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Appendix A - Backpacker Surveys

Survey of local backpackers - Cape Town

General:
Accommodation Type: Backpackers
Name: The Purple Turtle
Location: Long Street, Cape Town
Date: 17-05-2007

Person interviewed: bar lady (manager)
Duration of existence: 10 years

Facilities:
No of Rooms: 4
Room Type: dormitories
Bathrooms: 1

Restaurant on site: yes + 2 bars (open to public)
Breakfast included: no
Self-catering kitchen: no

Occupancy:
Current occupancy: 100%
Busiest time of year: 95% of year

Client Profile:
Gender: mixed
Age: mixed (many 20 year-olds)
Place of Origin: Sweden, mixed
Purpose of visit: tourism
Dislikes: crime
Likes: good location, convenient, culture
Common sightseeing destinations: Green point
Other destinations in SA: unknown

Other:
Transportation: meter taxi
Success of backpackers: location

General:
Accommodation Type: Backpackers
Name: Long Street Backpackers
Location: Long Street, Cape Town
Date: 17-05-2007

Person interviewed: barman (UK)
Duration of existence: 14-15 years

Facilities:
No of Rooms: 14
Room Type: double/ twin rooms and dormitories

Restaurant on site: no (only a pub)
Breakfast served: no
Self-catering kitchen: yes

Occupancy:
Current occupancy: 85%
Busiest time of year: weekends, summer

Client Profile:
Gender: mixed
Age: 18-28 years
Place of Origin: United Kingdom, Holland
Purpose of visit: tourism
Dislikes: -
Likes: atmosphere
Common sightseeing destinations: Cape POint, Table Mountain, Wine regions Shark Diving
Other destinations in SA: East Coast (Johannesburg only as a point of departure)

Other:
Transportation: rikis, walking, taxis (public)
Success of backpackers: location
Appendices

General:
Accommodation Type: Backpackers
Name: Cat & Moose Backpackers
Location: Long Street, Cape Town
Date: 17-05-2007

Person interviewed: Manager (7 years)
Duration of existence: 9 years

Facilities:
No of Rooms: max capacity 35 people
Room Type: mixed dormitories
Restaurant on site: no
Breakfast served: no
Self-catering kitchen: yes, two kitchens

Occupancy:
Current occupancy: winter: 20-60%, summer 100%
Busiest time of year: Summer

Client Profile:
Gender: mixed
Age: mixed
Place of Origin: mixed
Purpose of visit: mixed
Dislikes: atm crime
Likes: City of Cape Town
Common sightseeing destinations: Stellenbosch, Table Mountain, V&A Waterfront
Other destinations in SA: Garden Route, Kruger Park, Namibia

Other:
Transportation: walk
Success of backpackers: transportation & location

General:
Accommodation Type: Backpackers
Name: Carnival Court Backpackers
Location: Long Street, Cape Town
Date: 17-05-2007

Person interviewed: Manager
Duration of existence: 6 Years

Facilities:
No of Rooms: 27
Room Type: mixed
Restaurant on site: no (only bar)
Breakfast served: no
Self-catering kitchen: yes

Occupancy:
Current occupancy: 70%
Busiest time of year: Dec-April

Client Profile:
Gender: mixed
Age: 22-30 years
Place of Origin: Germany, United Kingdom, Holland
Purpose of visit: tourism
Dislikes: -
Likes: location
Common sightseeing destinations: Table Montain, Cape Point
Other destinations in SA: Garden Route

Other:
Transportation: public taxi, tours, walk, hire a car
Success of backpackers: location (change of paving of the street)
### General:
- **Accommodation Type:** Backpackers
- **Name:** North South Backpackers
- **Location:** Hatfield
- **Date:** 13-03-2007
- **Person interviewed:** Manager
- **Duration of existance:** -

### Facilities:
- **No of Rooms:** max capacity 35 guests (including camping)
- **Room Type:** camping, dorms & doubles
- **Restaurant on site:** only a bar
- **Breakfast served:** on request only
- **Self-catering kitchen:** -

### Occupancy:
- **Current occupancy:** 20%
- **Busiest time of year:** 65% capacity, slow during: 15 April-15 June and 15 December-15 January

### Client Profile:
- **Gender:** mixed (no single females)
- **Age:** 26-41
- **Place of Origin:** Europe
- **Purpose of visit:** internships/ exchanges
- **Dislikes:** safety
- **Likes:** within walking distance of shops, clubs and bars (Hatfield), atmosphere
- **Common sightseeing destinations:** Soweto & Apartheid Museum

### Other:
- **Transportation:** shuttle bus/ walking (very difficult)
Appendix B

Drainage Plan of the Minister’s House

Appendix C

Proposed Garage for the Hebrew Congregation
Appendix D

Proposals for the old Synagogue

Nigel Vos and Associates

In 1995, the DPW commissioned an evaluation of the building. Nigel Vos and Associates completed the evaluation and presented the department with a proposed function for the building. The proposal included the reconstruction of the Old Synagogue, which was to function as a "theatre in the round", with the addition of several functional buildings including an Apartheid museum located south of the synagogue.

Retha MC Basson’s Dissertation

A year later, Retha MC Basson proposed a Culture and Conservation Centre in fulfilment of her B (Architecture) at the University of Pretoria. Her proposal consists of training and educational facilities, a restaurant and coffee shop, in addition to a cultural museum to be housed in the original synagogue building. While the focus is on the proposed additional buildings, the restoration of the synagogue to its original state is central to the design. The proposal includes the documentation and subsequent removal of the additions made prior to its function as a ‘special’ Supreme Court.

DPW’s Report on the Development Possibilities and Sustainable use of the ‘Old Synagogue’ in Paul Kruger Street

According to Buntman, the DPW released a third proposal in 2000 titled Report on the Development Possibilities and Sustainable Use of the Old Synagogue in Paul Kruger Street which evaluated previous proposals and suggested that the synagogue should be converted into a museum with a “strong tourist orientation”. According to the DPW assessment, the building could become an attractive focal point in the city centre by ‘linking physical features to significant past events’. By restoring the building, one could create a new interest in its historic significance and enhance public awareness.

Charisse Levitz proposal for the SAJBOD

A further proposal was commissioned by the SAJBOD between 2000 and 2003. According to Buntman, the proposal, undertaken by Charisse Levitz, consisted of a ‘modern museum’ which is to reflect on Jewish history in Pretoria within a greater South African context (Buntman 2006:9).

Estee Schütte’s Dissertation

Finally, while not directly addressing the Old Synagogue, in 2006, Estee Schütte, in fulfilment of her M (Architecture) at the University of Pretoria, proposed a boutique hotel on the site south of the synagogue. The proposal caters for recreational activities spilling out onto a public space situated between the proposed hotel and the Old Synagogue.

Alex Wapnick’s personal Interests

According to various sources, a Jewish property owner in Pretoria, Alex Wapnick is interested in donating a substantial amount towards the restoration of the synagogue, with the subsequent conversion of the building into a centre for the disadvantaged urban population. Buntman points out that the proposal includes a soup kitchen and facilities for disadvantaged children. This centre would be run by the Jewish community, which would work hand in hand with local government departments.

Barbara Buntman’s “think tank”

At this point in time, Barbara Buntman, along with a small team of people, has set up a ‘think tank’ to explore possible and suitable options for the Old Synagogue and the surrounding sites.

6. including Buntman 2006:9
7. BUNTMAN 2007: personal interview
### Technical Investigation

#### OPTION 01 = existing scenario

<table>
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<td>21-Dec</td>
<td>8:00</td>
<td>MID SUMMER</td>
<td>21-Jul</td>
<td>8:00</td>
<td>MID WINTER</td>
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<td></td>
<td></td>
<td>morning sun penetrates into southern square (shined right through site onto paragoo building) (does not restrict lighting of other buildings)</td>
<td></td>
<td></td>
<td>minimal light penetration onto square</td>
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<tr>
<td></td>
<td></td>
<td>staircase is illuminaited</td>
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<td></td>
<td></td>
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<tr>
<td>12:00</td>
<td></td>
<td>light shines through onto circulation bridges but does not penetrates further onto northern side of building</td>
<td>12:00</td>
<td></td>
<td>northern façade exposed to morning light</td>
</tr>
<tr>
<td></td>
<td></td>
<td>minimal shading on eastern façade</td>
<td></td>
<td></td>
<td>minimal direct light on southern square (midday summer)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>partial shading on square</td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td>north-western corner; pleasantly shaded in midday in summer</td>
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<td>northern façade has good exposure to northern light</td>
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<td>southern square is partially shaded from western sun</td>
<td>no shadow cast on synagogue but square remains shaded</td>
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<td><img src="image3" alt="Image" /></td>
<td><img src="image4" alt="Image" /></td>
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<td>exposed north-western facade with minimal light penetration into public square (some light penetrates into interior pieces)</td>
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<td><img src="image5" alt="Image" /></td>
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<td>western restaurant/shop requires shading (not on late summer afternoon)</td>
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<td>Synagogue not shaded (highlighted by late afternoon sun (when square is in use))</td>
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<td><img src="image9" alt="Image" /></td>
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<td>Exposed western facade (but well shaded interior)</td>
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</tr>
<tr>
<td><img src="image11" alt="Image" /></td>
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<tr>
<td>Late summer afternoon shading of square</td>
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**OPTION 02** = removal of first block on northern of facade

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<td><img src="image7" alt="Image" /></td>
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<td>no changes from scenario 01</td>
<td>no direct light</td>
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<tr>
<td>shaded interior</td>
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Appendices
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<td>morning light shines right through to Paul Kruger Street on north-western corner of site</td>
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<td>pedestrian view from Paul Kruger Street</td>
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<td>PROBLEM SCENARIO</td>
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<td>more light on north-western corner (afternoon sun penetrates deeper into interior but does not reach southern square)</td>
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<td>minimal light penetration</td>
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<td>16:00</td>
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<td>18:00</td>
<td>More light on north-western corner (afternoon sun penetrates deeper into interior but does not reach southern square)</td>
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<td>Limited direct light on southern square - more afternoon light would be desirable</td>
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<td>Good afternoon light on circulation routes/bridges</td>
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Extended roof - SUMMER
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<th>extended roof - minimal impact</th>
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<td>Extended and moved toward roof - WINTER 12:00</td>
<td>maximum direct light on public square</td>
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<td>Extended and moved toward roof - WINTER 16:00</td>
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</table>


In fulfillment of the project, a baseline document was submitted in March 2007. The baseline document appears as it did at the time of submission.

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<td>The SBAT Evaluation Tool</td>
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<tr>
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<td>Figure 15.01 &amp; 15.02 Sketch: Site Analysis</td>
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<tr>
<td></td>
<td>Figure 15.03 Current facilities within walking distance of site</td>
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<td>Figure 15.04 Sustainable Building Assessment Tool Results Page</td>
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### List of Tables

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<td>Table 15.02 Economic Building Performance (SBAT results)</td>
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<td>Table 15.03 Environmental Building Performance (SBAT results)</td>
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<tr>
<td>07</td>
<td>Schedule of Accomodation</td>
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<td>Table 15.04 Unit Comparison</td>
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Introduction

The site is located in the Pretoria, north of Church Square on Paul Kruger Street directly adjacent to the Old Synagogue built in 1897. The project aims to address the lack of temporary accommodation in Pretoria by providing low-cost temporary accommodation mainly for travelers, researchers and others in need of affordable accommodation in the city centre. The building will include other functions such as varying degrees of more permanent accommodation (such as penthouse apartments) as well as income generation conference facilities and retail/entertainment businesses.

The objective of the project is act as a catalyst for regeneration in the area by introducing activity to the site through increasing numbers of visitors to the site, users of the site and creating interest in the site through public art, heritage and architecture. This document sets out the performance criteria of the project in terms of building type standards for similar buildings.
The presentations targeted specifically architects, engineers and others that are involved with decision-making in the construction industry with the objective of raising awareness of the problem while providing steps towards attaining the goals. The goals as set out in the 2030 “Challenge are as follows:

- The fossil fuel reduction standard for new building is reduced as follows: 
  - 60% in 2010
  - 70% in 2015
  - 80% in 2020
  - 90% in 2025
  - Carbon neutral in 2030

This goal suggests that by 2030 all buildings should be using no fossil-fuel, nor greenhouse gas emitting energy to operate. The focus therefore is on high-performance design.

Furthermore, steps were presented on how to begin working towards an achieving these goals:

- All new buildings, developments and major renovations should be designed to meet a fossil fuel, greenhouse gas (GHG) emitting, energy consumption performance standard of 50% of the regional (or country) average for that building type.

- At a minimum, an equal amount of existing building area be renovated annually to meet a fossil fuel, greenhouse gas (GHG)-emitting, energy consumption performance standard of 50% of the regional (or country) average for that building type (50% of the regional average through innovative design strategies, the application of renewable technologies and/or the purchase - 20% maximum – of renewable energy).

The emphasis of the 2010 Imperative is on ecological literacy in design education. Design schools are encouraged to lead the way by converting their buildings to carbon neutral environments through sustainable design strategies, generating on-site renewable power and purchasing renewable power.

Project performance aims

Architects have been placed in a position where they are able to address the growing environmental concerns. Buildings worldwide are major energy consumers due to the embodied energy of the materials specified right through to the running and maintenance of buildings. The objective is to reduce the consumption of energy of the building (using the SBAT tool) relative to other similar buildings by using passive systems wherever possible. While the presentation targeted wealthy first world countries, the principles are applicable in South Africa.

---

1. Live webcast in room 3-3 of the Architectural Department at the University of Pretoria, in South Africa.
The SBAT Evaluation Tool

The SBAT (Sustainable Building Assessment Tool) as designed by Jeremy Gibbert, allows for the evaluation of the performance of a building in terms of its sustainability. It covers social, economic and environmental aspects. The purpose of the baseline document is to set down performance criteria for the building to be designed. This initial application of the tool has been set out to identify performance goals and expectations. The tool will be tested against the final result.

Social Issues:

Occupant Comfort

• Lighting: exploitation of northern façade for natural lighting while avoiding unnecessary heat gain (although thermal gain is desirable in winter) and glare in the building. Southern façade maximises views of the Old Synagogue and allows for indirect natural light (large windows)
• Ventilation: Natural as far as possible
• Noise: 40bd sound insulation from traffic on Struben Street. Avoid noise transmission from inside the building (stairways, service ducts etc)
• Views: South: onto public square and Old Synagogue
North: Jacarandas on Struben Street and future developments on open land
West: View of Panagos Building
• Access to green: public space (soft landscaping) and increasing green courtyards ad balconies with increasing height in building
Inclusive Environments

- Public Transport: South Africa has a serious lack of public transport with the bulk of it linking the townships and the city in the form of railways and a network of taxis. Currently, taxis operate on Struben and Paul Kruger Streets but usage thereof is limited to one population group. The vision for the city in terms of the urban framework is to ‘pedestrianise’ Paul Kruger Street while discouraging the use of private transport. The framework suggests the introduction of a tram system and the widespread use of bicycles. The intersection of Struben and Paul Kruger Street becomes a tram interchange node.

- Routes/changes in level/edges: inclusive design in terms of NBR

- Access:

  a. Entrance path gateways minimum 850 mm clear width
  b. Dropped kerbs where main paths meet roads and drives
  c. Dwelling approaches level or gently sloping
  d. Lifts, where provided, to be sized for wheelchair access
  e. Main paths minimum 900 mm wide, with firm, even surface
  f. Level area at access point, at threshold level
  g. Entrance door flush threshold (i.e. max. 15 mm upstand)
  h. Entrance door minimum clear opening width 800 mm
  i. Internal doors minimum clear opening width 750 mm
  j. Corridors at entrance level wide enough for wheelchair access
  k. Staircase suitable for future stair-lift (in some areas), and
  l. Entrance-level WC and basins in units smaller than 5 persons

Current

- b. Lack of Public space in Pretoria. Provision of public space
- c. Lack of access and acknowledgment of SA heritage: most heritage buildings are inaccessible to the public. Provision of access and education of heritage with regard to the Old Synagogue. Allow for experience of heritage and a sense of place.
- d. Post office: Head office on church square
- e. Retail: Church Street, Van der Walt Street and Sammy Marks Square are essentially shopping boulevards and squares
- f. Childcare: There are several schools located in the area
- g. Banking: Bank branches on Vermeulen Street and Church Street
- h. Telephone facilities: informal telephone facilities on Church Square and at the post office
- i. Email/photocopying: none
- j. Residential: sparsely scattered throughout the city

4. refer to p15 for more information regarding the proposed group framework
5. Adler (1999: Part 35)
Participation and Control

• Environmental Control: Users can easily adjust the interior environment (ventilation, lighting etc) aided by passive shading which allows thermal gain in winter.
• User Adaptation: furniture and fittings are based on modular dimensions to allow for maximum flexibility of space
• Social Spaces: communal facilities (kitchens, balconies, courtyards and public space) allow for easy informal interaction between guests

Layers of space usage:

- Public: high movement along main pedestrian routes (limited interaction- destination orientated traffic)
- Public: ground floor retail and public recreational space (high interaction)
- Semi-public: interior spaces for all building users (including restaurant guests)
- Semi-private: courtyards, balconies and recreational spaces on individual floors catering for a limited number of people
- Private: individual rooms

Furthermore, the building provides access to retail including services, conference facilities and leisure and public recreational facilities

• Community involvement: Due to the nature of the process of urban regeneration, the building process has to accommodate community involvement in order to successfully integrate the building and the introduced functions into the urban environment. Due to the nature of the building and current lack of community in the area, it is impossible to allow user-participation with exception of the building owner, apartment owners and management teams.

• Collaborative partnership: with SAHRA to encourage access, education and integration of South Africa’s political and architectural heritage into the urban environment

Education, Health and Safety:

• Education: access to support facilities and access to the Old Synagogue (interactive education through experience)
• Health: access to first aid equipment; designated smoking areas away from air intakes
• Security: clear visual links, safe approach to building, exterior lighting

Implementation of crime prevention principles:

- a surveillance and visibility
- b territoriality
- c access and escape routes
- d image and aesthetics
- e target hardening

Economic Issues

Sources
The economy of an area can be stimulated by building that use and develop social skills.

• Local contractors: 80% of construction to be carried out by contractors within 40km of the project
• Local materials: 80% of materials to be sourced with 200km of the site
• Local component manufacture: 80% to be manufactured within 200km of the site
• Outsource opportunities: catering, cleaning, and small retail opportunities to be carried out by small emerging companies (this could create opportunities for BEE operators in line with government policies)
• Tenant restrictions: encourage local emerging businesses and promote a sense of place through local commercial activities (no franchises)
• Repairs and maintenance: carried out by contractors with 200km of the site

Efficiency Use

• Usable Space: WCs, circulation and plant rooms etc not more than 20% of building
• Occupancy goals

Good space management and ‘hot-desking’ operation of facilities allows greater occupancy of building. Facilities should be available for extended working hours to accommodate a greater degree of functions which simultaneously contributes to on-site activity

Adaptability and Flexibility

Building must be able to accommodate change in a sustainable manner (easy to retrofit, and accommodate new function)

• Vertical dimension: minimum 3m floor to ceiling height
• Internal partitions: non-load bearing to accommodate change (units designed according to open building principles to accommodate change in unit size easily)
• Services: easy access to electrical, telephonic and internet connections (wireless throughout building- and use of suspended floors/ceilings where necessary)

Ongoing Costs

• Maintenance: easy access for cleaning (i.e. no cherry pickers to clean windows) and repairs (light bulbs)
• Cleaning: hard wearing in high traffic areas
• Security: limit requirement and cost of security through design
• Disruption and downtime: limited effect on user

Capital Costs

• Consultant fees
• Build-ability
• Construction
• Shared costs
• Shared arrangements

Environmental Issues

Water

• Rainwater (including stormwater): harvested, stored and used
• Water-use: efficient devices used throughout the building
• Grey Water: recycled where possible
• Surface materials: absorbent outdoor surfaces (soft landscaping) to reduce stormwater run-off and watering requirements
• Planting: maintain existing trees and plant only indigenous tree

Energy

• Location: within 400m of public transport (the only form of public transport is taxis; vision incorporates a public transport network)
• Ventilation: Passive ventilation (mechanical only in limited parts of the building e.g. conference centre)
• Heating and cooling: passive (through orientation and shading devices)
• Appliances and fittings: energy efficient lighting and appliances (80% of light fittings to be energy efficient- i.e. fluorescent)
• Use energy generated from renewable sources wherever possible (solar-panels)
• Key tag activated master switches in guestrooms to save energy
• The use of bicycles and walking is encouraged to reduce carbon emissions of private vehicles
• Locally grown food served in restaurants
• Paper is recycled and used for stationary (on sale at site)
Renewable energy
- Toxic waste: safe disposal of printer toners and other toxic waste
- Inorganic waste: sorted
- Organic waste: composted (on site if possible)
- Sewerage: operates on city system
- Construction waste: minimised and re-used on site (damaged bricks and tiles)

Site
- Brownfield site: yes
- Neighbouring site: prevent shading of other building (Synagogue must have northern light to shine through stain glass windows and possible opened façade)
- Vegetation: extensive use of vegetated courtyards, window boxes & roof gardens
- Landscape inputs: avoid artificial inputs (e.g. fertilizers)

Materials and Components
- Embodied Energy: 80% of building made from low embodied energy components (e.g. concrete structure)- difficult to measure
- Materials: 80% made from renewable resources
- Manufacturing processes: avoid processes that release greenhouse gases- difficult to monitor
- Recycled components: 10% of materials and components from recycled resources
- Construction processes:7 minimally impact the environment (protect roots from existing trees during construction; avoid drainage of toxic fluids etc).

Design Factors

Location
- Location on major envisioned pedestrian route
- Situated on historical north south axis of the city
- Addresses lack of public space, public facilities and lack of accommodation in Pretoria city centre

Urban Regeneration
- Project promotes urban regeneration on the site (catalytic effect on surrounding areas) by activating the site and creating interest in the site

Heritage
- Project should promote awareness of architectural and political heritage
- Project allows for education and appreciation of local heritage

Factors to consider9

a. Is the building physically right for the location?

The building is located north of church square, the north being the more neglected portion of the city. The site is on the threshold between active functioning part of the city (closer to Church Square) and the northern more neglected part. It is at this point that the building heights change from single storey in the north to multi-storey. Currently this point functions as a gateway into the city from the north. It is located in close proximity to the physical city centre, forms part of the inner city and would fulfil functions currently lacking in the north.

b. Does the building address the amount and timing of visitors to the site?

Currently there is little activity on site beside Struben Street Motors that displays second hand cars on the corner portion of the site. The project seeks to attract activity to the site through urban regeneration by means of public art etc. The project seeks to promote Pretoria as a tourist destination (as well as a starting point for longer-distance tours in and around Pretoria).
southern Africa. It aligns itself with the Tshwane Tourism Awards Programme for 2006/7. Current figures of tourists passing through Pretoria are unknown.

c Is this a good use of the site or building as opposed to other possible uses?
Currently Struben Street Motors is looking at purchasing a portion of the site to display second hand vehicles. The city council is proposing a large L-shaped public square to surround the Synagogue. The objective of the project is to propose a better suited function to the site while simultaneously allowing for public space.

d How will the character of the site be preserved?
The Synagogue’s minister’s house, previously located on the site as well as the religious, political and architectural heritage of the site is to be preserved and emphasised as a method of attracting activity to the site and creating a place-specific experience for the visitor to the site.

e What is the potential value to the local community in terms of employment and increased spending?
While the project provides inner city housing and work opportunities on a very small scale, it addresses current lack of facilities in the city and acts as a catalyst for other activities (housing, retail etc opportunities) by introducing people to the site beyond standard working hours (increasing safety by introducing activity).

f Is the proposal part of a longer term development plan?
The project is a catalyst for the area and promotes pedestrian activity in the area. The goal is to encourage urban-regeneration in the northern part of the city.

g What is the likely demand for the facility and what recreational value will it offer visitors?
The demand for inner city housing, accommodation and the lack of public facilities will all be addressed on a small scale. The project focuses on providing temporary accommodation. It has a high recreational value for both visitors and residents of Pretoria.

h Do the local people support the proposal and will they be able to make use of the facility?
There is currently not much support as this part of the city is increasingly neglected as one moves further north. Local people (including schools, businesses etc) are encouraged to make use of the facilities.

i What plans have been made for subsequent management and maintenance of the site?
To be confirmed

j Will local materials and skills and expertise be used?
Yes

k Does the design reflect the character of the area- is it compatible with the local climate, topography and materials?
Yes

l Is provision made for people with disabilities?
Yes (accessibility as required in NBR)
## Sustainable Building Assessment Tool (SBAT-P) V1

### Project Details

<table>
<thead>
<tr>
<th>Project</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project title:</td>
<td>Date:</td>
</tr>
<tr>
<td>Location:</td>
<td>Undertaken by:</td>
</tr>
<tr>
<td>Building type (specify): Residential/Community/Commercial</td>
<td>Company / organisation:</td>
</tr>
<tr>
<td>Internal area (m²):</td>
<td>Telephone:</td>
</tr>
<tr>
<td>Number of users:</td>
<td>Fax:</td>
</tr>
<tr>
<td>Building life cycle stage (specify): Design/Construction/Operation</td>
<td>Email:</td>
</tr>
</tbody>
</table>

![Sustainable Building Assessment Tool Results Chart](chart.png)

- **Social**: 4.6
- **Economic**: 4.4
- **Environmental**: 3.9
- **Overall**: 4.3

Figure 15.04 Sustainable Building Assessment Tool Results Page
<table>
<thead>
<tr>
<th>Criteria</th>
<th>Indicative performance measure</th>
<th>Measured</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SO 1 Occupant Comfort</strong></td>
<td></td>
<td></td>
<td>4.6</td>
</tr>
<tr>
<td>SO 1.1 Daylighting</td>
<td>% of occupied spaces that are within distance 2H from window, where H is the height of the window or where there is good daylight from skylights</td>
<td>80</td>
<td>0.8</td>
</tr>
<tr>
<td>SO 1.2 Ventilation</td>
<td>% of occupied spaces have equivalent of opening window area equivalent to 10% of floor area or adequate mechanical system, with upolliated air source</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>SO 1.3 Noise</td>
<td>% of occupied spaces where external/internal/reverberation noise does not impinge on normal conversation (50dBA)</td>
<td>80</td>
<td>0.8</td>
</tr>
<tr>
<td>SO 1.5 Thermal comfort</td>
<td>Temperature of occupied space does not exceed 28 or go below 19°C for less than 5 days per year (100%)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>SO 1.5 Views</td>
<td>% of occupied space that is 6m from an external window (not a skylight) with a view</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>SO 2 Inclusive Environment</strong></td>
<td></td>
<td></td>
<td>4.8</td>
</tr>
<tr>
<td>SO 2.1 Public Transport</td>
<td>% of building (s) within 400m of disabled accessible (20%) and affordable (80%) public transport</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>SO 2.2 Information</td>
<td>Comprehensive signage provided (50%), Signage high contrast, clear print signage in appropriate locations and language(s) / use of understandable symbols / manned reception at all entrances (50%)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>SO 2.3 Space</td>
<td>% of occupied spaces that are accessible to ambulant disabled / wheelchair users</td>
<td>80</td>
<td>0.8</td>
</tr>
<tr>
<td>SO 2.4 Toilets</td>
<td>% of occupied space with fully accessible toilets within 50m along easily accessible route</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>SO 2.5 Fittings &amp; Furniture</td>
<td>% of commonly used furniture and fittings (reception desk, kitchenette, auditorium) fully accessible</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>SO 3 Access to Facilities</strong></td>
<td></td>
<td></td>
<td>5.0</td>
</tr>
<tr>
<td>SO 3.1 Children</td>
<td>All users can walk (100%) / use public transport (50%) to get to their children’s schools and churches</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>SO 3.2 Banking</td>
<td>All users can walk (100%) / use public transport (50%) to get to banking facilities</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>SO 3.3 Retail</td>
<td>All users can walk (100%) / use public transport (50%) to get to food retail</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>SO 3.4 Communication</td>
<td>All users can walk (100%) / use public transport (50%) to get to communication facilities (post/telephone/internet)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>SO 3.5 Exercise</td>
<td>All users can walk (100%) / use public transport (50%) to get to recreation/exercise facilities</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>SO 4 Participation &amp; Control</strong></td>
<td></td>
<td></td>
<td>4.2</td>
</tr>
<tr>
<td>SO 4.1 Environmental control</td>
<td>% of occupied space able to control their thermal environment (adjacent to operable windows/thermal controls)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>SO 4.2 Lighting control</td>
<td>% of occupied space able to control their light (adjacent to controllable blinds etc/local lighting control)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>SO 4.3 Social spaces</td>
<td>Social informal meeting spaces (parks / staff cantens / cafes) provided locally (within 400m) (100%)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>SO 4.4 Sharing facilities</td>
<td>5% or more of facilities shared with other users / organisations on a weekly basis (100%)</td>
<td>70</td>
<td>0.7</td>
</tr>
<tr>
<td>SO 4.5 User group</td>
<td>Users actively involved in the design process (50%) / Active and representative management user group (50%)</td>
<td>50</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>SO 5 Education, Health &amp; Security</strong></td>
<td></td>
<td></td>
<td>4.3</td>
</tr>
<tr>
<td>SO 5.1 Education</td>
<td>Two percent or more spaces/facilities available for education (seminar rooms / reading / libraries) per occupied space</td>
<td>80</td>
<td>0.8</td>
</tr>
<tr>
<td>SO 5.2 Safety</td>
<td>All well used routes in and around building well lit (25%), all routes in and around buildings visually supervised (25%), secure perimeter and access control (50%), No crime (100%)</td>
<td>80</td>
<td>0.8</td>
</tr>
<tr>
<td>SO 5.3 Awareness</td>
<td>% of users who can access information on health &amp; safety issues (i.e. HIV/AIDS), training and employment opportunities easily (posters/personnel/intranet sites)</td>
<td>70</td>
<td>0.7</td>
</tr>
<tr>
<td>SO 5.4 Materials</td>
<td>All materials/components used have no negative effects on indoor air quality (100%)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>SO 5.5 Accidents</td>
<td>Process in place for recording all occupational accidents and diseases and addressing those</td>
<td>100</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Table 15.01 Social Building Performance
Table 15.02 Economic Building Performance

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Indicative performance measure</th>
<th>Measured</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC 1.1 Local economy</td>
<td>% value of the building constructed by local (within 50km) small (employees&lt;20) contractors</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC 1.2 Local contractors</td>
<td>% of materials (sand, bricks, blocks, roofing material) sourced from within 50km</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC 1.3 Local components</td>
<td>% of components (windows, doors etc) made locally (in the country)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC 1.4 Local furniture/fittings</td>
<td>% of furniture and fittings made locally (in the country)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC 1.5 Maintenance</td>
<td>% of maintenance and repairs by value that can, and are undertaken, by local contractors (within 50km)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC 2.1 Capacity</td>
<td>% capacity of building used on a daily basis (actual number of users / number of users at full capacity*100)</td>
<td>80</td>
<td>0.8</td>
</tr>
<tr>
<td>EC 2.2 Occupancy</td>
<td>% of time building is occupied and used (actual average number of hours used / all potential hours building could be used (24*100))</td>
<td>80</td>
<td>0.8</td>
</tr>
<tr>
<td>EC 2.3 Space per occupant</td>
<td>Space provision per user not more than 10% above national average for building type (100%)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC 2.4 Communication</td>
<td>Site building has access to internet and telephone (100%), telephone only (50%)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC 2.5 Material &amp; Components</td>
<td>Building design coordinated with material / component sizes in order to minimise wastage. Walls (50%), Roof and floors (50%)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC 3.1 Vertical heights</td>
<td>% of spaces that have a floor to ceiling height of 3000mm or more</td>
<td>80</td>
<td>0.8</td>
</tr>
<tr>
<td>EC 3.2 External space</td>
<td>Design facilitates flexible external space use (100%)</td>
<td>80</td>
<td>0.8</td>
</tr>
<tr>
<td>EC 3.3 Internal partition</td>
<td>Non loadbearing internal partitions that can be easily adapted (loose partitioning (100%), studwall (50%), masonry (25%)</td>
<td>50</td>
<td>0.5</td>
</tr>
<tr>
<td>EC 3.4 Modular planning</td>
<td>Building with modular structure, envelope (fenestration) &amp; services allowing easy internal adaptation (100%)</td>
<td>80</td>
<td>0.8</td>
</tr>
<tr>
<td>EC 3.5 Furniture</td>
<td>Modular, limited variety furniture - can be easily configured for different uses (100%)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC 4.1 Induction</td>
<td>All new users receive induction training on building systems (50%), Detailed building user manual (50%)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC 4.2 Consumption &amp; waste</td>
<td>% of users exposed on a monthly basis to building performance figures (water (25%), electricity (25%), waste (25%), accidents (25%))</td>
<td>30</td>
<td>0.3</td>
</tr>
<tr>
<td>EC 4.3 Metering</td>
<td>Easily monitored localised metering system for water (50%) and energy (50%)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC 4.4 Maintenance &amp; Cleaning</td>
<td>% of building that can be cleaned and maintained easily and safely using simple equipment and local non-hazardous materials</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC 4.5 Procurement</td>
<td>% of value of all materials/equipment used in the building on a daily basis supplied by local (within the country) manufacturers</td>
<td>70</td>
<td>0.7</td>
</tr>
<tr>
<td>EC 5.1 Local need</td>
<td>Five percent capital cost allocated to address urgent local issues (employment, training etc) during construction process (100%)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC 5.2 Procurement</td>
<td>Tender / construction packaged to ensure involvement of small local contractors/manufacturers (100%)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC 5.3 Building costs</td>
<td>Capital cost not more than fifteen % above national average building costs for the building type (100%)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC 5.4 Technology</td>
<td>3% or more of capital costs allocated to new sustainable/indigenous technology (100%)</td>
<td>60</td>
<td>0.6</td>
</tr>
<tr>
<td>EC 5.5 Existing Buildings</td>
<td>Existing buildings reused (100%)</td>
<td>0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Table 15.02 Economic Building Performance
<table>
<thead>
<tr>
<th>Criteria</th>
<th>Indicative performance measure</th>
<th>Measured</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN 1.1</td>
<td>Rainwater % of water consumed sourced from rainwater harvested on site</td>
<td>90</td>
<td>0.8</td>
</tr>
<tr>
<td>EN 1.2</td>
<td>Water use % of equipment (taps, washing machines, urinals/showerheads) that are water efficient</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EN 1.3</td>
<td>Runoff % of car parking, paths, roads and roofs that have absorbent/semi absorbent/permeable surfaces (grassed/taffed/fossed/as paving) absorbant materials</td>
<td>65</td>
<td>0.7</td>
</tr>
<tr>
<td>EN 1.4</td>
<td>Greywater % of water from washing/relatively clean processes recycled and reused</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EN 1.5</td>
<td>Planting % of planting (other than food gardens) on site with low / appropriate water requirements</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EN 2.1</td>
<td>Location % of users who walk / cycle / use public transport to commute to the building</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EN 2.2</td>
<td>Ventilation % of building ventilation requirements met through natural / passive ventilation</td>
<td>80</td>
<td>0.8</td>
</tr>
<tr>
<td>EN 2.3</td>
<td>Heating &amp; Cooling % of occupied space which relies solely on passive environmental control (no or minimal energy consumption)</td>
<td>80</td>
<td>0.8</td>
</tr>
<tr>
<td>EN 2.4</td>
<td>Appliances &amp; fittings % of appliances / lighting fixtures that are classed as highly energy efficient (ie energy star rating)</td>
<td>70</td>
<td>0.7</td>
</tr>
<tr>
<td>EN 2.5</td>
<td>Renewable energy % of building energy requirements met from renewable sources</td>
<td>70</td>
<td>0.7</td>
</tr>
<tr>
<td>EN 3.1</td>
<td>Toxic waste % of toxic waste (batteries, ink cartridges, fluorescent lamps) recycled</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EN 3.2</td>
<td>Organic waste % of organic waste recycled</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EN 3.3</td>
<td>Inorganic waste % of inorganic waste recycled</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EN 3.4</td>
<td>Sewerage % of sewerage recycled on site</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>EN 3.5</td>
<td>Construction waste % of damaged building materials / waste developed in construction recycled on site</td>
<td>80</td>
<td>0.8</td>
</tr>
<tr>
<td>EN 4.1</td>
<td>Brownfield site % of proposed site already disturbed / brownfield (previously developed)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EN 4.2</td>
<td>Neighbouring buildings No neighbouring buildings negatively affected (access to sunlight, day light, ventilation) (100%)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EN 4.3</td>
<td>Vegetation % of area of area covered in vegetation (include green roofs, internal planting) relative to whole site</td>
<td>50</td>
<td>0.5</td>
</tr>
<tr>
<td>EN 4.4</td>
<td>Food gardens Food gardens on site (100%)</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>EN 4.5</td>
<td>Landscape inputs % of landscape that does not require mechanical equipment (ie lawn cutting) and or artificial inputs such as weed killers and pesticides</td>
<td>90</td>
<td>0.9</td>
</tr>
<tr>
<td>EN 5.1</td>
<td>Embodied energy Materials with high embodied energy (aluminium, plastics) make up less than 1% of weight of building (100%)</td>
<td>80</td>
<td>0.8</td>
</tr>
<tr>
<td>EN 5.2</td>
<td>Material sources % of materials and components by volume from grown sources (animal/plant)</td>
<td>80</td>
<td>0.8</td>
</tr>
<tr>
<td>EN 5.3</td>
<td>Ozone depletion No materials and components used requiring ozone depleting processes (100%)</td>
<td>80</td>
<td>0.8</td>
</tr>
<tr>
<td>EN 5.4</td>
<td>Recycled / reuse % of materials and components (by weight) reused / from recycled sources</td>
<td>50</td>
<td>0.5</td>
</tr>
<tr>
<td>EN 5.5</td>
<td>Construction process Volume / area of site disturbed during construction less than 2X volume/area of new building (100%)</td>
<td>100</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Table 15.03 Environmental Building Performance
According to the National Resources Heritage Act No 25 of 1999:

“Our heritage celebrates our achievements and contributes to redressing past inequities. It educates, it deepens our understanding of society and encourages us to empathise with the experience of others. It facilitates healing and material and symbolic restitution and it promotes new previously neglected research into our rich oral traditions and customs.”

The NHRA No 25 of 1999 (1) (3) determines when a place or object is culturally significant:

“\text{A place or object is considered part of the national estate if it has cultural significance because of its importance to the community, or pattern of South Africa’s history, its possession of rare aspects of South Africa’s natural or cultural heritage, its strong or special association with a particular cultural group for social, cultural or spiritual reasons.”}

In terms of the NHRA No 25 of 1999 the building is culturally significant for several reasons:

\begin{itemize}
  \item Architecturally, the building is typical of synagogues built world-wide during the 1800s. 
  \item The building is the first Synagogue to be built in Pretoria and tells of the strong Jewish community in Pretoria at that time
  \item Sammy Marx, a leading figure in Pretoria’s history at the time assisted the construction of the building.
  \item The Old Synagogue is on Paul Kruger Street (previously Market Street), which along with Church Street determines the inner city grid
  \item In 1952 the building was expropriated by the national government and converted into a supreme court designated to deal specifically with rising black opposition movements. It is here that in the 1950/60s Nelson Mandela and several co-accused were sentenced to imprisonment
  \item Today the building is empty, symbolically bearing the wrath of South Africa’s violent undemocratic past
\end{itemize}

Project is to fall within guidelines for the interpretation and presentation of cultural heritage as described by the ICOMOS Charter.

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Urban Regeneration

In his article *Evolution, Definition and Purpose of Urban Regeneration*, Roberts defines urban regeneration as:

"comprehensive and integrated vision and action which leads to the resolution of urban problems and which seeks to bring about a lasting improvement in the economic, social and environmental condition of an area that has been subject to change." 11

In essence, urban regeneration can be seen as:

- "An interventionist activity
- An activity which straddles the public, private and community sectors
- An activity which is likely to experience considerable changes in its institutional structures over time in response to changing economic, social, environmental and political circumstances
- A means of mobilizing collective effort and providing the basis for the negotiation of appropriate solutions
- A means of determining policies and actions designed to improve the condition of urban areas and developing institutional structures necessary to support the preparation of specific proposals" 12

Proposal

From this summary it becomes clear that urban regeneration is a process that by nature requires team input. It also is clear that urban regeneration requires the modification and adjustment of current and future policies to suit individual situations. It is not a set formula that can be applied to cities world wide let alone cities within one country.

Due to the nature of this theoretical project it is impossible to have the degree of participation and input as is necessary for urban regeneration projects. Therefore the project will focus on physical and environmental regeneration and will from a lesser degree (hypothetically) address social and community issues as well as the economic and financial aspects of the process. Existing policies and the adaptation thereof during the process will not be addressed. (addressed indirectly) It is important due to current needs in the area, the political and architectural significance of the site to address the heritage aspect and encourage activation of the space. Public art and architecture (both being design disciplines that deal with spatial and human interaction) will be investigated as a means of achieving this.

11. Roberts (2005:17)
12. Roberts (2005:22)
An informal survey of the two ‘Backpacker’ hostels in Pretoria was conducted by the author to establish what existing facilities in travel hostels are, what facilities are provided and positive and negative aspects from a management, location and tourism perspective. The results have been summarised in the following table.

The intention is to conduct the same survey with three ‘Backpacker’ hostels on Long Street in Cape Town. The youth hostels are said to have functioned as catalysts to Long Street by introducing activity which in turn attracted further investment. Long Street today is a vibrant and unique part of Cape Town, with many small businesses, bars and restaurants operating in the vicinity. This phenomenon offers a unique experience to the traveler and local resident in Cape Town.

Survey Evaluation

The data of the evaluation has been emitted at this point in the baseline document as it has been included as an independant appendix within this dissertation. Refer to Appendix A for the results of the survey.
Schedule of Accommodation

The schedule of accommodation has been emitted at this point in the baseline document as it has been included as an independent chapter within this dissertation.

Performance Criteria

In South Africa travel hostels, such as the Backpackers, are found in all cities and at all major holiday and tourist destinations across the country. In most cases the Backpackers are located within walking distances of natural and historical attractions (e.g. along beaches in the Eastern Cape; next to the Melrose House in Pretoria etc). Due to the nature of the accommodation provided, guests are usually budget travellers or young people seeking temporary accommodation during internships, study exchanges or other education-related activities. Generally, the age range of Backpacker guests is between 18 and 35 years old. As cost is an issue, Backpacker and other hostels seldom are new builds. Often old residences, old houses and other buildings are converted for the new function which adds to the character of the place. For this reason it is difficult to make a comparison of the building type. Therefore, the comparison will falls somewhere between the guidelines set out for student residences and those for hotels, which most closely relates to the Backpacker accommodation.

User Profile

• Luxury Penthouse Apartments
  Single/married young professionals located close to work opportunities in city centre

• Temporary Residential Accommodation
  NGOs and other commercial organisations and businesses can rent out small apartments within the building for visiting guests, researchers, trainees, etc that may be in Pretoria for an extended but temporary period of time. Lease agreements should range from 1 week - 3 months (renewable). Universities, technikons and other education-based organisations would be encouraged to make use of this facility especially for exchange students, visiting lecturers and researchers where the cost of accommodation is a concern. All rooms will be equipped with a study area specifically for this purpose. The location of the building allows for easy accessibility to research and education facilities (such as the New National Library- currently under construction). This facility will also cater for families that may need accommodation for short periods of time.

• Temporary Accommodation
  Short-term budget travellers (focus on tourism)

• Other facilities
  To be used by local businesses and educational institutions in the area for conferences and exhibitions.

Retail and Recreational Facilities

Facilities located on ground floor relating to main pedestrian movement and public space. This facility will include public toilets on the public square.

• Below grade parking
  Access to parking from Struben Street as the vision for the city is to pedestrianise Paul Kruger Street. Parking will be available for guests as well as businesses in the area and visitors to the site. The vision includes the operation of a tram system along Paul Kruger street minimising the need for private transportation. Due to the existing nature of our cities, there will always be a demand for vehicular parking.

The building should be designed in such a way as to not limit accessibility. (i.e. all disabilities: visual, mobile and auditory)
Appendices

Concerns and Deciding Factors

- Cost of accommodation (this may exclude penthouse apartments)
- Safety and security
- Access to facilities (academic, tourist and recreational)
- Comfort on a basic level (neat, natural light, hot water, clean communal facilities)
- Reasonable room size
- Self-catering Facilities
- Private bathrooms (especially for long-term guests and people that may be attending conference)
- Low noise level (work and study)

Characteristic of Building Type

According to the ‘Oxbridge model’, student accommodation functions best when social units of 5-6 students can be created. This size group functions best socially and reduces management problems. As the building is not student accommodation, these figures may not apply. Usually one staircase accommodates 4-10 students. Communal dining areas should allow for all students in one unit to eat at the same time. Spatial provision should be made for guests. Kitchens become the point for social interaction for students- more so than recreational spaces.

Security is a factor due to irregular hours kept by students (this may be similar for students and travellers).

Requirements

- Kitchens (communal)
  a  1 sink (two bowls) and 1 cooker (with 4 rings) serves max 5 Students (3 persons is preferable)
  b  Storage: 0.13m² refrigerator space/person
      0.3m² of dry goods/ person (i.e. 1 shelf pp)
  c  Lockable cupboard/ person
  d  Task and general lighting
  e  Min 3 sockets for appliances
  f  Minimum total length of work surface including cooker 3600mm
  g  Circulation space between units: 1200mm
  h  Duplication may be necessary to accommodate the disabled

- Bathrooms (communal)
  a  1 WC, 1WHB and 1 bath/shower per 5 students (3 persons is preferable)
  b  WC should be separate from bathroom (if only one WC)
  c  If WHB in individual rooms, WC and other amenities not more than 1 floor or 30m away

- Room Areas
  a  Bedroom (1 person): min 6.5m²; (2 persons): min 10.2m²
  b  Min width of room: 2.5m² (this allows for a full turning circle for wheelchair users: diameter 1500mm)
  c  Kitchen and dining area (if in individual unit): min 6.5m²
  d  Spaces must be flexible to accommodate different functions
  e  En-suite bathrooms: min 2.5m²
  f  Sound insulation: 40dB is appropriate (avoid noise from inside and outside e.g. stairways and service ducts

- Hotel Room Areas
  a  **: 20-22m²
  b  ***: 25-27m²
  c  ****: 30-34m²
  d  *****: min 36m²

Adler (1999: Part 36)
• Standard Furniture
  a Bed: 900x2000mm (doubles as sofa); bedside table (optional)
  b Desk 700x1800)
  c Drawers 800mm wide
  d Wardrobe: full height hanging space min 600x900mm with lockable space
  e Shelving: 300x3600mm (total run)
  f Easy chair (reading)
  g Desk chair
  h Washbasin (in cupboard)
  i All bathrooms to have shaver point (unisex), mirrors and task lighting

• Disabled considerations
  a Accommodate full turning circle 1500mm
  b Desk height 760mm
  c Shelving 700-1300mm above floor level
  d Sockets, switches and ironmongery at 1000mm
  e Sinks to clear 760mm above floor level
  f Bold colours for partially sighted
  g Door openings min 900mm

## Unit Comparison

<table>
<thead>
<tr>
<th></th>
<th>Hostel</th>
<th>Hotel</th>
<th>Flat</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kitchens:</strong></td>
<td>Fully equipped and communal, if provided</td>
<td>3 star: 20-22m²</td>
<td>1-3 persons: 6-10m² Galley kitchen: 1-3 persons 5.5-6.5m²</td>
</tr>
<tr>
<td><strong>Living area:</strong></td>
<td>Communal living area with TV</td>
<td>Hotel lobby and lounge area within hotel room (size dependant on rating)</td>
<td>With dining kitchen: 1-3 persons 11-13m² With galley kitchen: 1-3 persons 13-16m²</td>
</tr>
<tr>
<td><strong>Main Bedroom:</strong></td>
<td>Dormitories (range in size and no of guests) Double rooms usually available at a higher cost</td>
<td>2 Star: 20-22m²</td>
<td>1-3 persons: 6-12m²</td>
</tr>
<tr>
<td><strong>Double Bedroom:</strong></td>
<td></td>
<td>3 Star: 25-27m²</td>
<td>Only for 4-6 persons</td>
</tr>
<tr>
<td><strong>Single Bedroom:</strong></td>
<td></td>
<td>4 Star: 30-34m²</td>
<td>1-2 persons: 8-9m²</td>
</tr>
<tr>
<td><strong>Bathrooms:</strong></td>
<td>Communal (often unisex)</td>
<td>En-suite</td>
<td>1-3 persons: 1 x WC (may be in bathroom) 4-5 persons: 1 x WC (must have separate compartment)</td>
</tr>
<tr>
<td></td>
<td>Often en-suite bathrooms with double rooms (at additional cost)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Storage:</strong></td>
<td>To store backpack (often under bed or locker)</td>
<td>Built-in hanging height cupboard (valuables safe common in room)</td>
<td></td>
</tr>
<tr>
<td><strong>Linen:</strong></td>
<td>Usually provided (guests own sleeping bags sometimes required)</td>
<td>Fully services</td>
<td>1-3 persons: 0.4m² 4 persons: 0.6m²</td>
</tr>
<tr>
<td><strong>Walk-in general store:</strong></td>
<td>Often communal room with lockers for guests</td>
<td>-</td>
<td>1/ unit</td>
</tr>
<tr>
<td><strong>Service:</strong></td>
<td>Basic</td>
<td>Fully serviced (extent of service dependant on rating)</td>
<td>15%</td>
</tr>
</tbody>
</table>

Table 15.04 Unit Comparison
Bibliography


thank you to: nico my parents thornton my savior for the support the love the encouragement the ability