

DESIGN GUIDELINES

DEFINITION

Social housing

Social housing is the integration of disadvantaged communities by providing an affordable quality of life in adequate standard accommodation to satisfy the needs of that specific community in the urban area where the housing is located. It is a subsidised housing programme and managed by a viable and sustainable institution which engages the participation of the residents in the management of their own communities. The programme is designed under principles to accommodate low-income families by providing opportunities to integrate a variety of lifestyles from families with different backgrounds, but does not include individual ownership.



Figure 4.1.1.1
(The Social Housing Foundation)

Integration of disadvantaged communities

Social housing is a type of built environment that aims to engage families from different backgrounds, so that they can share, socialise and work in the same environment.

Affordable quality

The housing is affordable and offers financial flexibility for low-income families, in terms of low building costs and rentals.

Adequate standard accommodation

Social housing is low cost, but that does not mean low quality. The principle means that the housing is low cost, but of an appropriate standard to accommodate human beings with dignity.



Figure 4.1.1.2
(The Social Housing Foundation, Issue 2, 2005)

Subsidised

The project is subsidised by the Government through the Social Housing Institute. The Institute charges monthly rent for the housing units. The rental fees cover the capital invested in the long term and the maintenance costs of the project. To be affordable, the rental fees should not be more than one quarter of the families' gross income.

Area location of the project

The site of the project must have facilities to accommodate the needs of the future residents. These facilities include public transport routes and commercial, health and education facilities, which will encourage people to live in that particular area, as well as stimulating local economic growth and other developments.

Viable and sustainable institution

Development, management and maintenance of the project has to be conducted by a non-profit institution. The institution does not have to be part of any Government or political organisation. It must operate as a business company in order to be sustainable in the long term.

Participation of residents

The residents have to be involved in the process of development and management of the project. This includes participating in the skill training sessions, as well as applying these skills to their new environment.

Way of living

Families with different backgrounds should have the opportunity to define their needs by being integrated into the design process and sharing with other families in order to build a community environment.

PRECEDENT STUDY

Precedent studies for the project were made in conjunction with analysis of the proposed site and the local social housing project. The study aims to understand and elaborate on the concept of what is an adequate design for a specific community. The use of local precedents helps to effectively analyse the unique socio-economic issues of the communities, which need to be addressed to satisfy the needs of these communities. Through the precedent study, it will be decided how the waste management, communal spaces, security and children's play area safety needs will be integrated into the design.

Royal Maitland

Jac Snyman and JS Associates architects designed one of the phases of such a project. The project was developed by the Cape Town Community Housing Company. The concept was based on affordable housing and developed by the Social Housing Institute. The project is located in the CBD of Cape Town, on the edge of a Spoornet container complex and close to the harbour.

(The Social Housing Foundation, Issue 2, 2005:2)



Figure 4.2.1.1 Access to housing units

(The Social Housing Foundation, Issue 2, 2005:4)

The area is characterised by single storey units which fit into the neighbouring context. This development creates a desirable living area in the Inner City with medium density that encourages further development of the area. The target market is families with an income of between R5000 and R9000 who cannot afford to buy a house and do not qualify for subsidies.

The topography of the site is flat land that allows for appropriate open spaces around the buildings. The project was designed in such a way that units have views to the streets and public spaces. The semi-public spaces were designed by defining the ownership of that particular space.

The units were designed to be flexible enough to accommodate various needs. 1 bedroom units of 45m² and 2 bedroom units of 54 m² make up the 168 units of phase1. The materials used were inexpensive in order to minimise the building and maintenance costs. The site layout was initially designed to be open and have free access. The residents felt that the complex was too exposed for their safety. Therefore, a security gate and a guard-house were introduced at the main access area of the complex.

Pre-cast concrete walls and palisade fences were installed around the complex boundaries. Parking was conceptualised as one bay per unit and placed close to each unit for security purposes. Washing lines were provided in separate areas next to the management office. The spaces under the staircases provide storage for refuse bins in order to maximise the use of space. Landscaping has been designed around the buildings to increase interaction between residents.



Figure 4.2.1.2 Units overlooking the public spaces
(The Social Housing Foundation, Issue 2, 2005:5)

Troyeville

The Troyeville project was designed by Chris Shabangu Architects cc and developed by the Cope Housing Association. The complex is located on the edge of the Johannesburg CBD on the corner of Cornelia Avenue and Beelaerts Street.

(The Social Housing Foundation, Issue 3, 2005:8)

The site was chosen in order to benefit from existing facilities, such as schools, shops, recreation areas, public transport and clinics. The project was conceptualised as affordable housing units with low longterm maintenance, where residents could have the feeling of ownership, but could also feel involvement in community life by sharing some spaces. The development targets families that qualify for subsidy and have an income of between R2800 and R3500. The topography of the site has appropriate conditions to accommodate this type of building.



Figure 4.2.2.1 The blocks overlooking the courtyard
(The Social Housing Foundation, Issue 3, 2005:4)

The site is situated on land which is relatively high in relation to the surroundings, giving views over Johannesburg city. The building layout was designed to look out over a large open space. The layout orientation allows residents to supervise children in the play area, as well as to monitor other types of movement around the open space and access to the complex.



Figure 4.2.2.2 Recreation space
(The Social Housing Foundation, Issue 3, 2005:4)

The units were designed in order to accommodate the needs of different families. The project accommodates 120 housing units in which 14 are 1 bedroom units and 106 are 2 bedroom units. The security of the complex was achieved through the design of the building. The main access can be viewed from each unit. It is controlled for 24 hours a day by security guards.

Lighting of the street in the open spaces provides security during the night. Openings, such as windows and balconies, allow surveillance by the residents around the building boundaries, the streets and the building itself. The parking bays initially were provided around the communal space. The increase in the number of cars in the complex meant that parking bays were extended along the street. The outside parking facilities have had a negative impact on residents due to a lack of safety. Washing lines are located in the communal spaces. Each building has an area for refuse bins. Waste from these refuse bins is disposed of in the municipality bin. Landscaping has been introduced for communal spaces for the purpose of children's play areas. The layout of the project responds positively to the site context. The communal spaces serve as areas for interaction, where the residents can engage in gatherings.

Brickfields

Brickfields was one of the projects developed by the Johannesburg Housing Company and was designed by Savage and Dodd Architects cc, Fee and Chalis Architecture and Makhene and Associates. The building is situated in the Johannesburg CBD, on the edge of Newtown along Ntemi Piliso Street and Gwigwi Mrwebi.

(Project Review Series, Issue 6, 2005. pg 11)

The site is close to facilities such as a taxi rank, shops and recreation facilities. The aim of the design was to renovate the Inner City of Johannesburg, providing affordable housing and services, which in turn promotes sustainability and good quality of life. The project targets families with a monthly income of between R3500 and R10000. The site is clay soil and falls from South-west to North-east.



Figure 4.2.3.1 Commercial units overlooking the street

The design layout was based on an urban design framework that creates a unique concept by fusing high density for commercial and residential areas with recreation facilities. The complex is composed of buildings with different heights. The higher buildings have lifts and an emergency staircase. Design guidelines were based on the goal of providing an adequate living environment.



Figure 4.2.3.2 Access control of the complex
(The Social Housing Foundation, Issue 6, 2005:6)

Technology was one of tools used in the design concept. The buildings were designed to have views over the communal spaces and the streets, with interaction through balconies and windows. Materials used were based on long-term durability with low cost maintenance and aesthetic diversity.

Safety of the environment has been reached by the building orientation in which access to the units is from communal spaces. Technology was also implemented in the security system due to the development's location within the city. The complex has only one access point for vehicles and pedestrians. It is controlled by security guards and security cameras. Lifts have a malfunction system control by the guard-house that has direct access to the lift company in case of emergencies. All residents have an electronic gate card. The visitor access to the premises is by a temporary card collected from the security guard house. The units have been designed in order to be the same size, all facing communal space and the streets so as not to compromise safety. Washing lines are located on each floor and serve that particular floor. They are secured by facing gate and controlled by unit members of that specific floor. The washing line areas aim to avoid forcing residents to walk long distances with a washing load. Each unit has refuse bins which are stored under the staircase. Landscaping was developed to create many small green areas so as avoid large paving areas. Areas were also specifically designed as play areas for children.

PRECEDENT STUDIES RESPONSE TO THE PROJECT

- Royal Maitland has a good orientation plan. The proposed complex should have easy access to the destination. The private and semi-private spaces give the feeling of ownership. People like to have outdoor spaces to entertain themselves

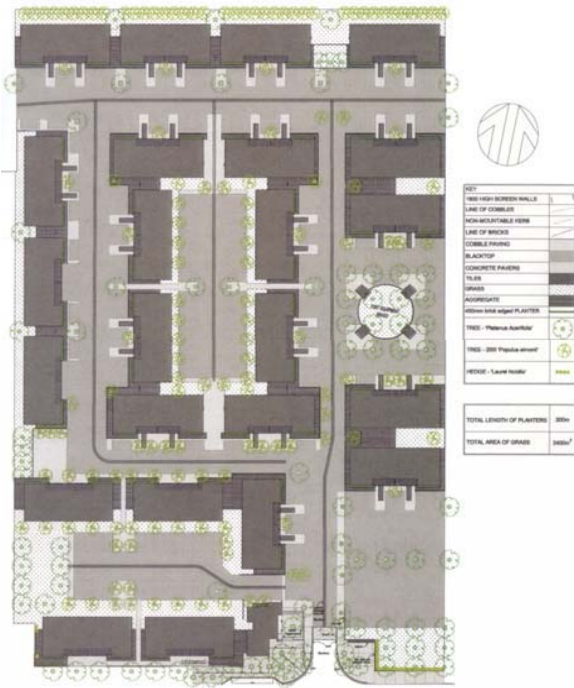


Figure 4.3.1 Royal Maitland site plan
(The Social Housing Foundation, Issue 2, 2005:3)

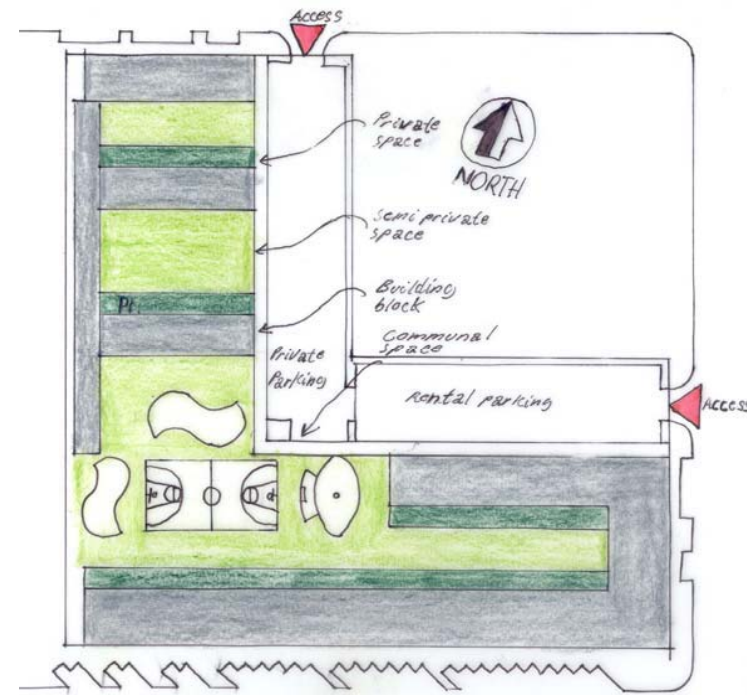


Figure 4.3.2 Layout of the proposed project

- The Troyeville scheme allows residents interaction between the buildings and views over the central communal space in order to supervise their cars, the main entrance and their children.

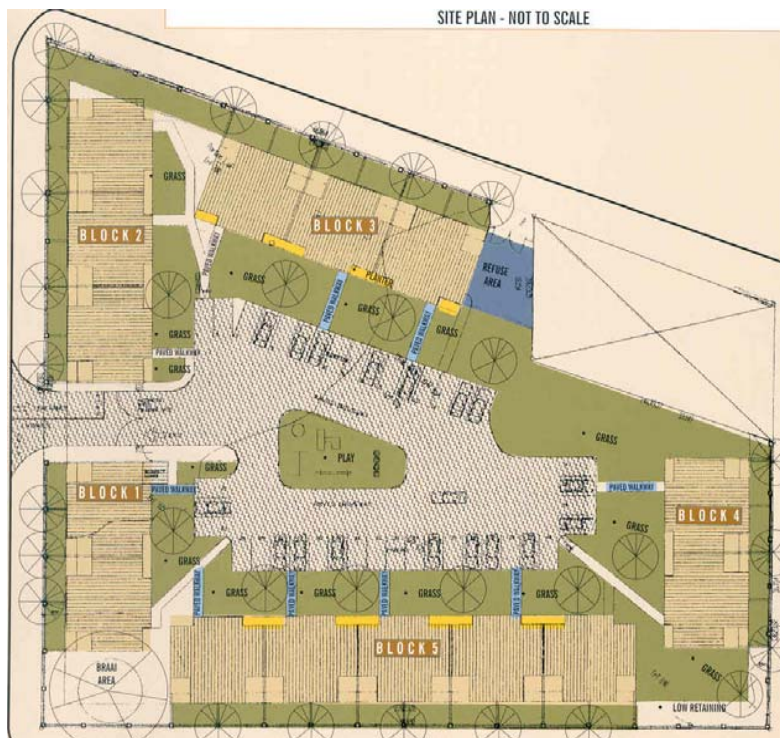


Figure 4.3.3 Troyeville site plan
(The Social Housing Foundation, Issue 3, 2005:3)

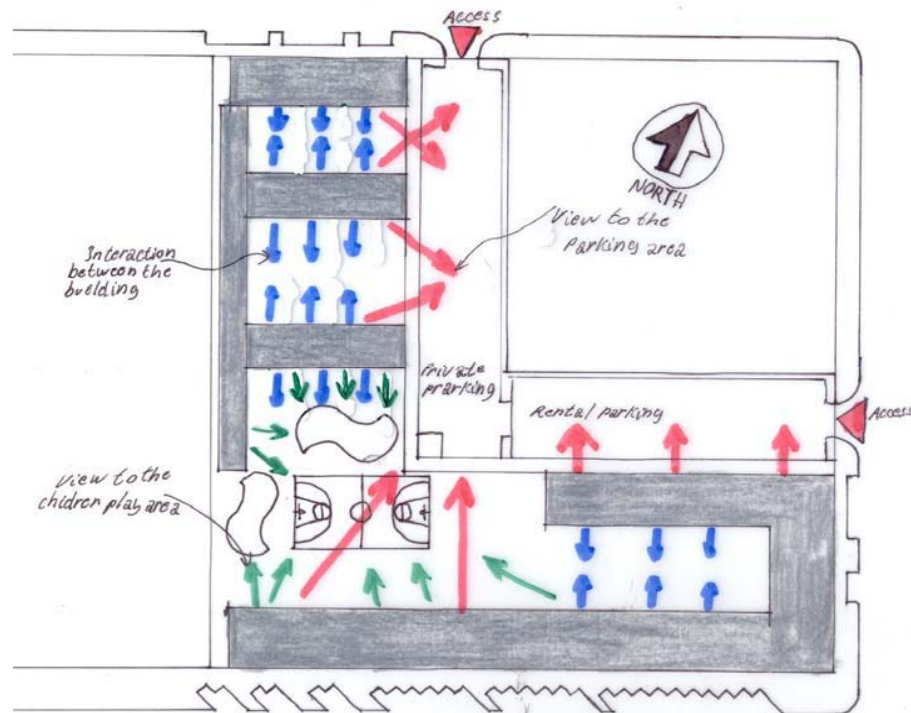


Figure 4.3.4 Interaction between the buildings

- Brickfields is a good example for a high density mixed-use programme. It provides diverse facilities to accommodate the needs of the residents without compromising affordability.



Figure 4.3.5 Brickfields 9 storey building

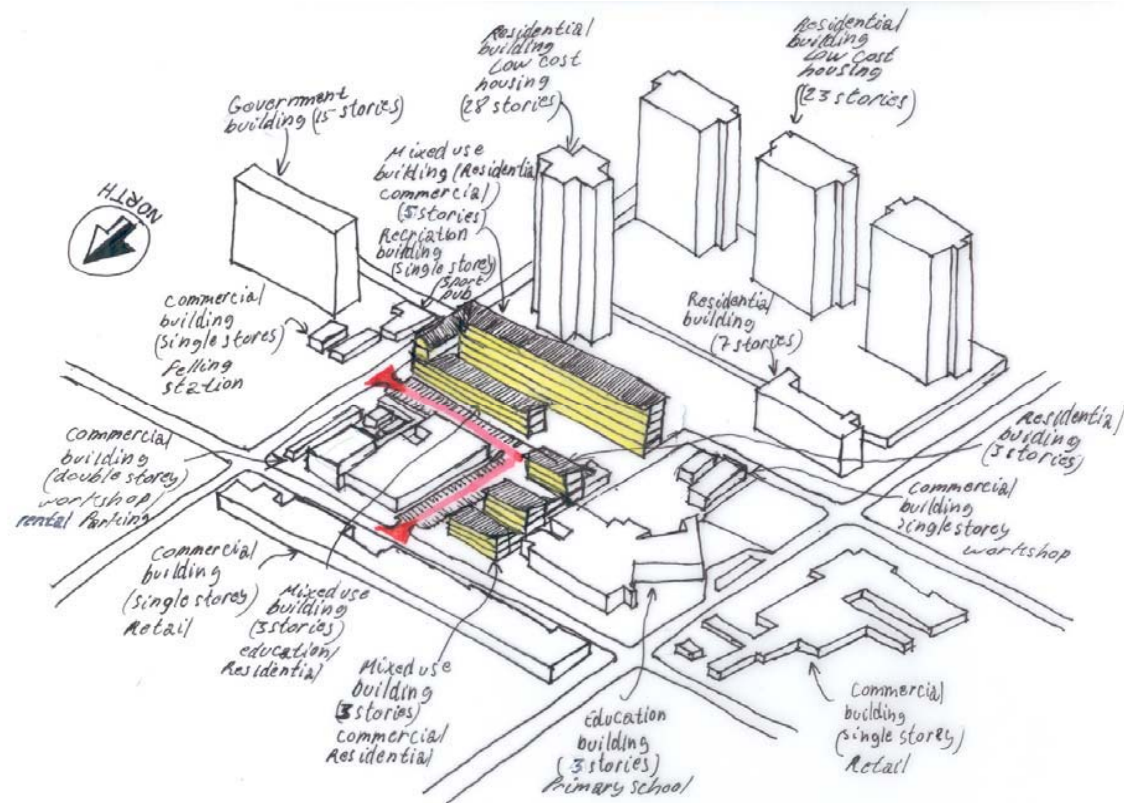


Figure 4.3.6 Proposed project high density