

The design of positive public space as a core public investment in low-income housing areas: Examining the possibilities for a market space and infill housing in Khayelitsha, Cape Town

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Abstract

Shelter for the urban poor is often viewed in isolation from the valuable public assets that constitute an urban public environment. In low-income housing areas the primary spatial structure should consist of positive public spaces, green systems, transportation networks with emphasis on non-motorised transport, community amenities and human-scale local interventions for informal and formal economic and social activities, where there is potential for mixed-use opportunities. Core gathering points and public spaces promote and reflect the democratic city and often form the social and economic heart of many communities. However, projects related to the public realm and associated facilities are often the first to be eroded from the public budget programme. Within a 10 year period of South African democracy the Government has delivered 1.6 million houses nationally based predominantly on the one-house, one-plot scenario [1 & 2]. The authoritarian emphasis on housing has been related to the quantity of houses delivered as opposed to the quality of urban environments created. Taking this into consideration, there is a strong need to recognise and promote housing developments as integrated and sustainable human settlements. Primary investment in public space is crucial in areas that have minimal access to valuable outdoor space and create highly valued human assets. This paper addresses a public space in Khayelitsha.

1 Introduction

The objective of this paper is to present a proposed Urban Design Framework (UDF) and informal market stalls design for Ntlazane Road/ Steve Biko environs in Khayelitsha in relation to the development of housing in the local and metropolitan context of Cape Town. The project was initiated by the City of Cape Town (CoCT): Economic Development and awarded to NM & Associates Planners and Designers in June 2004. The purpose of the project was to develop a design intervention strategy that integrated the public environment and could potentially release further public and private investment as a phased process. The challenge was to develop a principal urban framework within a primary development context that could attend to basic community needs and support a range of trading opportunities of a formal and mainly informal nature [2]. The design strategy focused on the *overall role of the site* as a significant public environment for positive functioning and informal activity within Khayelitsha at both a local area and site scale. The approach to the project involved addressing the fundamental concept of establishing a dynamic public realm that could support:

- Functional and spatial requirements, such as Khayelitsha Railway Station as a key transport interchange and activity node;
- Pedestrian movement and non-motorised transport as the main mode of access to the area;
- Different levels and types of informal trade, namely small, medium and large scale;
- Institutional facilities and related amenities; and
- Potential appropriate sites for live-work scenarios and high-density housing infill.

Taking these primary issues into consideration, I point out that the key informants for the project were the existing informal traders operating along Ntlazane Street and around Khayelitsha Railway Station. The potential of income-generating activities is argued as a possible poverty alleviation strategy [4]. Contrary to previous literature on the “informal economy”, income-generating households are neither disconnected nor autonomous to the macro (urban, national or international) economy, but they are rather an *integral part of the whole economy* [5], which allows for the freedom of exchange [6]. Ukukhula [7] describe three levels of trading, namely: survivalist trading, where the trader makes sufficient income to sustain the family; informal trading where there is sufficient income to support personal and family needs but also operates on a profit basis, influencing the independence of choice and lifestyle opportunities; and formal trading with a fixed, permanent location and is operated on a formal business principle with legal documentation to support the business. Informal and survivalist trading usually exist within numerous spaces and settings available and in favourable locations attracting high pedestrian thoroughfare, and hence creating multidimensional and diverse urban systems [8 & 9]. However, the survival or growth of informal trading depends on:

- **Access-** *lack of access to resources*, such as space for trading, materials to sell, finance, storage, transport to reach trading zones and minimal support mechanisms are seen as major blockages towards self-empowerment and future development.
- **Cost of space-** *rental of space* for trading may be determined by the traders themselves, organisations or authorities. These systems may influence the number, location and type of traders. In some areas informal traders do not pay or are unable to pay for space. Mismanagement of rentals may also lead to an unsuccessful trading improvement project.
- **Local Thresholds-** there are changes in *peak periods* (daily and weekly) for maximum trading. This is also affected by seasonal patterns e.g. the winter rainy period in Cape Town affects how traders operate as few traders have covered shelter.
- **Contextual characteristics-** *social relationships* between traders, taxi operators and customers may influence trading and gathering spaces, accumulation and type of traders working in proximity to one another i.e. the value of specific spaces for trading.

These points were seen as important guidelines for the design of the market stalls for informal trading purposes and were emphasised as a point of departure in the design development. A central question to the proposal is what form of infrastructure should be provided by a local authority and why? The concept proposed is a ‘basic minimalism’ approach, where an overall framework relates to a limited architectural development that can be incrementally appropriated by the community once the designer leaves the site. A key challenge lies in the ability to provide a venue for economic opportunities where there are limited resources and a desperate need for relevant scale and form of space that cannot be provided by the traders. In order for this project to be practical and attainable with appropriate management plans, which can be sustained over long periods, it is essential that innovation occurs at spatial, procedural and administrative levels. This kind of intervention should feed into national and municipal policy review and further housing projects. I emphasise that the budget allocation for this particular project has not to date been given priority. It is on this basis that I reinforce the importance of the project presented from an UDF level to site development scale as not only creating a future asset for the City of Cape Town, but also as a core gathering and market space for the people of Khayelitsha. Without such key public developments, many peripheral townships in South Africa will remain as dormitory housing settlements with fragmented internal spatial systems and disrupted social networks, a history of the apartheid era.

The methodology was initiated with a detailed contextual analysis of the existing Ntlazane Road/ Steve Biko environment with specific emphasis on observation and individual interviews with informal traders working along the road edge and around Khayelitsha Railway Station. Public participation with key stakeholders, inclusive of trading representatives and the City of Cape Town (CoCT) officials helped inform key issues, needs and desires in the process of generating a design proposal for the market stalls and UDF for Ntlazane/ Steve Biko environs. A final report was submitted to the CoCT by NM & Associates in December 2004 [10].

2 Contextual Understanding

Khayelitsha is a densely populated dormitory township situated approximately 30km south-east Cape Town Central Business District (CBD) and 17km south to the Belville Central Business District (CBD). Khayelitsha originated due to the need for accommodation of the overflow of squatters from overcrowded townships, such as Crossroads, Langa and Nyanga in Cape Town. The area is characterised by predominantly low-income formal and informal housing, where there are high levels of unemployment and poverty combined with social problems of crime, unsafe and limited living and working conditions. Households are generally isolated from economic and social opportunities relying on long distance travel to areas of employment and opportunity. There is generally inadequate provision of appropriate facilities and poor management of existing services.

Khayelitsha is the subject of the Presidential Urban Renewal Programme within which the question of income poverty is a key consideration. Within the broader context of Khayelitsha, there are two types of economic and spatial responses that can spatially support development and growth of the areas in a push towards poverty alleviation. Firstly, formal private and public economic and spatial intervention, as depicted by the eastern area of Khayelitsha Railway Station with the proposed Khayelitsha Business District (KBD); and secondly, public investment that reinforces the existing informal economy. However, the implications of informal trading and economic possibilities require a qualitative public realm that has the capacity to play a key role as an urban generator. This includes community facilities, which are associated to the residential fabric with appropriate management processes in order for entrepreneurial activities to function properly, and be suitably sustained in the long term.

There is an existing open space system in Khayelitsha which is well used by pedestrian movement, but poorly developed and maintained resulting in undefined spaces and misrepresented tracks of land. There is also a large percentage of underutilised vacant land. Such public open space and vacant land offer an opportunity to create dignified urban spaces as key components to the local environment, increasing accessibility and establishing a framework to enable socio-economic development. Public spaces are proposed at critical points, associated with high thresholds of people moving through an area on a continual basis, both during and out of peak hours. Such areas create vibrant places, which normally change and grow over time. The street edge to Khayelitsha Ntlazane Road and the public space adjacent to Khayelitsha Railway Station provide an opportunity for the development of a primary public space for informal trading, related social activities and the potential for desperately needed medium and high density infill housing in the surrounding local context. The planning and design approach considers systems that accommodate incremental growth processes allowing Khayelitsha to change with the needs of the people.

The site extends along Ntlazane Road from the City of Cape Town Stocks and Stocks complex southwards past the Steve Biko Road intersection to a portion of vacant land associated to a new pedestrian bridge. The site includes the under-utilised land to the west and adjacent to Khayelitsha Railway Station, which is currently being used as a market area for fruit and vegetable traders. The majority of informal trading occurs along Ntlazane Road from the Post Office to the intersection with Steve Biko Road. The proposed KBD located on the eastern side of the railway line from Khayelitsha Railway Station will inherently change the nature of the area through the encouragement of increased vehicular movement and large formal enterprise and private investment. However the development of the KBD will be a long term initiative compared to the immediate needs of the informal traders currently being relocated due to the construction of a new vehicular bridge over a proposed extension to Khayelitsha Railway line. The new Steve Biko Bridge will inherently alter the use of the space below on Ntlazane Road. Traders are temporarily being moved away from the site to a transitory area located close to the Railway Station, reinforcing the need to develop an appropriate public place for traders to operate. Design proposals take into consideration the development of the pedestrian bridge further south, linking Ntlazane Road to the proposed KBD.

3 Conceptual Urban Design Framework

3.1 Contextual Development Framework south of Spine Road, Khayelitsha

The role of a Contextual Development Framework (CDF) is to ensure that interpretation at the site scale is consistent with a broader spatial pattern and context that in turn, guarantees the public spatial structure facilitates key linkages, connections and energy gathering points. This CDF was informed by the analysis of existing trading patterns, areas experiencing high levels of pedestrians, existing vehicular movement routes, stopping points, green systems, public open space and the basic requirements (from both a land use and infrastructure perspective) of the surrounding communities. The design was also informed by the need to create a positive urban environment to address the dynamic and shifting nature of Ntlazane Road, whilst understanding future changes that may take place with the intervention of the KBD and re-alignment of the Steve Biko Road.

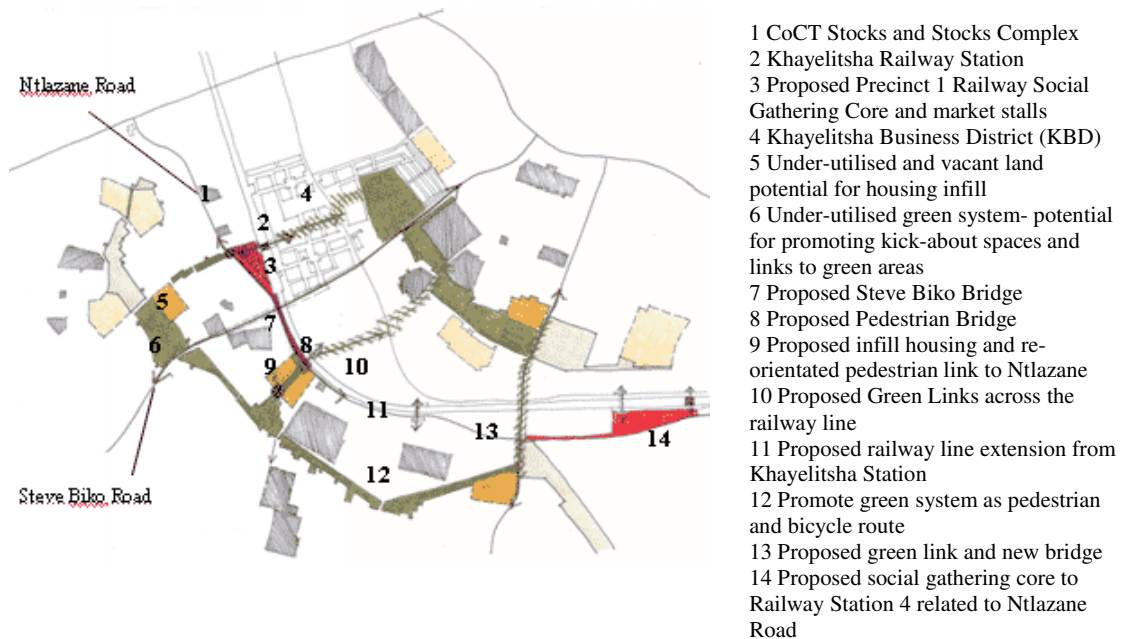


Figure 1: Contextual Development Framework

The following issues are the predominant factors informing the plan on a contextual level:

- *Proposed movement routes:* The introduction of the Steve Biko Bridge does not adequately address the flow and number of pedestrians moving in the direction of the activity core of the station. Large berms to support the bridge will redirect people across the road uncomfortably. Therefore, the CDF proposes to re-orientate this flow of movement towards Ntlazane Road and activate the base area demarcated for the proposed pedestrian bridge. High density residential units will address this new thoroughfare.
- *Green links:* The intention is to link the two large public open space systems located on either side of the railway line. This will assist in creating a circular route which is enhanced by both hard and soft landscaping and facilitating non-motorised transport [11].
- *Pulse Points/ Social Gathering:* The proposal is developed around the idea of 'pulse points' or activity centres as main public gathering points associated with core hubs, namely Khayelitsha Railway Station and the proposed Railway Station 4. Combined with this, the activity centres are spatially linked to the proposed pedestrian bridges in order to assist development, activate investment and motivate positive public spaces around the base of the bridges i.e. increased surveillance, space for informal trade, improved lighting and appropriate sustainable landscaping to create proper forecourts to the bridges.

3.2 Precinct Identification and Development for the UDF

Working within certain budget constraints, it is necessary to prioritise where and how design intervention should occur, inclusive of appropriate management and possible delivery processes. The following gives a brief explanation of the three different precincts. Precinct 1: the Station is seen as a core focus point with high levels of intense activities and a variation in thresholds. There is a high demand for trading activities in this vicinity. Precinct 2: Gateway focuses on the development of positive public space around the proposed pedestrian bridge. Precinct 3: Link spatially connects Precinct 1 and 2 through landscaping, spatial techniques and edge conditions. The appropriate phasing of the work into operational sections is carefully considered. Precinct 1 is proposed as Phase One, which can be split down further on a detailed level into different priority projects and implementation possibilities. Precinct 2 is proposed as phase two, but the initial development area will be focused around the pedestrian bridge, followed by the residential infill and institution development. Precinct 3 can be implemented according to budget and is suggested to take place after completion of the Steve Biko Bridge. Precinct 1 will be focused on within this paper as the heart of the development and key investment area. The quality of the public realm is fundamental in a context where there are minimal qualitative 'people places'.

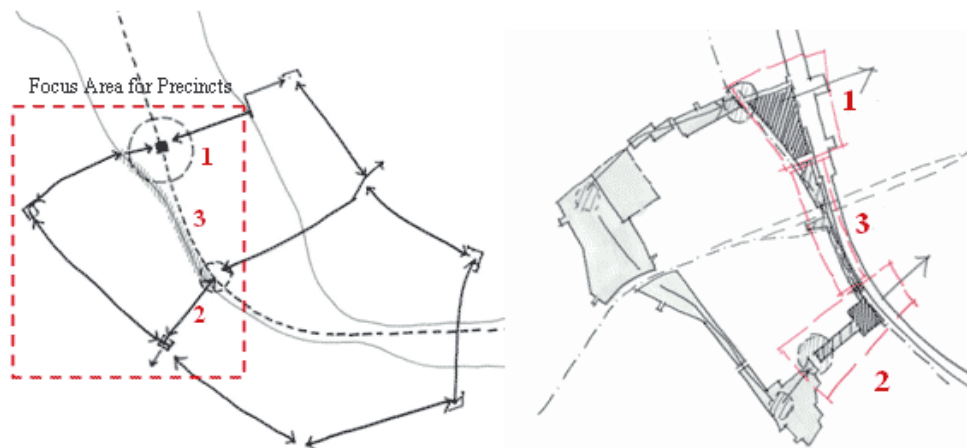


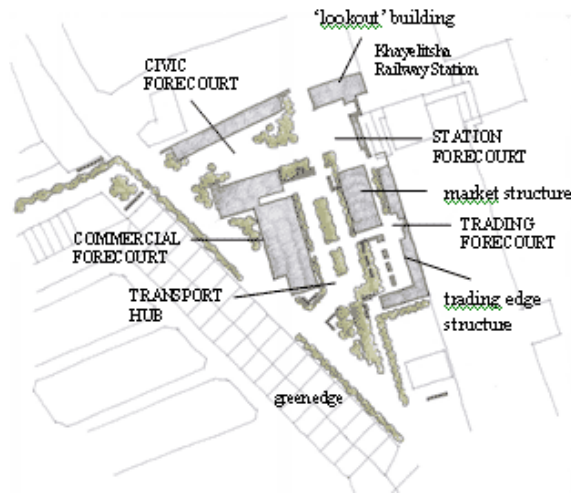
Figure 2: Precinct Identification for Ntlazane Road developments

3.3 Precinct 1: Station and Design of Market Stalls

The design of Precinct 1: Station is composed of integrated public forecourts. The courts are clearly defined public spaces which are easy to visually survey providing a level of security, but more importantly they have a sense of public place, community identity and containment. Brief descriptions of the courts are as follows:

- **Station forecourt** is the primary receptor area which absorbs a high number of pedestrians moving to and from the ramp and the proposed new stairs leading to Khayelitsha Railway Station. This court acts as the "centre stage". New stairs address the forecourt in celebration of the space.
- **Trading forecourt** area includes a mixture of enclosed and open trading shelters along the railway station fence edge, market trading canopy, unsheltered trading space, ablutions, water points and landscaping elements.
- **Civic forecourt** is a public space in which trading and recreational activity occurs. Trading units edge the court and define the spatial limit for pedestrian movement and social gathering.
- **Transport hub** incorporates a stop and drop space and waiting area for taxis. This works around the one-way vehicular movement system. This is contained by planted trees to line 'safe' pedestrian movement routes.

- **Commercial forecourt** allows for future development or private investment from outside developers. Larger trading units are flexible in nature. However, any development must adhere to recommended design guidelines for the area.



PRECINCT 1: STATION

- Clearly defined social gathering space around the base of the Station
- Shelter options to define the edge of public courts
- Movement to and from the station access ramp is re-addressed
- Provision of public ablutions and water points for traders
- Provision of trading options for edge conditions and market structure
- Provision of a “lookout” building for administration and general surveillance of forecourts
- Connect green public open space through the gateway areas
- Re-orientate Post Office entrance and create a public forecourt

Figure 3: Layout of Precinct 1: Station to show forecourts and integrated design

The overall development focuses on the need to direct and allow maximum pedestrian flow from the station in an east-west and north-south direction to residential areas and other amenities. Areas which receive high thresholds of social gathering are clearly defined as pedestrian zones, such as the Station Forecourt to accommodate high pedestrian flow during commuting hours (i.e. 6-8am and 4-7pm), combined with the general movement throughout the day. Although, there are large numbers of pedestrians moving to and from Khayelitsha Railway Station at present, it is recognised that this may change with the development of two new railway stations further to the south. However, with the development of the KBD to the east, Khayelitsha Station will most probably remain a focal gathering point attracting primary formal and informal trade and other economic and social activities.

The proposed architectural design for Precinct 1 includes different trading elements, namely trading edge shelters, a trading market, and mixed use trading structures. The intention is to provide a basic structure which can develop according to the needs of the traders and general public. Therefore, all the buildings are designed to allow for flexibility that can develop on an incremental basis. Ablutions will be incorporated into the trading edge shelters and appropriately designed within the structure. Water points are located close to open spaces and trading areas. Lighting, where not attached to the structure, is located in prime pedestrian movement areas and in spaces where high numbers of people gather. Materials used in the structures would be basic steel frames, masonry infill, concrete columns and roof sheeting. Low maintenance and the environmentally conscious running of the buildings are favoured.

The trading market takes the form of a canopy structure. Trading is intended for market activities, especially fruit and vegetable trade. Walkways on either side allow for possible trading or pedestrian movement or space for the general public to wait for taxis, sit and relax and meet with friends under shelter. Over time the trading areas (open spaces of 3m x 9m, 27m² or further divided into smaller trading spaces of 13.5m² or less, dependent on demand) may be formalised into secured units with roller shutter doors and partitions. The trading market canopy structure addresses the Station Forecourt and the Trading Forecourt.

Trading units (approx. 3m x 4m, 12m² or divisible into smaller units) are accommodated along the edge conditions of the railway line fence and form an edge to the trading forecourt. Different levels of unit size cater for small, medium and large-scale traders, where there is a variation in secured permanent (closed) units and covered, but open temporary units. A basic combination of floor-wall-roof incremental building process is suggested, as presented in Figure 4. However, these structures can grow (i.e. veranda) or change (i.e. formalise or become more secure and enclosed) over time. Benches are incorporated into the wall and floor elements. Units will have the possibility of access to electricity. Potential development allows for edge conditions to activate trading processes and the provision of appropriate shelter within the initial phase of the Precinct 1 development.

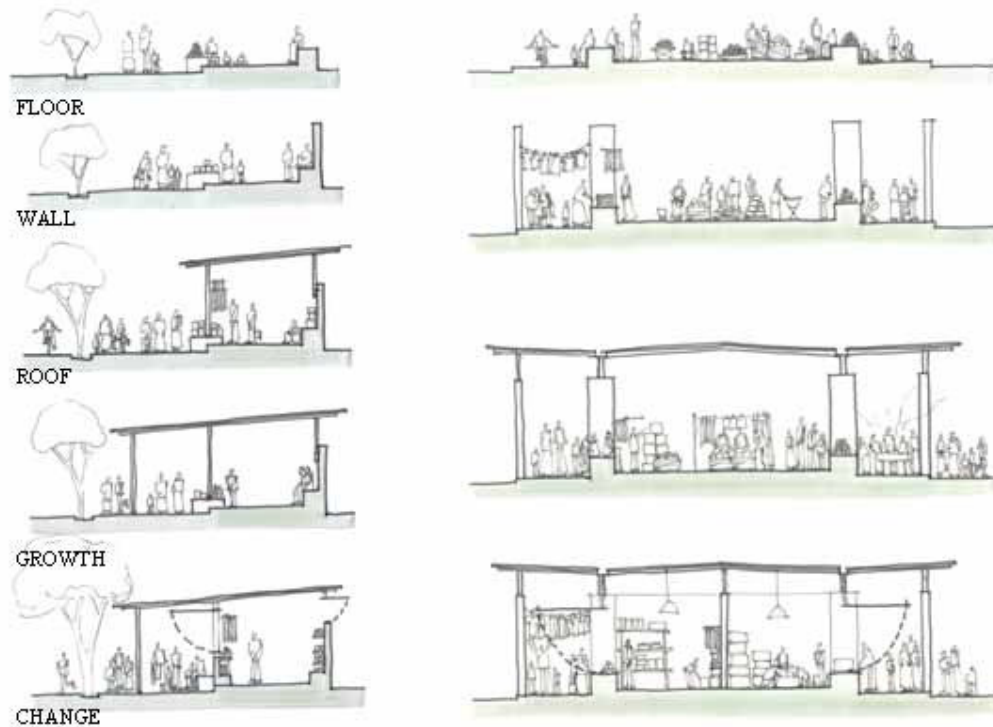


Figure 4: Sketches to show the flexibility and adaptation of the two types of trading structures

4 Conclusion

“The entrepreneurial contribution to the City by survivalists, crafters, market users, roving traders and the like is indeed significant. The City recognises an opportunity to encourage further new entrepreneurs while simultaneously seeking to offer growth opportunities (through formalisation wherever possible) for existing traders” [7]. In conclusion, I reinforce that the fundamental aim of the Khayelitsha Ntlazane Road/ Steve Biko Environs Urban Design Framework and Market Facility project was to establish a core positive public space with related facilities for existing traders. The long term vision is to implement and improve all *three identified precincts* with associated high-density housing possibilities to create an *overall integrated human settlement*. Residential infill is carefully considered as a possible means to house a greater population and add to the densification process within the heart of Khayelitsha. The predominant factor underlying the proposed development or improvement of these key elements is the responsibility to address poverty in particular. The development of Precinct 1: Station has the potential to act as an urban generator in Khayelitsha and create a key public investment for the CoCT through minimal means. A key issue was to design public spaces and buildings that are generally very difficult for

individuals to provide due to budgets and scale. The proposed development of Precinct 1 emphasises a core community space which accommodates a variety of different functions, facilities and places for multiple activities, which helps to address income poverty through potential employment possibilities. Minimal payments for trading spaces were found to be accepted by the informal traders in the area where the desire to have legally acceptable and more permanent places to operate were of greater priority. The prospect of a large market and informal trade area in close proximity to Khayelitsha Railway Station looks towards creating a dynamic environment, which is available to local residents and metropolitan commuters. I recommend that appropriate development of Precinct 1 takes place *concurrent* to the development of the KBD or there about, followed by the implementation of Precincts 2 and 3. This paper demonstrates the initial holistic approach from a spatial perspective. However, the proposal may not succeed in alleviating poverty or addressing a sense of self-empowerment through the informal sector if the economic, implementation, delivery and management issues are not addressed from both a top-down and bottom-up approach from the beginning. Important emphasis is placed on the initial management from the outset of the design development, delivery of trading structures and services through to the daily running of small informal businesses. It is important for the authorities to realise and recognise the potential of such projects in South African cities that are in all likelihood, the future of tomorrow.

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