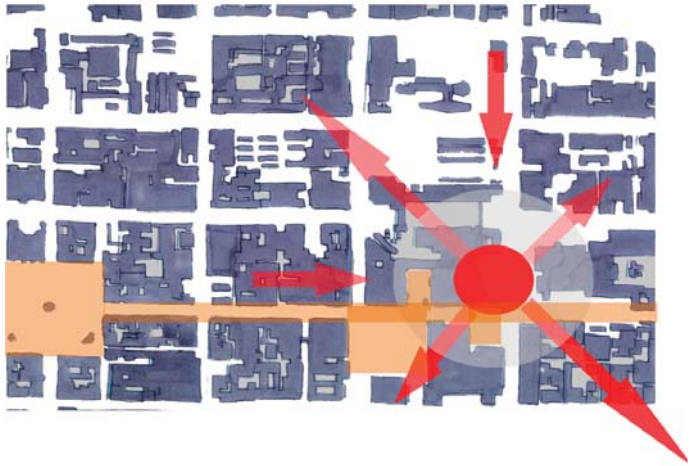

SAMMY MARKS BUSINESS HOTEL

Submitted by: Etienne Hutten
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SUBMITTED AS PART OF THE REQUIREMENTS FOR THE DEGREE
OF MAGISTER IN ARCHITECTURE (PROFESSIONAL) IN THE FACULTY
OF ENGINEERING, BUILT ENVIRONMENT AND INFORMATION TECHNOLOGY

University of Pretoria - Department of Architecture - November 2005

SUMMARY

The design of a five star hotel entails a miniature world within the walls of a building. Attendant human and psychological factors in such a community must be carefully worked out and used to the advantage of the public, staff and hotelier alike. The different components of the hotel must be layered in such a manner that it is suitable contextually and functionally.

The proposed hotel forms part of a very rich historically urban context. The focus of the design will be, not to ignore the surrounding context (as many hotels function on their own), but rather to support the city of Pretoria to strengthen its image as the Capital City and at the same time help to keep Church Street as the business core of the city. Densifying the Inner City to prevent urban sprawl and to create an environment that promotes security by activity. Although the scheme is a system in itself, it plays a supportive and integrative role in the Inner City of Pretoria.The design will strive not to be an island tipe building that exclude the general public, but instead to include them into the design so that the city as a whole remains the most important element.

The proposed Building will be situated on a remaining portion of Sammy Marks Square on the corner of Church Street and Prinsloo Street. The building functions will include a wellness component (link with the surrounding hospitals), hotel suites for accommodation, offices and retail shops.

CONTENTS

1. INTRODUCTION

PROBLEM STATEMENT

The city of Pretoria gets over three million visitors per year, which is to everyone's benefit and creates lots of opportunities for business. Contradicting some people's assumptions the business turnover in the city centre of Pretoria is round about R42 milliard per year. This dissertation is about developing a new luxurious five star hotel on the remaining portion of Sammy Marks Shopping Centre in the city centre of Pretoria, on the corner of Church Street and Prinsloo Street, which will fully capitalize on these statistics.

From the diagram on the right, it can clearly be seen that there is a shortfall of hotels in the immediate Inner City. There is only 2 four star hotels in this vicinity, with the rest averaging between two and three stars. Visitors and businessmen travel long distances when visiting the Inner City of Pretoria, as far as Johannesburg and Sandton, just because of their luxurious accommodations. Pretoria has to start competing with these kind of accommodations especially with the eye on the soccer world cup in 2010. With the rapid rail on the way, which runs from Johannesburg International Airport through the Inner City of Pretoria, this is a both a possibility as well as a necessity. There is also a great opportunity to combine the hotel with nearby hospitals to fully capitalize on the tourists coming to South Africa for affordable medical operations; using the hotel as a base during their recovery period, as the nearby hospitals are of highest international standards.

Facilities such as the Reserve Bank, State Theatre and the Department of Trade and Industry as well as all the attractions in the surrounding area is also in need of luxurious accommodation and facilities to help them functioning to their full potential.

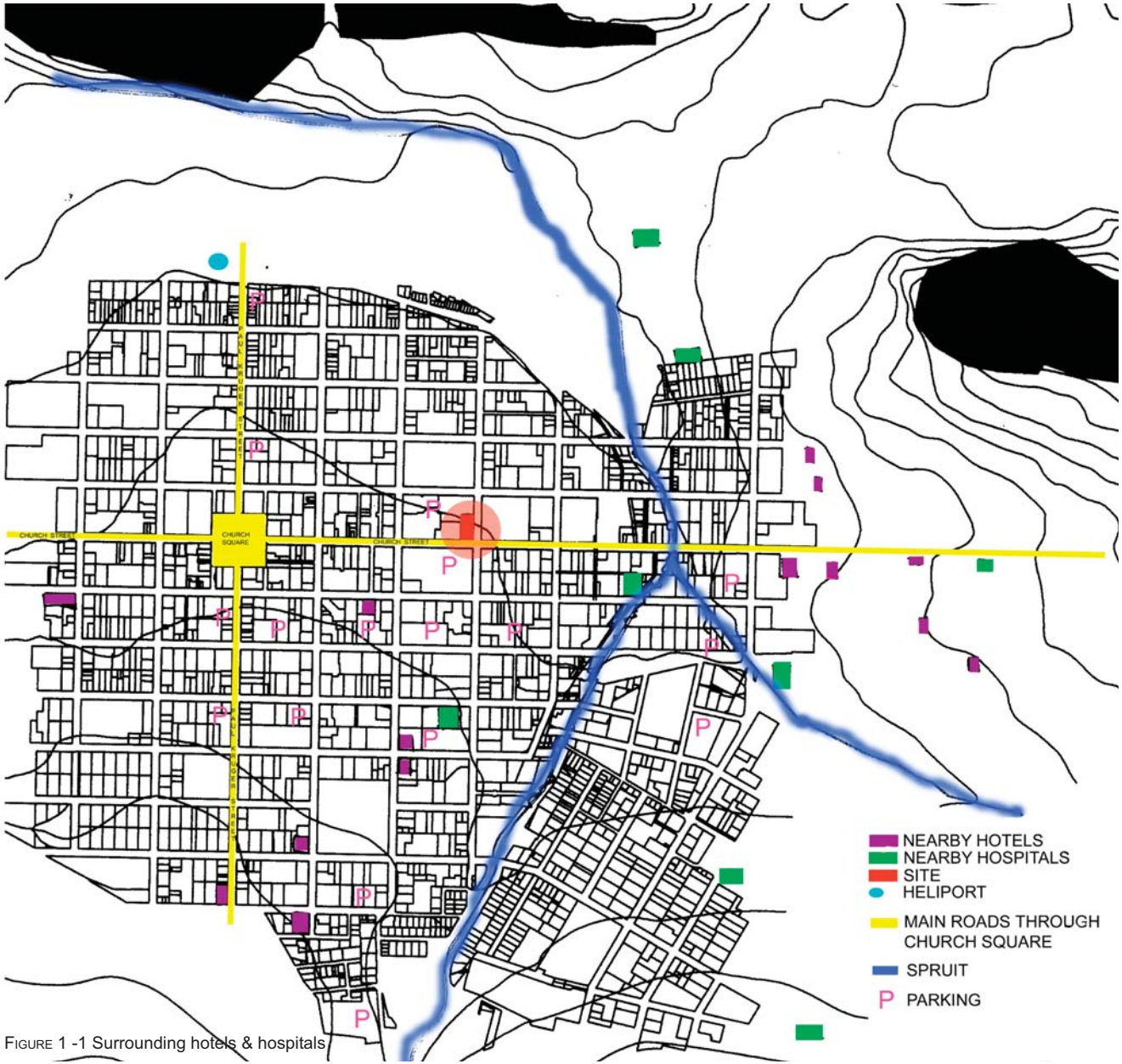


FIGURE 1 -1 Surrounding hotels & hospitals

SITE LOCATION

The site for the hotel development was identified in the Inner City of Pretoria on the remaining portion of Sammy Marks Shopping Centre on the corner of Church and Prinsloo Street.This site have the ability to inject new meaning into the CBD and to unleashed the vast potential and opportunities that lies within the city. The site has the further potential to create an enriching, sustainable and convenient environment that provides unlimited opportunities and choices to its inhabitants.There is a lot of activity and movement through the site that is under- utilized and in dire need for development that will create a new energy point on one of the four axises leading out from Church Square. This in turn will further create a spark towards Church Square and strengthen an important activity spine.

Two areas of study was identified namely the project area and the study area. The project area includes the area around Church Square, Minutoria, ABSA tower, Reserve Bank and the State Theatre. The study area will focus in on the immediate site and will include Sammy Marks Shopping Centre, which takes up the rest of the city block the chosen site is situated on.

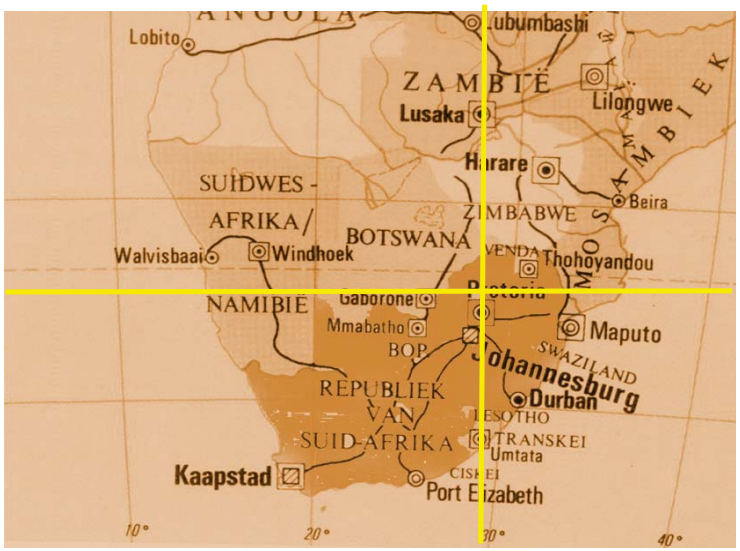


Figure 1 -2

PROJECT AREA

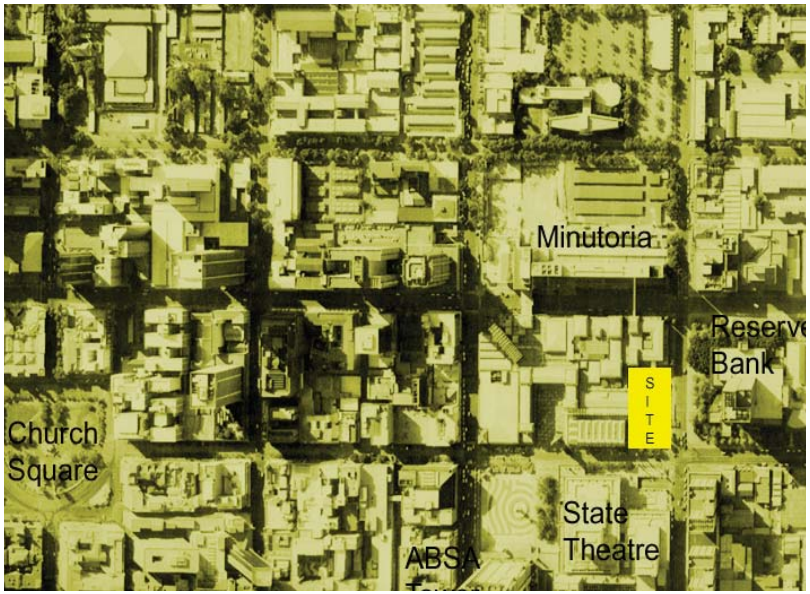


Figure 1 -3

STUDY AREA

Figure 1 -4

APPROACH

The city is a source of security for its citizens. As an environment orientated solely towards the human experience, it acts as a symbolic alternative to dangers of the wilderness, a place where people gather to give each other security through their collective strength. Similar to the city no other natural spectacle can compare with the brilliant colours, constant movement and complex textures of a coral reef. This rich pageant of life has been acted out in the same shimmering sunlit waters for many millions of years. In the over crowded tumult of life on the coral reef, living in close proximity with others is inventible. Some animals have taken the close association one step further, evolving relationships with members of a quite different species. Although such teamwork is usually to mutual benefit of both parties, the parties are not actively or intentionally "cooperating"- it is a system that runs on instinct and selective advantages, not intelligence or idealism. Cooperation lies at the heart of life in the coral reef. The reef itself is the product of a remarkable partnership between the tiny, immobile coral polyp in its chalky chasing and microscopic plant known as a zooxanthella. The plant provides the essential materials, including mineral nutrients; the plant keeps the polyp well fed. These in turn, provide a refuge for numerous other species of plants and animals in one of the most colourful and beautiful carnivals of marine life. To truly understand the rock solid, organic fantasia that is a coral reef, we may need to assemble the most sophisticated knowledge, technology, and theorems. Then again, may be we will step back with a nod and say: This is what life on earth does, given warm waters, sunlight and time. May be cities aren't so different from reefs at all? Before making pronouncements about the health of any reef or city- you have to know its age and where it stands in recovery from the most recent disturbance. We need to get away from the notion that reefs and cities everywhere at all times should look like the perfect undersea garden or utopian city in a travel brochure. "A central pre- condition for the achievement of high- performance urban environments is to compact the form of the city: to ensure that it develops, over a period of time, into a system that works well at a pedestrian scale. It is essential in order to maximize the generative capacity of urban systems. The more compact the local market, the greater the range of potential economic opportunities that present themselves to all inhabitants. In more compact systems the levels of social and commercial service are much higher and convenience and equity of access to them is much greater." (Dewar, Uytenbogaardt). Pretoria has much more to offer than the ubiquitous historical remnants of political dramas. Being the administrative capital of South Africa had a huge effect on academic, industry, trade, sport and other fields. In the field of science and technology the city contributes significantly to South Africa's development. Tshwane's strength in the fields of human science and scientific and industrial research, technology, medicine, education, manufacturing and training provides a strong base for future developments.

FIGURE 1 -5 City of Pretoria

FIGURE 1 -6 Coral Reef

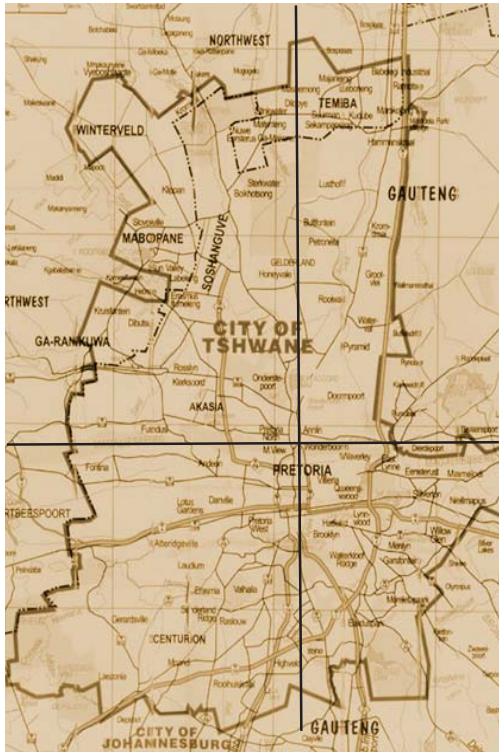


FIGURE 1 -7 City of Tshwane

TOURISM AND LEISURE

"The fashion for travel was well established by the end of the 18th century. It received new impetus and new direction from the early 19th century interest in nature and scenic beauty. But it was the railroad and the money middle classes, thrown up by the commercial and industrial revolutions, which produced the modern hotel. The word "hotel" was adapted, first in France and later in England about the end of the 18th centur, to signify a departure from the customary method of housing quests, to something more luxurious and ostentatious. The hotel offered everything that the fastidious visitor could desire; it constituted the transition from the old to the new.

"Modern hotels are of three, more or less distinct types- the commercial hotel, the resort hotel, and the residential hotel. The commercial hotel, which this thesis is more about, caters for the transient commercial guest. The travelling sales man was for a long time, its most important patron. The hotel industry, from its very nature is closely connected with the public in general. It is intresting to note, that this branch of business and its financial possibilities constitute blank in the field of general knowledge in a large proportion of the public. The hotel industries in South Africa, unlike in many other countries, struggles against many retarding influences, but at the same time there is no doubt as time have shown, that the hotel constitutes a good investment of capital." (Axelrod. A. 1940)

This thesis is about a five star hotel with a strong wellness component and the basic condition and the essential elements for life of full health and optimal wellness must be clarified. The WHO (World Health Organization) health definition provides the first hints. "The basic condition must be a "complete physical, mental and social well being", and a wellness lifestyle has to concentrate at least on these elements. Fitness is thus one element for physical well being on the way toward a high level of wellness; however, other elements such as good nutrition, beauty, relaxation, mental activity, social harmony, and environmental sensitivity must be added. The whole potential of human history in regional and global cultures should be used to achieve this goal." (Weiermair, Mathies, 2004)

Biological and genetic factors 24%	Iafrogene (medical) factors 16%
Environmental Factors 12%	**Individual lifestyle** **48%**

This figure summarizes the elements required for such a comprehensive understanding of wellness and provides a basis for further development of wellness concept.

Fig. 1 -8 Reasons for premature death (Weiermair, Mathies, 2004)

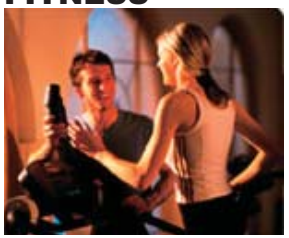
4 PILLARS OF WELLNESS

(wellnesshotels@belvita.it)

RELAX

BEAUTY

FITNESS



VITALE CUISINE

"Wellness represents a new global approach to health and stimulates a more leisure- based health concept as well as the development of a new health- orientated leisure system. Wellness hotels and health tourism started this process; gyms, saunas, fun pools, and wellness centres followed and are still following. Traditional health resorts such as spas and hospitals fell into a crisis and therefore need to modernize their concepts. The wellness approach initiated a process of globalisation and modernization of the leisure and health resorts, spas, and tourism destinations. As previously mentioned a big part of the hotel in this dissertation will be a recovery centre for tourist that come to South Africa because of affordable medical operations. In the capital many hospitals will have the opportunity to align themselves with the hotel to fully capitalize on this trend. This may just be the opportunity hospitals waited for to modernize their concepts.

The American physician Halbert Dunn developoped the wellness concept in 1959. This can be seen as a way to implement the new, broader WHO (World Health Organization) health definition. Health is now seen as a dynamic process, whose goal can be specified as "high- level wellness". Wellness is best described as a way of life. It is a lifestyle that you, as an individual, create to achieve your highest potential for well-being. Your lifestyle consists of actions you are able to control, such as how you exercise, eat, manage stress, and perceive the environment. Achieving a high level of wellness involves continual striving for a more healthful way of living. The world has become a global village with global leisure- based health systems. Basic knowledge for a long life based on high-level wellness now is at worldwide disposal. Throughout the history of developed global cultures, (medical) treatments have

been (theoretically) available. The network of health resorts offers all known treatments and wellness elements. High- level wellness could become available for all human beings. A new global social health and wellness policy must be defined. Health and wellness for all should be guaranteed.

Reality is a moving target. That leisure and its use, which historically is defined and redefined by technological innovations and changes in the economy and in the processes of work, may undergo a series of continuing rapid transformations. Perhaps the most important transformation is that customisation of leisure experience will mirror the customisation and diversification of work and daily life. For many post-modern lives will render distinctions between work and leisure almost meaningless. For others often living in close proximity, culture, religion, and ethnicity will define leisure and its appropriate use. The customisation of leisure will mirror the customisation of reality." (Weiermair, Mathies, 2004)

Figure 1 -9 Link between Jhb International Airport & Pretoria

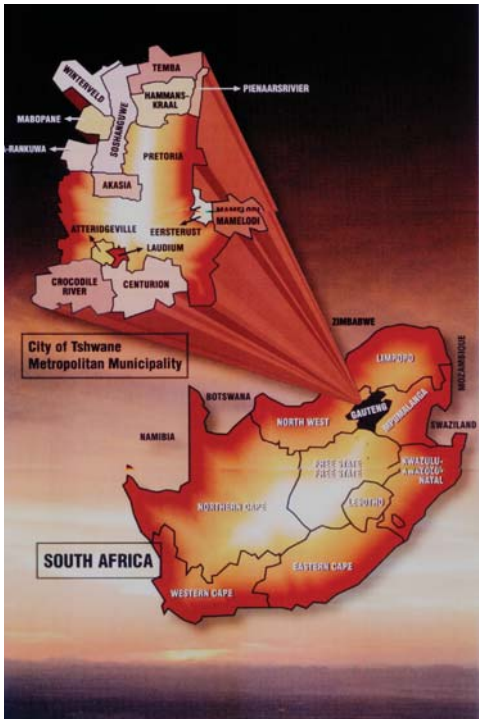


Figure 1 -10 City of Tshwane

TOURISM IN TSHWANE

With three million visitors per year the stimulation of the tourist industry is a priority to the Tshwane municipality. In the State of the City Address on 17 Feb. 2004 the executive Mayor of Tshwane, stated that: "the promotion of tourism is a key focus area of our Marketing Department for the forthcoming financial year". New projects geared towards increasing Tshwane's appeal to tourists include:

Freedom Park that is the flagship National Heritage project and will become an important tourist attraction and public place. Located at Salvokop at the Southern end of Paul Kruger Street.

The gautrain that is part of the Blue IQ initiatives and will run through Freedom Park with a stop near Pretoria Station. This public transport system will make the CBD much more accessible and connect Pretoria with major airports.

South Africa will host the 2010 Soccer World Cup. The tournament will be sure to boost the South African economy. An estimated three million fans will visit South Africa during the tournament, far more than the number of supporters who came for the Cricket World Cup in 2003 or the Rugby World Cup in 1995. Tshwane will also receive a piece of the pie in the form of the brand new Rainbow Junction Sport Station in the North of Pretoria.

Figure 1 -11 Gautrain

Figure 1 -12

All the above clearly portray the importance of tourism to the South African community. The upgrade of the Inner City and the creation of more luxurious accommodation is a realistic and important consideration. The CBD should be made more attractive to tourists.

A DESIGN PHILOSOPHY

INTRODUCTION

These days the art of design is moving very fast indeed, so fast that there is a sort of "intellectual gap" already formed. We constantly get the feeling that designers don't really grasp what they are doing during a certain design process when giving form to something and becomes more and more like a piece of art work. It is as if there is some sort of disorder going on in design trying to create order. Design at the end of the day strives to create order. It is almost like walking through a library searching for a good book, or searching the Internet for trust worthy information. How do you know that what your are getting isn't a lot of junk, that is again based on previous junk and so on? In a world of design we need some sort of vehicle to travel through this broad space filled with designs. Striving to move in a more structured way into the future and doing so moving past and eliminating all the junk surrounding us. It is as if the right design already exists, we should just find the right way (vehicle) to get to it. The end product (form) of design and the process itself is more and more like monsters. We can't get our arms around it to get it under control and so this monster grows bigger and bigger each day and eliminating our reference points. Part of this problem is that we are designing in more and more complex contexts. As a single designer, we can't grasp all the interactions or features on a specific context as self- continues designers.

EVOLUTION OF FORMS

Architects tend to copy a lot from one another. We often see the same details of a particular building or house been repeated on new designs, some times on a small scale and some times on a large scale. Can it be that artefacts surrounding us today are using us, in this case as designers, to reproduce itself to survive? Changes take place faster than we can understand it, and we don't know any more what is reliable knowledge and what is not. The world of the architect is created in an architect's mind according to certain principles related to the biology of the brain. According to one theory of the thinking process, an idea arises out of the competition among similar and dissimilar ideas occurring simultaneously in adjacent neural circuits of the brain. The same principles of competition and selection might be said to apply to the general public in accepting architecture. "Things in the built environment originate and endure (not just in the tectonic sense, but in their survival value in a society's common language) because they "make sense" in some way. Competing ideas in a society eventually suppress or reinforce each other to produce one or more dominant themes. In other words, creativity and survival work in ways that are compatible with the cognitive machineries that make up the mind. Nevertheless, sometimes the mind works against the body by acting in a harmful manner. An architect's mind has the power to either create designs that adapt to human needs and emotions, or to impose arbitrary images on the environment. A Darwinian selection process in architecture takes place among competing ideas in the mind. A second process, also Darwinian, occurs in the society of consumers. This second selection process is between styles, where certain styles win over others. In both of these selection processes (i.e., in the mind, and in society), the criteria are a mixture of human needs and irrelevant stylistic fashions. Meme propagation and encapsulation explain why these two disparate sets of selection criteria can coexist, and when one set can displace the other. The architect's mind is impacted by the problem space and various "memes" (conceptual entities that propagate among human minds) from a variety of sources. These could come from one's own memory; visual templates from the environment; the influence of other architects; etc. Competing forces such as engineering constraints, a desire for creativity, and the unique need to express oneself drive the design to its final state. A Darwinian process in the mind of the designer depends on a set of selection criteria. Specific architectural styles, however, replace the selection criteria of traditional adaptive design by a matching to visual templates, or "memes". Once adaptive design is abandoned, the spread of architectural styles depends strictly on factors governing meme propagation in a society. A minimalist style then possesses an unbeatable advantage over more complex styles, because of its low information content. Each design competes in the mind of the designer with other conceived possibilities, and the fittest ones (those that partially solve the problem as posed) survive to the next generation. More detailed designs generate further alternatives, which are culled by selection in the subsequent round. The cycle starts with the creation of variants, which then get culled by using a set of selection criteria; the survivors are used to create a new generation of variants, which get culled in turn; and so on. This represents a typical Darwinian process. Visual inspiration can fix the entire gestalt of a project in a single initial image. Often, it is precisely such a conceived image that, through the emotional feedback it generates in the mind of the architect, sustains the design and drives it towards completion. When architects turn for inspiration to fixed images from a set vocabulary defining a style, images displace the adaptive component of design by changing the selection criteria. Design then becomes a process of comparison with

certain visual stereotypes, which radically affects the end product. Matching to currently popular images takes priority over all the other design constraints. The new selection criteria may not aim at adapting a design to human needs. The selection process itself ceases to be recursive because selection occurs only on the first level, which is derivative of memory and stored images. If structural, functional, and practical constraints are abandoned in the interest of maintaining images, however, such a design method acquires advantages of economy over more complex approaches that are adaptive. Copying an image is very easy to do, and gives a superficial sense of understanding while ignoring the complexities of bo th the copied structure, and the needs of what is being designed. Grain silos were the end-result of adaptive design for agricultural storage, not for habitations. Copying the "look" of a structure developed for something ELSE, AND APPLYING IT TO A USE FOR WHICH IT WAS NEVER INTENDED, IS NOT ADAPTIVE. " (NIKOS. A. SALINGAROS)

RECURSION

"Nesting and variations of nesting, this concept is very general, stories inside stories, movies inside movies, Russian dolls inside Russian dolls. Sometimes recursion seems to brush paradox very closely. For example, there are recursive definitions. Such definition may give the casual viewer the impression that something is being defined in terms of itself. That would be circular and lead to infinite regress, if not to paradox proper. Actually, a recursive definition (when properly formulated) never defines something in terms of itself, but always in terms of simpler versions of itself. Sets can also be recursively enumerable, which means that it can be generated from a set of starting points (axioms), by the repeated application of rules inference. Thus, the set grows and grows, each new element being compounded somehow out of previous elements. But this is the essence of recursion –something being defined in terms of simpler versions of itself, instead of explicitly. Recursive enumeration is a process in which new things emerge from old things by fixed rules. There seems to be many surprises in such processes. It might seem that recursively defined sequences of that type possess some sort of inherently increasing complexity of behaviour, so that the further you go, the less predictable they get. This kind of thought carried a little further out you go suggests that suitably complicated recursive systems might be strong enough to break out of any predetermined pattern. And isn't this one of the defining properties of intelligence." (D.R. Hofstander). Christopher Alexander is also leaning towards a recursive approach in searching for form instead of a more popular present day self- referential approach. Our values, like the arms of a scale, weigh and determine our decisions, including those entailed in design. This value system is formed over years, shaped by the many lessons and experiences of life including our intellectual inquiries. When we attempt to infuse these conscious stimuli into a work of architecture it is very easy to handle them in a self-conscious manner. Acting in conscious of them, we may inadvertently focus on their agenda, and not on its influence on our value system. The idea simply generates architecture. The architecture becomes a means of representing that idea which generated it. It is self-referential. According to Christopher Alexander, constructive diagrams can describe the context, and it can describe the form. It offers us a way of probing the context, and a way of searching for form. Because it manages to do both simultaneously, it offers us a bridge between requirements and form, and therefore is a most important tool in the process of design. In all design tasks the designer has to translate sets of requirements into diagrams, which captures their physical implications. In a literal sense these diagrams are no more than stages on the way to specification of form, like the circulation diagram of a building, or the expected population density map for some region under development. They specify only gross pattern aspects of the form. But part from these diagrams to the final design is a matter of local detail. The form's basic organization precedes its design. The intention (or the physical meaning) of a known problem may be captured by a diagram; and by the same token the intension of any new, hitherto unconnected, set of requirements may be captured by a new diagram. To look at the illustration Alexander gives us (fig. 1) we can see the one on the left that the tree of sets is obtained by successive divisions and partitions. In A diagrams is derived out of the context by a certain designer (different diagrams will form for different designers), and depending on what and how much they know about specific things that is applicable to the context they are working in, they will start side- stepping their way through problems that appear along the way. By doing so the designer draw up diagrams from out the context, and choose certain diagrams above others according to he's/her preference to more familiar information. Sub dividing complicated diagrams into smaller, more understandable diagrams, and choosing your way through them according to your knowledge (eliminating some along the way), will give you diagrams to base form on, but it will not reflect the true form necessary for the specific context. In B Alexander suggest that we should start of with the smallest dia-

grams (understandable) and work our way back to the lager diagrams to arrive at form. The smaller the diagrams and problems the less emotions is involved and the more open it becomes to criticism and improvement. All the diagrams in the latter case are derived at statements about potential misfits and the interactions of these misfit variations. We are looking for some kind of harmony between two intangible ideas: a form that we have not yet designed, and a context that we cannot properly describe. The only reason we have for thinking that there must be some kind of fit to be achieved between them is that we can detect incongruities, or negative instances of it. The incongruities in an ensemble are the primary data of experience. If we divide an esembly into form and context, the fit between them may be regarded as an orderly condition of the esemble, subject to disturbance in various ways, each one a potential misfit. The task of design is not to create form that meets certain conditions, but to create such an order in the esemble that all the misfits are eliminated.

Fig. B is almost like the dog and bone situation. Imagine there is a dog and a human friend has just thrown a bone over a wire fence into another yard. He can see the bone through the fence, just lying there in the grass. There is an opening in the fence about fifty yards from the bone. What do the dog do? Some dogs will just run up to the fence, stand next to it, and bark; others will dash up to the opening and double back to the lovely bone. The barking dog sees the sub problem as (1) running to the fence, (2) getting through it, and (3) running to the bone. The other dog sees the sub problem as (1) getting to the opening of the fence, (2) going through it, and (3) running to the bone. Notice how everything depends on the way you represent the "problem space" –that is, on what you perceive as reducing the problem (forward motion towards the overall goal) and what you perceived as magnifying the problem (backwards motion away from the goal).

"In some sense all problems are abstract versions of the dog –and –bone problem. Many problems are not in a physical space but in some sort of conceptual space. When you realize that direct motion towards the goal in that space runs you in some sort of abstract "fence", you can do one of two things: (1) try moving away from the goal in some sort of random way, hoping that you may come upon a hidden "opening" through which you can pass and then reach the goal; or (2) try to find a new space in which you can represent the problem, and in which there is no abstract fence separating you from the goal." (D.R. Hofstander p.611)

In diagram B you can also do a backwards motion away from the goal in trying to get to the goal where as in diagram A you don't have enough information to fall back and try a different way to get to the goal.

But we still need that vehicle to explore and move successfully through the design space and therefore Christopher Alexander introduces 15 structural preserving transformations to be used in this broad design space.

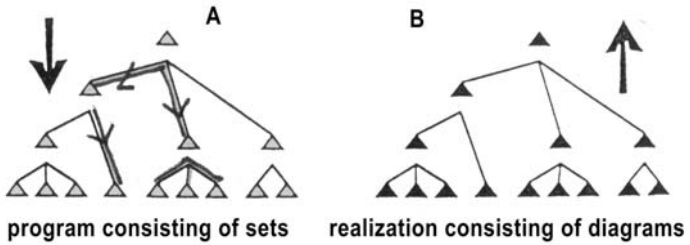


Figure 1 -13 Recursion & Nesting (Alexander)

15 STRUCTURAL PRESERVING TRANSFORMATIONS

These structures are what we got. How do we adapt in the future? Structures will try to minimize the risk of not preserving things we know about design. Minimize the risk that we design something that we are better of without. We are living in a very uncertain and complicated time where things are adapting and evolving. Things like style in a sense, is not part of this 15 structural preserving transformations and will only confuse use with what is reliably knowledge and what is not. This dissertation will attempt to see how the following 15 structural preserving transformations can help the design and to analyse the existing context.

Levels of scale	Contrast
Strong Centres	Graded Variation
Alternating Repetition	Roughness
Boundaries	Echoes
Positive Space	The void
Good Shape	Simplicity and Inner Calm
Local Symmetries	Not-Separateness
Deep Interlock and Ambiguity	

(Alexander.C, 1994)

CONCLUSION

Designers must find a way to work with complicated contexts where there are so many layers containing different information on a specific site, that it become so difficult to know with what information to work with and what to ignore. We must try to break these contexts up into smaller more understandable diagrams and try not to define something in terms of itself. With these diagrams we have the chance to go back if we get stuck and take different paths to get to a solution. Instead of trying to solve problems all at once and jumping to quickly to solutions, we must break things up into smaller pieces. The chances are the smaller and less complicated we think, the greater effect we will have with our designs.

With hotels and other developments of this scale one can very quickly get lost in all the information needed to compile the building and this can lead the designer to become more and more self- referential instead of following a recursive path in search of the appropriate form.

BRIEF HISTORY OF PRETORIA

Figure 2 -1 Statue of Andries Pretorius

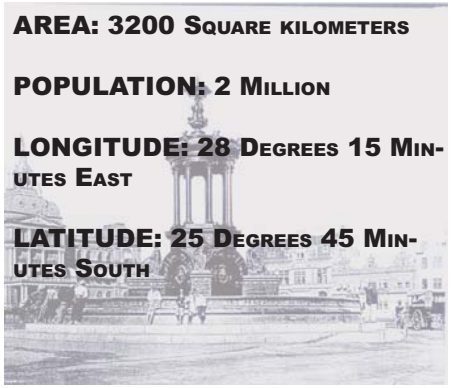


Figure 2 -2 Sammy Marks Statue

"The Pretoria urban design concept was based on a strongly defined image. The town was encircled by the Apies River on the eastern and the Steenoven Spruit on the western side. These water courses conceptually defined the boundary between the inside and the outside of the town, much like the medieval town wall would. From those boundaries the urban domain asserted its presence, which reached its highest intensity in the steeple of the central church, a presence both material and spiritual. The urban grid was ordered around the church and related both to the cosmic order of the sun's path and to the poorte (openings, gaps) in the Daspoort and the Schurweberg mountain range, thus interpreting the demands of the open furrow water supply system originating at Fonteine (Fountains) to the south of the town in such a manner that the watershed coincided with the central space, Kerkplein (Church Square). As with the wide streets the physical properties of the square reflected the air of the great open spaces." (Fisher, Le Loux, Mare' 1998)

"The study area as well as the early developments of the ZAR all centred around Church Square which was initially known as Market Square (Marktplein) because it served as a market place. The more important civic and commercial buildings rose rapidly around this large outspan area in the centre of Pretoria. The magistrate's office, the post office and the Grand Hotel were built next to the square. There was a time when no fewer than three hotels and five banks faced the square.

From Church Square activities along four streets to the south, west, north and east reached to the four outskirts of the ZAR: to the south Market Street (now Paul Kruger Street) led to the railway station from whence long journeys could be undertaken by train, or past the station the roads continued to Johannesburg and the Rand; to west Church Street led to the reformed church, the presidents private residence and the cemetery, and onwards to Rustenburg; to the north Market Street led to Bloed and Boom Street, then swerved to the right past the zoo and continued through Hove's drift across the Apies River through Wonderboompoort to Nylstroom and Pietersburg; to the east Church Street crossed Lion Bridge over the Apies River to Arcardia and proceeded to Middelburg, Machadodorp and the Lowveld.

The Kruger statue (or group of statues) is one of the most well known cultural historical landmarks in Pretoria. This group of statues was presented to Pretoria by Sammy Marks. He donated ten thousand pounds to the city of Pretoria for the sculpting of the statues. Sammy Marks was born in Neustadt, Lithuania, in 1844. He emigrated to England at the age of 18. In 1868, at the age of 24, he departed to South Africa and arrived here as a poor hawker. He settled in Kimberly and with his cousin, Isaac Lewis, founded a successful business. In 1882 he settled permanently in Pretoria and very soon he made name for himself as a businessman and entrepreneur with interest in coal, agriculture and forestry. Nobody had more influence on the business world in the ZAR towards the 19th century than Sammy Marks, who virtually controlled the business circles. It is no coincident that the chosen site is on a remaining portion of Sammy Marks Shopping Centre." (P.J. Greyling, 2000)

"From the beginning the physical structure and functions of Pretoria was distinct from other cities. Pretoria was laid out on lager city blocks with wider streets. Tus, together with low- rise town planning restrictions applied from the early 1930's, created a more spacious and lower density city. Pretoria's administrative and governmental character was deliberated emphasised by allowing civic buildings to exceed the prescribed height limitations, thus ensuring that the presence of the state overpowered that of capital. Clearly the symbolic value of height was embraced by the two cities to express their different characters- Johannesburg, the city of capitals, and Pretoria, the capital city. Pretoria has thus unusually long city blocks on the north-south axis and statutory 30 metre height limitation received International Style Modernism in low –rise developments below eight storeys, of U, L, and E plans, and with parallel wings of north south orientation. The influence of Nienmeyer and Le Corbusier was particularly strongly felt." (Fisher, Le Loux, Mare' 1998)

TSHWANE INNER CITY DEVELOPMENT STRATEGY

Figure 2 -3

Properly define major gateways to Inner City
Major landmark entrance from the south (International gateway)

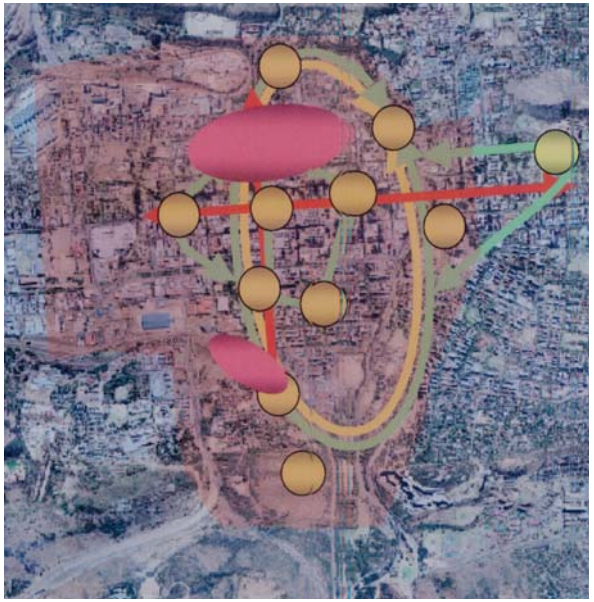


Figure 2 -4

Major nodes and places of interest

Less formal Cultural Zones (markets, street performances, small businesses etc.

Axis of Expression

Fixed mono-rail connecting major nodes in Inner City

Pedestrian routes connecting major places on interest

BUILDING BLOCK 1: ANNOUNCING THE DESTINATION

The significance of the Inner City as destination must be announced in bold terms by defining the gateways into the city from north, south, east and west.

BUILDING BLOCK 2: CULTURAL CIRCLE

In keeping with the vision that Tshwane and its Inner City should be developed as the Cultural City in Africa, the main structuring component for the future physical development of the Inner City is the proposed Cultural Circle. This concept is based on the identification of all existing cultural landmarks and facilities and the enhancement thereof, as well as the development of new, contemporary cultural landmarks, and the linking of these elements through a system of mono- rail transport and pedestrian routes. The development of the concept of the Cultural Circle is vital for the branding and identity of the Tshwane Inner City as a unique and special place in the country that can attract visitors from all over the world.

Figure 2 -5

Framing grid: Welcoming boulevards

Capital Anchors: Church Square, the Union Buildings and Freedom Park

Axis of expression: Church Street pedestrianisation and formal landscaping

Government Clusters around People's Squares

People's squares: High quality public spaces celebrating our heritage, culture and freedom

BUILDING BLOCK 3: DEFINING THE CAPITAL PRECINCT

The function of the Capital City with regards to the concentration of government headquarters and its ceremonial and celebratory role are most appropriately placed within the Inner City as the functional and symbolic heart of the Capital City. The areas that will compromise the largest concentration of the Capital City elements are defined as the Capital Precinct. The Capital Precinct is defined by a road grid that frames the Inner City and creates a system of welcoming boulevards. These welcoming boulevards also link important strategic locations that should accommodate landmark developments and capital symbols.

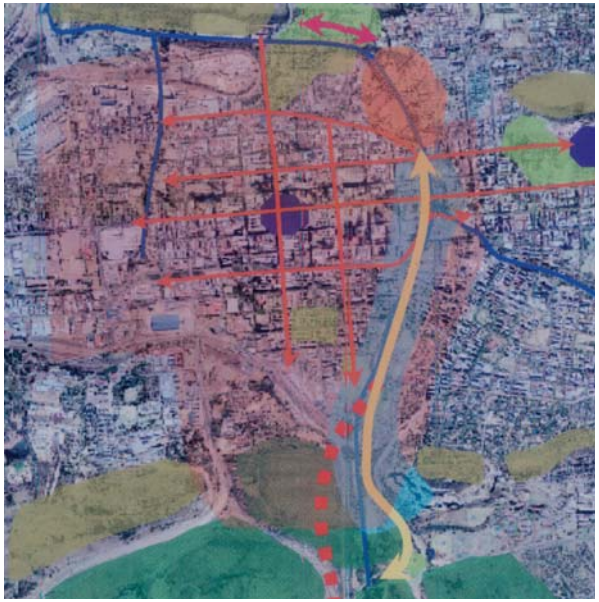


Figure 2 -6

Nelson Mandela Boulevard

New Interchange from Ben Schoeman directly into Inner City

Widening of the Apies river, development of an water promenade

BUILDING BLOCK 4: NELSON MANDELA CORRIDOR AND THE APIES RIVER PROMENADE

The Nelson Mandela Development Corridor is situated alongside Nelson Mandela Drive on the eastern edge of the Inner City. This corridor is a future focal area for arts, culture, government, business, sports, entertainment and commercial development. Nelson Mandela Drive has been upgraded to a dual carriageway and is the new main entrance to Pretoria. The corridor allows prime exposure on Nelson Mandela Drive.

Zone of Urban Regeneration

Urban Park

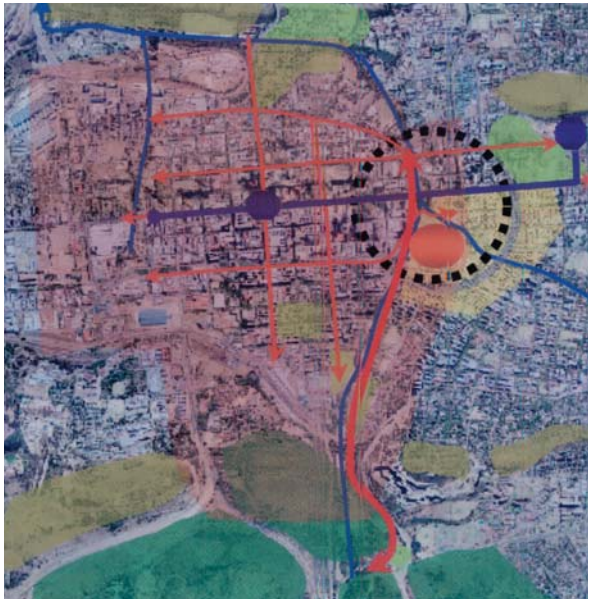
Housing

Business Development (residentially orientated) and Residential Amenities Integrated with Residential Development

Figure 2 -7

BUILDING BLOCK 6: ZONE OF URBAN REGENERATION

The western and north- western (Marabastad) parts of the Inner City are highly neglected areas that are in desperate need of urban regeneration. This area is ideally suited for the creation of a true integrated urban residential environment on the edge of the business district (the more central part of the Inner City).



Confluence of Walker and Apies Rivers and the intersection of Nelson Mandela Boulevard and Church Street

Site of a major focal node (High Quality World Class Convention Facilities, major museum)

Figure 2 -8

BUILDING BLOCK 5: TSHWANE CROSSING- A MEETING PLACE OF OPPORTUNITY

The meeting place of the Apies River, Walker Spruit, Nelson Mandela Drive, and Church Street has been identified as a strategic location for a landmark catalytic development in the Inner City. This location has been chosen as the physical embodiment of the principal of confluence that serves as the symbolic foundation of the Inner City Development Strategy.

Figure 2 -9

BUILDING BLOCK 7: MOVEMENT AND ACCESSIBILITY

The linking of strategic places is an important element of the Strategic Development Framework. These linkages are functional but also contribute to the experience of the Inner City as a destination. The role of public transport in this regard is critical and requires significant interventions and the establishment of a management framework.
The movement and accessibility building block comprises three main sub- strategies, namely:
- Moving people between Johannesburg, Johannesburg International Airport and Tshwane Inner City.
- Moving people between the Inner City and other destinations in Tshwane.
- Ease of movement within the Inner City.

The position of the **Gautrain** station is a major factor in linking the Capital Precinct and Inner City Core Area functionally and effectively with a larger functional area. Unfortunately the current position does not contribute specifically to releasing energy into the Inner City. If the position is reconsidered, it is proposed that the Gautrain Station rather be accommodated underground in the core area (between Church Square and Tshwane Crossing) instead of or in addition to the Pretoria Station location. The importance of the rapid rail is significant, and this link to Johannesburg International Airport and Johannesburg is most important for the Capital Precinct. (TSHWANE INNER CITY DEVELOPMENT STRATEGY)

CITY OF TSHWANE WE ARE THE SAME

The purpose of the Tshwane Inner City Development Strategy is to lay the foundations for the repositioning and regeneration of the Tshwane Inner City. The proposed site for this dissertation falls within the Tshwane Inner City Development Strategy of the City of Tshwane. The following is some specific guidelines and the relevance thereof on the chosen site and proposed development:

- To complete the vision of the exceptional public environment, it is necessary to ensure that all buildings within the Inner City, but specifically those landmark and prominent developments, be of exceptional contemporary architectural quality. The quality of all new buildings in the Inner City must be of exceptional, world-class standards. Ensure that all new buildings are of contemporarily contextual design quality incorporating typically, local materials such as sandstone, slate etc. to give the architecture in the Inner City a distinctive yet global appearance. Developers should also be encourage to develop “green” or environmental friendly buildings, as this in itself can become a part of the tourism potential of the Inner City.
Relevance: With the design of a five star hotel quality plays an important role for the general image of the hotel to the public and is partly responsible for the success of the development in the future. This dissertation will attempt to be of exceptional contemporary architectural quality within the Inner City. Roof gardens and atriums will form part of the structure, as this will help the development to be more sustainable and environmental friendly as well as to match the gardens around the Reserve Bank on the opposite block. This “greening” of the development will fit in perfectly with the functions of a wellness hotel from a functional as well as a marketing point of view.

- Investors, workers, residents and visitors need the assurance that their personal safety and the safety of their belongings will be reasonably guaranteed in the Inner City. This means that the probability and perception that someone will be the victim of any form of crime in the Inner City has to be reduced drastically.

Relevance: In this design the principals of panoptic space will play a big part in the prevention of crime. The African architecture is a spatialization of social discourse. Panoptics is a method of spatialistic intent, capable of dividing space and leaving it open at the same time, while an authoritative look capable of assuring supervision, is to be global and individualistic simultaneously. In the Gurunsi (Wes- African tribe) social concept of space, each and every one’s occupied position overlooks the whole society, cores communications with each other. Regards do not meet any obstacles, the integrity of someone’s opinion is always preserved: the authority of the eye is very cheap compered to the monarchic power that functions at high political cost. Punishment should be glaring in order to be a deterrent. In Africa, the problem is not to punish people, but to place them in such a position that they dare not behave abnormally.



Fig.2 -10 & 2 -11 Members of the Gurunsi compound working and observing each other.

- The Inner City should, above all, be a friendly, humane orientated place that caters for the needs of the permanent and daily population in the Inner City. Other factors related to a people friendly place are aspects related to residential quality and the social facilities provided to enable people to interact and develop.
Relevance: With a hotel a accommodation component will be added to the site and as statistics have shown, crime will be reduced in and around this area. This development will function eventually as a miniature world with all its social facilities it provides and will secure interaction of people, which in turn will increase a wide range of opportunities.

- One of the most important ingredients for a successful, exciting and sustainable new Inner City is a unique identity, and the branding and marketing thereof. The Inner City is a tradable commodity just like any other, and therefore like any commodity, that which is well known (through marketing) and has special appeal (uniqueness) is more tradable than others.
Relevance: Health is now seen as a dynamic process, whose goal can be specified as "high- level wellness". Wellness is best described as a way of life. It is a lifestyle that you, as an individual, create to achieve your highest potential for well-being. This trend of health and wellness is vast becoming more and more popular by the day. The hotel with the wellness component has the potential to develop its unique identity through right branding and marketing methods especially with the back- up of the Inner City.

- In an economy such as ours, informal trading is the lifeblood of a large section of the population. In addition, the culture of informal trading is part of our heritage and something that can be built out to contribute to a unique African identity. However informal trading can also bring with it a lot of functional and aesthetical problems, so it is important that informal trading in the Inner City be manage in such a way that it makes a positive contribution to the ambience and image of the Capital City.
Relevance: Formalizing the informal traders, especially in Church Street, is underway. This includes plans to reduce the numbers of traders to 250 and to force them to display only products that are characteristic of South Africa.

- The Tshwane Inner City is a place of strategic significance, not only in the city, but also from a national and international perspective. However it is generally acknowledge that the Inner City is currently not functioning as it should from an environmental, economical and social point of view.
Relevance: The baseline criteria for the hotel will be that of the SBAT (the Sustainable Building Assessment Tool) for the reason that it includes the triple bottom line and that the performance in terms of design methods can be measured in the future.

- The vision for the Inner City is based on three potential niches, namely- Cultural City, Capital City and Investment Destination of choice.
The Inner City already compromises a number of cultural and heritage assets, and by enhancing, expanding and elevating these aspects of the city, it will be possible to carve out a strong tourism nice for Tshwane that can be market nationally and internationally as a notable tourism destination.
Relevance: The hotel offers the opportunity for different culture from areas around Pretoria to be made prominent and be celebrated in the Inner City through vibrancy, colour, textures and every day life and to form tourism nice for Tshwane.

Fig. 2 -12 The vision for the Inner City- three potential niches

- Tshwane (or Pretoria) has always been regarded, as the capital city of the country, but it does not really look, feel or function as a true city of international standards. The City of Tshwane promotes itself as the capital city of the country and potentially of Africa. The current quality of the Inner City however does not support this visual of a world-class capital.
Relevance: Providing Pretoria's Inner City with luxurious accommodation will help the city to compete with places like Sandton City and Eastern suburbs of Pretoria, as the current conditions of Pretoria's hotels is so that people prefer to accommodate themselves outside of the city and to travel in to where they want to be. In preventing this current trend, the project will help Pretoria to come one step closer to be a world-class capital.

- The Inner City has to be transformed to an investment destination of choice, i.e. the place that al investors in the city would want to invest, not as a last alternative when an investor cannot afford to invest in one of the other nodes, as is currently the case. It also has to be an investment location that affords opportunities to the entire population of Tshwane.

Relevance: By playing a supportive role the project will try to include the entire region of Tshwane as far as possible by connecting it with the tourism part of the hotel. This will lift the standards of the Inner City and in time will attract investors to see this region as a destination of choice.

The Integrated Spatial Development Framework that was approved for the city in June 2002 as part of the Tshwane 2020 Integrated Development Plan identifies the Inner City as the area that has to accommodate the capital city functions and that belongs to the entire nation. It stresses the importance of an identified "Capital Core" that should reflect the entire nations values and aspirations; an area where an exceptional environment quality is achieved; and where symbolism and monumentality are ensured**.**

"The design of a successful hotel requires from the designer great discipline, subjugation of his own ego, sympathetic understanding of customers and operator, psychological insight into operational problems and their solutions. Not only must a whole miniature world function efficiently within the walls of the hotel, but all the attendant human and psychological factors in such a community must also be carefully worked out and preferably used to the advantage of the public, staff and hotelier alike.
In designing a hotel the following basic principals should be bearded in mind which, through not peculiar to hotel design, are more pronounced in this field than most others:"
(Architects Journal,1970)

- Design for an image

Both hotels and the public have outgrown their self- conscious attitude towards each other. Hotels often assumed an image of patronising luxury in the past and clients were inclined to feel their status had risen by entering such premises. Social changes have eradicated this phony attitude and hotels today quite rightly concentrate on catering at their customer's actual level. Any attempt therefore to over design and any inclination towards sumptuousness, rather than pure practicality within an acceptable level of comfort, should be resisted if for no other reason than economy. Yet it is essential to the future. Social standards are rising and tomorrows guest may not be satisfied with today's amenities, a degree of built- in flexibility is essential.

- Flexibility and change

Hotels are amortised usually within thirty to forty years, but they are built for a very much longer life and many changes will occur in the locality during this time. Such changes may exert a strong influence on the viability of the hotel and alterations to bring it in line with the new conditions might well be required. Every hotel obtains its customers by publicity. Most hotel situations have some natural amenities; these must be developed to the full and if possible other created. Such amenities often do not substantially increase the cost of the hotel, yet because of their publicity value, their effect on its success may be important.

- Management and communications

The nerve centre of any hotel is the management area. This is connected to the most departments for issuing instructions and receiving feedback information. Electronics are playing an increasing role in these activities, which pays excellent diffidence by reducing staff overheads and making more accurate forecasting possible, thus also reducing the capital tied up in stock and provision.

- Circulation

The four main generators of circulation are:
1.) Customers- from parking areas they will pass through the entrance and reception then split in two directions: lifts, staircases and corridors leading to bedrooms, or access to public rooms. Customers must not be allowed to pass from their bedroom direct to the car park without passing reception.
2.) Staff- they will start from staff housing, via their own entrance and changing- rooms to kitchens, service areas, bars, workshops and so on. At some point their paths may coincide with the customers path- this applies particularly to bedroom staff.
3.) Deliveries- two main lines of access will be required: first, for all foods, drinks, dry goods, stores, fuel and other deliveries, leading to luggage entry which will lead to a luggage store and, in multi- story schemes, via a luggage lift to bedroom corridors.
4.) Services- all mechanical, electrical and electronic equipment must be distribute in accessibility ducts. Convergence for transport of goods must be built in where required.

- Automation

A hotel houses many industries. As with most industrial problems, good communications and transport are the basic essentials for smooth functioning. How far to go with mechanization is not purely a question of expenditure or running cost. There is also a level of customer acceptance to consider.

(Architects Journal,1970)

TOURISM GRADING COUNCIL OF SOUTH AFRICA

Assessment Procedure

1. The assessor will conduct an assessment of the property including:
a) Exterior and grounds under the control of the establishment;
b) The public areas, guest facilities and guest services;
c) A random cross-section of the guest rooms (the sample must include all types of guest rooms located on the property, in all buildings and on all floors);
d) Throughout the assessor will note the overall attention to housekeeping and maintenance;
e) The assessment will be considered in context or “fit for purpose”

2. The assessor evaluates the total guest experience - this may or may not involve staying overnight as a “guest”. During their assessment the assessor will observe guest reactions to service and facilities provided.

3. At the end of the assessment the assessor will provide the owner/ manager/ representative with a verbal summary of the inspection.

4. The grading recommendation will be forwarded to the Grading Secretariat. The grading will be awarded by the Tourism Grading Council of South Africa.

5. The grading decision will be based on:

a) Customer feedback received by the Tourism Grading Council of South Africa in respect of the relevant establishment (year 2 onwards);
b) The conditions noted by the assessor at the time of the annual assessment.

6. The establishment will receive a full report and certificate for the grading. Plaques and other insignia will also be available.

7. If problems were noted during the assessment or if the property’s rating has changed these will be detailed in the report.

8. If a grading is awarded subject to minor alterations it is up to the establishment to commit to affecting these alterations within a specified time frame. The property must submit a letter to the Tourism Grading Council of South Africa confirming that the alterations have been actioned, upon which the grading will be awarded. Failure to adhere to this will result in the establishment losing their

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Stars

The Tourism Grading Council of South Africa has secured the exclusive use of the "star" symbol to denote standards in the Tourism Industry. Establishments will be assessed and given a "star" rating. Brief descriptions of what each star level represents can be viewed for serviced and self-catering accommodation.

Accommodation (Hotel / B&B, Guest House, Lodge, Country Houses)

* Fair to good (acceptable/modest) quality in the overall standard of furnishings, service and guest care. Clean, comfortable and functional accommodation.
** Good quality in the overall standard of furnishings, service and guest care.
*** Very good quality in the overall standard of furnishings, service and guest care.
**** Superior (excellent) comfort and quality with a high standard of furnishings, service and guest care.
***** Exceptional quality and luxurious accommodation (matching best international standards). Highest standard of furnishings, flawless service and meticulous guest care. (www.Tourism Grading Council of South Africa.)

HOTEL GRADING CRITERIA

The grading criteria have been developed based on guest expectations. The criteria cover:

* The building exterior;
* The bedrooms;
* The bathrooms;
* Public areas;
* Dining facilities;
* Food and beverage;
* Services and Service; and
* Housekeeping.

The score is defined as follows:

Excellent	10
Very good	9
Good	8
Standard	6 or 7
Acceptable	5
Poor	3 or 4
Unacceptable	1 or 2

Required Overall Score for each Grading Band

5-Stars

Overall score of 95% - 100%
Items to score 9 or 10
No more than 2 items to score 8

4-Stars

Overall score of 81% - 94%
Items to score 8 or more
No more than 2 items to score 7
All service elements to score 8, 9, or 10

3-Stars

Overall score of 71% - 80%
Items to score 7 or more
No more than 2 items to score 6
All service elements to score 8, 9 or 10

2-Stars

Overall score of 61% - 70%
No unacceptable items Less than 3
Items to scoreNo more than 2 items to score 6 or more5
All service elements to score 7, 8, 9 or 10
(www.Tourism Grading Council of South Africa.)

SEE APPENDIX FOR A COMPLETE REPORT ON FIVE STAR HOTEL REQUIREMENTS

3D MASS ANALYSIS

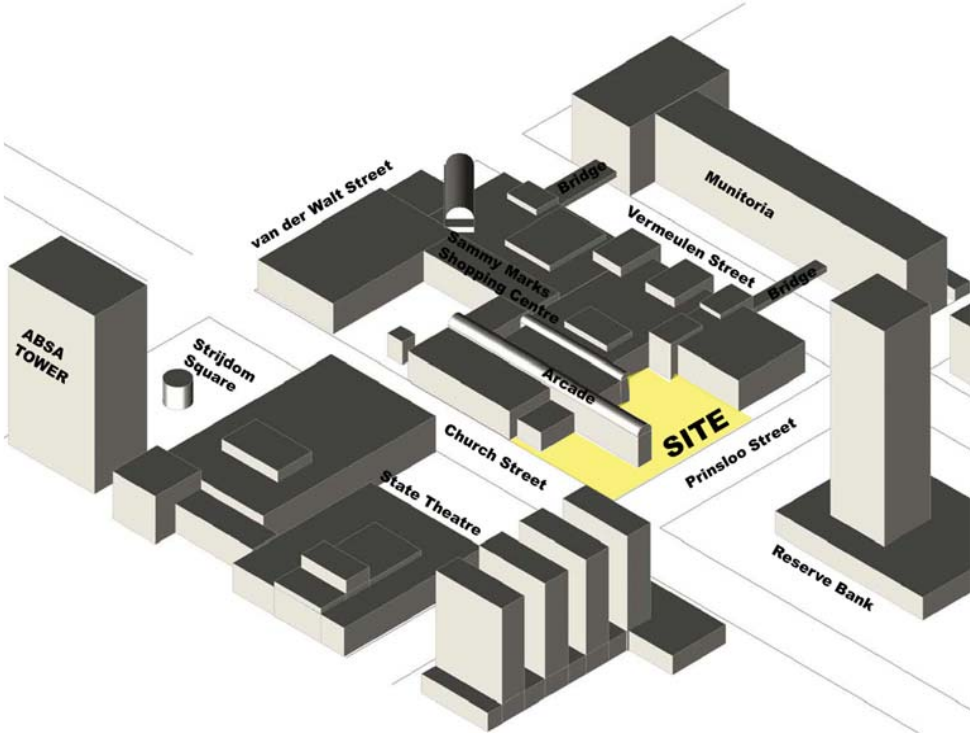


FIGURE 3 -1

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.

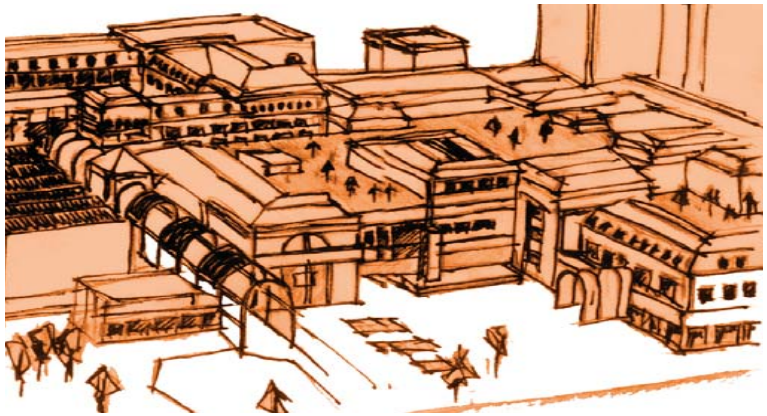


FIGURE 3 -2 Sammy Marks Development

Figure 3- 3 View towards site

SURROUNDING CONTEXT

Figure 3 -4

IMMEDIATE CONTEXT

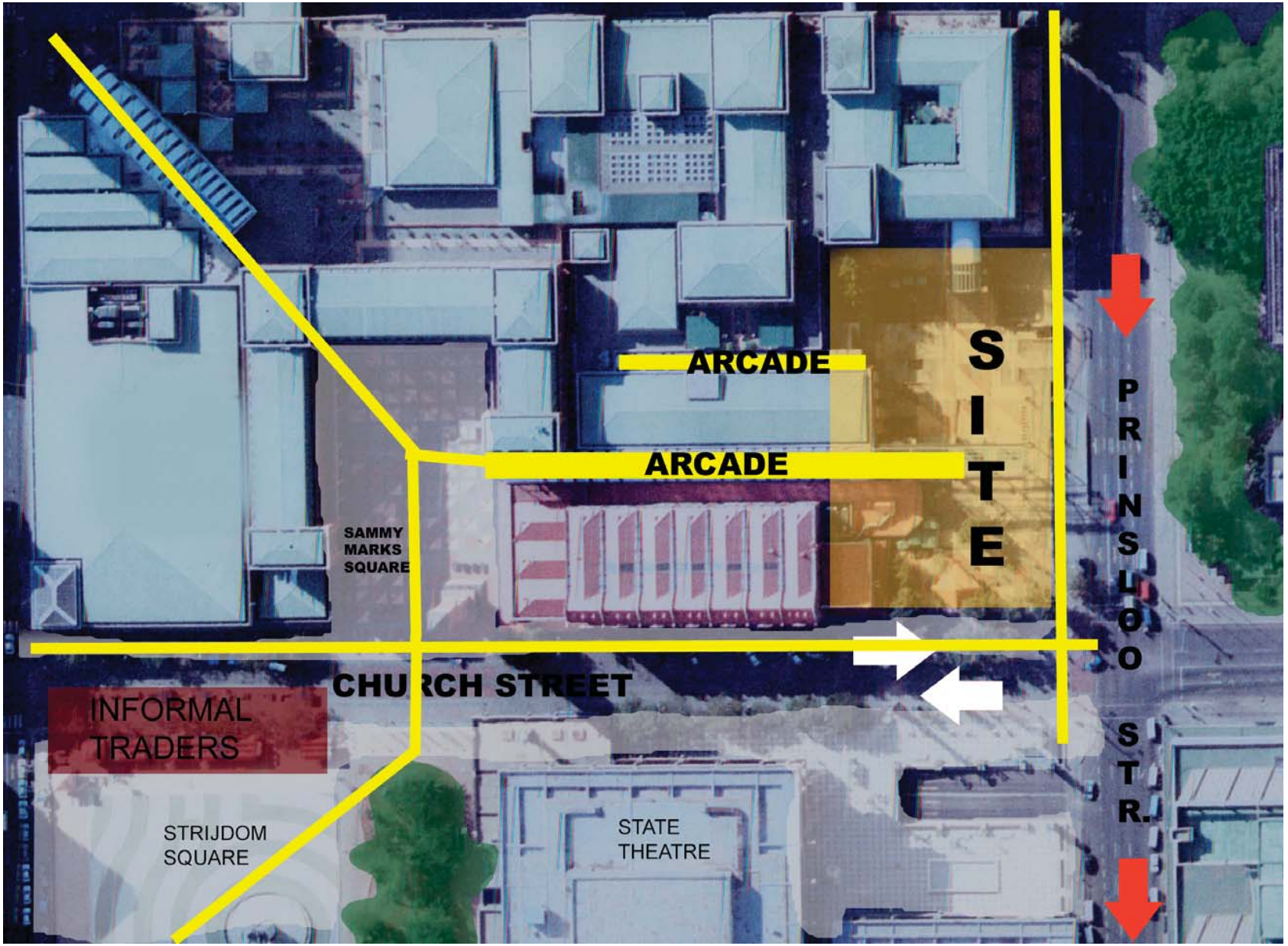


Figure 3 -5 Study Area

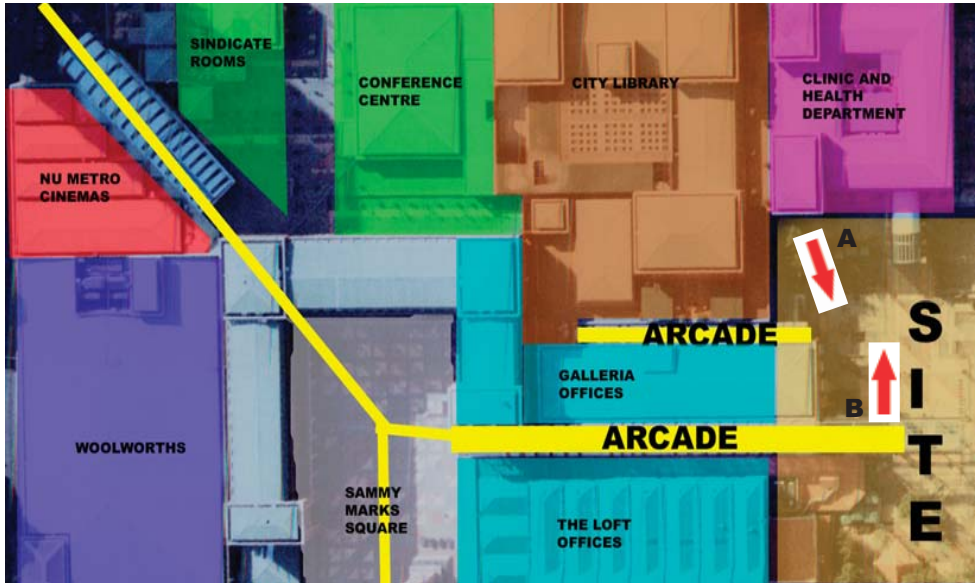


Figure 2 -6 First Floor Outlay of Sammy Marks Development

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

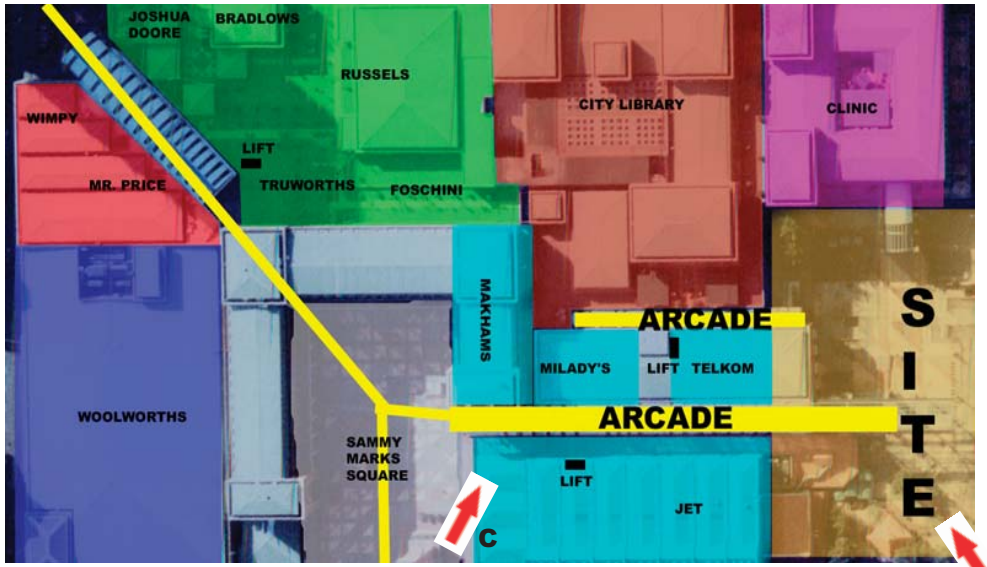


Figure 3 -7 Ground Floor Outlay of Sammy Marks Development

- 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

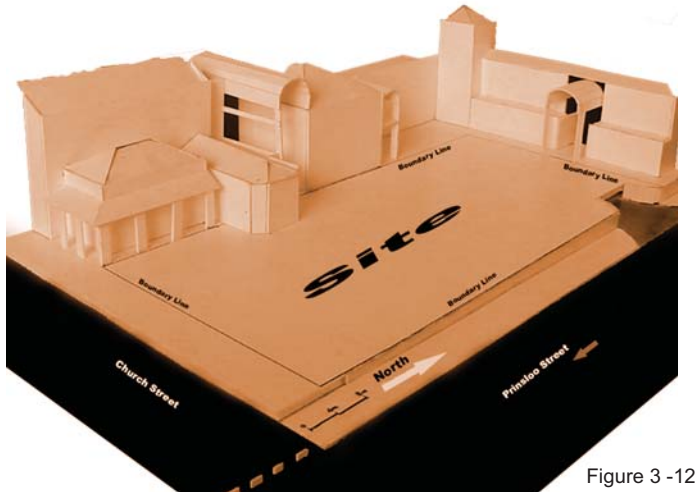


Figure 3 -12

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

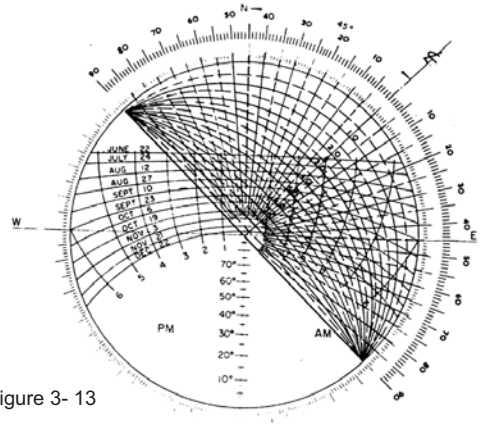


Figure 3- 13

"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).

PRECEDENT 1

Figure 4 -1 Exterior of Hyatt Hotel, Jhb.

Park Hyatt Hotel – Johannesburg
Architects: Gapp Architects and Urban designers

The Park Hyatt, in Johannesburg, is a 244 key, five star hotel that meets the prescribed design criteria of Hyatt international. It is situated in the Rosebank facing the well known Oxford Road and Bierman Avenue.
The hotel has a direct link to the Firs shopping centre and office complex at five levels. These levels relate to the following: - The 3- parking basement linking with the existing Firs basement; The 2- basement which joins the lower shopping level; The lobby, which is level with the upper shopping floor; mezzanines join the first floor office level which accommodates the fitness centre incorporates a swimming pool and is accessible from the hotel as well as from the public entrance of the Firs.

Architectural language

Although Hyatt International requires the highest standards in terms of quality criteria, they pride themselves on their openness to innovative proposals from all consultants. The way most well known brands such as Hyatt operate is based on the belief that the customer wants the comfort of the quality of a known brand, but expects something different and special which relates to the particular area where the hotel is situated. The architects and the interior designers therefore set out to provide an African experience. Externally the use of flush jointed brick creates a monolithic, warm, uncomplicated façade, which reflects the girded pattern of the regular guest room modules behind. The regularity of the brick façade is contrasted by flourished of steel and glass in special places. Other features of interest are the entrance, with its over scaled aperture and trumpeting entrance canopy; the presidential suite, with its protruding bay window and more complex glazing and the vertical break on the street corner, where the suites erupt in the form of glass and steel sculpture. Due to noise factor, the windows on the Oxford Road side are smaller, recessed and highly insulated. The building raps around a landscaped court". Most public facilities have the benefit of the garden- noise free haven that also responds gently to its neighbours to the south.
The interior designers continued with the African theme while avoiding the ethnic trap.

Figure 4 -2 Interior of Hyatt Hotel, Jhb.

Figure 4 -3 Courtyard of Hyatt Hotel, Jhb.

The interior is understated, yet containing finishes, furnishings and objects d'art of high quality: Rich autumn colours in the slate harmonised granite and hand painted contemporary silk upholstered furniture. The apparent simplicity of the façade and interior belies the complexity of a building of this type. Operationally it rivals the most complex of building types, in this case compounded by the need of a link into an existing building at various levels. Most human activities, in fact, is out of sight, in the basements, where a hive of activities keeps this organism running like a well oiled machine. (Architect & builder, Feb. 1996).

Figure 4 -4 Basement of Hyatt Hotel, Jhb.

The site

The site was chosen for its prominence, proximity to upmarket shopping and leisure facilities. It is also ideally situated within the greater Johannesburg/ Sandton complex. But with the choice of site came some challenges such as the need to incorporate the existing Firs Shopping centre and office complex; the compactness of the site and the noise generated from Oxford Road.

Figure 4 -5 Interior of Hyatt Hotel, Jhb.

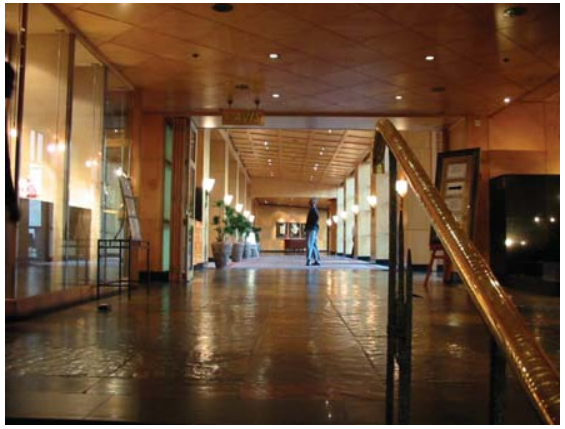


Figure 4 -6 Reception of Hyatt Hotel, Jhb.

Relevance:
The way the Hyatt Hotel is linked with an existing shopping centre is of relevance as the proposed development in this thesis, on the remaining portion of Sammy Marks, will have to accommodate guests and shoppers alike. Controlling and separating guests, visitors and general public is what contributes to the Hyatt's success. By sharing basement parking with the rest of the complex, with hotel guest and general public being separated and controlled at ground floor, resolved a lot of problems. The idea of entering the hotel from the basement and to have a check point at a level where the different kind of public meets, came from this precedent study.

PRECEDENT 2

Sandton Sun Towers- Sandton
Architects- Margoles Dukes & Smith Architects

The new 5- star Sandton Sun Towers extension to the Sandton Sun Hotel was opened at the beginning of September 1993. It was conceived primarily as a businessman's hotel comparable to the best business hotels in the world.

The Sandton Sun Towers was built at the cost of R145 million and has 230 beautifully appointed rooms, Including 16 executive suites, 36 studio suites, two of which were specially equipped for the disabled, and a penthouse double volume presidential suite with panoramic views. An interesting departure from standard hotel design is the provision of two exclusive floors with separate check- in, secretarial and executive lounge/ dinning facilities as well as a 24- hour butler service. The atrium restaurant, bar and lounge are located on the ground level and the new hotel also has a pool deck and fully equipped gymnasium. The Sandton Sun Towers is linked to the six floor of the Sandton Sun by a skywalk and the new building is set in a large landscaped garden, which features rare cycads.

Figure 4 -7 Exterior of Sandton Sun Hotel, Jhb.

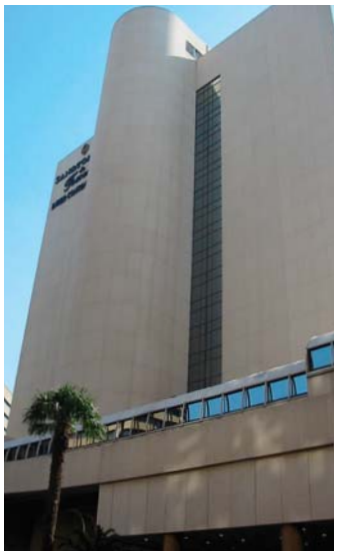


Figure 4 -8 Sandton Sun Hotel, Jhb.

Background

A consortium, which includes Liberty Life Association Ltd, Standard Bank Group Pension Fund and Eskom Pension and Provident Fund, owns the Sandton City complex which encompasses the shopping centre, office tower, twin towers and Sandton Sun Hotel, other specific office developments and portions of undeveloped land in the immediate vicinity of the complex. According to Wolf Cesman, CEO of Liberty Life Properties, several factors influence guests' choice of a 5- star hotel. These are: easy access to major freeways; a secure environment and superb "one- stop" shopping; entertainment and office facilities of an adjoining or integral complex such as Sandton City. These essential criteria are met at the Sandton Sun and Sandton Sun Towers hotels, providing a combination without parallel in South Africa.

Site

The Sandton Sun Towers is located on the very prominent site opposite the Sandton City complex bounded by 5th Street, Alice Lane and Maude Street Extention. The building has been placed on the southernmost portion of the site closest to the Sandton Sun Hotel to facilitate access to and from the existing hotel. The site has a 10m fall from east to west and there is an 8m servitude on the southern boundary reserved for landscaping and water features.

Figure 4 -9 Drop- off area, Sandton Sun Hotel, Jhb.

Figure 4 -12 Bridge link,Sandton Sun Hotel, Jhb.

Design

The architects perceived the new hotel as an integral part of the Sandton City Complex as a whole, which they felt, needed greater definition on the Sandton skyline. This promoted the design of an 18- story tower. The prominent lift and service core as well as the main entrance and porte coche're were situated on the eastern façade of the building which forms the base of the triangle shape of the building. The core is flanked by continuous vertical glazing emphasizing the verticality of the building and punctuating the façade. The entrance level of the hotel housing the reception area and public areas, namely the atrium bar restaurant and lounge, has a 5m high glazing for architectural features in this area. The pool area and gymnasium are located directly above the entrance level. As the Sandton Sun Towers was perceived by the operators as part of the existing Santon Sun Hotel, it was not necessary to provide the full facilities e.g. Conference rooms and restaurants normally required by a 5- star hotel. However this required a link and easy access between the two buildings. This link has been provided by means of a skywalk or bridge spanning to the sixth level of the Sandton Sun. The bridges are on two levels; the upper level is for access by the hotel guests and visitors, while the lower access is used for hotel services and personnel on level 5. The penthouse "Presidential Suite" is located on the 27th and 28th floors. This suite has been designed as a duplex unit with separate access on both floors. In order to provide an upgrade service, two executive floors were designed on the upper levels of the building. These differ from the typical floors in that they have separate check- in facilities and lounges/ dinning areas which are cantilevered and splayed across the north- east and south- east corners of the building. (Building, October, 1993)

Figure 4 -10 Basement Exit, to hotel reception

Figure 4 -11 Basement Entrance, parking

Relevance:

Three things were looked at with this precedent study. Firstly was the way the guest were dropped off at the entrance and thereafter moved down into the basement for parking. From the parking area it is possible to move up to the reception and the gym area. The hotel rooms can't be reached without a card that has to be swiped at security doors. The second important feature was how successful the upper floors worked with their own access and entrances. The third feature that was looked at was how the hotel was linked to nearby buildings, in this case by means of an enclosed pedestrian bridge. This made provision for the hotel to share facilities with neighbours, which ment that the hotel could exclude some of these facilities without a lost of grading.

PRECEDENT 3

Galician Centre for contemporarily Art- Spain, Santiago Compostela.
Architect- Alvaro Siza

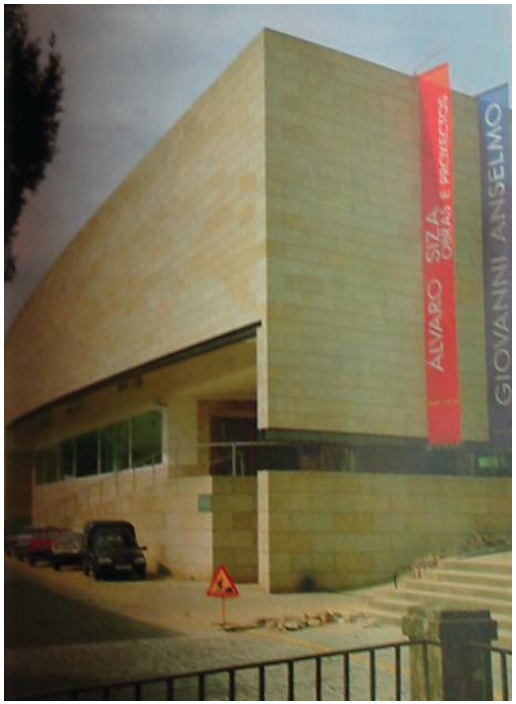


Figure 4 -13

Background

As is typical of his work, Siza was guided by his first impressions of the site. The Baroque façade of the monastery fascinated him. Siza placed the entry to the museum here too, inventing the monastery's corner facade to produce the two overlapping L-shaped volumes that rule his design. The main issue with this project was its insertion in an area surrounded by buildings of quite different scales and significance. It was up to the centre to overcome these difficulties by transforming an agglomeration of spaces and buildings into a coherent fabric. The preservation/ transformation criteria involved included the selection of cladding materials, so granite was chosen for the exterior, with colour variations. The building consists of two L- shaped wings each of three floors, which converge in a north- south directions at a point on the southern end. The west wing houses the main entrance, distribution and reception areas. The basement of the east wing contains the exhibition halls, cafeterias and bookshops. (Konemann, 2000, p.310)

Architecture

Siza's architecture is like his sketches: precise yet suggestive, concealing a surprising richness and authority in its apparent modesty. Clad in local granite, the museum is set above the street like a stepped platform. A cut out in the main façade directs the visitor towards the entrance, the route reinforced by an oddly angled soffit that mirrors an access ramp below. The building's end walls hangs from above, leaving a low horizontal slot with a fragmented view of the monastery's doorway. The museum's large vestibule opens into a triangular atrium with a clerestory window and monumental stair, a void between the two angled volumes of the design. The two levels of galleries beyond are arranged en filade, with parallel circulation corridors, although the winding path through them is full of incident and surprise, including a double- height space invisible on the ground floor revealed as a precipice terminating the upper floor galleries. Other strangely details display Siza's genius for shaping space and light, from the heavy suspended soffits under the skylights of the upper galleries to the trussed, angled clerestory of the library or the soft, disorientated light caught by the inside façade's horizontal soffit. The sculptural quality of Siza's work echoes the formal minimalism of the American architecture in the 1970's- the long spans, crisp stone work and angular shapes. (Architectural Record, October, 1994. p.104)

Relevance:

This precedent study was chosen to get an insight into how successful a site within an extremely difficult context was handled. Two factor had to be dealt with from an early stage, that of the scale and historic value of surrounding building. All the functions of the building work under a coherent building form and structure. Out of this building form, openings were cut out for entrances, views, light and heat gain.This building doesn't throw its arms up into the air to be seen, but instead display a simple and yet a high standard of architecture.

PRECEDENT 4

The lois& richard rosenthal centre for contemporary art- Cincinnati
Architect- Zaha Hadid


Figure 4 -15


Figure 4 -16

Conceptually the existing plan of the city curves upward, making the ground plane and the back wall a continuous surface. ”There is no break between the centre and its surroundings” Hadid stated. “We took the street grid of the city and pulled it into the centre, so that it seems as if the ground is rising to become the back wall. We call this the urban carpet: a continuous
surface between the street outside and the wall inside. It mediates between the city, the lobby, and the galleries beyond. During the day the lobby should be a kind of public square -
an open, day-lit, artificial park. Without paying an admission fee people can walk in and find out what’s going on in here”.

In contrast to the urban carpet, which is a series of polished, undulated surfaces, the galleries are expressed as if they had been carved from a single block of concrete and were floating over the lobby space.
The south facade forms an undulating, translucent skin, through which passers-by see into the life of the centre. Offices provide the facade with human animation.The east facade is expressed as a sculptural relief.
It provides an imprint, in negative, of the gallery interiors.”There are actually two distinct but complementary facades.The south facade, along Sixth Street, will integrate itself with the city by offering an animated and irregularly inhabited skin. We hope to achieve the impression of a collage, offering a strange, layered texture of activity and art in constant flux.
At night, the light from the windows could be very beautiful. It could be animated with all kinds of different lighting programs.” (www.designboom.com/portrait/zaha-c.html)


Figure 4 -17

Relevance:
The way the building functions and whether the abstract forms are sutable are not the main reason this precedent was chosen. Instead what was well important of this precedent is the way the building connects with the city. Hadid introduced a different form and made it looked liked it was grown out of the existing site. This was acchived by streaching the grid on ground level up into the building vertically.

PROJECT GOAL & SCOPE

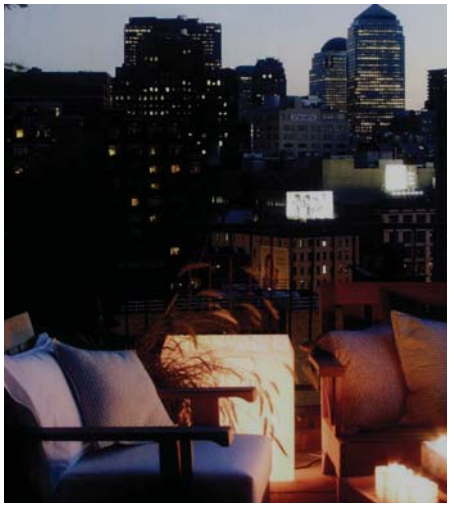


Figure 5 -1

The vision for Pretoria should be to build a City for all, a City in which no- one is left out. The objective of this thesis is to achieve integrated and efficient land use. The emphasis that planning is not only about physical development but also socio- economical institutional and environmental aspects must also be considered. It is important to create opportunities for people to live close to job opportunities. The area around the chosen site is full of job opportunities as it is located within the inner city, which is well connected with areas around the city. It is necessary to take cognisance thereof that resource are limited and that the best possible use must be made of investments regarding land developments. In other words where existing infrastructure can be shared to facilitate new developments it should be done. Infrastructure is present for this development, such as roads, transportation, sewer, water and electricity and no new infrastructure needs to be added. A further objective is to move away and discourage dispersed low- density urban sprawl. The infill nature of this development makes this accord with the objective of the development. The proposed development must be viable to last in the long term from a physical, social and economical perspective in contrast to most of the hotel developments in and around the city of Pretoria. As a baseline criteria the Sustainable Building Assessment Tool (SABT) will be used to measure the successes of the project. One of the main goals, to a large extent, is to be self-sufficient and not to place unreasonable demands on the capacity on the local authority over the long term. It will also try to reduce the need for car journeys and increase the competitiveness and attractiveness of urban centres against peripheral developments.

It is clear that the proposed land use as set out in the problem statement is necessary and that the development of a luxurious hotel will contribute to tourism and the enhancement of job opportunities as well as achieving a high level of wellness in the area. This will stimulate economic growth in and around the area because of the output it provides to the city in the end.

CLIENT

The intended client would be one of the main hotel groups, national or international that will be interested in becoming the stakeholder of the property as well as the development on the remaining portion of Sammy Marks Square in Pretoria's inner city. They can make decisions around the hotel involving different investors to buy or rent from them.

- This can include offices for embassies where different nationalities can be approached to have the luxury of owning or renting space in this new international hotel development within the CBD of Pretoria.

- The new trend in hotel business can be followed and that is to sell apartments to the public and give them the option to live there or to rent it out on a timeshare basis. This will give the public the chance to own accomodation in the hotel which will create public interest in the hotel.

- Establishing relationships with surrounding hospitals and travel agencies (for international visitors who find it a lot cheaper for opperations in South Africa then in their own countries) for patients to be recooparated from nearby hospitals after as well as accomodating them before opperations.

BASELINE REQUIREMENTS

Design Challenges

- Separate different layers of activities and movement- to fluently co-ordinate them as a whole.
- To allow for separate circulation for different functions and people.
- To integrate horizontal and vertical circulations well as services.
- To accommodate the existing column layout into the structure of hotel keeping in mind robustness and adaptability for future users.
- Creating panoptical spaces where people will feel secure through observation from the public; security through observation and activity
- Integrating the public into the design by moving the hotel reception higher up into the development preventing another island type of building.
- Encourage diversity and interaction of users.
- Respecting historic buildings and landmarks by having a greater understanding of the surrounding context.
- To accommodate the movement and functions of neighbouring buildings.
- To design a hotel of international standards.
- To design the East and Western facades to be attractive while preventing unwanted heat gain.
- Improve the street edge
- To have an architectural character and scale that is suitable for the CBD and the surrounding context.

1 Perfomance Prioritisation

Refer to site analysis, brief and client / Builder User Proirities

	Criteria	No Requirement 1	Low Requirement 2	Medium Requirement 3	High Requirement 4	Essential 5
SO	**Social**					
SO1	Occupant Comfort					X
SO2	Inclusive Environments				X	
SO3	Access to Facilities				X	
SO4	Participation and Control			X		
SO5	Education Health and Safety				X	
EC	**Economic**					
EC1	Local Economy			X		
EC2	Efficiency of Use					X
EC3	Adaptability and Flexibility				X	
EC4	Ongoing Costs				X	
EC5	Capital Costs			X		
EN	**Environmental**					
EN1	Water				X	
EN2	Energy				X	
EN3	Waste				X	
EN4	Site			X		
EB5	Materials and Components				X	

Table 5 -1 Preformance Prioritisation

Target Setting

Refer to site analysis, brief and client / Builder User Priorities		
	Criteria	**Target Set**
SO1	***Occupant Comfort***	
SO.1.1	Ventilation	Large openings with cross ventilation
SO.1.2	Thermal Comfort	High Mass
SO.1.3	Views	Maximum views for Public & private Spaces
SO.1.4	Indoor / Outdoor connection	Gradual transition-integrate natural environment
SO2	***Inclusive Environment***	
SO.2.1	Transport	Centralised Transport Access
SO.2.2	Entrance	Civic space
SO.2.3	Circulation	Hierarchal
SO.2.4	Public Space	Integrated and Defined Public Space
SO3	***Access to Facilities***	
SO.3.1	Childcare	Maintain
SO.3.2	Culture	References to cultural history
SO.3.3	Retail	Dual: Formal & Informal System
SO.3.4	Communications	Public Space
SO.3.5	Work / Residential	Integrated-not segregated
SO4	***Participation & Control***	
SO.4.1	Environmental Control	Community Participation
SO.4.2	Training	Developmental
SO.4.3	Social Spaces	To a high degree
SO.4.4	Amenity	Of a high quality
SO.4.5	Local Community	Control entirely local
SO5	***Education, Health, Safety***	
SO.5.1	Education	Multi-use facilities
SO.5.2	Safety and Security	Passive Surveillance
SO.5.3	Information	Easy access, INC. existing library
SO.5.4	Health	4 Pillars of wellness
SO.5.5	Recreation	Integrate into Defined Public Space
EC1	***Local Economy***	
EC.1.1	Local Contractors	Skills training for community
EC.1.2	Local Building Material	Use site Specific / lowest cost
EC.1.3	Local Components	Recycle
EC.1.4	Repairs & Maintenance	Community Responsibility
EC.1.5	SMME support	Initiate community based projects
EC2	***Efficiency of Use***	
EC.2.1	Space Use	Medium Density Development
EC.2.2	Occupancy Schedule	Hotel & Mixed Use
EC.2.3	Management of Space	Multi-Purpose and Mixed Used
EC.2.4	Use of Technology	Active & Passive Systems of highest standards
EC3	***Adaptability & Flexibility***	
EC.3.1	Vertical Dimension	Lower floors- Public; higher floors- Private
EC.3.2	Internal Partitions	Few
EC.3.3	Structure of settlement	Specific boundaries
EC4	***Ongoing Costs***	
EC.4.1	Maintenance	Community based & labour intensive
EC.4.2	Cleaning	Individual Delegation
EC.4.3	Security / care taking	Optimal
EC.4.4	Shared Costs	Investments- Hotel, offices, retail, health
EC.4.5	Cost Monitoring	On a regular basis- Separately
EC5	***Capital Costs***	
EC.5.1	Use of Existing	Local Resources
EC.5.2	Shared Costs	Private Investments
EC.5.3	Capital: Cost Ratio	1:.3
EC.5.4	Cost: Size Proportion	2:1 Shared Facilities & Reduce Materials
EN1	***Water***	
EN.1.1	Rainwater	Storage and irrigation
EN.1.2	Water Use	Personal- excluding irrigation
EN.1.3	Grey water	Recycled & filtered for irrigation
EN.1.4	Runoff	Gradual release
EN.1.5	Planting	Restricted exotics- inc. and match existing
EN2	***Energy***	
EN.2.1	Transport	Internal-Pedestrian, Long distance-vehicular
EN.2.2	Ventilation	Maximize natural potential
EN.2.3	Environmental Control	Passive systems
EN.2.4	Recycling	Low voltage; automated timers
EN.2.5	Renewable Energy Resource	Solar & thermal inertia
EN3	***Waste***	
EN.3.1	Organic Waste	Used for Fertilising etc.
EN.3.2	Inorganic Waste	Recycled and removed
EN.3.3	Toxic Waste	Removed from site- educate community
EN.3.4	Sewerage	Processed for reuse
EN.3.5	Construction Waste	Recycle and use

Table 5 -2 Target setting

EN4	***Site***	
EN.4.1	Brown field site	On a remaining portion of unfinished developm.
EN.4.2	Neighbouring buildings	Try as far as possible to incorporate
EN.4.3	Ecosystems	Conserve
EN.4.4	Landscape Inputs	Best practice
EN.4.5	Construction Processes	Local material and Labour
EN5	***Materials & Components***	
EN.5.1	Source	70% Local; 20% Recycled; 10% Other
EN.5.2	Embodied energy	Low: natural materials, raw state
EN.5.3	Manufacturing Process	Recycle & labour intensive
EN.5.4	Recycle & reuse materials	Yes
EN.5.5	Modular Coordination	Components designed for minimum space waste

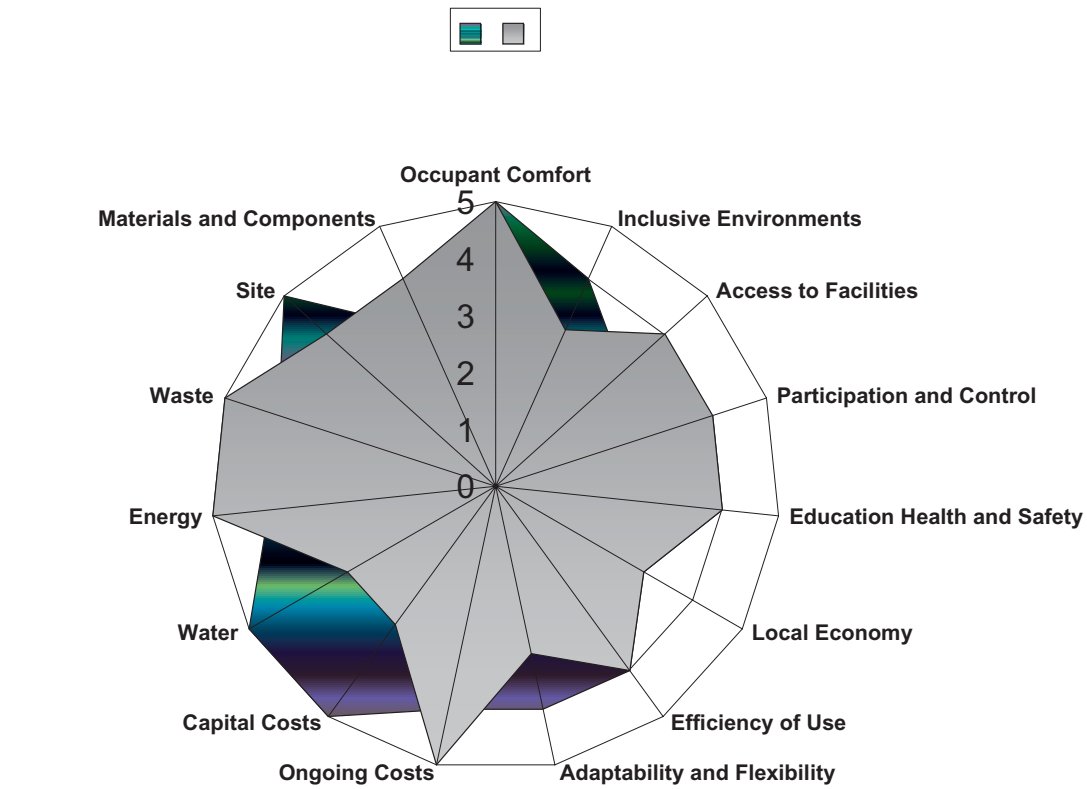


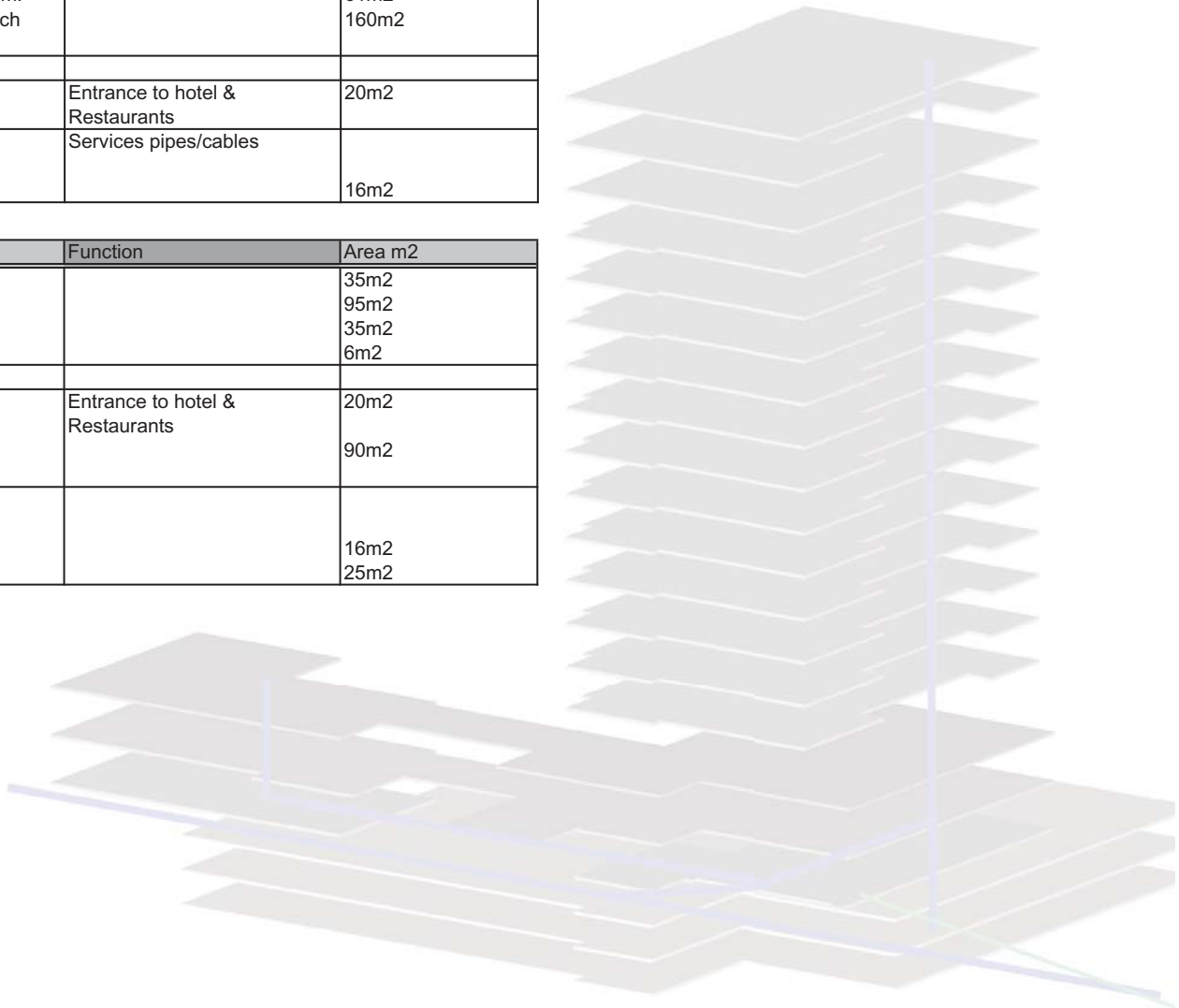
Figure 5 -2 SBAT Report

SCHEDULE OF ACCOMMODATION

Floor Level	Component	Facility	Function	Area
Basement 2	Mechanical & Electrical	Engineering	Ken fix-it Workshop and store	140m2
		Chillers plant		40m2
		Hot water generator & cylinders		72m2
		Sprinkler pump room.		61m2
		Transformer & switch room		160m2
	Parking	xx Bays		
	Public	Lift lobby x2	Entrance to hotel & Restaurants	20m2
	Services	Service ducts	Services pipes/cables	
		Fire escapes x3		
		Service lobby		16m2

Floor Level	Component	Facility	Function	Area m2
Basement 1	Mechanical & Electrical	Plant room		35m2
		Water tanks		95m2
		Pump room		35m2
		Grease trap		6m2
	Parking	xx Bays		
	Public	Lift lobby x2	Entrance to hotel & Restaurants	20m2
		Car rental & shuttle service		90m2
	Services	Service ducts		
		Fire escapes x3		
		Service lobby		16m2
		Store rooms		25m2

Table 5 -3 Accommodation schedule



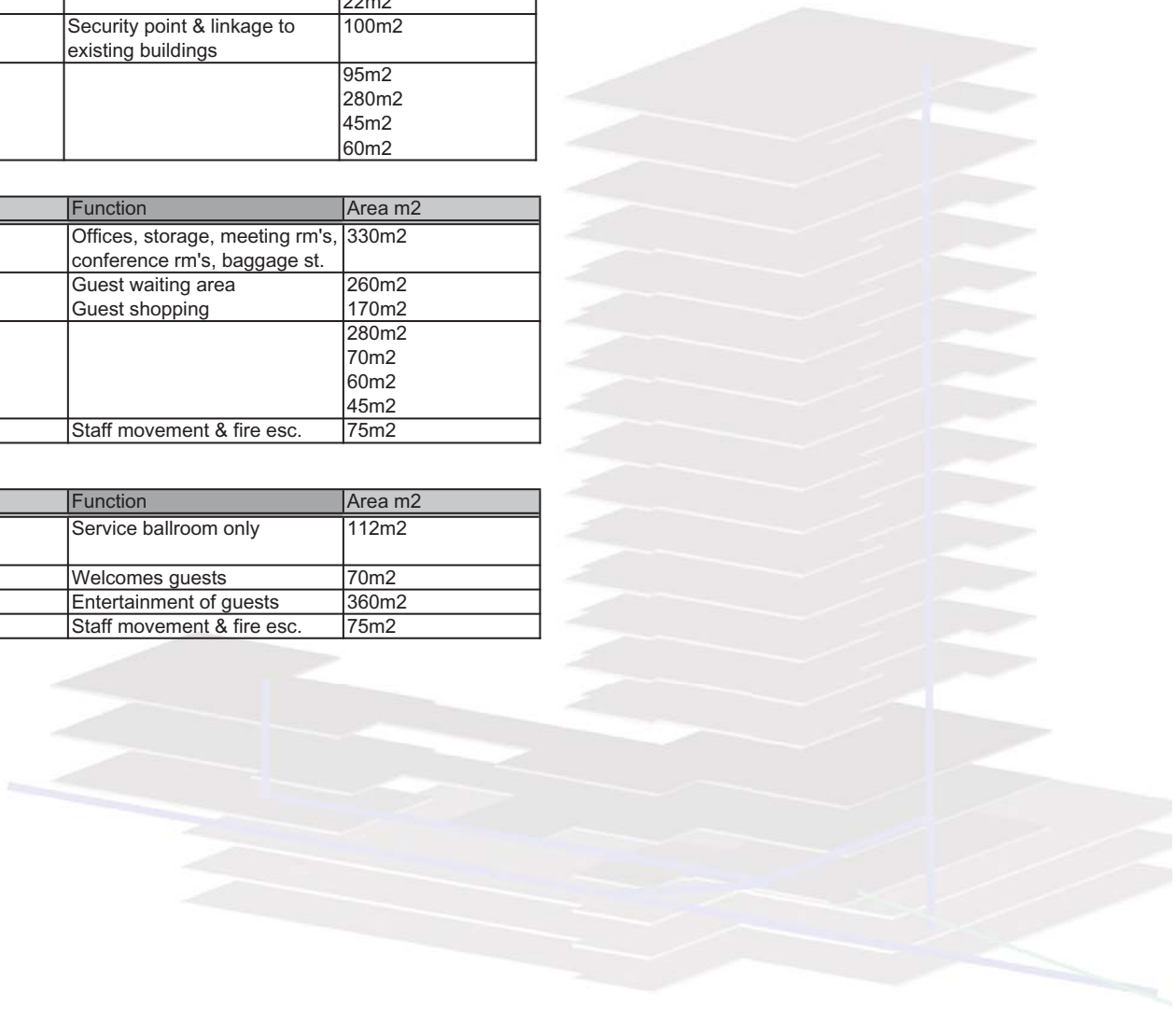
Floor Level	Component	Facility	Function	Area m2
Basement- Mezzanine	Mechanical & Electrical	Plant room		35m2
		Air handling rooms		52m2
		Fan & Exhaust		20m2
		Grease trap		6m2
	Parking	xx Bays		
	Services	Service ducts		
		Fire escapes x3		
		Service lobby		16m2
		Store rooms		25m2
	Food & Preparation & storage	Main Kitchen	Bulk food processing	210 m2
		Store rooms inc. c/r & d/f		130m2
		Pastry & Bakery	Bakery for hotel	55m2
		Cafeteria Kitchen	Staff services	26m2
		Offices	F&B manager & chef	18m2
	Employees	Change rooms (m&f)		130m2
		Bathrooms (m&f)		35m2
		Administration	Offices for training	75m2
		Cafeterias inc. ent. Rm.	For staff & Contract workers	95m2
		Staff entrance	Staff clock in & out	15m2
	Support	Loading areas	Deliveries, loading & offices	290m2
		Garbage disposal	Waste compacting & storage	100m2
		Ramps	Ent & exit from basement	165m2
	Housekeeping & Laundry	Laundry production	Office, storage & production area for hotel linen	90m2
		Housekeeping	Storage & issue of linen	25m2
		Uniform issue	Store & issue to employees	18m2

Floor Level	Component	Facility	Function	Area m2
Ground Floor Layout	Outdoor	Forecourt	Porte Cochere & parking	100m2
	Coffee shop			145m2
	Business centre	Pre- function	Reception, foyer & exhibition	175m2
		Break away rooms		45m2
		Conference room		180m2
		Bathrooms (m/f)		72m2
	Service area & general public entrance	Entrances	Security point & linkage to existing buildings	100m2
	Public- hotel	Main foyer		110m2
		Reception check point		30m2
		Lobby		22m2
	Retail	Shops	Public shopping	435m2
		Offices	Staff work areas	45m2
	Entrance to restaurant	Lobby	Controlled entrance & exit	40m2

Floor Level	Component	Facility	Function	Area m2
First Floor Layout	Business centre	Double volume Break away rooms Conference room Bathrooms (m/f) Lobby		160m2 210m2 180m2 72m2 22m2
	Service area & general public entrance	Entrances	Security point & linkage to existing buildings	100m2
	Restaurant	Lounge Dinning Service kitchen Bathrooms		95m2 280m2 45m2 60m2

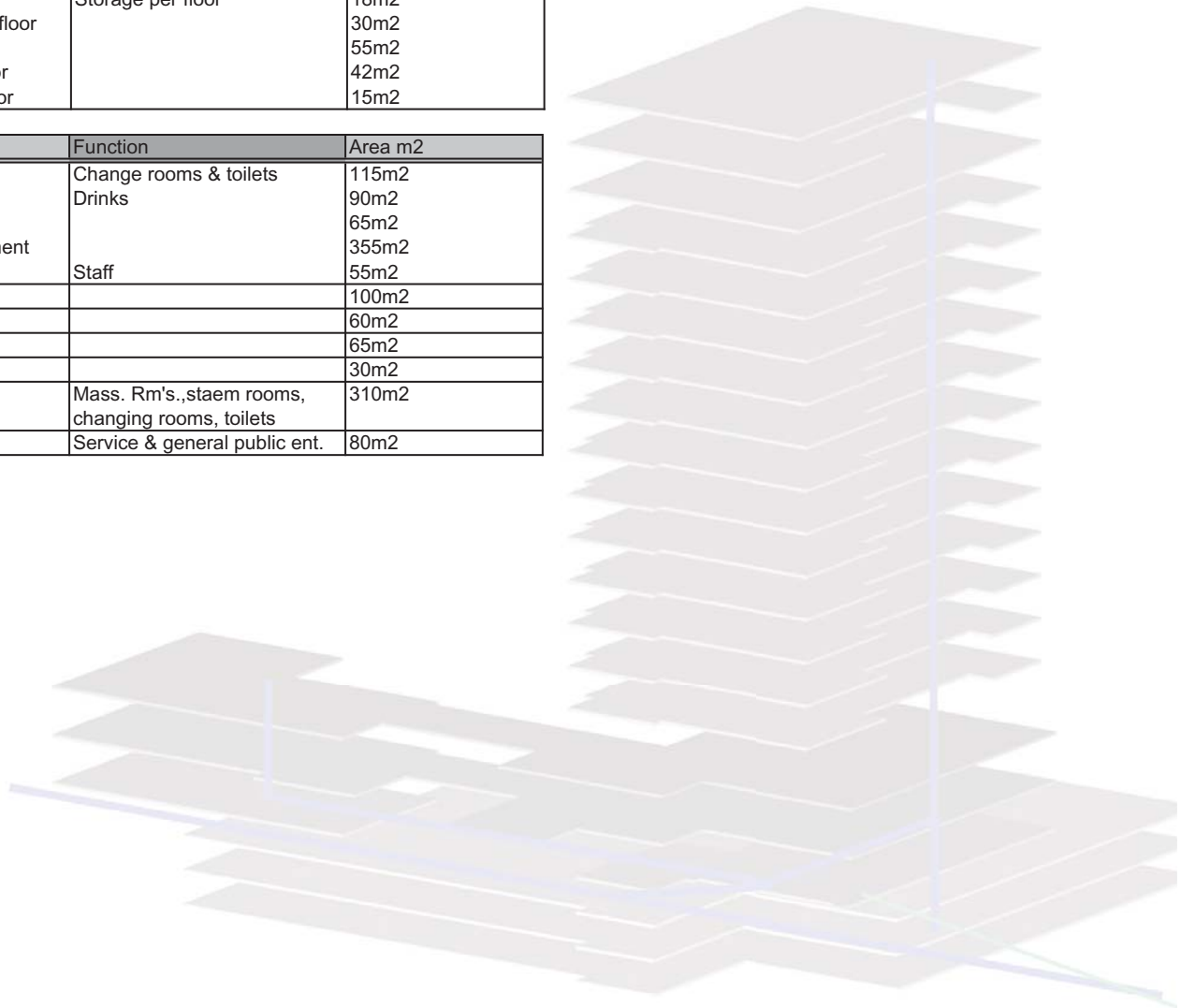
Floor Level	Component	Facility	Function	Area m2
Second Floor Layout	Support	Administration	Offices, storage, meeting rm's, conference rm's, baggage st.	330m2
	Public- hotel reception	Lounge Shops	Guest waiting area Guest shopping	260m2 170m2
	Restaurant	Dinning Bar & seating Bathrooms (m/f) Service kitchen		280m2 70m2 60m2 45m2
	Service area	Service lobby	Staff movement & fire esc.	75m2

Floor Level	Component	Facility	Function	Area m2
Ballroom Layout	Food & Preparation & storage	Service kitchen	Service ballroom only	112m2
	Entrance foyer	Reception	Welcomes guests	70m2
	Seating & dance area	Function space	Entertainment of guests	360m2
	Service area	Service lobby	Staff movement & fire esc.	75m2



Floor Level	Component	Facility	Function	Area m2
Guest Room Floors	Guest room types	Single	1 Bay	36m2
		Double	1 Bay	72m2
		Handicapped	1 Bay	36m2
	Suites	Duplex suites	One per floor	72m2
		Presidential	2	170m2
	Support	Housekeeping	Storage per floor	18m2
		Passenger lobby/ floor		30m2
		Guest foyer/ floor		55m2
		Service lobby/ floor		42m2
		Service shafts/ floor		15m2

Floor Level	Component	Facility	Function	Area m2
Gym and Wellness Centre	Gym x2	Bathrooms (m/f)	Change rooms & toilets	115m2
		Pool lounge	Drinks	90m2
		Entrance foyer		65m2
		Gym area- equipment		355m2
		Offices	Staff	55m2
	Wellness	Health bar		100m2
		Entrance foyer		60m2
		Aerobics		65m2
		Store rooms		30m2
		Wellness Centre	Mass. Rm's.,staem rooms, changing rooms, toilets	310m2
	Service area	Service lobby	Service & general public ent.	80m2



DESIGN PRINCIPLES

Figure 6 -1

Thresholds should act as shared environments (meeting places) or transitional space between public and private space.

Figure 6 -2

Enhance the visibility and legibility of the relationship and the transition between private and public domains (Rappaport 1977, p 23).

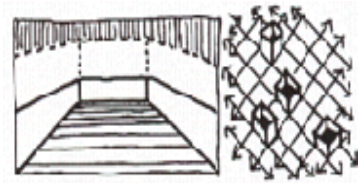


Figure 6 -3

Enclosure is needed for the public space to act as an urban room.

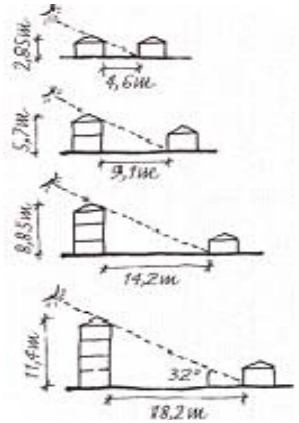


Figure 6 -4

To provide adequate solar access to a building, the distance between two buildings should be determined with the following: tan (latitude of the area + 10°) divided by the height of the adjacent building to the north.

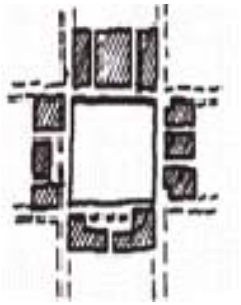


Figure 6 -5

Concentrate buildings with public facilities, amenities and collective service points adjacent to public spaces.

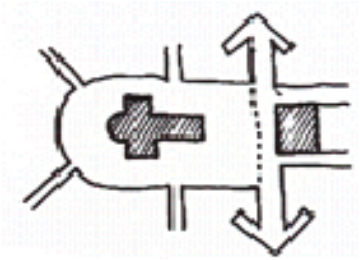


Figure 6 -6

Locate public building in relation to formal public spaces and important movement routes. Hard open space should announce the buildings and accommodate informal activities that respond to these buildings.

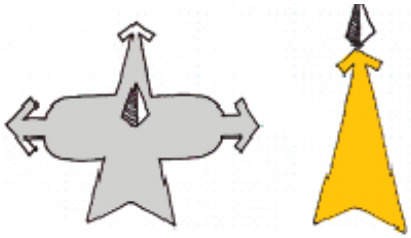


Figure 6 -7

BALANCE THE COMPOSITION OF BUILDING GROUPS, AND PLACE THE FOCAL POINT NEAR THE MIDDLE OF THE GROUP.
LOCATE SYMBOLIC AND/OR FOCAL POINTS IN THE MIDDLE OF A CLUSTER SPACE OR AT THE TERMINATION POINTS OF A LINEAR SPACE.

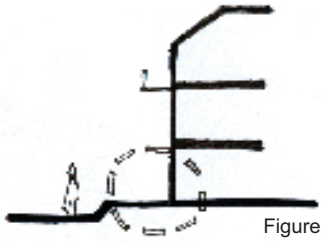


Figure 6 -8

THRESHOLDS SHOULD ACT AS SHARED ENVIRONMENTS (MEETING PLACES) OR TRANSITIONAL SPACE BETWEEN PUBLIC AND PRIVATE SPACE.

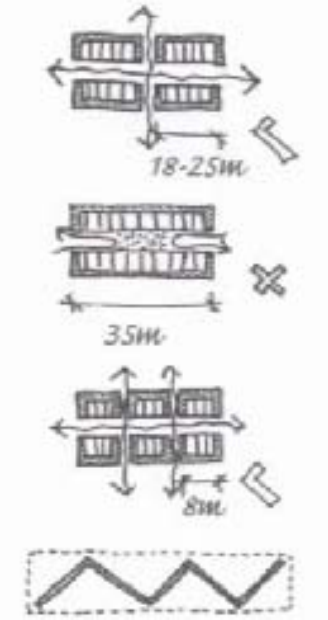


Figure 6 -9

In markets, dead space and stall facades longer than 35m, should be avoided. Shorter blocks between 18 and 25m are more appropriate (Behrens and Watson 1996, p215), with 8000mm being the optimum length for functionality and permeability. A zigzag layout can effectively facilitate movement on both sides.

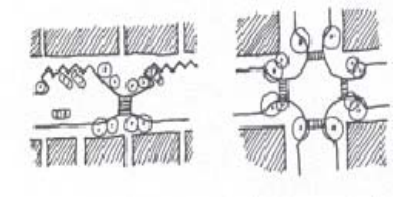


Figure 6 -10

Intersections and road crossings should be designed to be safe for pedestrians and vehicles. This includes the design of sidewalks and crosswalks, traffic signals and other intersection treatment.

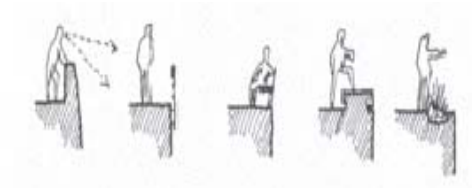


Figure 6 -11

The building façade should be linked to human activities along the route to ensure visibility of pedestrians and thus surveillance of the street. Surveillance of the street should also be facilitated from the upper storeys. The way this edge is made will also determine the feeling of the upper storey-space.

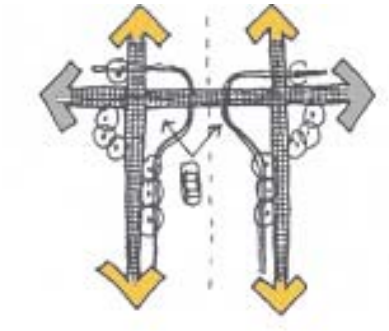


Figure 6 -12

Access for vehicles should be made difficult.

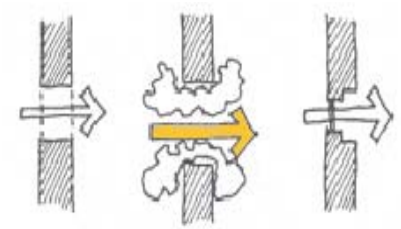


Figure 6 -13

Transition from public to private space should be appropriately made through the provision of perceptual locks. This will continue to the clear distinction between and definition of public and private spaces.

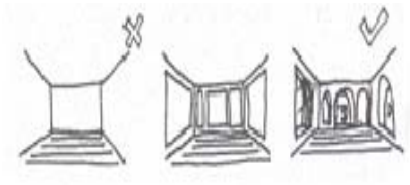


Figure 6 -14

Establish a boundary which can be a wall, windowed façade or natural features such as trees. Do not design large expanses of blank walls.

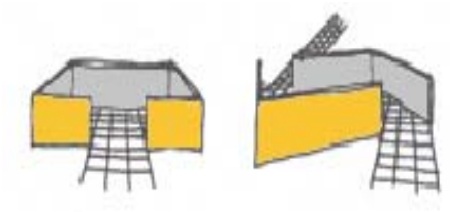


Figure 6 -15

Enhance the sense of enclosure with unity in walls and similar architectural treatment of buildings (Mouhtin 1992, p 72). Local styles and materials should be used consistently.

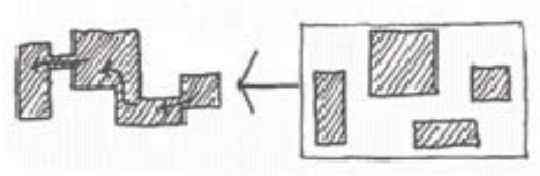


Figure 6 -16

Provide physical visible and perceptual connectivity between cluster and linear open spaces. Establish strong and legible linkages with various hard open spaces.

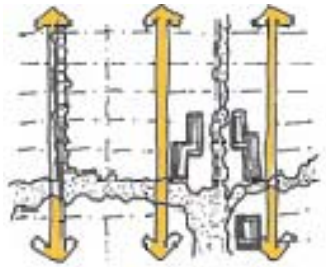


Figure 6 -17

Align the hard open space system and soft open space system with main public buildings, such as community centers or places of worship.

Figure 6 -18

Ensure quality of contextual linkages through the continuation of special activities or functions.

Figure 6 -19

Enhance structural similarity of the street through associational symbolism (personal experience) and cultural symbolism (common areas of the understanding of culture) to ensure that as many people as possible can relate to the space.

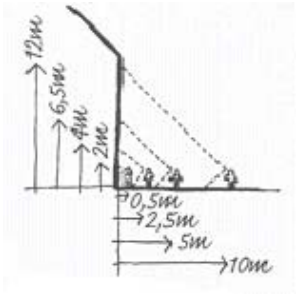


Figure 6 -19

Height of detail on buildings that could be appreciated from certain distances away from the façade:

-Up to 2,0m high to be appreciated from 0,5m away.
-Up to 4,0m high to be appreciated from 2,5m away.
-Up to 6,5m high to be appreciated from 5.0m away.
-Up to 12,0m high to be appreciated from 10,0m away.

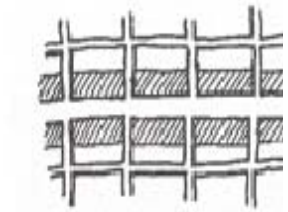


Figure 6 -20

Concentrate intensive activities along continuous vehicle-orientated and public-transport routes. Locate majority of public buildings also along these routes

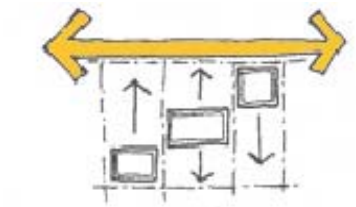


Figure6 -21

Distinguish between so-called front-and-back uses and definition, which take place within the street realm, but which differ for various urban users and cultures.

Figure 6 -22

Enclosure depends on the way buildings are grouped. Create a sense of enclosure, especially on corners, otherwise space gets fragmented.

DESIGN DEVELOPMENT

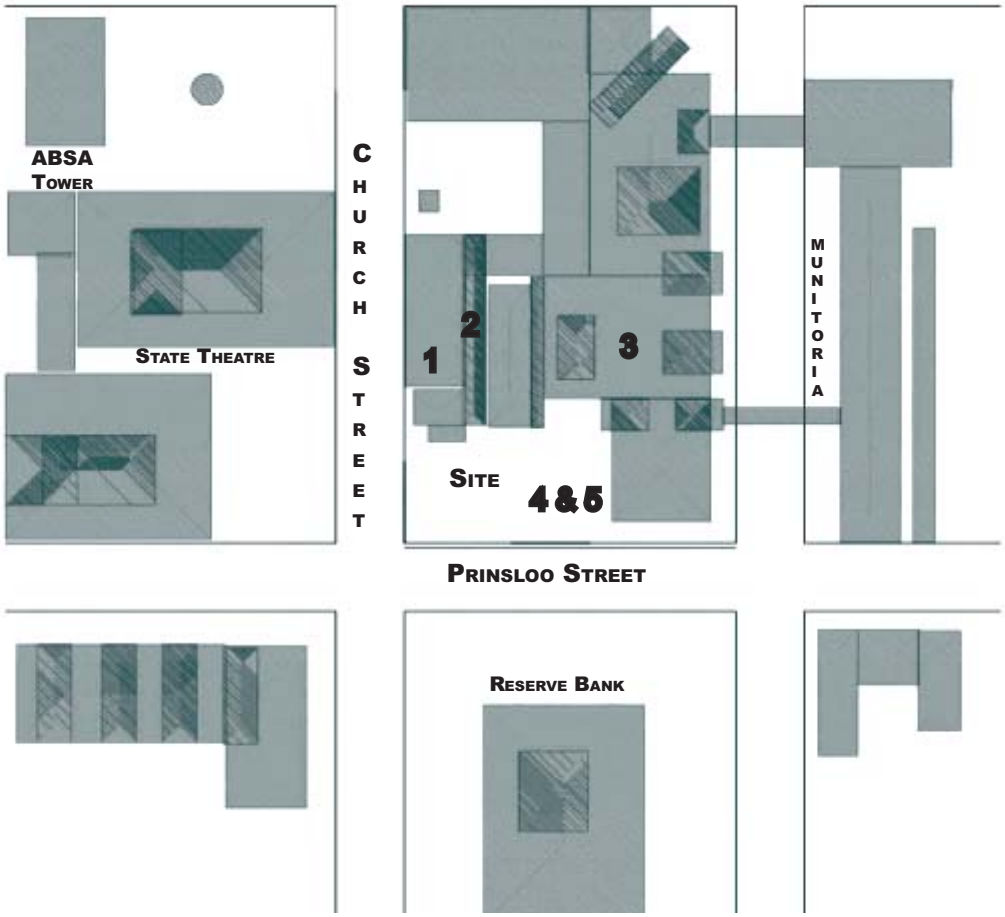


Figure 7 -1

The general idea is to create a building that will help to restore the lateral reference to the site. To create a space with a sense of enclosure and still be permeability the high amount of pedestrians walking un-orientated through the site, the new development will have to interact on various levels with the public and not repeat the mistakes the reserve bank as wall as the state theatre. These two buildings are big islands in the heart of the city and is only accessible to a certain kind of people at a certain time of day. This causes a dead area in a very important part of the Inner City. Buildings should not be designed in such a way the general public be excluded in these areas, but rather to incorporate them to ensure good interaction and mutual benefit of people.

5 Elements had to be kept into consideration during the design, namely:

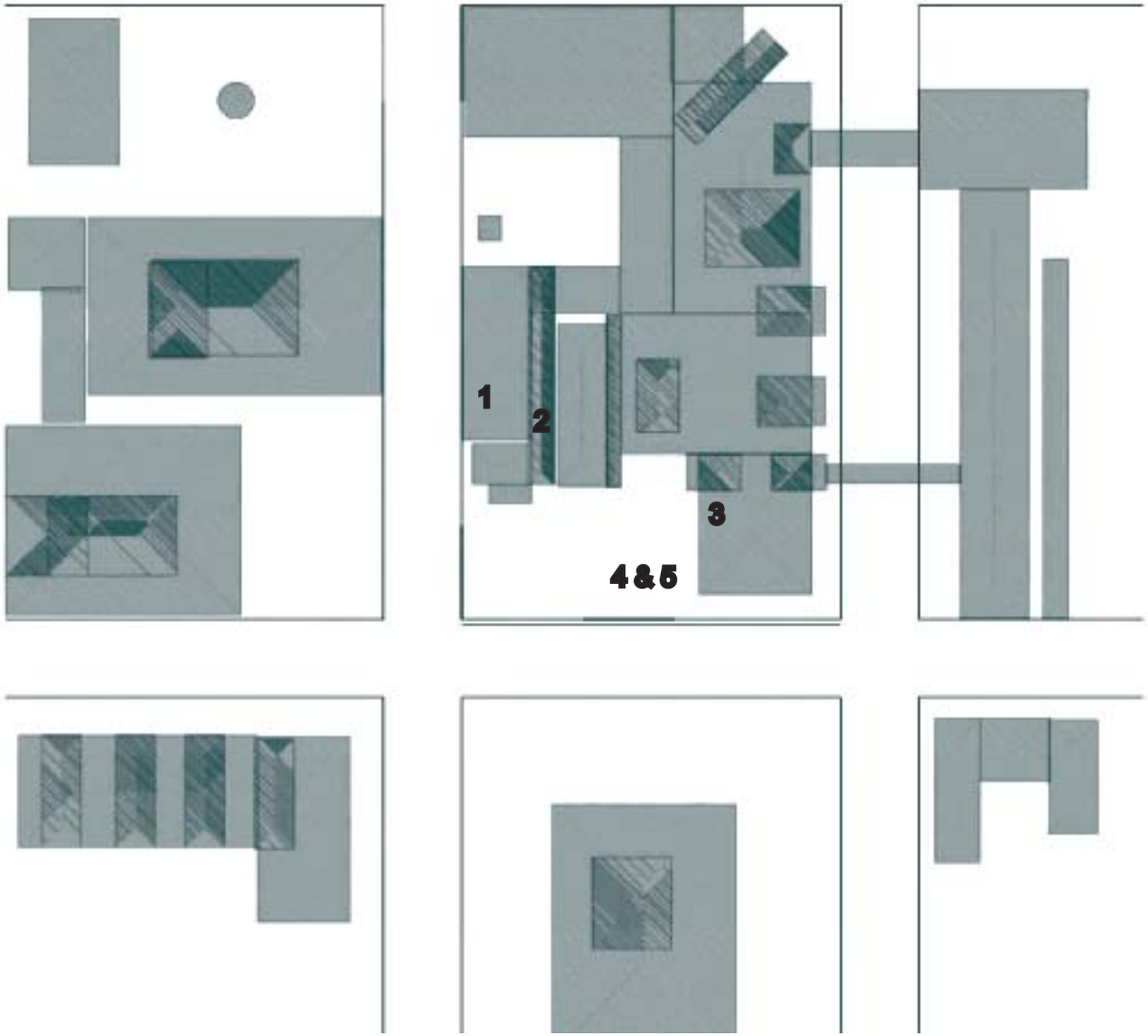
1.) The historic Sammy Marks buildings on Church Street. These buildings faces the pedestrianized Church Street and because of this have a very active retail component on the ground floors. As you move towards Prinsloo Street this shopping experience falls apart.

2.) The arcade (made with steel arches) linking Sammy Marks Square with the site. This arcade is currently been used for informal traders. It is also the entrance to the City Library and basement parking. This arcade takes a lot of movement and divides the site, on exit, into two portions. When exiting the arcade you are left with this magnificent view of the reserve bank and its shear scale. After this people wander around in confusion and usually falls victims of crime.

3.) Sammy Marks Development, hosting a verity of tenants.These include the Health Department, Inner City Planning Department as well as offices with conference facilities on the first floor, all of which faces the site. This was not seen as a constraint, but rather to give the new development as much variety as possible.

4.)The existing parking entrance & exit. This is at a lower point on the northern side of the site, with the floor been cut back to accommodate enough head height for vehicles using the ramp from and to the basement.

5.)The existing reinforced column grid stikking out at floor level. This grid is at a distance of 8.5 x 8m and is designed for a 23- story building (see techincal).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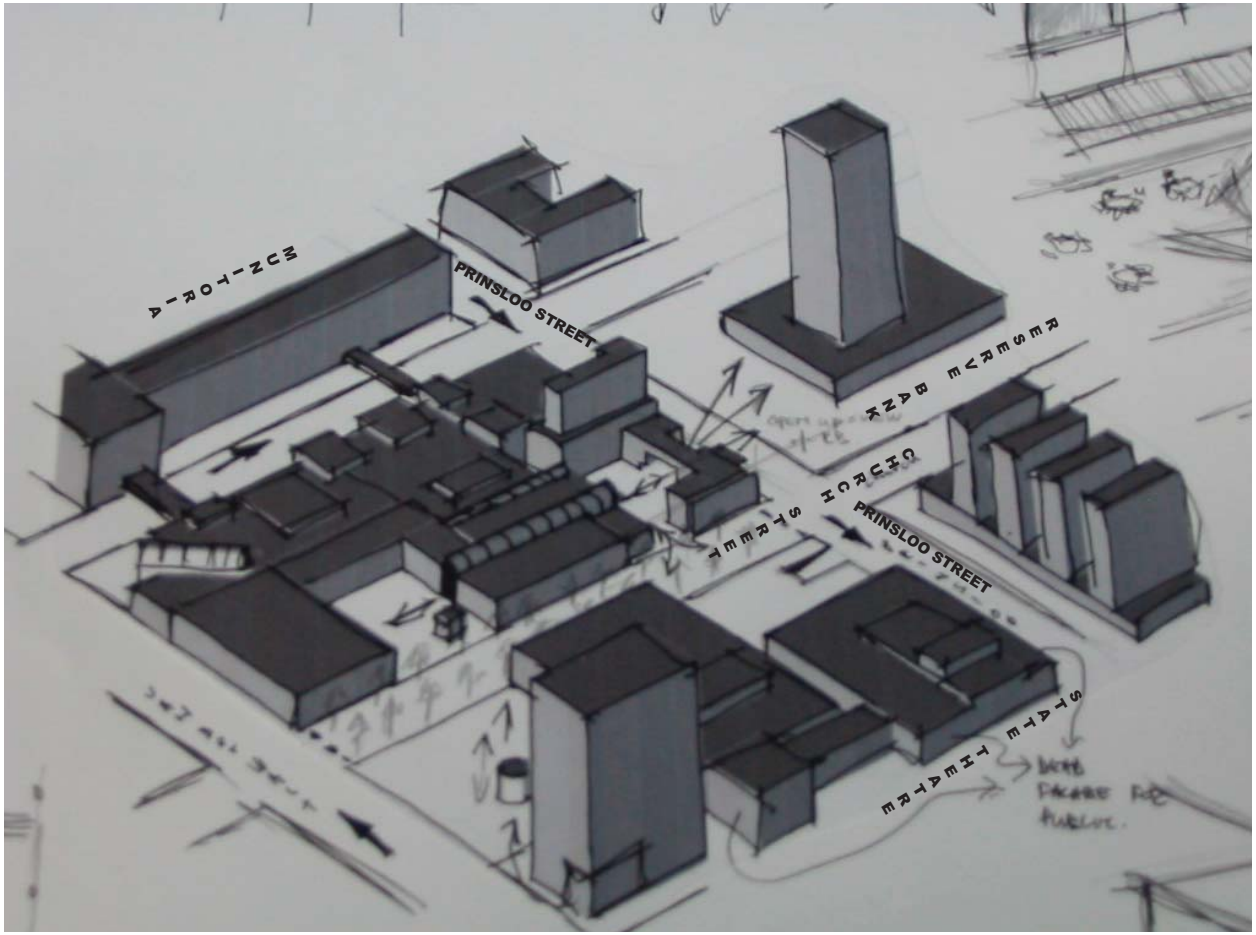
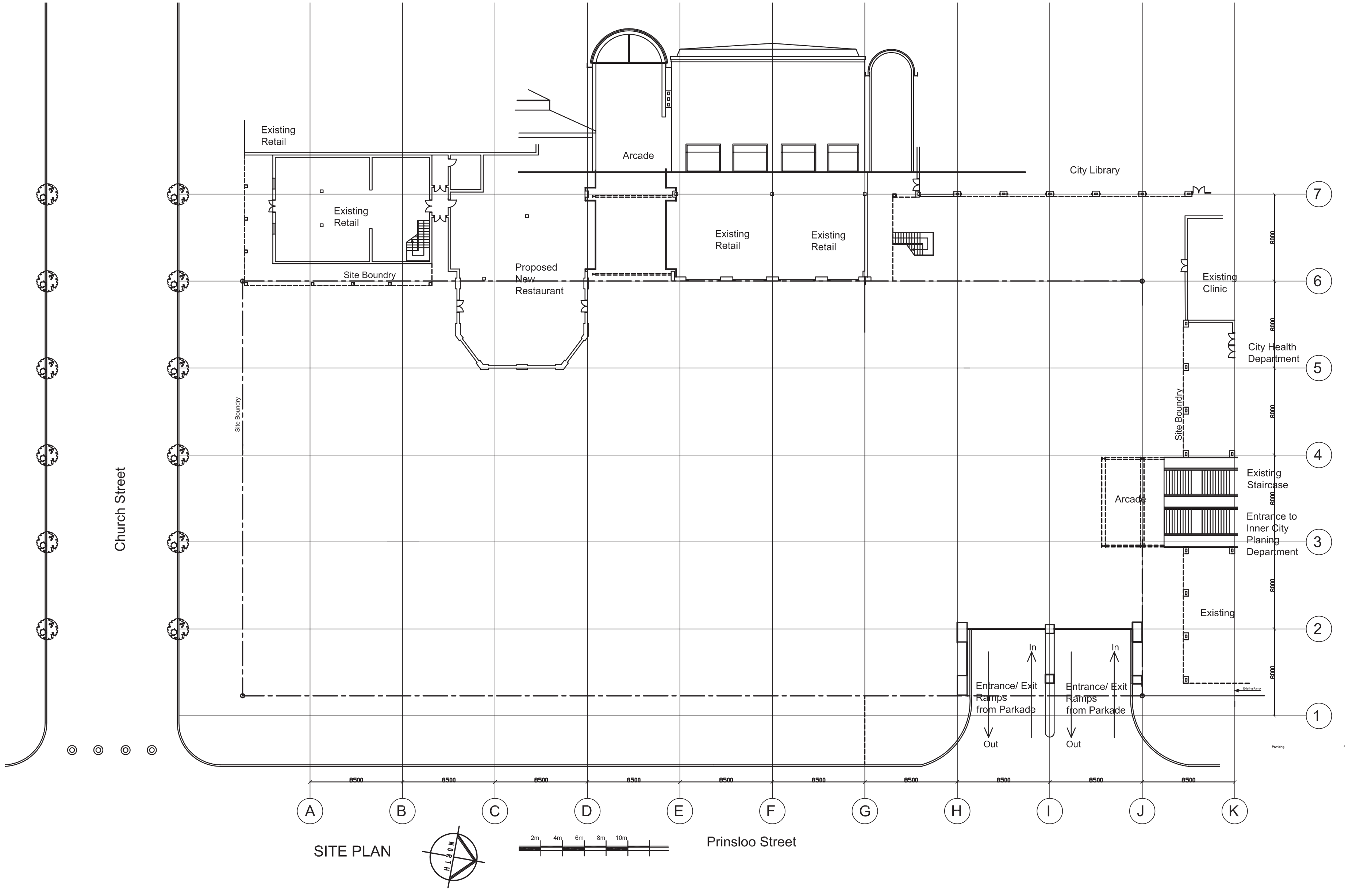


Figure 7 -2



Existing Retail
Arcade
City Library
Existing Retail
Existing Retail
Existing Retail
Site Boundry
Proposed New Restaurant
Existing Clinic
City Health Department
Site Boundry
Site Boundry
Church Street
Existing Staircase
Arcade
Entrance to Inner City Planing Department
Existing
In
In
Entrance/ Exit Ramps from Parkade
Entrance/ Exit Ramps from Parkade
Out
Out
8500
A
B
C
D
E
F
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1
2
3
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6
7
SITE PLAN
2m
4m
6m
8m
10m
Prinsloo Street

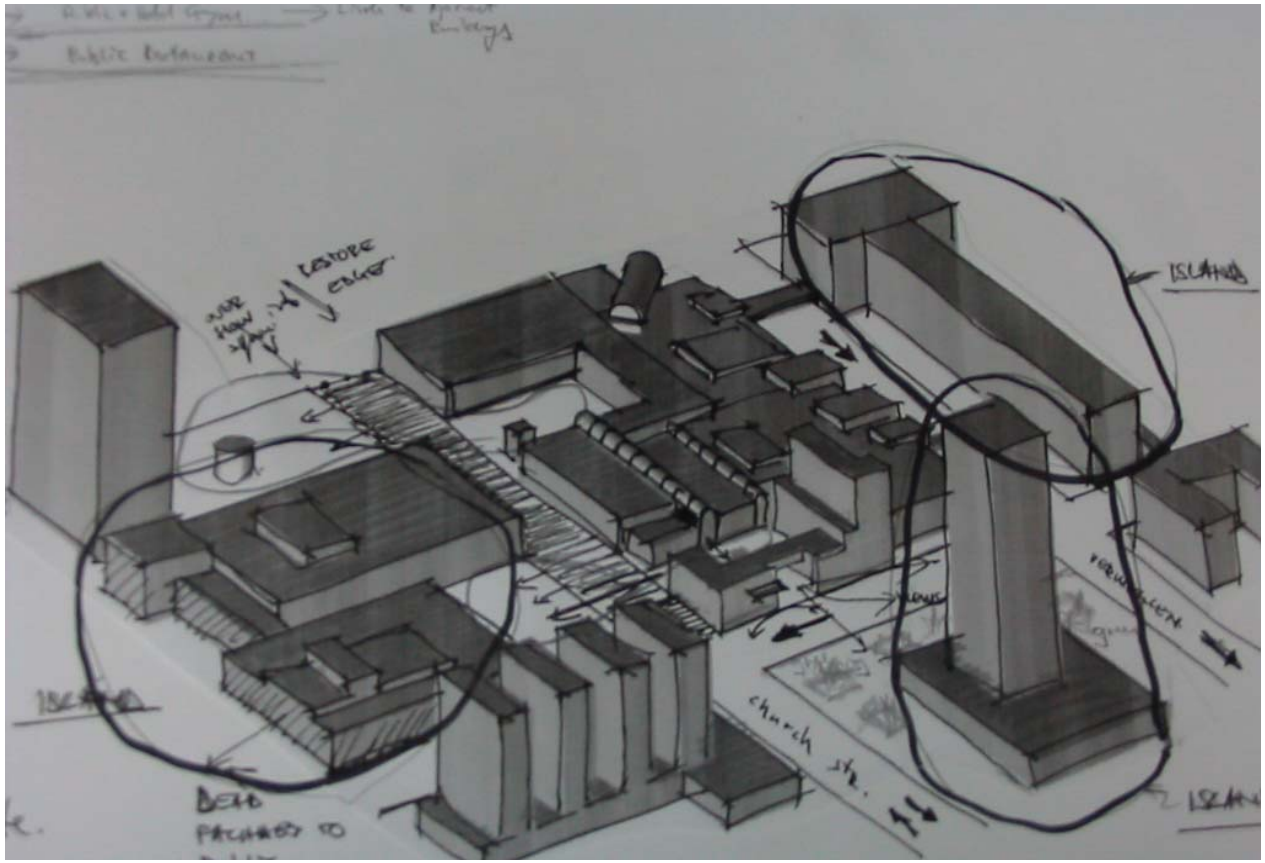
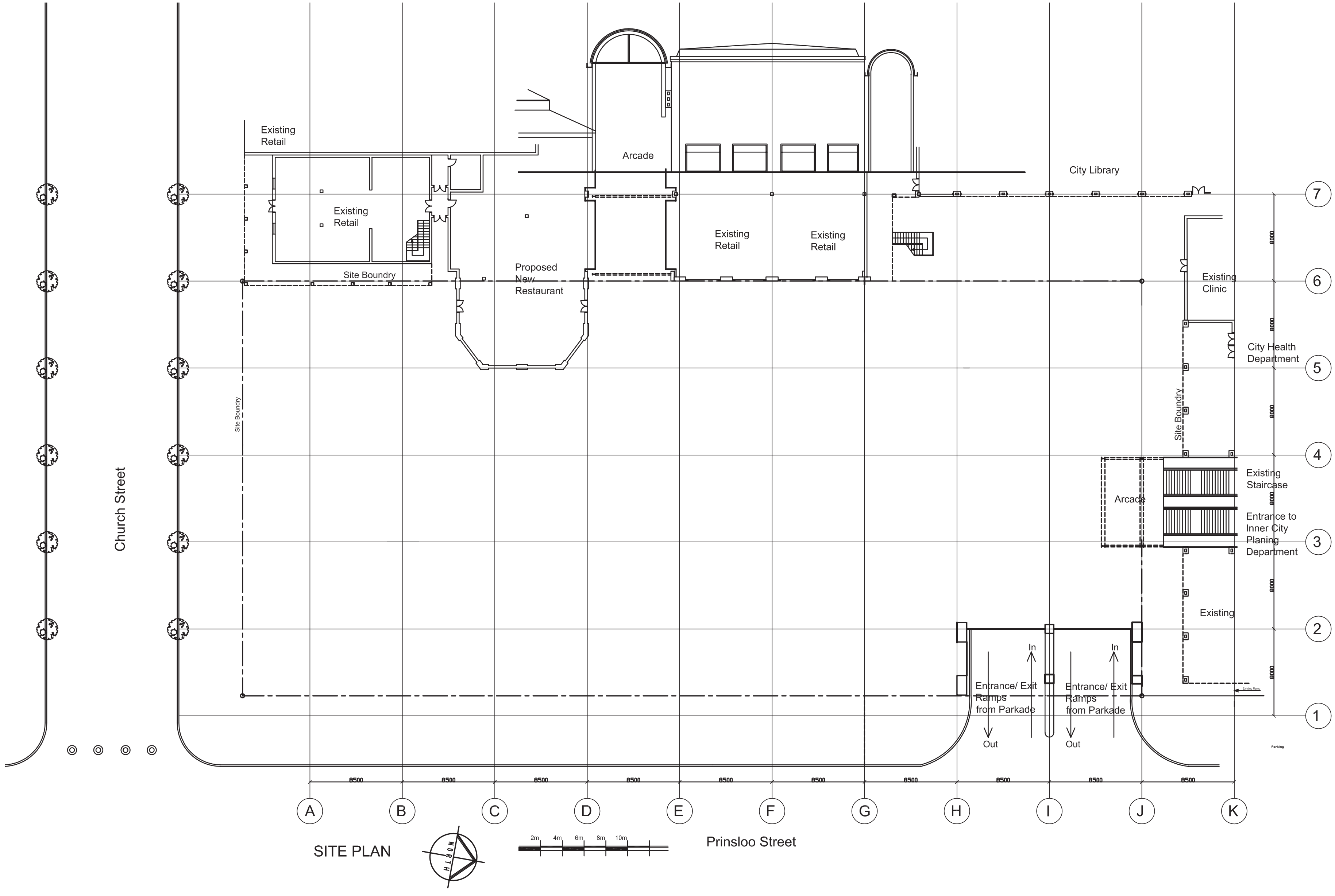


Figure 7 -3


Existing Retail
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Existing Retail
Site Boundry
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City Health Department
Site Boundry
Church Street
Existing Staircase
Arcade
Entrance to Inner City Planing Department
Existing
In
In
Entrance/ Exit Ramps from Parkade
Entrance/ Exit Ramps from Parkade
Out
Out
7
6
5
4
3
2
1
A
B
C
D
E
F
G
H
I
J
K
Prinsloo Street
2m
4m
6m
8m
10m

SITE PLAN

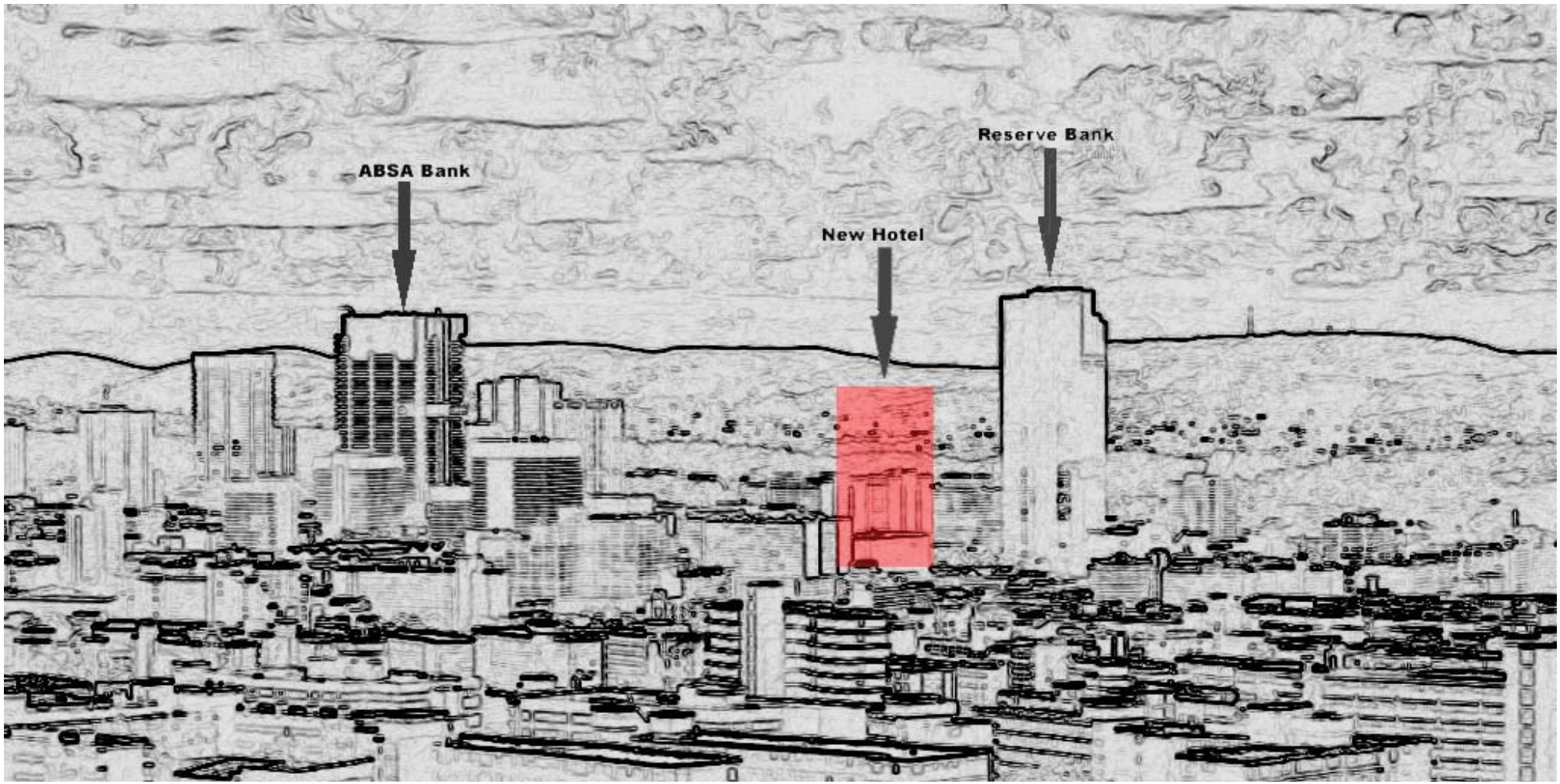


Figure 7 -4 Skyline of Pretoria

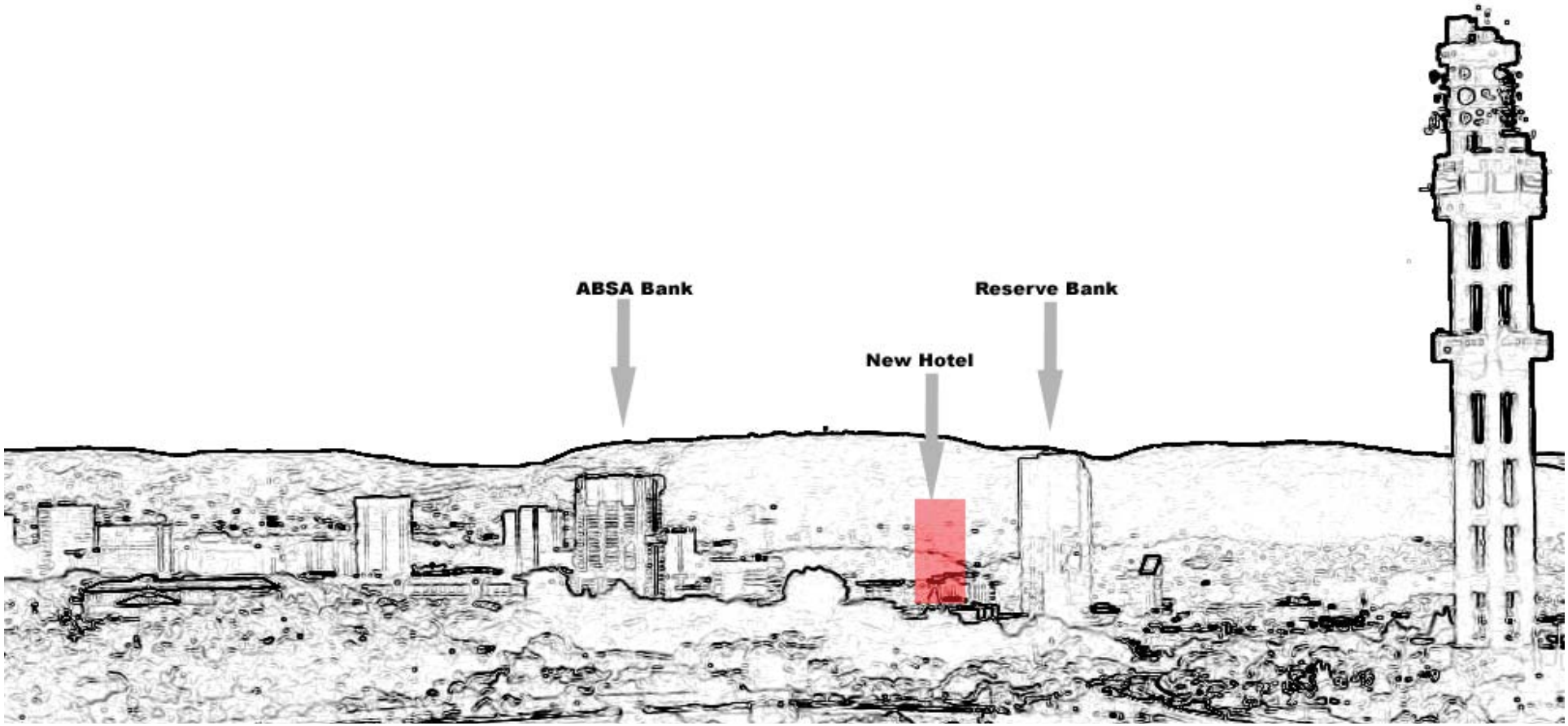
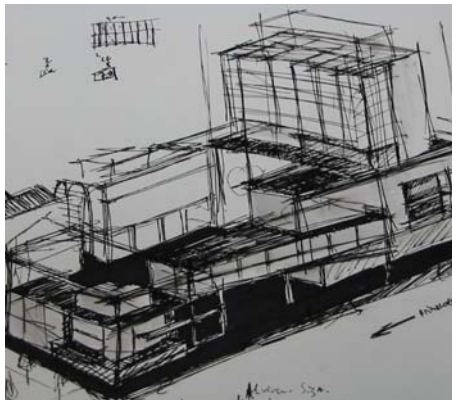
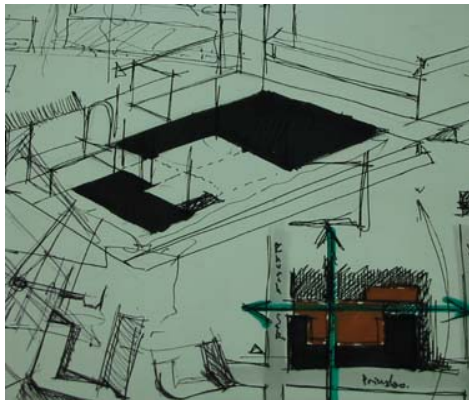
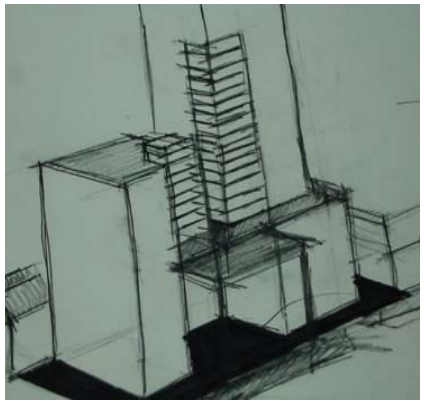


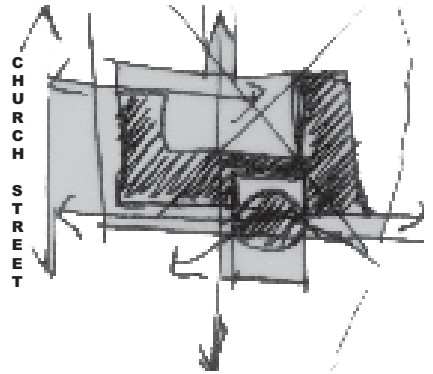
Figure 7 -5 Skyline of Pretoria

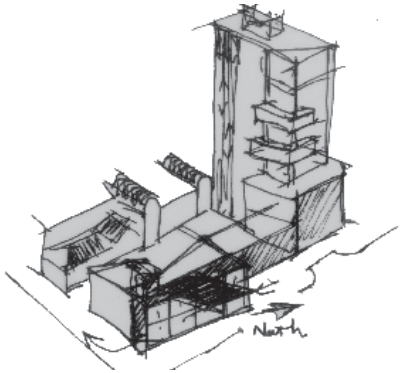
CONCEPT WORK

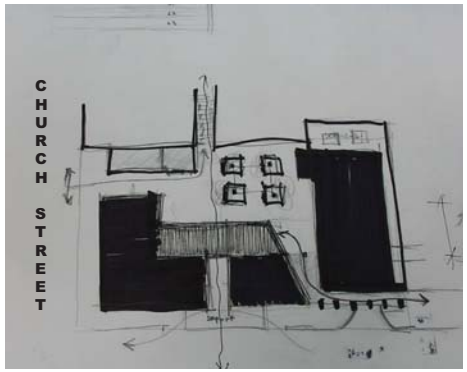


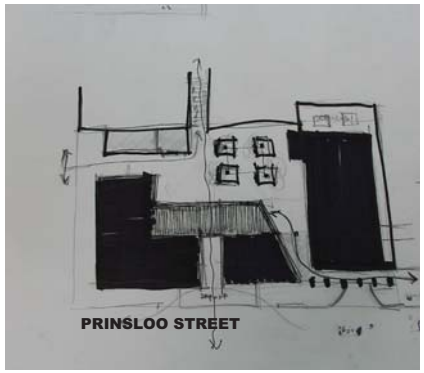


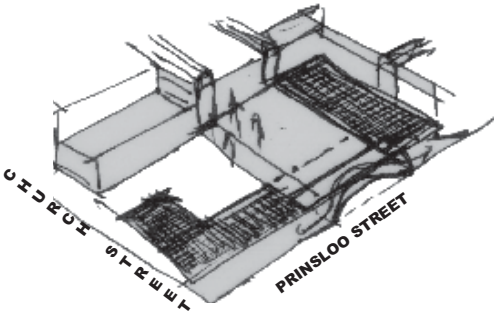


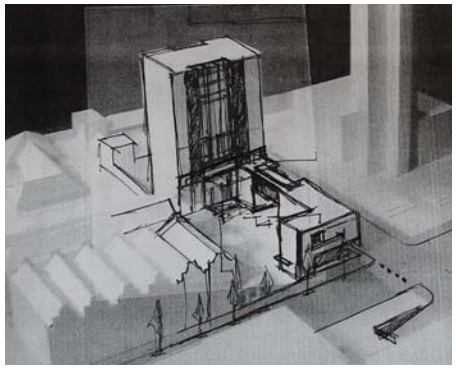


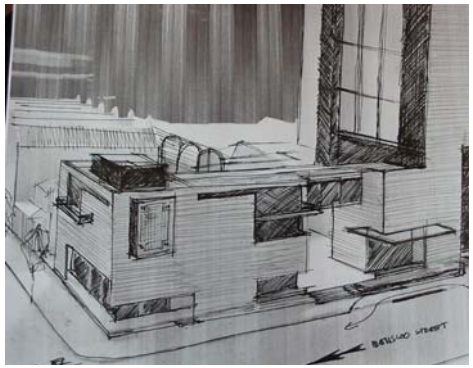


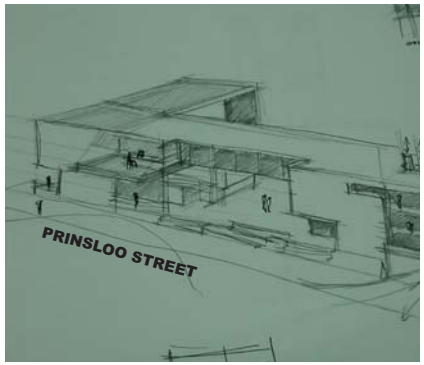


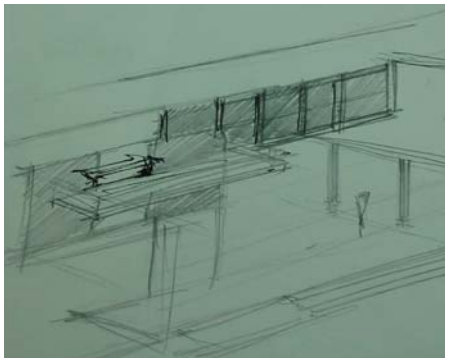


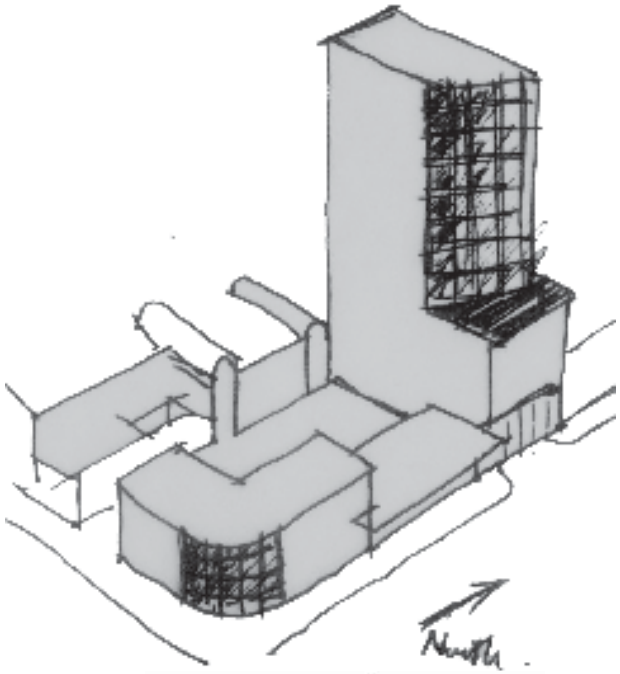


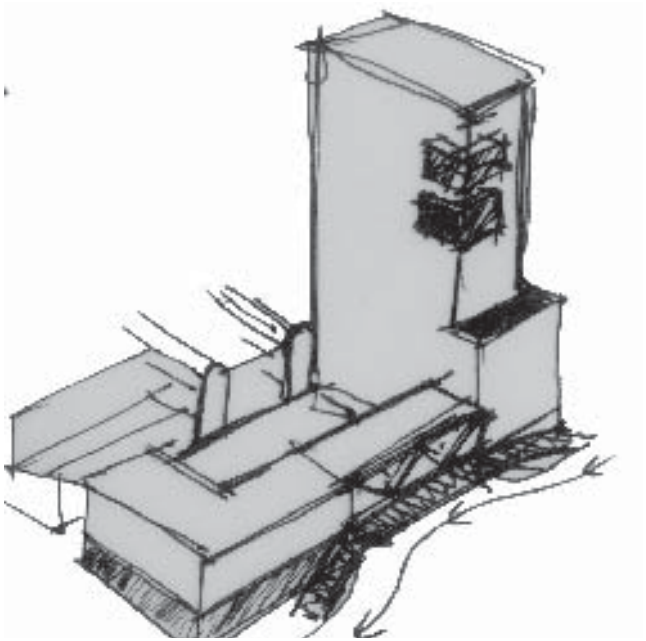


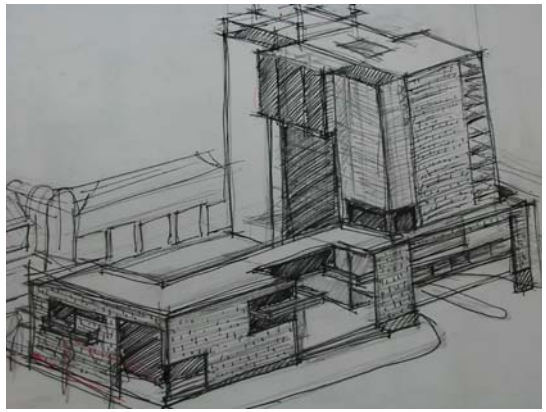


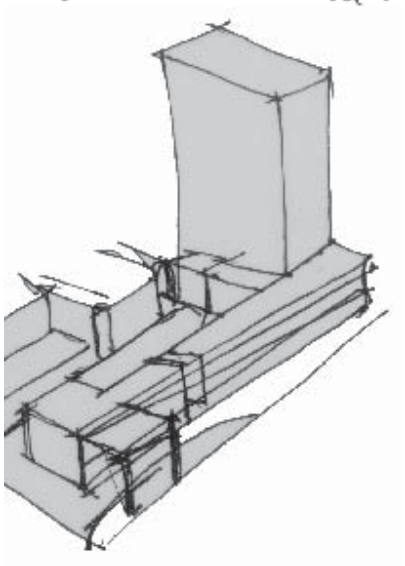


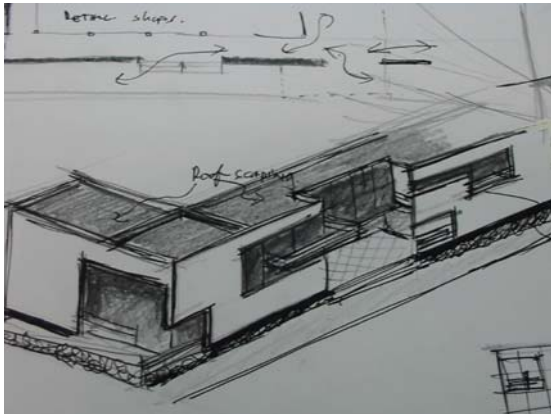


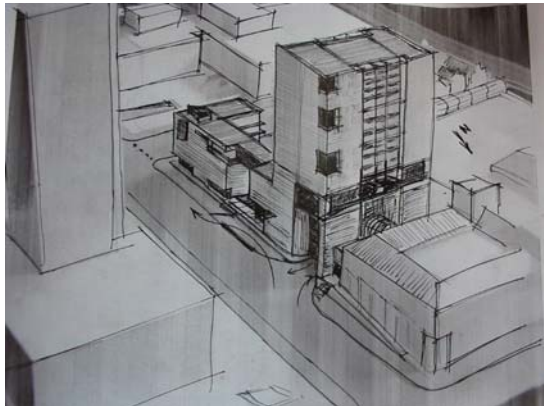












SPATIAL ORGANIZATION

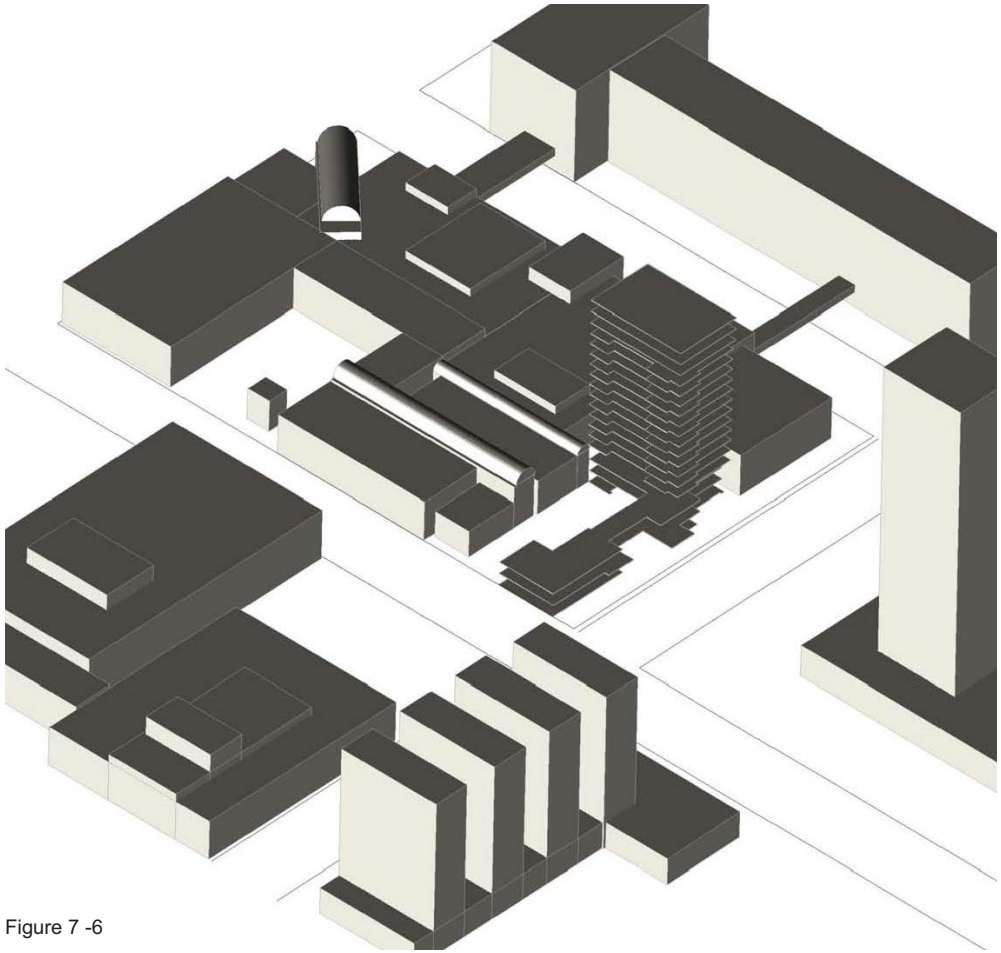


Figure 7 -6

The development is placed against the site's perimeter to restore the edge alongside Prinsloo Street. This will act as a lateral reference in the area.
A reletively small retail and restaurant component was placed on the corner of the site close to of the historical buildings, continuing their functions, height and materials into the new development. Because of the pedestrianized ceremonial Church Street the scale of development in this region should be kept to a minimum. Pedestrian movement will still take place along the historical buildings by providing enough space between the new and old buildings. This will ensure the interaction of the public both with the old and the new developments and so preventing dead facades.

A link between the corner building to the hotel tower was needed because of the fact that the hotel restaurant was situated on the second floor of the corner building, overlooking the activities on Church Street. A bridge was designed for this purpose, such to keep the view of the reserve bank when exiting the arcade of Sammy Marks Square and giving reference to the two bridges linking Munitoria with Sammy Marks.This bridge will be mostly of glass, which will also host the hotel lounge and bar area that will overlook the reserve bank and Prinsloo Street.

the height of the hotel tower that contains the wellness centre, business centre and hotel rooms was choosen such that it formed a nice transition from the reserve bank building to the munitoria building.

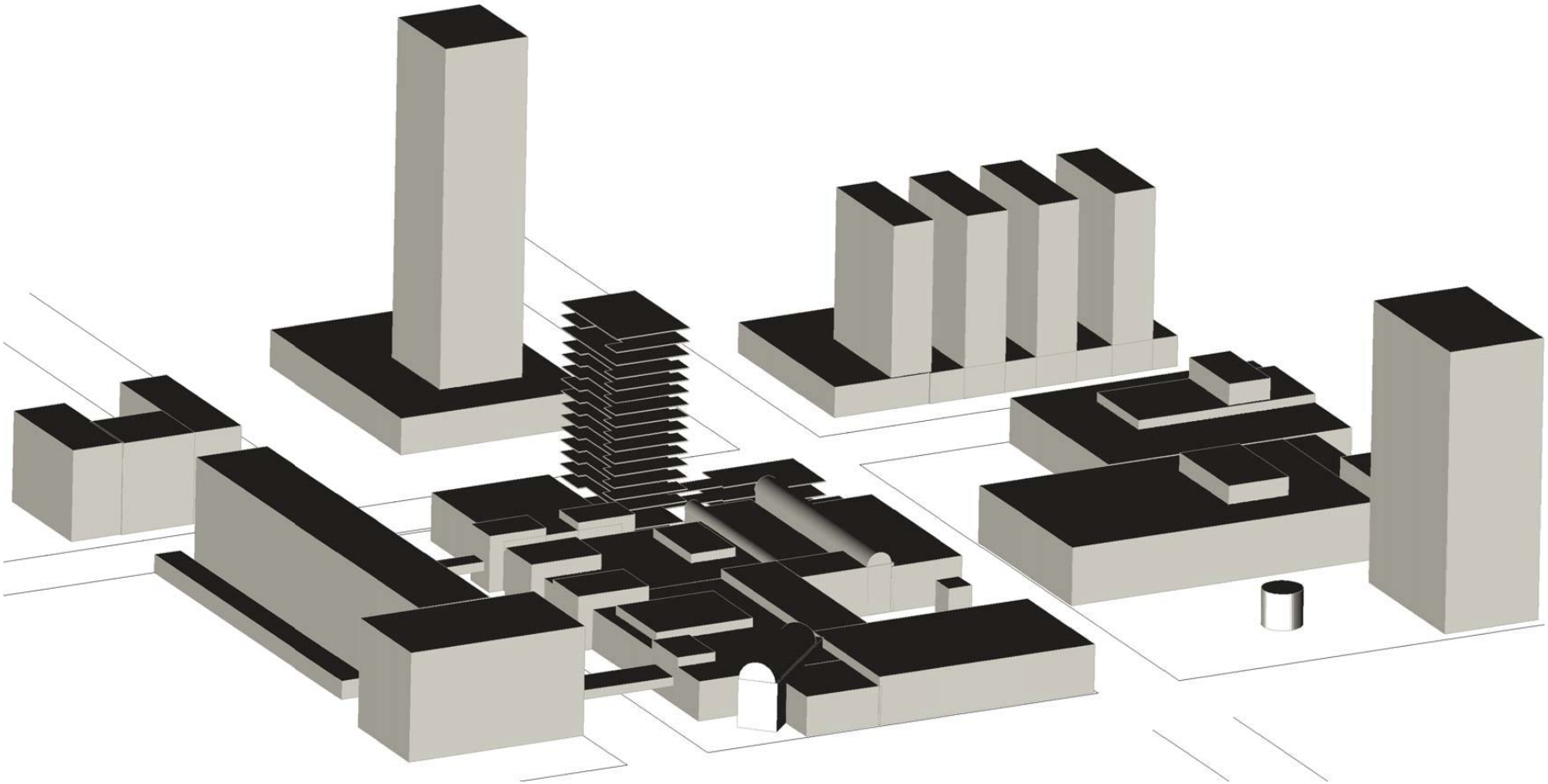


Figure 7 -7

MOVEMENT IN HOTEL

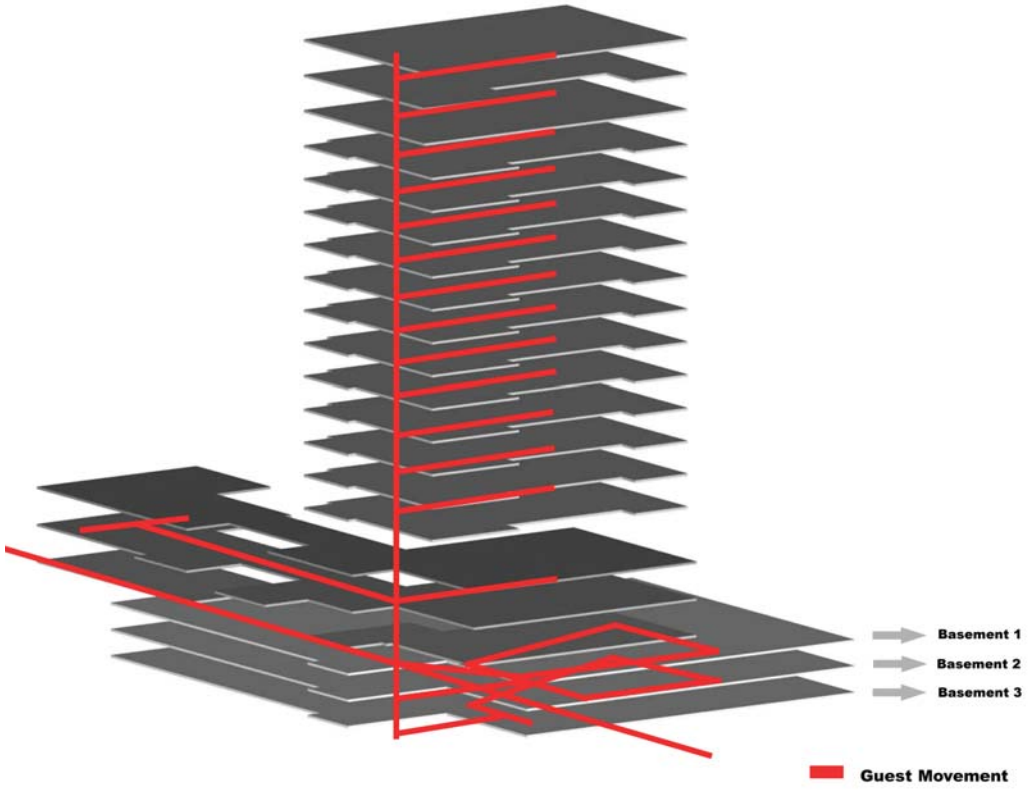


Figure 7 -8

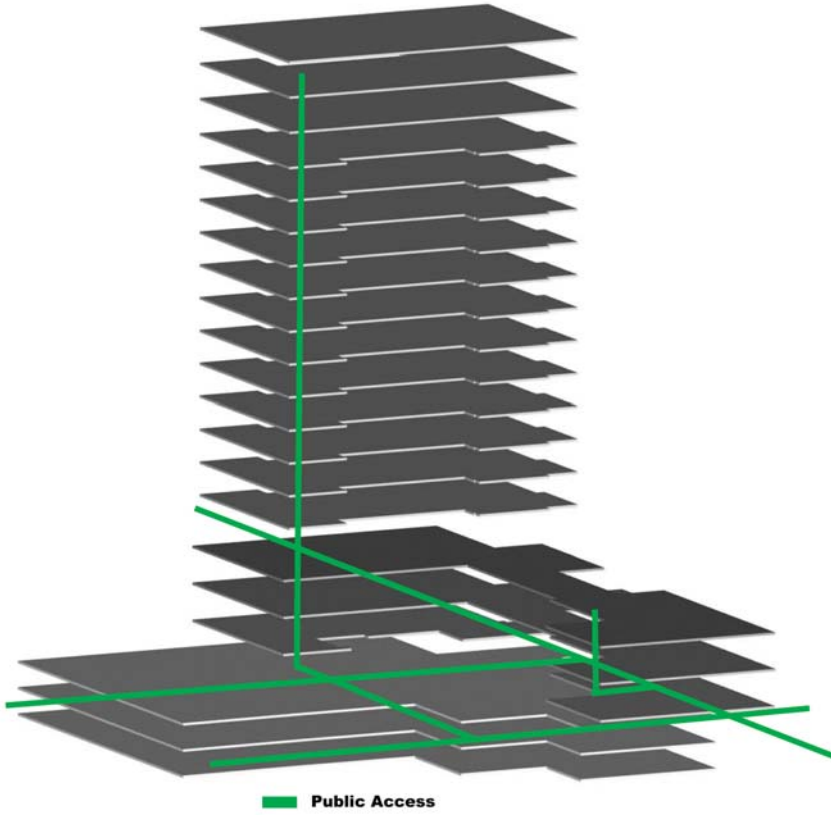


Figure 7 -9

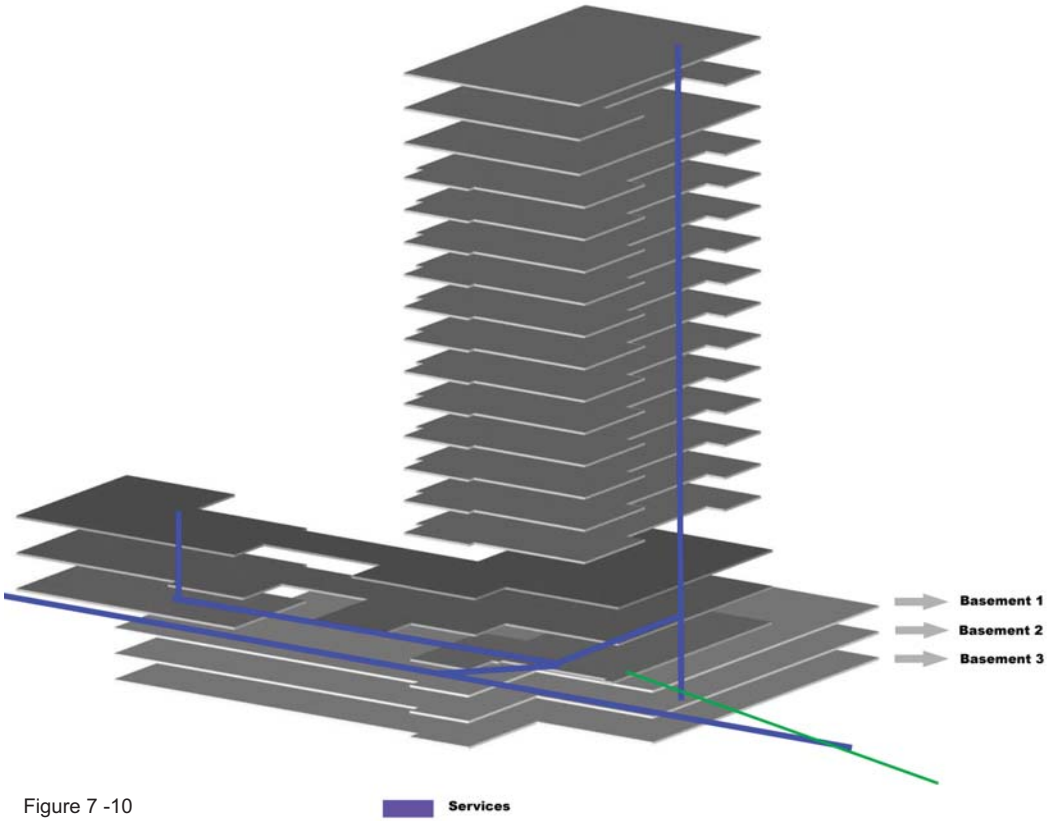


Figure 7 -10

BASEMENT

The three existing basements were used for the hotel's general functioning and guest parking. As this included an existing column layout, careful planning was needed to work around this. Firstly, the decision was made to separate the service and delivery areas from the guest entrance as well as from the rest of Sammy Marks development. This was one of the most important design considerations to keep services and hotel staff out of sight from the hotel guests. As can be seen from the diagram on the left, guest and deliveries enter the basement from Prinsloo Street and as they enter, get channeled into different areas by walls running parallel to each other. This forces the guest to continue and make use of the ramps going further down to the lower basement levels. From here the guests can enter the hotel and move to the reception on the second floor.

The vertical services were placed on the eastern and western sides of the tower block within close proximity of the delivery area and the guest drop- off. From the delivery and vertical service areas, three service corridors were provided, wide enough for trolleys and staff, linking the different functions in the basement.

The main kitchen was placed between the delivery area and the restaurants (next to Church Street). Goods get delivered and move linearly through the kitchen. From the separate storage for the dry goods and drinks, to coolers and deep freeze's, the preparation kitchen and finally to the production and a la carte areas, which will be provided with a service lift to access the restaurants above on the first and second floors. Service kitchens will be provided for the restaurants as well as on the function and ball room floors. The hotel will also have the luxury of having its own bakery and pastry and will be located near the vertical ducts of the restaurant areas for easy extraction purposes.

Hotel laundry will be contracted out but staff uniforms will be washed in house to control the quality. This can then be controlled and collected from an office where staff will get issued with the appropriate uniform.

Staff enter the hotel from the western service core, from the basement or past a security check point on ground floor, where they will be mostly moving up and down in the hotel out of sight of guests. They will have their own staff canteen with a separate service kitchen. Two separate ablutions were provided according to hotel regulations, one for staff members and one for contract workers. Offices and staff training facilities were also placed in the basement.

Mechanical and electrical equipment were placed on the lower basement levels as this equipment generates a lot of unwanted noise.

HOTEL ENTRANCE

The entrance is the first impression one will get when visiting the hotel and should be easily recognizable. A large cantilever porte cocere was designed along Prinsloo Street where guest can be dropped off. This area will be wide enough for two cars to pass each other. VIP parking was provided near this point as well as parking for coaches, all along Prinsloo Street.

The decision was made to move the hotel reception, restaurant and lounge upwards into the development as these areas take up a lot of space, giving the ground floor a posibility for public interaction. Being surrounded by non-accessible buildings, it was out of the question to make the hotel ground floor accessable only to hotel guests, as this would have prevented any public movement in the area. A smaller area on the ground floor, shared with the business centre, was designed to welcome the guests and to assist them with their luggage to the second floor. From here they will move to the reception and experience the lounge, bar and restaurant of the hotel.

Guest entering the hotel by car will have to drive down to the second and third basements levels for parking and from here they will move to dedicated lifts that will take them to the hotel reception on the second floor. Shuttle and car rental services will also be avillable from the second basement level which will be in direct contact with the hotel management.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Prinsloo Street
BASEMENT -MEZZANINE FLOOR PLAN
SCALE 1: 300
Kitchen layout
Service & delivery
Service corridor
Guest entrance
Vertical services

HOTEL TOWER BLOCK

The tower block was placed on the northern side of the site incoporating the existing facilities and linking them with the hotel.This made it possible to position the lower development close to the historical valuable buildings near the ceremonial church street. This will create a more favourable experience of the public spaces around the development.
With the service areas and vertical movement situated on the eastern and western side of the hotel tower, more rooms were left facing north- south with the corners of the tower block dedicated for hotel suites. These suites were provided with balconies which will have exellent views over- looking a vast area of Pretoria. The hotel rooms were not provided with balconies for security reasons.
With the existing column grid running through the hotel tower, the rooms had to follow this grid and were designed to be 36m2 in size. This is the min. area required according to the five star grading criteria. The rooms, both on the northern as well as on the southern side, were designed with large fenestration for views overlooking the city. The northern side of the tower block was provided with louvers to block unwanted heat gain and to lessen the demand on the air conditioning. The windows can't be opened by the guest and only cleaning staff will be able to open them. Certain windows were designed to pivot for easy cleaning purposes.

The link with the existing Sammy Marks development as well as access for the general public will take place at a security point on the ground floor on the western side of the tower.This will be as far as possible away from the hotel guests. This means that general public as well as the hotel guests will have separate access to the Inner City Planning Department, Health Department, City Library and the conference rooms on the first floor of Sammy Marks buildings.

The wellness component of the hotel was placed on the top three levels of the hotel. This will minimize the movement of guest past people who have just finished their exercising or who are on their way to exercise. These areas will also create a frequent meeting place for the public and will have with stunning views over the city.

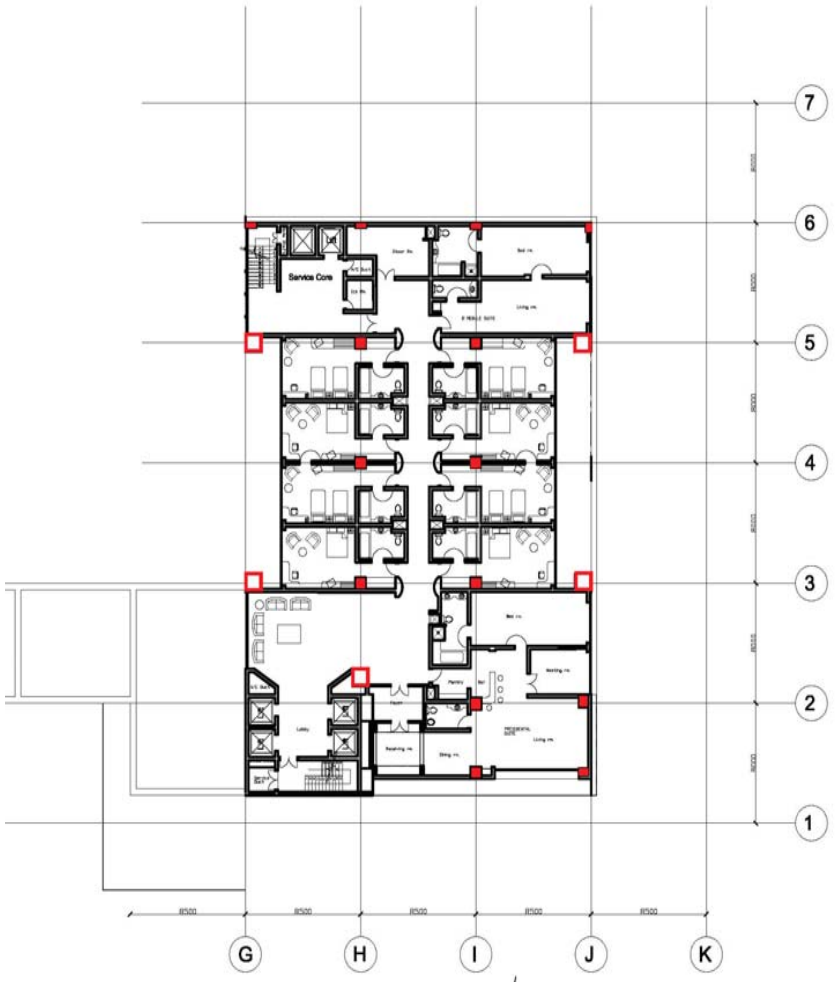
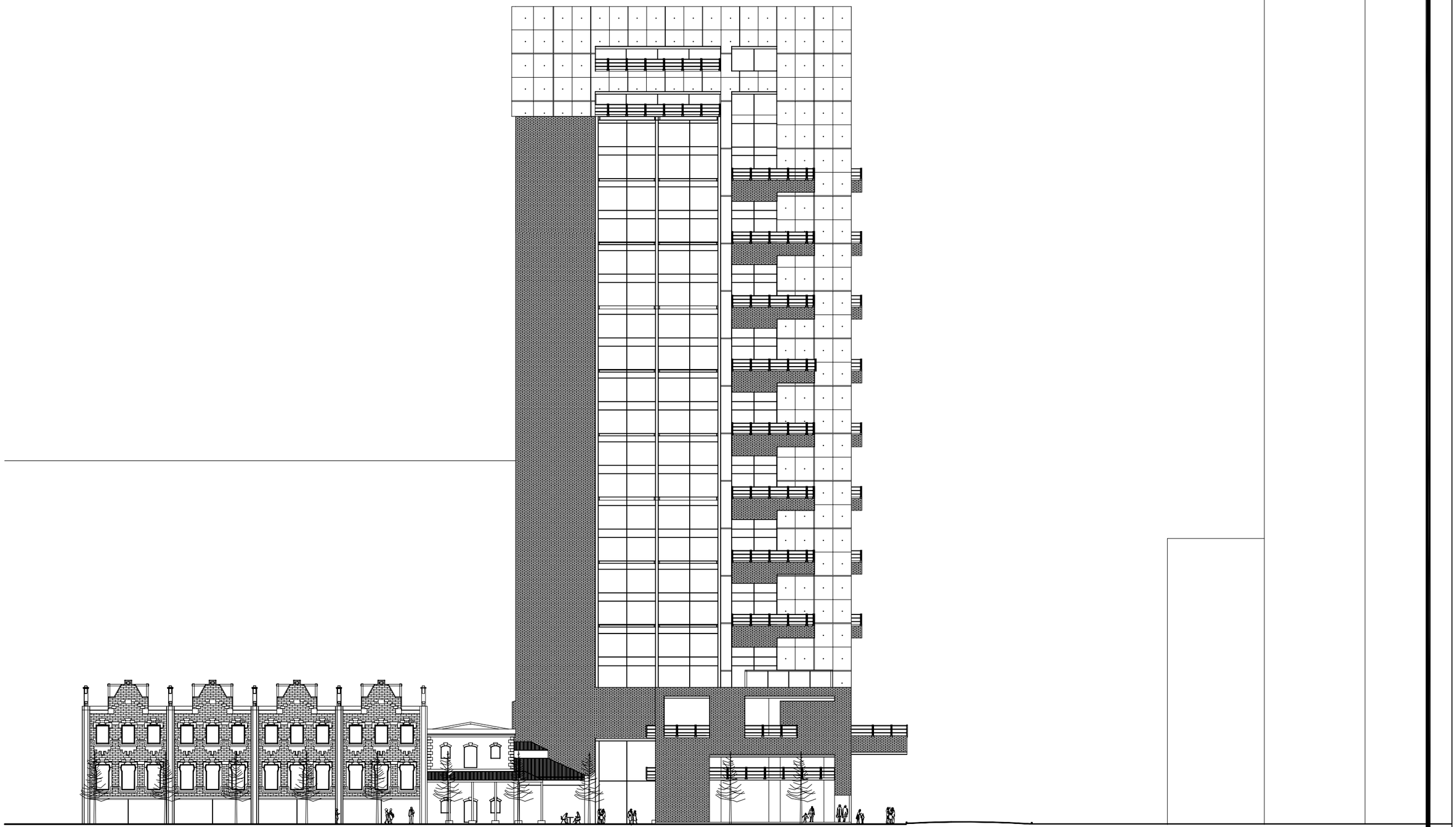


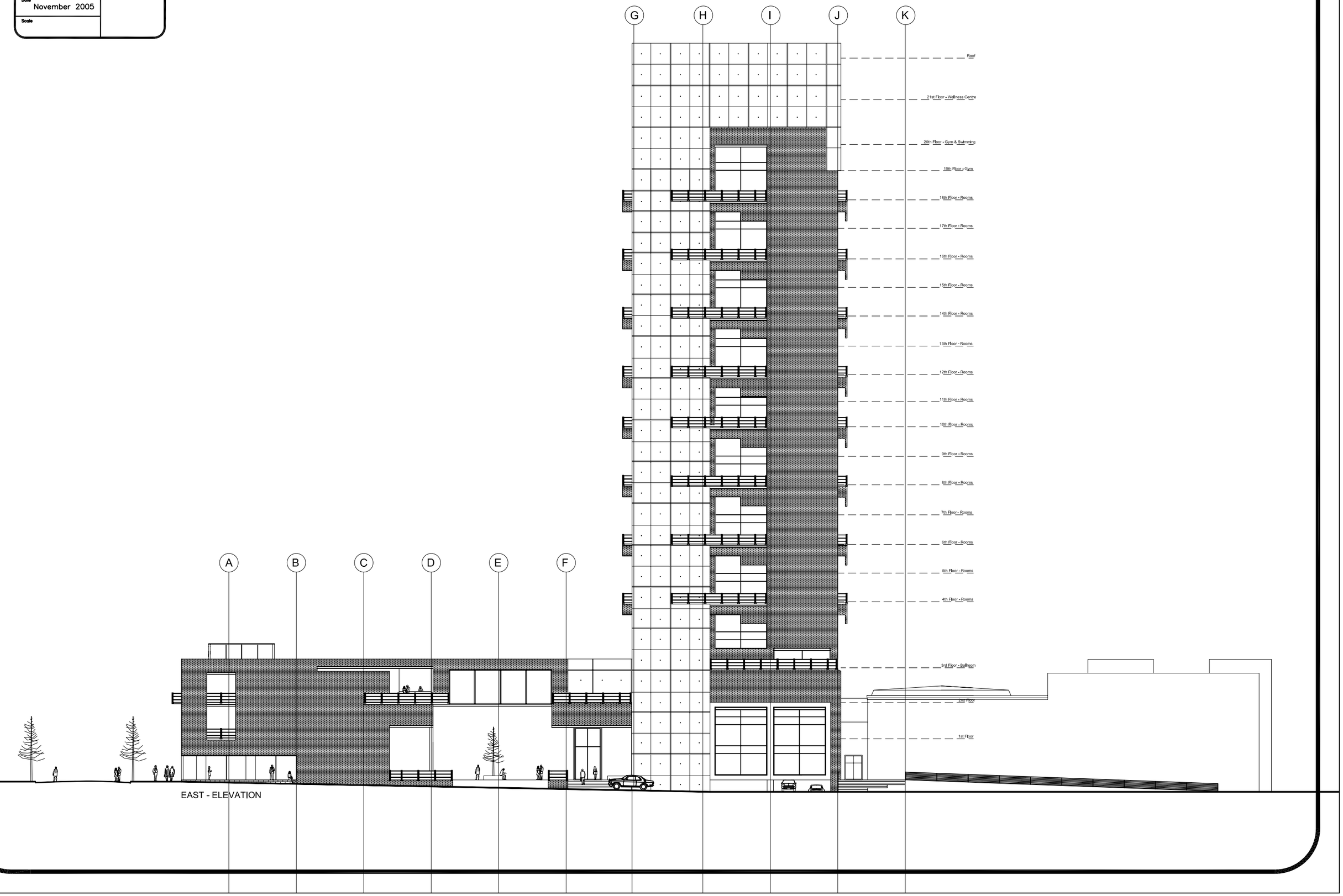
Figure 7 -11

Project number	Sheet
City Hotel	
Date: November 2005	
Scale:	



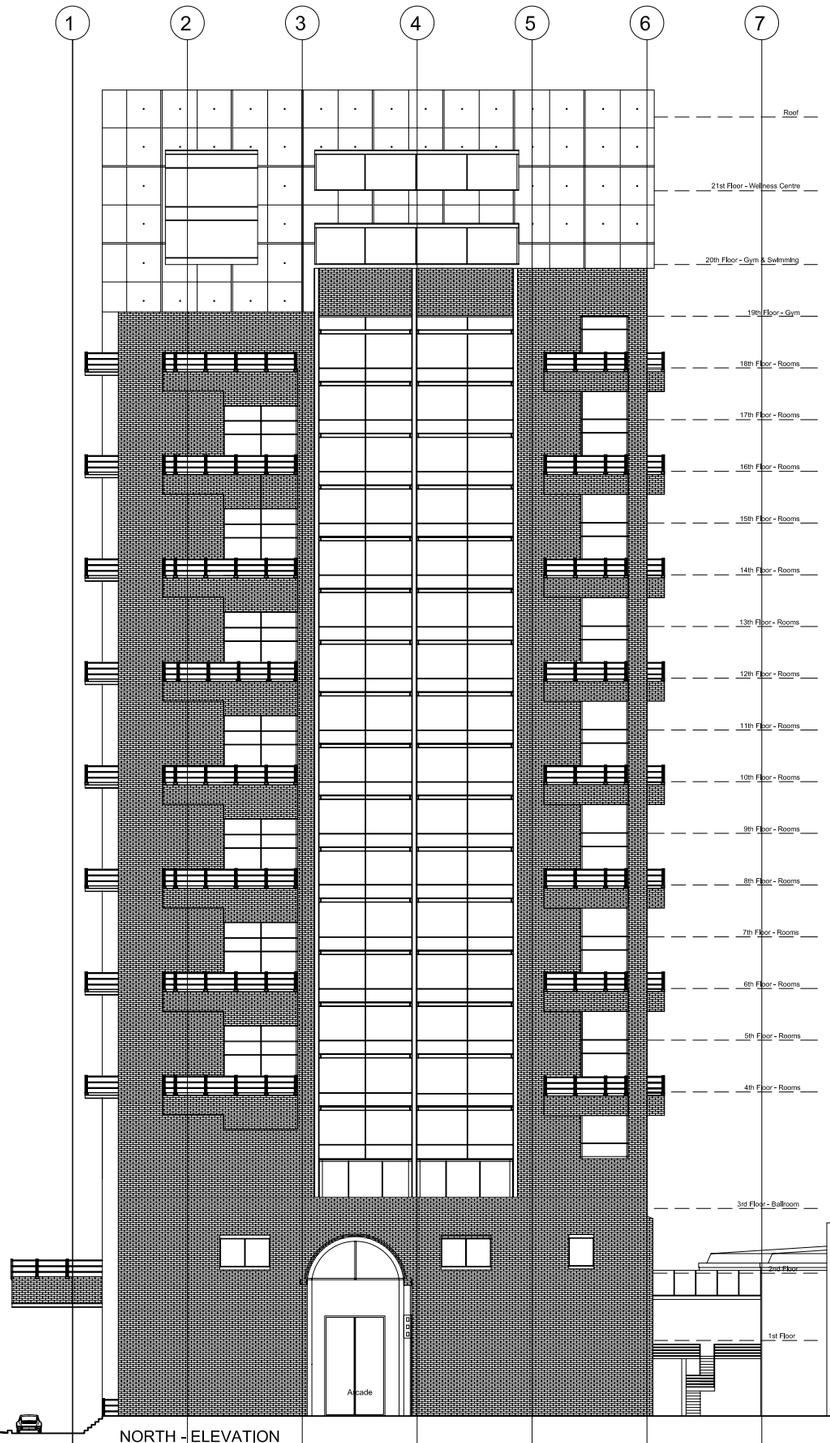
SOUTH - ELEVATION

Project number	Sheet
City Hotel	
Date: November 2005	
Scale:	



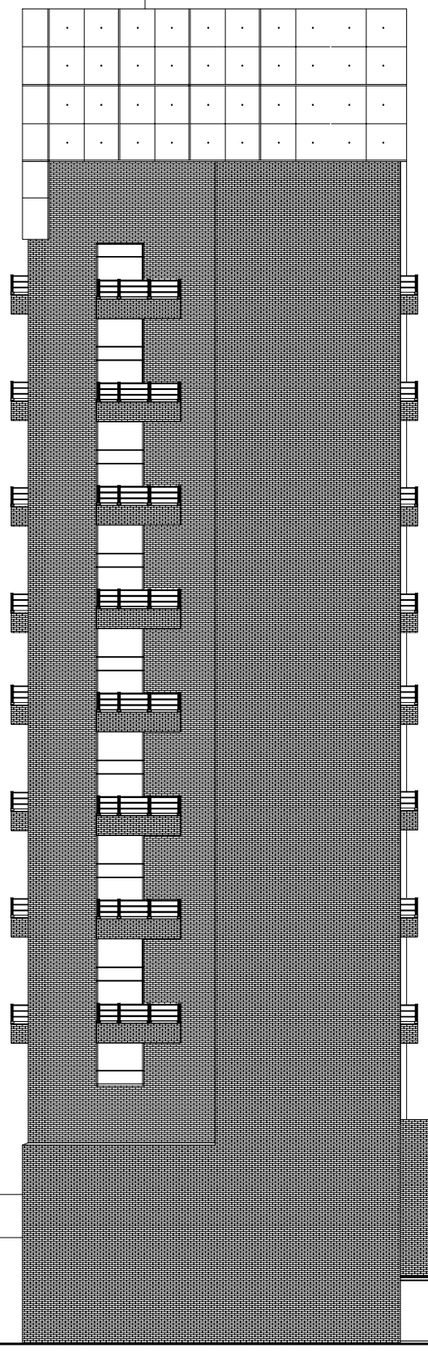
EAST - ELEVATION

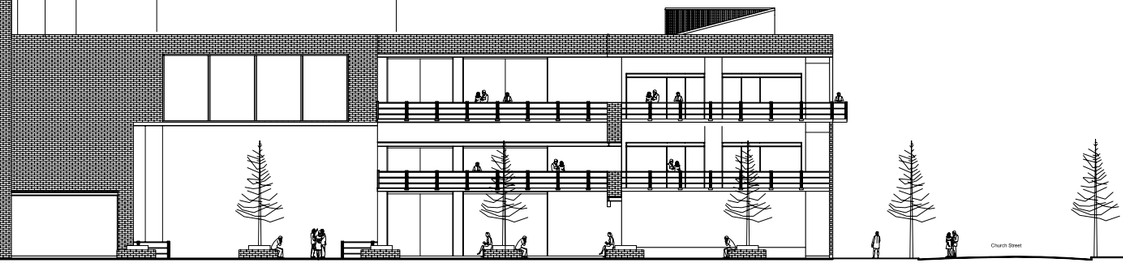
Project number	Sheet
City Hotel	
Date: November 2005	
Scale:	



NORTH - ELEVATION

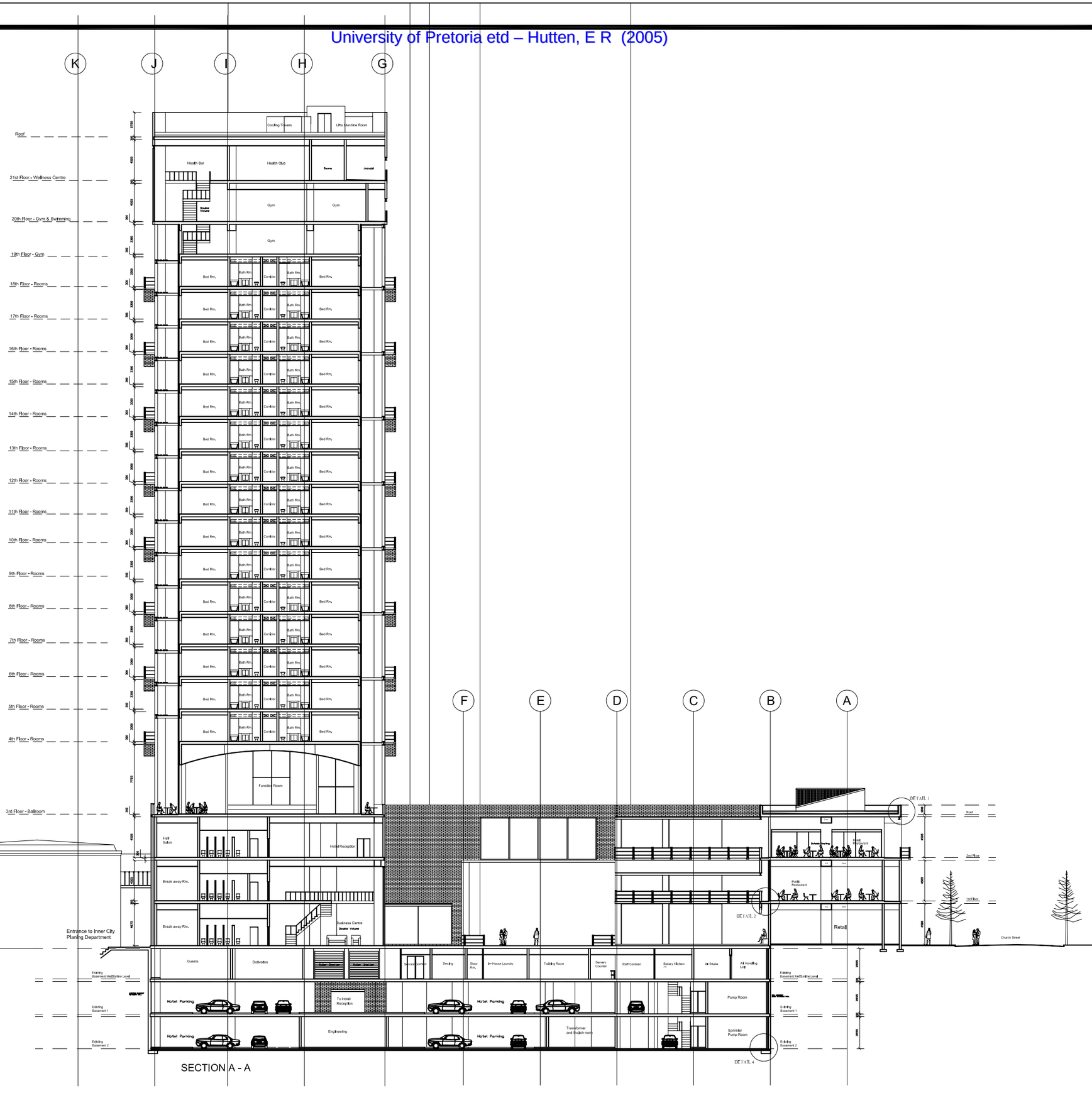
Project number	Sheet
City Hotel	
Date: November 2005	
Scale:	





WEST - ELEVATION

Project number	Sheet
City Hotel	
Date November 2005	
Scale	



SECTION A - A

Project number	Sheet
City Hotel	
Date November 2005	
Scale	

Church Street

Site Boundry

Servitude

Existing Ramps from Lower Ground

UP

Staff Parking

Staff Parking

Staff Parking

Existing Retaining Wall

Gents Changing Rooms

Ladies Changing Rooms

Lockers

Lockers

Ladies

Gents

Staff Entrance & Exit

Stoor Rm

Lift

Service Core

Air Intake

A/C Duct

Air Handling Unit

Store

Waste Disposal

Staff Ent. Room

Service Corridor

Notice Boards

Store Room

Reception

Office

Uniform Issue

Housekeeping & Linen

Service Corridor

Sorting

Cooler

Garbage

Staff Canteen

Servery Counter

New Retaining Wall

Trolly park

Training Room

Flour Store

Air Handling Unit

Air Intake

Pastry A/C

Cooler

Waiter's Station

Dessert & Room service Kitchen A/C

In- House Laundry

Stoor Rm.

Sewing

Office

Delivery Area

Turning Platform

Roller Shutter

Roller Shutter

Loading Zone Sorting Area

Existing Downstand Beam

Service Corridor

F& B Manager

Bakery A/C

Chef's Office

Fan & Exhaust

Grease Trap

To Restaurant

Serving

A La Carte

Production Counter

Preparation Kitchen A/C

Cold room

Cold room

Cold room

Deep Freeze

Dry Goods Storage

Liquor Storage

Liquor Cooler

Office

Security Check Point

Stoor Rm.

Plant Room

Dish Wash

Pot Wash

New Retaining Wall

Existing Retaining Wall

Site Boundry

Site Boundry

Entrance/ Exit Ramps from Parkade

Entrance/ Exit Ramps from Parkade

In

In

Services

Guests

Out

Out

8000

8000

8000

8000

8500 8500 8500 8500 8500 8500 8500 8500 8500 8500

A B C D E F G H I J K

1 2 3 4 5 6 7 8 9

Prinsloo Street

BASEMENT -MEZZANINE FLOOR PLAN

NORTH

2m 4m 6m 8m 10m

Project number	Sheet
City Hotel	
Date: November 2005	
Scale	

Church Street

Site Boundry

Servitude

Existing Parking

Hotel Parking

UP

Existing Ramps from Lower Ground

Transformer and Switch room

Existing Retaining Wall

New Retaining Wall

Sprinkler Pump Room

Store Room

Air Handling Unit

Grease Trap

To Restaurants

Existing Staircase from Lower Ground

Plant Room

Existing A/C Plant

Disable Parking

Service Core

Lift Shaft

Stoor Rm.

Lift

A/C Duct

Store

Engineering Office

Engineering Workshop

Engineering

To Hotel Reception

Standby Generator

HotWater Plant and Cylinders

Prinsloo Street

8500 8500 8500 8500 8500 8500 8500 8500 8500 8500

8000 8000 8000 8000 8000 8000

A B C D E F G H I J K

9 8 7 6 5 4 3 2 1

BASEMENT 2

2m 4m 6m 8m 10m

Project number	Sheet
City Hotel	
Date: November 2005	
Scale:	

Site Boundry

Servitude

Site Boundry

Existing Retaining Wall

New Retaining Wall

Pump Room

Store Room

New Water Tanks

Grease Trap

To Restaurants

Existing Staircase from Lower Ground

Plant Room

New Retaining Wall

Existing A/C Plant

Existing Ramps from Lower Ground

UP

Hotel Parking

Existing Parking

Disable Parking

Disable Parking

Existing Retaining Wall

Site Boundry

Site Boundry

Stoor Rm

Lift

Service Core

A/C Duct

Store

Car Rental & Shuttle Service

Seating

Seating

Seating

Store Room

To Hotel Reception

Domestic Water

New Water Tanks

Hotel Parking

Hotel Parking

Hotel Parking

Hotel Parking

Hotel Parking

Hotel Parking

Hotel Parking

Hotel Parking

Hotel Parking

Site Boundry

8000

8000

8000

8000

8000

8000

8500 8500 8500 8500 8500 8500 8500 8500 8500 8500

A B C D E F G H I J K

1 2 3 4 5 6 7 8 9

Prinsloo Street

BASEMENT 1

NORTH

2m 4m 6m 8m 10m

Project number	Sheet
City Hotel	
Date: November 2005	
Scale:	

Existing Retail
Existing Retail
Site Boundry
Proposed New Restaurant
Arcade
Existing Retail
Existing Retail
City Library
Existing Clinic
City Health Department
Service Core
Conference Rm.
Break away Rm.
Site Boundry
Pre- Function
Existing Staircase
Entrance to Inner City Planning Department
Coffee House
Existing
Retail
Retail
Retail
Retail
Existing Staircase from Lower Ground
Site Boundry
Hotel Entrance
To Hotel Reception
Services
Guests
In
In
Out
Out
Drop Off
Coach Parking
Church Street
Prinsloo Street
Parking
Parking

8500 8500 8500 8500 8500 8500 8500 8500 8500 8500 8500

A B C D E F G H I J K

1 2 3 4 5 6 7

8000 8000 8000 8000

GROUND FLOOR PLAN

NORTH

2m 4m 6m 8m 10m

Project number	Sheet
City Hotel	
Date: November 2005	
Scale:	

Existing Retail
Existing Retail
Arcade
City Library
Existing Retail
Existing Retail
Proposed New Restaurant
Service Core
Conference Rm.
Break away Rm.
City Health Department
Restaurant
Lounge
Business Centre
Break away Rm.
Inner City Planning Department
Existing
To Hotel Reception
Break away Rm.
Drop Off
Coach Parking
VIP Parking
VIP Parking
Church Street
Prinsloo Street

8500 8500 8500 8500 8500 8500 8500 8500 8500 8500

A B C D E F G H I J K

7 6 5 4 3 2 1

2m 4m 6m 8m 10m

FIRST FLOOR PLAN

Project number	Sheet
City Hotel	
Date: November 2005	
Scale:	

Existing Retail
Arcade
City Library
Service Core
Lift
Stair Rm.
A/C Duct
Notice Boards
Office
Meeting Rm.
Projectio Rm.
Conference Rm.
Front Office
Front Manager Office
Safe Deposit
Baggage Storage
Cashier
Concierge
Hotel Reception
Ladies
Gents
Disabled
Hair Salon
City Health Department
Arch to be flush to wall
Arch
Existing
Inner City Planning Department
Existing Ramp
Church Street
Prinsloo Street
Outside Seating
Handrail
Hotel Restaurant
Service Kitchen
Counter
Bar
Lounge
Shop
Outside Balcony
Coach Parking
Lobby
Bell Captain
Service Duct

8500 8500 8500 8500 8500 8500 8500 8500 8500 8500

A B C D E F G H I J K

8000 8000 8000 8000

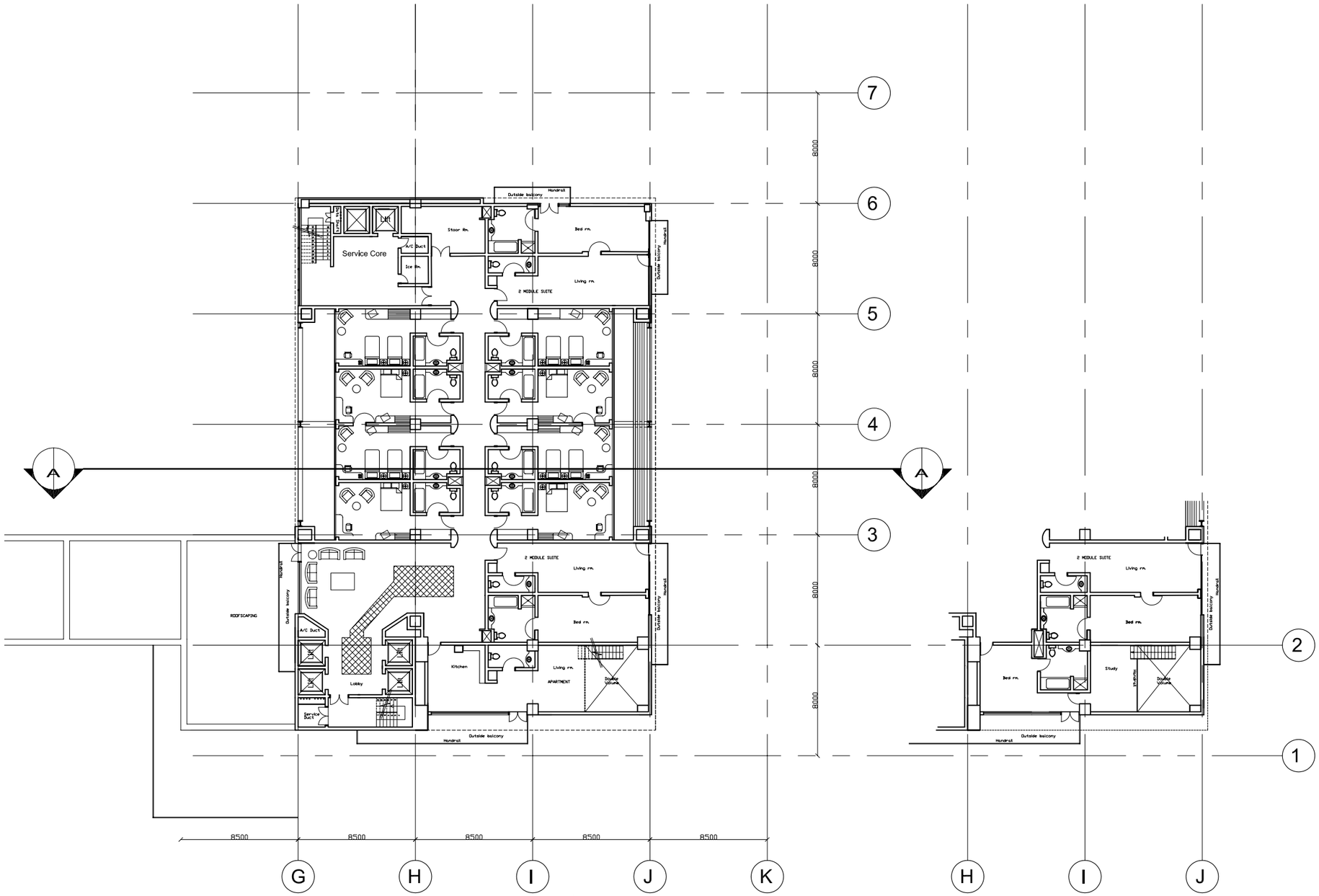
7 6 5 4 3 2 1

2m 4m 6m 8m 10m

NORTH

SECOND FLOOR PLAN

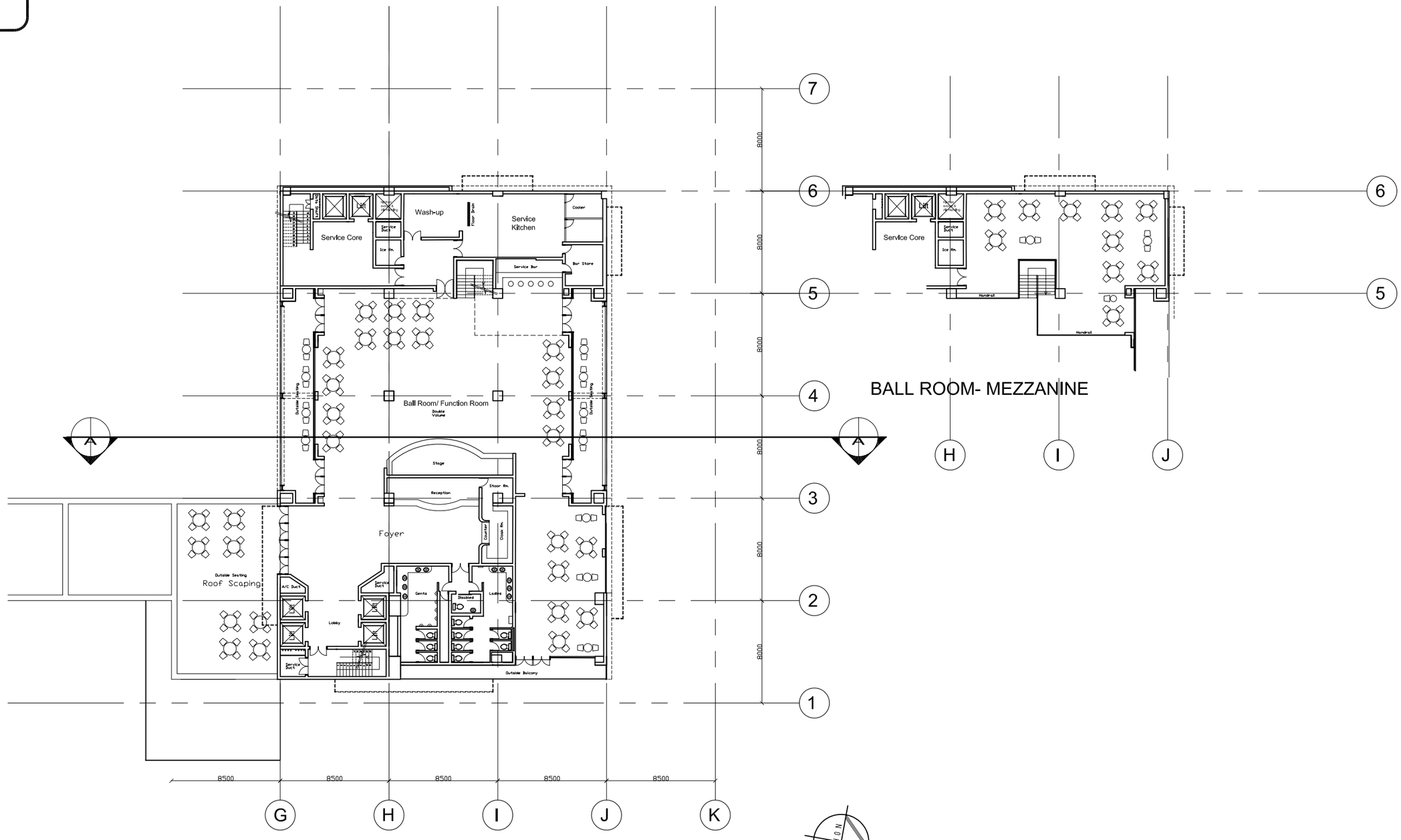
Project number	Sheet
City Hotel	
Date: November 2005	
Scale:	



FLOORS 4-16

APARTMENT FIRST FLOOR

Project number	Sheet
City Hotel	
Date: November 2005	
Scale:	



THIRD FLOOR- BALL ROOM/ FUNCTION ROOM

Project number	Sheet
City Hotel	
Date: November 2005	
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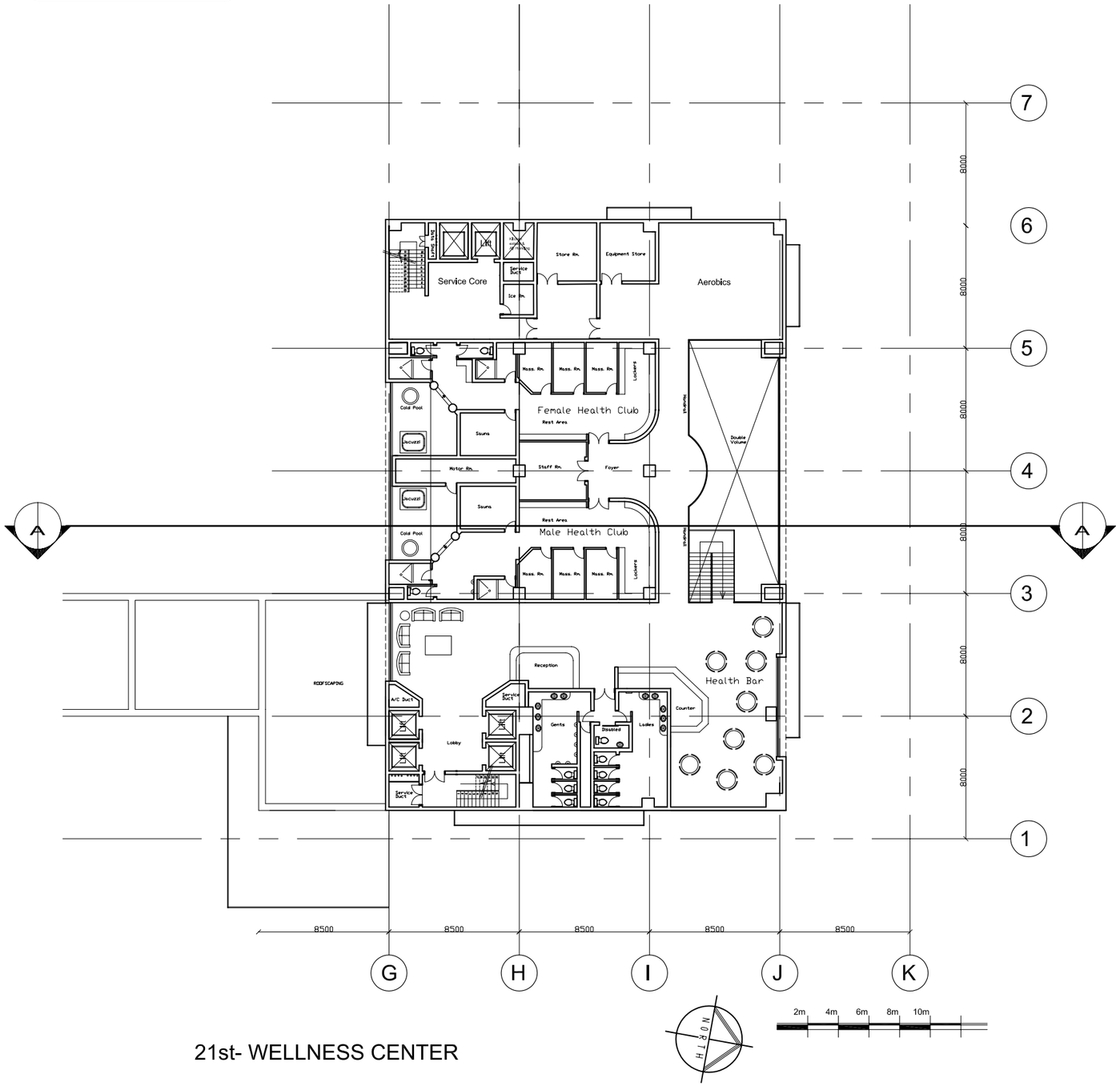
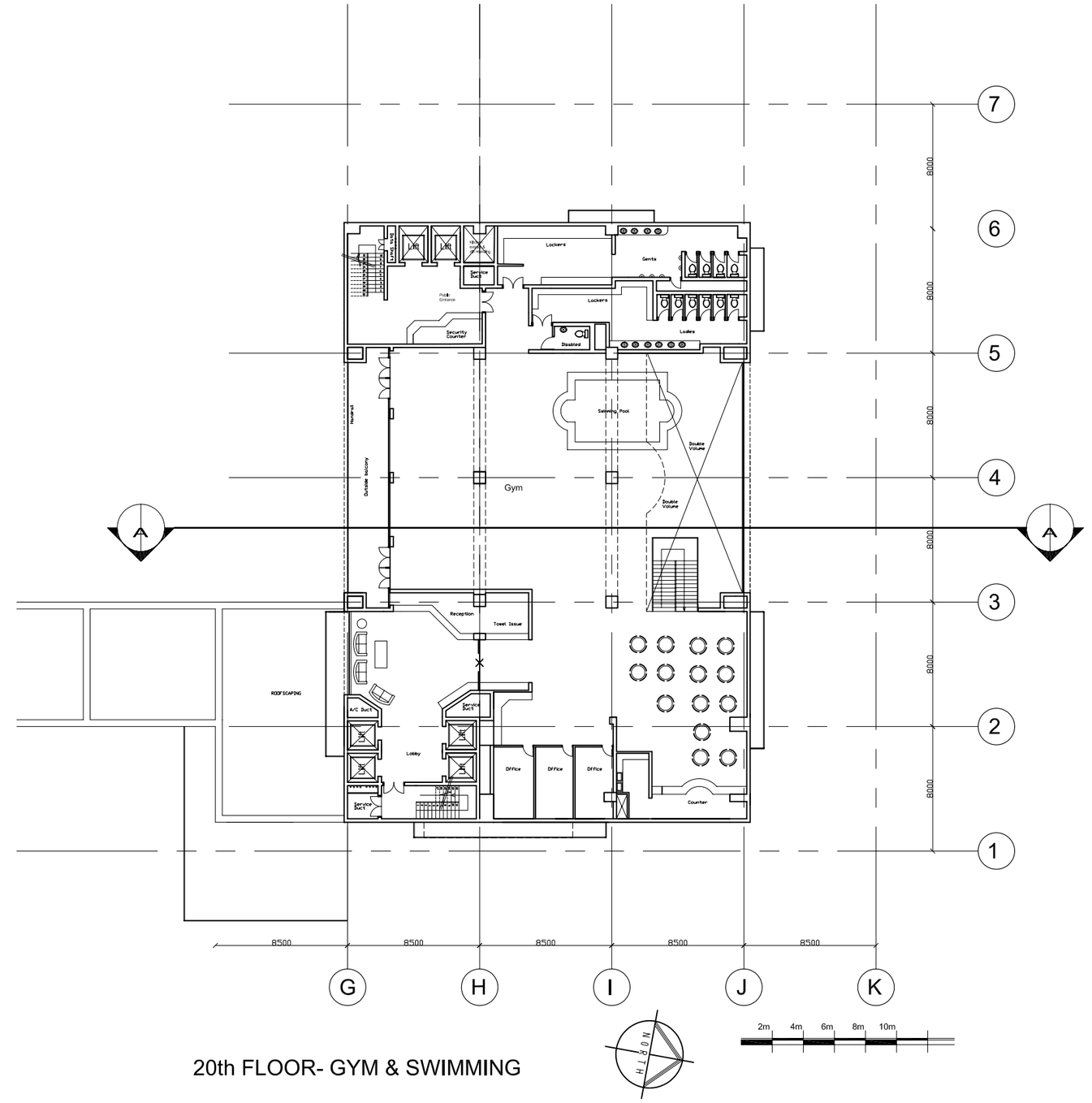


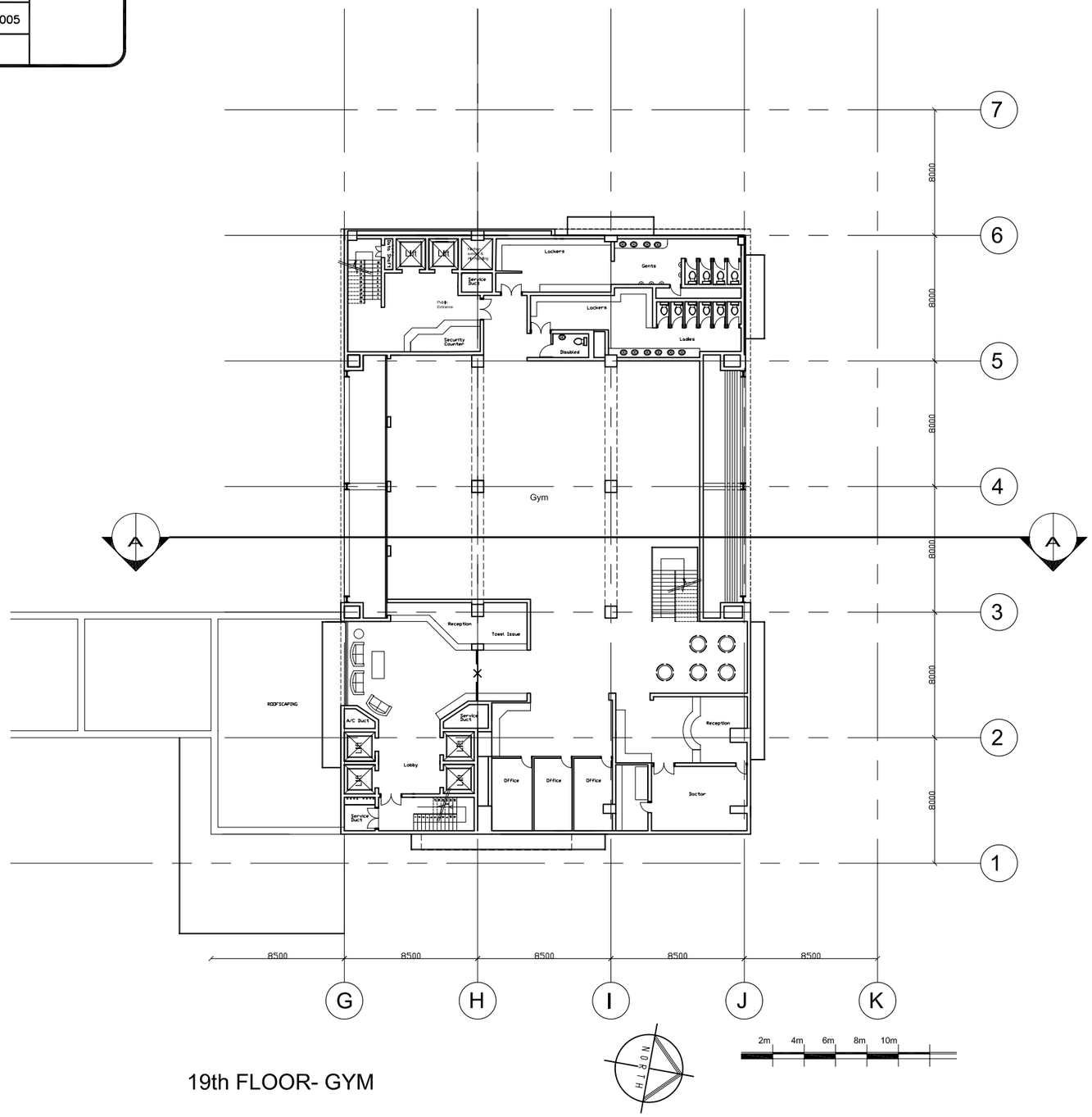
21st- WELLNESS CENTER

Project number	Sheet
City Hotel	
Date November 2005	
Scale	



20th FLOOR- GYM & SWIMMING

Project number	Sheet
City Hotel	
Date: November 2005	
Scale:	



19th FLOOR- GYM

Project number	Sheet
City Hotel	
Date: November 2005	
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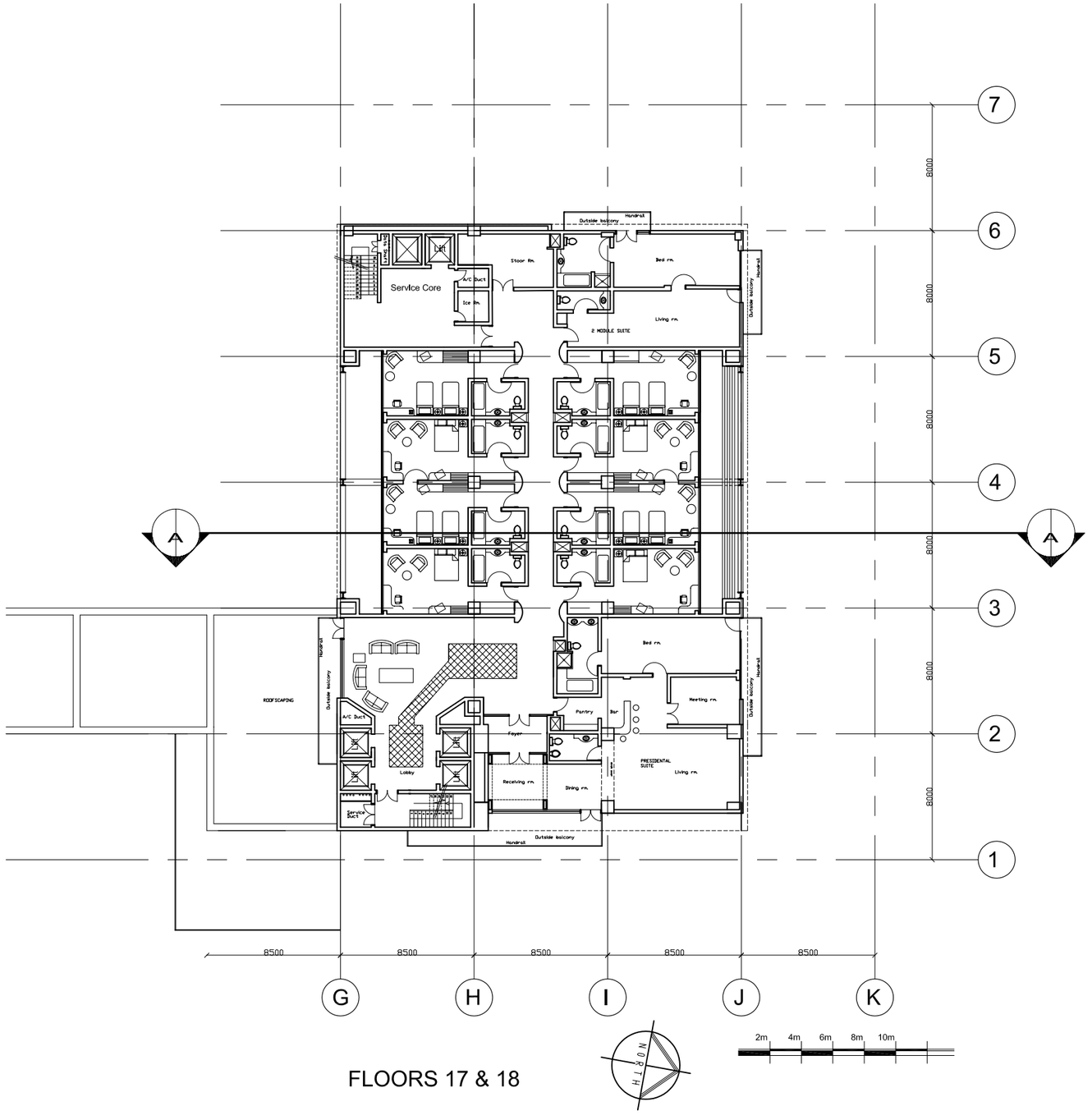


FLOORS 17 & 18

TECHNICAL INFORMATION

Site Conditions

The site forms part of the top of an existing parking arcade witch runs underneath the rest of the Sammy Marks development for three levels, used for parking and services. For the proposed development the parking entrance and exit on Prinsloo Street will be used. At this basement entrance and exit point the hotel will be stepped back to allow for enough head space for cars and service trucks. This means that the side walk on Prinsloo Street falls from Church Street to Vermeulen Street with about 1,3m and it is on this height that vehicles enter and exit the Basement.

Figure 9 -1 Entrance/ Exit ramp from basement

Figure 9 -2

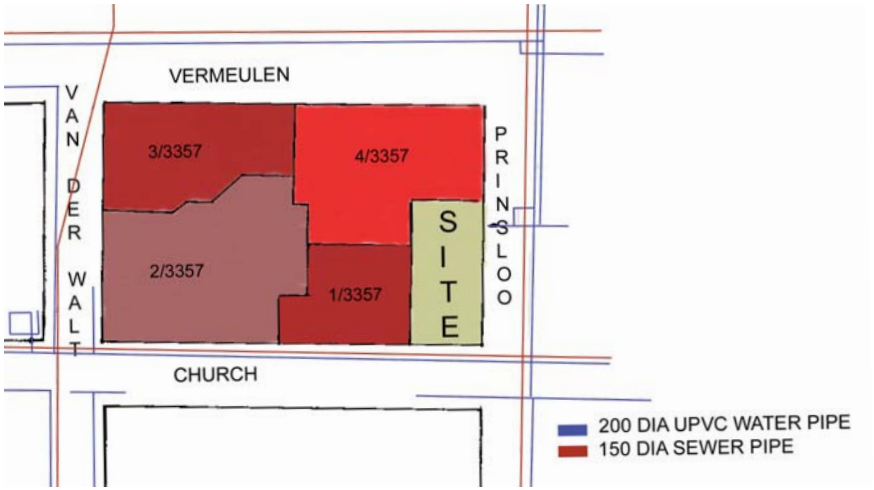


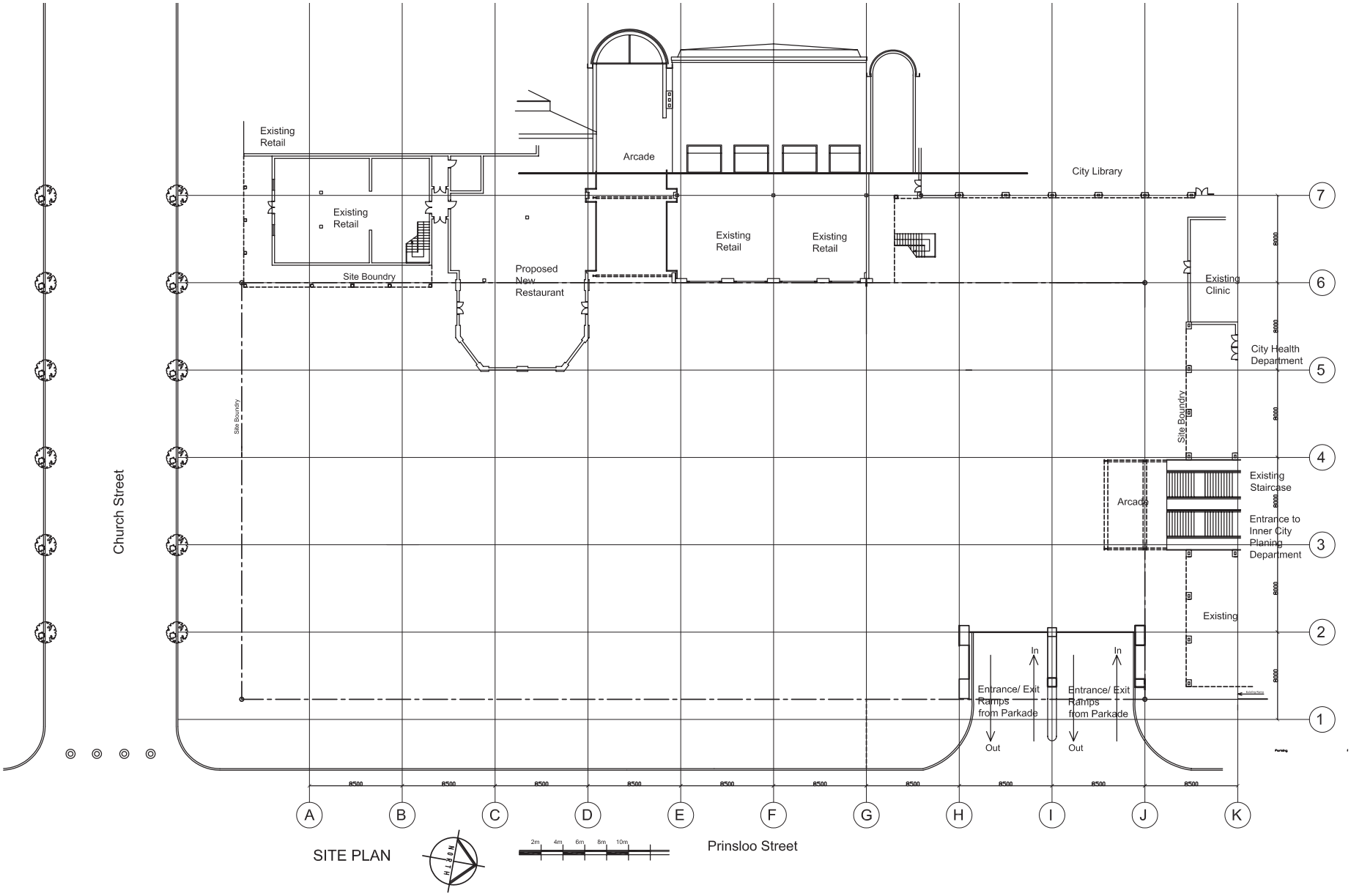
Figure9 -3 Water and Sewer layout around site

Parking will be provided in the existing basement underneath The Sammy Marks development and will have to be shared with the hotel functioning separately. There will also be VIP parking as well as coach parking created nearby the hotel's drop off, on the side of Prinsloo Street. Parking on Church Street will be limited as this part of Church Street between Prinsloo and Van der Walt is for pedestrians.

The sewer and water connection is situated on Prinsloo Street next to the basement entrance and exit and is in close proximity to the hotel's service and ducts.

There is an existing column layout/grid running from the third basement level through onto the site, which was designed to support a 23-story development (Murry and Roberts). This column grid will be incorporated into the proposed hotel development as far as possible; this will be further discussed in the structure of the building.

Figure 9 -4


Existing Retail
Existing Retail
Site Boundry
Arcade
Proposed New Restaurant
Existing Retail
Existing Retail
City Library
Existing Clinic
City Health Department
Site Boundry
Site Boundry
Arcade
Existing Staircase
Entrance to Inner City Planing Department
Existing
Church Street
In
In
Entrance/ Exit Ramps from Parkade
Entrance/ Exit Ramps from Parkade
Out
Out
8500
A
B
C
D
E
F
G
H
I
J
K
1
2
3
4
5
6
7
8000
SITE PLAN
WILSON
2m 4m 6m 8m 10m
Prinsloo Street

Superstructure

The structure of the building consists of a reinforced concrete frame clad with brickwork. It has two main components, a tower block and a much smaller retail block. The two blocks are connected by a bridge on the second floor and the bridge deck hangs from beams at roof level.

There are three existing basements under the tower block and they extend some distance under the retail block as well. The existing building (the three basements) was originally designed for another 23-story to be added and the proposed hotel is within this limit. The existing columns are mostly 800x800 with a few 1700x900. Reinforcing bars to the columns have been left sticking out to lap with rebar's for the new development. Above 1st floor, 800x800 columns are hollow in the middle to house services, which are taken into the ceiling void at the lower level. The walls of the lift shafts and the stair case are concrete to help with the overall stability of the building.

The floor grid is 8,5m x 8m to match the existing and the floors are 340 thick through slabs, with suspended ceilings. Concrete strength for columns is 40 Mpa after 28 days for slab and beams 30 Mpa for lift and stairwell walls 25Mpa.

Due to the existing basement it is difficult to sensibly introduce an expansion joint between the tower block and the retail block and because of this it was decided to design it as one building.

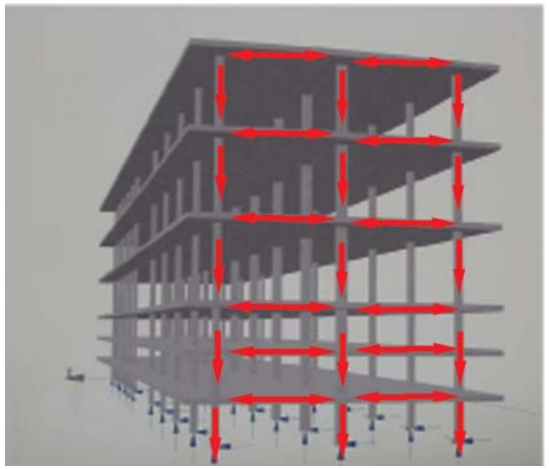


Figure 9 -5
Retail block, column & slab layout
Showing distribution of loads

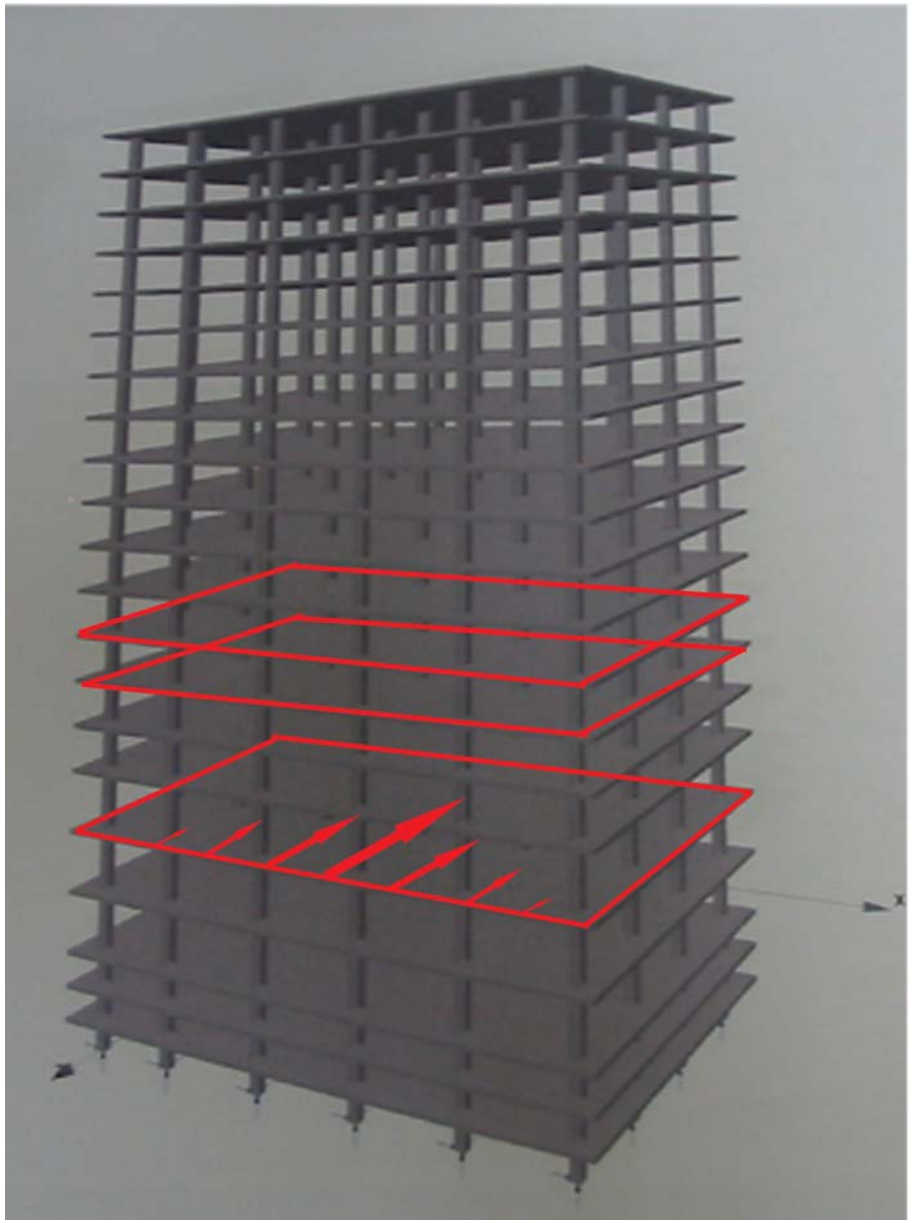


Figure 9 -6
Model of Tower block indicating slabs acting as deep horizontal beams, transferring horizontal(wind) forces to columns.

BASEMENT -MEZZANINE FLOOR PLAN

EXISTING COLUMNS FROM BASEMENT levels

Materials

All actions and elements used in the built environment consist of energy. As energy is a capital cost, it is important to have a proper understanding of the various energies so that it may be used more efficiently. This is also a requirement for the realisation of the national energy conservation goals and is closely connected to the whole issue of sustainability, which now, more and more, becomes a design requirement for all developments.

"Approximately 40% of the annual resources expenditure is consumed by the construction industry. The criteria for selecting materials, to date, have firstly been for structural stability and thereafter largely for aesthetic and first monetarily cost. Durability or life cycles monetary cost is only considered in some institutional and high-end commercial projects. Architects must weigh up a number of issues when considering measures to minimize embodied energy use. The first call must be to select the type of materials that, in their manufacture, use little energy. These are either materials that can be used close to their raw state, such as stone, timber and compacted earth, or recycled manufactured materials such as crushed brick and concrete, hard core and reused steel joists, waste materials from other processes. All of these elements can be assigned a resource value, a result that will make the selection process much less a matter of guess work on the part of the specifier." (St. John, 1992).

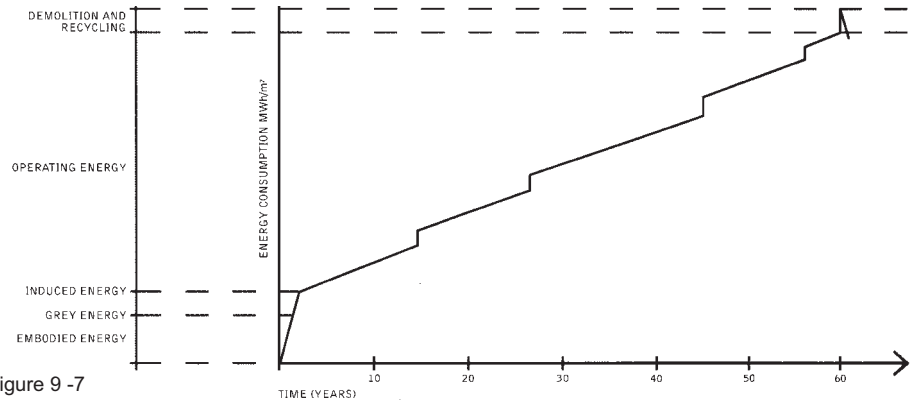


Figure 9 -7
Energy consumption in buildings (Jones, 1998).

"There are two basic aspects to the issue of energy in building design: how it can be used efficiently, and what form it should take. Energy conservation is as much about choosing the appropriate time, as it is about saving that energy. As regards the construction and occupation of buildings, parameters relating to the use of energy will vary according to location and political and economical factors. A building consumes energy in a number of ways: in the manufacture of building materials, components and systems (embodied energy); in the distribution and transportation of building materials and components to the constructions site (grey energy); in the construction of a building (induced energy); and in running the building and its occupants, equipment and appliances (operating energy). A building also consumes energy in its alterations and final disposal (embodied energy)." (Jones, 1998).

An energy efficient building looks to reduce consumption in all of these areas. The total energy budget of a building with state of the art, energy conserving technology has been significantly reduced over the last 20 years. Almost all of that improvement has come in the form of operating improvements and now the proportion of the energy budget devoted to operation has been reduced from approximately 75% to about 50% .

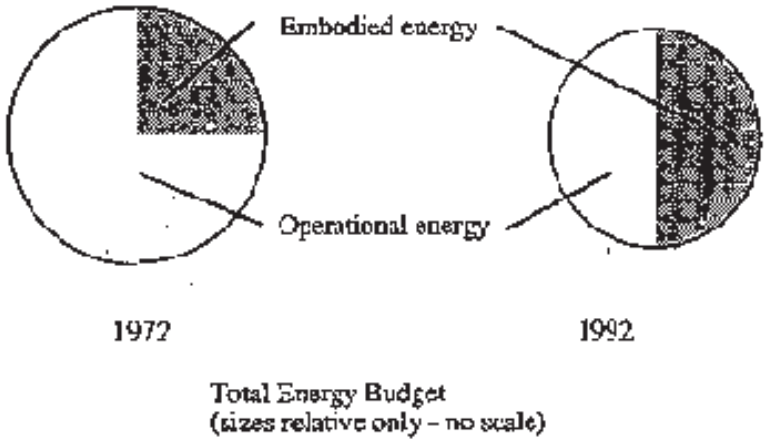


Figure 9 -8
Total energy budget (St. John, 1992).

"The material cycle is a strong three way inter action among recourses, environment and energy. As we proceed around the material cycle we see energy inputs required to obtain metals from ores; to make plastics from crude oil; to work and shape metals, ceramics and plastics; to assemble components and systems; to transport goods at all stages of production and to operate the final product in the hands of the consumer. Then we see energy dissipated as metals corrode or rust, as plastics degrade and as the trash in the sanitary landfill returns to the low energy natural stage. The production of goods requires more energy when natural recourses rather than recycled materials are used. Recycling therefore must be considered of primarily importance not only for materials and environment consideration but also for energy conservation.
The nature and volume of materials actually required by industry depend not only on the demand for goods and services, but also equally on the characteristics of the technologies used to transform resources into products. The nature and "resource productivity" of a specific sequence, and the quantitave balance between them, dictates the structure and geographical distribution of industrial activities and the nature, quantity and geographical origin of resources required for the making of products. The nature of materials used by industry is not only important in determining the demand for the natural resources from which they are derived. Indirectly they, and the processes used in their conversion, also determine the demand for other resources. From the point of view of resource consumption, it is also significant that large amounts of waste are generated in many of the processing stages of traditional manufacture. This wastefulness, found in much in our traditional manufacturing technologies, places basic physical constraints on the productivity, theoretically attainable at both the national and industrial level. Any improvement in technology from this point of view would lead to a large savings in the use of recourses." (Gabor, 1978).

Material and recommendations

Concrete

"Although concrete consists mainly of natural occurring materials that have been in the use since the time of the Romans, its modern use involves energy intensive processes, particularly in the manufacturing of cement and aggregates and transport for manufacture, transportation and installation. A problematic environmental issue is the wasteful use of wood as a disposable forming material. The disposal of demolished concrete is also a problem, and recycling takes a significant added amount of energy, ending with a lower quantity product.

In specifying concrete the following should be considered:
- Is concrete the most appropriate material? Is the structure been planned as a long life structure?
- Use repetitive shapes so that formwork can be reused.
- Avoid extensive use of concrete as a finished material, both to minimize the use of forming lumber and to cut down on embodied energy.
- Avoid using aggregates or cement types not normally used or stocked in the project's region. Specify locally mined and produced materials when ever possible.
- Specify only non-toxic concrete additions." (St. John, 1992).

Masonry

"Historically bricks were produced from local clay, and sun dried or fired in kilns with local fuel, thus reducing transport energy cost. Although masonry's embodied energy is high, when all of its thermal barrier and storage, structural and finish properties are realized in one application it winds up being relatively resource effective.

In specifying masonry the following should be considered:
- Be sure the application is an appropriate one for the use of masonry, and that two or three of its positive qualities will be utilized.
- Be careful of the use of chemical treatments for mortar, inform yourself about their environmental effects.
- Look for the most efficient method of insulating exterior walls, using as high levels of insulation as practicable.
- Consider the use of masonry made with recycled and waste materials." (St. John, 1992).

Woods

"The cultural and emotional place it holds in our collective conscious is evident in every part of the globe. Wood is one of the oldest and most versatile of building materials, and continues to play a major part in almost every building project. Properly managed as a renewable resource, it should continue to be a basic construction material indefinitely.

In specifying masonry the following should be considered:
- Find alternatives to old grown timber for all wood uses.
- Use wood whose origins are known to be sustainable or that of which are well managed.
- If a client demands the use of rare woods, use veneers instead of solid wood.

Veneers provide more effective use of the whole tree, and substrate can be made from sawmill scrap or waste." (St John, 1992).

PLASTICS

"Plastics are substrates composed of a mixture of organic materials. Plastics can be created from any biomass, but at this time they are mostly made from oil, natural gas, coal and salt. The key to use plastics, even more important than with some other materials, is to correctly match the material to the use.
In specifying plastics the following should be considered:
- Remember most plastics are petroleum based – explore alternatives.
- Use easily recycled plastics- avoid composites difficult to recycle.
- Avoid plastics for coating, bonding and sealing.
- Recycle, recycle and recycle." (St. John, 1992).

This clearly indicates that not enough prominence is given to the matter of sustainable design and the use and conservation of embodied energy. Professions of the built environment can play an important role to ameliorate this problem in the near future. In the end, selection of materials and systems for anyone building project, should be the result of a balanced analysis of the required performance of the building against assessment of embodied energy in the manufacture and processing of material components; an assessment of embodied energy consumption, covering identification of the original source of the materials and the energy costs involved in transporting the materials and components to the site; and what can be done in the field of limiting recycling and using waste materials.

ROOFS

Waterproofing membranes and roof repellent layers must be applied to the roof, together with adequate drainage, landscaping cloth, irrigation systems and other specialised products. But after this the environmental benefits are considerable, including a reduction in the "greenhouse effect"; cost savings from increased storm water retention with a reduction in the expansion of the related infrastructure; a decreased need for health care services from reductions in ground level ozone resulting from the reduction of urban heat; increased work productivity and creativity; and the incalculable benefits of passive experiences with nature and vegetation.

A green roof will have a noticeable impact on the heat gain and loss of a building, as well as the humidity, air quality and reflected heat in the surrounding neighbourhood. On a summer day the temperature of gravel roofs can increased by as much as 25°C to over 80°C or more in some cases. Covered with grass, the temperature of that roof would be contained around 25°C – with the resultant energy savings.

In real terms, 20 cm of substrate with a 20-40cm layer of thick grass has the combined insulation value of 15cm of mineral wool, and rooms under a green roof are at least 3-4°C cooler than the outside air when temperature ranges between 25-30°C.
Soil, plants and the trapped layer of air can also be used insulate sound. Sound waves that are produced by machinery and traffic can be absorbed, reflected or deflected, with the substrate tending to block the lower sound frequencies and the plants the higher. A green roof with a substrate of 20cm can reduce sound by 40Db. (Walls and roofs, 2003)

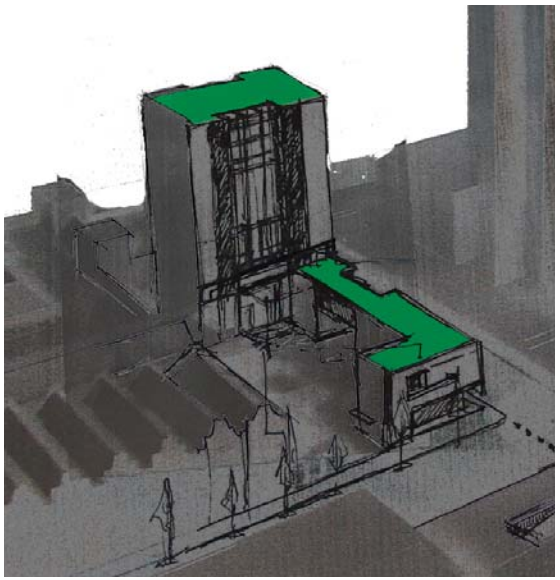


Figure 9 -9 Concept sketch showing green roofs

Vertical services

The general circulation layout is all about facilitating movement and to provide for the separation of guest, staff and maintenance personnel. This is not just to avoid disturbing the guests, but also to enable efficient servicing. Separating the circulation of resident and non-resident guests was very important and was achieved by providing direct access to the restaurant and ballroom from the main kitchen situated on the first basement level, which in turn have their own service kitchens.

The vertical communications in a multi-storey building are essential to its operation and are an important element in the planning. The elevator shafts extend the full height, and their location dictates the main circulation of people on each level. The elevators and stairs form a substantial vertical element, which is used for structural purposes. Toilets and utility rooms, air ducts, plumbing and electrical ducts are incorporated into the core so that the remainder of the floor plan is free from vertical ducts.

BASEMENT -MEZZANINE FLOOR PLAN

"Ducts are avenues through which sound can travel readily from central equipment to rooms, and between rooms. Air noise that might be transmitted through the duct system is reduced with sound- absorbent inner linings, plenums lined with absorbent material, or premanufactured sound traps designed for insertion in the ducts. All service pipes will be firmly attached to heavy walls, which will minimize transmissions of noise to rooms. Some electrical equipment produces a hum that can be annoying under some circumstances. Large transformers in this case are placed in the 3rd basement level as far away from quite areas as possible." (Bradshaw.V.1993)

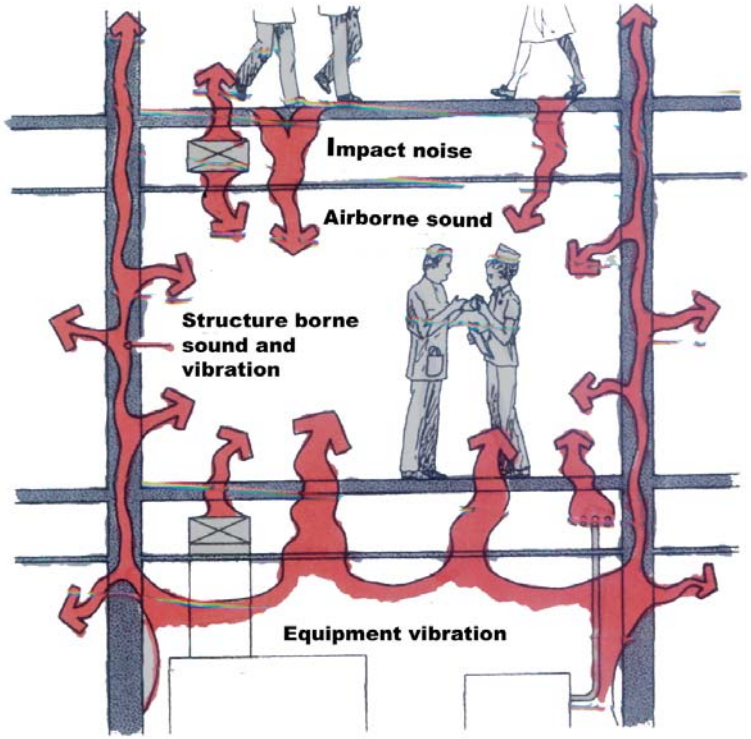


Figure 9 -10 Transmission of noise through building elements

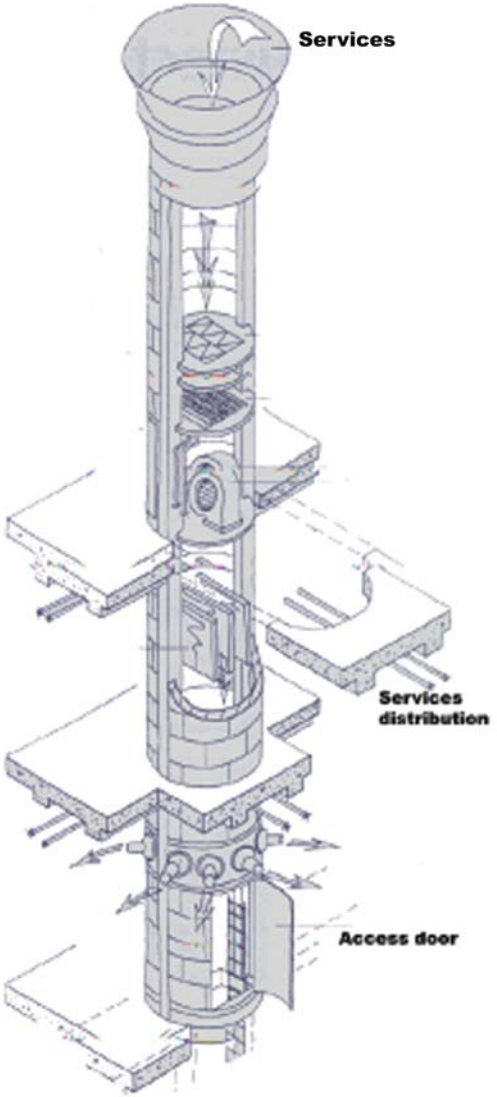
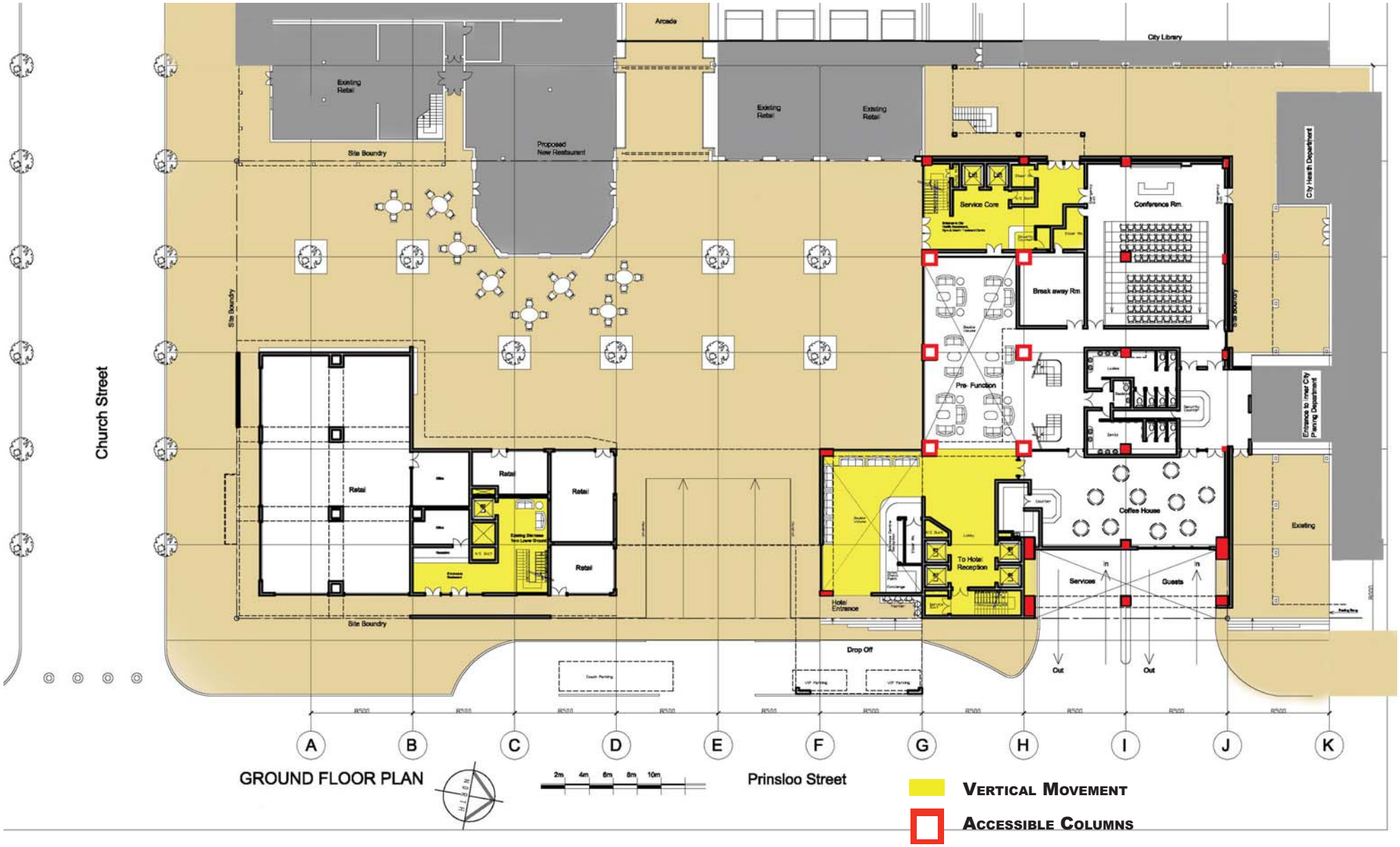


Figure 9 -11 Schematic diagram of hollow columns


Church Street
Arcade
City Library
Existing Retail
Site Boundry
Proposed New Restaurant
Existing Retail
Existing Retail
Service Core
Conference Rm.
City Health Department
Break away Rm
Pre- Function
Entrance to inner City Planning Department
Retail
Retail
Retail
Retail
Coffee House
Existing
To Hotel Reception
Hotel Entrance
Services
Guests
Drop Off
Out
Out
A
B
C
D
E
F
G
H
I
J
K
GROUND FLOOR PLAN
2m 4m 6m 8m 10m
Prinsloo Street
VERTICAL MOVEMENT
ACCESSIBLE COLUMNS

Bedrooms

"Bedrooms are the core of the hotel industry. For flexibility most rooms have a double bed or twin beds. Bedrooms normally have en-suite bathrooms. It may be assumed in preliminary calculations that the capital cost of a room will approximate to 1000 times its nightly rate." (Adler, 2005)

Corridor widths and bedroom sizes are greater in more expensive hotels. In the proposed hotel the corridors are 1.6 metres with a small lobby before entering the rooms with bedroom sizes of 36m2 (acc. to five star regulations).

To avoid an institutional appearance corridors should not appear too long. Fire regulations determine the positioning of escape stairs. This was one of the main reasons why the internal bathroom layout was chosen for the hotel bedroom floors. It helps significantly with sound insulation from corridor noise. The bathrooms will require artificial lightning and ventilation, but the external walling and the corridor length are minimised.

The ratio of single rooms to double rooms will be decided by the client depending on expected use. In this case it is for business executives and will require many single rooms. This is also the reason not to include balconies, but instead to use the space as working areas inside the rooms. It also minimizes the problems of security, wind and waterproofing. A raised threshold is always needed, and guests may slip or trip, causing claims for damages.

Planning problems at corners of the tower block was eased by having suites with a common lobby in these areas of the block. Five percent of rooms will be suitable for wheelchair users. This includes providing a much larger bathroom for wheelchair accessibility.

Air Conditioning

The air – conditioning system best suited to for this project is a central chilled water system. This system allows for an unlimited number of chilled water coil units that is operated separately but feed of the same chilled water supply. Chilled water is processed centrally in the chiller plant room in the basement. From here it is distributed in a close circuit to the various chilled water coil units. The cooling towers for cooling of the chilled water is located on the roofs of the building. The chilled water coil units vary in size from smaller console units for each guest room to bigger units for the public floors that are accommodated in the respective air-handling units for each floor. Each of these chilled water coil units then has it's own fresh air supply and ducting for exhaust and return air. Each guest room has it's own chilled water coil unit located in the ceiling void. This unit releases air into the room that is a mixture of fresh and return air. An air-handling unit on the roof of the building supplies fresh air. Exhaust air is simply disposed of individually at the top of each duct. The three floors containing the restaurants as well as the basements levels each have their own air-handling unit. (V d Westuizen, M. C, 1998)

The type of glass used for the fenestration of the building and its construction is of such a nature that would deliver the best possible thermal efficiency. The tower block is facing a north- south orientation that will help limit the big demand the air- conditioning places on the buildings resources.

"An electrical driven water chiller uses the same vapour compression refrigeration cycle as a DX (direct expansion) system. It has five connecting points for inputs and out puts:

- Electricity input to operate the compressor
- Chilled water return from the space- cooling equipment
- Chilled water supply to the space- cooling equipment
- Condenser water supply from the outdoor heat rejecting equipment
- Condenser water return to the outdoor heat rejecting equipment

A water chiller is a factory- designed, prefabricated assembly containing one or more compressors, condenser, water cooler and interconnections.

There should always be a floor drain located near a water-cooled condenser in case of leaks and of convenient disposal of water when the system is drained for repair. There should also be sufficient space around the chillers for insulations and maintenance personnel to work without restrictions." (Bradshaw. V.1993)

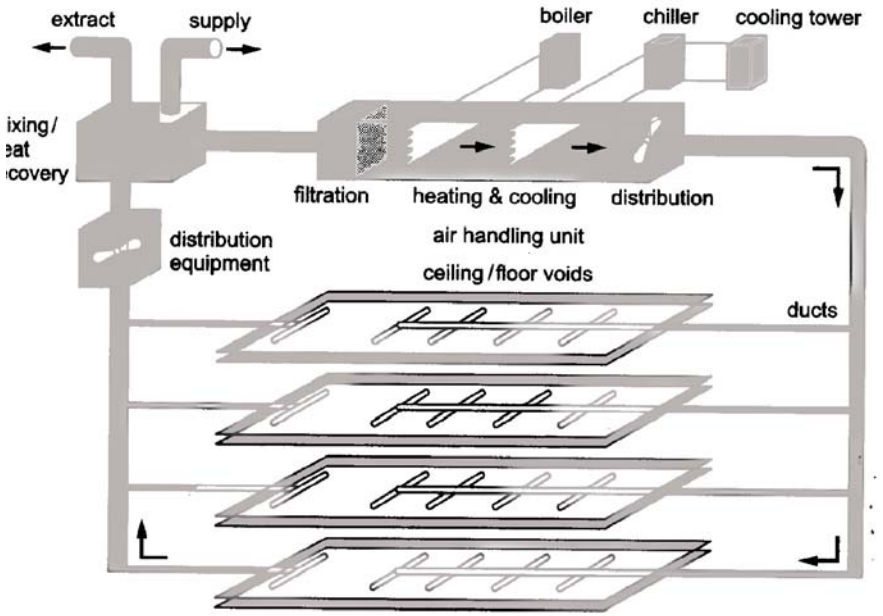


Figure 9 -12 Air- conditioning layout diagram

Fire

"Tall buildings and those extending over large areas have portions that cannot be reached by ladders and hoses. Large buildings therefore require their own fire- fighting systems. The most common means of fire suppression is the use of water supplied by automatic sprinkler systems or standpipe systems. There is provision made for fire brigade vehicles and appliances, and provisions for firemen's lifts. Special water storage tanks and fixed fire mains and hydrants will be provided in and around the hotel. If the effects of a fire are to be minimized and occupants allowed an opportunity to evacuate, fires must be contained within their immediate area of origin. Walls and partitions with fire resistance ratings should be provided in order to prevent the spread of fire from developing. The more compartments within an area, the better the chances for effecting fire control, minimizing damage, and preventing the fire from spreading and destroying other parts of the building."(Bradshaw.V. 1993)

The building's normal HVAC system is frequently used for smoke control. It is arranged so that it can either pressurize a zone or evacuate smoke from it as needed. The basic principal of zone smoke control is to provide a positive air pressure in the areas of safe refuge and a negative pressure in the areas of smoke contamination. The proposed hotel development has a number of smoke control zones, each separated from the others by partitions, floors, and doors that can be closed to inhibit the smoke movement.

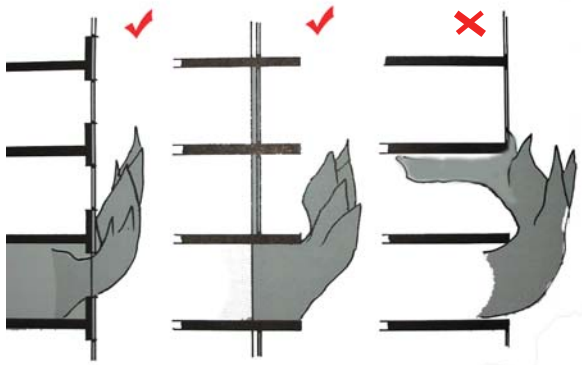
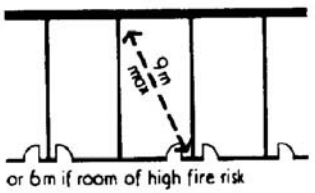
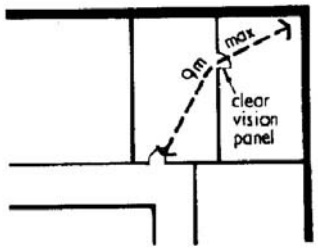


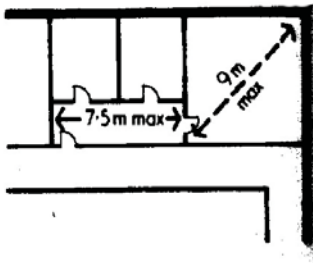
Figure 9 -13 Diagram showing the correct way of preventing spread of fire's trough the use of the building structures



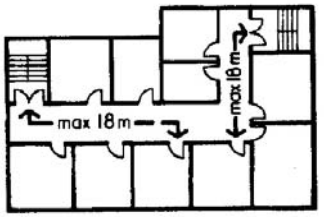
a *Maximum allowable travel distance to the doorway from the most remote corner of the room.*



b *In multi-room suites no single cross-room dimension should exceed 9 m.*



c *In multi-room suites any associated private corridor limited to 7.5 m long.*



d *Stage 2 escape; no room exit further than 18 m from entrance to protected escape route.*

Figure 9 -14 Diagram a- d showing fire regulations within a large building

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LIST OF FIGURES

5. Design Formulation:

6. Design Principals:

7. Design Discourse:

9. Technical:

11. APPENDIXES

CONTENTS

1. HOTEL GRADING CRITERIA

EXTERIOR

1. APPEARANCE OF BUILDINGS

10 – 9 In new buildings, absence of weathering, fresh well-maintained paintwork, an overall clean and "new" look. Alternatively, in older buildings no unsightly staining and well-maintained paintwork. Visible outbuildings or annexes to be of a similar standard. External lighting. Good clear signage. Addition of attractive architectural features, port cochere, etc.

8 High quality maintenance of paint and/or stone/brickwork though some natural weathering may be present. All areas of paintwork to be in sound condition. Some additional external features to enhance appearance.

2. GROUNDS AND GARDENSALL FACILITIES WITHIN THE

grounds should be evaluated in this section, including: gardens, tennis courts, swimming pools, bowling greens, volleyball courts, children's play areas, etc.

10 – 9 Evidence of systematic programme of maintenance – well-tended formal gardens or attractive "natural" environment. Tidy and well-lit pathways. Attractive appearance throughout the year. Well-maintained driveway and entrance. No disorder or rubbish and no evidence of litter. Provision of garden furniture or architectural features appropriate to the nature of the market attracted to the establishment.

8 High standards of maintenance in formal gardens. Pleasant and tidy appearance throughout the year. No clutter/disorder around service areas. External lighting, etc and good driveway. Some architectural features appropriate to the market.

3. PARKING

10 – 9 Marked parking bays in a secure environment. External security lighting. Secure enclosure for vehicles close to accommodation (if appropriate to the market). In B&B secure, well-lit parking area.

8 Organised, secure parking close to accommodation. In B&B secure parking within confines of grounds.

BEDROOMS

If there are a number of bedrooms which may have been decorated or refurbished at different times they may each be assessed at a different level of quality and condition. In this case the lowest mark is applied.

4. DECORATION

10 - 9 High quality wall covering (paint or wallpaper). Attention to detail, thoughtful co-ordination of patterns, colours and textures. If plain décor then addition of high quality pictures, objects d'art, etc although some styles require a "minimalist" approach. All work should look professional and be well executed.

8 High quality wall covering, but need not be in excellent condition. Signs of wear and tear (i.e. scratches, water splashes, finger marks, etc). Room décor may range from excellent to good.

5. FURNITURE AND FURNISHINGS

10 - 9 Excellent intrinsic quality and in excellent condition. Furniture of sound construction, attractive professional finish and detailing. Little or no sign of ageing, wear and tear or ill-use. Ample hanging space. Attractive comfortable easy seating with upholstery in excellent condition. Full, well-lined curtains with appropriate accessories, in working order. Electronic goods of excellent quality and in excellent condition.NB: some excellent antique furniture may show signs of "distress" which does not detract from its excellence depending on the degree of deterioration.

8 High intrinsic quality of materials may show some signs of use. Alternatively new, good (as opposed to excellent) quality furniture and furnishings. Some contract furniture even when brand new will only be "very good". Well cared for domestic furniture in a B&B may be very good. Curtains to be full and effective in retaining heat/keeping out light. Good quality electronic goods in good condition.

6. FLOORING AND CEILING

10 - 9 High quality fitted carpets (high percentage wool content), good thick pile and underlay, professionally laid and in pristine condition. Alternatively excellent quality domestic carpeting, fit for purpose, professionally laid and in pristine condition. High quality wooden or tiled flooring, professionally laid and in pristine condition with high quality occasional rugs or mats. Ceiling to be of excellent quality and professionally fitted, no sagging ceilings or evidence of water leakage or seeping. Professionally painted with no marks, or stains.

8 High quality carpet beginning to show some signs of ageing (flattening or wearing). No stains, burns or marks, etc. Alternatively carpet with higher percentage of man-made fibre but in new condition. Wooden or tiled flooring in need of buffing but with high quality rugs. Ceiling of good quality and professionally fitted, no sagging ceilings or evidence of water leakage or seeping. Professionally painted.

7. BEDS AND LINEN

10 - 9 Beds sizes frequently larger than standard size. Sound mattresses and spring bases. Decoration, interesting bedframes (excellent quality). High quality linen, "crisply" laundered. A good supply of pillows, cushions. Thick, weighty blankets with spares available. Good quality duvet (season dependent) co-ordinated with bedroom décor and softs if no separate bedcover. Bedcovers thickly quilted or similar high quality, co-ordinated with bedroom décor and other soft furnishings. Valances where appropriate. Headboards offering a degree of comfort and free from head or other stains.

8 Very good firm mattresses and sound base. All bed linen and bedding to be of high quality though may not be in a brand new condition - co-ordinated with other soft furnishings. Bed frames may be of an older style, but in good condition and good quality.

8. TEMPERATURE CONTROL

10 - 9 Thermostatically and individually controlled heating and/or cooling system capable of maintaining a comfortable room temperature of between say 18oC and 25oC. Appropriate to size and location of room. Apparatus in excellent condition. In hotels an excellent score would apply for ducted or remote controlled air-conditioning. In B&B new domestic, excellent quality heating or cooling (free standing/wall or ceiling mounted) appliance is acceptable (fan, heater, air-conditioner).

8 Individual control by guest at all times, some ageing of excellent apparatus. Good quality and quiet wall mounted air-conditioners would receive an 8 rating. In B&B, new, good quality domestic heating or cooling (free standing wall or ceiling mounted) appliance is acceptable (fan, heater, air-conditioner).

9. LIGHTING

10 - 9 Overall high standard of illumination in room. Controllable dimness/glare. Light sources in all appropriate places – especially for shaving, make-up, contact lenses, reading, etc. Bedside lighting control separate for each occupant. Picture lights, recessed spot lamps. All lights and shades of high quality manufacture and in excellent order. No wobbly connections, burnt shades, flimsy bases that fall over, etc.

8 Provision of more sources of light than is strictly necessary i.e. more than just centre and bedside lights. High quality fittings, lamps bases, etc.

10. SPACIOUSNESS/OVERALL IMPRESSION

10 - 9 A spacious, well-planned room with furniture in convenient places. Ease of access to all furniture, cupboards, wardrobes, drawers, etc. A sitting area with sufficient space to relax. Space to put luggage so that it does not clutter the room and obstruct access. Easy access to all facilities e.g. use of desk without having to move tea tray. TV visible from sitting area or bed. Unrestricted view of full mirror. No intrusive noise from other rooms or public areas.

8 Reasonably spacious room with good access to all furniture and facilities. No areas of restricted access or obstruction. Not necessary to have a self-contained sitting area but room must be large enough to comfortably contain an easy chair in addition to the standard bedroom furniture. No creaky boards or intrusive noise.

BATHROOMS

11. DECORATION AND FLOORING

10 - 9 Highest quality floor and wall coverings. Tiles well fitted. Grouting in excellent condition. No marks, stains, condensation damage. No peeling wallpaper or flaking paint. Flooring well-fitted and free from stain or water damage.

8 May be high quality finish but not always recent – some signs of wear but all in sound condition. Alternatively, may be recently decorated but not with the highest quality materials, though a competent and professional job. High quality floor covering or tiles.

12. FIXTURES AND FITTINGS

10 - 9 High quality, solid, well-made fittings in excellent order and matching style. High quality finish. Sturdy cast iron or steel and enamel bath. Attractive shower screen. Good sized washbasin. Easily used, responsive controls. Plenty of hot water at all times.

8 Generally high quality fittings throughout, but not necessarily new. Good-sized bath. Shower screen or good quality curtain (if necessary to keep surrounding area free from water). All porcelain in good order – no cracks, crazing or dull finish, no stains. Matching and co-ordinated styles.

13. LINEN

10 - 9 Full range of towel sizes – bath sheet, (bath towel optional), hand towel, face cloth for each guest. Provision of towelling robes. Thick, heavy, fluffy quality with plenty of pile. Replace daily or after each use.

8 Range of towels including bath sheet/towel and hand towel per guest but not quite such heavy quality as found in excellent. Changed frequently or at guest's request.

14. LIGHTING AND TEMPERATURE CONTROL

10 - 9 Lighting effective for all purposes – shaving, make-up, and contact lenses, particularly at washbasin/shaving point. Excellent quality fittings, recessed lights, spot lamps. In cold climate heated towel rails and/or other forms of heating should be provided.

8 High standard of light fittings – centre, main light plus adequate shaving light, possibly supplementary lights. Possible heated towel rail and/or other form of heating in cold climate.

15. SPACIOUSNESS

10 - 9 Conveniently laid out bathroom with easy access to all facilities. Plenty of provision for laying out toiletries and hanging up clothes, etc. A high level of spaciousness.

8 Good-sized rooms with access to all facilities. May be room for only one person at a time. No awkward corners or obstructed parts. Good space for toiletries.

PUBLIC AREAS

All areas other than the areas previously mentioned, which are inside a building and are accessible to guests and the public should be evaluated under this section.This includes: conference facilities, corridors, public toilets, lounges, reception areas, fitness centres, business centres, etc.

16. DECORATION

10 – 9 High quality wall covering in excellent condition. Evidence of co-ordinated design. Interesting architectural features, artwork, objects d'art, etc. No evidence of ageing, wear and tear (some historical locations excepted). High quality professional finish.

8 Use of high quality materials, though not necessarily in pristine condition. Alternatively more moderate quality materials if recently decorated. Attempt to co-ordinate design with additional attractive features. No scratches, chips, stains, or scuffs. Professional workmanship.

17. FURNISHINGS AND FIXTURES

10 – 9 High degree of comfort and luxury. High quality in excellent condition. Attractive, co-ordinated extras. Decorative, occasional pieces in main room/s and corridors. In B&Bs high quality domestic furniture in excellent condition.

8 High quality furniture but not necessarily new. All in sound condition, but may have "lived-in" feel. Alternatively, more moderate quality furniture in excellent condition. Comfortable easy seating.

18. FLOORING AND CEILING

10 - 9 High quality fitted carpets (high percentage wool content), good thick pile and underlay, professionally laid and in pristine condition. Alternatively excellent quality domestic carpeting, fit for purpose, professionally laid and in pristine condition. High quality wooden or tiled flooring, professionally laid and in pristine condition with high quality occasional rugs or mats. Ceiling to be of excellent quality and professionally fitted, no sagging ceilings or evidence of water leakage or seeping. Professionally painted with no marks, or stains.

8 High quality carpet beginning to show some signs of ageing (flattening or wearing). No stains, burns or marks, etc. Alternatively carpet with higher percentage of man-made fibre but in new condition. Wooden or tiled flooring in need of buffing but with high quality rugs. Ceiling of good quality and professionally fitted, no sagging ceilings or evidence of water leakage or seeping. Professionally painted.

19. LIGHTING

10 - 9 Overall high standard of illumination giving sufficient light for all appropriate purposes but also designed for good effect – showing off features of rooms/ corridors. All lights and shades of high quality manufacture and in excellent order. No wobbly connections, burnt shades, flimsy bases that fall over, etc. No harsh fluorescent tubes.

8 High quality fittings with more adequate spread of illumination for practical use, though no or limited sophisticated use of lighting "effects". Occasional lamps, reading lights, perhaps picture lights.

20. ATMOSPHERE AND AMBIENCE

10 - 9 Harmonious combination of décor, lighting and comfortable furniture. Soothing co-ordinated effect. No jarring elements. Interesting architectural features, spacious rooms. No intrusive noise. In a B&B no intrusion of boisterous pets.

8 Comfortable, relaxed feel. May be some busy activity or music in background but not intrusive. Co-ordinated décor, finishing, etc.

DINING FACILITIES

21. DECORATION

Same as public areas and should be assessed as part of public areas if an open plan area. Dining area assessed separately to public areas if a separate room. In B&B can be assessed under public areas.

10 – 9 High quality wall covering in excellent condition. Evidence of co-ordinated design. Interesting architectural features, artwork, objects d'art, etc. No evidence of ageing, wear and tear (some historical locations excepted). High quality professional finish.

8 Use of high quality materials, though not necessarily in pristine condition. Alternatively more moderate quality materials if recently decorated. Co-ordinated design with additional attractive features. No scratches, chips, stains, or scuffs. Professional workmanship.

22. FURNISHINGS

General principles of furnishings in public areas with additional considerations.

10 - 9 High degree of comfort, well-spaced chairs of appropriate height for tables. Co-ordinated themed design. Spacious tables.

8 All of high quality but not necessarily the same design though co-ordinated. Good sized tables.

23. FLOORING AND CEILING

Same as public areas and should be assessed as part of public areas if an open plan area. Dining area assessed separately to public areas if a separate room.

10 - 9 High quality fitted carpets (high percentage wool content), good thick pile and underlay, professionally laid and in pristine condition. Alternatively excellent quality domestic carpeting, fit for purpose, professionally laid and in pristine condition. High quality wooden or tiled flooring, professionally laid and in pristine condition with high quality occasional rugs or mats. Ceiling to be of excellent quality and professionally fitted, no sagging ceilings or evidence of water leakage or seeping. Professionally painted with no marks, or stains.

8 High quality carpet beginning to show some signs of ageing (flattening or wearing). No stains, burns or marks, etc. Alternatively carpet with higher percentage of man-made fibre but in new condition. Wooden or tiled flooring in need of buffing but with high quality rugs. Ceiling of good quality and professionally fitted, no sagging ceilings or evidence of water leakage or seeping. Professionally painted.

24. LIGHTING

Same as public areas and should be assessed as part of public areas if an open plan area. Dining area assessed separately to public areas if a separate room.

10 - 9 Overall high standard of illumination giving sufficient light for all appropriate purposes but also designed for good effect – showing off features of rooms/corridors. All lights and shades of high quality manufacture and in excellent order. No wobbly connections, burnt shades, flimsy bases that fall over, etc. No harsh fluorescent tubes.

8 High quality fittings with more adequate spread of illumination for practical use, though no sophisticated use of lighting “effects”. Occasional lamps, reading lights, perhaps picture lights.

25. ATMOSPHERE AND AMBIENCE

10 - 9 Harmonious combination of décor and lighting. Spacious room and good layout of tables. No intrusive noise or smells. Themes or designs may add to the ambience. In a B&B may be a comfortable family dining room with high quality domestic furniture.

8 High standard of fabric. Perhaps busy, with some background noise. Tables rather close together. A little noise from bar or in a B&B sound of family in kitchen. Smaller room, atmospheric lighting.

FOOD AND BEVERAGE

Applies to outsourced as well as internal F&B – if the guest views the outsourced facility as being part of the hotel establishment (irrespective of whether the dining product is branded) it should be included in the assessment.

26. DINNER PRESENTATION

10 - 9 Well laid out on appropriate plate with attractive and appropriate garnish. Pleasing combination of colours, textures, and shapes. Attention to care and execution with attention on visual appeal. Carvery to be attended and rehabilitated. Buffet replenished/refreshed. In a B&B careful thought as to combinations of texture and colour. In simpler dishes – use of garnish, tidy, neat arrangement.

8 Obvious care and attention to detail with visual effect but perhaps not with the highest degree of skill. Tendency to standardise garnish.

27. DINNER QUALITY

10 - 9 Skilful use of finest, fresh ingredients. Could be simple style but with great attention to detail and quality. Everything prepared to the right degree. Good balance on menu with something for most tastes.

8 Evidence of aiming for highest quality but may not quite reach top level of execution. High quality fresh ingredients.

SERVICES AND SERVICE

28. WELCOME, FRIENDLINESS, ATTITUDE

10 - 9 Warm friendly smile. Helpful attitude. Help with luggage and provision of information about the establishment. All establishments attempt to establish a good rapport and show willingness to please.

8 Cheerful demeanour and attitude. Guests will be shown to room and given necessary information – told to ask if anything else required.

29. RESERVATION, CHECK-IN AND GENERAL EFFICIENCY

10 - 9 Efficient and helpful telephone reservation – all details taken down and checked and all necessary information given. Prompt, thorough check-in. All necessary information given to guests – layout of property, available facilities, meal times, etc. Any messages forwarded promptly. Efficient communication with other departments – summoning porter, booking restaurant table, etc.

8 Reservation dealt with promptly and all necessary information taken and provided. Efficient check-in. Perhaps not always given full information about facilities. Good responses to any requests, but guest's needs aren't anticipated.

30. PORTERAGE

Porterage may not apply to all serviced accommodation, but some assistance with luggage is expected at all 4- and 5-star hotels.

10 - 9 Smart, helpful manner of staff readily available. Good knowledge of hotel facilities and local area.

8 Willing and friendly, and reasonably knowledgeable about most matters – willing to find out. May have other duties but endeavours to be prompt.

31. ROOM SERVICE

Applies to outsourced as well as internal room service.

10 – 9 High standard of promptness and efficiency. Telephone answered promptly. Order delivered with minimal delay. Attentive manner. Orders correct – no items wrong or missing. Appropriate condiments. Attractive presentation. Cutlery and napkin provided. Dirties removed at earliest convenience.

8 Order taken in pleasant manner. Delivered in reasonable time. Pleasant attitude. Order correct. Asked if anything else required. Tray collected from outside room. If outsourced a tray (table), plate, and cutlery is provided by the accommodation establishment on which the guest can place their food.

32. PUBLIC AREA SERVICE

10 - 9 Efficient, attentive service from smart, willing staff. Needs of guests anticipated. Polished, professional manner. Drinks correctly served and presented. Top ups offered.

8 Brilliant, willing staff, helpful and attentive, though perhaps lacking the final polish. Show willingness when anything requested, though may have to go away and ask.

33. MEAL SERVICE

10 - 9 Cheerful friendly, polite, well-trained staff. Well-informed about food and wine. High standard of personal cleanliness. Prompt and efficient service. Correct cutlery and glasses supplied for each meal. Good judgement on timing of courses and drinks. Any further needs responded to. For breakfast a cheerful meet and greet, prompt service and dirties to be cleaned promptly and top-ups noted.

8 Well-motivated staff that shows evidence of aspiring to excellent standard, but may fall a little short and who could benefit from more training.

34. CHECK-OUT EFFICIENCY

10 - 9 Prompt attention. Bill correct in all details. Every item explained by receptionist. Guests asked if they enjoyed their stay. Positive last impression. Staff well versed in all methods of payment.

8 Prompt attention. Attempt at excellence, but perhaps lacking professional polish. Cheerful, bill correct.

35. TOURIST INFORMATION

10 - 9 Information pack in bedrooms or in reception/lounge on immediate and surrounding area as well as accommodation specific information. Books, pamphlets on matters of local interest, leisure facilities, etc. Personally prepared information. Staff well versed on relevant tourist information. Staff willing to assist and inform tourists on the local area. High attention to personalised itineraries and personal interest in guest's information requirements.

8 As for excellent but limited range. Staff not as well versed.

HOUSEKEEPING

36. BEDROOMS

10 – 9 High standard of cleanliness, attention to detail. Well-made beds, gleaming surfaces, no smears or marks. Evidence of thorough, not just superficial cleaning. No blown bulbs or broken equipment. Turndown service, room tidied, any trays taken away. Lights on and curtains drawn in the evening.

8 High standard of cleanliness but attention to detail may not come up to the same standard as "excellent". One or two small areas of maintenance missed.

37. GUEST BATHROOMS

10 – 9 Fastidious attention to hygiene. All surfaces gleaming. Clean, fresh smell. High level of efficiency.

8 Generally very high standard, but perhaps one or two slight lapses.

38. PUBLIC AREAS

10 – 9 All well vacuumed. All surfaces, high and low, dust free, no cobwebs. Table surfaces well polished, no smears. Ashtrays clean. No fingerprints on doorplates, light switches, etc. Flowers fresh and well arranged. Newspapers, books, etc up to date and tidy. In B&B personal/family items all tidy and uncluttered.

8 Generally very good level of vacuuming and dusting. Everything tidy and well arranged.

39. PUBLIC TOILETS

10 – 9 Fastidious attention to hygiene. All surfaces gleaming. Clean, fresh smell. High level of efficiency.

8 Generally very high standard, but perhaps one or two slight lapses.

40. RESTAURANT

10 – 9 High standard of cleanliness in all areas – no evidence of previous meal. Efficient vacuuming. Tables always set-up to high standard.

8 Generally high standard of cleanliness – no dust, etc. May be some clutter. Pile of menus, wine lists, etc.

40. APPEARANCE OF STAFF

The nature of the establishment will be taken into account as formality may vary significantly.

10 - 9 Clean, neat, appropriate clothes. A general smart, well-groomed appearance. Sleeves and trousers the right length. Clothing fresh and well ironed. Hair clean and under control. Hands and fingernails clean. Polished shoes.

8 Approaching excellent, but lacking the final touch. Perhaps some items a little ill fitting. All clothing clean.

CONCLUSION

FOR 4 AND 5 STAR HOTELS A HIGHER LEVEL OF GENERAL AMBIENCE AND SPACIOUSNESS WILL BE REQUIRED IN ALL AREAS OF THE HOTEL E.G. SPACIOUS CORRIDORS, BEDROOMS, ETC. SOME ACCOUNT MAY BE TAKEN OF LIMITATIONS IN OLDER OR HISTORIC PROPERTIES.

BEDROOMS

Room size must be comfortable and adequately accommodate all the furniture provided.

The bedroom should have at least two seating chairs.

If appropriate and fit for the purpose televisions must have a remote control and a wide choice of channels should be provided (pay TV is appropriate).

Air-conditioning and/or other forms of heating or cooling are preferred in conditions where extreme day and/or night temperatures are experienced. All 5-star hotel rooms should have air-conditioning.

There should be a safe in each room.

There should be a hairdryer in each room.

In areas where malaria occurs, adequate protection against mosquitoes in the form of mosquito nets, window gauze and/or insecticide should be provided in each guest room.

Bathrooms

A range of quality guest amenities should be available.

A bath and shower should be available (the shower may be over the bath). All new, purpose built 5-star hotel bathrooms should have a separate bath and shower.

Services and Food and Beverage

A 24-hour reception service is required in both 4- and 5-star hotels.

There should be a served beverage service in the public lounge and/or bar area.

Guest laundry service is required (need not be 24 hour but suitable to guest requirements).

A full service restaurant open to residents should be available if no alternative restaurant/s of high standards are available in the vicinity of the hotel. A full hot meal served in a suite is also acceptable, where the establishment offers full dining facilities in each suite (i.e. table, crockery, cutlery, condiments, linen, glassware, etc).

Room service should be provided (24 hours in 5-star hotels and 18 hours in 4-star hotels). This may be outsourced, but should be of a standard that conforms to the standard of the hotel.

DEFINITION

A hotel provides accommodation to the travelling public, has a reception area and offers at least a “breakfast room” or communal eating area. In general a hotel makes food and beverage services available to guests, these may be outsourced or provided by the hotel

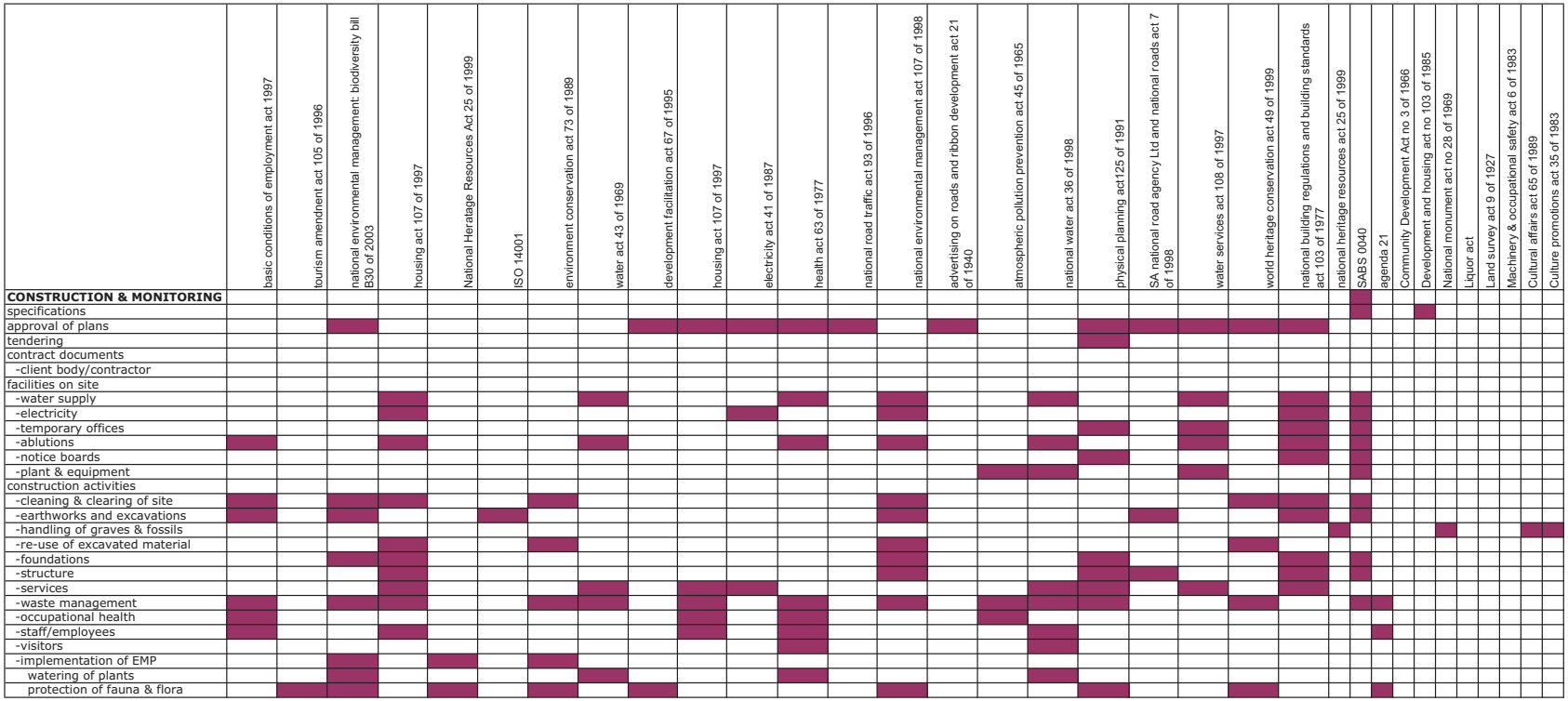
(www.Tourism Grading Council of South Africa.)

2. LEGISLATION FOR HOTELS

THE FOLLOWING TABLES SUMMARISE THE ACTS AND LEGISLATION THAT WILL BE APPLICABLE AT DIFFERENT STAGES DURING THE CONSTRUCTION OF THE HOTEL.

	basic conditions of employment act 1997	tourism amendnent act 105 of 1996	national environmental management: biodiversity bill B30 of 2003	housing act 107 of 1997	National Heratage Resources Act 25 of 1999	ISO 14001	environment conservation act 73 of 1989	water act 43 of 1969	development facilitation act 67 of 1995	housing act 107 of 1997	electricity act 41 of 1987	health act 63 of 1977	national road traffic act 93 of 1996	national environmental management act 107 of 1998	advertising on roads and ribbon development act 21 of 1940	atmospheric pollution prevention act 45 of 1965	national water act 36 of 1998	physical planning act125 of 1991	SA national road agency Ltd and national roads act 7 of 1998	water services act 108 of 1997	world heritage conservation act 49 of 1999	national building regulations and building standards act 103 of 1977	national heritage resources act 25 of 1999	SABS 0040	agenda 21	Community Development Act no 3 of 1966	Development and housing act no 103 of 1985	National monument act no 28 of 1969	Liquor act	Land survey act 9 of 1927	Machinery & occupational safety act 6 of 1983	Cultural affairs act 65 of 1989	Culture promotions act 35 of 1983
PRE-PLANNING																																	
client structure management plan																																	
business plan			■	■				■			■		■	■		■	■	■			■	■		■			■						
-corporate structure																																	
-contracts																									■								
site selection																																	
-desk study																																	
-existing infrastructure																																	
-design			■	■				■			■		■	■		■	■	■			■	■		■		■						
1st phase consultants appointm'ts																									■								
land survey	■		■		■		■																							■			
feasibility study																																	
-economic																										■							
-social																															■	■	
-environmental (scoping report)		■	■	■	■		■		■					■				■			■				■								
sustainability			■	■		■	■	■	■	■								■							■								

	basic conditions of employment act 1997	tourism amendment act 105 of 1996	national environmental management: biodiversity bill B30 of 2003	housing act 107 of 1997	National Heritage Resources Act 25 of 1999	ISO 14001	environment conservation act 73 of 1989	water act 43 of 1969	development facilitation act 67 of 1995	housing act 107 of 1997	electricity act 41 of 1987	health act 63 of 1977	national road traffic act 93 of 1996	national environmental management act 107 of 1998	advertising on roads and ribbon development act 21 of 1940	atmospheric pollution prevention act 45 of 1965	national water act 36 of 1998	physical planning act125 of 1991	SA national road agency Ltd and national roads act 7 of 1998	water services act 108 of 1997	world heritage conservation act 49 of 1999	national building regulations and building standards act 103 of 1977	national heritage resources act 25 of 1999	SABS 0040	agenda 21	Community Development Act no 3 of 1966	Development and housing act no 103 of 1985	National monument act no 28 of 1969	Liquor act	Land survey act 9 of 1927	Machinery & occupational safety act 6 of 1983	Cultural affairs act 65 of 1989	Culture promotions act 35 of 1983
DESIGN AND PLANNING																																	
appoint consultants																									■								
EIA																																	
-site selection																																	
-site assessment																																	
water			■				■					■		■			■		■	■	■												
soil			■				■					■		■							■												
air			■				■					■		■		■					■												
light			■				■					■		■	■	■					■												
noise			■				■					■		■							■												
access roads			■				■						■	■	■				■		■												
waste			■			■	■					■		■	■	■					■												
fauna		■	■		■		■		■					■				■			■				■								
flora		■	■		■		■		■					■				■			■				■								
-social																																	
-economical																																	
-cultural		■	■	■	■		■		■					■							■												
building design	■	■					■	■	■	■	■	■		■		■	■	■		■	■	■		■									
-building regulations																								■									
-health and safety																															■		
-waste management			■				■	■		■		■		■		■		■			■			■	■								
-energy use																																	
electricity				■							■			■								■		■									
gas				■										■																	■		
solar				■								■		■		■						■											
building facilities																																	
-accommodation	■	■					■	■	■	■	■	■		■		■	■	■		■	■	■		■									
-conference facilities	■	■					■	■	■	■	■	■		■		■	■	■		■	■	■		■									
-kitchen				■				■		■	■	■				■	■			■		■		■									
-health and safety	■									■		■				■															■		
-staff residence	■			■			■	■	■	■	■	■		■		■	■	■		■	■	■		■									
-roads	■						■				■		■	■	■		■	■	■		■	■											
-parking							■				■		■	■			■	■	■		■	■		■									
-labour										■	■					■									■								
-site security																		■			■			■									


basic conditions of employment act 1997
tourism amendment act 105 of 1996
national environmental management: biodiversity bill B30 of 2003
housing act 107 of 1997
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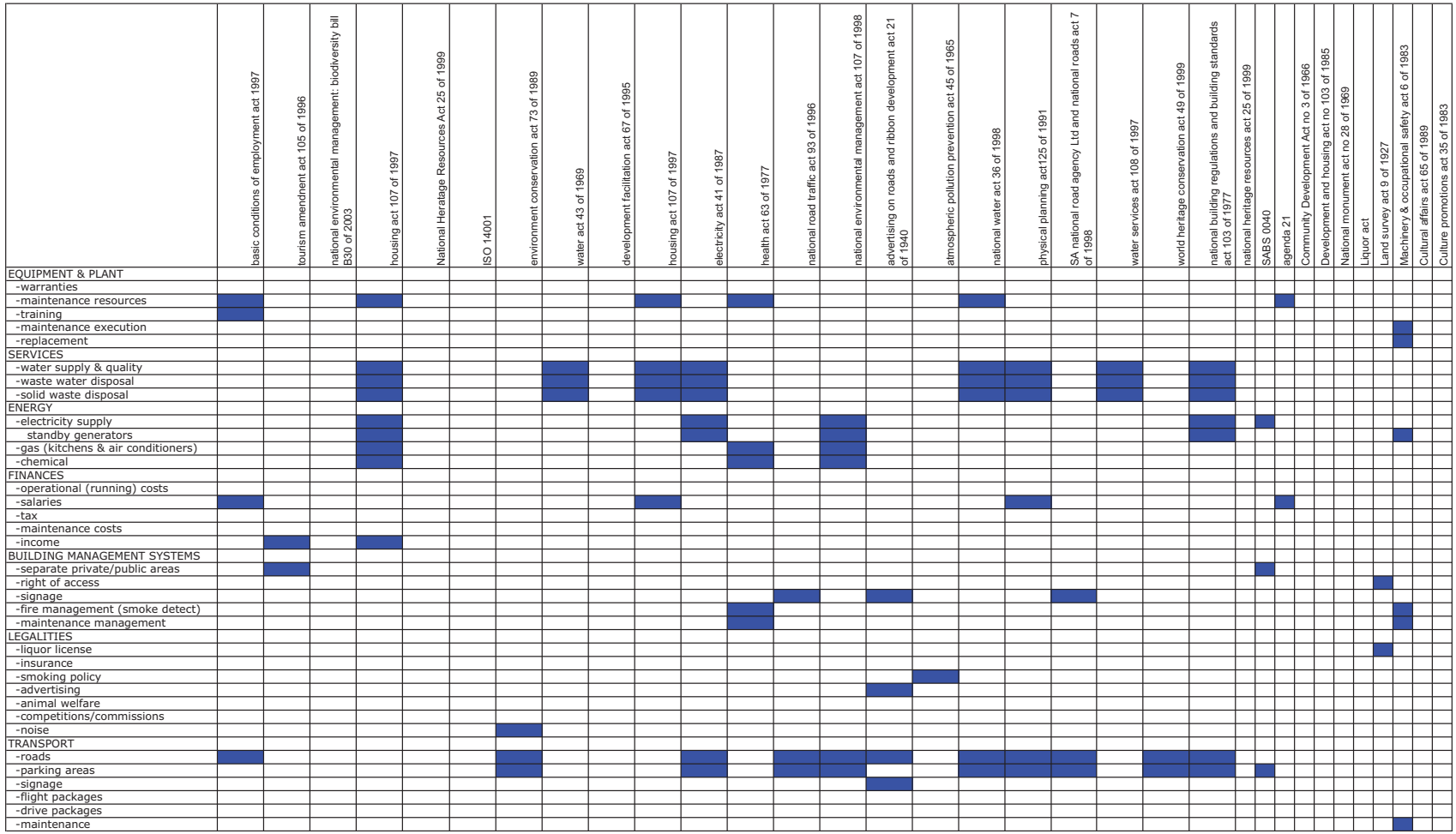
national water act 36 of 1998
physical planning act125 of 1991
SA national road agency Ltd and national roads act 7 of 1998
water services act 108 of 1997
world heritage conservation act 49 of 1999
national building regulations and building standards act 103 of 1977
national heritage resources act 25 of 1999
SABS 0040
agenda 21
Community Development Act no 3 of 1966
Development and housing act no 103 of 1985
National monument act no 28 of 1969
Liquor act
Land survey act 9 of 1927
Machinery & occupational safety act 6 of 1983
Cultural affairs act 65 of 1989
Culture promotions act 35 of 1983
CONSTRUCTION & MONITORING
specifications
approval of plans
tendering
contract documents
-client body/contractor
facilities on site
-water supply
-electricity
-temporary offices
-ablutions
-notice boards
-plant & equipment
construction activities
-cleaning & clearing of site
-earthworks and excavations
-handling of graves & fossils
-re-use of excavated material
-foundations
-structure
-services
-waste management
-occupational health
-staff/employees
-visitors
-implementation of EMP
watering of plants
protection of fauna & flora

	basic conditions of employment act 1997	tourism amendment act 105 of 1996	national environmental management: biodiversity bill B30 of 2003	housing act 107 of 1997	National Heratage Resources Act 25 of 1999	ISO 14001	environment conservation act 73 of 1989	water act 43 of 1969	development facilitation act 67 of 1995	housing act 107 of 1997	electricity act 41 of 1987	health act 63 of 1977	national road traffic act 93 of 1996	national environmental management act 107 of 1998	advertising on roads and ribbon development act 21 of 1940	atmospheric pollution prevention act 45 of 1965	national water act 36 of 1998	physical planning act125 of 1991	SA national road agency Ltd and national roads act 7 of 1998	water services act 108 of 1997	world heritage conservation act 49 of 1999	national building regulations and building standards act 103 of 1977	national heritage resources act 25 of 1999	SABS 0040	agenda 21	Community Development Act no 3 of 1966	Development and housing act no 103 of 1985	National monument act no 28 of 1969	Liquor act	Land survey act 9 of 1927	Machinery & occupational safety act 6 of 1983	Cultural affairs act 65 of 1989	Culture promotions act 35 of 1983
OPERATIONS & MONITORING																																	
PEOPLE																																	
-employment	■			■						■		■					■								■								
-training: unions	■																																
-skills development	■																																
-benefits	■											■																					
-contracts																																	
-labour relations										■								■							■								
-health & safety	■											■																					
-ownership																																	
-child labour																																	
-immigration																																	
HEALTH & SAFETY																																	
-employees	■			■						■		■					■								■								
-visitors												■																					
-transportation																																	
cars													■						■														
busses													■						■														
helicopters													■						■														
-access for																																	
ambulances													■						■														
fire trucks													■						■														
-medical facilities												■																					
-security																		■						■									
-theft & crime, vandalism																		■						■									
-water quality control				■				■				■		■			■			■		■		■									
-food quality control												■					■			■													
-kitchen hygiene																																	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EQUIPMENT & PLANT
-warranties
-maintenance resources
-training
-maintenance execution
-replacement
SERVICES
-water supply & quality
-waste water disposal
-solid waste disposal
ENERGY
-electricity supply
standby generators
-gas (kitchens & air conditioners)
-chemical
FINANCES
-operational (running) costs
-salaries
-tax
-maintenance costs
-income
BUILDING MANAGEMENT SYSTEMS
-separate private/public areas
-right of access
-signage
-fire management (smoke detect)
-maintenance management
LEGALITIES
-liquor license
-insurance
-smoking policy
-advertising
-animal welfare
-competitions/commissions
-noise
TRANSPORT
-roads
-parking areas
-signage
-flight packages
-drive packages
-maintenance

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DECOMMISSIONING																																	
feasibility																																	
-registration																																	
-public participation																																	
-EIA & VIA																																	
-plannig (fast track)																																	
relocation & evacuation																																	
-unemployment																																	
-compensation																																	
-temporary housing																																	
-labour laws																																	
demolition																																	
-demolition standard																																	
-waste																																	
-pollution																																	
air																																	
water																																	
soil																																	
-temporary accommodation																																	
-temporary services																																	
-explosives																																	
-recycling																																	
-labour laws																																	
-heritage awareness																																	
-relocate trees																																	
-remaining infrastructure																																	
-toxic waste																																	
-medical waste																																	
-health & safety																																	
-safety signage																																	
rehabilitation & site maintenance																																	
-encroachment of invaders																																	
-maintain trees																																	
-stormwater & site hydrology																																	
-prevent illegal squatting																																	
redevelopment																																	

3. FEASIBILITY STUDY

Project Data

General

Name of Project	Sammy Marks Business Hotel
Project Location	Pretoria CBD- Sammy Marks
Date of Issue	5 Sep.2005
Scheme	Indicative Viability Analysis
Currency	R Rand

The hotel is a commercial development. Above all a return on the capital investment is of paramount intrest. The annual nett income is a factor of the annual income out of hotel activities set of against the hotel operating expenses and management costs.There are four main contributors to the total income out of hotel activities. They are the accommodation catering, bar sales and sundries. Accommodation makes up the biggest share at 50% and the others are 28%, 17% and 5% respectively.A occupancy of 60% for 1.3 persons per room will be used for calculasion purposes.

Land

Land Cost	R 12, 672, 000
Land Cost per m2 of Bulk	R 4, 000
Bulk Available	3168 m2

Programme

Estimated Cost Base Date	31-Jul-06
Effective Date of Purchase	27 Oct. 2006
Commencement of Construction	22 Nov.2006
Auto matic Calculation of Precontract	4 Months
Completion of Construction	20 Feb. 2008
Construction Period	15 Months

Interest

Nominal Intrest Rate- per annum	15.50%
Nominal Intrest Rate is Compounded	Yearly

Municipal Valuation

On Land	
On Improvements	
Total	

Rentals

Present Value Rate for Rentals	12.00%

Notes/ Basis of Estimate

1.) Professional Team

Architect
Landscape Architect
Interior Architect
Town and Regional Planner
Quantity Surveyors
Construction Managers
Structural Engineer
Mecanical Engineer
Electrical Engineer
Project Manager

Consultants:

Kitchen consultant
Telephone consultant
Computer specialist
Audio Visual Consultant

2.) Scope of Work

Proposed Hotel, Retail and Business Centre in Pretoria's Inner City
The proposed development provides for the following rentable areas:

A- Retail
B- Business Centre
C- Restaurant
D- Hotel

					Refer to point 8.) With Parking- Basement		
	A	B	C	D	A	B	C
Construction Area	450m2	2040.32m2	871.5m2	19290m2	562.5m2	2552.82m2	1198.3m2
Rentable Area	352m2	1626m2	587m2				
Usable Area	352m2	766.56m2	403m2				
Shop Area	365.1m2	1648m2	416m2				
Use Ratio					63%	64%	50%
With parking hotel construction area				22177.5m2			

3.) General

Concept plans of architect used for estimating purposes
Estimates based on information from similar projects

4.)Programme

For the purpose of this estimate the following programme has been used:

Land purchases date	27 Oct. 2006
Construction period	15 Months
Construction commencement	22 Nov.2006
Construction completion	20 Feb. 2008

5.) Cost Escalations

Prior to Construction	10.00%
During Construction	9.00%

6.) Vacancies
No provision has been made for vacancies

7.) Rentable Area
The rentable area is calculated on the South African Property Owners Association (SAPOA) method of measurment

8.) Parking Provisions
Making use of existing basement parking complex- number of bays needed will be bought at current building rates.

Required parking bays based on-
Retail- 2bays/ 100m2 of rentable area
Restaurant- 3bays/ 100m2 of rentable area
Business Centre- 2bays/ 100m2 of rentable area
Hotel Staff/Guests- 1.5bays/ room

9.) Exclusions
The following are specifically excluded from the estimated improvements cost:

Mecanical and electrical -
Satilite TV Backbone system
Refrigeration equipment
Gas installation

General:
All tenants fixtures and fittings
Special tenants requirements
Tenants signage to building
Provision for future extension
Vat

Executive summary

Construction area	Hotel	22177.5m2
	Retail, Business Centre, Restaurant	4313.62m2

Elements		Cost Excl. VAT®	Elemental Rate/m2 Building area
1.) Preliminaries(10%)		18,463,005	
2.)Estimated cost			
	Business Centre	12,764,100	R5000/m2
	Retail	1,968,750	R3500/m2
	Restaurant	4,793,200	R4000/m2
	Hotel	161,700,000	R1,050,000/ room (154 rooms)
Service areas, storage Machine rm's		2,250,000	R1500/m2
Paving		209, 000	R100/m2
Landscaping		365,000	R200/m2
Parking(use of existing)		580,000	R2000/m2
	Total	184,630,050	
	Sub- total	203,093,005	
3.) Contingencies (3%)		6,092,792	
Estimated current building cost		209,185,797	
4.) Escalation			
pre- contract escalation (10%)		6,792,431.96	
post- contract escalation (9%)		12,643,679,.51	
Escalated building cost		228,622,000	
5.) Professional fees		32,509,000	
Estimated current building cost		261,131,000	
6.) Development cost		540,000.00	(Rand)
Town planner			15,000.00
Geotechnical report and land survey			50,000.00
Sundry legal fees			40,000.00
Traffic Eng.			30,000.00
Plan scrutiny fees			45,000.00
Electrical bulk contributions			180,000.00
Bulk civil engineering cost			120,000.00
Opening function			60,000.00
		261,671,000	

7.) Intrest		
Interim intrest on development cost during construction period of 15 months at 15.5%		45,123,000
Interim intrest on land cost during construction period of 15 months at 15.5%		2,501,000
Sub- total	309,295,000	
8.) Land costs	13,321,603	
Land value		12,672,000
Rates and taxes during construction		80,355
Bond registration and transfer fees		539,248
Re- zoning and proclamation costs		30000
Sub- total	322,616,603	
9.) Sundries	1,415,434	
Insurances		1,000,000
Leasing fees(5% of total net income)		415,434
TOTAL PROJECT COST	R 324,032,037	

Income and Return Schedule

(Value added tax is excluded from all rentals herein)

Category/Tenant	**Rentable Area** m^2	**Initial Rental** 31 Sep.2005 12%per annum	**Future Rental** 20 Feb.2007	**Net Monthly Future Income**
Retail	365	R 85.00	R 102.69	R 37,481.58
Business Centre	1626	R 90.00	R 108.73	R 176,794.66
Restaurant	587	R 90.00	R 108.73	R 63,824.40
		Total excluding parking		R 278,100.64
Parking	58 no.	R 200	R 238	R 13 804
		Total including parking		R 291,904.64
				For one year (x12)
Nett annual income				R3,502855.68
Allowance for vacancies, bad debt (less 5%)				R3,327,713

Hotel

Room information		**Number**	**Rate- R**
Guest rooms		140	R 800
Suites		28	R 1200
Presidential suites		2	R 4000
Number of guests per room		x 1.3	R 199680/DAY
Occupation rate		%	60
Income out of hotel activities			R 87, 459,840
	Departmental income %		
Accommodation	50	R 43,729,920	
Catering	28	R 24,488,755.2	
Bar Sales	17	R 14,868,172,8	
Sundries	5	R 4,372,992	
Hotel operating expenses			R 56,673,976
Accommodation	20	R 8,745,984	
Catering	60	R 14,693,253.12	
Bar Sales	50	R 7,434,860.4	
Sundries	90	R 3,935,692.8	
General	25% of total income	R 21,864,960	
Hotel management cost			R 9,336,338
Management fee	2.5% of turnover	R 2,186,496	
Incentive bonus	25% of nett income	R 7,149,842	
Nett annual income			R 21,449,526
Nett income as % of gross income			24.53%

Return on Investment

All together

24,777,239.00
324,032,037 → 7.70%

Sensitivity Study on Income
(effect of escalating average rental by 12%

Retail, Business Centre & Restaurant

	Average rental	Initial return	% increased
Current average rental of	88	7.70%	-
Assuming an average rental of	99	8.60%	0.90%
Assuming an average rental of	110	9.50%	0.90%
Assuming an average rental of	123	10.70%	1.20%