

1. ANALYSIS FROM THE CBD PERSPECTIVE

1.1. BRIEF HISTORICAL BACKGROUND

The last three decades saw the desertification of the Johannesburg central business district (CBD) as many businesses moved to the northern suburbs. Multiple, decentralised nodes (indicated in red), offering employment, recreation and retail opportunities, often in the form of shopping centres, sprang up in the northern suburbs. Johannesburg followed the growth pattern of American cities by the decentralisation of its CBD. The nodes serve residents in the suburbs to the extent that they rarely need to go into the CBD itself. The CBD character and function of Johannesburg has subsequently changed.

Johannesburg was founded essentially as a mining town and this, together with the apartheid political structure, were the two most significant factors to shape the structure of the city. The mining belt separated the north and the south of the city. In addition, the city was divided along both racial and economic lines. The present challenge is to overcome this inherited imbalance and get the city functioning efficiently. (Thorn and Gibson, 1994)

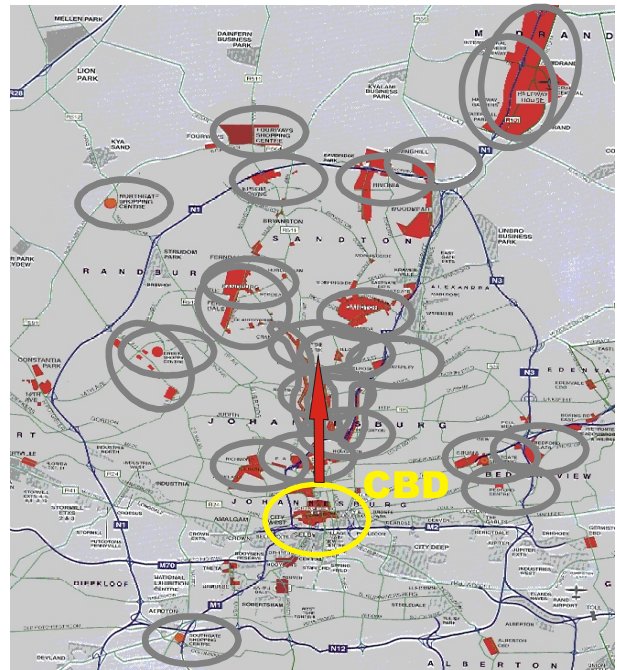


Figure 1. Decentralisation of Johannesburg

The inner city has lost its status, linked to accessibility, as well as safety and security issues, resulting in decline in investment. To resolve this, the City Council, together with the Johannesburg Development agency (JDA), is implementing a plan for the gentrification of the Inner City. This programme has been incorporated into the Local Integrated Development Plans. (GJMC, date unknown)

Some of the major tasks to be tackled include:

- Perceptions of safety and security
- Poor public transportation within the Inner City
- The cost of converting buildings from industrial/ commercial uses to residential
- The lack of open spaces

1.2. THE CURRENT STATUS OF THE CBD

Despite the migration trend to the North and the risks associated with the CBD, it still remains the heart of the metro region. The opportunity costs of CBD abandonment is too high when taking the following economic and social characteristics into consideration:

- There is seven million square metres of floor space in the CBD
- 800 000 people come into the CBD every day
- 160 000 people are employed in the CBD
- It is the most accessible part of the metro area (road, rail, taxi, bus)
- Rents are relatively low
- There is little congestion and parking is easy
- Properties are to be re-evaluated for reduced rates
- Business improvement districts are successful in conquering crime and grime
- The CBD has become multinational and cosmopolitan

1.3. THE RIGHT TIME TO REVITALISE THE CITY CENTRE

All aspects that started decentralisation in the 1970's are being reversed. Given the economic status of our country it is an unignorable fact that suburban type culture will not be able to sustain our increasing population. Numerous positive factors are evident to stimulate inner city revitalisation, the main factors being:

- Political will
- Economic stability and projected growth

- New market forces (emerging middle class society)
- Significant assets that require preserving
- Many initiatives underway
- Property prices low
- No congestion/ plenty of parking
- Properties are to be re-evaluated for reduced rates

Various inner city initiatives are currently being implemented guided by the abovementioned factors. Some of the precinct initiatives each with its own characteristics are indicated below.

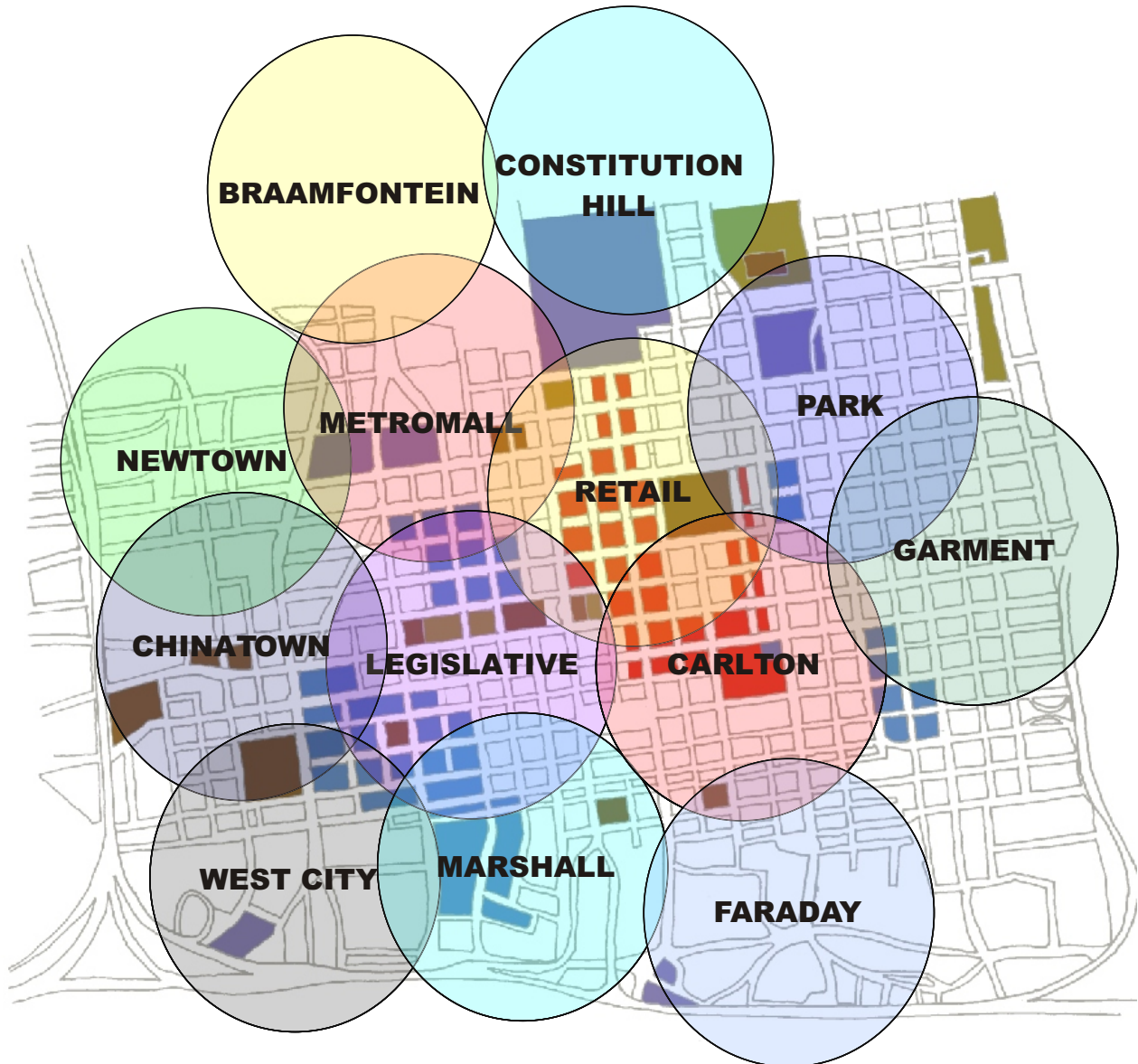


Figure 2. Inner City Initiatives

1.4. THE EFFECT OF THE BRAAMFONTEIN CORRIDOR

The development of Braamfontein will dramatically influence the traffic to and revival of the Newtown Precinct which is the focus of this project. Within the CBD, Braamfontein is the economic node of the Johannesburg city centre. Key landmarks like the University of Witwatersrand, four of South Africa's major corporates, the Civic Theatre (home of the Nelson Mandela Theatre) and Johannesburg's local government are found in Braamfontein. It is the fourth largest node for office space in Johannesburg, offering 428 000 sq metres of A and B grade commercial space. Braamfontein forms the major corridor link (known as the Cultural Arc) between the Newtown and Constitution Hill developments. Braamfontein is planned to be established as an area that is relatively safe and secure, vibrant, and physically attractive with a growing evening economy. (JDA,2003)

2. ANALYSIS OF THE NEWTOWN PRECINCT

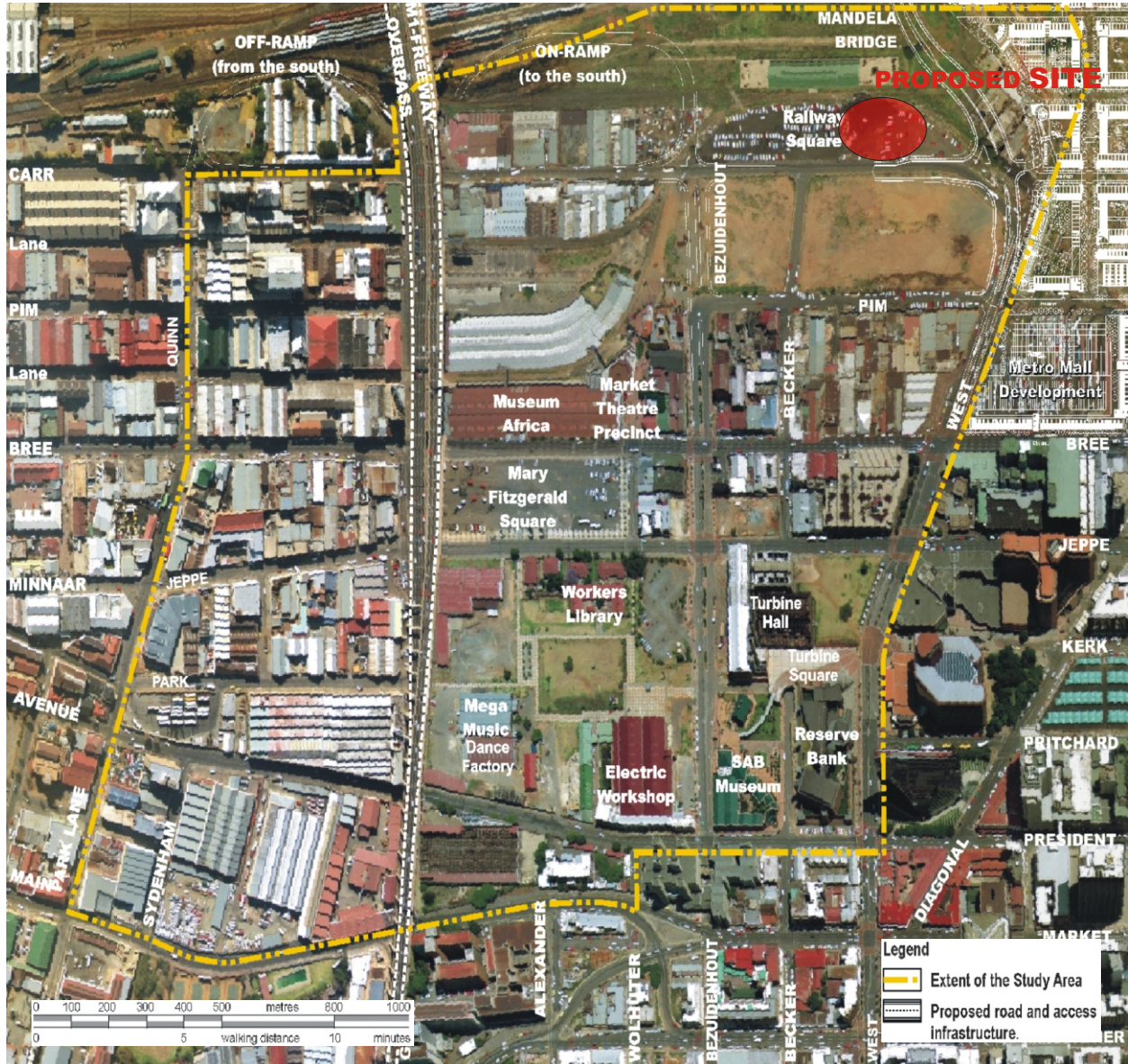


Figure 3. Newtown Precinct

Newtown is located in the western sector of the Johannesburg city centre, covering an area that stretches from the marshalling yards and railway lines to the north, the M2 motorway in the south, West Street in the east and Quinn Street in the west.

2.1. BRIEF HISTORICAL BACKGROUND

At the turn of the 20th century, the area now called Newtown Precinct was known as the Brickfields. It was naturally rich in clay and brick-making became a popular form of generating income for Johannesburgers at the time. Some individuals even had their own clay mixers for making bricks. By 1896, about 7000 people of all races lived in the Brickfields area. The land was later named Burghersdorp.

As this land was close to the centre of Johannesburg and the railway line, many businesses and overseas immigrants bought stands in Burghersdorp. Alongside brick companies, the area saw the sprouting of trading companies, banks, a brewery, and fisheries. Many Indians set up shops and eateries along Locatie (now known as Carr Street), which led to the station.

In April 1904, as a measure to combat the bubonic plague that had broken out, the fire brigade set the area alight destroying everything in the inferno. The area was surveyed and re-planned in unbecoming haste and renamed Newtown six months later. A commercial area where vast fortunes in milling, production of sugar and food merchandising would come to existence. Newtown has now become the cornerstone of South African heritage and culture, particularly Johannesburg. Hence it is widely accepted as the city's cultural centre. (JDA,2003).

2.2. FEATURES OF NEWTOWN

Capitalising on Newtown' history as the hub of exchange and the original cultural centre of Johannesburg, the redevelopment of Newtown is a key focus area with the potential to attract major investment, particularly in creative industries, culture and tourism. Newtown is being developed into a vibrant, mixed use area with a unique character based on existing cultural facilities.

This destination will be made easier to reach with the construction of the Nelson Mandela Bridge and associated N1 / Carr Street interchange. The Nelson Mandela Bridge opened in July 2003 and is the new gateway from the north capable of carrying up to 3000 cars per hour. The project was co-funded by Blue IQ, the City of Johannesburg, National Roads Agency and the National Department of Transport. This pedestrian and vehicle link improves access for local national and international tourists. The new bridge forges a link between Newtown and Braamfontein. The redevelopment of the area is planned under the concept of the Cultural Arc that links Newtown and Constitution Hill.to the north west of the site. (JDA, 2003).

1. New Carr Street Interchange
2. Mandela Bridge
3. Old Railway Station
4. Metro Market
5. New Residential Development
6. Africa Cultural Centre & Children's Museum
7. Market Theatre Precinct
8. Museum Africa
9. Mary Fitzgerald Square
10. Dance Centre
11. Worker's Library & Museum
12. Multimedia Centre
13. Turbine Hall & Boiler House
14. Mega Music
15. Dance Factory
16. Electric Workshop
17. SAB Museum
18. Reserve Bank
19. Bus Factory



Figure 4. Key Newtown Precinct Development Projects

M1 / CARR STREET INTERCHANGE

The M1/Carr Street on/off ramps greatly improve access to Newtown from the south, east and west of Johannesburg. Previously, one would have had to off -ramp at Smit Street to gain access to Newtown. With the new interchange, northbound traffic can gain easier access and exit into Newtown. This improves the link to other important tourist destinations in Soweto, Gold Reef City and the west of the city.



Figure 5. M1/Carr street on-ramp

NELSON MANDELA BRIDGE

The 295 metre long Nelson Mandela Bridge is a landmark gateway into Newtown and the city centre . The cable stayed bridge can accommodate over 3000 vehicles per hour. (JDA,2003). The bridge also features pedestrian walkways and once lit, provides a spectacular new element to the Johannesburg skyline.

The Nelson Mandela bridge forms a major part of the new link joining Braamfontein in the north and Newtown in the south.

Both the M1/Carr Street interchange and the Nelson Mandela bridge have been new developments that vastly improves accessibility to the Newtown Precinct over and above existing access routes.



Figure 6. The Nelson Mandela Bridge

METRO MALL

The multimillion rand Metro Mall opened at the beginning of this year. This shopping complex and transport hub features some of Johannesburg's top public art displays. The artwork is a tribute to the numerous artists working in the Newtown Precinct and throughout the city. Designed to enhance the shopping experience, the art includes life-size sculptures, murals, mosaic and installations.

The mall includes a wholesaler on site to cater for the growing demands of the commuters as well as the growing number of residents in Newtown. On its second level, the mall has a food hall that offers traditional local cuisine prepared under the watchful eye of the environmental health ministry, not that it is necessary, but provides a piece of mind for the numerous visitors to Newtown. Metro Mall is situated between Simmonds, Sauer, West and Pimm Streets and incorporates the Bree Street taxi rank.



Figure 7. Sculptures at the Metro Mall



Figure 8. Metro Mall

MARY FITZGERALD SQUARE

Launched three years ago by the State President, Mr Thabo Mbeki, this square has become a popular venue for public performances and gatherings. Originally known as Aaron's Ground and later renamed Mary Fitzgerald Square, this former wagon site was used for the many strikers' meetings at the turn of the 20th century. This square lies at the heart of Newtown. It was renamed Mary Fitzgerald Square in 1939, in honour of the first woman trade unionist who played a key role in the miners strikes of 1910. (JDA, 2003)

With a capacity for over 50 000 people, the square provides an outdoor space for a wide array of activities, including outdoor film festivals, concerts, markets, carnivals and exhibitions. A key feature of the square is also the biggest outdoor LED screen on the continent, measuring 55 square metres. In addition, two sky disks are major elements on the square. The first depicts the stellar constellation as at the birth of Mary Fitzgerald, the second depicts the constellation as at the first democratic election of 27th April 1994. There is a third, which can be found at the entrance to the MuseuMAfricA depicting the constellation as at the official launch of the square on 16th December 2001- Reconciliation Day. The disks use unique optic fibre lights that glow in the dark.

The lighting for the square was designed by renowned French lighting engineer, Patrick Rimoux who was also commissioned to design the lighting for the surrounding public open spaces. The unique lighting provides essential street lighting whilst giving the area an appropriate festive ambience. (JDA. 2003)



Figure 9. Metro Mall eateries



Figure 10. Mary Fitzgerald Square

BLUE IQ

The headquarters are next to the Electric workshop and incorporate a media centre, which showcases the major projects they fund. Some of the ground breaking work funded through this multi billion rand initiative include: Newtown Development, Kliptown, Constitution Hill Innovation Hub, Johannesburg International Airport IDZ, Gautrain Rapid Rail Link. City Deep Container Depot, Gauteng Automotive Cluster and Wadville Alrode Industrial Corridor.



Figure 11. Mary Fitzgerald Square aerial

MUSEUMAFRICA

MuseumAfrica is Johannesburg's premier history museum and is appropriately located in the centre of the Newtown Precinct. It is housed in what was once Johannesburg's first fruit and vegetable market. As such its construction was designed for this purpose in 1913. (JDA, 2003). For its time it is a good example of the advances made in industrial building techniques. In the early 1990's, the market building was renovated for MuseumAfrica. The new museum was launched in 1994, the year of South Africa's first non-racial democratic elections. The museum is home to permanent displays on the history of the city in the 20th century.



Figure 12. MuseumAfrica



Figure 13. Market Theatre

AFRICAN BANK MARKET THEATRE

This is an internationally acclaimed theatre that became known as the first integrated theatre. It was a centre point of debate and challenging ideas in the new South Africa. It houses three theatres, a bar, an art gallery and the second of the famous Moyo's restaurants.

The Market Theatre complex is also home to the popular Kippies International Jazz Club, which is modeled in an old Victorian toilet and named after the legendary saxophonist, Kippie Morolong Moeketsi. (JDA, 2003). Gramadoelas restaurant, that specialises in South African cuisine boasts patrons that vary from heads of state, including Queen Elizabeth II, and culture vultures who frequent this complex.

The Market Theatre complex has had a consistent ambience and spirit of a marketplace while bringing in nightlife into the CBD.

ELECTRIC WORKSHOP

The Electric Workshop is a large and spacious building that follows the city's industrial architecture. It was built in the 1920's as part of the electricity site in Newtown, which had been established in 1904. The electric workshop has been used as a venue for a myriad of uses, from jazz and kwaito concerts as well as a rave and corporate launch venue. This was the site for Johannesburg's Biennale in the mid 90's.

The Gauteng Department of Education Trust (including numerous philanthropic organisations) have earmarked this building for use as a science and technology centre, to teach learners about the value of science and mathematics in a fun manner. (JDA, 2003)



Figure 14. Electric Workshop

3. SITE AND IMMEDIATE CONTEXT

3.1. BACKGROUND

GAPP Architects and Urban Designers were appointed by the Johannesburg Housing Company (JHC) to prepare an Urban Design Plan for Brickfields residential neighbourhood which is south of the proposed site. An array of architects are to be commissioned to prepare detailed designs for different areas within the framework. The aim of the urban design plan is to achieve an architectural integrity over the whole site whilst at the same time developing specific areas with their own identity and character. The urban design framework for the Brickfields developments also forms a basis for the adjoining areas. The project is a key component of the Newtown Urban Design Framework and part of the Inner City Regeneration Plan for Johannesburg.

The site is located on the northern portion of Ptn 1 of Erf 557 Newtown on an undeveloped site between Carr, Pim, West and Bezuidenhout Streets, on the edge of the CBD in Newtown. The project is a key component of the Newtown Urban Design Framework and part of the Inner City Regeneration Plan for Johannesburg.

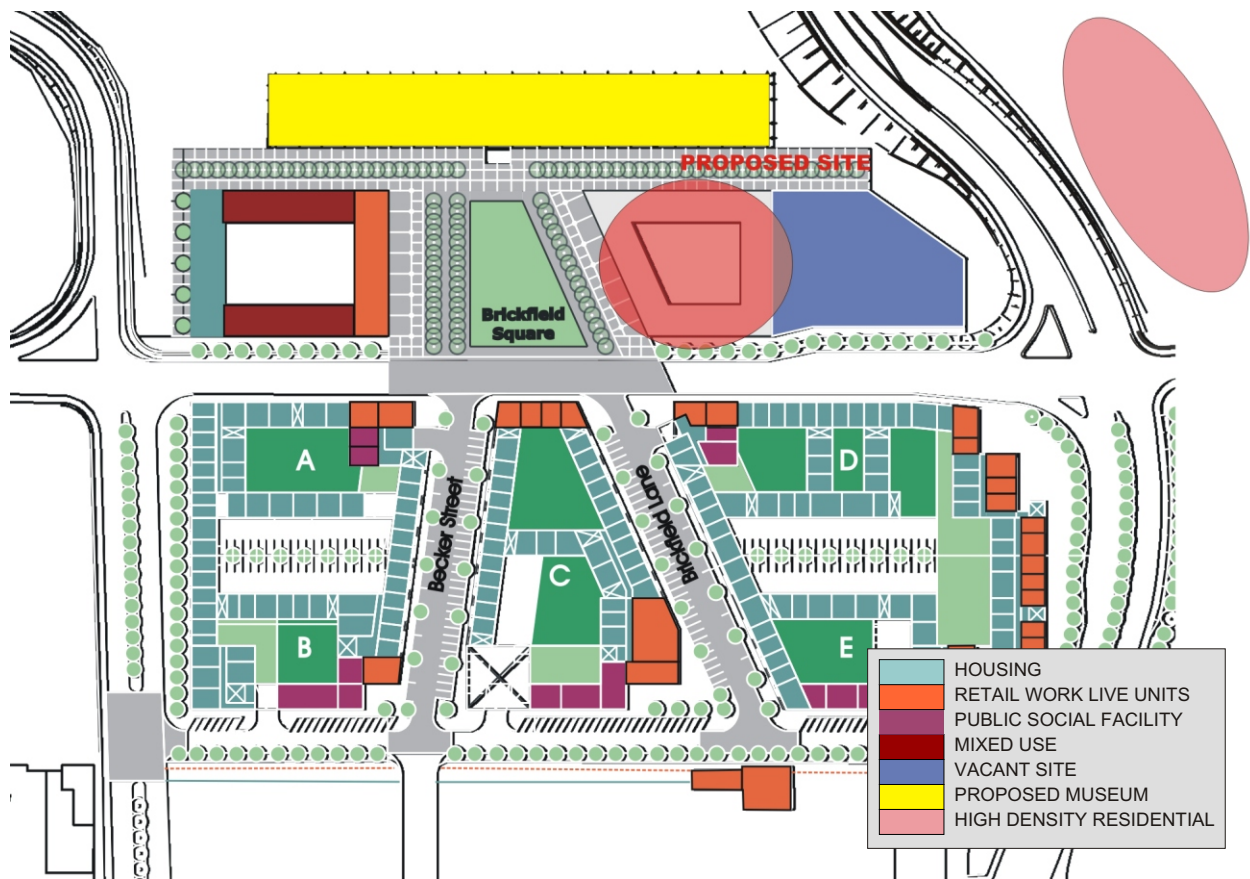


Figure 15. Brickfields Development

3.2. SITE SPECIFICS & CONSIDERATIONS

There is much development taking place in close proximity to the project site. This includes enhanced access to the areas through the erection of the new Nelson Mandela Bridge which links Braamfontein and the north to the eastern side of the CBD, as well as the new off ramps from the M1 which lead onto Carr Street. Infrastructural developments also include the new Metro Mall development on the south-eastern boundary of the site, and the revamped Mary Fitzgerald Square which is in the general vicinity of the project. Brickfields residential development takes place within a context of R400 million investment in projects under current construction or recently completed in Newtown (indicated in previous section).

The proposed site is located along a planned activity street to the south. The local integrated development plan defines an activity street as a local street where access to the activity along the street is of paramount importance. (GAPP Architects, 2003). Mobility is compromised in favour of activity. The preferred land use should encompass residential, business and retail. All uses should be of a local and fine grain nature. Accommodation of pedestrian intensive uses is of utmost importance. A high level of access is desirable. Speed calming is essential on activity streets. Public transport facilities should be provided and activity should be preferably one block/ erf deep. The site is surrounded by proposed and existing high density housing of which there is a large and proven market demand. The Carr Gardens project of 140 units, the Tribunal Gardens project of 174 units and the Newtown Urban Village of 356 units have all been constructed within the general vicinity of the site. There has been an enormous demand for accommodation in this west side of the inner city with all these projects fully let before completion. All these projects run at 100 percent occupancy. The Johannesburg Housing Company is confident that the demand for accommodation at the proposed site will be similarly overwhelming. (GAPP Architects, 2003).

The area is characterised by numerous derelict buildings that are in need of upgrading. With the planned residential development, this should be addressed while also achieving improved overall confidence in the CBD.

This project will later propose a transport museum at the unused Parktown Station to the north of the site. This will significantly induce pedestrian and tourist activity towards the site from the core cultural area as well as other areas. This will form a strong pedestrian link with the core cultural centre. The historical significance of the Parktown station facade will be retained and design considerations with regard to this building will have to be taken into consideration.

The Nelson Mandela Bridge also creates a strong visual impact to the north east of the site. This is also expected to stimulate vehicular movement as well as pedestrian movement.



Figure 16. South View from site



Figure 17. West View from site

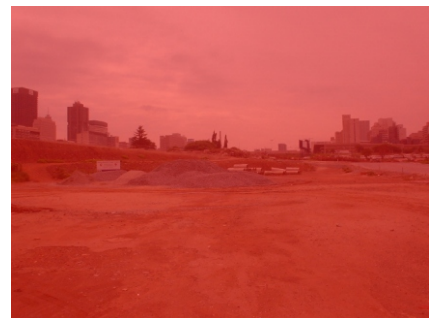


Figure 18. East View from site



Figure 19. North East View from site



Figure 21. Old Parktown Station



Figure 20. Derelict buildings in the vicinity

4. TECHNICAL

4.1. CLIMATE

Average climate statistics for Johannesburg are:

Position: 28 08' South, 28 14' East
 Height: 1694m
 Period: 1961 to 1990

TEMPERATURE

As indicated in the appendix A the average daily maximum temperature for each month varies from 16 degree's Celsius to 26 degrees Celsius while the average daily minimum ranges from 4 degrees Celsius to 15 degrees Celsius. Buildings should be designed to accommodate this large temperature variation. This should be used as a general design guideline for the building however consideration must be given to temperatures as high as 35 degrees Celsius and as low as -8 degrees Celsius as these temperatures are on the rare occasion reachable.

PRECIPITATION

As indicated in the appendix the average monthly rain varies from 125mm to 4mm. The average annual rainfall is 713mm.

4.2. GEOLOGY

Subsurface conditions consist of a complex system of igneous and metamorphic rocks (diabase, dolerite, quartzite, and shale) weathered to depths up to about 30,5m and overlain by a thin vaneer of transported soil. The boundary between transported and residual soils can be distinguished by a "pebble layer" that is an unvarying indicator in that vicinity.

FOUNDATION PROBLEMS RELATED TO MINING

Johannesburg owes it's existence to extensive gold mining. Environment disturbance on such a scale is bound to cause many problems. Fairly large areas are undermined, some at very shallow depth. Appreciable surface movements occur in these areas. Earth tremors related to rock falls cause minor disturbances such as plaster cracking. Ground water is present in the weathered rock and pumping is essential for foundations.

4.3. SITE PLAN

The site forms a portion of the proposed subdivision of portion 1 Erf 557 Newtown in accordance with GAPP Architects site development proposal. The subdivision as of this date is not yet approved and the land is currently zoned for industrial use. Development guidelines are therefore used as a formal guiding procedure as it is envisaged that these would be implemented in the rezoning.

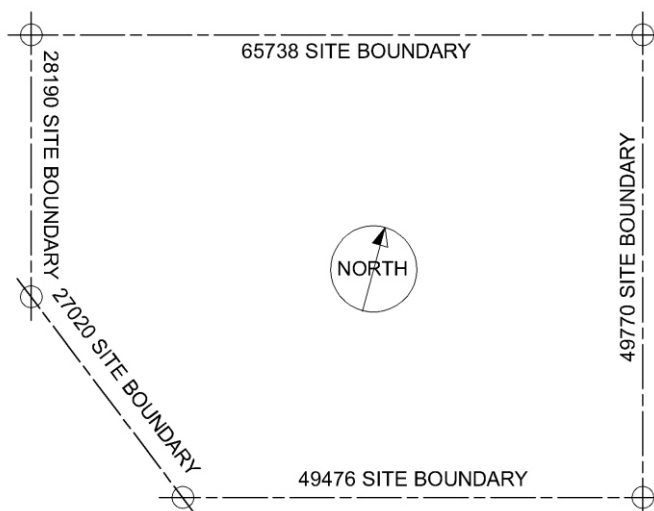


Figure 22. Site Plan

4.4. CADASSTRAL MAP

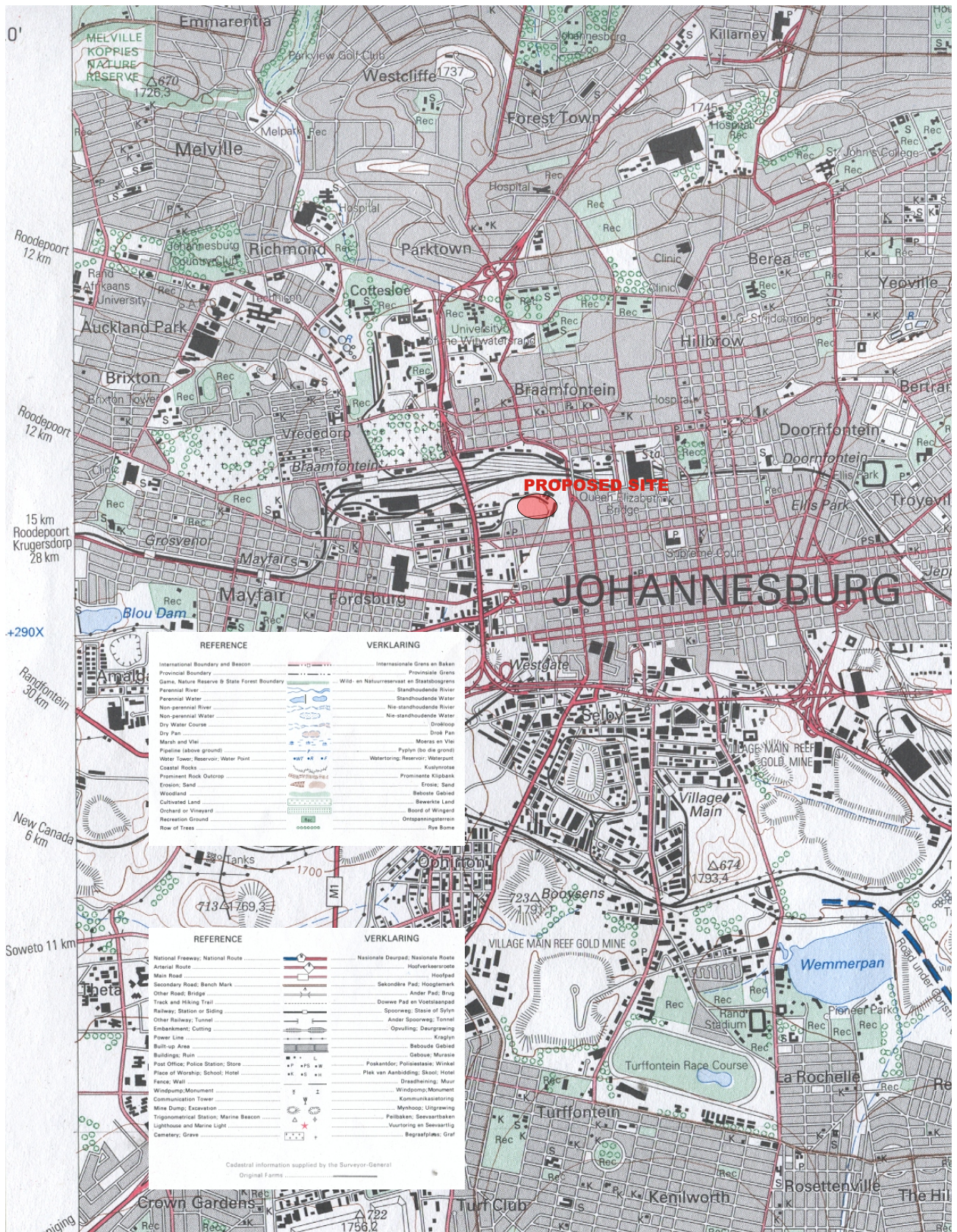


Figure 23. Cadastral map

5. CLIENT

The client, the Johannesburg Development Agency (JDA), was established by the City of Johannesburg in April 2001. It is an economic development agency that plays a pivotal role in the City's developmental strategy, Joburg 2030. (Thorn and Gibson, 1994). As a management body it is tasked to facilitate development within the CBD. Part of its mandate is to be the implementing agent for three Blue IQ projects. Blue IQ is the Gauteng Provincial Government's economic development initiative to create a "smart" province.



Figure 24. JDA

As its vision the JDA will “drive developments that contribute towards achieving Johannesburg’s potential as the African World Class City – a city of prosperity, excellent quality of life and a wealth of cultural and economic opportunity”. (JDA, 2003). Its mission is “to initiate, promote and implement activities that lead to increased economic development for the City of Johannesburg”. (JDA, 2003).

The objectives of the JDA are:

- To create jobs, development and housing opportunities
- To increase the rates base by stabilising decline, attracting investment into new developments, facilitating and securing improvements to infrastructure and promoting mechanisms to improve management of the public environment
- To boost Johannesburg's image as a place for living, investment, and visiting. To respond to and realise the aspirations of the whole population of Johannesburg by improving quality of life and economic opportunities for all

(JDA, 2003)

Within the scope of this project the client's key objective is the revitalisation of the inner city and achieving economic stability. The client views inner city regeneration possible only by means of public and private sector partnership. Its key objective therefore is to facilitate this partnership. The Newtown Cultural Precinct Plan has enabled City Council, and the JDA, to undertake the “capital web” approach, which realises publicly primed actions. . Two principles underlie the approach:

- Public investment is to stimulate private development responses, guided by the precinct plan.
- Those public investments that do not generate direct returns must be understood in terms of their on-going indirect returns and the strategic objective that is being achieved, i.e. The establishment of a primary cultural node within the Johannesburg City Centre.

(JDA, 2003)