The interior boundary: Spilling out into Braamfontein, Johannesburg

by
Elaine de Beer

Submitted in partial fulfilment of the requirements for the degree Master of Interior Architecture (Professional)
Department of Architecture
Faculty of Engineering, Built Environment and Information Technology
University of Pretoria
Studyleader: Elana van der Wath

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Abstract

The façade as boundary is studied in an attempt to create a public ground floor where boundaries start functioning as thresholds. It could be argued that the boundary [potential threshold] becomes the introduction to the interior space. The study will explore the effect of an interior application on its surrounding urban context and whether an interior intervention can add a positive contribution to the neighbourhood regeneration. The perceived limit of interior design will be extended to include the boundary as an integral part of the design. The project will address the lack of communication between the interior and the exterior context. The boundary will be considered the end of exterior space and the start of interior space. The theory is applied to a site located in Braamfontein, Johannesburg.

Abstrak

Die façade as grens is bestudeer in ‘n poging om die grond vloer in publieke ruim te omskep waar grense as drumpels optree. Die grense [potensiele drumpels] word gesien as die eerste ontmoeting met die binneruim. Die study verken die effek van die binneruim op die omliggende stedelike konteks en of binne ontwerp ‘n positiewe bydra kan lewer tot die heropbou van die omgewing. Die waargenome beperkinge tot binne ontwerp word uitgebrei om die grens as ‘n integrale deel van die ontwerp te sien. Die projek wil die gebrek aan kommunikasie tussen die binneruim en die omliggende konteks aanspreek. Die grens word gesien as die einde van die buiteruimte en die begin van die binneruimte. Die teorie word toegepas op die verkose bouterrein wat in Braamfontein, Johannesburg, geleë is.

Figure i: Nelson Mandela Bridge (Childs, 2012)

Full dissertation title	The interior edge: spilling out into Braamfontein, Johannesburg
Submitted by	Elaine de Beer
Study leader	Elana van der Wath
Degree	Master of Interior Architecture (Professional)
Department	Architecture
Faculty	Faculty of Engineering, Built environment and Information technology
University	University of Pretoria
Programme	Mixed use building with public, semi-public, semi-private and private areas
Site description	Site adjacent to unused alleyway, in the centre of upliftment in Braamfontein, with great potential to contribute to the overall urban environment
Client	Andrew Bannister
Site location	Erf 2791 and 2793, Johannesburg
Address	9 de Beer Street, Braamfontein, Johannesburg
GPS Coordinates	S26o11'38.0" E28o02'05.7"
Architectural Theoretical premise	The interior boundary and its importance
Architectural Approach	Opening the ground floor of the building for public use, with the boundary blurred, spilling the interior out into the urban environment
Research field	Urbanism and Human settlement

I have strength for all things in Christ Who empowers me
-Philippians 4:13

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1.1 Introduction

Interior architecture is a hot topic. The South African Institute of the Interior Design Profession (IID, 2012) is currently underway to establish Interior Architecture as a professional discipline. The discipline is new and still defining itself among architects and designers. In the uncertainty students, academics and practitioners have tried to establish a niche in which to operate, each responding to what they think it should be. Looking back at my four previous years of study, one theme and problem kept arising - the perceived limits of the discipline, i.e. where does the responsibility of the interior architect begin and where does it end? This dissertation strives to question these limits of the discipline.

In his dissertation, Interior design as architecture's 'Other', Raymund Königk defines interior design as follows: "Interior design is a mode of cultural production which engages in the design of enclosed spaces in existing structures, with emphasis on the design of volume" (2010:60). From this definition *found space* can be considered the 'site' of interior architecture. The definition of interiority, as put forward by Christine McCarthy (2005) to explain defined space, expands on the extent of the realm of interior architecture, where space can be considered interior as long as it is defined, intimate and forms a part of an enclosure of some sort. This interior space can exist within the envelope, on the boundary between the interior and exterior, or even just touching the existing building. All of these inside-outside spaces have a direct influence on the character and aesthetic of the building and should be included in the responsibility of the interior architect. The definitions concerning interiority are further discussed in chapter 3.

A building that is designed without consideration of the effect on the surrounding environment is isolated. Insular buildings are created by ignorance of the exterior context and influence. These buildings limit the interaction level with the public environment, prohibiting social contact between residents. How the building stretches out and affects the exterior must be considered to create a meaningful and successful project on an interior level. For the successful integration of a building into its environment, the boundary plays an important role. The boundary can be considered the introduction to interior space, linking the exterior to the interior. The boundary therefore represents an extension of the interior and should be addressed as a part of it. Boundaries can act as either barriers or thresholds, where barriers have a negative influence on the interior-exterior relationship and thresholds have a positive influence. These terms are explored further in chapter 3.

A blurred boundary can create an active edge and threshold. This boundary will affect both the interior and the exterior and become an important role player in the urban context and the interior design. Activated boundaries form the main connection point between interior environment and exterior context. As part of this dissertation the crossover point from interior space to exterior space, i.e. the boundary, is the main focus. The emphasis is on the primary boundary which is investigated in detail along with secondary and tertiary boundaries, towards both the interior and the exterior, resolved as extensions of the primary boundary. This layered boundary concept is illustrated in figure 1.2.

The aim of the study is to establish the connection between the interior and the surrounding urban environment. Areas that are undergoing regeneration on a larger

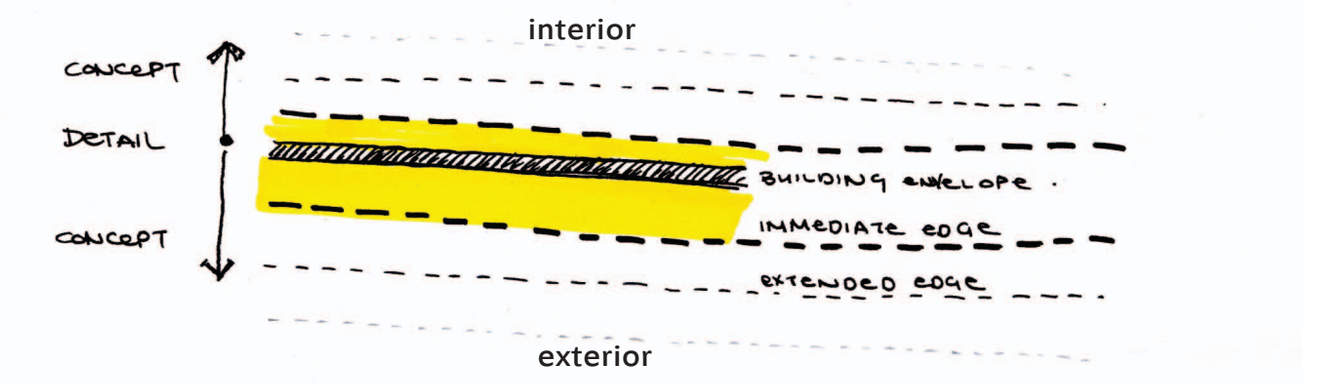

Figure 1.2: Primary and secondary boundaries

scale provide the opportunity for the interior scale regeneration project to contribute to the overall area amenity. This connection will be examined best in an area where urban regeneration is already taking place, but is still in its infancy, providing an opportunity to connect with the momentum already established. The Johannesburg precinct of Braamfontein was identified as an opportune area. A framework, which responds to existing frameworks and built environment, is required. Such a framework will focus on creating a people-oriented cityscape where residents are encouraged to interact with the buildings and streets of the city.

The most important criterion for site selection for this study, is the level of boundary exploitation available. A viable site was found at 9 De Beer Street, Braamfontein, a site with an uncommunicative façade, an inactive alleyway with a lot of potential for intervention, an obstructed courtyard and an underutilized rooftop. All of these inactive spaces form the boundaries of the building and currently act as barriers to unleashing the potential of the site.

In chapter 2 the neighbourhood, block and site are analysed in terms of functionality and activity levels. The surrounding block is analysed in terms of the building uses, contributing to the context of the site, the streets around the site to understand the way the block currently functions and the way people use the block. A comprehensive building analysis is presented, which encompasses the original intent of the building, the materials, the current function and the character of the building. The building was interacted with on a personal level, to aid understanding of the intricate detail of the building, its users and processes.

Arising from the analysis, a conceptual approach is formulated in order to provide direction to all design decisions. The concept is then applied to all areas of the design with the focus on the boundary design. The design aims to introduce public spaces into the site facilitating the transition from public to private space. Supporting functions are introduced into the site to create interest and activity and draw people in. The new functions are all supplementary to the existing function of the building, reinforcing the current activities. The current function is considered critically and examined on a conceptual level, exploring what it could become if redesigned. The conceptual approach is further explained in chapter 4, followed by the design resolution in chapter 5.

A number of details are resolved technically in chapter 6. These details have been selected to enhance the understanding and exploration of the theme of 'boundary'.

1.2 Problem Statement

In her article, 'Towards a definition of Interiority' (2005:116), Christine McCarthy explores the concept of the extended interior as follows: "Inside and outside are architectural prescriptions tied to the boundary of building, whereas interiority and exteriority weave within and without the built constraints of architecture, sometimes between them, and sometimes independent of them." The interior edge or boundary and the building edge therefore do not necessarily always coincide. An interior can fall on the building edge in some designs, but it can also extend beyond the envelope of the building. The interior boundary is dependent on interiority, whereas the building edge is defined by the envelope of a building. Any well-defined space can therefore be considered interior, presenting qualities of intimacy, user-specific scale, enclosure etc.

Interiority is created wherever a space is defined. This definition of space can be achieved by using several different elements, each creating boundaries in a different manner. A boundary need not always consist of wall, floor and ceiling. In her article McCarthy (2005) argues that even a step, or change in atmosphere could create a boundary to a defined space.

The investigation further looks at 'island' interventions – interior interventions that function in isolation and are perceived as inaccessible spaces - and the lack of communication between interior design and the exterior context that is often the norm. An interior space can be completely removed from the exterior and does not necessarily respond to the exterior context. This separation is heightened when the design of the boundary is neglected. Brooker and Stone (2010:134) state: "the detailed manner in which an interior is expressed can be separate and disconnected from the exterior. The quality of the interior space can reference only itself, that is, be independent of outside influence and have little or no relationship with the host building." These enclosed areas of intervention result in island interventions. Island interventions do not contribute positively towards their surrounding neighbourhoods because of their isolated nature. They are the result of deactivated edges and dead façades, but conversely also create these inactive edges.

This disconnected form of building is currently the reality in Braamfontein, where most buildings only reference themselves with little interaction with the broader context. This separation prevents the interior intervention from having any influence on neighbourhood regeneration.

The interior is therefore disjoined from the context, rendering it obsolete as an urban intervention.

This communication barrier between the interior and exterior should be breached to create informed and contextual interior designs that have the potential to contribute to their surrounding environments. In *Basics Interior Architecture: context + environment*, Brooker and Stone write: "A building or interior occupies a unique situation; it is inherently connected to its site. This particular location or context contains a series of distinct qualities and possibilities. The designer can analyse and reveal these properties and use them to deepen and expand the quality of the interior" (2008:10). Contextual interiors therefore create added layers of meaning to the design, strengthening the intervention.

The dissertation also investigates the boundary of the interior as a catalyst for design. Accessible interior spaces require active and well-considered boundaries. The boundary of the space should not be ignored, but should rather inform and influence the design. A successfully integrated boundary will result in an interior space that can have an effect on its immediate exterior context, providing opportunity for contribution to the surrounding neighbourhood and eventually even urban scale regeneration. For a building to have such an influence, it should be opened up to public interaction by turning boundaries into thresholds. This change increases the opportunity for interaction with the interior. The boundary, or potential threshold, is the interaction between the exterior and the interior, which should be in dialogue with each other. In a high rise building, the ground floor must act as the threshold to the rest of the building. The interior is in essence dependent on the character of the exterior skin of the building. The façade and ground floor of a building should therefore be exploited as opportunities for interaction.

The street can be considered the first connection between the interior environment and the neighbourhood context. This boundary presents the biggest opportunity for the interior designer to contribute to the urban environment. This influence begins at the boundary and extends to the street. The effect that the design has on the street can then in turn have the ability to influence the block, the block can influence the neighbourhood and the neighbourhood can have an influence on the greater urban environment. This process can also be reversed to focus on interior environments, where the threshold has the potential to influence the passage, and the passage can influence the room. This process is explained through the diagram in figure 1.3.

This dissertation investigates why it is necessary for interior spaces to be linked to exterior spaces and how interior interventions can contribute positively to building, street and eventually to neighbourhood regeneration. The study is particularly

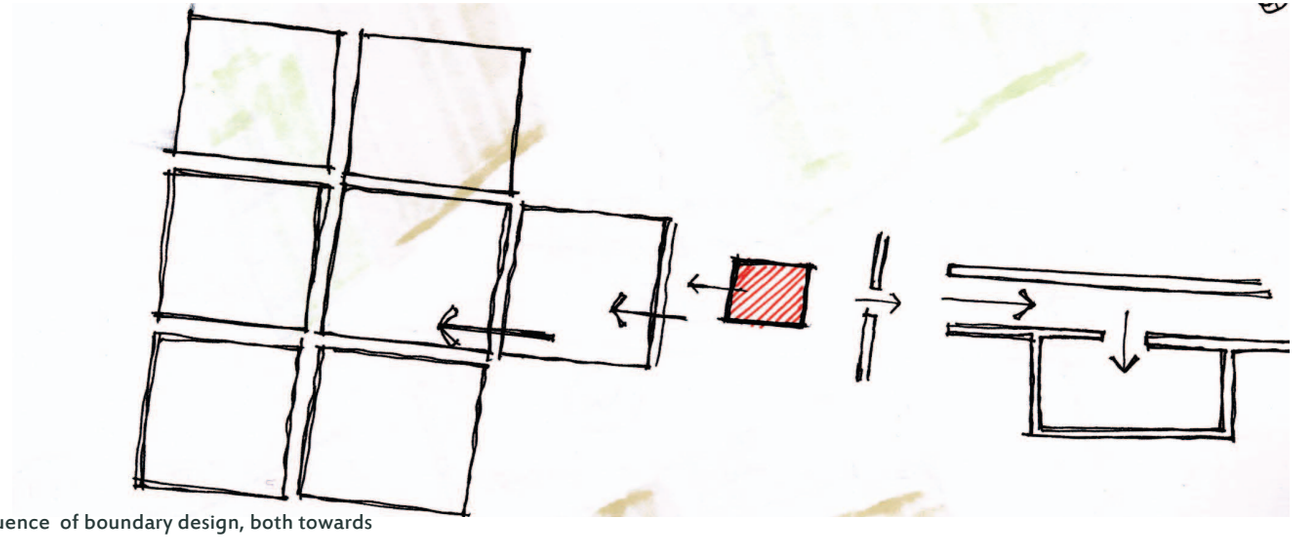

Figure 1.3: Diagram illustrating the possible influence of boundary design, both towards the exterior and interior environments.

concerned with the boundary condition and how barriers might be converted into thresholds in existing buildings such as 9 de Beer Street, Braamfontein.
The aim of the study is to investigate the crossing of boundaries, the different elements constituting boundaries and the hierarchy of different boundaries. The focus will fall on the primary boundary crossed between interior and exterior environment at the level of the building envelope.

The ideal neighbourhood would consist of accessible interior spaces that are open to the enjoyment of all users of the city, allowing a free and socially engaging interaction space at ground floor level.

1.3 Importance of study

The project strives to create a link between the interior and exterior through the particular design of boundary. The interaction with the boundary of the design becomes important to test the success of the project. The boundary can be seen as a transitional space and the introduction to interior space. It should also be comfortable and alluring. By means of this study, the researcher is investigating the importance of the boundary as the link between interior and exterior space.

The study focuses on a specific site, one which is unique, but which represents numerous sites with similar boundary-related problems. An investigation such as this may lead to positive changes in areas with on-going neighbourhood regeneration. The study aims to illuminate design principles than can be employed in other sites to address these problems.

1.4 Assumptions and Delimitations

The study includes the exploration of the boundary and the extension of interior space. The study does not address exterior space independently. Only the edges of the chosen site are explored. However, these represent edges from other sites with similar problems. The edges of the chosen site are to be studied with the goal of creating thresholds, public and transitional spaces. All edges studied should be linked to or adjacent to existing interior space.

The proposal does not necessarily work parallel to the owner's ideal of renovation, but it does acknowledge the overall master plan for Braamfontein.

It is assumed that the hotel will be closed for the remainder of the additions and alterations, as well as the shop on the first floor being vacant.

chapter 2

Figure 2.1
De Beer Street view

Figure 2.2
9 De Beer Street

Figure 2.3
9 De Beer Street with alleyway

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2.1 Introduction

The approach to the dissertation is to identify a site that is appropriate for the testing of the problem statement and to develop the project from there. The site informs the direction of the dissertation and it also determines the extent to which the problem can be evaluated. The site selection is therefore important and was done with care to ensure the best opportunity for exploitation of the boundary.

2.1.1. Methodology

In undertaking the proposed project a number of research methods are employed to analyse and investigate the site, i.e. the real-world problem. The methods are listed and explained below:

o The Information Flaneur

The Flaneur can be divided into the methods of perception of the Curious Explorer or the Critical Spectator (Dörk, Carpendale & Williamson, 2011:2). The flaneur in the form of the curious explorer was utilised to further analyse the chosen site. The curious explorer can be defined as: "The flaneur appears to have no goal; rather, experiencing city life is his primary aim. Without becoming fully part of it, he passes through squares and crowds making sense of the city" (Dörk, Carpendale & Williamson, 2011:2).

The chosen site was visited several times to experience and observe it at different times of day and on different days of the week. The author also spent a night in the hotel to observe clearly the sounds, smells, time schedule and people associated with the site currently. The combination of these activities provided the researcher with a clear understanding of how the site operates.

o Qualitative research

According to Ospina (2004:2), qualitative research is the study of an object in its context in an attempt to understand it. The chosen building therefore cannot be separated from its surrounding context to truly understand how it functions. The qualitative approach can further be described as the grounded theory method. This method is described by Groat and Wang (2002:180) as follows: "..the researcher seeks to enter a setting without present opinions or notions, lets the goings-on of the setting determine the data, and then lets a theory emerge from that data."

Qualitative research was conducted through means of photographs, videos and lived experience.

o Dérive

"In a dérive one or more persons during a certain period drop their relations, their work and leisure activities, and all their other usual motives for movement and action, and let themselves be drawn by the attractions of the terrain and the encounters they find there." (Debord, 1958)

The dérive was utilized to explore the elements around the site that draw in visitors and offer attraction points.

2.1.2. Research strategy

The first step was to analyse the dead façade and surrounding spaces of the chosen site to understand the current levels of activity. The aim of the analysis is to identify possible areas of activation in the area surrounding the building, as well as the building self. Active edges were also investigated in the form of surrounding buildings as well as by means of precedent studies.

The current edges of the site will be identified and analysed. Focus will be given to all edges that have direct contact with interior space, or are relevant to interior space. After the analysis, the process of redesign will take place with the intention of linking to and contributing to the existing urban revival surrounding the site.

2.2 Neighbourhood selection

In selecting a possible site, different neighbourhoods in Johannesburg where upliftment and regeneration projects are taking place were considered. Newtown, the Maboneng precinct and Braamfontein were identified as possible locations for intervention.

Braamfontein was identified as the area with the most potential for urban contribution, because the regeneration is still in its infancy. This provides the biggest

Figure 2.4
South Africa, showing Gauteng (Plak, 2012)

Figure 2.5
Map of Gauteng (SA Places, 2012)

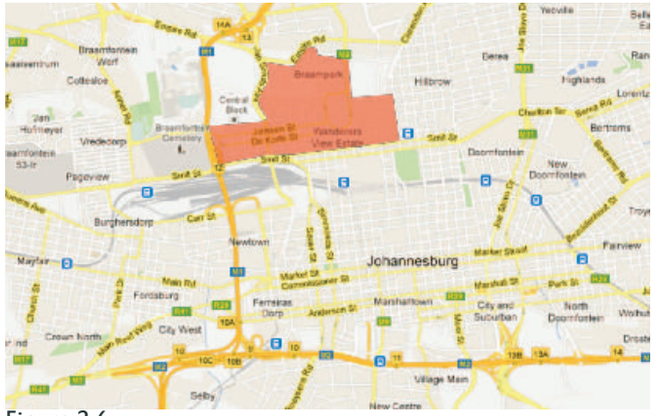


Figure 2.6
Johannesburg showing Braamfontein (Google Earth, 2010)

opportunity to slot into the regeneration process. Figures 2.4 - 2.6 depicts the Braamfontein context. Figure 2.8 on page 14, shows the selected block and site of interest.

Existing regeneration projects that have been implemented are considered very successful and have been well received (Braamfontein development projects, 2011). The Braamfontein neighbourhood has undergone numerous acts of upliftment, mostly to the exterior urban environment, in the form of sidewalk clean ups, installation of public art, upgrading of parks, removal of informal trade and heightening of security (Braamfontein development projects, 2011). Two main developers, Play Braamfontein and South Point, have also contributed positively to the number of regeneration activities in the area.

Through closer neighbourhood analysis it became evident that throughout Braamfontein, nodes of development have been established, each one contributing to the overall upliftment of the larger neighborhood. New developments implemented since 2003 include (fig 2.7):

- Neighbourgoods market (By Play Braamfontein)
- Art on Juta (By Play Braamfontein)
- Randlords (By South Point)
- Lamunu Hotel (By South Point)
- Stevenson Gallery (Independent)

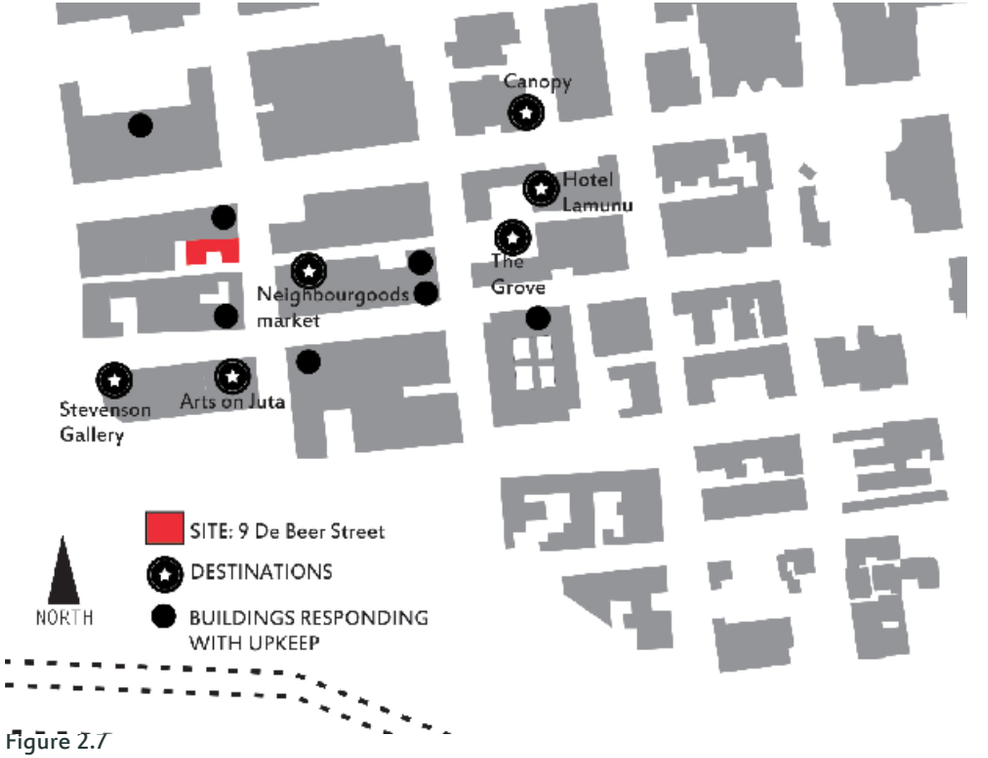


Figure 2.7
Buildings responding with upkeep in the area

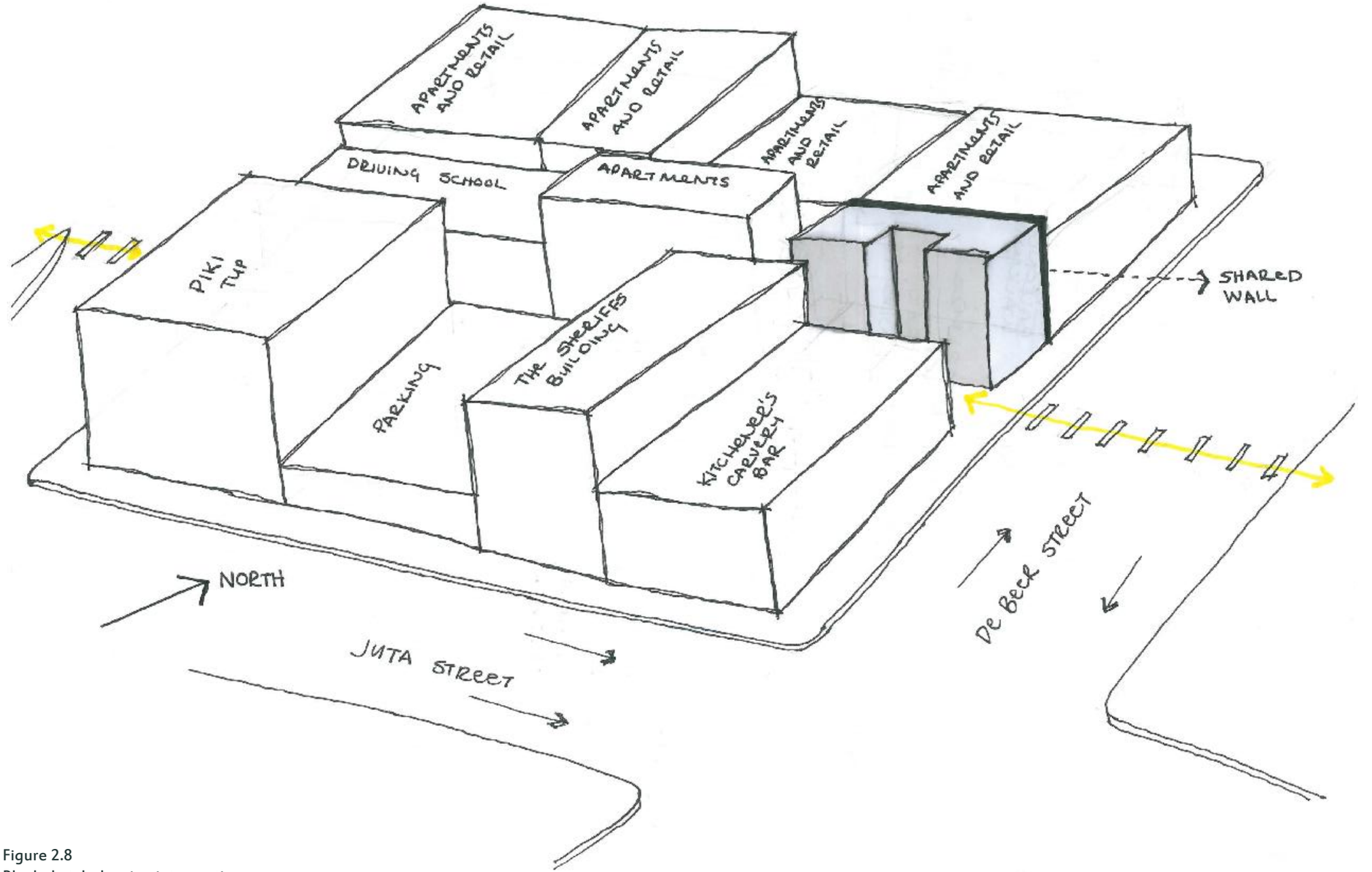


Figure 2.8
Block sketch showing intervention

Several buildings in the area have responded with upkeep and restoration, each one affecting Braamfontein and its overall status in a positive manner. Figure 2.7 indicates destination spaces in the area, as well as buildings that are responding to the regeneration taking place.

From this analysis it can clearly be seen that the regeneration in Braamfontein is picking up momentum. Buildings are affecting each other in a positive manner to build on the successes of other interventions. This process allows the uplifted areas to expand and influence the surrounding neighbourhood.

In a similar way, this expansion, provides the opportunity for an interior intervention to slot into the movement and also contribute to its surrounding environment.

2.2.1 History of Braamfontein

Braamfontein was originally intended to be a residential area for workers of the mines in the CBD, and the workers of the Brickfields to the west of Braamfontein (Contemporary Braamfontein, 1968:3). Later, Braamfontein received partial business rights and a small strip was dedicated to light industry (Contemporary Braamfontein, 1968:9).

Braamfontein is situated on the edge of the Johannesburg CBD and is considered as part of the business district. Decay in the inner city started taking place in the 1990's with Braamfontein suffering the consequences (Minors,2010). "Lying just outside the Johannesburg CBD, north of the city, Braamfontein suffered a literal exodus of businesses and institutions as the centre of Johannesburg moved out to Sandton and the northern suburbs, but it never decayed as some of the inner city has done. Instead, Braamfontein has become home to a less formal economy" (Gauteng Destinations: Braamfontein, Johannesburg. n.d.).

After the entry of less formal businesses the vacancy level increased and the public environment started to degrade (Darroll, 2003:26). The problem factors that were identified in Braamfontein are diverse. Numerous solutions needed to be implemented in conjunction with each other to relieve the overall decay. "The establishment of a city improvement district (CID) was identified as being the most viable intervention to reverse the downward spiral. The Braamfontein Improvement District was formally legislated in 2004" (About Braamfontein, 2011).

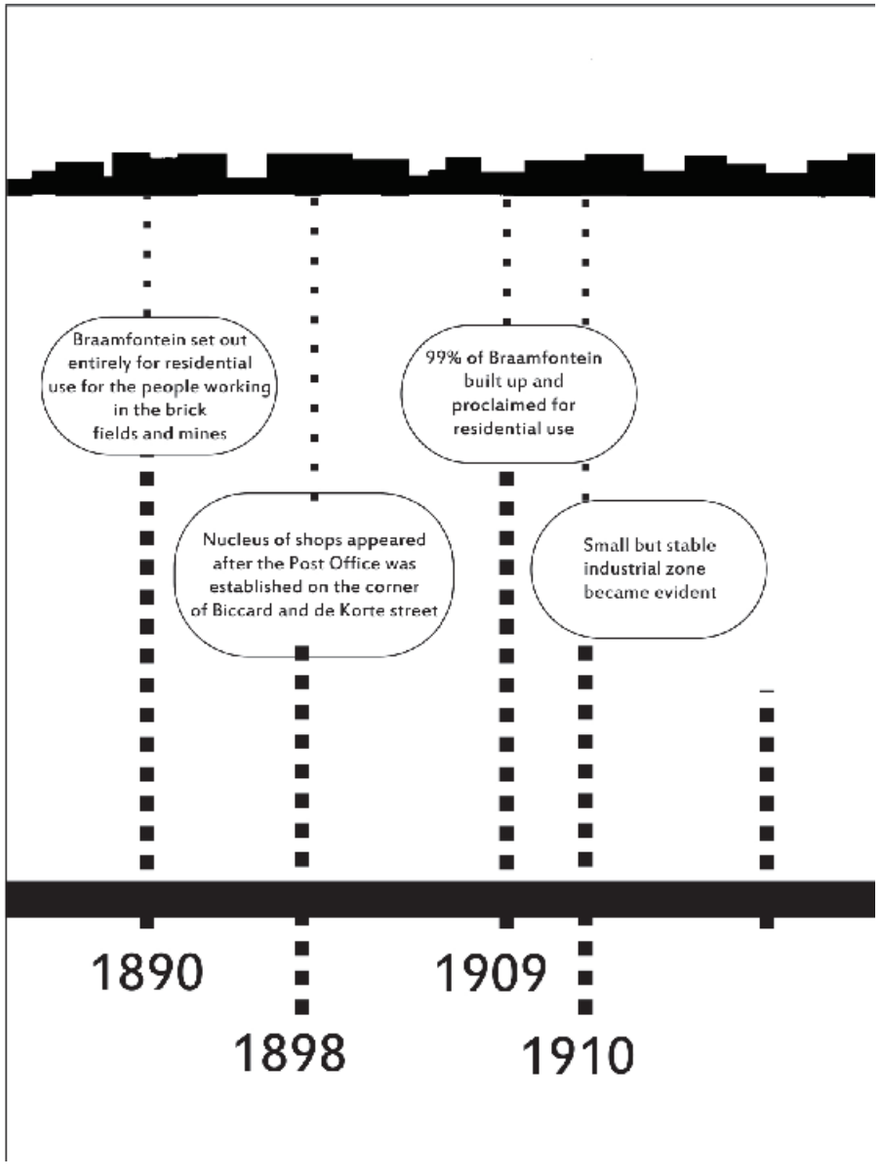
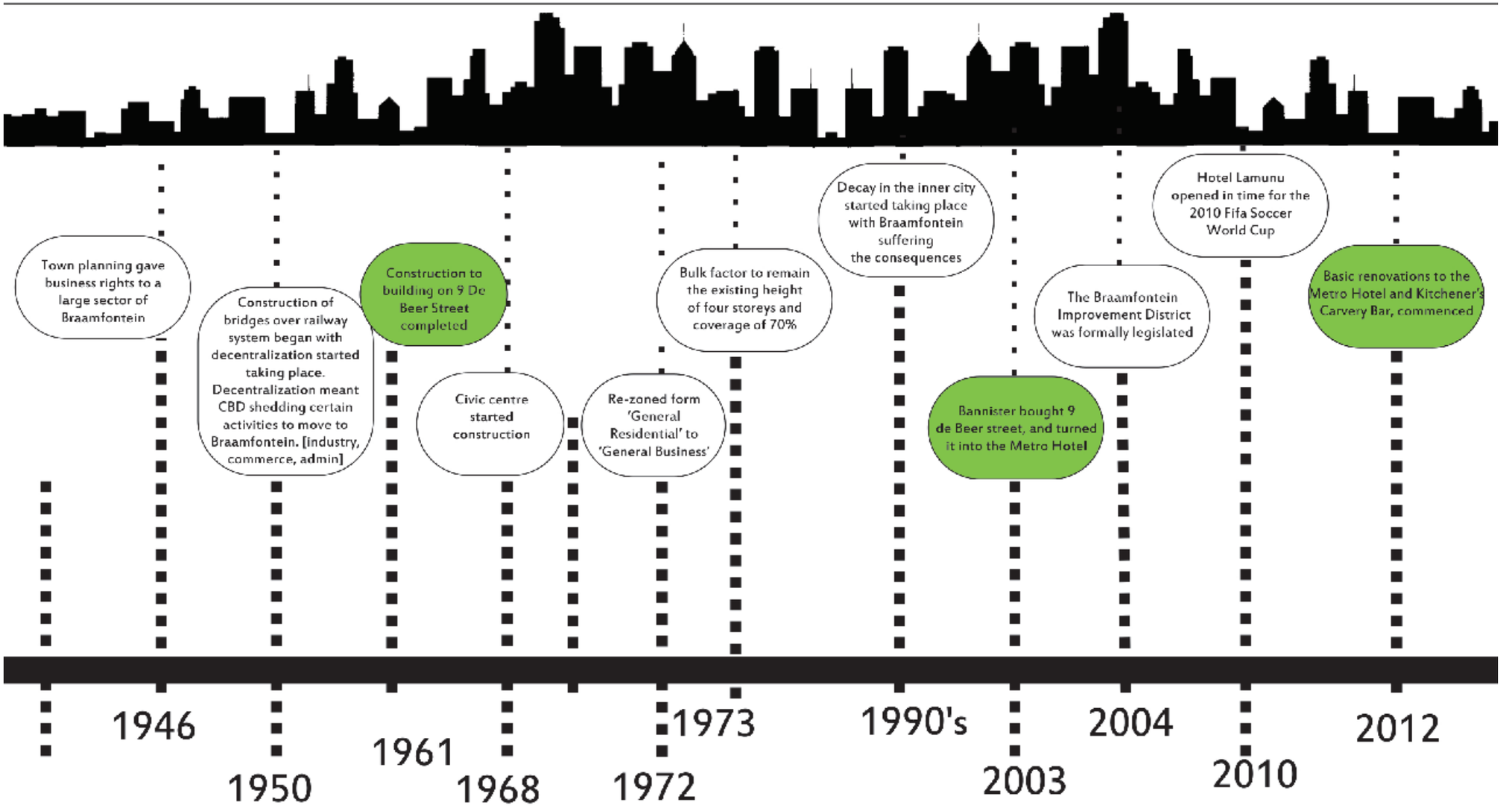


Figure 2.9
Timeline of Braamfontein



The CID consists of private property owners in the area that agree to pay a higher taxation on their properties for improved service delivery. Regeneration started taking place in 2003 with developers buying properties to renovate and sell for a profit. Today, Braamfontein is classified as a mixed use area, with a full range of building typologies. The history is depicted in a timeline in Figure 2.9.

2.2.2 Context and environment

Currently there are two major developers in Braamfontein: South Point, that provides mainly low cost student housing, and Play Braamfontein, that focuses on developments for the upper- middle class. These two opposing role players put an interesting spin on gentrification in the area, because they are targeting two polar opposite client profiles.

Braamfontein therefore provides the opportunity to design for these differing client profiles, and if successful, the area will comprise of three different core income groups. This position creates an opportunity for a greater diversity of users, especially important when considering a *new urbanist* approach. This approach is further defined in chapter 3. The different user groups create the prospect to design for a diverse community with shared public space.

Braamfontein is an area that is dominated by edges. The buildings are mainly insular and sidewalk activity is kept to a minimum. Dead façades and under utilized boundaries are prominent, but the area is primed for change: "Braamfontein is filled with people that want to learn and better themselves" (Ascroft, 2012). A range of upliftment projects have been implemented to great effect, some challenging this insular building typology by creating public thoroughfares and squares. An example of this is the The Grove in front of Hotel Lamunu, discussed in depth in chapter 3.

Braamfontein also consists of a variety of transport nodes. Bus routes take commuters through the neighbourhood, with the closest bus stop in De Korte Street, near the entrance to Bertha Street. The taxi route also leads south from Bertha Street, with a stop just after De Korte Street, to drop off commuters going into Braamfontein. Figure 2.10 indicates the bus stop, as well as the taxi drop off point. The figure also indicates the intensity of pedestrian traffic in each street.

On the far eastern end of Braamfontein, the new Gautrain station opened for public

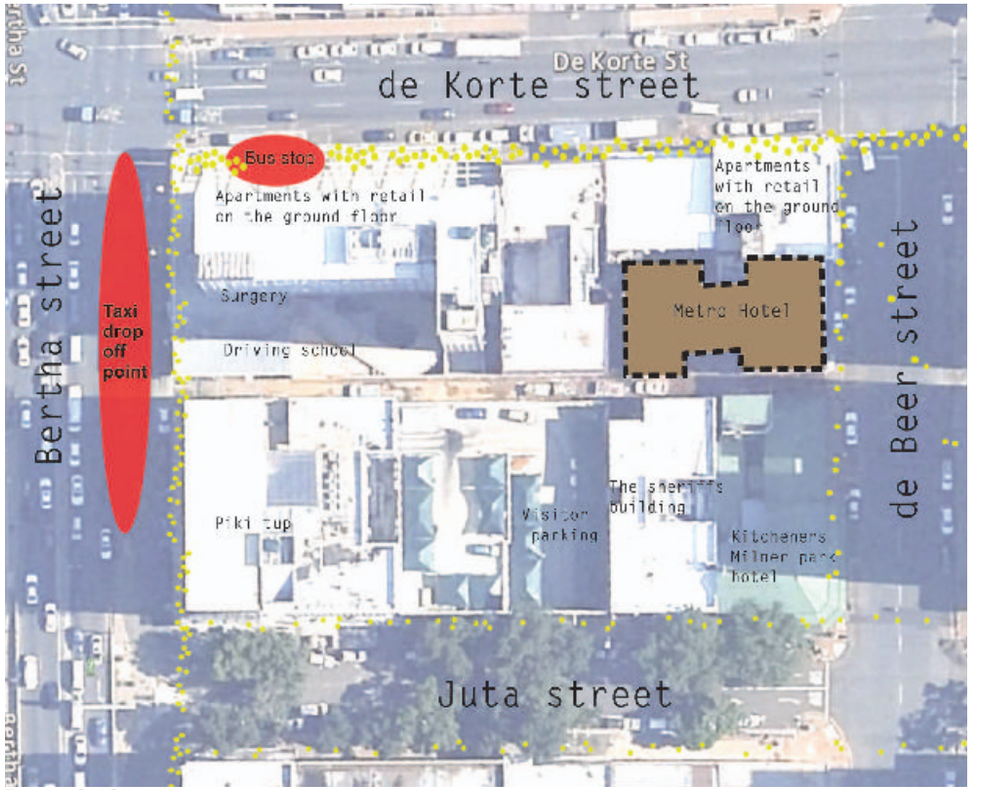


Figure 2.10
Braamfontein pedestrian and public transport routes

use earlier in 2012, providing an additional mode of transport. The location of the station can be seen in the framework discussion.

As mentioned earlier, Braamfontein comprises a large student community due to the proximity of the University of the Witwatersrand (WITS). One of the entrances into WITS is accessed form the Braamfontein, providing the students with a neighbourhood where low cost housing is provided by developers such as South Point. This presence of young students, lends a vibrancy to the area.

Braamfontein also has a prominent arts and culture presence with the Joburg Theatre and The Wits Art Museum (WAM) in close proximity. These cultural attractions draw

artists and performers to the area. The deployment of street art in the neighbourhood also strengthens the idea of Braamfontein as a cultural node.

Some blocks are vibrant, with bright colors and filled with young, artistic people. Others are derelict and seem dangerous. These contrasting identities are visible and altering from block to block in the Braamfontein neighbourhood, due to the regeneration process still being in its early phases.

2.3 Framework

Johannesburg is an area where a number of urban upliftment programs are underway. The first step involved in compiling a framework involved evaluating several existing frameworks to determine the general direction of development in the area.

Three existing frameworks were identified as potential starting points. These frameworks are the Osmond Lange Precinct Framework, the Joburg inner city Urban Design implementation plan by the JDA and the Urban Railway park by MMA.

Each framework was investigated and evaluated. Elements from both the Osmond Lange Precinct Framework and the Joburg inner city Urban Design implementation plan by the JDA were identified, adjusted and expanded to form part of the current framework. These elements were combined with a specific *new urbanist* approach to the area. The full matrix of the different elements and how they were interpreted can be seen in addendum A.

From the matrix, several framework guidelines were established. These guidelines are to:

- provide interventions that are sustainable, inclusive and robust
- distinguish the different precincts identified in the existing frameworks, drawing on the energy of Braamfontein
- draw in people from the surrounding areas
- build on the existing cultural character of the area
- upgrade the image of the city by expanding on the regeneration in Braamfontein
- add activity in the area
- create pedestrian routes and upgrade the existing public spaces

With the above mentioned framework guidelines in mind, an analysis of Braamfontein was conducted. Special attention was given to indicate existing green spaces, ground floor activity, pedestrian concentration, places of interest and transport routes. The documentation of this analysis is depicted in Figure 2.11 - 2.16. In his book, '*What makes a good city',* Kevin Lynch (1980:47-48) names four

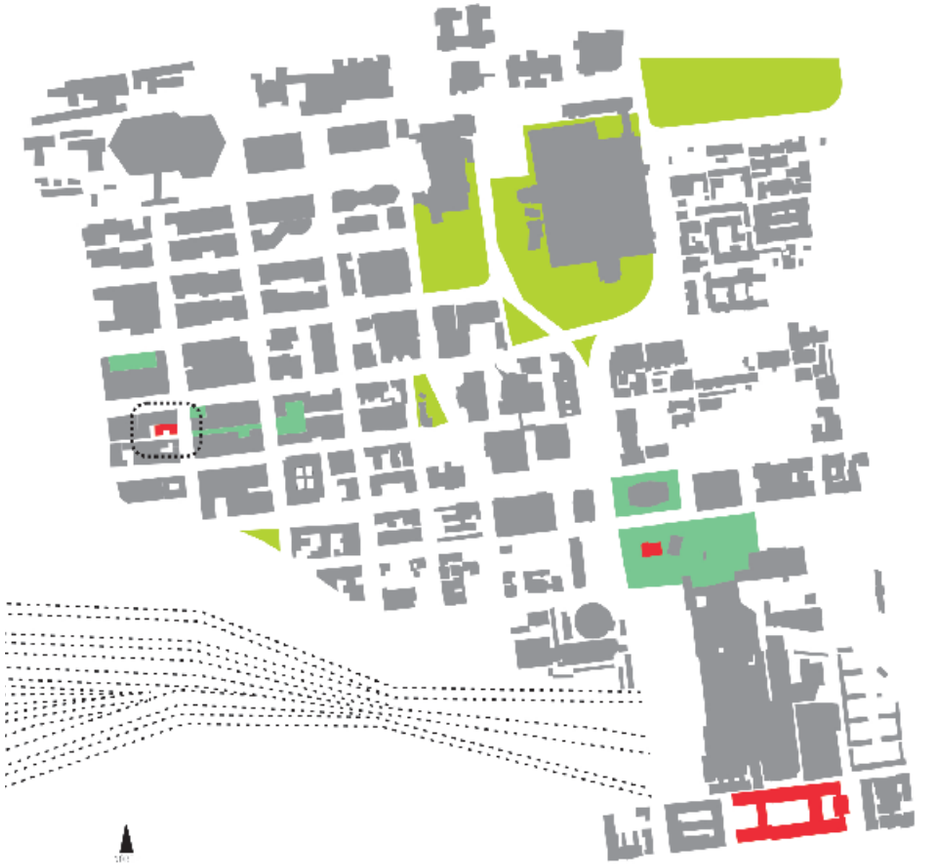


Figure 2.11
Map of Braamfontein: Existing green space

Figure 2.12
Map of Braamfontein: Ground floor activity

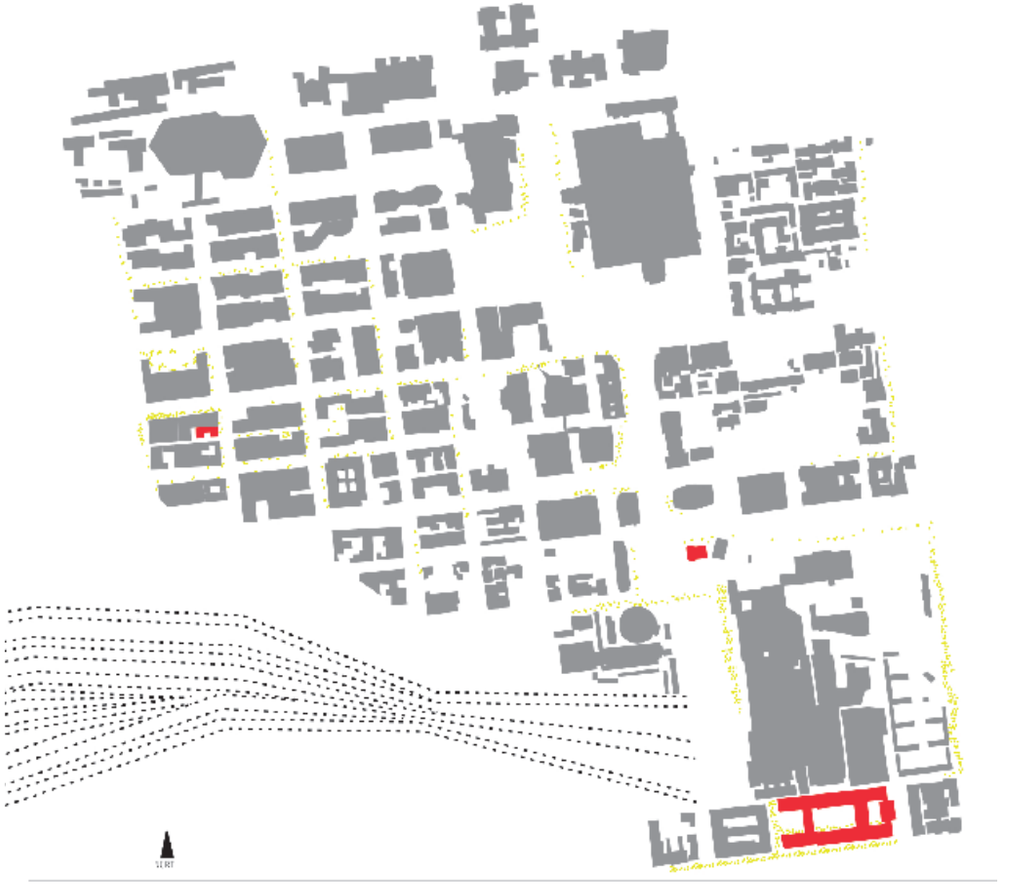


Figure 2.13
Map of Braamfontein: Pedestrian concentration

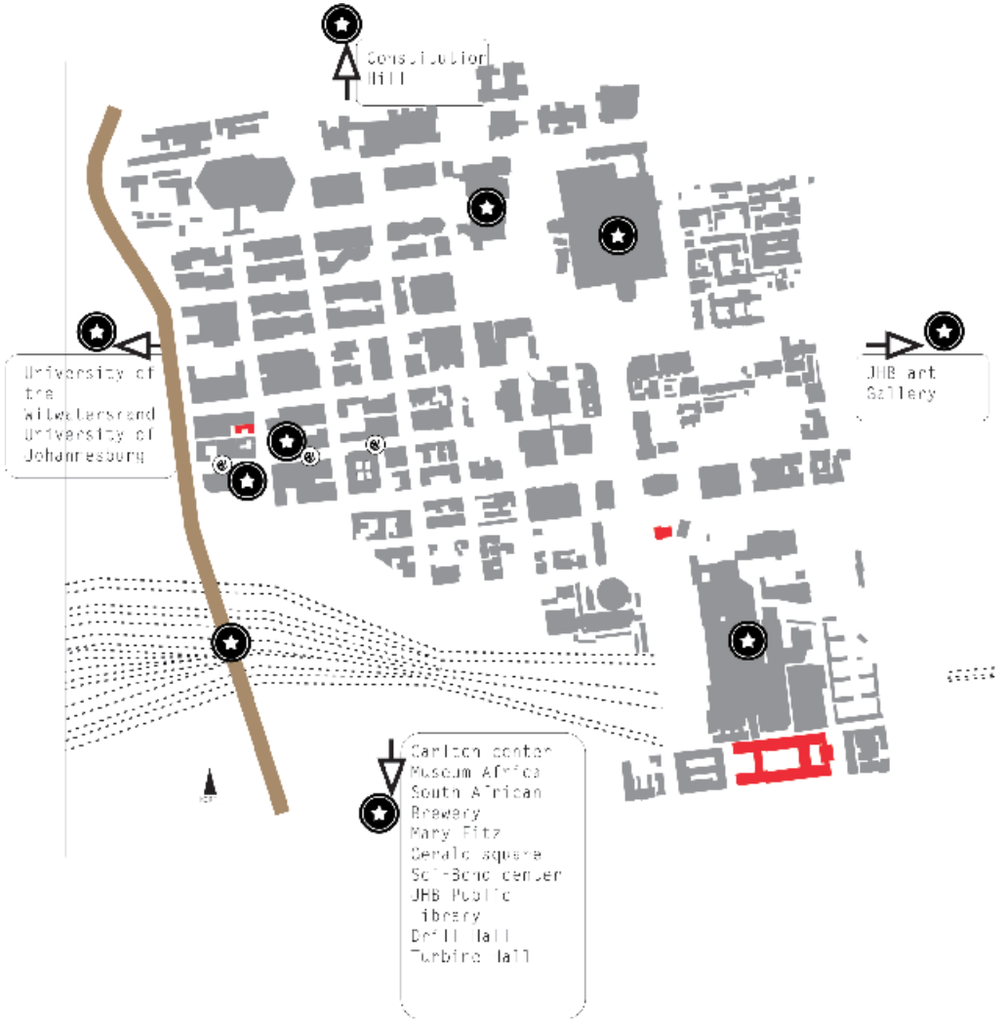


Figure 2.14
Map of Braamfontein: Places of interest

Figure 2.15
Map of Braamfontein: Feeder routes into the neigbourhood

Figure 2.16
Map of Braamfontein: Bus routes

elements that contribute to the legibility of a city. These elements are districts, paths, nodes and landmarks. All four of these elements should be utilized on the macro scale of Braamfontein to create a legible neighbourhood.

The proposed framework that was composed from the matrix guidelines is called The Pedestrian City. The Pedestrian City aims to uplift Braamfontein to a pedestrian oriented neighbourhood. In the process of implementing the Pedestrian City in the Braamfontein neighbourhood, attention should be given to strengthening the elements defined by Lynch (1980:47-48), thereby contributing to the legibility of Braamfontein.

Through the implementation of the Pedestrian City framework, Braamfontein should become more pedestrian oriented, linking activity nodes by pedestrian routes that cut through Braamfontein on both the north-south axis and the east-west axis. By creating these pathways, Braamfontein is opened up for pedestrian use, promoting social activity between the diverse groups of people present in the area. Figure 2.17 on page 22, indicates the location of the proposed pedestrian routes. The primary pedestrian routes runs from east to west and are indicated by a thicker, light green line. The secondary pedestrian routes run from north to south and are indicated by a thinner, darker green line. The combination of these routes can provide the neighbourhood with increased pedestrian activity, by allowing pedestrians to walk through the entire neighbourhood, and linking Braamfontein with the surrounding neighbourhoods.

The selected site is indicated in relation to the framework in Figure 2.18 on page 22. The figure shows the site in close proximity to one of the primary pedestrian routes. The site is in a good location to be enlivened by this proposed pedestrian route and enhance it in turn. The Pedestrian City provides the opportunity for the project to explore an additional public edge bordering on the site. The framework attempts to introduce an unser-orientated design approach, further explained in chapter 3.

Figure 2.17
Proposed pedestrian routes

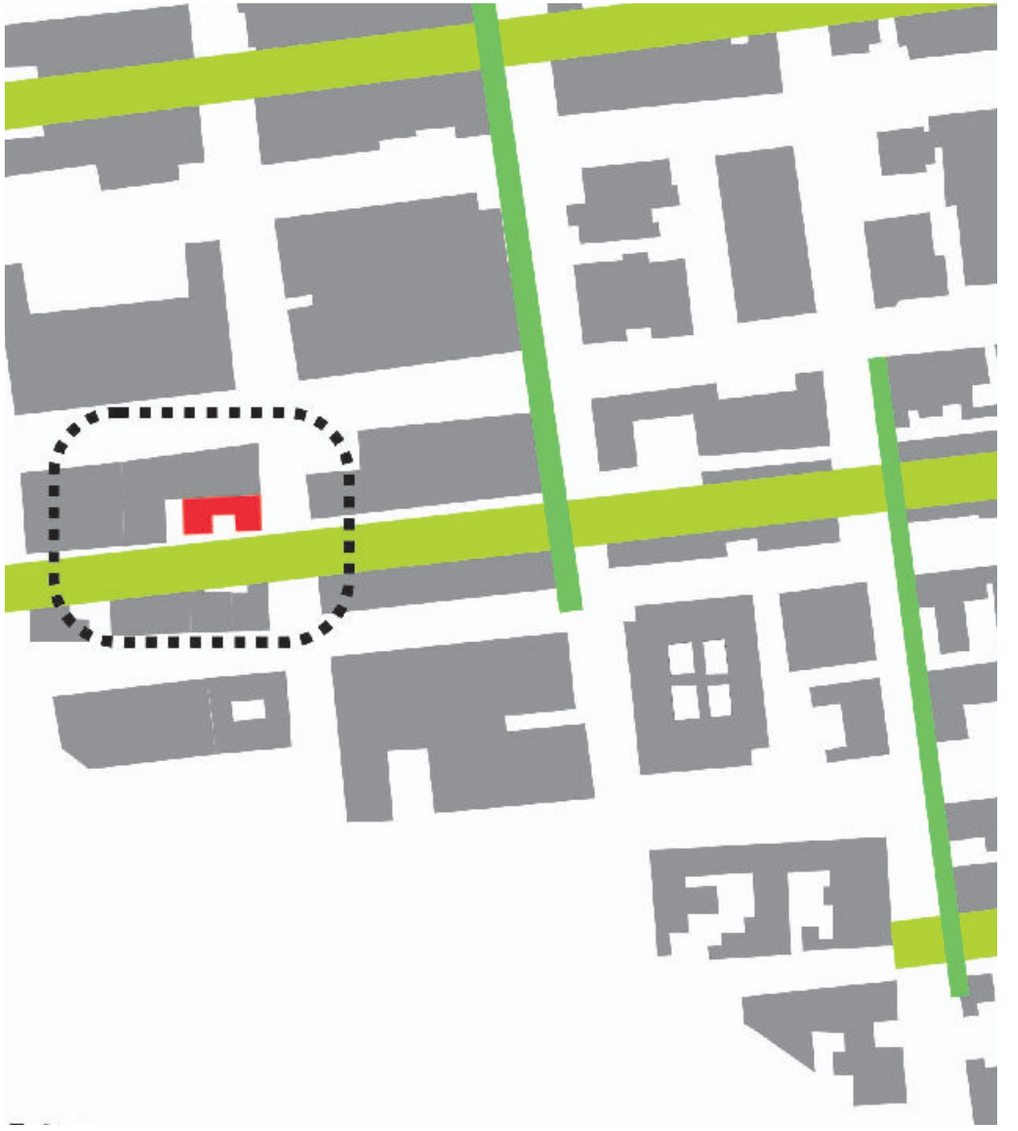


Figure 2.18
Selected site in terms of the Pedestrian City

2.4 Introduction to site

The framework formed the basis of the analysis with the focus on the overall neighbourhood. This can be considered the macro level analysis. The next level of analysis, the meso analysis, was conducted on the selected site. The third and final level of analysis, the micro analysis, was of the selected building itself.

For the meso analysis, a building criterion was set up before identifying a possible site to work in. The building needs to comply with the following criteria for final selection. The building:

- should consist of an underutilized or inactive edge,
- should be in a dilapidated state with the need for refurbishment,
- should fit into the overall regeneration program of the Braamfontein precinct,
- should have the potential to open up the ground floor for public interaction,
- should be accessible and documentation of the building and site should exist and be available.

The criteria were set up to aid the decision and to eliminate buildings that do not conform to the criteria. The selected building is located at 9 De Beer Street, Braamfontein, Johannesburg. (fig 2.19) The building stood out as one of the buildings closest to the central nodes of intervention that also meets the required state of dilapidation and offers a lot of opportunity for boundary exploration (the central node of intervention can be seen in Figure 2.7, as discussed earlier). The level of dilapidation is further discussed in section 2.6 indicating the dilapidation on each level of the building as well as the spaces surrounding the building.

The building is a four-storey building, with a partial rooftop on the western end of the third floor. The building is built right up to the building line on both the eastern and southern side, with a shared wall between the selected building and the building on the northern side. The site consists of two courtyards. One leading from the alley on the western end of the building and the other placed between the alley and the building on the southern side of the site. The building also consist of a small service duct in the northern side of the building, allowing light in down to the ground floor.

On the southern side of the selected site, Kitchener's Carvery Bar is situated, referred to mostly just as Kitchener's. Kitchener's is one of the oldest pubs in Johannesburg, dating back to early 1900's. Currently the ground floor is being renovated, with office space on the first floor. Kitchener's is still fully functional and is open seven days a week, attracting a vibrant crowd and adding to some night-time activity. On the northern side of the site, a three-storey apartment block is situated. The ground floor of the block is used as retail space, with the entrance leading to the first and second floors on the boundary line next to the site. The selected site shares a wall with the apartment building, ensuring a close connection.

Figure 2.19
Street view of 9 de Beer Street, Braamfontein

The building was completed in 1961 and was originally designed as office accommodation. The building is currently owned by Mr Andrew Bannister. Bannister, a photographer, purchased the building in 2003 (at that time it was used as office space) and turned it into his photography studio and the hotel (Bannister, 2011).

2.5 Street analysis

An interior intervention is a small scale intervention when considering the larger context. For an interior to make an impact on the urban environment, the urban environment also needs to be scaled down. The first point of contact from an interior to its surrounding urban environment is the sidewalk and street. For the interior to have an effect on the greater urban environment, it must first and foremost influence the sidewalk and street.

In The City Cultures Reader it is explained as follows: "We must consider the quality of street space and of buildings in relation to each other. A mosaic of interrelationships ... The point is therefore to permit 'buildings' and 'street' as spaces with different degrees of public accessibility to penetrate each other in such a way that not only the borderlines between outside and inside become less explicit, but also that the sharp division between private and public domain becomes softened" (Borden, Hall & Miles, 2000:255).

The street and sidewalk form a direct physical connection between an interior intervention and the greater urban environment and had to be analysed in more detail. The surrounding streets were analysed to determine the existing pedestrian quality as well as the way in which it currently functions. The surrounding streets are Bertha Street, Juta Street, De Beer Street and De Korte Street (fig 2.21). Miele Street, as the street on the opposing end of the alleyway, was also studied. This alleyway leads from De Beer Street, through to Miele Street and ends in the public square at Hotel Lamunu (fig 2.20).

The streets were analysed in terms of foliage, pedestrian activity, street furniture, public transport, parking, parkades, office space and street lighting. For the analysis a symbol representing each activity was assigned to indicate its presence or absence in a panoramic view of each street. The legend is depicted in Figure 2.22.

A bar scale is depicted under each panoramic, indicating the boundaries of the edge

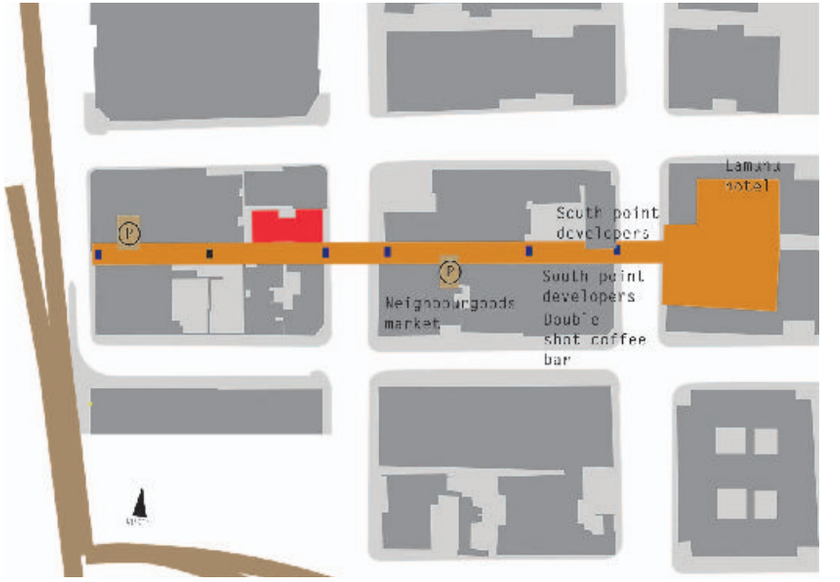


Figure 2.20
Macro context

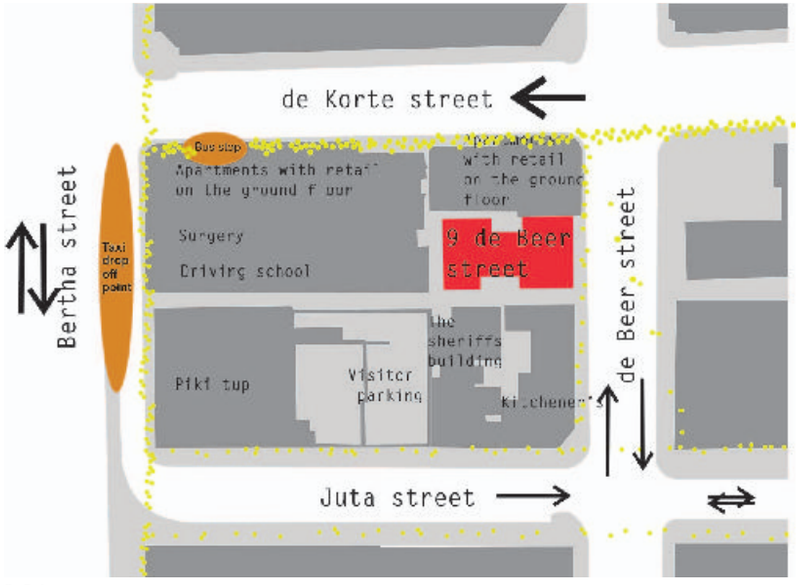


Figure 2.21
Meso context

of each street. Green is used to indicate thresholds and boundaries that promote activity and black is used to indicate barriers and boundaries that discourages activity.

The analysis is indicated in Figure 2.23 - 2.30 and was completed on the 2nd of March 2012.

Figure 2.22
Panoramic symbol legend

Bertha Street:

Bertha Street leads to Nelson Mandela bridge. The street is filled with cars and Taxis racing into the city. The street does not consist of a lot of pedestrian activity, only the people that were just dropped off by public transport.

Apartments with retail on ground floor | Surgery | Driving School | Piki Tup

Figure 2.23: Bertha Street, Western elevation

Miele Street:

Miele Street is a quiet street with the open square infront of Hotel Lamunu. A lot of people gather and walk through this space through the day, resulting in constant pedestrian activity. Restaurant seating that encroaches on the courtyard also provides activity during the day. The street edge is mainly used for parking.

Student accommodation by South Point | Entrance to Lamunu parkade | The Grove courtyard | South Point development

Figure 2.24
Miele Street, Western elevation

Juta Street:

Juta Street is a quiet, shaded street with artwork and seating. The street does not have a lot of pedestrian activity. The street is at the edge of Braamfontein and you almost have to walk past Braamfontein before you reach Juta Street.

Figure 2.25
Juta Street, Northern elevation

Figure 2.26
Juta Street, Southern elevation

De Beer Street :

De Beer Street is a small street with minimum edge activity, only cars parking on the side. The entrance to Neighbourgoods market is from de Beer Street, with the unused square on the northern end of the alleyway. Most of the activity occurs in and around Kitchener's. The alleyway is locked and cannot be used by the public.

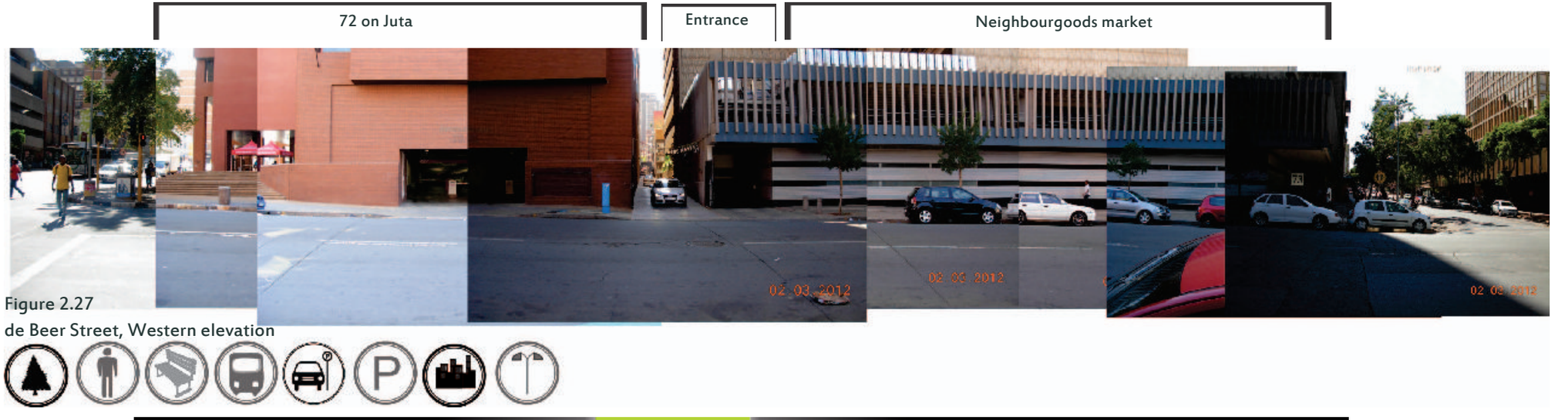


Figure 2.27
de Beer Street, Western elevation

Figure 2.28: de Beer Street, Eastern elevation

De Korte Street:

De Korte Street is a busy, one-way four lane street with a bus stop on the western end. People walk fast on the sidewalks, to and from work. The southern elevation of the street is dominated by the back of Jorrison place with entrances to Jorrison place parkades.

Figure 2.29: de Korte Street, Northern elevation

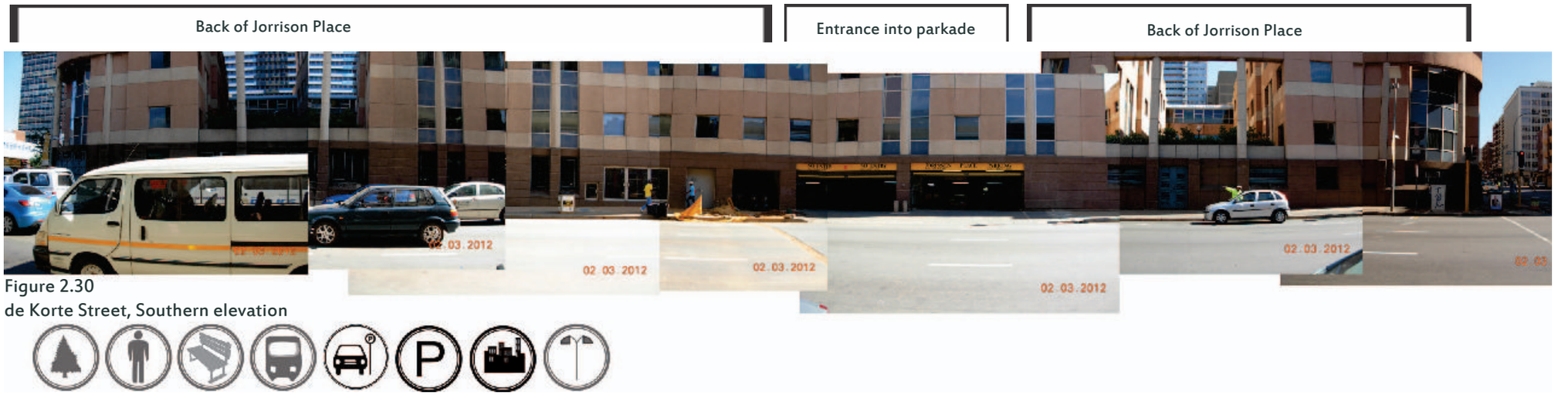


Figure 2.30
de Korte Street, Southern elevation

From the analysis of the surrounding streets, it is clear that the current pedestrian activity is concentrated around the public transport nodes and availability of seating and shade.

Underneath each panoramic image, a colour gradient indicates areas publicly accessible from the street. The black bars indicate boundaries that act as barriers, for example walls, doors and fences, and the green bars indicate accessible public space. The majority of the buildings in this area are insular where boundaries act as barriers, with the exception of the public square at Hotel Lamunu and the partially activated alleyway leading to the square.

People use the sidewalks as a fast route to get to and from work. A clear lack of public spaces for recreation is evident with the resulting decrease in public activity.

2.6 Site analysis

The building consists of unused courtyards, an alleyway, a rooftop and sidewalk (fig 2.31 and 2.32). The exterior gives the impression that the building is old and untended, and the interior supports this impression. Although the building has undergone renovation within the previous two years, more than half of the building is still in an extremely dilapidated state.

The project concentrates on two of the elements described by Lynch (1980:47-48) namely: path and node. Due to the increase of pedestrian routes as part of the Pedestrian City Framework, the alleyway becomes an extension of the site. The alleyway will, therefore, be connected to the site, and resolved as a part of the design. Figure 2.33 - 2.35 illustrates the alleyway visually.

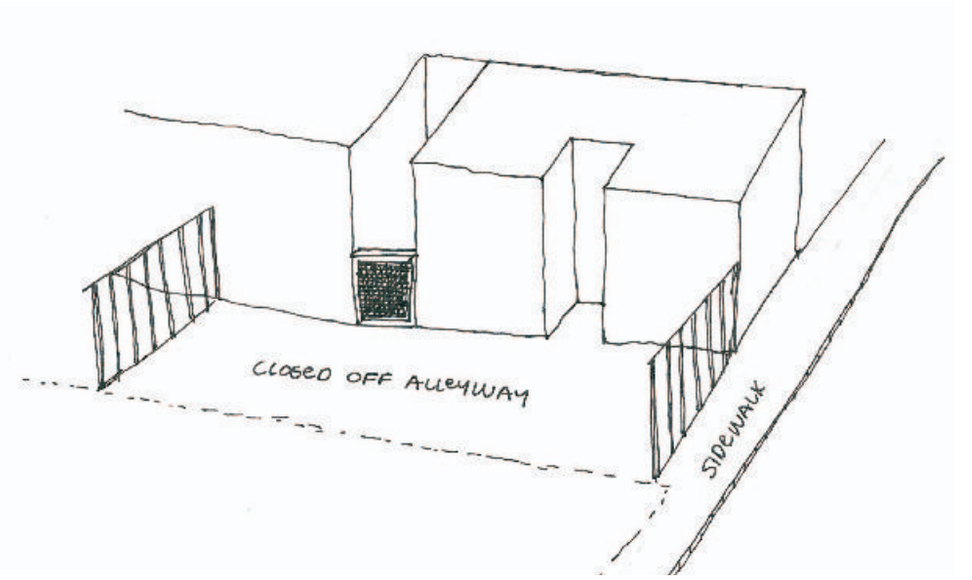


Figure 2.31
Diagram of building showing alleyway and sidewalk

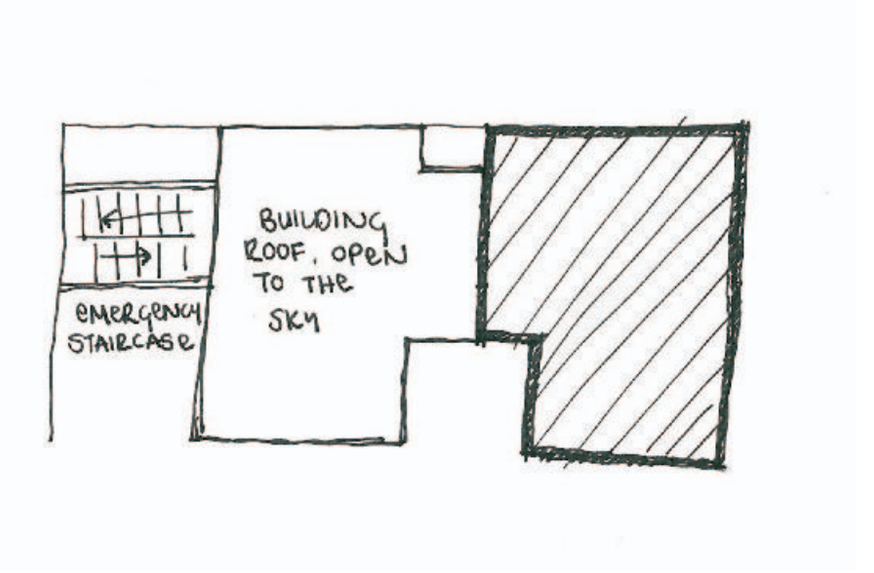


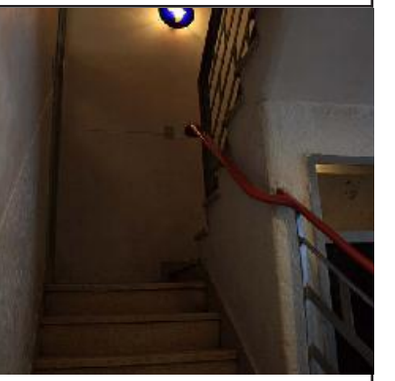
Figure 2.32
Plan of building, indicating rooftop space

Figure 2.33
Photo of alleyway right next to 9 de Beer Street

Figure 2.34
Photo of alleyway in the middle allowing more natural light

Figure 2.35
Photo of Alleyway when entering from Bertha Street, allowing natural sunlight

The hotel has been partially renovated, and the owner plans to upgrade the hotel further after obtaining funding (Bannister, 2011). The hotel consists of four floors and a rooftop area. The floors have different functions and are divided as follows:

Floor	Function	Level of Dilapidation	
Ground floor	Reception En-suite Accommodation Shop front – currently leased to Kgwedi Glass Works	Dilapidated and unused spaces Hotel rooms renovated	 
First floor	Hotel rooms with communal bathrooms, and en-suite accommodation	Partially renovated	 
Second floor	An artist's studio, with plans to be converted into additional rooms for the hotel	Badly dilapidated	 

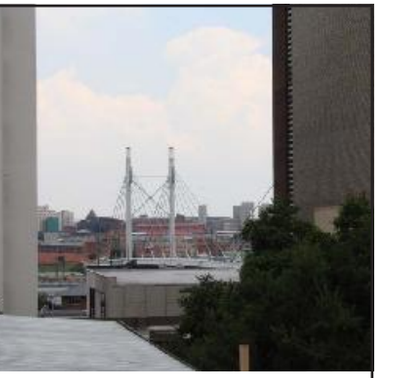
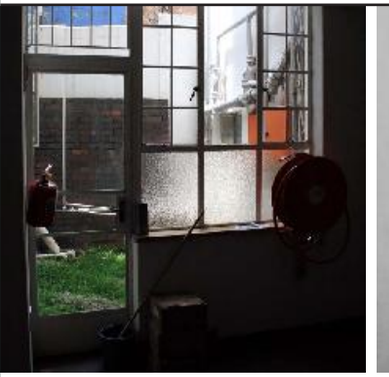
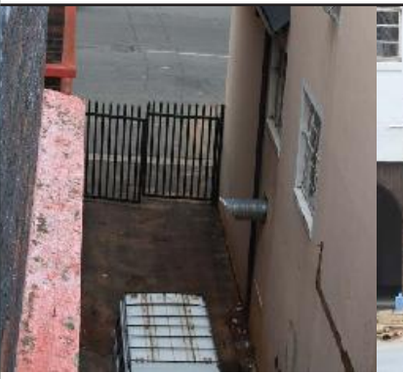
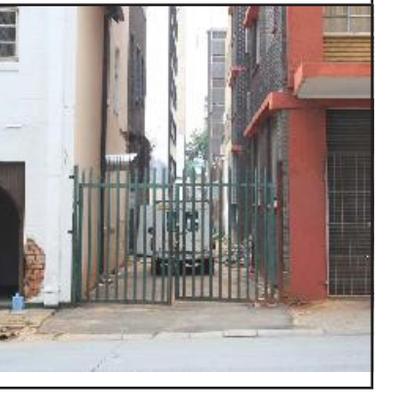
Third floor and roof top	Washing line, temporary staff quarters	Dilapidated	 
Courtyards	The building contains several unused courtyard spaces	Dilapidated and unused spaces	 
Alleyway	The alleyway adjacent to the hotel is used as a service entry only Municipal grounds	Badly dilapidated	 

Table 2.1
Interior Layout of the Metro Hotel, Braamfontein.

The street edge of the building is completely neglected with the majority of the ground floor leased to a glass fitting company. The ground floor street façade of the building is covered mainly with reflective glass; visually completely removing the interior space from the street. The building discourages any kind of pedestrian interaction. On the ground floor the reception area is small and uncomfortable with some of the interior spaces and courtyards left dilapidated. The alleyway, on the southern side of the building, is only used as a service entrance. It is closed off with a palisade gate for most of the day and creates a threatening and unsafe atmosphere.

The longest axis of the site is oriented east to west, with the main entrance located on the eastern side. There is an alleyway running the full length of the block on the southern side of the building. The alleyway is completely unused. The palisade fence is controlled by Kitchener's Carvery Bar (the building on the corner of De Beer Street and Juta Street), but the alleyway is in actually municipal property and should be dedicated to public use.

The site also contains an emergency staircase that is connected to each floor as well as the rooftop at the back courtyard. There is currently no sidewalk activity around the site. For additional information, a 12-hour video surveillance was conducted during a weekday from 09:15 - 21:15, showing the existing activity on the eastern side of the building. The results of the surveillance can be seen in Table 2.2.

From the video surveillance it is evident that the number of people interacting with the building is extremely low compared to the number of people walking or driving past each hour. The area is apparently a busy pedestrian part of the city, but the building ignores the passer-by through the following design mistakes:

- No sidewalk activity
- Reflective glass, discouraging interaction
- Closed off alleyway, limiting access to the site
- Lack of signage, indicating the function of the building

Number	Time	People walking past building	People going in and out of the building		Workers going in and out of the building		People going in and out of the building next door		People just in and out	People for the glass fitting	Desk clerk smoke breaks	Cars stopped	Cars driving past
			In	Out	In	Out	In	Out					
1	09:15	108	11	21	-	-	6	1	-	6	2	6	117
2	10:15	106	12	16	1	2	4	3	-	7	1	5	114
3	11:15	95	2	4	--	-	6	6	9	7	-	2	113
4	12:15	141	5	6	3	4	4	2	3	3	1	1	133
5	13:15	155	6	2	2	1	3	1	3	6	1	2	114
6	14:15	98	6	5	2	2	5	2	4	2	1	5	102
7	15:15	110	2	2	-	-	6	4	3	1	1	4	168
8	16:15	112	6	14	2	3	2	3	2	8	-	4	148
9	17:15	37	15	8	3	4	5	6	2	-	1	1	79
10	18:15	36	20	9	2	2	5	4	-	-	-	2	65
11	19:15	28	11	15	-	-	2	-	3	-	1	2	54
12	20:15	29	13	5	-	-	5	2	2	-	2	3	37
Total													

Table 2.2
Analysis of facade activity

Figure 2.36
Eastern elevation of building (Strydom, 2012)

2.7 Building analysis

The zoning in Braamfontein has changed continuously, over the past 122 years, as did the functions of the buildings in the area. The buildings themselves, however, did not change as frequently. The façade of 9 de Beer Street (fig 2.36) does not speak of the design of a hotel, and is one example in Braamfontein, of many, where the shape and design of the building has little or no relation to its function. This edge typology is not deliberate, but rather a remainder of an earlier era.

The building is evidence of a modern time in the city, where people interacted with the centre of the city. The building is built in a modernist fashion with Art Deco elements on the interior. The building comprises interesting niches and courtyards. It has been altered several times over its lifespan with little of the original building still intact. The building is therefore not significant on its own, but only as a part of the overall neighbourhood. The location of the building allows it to possibly act as a catalyst for drawing people into Braamfontein.

2.7.1. Form and Structure

The selected building is an international style modernist building with strong linear elements on the façade that are repeated in both vertical and horizontal axes. The exterior of the building is painted red, with exposed red and grey brick underneath the windows. A rhythm is created on the façade with vertical red strips running the height of the building, emphasizing its four-storey height. The red and grey exposed brick is alternated on the different floors, adding to the rhythm on the exterior.

The building consist of a load bearing concrete column and slab structure, with non-structural brick infill walls. Currently there are no mechanical or specialist systems installed in the building like air-conditioning or telecommunications with the exception of a series of fire hose reels dispersed throughout the building. Vertical circulation in the building is currently achieved mainly through the central staircase that is indicated in Figure 2.37 on page 36. Two lift shafts are present in the building, but neither are used. An emergency external staircase on the western side of the building provides secondary access to each floor.

Lighting throughout the building is predominantly artificial, with only the small central service duct allowing limited additional natural lighting into the centre of the

building. Each room has its own window allowing natural light and ventilation. These windows are on the eastern, southern and western façades. Direct sunlight is blocked on the western façade, by the neighbouring building. Direct sunlight can therefor only enter the building from the eastern façade with a small amount of reflected natural light admitted through the southern façade in summer. The northern façade shares a wall with the neighbouring building, limiting the amount of natural light admitted to the building from the north.

Due to a lack of a central air-conditioning system, ventilation in the building reverts to passive ventilation, with no specific interventions made for the design of passive systems.

The building has a very insular nature, with a small number of entrances and openings to the public realm. Figure 2.37 diagrammatically explains the number of boundaries that acts as barriers compared to the boundaries that acts as thresholds. The ground floor is visually divided from the rest of the building with a concrete cantilever. The rhythm present in the other floors of the building is also not repeated on the ground floor, creating a further division. The façade of the ground floor is 70 per cent covered in reflective glass, acting as a repellent for passers-by.

The existing separation of the ground floor from the other floors of the building, presents an opportunity to create a unique level with a different but supplementary function to the rest of the building, promoting interaction and providing activity drawing people into the space.

2.7.2. History and Function

The building was originally designed by Liknaitzky & Kaplan Architects and was completed in 1961 (Liknaitzky & Kaplan Architects,1961). The original function was office space. It remained the primary function of the building until it was bought in 2002 by Andrew Bannister, who saw the opportunity to transform the building into a hotel. The building still functions as a hotel, which occupies 40 per cent of the building.

The remaining 60 percent is made up by the retail space on ground floor and the unused, derelict spaces throughout the building. The alleyway and courtyards (fig 2.38 and 2.39) are not used to their full potential, mainly being kept closed and inaccessible.

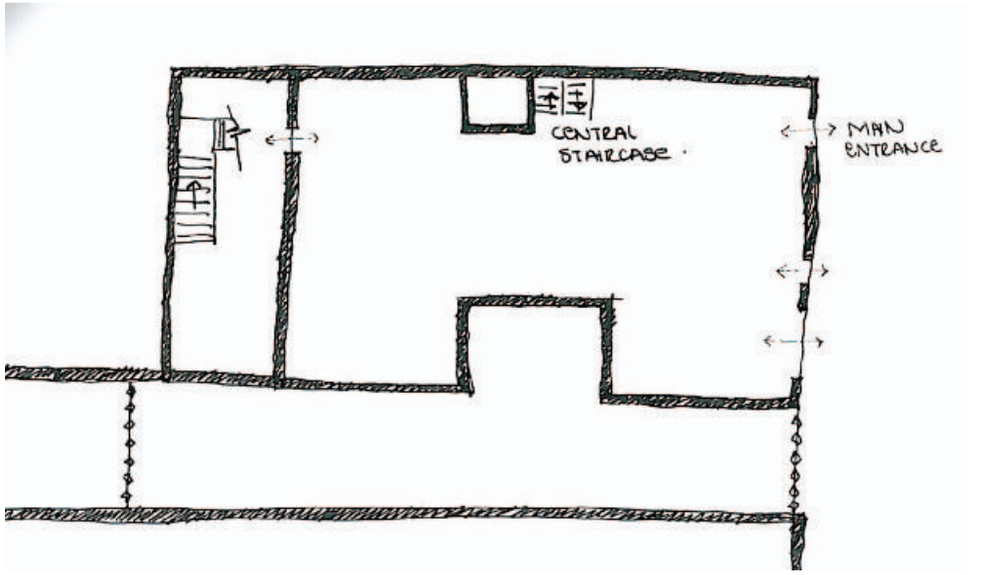


Figure 2.37
Insular nature of building

Figure 2.38
Courtyard on western end of building
(Strydom, 2012)

Figure 2.39
Internal service duct

The hotel is primarily rented out for short hour visitations. The owner describes this as his biggest income generator with one room rented out several times during one day, with just a quick cleaning break in between. The hotel boast an 80 percent occupancy rate (Bannister, 2011), and can therefore be classified as successful. The experience however, is far from desirable, with room for improvement on the layout, lighting, ventilation, acoustics and furnishing fronts.

2.7.3. Quality and Character

The interior of the building is completed in various styles, ranging from Art Deco and Modern interiors to the bare necessities in others. Each floor consists of different finishes that have not been applied uniformly throughout the floor. On some floors, the finishes differ from hallway to hallway. The building gives the impression of being a work in progress that has not been completed and hasn't been for quite some time.

The interior of the building has a wide variety of textures but no overall style or theme that is drawn throughout. This mix of textures and themes creates a greater scope for change and alteration. The textures consist of floor-, wall-, and bathroom finishes, different doors, different staircases and lighting methods. In figure 2.40, some of the textures are shown next to each other to indicate the variety.

The current layout of the hotel creates dark and cramped spaces, experientially

Figure 2.40
Palette of interior textures

portraying the approach of the owner to put in as many rentable rooms as possible. The limited amount of natural lighting contributes to the dark interior spaces created. The exposed concrete floor slabs on floor one, two and three contributes to the feeling of cold interior spaces.

2.7.4. The Metro Hotel as brand

The name of the hotel is the only form of brand used currently. On the eastern façade of the building, the name is displayed in big, capital letters (fig 2.36 on page 35). The font chosen, is a very strong and boxy font, giving an indication of the simple design that can be expected of the interior.

On the interior there is no one uniform aesthetic feeling that is created throughout the space. Each floor has its own set of finishes and style, and therefore does not relate to the existing brand.

The brand of the hotel can therefore be expanded to include the interior spaces and to form an umbrella brand for the supporting functions that are discussed in chapter 4.

2.7.5 A night in the Metro Hotel

The researcher spent a night in the Metro Hotel, to fully understand the smells, noise, systems, safety and activity in the hotel, at all hours. The hotel visit was conducted on the 20th of January 2012, in room 16 on the first floor (fig 2.41). The room is an en-suite room with a window looking out on the alleyway. It has a double bed, sofa, three chairs, a television, two bedside tables and a dresser. There was no flooring material in the room leaving the unfinished concrete of the slab exposed.

The first floor consists mainly of rooms sharing a communal bathroom resulting in 24-hour activity on the floor. The neighbouring building, Kitchener's, has a bar that closes at 4:00 am and provides music and entertainment for a variety of patrons. This ensures street activity into the early hours of the morning with very little quiet time. The lack of soft furnishing in the hotel, increased the noise level of people opening and closing doors as well as walking in the halls throughout the night. Thin walls contribute to the propagation of sound through the hotel.

The low-cost level of accommodation was embraced by the nomadic clientele. The patrons mainly consisted of people needing a place to stay for only one night, as well as those requiring rooms that were rented for only an hour. In figure 2.42 and 2.43, room 16 and its view is indicated, showing the interaction with the researcher. Figure 2.44 is a collage created to explain the lived experience of spending a night in the existing hotel.

The information obtained from this experience was utilized in understanding the way the building currently functions, as well as enabling the identification of design opportunities within it. Through the experience, the researcher was able to identify problems and opportunities that are discussed further in chapter 4.

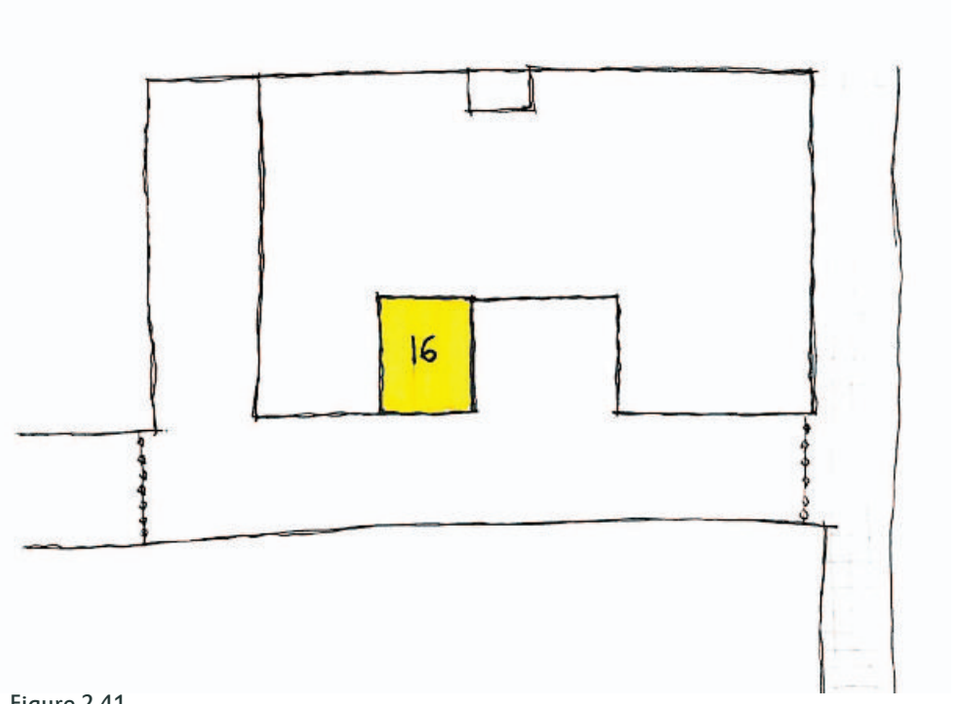


Figure 2.41
Room 16 on the first floor, indicated on plan

Figure 2.42: A typical interior room.

Figure 2.43: The view into the alley from room 16

Figure 2.44: Collage depicting experience

2.8 Conclusion

Through the analysis of the state of dilapidation, the intervention at 9 De Beer Street can be classified as "Medium-High Change" (Kincaid, 2002:53). Kincaid defines Medium-High Change as: "maintaining the external fabric, reconfigure the internal space, with some modification of the building's structure." This level of alteration will be combined with Scott's distinct stages of alteration, namely: "stripping back, making good and enabling works" (Scott, 2008:108).

The intervention will strive to activate the building through the addition of supplementary functions and activities. These supporting functions should strengthen the current function of the building, that of a hotel. These functions are discussed at length in chapter 4. The building should open up to the public on ground floor in order to fully take advantage of activating the space and drawing people in through the use and manipulation of the boundary.

The building currently consists mainly of boundaries in the form of barriers, as was discussed in section 2.7.1. The different types of boundaries are further distinguished between in chapter 3. The intervention will work with the current upliftment action in the area and aims to contribute towards it.

The site selection played an extremely important role in the dissertation as the starting point of the process. The site also became the starting point for the establishment of a concept and eventual design resolution. The selection of the site was driven by the applicability of the theoretical and real-world problems, with the intention to exploit the boundary to its full potential. The selected site consists of numerous boundaries, each presenting a different opportunity. These boundaries will be developed to encourage public participation, communal activities and to question norms usually encountered in relation to boundary conditions.

In the next chapter, theory concerning the boundary of interior space and theory on the urban environment are explored to further inform the design.

chapter 3

Figure 3.1: Braamfontein, the ideal

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3.1 Introduction

The theoretical chapter will investigate theories supporting the dissertation in evaluating the site boundary. The chapter assesses theories that investigate the role of boundaries in the built environment. Specifically of interest is the role that the interior space can play in neighborhood regeneration and the investigation of what constitutes a good city space, as well as the role that boundary design can play in it. These theories start to form the base of the conceptual development, supporting the project and its intentions.

3.2 What makes a good city

To attempt to contribute to an urban environment, one must first understand the ideal that we strive towards. In an attempt to define a good city, the theories presented by a renowned urban planner as well as the views of the populace are examined.

Kevin Lynch, the American urban planner who did extensive research on how people perceive and navigate urban spaces, gave a lecture in the 1980's on what constitutes a good city. In the lecture he identifies five performance dimensions that contribute to making up a good city. These elements are vitality, sense, fit, access and control. He continues to explain the terms as follows:

- *By vitality I mean the degree to which the city supports the fundamental, biological performance of human beings: that the city gives us enough air, water and food to eat, that it supports the functioning of our bodies and their temperature regulation, all those things that allow us to survive as individuals and the species to continue.*
- *The second dimension, which I call sense, is the degree to which the city can be perceived and organized in the minds of the people that actually live in it, and the degree to which that organization can be connected with other meanings they hold.*
- *Thirdly, fit is the way in which the physical city matches the way people want to act, whether it is the way they wish to eat, or to sleep, to move or whatever.*
- *Fourth, a good city is one which gives you access to many things: to services, to other people, to information, to different kinds of places. It is not only the quantity of accessible things that is important, but the degree of choice that is offered, the diversity that is presented to you.*
- *Finally ... the dimension of control ... is the degree to which the environment is under the control of the people that actually use it or reside in it, how responsible and well informed they are in that control, how stable that control is, and so on.*

(Lynch, 1980:5)

These elements, combined, form the criteria for a good city. Each of these elements can be identified in different physical things and is not meant to be a recipe for building, but rather an exploration of the character traits a good city should comprise. The realisation of these elements will form a city that is legible and navigable and forms a true sense of community.

The researcher also evaluated the views of the everyday man on what he or she would like to see and experience in a good city. A blog called The Urban Vision, providing a layman's take on the prerequisites of a good city, was also evaluated in this regard. The blog published an article in 2010 called 'What makes a good city' (Hiranandani, 2010). The article compares different cities with one another and as conclusion gives a summary of points that a good city should consist of. These points are:

1. *It should have mixed use neighbourhoods. Mixed-use neighbourhoods where every 200 acres of development is self-contained where all activities of residential, commercial, retail, hospitality and basic entertainment facilities are available.*
2. *It should be walkable with large footpaths along its roads.*
3. *It should be totally automobile independent, as all the major cities of the world are, London, New York, Tokyo, Hong Kong and Singapore. The roads should be full of taxis and buses with a minimum of private vehicles. In these cities one does not need a driving license to survive.*
4. *Great public places where people can congregate.*
5. *Housing for all its citizens.*

(Hiranandani, 2010)

The points named in the article provide a couple of very specific elements that embody the characteristics identified by Lynch. By comparing the two, it can be concluded that the essence of the elements present in a good city, in these two texts, are similar.

The Public Face of Architecture identifies an additional element needed for the

design of a good city space: the search for a balance between public and private spaces.

> *"A good city, street, neighbourhood achieves a marvel of balance between its people's determination to have essential privacy and their simultaneous wishes for differing degrees of contact, enjoyment or help from the people around. This balance is largely made up of small, sensitively managed details, practiced and accepted so casually that they are normally taken for granted."*
> (Glazer& Lilla. 1987:99)

Urban spaces are complex with numerous variables, depending on the residents of the area. A combination of public and private spaces should be provided, that complement the needs of the users.

3.3 The role of the interior on the urban environment

> *"Urban design involves the arrangement and design of buildings, public spaces, transport systems, services, and amenities. Urban design is the process of giving form, shape, and character to groups of buildings, to whole neighbourhoods, and the city.*
>
> *It is a framework that orders the elements into a network of streets, squares, and blocks. Urban design blends architecture, landscape architecture, and city planning together to make urban areas functional and attractive."*
> (www.urbandesign.org)

From the definition above it can be concluded that urban design projects combine several areas of expertise to create an informed and designed whole. Ali MadaniPour (1996) expands on this notion by suggesting several elements that contribute to urban design. He describes the elements as follows: "Information about road standards, open space requirements, trees and plants in the urban environment, lighting, infrastructure, patterns of access, modes of transport, pedestrianisation schemes ... is needed in the design of urban areas" (1996:x).

Neither of these writings mention the interior realm specifically, even though it can form such a strong augmentation to the design of the whole, when reacting to the context. The interior spaces can become an addition to the urban environment on a more intimate level. Therefore, the concepts and principles should be transferable even into the most private spaces.

Currently, Braamfontein's interior environments are disjoined from the exterior context. Most of the buildings in Braamfontein are insular, turning their back on the public sidewalk and referring only to their function and the nature of the interior self. Sidewalk activity in the area is scarce and informal traders have been removed (About Braamfontein, 2011). Even though this is the main tendency in the area, some developments have opened up to public interaction, introducing a new trend. Hotel Lamunu is an example of this and will be discussed as a precedent study later in this chapter.

This new trend of opening the interior spaces for public interaction introduces two very important design considerations. Firstly, the hierarchy of public to private space. This crossing of space still needs to read comfortably in order to create successful interior spaces. The second consideration is that of boundary design. When an interior space is opened up to public interaction, the boundary of the space is dissolved. This boundary should, however, still be readable for the space to be considered interior. The slight boundary lends the space the quality of interiority freeing it of complete enclosure.

Christine McCarthy (2005:115) describes this as follows: "Boundary conditions determine the flexibility, mobility, and the extent of interiority. They move and change, making temporality an active condition of interiority, figured as a bounded but volatile condition ..." and "identification and placement rather than a relation to spatial form determine interiority ... placement within a system, or an ideological framework, interiorizes enabling interiority to be independent of simply physical constructions of insides and interiors. Inside and interiority may of course coincide but this correspondence is incidental" (2005:116).

The hierarchy of public to private space and the boundary condition are further explored in the following two sections.

3.4 Public and private space

In *The Hidden Dimension*, Edward Hall (1990:122-125) identifies four distances of interaction from the human body. These are the intimate space, the personal space,

the social space and the public space. Similarly, Michael Georgiou (2006:14) identifies the same four hierarchies, referring to them as spheres. He then proposes that the built environment acts in a similar way, demarcating gradient zones of public to private space.

In the *Public Face of Architecture* (1987), Nathan Glazer and Mark Lilla, defines the public and private spaces as follows: "By the end of the 17th Century, the opposition of 'public' and 'private' was shaded more like the way the terms are now used. Public meant open to the scrutiny of anyone, whereas private meant a sheltered region of life defined by one's family and friends" (Glazer & Lilla. 1987:33).

From these principles the interior spaces of a building can be arranged to ease the crossing from the most intimate sphere back into the public sphere. Spheres between the public and the private will fill up the gradient of the hierarchy, establishing numerous different levels of spatial privacy leading from the one to the other. These spaces build on one another, creating a legible whole.

The crossing between different levels of spatial privacy can be separated through boundary design. The principles and interior palette that can be used for these purposes, is explored further in the next section.

3.5 Boundary principles

In *Architecture of Fear*, Peter Marcuse (1997:101-114) wrote an article called *Walls of Fear and Walls of Support*. In the article the different characters that walls can take on as boundaries in urban areas are explored. He discusses the different meanings that a single boundary can have, depending on which side of the boundary your viewpoint is from.

> *"The key question, in the construction of cities and of communities within cities, is what the relationship of the people within them is to one another and to those outside. Walls reflect those relationships. If they are hierarchical, then boundaries will reflect power and status, and walls will reflect superiority and inferiority.*
>
> *If differences among people are differences only of kind, of preference, of history and tradition, then walls may in fact undermine hierarchy by fostering respect for difference. Such walls may require negotiation to meet the needs of those on both sides; if those negotiations are among equals, they become simply an inevitable aspect of living in an urban society. Walls that welcome and shelter are fine in their place, but not walls that exclude and oppress, or isolate and confine."*
>
> (Marcuse, 1197:113)

From the quotation above, it is clear that a single boundary can have different meanings to different people. The approach to boundary design should therefore be conducted carefully as to not unnecessarily exclude.

An article in Intimus called Thick Edge: Architectural boundaries and spatial flows, (Borden. 2006) considers the negative impact that boundaries can have on a place when the sole purpose is that of exclusion. It suggests that boundaries can become social and spatial ordering methods particularly in public spaces.

> *"So what is the boundary? George Simmel noted that boundaries make social orders more concrete, more intensely experienced; indeterminate in themselves, they stand in contrast to the physical boundaries of nature, their significance springing from interaction on either side of the line. "*
>
> (Borden. 2006:51)

The article goes on to explain that boundaries can however be opened up in such a manner as to place the responsibility on the visitor and make them aware of their wanted or unwanted presence without physically excluding anyone. The physical act of crossing the boundary is highlighted to make the visitor aware of this action.

Both the public and private spaces in the urban environment can be influenced by boundary design. MadaniPour (1996:8) defines it as follows: "Since every architectural volume, every structure of walls, constitutes a boundary, a pause in the continuity of space, it is clear that every building functions in the creation of two kinds of space: its internal space, completely defined by the building itself, and its external space, defined by the building and the others around it."

The design of boundaries therefore has an extensive influence on the urban realm and can be used to create the desired level of privacy and interaction.

Michael Georgiou (2006) provides an interesting approach to boundary design in his

dissertation called *Architectural Privacy.* He notes that a person perceives their surrounding environment through their senses. He then compares boundaries as filters of information to the human body and its senses.

From this metaphor, he identifies five elements that he refers to as factors which affects architectural privacy. These factors are: visibility, vocals, olfactory, accessibility and proximity. Through the combination of these elements in various forms of intensity, boundary design can contribute to the sense of spatial privacy experienced in an interior. These elements therefore start to form an interior palette to design with. An expanded version of the interior palette is discussed in chapter 4.

The boundaries will also be evaluated in terms of edge activation. Active edges promote activity around the building as well as getting it to permeate into the building. Cities with active edges become comfortable 'staying' zones. Gehl (2010: 134) distinguishes between first- and third-world countries, where the amount of voluntary activities increases with the economic growth of a country: "In the more economically developed part of the world, city life particularly stationary activities, is far more influenced by optional activities. People walk, stand and sit where the quality of city space invites them to do so."

This 'edge effect' is considered to have a major influence on where people choose to sit and spend their time when walking through a city space. Edge activation provides an opportunity to draw people into the space, activate the space and promote social interaction between the users of the space.

The principle of edge activation will be applied to the design on the boundary level. These activated boundaries will become nodes of activity and interaction forming public spaces where people can spend time with one another. Through this formation of socially active public places, a sense of community can be established.

3.5.1 Boundaries in the built environment : barriers and thresholds

> *" When demarcated, a boundary can define both micro and macro worlds: the limits of a room, a building, a site, a city, a county and a country are all marked in some way. Boundaries ring-fence containment and denote 'inside' from what lies beyond; they imply control by encumbents on what happens within them. Once limits are established, boundaries are to be defended. Where the edges of boundaries are crossed, these represents points of control and special places of transition that are marked with thresholds, portals, gates and bridges."*
>
> (Porter, 2004:13)

This definition from *Archispeak* denotes the boundary as a way of demarcating spaces and territories. The boundary here is referred to mainly as a way to indicate where one space stops and another begins. This specific definition does not, however, discuss the level of different boundaries that can be created, from a strong physical boundary, to a soft implied boundary.

In the article *Towards a Definition of Interiority*, Christine McCarthy's (2005:114) view on boundary challenges the formality and 'thickness' of the boundary. She explains it as follows: "The ideological strength of border means that even a thin geometry of boundary allows an anorexic coding of interiority. An abstract sign of boundary, rather than substance, this geometry is of no significant thickness."

In order to be able to work with the boundary, it must still be defined further. Boundaries can be divided into two separate categories. One being a crossable boundary, hereafter referred to as a threshold, and the other an obstructive boundary, hereafter referred to as a barrier. Thresholds and barriers inform the public of the level of interaction desired by the designer at a specific part of the building envelope.

Thresholds promote interaction and require participation to be considered successful. People cross thresholds everyday, and the ease in which this crossing take place can further contribute to its success. On the other hand, barriers can be seen as the inactive boundary, where the interaction level is controlled through limited access. This accessibility is defined by the level of obstruction created by the barrier. Some barriers are visually permeable but physically inaccessible, while others present a total disconnection. The level of accessibility or obstruction in both thresholds and barriers can be designed to create alluring boundaries, inviting public interaction.

The barrier can therefore be described as the negative boundary, with limited or no interaction levels, and the threshold as the positive boundary, where interaction is required and promoted. Through creating a balance between barriers and thresholds, a hierarchy is created in the building in terms of public and private space. The building and the immediate space surrounding the building also contribute to this legibility.

In this space the interior edge and the building edge is defined. This is different for each site. The space surrounding the building needs to consist of interior qualities for the interior edge to be able to extend beyond the building edge. In this project, the interior edge is meant to extend beyond the building edge into the surrounding environment, contributing to the urban regeneration at street level.

The barrier will be evaluated as an opposing character to threshold. The importance of the project is to extend beyond the perceived boundary of interior design to include the edge and threshold as an integral part of the design.

3.6 The extended interior as catalyst for neighbourhood regeneration

From the boundary exploration conducted, one can now ask, what and where is the boundary of the interior realm? Does the interior always stop at the boundary of the building and is therefore always wrapped in a building? Or can it just be defined in some manner to form an intimate space?

The extent of the interior realm is explored by the expanded definition of interiority as a part of the interior environment. "Inside and outside are architectural prescriptions tied to the boundary of building, whereas interiority and exteriority weave within and without the built constraints of architecture, sometimes between them, and sometimes independent of them" (McCarthy, 2005:116). This broad understanding of interiority set forth in the article by McCarthy, validates the project as an interior design project spilling out to the exterior environment.

"Interiority is hence an explicit manipulation of an environment to achieve and construct a desired space" (McCarthy, 2005:113). The spaces surrounding the interior intervention can therefore also be considered as interiority, because of the connection in design from the one, to the other. These spaces also consist of qualities associated with interior environments, like intimacy, enclosure and rhythm and facilitates the spill out of interior design to the exterior context. Interiority is to be present in the alley, the courtyards and the rooftop. All of these spaces are therefore to be designed as interior environments and as extensions of the boundary.

The spill out of the interior project, allows the interior to extend into the urban environment and to physically start to mould the cityscape. This connection between the interior and the exterior, enables the project to introduce elements of the New Urbanist approach and to start forming a community in Braamfontein. The New Urbanist approach is described by Grant as follows: "..new urban approaches affirm the appeal of compact, mixed-use, walkable, and relatively self-contained communities" (Grant, 2006: 3).

Principles of New Urbanism are listed by Grant as: "...fine-grained mixed use, mixed housing types, compact form, an attractive public realm, pedestrian-friendly streetscapes, defined centres and edges, and varying transport options" (2006:8). New urbanism concentrates on creating self-sustaining smaller communities in cities. This design strives to create a memorable, self-supporting community within the larger city.

> *"Community is an important concept for new urbanism because in many ways it constitutes the ultimate goal of design interventions. New urbanism seeks to create opportunities for positive social interactions in space. It represents an effort to create local spaces for socializing: places to shop, educate, play and work near home. New urban approaches typically envision bustling streets, with people hopping on streetcars, calling 'hello' to the greengrocer on their way home."*
>
> (Grant, 2006:19)

This level of community described by Grant forms a deep sense of belonging, something that is currently missing in Braamfontein.

"The more responsibility users have for an area - and consequently the more influence they can exert on it – the more care and love they will be prepared to invest in it ... Thus users become inhabitants" (Borden, Hall & Miles, 2000:253). By creating a community feel in Braamfontein, residents, and to an extent, pedestrians, will start to partake in the upliftment and renewal projects that are currently underway in the area. A sense of community contributes to a sense of ownership, promoting participation.

3.6.1. Supporting theory: Veranda Urbanism

Veranda Urbanism is a term coined in Brisbane, Australia. The term is still in its early development and theory around it scarce. The movement, however, is creating waves and drawing attention in urban environments. The focus of the group is to define the

veranda as a typology and realise the importance of a crossing space in the urban context. (Veranda Urbanism, 2008)

The veranda as the introduction space is needed to orient the user and provide information on their way forward. The veranda also acclimatises the user to their new environment, ensuring a comfortable transition from one space to another. The importance of the veranda as the introduction space to a building or as the neutral zone between two opposing spaces, needs to be related to an urban context. The veranda is traditionally linked to a suburban context as a residential element. The value of an urban veranda should be recognized as the neutral space that facilitates social interaction, which in turn influences the sense of community in a city.

The consideration of this movement, illustrates the relevance of this project in the urban context, as it is being similarly expressed in other parts of the world.

3.7 Precedent study: Hotel Lamunu

Location
Braamfontein, Johannesburg
Original Function
30 room hotel called the Orchidea Hotel
New Function
60 room hotel called Hotel Lamunu
Architect
Lupini Architects
Square design
Silvio Rech and Lesley Carstens
Developer
South Point Developers
Project completion
June 2010

Lamunu Hotel is a Typological precedent. It is a hotel situated in Braamfontein with public open spaces. By looking at this precedent the question will be asked of how successful the public spaces are, and what its overall contribution to the area is

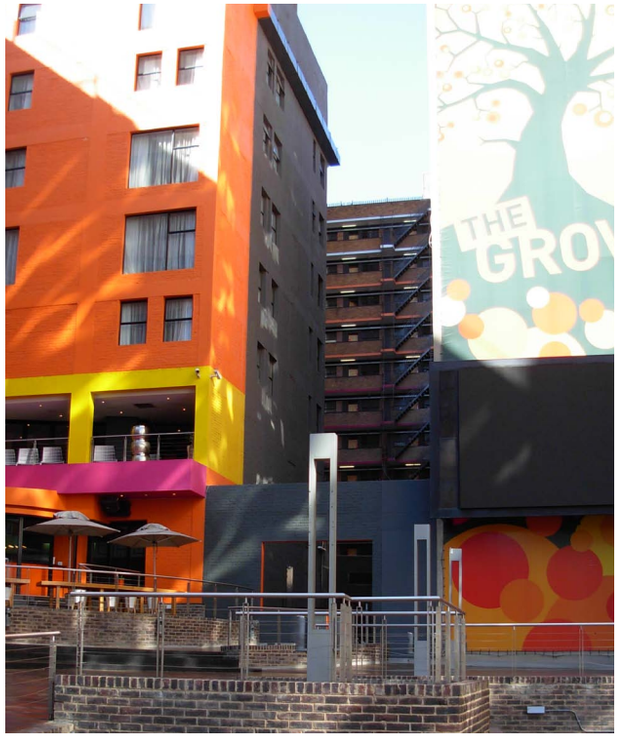

Figure 3.2: Hotel Lamunu

BACKGROUND INFORMATION

Hotel Lamunu was designed and refurbished from the old Orchidea Hotel building. The refurbishment was designed by Lupini Architects and the project was completed in June 2010, for the Viva 2010 Soccer World Cup. (World Architecture News, 2011) Simon Cretney, the project architect from Lupini Architects explain their process as follows: "In order to create a new hotel out of the old building, we pulled out everything - internal walls; all water, sewer and electrical reticulations; windows; doors; everything... Our aim was to completely renovate and overhaul the existing distressed building and place it back into the community pool as a modern iconic structure in the Braamfontein district." (World Architecture News) The hotel is situated in the heart of Braamfontein and is walking distance away from the Ellis Park stadium and the Nelson Mandela Bridge.

Hotel Lamunu with its colourful exterior has become somewhat of a tourist destination. When you spend a bit of time in the courtyard in front of the hotel, several visitors will come past only to take a picture of the lively exterior. Interact Media Defined, described Hotel Lamunu as: "the talk of the town." (Interact Media Defined, 2011) in their 2011 article.

Hotel Lamunu also won the 'Relaxing & Playing' award at the 2012 Joburg Halala Award. "Organised by the City of Joburg's Johannesburg Development Agency, the annual Halala Awards pay tribute to companies and individuals whose projects and concepts contribute to the revitalisation of Joburg's inner city." (Hotel and Restaurant, 2012)

MATERIALITY

Materials used in the courtyard space, are mainly hard and durable. The main materials are concrete, bricks, stainless steel and painted steel in the form of riser edgings. Colors used in the square are bright and vibrant. Hotel Lamunu is known for

its main orange color with dashes of pink, yellow and blue. These colors contribute to the warmth of the square and links directly into the new found energy of Braamfontein.

TEMPERATURE AND FEEL

The courtyard is mainly in the shade with only a small portion by the restaurant seating permitting direct sunlight. The hard materials and the lack of sunlight in the courtyard creates a cold and impersonal atmosphere. Wind is another a problem in the courtyard. There are no wind screens allowing wind to funnel through the space and adding to the discomfort level.

SETTING

In front of the hotel, in the middle of the block is a publically accessible open courtyard. This courtyard is know as The Grove and was design by Silvio Rech and Lesley Carstens. The courtyard was designed as part of an urban design scheme planned for Braamfontein. Both Silvio Rech and Lesley Carstens won the designer of the year award presented by VISI for the urban design scheme. (VISI, 2011) The block was opened up by partial demolition of the front building, creating what was supposed to become the 'city square'. The Grove is accessible for public use 24-hours a day with a big outdoor television, showing live sport clearly visible in the courtyard. Branding for The Grove is clear throughout the courtyard space. The original intention was to draw people into the space, to watch the World Cup matches.

Two open entrance ways feed the courtyard from the surrounding streets (De Korte Street and Juta Street), with one edge of the courtyard completely opening up onto Miele Street. Both the entrances create an arch effect leading through existing buildings that tower over them. The courtyard space creates intimate nooks and corners with the use of ramps, staircases and raised platforms. Four fixed brick planters are also dispersed through the courtyard, providing a softer atmosphere. On the right hand side of the courtyard, two restaurants serve the space throughout the day. The one restaurant, Vèlo, is also an exhibition space. Both the restaurants have seating spilling out onto the courtyard. Umbrellas can be opened to created shaded seating if necessary.

At the back of the courtyard, a wall covered the courtyard from the alley beyond. This wall has been opened up during the year, forming continuity between the alleyways extending on both ends of the courtyard. This change can be seen in figure 3.3 and 3.4.

Figure 3.3: Hotel Lamunu, view of the courtyard. Picture taken on the 7th of October 2011, showing closed wall leading to alleyway

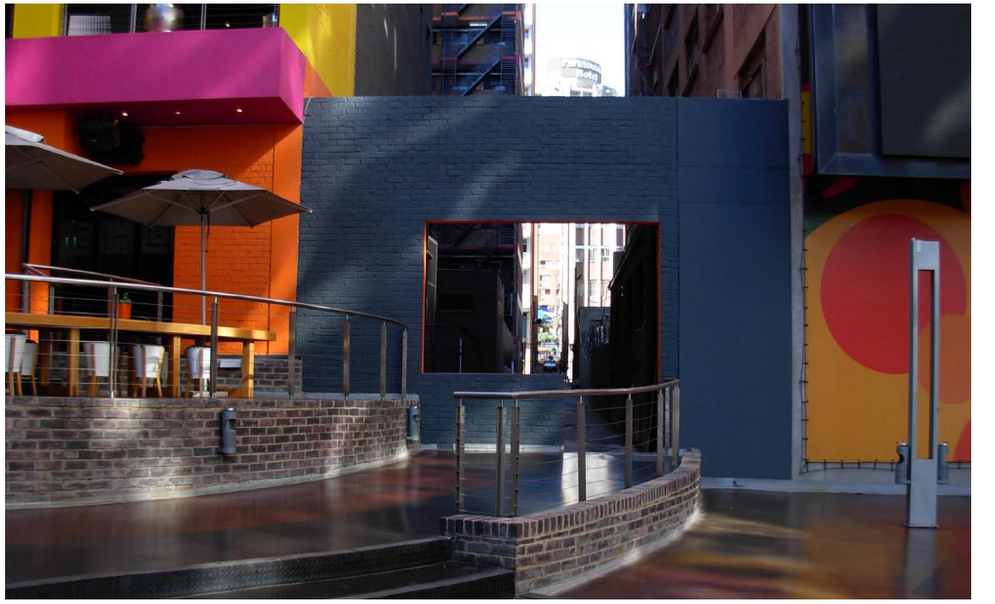

Figure 3.4: Hotel Lamunu, view of the courtyard. Picture taken on the 27th of July 2012, showing opened wall leading to alleyway.

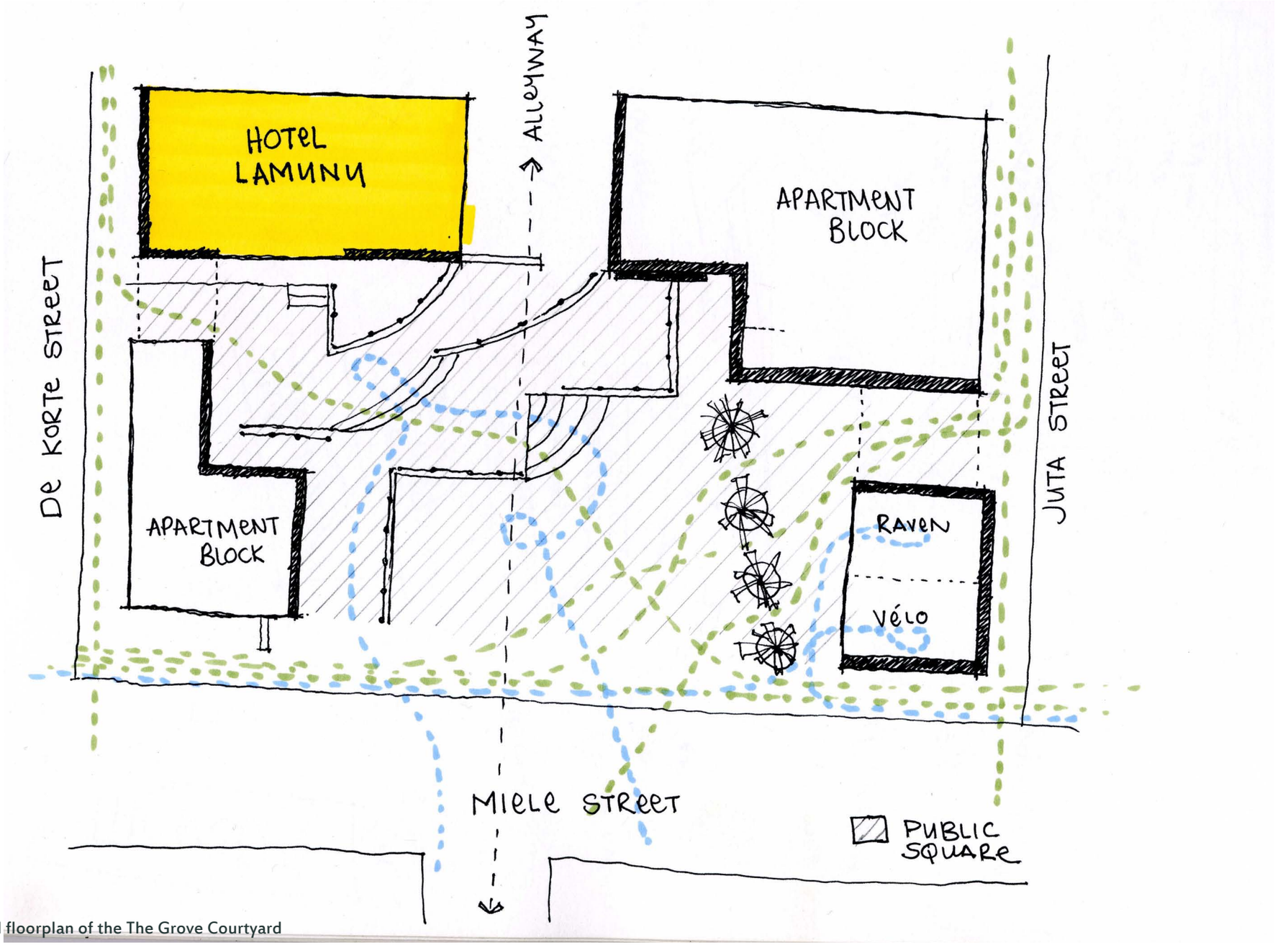

Figure 3.5: Sketched floorplan of the The Grove Courtyard

The change in the wall also indicates progress and that the area in general is moving forward and adding to the overall feel, bit by bit.

MOVEMENT

The courtyard is mainly empty. The main activity is people that use the space as a short-cut from walking around the block. The activity is drawn out in the diagram showed in figure 3.5. The restaurants are quite and the open spaces are mostly empty. Every now and then a tourist can be spotted photographing this infamous space, but the interaction level stays to a minimum.

The entrance way from De Korte Street is quite and seldomly used because of its close proximity to the hotel specific activities. The pedestrian user walking through this entrance way must first walk past a series of board rooms, the reception and the bar seating before have to descend a number of steps to finally reach the courtyard. This process is very exposed and makes the pedestrian feel like an intruder.

On the contrary the entrance way from Juta Street is very popular and used frequently. Once the pedestrian walked through the entrance way, they are already in the public section of the courtyard, giving the feeling of allowed presence. In this section of the courtyard public restaurant seating is also available, strengthening the overall atmosphere of 'for the public'.

EXPERIENCE

The courtyard gives the impression that the user is alone in the space. On three of the four sides the courtyard is surrounded by high rise apartment buildings and the hotel itself. The fourth side opens up to Miele Street, with South Point, the developers of the project, visible across the street.

Figure 3.6: Hotel Lamunu, outdoor bar seating

Figure 3.7 : Hotel Lamunu, view from the ground

3.8 Case study: 44 Stanley

Location
Milpark, Johannesburg
Original Function
Factories and storage sheds
New Function
Restaurants, cafés, Botiques, shops and studios
Developer
Brian Green
Project completion
2004

Figure 3.8: 44 Stanley, Outdoor seating

44 Stanley is an example of a public space which successfully integrated the interior with the exterior through proper utilization of the negative space. People use this space, they feel comfortable in it and the aesthetic is warm and inviting.

INTERVIEW
For the purposes of this precedent, an interview was conducted with the developer, Brian Greene on the 6th of July 2012 at the premises of 44 Stanley. The aim of the interview was to understand the concept of the space, and to gain a better perspective of the activities and the users.

BACKGROUND INFORMATION
44 Stanley is an enclosed oasis of social activity and escape. People go to the space to relax with friends, take a break from their work day and to recharge. The space mainly consists of restaurants, a mix of outdoor and indoor seating, shops and galleries.

"The buildings of 44 Stanley Avenue were Automobile Association garages, where cars that had had a run-in with Johannesburg's roads came to get fixed. When the AA moved out, a few hundred squatters moved in and the buildings were subject to vandalism" (Gauteng Tourism), Brian Greene, the developer, saw the possibility of creating a multi-functional space where people can unwind and socialise, and in March 2003 the project commenced.

The buildings of 44 Stanley were renovated, adding bigger windows to create well lit interior spaces. To create a cohesive whole parts of one building was repeated throughout the centre, borrowing from one building onto the next. Some buildings became the blueprint for the balustrade while others set the tone for materials and textures. This created an eclectic aesthetic that encapsulates all of the existing elements, making it seem as if it has always been this way.

MATERIALITY
The materials in the development is mainly steel, glass, brick, mosaic and scattered potted foliage. Signage is also clearly visible in all the walkways providing an ease in

navigation. The space is however also very crammed with activity and one single thing can easily get lost in the greater picture.

INSPIRATION AND DRIVE OF PROJECT

The developer envisioned a space where people can relax, spend time with friends, and where they can breath inside the city. A space that contributes to the surrounding environment, where one project links into another and start to form the backbone of a greater community. This vision has not been completely realised due to the lack of participation from surrounding developers. The vision for 44 Stanley was to create a place where artistic people can enjoy the company of friends and relax for the afternoon.

Time stands still in this created corner, because the user feels separated from the buzz of the city. 44 Stanley creates an oasis of calm relaxation in the middle of the city. Planting was added in the open spaces between the buildings to soften the atmosphere and to create a more user orientated space. The planting also contributes to a warmer experience of the space, softening the hard, paved ground floor and the brick walls of the surrounding buildings.

Furnishes seating also contributes to the comfortable environment created. The shops in 44 Stanley are screened to be creative and to add to the collective whole with excellence in food and quality of products.

DESIGN PRINCIPLES

There is no one overall theme running through the development. The only thread that can be taken throughout is that the development is created to a human scale. It is intimate and comfortable and gives the user a sense of belonging and security. The developers added bigger windows in all of the buildings ensuring well lit interior spaces. Some of the buildings have bay windows, creating nooks and niches.

These smaller corners in the design add to the user scale of the development. Branding is evident in the space as signage and colors are used abundantly. The shops extend their window display to spill out onto the walkways in the space creating visual interest for the people meandering through.

Seating in 44 Stanley is diverse, catering for a range of users and time frames. Seating includes benches with soft furnishing for longer periods of staying, soft furnished chairs as well as durable plastic and aluminium chairs for outdoor use. The main courtyards are filled with different seating options where customers have the option to sit on any of the available options.

In each of the courtyards a round cement fountain is added, creating white noise drowning the specific words of all the different conversations taking place at one time. The shape of the fountain is inspired by the Karoo Dam, adding to the rural atmosphere.

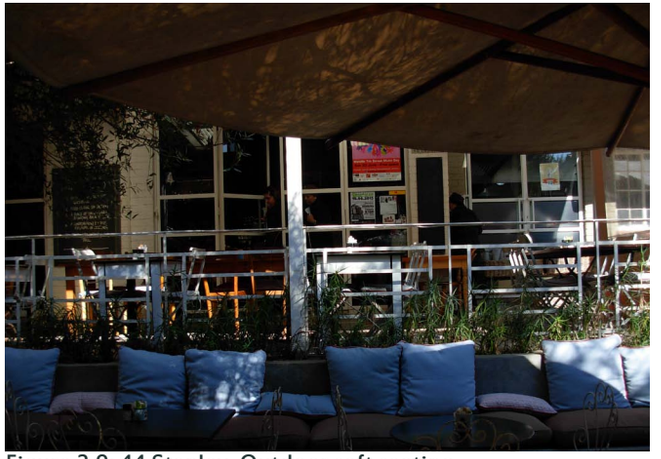

Figure 3.9: 44 Stanley, Outdoor soft seating

Figure 3.10: 44 Stanley, Outdoor fountain

Figure 3.11: 44 Stanley, shop spill-out

SETTING

44 Stanley consists of a block in the middle of the city where buildings have been connected with elements from the one, extended to another. Paths and enclosed walkways connect the negative space, allowing the user to walk from one end to the next. The spaces are complementary and balanced with restaurants and shops dispersed evenly.

One of the big problems with the development, is the lack of adequate parking space. The developers did however make an active choice to not provide more parking, and in that way limiting the amount of people that can enter the space at a single given time.

USER GROUP AND MOVEMENT

The users of 44 Stanley consists mainly of urbanites who seek an escape from the buzz and uncertainty of the city. The space is catered for the young artistic individual who has a sense of aesthetic and requires a level of atmosphere to become a regular user.

The main activity hours are around breakfast and lunch, with the highest level of activity between 12:00 and 14:00. Throughout the day there are visitors, either on a business meeting, or a social visit with a friend. 44 Stanley has become one of the central meeting spaces. People move through the space in a meandering fashion. Deciding on where to stay by the choice of food, availability of seating, temperature and the quality of the outdoor space.

EXPERIENCE

44 Stanley is an oasis in the middle of the city. The combination of good food, a variety in seating options mostly outside and the numerous shops visitors can meander through, creates an escape for most city dwellers.

People feel safe in the space. In the Urban Green file, Leigh Darroll (2004:16) assigns the success of the 44 Stanley development to “its honesty, simplicity and human scale.”

EFFECT ON SURROUNDING URBAN ENVIRONMENT

The site is completely walled off with two distinct entrances.The entire development is enclosed by walls running all around, and is in essence an island in the middle of the city. Once you entered through the walls, you are in a different world, separated from the exterior and the happenings of the city. In the same way 44 Stanley has no effect on the outside environment, it is completely removed from its context.

Figure 3.12: Sketched plan of 44 Stanley.

The surrounding buildings and cityscape has no relation to the development. 44 Stanley will therefore only stay an ‘island intervention’. Once people entered through the surrounding walls they are encapsulated by the atmosphere of the space, but this essence is not continued further out into the city.

This removal contributes to the false sense of security given inside the 44 Stanley development.

3.9 CONCLUSION

The theory evaluated in this chapter in conjunction with the two precedent studies undertaken creates a palette of elements and ideas that, if implemented, can create a successful urban intervention project.

Hotel Lamunu is not a very busy place. People walk through the space constantly, but the level of interaction is still minimal. Although the space is not extremely successful, it does contribute to the overall neighbourhood by encouraging other developments in the area. Since the start of the Hotel Lamunu project, numerous other regeneration projects have been undertaken in the area.

On the other hand, 44 Stanley is a very successful urban project, where the negative spaces linking buildings are used extensively. Brian Greene is of the opinion that a part of the success of 44 Stanley is the fact that it is closed off and not exposed to the city in its untamed form. This sense of security becomes an alluring factor drawing people into the space to experience it. The 44 Stanley development, however, has little to no effect on the surrounding urban environment, limiting the extent of this project and posing the question whether it can be considered an urban project at all.

One development can make a difference in an area, but when several developers and property owners in one neighbourhood come together, then the opportunity for real change is within reach. The principles of negative space development and creating a sense of security can then be implemented on an urban scale, affecting an entire neighborhood. This form of intervention can have a lasting effect on an area and contribute to regeneration.

chapter 4

Figure 4.1
City Stoep

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4.1 Introduction

Original residential setups incorporated a hierarchy of spaces, from the street to the garden and then into the building itself, allowing people to enter private space gradually. This space became a semi-public space, a space for interaction, where the visitor was introduced to the function of the building and eventually to the owner of the space. An example of this is the traditional Cape Dutch house (17th to early 19th century) that was usually surrounded by a low wall, demarcating the farmyard (Encounter South Africa, 2012).

In modern urban living where the entire process has become extremely condensed and been changed to apartment living, this semi-public introduction space has fallen away. In the *High-Density Liveability guide* provided by the Institute for Sustainable Resources (2012), they refer to this phenomenon as follows: "Sense of community has been described as the degree to which a person feels that they belong to a readily available, supportive and dependable social structure. Social interaction within a community has been shown to reduce social isolation and enhance community connectedness. By contrast, reduced interactions can have a negative effect on social capital, decreasing social bonding and a sense of belonging to one's neighbourhood".

Therefore, in order for a neighbourhood to become a community, the social interaction opportunities need to be increased, to allow people to get to know their neighbours – the people they share the city space with. This layering of space then becomes a very important element in contributing to a community and should promote interaction and social activity. This chapter explores what such a space might entail and what its spatial qualities could be.

4.2 Concept development

The conceptual idea that is discussed in this chapter is based on both the theoretical investigation and the site analysis. In order to establish a fitting conceptual approach, the vision of the project is re-evaluated and condensed to form the following seven points. The aim of the project is to:

- contribute to the overall urban environment through the intervention
- add to the overall sense of community in the neighbourhood
- open up the alleyway to create better pedestrian access to Braamfontein
- draw people into the area and make them stay for longer periods of time
- dissolve the boundary between interior and exterior
- activate the ground floor and make it publicly accessible
- add complementary retail activities in the hotel space

The aims listed above are translated into a conceptual approach towards 9 De Beer Street in the diagrams shown in figure 4.2. Here the first diagram shows the current insular nature of the building. The design will, however, strive to create an interplay between publicly accessible spaces and private spaces, (second diagram), to ultimately create a porous building that interacts with the public domain as in the third diagram. Figure 4.3 shows the intervention on a macro scale.

The project aims to strengthen the sense of community in the neighbourhood. Community is created where people know, and trust their neighbours. This level of trust can only be achieved where prolonged interaction between users is established.

"A heightened sense of community may also lead to more engaged community members, yielding benefits relating to public participation and involvement in

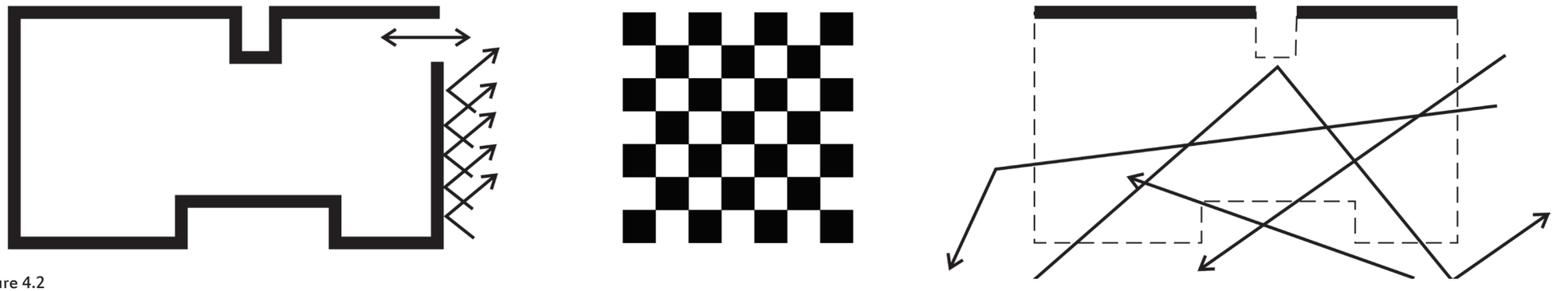

Figure 4.2
Diagramatical concept approach

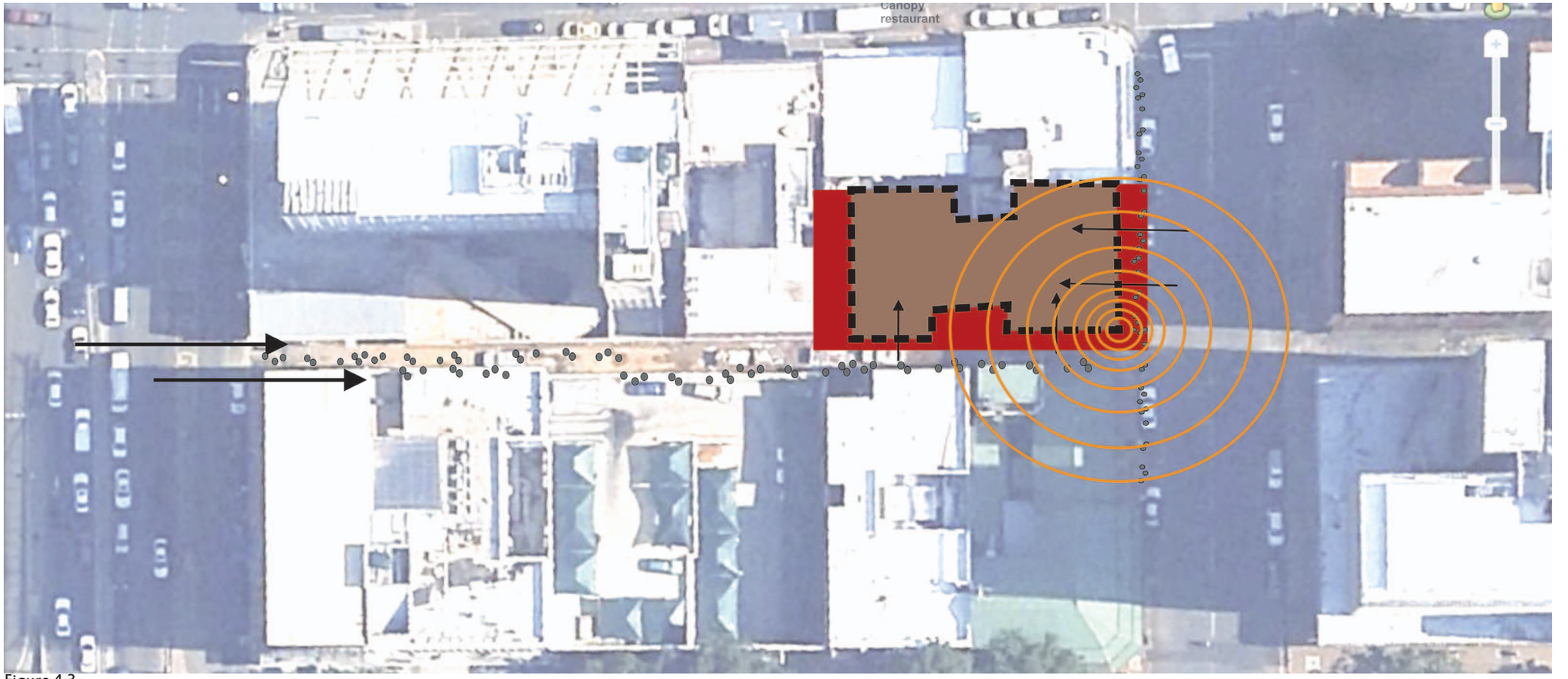

Figure 4.3
Concept development: Spill out of the intervention

community outcomes" (Institute for Sustainable Resources, 2012). Thus, when people know their neighbour and the people they share the city space with, they will be more willing to accept responsibility for the neighbourhood.

The increased feeling of community will aid in the regeneration process as people will start to contribute to their environment. The architectural language should therefore be aimed at the community. The design solution should enable interaction and promote activity. In figure 4.4 on page 64, hierarchy and filter spaces are investigated. Through this investigation, the importance of introduction spaces were examined.

Introduction spaces are considered neutral ground and spaces dedicated for public interaction. With the dense manner in which urban areas are populated, allowance for open, public spaces, especially leisure spaces on the interior, have decreased, limiting the interaction level.

The project investigates how these spaces can be reincorporated into the existing building, enhancing its contribution to the neighbourhood.

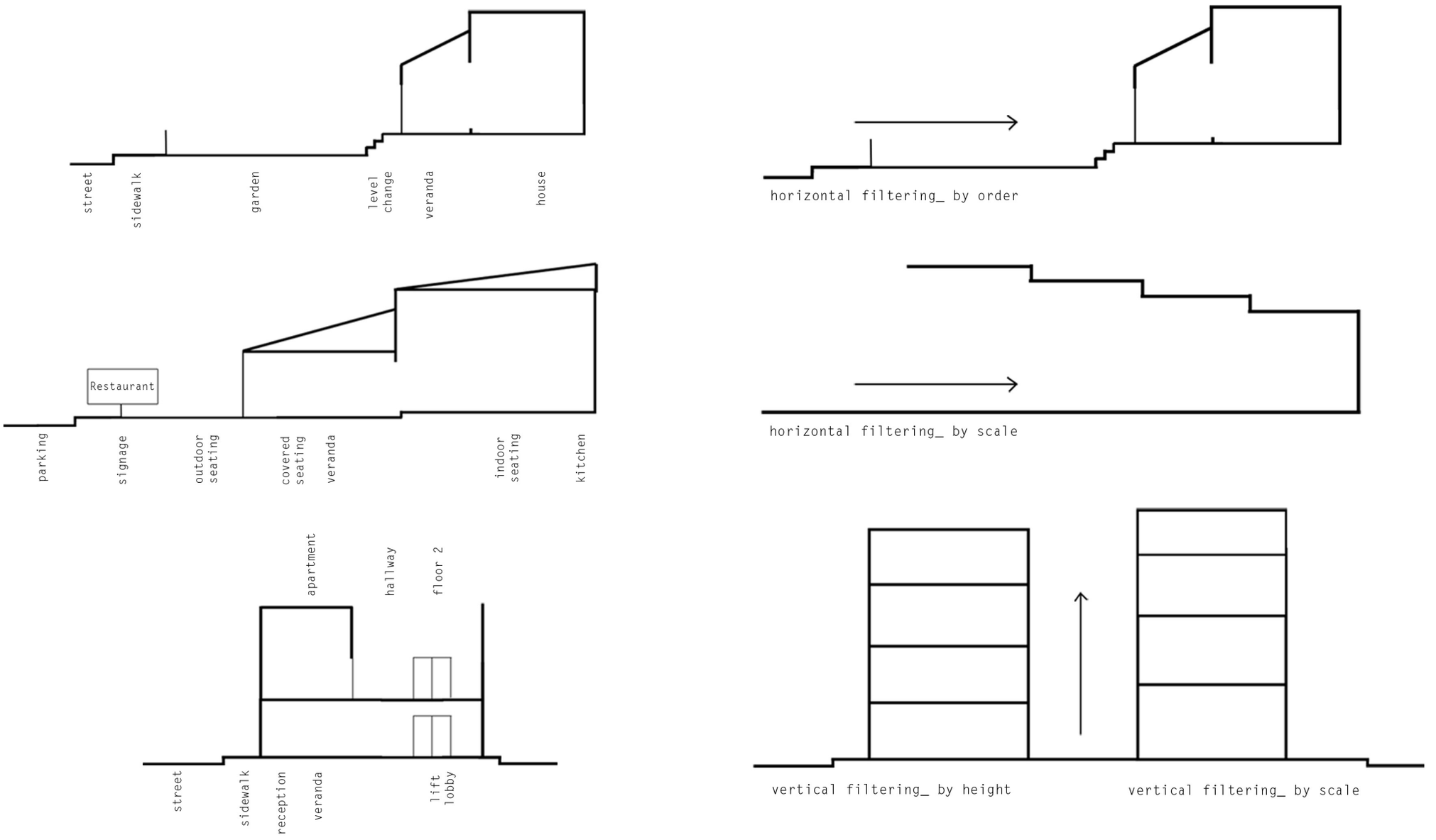

Figure 4.4
Concept development: Hierarchy and filter exploration

4.3 The City Stoep as concept

For the development of the concept, the terms 'veranda' (Australian), 'engawa' (Japanese) and 'stoep' (South African), were explored. The 'veranda' is commonly defined as a roofed platform along the outside of a house (Oxford English Dictionary, 2012: Veranda). Similarly 'engawa' is defined as the link between the interior of a building and the exterior, creating a flow from the inside to the outside (Asian Info, 2010). 'Stoep' is widely considered to be the South African counterpart of the veranda. (Dictionary. 2012) For the purposes of the dissertation, the term 'stoep' will be used further as an encapsulating word for all three terms. The use of 'stoep' also links the concept back to the South African context.

In this dissertation the stoep is explored as a public gateway and filtering space, where this space acts as the link between the building to the exterior urban environment. This dedicated space is an important threshold for the user in orienting himself, as well as introducing the function of the entered space. The stoep in essence acclimatises the user from one area to the next, making the crossing of boundaries smoother. It is a space between spaces that filters both people and functions, in order to join two opposing spaces as a readable unit.

These qualities of the stoep are incorporated and translated into a conceptual approach for this dissertation. The aim is to create 'The City Stoep'.

The City Stoep aims to reintroduce vital communal, semi-public spaces into buildings. It specifically aims to transform ground floor spaces into spaces for public use. This process should aid in increasing activity levels and creating the opportunity for social interaction. The City Stoep should function as an introductory space between the city and the interior of the selected site, softening the boundary and the transition between the two spaces.

4.3.1. Boundary exploration

The different privacy levels created by spatial organisation, becomes an important element in the manipulation of boundaries. This transition from public to private space is facilitated by boundary design. The privacy level of each space is dependent on its accessibility and can be partially controlled by the user.

In *Architectural Privacy*, Michael Georgiou (2006:9) argues that people perceive their environment mainly through the five senses. He further identifies five factors that affect architectural privacy. These factors are: visibility, vocals, olfactory (sense of smell), accessibility and proximity. These five factors can be translated into design elements used for boundary design that will ultimately provide the user with a sense of privacy, depending on the combination of the collective design elements in a certain space.

From Georgiou's (2006) five factors, the researcher derived a palette of interior elements as part of a personal observation that has been incorporated into the design approach. This palette dictates decisions on boundary design in order to achieve different levels of privacy, depending on the level of intensity of each element. The palette derived from these factors are: light, colour, acoustics, smell, materials and textures, temperature and scale.

Figure 4.5 on page 66 illustrates which level of privacy each element will indicate in its extreme form. Through the combined use of the design elements and varying their intensity levels, different levels of privacy are created. These privacy zones are separated by boundaries. The boundaries framing the public space will consist mainly of thresholds, while the boundaries framing private spaces will consist mainly of barriers.

Boundaries can contribute to the indication of privacy level through their design. Barriers have no point of interaction and are utilized more in private spaces. The closed off nature of the barrier contributes to the indication of a high privacy level. Adjustable thresholds give the user the ability to control the level of privacy according to their needs. Thresholds have the potential to be either an edge or a threshold, providing adjustability.

The usual hierarchy of space ranges from private, semi-private, semi-public and public space. Georgiou (2006:14) also discusses four spheres of privacy. He identifies them as the intimate, personal, private (this sphere is also refered to as the social sphere by some) and public spheres. The project elaborates on these four levels of privacy, creating a number of similar levels through the combination and applied intensity of interior elements. All spaces in this project consist of gradient levels of privacy between the private and public domain.

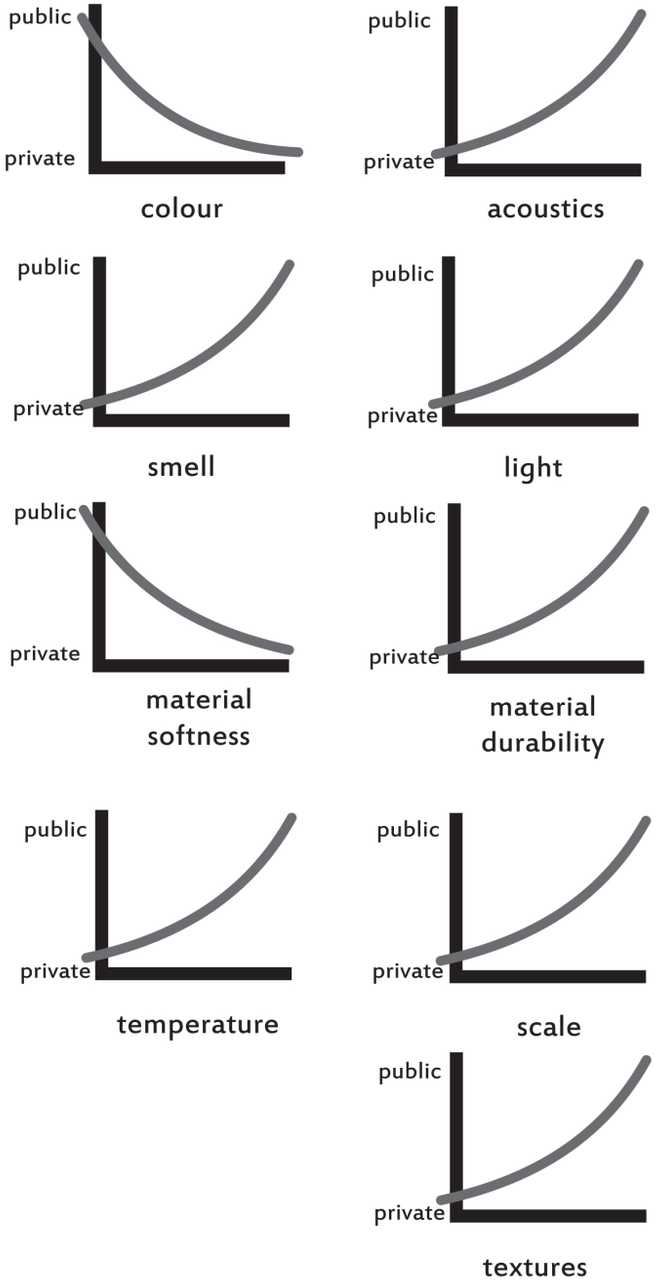

Figure 4.5
Concept development: Graphs indicating effect of boundary design elements

By combining these principles the level of privacy in a space can be carefully determined. Adjustable privacy levels can be incorporated into some spaces to provide the user with control over them.

In addition to its role in questioning boundaries, the City Stoep should also introduce the function of the building, it should acclimatise the user to their new environment, it should provide information on the function of the building, it should provideapauseorwaitingareafortheuseranditshouldcreateaspaceforsocialinteraction.

If it is successful in achieving the above mentioned aims, the City Stoep can contribute positively to the neighbourhood and aid in the urban regeneration.

4.4 User description

In areas where urban regeneration is implemented, there is always a danger of gentrification forming homogenous neighbourhoods. “Gentrification is defined as the process by which wealthier (mostly middle-income) people move into, renovate, and restore housing and sometimes businesses in inner cities or other deteriorated areas formerly home to poorer people.” (Geography. 2009)

One of the side effects of gentrification is the formation of mono-culture areas, where only one socio-economic group is represented. The city centre needs diversity in cultures and income groups to become self-sustaining. Gentrification in the CBD should be avoided if possible. New urbanist design principles are in line with this approach by contributing to: “neighbourhoods that are compact, mixed-use and pedestrian friendly; districts of appropriate location and character; and corridors that are functional and beautiful [that] can integrate natural environments and man-made communities into a sustainable whole” (Katz, 1994: xx).

The process of gentrification is currently in the early phases in Braamfontein with developers trying to shape the community to fit into their vision and comfort zone. The upliftment of the area is coming at a price and raising the property values. In Braamfontein, however, there is a unique situation where the two polarised developers, as discussed earlier (in chapter 2), provide for both the middle-high income group, and the low income student. A monoculture city can therefore be avoided by embracing the two different groups and expanding this socio-economic diversity.

Figure 4.6
Concept development: User explanation

The program of the ground floor should oppose gentrification. It should form a link to the existing socio-economic groups present in the area, and promote the addition of more such groups. It should celebrate difference and diversity.

Braamfontein is currently used by students, young professionals, office workers and pedestrians. To appropriate this space as a part of the city with a diverse population, the intervention should strive to take into consideration the widest possible range of users. The design intervention should therefore not target a specific age group, but rather a specific type of person: the young at heart, adventurous, city dweller, who loves to be at the centre of action and become a part of the city and the way it functions. This city dweller will then be considered the user, because of the way they interact with the city.

4.5 Proposed program

The client for this project is the owner of the Metro Hotel, Mr Andrew Bannister. Bannister envisions an upgraded hotel to form a part of the regeneration of the area. An expanded vision for the hotel is proposed, with supplementary activities to support the hotel and draw in more people. The spaces adjacent to the building consist of a courtyard and unused alleyway. Both these spaces present good opportunities to link the building to the urban fabric of the neighbourhood.

The alleyway is within close proximity of the taxi drop off point and the bus stop, lending itself to become a pedestrian walkway, leading into Braamfontein. This walkway should introduce more pedestrian activity into the neighbourhood and activate one of the unused edges of the building.

The intention of the ground floor is to :

- o draw in new people and the general public
- o introduce and support the hotel function through the intervention
- o build on the character that is already there by creating a space in complement to the hotel
- o create a user-friendly space through edge activation

These intentions are further explained in figure 4.7 on page 68. Here the implementation of the design process is explained in relation to the larger surrounding area. Firstly, the site should be identified. Secondly, the urban fabric should be perforated and space should be dedicated for pedestrian use. This pedestrian walkway will offer interaction opportunities with the building. Thirdly, the ground floor façade of the building should be more permeable, to allow interaction. Fourthly, additional activities should be introduced to draw in new users.

Lastly, these principles should be repeated throughout Braamfontein to create nodes of interaction supporting one another. By duplicating these principles in other buildings, the neighbourhood regeneration is supported by the design of multiple interior spaces.

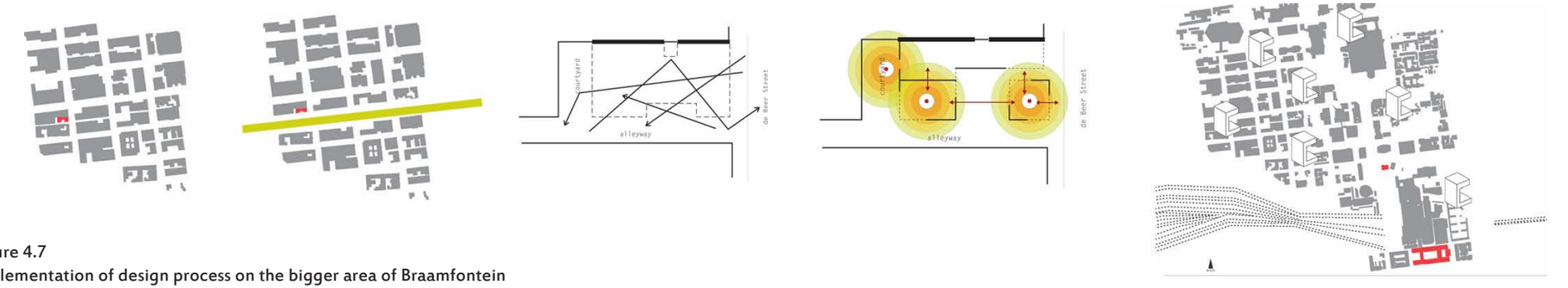

Figure 4.7
Implementation of design process on the bigger area of Braamfontein

4.5.1. Assigned Programs

Three new additional activities are proposed, with each activity slotting into either the public, semi-public or semi-private domain. This connection can be seen in figure 4.8. The new programs all support the main function of the building, the hotel, and complement each other as supporting functions. The supporting functions will form the main public interface of the building and will promote activity and awareness around the hotel.

In selecting appropriate functions, *Adapting Buildings for Changing Uses* by David Kincaid (2002, 21-65) was consulted. A complete table of this exploration can be seen in addendum B. The focus of the supplementary activities are either complementary to the hotel function, or play to the diversity of the people in the area, or both. The added programs are explained as follow:

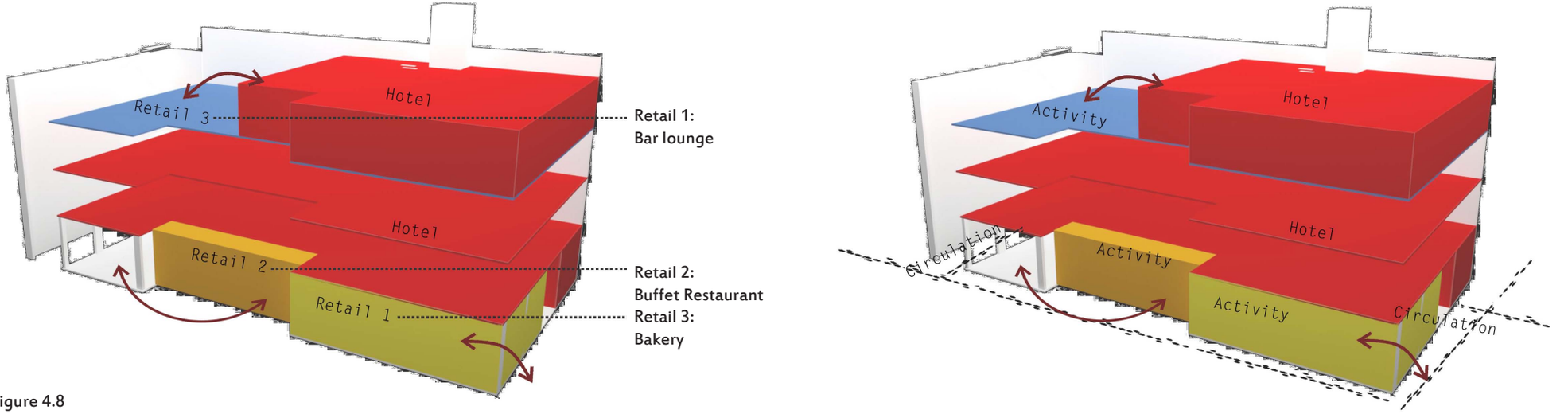

Figure 4.8
Isometric of assigned programs

- Bakery

A bakery space was selected as the link to the public domain. This activity node is placed on the most visible and active corner of the ground floor. The intention is the creation of a retail space that will appeal to various user groups and encourage a diverse group of people to use and frequent this corner of the site.

To serve as a precedent study for both a bakery and a commercial space, Princi was analysed in terms of design idea, layout, materials and lighting. See section 4.6.

- Buffet

The second activity is a Buffet space that operates mainly in the morning and afternoon. In the morning it will provide a breakfast buffet for the hotel customers as well as people on their way to work, and in the afternoon, it will provide a buffet lunch. Currently the hotel does not have a restaurant space. The buffet space is designed as a semi-public activity, sheltered by the bakery for selected entry, but open to the alleyway and courtyard. The bakery can supply bread to the buffet, adding to the bakery's clientele.

- Rooftop Bar

The third activity, the rooftop bar, is considered a semi-private space, because of its selective entry. The rooftop bar links directly back to the hotel and forms a relaxing space to unwind after a long day. The bar also links with the alleyway, in the form of a public staircase.

- The Hotel

In 2009, Mr Bannister approached RSL Architects to renovate the hotel in time for the 2010 Soccer World Cup. This renovation never took place, due to lack of funding. The renovations ignored the context of Braamfontein, and continued to attempt to make the Hotel as profitable as possible by increasing the room count to the absolute maximum. Due to this approach a lot of design elements where left to chance and in the end were not properly resolved. The redesign of the hotel also still left it very insular.

The proposed layout by RSL Architects can be seen in figure 4.9 - 4.12. Here some of the unresolved design elements can be seen, like the small passage ways with no natural light or ventilation, the bedroom doors opposite each other in the hallways creating a less private experience, shared walls between beds, small window

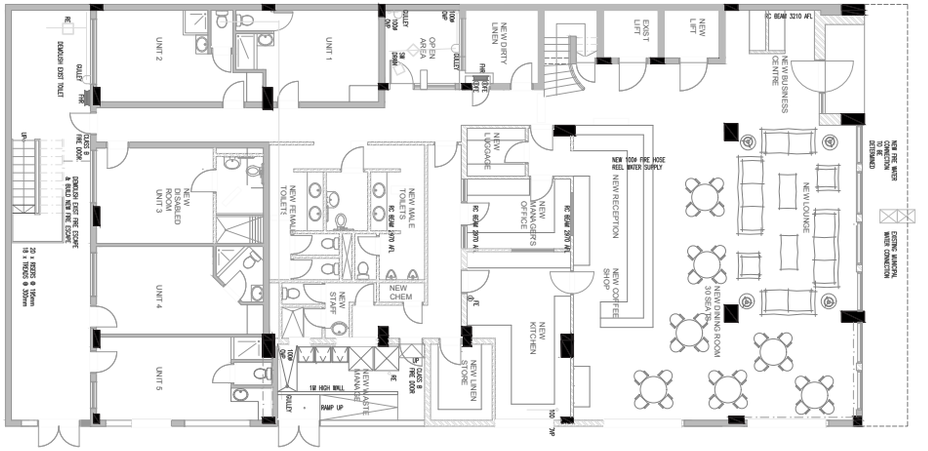

Figure 4.9
Proposed ground floor design by RSL Architects

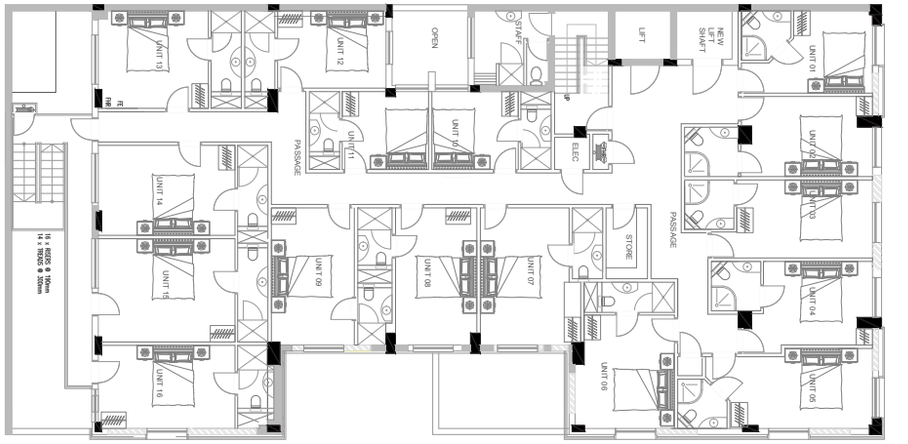

Figure 4.10
Proposed first floor design by RSL Architects

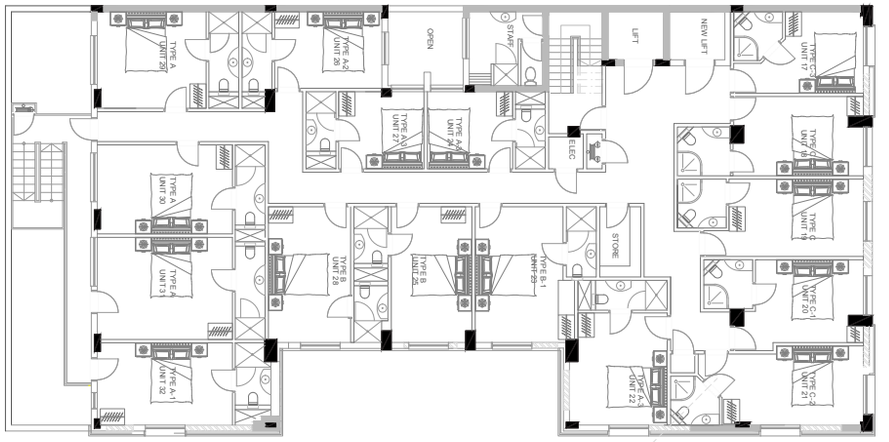

Figure 4.11
Proposed second floor design by RSL Architects

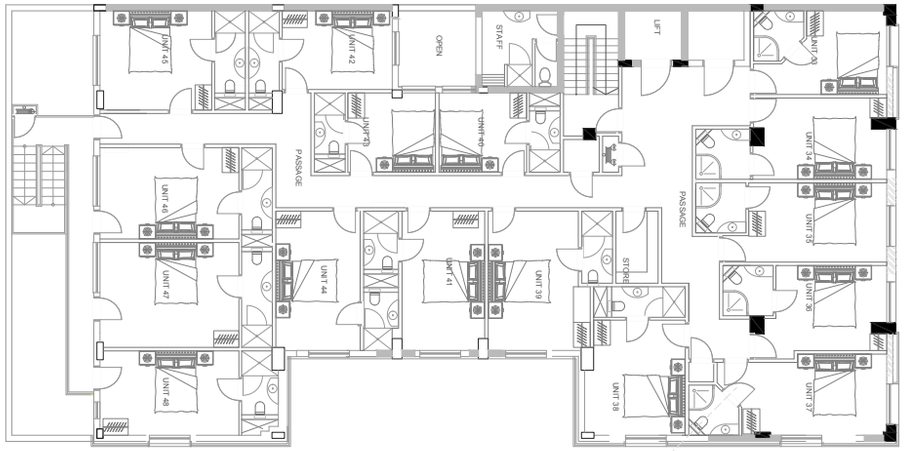

Figure 4.12
Proposed third floor design by RSL Architects

openings and limited public or communal spaces for interaction.
Although the above mentioned supplementary functions have been proposed, the hotel itself also requires an intervention which will link it to the overall aims of the project and neighbourhood. The reimagined hotel should stimulate and encourage diversity. The hotel occupies two and a half of the four levels in the building, with a ground floor presence in the form of a reception area.

The conceptual design of the hotel is now approached through boundary design. The design of boundaries indicate the privacy level in each space, demarcating different activity zones. The proposed hotel consists of 30 rooms, three additional retail activities and three integrated social spaces.

Boundaries are indicated through the use of light, colour, acoustics, smell, materials and textures, temperature and scale. Some of the boundaries are controlled by the user, giving them the ability to decide the level of privacy desired.

The communal spaces are dedicated to promoting interaction between guests and in that sense start to form a community. The traveller that is looking to socialize and meet interesting new people from around the world, share experiences and experience other cultures, has the opportunity to meet similar people in these areas. This contemporary approach of enlarging your network of friends also contributes to the sense of community, even if it is only kept alive in the digital realm.

The first floor promotes the highest level of activity with the entertainment lounge and the double volume space, linked to the courtyard below. This floor also makes use of two communal bathrooms, one for males and one for females, reducing the size of each room. Rooms on this floor are therefore the more affordable of the accommodation on offer.

Both the second and third floor consists of rooms with en-suite bathrooms, raising the privacy level of the rooms in general. The second floor also consists of a communal space, but this space is dedicated to reading and quiet tasks like checking e-mail. That makes the level of interaction in this communal space lower and the privacy level higher than in the entertainment lounge. Figure 4.13 indicates a diagrammatical layout of communal spaces and activity zones.

Some rooms provide added luxuries like a television, desk and seating. These rooms are rented at a more expensive rate. The privacy levels and the amount of

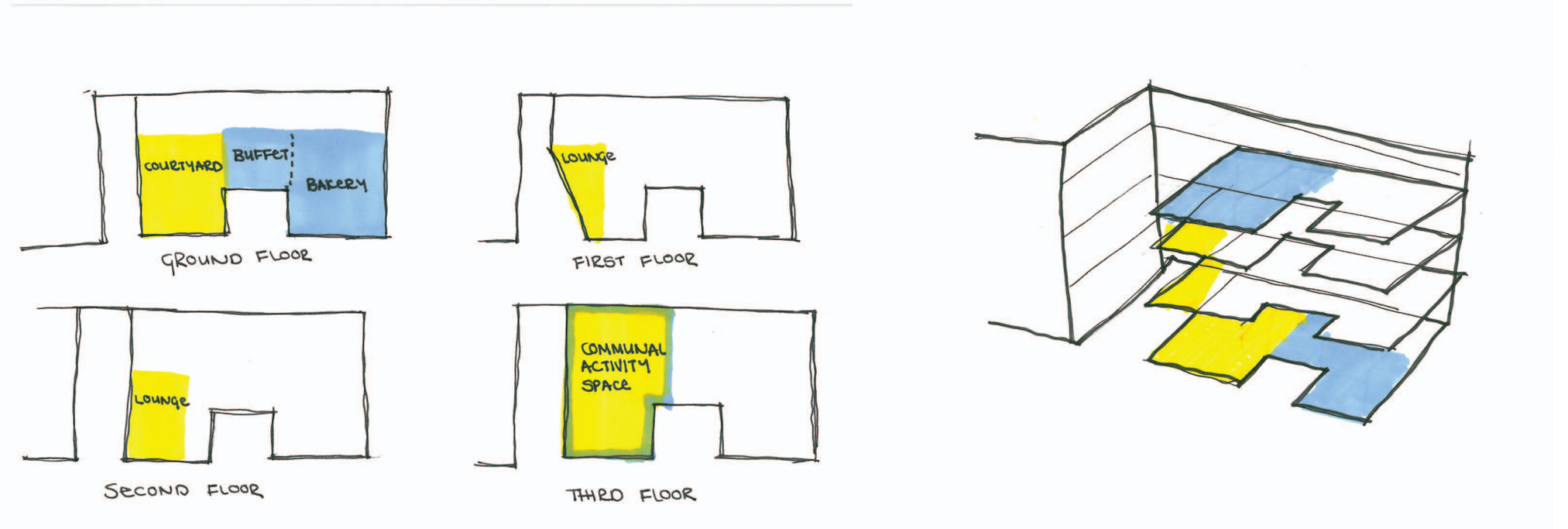

Figure 4.13
Sketched diagramatical layout of hotel, indicating communal spaces and activity zones

additional elements available, provides the user with a wide variety of choice in selecting an appropriate room, whether this choice is based on the cost of the room, or the privacy level. The combination of rooms provide the potential guest with a diverse selection to suit their needs.

Four precedents informed the approach towards the hotel redesign. Firstly the Superbude in Hamburg (figure 4.14-4.16) was chosen as precedent for its treatment of communal spaces. The Superbude is unique for its combination of hotel and hostel spaces. The design is alluring and friendly with activity zones spread throughout the space. The hotel is
designed to accommodate a diversity of people, "... from backpacker to business traveller everyone meets up in the Kitchenclub, the dining-hall, to prepare meals. And whilst some people are cooking the others are breaking virtual records on one of the Wii consoles. The hostel-hotel experience turns into a social event pretty fast!" (Architonic: Hotel Superbude, 2008).

Secondly the Hudson Hotel in New York (figure 4.17-4.18), by Philippe Starck, was evaluated for the use of colour and efficient room layouts. Yellow is used strongly through the interior of the public spaces, with the private suites clad in wood and finished mainly in white and shades of grey.

Thirdly the Urbn hotel in Shanghai (figure 4.19-4.21) was looked at for its city inspired

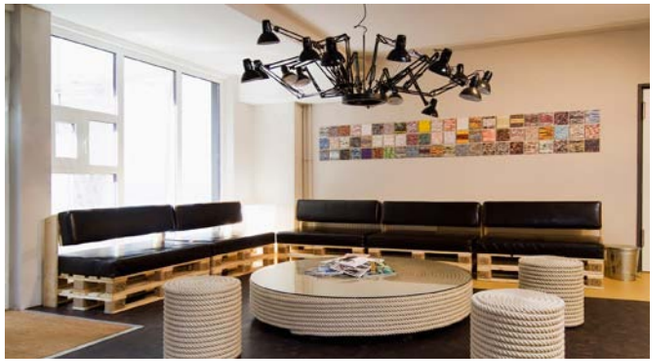

Figure 4.14
Superbude Hostels, Communal lounge (Superbude Hostels, 2008)

Figure 4.15
Superbude Hostels, Communal Kitchen (Superbude Hostels, 2008)

Figure 4.16
Superbude Hostels, Communal dining room (Superbude Hostels, 2008)

Figure 4.17
Hudson Hotel, Facade (Hudson Hotel, 2012)

Figure 4.18
Hudson Hotel, Interior Room (Hudson Hotel, 2012)

Figure 4.19
Urbn, Courtyard view (Urbn, 2012)

Figure 4.20
Urbn, Dining room (Urbn, 2012)

Figure 4.21
Urbn, View from the roof (Urbn, 2012)

Figure 4.22
Pay and Sleep, London (Pay-and-sleep, 2012)

design. The hotel focuses on maximizing the impact of the views created in the city as well as creating quiet zones to relax. Urbn Shanghai refer to themselves as “the next generation of hotels that bring more into the heart of the city“ (Urbn Hotels, 2012). Urbn is a carbon-neutral hotel, and strives to establish environmentally friendly principles in hotel design.

The Pay and Sleep Hostel in London (figure 4.22) offers a look at an alternative accommodation method to the norm of renting a room for an entire day. The Hostel is situated in close proximity to the airport, and provides guests with the opportunity to rent a room for only a few hours of sleep, as required.

4.6 Trend analysis

The interior design is done in a modern, contemporary fashion, to stay true to the style of the original building and to build on its urban nature. A neutral backdrop is created with accents of colour used to indicate the privacy level and the branding.

Furthermore, the interior material selection is subject to the results of a trend analysis. To understand the general tendencies in hotel design, a trend analysis of hotel interiors designed in 2012. Figure 4.23 - 4.32 shows imagery illustrating the current trends. From these images, the materiality trend currently visible in hotel interiors are:

- the use of vinyl in art and wallpaper
- the use of patterns and textures
- bright colors as accents or to create entire spaces
- indirect lighting sources

Trends concerning the design approach that can be derived from the previous four hotel precedents and the trend analysis. These trends are:

- thematic hotels
- hotels designed by famous designers and architects
- environmentally friendly hotels
- pop-up hotels and short hour hotels

The materials identified from the trend analysis are to be incorporated into the design to create a hotel interior that is in step with international trends.

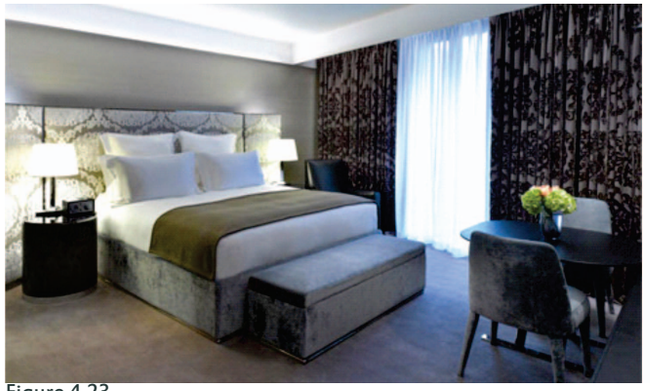

Figure 4.23
Interior by Lema (Interiora, 2012)

Figure 4.26
Patterns (Luxpresso, 2012)

Figure 4.27
Written floor (It's about interior, 2012)

Figure 4.30
Thematic hotel (Design Box 365, 2012)

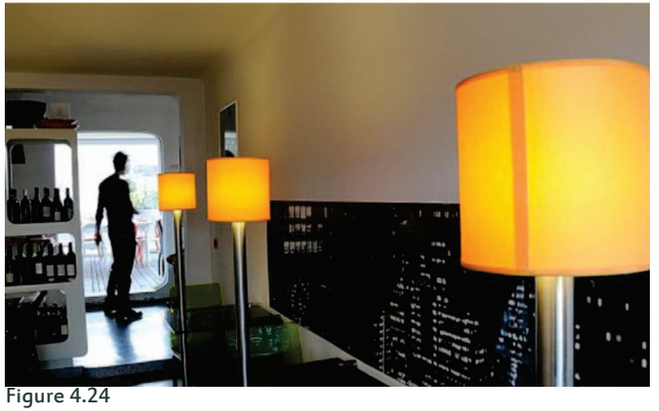

Figure 4.24
Vinyl Art (Home Interior Design, 2012)

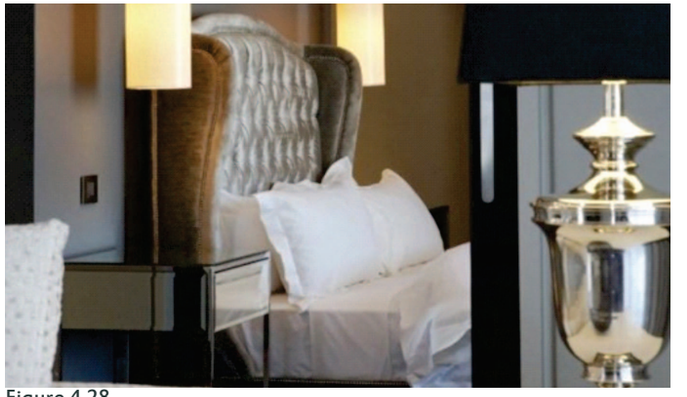

Figure 4.28
Textured material (The EP insider, 2012)

Figure 4.31
Everything pink (Feature shoot, 2012)

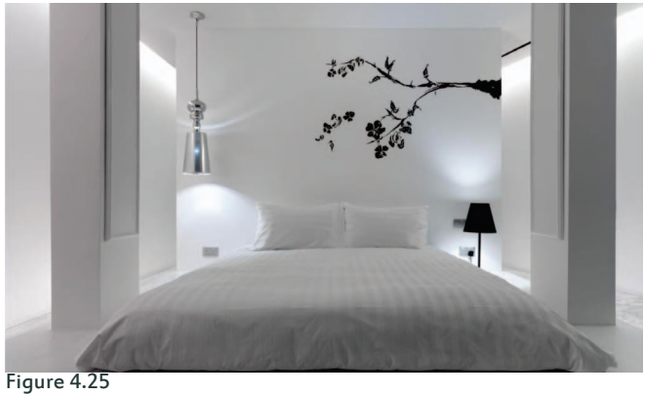

Figure 4.25
Vinyl wallpaper (Home models, 2012)

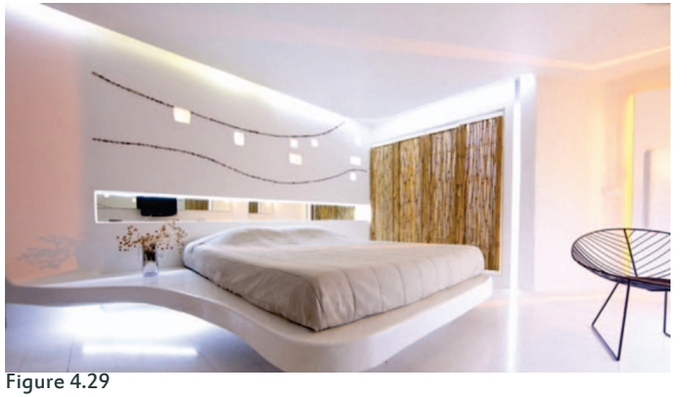

Figure 4.29
Washed light (Let me be inspired, 2012)

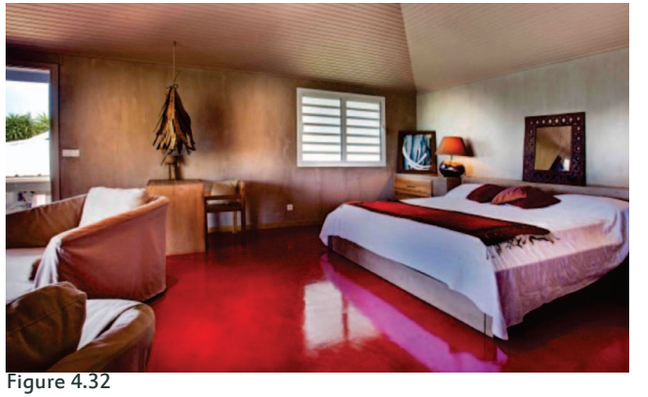

Figure 4.32
Accent color (National Geographic, 2012)

4.7 Precedent study: Princi Bakery

Location
Milan Italy
Function
24-hour Bakery
Architect
Claudio Silvestrin Architects
Project completion
2006

Figure 4.33
Food Display (Princi, 2012)

Princi is an international precedent where the brand is strengthened by the design of the bakery. The bakery will also be looked at in terms of the values it portrays, the way it communicates the identity and it commercial essence.

BACKGROUND INFORMATION

Princi is a 24–hour bakery and is known for its Milanese bread that is made without yeast. The approach of the bakery is to create a place that can be visited anytime and that focusses on a wholesome approach. (Princi, 2012) The identity of the brand is encapsulated in the four elements needed to make bread: flour, water, air and fire (Princi, 2012). All four these elements are visible and showcased in the bakery, from the process of creating dough through the combination of flour and water, to the fire ovens for the final product. The bakery is focussed on the wholesome goodness of producing baked goods from traditional methods as well as using fresh products where they make all their ingredients from scratch and therefore cut out processed ingredients.

The bakery is situated in a very busy square in Milan, and therefore needs to synthesize the traditional methods with the modern city life. Everything about the bakery says quick stop, and ushers users through but the space still draws people in and is full of atmosphere.

LAYOUT

The bakery is a long rectangular space, exploiting the edges for display and seating. On the one side of the bakery, all the baked goods are laid out on display for ease in selection. The baked goods are displayed in a long glass display unit, revealing all the possible choices to the user. Staff are positioned at the back of the display counter to help clients where necessary. The middle of the bakery is used as circulation space and to form queues by the popular products.

The other side of the bakery provides seating for the user who prefers to quickly eat their baked goods before plunging back into city life. The seating is high and the comfort level is limited.

MATERIALS AND LIGHTING

The materials used in the design is mainly natural porphyry rock in a similar color to

the bread itself. (Claudio Silvestrin Architects,2006). The floor is covered in a smooth porphyry rock and the walls in a roughly finished counterpart. The interior reminds the user of the natural roots through using rough and natural materials. Stone is used throughout and visual links to the fire ovens create warmth and atmosphere.

Lighting in the bakery is focussed only on the bread, creating an alluring atmosphere where the product also becomes the artwork of the space. Candlelight are also utilized in the space to soften the rock and to add to the overall atmosphere.

CONCLUSION

Princi synthesizes two opposing ideas, making wholesome products available and accessible in the busy city life where it normally boils down to fast food and processed goods. The ease of access draws people into the bakery for the quick and painless process. The user is also presented with different levels of interaction, from a quick stop to a lingering lunch.

The combination of choice, the atmosphere and quality of the product is a recipe for success in a modern city.

Figure 4.34
View to the exterior (Princi, 2012)

Figure 4.35
Kitchen view (Princi, 2012)

Figure 4.36
Linear interior (Princi, 2012)

4.8 Conclusion

The intervention should activate the alleyway as a public pedestrian walkway, by creating the pedestrian walkway through Braamfontein, leading from Bertha Street, to Miele Street and further. This will draw people into the neighborhood and create niches and corners for staying. Through the activation of the alleyway the chosen site is more exposed with a greater public involvement.

The building should act as a catalyst in the area for other buildings and it should refrain from becoming insular. The building should rather be inviting for travellers, passers-by and office workers alike. This node of public interaction should be taken and repeated through Braamfontein, not just becoming one installation but re-appropriating several buildings in the area to really make Braamfontein a pedestrian neighborhood with active ground floors promoting interaction.

The selected programs support the main function of the building, namely the hotel, and strengthens it. Through boundary design the interior environments are divided into public to private spaces. We can compare the building to a small neighbourhood. Different people will be combined in the space and forced to co-exist peacefully. Certain spaces are dedicated as public space and will be accessible by all. Guests have the choice to withdraw from the public activities into the privacy of their own room. Through this analogy the principles of edge activation can also be utilized in the communal spaces. These spaces should encourage interaction between guests, contributing to the sense of community.

The project is not the first development in Braamfontein to promote the use of communal space, but it builds on the existing trend in the area. The project can therefore learn from the mistakes of other interventions. Through numerous interventions taking the same direction, the area can slowly be changed to form a diverse neighbourhood that encourages interaction and the building of a community.

This process can be compared to the intervention at 44 Stanley. The biggest differences being the project at 44 Stanley could be completed in one process. It however is still insular in its nature and has no effect on the surrounding neighbourhood. The principles nonetheless stay the same. The project should add to the activity level and the vibrancy of the area.

chapter 5

Figure 5.1
Proposed atmosphere of space

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5.1 Design approach

> *"The most successful multi-use centers, in terms of pedestrian use, are those that have been integrated with the urban context they serve and which serves them. This integration is primarily the result of the interior-exterior continuity of the pedestrian systems."*
>
> (Bednar, 1990: 103)

The intervention focuses on the design of the boundary condition, with a specific focus on the boundary relationship from the interior of the building to the exterior. For this purpose the alleyway is included as a part of the site and is treated as an extension of the interior realm.

The design project aims to renovate 9 De Beer Street to uplift the current hotel to a three star rated establishment. The design also focuses on the development of the additional activities to the site, to promote the social activity around the building and to form a publicly accessible interior space that can contribute to the neighbourhood.

The intervention links with the current design qualities of the building, but it will indicate new work through the use of new and contrasting materials. New work will either be handled in the way that the building start to give way to public space, or as additional public spaces that is added onto the building. Colour is also used in this regard to help indicate designated areas and to strengthen the brand identity. The focus of the material selection is to deepen the communication of public-, private- and transitional spaces.

The boundaries forming 9 De Beer street are re-evaluated to create an interplay between barriers and thresholds, allowing the city dweller to read the spaces as public or private. Gradients of private space is added to the interior through the design of boundaries.

In *The Social Life of Small Urban Spaces*, William Whyte (1980) explores the following elements as contributors to a successful public urban space:

- choice in seating through moveable seating options
- water, as a contributor for look, feel and white noise
- food, as an attraction point for people
- people attract more people
- music, for liveliness
- trees to offer protection against the elements
- retail elements, for liveliness
- public toilets

A combination of these elements is explored to form the design solution. The interior intervention should ultimately contribute to the surrounding neighbourhood and should therefore extend towards it. The building will give way to public space, linking the interior and the exterior. This is most evident at the crossing into public space.

5.2 Assumptions

For the design implementation, a couple of assumptions are made:

- the Pedestrian City framework is implemented
- the retail space on the ground floor is vacant
- the ground floor is appropriated for public space, as required by the framework

These assumptions will aid the making of design decisions.

5.3 Approach to demolitions and additions

> *"The idea of alteration is to offer an alternative to preservation or demolition ... if one considers the survival of the original building, the host so to speak of the new works, then the activity assumes a wider scope. It becomes like an act of transition or translation, from the past into the present, with logically also a consideration for the future ..."*
>
> (Scott, 2008:11)

In *On Altering Architecture*, Fred Scott refers to the work of alteration as a process of stripping back, making good and enabling works (2008:109). The host building, 9 De Beer Street, therefore first needs to be stripped back of parts that is prohibiting the building to function properly and to project into the neighbourhood regeneration.

The stripping back is completed in the form of partial demolition to enable the host building to give way to public space. This can be seen in the double volume space that

is added at the courtyard as well as in the rooftop bar (fig 5.2). The building also gives way to public space through the addition of the balconies. The wall at the balconies creates an indented space towards the interior, providing space for the doors to open onto and strengthening the sense that the building opens onto the exterior (fig 5.3).

The next step, referred to by Scott as *making good*, is the additions of new interior walls and additional structural elements added to the building to enable the new works and support its new programmes. Both the demolitions and additions can be seen in the demolition plans where red indicates demolitions, green indicates additions and grey indicates the existing built form, illustrated in Figure 5.4 - 5.7 on page 108.

The building is primarily adapted in two ways. The first is the cut back of the existing building, to allow the building to give way and embrace public space. This is done through the selective removal of the concrete floor slab, especially in the courtyard and balcony spaces, and in the way the external brick wall is constructed. This form of alteration to the building is therefore more robust in material selection and connection method.

The second is the addition of spaces like the public walkways and staircase. This is done through light weight steel construction that is added onto the existing structure.

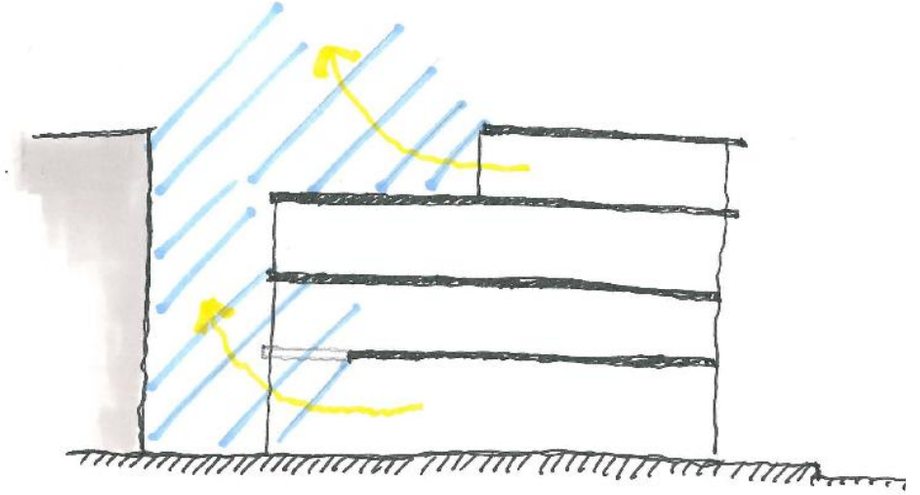

Figure 5.2
The building opens up to public space, southern view

The construction and connection methods employed here, are removable and changeable. These methods of addition and alteration is further expanded on in chapter 6 through the detail design.

5.4 Design development

To understand the full extent of the design, the approach to the design on both plan and section is discussed next. The users of the space, the transport methods available and the branding and signage of the space is also considered. Rendered perspectives are also shown to give a feel of the space. Lastly, the added boundaries in the form of both thresholds and barriers are also evaluated.

A basic layout of each floor is illustrated in Figure 5.8 on page 85. The diagrams show the areas dedicated to each function and how they relate to each other. The layout of each floor is discussed in detail in the next section.

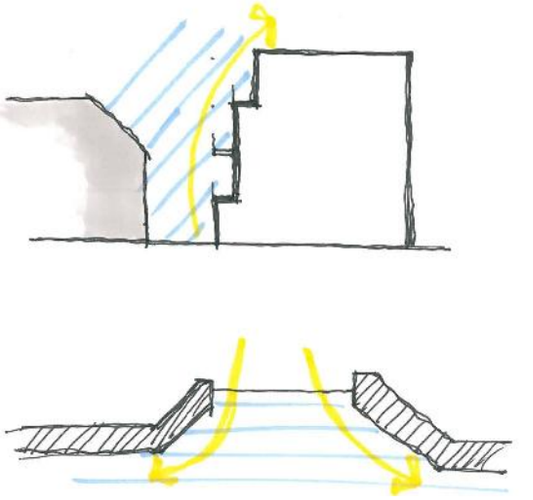

Figure 5.3
The building opens up to public space, eastern view and baclony plan

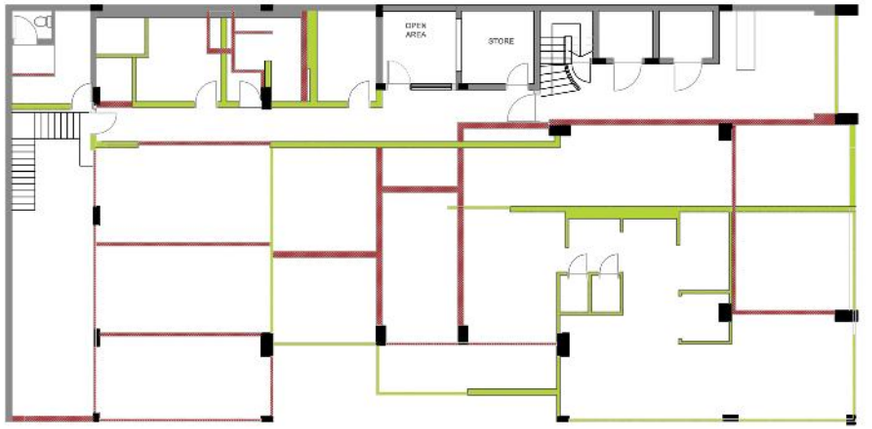

Figure 5.4
Ground floor demolition plan

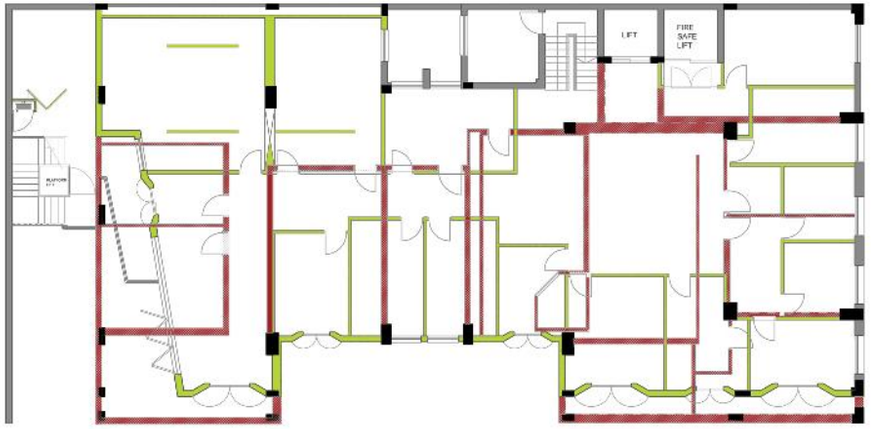

Figure 5.5
First floor demolition plan

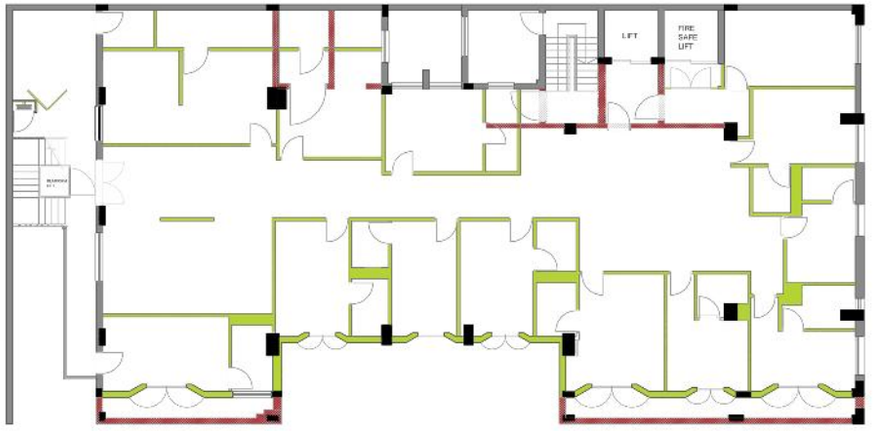

Figure 5.6
Second floor demolition plan

Figure 5.7
Third floor demolition plan

Figure 5.8
Basic layout of each floor

5.4.1. Ground floor design

The ground floor (fig 5.14 on page 88) houses the hotel reception, a bakery retail space, a buffet, a public courtyard, public water closets and the public staircase leading to the rooftop bar.

The reception on ground floor acts as the introduction to the rest of the hotel. During the day the reception is opened completely with the possibility to close it off during the night for safety and climatic purposes. On ground floor, the hotel space can only be accessed through the reception, providing a point of access control. The rest of the hotel works with a card system, providing access to private areas for guests and staff. This can be seen in Figure 5.9 on page 86, where yellow indicates areas only accessible by hotel guests and staff. The spaces left blank are publicly accessible.

The design of the ground floor focuses on opening the building to allow for public interaction. A retail space is introduced on the south-easterly corner in the form of a bakery. This corner is the most public corner of the building, linking into both the

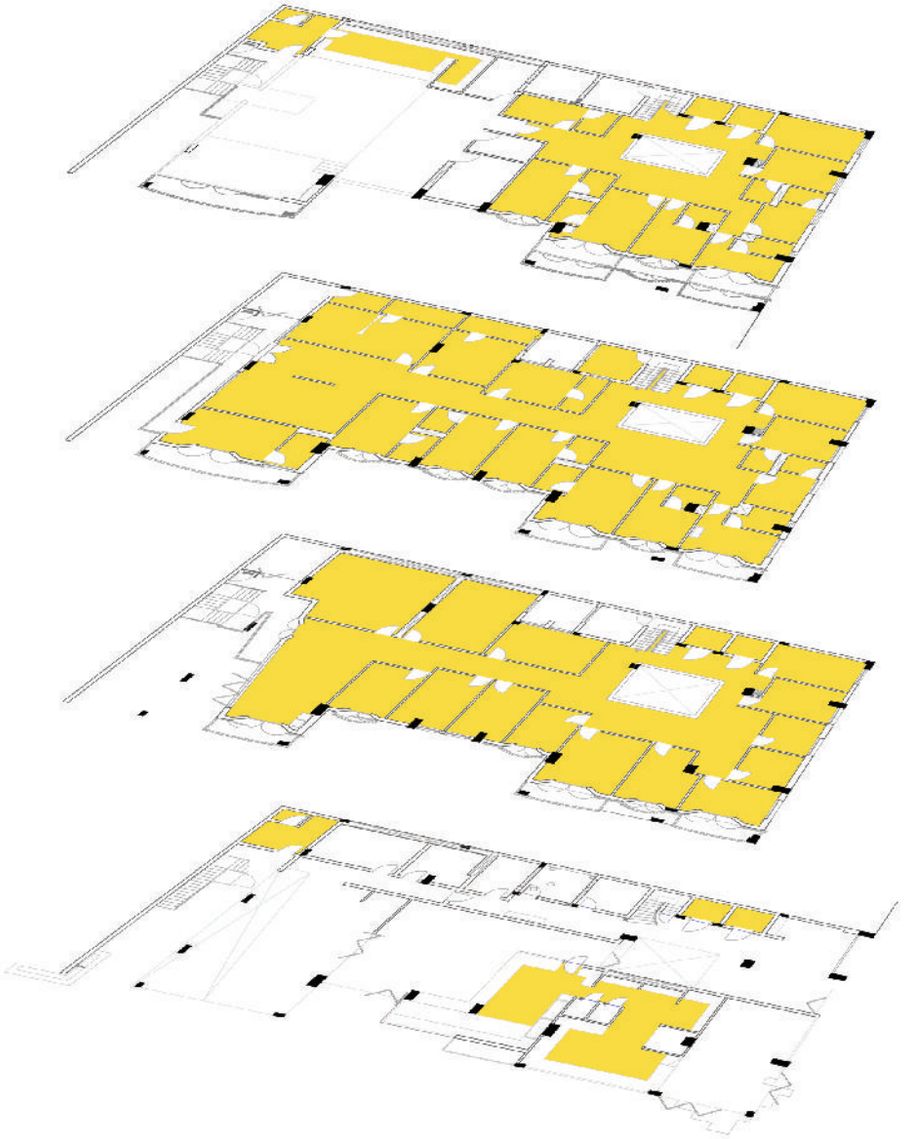

Figure 5.9
Public access and hotel access

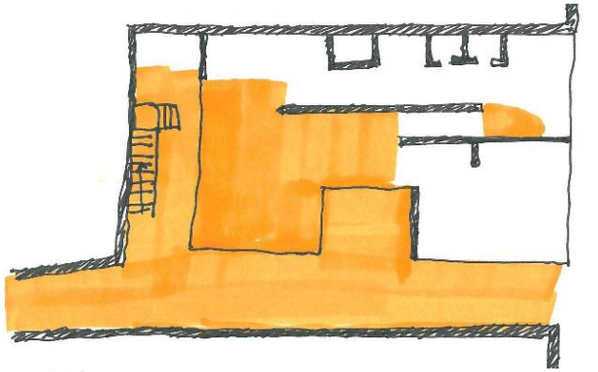

Figure 5.10
Social spaces on ground floor

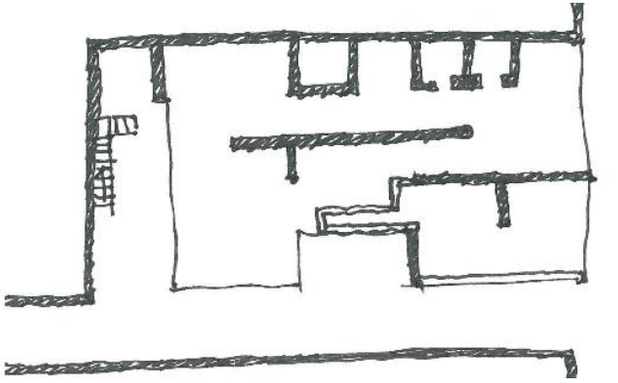

Figure 5.11
Open ground floor

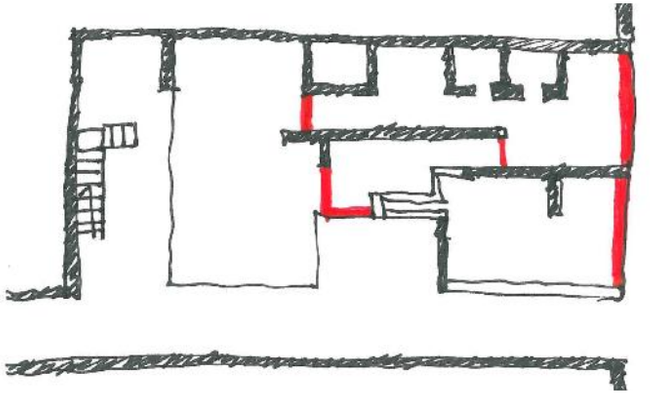

Figure 5.12
Closed ground floor

alleyway and the sidewalk. The entrance to the bakery, therefore, takes advantage of the most exposure. The programme of bakery is selected for the diverse user-group that can benefit from it and that will be attracted to the space by it. This programme links into the public domain as an independent retail space. The bakery also becomes the supplier of baked goods to the buffet ensuring a symbiotic relationship. The floor of the bakery spill out into the existing municipal concrete tiles on the sidewalk, indicating an extension of the interior. Two of the walls of the bakery dissolve completely during the day, providing easy access for pedestrians.

The buffet can be accessed from both the reception and the alleyway, encouraging use by hotel guests and visitors. The placement of the buffet space therefore links into both the public domain and the private hotel domain. The seating in the buffet is in the form of long tables encouraging communal meals and interaction. The bakery and the buffet share a service space which includes storage, wash-up and garbage removal.

The courtyard becomes the major organisational element, with all the activities spilling out onto it. The courtyard provides a public WC for patrons to the buffet as well as the courtyard. In the courtyard, a water element is introduced to provide white noise for background, separating the user from the street noises. The courtyard is situated at the back of the building, providing a sheltered space for people to escape to during lunch or a quick break. At the back of the courtyard, the public staircase creates a public link to the rooftop bar. The staircase is sheltered by the courtyard, providing passive surveillance.

The buffet, the courtyard and the alleyway is dedicated as social space on the ground floor. The seating in the reception can also be seen as social space. Figure 5.10 illustrates the location of social spaces on the ground floor.

The ground floor is opened up during the day, to promote interaction. The opened ground floor can be seen in Figure 5.11. Pedestrians then have access to the reception, the buffet, the bakery and the courtyard.

At night the buffet, bakery and reception will be closed. These spaces should not be publicly accessible at night for both security and climatic purposes. The courtyard and staircase to the west remains publicly accessible. This is illustrated in figure 5.12. A detailed plan of the ground floor is illustrated in Figure 5.14 on page 88.

5.4.2. Alley design

The design of the alleyway is considered an extension of the ground floor. The general design approach to the alley, is to create a robust and durable publicly accessible pedestrian route that encourages the boundary buildings to form a permeable facade, and promote activity in the alleyway.

The alleyway creates a walkway from Bertha Street to De Beer Street. This new pedestrian walkway can connect to the existing pedestrian alleyway that links De Beer Street to Miele Street and beyond (fig 5.15 on page 89).

On the ground floor there is only one floor level, sloping towards the alleyway with a 1:100 fall to the southern end of the site, providing no water access into the building. This creates a single level on the entire ground floor to improve accessibility and to demarcate the space as a part of the public domain (fig 5.13). On the southern end of the alley, the water drainage is situated to collect all storm water from the building and the alley.

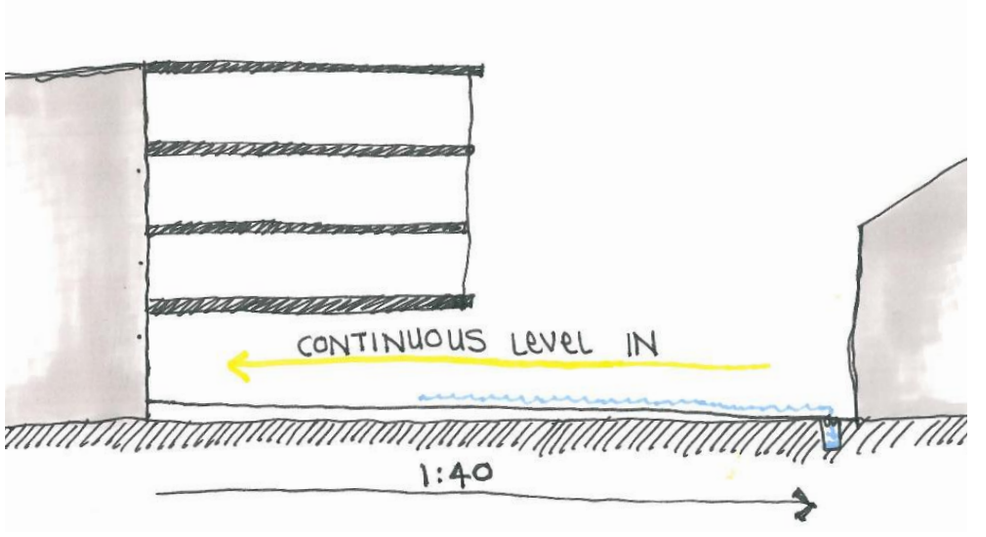

Figure 5.13
Continuous floor level

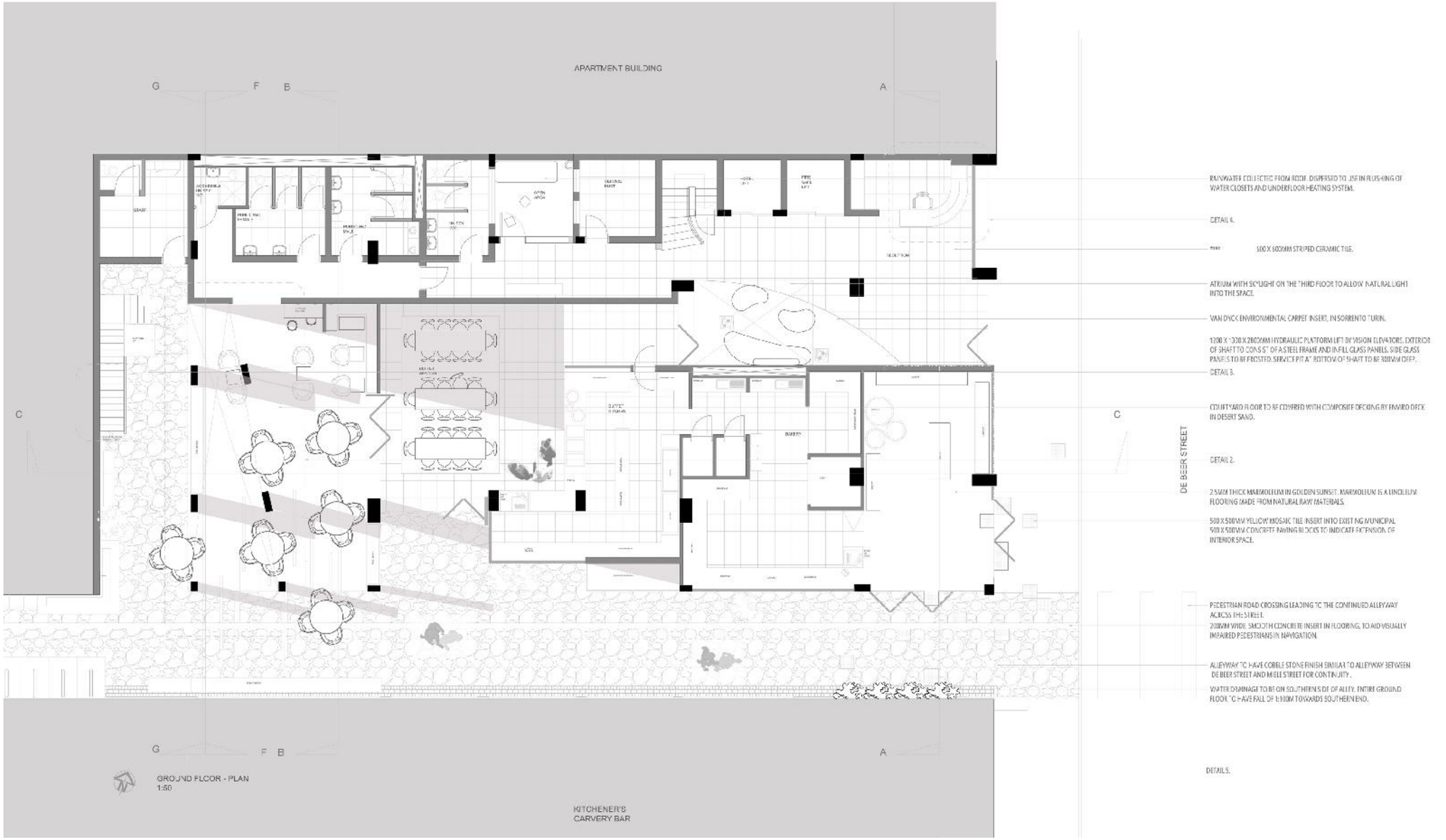

Figure 5.14
Ground floor plan

The southern facade of the building is designed to spill out onto the alleyway. The intention of the alleyway is to encourage the other buildings forming the barriers, to follow the design example and also spill out onto this walkway (fig 5.16 and 5.17 on page 90).The alley holds the potential to become an event space. The alley therefore becomes a neutral canvas for the activities that forms the boundary of this pedestrian link into Braamfontein. In figure 5.16 on page 90, the yellow arrows indicate possible areas of added activation.

The materials used in the alleyway are durable and robust. A cobblestone finish is used similar to the one in the existing walkway for uniformity. This hard surface enables the user to hear the footsteps as a form of introduction in a welcoming manner. The ability to hear someone approaching also acts as a security measure.

Figure 5.18 on page 90 indicates the changes the alleyway design will have on the city block. Possible parking for hotel guests is indicated through the lighter grey blocks in the second block diagram. A taxi drop off in Bertha Street is also indicated in the second block diagram. Pedestrians and guests can make use of this public transport link. A Metro bus stop in De Korte Street, is also within a 5 minute walking distance.

The alley also provides bicycle stands for people preferring a bicycle as mode of transport. This provision refers back to the framework where people are encouraged to make use of bicycles, public transport or to walk the city. Visitors can also use the Gautrain to Park Station that is situated close by. The station is indicated in the framework drawings in chapter 2.

Artificial lighting is introduced in the alleyway in the form of LED lighting strips. The white stripe indicated on the northern facade of the unfolded wall plan[1] (fig 5.19 on page 115), indicates the protruding cover for the LED lighting strips. The complete alleyway can be seen in the unfolded wall plan illustrated in Figure 5.19 on page 91.

1. The unfolded wall plan is a form of an orthographical sketch, used in the late-eighteenth-century by furniture makers to show the style, materiality and detail on the interior of a building. (Weinthal, 2011:299)

Figure 5.15
Alleyway link

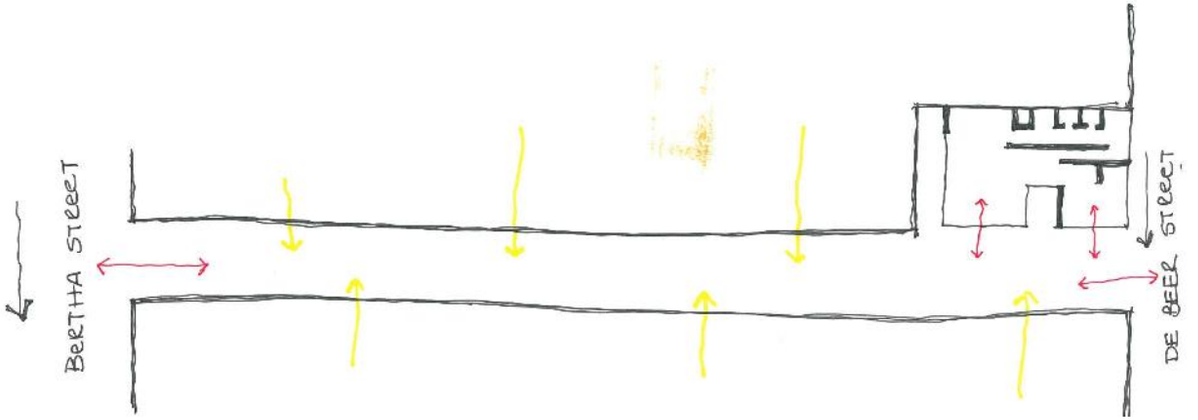

Figure 5.16
Alley activity encouragement

Figure 5.17
Possible activities in the alleyway

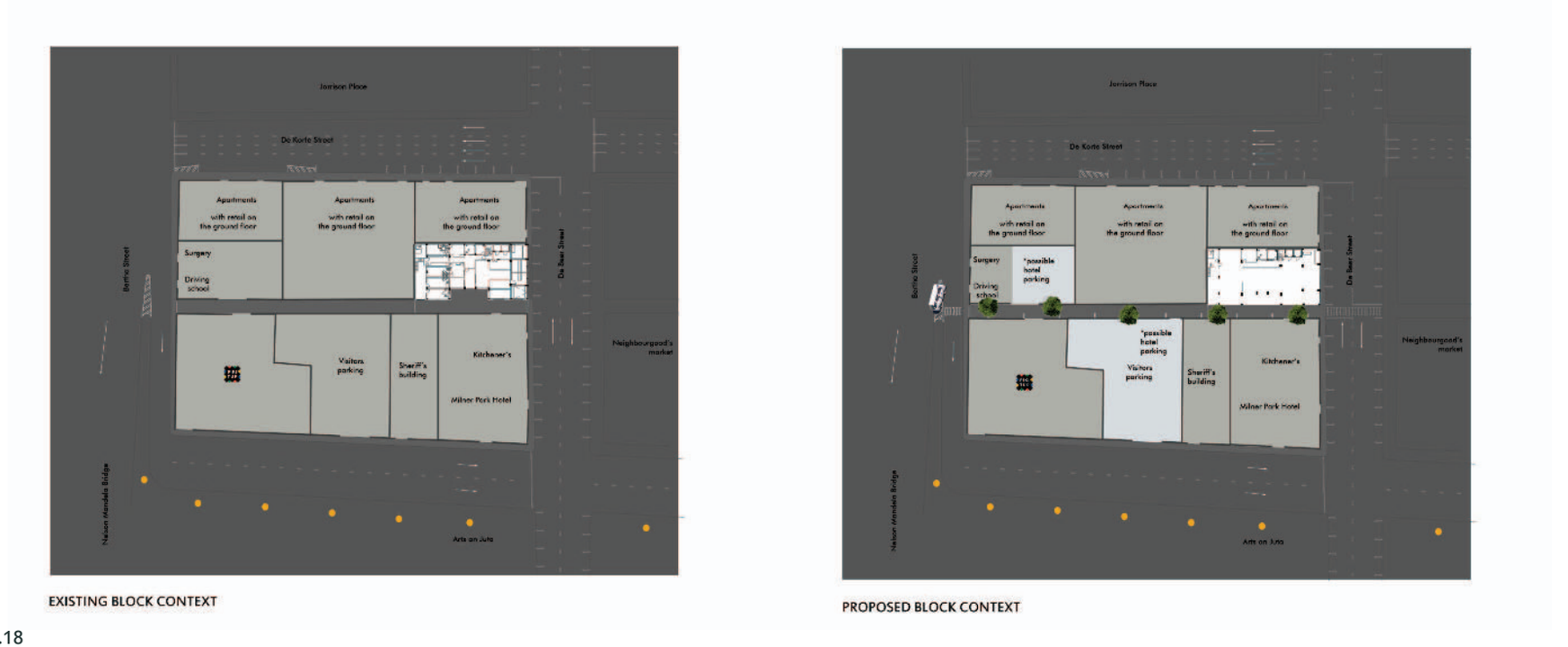

Figure 5.18
Changes made to city block

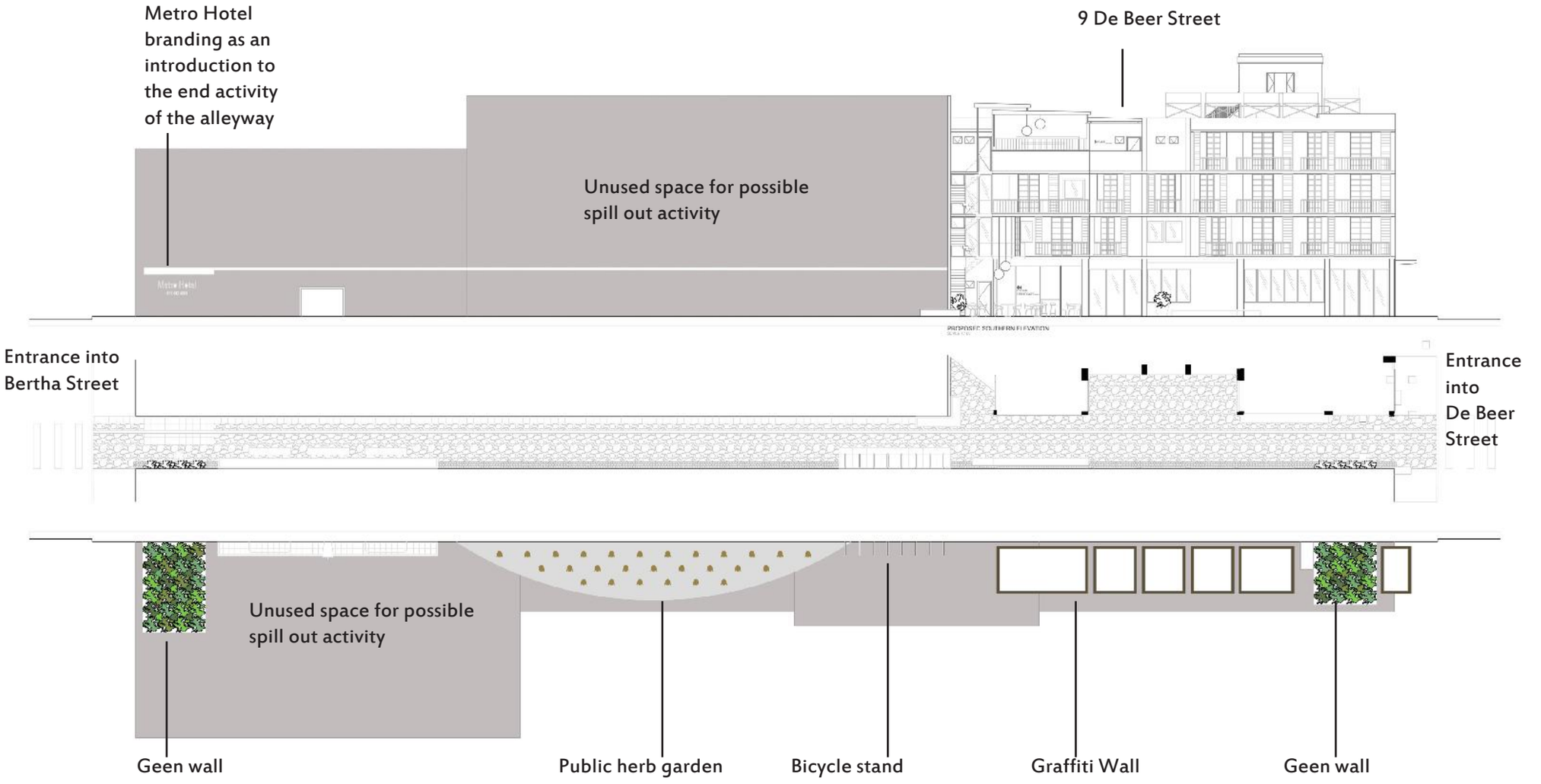

Figure 5.19
Unfolded wall plan of the alleyway

5.4.3. First floor design

The first floor (fig 5.23) consists of the affordable hotel accommodation, communal bathrooms and an entertainment lounge. The first floor of the building is cut back to form a double volume space in the courtyard, giving the impression that the building opens up to the public spaces.

The first floor hotel accommodation is designed with communal male and female bathrooms, providing an affordable option. This allows for smaller room designs that result in cheaper accommodation. The second and third floor offers a more expensive option with en-suite bathrooms. The affordable option is on the lower level to establish a hierarchy in accommodation (fig 5.20). This change in luxury level contributes to the sense of boundary crossing from the one space to the next.

An entertainment lounge is also added on the first floor as a social space (fig 5.21). The lounge encourages interaction between guests and provides a space for relaxation. The purpose of the lounge is to watch television and socialise. A large window creates a link to the double volume space leading to the courtyard below. This creates a connection between the guests in the lounge and the people in the courtyard (fig 5.22). A detailed plan of the first floor is illustrated in Figure 5.23.

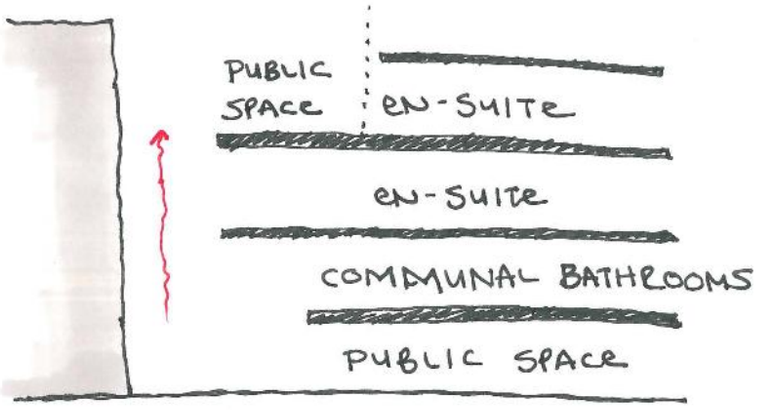

Figure 5.20
Hierarcy of accommodation

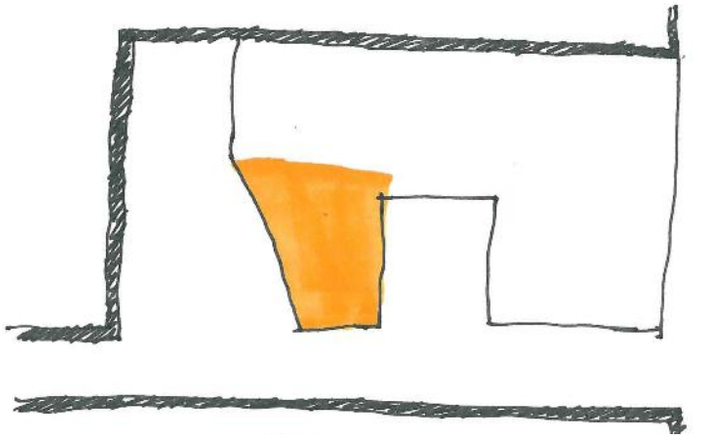

Figure 5.21
Social space on the first floor

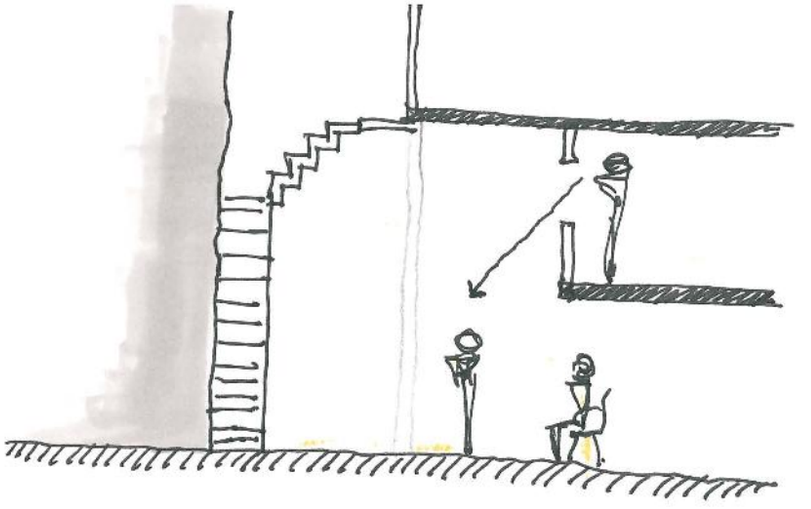

Figure 5.22
Interaction between the lounge and the courtyard

Figure 5.23
First floor plan

5.4.4. Second floor design

The second floor (fig 5.26) consists of en-suite hotel accommodation, a laundry room and a reading lounge.

Room layouts on each floor allows for larger luxury rooms, intended for longer periods of stay, where additional amenities are provided, like a lounge set or a private television. These rooms are considered to be luxury rooms. The luxury rooms are marked on plan with an encircled L. Smaller rooms include only the beds and form a part of the affordable accommodation options.

The varying sizes and privacy levels of the rooms allow the hotel to cater for a diverse clientele. The rooms closest to the vertical circulation are demarcated with a higher privacy level. Rooms closer to the social spaces, provide less privacy and are charged at a lower cost (fig 5.24). Sleeping arrangements also conform to this idea, with family rooms provided towards the social spaces where a lower level of privacy is required. Single and double rooms are provided in the higher privacy areas.

A laundry room is included on both the second and third floor. These rooms are to store clean linen and to take in dirty linen only. The washing and ironing of the hotel will be sent to a dry cleaner. The hotel can offer this service to guests at an additional fee.

A communal lounge intended for work and reading is included on the second floor as a social space (fig 5.25). This space offers Wi-Fi connectivity and is intended to be a quieter retreat.

A detailed plan of the second floor is illustrated in Figure 5.26.

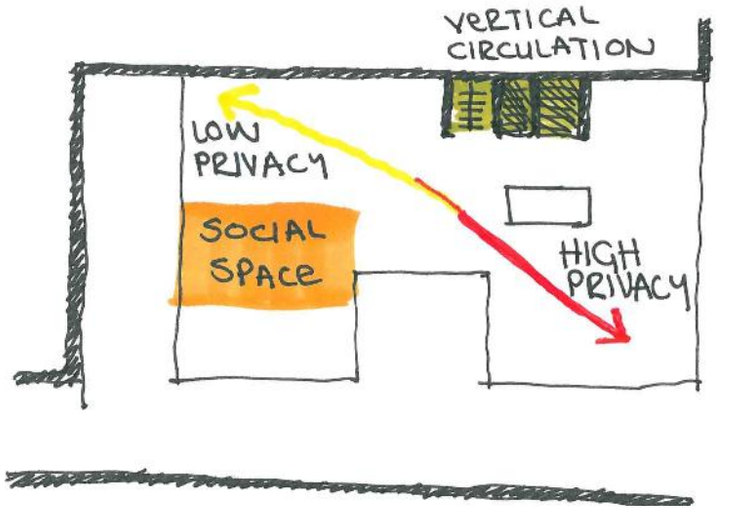

Figure 5.24
Privacy demarcation

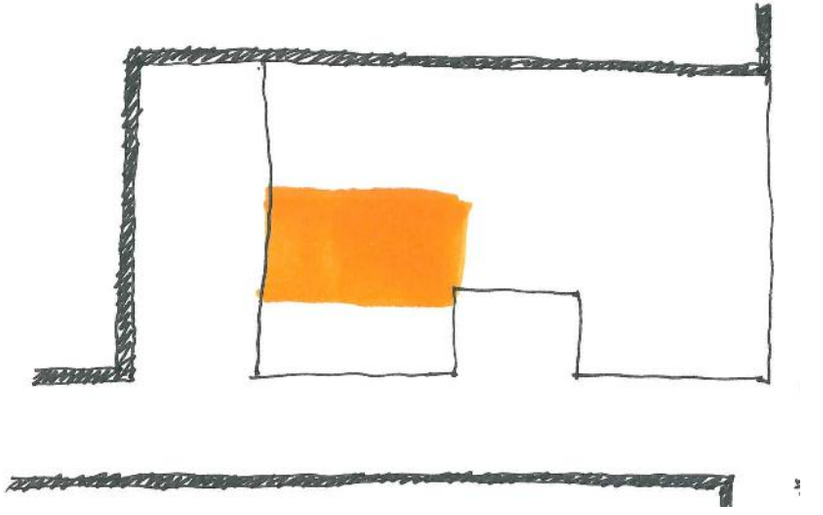

Figure 5.25
Social space on the second floor

Figure 5.26
Second floor plan

5.4.5. Third floor design

The third floor (fig 5.29) also houses the next level of hotel accommodation, a laundry room and the rooftop bar.

The third floor also consists of en-suite accommodation with the hotel space leading to a rooftop bar at the western end of the building. The rooftop bar is the dedicated social space on the third floor (fig 5.27). The bar is accessible from the alleyway through the use of the public staircase or the platform lift, or from the hotel using an access card. Vertical circulation in the hotel is achieved through either the enclosed staircase, or one of the lifts provided. The location of the vertical circulation is indicated in Figure 5.28. The entrance to the hotel is recessed, creating another threshold, indicating the crossing to private space.

The rooftop bar is covered with a light weight roof, providing protection against the elements. The sides of the bar are however open, linking the patron to the city beyond. Two private lounges are provided along the public staircase leading to the bar. These lounges are visually open to people passing by in the alleyway, creating an introduction to the rooftop activity.

A detailed plan of the third floor is illustrated in Figure 5.29. Figure 5.30 illustrates the roof plan.

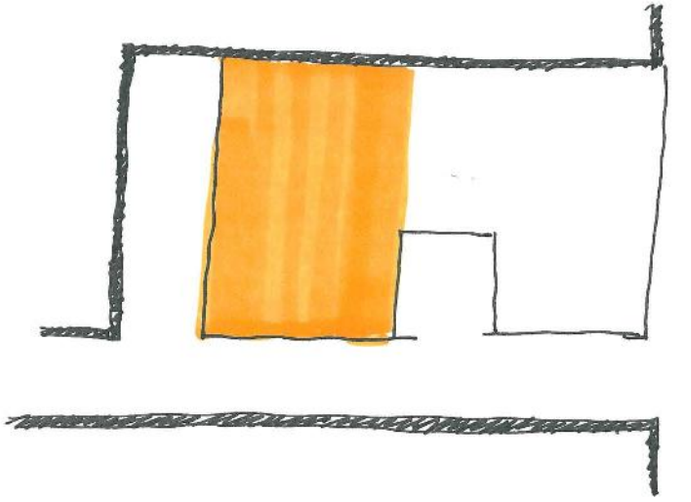

Figure 5.27
Social space on the third floor

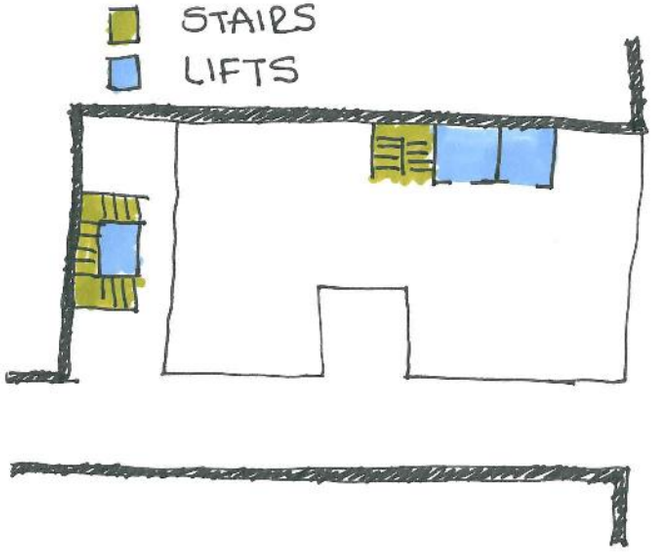

Figure 5.28
Vertical circulation

Figure 5.29
Third floor plan

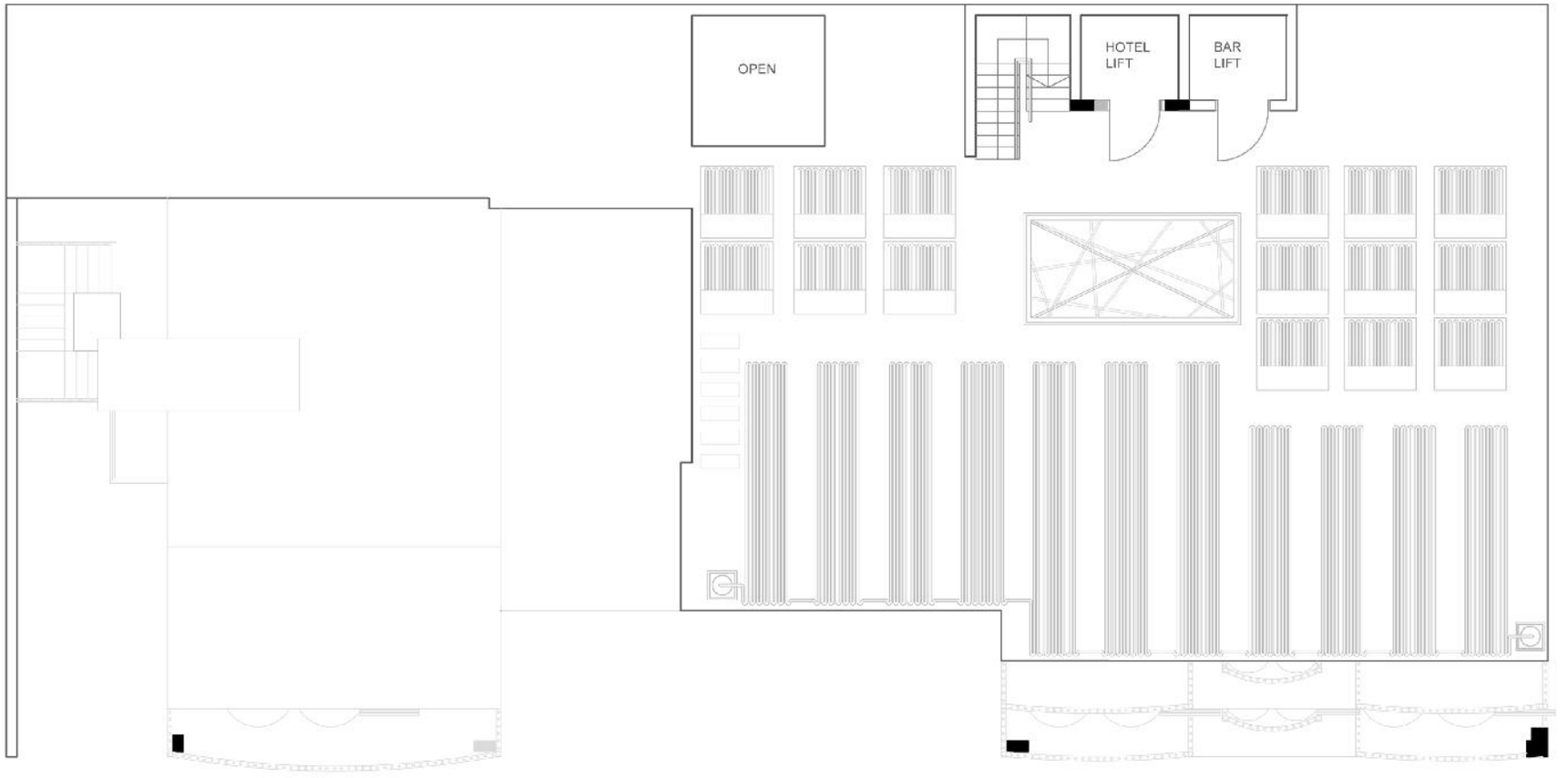

Figure 5.30
Roof plan

5.4.6. Section design

The sectional exploration creates a sense of the volumes created on the interior as well as crossing to the exterior space. The crossing from one space to the next is also evident on the sections.

On the sectional design, the indication of materials and use of color can be seen. The sections also indicate the privacy hierarchy through the design of ceiling heights. As the level of privacy intensifies, the ceiling level lowers, to indicate a more intimate scale.

Figure 5.31 - 5.33 indicates the volumetric design. More technical sections can be seen in chapter 6.

Figure 5.31
Section A-A

Figure 5.32
Section B-B

Figure 5.33
Section C-C

5.5 Inclusive considerations

The conceptual approach is grounded in diversity, therefore inclusivity was considered carefully throughout the design. The design, therefore, does not discriminate or exclude any users, and care was taken to make all spaces accessible.

Inclusive considerations in the design include the lack of level changes, vertical circulation in the form of lifts, signage, adjustable lighting levels in both public and private areas, inclusion of inclusive rooms, dedicated refugee areas and a fire man's lift.

5.6 Branding and Signage

An encapsulating brand was developed for the design. The brand represents all four of the programmes in the building: the bakery, the buffet, the hotel and the bar (fig 5.34). Figure 5.35 indicates how the brand will be adapted to indicate a specific focus area.

Figure 5.34
Encapsulating brand

The colours used in the brand each represents different elements of the space they epitomise. The yellow used for the Bakery represents cheerfulness and is associated with food. The red used for the Hotel plays on the colour of the existing building. Red also symbolises energy, warmth and it provides high levels of visibility. The orange used for the Buffet is associated with creativity and healthy food. Blue is used for the Bar lounge because of its calming effect and its association with the sky.

The colour of each programme is used in the interior spaces to indicate and strengthen the brand. The colours are used in varying forms of intensity, to indicate the level of privacy in the space as described in chapter 4.

Additional signage in the hotel is uniformly done in the font: "i am online with you". The font was selected for its skyline resemblance. Signage is laser cut from mild steel plates and projected from the wall to create a three dimensional effect. These steel signage profiles are used to indicate the different bathrooms and the reception area. A line at the end of the word points in the direction of the space indicated. Below, a sample of the font is shown:

Figure 5.35
Focussed brand

5.7 Interior views

Interior views were generated to form a representation of what the spaces would look like. Figure 5.36 indicates the courtyard and double volume space both during the day and night. , Figure 3.37 indicates the reading lounge and Figure 5.38 indicates the reception.

Figure 5.36
Courtyard generated view

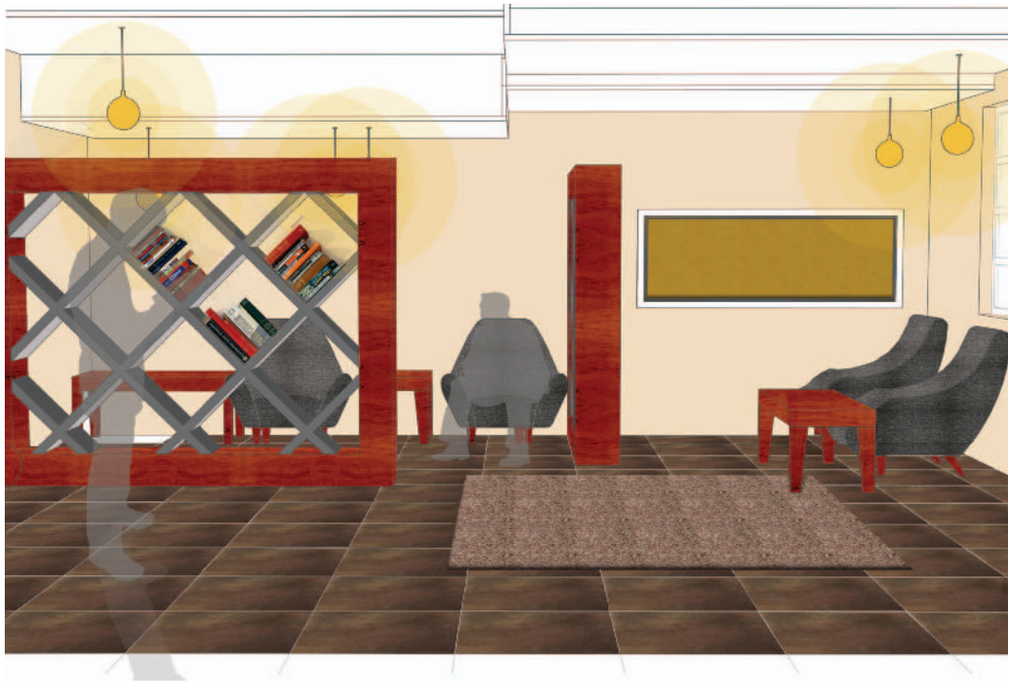

Figure 5.37
Reading lounge generated view

Figure 5.38
Reception generated view

5.8 New barriers and new thresholds

The design changed the boundary condition of the building, especially on ground floor level. Figure 5.39 and 5.40 diagrammatically compares the level of change that the design had on the ground floor boundaries.

The number of thresholds now exceed the number of barriers, implying an increase in public space within and around the building. Barriers are still used to demarcate private space, but the barriers have been pushed backwards, creating a first layer of public space, followed by the more private spaces.

The immediate boundaries next to the activated alleyway and sidewalk, are dissolved into permeable thresholds. These thresholds promote activity and invites pedestrians to linger into the space and to stay.

The corner commercial activity formed by the bakery, also provides added interest for people walking past, to enter the space.

Barriers and thresholds are used throughout the hotel space in a similar manner, barriers to indicate private space and thresholds to indicate public space.

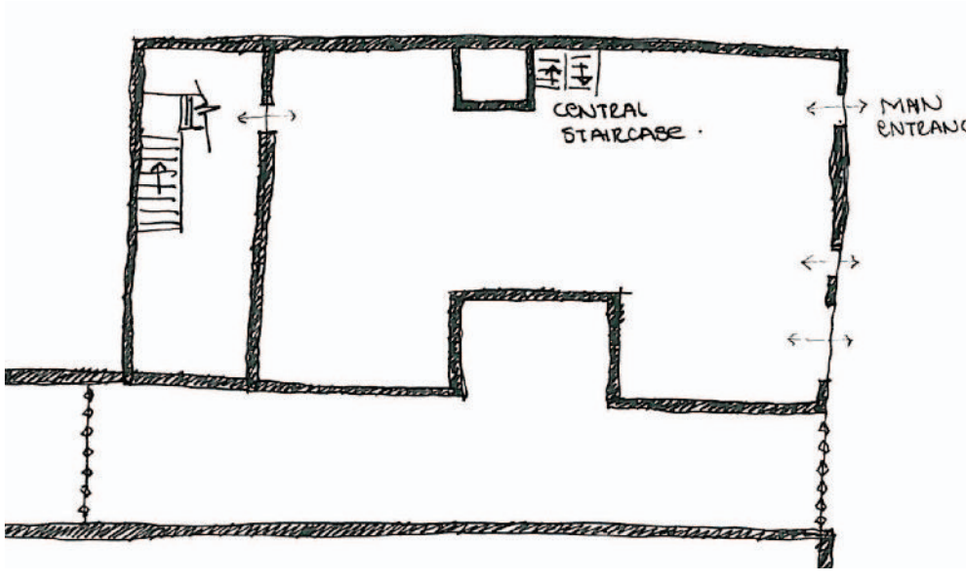

Figure 5.39
Original barrier vs. threshold ratio of the ground floor

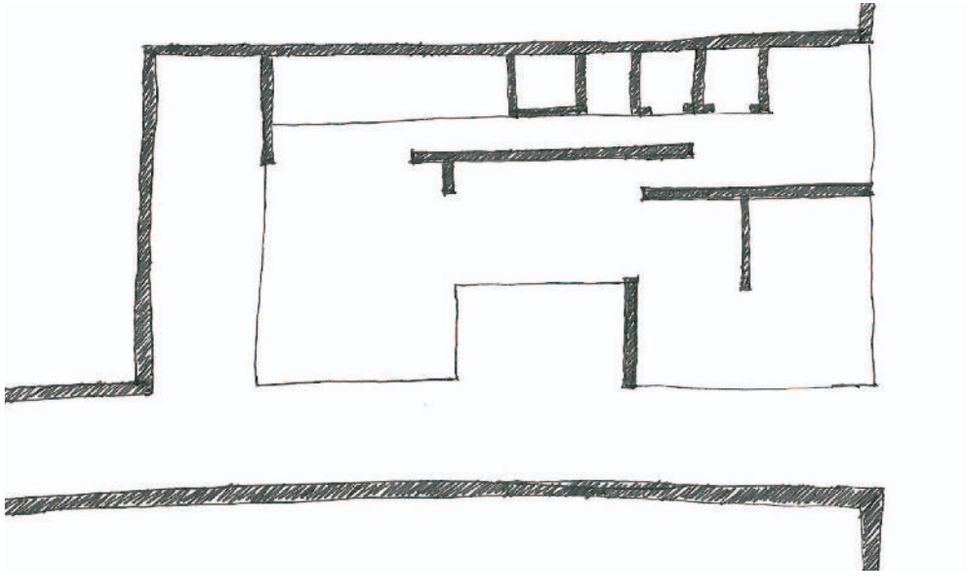

Figure 5.40
New barrier vs. threshold ratio of the ground floor

5.9 Conclusion

The design opens the building up for interaction with the public domain. The interior starts to spill out into the exterior defined spaces. This spill out allows the interior design to stretch into the alleyway and sidewalk and to physically form a part of the neighbourhood.

The alleyway that forms the pedestrian link, will draw people into the space and increase the amount of pedestrian activity with the building. The southern facade becomes one of the primary facades for engaging and is therefore altered to allow for this. The balconies create a social link between guests and pedestrians, increasing the amount of activity between the building and city dwellers. The eastern facade of the building is also designed to be permeable, allowing a visual link into the building.

People are encouraged to use the social spaces through the accessibility level. A level of trust is embedded into the use of the spaces with security measures left to passive surveillance.

The technical resolution of the design will be discussed in chapter 6.

chapter 6

Figure 6.1
Detail resolution

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6.1 Approach to detail design

The approach to detail design will strengthen the conceptual approach by emphasizing the boundary condition. The crossing from one space to another becomes important as a visible transition. Connections should therefore be celebrated and articulated. Details in the public spaces are exposed with visible connections. In the private spaces, the details are hidden to create a smooth crossover. Through this technical approach the crossing of boundaries are highlighted.

In the technical investigation, several elements will be investigated to a detail level. These elements include: lighting design, material selection and detail resolution of some of the architectural- and interior design elements in the project.

6.2 Lighting investigation

Lighting design forms a prominent part of the interior realm and becomes an important design element. Appropriate lighting can assist in the function of a space as well as create a desired atmosphere.

Lighting considerations will strengthen the public or private hierarchy of each area. In private areas, the lighting levels will be adjustable, allowing the guest to control and decide on the desired level of lighting - aiding in the comfort level. In public areas, movement sensors will switch the lights on when someone enters the space. The lighting levels here will be consistent throughout the public spaces with additional task lighting when required.

In this section, only the light condition, atmospheres created, energy efficiency and lamp selection will be discussed. The full lighting investigation can be seen in Addendum C.

6.2.1. Lighting condition

The lighting condition in the design is created by using five different elements. Each of the elements will be described, explaining the character and application.

The first element is the light colour. In this instance a warm white light is compared to a cold white light. Warm white light will be used in spaces where comfort is essential, like in the hotel rooms, the dining room, the reception area and in the entertainment lounge. Cold white light provides a more accurate colour rendering quality and will therefore be used in work spaces like the kitchen, at the reception desk and in the reading lounge. (fig 6.2)

The second element is the light intensity. Here lighting will either be used at full strength or it will provide the option of dimming the light intensity. Bright light will be used in task orientated environments like the reading lounge, as opposed to dimmable lights that will be provided in the hotel rooms. (fig 6.3)

The third element is the direction of the light. Light can be used as accent lighting with a visible light source or it can be used to create an ambient lighting level, lighting an element or plane and hiding the light source. In the design, accent light and ambient light will be used in conjunction with each other. Accent light will be used as task lighting and will be provided for instance in the dining room and reading lounge. Ambient light will be utilized in less public spaces where atmosphere is desired above task lighting. (fig 6.4)

The fourth element is the effect of the lighting. This element consists of either task lighting or atmospheric lighting. Here a combination of the light intensity and the direction of the light forms the final element. Task lighting is provided in areas with high levels of activity, opposed to atmospheric lighting that is provided in areas of retreat. (fig 6.5)

The final element is that of information. Lighting can be used in the brand of the space as well as in the form of signage. The light should accentuate the information that is communicated (fig 6.6). This can be achieved either through accent lighting or through back-lighting methods.

In the design, an interplay of these elements will be used to create the desired level of intimacy or public space. The lighting methods will also be used to indicate areas of activity or relaxation. This will be done through the colour rendering, intensity and atmospheric qualities of each lamp.

Information and signage in the design will also be highlighted through the use of accent lighting.

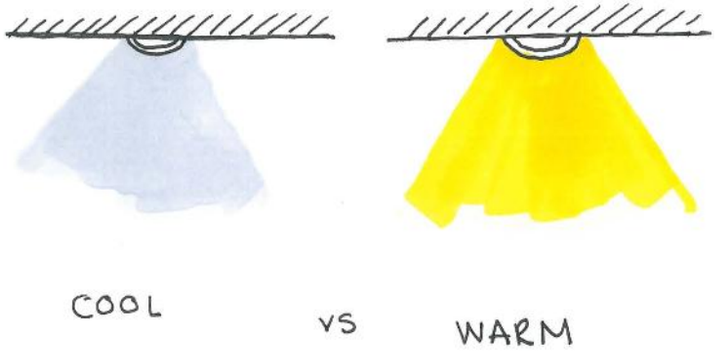


Figure 6.2
Light color

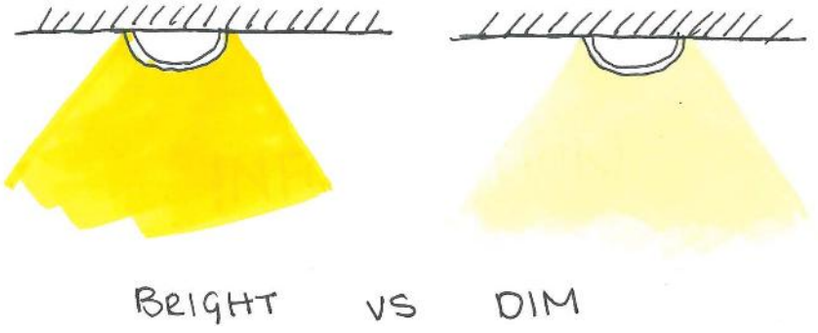


Figure 6.3
Light intensity

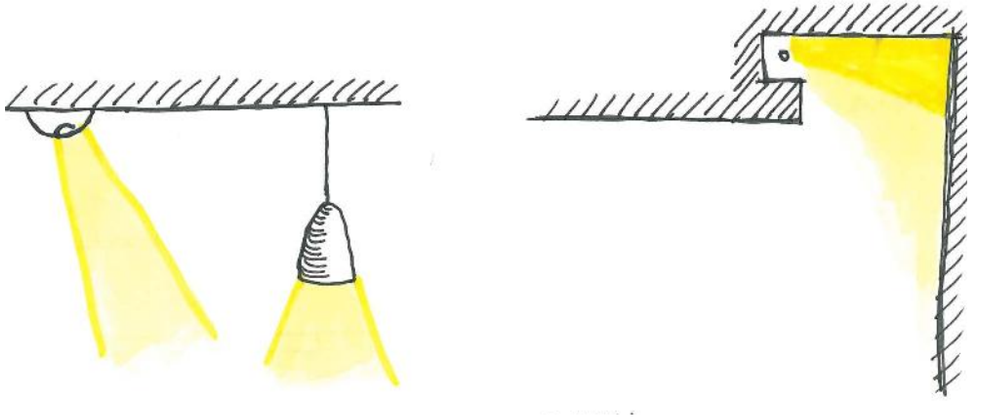


Figure 6.4
Direction of light source

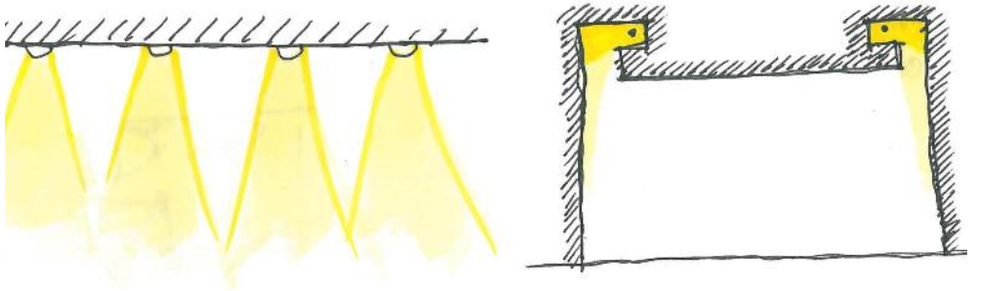


Figure 6.5
Lighting effect

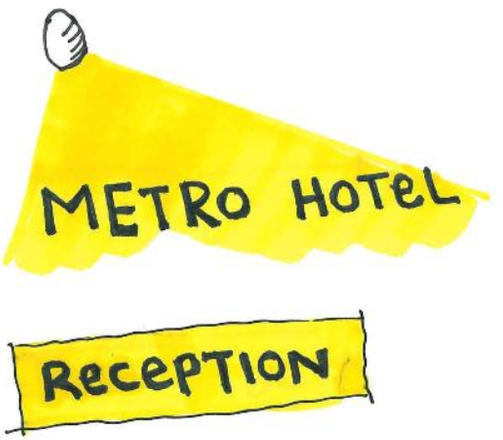


Figure 6.6
Information lighting

6.2.2. Atmospheres created

The atmosphere in each space is dictated by the hierarchy of privacy levels. The public spaces will consist of consistent lighting. The private spaces will allow for a level of adjustment, enabling the guests to customize the atmosphere in the room.

The total atmosphere will be composed of the lighting condition specifically designed for each space.

6.2.3. Lamp selection

In this section the selected lamps for the different lighting methods will be discussed and the specific reason for selecting each one.

- ### Halogen Dichroic reflector

The lamp was selected for its excellent colour rendering ability, providing a crisp white light. The halogen dichroic reflector (fig 6.7) also consist of a cool lighting beam, reducing heat gain. The lamp provides a directional beam of light in various spread sizes. The lamp is considered to be environmentally friendly because it doesn't contain any lead or mercury. (GE Lighting. 2010)

Technical information on the lamp selected:

12V
30 W
24 degree beam spread,
2900K colour temperature
625 Lumens
Average life 5,000 hours

Placement and use

The lamp will be used for most directional requirements and where colour rendering is important like in the kitchen and bakery. All down lighters will be halogen dichroic reflectors.

Connection

The halogen dichroic reflector will be recessed into the ceiling using an adjustable down light fitting to form a flush light connection that can focus the light on a specific area if needed. (fig 6.8)

Figure 6.7
Halogen dichroic reflector lamp (Tool station, 2012)

Figure 6.8
Recessed fitting (Lighting styles, 2012)

- ## Eco globe light bulb

The lamp was selected for its energy efficiency and its aesthetic appeal. The translucent white colour of the globe, creates a uniform wash of light without the user being able to directly see the light source. The eco globe (fig 6.9) can therefore be used without a cover. The eco globe is available in both a cold- and warm white. (Lumena, 2012)

Technical information on the lamp selected:

Daylight white 6500K, also available in Warm white 2700K
24W /
240V
1500 Lumens
Average life 8,000 hours
Up to 80% energy savings

Placement and use

The lamp will be used in the reading lounge and dining room as a dropped task light.

Connection

The eco globe light bulb will be suspended from the ceiling leaving the bulb exposed to show its form. (fig 6.10)

Figure 6.9
Eco globe light bulb (Lumena, 2012)

Figure 6.10
Suspended connection
(Blog sparks direct, 2012)

- ## LED strip lighting

The LED lighting strip (fig 6.11) was selected for its energy efficiency and uniform light distribution. The long line created by the strip lighting eliminates the break of light due to socket shadows, a common problem when using fluorescent bulbs. The lighting strip also requires minimum space allocated to create the cove lighting effect. (Lighting orient, 2012)

Technical information on the lamp selected:

Easily bendable at an angle of 140 degrees
3mm in height
Requires a 12V input
Available in warm- and cold white
Dimmable
300 LED's per 500m
4500 lumens

Placement and use

The LED light strip will be used to create all of the cove lighting effects distributed through the hotel and to light the trends at the public staircase.

Connection

The LED strip lighting will be connected to the wall, ensuring an invisible light source for the cove lighting effect (fig 6.12)

Figure 6.11
LED Strip lighting (Lighting orient, 2012)

Figure 6.12
Cove lighting effect (Decoist, 2012)

- ## String pendant

The pendant was selected for its aesthetic appeal. The pendant (fig 6.13) is easy to make and can be produced at low cost. A manual to make a string pendant are digitally available on the internet (How done, 2011). Any bulb can be connected to the string light, and it is recommended that an eco globe light bulb be used.

Technical information on the lamp selected:

The pendent will have the same technical specification as the bulb used, in this case, the eco globe light bulb

Placement and use

The pendent will be placed in the double volume section of the courtyard and in in the bar lounge on the rooftop of the building.

Connection

The String pendant will be suspended from the ceiling (see Figure 6.10) exposing the eco globe light bulb from underneath the string. The string will form a paterned shadow cast on the floor wall and ceiling.

Figure 6.13
String pendant (How done, 2011)

- ## Fluorescent tube light

A fluorescent tube light was selected for its excellent colour rendering quality and high light output. The 5000K bulb is called the daylight bulb and imitates natural sunlight. A fluorescent light is also energy saving. (Fagurhult. n.d.)

Technical information on the lamp selected:

5000K , Daylight
35W
Average life 17,000 hours
Length of fluorescent to be used 1500mm
4300 Lumens

Placement and use

The fluorescent tube light will be used in the back-lit skylight created on the ground floor in the courtyard space as well as in the circulation space through the hotel. The fluorescent will be used in a crisp white.

Connection

The fluorescent tube lights will be connected to the wall surrounding the back-lit ceiling. An opal perspex panel will separate the light fittings from the courtyard creating a uniform glow.

Figure 6.14
Fluoresent tube light (Illima, 2012)

Figure 6.15
Fluorescent housing (Global market. 2012)

6.2.4. Energy efficiency

The energy efficiency of each lamp were evaluated in terms of life-span, light intensity and heat output. The lamps were selected for their high lumen output compared to their watt consumption.

Lamps that require a lower level of watts, but that still produces the desired lumen level, was selected. The technical information on each lamp indicates the low watt levels and the lumen output.

6.2.5. Ceiling plans

In figure 6.16 - 6.19 the ceiling plans are indicated for each floor, showing the lighting systems in each space. The combination of these selected lamps, produce the lighting quality on the interior of the hotel. Each lamp consists of different qualities to create different atmospheres. Some spaces consists of a combination of lamps to create the desired effect or adjustability. Other spaces will be lit using only one of the chosen lamps.

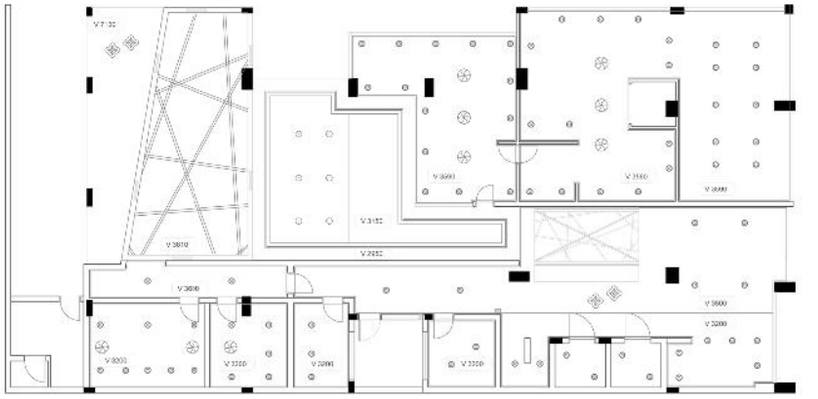


Figure 6.16
Ground floor ceiling plan

6.3 Material selection

The material selection was completed with two polar spaces in mind: the public spaces and the private spaces. The section below will explain the approach towards selecting appropriate materials for the public-, transitional- and private spaces. This gradient of material selection is also explained in figure 6.20 on page 117. Table 6.1 on page 118, indicates the properties evaluated for each material for selection.

6.3.1. Materials for public spaces

The materials chosen for use in the public areas depend on the amount of traffic they need to withstand. Therefore hard and durable materials are selected for the public spaces to provide areas that can withstand high volumes of traffic and that are long lasting. Materials selected for public areas should also be easily cleanable for example non porous materials is used in the bar lounge, and the timber decking is sealed for protection.

The alleyway will have to endure the highest amount of pedestrian movement, and

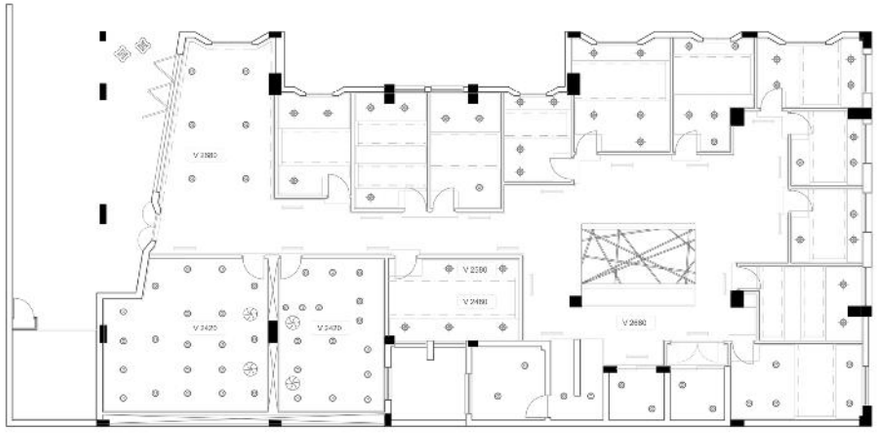


Figure 6.17
First floor ceiling plan

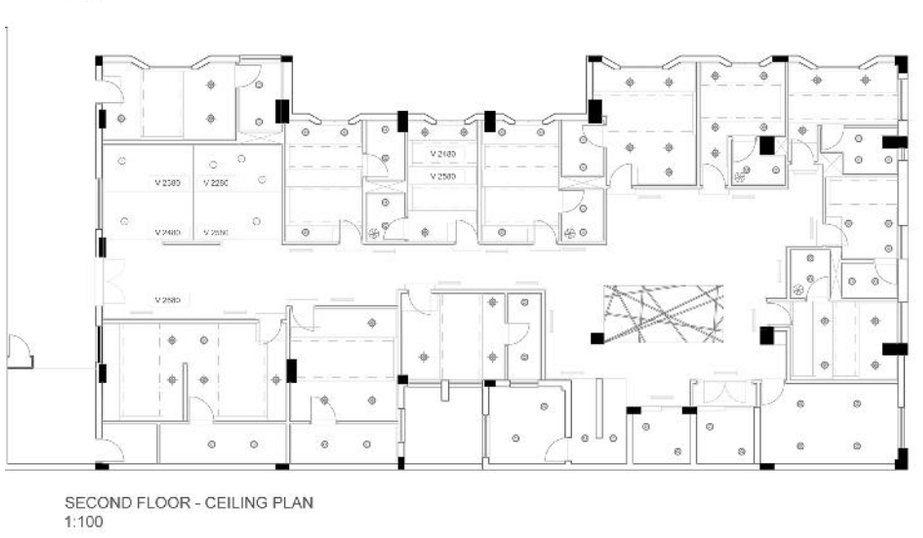


Figure 6.18
Second floor ceiling plan

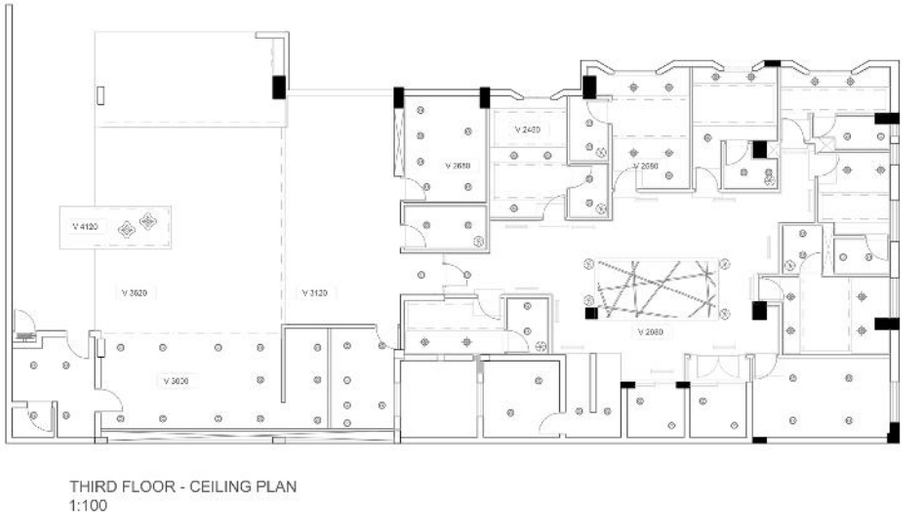


Figure 6.19
Third floor ceiling plan

therefore requires the most durable material. A cobblestone finish is selected creating a dialogue with the alleyway across the street, to form a uniform pedestrian link. Cobblestone is also a very durable material allowing for high amounts of pedestrian traffic. The effect created by the cobblestone links into the overall retro feel of Braamfontein.

The courtyard will consist of the next level of durable materials. The floor finish will be of composite decking to aid in the experience of an outdoor space. The decking however provides a softer and more welcoming finish than the cobblestone in the alleyway. The decking will be used on all outdoor balconies and walkways, as well as in the rooftop bar lounge.

The wall finishes in the courtyard will remain as is for the surrounding buildings. The wall surfaces added in the double volume space will consist of the reused brick providing an honest portrayal of the building self and again linking into the retro feel of Braamfontein. An introduction of large 6mm safety glass wall panels provide a visual link to the interior. Other materials present comprise of the existing materials of the building, like plaster and concrete.

The public staircase is made of powder coated mild steel. The handrail of the staircase is finished in black, providing a contrasting colour to the surrounding environment as an inclusive measure. The staircase is finished with the same composite decking providing a contrast in colour between the risers and treads. The bar lounge is also considered to be public space. The flooring material here will again be composite decking. The bar lounge is covered by a light weight steel roof structure, providing protection against the elements.

6.3.2. Materials for transitional spaces

The first transitional space is the retail space on the south-eastern corner of the building. In the retail space, yellow inlaid linoleum tiles, made from natural materials and fully recyclable, are used as a floor finish to create a softer finish than the outdoor environment, but one that is still very durable and easily cleaned. The wall finish is exposed, reused red brick, linking the space to the public domain. The brick is salvaged from the demolished interior walls of the existing building. Saligna wood furniture in the form of tables and shelving, softens the feel of the space.
Additional display elements like baskets and linen covers, form the bowls of the bread display, providing an easily washable solution and a generous interior feel.

Figure 6.20
Gradient of material selection

MATERIAL		HARDNESS			DURABILITY	MAINTENANCE	TEXTURE		COLOUR	HONESTY IN USE	LUXURY LEVEL	SOUND ABSORPTION (ACOUSTICS)	RECYCLABLE	NATURAL MATERIAL
		HARD	MEDIUM	SOFT			HARD	SOFT						
MATERIALS FOR PUBLIC USE														
Cobblestone		*			***	-	**		*	***	-	-	***	*
Concrete		**			***	-	**		*	***	-	-	**	*
Mild steel		***			***	-			*	***	-	-	***	*
Reused Brick		*			***	-			*	***	-	-	**	*
Timber Decking			*			*			*	-	-	*	***	**
Safety Glass		**			***	*			-	***	-	-	**	*
MATERIALS FOR TRANSITIONAL SPACES														
Linoleum flooring			*		***	*		*	***	-	*	*	***	***
Timber furniture			**		**	*	*		*	-	*	*	***	*
Plastic furniture		*			**	*	*		***	-	*	-	***	-
Ceramic tiles			**		***	*	*		***	-	*	-	**	*
Wall Paint			*		**	**	*		***	-	*	-	-	-
Acoustic ceiling panels			*			*	*		-	-	*	***	***	*
MATERIALS FOR PRIVATE USE														
Carpet				*		***		*	***	-	**	**	**	**
Couch upholstery				*		*		*	***	-	**	**	**	**
Felt				**		*		**	***	-	**	***	**	**
Linen				***		***		***	***	-	***	**	**	**

\- NOT PRESENT * LOW LEVEL ** MEDIUM LEVEL *** HIGH LEVEL

Table 6.1
Material properties evaluated for selection

The transitional spaces include the reception area and the circulation spaces. The reception area provides a section that is classified as more private, with a carpet insert, made of Eco carpets in Sorrento Pavio, as a comfortable flooring option for a longer period of stay. The carpets are supplied by Van Dyck Carpets, who is a member of the Green Building Council of South Africa. "The company is making great strides in the minimising of waste, reduction of energy, reducing the use of hazardous materials, and reduction of emissions – with very low CO^2 emissions during normal operations. In addition, recycled materials are used instead of virgin materials wherever possible. Also, Van Dyck's comprehensive recycling programme ensures the reuse of both post-industrial waste including production rejects, and post-consumer waste in the form of uplifted carpet" (Van Dyck Carpets. 2012).

The floor finish throughout all of the circulation spaces will be the 500mm x 500mm, striped porcelain tile in ivory. The lighter tile colour is selected for the primary transitional spaces. A darker tile, Metropolitan Mokka, will be used in more private spaces like the dining room. The dining room also has a carpet insert, in Sorrento Pavio by Van Dyck Carpets, below the seating area, for additional comfort. A higher level of comfort is indicated through the use of carpeted floor finish in.

The wall will be plastered on the interior of the hotel, creating a softer and smoother effect than the rough brick. The transitional spaces will be painted in Dulux earthen cream 1, creating a light backdrop for the activities in the space. The paint used is low in VOC's and water based. The wall finish in the entertainment lounge is similarly finished in the earthen cream 1. The reading lounge is treated in the same way providing a relaxed atmosphere. The couches in both the entertainment and reading lounge is upholstered in a durable, roughly textured grey material for a balanced characteristic of comfort and durability.

6.3.3. Materials for private spaces

Materials selected for the private spaces are soft, aiding in the comfort level experienced by the user. Luxurious colours and textures are selected to form a rich palette. This will be enhanced by the lighting effect created in the room.

The room will have a carpeted floor finish in Sorrento Turin, by Van Dyck Carpets, creating a darker finish than those in the transitional areas. The wall will be painted in a slightly darker hue of the same colour, Dulux earthen cream 2, indicating a higher level of privacy.

The bathrooms on each floor will be tiled in the 500mm x 500mm Metropolitan Mokka tile. The walls will be covered in a striped porcelain tile in cream. The finishes used in the bathrooms provides an easily cleanable area that also speaks of the higher level of privacy.

6.4 Systems and services

Several systems are included in the building. These systems consists of ventilation, heating and cooling, fire safety, the lighting condition, acoustic considerations and ducting for the plumbing and telecommunication systems. The systems will each be discussed in the next section. Additional services that are provided by the hotel includes WIFI, washing and ironing of laundry and the use of the rooftop bar, reading- and entertainment lounges.

6.4.1. Ventilation

Passive ventilation is used throughout the building. Extractor fans placed on the roof of the building next to the skylight, creates a vacuum drawing in cool, fresh air from the opened southern- and western façade of the building (fig 6.21 on page 120). The hot air of the building will then be extracted through the roof at the skylight, allowing it to rise through the atrium. In winter, this process can be reversed, drawing in hot air from the roof of the building, pushing out the cold air on the southern façade.

Rooms that are not naturally ventilated, like some internal bathrooms, consist of extractor fans in the ceiling allowing for adequate air supply. Extractor fans are also included in the kitchen, allowing for a faster air change rate.

6.4.2. Heating and cooling

The building is a south facing building. This creates a limited amount of heat permitted into the building through sunlight. Cooling is therefore left to ventilation only, with the exception of the luxury rooms as explained in chapter 5.

The building is heated using an under floor heating system (the system is provided by Home Comfort). A new 40mm screed, covers the copper pipes that radiates the heat into each floor (fig 6.22 on page 120). The system uses solar heated water that is pumped through the pipes.

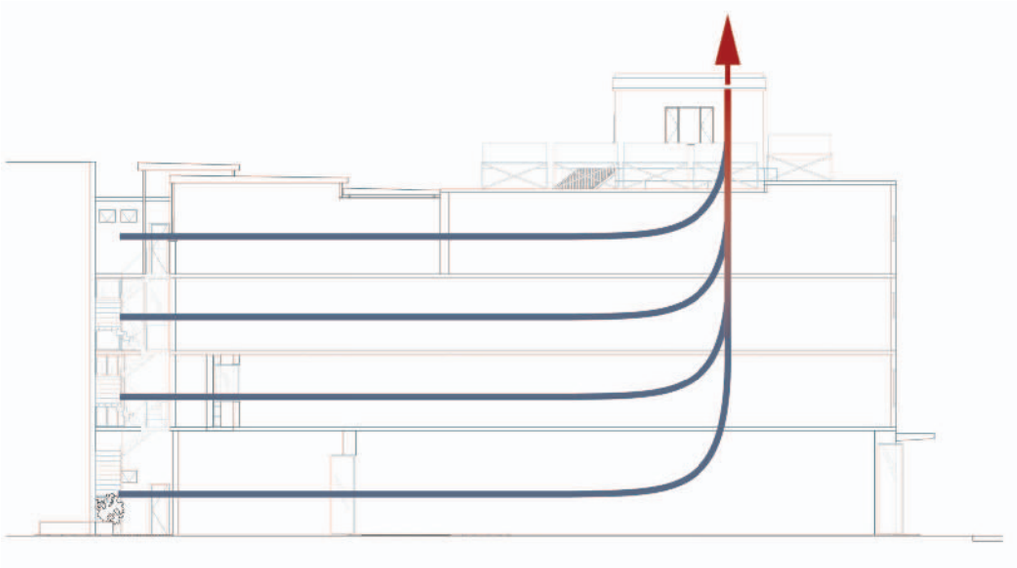


Figure 6.21
Ventilation in summer

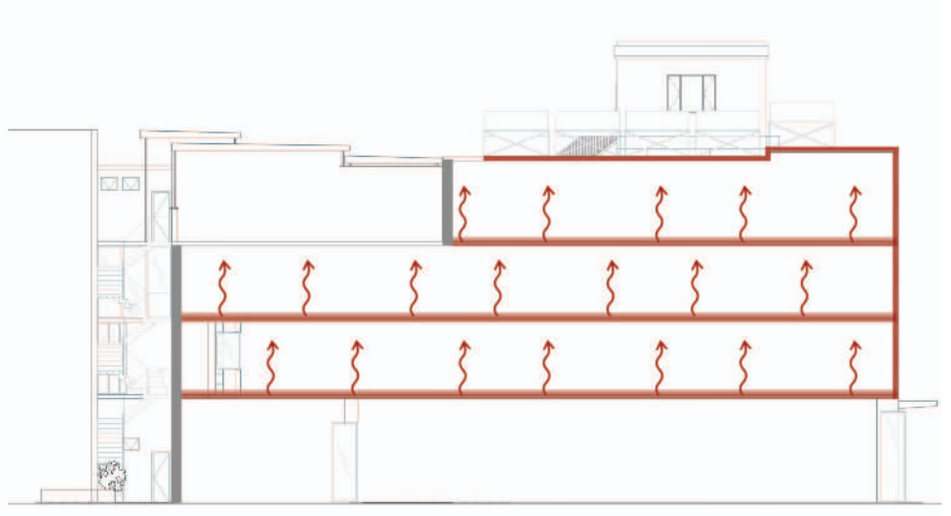


Figure 6.22
Underfloor heating

The water in the system is only circulated, and not used, therefore only one solar geyser is necessary for every three rooms.

Each room is provided with a thermostat, enabling the guest to control the heating in their room. When the thermostat is switched off, water circulation to the room is cut off, and therefore not heated. Rooms are therefore only heated when occupied.

6.4.3. Fire safety

Fire safety in the building consists of a fire hose reel on the western end of each floor and additional fire hydrants placed on the eastern end of each floor. The building

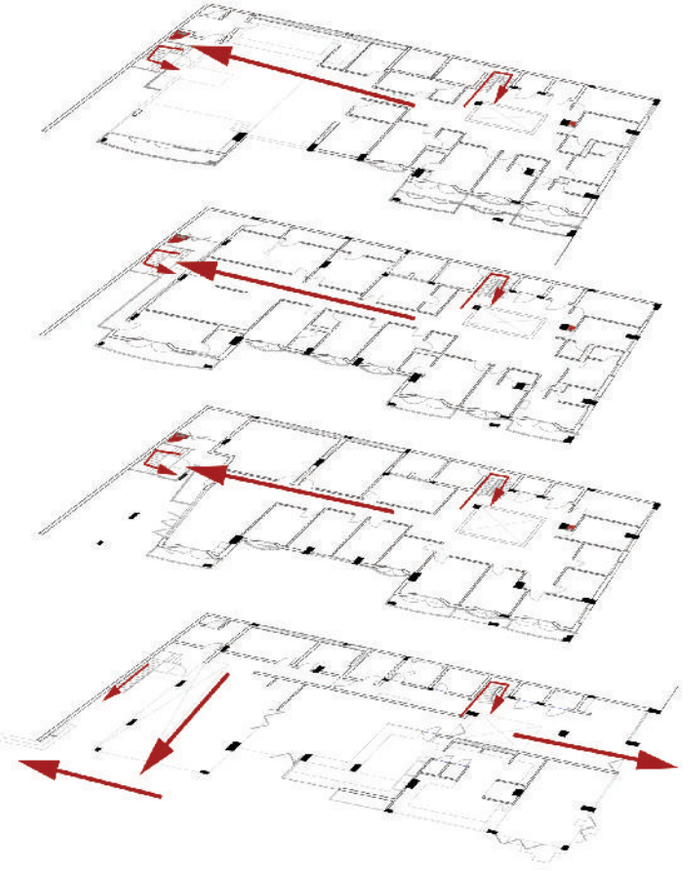


Figure 6.23
Emergency routes

consist of a fire man's lift and indicated refugee areas for the public staircase. These inclusions can be seen in chapter 5 in Figure 5.12, 5.21, 5.24 and 5.27. Demarcated emergency routes, in case of a fire, are indicated in Figure 6.23.

6.4.4. Lighting condition

The building faces south, with a shared wall on the northern façade, and a four storey building blocking natural light on the western façade, allowing only a small amount of sunlight, to enter the building from the eastern façade.

The southern facade of the building is cut back, creating a tapered eastern facade. This step forms balconies and allows more light into the alleyway (fig 6.24 and 2.25). A skylight is also added to the building, increasing the lighting levels on the interior of the building (fig 6.26).

Figure 6.24
Tapered, eastern facade

Figure 6.25
Balconies on southern elevation

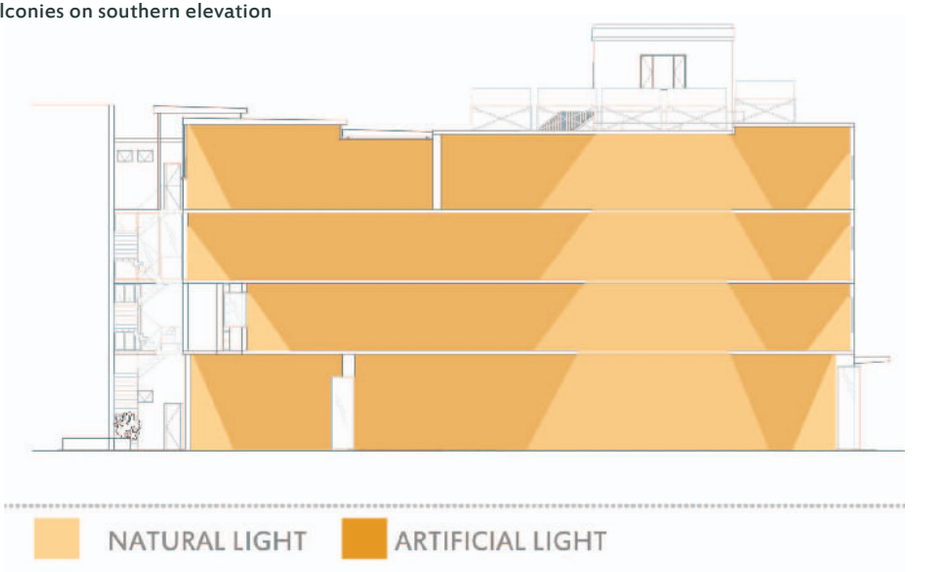


Figure 6.26
Natural light permitted by atrium

6.4.5. Acoustic considerations

> *"the room acoustics is achieved almost exclusively by the design and construction of the ceiling. Ceiling systems with high sound absorption coefficient are suitable for regulating the sound level, the intelligibility of speech and music and the reverberations in a room because these factors depend on the sound-absorbent surfaces in the room."*
>
> (Hausladen & Tichelmann, 2010:150)

The main acoustic inclusion throughout the design is the addition of acoustic absorptive ceiling panels (fig 6.27). The ceiling panels are suspended, concealing services and cabling. The ceiling panels are not connected to the walls, but a 50 mm gap creates a shadow line that runs along the wall and ceiling connection.

Walls throughout the hotel space are single leaf brick walls, providing additional sound attenuation. For additional sound absorption, felt wall-mounted panels will be distributed through the circulation space, the transitional spaces and in some of the hotel rooms. These panels will provide an additional soft surface to absorb sound.

In the hotel rooms, the carpeted floor finish, the furnishings included and the linen all aid in absorbing sounds. The suspended ceiling will also be implemented in the hotel rooms.

The hard cobblestone surface in the alleyway, will create the sound of footsteps, as people approach the building. This first noise acts as an introduction sound, indicating that someone is on his way. The noise of footsteps indicates that the space is being used and forms a pleasant and welcoming sound.

On the other hand, the water fountain at the entrance into the courtyard, creates white noise and drain out other noises from the city. This can be seen in a similar application in Paley Park, New York, where water is used to create a separation between the visitors and the city (fig 6.28). Similarly the shutters provided at the windows of each room, give the guest the option of limiting the noise from the city, or to allow it in completely

The building will also generate noise. The bar, for example, provides a stage area for live performances. the building will therefore also contribute to the surrounding

Figure 6.27
Texture of ceiling panels

noise levels, providing desired noise to the neighbourhood. The noise created can be seen as desired, because it indicates activity and liveliness.

6.4.6. Ducting

Two main service ducts are included in the building. One for electrical and telecommunication and the other for plumbing.

The plumbing duct is joined in the ceiling void on first- and ground floor level, to reduce the number of ducts that cut through the entire building. The horizontal connections are joined into the main system on the northern open air duct of the building, with a fall of 1:40. This is illustrated in figure 6.29.

Figure 6.28
Paley Park (Bolin's Weblog. 2008)

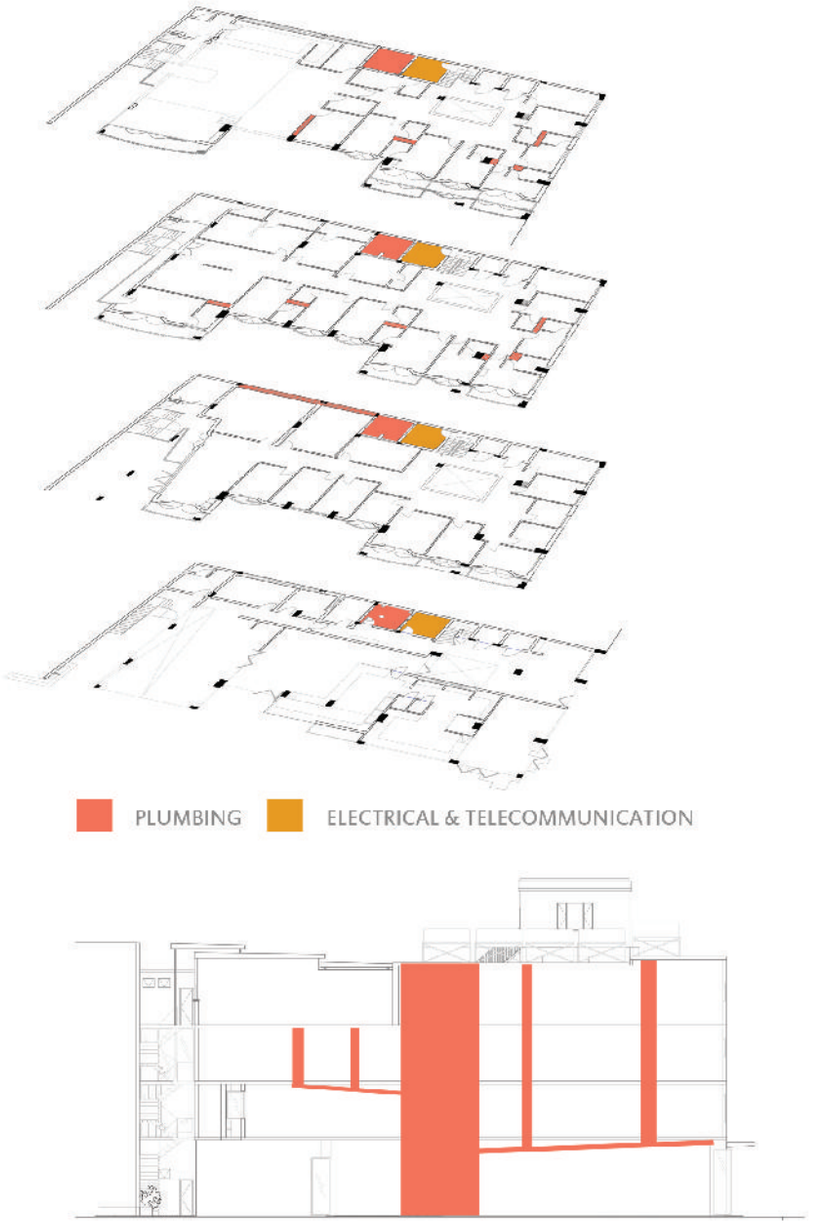


Figure 6.29
Plumbing and electrical ducting

6.5 Detail resolution

In the process of indicating the technical approach to resolving details, four principle details were resolved to represent the direction of the technical resolution.

Detail one indicates a resolved hotel room. The detail focusses on the change of level of privacy inside the room, from the doorway to the bed. The detail also focuses on the material selection for this private space, as a representation of the most intimate space allocated in the hotel.

Detail two describes the condition created by the double volume section of the public courtyard. It indicates the relation of the first floor lounge to the courtyard. The detail also focuses on the connection of the light weight walkway addition leading to the entrance on the first floor.

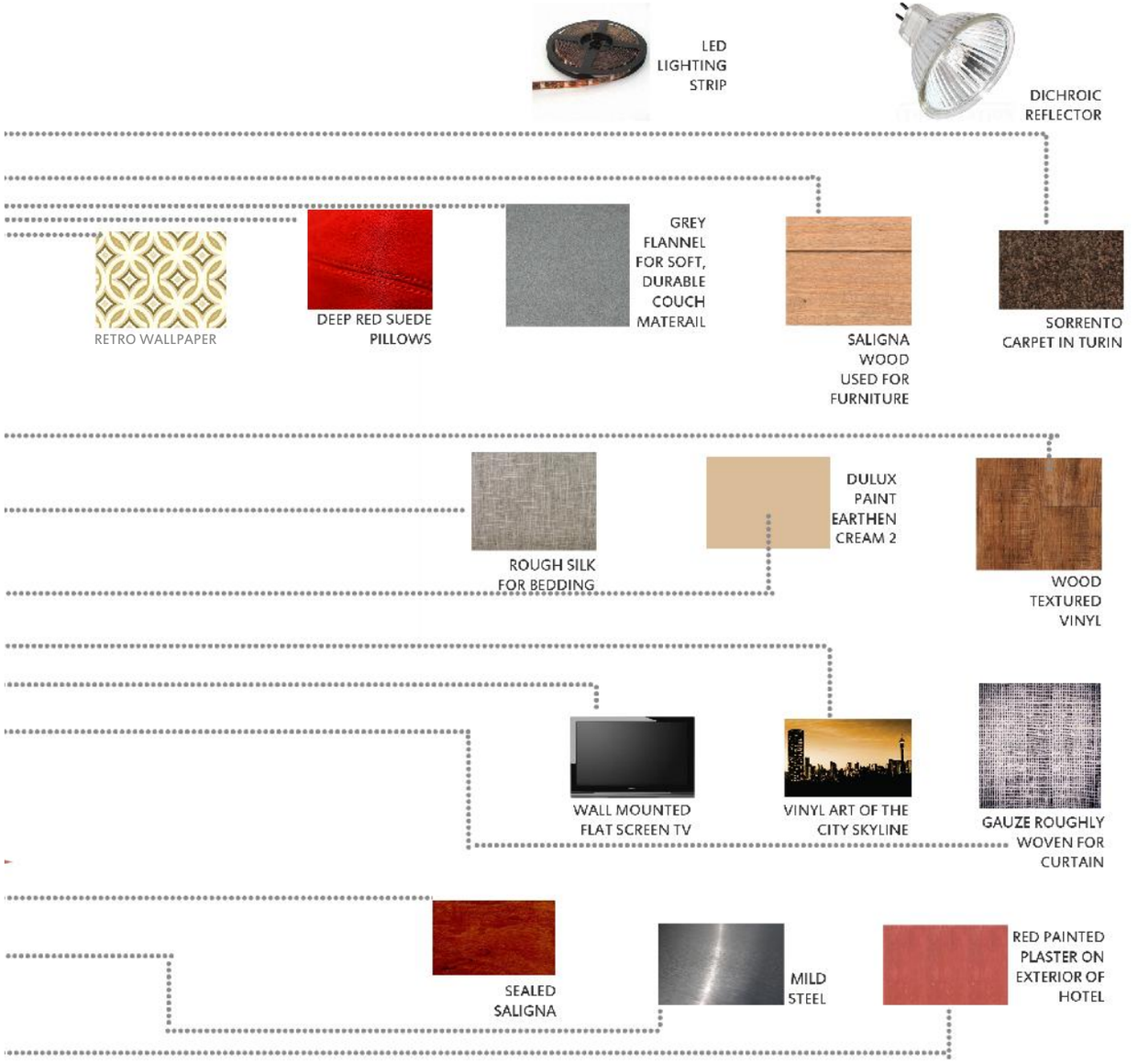
Detail three explores the public staircase into a high level of resolution. The staircase takes into consideration elements of inclusive design, public safety and fire regulations. This detail is resolved to assembly level, indicating an exploded isometric of the connection methods.

Detail four is located on the reception counter of the hotel. The detail is taken to product design level and indicates lighting, signage, inclusive considerations, material selection and functionality.

6.5.1. Detail 1

Hotel room interior with an unfolded wall plan of the room, indicating the material selection in the private spaces.

Figure 6.30
Unfolded wall plan of hotel room interior



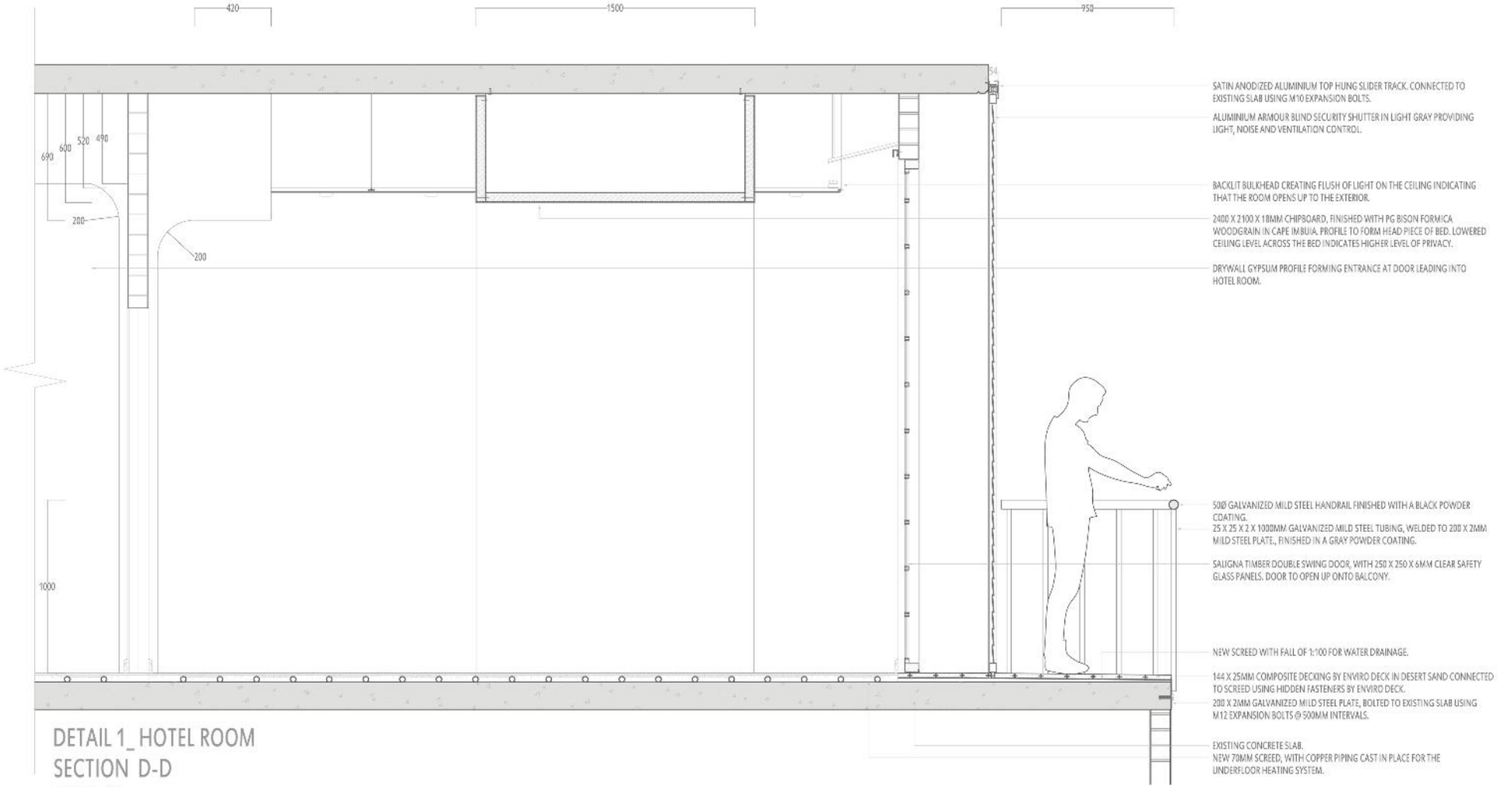


Figure 6.31
Hotel room section D-D

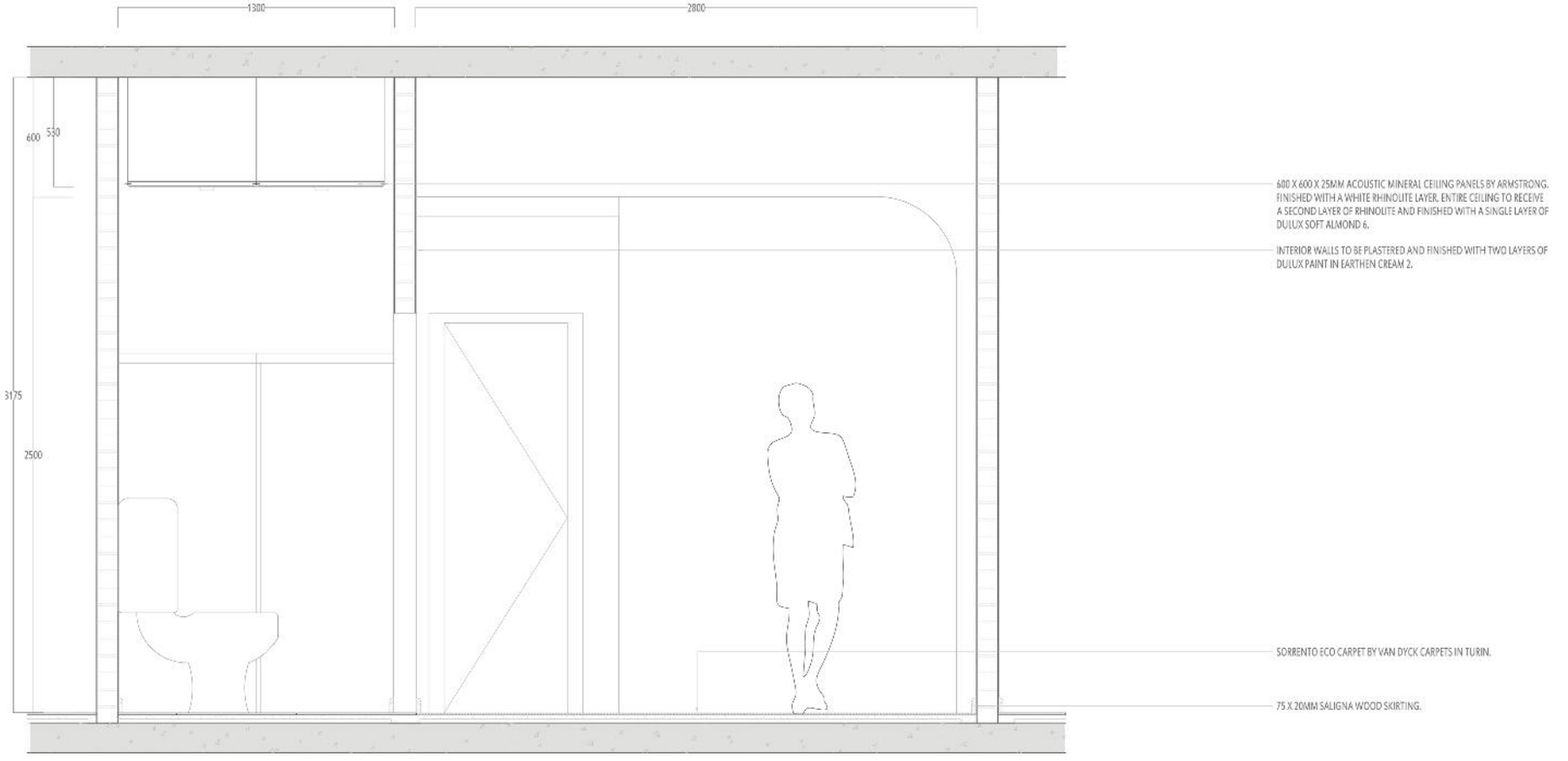


Figure 6.32
Hotel room section E-E

6.5.2. Detail 2

Double volume courtyard space with balcony connection detail.

Figure 6.33
Section indicating double volume space

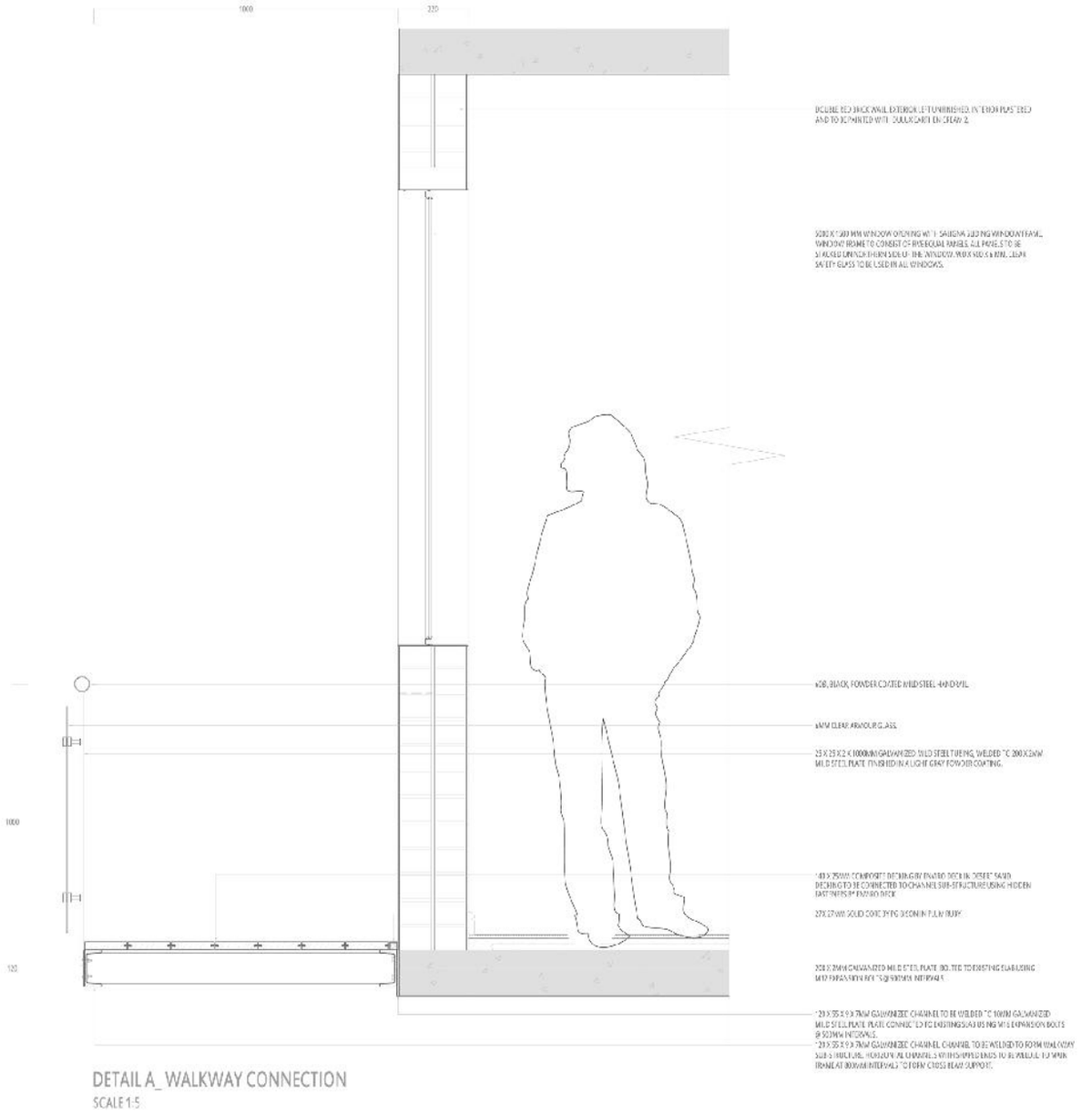


Figure 6.34
Walkway connecting to building

6.5.3. Detail 3

Staircase design indicating the lighting connected to wall.

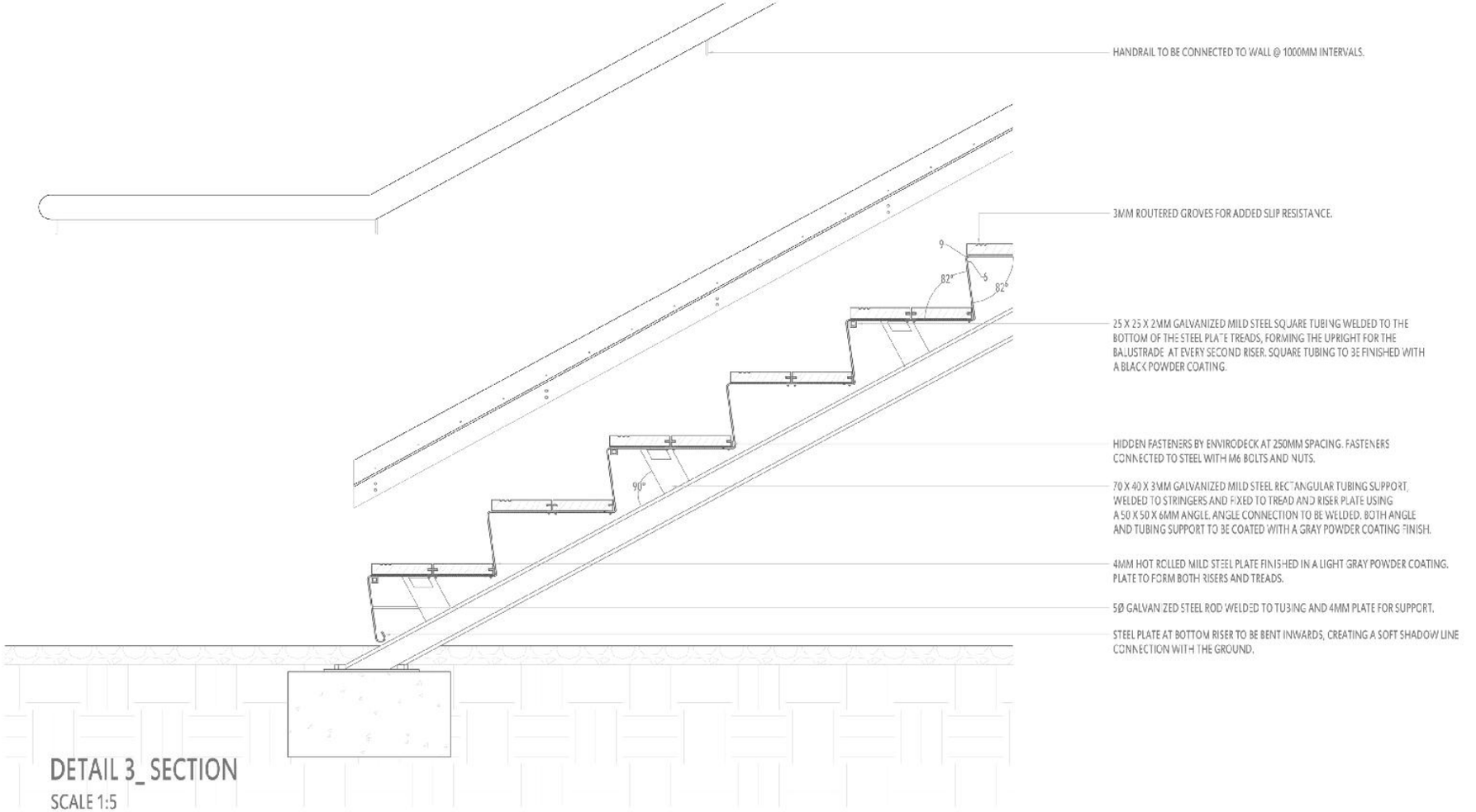


Figure 6.35
Staircase side elevation

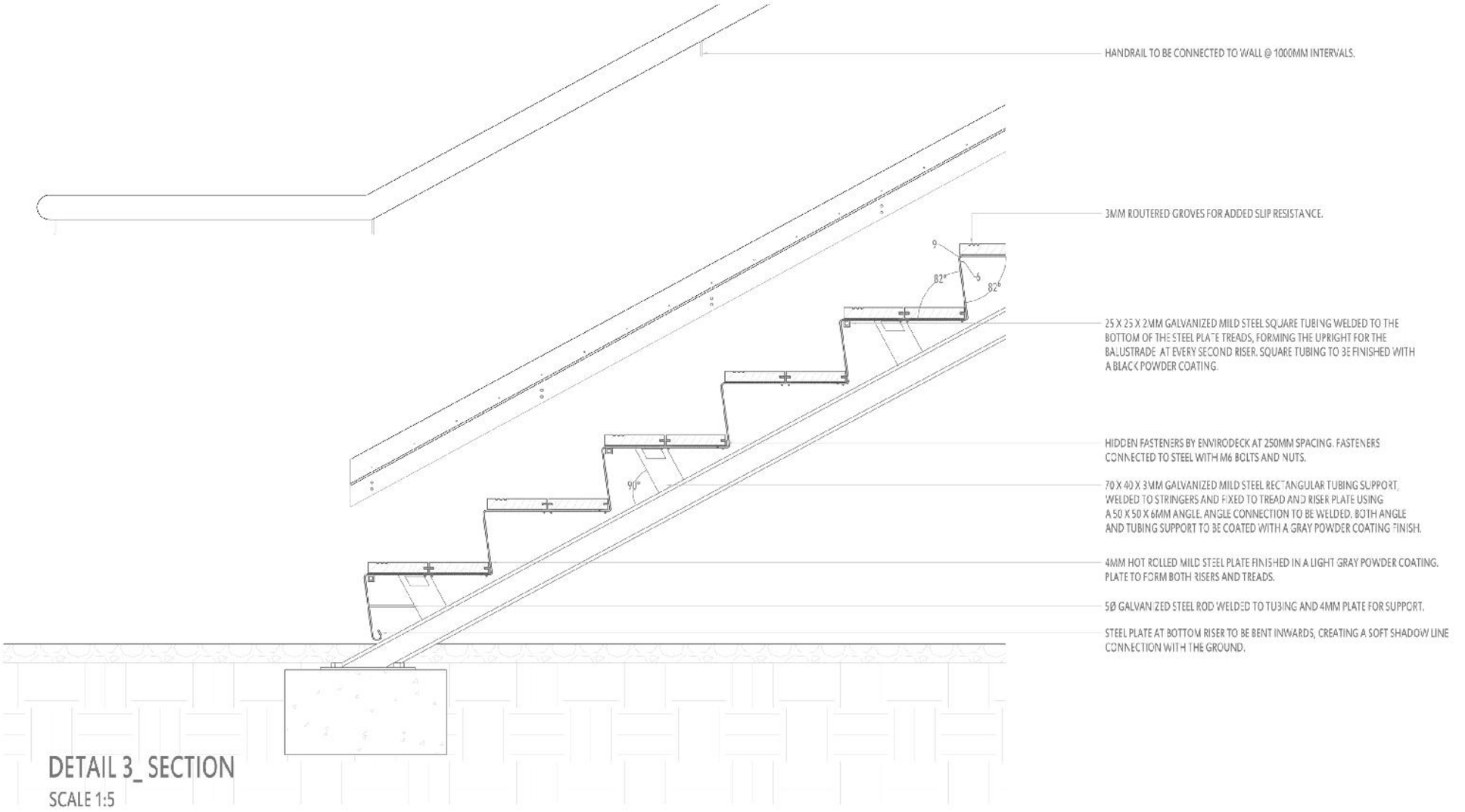
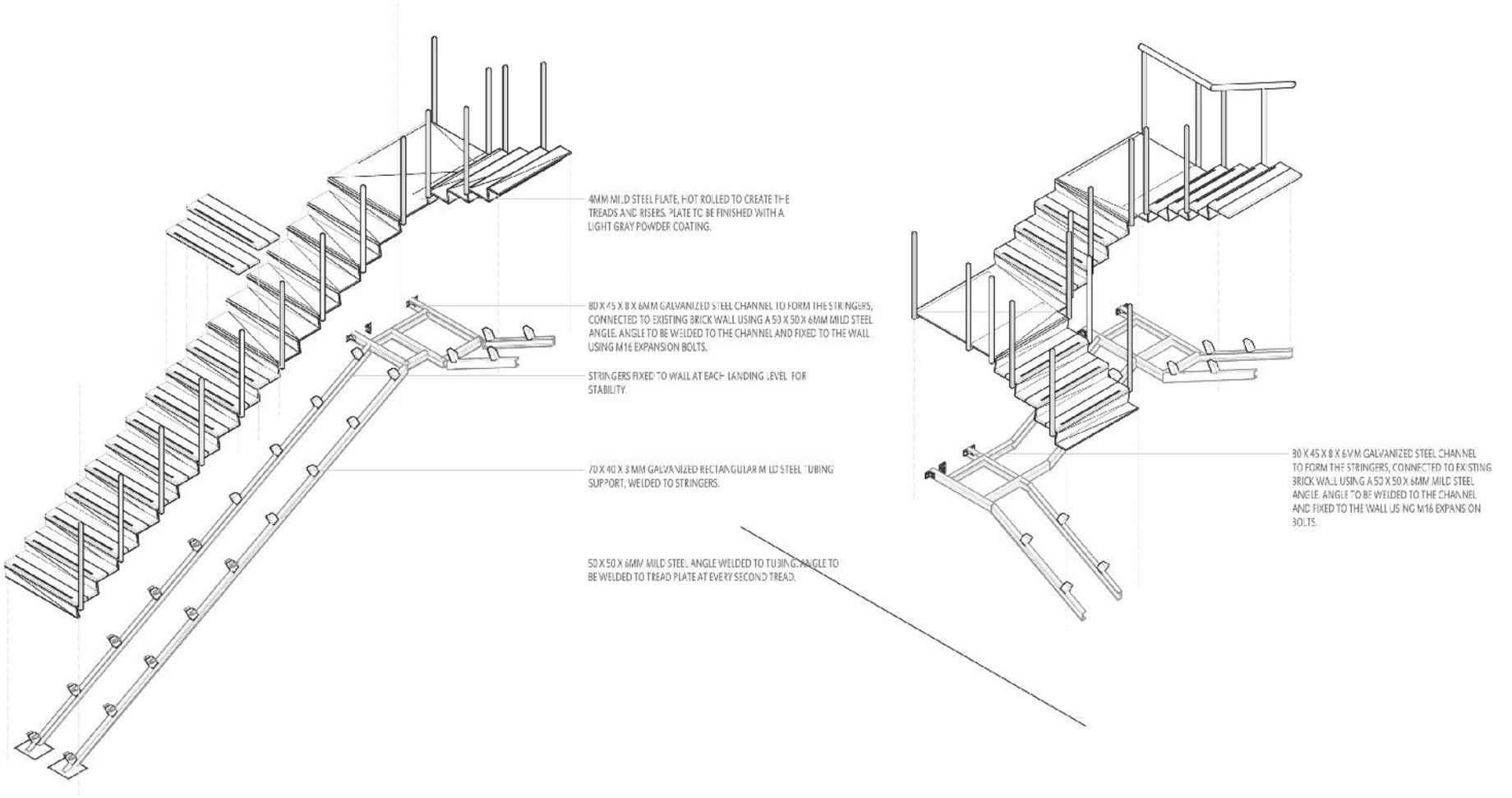


Figure 6.36
Staircase section 1



DETAIL 3_ EXPLODED ISOMETRIC
INDICATING BASIC ASSEMBLY OF THE STAIRCASE FOR THE GROUND FLOOR LEVEL
SCALE 1:20

DETAIL 3_ EXPLODED ISOMETRIC
INDICATING BASIC ASSEMBLY OF THE STAIRCASE FOR THE FIRST TO THIRD FLOOR LEVEL
SCALE 1:20

Figure 6.37
Staircase isometrics

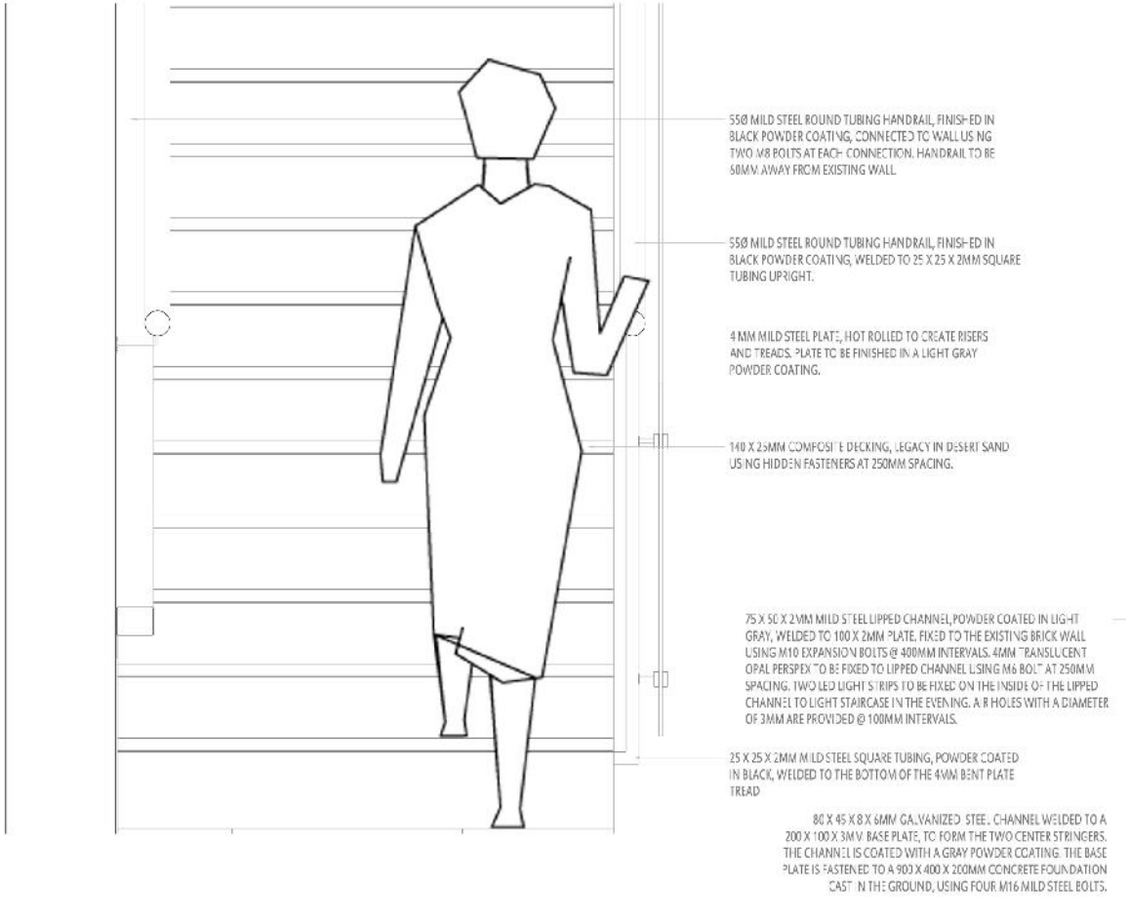


Figure 6.38
Staircase front elevation

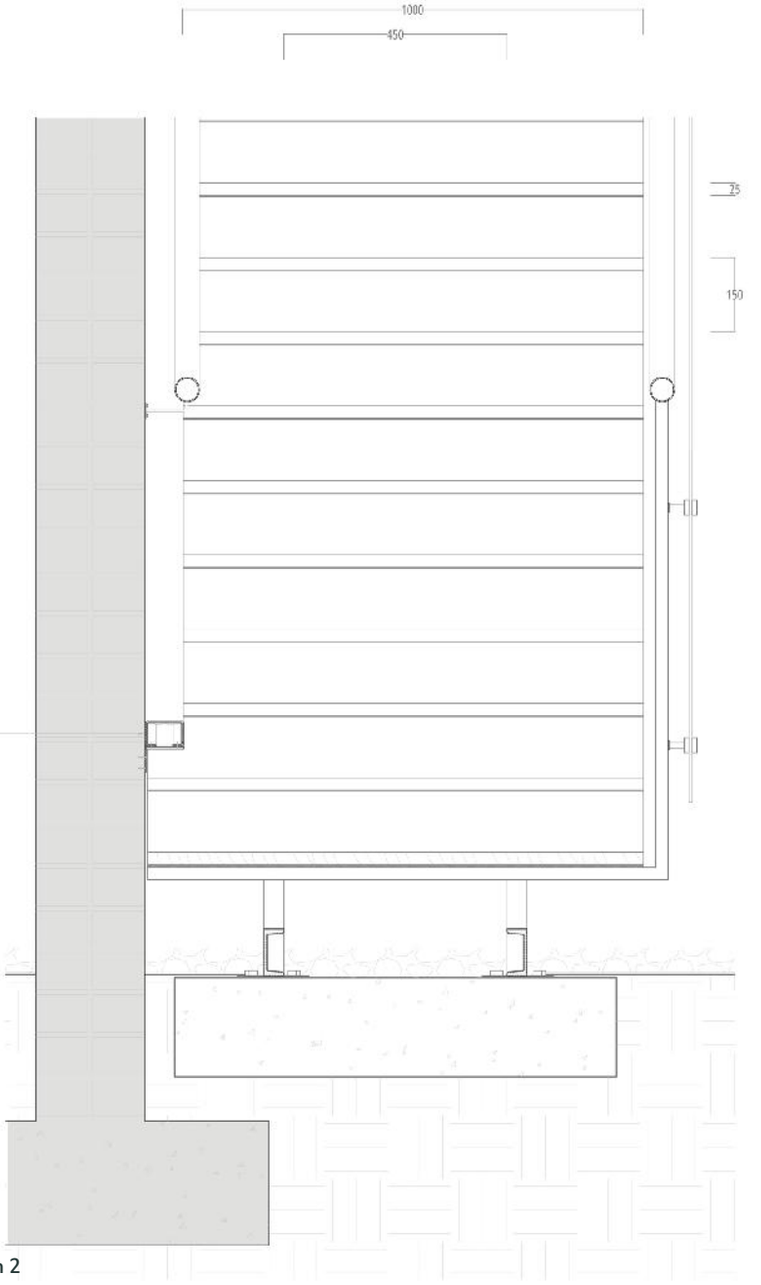


Figure 6.39
Staircase section 2

6.5.4. Detail 4

Reception counter.

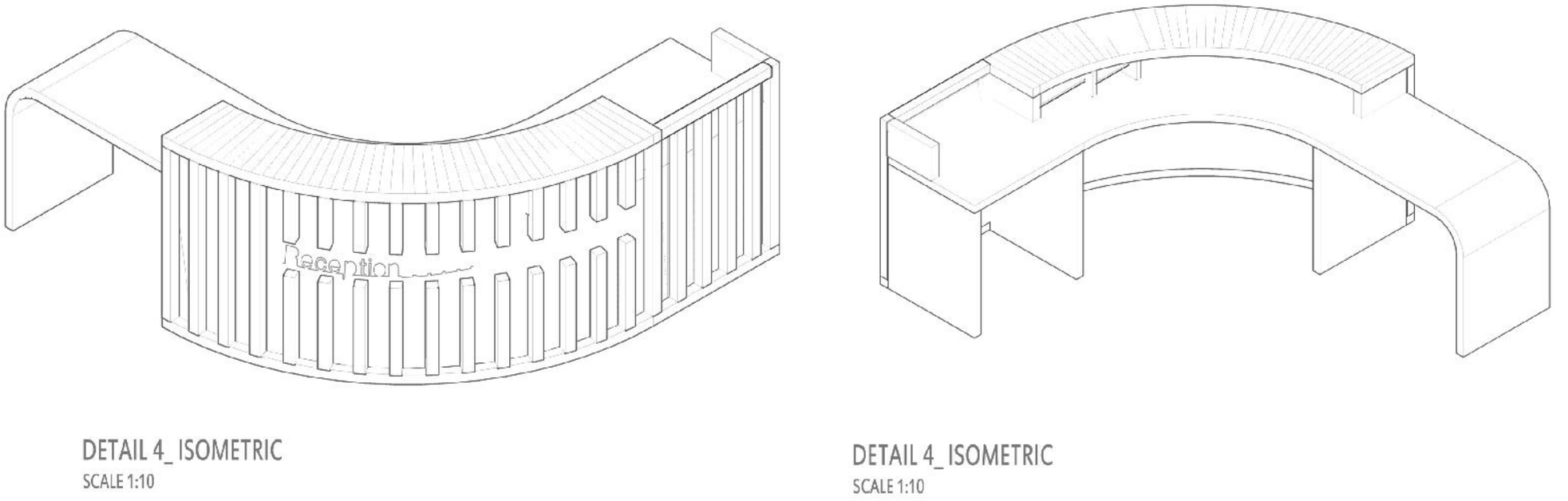


Figure 6.40
Reception counter isometrics

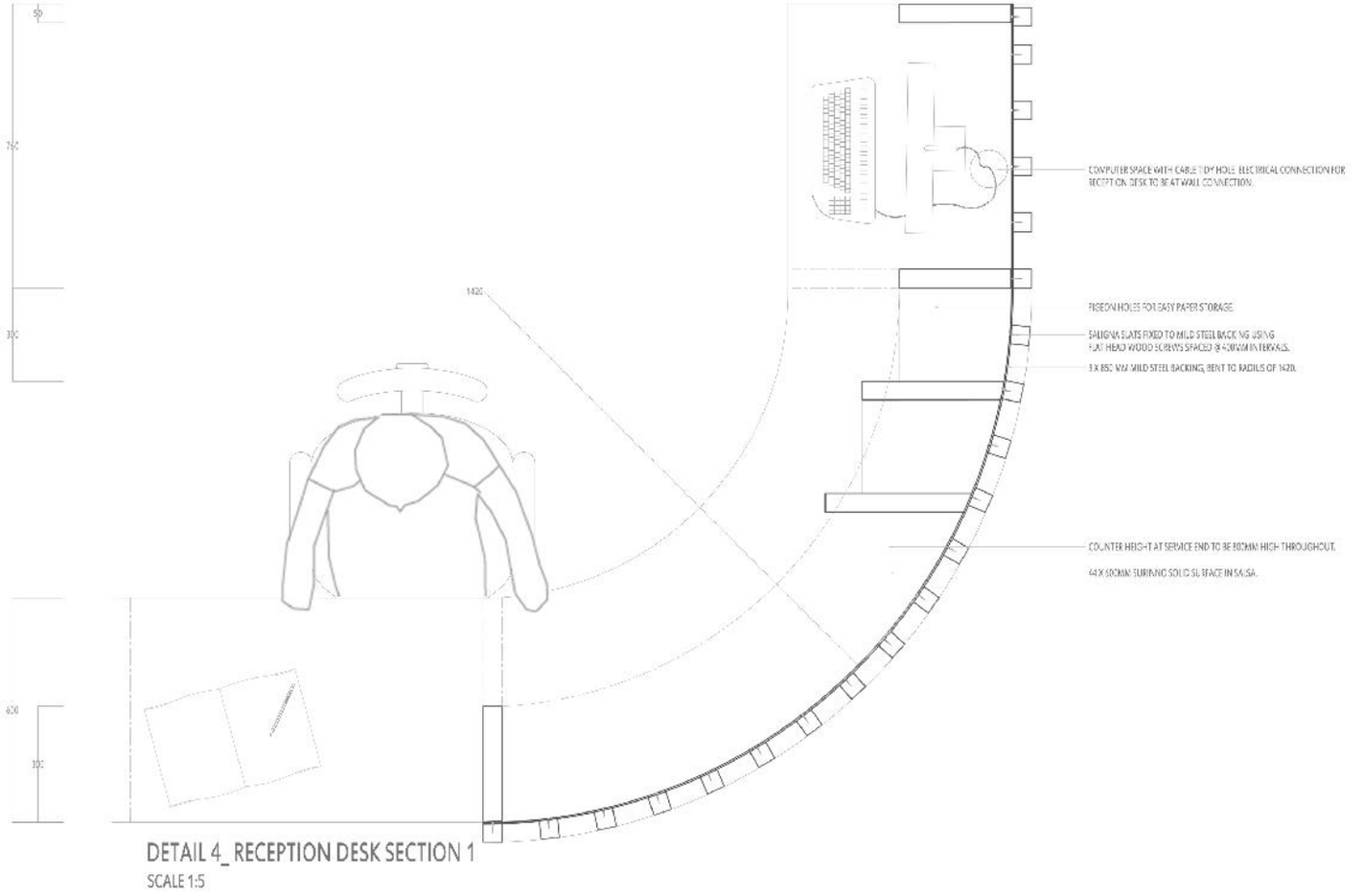


Figure 6.41
Reception counter section 1

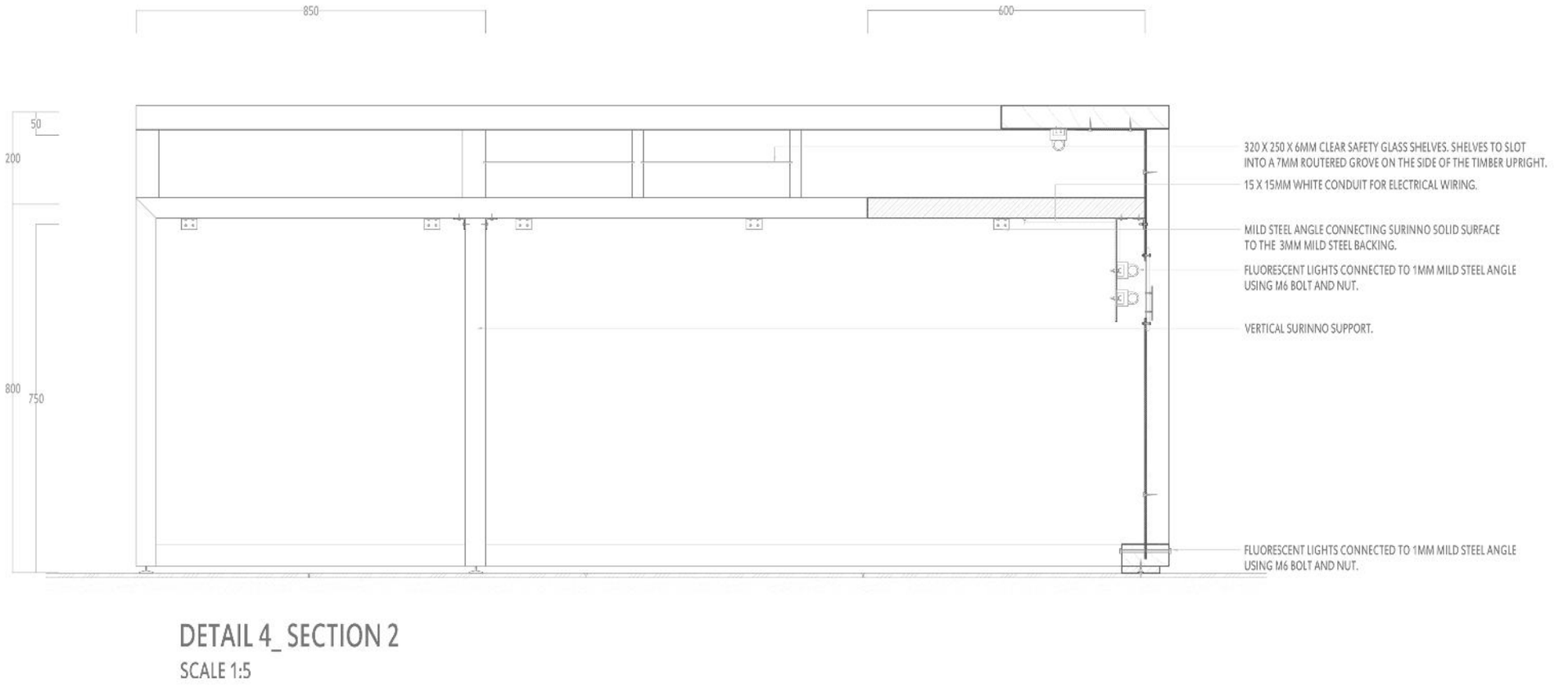


Figure 6.42
Reception counter section 2

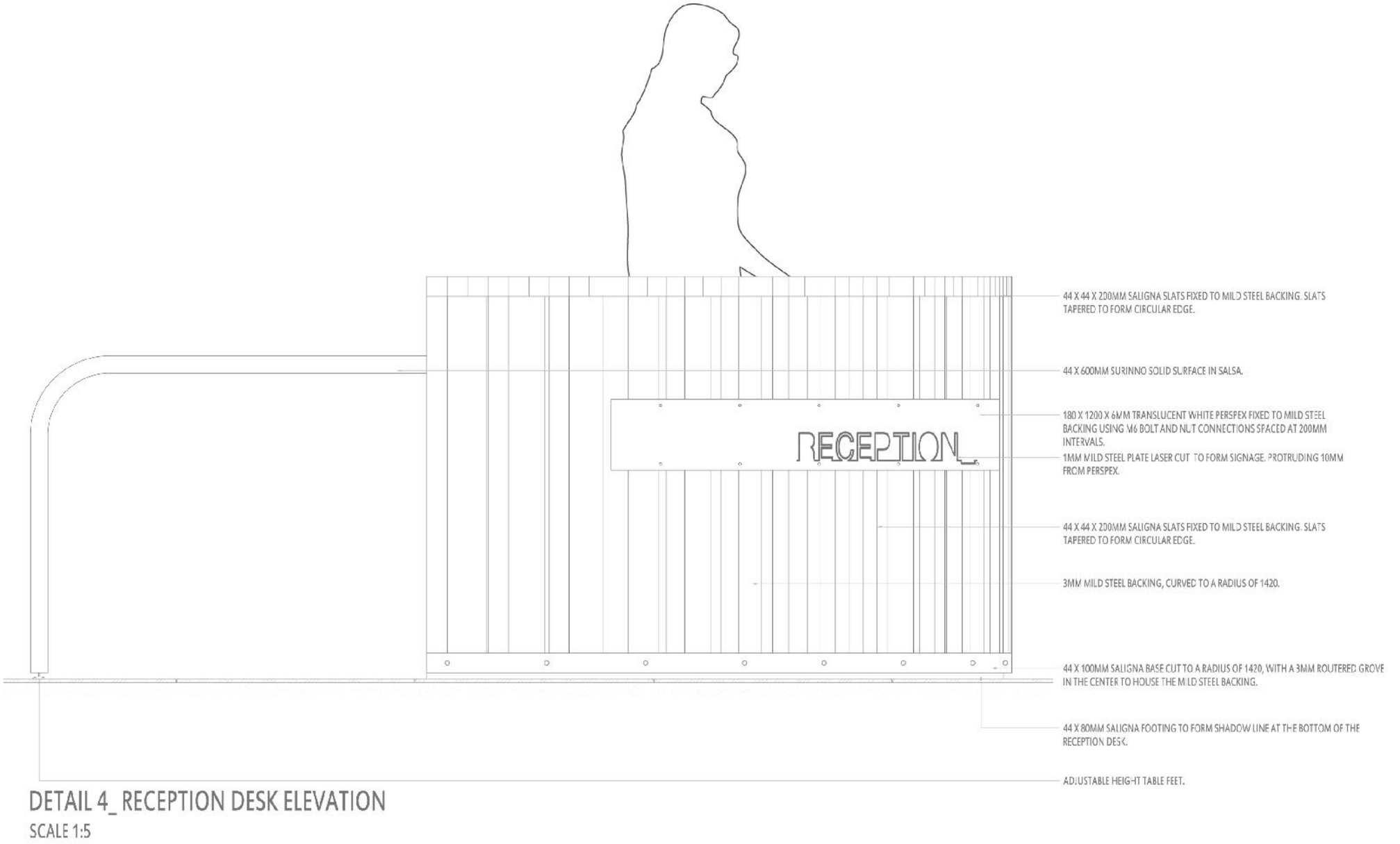


Figure 6.43
Reception counter front elevation

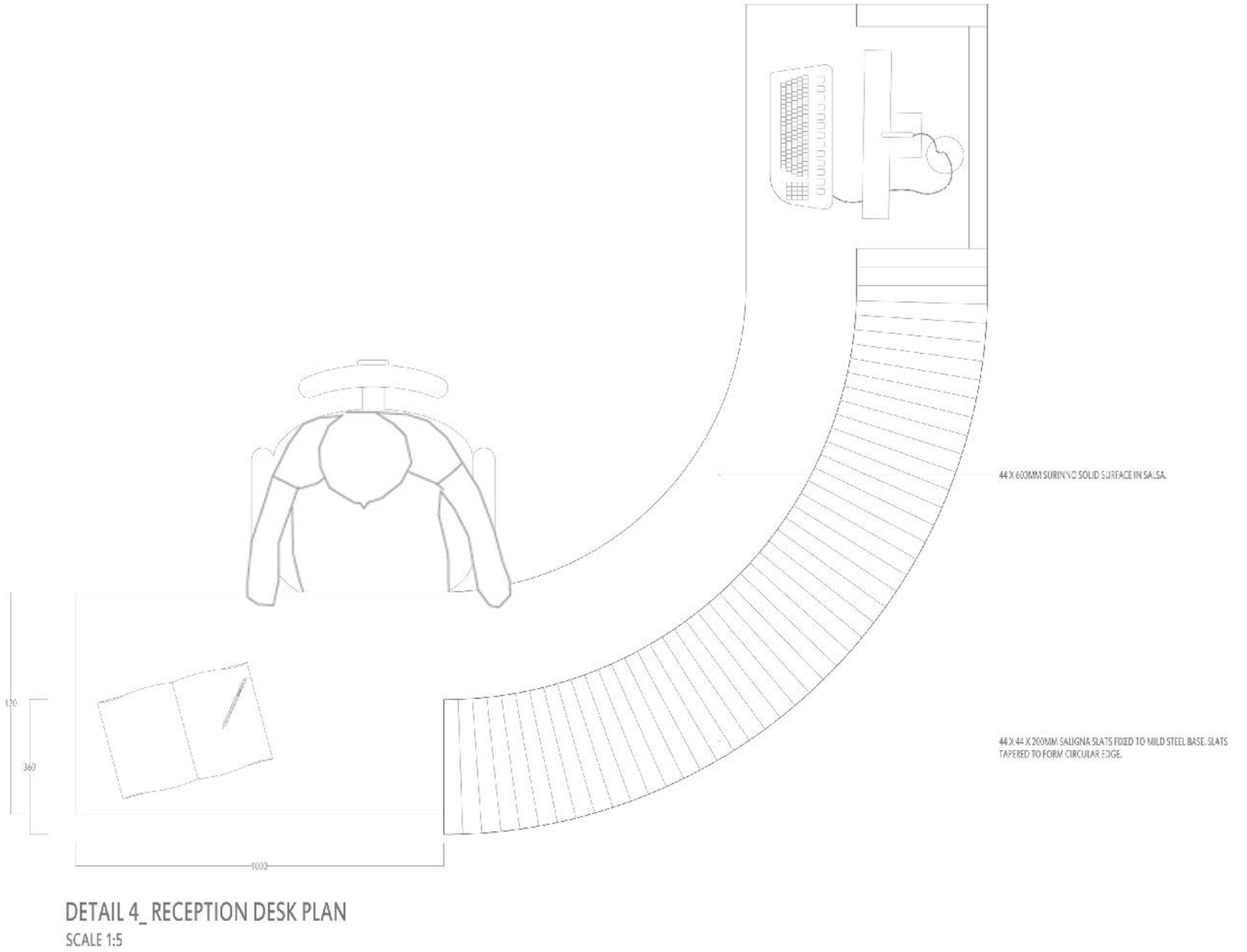


Figure 6.44
Reception counter top elevation

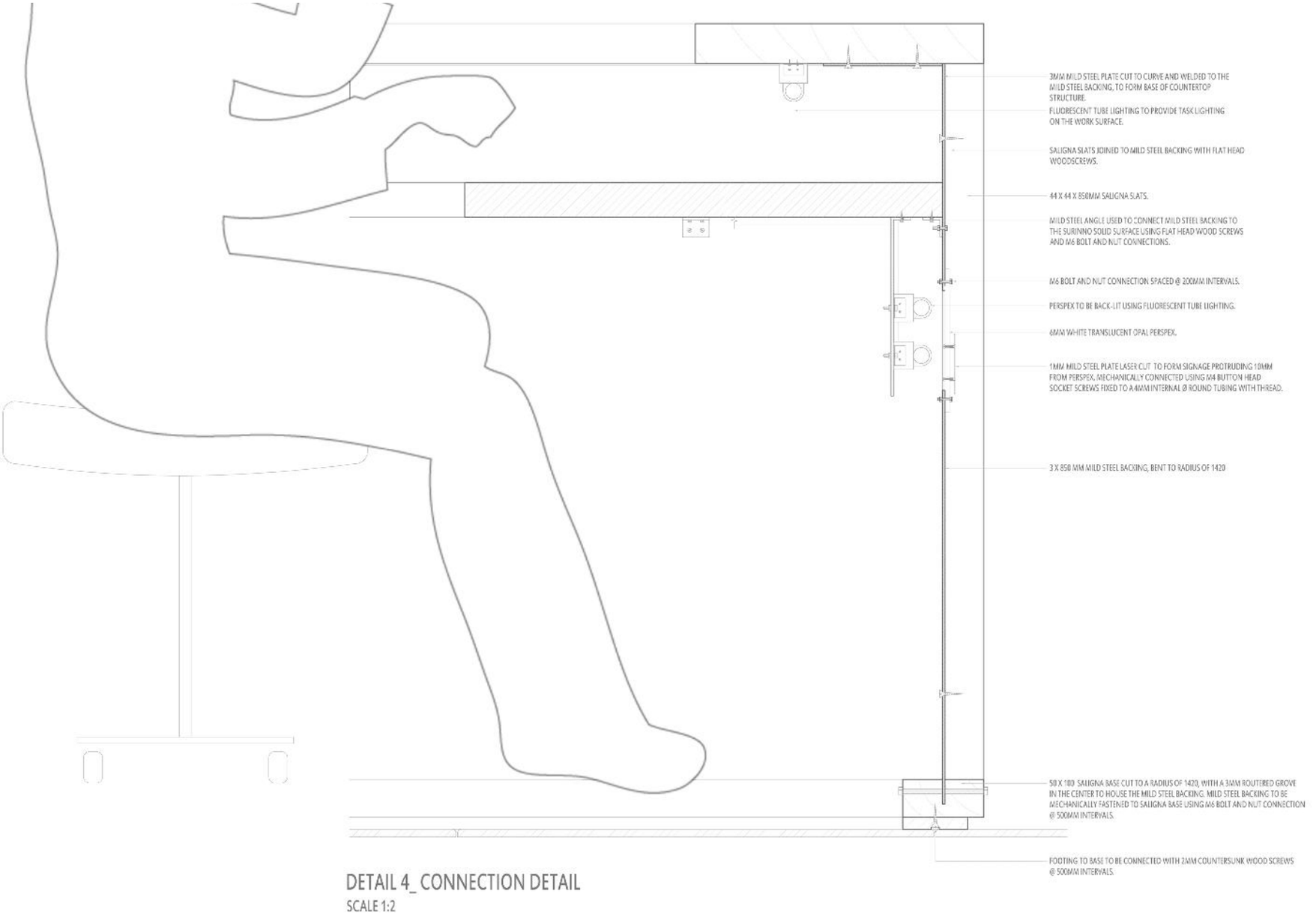
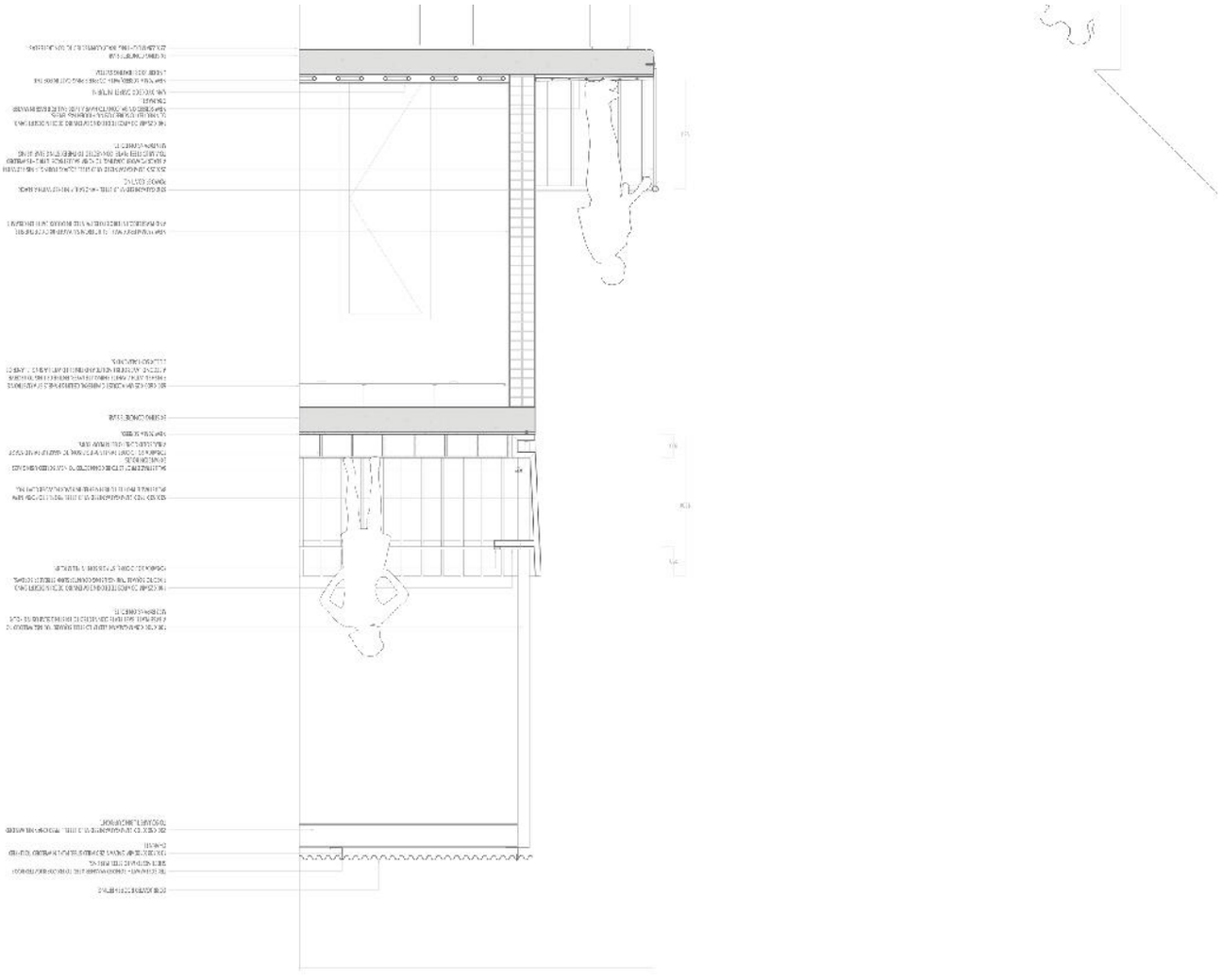


Figure 6.45
Reception section 3

6.5.5. Detail 5

Boundary section.

Figure 6.46
Boundary section



6.6 LEED-CI evaluation

LEED, Leadership in Energy and Environmental Design (LEED. 2004), established a system for commercial interiors (LEED-CI) that is used to test the environmental inclusions of the intervention. This LEED-CI test was completed and the result can be seen in Figure 6.47.

The intervention scored a total of 74/100, which means the interior would receive LEED-CI certification (a score above 40, means a project is successful in applying for certification).

LEED 2009 for Commercial Interiors

Project Checklist

Project Name

Date

Y	?	N			
15			**Sustainable Sites**	**Possible Points:**	**21**
2			Credit 1	Site Selection	1 to 5
4			Credit 2	Development Density and Community Connectivity	6
5			Credit 3.1	Alternative Transportation—Public Transportation Access	6
2			Credit 3.2	Alternative Transportation—Bicycle Storage and Changing Rooms	2
2			Credit 3.3	Alternative Transportation—Parking Availability	2
8			**Water Efficiency**	**Possible Points:**	**11**
Y			Prereq 1	Water Use Reduction—20% Reduction	
8			Credit 1	Water Use Reduction	6 to 11
23			**Energy and Atmosphere**	**Possible Points:**	**37**
Y			Prereq 1	Fundamental Commissioning of Building Energy Systems	
Y			Prereq 2	Minimum Energy Performance	
Y			Prereq 3	Fundamental Refrigerant Management	
2			Credit 1.1	Optimize Energy Performance—Lighting Power	1 to 5
2			Credit 1.2	Optimize Energy Performance—Lighting Controls	1 to 3
7			Credit 1.3	Optimize Energy Performance—HVAC	5 to 10
3			Credit 1.4	Optimize Energy Performance—Equipment and Appliances	1 to 4
5			Credit 2	Enhanced Commissioning	5
2			Credit 3	Measurement and Verification	2 to 5
2			Credit 4	Green Power	5
12			**Materials and Resources**	**Possible Points:**	**14**
Y			Prereq 1	Storage and Collection of Recyclables	
1			Credit 1.1	Tenant Space—Long-Term Commitment	1
2			Credit 1.2	Building Reuse	1 to 2
2			Credit 2	Construction Waste Management	1 to 2
2			Credit 3.1	Materials Reuse	1 to 2
		n	Credit 3.2	Materials Reuse—Furniture and Furnishings	1
1			Credit 4	Recycled Content	1 to 2
2			Credit 5	Regional Materials	1 to 2
1			Credit 6	Rapidly Renewable Materials	1
1			Credit 7	Certified Wood	1

Y	?	N			
16			**Indoor Environmental Quality**	**Possible Points:**	**17**
Y			Prereq 1	Minimum IAQ Performance	
Y			Prereq 2	Environmental Tobacco Smoke (ETS) Control	
1			Credit 1	Outdoor Air Delivery Monitoring	1
1			Credit 2	Increased Ventilation	1
1			Credit 3.1	Construction IAQ Management Plan—During Construction	1
1			Credit 3.2	Construction IAQ Management Plan—Before Occupancy	1
1			Credit 4.1	Low-Emitting Materials—Adhesives and Sealants	1
1			Credit 4.2	Low-Emitting Materials—Paints and Coatings	1
1			Credit 4.3	Low-Emitting Materials—Flooring Systems	1
1			Credit 4.4	Low-Emitting Materials—Composite Wood and Agrifiber Products	1
1			Credit 4.5	Low-Emitting Materials—Systems Furniture and Seating	1
1			Credit 5	Indoor Chemical & Pollutant Source Control	1
1			Credit 6.1	Controllability of Systems—Lighting	1
1			Credit 6.2	Controllability of Systems—Thermal Comfort	1
1			Credit 7.1	Thermal Comfort—Design	1
1			Credit 7.2	Thermal Comfort—Verification	1
1			Credit 8.1	Daylight and Views—Daylight	1 to 2
1			Credit 8.2	Daylight and Views—Views for Seated Spaces	1
			Innovation and Design Process	**Possible Points:**	**6**
			Credit 1.1	Innovation in Design: Specific Title	1
			Credit 1.2	Innovation in Design: Specific Title	1
			Credit 1.3	Innovation in Design: Specific Title	1
			Credit 1.4	Innovation in Design: Specific Title	1
			Credit 1.5	Innovation in Design: Specific Title	1
			Credit 2	LEED Accredited Professional	1
			Regional Priority Credits	**Possible Points:**	**4**
			Credit 1.1	Regional Priority: Specific Credit	1
			Credit 1.2	Regional Priority: Specific Credit	1
			Credit 1.3	Regional Priority: Specific Credit	1
			Credit 1.4	Regional Priority: Specific Credit	1
74			**Total**	**Possible Points:**	**110**

Certified 40 to 49 points Silver 50 to 59 points Gold 60 to 79 points Platinum 80 to 110

Figure 6.47
LEED-CE evaluation

6.7 Conclusion

The technical resolution was conducted with the boundary condition in mind. Several elements including the lighting, the ceiling height and the connection method all contribute to the experience of a new space and the crossing of boundaries.

Through the combined strength of these elements the crossing of boundaries are not just celebrated, but also highlighted.

chapter 7

Figure 7.1
Aerial view of Braamfontein (Childs, 2012)

7.1 The boundary condition 148

7.2 Effecting Braamfontein 148

7.3 Conclusion 149

7.1 The boundary condition

The boundary is the main focus of the dissertation - to connect the interior to the surrounding neighbourhood and environment. The boundary of the building is dissolved, promoting interaction between pedestrians, visitors, staff and guests. Physical and visual links between the building and the public domain are created to facilitate interaction.

Through the design of the boundary, the possible activity levels of the building increased to draw more people into the building as well as the neighbourhood.

7.2 Affecting Braamfontein

The effect on Braamfontein can be illustrated at the hand of three diagrams. Diagram 1, Figure 7.2, illustrates the existing insular nature of the building. As discussed in chapter 2, the existing building repels pedestrians and discourages any form of interaction. The nature of the building is therefore to retract and not respond to its environment.

Diagram 2, in Figure 7.3, illustrates the nature of the project if the interior alone was redesigned. The activity level in the building self would increase, but there would still be little to no interaction between the interior and the exterior.

Diagram 3, in Figure 7.4, illustrates the full potential of the building, where the boundary is dissolved and the maximum level of interaction is encouraged. The building and how people start to use this new space, will start to inform the behaviour of people in the neighbourhood. Diagram 3, in Figure 7.4, therefore illustrates the approach taken in the design. The boundary is included as a part of the interior realm and strengthens the design. This also allows the function of the interior to relate to the neighbourhood.

Diagram 1 - 3 communicates the level of change implemented in the design of 9 De Beer Street. From diagram 1, with no interaction with the public domain and limited interior activity, to diagram 3 where the interior and the exterior are joined through the design. This boundary approach forms the groundwork for a contextual interior with the ability to influence the neighbourhood.

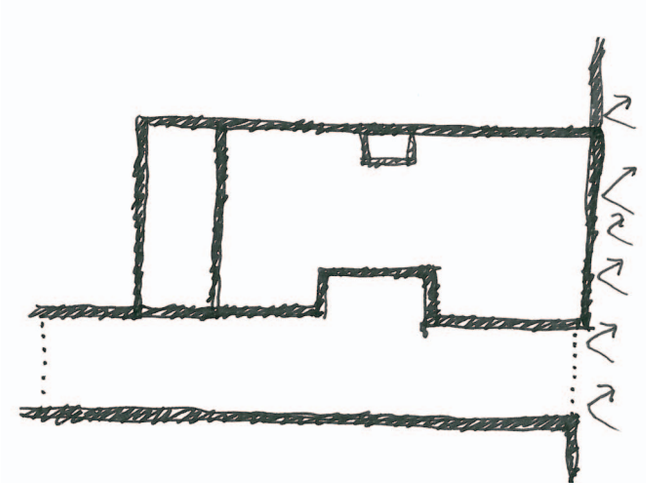


Figure 7.2
Diagram 1: Insular building

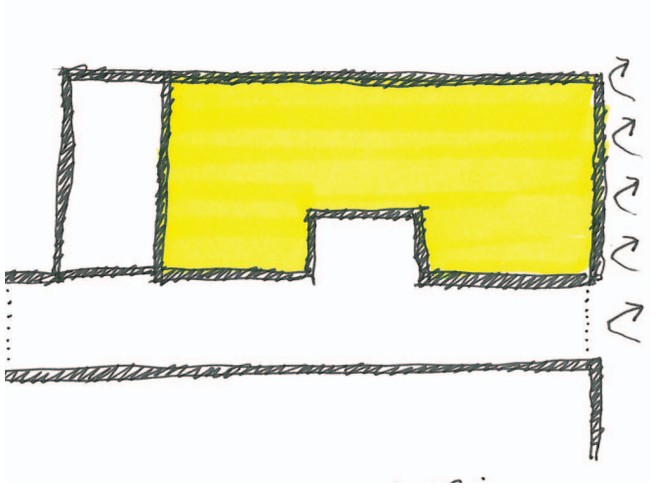


Figure 7.3
Diagram 2: Interior changes only

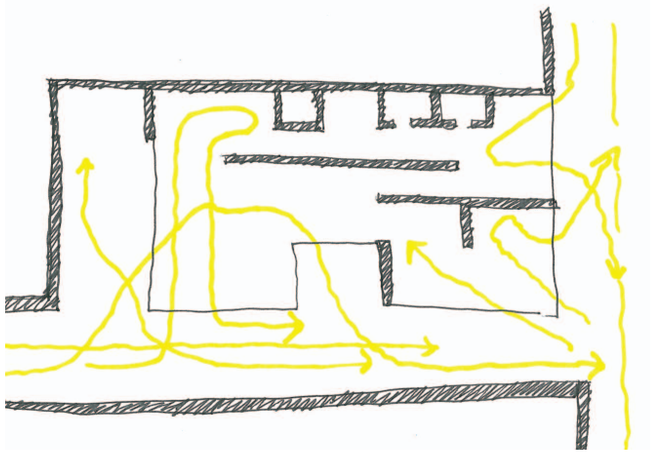


Figure 7.4
Diagram 3: Full potential of project

7.3 Conclusion

The new boundaries of the building give way to public space and draw the public into the interior. This invites interaction between the interior and the neighbourhood. Boundaries on each level and on all three façades were changed into an interplay between barriers and thresholds. Defined exterior spaces, like the courtyard and alleyway, are considered an extension of the design and consist of qualities of interiority, allowing the interior to stretch into the exterior space and the neighbourhood.

The alleyway is activated and the building connects with the neighbourhood through its permeable and accessible facade. A dialogue between the interior and exterior is formed through the spill out of interior space and the public space that is drawn into the building. The interior environment is also shaped by the exterior through this dialogue, creating a contextual interior. The boundary therefore becomes the catalyst to the interior experience. The building was changed from a barrier dominated building to a threshold dominated building, becoming an inviting space that encourages activity.

People are encouraged to use the space and a sense of place is created through the demarcation of spaces. The added programmes and open nature of the design, provides activity that draw people into the space and to the block. The activities add liveliness to the building ensuring activity, and therefore users, for all the different times of day.

The design promotes diversity through the different interior options provided and through the permeable nature of the peripheral boundary of the building. The design caters for different needs and provides different forms of social spaces. These spaces reach from the interior outwards, to include the neighbourhood in the activity. The openness of the building includes all and doesn't discriminate.

The open nature of the intervention instils a level of trust to the user and provides numerous opportunities and ways to interact with the building. This level of trust will start to shape the way people interact with Braamfontein, providing the opportunity for other buildings and interiors to follow. The permeable nature of the building creates a blurred boundary between interior and exterior. The neighbourhood and the interior is now intertwined with one another, affecting and shaping each other.

The intervention is not the first project in Braamfontein, but it builds on the momentum created by the other developments. It does however take a big step forward to attract and involve a more diverse range of users, and in doing so hopes to encourage a sense of community in the neighbourhood.

List of references

List of references

- About Braamfontein. 2011. [Online]. Available: <http://www.braamfontein.org.za/content/about-us>. [Accessed 3 October 2011].
- Architonic, Hotel Superbude. 2008. [Online]. Available: < http://www.architonic.com/aisht/hotel-superbude-dreimeta-armin-fischer/5100436>. [Accessed 7 August 2012].
- Artistic control. 2012. [Online]. Available: <http://www.artisticcontrols.com/resources/technical/how-to-calculate-lux.php>. [Accessed 25 September 2012] .
- Ascroft, C. 2012. Personal communication. 2 March 2012, Braamfontein, Johannesburg.
- Asian Info. 2010. *Japanese Architecture.* [Online]. Available: < http://www.asianinfo.org/asianinfo/japan/architecture.htm>. [Accessed 22 May 2012].
- Bannister, A. 2011. Interview with the researcher on 19 October 2011, Braamfontein, Johannesburg.
- Bednar, M.J. 1990. *Interior Pedestrian Spaces*. B.T. London: Batsford limited.
- Blog sparks direct. 2012. [Online]. Available: < http://blog.sparksdirect.co.uk/nemo-asteroid-suspension-pendant-modern-style-globe-hanging-ceiling-lamp/ >. [Accessed 26 September 2012].
- Bolin's Weblog. 2008. [Online]. Available: <http://bolinq.wordpress.com/2008/02/10/paley-park/>. [Accessed 16 October 2012].
- Borden, I., Hall, T. & Miles, M. (eds.) 2000. *The City Cultures Reader*. London: Routledge.
- Borden, I. 2006. Thick Edge: Architectural Boundaries and spatial Flows. In: *Intimus. Interior Design Theory Reader.* Edited by Taylor, M. & Preston, J. (eds.) London: John Wiley & Sons, 49-55.
- Braamfontein development projects. 2011. [Online]. Available: <http://www.joburg.org.za/index.php?option=com_content&task=view&id=128&Itemid=58>. [Accessed 4 October 2011].
- Brooker, G. & Stone, S. 2008. *Basics Interior Architecture: context + environment.* New York : Watson-Guptill Publications.
- Brooker, G. & Stone, S. 2010. *What is interior design?* Switzerland: RotoVision SA.
- Childs, S.M. 2012. *Aerial view of Braamfontein*. Braamfontein, Johannesburg.
- Childs, S.M. 2012. *Nelson Mandela Bridge.* Braamfontein, Johannesburg.
- Claudio Silvestrin Architects. 2006. [Online]. Available: < http://www.claudiosilvestrin.eu/mobile/index.php?option=com_content&view=article&id=45%3Aprincibakerysperonariduomo&catid=2&Itemid=11>. [Accessed 3 July 2012].
- Darroll, L. 2003. Empowering public space: the Braamfontein Regeneration Project. *Urban Green File*. October, 8/4: p. 26-31.

- Darroll, L. 2004. 44 Stanley Avenue, No fancy stuff. *Urban Green File*. May/June, 9/2: p. 16-17.
- Debord, G. 1958. *Theory of the Dérive*. [Online]. Available: < http://www.bopsecrets.org/SI/2.derive.htm>. [Accessed 18 March 2012].
- Decoist. 2012. [Online]. Available: < http://www.decoist.com/2012-09-22/bedroom-lighting-ideas-to-brighten-your-space/>. [Accessed 26 September 2012].
- Design Box 365. 2012. [Online]. Available: < http://www.designbox365.com/?tag=interiors >. [Accessed 12 September 2012].
- Dictionary. 2012. [Online]. Available: <http://dictionary.reference.com/browse/stoep>. [Accessed 18 June 2012].
- Dörk, M. Carpendale, S. & Williamson, C. 2011. *The Information Flaneur: A Fresh look at Information Seeking.* Canada: University of Calgary.
- Encounter South Africa. 2012. [Online]. Available: <http://www.encounter.co.za/article/19.html#Comments>. [Accessed 19 September 2012].
- Fagurhult. n.d. [Online]. Available: <http://www.fagerhult.sk/products/technical-info/documents/FAGERHULT_T5-lysroret_UK.pdf>. [Accessed 25 September 2012].
- Feature shoot. 2012. [Online]. Available: < http://www.featureshoot.com/2012/05/neon-hotel-interiors-by-brad-carlile/ >. [Accessed 12 September 2012].
- Gauteng Destinations: Braamfontein, Johannesburg. n.d. [Online]. Available: <http://www.sa-venues.com/attractionsga/braamfontein.php>. [Accessed 25 October 2011].
- Gauteng Tourism. 2012. [Online]. Available: <http://www.gauteng.net/attractions/entry/44_stanley_avenue/>. [Accessed 11 July 2012].
- Gehl, J. 2010. *Cities for People*. Washington DC : Island Press.
- GE Lighting. 2010 [Online]. Available: <http://www.gelighting.com/LightingWeb/emea/images/Halogen_MR16_IR_Lamps_Data_sheet_EN_tcm181-12732.pdf>. [Accessed 25 September 2012].
- Geography. 2009. [Online]. Available: <http://geography.about.com/od/urbaneconomicgeography/a/gentrification.htm>. [Accessed 24 May 2012].
- Georgiou, M. 2006. Architectural Privacy. Unpublished dissertation, University of London, London.
- Glazer, N & Lilla, M. (ed.) 1987. *The Public Face of Architecture. Civic Cultures and Public Spaces.* New York: The Free Press.
- Global market. 2012. [Online]. Available: <http://www.globalmarket.com/product-info/t5-fluorescent-electronic-wall-lamp-with-small-reflector-163063.html>. [Accessed 26 September 2012].

- Grant, J. 2006. *Planning the Good Community: New Urbanism in theory and practice*. New York: Routledge.
- Greene, B. 2012. Personal communication. 6 July 2012, Milpark, Johannesburg.
- Google Earth, 6.0.3.2197. (2010). Braamfontein, Johannesburg, 26 o 11'38.44" S; 28 o 02'03.90" E, 1740 m. Street view. [Online]. Available: <http://maps.google.co.za/maps?hl=en>. [Accessed 19 October 2011].
- Google Earth, 6.0.3.2197. (2010). Braamfontein, Johannesburg. Street view. [Online]. Available: <http://maps.google.co.za/maps?hl=en> [Accessed 12 March 2012].
- Hall, E.T. 1990. *The Hidden Dimension*. New York: Doubleday & Co.
- Hausladen, G. & Tichelmann, K. 2010. *Interiors Construction Manual*. Institut für internationale Architektur-Dokumentation: Munich.
- Home Interior Design, Architecture and Decorating Ideas. 2012. [Online]. Available: < http://homeklondike.com/2012/08/16/orange-boutique-hotel-in-rome/8-orange-boutique-hotel-in-rome/>. [Accessed 12 September 2012].
- Home models. 2012. [Online]. Available: < http://homemodels.org/the-club-hotel-interior-bedroom/ >. [Accessed 12 September 2012].
- Hotel and Restaurant. 2012. *Round of applause for Joburg CBD's Hotel Lamunu*. [Online]. Available: <http://www.hotelandrestaurant.co.za/tourism/round-of-applause-for-joburg-cbds-hotel-lamunu/>. [Accessed 9 September 2012].
- Hiranandani, S. April 2010. *What makes a good city?* [Online]. Available: <http://www.theurbanvision.com/blogs/?p=372>. [Accessed 29 August 2012].
- How done. 2011. [Online]. Available: <http://howdone.info/22405-how-to-make-a-string-pendant-lamp.html>. [Accessed 25 September 2012].
- Hudson New York. 2012. [Online]. Available: < http://www.hudsonhotel.com/en-us/#/home/>. [Accessed 7 August 2012].
- IID. 2012. [Online]. Available: <http://www.iidprofessions.com/about.htm>. [Accessed 18 September 2012].
- Illima. 2012. [Online]. Available: <http://www.illimasa.co.za/>. [Accessed 25 September 2012].
- Institute for Sustainable Resources. 2012. *High-Density Liveability Guide. Factsheet 9 - Sense of Community*. [Online]. Available: <http://www.highdensityliveability.org.au/community_sense_of_community.php>. [Accessed 19 September 2012].
- Interact Media Defined. 2011. *Braamfontein - home to a hip new hotel*. [Online]. Available: < http://www.interactmedia.co.za/index.php?option=com_content&view=section&layout=blog&id=46&Itemid=171&limitstart=18>. [Accessed 9 September 2012].
- Interiora. 2012. [Online]. Available: < http://zainteriora.net/2012/06/14/costum-made-interiors-by-lema/>. [Accessed 12 September 2012].

- It's about interior. 2012. [Online]. Available: < http://itsaboutinterior.tumblr.com/post/22666556634/mama-shelter-hotel-by-philippe-starck >. [Accessed 12 September 2012].
- Katz, P. 1994. *The New Urbanism: Toward an Architecture of Community.* New York: McGraw-Hill Inc.
- Kincaid, D. 2002. *Adapting Buildings for Changing Uses*. London : Spon Press.
- Königk, R. 2010. Interior design as architecture's 'Other'. Unpublished dissertation. Pretoria: University of Pretoria.
- LEED. 2004. [Online]. Available: < http://www.usgbc.org/Docs/LEEDdocs/CI-final%20content%20draft.pdf >. [Accessed 18 October 2012].
- LEDtronics. 2012. [Online]. Available: < http://www.ledtronics.com/TechNotes/TechNotes.aspx?id=13 >. [Accessed 24 September 2012].
- Let me be inspired. 2012. [Online]. Available: < http://www.letmebeinspired.com/andronikos-hotel-interiors-by-klab-architecture/ >. [Accessed 12 September 2012].
- Lighting Levels. 2012. [Online]. Available: < http://www.arca53.dsl.pipex.com/index_files/lightlevel.htm>. [Accessed 25 September 2012].
- Lighting orient. 2012. [Online]. Available: <http://www.ledlightsorient.com/silicone-waterproof-flexible-led-strip-p-76.html>. [Accessed 25 September 2012].
- Lighting styles. 2012. [Online]. Available: <http://www.lightingstyles.co.uk/ceiling/recessed-downlights/recessed-downlight---12v-adjustable/adjustable_downlight_low_voltage.htm>. [Accessed 25 September 2012].
- Liknaitzky & Kaplan Architects. 1961 Council drawings: obtained from Johannesburg city council, Braamfontein: Johannesburg.
- Lumena. 2012. [Online]. Available: < http://www.lumenalights.com/shop/Eco-Globe-Light-Bulb-120mm-B22-BC-Daylight-White-Colour.html>. [Accessed 25 September 2012].
- Lurie, G. (1968) Contemporary Braamfontein. Unpublished dissertation. Johannesburg: University of the Witwatersrand.
- Luxpresso. 2012. [Online]. Available: < http://luxpresso.com/photogallery-indulge/charming-oldworld-hotels-to-stay-at-during-the-2012-london-olympics/14315/7 >. [Accessed 12 September 2012].
- Lynch, K.A. 1980. *What makes a good city? General theory of good city form; a new try at an old subject.* Holst Memorial Lecture. [Online.] Available: <http://alexandria.tue.nl/extra2/redes/lynch1980.pdf>. [Accessed 30 August 2012].
- MadaniPour, A. 1996. *Design of Urban Space. An Inquiry into a Socio-spatial Process*. London: John Wiley & Sons.
- Marcuse, P. 1997. Walls of Fear and Walls of Support. In: *Architecure of Fear.* 1997 . Edited by Ellin, N. New York : Princeton Architectural Press, p. 101-114.
- McCarthy, C. 2005. Towards a Definition of Interiority. *Space and Culture,* Vol. 8, No. 2, p 112-125.

- Minors, D. 2010. University of the Witwatersrand. [Online]. Available: < http://www.gradnet-db.wits.ac.za/adamlevy.html>. [Accessed 19 June 2012].
- National Geographic. 2012. [Online]. Available: < http://intelligenttravel.nationalgeographic.com/tag/hotel-central/ >. [Accessed 12 September 2012].
- Ospina, S. 2004. *Qualitative Research.* London: Sage Publications.
- Oxford Dictionaries. 2012. *Veranda.* [Online]. Available: < http://oxforddictionaries.com/definition/english/veranda?q=veranda>. [Accessed 18 June 2012].
- Pay-and-sleep. 2012. [Online]. Available: <pay-and-sleep.com>. [Accessed 19 July 2012].
- Porter, T. 2004. *Archispeak.* New York: Spon Press, Taylor and Francis Group.
- Plak. 2012. [Online]. Available: < http://plak.co.za/moreinfo.php?id=18984>. [Accessed 3 March 2012].
- Princi. 2012. [Online]. Available: <http://www.princi.it/>. [Accessed 19 July 2012].
- SA Places. 2012. [Online]. Available: < http://www.places.co.za/maps/gauteng_map.html>. [Accessed 3 March 2012].
- Scott, F. 2008. *On altering architecture.* New York: Routledge.
- Strydom, N. 2012. *Courtyard on western end of building.* Braamfontein, Johannesburg.
- Strydom, N. 2012. *Eastern elevation of building.* Braamfontein, Johannesburg.
- Superbude Hostels. 2008. [Online]. Available: <http://www.architonic.com/aisht/hotel-superbude-dreimeta-armin-fischer/5100436>. [Accessed 19 July 2012].
- The EP insider. 2012. [Online]. Available: < http://www.exclusivelypride.net/blog/offers/cape-town-offers/ >. [Accessed 12 September 2012].
- Tool station. 2012. [Online]. Available: < http://www.toolstation.com/shop/Lighting/12V+Halogen+Lamps/MR16+Dichroic+Lamp+20w+36/d220/sd3278/p48503 >. [Accessed 25 September 2012].
- Urban Design. [Online] Available: < www.urbandesign.org>. [Accessed 3 September 2012].
- Urbn Hotels. 2012. [Online]. Available: < http://www.urbnhotels.com/>. [Accessed 7 August 2012].
- Van Dyck Carpets. 2012. [Online]. Available: < http://vandyckcarpets.com/blog/going-the-green-way/>. [Accessed 12 September 2012].
- Veranda Urbanism. 2008 [Online]. Available: <http://verandaurbanism.wetpaint.com/>. [Accessed 25 April 2012].
- VISI. 2011. Designer of the year. [Online]. Available: < http://www.visi.co.za/content/article/413/and-the-winner-is>. [Accessed 3 September 2012].

- Weinthal, L. (ed.) 2011. Toward a New Interior. An Anthology of Interior Design Theory. New York: Princeton Architectural Press.
- Whyte, W.H. 1980. *The Social Life of Small Urban Spaces.* New York: The Conservation Foundation.
- World Architecture News. 2011 [Online]. Available: < http://www.worldarchitecturenews.com/index.php?fuseaction=wanappln.projectview&upload_id=16227>. [Accessed 19 June 2012].

Addendum A

Osmond and Lange framework	JDA	Interpretation and expansion	Design implementation
Implement safe pedestrian routes separate from busy traffic. Design uncluttered walkable pavements	Upgrade the alleyways in Braamfontein Create a walkable city, where the public space becomes the point of interaction Create non-motorised transport routes on Rissik and Wolmarans street. Improve Nelson Mandela bridge as a link between the commercial core and Braamfontein	Promote pedestrian exploration which results in people engaging with the city and its buildings.	A number of strategically located pedestrian walkways
Create a central, purpose designed transport interchange		Becoming a gateway to the entire city.–	Park station becomes [the heart – pumping life and activity] the link between Hill brow, Braamfontein, Newtown, CBD, Yeoville, Doornfontein, Fordsburg, Marshall town
Accessibility of the city to the northern suburbs. Drive a revitalisation into the city.			Drawing more people into the city, especially at night time Public transport running longer times – up to 24:00 with safe pedestrian routes – drawing in people in the night time

Develop anchor public spaces	Develop public spaces next to the BRT stations. Public spaces and routes connecting the BRT routes. Provide a convenient pedestrian route between east and west. Refurbishment of existing public spaces	Develop public spaces Create recreational spaces for people to go	Joubert park [edges] upgrade, safety, cleaning, surveillance, lighting Urban rail park
Encourage active street edges and vertical mixes of uses	Treatment of Bad buildings. Refurbishment/demolition/ development Negotiations with land owners adjacent to BRT routes to open up dead facades to accommodate street level shop fronts and shops with extended hour usage		Buildings that not of significance in historical value and city life, to be demolished [Lina Bo Bardi] /altered/adaptively reused so that it contributes to meaningful public space and the overall urban regeneration.
Improve safety and security in the area		Establish core improvement districts for areas that are lacking	Demarcate precinct through functional street art furniture [like Braamfontein] Propose a sponsored clean up by Transnet/ Prasa/ Gautrain [use precedent of ABSA cleaning up their own precinct] Improvement districts – cleaning, improve municipal services, clean up busy pedestrian routes, formalize street vendors

Incorporate and celebrate heritage in the area		Three different levels of significance -Johannesburg city area - Railways - South Africa All linking in to each other	Acknowledge history to complement the character of the space and to project forward for the future
Render park station precinct legible and navigable through mapping and signage	Provide directive information and signage boards at BRT stations and major pedestrian routes	Should not only be done in Park station, but should be visible in all the adjacent precincts	Create way finding and precinct identification, though street art furniture
	World class African city	Gateway to the rest of Africa Becomes the central point of getting together	
	Connecting to Wits and UJ and the student community. Open the campus up with potentially active building frontages supporting the connection to the CDB	Creating convenient pedestrian links between the campuses and the surrounding environments	Creating physical pedestrian links between the surrounding environments, drawing the students in Focussing on activating and drawing in Wits students
	The zone should reflect the diverse characteristics with well-developed public transport facilities and safe pedestrian linkages		Creating pedestrian routes and upgrading existing public spaces
	Substantial public art installation in Braamfontein as a part of the cultural arc	Braamfontein as a part of the cultural arc	Using art as furniture to serve a function in the area

Addendum B

Finding viable uses for redundant buildings. - chapter 2

Characterising the available supply:

- Supply demand performance and decisions
- Identify generic characteristics
- Elements changed during refurbishment
- Factors affecting value
- Preferred structure and dimensions
- Physical profiling

Possible uses for available buildings:

- Demand characteristics of differing uses
- Extending the scale of use categories
- Relating uses to available buildings

Identifying options with the Use Comparator:

- Appropriate criteria for supply and demand comparison
- Functional framework of the comparator
- Comparator stages

Stage 1
Stage 2

Characteristic 1: use class order
Characteristic 2: Hostile factors
Characteristic 3: Tenure
Characteristic 4: Slab to Slab height
Characteristic 5: Strength
Characteristic 6: Fabric Specification quality
Characteristic 7: Building character
Characteristic 8: Depth of floor plate
Characteristic 9: External and core access
Characteristic 10: Street characteristics
Characteristic 11: Amenity assessment
Characteristic 12: Public transport
Characteristic 13: Private transport

USE OF THE COMPARATOR

First stage:
purpose is to identify those features that will eliminate certain potential uses
Second stage:
deal with the key physical and locational elements of the building

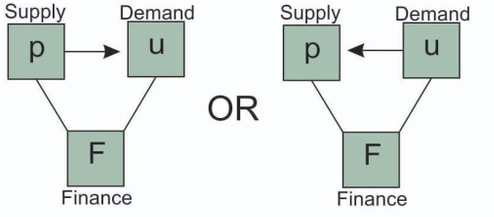
Physical change possibilities:

- Exploring the extent and nature of physical change
- Reviewing the options for change
- Selective demolition
- Physical characteristics changed in selective demolition
- Benefits of selective demolition

	MAINTAIN EXTERNAL FABRIC	REPLACE EXTERNAL FABRIC
MODIFICATION: INTERNAL SPACE only	low change	low-medium change
RECONFIGURATION: SPACE & STRUCTURE	medium-high change	high change

Assessing viability:

- Aspects of viability
- Sequence of analysis
- Potentials of failure



Adapting buildings for changing uses
- David Kincaid

Addendum C

Lighting investigation

The ligting study is done as a part of the technical resolution of the design. Different lighting requirements will be evaluated in terms of light level requirements for specific areas, as well as the appropriate lamps selected for the desired outcome. The lighting investigation will also include the desired atmosphere that the lighting should create.

Definitions

LEDtronincs (2012) provide the following definitions for Lighting measurement terms:

Lumen:
A unit of light flow or luminous flux. The lumen rating of a lamp is a measure of the total light output of the lamp. The most common measurement of light output (or luminous flux) is the lumen. Light sources are labeled with an output rating in lumens. For example, a R30 65-Watt indoor flood lamp may have a rating of 750 lumens. Similarly, a light fixture's output can be expressed in lumens.

Luminance:
Luminous Flux (light output). This is the quantity of light that leaves the lamp, measured in lumens (lm).

Luminous:
This is the amount of light measured on the work plane in the lighted space. The work plane is an imaginary horizontal, tilted or vertical line where the most important tasks in the space are performed. Measured in footcandles (fc or lux in metric), light levels are either calculated, or in existing spaces, measured with a light meter. A footcandle is actually one lumen of light density per square foot; one lux is one lumen per square meter. Like lumens, footcandles can be produced as either initial or maintained quantities.

Lithg level:
Light intensity measured on a plane at a specific location is called illuminance. Illuminance is measured in footcandles, which are workplane lumens per square foot. You can measure illuminance using a light meter located on the work surface where tasks are performed. Using simple arithmetic and manufacturers' photometric data, you can predict illuminance for a defined space. (Lux is the metric unit for illuminance, measured in lumens per square meter. To convert footcandles to lux, multiply footcandles by 10.76). (

Kilowatt Hour (kWh) Formula:
The measure of electrical energy from which electricity billing is determined. For example, a 100-Watt bulb operated for 1000 hours would consume 100 kilowatt hours (100 Watts x 1000 hours = 100 kWh). At a billing rate of $0.10/kWh, this bulb would cost $10.00 (100 kWh x $0.10/kWh) to operate over 1000 hours.

Lighting level requirements

"The CIBSE (Chartered Institute of Building Services Engineers) produces a Code for Interior Lighting which gives lighting requirements for areas." (Lighting Levels. 2012.)

They indicate the lighting level requirements in table form, specifying the lux level required, the activity classification and the area in which that activity can take place. The General lighting requirement table, provides a basic idea of the lighting level required for certain tasks.

Another table, focussing on hotels and restaurants, is also provided. This table focusses on specific activities associated with hotels and restaurants and indicates the required lux level, minimum glare ratio and the minimum colour rendering requirements for the specific activities.

These tables can be seen on the next page.

General lighting requirements

Illuminance (lux)	Activity	Area
100	Casual seeing	Corridors, changing rooms, stores
150	Some perception of detail	Loading bays, switch rooms, plant rooms
200	Continuously occupied	Foyers, entrance halls, dining rooms
300	Visual tasks moderately easy	Libraries, sport halls, lecture theatres
500	Visual tasks moderately difficult	General offices, kitchens, laboratories, retail shops
750	Visual tasks difficult	Drawing offices, meat inspection, chain stores
1000	Visual tasks very difficult	General inspection, electronic assembly, paintwork, supermarkets
7500	Visual tasks extremely difficult	Fine work and inspection, precision assembly
2000	Visual tasks exceptionally difficult	Assembly of minute items, finished fabric inspection

(Lighting Levels. 2012.)

Hotels and Restaurants

Area	Illuminance (lux)	Limiting Glare rating	Minimum colour rendering (Ra)
Kitchen	500	22	80
Restaurant, dining room, function room	-	-	80
Self service restaurant	200	22	80
Conference rooms	500	19	80

(Lighting Levels. 2012.)

Calculating lux levels in designated areas

The following calculation was used to calculate lux levels in three representative rooms. The rooms are: the courtyard area, the reading lounge and a hotel room. The formula is provided by *Artistic Controls* (2012), a stage design company.

Lux level = total light output (lumens) / area (square meters)

therefore

*Total light output = lumens per fixture * number of fixtures*

(Artistic contols, 2012)

1. Courtyard area

Lamp selection in the courtyard: Fluorescent tube lighting

Lux level = total light output (lumens) / area (square meters)
= 4300 / 48.96
= 87.8 lux

Total light output = lumens per fixture * number of fixtures
= 87.8 * 6
= 526.9 lux

The courtyard therefore creates a backlit artificial skylight, permitting 526 lux, adequite lighting for a retail environment.

2. Reading lounge

Lamp selection in the reading lounge: Eco globe light bulbs

Lux level = total light output (lumens) / area (square meters)
= 1500 / 23.04
= 65.1 lux

Total light output = lumens per fixture * number of fixtures
= 65.1 * 6
= 390.6 lux

The minimum required lighting level in a space dedicated for reading is 300lux. The reading room consists of six eco globe light bulbs, resulting in a total lux level of 390.6 lux.

3. Hotel room

Lamp selection in the hotel room: A combination of the halogen dichroic reflectors and the LED lighting strip

Halogen dichroic reflectors:
Lux level = total light output (lumens) / area (square meters)
= 625 / 16.28
= 38.3 lux

Total light output = lumens per fixture * number of fixtures
= 38.3 * 4
= 155.2 lux

LED ligthing strip:
Lux level = total light output (lumens) / area (square meters)
= 4500 / 16.28
= 276.4 lux

The lux level for the LED lgihting strip, cannot be multiplied by the number of fixtures, as there is only one strip in each room. The lux levels indicated is sufficient for general lighting in a room or can create ambient lighting, when the cove lighting is dimmed.

In the hotel room, the dichroic reflectors can be used in conjunction with the LED strip lighting, to create a higher lux level. Or it can be used seperately depending on the atmosphere desired.