5.1. INTRODUCTION

The design guidelines are a synthesis of solutions to problems identified through theoretical research as well as the physical and social analysis. The author identified six guidelines, each with sub guidelines which functions as a summary of what an outdoor environment should provide in order to enhance the psychological healing process. The six guidelines includes: independence, purpose, consciousness, rest, connectedness and physical activity. These will be described and illustrated in this chapter and applied to the open space framework, sketch plan and technical resolution.

5.2. INDEPENDENCE

Institutionalized individuals are not only dependent on medication but also dependent on staff members by choice or for permission to do certain things. The physical and social outdoor environment should provide patients with the confidence to maintain their roles as independent individuals (Tyson, 1998:34).

5.2.1. INDEPENDENT FUNCTIONING

The landscape should enable people from different abilities or disabilities to function independently. The surfaces of walkways should accommodate wheelchair users, and other differently abled individuals (Fig. 5.2).

5.2.2. FREEDOM

Institutionalized individuals experience a lost sense of freedom. The outdoor environment should provide patients with a sense of freedom. This can be achieved by creating soft boundaries in the landscape to prevent the patient from feeling caged in (Fig. 5.3).

5.2.3. PRIVACY

Patients and staff need places where they can sit in private, on their own (Fig. 5.12) or in groups, somewhat concealed from by passers while they can still have a view over the landscape and outdoor activities through passive surveillance that doesn’t compromise their safety (Fig. 5.4).
5.2.4. CHOICE & CONTROL
Institutionalized patients might experience a loss of control and choice (Green places, 2005:27). The outdoor environment should provide the user with a choice of sunny, shady, private, or social areas to sit. The user should also have a choice between different outdoor experiences or activities (Fig. 5.11) and whether they want to participate or just observe (Fig. 5.7). As part of the horticultural therapy program patients could also be allowed to research and choose what they want to plant.

5.2.5. LEGIBILITY
The theoretical research indicated that humans prefer and feel more relaxed in places where it is the easiest to extract information needed to function properly (refer to 2.3.2). The landscape should be simple and easy to read. Attention can be directed to important areas by making use of contrast, natural borders and sight-line views located along paths for visual connections between places. Structures or planting along a path can lead the eye to an important focal point while change in paving type, or signage can give clues and encourage movement to a certain area (Fig. 5.5).

5.3. PURPOSE
An negative effect of institutionalization includes a lost sense of purpose. Patients often have difficulty to identify or establish their role in society. An outdoor environment that provides work opportunities, motivation and positive messages can help to restore a sense of purpose for institutionalized individuals.

5.3.1. WORK OPPORTUNITIES
The outdoor environment should provide patients and the surrounding community with job opportunities and responsibilities (Fig. 5.6). This will create a feeling of purpose and independence. It can also alleviate the stigma of mentally ill patients when the public see how they fulfil “normal” social roles refer to (2.4.4). Patients can be involved in the maintenance of the outdoor environment while productive landscapes will provide further job opportunities (refer to 6.1.2).
5.3.2. MOTIVATION
An interesting, inviting environment will motivate patients to participate in outdoor activities. If a patient observes other people that engage positively with outdoor activities, it would motivate them to get involved too (Fig. 5.7).

5.3.3. POSITIVE MESSAGES
Man made designed elements should be positive in their messages (Green places, 2005:28). Positive messages in the landscape can include positive images or phrases in mosaic art by Weskoppies patients (Fig. 5.7). Vibrant colours and a well maintained environment also gives a positive message (refer to 6.2).

5.3.4. OWNERSHIP
According to Tyson (1998:34) people have a need to identify personally with their surroundings. When people feel uninvolved and unfamiliar to an outdoor environment it can lead to disinterest and lower social usage (Fig. 5.8).
This could ultimately lead to the deterioration of physical features due to a lack of maintenance. To ensure continued life and growth the outdoor environment needs the involvement of people. The process forms an integral part of the healing potential of outdoor environments (Tyson, 1998: 175). The outdoor environment could facilitate a horticultural therapy program, where patients take ownership and responsibility for the garden. Patients should also be involved in the construction process and be allowed to make their ‘mark’ at Weskoppies through mosaic art as part of an occupational therapy program (refer to 6.2). All of these have the potential to strengthen the healing process by providing the patient with a sense of responsibility, pride and achievement (Fig. 5.8).

5.4. CONSCIOUSNESS

5.4.1. SENSORY STIMULATION
Awareness of surroundings and consciousness can be encouraged by stimulating the senses. Outdoor environments have the potential to stimulate the senses more intensely than indoor environments. Visual stimulation may include bright colours and positive messages in the landscape (Fig. 5.7). People should be allowed to touch plants and feel different textures in the landscape. Fragrant flowers and herbs in the landscape will stimulate the sense of smell which can bring back good or bad memories helping individuals cope with their reality. Herbs and other edible plants can also stimulate the taste sense (Fig. 5.9).

Fig. 5.9: A horticultural therapy garden stimulates the senses. Fragrant flowers, climbing plants and crushed groundcovers stimulates the sense of smell. Herbs can be tasted and different and touched (Author 2009).
5.4.2. AWARENESS OF TIME
Institutionalized individuals lose track of time and date which results in a feeling of helplessness. A healing landscape should heighten the users awareness of time. This can be achieved by implementing plants that accentuate the seasons (Fig. 5.10). A sundial in the landscape will also communicate time and the Landscape Architect should explore ways in which the date can be communicated in the form of an outdoor calendar.
5.4.3. CHANGE
If the physical outdoor environment stays constant the people in it responds less and less to it (refer to 2.3.4). The outdoor environment should illustrate change throughout the year and over longer time periods. This brings life and an element of surprise and anticipation to the landscape. This will motivate patients to consciously notice and take interest in their outdoor environment.

5.4.4. EXCITEMENT
The outdoor environment should create a sense of excitement. People need to have some activity that they can look forward to. Outdoor environments can accommodate events like music festivals, sport events and an outdoor markets on a annual or weekly basis.

5.4.5. VARIETY OF EXPERIENCES
To counteract boredom, the outdoor environment should provide the user with a variety of experiences and activities. These could include sport activities, social activities, horticultural therapy, a flower experience and a wilderness experience. Passive activities such as socializing, sleeping and observing should also be accommodated. (Fig. 5.11).

Fig. 5.11 (below): A variety of outdoor experiences. (Author 2009)
5.5. REST

Rest is one of the basic human requirements for survival; it is a vital ingredient for maintaining a healthy body and mind. Patients at mental institutions need more rest than healthy individuals. The outdoor environment at mental institutions should therefore accommodate rest more intensively.

5.5.1. REFLECTION

Patients and staff often need time alone for reflection and contemplation to regain composure after stressful situations. The landscape should have quiet places where people can comfortably sit in privacy away from the mainstream activities (Tyson, 1998: 35)(Fig. 5.12).

5.5.2. RELAXATION

According to Fisher (2000:41), exposure to natural elements such as seasonal blossom, leaf change, the vibration of wind through leaves and twigs and birdsong could result in reduced stress levels.

5.5.3. FAMILIARITY

Institutionalization may result in disorientation, feelings of disconnectedness and estrangement which increases stress and prolongs the recovery process. The outdoor environment should therefore be warm and welcoming to create a feeling of familiarity where the patient could rest and recover. The aesthetic should reflect the culture and context of the most of the users. Familiar elements should be integrated in the design (Tyson, 1998:33). By allowing patients to participate in creation and maintenance the outdoor environment they will be able to associate with it and experience a sense of familiarity.

5.5.4. SECURITY

A landscape can only accommodate rest when the users feel secure and safe in it. Staff members should be able to observe patients from different points while working (Tyson 1998:35). Vegetation or structures should not obstruct views at the public areas. Views may only be obstructed where privacy is required around the wards which are permanently under supervision of staff members. Paving should be slip resistant (Fig. 5.13).
5.5.5. COMFORT
The outdoor environment should be comfortable for the user to function in. Materials selected for seating should not be too hot or cold to sit on. Paving or planter materials should not cause glare. Horticultural planters should be at different heights to accommodate standing and seated people as well as wheelchair users. A good combination of shaded and sunny seating areas should be provided for comfort during summer and winter. Deciduous trees will provide shade during the summer while allowing sun to filter through in winter (Fig. 5.14).

5.5.6. SLEEP
Medication for mental illnesses often causes drowsiness. The outdoor environment should satisfy the patients need for sleep during the day. Lawn can be sculpted to provide comfortable sleeping spaces. Wooden benches could also be shaped to be comfortable for sleeping (Fig. 5.15- 5.16).
5.6. CONNECTEDNESS
Institutionalized patients are physically isolated from the outside world and also often feel emotionally isolated from their surroundings and other people. This results in a feeling of powerlessness. The outdoor environment can assist in overcoming this isolation by accommodating social interaction, social support, connections with natural systems and accessibility.

5.6.1. SOCIAL INTERACTION
An outdoor environment can encourage social interaction with areas where people can meet or sit in groups. Sport, outdoor areas to eat and community activities such as gardening also encourages social interaction (Fig. 5.17).

5.6.2. SOCIAL SUPPORT
Physical and emotional isolation negatively affects recovery (refer to 2.4.1). A community activity such as gardening or mosaic work can give character and identity to the outdoor environment. Family members or friends of patients should be allowed to be involved in the outdoor activity program. This will help patients adapt to their environment more quickly and also reassure the family member or friend that their loved ones are in quality care.
5.6.3. CONNECTED TO NATURAL SYSTEMS
Humans have a need for close contact with nature (refer to 2.3.2). The outdoor environment should allow people to be in contact with natural systems to realize their role and connectedness as part of an integrated whole. This can include hiking trails with lookout points in areas with natural vegetation which allows people to experience nature in its pure form. Wetland areas with bird hides can also bring people closer to nature and natural systems.

5.6.4. ACCESSIBILITY
The outdoors should be easily accessible from indoors to accommodate the pacing of some patients. People of all ages and abilities should have access to outdoor activities. The public and surrounding community should also have access to the outdoor environment at Weskoppies at specific times. However this should happen under controlled circumstances. The public could be allowed on Saturday’s only to visit the flower farm or market. At these times security should be sharpened.

5.7. PHYSICAL ACTIVITY
The outdoor environment must encourage exercise and movement of different intensities as far as people are able (Tyson, 1998:34). Enough flat open space should be provided for sport activities and active occupational therapy activities (Fig. 5.18). Walking could be encouraged through flower fields, hiking trails and experiential routes throughout the site.

5.8. CONCLUSION
When an outdoor environment provides the user with independence, purpose, consciousness, rest, connectedness and physical activities at Psychiatric institutions like Weskoppies and other outdoor places it will have the potential to enhance the psychological healing process. The design guidelines influenced the design decision making process at various scales as illustrated in the open space framework and sketch plan chapters that will follow. The design matrix table at the end of the open space framework and sketch plan chapters will indicate how each of these guidelines have been addressed in the various design elements. This will serve as proof that the design addresses the guidelines as set out in this chapter.