

Church Square Precinct.

The focus of the intervention is one of the country's most iconic squares and the historical and political heart of the city. Located in the center of Pretoria, the administrative capital of South Africa, it is a site of great historical significance, with roots dating back to the 19th century.

- **Site Analysis:**

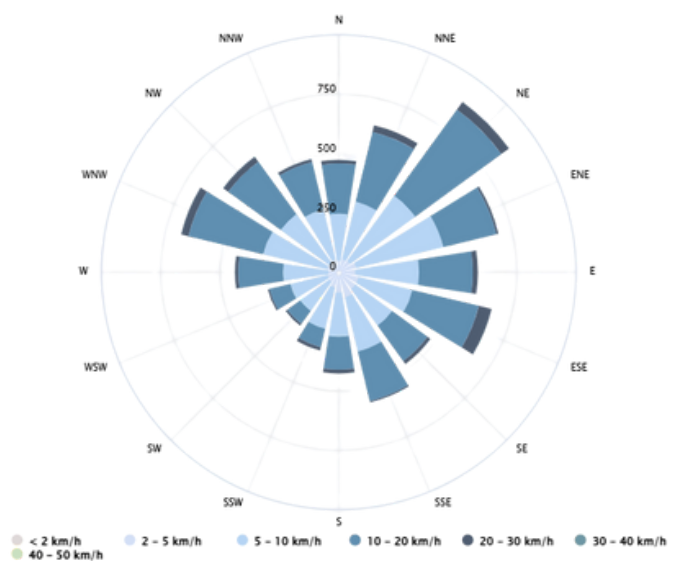
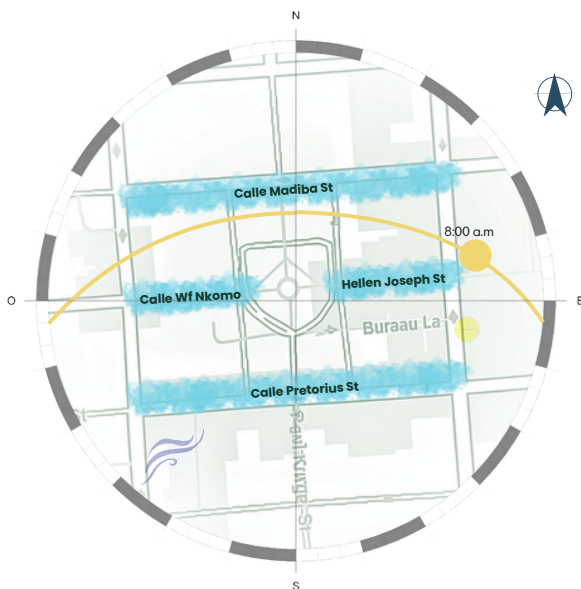
Church Square is located in the heart of downtown Tshwane, South Africa. This area is an important connecting node between different streets and public spaces. The city of Tshwane is the administrative capital of South Africa and has a population of over 3 million.

The access area to Church Square is approximately 1.3 km long and is bounded by several streets. The area is an important center of commercial and government activity. It is also a major center of social and cultural activity, and is home to several historic monuments and buildings.

- **Climate:**

Church Square in Pretoria has a subtropical climate with hot, humid summers and cool, dry winters. Temperatures can reach 30°C in summer and drop to as low as 5°C in winter.

- **Sunlight Map and Wind Rose:**



Average Temperature: Between 18-20 °C.



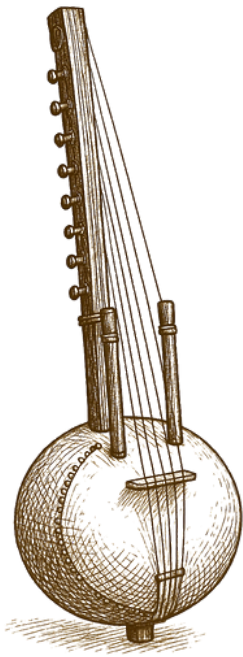
Predominant Winds: At the beginning of the year they are predominantly easterly, southerly in the middle of the year and northerly towards the end.



Humidity: December - January 62% and 63%. July - August 47% and 43%.



Annual Rainfall: 675 millimeters.



- **Conceptual Idea:**

What is the Kora?

The kora is a traditional West African instrument, a type of 21-stringed harp made from a large calabash and cowhide, associated with African griots, or bards: transmitters of history, music, and oral wisdom.

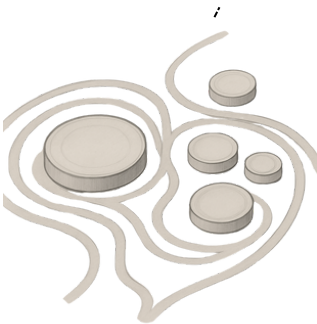
Why Kora Square?

Kora Square can be interpreted as:

- A space that harmonizes cultures: Just as the Kora unites notes in a melody, the plaza can unite people, languages, and diverse communities in Pretoria and South Africa.

- **Project Description:**

In the heart of Pretoria, South Africa, the Church Square project seeks to transform this public space into a vibrant meeting point for the community, promoting social, cultural, and educational activities. With green areas, rest areas, and a mini-museum, it is expected to improve residents' quality of life and reflect the city's identity and culture.



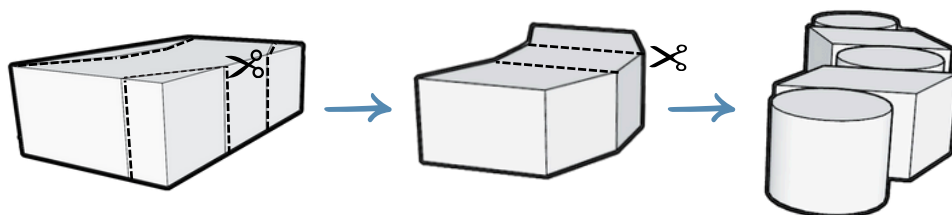
- **Volumetry:**

The redesign of Church Square, renamed Kora Square, is inspired by the form and symbolism of the African kora instrument. The square adopts a circular geometry, reflected in the shape of the park and mini-museum, while the curved paths evoke the waves of sound and the flow of music. The instrument's strings are visually reinterpreted through linear strokes in the pavement, creating an urban space that invites encounter, contemplation, and sensorial experience.

- **Statement of the Problem:**

Church Square, faces significant challenges that affect its residents' quality of life. The lack of accessibility and connectivity for pedestrians and cyclists limits mobility and social interaction in the area. Furthermore, the need to improve safety in the area, compounded by the lack of adequate lighting, resulting in dark and unsafe streets, generates concern and mistrust among residents and visitors. The absence of adequate social spaces and rest areas restricts opportunities for recreation, social integration, and cultural development. Likewise, the failure to consider climate impacts and the need to reduce emissions compromise the sustainability of the area. Finally, the lack of beautification and landscaping in the area contributes to a neglected and unattractive environment, negatively impacting Church Square's image and potential as a vibrant and dynamic public space.

- **Volumetry of the Museum:**





- **Justification:**

The project aims to design an urban intervention proposal for Church Square in Pretoria that responds to the needs of residents and fosters social, economic, and community development. The goal is to create a vibrant public space that promotes social interaction, recreation, and connection with local culture.

- **General Objective:**

To develop a culturally significant and economically viable space that promotes the preservation of the identity and cultural heritage of the local community in Pretoria, through the creation of a recreational park that fosters social interaction, recreation, and socioeconomic development.

- **Specific Objectives:**

- ▶ Design spaces that encourage social interaction and recreation.
- ▶ Integrate elements that celebrate and promote local culture and Pretoria's identity.
- ▶ Implement sustainable practices for the construction, maintenance, and use of space.
- ▶ Include green areas and natural elements that connect users with the environment.

These objectives seek to create a public space that is inclusive, sustainable, and reflects the cultural identity of the local community in Pretoria.

- **Intervention Criteria:**

Improve access to the Church Square Precinct and the image of the area by:

- Promote pedestrianization.
- Cycle routes and/or solutions to provide general movement and connectivity.
- Security considerations.
- Beautification including landscaping and greening.
- Social spaces for the crowds of downtown workers.
- Climate consideration specifically around the urban heat island effect and emissions reduction.

- **Problem Identification:**

The problems identified in this area are:

- Lack of accessibility and connectivity for pedestrians and cyclists.
- The need to improve security in the area.
- The absence of social spaces and rest areas.
- The need to consider climate impact and reduce emissions.
- The lack of beautification and landscaping in the area.

- **User Type:**

The access area to Church Square is used by a variety of users, including:

- Government and commercial sector workers.
- Students from universities and colleges in the area.
- Tourists visiting the area's monuments and historic buildings.
- Local residents who use the area for shopping and other services.



- **Needs Program:**

ENTERTAINMENT AREAS	EXHIBITIONS
	RECREATION
	EVENTS
AREAS OF COMMERCE	FOOD SALE
SERVICE AREAS	SECURITY POST
	BICYCLE PARKING
COMMON AREAS	GREEN AREAS
AREAS OF ACCESSIBILITY	CIRCULATION

- **Architectural Program:**

ZONING	SPACES
PUBLIC AREA	Circulation zone
	Green areas
	Recreational area
	Meeting area
SERVICE AREA	Mini Museum Area
	Parking Area
	Shopping Area

- **Zoning:**



- **Proposal:**

The Kora Square project seeks to create a high-quality public space that promotes sustainable development and improves the quality of life for Pretoria residents by encouraging social interaction and recreation in harmony with the urban environment.



This project in Church Square, Pretoria, is designed to provide a vibrant and welcoming public space for both the local community and visitors to the city. Through urban and architectural design, the project seeks to highlight the harmony between the public space and the urban environment, as well as the functionality and aesthetics of the design. The goal is to create a meeting and recreational space that promotes social interaction, recreation, and community development, improving the quality of life for residents and the image of the city.

- **Vegetation to Implement:**



Dombeya
Rotundifolia



Buddleja
Saligna



Phoenix
Canariensis

- **Illustrations of the Area to be Intervened:**



Madiba Street

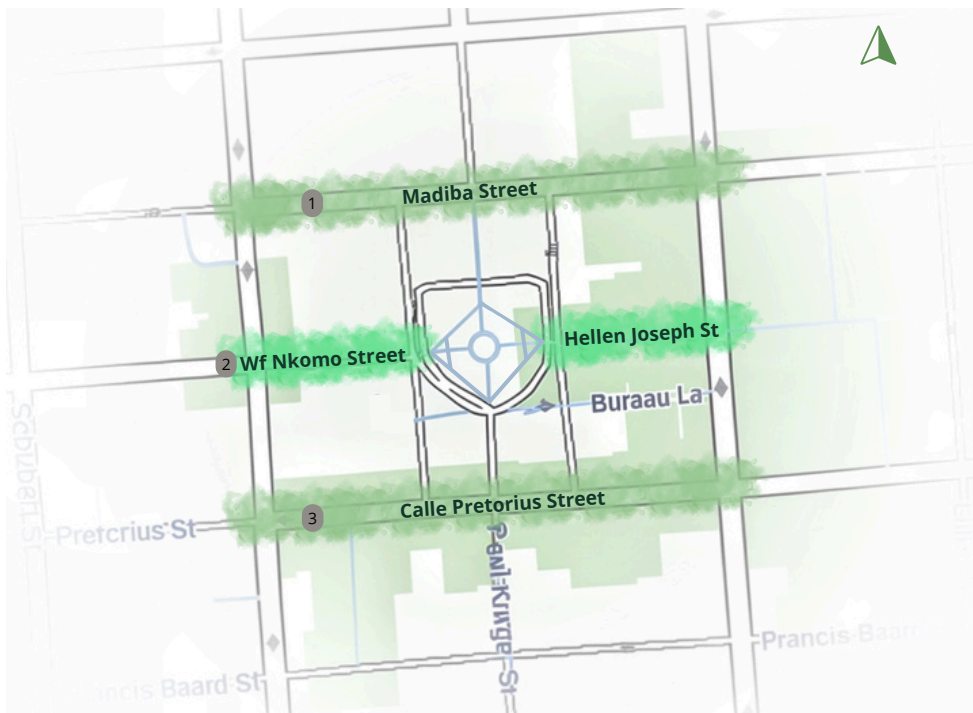


Street Pretorius



Street Wf Nkomo and Hellen Joseph

- **Intervention Proposals:**



 Parking areas and cycle paths.

 Pedestrian zone and cycle route.

 Connection between streets.



1



2



3



1. Madiba Street.

The street will be renovated to improve mobility and the use of public spaces. A safe cycle path, strategic parking areas, and rest areas with street furniture will be implemented. The goal is to create a more accessible, sustainable, and comfortable environment for pedestrians and cyclists, promoting better integration of urban spaces.



2. Wf Nkomo y Hellen Joseph St.

The street will be transformed into a pedestrian space, prioritizing sustainable mobility and recreational use of the surrounding area. As part of this project, a safe and designated cycle path will be incorporated, encouraging the use of bicycles as an efficient and environmentally friendly means of transport. In addition, street furniture such as benches, planters, lighting, and rest areas will be installed, creating a more comfortable and accessible environment for pedestrians.



3. Pretorius Street.

The street will be designed with a properly marked cycle path, allowing safe travel for cyclists and encouraging the use of alternative transportation. In addition, strategically located parking areas will be provided to optimize traffic flow and ensure accessibility to businesses and homes. To improve the pedestrian experience, rest areas equipped with modern street furniture, such as benches, planters, and shaded areas, will be incorporated, creating comfortable and friendly spaces.

• Approach to the Proposal - Cycle Route:

The proposed cycle route is an infrastructure designed to facilitate sustainable mobility for tourists and the local community, promoting a safe and accessible route that connects the area's main heritage buildings with Church Square.

This initiative will allow users to travel efficiently while discovering the historical and cultural value of each landmark along the route. Furthermore, the bike route will promote tourism, urban integration, and equitable access to public spaces, strengthening the city's identity and heritage.

In addition to the aforementioned, the cycle route will feature bicycle parking, where users can not only safely park their vehicles but also access a temporary rental service. Additionally, strategically located trash cans will be installed, along with sustainable street furniture for rest, and businesses will be encouraged along the route. The route will be equipped with clear and efficient signage, ensuring a smooth, comfortable, and accessible experience for all visitors.



**National Department
Public Works**



Palace of Justice



**Old Reserve
Bank Building**



**Van Schaik
Bookstore**



**Brooklyn City
College**



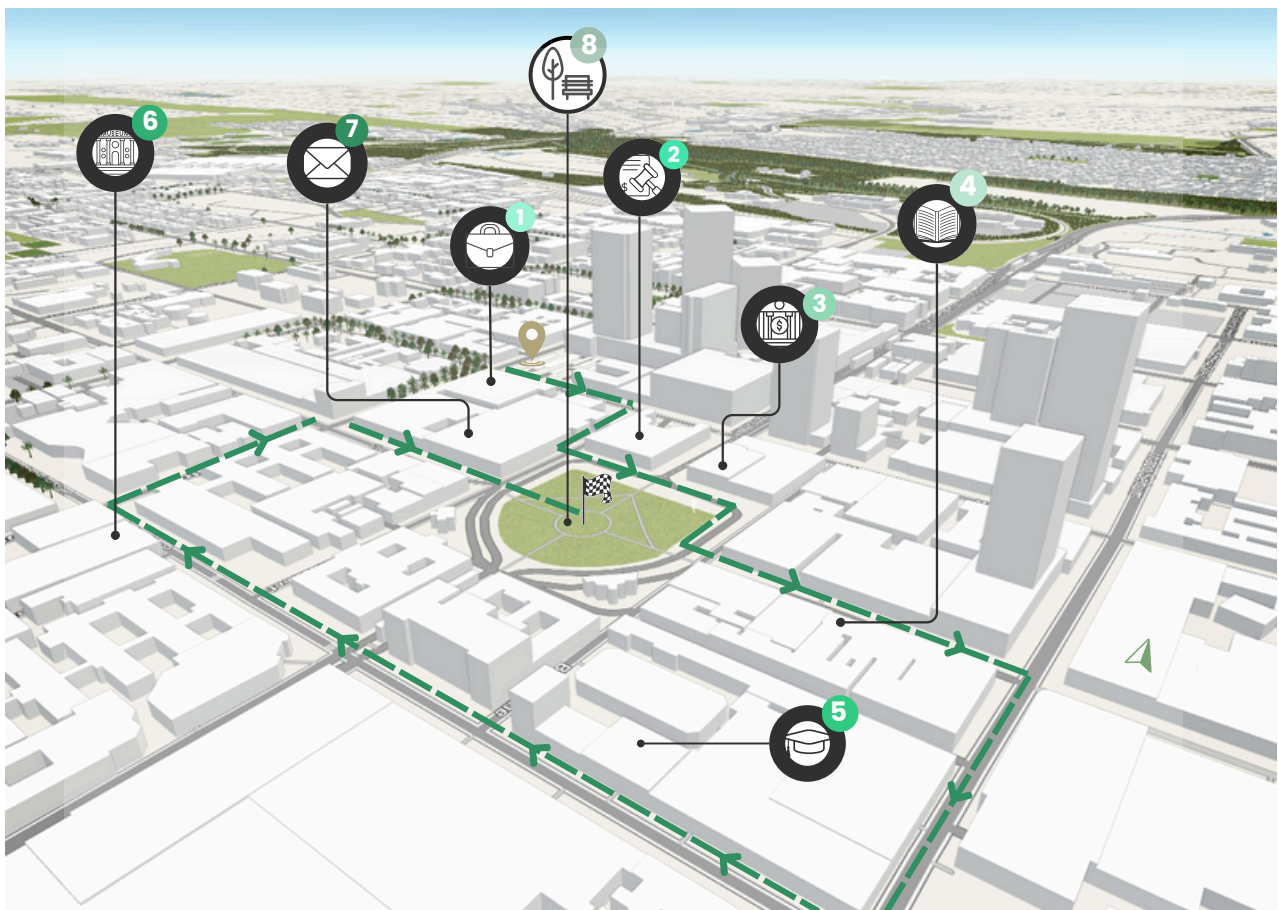
**SAPS Heritage Museum
Compol**



**Pretoria Post
Office**



**Paul Kruger
Statue**



- **Environmental Assessment of the Project:**

The redesign of Church Square incorporates an active environmental strategy that seeks to mitigate the ecological impact of the urban environment through sustainable, energy-efficient solutions. The choice of recyclable materials, the installation of solar-powered LED lighting systems, and the incorporation of native vegetation will significantly reduce greenhouse gas (GHG) emissions.

It is estimated that replacing traditional lighting with LED technology and optimizing the green space to capture carbon will reduce urban energy consumption by approximately 25% compared to current levels. These measures respond to local and national sustainable development goals and strengthen the square's resilience to climate change.



- **Community Benefits Assessment:**

Beyond its technical merits, the project has a clear social purpose. The redesign of Church Square is conceived as a tool for urban transformation that contributes to improving the quality of life of local communities. By creating a more accessible, safe, and attractive public space, it will encourage active use of the square by people of all ages and backgrounds, strengthening the social fabric and promoting a sense of belonging.

A positive impact is expected in several areas: local economic activation through the creation of temporary jobs during the construction phase and new spaces for regulated informal commerce; cultural and educational benefits through heritage signage and areas for outdoor cultural activities; and physical and mental health benefits, thanks to the promotion of walking, outdoor recreation, and contact with urban nature. Overall, the project aims to transform Church Square into a benchmark for inclusive public space, promoting social cohesion and cultural identity.



KORA SQUARE





Mini Museum



1. Complete Neighborhood

The mini-museum serves as a cultural anchor that complements the urban fabric by offering an educational, recreational, and tourist space. Its inclusion in Church Square ensures that the neighborhood not only has basic services, but also access to culture, learning, and historical memory.



2. People-Centered Streets and Mobility

The museum is integrated into a pedestrian environment with safe cycle routes and bicycle parking. Slow, accessible traffic is prioritized, encouraging walking and social interaction, reducing dependence on cars.



3. Connected Places

The museum's design and strategic location within Church Square connect it to other green areas, rest areas, and transportation networks. The open and accessible architecture promotes a natural flow of visitors, strengthening the physical and symbolic connectivity of the space.



4. A place for everyone

The museum is designed with universal accessibility criteria in mind, including ramps, inclusive signage, and spaces for all ages. Furthermore, its cultural programming seeks to represent and celebrate Pretoria's ethnic and cultural diversity.



5. Clean Construction

The use of local, recyclable materials and passive construction techniques reduces the museum's carbon footprint. The compact and efficient design minimizes resource use during construction.



6. Green Energy and Buildings

The museum incorporates natural lighting systems, solar panels, and cross ventilation to reduce energy demand. This makes the building a model of energy efficiency and commitment to renewable energy.



7. Circular Resources

The design includes rainwater harvesting systems and waste separation at source, promoting recycling and reuse. The wood used comes from sustainable sources and is treated to extend its useful life.



8. Green Spaces and Climate Resilience

The museum grounds feature native gardens, shade trees (like the pink-flowered one pictured), and sustainable drainage solutions. These elements help mitigate the effects of urban heat and torrential rains, improving climate resilience.



9. Sustainable Living

The museum promotes conscious lifestyles through exhibitions, workshops, and educational activities on local history, sustainability, and the environment. It becomes a source of inspiration for visitors and the community.



10. Green Economy

The mini-museum boosts the local economy by attracting tourism, creating direct and indirect jobs, and offering opportunities to artists, guides, and entrepreneurs. It acts as a cultural hub within a more sustainable and inclusive urban economy.

Shopping Area



1. Complete Neighborhood

The commercial area provides direct access to prepared foods and spaces for social gatherings, guaranteeing basic services within the urban environment. This avoids unnecessary travel and strengthens the neighborhood's self-sufficiency.



3. Connected Places

The food stalls and furniture are integrated with the pedestrian routes, connecting the commercial area with the rest of the urban park. This arrangement strengthens the spatial continuity of the project.



5. Clean Construction

Commercial modules use lightweight, prefabricated, and reusable structures. These constructions generate a low environmental impact and allow for efficient assembly without permanent soil disturbance.



7. Circular Resources

Street furniture is made of durable and recyclable materials. The modular arrangement of the elements facilitates their maintenance, repair, and eventual reuse within the same environment.



9. Sustainable Living

The design promotes local consumption and outdoor living. People have access to food without having to travel by car, reducing their carbon footprint and strengthening sustainable practices.



2. People-Centered Streets and Mobility

The area is completely pedestrianized, with no vehicular interference. The wide paths allow for smooth and comfortable traffic for all users, prioritizing the safe pedestrian experience.



4. A place for everyone

The space is accessible and inclusive. It is designed to welcome people of different ages and social backgrounds, fostering inclusive participation and community engagement.



6. Green Energy and Buildings

The space's lighting uses energy-efficient LED fixtures. This ensures efficient energy use and extends operating hours without compromising sustainability.



8. Green Spaces and Climate Resilience

The immediate surroundings include trees and urban vegetation. These elements provide shade, reduce surface heat, and improve environmental conditions, strengthening the climate resilience of the space.



10. Green Economy

The commercial zone generates direct employment for local entrepreneurs and promotes the small-scale economy. This boosts the urban economy and contributes to social equity through accessible opportunities.





Rest Area



1. Complete Neighborhood

The rest area is an integral part of the urban space, offering an accessible place for pause, gathering, and social interaction. This enriches the neighborhood by adding infrastructure aimed at community well-being.



2. People-Centered Streets and Mobility

The design prioritizes pedestrians through wide paths, flat pavement, and ergonomic furniture. The environment is free of obstacles and barriers, conducive to walking, stopping, and remaining in space safely.



3. Connected Places

The space is visually and physically connected to adjacent areas. The linear arrangement of benches and vegetation allows for continuous flow, facilitating the connection between different sections of the park or plaza.



4. A place for everyone

Inclusivity is evident in the furniture design, with benches of varying heights and shapes that allow for use by people of all ages. The presence of older adults and young people in the image demonstrates the diversity of users.



5. Clean Construction

The construction elements visible in the image are simple and low-impact. Industrialized, possibly prefabricated, materials are used, allowing for rapid, precise construction with minimal waste generation.



6. Green Energy and Buildings

The building features modern, solar-powered lighting. The open-plan location allows for natural light, reducing the need for artificial lighting during the day.



7. Circular Resources

Street furniture features wear-resistant surfaces, possibly made from recyclable or recycled materials. The use of modular elements promotes long-term maintenance and reuse.



8. Green Spaces and Climate Resilience

The area is framed by densely foliated trees that provide shade and reduce soil temperature. The trees contribute to the absorption of rainwater, improving the area's ability to adapt to climate change.



9. Sustainable Living

The space encourages healthy habits such as walking, outdoor conversation, and enjoying the urban environment. The image shows an active and relaxed use of the space, promoting a lifestyle more connected to the environment.



10. Green Economy

This area's maintenance is efficient thanks to its minimalist and durable design. It also creates urban value by attracting visitors and encouraging long-term use of the space, which can have a positive impact on the local economy.

Pretorius Street



1. Complete Neighborhood

Madiba Street connects public transportation, pedestrian mobility, and bicycle lanes in a single space, ensuring direct access to basic mobility services within the neighborhood.



3. Connected Places

The presence of the bus stop, the vehicle lane, and the bike path on the same stretch guarantees effective intermodality. The street serves as a connecting axis between different sectors of the neighborhood.



5. Clean Construction

The road and transportation infrastructure uses simple and efficient solutions, without unnecessary interventions. The integration of trees along the bike path reduces the environmental impact of concrete.



7. Circular Resources

Street furniture, such as the bus stop, uses durable, modular metal materials. This facilitates maintenance and allows for reuse in other areas of the neighborhood.



9. Sustainable Living

Walking, cycling, and public transportation reduce dependence on private vehicles. Streets promote sustainable routines and improve air quality.



2. People-Centered Streets and Mobility

The route prioritizes pedestrian safety and comfort with clearly marked zebra crossings and wide sidewalks. The inclusion of segregated bike lanes reinforces active and safe mobility.



4. A place for everyone

The urban space includes pedestrians, cyclists, and public transportation users. Its design favors a diverse range of users, regardless of age or physical condition.



6. Green Energy and Buildings

The street provides a favorable environment for non-motorized transportation, reducing energy consumption from private transportation and promoting sustainable habits.



8. Green Spaces and Climate Resilience

A continuous row of trees runs alongside the bike path, providing shade, reducing road temperatures, and absorbing CO₂. This improves the user experience and contributes to urban resilience.



10. Green Economy

The infrastructure facilitates access for workers, students, and consumers to local services and economic activities without the need to use a car, thus strengthening the local economy.

