

LOCATION

Sandton City is situated in Sandton, one of Johannesburg's most affluent suburbs.

The complex is bounded by four roads, namely Rivonia Rd, Fifth Str, Alice Lane and Sandton Drive which provides direct access to both the open and covered parking areas.

The Johannesburg ring road system provides rapid access from the Complex to Pretoria, Jan Smuts Airport and the East and West rand.

Sandton City is situated 13 km's from the centre of Johannesburg with a travelling time of 15 minutes.

SIZE

Total Sandton City Complex:

195 180m²

Gross Lettable Area:

Shopping Centre: 109 000m² (up from the original 35 000m²)

Offices: 86 180m² made up of:

Office Tower - 22 700m²

Twin Towers - 20 150m²

3 Alice Lane - 15 330m²

Zenex - 11 440m²

15 Alice Lane - 16 560m²

Sandton Sun & Towers Hotel:

62 645m² with 565 rooms/5 restaurants and 2 bars

Parking and services:

152 650m² - a total of 6200 parking bays (open and covered)

Major Stores:

Total: 60 000m²

Gross lettable area divided into:

The Hyperama (14 200m²), Stuttafords (8 000m²), Edgars (9 850m²), John Orr's (6 450m²), Woolworths (8 050m²), Checkers (4 950m²) and Entertainment World (8 500m²).

Satellite tenants:

49 000m² (i.e. 45%) gross lettable area.

(Total number is over 250 speciality shops and service tenants).

DESCRIPTION OF CENTRE

Sandton City is a multi-level centre. It has two main levels (upper and lower), and in certain areas intermediate levels, a Basement Level (the cinema level) as well as a roof level.

- | | |
|-----------------------------|--|
| Roof Level: | Two specialist operations |
| Upper Level: | Tenant mix predominantly high fashion and accessories, with jewellers and curios much in evidence. |
| Lower Level: | Tenant mix is primarily specialist operations with food, interior decor and furniture. |
| Banking Level: | Primarily banking and building societies with one or two specialist tenants, e.g. florist and hairdressers. |
| Cinema Level: | Cinemas (15 in all), Showscan Theatre, restaurants, video amusement area, take away outlets and specialist operations. |
| Delivery and Storage Level: | This service level is underground and all deliveries (except to Woolworths, Checkers, Hyperama, Sales House and Boardmans - which have independent direct access to parking) are routed along a service road with lift access to a service passage behind the shops. This ensures that there is little or no conflict in the traffic of shoppers and deliveries. |

TENANT BREAKDOWN

11	Arts and Curios
7	Bakeries, Confectionery and liquor merchants
11	Banks and Building Societies
8	Books, Stationery and Art Requisites
15	Ster Kinekor Cinemas
1	Show Scan Theatre
1	Entertainment Booking Facility
6	Departmental & Food Stores
43	Fashion and Accessories stores
3	Florists
13	Footwear and Repair Stores
18	Furnishings & Interiors
9	Gifts, China and Glassware
16	Hair, Beauty and Health stores
15	Jewellery stores
6	Leather goods and luggage
7	Optical
12	Photographic, hi-fi and music outlets
26	Restaurants, coffee shops and fast food outlets
8	Specialised service stores
14	Speciality stores
6	Sport stores
2	Tobacconists
2	Toys, hobbies and handcrafts
3	Travel agents

AESTHETICS

An elegant and sophisticated atmosphere is prevalent throughout the centre with modern quality finishes and the expert use of colours. Sweeping malls as well as the strategic positioning of skylights ensure that the centre is filled with maximum natural lighting. Reflective surfaces have also been utilised to enhance the quality of light.

The co-ordinating colours of African Red granite cladding on the lift cores, glass balustrading and stainless steel handrails reflect Sandton City's upmarket identity.

The main promotions court of approximately 300m² features a black polished granite fountain with a series of weirs that echo the design of concentric circular light troughs in the ceilings.

Adding to this stunning effect is the circular pattern of polished granite and marble on the floor. Attractive mall furniture, slatted benches and planters of burgundy stained oak and telephone kiosks, signage and direction boards decorate the malls.

Sandton City stores also follow the image created by the centre. Interior decorated stores & designer fittings maintain an upmarket identity throughout the centre.

ORIENTATION:

- i) By majors in key positions on both upper and lower malls;
- ii) By courts adjacent to majors;
- iii) By grouping of tenants by merchandise type

CENTRE ACCESS

General:

Via lift, escalator, stairs and direct entrance to the malls, per level, as well as an independent entrance to the Hyperama to provide easy access for convenient shopping.

Access: i) Direct access from roof level parking:

- * by two observation lifts and escalators to the Fountain Court (main promotions court);
- * by one observation lift and escalators to the Checkers/Woolworths Court;
- * by one lift, stairs and escalator to level 6 (Boardmans)

ii) escalators to all courts including cinema level;

iii) lifts and escalators through John Orr's, Stuttards &

Edgars;

iv) Trolley lifts from roof to Checkers;

v) Lift and escalators to Woolworths (not from roof)

vi) Lift from roof to Cinema level

PARKING

Sandton City houses 6200 parking bays including 3 200 undercover bays and 3 000 open bays. Each shopping level is served by parking decks.

N.B. Roof Level parking with direct access via lifts, escalators and stairs to the Centre is an especially important facility.

SPECIAL FACILITIES

Paraplegic access, lavatories and parking

Post Office with 7250 boxes

6200 parking bays

Customer information kiosks

Sandton City Gift Vouchers

Entertainment World

20 Entrances

Links to Sandton Sun and Sandton Square

250 Specialist stores and services (Exclusive Designer Merchandise)

6 Major Departmental Stores

Financial Services

Medical Mews

21 Floor Office Tower

Zenex House

3 Alice Lane

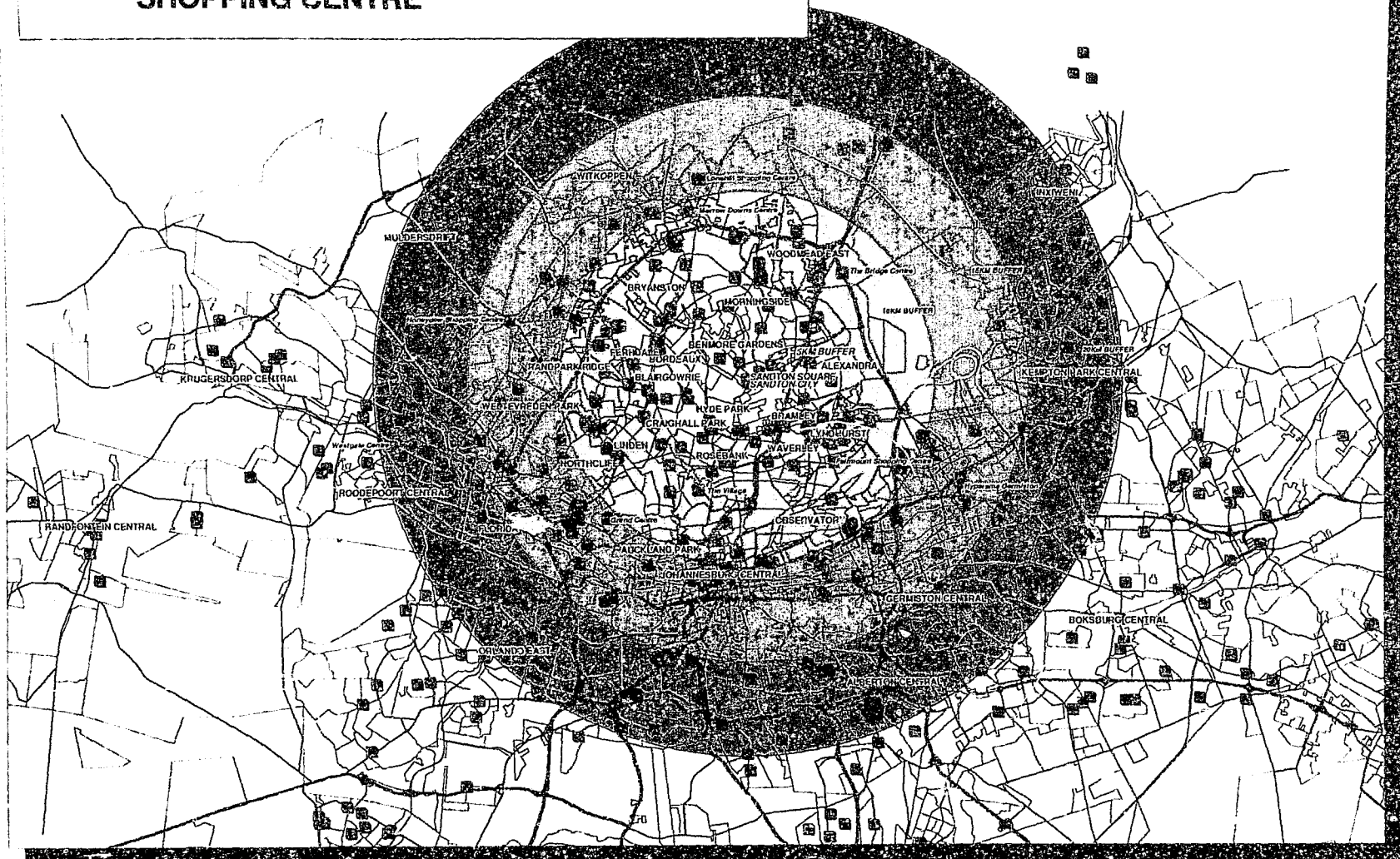
15 Alice Lane

10 storey Twin Towers

5 Star Sandton Sun & Towers

APPENDIX K - SURROUNDING CENTRES
TO SANDTON CITY

**MAP 1: CATCHMENT AREA OF SANDTON CITY
SHOPPING CENTRE**



LIST OF COMPETITIVE RETAIL WITHIN A 5KM RADIUS OF SANDTON CITY

- Alexan Resource Centre is located on the corner of Selbourne and 12th Avenue in Alexandra.
- Balfour Park Shopping Centre is located on Athol Road in Highlands North. Balfour Park Shopping Centre has a Gross Leasable Area of 21 000m², which results in it being classified as a Regional Shopping Centre. The anchor tenant is Shoprite Checkers.
- Benmore Gardens Shopping Centre is located on the corner of Grayston Drive and 11th street in Benmore Gardens. It has a Gross Leasable Area of 10 539m². Benmore Gardens is classified as a district shopping centre. The anchor tenant is Pick n'Pay.
- Bramley Gardens Shopping Centre is located on the corner of Corlett East and 2nd Avenue in Bramley Gardens. The anchor tenant is Pick n' Pay.
- Bryanston Shopping Centre has a Gross Leasable Area of 10 065m² and is located on the corner of William Nicol Drive and Ballyclare in Bryanston. This centre is classified as a District shopping centre and has CNA and Checkers as anchor tenants.
- Capri Shopping Centre is located on the corner of Louis Botha and Grenville in Savoy Estate. The Spar is the anchor tenant.
- Freeway Centre is located at 620 Louis Botha Avenue in Bramley.
- Corlett City is located on the corner of Berkswell and St Benedict Street in Gresswold.
- Craig Park centre is located on Jan Smuts Avenue in Craighall Park.
- Hyde Square is located on the corner of Bompas Road and Jan Smuts Avenue in Dunkeld West.
- Grayston Shopping Centre is located on Grayston Drive in Strathaven. Restaurants, Mr Price and a pharmacy are some of the retailers.
- Grafton Avenue Shopping Centre is located on Grafton Avenue in Craighall Park.
- Highlands centre is located on the corner of Louis Botha Avenue and Athol Street in Highlands North. The Black Steer is a tenant in this centre.
- Galleria Centre is located on Bath Street in Rosebank. The Galleria pharmacy is one of the most well known retailers in this centre.

- Hyde Park Corner is located on Jan Smuts Avenue in Hyde Park. Hyde Park Corner is anchored by Pick 'n Pay, CNA, Woolworths and NU Metro. It has a Gross Leasable Area of 20 866m², and hence is classified as a regional shopping centre.
- The Firs is located on Oxford Road in Rosebank. It has a Gross Leasable Area of 10 000m², which results in the centre being classified as a district shopping centre. Facts & Fiction are the anchor tenants.
- The Mews is located on Oxford Road in Rosebank.
- Birdham Shopping Centre is located on North Street in Birdham.
- Park Gallery is located on Corlett Drive in Melrose North.
- Illovo Post office centre is located on 30 Rudd Road in Illovo.
- Kelvin Village is located on the corner of Southway and Raymond Streets in Kelvin.
- Alex City is located on 1st Avenue in Marlboro South.
- Morningside Shopping Centre is located on Rivonia Road in Morningside.
- Nedbank centre is located on Louis Botha Avenue in Bramley.
- Oaklands Shopping Centre is located on the corner of Kruger Street and Victoria Road in Oaklands.
- Riverclub Centre is located on Northleigh Crescent in Bryanston.
- Rivonia Square is located on the corner of Rivonia Road and 7th Avenue in Rivonia.
- Sandton Square has a Gross Leasable Area of 16 500m² and is thus classified as a district shopping centre. It is located on the corner of Maude and 5th Streets in Sandown. Imperial Palace, Luigi's, Trumps, Biagi's, Grill and Tavern, Spur, Gucci, Chiradellis and Montego Bay are a sample of the anchor tenants located in Sandton Square.
- The Pavillion Shopping Centre is located on the corner of Summit and Kelvin Roads in Morningside.
- Thrupps Centre is located on 204 Oxford Road in Illovo.
- Tyrwhitt Mall is located on the Corner of Cradock Avenue and Oxford Road in Rosebank. This centre has a Gross Leasable Area of 51 324m² and hence is classified as a super regional shopping centre.

- Valley Shopping Centre is located on Jan Smuts Avenue in Craighall park.
- Village Walk is located on the corner of Maude and Rivonia road in Sandown. This centre is classified as a super regional shopping centre.
- Waverley Shopping Centre is located on the corner of Scott and Knox Streets in Waverley.
- Wendywood Shopping Centre is located on the corner of Daphny and Wendy Streets in Wendywood.
- Morning Glen Shopping Centre is located in Gallo Manor.
- Rivonia Junction is located in rivonia.
- Edenburg Mall is located on the corner of 7th and Homestead in Rivonia.

APPENDIX L - FOLLOW UP LETTER TO
MANAGEMENT

APPENDIX L: FOLLOW UP LETTER

Dear

Re: MSC Research for the University of the Witwatersrand

I would like to extend my thanks for taking the time, out of your busy schedule, to assist me with the above. My report would not have been possible without your valuable insight.

Please feel free to contact me if you would like a copy of this report, and I will gladly forward one to you.

Thank you again for all your help

Yours sincerely

Michelle Slabe

APPENDIX M - SANDTON CITY FACT
SHEET

LIBERTY LIFE PROPERTIES :

LIBERTY LIFE ASSOCIATION OF AFRICA LTD.

Group assets are valued at approximately R5.9bn

Liberty Life has ownership (either wholly or in consortia with other institutions) of all categories of property but specialises in investment and management of prime retail and commercial (office) developments.

The 119 buildings in Liberty Life's property portfolio had a total valuation at 31 December 1994 of R5 900 million of which R4 600 million is attributable to Liberty Life.

Many of Liberty Life Association's properties are landmarks in several cities in South Africa.

LIBERTY LIFE'S MAJOR PROPERTY HOLDINGS

	R MILLION	% OF PORTFOLIO
Sandton City, Sandton Sun & Towers Hotel (60%)	984	21,4
Sandton Square (30%)	69	1,5
Eastgate Regional Shopping Centre	980	21,3
Standard Bank Centre (50%)	205	4,5
Liberty Life Centre	210	4,6
Libridge	120	2,6
Volkscas Building, Pretoria	140	3,0
Jorissen Place	93	2,0
41 Kruis Street, Johannesburg	50	1,1
Greenacres Shopping Centre, Port Elizabeth, (50%).	70	1,5
Liberty Life Gebou, Pretoria	65	1,4
	2 986	64,9

Liberty Life's properties contain over 3 600 tenants.

Major National Tenants: The OK Group is Liberty Life's largest tenant, both in terms of area occupied and rental paid, followed by Edgars, Pick 'n Pay, Wooltru and Shoprite Checkers on a rental basis and Pick 'n Pay, Shoprite Checkers, Edgars and Wooltru on an area basis.

Other major developments in progress, or nearing completion, include: #Extensions to Eastgate Regional Shopping Centre, and additional parking - R76 million. #A Holiday Inn Garden Court (3 star) hotel and Dion store - R102 million. #Conversion of a Johannesburg CBD building as Edgars flagship store - R41 million. #An office block at The Galleria Shopping Centre for Times Media Limited - R58 million. A major extension to and refurbishment of BP Centre, Durban - R60m. The refurbishment of Safren House, Braamfontein, including additional tenant parking - R34 million.

New developments (as at 6.11.95) include the acquisition of the Holiday Inn Garden Court Port Elizabeth - R33 million; construction of Liberty Life Place, Hatfield, Pretoria - R30 million.

NAME OF BUILDING : SANDTON CITY SHOPPING COMPLEX
ADDRESS : CORNER RIVONIA RD & FIFTH STREET, SANDTON,
GAUTENG
DESCRIPTION OF BUILDING : REGIONAL SHOPPING COMPLEX
OWNERS : LIBERTY LIFE ASSOCIATION OF AFRICA (PTY) LTD
ESKOM PENSION & PROVIDENT FUND
STANDARD BANK GROUP PENSION FUND
(KNOWN AS THE SANDTON CONSORTIUM)
DATE OF COMPLETION : FEBRUARY 1995

MEMBERS OF PROFESSIONS INVOLVED IN THE DEVELOPMENT:

ARCHITECTS : MARGOLES DUKES AND SMITH ARCHITECTS CC
DESIGN CONSULTANTS : D.I. DESIGN AND DEVELOPMENT CONSULTANTS,
TORONTO
STRUCTURAL ENGINEERS : KAMPEL, ABRAMOWITZ YAWITCH & PARTNERS
ELECTRICAL CONSULTANTS : BFBA CONSULTANTS INC.
ELECTRICAL ENGINEER : WILLS AEREBOE AND ASSOCIATES
MECHANICAL ENGINEERS : AIRGRO (PTY) LTD

MAIN CONTRACTOR & PROJECT MANAGER

: RAPP & MAISTER CONSTRUCTION (PTY) LTD

LIBERTY LIFE PROPERTIES (PTY) LTD - PROPERTY DEVELOPERS, LEASING AGENTS,
ADMINISTRATORS, AND MANAGERS

HISTORY

SANDTON CITY, was developed in 1973, as a Shopping Centre inclusive of a 20 000m² high rise Office Tower in the suburbs of Johannesburg. In 1982 an additional 40 000m² of retail space was added, including a further 20 000m² of office space, the "Twin Towers", creating the largest Complex of it's type in South Africa, and in 1984 the Sandton Sun Hotel (384 rooms) was completed, making the Sandton City Complex, one of the largest mixed use retail developments in the world.

As the Complex was now some 10 years old since its previous refurbishment, and in order to meet the demand of International Standards, the opportunity for the Owners to "catapult" the Complex into the 21st century arose.

In 1991, understanding that the political arena would change the face of South Africa forever into the future, the Owners, very positively embarked on, not only a major internal refurbishment of both Office Tower and Twin Towers and the Shopping Centre, but the development of:

a further 5 star hotel, the "Sandton Sun Towers" (234 rooms) linked by overhead bridge to the existing Complex,
the erection of an 444 room Holiday Inn Garden Court completed November 1995.

The property to the north of the Complex has also since been developed into a unique Entertainment (Restaurant) and Retail Centre known as "Sandton Square", incorporating an "Italian Piazza" linked to Sandton City by way of a further skywalk, with retail emphasis, and of which the Liberty Life led Sandton Consortium own 50%.

Whilst this new Centre increased the "Entertainment Profile" in the area, the Sandton Consortium foresaw the opening in the market for an 8 700m² Entertainment Centre (inclusive of 15 cinemas, showscan theatre, children's entertainment, restaurants and coffee shops) known as "Entertainment World at Sandton City" - this exciting development was completed in November 1994, and is considered to be one of the engineering feats of the decade, in it's field.

Further opportunity was created at Sandton City with the addition of $\pm$ 800 additional parking bays, built in deck form thereby increasing the depth of one of the current malls to realize a further 3500m² of retail space connected to the new parking decks, all of which was completed by November 1994.

The above, will inevitably give rise to the Sandton City Complex being geared to ensure growth of the investments into the 21st century and the continuity to dominate the retail atmosphere in South Africa.

In summary the major changes include:

The refurbishment of the Shopping Centre including entrances, malls, lighting, electrical reticulation, airconditioning, vertical transportation, shopfronts, tenant's premises - to a specified design criteria.

An additional 3500m² of GLA for satellite shops.

The provision of an additional 800 parking bays.

The introduction of an 8700m² Entertainment Level.

The refurbishment of tenant shopfronts and fixtures.

Complete refurbishment of the common areas of both the "Office Tower" and "Twin Towers".

The development of the common areas of both the "Office Tower" and "Twin Towers".

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The development of the 5 star Sandton Sun Towers Hotel.

The erection of a 444 room "Holiday Inn Garden Court".

The overall effect of these changes will undoubtedly enhance customer appeal, and ensure investment growth into the 21st century, considering the positive economic and political platform now created in South Africa.

EFFICIENCY IN THE USE OF CAPITAL

The investment in this project was R 135 000 000 which was carried out in three phases:

Sanfurb	Refurb of walls, Airconditioning, Electrical, Parking Areas	Office Towers,
Parksan Sterkor	Additional 3500m ² GLA and 800 parking bays Development of "Entertainment World".	

It does not include that of tenants in refurbishments to shopfronts, interiors and fixtures, which have also greatly enhanced the investment value of Sandton City.

Land Input:

The Owners were successful in negotiating the transfer of additional business rights from one of the adjacent properties owned by them which was applied as additional satellite shops and the entertainment mall with some square meterage remaining for future development.

Owing to the transfer of rights the overall renovation strategy was achieved without any land cost considerations.

Construction:

Refurbishment

Modernization of existing malls; Office Towers refurbishment; additional GLA; new extensions & parking decks; Entertainment World.

Professional Fees

Architects; Structural Engineers; Electrical Engineers; Airconditioning Engineers; Road designs and other.

TOTAL COSTS:

R135 000 000

Funding Methods:

The Sandton Consortium led by Liberty Life funded the projects out of investment capital over the period.

It should be noted that additional parking was in great need as the Complex had been operating at full parking capacity for some years, and in order to raise the foot traffic in the Centre the creation of the Entertainment World would do just that, thereby increasing the level of trade throughout the Centre, the benefits of which will be seen through rental levels in the years to come.

EFFICIENCY OF MAINTENANCE AND OPERATION

Airconditioning and Ventilation

The Sandton City Complex has grown almost three times in size since 1973, and the brief was given to:

- A) Analyze non-performing areas.
- B) Replace outdated machinery and plant.
- C) To re-arrange plant to provide better flexibility/functioning and energy management.
- D) To provide a building management system in order to control this vast plant.
- E) Not to interfere with tenants and customers - hence after hours work.

The major work undertaken was as follows:

- Revamp of Phase 1 (1973) shop and mall airconditioning.
- Upgrading of Phase 2 (1984) shop and mall airconditioning.
- Revamp of Office Tower, Twin Towers and Medical Suite airconditioning.
- Revamp and provide some new airconditioning in Entertainment Centre.
- Introduction of B.M.S. system.
- Re-arrangement of central chilled water system.

Phase 1

Initially served with ceiling mounted chilled water A/H plants - now, by central variable volume A/H units located on the roof. Future expansion now easily catered, for maintenance can now be carried out during normal working hours as units are now airwise linked in parallel. Full modulating economy cycle now ensures low consumption.

Phase 2

In 1983 variable volume airconditioning with dampers in branch ducts to each shop was provided. Due to underperformance of chilled water cooling coils in the past, the cooling coils have been replaced, mall air supply terminals changed and B.M.S. control to A/H units put in place.

Office Tower, Twin Towers and Medical Mews

Office Tower - Previously high pressure fans, oil fired burners drove the airconditioning (1973). In 1994 perimeter zone high pressure boxes were replaced with low pressure V.A.V. control units, as were the internal zone boxes. Hot water reheat coils were removed and electrical insert duct heaters were fixed. All air handling units were filled with new chilled water cooling coils, gear drive opposed bladed economy cycle dampers, new electrical panels and new electric controls linked to B.M.S. for further reduction in consumption.

Twin Towers - The revamp included the upgrading of chilled water pumps, new water cooling coils on all console units (each floor) and new variable volume valves to all air take-offs from the riser ducts to the office floors.

Medical Mews - Previously a constant volume reheat system (1973), was now replaced by a variable volume system and linked to the B.M.S. (done in one weekend so as not to disrupt these emergency-rated tenants).

Entertainment Centre - This area can cater for up to 2500 people seated in cinemas, 400 people in shops and 500 people in restaurants. The airconditioning is a central chilled water system with A/H plants to cinema's and variable volume A/H plants to mall and shops.

EFFICIENCY OF MAINTENANCE AND OPERATION/2

Building Management System

Controls 180 000m² of airconditioned space, with full colour graphic displays and has an energy management package attached.

Central Chilled Water System

Originally, in 1973, there were two 3500 kw york chillers installed in series in 1984, an additional 3 machines were added for phase 2 operation installed in parallel with chilled water pumps per chiller. Due to phasing out of certain refrigerants worldwide - Sandton City is now served with a single chilled water system with nine chillers connected to nine primary circuits, all chillers are new and one old york chiller now acts as standby for the phase 1 circuit. Virtually 90% of the chillers are now in line with the Montreal Protocol Agreement.

All airconditioning controls are now located in one major plantroom, instead of two previously, allowing more space for storage and ultimately storage income.

Security and Access Control

The most effective security in the Shopping Centre is in the form of high profile uniformed, plain-clothed, motorized guards, some with police trained dogs and most staff equipped with two-way radios.

The guard patrolling measures are backed up infra-red, CCTV, motion detectors, 110 CCTV camera's connected to recorders with play-back facilities.

There is direct communication via a REMRAD system, linking the Complex to the Sandton Crisis Control Centre, who assist with any emergency.

All entrances to the Shopping Centre have visible guards and they are connected by intercom to the security control room.

The Complex has mobile "metal detectors" should the need ever arise, which would cover major entrances.

Security measures are, however, reviewed constantly in the light of changing circumstances.

The P.A. system throughout the Centre is linked to the security control room and can override music etc. for important/emergency messages.

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Electrical Power, Data and Telecommunications Reticulation

Due to the Sandton City Complex operating an effective eighteen hours per day, interruptions to these services can only be undertaken between 1 am and 6 am.

The incoming main electrical supply comprises of two separate services, a main and alternate supply.

The main supply consist of four incoming feeders from the local council rated so that any two can carry the entire load of the Complex, should any feeder be damaged. The alternate supply is via the Sandton Square Shopping Centre, which also feeds from the local council, and is an addition to the system.

The internal HV reticulation comprises a ring system feeding various HV switches in the Complex.

The CV distribution boards are located at various points around the Centre and ensure isolated areas are affected by maintenance/breakdowns. Each shop is individually metered, ensuring controlled tenant consumption.

The "Fountain Court" or main promotion court has a dedicated floor power system to cater for any type of promotion - a new addition.

There are a number of emergency diesel generating plants around the Centre, and major tenants have their own source of emergency power, should the need ever arise. All sources designed for "protection of life" and are connected to the emergency power, such as, smoke extract fans, lighting, some ventilation plant, security control equipment, and parking area controls, lifts, fire pumps and fireman's lifts.

The Centre is protected against fire by a sprinkler alarm system, and has smoke detection units in all shops, offices and mall areas (an upgraded addition) linked to the REMRAD system mentioned earlier.

Vertical Transportation System

The existing escalators and lifts in the Centre were all refurbished and the lifts upgraded with the latest technology. All lifts in the Centre now give access to all levels from level 2 basement parking to level 7 roof parking. Three new lifts were installed for easier access by customers, one near Woolworths and two for the Entertainment World situated on level 2. The Entertainment Centre also has two new escalators taking shoppers from level 2 to level 4.

In what is described as an engineering feat in order to access "back" space on level 4 shopping for storage purposes, a goods lift was "tunnelled" three metres into previous backfill then a "vertical tunnel" was drilled from the truck tunnel below the Centre on level 2 to level 4 (some twenty metres in height).

Sandton City has:

- 19 Public escalators
- 7 Public lifts in the Centre
- 12 Lifts servicing the Office Tower
- 8 Goods lifts servicing tenants for the truck tunnel

The above figures exclude both lifts and escalators located in the major tenants/hotel premises.

Energy Management Provision

With the commissioning of B.M.S., all airconditioning is controlled from "switch-on" to "switch-off" and these times are monitored throughout the year on a daily basis.

Natural skylighting on level 6 throughout the mall allows for greater penetration of sunlight thereby allowing the use of low voltage lighting around these points. Fluorescent tubing is used for artificial lighting of the malls, in lighting coves.

The decks of carparks in and around the Centre are manually controlled to switch off up to two-thirds of lighting once the Complex has closed at 1 am until 6 am, when they are systematically turned on, along with the lighting levels outside.

General Maintenance

The finish for the malls and public areas took cognisance of maintenance and cleaning in areas which are subjected to high traffic flows. The imported ceramic tiled floors have proved to be a durable surface which requires washing with a simple soap solution. The walls also have a tiled surface for easy cleaning, in order to maintain the upmarket appearance. The use of granite and marble completed the look.

Plasterboard finishes to ceilings and lighting coves are easily re-instated to pristine condition through a simple application of paint.

All mall furnishings including benches, refuse bins, directory boards, poster holders and telephone units were redesigned in hard wearing materials to withstand abuse.

In the public toilets, the use of floor and wall tiles, marble vanity slabs, and hard wearing formica panels were introduced for ease maintenance.

The full height shopfronts prescribed in terms of the design criteria eliminated the heavy timber bulkheads which were the responsibility of the owners.

All major entrances had dust trap mats introduced to ensure the collection of dust before entering the malls.

In order to maintain the highest level of acceptability by our customers, an experienced team of maintenance staff are employed, in radio control with management and cleaning department for fast efficient response.

ADAPTABILITY

Building Modules

The existing building and extensions are based on a ten metre structural grid system which reduces the proliferation of columns in the shop space and allows greater flexibility for movement of shops, and shopfitting, merchandising etc. This is patently obvious by what was created in the Entertainment Level:

- Massive three metre concrete beams were constructed under the existing building, between columns, then the columns removed, in order to create free space devoid of columns for the cinema's. An engineering success never seen before in South Africa.

Partitioning

Excluding the major tenant shop areas which require a full-height brickwork, sub-division walls are two hour fire rated between shops, the smaller shops being sub-divided by full height partitioning.

Electrical and Cabling Reticulation

Each shop is served from a dedicated distribution board feeding from service lanes behind the shops, which allows for tenant changes without disruption of other areas.

Service outlets are provided at frequent intervals throughout the Centre providing easy cleaning and maintenance.

All electrical boards allow for further capacity for future additional circuits and ease of relocating tenants or changing shop layouts.

The mains is designed to be easily upgraded from phase 1 to phase 3 if need be.

Other Services

All other services such as telephone, intercoms, fire detection etc have been co-ordinated throughout the Centre, so they are easily identifiable and controlled.

All cables both high and low voltage have their own "cable-trays" which are a few kilometers in length in some cases. These are now all easily accessible, as they run throughout the parking garages, for maintenance purposes.

Fire phones are located at strategic positions to provide immediate communication linked to the security control room. All lifts now have communications with security control for effective communication.

All signage in the Complex is linked to a central fire control system for quick de-energizing by the fire department, controlled by fireman's switches located at selected entrances.

Sub-Divisibility

Other than the public malls, courts and rear service passages the tenant areas are completely flexible to cater for any expansion/contraction on all levels.

A number of design criteria options were furnished to tenants in order to achieve desired standards, however, avoiding the effect of stereotype shopfronts.

Due to the generous ceiling void, services are accessible in the mall areas, and any further technology changes in the future can be carried out without major disruption.

Parking garage entrances to malls have been designed to facilitate further retail expansion, should one so wish.

USER SATISFACTION AND QUALITY OF SERVICES

Parking Garages

Lighting levels have been increased, and ceilings and walls painted to create a comfortable feeling of space. New graphics detailing levels, access to shops and services, now make easy reading to customers.

All parking equipment such as tills, booms and cashier booths have been replaced and should see the parking operations, controlled by computer, well into the 21st century.

All entrances from major roads around the Centre not only have new signage, but free-standing signage on the pavements to direct customers, which are illuminated at night.

Electrical Outlets

Great care has been taken to ensure that each tenant has a sufficient number of electrical outlets for varying uses in their shops.

Should any tenant require additional outlets, this can be arranged through the technical/maintenance department.

Lighting Level and Internal Environment

The refurbishment of Sandton city has involved a radical upgrading and improvement of artificial lighting levels to malls, as well as the introduction of improved natural lighting.

Roof lights/skylights have been introduced at various strategic points along the upper malls and provide direct sunlight in these areas.

Lighting levels are provided to tenant requirements, and in the event of an emergency a level of 50 LUX is maintained in the public areas, allowing for safe exit from the building.

Roof parking lighting has been upgraded which makes the roof parking more secure and provides the customer with a feeling of safety.

Airconditioning

As all chillers and air handling units are now controlled by the B.M.S., regulatory time function are now easily controlled, both day and night.

The B.M.S. has provided for a reduction of staff, by each tenants temperature being able to be monitored 24 hours per day reducing the argument factor by the tenant concerned, and levels of temperature can be changed from this control point.

Each phase of the Shopping Complex now has a spare chiller, in the event of maintenance to be carried out, or component failure.

Due to extended trading hours becoming more of a reality, the control of airconditioning is now made as simple through the "push of a button".

Vertical Movement Services

The design of Sandton City is such that access can be gained at the various parking levels to each of the trading levels.

Lift access has been given to provide for the elderly and infirm, to any level they wish to visit.

Vertical movement of merchandise is also adequately provided for in all service passages.

Escalators provide for liberal movement to each level in the Centre and are strategically placed for use from the parking areas.

Cleaning Services

The cleaning of the Complex is undertaken by a number of contractors, and is largely machine operated. All refuse is collected at two central points below the Centre in the Truck Tunnel and compacted by four compactors, two in each area, which ensures control, in the event of a fire.

Special Facilities

All entrances into the Complex have "ramped" walkways. Dedicated paraplegic parking bays form part of each entrance. Specially designed "paraplegic toilets" are situated at each bank of toilets inside the Centre.

Each bank of toilets in the main mall areas provide feeding/changing facilities for mothers and their young, separated for ease of use.

Services/Changes in Technology and Usage

The "Fountain Court" now has a "flat" promotions area, previously raised, and electrical cabling, plumbing etc is fed via brass plated cover holes into the parking deck below. Therefore no need for noisy equipment within the promotion area.

A P.A. system, Hi-fi, and lighting system has been installed in a "one-way" glass cubicle specially designed to blend in with the aesthetics of the Fountain Court.

A "wrap around" programmable fountain relating to the lift, finishes the high gloss look of the Fountain Court, and one feels "submerged" in water on the lower level, if travelling in the lift.

External Environment

As Sandton City is bordered by four main roads, the parking area/pavements have been re-landscaped to soften the external appearance and the plants chosen for colour presentation seasonally, and to control access of pedestrians to designated entrances. Trees have been planted on all pavements to "hide" the Centre, but allow breaks for signage etc.

Management Philosophy in Respect of Access to Parking for Both Tenants and Customers

The connected Sandton Sun Hotel now has dedicated parking for guests.

Customers have a choice of "free" outdoor parking or "paid" undercover parking literally at any point around the Centre.

Tenant parking is provided, undercover and open (choice again) at varying rates at various points around the Centre.

Roof parking previously free of charge and uncontrolled, will now be "free of charge" for the first couple of hours and charged for thereafter, due to staff at the office buildings surrounding the Centre, parking all day, thereby reducing the number of parking bays available to shoppers.

QUALITY AND DURABILITY OF DESIGN AND FINISHES AND ENVIRONMENTAL ASPECTS

The refurbishment and extension to Sandton City which has resulted in the conversion of a twenty year old Shopping Complex into the retail capital of South Africa is totally unique and rates amongst the best in the world.

To accomplish this objective, it has required an entrepreneurial appreciation of a solidification in tenant mix whilst employing innovative letting, in order to maintain the retail focus of the Complex. This has also led to the unequalled collaboration of both tenant/developer in co-operation with the Sandton Municipal Council.

The inspirational aspects of design relative to the malls, courts, public space and shop design criteria were provided by D.I. Design of Toronto. The design concept combined all the elements and was implemented by the Architects and tenants alike. The tenants invested their own money in the creation of some outstanding store frontages to complement their excitingly different surroundings.

Design and Finishes

Due to Sandton City being an extremely successful Shopping Complex, great care had to be taken to avoid disturbing the winning formula, when determining what changes were needed due to "wear" by unprecedented customer support over the years.

When considering the design and choice of materials, care had to be taken to ensure that the lasting quality would be retained, at a level commensurate with the image that Sandton City had built over the years.

In order to provide for a bright, light and airy ambience, the design criteria had to be developed taking these issues into account, for the South African public, accustomed to these qualities.

In dealing with the interior space, the design consultants prescribed a much greater ceiling height with shopfront heights stipulated at 4.7. meters augmenting a sense of greater space and creating an illusion of a widening of the malls.

The addition of a much greater "Entertainment Mall" with allied food services and retail shops completes the co-hesion of this highly successful Centre.

Customer response to the final result achieved by adopting these criteria has confirmed the correctness of the Owners decision to refurbish at enormous cost in a then unsettled South Africa.

SANDTON

SANDTON - Liberty Life has extensive property holdings in the Sandton area valued at over R2b the majority of which are held via its 60% interest in the Sandton Consortium.

SANDTON CITY COMPLEX - comprising the Sandton City Shopping Centre, the Office Tower and Twin Towers, Banking Mall, Medical Mews, Sandton Sun and Towers Inter-Continental Johannesburg and Holiday Inn Garden Court Sandton City hotels. The Sandton City Complex is internationally renowned as the finest mixed use retail, commercial and hotel development in Southern Africa.

Ownership: Liberty Life (60%) heads a consortium of financial institutions.

Description: 104 000m² retail gla, 46 000m² office gla. *December 1994 valuation R984 million (attributable to 60% Liberty Life ownership.)*

Sandton City is directly linked to the prestigious premier hotel in South Africa, the 5-star Sandton Sun and Towers Inter-Continental Johannesburg (which contains 565 rooms and suites, restaurants, banqueting and other facilities), and to Sandton Square.

It comprises:

*over 250 shops, including major retailers, national chains, select boutiques and speciality stores. Major retailers - Woolworths, Edgars, John Orrs, Stuttafords, Hyperama (OK Group), Checkers and Ster-Kinekor Entertainment Centre.

*Banking Mall which houses all of South Africa's major banking institutions;

*Medical Mews;

*21-floor Office Tower;

*Twin Towers - two interlinked 10-floor office buildings.

*Ster-Kinekor Entertainment World comprising 15 cinemas, a showscan theatre, 2 restaurants, additional retail and covered parking;

Over 8 000 covered and open parking bays.

History:

Opened	1973
Major extensions	1983
Sandton Sun Hotel	1984
Refurbishment	1993
Completion of refurbishment of shop frontages and stores by majority of tenants at their cost	1993
Sandton Sun Towers Inter-Continental Johannesburg	1993
Parking garage extension & additional retail	1994
Ster-Kinekor Entertainment Centre	1994
Recladding of the Office Tower and refurbishment of offices	1994
Holiday Inn Garden Court Sandton City	1995

SANDTON SQUARE

SANDTON SQUARE - a new development under construction opposite the Sandton City complex and adjacent to the Sandton Civic Centre.

Ownership: *The consortium of financial institutions led by Liberty Life owns 50% of this project which was valued at R300 million in 1994.*

Description: A leisure centre around an open air square with pavement cafes and exclusive boutiques. Sandton Square will be linked to Sandton City via a skywalk mall lined with shops on both sides and leading directly into Sandton City. Designed in the style of an Italian piazza the development's focus is a central paved square which is planned to accommodate 6 000 people.
16 500m² retail gla; 18 000m² office gla. Undercover parking for over 2 000 cars.

Completion: April 1995.

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