



UNIVERSITEIT VAN PRETORIA
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YUNIBESITHI YA PRETORIA

A PUBLIC PARLIAMENT

A study in politics, public space and people in the Capital City.



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A Public Parliament: A study in politics, public space and people in the Capital City.

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Primary Research Field

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This document pertains the proposal for a parliamentary precinct at the foot of The Union Buildings Estate.

Erf 357-JR, Arcadia.

Stanza Bopape Street, Pretoria.

25°44'28"S; 28°12'42"E

Declaration of authenticity

In accordance with Regulation 4(e) of the General Regulations (G.57) for dissertations and theses, I declare that this document (which I hereby submit in partial fulfillment of the degree Magister of Architecture Professional) is my own work and has not been submitted by me for a degree at any other institution.

I further state that no part of this document has already, or is currently, being submitted for any degree, diploma or other qualification.

This document is substantially comprised of my own work. Where reference is made to the work of others, the extent to which the work is used has been indicated and fully acknowledged both in the text and in the list of references.

Suzette Elizabeth van der Walt

In acknowledgement

I would like to thank:

My Mother – for always being my number one fan.

My Sisters – for seeing that the role of my number one fan is always under threat.

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The Red Table – for being there, however sporadically, for 6 years and many more. And Omphile – for the last few; for staying.

All the people who have taught me and changed my life. Teachers, lecturers and friends. Nothing I have learnt has left me. Even though some of it only made sense much later.

...and thus, my friends, what the architectural profession lacks is an understanding of its own social importance. This lack is due to a double cause: to the anti-social nature of our entire society and to your own inherent modesty. You have been conditioned to think of yourselves merely as breadwinners with no higher purpose than to earn your fees and the means of your own existence. Isn't it time, my friends, to pause and to redefine your position in society? Of all the crafts, yours is the most important. Important, not in the amount of money you might make, not in the degree of artistic skill you might exhibit, but in the service you render to your fellow men. You are those who provide mankind's shelter. Remember this and then look at our cities, at our slums, to realize the gigantic task awaiting you. But to meet this challenge you must be armed with a broader vision of yourselves and of your work. You are not hired lackeys of the rich. You are crusaders in the cause of the underprivileged and the unsheltered. Not by what we are shall be we judged, but by those we serve. Let us stand united in this spirit. Let us – in all matters – be faithful to this new, broader, higher perspective. Let us organize – well, my friends, shall we say – a nobler dream?

*Elsworth Toobey in The Fountain Head
(Rand 2005:251)*

Abstract

South Africa is on fire. The dream of a rainbow nation has gone up in flames with the buildings being burned by those protesting an unjust system of governance. The people have begun to take back the power from those they elected to empower them, taking matters into their own hands.

Architecture cannot be autonomous in the face of a society in flux. Architecture in South Africa can be used as a tool to accommodate the lives of a people in search of an identity that is free of post scripts. Post-colonial, post-apartheid can no longer be South Africa's identifiers. And rainbow washing will not do. South Africa needs to live up to its claim of being a democracy. The role of the architect is not apolitical one, but not autonomous of politics either. If South Africa is a democracy, what might its cities look like?

This dissertation investigates the nature of democracy and its manifestation in space, making the claim that truly public space is the space in which democracy manifests— it is largely ungovernable, unpredictable and entirely in the hands of the people. The scheme therefore hopes to celebrate the value of public space by identifying a public space that does not fulfill its potential, and introducing a programme that utilizes the democracy of public space and contributes to it.

The scheme is placed in the premise of Pretoria as singular capital of South Africa (an issue that has been under debate since the formation of the union). This creates a need for the accommodation of programmes currently spread across the three capitals. One such a programme, the one in question, is that of parliament where democracy is tested by those in power. The site in question is one that has been a part of the political discourse in Pretoria for some time; The Union Buildings Estate, where protestors often gather to antagonize government.

The acknowledgement of the Union Buildings as the face of government sees the project, the parliament, brought to the foreground, located in the street where it is made public and accessible. It is an object made to be owned by the people and, should they feel the need, destroyed.

Suid Afrika is aan die brand. Die droom van 'n reënboognasie waai weg in die rook van geboue wat daaglik afgebrand word deur mense wat teen die waargenome onregerdige regeeringsproses protesteer. Suid Afrikaners het begin om die mag terug te neem van die mense wat hulle aangestel het om hulle te bemagtig.

Argitektuur kan nie self-regerend wees tydens die onvoorspelbaarheid van ons huidige samelewing nie. Suid Afrikaanse argitektuur kan gebruik word as die huisvesting van 'n bevolking opsoek na 'n identiteit, een sonder voorskryf gedikteer deur die verlede. Postkolonialisme en post-apartheid kan nie verder die identiteit van Suid Afrika bepaal nie en die suiwering deur middel van 'n reënboog sal ook nie deug nie. Suid Afrika moet nou beny dat dit wel 'n demokrasie is. Die rol van argitektuur is apolities maar staan ook nie buite die politiek nie. Indien Suid Afrika wel 'n demokrasie is, hoe sal sy stede en dorpe lyk?

Hierdie skripsie ondersoek demokrasie en die uitbeelding daarvan in ruimtes, en stel voor dat die enigste werklike demokratiese ruimtes slegs publieke ruimtes is; aangesien werklike publieke ruimtes nie beheer of voorspel kan word nie en daarom slegs deur die samelewing beheer en bepaal word. Die projek skep waardering vir die publieke ruimtes deur goeie publieke ruimtes te identifiseer wat nie tot hul reg geskied nie en 'n ooreenkomstig program voor te stel wat die demokratiese neigings van publieke ruimte vuur en aanmoedig.

Die projek is gebaseer op die stelling dat Pretoria as enkele hoofstad van Suid Afrika verklaar moet word, 'n aangeleentheid wat al gedebateer word sedert die vorming van die Unie van Suid Afrika in 1910. So 'n verklaring skep die nut vir die inkorporeering van die oorblywende hoofstede se take, onder andere die parlement. Die parlement is waar demokrasie daaglik beproef word deur die regering. Die terrein wat gekies is vir die taak is ook al jare deel van politiek teenstredigheid, naamlik die Uniegeboue en gronde. Dit is tans waar protes gereeld plaas vind en word gesien as die gesig van die regering.

Die aanvaarding van die Uniegeboue as die regering se koppelvlak lei tot die besluit om die parlamentsgebou tot voetsoolvlak te bring, waar dit bereikbaar en toeganklik is vir alle vlakke van die samelewing. Die gebou word die besitting van die samelewing en kan dus deur die publiek beskerm of uitgewis word; soos hulle besluit.

The right to the city is far more than the individual liberty to access urban resources; it is a right to change ourselves by changing the city. The freedom to make and remake our cities and ourselves is, I want to argue, one of the most precious yet most neglected of our human rights.

David Harvey, Geographer and Urbanism Theorist
[Harvey, 2008]

Preamble

This document discusses a speculative design scheme that is located within a conceptual and urban framework/vision that was developed for the broader precinct. The framework/vision was developed to address the current climate of the context (politically, theoretically and spatially).

The framework/vision document will be referred to throughout this dissertation and for that reason it is recommended that the reader familiarizes him/herself with it before reading this document. The full document can be found as an addendum to this dissertation.

This investigation results from a personal manifesto of sorts, a prediction not of architecture as a form of social engineering that can active changed people's lives but rather as acknowledgement of the potential for architecture to establish conditions that promote the thriving of the human spirit. In architecture as in all things we see, we first see ourselves. We use the self as the measure of all things. Sometimes when facing architecture we look ourselves dead in the eye. This is chance. If we design in a way that accommodates this chance, we reduce the distance between makers and users, between architecture and life.

The speculative scheme and this accompanying document, stems from a personal investigation into issues of democracy and identity of self and of others and of self in relation to others. It is therefore interlaced with the personal thoughts and musings, speculations and hypotheses that developed from, or acted as fuel to, the investigation. This document illustrates the development of these notion into architecture by means of sketches by the author. The drawings included, though often incomplete or inaccurate, document the thought processes as they occurred - and often a thought is abandoned mid-sentence or mid-sketch.

This document thus also serves as a documentation of a process over time. Care has been taken to present ideas as they occurred, however, occasionally thoughts have been stretched across numerous sections or repeated as reminder to the reader. Therefore it is important that despite being viewed as a collection of thoughts and ideas, each drawing or musing needs to be viewed in light of the entire document. Similarly, this document needs to be viewed in its context of the continuum of architectural and political theory, without which it holds no meaning.

Instead of portraying newness, true architecture makes us aware of the entire history of building and it restructures our reading of the continuum of time (Pallasmaa, 2012)

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Addendum



Figure 1 - *Liberty* (a work by graffiti artist, Faith47) , Cape Town
(photograph by author, 2012)



...ual before the law





If you are neutral in situations of injustice, you have chosen the side of the oppressor. If an elephant has its foot on the tail of a mouse and you say that you are neutral, the mouse will not appreciate your neutrality.

Desmond Tutu

Chapter 1:
PRELIMINARIES

1.1. The People vs. The Government

The United Nations *Universal Declaration of Human Rights* implies the unity of all nations of the world under ideas of freedom and the implicit idea of democracy (UN, 1848). This global ideal sees countries who adhere to drastically undemocratic processes being ostracized and excluded from the rights and privileges awarded to those affiliated with the United Nations. It would thus stand that democracy is the global standard, in varying scales.

South Africa, globally, still triggers memories of Apartheid, the social evil known world-wide as having produced Nelson Mandela who is heralded as a savior for all across the globe. Despite his name being mentioned by political candidates to evoke liberal nostalgia, the era of Nelson Mandela and the rainbow nation is over.

2015 marked an upswing in the dissatisfaction with authority in South Africa. Largely led by the student youth of the country, a war on post-colonial remnants and systemic oppression was declared and government was caught completely off guard. There was a mass onslaught of protests for which everything was made viral by the suffix *must fall*. In the history of our young democracy the government had never been so vehemently antagonized.

But the issue of *The People vs. The Government* was not unique to South Africa. Upon investigation and with the right focus it was possible to identify examples of civilians using their democratic rights to express their dissatisfaction with government. These displays of dissatisfaction ranged from the *Edward Snowden*s of the world, who reported misuse of government resources (and was imprisoned for treason as a result) to the Icelandic public successfully sacking their entire government and employing new representatives (Savastio 2013).

This focused the investigation to question democracy at its core. If the departure point would be Abraham Lincoln's Gettysburg address then democracy implies the governance of the people, by the people (Wikipedia 2016). Since everyone cannot be actively involved in all instances of decision making, democracy manifests in a system of representation and participation. We participate by electing officials to represent us in governance of us. What then, occurs when waves of protest and civil disobedience sweep over the democratic world? This implies that the scale of representation sits intersecting the container that houses democracy – and the container moves along the scale, so at any one time there is a varying amount of participation and representation – when the government pulls too far in one direction, we become actively involved and thus representation is pulled more directly into democracy.

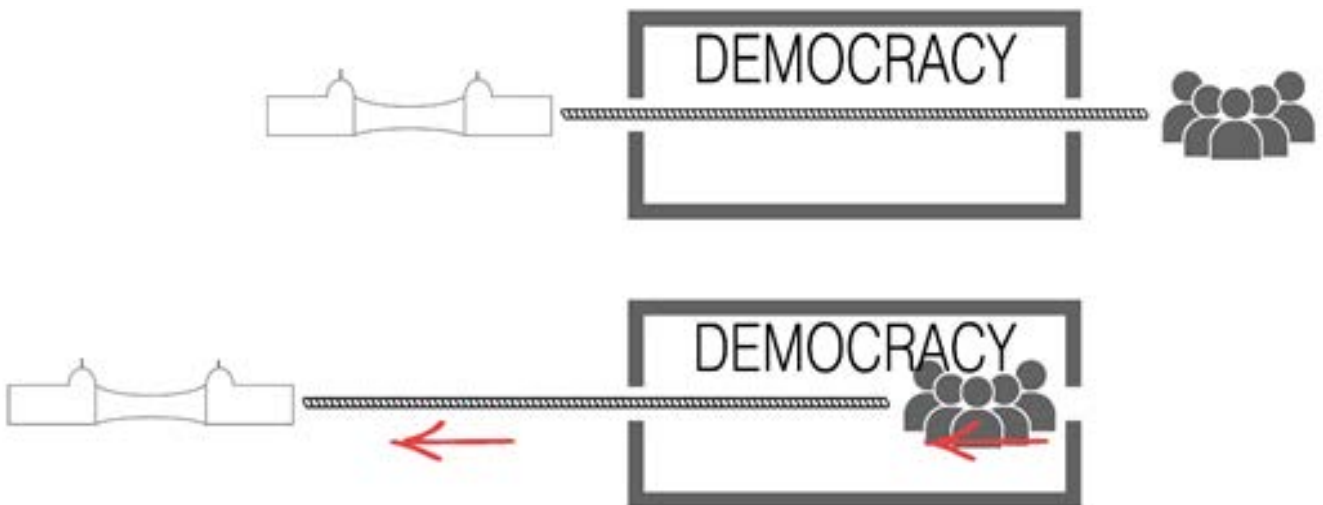


Figure 2 - The moving container of democracy (diagram by author, 2016)

1.2. Pretoria the Capital City

Some writers (Young 1990) see *the city as a site of difference, seeing this as providing new possibilities for democratic communities* (Watson and Studdert 2006: 2), which is what lead this exploration to its locality.

The presidential *State of the Nation Address raised the issue of dissolving South Africa's 3-part capital city distribution* which suggests the petition for Pretoria as the country's only capital (BusinessTech, 2016). This will not only be of practical benefit to the country (economically and logistically) but will also serve as a stronger statement of national identity.

Capital cities, specifically African post-colonial capital cities, are the site in which the state projects its power. It does so using symbols of power which most often manifest in the naming of streets, erection or removal of monuments and the layout of the city; its government institutions their architecture and public space. To a large extent capital cities are the manifestation of a state's ideologies (Therborn & Becker 2012: 1-2).

If Pretoria is to be the capital of South Africa and because South Africa is a democracy, then Pretoria ought to be democratic

1.3. Democracy Embodied: The importance of good public space

Kingwell (2009) describes public space as the place democracy lives. It is considered *political air* (Kingwell 2009:3) and is further described as being not only the physical pauses in fabric for recreation and release but it is said to *also mean something larger and looser: the right to gather and discuss, to interact with and debate ones fellow citizens* (ibid:7).

From this, the importance of public space in defining a capital as democratic becomes evident. A study into the public spaces, parks squares and active streetscapes becomes critical in establishing whether or not Pretoria is democratic and to what extent.

The Project for Public Spaces (pps.org) quotes William H. Whyte as saying; *The street is the river of life of the city, the place where we come together, the pathway to the center.* PPS advocates for the recapturing of the streets as public spaces as opposed to purely vehicular circulation routes. In his MArch Prof dissertation, Ahmed Alkayyali (2011) states that South African public space has lost its value due to incoherent town planning and has thus begun to relocate to the streets (Alkayyali 2011). He mentions public space being seen as the public interface of a city (according to Carr et. al (1992: 3)) and suggests that Pretoria's public interface lies in its streets. Evidence of this movement comes to mind in the number of street vendors on sidewalks and traffic islands in Pretoria. Trade is considered an effective creator of public space, as Watson and Studdert (2006:3) remark, markets can offer possibilities not only for local economic growth but also for people to mingle with each other and become accustomed to each other's differences in a public space. Perhaps the inherent chaos of a post-colonial city under reclaim is one of the best things to happen to the city's public space?

Despite the inherent emerging nature of these informal markets and their resilience in the face of metro police raids and evictions, they cannot alone be the creators of public space in the city. The lack of well-functioning public space (albeit a park or a sizeable sidewalk) renders the city as achieving below its potential in terms of a democratic city.

Da Costa and Van Rensburg (2008b) advocate for event driven solutions to reactivate the city – acknowledging that architecture and the urban fabric is only given real value by its use, and that to fix inherently social issues, the city must create social space where these issues may be dealt with and unpredicted outcomes may formulate themselves. It is this simultaneously non-descriptive and adaptable public space that is truly the manifestation of democracy – *spaces that contest functional hierarchies can be defined as being democratic, where experience is not subordinate to a dominating requirement of use* (Da Costa and Van Rensburg 2008b).

This sentiment served as a departure point for the precinct and larger city framework.

1.4. Democracy Housed: The role of Architecture

How does Architecture facilitate Democracy?

With the creation of an urban system of democratic public spaces, the role of architecture in the creation of a democratic city comes into question, but the generation of relevant programmes that allow architecture to become a dynamic interface between spatial hierarchies within the urban realm (Da Costa and Van Rensburg 2008:51).

This tests the hypothesis that architecture could facilitate democracy and will therefore stem from an investigation into architectures successes and failures to facilitate democracy and to determine a valid solution for the question.

The Union Buildings, the perceived seat of government, sits meters behind intraversable terraces a vast lawn and on the street edge a fence with a very small gate provides entry to the lawn. The would-be public lawns are used as outdoor recreation space but the few visitors on the lawns in comparison to the density of the surrounding neighborhoods raises the question of whether the lawns are being used to their full potential as urban public space. This could be because of the fence and gate scenario, or perhaps the sheer scale of the lawns serves to intimidate rather than welcome visitors.

With regards to the current protest-filled political climate, the union buildings is being manifested as the destination for marches of protest. The urban vision outlines this and accommodates such marches in the dedicate protest route framework. The proposal of a change in function by the Union Buildings to house the administrative features of legislative parliament serves in making the site a more apt destination for a march of protest.



Figure 3 - The 9m tall statue of Nelson Mandela was introduced to the site on reconciliation day in 2012 (Author, 2015)

Pause

Reflection

I am not quite a born-free. I was a Pretoria Minute born child. Not that I had ever heard of the Pretoria Minute until many years later. I started my pre-school education, officially, when my family moved from Pretoria to the Eastern Cape. I started preschool in 1995 drawing the South African flag, singing the national anthem and knowing that Nelson Mandela was the president of South Africa. To me there had never existed a world before this.

My 7 year old sister at the time would occasionally refer to the old South African flag whenever we came across it on old documents or in photographs in the many museums my mother took us to as children. I believed that they had just wanted something more colourful and that's how we ended up with the image that is imprinted in the eyes of every school going child from day one.

Perhaps my difficulty to seek an academic definition for democracy is because the term has become a non-negotiable to my generation. Much as how capitalism seems to have no viable alternative; we are taught about profit and self-gain in every subject at school – literature included stories of children using entrepreneurial instincts to help their families out of poverty due to retrenchment and family illness. In mathematics you always have to sell your apples to a friend, you would never simply give them away.

Every turn of the schooling system preaches democracy, so much so that we see no alternative option. We believe in freedom and autonomy and individualism as a basic human right. Even in present turmoil of the political and civil landscape the idea of democracy embodies this blind faith in freedom and autonomy as though it were a right. Despite disputes and disagreements on a variety of matters South Africans genuinely believe in democracy. They have faith that democracy is the system, above all else, that will maintain and ensure the liberty of all South Africans which is an idea held as true as any faith in a higher power.

Jean-Jacques Rousseau introduced this idea when he postulated that all societies need a religion to hold them together. At the time he introduced the idea he felt that Christianity, which was the prevailing religion in Europe, was dealing too much with matters of the heavens and the afterlife and thus postulated the need for a civil religion. He believed that if all members of a society held the same principles as true and had faith in a system then there would be political unison and the society could progress (Rousseau and Frankel 1947).

In a post-Apartheid South Africa, Democracy is held as a sacralised political system, one that people believe in as an absolute truth. It is important to clarify the origins and extent of political religion, the commentary below aims to shed light on the idea.

Response - Political Religion vs. Civil Religion: Religious Politics

The following is in response to the explanation of Emilio Gentile of the concept of Political Religion and the criticism against the idea.

Civic religion is often heralded as a national good in democratic pluralist society. Gentile (2005:20) suggests its value as a tool of analysis of political systems and national ideals, suggesting that critics of the idea fail to see the value as analysis tool.

Gentile(2005:21) raises the point that theologians and Christian intellectuals often fiercely oppose the religious character of political and civic religions claiming the potential evil of such systems (e.g. Nazism) results in very dangerous territory. There is also contestation with regard to the definitions of political religions as opposed to civil religions – some believe

the ideas are the same and others believe they are worlds apart. The debate resurfaced, particularly in post-Vietnam war America when sociologist Robert Bellah (1976 pp.1.21 in Gentile 2005:20) publicized an article on the topic saying few have realized that there actually exists alongside of, and rather clearly differentiated from the churches an elaborate and well-institutionalized civil religion in America. Bellah (1976 pp.1.21 in Gentile 2005:20) proposed a definition that eliminated debate by suggesting there is a distinct religious dimension to politics – this is what he believed was meant by civil religion. With time, and possibly the gradual secularization of the global academic community, the idea of civil religion has become less criticized and is acknowledged as a valid observation (especially in places like the USA)(Gentile 2005:24).

Political religion, as opposed to the idolization of the people which is the case with civil religion, deals with totalitarianism – where the state, a political party or one reason reigns supreme.

It must be noted and emphasized that Gentile (2005:28) criticizes the scholars that deal with (and criticize) political religions, perhaps due to personal agnosticism/atheism. He argues that in simply declaring totalitarianism, a political religion implies regarding a political entity as godly/sacred and does not replace a god/divine being. This is most evident in the political religion scenario of the Nationalist Regime in South Africa, which used churches to reaffirm nationalist values. Church and state were both seen as moral authorities, one in support of the other. The truly religious were the first to use the term and did so to create a term that embodied their criticism of totalitarian systems, saying only a truly divine entity should be regarded as highly as totalitarian systems regard political entities.

The sacralisation of politics is manifest in the way the ideal of politics was conceived, experienced and represented by its supporters, in their style of life as well as in their attitudes towards the adversaries and opposing ideals. Modern political movements are transformed into secular religions when they: (a) define the meaning of life and ultimate ends of human existence; (b) formalise the commandments of a public ethic to which all members of these movement must adhere; and (c) give utter importance to a mythical and symbolic dramatisation in their interpretation of history and reality, thus creating their own 'sacred history', embodied in the nation, the state or the party, and tied to the existence of a 'chosen people', which were glorified as the regenerating force of all mankind. (Gentile 2005:29).

It is important, also, to state hereby the difference between a civil religion and a political religion. Political religion aims to overrule all other beliefs in the name of a political ideal. It often condones violence in the enforcement thereof (Gentile 2005:30). Civic religion, however, encompasses an overarching goal of citizens that hold it true above all else. It implies that despite having differing political views, an entire society holds true a specific ideal that they believe is for the greater good of all people (Gentile 2005:30)

The fact that South Africa is in a state of unrest and is marked with displays of unrest and disagreement on a daily basis but is not descending into civil war is testament to the religious nature of our belief in democracy. Disagreement and debate are the sacraments of democracy.





Figure 4 - The South African flag is a daily part of children's lives, the *rainbow-washing* of a very unresolved story (CNN, 2013)



Figure 5 - A delapidated farm structure at the MoralettaKloof Nature Reserve (Author, 2016)

Chapter 2:
PLACE



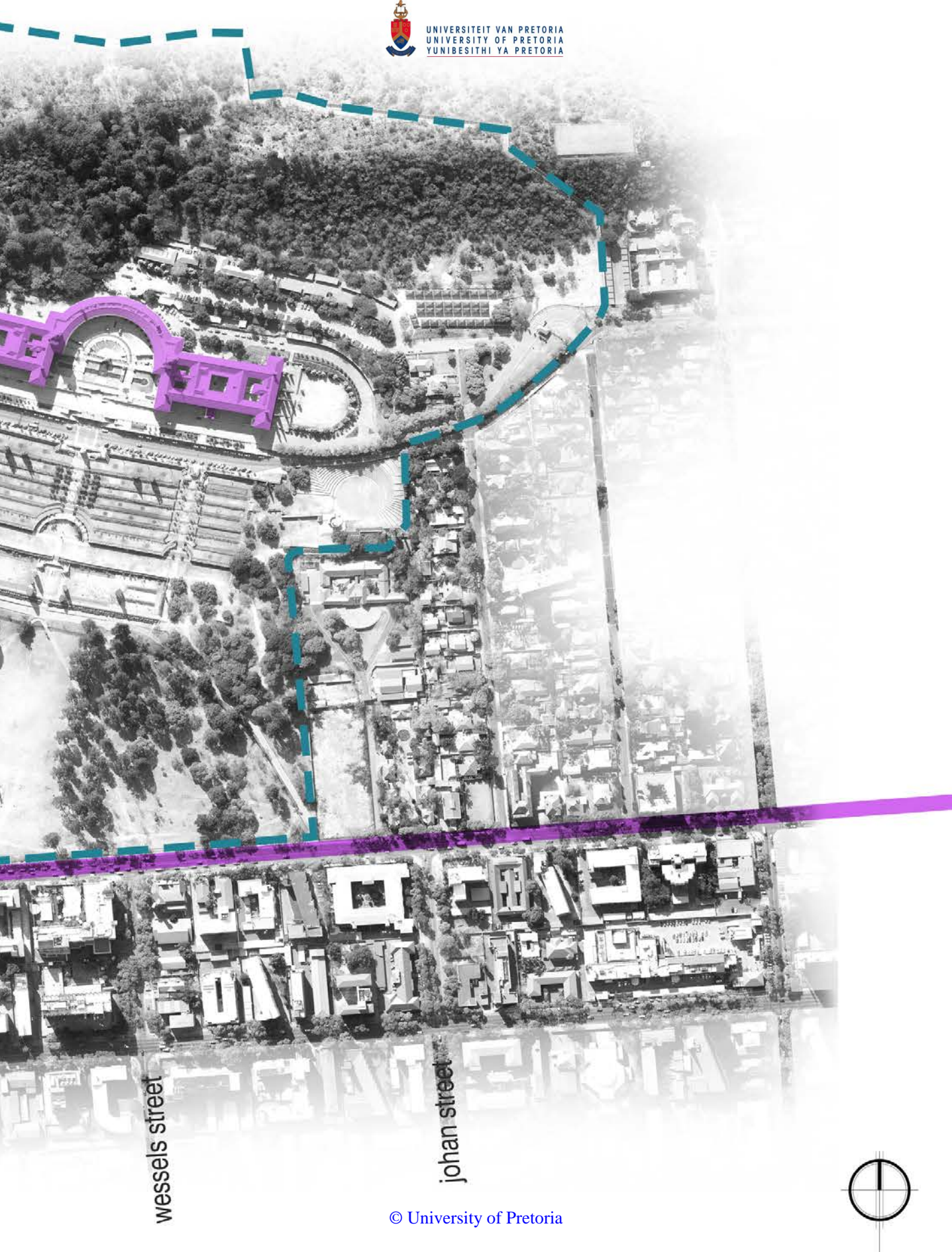
edmond street

madiba street

stanza bopape street

hamilton street

leyds street



wessels street

johan street



The Union Buildings and grounds are described as a place or site of significance [that] enriches people's lives, providing a deep and inspirational sense of connection to community and city landscape, to the past (history) and memories. It is a tangible expression of a proudly South African identity and experience and as a place of significance it reflects the diversity of the South African society, telling us who we are, the past that has formed us as well as the South African landscape according to the Conservation Management Plan implemented by the Union Buildings Architectural Consultants (Schutte 2016).



2.1. Prehistory

The Pretoria area was home to the Southern Ndebele people who occupied it between 300 and 400 years ago (SA History 2013). The name of Pretoria's municipality, Tshwane, is allegedly derived from a legendary chief, of the Manala, a division of the southern Ndebele people (SA History 2013). They and other tribes occupied the greater Pretoria area relatively peacefully until the beginning of the Difeqane – the great strife between South African tribes at the hands of migrating Nguni tribes (SA History 2013).

The hill currently occupied by the Union Buildings, the southern slope of Meintjieskop, is said to have been occupied some 30 years before the first European settlers arrived in the area, by Mzilikazi, a general who had fled the army of King Shaka and conquered numerous smaller tribes in the process (SA History 2011). After shortly

occupying the Daspoort mountain range, Mzilikazi heard of the approaching Voortrekkers and after a number of battles, some won by him and others by the Boers, he fled north beyond the Limpopo River (SA History 2013).

Figure 6 - A linocut print depicting the Western view towards the Union Buildings (undated) by JH Pierneef

2.2. History

It was 1840 and the first Boers had begun to settle in the area today known as Pretoria. The first registered farms were *Elandsport* and *Groenkloof*. Thirteen years later the two farms are declared a town and in 1855 it was named after Andries Pretorius and declared the Capital of the *Zuid Afrikaanse Republiek*, his son, Wessel, later becomes the first president of the ZAR (Pretoriana 1960: 7 -12).

A year later the town was laid out by Andries du Toit who would own the Elandsport area farm called Arcadia (SA History 2015) for some time before a portion thereof was sold and named Meintjieskop. This would later become the seat of The Union, which was declared in 1910. The Union of South Africa was established as a compromise between the British and the ZAR, after the ZAR had spent some time under British control – collateral of the *South African War* (Sahistory 2015, Schutte 2016).

South Africa's unification sought to identify both colonial language groups as equal stakeholders in the country's affairs – negating of course the native South Africans in true colonial fashion. The Cape had originally been a British colony and the Transvaal the domain of the ZAR – with Pretoria at its capital. Upon the unification of the colonies there was conflict and thus compromise over the location of the country's capital. In the interest of balancing power, the leaders of the newly unified South Africa decided that having all government centralized in one place could render that place too powerful, so it divided the branches among three provinces, with the Free State and more specifically, Bloemfontein, housing the Judicial capital, Cape Town the Legislative and Pretoria the Administrative.

Notwithstanding the apparent division of power, Pretoria was awarded the honour of seating the government's administration, as well as the president – who would be accommodated in the Union Buildings. 75 years after the Union Buildings were built they were described as remaining the most monumental and imposing buildings in the country and as symbolising the national administration of South Africa more than another building in the country (Rencken 1989: 1).

Despite the apparent symbolism and meaning of the buildings, there is latent controversy regarding the commission. Specifically with regards to the political situation during the period leading up to the unification of South Africa as well as the decision to make Pretoria the

administrative capital of South Africa. The patronage of the buildings can be ascribed to a vast government network under the helm of Jan Smuts, then Colonial Secretary, and Louis Botha, then Prime Minister (Christenson 1996:1).

The 1908-1909 National Convention was held at Durban and sought to establish a draft constitution for the union, an idea that was advocated by Smuts and supported by the Milner Kindergarten. The Milner Kindergarten was the group of British civil servants during the post war time period, preceding the formation of the Union, who worked under Lord Milner (Christenson, 1996:4). At the convention the debate regarding the location of the capital of the new union was heated. After eliminating the British colony at Pietermaritzburg and the Boer colony at Bloemfontein, the argument rested on the size of the British Colony at the Cape and the financial power accredited to Pretoria due to its closeness to the gold of the Witwatersrand. The debate was eventually only settled once Smuts proposed the splitting of the capitals into the three we know today (Christenson 1996:2).

Although the split-capitals decision was then drafted in the constitution, most people, politicians, the public and the press alike, believed it only temporary and that ultimately Pretoria would become the sole capital. At a meeting of the Assembly in Cape Town, concerns were raised that the over investment into buildings in Pretoria would ultimately become an argument for the declaration of a singular capital at Pretoria (Christenson 1996:3). It cannot be said with certainty whether Smuts and Botha kept this idea in mind when commissioning the monumental acropolis (Rencken 1989: 1) from Sir Herbert Baker.

Early sketches by Baker do, however, reveal that the possibility of Pretoria as singular capital was well known, because of Baker's inclusion of a parliament building on the koppie behind the semi-circular colonnade, as well as a vast complex of government buildings down the hill in front of the buildings. It is not documented whether the design of the capital precinct was suggested by Botha and Smuts to Baker, or whether Baker dreamt up the vision of a singular capital and the Union buildings as part of a governmental complex.

It is worth noting the importance Christenson associates with the connection between both Smuts and Baker and the Milner kindergarten (1996: 4-5). RH Brand was one of

the Transvaal delegation's secretaries during the transition period to the union and worked closely with Smuts in drafting the documentation for the Durban convention. In earlier years, Brand was also responsible for many of Baker's other governmental commissions. Christenson (1996) insinuates it was this mutual connection that earned Baker the commission.

The Kindergarten was also responsible for rallying British support for the unification on behalf of Smuts, although their motives weren't in line with his. Botha and Smuts believed that the unification of South Africa under a Pretorian capital would return control of South Africa to the Boers. The Kindergarten, under Milner, believed this

control would be temporary and that the union would improve conditions in South Africa, encouraging an influx of British citizens, who would ultimately outnumber the Boers and ensure the election of British control, thus once more expanding the empire. Despite their different motives and the difference of both these from the motives heralded to the public, the Union was declared. The construction of the buildings, however, had already begun in late 1909.

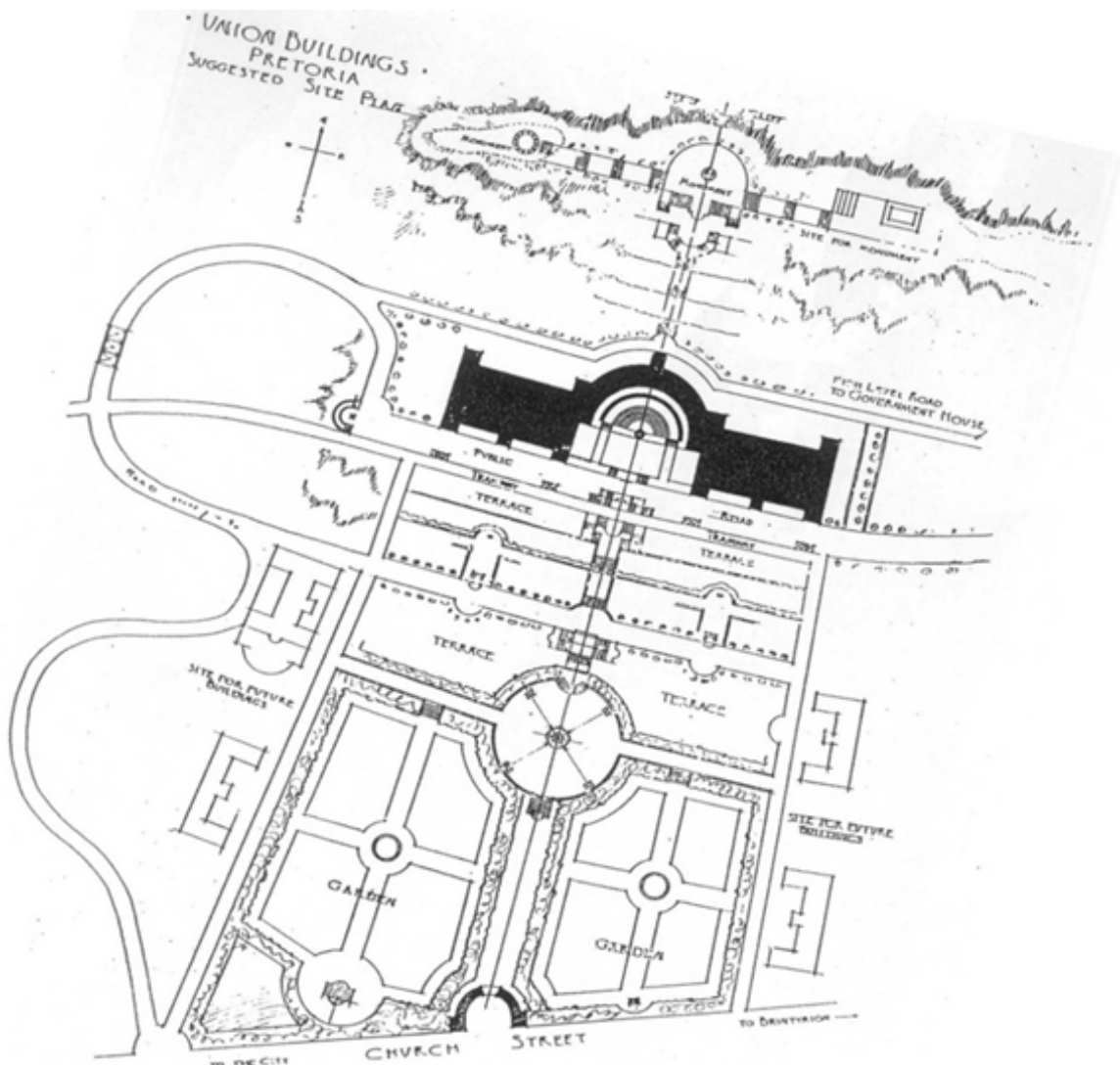


Figure 7 - 1909 plan showing baker's intention for the grounds.
 (Baker 1909 in Muller & Young, 2005)



Figure 8 - An early sketch of Baker's intention for the Union Buildings (25 June 1909) (Baker, 1909 in Christenson, 1996)

2.3. Story

The early sketches of the design showed a government precinct resembling an acropolis. The concept of an Acropolis appealed to Botha and Smuts (Rencken 1989:1) because of the implied grandeur. The site selection also tied in with this idea perfectly. The British High Commissioner, Lord Selbourne, described the site as being *one of the best sites in the world* and suggested that future visitors to the buildings would admire the *forethought and courage of those who chose it* (Rencken 1989:1).

Baker proposed an array of buildings on the site. The main building was formed by two wings connected by a semi-circular colonnade. The semi-circular colonnade framed an Amphitheatre and from the center, the stairs to the upper *koppie* would lead one to the parliament building which was flanked by a monument to the Union, also described as a temple of peace. The main building would be framed by landscaped terraces supported by other governmental buildings all the way to Church Street.

Baker's understanding of politics was clear in his proposal for the precinct to be constructed in phases as the funding became available. His inclusion of a parliament building testified to his belief in a singular capital, one that spoke to the agenda of Smuts and Botha (Rudford 1988:65). Baker later denied ever intending for such a building in Pretoria. His insight into political process was also shown in his focus on the amphitheatre which was to accommodate the important ceremonies and rituals of government. By using the natural elements of the site to induce hierarchy of space and by selective positioning of buildings along the natural

slope he ralted the design to the concept of *The Grand Manner* as outlined in his 1909 article *The architectural needs of South Africa* (Baker 1909, cited in Christenson 1996:6).

In the research for his paper, Baker studied the architecture and urbanism of a variety of civilizations worldwide and through different eras. He compiled a list of aspects he considered important that were derivable from ancient societies including; the acropolis site; monumentality; a careful use of scale; and the asymmetrical arrangements of buildings on different levels. All of these aspects are visible in his proposal for the Union Buildings (Baker 1909, cited in Christenson 1996:6).

The Grand Manner Baker refers to deals with the way architecture and urbanism convey their political intention to the viewer in their arrangement in space and their impression from a distance. He believes it is primarily through this arrangement and impression that architecture makes its political nature and value known embodying the *idea of civic and national dignity and power* (Baker 1909:513 cited in Christianson 1996:6).

If one refrains from questioning Baker's allegiance with British imperialism, one can see why Botha and Smuts thought of Baker's ideas as well-aligned with their intentions. These ideas were aligned with the ideas of Christopher Wren (also a British Architect) who suggested *a public building should be national ornament which 'establishes a nation, draws people and commerce and makes a people love their country'* (Rencken 1989:1)..

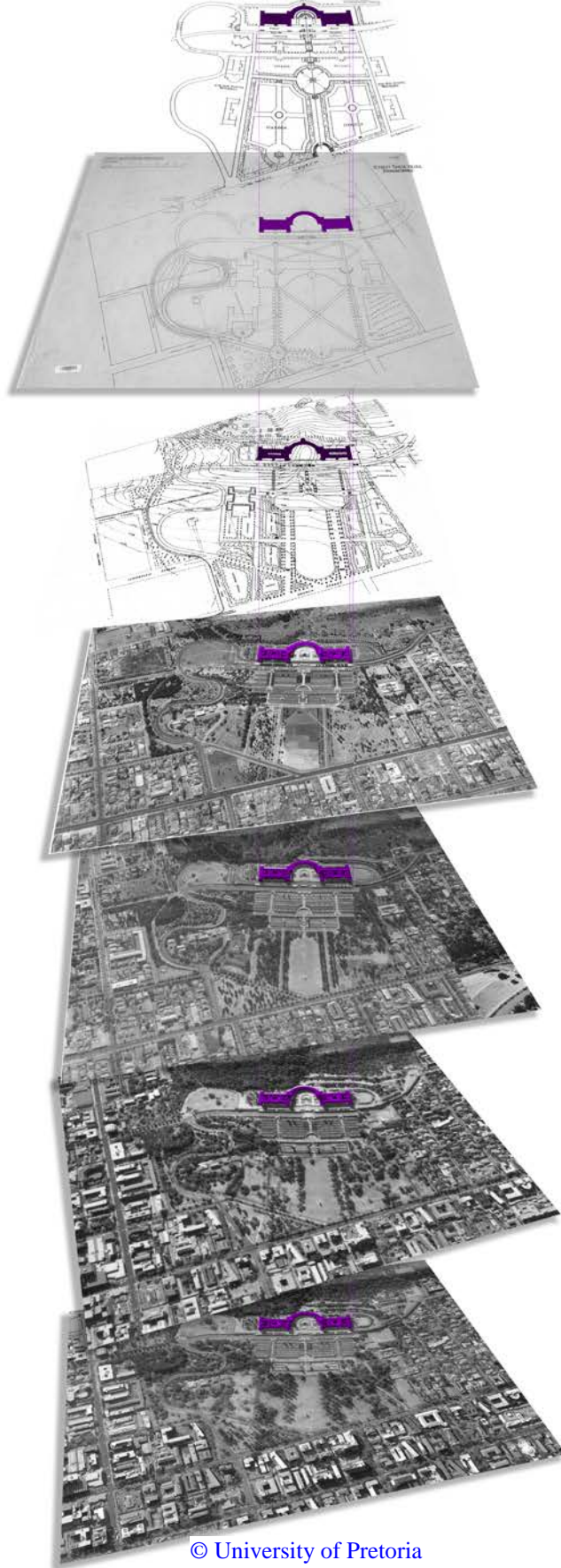


Figure 9 - A series of schematics (plans and aerial photographs) showing the changes from intention to present day of the Union Buildings Estate.
From top to bottom: 1909 plan (Baker, 1909 in Christenson, 1996)
1910 plan (DPW, 1910 in Muller & Young, 2005)
1911 plan (n.a., 1918 in Muller & Young, 2005)
1939 Aerial Photo (ibid.)
1954 Aerial Photo (ibid.)
2001 Aerial Photo (ibid.)
2009 Aerial Photo (ibid.)

2.4. Analysis

2.4.1. A Colonial Symbol

Many of Baker's original intentions were lost due to budget constraints brought about by, amongst other issues, World War 1. The site was imagined as an *acropolis* of the city (Rencken 1989: 1), signifying the majesty and importance of the matters of government. The monumentality of the project was still captured, albeit without the temples and extremely formal landscaping.

In their analysis of post-colonial capital cities, Bekker and Therborn (2012) discuss the importance of architecture, public space, monuments and street names as a Nation State's symbols of power and authority. The Union Buildings are both a building, monument and public space. The intention behind the building was to serve as a symbol of the power and authority of the Union and also implied in its very design the ideas of segregation and exclusion of all those who were not represented by the two wings and connecting courtyard. Bekker and Therborn discuss these symbols in cities after independence and what happens to them thereafter, *these symbols are subject to change – and their symbolism may change* (Bekker and Therborn 2012).

Despite the very blatant inequality that still plagues South Africans' daily lives it has, for the most part become known by an array of symbols of democracy, citizenship and new forms of power in the form of changes in administration, universal suffrage, equity systems and so forth. These symbols, however, appear largely on paper. For the most part, the continual importance given to the Union Buildings until this day is evidence of this.

In a discussion over the ways in which entities enforce their power there are, according to Dovey (1999), a number of ways in the built environment plays a role. The Apartheid government largely relied on the principle of *authority* and its implications to control behavior of those it favoured and the principle of *force* on those it oppressed. Other forms of doing so involve *manipulation, seduction and coercion* – although most often different variations of all these techniques are present at any one time Dovey (1999:11-16).

The Union Buildings are heralded as imperial architecture and should thus, upon first thought, be an unlikely seat for a post-apartheid government. According to Bekker and Therborn (2012: 180) *the insertion of local elements and use of materials makes it perhaps an unlikely, but nevertheless a highly successful centre for the power of post-apartheid government.*

This is a statement the author both agrees and disagrees with. Bekker and Therborn (2012) suggest that the site was easily appropriated and herald the inauguration of Nelson Mandela as an example of how appropriate the site is for state celebrations of this nature. They also allude to the point the author wishes to make, *the careful division of the crowd into three, separated by fences (dignitaries at the top, necessary members of the ceremony and close associates ranged down the gardens, and perhaps 100 000 ordinary people on the lawns below), prefigured the maintenance of a steep hierarchy in government and society after apartheid* (Bekker and Therborn 2012: 180, emphasis added by author).

Perhaps it was mere practicality of site choice, or the economy that resulted in the maintaining of South Africa's capitals post 1994, and thus also the adoption of the edifices of power, like the Union Buildings. Perhaps the lack of a series of buildings upon the new regime's election can be ascribed to the fact that the new regime was a democratic one; that the nation had faith in the idea and was not in need of new symbols in order believe in it. In a well-functioning democracy there is no need to legitimize power in the form of built form and rituals of state authority.

Despite a well-functioning democracy having no need for symbols of authority, South Africa is an ill-functioning democracy and the continued attempt at grandeur and the increased security at the Union Buildings may be evidence of the new regime borrowing authority from the past. *The historical role of the Union Buildings is assured, it seems – documents describe them as being 'the best precinct to the Presidency - the top level of government and heart of governance'* (Department of Public Works 2005 cited in (Bekker and Therborn 2012: 186). The Apartheid government used institutions like the Union Buildings to speak their authority over the oppressed. Authority as means of power manifestation in built form is institutional and is therefore accepted without question (Dovey 1999:11). There is an absence of argument. We recognize it because we see it as serving a greater purpose. The inclusion of the Union Buildings in the logo of Tshwane, the new South Africa's attempt at repackaging the colonial capital for democratic consumption (Bekker and Therborn 2012: 180), raises these questions. This does not necessarily insinuate the democratic government consciously adopts Apartheid techniques of intimidation and authority, but remains speculation.

It is the visibility of authority over citizens that has them making institutions of that authority the target. *Pretoria is a common, but far from exclusive, physical focus of such protest* (Bekker and Therborn 2012: 183). The Union Buildings has, time and again, been the location of civil protest and public outrage. Beginning with the 1913 march to protest the jailing of boys who did not concur to military service (Sa History 2011) and culminating recently in a series of marches to the Union Buildings, the most influential perhaps being #FeesMustFall in October 2016.

2.4.2. A Park

The following section is based on the Author's observations.

The unrealized vision for the Union Buildings and surrounding precinct becomes very apparent when walking through the grounds, despite the site still being relatively well maintained and used for recreational activities. The buildings that were meant to frame the terraces were never built. As a result the lowest lawn feels poorly contained and difficult to use for much more than large events that use temporary structures or informal picnics under the surrounding trees.

The site has been used to host a world-renowned extreme sports event which attracts a massive crowd to the lawns, where temporary event space and grandstands are erected

and cleared away afterwards. The Union Buildings provide an impressive backdrop to the event which makes the decision to host the event there apparent.

Figure 5: The Redbull Xfighters event saw the grounds transformed into a series of dust mounds with the buildings making for an impressive backdrop to the action shots of motorcyclists (Primi Patti, 2015)

However, on a daily basis the site sees very few visitors, compared to its size and the density of the area it finds itself in. A number of people use the space for exercise purposes, over weekends people have picnics under the trees during the day you can see a few tired bodies napping under the trees while some have lunch and chat softly. The site is used as a public park..

The grounds are used recreationally but the lack of structure, perhaps the polar opposite of the strict classical regimented plan proposed by Baker, leaves the space less legible to the user. The potential of the space as public space is unfulfilled. The reality is that the park is fenced off with limited points of access. The number of people using the sidewalks just south of the fence is relatively low, there are more pedestrians on the southern side of Stanza Bopape street, perhaps this is due to the edge condition



being more accommodating on this side of the street, the location of vendors here and the high traffic speeds in the street discouraging people to cross the street and walk on the wider side, next to the park edge.

During protests and marches to and at the Union Buildings, protestors are bottlenecked at the small gates to get into the grounds. Not only does this undermine the efficacy of their movement, the secondary fence that has been placed at the top of the main lawns has lockable gates that are locked during demonstrations to contain protestors in an easily targetable camp, with those the protestors usually wish to address, being safely inside the buildings, behind a wall of police in riot gear, or in times they are not even on the property.



Opposite page, this page top to bottom:

Figure 10 - The Union Buildings make for an impressive backdrop to extreme sports events (Primi Piatti 2015)

Figure 11 - (Vandalised signage near the pedestrian gate from Stanza Bopape street (Author 2016)

Figure 12 - The view from behind the fence (Author 2016)





2.4.3. A Street

The following section is based on the Author's observations.



Stanza Bopape street runs South of the Union Buildings estate. The street became known as stanza Bopape street in 2012, named after a freedom fighter from Mamelodi who was tortured to death by the Apartheid government.

Originally, the street was a part of Church street, name after the first church in Pretoria - the reason farmers originally gathered in the area (SA History 2013). Over the years Church street has undergone numerous changes and the portion of the street in front of the Union Building Estate presently carries 6 lanes of traffic. This renders the street very busy and not conducive to easy pedestrian movement from ones side to the other. From early in the morning the street is bustling and the number of taxis travelling East out of the City and West into the city is overwhelming.

There are a handful of pedestrians, a number that increases when the city embarks on its daily commute. At lunch time, the triangular traffic island at the base of the estate is littered with tired bodies. The traffic increases again towards the end of the day when the commute begins again.

At the Southern side of the street, vendors sell snacks and sweets to passersby. Late in the afternoon and into the evening, residents of the buildings surrounding the traffic island gather outside under street lights, children play soccer and mothers chat until its time to go inside.

The closeness of all necessary amenities renders the place densely populated, and the community knows its people - there is a distinct sense of surveillance. However, this sense decreases as one moves east, towards the Hilton Hotel, where diplomatic cars race through the street and a handful of homeless people use its walls to support their daily stupor.

Opposite Page, top to bottom:

Figure 13 - The safe side of the fence during #FeesMustFall (SABC, 2015)

Figure 14 - The other side (SABC, 2015)

This page:

Figure 15 - Photographs of the streets surrounding the triangle at the base of the grounds, Stanza Bopape street and Madiba Street. Taken at sunrise, and already the streets are abustle (Author 2016).



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Chapter 3:

PUBLIC

Urban Framework for a democratic city

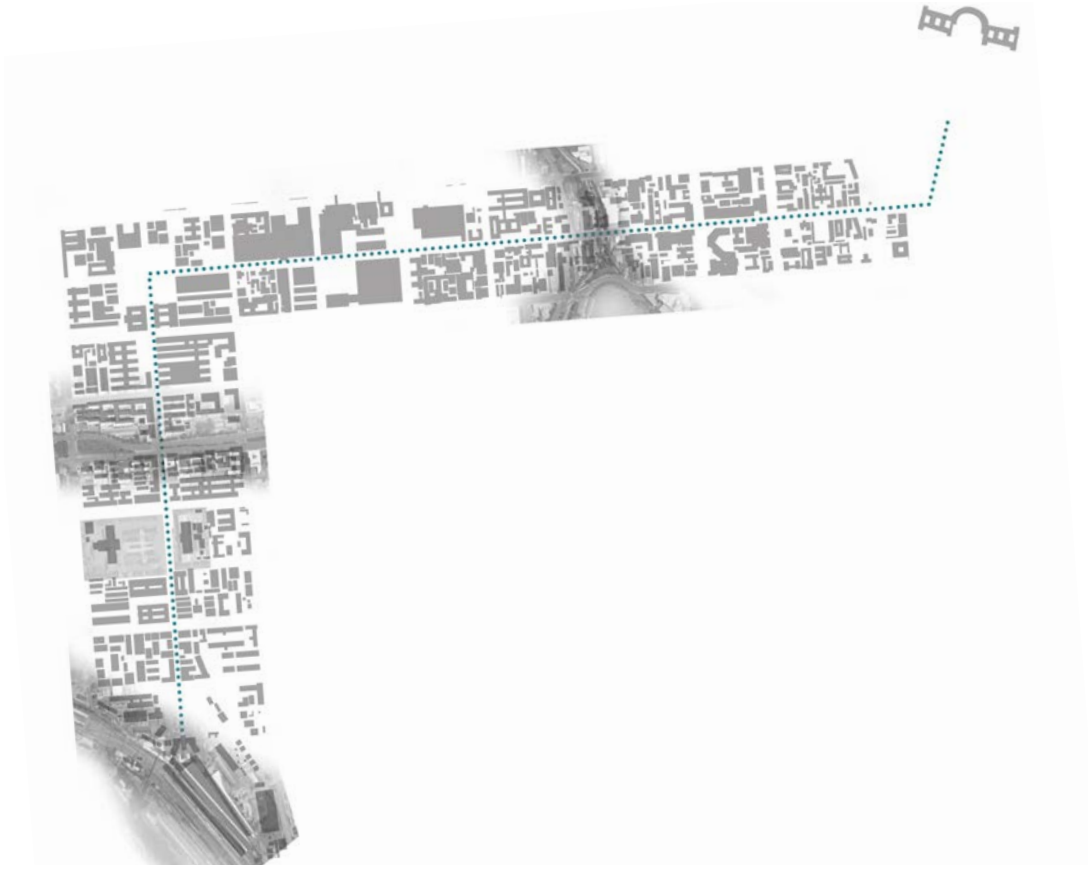


3.1. Departure & Discovery

The initial investigation undertaken aimed at mapping locations of politically themed violence in Pretoria over time. Addendum A contains a series of maps and a historic timeline can be found collating these events.

Historically, Pretoria as Apartheid city saw a number of events of contestation and violence. The majority of these displays were directed at national party rule and were the symptoms of dissatisfaction with the oppressive system. The scars of these moments of violence have remained largely invisible and un-commemorated in the city.

It is interesting to note, however, that the route of protest march established by the first display of dissatisfaction (the women's march of 1956) used a route similar to the route used during present day protests against systemic injustice, for example the #FeesMustFall march of 2015.



3.2. Development

Kingwell and Turmell (2009:xii & xiv) describe public space as being where democracy occurs, this brings to mind visions of Parisian boulevards filled with hordes of citizens in protest. It was this thinking that led the study to mapping of the formal public spaces along the study area. This proved how few formal public spaces Pretoria had which, with the idea of public spaces being democratic spaces in mind, sheds some light on Pretoria's status as an undemocratic city.

The route that formed the basis of the designated area also falls along a large number of pedestrian focused streetscapes. The portion of road in front of City Hall, for example, has wide sidewalks that spill over from the park in front of the building. However, the erection of a fence on the day of our visit proves why the park and sidewalk are relatively deserted apart from those passing through.

The street plays host to numerous governmental buildings and large office blocks which can be ascribed as the reason for so many pedestrians along its sidewalks. These pedestrians have inspired vendors who sit in building alcoves and on street corners selling an array of goods. This ties in with the belief of the PPS (Project for Public Spaces) that *streets are more than just a means of mobility. Streets themselves are critical public spaces that can lend richness to the social, civic, and economic fabric of our communities* (PPS.org, n.d.).

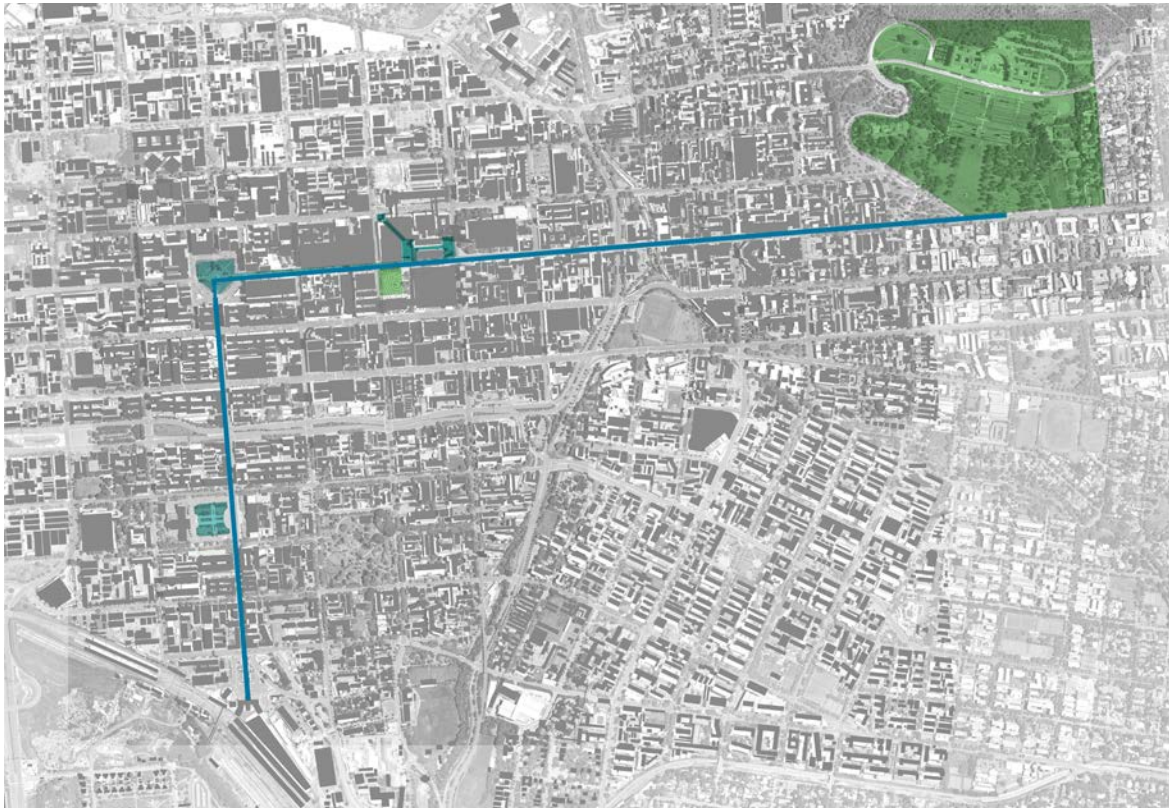
In order to practice governance, government buildings need to engage with the public. The policy behind Pretoria's scattering of governmental departments is ascribed to the attempted accessibility of departments by the public, by placing them within the city fabric as opposed to isolating them in a specific governmental precinct. Regardless of this intention, the government still seems relatively inaccessible

and out of touch. The government buildings in Pretoria and along the study area mostly have concealed entrances for their staff or numerous barriers to entry. There is little opportunity for public interaction.

The Urban framework proposes the establishment of a network of formal public spaces and streetscapes along the designated route that encourage public use and appropriation and the inclusion of even more governmental programmes in the buildings along the route. The idea is that not only will the city become more democratic in accordance with Kingwell & Turmell (2009: xii & xiv), but this will also encourage an outside life for those working in government buildings where the chance of interaction with those using the public spaces is more likely. The proximity of government buildings (and thus interface) to public spaces and public streets will provide platforms for protest and civil displays within a relevant radius to the governmental institutions they are targeting.

The introduction of programmes to contribute positively to the existing and new public spaces will serve as urban acupuncture to potentially radiate into the city providing improved living conditions for its citizens an intention outlined in the Tshwane 2055 vision (Tshwane Planning Commissioners and City of Tshwane 2013:215).

The full framework document is contained in Addendum B.





Chapter 4:
PERCEPTIONS

4.1. Power

Our understanding of power, perhaps due to the current gestalt, brings about ideas of domination and rule of certain parties over others. This usually implies a type of force or incentive. The origin of the concept of power, however, lies in the denotation of one's capability to perform a certain action. This also brings about the question of empowerment, the creation of another's capability to perform an action. Often, the empowerment of one conversely results in the oppression of the capabilities of others, this is paramount when the empowerment of one ensures power over others (Dovey 1999:2).

With regard to political relations, this is often the case – but we have come to accept that, in its most honest form Democracy involves the empowerment of certain individuals to have power over other individuals. This serves to empower those subjects of power, to be able to form certain capabilities. We give our representatives power so that they may act on our behalf, and empower us to lead a certain type of life (that involves certain actions). Thus their empowerment leads to our empowerment. Ultimately, by definition, in a democracy, the citizens have the power, the politicians ensure this power by acting on their behalf.

The recent eruption of civil protest speaks to this idea of representation and control – by becoming more actively involved in governance, through protests and civil action, the people of South Africa are expressing their dissatisfaction with their representatives.

4.2. Public Space

How does a regime design public spaces that accommodates a rally but also serve daily life? Shouldn't urban designers deliberately be able to create better spaces for the exercise of democratic protest?

Is not the central tone of most protests an aggressive irony, a boisterous public excoriation of political hypocrisy, of the emptiness of a regime, whether it be the most closed, authoritarian police state or an open, democratic one?

As the exhibition made clear, protesters choose their sites, their routes, their rituals, and their songs to highlight the distance between a regime's symbols and the needs and desires of the people. A protest can succeed only, I argue, if it defies the regime by occupying space usually denied it, or occupies it in a way that transforms the place's meaning. (Page 2008:86)

It seems worth mentioning that from the onset of the protest culture parameter of the urban vision – I struggled to console myself with the idea that we could claim to be designing a space for protest. I had to constantly remind myself that we were not designing a protest route as much as the temptation often came to call it that. We are dealing with public space because we believe that public space is the most democratic space in a city. We do not believe that all open spaces are public. A commodified space, any with a form of access control is no longer public. This is as good as barricading and preventing access to some individuals in public squares in the event of protest (as in the case of the French labour protest of 23 June 2016).

It is thus relevant that a route should be implied between these spaces, and that the route be along the street which is South African public space as much as any European Square or American Park – there is a historic association to be made here as well. The streets were, during Apartheid, the one place where all South Africans had to walk in Pretoria. There were perhaps separate entrances into buildings, but the street was still public. It was in the streets the protest and riot and violence in the name of freedom has always occurred in Pretoria, albeit only en route to the direct access to government.

Public space is not democratic in how it is designed – it's paving and trees and benches do not make it democratic. *A truly 'democratic' architecture is therefore impossible to achieve; what is achievable, on the other hand, is the construction of an architecture serving democratic political programs (Lambert 2016).* Buildings are not what/who is/are inside them (Lambert 2016). They embody values because of the activities they facilitate. To reiterate from before, it is this simultaneously non-descriptive and adaptable public space that is truly the manifestation of democracy.

4.3. Parliament

South African Parliament website states that the constitution requires of parliament the opportunity for public participation (Parliament RSA n.d.). A few ways of direct and indirect participation are outlined. Amongst others, lobbying outside parliament is considered a recommended way in which to indirectly influence parliament.

Act 4 of 2004: Powers, Privileges and Immunities of Parliaments and Provincial Legislatures Act, states that; *A person who creates or takes part in any disturbance in the precincts while Parliament or a House or committee is meeting, may be arrested and removed from the precincts, on the order of the Speaker or the Chairperson or a person designated by the Speaker or Chairperson, by a staff member or a member of the security services* (Chapter 3, section 11).

The 2015 *Fees must fall* saw the media littered with photographs of students protesting at the gates of parliament. The most provocative images were those of

students who had been injured by police anti-riot squads. These students never entered the premises. They were met at the gates. They were indirectly influencing parliament. And yet many of them were arrested, despite being outside of the official precinct.

Figure 16 - Students storm the gates of Parliament, Cape Town (October 2015) (BBC 2016)



4.4. Democracy

The idea of democracy holds various meanings world-wide. Isokhan & Stockwell (2011:1) suggest the debatability of democracy's definition is evidence of the existence thereof, its importance and its ability to absorb a variety of opinions. (ibid:1)

Despite not being where the concept originated, the term democracy credits its origins to Ancient Greece (n.a. n.d.: history.com & Isokhan & Stockwell 2011:1). *Athenian leader Cleisthenes introduced a system of political reforms that he called 'demokratia', or "rule by the people"* (n.a. n.d.: history.com). Based on this understanding, the citizenry of a place are entitled and encouraged to participate in their own governance.

In *Demokratia* (the Athenian assembly) all those considered citizens were encouraged to attend and partake in discussion and decision making (n.a. n.d.: history.com & Isokhan & Stockwell 2011:1). All citizens also spent a time performing their duty as state officials (Isokhan & stockwell 2011:1).

Modern democracy has a more inclusive definition of citizenry and a less inclusive approach to self rule where democratic elections serve to elect representatives who govern.

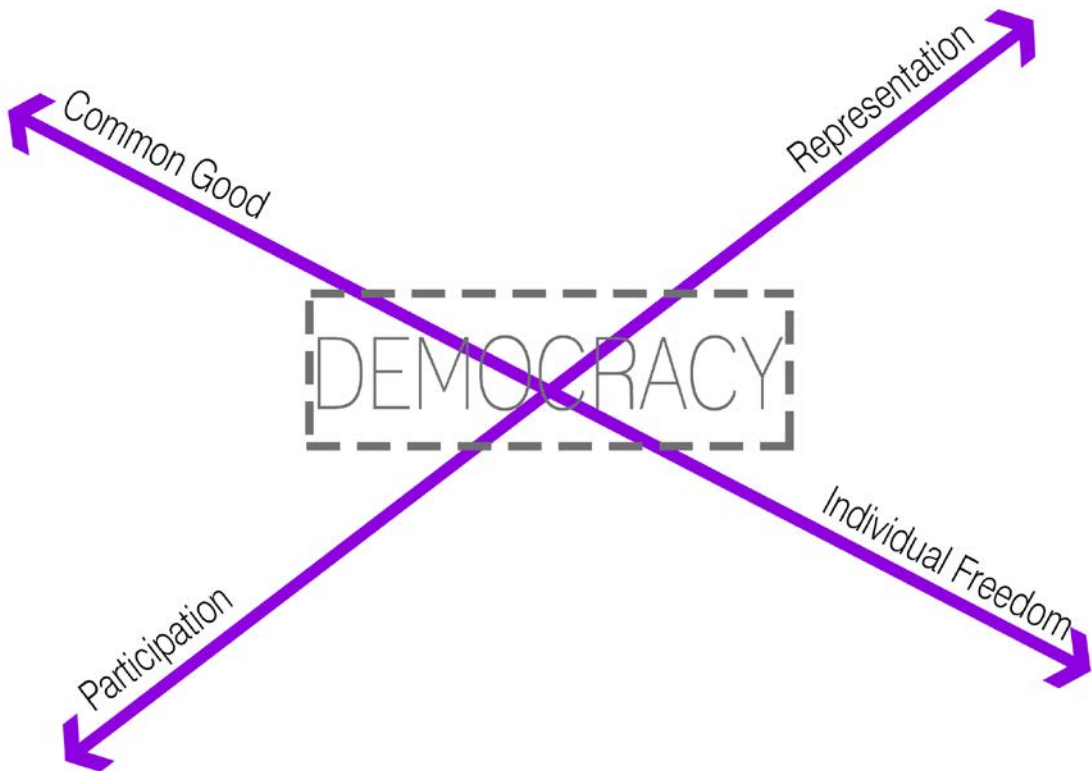
A singular definition of democracy is not the aim, such a rigid definition would be inherently undemocratic, not to mention the fact that democracy deals with people who are ever changing in their needs and desires and thus democracy will not be one thing always but it is able to change (ibid.:2). Democracy occupies the liminal space housed during numerous interplays of ideas.

Contemporary democracy operates on simultaneous scales of representation/participation and the common good/individual freedoms (ibid.) (see figure).

These scales are in place because true democracy is impossible to achieve. The essence of democracy is its position as unattainable goal, it's promise to come (Jacques Derrida in Isakhan & Stockwell, 2011: 2).

The issue of representation vs. participation is brought under the spotlight when we see acts of protest and civil disobedience - when those represented lose faith in their representatives.

Figure 17 - The intersecting scales contained within democracy (Author's diagram 2016)'



4.4.1. Democracy as Hybrid

The independence of many colonial countries was made official upon establishment of independent governance and very often, parliament, as was the case with Botswana. Based on the British parliamentary system, Botswana has a parliamentary system determined by universal suffrage, whereby all citizens of the country have vote in determining the members of parliament (through the election of a democratic government)(The Commonwealth, n.d.).

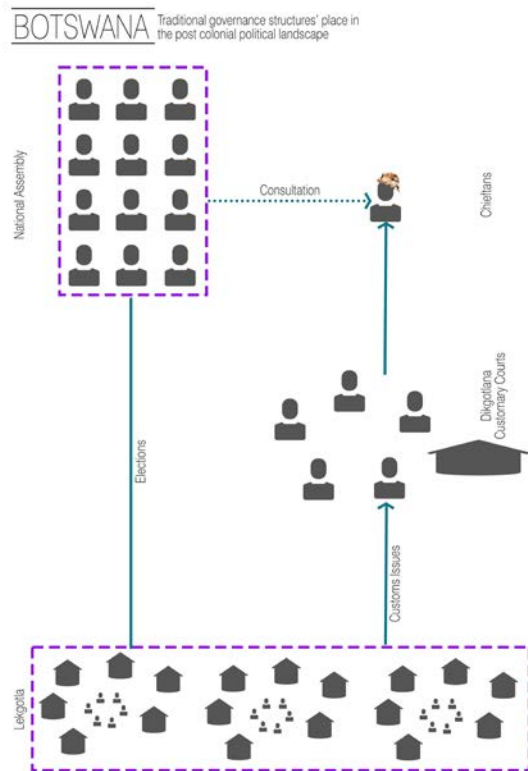
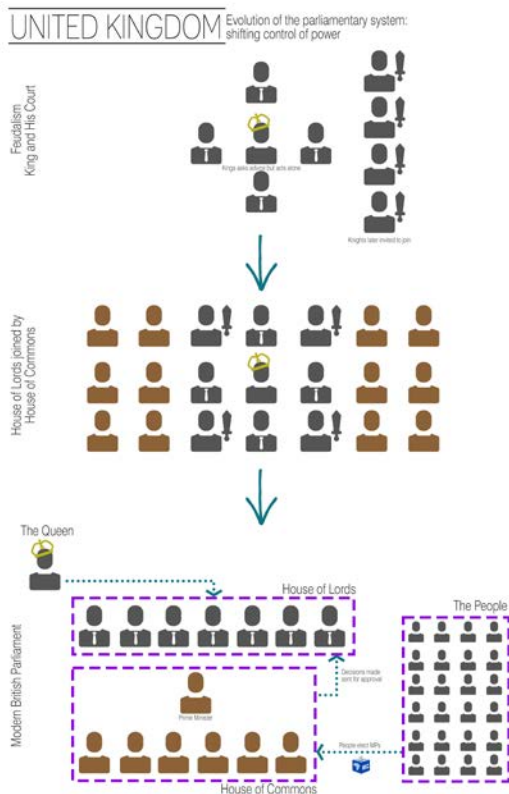
The system, however, differs in the sense that it incorporates traditional governance systems. Despite the modernization of Botswana, many citizens still live in traditionally managed villages, governed by councils made up of male household representatives. These councils meet in a *Legotla* to discuss matters of governance in their smaller communities. When larger customs issues arise, customary courts known as *Dikgotlana* resolve these issues. If no resolution can be met, issues are taken to the Chieftans of various clans to rule over these issues.

The representation of customs issues in parliament is through these Chieftans who form the 40 member *Ntlo ya Dikgosi* (The Commonwealth, n.d.).

This hybrid system marries the evolved British system and traditional governance establishing a distinctly African system of democracy.

Figure 18 - The British parliamentary system has been the benchmark for parliamentary systems worldwide (Author's diagram 2016)

Figure 19 - A more contextual example of a hybrid system of traditional governance and colonially established systems can be found in Botswana (Author's diagram 2016)



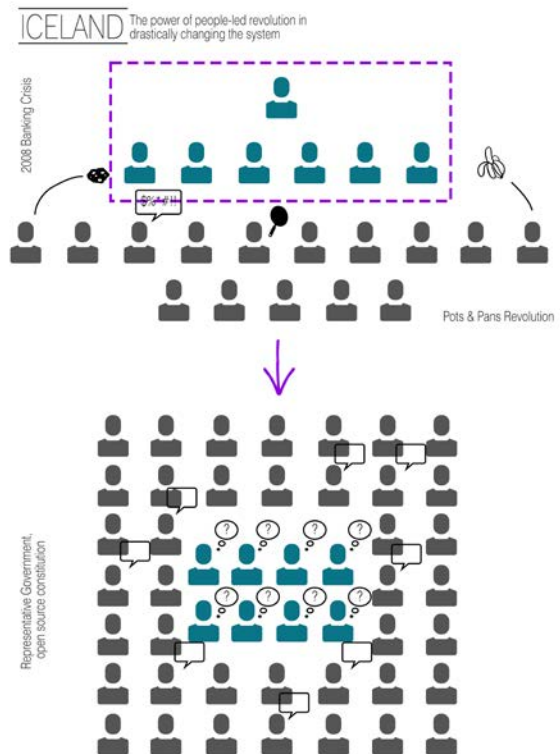
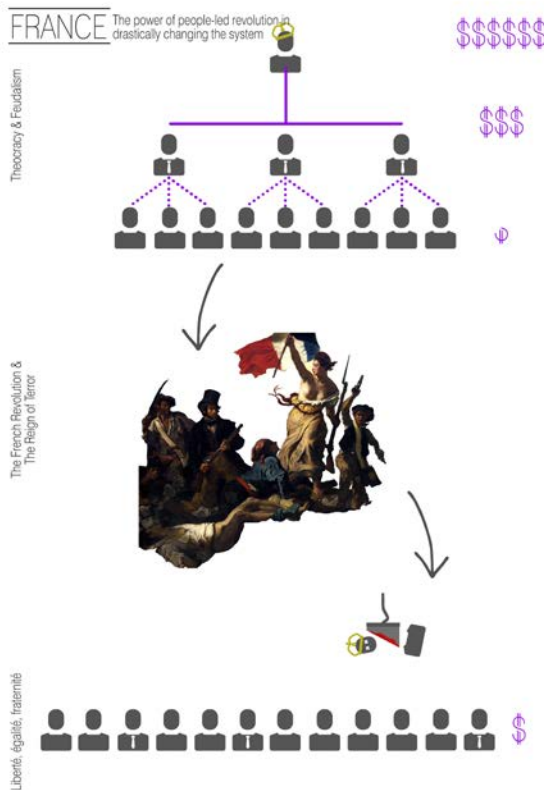
4.4.2. Democracy as Revolution

The story of the French Revolution has marked, for decades, a turning point in government of society. The ability of civilians to overthrow the monarchy marked a spirit of liberty and quality that still governs French politics to this day.

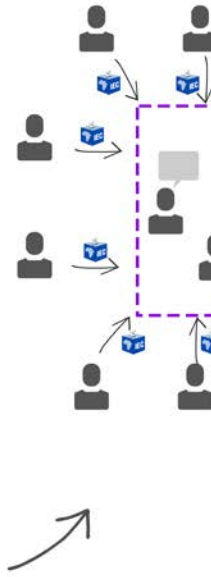
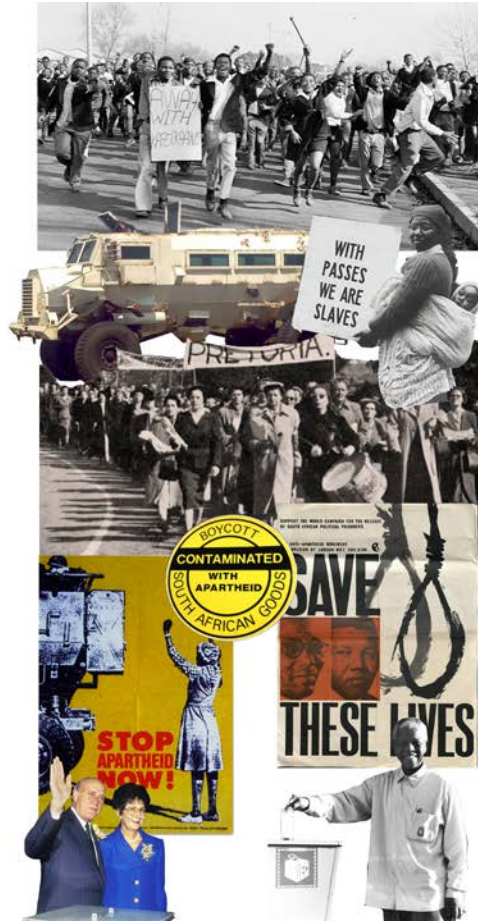
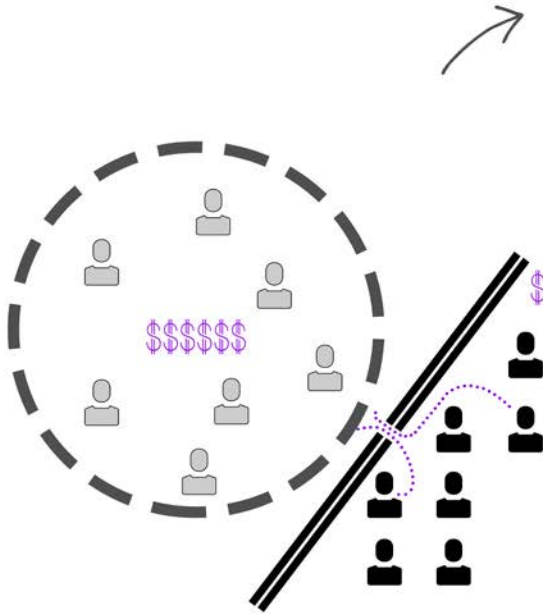
Iceland underwent a similar revolution in 2012 whereby, following the 2008 financial crisis, the public protested outside parliament and eventually overthrew government. Thereafter the election of new officials was done over social media. Those responsible for the financial crisis were tried as criminals for treason.

Figure 20 - France embodied the power of individuals by overthrowing the monarchy during the French Revolution (Author's diagram 2016)

Figure 21 - Iceland underwent a similar revolution which implemented the media of our era and served as an example for the power of the people today (Author's diagram 2016)



SOUTH AFRICA





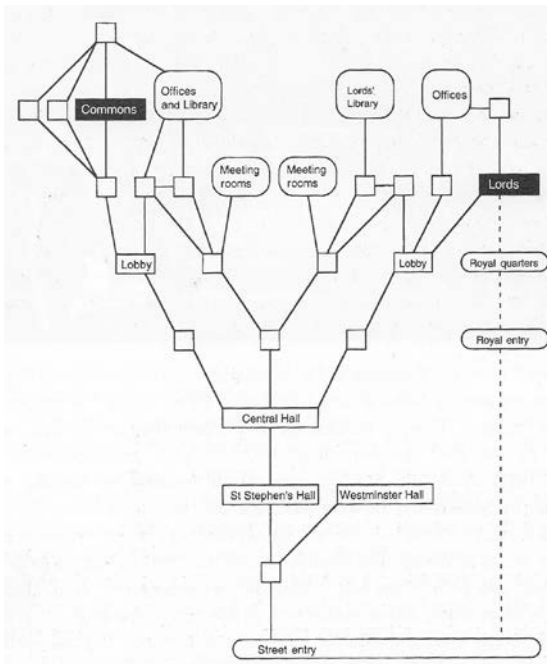
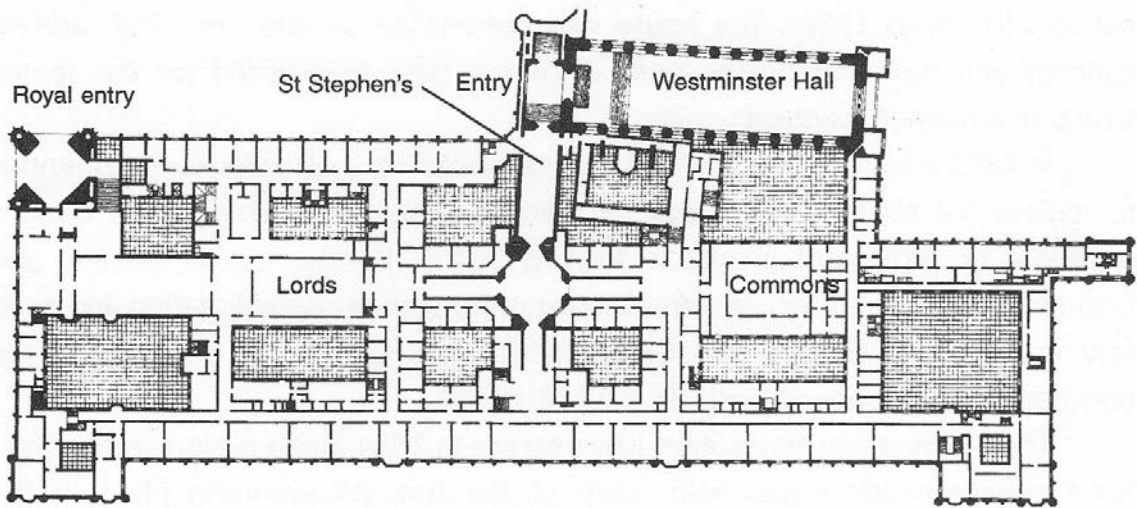
4.4.3. Democracy in Flux

South Africa, as discussed, is littered with displays of politically themed unrest. The latest social media trends regularly feature the term decolonisation; which stems from the youth (those newly participating in the democracy) who believe that despite the 1994 declaration of democracy and universal freedom, inherited systems of oppression still govern the South African political and economic landscape.

Figure 22 - South Africa's recent political history is marked with the exclusion of the majority, the revolutions and international boycotts that lead to the abolishment of Apartheid and the introduction of universal suffrage. Presently, the country identifies as democratic which is both reason for the current displays of political unrest and reason why these displays can occur. South Africa's democratic definition is in flux (Author's diagram 2016).

4.4.4. Democracy in space – Case study 1

Hillier & Hanson's (1989) analysis of the structure of space to determine access control and hierarchies of *publicness*. Depth into structure (systemic not architectural) implies status of those allowed. Spatial syntax allows buildings to embody ideologies (Dovey 1999:90). It maps how buildings structure social structures. It reduces buildings to a largely functional creation - which allows thorough engagement between architect and issues and users and ideals. Spatial syntax can thus be used as a tool to challenge existing norms of power structures and systemic processes.



The significance of the British political system was perhaps amplified by the British Empire's colonies consequently adopting the system post-independence. It is therefore that there are many countries world-wide with a variations of the British parliamentary system still in place. Australia achieved independence in 1901 and structured their own legislative system upon the ideas manifested at Westminster.

Above and left:

Figure 23 - The plan of the British Houses of Parliament at Westminster

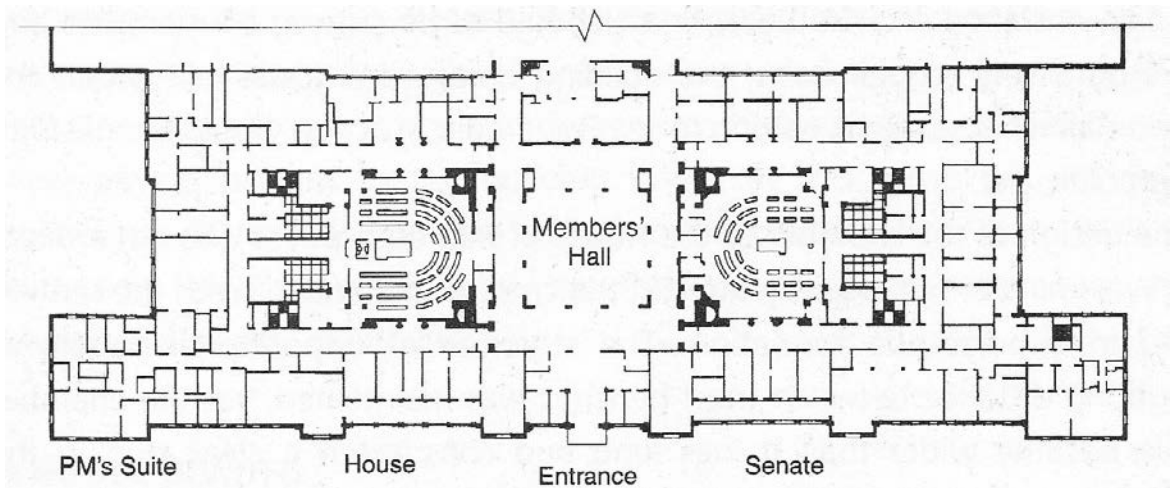
Figure 24 - The spatial syntax diagram of the British Houses of Parliament at Westminster

Opposite page, top and bottom:

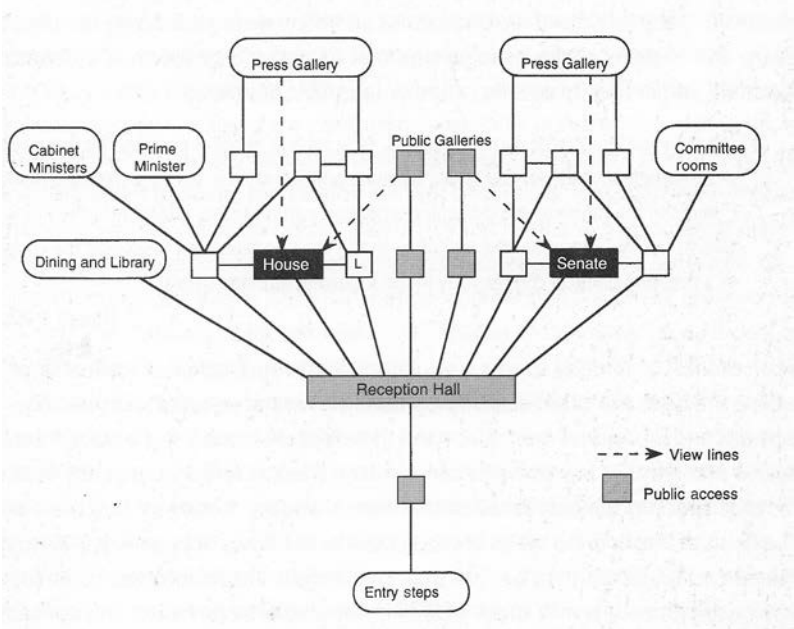
Figure 25 - The plan of the temporary Australian Parliament building in Canberra

Figure 26 - The spatial syntax diagram of the temporary Australian Parliament building in Canberra

Although the perpetual unfair treatment of Aboriginal people in Australia comes to mind, Dovey (1991:89) heralds post-1901 Australia as a highly democratic egalitarian society. The system adopted from the English was altered to include a senate and prime minister as opposed to the British monarchy and House of Lords. Until 1927, Australian parliament occupied an old colonial building from where it moved to a purpose made, albeit temporary building in Canberra. Despite being considered only a temporary building, the Provisional Parliament House constructed in 1923 was successful nonetheless in the syntax of democracy (Dovey 1999, 90 – 93). The plan replicated the houses at Westminster in that two houses flanked the reception hall, but these houses were no longer to divide class, they were located shallowly (implying closeness to the outside) on the syntactic plan and they were also accessible from all sides. The prime minister and cabinet were also housed in this building. Public and press galleries were accessible from the same passages and galleries as that were used by members and ministers who could not *escape each other* (Grattan 1988: 13 in Dovey 1999: 91). Public access was the tone of the building and the singular entrance made the ministers and members very public figures, they would give interviews and receive dignitaries on the steps to the entrance.



The building outlived its temporary status which required many additions over time. The convoluted structure and poor formal expression is said to have rendered it unsuccessful as government building, and yet this resulted in what seems to be the epitome of a democratic spatial syntax (Dovey 1999, 90 – 93). The lack of private corridors between spaces meant a badly timed quip could easily be overheard and made public knowledge.



Much of the success attributed to the coincidental democratic layout of the provisional parliamentary building was lost during the commission of a new Parliament House, an attempt to regain the Australian public's faith in the constitution. The project was the result of a competition and was completed in 9 years after the competition was won (Dovey 1999, 92-93).

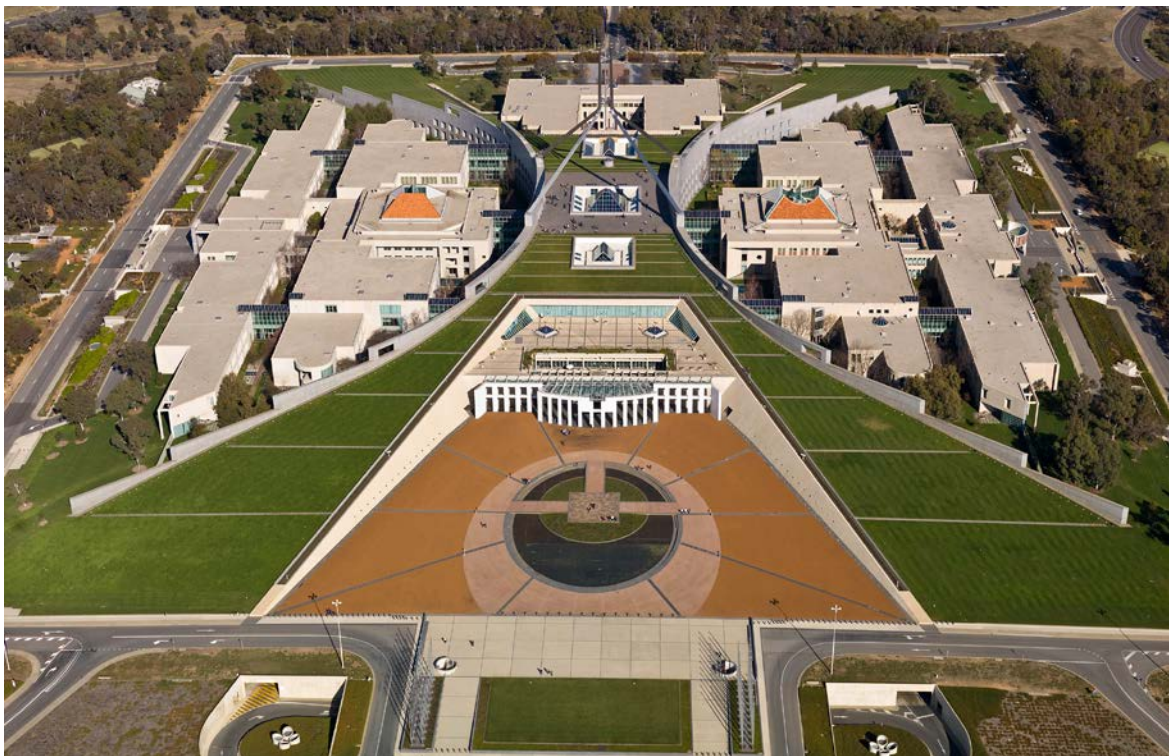
The competition brief, prepared by the Parliament House Construction Authority, was extremely deterministic and featured two volumes worth of guidelines. The architects, in essence, only had control over the execution of form and construction. The programme had been determined by the government who dictated most significantly that the public was to be strictly separated from the members and senators. The instruction called for separate circulation specific to visitors separate from those who worked in the building. There is however, a halfhearted attempt made at inclusion of the public, with constant viewing of the building's workings as a clichéd attempt at participation. The result becomes a zoo enclosed around a parliamentary building where one hardly ever sees the occupants doing anything of significance.

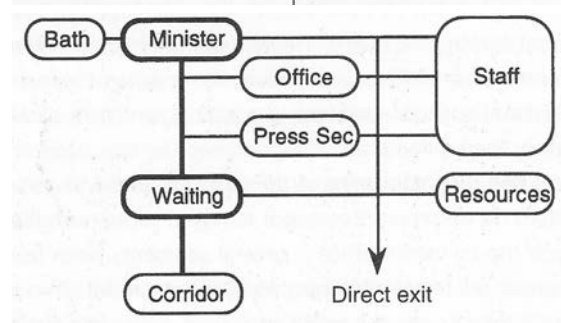
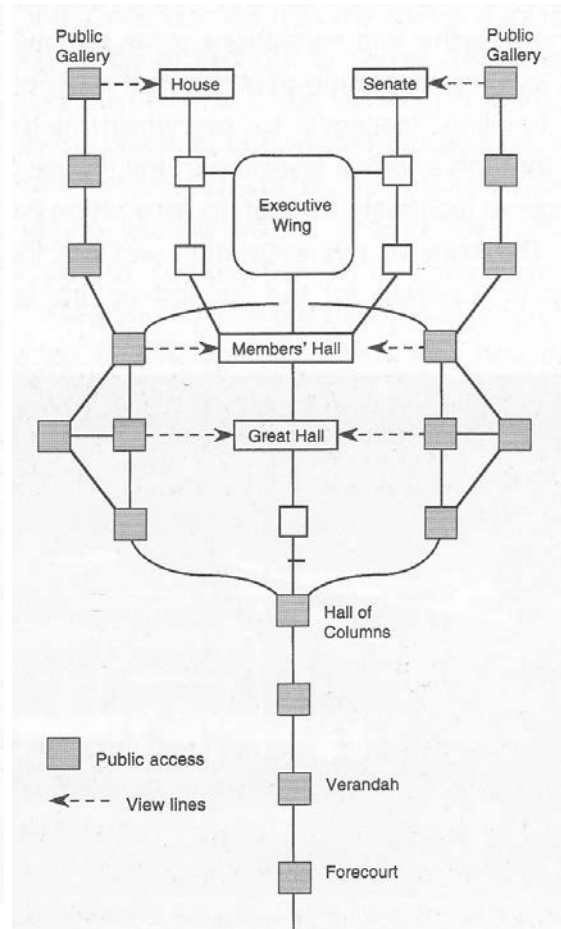
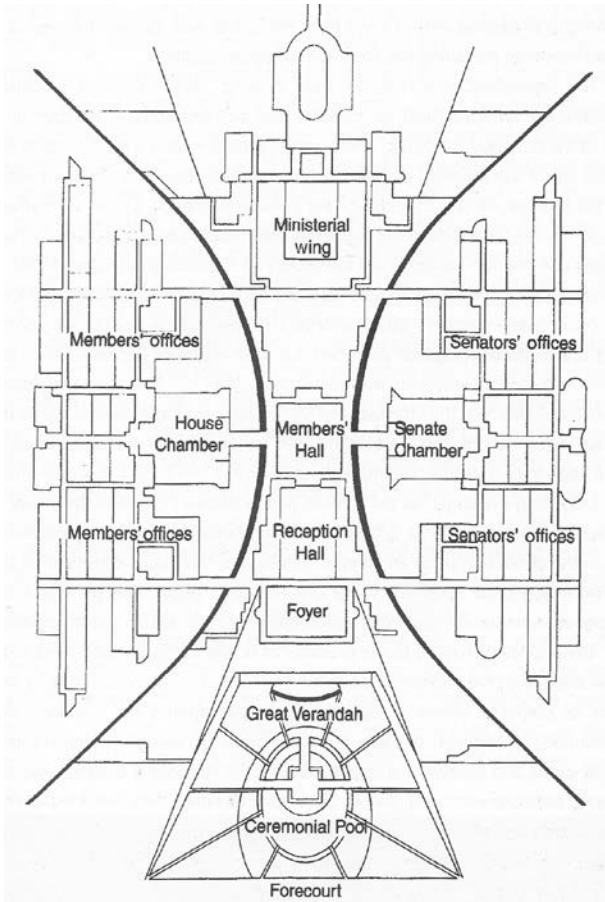
Separate entrances and circulation meant there was more autonomy awarded to senators and members, who were

now no longer easily contacted by the press or the public. Everything was, much like a zoo or gallery, carefully curated, despite the built form's apparent transparency and accessibility. Dovey describes the winning plan (opp. page) as four separate buildings in a cruciform with four entries for four classes of people whose paths and gazes cross only in the two debating chambers (1999:94). When observing the syntax of public spaces throughout the building (opp. page) the building inside a gallery or gallery around a building phenomenon becomes clear.

The grand entrance into the building for the public tourists resembles a monumentality reminiscent of the Washington Mall and Capitol Hill, and similar to the Mall, visitors are merely invited as observers of government practice, spectators to the officials they've elected. The mall has, however been the location of numerous political demonstrations over the years (protests against the Vietnam War come to mind – can similar demonstration take place on the Grand Verandah? The Grand Verandah and Ceremonial Pool seem very similar to Baker's intended amphitheater at The Union Buildings – public and visible, although easily surveyed and thus controlled.

The example of the Australian Parliament House illustrates the coincidental success of a building that was appropriated





in allowing for democracy far more than one that was designed specifically as a symbol thereof.

Perhaps the intentions of the brief for the new building, despite being veiled by democratic ideals, sought only to address issues of security and privacy of the building's occupants - despite the effect on the public who are as much stakeholders as the occupants.

The study alludes to the identification of liminal spaces as the spaces most democratic in the built environment, insinuating also that democracy often grants freedom of access to government officials, and infringes on the right to privacy of those individuals. This might spark debate with regards to human rights, but the debate is easily settled by the reminder of the public good.

Politicians are granted power to represent, and as representation they are in service of the public. In the name of the public good, in a political capacity, politicians need to be accessible.

Figure 27 - (opp. page) An aerial photo showing the *new* Australian Parliament House

Figure 28 - (above, left) A diagrammatic plan of the *new* Australian Parliament House

Figure 29 - (above, right) The spatial syntax diagram of the *new* Australian Parliament House

Figure 30 - (right) The spatial syntax diagram of a typical office suite in the *new* Australian Parliament House

4.4.5. Democracy in space – Case study 2

The Constitutional Court was commissioned by the Truth and Reconciliation commission in 1998 and construction commenced in 2002 (King & Flynn 2012:65-66). The site selected was the Old Fort in Johannesburg, which became Johannesburg's main prison after the abandonment thereof as military fortification. The aim of the project was to strengthen the discourse around Human Rights and also rebalance the representation of heritage in South Africa as part of an active strategy to do so by government (ibid.).

The heritage represented on the site is both tangible (the actual physical military and prison architectural fabric) and intangible (human rights as having been infringed upon so drastically during the site's use as a prison). The heritage significance is thus based on both tangible and intangible aspects, which strengthen the overall significance substantially (ibid.: 71).

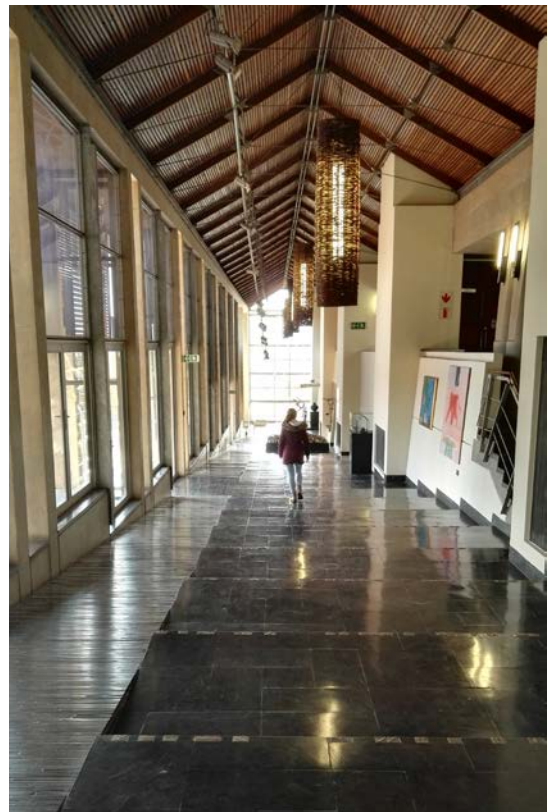
It is interesting that the heritage aspect of the site, the prison museum and information centre were not a part of the original brief for the site that the consideration of any heritage narratives only began months before the construction of the project (ibid. 77). The original project was only that of the court, and the location was only partially selected because of its heritage and association with human rights (the main focus of the court), other reasons dealt with the closeness of the site to the existing site of the court, location in Johannesburg which was already well connected and the opportunity to use the court as an insertion project for urban upliftment (ibid.).

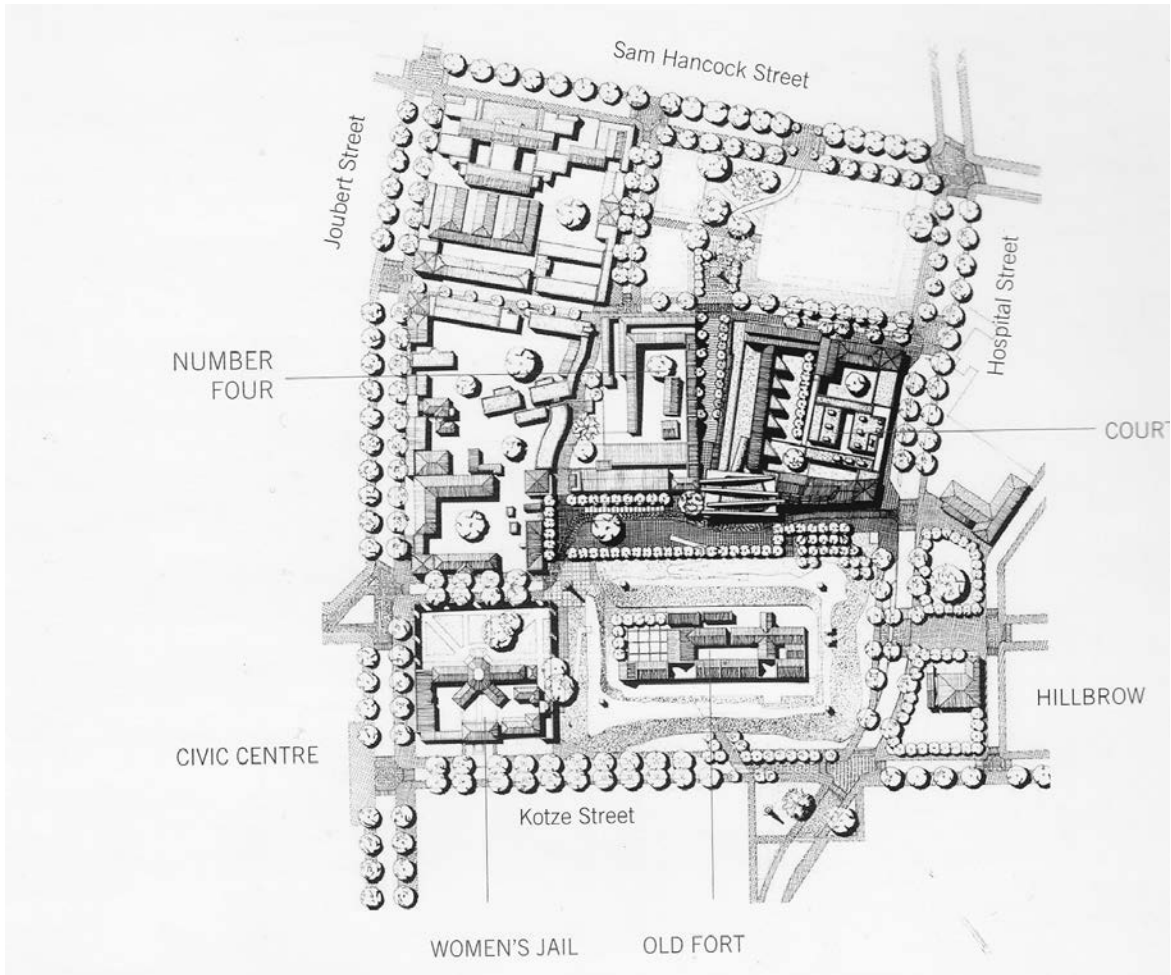
The poetry behind the site as it stands today lies largely in it becoming a place of justice, on the site of a place of injustice (ibid. 68). The site housed many regular criminals but was notorious for its treatment of black prisoners who were arrested because their everyday life was criminalized. The prison buildings' information panels and installations remind one of the injustice they underwent while held at the fort.

The attempted *publicness* speaks to the idea that museums and the presentation of heritage in South Africa today should not be to act as neutral spaces but spaces in which the narrative of Post-authoritarian dispensation actively plays out (Davison 2005, cited in King and Flynn 2012: 69). This would suggest that the spaces are designed to hold aspects of previous layers of history in a place and

that the accessing of these aspects forms a new layer in space. Where the institution associated with the oppression of human rights is located in exactly the same space, with remnants visible, as the relic of this oppression, heritage becomes a tool for nation building.

At Constitution Hill the heritage becomes an important part of the narrative of Human Rights in Post-Apartheid South Africa (King & Flynn:69) and globally. The site tells a universal story, as opposed to that of a single hero or event and speaks thus to a broader audience. The narratives of historic inhabitants extends to those of the prison guards which also enriches the character of the narrative of the place. The inclusion of the Fort's military history also adds to the richness of the narrative of place, a richness even further amplified by the presence of the constitutional court on site – which leaves room for the user of today to form part of the continuum of human rights in this place and in the world. The site also sits directly in an urban context, amid high rise residential buildings and visitors are thus immersed in





daily Johannesburg upon accessing the site, which is also fully accessible on foot and via Johannesburg's vast public transport network.

According to King and Flynn (2012:71) Constitution Hill is a part of symbolic reparation – a refashioning of the public sphere such as through updated museums and memorials and changed street names as mandated by the TRC. The publicness of the site is, however, brought into question when the site is hardly ever used during the daily lives of the surrounding residents. Perhaps the very nature of a fort what disallows it to be used as natural public space on a daily basis – but even for specific events the site tends to fall short of its potential and its promised. The intention was for the site to contribute to a democratic dialogue once it restored balance of heritage representation in South Africa, it also hoped to diffuse discordance and disenfranchisement of some South

Africans to whom the story did not directly relate – this was once more done by bringing to light questions of human rights in general, a universal concept that should ring true with the throngs of international visitors the site hopes to encourage to attend (King & Flynn 2012:70). However, Graham (2002 cited in King & Flynn 2012:74) believes the overt focus on tourism, and specifically foreign tourism, could be the very reason the site falls short of contributing positively to the current discourse and continuum of human rights.

The intentions were for the site to feature a human rights centre. The support for the project was, in fact, gained not for the power of the heritage it embodied but for the positive role it could have played in the urban upliftment of the area. However, the fact that the main brief was only for the court building, the rest of the design being conceived as an afterthought meant that once



the court and museum were completed the rest was never constructed. The additional programmes, including the human rights centre, were proposed as future developments that have not materialised to date. As a result there is little active creation of new layers on site by individuals not involved in the court process itself - which the observation of the relative ghost town on site supports.

The court building itself was designed with the institution's mandate of social and political transformation. The court becomes the highest authority in the land and its aim is the protection of the rights outlined in the Bill of Rights (Con Court SA 2013). The concept of traditional African justice was used to guide the court's design and it features many symbolic and beautifully crafted elements that make it an artwork in itself (ibid.). Many of the ideas are overtly stylistic and literally translated which has rendered the building a source for criticism since its inception. However, as far as its daily function as a court building, it appears to serve its purpose sufficiently.

The finely crafted ornate wooden doors sit off to one side and the opening into the building is demandingly narrow. The symbols on the door symbolize the main rights in the Bill of Rights and the 8m doors sit in a glass façade, announcing their presence (Con Court SA 2013). Beyond the narrow but tall doors there is a security checkpoint that immediately reminds one that this is a state institution and all are not welcome. On days when the court is not in session, a paid tour of the fort and court grants one access into the court building where one is hastily dragged through the foyer and into the court chamber with a well-rehearsed guide sharing the *top 3 facts* of the design.

The necessary procedure and security concerns are apparent, which unfortunately render the aspects of the design that had hoped to make it democratic less successful. The chamber, for one, is not visible from the foyer space, the entrance into the chamber and its organization and furniture is much the same as standard Roman law inspired court rooms, despite the seating arrangements placing the judges lower than the audience.

Despite the activation of Constitution Square during specific events on the site, the access control of the site and its pitiful offering to local residents sees it not fulfilling its potential as public space or urban good. Grobbelaar (2012:103) cites Bakker and Muller (2010) when he argues that despite developments like Constitution Hill being *appropriately placed to allow critical public engagement*,

their private nature dislocates them from their context and they are perceived by residents as foreign entities in their midst. Despite the gentrification process creating a private space in someone's midst implies, if heritage a heritage resource is located in an area that needs useable public space for daily users, the author believes it is the responsibility of translate the heritage resource into a useable resource to address further needs of the surrounding community to provide access and engagement and contribute positively to the area. This speaks to the intention of the project at Constitution Hill to be a tool of nation building, albeit in a very mundane day-to-day way.

Figures on opposite page (clockwise from top left)

Figure 31 - The inside of the courtroom from the public gallery (Author, 2016)

Figure 32 - An installation in the prison museum showing the daily rations of prisoners and the condition of the plates they were fed on (Author, 2016)

Figure 33 - The slotted concrete roof of the entrance foyer to the court. One of the less successful conceptual intentions of the project, the slots and slanting columns are meant to mimic the conditions of meeting below a tree to discuss events and governance in African tradition (Author, 2016)



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Chapter 5:
PRAGMATICS
Defining the Programme

Stemming from the Urban Framework that aims to address the democratization of Pretoria as a capital city, the scheme discussed in this document touched on two of the issues the framework established. Both issues arose congruently and were thus also dealt with simultaneously, neither being heralded more important than the other and both being seen as intertwined with the other.

The first is that of a singular Capital City implying the accommodation of the necessary governmental programmes currently housed by the other capitals. The one that held particular significance to the issue of democracy as interplay between government and the public is that of parliament.

The second issue also speaks to the idea of democracy in the city. The Union Buildings Estate has the potential to act as a well-functioning public space. This scheme hopes to achieve the potential of the site by introducing auxiliary functions and housing existing functions, to influence and amplify each other and embody the spirit of democracy in a Capital City.

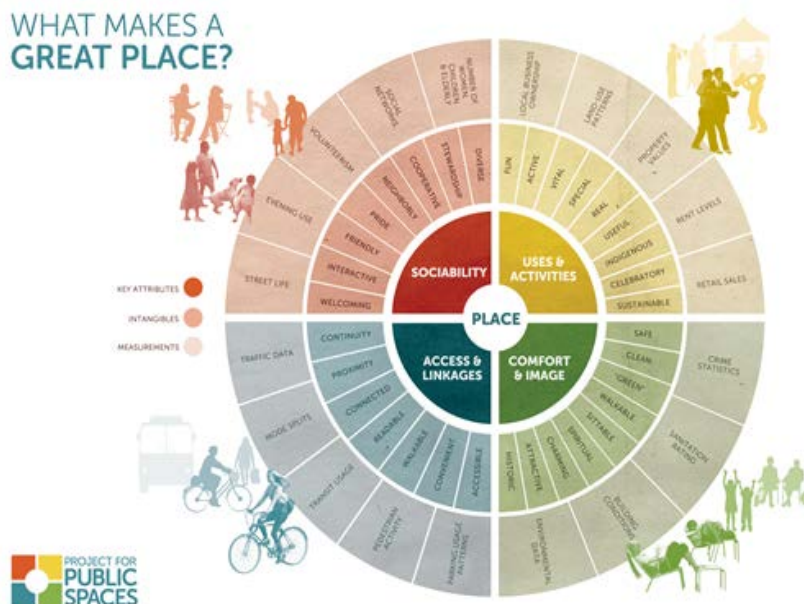


Figure 34 - What makes a great place (PPS.org n.d.)

5.1. Park

5.1.1. What must a park be?

In terms of urban design thinking, Placemaking was an idea discussed as early as the 1960s by the likes of Willam H Whyte and Jane Jacobs. (PPS.org, n.d.b) Today the Project for Public Spaces has become a valuable repository for resources related to placemaking. Placemaking stems from the idea of the right to the city and PPS outlines, frequently, the necessity of placemaking in creating well-functioning cities. The process of placemaking is the epitome of democracy in design.

Placemaking refers to a collaborative process by which we can shape our public realm in order to maximize shared value. More than just promoting better urban design,

Placemaking facilitates creative patterns of use, paying particular attention to the physical, cultural, and social identities that define a place and support its ongoing evolution. (PPS.org, n.d.)

There are ways to measure the quality of a space as a place as illustrated in the diagram.

The Union Buildings Estate and by extension the parliamentary precinct proposed herein, needs to be a place to fulfill its goal as a valuable contribution towards a democratic Capital City. To do this the following needs to be addressed/realised;

- *The community is the expert in their needs and should therefore be consulted (or the design should be robust and malleable enough to allow participation in its alteration and appropriation).*
- *Place should be the goal at hand. Elements of the design should be included to improve the quality of space in a manner that encourages ownership and pride from the community.*
- *A study in spaces and people may shed light on how people use spaces and what their needs are.*
- *Introduction of smaller (primary phase) interventions that inspire appropriation and use, resulting in maximum output for minimum capital investment. The human investment from the community makes the space.*
- *a place and will encourage further development in and around the area propagating long term improvements.*
- *Interventions need to be grouped in a manner that encourages their use and the likelihood of social interaction.*
- *Designing based on the required uses and not the desired form.*
- *The project will never be in completion. An effective public space is ever-changing and evolving and the architect should keep this in mind.*
- *All buildings need to support spaces in between*

(Adapted from Project for Public Spaces' *11 points on placemaking*, PPS.org, n.d.c)

5.1.2. Precedent – Plaza Hidalgo & Plaza del Centenario, Mexico City

The Plaza Hidalgo and Plaza del Centenario complex in the historic Coyoacán in Mexico City flank the Fuente de los Coyotes after which the place is named. The two Plazas are actually full-sized parks because of the series of routes that connect various green spaces, markets, municipal buildings and a historic church, Parroquia de San Juan Bautista.

The sites, as their names would imply, primarily serve as circulation, connecting an array of activities. The wide, tree-lined boulevards are edged with benches and provide a space to sit and watch the activities of passersby. The position of the site between historic sites and a still active church guarantees foot traffic on weekends as well. The flexibility of space is ascribed to the numerous foot paths (PPS.org, n.d. ii) and their ability to increase chances of interaction. The presence of public buildings provide a sense of interface for the government, and most likely the act of working in a park makes for a pleasant work environment for the officials employed there.

The result of public building, heritage sites, markets, green space and thoroughfare is a vibrant public space in which people from all walks of life occupy the same space, this increases the likelihood of interaction and exchanges.

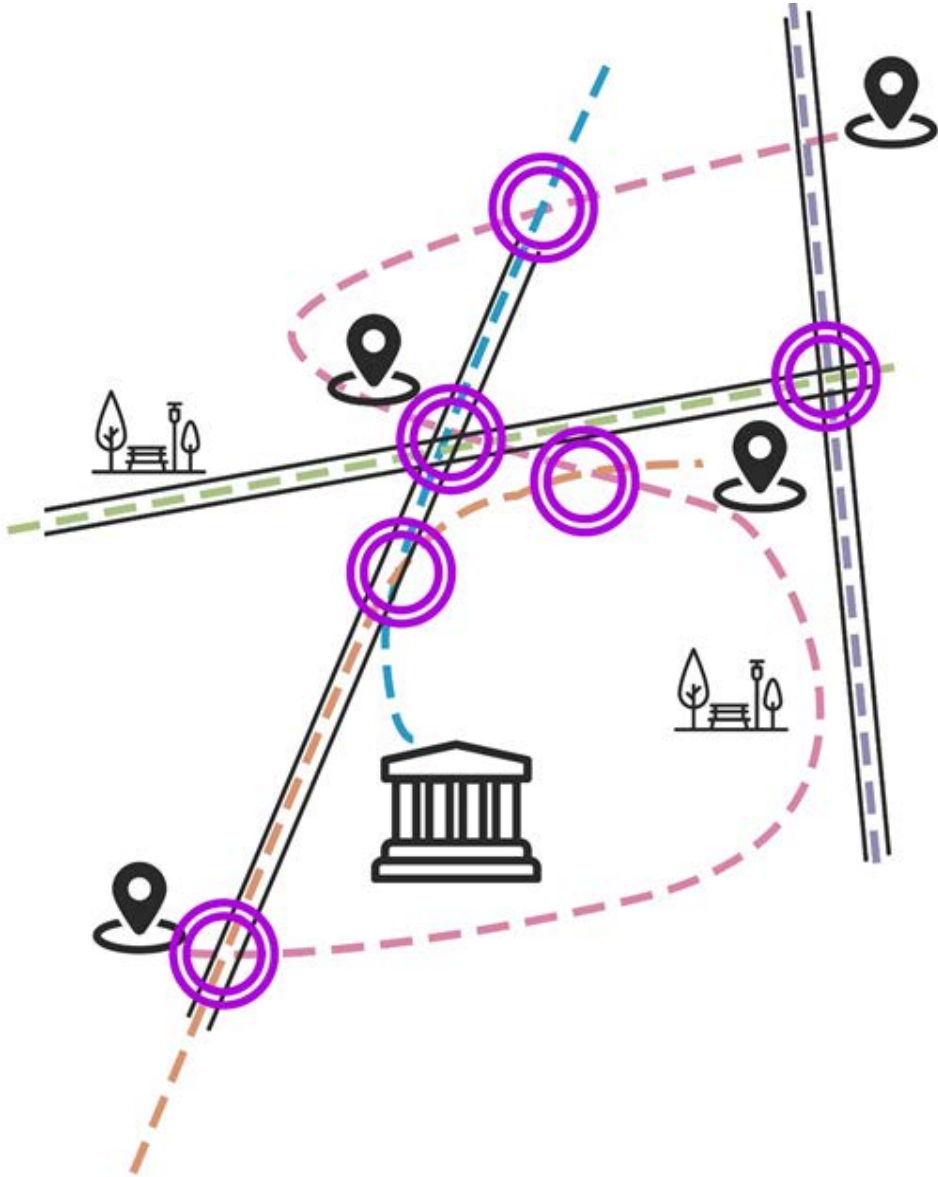


Figure 35 - The boulevard at Plaza Hidalgo is mainly a pedestrian thoroughfare along which some visitors rest on shaded benches.

Figure 36 - The Fountain of Coyotes is at the centre of the precinct acting as both beacon and meeting point. (Datter 2009)

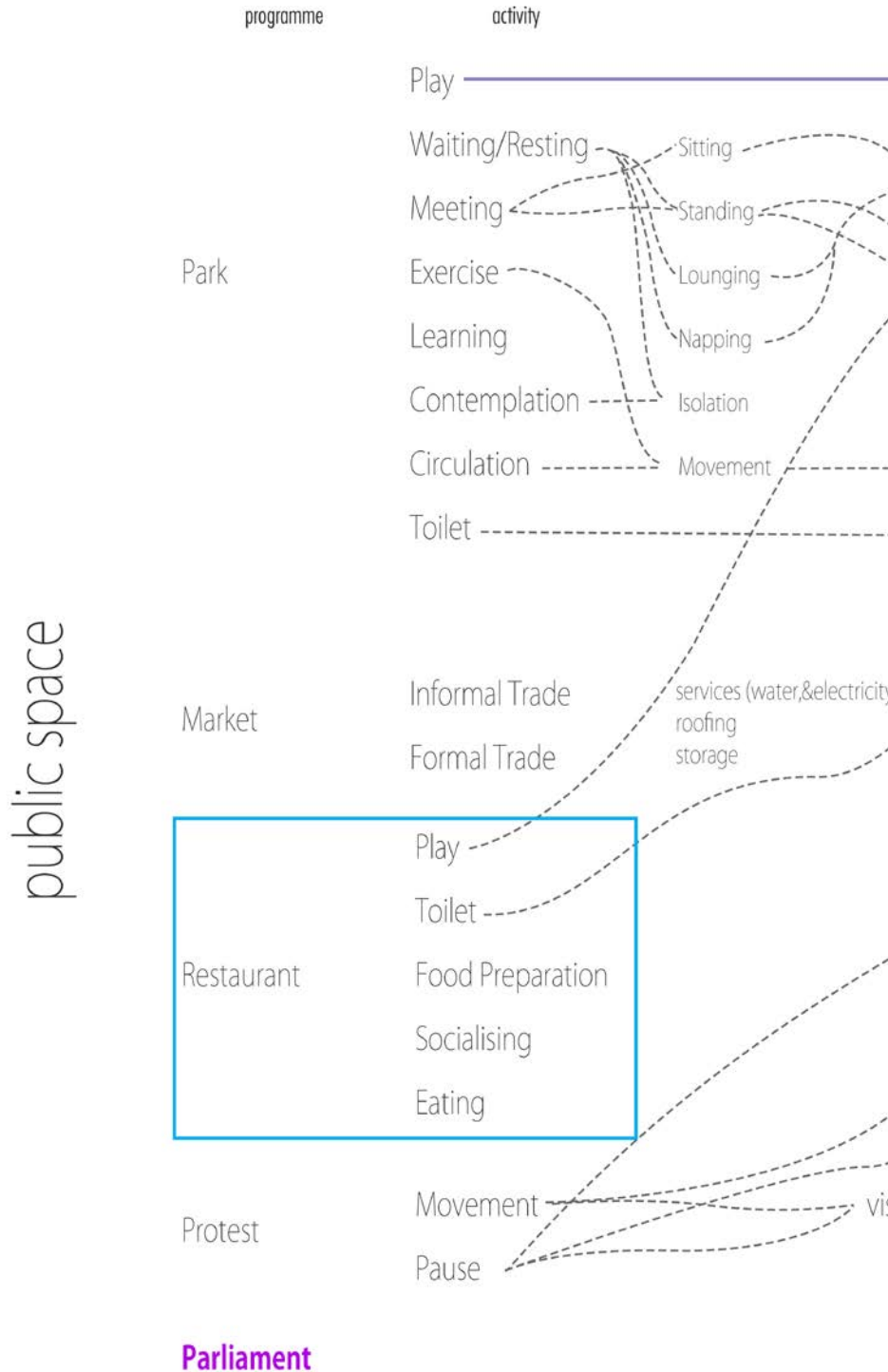
Opposite Page

Figure 37 - Diagram showing the increased likelihood of interactions between people because of the various destinations and activities in the park.



5.1.3. Intention for the Park

The following diagram illustrates the programmatic intentions for the park:



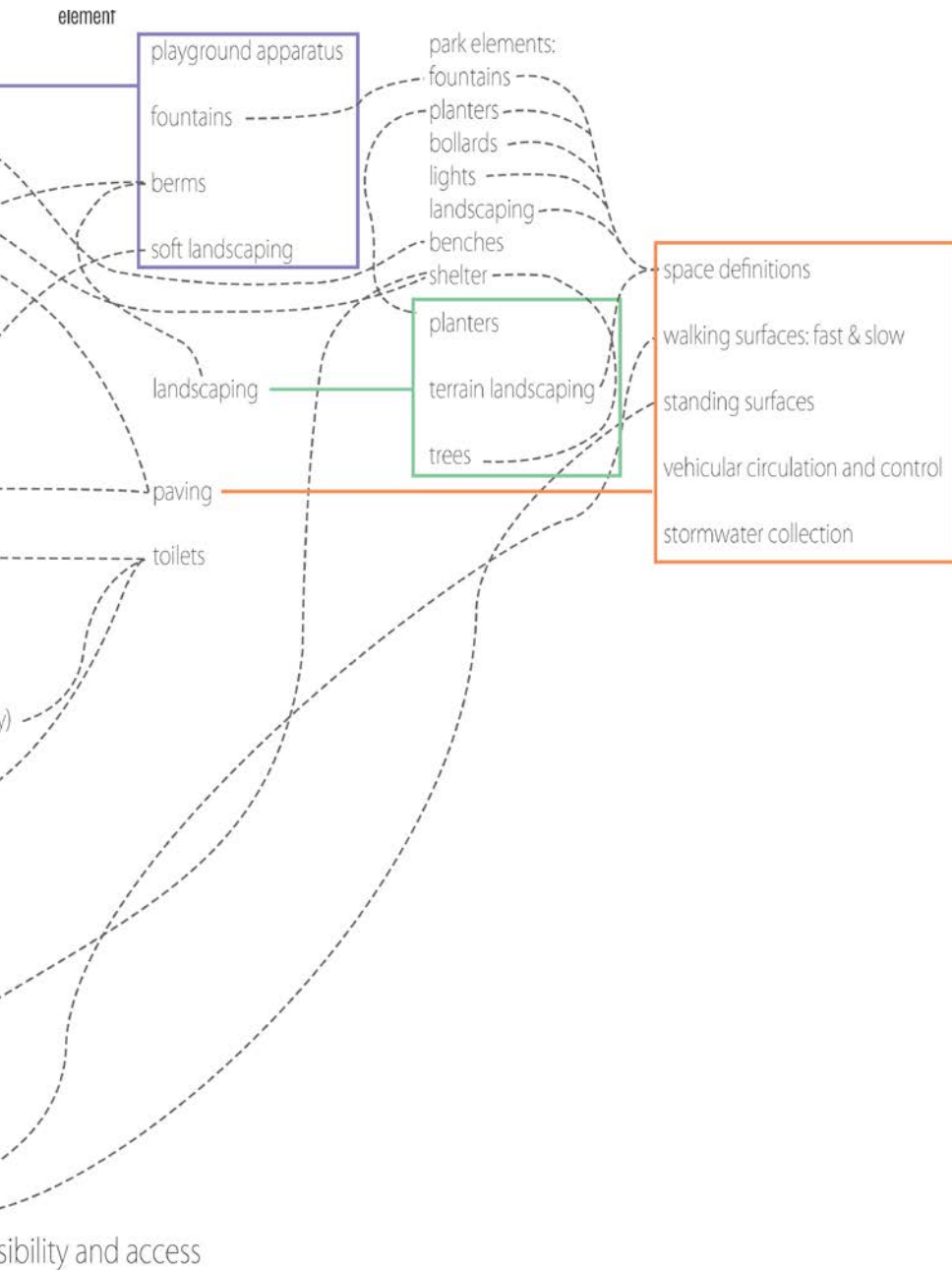


Figure 38 - Daigram illustrating the generation of the parliamentary precinct programme

5.2. Parliament

5.2.1. Parliament House, Cape Town

There is little published about the workings of parliament which leaves much of the following as speculation for the purposes of establishing programme.

The parliament of South Africa is located in a parliament precinct in the Company's Garden in Cape Town where it has been since the British Empire granted the Cape Colony right to a parliament in 1853. The initial Cape parliament was a bicameral (two houses supported by a joint administration) and had a lower and upper house. The

member of the lower house were elected by male suffrage, regardless of race. The following years saw many shifts in the structure of parliament based on rights of suffrage awarded to women, Coloureds and Indians with time. The present day parliament is also bicameral. The National Assembly is the House directly elected by the voters, while the National Council of Provinces is elected by the provinces and represents them to ensure that provincial interests are taken into account in the national sphere of



Figure 39 - Henry Freeman's original design (Cusack 2009)

Figure 40 - Parliament House shortly after completion in 1884 (n.a. 2013)

government (Parliament, n.d.).

The first parliament was housed at *Tuynhuis*, called Government House at the time but the Assembly House soon outgrew its space. From here it was relocated to Masonic Lodge of the Dutch Grand Orient designed by Louis Michel Thibault. The legislative council was housed in the Old Supreme Court Building (now known as the *Slave Lodge*), also designed by Thibault. Very soon bigger spaces

were required for both houses which saw the Public Works department commission Henry Freeman to design a domed edifice with end pavilions in an overall composite classical style (Cusack, 2009).

Because of a calculation error in the foundations, the building was thus later completed under Henry Greaves in 1884. The design saw the elimination of most of the decorative features originally included – no dome, no

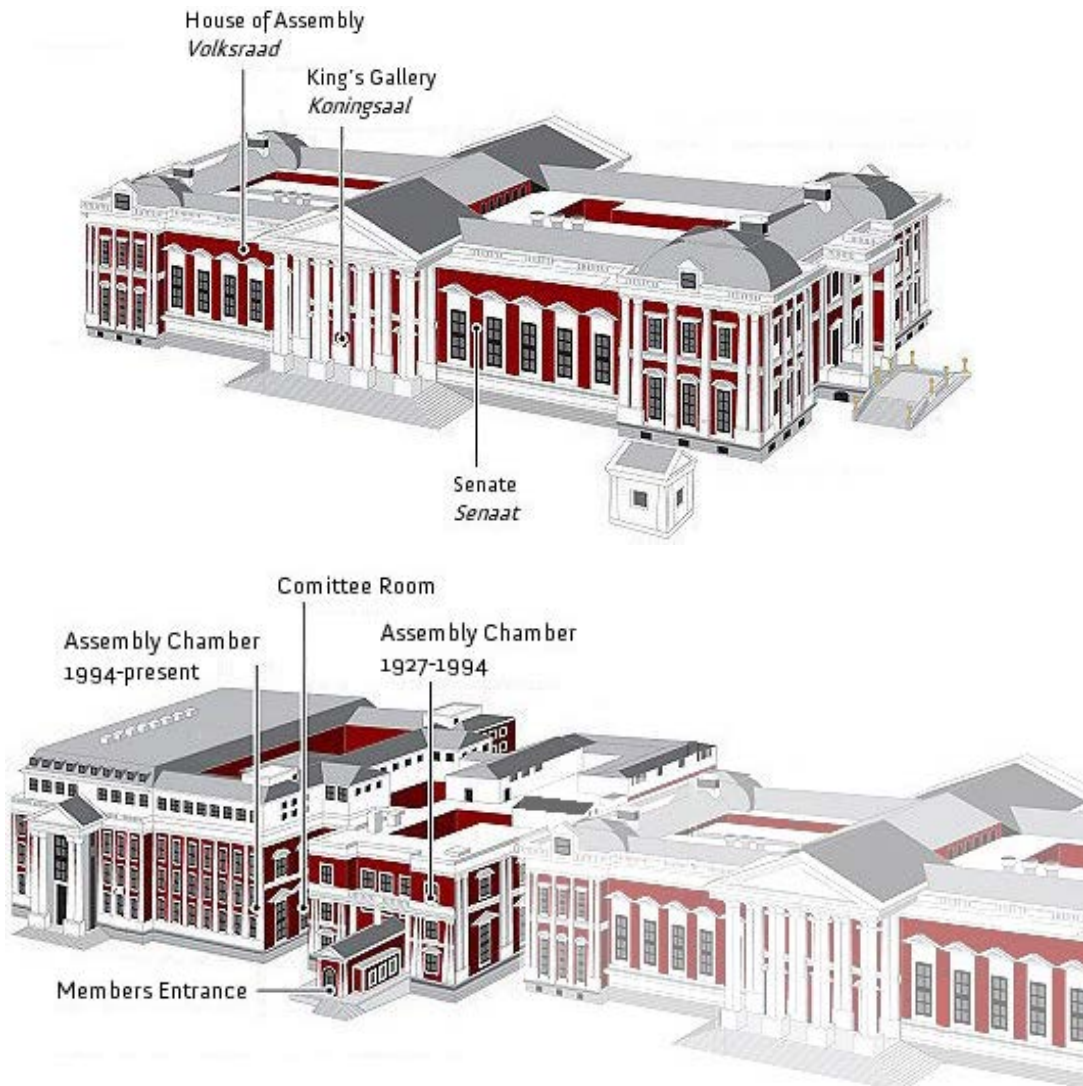


Figure 41 - Diagram illustrating the original building (Cusack 2009)

Figure 42 - Diagram illustrating the additions to the original building (Cusack 2009)

statues and no fountains (from description of photograph at Wikipedia.com (n.a. 2013)).

The building has remained the location of South African parliament until today. It has undergone numerous extensions and relocations of functions within the building. The official address for the building is in Parliament Street onto which it faces. Its rear façade sits along Government Avenue, the tree-lined lane that acts as the spine of the Gardens (Cusack 2009).

Upon entering the building one would walk through the *Koningsaal* (King's Hall) the lobby named after the royal portraits adorning its walls. The hall was later renamed the Gallery Hall once South Africa was declared a republic in 1961, upon which the portraits were relocated to a museum wing and the replaced with others. The building's symmetrical layout saw the Assembly Chamber housed to the left and the Senate to the right (Cusack 2009).

In 1920, shortly after Cape Town was declared the Union's Legislative capital, Sir Herbert Baker was commissioned to extend the building, to accommodate a bigger Assembly Hall. The old Assembly hall became a dining room. The 1980s saw another extension to accommodate the 1983 constitution calling for a tricameral system where a house for each whites, coloureds and Indians was established (Cusack 2009).

Over the years, changes have been made internally and major functions have seemed to locate more towards the new wing (Cusack 2009). The new wing is the current seat of majority of parliamentary events and houses the daily proceedings of the national assembly, South Africa's lower house. Parliament's two house are made up of 490 seats, 400 in the National Assembly and 90 in the National Council of Provinces. There are representatives from 13 parties present in parliament.

This new Assembly Chamber (housed in the new wing and (previous page) can be seen in media footage of parliamentary debates State Opening of Parliament, the President's State of the Nation address, and the during visits of foreign heads of state. Its decorative carpets, designed to give an African feel was a later decision to add to the hastily converted space which seems unsuited to its use on the most part. Cusack (2009) believes the detailing of the hall is poor and this bares testament to how *the chamber as a whole was hastily designed and quickly constructed*.

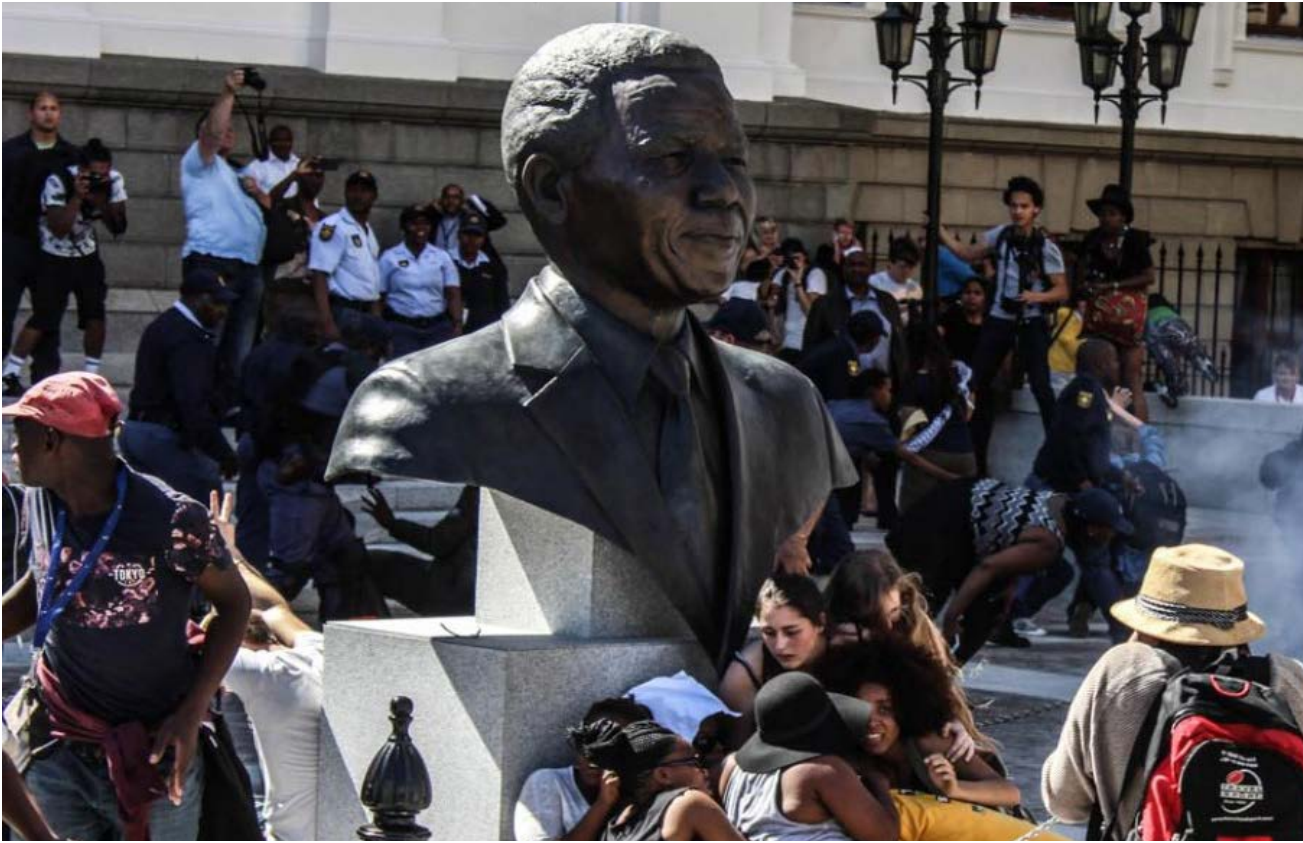
The second house, that of the National Council of Provinces has been housed in the original Senate chamber since its inception in 1997. The senate chamber was originally modelled after the chamber of lords and featured the oblong arrangement of two opposing parties. This arrangement was changed to a semi-circular one during the refurbishment shortly after the NCOP was established in 1997.



Figure 43 - Distorted view of the National Assembly chamber (Bothma, 2016)

Figure 44 - A less peaceful moment in the Assembly Chamber (Maduna 2016)

Figure 45 - The National Council of Provinces (Zhao 2010)





Outside of the building an ornate bust of Nelson Mandela welcomes visitors. It was unveiled in 2014 and the official statement from parliament read:

It is hoped that the bust will provide a place for people to gather when they visit Parliament and that it will inspire public memory about the long and bitter road we have travelled to democracy and what still remains to be achieved (News24 2014).

Figure 46 - Students use the Nelson Mandela bust as shelter during police fire outside of parliament (livemag 2015)

Figure 47 - Blade Nzimande behind the gates of the parliamentary precinct when students stormed the site in October 2015 (Bennet, 2015)..

5.3. Parliamentary Precinct, Pretoria

The scheme outlined in this document needed to address the existing parliamentary system and its spatial accommodation in order to establish a benchmark for the design. For this reason, the study summarised in

the previous section was embarked upon. Using the information gathered from this study and interpretation, the following accommodations schedule could be established.

Requirement	No. of rooms/ ppl	Size	m ²	Subtotal	Total
General Space					
Entrance	1	100	100	100	
Toilets	10	2.5	25	25	
Kitchen	1	150	150	150	
Reception Space/Restaurant/Gallery	600	1.6	960	960	
Service Yard	1	20	20	20	
Offices Open Plan Office	5	2.6	13		
Private Office	8	9	72		
Canteen	1	6	6	91	
					1346
Party Specific (Office x 8)					
Offices Lobby	8	6	48		
Open Plan Office	8	2.6	20.8		
Boardroom	8	40	320		
Canteen	8	4	32	420.8	
Toilets	10	2.5	25	25	
					445.8
National Assembly					
Lobby	400	0.2	80	80	
Toilets	10	2.5	25	25	
Offices Open Plan Office	5	2.6	13		
Private Office	2	9	18		
Canteen	1	6	6	37	
Chamber Seating	500	1.6	800		
Media	100	1.6	160		
Clerical	20	1.6	32		
Speaker/Debate	80	1	80	1072	
Circulation			50	50	
					1264
National Council of Provinces					
Lobby	90	0.1	9	9	
Toilets	6	2.5	15	15	
Offices Open Plan Office	5	2.6	13		
Private Office	2	9	18		
Canteen	1	6	6	37	
Chamber Seating	90	1.6	144		
Media	5	1.6	8		
Clerical	5	1.6	8		
Speaker/Debate	10	1	10	170	
Circulation			20	20	
					251
Total					3306.8

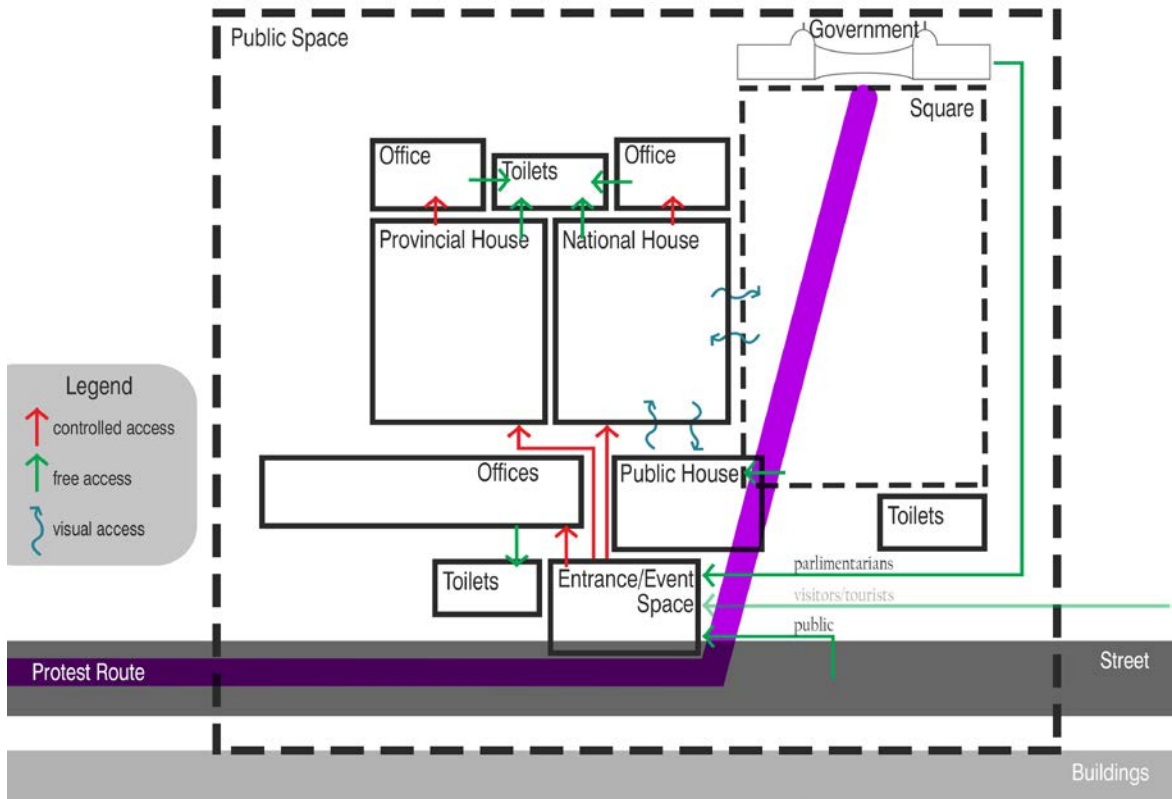




Figure 48 - An artwork from the Constitutional court collection,
Johannesburg, South Africa (Photograph by author, 2016)

Chapter 6:
POSTULATIONS

6.1. Democracy is Liminality

Aldo van Eyck (1968) defined liminality as an interrelationship between two phenomena rather than their opposition. The term originated in anthropology to refer to the in-between stage during specific cultural rites of passage, the stage after someone is removed from society and before they are reintroduced (La Shure, n.d.). In architecture, as the writing of Van Eyck suggests, liminality refers to the spaces that are neither of one place nor of another. The etymology of the word is ascribed to the latin word *limen*:

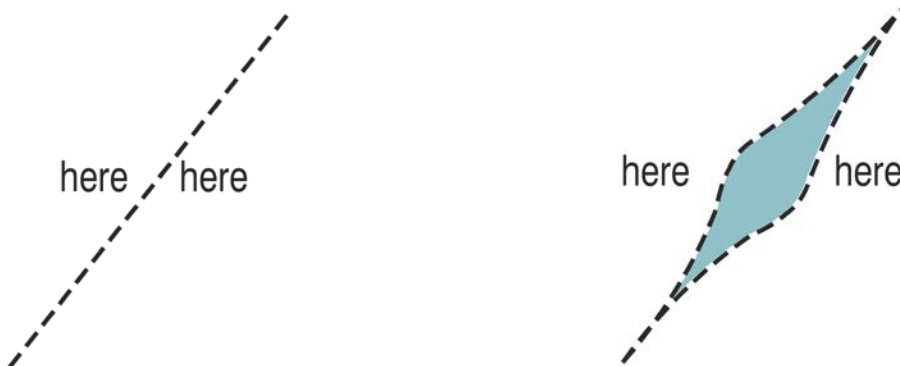
Of or pertaining to the threshold or initial stage of a process. Both liminal and liminality are derived from the Latin “limen,” which means “threshold”—that is, the bottom part of a doorway that must be crossed when entering a building (La Shure, n.d.).

Liminality can therefore be described as the state of physically occupying the threshold, being within it. This definition can prove more useful than expected in the pending discussion. The basis for this document is largely found on the concept of liminality although not always stated in so many words. It should, therefore, be noted that;

As a consequence of the multi-faceted nature of liminality, I constantly shift between different dimensions of liminality including the zone between; the physical and the conceptual; people and space; the artist and the audience; one practice and its marginal alternative (Smith, n.d.).

Much can be said about liminality but for the purpose of this investigation a specific point needs to be made. A study that claims, as this has, that truly public spaces are the most democratic spaces in the city does so on the very basis that truly public space is inherently liminal. Sidewalks become the threshold between office building and private vehicle. Parks become the pause point between taxi and home. The likelihood of encountering hundreds of fellow citizens practicing an array of different activities in the same space is the assumed definition of liminality in space.

The reality is that public space and liminal spaces in buildings (passages, corridors etc), though marking the transitional zone between two other spaces of perhaps more programmed nature, become spaces in themselves, this is possibly easier to understand in reference to public space and relates to Aldo Van Eyck's conception of the *Third Space* (Van Eyck 1968); the occupied threshold. This becomes the space where one can do both nothing and everything at once.



As Grattan's description of politicians' inability to escape one another and the press in the original Australian parliamentary building (1988: 13 in Dovey 1999: 91) the democracy of liminal space lies in our exposure to others, their freedom to be there being corollary to ours.

The very nature of liminal space, or *loose space* (as termed by Franck and Stevens 2006:42) sits juxtaposed to both colonial and apartheid city planning strategies where control and discipline were the distinctly modernist rules applied to space. By contrast then, a democratic city is not necessarily one that is absent of formal public spaces but rather one that has public spaces that are connected by public streets designed to accommodate the *anything can happen* nature of democracy. In an essay berating Times Square for being pseudo public space Aaron Betsky suggests that;

When it works, public space, in other words, has an element of danger. It eats away at your assumptions, confronts you with the possibility of violence or disease, or even more simply to rain, snow, and heat. To use a phrase from our therapeutic culture, it takes you out of your comfort zone (Betsky 2015a).

In his celebration of the democracy and freedom of liminality Betsky appeals the following:

...I would call for an architecture that does not delineate public and private space, does not articulate the common, and does not connect us in a prescribed manner. I would argue for a leaky, confusing, difficult to understand and perhaps even to use architecture that, somehow, somewhere and maybe even sometimes, creates the sense that we are only truly alive when we are part of a social construct in which we can act out the roles we believe or are proper to us. (Betsky, 2015b)

The focus of the Urban Framework and this scheme on both democracy and public space as manifestation thereof is due to the liminality of both public space and of democracy.

This establishes certain concepts, namely;

- *Democracy takes place where there is little control and possibilities are open to all users to perform their daily and occasional rituals.*
- *Democracy occurs when our exposure to others and their activities is not within our control.*
- *This implies that the most democratic spaces in a democratic parliament building are in fact not those in which debates are housed and bills are drafted but in the in-between spaces where members, the public, staff and all alike are bound to interact, most likely by chance.*

6.2. Fire!

You have to be logical. You know? If I know that in this hotel room they have food every day, and I'm knocking on the door every day to eat, and they open the door, let me see the party, let me see them throwing salami all over, I mean, just throwing food around, but they're telling me there's no food.

Every day, I'm standing outside trying to sing my way in: We are hungry, please let us in. We are hungry, please let us in. After about a week that song is gonna change to: We hungry, we need some food. After two, three weeks, it's like: Give me the food Or I'm breaking down the door. After a year you're just like: I'm picking the lock. Coming through the door blasting.

It's like, you hungry, you reached your level. We asked ten years ago. We was asking with the Panthers. We was asking with them, the Civil Rights Movement. We was asking. Those people that asked are dead and in jail. So now what do you think we're gonna do? Ask? (Shakur 1994)



In both examples above, there is insight into the reason we see acts of political demonstration taking on a disruptive and often destructive nature. Political columnist, Bongwiwe Tshiqi (Tshiqi 2015) does not advocate for the destruction of property or the disruption of education but explains that the blame for such escalations can only be placed upon those who push citizens of the point of burning their own infrastructure to make a point. *We have to blame the guys who walk around making promises during election years and then turn around and ignore their voters after the celebratory parties are wrapped up... And we have to blame ourselves for not caring enough to listen to them before they start burning and destroying our cities* (Tshiqi 2015).

Figure 49 - Jason Nelson, a popular social media commentator outlines the psychology that drives people to acts of civil demonstration and protest (Nelson, n.d.).

The value of buildings as symbols of power lies in their embodiment of tacit control of those in power over those in submission. As outlined earlier, democracy, despite its definitions of freedom and self-rule, involves the submission of those electing officials to the rule of the officials in the name of a common good. We elect those we trust to represent us. This renders government buildings as symbols of this agreement. In his description of the different manifestations of power in built form, Dovey (1999: x) suggests that authority, being institutional and accepted renders government buildings as subtly enforcing their authority on their citizens. This is visible in Nazi architecture, for example, where scale was often used to imply dominance over the individual. This is because Authority, especially when it is contested, requires legitimization. It uses symbols to do so (Dovey 1999:13-16). Buildings make the nation state visible.

In democracy there is less need for monuments and parades and strutting of state power because there isn't a need to legitimize power if the interests of the people are really being served. Monuments and grand governmental buildings fool the powerful and powerless that the authority is legitimate. According Dovey (1999:14) often the erection of overt expressions of power tend to ward and inverse relation. The Union Buildings could be seen as this false legitimization of power, Smuts and Botha hoping to convince the British and themselves of the power of Pretoria, as can big modernist government buildings of the Nationalist government (Figure 27).

Buildings are used by governments to symbolize their power (as do monuments, street names, public spaces etc.). People assign power and meaning to symbols because symbols devoid of context are merely formal expressions. To destroy a symbol, despite the destruction of a practical use of something, is to antagonise the meaning assigned it.

Why then the method of fire? Apart from global mythologies and the association of fire with stories of destruction and rebirth the use of fire has been well-intertwined with political violence in South Africa. The prominence of *Necklacing* in South African townships during the peak of the anti-Apartheid struggle. The *Necklace* implies placing a petrol soaked tyre around the victim's neck and setting it alight (Ball 1994). Ball (1994) refers to Kertzner (1988) who argues that "*rituals are invented out of pre-existing symbols, and that they become established because of the social circumstances of the participants, and not because of the inventor*" (Ball 1994). The act of setting a person alight was not performed to kill the person, they were often already dead when the burning occurred. Instead, the burning of a human body implied utmost punishment. *Burning was seen to possibly symbolise a number of things. It may be associated with the destruction of the soul of the person, thus breaking the link with the ancestors, it may signify the destruction of evil or the purification of the society. Obviously, in the physical sense, the victim is unrecognisable after he/she has been burnt, there is a visual destruction of the person* (Ball 1994).

The burning of symbols of oppression is an instantaneous ritual against a symbol. It attracts attention as can often be seen in the columns of black smoke rising high into the sky during protests. The remnants of these fires often stand smoking during the lull after protests, when government finally listens and concedes.



Figure 50 - Keith Alexander's Black Eagle (Alexander 1991) is an example of his work depicting ruined structures surrounded by natural elements with an air of reverie in the relationship.

6.3. Memory: The monumentality of ruins

6.3.1. The intrigue of the ruin (Ruinenlust)

According to a webpage selling prints of his work, Keith Alexander's main theme was *the impermanence of man's work in the face of a relentless nature*, and this theme is evident in many of his paintings. () Perhaps it is the awe of nature that inspires awe in us when seeing ruins of once great structures.

In the first few lines of her book, *Pleasure of Ruins*, Rose Macaulay refers to herself as a *pleasurist* (1953: xv) with regards to the subject of ruins. Macaulay largely attributes her fascination, much like Keith Alexander, to the conquering of manmade objects by nature.

The German term *Ruinenlust* embodies this ephemeral fascination often associated with ruins. *Ruinenlust* refers to an interest in ruins, perhaps the alternate interpretation of *lust* can also lend itself to a *desire* for ruins. This desire may explain flocks of tourists in places like Machu Picchu and the ruin-littered city of Rome. Historically, sites of classical ruin inspired awe and were used by the likes of Mussolini to inspire a nation to achieving greatness (Holland 2013). The presence of classical ruins is largely used to substantiate the greatness of the civilizations that built them, an architectural legacy for their successors. It could also testify to the power of their conquerors.

There are, however, modern ruins as well. These often carry less reverie because of their youth (as ruins); *new ruins are for a time stark and bare, vegetationless and creatureless; blackened and torn, they smell of fire and mortality. It will not be for long.* (Macaulay 1953:453) As insinuated by Macaulay, modern ruins are more often sites of war and contestation that have left buildings destroyed. Their decay is thus instantaneous at first and only then are they further degraded by nature. Despite the apparent lack of history of modern ruins in comparison to ancient ruins, modern ruins caused by deliberate destruction hold their own stories that often inspire recollections more directly accessible by the observer.

Ruins possess the ability to locate us (the observers) and themselves (the ruins) in the continuum of human existence. Buildings are intrinsically linked to culture and history and the reciprocal nature of locating self and building in time (in relation to one another) allows buildings to crystallise a specific epoch, "*ementing the very fabric of time and culture* (Trigg 2010: 8). This way, an old building serves to tell of a time gone by and our occupation of its story telling locates us in relation to the story. However, the *ruin never presents a complete narrative* (Trigg 2010:6). Certain aspects of the historic events are lost due to decay. Where building is history, ruin is memory. Through the voided space of the ruin, history and memory are visible in terms of the *felt experience of what is now absent*.

Still, there is a tougher, more critical edge to the acceptance of the decay of buildings and their inevitable ruin that places architecture in a unique position to inform our understanding of the human condition and enhance its experience (Woods 2012).

6.3.2. Memory and identity

The importance of memory discourse has become the occupation of the post-modern world where the rational recital of historic events is given less prominence and the recollection thereof, naturally tainted with interpretation and emotion, is favoured. This is perhaps because of the impact it has on the human condition. Huyssen (2003) suggests that it is essential in regaining a “strong temporal and spatial grounding of life and the imagination” (ibid: 6). This would imply that the act of remembering, as an individual or a collective, becomes a part of the coming to terms with events in history. Factual recordings of events do not tell of the human reactions they inspired – they serve merely as triggers from which we establish our interpretations and understandings. Our memory of events shape our perceptions of the events and thus our perceptions of ourselves.

Huyssen further hypothesizes that the obsession with memory may go hand in hand with mankind’s fear of oblivion. The increasing expanses of knowledge has left mankind feeling very small and it is only natural to cling to our memories when we fear ourselves slipping into insignificance. Our memories become integral to our identity. (ibid: 24-26)

In his musings about memory, Lebbeus Woods speculates that memory of events is not stored at all, that our recollections of events are constructed when we retrieve them (Woods 2012). This idea can be clarified by the writings of psychologist, Daniel Schacter who has dedicated his life to the study of memory. Schacter refers to the work of Ulric Neisser and speculates that memories are not encoded in their whole form but are stored using smaller, critical facts that trigger the recollection of the full memory (Schacter, 1996:40). In his study on the brain, David Eagleman explains how the creation of memory works and also the recollection thereof. Eagleman reiterates the concept of breadcrumbs triggering memories of events but also emphasises the role our emotions play in how memories of events are stored. For example, when we experience a moment of danger, our fear and consequent adrenalin allows our brains to collect more data than usual, providing us with a far richer memory of the event (which Eagleman describes as the reason we feel like time moves slower during these moments). The added information serves us in future fearful situations providing us with more information to predict and deal with danger. This way, traumatic events become learning opportunities to be used as future reference.

Often a focus on traumatic events governs the collective memory of a group of people. Huyssen argues that this is necessary because trauma lies on the threshold of remembering and forgetting (Huyssen 2003:8). However, an overt focus on trauma can lead to regression and repetition of trauma. Valid, collective discourse regarding human rights (e.g. the South African Truth and Reconciliation Commission) may lead to collective understanding and an ability to progress from trauma. As another alternative, which is far more suited to the role of the architect, Huyssen suggests the creation of *objects, artworks, memorial or public spaces of commemoration* (ibid.: 9).

6.3.3. Memorials as mediators of collective memory

Young (1994) cites Arthur Danto as having said *we erect monuments so that we shall always remember and build monuments so that we may never forget.* (1994: 3) which Young then elaborates on to mean that *monuments commemorate the memorable and embody the myths of beginnings. Memorials ritualize remembrance and mark the reality of ends.* From Young's writing, monuments can both monumentalize triumphs while commemorating deaths in the path towards triumph. Memorials are thus sites of remembrance of events, devices that trigger recollection and contemplation of events and their effect on human beings.

During the lifetime of memorialisation of events there have been numerous significant changes in thinking. Initially monuments were mostly freestanding objects in open space. These can still be seen in many old cities today and are still fond tourist destinations. Over time, these objects became mediated by the creation of space around them. Benches and landscaping began to frame the objects (Stevens & Franck 2016: 11).

There was also a shift from the notion of free standing monuments to those of memorials. Not only were triumphs regarded as memorable, but hardship and loss was now remembered to inspire thought and contemplation in observers (ibid.). There was also a drastic adjustment to the scale of monuments, where the size was used to commemorate greatness, a sensitive, human scale began becoming the focus of memorials (ibid.). This could be due to the fact that human stories are being conveyed, and should thus be ore appropriate to human listeners. A change from memorials/monuments to be viewed occurred when a focus on engagement and interaction took place. This can be achieved by introducing functional aspects to memorials, not only by theme-park type installations.

Because memory is not static and requires contemplation upon each recollection it *is not achieved by simply viewing a sculpture but is instead an active, engaged process requiring people to look within themselves for memory* (Young 200:19 cited in Stevens & Franck 2016: 34).

Case Study – Vietnam Veteran’s Memorial, by Maya Lin (National Mall, Washington DC)

With regards to subtlety of scale, the Vietnam Memorial comes to mind where Maya Lin constructed what is in essence a counter monument (this because of its refusal to occupy space in a manner that other monuments in the precinct do. The subtly and abstracted nature of the memorial allows for contemplation in the space and becomes very personal for some visitors, who recognize names of loved ones along the wall. For others, the act of decent and the presence of so many names of killed soldiers becomes an overwhelming commentary on the effects of war. There is limited interactive displays other than the engraved marble that is used to take rubbings of the names of fallen soldiers – and yet this interaction of the act of witnessing a fellow visitors taking a rubbing of the name of a loved one, becomes an emotional experience nonetheless. There is a quietness about the memorial- it does not scream for attention and demand remembrance. It quietly enters the thoughts of visitors and leaves an impression long after they leave the site. (Mock 1994)

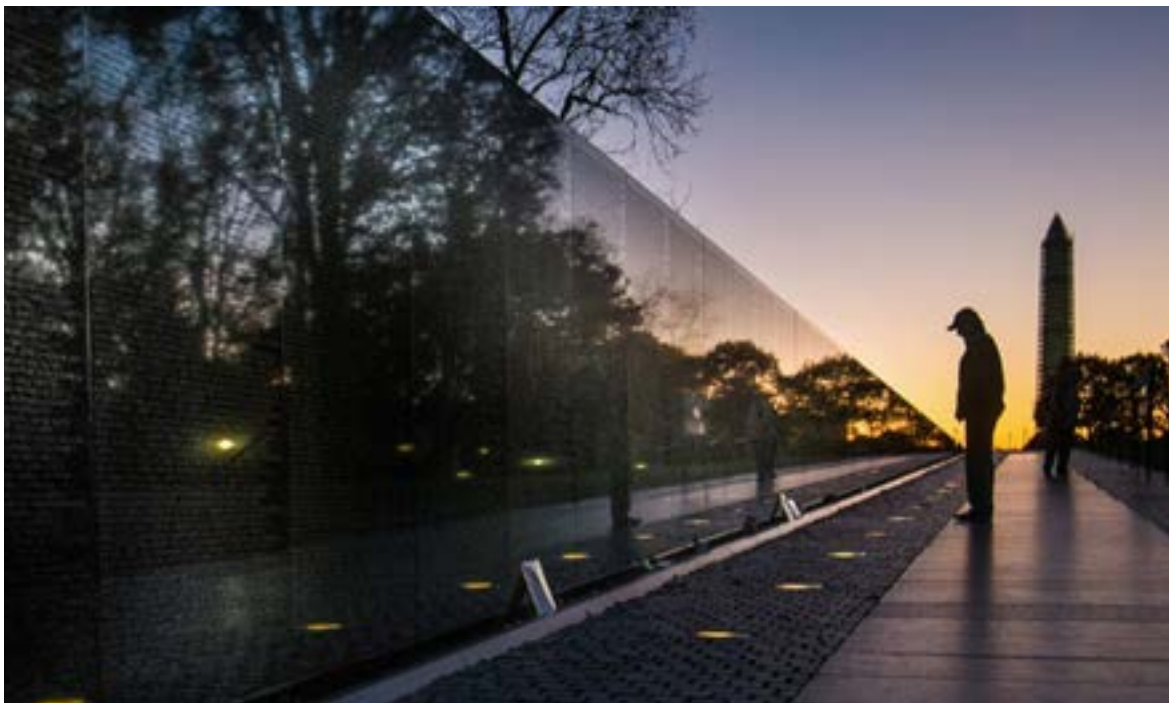


Figure 51 - (top) The Vietnam Veterans memorial is cut into the landscape, and its total height never leaves users feeling towered over (National Park Service, n.d.)

Figure 52 - (above) The Vietnam Veterans memorial is made of highly reflective marble, adding to its subtlety (Ake, 2013)

Case Study – Diana Memorial by Kathryn Gustafson (Hyde Park, London)

The Diana Memorial Fountain exemplifies an interactive memorial that occupies and improves public space. Designed as accessible and interactive, the concept was derived from Princess Diana's kind, accessible persona as Princess of Wales. The memorial creates a thriving public space where children play and sunbathers spend summer days relaxing near the water. The fountain also has quieter spaces along it, where visitors can quietly contemplate and meditate (Gustafson Porter n.d.).



Top, then bottom:

Figure 53 - A playful portion of the fountain (Grey, 2005)

Figure 54 - A slower portion of the Diana Memorial Fountain (Royalparks, n.d.)



6.3.4. The value of ruins as tool for remembrance

The very nature of ruin is liminality – “in the ruin, porousness of borders prevails” (Trigg, 2010:3). Trigg compares Bachelard’s Poetics of Space which discusses the inherent protection a dwelling implies over an occupant to the ruin. In a ruin all accounts that it once implied protection over an occupant are damaged and very obviously in the process of decay (Trigg, 2010:4). If everything is decaying, nothing is still. One is not in a state of protection, nor in a state of desolation. One simultaneously occupies the present and the past and this status is constantly in flux; there is little sympathy from a ruin on those hoping to grasp their locality in its continuum, it continues to be in flux despite our occupation. When faced with a ruin we confront ourselves and those who once occupied it (and in the event of deliberate ruination, those who destroyed it). We also confront its initial reason for being constructed, its value as object and its value as ruin. The ruin discloses that the permanence assigned is a value of place and not of object (Ibid.).

In his seminal work *The Modern Cult of Monuments*, Alois Riegl discusses the point of historical value and why we assign it to objects of the past. Riegl suggests that historical value (the value inscribed on ruins for which they are protected) lies in its marking of a critical point in human development (Riegl, 1996:69-70)

...in other words: everything that succeeds was conditioned by what came before and would not have occurred in the manner in which it did if not for those precedents. The cause of every modern historical perception is precisely the idea of development (Riegl 1996:70)

The intrigue around ruins lies in their ability to allow us to occupy multiple realities simultaneously, this stands in opposition to well preserved old buildings which leave little room for interpretation. Ruin inspires creative remembering and leaves room for imprinting the of self on the recollection of events. The majesty of decay lies also in its embodiment of the intrinsic fragility of our buildings and, by implication, of ourselves.

Ruins of objects destroyed specifically during moments of contestation inspire a collective memory of events and can serve as a reminder of past trauma and an inspiration against allowing atrocities to ever take place again. Ruins as memorials become the trigger points of a social order, ingrained in society as a whole.

The wall itself has no value as object; it serves only to symbolize a far greater period of trauma for the German people. It thus, despite only having been used as a device separating the East and West of Germany, an atrocity in its own right, symbolizes to the residents of Berlin, and the world at large, the entire holocaust and the infringement on human rights at a mass scale.

Case Study – The Berlin Wall

An object such as the Berlin wall becomes a trigger of a far larger collective memory that instills a spirit of *never again* in German citizens, and the world (Huysen 2003:13-14). The memory is not necessarily personal to many individuals. Often, people who had no connection to the holocaust or the World Wars are still moved by the ruins of the wall. We participate in a collective memory of pain that inspires a collective valuing of, above all, human rights. It is this lesson in humanity that ruins can inspire in us.

Two specific schools of thought and attitudes come to mind, neither having more merit than the other. The Berlin wall stands partially in ruins, partially still erect marred with graffiti from its time as a reminder to the people of Germany, and the world. This illustrates two strategies with relation to a single object. In some parts, the ruin of the wall was used as the basis for construction of new objects that serve as memorials. In others, it was left in decay, the rubble serving as memorial in itself. A large number of the different treatments of the wall were citizen-led initiatives and occurred when the ruin of the wall, a symbol of a traumatic collective memory, was left to be appropriated by those affected by its memory.

At certain points the wall has been completely removed on the surface, the line marking its position has been incorporated into the paving and is dated with intermittent plaques. These spaces allow the memorial of a ruin to enter into the daily life of people using the walkways paved around the subtle marker of the past.

In another instance, that of the Peter Fechter Memorial there was originally a cross erected along the wall at the location of his death (a very public, brutal case of mutual fear between parties that led to his very slow, inhumane death) (Brecht n.d.). Once the wall was removed and all traces of it erased in the area, a simple, small obelisk was erected in the place of his death, now a bustling commercial sidewalk.



Figure 55 - Marking the Berlin wall's location (Johnston 2012)

The third case involves the careful preservation of a portion of the wall (and watchtowers etc.) in combination with various installations and interactive exhibits that serve to educate visitors on the events of the wall. The Berlin Wall Memorial is a formal institution of remembrance where ruin was preserved to accurately convey facts and inspire contemplation upon them.

Another formal, albeit more abstract, institution of remembrance is that of the East Side gallery. A number of artists were commissioned to paint murals on the wall. This public art exhibit became a marker of public space and served to give commentary on events in a manner that inspires the public to interpret their meanings for themselves. The murals have also, at times, been the site of vandalism and graffiti, which could perhaps be even more apt for public site of interpretation than a policed exhibit of immaculate artworks.

In less popular parts of the city, however, the wall was often only partially broken down. Daily, residents walk past these remnants and the memory of events becomes a part of their daily lives. Many of these sites, and those no longer in existence, were places where the public, tourists and locals, once chiseled away pieces of the wall to keep as totems of memory.

The ruin, translated into many forms, became the instigation point for the collective memory of the people. It became public property and its destiny was in the hands of those who passed it every day, or visited on occasion. Ruins as devices for memory serve the role of collective memory in an apt manner because they are surrendered to the environment they are in, both the natural and the human context. This allows for individual and collective interpretations and appropriations of memory, which sculpts identity as individuals or a collective.

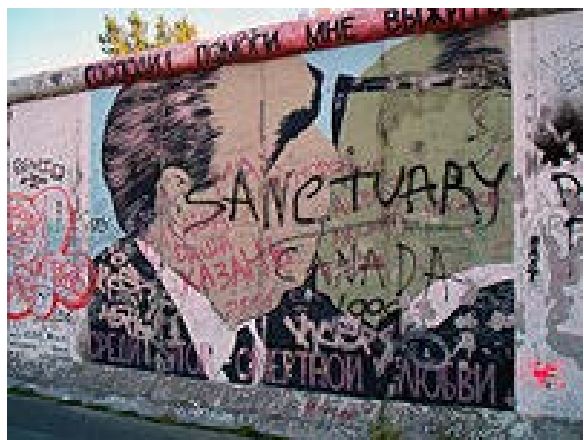


Figure 56 - The Peter Fechter Memorial (Ives 2015)

Figure 57 - An installation at the Berlin Wall Memorial (Beier 2010),

Figure 58 - A vandalised portion of the East Side Gallery (Thurn 1995)

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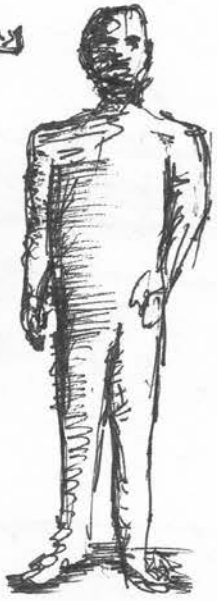
Figure 59 - A portion of the Berlin wall left after demolition (N.A. 2010)



AUTONOMY

ARCHITECTURE

ZEITGEIST.



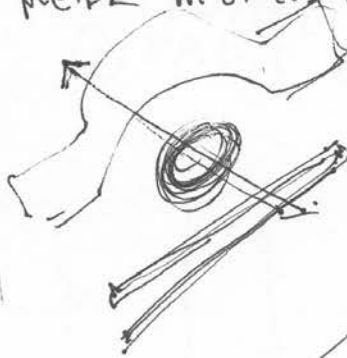
RICHARDO BELLI.

LEVA FOX

NICHOLAS GRIMSHAW PORTICULUS LONDON

NOEMAN FOSTER WILLS FABER + DUMAS BUILDING 1914

MEIER M OF CONTEMPORAN APX BARCELONA



WHAT'S THE BEST WAY TO
 ACHIEVE MY UNDERSTANDING
 OF THE BUILDING.
 WHAT ARE THE VALUES
 IT HAS



Figure 60 - Page from author's journal dated 22 March 2010. The lowest drawing shows the notion of the precinct as a series of objects through which protectors and the public move en route towards the Union Buildings.

OBJECTS ALONG ROUTE.

EFFECT ON GRANDEUR?

AGE OF UNION

→ SALE?

Chapter 7:
PRECINCT
Development of the Programme

7.1. Site delimitation: defining the precinct

This section can be viewed as an extension of the analysis of the site documented in Chapter 2.

The area focused on for the scheme can be described using the working areas identified by Newtown Landscape Architects as I and K, the Southern Lawns and the South western traffic triangle (Muller & Young 2005:18).

The sites are both considered of relatively high importance. The lawns, however poor the condition of the grass and the age of the trees, still meet Baker's original intent of providing uninterrupted views to the buildings. The presence of the General Louis Botha monument also contribute to the value according to National Heritage Resource Council definitions (ibid: 67).

The triangle plays host to pedestrians, mostly passing through the site to the grounds or using the parkland as recreational place (during lunchtime there are a number of napping bodies under the trees. The value of the triangle, however, is regarded as medium (ibid: 75) because of the presence of the canon monument, which is lowered due to its disconnection from the main estate grounds.

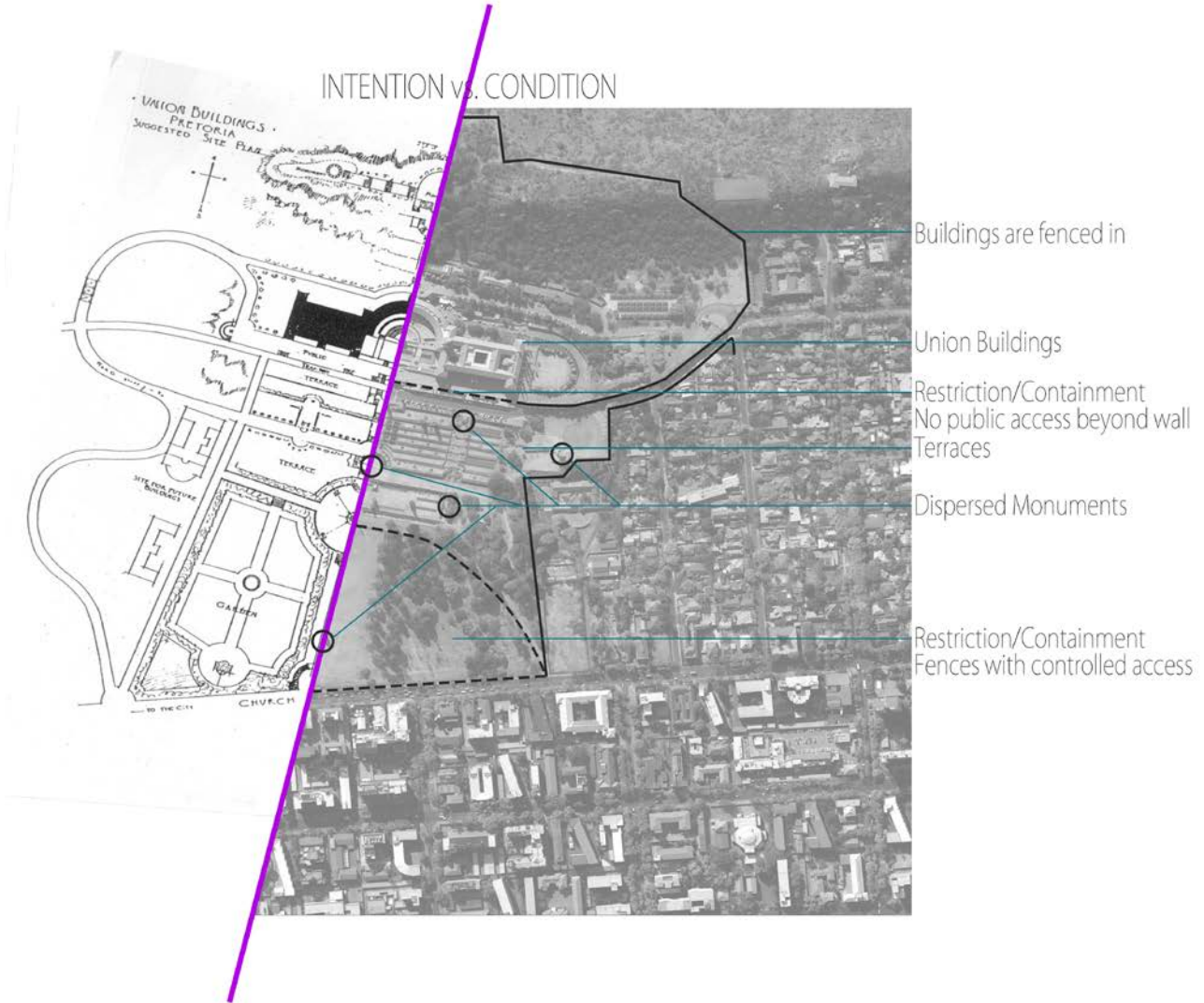
With regard to the urban framework and the identification of the route of protest and the connection of public spaces, the precinct identified was chosen because of its role along the route. The site serves as the final transition from the streets and onto the grounds, from the realm of the city (mundane) into the realm of the divine (government). The site in itself was also identified because of its poor interface with the street, often very busy with vehicles, leaving the grounds underutilized by daily city dwellers. The site is the threshold between the grounds, the upper portion of the Southern Lawn (where protestors congregate) and the city. It is the liminal space between the city and the government edifice.

The exploration of the site and its potential began with studying the intentions of Baker for the site and the present day situation. Many of Baker's initial ideas were never realized, others were and have merely been lost with time. Other changes are very recent and mostly relate to access control within the grounds.

Figure 61 - The working areas established for Newtown Landscape Architect's 2005 heritage audit on the Union Buildings Estate (Muller & Young, 2005:18) (Delimited precinct highlighted by author.)



INTENTION vs. CONDITION



7.2. Conceptual Thinking

The process of developing the design stemmed largely from an investigation into the nature of the transition spaces. Using the proposed spatial syntax of the programme (Chapter 5) as a departure point an investigation into the democracy of traditional parliament was undertaken.

Using the thoughts of Dovey (1999) regarding the democratic nature of transitional spaces in the old Australian parliament as opposed to the new and the postulation that democracy is manifest in the liminal and not the programmed, concrete aspects of government institutions, the spatial syntax was investigated to reveal opportunities of liminality.

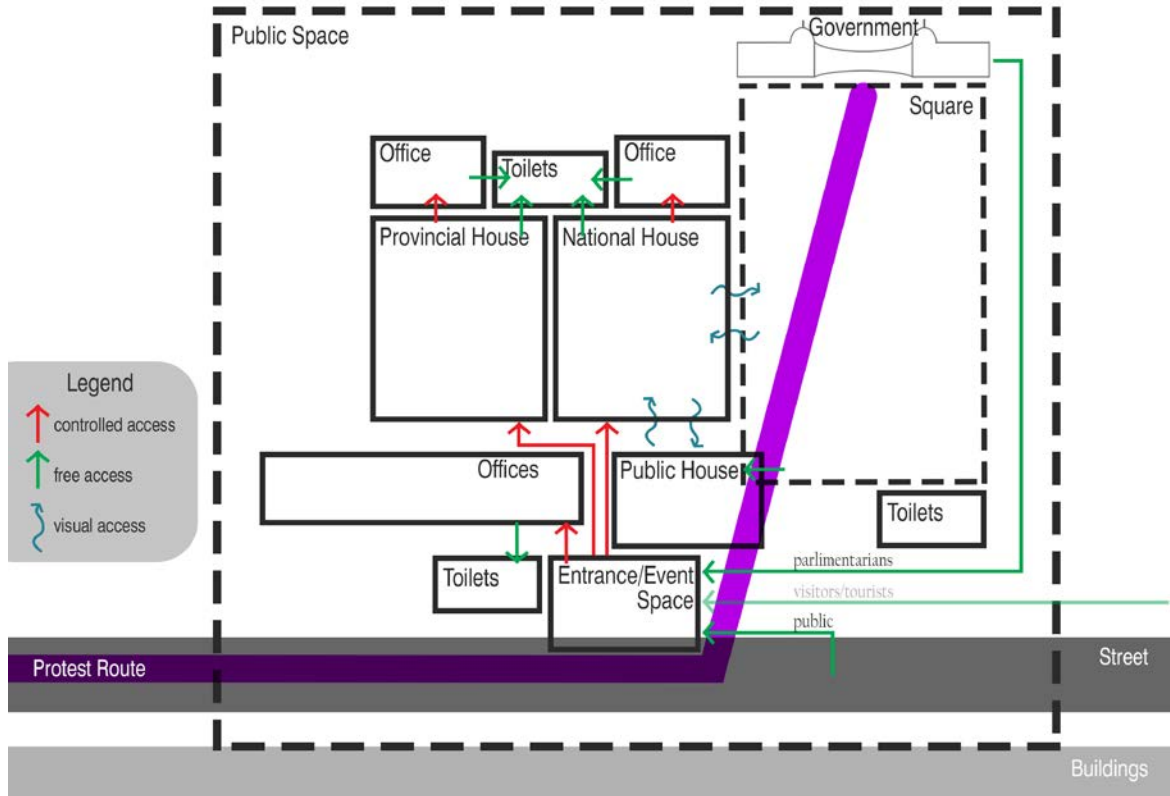
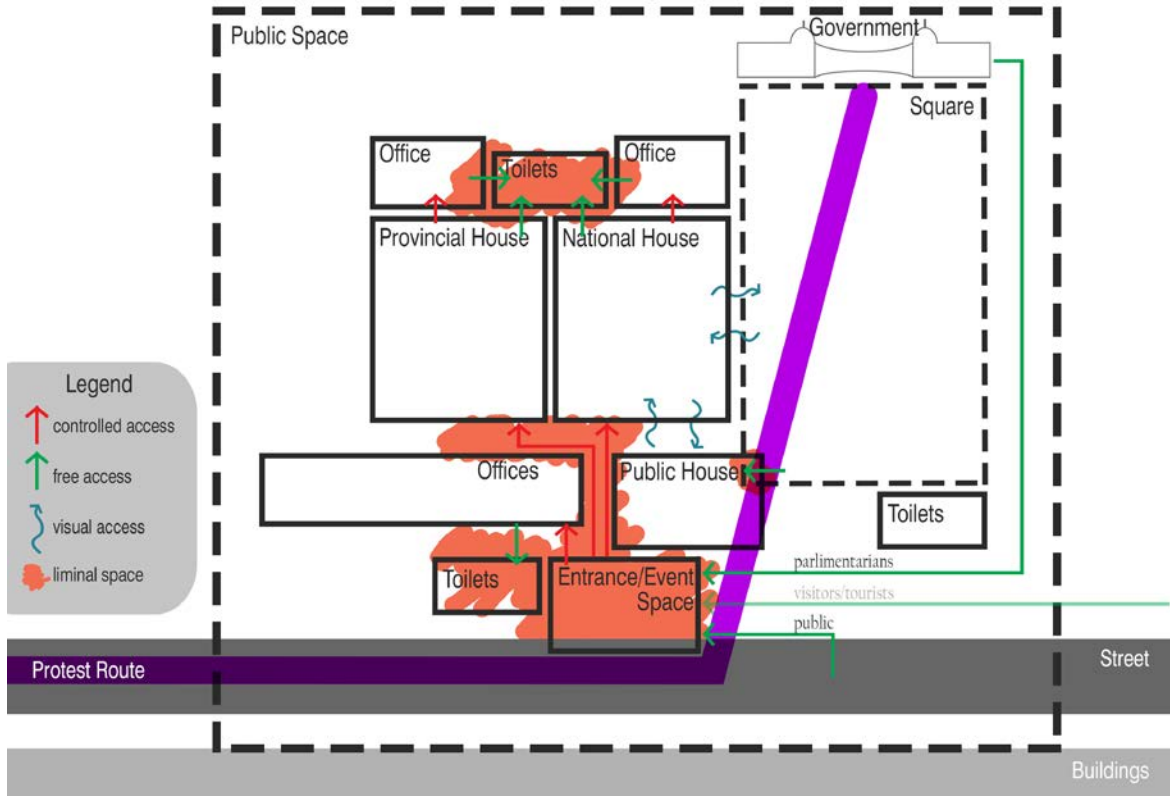


Figure 62 - The spatial syntax of the proposed programme (Author's diagram)

Opp. Page:

Figure 63 - The Spatial Syntax diagram with liminal spaces highlighted (Author's diagram)

The diagram below was developed to understand the relationship between different aspects of programme. The relationship between spaces was based upon the limited understanding of current parliamentary process which was supplemented by speculation. Access between spaces is also shown, some spaces being freely accessible to all in the prior space, while others are access controlled. Because of the expected decorum of the parliamentary process, it is understandable that certain parts of the building remain inaccessible to the public. Where possible and necessary, however, the implication of accountability and public involvement has been addressed by suggesting where mere visual access can be included.



The focus on liminality then saw the identification of the liminal space becoming paramount. These spaces would then become those under most scrutiny, providing an opportunity for innovation and exploration of the theoretical investigation.

The liminal spaces in the building were identified as the passages and toilets and staff canteens and even service yards. Spaces where there is no room for showboating and smoke and mirrors. Everyone moving through a corridor is equal in that they each are being imposed upon by the confines of the space. They cannot always choose with whom they occupy a space. They are subject to others as much as others are subject to them.

Majority of these spaces, as the idea of liminality would imply, are only temporary spaces. They are transitional and thus never occupied for long periods of time by the same people. The moment of democracy is thus brief. The exploration hoped to identify ways in which this moment of liminality could be extended and exploited.



7.3. Precinct Proposal: Iteration 1

The initial noteworthy iteration aimed to marry the intentions of Baker and the intentions that would increase the quality of the public space.

Using existing phenomena, the location of the protest route and existing taxi stop was accommodated. The position of the main building was determined in a manner that addressed the visual connection between the grounds and the building, protestors and the parliamentarians and the daily public and their government.

The assumption that the building will function as part of a precinct saw the employment of Baker's original series of government buildings flanking the square. These, in combination with the form of the parliament building, hold the space and provide a back to the public space.

The axis of the divine is captured and the placement of a large tree one its end serves as beacon and gathering point outside the building.

The existing informal traders along Stanza Bopape street are accommodated in a more formal structure that also acts as the taxi stop on site. There is also a formal transport drop-off within the precinct, a decision made to encourage filtration of people into the site.

The inclusion of parking at the base of the Union Buildings Estate hopes to draw tourists who currently only access the site from above and never traverse the grounds to the street below, into the public realm encourage *cross-pollination* between tourist specific activities and daily public space.

Figure 64 - Precinct design iteration 1. Manipulated from original explorations based on analysis of existing conditions, historic intentions and the requirements as set out in the project brief. (24 April 2016)

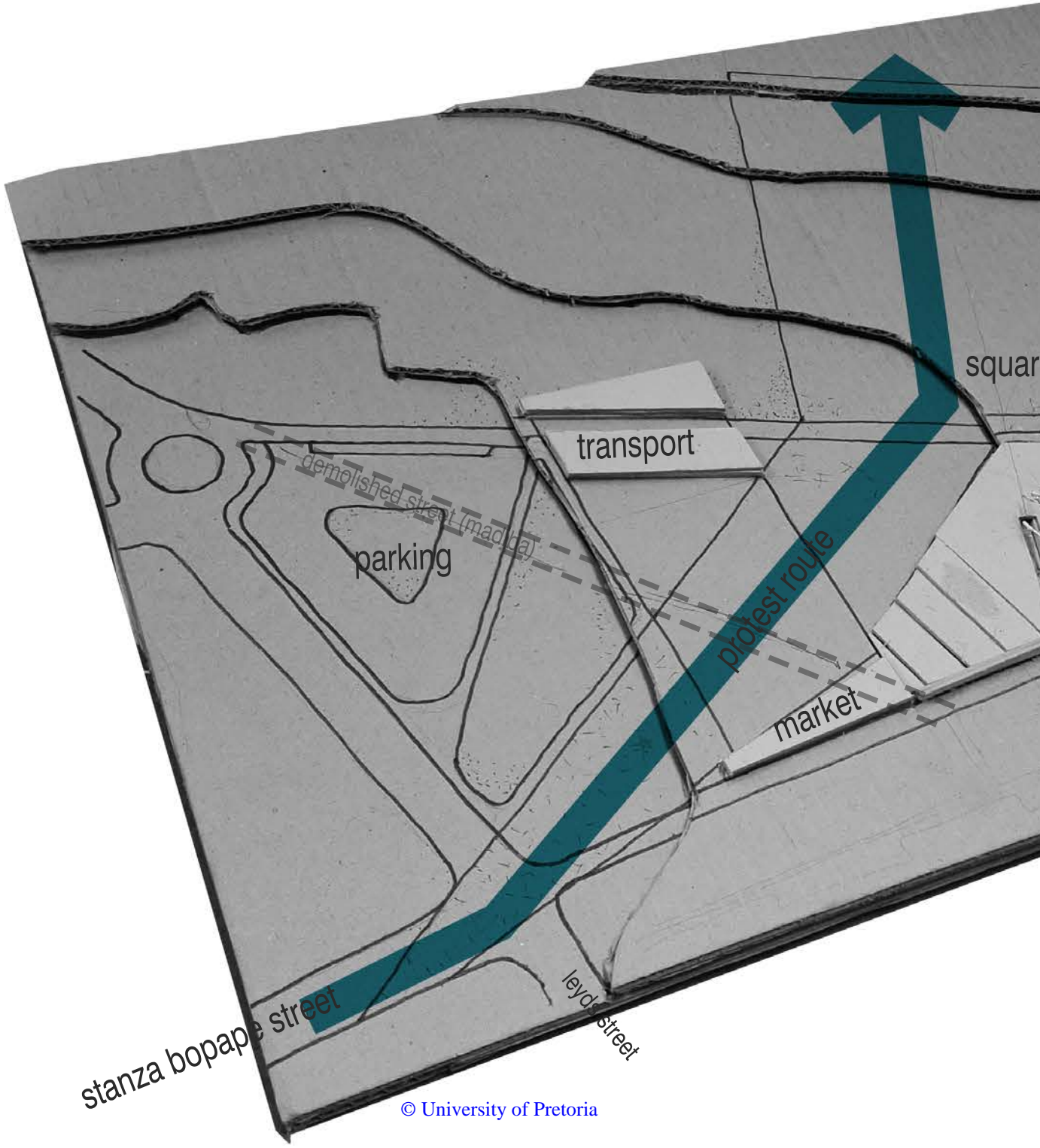
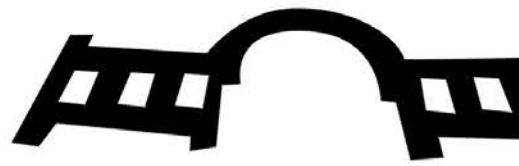


7.4. Precinct Proposal: Iteration 2

The development outlined in the second iteration shows only minor alterations. The first is illustrated in later model, whereby the slot that was to capture the axis is opened to create a space for external gathering. The location of public informal gathering space at the culmination of the divine access marks the shift in focus from government (divine), to the inclusion of the public (the mundane).

Additionally, there was exploration into the manner in which the auxiliary governmental functions flanking the square should be housed. The iteration shows an amalgamation of forms (which was later critiqued at ignoring the human scale and eliminating the opportunity for intimate spaces in between buildings).

Figure 65 - A second iteration of the precinct proposal, with limited alterations from the first. (26 April 2016)



7.5. Precinct Proposal: Iteration 1 & 2: Model

The model served to illustrate the intention with regards to the relationship with ground. The attempt was for a subtle building, absent of the traditional grandeur associated with government buildings.

This plays on the idea of returning the sacralisation of democracy to a mundane level. It also aims to reduce the scale of government buildings in relationship to the street, the occupation of which addresses the idea of threshold of the grounds, the occupation of historically liminal space and the accessibility of government.

In this manner, the precinct acts as an occupiable gateway between the city and the sacred space of the Union Buildings.

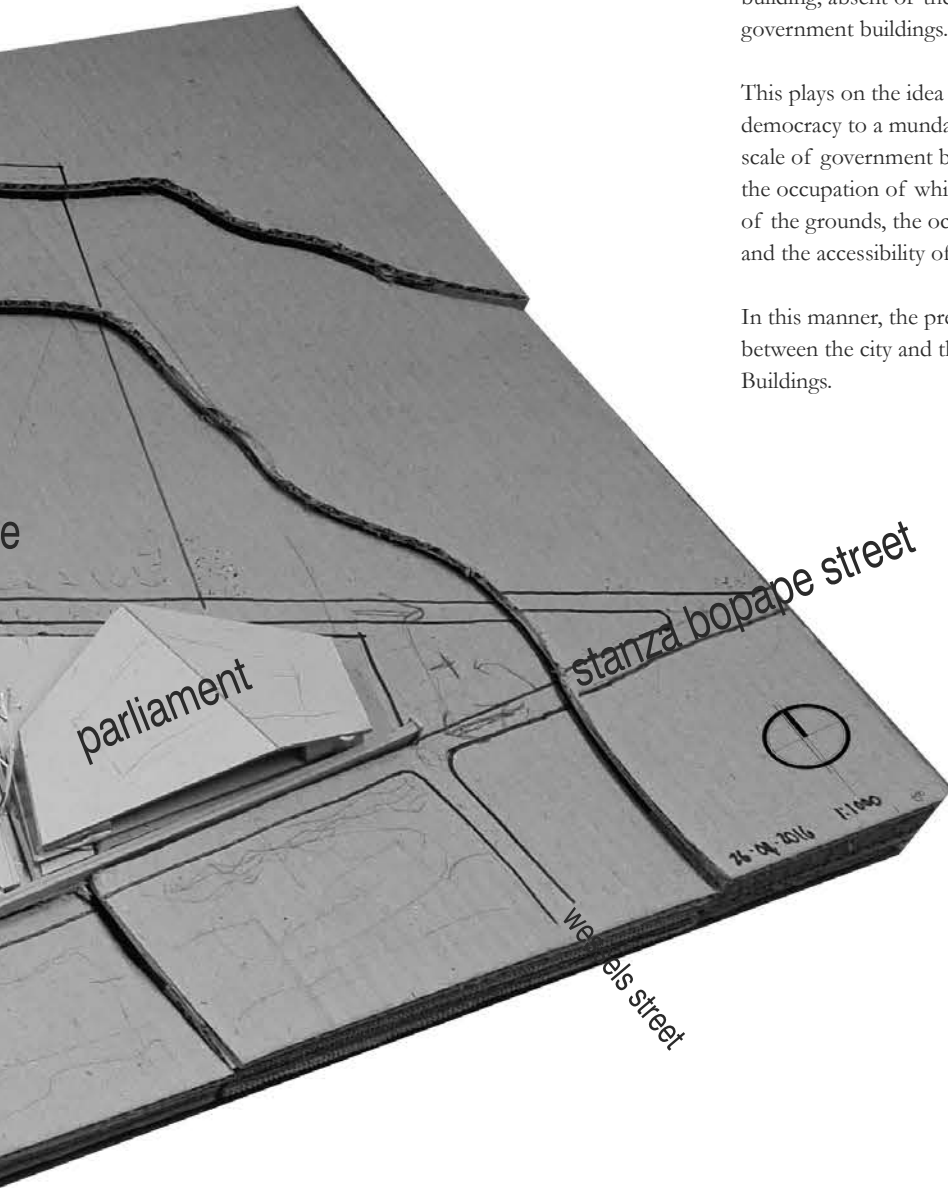
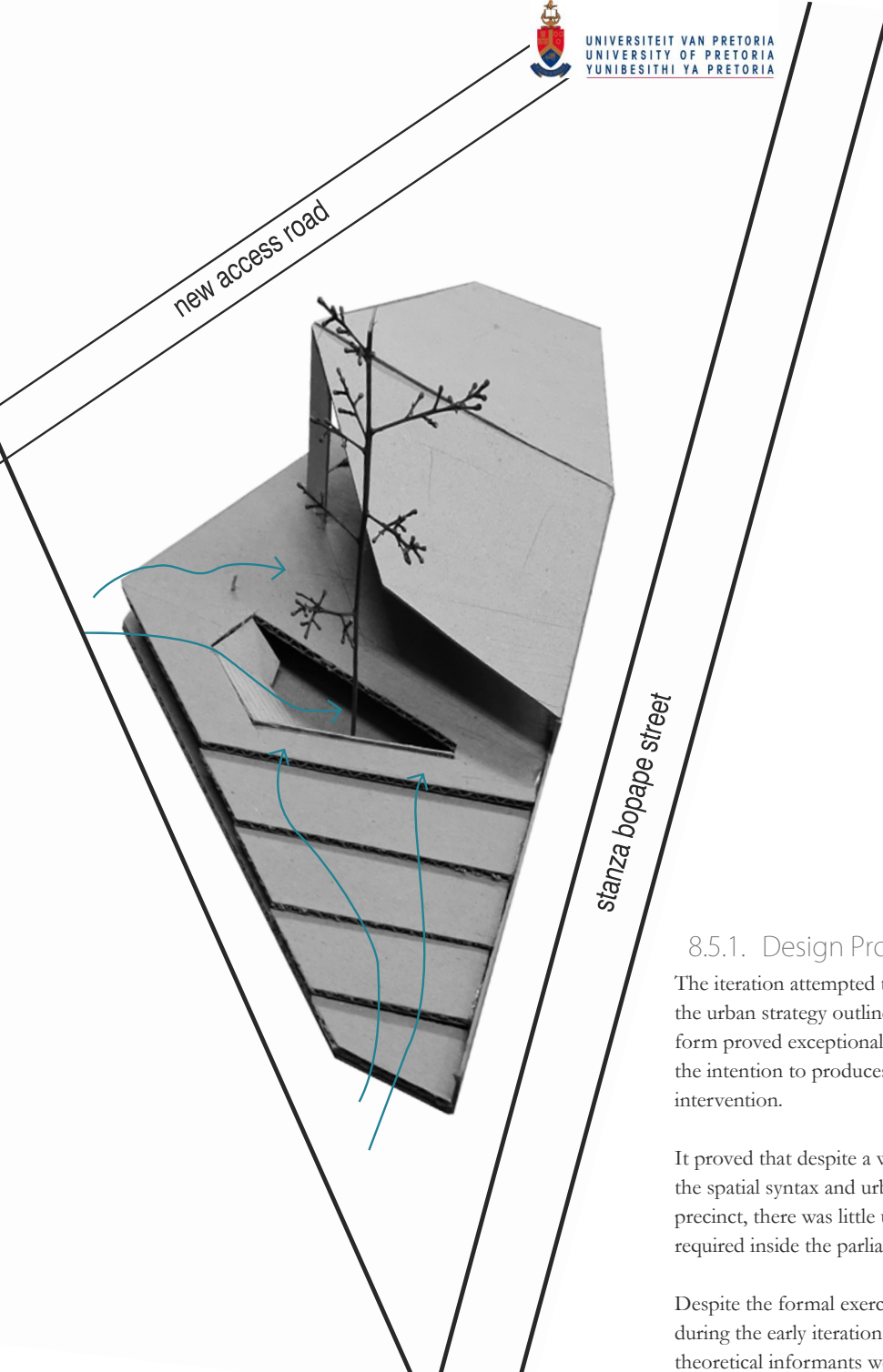


Figure 66 - Model illustrating the initial proposal for the precinct and a conceptual exploration of the building form determined by the site. (Precinct iteration 1; Building Concept) (26 April 2016)



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Chapter 8:
PROCESS
Development of the Scheme



8.5.1. Design Proposal: Iteration 1

The iteration attempted to apply the outlined form from the urban strategy outlined in the previous chapter. The form proved exceptionally large and not fully in line with the intention to produce a subtle, close to the ground intervention.

It proved that despite a well-developed understanding of the spatial syntax and urban condition required for the precinct, there was little understanding of the intricacies required inside the parliamentary building.

Despite the formal exercises and the results produced during the early iterations, the formulation of concept and theoretical informants were still being explored.

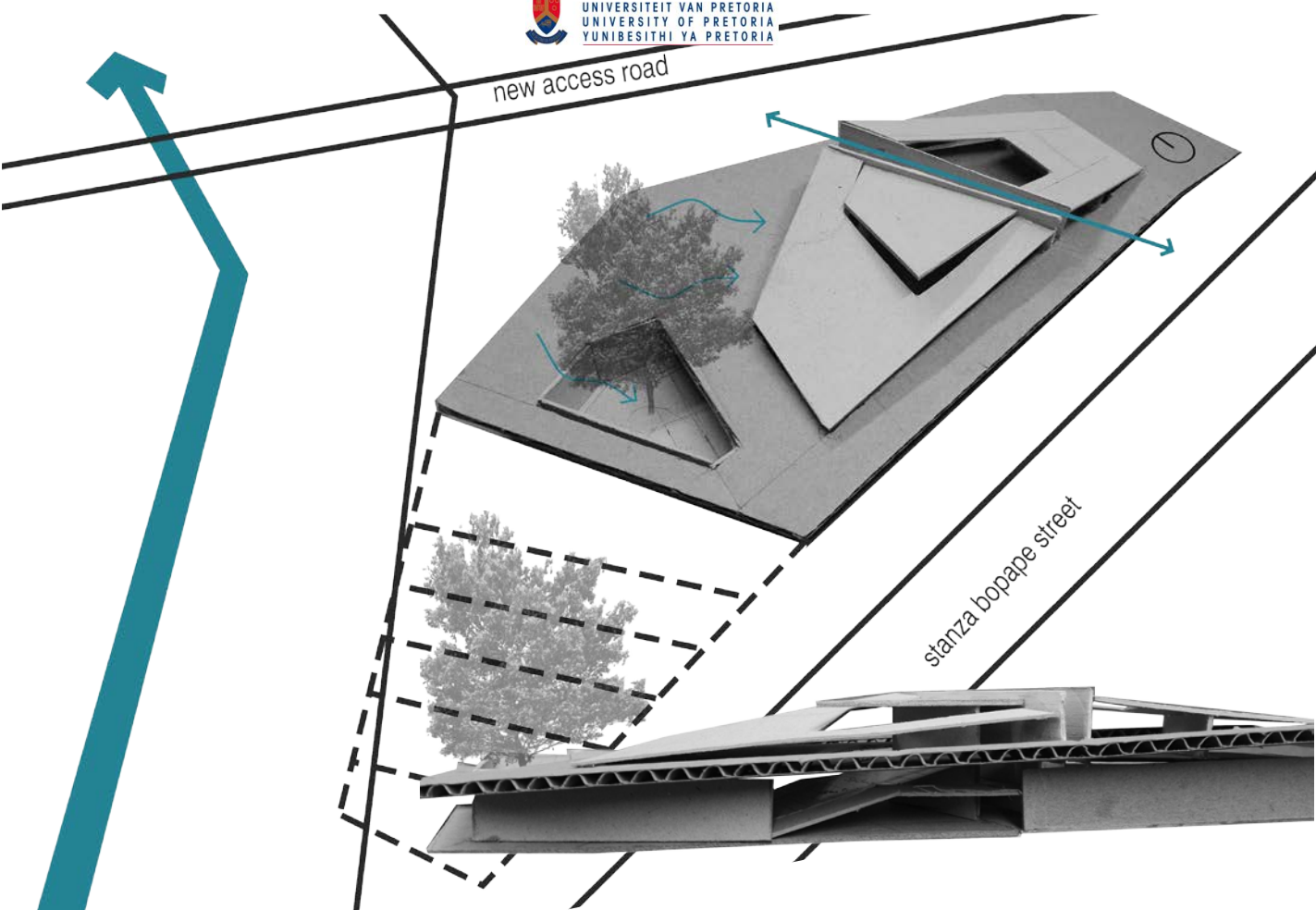
The manner in which edge between the formal spaces within the building and the informal public spaces outside the building were treated became relevant from the onset. The act of creating an outdoor amphitheatre that was essentially embedded in the skin of the building was one exploration of this idea.

Above, and opposite page:

Figure 67 - Photograph of the model built to illustrate Iteration 1 (May 2016), aerial view.

Figure 68 - Photographs of the model built to illustrate Iteration 2 (May 2016), aerial view and side view showing levels inside building

Figure 69 - Conceptual elevation of the second iteration.



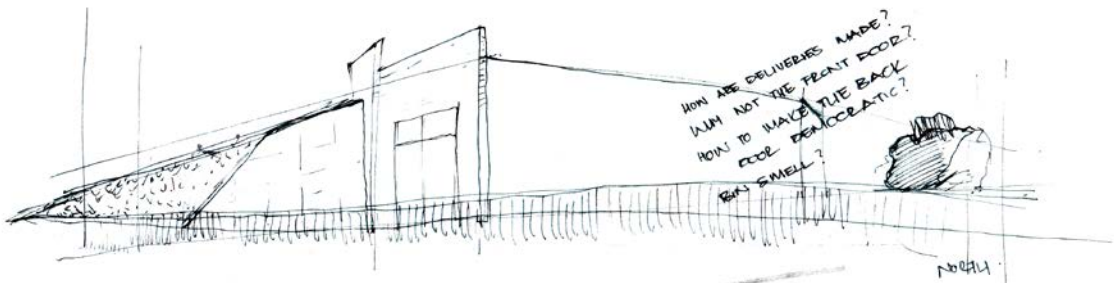
8.1.1. Design Proposal: Iteration 2

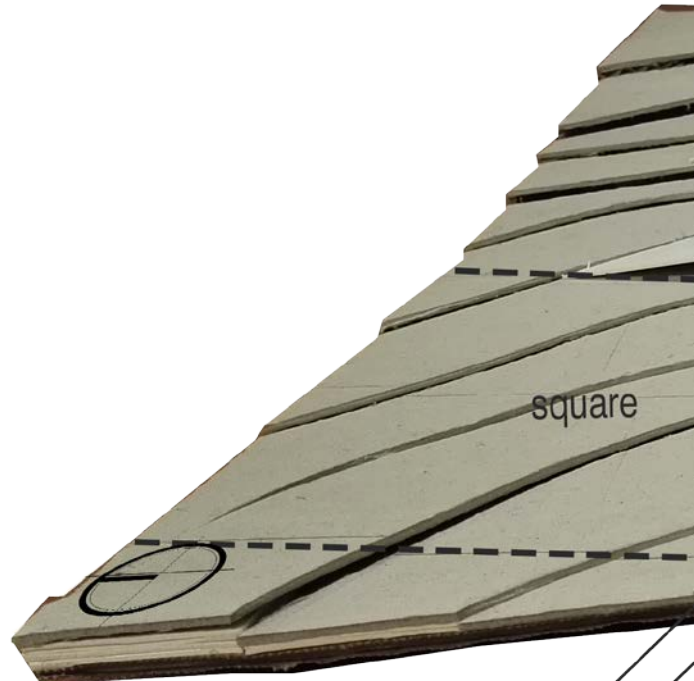
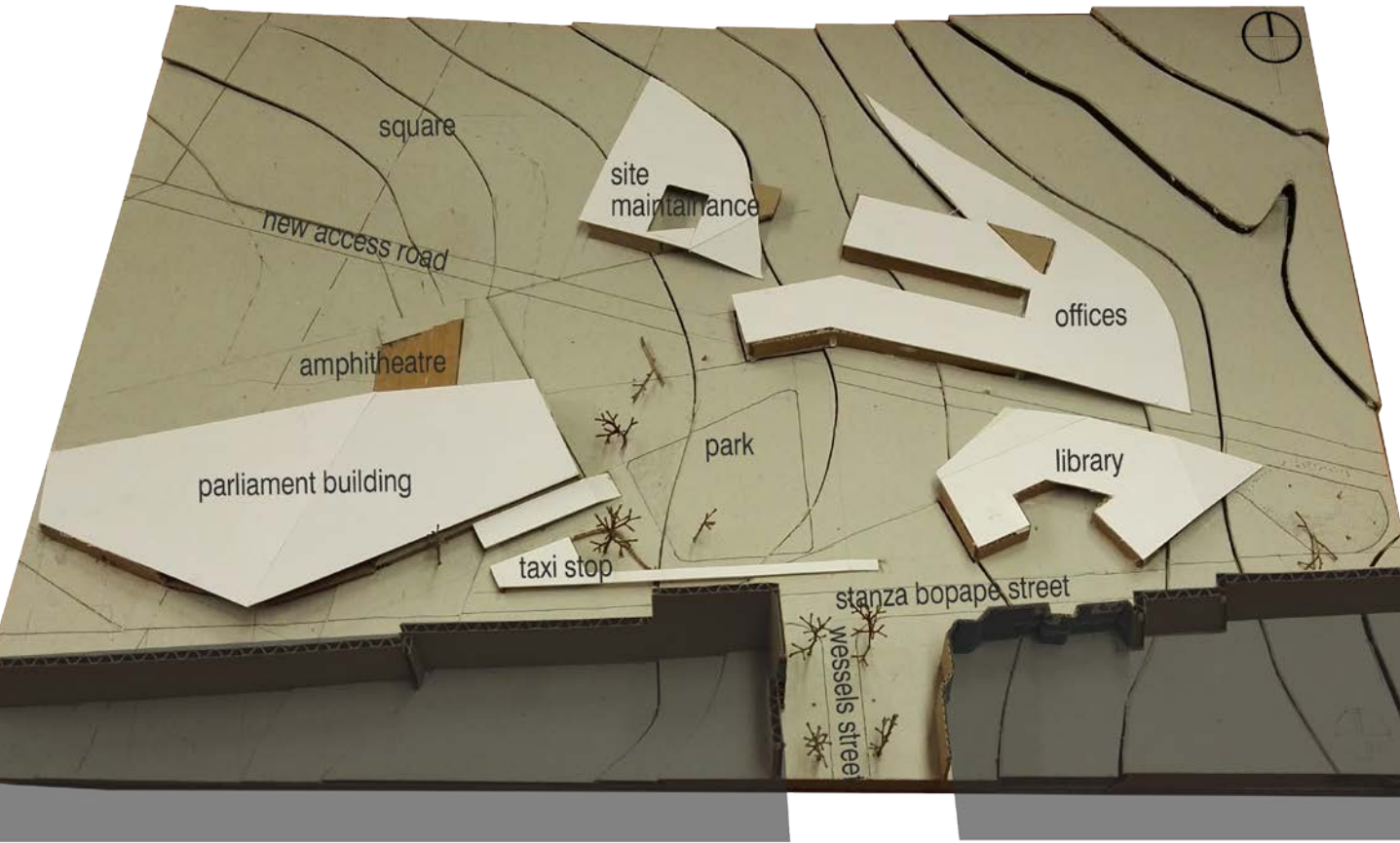
A variation on the exploration undergone in iteration two, this attempt aimed to reconcile the subtlety of the first iteration (in terms of scale and a perceived *growing* from the ground plane).

The drastic volume of the building was reduced by creating a void inside the volume, so that it may still respond to the urban requirements outlined in the site planning (chapter 8).

The exploration of liminal spaces (especially those of circulation into and through the building) manifested in the introduction of drastic cutting of the form. This hoped to

create visual connection between the democratic liminal spaces and the outside. The ramp cutting through the building exaggerates the ritual of descent into the chamber; enforcing accountability and decorum upon entering the proceedings.





The model built to illustrate the third iteration of the design and development of the precinct. (Scale 1:500)

Figure 70 - Overhead view of the model (Iteration 3)

Figure 71 - Oblique view of the model, showing the edge between discussion chamber and public amphitheatre.

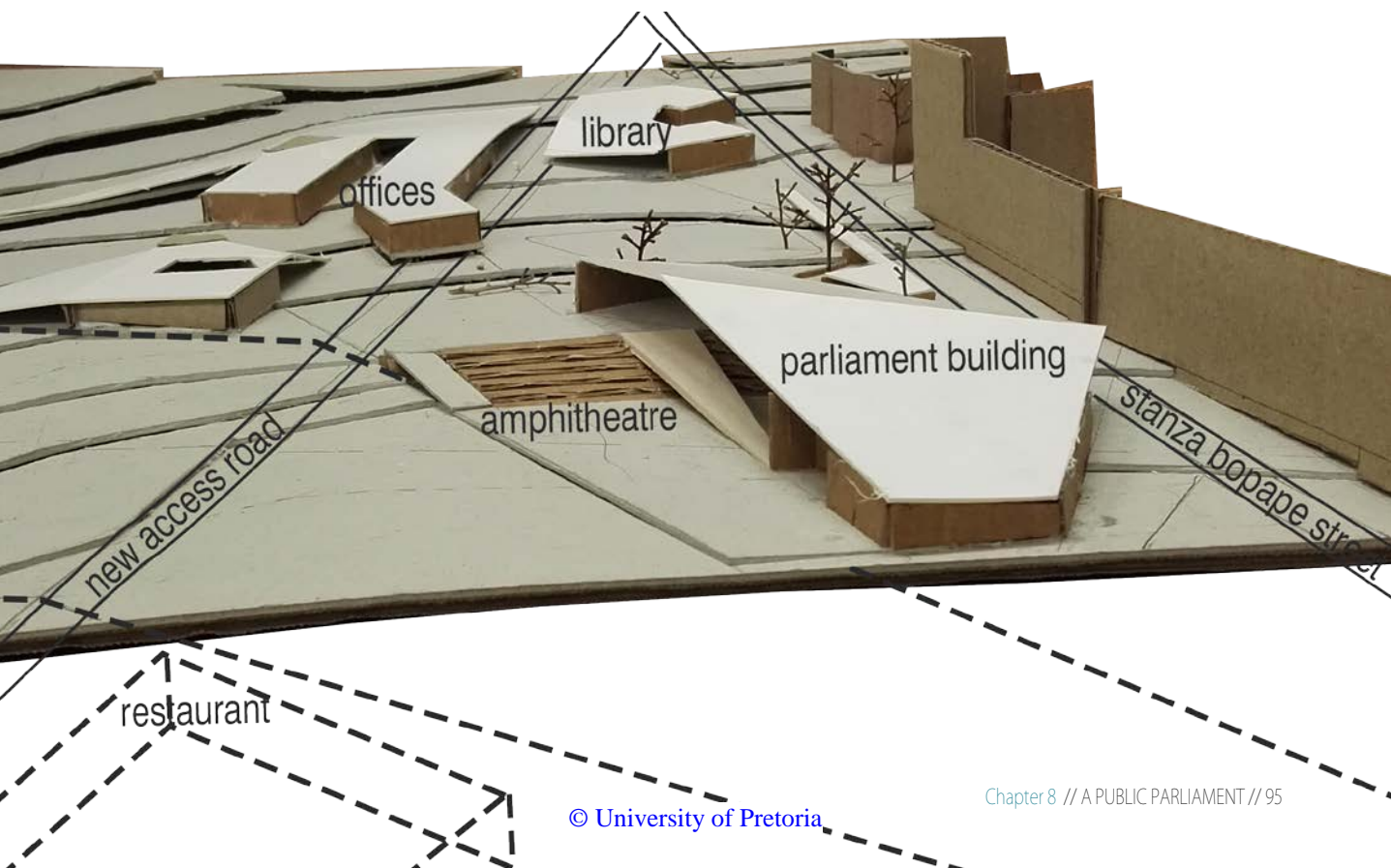
8.1.2. Design Proposal: Iteration 3 (June)

The development of the scheme further saw the design of the public space around the building take precedence. The importance of auxiliary programmes was addressed by the inclusion of other buildings.

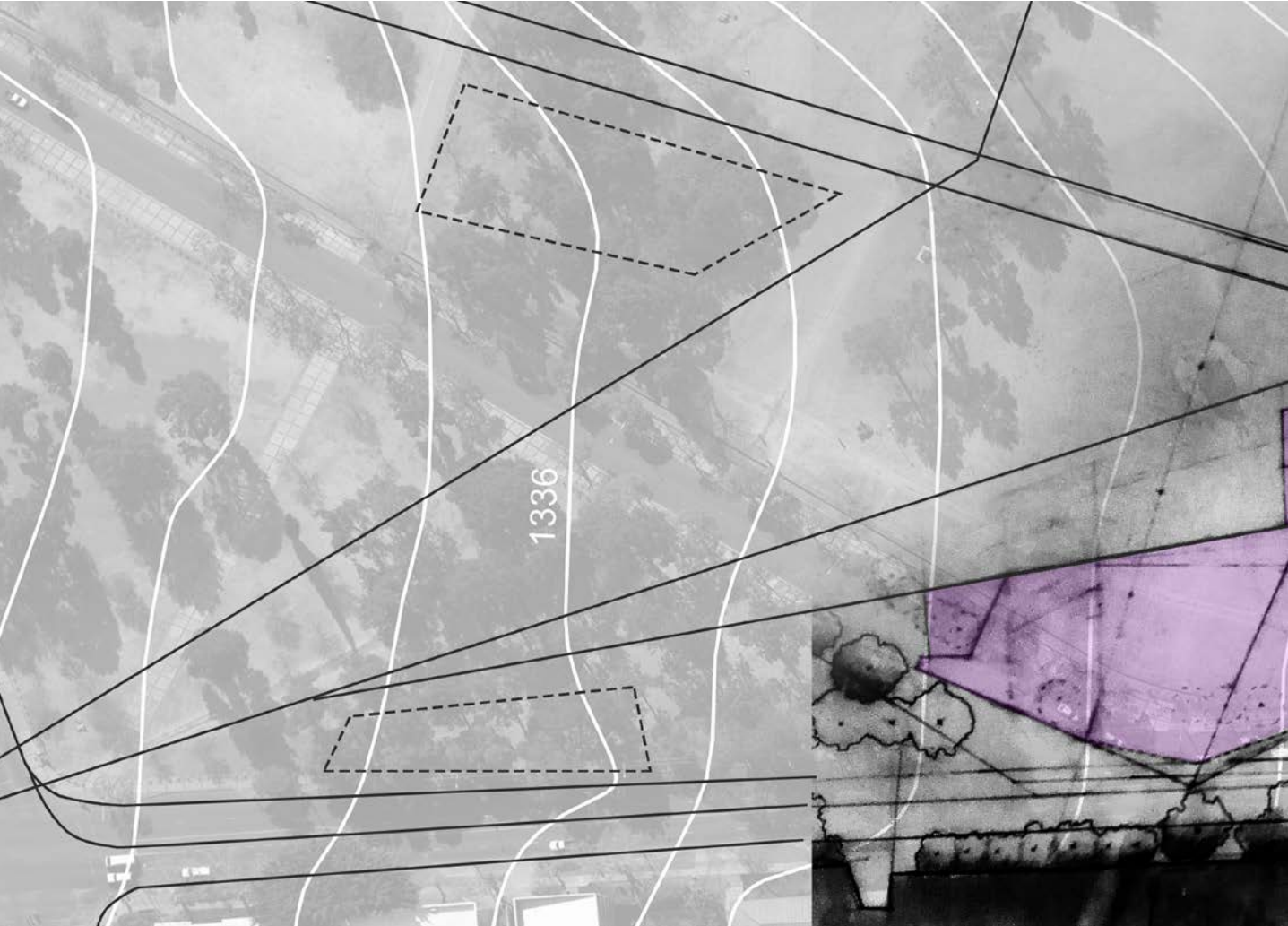
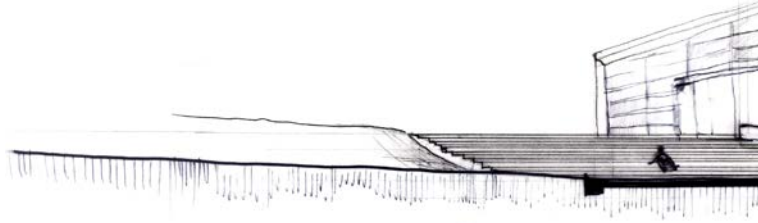
The language in which these buildings was to be treated was in keeping with the subtlety attempted in earlier iterations. The nature of the forms thus sat firmly grounded in the landscape and only subtly rose from the context. Majority of the roofscapes were designed to be landscaped, blending into the landscape and only visible on the human scale.

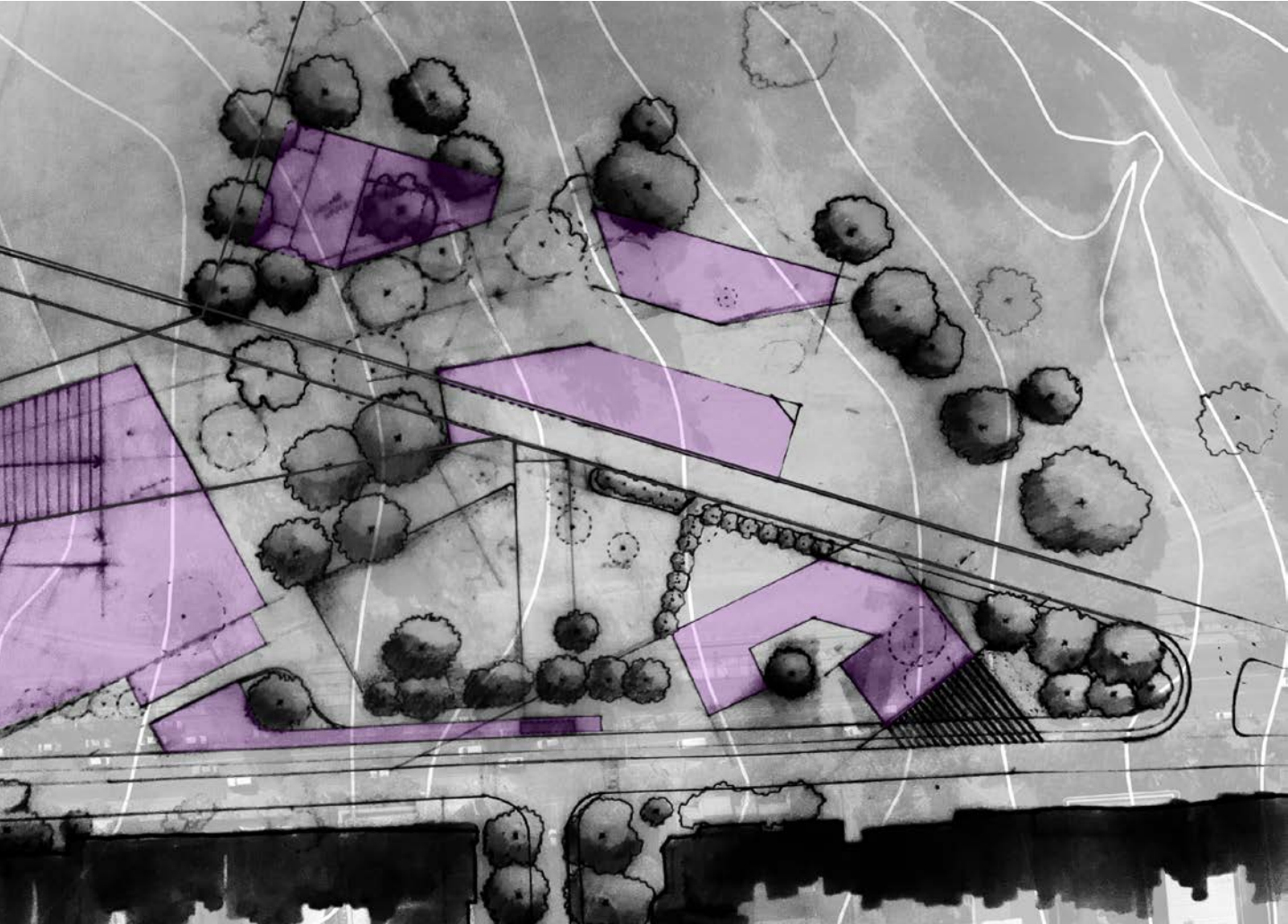
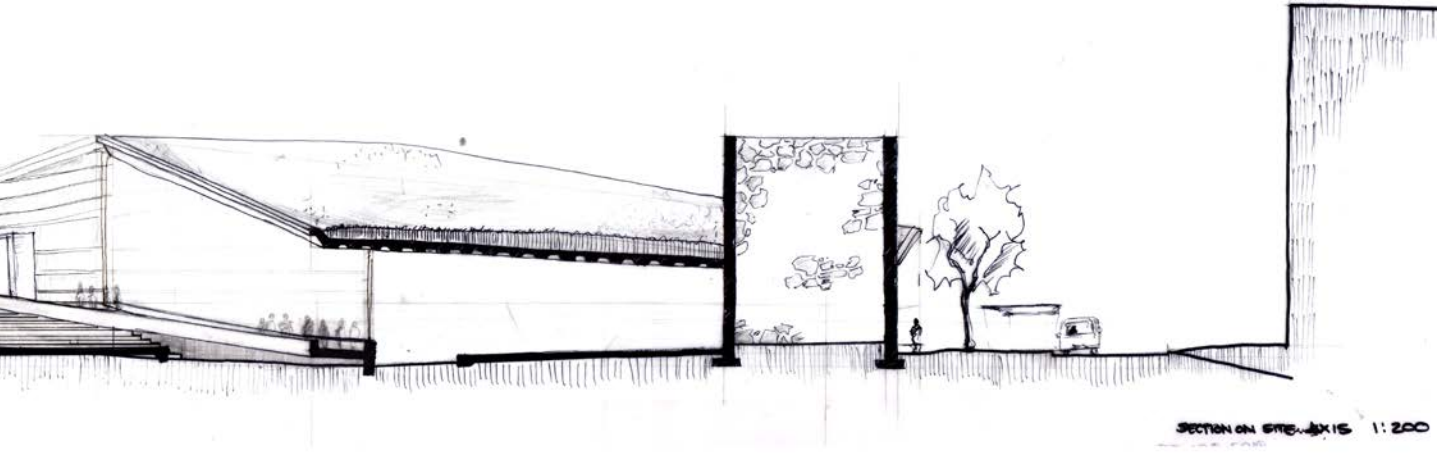
The urban response was complimented during the June review, despite the clumsiness with which buildings appeared to have been arranged. It appeared as though the initial ordering geometry had become distorted and thus lost on the viewer, leaving the precinct seeming unordered.

The building itself still failed to address the intricacies of the programme, perhaps due to a lack of understating as to the intricacies involved. The structural aspects of the massive roof were also brought into question.



Drawings of the development (June 2016)
Figure 72 - Section (NTS)
Figure 73 - Site Plan (NTS)

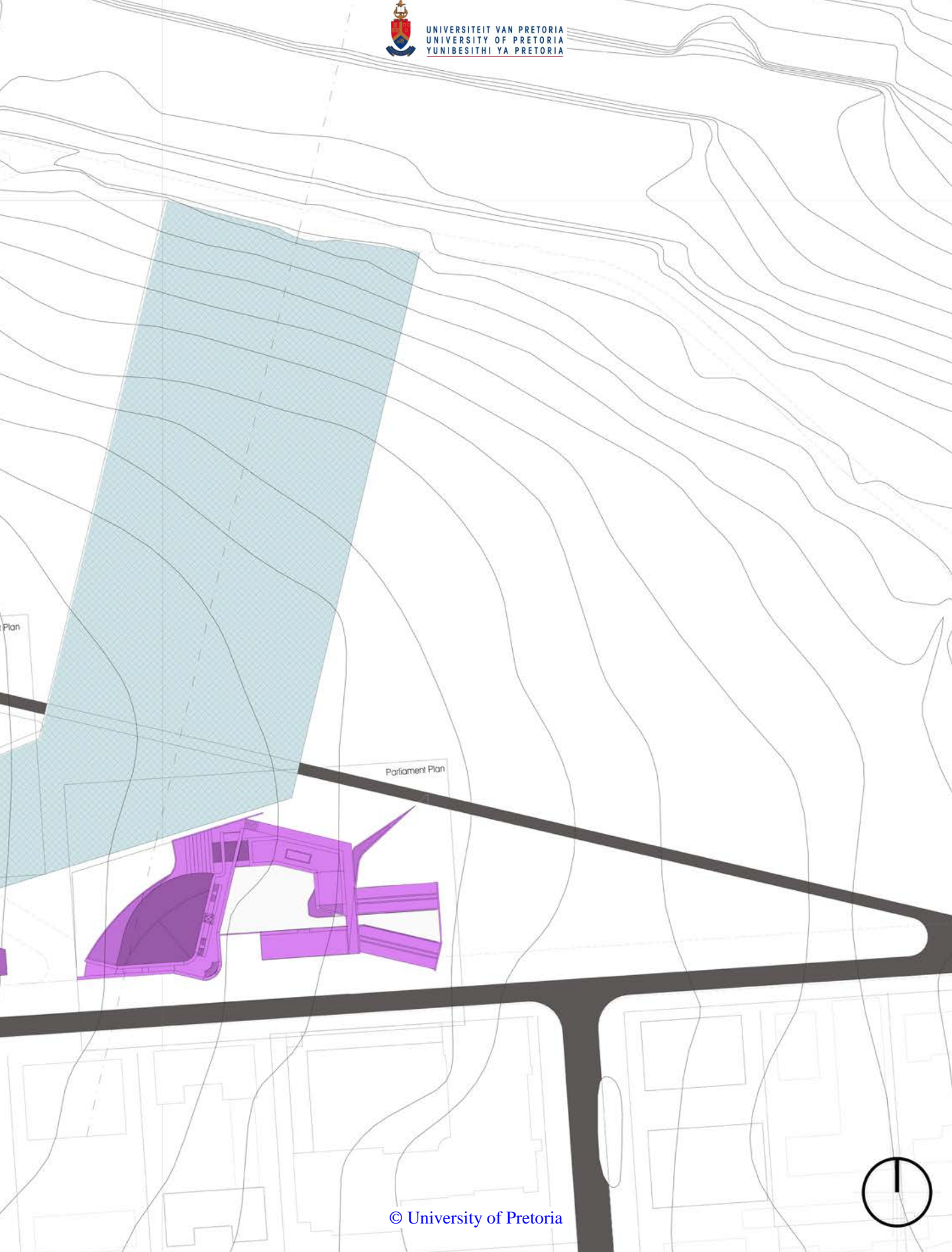






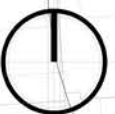
8.2. Design Proposal: Iteration 4 (August)





Plan

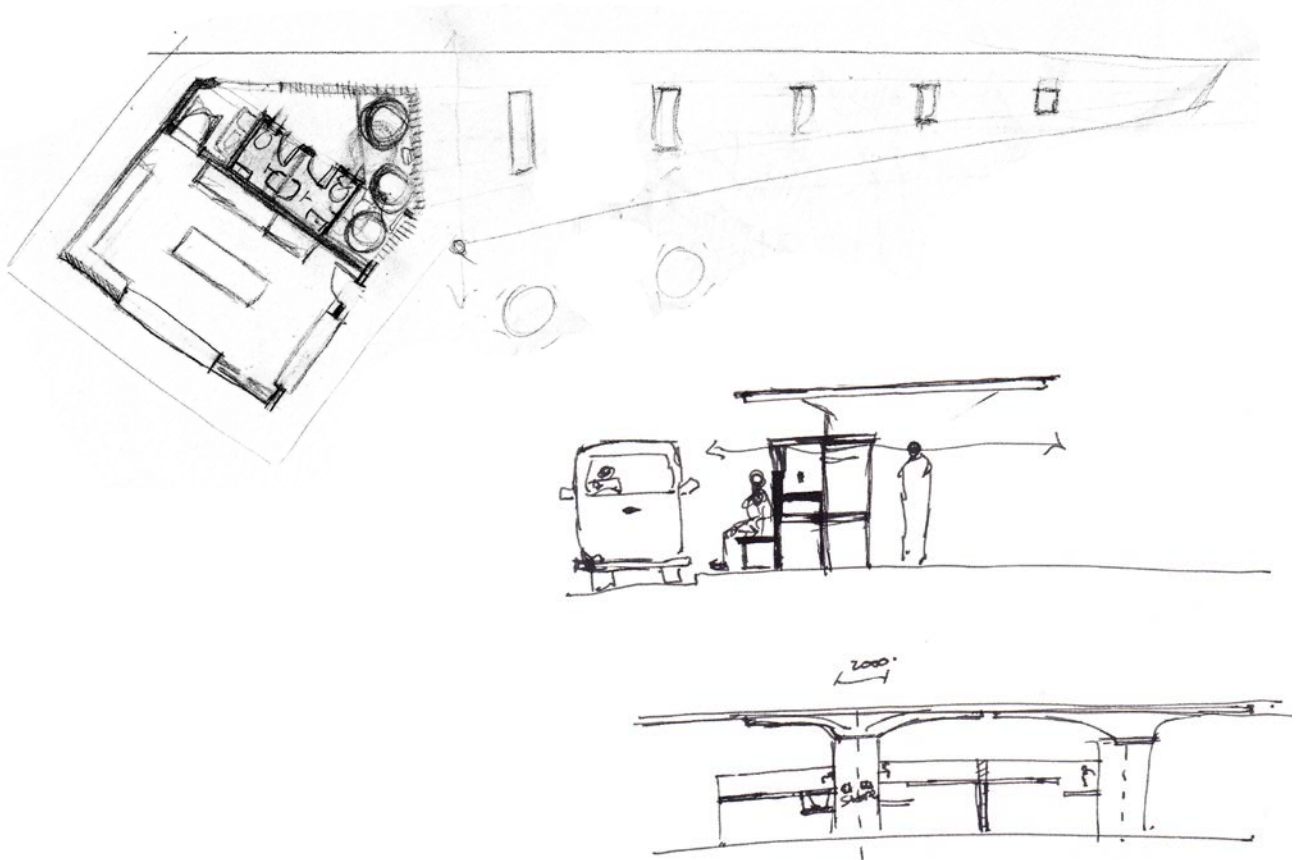
Parliament Plan

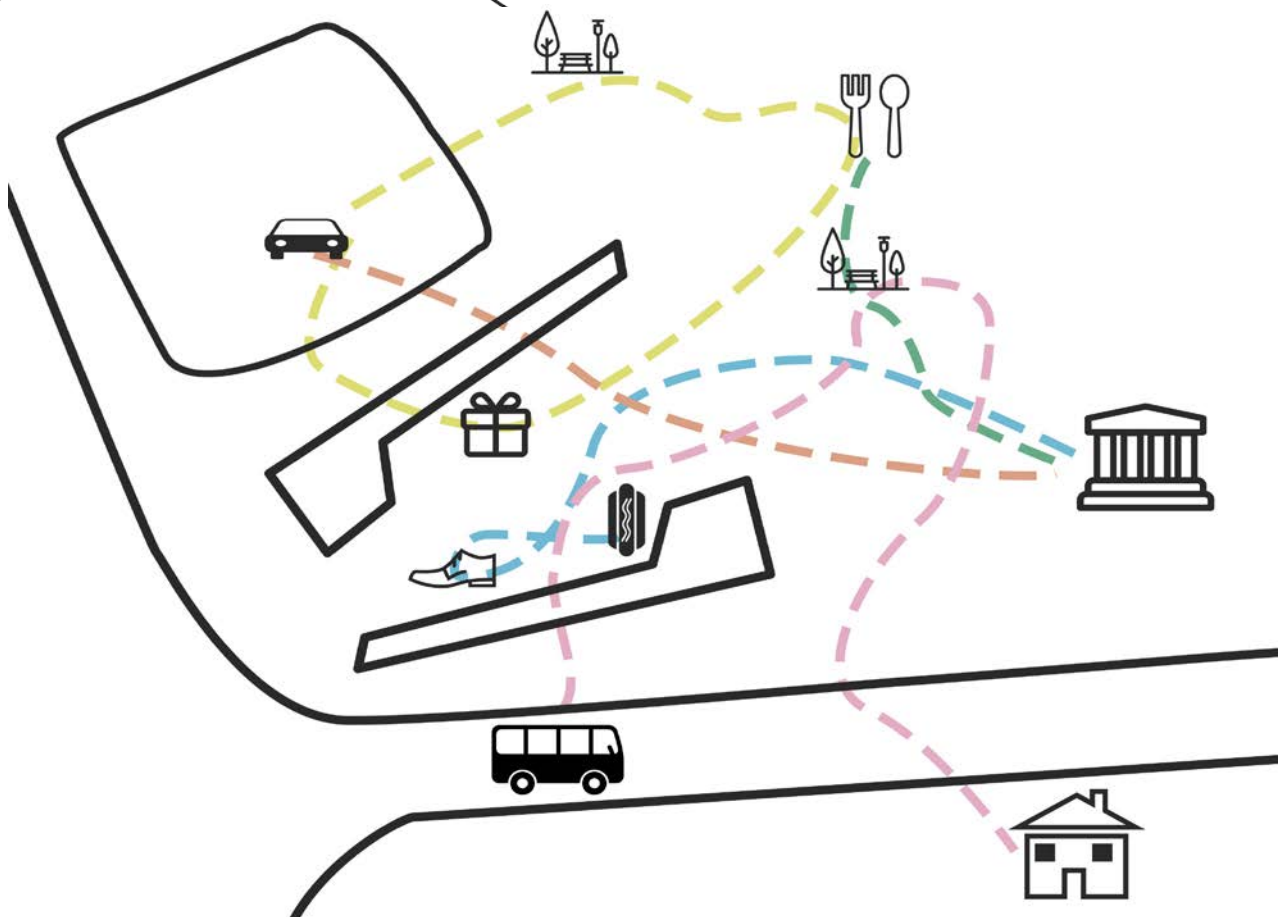
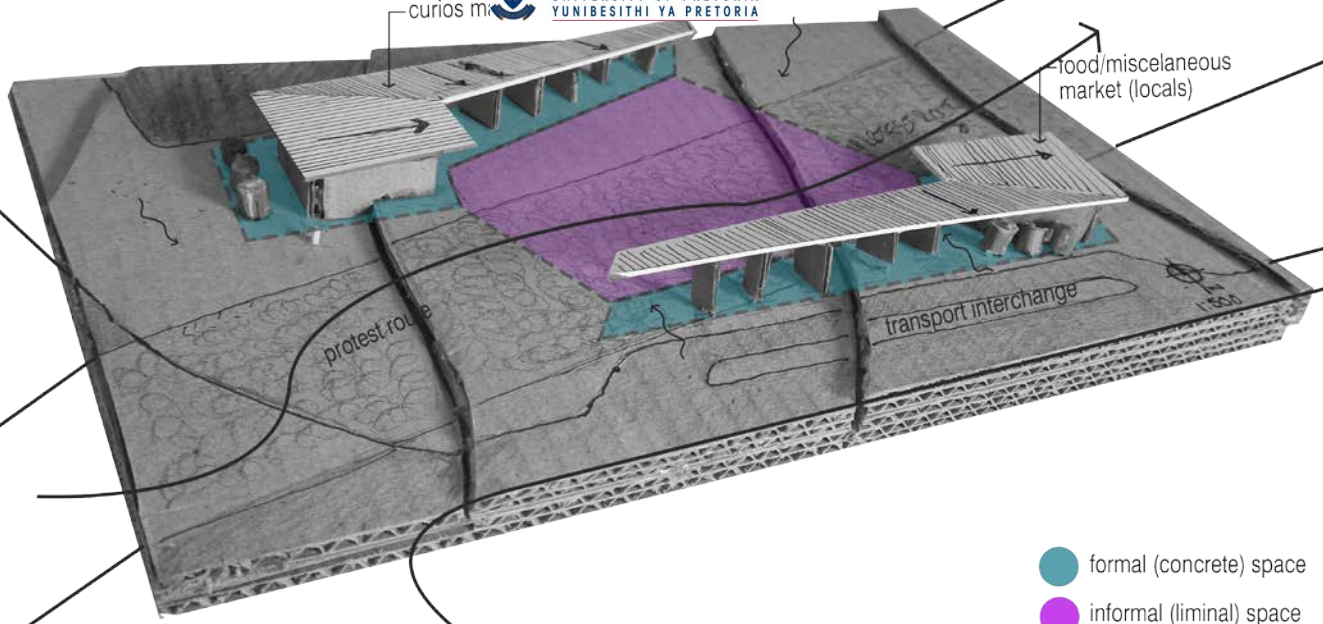




8.2.1. Market

The market space acts a funnel for the protestors during protests. By using two flanking structures, the activity of trade is housed at the centre of the public space. It also encourages interaction between tourists, accessing the curios market, and the everyday public, using the food vendors. The inclusion of food vendors' informal seating arrangements will increase the sociability of the space allowing employees of nearby buildings (and parliament) to interact with the everyday users of the space and tourists.

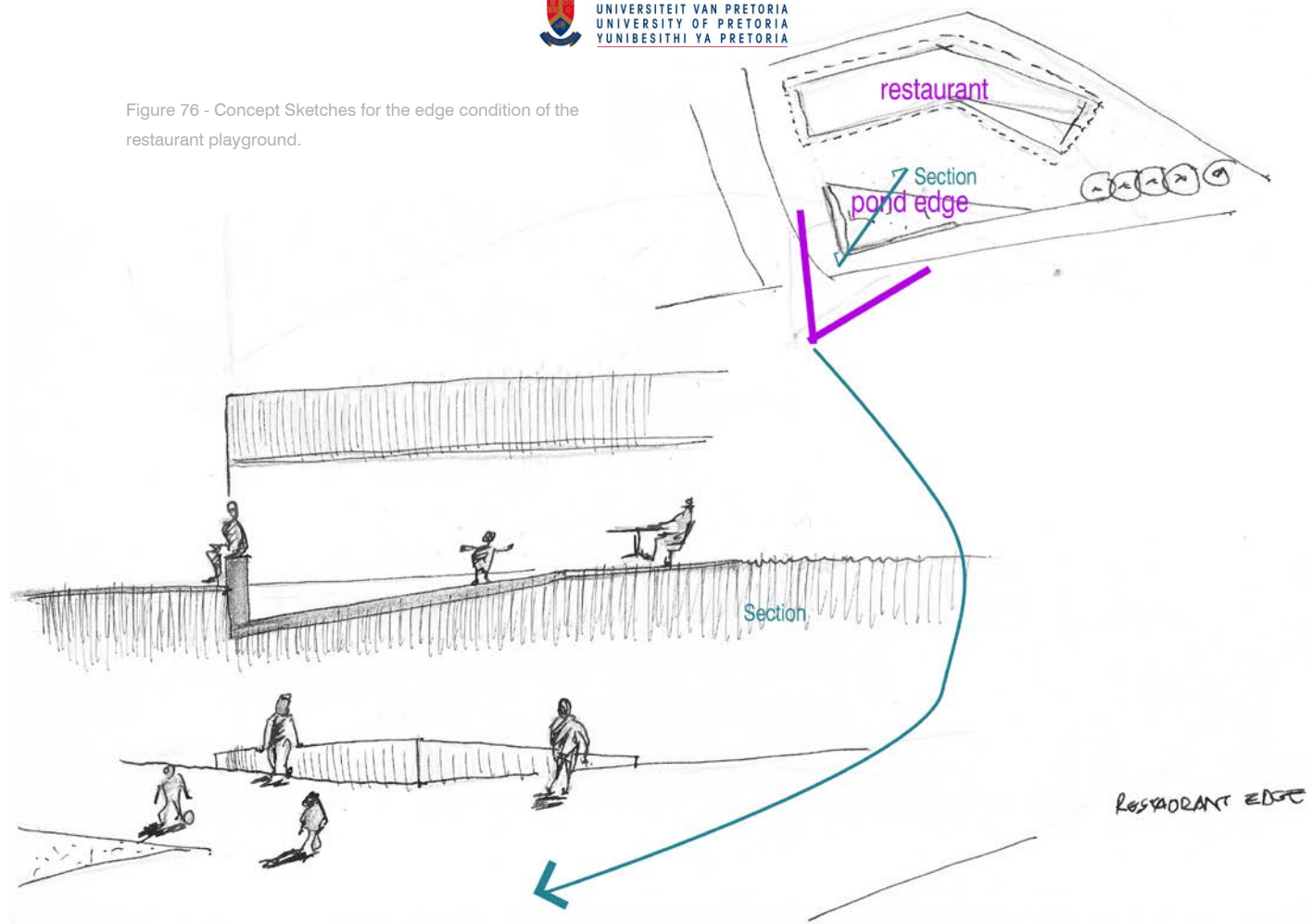




Opposite Page
Figure 74 - Concept sketches of the market space

Opposite Page
Figure 75 - Concept sketches of the market space
This Page

Figure 76 - Concept Sketches for the edge condition of the restaurant playground.



8.2.2. Restaurant

The restaurant on site addressed the initial aspect of the programme that allowed for large gatherings and functions at the parliament building. The restaurant serves as venue for these gatherings and because of its position in the public space, there is a strong likelihood of interactions between different users.

The restaurant also incorporates a bar which might become the watering hole for locals in the area and parliamentarians alike. The proximity of the restaurant to the memorial and the Union Buildings renders it a likely point of interest to visitors to the site as well. The restaurant, market and parliamentary building form an enclosure of a public playground, for the children living in the area as well as patrons of the restaurant and market to allow their children to play under surveillance. This also encourages interactions between children of different walks of life.

8.2.3. Public Toilets

The frequency of public toilets throughout the precinct is in anticipation of the users a public park can expect. The treatment of these public toilets also needs to be unique in that the programme holds possibilities for liminality and is not often celebrated.

The design should increase the desire in users to linger and should encourage an identification with one another's humanity.

Case Study: Public Ablutions, Richard Leplastrier, 2006

Leplastrier's public ablutions are exceptionally humble but the manner in which space is dealt with is unconventional.

The building internalises its functions, but the planting within the building and the floor finishes create a sense of outdoor space. The roof overhead seems to unify smaller buildings in the building.

The privacy of the toilet cubicles is respected and seating inside the building gives people a place to wait, without feeling like they are inside a toilet building. Communal handwashing troughs increase the likelihood of social interactions.



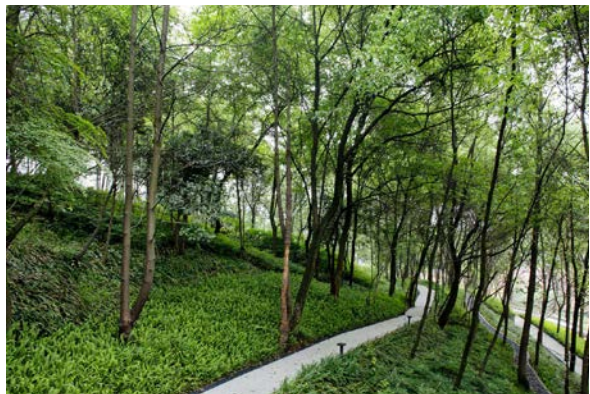
Figure 77 - Photographs of Richard Leplastrier's Public Ablutions in Sydney. Completed in 2004. (De Wall & Przywecki 2016)

8.2.4. Interpretation Memorial

The issue of colonial symbols has been brought into question in the South African political discourse over recent years. The Rhodes Must Fall saga marked a turning point in the debate, taking it from mere discussion into action.

The question of what to do with the colonial history of South Africa and its symbols in our present era is dressed by this intervention in the form of an interpretation memorial, that places a number of these symbols in context, with each other and themselves. By introducing new works of art, making information about the the works available and introducing additional programmatic aspects to the Union Buildings Estate the intervention hopes to honour the artistic value of the colonial statues and busts while contextualising them in a manner that makes their meaning useful and relevant.

Similar to a sculpture park the space will be both archive and gallery but equally functional as an outdoor recreational space. Using the natural slope of the landscape, the introduction of terraces following an undulating path with portions of high speeds and others that encourage slow movement and contemplation, the memorial will tell a story along its narrative that hopes to provide insight into the political history of South Africa, also contextualising the Union Buildings edifice, and making the estate more of an attraction to both local and tourists. It will lend practical value of a contribution to the political narrative in South Africa, a valuable asset to The Capital City.



Conceptual informants for the memorial, right. Top to bottom:
Figure 78 - The Olympic Sculpture Park, Seattle. (Charles Anderson / Atelier ps, 2007) (Buchanan 2010)
Figure 79 - Nirox Sculpture Park, Johannesburg. (N.A. 2016)
Figure 80 - The Hillside Eco Park, Hunan China (Z+T Studio) (Zhang 2016)

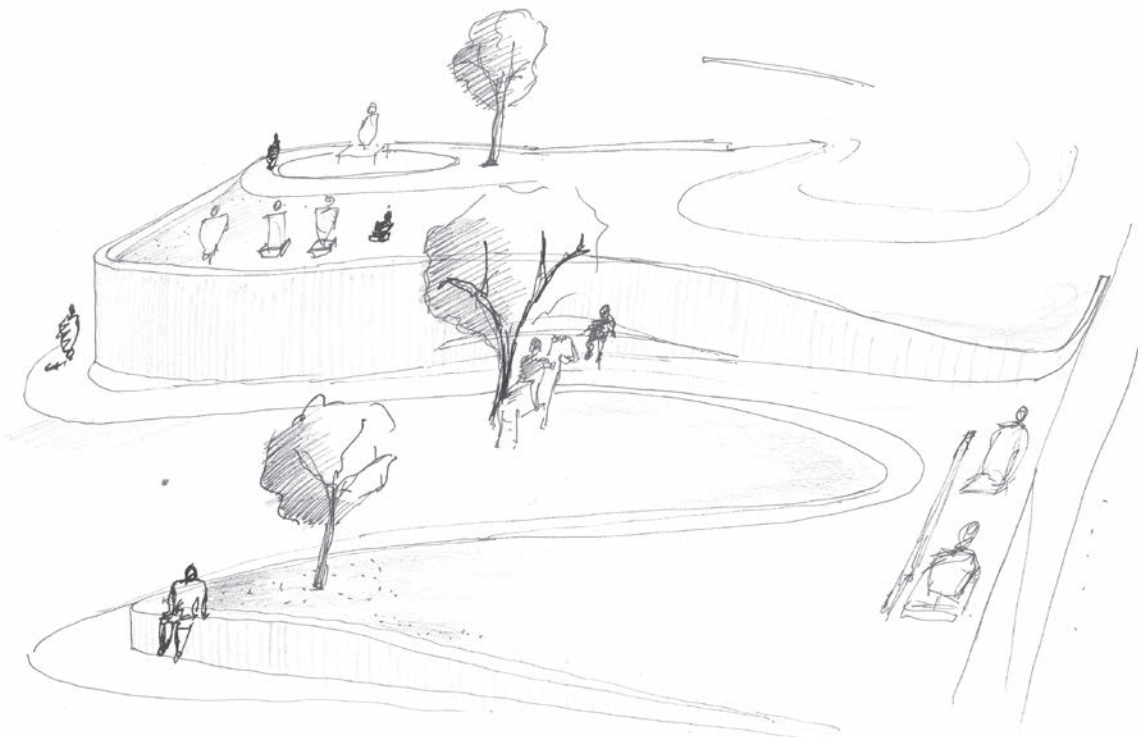


Figure 81 - A conceptual illustration of the memorial (Author 2016)

Figure 82 - A conceptual section of a portion of the memorial (Author 2016)

8.2.5. Concept

The concept for the building developed from its *place* and the requirements set out in the *pragmatics* section of this document., from here it was guided by the *postulations* about democracy, destruction and the value of what has been destroyed.

The building, being in the presence of a historical object with very specific political implications, as well as a precinct that serves as political dialogue, forms part of the continuum of political discourse on the site (dialogue brought forward by the memorial outlined in the previous section). Despite the traditional *gravitas* expected of governmental institutions, it is important that it takes on a more subtle tone in its context, to establish it as a possession of the people, who are the focus of the democracy it aims to uphold. This will also serve to limit formal contestation with the Union Buildings, reducing the opportunity for debate. It also addresses the nature of the street and the humanity of the public space within which it sits - the building needs to find a way to be both human and institutional.

Another issue revolves around this *publicness*. The building occupies public space by which it is surrounded. It needs to acknowledge all sides as fronts. It needs to address the liminality of its edge conditions and, considering this is

where most interactions with the public will occur, these edges must be embodied and occupiable. They must be of the public and of the private.

Following the investigations into the democracy of liminality and the importance of destruction in the South African political discourse, the building needs to surrender to its people fully. This implies, for this investigation, that it needs to be an object that the people may choose to burn in the event of unrest. Aspects that contribute to the process of democracy, the liminal, will be treated in a more robust manner so that they may outlive the attempted destruction of the building.

Other aspects, which deal more specifically with the decorum and procedures of the building will be treated in a manner appropriate for government buildings, with sophistication and a simultaneous air of fragility - marking the temporality and mortality of these processes. The sophistication of these spaces will, however, not be protected from the public in any manner (returning to the idea of ownership by the public) and will most likely be susceptible to vandalism and destruction. These aspects; their condition, destruction and maintenance, will be used as a measure of the nation's position on the scale of democracy (chapter 4).

The intentions for the building can be outlined as follows:

It needs to form a subtle part of the political discourse on the site, in its locality, relationship to context and legacy in the event of its demise.

It needs to address publicness on all its sides. It needs to be surrendered to its public.

Its institutional spaces should be fragile and susceptible to public appropriation and destruction. There may be fire.

Its liminal spaces: edges, circulation spaces, generic spaces need to be its most celebrated and robust - they will serve as a monument to democracy amid the ruin.

Developing the plan

The commentary received after the June review expressed the lack of order in the scheme, despite the intention of marrying site influences with programmatic requirements.

Returning to the concept of democracy as divine institution and the street as the domain of the people, the two main ordering systems of the site were identified. The first, that of the Union Buildings, the seat of government, serves to symbolise the divinity of democracy that South Africans strive towards. The second is that of the street.

The site had already been ordered according to these systems, but the building itself needed to be guided by them as well. The decision to highlight the procedural aspect of the decorum of parliament was investigated early on. It was important not to lose the gravitas of this process, which is why the processional corridor was placed on the intersection of the two planes - the departure point (west) leaving the public space behind and the final view to the north is that of the Union Buildings. The corridor is used as holding device for the discussion chamber.

The decision to attach the office building to this anchor was not simple to execute. The importance of separating it was to identify it as not belonging to the parliamentary space. Its connection to the anchor is below ground, where it can be observed from above. However, from the public space the buildings appear as separate entities, hovering near one another but never touching.

Progression from ordering system through to conceptual layout:

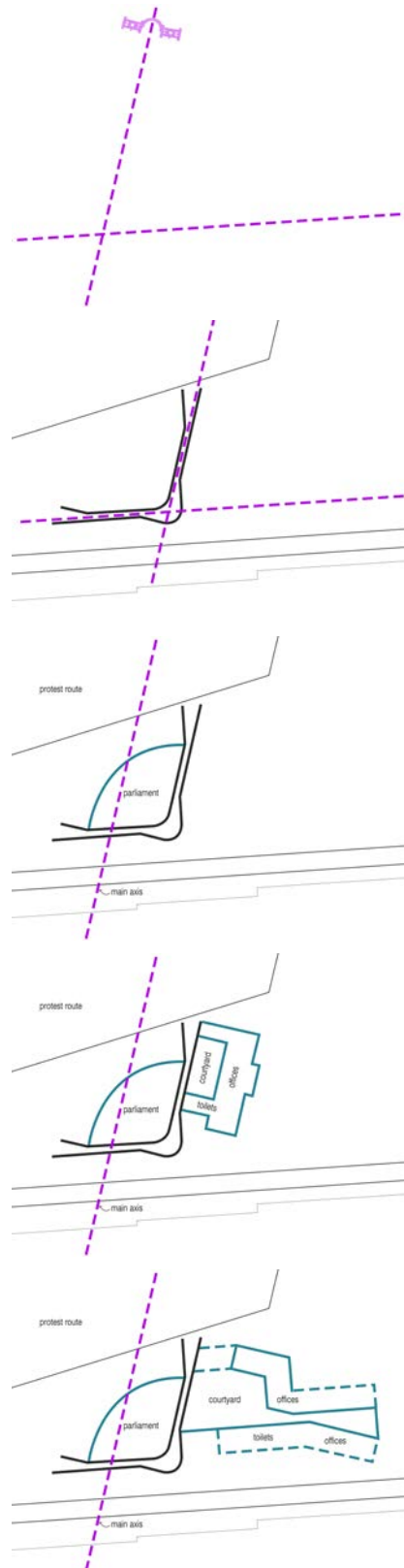
Figure 83 - The main ordering systems imposed on the site are that of the union buildings (divine) and street (mundane).

Figure 84 - The marrying of the mundane (the people) and the divine (the value of democracy) creates an intersection, the location of the descent into parliamentary proceedings.

Figure 85 - The union of the two systems holds the discussion chamber, where it is in view of the public space, which acts as backdrop for parliamentary debate.

Figure 86 - The first attempt of attaching the office buildings and toilets to the main space.

Figure 87 - Iteration of the position of the offices, creating a lengthened courtyard encouraging spectatorship of, not only the formal proceedings but also the daily functioning of the parliamentarians.



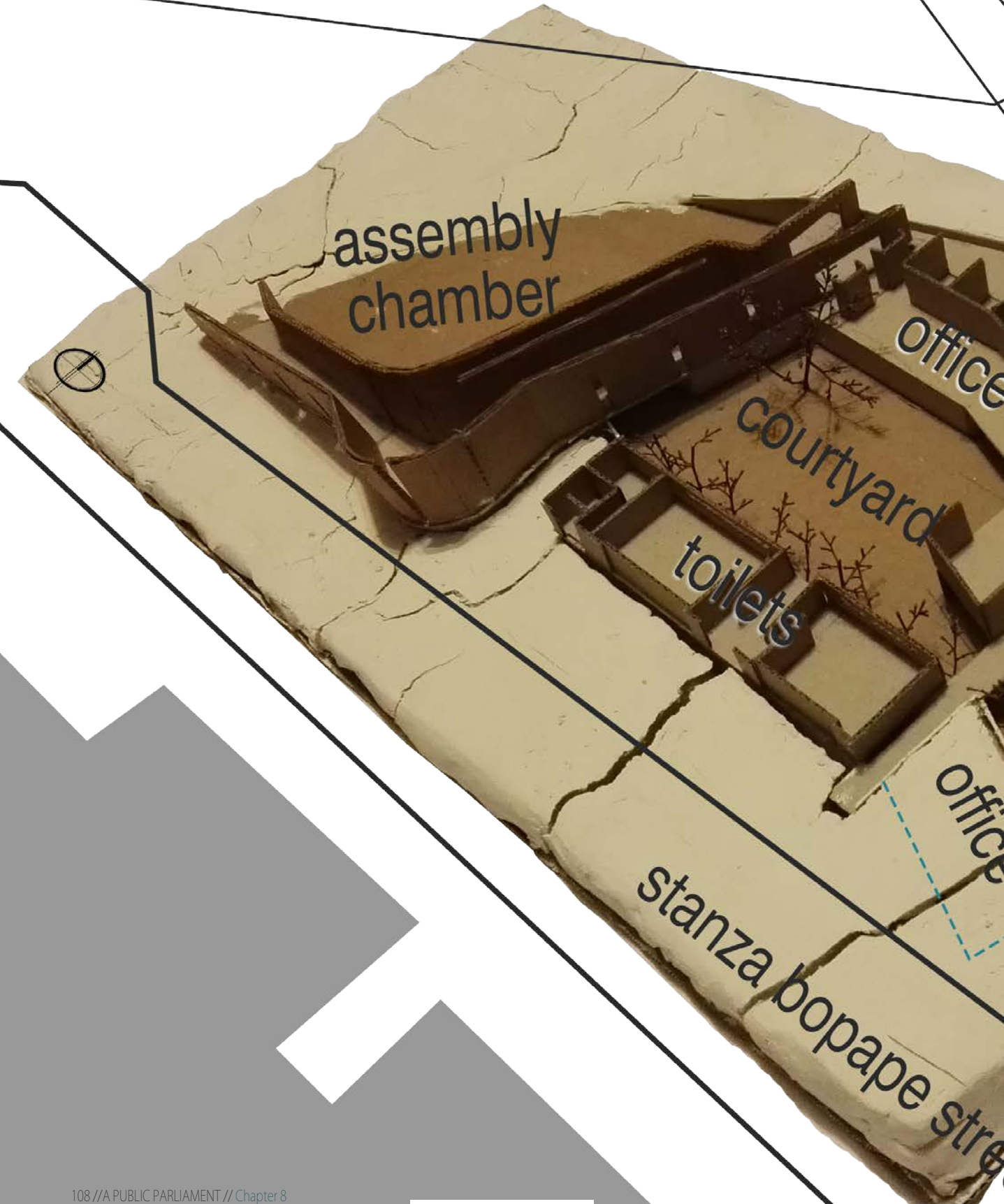
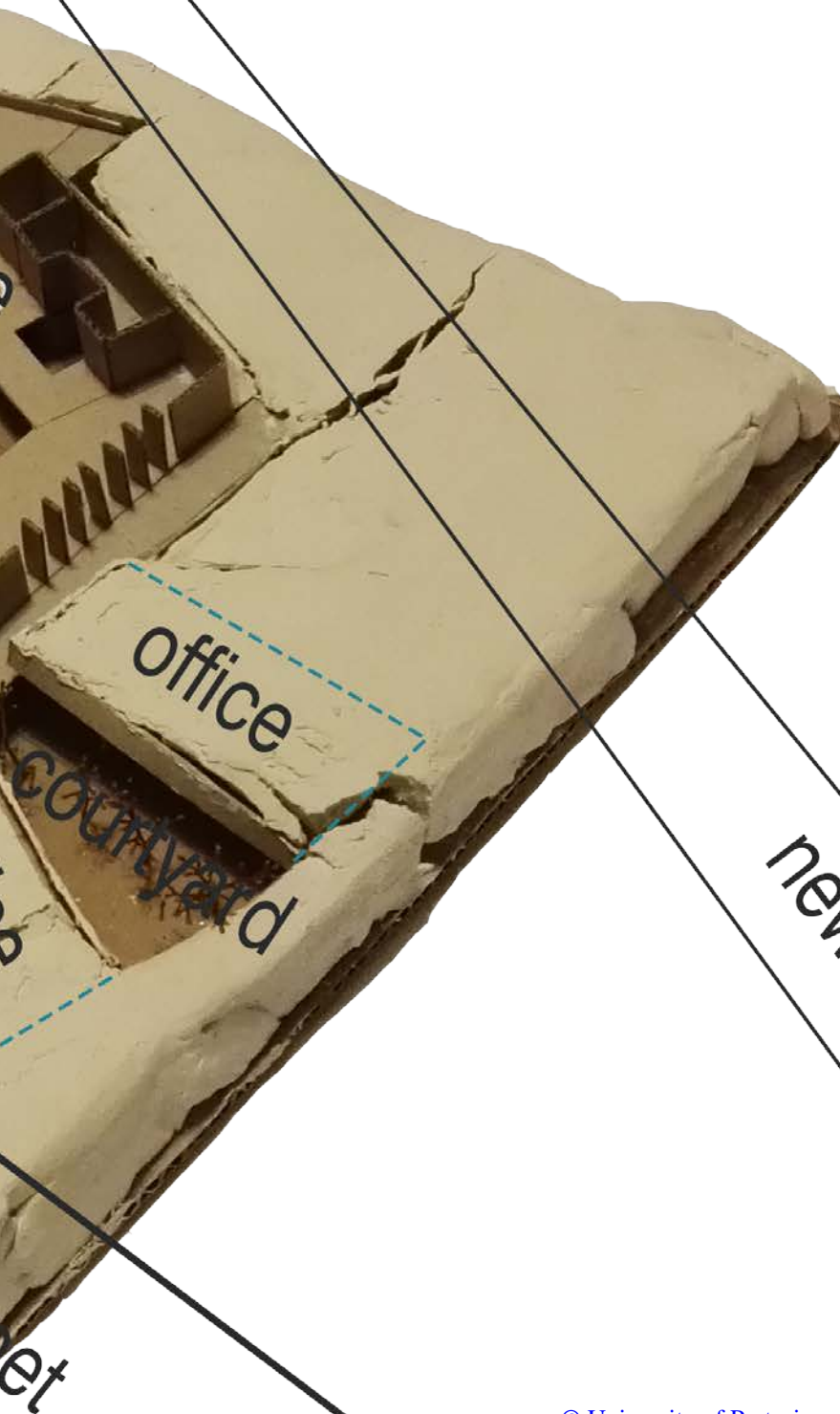
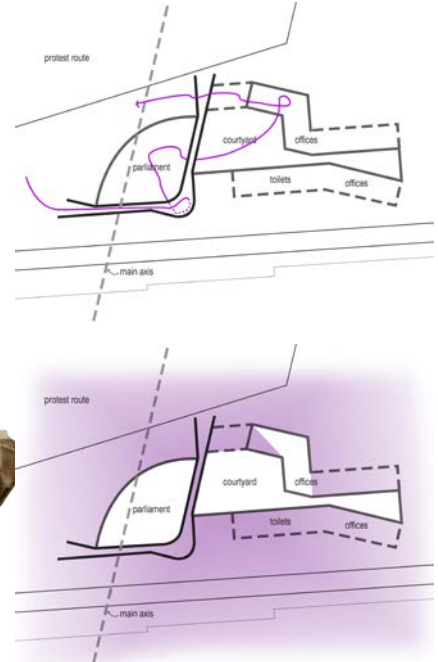


Figure 88 - A photograph of the model illustrating an extrapolation of the plan developments

Diagrams below:

Figure 89 - Route of parliamentarians through the building

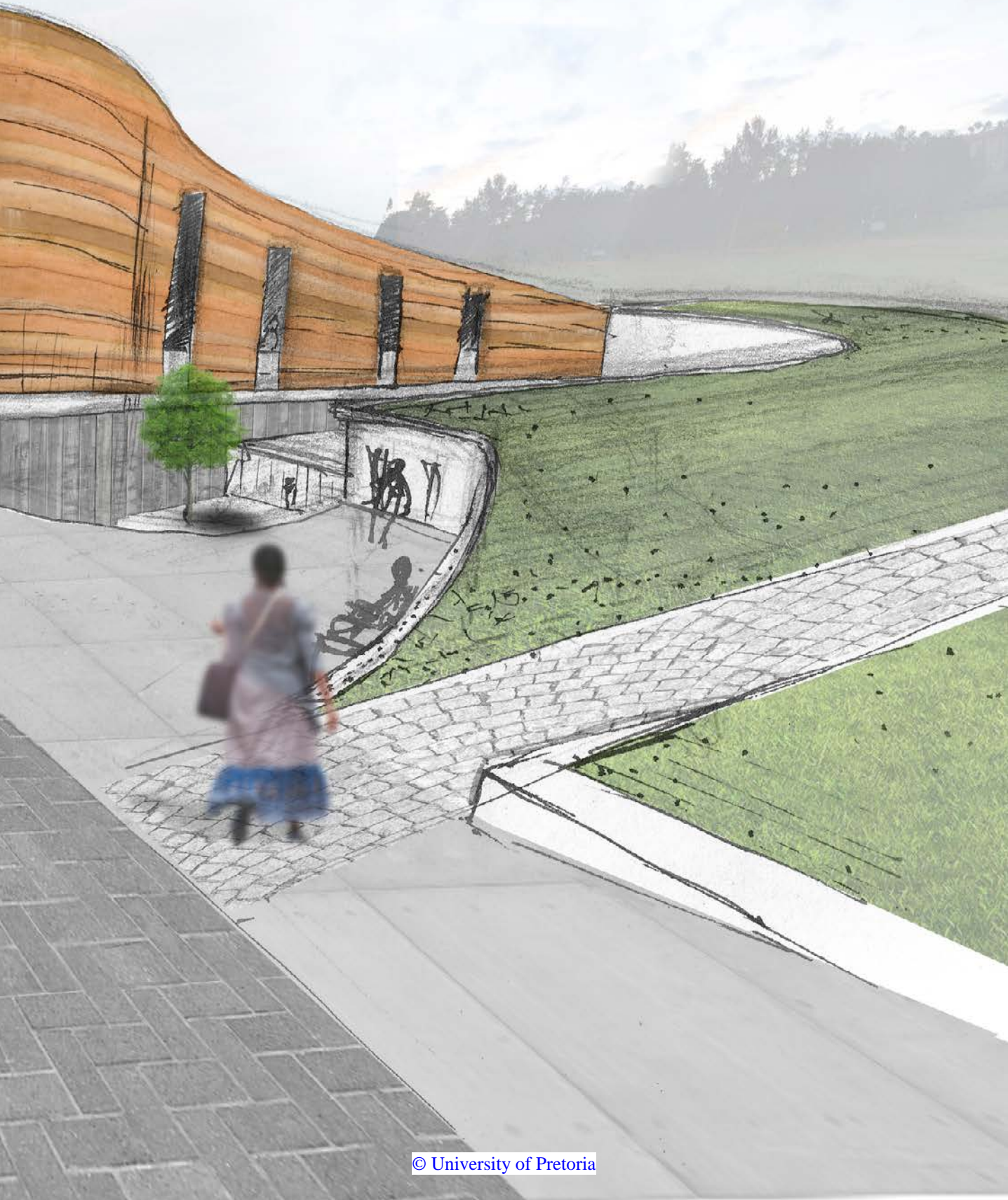
Figure 90 - Parts of the building accessible to the public physically (coloured region indicates where people are permitted).



new access road

8.3. The Parliament Building



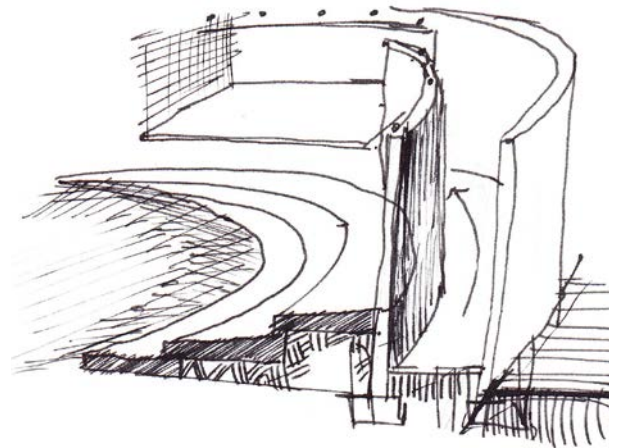
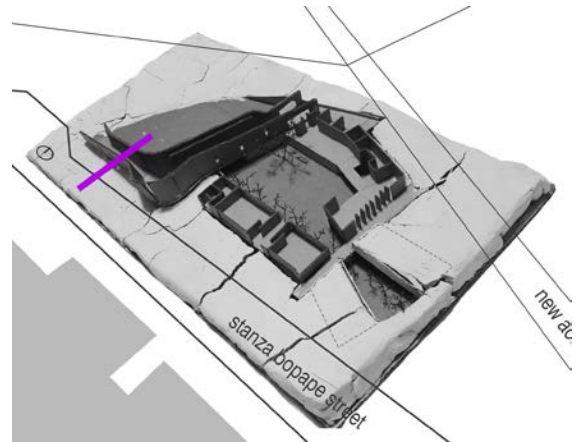


Assembly Chamber and Corridor

The assembly chamber is governed by strict rules regarding protocol and procedures. However, it is not the focus of the investigation in that it is merely anchoring point around which the liminal spaces investigated revolve. The space is designed to become an open air amphitheatre in the event of the building's demise.

The corridor leading parliamentarians to the chamber, however is of significance to the programme. This space is designed to be deliberately imposing, with high, heavy walls that are narrowly spaced. This creates a sense of enclosure on users. However, from the outside, despite acting as landmark, the corridor appears as though it grew from the earth, its narrowness asserts no dominance over the public space.

The corridor becomes the processional route for those entering the space, but is also open to the public who may use it to move through the building, to the lookout point, or to access the offices building. The narrowness of the space not only allows parliamentarians to rub shoulders, but may increase the likelihood of the public becoming acquainted with their politicians.

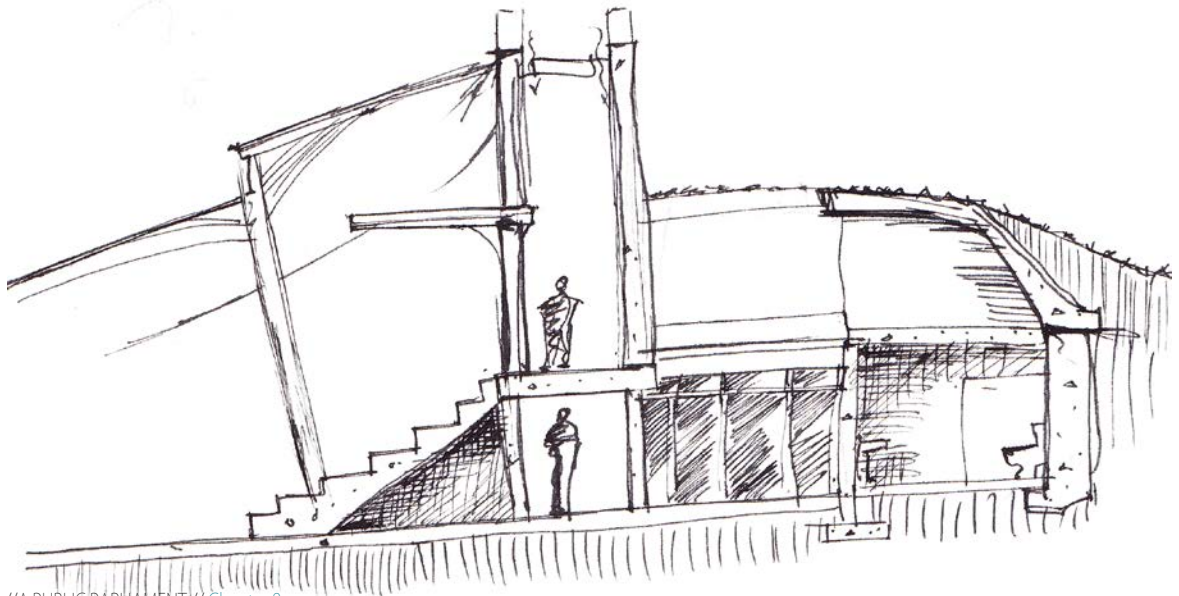


Top to bottom:

Figure 91 - Model with relevant section highlighted

Figure 92 - Conceptual 3D exploration sketch of the corridor behind the assembly chamber

Figure 93 - Early conceptual section through the discussion chamber, corridor and courtyard,

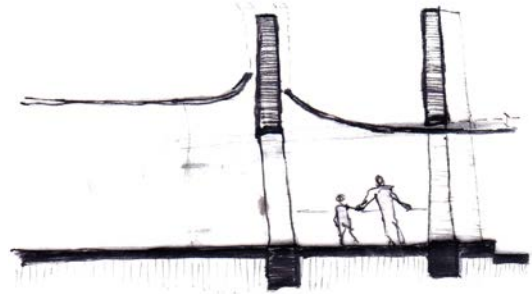
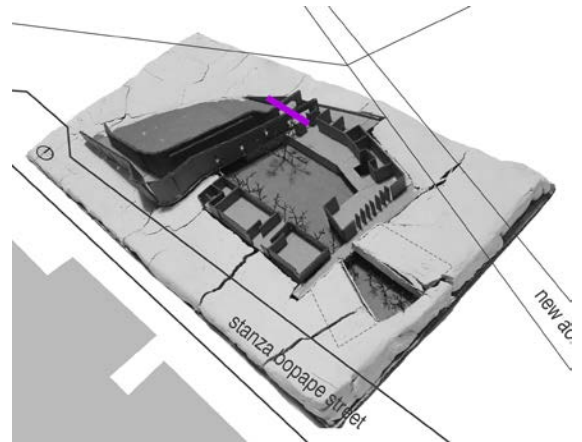


Entrance to Office Building

The building entrance forms the intersection of thresholds. The drastic cutting of an opening in the two heavy set rammed earth walls is an abrupt threshold, mediated by the overhead plane.

The canopy above appears as singular canopy a first, punching through both walls and mediating the user from public space into office space, but the canopy is actually split into two. This way, the canopy belongs to its own realm, it mediates the transition between spaces but does not belong to any of the spaces. It occupies the threshold.

The viewing space north of the entrance, frames the union buildings. This space is, however, also not held by the canopy. It thus becomes a destination space, and does not become associated with the canopy which denotes movement between spaces.

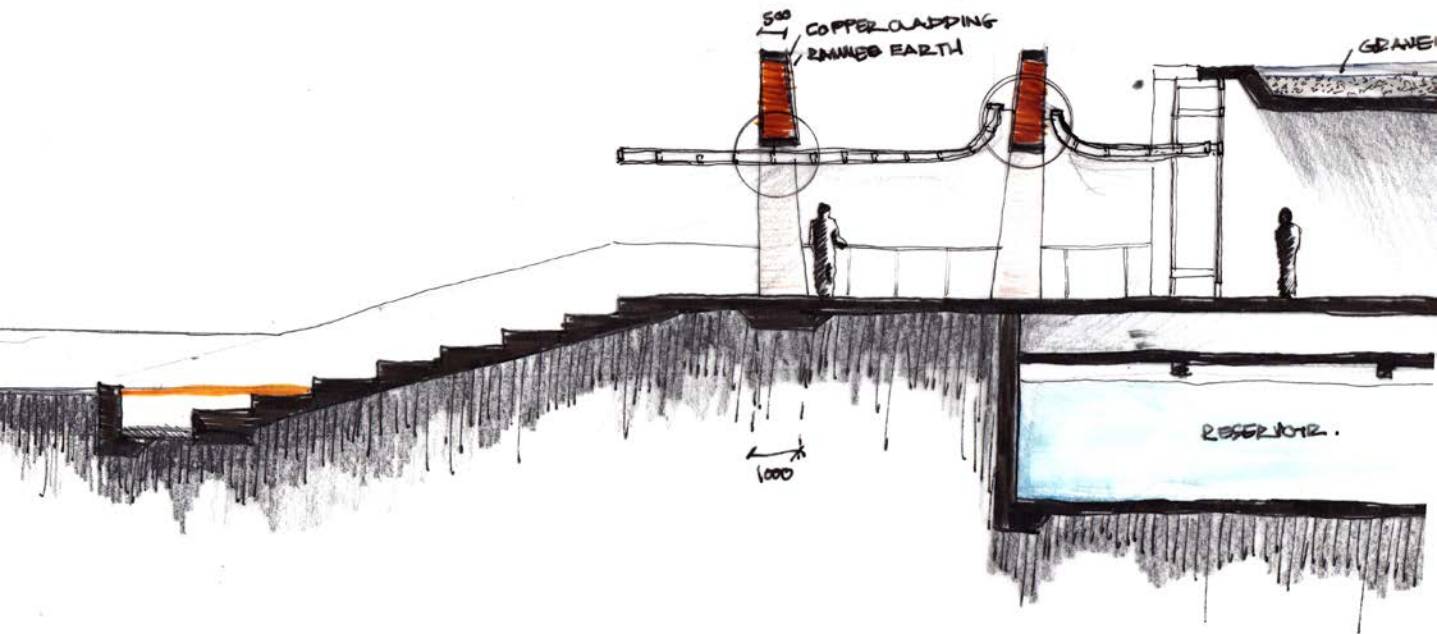


Top to bottom:

Figure 94 - Model with relevant section highlighted

Figure 95 - Conceptual sketch of the entrance to the office building.

Figure 96 - Development of the section.



Office Building

The office building houses the administrative functions of the parliament building. The manner in which the offices occupy the public space needs to be one that embodies daily democracy.

The courtyards become social spaces that encourage occupants to interact within the public eye. The casual interactions between people are the true manifestations of democracy. The visibility of these courtyards includes passers-by in the process.

Landscaped roofs aim to extend the park-scape over the building so that it takes less from the public space. The thermal implications of landscaped roofs and a wall backed by earth are also beneficial in creating passively controlled internal environments.

Figure 98 - Early Concept sketch of the type of edge conditions and the opportunity of having lower spaces that the public can view activity from

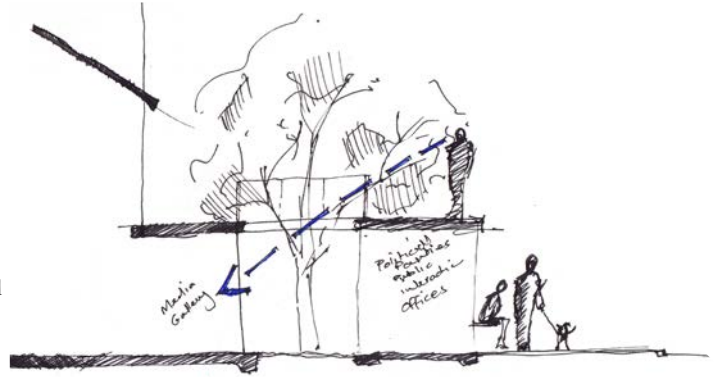


Figure 97 - Concept sketch of the office building showing the courtyards and terraced roofs.



Courtyard

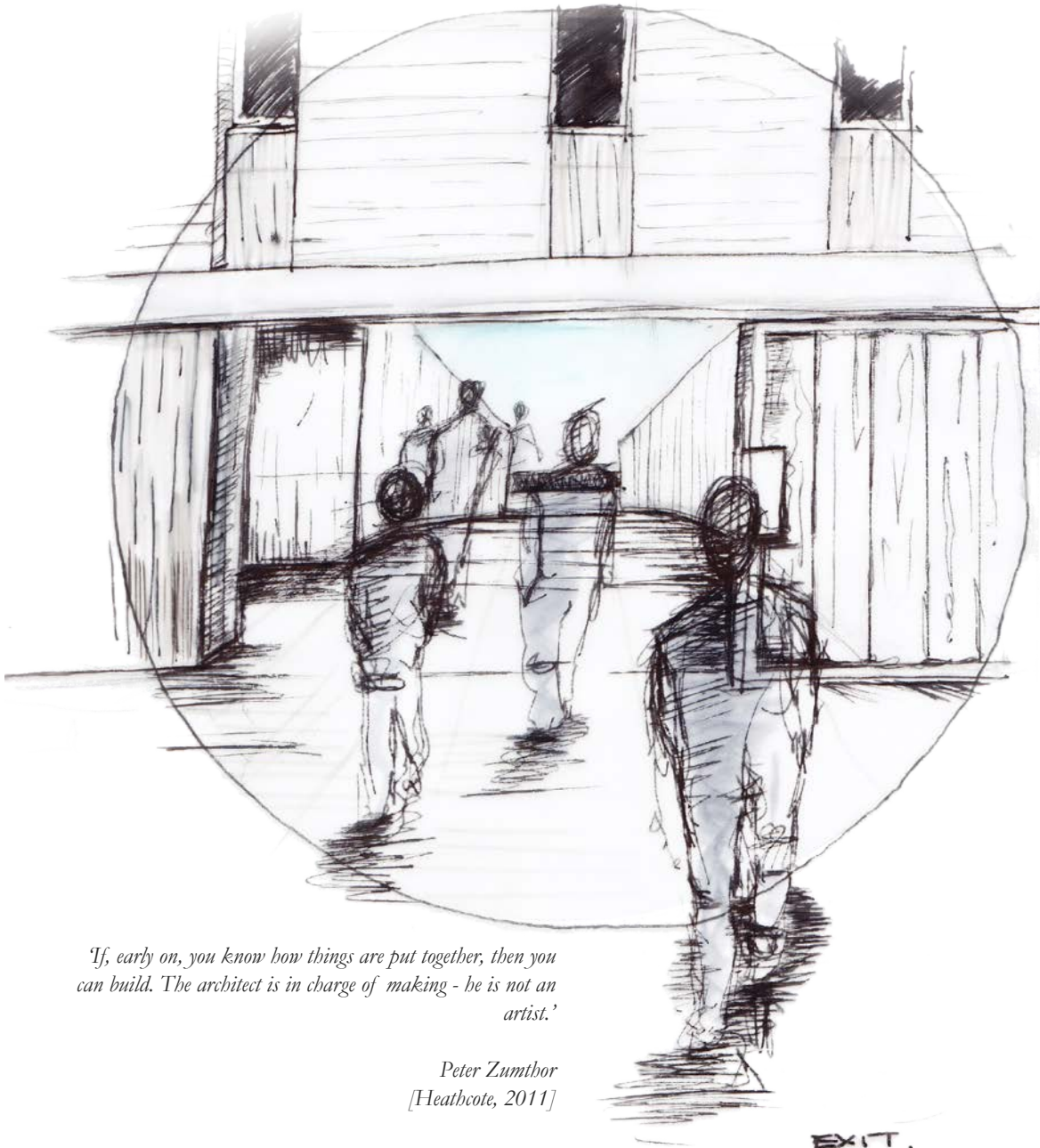
The courtyard forms part of the parliamentary procedure, much like the entry corridor. It is the space into which parliamentarians are released and will gather during breaks and after sessions. It is in full view from the street, where passers by can overhear the casual discussions between officials.

Another space with democratic potential, the courtyard could easily be reduced to merely circulation. The introduction of planting and smaller spaces will encourage users to linger and potentially engage with one another.

Figure 99 - Concept sketch of the courtyard



Figure 100 - Exit from the chamber into the courtyard



'If, early on, you know how things are put together, then you can build. The architect is in charge of making - he is not an artist.'

Peter Zumthor
[Heathcote, 2011]

Chapter 9:
PROGRESS
Technology and Systems

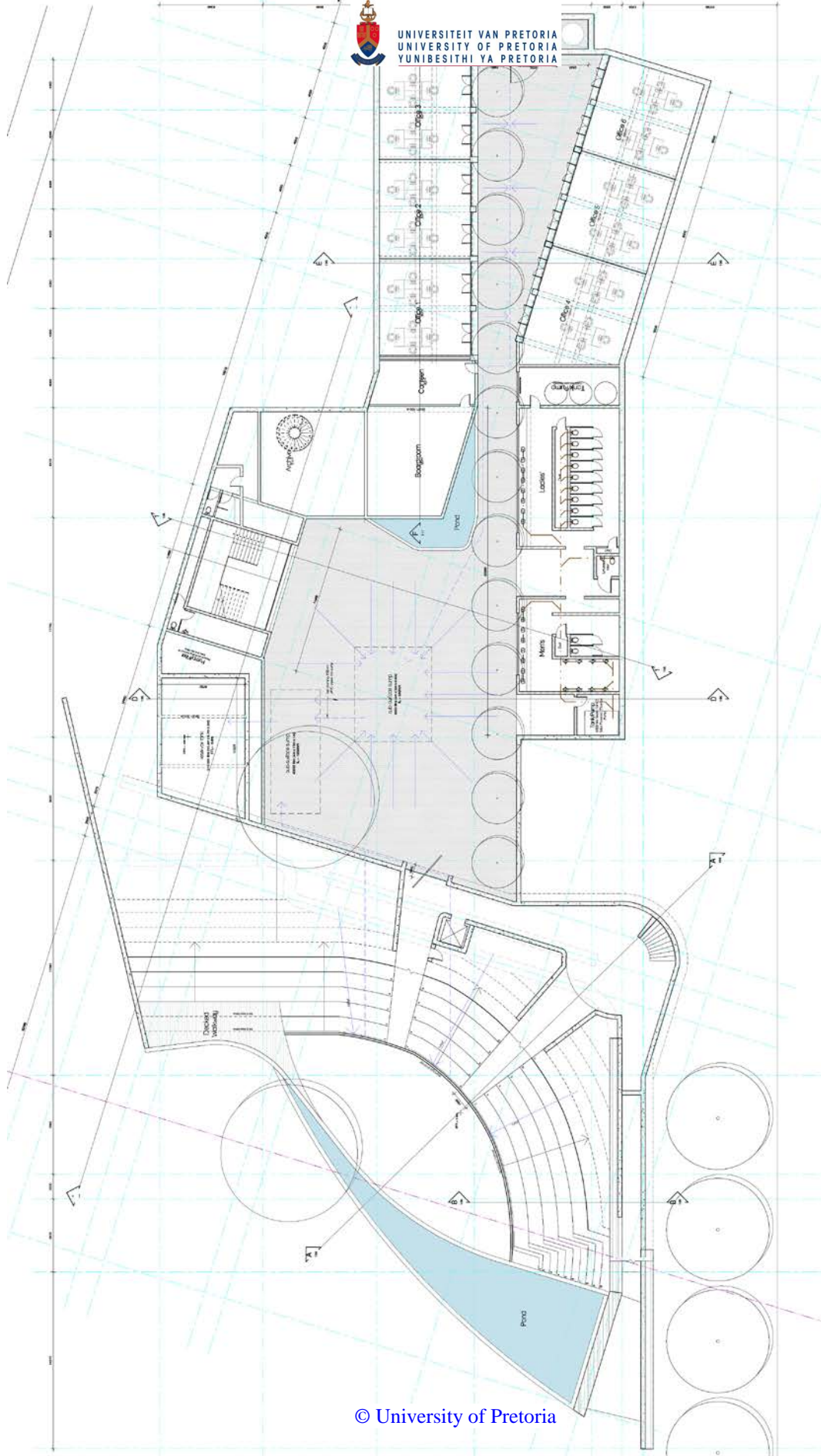


Figure 101 - Development of the Ground Floor Plan (NTS), 22
September 2016

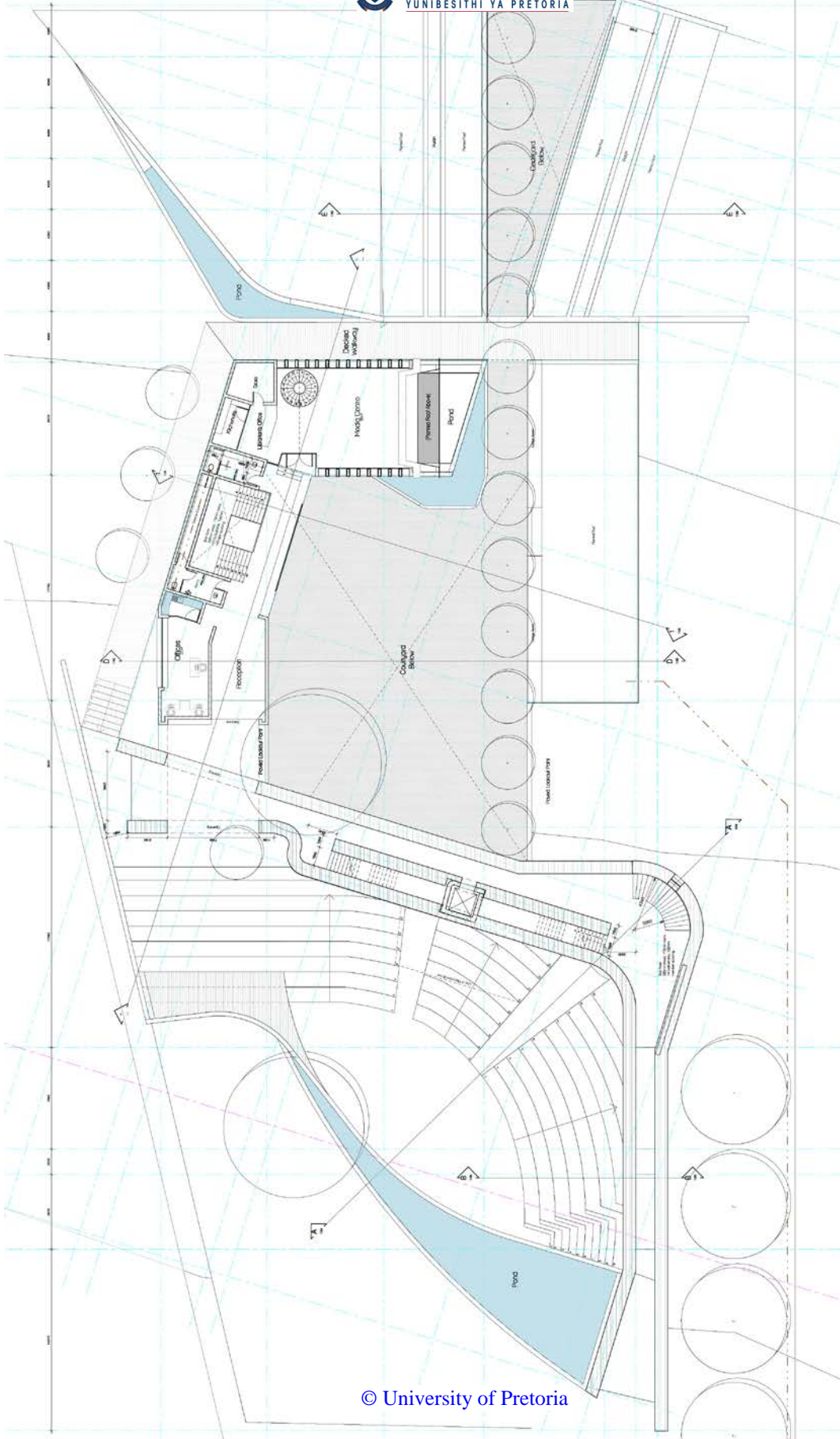


Figure 102 - Development of the First Floor Plan (NTS), 22
September 2016

9.1. Techné

Following the requirements for the project and the development thereof, the attitude towards the assembly of the building flowed from similar roots. The following points were highlighted in the previous chapter as being of importance. Accompanying these points are their consequential implication on the building assembly:

It needs to form a subtle part of the political discourse on the site, in its locality, relationship to context and legacy in the event of its demise.

Closeness with the ground, legacy contributing to park - construction of sub-surface structures, designing for re-use, waterproofing of basements, daylighting & ventilation of sub-surface spaces.

It needs to address publicness on all its sides. It needs to be surrendered to its public.

Deep skin & Visual access - A public building that can serve privacy of occupants while promoting transparency, contributive building facades.

Its institutional spaces should be fragile and susceptible to public appropriation and destruction. There may be fire.

Fragile & Responsive surfaces - Haptic nature of finishes and furnishing, designing for maintenance, designing for vandalism, materiality and touch, the impact of fire.

Its liminal spaces: edges, circulation spaces, generic spaces need to be its most celebrated and robust - they will serve as a monument to democracy amid the ruin.

Robust & complex structure - longevity and durability of materials, the effect of fire, materials and the impact of time, limits of spatial accommodation.

9.1.1. Monumentality & Rate of Decay as manifestation of democracy

From discussions regarding the monumentality and democratic legacy the building needs to contribute to the site, in the event of its abandonment or destruction (should it no longer serve the interest of the people) and the argument concerning the democracy of liminality the following hypotheses need to be stated outright:

If the monumentality of memorials serves to instill remembrance then a monument to democracy would memorialise that which is democratic.

If democracy lives in the liminal spaces, then those are the spaces that should be memorialised.

If ruins can serve as tools for collective memory and can act as tools for inspiration by reminding a nation of common values, then destroying a building designed to accommodate democracy and allowing its liminal spaces to remain (and be appropriated) will create a ruin that forms part of a discourse that cherishes democracy above all else.

The monumentality of an aspect of programme is associated with its contribution to the democratic nature of the space. This would imply that the aspects that contribute more to democracy need to be memorialized more. The act of memorial in a ruin is performed by the preservation of certain aspect, or the delay of their decay. The preservation of a building is not the work of an architect, but the architect's contribution will be to design the building to decay at different rates.

Democracy = Liminality

Monumentality $\propto \frac{1}{\text{Rate of Decay}}$

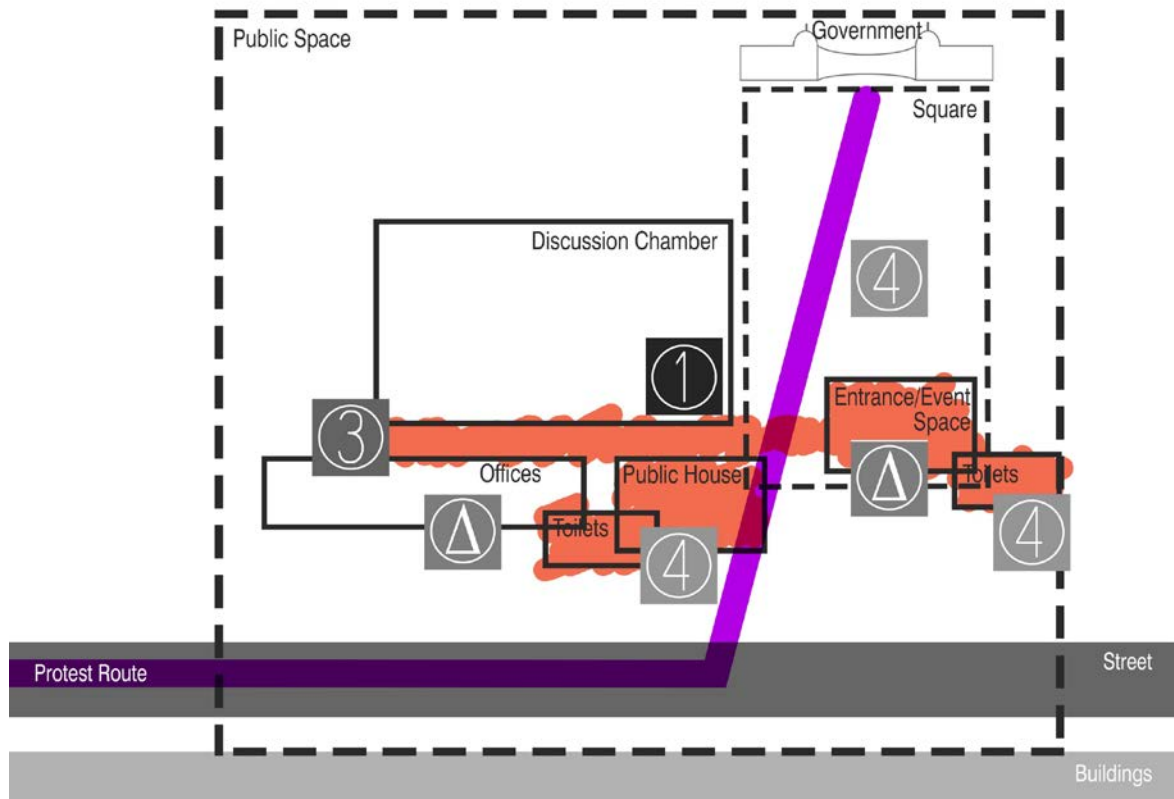


Democratic Spaces, e.g. circulation, public space, toilets etc.
(i.e. Mundane) = slower decay

Rates of decay:



The different rates of decay were identified as potential gradings of the spaces. These gradings were assigned to spaces in the building based on their accommodation of different aspects of the programme (below). The investigation then saw the identification of the basic elements of architecture to establish which materials were suitable for different elements and at which rates of decay.



Basic Elements of Architecture:





Floors

The treatment of the floor plane provides an opportunity for differentiating space without walls. Floors also imply the pace at which humans are encouraged to move in spaces. As with most finishes, they create atmosphere and naturally have an implication in term of temperature and sound in spaces.



Manipulation of the floor plane can designate space, sculpt furniture and express control over space. It can divide and unify spaces. It can allow liminal space to belong to other spaces.



The floor finishes to the left are shown in order of their rate of decay. For this scheme, the grading outlined previously of various materials and architectural elements was undertaken to establish a materials palette. Some of these investigations are shown below.

Roofs

The potential antagonization of government in the parliament building, combined with the nature of roofs to issue protection over occupants implies that the roof of the discussion chamber should be instantaneously destructible.



This raises questions of safety, durability and the ability of the roof to provide shelter. Some of the investigated materials are shown.

Walls

Walls serve as more than spatial dividers. The haptic qualities of different materials give certain impressions to the occupants of spaces.

The heaviness of rammed earth implies a belonging to the earth, to the context, it can be associated with power in that it needn't assert dominance in terms of scale, its authority is enforced by its occupation of space.



Copper wall cladding implies a fragility of space. A tentative voice in a space that is full with humans' unpredictability. The ability of copper to reflect the presence of people, to remain vibrant and reflective when regularly touched and become dull and coated with patina if left to age. It is also a material that will easily be the subject of vandalism, should a building lose its meaning to its audience.



9.2. Development of Assembly

The following series of drawings depict the development of the building in terms of the requirements dictated in section 9.1. These drawings focus on liminality of spaces and therefore aim to resolve, most specifically, the spaces most commonly neglected, in a manner to increase the appeal of these spaces, to encourage longer durations of occupancy in them and therefore increase the likelihood of interaction and negotiation of space between users.

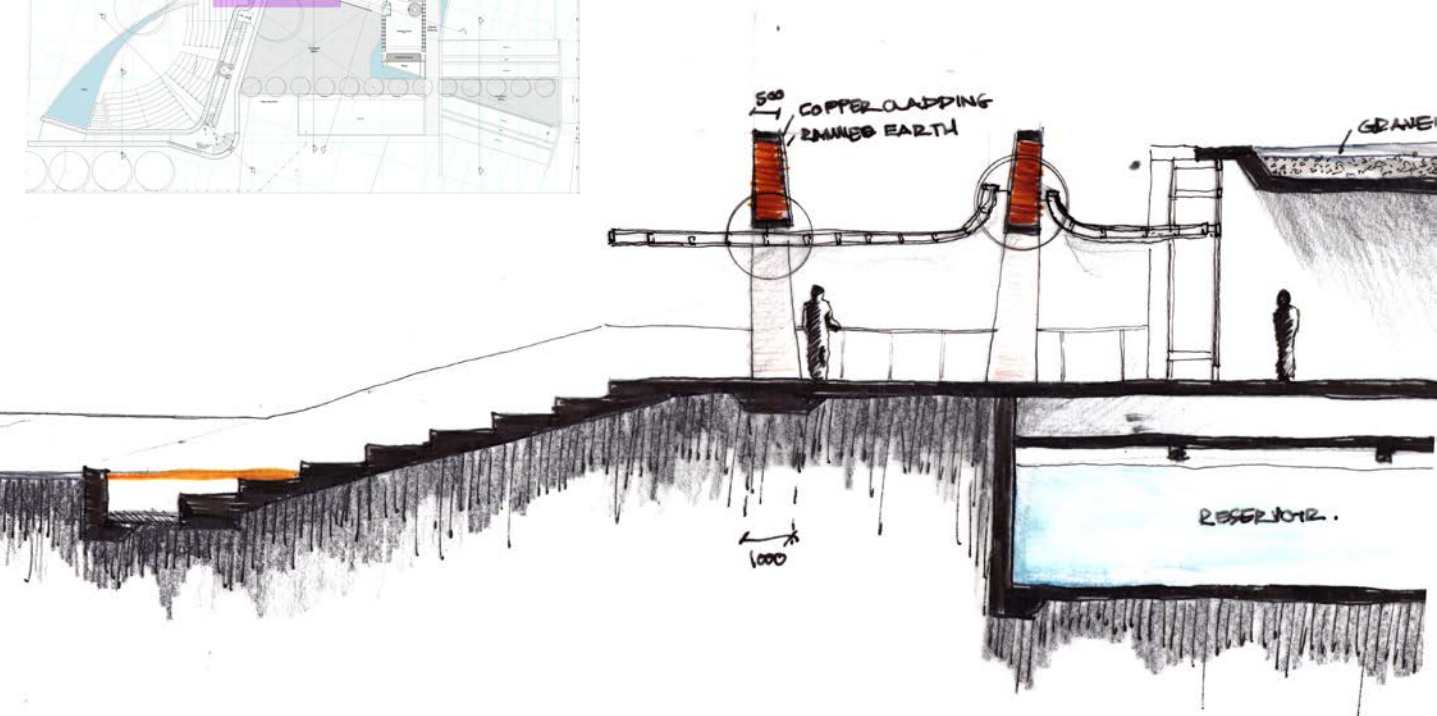
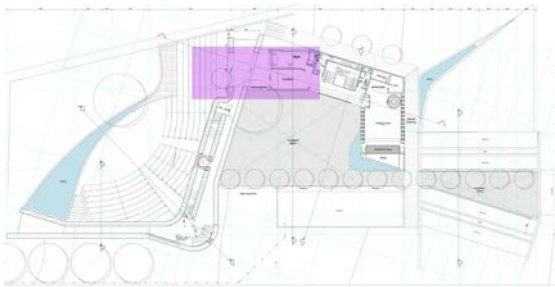
9.2.1. Building Entrance

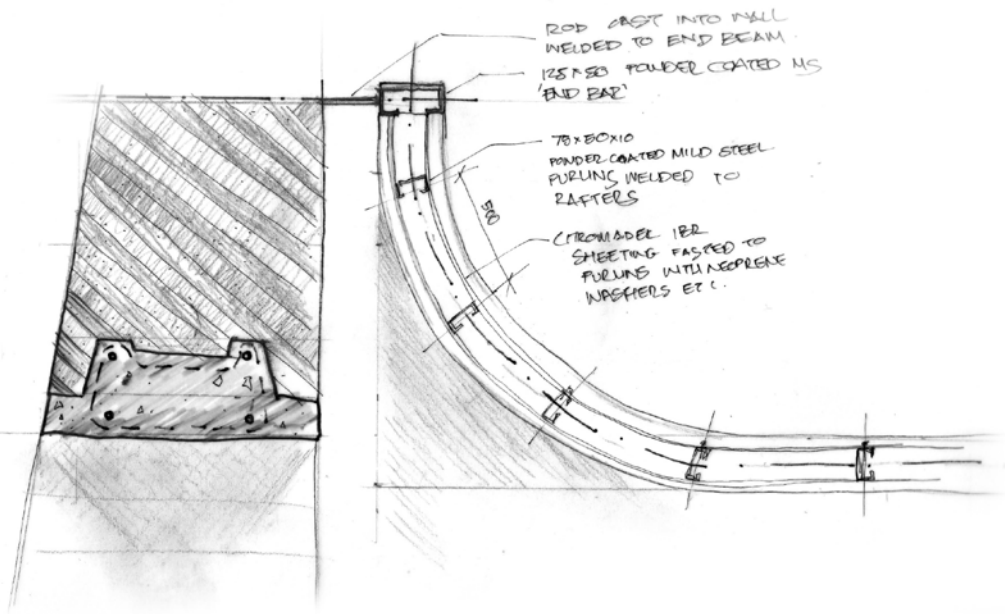
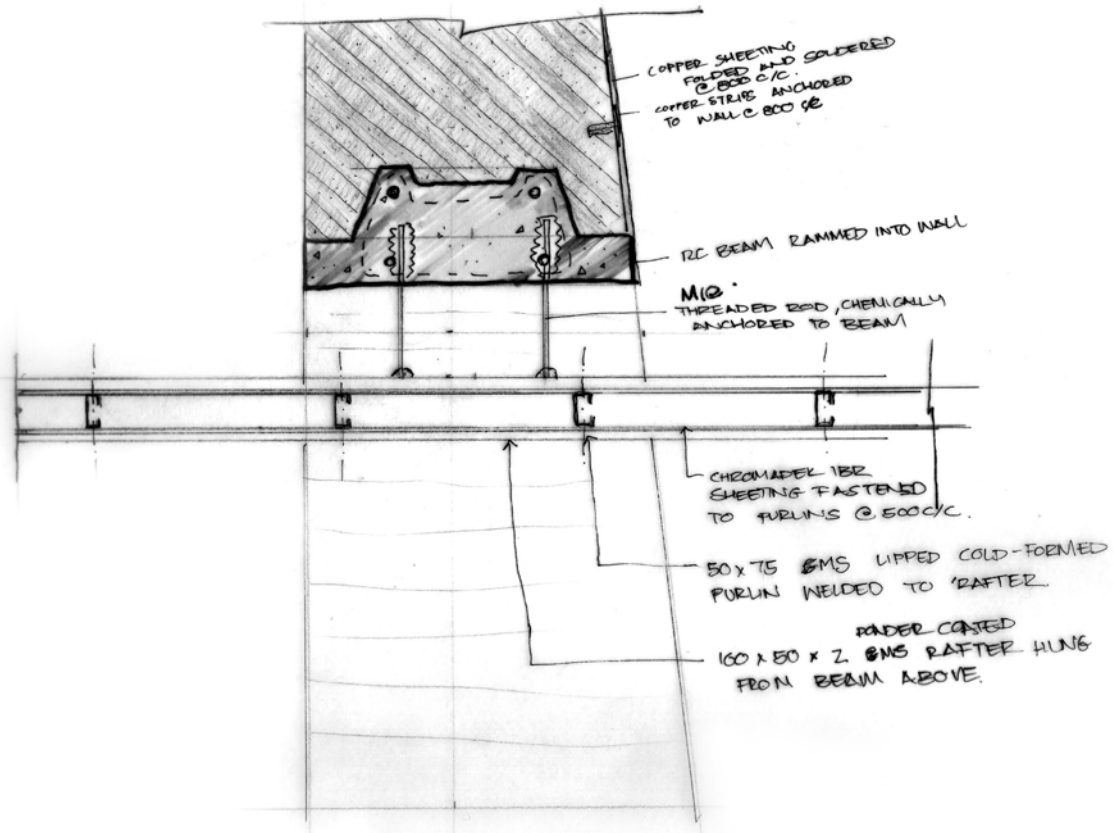
The notion of occupiable threshold and floating, transcendent roof plane lends itself to constructing a durable roof from materials that appear exceptionally light. The initial explorations of this roof saw it being aptly made of lightweight reinforced concrete. The meaning of concrete in the scheme, however, is that of permanence and the use thereof as roof may be misconstrued. The decision to use lightweight steel framing and metal roof sheeting that are bent into the needed profile to give the illusion of floating and asymptotic approach to the walls can be achieved this way, as illustrated.

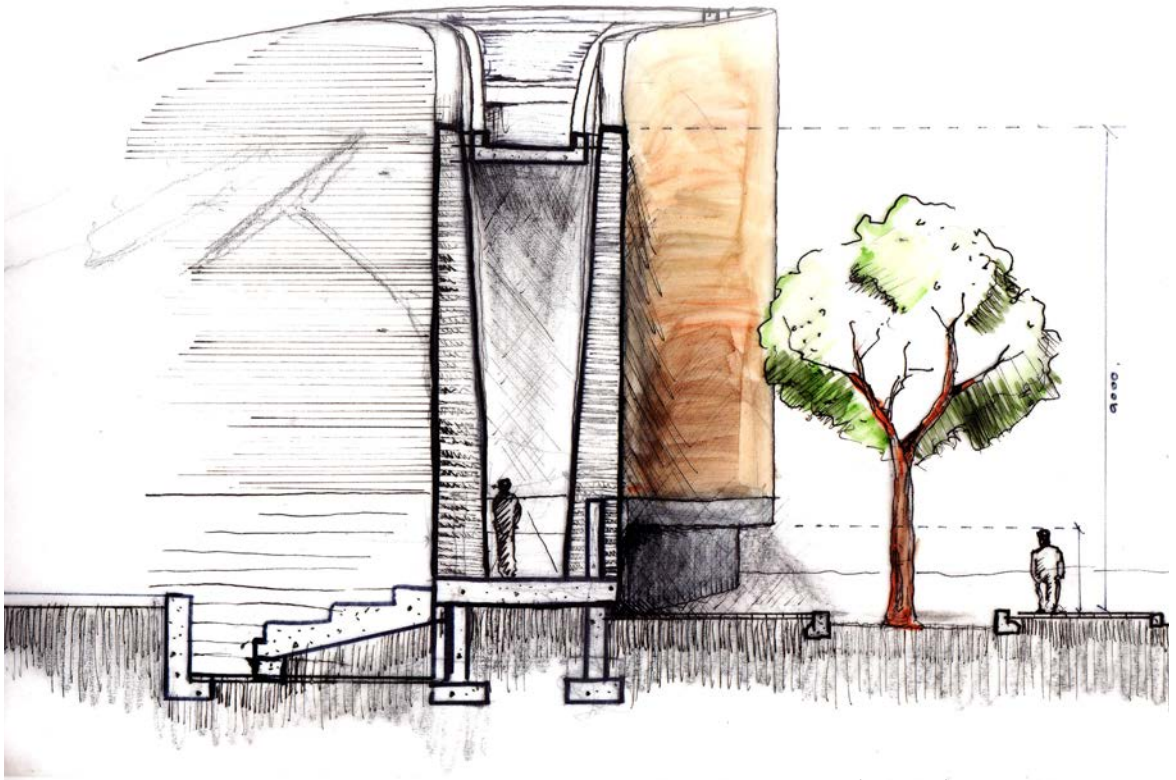
The resolution of this detail requires consideration of the natural light washing the wall in the space between wall and roof and the insertion of lights into the canopy to achieve a similar effect at night.

Figure 103 - Explorative section through the entrance, highlighting location of details

Figure 104 - Exploration of the details of canopy connections to wall opening.







9.2.2. Processional Corridor

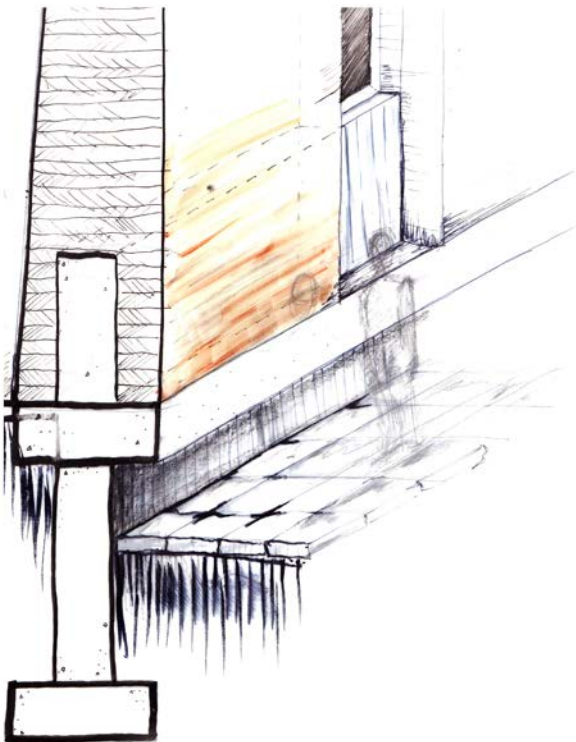
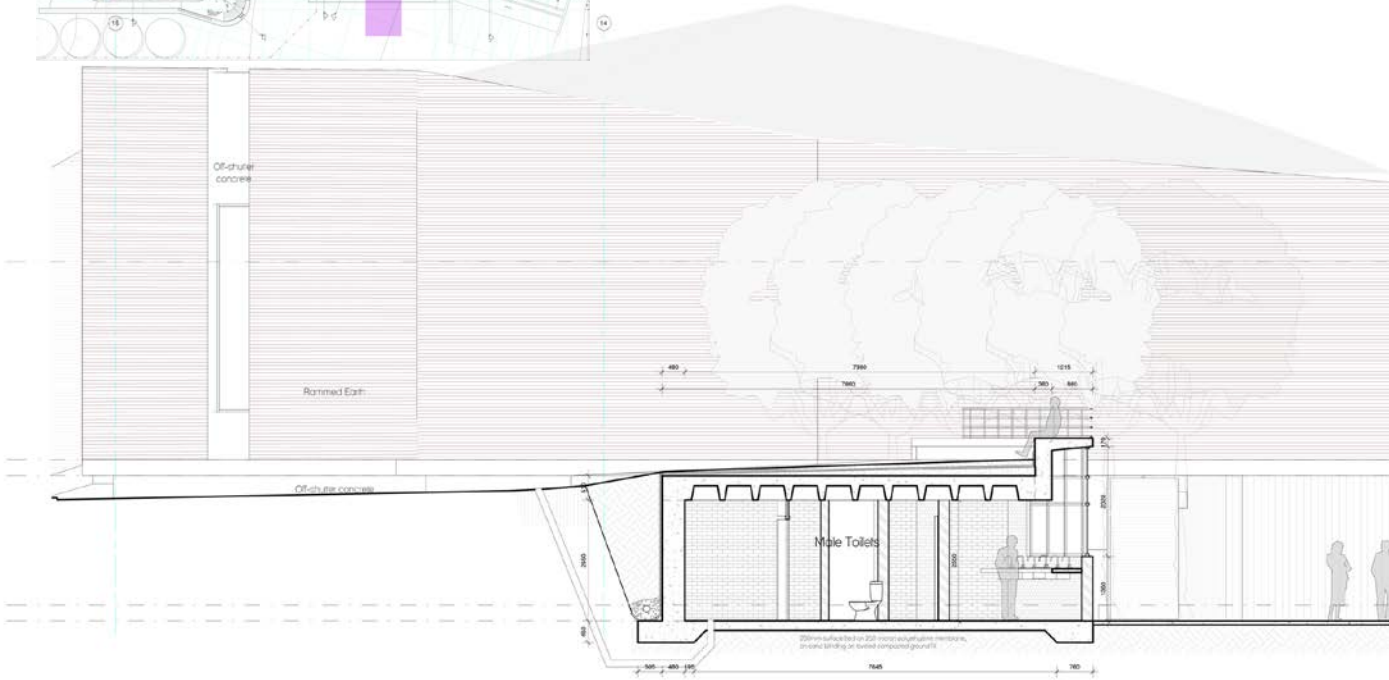


Figure 105 - Explorative section through the entrance, highlighting location of details

Figure 106 - Exploration of the details of canopy connections to wall opening.



9.2.3. Courtyard, Circulation and Toilets

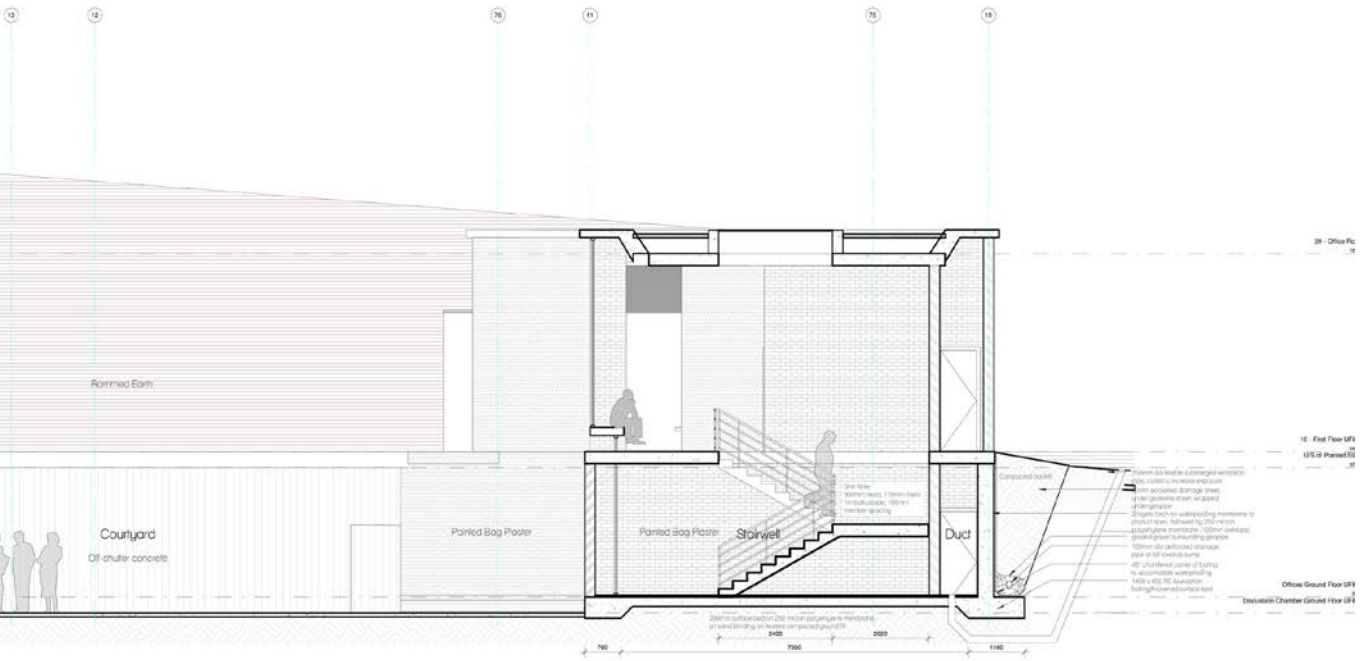
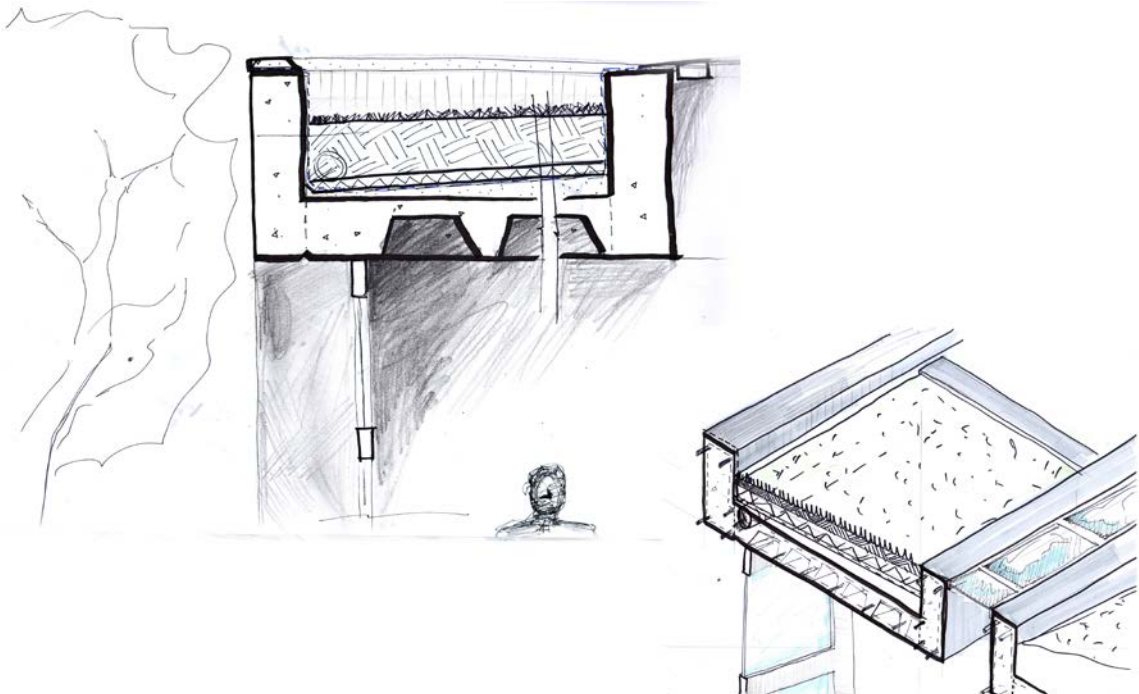
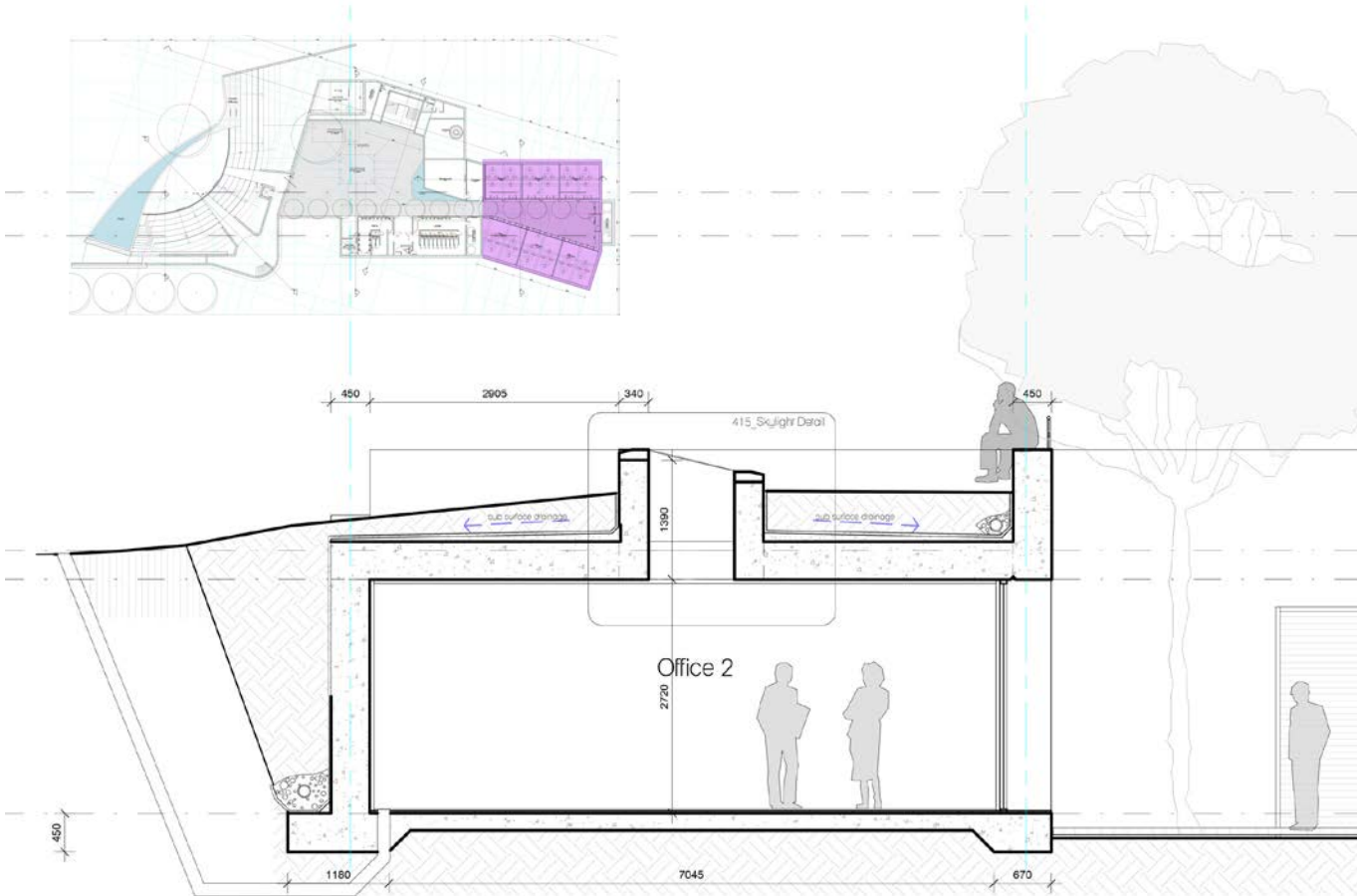


Figure 107 - Section through courtyard showing office building staircase and toilets (NTS), September 2016



9.2.4. Underground Offices

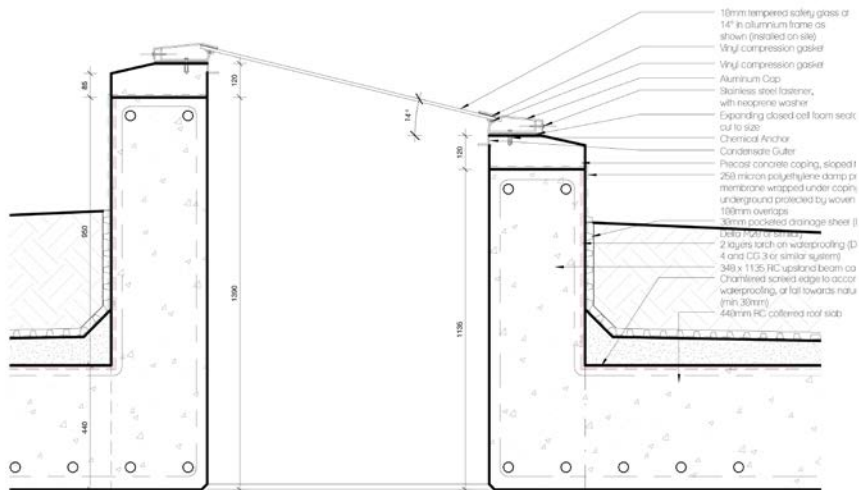
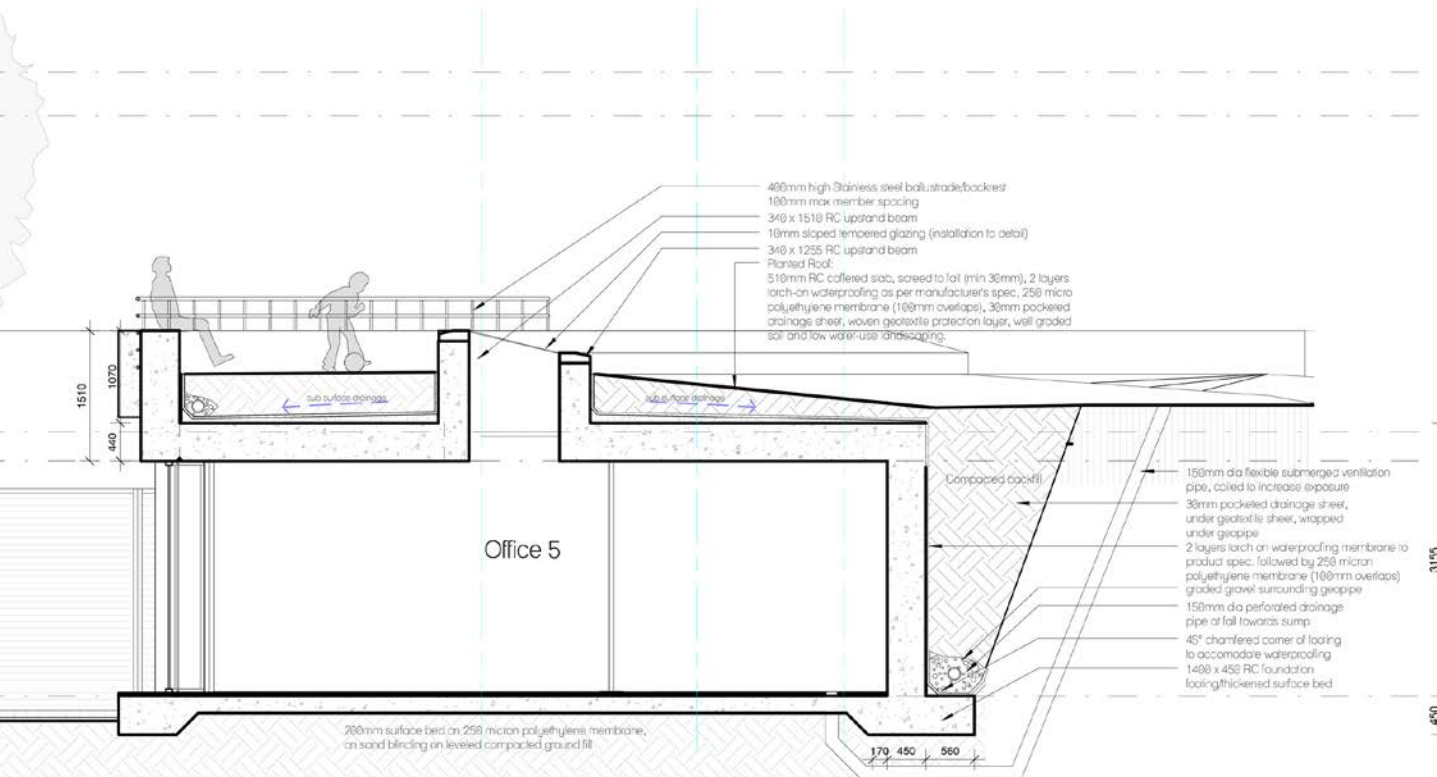


Figure 108 - Section through offices (NTS), 22 September 2016.

Figure 109 - Explorations of the slab edge overhead.

Figure 110 - Skylight detail (NTS), 22 September 2016

9.3. Sustainability

The importance of building green is highlighted time and again but never before has the need of a more responsible attitude towards the environment been called for. The importance of buildings that contribute positively to their context (social and environmental) is outlined in the constitution;

The Bill of Rights Act No. 108 of 1996, Section 24 reads as follows:

Everyone has the right

- a. to an environment that is not harmful to their health or well-being; and
- b. to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that
 - i. prevent pollution and ecological degradation;
 - ii. promote conservation; and
 - iii. secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

(SA Government 1996)

It is for this reason that the National Standards regulation buildings in South Africa (SANS 10400) has very strict rules regarding environmental aspects of buildings. However, the requirements laid out in the regulations are passed on a deemed to satisfy basis and do not encourage innovation and ground breaking developments in the sustainable building practice. Despite this, however, more and more institutions are opting for green buildings, because of the benefits (of which environmental protection is only a small one).

Green building incorporates design, construction and operational practices that significantly reduce or eliminate the negative impact of development on the environment and people. Green buildings are energy efficient, resource efficient and environmentally responsible.
(GBCSA n.d.)

9.3.1. Sustainable Building Assessment

There are a number of manners in which buildings are assessed for sustainability in South African. The Green Building Council of South Africa is considered the authority on green building in South Africa and the Greenstar SA is the tool developed to measure sustainability performance of buildings in South Africa. The GBCSA is affiliated with the World Green Building Council (GBCSA n.d.).

Despite the Green Building Council's Greenstar rating considering the human factors of sustainable built environments (GBCSA 2008), the Sustainable Building Assessment tool (developed by Jeremy Gibberd of the CSIR looks specifically at the impact the construction of a project has on the socio-economic environment it sits within. This would imply consideration the impact a building has of the existing local community and not only on its occupants. Jeremy Gibberd (SBAT n.d.) believes this to prove the appropriateness of the tool for developing countries.

Because of the nature of the scheme and its focus on social and economic factors of the city, the SBAT has been selected as an appropriate measure of the building's performance. Despite being developed with residential use in mind the tool is useful in establishing where the shortcomings of a project fall, as was the case upon the evaluation of the building.

Figure 111 - The outcomes page from the SBAT (20 October 2016).
With adjustment to certain aspects, the result may prove more apt.

SUSTAINABLE BUILDING ASSESSMENT TOOL RESIDENTIAL

1.04

SB SBAT REPORT	Achieved
	3.8

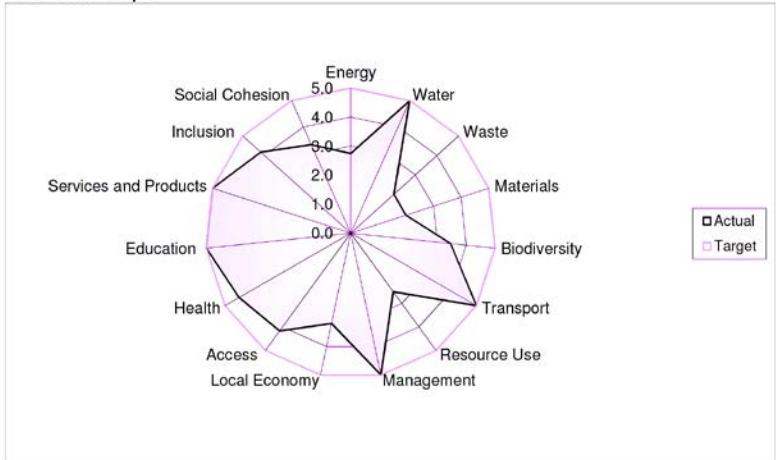
SB1 Project

Parliamentary Building

SB2 Address

Stanza Bopape Street, Pretoria, South Africa

SB3 SBAT Graph



SB4 Environmental, Social and Economic Performance	Score
Environmental	3.0
Economic	4.0
Social	4.4
SBAT Rating	3.8

SB5 EF and HDI Factors	Score
EF Factor	3.2
HDI Factor	4.2

SB6 Targets	Percentage
Environmental	61
Economic	79
Social	88

Conclusions

The achieved rating is relatively low if one considers the focus on sustainability in the current discourse of the built environment at present. This could be explained by the tool’s focus on residential projects, but it is more likely ascribed to the implementation of materials. The SBAT assigns high values to the use of timber elements in the building, of which there is a limited application in the building, apart from as finishing and furnishing. Despite this, however, perhaps the inclusion of timber framed drywalling systems could increase the rating in this regard. Because of the very specific types of materials and finishes required, the likelihood of increasing the materials aspect of the rating is slim.

The building also performs badly with regards to energy. Because of its sporadic use throughout the year and its relative abandonment at night, there is no need for the building to store any alternative energy. By implementing good daylight practices and limiting the energy demand, a small number of photovoltaic cells will be sufficient in producing the required energy. The storage of energy is both costly and harmful to the environment (batteries used to store charge are harmful when disposed of) and the decision to use the city energy grid when the PV cells are not sufficient has thus been taken.

Perhaps a thorough investigation into the project and the application of a more appropriate tool could deliver better results, but the project seems to serve its community in a manner that makes little impact on the natural environment; which was its aim.

9.4. Building Systems

The entire parliamentary precinct forms a complex system of interdependent functions – their proximity and similarity imply their connection. The precinct is, in its entirety, a public space which creates challenges with regards to our traditional understanding of services.

Traditionally, a public building located in a city will naturally have street frontage. The sides of buildings are hardly seen because each building in a line tries to maximize its street frontage. The implementation of buildings lines on city streets, sees to it that buildings have service spaces along their backs and sides. These alleyways are notorious for being dirty and would be where you find an open manhole, a plumber's rod and the accompanying smell.

The parliamentary precinct, with regards to its serviceability, poses two problems. The first is its location between two streets and in the most public realm. The buildings within the precinct can, therefore, have no back or sides. Every side is a front. Architectural best practice has taught us that the services of a building should never be located at the front of a building. This leaves the debate at a crossroads – to reveal the systems and celebrate them, or to turn them

inward and embed them in the skin of the building.

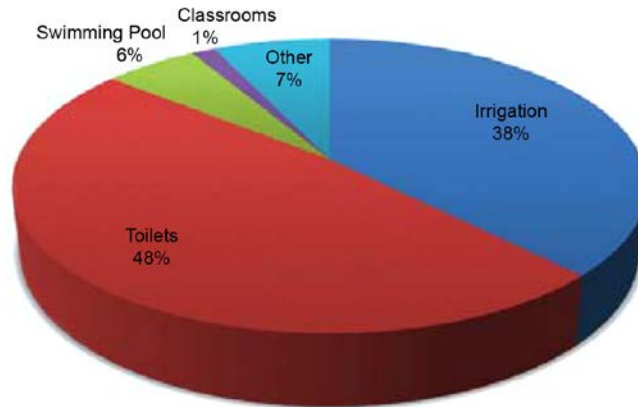
For the focus of this scheme not all systems and environmental comfort factors have been scrutinised. It was necessary to delimit the investigation to ensure thoroughness. The issues under discussion below highlight the considered systems and strategies.

9.4.1. Water System

In 2010, the United Nations declared access to clean water and sanitation a human right (UN, (n.d.). This right leaves it within the government's responsibility to provide all citizens with between 50 and 100litres of water per day, within 1000m from their homes to be collected within 30mins and should cost less than 3% of the household income (UN n.d.). According to government South Africa is currently experiencing one of the most devastating droughts in many years, which makes each and every drop of water critical for the survival and well-being of its citizens (South African Government 2016). Considering South Africa's current water shortage, it is crucial for the built environment to limit its impact on the existing water supply and to promote sustainable water use practice by its occupants.

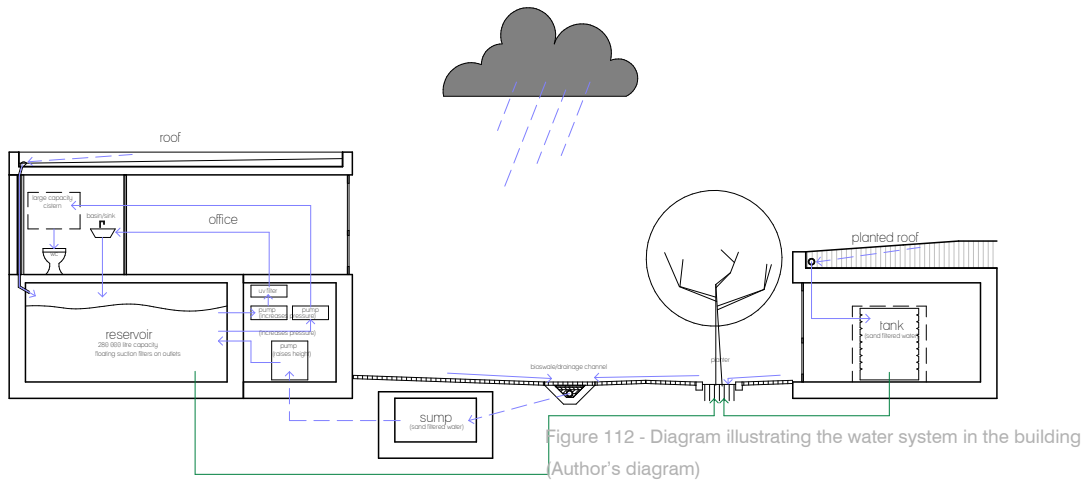
There are numerous resources and products available to limit the water consumption of buildings. Sanitary fixtures account for almost half the water use of an institutional building (see figure). This would imply that the implementation of grey water systems that recycle water from handwashing, and the implementation of toilets and urinals that use less water per flush, could drastically impact the water consumption of a building. The design of landscaping that uses low water demanding plants can also impact on the water requirements.

Institutional Example
Typical Water Use for a High School with 1200 Learners (with sportsfield)



The South African National Standards 10400 Section R governs the disposal of stormwater runoff so as to prevent damage to structure by excessive rainwater. There is allowance made for rationally designed systems that would implement this runoff, despite little elaboration being present; the section titled R2 Saving states that the regulations do not imply the need for gutters and downpipes per se, provided the installation of a system that sufficiently protects the structure is in place (SABS 2011:R). This system must also not cause damage to any other structures by discharging the water (SABS 2011:R).

Thus far, the application of systems that utilize surface runoff to decrease the demand on water supply, is not legally required. However, such a system has been implemented in the scheme discussed herein, to test the likelihood of a theoretical zero demand on local resources. This system, in combination with greywater systems and the implementation of a reduced water demand, is illustrated below.



- The system, firstly, features the implementation of low flush toilets and urinals wherever their positions are indicated.
- Because of the position of the building mostly below ground and the exposure of the courtyard surface to rainwater, it is not only a part of water saving that required the harvesting of surface water runoff, but also in compliance with SANS 10400 Section R, in order to protect the structure it is crucial to remove all rainwater from the courtyard as quick as possible.
- This led to the incorporation of drainage channels in the courtyard which lead to an intermediary sump below the courtyard. The implementation of the sump is to increase the speed of drainage from the courtyard in the event of flash flood.
- From the sump, water is pumped into the main reservoir where it is stored over longer periods.
- From the reservoir, water passes through a series of in line filtration processes when required. The pressure is also increased.
- Bearing in mind the high traffic times that will occur in the buildings toilets, there are large cisterns located closer to the demand.
- Soil from water closets and urinals will pass to a storage tank from where it will be raised to the level of the municipal sewer connection in Stanza Bopape street.
- Water from hand wash basins will be filtered in line for particles and grease, and re-enter the reservoir.
- The additional surface runoff, from planted roofs, is collected directly in tanks which are left unfiltered and used for drip irrigation of the landscaping in the courtyard and for ponds on the premises.

Parliament is only in session during certain times of the year, and is in attendance by some only occasionally. However, the daily occupation of the building will be by the staff of the building. The calculations following deal with the staff of the building as consumers of water and established the required water demand, the viable water yield and the storage requirements from a system that uses both rain and grey water to meet its water demands. It is necessary to reevaluate the values below, upon completion of the scheme, to establish whether the system will work.

Preliminary assumptions were as follows:

- There are **30 staff members** permanently in the building.
- South African government states each person uses 300 litres of water a day. Assuming 300l /person/day, 29% is for toilet flushing, 3% consumption and 5% handwashing (eThekweni Municipality, 2009). This leaves 111 litres per person per day. If staff are only at the office for 8 hours a day this reduces the demand per person to **37 litres per day** ($8/24 \times 111 = 37$ litres).
- Assuming 3 litres of water is used per handwash and each person washes their hands 6 times a day (eThekweni Municipality, 2009) $6 \times 3 \times 30 =$ **540 litres of greywater are produced everyday.**

Viable areas for rainwater catchment:

The courtyard (water must be removed to limit water logging of soil below and flooding of building) = 739m²

Green Roofs above office space = 1073m²

The assembly chamber = 323m²

Total yield area = 1812m²

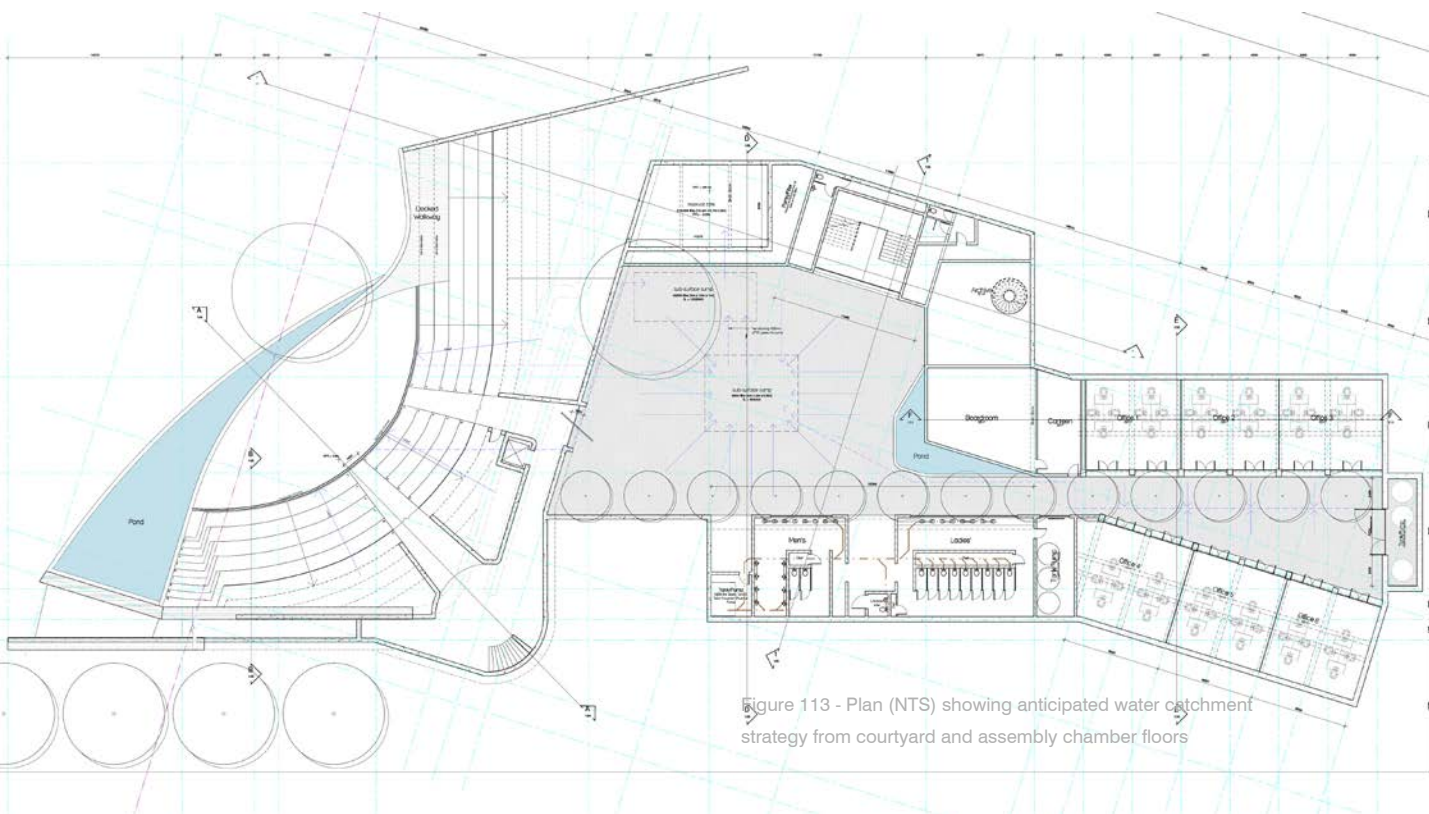


Figure 113 - Plan (NTS) showing anticipated water catchment strategy from courtyard and assembly chamber floors

Using the values and assumptions above, the initial calculations produced the following results:

MONTH	AVE RAINFALL , P (m)	CATCHMENT YIELD (m ³) (Yield =	ALTERNATIVE WATER SOURCE (m ³)	TOTAL WATER YIELD (m ³)
January	0.15	214.32	16.74	231.06
February	0.08	107.16	15.12	122.28
March	0.08	117.16	16.74	133.90
April	0.05	71.44	16.20	87.64
May	0.01	17.15	16.74	33.89
June	0.01	11.43	16.20	27.63
July	0.00	5.72	16.74	22.46
August	0.01	8.57	16.74	25.31
September	0.02	28.58	16.20	44.78
October	0.07	104.30	16.74	121.04
November	0.10	148.60	16.20	164.80
December	0.15	214.32	16.74	231.06
ANNUAL AVE.	0.70	1048.74	197.10	1245.84

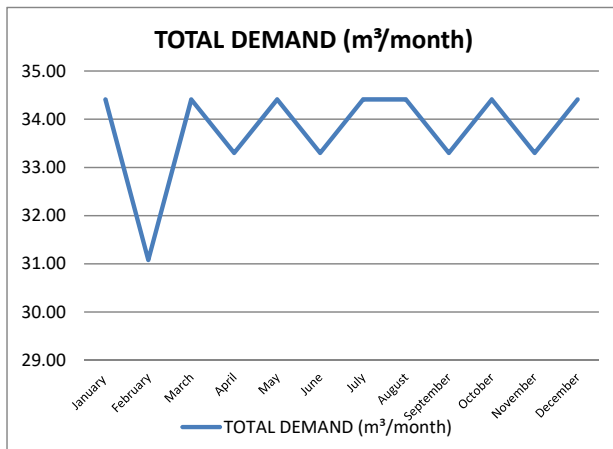
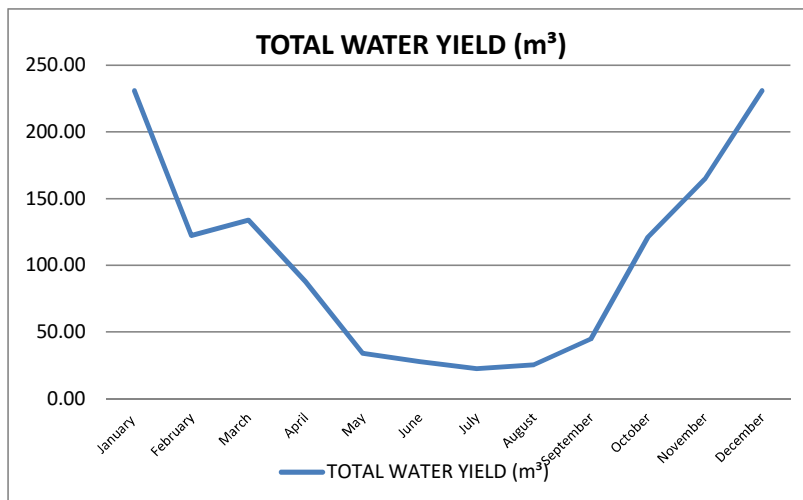
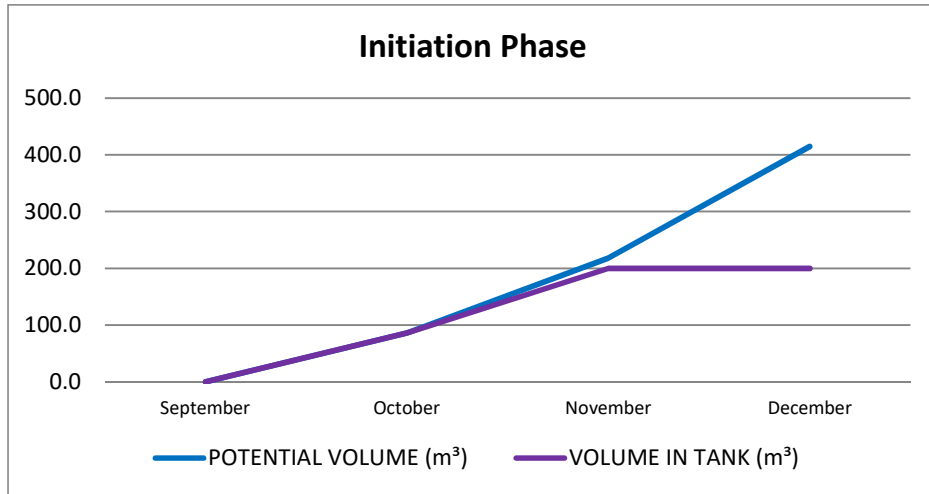


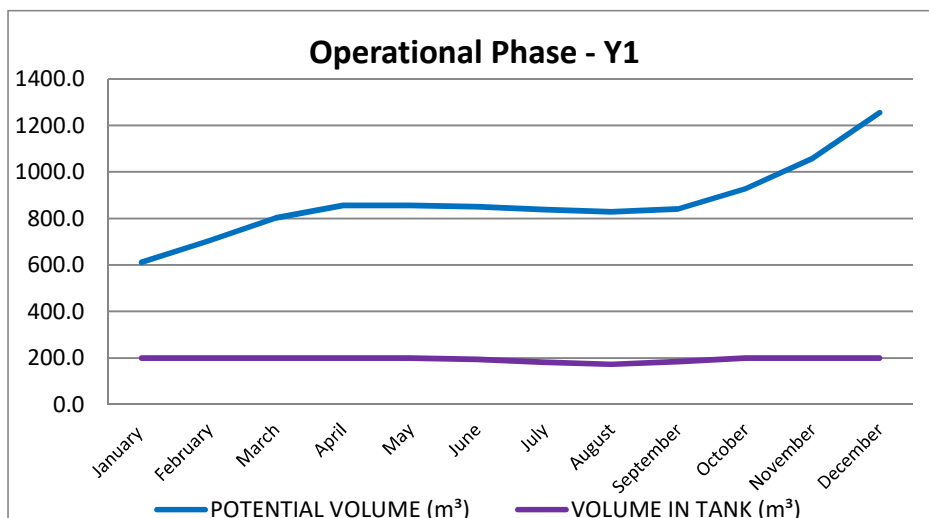
Figure 114 - Tables and graphs illustrating the anticipated yield from the maximum catchment area and the demand of the building by permanent staff. Rainfall data obtained from <http://www.pretoria.climatemps.com/precipitation.php>.



WATER BUDGET

YEAR 1

MONTH	YIELD (m ³ /month)	DEMAND (m ³ /month)	MONTHLY BALANCE	POTENTIAL VOLUME (m ³)	VOLUME IN TANK (m ³)
January	231.1	34.4	196.7	611.4	200.0
February	122.3	31.1	91.2	702.6	200.0
March	133.9	34.4	99.5	802.1	200.0
April	87.6	33.3	54.3	856.5	200.0
May	33.9	34.4	-0.5	855.9	199.5
June	27.6	33.3	-5.7	850.3	193.8
July	22.5	34.4	-12.0	838.3	181.9
August	25.3	34.4	-9.1	829.2	172.8
September	44.8	33.3	11.5	840.7	184.2
October	121.0	34.4	86.6	927.3	200.0
November	164.8	33.3	131.5	1058.8	200.0
December	231.1	34.4	196.7	1255.5	200.0



The system works on the basis of an initiation phase which is required to start the system. The initiation phase occurs during the rainy months in which no water is removed from the system; it is used to build up a reserve of water. After this the system can function without a sufficient deficit. Despite the size of the reservoir, 69m² at 2.9m high, there is still a deficit during the dry months. The operational phase graph above illustrates the amount of rainfall that could be yielded given the catchment area and the amount actually captured in a reservoir of the given size (200m³).

There is an 800m³ of water not being harvested in December because of limited storage capacity. It would be unnecessary to build a reservoir that can store 800m³ of water since the reservoir only needs to be 212m³ to meet the demand. However, the paved courtyard area yields 433.94m³ which, in addition with grey water recycling yields 631.04m³ per year. The annual demand is only 405.15m³ which renders the process of only harvesting grey water and rain water from the paved courtyard sufficient for the demand of the permanent staff in the building. However, there will still be an excess of 166m³ of water in the wettest months from this system.

WATER BUDGET YEAR 1

MONTH	YIELD (m ³ /month)	DEMAND (m ³ /month)	MONTHLY BALANCE	POTENTIAL VOLUME (m ³)	VOLUME IN TANK (m ³)
January	105.4	34.4	71.0	211.9	200.0
February	59.5	31.1	28.4	240.3	200.0
March	65.2	34.4	30.8	271.1	200.0
April	45.8	33.3	12.5	283.5	200.0
May	23.8	34.4	-10.6	273.0	189.4
June	20.9	33.3	-12.4	260.6	177.1
July	19.1	34.4	-15.3	245.3	161.7
August	20.3	34.4	-14.1	231.2	147.6
September	28.0	33.3	-5.3	225.9	142.4
October	59.9	34.4	25.5	251.4	167.8
November	77.7	33.3	44.4	295.8	200.0
December	105.4	34.4	71.0	366.8	200.0
ANNUAL AVE.	631.0	405.2	225.9		

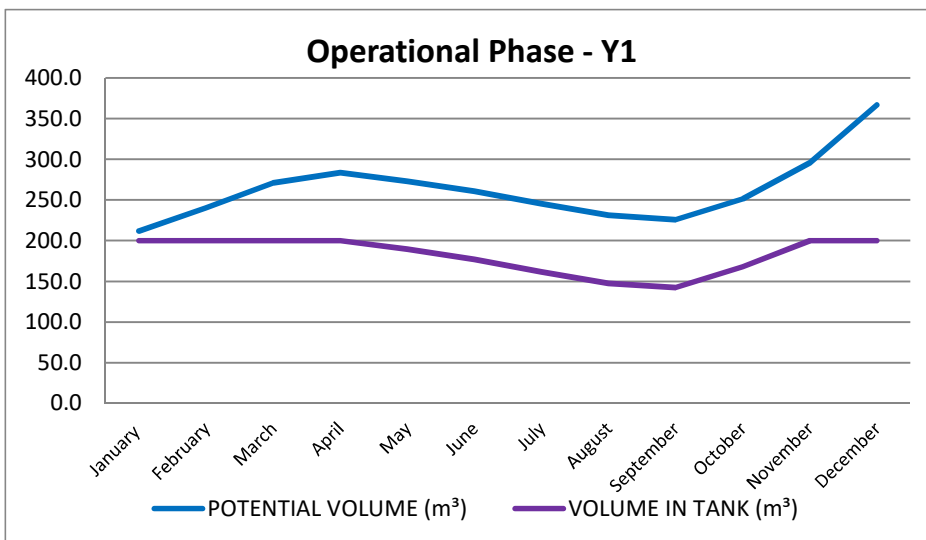


Figure 115 - Tables and graphs illustrating the sizing of the reservoir after reducing the catchment area.

Should the grey water harvesting be regulated, with a bypass valve that only allows it into the reservoir if there is a need, the system may safely accommodate the courtyards' annual yield of 433.94m³ which is in excess of the annual demand of 405.15m³. This would imply an additional system for the application of grey water for irrigation purposes, or an additional reservoir for the storage of more water, so that the sporadic use of the assembly chamber could also be catered for. Using similar assumptions as above, the size of such a reservoir has been calculated below using the following assumptions:

The times at which parliament is in recess have been reflected in the number of people used to calculate demand. A full month renders occupation at 530 persons per day, a half month at 280 and a recess month only at 30.

The individual demand is also reduced during fuller months (based on the probability of bathroom visits decreasing as the number of people increases).

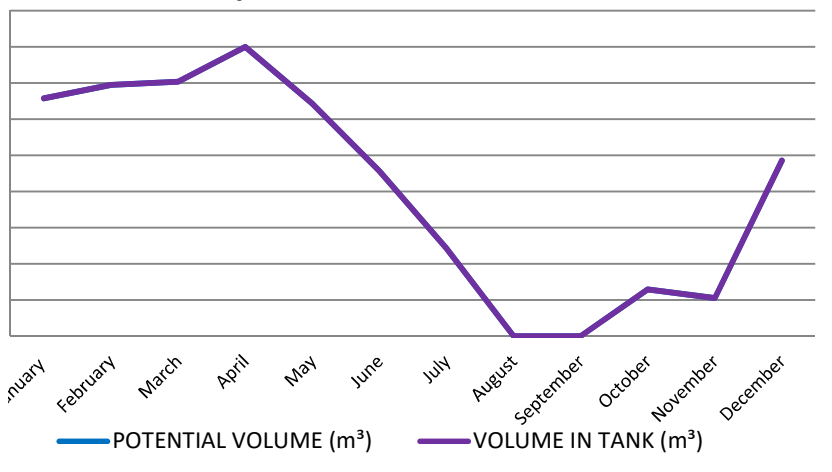
The water generated as grey water is reduced as well.

The total annual demand is calculated as 2373.53m³ with the total possible yield as 2184.74m³ (based on a 1136m³ assumed yield from grey water. This would show that there is a deficit in the yield to meet the demand. None the less, sizing the additional tank at 400m³ (approximately 13m x 10m x 3m) will still render the system at a loss just after the dry months.

WATER BUDGET YEAR 1

MONTH	YIELD (m ³ /month)	DEMAND (m ³ /month)	MONTHLY BALANCE	POTENTIAL VOLUME (m ³)	VOLUME IN TANK (m ³)
January	292.3	206.5	85.9	328.6	328.6
February	241.2	222.6	18.6	347.1	347.1
March	251.2	246.5	4.7	351.8	351.8
April	81.4	33.3	48.1	400.0	400.0
May	95.1	173.6	-78.5	321.5	321.5
June	145.4	238.5	-93.1	228.5	228.5
July	139.7	246.5	-106.7	121.7	121.7
August	86.6	321.2	-234.6	0.0	0.0
September	162.6	238.5	-75.9	0.0	0.0
October	238.3	173.6	64.7	64.7	64.7
November	226.6	238.5	-11.9	52.8	52.8
December	224.3	34.4	189.9	242.7	242.7
ANNUAL AVE.	2184.7	2373.5	-188.8		

Operational Phase - Y1



From the calculations above it can be noted that the likelihood of an entirely self-sufficient water system in a large public building is unlikely. However, small changes to the water system, from the application of water use reducing fixtures and grey water recycling (even if only for irrigation) makes a drastic impact on the use of water in a building like this.

The system was envisioned from the conception of the project which also proved its application more appropriate and suited to the scheme. The water strategy of the scheme applies the philosophy of minimum external water input and aims to operate based on the potential of rainwater harvesting and grey water application as usable water for irrigation and for both potable and non-potable water supplies. It is believed that, on further investigation, the system, if treated as inter-dependant with the other buildings in the precinct, an entirely self-sufficient system may be created.

9.4.2. Indoor Environmental Comfort

The value of well-functioning office spaces is invaluable in our current society, where often economic hardship in combination with poor work environments affect staff adversely. According to the Green Building Council, an improvement in Indoor Environmental comfort can increase productivity by up to 20%. This can be achieved by increasing ventilation, control over temperature and lighting, the use of natural light and the absence of toxic materials (GBCSA.org n.d.).

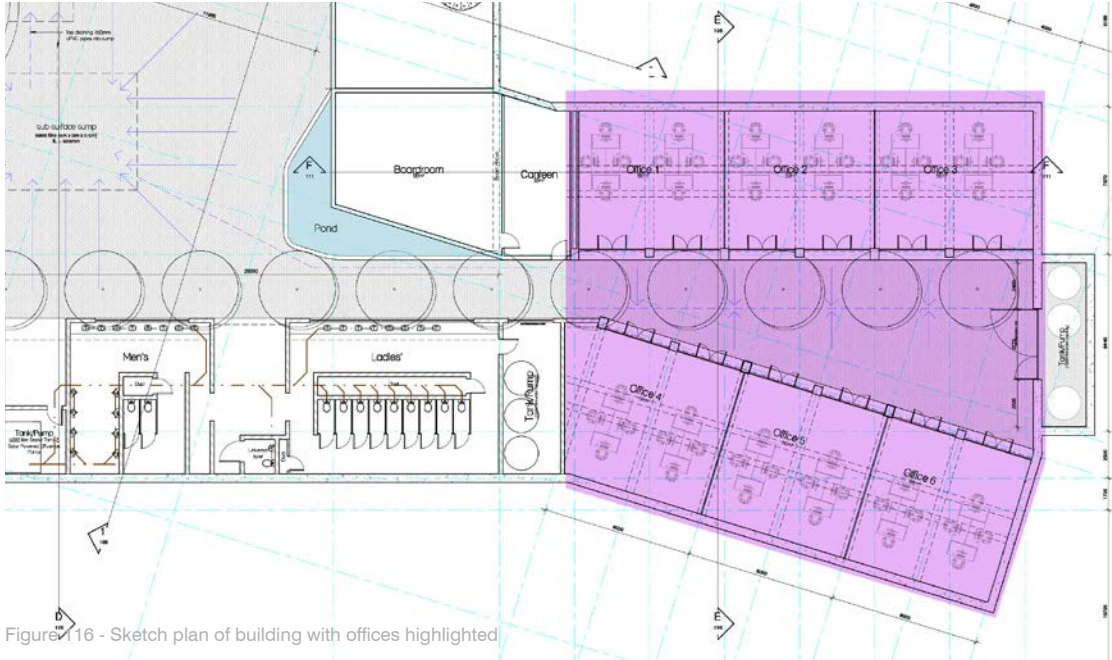


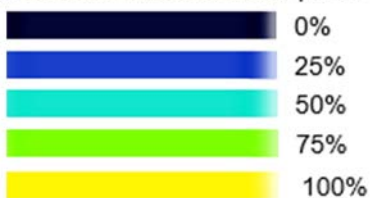
Figure 116 - Sketch plan of building with offices highlighted

Daylighting

In large buildings *electric lighting accounts for 35 - 50% of total electrical energy consumption* (Autodesk 2015). This would mean that the benefits of a thorough daylighting system is beneficial for the occupants and the operational cost of the building. To develop a daylighting strategy for the building a series of iterations of the building section were undertaken, each tested using indoor an environmental modelling computer programme, Sefaira . The software produces two visualisations, illustrating two aspect of daylight analysis of the spaces.

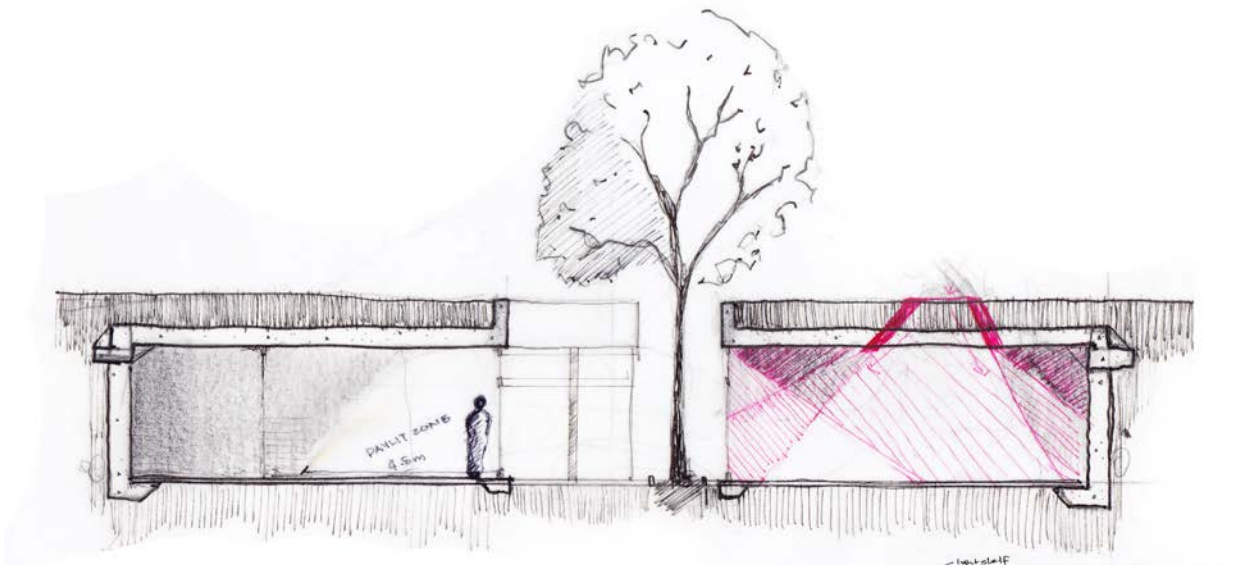
The first is an Spatial Daylight Autonomy value (sDA) which is used to evaluate whether a space receives enough usable daylight throughout the year. The diagram produced shows a colour variation on the plan of a building - ranging from dark blue to yellow. Yellow spaces receive illumination at the work surface height given (850mm) 100% of the year. The colour grading proceeds to green at 75% of the time and then darker blue as the illuminated work surface percentage throughout the year decreases.

Percentage of occupied hours where illuminance is at least 300 lux, measured at 0.85 meters above the floor plate.



The second is called Annual Sunlight Exposure (ASE) helps to identify whether a space is subject to overlighting. The visualisation colours the plan to reveal which spaces are overlit and which are underlit on average. Yellow spaces will be subject to glare while blue spaces will require task lighting. The clear spaces are perfectly lit for work surfaces.

Figure 117 - The gradation key of the sDA visualisation.



Office Concept

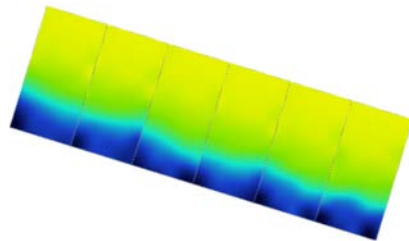
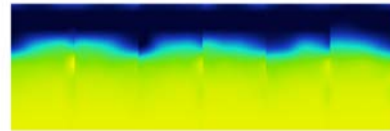
The first daylighting study was performed on the conceptual section of the offices.

The section initial showed a basic below-ground building with landscaped roof and storefront opening (Section above). Using basic daylighting rules of thumb the space could be daylit up to half the depth of the building (where the height of the sidelight = d and the depth of illuminance is $1.5d$). The right hand side of the diagram illustrating the rules of thumb shows how a light shelf may increase the depth of illuminance up to $2d$.

The diagrams to the right are visualisations of the sDA value and ASE values in the spaces. The 300lux illuminance is almost two thirds of the space, while one third of the southern building is adequately lit without glare and the Northern building is adequately lit without glare on approximately to thirds of the plan.



sDA of the spaces - concept



ASE of the spaces - concept

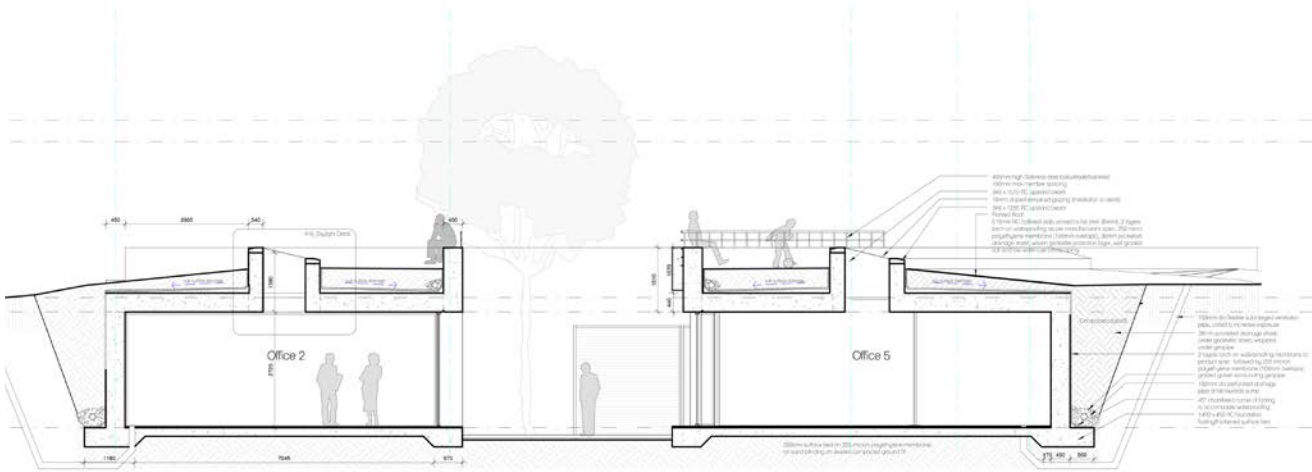


Figure 118 - Conceptual section of the office spaces.

Figure 119 - Daylighting rules of thumb diagram

Figure 120 - sDA visualisation of the spaces.

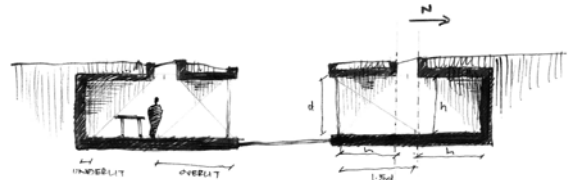
Figure 121 - ASE visualisation of the spaces.



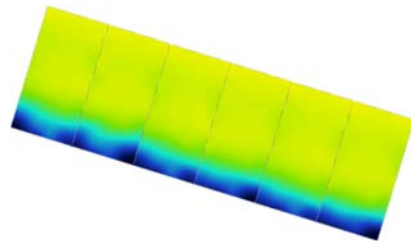
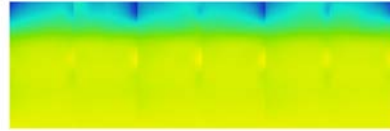
Office Iteration 1

The first iteration saw the introduction of skylights running the full length of the spaces and located in the middle of their depth. --

The daylighting prediction shown in the diagram anticipated a larger illuminated area which was proven by the sDA visualisation. However, the ASE visualisation began to show that majority of the lit space was overlit and would be spaces faced with glare.



sDA of the spaces - iteration 2



ASE of the spaces - iteration 1

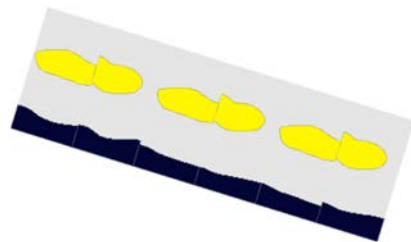


Figure 122 - Preliminary computer aided drawing showing the first iteration of the conceptual section (Section EE NTS).

Figure 123 - Predicted diagram applying the rules of thumb for iteration 1

Figure 124 - sDA visualisation of the spaces after the first iteration.

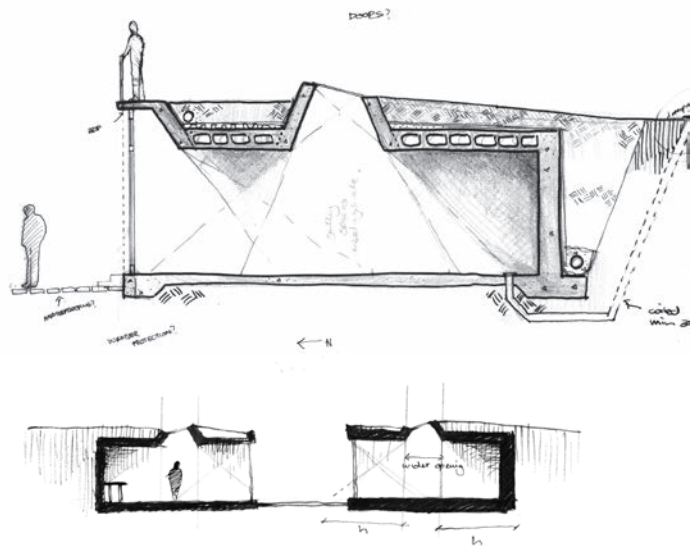
Figure 125 - ASE visualisation of the spaces after the first iteration.

Office Iteration 2

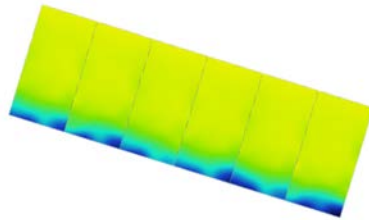
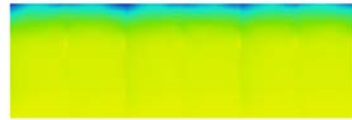
The second iteration was only a slight variation on the first, which is why they were both tested on Sefaira at the same time. The section shows how the skylight in iteration is only slightly altered to increase the size of the lower opening. This change was made to improve the appearance of the skylight from inside the space and increase the size of the opening in an attempt to spread the light further.

There is no specific rule of thumb illustrating this idea but the previous diagram was extrapolated and the prediction made as shown.

The sDA visualisation shows that majority of the area of the spaces is lit at above 300 lux at the given work surface. However, the skylights cause tremendous glare directly beneath them on the Southern building and almost all over in the northern building.



sDA of the spaces - iteration 2



ASE of the spaces - iteration 1

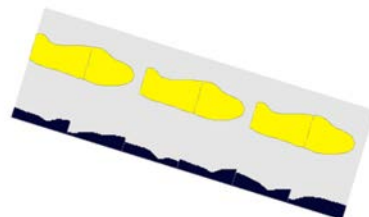


Figure 126 - Iteration 2, slight variation of iteration 1, where angle of internal walls of the skylight was altered to improve aesthetic and increased aperture (Northern portion of Section EE NTS).

Figure 127 - Predicted diagram applying the rules of thumb for iteration 2 - values extrapolated with discretion.

Figure 128 - sDA visualisation of the spaces after the second iteration. The change is only slight.

Figure 129 - ASE visualisation of the spaces after the second iteration.

Office Iteration 3

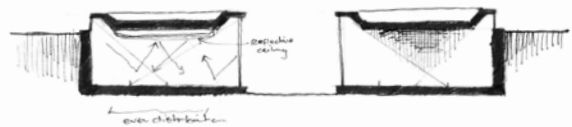
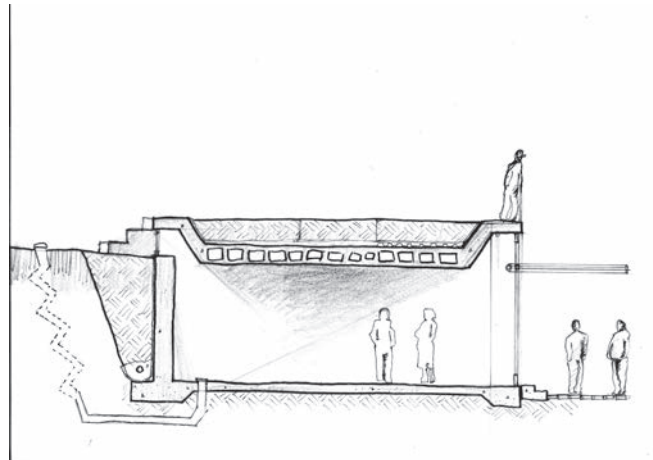
The 4th iteration saw the abandonment of the clerestories. This was partially due to their inclusion breaking the roof scape, which is occupiable and should be an extension of the park above, and in keeping with the manner in which the roof and building edges of the overall scheme had begun to develop. The intention was also to address the sharp overhead light that was penetrating the spaces from above.

The diagram prediction of how light would work in the spaces predicted even distribution of light on the work surface height. The left hand side of the diagram shows how introduction of a lightly coloured ceiling may use ambient and refracted light to soften light and produce a constant glow of light in the space.

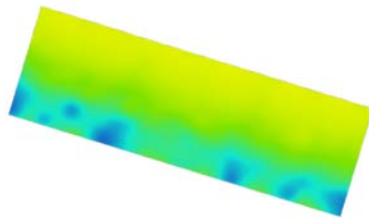
The visualisations reveal the iteration was partially a success. The southern build has no glare, and underlit space may be addressed using the refraction principle illustrated above, or these spaces can be programmed with functions requiring less light.

The Northern building, however still receives heavy glare on more than half its surfaces. Further iterations may be needed to identify the cause of this.

Possibly strategies include the application of solar shading devices along the facade, thus decreasing the allowed light from the store front or extending the overhang. These strategies will be investigated from here on.



sDA of the spaces - iteration 2



ASE of the spaces - iteration 1

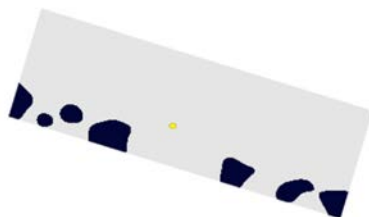


Figure 130 - Iteration 3, where skylights were abandoned and clerestories introduced (Southern portion of Section EE NTS).

Figure 131 - Predicted diagram applying the rules of thumb for iteration 3, depth of luminance from the clerestory were under-exaggerated.

Figure 132 - sDA visualisation of the spaces after the third iteration. Almost full illumination was achieved.

Figure 133 - ASE visualisation of the spaces after the second iteration, no glare in the Southern building.



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Chapter 10:
PRODUCT

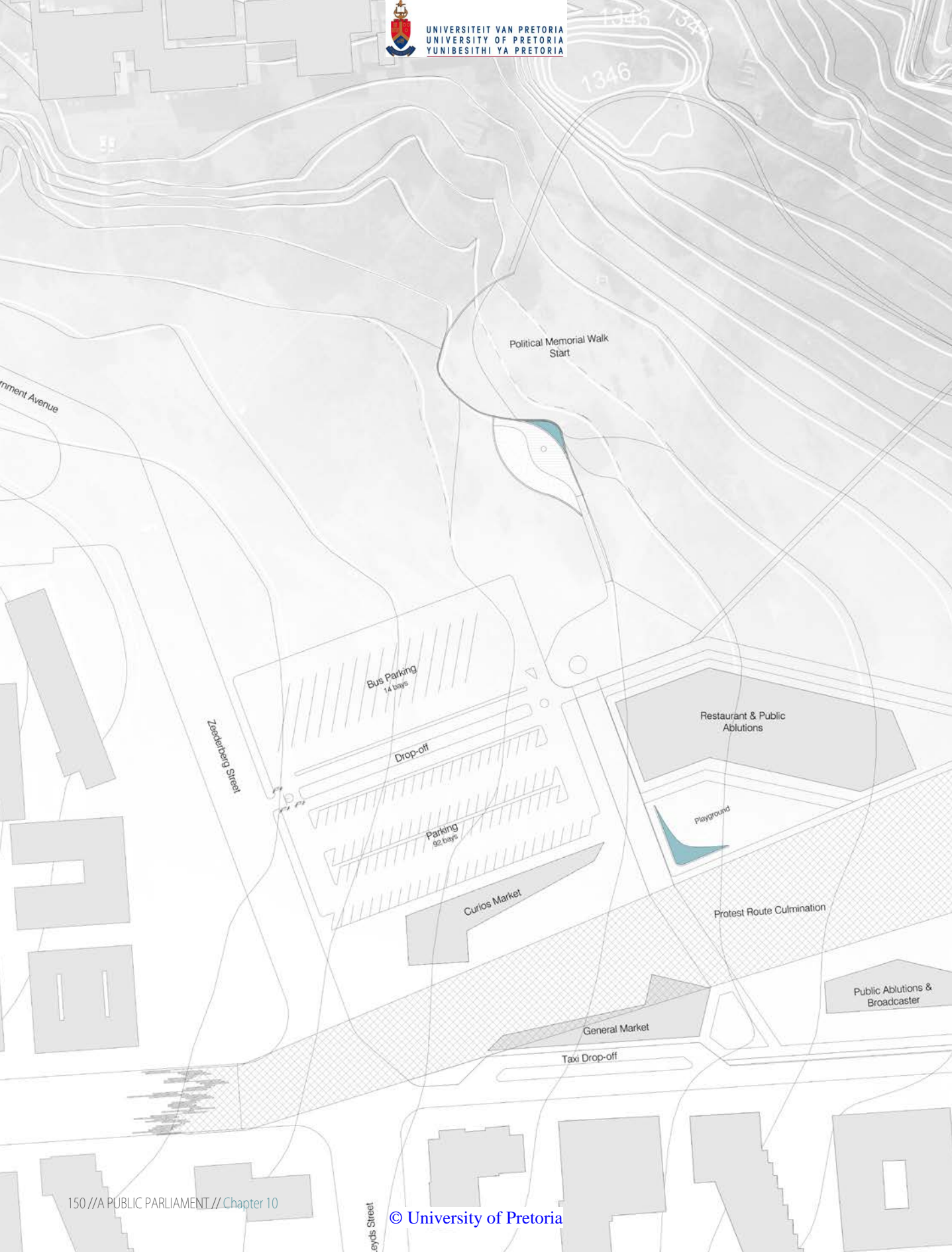
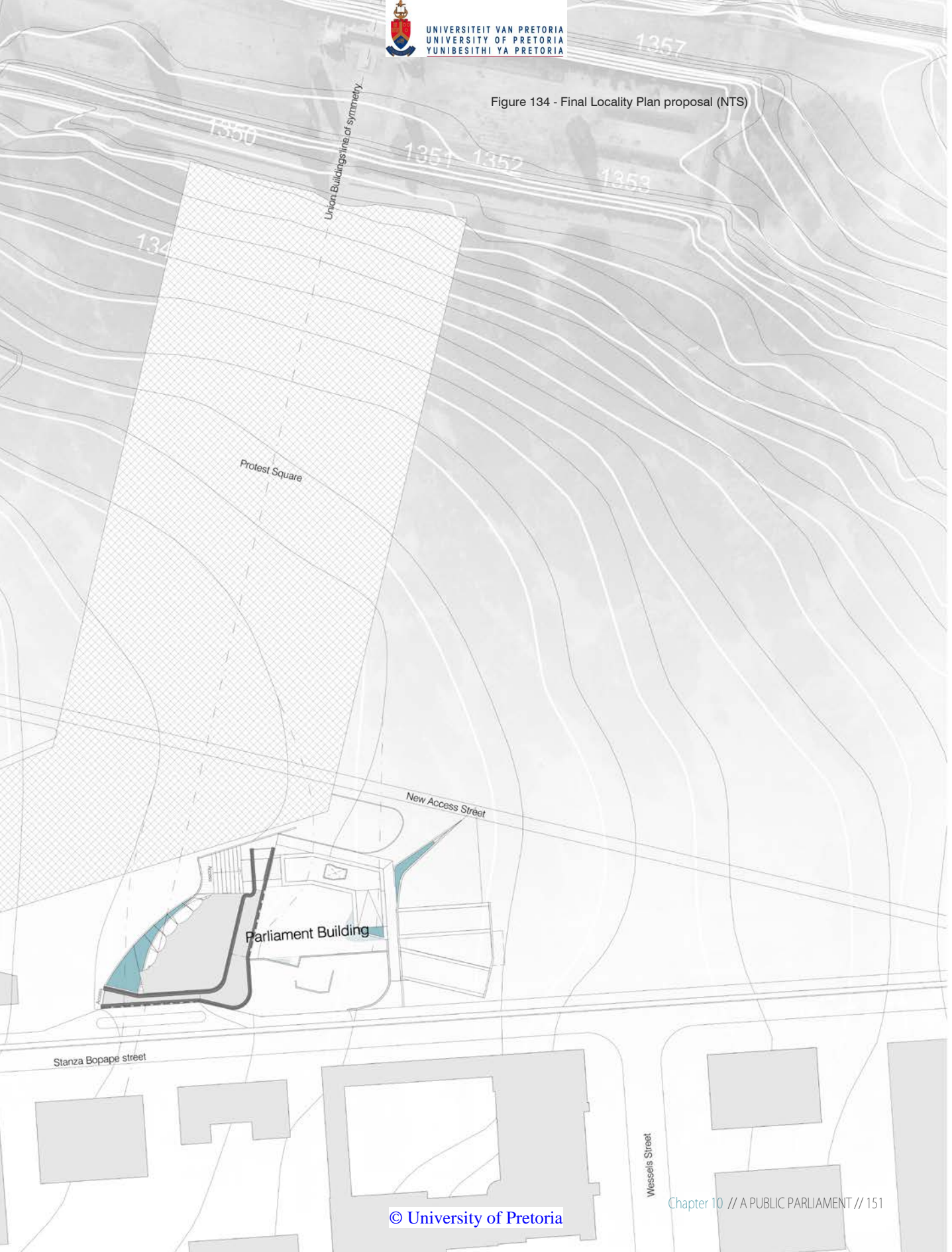




Figure 134 - Final Locality Plan proposal (NTS)



10.1. Political Interpretation Memorial

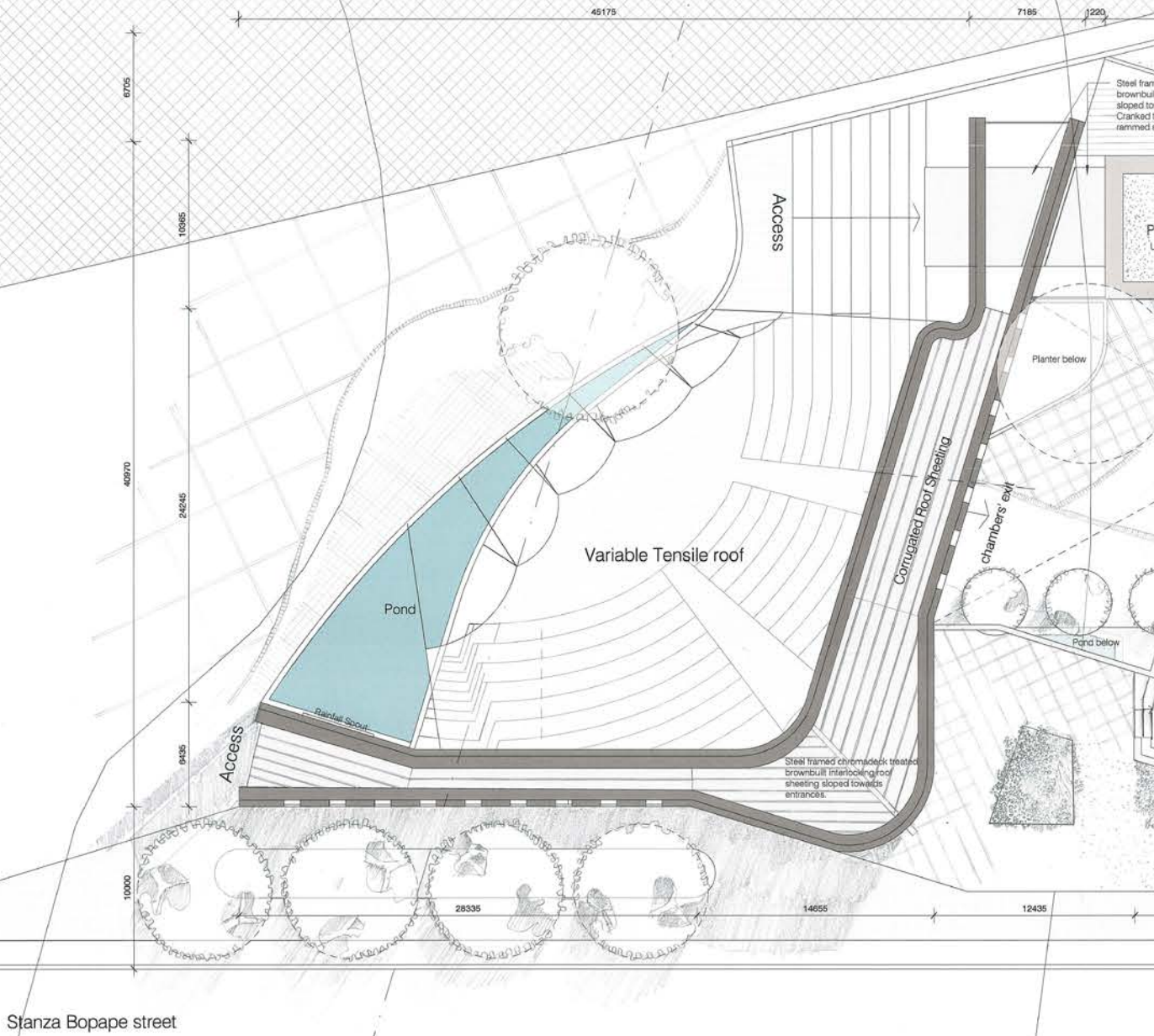
The political memorial proposal illustrates the proposed sense of space required for contemplative spaces, the spaces can be for internal reflection or group discussion. The statues and their accompanying translations become triggers for dialogue and introspection into our roles in the political continuum of South Africa. The public nature and concealed observation from above enforces the necessity of this introspection because of the accountability it implies.



Figure 135 - Section of the Political interpretation memorial path.

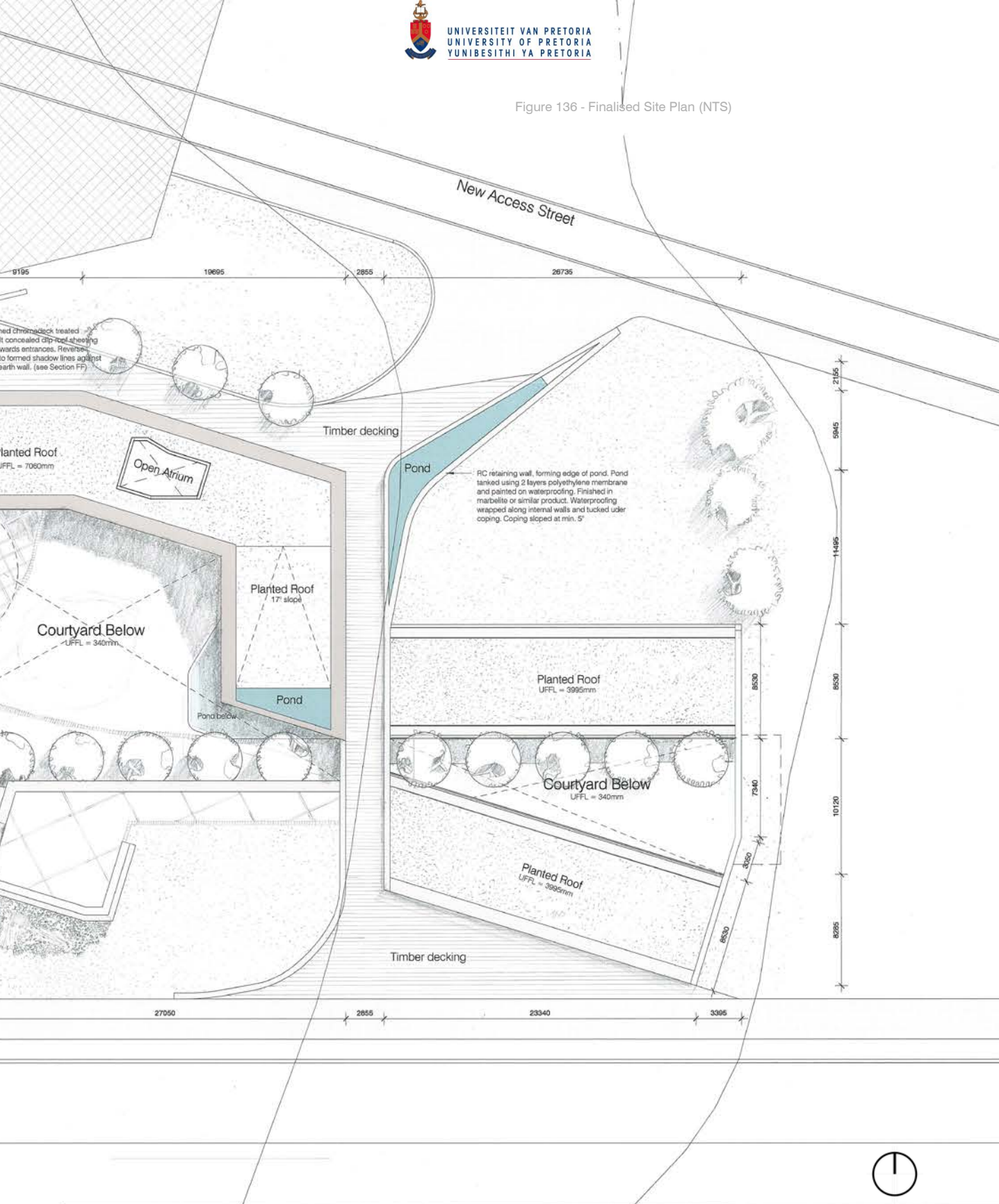


10.2. Building



Stanza Bopape street

Figure 136 - Finalised Site Plan (NTS)



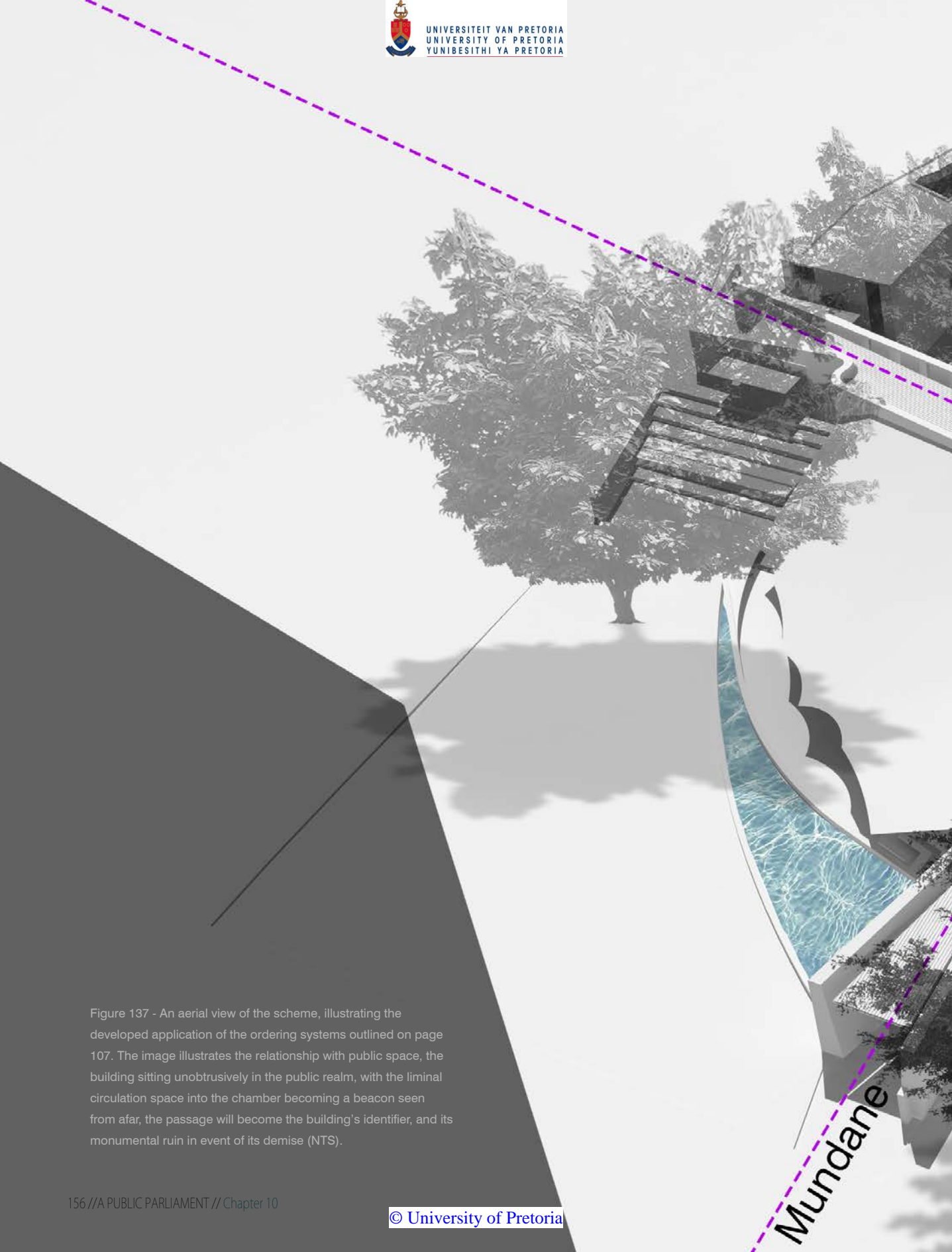
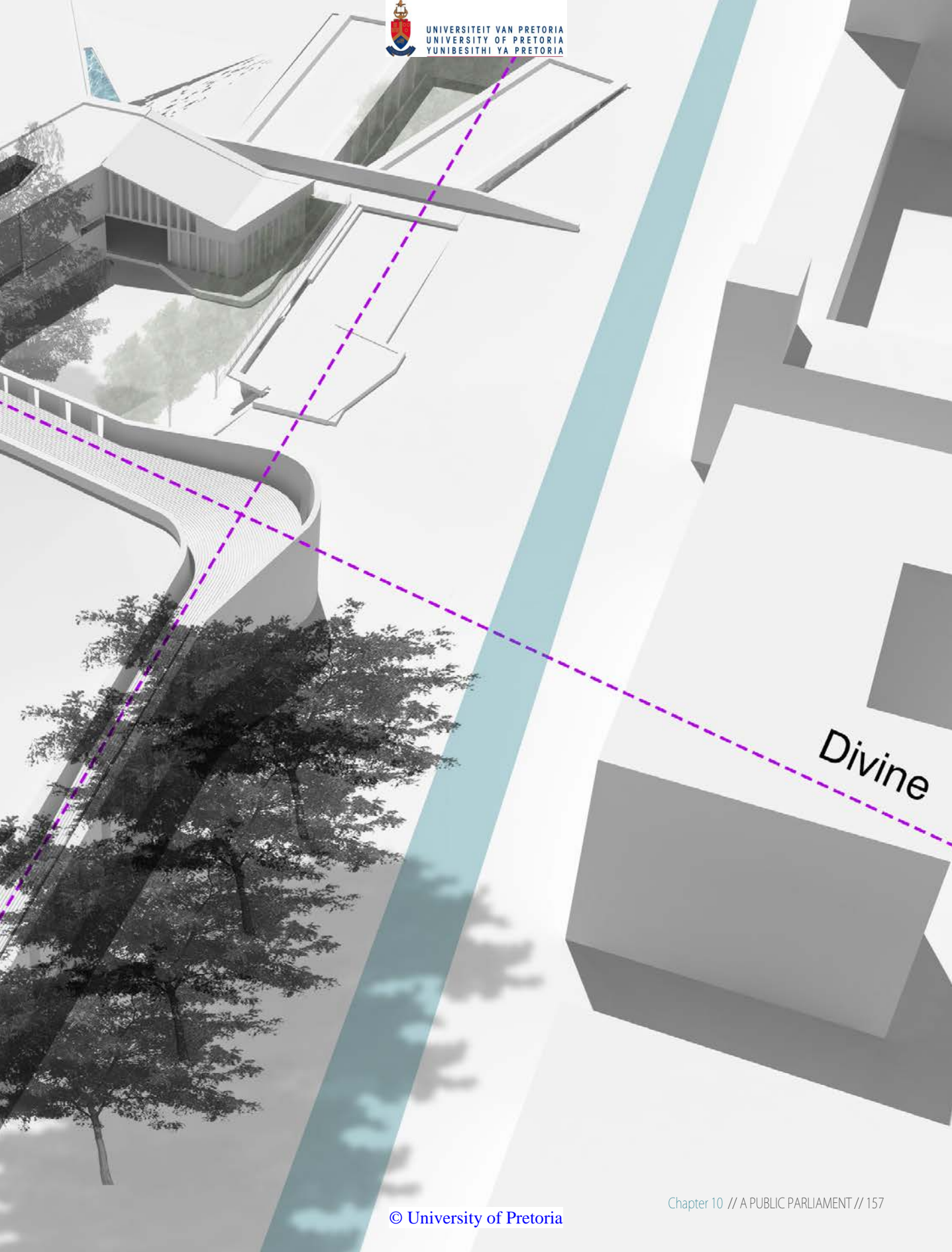


Figure 137 - An aerial view of the scheme, illustrating the developed application of the ordering systems outlined on page 107. The image illustrates the relationship with public space, the building sitting unobtrusively in the public realm, with the liminal circulation space into the chamber becoming a beacon seen from afar, the passage will become the building's identifier, and its monumental ruin in event of its demise (NTS).

Mundane



Divine

10.2.1. Ground Floor Plan

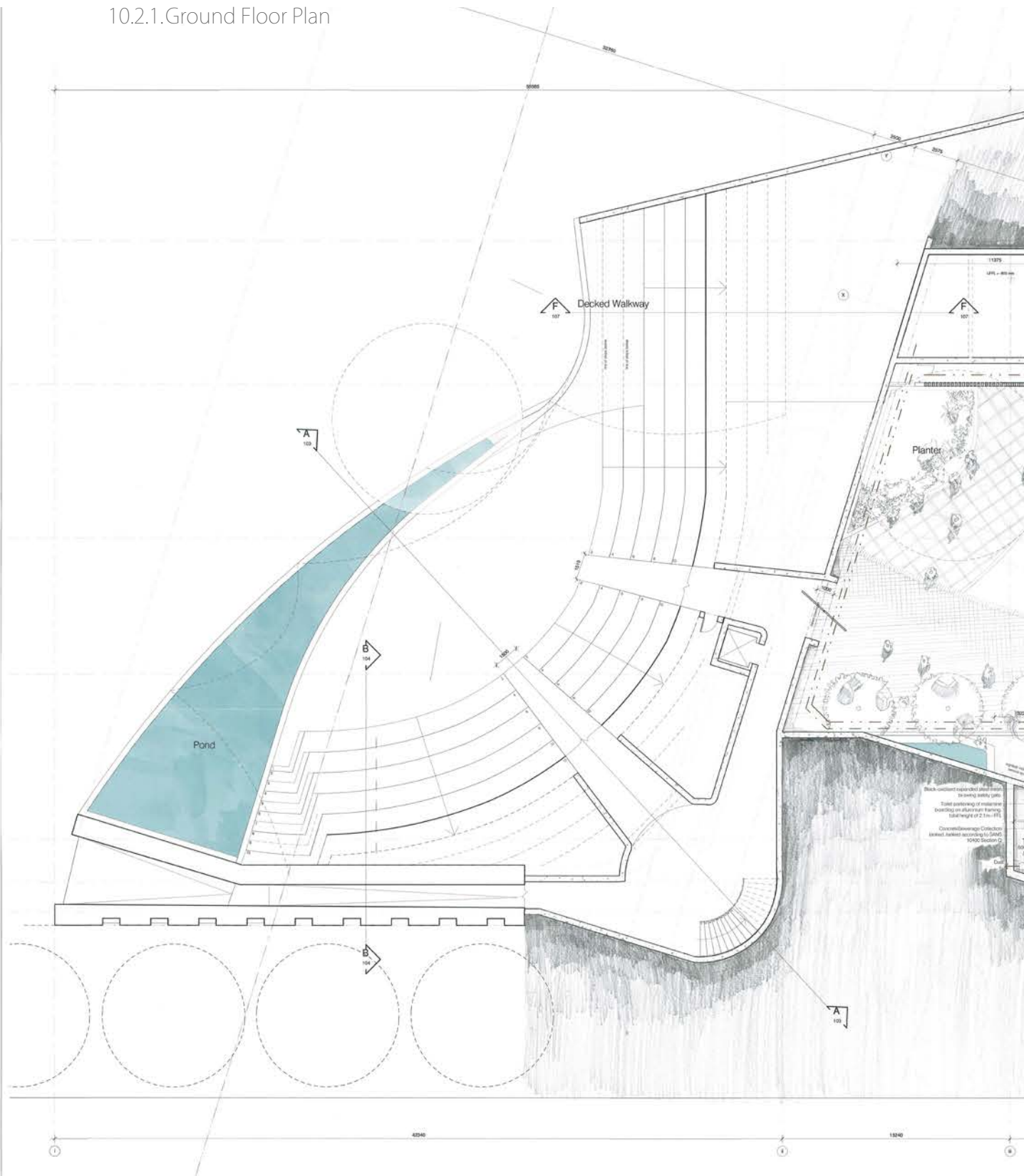
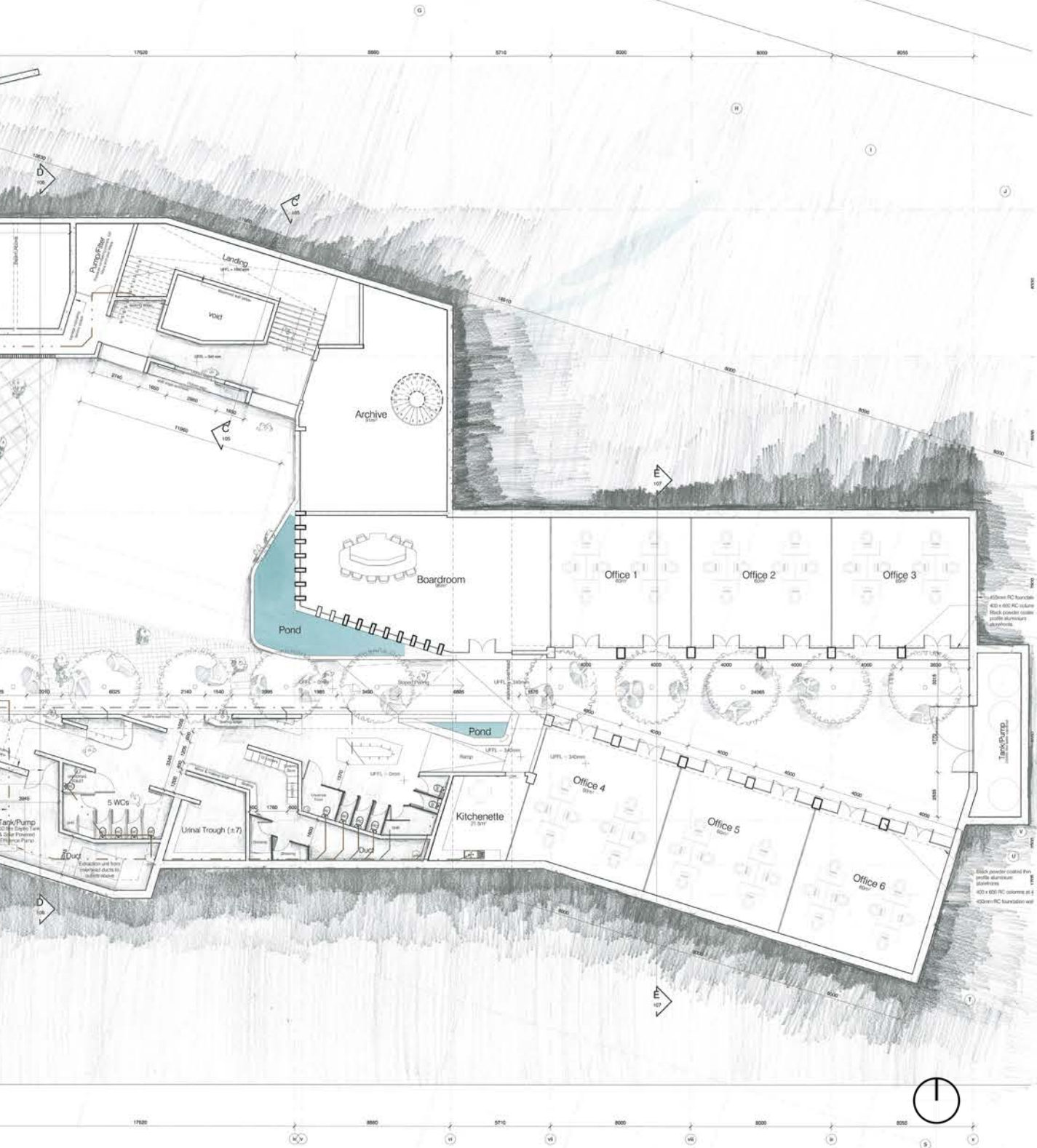


Figure 138 Finalised Ground Floor Plan (NTS)



400mm FC kerbside
 400 x 600 FC stone
 black concrete cast
 profile aluminium
 aluminium
 400mm FC kerbside
 400 x 600 FC stone
 black concrete cast
 profile aluminium
 aluminium



10.3. Interaction

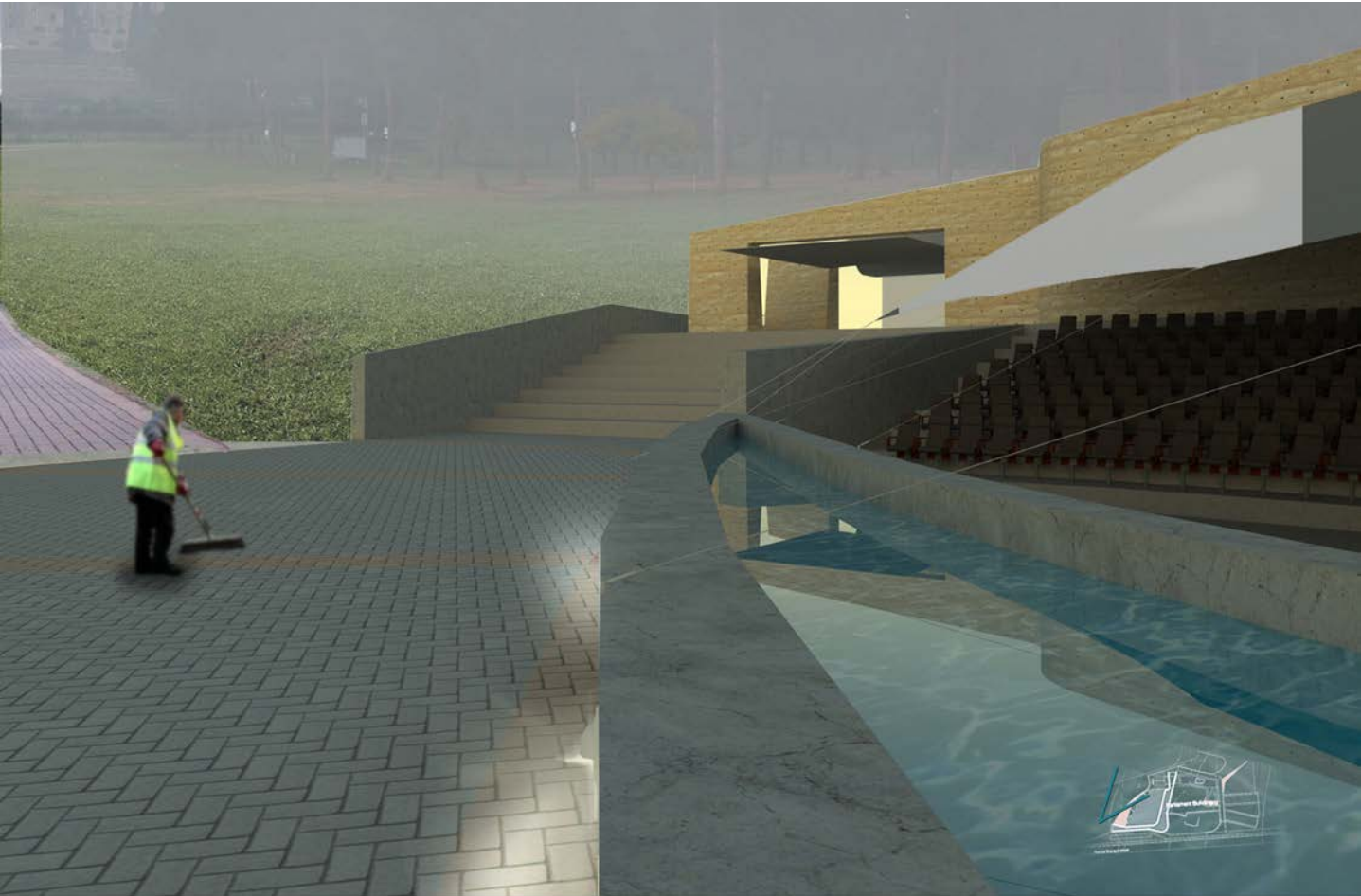




Figure 140 - A quiet morning outside the parliament chamber

Figure 141 - Protest has broken loose

(computer generated impressions, graphic collage)

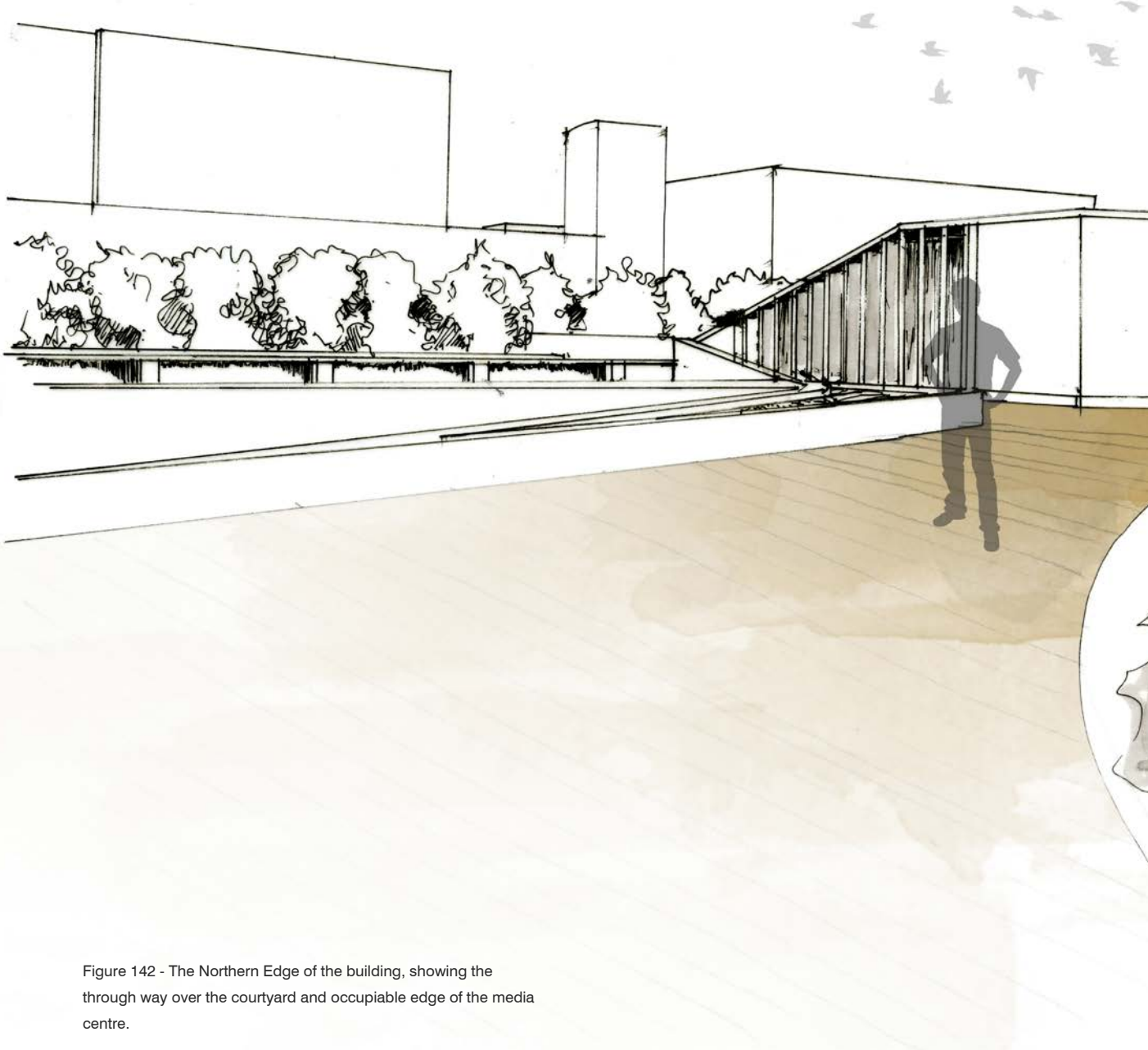
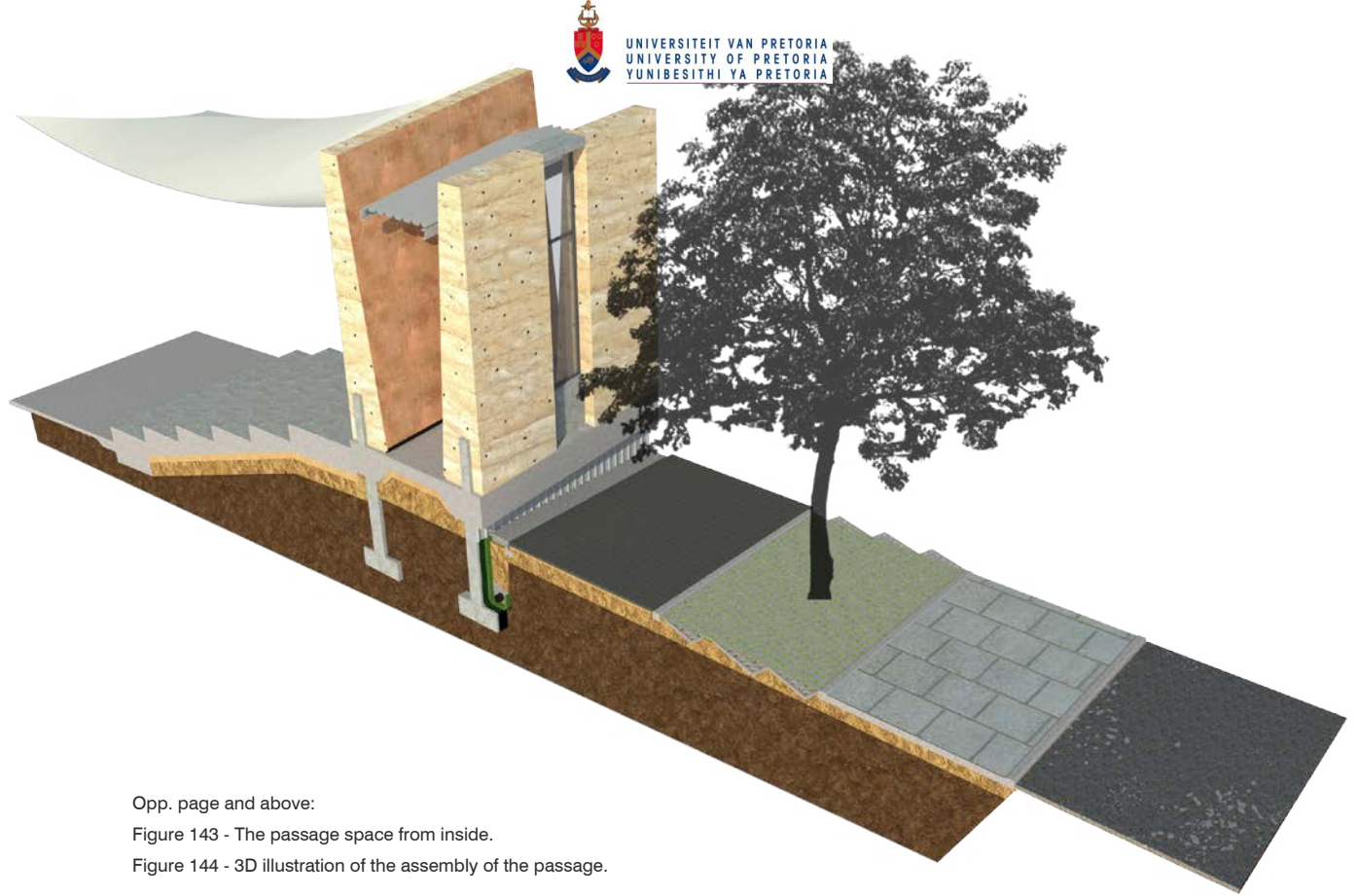


Figure 142 - The Northern Edge of the building, showing the through way over the courtyard and occupiable edge of the media centre.







Opp. page and above:

Figure 143 - The passage space from inside.

Figure 144 - 3D illustration of the assembly of the passage.

10.4. Liminality of Junctions: Processional Entrance & Passage (Section BB)

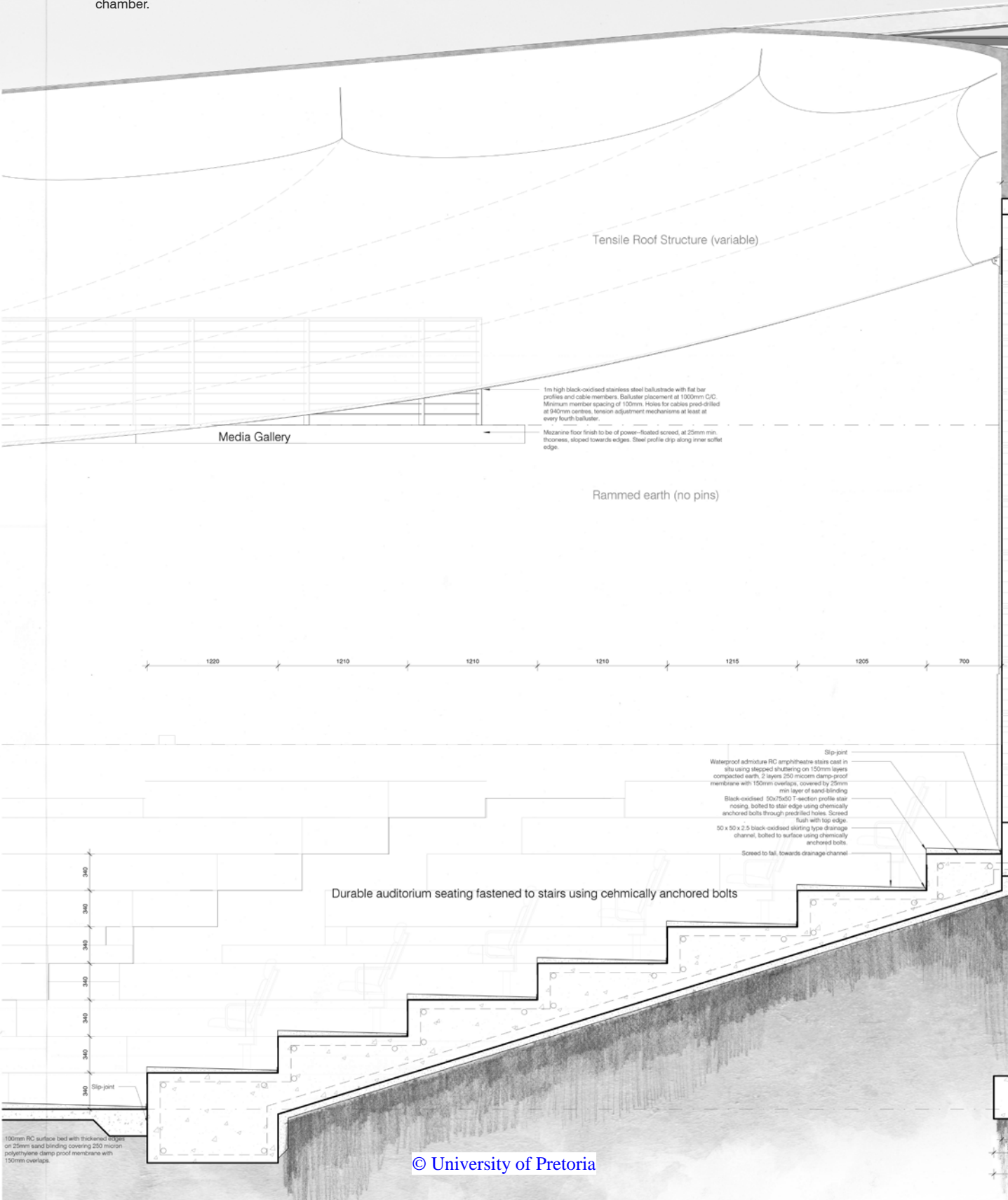
The passage was developed with attention given to the edges of planes and materials. The intention was, again, to interrogate how different planes touch each other and how different junctions are mediated.

The floating roof above the passage is pulled away from the walls, and echoes the lines of the floor, which leaves it floating away from the walls where it is suspended, because of the tapering nature of the walls. This gives the impression that it belongs to the floor and not to the walls. The grey colour of the chromadeck coated sheeting (left exposed and without ceiling, also mirrors the floated concrete below. The floor and roof plane become an enveloped for those within. The walls, that do not meet the roof or the floor (by means of steel skirting detail) become the guiding element that houses the space laterally. This implies guidance and stability, which is exploited by the narrowness of the space - the implication of forced contact and interaction remains clear.

The edge condition of the passage was criticised for its poor space-making on street side, however, this was intentional. The space on street side is designed to become a quick transitional zone. The slotted windows in the rammed earth wall also make the internal space one where only fleeting glances of figures on the other side become possible. This renders users inside and outside as anonymous to each other - their identities are not important, rather their presence as part of the agreement between parliamentarian and public is important.

The profiled off-shutter concrete edge of the parliament passage is a detail repeated throughout - the vertical emphasis reminding those outside the building of the functions below. The lines appear to pull the ramp towards the ground, to which it belongs.

Figure 145 - Section BB, through the passage into the discussion chamber.





10.5. Occupied Circulation: The Office building stairwell (Section CC)



Figure 146 - Section CC through the stairwell of the building. The development of the section hoped to translate traditional transient spaces like stairwells into occupied spaces - transforming spaces that are traditionally left to passing commentary into social spaces where the debate and discussion happens within earshot of all of the building's occupants.

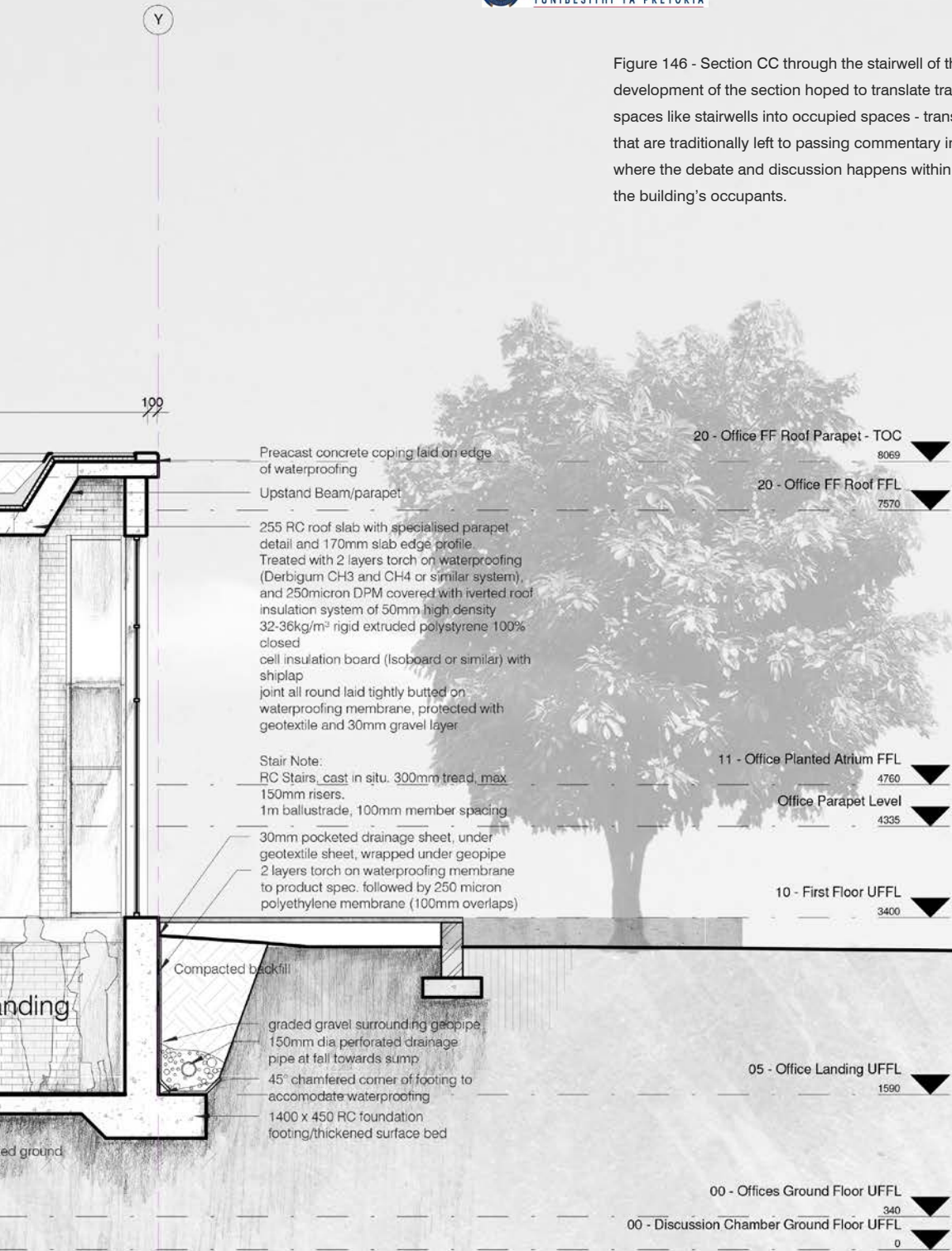




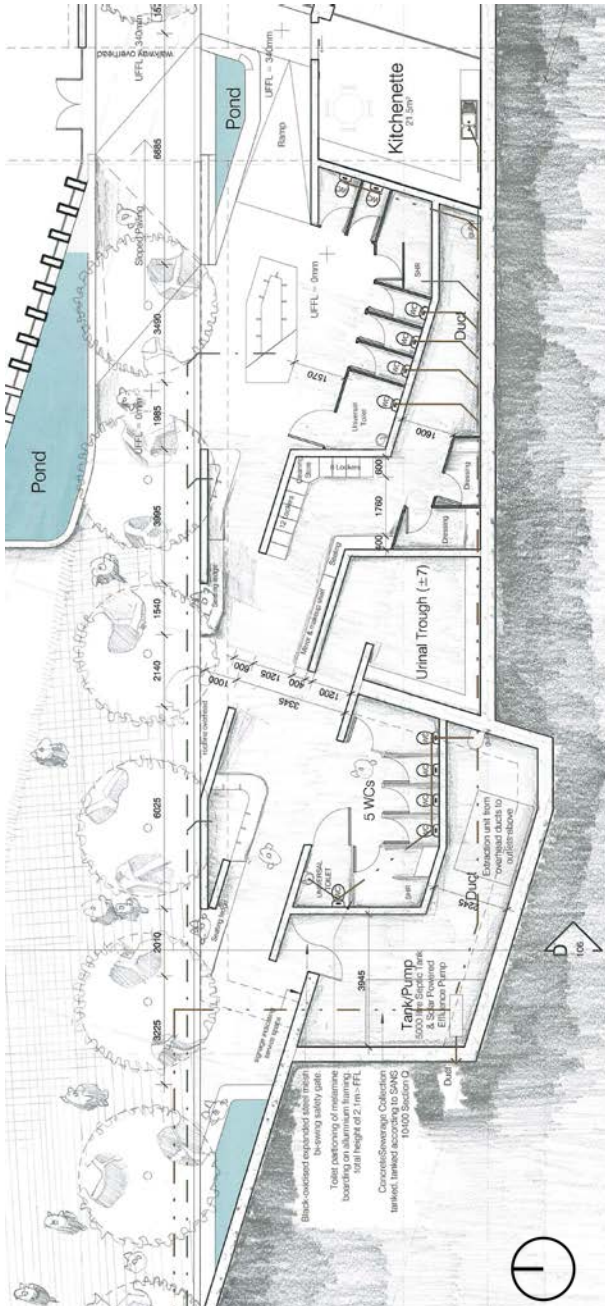
Figure 147 - Section through the 3D model cut at Section CC, showing the reverse.

Figure 148 - The Section illustrates the occupation of the landing as third space, encouraging observation of the activities of others, again focussing on the idea of accountability and the interplay between privacy and accessibility to information.





10.6. Privacy vs. Access: Democracy of the toilet



The resolution of the toilets developed from numerous iterations of the transitional spaces in between the physical accommodations of traditional toilets. The line between privacy and publicness was interrogated and resulted in the layout being opened up onto the courtyard, allowing minimal private spaces despite where absolutely necessary.

The ritual of cleansing post ablution became a public activity where eye contact between users becomes more likely. The implementation of trough basins and urinals and the minimum legally allowed spacing between users in space.

Careful consideration was given to the legally allowed sizes for passages and thoroughfares, and the limits were pushed to create awkward points of conflict between users - despite the inherent openness of the facilities to the courtyard. These tensions between geometries and between users and building aimed to instil constant self-awareness in relation to self and others and space.

Opp. Page and above:

Figure 149 - The view back onto the main courtyard.

Figure 150 - The final proposal for the toilets' layout.

10.7. Surveyed Democracy: The courtyard



Figure 151 - The main courtyard of the building.

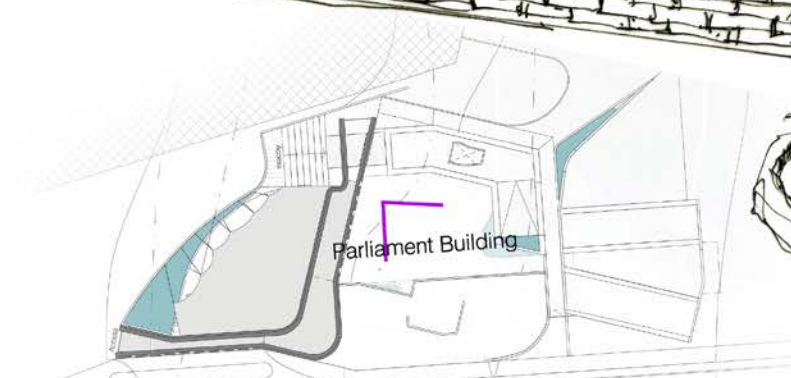
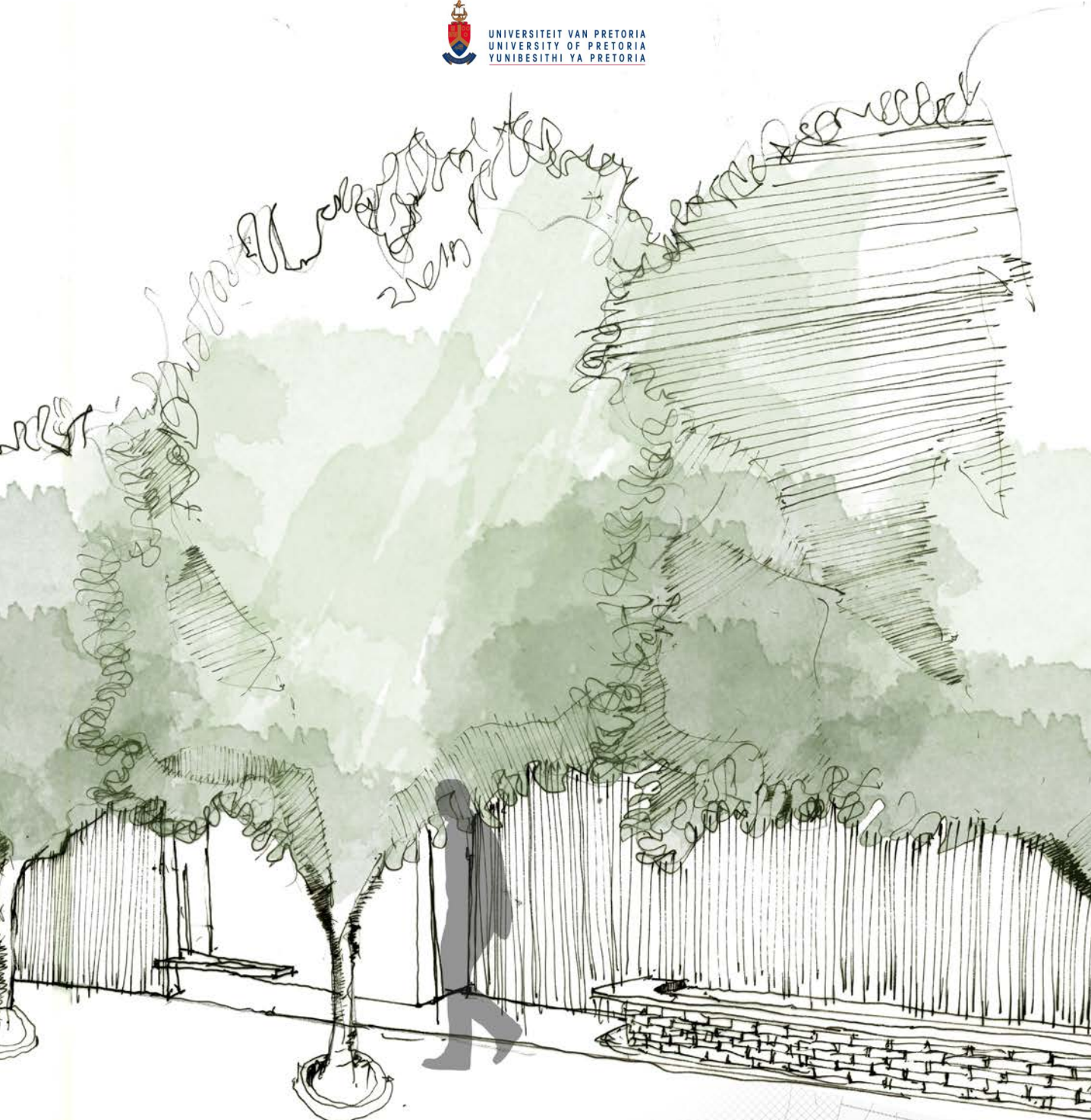
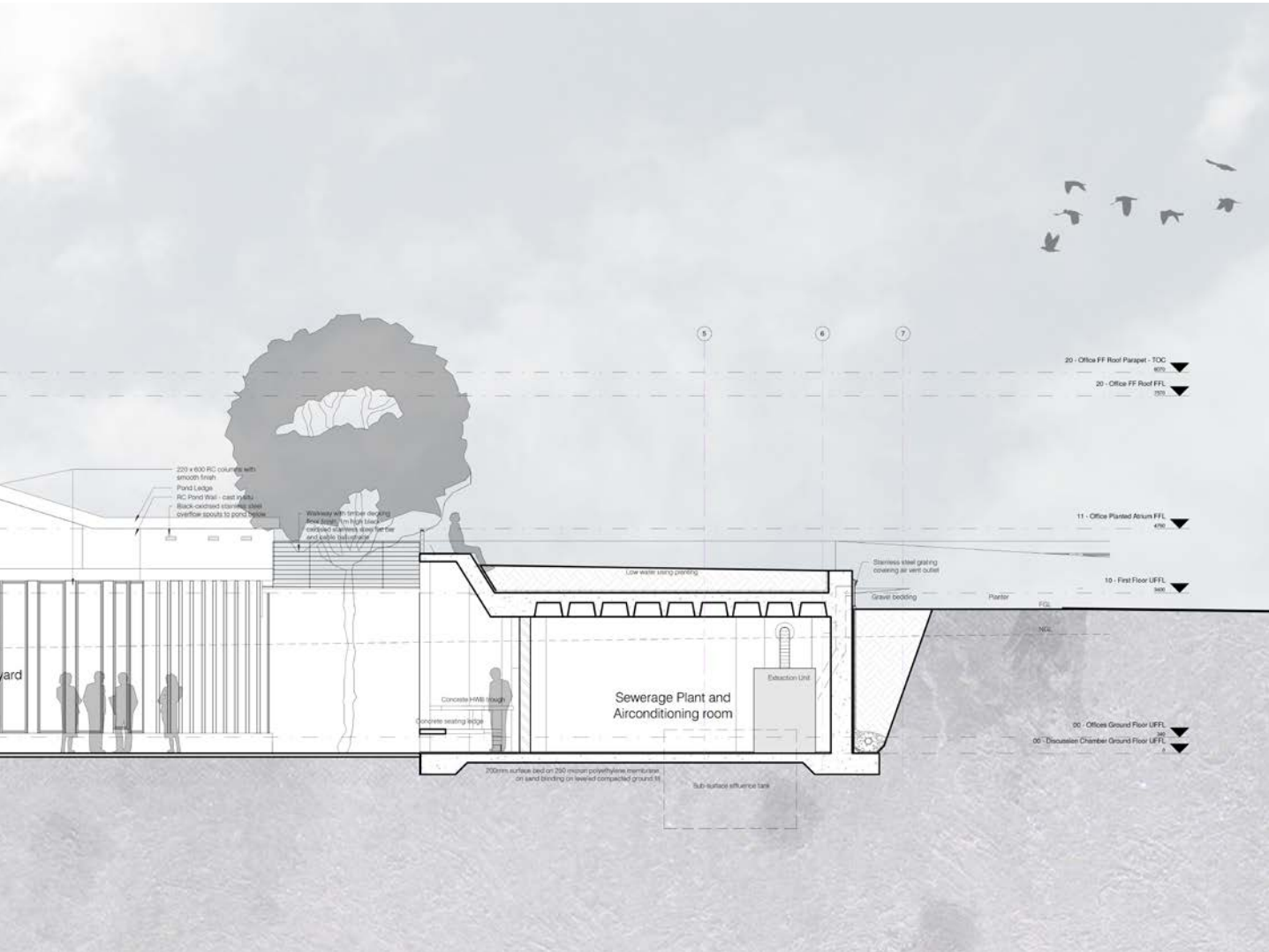




Figure 152 - Section DD cutting through the courtyard, and the water and sewerage tanks located South and North of the courtyard.

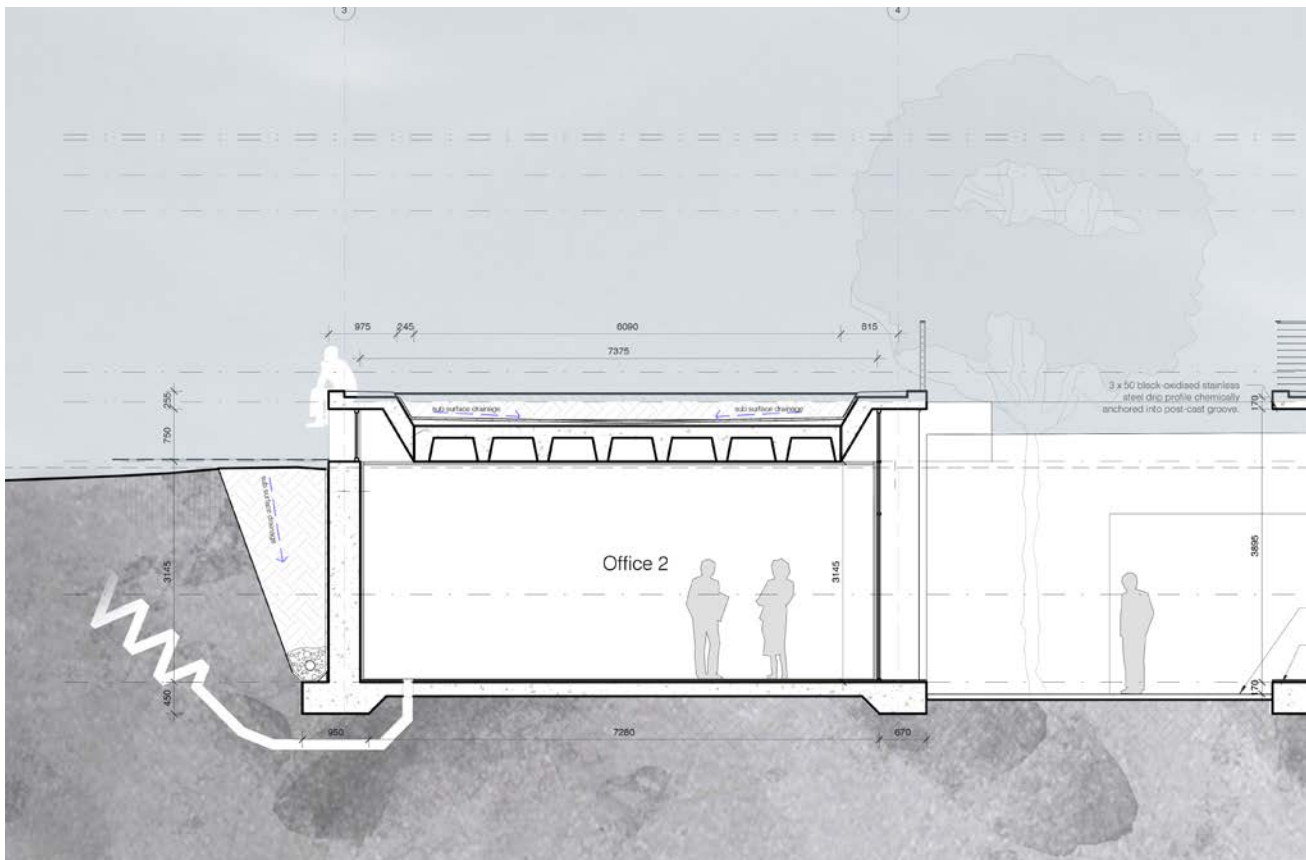


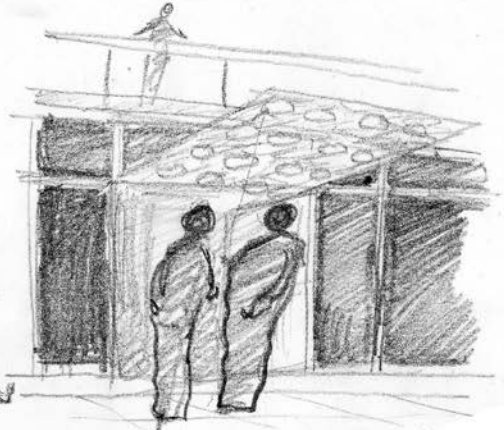
10.8. Surveyed Democracy: Office Space

Opp. page and below:

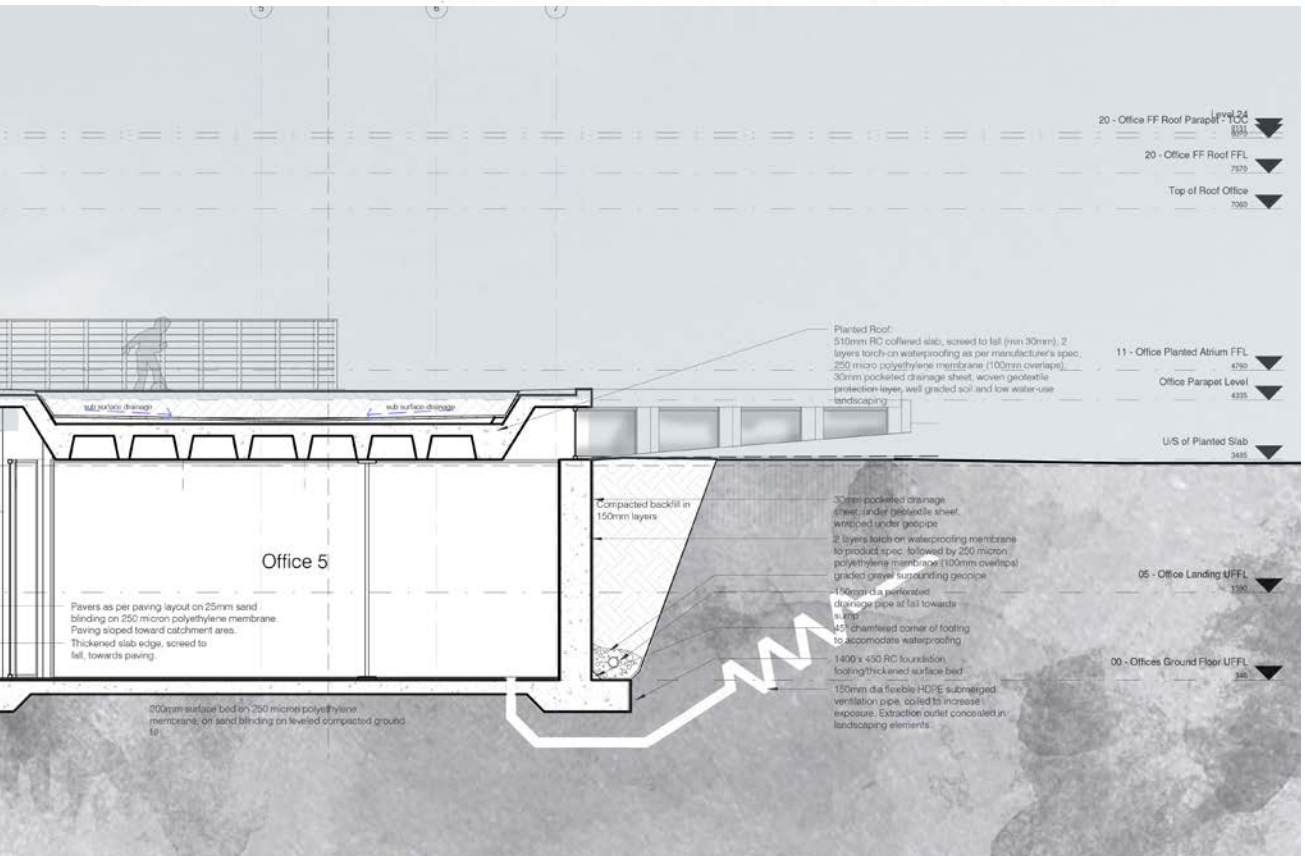
Figure 153 - Sketches illustrating the development of the character of the courtyard in the office wing.

Figure 154 - Section EE, through the office wing and courtyard.





Overhead screen =
Impression of privacy - likelihood of pause and discussion increases.
Shading device - of facade and courtyard
Device to show occupancy - those above can see when people are working below
Security - upswung steel louvred screen can act as security gate when in closed position.



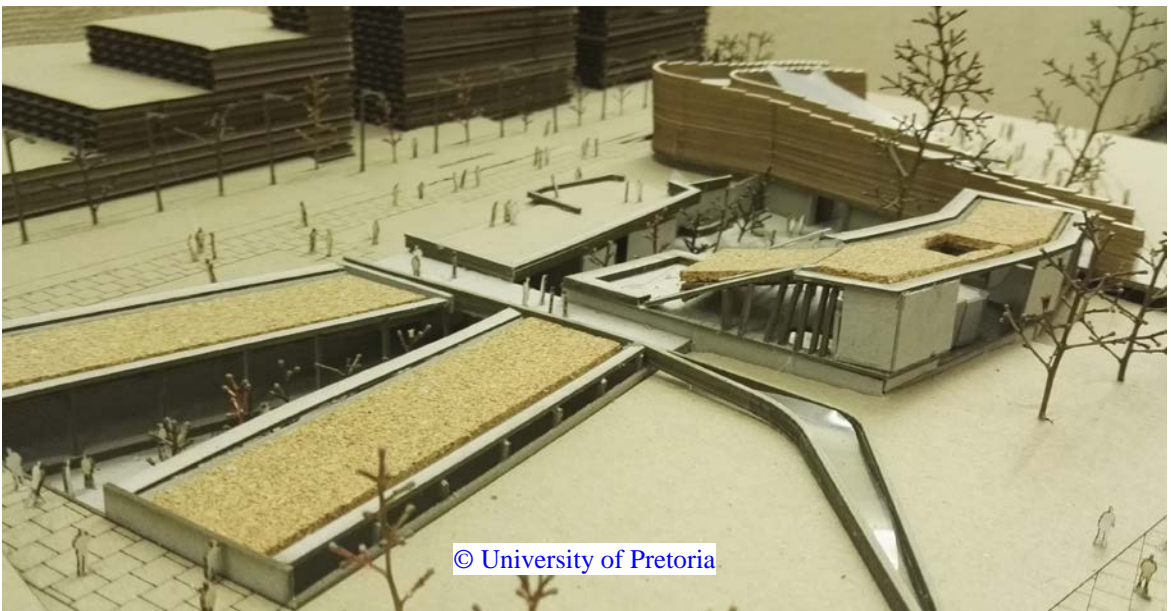
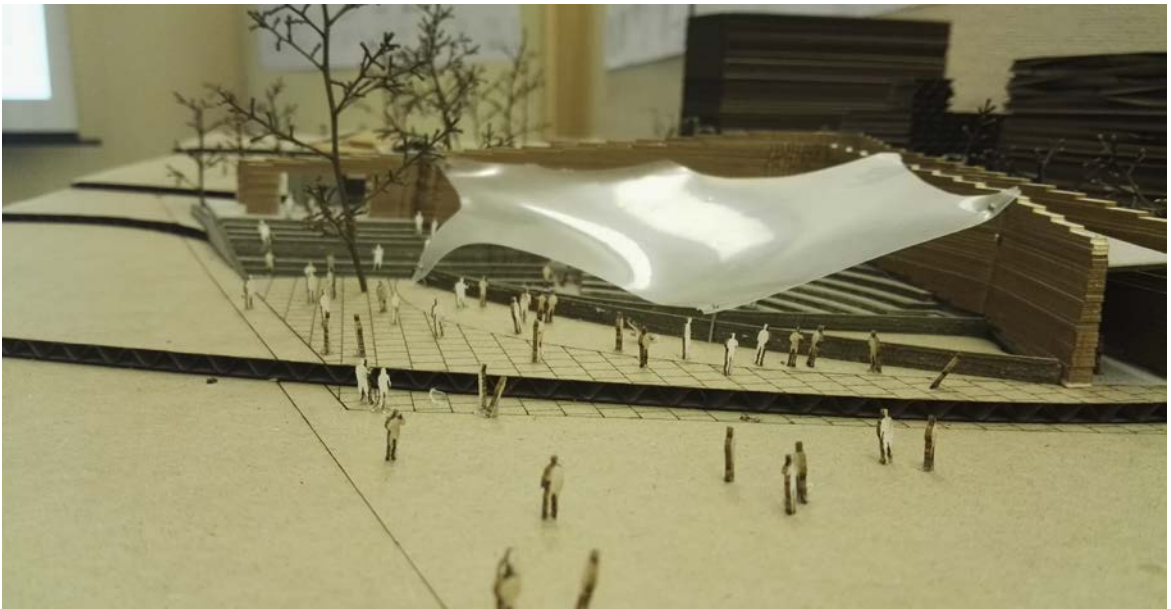
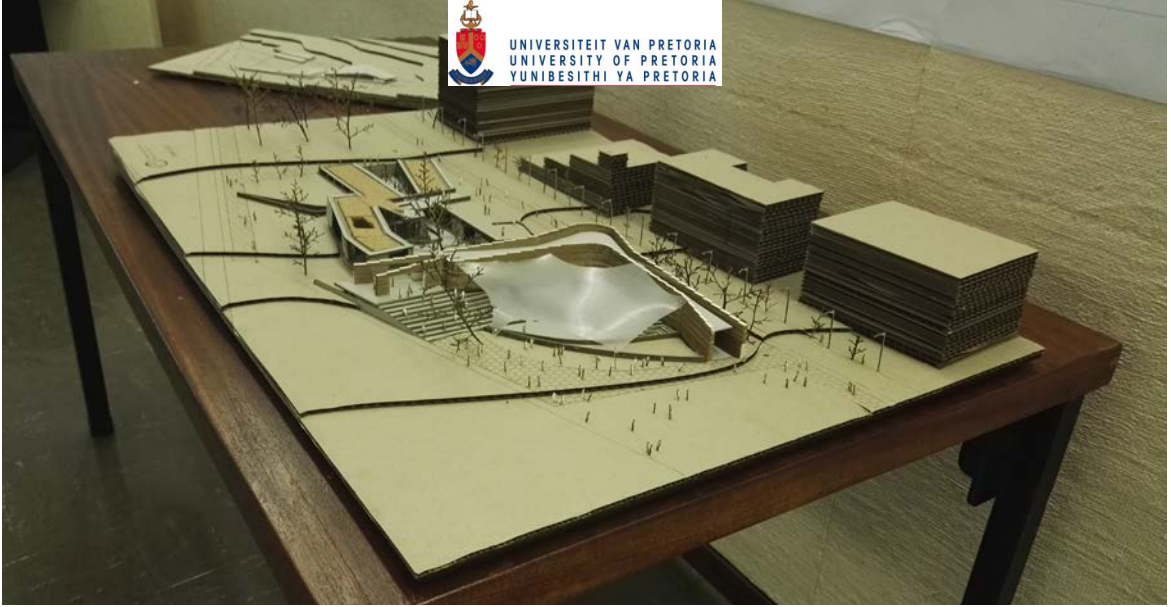


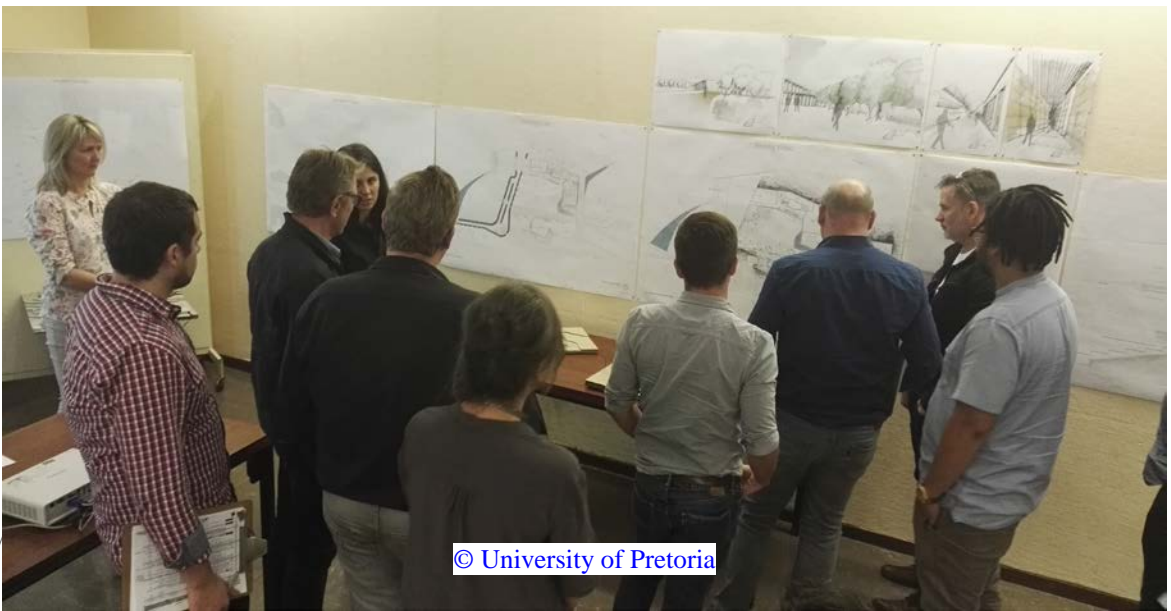
Figure 156 - Photographs of the final 1:200 model.





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Chapter 11:
POSTSCRIPT



In conclusion

During my architectural education I have often been reminded that architecture cannot be used as a tool for social engineering. Reared as architectural student in a school that prides itself on a regional approach, another reminder was always of the importance of context. Despite the success of the second message in my education, the first has always been a fine line that I fondly dwell very near to.

South Africa is littered with unrest and volatility presently. At the departure of this scheme things had slowed after a personal experience of the turmoil watered a seed that had been planted when the only architecture I practiced was with Lego.

“I refused to write about the flight of a bird or growing of a flower (during apartheid). I could not write about that when people are being killed by the system.” James Matthews, South Africa Struggle poet (Kamaldien 2016)

I concede that architecture is not a tool for social engineering, at least not in such direct terms. However, architecture, in times of strife and turmoil both socially and environmentally, can no longer afford to be reduced to a practice of the wealthy, where displays of aesthetics allow it to remain absent from discussions of transformation and radical accountability. Architecture, and architects, need to begin engaging with the issues at hand and create environments that serve an ever-changing society.

As outlined by Da Costa and van Rensburg (2008), bricks and mortar cannot change the lives of people. It is in the programmatic accommodation of our buildings that we fulfil our roles as architects. We cannot simply design buildings that introduce form to pre-determined function; it renders us no more than the draftsmen of others' dreams.

The division between formal and functional issues in architecture diminishes the engagements of architects with issues of power... This division between form and program is an ideological division which is ultimately untenable. It serves to sustain the illusion that architecture can be practiced in a realm of autonomy from social power (Dovey, 1996: 27-28).

In the investigation undertaken herein, I have kneaded issues of my time using the skills of my trade. I have hoped to uncover the realities of what it is South Africans want (democracy) and identified where it lives (public space). I have acknowledged where it plays (parliament) and tried to establish an interplay between these elements on a site that is rife with contestation and conflict. By acknowledging the mundane life of democracy and the extraordinary expectations people have from it, I have hoped to identify the position of architecture within the discourse.

Besides the intricacies of liminal spaces in the programme and theoretical continuum at hand, the value of designing occupiable liminality far surpasses this scheme. By designing liminal spaces; toilets, sidewalks, passages and façades, in a manner that declares them occupiable, we manage to include the 99% as clients of our buildings. This renders architecture the playground for all of humanity, so that our public buildings and spaces become truly public once more.

The realization of this scheme, as with any other addressing a theme that is continually in flux, has raised as many questions as it has answered. It has certainly fueled a curiosity that has burnt for as long as I can remember and has fostered the tools needed to further investigate and experiment.

Opp. page:

Figure 156 - Photographs of the final examination 22 November 2016.



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11.2. Print

- Alkayali, A.** (2011) *Liminal Public Infrastructure*. Pretoria: University of Pretoria.
- Baker, H.** (1909). *The Architectural Needs of South Africa*. **The State, May, Carr, S. et al.** (1992). *Public space*. Cambridge: Cambridge University Press. Cited in (Christenson: 1996).
- Baker, H.** (N.D) *Architecture and Personalities*, cited in **Radford, D.** (1988). Baker, Lutyens and the Union Buildings. *South African Journal of Cultural and Art History*, 2(1), pp.62 - 69.
- Bakker, KA & Muller, L.** 2010. *Intangible heritage and community identity in Post-Apartheid South Africa*, in *Museum International*, Vol 245, No 246. Cited in (Grobbelaar, 2012).
- Bekker, S. and Therborn, G.** (2012). *Capital cities in Africa*. Cape Town, South Africa: HSRC Press.
- Bellah, R** (1967) 'Civil Religion in America', *Dedalus* 97/1, pp.1.21. as cited in **Gentile, E.** (2005). Political religion: a concept and its critics – a critical survey. *Totalitarian Movements and Political Religions*, 6(1), pp.19-32.
- Christenson, E.** (1996). Herbert Baker, the Union Buildings and the Politics of Architectural Patronage. *South African Journal of Cultural and Art History*, 6(1-4), pp.1-9.
- Cusack, A.** (2009). *The Houses of Parliament, Cape Town* [online] Available at: <http://www.andrewcusack.com/2009/die-parlementsgebou/> [Accessed 24 Jul. 2016].
- Da Costa, M and van Rensburg, R.** (2008) Space as ritual: rethinking spatial strategies in the African city. *South African Journal of Art History*, 23:3. Page 43–55.
- Dovey, K.** (1999). *Framing Places: Mediating power in built form*. London: Routledge.
- Fairclough, G., Harrison, R., Jameson, J. and Schofield, J. ed.,** (2008). *The Heritage Reader. 1st ed.* Abingdon: Routledge.
- Gentile, E.** (2005). Political religion: a concept and its critics – a critical survey. in *Totalitarian Movements and Political Religions*, 6(1), pp.19-32.
- Grobbelaar, L.** (2012). *New Royal Theatre*. MProf. University of Pretoria.
- Hillier B & Hansen, J.** (1989) *The social logic of space*. Cambridge: Cambridge University Press, pp.1-49.
- Holland, T.** (2013). *Rubicon: The Triumph and Tragedy of the Roman Republic 40th An. Edition.* (preface) London: Little Brown.
- Huyssen, A.** (2003) *Present Pasts: Urban Palimpsests and the Politics of Memory*. California: Stanford University Press
- Isakhan, B. & Stockwell, S.** (2011). *The secret history of democracy*. Houndmills: Palgrave Macmillan.
- Kingwell, M. and Turmel, P.** (2009). *Rites of way*. Waterloo, Ontario: Wilfrid Laurier University Press.

- King, T and Flynn, M.K.** (2012) Heritage and the post-apartheid city: Constitution Hill, Johannesburg in *International Journal of Heritage Studies*, 18:1, 65-82
- Kertzer, D.** 1988. *Ritual, Politics and Power*. New Haven and London: Yale University Press as cited in Ball (1994)
- Law-Viljoen, B. ed.** (2006). *Light on a Hill: Building the Constitutional Court of South Africa. 1st ed.* Johannesburg: David Krut.
- Macaulay, R.** (1966) *The Pleasure of Ruins*. 2nd Edition. New York: Walker & Company
- Muller, L. and Young, G.** (2005). *Heritage Audit: Union Buildings Estate*. Johannesburg: Newtown Landscape Architects.
- Rand, A.** (2007). *The Fountainhead*. (1994 ed.). London: Penguin.
- Rencken, C. ed.** (1989). *Union Buildings: The first 75 years*. 1st ed. Pretoria: Bureau of Information.
- SA Government** (1996). *The Constitution of the republic of South Africa 1996: The Bill of Rights. Government*, Chapter 2, Article 17, page 8.
- Schacter, D.** (1996). *Searching for Memory: The Brain, the mind and the past*. Harper Collins, pp.39-71.
- Riegl, A.** (1996). *The Modern Cult of Monuments - Its Essence and its Development*. In: **N. Stanley-Price, M. Talley and A. Melucco Vaccaro, ed.**, Historical and philosophical issues in the conservation of cultural heritage. 1st ed. Los Angeles: Getty Conservation Institute, pp.69-83.
- Rousseau, J. and Frankel, C.** (1947). *The social contract*. New York: Hafner Pub. Co.
- SABS** (2011) *The South African National Standards: The application of the national building regulations*. Pretoria: SABS Stabdards Division.
- Tshwane Planning Commissioners and City of Tshwane** (2013) *Tshwane 2055 Vision: Remaking South Africa's Capital City*. Tshwane: City of Tshwane.
- Watson, S. and Studdert, D.** (2006). *Markets as sites for social interaction: Spaces of diversity*. Bristol GB: The Policy Press.
- Young, I.** (1990) *Justice and the Politics of Difference*, Princeton, NJ: Princeton University Press. cited in **Watson, S. and Studdert, D.** (2006). *Markets as sites for social interaction: Spaces of diversity*. Bristol GB: The Policy Press.

11.3. Web

Autodesk (2015) *Lighting and Daylighting Design* [online] Available at: <http://sustainabilityworkshop.autodesk.com/buildings/lighting-and-daylighting-design>. Accessed 20 October 2016.

Betsky, A. (2015). *Times Square and the Reality of Public Spaces*. [online] Architect: Urbanism & Planning. Available at: http://www.architectmagazine.com/design/times-square-and-the-reality-of-public-spaces_o. Accessed 25 Jul. 2016.

Betsky, A. (2015). *Beyond Buildings: The Architecture of Liminal Spaces*. [online] Architect: Urbanism & Planning. Available at: http://www.architectmagazine.com/design/urbanism-planning/the-architecture-of-liminal-spaces_o. Accessed 25 Jul. 2016.

Brecht, C. (n.d.) *Peter Fechter*. [online] Available at: <http://www.berliner-mauer-gedenkstaette.de/en/1962-300,353,2.html>. Accessed 10 October 2016.

Constitutional Court of South Africa (2013) *Visitor's Brochure* [online pdf] Available at: <http://www.constitutionalcourt.org.za/site/thecourt/concourtbrochure-2013.pdf>. Accessed July 2016.

BusinessTech.co.za (2016). *How much it will cost to make Pretoria the only capital city in South Africa*. [online] Available at: <http://businesstech.co.za/news/government/112601/how-much-it-will-cost-to-make-pretoria-the-only-capital-city-in-south-africa/>. Accessed 19 Feb. 2016.

Johnston, L. (2016) *Public Ablutions* [online] Available at: <http://www.ozetecture.org/2012/public-ablutions/#!prettyPhoto>. Accessed 20 October 2016.

Kamaldien, Y. (2016) *Cape poet urges universities to teach his work (Interview with James Matthews)*. [online] Available at: <http://www.iol.co.za/news/south-africa/western-cape/cape-poet-urges-universities-to-teach-his-work-2001889>. Accessed 29 March 2016.

La Shure, C. (n.d.) *What is Liminality?* [online] Available at: <http://www.liminality.org/about/whatisliminality/>. Accessed 27 September 2016.

Harvey, D. (2008). *The Right to the City*. New Left Review, [online] (53). Available at: http://newleftreview.org/II/53/david-harvey-the-right-to-the-city#_edn8. Accessed 8 April 2015.

Gustafson Porter (n.d.) *Diana, Princess of Wales Memorial*. [online] Available at: <http://www.gustafson-porter.com/diana-princess-of-wales-memorial-fountain/>. Accessed 10 October 2016.

GBCSA (2008) *The Inside Guide to Green Star S.A.* [online pdf] Available at: <https://www.gbcsa.org.za/wp-content/uploads/2013/05/FACT-SHEET-Green-Star-SA-Oct-2008.pdf>. Accessed 19 October 2016.

History.com (n.d.) *Ancient Greek democracy*. [online] Available at: <http://www.history.com/topics/ancient-history/ancient-greece-democracy>. Accessed 8 April 2016.

Nelson, J. (n.d.) *Facebook Status* [online] Available at: <https://www.facebook.com/TheNowist>. Accessed 20 September 2016.

News24 (2014) *Mandela bust unveiled at Parliament* [online] Available at: <http://www.news24.com/elections/news/mandela-bust-unveiled-at-parliament-20140428> accessed 27 September 2016.

Page, M. (2008). *Dispatch - Urban Design and Civil Protest. Places Journal*, [online] 20(1), pp.84-87. Available at: <https://placesjournal.org/assets/legacy/pdfs/urban-design-and-civil-protest.pdf>. Accessed 1 Mar. 2016.

Parliament of the Republic of South Africa (n.d.) *Parliament: Public Participation*. [online] Available at: http://www.parliament.gov.za/live/content.php?Item_ID=28. Accessed 20 April 2016.

PPS.org (n.d.). *Streets as Places - Project for Public Spaces*. [online] Project for Public Spaces. Available at: <http://www.pps.org/reference/streets-as-places/>. Accessed 26 Sep. 2016.

PPS.org (n.d.) *Signature Places: Great Parks we can Learn From*. Available at: <http://www.pps.org/reference/six-parks-we-can-all-learn-from/>. Accessed: 9 October 2016.

SA History (2011) *Pretoria timeline 1800-2009*. [online] Available at: <http://www.sahistory.org.za/topic/pretoria-timeline-1800-2009>. Accessed 20 February 2016.

SA History (2013) *Prehistory of Pretoria*. [online] Available at: <http://www.sahistory.org.za/topic/prehistory-pretoria>. Accessed 20 February 2016.

Savastio, R. (2013) *Icelanders Overthrow Government and Rewrite Constitution After Banking Fraud-No Word From US Media* [online] Available at: <http://guardianlv.com/2013/12/icelanders-throw-government-and-rewrite-constitution-after-banking-fraud-no-word-from-us-media/>. Accessed 20 March 2016.

Schutte, C. (2016). *The Birth of the Union Buildings* [online] Theheritageportal.co.za. Available at: <http://www.theheritageportal.co.za/article/birth-union-buildings>. Accessed 6 April 2016.

South African Government (2016) *Water and Sanitation embarks on a Water Saving Campaign in Bushbuckridge* [online] Available at: <http://www.gov.za/speeches/water-and-sanitation-embarks-water-saving-campaign-bushbuckridge-6-oct-2016-0000>. Accessed 19 October 2016.

Shakur, T. (1994) *Tupac Shakur: In his own words MTV* [online video clip] Available at: <https://www.youtube.com/watch?v=D1TQU1gsTcVY>. Accessed 23 August 2016.

The Commonwealth (n.d.) *Botswana: Constitution and Politics* [online] Available at: <http://thecommonwealth.org/our-member-countries/botswana/constitution-politics>. Accessed 8 April 2016.

Trigg, D. (2010) *Architecture and Nostalgia in the Age of Ruin*. [lecture transcript, online] Available at: https://www.academia.edu/208447/Architecture_and_Nostalgia_in_the_Age_of_Ruin. Accessed 8 August 2016.

Tshiqi, B. (2015) *Why protesters often have no other choice but to burn public property*. [online] Available at: <http://www.timeslive.co.za/local/2015/05/08/why-protesters-often-have-no-other-choice-but-to-burn-public-property1>. Accessed 23 August 2015.

UN (1948) *Universal Declaration of Human Rights* [online pdf] Paris: United Nations. Available at: <http://www.un.org/en/universal-declaration-human-rights/>. Accessed 11 February 2016.

UN (n.d.) *The human right to water and sanitation* [online] Available at: http://www.un.org/waterforlifedecade/human_right_to_water.shtml. Accessed 19 October 2016.

Van Eyck, A. (1968) *Doorstep*. In team 10 primer, ed. **Alison Smithson**. London: Studio Vista: 96-104. As cited in n.a. (n.d.) Liminal Theory and Principles [online] Available at: http://arch.ttu.edu/wiki/Liminal_Theory_and_Principles. Accessed 27 September 2016.

Whyte, W. (1988). *The Social Life of Small Urban Spaces*. [video] Available at: <https://www.youtube.com/watch?v=MjxXTsHgc8g>. Accessed 21 May 2016.

Wikipedia (2016). *Gettysburg Address*. [online] Available at: https://en.wikipedia.org/wiki/Gettysburg_Address#cite_ref-Borrit_18-0. Accessed 25 May 2016.

Woods, L. (2012). *Beyond Memory*. [Blog] Lebbeus Woods. Available at: <https://lebbeuswoods.wordpress.com/2012/03/22/beyond-memory/>. Accessed 4 October 2016.

11.4. Images & Video

AKE, D.J. (2013) *A visitor at the Vietnam Veterans Memorial in Washington passes early in the morning on Veterans Day, Nov. 11, 2013, to look at the names inscribed on the wall.* [online image] Available at: <http://abcnews.go.com/Politics/heartbreak-hope-quest-add-74-names-vietnam-memorial/story?id=23276750>. Accessed 10 October 2016.

Alexander, K. (1991) *Black Eagle* [painting] in Robbins, D. (2000) *Keith Alexander: The Artist in Retrospect*. Jonathan Ball Publishers: Johannesburg, p109.

Baker, H. (1909) *Preliminary water-colour sketch for the Union Buildings, dated 25th June 1909.* in B (1996). Herbert Baker, the Union Buildings and the Politics of Architectural Patronage. *SAJAAH*, 6(1-4), pp.1-9.

BBC (2016) *Students forced their way into the parliamentary complex.* [online image] Available at: <http://www.bbc.com/news/world-africa-34592523>. Accessed 27 September 2016.

Beier, C. (2010) *Berlin wall Memorial in the Bernauer Strasse, Berlin, Germany.* [online image] Available at: <http://www.cbpictures.com/media/c501873c-b403-11df-bc04-00270e1b481a-berlin-wall-memorial-in-the-bernauer-strasse-berlin-germany>. Accessed 16 October 2016.

Bennet, L. (2015) *Minister of Higher Education Blade Nzimande addresses students who are protesting outside of parliament on October 21, 2015 in Cape Town, South Africa.* [online image] Available at: <http://www.timeslive.co.za/politics/2015/10/22/Students-held-Blade-Nzimandes-staff-hostage>. Accessed 27 September 2016.

Bothma, N. (2016) *A general view of the National Assembly in parliament in Cape Town.* [online image] Available at: <http://www.dispatchlive.co.za/news/2016/04/05/anc-seen-saving-zuma-in-impeachment-vote/>. Accessed 27 September 2016.

Buchanan, A. (2010) *The Olympic Sculpture Park.* [online image] Available at: <http://www.landazine.com/index.php/2011/12/seattle-landscape-architecture/>. Accessed 16 October 2016.

CNN (2013). *Children waved South African flags at the Milton Mbekela school in the village of Qunu, Mr Mandela's boyhood home.* [online image] Available at: <http://www.african-sweetheart.com/2013/07/happy-95th-birthday-to-former-south.html>. Accessed 24 July 2016.

Cusack, A. (2009) *Henry Freeman's original design for the Parliament Building.* [online image] Available at: <http://www.andrewcusack.com/2009/die-parlementsgebou/>. Accessed 24 July 2016

Datter, T. (2009) *Coyote fountain in the Jardin del Centenario in the center of the borough of Coyoacan in Mexico City.* [online image] Available at: <https://commons.wikimedia.org/wiki/File:CoyoteFountainCentenarioDF.JPG>. Accessed 9 October 2016.

Dept. Public Works (1910) *Union Buildings Estate Site Plan.* In: Muller, L. and Young, G. (2016). Heritage Audit: Union Buildings Estate. Johannesburg: Newtown Landscape Architects.

De Wall, J. & Przywecki, W. (2016) *Photos of Richard Lepastrier's Public Ablutions* [online images] Available at: <http://www.ozetecture.org/2012/public-ablutions/#!prettyPhoto>. Accessed 20 October 2016.

Ernst de Jong Studios (1966) *Photograph of Church Square and the Transvaal Provincial Administration building by night*, used as back cover of brochure: Transvaal Provincial Administration inauguration of the Provincial Building by the State President, Mr C.R. Swart November 27, 1963 [historical brochure]. Pretoria: South African Government.

Grey, C.G.P. (2005) *Diana, Princess of Wales Memorial Fountain* [online image] Available at: https://en.wikipedia.org/wiki/File:Diana,_Princess_of_Wales_Memorial_Fountain.JPG. Accessed 10 October 2016.

Ives, S. (2015) *Monday's Monument: Peter Fechter Memorial Obelisk, Berlin*. [online image] Available at: <http://www.sanantoniopeace.center/mondays-monument-peter-fechter-memorial-obelisk-berlin/>. Accessed 10 October 2016.

Johnston, R.K. (2012) *Marking the location of the Berlin Wall*. [online image] Available at: <https://rkeithjohnson.wordpress.com/2013/02/10/germany-2012-5/>. Accessed 10 October 2016.

Livemag (2015) *#FeesMustFall: The historic week in pictures* [online image] available at: <http://livemag.co.za/vip/feesmustfall-week-in-pictures/> Accessed 29 September 2016.

Maduna, L. (2016) *A scuffle between Economic Freedom Fighters MPs and Parliamentary Protection Services during President Jacob Zuma's 'Question and Answer' session in Parliament on May 17, 2016 in Cape Town*. [online image] Available at: <https://www.enca.com/south-africa/no-more-overalls-in-parliament>. Accessed 27 September 2016.

Mock, F.L. (1994) *Maya Lin: Strong Clear Vision*. [film] USA: Freida Lee Mock.

N.A. (1911) *Union Buildings Estate Site Plan*. in: **Muller, L. and Young, G.** (2005). *Heritage Audit: Union Buildings Estate*. Johannesburg: Newtown Landscape Architects.

N.A. (2010) *Berlin Wall* [online image] Available at: <https://obscurelight.wordpress.com/>. Accessed 10 October 2016.

N.A. (2010) *Mexico city coyoacan around plaza bidalgo and centennial gardens*. [online image] Available at: <https://georgeinmexico.wordpress.com/2010/07/11/frida-diego-bullfighters-mummies-and-more-georges-guide-to-mexico-city-%E2%80%93-south-of-the-center/>. Accessed 9 October 2016.

N.A. (2016). *The final Parliament building as constructed (without statues, dome or fountains)*. [online image] Available at: https://en.wikipedia.org/wiki/Houses_of_Parliament,_Cape_Town#/media/File:Parliament_of_the_Cape_of_Good_Hope_-_CapeArch.jpg. Accessed 27 September 2016.

N.A. (2016) *Winter Sculpture Fair returns to the Nirox Foundation Sculpture Park*. [online image] Available at: <http://www.mediaupdate.co.za/media/104768/winter-sculpture-fair-returns-to-the-nirox-foundation-sculpture-park>. Accessed 16 October 2016.

N.A. (n.d.) *Diana Memorial Fountain* [online image] Available at: <https://www.royalparks.org.uk/parks/hyde-park/things-to-see-and-do/memorials,-fountains-and-statues/diana-memorial-fountain>. Accessed 10 October 2016.

National Park Service (n.d.) *Vietnam Veteran's Memorial*. [online image] Available at: <http://www.historybyzim.com/2012/06/maya-lin-the-vietnam-veterans-memorial/>. Accessed 10 October 2016.

Price, G. for **eThekweni Municipality** (2009). *Greening Durban: Water Conservation Guideline*. Durban: eThekweni Municipality. Available at: http://www.durban.gov.za/City_Services/development_planning_management/environmental_planning_climate_protection/Publications/Documents/GG_Water_Guide.pdf Accessed 14 Sep. 2016.

Primi Piatti (2015) *Redbull Xfighters eventspace*. [online image] <http://www.primi-world.co.za/primi-food-stall-at-red-bull-x-fighters/>

SABC (2015). *Police fire stun grenades at protesting students*. [online image] Available at: <http://www.sabc.co.za/wps/wcm/connect/af856f004a50904c9fdedf6d39fe9e0c/Stun-Grenades-Fees-Must-Fall.jpg?MOD=AJPERES&CACHEID=af856f004a50904c9fdedf6d39fe9e0c>. Accessed 26 September 2016.

SABC (2015). *Students throwing rocks at police*. [online image] Available at: <http://www.sabc.co.za/news/a/06d982004a5172109061db6d39fe9e0c/Students-divided-over-Fees-must-fall-outcome-20151024> Accessed 26 September 2016.

Sowetan (2015) *Students from several universities protested at the Union Buildings in Pretoria last year*. [online image] Available at: <http://www.bdlive.co.za/opinion/2016/02/29/history-could-douse-campus-infernos>. Accessed 29 September 2016.

Thurn, J.F. (1995) *Berlin, East Side Gallery*. [online image] available at: https://en.wikipedia.org/wiki/File:Bundesarchiv_B_145_Bild-F088809-0038,_Berlin,_East_Side_Gallery.jpg. Accessed: 10 October 2016

Zhao, S. (2010) *National Council of Provinces interior* [online image] Available at: https://en.wikipedia.org/wiki/National_Council_of_Provinces#/media/File:National_Council_of_Provinces_of_South_Africa.jpg. Accessed 27 September 2016.

Zhang, H. (2016) *The Hillside Eco Park* [online image] Available at: <http://www.landezine.com/index.php/2016/09/the-hillside-eco-park-by-zt-studio/>. Accessed 16 October 2016.



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ADDENDUM