



Figure 6.1: Location of site and relevance as an intermediate stop

6 Design development

The Germinate Concept
The Site
Program
Client
Influence of Guidelines

This chapter illustrates the various factors which influenced the design and outlines the various intentions of the scheme, the purpose it serves and the overall intention. The manner in which the guidelines influenced the final product is also illustrated.

Germinate

The idea

Germinate is a development which intends to offer an introduction to the unique environment of Salvokop. The development offers a platform from which other interventions can also grow. The simple nature of the scheme supports this foundation. The type of structural systems employed also allow for a future change of use.

The purpose

The purpose of the scheme is to create a reception space for visitors and residents alike. The provision of housing, social facilities and commercial opportunities ensures relevance to both locals and tourists. The nature of the public space works in harmony with the already established pedestrian route and allows for the establishment of edges containing retail and social amenities.

[jur-muh-neyt]

-verb.

-to begin

to grow or
develop.

germinate

The application

A public space edged by retail opportunities and a coffee shop channels pedestrian traffic towards the rest of the suburb and provides customers for the active building edges. The suburb is built on a considerably more intimate scale when compared to the nearby city centre (to the north) and industrial area (to the west) as is indicated by the contrast in building height.

The Ground floor is almost entirely open to the public, with access controlled only to the crèche and clinic, and at the multi-use space during private events. The first and second floor of the north-most building houses short-term accommodation, whilst the southern building contains rental housing on the upper floors. The free-standing pavilion structure on the Western edge of the site has additional un-programmed open space on the first floor.

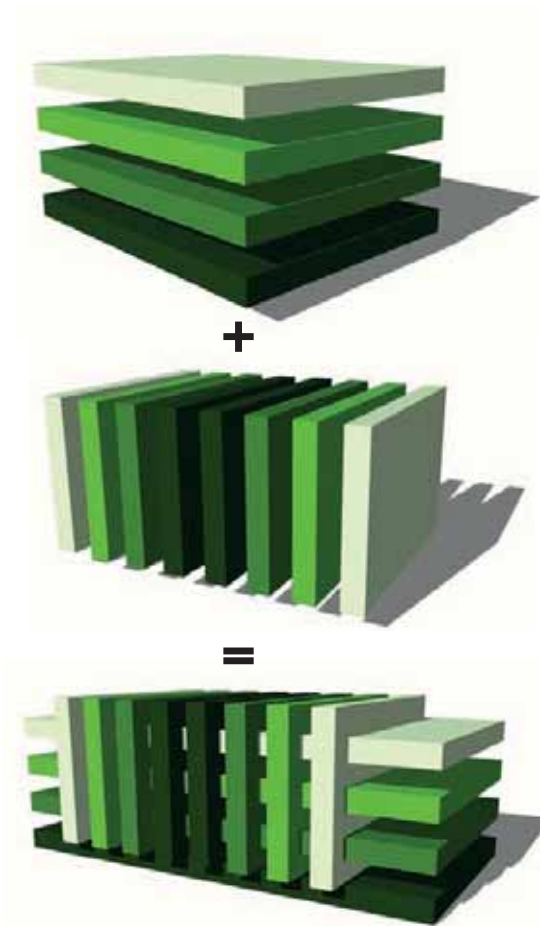


Figure 6.2: Vertical and horizontal variation resulting in choice, encouraging ownership and community

Site

The site is situated in the suburb of Salvokop to the south-west of the Pretoria City Centre, on the north-eastern corner of the existing suburb grid. Once the building restrictions (5m on all sides) are accommodated, the site dimensions are approximately 81x54m with a substantially filleted edge on the North-East corner of the site creating a curved boundary. The aforementioned dimensions relate to one another as a ratio of 3:2, which if expressed in a triangle against a 90° corner generate the angles 56° and 34°.

Both the ratio and the sets of angles influenced the design and layout of the site on plan

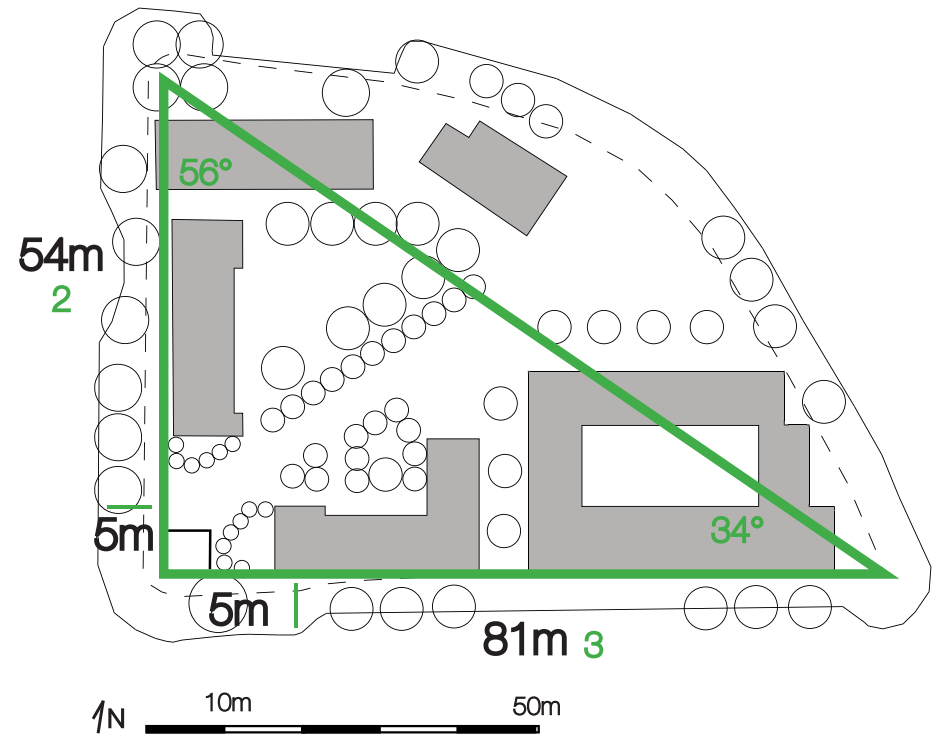


Figure 6.3: Proportions of the site

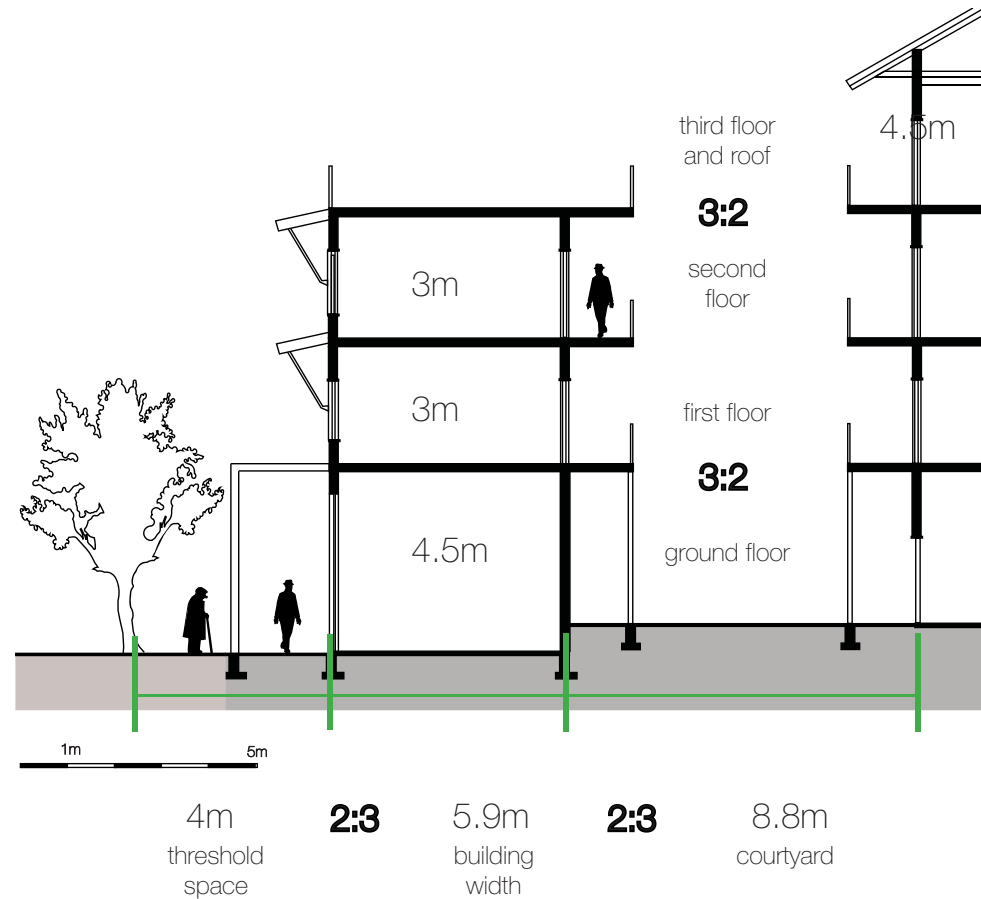


Figure 6.4: Utilised angles of the site on plan

Figure 6.5: Utilised angles of the site on section

Program

Public reception square

The public square on the north-eastern corner of the site acts as a reception space as one enters the suburb. Visitors to the city are often unfamiliar with the overwhelming urban environment. A reception square welcomes and channels users towards points of information whilst providing an introduction to the vibrant and bustling socio-economic climate. Locals can also benefit from the nature of the square as a meeting point for organised as well as unplanned encounters. The nature of the site as a gateway to Salvokop and to the city requires a public area acting as a threshold space.

The surrounding buildings compliment the form and function of the square by creating well-defined edges as well as the opportunity for public activities through the accommodation of shops and social facilities. Landscaping is also appropriately arranged to soften the harsh edges, define the development, and to provide greenery and shading.

Short term housing

Due to the ideal location of the site, in such close proximity to the Pretoria Metrorail and Gautrain stations, as well as to a central bus terminal, an opportunity for short-term accommodation arises. Many users of the city must travel a few hours by bus or train to conduct extra-ordinary business in Pretoria relating to healthcare, business,

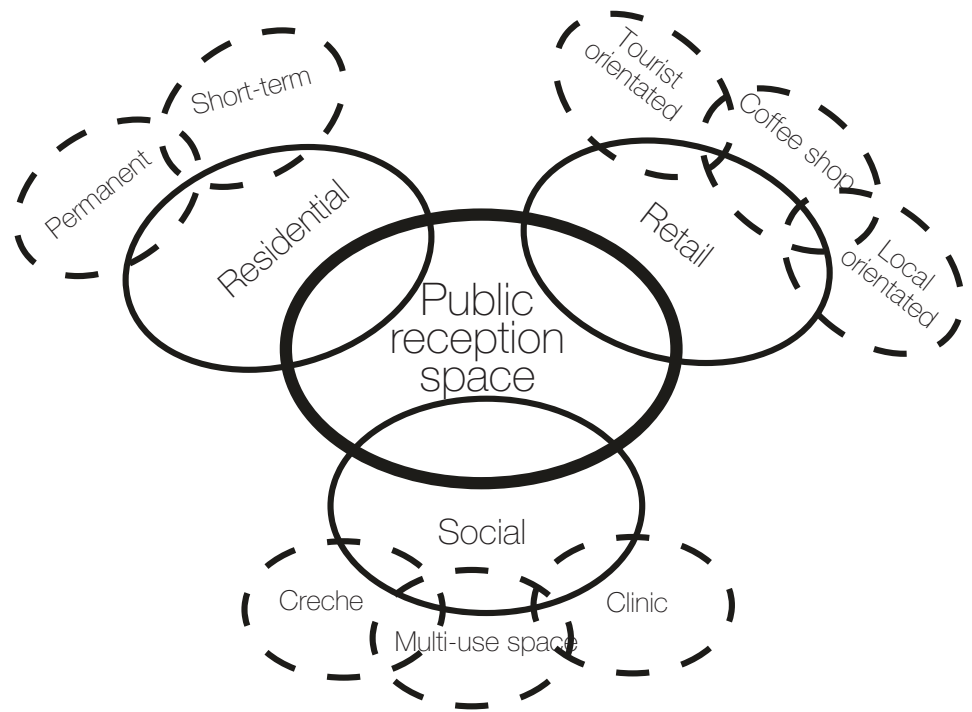


Figure 6.6: Parti diagram applied to function

finances or important documents. Many of these users are unfamiliar with the city and cannot afford the more conventional hotel style short-term accommodation. The prime location of Salvokop and the provision of short-term rental housing allows these visitors to over-night in one-roomed units for a short duration in order to visit a clinic, collect an ID book, apply for work or other tasks that cannot necessarily be completed in one day.

This accommodation will be managed by a centrally located housing office where applicants can pay to receive an access card before occupying their room. Visits will be limited to a few nights.

The design of the housing also allows for student type accommodation, occupancy of which can be renewed and paid for monthly.

Permanent rental housing

The more permanent housing is situated on the southern edge of the site. Once fully occupied, it will provide the threshold population required to sustain the commercial and social facilities. Single bedroom units with a bathroom, kitchen, lounge and dining areas allow for the accommodating of employed semi-professionals, couples or single parents. Units on the first floor also have access to a balcony whilst all units have access to the social areas located on



Figure 6.7: Highlighting the need for short-term accommodation close to the city's amenities

each floor. A pedestrian bridge links the blocks which are separated to allow for public traffic on the ground floor.

Access is controlled through a single entrance and circulation shaft with a fire escape staircase to be utilised in emergencies only.

Commercial/Retail

Approximately ten retail units are provided on the ground floor level, along the edges of the public spaces. Units offer opportunities for small to medium enterprises to settle and begin operating from a fixed location. Double retail units are also available for larger enterprises. These units have full glass frontages with a ceiling height of roughly 4.5m, to encourage public function. The prime location of these units ensures exposure of all tenants to passing pedestrians, thus activating edges of the development focussed more towards tourists visiting Freedom Park and other historical landmarks in the area, with locals on their daily routine travelling to the station or city and home again. A specific unit equivalent to approximately 3 regular retail units has been created and designated as a coffee shop. Its inside and outside seating further energises the public space and makes use of the position's northern aspect.

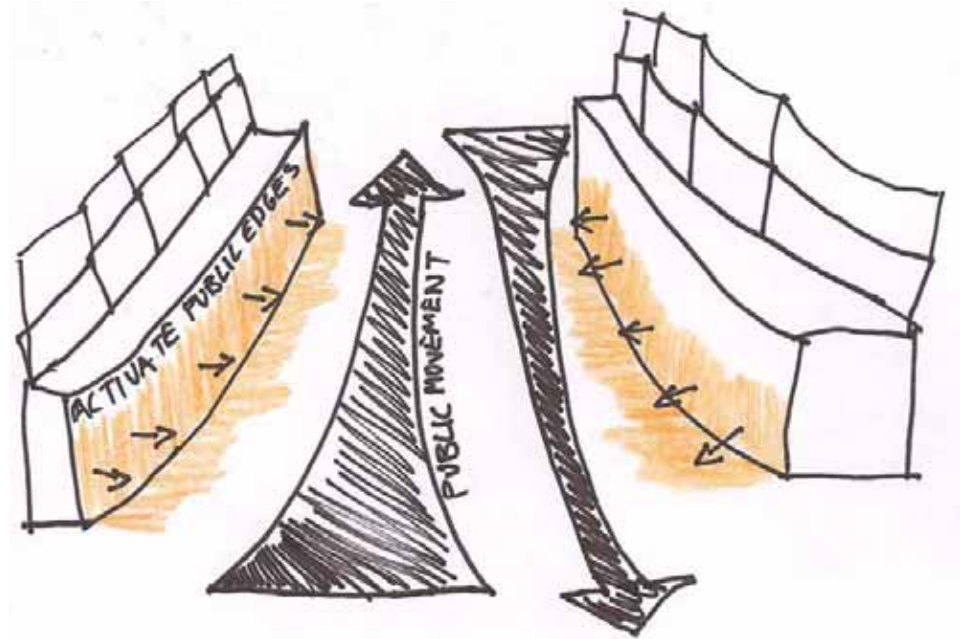


Figure 6.8: Illustration of important edges which can be activated to take advantage of pedestrian movement

Social facilities

Social facilities are provided in the development in order to strengthen the community by providing for urgent needs to be catered for on-site. The clinic in the southern block is accessed directly from the central public space and contains three consulting rooms, as well as a dispensary and an emergency room. The clinic is laid out in such a manner as to allow for ease of access by patients on its northern edge, as well as to provide more secure and private access for management and staff.

The crèche is another social facility proposed for the development, and is located on the ground floor on the southern edge of the main housing block. The more secluded location provides a quieter, more protected environment for the children. Simply portioned play and learning “rooms” flank a central strip of amenities including a kitchen and restrooms, and opens out onto a courtyard which is exclusively for use by the crèche.

A multi-use space is contained on the site’s western edge and can accommodate meetings, exhibitions or private functions. Folding doors on the eastern and western edges ensure that the longer sides of the building can be almost entirely displaced to offer the increased permeability especially appropriate for public events.

Public toilets can also be found on site positioned specifically to serve those working and visiting the development.

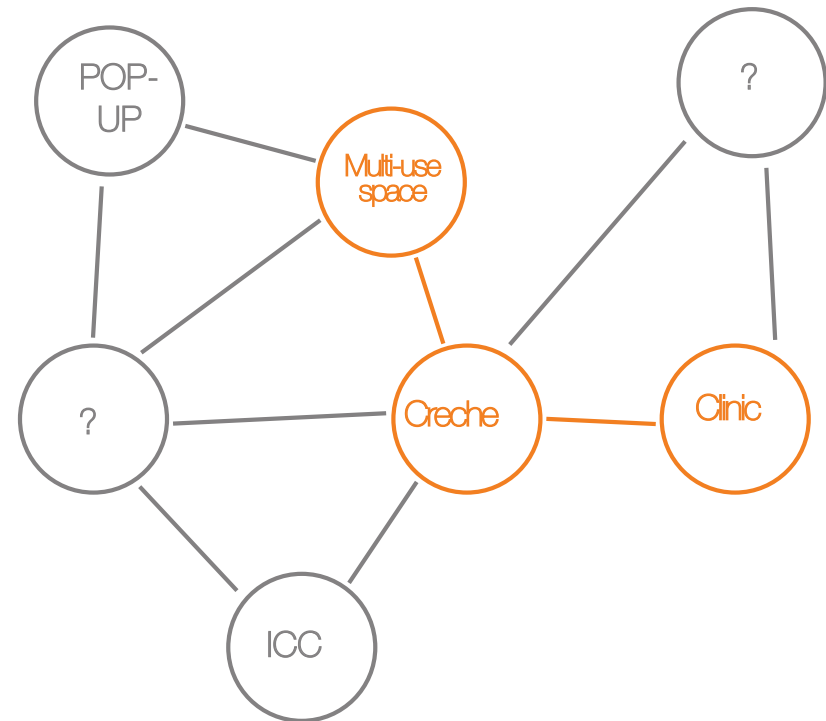


Figure 6.9: Highlighting the possibility of creating a network between new and existing social facilities in Salvokop

Client

The development will be undertaken for a mixed client consortium. In order to successfully manage the wide range of activities the suggested anchor client for the proposed development is **Yeast City Housing (YCH)**.

YCH was founded in 1998 as a Section 21 (not for profit) Organisation, under the auspices of the Tshwane Leadership Foundation (TLF) and their primary mission is to facilitate the delivery and management of a balanced portfolio of housing stock in Tshwane that meets the requirements of individuals, with an important emphasis on working with communities and understanding their needs. A secondary aim is to empower individuals through healthy economic and social systems.

YCH already has a pilot project in Salvokop namely the Inkululeko Community Centre (Figure 12) which houses a preschool care centre, homework facility, children's clubs as well as youth and community development forums (Tshwane Leadership Foundation, 2010)

Established initially in August 2000 primarily as a day-care centre, the Inkululeko Community Centre (ICC) has developed



Illustration 6.10: Yeast City Housing logo



Illustration 6.11: The Inkululeko Care Centre in Koch street, Salvokop

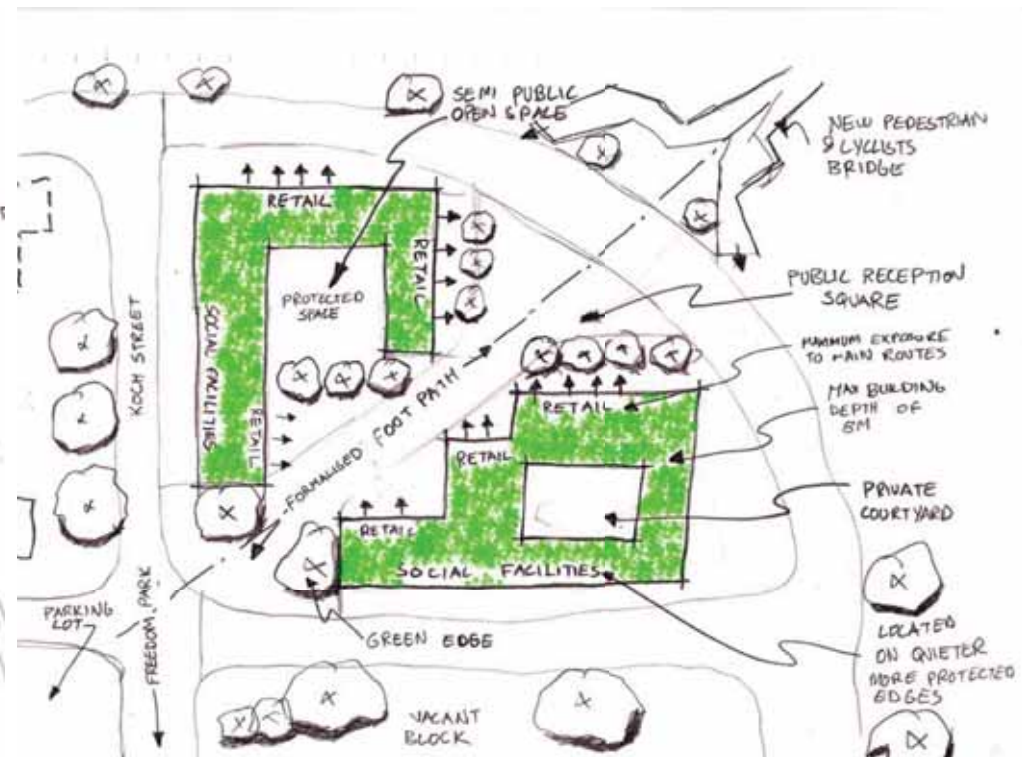
into a facility which caters for a variety of social needs. Childrens' clubs provide children with an opportunity to interact and socialise in a safe environment, and other initiatives develop communities through drama and library facilities. The Centre boasts Salvokop's only swimming pool which is accessible exclusively to the children attending the centre (TLF, 2010). 2005 saw the growth of the centre to include a homework facility for Grade 1-3 learners as well as the provision of extra lessons over weekends for matric candidates. The Centre is an important social development node, also accommodating facilities for community and resident's meetings. The Korpanong Adult Group also meets at the Centre and provides adults the opportunity to discuss issues regarding parental care and HIV/AIDS (TLF, 2010). The multi-functional facility is an example of a holistic social intervention, one of many that have been initiated by the TLF.

A mixed-use development could further empower the TLF to make an even greater positive impact on the lives of Salvokop inhabitants. Situated approximately 100m north of the ICC, the proposed development could form an important network extension, with the centre in providing important social services, focussed around a variety of housing options.

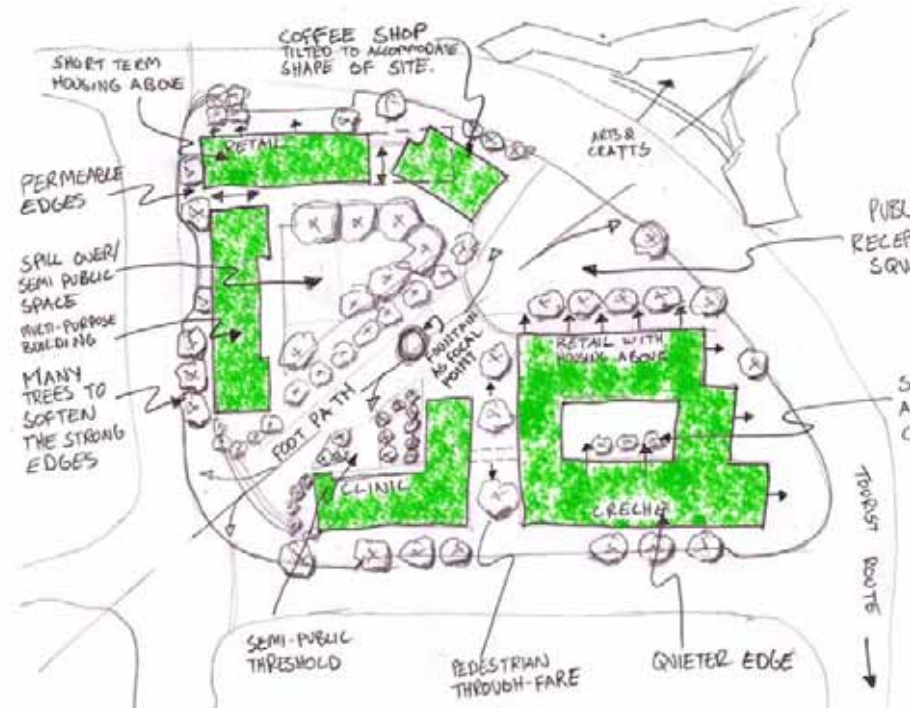


Illustrations 6.12-17: Activities of the Inkululeko Community Centre

Design development



Figures 6.18-21: Development of design with site influences



Public space pedestrian flow

Pedestrian movement is an important design informant in this context. Fast moving pedestrians moving purposefully through the site are accommodated with direct routes across the site. Conversely, users wandering through the development intent on exploring are provided with a variety of options and routes. Many places are also provided for pedestrians to stop and wait, either at the coffee shop or in the shade of one of the many trees.

space heirarchy

The inclusion of facilities that span the spectrum of public to private usage requires the inclusion of a variety of spaces and the clear demarcation of the threshold between them. The pergola proposed as an edge around the majority of building faces adds impact to the formation of intermediate spaces between the public and the private. The variety of routes and positioning of open spaces also contribute to the hierarchy of spaces.

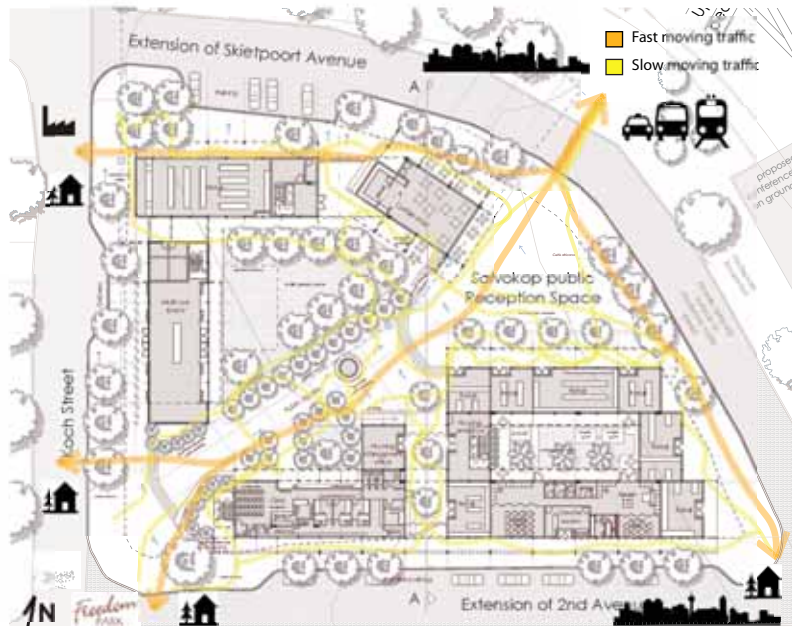


Figure 6.22: Visualised pedestrian routes and possible destinations



Figure 6.23: Hierarchy of spaces

overflow spaces

Due to the favourable climatic conditions in the region, outdoor spaces on ground floor are included as “outside rooms.” These spaces are positioned to allow for a spill-out from either the retail or social facilities. The central green space is particularly important as an overflow for the multi-use facility located on the western edge of the site. This space could potentially accommodate a gazebo for private (closed) functions or less formal public gatherings.

vegetation

The nature of public spaces require that “breathing spaces” be created within the direct pedestrian flows. Vegetation of varying size is introduced on site to create permeable edges to different spaces. The placement of larger deciduous trees on the northern and western façades in particular also assists in shading the interiors during warm summer afternoons. The trees planted around the central green space provide shade for picnics or public functions.

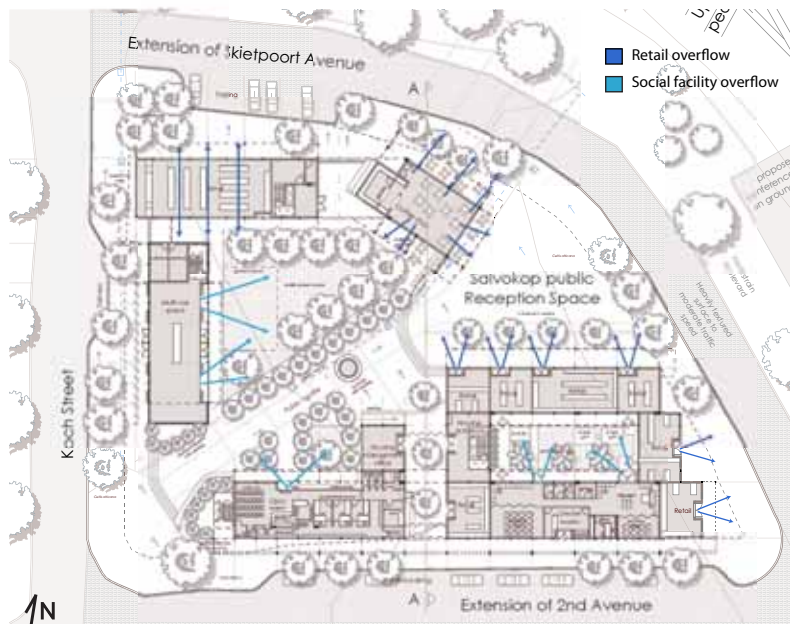


Figure 6.24: Interaction between inside and outside spaces for retail and social facilities

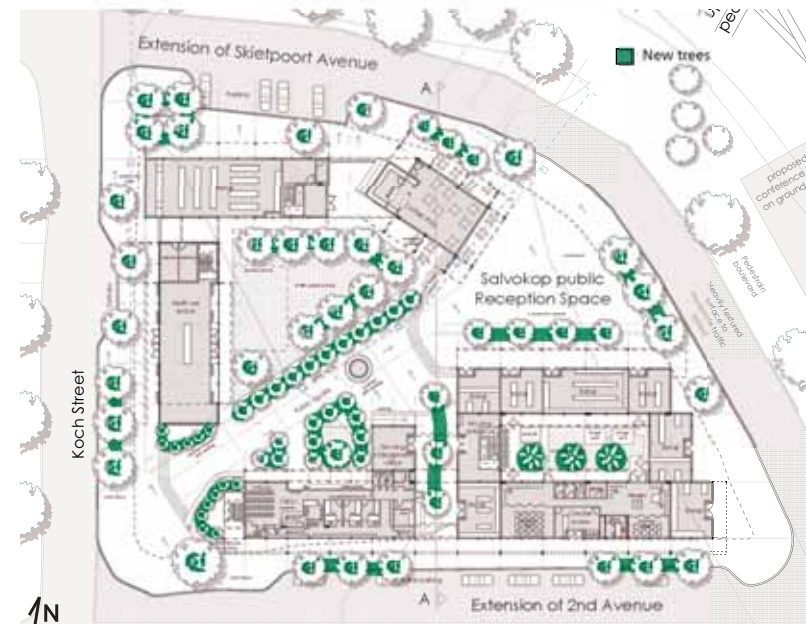
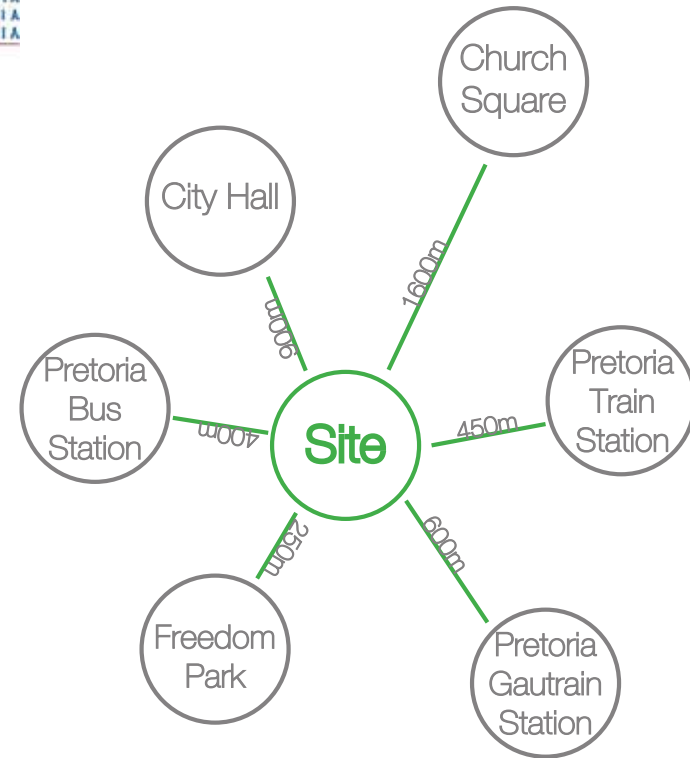


Figure 6.25: Location of new trees to enhance the public space



Influence of guidelines

Once appropriate guidelines have been established and tested against existing precedents they could be applied to a design. Along with requirements and influences imposed by the site, the client and the idea, each guideline influenced the decisions taken in the process of arriving at a final product.

Figure 6.26 Location relative to important points nearby

Opposite page left to right

Figure 6.27: Different densities across the site

Figure 6.28: The various uses incorporated

1. Location

The location of Salvokop relative to the city and important transport nodes sets a foundation for a well-positioned development. Residents will easily be able to travel to work in the city and beyond, whilst visitors to the to the city or surrounding area will just as easily be able to visit the development. By locating a mixed-use development in such close proximity to a transport terminal, the chances of establishing successful and sustainable business operations and the formation of a viable community are also increased.

- 4 storey (>10.5m)
- 2 storey (4.5-7.5m)
- 3 storey (7.5-10.5m)
- 1 storey (<4.5m)



- Social
- Retail
- Residential (long-term)
- Residential (short-term)
- Restaurant

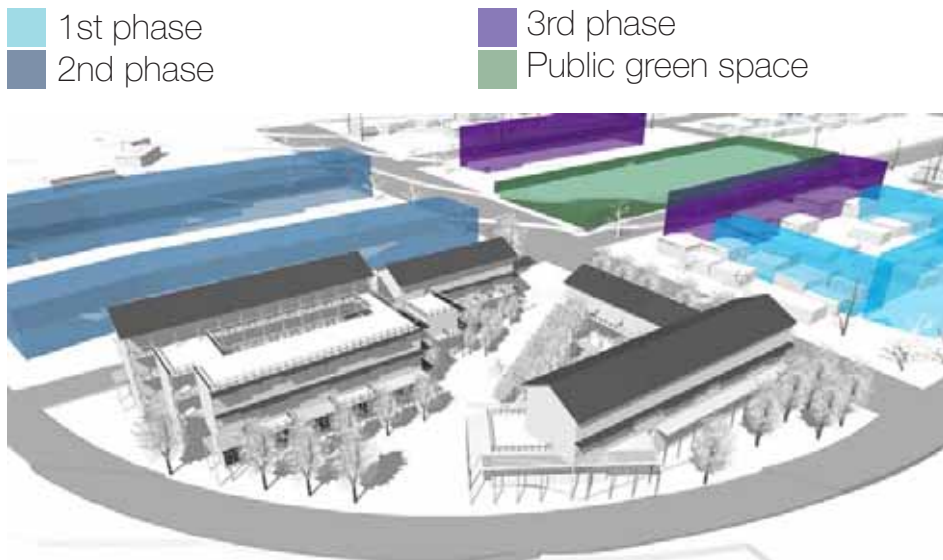


2. Density

The ideal location of the site requires appropriate and effective use of the land. Previously used as an on-grade parking lot, a medium density mixed use residential development of 90 dwelling units/hectare (du/ha) is proposed (Tonkin, 2008 :12). This density appears to be appropriate and will ensure that more users benefit from the site. A higher density was found to be inappropriate and would have required a vastly over-scaled development in comparison to the rest of the suburb which comprises of single storey buildings. Because the site is so strongly disconnected from the Central Business District (CBD) by the railway track virtually no relation with the city centre's taller buildings can be established.

3. Mixed-use

The inclusion of a range of residential, commercial and social facilities ensures a diversity of services to a broader spectrum of users. For many the development will become home, whilst for others it will become an opportunity to establish a business. The range of social facilities also ensures that the development becomes a place of value to the community, to receive health or child care. The greater the diversity of uses the development offers, the wider the range and sources of support and patronage that become available to it.



retail
housing
creche
clinic

} formed around
existing footpath

4. Long term plan

Many developments of this nature can become obsolete due to an inability to expand or change use. The proposed structural system and the manner of this development's layout allow the buildings and spaces surrounding it to be extended easily, to be adapted or simply to be disassembled to accommodate new functions or purposes. This ensures that the entire development is part of a long term solution for the area, for as long as the will to maintain its relevance remains.

5. Immediate needs

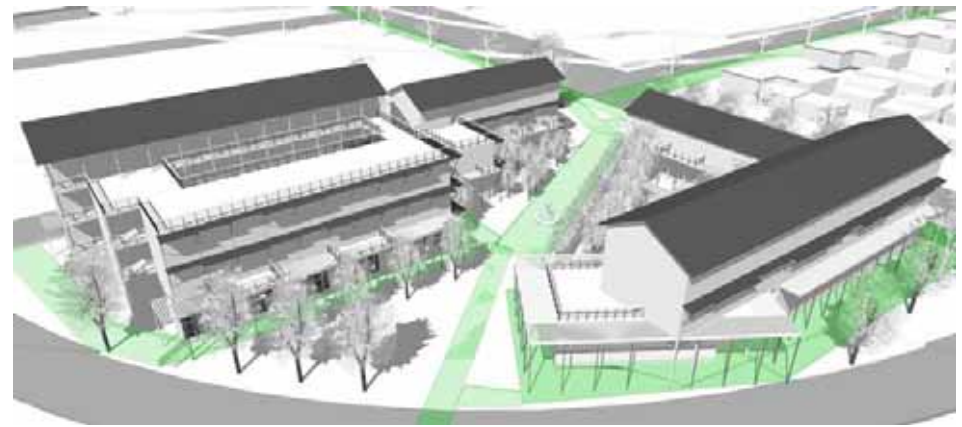
When planning developments that include housing it is important to also address the urgent needs of the community and other potential users of the space. The provision of short term housing as well as social facilities such as the crèche and clinic, provides individuals with the essential basic facilities, whilst adding a meeting space and an area for private functions accommodates the needs of the broader community. Public open spaces throughout the proposed development also encourage less formal, but equally necessary use of the site.

Figure 6.29: Framework and proposals of surrounding sites

Public open space
Private open space



Pedestrian routes



6. Communities

The formation of communities cannot be forced, but should rather be provided for. The generous allowance of public space for both commuting pedestrians and less energetic users enables chance encounters and other rendezvous. A coffee shop which overlooks the public square offers locals and visitors a warm reception when returning from or en route to the city. More private spaces intended for use by residents of both blocks create opportunities for social interaction and the formation of stronger communities.

Figure 6.30: Communal spaces

Figure 6.31: Pedestrian routes

7. Pedestrian

Due to the main and most direct connection to the city being the pedestrian bridge, as well as the predominately car-less nature of the suburb, pedestrian travellers must become the priority. The preservation and formalisation of the previously existing footpath, combined with the activation of the edge condition of buildings overlooking the main flow ensures a direct and pleasant experience for all traversing the site on foot. A variety of options and a hierarchy of routes allows a dynamic experience for users, providing an opportunity to decide on a course when en route to their destination or simply exploring.