3D MASS ANALYSIS

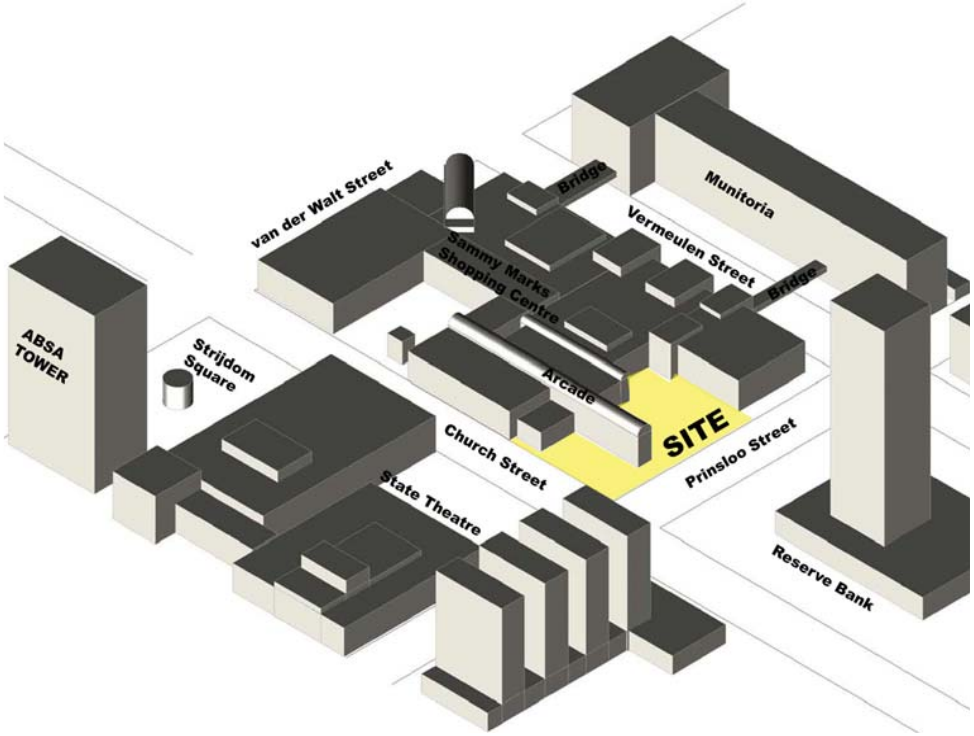

FIGURE 3 -1

The disparity of scale of the existing buildings around the site can clearly be seen. First there is Sammy Marks Shopping Centre that takes up a whole city block with an average height of 3- 4 stories. North of Sammy Marks is the Munitoria building which is 12 stories in height. The State Theatre on the Southern side of the chosen site measures well in height with Sammy Marks Historic building as well as the shopping centre. Then there is the two buildings that stands out as 2 very strong landmarks around the site and that is the Reserve Bank and the ABSA tower. Both are very dominant buildings because of there sheer height as compared to the norms for buildings in the CBD of Pretoria, which average about 5- 7 stories in height, because of the unusually long city blocks as discussed in Pretoria's History.

Further, edges are linear elements not considered as paths: they are usually, but not always, the boundaries between two kinds of areas. They act as lateral references. As can be seen on the 3d mass analysis diagram a strong loss of lateral references occurs while travelling in the vicinity of the site. This is because of the huge open areas on the corners of the Sammy Marks as well as the State Theatre developments facing each other and the Reserve Bank not been a perimeter building but sitting almost in the centre of the city block. This area is not holding together generalized areas, as edges for many people are important organizing features.

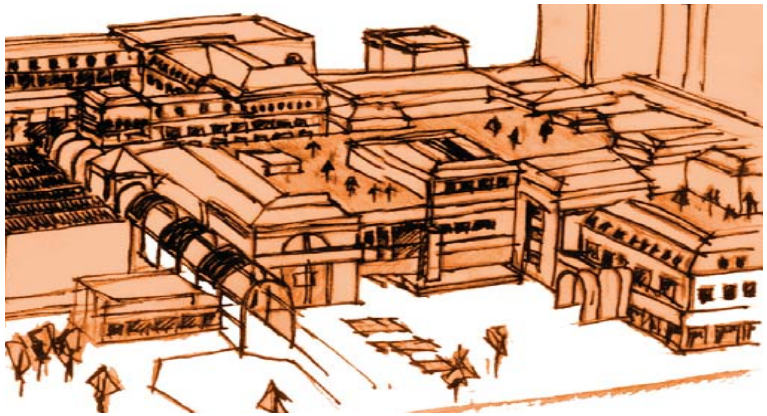

FIGURE 3 -2 Sammy Marks Development

Figure 3- 3 View towards site

SURROUNDING CONTEXT

Figure 3 -4

IMMEDIATE CONTEXT

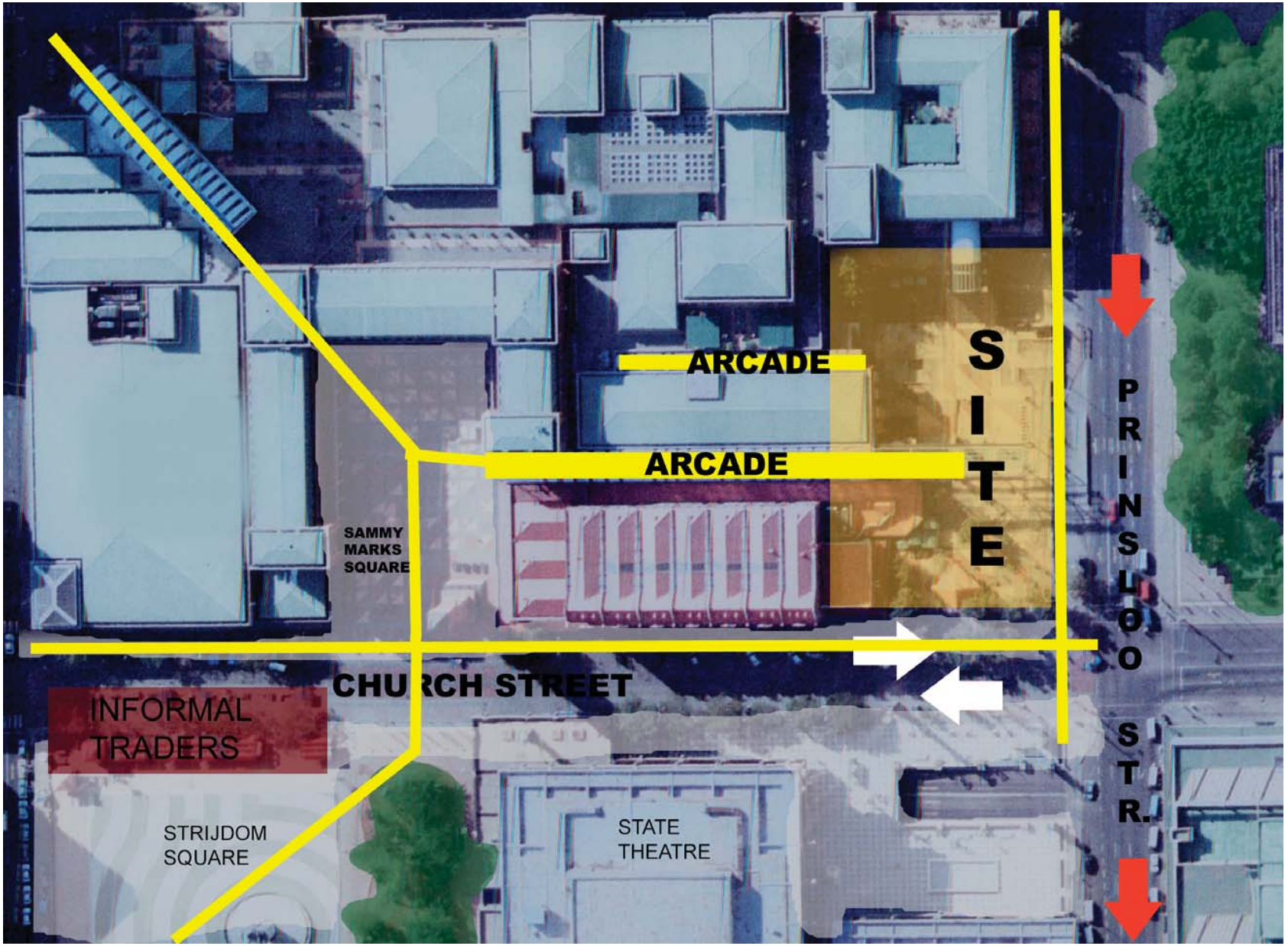

Figure 3 -5 Study Area

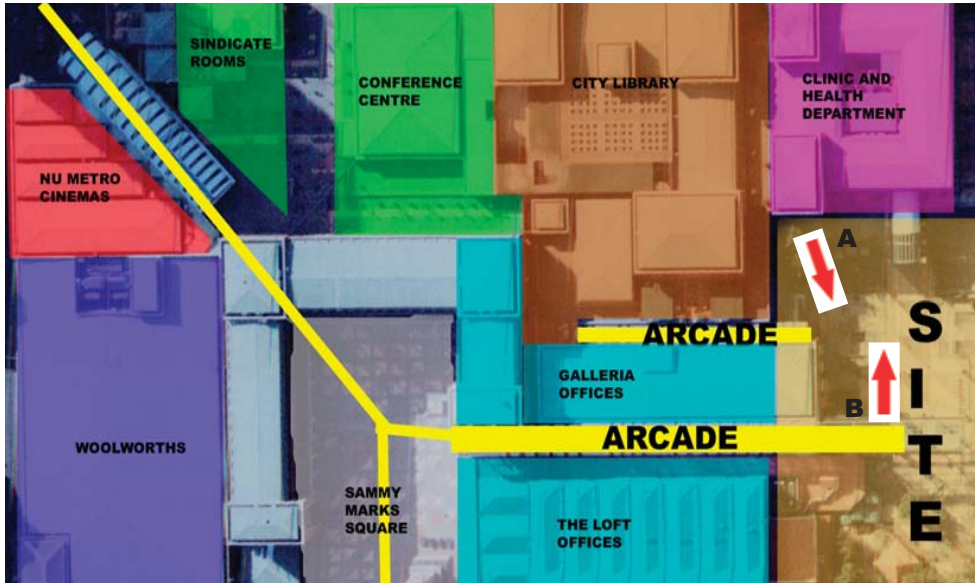

Figure 2 -6 First Floor Outlay of Sammy Marks Development

- Clinic and health department
- City library
- Offices
- Conference rooms
- Retail
- Entertainment

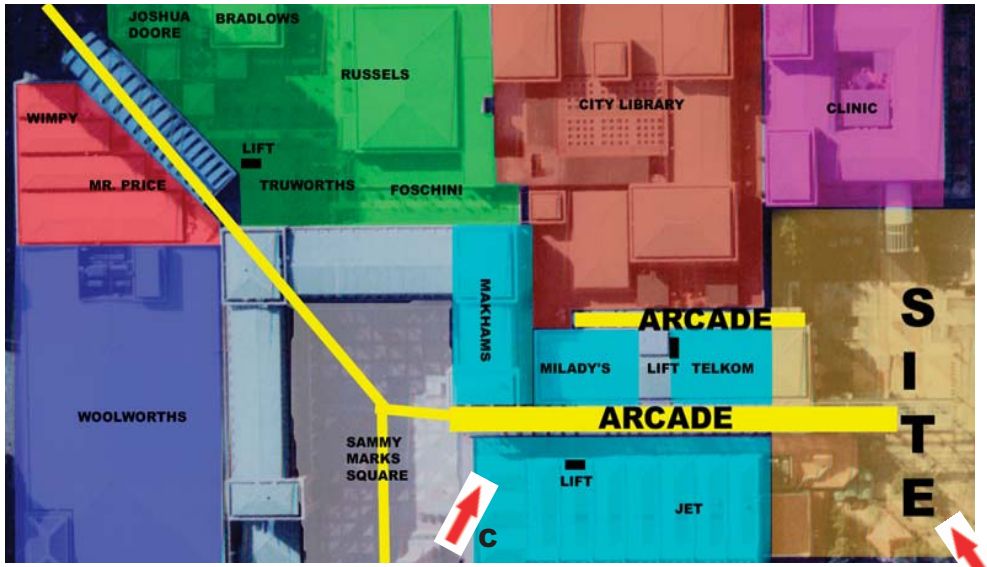

Figure 3 -7 Ground Floor Outlay of Sammy Marks Development

- Clinic and health department
- City library
- Retail
- Retail
- Retail
- Retail

D

Figure 3 -8

A

Figure 3 -9

B

Figure 3 -10

C

Figure 3 -11

SAMMY MARKS SHOPPING CENTRE

From a national monument to shopping arcade. As the Sammy Marks building is a national monument, the external façade and roof had to be maintained and refurbished intact during the building of the new shopping centre. The original structure of the Sammy Marks building consisted of a series of three- story brickwork “cells” on packed stone foundations. Two of these cells had previously suffered serious fire damage, one case resulting in considerable bulkling and deflection of the main floor structure. Although the existing roof trusses were in reasonable condition, roof sheeting was in urgent need of replacement. The original roof of the building was carefully stripped and the trusses treated and repaired. New roof sheeting, to the same profile as the removed sheeting, was used to reclad the roof. The incorporation of Sammy Marks building into the new development resulted in it being bound by a new three- level parking basement on its northern perimeter. Lift access to the basement was provided by a new lift shaft in the north- west corner of the building. Removal of the west and part of the north wall at the north- west corner of the building was achieved by installing underpinning bases in- and outside the gable wall, as well as casting a reinforced concrete frame into the wall. This highly complex process was accomplished without mishap. The vast size of the Sammy Marks Square site, occupying a full city block with a perimeter of 720m2 and a total building area of 115513m2, combined with the nature of the construction and integration of the refurbished historical buildings, has required the project to be carried out with carefully planned precision. The first of the two bridges linking Sammy Marks Square with Munitoria is a double story structure on four columns, 28m long and 16m wide at the broadest point, with a pedestrian link on one level and the major’s suite and entertainment area on the other. The second bridge is 48m long and 8m wide and is supported by only two columns. (SA Builder, Jun. 1992)
Two main arcades lead into Sammy Marks Square in the city core- one from the Reserve Bank site on Prinsloo Street, and the other from the corner of van der Walt and Vermeulen Streets. The arcades are covered with a semi transparent vault on steel arches, which are spaced at 8m, and with a total height of about 13m. The flanges and the web of the arches and legs are made up of flat steel because a hot rolled section of that size (400x200) could not be bent to the required radius. Roof purlins are tubular sections and carry the corrugated acrylic roof sheets alternated with prepainted corrugated steel to reduce the build- up of heat under the vault. (Architecture SA, June 1993)

LEGAL CONTEXT

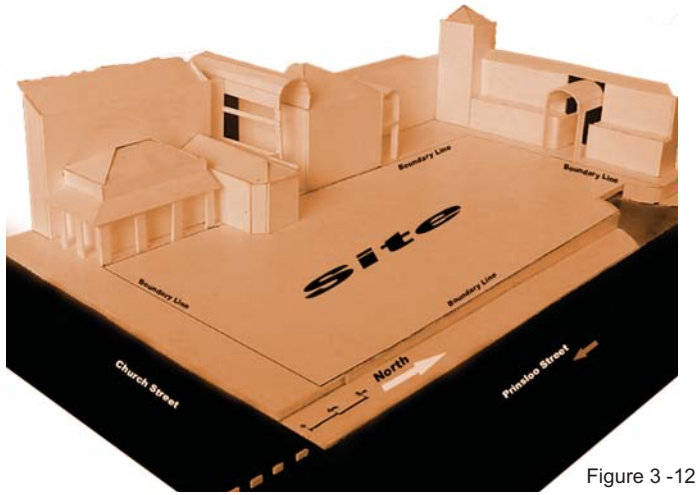

Figure 3 -12

Portion 5 Erf 3337- Situated in the Township of Pretoria, Registration Division JR, Provence of Pretoria- Witwaters Rand- Vereeniging.

Central Pretoria Metropolitan Substructure sold this portion to Biosupreme Investments (Proprietary) Limited no. 93/04349/07- a company beloning to Lee Kye Jin from Singapore on the 8th of May 1995.
The amount that was paid to Central Pretoria Metropolitan Substructure was R1,000, 000, with the total Area of Portion 5 Erf 3337 measuring 3168m2.

The site boundary is at 6000mm from the end of Prinsloo and Church Street inwards, 4000mm from the end of the building façade on the northern part of the site and at the beginning of the building façade on the western side of the site.
The floor space ratio is not allowed to exceed a factor of 13.2 for a hotel development.

CLIMATE

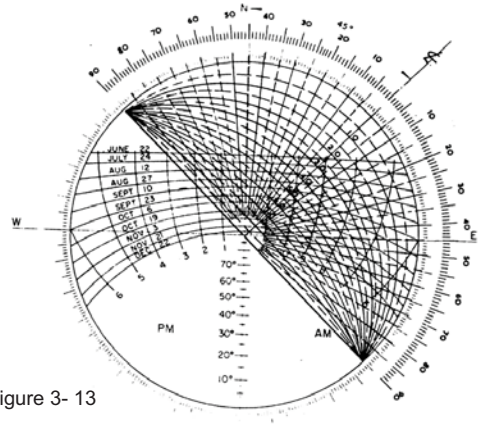

Figure 3- 13

"Pretoria is a beautiful place, some call it a town while others call it a city. The streets are really wide but they are not paved. On dry days clouds of dry red dust hang over the roads because there is a constant traffic of horses, oxen and donkeys- sometimes from ten to twenty in front of one wagon. If it rains, on the other hand, and it can rain an awful lot, sometimes continuous heavy downpours for two to three days, the wide roads become pools of mud where one sinks into one's knees. Within two days the ground is hard again as before thanks to the hot sun. In the Transvaal it can become overwhelming hot, especially in the summer". (From a letter by Izaak Wust, a Dutch teacher, writing to his family in Holland, 29 April 1897, translated)

Pretoria enjoys calm sunny days (the sun shines for about nine hours a day 300 days a year) and warm evenings for up to eight months of the year with stunning sunsets and impressive highveld thunderstorms in summer and mild winters.

Pretoria receives summer rainfall. It receives an average annual rainfall of 763mm, of which 88% falls in the summer months, often appearing in the form of late- afternoon thunderstorms associated with lightning and occasional hail. Large amount of water fall in short periods of time. In summer and mild winters temperatures average 6° C to 23° C maximum, with an extreme maximum and minimum temperatures of 41ºC and -5ºC respectfully. (www.ifla.org)

In the design special attention should be given to the huge temperature variations in Pretoria during summer and winter times, which plays an important role in the occupant comfort, as this is one of the biggest concerns in a hotel and any place with residence. The design should also try to make use of systems that can capitalize on the rainfall that the site offers and not to let it become run-off water that will become someone else's problem.

EXISTING BUILDINGS ANALYSIS

Figure 3 -14 Reserve Bank

Figure 3 -15 Strijdom Square

Reserve Bank (Architect- Burg, Doherty & Bryant)

"Against the backdrop the Reserve Bank sticks out as a bone of contention. A late modern clone of Miesian and Bunshaft principals with a high- tech gloss, it sports space-age external glazing, slick granite Finnish and state of the art- or art of the state?- infrastructure. Yet its architectural image "tower on plaza" massing and sheer façade root it firmly in the past. The Institute of Architecture declared it a merit winner. The acerbic De Beer suggests instead that the building's "most appropriate if unintended metaphor is that of being a tombstone to the South African economy."
From the mid 70's South Africa dropped out of the skyscraper market and out of touch with the technology required to create such buildings as Sears, World Trade Center, Lloyds and AT&T. sadly for skyscraper enthusiasts, sense seems to have prevailed along with other limiting socio- economic factors, particularly a shrinking economy during the sanctions period. (Fisher, Le Roux, Mare' 1998)

Strijdom Square

"On the corner of Church and Van der Walt Street it covers about one quarter of the city block and is totally paved with planter boxes especially towards the eastern side of the State Theatre. The main element of the square was the Strijdom monument with a concrete dome like structure covering the monument. This feature doesn't exist anymore today as it collapsed. Part of the monument that still exists today is a feature with horses on a central column in the centre of a fountain." (Le Roux, 1990)


Figure 3 -16 State Theatre

State Theatre

The State theatre consists of five theatres within the complex, with a square on the corner of Church and Prinsloo Street. The main structure consists out of columns and beams of off- shutter concrete, flat roofs and elevated ducts. The building stands with its back to the rest of the city because of three facades that is impenetrable next to three main roads in the Inner City. At the time of its completion in 1981, the State Theatre complex was the largest centre of its kind in the Southern hemisphere. Made of concrete it is characteristic of Japanese architecture especially to work by Kenzo Tange.


Figure 3 -17 ABSA Building

Absa Building (Architect- Samual Pauw)

"Situated on the south- western corner of Strijdom Square next to Pretoruis and Van der Walt Street. It is an office block of 38 storeys. This structure remains Pretoria's outstanding example from the heyday of the skyscraper. Unlike so many other examples it broke new ground on the formal criterion of honest expression of the diverse components of architectural form. The possibly anthropomorphic proportions of its return to the base/ shaft/ capital articulation of the classic skyscraper contrast strongly with the sheared- off Modernism of its contemporaries and its exponential scale adds romantic overtones to the classical references. This building have access to four levels of basement parking covering the whole block." (Fisher, Le Roux, Mare' 1998)

Sammy Marks Building

"The building was designed in 1903 by W. J. De Zwaan and has shopfronts that reminds us of the Amstrrdam "gragtehuise". It is a building of excellent workmanship with referance to De Zwaan's Dutch Bank on Church Square. It is the last building complex of Samual Marks in the city. As style and typology a great example of the beginning of the 20th century shopping complexes filled with commercial and retail opportunities today. This building is historically connected with Tudor/ Chambers on Church Square, Saxon Chambers and Afrik House in Paul Kruger Street". (Le Roux, 1990)


Figure 3 -18 Sammy Marks Historic

Figure 3 -19 Kynoch- Building

Kynoch- Building (1875-1884)

"The Sammy Marks building together with the Kynoch building forms a unit that is one of the rare examples of Pretoria's street facades during the change of the century (19th – 20th). This building dates back to 1875- 1884 and is the oldest remaining building in the Inner City. This building must be protected because of its cultural historically importance together with its contextual importance." (Le Roux, 1990)


Figure 3 -20 Munitoria

MUNITORIA

"Comparing Mies van der Rohe's Seagram Building (1958) with the Trust Bank Centre (Colyn & Meirig 1971) and other local clones such as Munitoria (Burg, Lodge & Burg) illustrates John Winter's observation that the misfortune of Mies van der Rohe's was to have been "half understood by so many architects and to have half- baked imitations of his buildings constructed in such numbers". In particular the curtain- wall façade pioneered by van der Rohe proliferated "the depressing vulgarisation of the glass- and- metal sheeted office building to the point at which its unthought- out clichés have become nearly as ridiculous as the spurious skyscraper Gothic of the earlier twentieth centurary. Pretoria's civic structures of this period show strong overseas influences. Munitoria's curtain- wall of solar shield glass is strongly reminiscent of Van der Rohe's Alexander platz project". (Fisher, LeRoux, Mare' 1998)

Conclusion

All the buildings on the block in this part of the City's CBD is landmarks on their own. From cultural history this group of buildings is the best examples of the Afrikaners self-confidence at the end of the 1960's.

"The main problem that was created by the Reserve Bank, State Theatre, Strijdom Square and Munitoria are one of interruption. The oneness of the movement patterns along the streets has been cut off that makes these places islands, islands that can only be used by certain types of people at only certain times of the day. The modernist approach must be rejected today and the city must come first." (Le Roux)

These thesis aims to design a hotel that will not follow the above trend but to desing a hotel in such a way that the ground floor is accessible and usable to the general public at any time of the day. Where usually the hotel foyer takes up all the public space in the city and so becomes islands.

"The city is not the place of the individual, but the place of the individuals who together make up a community. It is the relation between individuals that constantly weaves the threads of ideas and expanding information." If we start out from the idea that the city is the physical domain for the modern development of the commonality, we have to accept that in physical terms the city is the conjunction of its public spaces. Public space is the city. In order for urban space to fulfil its allotted role it has to resolve two questions: identity and legibility. The identity of a public space is tie up with the physical and social identity of its wider setting. However, this identification is bound by limits of scale that are normally smaller than those of the city as a whole. Thus being so, if authentic collective identities are to be maintained and created, it is necessary to understand the city not as a global unitary system but as a number of relative autonomous small systems. However, we are dealing here not simply with identity of the neighbourhoods but with the particular representative identity of each fragment of the urban space; in other words, with the coherence of its form, its function, its image. The space of collective life must be not a residual space but a planned and meaningful space, designed in detail, to which the various public and private constructions must be subordinated. The design form of the public space has to meet one other indispensable condition: to be easily readable, to be comprehensible. If this is not so, if the citizens do not have the sense of being carried along by spaces which communicate their identity and enable them to predict itineraries and convergences, the city loses a considerable part of its capacity in terms of information and accessibility. In other words, it ceases to be stimulus to collective live." (From a speech of Oriol Bohigas of MBM Arquitectes when the Gold Medal of the RIBA was given not to a person but a whole city, namely Barcelona).