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portal to pretoria



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establishing a northern gateway to the city

portal n. 1. an entrance, gateway, or doorway 2. any entrance or access to a place 3. *internet.* a web site or service that provides access to a number of designated resources, information and facilities on a network 4. tool/ set of tools for organized knowledge discovery that assists identification and selection of appropriate resources



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establishing a northern gateway to the city

by Marinda Smalberger

mentor: Gary White
course co-ordinator: Prof. Roger C. Fisher

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fig. 1.1



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Cities are the physical manifestation of man's existential ordering of his environment. They are a source of, and display the identity of an individual, culture or region. As architects, the buildings to which we give form determine the manner in which the users live in and around them, thus creating a perception of that environment. Each individual's perception is determined through experiential knowledge, their personal historical and cultural background effecting a unique experience of that environment. An affinity for this designed experience can be developed through an identity with the elements displayed. However, a failure to do so may discourage the use of a place and negativity may be fostered towards it.

It is our challenge as designers, within a South African context of diverse cultures, to design environments with which all its users can identify. Methods of place-making and form-giving must be accessible to each individual. The elements employed should transcend culture and history.

Identity and uniqueness of place should be our ultimate goals. Through the use of the place, a new experiential history is developed, encouraging fondness and sympathy. Through memories, it integrates itself with our lives.



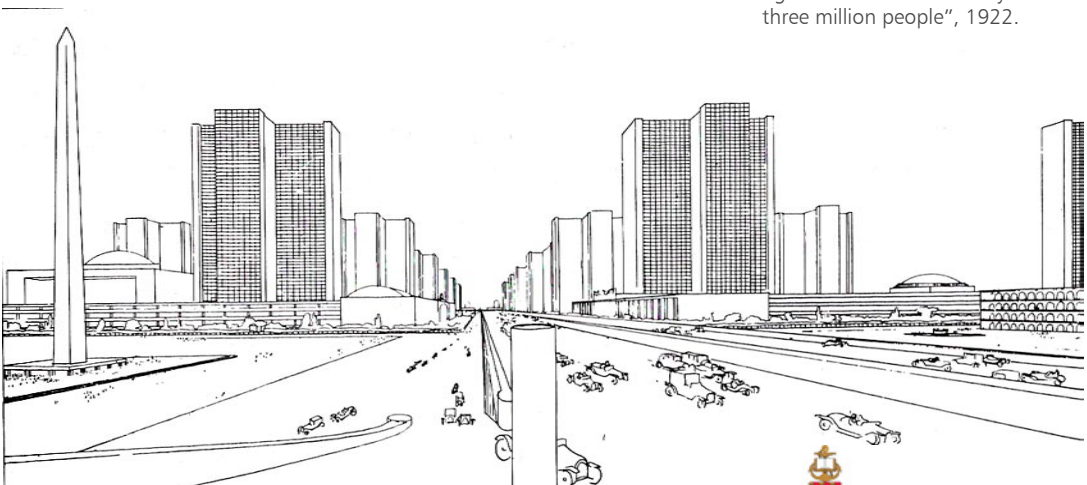


orientation

From primitive times to modern-day, man has been attached to the environment in which he finds himself. By distinguishing and naming certain parts of this environment, he formulates a visual image of his surroundings, in order to move with ease through it. If such reference should be disturbed, if way-finding cannot occur, mobile man is filled with the terror of being lost. (Lynch 1982; p. 123-125).

Hence the need for orientation. Within the modern city, many factors hinder the way-finding strategies of its users. Within stark, unmemorable and unidentifiable environments, single visual images merge in their similarity, preventing clarity in the mind of the user.

fig. 2.1 Le Corbusier's "city for three million people", 1922.





Kevin Lynch (Lynch:1982, p46-48) classifies the five physical elements which contribute to the environmental image. In order for a clear city image to be established, these elements are to be strengthened. The manner in which they are patterned together produces a rich urban environment. Each element can contribute to the identity of another.

_paths:

>> channels of movement are often the predominant element whereby other elements are ordered in the mind of the user. They may be streets, walkways, railroads etc.

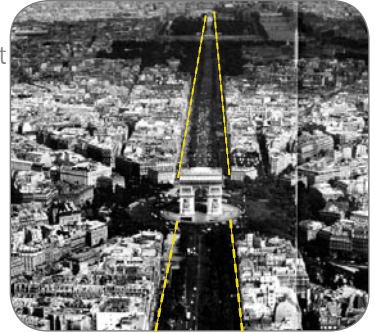
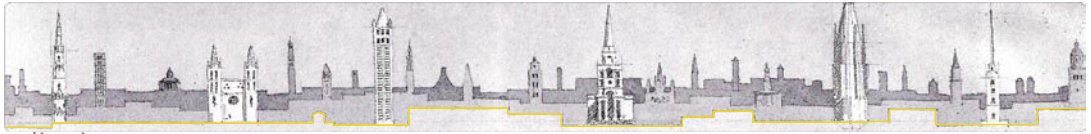


fig. 2.2- Paris, looking south-east

_edges

>> linear boundaries, breaking the lateral continuity. They may be barriers, preventing movement from one region to another. Alternatively, they may act as seams along which interaction can occur. They are used to arrange generalized areas in the mind of the user.

fig. 2.3- skyline features



_districts

>> areas within the environment, two-dimensionally mapped as having a specific identifying character. Identifiable from the inside or outside, the experience of a district varies within contexts.



fig. 2.4- Toulouse-Le Mirail (France), Plan

_nodes

>> focal points, the cores between which the user travels. They may be concentrations of activity, brought about by some physical use.

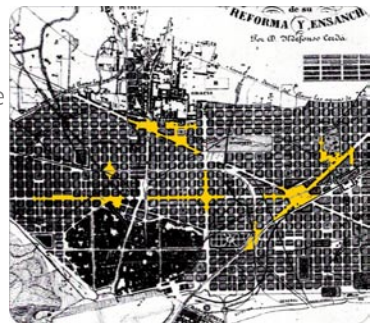


fig. 2.5- Barcelona, Plan of city by Ildefonso Cerdà,

_landmarks

>> external point references, usually simply-defined physical objects. They provide a constant direction by which users can position themselves. They often lend identity and structure to the environment.



fig. 2.6- Landmark. Berlin



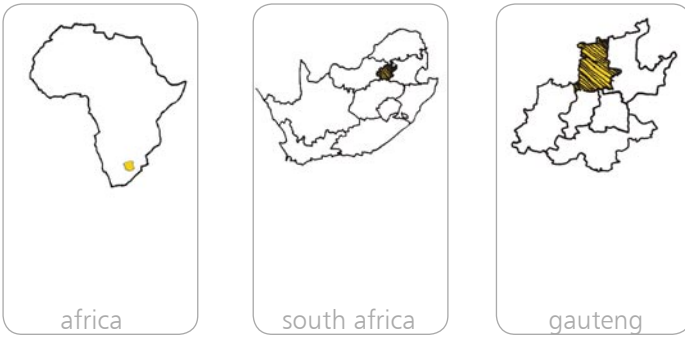


fig. 2.7 diagrammatic sketch of proposed site position in Africa, South Africa and Gauteng

The proposed site to be investigated in this dissertation is located in the South African Province of Gauteng. Tshwane, a municipal ward of this province has, as its central business district (CBD), the city of Pretoria. It is within this urban context that the subject under investigation will be modelled.

Pretoria was established in 1855 as the seat of the ZAR government, and continues to be the administrative capital of South Africa. The low-lying plain is given form through the rigid orthogonal street grid, related to the cosmic order of the sun's path and the position of topographical access points (Jordaan, 1989: p.26). This grid finds its focal point in Church Square, as historical, religious meeting place.

city-wide context



fig. 2.8 figure ground of the Pretoria CBD





The Pretoria precinct under investigation is bounded by D.F.Malan avenue to the West, Boom street to the North, Prinsloo street to the East and Proes street as Southern boundary. This area displays a broad variety of uses, differing greatly in urban character from the rest of the city. The form, organisation and general use, display a disintegration of the urban fabric. This lends a sense of detachment from the urban environment.

Interventions proposed are to re-stitch this precinct to the Pretoria urban fabric, bringing urban regeneration to the study area. The urban character unique to the area is to be optimised to the advantage of all city users.

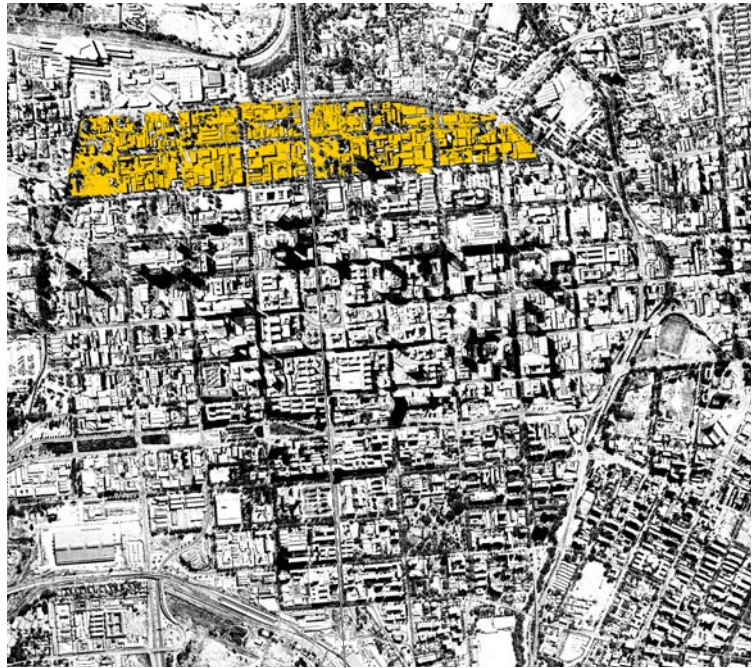


fig. 2.9 district within urban context

boom str. >>>

bloed str. >>>

struben str. >>

study area



[city] paths:

Paul Kruger Street and Church Street act as lateral axes within the orthogonal street grid of Pretoria. Emanating from Church Square, the historical civic centre, they divide the city into four quadrants, the *Urbs Quadrata* grid system devised by the Romans. They lend great significance to Church Square at their point of intersection (Holm, 1998:62). The rational gridiron layout of streets assists orientation within the city on a vehicular scale.



fig. 2.11. sketches of typical views in district
fig. 2.12. aerial view down length of Paul Kruger street



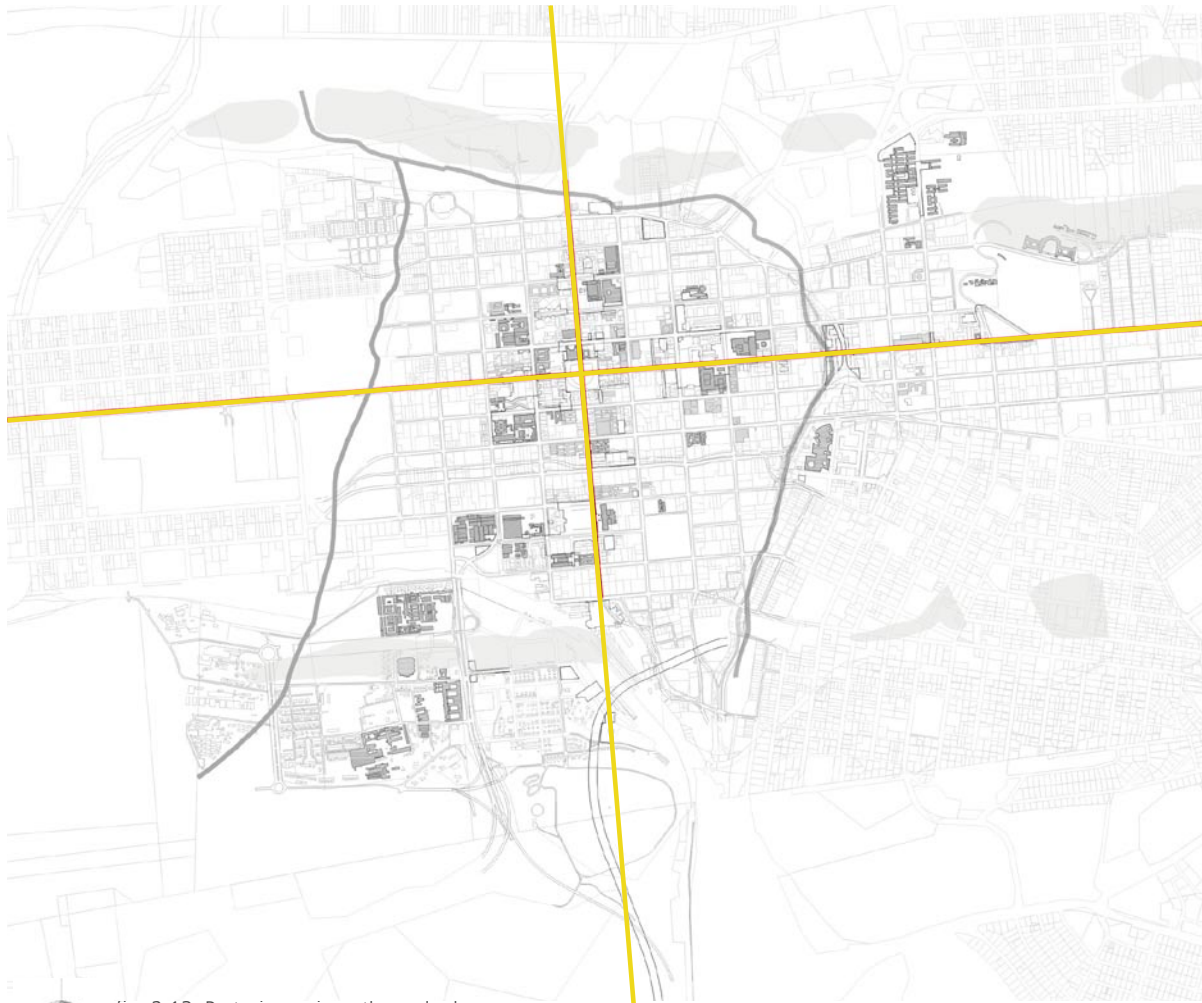
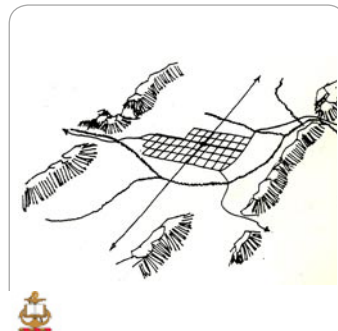
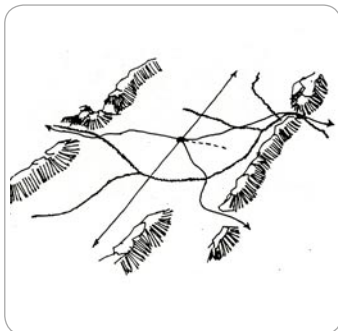
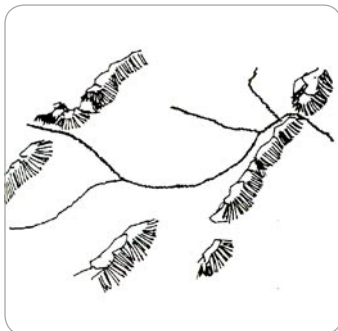


fig. 2.13. Pretoria- main paths and edges

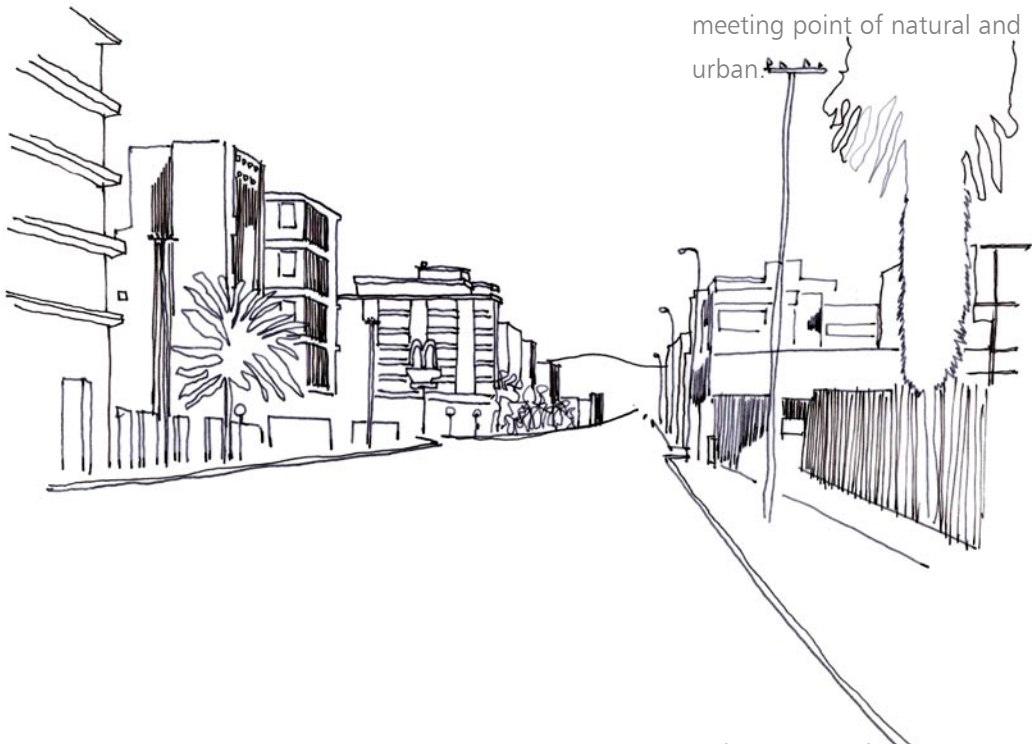
paul kruger street >

fig. 2.14. development of Pretoria within natural edges





<< church street



[city] edges
 The *Daspoort* and *Schurweberge* mountain ranges bound the city to the North and South. The *Apies River* and *Steenoven Spruit* define the city edge to the East and West. These natural barriers form between them a low-lying plain upon which the city is built. This type of landscape Christian Norberg Schulz classifies as a 'classical landscape', distinct elements composed to a meaningful order making "human fellowship" possible (Norberg-Schulz, 1980: p.47). The surrounding topography defines the urban edge as meeting point of natural and urban.

fig. 2.15 view of natural-urban edge

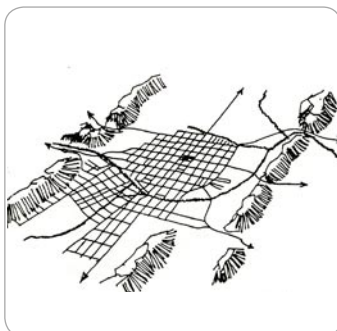




fig. 2.16. northern district

_[city] districts

Districts can be identified in the city according to various criteria.

The grouping of related functions often lends a unique character, for example the museum district, located South of Church square, including the city hall, national science museum and other strategically placed buildings.

Other districts are determined by the nodes at their centre, such as Church Square precinct, a primarily civic district.

The study area, with its unique usage and urban fabric, possesses an informal character. The activities occurring on-street, the manner in which retail is conducted, creates a rich sensory experience. The vivid colours, distinct smells, and blaring music provide a vibrant *rhythm*, alternative to that of the civic centre. The taxi-dominated Bloed- and Boom Streets contribute to this image, as do the various train stations and taxi ranks.





group study area



boom street
blood street
struben street

fig. 2.17. aerial photograph of study area



fig. 2.18. figure ground study

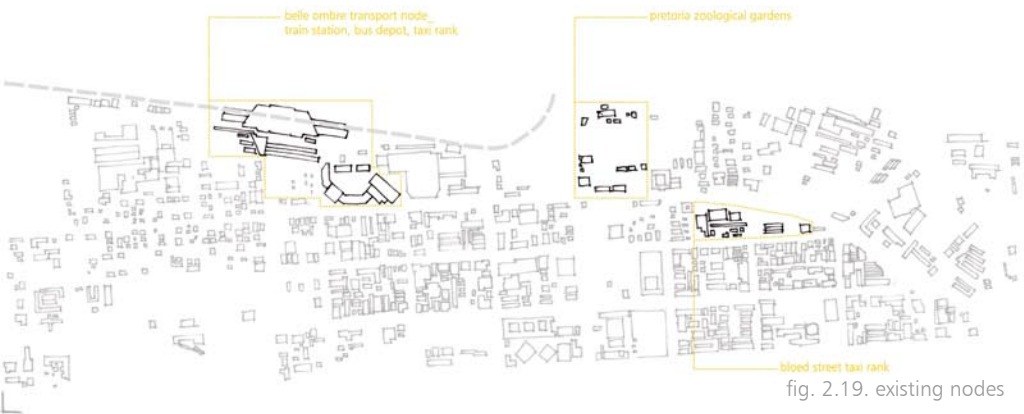


fig. 2.19. existing nodes

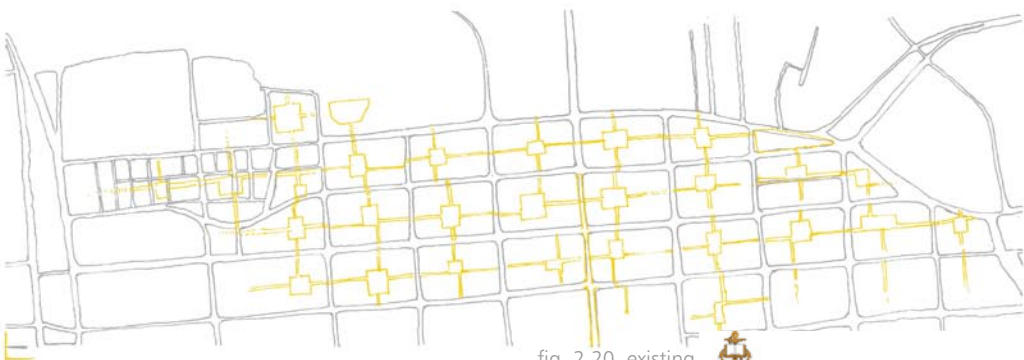


fig. 2.20. existing





group study area proposal

The group proposal for the district includes a pedestrian arcade system, running mid-block through the precinct, harnessing the current pedestrian activity. Pedestrian arcades are a vernacular characteristic of the Pretoria CBD, providing an alternative intriguing movement network. The inclusion of well-designed public spaces on these pedestrian routes introduces new commercial, social and cultural opportunities.



fig. 2.21 figure ground



existing nodes:
transport-orientated nodes are to be developed in order to accommodate increased use, catering for all users. The design of public spaces and facilities will create vibrant and unique urban environments.



pedestrian arcades:
proposed mid-block throughout the northern precinct. They provide alternative semi-public routes which enrich the existing movement network, providing opportunities for development

Paul Kruger Street:
It is the group's proposal that this road be semi-pedestrianised from Church street to Blood street. Access will only be afforded to delivery, service and municipal vehicles. The length of the street is to be paved, so as to slow vehicular traffic. Pedestrian movement will be favoured by a large central promenade. Planting and street furniture will be introduced

fig. 2.22. pedestrian arcade+public space network proposal





paul kruger street >>

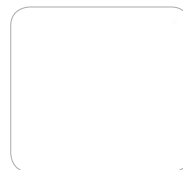
_[city] nodes

Nodes are created through intensified use: for transport (Bosman Street Station Square), retail (Sammy Marks Square) or civic (Pretorius Square) purposes. The common presence of public squares reinforces their importance. The increase of activity at these points encourages further use and development. Church square and Burgers Park are the two best examples of green open space within the city context. The common presence of public open space reinforces their importance. A diagram depicting designed open public space in the CBD reveals the lack of such urban elements in the Northern and Western regions. This may contribute to the visibly disjointed urban fabric.



fig. 2.24. Pretoria- public space network

fig. 2.23. existing public squares



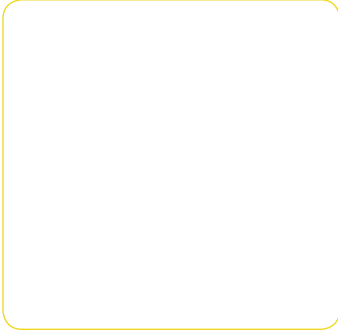


fig. 2.25. view of Paul Kruger statue + raadsaal, church square

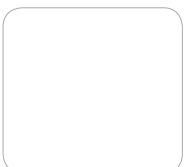




fig. 2.26. Pretoria_landmarks



[city] landmarks

Several buildings in Pretoria act as landmarks, their importance gained through height (National Reserve Bank), function (State Theatre) or historical relevance (Paul Kruger House). These buildings act as points of orientation for the users and means through which relative locations can be communicated.

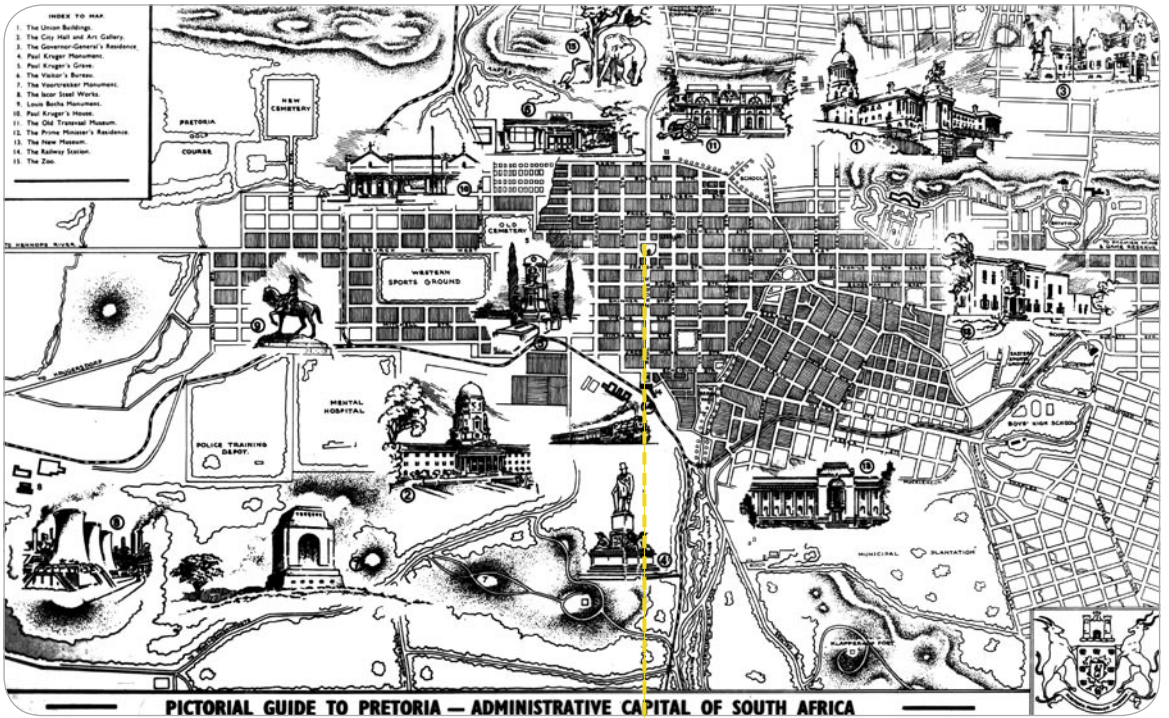


fig. 2.27. postcard depicting landmarks in Pretoria, date unknown



fig. 2.28. Pretoria_landmarks





urban problem statement

Insufficient orientation and legibility for the unfamiliar city user within the Pretoria CBD discourages the efficient use thereof. Although many of the urban elements required for urban orientation are present, the disjointed organisation decreases their legibility to users. Furthermore, the *ad-hoc* allocation of government resources frustrates the uninformed city user, leading to a negative perception of city and government.



fig. 3.1 Aerial photograph of the central area of Pretoria, looking towards the south east. 1949.





[paths]

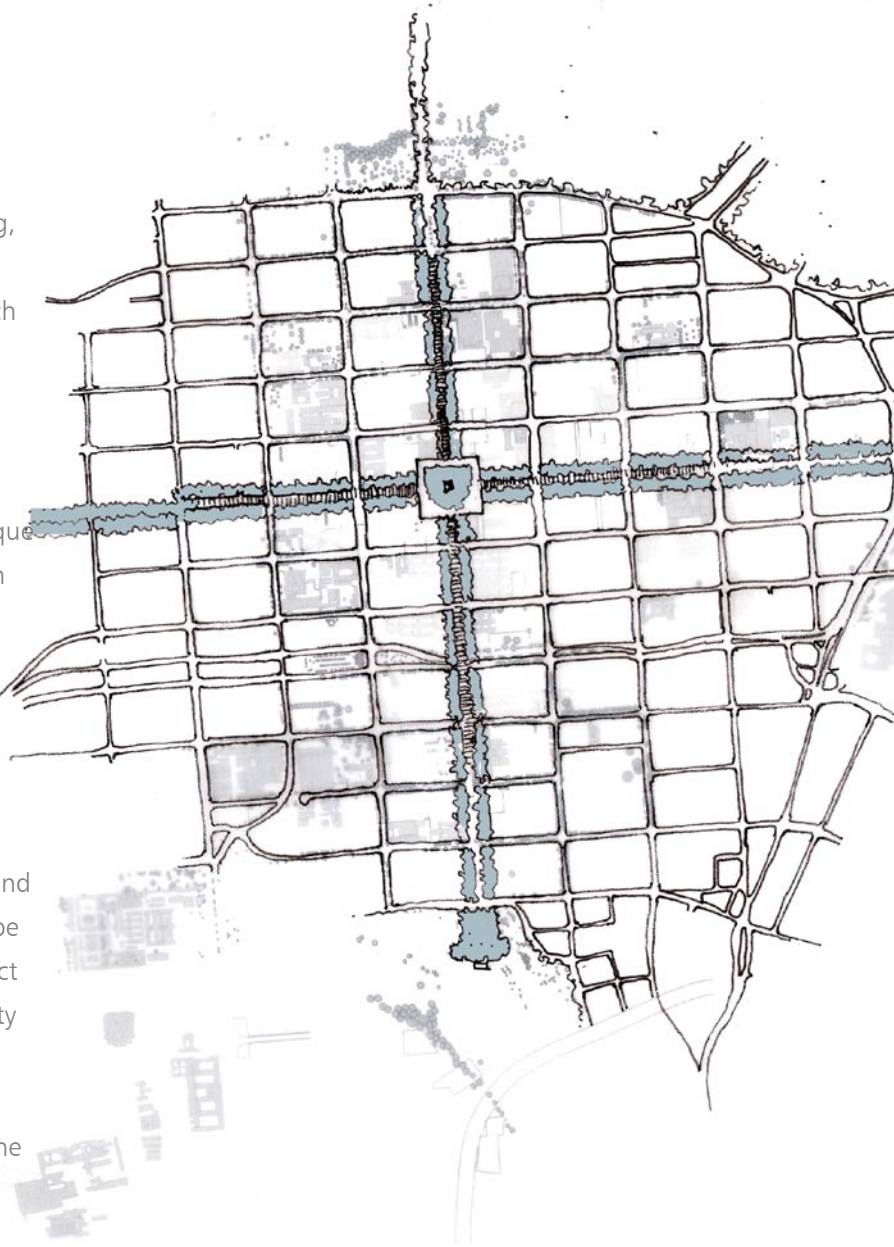
The orthogonal street grid, through its regularity, provides a rational, legible component by which the city can be mentally 'mapped'.

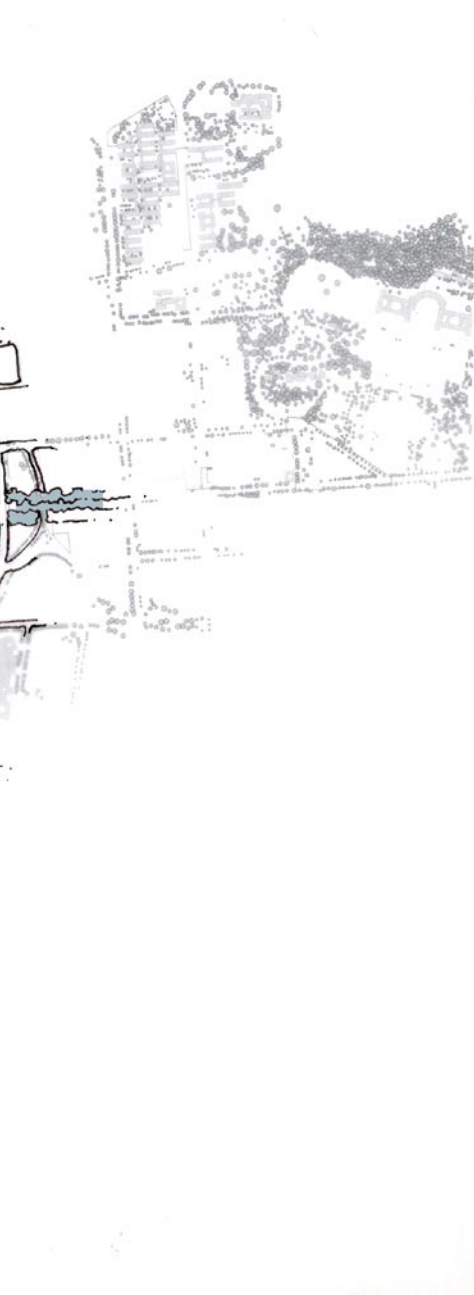
However, this regularity at times tends towards monotonous uniformity. The lack of unique identity displayed by many of the streets hinders a clear sense of orientation.

It is thus important that we strengthen users' environmental image through visually identifying, especially, the two main axes of the city of Pretoria, namely Church Street and Paul Kruger Street. Currently, the pedestrianisation of portions of Church Street has generated informal trade activity along its length. This lends a unique character to the street, which can immediately be identified.

As previously mentioned, the group proposal for the northern city precinct includes the semi-pedestrianisation of Paul Kruger Street from Church Square to Bloed Street. The street design, and that of adjoining buildings, will be considered to contribute a distinct character along this street. Priority will also be given to pedestrian paths, which are proposed mid-block in the northern precinct. The nature of activity and movement generated along various paths will be determined by the spaces through which they pass. Approach and further movement through the city will also be considered.

urban opportunities





[a]



[b]



[c]



fig. 3.2 orthogonal street grid
fig. 3.3 [a] -[c] street activity_pretoria





[edge]

Currently the city edge can be identified, due to the contrast between the natural and the urban. However, the opportunities created by this juxtaposition have not been realised, and interaction is poor. The urban fabric is seen to disintegrate towards the periphery. The natural landscape is poorly maintained, displaying an apparent disregard for the natural environment. The state of disrepair of many buildings on the outskirts of the CBD lends a negative perception to those commuting into the city.

The natural-urban city edge must thus be clearly defined, through the reinforcement of a physical or psychological threshold. This threshold should assist and highlight the transition from natural to urban, enhancing and acknowledging the qualities of both.





[districts]

Several districts within the CBD have received visible attention through financial and planning investment. However, the Northern and Western areas do not display such attentions, despite their intense use. The historical political attitude and demographic exclusivity towards certain regions of the city has led to a deficit of development. It should thus be of primary concern to create the optimal conditions for improvement, to uplift these areas to a more acceptable urban standard. Defining the threshold should serve to strengthen the character of the district. Through a strong environmental approach to design, the unique character of the area can be harnessed to create a distinct, vibrant environment for all users.



fig. 3.4 various photographs of northern district





[nodes]

Existing nodes within the Pretoria CBD are mostly associated with public spaces. However, these public spaces are often poorly designed, becoming lifeless and unused.

The lack of enclosure and activity-generating functions are just some factors which contribute negatively to examples such as Strijdom Square.

Nodes of activity can be identified in the Northern district, however limited and inadequate public open space has been provided. In order to introduce development and encourage urban regeneration in identified districts, nodes must be established as catalysts. These nodes should display the unique character of the region, promoting urban culture and public life.

The provision of well-designed public open space, providing opportunities for recreation and social interaction, will afford richer urban environments. These nodes should act as models, encouraging regeneration of public space throughout the city.





[landmarks]

Landmarks, though present in the CBD, are often uncelebrated. Buildings, such as the reserve bank, contributed to the development of public space in the initial design. However, with time and change of use, the need for security measures increased. Designed public space has been enclosed and is now exclusively for the use of employees.

Within the Northern district, visual landmarks are limited. Buildings, due to their functions, may act as landmarks to those familiar with the area, but contribute little to the orientation of the unacquainted public. A landmark should be provided, visually accessible from various points within the district and along primary paths. This should assist users in creating visual image sequences for self-orientation, and a means of communicating position to others.



fig. 3.5 nodal development proposal indicating 5-minute walking circles

fig. 3.6 | conditio





client profile

Pretoria, as national administrative capital, is largely given form and identity by the governmental and institutional buildings which comprise it. The *ad-hoc* allocation of poorly-developed public resources becomes illegible for users, impeding the use thereof and, as a result, the city.

The project proposed is intended to co-ordinate, streamline and facilitate public service delivery on a local, regional and central level of government. The department of public works is responsible for the provision and management of land and accommodation to the various national departments and institutions [strategic plan 2006/2010, compiled by strategic management unit, Department of Public Works]. Certain government objectives must be reached in terms of public service delivery.

An efficient and effective use of government resources is essential, and instrumental in achieving these objectives.

The Tshwane Inner City Development and Regeneration Strategy [TICDP], 2005 [Gapp architects & Urban Designers] proposes the establishment of a public open space network, enforced by the location of Government offices [appendix A]. Through necessary use, a government building promotes activity in a location. Intended sustainable urban renewal can thus be stimulated through public investment.



3.7



3.8

fig. 3.7-3.9 interior views of gpg building, c/o bosman and pretorius street

fig. 3.10 location of public sector buildings in CBD

fig. 3.11 south african coat of arms

3.9



SOUTH AFRICAN

GOVERNMENT DEPARTMENTS

Agriculture
Arts & Culture
Communications
Correctional Services
Defence
Education
Environmental Affairs & Tourism
Foreign Affairs
Government Communications (GCIS)
Health
Home Affairs
Housing
Independent Complaints Directorate
Justice & Constitutional Development
Labour
Land Affairs
Minerals & Energy
National Intelligence Agency
National Treasury
Provincial & Local Government
Public Enterprises
Public Service & Administration
Public Service Commission
Public Works
Science & Technology
Secretariat for Safety & Security
SA Management Development Institute
SA Police Service
SA Revenue Service
SA Secret Service
Social Development
Sport & Recreation South Africa
Statistics South Africa
The Presidency
Trade & Industry
Transport





Many existing governmental buildings were built during the previous political era. The approach towards employee structures was strongly hierarchical, the compartmentalised office system clearly reflecting this. With the introduction of the new constitution and frameworks for development within the departments, their needs in terms of infrastructure have changed. Internal office walls have been demolished for new open plan office layouts; however the building was never intended for use in such a manner. Thus the quality of work environments is of a low standard. Lack of maintenance to several buildings has led them to become health and safety hazards [strategic plan 2006/2010, compiled by strategic management unit, Department of Public Works]. It becomes impossible to provide a satisfactory public service within this working environment. The frustration often experienced by members of the public, lends a negative perception of public service delivery, directly related to government and ultimately projecting a negative city image.

3.11



■ = national government



Complementing the project proposal is the establishment of a Public Sector partnership within the Department of Public Works, as a joint venture between various levels of government. It will be “focused on meeting the needs of all sections of the public as customers of public services... supporting and encouraging the adoption of new technology throughout the public sector; with sharing experience and good practice in service innovations; and with delivering key inter-agency strategic projects, joining up and integrating public services...”

[LondonConnects, *Future strategy: 2006 and beyond*, accessed from www.londonconnects.gov.uk]. This “city vision” department, similar to the Inner City Operational task team proposed by the TICDP, will aim at enhancing, improving and integrating the urban character of Pretoria, in order to establish it as a nationally and globally significant city [see appendix A]. With the approach of the 2010 FIFA World Cup it will be imperative for Pretoria to be accessible to all visitors, local and international.

user profile

Jan Gehl identifies three types of outdoor activities that may take place within a city environment. Firstly, necessary activities are those that are compulsory and generally occur independently of the physical framework provided. This includes shopping and working [Gehl, 1987: p.11]. Optional activities occur under favourable exterior conditions. This category

fig. 3.12 sketch of recreational activities

fig. 3.13 necessary activities





is of particular interest in physical planning as it includes most outdoor recreational activities. An optimal environment should be created to encourage such activities [Gehl, 1987: p.13]. Lastly, social activities are the active or passive social interaction which mostly results in conjunction with the other two activities. They occur spontaneously as a direct consequence of using the same space. Social activities are indirectly supported when other types of activities are catered for in public spaces.

Three categories of users can thus be identified:

_familiar users

This category addresses the current users of the city. These users work, live in, or frequently make use of the city's facilities and have developed a sufficient sense of orientation through the regular use of functional routes. These users develop individual landmarks and an environmental image through personal experience. Familiar users should be catered for, through the provision of necessary facilities, and thus be attracted to the site. The activities provided by the proposed project should encourage lingering of the city's current users, displaying city life as an attraction to potential users.

_unfamiliar users

These include potential users of the city, which currently do not use the city for security, locality or discomfort reasons. These users are the primary focus of the project. They enter the CBD for unavoidable activities, inaccessible elsewhere. As occasional visitors of necessity, they





experience the greatest frustration, their ignorance of the city structure causing disorientation.

The formulation of a point of reference, providing necessary information on orientation and usage would facilitate city use.

A positive experience could thus decrease the animosity felt by such users, encouraging further exploration of possibilities.

Regular use would lead to ease of use. Once 'at home' within the urban environment, a fondness and affinity for the city can be developed.

_sporadic users

These are temporary visitors, for example, tourists. As short term users of the city, their perception of the city is formulated predominantly through visual experience of *character*. Here, navigability and transcending legibility is essential, due to the unfamiliarity of the surroundings. Urban culture displayed, will create points of unique interest and ensure lasting visual images.

With the approach of the 2010 FIFA world cup, this category of users will be of particular interest. Although not the major concern of the project, the manner in which visitors, whether local or international, perceive the city and its inhabitants should be positive and memorable.





The proposed project should allow for the integration of users from varying demographical contexts- the accessibility for each of the space, and ultimately the city context, being the primary goal. A strong interactive component between government and the public will be enforced. Active and passive continual participation from users is to contribute to *identity of place*. Activities provided and generated should encourage the fostering of a vernacular urban culture.

fig. 3. 14





The architectural component to be investigated is that of an urban orientation foyer building. It is to receive users, providing information which will improve their ability to further move through, and make use of the city and its facilities. This will be orchestrated by the government City Vision Department proposed as project client. Accommodation will be provided, not only for the city vision department, but also other select government departments intending to assist users in orientation and integration within the public service.

Despite accommodating various selected civic functions, the building is to be approached as a public mixed-use building as opposed to a specialised civic building. As forerunner in the government and public integration process, the project is to layer programme, facilities and movement spaces, maximising interaction opportunities between its governmental client and public users. The proposed public square is to lend an associated civic importance to the building, while promoting public life. The accommodation of various commercial functions is intended to dispel the exclusivity of programme currently displayed by governmental and institutional facilities.

architectural proposal

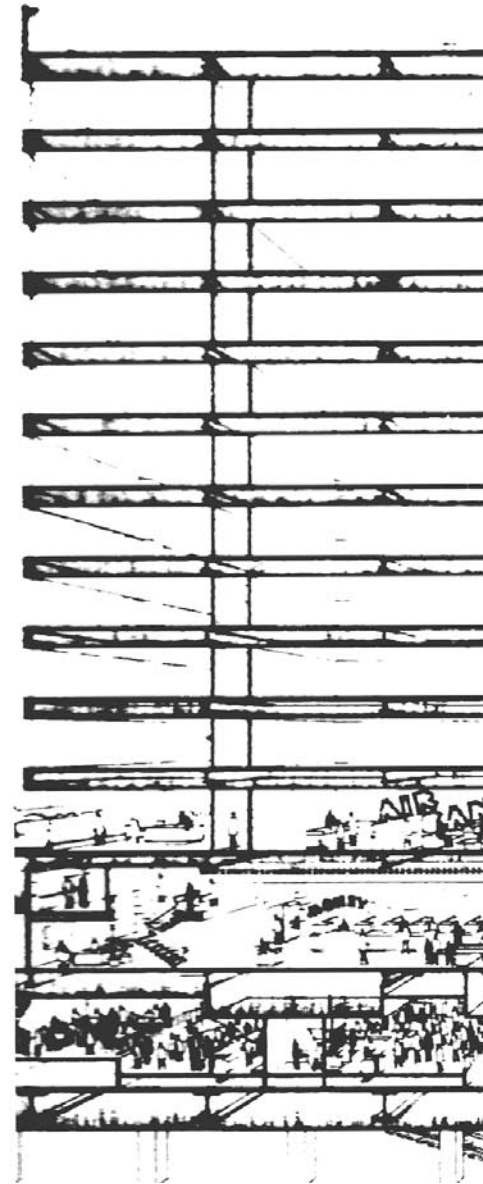
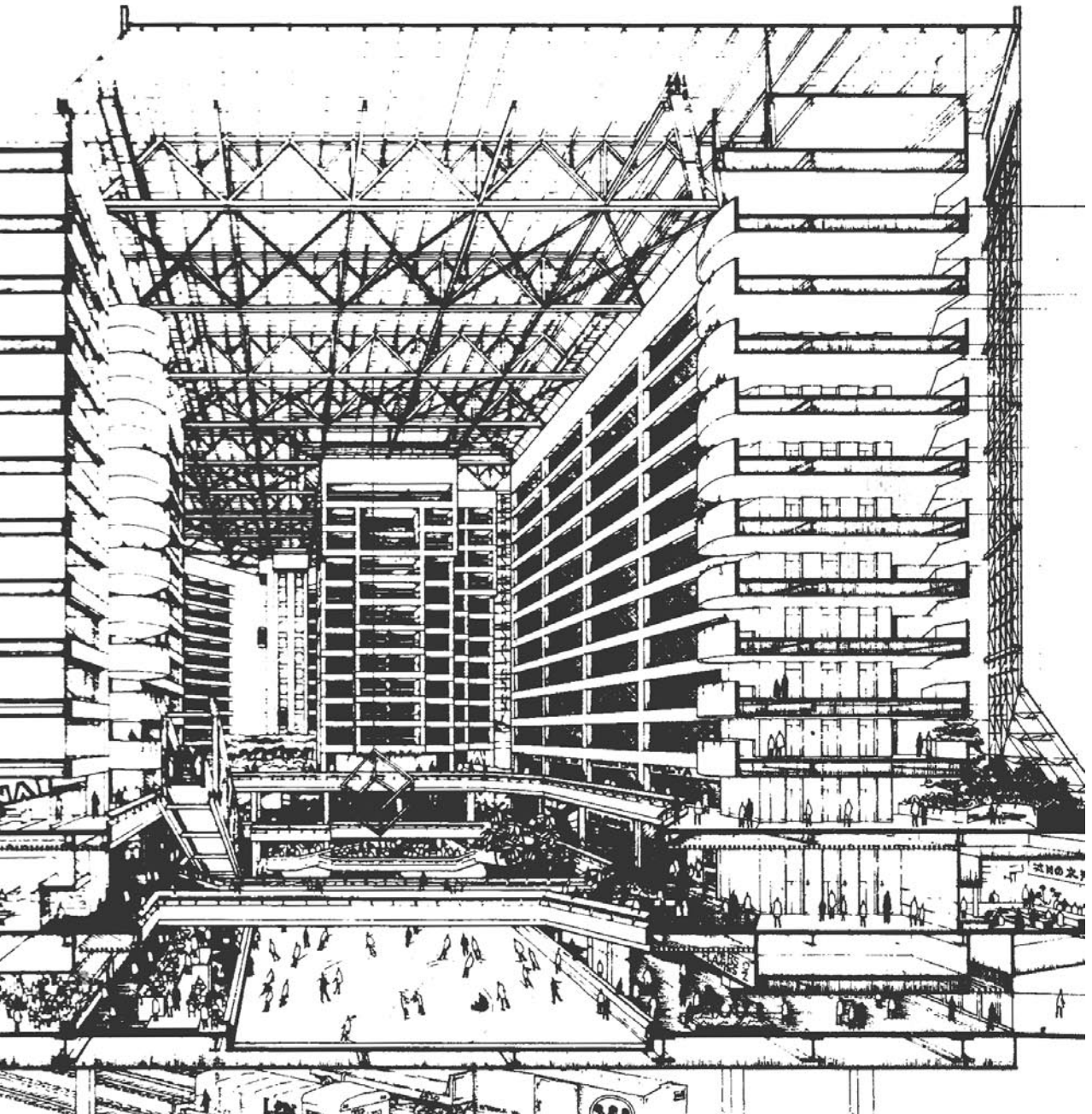


fig. 3.15 sketch of unknown multi-use building

fig. 3.16

“It is also possible to create sensibility by improving the human ability to perceive the environment...One may educate users to attend to their environment, to learn more about it, to order it, to grasp its significance”





The project is to act as a catalyst for urban regeneration. By incorporating necessary functions within the building, new users are introduced to an area of the city, along with financial and social opportunities. Once adequate development has occurred the nature of the programme may change to accommodate the new urban context and users. Thus the current programme will be considered transient and long term adaptability will be provided for.





fig. 4.1 proposed site in city-wide context



site proposal

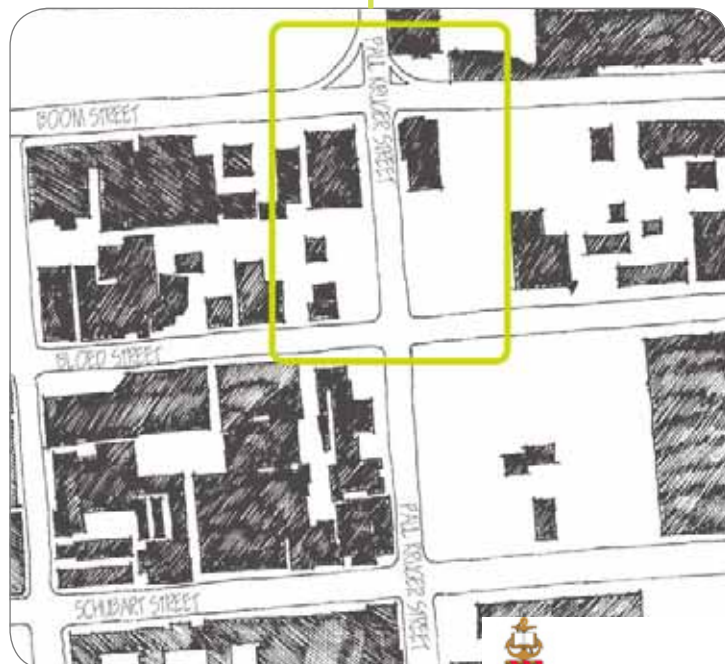


fig. 4.2 proposed site in local context





The site proposed to be developed as an architectural response to the urban objective is located on the corner of Paul Kruger Street and Boom Street, diagonally across from the Pretoria Zoological Gardens [here forth zoo]. This site was selected for its relative location to several of the way-finding elements discussed earlier. As Paul Kruger Street winds around *Meintjies Kop*, glimpses of the city are afforded to the traveller. However, it is upon the user's arrival at the Boom Street-Paul Kruger intersection that the urban environment can be sensed. As such, this intersection acts as a city entry point. As the user moves southward along Paul Kruger Street, the urban fabric transforms to gain a civic quality at Church Square.

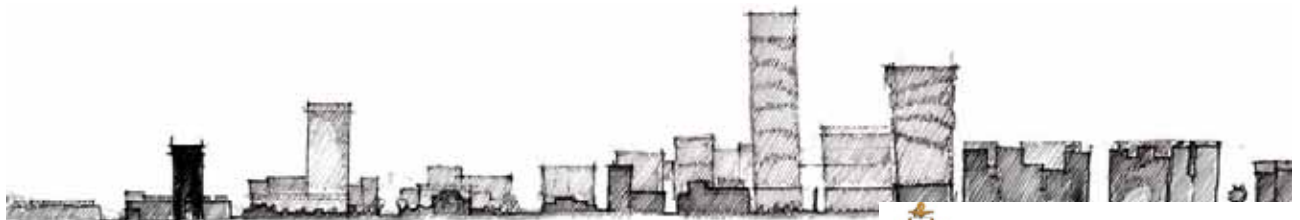




fig. 4.3 aerial view sketch of Paul Kruger Street

fig. 4.4 photograph of proposed site as seen from the North on Paul Kruger Street

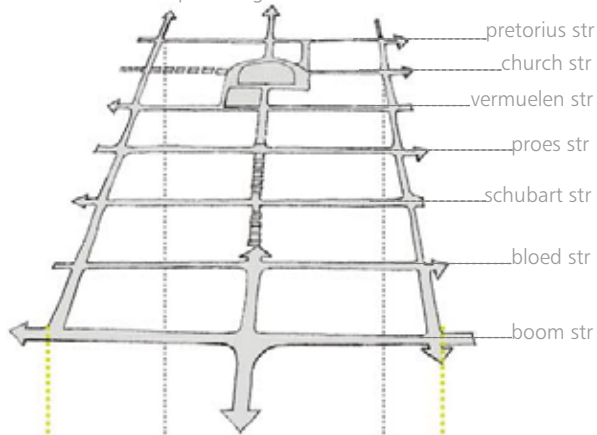


fig. 4.5 sketch section through Paul Kruger Street looking East

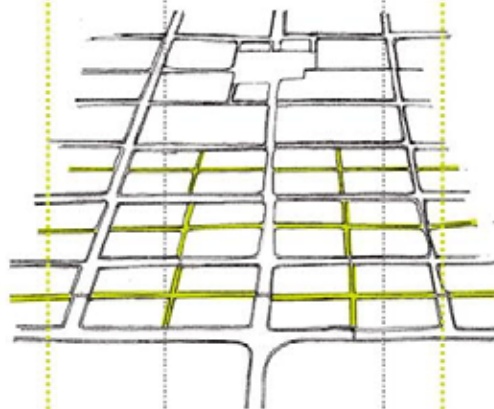




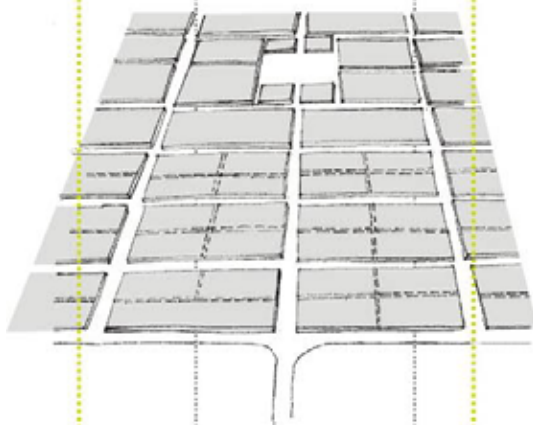
andries paul kruger bosman



vehicular paths



pedestrian paths



block configuration



building volumes

site analysis

fig. 4.6 local context





path



fig. 4.7 aerial view sketch indicating paul kruger str. as path

This site was selected due to its prominent location on Paul Kruger Street, identified as a North-South city axis. The proposed project is to strengthen the legibility of Paul Kruger Street as a primary city *path*. The users, their means of commuting and direction of approach will be considered as a design tool in streetscape design.



fig. 4.11 photograph down paul kruger street looking south

edge



fig. 4.8 aerial view sketch indicating boom str. as edge

Boom Street acts as natural-urban *edge*, further reinforced in this area by the presence of the Pretoria Zoological Gardens. The transition between these two environments is to be enhanced, respecting both as essential components in developing an urban threshold.



fig. 4.12 photograph down boom street looking east

node/landmark



fig. 4.9 aerial view sketch indicating proposed node

The proposal for the broader site is to contribute to the establishment of a northern civic *node*, as a component in the public space network of the city. The proposed public square will be integral to establishing this element of orientation. The creation of a visual landmark will lend identity to the node, and will, in turn, be strengthened through the activity generated by the node.



fig. 4.13 photograph of market in Angola

district



fig. 4.10 aerial view sketch indicating allocation of district

The unique character of the northern district is to be displayed in the design. The layering of old and new within this transitional area should create a familiarity for current users and a rich environment for the future.



fig. 4.14 photograph of street-scape in marabastad



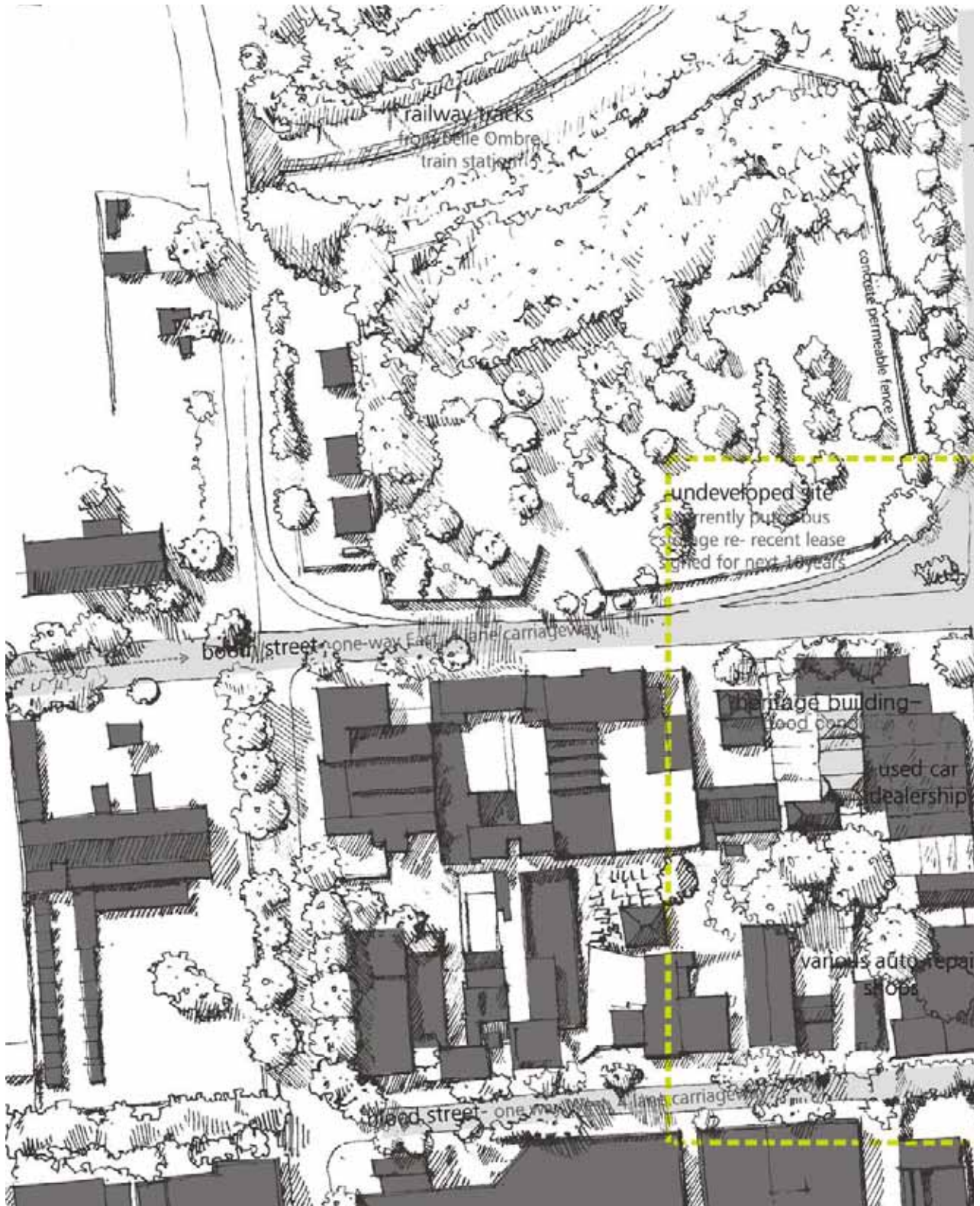


fig. 4.16 street elevation of proposed site along Paul Kruger Street East



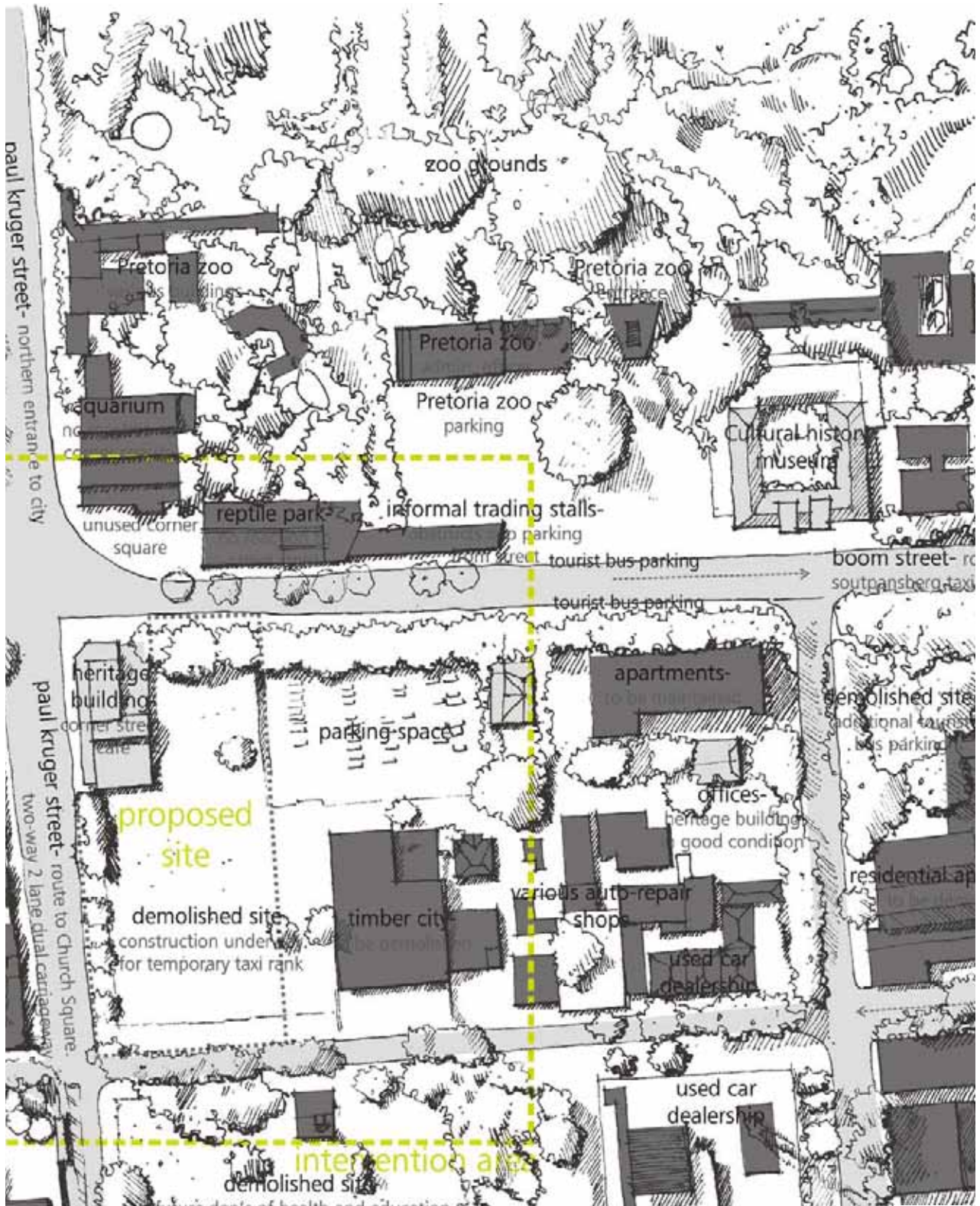


fig. 4.15 sketch of existing infrastructure on and around site







the site



fig. 4.17 site as seen from above from apartment building north east





fig. 4.18 photograph of La Defense,

gateway proposal

“If the point where the path crosses the boundary is invisible, then to all intents and purposes the boundary is not there. It will be there, it will be felt, only if the crossing is marked. And essentially, the crossing of a boundary by a path can only be marked by a gateway.”

(Alexander et al. 1977. p.277)





fig. 4.19 gateway site position_view down Paul Kruger Street from North

It is the proposal of this dissertation to establish the Paul Kruger-Boom Street intersection as a northern urban gateway for the Pretoria CBD. A gateway marks the threshold between one identified region and another, dramatically or subtly announcing transition. On approach, it marks the edge of that which is being contained. As one moves towards the gateway, perception thereof and what lies thereafter is altered. An open gateway frames altering views as revelations of that which is to come. Visual images are illuminated which contribute to sequential memory of the user [Cullen, G. 1971].

In order to instil a sense of place into the Paul Kruger-Boom street intersection, a unified approach must be followed. The intersection as a whole will be considered as an integrated public space to which various public space types and buildings contribute. Similar gateways have also been proposed by the TICDP for the eastern and western entry points. The southern gateway is announced through significant green spaces.

A unified design approach to the blocks adjoining the proposed site should assist in the sense of place- a memorable node within the Pretoria context. The design of various public space components will reinforce the social and civic importance of this gateway. It is the intention that the gateway should reinforce the urban elements of orientation, assisting user navigation through, and legibility of, the city of Pretoria.



Paul Kruger Street, originally named Market Street, developed historical significance as the north-south axis, crossing Church Street at Church Square, historically referred to as Market Square. It was later named Paul Kruger Street after the ZAR president in power from 1883-1900. The presence of several historical buildings on Paul Kruger Street, imbue the street with a rich historical character. In recent years, the street has been identified as a focus for upgrading, due to the presence of much undeveloped land (especially to the North) and the state of disrepair displayed by many of the buildings [see appendix A].

There are several buildings on the proposed site identified as having heritage value which must be preserved, renovated and suitable programmes allocated [see Appendix B]. Amongst these is the Zoo Café building. Located on the corner of Boom and Paul Kruger Streets, it currently functions as a shop on the ground floor level with office space on the first floor. An automotive workshop was housed in a southern wing; however it has now been vacated. These functions, excepting the office space, are in keeping with the initial design. The first floor was originally intended as residential apartments.

This building, identified by Schalk le Roux as having heritage value [le Roux, S; Botes, N. 1991: P.28], is significant as a corner-street café typology building. Having maintained its function as such, it



fig. 4.20 historic view north down market street from Proes Str, date unknown

historical context

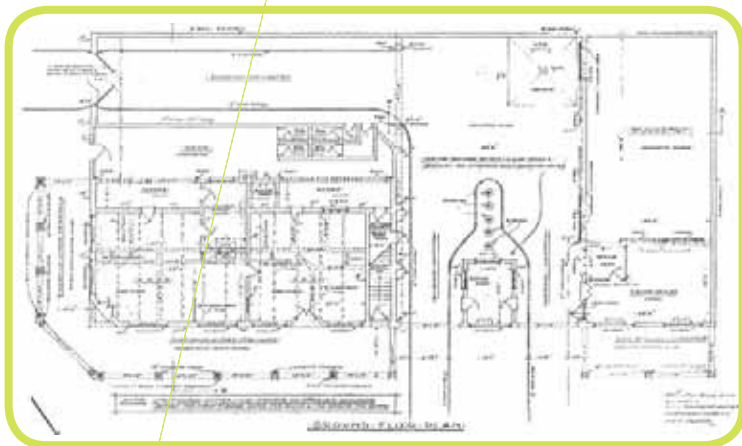


fig. 4.21 original architect's drawing_ ground floor plan



fig. 4.22 original ar





acts as a constant within a changing environment. A corner-street café refers to a South African Milieu with which all users of varying economical and demographical backgrounds can identify. Sigrig van Roode, discussing the city of Cairo's attitude towards heritage buildings, questions the meaning of heritage architecture within a post-colonial city. Heritage architecture in the case study, as with many heritage buildings in Pretoria, may be seen either as relics of an oppressive past or worthy of their own place in history. The question

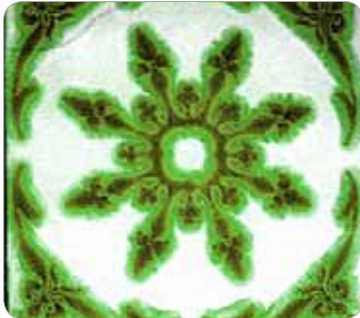
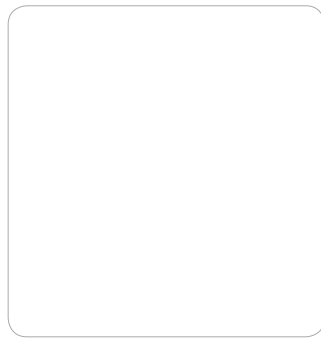


fig. 4.23 general images of zoo cafe



of accountability in preservation can be raised, the lack of respect shown currently by the city council towards heritage building being a matter of concern. However, these buildings act as invisible layers, assisting us in a better understanding of previous inhabitants' decisions (van Roode, S. 2006: p.48-50).

fig. 4.24 general images of zoo cafe



It is proposed, as a component within the investigation of the site, to preserve and integrate the Zoo Café building, thereby assisting the layering process by which the project gains depth of meaning. The building provides a reference point for existing users of the site and should contribute to a better appreciation of the city for future users. The juxtaposition of old and new will assist users in an emotional orientation within time, linking the present moment with past and future. This temporal orientation may be more important to some than that of corresponding spatial orientation (Lynch, K. 1981: p.135).





During the course of the year the site has undergone several changes, in preparation for the construction of a temporary taxi rank to supplement demand during the construction period of the Bloed Street taxi rank. The only buildings still remaining on the site are those whose tenants' lease has not yet expired (*Timber City, Zoo Café* etc). Several buildings were demolished without the tenants' consent (Automotive Workshop on Paul Kruger Street after a 28year lease agreement). It is the intention of the City Council to clear the site as a whole and later develop the site as a shopping mall). Several heritage buildings have been demolished during the site clearing process though documentation is limited. The remaining tenants expressed their dissatisfaction when interviewed. The lack of stakeholder participation and consideration has caused tenants to foster a negative attitude towards the new development.

social context

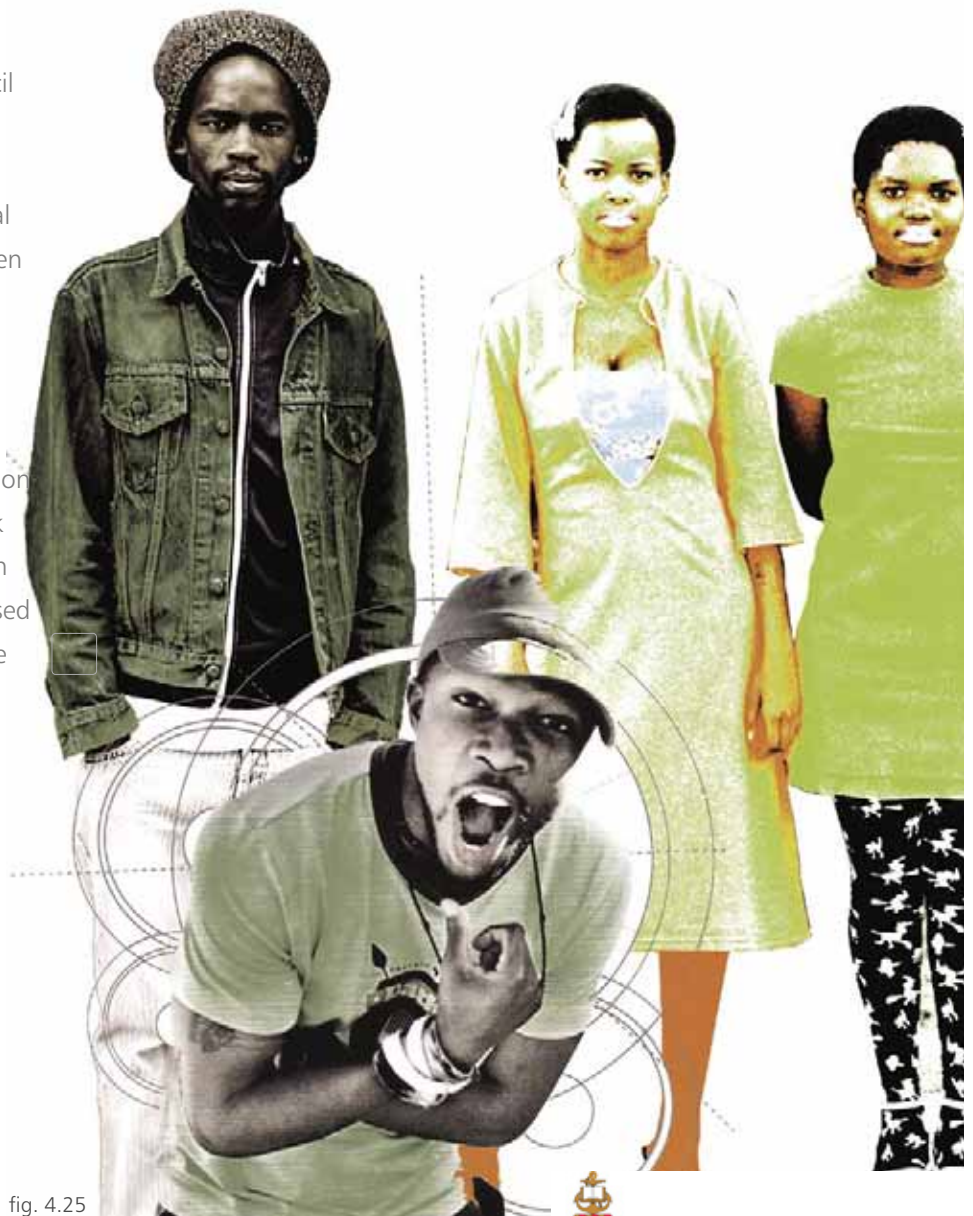


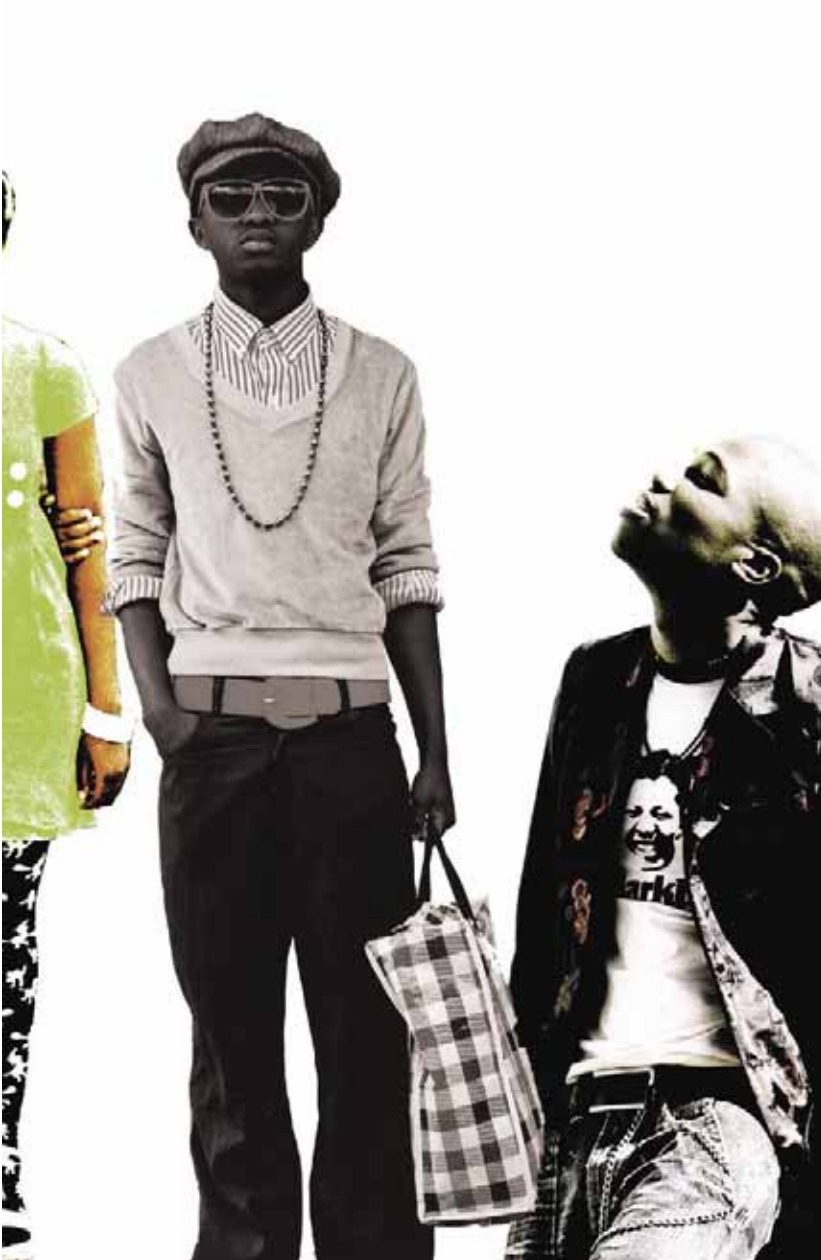
fig. 4.25





Jay Gajoo, owner of *Zoo Café*, has leased the building housing her corner-street shop for approximately ten years. A similar shop was run from that building by several owners for approximately 50 years prior to Gajoo's ownership. The building is owned by the city council, but there are plans to demolish it in February 2008. During the week the shop clientele is predominantly passers-by from the street. However, over weekends sales are mostly made to visitors to the zoo, due to exorbitant prices for refreshments within the zoo grounds.

An open parking lot east of the *Zoo Café* provides additional visitors parking (approximately 120 bays) to supplement the parking available at the zoo entrance. During the week visitors to the zoo mostly consist of school groups arriving in luxury busses, whereas weekend visitors are families and tourists, commuting in private motor vehicles. The seven storey residential apartment block in the north east corner of the block contributes a residential component to the area. This provides some night-time activity, however restrictions limit disturbance. Private evening functions hosted in the zoo facilities also ensure after-hours movement in the area.





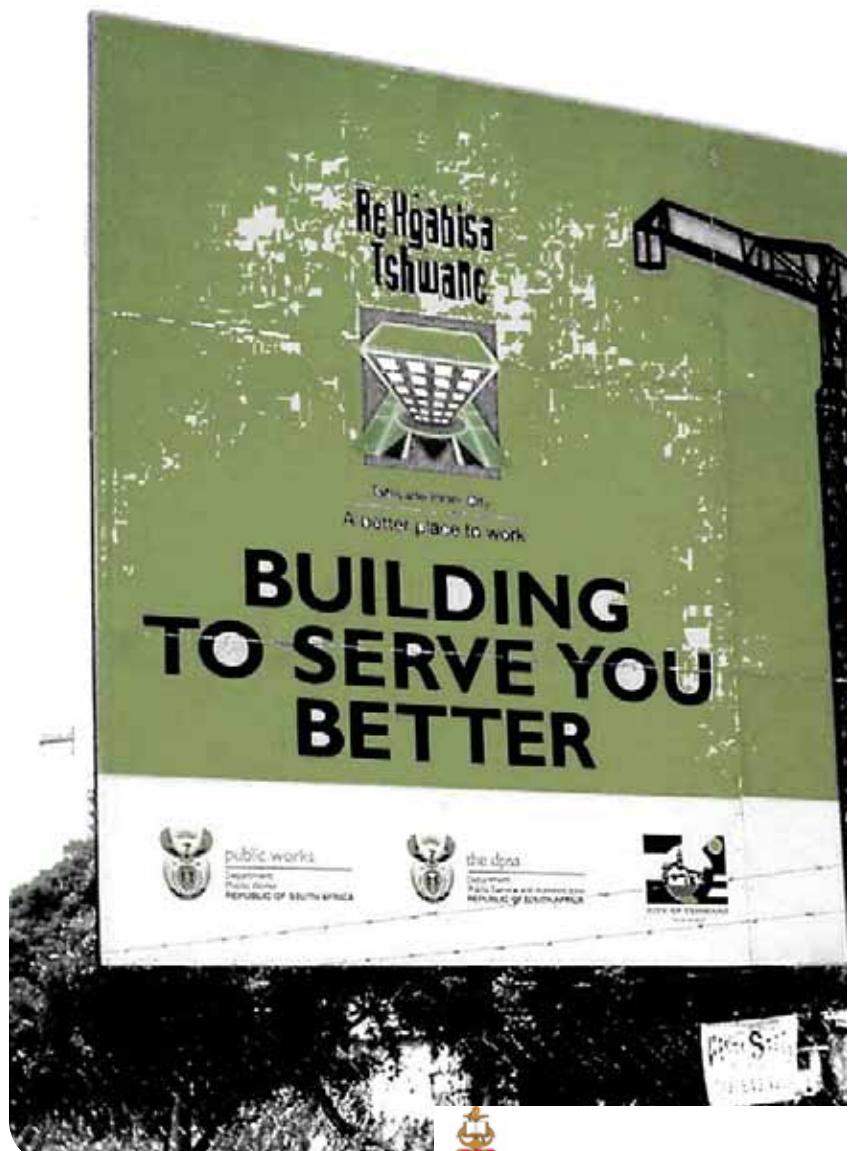
New ablution facilities have recently been constructed south of Zoo Café, steel canopies erected and the block has been cordoned off with wire fencing to accommodate the temporary taxi rank. Although new users have been introduced into the site, activity mostly occurs at selected peak times. During the larger portion of the day, activity is restricted to the enclosed taxi rank area.

The city block to the south was demolished approximately six years ago, according to Gajoo, in preparation for the new complex for the departments of education and health. Site excavations commenced in approximately August 2007. The demolitions have reduced pedestrian activity along Paul Kruger Street. This has contributed to a sense of neglect in the area. However, once the construction of several government buildings has been completed, a large quantity of new users will be introduced to the site, and provision should be made for their future needs.



fig. 4.26 view of partially-demolished site, 28 February 2007

fig. 4.27 view of temporary taxi rank on site, 02 June 2007





Currently, the block under investigation is divided into 26 separate erven. In order to construct the proposed shopping mall, the city council purchased most of the properties not already under their ownership. Erf 2863, on which the seven storey residential apartment block is located, has proved more problematic. The apartments are under sectional title ownership and the council must negotiate separately with each owner. The process is inconclusive at this stage.

legislative context

The proposed project proceeds with the assumption that all erven within the city block are purchased by the client. All properties will be consolidated, excepting those on which identified heritage buildings are to be preserved (erven R/842, 1/845 and 1/847) and the property on which the residential apartment block stands (erf 2863). The newly consolidated property will then be subdivided into new land parcels and managed on a sectional title basis. Such land division applications will also include amendments to the current zoning and town planning regulations for the properties involved. It is also assumed that, considering City Council's proposed development for the area, most of such legal procedures are currently under way.

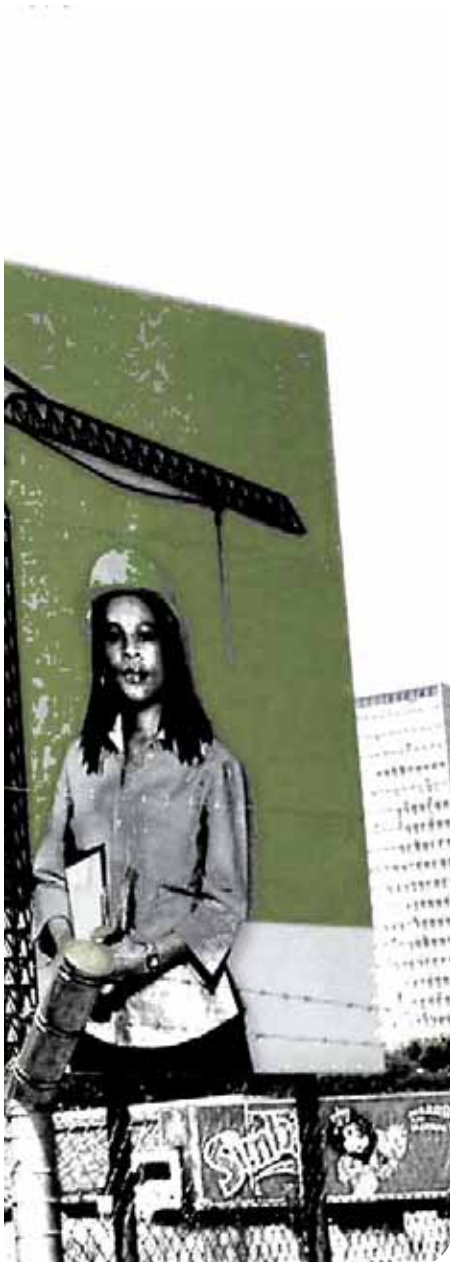


fig. 4.28 signage on adjoining site





All proposed development will be subject to the South African National Building Regulations as stipulated in the South African Bureau of Standards 0400-1990. All town planning amendment applications will be conducted in accordance with application procedures stipulated by the City of Tshwane, City planning, Development and Regional Services Department. The full public participation and advertisement procedures will be followed. All site development and building plans are subject to approval by the Department of Housing, City Planning and Environmental Management, City of Tshwane. The proposed renovations and alterations to identified heritage structures will be subject to approval by the South African Heritage Resources Association (SAHRA) in compliance with the National Heritage Resources Act (act No. 25 of 1999).



fig. 4.29 sketch of senior





fig. 4





introduction

The theoretical departure point of the project is orientation of the individual within an urban environment. Orientation is determined by our ability to perceive and identify with our surroundings, our *sense of place* [Lynch, K. 1981: p.131]. Within a South African social environment comprising varying cultural groups, the challenge is that of providing a built environment identifiable to all its users. "Physical form plays no significant role in the satisfaction of important human values, which have to do with our relations to other people." [Lynch, K. 1981: p. 99].



fig. 5.1 road markings

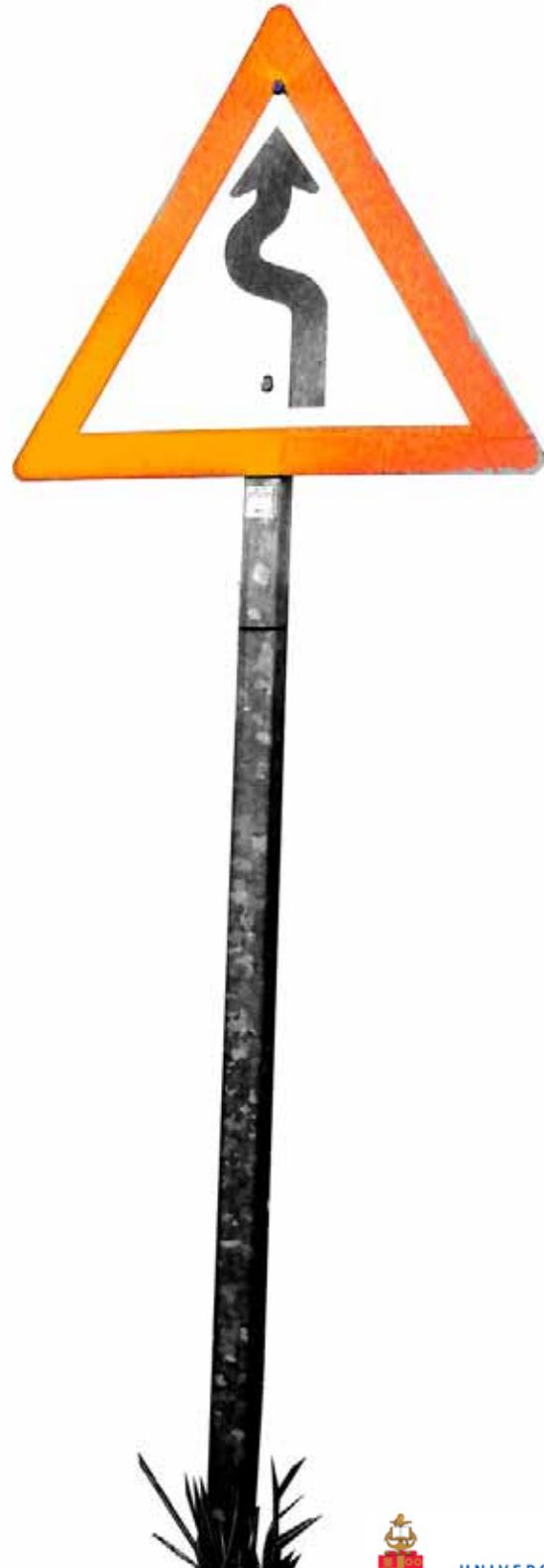




“For me, the acts and thoughts of human beings are the final grounds for judging quality.”
[Lynch, K. 1981: p. 49].

“The place is the concrete manifestation of man’s dwelling, and his identity depends on his belonging to places.” [Norberg-Schulz, C. 1980: p. 6].

orientation + interaction



Establishing a point of orientation, reinforcing the existing urban structural elements comprised the city-wide concern of the proposed project. How the physical urban and architectural environments are composed to strengthen the user’s mental image of their surroundings, contributes to navigation thereof. However, the extent to which it can distinctly be recalled, indicates *identity* and a *sense of place* within that particular environment [Lynch, K. 1981: p.131]. The spatial structure of an environment must not only facilitate orientation, but must provide concrete objects for identification, in order for it to become *meaningful* [Norberg-Schulz, C. 1980: p. 21].

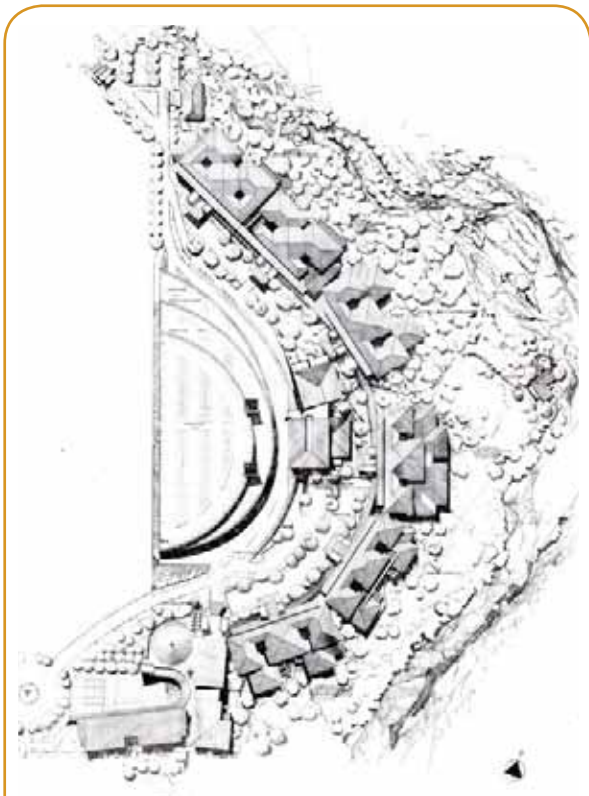


fig. 5.3 site plan_sketch

Christian Norberg-Schulz identifies a phenomenological notion of *place* as a qualitative character, more than a sum of its spatial relationships [Norberg-Schulz, C. 1980: p.7-9]. It is comprised of the *landscape* (natural) and the *settlement* (man-made). The settlement concretizes man's understanding of the natural environment, forming a *cultural landscape* [Norberg-Schulz, C. 1980: p. 52]. A symbolic language is developed through this understanding and is contextual to a specific environment. Identity cannot be supported by a universally abstract environment, but rather one that is culturally and situationally articulated [Pallasmaa, J, Architectural Review, May 1988: p.28].



5.4

p The Mpumalanga Provincial Government Complex strove for "The Making of An African Building", through architecture which displays the democratic society it serves. The architects investigated a civic architecture that would accommodate the new frames of reference in democratic civic life. The surrounding context informed the design, allowing integration of the built and natural environment. Nearby granite domes and the symbolism of the confluence of the two rivers are harnessed in the architectural language. The various facades relate in different, complimentary ways with the immediate surroundings [Malan, C. and McInerney, P. 2001] displaying a desire to incorporate the natural components of the site.



5.5

fig. 5.4 view of the legislature including civic square

fig. 5.5 view of the humanised scale and tectonic quality of the walkways



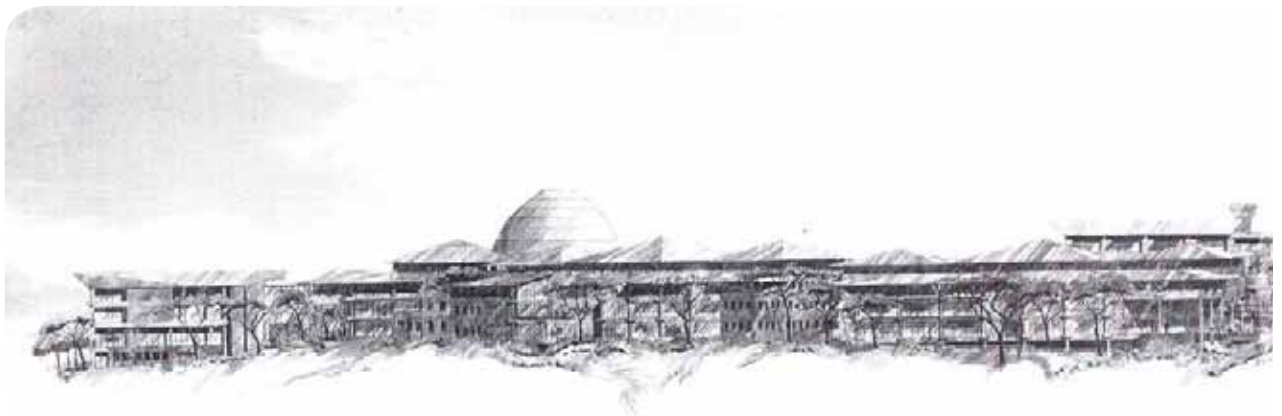
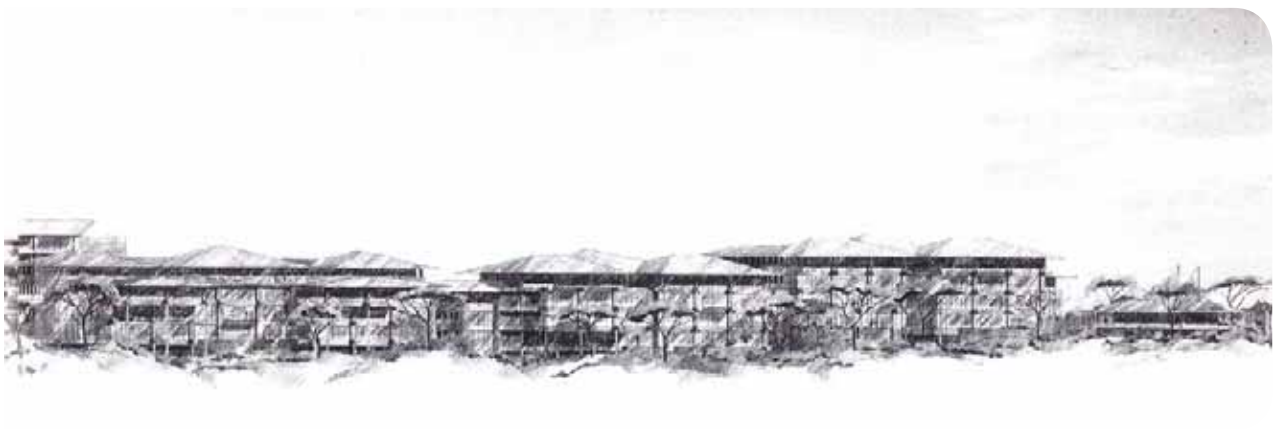


fig. 5.6 extended riverfront elevation of mpumalnga legislature





Juhani Pallasmaa discusses the priority assigned to the visual aesthetic in modern consciousness. He argues that perception is the sum of all sensory experience, which can be related back to tactility. "The architecture of the eye detaches and controls, whereas haptic architecture engages and unites." [Pallasmaa, J, *Architectural Review*, May 2000: p.5]. In the Mpumalanga Government Complex, a holistic approach to texture, finish, scale and detail creates an intimate experience which assists identity and orientation in the complex.



5.7

In the Mpumalanga Provincial Government Complex, selected traditional forms were employed in a contemporary manner, intended to suggest a culturally-adapted architecture. However, the resultant visual style is a pattern of a *specific* culture. Although intended to create a sense of identity, their cultural exclusivity limits their accessibility to all users.

5.8

Sediments of tradition, history and culture, are fused into a given context. Culture cannot be dissembled and re-composed, it must be lived. Often attempts to instil a sense of place and authenticity are mistakenly applied as superficial historical and regional motifs. Regionalism is thus reduced to what Pallasmaa describes as a *sentimental provincialism*, and culture becomes "...an object of deliberate fabrication". *Placemaking* in Pretoria must react to a variety of cultures. The challenge posed is thus the development of an architectural language which suggests a diversity of cultures, while excluding none.





fig. 5.7 texture identified on site
5.8 Synagogue on Paul Kruger Street
5.9 Sketch of pedestrian activity

5.9



Jane Jacobs discusses the phenomenon that “the sight of people attracts still other people” [Jacobs, J. 1972: p. 47]. Public social interaction, whether active or passive, is a main attraction of the city, versus the intimate interaction provided by a domestic environment. Although privacy is essential to city dwellers, a balance of differing degrees of social contact must be available. Jacobs further states that public contact and the resulting safety aspect can contribute to overcoming segregation and racial discrimination within a city [Jacobs, J. 1972: p. 82].

p The Mpumalanga Legislature was designed to encourage use and to address the human dimension by creating opportunities for interaction. The civic square or *isigcawu* provides an arena for public activity. The provision of micro-climates such as seating under trees and shaded colonnades encourages more intimate interaction. The social interaction between urban users determines the public life in cities. It should be our aim to provide an environment which supports and encourages such interaction. The users and activities within such an environment contribute to its character.

Human activity is appealing to still other people because they can identify with that form of activity. By seeing other people within a city environment making use of facilities, a user feels more at ease to be within that environment as well. The sight of people of similar race, economic or social status further reinforces the affinity to the surr





It should not be our aspirations to identify a cultural style suitable for a democratic society. Rather, we should strive to design populated places; we should provide opportunities for interaction. We should generate activity through the provision of the necessary programme. This will generate events of a social and public nature which contribute to a vibrant urban environment [Tschumi, 1994]. The users, for whom we design, become the greatest assets to the environments we create. The built environment should not “attempt to conquer the foreground...” instead we should be “creating a supportive background for human activities and perceptions.” [Pallasmaa, J. Architectural Review, May 2000: p. 9]

It is this which will provide identifiable environments, accessible to users from a broad demographical spectrum, culturally unrestrictive and unique in character. These environments are dynamic, meaningful, and unifying for its users. An unconscious culture develops through the fusion of memories and experiences establishing a dialogue between the individual and collective. And it is this culture, this unique character, which will be, for all those who partake, the *sense of belonging to place*.





Urban form was primarily derived from the surrounding context. It was necessary to address issues of scale with the proposed form. A suitable scale needed to be established towards the existing heritage building, also providing a humanised scale on the square. However, the scale also had to establish the building as a notable landmark on the urban skyline. Movement through the site, towards the city was important for connectivity to the city context. Existing movement axes were to be reinforced and emphasised through the design. The development of the square and adjoining student projects was also a consideration.

form development





fig. 5.11 concept model [a]_view from north

[a]The initial concept was of creating a frame or backdrop for the zoo café building. The height of the building would establish a northern landmark and anchor for Paul Kruger Street. The new and existing building would be integrated as a single entity. The new building was to be set respectfully away from the heritage building, creating an intimate semi-private space. This form was developed under the proposal that a similar tower on the opposite side of Paul Kruger Street, would contribute to the creation of an urban gateway. Surrounding buildings were proposed which provided a street edge and enclosure to the public square.

A critical analysis of movement through the block layout of this proposal revealed disjointed spaces. The new proposed 'tower' overshadowed the heritage building, an 'alley' developing between the two masses. The movement from the pedestrianised portion of Paul Kruger Street was obstructed by the proposed tower. Physical and visual linkage between Paul Kruger Street and the proposed public square was impeded by the buildings.

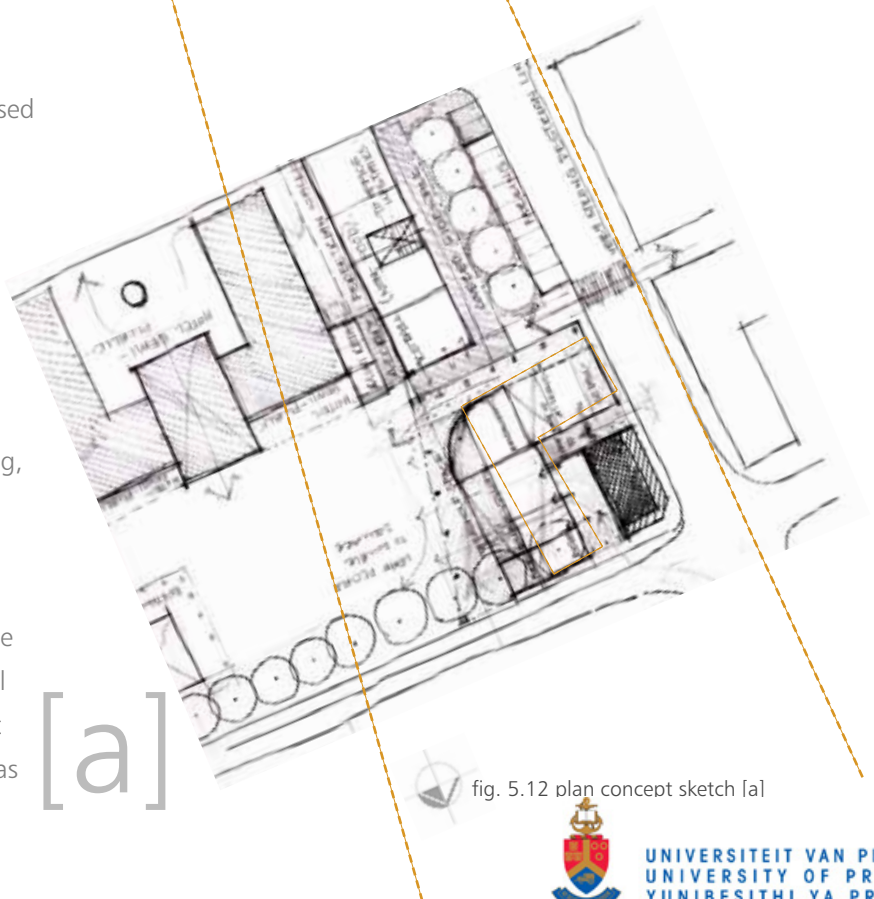


fig. 5.12 plan concept sketch [a]



[b]

[b] The second proposal was to pull away a portion of the building, funnelling movement into the city. The quality of the resultant intermediate spaces was notably improved. However, the southern portion of the building acted as an obstruction, lacking the desired fluidity of motion. The interaction between various building components and linkage between street and square were still a matter of concern.

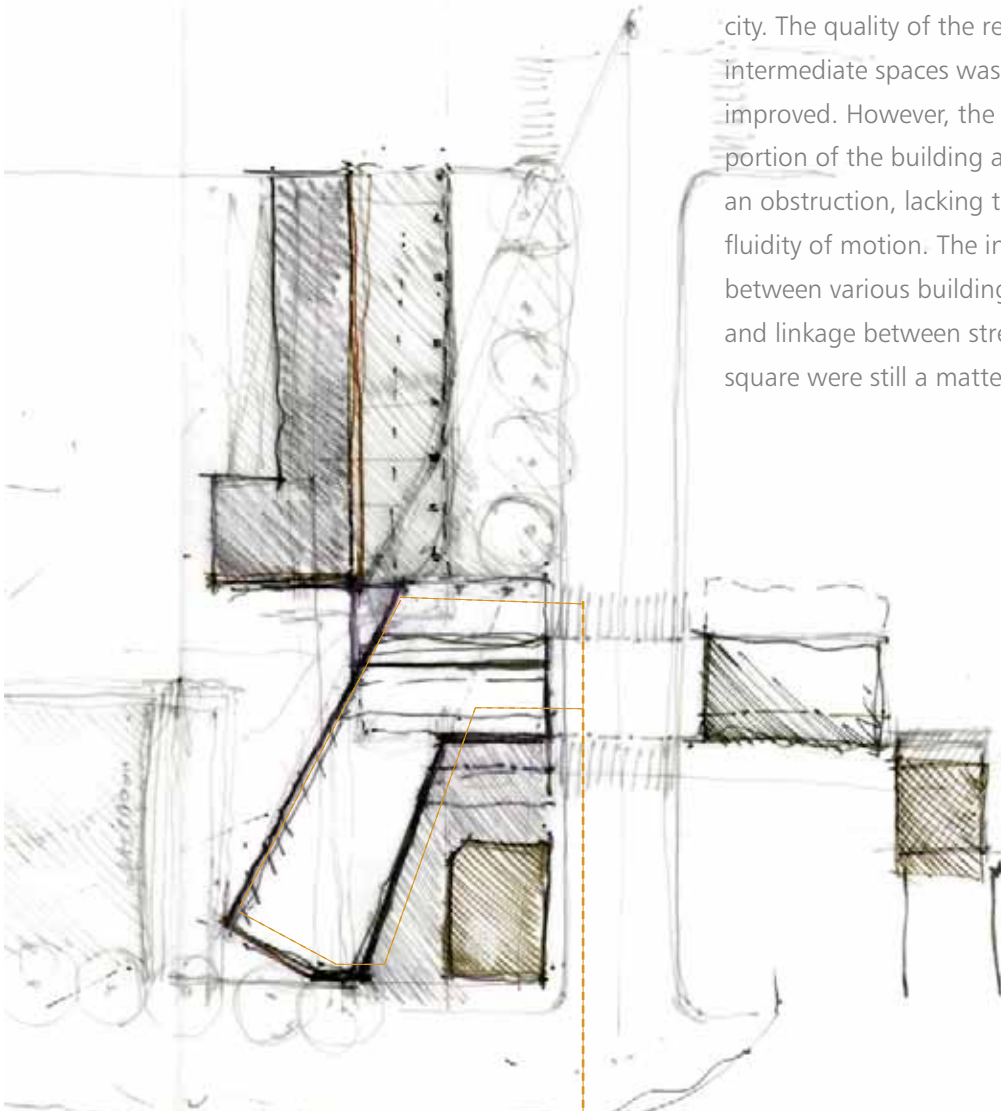
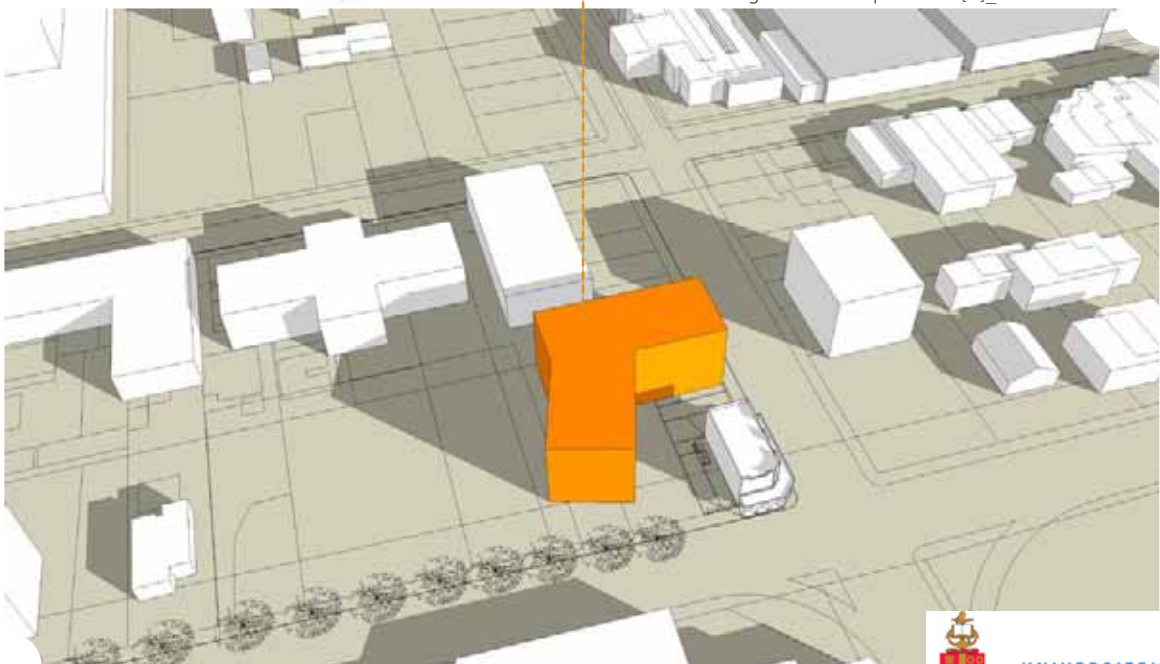


fig. 5.13 plan concept sketch [b]

fig. 5.14 concept model [b]_view from north





[c] The proposed building was now split into two components- a landmark 'tower' portion, and then a dynamic linear portion which was scaled down to suit the heritage building and square. Linear movement could now be guided either side of the tower, which acts as a point reference. The tower could now be afforded a height of more stature. However, the interaction between proposed buildings seemed disjointed and detrimental.

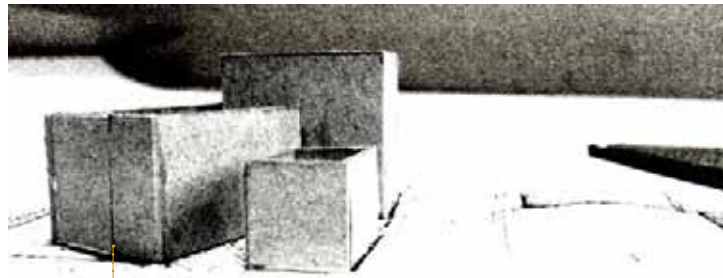


fig. 5.15 concept model [c]_view from north

[c]

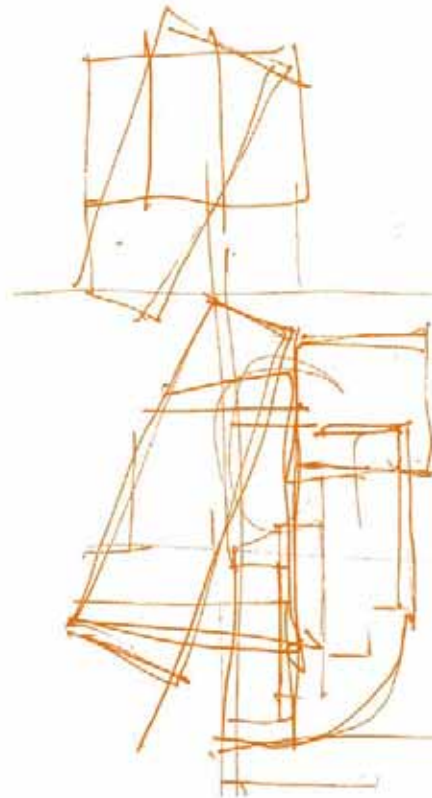
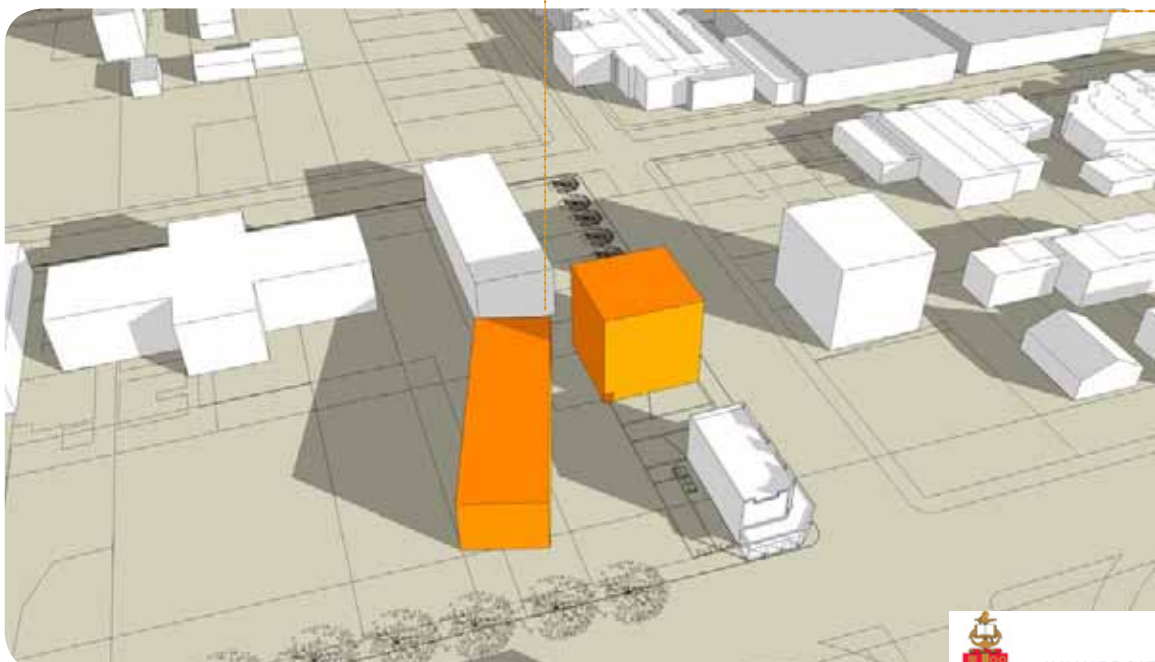


fig. 5.16 concept sketch

fig. 5.17 concept model [c]_view from north





p

The Gas Natural building, designed by Miralles-Tagliabue Architects, was studied as an example of a landmark tower within a high-density, low-rise environment. The building geometries, described as “form follows urbanism”, relate to the axes and districts of the urban context [www.geocities.com]. The absence of hierarchy of facades, the variety and originality of forms and the uniqueness of the building when viewed from different vantage points contributes to unique built form, which can only be truly experienced when moved through. The manner in which the surrounding landscape and public square are integrated with the building volume relates to human dimension and dynamic. The fragmentation of the building volume, reduces the impact, and allows respectful integration within the existing urban fabric. The material and formal extravagance enable it to contemporise the city, catalysing development in the area. [Raventós, A.G. Domus, July/August 2006, p. 58].



fig. 5.18 conceptual model, natural gas building

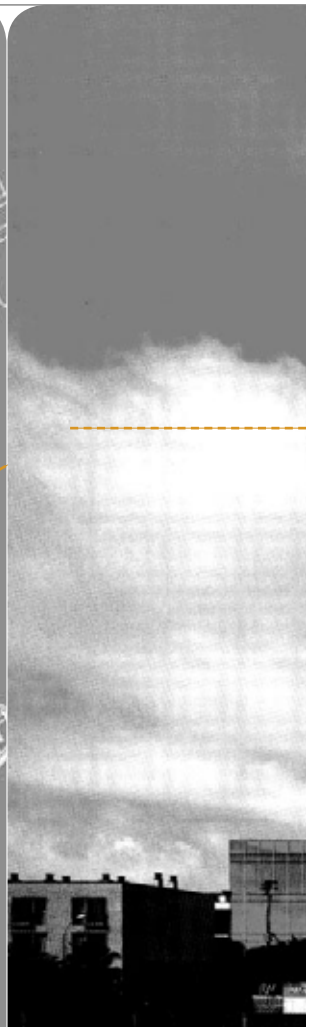


fig. 5.19 general site plan





gas natural building_ Enric Miralles-Benedetta Tagliabue

This precedent was influential in the creation of a dynamic urban and architectural form, and the fragmentation of the tower to reduce the impact of the built mass. The landscaping around the building was also studied as a generator of suggested movement.



gas natural building





fig. 5.21 concept sketch [d]



[d] The linear dynamic component was now combined with the southern building. This addressed the desired continuity of north-south movement. This proposal considered leaving portions of the ground floor open, to facilitate connectivity between street and square. The linear component reacted to square and surrounding building scale, whereas the verticality of the tower component established an uncomplicated landmark, stark against the city back drop. However, the path of movement suggested by the line of the building competed with that of Paul Kruger Street.

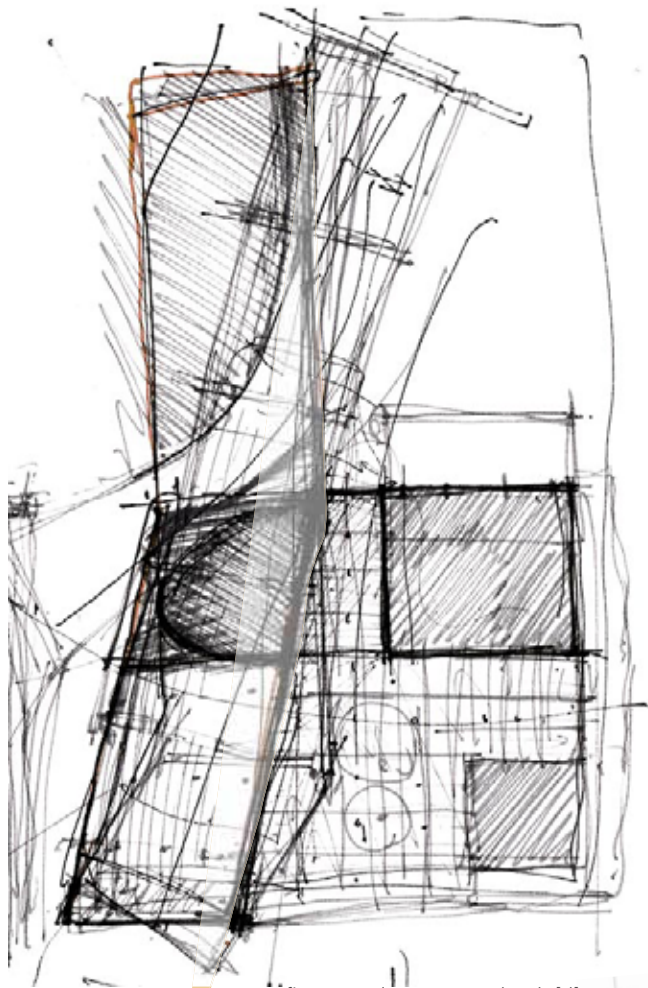


fig. 5.22 plan concept sketch [d]



[d]

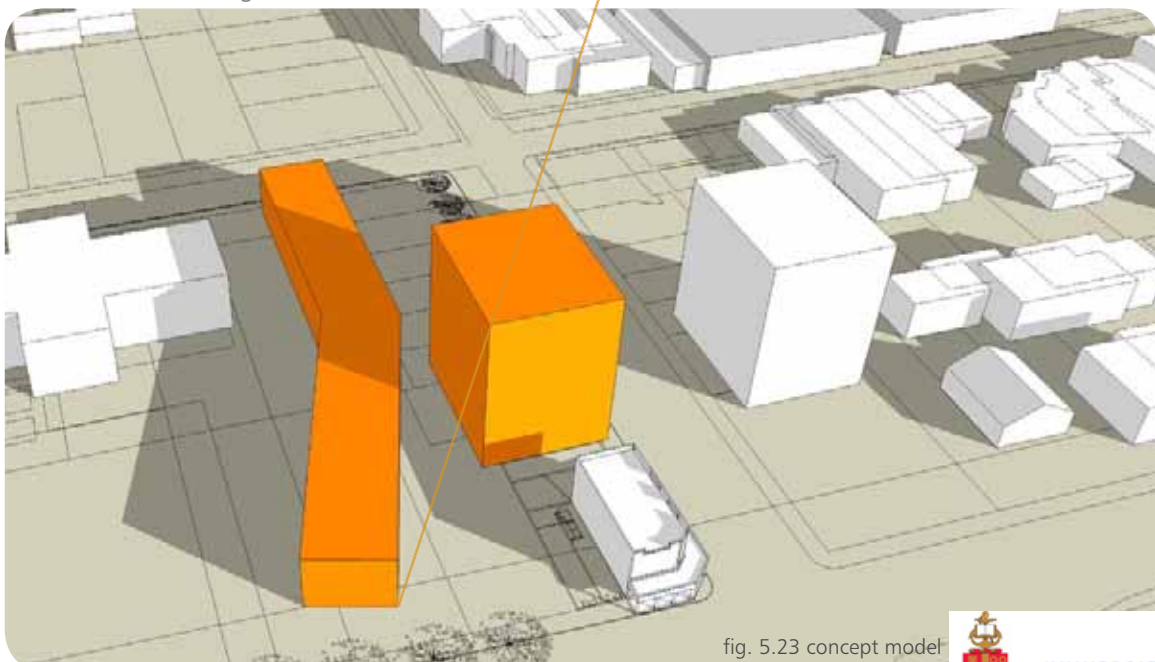


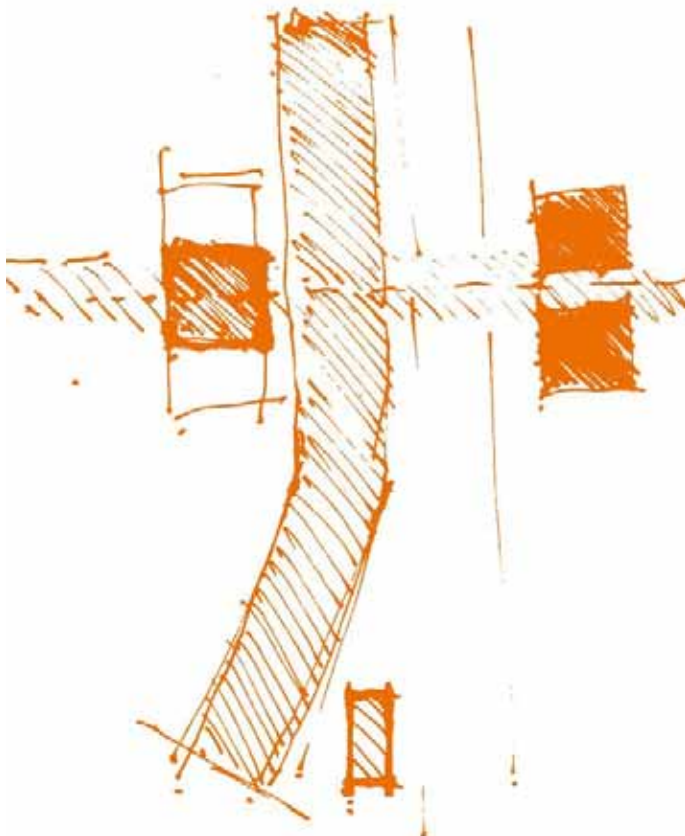
fig. 5.23 concept model





fig. 5.24 concept model [e]_view from north

[e]



[e] Until this point, an assumed secondary tower addressed the need for a defined gateway. By moving the proposed tower across Paul Kruger Street, the project was unified along the path of movement. The linear building guides movement into the city and respects context. The tower acts as visual landmark, relating to the city context. A proposed link or bridge would strengthen the connection between these two entities, establishing the psychological threshold.

fig. 5.25 plan concept sk





gateway components

[a] Public square

A proposed public square addresses the spatial linkage to the public and civic space in the city. Public space has always been, with variety, the meeting place, marketplace and traffic space of the city. The *traditional city* provided a balance between these three aspects. Streets were dimensioned to accommodate pedestrians and squares suited uses requiring space. However, in the *invaded city*, car traffic has overtaken the city, and public space has changed dramatically. A direct correlation exists between urban quality and public life. Public spaces inspire a variety of urban activities. Pedestrian movement through a site promotes users to linger and enjoy social and recreational activities. [Gehl, J. and Gemzøe, L. 2003: p. 10-14]. In order to reconquer the city and inspire urban regeneration, we must once more develop public space as a platform for social and recreational activities. The motor vehicle must be pushed back, and pedestrian activity promoted.

The proposed public square is to act as a starting point. Users are intended to arrive at the city by motor vehicle, park within safe and accessible points, then proceed into the city by foot and public transport. This will reduce noise and air pollution in the city, making it a friendlier environment for pedestrians. The renewed activity within the Northern district will contribute to a vibrant urban environment, displaying urban culture and community life.



fig. 5.26 Spatial linkage down Paul Kruger Street





fig. 5.27 parc de la villette_points of intensity_urban context

[Parc de la Villette_Bernard Tschumi Architects]

Parc de la Villette, designed by Bernard Tschumi architects, is an urban park which acknowledges the social realities of urban public space. The juxtaposition of a variety of activities was intended to encourage new attitudes and perspectives. It is an open-air cultural centre "encouraging an integrated programmatic policy related both to the city's needs and to its limitations". [Tschumi, B. 1994: 55].

The park can be considered as a large discontinuous building, comprised of various programmatic components, overlapping with the city and existing suburbs.

The park is an urban regeneration project within a populated semi-industrial quarter of north-east Paris.

p The park contains the Museum of Science and Technology, a City of Music- a Grande Halle for exhibitions and musical performances. "The park forms part of the vision of the city" [Tschumi, B. 1994: p. 55].

The design included placing *folies* on a point-grid system, establishing a common denominator throughout the programmatically complex, though ill-defined terrain. The deconstructed 10m x 10m red cubes established a symbol and identity for the park. These *folies* fulfil programmatic requirements, generating *events*. Tschumi describes a programme as "...a determinate set of expected occurrences...often based on social behaviour, habit or custom." [Tschumi, B. 1994: p. 13]. Events, however, are "an i

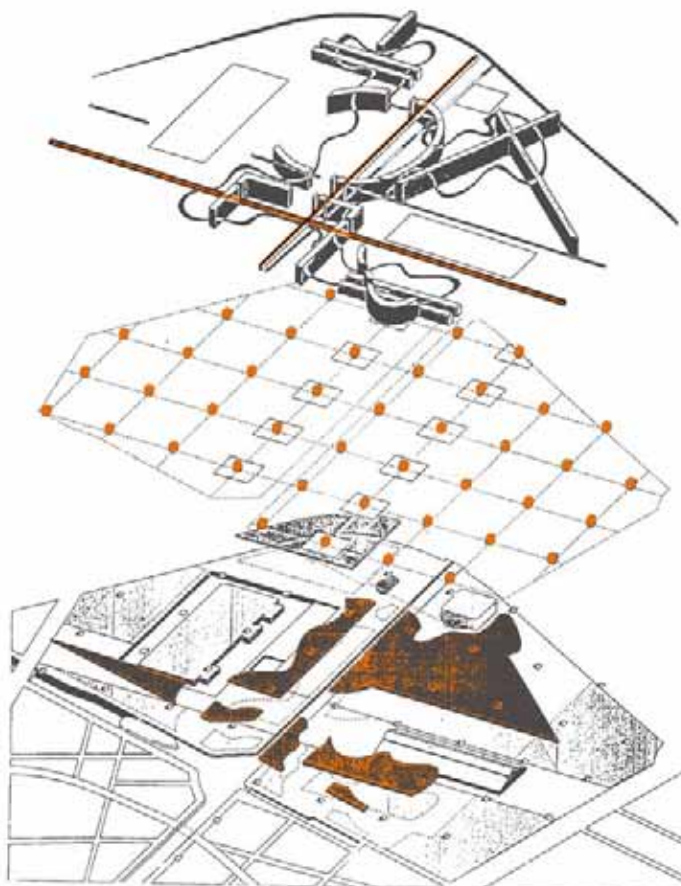


fig. 5.28 parc de la villette_points, lines, surfaces

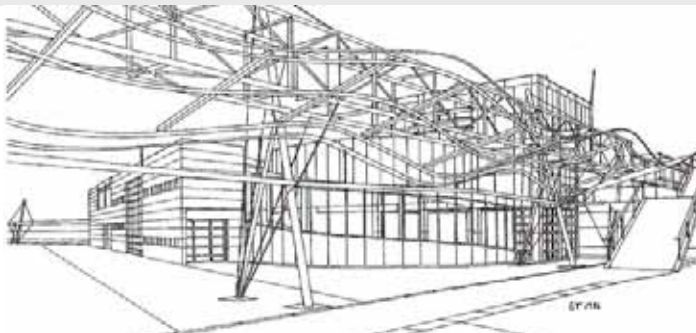




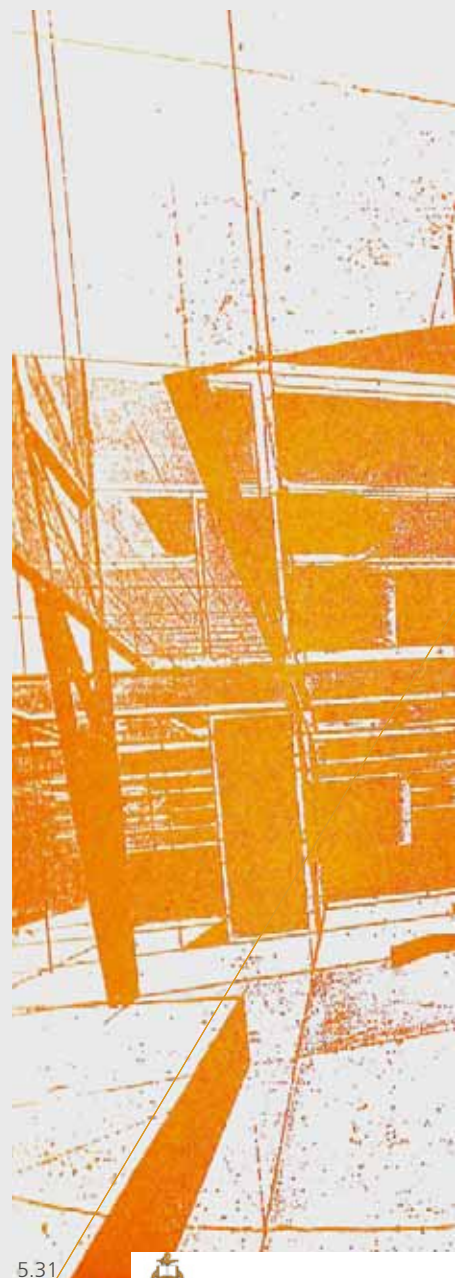
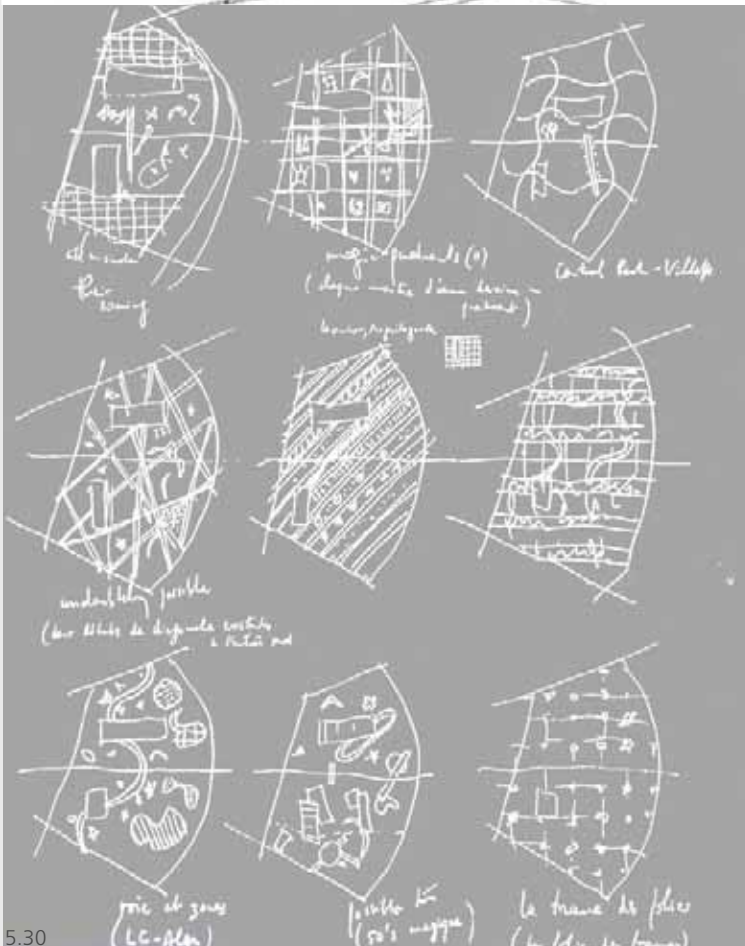
of unexpected outcomes...Revealing hidden potentialities and contradictions in a program(me)" [Tschumi, B. 1994: p. 13]. One can thus combine common programmes in order to generate unexpected events. This all considers the temporal quality of space, and the spatial quality of time due to movement.

Pedestrian movement across the site is marked by a cross of coordinate links. The North-South passage relates to the two Paris gateways and the subway stations Porte de la Villette and Porte de Pantin. The East-West coordinate link refers Paris to its suburbs. These pedestrian routes are covered in their length by a designed structure. Designated *folies* are arranged along the main routes accommodating the most frequented activities, encouraging access to the site. A random curvilinear path connects various parts of the Park, in the form of Thematic Gardens. Surfaces are programmatically determined by the activities to which they give play. The nature of the surface allows for the suited activities [Tschumi, B. 994: p. 57].

5.29



5.30



5.31



parc de la villette_bernard tschumi architects_concepts

The influence of this precedent is the development of the gateway intersection as an urban park related to an overall city vision. The programmatic requirements of the various facilities are to generate *events* of a social and recreational nature which inspire urban public life. Movement axes can generate activity in spaces along their length, and should be clearly identified. Varying surfaces can determine and facilitate intended functions.

p



fig. 5.29 walkway structures
fig. 5.30 concept development sketches
fig. 5.31 perspective sketch of folly



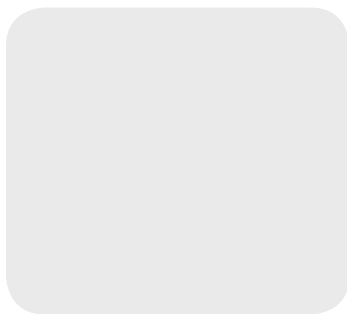
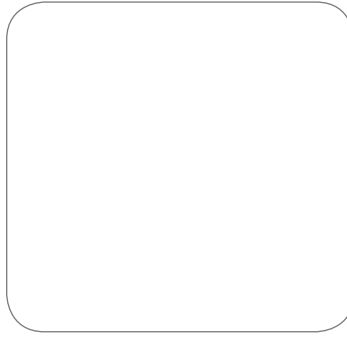


fig. 5.32 photographs of walter sisulu square, surrounding context, overlaying of old + new, community oppurtunities, materials

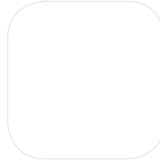
fig. 5.33 elevation of perimeter building from square





[b] Existing context_ zoo café building

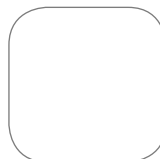
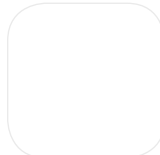
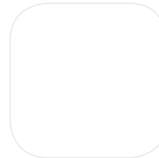
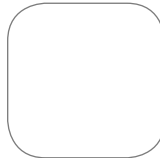
The zoo café, as previously discussed [chapter 04_site proposal_historical context] introduces a temporal layering to the proposed project. It assists users in orientating themselves within a portion in time, referring to the historical layering of the site.



p

[Walter Sisulu Square of dedication_ StudioMAS Architects]

A project where such layering is displayed, is that of Walter Sisulu Square of Dedication, Kliptown. The rich history of Kliptown is acknowledged through the square and other building elements. The project is also approached as an urban park, showing influences of Tschumi's theories. The design "indicates a direction to be taken rather than a destination", providing a rich and enabling programme of spaces, allowing for future change to community needs. The concept uses symbolism as design generator, acknowledging the site's relevance in political history. The square is flanked by permeable building volumes on either side, overlaying the existing buildings. The predominantly open nature of the lower floors encourages movement into the square, generating various informal activities. This is also an attempt to harness the activity and atmosphere of the existing street and retail buildings. The square is divided into two components of symbolic nature, the surfaces denoting intended activity.





Although the square does not currently interact as successfully with the existing fabric as intended, it displays the benefit of layering old and new. Community involvement and upliftment, generating opportunities and creating a future vision can all be considered key strategies in urban regeneration. The provision of market stall facilities on ground level beneath the building structure, although somewhat restrictive, indicates an incorporation of the informal activities within the proposed design. This encourages community ownership of the new facilities. The palette of materials visible in the project, though somewhat elaborate in cases, indicates an attempt to create a tactile environment, promoting local industries, in the establishment of a robust environment, accommodating future change in use.





It is proposed that the façade of the Zoo Café building be maintained and renovated. However the interior and the Southern and Eastern facades are to be demolished. Within the new proposed framework, these facades now become very public and need to be accessible and permeable. The prominence and resulting status of the building increases the value and marketability of the building. The interior spaces should thus be of a suitable standard. Both the ground and first floors are to retain their existing functions. A new reinforced concrete structure will be inserted to support the existing façade. A glazed façade will encourage interaction of the Southern and Eastern fronts with pedestrian activity.

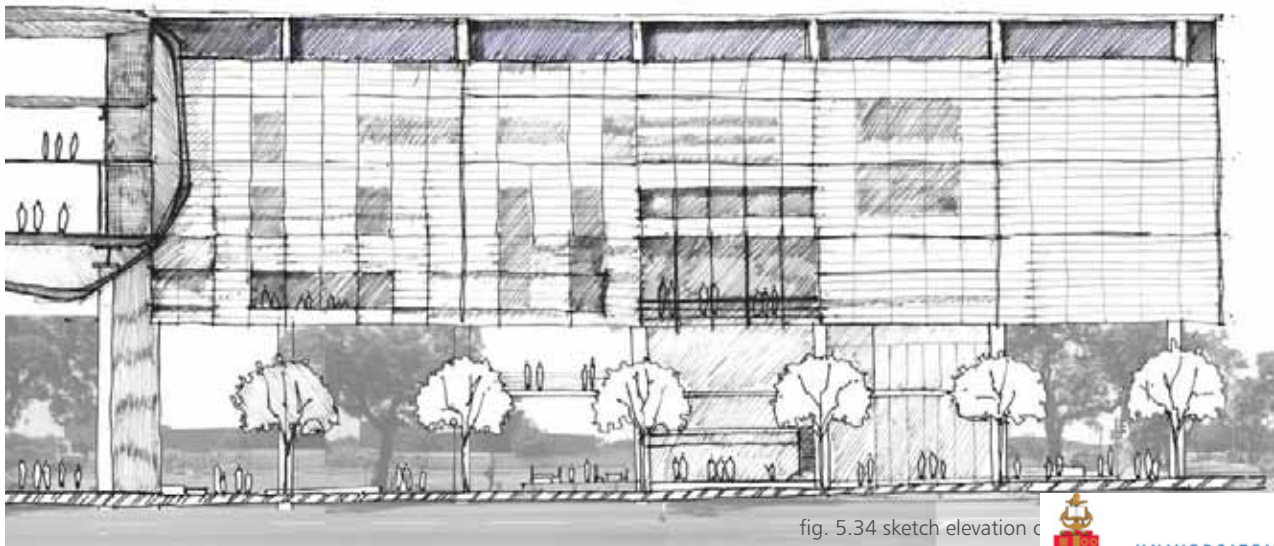


fig. 5.34 sketch elevation c





[c] threshold/link

Establishing a theoretical urban *threshold* is manifested in the form of a bridge linking the proposed two buildings either side of Paul Kruger Street. The bridge is located on the main mid-block pedestrian axis. It thus marks the gateway on both the vehicular route (Paul Kruger Street) and the pedestrian path. It reinforces the character and composition of the surrounding district, changing perspectives thereof.

The German philosopher Martin Heidegger describes a boundary as "...that, at which something begins its presencing...". Norberg-Schulz indicates it to be a threshold separating 'inside' from 'outside'. He, furthermore, identifies the basic properties of man-made places [Norberg-Schulz, C. 1976: p. 23]. The bridge is intended as a separate entity within the gateway development, its programme, as corporate restaurant and conference facility, denoting the *meeting place* of city and the exterior world. It is not to mark the exact moment of entering the urban environment, but should rather allude thereto.

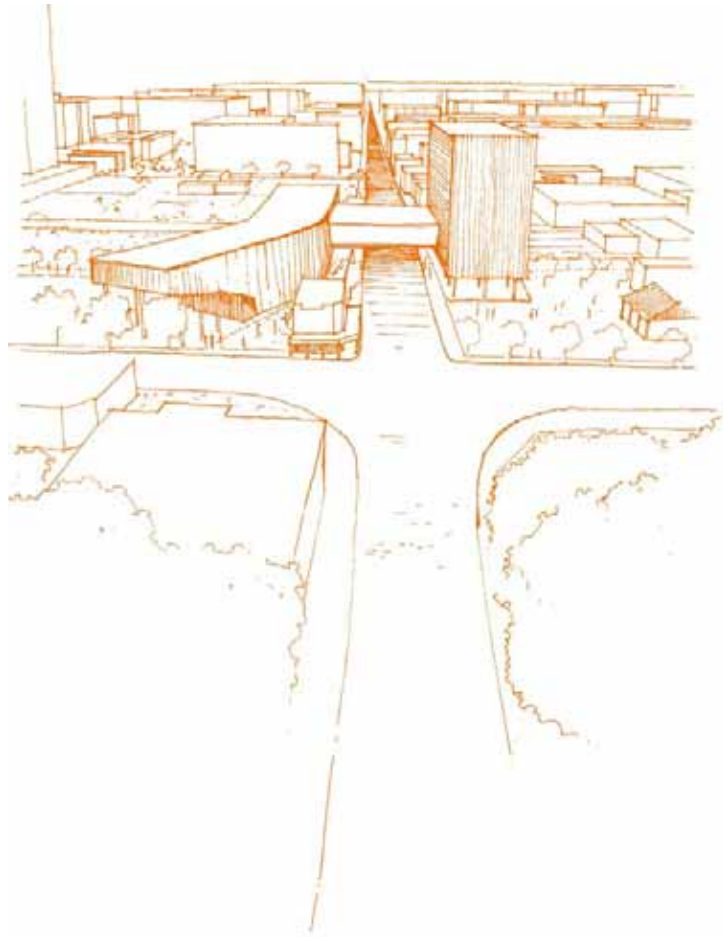
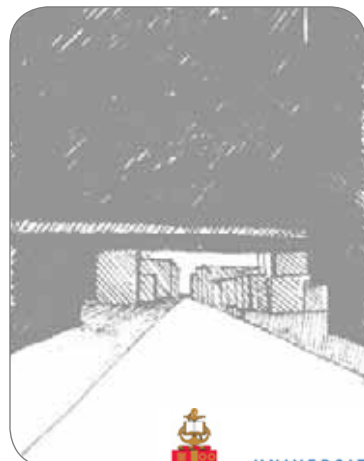


fig. 5.35 perspective view down Paul Kruger Street indicating threshold

fig. 5.36 perspective sketches of changing perceptions of threshold





[d] the landmark

The visual landmark takes form as a multi-storey tower block, initially conceptualised as a multi-functional predominantly office space building, later adopted as a new hotel building in a fellow student's project [P. Mare, 2007]. The abstraction and scale of the building is to contrast with the two and three storey surrounding buildings, achieving an iconic status within the urban environment. The tower associates the gateway with the city which it announces, a visual reference to buildings such as the Reserve Bank and ABSA Building. The surrounding components are to assist in achieving a well-scaled environment.

Tall buildings have been traditionally associated with the expression of power, and thus favoured by governments and institutions who wished to display such a public image. However, it is not this form of architectural meaning that is to be suggested. Rather, through a dynamic, interactive façade, the building can achieve a transient character. "The lightness must come from within, since it is not only a physical quality, but a mental, even philosophical one." [Piano, R. Domus, April 2001, p. 68]. Such employed interaction allows a social transfer between the interior user and the general public, contributing to a vibrant, dynamic street environment.

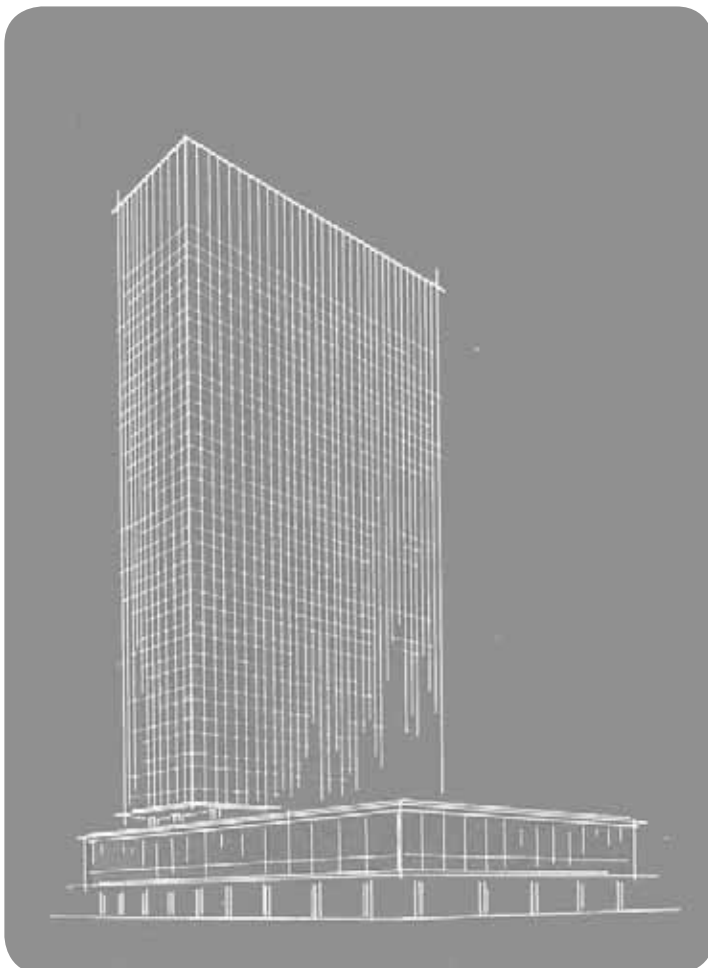


fig.
thor





[e] Transition building



This building serves as the main focus of the architectural design and technical investigation. This building marks the transition from natural to urban. The process of entering the city affects the way you feel about the city once 'inside'. "If the transition is too abrupt there is no feeling of arrival..." [Alexander, C. *et al*, 1977: p. 549]. This transition building is thus to mediate between city and user, providing the necessary layers, assisting adjustment to the city environment. The building will thus act as an urban foyer, providing a legible entry point from which to proceed into the city. The building form shows a transition in a North-South direction from the organic of the natural, to the formalised structure of the urban. The programme, linear components and colour utilised will further allude to this transition. The transition from the public to private realm will be emphasised through the visibility of various spaces, ranging in use. Design generators of plan and programme can be categorised as [i] layering [ii] movement [iii] legibility

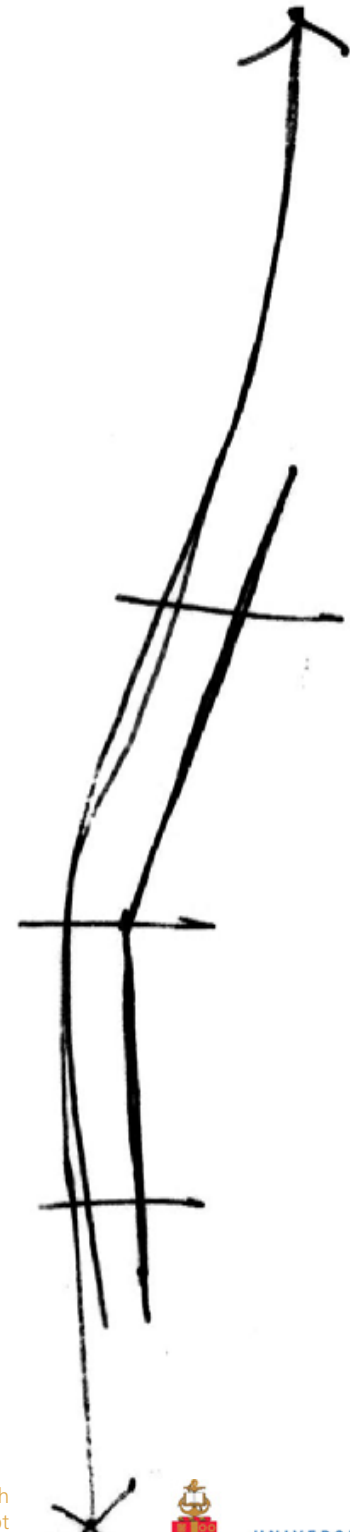
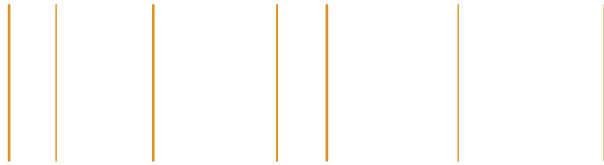


fig. 5.38 transition concept sketch
5.39 western facade layering concept

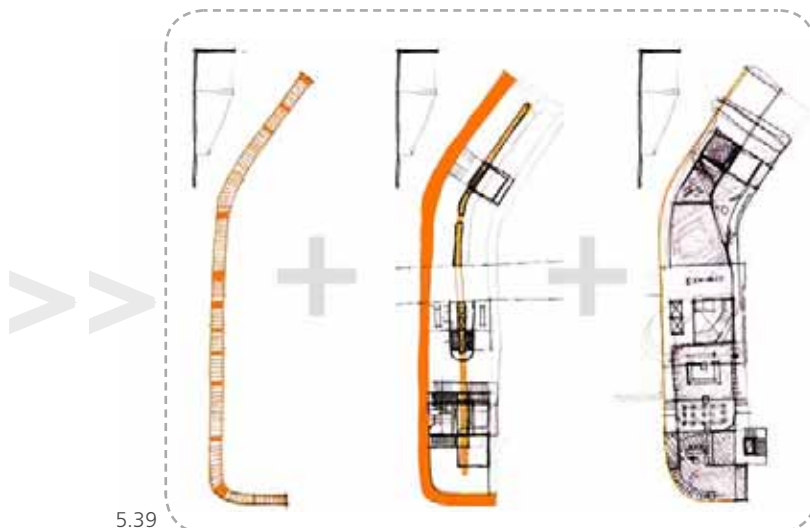




[i] layering

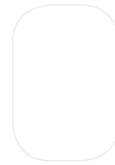
The concept of layering assists in the transition across a boundary or *edge*. The building form refers to the natural-urban transition. The change in programme and spatial definition from North to South echoes this transition. The Northern tip of the building is designated with predominantly public facilities such as restaurants. The northern façade is also staggered, to suggest 'openness' towards nature, creating an organic flow. The linear quality of the plan also assumes a fluid nature. Proceeding to the South, the programme formalises, finding its anchor in the offices for the City Vision Department. This reinforces the designed client as the 'driving force' behind the proposed development. The stepping of the roof line- from a fourth floor level at the northern end, to a seventh floor level at the southernmost tip- relates to the scaling of heights as one moves into the centre of the city.

Layering is also displayed vertically, through the different floor levels. The openness of structure displayed by the ground- and first floors reinforces their public nature, further confirmed by the facilities designed on these levels. A transition from public to private space is experienced as one moves higher into the building, culminating in the semi-private roof gardens and private office space of the top floors. This layering of spatial types is also expressed on the plan. Walkways [*paths*] create an intermediate semi-public or semi-private space, which interact on varying levels with



5.39





public square. The opacity of the designed facades denotes the nature of the interaction.

The western façade, facing onto the street, is reacting to a fast-paced vehicle-dominated environment. It must create a bold first impression which can be appreciated at a speed. However, for the pedestrian, it should provide a finer-grained interaction relating to a slow, personal transition through the space. For the interior user of the walkways, it allows vantage points of the surroundings depending on the position and opacity of the panels. This façade creates a permeable, homogenous *edge* to the building.

The eastern façade is composed of boxes, varying in height and transparency, determined by the climatic requirements of the interior programme. Some portions of the façade are demarcated by translucent

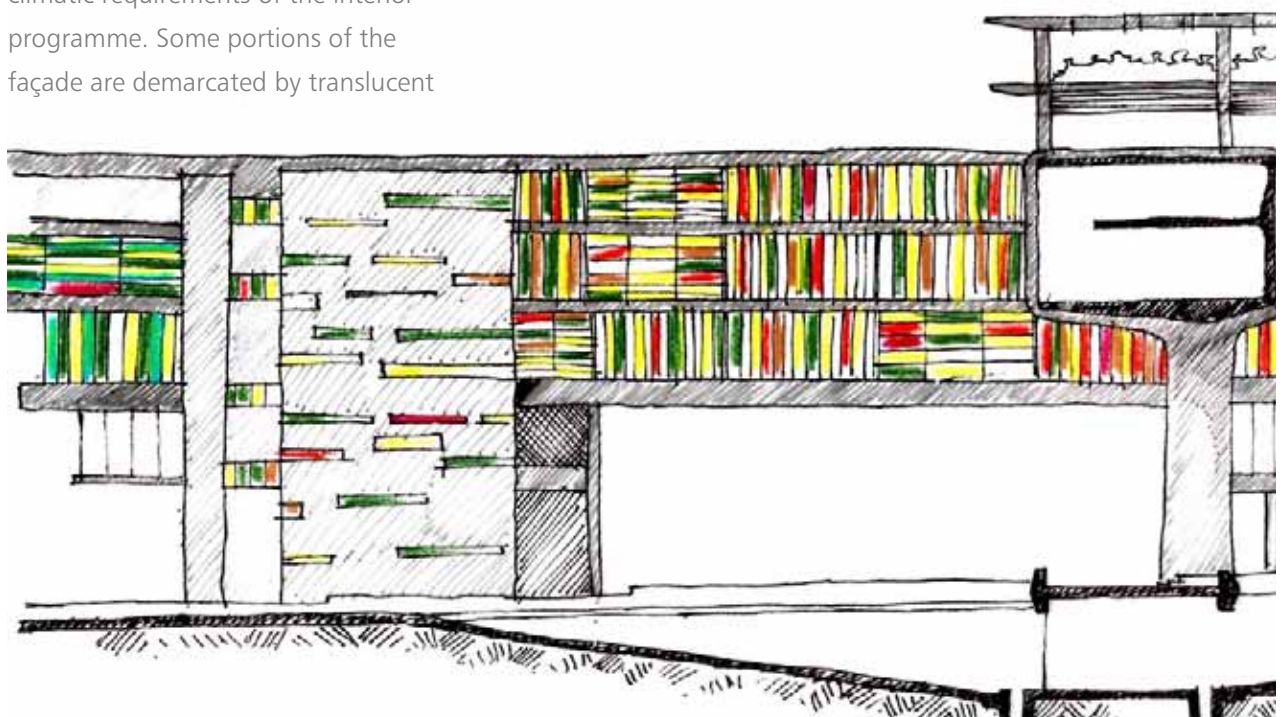
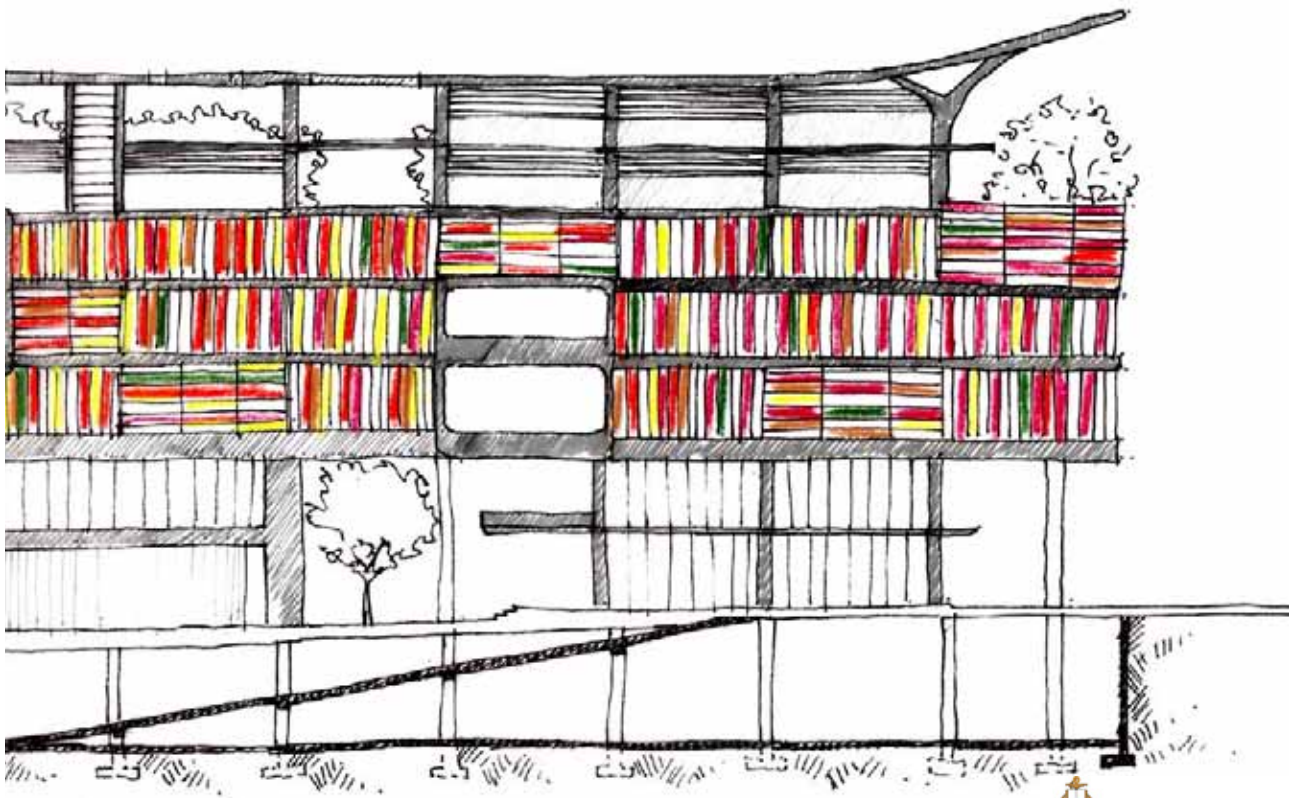


fig. 5.40 proposed design of western facade



glass balustrade. This opens the interior to visual access from the square, assisting in legibility of the building. Where more privacy is required, a screening solid display unit or waiting alcove is employed. Public seating is also provided on this façade. The activities generated by these components display the human element and distinctly public identity of the building.

This layering of activities is vital to displaying the human element and the building. By allowing visual access into areas usually closed off, a unique character is revealed of an urban building. The showcased human activity creates a dynamic, vibrant façade, contributing to the city user's perception of the building. This allows for various users to identify, through others, with the given environment.





[ii] movement

Human movement through the spaces designed is the key linear factor from which plan form was derived. A mapping of free movement through the horizontal levels, especially on the ground floor, brought about the 'bent' line. People do not turn at sharp angles when changing direction on linear path. Rather, they turn gradually, creating an organic pattern.

The building too takes on this 'bent' character, funnelling movement towards the city centre. Paving and landscape design underneath and around the building suggests the building as a transitional element within the larger node, rather than a barrier. Approach to entry points of various facilities within the building are indicated with a 'softening' of line, leading movement. These lines improve the accessibility of the spaces.

The periphery walkways are specifically designed to be useful for more than just movement. Furnished with seating, worktops and display alcoves, these walkways are to have a 'cross-programmed' nature. Under the discussion of Parc de la Villette [04_gateway components] the concept of *programme* and *events* was raised. The walkways are suited to accommodate various events, rather than purely facilitate a programme of movement. As such they encourage and display activity, vital to the design as backdrop for an experiential environment.

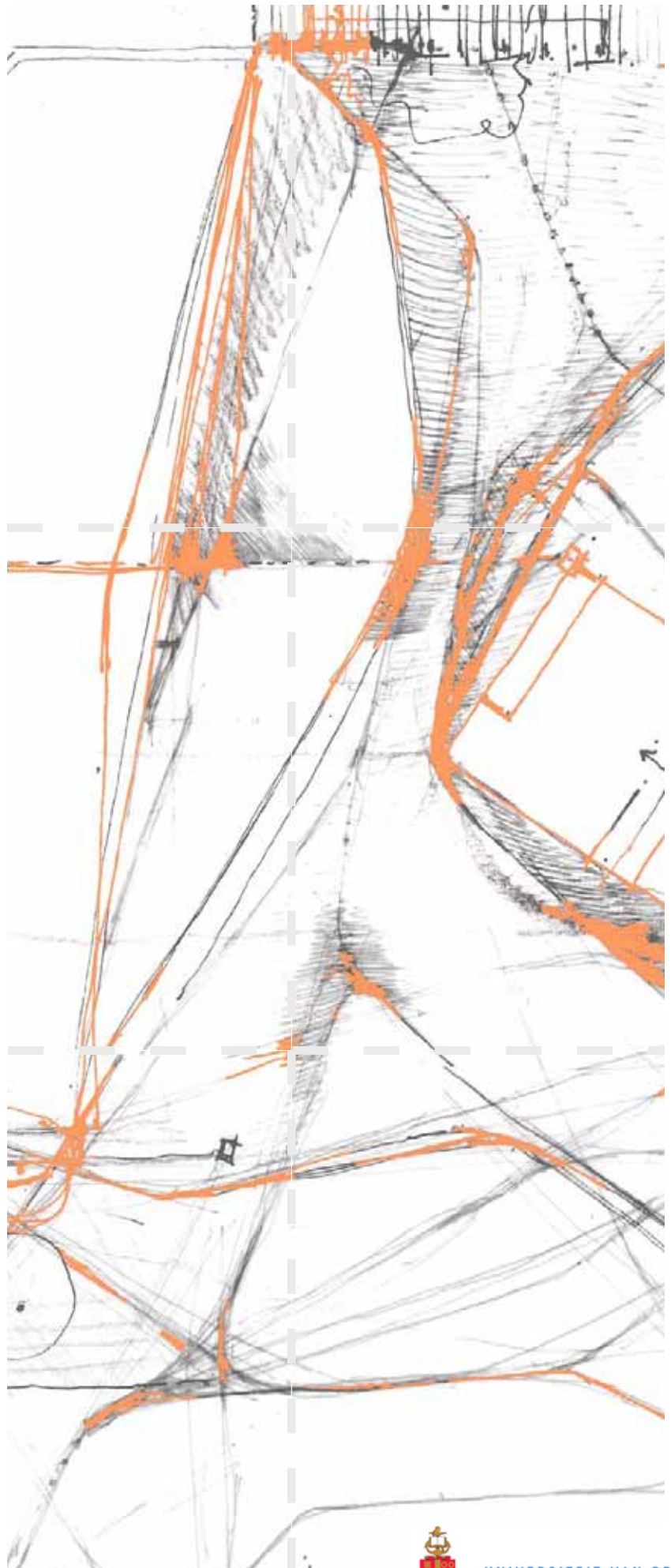




fig. 5.41 movement study_analysis sketch

[iii] legibility

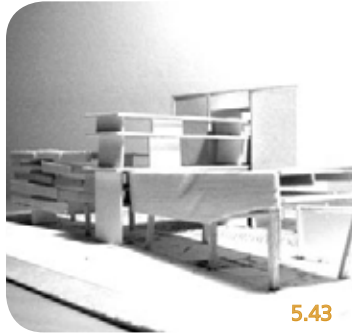
Visual legibility strongly influences the ease with which the unfamiliar visitors may navigate the building. The interactive western façade and colours employed will refer to the position of various functions. Sensors within the building will be activated by movement along the walkways. This will suggest the frequency of use of certain areas, varying according to time of day and function. This will assist users in discerning whether the desired public facility is available at present.

The spatial allocation of service and movement cores [*nodes*] concentrates functions, creating a common denominator throughout the different levels of the building. The central staircase, through its irregular and solid form, acts as a visual point of reference [*landmark*] from the square and various parts of the building. The walkways contribute to a rational understanding of movement along the building. The use of flexible signage allows for accurate indication of function and direction. The visual accessibility from the main movement cores was addressed.

Legibility and orientation is further reinforced by the use of vivid colours to identify floors. Through tile inlay details in the concrete screed floors and limiting signage and furnishings to a specific colour, position can be easily identified. This use of colour is to be transferred to facades for legibility of function on the exterior.



5.42

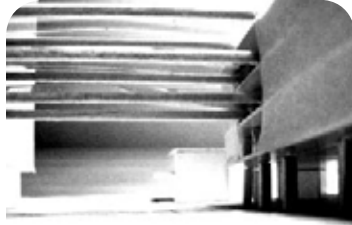


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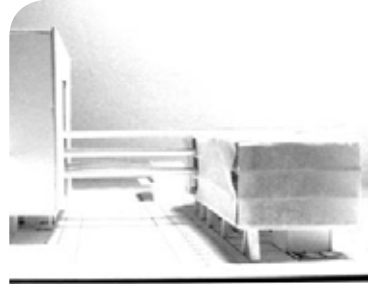


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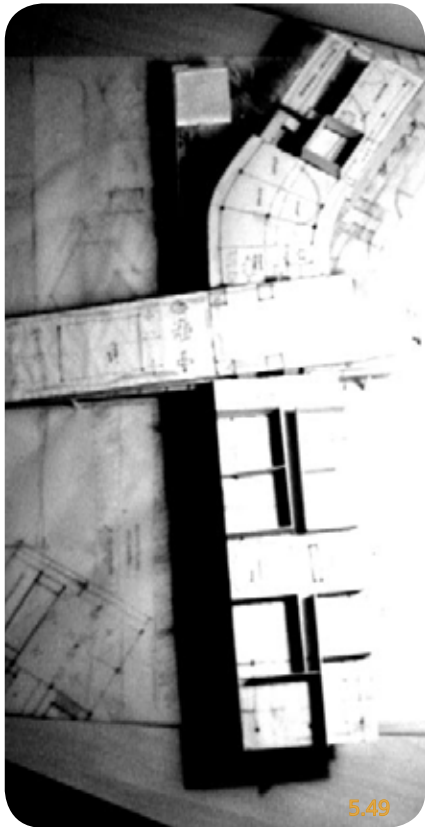
fig. 5.42-5.44 concept model 2
5.45-5.46 concept model 3
5.47-5.49 concept model 4
5.50-5.53 concept model 5



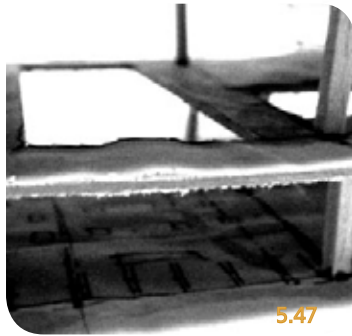
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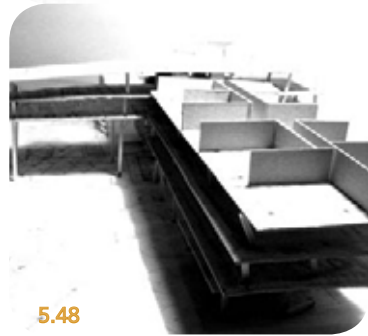
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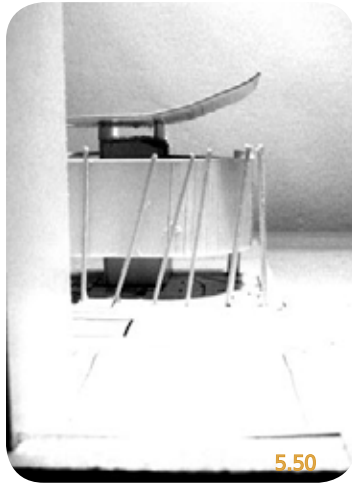
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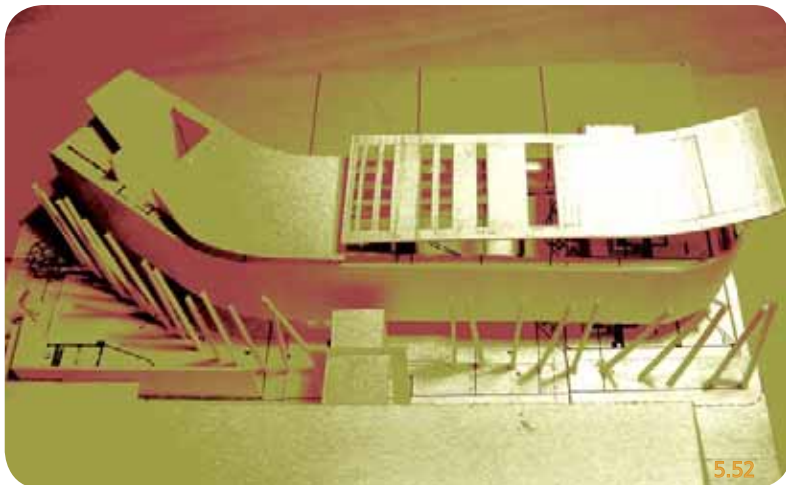
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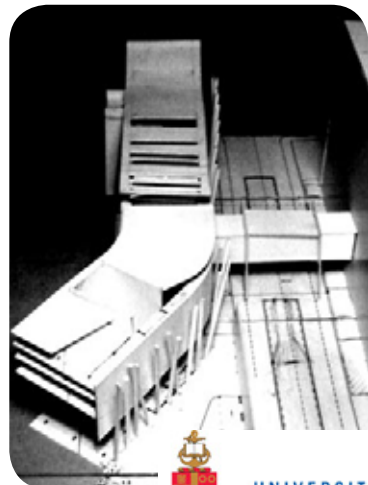
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5.51



5.52





“Construction is the mother tongue of the architect. The architect is a poet who thinks and speaks in terms of construction.” AUGUSTE PERRET

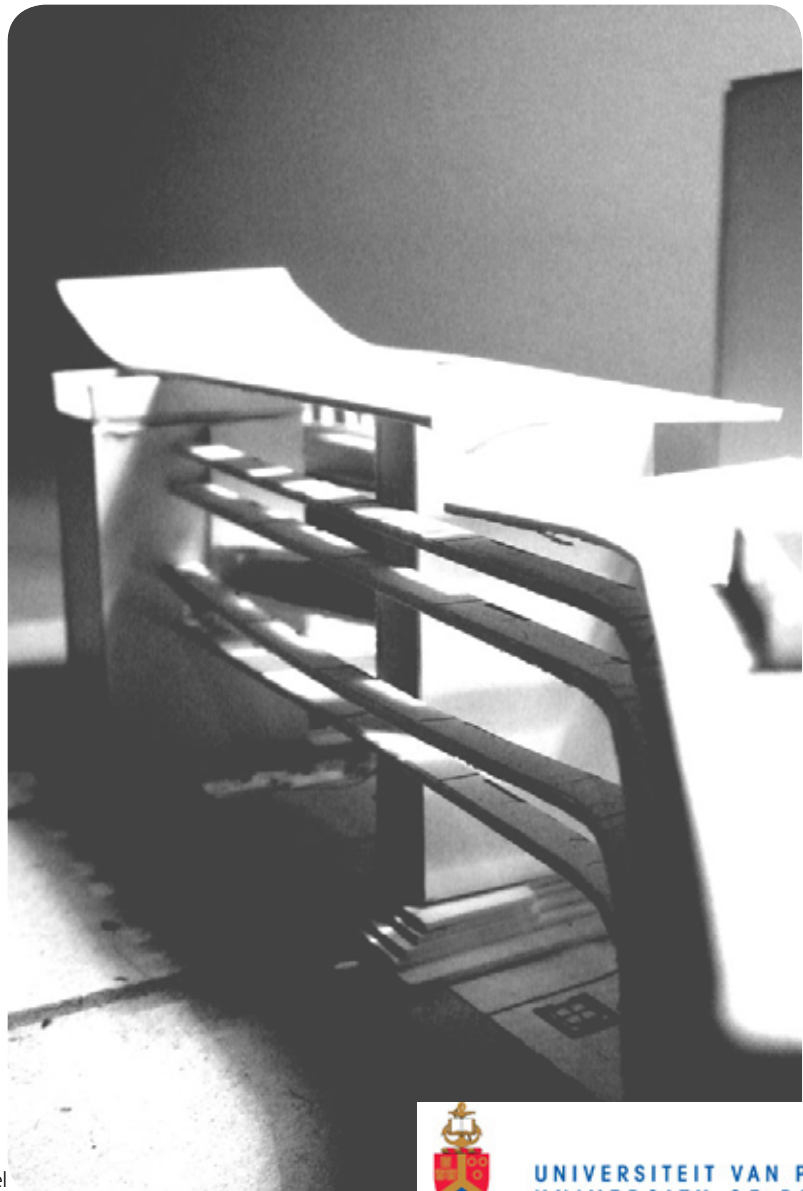


fig. 6.1 photograph of concept model





introduction

Gottfried Semper classified the building crafts as two fundamental procedures: the *stereotomics* of the earthwork, the repetitious piling up of massive elements to compose a volume; and the *tectonics* of the frame, lightweight components composed to define a spatial matrix [Frampton, K. 1996: p. 5]. Vernacular architecture displays varying roles played by these two forms, influenced by climate, custom and available material. The *tectonic* or *frame* component has an affinity to the sky, whereas the *stereotomic* has an affinity to the earth, dissolving therein. [Frampton, K. 1996: p.7]. This relates to man's existential *dwelling* "between heaven and earth". The shape of the sky is described by "the vaulting path of the sun", whereas the earth is related to the human need for shelter. (Norberg-Schulz, C. 1980: p. 24).

The technical discussion comprises these two components, and their relation to the human element, with the primary focus on the *tectonic* as a transient/temporal interface.





the stereotomic

“Pretoria regionalism...reflects a particular response to nature and landscape through the economical use of naturally available and industrially produced materials with an empirical response to climate...” [Fisher, R.C. 1998: p. 123]. Inspired by *Brazil Builds*, many civic and institutional buildings built after the 1940’s display elements such as *Brise Soleil*, roof gardens and fluid concrete form work. [Fisher, R.C 1998: p.197-229]. The attempt is to create a building which relates to the local vernacular, while maintaining a culturally non-specific architectural language.

A massive concrete structure was selected as load-bearing component. The material use is regionally respectful as an architectural component, and assists in maintaining a temperate internal environment. The structure creates a skeletal framework, within which internal partitions can be provided as space requirements stipulate. Suspended floors and ceilings accommodate regular change in office space requirements.

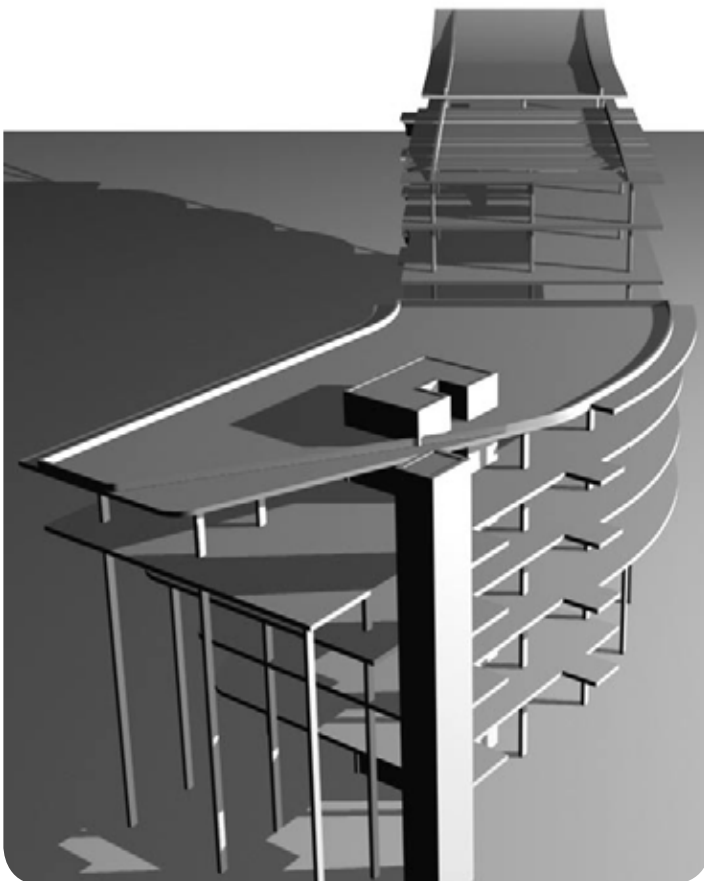
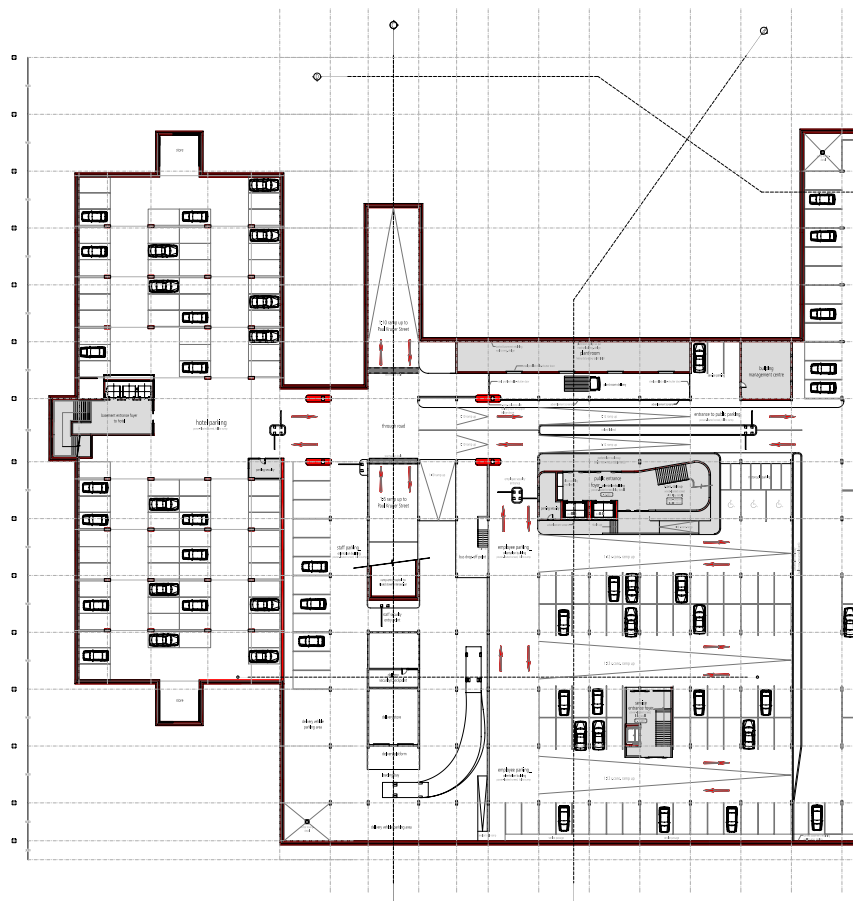


fig. 6





The building's structural system originates from the basement. The proposed building, as departure point when moving into the city, must provide vehicular parking for visitors entering the city. The visitors are intended to leave their vehicles at a safe and accessible point, then proceed into the city on foot or make use of various forms of public transport. Such parking is best provided in a basement level facility. Parking bays, which usually impede pedestrian movement, can thus be eliminated on street level. This also maximizes use of the site at street level. The basement will be used by all the buildings located on the street block. A public parking component will also generate an income, which can contribute to the maintenance of the square.



The basement was co-designed by fellow students Piet du Preez [informal trading centre] and Pieter Maré [hotel]. A tanked system was employed against horizontal and vertical ground water pressure [see typical detail]. Any ingress of water, either through leaking or stormwater penetration, can be drained, as surface drainage, to mechanical sumps at selected points. Extractor fans to ground level remove exhaust air; clean air is introduced through conduits from the plant room. The basement roof [square level] is waterproofed and paved. Tree planter boxes provided are placed strategically above columns to carry the additional loading. Areas adjacent to the entry point were designed with a minimum clearance height of



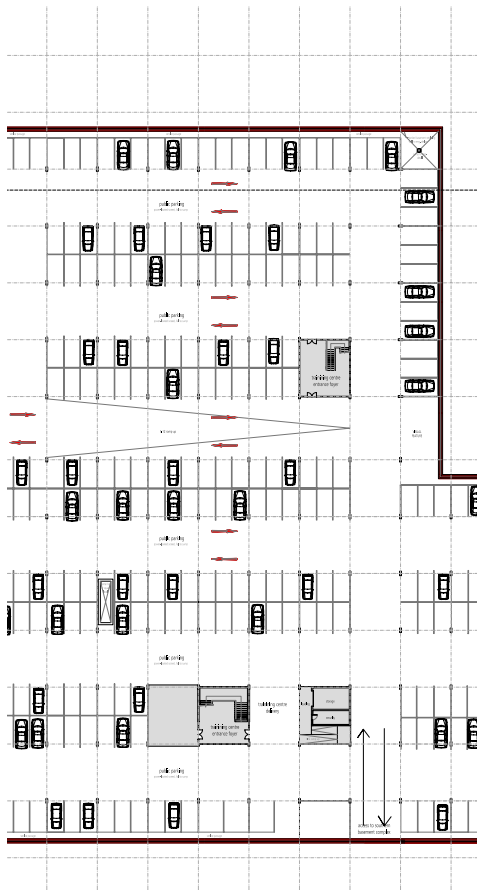
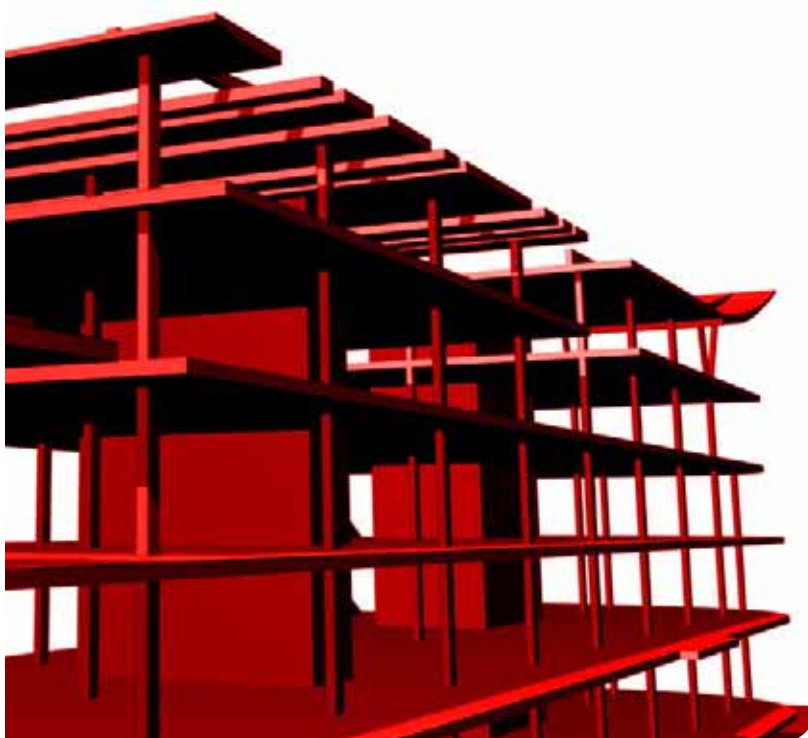


fig. 6.3 basement plan
fig. 6.4 view of pergola

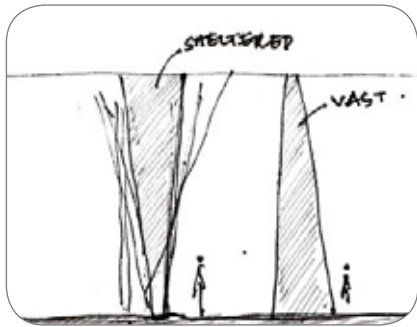
4.5 metres to admit service and emergency vehicles, should it become necessary. The remainder of the basement is ramped in order to reduce the height, with a 2.4 metre clearance height allowed for the public parking area.

The entrance to the basement level is provided by a two-way vehicular ramp in the centre of Paul Kruger Street. Accessible from both a Northern and Southern direction, the location of the parking entrance is clearly legible to unfamiliar visitors approaching the building, enforcing its use as a point of orientation. A series of security booms will be utilised to demarcate visitor and employee parking for the relevant buildings. Access to buildings will be provided by monitored lift and stair shafts, which continue through to the various levels above. The basement also provides facilities for deliveries and waste removal.

The column grid of 9mx8m was influenced by the need for an economical parking layout on the basement level. A 300x700 reinforced concrete column was recommended by the structural engineer [Carl von Geysso, during interview with author]. The size can be reduced proportionally moving upwards through the floors. The reinforced two-way slab was calculated to have a depth of 340mm, a marginally thicker slab favoured in order to reduce the amount of steel reinforcing required. 595mm reinforced concrete beams span in the longer north-south direction.



6.5



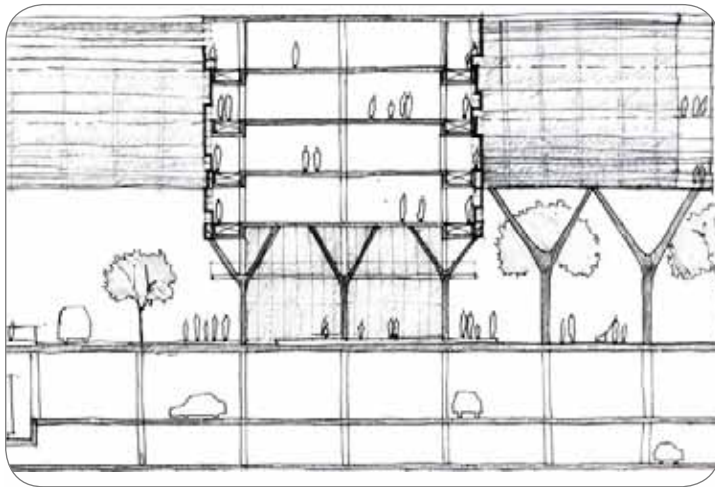
6.6



fig. 6.5 column investigation_sketch
 6.6 school entrance canopy, Brazil_Oscar Niemeyer
 6.7 concept sketch_columns
 6.8 t-frame structure
 6.9 Perspective view of roof form



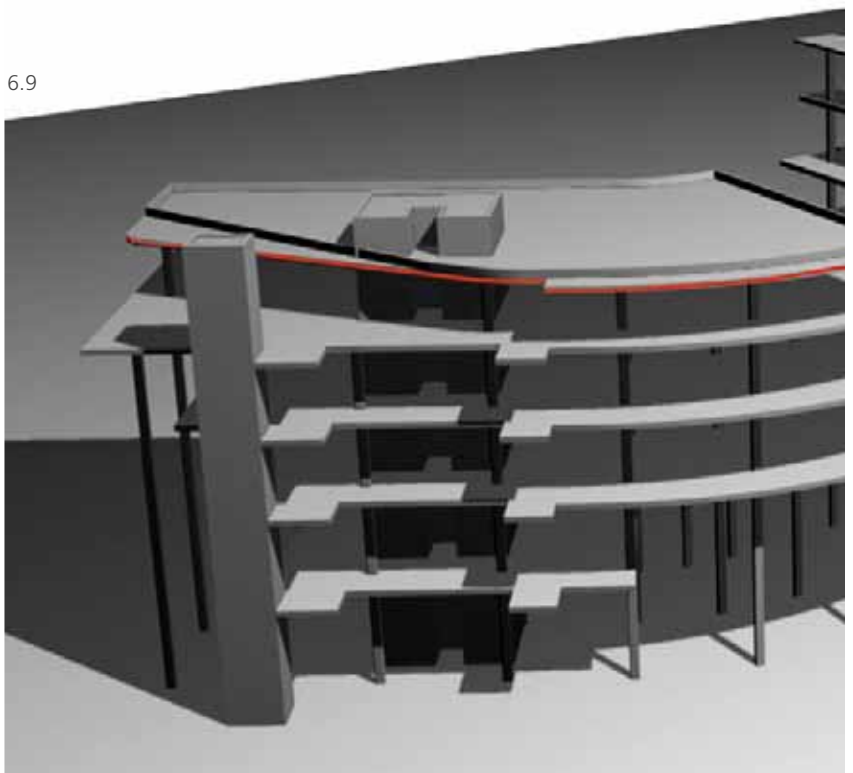
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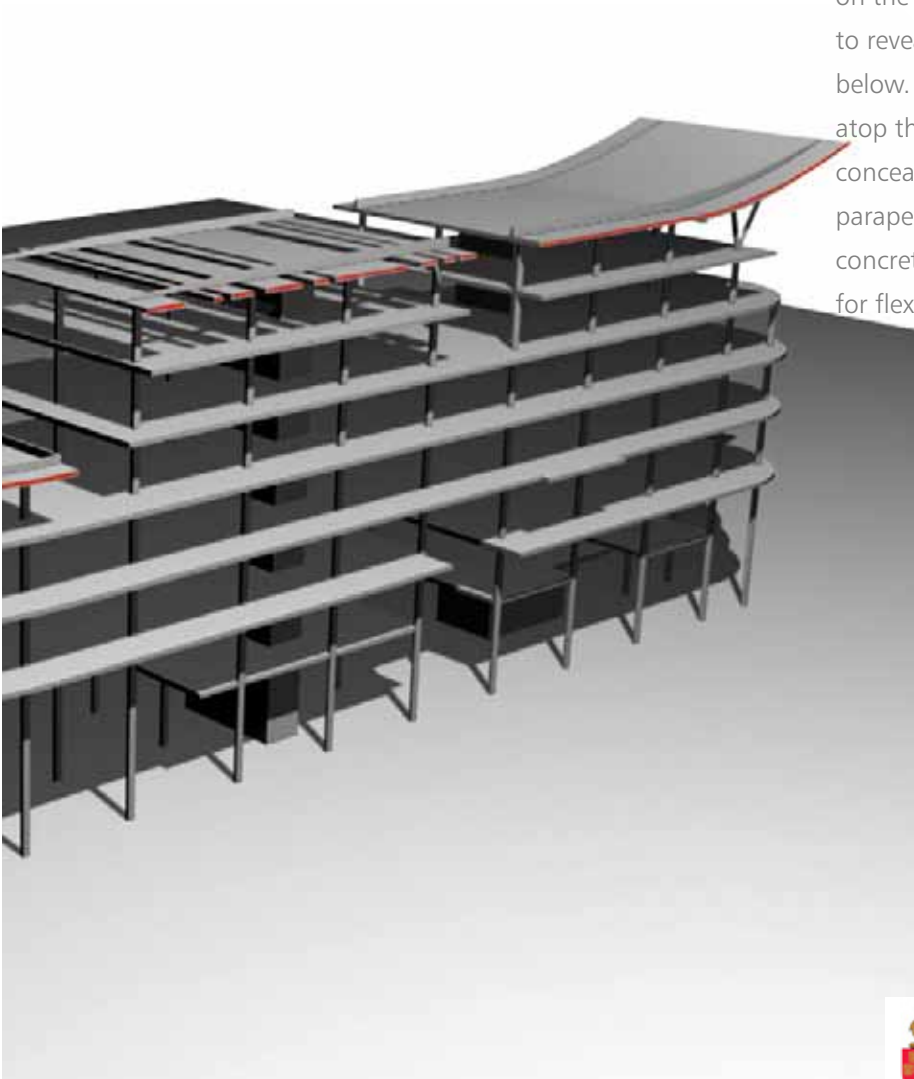
The building being raised from the ground on street level, led to an investigation of column forms, in an attempt to humanise the space below the structure. However, an intricately formed column was later discarded. Unless a symmetrical column form was utilised, it would denote or favour a direction for movement. The desired freedom of movement through the public space would thus not be articulated in the structure. Complexity was rather provided by enclosing portions beneath the building for commercial use, reducing the overwhelming volume.

6.9



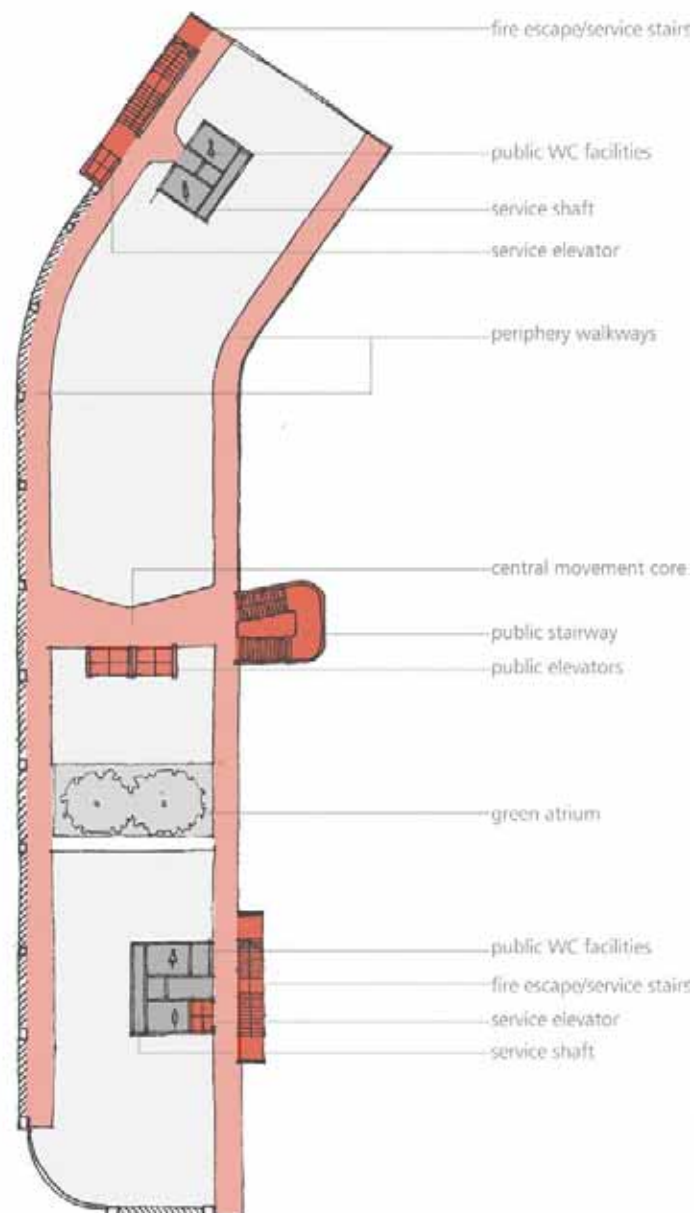


The use of a predominantly flat roof accommodates a roof garden, and allows for future upward expansion. The curved roof and branched columns [south] is an expression of transient freedom and movement. It opens up a welcoming view of the city. The use of concrete formwork to construct these components references to the Pretoria tradition of concrete work. A concrete parapet wall conceals the waterproofing, set back from the roof edge to achieve a slim line on elevation. Shuttering for the curved roof is to be constructed from 150mm wide timber planks, achieving a finely-textured finish. This roof flattens, disintegrating to a concrete pergola above the roof garden. The roof curves horizontally on the northern end of the building to reveal a more intimate roof garden below. This is echoed in a roof garden atop the redesigned heritage building, concealed by the existing stepped parapet wall. The use of precast concrete planter boxes was favoured for flexibility of planting.

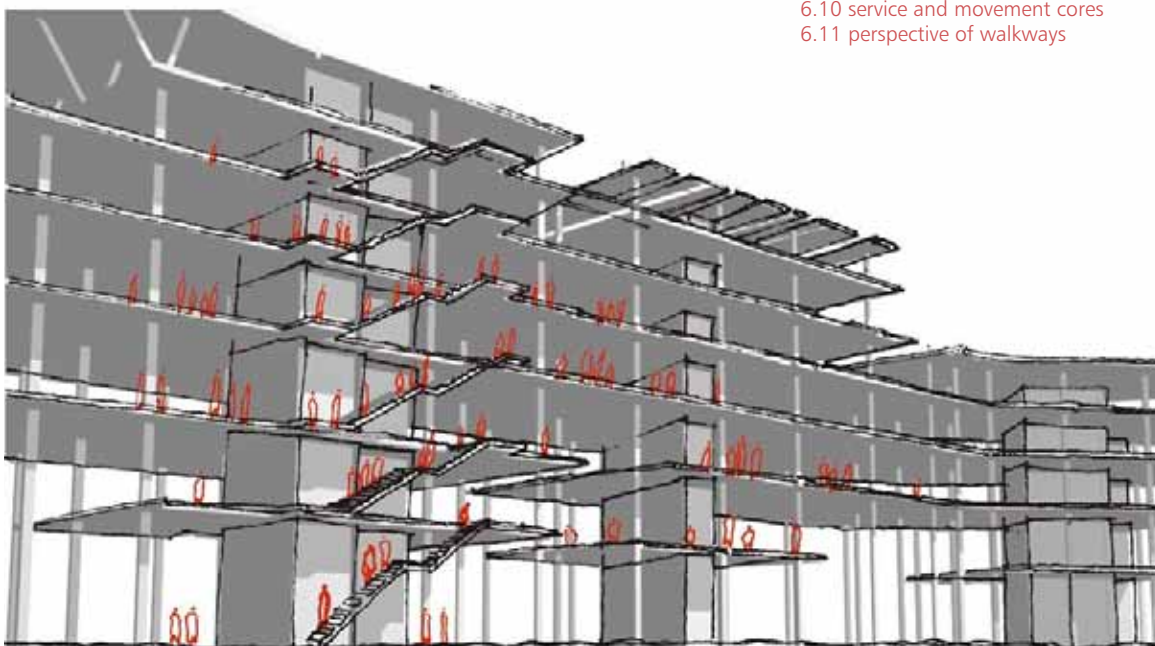


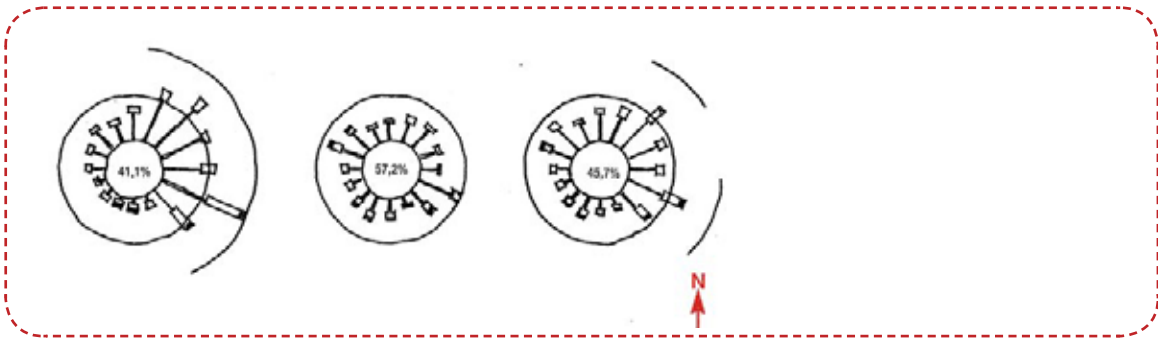


Two vertical service cores concentrate utilities, allowing for efficiency and flexibility. These are connected to horizontal service spines, located in the ceiling void above walkways. These service channels allow easy access to conduits for maintenance and modification. Passive ventilation is encouraged in order to reduce energy consumption. The exterior facades are designed to encourage cross ventilation. The secondary leaf of glazing is fitted with operable windows and high level louvers for the escape of hot air. A supplementary mechanical ventilation system, operated by a basement plant room, is provided to create a comfortable working environment. Cool air is transported in ducts, concealed in the eastern service spines, and introduced via inlets in the suspended floors. Hot air is extracted through outlets in the suspended ceiling, and transported back to the plant room, via the western service spines.



6.10 service and movement cores
6.11 perspective of walkways

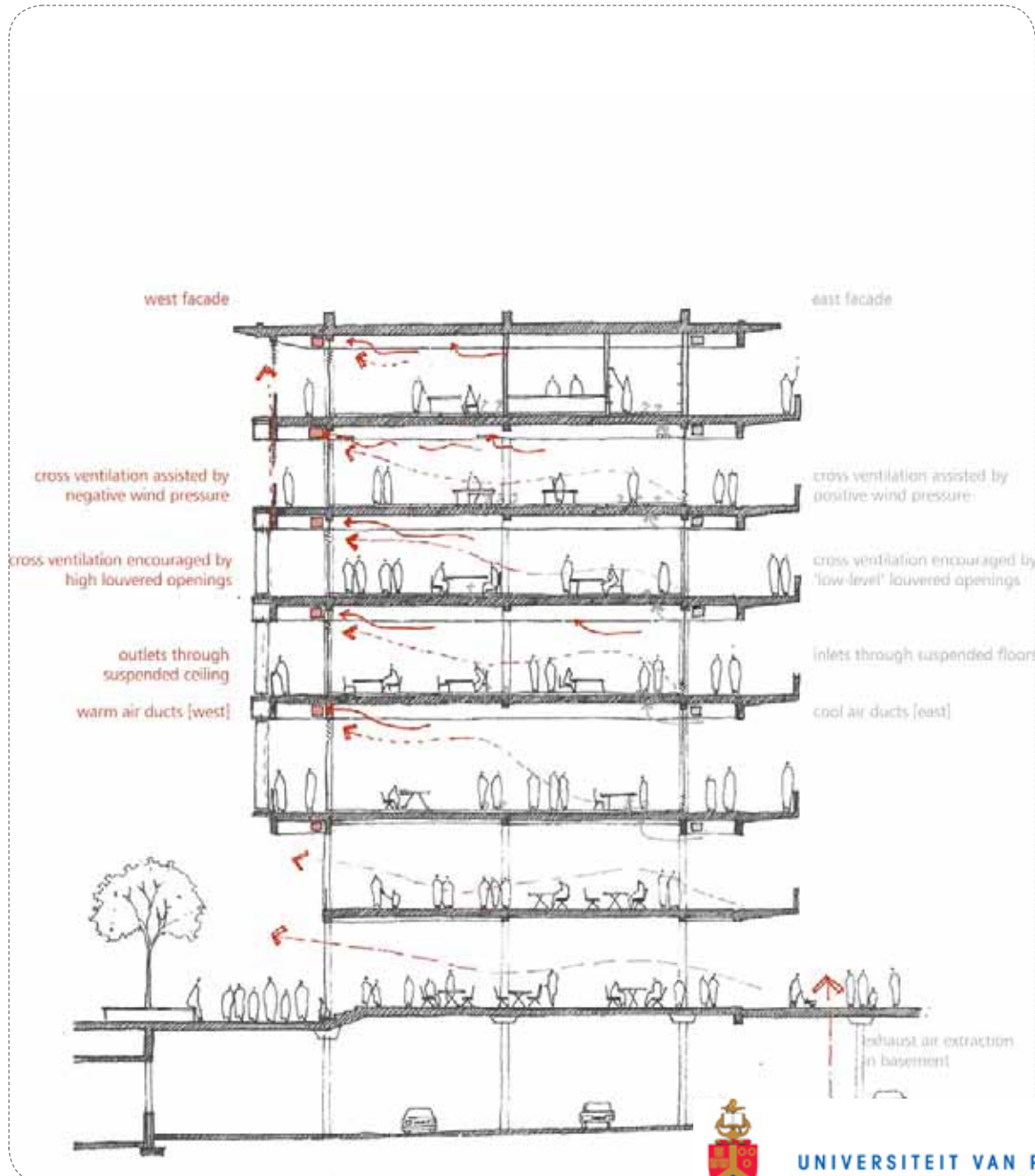




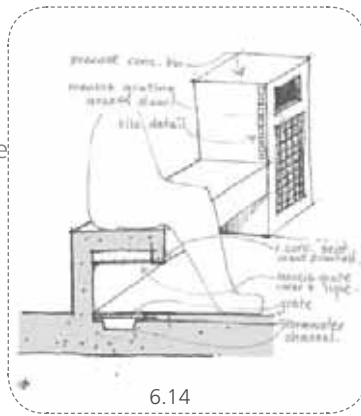
6.12 wind rose for pretoria indicating predominantly north-east and south-east wind.

wind pressure differences on the western and eastern facades thus assist in ventilation through the building

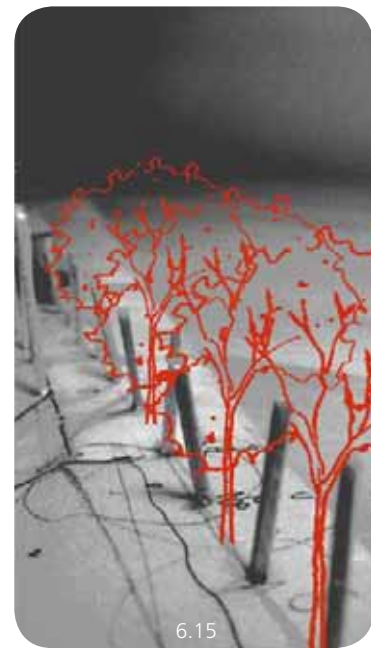
6.13 building ventilation diagram



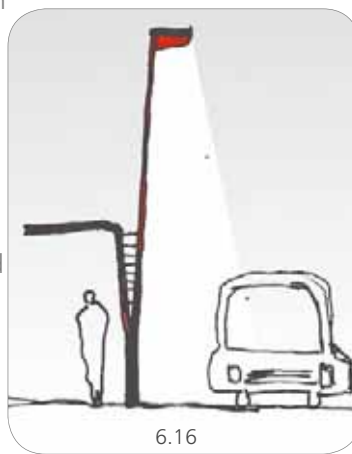
Another component of the investigation was that of creating a unified public space under and around the building. Street furniture and planter boxes were designed, in conjunction with fellow students, to be used throughout the gateway node. An analysis of identified movement patterns through the site developed as a paving design. Where these lines intersect other components, street furniture can be allocated. To achieve organic lines in the paving, cast-in-situ pigmented textured concrete was selected as finish for the main public square areas. Tile and stone inlays emphasize the organic lines of the design. Cast iron grates are installed at points identified, to allow for storm water run-off to drains cast in the floor slab. Cobble paving is to be used on the road surfaces to contribute to an audible experience. Bollards demarcate pedestrian walkways from vehicular zones.



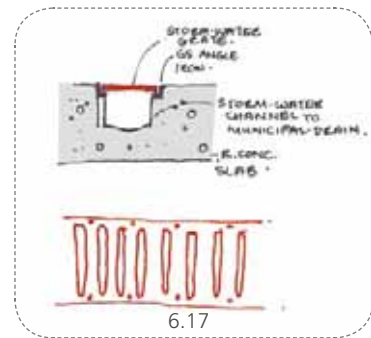
6.14



6.15



6.16



6.17

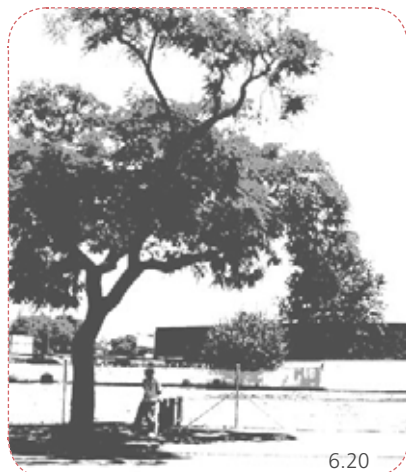


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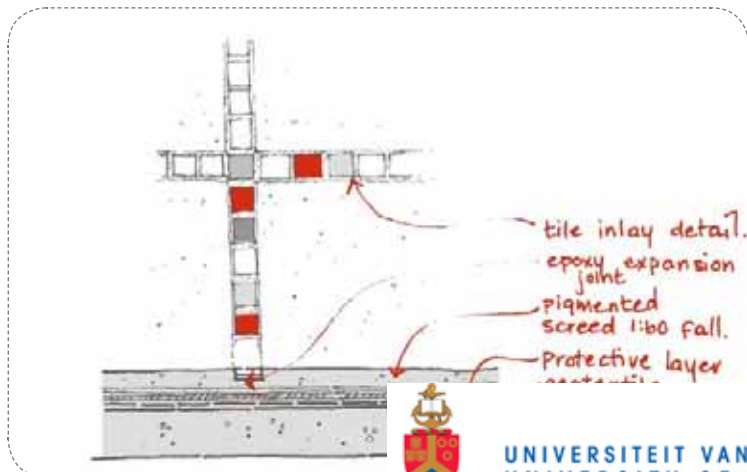


6.19

- fig. 6.14 seating detail
- 6.15 trees and lampposts
- 6.16 lamppost sketch
- 6.17 stormwater channel investigation
- 6.18 brick floor, placa del general moragues, spain_e. kelly
- 6.19 paving, chasse terrain, netherlands_west 8
- 6.20 existing tree on site
- 6.21 paving detail



6.20



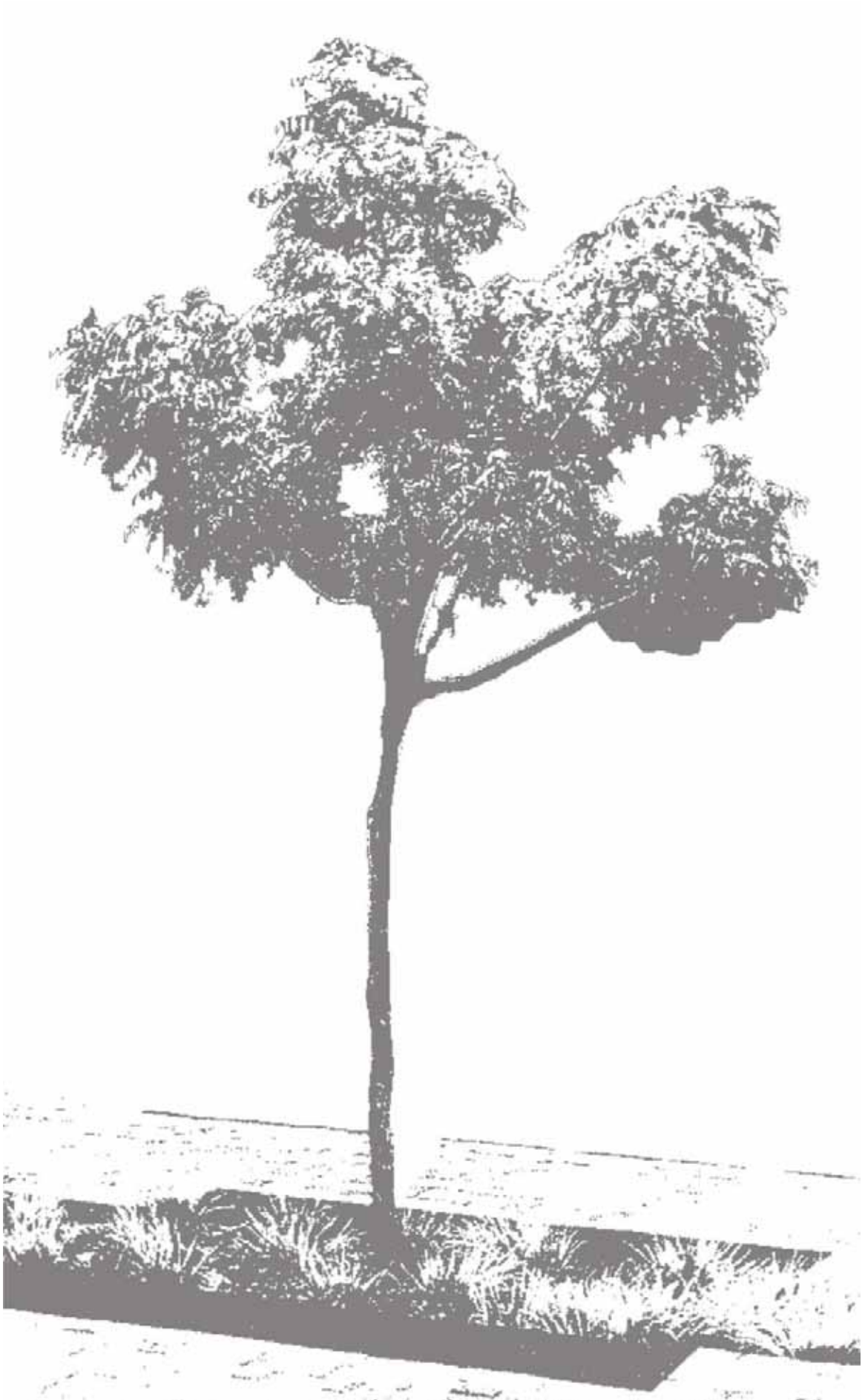


fig. 6.22 tree wisteria investigated as alternative planting to jacarandas



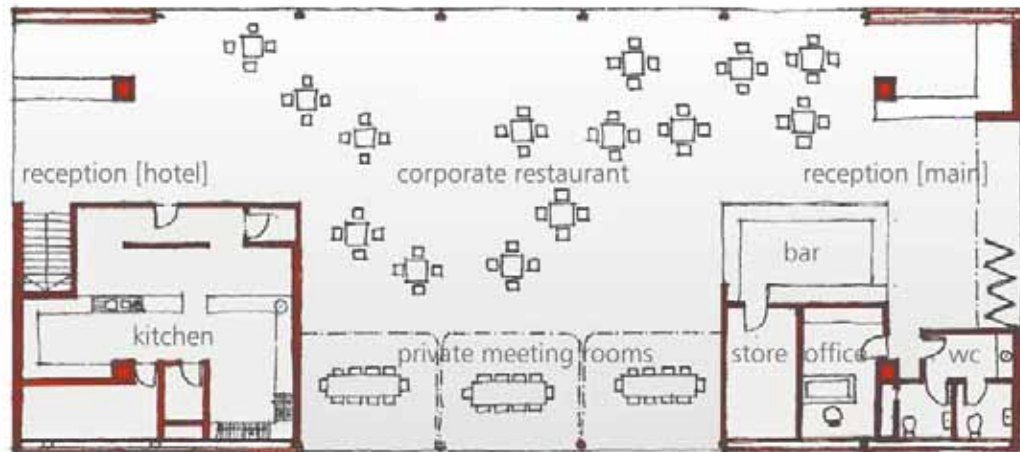


fig. 6.23 lower floor plan [3rd]

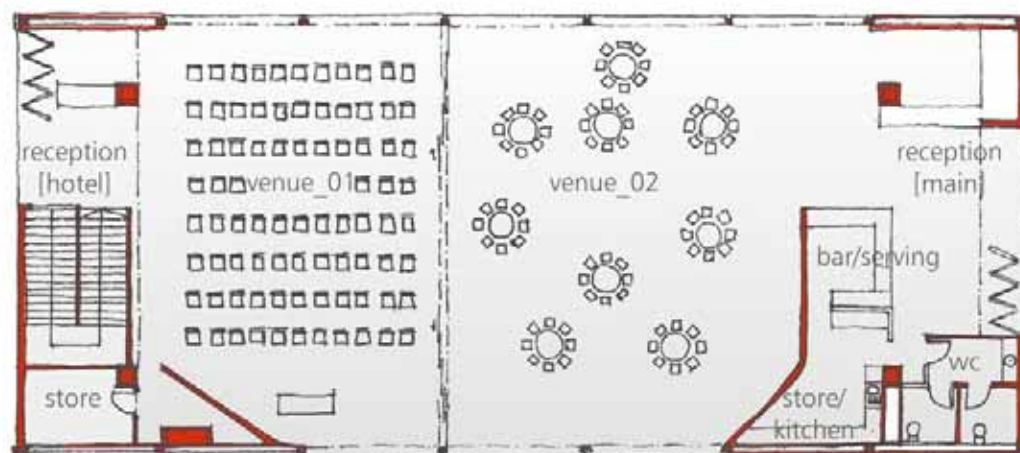
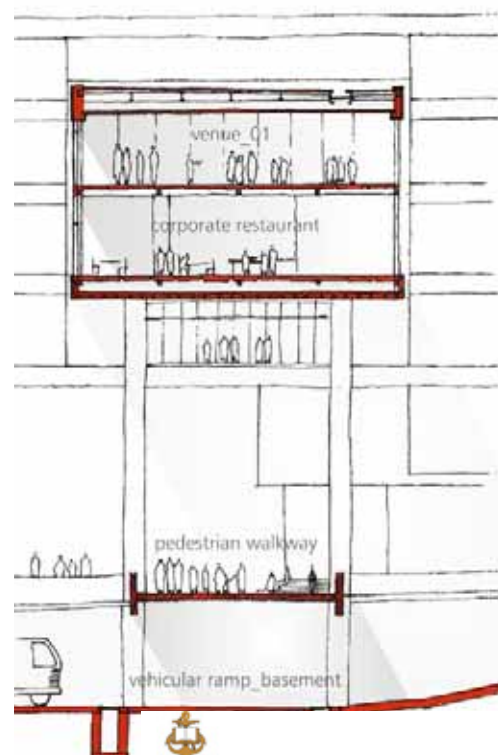


fig. 6.24 upper floor plan [4th]

the bridge

The bridge was designed conceptually as component within the design. It is to be constructed from welded steel trusses, maintaining a light-weight appearance. White aluminium cladding to the roof and base conceal service ducts and structure, while the north and south elevations are enclosed by structural glazing. The interior spaces have a light, neutral appearance. Massive concrete columns provide the necessary vertical support and conceal service and ventilation ducts to the basement.



6.25 section tl





6.26

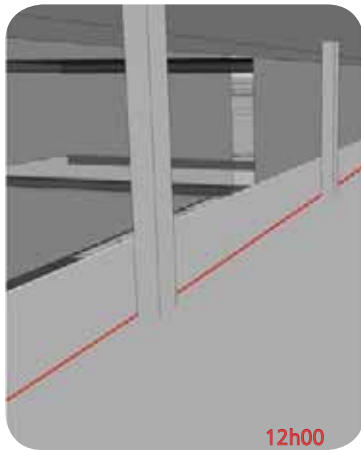
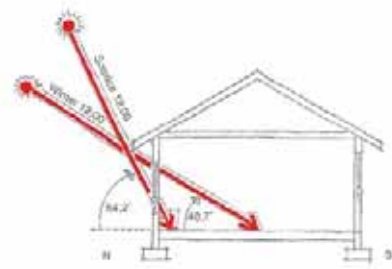


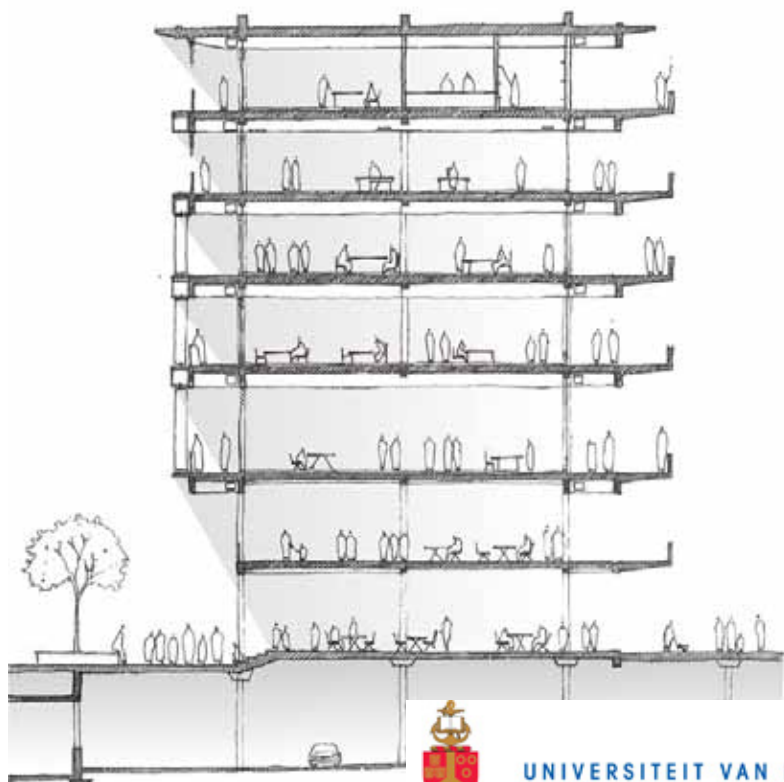
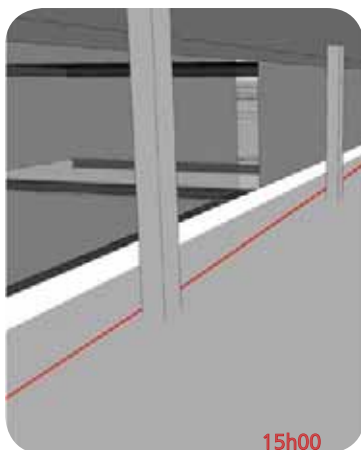
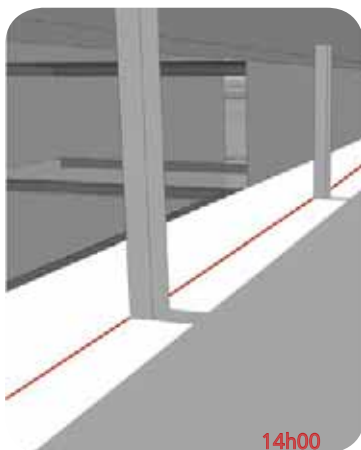
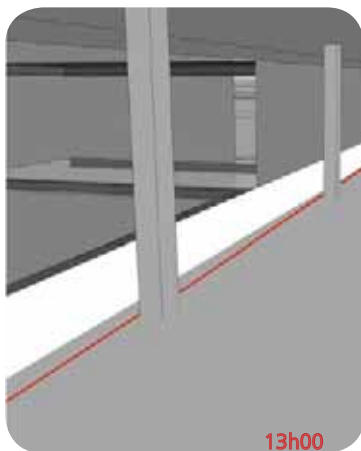
fig. 6.26 study of western sun on walkways
fig. 6.27 solar angles for pretoria
fig. 6.28 solar ingress on western facade

6.27



the tectonic

The primary focus of the *tectonic* investigation was that of the integrated western façade skin. It was intended to be a dynamic component, suggesting layering of interior and exterior spaces. Simultaneously, this façade was to assist in solar regulation to the interior. A study of solar effects on the building revealed that the adjacent tower building obstructs the western sun to the building from approximately 15h30 [during summer solstice]. A study was undertaken to investigate the influence of western sun on the periphery walkways. This study showed almost no sun falls into the core interior spaces, only on the walkways.



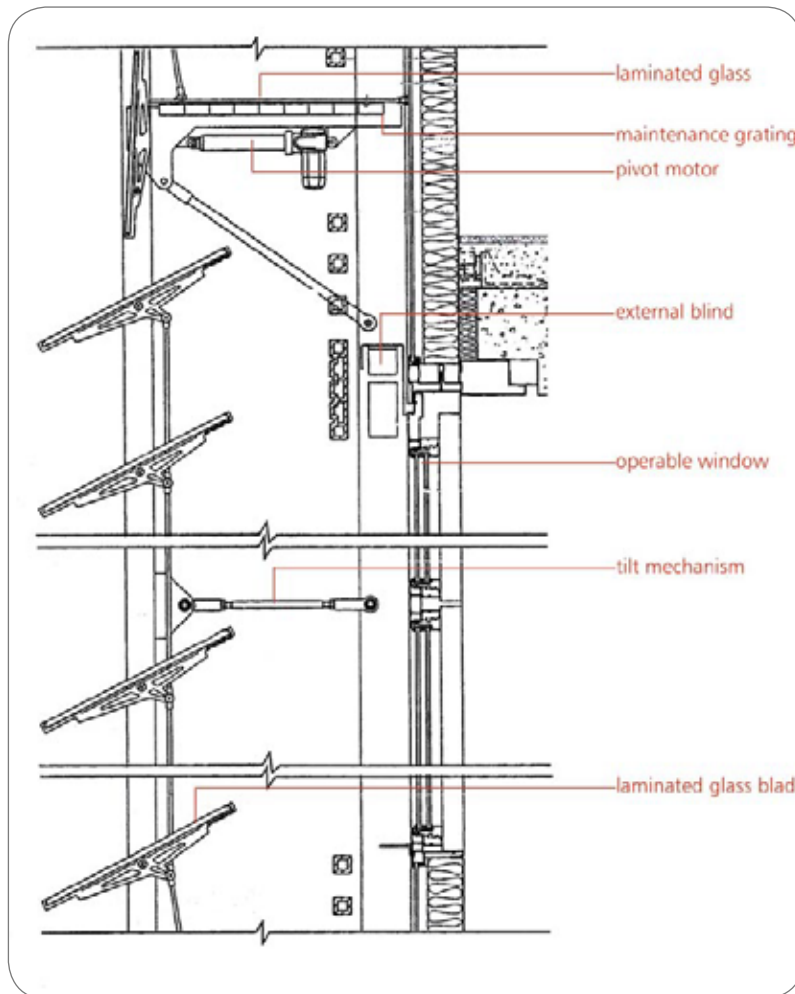


fig. 6.29 section through curtain wall, debis tower, potzdamer platz_renzo piano

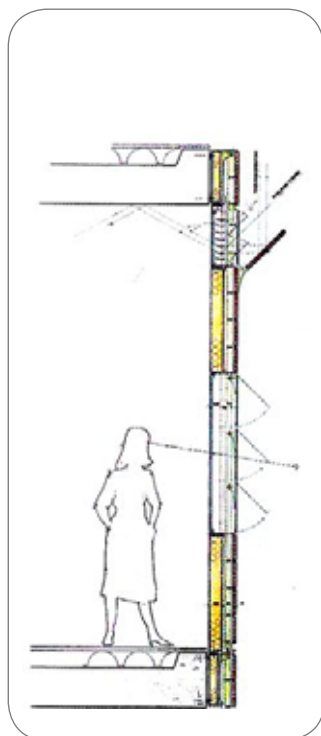
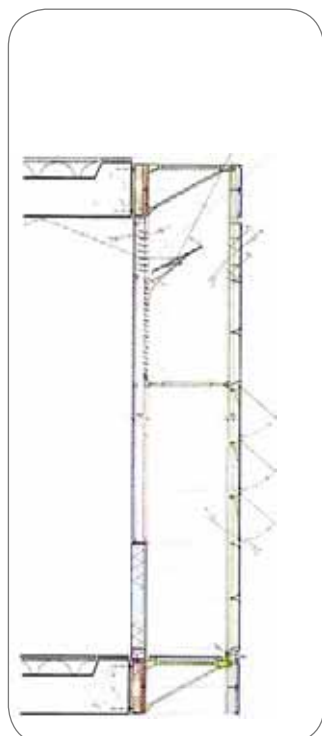


fig. 6.30 sectional studies_potzdamer platz building_renzo piano

fig.



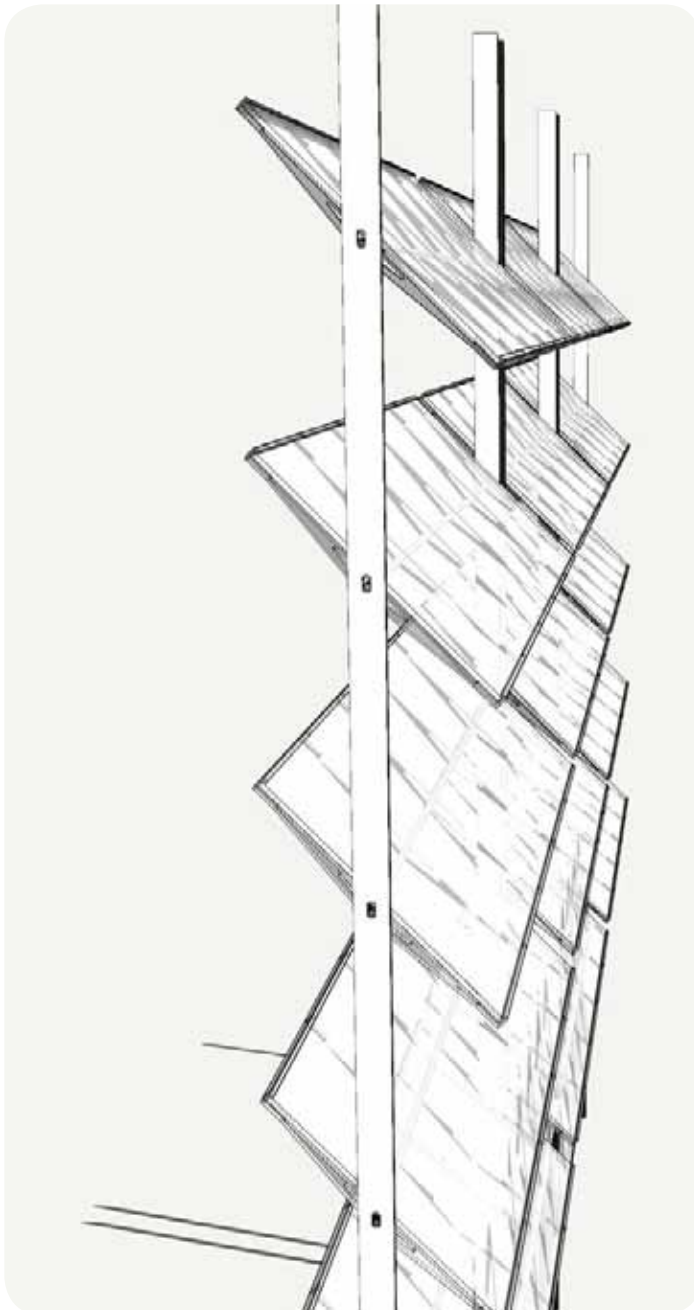


fig. 6.32 side view of horizontal louvers

The building skin was thus designed primarily as an interactive façade, assisting in internal glare control. In addition, as a building skin, it was to assist in regulating climatic factors such as lighting, ventilation, internal thermal environment, safety factors, sound insulation and energy gain [Lang, W. 2006: p. 30]. The initial design was to develop an integrated system using a variety of materials. Several building skin systems were studied. One such a system was that used by Renzo Piano in his Debis Tower, on Potsdamer Platz. The western elevation is clad in an outer layer of sensor-regulated mechanically operated glass panels. These panels can be pivoted to reflect light and assist in ventilation in warm weather.

A skin was developed composed of horizontal glass louvers, fixed in profiled aluminium operable mechanisms, in a vertical steel frame. However, the horizontal orientation limited views from the interior. Release of hot air would be obstructed by the angle of the louvers, thus impeding ventilation. If reflection of low western sun was desired, the panels would have to be almost closed to prevent solar ingress.

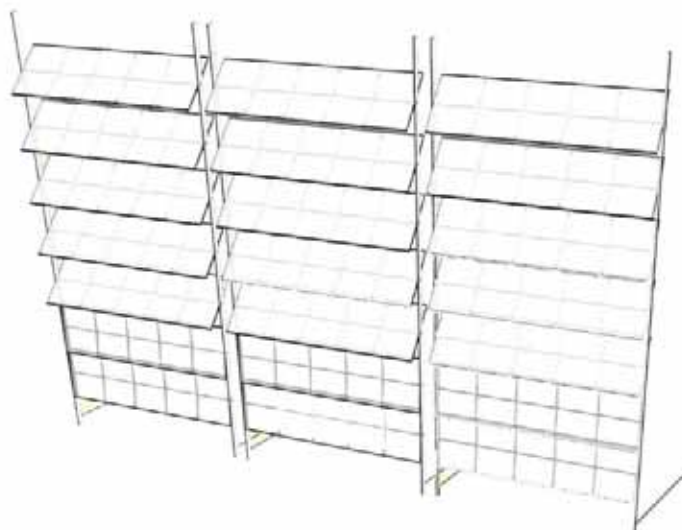
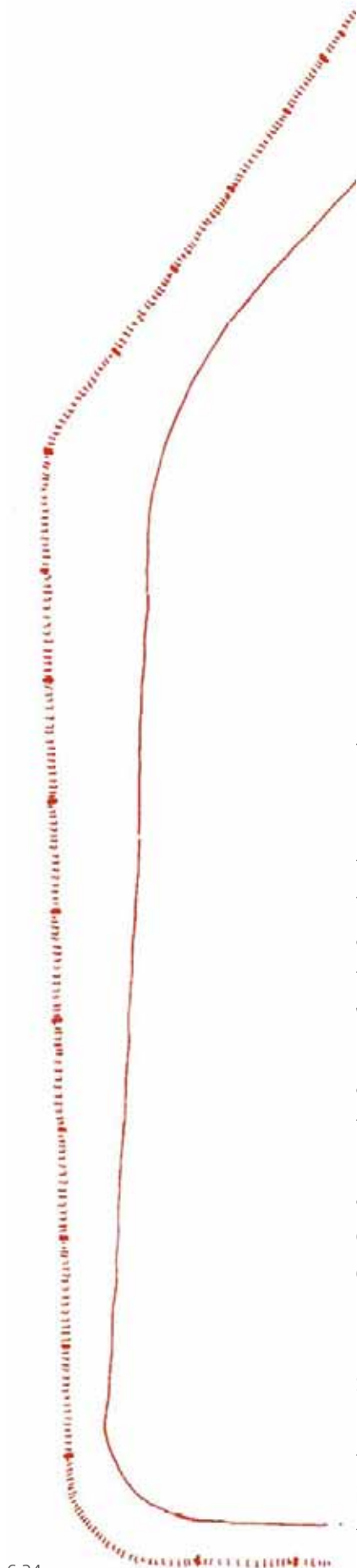


fig. 6.33 front view of horizontal louvers





fig. 6.34 plan form of screen
6.35 section through screen



The next design investigated pulling the skin away from the building, creating a cavity for the release of hot air. However this design was soon discarded as it created a barrier between the building and street. This would obstruct views from both the interior and exterior and would detach the building from its context. The curved nature of the designed screen also seemed obscure and out of place with the rest of the design.

[sauerbruch hutton architects]
Several projects by sauerbruch hutton architects were studied, for their use of bold colours in creating integrated glass facades in an ecologically responsive manner.

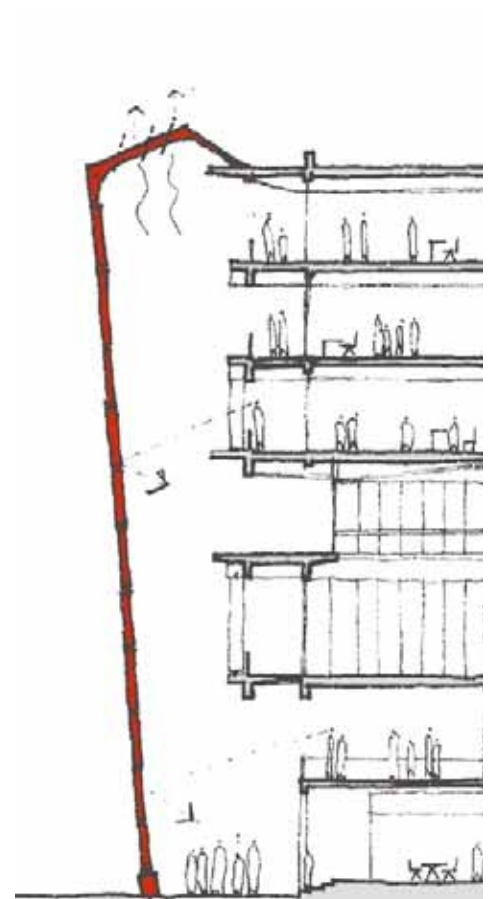




fig. 6.36 facade views, german federal environment ministry_sauerbruch hutton

p [German Federal Environmental Ministry]
The curved form of the German Federal Environmental Ministry in Dessau, displays a striking, colourful façade. The façade is composed of a palette of 52 colours, screen-printed on a series of glass 'blocks'. The glass panels 'colour code' the building complex for seven different areas. The monolithic nature of the façade is broken by eight alternating horizontal bands of timber and glass. Clear glazed windows are set back from the larch slats which clad the spandrels. In between, glass blocks are screen-printed with enamel to achieve the bold colour. This is offset by the contrasting colours of the louvered reveals [Finch, P. *Architectural Review*, July 2005, p. 40]. The materials used for the façade were selected above others, as they were ecologically correct [Betsky, A. *Architecture*, August 2005, p. 38].



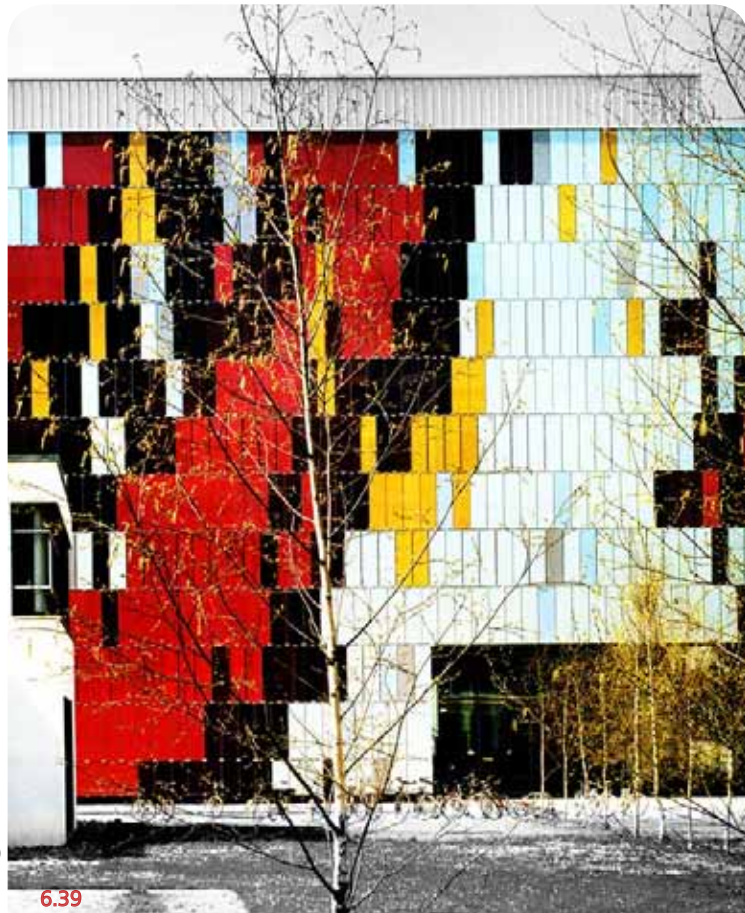
fig. 6.37 section through facade
6.38 facade view



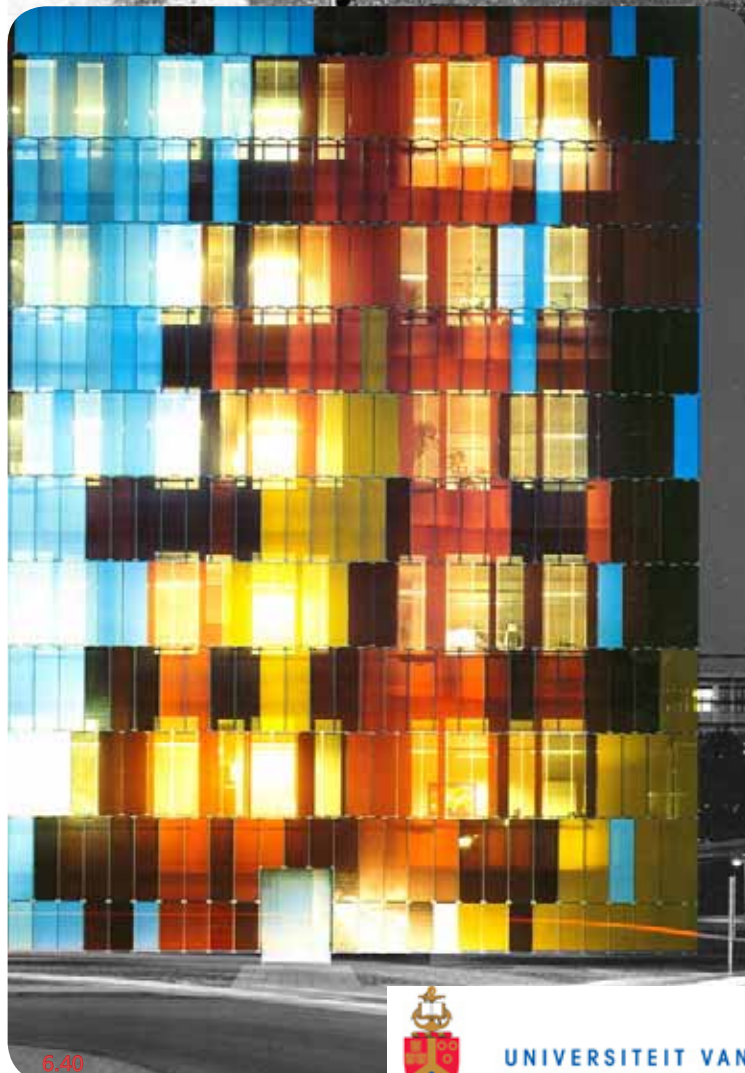


[Pharmacological laboratories, p
Biberach]

This building acts as a visual landmark within a dreary industrial research complex. The façade is expressed as a composition of silk-screen fritted glass louvers, acting as a solar and rain screen. A palette of magenta, ochre, pale blue-white and so on create a dynamic pattern, filtering environmental factors on a secondary glazed façade [Jacques, E. Architectural Review, August 2003, p. 52]. The mobile glass panels follow the sun, regulating the effects of temperature, wind and radiation. The material quality of the treated glass creates a bold, opaque façade during the day, which transforms to a luminous element at night. The aim of the architects was to create an environment which stimulates perception [Domus, June, 2003, p. 62-63].



6.39



6.40

fig. 6.39-6.40 facade views, day + night,
pharmacological laboratories_ sauerbruch
hutton

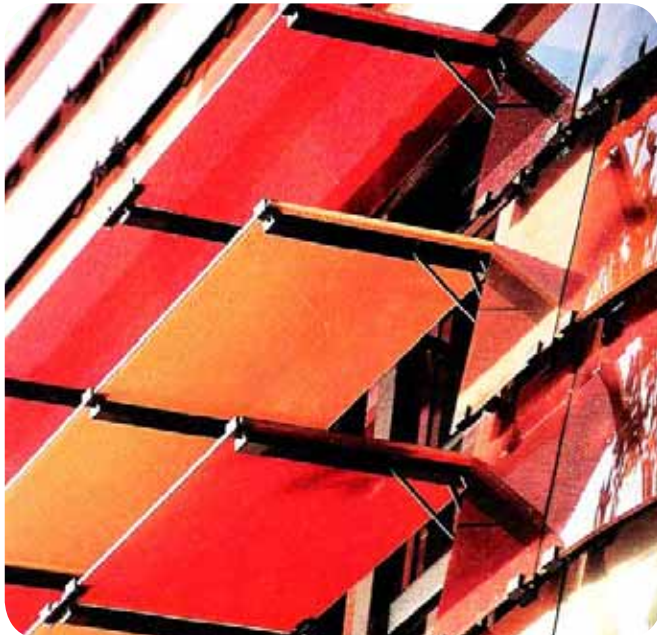
fig. 6.41 street facade view, pharmacologi-
cal laboratories_ sauerbruch hutton





[Berlin Fire and Police Station] p
 This project is an extension of an existing 19th century building, the existing building forming the backbone for the new wing. This new floating luminous body is fixed to the lower part of the existing sheer brick wall and is raised to accommodate the force vehicles. The transition from greens to reds of the glass façade reflects the neighbouring greenery [www.sauerbruchhutton.de]. The glass panels for this building are screen-printed on the back with a grid of dots, achieving almost any desired exterior finish and a fairly neutral light to the interior [Schittich, 2006. P20]. Panes are fixed in aluminium-coated brackets; moveable louvers are situated in front of window openings.

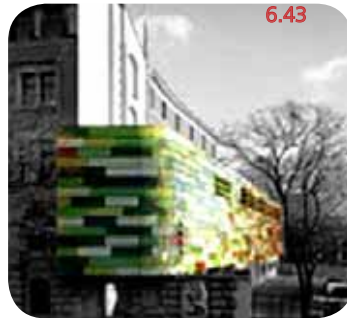
6.46



6.48



6.42



6.43



6.44



6.45

fig. 6.42- 6.45 facade views, berlin fire and police station
 fig. 6.46- 6.49 facade detail views
 fig. 6.48 facade view, berlin fire + police station

6.47





From the study of these projects, a skin was designed for the western façade, composed of screen-printed glass vertical louvers. To display human interaction with the building, the louvers are to be connected to sensors installed in the walkways. The intention is that movement through the building will be monitored and recorded, then expressed as a variation of colour on the façade. The choice of colours is related to orientation on the specific floors. The transition from the natural to the urban environment is to be expressed in red and green tones on the elevation. The skin creates a climatically responsive layer for the building. It allows for natural ventilation, and can seal completely, insulating the interior from adverse exterior conditions. The perforated steel platform to which the louvers are fixed allows for escape of hot air during warm afternoons. Horizontal bands, concealing turning mechanisms and the slab edge, are to be clad in treated hardwood slats, and emphasise the horizontality required to suggest linear movement on this facade.

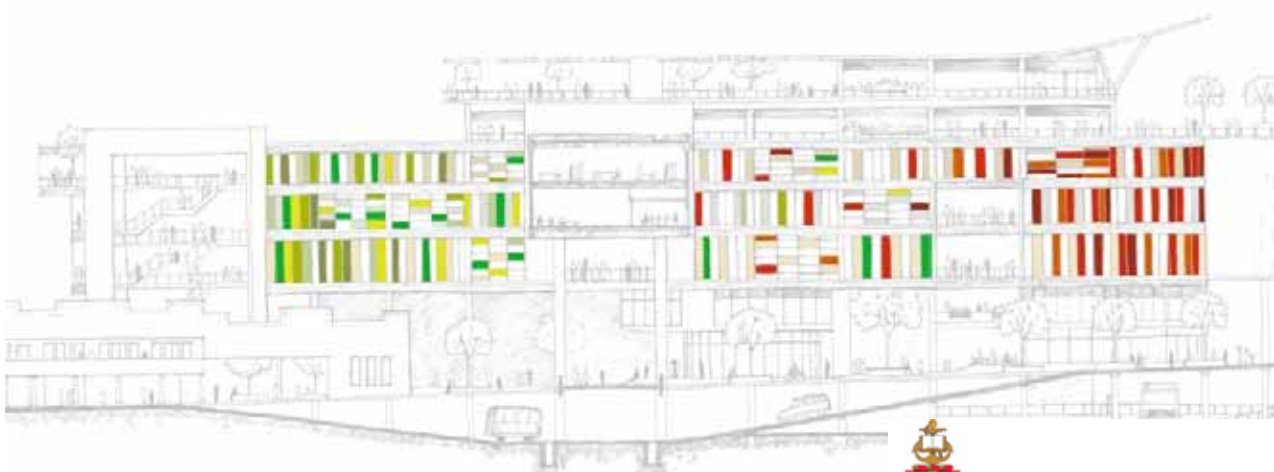


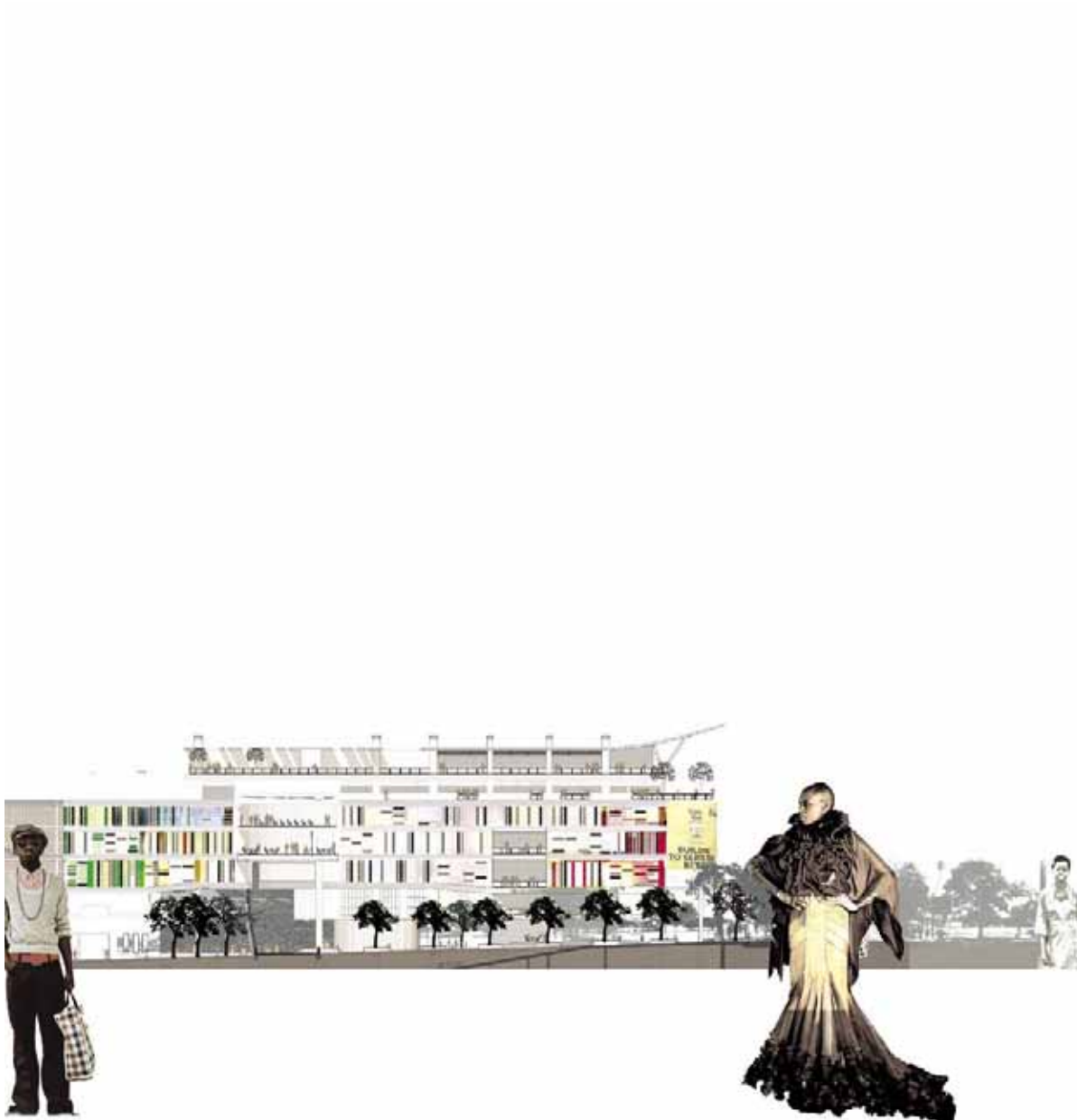
fig. 6.49. western elevation_sketch





fig. 6.50 the day commences, the facade a neutral background, anticipating its' users...





...gradually colours of interaction are revealed...



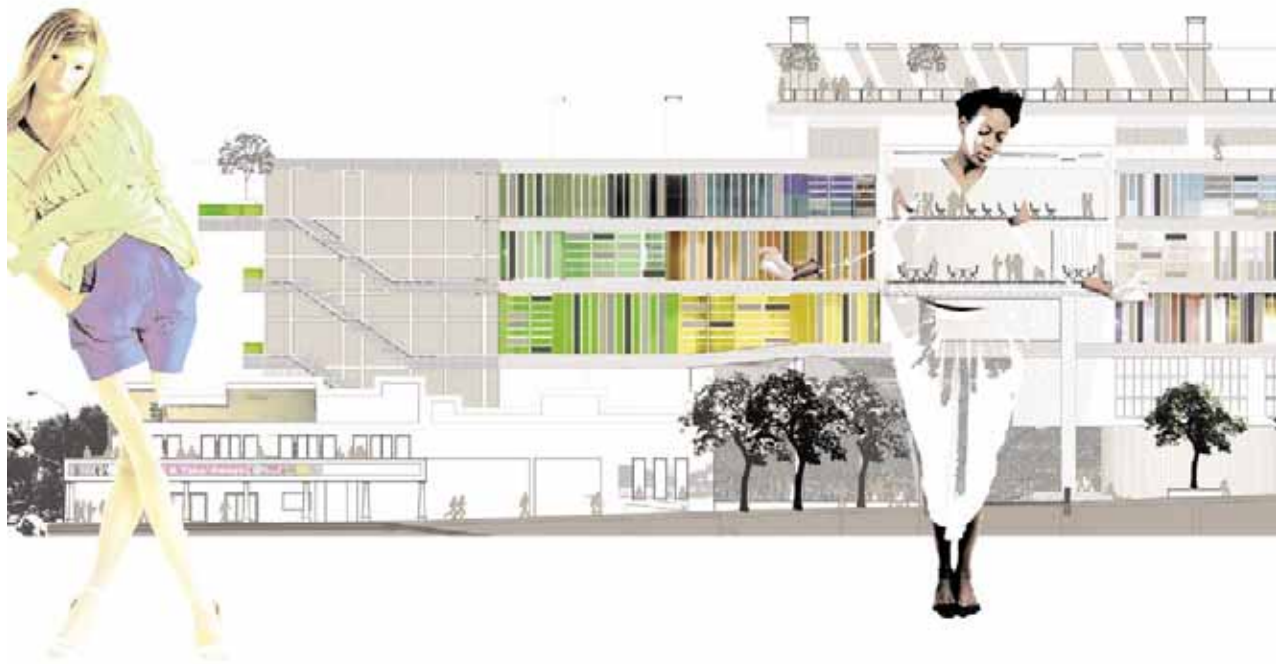


fig. 6.51 ...as the day draws to an end the facade reaches its full colour potential...







fig. 6.52 ...to remain as nighttime witness to the day's activity.







The eastern façade is an articulated façade, composed of 'boxes' of varying size, height and translucency. These boxes are finished in the same palette of materials expressed on the western façade, however in a disintegrated, seemingly random, manner. The use of glass balustrades further explores the material quality of glass in achieving layers of transparency. The seating, worktops and design alcoves provided within the façade boxes, contributes to the cross-programmed nature of the walkways and their usefulness therein. This façade becomes a metaphor for the city skyline and urban fabric.

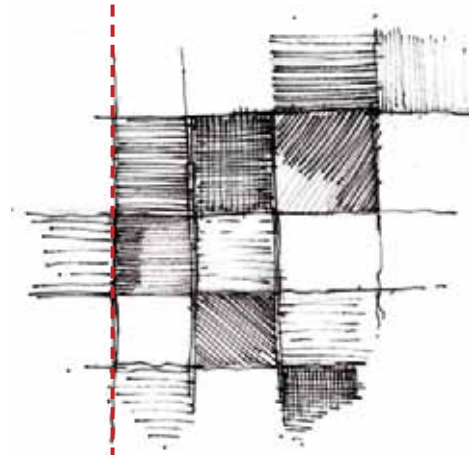
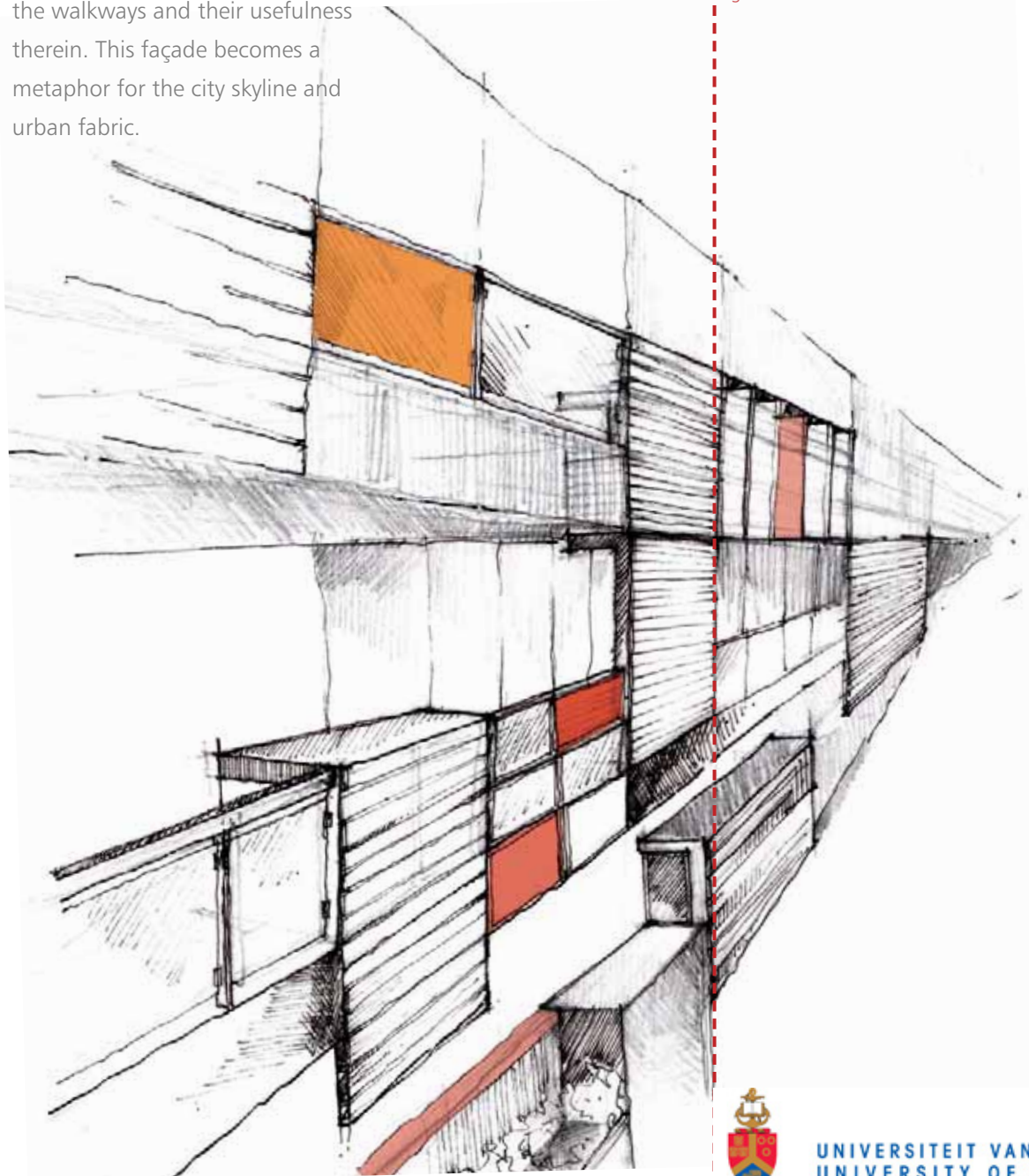


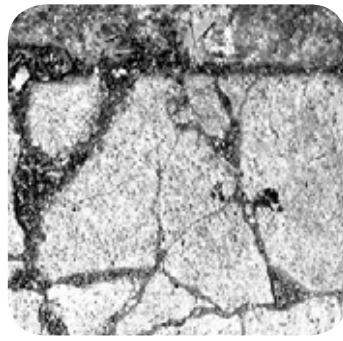
fig. 6.53 facade concept sketch

fig. 6.54 eastern facade sketch





materials



6.55



6.56

The choice of materials for the various components were influenced by textures and colours identified on site. Materials denote the nature of the component, and contribute to layering and legibility.

[concrete]

Permanence is suggested through the use of dense 'heavy' materials, primarily concrete. Tile inlay details used in the screed of the building's walkways contribute colour for identification. They contribute a human-scaled detailing and suggest intensity of activity. The pigmented textured screed of the square's paving suggests an 'earthy' quality, relating to the natural. Cast-in-situ concrete street furniture is robust for continued use. The off-shutter finish of the outer sheath of the main central staircase is to lend a sense of permanence to this element, reinforcing its identity as a point of reference.



6.57

[chronos chromos concrete]

This is a concrete with thermochromic pigments, developed by students at the Royal College of Art in London. Concrete thus becomes a surface for graphic displays. Local colour changes are set off by heat, produced when an electrical current is passed through nickel-chromium wires [Rittel, A. 2007: p.88].



6.58





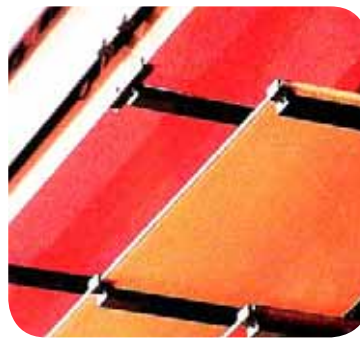
This material is to be utilised, with discretion, as main signage within the building. By setting up a grid of wires behind the concrete, signs can be changed as new functions are allocated. Signage is thus accurate, legible and robust in finish. Legibility is also incorporated within the structure, as opposed to flimsy surface signage, which often appears as an after-thought.

[Glass]

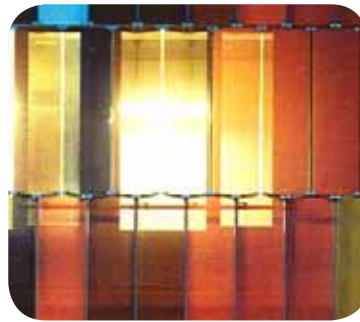
Screen-printed glass is used to create interactive colour patterns on the façade, adding vibrancy and visual interest to the project. Translucent, transparent and acid-etched glass are further utilised to create layers from interior to exterior. Shadows and forms behind the glass animate the surface, humanising the building. The use of laminated glass assists in solar reflection and improves safety for users. All glazing frames are to be powder-coated aluminium to reduce future maintenance. Safety glass is to be used in all balustrades and façade louvers.

[Timber]

Treated hardwood slatted timber was selected as additional cladding material, above materials such as aluminium, as a more sustainable choice and for its future recycling possibilities. It reduces glare from the buildings surface, and has low heat transmittance to the interior. It also introduces an irregular, natural component to the facades.



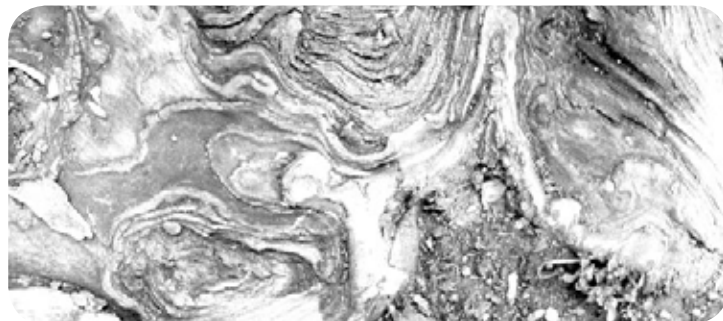
6.59



6.60



6.61



6.62



fig. 6.59 -6.60 glass louvers, berlin fire and
police station
fig. 6.61 -6.63 existing site textures





6.64

[Steel mesh]

Steel mesh is used to enclose the northern and southern service/ fire escape stairs. It secures the staircases, while allowing visual access from both sides. It creates a robust barrier and assists natural ventilation through the structure. It provides a degree of solar shading to the adjoining spaces. Steel mesh is also used for growth balustrades, in areas such as the southern atrium of the building.



6.65

The choice of materials, and their application in the design, is indicated in the technical drawings. Construction details are provided for identified components in the building, limited to those of particular concern to the technical investigation. A unified approach was adopted to the detailing of the building and surrounding components. Details not explicitly presented can be assumed to follow the same rationale as those displayed.



6.66

fig. 6. -6. existing site textures

“... the culture of the tectonic still persists as a testament of the spirit: the poetics of construction. All the rest...is mixed up with the lifeworld, and in this it belongs as much to society as ourselves.”
KENNETH FRAMPTON.

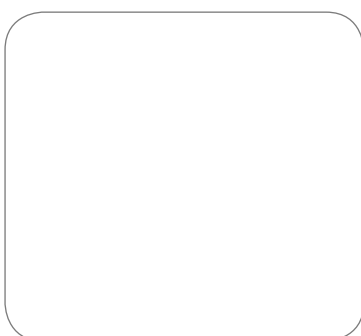
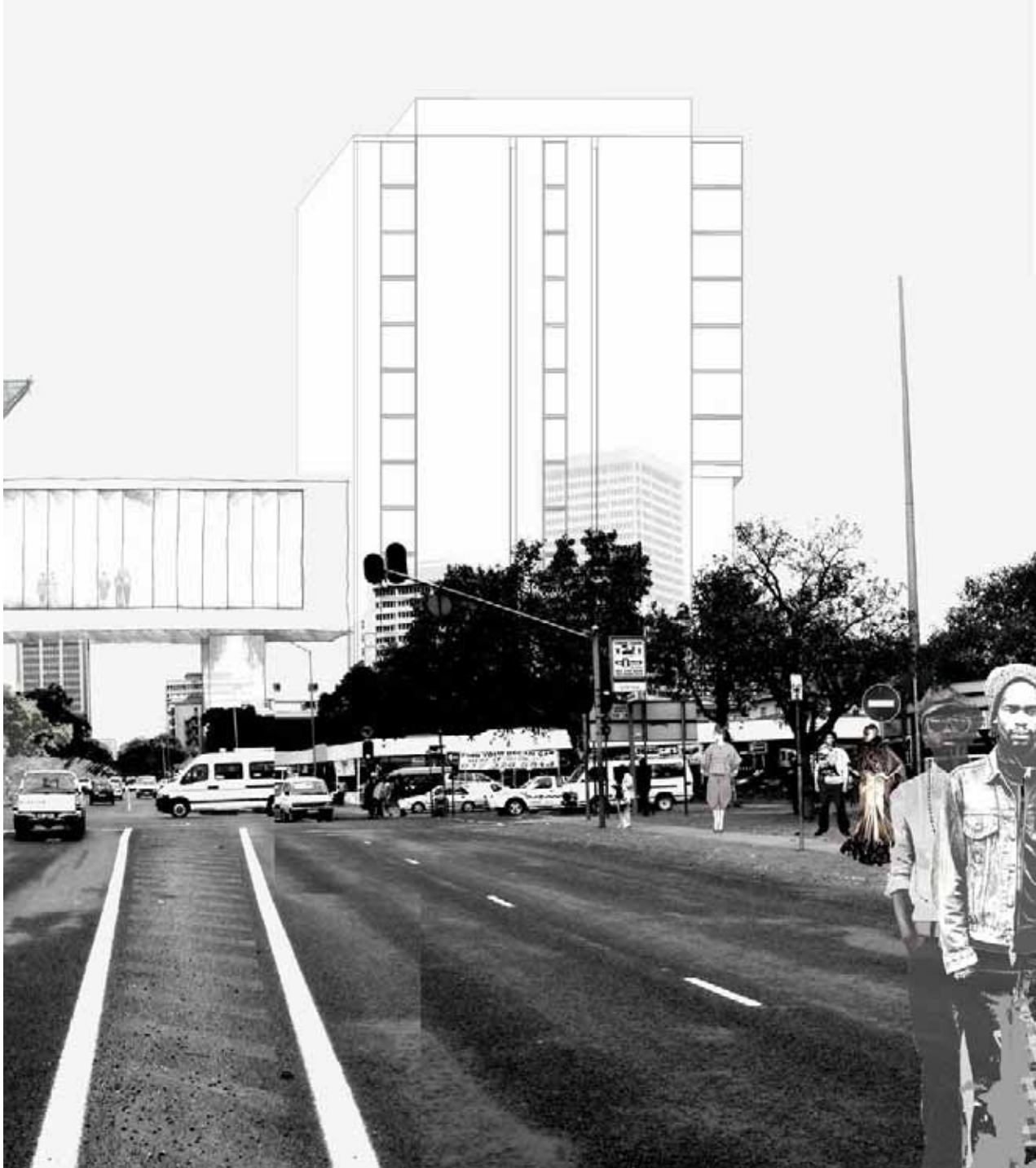




fig. 6.67 northern gateway perspective







conclusion

User orientation within the Pretoria urban environment is essential in encouraging the unfamiliar city user to make use of the resources available. However, orientation elements cannot be all we provide. In order to create a richly experiential and populated environment, a unique quality must be instilled in order to nurture fondness in users.

This dissertation has afforded me the opportunity to study and become intimately acquainted to a portion of the city with which I was previously unfamiliar. The knowledge gained of my site and its locality rendered me more sympathetic towards the particular environment, appreciating its positive qualities, and making me enthusiastic to overcome the weaknesses. The city-wide context was revealed as an environment rich in potential, though requiring some development to optimise the city for the use of all. It was within the northern district study area that the strongest sense of place was experienced. Here the users had collectively taken ownership of their environment, their individuality experienced in a variety of sensory displays.

Through the study I have developed a sense of ownership of my city, a feeling that must be transferred to the intended user of the site. The user must become aware of the many opportunities available in the city. The city should be a distinct display of a collective identity, thereby becoming a source of identity for the individual. As designers we must aim to alter the perception of those who use, or should use, the city. It then lies in the hands of the users to appropriate the city, to reveal and optimise its potential. As Jane Jacobs concludes "...lively, diverse, intense cities contain the seeds of their own regeneration, with energy enough to carry over for problems and needs outside themselves," [Jacobs, J. 1972: p. 462]. This, I believe, to be true of Pretoria and eagerly anticipate its future.



fig. 7. sketch of voortrekker monument





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[a]

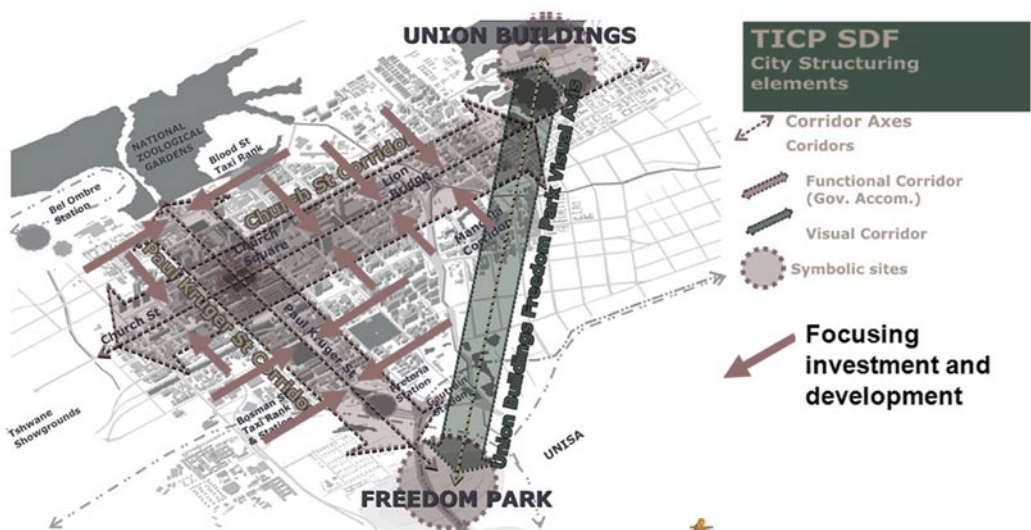
[Tshwane Inner City Development and Regeneration Strategy, 2005]

Gapp Architects + Urban Designers

The Tshwane Inner City Development and Regeneration Strategy, 2005 compiled by Gapp Architects and Urban Designers describes the Tshwane City Vision as "...to become the leading international African capital city of excellence that empowers the community to prosper in a safe and healthy environment." [p.5]. This includes clearly defining the city, and establishing it as a place of excellence. The inner city is demarcated as urban core for the City of Tshwane Municipality and maintains its importance and strategic position [p.8]. The development determined, is that of "catalytic intervention" [p.14].

The significance of the city is to be announced by defining the gateways into the city. From the south, the gateway is marked by green spaces and an impressive natural setting. The northern entry point already defined by the strong natural setting. However this may be enhanced by a landmark or capital symbol development. The possibility of linking the eastern and western part of the ridge with a landmark is considered.

fig. 8.1 city development corridors



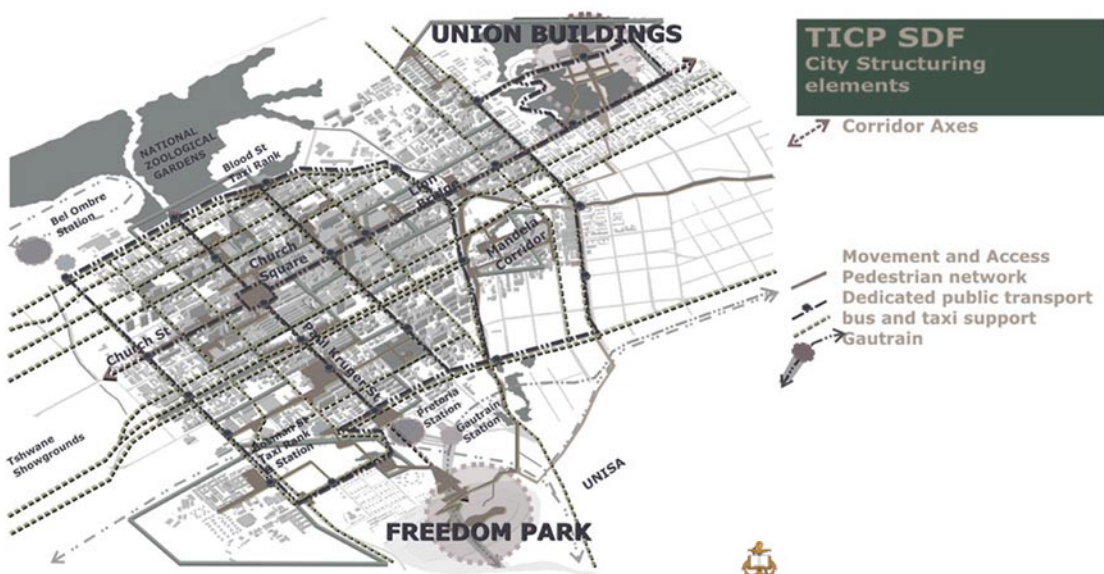


Landmark developments are similarly proposed for the eastern and western entrances.

Paul Kruger Street and Church Street comprise a monumental grid as axes of expression. These axes must be articulated to reflect the capital city image. Along the axes, government buildings should be clustered around public squares. These 'People's Squares' should be designed as high quality celebrations of our heritage and culture, each unique in character.

All government buildings are to be developed within the inner city, especially around significant public places and along axes. The Inner City Strategy proposes the establishment of an Inner City Operational Task Team that will manage all capital investment and other operational aspects. This task team will further encourage future partnerships between local and national government, encouraging participation from the private sector. They will attract and facilitate investment, liaising between the Department of Public Works and Public-Private Partnerships.

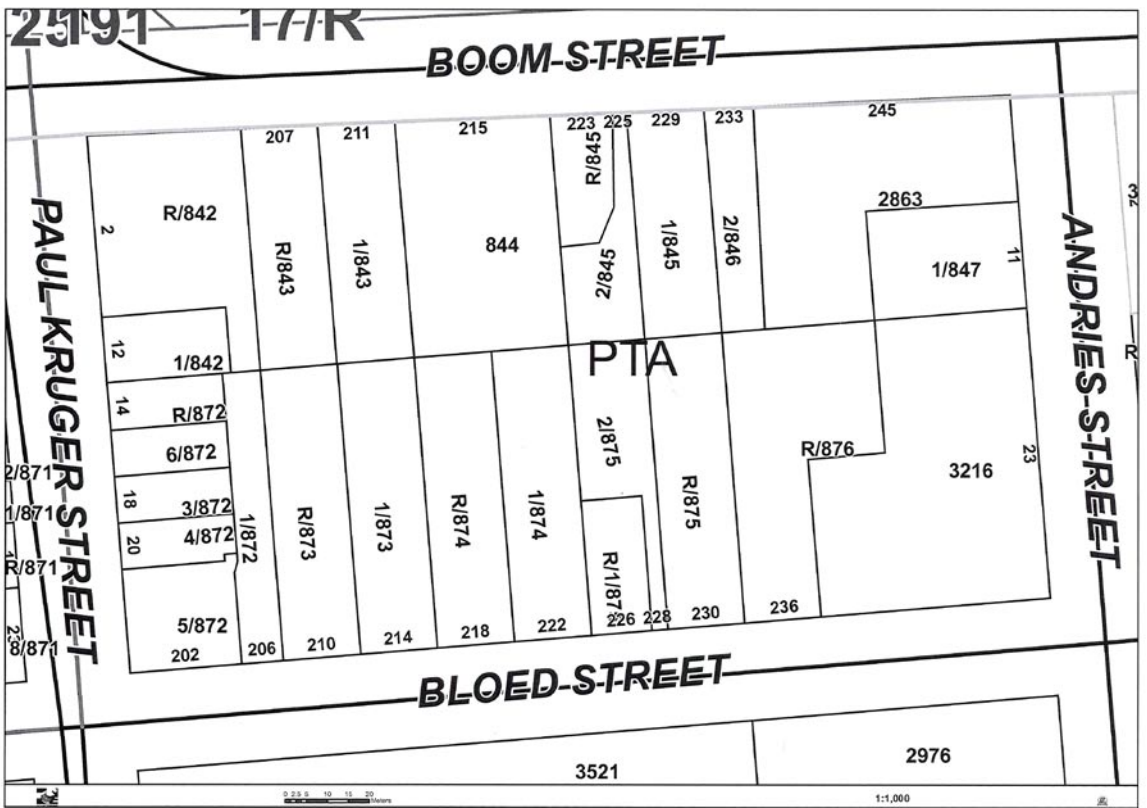
fig. 8.2 proposed city movement network



[existing land division]

[b]

fig. 8.3 erf layout and numbers for site block





16 JUNIE / JUNE 2000

Moot se grootste koerant

[C]

Special street p

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reeks



Elizabeth Kruger

A special project has been launched to improve Paul Kruger Street in the central parts of the city and the Moot.

The project, which is the brainchild of students from the Tukkies department of town and regional planning, was announced to the community at an open day and exhibitions in front of the Old Synagogue and the Pretoria Station.

The project is supported by the Pretoria Inner City Partnership and the City Council of Pretoria.

Improvements are planned for the area between Beem and Struben streets adjacent to the Zoo, the area surrounding the Pretoria Station from the station itself to Jacob Maré Street and around the old Synagogue between Proes and Struben Streets.

The aim of the project is to develop a strategic framework for the gradual upgrading of Paul Kruger Street into an urban space suitable for a capital city.

The street must be developed to reflect the rich history of Pretoria as well as the future and accommodate a wide variety of activities.

It must also be a pleasant environment for pedestrians and a street that accommodates the needs of both businesses and residents of the area.

Paul Kruger Street has been chosen on the basis of its important historic role in the development of Pretoria and its visibility as a gateway into the city, its future role in public transport and its tourist attrac-

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Special street project

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tions.

Existing tourist attractions include the Pretoria Zoo, the Transvaal Museum and potential places of interest such as the synagogue where the trial of Nelson Mandela took place.

Another factor that contributed to this choice was the large amount of land that is undeveloped and in serious need of upgrading.

Residents can also have their say about the improvement of Paul Kruger Street.

People can phone Marinda Schoonraad on 082-391-9440, Prematha Velayutham from Mondays to Wednesdays on 420-4180, Albrecht Herholdt at the Inner City Partnership on 308-7906 and Machiel Erasmus at the City Council of Pretoria on 308-4604.

fig. 8.4 an article from a local Newspaper indicating intended upgrades to Paul Kruger Street, 2002



[heritage buildings]

[d]

Buildings, identified on and around the site, as being of heritage value, are to be preserved. These buildings are to be appropriately renovated and new programmes assigned. The new functions of the buildings will ensure their continued use.

01_ 229 Boom Street, erf 845/1

This is a single storey building, originally designed as a residence. It is identified by Le Roux as being of the Late Victorian/Edwardian style. It is a component one of three similar structures, on erf 3135 [demolished] and erf 847 [discussed below]. Architectural elements are relatively well preserved, however the building is currently inhabited illegally, and is in a state of disrepair. Within the project it is to be proposed that the building be renovated and equipped as a restaurant building on the public square. Existing plans for building not available from Municipality.



fig. 8.5 front view of building



fig. 8.6 rear view of building

01_ Andries Street, erf 847

This single storey is similar in style to the building on erf 845/1 described above. It is currently in a well-maintained condition, though some architectural elements of the building may have been spoilt through renovations. This building is proposed to house a creche within the new development of the square.



fig. 8.7 and 8.8 Front and side views of building





fig. 8.9 front view of building from Andries Street

01_ c/o Andries and Boom Street

This double storey building used to house the ZAR Cultural History museum. However, through lack of maintenance the museum has had to close. The Pretoria Zoological Gardens are the current owners of the building, and there are plans to renovate and re-open the building to the public as a Life Science Museum.

