

CITY SERVICE STATION

developing the public amenity network for the new urban community

k a y h a u s l e r



declaration

I, Kay Hausler [0509794p], am a student registered for the course Master of Architecture [Professional] in the year 2010. I hereby declare the following:

I am aware that plagiarism [the use of someone else's work without permission and/or without acknowledging the original source] is wrong. I confirm that the work submitted for assessment for the above course is my own unaided work except where I have stated explicitly otherwise. I have followed the required conventions in referencing thoughts, ideas and visual material of others. For this purpose, I have referred to the Graduate School of Engineering and the Built Environment style guide. I understand that the University of the Witwatersrand may take disciplinary action against me if there is a belief that this is not my unaided work or if I have failed to acknowledge the source of the ideas or words in my own work.



kay hausler
03 - 12 - 2010

This document is submitted in partial fulfilment for the degree:

Master of Architecture [Professional]

at the University of the Witwatersrand, Jo-
hannesburg, South Africa, in the year 2010.

A C K N O W L E D G E M E N T S

I would like to thank my family for 6 years of endless support, patience and encouragement. Thank you to my supervisor, Lone Poulsen, for her invaluable direction and assistance this year. A very special thanks to the 'harem' and the 'commune' for the advice, the laughter, the moral support, the sanity and the camping food. To my friends, thank you for giving me balance and perspective.



LIES

[C O N T E N T S]

- 1_ **abstract**_____
- 2_ **introduction**_____
lost space to public amenity
- 3_ **mutualism**_____
- 4_ **reading the city**_____
the setting
amenity
mapping
history
- 5_ **site**_____
- 6_ **thesis proposal**_____
precedent _ the contemporary amenity
- 7_ **design drivers**_____
tolerances
adaptive reuse
public : private
precedent _ melbourne
hybridity
- 8_ **form**_____
- 9_ **programme**_____
- 10_ **conclusion**_____
- 11_ **case studies**_____
- 12_ **concept development**_____
- 13_ **urban intervention**_____
- 14_ **architectural intervention**_____
- 15_ **bibliography**_____

m e a - l i e s
_ moshe sekete
(Masondo, Potenza, and
Adams, 2007: 46)

1

A B S T R A C T

J o h a n n e s b u r g
i n n e r c i t y
2 0 1 0



The inner city of Johannesburg has encountered many changes in its identity, use and level of occupation. In 2010, downtown Johannesburg is comprised of pockets of vibrant action and production with an ever-increasing industrious populace and residential sector, and therefore ever-increasing pressure on the public services. With the legal and illegal conversion of countless commercial buildings for housing, what is apparent is the lack of basic public amenities. While the informal network, clustering around populated points, satisfies minor daily needs, its transient, simplistic, repetitive system, does not perform to the extent required by a residential community. These enterprises are neither large enough to be an institution, constant enough to be socially inclusive nor structured enough to be capable of fulfilling social services.

Concurrently, there exists a series of unutilised, unproductive private spaces; a dormant network of sites, saturated with potential to fulfil that which the city is lacking, an efficient public territory.

[Taking something the city has and doesn't need and creating something city dwellers don't have, and need.]

This thesis aims to use unproductive 'gaps' to create a model for urban public infiltration; incorporating existing amenities into a complex, hybridised, democratic structure. The result is to be the formation of an inclusive social service network, provision of basic amenities, opportunities for the gathering of an increasing residential population and the reception and integration of a non-residential and immigrant population, in the city of Johannesburg.



2

I N T R O D U C T I O N



LOST SPACE TO PUBLIC AMENITY

“The instrumentality of design [is] its enabling function”

(Wall, 1999: 233). Public architecture exists to satisfy public need and facilitate social interaction. The resultant relationship between public and space is vital in creating functioning city ‘neighbourhoods’. The inner city of Johannesburg is no longer the primary central business district; it is now a cosmopolitan African metropolis inhabited by a new public requiring an urban neighbourhood. This population has been defined by Clive Chipkin as “urban optimists” who “see the inner city as a place of opportunity rather than a zone of economic decline” (Chipkin, 2008: 416). While the city’s complex physical structure is reclaimed by this new population, the one thing missing is a public interface.

The city of Johannesburg consists of layers: a natural backdrop and a built landscape interspersed with ever-evolving, ever-active transport, communication, social and economic networks. These networks tie the city and its users together. The residual, ‘negative’ layer is made up of a series of blank, unproductive spaces. These are a typology of their own and due to their prevalence, produce their own spatial network. This typology is what Roger Trancik has defined as “lost space” (Trancik 1986: 3).

In Hunch, produced by The Berlage Institute, Luciano Basauri and Francisca Insulza focus on the urban voids of LA, stating that “‘wanting space’ is not a negative condition, but one to be taken advantage of. Together these voids form a powerful system of semi-public spaces; although they are privately owned, they are used and perceived collectively” (Basauri and Insulza, 1999: 26)

[*The city is public,
the buildings are private.
The need is public, the
space available is private.]*

These ‘lost spaces’ of the city represent a lack of spatial, monetary and urban productivity and are therefore appropriate sites for intervention. These gaps have enormous potential to fulfil that which the city is lacking, an effective, appropriate public domain. The infusion into the programmatic void acts as a catalyst for that which Jane Jacobs in *The Death and Life of Great American Cities*, terms ‘city diversity’; the multiplicity of form, function, use and user within an urban region.

Lizeka Mda addresses the lack of public space in her essay *City Quarters: Civic Spine, Faraday Station, KwaMayiMayi and Ponte City* and comments on the city council’s use of substantial funding to create entirely inappropriate urban landscapes, while people are naturally constructing small, yet efficient public amenities in left-over spaces (Mda, 1998: 198). Within the specific setting of Johannesburg, what is required is not another park or public-square, but a concentrated network of functioning public amenities which directly benefit the user.

People create public space and public amenities instinctively. These spaces are efficient due to the natural, needs-based manner in which they are formed. In this unique urban and social situation, public service is most effective in its simplest structure and purpose, where facility and recreation occur simultaneously. The thematic mixture generates social, spatial and economic success in the unproductive spaces of the city. The hybrid public amenity acts as a typology for creating city diversity; a plant-like network, which spreads, mutates and evolves within a defined urban ‘room’ and ultimately throughout the city.

13



3

M U T U A L I S M

On the periphery of the inner city, where the commercial, industrial and residential sectors meet, there exists a multi-cultural, multi-national public. This 24 hour-community requires the same quantity and variety of essential amenities as any suburban neighbourhood. The existing mixture of functions, patterns of use and users of this transitional zone tends towards the “city diversity” that Jane Jacobs claims makes for a successful city region. According to Jacobs, considering the combination of uses is fundamental in understanding the urban landscape. Jacobs states that “city diversity itself permits and stimulates more diversity” so when “re-building” urban centres, it is fitting to focus on a diversely structured yet undeveloped region which has the potential to generate multiplicity within itself (Jacobs: 1961: 144). The inner city periphery is such a space. The existing built form and land-use varies greatly and the presence of the public throughout the day is consistent (due to the commercial and residential elements), however, this population is not catered for in terms of functioning social services.

Residential space is inefficient without a social space, commercial entities are unproductive without service auxiliaries and education facilities are incomplete without student resources. Large populations within specific areas for the purposes of work, education and (or) residence, require both social and cultural facilities and basic services. In *The Death and Life of Great American Cities*, Jane Jacobs asks, “how can cities generate enough mixture among uses – enough diversity – throughout enough of their territories, to sustain their own civilization?” (Jacobs, 1961: 144). She explains that ‘city diversity’ (that is programmatic, spatial, social, economic multiplicity) produces self-sufficient urban cores; a contained ‘pool’ of use. Jacobs claims that a site within which four specific conditions are evident, has the potential for success.

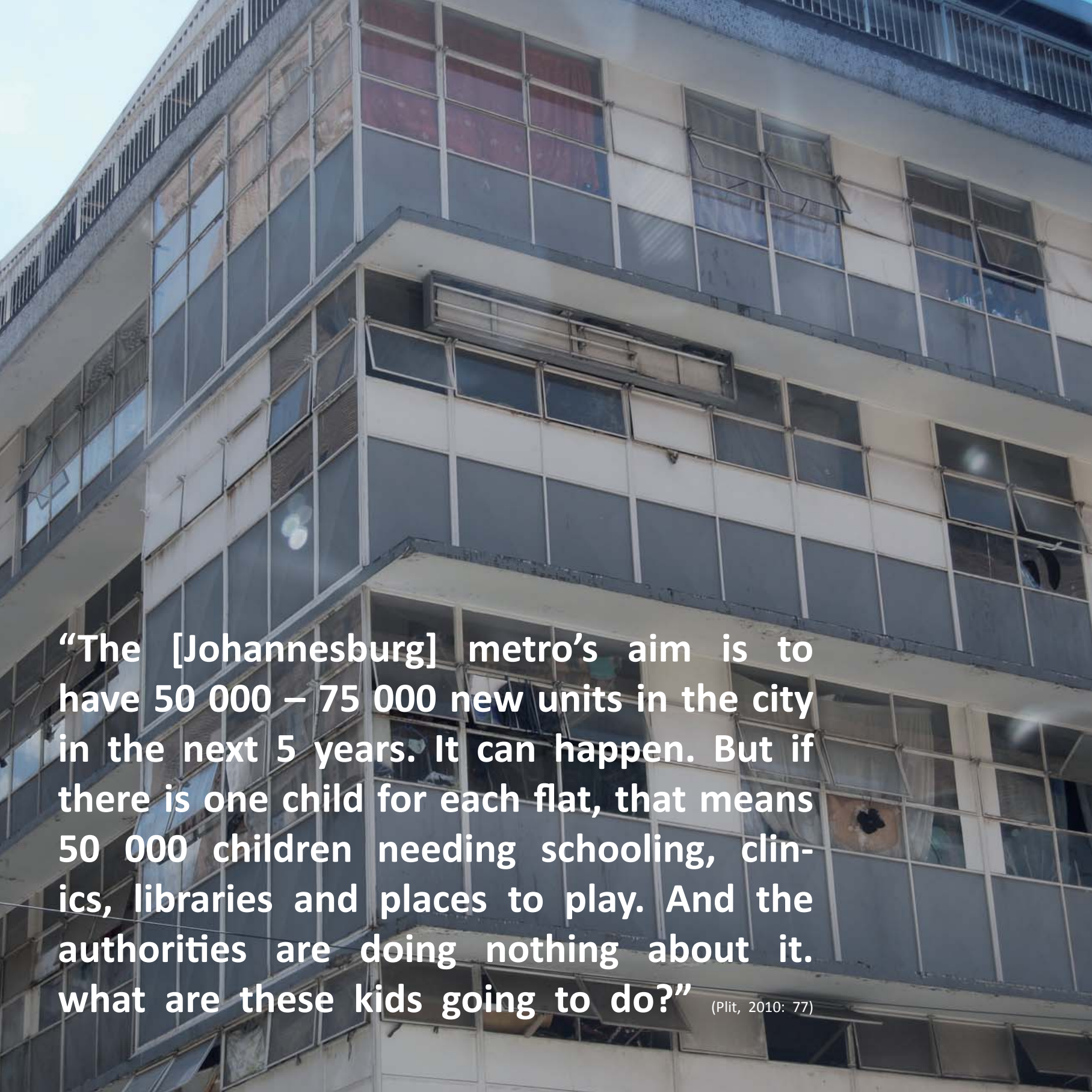
The conditions which according to Jacobs generate city diversity are:

- 1 _ “The district, and indeed as many of its internal parts as possible, must serve more than one primary function; preferably more than two. These must insure the presence of people who go outdoors on different schedules and are in the place for different purposes, but who are able to use many facilities in common”
- 2 _ “Most blocks must be short; that is, streets and opportunities to turn corners must be frequent”
- 3 _ “The district must mingle buildings that vary in age and condition, including a good number of old ones so that they vary in the economic yield they must produce”
- 4 _ “There must be a sufficiently dense concentration of people for whatever purposes they may be there. This includes dense concentration in the case of people who are there because of residence.”

(Jacobs: 1961: 147).

According to Jacobs, within big cities exist large, diverse populations, requiring a wide range of specialised amenities. The denser the population of an area, the more small enterprises it can support. Therefore, by ‘tapping into’ an existing dense population or densifying a lesser population, more varied and numerous enterprises can survive. The product, is city diversity; a more efficient use of space containing a varied series of places and programme and ultimately, a more efficient urban region (Jacobs: 1961: 147).





“The [Johannesburg] metro’s aim is to have 50 000 – 75 000 new units in the city in the next 5 years. It can happen. But if there is one child for each flat, that means 50 000 children needing schooling, clinics, libraries and places to play. And the authorities are doing nothing about it. what are these kids going to do?”

(Plit, 2010: 77)

4

R E A D I N G
T H E C I T Y

In Tokyo Blanks, Stefano Boeri speaks of the programmatic voids in the city as a **“parallel universe” made up of unproductive surfaces and spaces. He states that “the clefts, intervals, glades in the body of the metropolis, help us to perceive, much more effectively than do skyscrapers, clusters or single-family housing districts, the spirit of a city”** (Boeri, 1999: 40).

Spatial efficiency within the city is of extreme importance. An empty space represents a lack of productivity. Roger Trancik explains, “lost spaces are the undesirable areas that are in need of redesign: the antispace, making no positive contribution to the surroundings or users” (Trancik 1986: 3). He sees these surfaces and volumes as an individual typology. According to Trancik, the spatial implications of historical planning and design methods, the creation of transport networks, zoning and urban renewal, privatisation of the public realm and alterations in land-use have allowed for these “lost spaces” to occur (Trancik 1986: 1-4).

In Johannesburg, these spaces are often components of private buildings. Due to an increase in the population and a shortage of appropriate low-cost housing, vacant lots, abandoned office or residential blocks and empty shops often end up being densely populated by squatters. Trancik states that “lost spaces, underused and deteriorating, provide exceptional opportunities to reshape an urban centre, so that it attracts people back downtown and counteracts sprawl and suburbanization” (Trancik 1986: 2).

In From Industry to Culture: leftovers, time, material transformation in four contemporary museums, Phoebe Crisman quotes Ignasi de Solà-Morales’ position on the appeal of “vacancy and openness” in the city; a condition he calls ‘terrain vague’. De Solà-Morales’ explains that “the relationship between the absence of use, of activity, and the sense of freedom, of expectancy, is fundamental to understanding all the evocative potential that the city’s terrains vagues have accrued as part of the very perception of the city in recent years. Void, then, as absence, and yet as promise, as encounter, as the space of the possible exception” (Crisman, 2007: 407).

Certain regions of Johannesburg are becoming increasingly unproductive and progressively more decayed due to these ‘antispace’. It is these spaces which hold the potential for greatly diverse and consequently, efficient urban centres.

20



THE SETTING

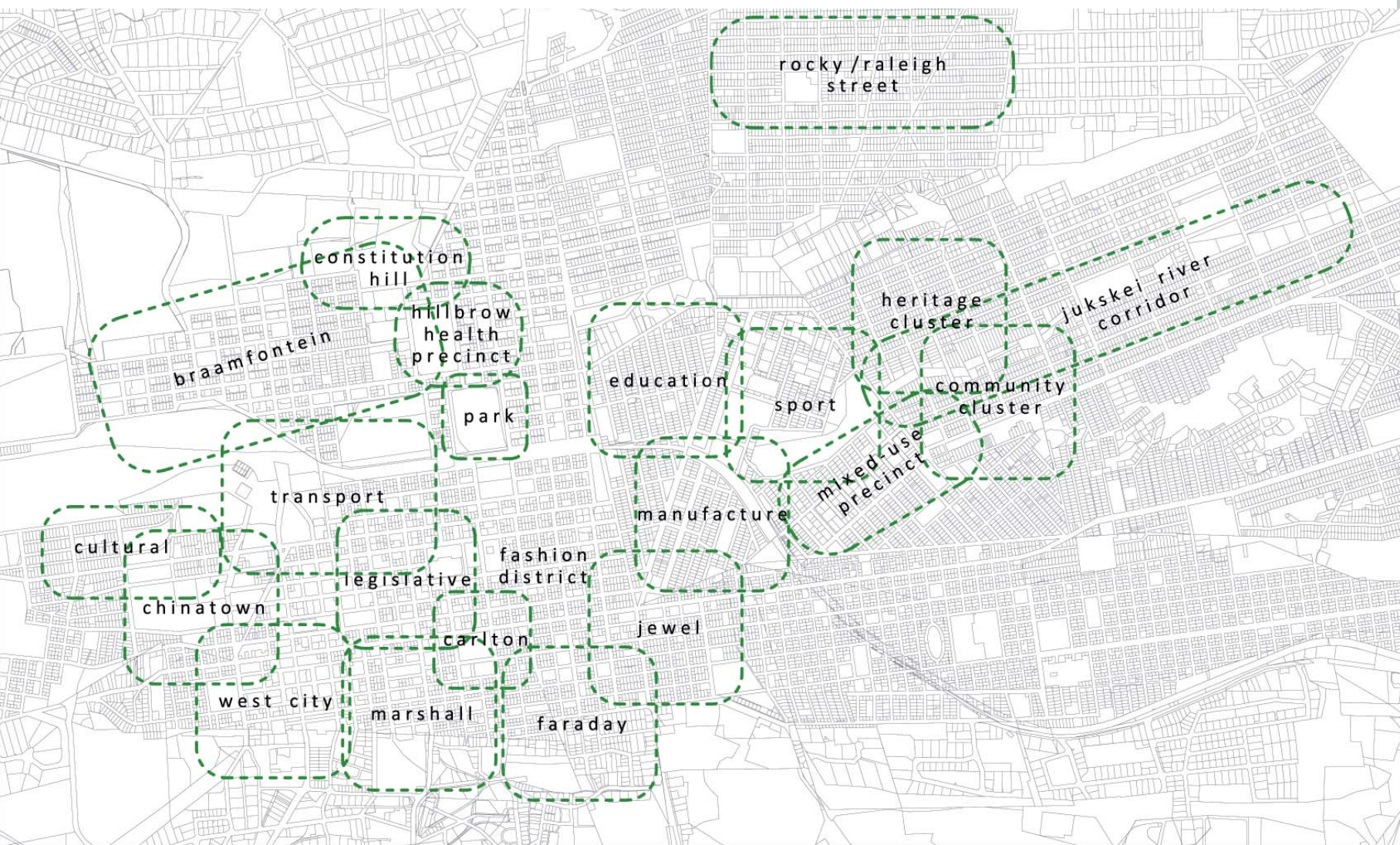
The inner city of Johannesburg has been a focus for redevelopment as an attempt to lure commercial and social activity back to the abandoned CBD. In order for the development to be directed towards specific areas and provide areas with a unique identity, regions within the city were defined by the JDA (Johannesburg Development Agency). Newtown, for instance, was classified as the 'cultural precinct' and has been the location for the regeneration and creation of various heritage sites for cultural activity, such as Museum Africa, Market Theatre and Mary Fitzgerald Square. Simultaneously, the area gained other uses, such as social housing in the Brickfields project (by Savage and Dodd), the large transport node, MetroMall (by Urban Solutions) and clusters of small amenities and entertainment venues. This has created a multi-functional, vibrant urban centre; a region of successful diversity.

The JDA are implementing that which Roger Trancik hypothesizes; rebuilding decaying centres and buildings in order to restore the city and therefore bring people and business back to the original CBD.

n e w t o w n
c u l t u r a l p r e c i n c t
2 0 0 9
1 + 2 . MetroMall
(Urban Solutions)
3 + 4 . Brickfields Social Housing
Project (Savage + Dodd)
5 . Mary Fitzgerald Square

21





inner city districts

city precinct plan
— Johannesburg De-
velopment Agency

Roger Trancik states, **“an integrated city will prevail if, in the process of transforming worn out urban areas, we bring infill development into harmony with the predominant existing pattern. An integration of living and work places in the urban core can stimulate a functional yet cultural city of mixed uses, in which lost exterior spaces become new arenas for social and physical interaction”** (Trancik, 1986: 234).



SHOE CLINIC



A M E N I T Y

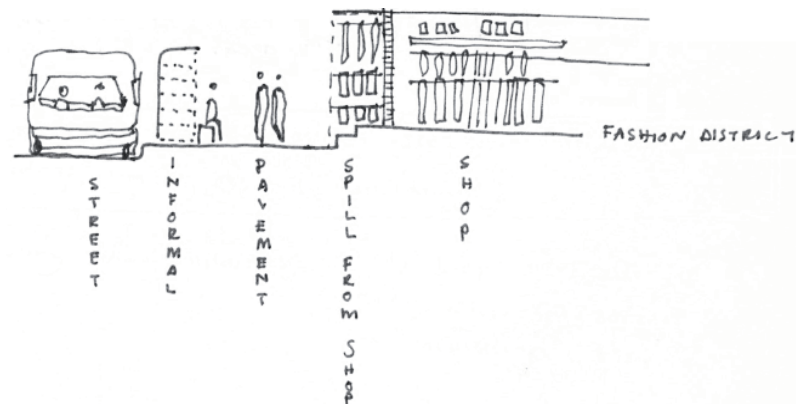
The unproductive buildings are as prevalent as the gaps in civic infrastructure; they represent 'need' and site for intervention. In order to analyse the existing network of public infrastructure, it is necessary to deconstruct the notion of public space and public amenity.

'Amenity', is an active system or space for public service.

In South Africa, the requirements and physical manifestation of public amenity (and the relationship of the public with it) varies greatly. Within some areas, amenity is characterized by a collection of commercial enterprises within large, exclusive shopping malls or smaller strip malls. Within the city-centre, it differs further. Some redeveloped areas such as 'Bank City' include purpose-built public arenas, where restaurant seating spills into squares shielded by sizeable towers. These are almost exclusively commercial areas, meaning that while these spaces are well-utilized at midday by office-workers; their patronage at other times is limited.

25

On the periphery, however, 'amenity' is a unique model, serving a multitude of publics, where services do not necessarily operate within formal buildings or structures. Many functions or enterprises exist as part of the system of the street or as a component of a formal industry or business venture. These minor, informal institutions are of great value to the city and its passing patrons, due to their frequency, specificity and low-cost items or services, however, their transient nature and lack of infrastructure reduces their efficiency and convenience to a resident public with constant service requirements.



informal amenity
Polly Street, Doornfontein.
 2010

In residential suburbs exists another type; the neighbourhood community centre. This is predominantly comprised of a basic hall structure which accommodates varying functions operating according to an allocated 'time rental' throughout the week. These spaces are public, yet exercise access control. They serve their specific society in terms of regular functions and exist primarily as spaces of gathering and interaction. The basic form allows for a wide variety of use, often including community meetings, religious gatherings, sport or training for various ages and disciplines such as martial arts, yoga or pilates, children's scout meetings, performances, educational programmes, skills training and social events.

A typology for an urban community centre does not exist in this part of Johannesburg. The population is as large as that of any suburb, with the equivalent needs, but does not have the designated space within which to exercise these social functions.

The primary question is related to what a city community centre is, what it incorporates and how it operates within its unique context.

i n c l u s i v i t y

the neighbourhood community centre *parkhurst recreational centre*

facilities offered:
*hall, clinic, sport (tennis
courts), post boxes, library,
playground, skate ramp, graf-
fiti wall and playing field*

the space is used for:
*the hall is used for a wide va-
riety of activities at varying
times of day, such as commu-
nity meetings, gymnastics or
pilates or bridge clubs; people
walk dogs on the field; fami-
lies use the space on week-
ends; mothers meet with their
babies in prams; students
hang out on the grass and
the clinic has a district nurse
and offers baby and child
healthcare services, counsel-
ling and ante natal classes.*









e x c l u s i v i t y

the other side of
parkhurst recreational centre



defining public
amenity
a study of forms of public
amenity currently operating
in the inner city.
This analysis is used to map
the existing amenity networks
within the defined area.



M A P P I N G

Defining the fundamental components of civic infrastructure, as being public spaces and public services, facilitates the investigation of the existing public networks contained by the periphery of the inner city. A public facility must advertise itself physically or through signage in order to flourish. Thus, a broad mapping of these obvious or promoted locations within the focus-area of the periphery, will illustrate the successful networks as well as those which are lacking or absent. Using the JDA's designated districts as a foundation onto which data is gradually layered, generates a diagram of the density and comprehensiveness of the public infrastructure and, more importantly, the gaps.

A broad analysis of the periphery of the inner city shows that the western city-edge has been redeveloped to include many public gathering spaces as well as civic, cultural and transport nodes. The northern boundary contains the train station, the Johannesburg Art Gallery and associated park, expansive taxi ranks, informal markets and malls. The north-eastern portion includes a cluster of religious buildings and a few minor education facilities, while the southern edge, which borders on industrial land, has scattered public recreational facilities and a handful of semi-public squares. The eastern portion in comparison is gravely lacking in public amenities. The urban-renewal projects and the significant public infrastructure appear to have 'skipped' the south west portion of Doornfontein (defined as the 'Fashion District') and continued into the 'Manufacturing District' with urban recreational spaces such as the Arts On Main development and Mai Mai Market.





The area was identified by the Johannesburg Development Agency as a region for upgrade, however, very little expansion or improvement is evident. The only modification to the urban public domain consists of a few pavement mosaics, signage and new street lighting.

The development of Fashion Square (opening onto Pritchard and Polly Streets), designed as an outdoor public and event space, was aimed at promoting spin-off fashion-orientated developments in the area. The square itself is permanently enclosed by high fences and has therefore not succeeded as a public gathering space or a dynamic event venue. While a few housing developments, small fashion studios and studio apartments have been developed in the south of the Fashion District, the JDA's interventions have been insufficient and the area has not reached the success of other developed and thriving inner city regions. The Fashion District is, therefore, an appropriate environment within which to test the typology of a self-sufficient public network of subsidised enterprises in order to create a functioning, all-inclusive zone.

HISTORY

In order to build onto an existing urban centre, it is crucial to learn from the historical formation of the region, the culture, lifestyle and social systems of the current population, the urban context and the formal and informal networks and material structure of the space. Roger Trancik claims that it is “incumbent upon designers of the modern city to find the inherent relationship between form and purpose that has evolved through the local tradition and regional context” (Trancik, 1986: 234)

Doornfontein was originally a farm inhabited by the earliest settlers, the Voortrekkers, who lived in wagons or unsophisticated reed and mud structures. The land was named after the local spring (or ‘fontein’) and means the ‘fountain of thorns’. The area was proclaimed as a public mining site in 1886 and within the next few years, the land was appraised at extreme value due to its gold-bearing properties (Palestrant, 1986: 8-20). In the 1980’s, Doornfontein was a separate township; a residential area for the wealthy Randlords with large estates and its own authority and police force. Doornfontein and its surrounding areas began densifying as more people moved to the

Transvaal. The area became known for its high land-value and elitist populace and boasted the popular social meeting place, the Doornfontein Club and later the Doornfontein Baths (Palestrant, 1986: 40-44; 105). In 1896, the region of Rosebank was proclaimed and stands were advertised as being “in the country”. In the early 1900’s, the population of Doornfontein discovered the more favourable location of Parktown. Doornfontein lost its residents and its exclusivity and the land-value and property sizes were reduced (Clarke, 1987, 19-36).

In the 1930’s, Johannesburg began developing upwards. The city centre now contained ever-increasing numbers of skyscrapers and the former mining camp became a functioning commercial city (Clarke, 1987, 95). In September 1934, the Star Newspaper contained an article headed “Looking out over rooftops from the city’s tallest buildings” and referred to the many living spaces on rooftops of the buildings in the inner city. The article states, “many of the ornamental domes of buildings serve as completely furnished caretakers’ domains. These people live and have their being on rooftops with the sky as their neighbour” (Clarke, 1987, 96).

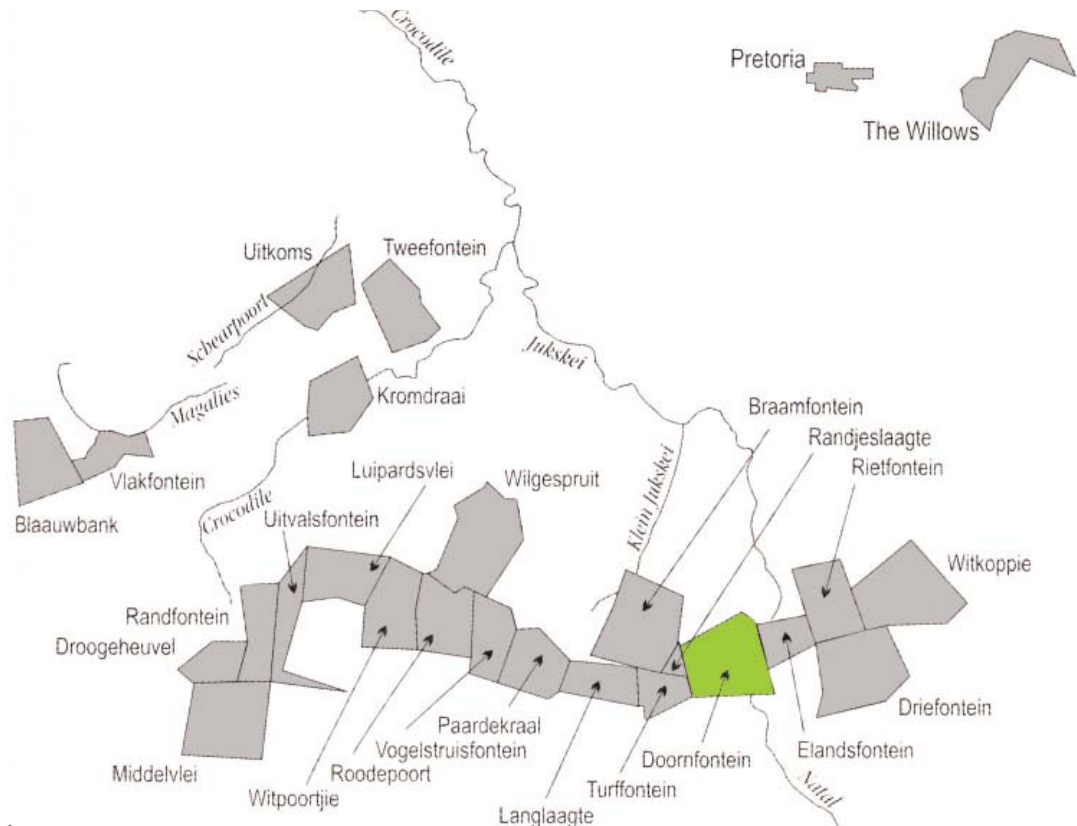
34

Johannesburg

1 . original layout of farms within the Witwatersrand, 1885 (adapted from Beavon, 2004: 48)

2 . map of Johannesburg, 1987 (Beavon, 2004: 19)

3 . sky-locations still evident on inner city rooftops, 2010



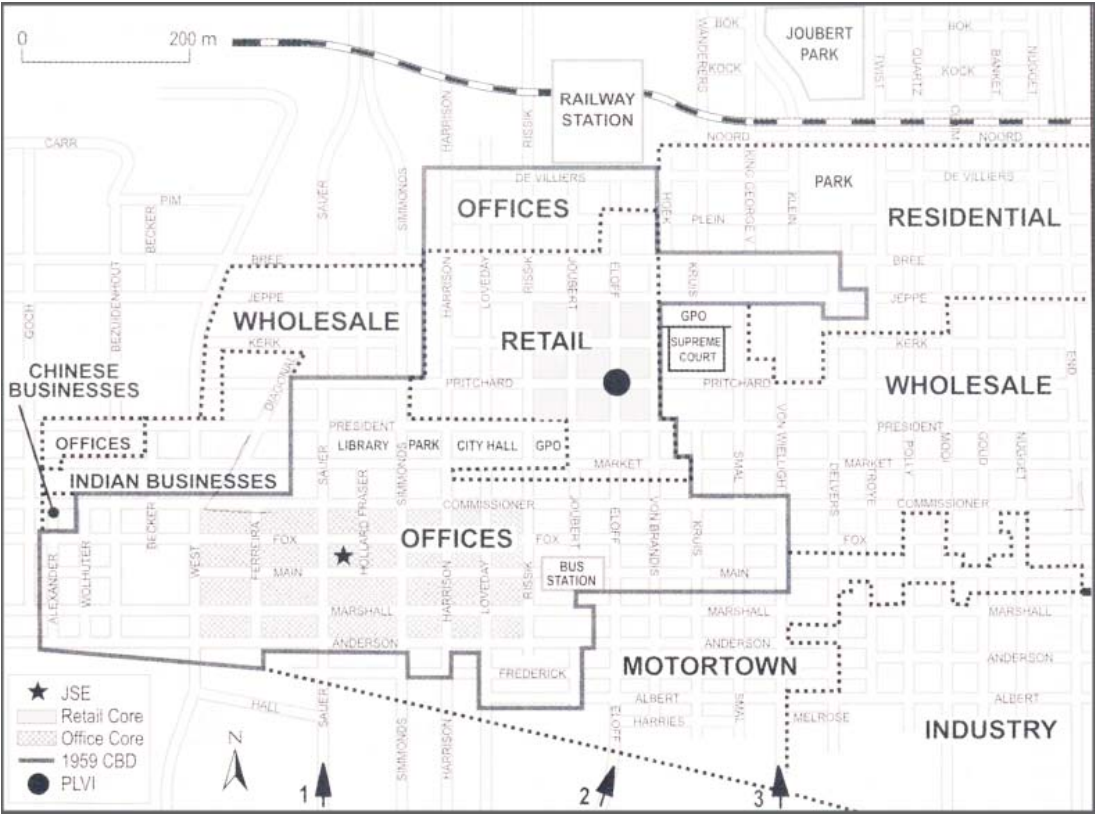
Simultaneously, many residential blocks incorporated a number of simple rooms on rooftops, designed to be set back from the facade so as not to be seen. These spaces were for occupation by domestic staff. This was because of the Natives (Urban Areas) Act of 1923, which stated that domestic workers were only permitted to live on the property of their employer if they were provided with appropriate accommodation (Goldring, 2009: 2). The era (from 1948 to 1994) known as Apartheid, saw the enforcement of the Group Areas Act (of 1950), which prevented non-white and white communities living in the same areas. Locations outside of the city were created and, over time, between 8 000 and 10 000 non-white people were removed and relocated to areas according to their race (Clarke, 1987, 143). At this time, people living in these “sky locations” were forcibly removed from the city, leaving these unique spaces largely unutilised (Goldring, 2009: 2).



In 2010, the rooftops of the inner city, remain as ‘lost space(s)’; unused, detached, saturated with potential. The city contains numerous similarly-blank, valuable spaces; once-used and abandoned, as the city’s inhabitants dispersed. Decentralisation began in the 1970s, when a number of corporate headquarters began moving to the urban edges. Small business districts were developed in Crown Mines, Barlow Park, Sunninghill and Sandton. Clive Chipkin states that “none of these early prototypes moved to what would soon become the Sandton CBD. The construction of a CBD in the Northern suburbs, seemingly an event that occurred overnight, was in fact three decades in the making”. Chipkin explains that this process was due to South Africa’s political crisis of the 1980’s (Chipkin, 2008: 411). The result is polycentricism: a city with multiple urban cores. The inner city is no longer the primary CBD and has allowed for the area’s diverse structure, programme and population (Chipkin, 2008: 410). The inner city is conducive to the kind of urban multiplicity that Jane Jacobs claims stems from existing diversity. Doornfontein is such a site; for expansion and regeneration, for success.

In the last fifty years, Doornfontein has undergone a shift in classification and structure, from the bustling shopping tract of Market Street, to a ‘wholesale’ district, to a conglomerate of sweatshops, to a ‘fashion district’, to a current-day fusion of fashion, housing, mass-storage, minor retail and education. The structure of the buildings has changed too. The original, large wholesale spaces on the ground floor have been divided into small, single-room, separate enterprises. The upper floors of some buildings have been converted into storage space, additional retail space or flats.

This is an area in flux with a transient physical structure and population. In this region, a restaurant space one month is a market the next. Spaces are altered informally with a welder or by the rearrangement of furniture, according to what is seen to be required at that specific time.



J o h a n n e s b u r g
map showing the use zones
of the inner city, 1959
(Beavon, 2004 :152)

To the north of the district, is an area known as the 'Ethiopian Quarter'. The enterprises of this zone support the large Ethiopian population in the area. The buildings are predominantly Chinese-owned and while the merchandise is comparable to Chinese-wholesale, the tenants, managers, patrons and associated restaurants, coffee shops and services are Ethiopian. In these buildings, the public domain is not simply the ground floor and street. These buildings contain a vertical shopping structure. Multiple levels of retail and recreation draw the public up through the building.

This is an example of the adaptive reuse of unproductive internal spaces for public inclusion and public service, responding to the specific requirements of the direct context and population.

This portion of Doornfontein is currently a vibrant, bustling urban centre, hindered by its physical surroundings. New developments stand like stars in the firmament against the backdrop of layers of worn-out history, the remarkable forms of industry and lifestyle and fusion of nationalities and ethnicity. This is a unique metropolitan African society.

The public is particularly visible in this area, due to the permanently animated streetscape, but save for the pavement and the multitude of taverns; an obvious public realm is non-existent. The area serves multiple publics on multiple levels; the people who work in the retail and commercial sector, the many residents, the people attending the various training institutions and the visitors. The area is also a transport hub, introducing a constant non-residential (often foreign) passing public. Not only is it a centralised point on the Bus Rapid Transport (BRT) route, but it is also the terminus for buses arriving from other African countries, such as Zambia and Zaire.

This thesis aims to create a public domain that satisfies the needs of each of these publics, both separately and concurrently.

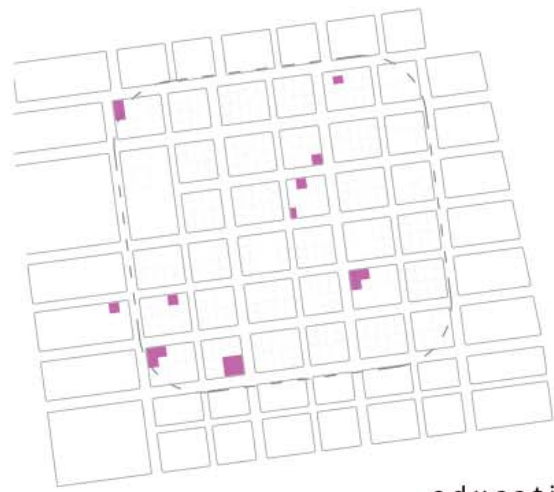
**“fieldwork is half research –
searching for something; half
experience – letting it find you.
Intelligence weaves them to-
gether, connecting what you
found to what you thought
you were looking for”** (Chu, 1999: 2)

5

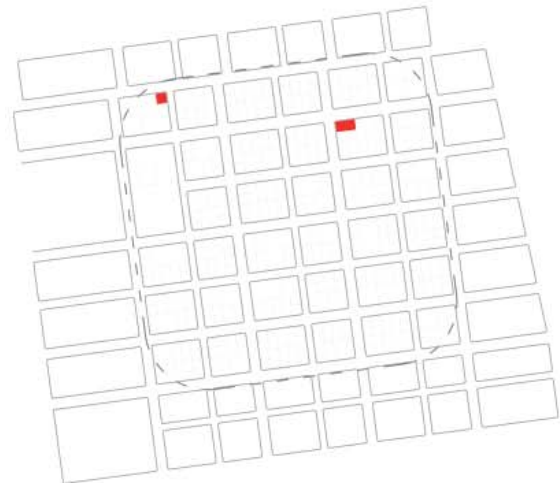
S I T E

Jane Jacobs states that it is vital to understand the components composing the urban structure. Therefore, in order to address the need for public infrastructure, it is necessary to analyse the existing public network.

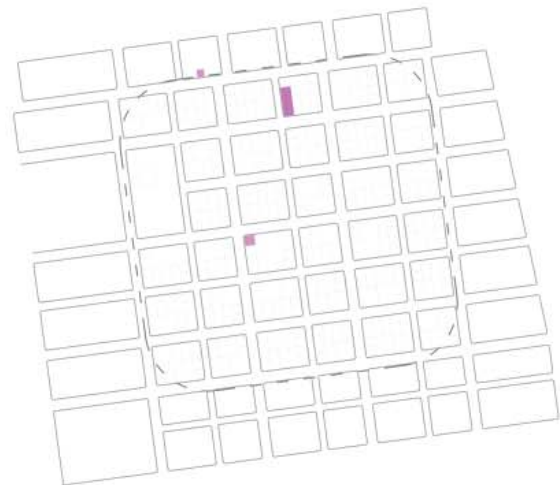
Mapping the evident public institutions of the focus area, illustrates not only the type of amenity in operation, but also the extent to which they are clustered. This highlights the gaps in public infrastructure. The research produces a series of diagrams. What is evident, is the quantity of minor tertiary education facilities and entertainment venues (all shebeens or taverns) and the complete absence of open or green space, sports arenas, playgrounds, recreation space and formal religious institutions.



education



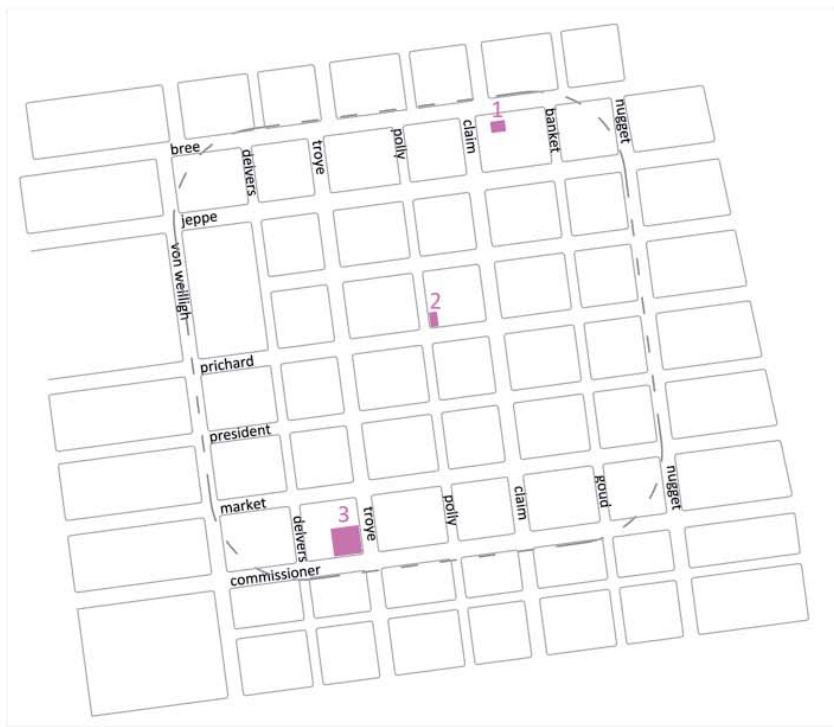
open



medical

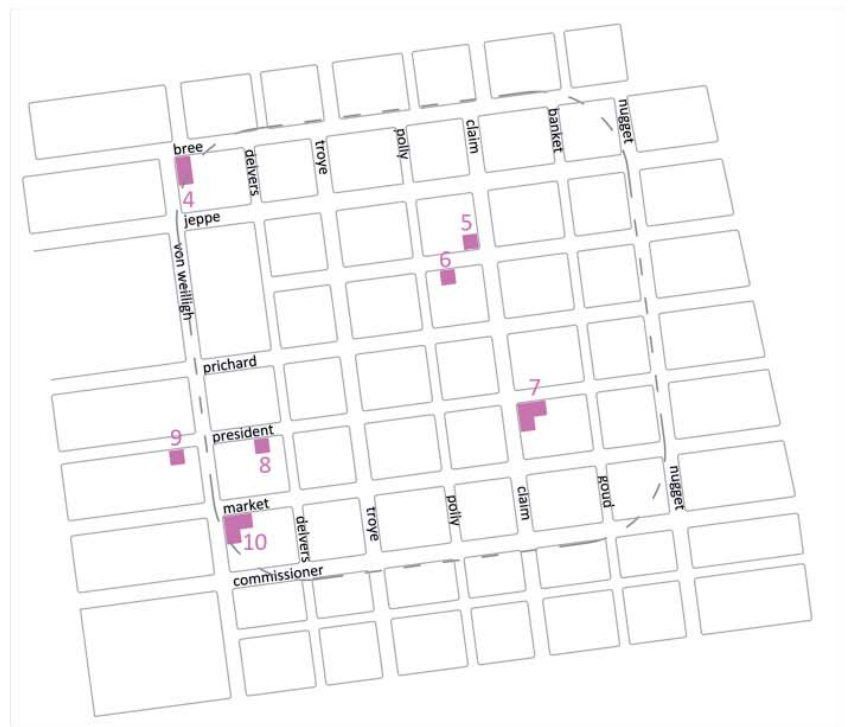


micro map
intensive mapping of the public
infrastructure in the Fashion
District, Doornfontein



ground floor

- 1: creche
- 2: training college
- 3: business college

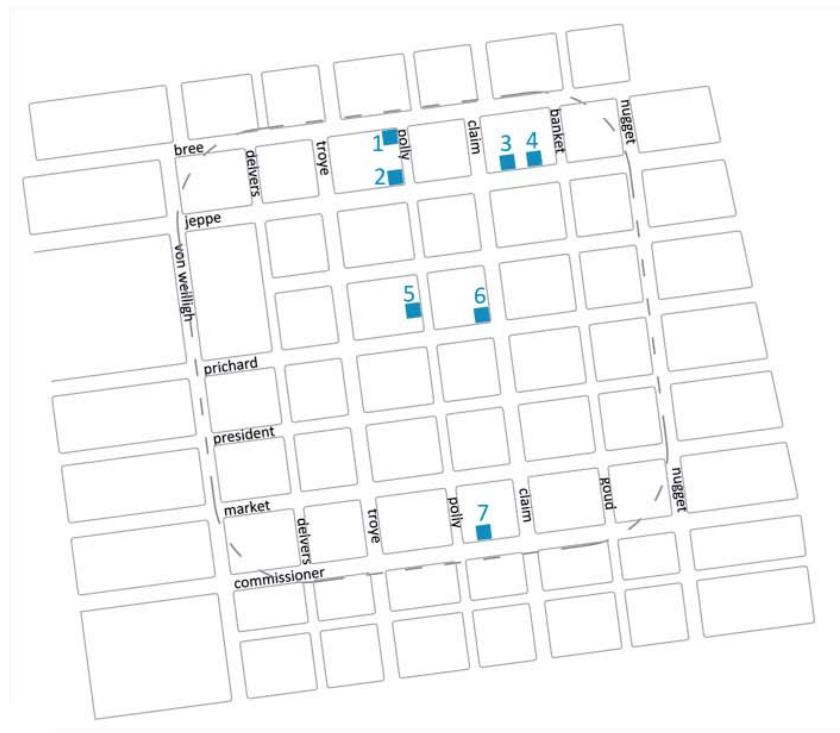


first floor + above

- 4: pre-school
- 5: nursery school
- 6: business college
- 7: computer training
- 8: training college
- 9: training college
- 10: creche
- 11: pre-school

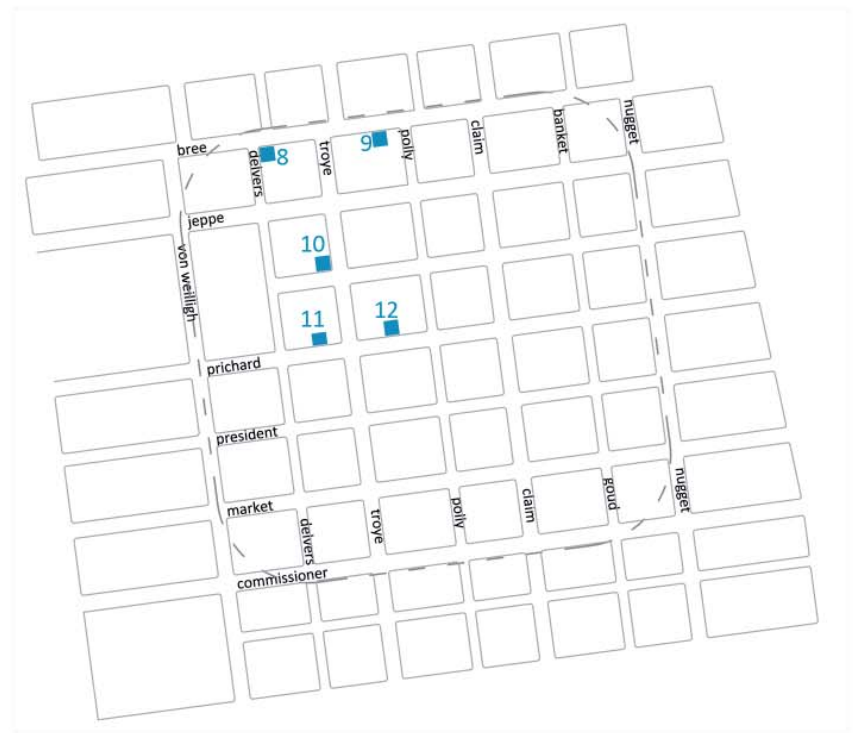


analysing the existing amenities :



ground floor

- 1: sports bar
- 2: shebeen / casino
- 3: shebeen
- 4: shebeen
- 5: mozambican tavern
- 6: savannah's tavern
- 7: portuguese restaurant and bar



first floor + above

- 8: bar
- 9: bar
- 10: bar
- 11: virgin cafe _ sports bar
- 12: bar

apparent patterns and resultant physical and social networks



The portion of Doornfontein that borders with City and Suburban (the Fashion District), is in a state of decay. While a few buildings to the south of the region have been renovated for fashion studios or apartments, the balance of the area is dilapidated. The building structure and use is, by and large, very similar, yet the area has a visible north-south divide. The configuration of the southern portion is predominantly small retail on ground floor level, with warehousing (or office space converted to storage) on the floors above. The arrangement of the northern portion is primarily small retail (generally fashion-orientated) with the upper floors being either purpose-built residential space or office layouts that have been converted (legally or illegally) into residential space. The variety of primary use within the existing buildings in the area (housing, retail, education) indicates its capability to generate further diversity at various intensities. This makes it an ideal site for testing a typology for social programming.

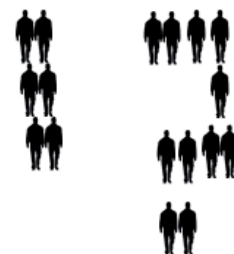
The proposed typology is to be adaptable and inspire similar developments as part of regeneration schemes elsewhere in the city. The focus area for intervention will comprise a series of city blocks within Doornfontein which will act as a minor 'neighbourhood' supporting the network. These sites are chosen using the data gained through mapping and site analysis, ensuring that the combined region incorporates the conditions defined by Jane Jacobs. The site investigation has shown that the area's prime functions are retail and dense housing, with an additional function identified in the multiple forms of tertiary education. The city blocks are short, including only four or five stands per street edge. The diversity in building age is clear and while a few buildings to the south of the district have been redeveloped or newly constructed, the majority within the projected area are older and in varying conditions. There is a consistent volume of people in the area due to the working and resident community who require various services and facilities.



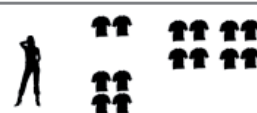
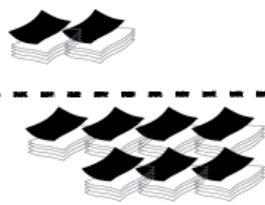
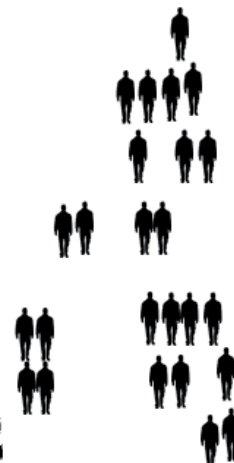
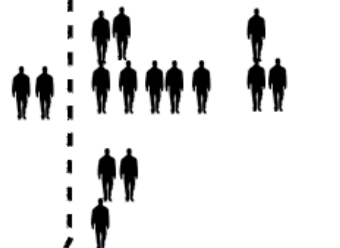
Public amenity aligns itself with the densest population. It is therefore fitting that focus be directed towards the northern region of the Fashion District, which includes both residential and commercial activity.



johannesburg
art
gallery



drill
hall



carton
centre



transitional zone
*contextual use zones and
influences on the site*



industry



wholesale



residential



commerce



fashion

The Revised Business Plan for the Inner City Fashion District, as prepared by Rory Robertshaw of Issue Urban for the JDA (2002), defines the role of the JDA in the development and regeneration of the Fashion District. The document describes the responsibility of the JDA as playing a “supportive/enabling role, pushing delivery to the most appropriate level or institutions” in order to “prioritise the formation of a Fashion District CID [City Improvement District]” (Robertshaw, Issue Urban, 2002: 2).

According to the documentation, the fundamental elements of the Fashion District Project are to be viability, functionality and sustainability, focussing on social and economic opportunities. The JDA’s main objectives are to “facilitate urban management services, allow for public and private sector investment [and] create opportunities for generating revenue”, while the district becomes ever more independent.

Other objectives are:

“to upgrade infrastructure taking cognisance of urban form; the public/private realm interface; public spaces, open space, markets, a traffic plan; parking and offloading needs; and the realisation of an attractive and supportive physical environment that utilises adaptive reuse of buildings in a manner that is sympathetic to the needs of local users. The design and resolution of public spaces will aid in assisting more meaningful social amenity for all users in the area” (Robertshaw, Issue Urban, 2002: 4).

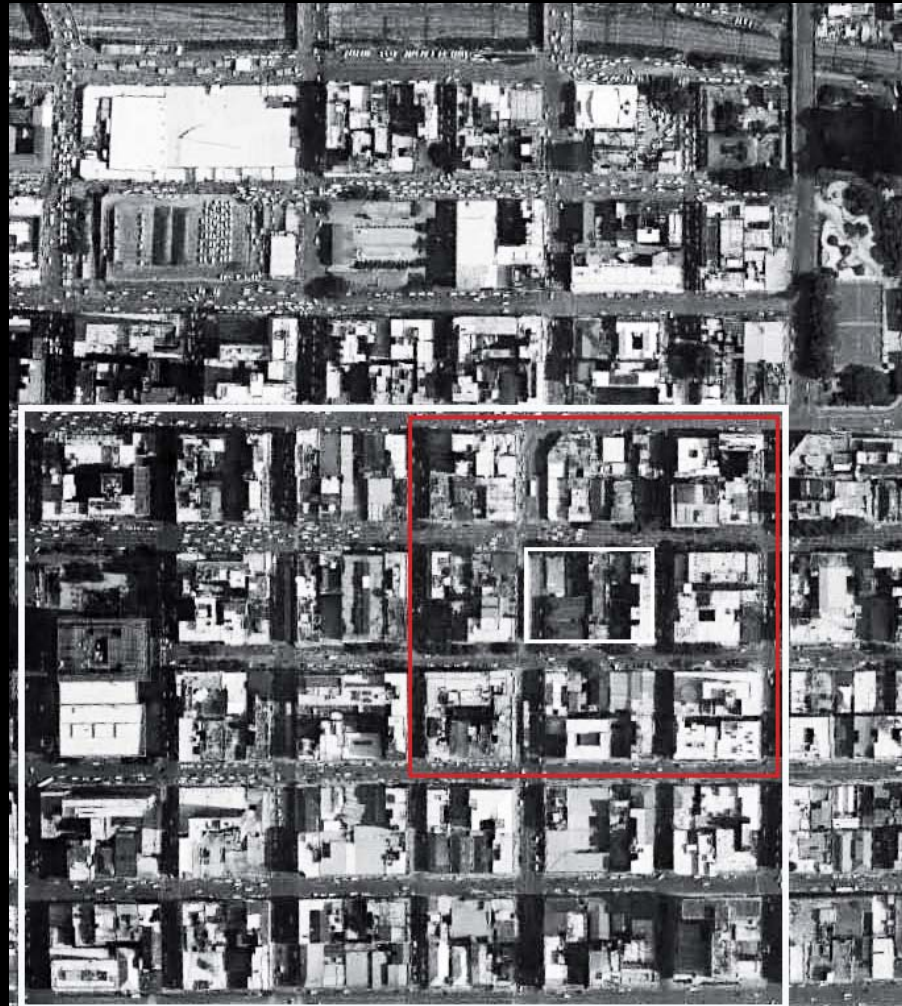
Within this area, there is virtually no open space. This means that any additional spatial requirements must be fulfilled through mediation (both physically and socially) with the existing framework. Thus, the most appropriate space for infusion is that which can be defined as ‘lost space’. In this context, ‘lost space’ exists around, within and on top of aged structures. The introduction of public spatial units must be the result of the material negotiation between contrasting programmes, new and old, public and private. This can be achieved through the adaptive reuse of a series of existing buildings in various states of decay. The architectural infusion and the original structure have a mutualistic relationship. The exposure and exchange exists between public and private. The connection produced allows the public realm to draw from existing services while the private realm gains an effective social, economic and functional service. The addition grows into the private domain but maintains a defined threshold between public and private, old and new.

Thus, the site requirements can be defined as:

— **a group of city blocks determined to be a ‘gap’ in public infrastructure, containing a multitude of opportunities for physical and social intervention and a close proximity between the available space and streetscape.**

These parameters are satisfied by the city block to the north east of the district between Jeppe Street and Kerk Street, Mooi Street and Goud Street. The site is aligned to the BRT route of Claim Street and is to be considered as part of the greater nine city-block region within which it falls. The defined area consists of buildings of a varying age and condition and the surrounding blocks include several recently renovated residential buildings. The overall scale of the built landscape is lesser than that of city centre, as the area is a transitional zone, where the commercial core and lower scale industrial and residential periphery meet. Roger Trancik articulates that “as urban designers we must work as surgeons or auto mechanics and repair the broken diverse parts of the city rather than trying to manufacture a completely new, self-sufficient, conflict-free urban machine” (Trancik, 1986: 230). These sites are prime opportunities for renewal and diversity for public benefit in terms of a theoretical approach as well as that of the JDA.

s i t e
 [a b o v e]
 aerial photograph of site
 [b e l o w]
 site demarcation



s i t e
a gap in built form
a gap in public infrastructure



6

T H E S I S
P R O P O S A L

This thesis proposes an urban public skeleton culminating in a hybridised public amenity network as mediation with the existing built landscape. The typology to be designed as a product of this research is aimed at transforming lost space to productive space; blank urban rooms to inclusive, utilized public arenas.

The projected result is a functioning public territory, and therefore a successful, diverse urban centre and for the development of a typology which promotes the use of unproductive gaps for social programming in other parts of the city.

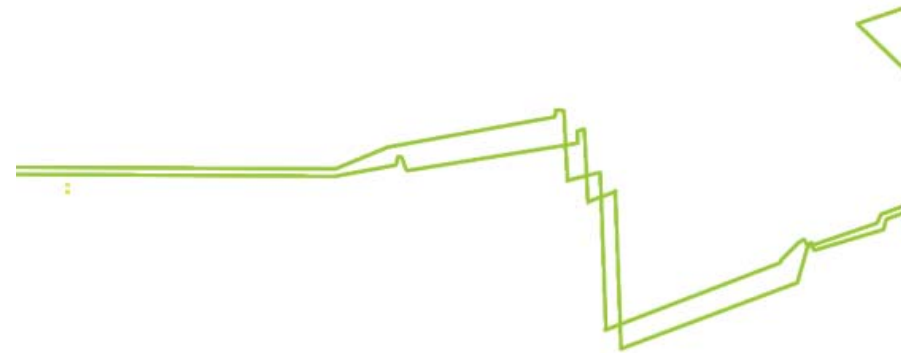
The 'lost spaces' of the city represent a lack of spatial, monetary and urban productivity. These urban voids have an inherent structure. They are 'rooms' with edges, boundaries, conditions, monetary value and public significance. The physical thresholds of each space are provided by their material and legal surrounds; buildings, pavements, zoning and air rights and urban frameworks. These spaces represent fertile ground; currently fallow, but with the potential to support growth.

The built landscape becomes the site; the existing buildings seen as a thickening of the ground. The public network is to have plant-like tendencies. The network is to behave like a vine or creeper which has the capacity to grow, generate its own sustenance, extend limbs, explore surfaces (in search of an optimum route), mutate, divide, envelope structures or enclose space, converge, separate and encroach into the existing private realm. The plant-like system does not only have a reaction to that which it discovers, but is reacted to by the site itself. Just like forest conditions, the forms beneath the creeper must adapt to survive; the weakest of which will die. The path and structure of the architectural intervention will have a similar effect. The built landscape supporting the 'enveloping' network would be altered by the addition.

Most buildings would adapt to it, allowing for a successful mutualistic relationship, while others would not survive the new conditions and might be dismantled or demolished.

The existing informal network serves a social function. Each enterprise operates according to the requirements of a particular locality but the service is inconsistent and unreliable due to a lack of legal and physical structure and management. The introduction of a formalised structure aims not to exclude or compete with this network, but to learn from it and expand on its functionality and exist as an extension to it. The formalised, 'super-sized' typology is to be more constant, efficient and productive in order to create an institution to tie the city neighbourhood together.

The same principle applies to the existing amenities. The development aims at incorporating these smaller systems into the larger network being formed. The typology is intended to re-think the social institution and tie the stand-alone amenities together so as to create an inclusive public system.

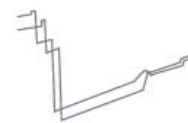


the explorative network

connecting programme, distributing
programme, finding lost space,
filling lost space



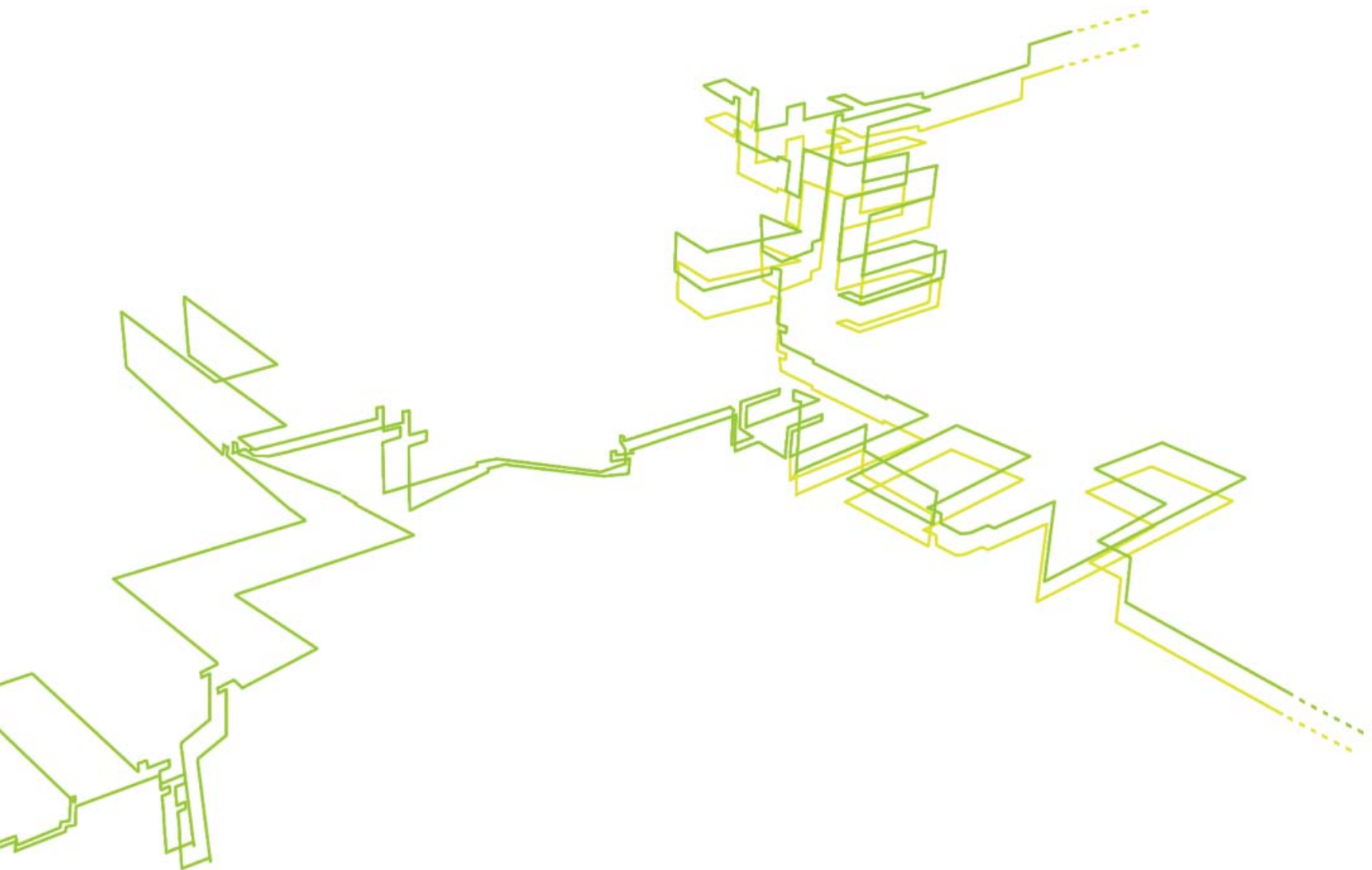
movement



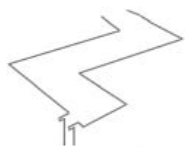
exploration



mutation



53



growth



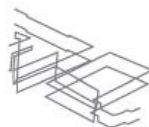
envelopment



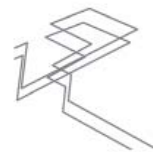
convergence



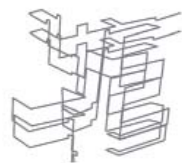
divergence



division



development



encroachment



THE SERVICE STATION

The contemporary answer to the local neighbourhood-need is the service station.

Existing to **fulfil the average need of the average person**, this space incorporates programmatic and spatial components in a variety of combinations, directly related to the context. The amenities are hybridised and would be seen as an unusual blend, if they weren't so common. The service station typically incorporates a petrol facility, a shop, a restaurant and restroom facilities. Depending on its site, it may also include a picnic area, playground and various speciality shops, such as gift shops, specialised food outlets, mechanic services, car sales, an ATM, a car wash, movie-rentals or markets. These everyday amenities are predominantly open 24 hours a day and contain small quantities of a large array of products to satisfy a diverse public.

The project in Doornfontein is to do a similar thing. **The amenity is to be an institution, larger than the scattered kiosks and stalls, smaller than the all-encompassing conglomerate or shopping mall. The intervention is to be comprised of a fusion of functions with the adaptability for multiple uses at a variety of times, the possibility for growth and expansion, the incorporation of service with recreation and the reception of a multitude of publics.**

By harnessing and learning from the existing, the informal and a series of case studies, an efficient, appropriate public realm can be created where public and private domains are exposed to one another, for mutual profit. This is aligned to the JDA text, which includes intentions to develop a "strong human, well networked, technical, institutional, financial and infrastructure base" for the area as well as a "new brand identity" and "brand architecture" in a process aligned to the regeneration occurring in other parts of the inner city (Robertshaw, Issue Urban, 2002: 5).

Contemporary integration exists on numerous levels of space and use. According to Nan Ellin in *A Vulnerable Urbanism*, "the current shift in architecture and urban planning has been from the earlier emphasis on objects and the separation of functions, to context and programmatic hybridity" (Ellin, 2003: 226). This fusion allows for small enterprises to be successful. The specificity of each part would fail if it existed alone, but in a cluster, the variety of specialized amenities makes the whole viable. The units share the site, services and practicalities as well as the user base; the more units, the more users. In *Integral Urbanism*, Ellin quotes William H Whyte's theory of "triangulation", which is the deliberate combination of dissimilar (almost contradictory) functions for an astonishingly positive result. This increased activity density is effective and sustainable due to the reduction in resources and sprawl. The spatial, management and service requirements are drastically reduced, time and transport of patrons is reduced and social interaction and opportunities for further development are greatly increased. This is 'city diversity' on a minor scale.

The proposed urban social network existing amenities are linked at a macro scale, while the hybridity of programme and space within the complex addition represents linkage at a micro-scale. At an operational level, however, the amenity must be visibly connected so as to indicate the presence of a public service network.

In Johannesburg, the philosophy on competing branding and advertising appears to be ‘the bigger and brighter, the better’. Inner city buildings are wrapped in advertising, rooftops incorporate almost-invasive signage and lighting; even transportation requires a trademark colour and composition. The bright red and blue BRT stations are all identical in form and create a network by their appearance. Kiosks used for phone services or internet cafes perform a public function and while their container-shell is constant, their extensive exterior branding gives each its own identity.

The “branding” and therefore visual connectivity in this case, is not to add to the visual noise levels in the city, but rather to incorporate existing networks through an urban landscape; the creeper’s ‘shoots’, which draw users and connect existing enterprises to the composite structure. This connective tissue is to both literally and figuratively green and is to make visible the new growth and recycling of components of neglected city structures.

Like growing healing plants in toxic ground, this is

urban detoxification.

This green infiltration aims at retaining and harnessing the identity and materiality of the urban fabric while drawing the natural aesthetic of Johannesburg, largest man-made forest in the world, into the city.



urban detoxification
less patrick blanc, more duisberg park

[above] green walls by patrick blanc
images: www.google.com/images

[below] duisberg park, germany
by lutz und partner
image: (paredes, 2006: 265)

7

DESIGN DRIVERS

TOLERANCES

The lost spaces in the city are transient spaces, often used for brief periods for varying functions. It is questionable therefore, whether the architecture imposed on that site should be of a similarly transient manner, or of a contradictory permanence. In creating a spatial network which aims to effectively 'fill the unproductive gaps', what is in demand, is not a mobile solution, but rather something constant which extends its positive effect through the various networks it culminates.

The design drivers are therefore: **a series of primary public functions within an adaptable structure (allowing for hybridity of programming), which both gains from and returns a service to the existing site with which it merges, advertises itself, appeals to all publics and has both sustainable and green (planted and recycled) components in the final form.**

In following Jane Jacobs' principle of 'city diversity', there should be multiplicity, not only in the urban regeneration stimulated by the architectural intervention, but also in the form itself. For this reason it is vital to study the structure and constituents of traditional public amenities and re-imagine those functions for the unique situation and population requirements set by the site in Johannesburg.

Within this setting, there exists the physical and social tolerance between private and public, street and amenity as well as the social and political division between various publics. Sarah Whiting in her essay *Going Public*, describes the role of the architect, as **"public cross-guard: a generator of and mediator among multiple publics"** (Whiting, 2008: 190). A civic network allows for social interaction and exchange in the city. The current population can be documented through studying the existing amenities. Apart from the South African people, there is a large Mozambican community in the area (evident in the Mozambican market, bars and restaurants), as well as a Chinese population (which appears to be there for the purpose of commerce rather than residence) and a large proportion of people from various African countries such as Ethiopia.

xenophobic attacks south africa 2009

images courtesy of:

- 1 . www.abc.net.au
- 2 . www.i.telegraph.co.uk
- 3 . <http://media.monstersandcritics.com>



The JDA aims to develop social opportunities within the district, by involving and representing previously excluded groups, such as immigrants and the marginalised (Robertshaw, Issue Urban, 2002: 5). In *The Spaces of Democracy*, Richard Sennett describes Aristotle's belief that "the awareness of difference occurs only in cities, since the very city is formed by *synoikismos*, a drawing together of different families and tribes of competing economic interests, of natives with foreigners" (Sennett, 1998: 19). The amenity network must be suitable for all publics in programme, as well as spatial organisation. This exchange between such diverse communities, allows for social diversity and complexity, which tends towards the notion of the 'city neighbourhood'.

In the book *Cosmopolis II: Mongrel Cities in the 21st Century*, Leonie Sandercock states that with Integrating Immigrants, "the problem of co-existing in the shared spaces of cities of difference", is solved through the contemporary notion of "cosmopolis: cities in which there is acceptance of, connection with, and respect and space for the stranger" (Sandercock, 2003:127). The result is what Sandercock terms a 'hybrid culture'.

South Africa is known for the fusion of its inhabitants. As more legal and illegal immigrants relocate into the country (and particularly Johannesburg), divisions of the local population become increasingly unsettled. This is not what Sandercock terms 'urban fear'; but rather, xenophobia. The multiplication of an already large population with enormous housing and employment shortages causes the local to resent the international. The climax of this conflict occurred in 2008, when highly-publicised xenophobic attacks and riots caused huge disruption in the country and forced the immigrant population into hiding.

The architectural solution for integrating immigrants is through what Sandercock calls 'place-identification' and belonging. People from different cultural and spatial backgrounds require a sense of community when redefining their position within a new context. Thus, spatially, socially and programmatically, architecture must support this public. The result is the classification of the designer as mediator. Sandercock conveys Richard Sennett's ideas of 'togetherness in difference' exploring the notion of "living together not simply in tolerant indifference to each other but in active engagement" (Sandercock, 2003: 87)



ADAPTIVE REUSE

In his Citichat article (of 15/03/2010), titled Reconsidering Bad Buildings, Neil Fraser says, it is the neglected, decaying buildings that hinder the development of the Fashion District (Citichat: 15/03/2010). The defined site contains a fusion of an old and dilapidated building, two open and neglected parking lots, an old, hybridised building, a newly renovated residential building and a building recently converted from the African Diamond Company, to a residential block. The degraded buildings on this site are therefore optimum as 'hosts' for a new architectural addition between which a mutualistic relationship can develop.

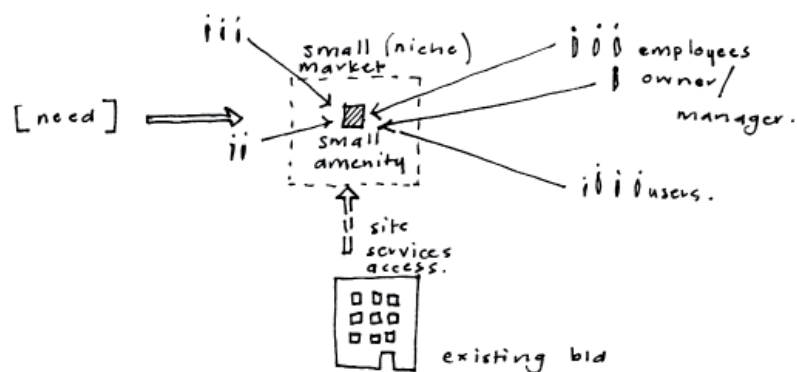
In biological terms, "mutualism occurs when both members of a pair of species benefit from their interactions, usually by avoiding negative interactions with other species" (Hickman, Roberts, Keen, Larson, l'Anson, Eisenhour, 2008: 826). The existing buildings tend towards that which the appendage requires; a form as site, a physical structure, existing articulation of services, existence within a vibrant location, adjacency with multiple transport nodes and prominent street edges. Similarly, the addition is precisely that which the original buildings and context necessitate, a channel with which to engage social and economic activity, as well as physical renewal, imperative to their survival.

The adaptation of an original building, is to give the degraded worth in contemporary society. Jane Jacobs endorses the notion of using old buildings for these small "infusions". She claims that **"old ideas can sometimes use new buildings; new ideas must use old buildings"** (Jacobs, 1961: 188). This is because the costs related to constructing, buying or renting new premises are exceedingly high, thus without adding large profit margins to merchandise or services (making them unsuitable to the community), small enterprises cannot afford to use new buildings. Jacobs goes on to explain that it is the evidence of "ingenious adaptations of old quarters to new uses" that prove that "city districts have vitality and are responsive to human needs" (Jacobs, 1961: 194).

Adaptive reuse brings to light the debate on the extent to which the existing is retained or destroyed. This thesis suggests that the original is seen as the site; a collection of disused buildings to be utilised as resource rather than monument. The process of recycling, takes these edifices from anonymity, to branded, included, active spaces.

The proposed system of public amenities is to not only adapt and recycle existing structures, but also to be adaptable in its individual spaces, in terms of structure and variety of programme. The small amenity must be adaptable in order to survive. According to Jane Jacobs, to keep overheads low is to allow for small enterprises to exist and be successful. To allow for small diverse enterprises within a small, dynamic, vibrant area is to allow for district success (Jacobs, 1961: 188). A series of functioning primary uses, made economically successful by a constant presence of passing public, create what Jacobs terms as "a fertile environment for secondary diversity" (Jacobs, 1961: 162). Secondary uses are those that grow in response to the presence of the thriving primary use. The anchors allow for these smaller, more specialised conveniences to develop, which in turn draw more users to the area. In Doornfontein, while the primary uses are retail, wholesale and education, opportunities exist to serve and employ residents and visitors, secondary amenities are required to fulfil the needs of these people to ensure that the area is self-sufficient and the population does not have to leave the district to seek supplementary services.

The mutualistic addition is to provide public facilities and an architectural catalyst for public life.



Roger Trancik articulates that **“in any redesign of urban space, the conflict between public good and private gain must be resolved”** (Trancik, 1986: 17).

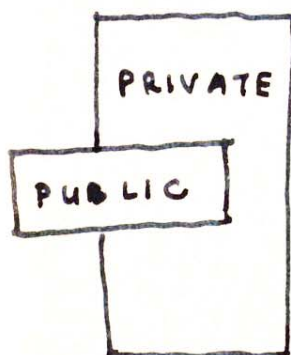
PUBLIC : PRIVATE

Kaarin Taipale, in her essay *Citizen or Shareholder*, states that “the city is not only about buildings, but about the space in-between. Streets, parks and squares will remain the core of public space, but a two-fold shift has already occurred: from horse carriages to virtual mobility, and from a purely public space to a fuzzy mix of public and private domains. We’ll have to learn to read the complexity of it in all of its power-driven manifestations” (Taipale, 2008: 147). In order to create a transitional architecture in the “fuzzy mix” between these seemingly opposing sectors requires the understanding of each, individually.

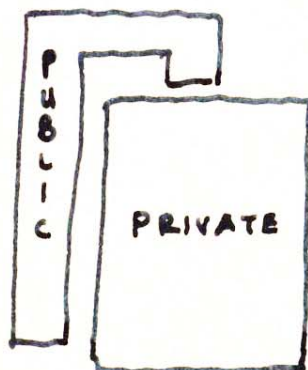
The private and public entities too, have a mutualistic relationship. Ali Madanipour in his book, *Public and Private Spaces of the City*, states that, as humans, it is the natural and public influence that shapes our understanding of our own private realm. He claims that “rather than a pure, disconnected and disembodied private sphere, human subjectivity is located at the intersection of biological and social forces and is constantly changing them and being shaped by them. The inner private space of the body and the public space of the world are, therefore, interpenetrating and interdependent” (Madanipour, 2003: 229). It is the exposure and exchange between people that shapes individual identity. In *Public Places and Spaces*, Michael Brill states that the historical intrusion of public into private is via the public media. He claims that information, representing the public, has always filtered into the private zone. Whereas historically the separation between the two has been absolute, there is a shift in modern society where the private chooses to combine their own domain with the public. This is seen in the various ‘home-based’ businesses and services, such as offices or childcare (Brill, 1989: 20). While the private sector in this context must retain solid thresholds, due to the need for privacy and security, the beneficial interface with the public, allows the hybrid to be viable.

Territorialism is a primal yearning; people feel the need to protect their space and feel safe within that which is designated to them. Thus, in the mediation between the existing private and added public, it is imperative that a membrane or threshold is maintained between the two. Madanipour states that “representation and exchange are closely connected with the material conditions in which they take place” (Madanipour, 2003: 235). It is therefore necessary to construct the public arena so that it promotes this interaction through spatial experience. In reality the responsibility of the development falls to one of the two sectors.

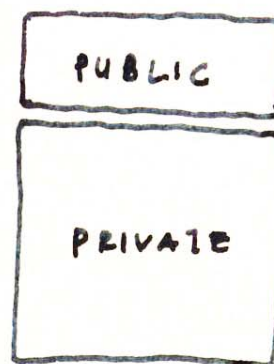
In this proposal, it is the public which is encroaching into the private domain, indicating that it is the public component which adjusts to private right. Ultimately the social and physical tolerances are resolved in the formal product.



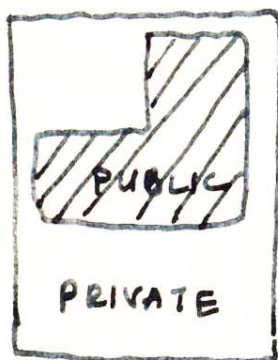
1



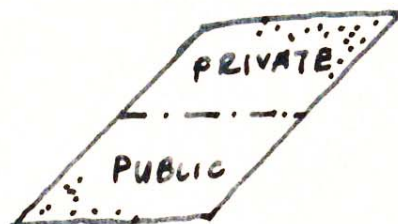
2



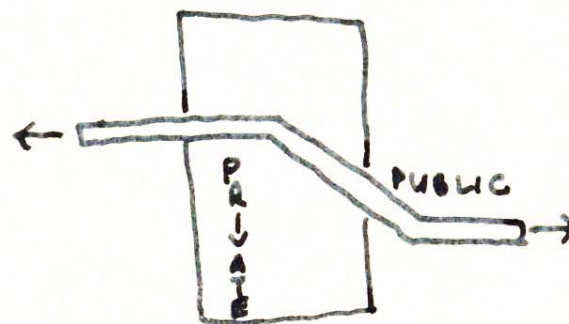
3



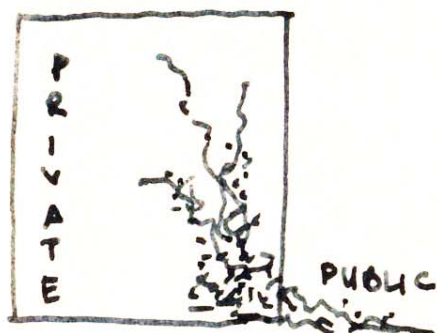
4



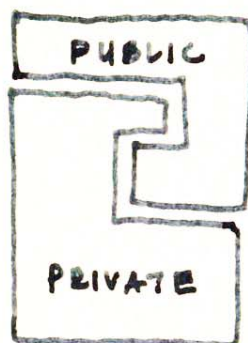
5



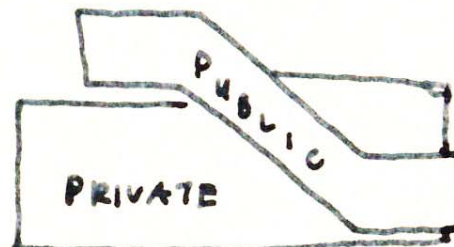
6



7



8



9

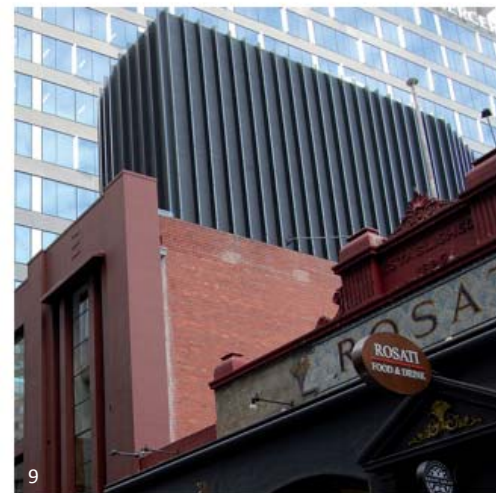
MELBOURNE

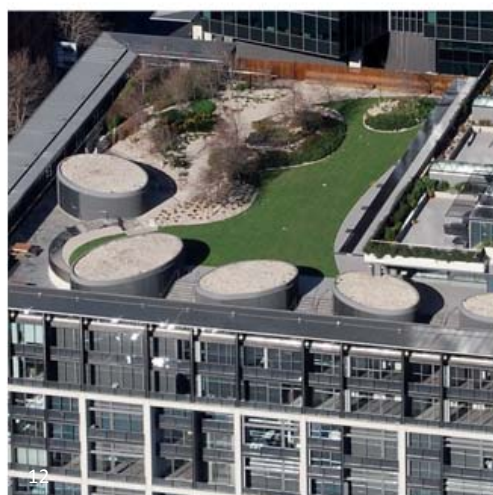
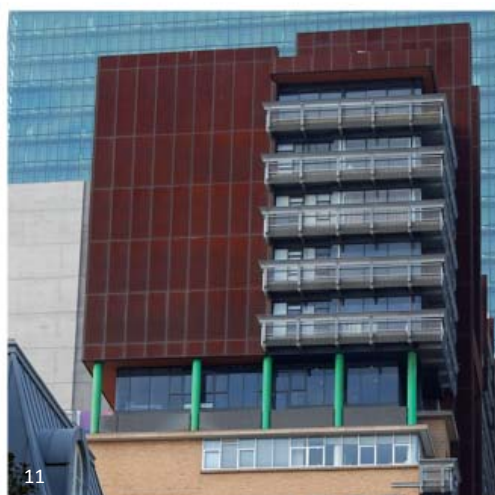
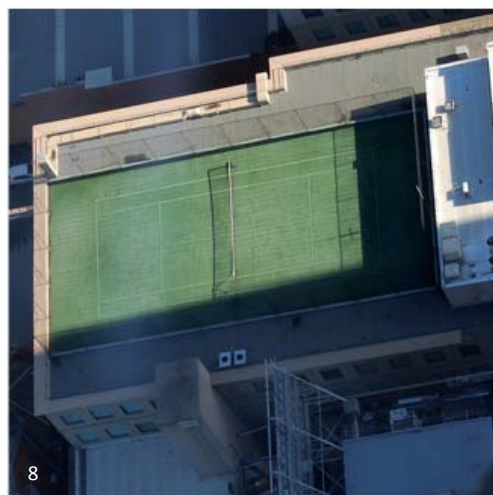
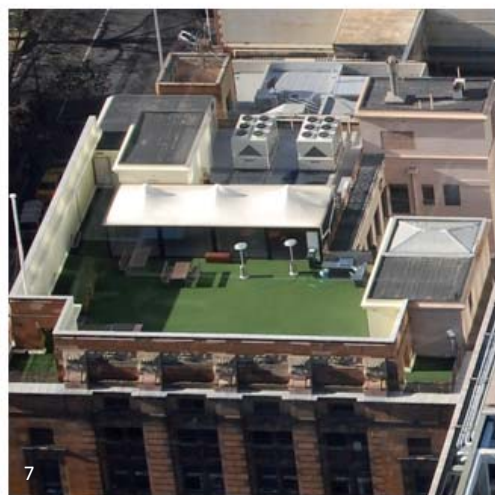
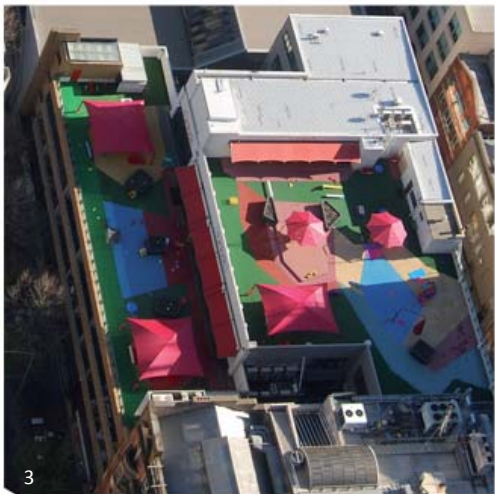
A model for the effective urban public domain is Melbourne, Australia. Here, what is created is not simply public space; it is a further development from public space. An available public (or private) area is used as a site. Public squares, laneways, rooftops and pavements are not left as surfaces that belong to the community, they are used as sites for physical additions that not only practically benefit the user, but draw more users to that space. Public squares gain large public artworks which exist as semi-permanent seating while creating an amphitheatre; laneways are used as free, accessible gallery or performance spaces; pavements must include seating, shade, bicycle racks and performance space and rooftops are inhabited with bars, movie theatres, gyms, swimming pools, tennis courts, gardens or crèches. Each space is conceived beyond the simplicity of **public space** and into the realm of **public amenity**.

The public intersection with the private appears seamless, without either losing its integrity. Melbourne's public additions to private buildings, illustrate the viability and popularity of such developments, due to the fact that each space gains an appropriate function and an associated economic yield of varying measure.

Johannesburg has the potential to imitate Melbourne. Melbourne has a series of official development and sustainability manuscripts which govern the current and future maintenance and improvement in the city.

The Melbourne Development Strategy 2030 is such a document. The strategy includes guidelines for expansion and population growth, sustainability frameworks, the future inhabitants, possible future lifestyle requirements, and how all these elements correspond to the current and future planning and structure of the city. A major objective is to create "a more compact city". The strategy is to densify and optimise existing locations in order to make the regions more efficient and "liveable" for their residents or users. The document states that as the population increases, the optimisation of these areas becomes more crucial in order to maintain the socially-orientated system (Victoria Department of Infrastructure, 2002: 36).





melbourne _ as case study

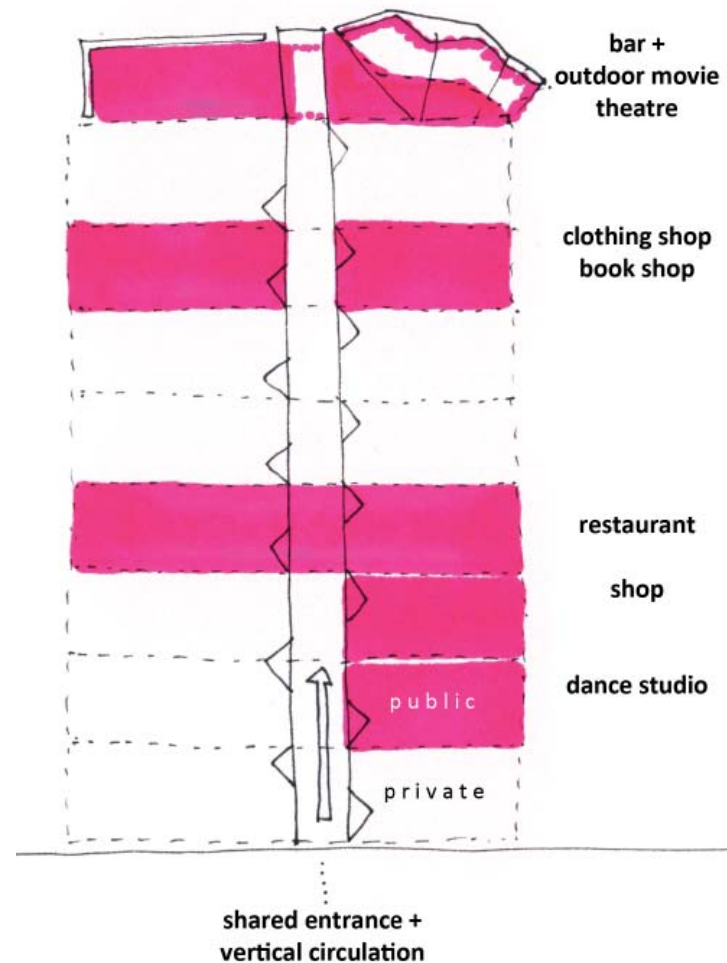
public spaces, public amenities and parasitic / mutualistic architecture

- 1 : new yellow steel bridge within original bridge structure.
- 2 : indoor and outdoor swimming pool on the roof of an office block
- 3 : Kids On Colins creche on a rooftop in the city centre
- 4 : outdoor public movie theatre on the roof of Clarence House
- 5 : public art in a public square used as seating for lunch breaks
- 6 : public bar on the roof of Clarence House
- 7 : private roof garden in the city
- 8 : tennis court on the roof of an apartment block
- 9 : new addition to an existing building incorporating the distance between new and old facades
- 10: new balconies added to an existing structure - designed so as not to cut into the original facade but to remain separated through contrasting materiality
- 11: mutualism : new addition on top of existing building
- 12: landscaping on the roof of an office building

The city of Melbourne is also a successful prototype for adaptive reuse. The city council created a policy, whereby additions to heritage buildings have to comply with a series of precise regulations. The rationale is to ensure that new additions do not detract from the original in any way. This is achieved by several methods, including the imposition of a consistent distance between the facade of the primary structure and that of the addition. The result is that new component resembles a completely separate building in the background.

The Clarence House building in Melbourne's city centre is an assembly of varying functions much the same as Starrett and Van Vleck's Downtown Athletic Club in New York (Koolhaas, 1994: 153). Although on a smaller scale and dissimilar programming, the building draws the public upwards through a series of semi-public spaces, each with its own experience and function. Various commercial opportunities that encourage either fleeting exposure or quiet browsing, step upwards towards spaces of relaxation, entertainment and even education. This is vertical recreation. Although privately owned and developed, the building is predominantly used by the public.

In the book *Public Places and Spaces*, Michael Brill describes the negotiation between public and private, quite unconventionally. He suggests that it is the private sector that should control the construction and management of its buildings so as not to interfere with "public good" (Brill, 1989: 20). By encouraging mutualism between public additions and the existing 'host' buildings, both structures and populations benefit. The amenity serves the public, while the private sector reaps the economic benefits. The infusion into and on top of the building does not preserve its 'host' and can therefore create its own programmatic and circulation systems and, in fact, its own structure, inside the original. The popularity and proliferation of Melbourne's urban social and spatial interventions exist as proof of the efficiency of these strategies. Their success confirms that similar networks and spaces in South Africa could operate as effectively, thereby creating the appropriate public realm required.



H Y B R I D I T Y

Rem Koolhaas articulates that “In the Downtown Athletic Club each “plan” is an abstract composition of activities that describes, on each of the synthetic platforms, a different “performance” that is only a fragment of the larger spectacle that is the Metropolis” (Koolhaas, 1994: 157). The built form of the Downtown Athletic Club represents that which exists around it in a diminutive scale. The architecture is created for people and must reflect their ordinary lifestyle. The architecture of the urban community centre is to be similar; the structure is representative of the direct context. The programme is specific to the need produced by the users’ presence, the space is moulded out of that need and the form is to attract response from that user. While the form meshes itself with an existing built landscape, the structure embodies that which the user requires. Koolhaas states, “such an architecture is an aleatory form of “planning” life itself: in the fantastic juxtaposition of its activities, each of the Club’s floors is a separate instalment of an infinitely unpredictable intrigue that extols the complete surrender to the definitive instability of life in the Metropolis” (Koolhaas, 1994: 157). While this hybrid network is built on idealism, the form of the public-convenience facility in the South African city is built on realism; the basic, everyday necessity.

67

The architectural product is designed for the public, by the public. The human possesses human-qualities because of other humans; similarly, built form exists because it is required, designed, produced and used by humans. In the book *Camouflage*, Neil Leach expresses that “we human beings are governed by a chameleon-like urge to blend with our surroundings – to “camouflage” ourselves within our environment. We need to feel at home to find our place in the world” (Leach, 2006: 9).

Spaces for public use must ultimately be democratic in their design and experience. They should reflect, accommodate and provide for the human.

[opposite]

clarence house, melbourne

a study of the infusion
of the public into the private realm
within an original building in the
city of melbourne.
2009



WHAT IF?

YOU COULD LIVE, WORK, AND RAISE SHEEP IN THE SAME BUILDING

THE 57TH ANNUAL P/A AWARDS

the complex network
the hybrid, adaptable public form
(cover of architect magazine, Jan 2010)

8

F

O

R

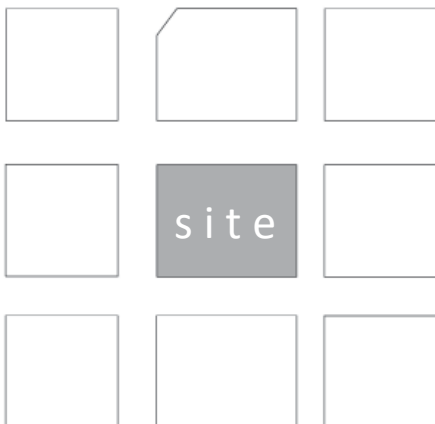
M

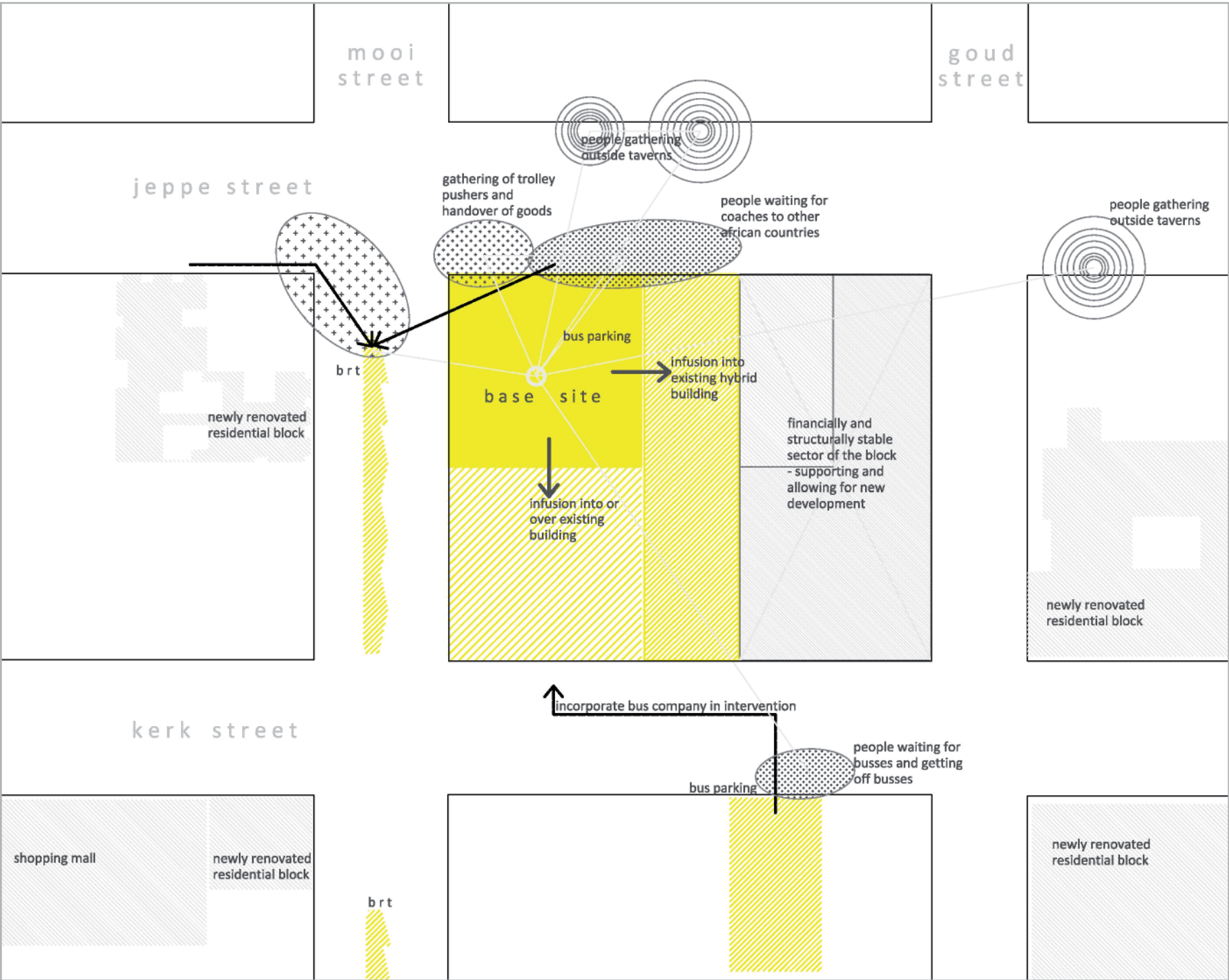
The public facility proposed in this thesis aims to reverse regional decay and relieve the pressure on the existing public services by developing an adaptable structure which transforms unproductive spaces into a hybridised social institution. The infusions are to be designed as a collective; adding a currently-missing layer to a focus area in order to create a productive urban neighbourhood. The urban community centre aims to link all existing amenities to the new addition, so as not to create competition with the original systems, but rather to incorporate them into an all-inclusive public infrastructure.

existing form : site analysis

The proposed site comprises a mixture of old and new buildings, available space and available air rights. The 'base' site is comprised of two adjacent parking lots, one associated with the warehouse behind it (no longer in use) and the other aligned to a bus company, Trans Africa, operating from the ground floor of the adjoining building. This building stretches from Jeppe Street to Kerk Street and was originally designed with a simple three-storey structure, allowing for a flexible interior. This means that the building has been continually hybridised; once containing a butchery, hair salon and offices and currently including the bus company on the ground floor, an education facility, Pride Learning Academy, on the first floor and a church facility on the second floor. The building has a flat roof and includes a basement with a delivery lane which extends from Jeppe to Kerk under the building. This building relates to the existing multiplicity that Jane Jacobs refers to and is to be a 'host' for mutualistic mediation by the new form. The warehouse still supports its original structure and roof. The attractive original features such as the roof lights could be retained while incorporating the structure into the greater infusion.

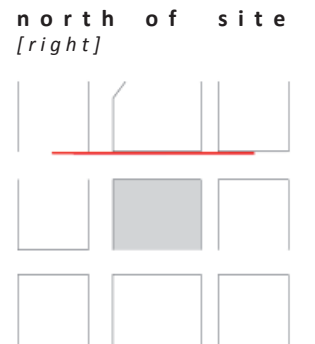
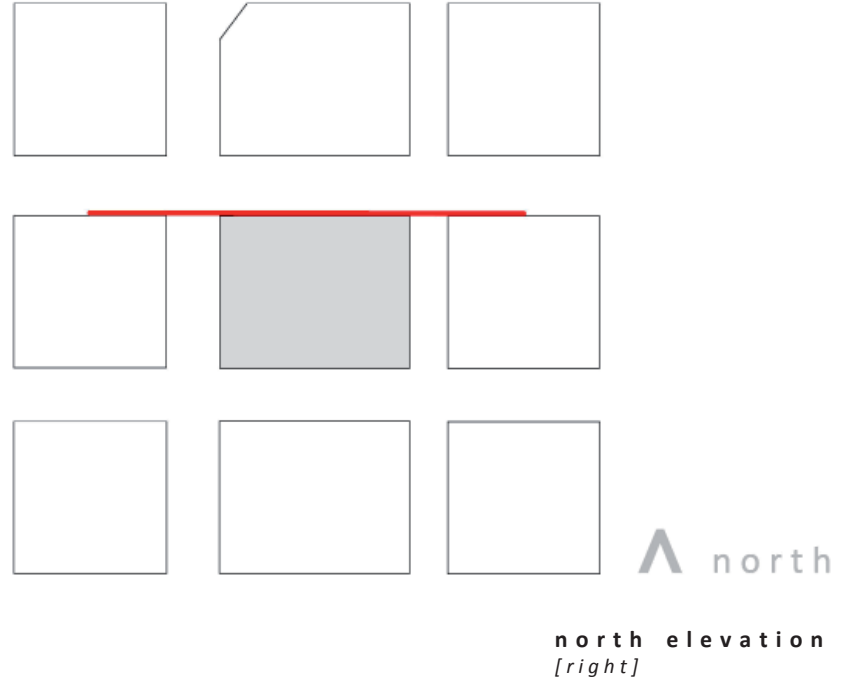
The remaining four buildings on the site are considered to be 'stable'. These are buildings which are obviously successful private ventures which give the block fiscal and structural security and can 'support' the proposed addition by their presence. These include a security company, two residential buildings (one of which has been recently renovated) with small retail outlets at ground floor level and the African Diamond Company building, newly converted to a residential block.





site analysis

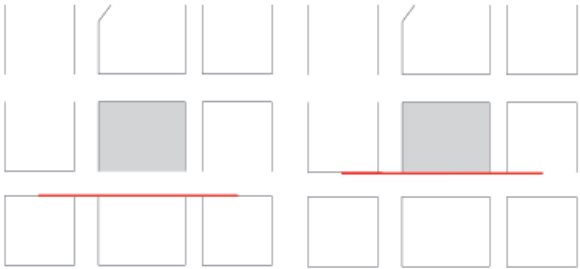
72





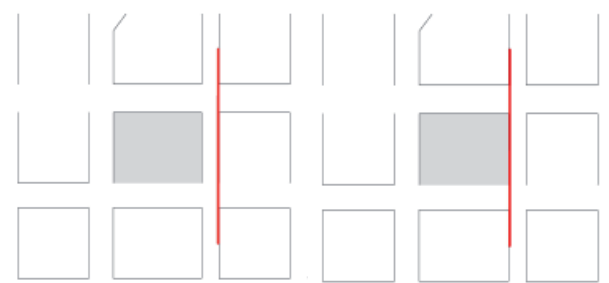


south of site south elevation
 [above] [below]



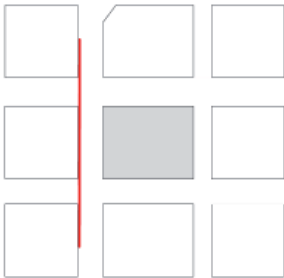


east of site east elevation
[above] [below]





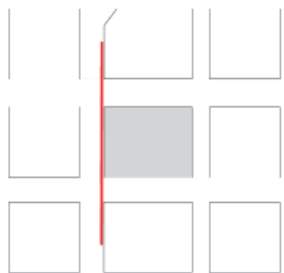
west of site
[above]



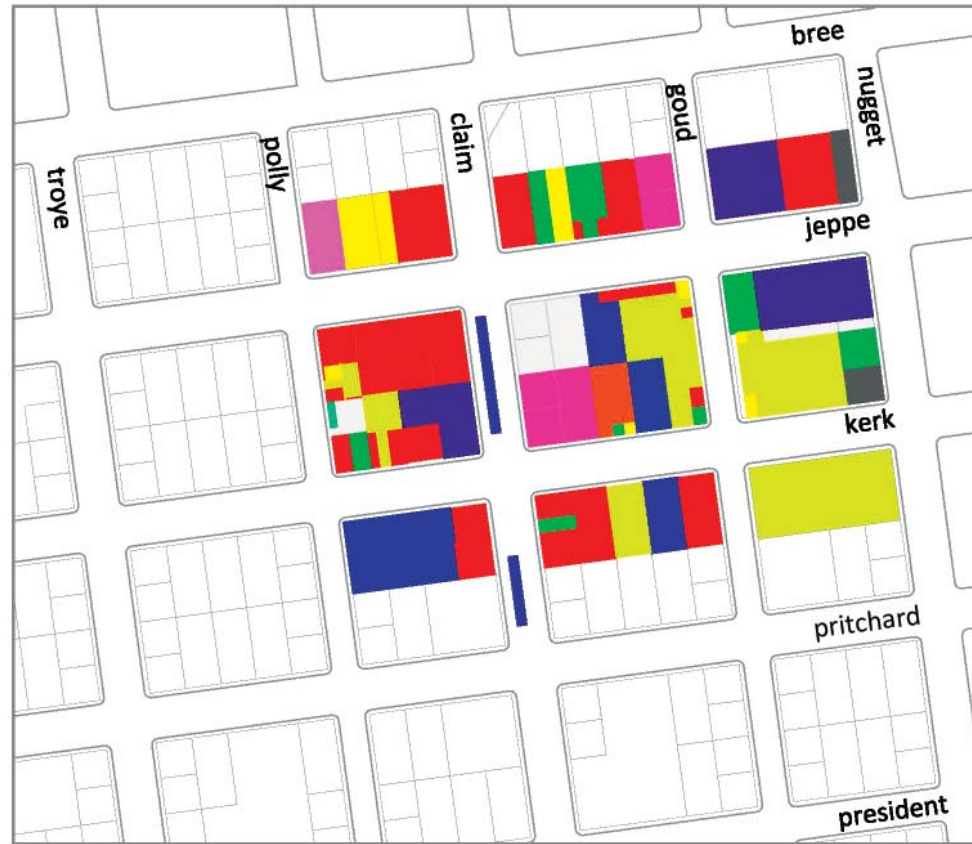
76



north west elevation
[right]







ground floor





f i r s t f l o o r



s e c o n d f l o o r
a n d a b o v e

u s e m a p p i n g
a study of all uses on the site
and making up the direct context

The dominant use within the surrounding blocks is evidently residential. This consists of mainly newly developed or renovated residential units.

existing networks

The nine blocks within which this site falls, form its direct context and the urban fabric within which the extents of the network's 'shoots' will explore. The surrounding blocks contain a similar fusion of old and new buildings and a variety of use and structure. The many new residential buildings, along with the variety of small amenities operating from these blocks, exist as both social and service networks which are to be drawn into the complex infusion proposed.

A series of existing networks are linked to site and surrounding edges. The BRT station to the west of the site is responsible for drawing and depositing a large number of people into the vicinity. The Trans Africa Bus Company and the Inter Cape and CR Holdings Companies (opposite the southern edge of the block) are the pick-up and drop-off points for 'luxury coaches' from other African nations. There is no infrastructure associated with this function. The only structure is an office and an empty parking lot off Jeppe Street (on the site) and a basic shed space on Kerk Street. Passengers waiting for their bus sit on their luggage on the pavement, while the bus navigates its way through the miniscule gate to the parking lot.

Concurrently, trolley-pushers (gathering cardboard) assemble on the corner of the same pavement with their trolleys, where they load their collections into small trucks going to the depot. This informal system is an important network to be taken into consideration as, for these people, this exchange is how they earn an income.

The block to the north of the site and the corner of the eastern block contain taverns. These spaces are populated day and night and are therefore the base of a minor social network.

The amenities in the immediate context include several hair salons, cellphone shops, laundries and an international freight company. The latter performs a vital function in the lives of the resident immigrants, giving them the opportunity to send goods home to their families.

The site of this project exists in transitional zone between the Fashion District, the residential districts of Hillbrow and Joubert Park to the north, the industrial areas to the south and east and the commercial centre to the west.

These are all networks which will both feed and need to be fed by the proposed architectural intervention.

greater urban links
*major influences on the site,
population present and existing networks*



residential nucleus



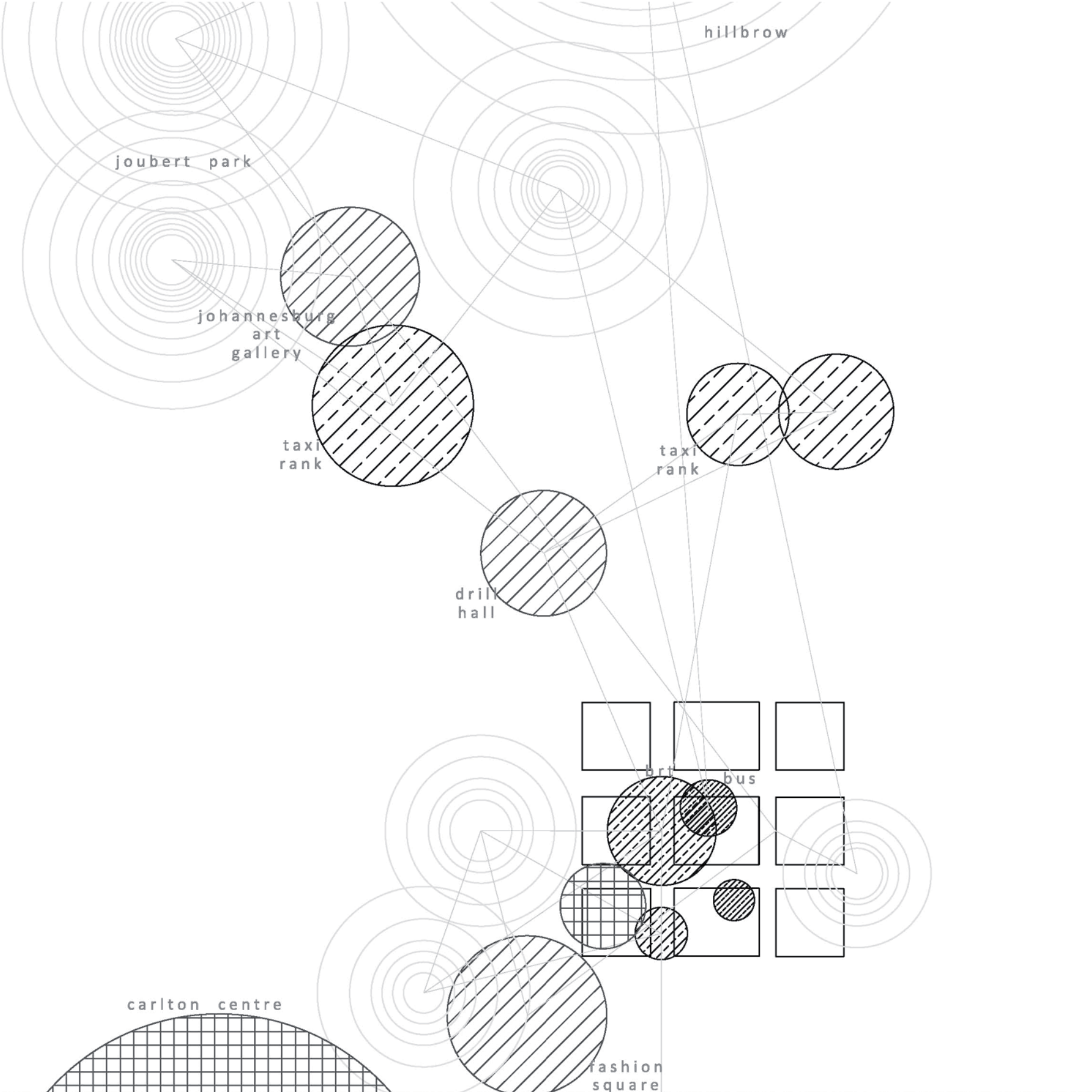
commercial centre



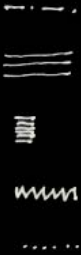
transport hub



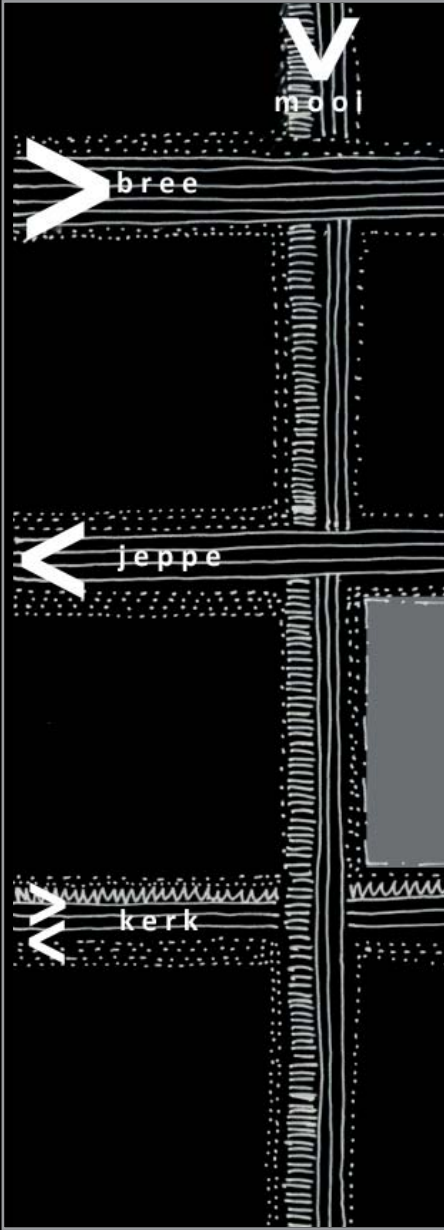
cultural centre

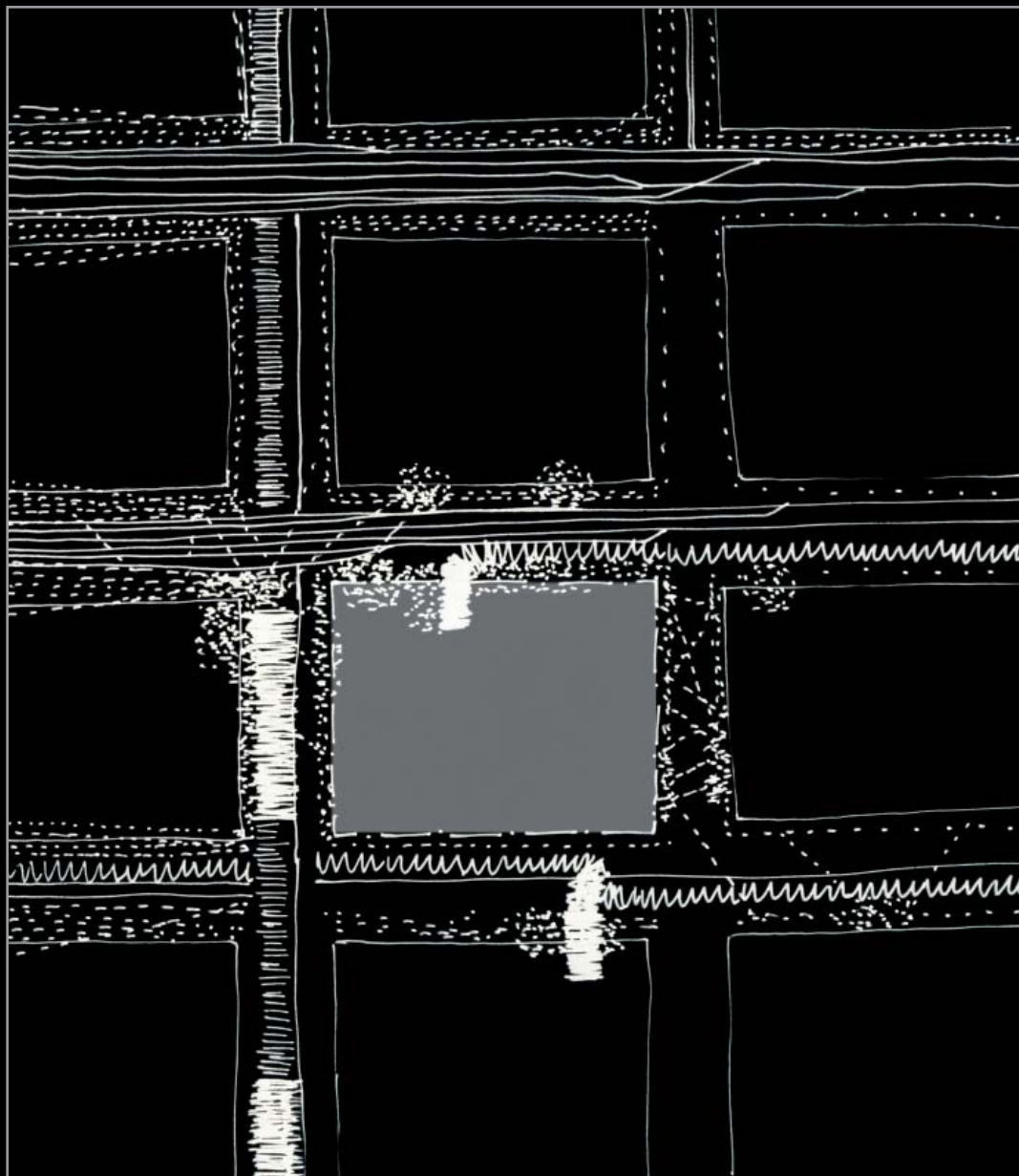
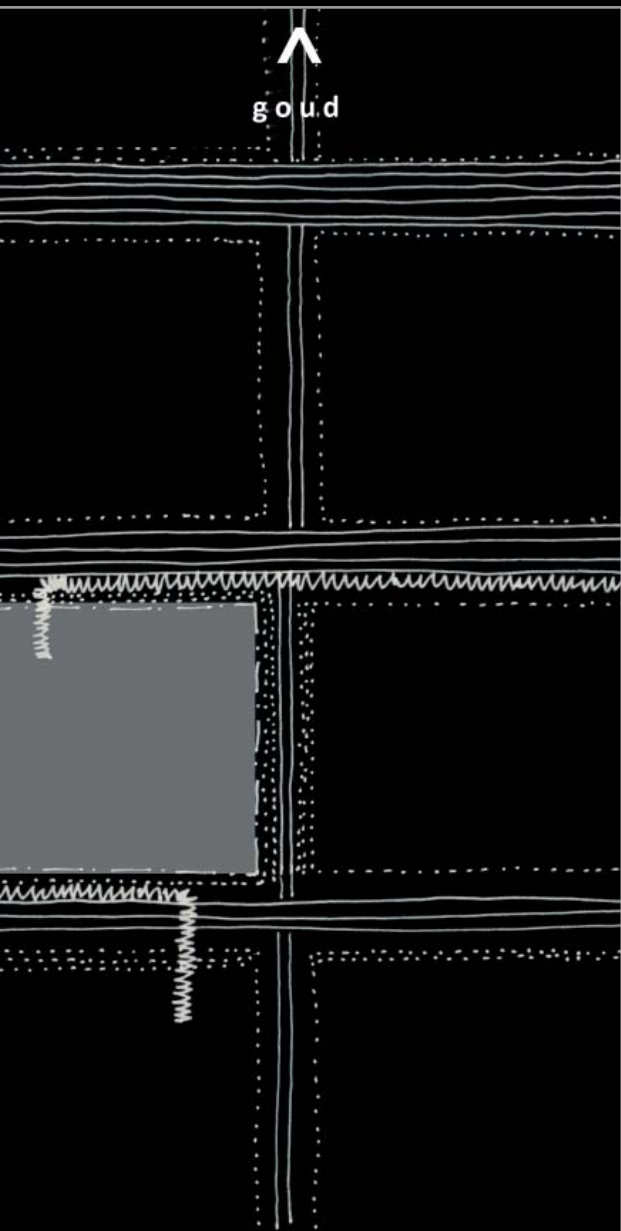


m o v e m e n t | t r a f f i c
*a study of public movement
intensities through the focus area*

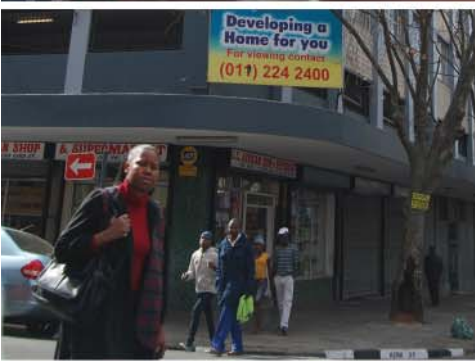


site
traffic
brt bus
private bus
pedestrian





multi



user mapping

the diversity and density of public in the area and the 'pooling' and patterns associated with various spaces, amenities and functions.



brt



private bus company



vehicle



pedestrian : daily visitor



resident

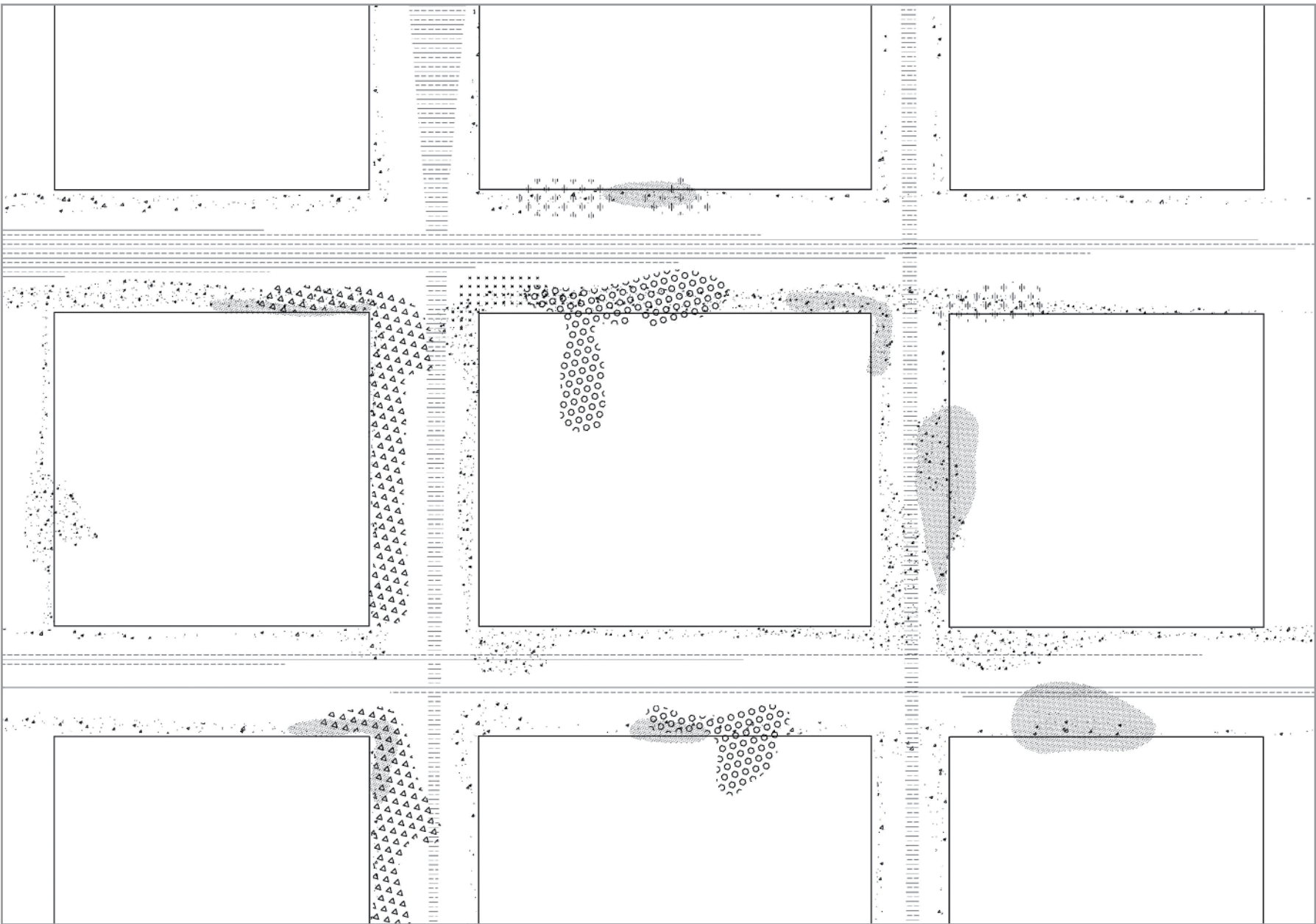


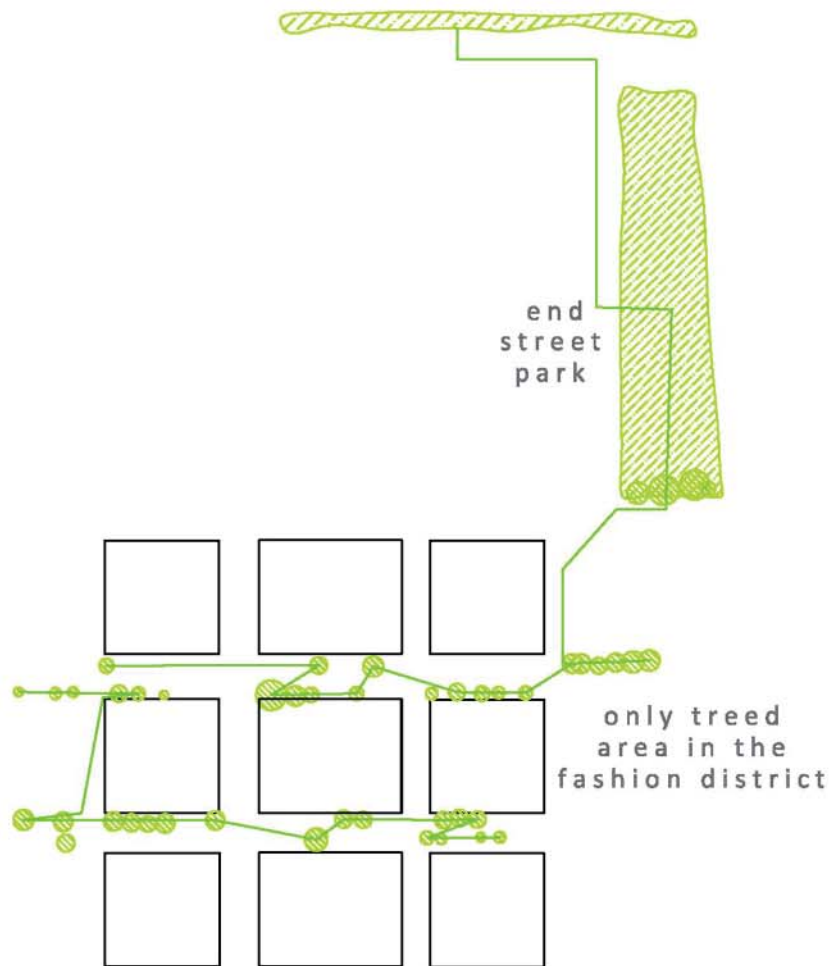
tavern patrons



trolley-pushers

ple
publics



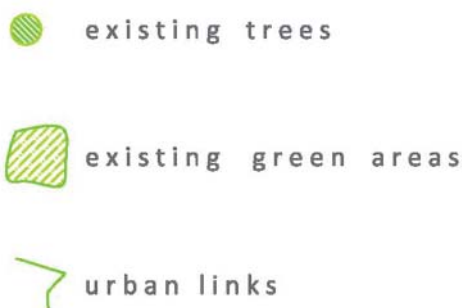


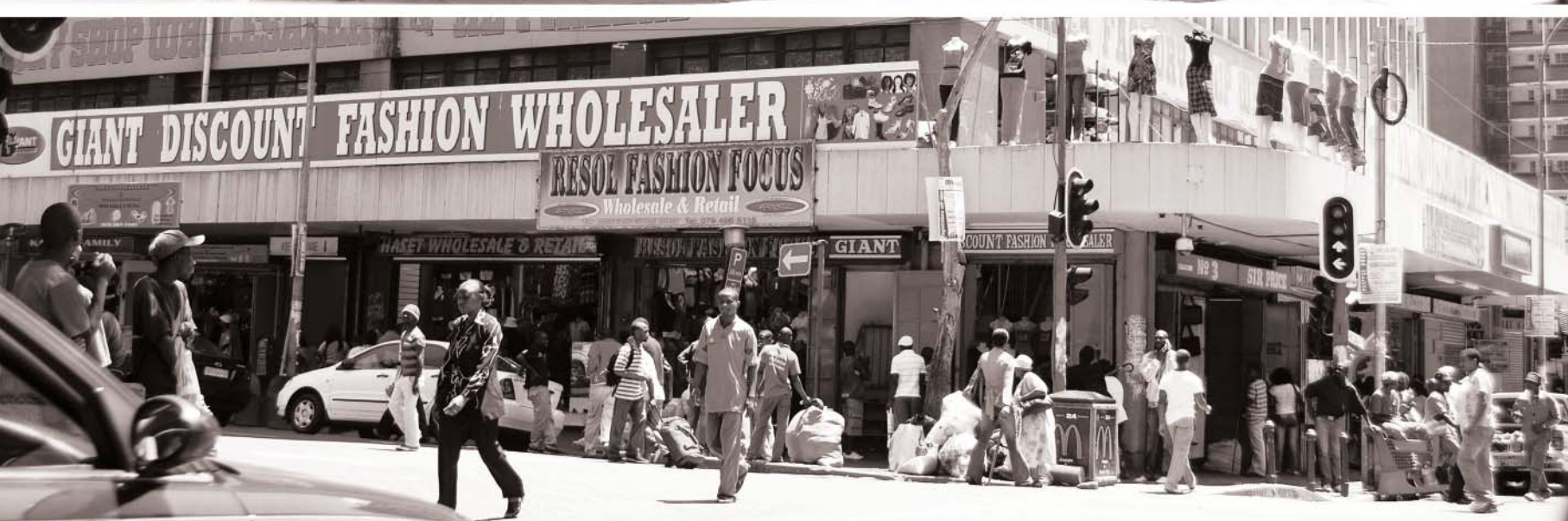
proposed form: complex urban community centre

The network reflects the plant in its performance (the negotiation with an optimum host) and appearance (the visual and experiential planted and recycled composition); bringing the forest into the city both theoretically and literally. The green 'branding' of the infusion connects each existing amenity, transport, social, ethnic and religious network to the complex public structure and exists as a visual promotion of the new, all-inclusive public-system. Just as the iconic colour and form of BRT stations and service stations inform the public of their function, so the introduction of a rare green layer will act as an icon of urban growth. The intervention is ultimately a fusion of basic public services, be it daily tasks, education, recreation or religion. The facility seeks to become a series of subsidised enterprises of social programming, hybridised with a recreational component designed to promote social interaction.

The formal design is to rethink the social institution in order to create a site-specific, needs-based facility which relates to a multitude of publics and the unique identity of the location. The intervention must not only reflect the population, but also the surrounding landscape. Trancik explains that "people's image of and reaction to a space is largely determined by the way it is enclosed" (Trancik, 1986: 18). These structures are to exist between, inside, around or on the rooftops of primary structures. The unique form, hybridity of programme and aesthetic of the addition will advertise its presence and encourage interest and participation from the public.

The design is to be related to the way people currently understand and utilise public space in order for the population to identify with the intervention. Currently, the only public space is that of the street and pavement. For this reason, the notion of street is to be carried through the structure, aesthetic and distribution of programme within the facility. As lost space (although plentiful) is comprised of small 'in-between' urban rooms, opportunities for lateral development are minimal. The architectural infusion is therefore forced to become vertical, retaining as much of the ground floor as open public space, while stacking functions according to physical constraints, importance (higher patronage near to the ground floor), security thresholds, tolerances, light, sound and programmatic implications. The plant-like search for space allows the road-like network to coil on itself as it grows upwards and to branch outwards into the internal void of existing buildings, to hang over smaller structures and to encroach onto rooftops.





9

P R O G R A M M E

Jane Jacobs states that **“the infusion of a new potential use is to have a practical idea of what the infusion must accomplish if it is to overcome the district’s root trouble”** (Jacobs, 1961: 157). The “root trouble” in this portion of Doornfontein, is the lack of public territory. The mapping demonstrates the amenity density-patterns of the surrounding areas compared to the chosen sites. The site is optimum due to the quantity of people drawn to the area and the complete lack of public environment to support them. The continuous presence of people is due to the numerous buildings on and around the block having been recently converted from commercial to residential, the continual influx of people into the area by BRT bus, the arrival of immigrants by private bus companies and the location of exchange for the trolley-pushers.

The diagrams produced by the mapping demonstrate a severe lack of formal religious spaces, open or green spaces, crèches, playgrounds, family entertainment spaces and exercise facilities.

[Children play on pavements and in passages, washing hangs out of windows, religious ceremonies are required to take place beyond the city perimeter, mothers are forced to take their babies to work with them; the city of Johannesburg, the world’s largest man-made forest, is not green.]

This thesis looks to the existing amenity networks and patterns in Doornfontein in order to establish that which is lacking and to learn from the way facilities operate successfully and where they fail to be efficient. When addressing the services that are absent in an area, it is vital to determine whether they are missing and if there is a need for them, or if they are missing because there is no need for them. The programme is defined through this analysis of the existing amenities. A social facility which exists in the area (but is not functional), is evidently in need, and is therefore an appropriate subject of study and redesign. The new addition, however, is not aimed at eliminating or competing with the original enterprises.

The proposed network is aimed at linking the public infrastructure which exists but is not sufficient or effective, to the design intervention in order to generate a complex system of social services within a concentrated area.

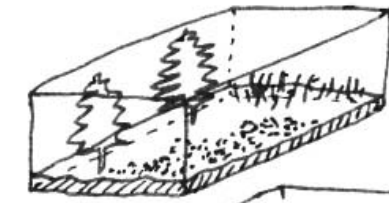
The research into Doornfontein has defined the amenities which are required. Some facilities, such as crèches and exercise facilities, exist (showing that they are needed) but are ineffective or insufficient for public use due to their size, location or condition. The two crèches in the area operate in run-down buildings, within small spaces with covered windows and no open-air play-spaces. The only gym space is male-orientated and only provides boxing. There are laundries in the area but balconies and rooftops are the only drying areas. Other public services are required for healthy living and productive urban neighbourhoods are simply absent, such as green space, libraries, recreational space suitable for all ages, playgrounds, religious space or a ‘town hall’.

It is therefore appropriate that these services be introduced in a formalised structure so as to create a functioning, diverse urban centre. In order to make these spaces financially, spatially and socially viable, the addition is to incorporate a hybrid of programme and adaptability of structure. Hybridity is evident in the direct context and in the buildings within the block.

e x i s t i n g c r e c h e
Polly Street, Doornfontein, 2010.
A first floor creche, situated above
a bar and identified only
by its painted windows.



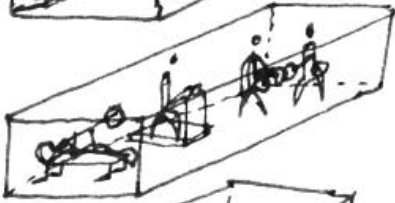
city ser



park >



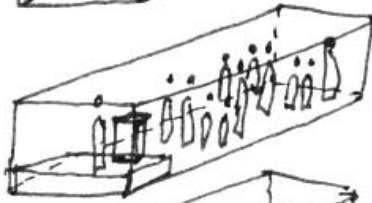
bar <



gym. <



movie theatre <



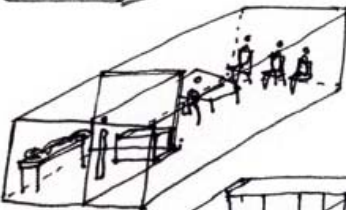
religious space <



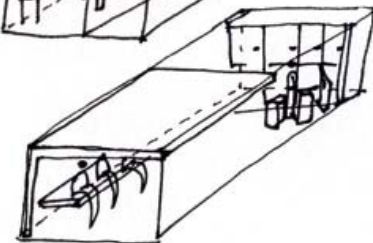
creche <



laundry <



clinic. <



bus stop. <

programmatic capsules
Defining elements of everyday public service.

vice station

The urban community centre is to be identified as the **city service station**. It is to be comprised of a vertical layering and juxtaposition of service and social spaces. The programmatic components are to be distributed along a vertical 'route'. These are defined simply as a

crèche, library, religious space, exercise facility, park, family entertainment venue and a multi-faceted terminus and citizens' advice bureau.

These traditional typologies are to be tested and redefined in order for the product to reflect both the population and physical context. Within each type, lies the possibility for hybridity of use according to time or planning.

The '**crèche**' is seen as a care and education facility. A process of time rental allows for a morphing programme; the space is a crèche connected to a space which is a kindergarten in the morning, homework facility in the afternoon and library and study area at night. The result is three programmes, three sectors of the public; hybridity within a single space.

The '**exercise facility**' also requires redefinition for validity in this context. While typical fitness centres may not draw the public, creating opportunities for boxing, dance and martial arts, allows various ages, ethnicity and cultures to participate within a single space. The structure of this space is to be flexible in order to adapt to these different functions and can therefore be used as gathering, exhibition or social space at various times.

The lack of evident **religious space** in Doornfontein illustrates that an intervention could be multid denominational and multi-use. A '**hall**' in its basic form, it invites performances, religious ceremonies, community meetings and funeral services. The existing church facility on the site has potential to be adapted and formalised for this purpose. The multiple arrivals into the area (migrant or immigrant), require an introduction to the area, the country or community. This public building has the potential to gather the public and encourage interaction and an exchange of information.

Programmatic components compose patterns such that the manipulation of representative graphics can inform degrees of physical intersection or separation. Facilities require similar internal services, such as access, wet services, outdoor space or dining facilities. These programmes have the potential to become common between amenities, thereby reducing cost and increasing hybridisation. Re-thinking the institution involves re-designing the architectural type, the programme and the way people relate to it.

10

C O N C L U S I O N

The typological product has infinite possibilities in terms of diffusion or invasion and hybridity. The design is centred between the uncontained creeper-like behaviour of the evolving network, and the grounding of reality and context. The negotiation results in entry points, like chimneys, which draw users upwards out of the bustling streets; planting which oozes over the edges of buildings, telling the passing public that recreation is nearby; the sound of children playing as a call to others to join the game; the chime of the time-out, introducing the next boxer to the ring or the sound of psalms being sung from above, drawing the religious closer to their God. The project above the streetscape is not a park on a roof, but rather a composite of community opportunities filling the uncoordinated void.

Ultimately, the architectural intervention is that which Marc Angelil and Anna Klingmann define as, a “hybrid morphology [that] unfolds from a system of relations between different, sometimes contradictory forces, no longer as an absolute but in reference to other structures” (Ellin, 2006, 20). The city includes a variety of spaces, programmes and voids. The functions within the built form draw a diverse public; the public produces a need; the need requires minor-enterprise; enterprise necessitates place; place requires space; voids denote available space; space demands structure, access, identity and a connection to other space. A network is formed; the network draws users; the space serves the user. The product is the complex network of public amenities filling ‘lost space’, within a single city block in the transitional land-use zone of the inner city of Johannesburg.

Raoul Bunschoten states that **“a city expresses the actions of individuals and collectives in an environment organised by rules. It reflects the needs of individuals and collectives. It orchestrates scenarios for living collectively. It exists as an expression of, and a backdrop to, the physical encounters that remain so important in our lives, despite the technical advances in communications”** (Bunschoten, 1998: 7).

In Doornfontein, the rules are the urban skeleton; the needs, the amenity; the encounters, the network; the expression, the architecture.



11

C O N C E P T
D E V E L O P M E N T



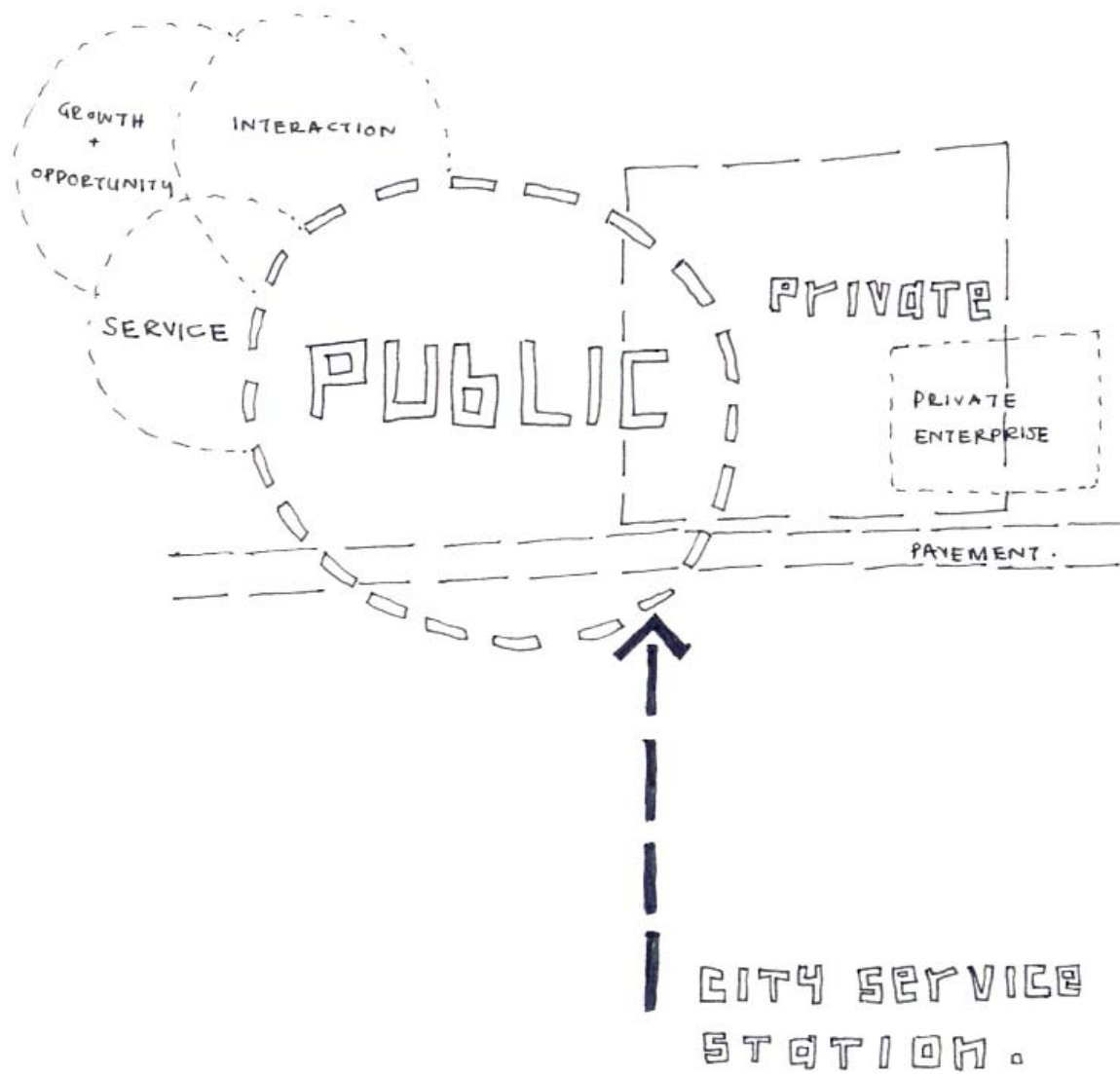
city service station

[urban] [amenity] [terminus]

defining how the building is to perform

The purpose of the **city service station** is essentially to utilise unproductive urban rooms as a site and to create an all-inclusive, democratic structure which incorporates and culminates existing and new networks.

At its essence, the building is about **social and architectural exposure and exchange.**





“In the city, the geography of human acts are landscape. Operations involve layering, revitalising, infilling, marking, carving.”

(Saitowitz in Bell, 1996: 21)

103



terminus	[store baggage]	[buy ticket]	[wait]					
citizen advice	[information]	[meet]	[talk]					
coffee shop	[drink]	[eat]	[meet]	[talk]	[work]			
clinic	[care]	[wait]	[read]	[watch tv]				
library	[sit]	[read]	[work]	[learn]	[meet]			
hall	[gather]	[learn]	[play]	[exercise]				
creche	[care]	[play]	[learn]	[teach]	[eat]			
kindergarten	[care]	[play]	[learn]	[teach]	[eat]			
homework centre	[sit]	[learn]	[teach]	[talk]	[read]			
entertainment	[meet]	[talk]	[watch a movie]	[drink]				
park	[play]	[meet]	[lie on the grass]	[relax]	[gather]	[pray]	[eat]	[drink]

+][draw money][read a book][eat][use the toilet]

][wait][read][relax][use the toilet]

[collect medication]

+][take books out][teach][relax]

][meet][pray][sing][play music][talk][dance][perform]

at][use the toilet][grow food][store toys]

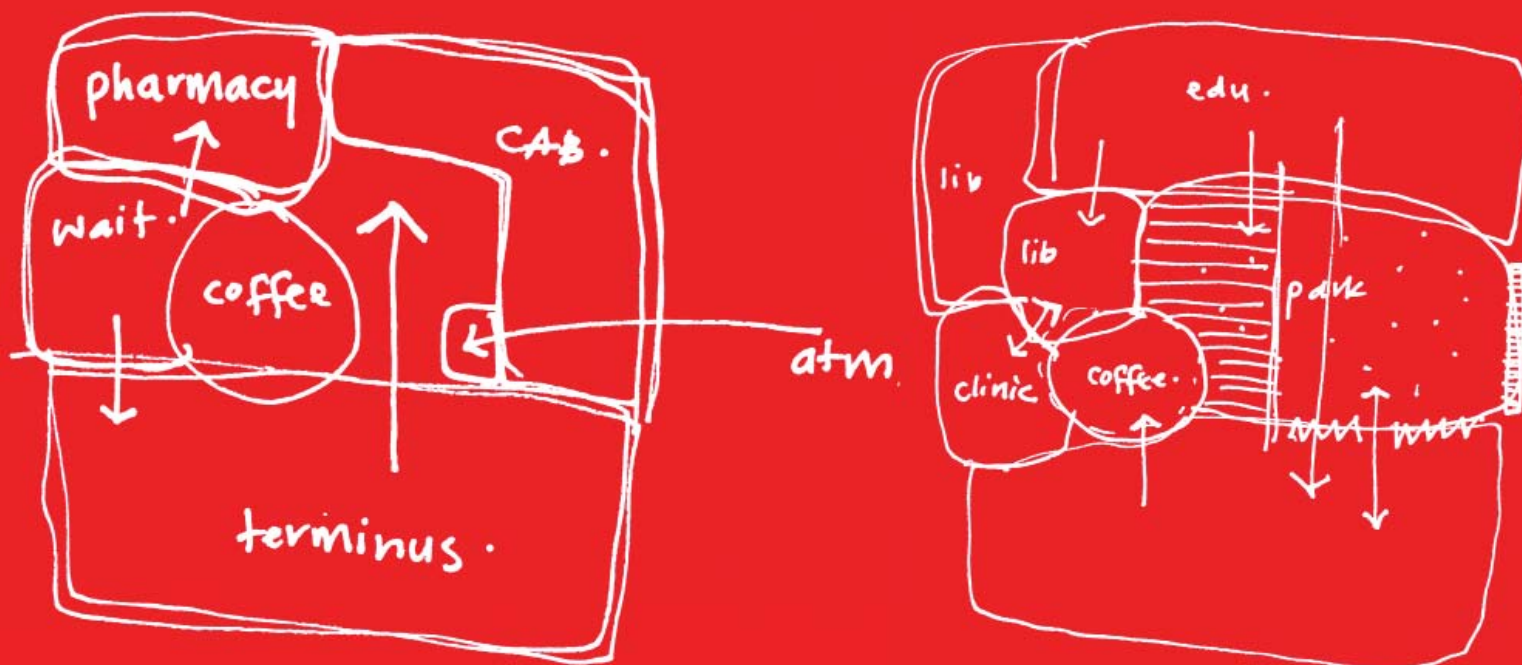
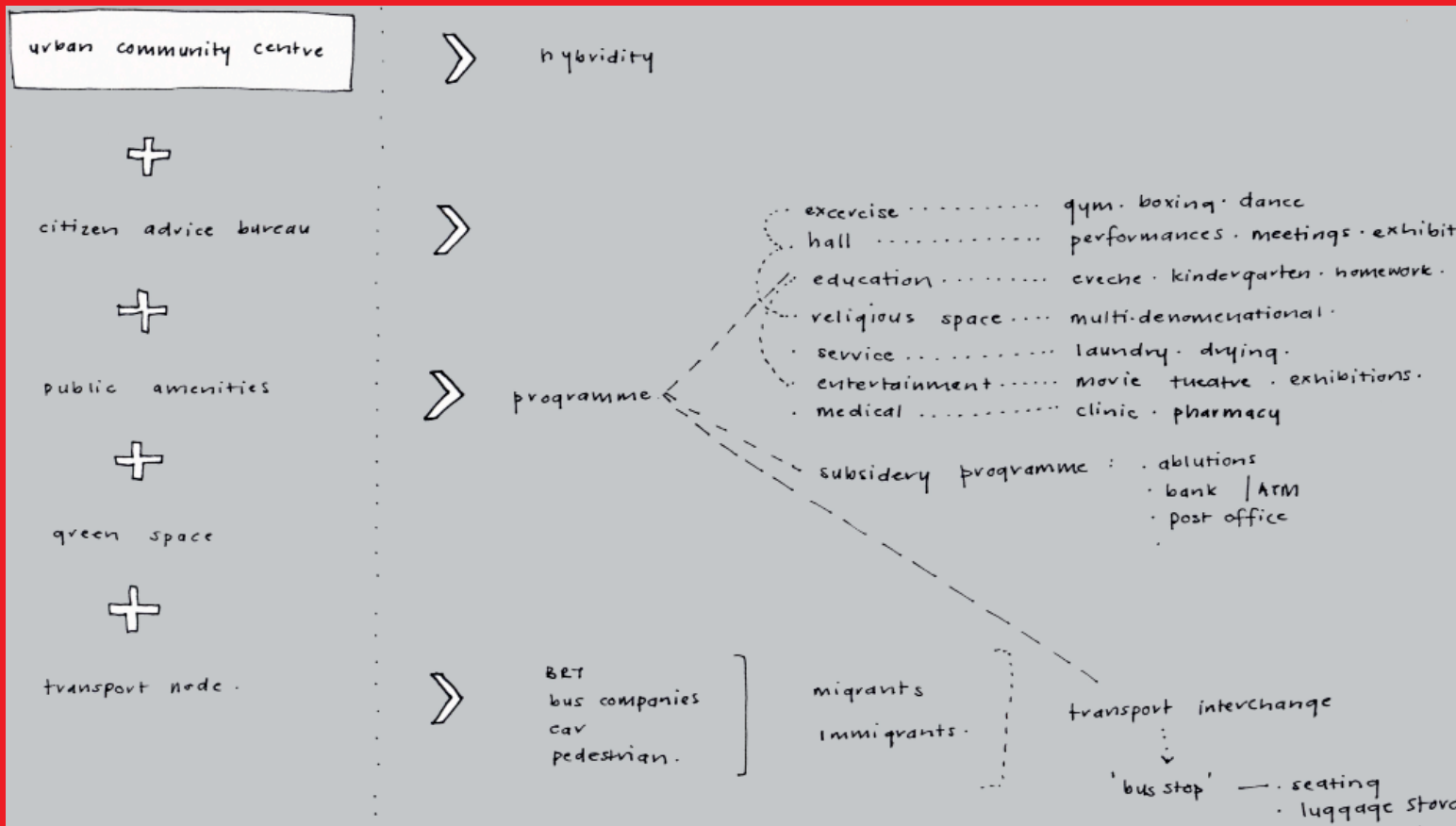
at][use the toilet][exercise][perform][sing][grow food]

d][use the toilet][play][exercise]

think][eat][watch children play][relax]

s][sit in the sun][watch children play][exercise][read]

rink][grow grass][talk][perform].



The architectural product can be divided into three parts.

a the terminus:

receiving and dispatching dedicated busses and enclosing all bureaucratic elements of bus-travel.

b the long building to the east:

the most structured building is to contain the most structured programme. This building has the capacity to be completely closed at night. This is therefore the most appropriate location for programme requiring formality, access control, security and specific time rental. For this reason:

_ the ground floor of the building is to contain basic public services (private enterprises, only operating during the day and requiring direct access and thoroughfare), as well as to incorporate the informal sector in flexible stall spaces which can be locked up at night.

_ the first floor is to contain a clinic and counselling centre.

_ the second floor is to contain the redevelopment of the programme retained from the existing hybrid building, the crèche and the church office. The crèche is designed to include larger facilities and incorporate a kindergarten. The church office is to have its own access.

_ the roof of the neighbouring building to the east is to be utilised as a green space, playground and food garden for the children in the kindergarten. As the second floor and neighbouring roof levels meet at this point, the children are able to utilise the space while being totally separate from the general public and public green space.

_ the roof of the building is to incorporate a new amphitheatre structure with stage and extended decking. This creates a flexible public gathering space and can be used for religious meetings, community meetings, performances and social events. The decked surface allows for a larger performance space, an expanding audience or a form of exercise class.

c the open site:

is to be utilised for the most unstructured programme. Here, the fragmented layout allows for a vertically-stacked hybrid. The weaving circulation intertwines the three structures together and gains programme within itself.

programmatic links

Noting the primary programmes, it is possible to find possible programmatic links and opportunities for unusual hybrids.

A C C O M M O D A T I O N R E Q U I R E M E N T S

clinic

-	Reception	= 3 x 3	= 9m ²
-	Staff room / kitchen	= 3 x 3	= 9 m ²
-	Cleaners storeroom	= 2 x 1	= 2 m ²
-	1 patient wc	= 1.2 x 3	= 3.6 m ²
-	1 staff wc	= 1.2 x 3	= 3.6 m ²
-	Storeroom	= 3 x 2	= 6 m ²
-	Min 3 doctors rooms	= 3(3 x 5)	= 45 m ²
-	Physiotherapy	= 3 x 4	= 12 m ²
-	Counselling	= 3 x 4	= 12 m ²
-	Room with beds	= 6 x 3	= 18 m ²
	Total		= 210 m²

creche

-	2 – 3 m ² per child		
-	6 – 8 children per group		
-	2 groups	= 2(8 x 3) m ²	= 48 m ²
-	Cupboards, etc		= 4 m ²
	Total		= 52 m²

kindergarten

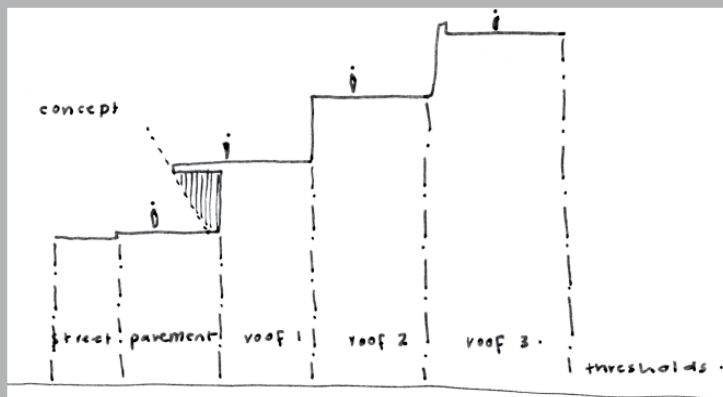
-	1.5 – 3 m ² per child		
-	25 – 30 per group		
-	2 groups	= 2(30 x 3)	= 180 m ²
-	Cupboards, etc		= 4 m ²
	Total		= 184 m²

after school

-	1.5 – 4 m ² per child		
-	25 – 30 per group		
-	1 group	= 30 x 4	= 120 m ²
-	Cupboards, etc		= 8 m ²
	Total		= 128 m²

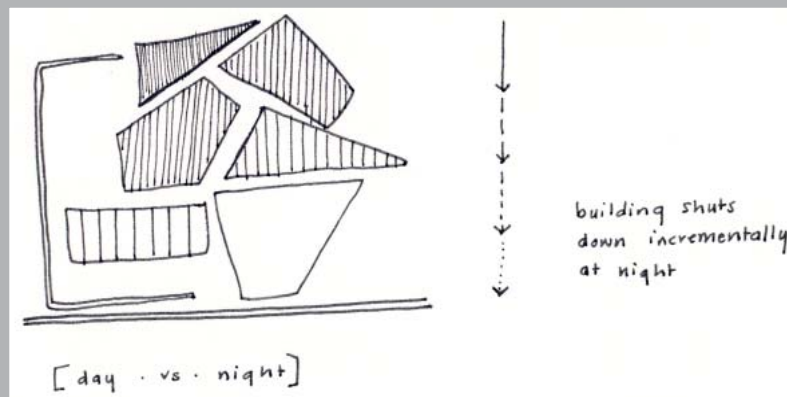
library

-	Reception	= 3 x 2	= 6 m ²
-	Book shelves	= 20(1.5 x 4)	= 120 m ²
-	Storeroom	= 4 x 3	= 12 m ²
-	Lounge area	= 4 x 8	= 32 m ²
-	Work area (tables)	= 4 x 10	= 40 m ²
-	Media	= 10 x 10	= 100 m ²
	Total		= 310 m²



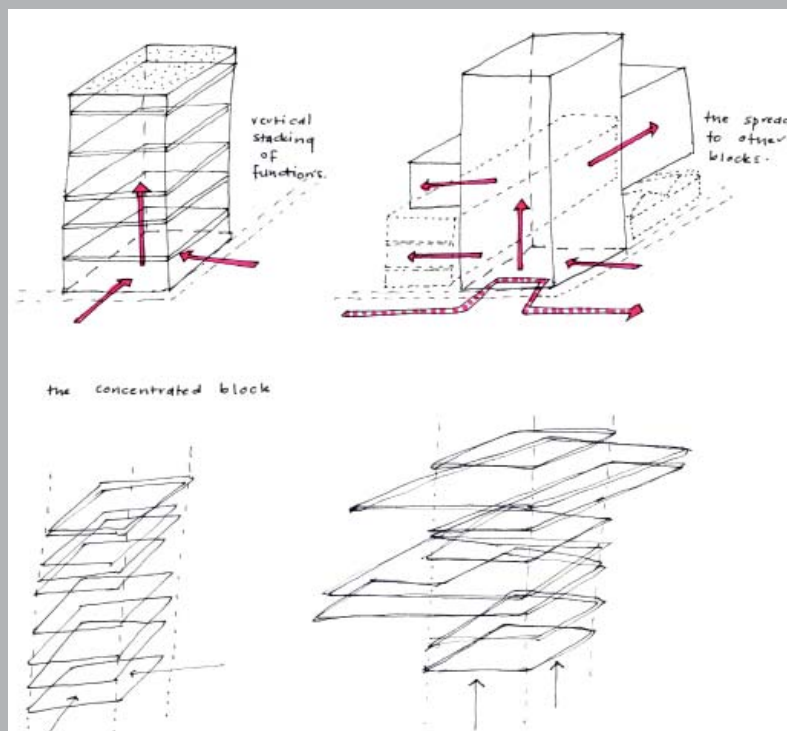
exploring threshold

investigation into height variations for security, privacy and access thresholds



time rental

investigation into vertical layering of day-time programme and the incremental closure progression from the top floor to the ground floor. The open site and terminus are to remain open 24 hours a day.



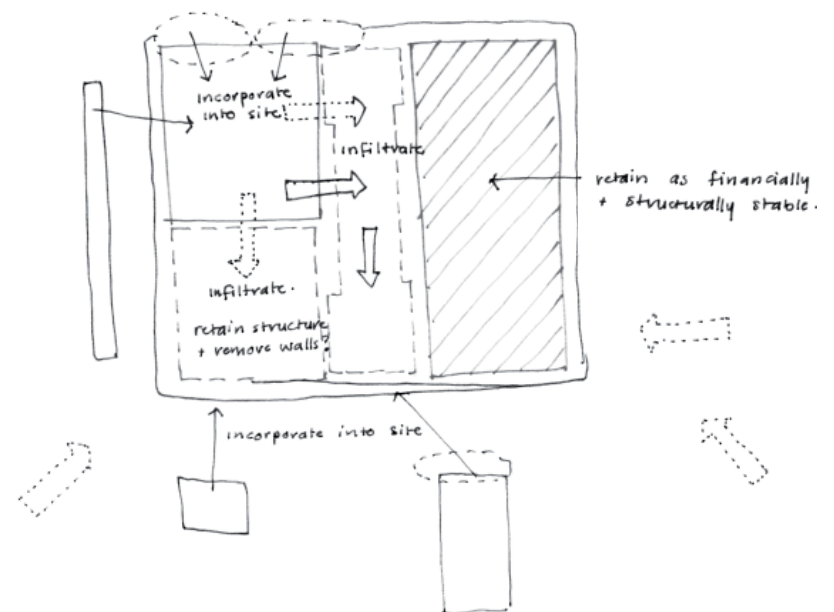
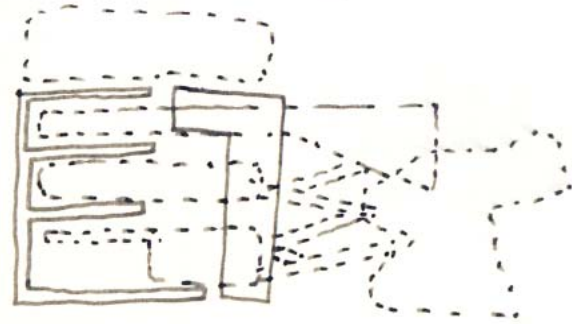
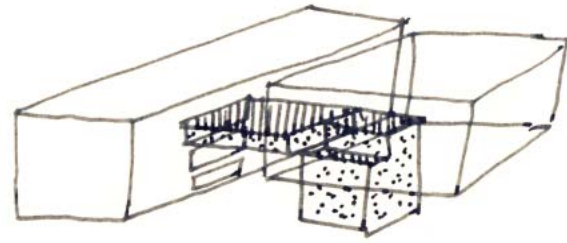
breaking the mould

investigation into the departure from the vertically-stacked city tower by shifting floor plates and volumes, thereby allowing for infiltration into and over the existing built landscape.



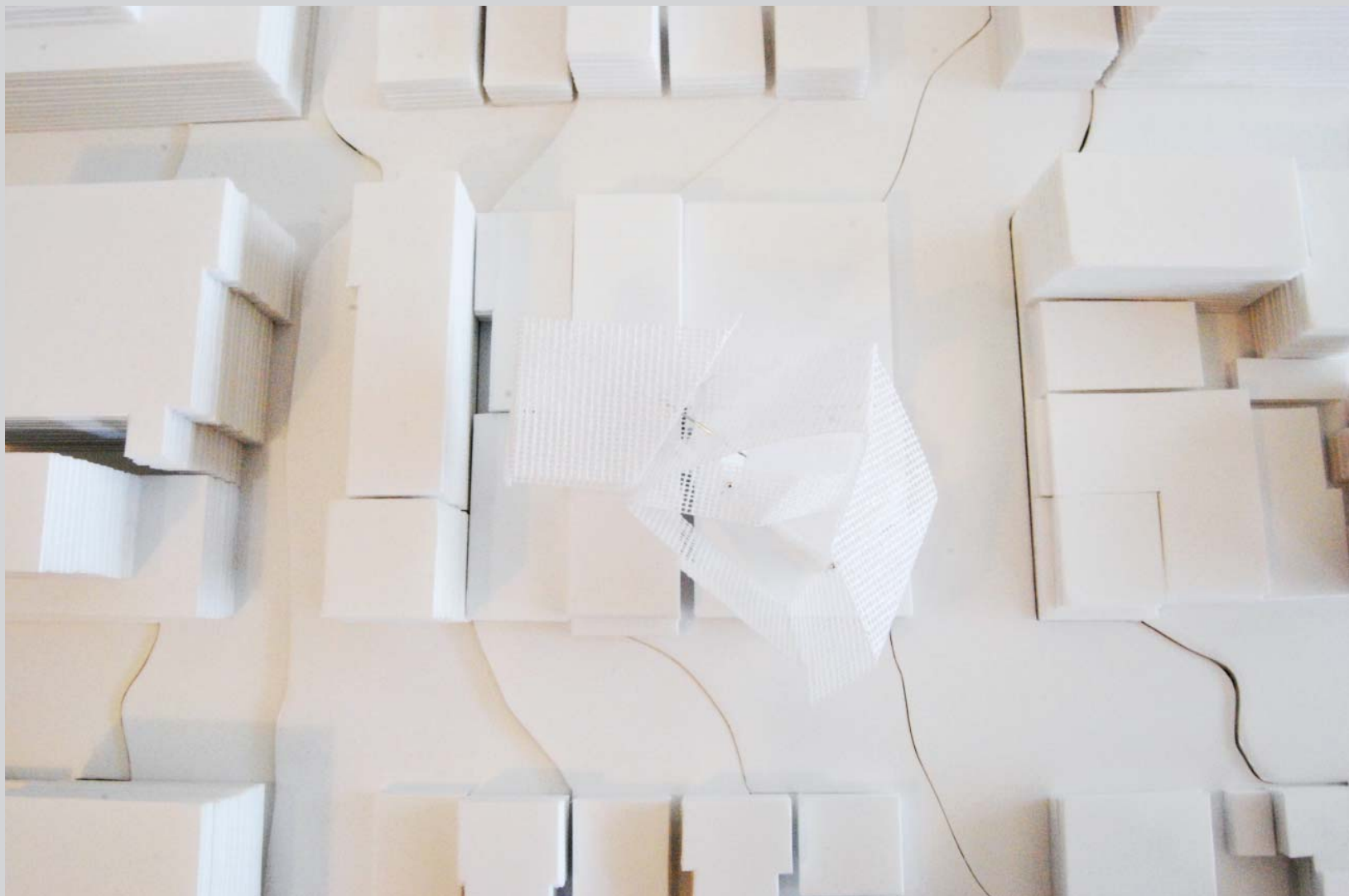
mutualism

A study of the physical manifestation of mutualism between 'parasite' and 'host'. The mutually beneficial relationship is to be physical, financial, social and programmatic. The two structurally-simplistic existing buildings allow for the material infiltration to occur. The formality and minimalism of the original forms, allows the new infusion to express itself as a unique entity and become an icon of urban regeneration and social possibility.

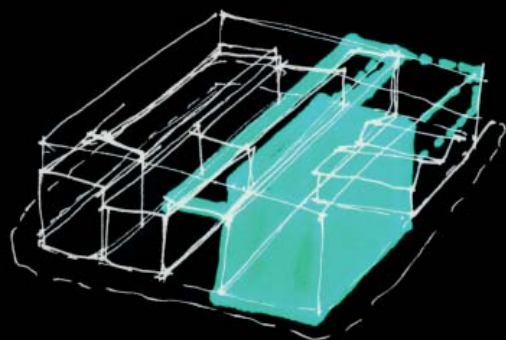
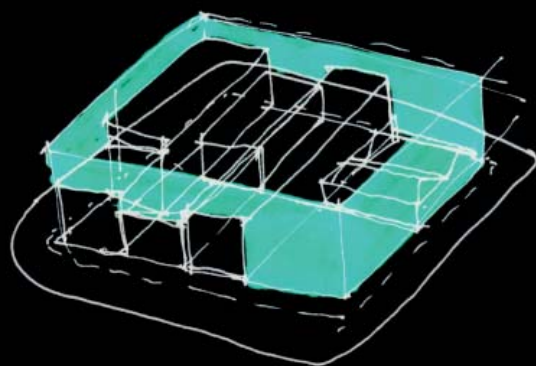
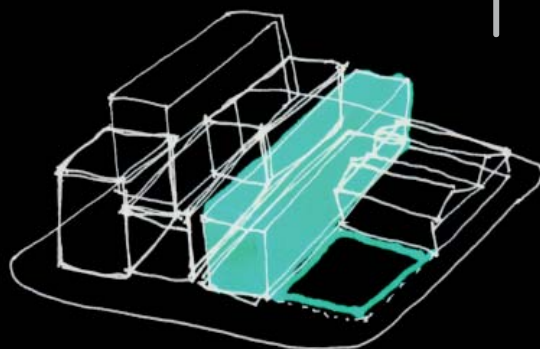


parasitic architecture

Las Palmas Parasite, Rotterdam –
Kortenier Stuhlmacher Architekten
(image:architecture.myninjaplease.com)



INFUSION



I N T O T H E B L O C K

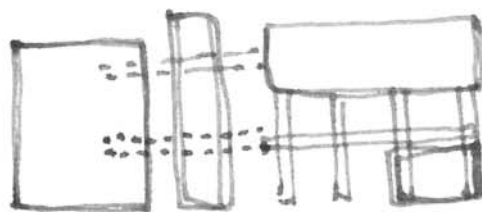
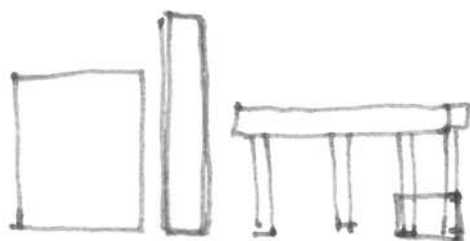
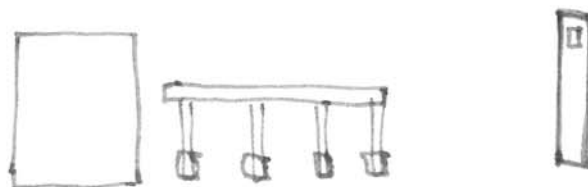
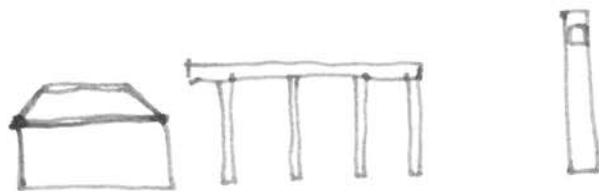
Testing the degree to which the mutualistic addition infiltrates into the existing built landscape.

The four buildings forming the eastern portion of the block are determined to be 'stable'; adding positive financial, programmatic, social and structural stability to the city block. For this reason, this portion of the block is to remain untouched, while the existing structures to the west, are to be utilised in the

113

The building to the East of the vacant site (which extends from Jeppe Street to Kerk Street) is an existing hybrid, containing a religious space, a badly organised crèche, a take-away restaurant, a small cellphone shop and a bus company. This hybrid can be seen as unproductive, as the spaces are inefficiently organised and the building is inaccessible to the general public. The formalised concrete-framed structure is to be (for the most part) kept intact and utilised as a 'host'. Any alterations are to be the rearrangement of internal non-load bearing walls and a few simple punctures into the skin, allowing the two structures to merge into one another.

The abandoned warehouse is to be incorporated into the development as it is seen (by the local community) to be a negative situation which is claimed to be connected with illegal transactions. The structure possesses the style and form reminiscent of early transport buildings in Johannesburg. The roof lights are similar to those on the original park station building and Museum Africa (the original city market). For this reason, the structure is to be largely retained. Ensuring that the roof is untouched will preserve the building's link to Johannesburg's historical transport aesthetic.



service station
to
city service station

12

D E S I G N
D E V E L O P M E N T

ARCHITECTURAL DEVICES

a : openness



b : internal street



c : service



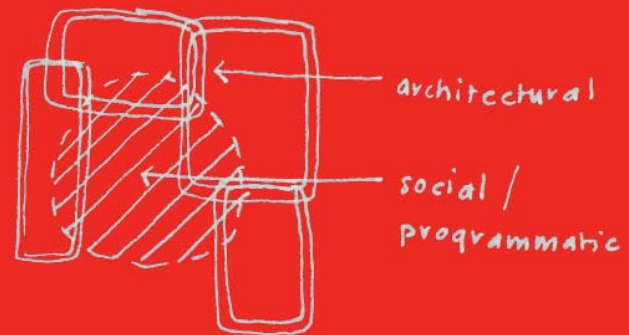
d : public : private



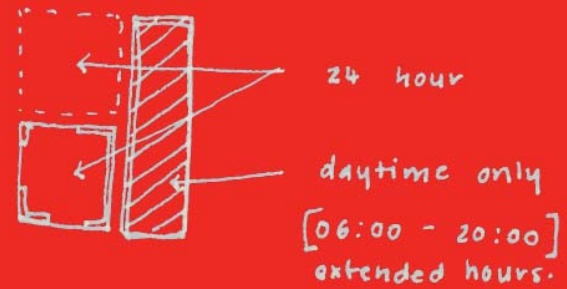
e : multiple publics



f : exposure + exchange



g : day vs night



h : urban detoxification



i : internal views



n : time rental



o : interactive architecture



p : structured vs unstructured programme



THE CREEPER

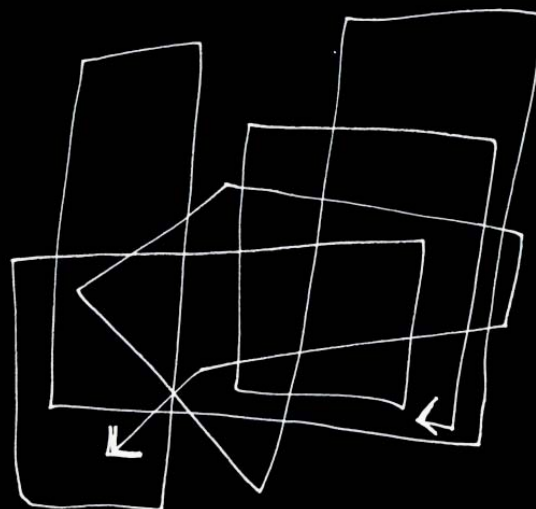
120

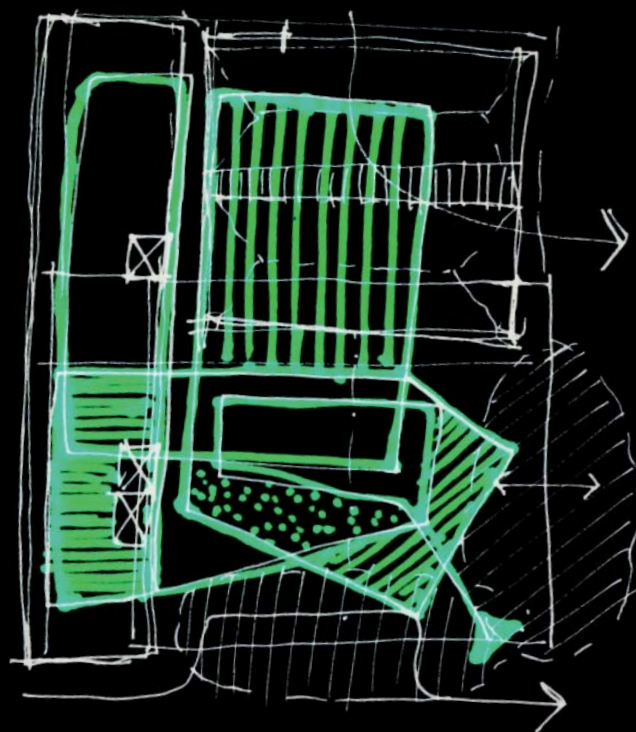
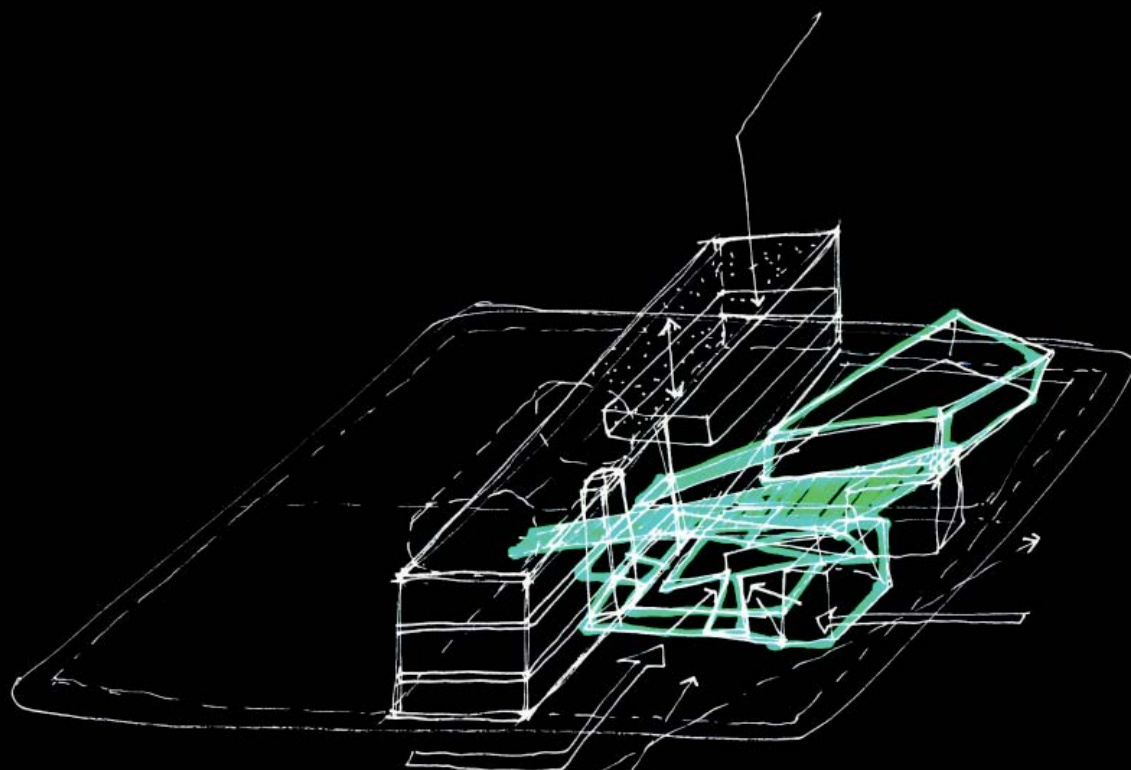
the creeper

The analogy of the creeper is continued in the design of the building in terms of structure and layout of programme. **The concept of plant-like exploration, expansion, multiplication and diversion, can exist in both the physical development of the building ('exploring' the built landscape) and in the experiential progression of the user.**

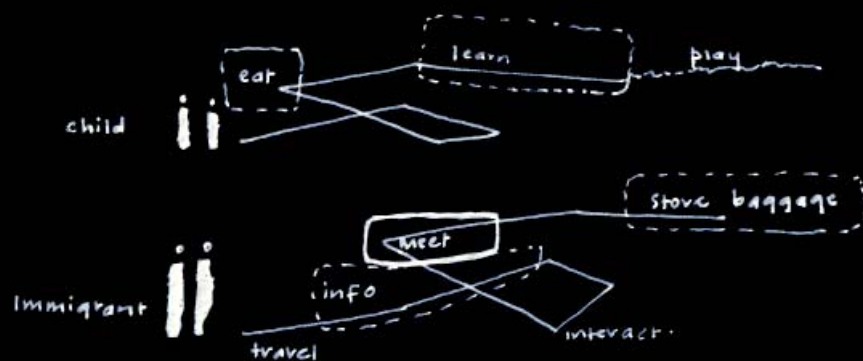
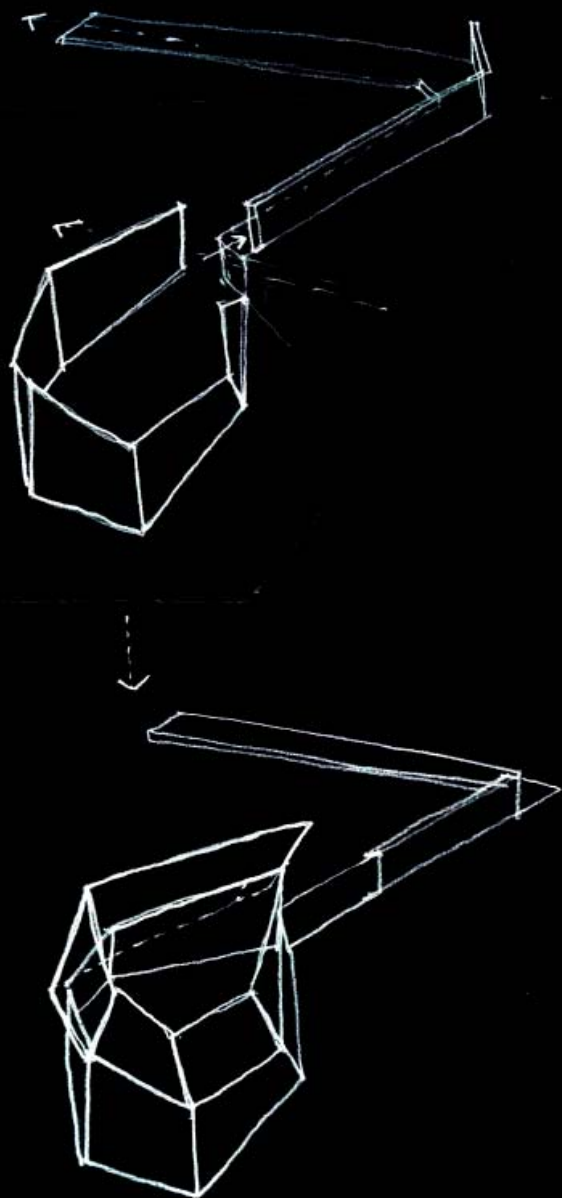
The slow, undulating circulation routes through the new structure are aimed at heightening the users' personal, physical interaction with the building, as well as to allow the structure to 'grow' upwards, gaining volume and skin; wrapping around itself to form envelope and diminishing to ooze into existing volumes.

The creeper becomes tangible in its progression from ramp, to balustrade, to wall, to envelope, to roof and then its reduction to screen and internal wall and junction with the existing.



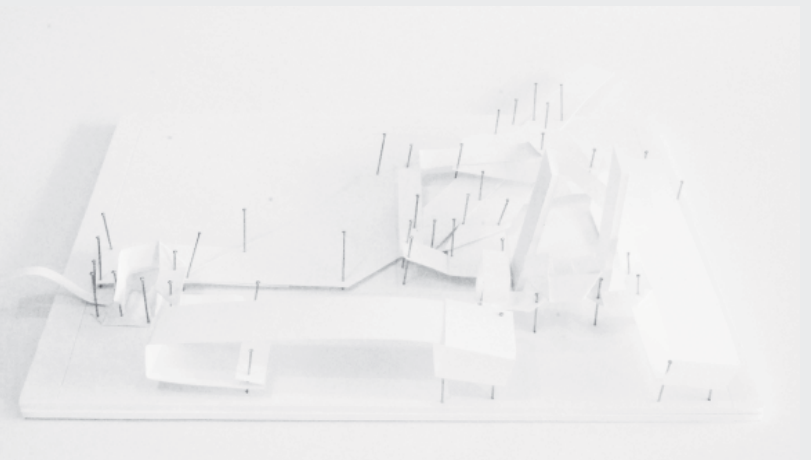
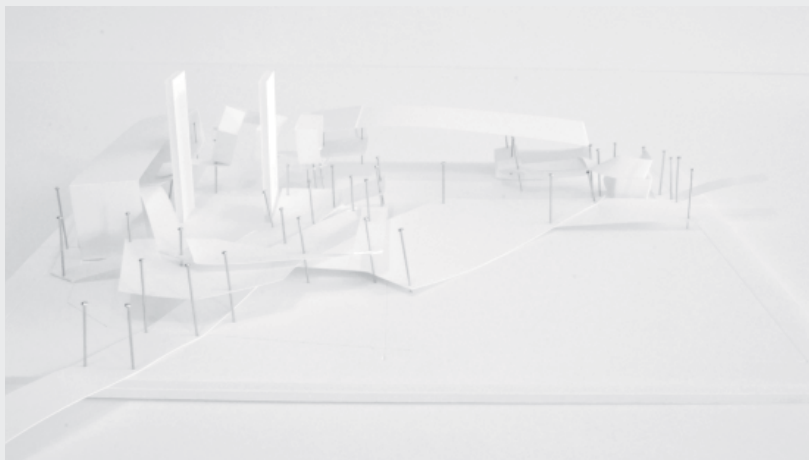
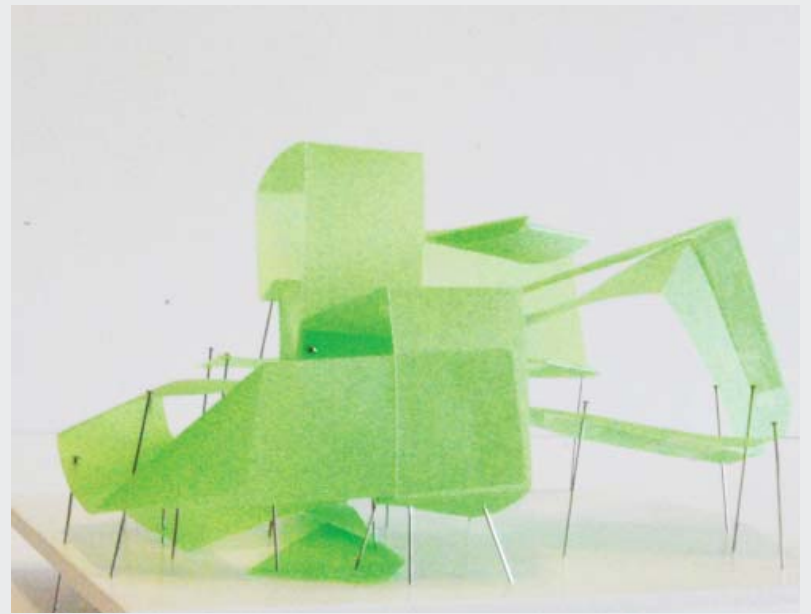


[from ramp, to balustrade, to wall, to envelope, to roof . . .]

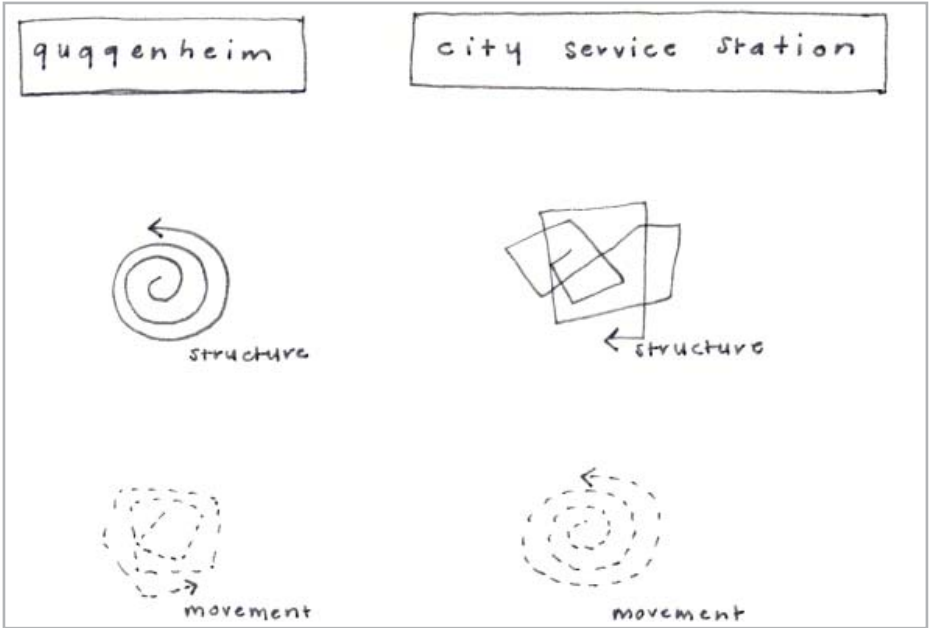
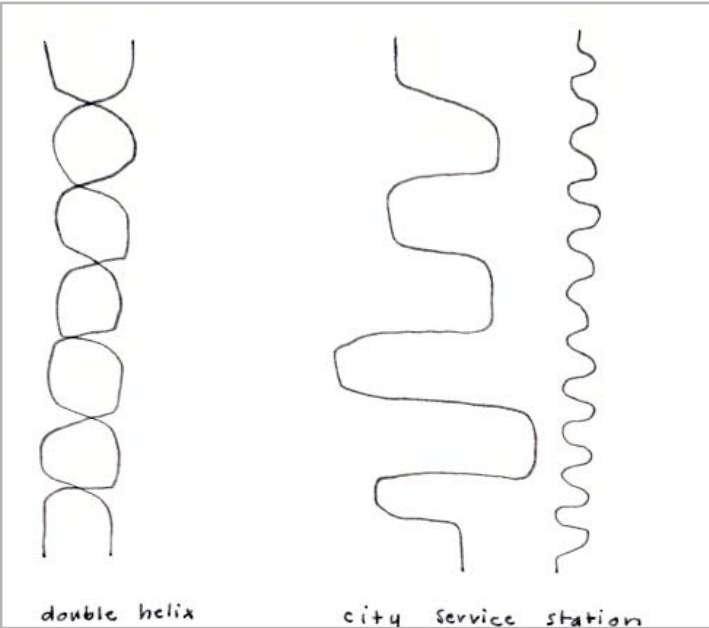


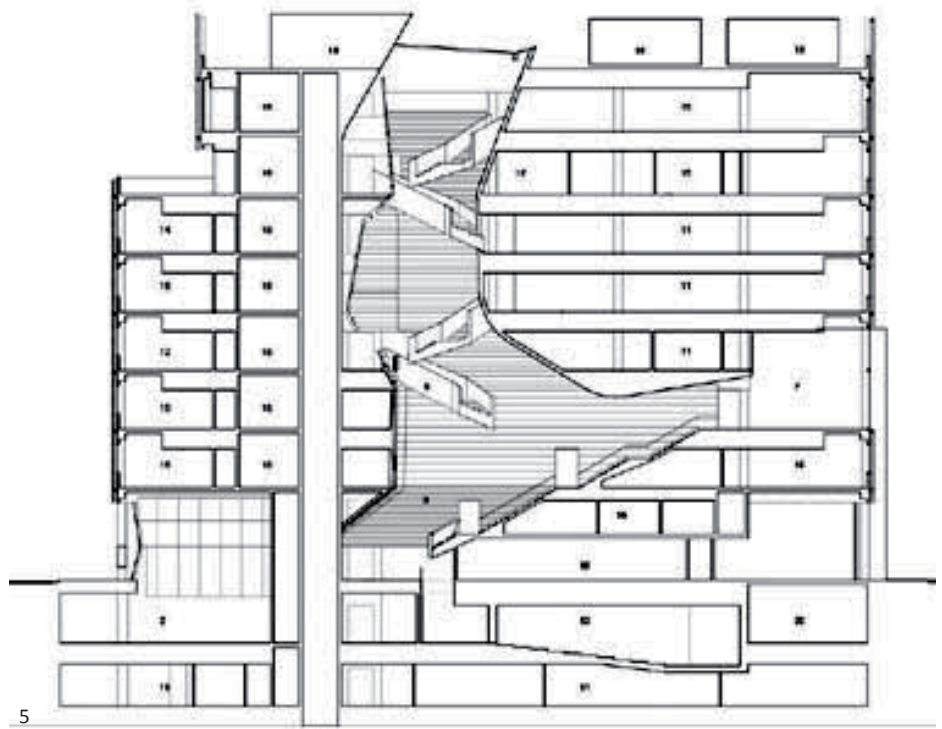
developing creeper

an exploration into the physical manifestations of the mutualistic creeper and its interaction with both old and new structures.



VERTICAL CIRCULATION





4 1 c o o p e r s q u a r e

the new academic building
for the cooper union
— Thom Mayne of Morphosis

images

1 - 4 : roland halbe for www.dezeen.com

5 : section through circulation core

www.arcspace.com

g e t y o u r s e l f h i g h

the chemical brothers

STRUCTURE

merging new with old

Dancing House, Prague _ Frank Gehry
(images: google images)

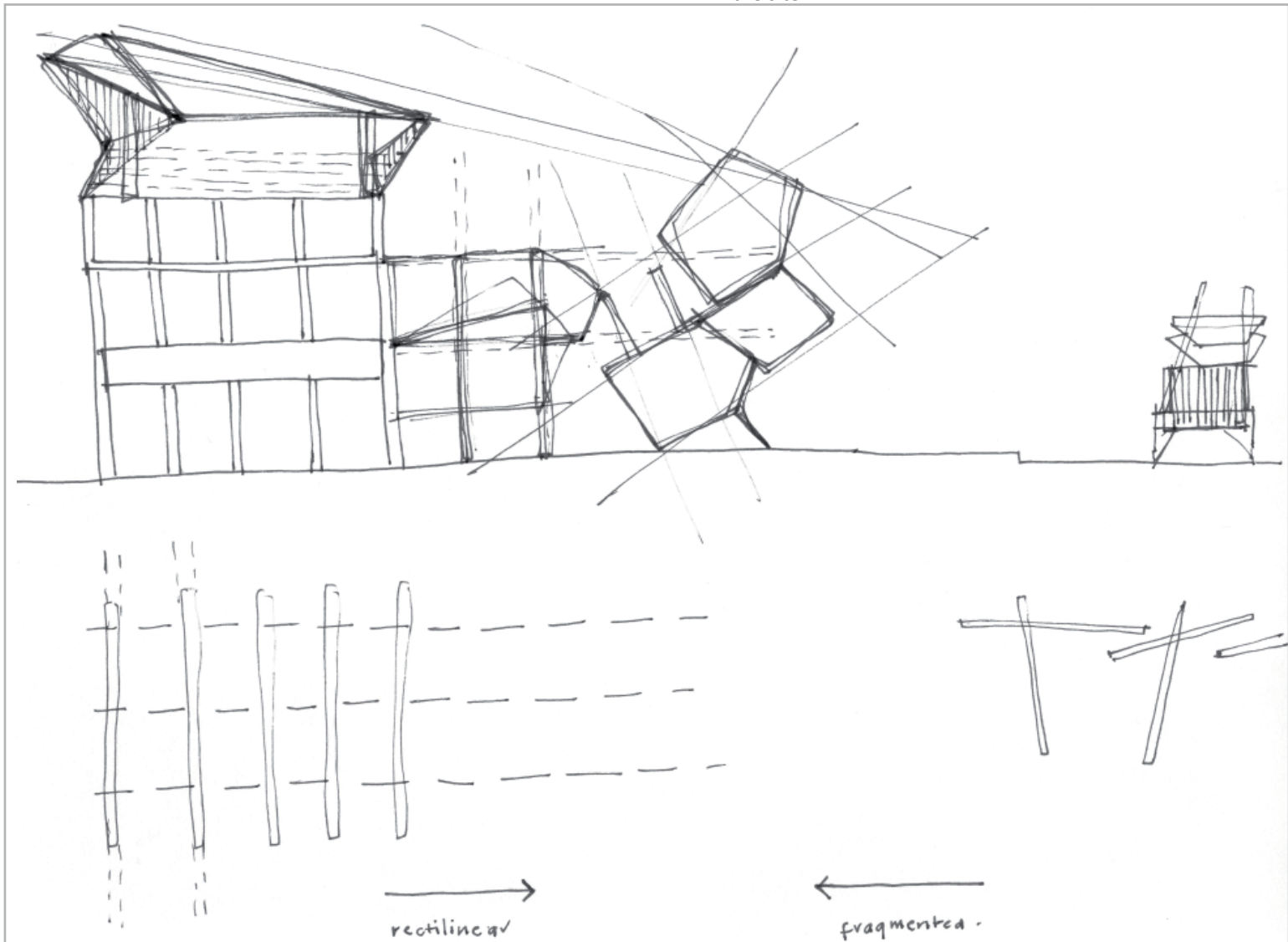
126



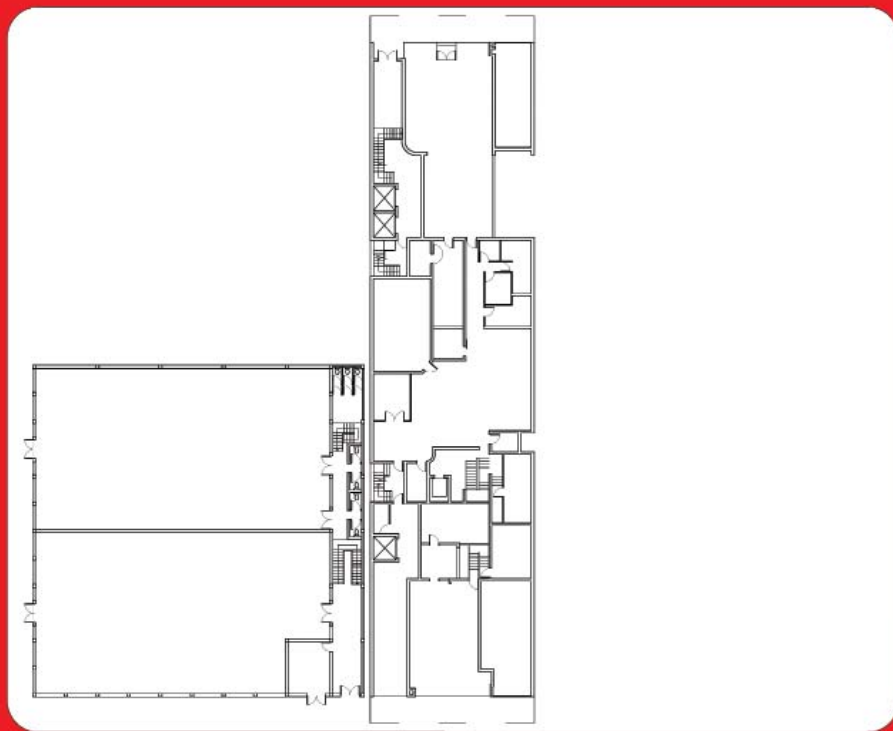
tying the new into the existing fabric

The existing buildings consist of two concrete-framed buildings, each with a regular column grid, predominantly to the edges of each form. This produces free internal spaces which allow for flexible division according to the specific programme. The new structure is to appear as a product of the two existing buildings; allowing both new and old to have a physical effect on each other. For this reason, the prominent grid lines from each original structure are merged and continued onto the new site. This allows the organization of each building to be read in the respective street elevations, where old and new meet.

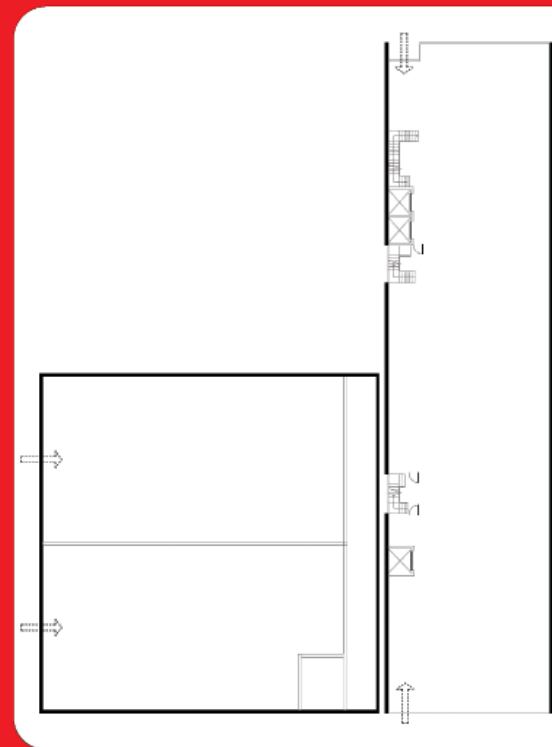
As the new structure regresses from the existing, the grid begins to fragment and deconstruct. This disintegration is to relate to the fragmented form of the BRT station to the west of the site.



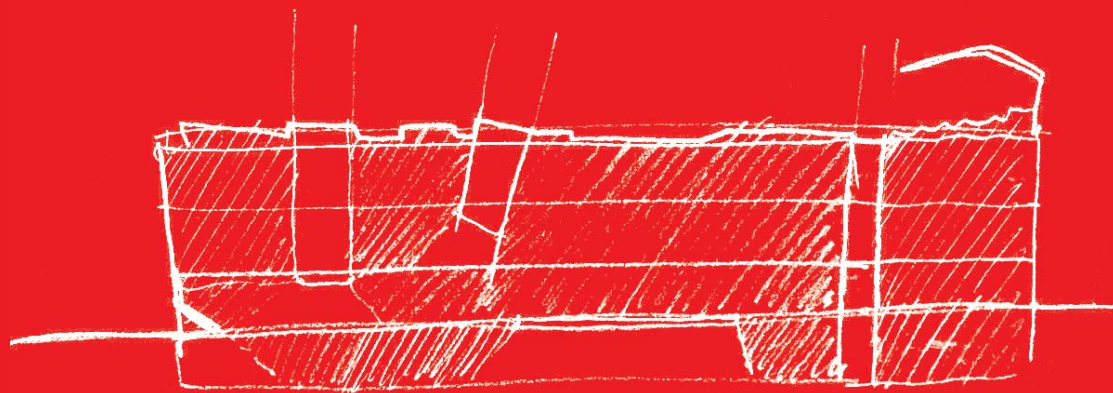
BREAKING THE BLOCK



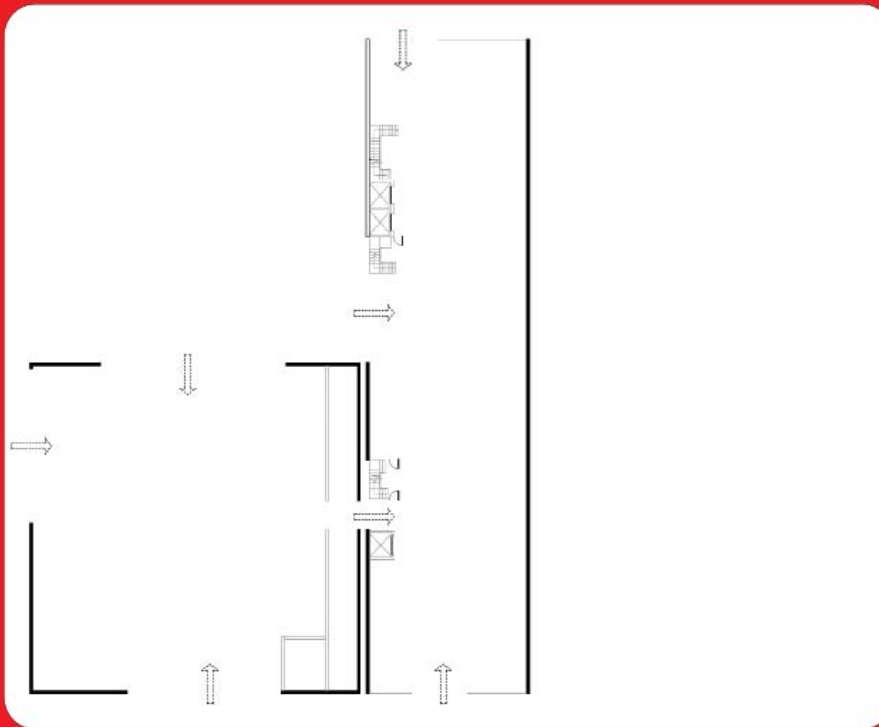
1



2



4



3

infusion into the existing

A study of the transformation of the ground plane generated by the mutualistic addition. The cuts into the existing structure relate to the access and circulation routes of the development. The openings allow all three structures to blend into one another to form one homogenous form and experience.

1 : the existing floor plans for the two original buildings

2 : the existing openings to the original buildings

3 : the new openings into both structures, exposing them to the open site

4 : cutting into the existing building (to the east of the open site) to create light wells into the lower levels.

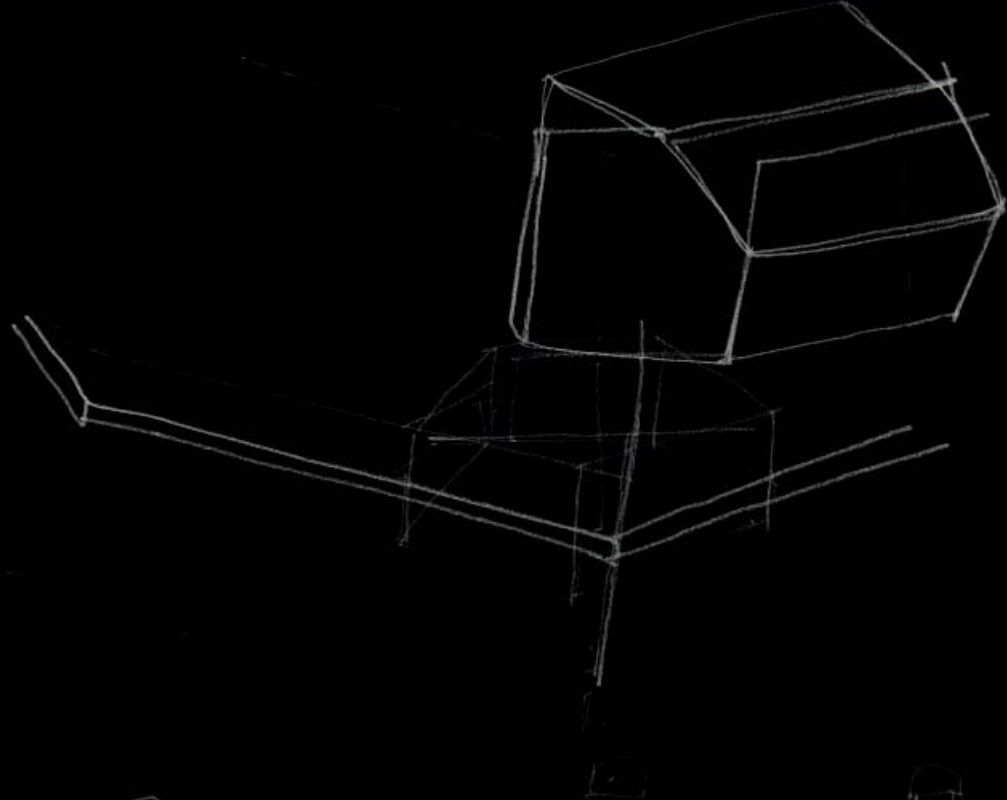
The light well contains vents at the top, allowing hot air to escape and therefore cooling the amenity arcade on the ground floor.

5 : the angle of the glazing in the light well creates a connection between the children in the kindergarten and people in the amenity arcade while people in the clinic are excluded, giving them a sense of privacy.



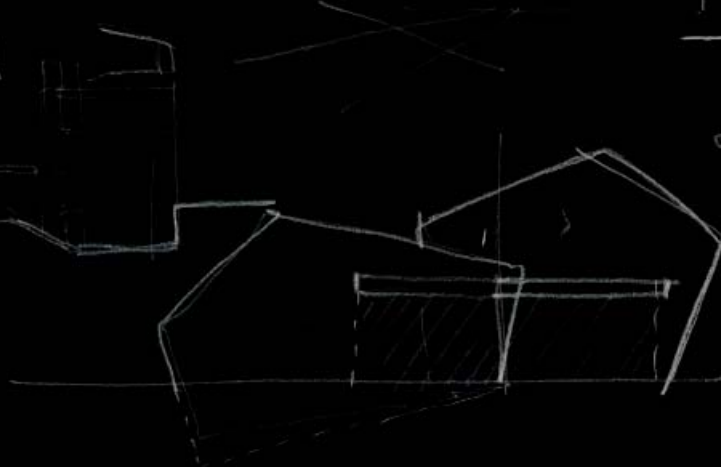
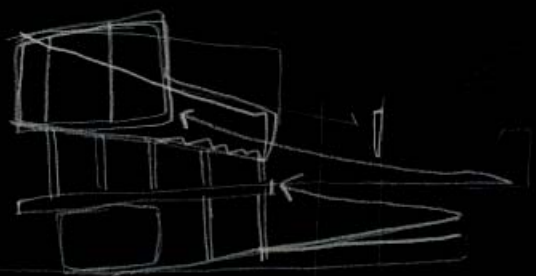
5

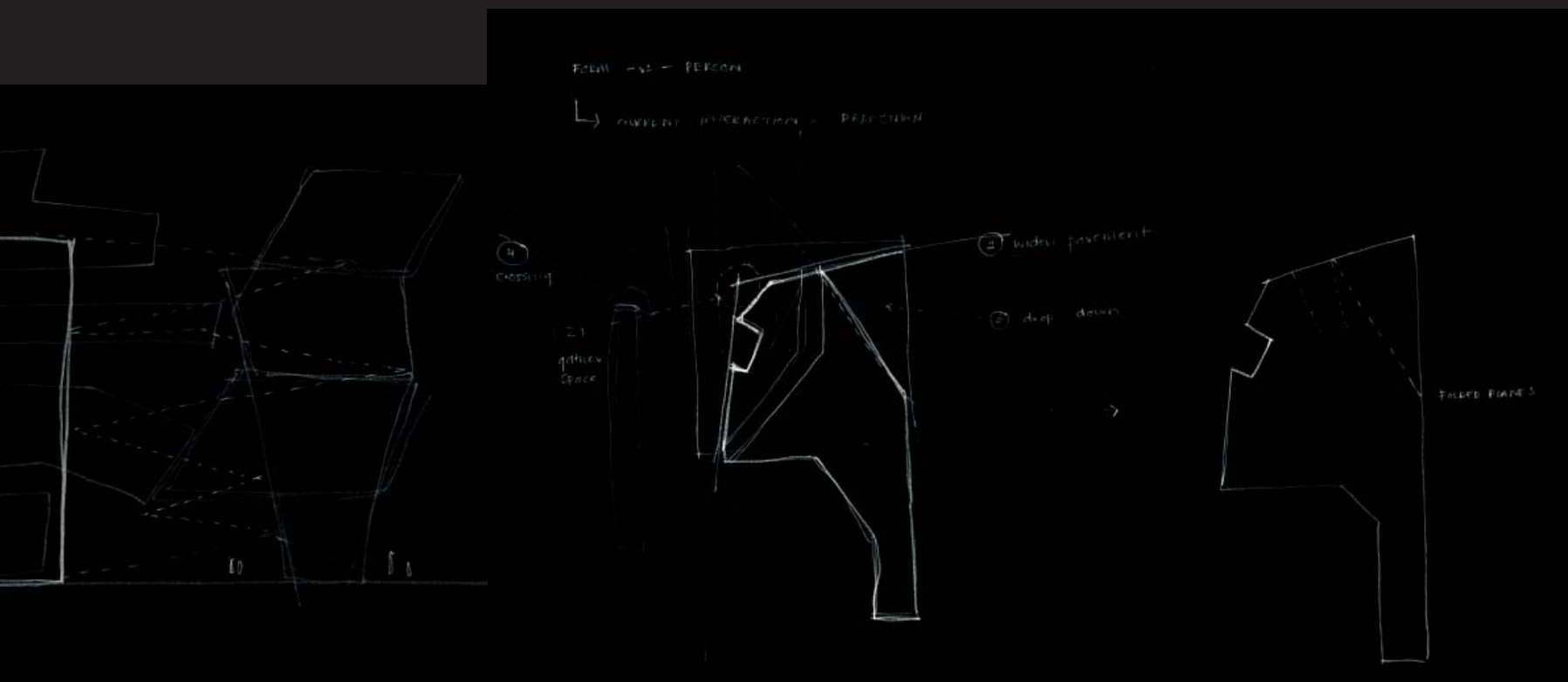
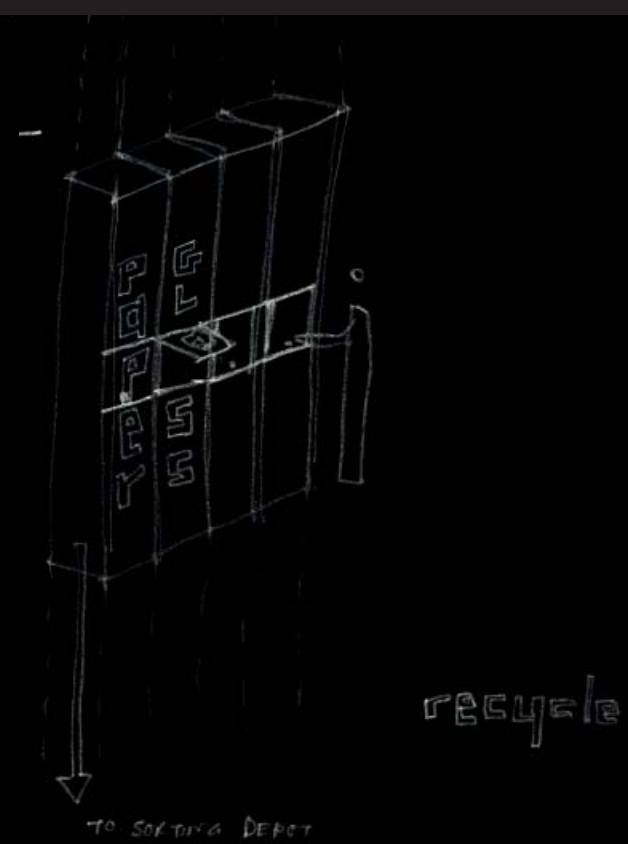
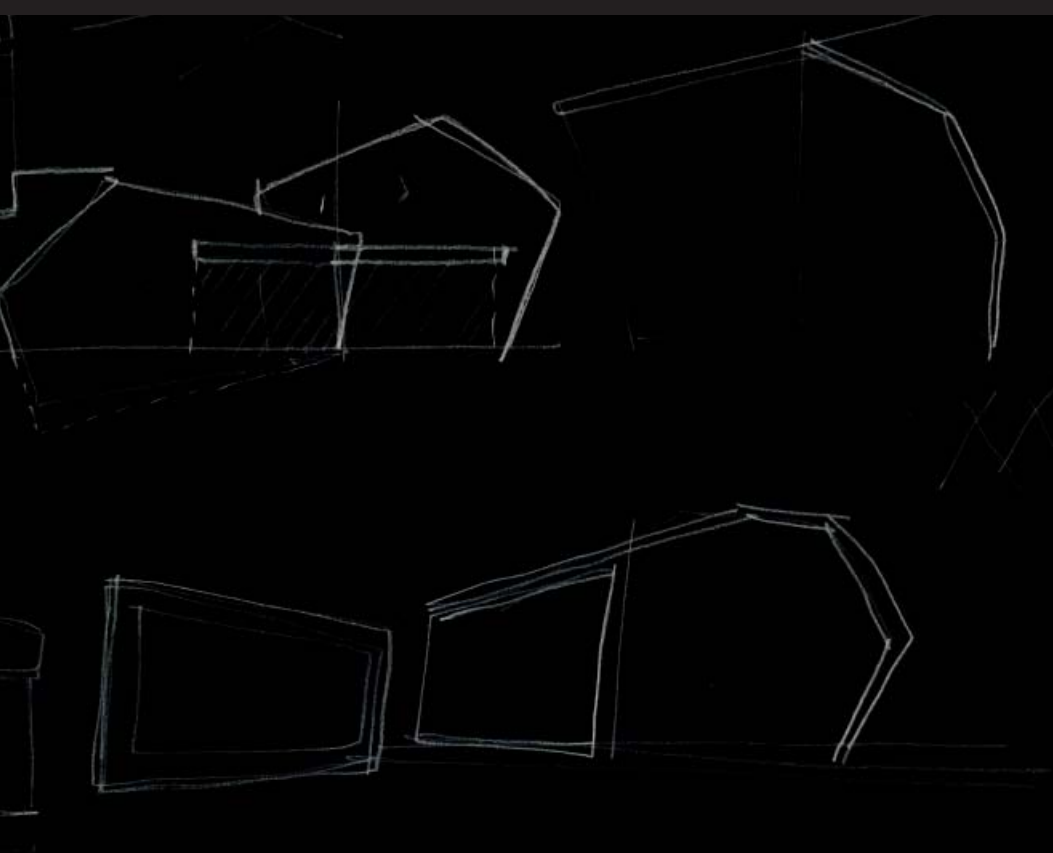




4000'
= 27000

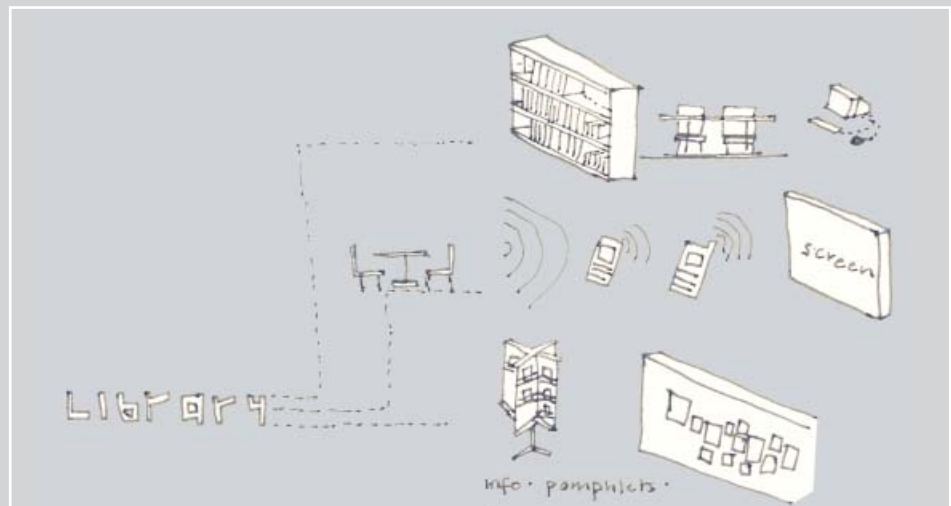
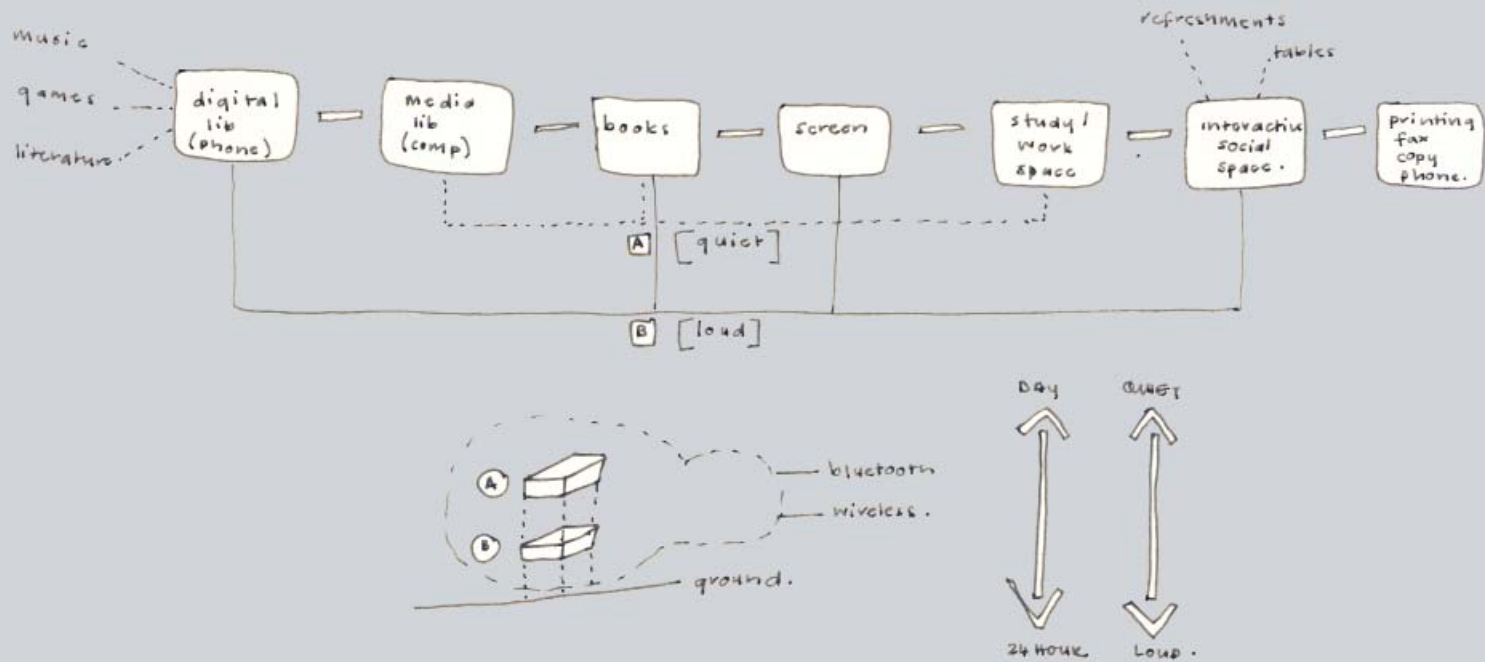
26 456.
1500





REDEFINING PROGRAMME

[programming waiting]



rethinking the library as a type

[opposite]

Questioning the constituents of the 'library' when it exists in the inner city

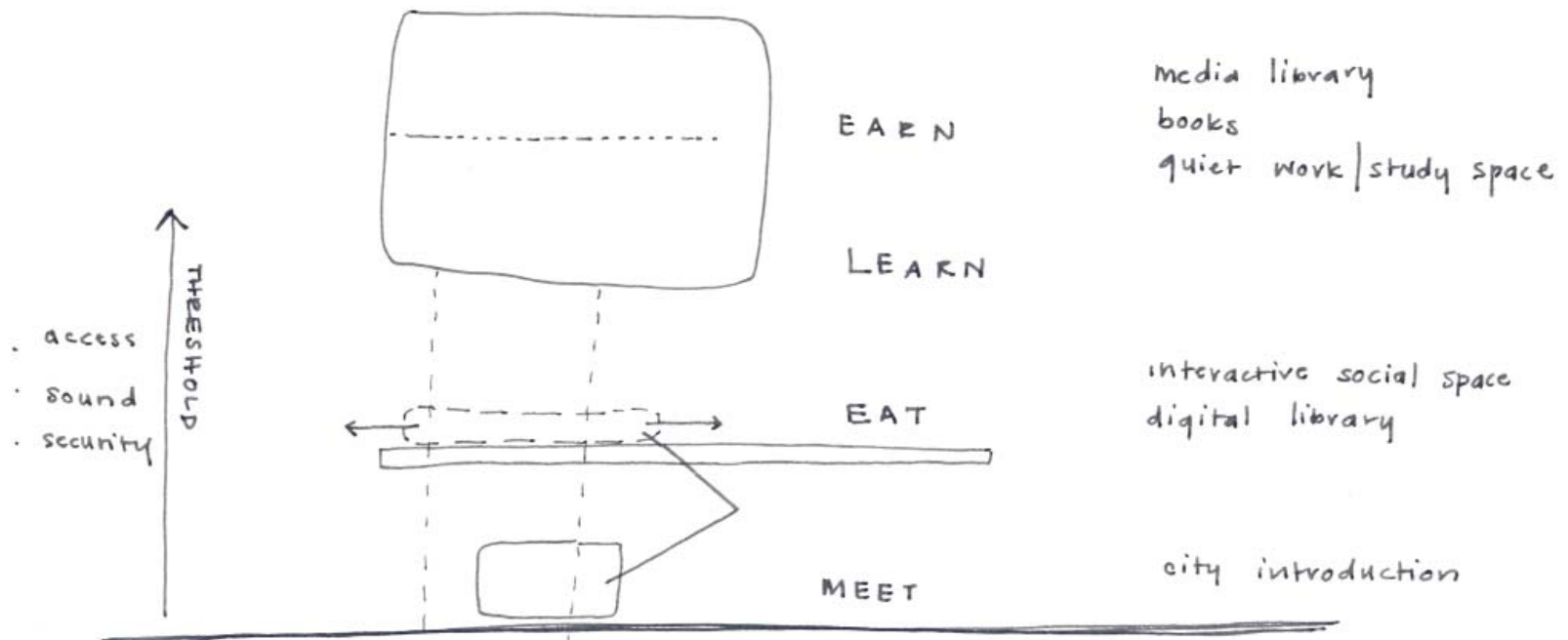
The inner city library is, in its essence, about a transfer of information, predominantly by means of cellphone based media (such as games, books and music). Through this transmission, the cellphone becomes the basis of both virtual and literal social networking. Social gathering and entertainment becomes a primary constituent of this urban information centre. The existence of traditional book storage and quiet work space becomes less important, but remains valuable as a space to be utilised by all ages.

[this page]

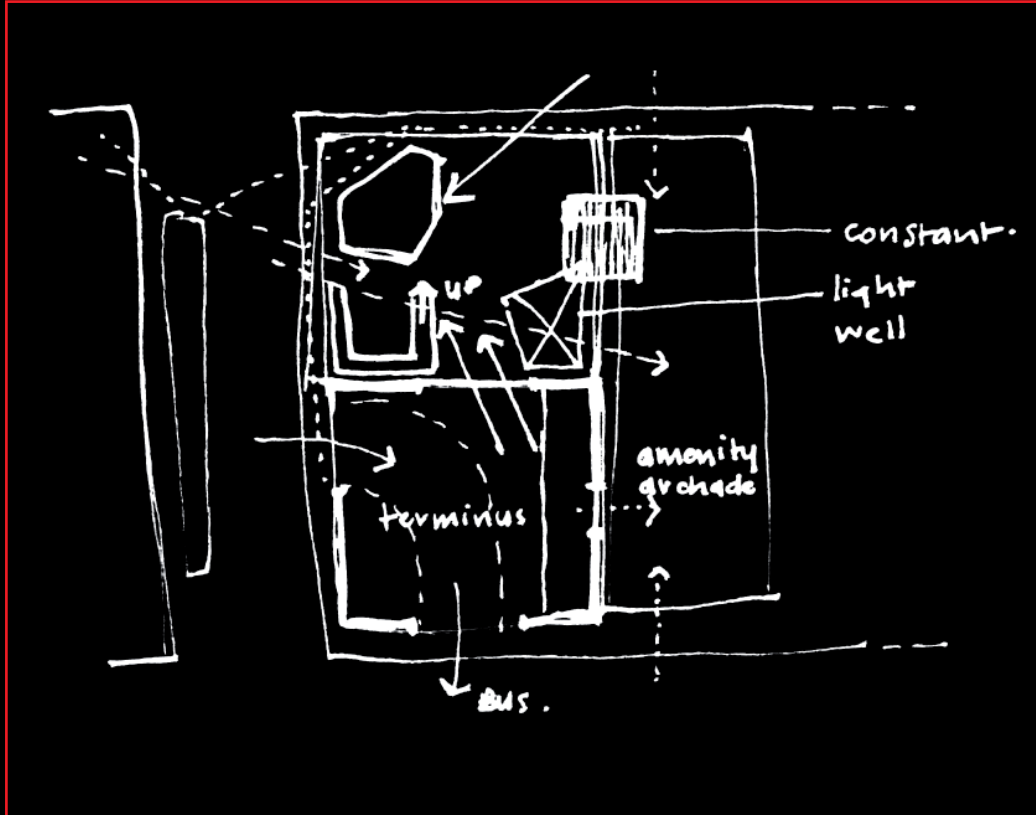
Library + cafe

Fragmenting the notion of cafe and library and creating a form of multi-layered hybrid, allowing each programme to influence each other. The social function of each, makes them compatible. The resultant diagram is at its essence, the basis of the new form.

133



SITE RESPONSE



134

people carving
routes into the site
access routes, sight lines, pedestrian movement
and ordering related to programmatic significance
begins to inform the layout and splintering
structure of the ground floor and the progression
with which the following floors exist.

breaking the block

Considering the complete volume available on the open site in order to understand the consequences of the architectural and theoretical devices employed to develop the new form.



cutting corners

Exposing the corner (the most important public space in the Johannesburg city block).

Cutting the library volume to create a view into the space from all four corners, advertising its programme allowing people to draw other people to the space.



directional building

A building which announces entrance and conveys openness and democracy.

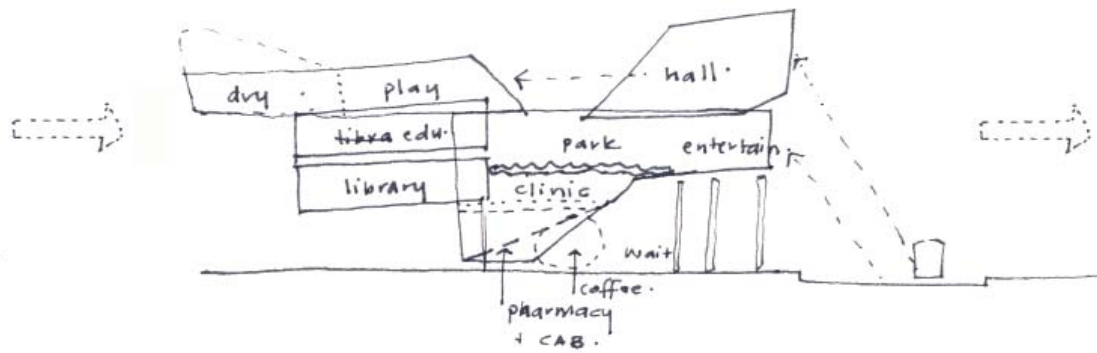
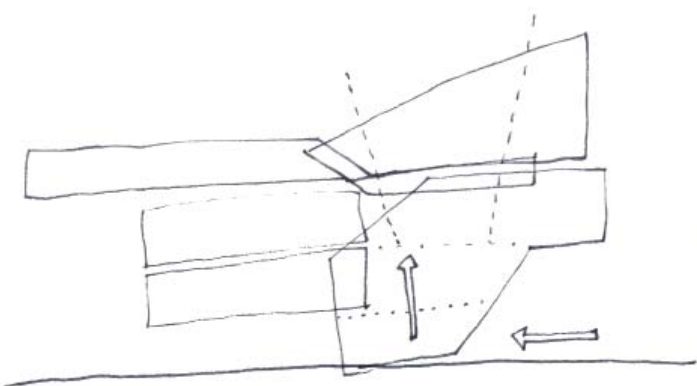


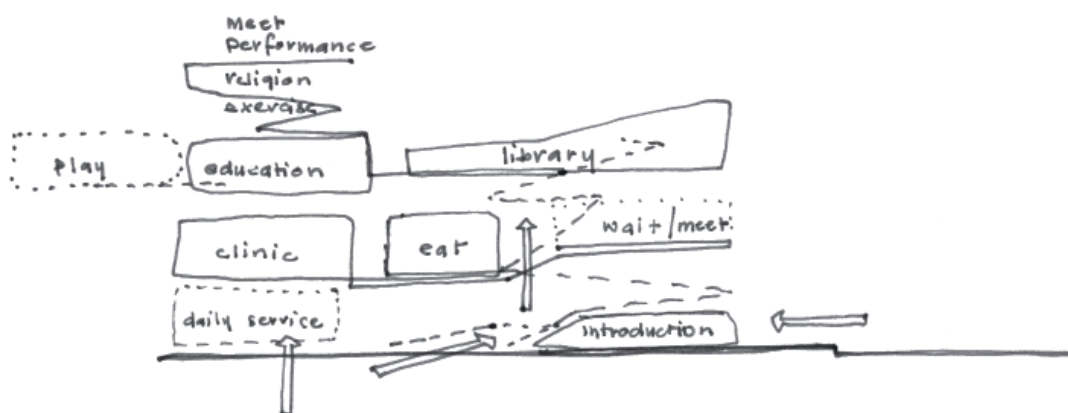
elevating knowledge

Levels of accessible information and social networking growing in spatial formality towards the second floor.

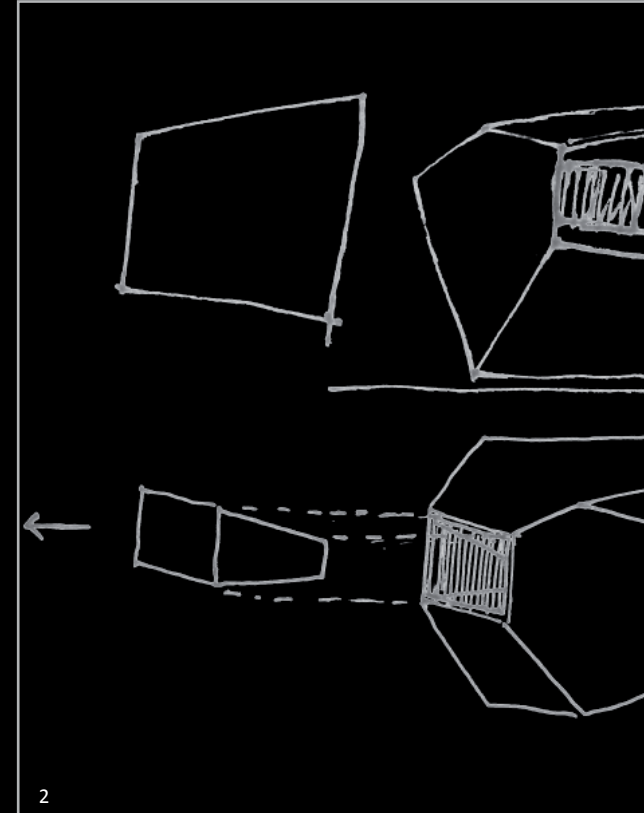
As the user moves upwards, they are exposed to and become involved in more programme and opportunities.



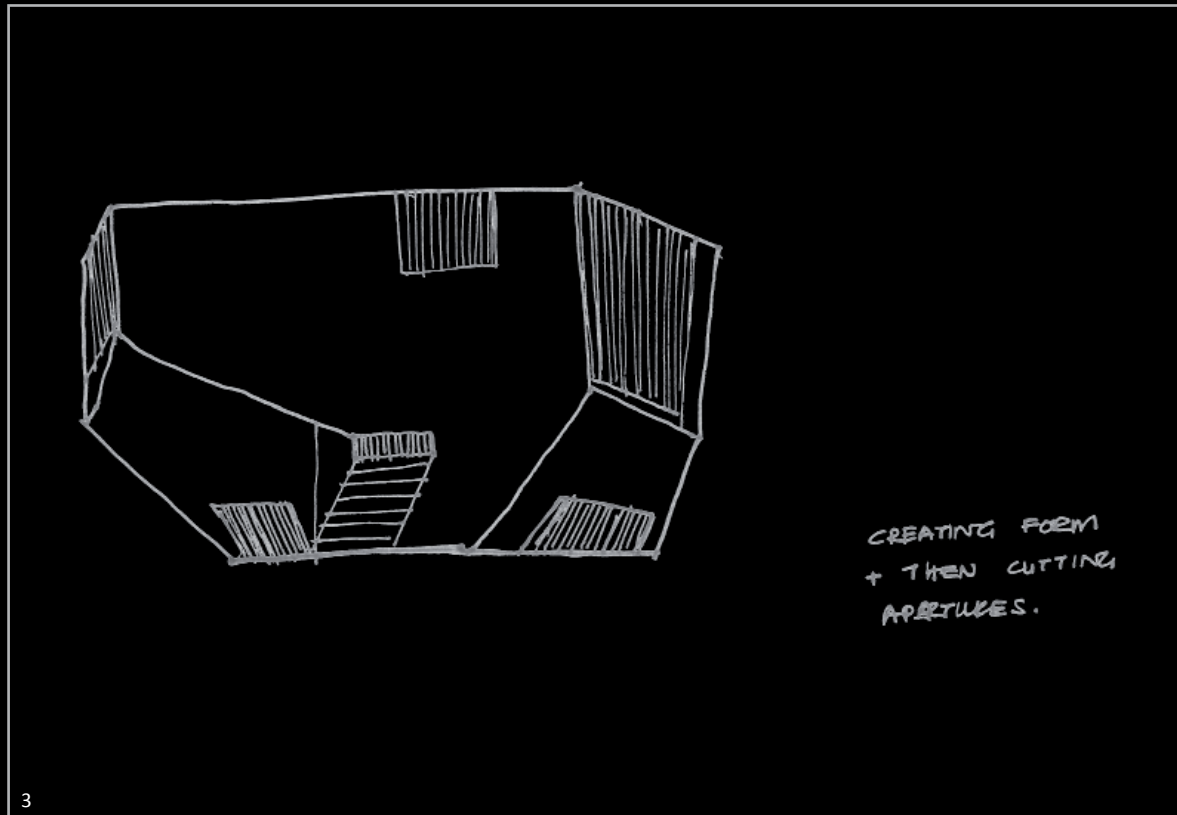
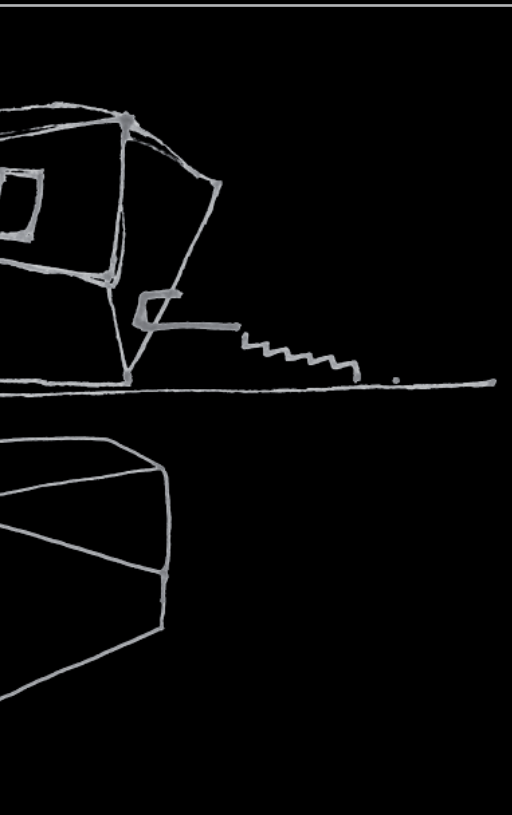




DEVELOPING FORM



r e g u l a r f o r m
i r r e g u l a r c u t s



3

139

c a s a d e m u s i c a

porto, portugal _ OMA

1 : *www.arquibooks.blogspot.com*
 2 - 3 : exploring the de-
 sign of fragmented forms

carving the library

A regular form, sculpted by the defined architectural devices.

link

The building begins to merge with the existing structure. The materiality of the new library slides over the existing facade, showing the infusion of new into old.

views generate cuts

The form is generated by the views into the building from the street and the internal courtyard. The library is designed to expose specific internal functions to the passing public. For this reason, facets in the skin, frame and promote certain interior occurrences, such as the media library or reading and socialising spaces.

simplify

The envelope is to be kept as understated as possible in order to allow for the framed views to take precedence and to ensure that the form is accessible and not foreign or intimidating.

appropriate scale

A mezzanine is designed to halve the larger volume, separating the loud and quiet portions of the library. The form is to decrease in mass as it attaches itself to the existing structure, celebrating the junction.

connecting structure and street

An angled cut at the base of the library creates a link between people on the street and people using the space. This is to encourage the growth of the social network and promote the use of the space.

reduction

The angled window allows the form to appear thinner and less solid and weighty, while the glazing opens the facade and makes it more approachable.

deduction

The volume is decreased further where the new form meets the old.

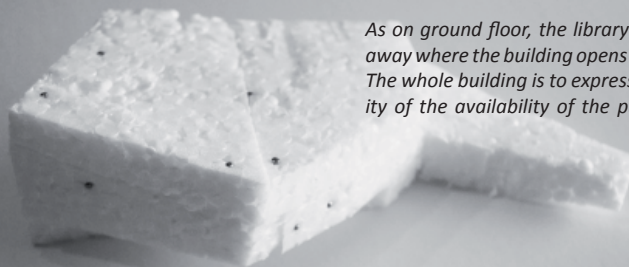
denoting entrance

Additional volume is added to create an overhang as the ramp intersects with the library.



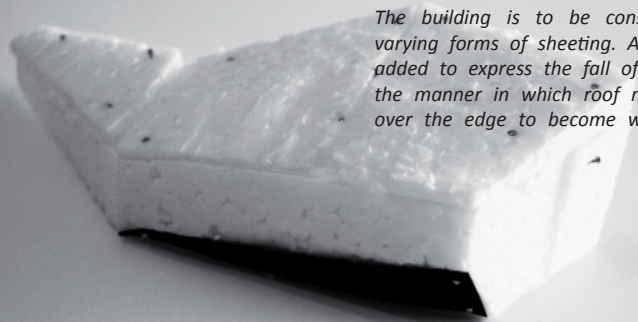
directional incisions

As on ground floor, the library form is carved away where the building opens onto the street. The whole building is to express the accessibility of the availability of the public structure.



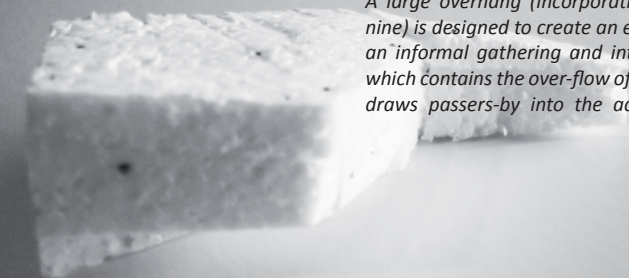
covering

The building is to be constructed using varying forms of sheeting. A roof plane is added to express the fall of the roof and the manner in which roof material wraps over the edge to become wall treatment.



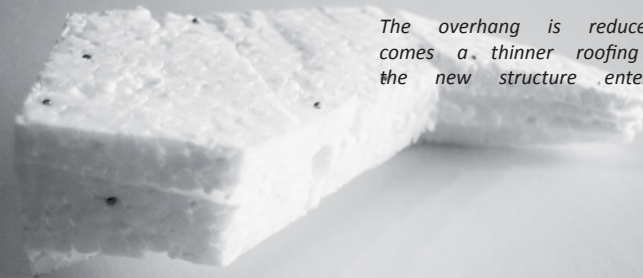
exterior library

A large overhang (incorporating the mezzanine) is designed to create an external library; an informal gathering and interactive space which contains the over-flow of the library and draws passers-by into the activities within.



juncti on

The overhang is reduced and becomes a thinner roofing element as the new structure enters the old.



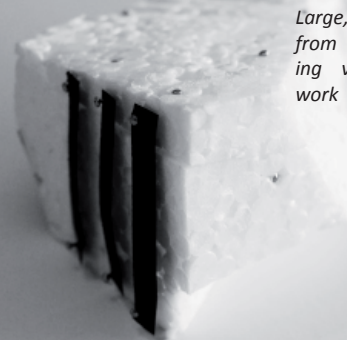
inclusi onary form

The overhang and mezzanine are cut away, producing a simplified, enclosing structure, which appears to contain the internal courtyard of the open site while reducing the mass of the library structure. The angle of the incision allows more light into the open space.



building frame

Large, vertical structural fins extend from the second floor to the roof, framing views into the media library and work space on the mezzanine level.



glazed connections

Translucent facets of the library allow the structure to open up towards the interior courtyard. This promotes views into the library, maintaining the social and architectural connections throughout the new development. The opening allows softer southern light into the formal working space within the library.



public profile

city service station



single mother

06: 00 - drops child at the creche
06: 15 - buys a cup of tea from the kiosk
06: 25 - takes BRT to work

- 2nd floor
- ground floor
- across the road

16: 30 - arrives by BRT
- collects child
16: 45 - meets her friend at the library
17: 00 - attends religious meeting

- across the road
- 2nd floor
- 2nd floor
- rooftop amphitheatre



child

14: 00 - arrives by foot
- buys herself lunch from the stalls
14: 30 - does her homework in the quiet library
17: 00 - meets her older brother in the loud library
17: 10 - goes home by taxi

- 1st floor
- 3rd floor
- 2nd floor
- ground floor



immigrant

08: 00 - arrives from Lusaka
08: 30 - eats breakfast from the zambian food stall
09: 15 - visits the citizen advice center
10: 00 - finds an accommodation advert on the notice board
10: 15 - contacts the land lord via email in the media library
- prints the information he needs

- terminus
- 1st floor
- ground floor
- ramp from ground floor
- 2nd floor
- 2nd floor



student

09: 00 - has her hair done in the amenity arcade
10: 00 - buys a cup of coffee from the kiosk
10: 00 - catches a taxi to university
16: 30 - arrives by taxi
- collects her medication from the pharmacy
16: 45 - meets her friends at the loud library
17: 00 - attends a play rehearsal

- 2nd floor
- ground floor
- ground floor
- ground floor
- ground floor
- 2nd floor
- rooftop amphitheatre



trolley pusher

07: 00 - arrives with daily cardboard collection
07: 30 - sorts his goods in the depot
09: 00 - meets the co-ordinator for payment
10: 30 - buys food from the stalls
11: 00 - watches a documentary while he waits for his appointment at the clinic
11: 30 - visits the clinic
13: 00 - sorts the daily recycling from the building

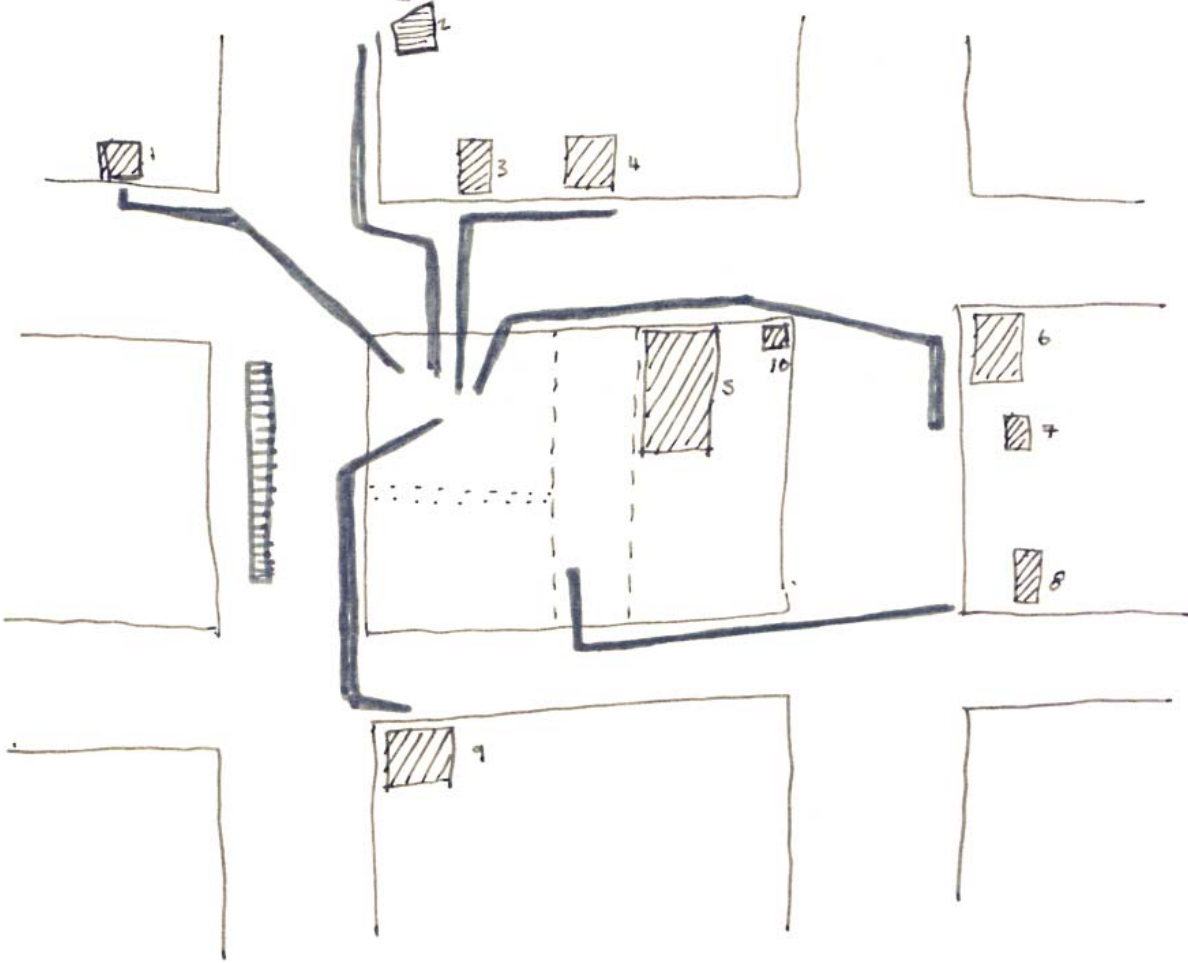
- basement
- basement
- basement
- 1st floor
- 1st floor
- 1st floor
- basement



13

U R B A N
I N T E R V E N T I O N

urban plan.



2



3



7



147

[opposite]

culmination of surrounding social and amenity networks

The aim of the new public amenity node is not to replace the social and programmatic systems that exist, but rather to create a centralised community location which draws all these networks together in a building which supplements the area with that which it lacks and improves and enhances that which is present but insufficient or ineffective.

1: laundry 2: boxing gym 3: tavern
4: tavern 5: restaurant 6: tavern
7: hair dresser 8: laundry 9: freight and postage 10: beauty salon

[this page]

services

Amenities within the surrounding city blocks, as per urban network diagram (opposite).

8



10



14

ARCHITECTURAL
INTERVENTION

[this page]

s i t e m o d e l

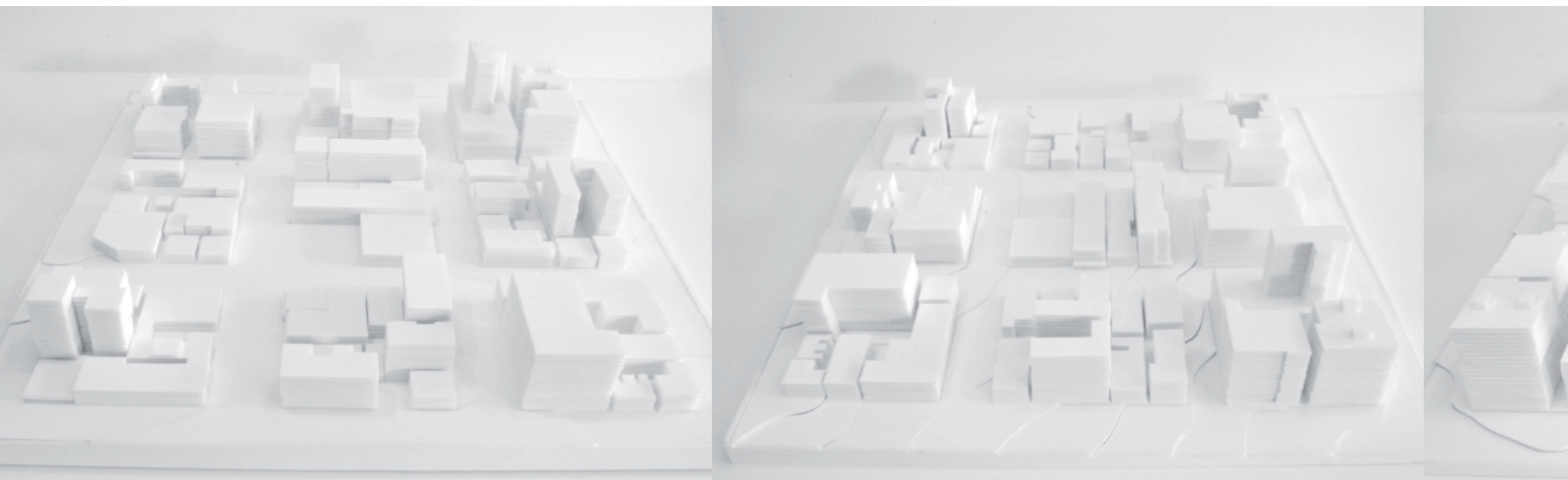
[from left to right]

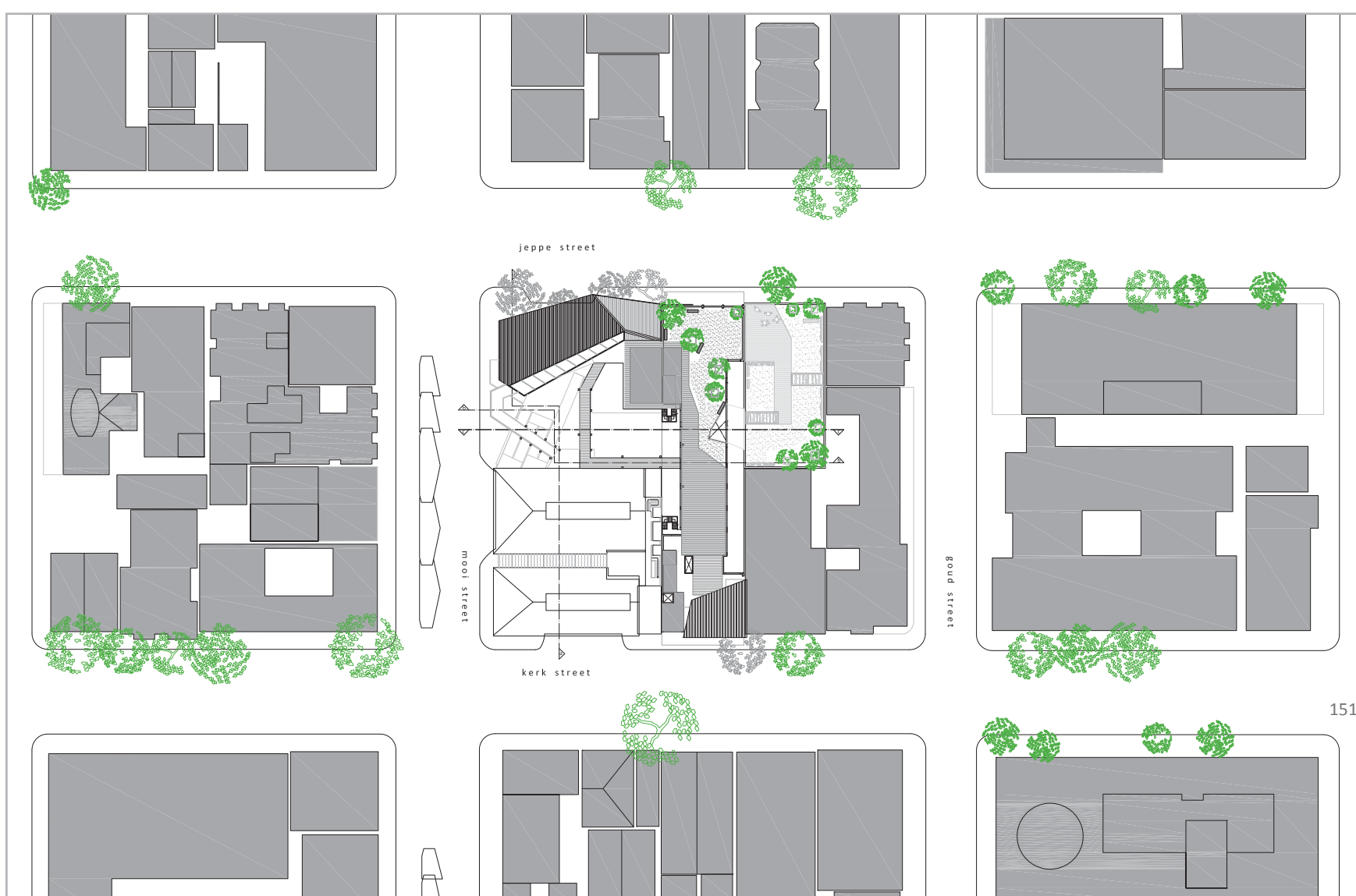
1 : looking east. 2 : looking north.

3 : looking west. 4 : looking south

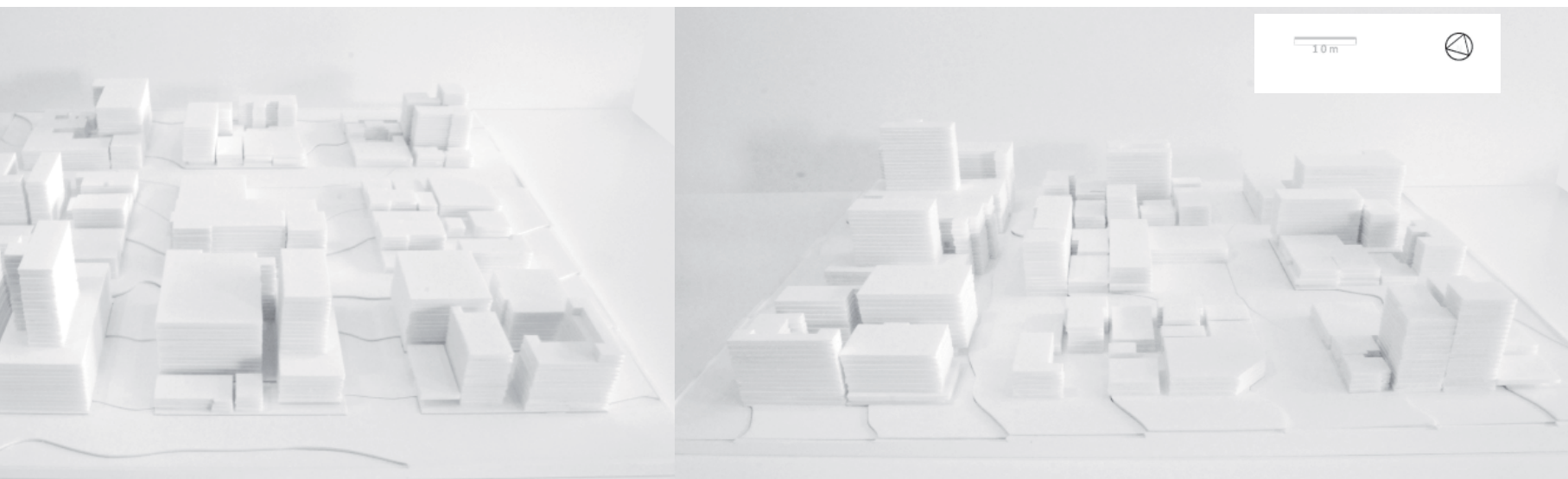
[opposite page]

site plan





151

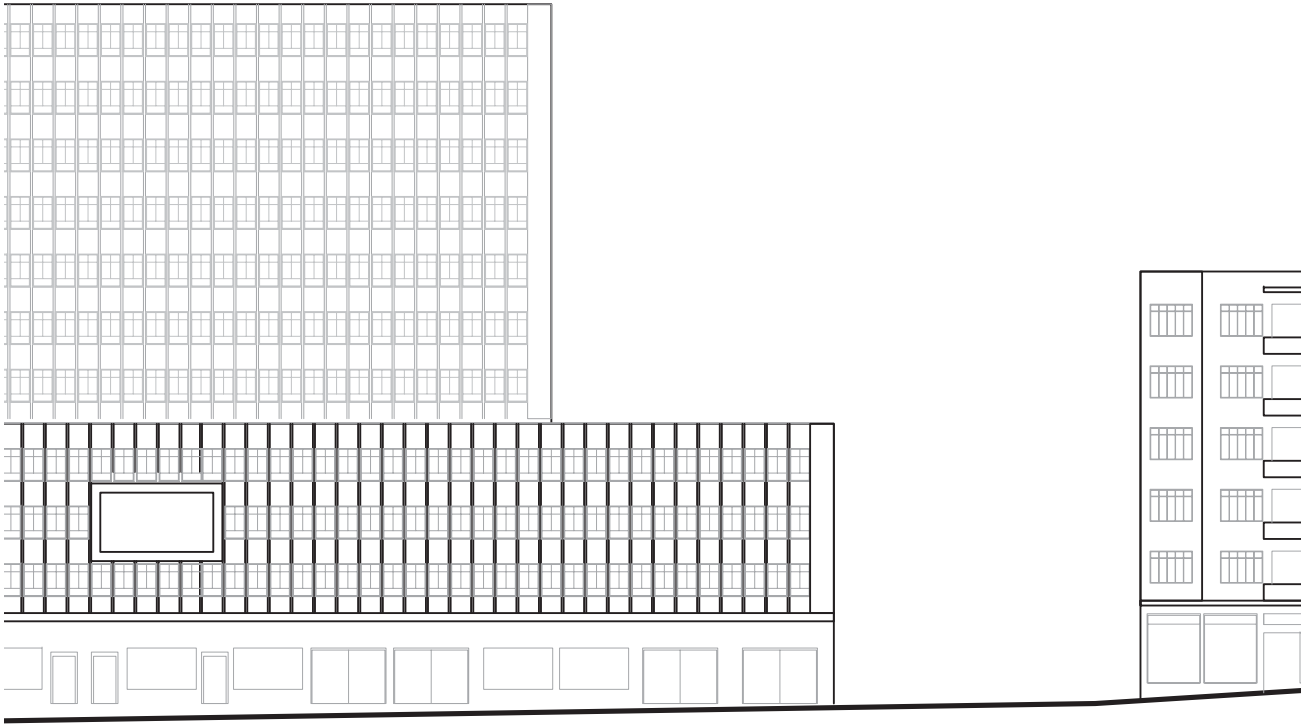


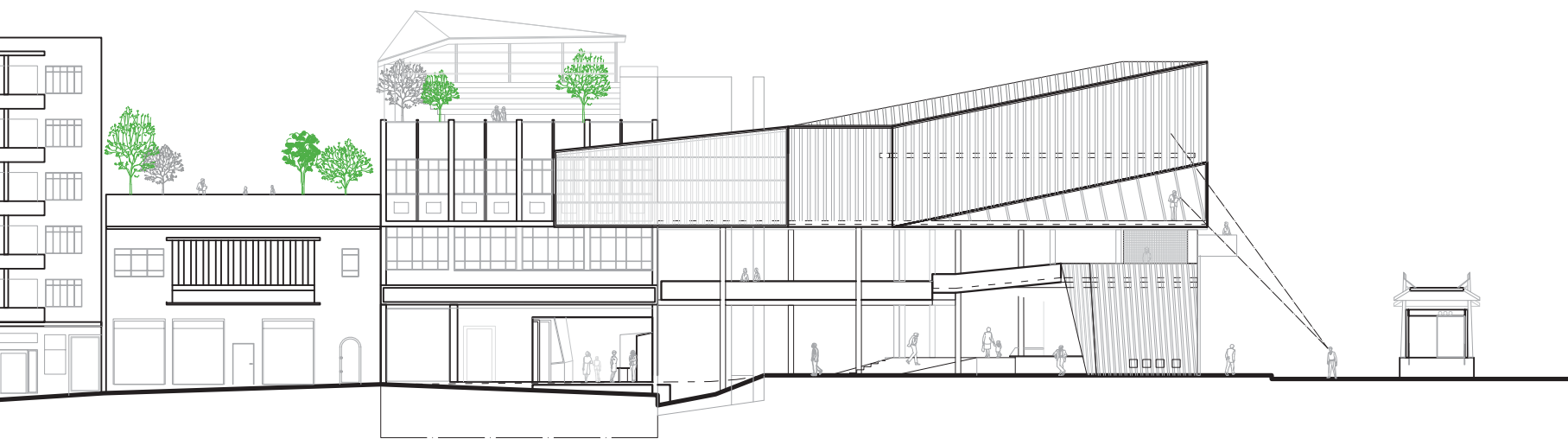
connective architecture

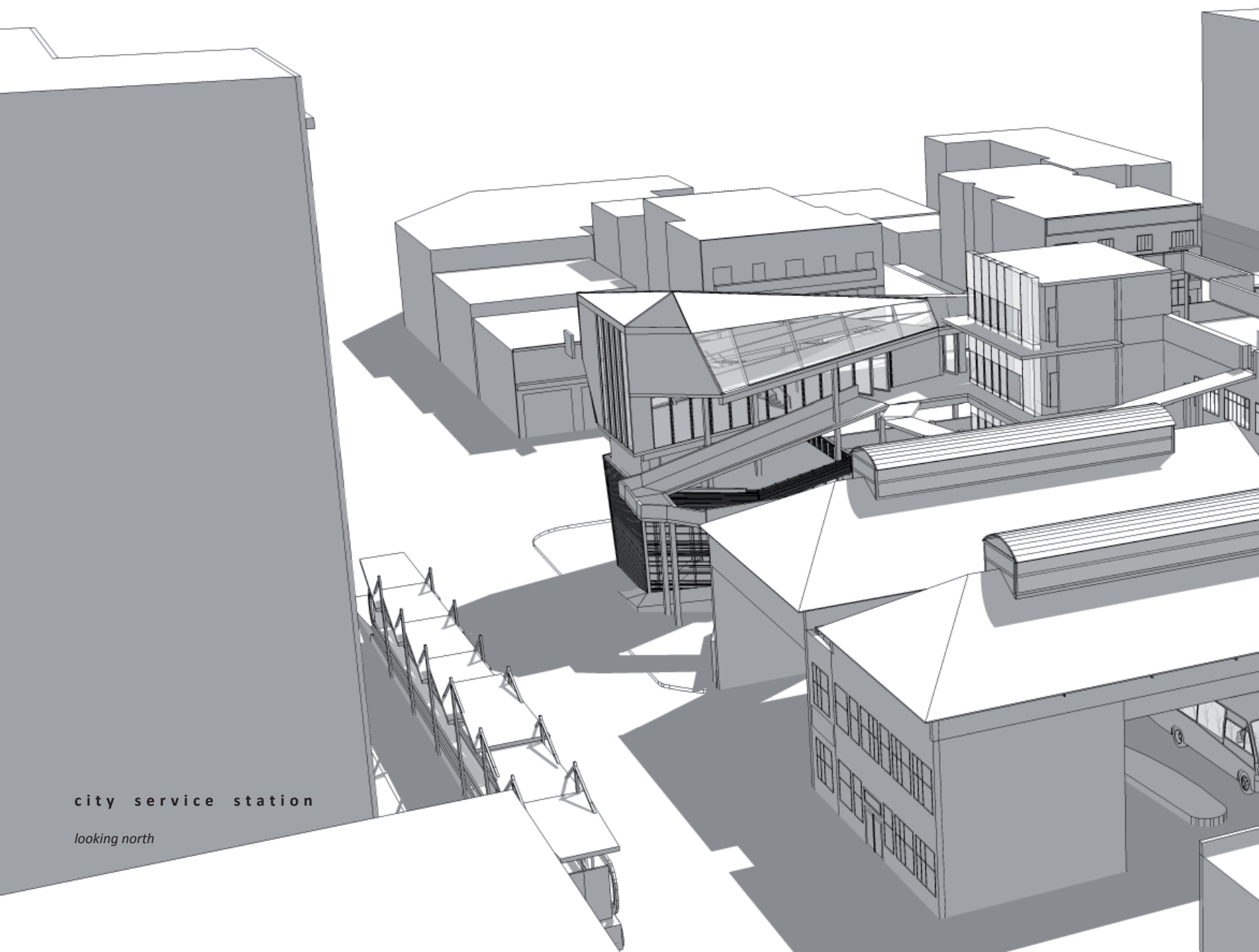
The building is to become an extension of the streetscape; an expanding, growing ground plane, creating the connective tissue which links the building to its urban context and community. The creeper analogy becomes literal in the development of the building. The pavement is drawn upwards into a ramping structure; ramp expands to become spatial and allow for pause and interaction; ramp extends to become wall; wall becomes skin; skin encloses volume and creates shelter and weatherproofing. The creeper grows into the internal volumes of the stripped, block-like existing structures, creating a new internal skin and a series of new volumes and more effective programmes.

Balustrades to the perimeter of the structure are kept solid and minimal, so as to maintain the simplicity of form, while all internally-facing balustrades are designed to be light and open. This is to promote interior views and visual links between programmes and people. This also allows the courtyard (a product of the enveloping structure) to appear connected to each level and for the series of ramps to be experienced as one continuous route, which widens and expands to become spatial and internal.

north elevation

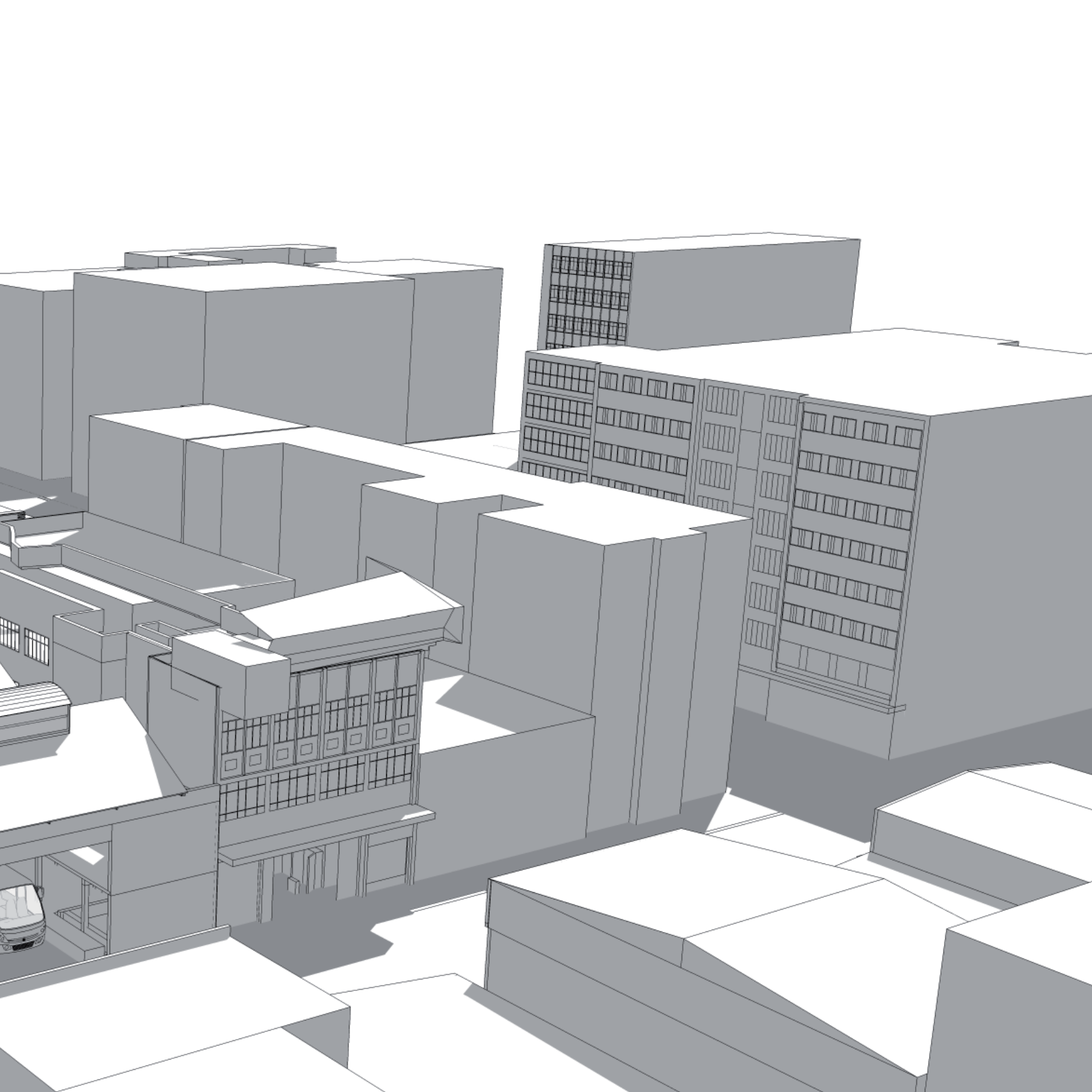






city service station

looking north



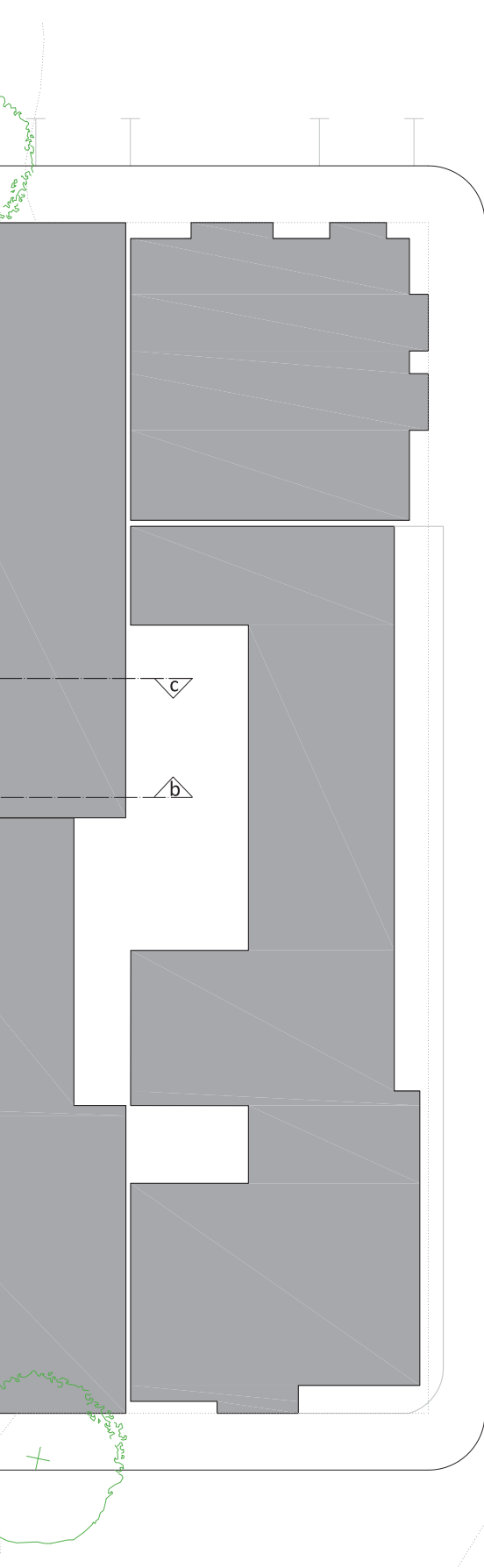
city service station

looking north down mooi street



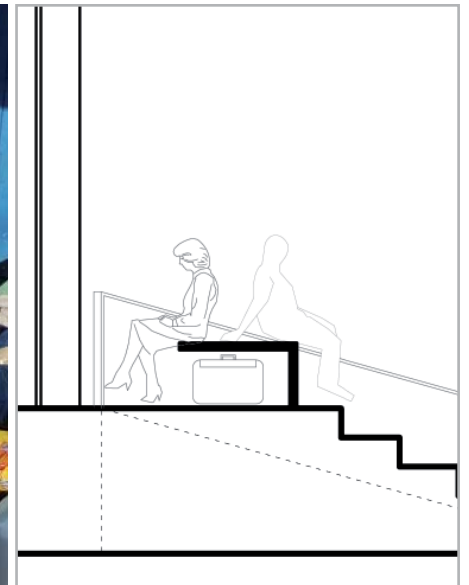






goud street

On ground floor, the platform from the terminus is carried through to the primary site, linking the two and creating an escape from the pavement itself, while remaining structurally open to it. Seating lines this platform forming a queuing space and is designed in reference to the way people wait for busses currently. At present, people sit on the baggage while waiting along the pavement. The bench-like seats provided are to have one vertical edge open to allow for baggage to be stored underneath, while people wait.



159

ground floor plan

The light grey hatch indicates the existing structure, while the black indicates additions.

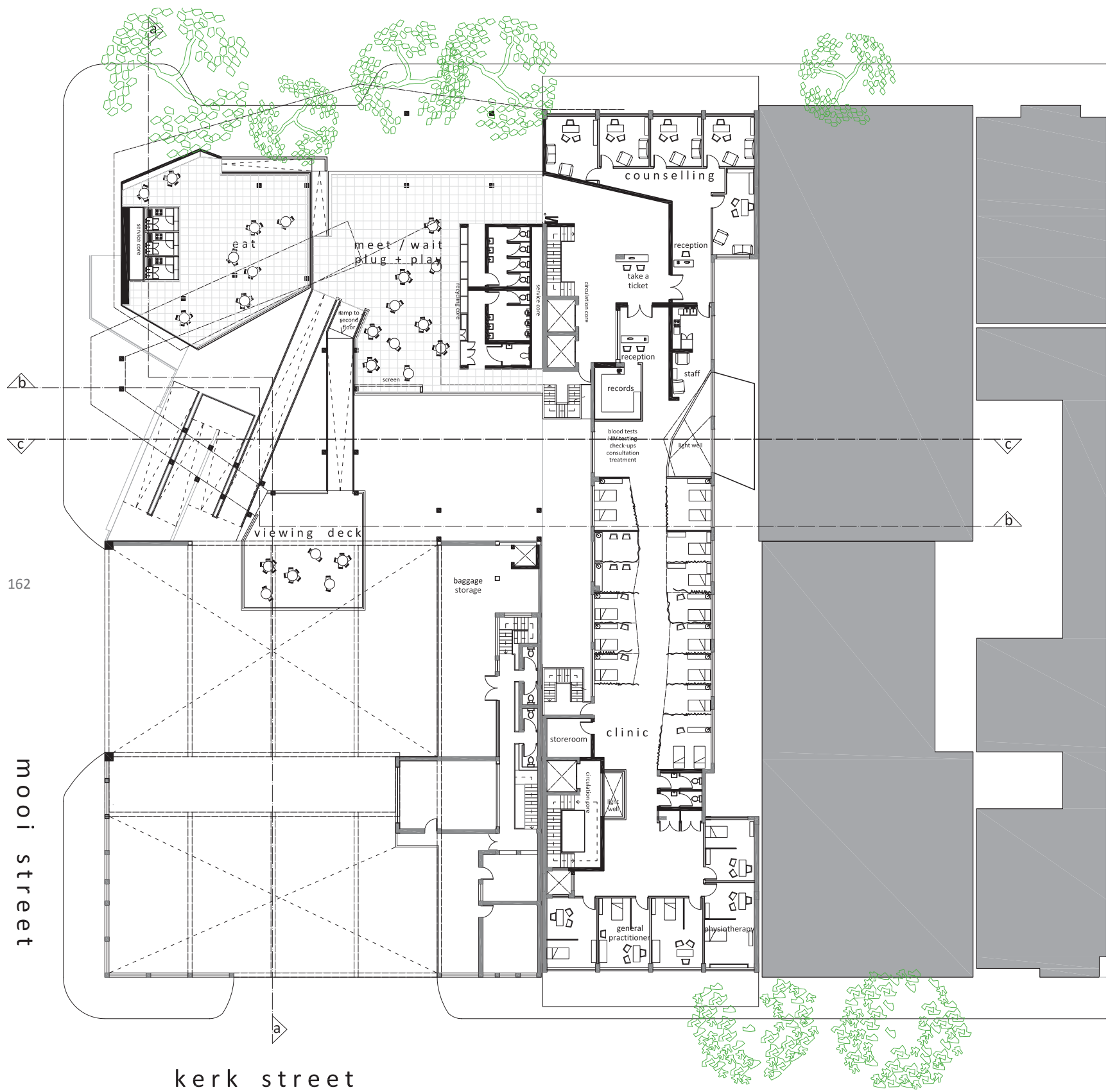




city service station

*view into the internal courtyard
from the terminus showing the bag-
gage storage area and waiting space*





first floor plan

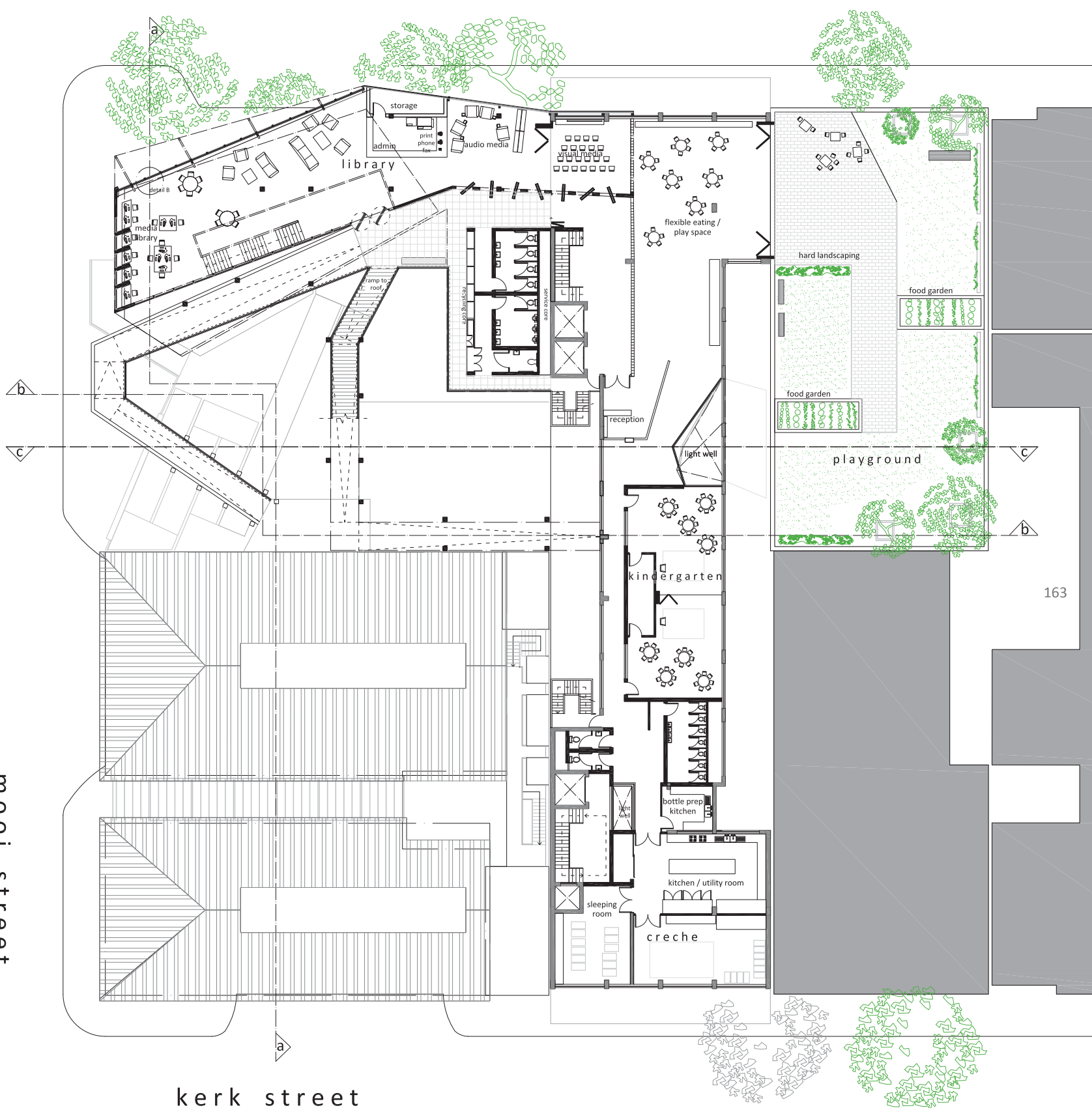


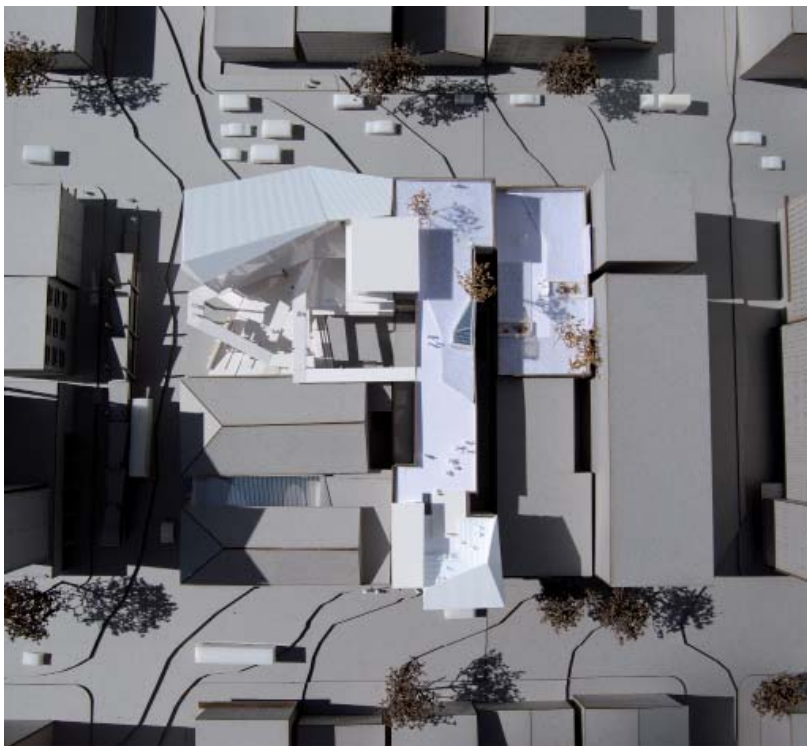
mooi street

kerk street

second floor plan

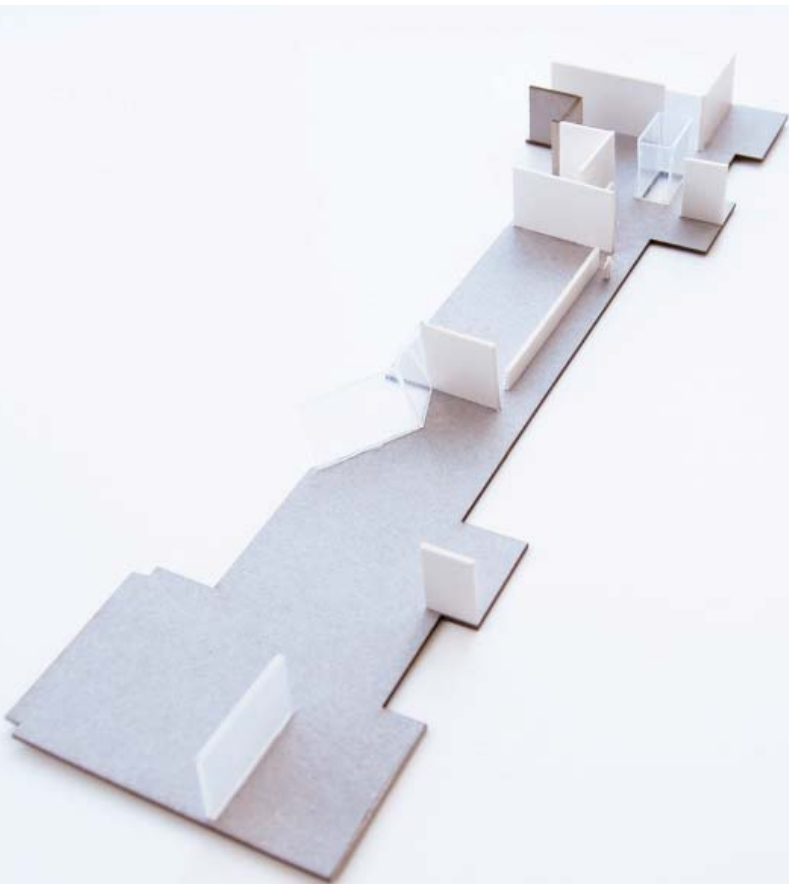
2 m 10 m



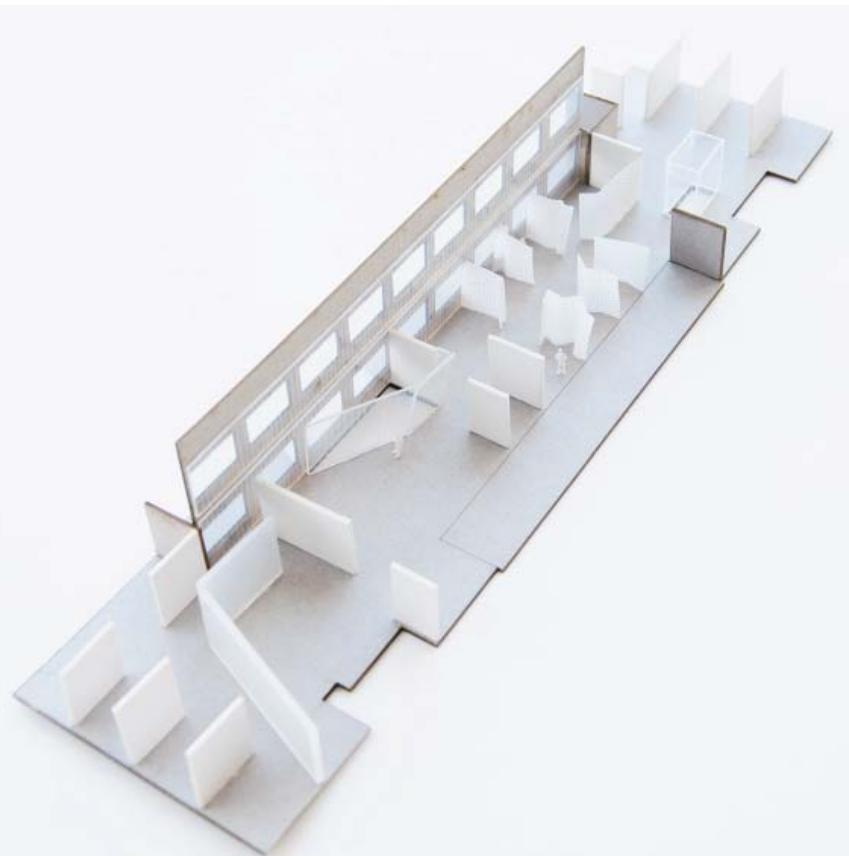


f i n a l m o d e l

The grey indicates the existing structures and landscape, while the white indicates additions.



s e c o n d f l o o r



f i r s t f l o o r



g r o u n d f l o o r



b a s e m e n t

i n n e r c i t y c h i l d r e n

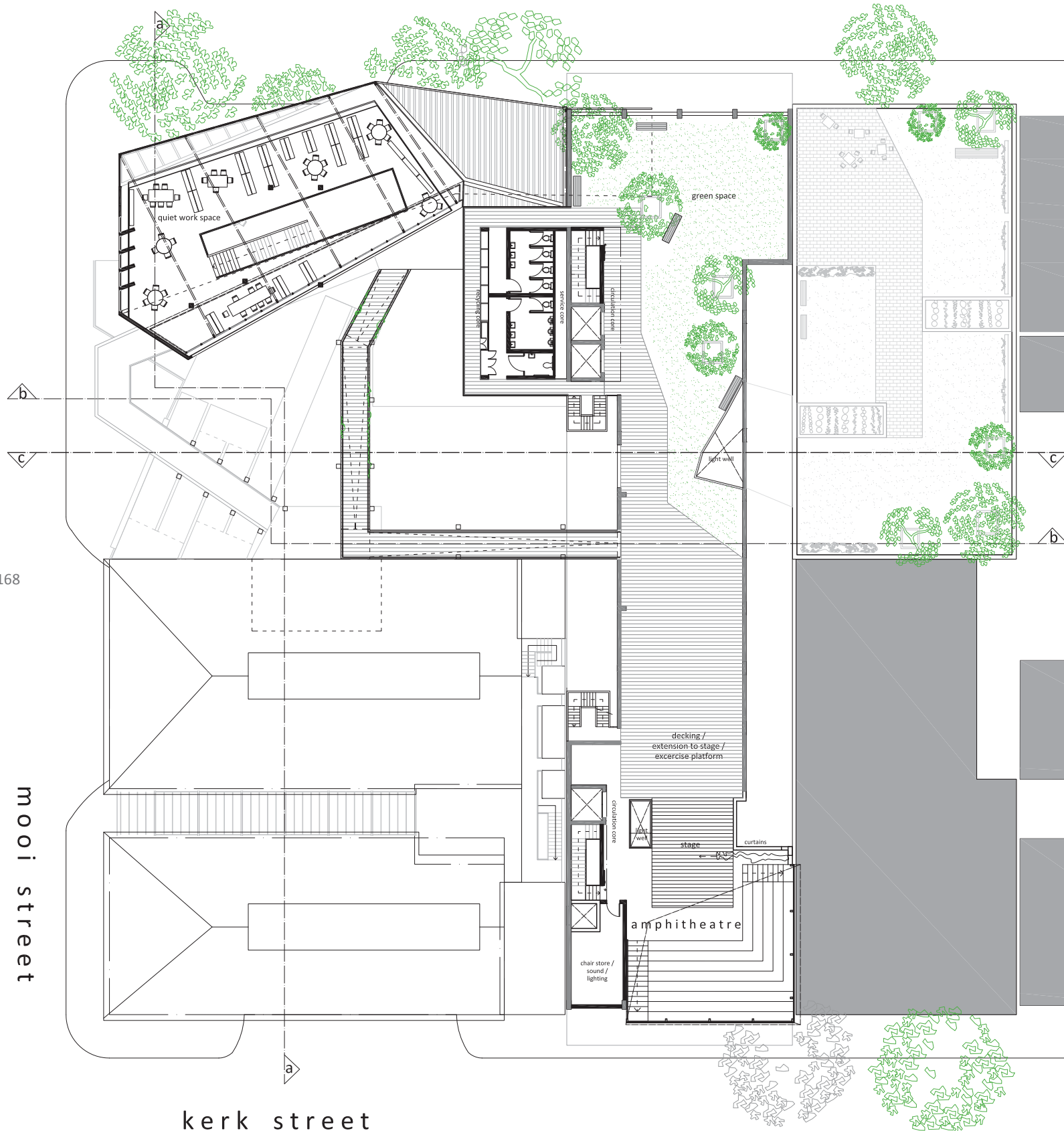
On the second floor, the kindergarten opens onto the neighbouring rooftop, which is converted into a playground. The space is separate from the public green space and exists as an outdoor extension of the flexible internal space and has both hard landscaping and low concrete boxes containing food gardens.

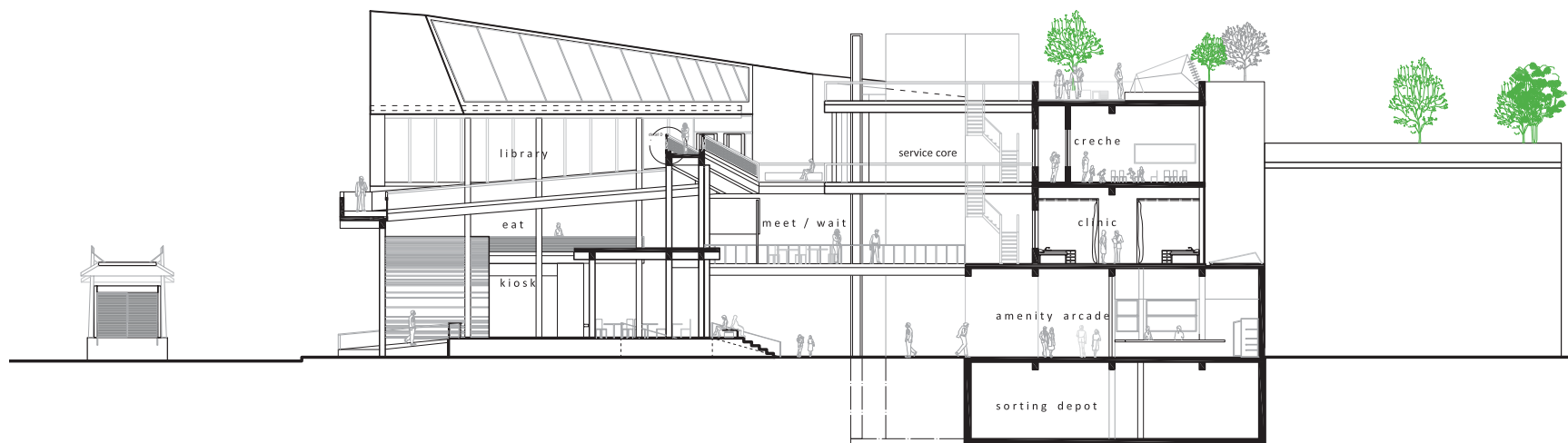


ENS FRANCINA 0713195923

WHOLESA







s e c t i o n
sectional elevation
the internal

b - b
through
courtyard



169



[left]
third floor / roof plan



[right]
view of library from
internal courtyard



The library is well insulated from external noise and heat, using a bubble foil layer (which reflects heat) hidden by the ceiling boards which fit between the steel structure, allowing the construction to remain visible. The first floor of the library is called the “loud library”. This refers to its programming, rather than its noise level. The space consists of a media library or internet cafe to the western edge and audio media and visual media to the eastern end, where the new structure merges with the existing. The audio centre consists of a lounge-like layout with listening pods accessed using head-phones, while the visual media space can be closed off with sound-proof doors when in use. This negates the need to separate the loud and quiet library with a sound barrier.

The entire envelope of the audio and visual media areas consists of large pivot doors, which can be opened to ventilate the space and provide passersby with visual access to the various forms of information available.

The second floor is dedicated to various forms of education. In order to symbolically connect the library and kindergarten to one another, a glass brick wall is used. This semi-translucent membrane allows the different users to become aware of each other, while eliminating direct views.

170

l i b r a r y

internal view of the library
showing the administration area
and quiet library mezzanine





172





173

w e s t e l e v a t i o n





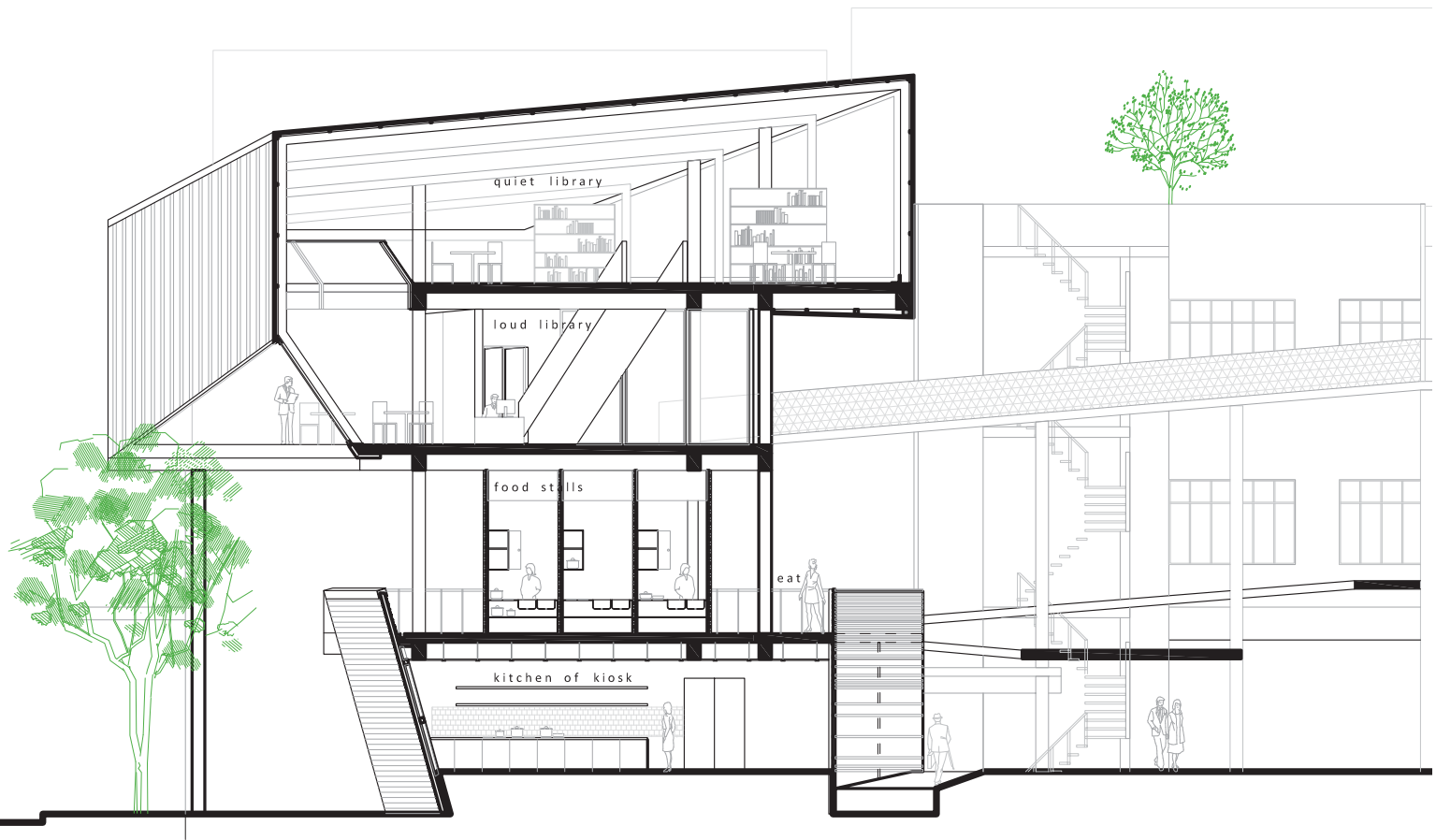




b a s e m e n t p l a n

*sorting depot (run by recyclers) and
second hand furniture recycling*

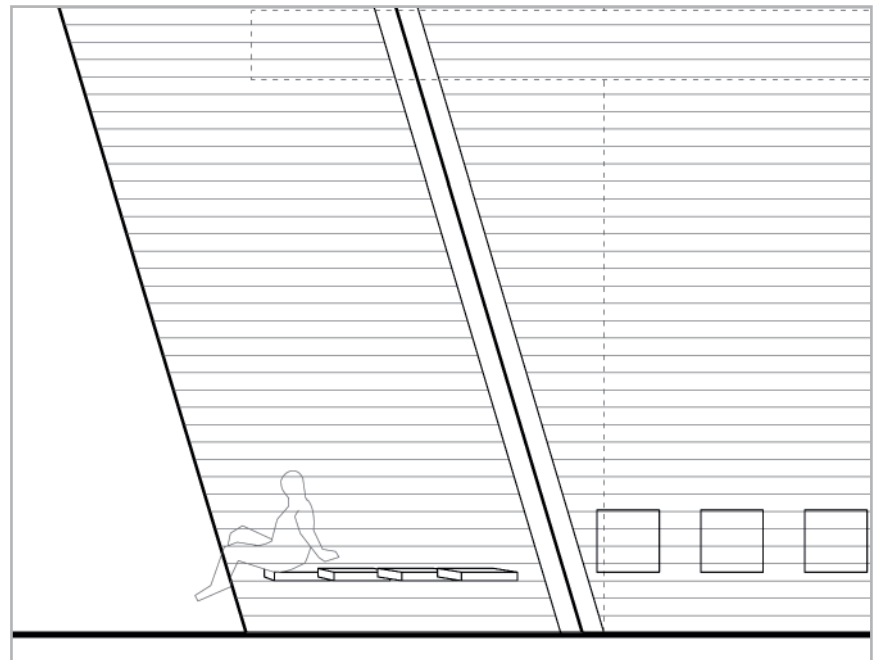


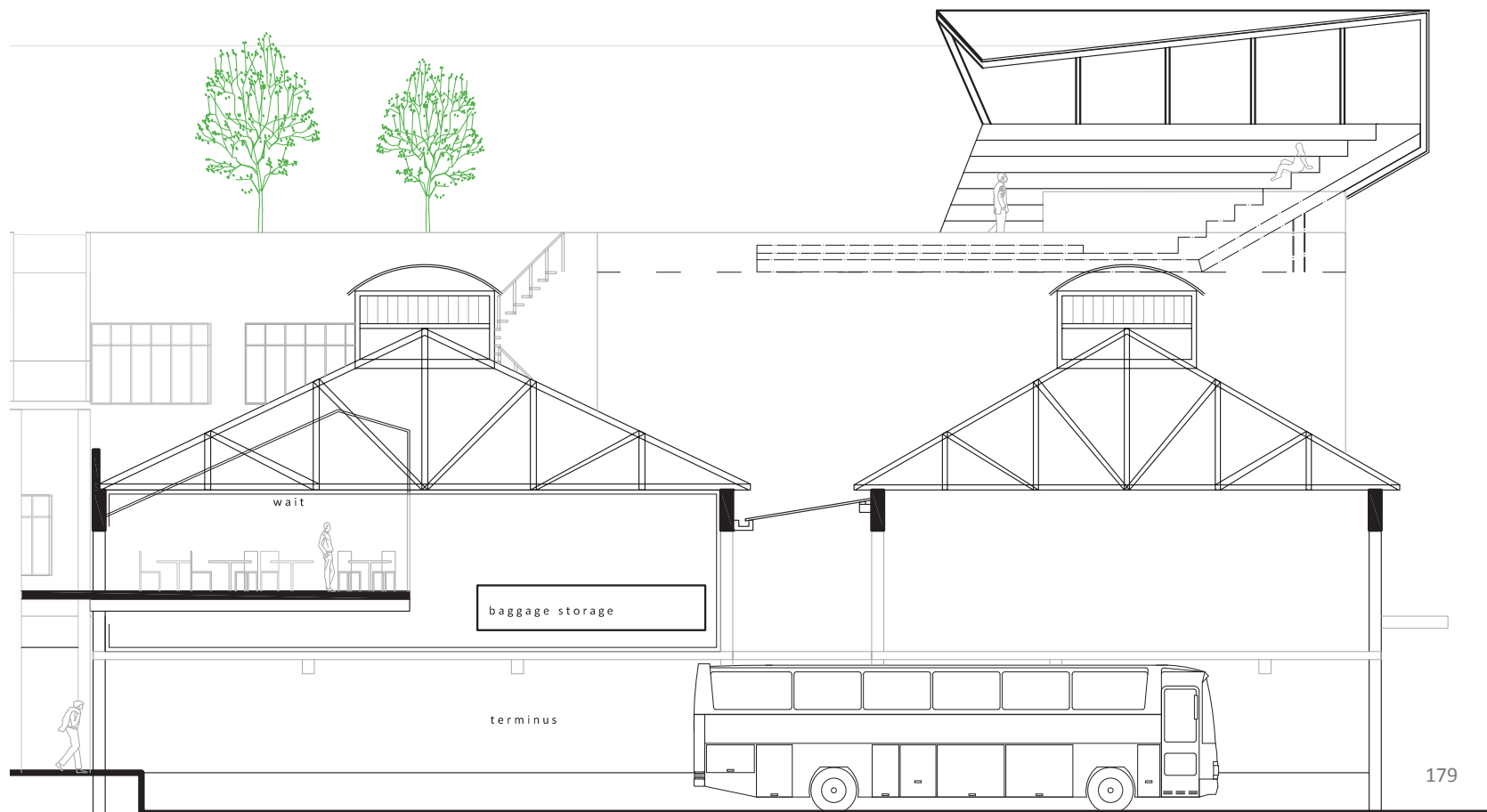


social and architectural exposure and exchange

The design of the building is based on the notion of social and architectural exposure and exchange. The building is to relate to the human in terms of scale, use and the basic physical interaction between body and structure. For this reason, the materiality is to be tactile and rugged, while the built form is to be able to be opened, closed, sat on, adjusted or viewed at specific moments in the building where the user might require it. This creates a personal connection between each member of the public and the democratic structure, by allowing them to control their own physical, climatic or experiential conditions at all times.

This is evident on the ground floor where people waiting for taxis at the taxi stop can pull a portion of the kiosk facade down as a seat. The seating wraps around the building and leads the end of the queue to the waiting space on first floor.

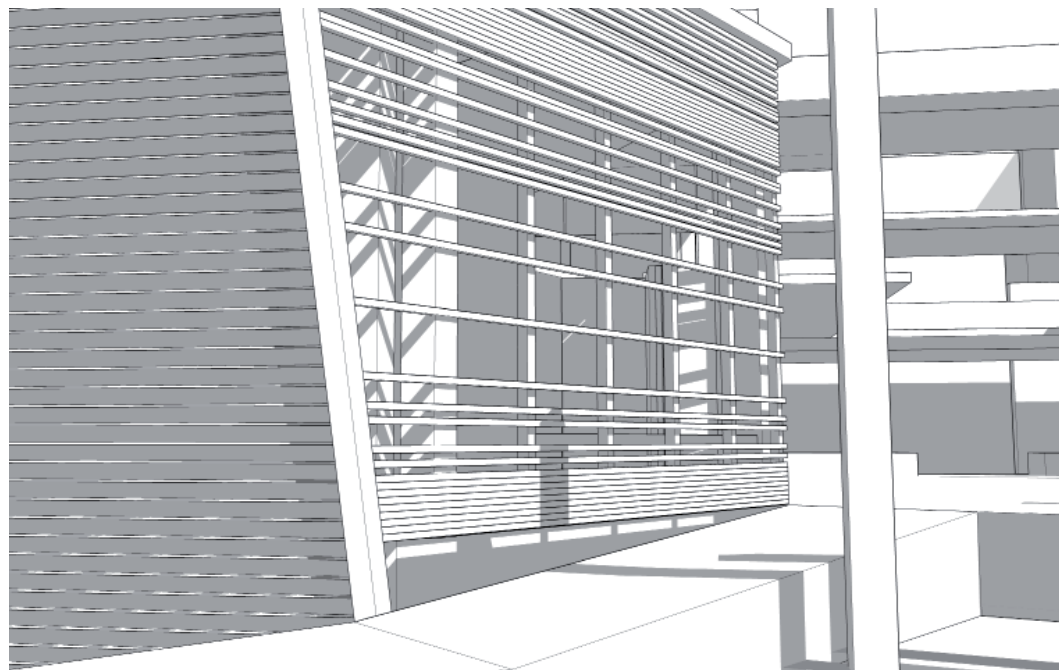




s e c t i o n a - a

2 m

10 m



o p e n n e s s

The building's skin fragments to allow for views into areas of social gathering and information transfer from the internal courtyard and points of arrival.



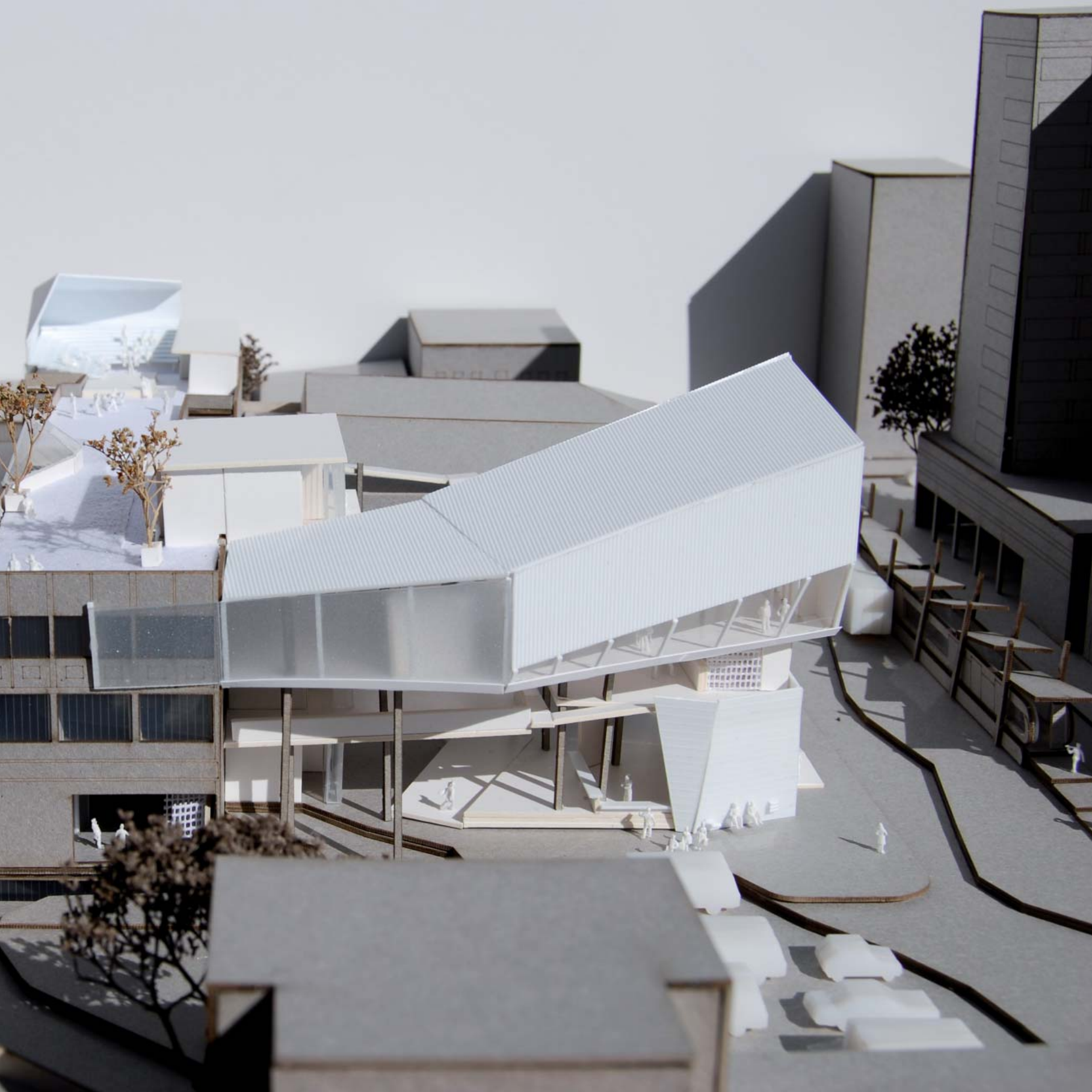
j e p p e s t r e e t



taxi stop and waiting space



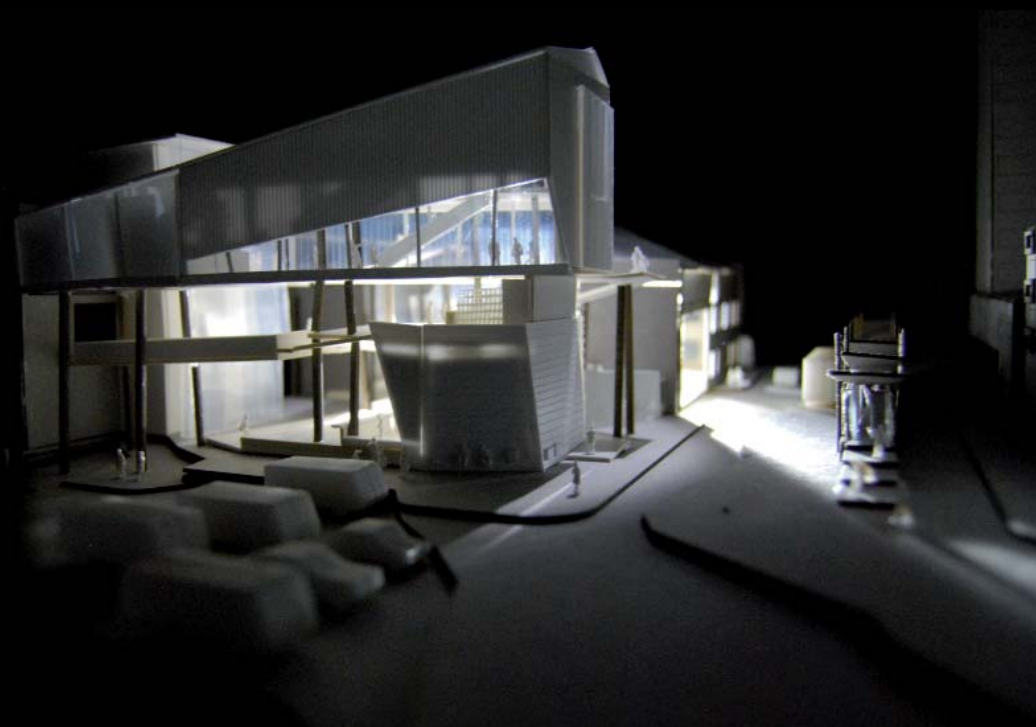




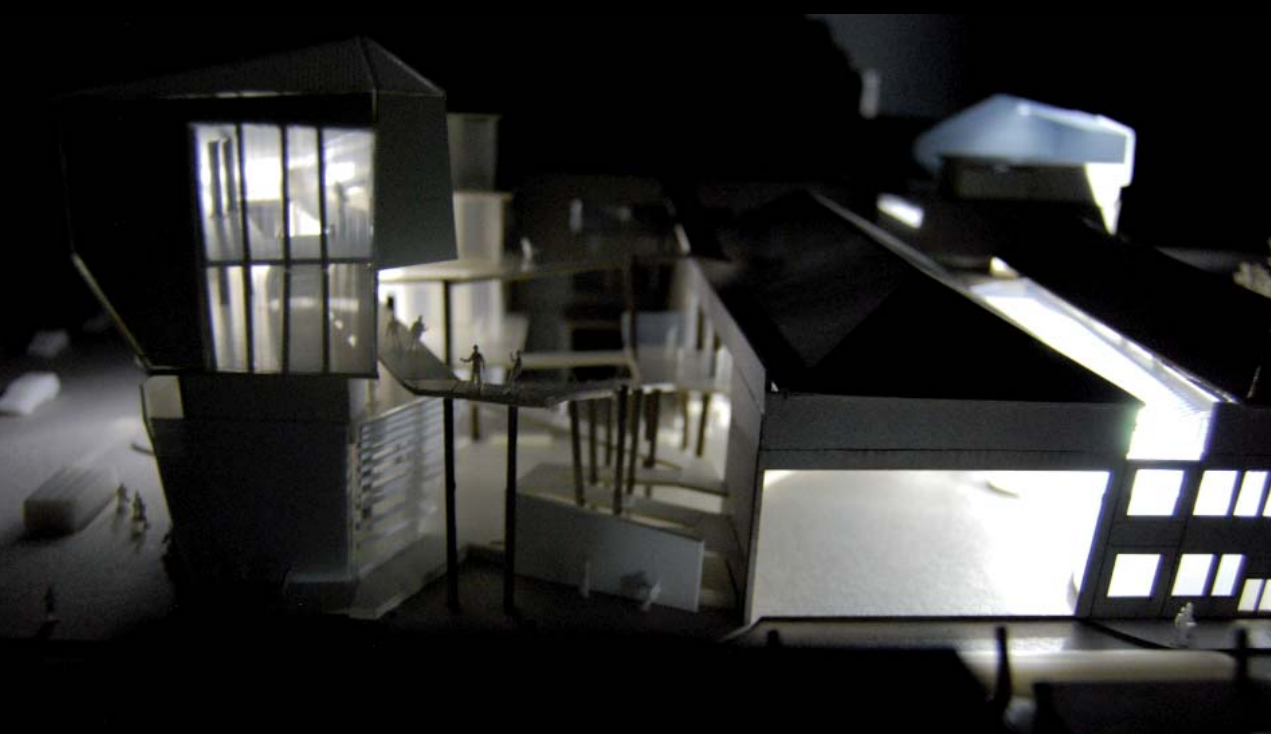


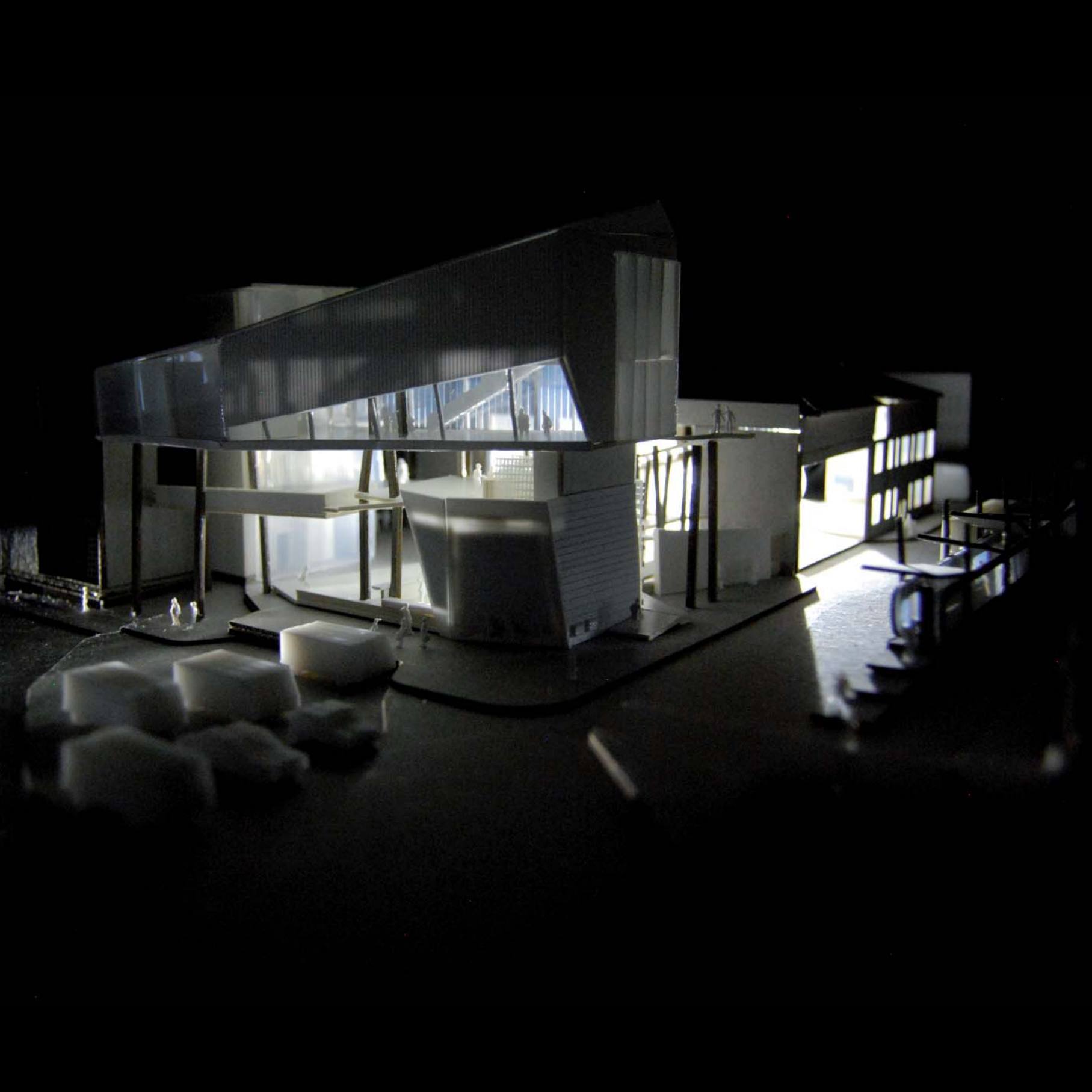
extended hours vs 24 hour

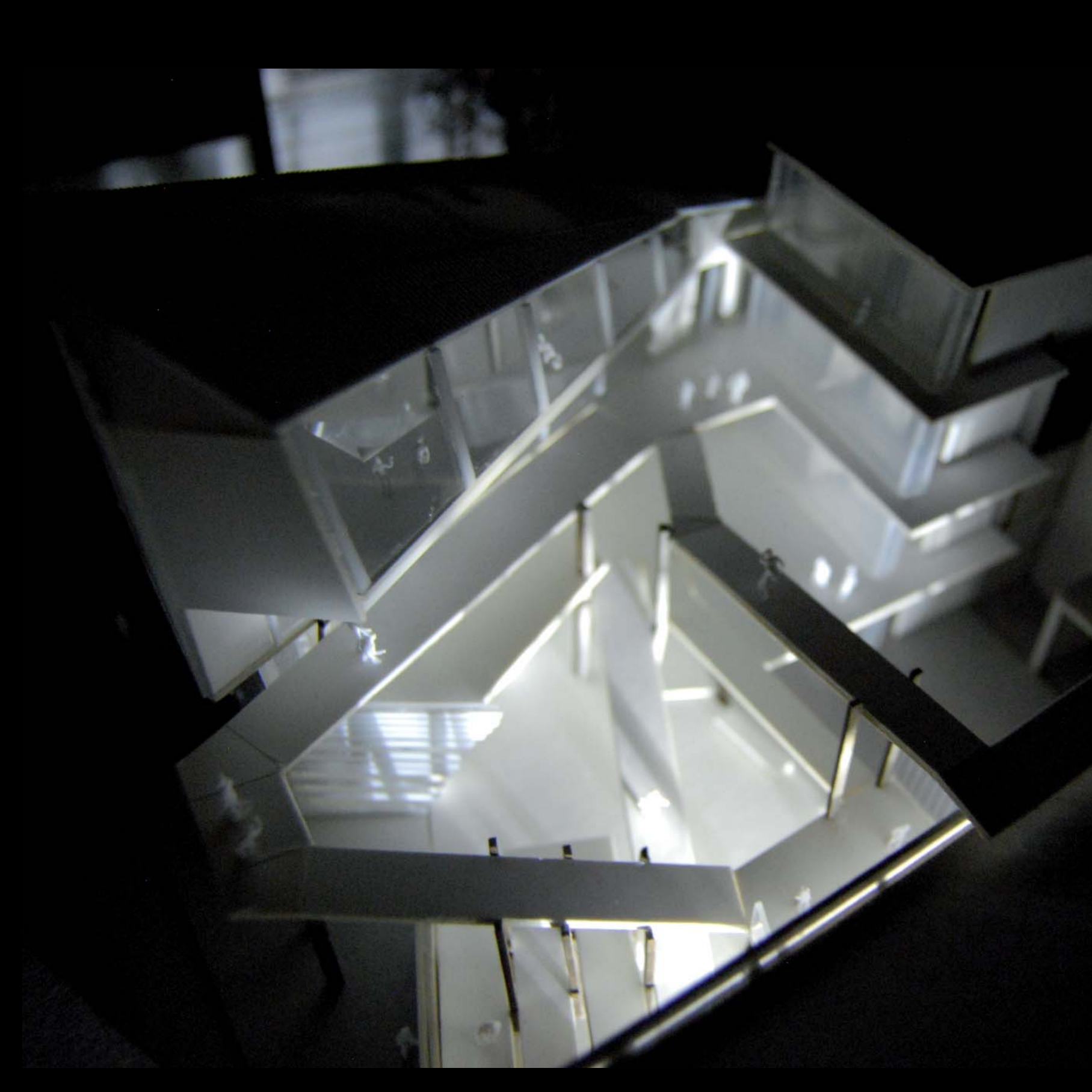
The programme within the original structure allows for extended business hours and is then completely closed at night. The unstructured programme and terminus, however, remain open 24 hours a day. This flexibility allows students or professionals to study or work in the quiet library; courses, documentary screenings or social gatherings to be conducted in the loud library; performances, exhibitions or movie screenings to occur on the meeting platform and for people to wait for late night bus arrivals or departures.



186

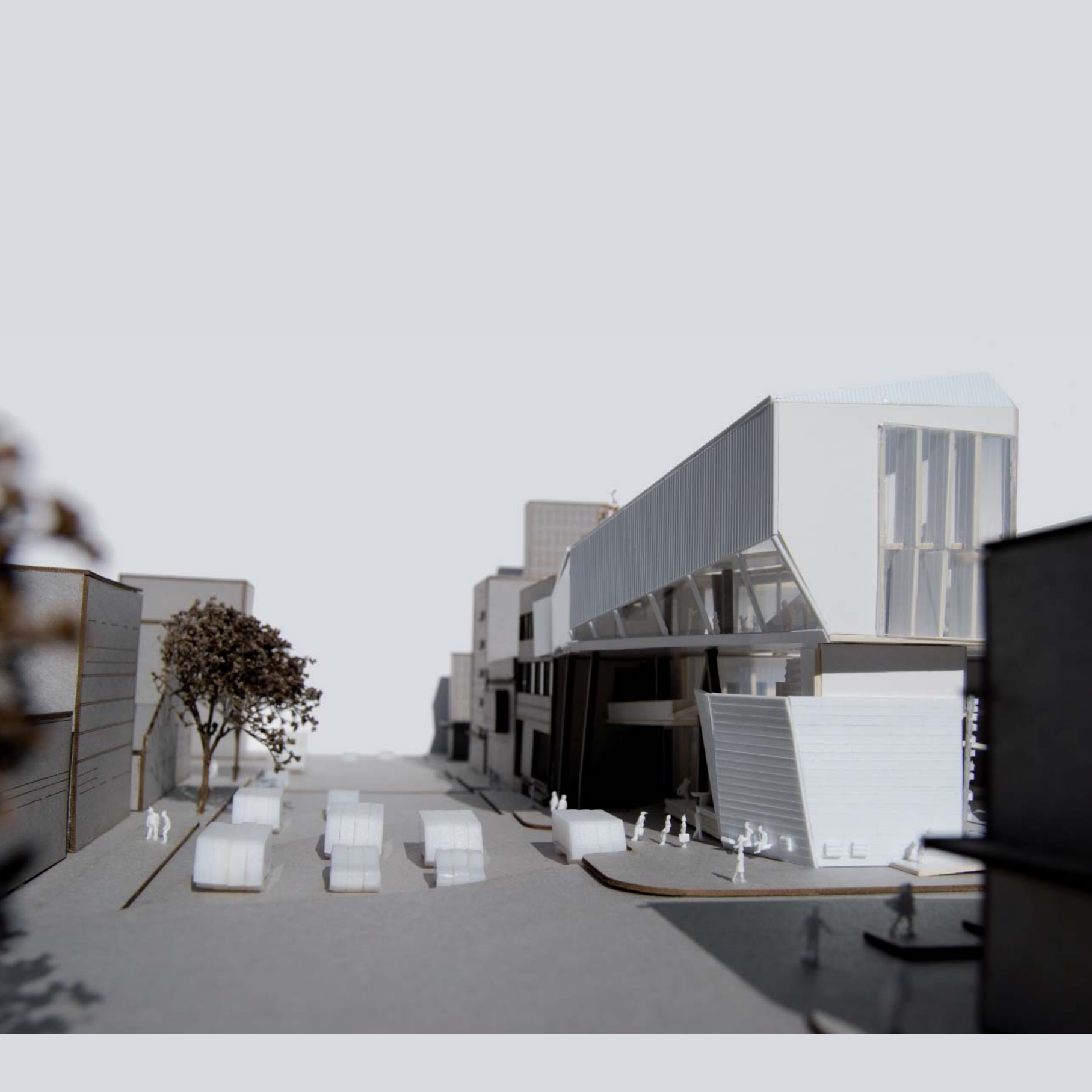














i n n e r c i t y r o o f t o p

The library mezzanine faces a green roof space which consists of decking, which becomes a stage and then folds into the seating of the covered amphitheatre. This space is to operate according to a time-rental system, allowing for varying uses at different times of day, throughout the week. The space is designed to accommodate more than one function or programme at a time. The stage can be used for small meetings, large religious gatherings, performances or classes. The decking can be used as an extension of the stage, for more seating or for a separate activity, such as exercise or dance classes. The green space can be utilised for leisure, meetings, and social gatherings or by certain religions as a place to conduct ceremonies.

u r b a n i s e d r e l i g i o n

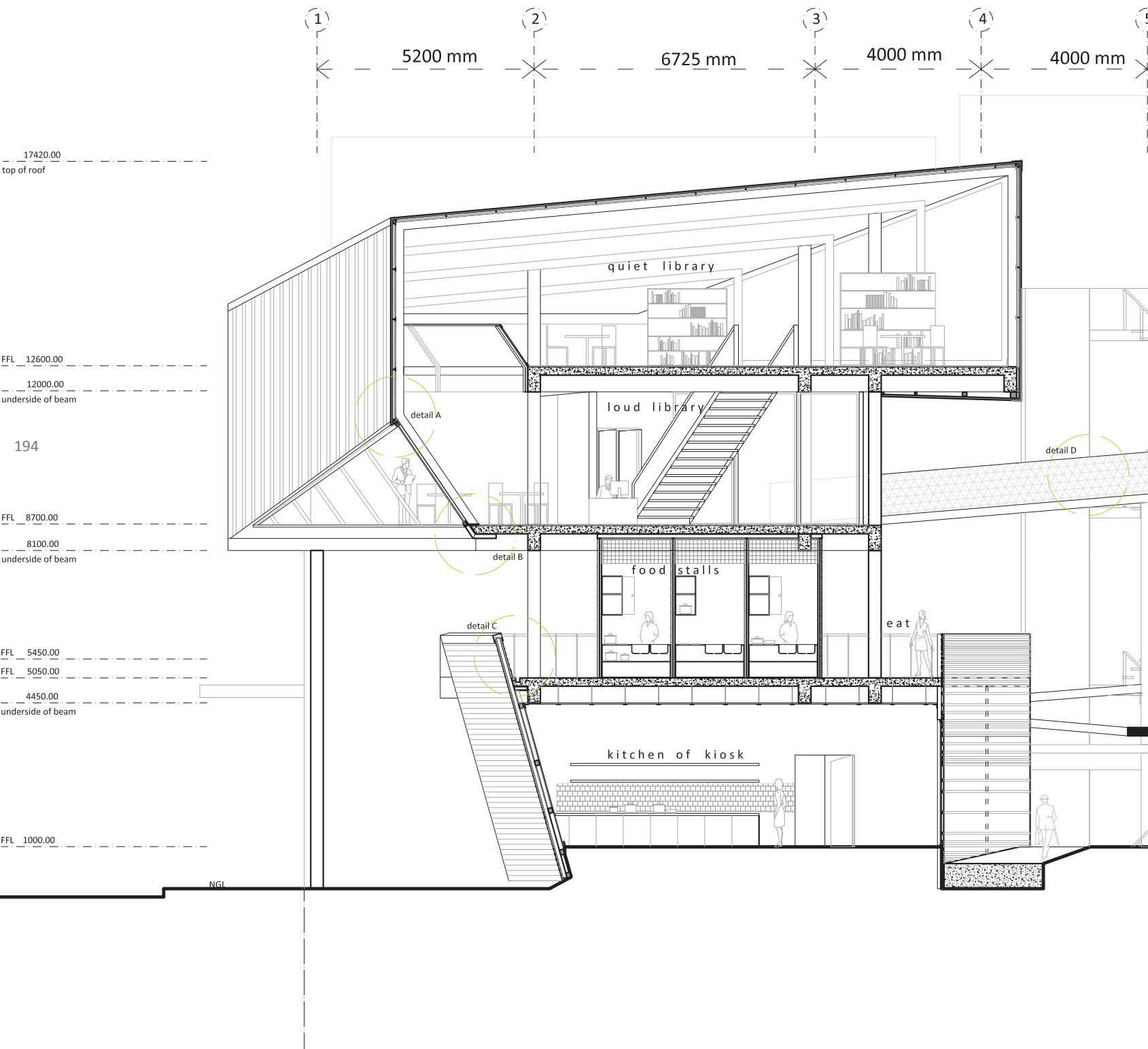
— *malusi malanga*
(Masondo, Potenza, and
Adams, 2007: 32)

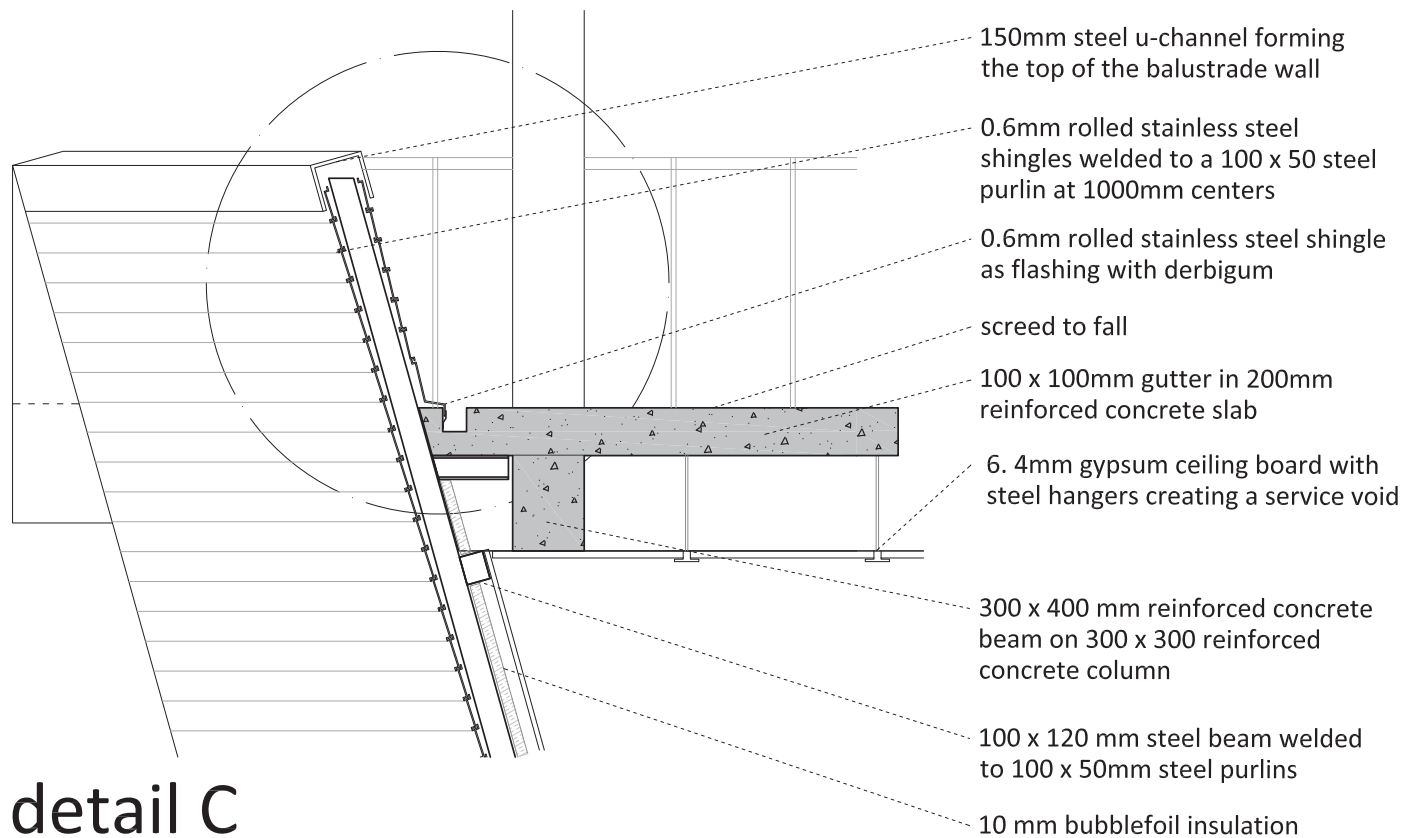


193

leisure + gathering exercise + observation performance + teaching







detail C

d e t a i l c

detail showing steel shingles of the angled kiosk wall which continues to become the balustrade of the eating platform



s e c t i o n

a - a



10 m



form and materiality

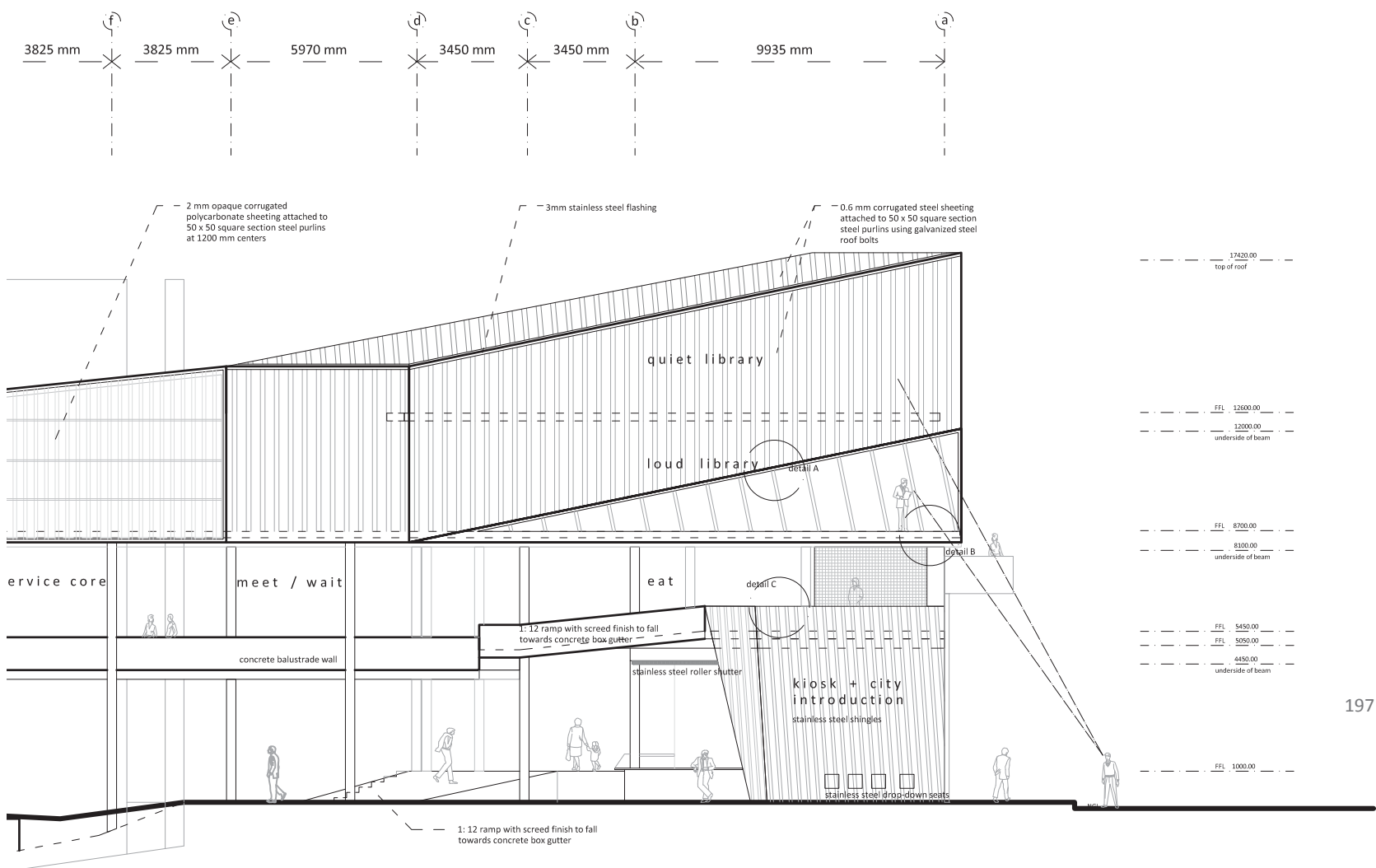
The roof sheeting continues over the edge to become the wall treatment. The sheeting is carried through to the facade of the existing building, celebrating the mutualistic relationship between old and new. The steel sheeting is merged with an opaque polycarbonate with the same corrugations so that, during the day, the structure reads as seamless but at night the junction between original and addition is illuminated. This light box is experienced from both the street and the internal courtyard.

The dark window frame of the angled glazing makes the opening 'disappear'. This is to create the illusion that the library's form is thinner and less weighty.

circulation + structure

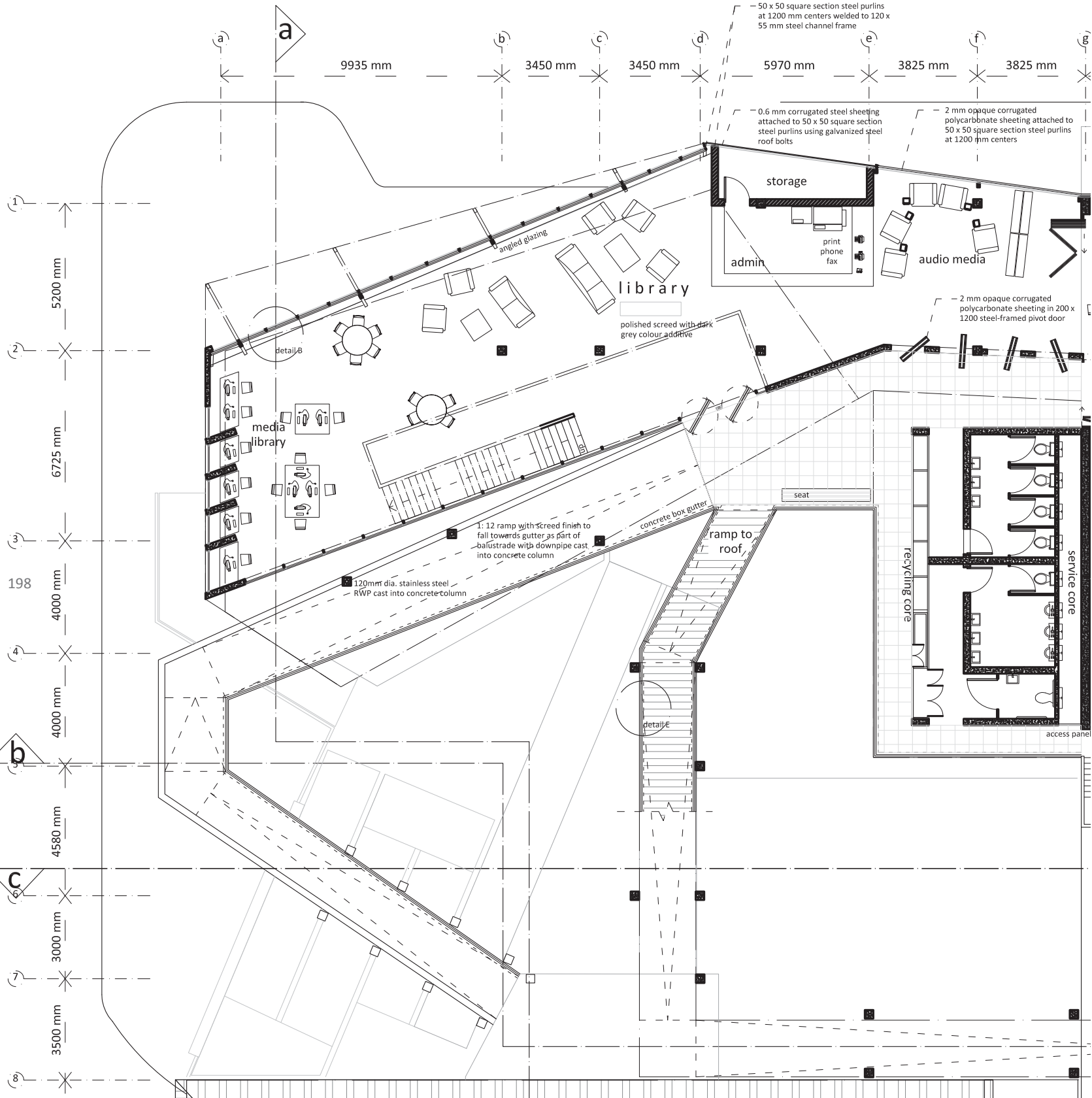
The two existing circulation cores (containing lifts, staircases and fire escapes) are to be retained. Small alterations are made in order to restrict access to certain portions of the building, for example, the clinic and crèche are to have one entry point and the other is blocked off, without restricting movement up and down the staircase or fire escape.

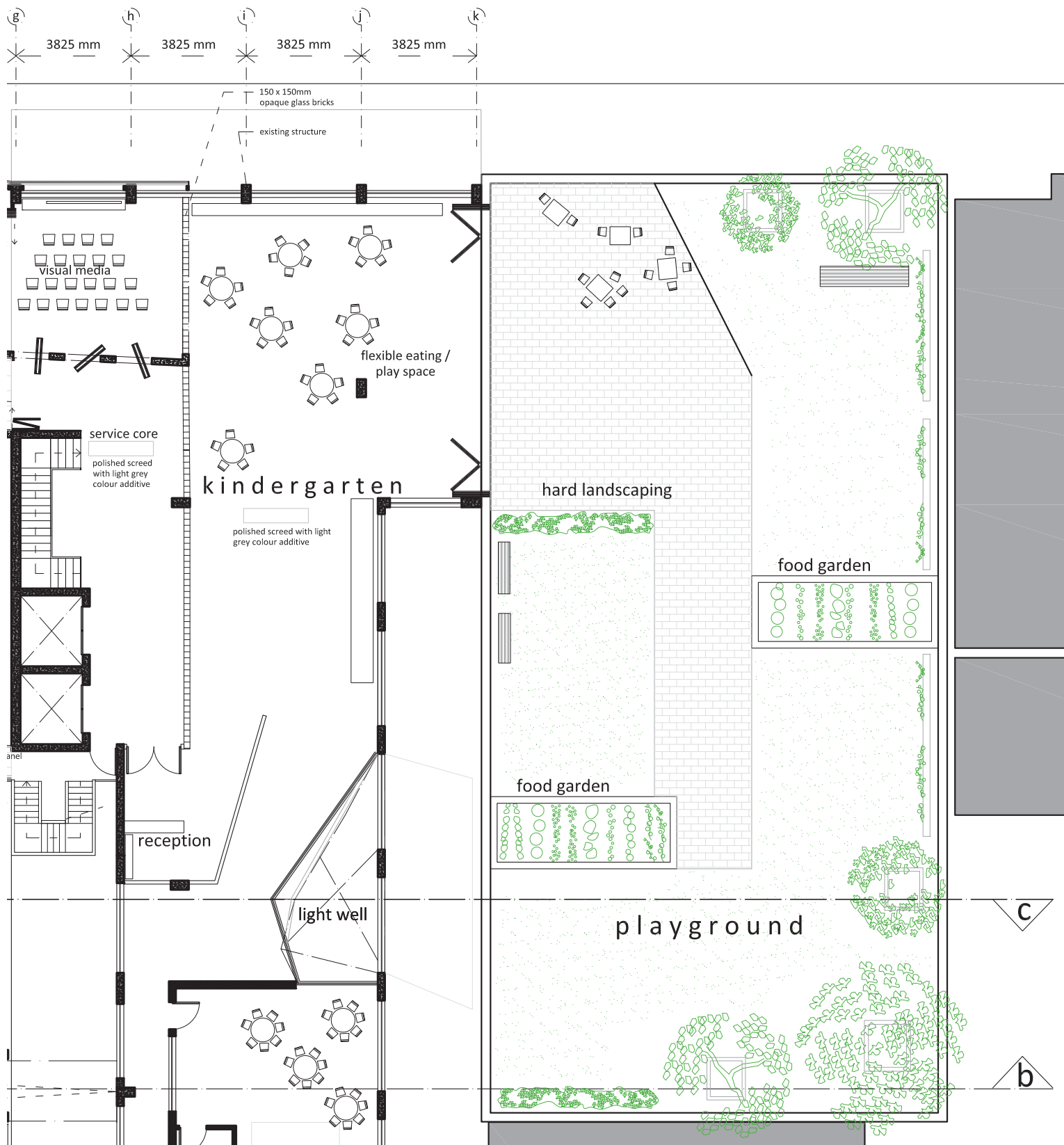
The supports of the stepped structure are to be kept separate so as to read as disconnected elements.



n o r t h e l e v a t i o n







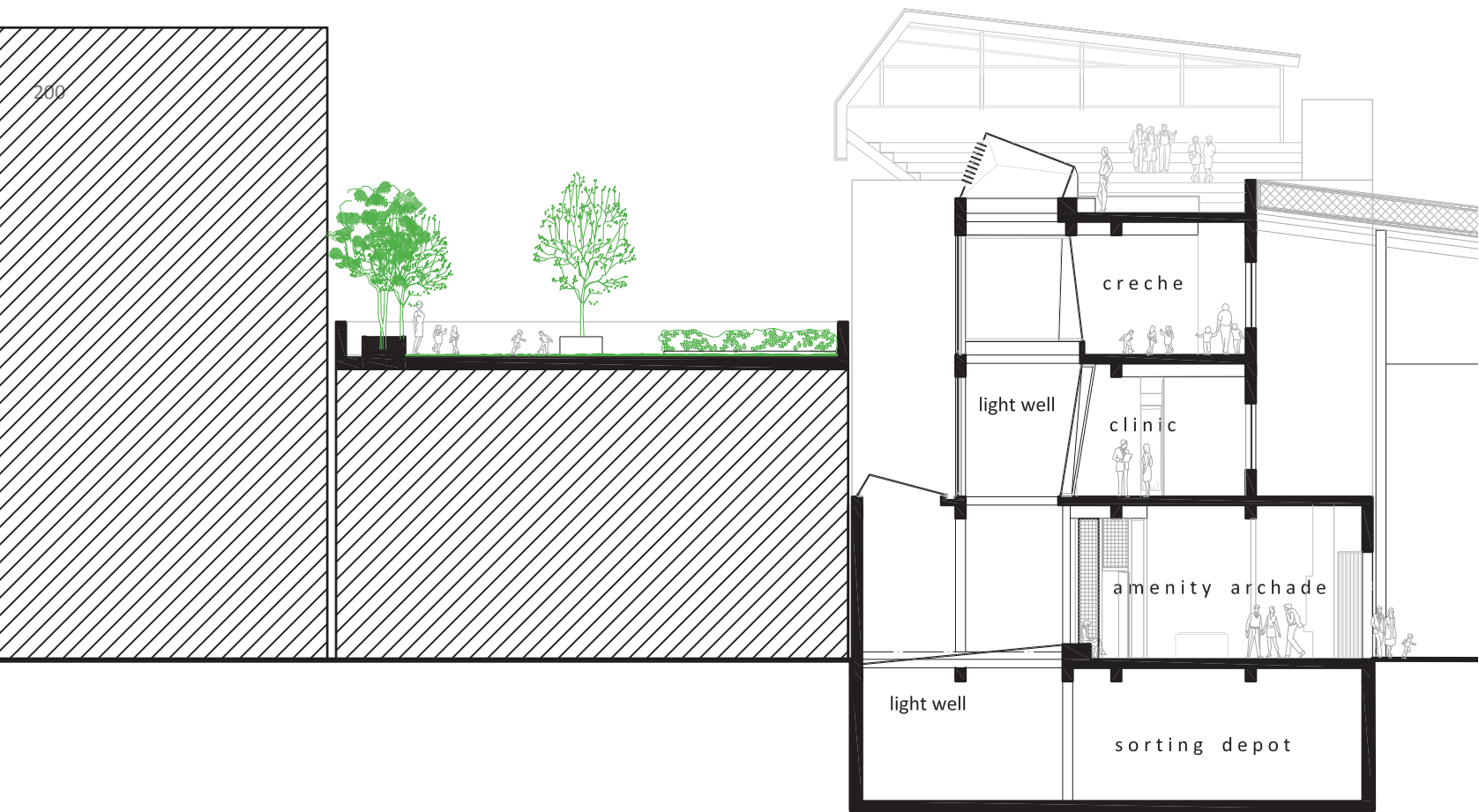
s e c t i o n

c - c



2 m

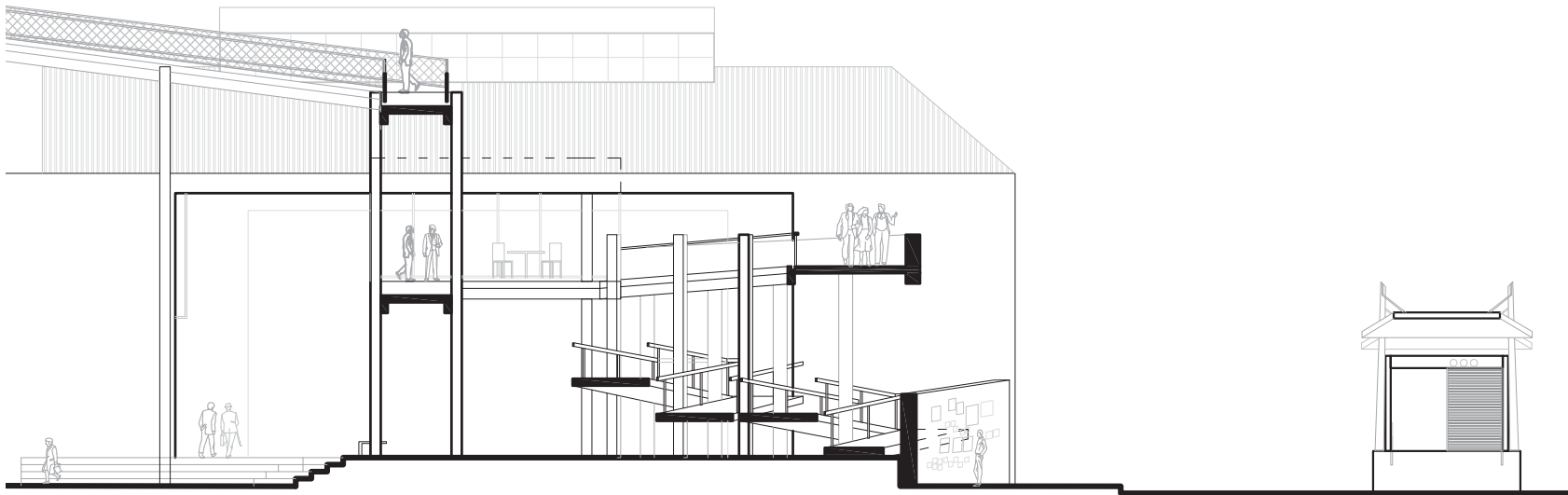
10 m

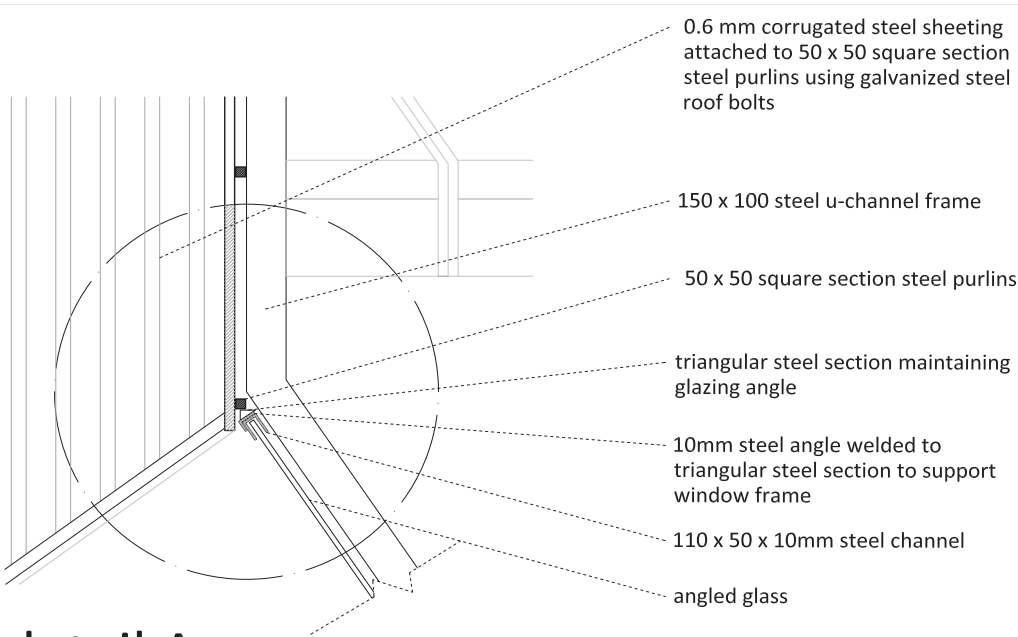


physical manifestation of the creeper

The ramps are designed to relate physically and programmatically to space to which they lead. The ramp from ground to first floor includes a thickened balustrade wall which is utilised as a notice board for accommodation notices, advertisements or the promotion of courses or events within the building. This relates to the city introduction on ground floor, as well as the interactive waiting spaces above. The ramp from first to second floors is drawn through the terminus and the library, exposing people to one another and the various programmes, while physically linking the buildings' different parts. The ramp from the second floor to the roof is about advertising the public green roof space. As people at street level would not know that this space is available to them, just as the amphitheatre structure hangs over the edge of the existing building (advertising its presence as an added innovation), the ramps include long planter boxes containing creepers, which will grow over the balustrade structure and eventually hang down over the internal courtyard. This hanging garden will develop over time, drawing more users to this oasis.

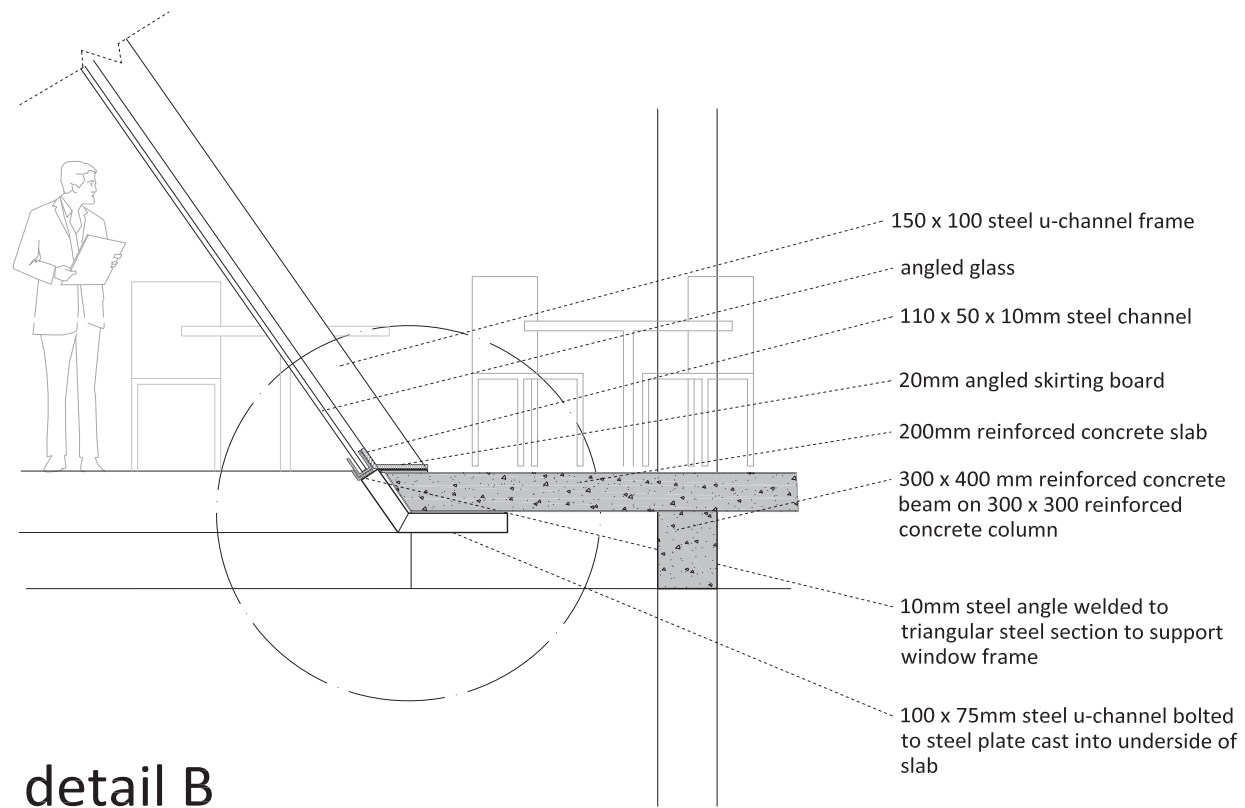
201





detail A

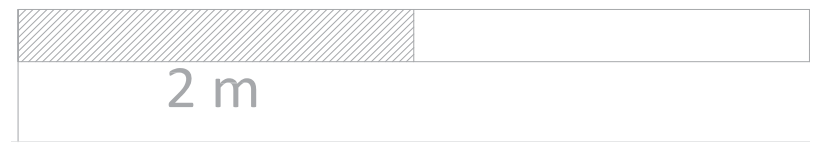
202



detail B

d e t a i l a and b

detail showing the construction of the angled window in the library



100 x 100 steel square section
handrail

50 x 100 steel u - section frame

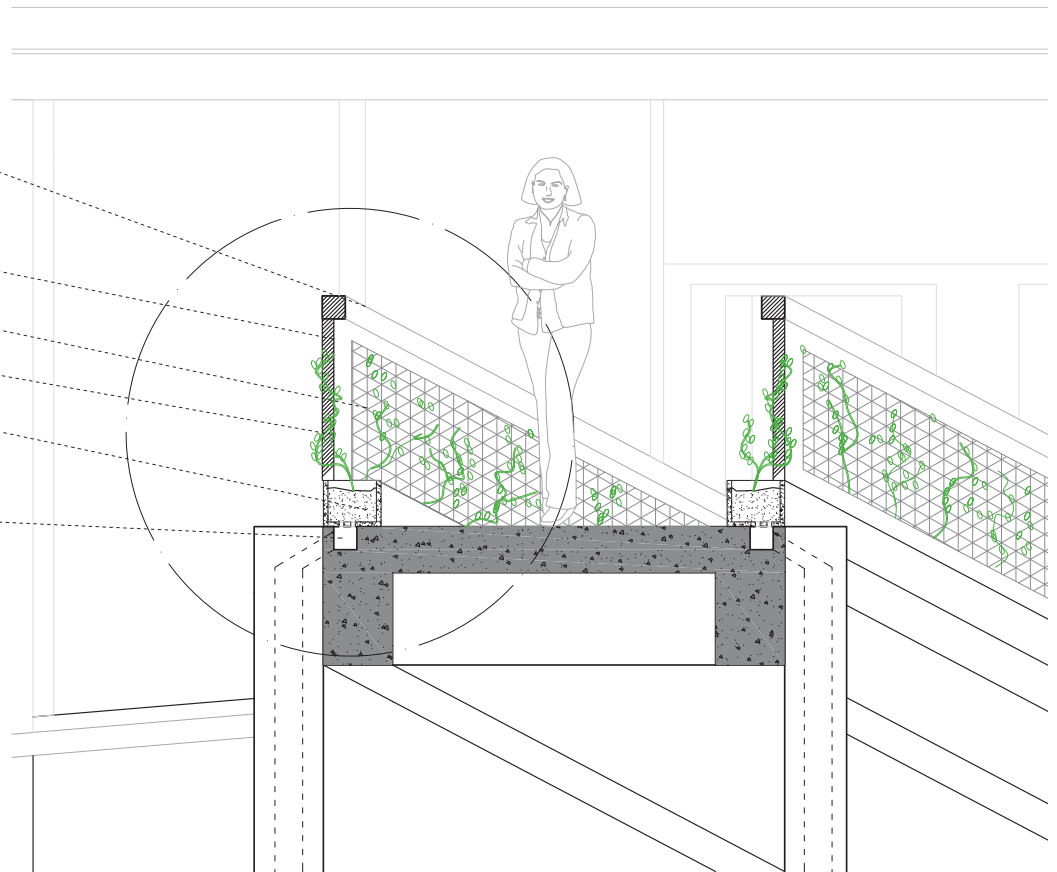
stainless steel weld mesh

evergreen creeper

200 x 250 fibre cement planter
with potting soil and drainage
holes

concrete box gutter takes water
to gutter cast into concrete
columns

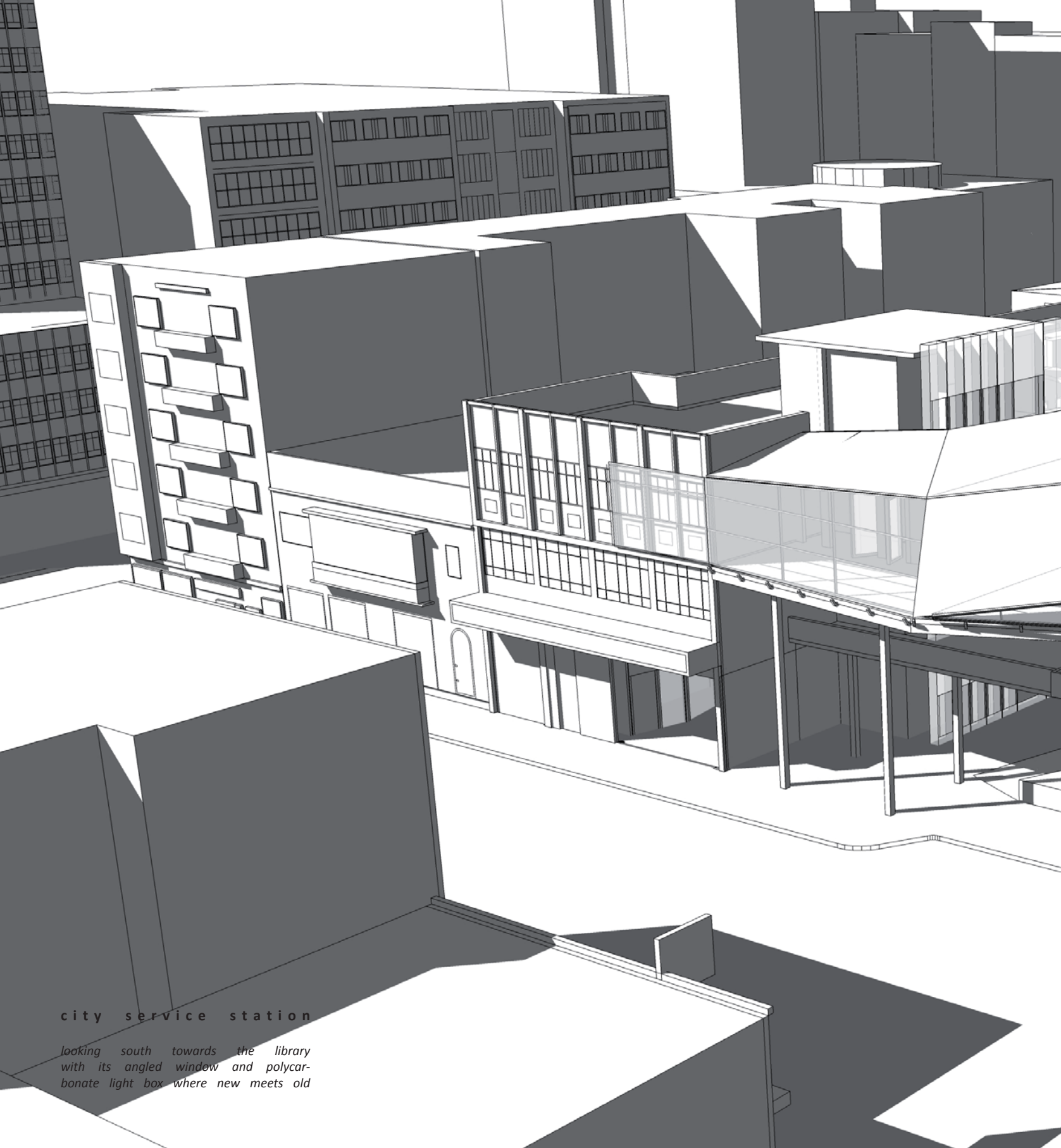
detail D



203

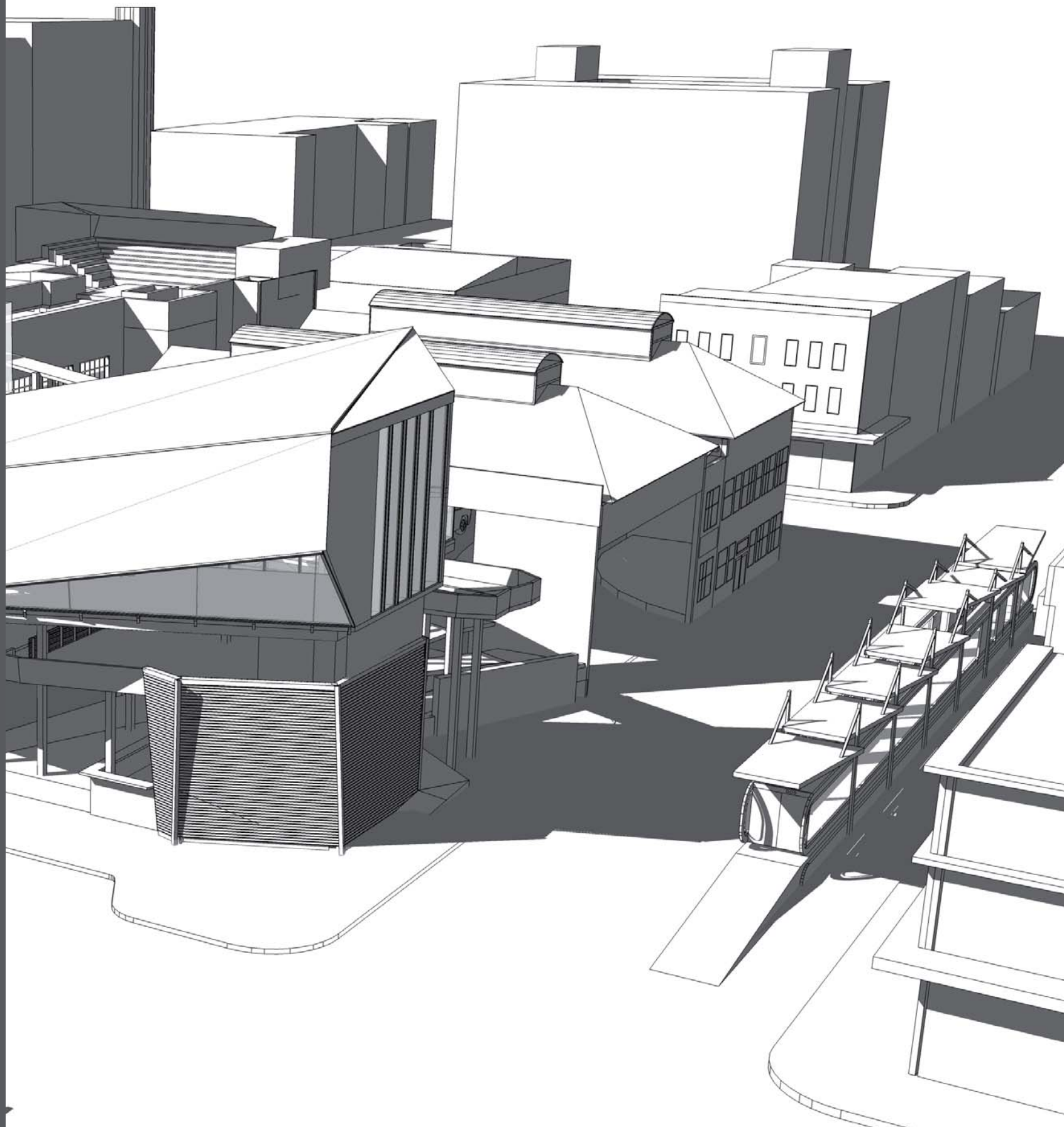
d e t a i l d

Detail showing the ramp from the second floor to the roof space. The creepers create hanging gardens which advertise the green space on the roof



city service station

looking south towards the library
with its angled window and polycarbonate light box where new meets old





city service station

north elevation as seen from jeppe street





15

B I B L I O G R A P H Y

books

- Adjaye, D in Allison, P (ed). (2006). *Making Public Buildings: Specificity, Customization, Imbrication*. London: Thames and Hudson.
- Basauri, L and Insulza, F in Sigler, J (1999). *Hunch: The Berlage Institute Report*. No. 1. The Netherlands: The Berlage Institute.
- Beavon, K (2004). *Johannesburg: The Making and Shaping of the City*. Pretoria: University of South Africa Press.
- Boeri, S in Sigler, J (1999). *Hunch: The Berlage Institute Report*. No. 1. The Netherlands: The Berlage Institute.
- Brill, M in Altman, I and Zube, E.H (ed). (1989). *Public Places and Spaces*. New York: Plenum Press.
- Bunschoten, R / CHORA. (1998). *Metaspaces*. London: Black Dog Publishing.
- Chipkin, C.M. (2008). *Johannesburg Transition: Architecture and Society from 1950*. Johannesburg: STE Publishers.
- Clarke, J. (ed) (1987). *Like it Was: The Star 100 Years in Johannesburg*. Johannesburg: Argus Printing and Publishing Company.
- Chu, Shiu-an-Wen in Sigler, J (1999). *Hunch: The Berlage Institute Report*. No. 1. The Netherlands: The Berlage Institute.
- Ellin, N. (2006). *Integral Urbanism*. New York: Taylor & Francis Group.
- Ellin, N in Spellman, C (ed) (2003). *Re-envisioning Landscape/Architecture*. Barcelona: Actar
- Farfan, X. (2006). *Re-activating Play: Children in the Fashion District*. Unpublished thesis for M Arch (Prof). Johannesburg: University of the Witwatersrand.
- Greenberg, M (1995). *The Poetics of Cities: Designing Neighbourhoods That Work*. Columbus: Ohio State University Press.
- Hadebe, T in Judin, H and Vladislavic, I (ed). (1998). *Blank: Architecture, Apartheid and After*. Rotterdam: Nai Publishers.
- Hickman, C.P, Roberts, L.S, Keen, S.L, Larson, A, l'Anson, H, Eisenhour, D.J (2008). *Integrated Principles of Zoology*. Fourteenth Edition. McGraw-Hill: New York.
- Jacobs, J. (1962). *The Death and Life of Great American Cities*. London: Jonathan Cape.
- Koolhaas, R (1994). *Delirious New York*. Rotterdam: 010 Publishers.
- Neil Leach, (2006). *Camouflage*. Massachusetts: The MIT Press.
- Madanipour, A (2003). *Public and Private Spaces of the City*. New York: Routledge.
- Masondo, I. Potenza, R. And Adams, L (ed) (2007) *Face Her*. Johannesburg: Market Photo Workshop.
- Mda, L in Judin, H and Vladislavic, I (ed). (1998). *Blank: Architecture, Apartheid and After*. Rotterdam: Nai Publishers.
- Melis, L (ed) (2003). *Parasite Paradise: A Manifesto for Temporary Architecture and Flexible Urbanism*. Rotterdam: Nai Publishers.
- Mertens, E. (2010). *Visualising Landscape Architecture: Functions/ Concepts/ Strategies*. Germany: Birkhauser.
- Mostafavi, M and Najle, C (ed). (2003). *Landscape Urbanism: A Manual for the Machinic Landscape*. London: Architecture Association.
- Palestrant, E. (1986). *Johannesburg One Hundred: A Pictorial History*. Johannesburg: AD. Donker (pty) Ltd.
- Paredes, C (ed). (2006). *Industrial Chic – Reconverting Spaces*. Italy: Edizioni Gribaudo srl.
- Powell, R (ed). (2004). *People Making Places: Imagination in the Public Realm*. Yorkshire: Public Arts.
- Saitowitz, S in Bell, M and Leong, S.T. (1998). *Slow Space*. New York: The Monacelli Press, Inc.
- Saitowitz, S in Bell, M (ed). (1996). *Architecture at Rice University*. New York: Rice University School of Architecture.
- Sandercock, L (2003). *Cosmopolis II: Mongrel Cities of the 21st Century*. London: Continuum.
- Sennett, R (1998). *The Spaces of Democracy*. USA: The University of Michigan.
- Taipale, K in Ruby, A (ed). (2008). *Urban Trans Formation*. Berlin: Ruby Press.
- Trancik, R. (1986). *Finding Lost Space: Theories of Urban Design*. New York: Van Nostrand Reinhold Company.
- Wall, A. In Corner, J (ed). (1999). *Recovering Landscape*. New York: Princeton Architectural Press.
- Whiting, S in Ruby, A (ed). (2008). *Urban Trans Formation*. Berlin: Ruby Press.
- Zimmerman, A. (ed) (2009). *Constructing Landscape: Materials, Techniques, Structural Components*. Germany: Birkhauser.

journals . articles . unpublished work

City of Toronto (2006) PATH: Toronto's downtown walkway _ Path facts. (www.toronto.ca/path)

Crisman, P. (Sept 2007). From industry to culture: leftovers, time and material transformation in four contemporary museums from The Journal of Architecture. V.12 n.4.

Fraser, Neil (March 2010). Reconsidering Bad Buildings. Citichat. (www.joburg.org.za)

Goldring, R (2009). Urban Amnesia. Unpublished essay for BAS (Hons). Johannesburg: University of the Witwatersrand.

Goldhoorn, B (2009). Rooftop Hop. Volume. V21. P 104 – 105.

Nardulli, A (Jul 2006). The Underground City (PATH): The largest underground shopping complex in the world. Toronto. (www.toronto.com/path).

Plit, R in Fife, I (2010). Not Just About Money from Financial Mail. 27 August 2010. p 77.

Struthers, C, Fernandis, A and Cox, A (2010). Rooftop Playgrounds Take Children Off The Streets. The Star Newspaper. 13 July 2010. P 8.

official documentation

211

Robertshaw, R of Issue Urban for the Johannesburg Development Agency (2002). Revised Business Plan for the Inner City Fashion District Project. Johannesburg.

Victoria Department of Infrastructure (Oct 2002). Melbourne 2030: Planning for Sustainable Growth. State of Victoria. (www.melbourne2030.vic.gov.au)

internet references

[http:// architecture.myninjaplease.com](http://architecture.myninjaplease.com) (accessed: 17/02/2010)

all photographs and sketches (unless stated) : kay hausler

