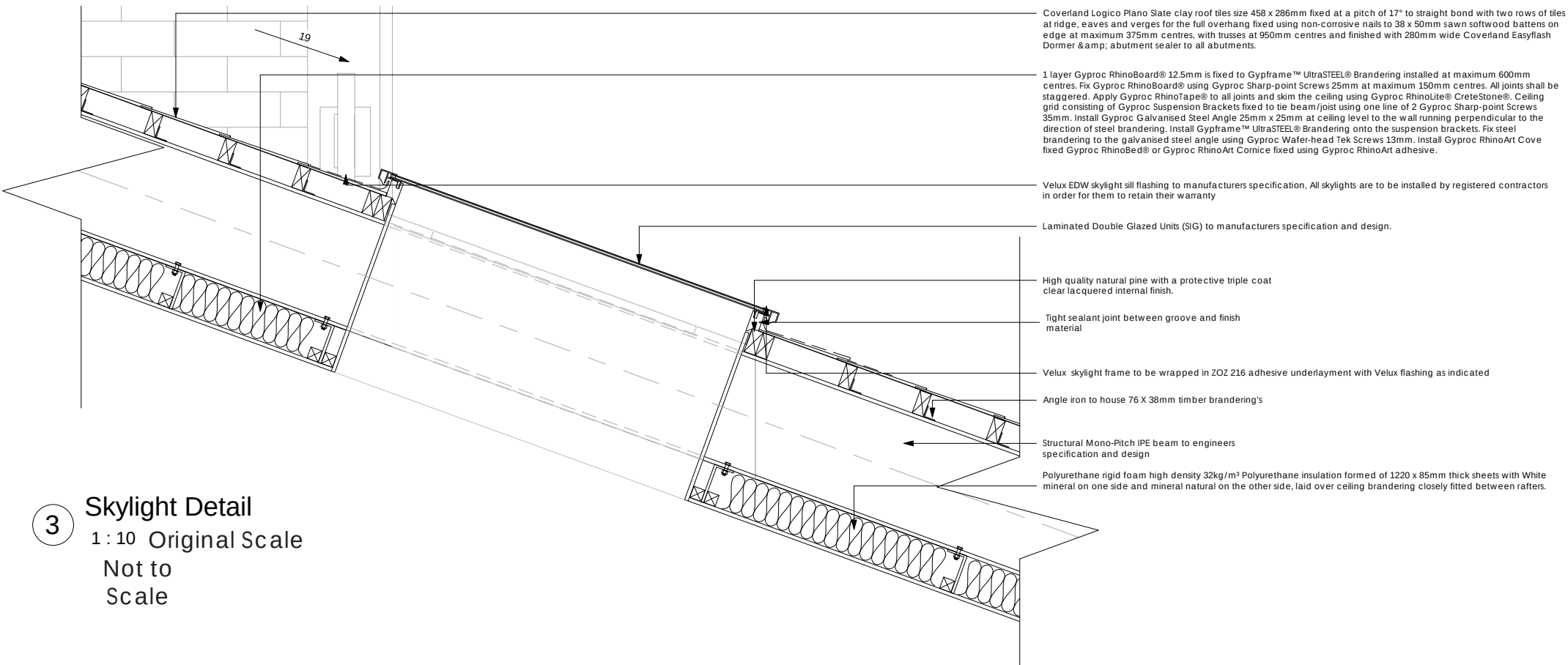
Technical Details | 6.2.2 | Perimeter Section D-D



Not to
Scale

2 Roof Detail
1 : 10 Original Scale

Technical Details | 6.2.2 | Perimeter Section D-D



3 Skylight Detail
1 : 10 Original Scale
Not to Scale

Technical Details | 6.2.2 | Perimeter Section D-D

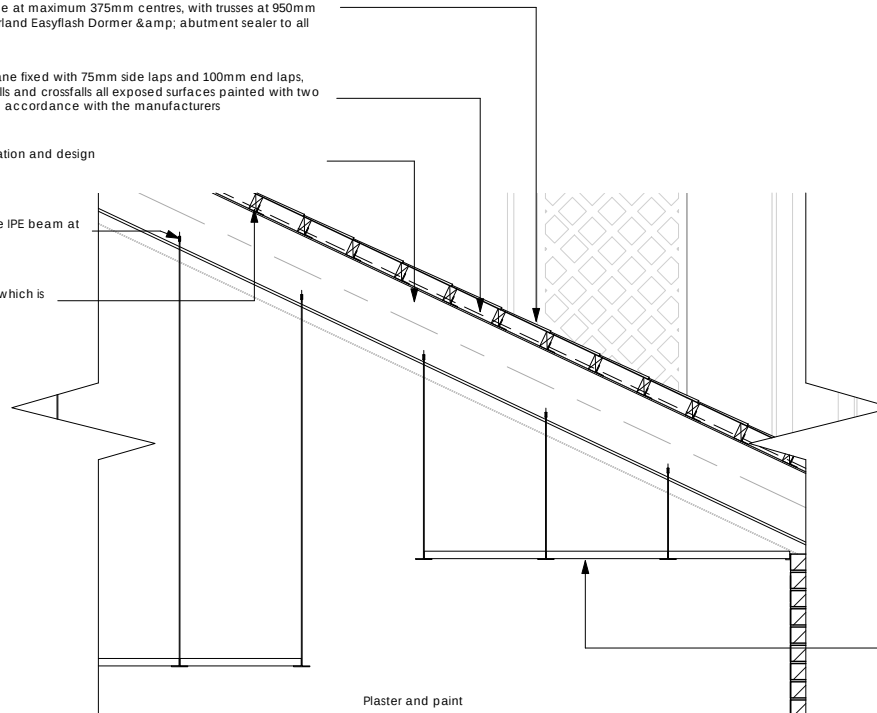
Coverland Logico Plano Slate clay roof tiles size 458 x 286mm fixed at a pitch of 17° to straight bond with two rows of tiles at ridge, eaves and verges for the full overhang fixed using non-corrosive nails to 38 x 50mm sawn softwood battens on edge at maximum 375mm centres, with trusses at 950mm centres and finished with 280mm wide Coverland Easyflash Dormer & abutment sealer to all abutments.

Derbit SA Derbit SP FR waterproofing membrane fixed with 75mm side laps and 100mm end laps, sealed by torchfusion to primed surface to falls and crossfalls all exposed surfaces painted with two coats bituminous aluminium paint, installed in accordance with the manufacturers recommendations.

Mono-pitch IPE section to engineers specification and design

Fixed galvanised hangers bolted to underside IPE beam at 600mm c/c as per supplier specification

76 X 38mm timber purlins fixed an angle iron which is bolted to the IPE beam

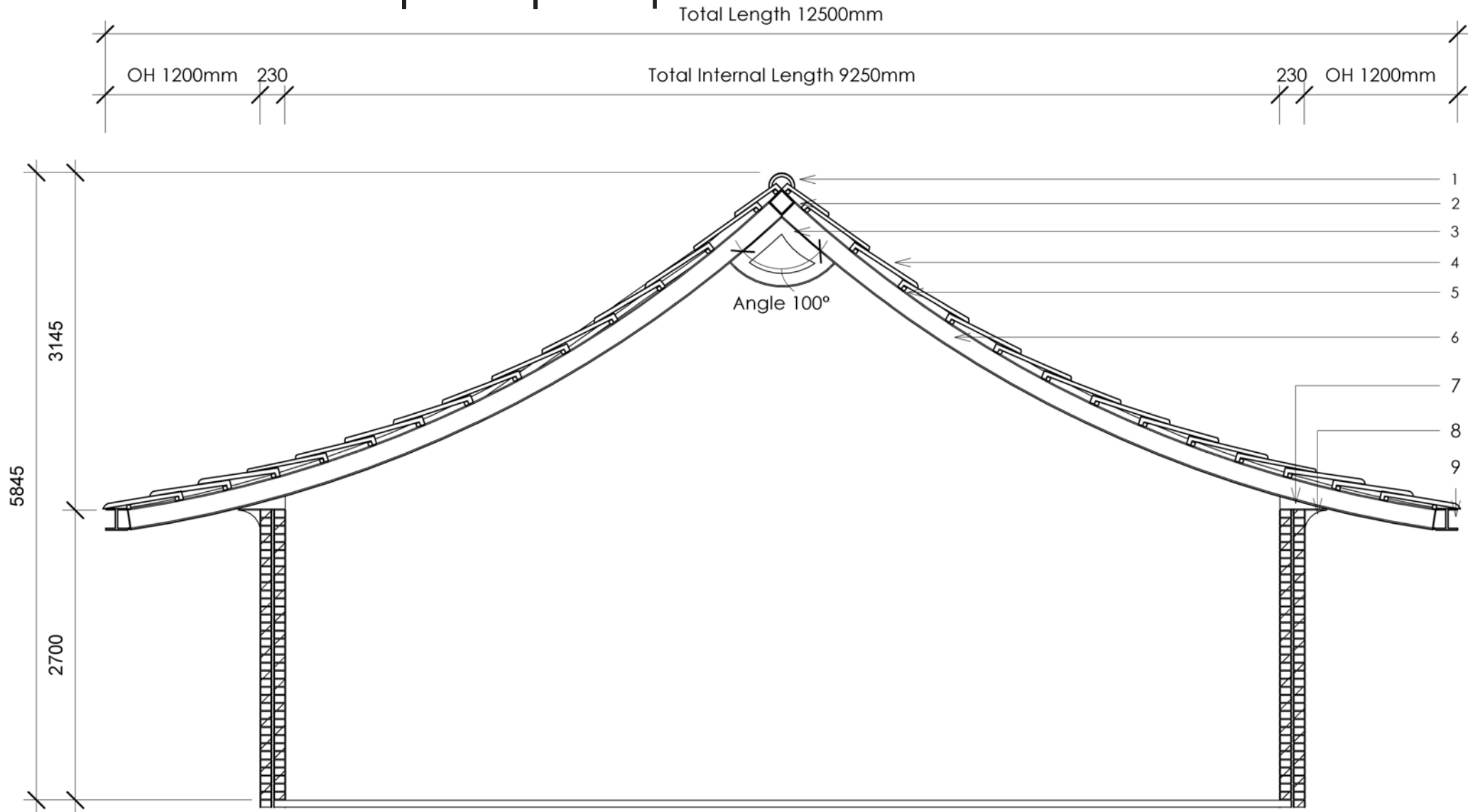


German manufactured plain Flat Lay-in metal ceiling tiles with Black acoustic fleece, size 600 x 600 x 0.5mm thick bonded to tiles with four Sharp 03 edges and White RAL 9003 powder coated finish laid on, S31 concealed swind-down demountable T15 - S45 suspension system including galvanised main tees, cross tees, hold-down clips and wedges, all suspended with galvanised hangers at centres not exceeding 1200mm. Ceiling perimeter to be finished with pre-painted No. 50 - 19 x 24 wall trim.

4 Suspended Ceiling Detail 1 : 20 Original Scale

Not to
Scale

Technical Details | 6.2.3 | Adapted Traditional Chinese Roof



- | | | | |
|---|--|---|---|
| 1 | Dark Grey Terracotta Ridgecap | 6 | Steel I Beam for Rafters to eng spec |
| 2 | 178 * 178 Square Steel Hollow Section | 7 | Traingular Steel Connection piece welded to wall and roof |
| 3 | Steel Ridge Connection at Apex to eng spec | 8 | Steel Cornering welded to roof and drilled to wall. |
| 4 | Dark Grey Terracotta Tiles | 9 | 254 x 146 Steel I Beam to eng spec |
| 5 | 76*38 Steel Purlins @ 400c/c | | |

Technical Details | 6.2.4 |

Bathhouse Section

Coverland Logica Plano slate clay roof tiles size 450 x 250mm fixed at a pitch of 1:7 to straight bond with two rows of tiles at ridge, eaves and verges for the full overhang fixed using non-corrosive nails to 30 x 50mm storm softwood battens on edge of maximum 375mm centres, with busses at 950mm centres and finished with 250mm wide Coverland BayRain Danner Akamp; abutment water to all abutments.

Detail 14 Detail 15 FR waterproofing membrane fixed with 75mm side laps and 100mm end laps, sealed by torchfusion to primed surface to falls and crossfalls all exposed surfaces painted with two coats bituminous aluminium paint, installed in accordance with the manufacturers recommendations.

German manufactured plain Flat Lay in metal ceiling tiles with black acoustic fleece, size 600 x 600 x 0.5mm thick bonded to tiles with four Shap 03 edges and White RAL 9003 powder coated finish laid on S31 concealed wind-down demountable T15 - 145 suspension system including galvanneal main bars, cross bars, hold down clips and wedges, all suspended with galvanneal hangers at centres not exceeding 1200mm. Ceiling perimeter to be finished with pre-painted No. 30 - 19 x 24 wall trim.

Waterfall Outfalling purpose made 0.9mm thick epoxy coated internally and externally aluminium gutter, 300mm girth 1 x bent in standard lengths, butt strap joints riveted and silicone sealed, including cut and milled angles, stop ends riveted and all sealed on the inside with Dow Corning 813 silicone sealer

Exposed Coratix® 818 20-30MPa Monorose Impeded FFA clay face brick, size 200 x 110 x 75mm, manufactured in accordance with 227:2007, bedded and jointed in Class 1 mortar and pointed with flush vertical and recessed horizontal joints, suitable for exposure zone 1, 2.

GR batulade comprising spigot (Code: GSPOM353) fitted to 10mm laminated safety glass (wherever specified) including all necessary 304 stainless steel fittings and installed in accordance with the manufacturer's recommendations. Quantities of hardware dependent on dimensions and design of batulade.

Screed : All surfaces should be a minimum of 220mm thick, free from laitance, dust and other contamination. Prime surface with one coat Flowprime Solvent Free Epoxy Primer and Base Coat (spread rate - 0.22 kg/m²) with a maximum overcoating time of 24 hours. Apply one coat Pebble Grey Resin Concrete (spread rate - 4.2kg/m²) to a minimum 40mm thickness, with a maximum overcoating time of 48 hours and apply Superadit sealer coat (spread rate - 0.08 kg/m²). Applied in accordance with approved Flowcrete specifications by approved application.

Waterproofing to concrete retaining walls to be one layer Deltapum C04 waterproofing membrane, with 100mm side laps and 150mm end laps, sealed to primed surfaces by means of 'torch fusion', to receive Delta V48 dimpled drainage and protection layer to receive compacted fill (to engineers specification) on top of geo drainage pipe system. Waterproofing to be installed by an Approved Deltapum Contractor under a 10-year guarantee.

Reinforced concrete surface bed, thickness and Mpa to engineers specification and design

Groundwell A11 155 Green 17µm damp proof membrane under concrete surface beds conforming to SANS 155-1 (2011) laid with minimum 150mm overlaps and sealed with Gungles pressure sensitive tape

Engineering aggregate fill to engineers specification

300 x 400 bench do

Plaster and Paint

RC Liner

W200

2720

665

665

1470

3000

NGL

4000

1400

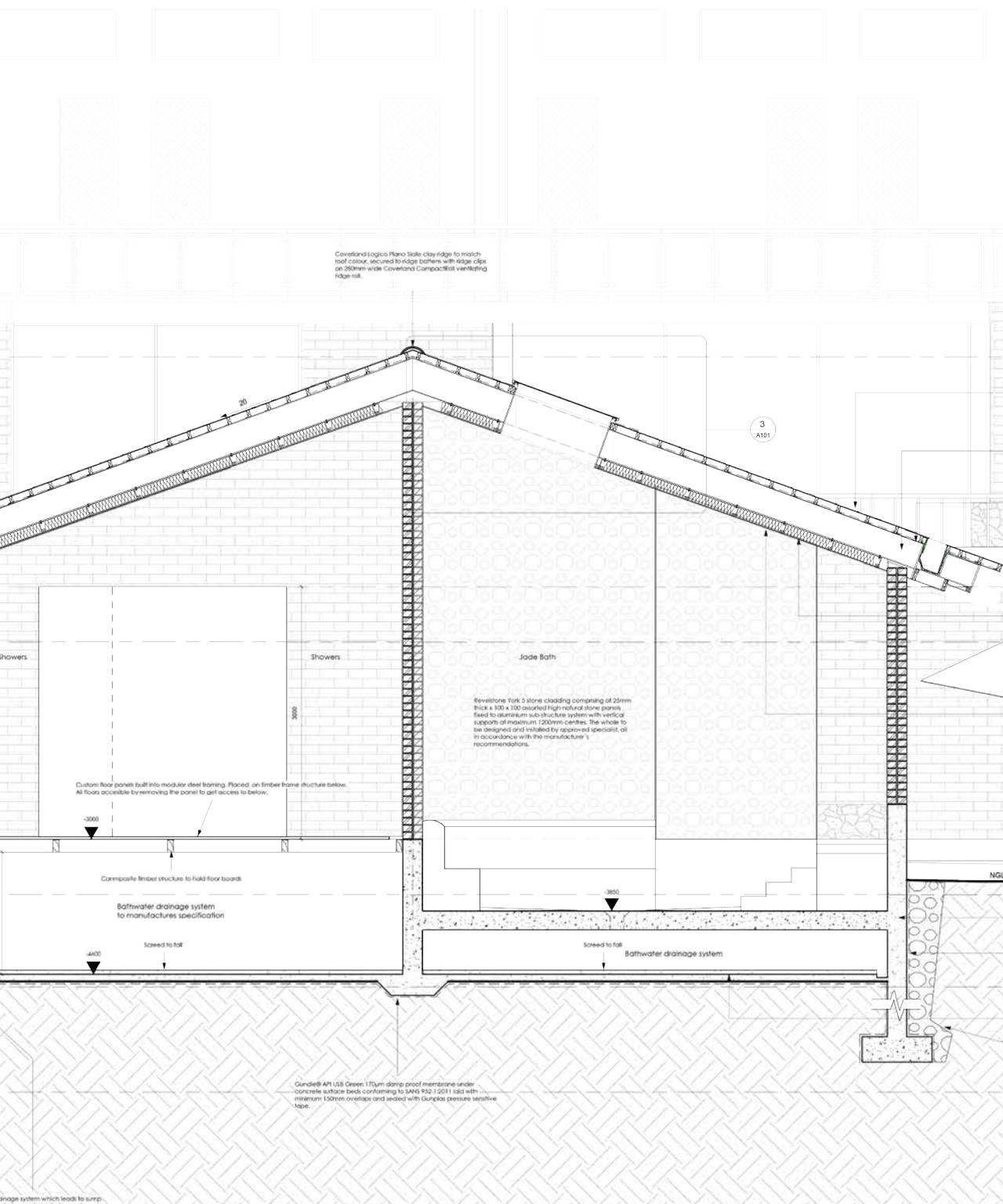
4

A101

1

Bathhouse Section

1 : 25



Ground Floor Limit Height
2726

Coverland Logica Plano Slate clay roof tiles size 458 x 286mm fixed at a pitch of 17° to straight bond with two rows of tiles of ridge, eaves and verges for the full overhang fixed using non-corrosive nails to 38 x 20mm spars (softwood battens) on edge of maximum 275mm centres, with busses at 950mm centres and finished with 200mm wide Coverland Fourflash Downspout; abutment sealed to all abutments.

Waterflex Guttering purpose made 0.3mm thick epoxy coated internally and externally aluminium gutter, 300mm girth, 1 x bent in standard lengths, built stop joints riveted and silicone sealed, including out and infeed angles, stop ends riveted and all sealed on the inside with Dow Corning 613 silicone sealer.

Delta SA Delta 1 SP FR waterproofing membrane fixed with 75mm side laps and 100mm end laps, sealed by hot fusion to primed surface to fall and crisscross all exposed surfaces painted with two coats aluminium paint, installed in accordance with the manufacturers recommendations.

Ground Floor
0

Polystyrene rigid foam high density 30kg/m³ Polystyrene insulation formed of 1200 x 60mm thick sheets with white mineral on one side and mineral natural on the other side, laid over ceiling bracing closely fitted between rafters.

U.S. Beam
400

1 layer Cypac Rhinobond® 12.5mm is fixed to Cypac Rhinobond® UltraSteel® bracing installed at maximum 600mm centres, fix Cypac Rhinobond® using Cypac SharpPoint screws 25mm at maximum 150mm centres. All joints shall be staggered. Apply Cypac Rhinobond® to all joints and skim the ceiling using Cypac Rhinobond® Cretebond®. Ceiling and consisting of Cypac Suspension brackets fixed to the beam/joist using one line of 2 Cypac Sharp-point screws 30mm. Install Cypac Galvalume Steel Angle 25mm x 25mm at ceiling level to the wall running perpendicular to the direction of steel bracing. Install Cypac Rhinobond® UltraSteel® bracing onto the suspension brackets. Fix steel bracing to the galvanneal steel angle using Cypac Water-head Fast Screws 13mm. Install Cypac Rhinobond® Core fixed Cypac Rhinobond® or Cypac Rhinobond® Core fixed using Cypac Rhinobond® adhesive.

2nd Floor Ground
3006

U.S. Beam
3855

300m cast in situ concrete granite wall to engineers specification and design.

Waterproofing to concrete retaining walls to be one layer Derbigum C24 waterproofing membrane, with 100mm side laps and 150mm end laps, sealed to primed surfaces by means of Torch-Apex®. No receive Delta M8 dimpled drainage and protection layer to receive compacted fill (to engineers specification) on top of pipe drainage pipe system. Waterproofing to be installed by an Approved Derbigum Contractor under a 10-year guarantee.

Lower Bathroom Ground
4780

Reinforced concrete surface bed, thickness and Mpa to engineers specification and design.

Engineering aggregate fill to engineers specification.

1st Basement
4800



CHAPTER 7

Feasibility and Viability Study

CHAPTER 7 | Feasibility and Viability Study

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Feasability Study | 7.1 Client

Funding Strategy

Brief Introduction of Key Players

'No name' Privately owned company

The client will be a privately owned company that invests in new forms of cultural and recreational infrastructure within the Gauteng region – where possible they will engage with local community associations so that projects are well suited for their areas and have a higher chance of success. This is a for profit driven company and so it values the commercial aspect in all of its projects.

China Construction Bank(CCB)

The CCB is a bank in China with a branch in Johannesburg that offers business and construction related services for development of the African market. They provide bilateral funding and other services to target market clients, which include domestic guaranteed loans, syndication loans, trade finance, project finance, Renminbi services, Forex trade and settlements.

The Chinese Association (TCA)

The Chinese Association is one of the oldest and largest organizations within Gauteng to represent the Chinese and East Asian community. Formed in 1903, formerly known as the Transvaal Chinese Association, its goals are to represent the interests of most of the Chinese community within the province. This association has spun off multiple different divisions that exist throughout the province including the business and crime forum, Chinese culture division(community centers and schools), women's federation, social responsibility division, communication division, caring of the aged division, sports division, legal advice division, youth division and the Chinese affairs division.

Cyrildene Chinatown Community Association (CCCA)

Established in 2005, its formation was due to safety and security concerns within the neighborhood. However, in recent years it has sponsored many events and projects such as the annual Chinese New Year festivities and the Chinese Arch Gates). As such

they have also been identified as the key association within the neighborhood for community members to discuss their grievances.

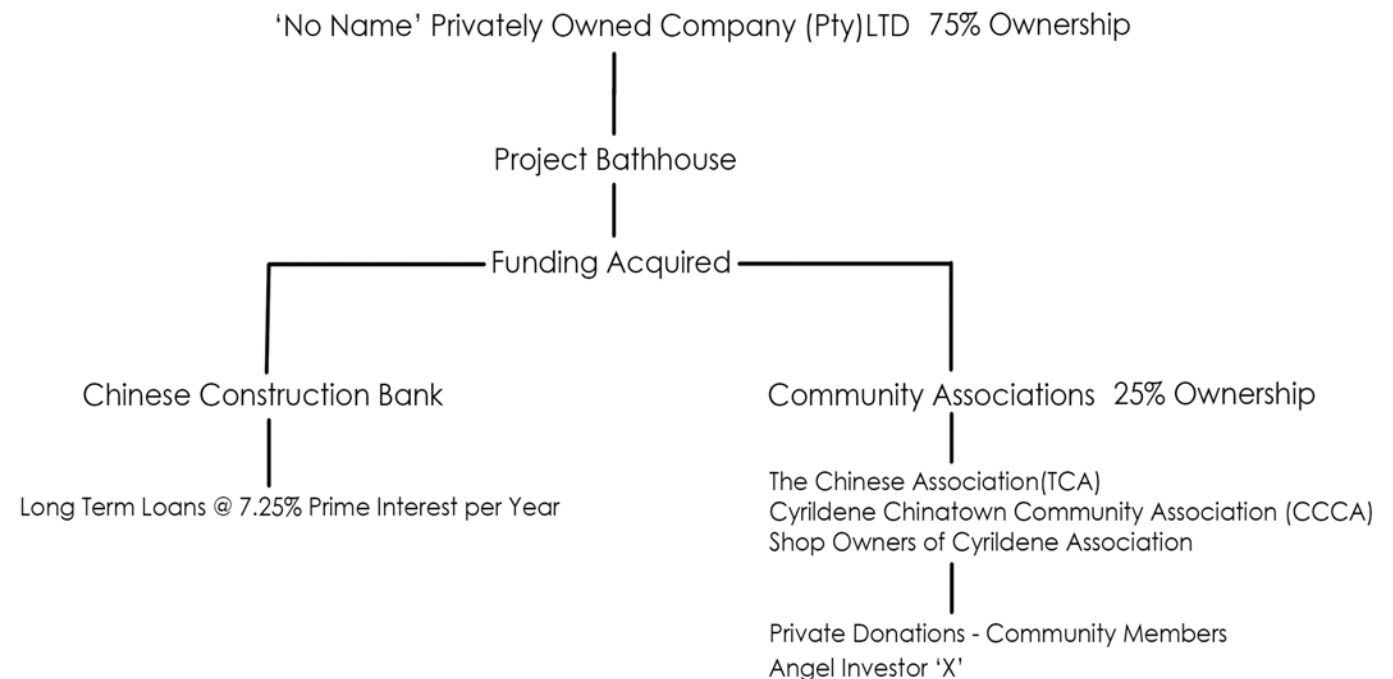
Shop Owners Association of Cyrildene

An association that helps promote, protect, and mediate between the interests of the current shop owners within Derrick Avenue.

Angel Investor 'X'

A high-net-worth individual who lends funds in exchange for ownership and equity. Due to intense pride of being both a South African and a Chinese person, this individual has spent many years trying to promote the Chinese South African culture through business adventures. With the help of the associations within Johannesburg, he helps fund projects that fall within these objectives.

The privately owned company has to raise initial Capital funds for each new project, so this is where they are able to look for funding in the form of loans from banks, however the reason they have chosen to work with the local associations within Cyrildene is because they have discovered, it is through those associations that an Angel Investor enjoys investing in projects that raise the cultural profile within the neighbourhood. It is through this angel investor and the private donations within the neighbourhood associations(These associations have funded quite a few projects already, one of the most notable ones is the 'Chinese Gates' that stand on either side of the Chinatown street. Through research it is seen that the community has a lot of pride for their culture and so is willing to invest in ideas and projects that further engrain that culture.) that a quarter of the needed funds for the project are secured. The other three quarters is acquired through the long-term bank loans(at a prime interest rate of 7.25% per year) from the China Construction Bank located in Johannesburg taken out by the private company. In this way there is an 75/25 percent split in the project's future profits after the loan and initial costs have been paid off.(Refer to Appendix F for detailed breakdown)



Feasability Study | 7.2 Client Brief

Type of Development

East Asian Bathhouse Business

The Users

The bathhouse is a building that is meant to be used by the public. This includes the local residents, shop owners and community members, residents of Greater Johannesburg and Gauteng, and tourists. Most of these are middle to upper class individuals.

Programme

The programme will be based on the East-Asian bathhouse model where there are multiple facilities within the bathhouses. This in addition to the analysis of site and contextual needs will inform the program.

Entrance & Admin

- Courtyard, Recaption, Traditional Chinese Front Gates, Managers Office, Staff Lounge, Staff Toilets

Semi-Private Areas

- Male and Female locker rooms, Water closets, Antechambers, Barbers Quarters/Hair Salon

Bathhouse Area

- Showers, Wet Sauna, Scrub Area, Mineral Baths, Hot Bath, Low Temp bath, Cold Bath/Plunge Pool

Sauna Rooms

- Traditional Dry Sauna, Ice Room, Pinetree Firewood Room, Crystal Sun Salt Room, Jade Meditation Room, Tranquil Forest Room

Spa and Beauty Treatment

- Nail bar, Massage rooms, Body care and Facial room, Footcare room.

Overnight Stay

- Heated floor sleeping area, Sleeping Cubes, Bunk Beds Room Male and Female Separation.

Recreation

- Kids Play Area, Cinema/Indoor Entertainment Room, Arcade Games Room and a Dance Studio

Food

- Mini Restaurant, Kitchen, Vending machine area, Snack Area

Health

- Gym

Equipment and Services

- Rainwater Tanks, Filtration and Water Treatment, Water Pumps, HVAC & other Mechanical systems, Electrical Substation, Photovoltaic Battery Room, Maintenance Room, Janitors Closet, Bath Cleaning Storage, and General Storage.

Parking

- Public Parking Bays, Staff Parking Bays

Feasibility Study | 7.3 Project Brief

Site Motivation

The site itself is proclaimed. It is part of the City of Johannesburg(CoJ) and falls under Region F of the municipality. The site was reconsolidated in 2011 from 5 different sites and now falls under one large site, namely Erven 733. The current owner has since mysteriously disappeared leaving the land vacant and in disrepair. The municipality of Johannesburg is attempting a forced takeover of the site which they will then auction to potential buyers. For Site Plan please refer to Appendix G. The site also falls under an approved Town Planning Scheme. It is currently under the Regional Spatial Development Framework of 2010/2011 but has been earmarked by the city of Johannesburg as

an important space for future development. A more recent Urban Development Framework has already been submitted to the CoJ and is awaiting approval.

Bulk Services

Although the site itself is in disrepair there are a number of bulk services that need only be connected when official ownership is transferred. These are the access roads, storm water, waste pickup, City power, Johannesburg water, Egoli gas. The area also has private investments such as Vuma Fibre and Telkom telephone lines.

Feasibility Study | 7.3 Project Brief

Site Information

Street No	26
Street Name	Derrick
Stand No	733
Area(m²)	6384
Township Name	Cyrildene
Current Owner	Sangricom Pty Ltd
Market Value	R3 880 000
Zoning	Business 3
Ward Name	118
Region Name	Region F
Stand SG Code	T0IR0158000000007330000000

Zoning

The current zoning of the site is set at 'Business 3'. I propose that the zoning be kept at 'Business 3'. While the proposed bathhouse isn't considered part of the allowed land use due to it being a 'place of amusement', 'parking area' and 'restaurant', with the permission of local authority, we are allowed to use the land for our intended purposes. This keeps the rates of the piece of land at reasonable rate without having to rezone. A report will have to be generated so that we can appeal to the local authorities.

Financial considerations

The land is valued at R3 880 000. It is advisable to purchase the land rather than a long-term lease of a 100 years as we intend for the project to be an iconic building within the community and neighbourhood for a long time. It is also advisable to purchase due to there being future investment projects within the neighbourhood due to the success of this project thereby increasing its potential future value.

Since the land is currently vacant there is no need for demolitions. The land has a lot of debris and uncontrolled vegetation and so will need to be cleaned up before anything starts. When construction has started, maximum effort needs

Schedule of Rights

	Permitted	Proposed	Complies
FAR	2.1	2.1	Yes
Coverage	70%	70%	Yes
Zoning	Business 3	Business 3	Yes
Density	50du/ha	50du/ha	Yes
Height Restrictions	4	2 or 3 Max	Yes
Building Lines	1.89m on street side	1.89m on street side	Yes
Parking	6bays/100sqmofbusiness	0.2bays/person	No

USE ZONE	PURPOSES FOR WHICH LAND AND BUILDINGS MAY BE USED	PURPOSES FOR WHICH LAND AND BUILDINGS MAY BE USED ONLY WITH CONSENT OF THE LOCAL AUTHORITY	PURPOSES FOR WHICH LAND AND BUILDINGS MAY NOT BE USED
(1)	(2)	(3)	(4)
Business 3	Shops, service industry, confectionary, banks building societies, medical suites, restaurant, dwelling units	Offices, restaurant, gymnasium, place of amusement, dwelling units, residential building, place of instruction, institution, place of public worship, community hall, sport and recreation clubs, parking area, parking garage	Uses not in columns 2 and 4

Fig 7.1 Table showing Business 3 Land Uses (5th Avenue, n.d.)

to be used in order to ensure the safety of the surrounding community. There needs to be a minimal disturbance on the daily lives on the shop owners and residents. The biggest financial costs would be in the researching and development of a sustainable water infrastructural system for the bathhouse in addition to the possible upgrading of existing water pipes by the municipality.

- Purchasing of ERF 733 at Market value: **R3 880 000**
- Current Building Area: **2394m²** (Refer to Appendix A-1)
- Current Cost to Construct: **R19 567 000.00** (Refer to Appendix A-1)

- Cost of Architects Fees: **R1 937 278.91**(Refer to Appendix A-2)
- For Stage 1 Architectural Fees amount to **R 96 863,95**(Refer to Appendix A-3)
- Total Professional Fees amount to **R 4 209 648.91** (Refer to Appendix A-4)
- Estimated Cost of Development: **R27 656 648.91** (Refer to Appendix A-5)

Feasibility Study | 7.4 Implementation

Social and Economic Impact

Cyrildene is known as an area to experience East Asian and specifically Chinese culture. By building my project I aim to increase the cultural significance of the area. Not only that but I will be introducing the concept of an East Asian bathhouse that has not been seen in the South African context. This can result in additional people visiting the area for tourism or just to experience something new in Johannesburg, creating a new stronger image of the Cyrildene area, providing a new recreational activity as well as re-urbanising the area so that it stops the urban decay that is currently happening within the neighbourhood.

This in addition to the CoJ UDF plan, to increase density within Derrick street would result in more residents, businesses, and offices. This means there would be a lot more users and thus would benefit the businesses in the area quite a bit. There would be a need to provide more parking in the area and also a greater need to monitor the activities within the neighbourhood so that the current lack of maintenance and deterioration does not occur. Existing services would be strained and so would need upgrades in the future.

Business Operations of the Bathhouse

Adapted from Precedent Study of Ofuro Ousama, Ebina branch, Japan.

On arrival an entrance fee is paid, this fee will change according to age group, children and pensioners are half price whilst adults pay full price. Additionally, the costs will be cheaper during the weekday as opposed to the weekend when people are free. The entrance fee includes your basic access most of the facilities inside. However, this fee should be affordable and should mainly look to just cover the running costs of paying the monthly municipal rates and using the water and electricity(which are lower than normal business running costs due to the use of renewable sustainable energy sources and grey water recycling methods). The main profit of the bathhouse is derived from the extra services that are provided and help subsidise the overall running costs of the

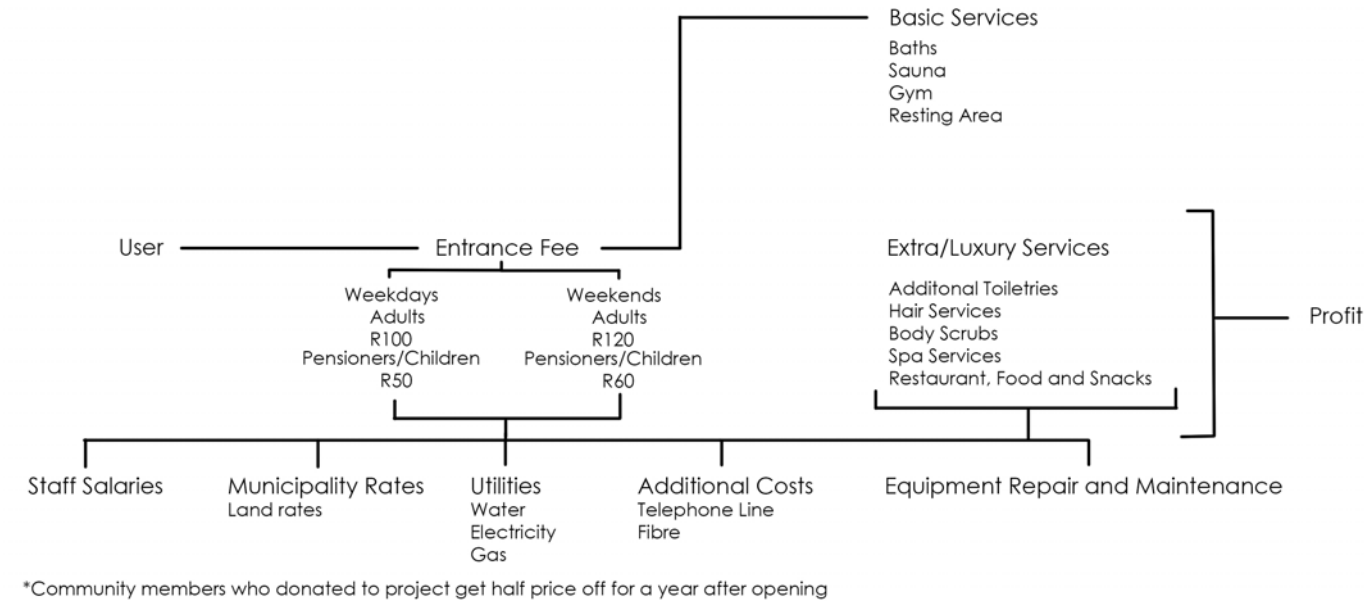


Fig 7.2 Organogram showing Business Operation Relationships by author

business. These extra services include the selling of additional toiletries, spa services such as the different massages and treatments, the barber/hair salon services, the body scrubs and the selling of the food and snacks.

Fee Breakdown and Economic Viability

Gross Income: R 8 700 000 per Annum (Refer to Appendix A-6)

Operational Cost and Expenses: R3 915 000 per Annum (Refer to Appendix A-6)

Net Income: R4 785 000 per Annum(Refer to Appendix A-6)

Profit Split amongst stakeholders:

'No Name' Private Company (75%)	Associations + Angel Investor (25%)
R3 588 750.00 Per Annum	R1 196 250.00 Per Annum

Loan interest @ 7.5% Per Annum

Bond building 20 years = 240 Months

R27 656 648.91(Est Cost of Dev) * 75% = **R20 742 486.68**

Loan Amount: R20,742,486.68

Monthly Repayment: R249 000.88

Loan term: 10years

Interest Rate: 7.5% per annum

Total Interest: R9 129 340.04

*Calculated using the banks online load calculator

** All values exclude VAT

'No Name' Private Company

Profits of R3 588 750.00 per annum/ 12 = R299 062.50 per month > Monthly Repayment of R249 000.88

Feasibility Study | 7.4 Implementation

From this we see that the ‘No Name’ company is able to make the monthly repayments due to the bank over a period of 10 years and are even able to repay their loan within those 10 years decreasing the total accrued interest. After paying off the loan, ‘No Name’ Private Company is able to take on all the profits made from the bathhouse.

The association is not charging interest and is only doing this to improve the local community, so all profits get used to invest in other community projects that happen within Cyrildene and the Chinese community.

Project Team Structure

The mandatory Professional Team will consist of the following individuals:

Category	Professional	Reasons for employment
Legal	Attorney	Will draw up the legal documentation between the various stakeholders(the community associations, the ‘angel investor’ and the private company. Will draw up and negotiate the transfer of title deed to new owner.
Planning	Land Surveyor	To attain accurate site readings and levels due to site topography variations not included in the outdated sg diagram and title deed. Needed for accurate site design process.
Design	Architect	Principle Agent, all design and construction decisions will run through this person and client. Designs the building according to client’s specifications and within the boundaries of the rules and regulations set out in the South African National Standards 10400 and XA -Energy Use.
Design	Quantity Surveyor	Will manage the costs and budget of the building project from outset to completion. Will ensure the costs of the project do not exceed the budget. Will also be in charge of generating payment certificates.
Design	Structural Engineer	Test and design the structures that ensure the safety of the occupants. Calculates the appropriate loads and pressures that structures within the bathhouse. They suggest appropriate materials, inspect construction work, and ensure the structural soundness of a building.
Design	Mechanical Engineer	To design and ensure the safety and functionality of the HVAC and water infrastructure layouts and systems within the bathhouse as required by the National Building Regulations. Building management systems are all integrated through this person.
Design	Electrical Engineer	Will design and ensure the safety and functionality of the electrical systems within the bathhouse required by the National Building Regulations. Will ensure that electrical components within do not interfere with water systems or vice versa. Will also aid in design of sustainable system components such as the photovoltaic system.

Project Team Structure

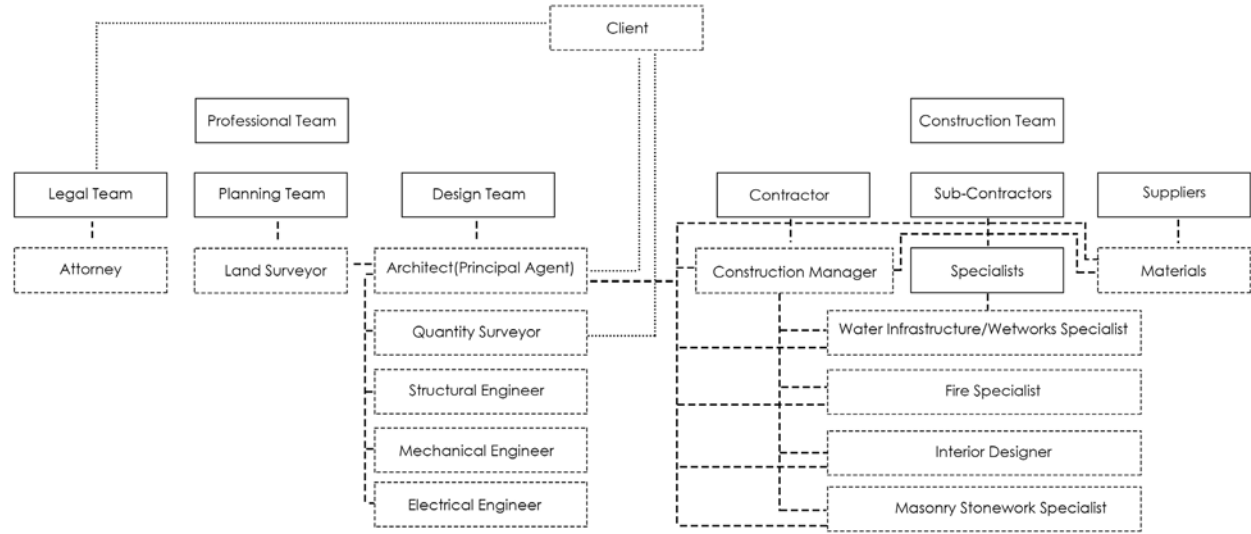


Figure 7.3 organogram showing project team relationships by author

Construction Methodologies

Contract and Tender Type

The contractual arrangement for this project would have to be a general contract. This general contracting is also known as the traditional design led contract. The architect(appointed as a principal agent of the client) with the client will work together to come up with the design. When the client accepts the proposal, the architect will start preparing all the necessary construction documentation for the tender process. Once ready the tenders are going to be sent to contractors by negotiated tender.(This is because the client ‘No Name’ already has established contacts within the industry and knows who they like working with for competitive prices amongst other factors). After the architect, the client and the quantity surveyor will evaluate who is most appropriate for the project. The contractor will then be appointed. That contractor will work specifically with the principal agent(the architect in this case) to select an appropriate site management

structure, hire the necessary sub-contractors and purchase the necessary building materials.

The main reason why this contract works best is because my project is very much design orientated, where the architect needs as much control of the overall process as possible and where the design is already known. What I am saying is that the most important part is the design contains information about bathhouses and theoretical elements such as phenomenology, which only an architect would know about. This in addition to the fact that there is not much of a time constraint allows the traditional design led contract to be the best on offer for this project.

Feasibility Study | 7.4 Implementation

Construction Team and other Consultants

Team Member	Reasons for employment
Contractor	Provides or sources all the material, labour, equipment, and services necessary for the construction of a project. Works hand in hand with architect to perform work. Hires subcontractors with architect's approval.
Water Infrastructure/Wet works Specialist	Will be advising with the mechanical engineer on water infrastructure. In addition will be advising on waterproofing the rooms and internal facilities and the purchasing of best water components.
Fire and Safety Specialist	Necessary to consult to make building comply with SANS 10400 Part T.
Interior Designer	Will design the internals of the interior spaces within the common areas.
Masonry & Stonework Specialist	Will work with Structural Engineer and architect to advise on best use of stonework and stonework understanding of properties.
Various Material Suppliers	Supply Building materials for the Project at a competitive rate.

Site Management

I believe that there should be site management in terms of restrictions and safety around the site. The reason being is that this is quite a busy commercial neighbourhood and so the health and safety of not only the site and its workers but also that of the everyday citizen are of the utmost importance. This also means that the client will only be allowed on site if permission is granted from the contractor. However, the client should ideally never have to have direct conversations with the contractor and should voice any complaints through the principal agent(architect). The bringing in of potentially hazardous materials and vehicles needs to be thought of, as the area is quite densely packed with people. Noise levels can get out of hand and so the noisiest periods should be negotiated to work during the evenings.



8

That's all Folks!

CHAPTER 8

Conclusion

Conclusion | 8.1 | To bath or not to bath

In Conclusion

In this report I've highlighted the possibilities that could be presented when implementing a bathhouse typology as a means of cultural urban regeneration to strengthen and reinvigorate a communities declining culture.

Cyrildene is selected as the focus area of this thesis, as it is a community that has established roots that are slowly fading away – residents describe the negative aspects of the suburb and the great need for an intervention at a micro level. Research into the current spatial and social context of Cyrildene affirms this need for an intervention, the suburbs residents needing an alternative cultural and recreational outlet. If successful, this study can be used as a model to be transferred to other communities within Johannesburg that have a similar if not the same issues that currently affect Derrick Avenue.

The design of the bathhouse aims to manifest the theoretical premise of this research report - notions of phenomenology were explored through the notion of nudity, the use of water as a means of recreation and healing, as well as re-imagining the use of bathhouse as a means of urban regeneration. In this manner, the architecture attempts to create a programme in which the end users start to re-invest in their community, re-discovering the pride of the culture as well as providing a new and interesting form of architecture for the residents of the suburb and of the Greater Johannesburg area.

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Appendix A | Viability Study

Appendix A-1: Total Construction Cost

Programme Feasibility											
Space	Unit Area	Quantity	Total Area m²	Rand/m²	Total Cost						
Entrance & Admin											
Traditional Chinese Front Gate	±10m²	1	10	R8 600,00	R86 000,00	Parking					
Courtyard	±50m²	1	50	R100,00	R5 000,00	Bays Staff Parking	±12,5m²	10	125	R600,00	R75 000,00
Reception	±20m²	1	20	R9 000,00	R180 000,00	Bays Public Parking	±12,5m²	20	250	R600,00	R150 000,00
Manager's Office	±15m²	1	15	R8 200,00	R123 000,00	Shared Areas					
Staff Lounge	±30m²	1	30	R8 200,00	R246 000,00	Common Area	50	1	50	R9 000,00	R450 000,00
Staff Toilet	±5m²	2	10	R12 500,00	R125 000,00	Cafeteria/Restaurant/Eating Area	225	1	225	R8 200,00	R1 845 000,00
Equipment and Services						Kitchen	75		75	R12 500,00	R937 500,00
Rainwater tank	±3m²	2	6	R7 900,00	R47 400,00	Snack Vending Area	±15m²	1	15	R8 200,00	R123 000,00
Filtration and Water Treatment	±2m²	1	2	R7 900,00	R15 800,00	Sauna Rooms					
Water Pumps	±5m²	1	5	R7 900,00	R39 500,00	Traditional Hardwood Kiln	±15m²	1	15	R12 500,00	R187 500,00
HVAC & Mechanical Systems	±25m²	1	25	R7 900,00	R197 500,00	Ice room	±15m²	1	15	R12 500,00	R187 500,00
Electrical Substation	±25m²	1	25	R7 900,00	R197 500,00	Pinetree Firewood	±15m²	1	15	R12 500,00	R187 500,00
Photovoltaic Battery Room	±25m²	1	25	R7 900,00	R197 500,00	Crystal Sun Salt Room	±30m²	1	30	R12 500,00	R375 000,00
Maintenance Room	±5m²	1	5	R7 900,00	R39 500,00	Jade Meditation Room	±30m²	1	30	R12 500,00	R375 000,00
Janitors Closet	±1m²	2	2	R7 900,00	R15 800,00	Hinoki Forest Room	±50m²	1	50	R12 500,00	R625 000,00
Bath Cleaning Storage	±10m²	1	10	R7 900,00	R79 000,00	Spa Area					
General Storage	±10m²-20m²	1	20	R7 500,00	R150 000,00	Massages	2	5	10	R8 200,00	R82 000,00
Semi Private Areas						Bodycare	2	5	10	R8 200,00	R82 000,00
Male locker room containing:		1				Skincare	2	5	10	R8 200,00	R82 000,00
Lockers for 150 people(Subject to Change)	±0,8m²	150	120	R10 000,00	R1 200 000,00	Footcare	2	5	10	R8 200,00	R82 000,00
Vending Area	±10m²	1	10	R10 000,00	R100 000,00	Overnight stay					
WC	±5m²	4	20	R12 500,00	R250 000,00	Heated floor sleeping area(Mixed)	50	3	150	R12 500,00	R1 875 000,00
Antechamber for bathhouse	±20m²	1	20	R10 000,00	R200 000,00	Sleeping Cube Rooms(Mixed)	100	1	100	R7 900,00	R790 000,00
Barbers quarters	±10m²	1	10	R8 200,00	R82 000,00	Bunk beds sleeping area:					
Female locker room containing:		1				Male	100	1	100	R7 900,00	R790 000,00
Lockers for 150 people(Subject to Change)	±0,8m²	150	120	R10 000,00	R1 200 000,00	Female	100	1	100	R7 900,00	R790 000,00
Vending Area	±10m²	1	10	R8 200,00	R82 000,00	Recreation					
WC	±5m²	6	30	R12 500,00	R375 000,00	Kids Play Area	50	1	50	R8 200,00	R410 000,00
Antechamber for bathhouse	±20m²	1	20	R10 000,00	R200 000,00	Cinema/Indoor Entertainment Room	50	1	50	R13 000,00	R650 000,00
Hair and Nail Salon(Might move to public area)	±20m²	1	20	R8 200,00	R164 000,00	Arcade Games Room	30	1	30	R8 700,00	R261 000,00
Bathhouse Area						Health					
Showers	±2m²	12	24	R12 500,00	R300 000,00	Gym	100	1	100	R8 200,00	R820 000,00
Steam Room/Sauna	±10m²	1	10	R12 500,00	R125 000,00	Rates attained from AECOM Construction 2019 standard rates list					
Paid Scrub Area	±15m²	1	15	R12 500,00	R187 500,00						
Mineral Bath 1 (Jade Pool)	±10m²	1	10	R12 500,00	R125 000,00						
Mineral Bath 2 (Mudworth Pool)	±10m²	1	10	R12 500,00	R125 000,00						
Mineral Bath 3 (Seasalt Pool)	±10m²	1	10	R12 500,00	R125 000,00						
Hot Bath	±20m²	1	20	R12 500,00	R250 000,00						
Low Temp bath	±10m²	1	10	R12 500,00	R125 000,00						
Cold Bath/Pool	±30m²	1	30	R12 500,00	R375 000,00						

Appendix A-2: Calculating Architect Fees based on Project Cost Based method

Cost Bracket	Value of Works		Primary Fee	Plus Secondary Fee	
	From	To		Add %	On Balance Over
7	R13 000 001	R40 000 000	R1 346 249	9%	R13 000 001

Portion of Table1: Project Cost-Based Fee from Framework for the Professional Fees Guideline published by the Council in Board Notice 195 of 2011.

Maximum Building Cost = **R19 567 000**

Total Architectural Fees: Primary Fee + (Total Building Cost – Min Cost of Work) x Percentage of Secondary Fee

= R1 346 249 + (R19 567 000 – R13 000 001) x 9%

= R1 346 249 + (R6 566 999 x 9%)

= R1 346 249 + (R591 029.91)

= **R1 937 278.91**

Appendix A-3: Work Stage Fee Breakdown for Architect

Work Stage	Proportion of Fee	Cumulative Total	Our Example
1	5%	5%	R 96 863,95
2	15%	20%	R 290 591,84
3	20%	40%	R 387 455,78
4a	20%	60%	R 387 455,78
4b	10%	70%	R 193 727,89
5	27%	97%	R 523 065,30
6	3%	100%	R 58 118,37

Architects Fees: R1 937 278.91/ R19 567 000 = 10%

Appendix A-4: Fee Estimates for all Professionals

Professional	Percentage of Building Cost	Fees in Rands
Architect	10%	R1 937 278.91
Electrical Engineer	2%	R 391 340.00
Structural Engineer	2%	R 391 340.00
Mechanical Engineer	2%	R 391 340.00
Quantity Surveyor	5%	R978 350.00
Land Surveyor	N/A	R30 000.00
Attorney	N/A	R90 000.00
Total Professional Fees		R 4 209 648.91

Appendix A-5: Development Costs

Construction costs	R19 567 000.00
Professional costs	R4 209 648.91
Land Costs	R3 880 000.00
Estimated Cost of Development	R27 656 648.91

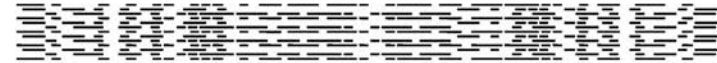
Appendix A-6: Income Generating breakdown

Incoming Generating Spaces	Monthly Gross Income	Annual Gross Income	Monthly Net Profit	Annual Net Profit
Entrance Fees(Weekdays)(100*50Avg*5days*4weeks)	R100 000.00	R1 200 000.00	R55 000.00	R660 000.00
Entrance Fees(Weekends)(120*150Avg*5days*4weeks)	R360 000.00	R4 320 000.00	R198 000.00	R2 376 000.00
Hair Salon/Barber Shop	R25 000.00	R300 000.00	R13 750.00	R165 000.00
Spa	R150 000.00	R1 800 000.00	R82 500.00	R990 000.00
Restaurant	R60 000.00	R720 000.00	R33 000.00	R396 000.00
Snacks	R30 000.00	R360 000.00	R16 500.00	R198 000.00
TOTALS	R725 000.00	R8 700 000.00	R398 750.00	R4 785 000.00

*Assumption of a 45%Overhead+55%Profit Future Forecasting Model

** Overhead involves labour costs, utilities, and material replenishment

Appendix B | Ethics Clearance



SCHOOL OF ARCHITECTURE AND PLANNING HUMAN RESEARCH ETHICS COMMITTEE

CLEARANCE CERTIFICATE
PROTOCOL NUMBER: SOAP036/03/2020



PROJECT TITLE: A bathhouse in Cyrildene: A phenomenological approach to the design of a bathhouse in Johannesburg.

INVESTIGATOR/S: Alan Kow (Student No: 535203)

SCHOOL: Architecture and Planning

DEGREE PROGRAMME: Master of Architecture Professional (MArch Prof)

DATE CONSIDERED: 09 May 2020

EXPIRY DATE: 09 May 2021

DECISION OF THE COMMITTEE: Approved

CHAIRPERSON
(Dr Brian Boshoff)

DATE: (Signed electronically under lockdown: 10.5.20).

cc: Supervisor/s: Gerald Chungu

DECLARATION OF INVESTIGATORS

I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to endure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee

Signature

Date 10 June 2020

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Appendix C | Interview Data

General demographic information

A

- 1 Are you a resident of Cyrildene? If not, what is the reason for you visiting the area?
 - a What service do you provide in Cyrildene?
- 2 How long have you been a resident of the area? How long have you been working in the area?

Cyrildene's Derrick Street

B

- 1 What are your general thoughts about Cyrildene's Derrick Avenue?
- 2 When you first enter the neighbourhood, what are the top 3 things you notice?
- 3 Would you recommend Cyrildene's Derrick Avenue to a colleague as a travel destination? Why or Why not?
- 4 If I gave you the chance to put anything you wanted that would improve the area, what would you ask me to design?

Bathhouse and Culture

C

- 1 What is your experience with bathhouses?
 - a) If has experience skip to question 3.
 - b) If has no experience continue with question 2.
- 2 What do you think happens within a bathhouse?
- 3 Now knowing what happens within a bathhouse would you be willing to pay for the experience?
- 4 Who do you think should be able to access this bathhouse?
- 5 Would you be willing to bath naked amongst other people of the same gender?
- 6 Would you be willing to bath naked amongst other people of mixed genders?

Phenomenology

D

- 1 Where is your favourite place in the world? Why?
- 2 When you walk into a building, what is the first few things that you notice?
- 3 What kind of fragrances and smells do you enjoy?
- 4 Does being in a closed environment make you feel safe?
- 5
 - a Timber
 - b Concrete
 - c Bricks
- 6 What sort of food do you like eating?
- 7 In your life, your favourite memories have they been by yourself or with others?

User 1	User 2	User 3	User 4
Yes	Yes	No	Yes
N/A	Manager	Sells Clothing	Student
21 Years	4 Months	3 Months	11 Years
Positive-Easy Access Asian Snacks, Negative-Stinks	Positive	Netural	Positive
Cars,Shops,Chinese People	Nice Buildings	It's like a rural area	Lots of People
Yes, for Food	No	No	No, this area is not safe
Better Parking	Groceries	Improve Street	More safety
Yes	None	Yes in China	No
N/A	Bathing	N/A	People take baths together
Yes	No	Yes	No
Everyone who can pay	Bathing should be done alone	Everyone should have access	Any one
Yes	No	Yes	No
No	No	No	No
South Korea-WalkFreely, Subways, Convenience	Saudia Arabia	Home - China	Home- China
Cleanliness	Environment	Cleanliness	The Floor
Sweet Fruity Scents	Rose/Flower Smell	Lime	None
Yes feels safer	Yes	Yes	No
Yes	No	Nope	Yes
No	Yes	Yes	Yes
Yes	Yes	Nope	Yes
Potato based foods	Rice and Fresh Lentils	Spicy Food	Asian Food
With Others	Alone	Alone	With Others

User 5	User 6	User 7	User 8
Yes	No - Edenvale	Yes	Yes
General Practitioner	Grocery Seller	N/A	Café Owner and Chinese Teacher
12 Years	23 Years	22 Years	20 Years
Positive	Negative	Positive, Chinese people, food, culture	Positive
It seemed very safe, clean	Very Clean	Asian culture and lots of cars	Was Clean before
Yes	No	Yes	Yes
More Safety for foreigners	The mindset of the people to respect it	Karaoke Bar, Boutique Shops	More Safer Walkways
No	Yes	Yes	Yes
People takes baths	N/A	N/A	N/A
No	No he wouldn't	Yes	Yes, membership system
No one	Normal people. No germs.	Everyone	Members, everyone besides the sick
No	Yes	Yes	Yes
No	No	No	No
Saudia Arabia	Taiwan	Greece	Japan
Cleanliness	Lights	Cleanliness, Lights	Cleanliness
Cigar	Anything that's not disgusting	Baby Fabric	Coffee Smell/ Flowers
Yes	No	Yes	Yes
Yes	Yes	Yes, Light wood is better	Yes
Yes	Yes	No, cold	Yes but has to be modern
No	Yes	No, industrial ugly	Yes
Everything except Pork	Chinese Food	Chinese food and seafood	Natural Organic Healthy Food
Alone	With Others	With Others	With Others