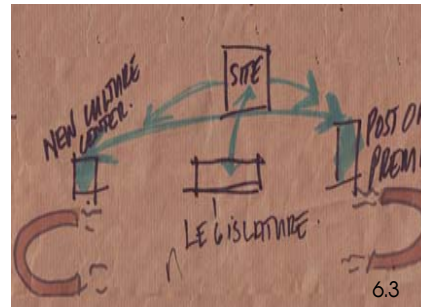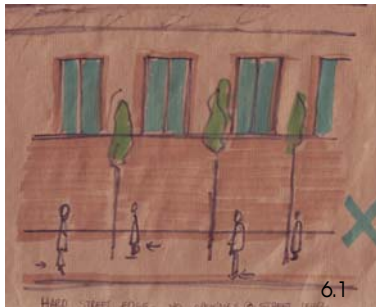URBAN
REGENERATION

URBAN DESIGN THEORIES

One of the primary functions of developing the site is to restore legibility to the urban environment. The building should function as an integral part of the city, responding to its context and connecting to the urban fabric. It is also important to consider the importance of acknowledging the historical grain and scale of the site. The building should not overpower the historical buildings around it, and the existing street grid, which makes reference to the early town planning of Johannesburg, should be respected. The relation of the built form to the human scale and pedestrian routes is also very important with the site being in an area of high pedestrian traffic. In order to create a building which fits coherently into its city context it is important to consider it in the larger context of the city,

Although the project fits into an existing framework it was important to consider its relationship to that framework through an investigation of basic urban design theories.

New urbanism is a post-modern planning movement, geared towards the creation of a liveable, sustainable, compact and vibrant built environment. Urban living is rapidly becoming the new hip and modern way to live for people of all ages and from all segments of society - where housing, work, shops, entertainment and civic facilities are all within walking distance. New urbanism favours authentic places such as historic urban centres.

6.1

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6.5

Exploration Of The Urban Context Of The Site Developed In This Dissertation

New urbanisms principles are aimed at raising people's quality of life and standard of living, by creating better places to live, and reviving the lost art of place making and fixing and infilling of cities.

The new urbanism charter includes these points as guidelines in urban development.

1. Walkability

-Most functions within a 10-minute walk of home and work.

-Pedestrian friendly street design (buildings close to street; tree-lined streets; on street parking; hidden parking lots; narrow, slow speed streets).

2. Connectivity

-Interconnected street grid network disperses traffic & eases walking.

-A hierarchy of narrow streets, boulevards, and alleys.

-High quality pedestrian network and public realm makes walking pleasurable.

3. Mixed-Use & Diversity

-A mix of shops, offices, apartments, and homes on site. Mixed-use within neighbourhoods, blocks, and buildings.

-Diverse groups of people of different ages, classes, cultures, and races.

4. Mixed Housing

A range of different type, sized and priced houses in close proximity.

5. Quality Architecture & Urban Design

-Emphasis placed on beauty, aesthetics, human comfort, and creating a sense of place.

-Special placement of civic uses and sites within the community.

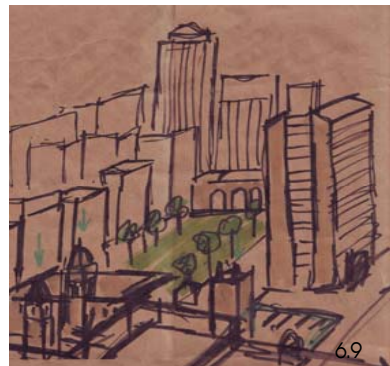-Human scale architecture and beautiful surroundings nourishing the human spirit.

6.7

Urban Connections To The Site

6.6

URBANDESIGN THEORIES

6. Traditional Neighbourhood Structure

-Discernable centre and edge.

-Public space at centre.

-Importance of quality public realm; public open space designed as civic art.

-A range of uses and densities contained within 10-minute walk.

-Transect planning: Highest densities at town centre; progressively less dense towards the edges.

7. Increased Density

-More buildings, residences, shops, and services closer together for ease of walking, to enable a more

efficient use of services and resources, and to create a more convenient, enjoyable place to live.

-New Urbanism design principles applied at the full range of densities from small towns, to large cities.

8. Smart Transportation

-A network of high-quality trains and public transport connecting cities, towns, and neighbourhoods.

-Pedestrian-friendly design that encourages a greater use of bicycles, rollerblades, scooters, and walking as daily transportation.

9. Sustainability

-Environmental impact due to development limited.

-Eco-friendly technologies used, with respect for ecology and value of natural systems.

-Energy efficiency.

-Less use of finite fuels.
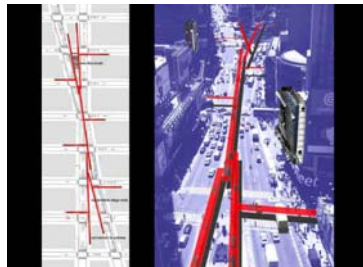
-More local production.

-More walking encouraged.

10. Quality of Life

Together these principles add up to achieve a high quality of life - creating places that enrich, uplift, and

6.8

6.9

INFLUENCES

From left:
Herzog & de Meuron,
Central signal Box, Basel
(Mack 2000 . 87)
Herzog & de Meuron,
Library of Eberswalde
University, (Mack 2000. 70)
Herzog & de Meuron,
Institute for hospital
Pharmaceuticals, Basel
(Mack 2000. 142)
Rob Krier, study for
perimeter block with
courtyard,
Schutzenstrasse Berkin.
(Krier 1982. 215)
Rob Krier, Architectural
elements - Landsberger
Alee (Krier 1982. 99)
Rob Krier, Analogus City
(Krier 1982. 212)
Lot-Ek, study of connexions
in New York City
(www.lot-ek.com)

URBAN
REGENERATION

INFLUENCES

Bank City
New head office for First National Bank, Johannesburg CBD
Revel Fox Associates,

The brief assumed Bank City would be in the same vein as other contemporary city developments. It was assumed it would take the form of a building with a large footprint, a large atrium, a concrete frame, full air-conditioning, conventional services, fully clad in granite, with strip windows and a corporate sign on top. (Fox 1998. 68) The actual design was a drastic departure from that standard.

The building was con considered as a part of a greater whole – the city. The existing street grid was respected with streets continuing through the open public spaces which are defined by the background buildings of Bank City.

Fox wanted the building to make a positive contribution to the city; to form part of the city; and relate to its context - rather than to create citadel-like building, removed from the urban fabric and the grit of city life.

Essential factors in the design were;-
Holding the existing building line.
Reducing the buildings height.
Respecting the street grid.

7.1

Left: Simmonds Street, looking North towards Bank City. The scale of the new bank building (background) blends harmoniously with the Historical architecture of the Financial District.

The low key inner city urbanist model within the scheme further suggested pulling back facades of buildings fronting onto Kerk Street; and creating large porticos as a way of demarcating bank territory; with the ebb and flow of city life being allowed to continue around the base of the buildings.The then accepted model of a straight atrium and podium building was criticised by the design team. This concept privatises city space for the exclusive use of the elite, whilst authentic city life is externalised and made inconsequential to the building. Buildings on this model, with a single entry and an impenetrable ground floor reduce dialogue between the building and the city fabric. They become contextless, and could be located in any part, of any city.

The Bank City Project aimed at creating dialogue with the street through a more human scale and a penetrable appearance. The bank was envisaged as part of the city, and designed in a way that it would contribute to the workings of the city. The building is low and unthreatening, and allows sunlight into the public spaces. The design reinforces FNB's confidence in the city. It is not a citadel in the city, from which life passes by, but rather the building and its occupants enter into that life. (Fox 1998. 69)

The four buildings of the complex are symbolically joined together on each side of Simmonds Street into a wall of facades around a civic square; a formal open area around which the buildings can front. The remaining perimeter edges are dedicated to retail and ordinary shopping activity. The public city square is historically important. It gives identity to the bank and is also part of the memory of the Library Gardens (now Beyers Naude Square) onto which the banks original headquarters faced.

Kerk Street View Of Bank City

7.4

7.3

Simmonds Street Views Of Bank City In The Context Of The Historical Financial District

7.2

7.5

View From The Kerk Street Market
Through Bank City Into First Place

7.6

I N F L U E N C E S

Whilst the design team was unanimous in supporting the urban model of the scheme, many felt its classical language was inappropriate. It was seen as an undesirable linking of the building to the classical sandstone civic buildings of the general precinct, which belong to the old 'tarnished' era of Johannesburg's history. Using these buildings as a major influence in the creation of a new form was seen to communicate a negative message about the banks position in the new society. (Fox 1998. 69) Foxe's argument in favour of the classical language was that it fitted effortlessly into the existing urban context, and forms a timeless model unencumbered by fleeting fashions.

The facades were designed in sandstone, but this was substituted for granite, due to cost and life-span implications. This is unfortunate. The sandstone would have helped the buildings to fit more unobtrusively into the urban context, and would have created a softer urban fabric. The granite does however give the bank city precinct its own distinct identity.

Standing in first place (the central public square) at the opening day of Bank City… we were struck by how powerful the building is… the impact of the building is unquestionable. First Place is a grand civic space, and while we were sitting, listening to the state president give his opening address, I chuckled to myself when I saw a street hawker stroll past him, right through the square, with a mountain of furry toys strapped to his back – the ebb and flow of urban life indeed. (Jacobs 1998. 70)

**The Drill Hall, Johannesburg
Michael Hart Architects**

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WE SHALL REMEMBER

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7.10

URBAN REGENERATION

INFLUENCES
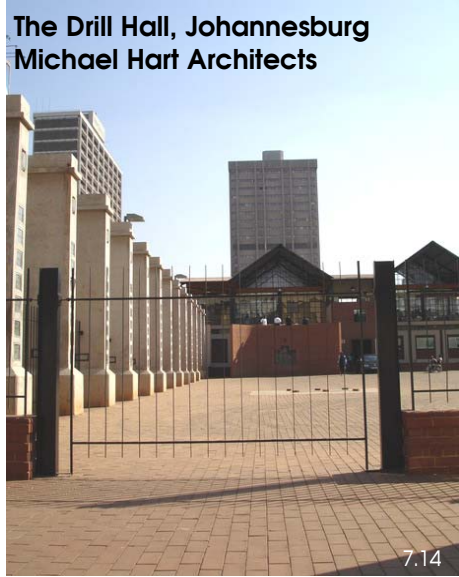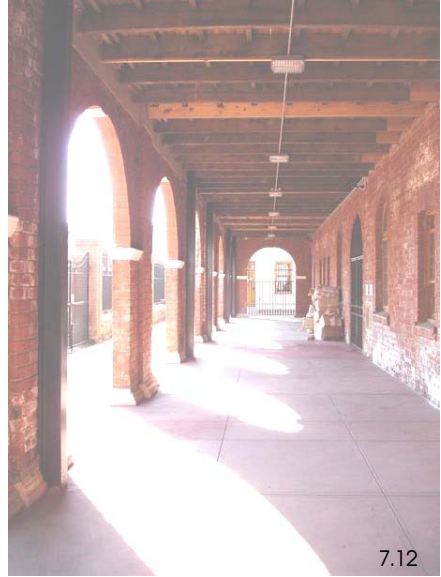
The Constitution Hill Complex, No 4 Prison, Johannesburg
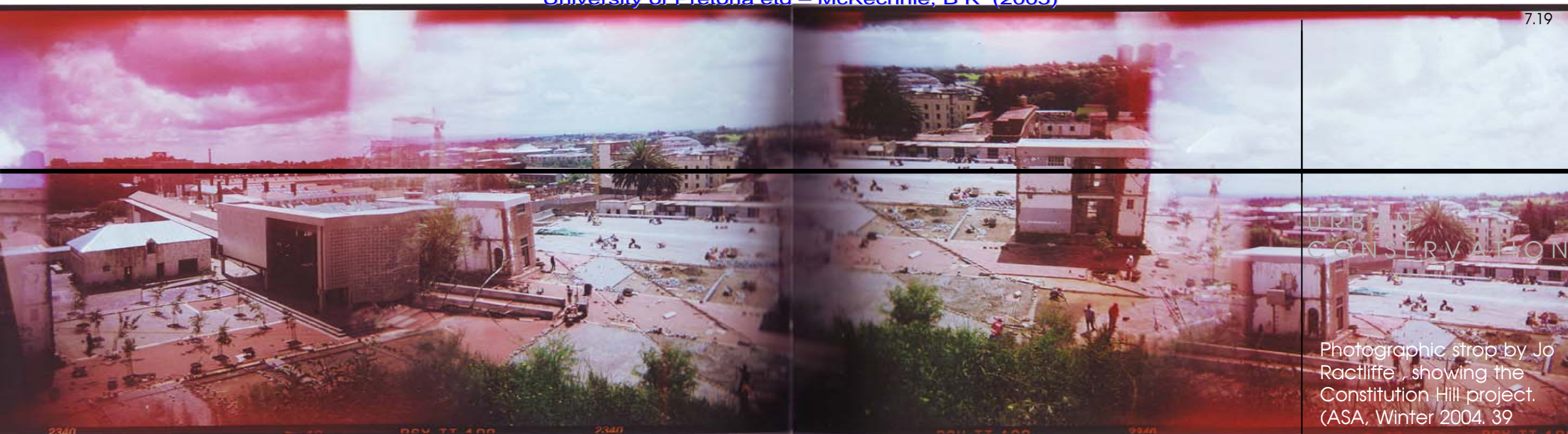**Urban Solutions + OMM Design Workshop**

The Constitution Hill project has overlaid a new, positive identity onto a site with a less than exemplary history – Creating a place symbolic of inclusion, access and unity in an area which completely represented the segregation, exclusion and brutality of Apartheid South African society. *If being lost, disconnected, stripped and physically abused was the extreme of black suffering, being placed in a distancing position of surveillance and control was the lot of white lives.* (le Roux, Hell / Whole, Art South Africa, Winter 2004. 39)

The Constitution Hill complex mirrors the New South African Constitution's *construction of binaries between a bad past and a future freedom.* (le Roux, Hell / Whole, Art South Africa, winter 2004. 39) The complex links heritage and tourism strategies, urban and architectural interventions and arts procurement.

The first phase in the development of Constitution Hill was the historical survey of the area by architectural historians Derek and Vivienne Japha and Herbert Prins. The development of the area had to be extremely sensitive to the historic and social history of the prison. The careful documentation of the No 4 and 5 prison blocks ensured that they would remain legible as historical artefacts.

The Constitutional Court Building

7.15

URBAN
CONSERVATION

Photographic strop by Jo Ractliffe , showing the Constitution Hill project. (ASA, Winter 2004. 39

The development explores a programme for mixed use development on a historical site including

- up-market residential development

- commercial space

- public functions

public space

Historical elements are woven into a contemporary form - and in the process the spirit of the place is completely subverted – without losing the gravity of its historical connotations.
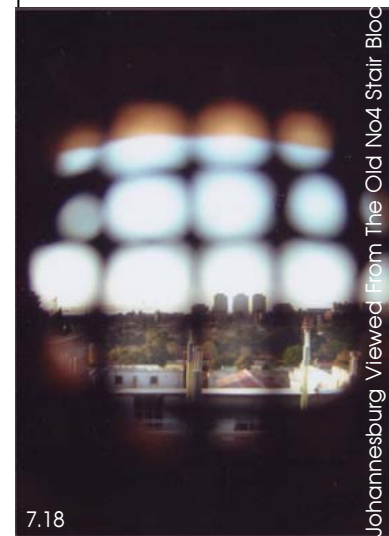
The Constitution Hill complex has been transformed from a place of exclusion, separation and confinement into one completely connected to its context in the city.

7.16

The Constitutional Judges Chambers

7.17

West Elevation Screen Detail

7.18

Johannesburg Viewed From The Old No4 Stair Bloc

URBAN
REGENERATION

INFLUENCES

7.20

The Mobile City

7.21

7.22

7.23

The Artist Explains Her Work

The Mobile City, ABSA Bank, North Tower, Johannesburg
Susan Woolf (Artist), Paul Kawood and Lewis Levin (Architects).

Suspended in the lobby of the ABSA Bank North Tower, Artist Susan Woolf's Mobile City is the world's biggest kinetic sculpture. The work juxtaposes the old and new cities of Johannesburg. The sculpture depicts the buildings of Johannesburg, the roads and highways connecting them and the Highveld surrounding the city. Johannesburg is shown, divided into two cities, with the substructure of mine shafts as an underlying connection between the two apparent anomalies. The old city depicts the historical buildings of Johannesburg - representing the past. The new city consists of contemporary buildings – representing the present. The two cities examine the relationship between past and present – between time and memory. The sculpture is driven by three motors and takes 20minutes to complete a full cycle (up and down). The movement of the two suspended cities creates opportunities for the viewer to experience different visual and spatial relationships between the past and present cities – *a collision in space and time* –as different aspects come into focus and then disappear. The work not only comments on the differences between the old and new Johannesburg, but also reflects on the simultaneous existence of the two cities.

Woolf's art concentrates on the symbolic and conceptual aspects of society. She defines her work as, "... *the appreciation of heritage and generations, referring to the past, and linking it to the present and future. My art continues to examine, through personal experience, both crises in and solutions to the South African situation"*- Issues which are clearly relevant to Contemporary Johannesburg.

URBAN
REGENERATION
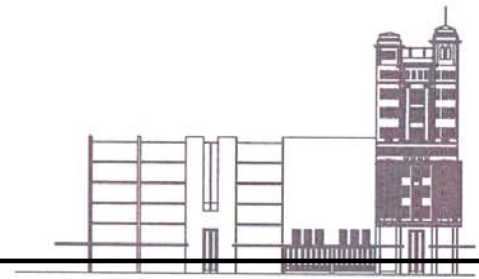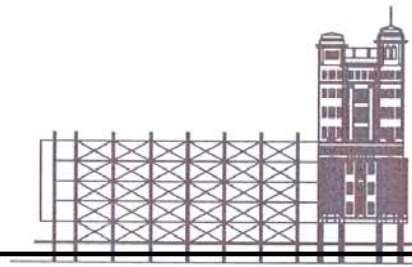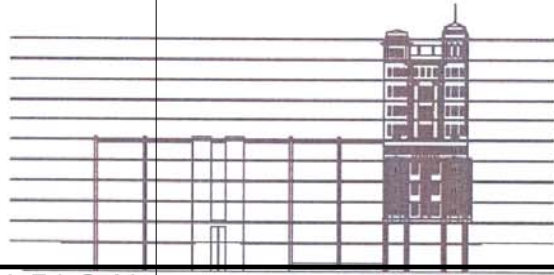
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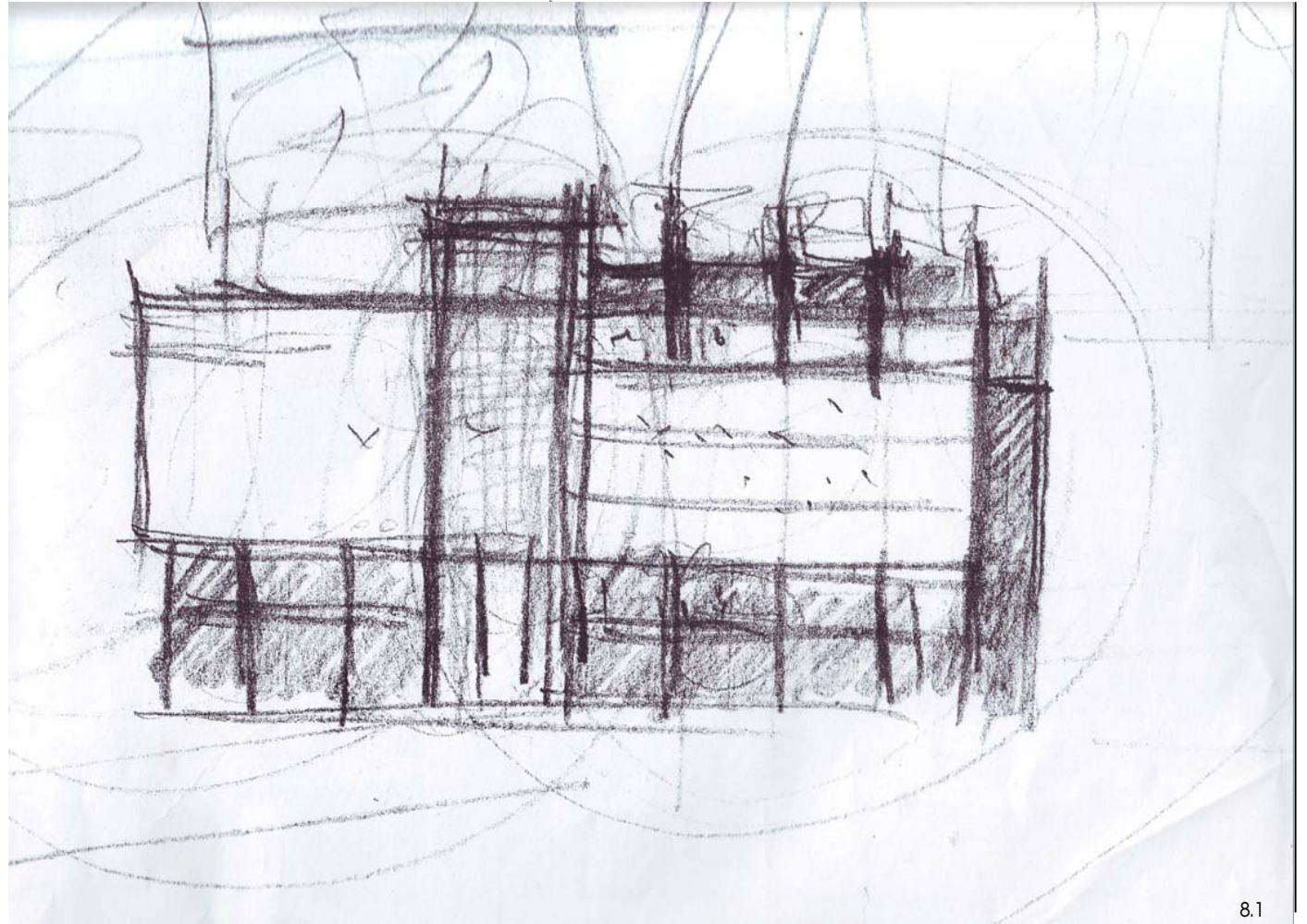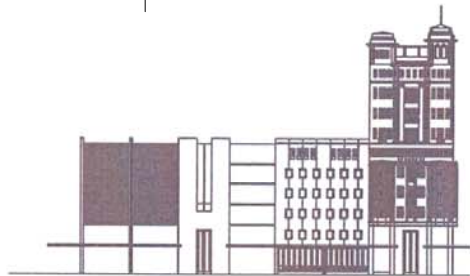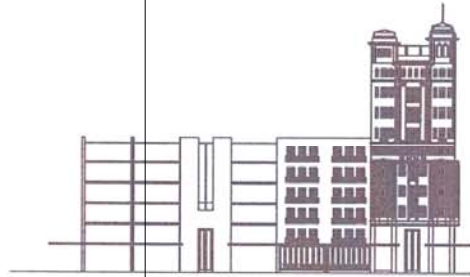
elevational studies
scale 1 : 250

8.1

Themes that inadvertently emerge when one looks at contemporary Johannesburg are those of identity and universality, enclosure and exclusion, inside and outside, centre and edge. (Bremner, 2004. 24)

An appropriate architecture must be directly influenced by its local context, and be seen to bespeak on its environment - ensuring a sensual, luxurious fit. The architecture should fit the site in the same way a couture garment is tailored to fit a specific body, suiting it in a way which could not be achieved by something standard, off the shelf or mass produced.

The architectural language appropriate to a high profile site at the heart of a world class city should be unique, opulent and luxurious. This provides an opportunity for the creation of juxtaposition between the envisaged future luxe city centre, and the present messy neglected and decaying Johannesburg - It is these contradictions and juxtapositions that give vibrant places their character
In the same way that one should not over-restore a historical artefact – the patina gives it a sense of historic time and authenticity. Johannesburg will never be a completely regenerated city. It is the neglect and blight of the past, overlaid by the new and renovated contemporary city, which creates its unique genius loci. An insertion on such a site should be unique and memorable - yet not in a manner that will cause the insertion to compete with the historical aspect of the context. It should add identity, sense of place and legibility to the area.

The site is within a city of extreme diversity. It is the juxtapositions inherent in a third world, yet world class city, which should be exploited to create an edgy, authentic, vibrant urban fabric.

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

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

From the initial concept phase, various important design aspects were identified. Although the language of the building has altered, these aspects have remained – the underlying generators of the final form – namely:

Appropriateness to the city and its history

Responsiveness to the urban context

Respectfulness of the historical city scale and grain

Lightness

Openness – permeability

Connectedness – to the city – between inside and outside

The 1901 Site Survey Diagram   8.2

The Original Obei And Obei Plans Of The Barbican

8.3

8.4
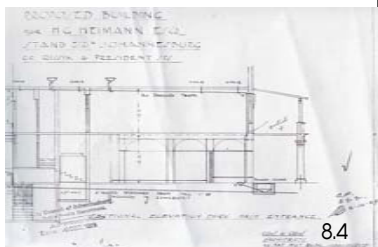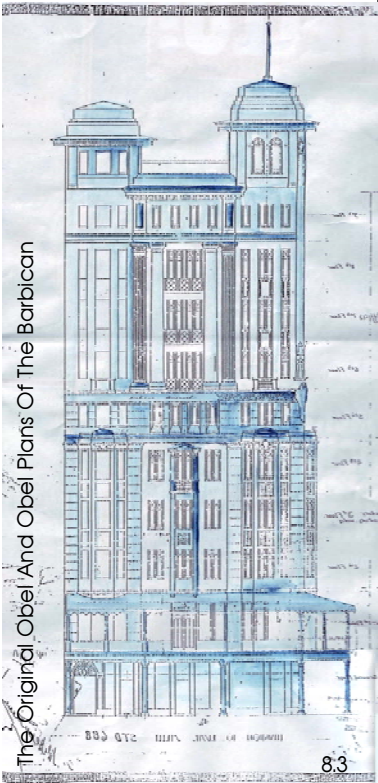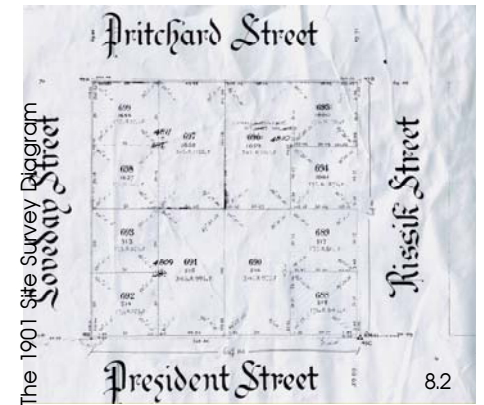
The architecture is about weaving together aspects of different times and cultures into a cohesive contemporary form. The concept of articulating the original four stands on the site is an important design consideration – respecting the historical grain of development. It is important that the building should form part of the city - enriching its urban context. Criticism has been levelled against 'gentrified' city developments, which (although situated in multi dimensional urban areas) too often turn their backs on their context. Unfortunately the developers believe that the success of selling these exclusive city developments depends upon creating a security net of separation between the development's users and the world beyond their doors; creating what Iain Louw, Professor of architecture at The University of Cape Town, refers to as 'vertical gated communities' (Heights of Contradiction, Art South Africa, Winter 2005. 53). For this reason, it is important to create a public function which relates to the city at the vibrant street level – The building is semi permeable to the city, allowing its energy to spill over into the street - enhancing the connection between the built form and the city.

Creating a perimeter block to restore the legibility of the street grid is a priority. The perimeter block configuration provides an opportunity for an internalised palazzo style, semi private courtyard space - which makes reference to the service courtyards of historic Johannesburg. Although public space is important (especially in a densely developed city like Johannesburg) – the creation of an external public space in this context would be inappropriate, as it would compete with the open space of Beyers Naude Square - only a block away. Further development on the south side of the site is very important to restore the legibility of Government Square, directly across from the site and in front of City Hall. The present blank state of the site has robbed the square of its historical **edge**, its **legibility** and its **energy**. Given the unfortunate hardness and heaviness of the existing buildings flanking the site, it is important that the new building should create an aspect of lightness and permeability along the street.

The visual link from the city street - through the building, to the internal space of the courtyard - is very important.

It is important that the building to be infilled on the site should respect the scale of this important historical precinct. Unfortunately the 30 storey Old Mutual Head Office, and Game's 10 storey perimeter block on the periphery of the site are grossly over-scaled, and unrelated to the historical context. This heightens the importance of creating a dialogue between the new building and the historic City Hall, Post Office and Barbican buildings. The scale of the infill building should emphasize the importance of these buildings.

Investigating The
Connectedness And
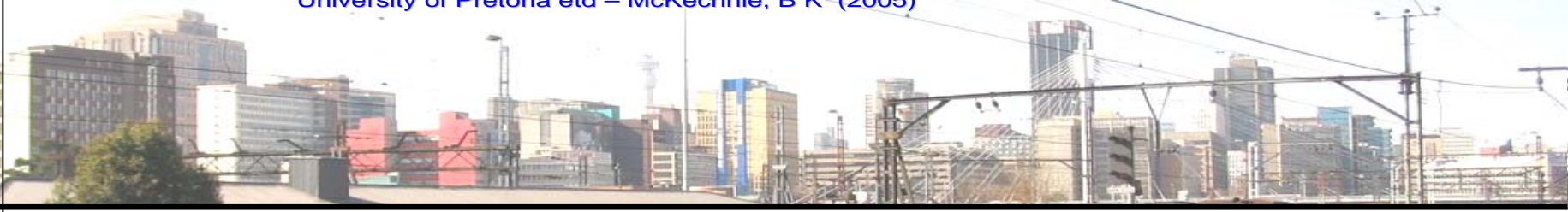Dialogue Of The New
Building To The City

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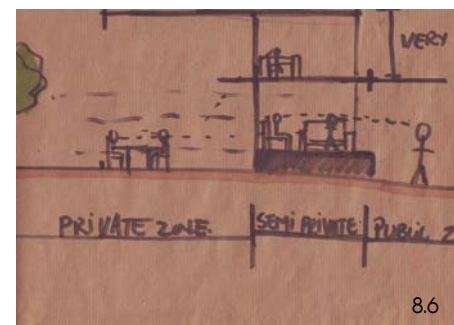
D E S I G N   D E V E L O P M E N T

Initial Concept

The brief explored a building which formed part of a perimeter block and contained street level public space. The scale of the building respected the historical scale of the precinct, and the façade articulation represented the original smaller stands on the site (now consolidated into one stand). The concept of a screen was explored along with the idea of overlaying images of the historical streetscape on the screen.

It was decided to revisit these ideas.

Articulating the building as smaller modules resulted in a disjointed form.

No architectural documents of the original buildings on the site along President Street could be located to overlay onto the screen.

The only architectural drawings of the original buildings on the site which could be located at the Johannesburg Municipality;-

Right- The Harvey Greenacre and Co general stores and office building on Rissik Street (no date or architect could be traced for the building, The style suggests it was probably from the early part of the 20th century). This building seems to have survived until the site was cleared for parking in the early 1990s. The building occupied a double site in the middle of the block, next to the Barbican, Historical photographs would suggest that the buildings five storeys represented the general scale of the area.

Left- The Barbican Building, by Obel & Obel 1929. This 'New York' inspired 'skyscraper' still stands on the corner of Rissik and President Streets. The exterior is unscathed - apart from the demolition of the original pedestrian portico. The building has been mothballed since 1990. Unfortunately it was illegally occupied by squatters in 2002 who gutted the interior.


8.8

8.9

Resolution of Concept

The perimeter block layout has been retained. The elevations have been resolved with a more uniform treatment of glass on the lower levels – creating an aspect of visual permeability and connectedness between to public realm of the city and the internal (public) areas of the building.

The visual link from the hard city street - through the building, to the green internal space of the courtyard, is very important and a unique experience in a hard grey city. The openness of the building – to the city street from the internal courtyard - also creates a play between **internal** and **external** space. The pond in the courtyard adds an element of restfulness to the building – creating a place of tranquillity in the city. The pond element is repeated in the roof-top, rim-flow swimming pool. Upon entering the pool the city is reflected around you. The transition between the reflection of the city in the pool and the actual city becomes blurred. You float, weightless. The city is all around you, enveloping you - You are part of the city.
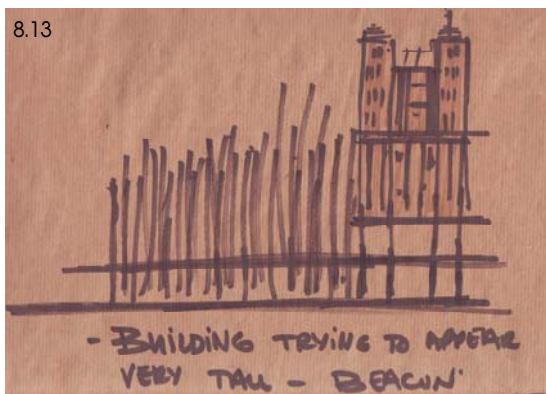
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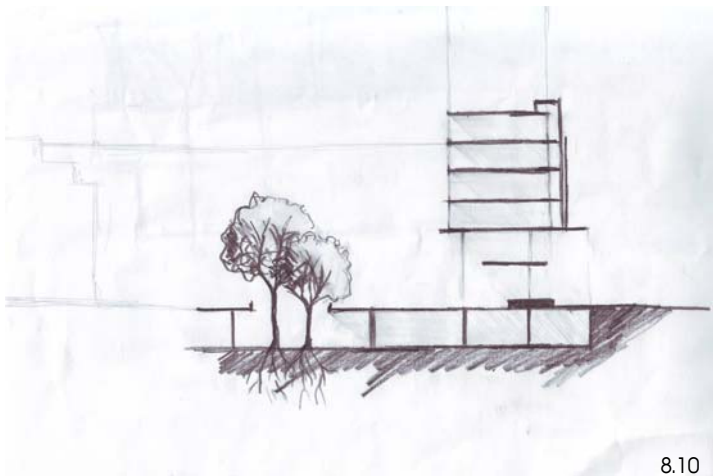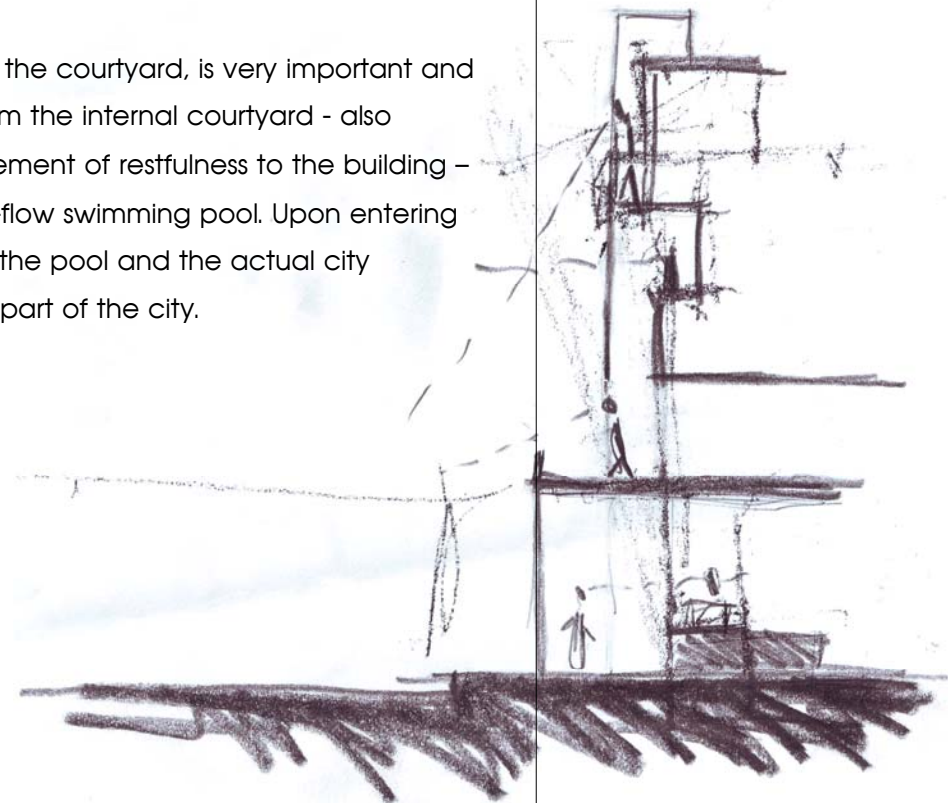
DESIGN DEVELOPMENT

The screen aspect of the initial design has been retained and re-worked. The screen serves as a shielding element for the private residential component of the building. The city is, however, still visible from the inside of the building through the screen. The screen is created from willow osiers, woven between steel flats, making reference to the traditional Ndebele method of construction (using wattle, woven between wooden poles and plastered with mud). Although the original concept of depicting the historic streetscape on the screen was abandoned, subtle breaks have been left in the screen along the divisions of the original city stands.

The corner aspect of the site is very important. Traditionally the corner stands in Johannesburg were more sought after, due to their extra street frontage and the opportunity for more volumetric architectural expression - like the towers and turrets on the Barbican Building. The importance of the corner of the site is further emphasised as it is in the direct view of the main access to City Hall, and diagonally opposite the main entrance to the Gauteng Provincial Legislature. The strategic corner sighting affords a very important opportunity to create a strong visual identity for the building by peeling back its screen to reveal the glass- light beacon con-
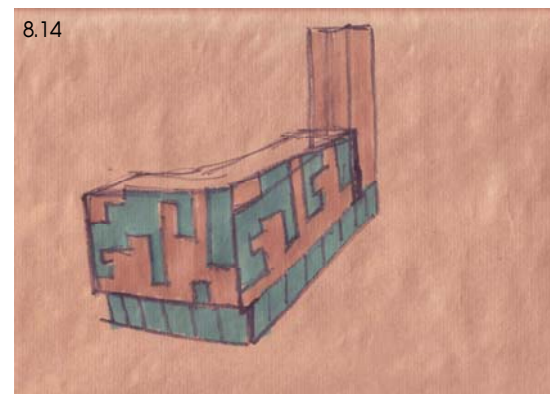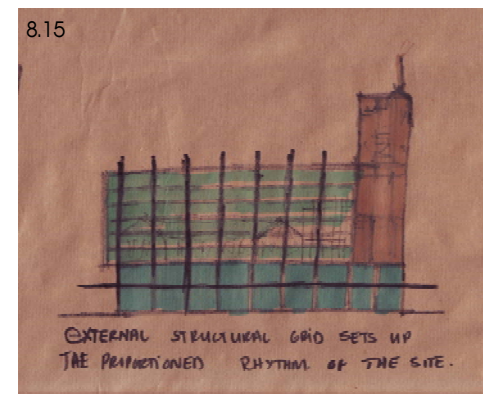

8.12

8.13

- BUILDING TRYING TO APPEAR VERY TALL - BEACON'

8.14

8.15

EXTERNAL STRUCTURAL GRID SETS UP THE PROPORTIONED RHYTHM OF THE SITE.

Further Exploration Of Design Elements

The glass form of the building, like a glazed jewel on the street, sets it apart from its heavy, over-scaled neighbours. At night the building glows from the inside out – forming a light beacon in the dark city. Seasonal silkscreen artworks commissioned by local artists will be stretched over the willow screen. They will enhance the identity of Kopanong as a cultural, as well as government precinct; and give further identity to the area. As the breeze filters through the willow osier screen, the silk artworks billow gently – enhancing the image of the building as a permeable, ethereal object of beauty – a symbol of the re-awakening of Johannesburg.

8.16