Initiation Site Development in Khayelitsha, Cape Town: Addressing the Challenges of Urban Initiation While Preserving Tradition and Culture

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- Geoffrey Mamputa, Assistant Director of Arts and Culture
- Benjamin Festus, Kirstenbosch Gardens Environment Education Centre
- Philip Gyakne, Eastern Cape Environmental Health Official
- Charl Marais, Senior Professional Officer, City Parks
- Sikelela Zokufa, Traditional Surgeon

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Chapter 1: Overview of Methods and Recommendations

The purpose of this project was to assist in the preparation of a plan and an implementation strategy for the development of the Good Hope College Initiation Site in Khayelitsha on behalf of the City of Cape Town's Social Development Department.

The team worked on site from October 20th to December 19th, 2010. Over the seven week period, the team attended an initiation indaba, worked with city officials from several departments, and interviewed Langa Initiation Site officials, a senior manager of the Western Cape Department of Arts and Culture, an *ingcibi* (traditional surgeon), an Eastern Cape Health Official, and Kirstenbosch Garden personnel to identify and further define the elements essential to the design of the Good Hope College Initiation Site.

This report is written with the intent that it may be used to assist the City in the selection of elements necessary to the design of an initiation site in Khayelitsha. The chapters below are ordered in the sequence that the team approached the work in order to develop the recommendations. An assessment of challenges that exist at the formal initiation site located in Langa was compiled over the seven week period through several site visits and discussions with the Langa Initiation Site Personnel. This information was then detailed to facilitate the rationale for the project recommendations—a detailed plan of implementation for the Good Hope College Initiation Site in Khayelitsha, incorporating a site layout, infrastructure plans, a list of projected costs, preliminary tender documents, and a plan for effective management and maintenance.

To gather information about the changes in initiation culture and to gain a better grasp of the City of Cape Town's vision for the proposed Khayelitsha site, the team first attended an indaba, or gathering, of city officials and abantu (ethnic groups) representatives discussing the initiation ritual. There, the team was able to meet several initiation site leaders and key role players, and discovered that the individuals present at the indaba had, at a previous meeting, decided to develop the informal Good Hope College Initiation Site, using the initiation site in Langa as a model.

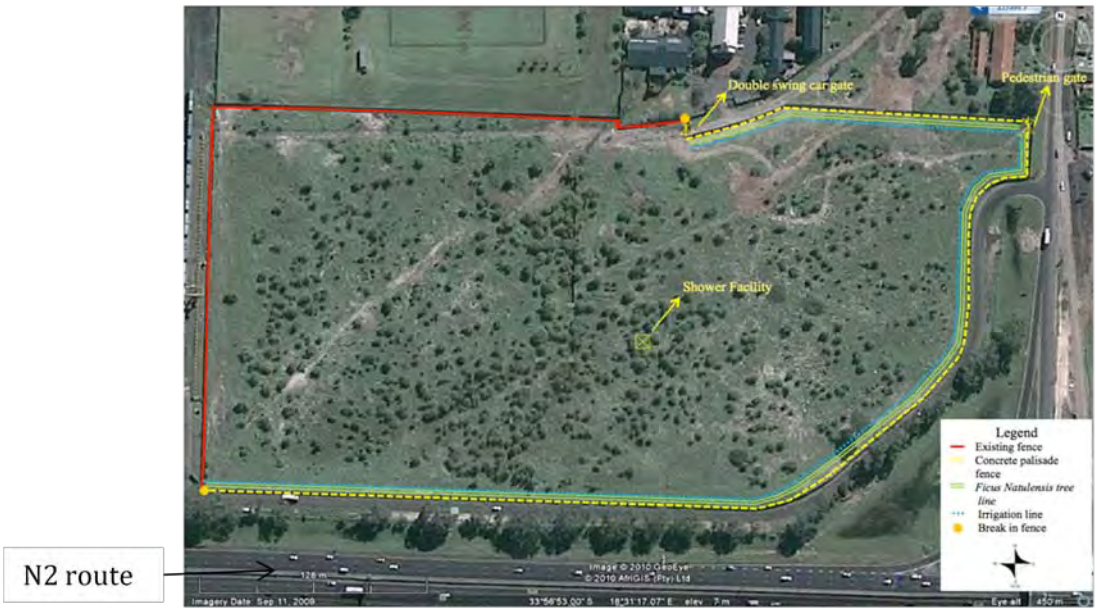


Figure 1 - Aerial View of Langa Initiation Site

The Langa site has been used for the initiation ritual for many years and is central to this project and the team's recommendations. Many South Africans from both the Eastern and the Western Cape have attended, or sent young males to this initiation site to take part in the ritual. Of significance is the fact that there have been no fatalities at Langa, making it a trusted initiation site that city officials and respected abantu representatives have put faith in.

On the first visit to the site, the team spoke with the site manager, and gathered valuable information that helped form the design of the Good Hope College Initiation Site. Analysis of the Langa site includes:

- Condition and effectiveness of the concrete palisade fence, constructed by the City to secure the site and provide privacy
- Site access for both cars and pedestrians
- Documentation of landscape and vegetation using photographs to gain a better understanding of desirable environments for initiation
- Study of the current irrigation system, parking, water taps, and shower facilities
- Challenges such as trash dumping, rubble dumping, and vandalism
- Site management practices.

Zolisa Pakade, the project manager responsible for the formalization of the Khayelitsha Initiation Site from the City of Cape Town Department of Social Development, met with the team to discuss the City's initiative, budget, recent progress, and challenges. The City of Cape Town has become involved because of growing community pressure for municipal support to help preserve the initiation culture by providing sites where the ritual may be safely practiced.

Zolisa Pakade informed the team that there are currently three informal initiation sites in Khayelitsha that are being considered by the City of Cape Town's Social Development Department as locations for formal initiation facilities. In order, from west to east, the sites are located 1) near the intersections of Spine Road and Mew Way, proximate to Good Hope College, 2) corner of Lindela Road and Mew Way, and 3) corner of Nyanda Avenue and Landsdowne Road.

Figure 2 - Three Proposed Initiation Sites in Khayelitsha

Given that the City's budgetary constraints currently allow for the development of one site, the Department had identified the Spine Road/Mew Way site, called the Good Hope College Initiation Site, as the first location to be developed into a formal initiation site.

Major challenges discussed were fencing, topography, and city ownership of desirable land. The team learned that the City of Cape Town Department of Social Development has created an Initiation Task Team, which has secured an initial sum of R300 000 for project use. The Department had also requested the transfer of 1,8 hectares of city owned land on the site proximate to Good Hope College for initiation purposes.

On the first visit to the proposed initiation site, the team identified potential borders, important geographic features such as a hill in the western region of the proposed site, and areas where initiates currently construct their huts. Concerns noted during these visits included the steep grade of the land near Spine Road and the location of the huts among the thin cover of bushes on the site.

Figure 3 - Huts Seen from Spine Rd.

City officials confirmed that the Khayelitsha population is far larger than the population of Langa, where many of the 240 initiates who annually complete their initiation at the Langa Initiation Site live. The Langa Site staff personnel estimated that the 8,2 hectares site could accommodate up to 200 initiates at any one time, allowing for continued use of the site with increased attendance. Given that at least as many initiates who go to the Langa Site annually are expected to utilize the Khayelitsha Site, it was deemed illogical that the proposed Khayelitsha Site be developed on a mere 1,8 hectares.

Preliminary designs for the initiation site were then developed utilizing up to 8,2 hectares of land bordered by Spine Road to the south, Mew Way to the east, and the fence line of the Denel ammunition manufacturing company on the northwest. Preliminary maps of the site included:

- Site area and perimeter
- Current location of initiation huts, land elevation, and visibility from surrounding landmarks based on photo documentation, GPS, and Google Earth tools.

Following the development of the preliminary site designs, the team met with the Violence Protection through Urban Upgrading (VPUU) official Alastair Graham, in order to learn more about the land that the team was recommending be included in the plans for the Good Hope Initiation Site. At this meeting the team was informed that a portion of the site which had been

included in the initial designs is currently under the ownership of Denel. The team then met with Lungelo Nokwaza, manager of the Department of Social Development, to discuss the proposed design concepts and site size.

Figure 4 - Land Ownership Distribution of the Good Hope College Initiation Site

The team later met with Larry Cronje, a senior technician from the Department of Water and Sanitation in the township of Khayelitsha to discuss:

- The availability of a water supply at the Good Hope College Initiation Site
- The method and cost of attaining water from the bulk water line.

Further analyses of the Good Hope College Initiation Site determined:

- The proposed location for gates
- The amount of fill that will be needed to create level ground on the Spine Road boundary so that a fence can be constructed
- Topographical features such as valleys, hills and points of high visibility to identify the optimally private location for showers and latrines.

The team met with a Senior Professional Officer of City Parks, and Kirstenbosch Gardens personnel to discuss viable plants for screening purposes that could survive the wind, sand, and high water table that exists at the Good Hope Initiation Site. Several shrubs that Kirstenbosch

Gardens personnel have field-tested at a secondary school in Khayelitsha were recommended for use on site, and four were chosen for further analysis by the team.

Information was also obtained from city departments and private contractors for the preparation of specifications and prices for palisade fencing, tree planting, irrigation, and dropped curbing for vehicular entrance onto the site.

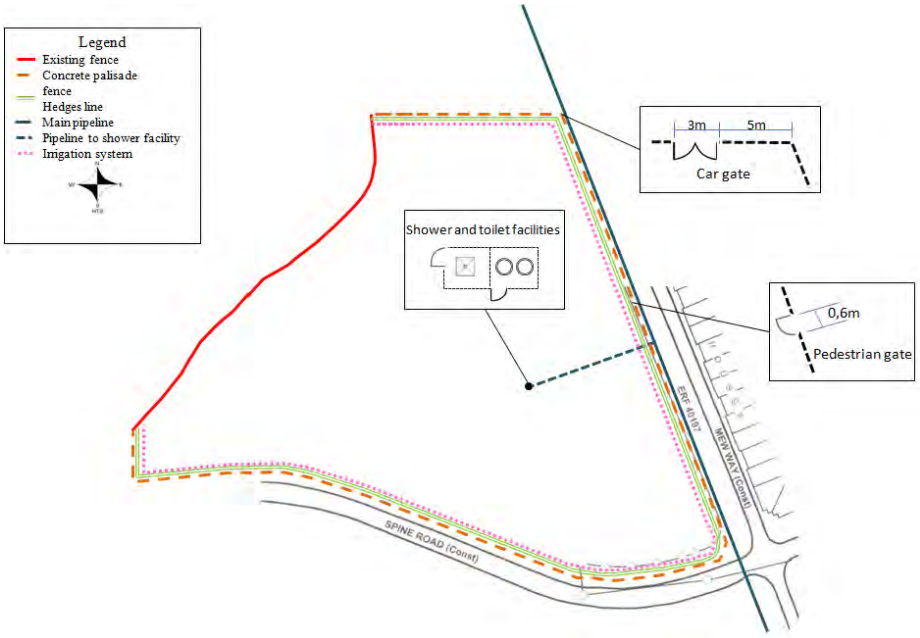


Figure 5 - Site Specifications

Utilizing the information gained from the team's methods, an 8,2 hectare site, which includes Denel owned land, was designed to be developed in two phases:

- Phase I consists of developing the site on a 3,8 hectare portion of land currently owned by the City of Cape Town, larger than the initial site request of 1,8 hectares, but still estimated to accommodate only 120 initates/year, based on Langa capacity.
- Phase II includes the land from phase I plus a portion of Denel's land, if the City is able to lease or acquire it. This will increase the size of the initiation site to the recommended size.

Construction of the initiation site proximate to Good Hope College in Khayelitsha is expected to commence in the months that follow our departure. We hope that the work done will lay a precedent for subsequent construction of other formal initiation sites.

Chapter 2: Analysis of the Langa Initiation Site

The Langa Initiation Site is an 8,2 hectare formal initiation site used by approximately 240 initiates annually, with one season between May and June, and another from November to January. The site is bordered by the N2 highway, Bhunga drive, a waste management facility, a catholic institution, and a sports field.

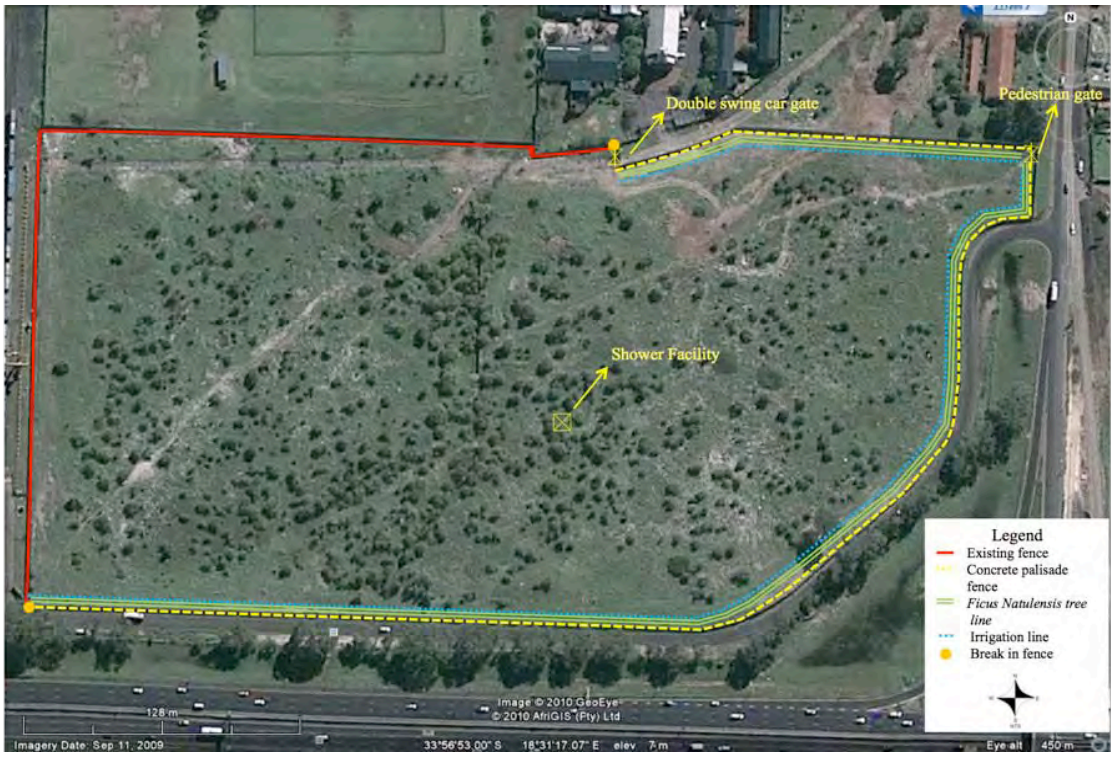


Figure 6 - Aerial View of Langa

Although the areas surrounding the City of Cape Town have become more heavily urbanized, the Langa Initiation Site has been able to sustain the traditional practice of initiation in a highly altered social, cultural, and environmental context. Since the 1930's the property has been used informally as an initiation site. Between 2005 and 2008, the property was developed into a formal initiation site, the first in the Western Cape, by the City of Cape Town, with the construction of showers, a concrete palisade fence, and the formation of a management team. The site management has dealt with the many social, environmental, and cultural concerns of the surrounding community with regards to initiation, and has provided an area that is accepted and widely used for initiation purposes. This site is highly respected in the initiation community for

the fact that there have been no fatalities on site. The site management, city officials, and initiation community can be attributed for this success.

2.1 Site Management

Historically, initiation site management was not required— there were no official sites to manage, no facilities to maintain, and no government involvement. Initiations took place in the bush. Now that initiation has been brought into an urban environment where space and resources that were traditionally used are limited, a management team is a valuable asset to the preservation of the site and to the provision of a safe environment for initiation.

The Langa site management consists of an initiation site committee, site manager, and associated government officials. The Langa Initiation Site Committee is composed of 6-7 volunteer community members. Much of the success of the site is due to the high involvement of the site committee members in the community.

2.2 Role of the Site Committee

In an interview with the Deputy Chair of the Langa Initiation Site Committee, it was found that major roles of the committee are to create awareness in the community about the initiation seasons and to tell prospective initiates what they need to do to be initiated. Each season, an advertisement is placed in the local newspaper to spread news of the upcoming initiation season to the families of eligible boys. A meeting is then held where the necessary preparation that must take place before the initiation can proceed is presented. During this meeting, the committee often recommends *ikhankathas* (guardian and traditional nurse) to the community.

The site committee is developing a set of rules and regulations that will be enforced collectively by the site manager, *ikhankathas*, and *ingcibis*. The draft of the rules is as follows:

1. Site to be declared a gun fee zone
2. Excessive liquor not allowed. The standard with reference to quantity should be set, as is normally required by custom, not by the financial muscle of the family
3. No stokvel[1]
4. Branches of Port Jackson trees should not be cut at the site for the erection of *ibhoma* (hut). Existing trees must be retained. Bring your own branches

[1] Stokvel: Celebrations at the conclusion of initiation.

5. Dumping / vandalism prohibited at the site
6. Control of access to the site, young men's conduct should be assessed. Site should be treated as a formal school
7. Optimal hygienic standards covering every aspect of the initiation process should be promoted for health reasons, i.e. the site itself and *amakhonkata* (traditional nurses) should be clean at all times
8. Entrance to the site by gate or gates only. Entrance of cars to be limited
9. When the *ibhoma* is set alight at the end of the initiation process, that particular family is responsible for any damage that may be caused by the fire if not monitored by them. Supervision is very important
10. The site is reserved for initiation purposes only
11. It is compulsory that a member of the initiate's family be on site to monitor the process and sleep at the site for the first 8 days
12. Initiation season must be from:
    - November – January
    - April – June
13. Only one half of the site must be used per season:
    - Power Station Section
    - N2 gateway
14. "*Amabhoma*" initiates huts should not be erected close to each other
15. "*Ikhankatha*", traditional nurses should supervise the use of water taps and showers
16. A fee is to be paid into an account (an estimate of R100 per month) in advance by the initiate's families to defray costs, water, etc[2]
17. Plots for the erection of initiate's huts should only be chosen by the families on submission of doctors certificates (Authentic)
18. Traditional surgeons and nurses who do not attend committee and general meetings convened by the initiation committee and who are not on the database should not be allowed to perform their duties
19. Traditional surgeons should not perform procedure without receiving a doctor's certificate from the committee

[2] The Langa site managers stated that no compulsory costs are placed upon the initiates and that the site is free to use for all members of the community. This cost may soon be required for site use.

20. Committee needs to seek legal advice with regards to sanctions to be noted on violation of the rules
21. Community to endorse and own the rules and regulations

These rules and regulations have been adapted to deal with changes within the community and to make the initiation ritual on site increasingly safer. Recently, some male family members have stayed on site, as is suggested by rule 11, to oversee the behaviour of the boy, and to ensure that he is not taking part in inappropriate practices such as drinking or smoking compulsively. The site committee's development and enforcement of these rules will help to continue the Langa site's success.

2.3 Role of the Site Manager

The site manager is recommended by the site committee to the South African Heritage Resource Agency and the Department of Arts and Culture, and is hired and paid by the Department of Arts and Culture. The site manager is responsible for controlling access to the site, overseeing the site conditions, registering initiates, and enforcing site regulations. When a prospective initiate arrives, the site manager makes sure he has a valid medical certificate in his possession, and proceeds to register him. The site manager must know how many initiates are on site at all times for their safety. If there are any major issues or problems, the site manager will alert the site committee in a timely manner.

The site manager evaluates the initiation site and reports these conditions to the site committee, who then submits a monthly report to the Department of Arts and Culture and the Department of Social Development so that they may make the necessary repairs and adjustments, and request a budget allocation when necessary. The site manager is responsible for scheduling trash pickups with the Department of Solid Waste. The Department of Environmental Affairs, who is in charge of the management of the site, is responsible for financing the trash pick-up and management of the site.

As compensation for his work, the site manager receives a stipend estimated to be approximately R15 000 per year. This is the only operational cost of the site.

2.4 Involvement of the Health Department

The Langa Site Committee requires that all initiates who undergo the ritual provide the *ingcibi* with a medical certificate that affirms their health status. Provision of the certificate to the surgeon prior to the date of circumcision (the first day of initiation) is suggested, but not required by the Department of Health. The Department of Health does ensure that the condition of the site is satisfactory by frequently visiting the site throughout the year.

2.5 Fencing

On the Langa site, a 2.4 metre high concrete palisade fence has been constructed in order to provide seclusion for the initiates. This structure was built in 2009 at a cost of R1 593 per metre. The fence has since been broken over the course of the past year in several spots by vandals who the Langa site manager believes are looking to create a shortcut across the site, rather than walking around the perimeter. The break in the fence, which can be seen on the left side of the entrance gate (Figure 7) is approximately 0,8 metres wide, implying that this hole is most likely not being used to transfer branches from the premises for burning purposes. The fence has not since been repaired out of concern that it will merely be broken again.

Figure 7 - Double Gate Access at Langa

Figure 8 - Trash Illegally Dumped in Langa

Two entrances, one pedestrian gate and one swinging gate are located away from major roadways. It was reported that the swinging gate entrance had been left unlocked in the past for vehicle entrance, consequently allowing for the dumping of trash, the cutting of trees, and other misuse of the land.

During the initiation off season in past years, the land has been illegally accessed for the grazing of cattle. As was discussed with the Langa

management, the site should solely be used for initiation purposes as it is sacred land, and the gate is now kept locked to prevent the access of animals and dumping of trash.

The management team at Khayelitsha may have to deal with the occurrence of dumping on site, if the gate is left open, and if the gate is left locked, the fence may be broken.
At the time of our visit, the site had recently been cleaned by the City of Cape Town in preparation of the approaching initiation season. However, there were a couple small piles of trash and burnt tar implying that this trash had either been dumped recently, or that the cleaning was not completed. The site is evaluated monthly by the Langa site committee during the initiation seasons, and is cleaned immediately before each initiation season. Specifications for fencing and gates on the Langa site can be found in Appendix A and Appendix B.

2.6 Vegetation

The trees at the Langa site consist primarily of the Port Jackson species. These trees are an alien species to South Africa, imported from Australia. Port Jackson trees are favoured for use at the Langa site because they require little water, grow relatively fast, and provide proper screening and shade for initiates. The sandy soil at Langa does not deter this tree from growing freely. The Langa site has been given special permission from the City of Cape Town to allow these trees to remain on site, despite a policy requiring the removal of all invasive alien vegetation.

Figure 9 - Ficus natalensis Trees Planted at Langa

Of the trees planted on site, 105 *Ficus natalensis* (natal fig) were observed on-site that had been planted by the City of Cape Town around the concrete palisade fence enclosing the site. These trees were chosen for their ability to grow in sandy soils. However, they can require an irrigation system for up to three to four years. At one year old, these trees are not currently able to screen

the site or provide much additional seclusion for the initiates. Trees were planted 2 metres from the fence and ten metres apart, as recommended by the City Parks Department. Specifications for planting procedures can be found in Appendix C.

The team recommends that a hedge be planted at the Langa Initiation Site between the existing *Ficus natalensis* trees to help provide additional screening while the trees continue to grow. On site, initiates are forbidden to cut down any vegetation. They are required to provide their own material for the construction of their hut. Recently, the management team has found that vandals have cut down some trees on site for firewood.

In order to preserve the land and vegetation, the site has been divided into two sections. Each section is used semi-annually. This site rotation allows for vegetation growth and helps preserve a more forest-like appearance. Grasses cover much of the site.

2.7 Water Supply

A pipeline runs through the Langa site to provide showers, irrigation, and drinking water. The water source provides cleaner, safer, and healthier conditions for the initiates than are present in other urban informal initiation sites. The main water line to the site is a 50mm CL10 HDPE pipeline.

2.7.1 Showers

Figure 10 –Showers entrance and fence at Langa

In 2005, an outdoor shower about 2 meters tall with two showerheads was constructed in the middle of the site. The management expressed that the two shower taps are adequate for the number of initiates at the Langa site. Each tap is secured by a lock to prevent theft and misuse of the water. The showers are surrounded by an iron fence with vegetation growth to help allow the structure to blend into the environment, and to provide seclusion for the initiates. Despite one of the showerheads being damaged, the shower is still functional. The gate to the fencing

surrounding the showers has been stolen; Langa site personnel stated that the stolen gate would soon be replaced with a less desirable metal or plastic door.

Figure 11 - Evidence of Vandalism on the Shower Structures at Langa

During the first week of initiation, initiates are forbidden to take showers. After the first week, initiates are allowed to shower. By the fourth week, when the process is complete, all clay that represents boyhood must be washed from the initiates' body. According to the Langa management, the shower is an integral part of ensuring the health and cleanliness of initiates after the first week, and allows the initiates to wash the clay from their body, as is customary at the end of an initiation.

2.7.2 Toilets

No toilet facilities are present on site. Currently, the initiate will dig a hole near his hut to use as a toilet. This unsanitary practice has made the Department Water and Sanitation concerned for the health of initiates. The Department of Health expressed a need for toilet facilities in close proximity to the shower so that the initiates can wash their hands. Soap is brought by the initiates. The Langa site management recognizes a need for toilets on site, and is considering the installation of pit latrine style toilets in the future.

Figure 12 - Example of Irrigation System at Langa

2.7.3 Irrigation

Currently an irrigation system is used on site to provide water for trees that have recently been planted in order to promote growth and screening of the site. 1100 meters of 50mm pipe (CL 10 PE 100 HDPE Pipe SABS) was installed with 105 pop-up sprinkler heads and a Hunter Smart Valve Battery Controller. The

irrigation system is programmed to activate only two to three times a week at night in order to conserve water. A list of materials and diagrams showing the piping and sprinkler plan can be found in Appendix D and Appendix E respectively. While on site, one sprinkler head was found to have come out of the ground where it was installed. The problem could easily be fixed by digging a small trench and burying the piping back into the ground. Aside from this, the irrigation system appears to be successful. The trees are becoming established and the irrigation system may be able to be removed within the next year and used at another initiation site, if such arrangements could be arranged.

2.8 Site Access

Two entrances are located on site. One pedestrian entrance and one swinging gate entrance. The entrances are located just off of Bhunga Drive. Specifications for the pedestrian gate and the swinging double gate can be found in Appendix B.

2.8.1 Emergency Access

The vehicular gate entrance allows emergency vehicles access to the site, in the event of a fire or medical emergency.

2.8.2 Waste Management

The vehicular gate entrance allows for waste management trucks to enter the site in order to pick up the tires, sand, rubble, and miscellaneous trash items dumped on site. Trash left on site presents health issues for the initiates, and needs to be removed. The initiation site committee evaluates the site's conditions once every month, and then provides a written report to the City of Cape Town's Department of Solid Waste to arrange trash pickups.

Figure 13 - Parking Area Located to the Left of the Entryway

2.8.3 Parking

A clear area near the double gate entrance is available to park cars. Ingcibis, ikhankathas, and initiates' families park in this area. Approximately 15 cars can be parked on site. There is also an area outside the fencing that can also be used for parking.

2.9 Summary

The Langa site continues to be known as the most reputable initiation site in the Western Cape since being formalized in 2005. The site management, fencing and gates, and rules and regulations are recommended for implementation at any initiation site, as they ensure that initiates are able to complete their initiation in a safe environment reserved for the sole purpose of the ritual. Challenges that must be considered include dumping of trash and misuse of land that could be prevented by better managing site entry. It would be recommended that for other sites, a hedge of shrubs rather than trees is planted, as they will grow faster and provide more adequate screening. Langa provides an excellent model for the Good Hope College Initiation Site.

Chapter 3: Good Hope College Initiation Site

Of the three informal initiation sites in Khayelitsha that are being considered by the City of Cape Town Department of Arts and Culture as locations for formal initiation sites, the team focused on providing a plan for formalization of the initiation site at the intersection of Spine Road and Mew Way located near the Good Hope College. The area that was considered for development can be seen below in Figure 14.

Figure 14 - Good Hope College Initiation Site

3.1 Existing Site Conditions

The proposed site area is bounded by Spine Road to the south, Mew Way Road to the east, and Denel, a state owned ammunition manufacturing company to the west. The topography of the site varies in elevation from approximately 27 to 39 metres above sea level, and is covered with grasses and shrubs, ranging from one to four metres in height. The alien Port Jackson tree accounts for most of the vegetation found on site. During the initiation season, much of the site can be seen from the top of Lookout Hill and along Spine Road. A small valley in the center of the proposed site extends north, and one hill of particular significance is located in the western part of the site (Figure 15). This hill is easily accessible from Spine Road, and provides a view

over the entire site, reducing privacy. There is a steep two metre drop that exists approximately three metres to seven metres from Spine road on the edge of the region's southern border.

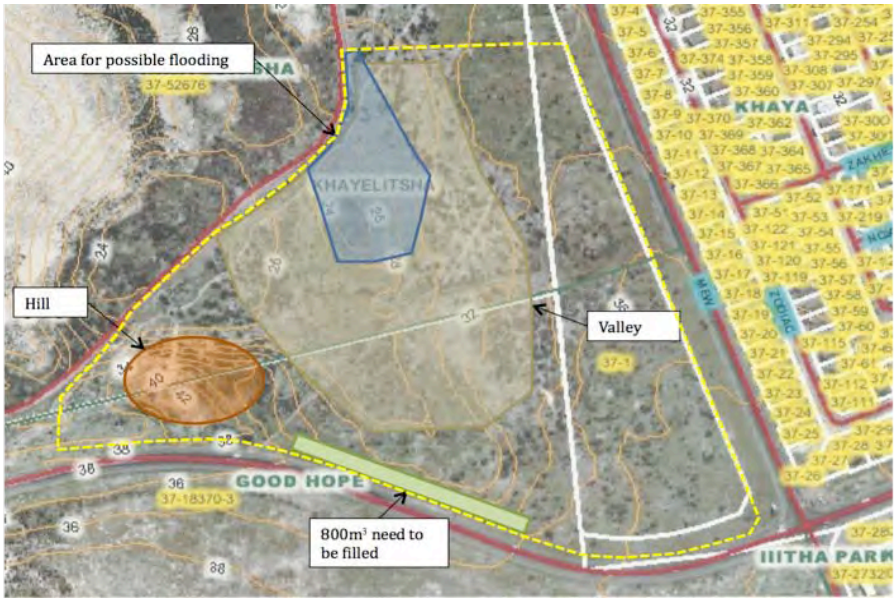


Figure 15 - Good Hope College Site Conditions

Currently, the dumping of trash presents a challenge. Piles of trash, and more recently, a large pile of tires, can be found on the site. The tires are believed to have been brought on site to be burned at the conclusion of the ritual for one of the current initiates. Despite the harm that this causes to the environment, this practice is currently considered acceptable.

3.2 Proposed Site Design

The City of Cape Town initially proposed a site that is approximately 1,8 hectares in size. The application for the land can be seen in Appendix I. With the size and usage of Langa in mind, Social Development management agreed that the 1,8 hectare site that had been requested by the department was grossly inadequate for the projected use of the site. Concerns were also voiced about the construction of the concrete-palisade fence along the steep grade that is located off of Spine Road. Large amounts of fill will be needed to ensure that a level fence may be constructed that provides adequate screening for the initiates.

There were approximately 50 huts visible in late November, not yet halfway through the initiation season. Estimated totals will exceed 120 initiates per season, or 240 initiates per year for the Good Hope College Initiation Site. Estimated totals could not be calculated for the other

two informal initiation sites in Khayelitsha, but it is known that these are also being used this initiation season. It can be assumed that some initiates from other sections of Khayelitsha will travel to the Good Hope College Initiation Site once it is formalized, as is the situation at the Langa Initiation Site, where males come from across the Western Cape, and from as far away as the Eastern Cape, to complete their initiation.

Using the Langa site as a model and considering the population of Khayelitsha, the topography of the proposed site and the observed distribution of initiation huts during the current initiation season (Figure 16), a site of approximately 8,2 hectares was deemed an appropriate size for the Good Hope College Initiation Site.

Figure 16 - Location of Huts in the Khayelitsha Site

The site's perimeter will be enclosed by a fence that will run along Spine Road and Mew Way and connect to part of an existing fence owned by Denel. The team requested that the road reserve be reduced from 20 meters to 10 meters in order to increase the area of the terrain while reducing the amount of fill that is necessary to eliminate the steep grade along Spine Road for the construction of the fence on the southern border.

A site map of the proposed area is below:

Figure 17 - Proposed layout for the formalization of the Good Hope College initiation site

There are several benefits to choosing this site, both from a topographical and financial standpoint. The plot of land recommended for enclosure encompasses a valley and hills that initiates can use for screening. As seen in November 2010 initiates set up their huts in the valley during summer season because the walls of the valley provide screening and seclusion. Likewise, the hills provide the initiates with dry ground during the wet season, helping to prevent diseases and infection. By enclosing the small hill located in the western region of the proposed site that provides a view over the site (Figure 15), the privacy of initiates will be further increased. It is important to include the hill inside the site fence to maintain this privacy. Money will be saved by merging the fences that will be installed by the City of Cape Town on the northern and southern site borders with the Denel fence that currently exists on the west side of the proposed site. City officials do not anticipate that permission will need to be granted from Denel to build up to their fence.

Given that a portion of the proposed site is controlled by Denel (Figure 18), it is proposed that the development of the site be undertaken in two phases. Phase I will incorporate 3,8 hectares of

city-owned land, during which time the City will negotiate the acquisition or lease of the Denel-controlled land with the National Department of Public Works.

Phase II could commence once the Department of Social Development has acquired rights to the additional 4,4 hectares of adjoining land. This proposal will be comprised of the Denel-owned parcel in addition to 0,64 hectares of city-owned land. The disposal of the Denel-owned land to the City is a distinct possibility, given that its topography renders it unsuitable for most commercial uses and given the State's support for initiation initiatives.

Figure 18 - Land Ownership Distribution of the Good Hope College Initiation Site

Maps showing the development of both phases are shown below in Figure 19 and Figure 20. The complete reservation of City land applications are found in Appendix L.

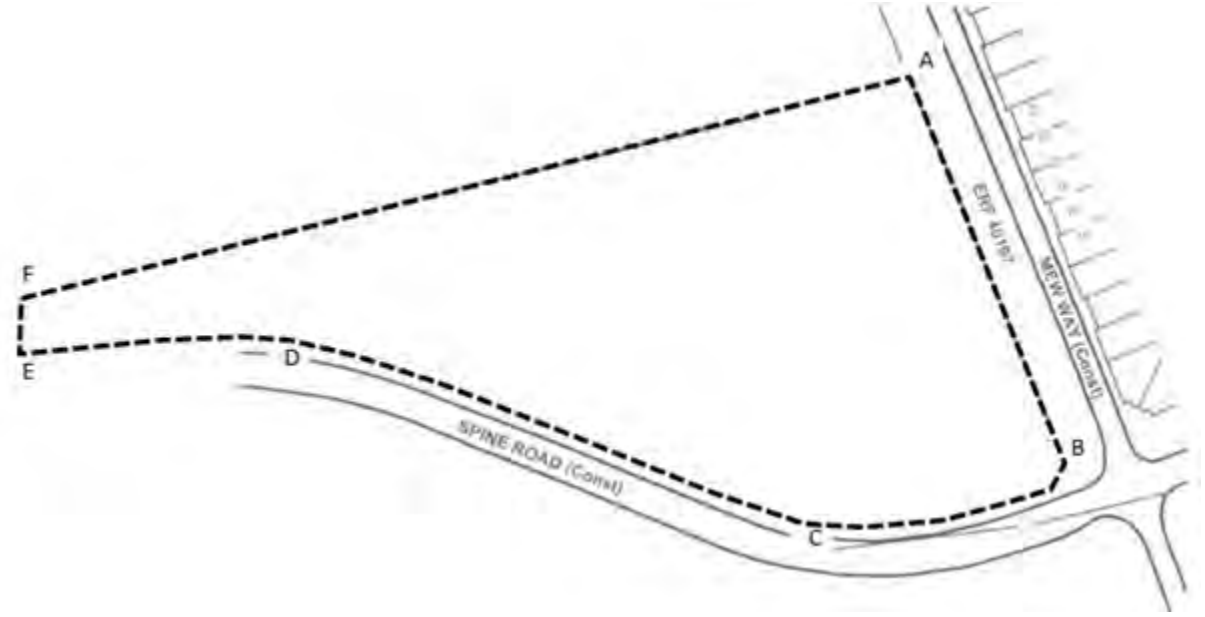


Figure 19 - Phase I

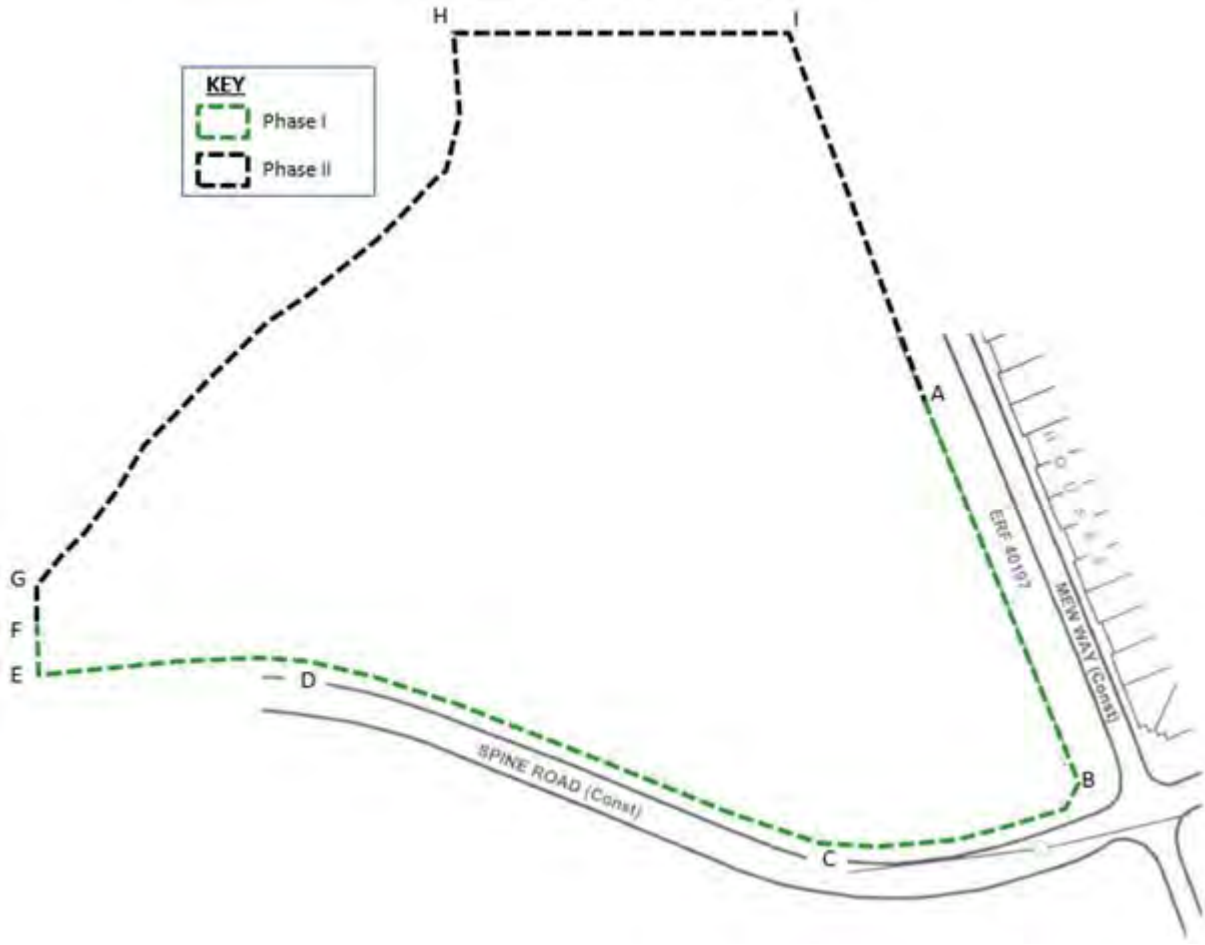


Figure 20 - Phase II

3.3 Recommendations

Recommendations for fencing, site access, vegetation, and water supply are as follows.

3.3.1 Fill

Currently there is a two metre decline approximately 3-7 metres away from and for a distance of 160 meters parallel to Spine Road. This steep grade will need to be filled in order to properly install a fence. This will increase the cost of construction, but will provide a level surface for a fence to be constructed. Approximately 800 m^3 of fill will be needed to address the decline on the Spine Rd. boundary. To avoid the cost of an additional 1,5 metres (creating a level surface 11,5 metres from the road) that will be needed if hedges are to be planted adjacent to the fence along Spine Road, trees are to be planted parallel to the fence at the bottom of the slope. This cost of implementing trees (rather than shrubs) along the 160 metre length is identical given a cost of R12 per shrub, and R60 per tree.

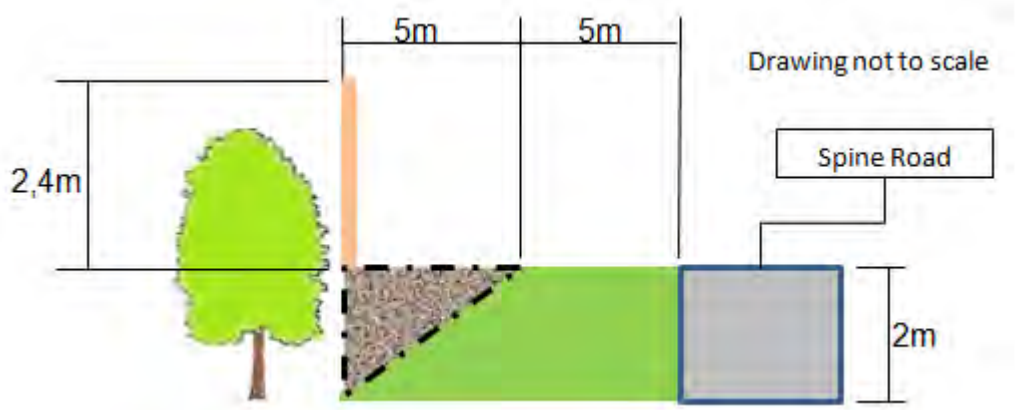


Figure 21 - Dimensions for Necessary Fill

3.3.2 Fencing

A 2,4m tall concrete palisade fence, built to the same specifications as the Langa Site fence, will be constructed along the perimeter of the site (excluding the side enclosed by the Denel fence) along the 1 006 metre perimeter. The fence will include a one metre wide pedestrian gate and a 3 metre wide double gate for emergency vehicle access. Both gates will be 2,4 metres high (Appendix B). The gates should be located on the northern fence, close to Mew Way, since the adjacent property is reasonably level, is city-owned and can be used for car parking for people attending to the initiates. A dropped curb will be required to allow for vehicular access.

While thick hedges and wooden fences were considered, a concrete palisade fence was deemed more acceptable by all those with whom the City has spoken because it is harder to penetrate than a thick hedge or wooden fence, more impervious to wear and age than a wooden fence, and less likely to be stolen, or cut down and burned for fire wood. Alternative forms of deterrents such as signs may also not be effective because some Khayelitsha residents are not literate, and a sign with or without words may still be stolen or ignored.

There will be little additional cost for fencing materials following the construction of the fence for phase I because the fence posts installed in the first phase can be moved to the perimeter of the phase II site area, leaving 78 m of spare fence. Due to fencing labor costs, however, it will be less expensive to build the recommended site layout all at once, rather than in phases. Detailed specifications for the design of the fence and gates can be found in Appendix A.

3.3.4 Vegetation

Hedges should be planted along the inside of the fence to re-enforce screening and to help the fence blend into the surrounding environment. The hedges shall consist primarily of shrubs, the exception being trees planted along the 160 metre stretch at the edge of the slope adjacent to Spine Rd., which should be trees. Shrubs should also be planted around the bathroom and shower facilities to provide privacy.

There are three types of shrubs that have been recommended by the City Parks official and Kirstenbosch staff personnel. In a discussion of seven pre-selected shrubs and trees that were chosen for their ability to handle the harsh winds, sand, and high water table present at the Good Hope Initiation Site, the *Chrysanthemoides monilifera* (Tick Berry), *Rhus crenata* (Dune Crowberry), and *Metalasia muricata* (White Bristle Bush) have been selected for site use. All three are tough, indigenous species favorable for planting. All three grow at least 2 metres in height, and spread to create what will appear as a single seamless hedge. Of the three, the *Rhus crenata* is the most favourable plant since it is the fastest growing, and does well in open areas. The *Chrysanthemoides monilifera* flowers in the summer and will contribute to the aesthetic appearance of the initiation site. The three species can co-exist, and may be planted together in any pattern or arrangement. Other plants that can be considered include the *Brachylaena discolor (Coast Silver Oak), Tarconathus camphorates* (Camphor Bush), *Sideroxylon inerme*

(Bully Tree), and *Ficus natalensis* (Natal Fig). Of these trees, the *Ficus natelensis* is planted at the formal Langa Initiation Site. The *Brachylaena discolor* in particular, is a very dense bush that grows to a height of 4-10 metres, and it was recommended to be planted along with the *Chrysanthemoides monlifera, Rhus crenata,* and *Metalasia muricata* to help thicken the hedge. The shrubs and trees, as listed in order of recommendation for planting on the Good Hope initiation site are as follows:

Table 1 - Recommended shrubs and trees for Khayelitsha[3]

Type of Vegetation	Height (m)	Cost per plant	Necessary Units	Total Cost
Rhus crunata	3	R12(4 kg)	502	R6 024
Chrysanthemoides monilifera *(Tick Berry)*	2	N/A	502	N/A
Metalasia muricata *(White bristle bush)*	2-4	R12 (4 kg)	502	R6 024
Trees—listed in order of recommendation				
Brachylaena discolor *(Coast Silver Oak)*	4-10	R60 (20kg)	100	R6 000

Any of the seven shrubs and trees discussed is believed to be suited for the Good Hope Initiation Site's conditions, and may be planted inside the site where more vegetation is needed. All the plants mentioned above are indigenous evergreen species and can survive in sandy land and are tolerant of drought. The Kirstenbosch Gardens Environmental Education staff personnel has used all of the plants in Khayelitsha, and have had great success, particularly at Luhlaza High School, down the road from the Good Hope Initiation Site. A complete list of shrubs and trees which have been hand-selected to be most successful at the Good Hope Initiation Site by the horticultural experts, with whom the group spoke, may be found Appendix J.

The best time to plant shrubs and trees in Cape Town is during the months of April, May, and June. All recommended plants require an irrigation system, primarily between the months of January and March, when the temperature is particularly high. An irrigation system will need to be implemented for the at least the first year to help ensure the success of the shrubs and trees. It has been determined that since the Denel Land which borders the recommended site layout is

[3] Note: Total units are based off of 2 m spacing between shrubs, and 10 m spacing between trees. Total cost is based off of hedge consisting of only the specified type of vegetation. Varying type of vegetation in hedge will affect total units and total cost.

inaccessible by the public, and is rarely traveled by Denel employees, it is unnecessary to place a hedge of any sort down the length of the 297 metre Denel fence. This will save a considerable amount of money on both shrubs and irrigation.

Shrubs should be planted a distance of two metres apart on the inside of the fenced perimeter, with irrigation placed halfway in between every two plants. Shrubs are less expensive than trees, and spaced 2 metres apart, are expected to create a thick hedge for screening purposes in a relatively small period of time. The diagrams for both phases are shown below.

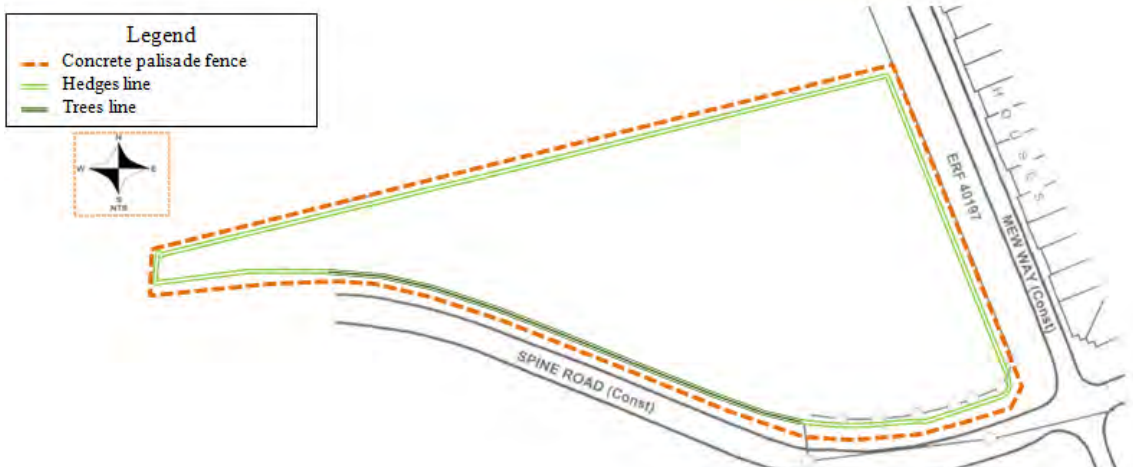


Figure 22 - Vegetation Layout for Phase I

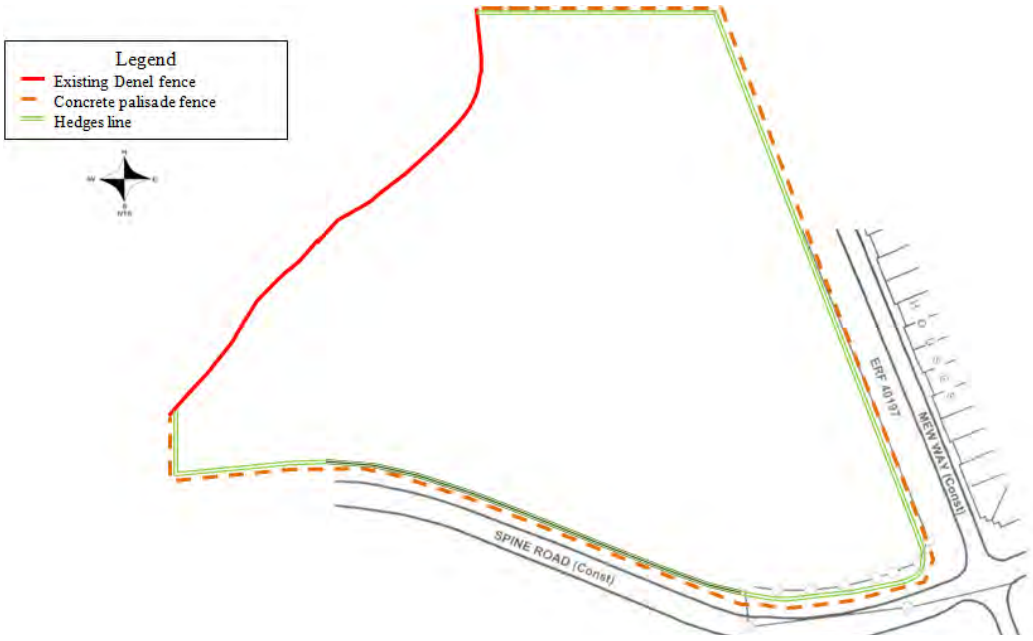


Figure 23 - Vegetation Layout for Phase II

3.3.3 Water Supply

Water is needed on formal initiation sites for both showers and irrigation purposes. Currently there is no water supply on the Good Hope College Initiation Site. Water will be supplied from a 500mm bulk water supply that runs parallel to Mew Way Road on the eastern border of the proposed site. A T break will be installed to the mainline as shown in the diagram below, which reduces the mainline water flow from 500mm to 100mm before the water travels into a 50mm pipeline.

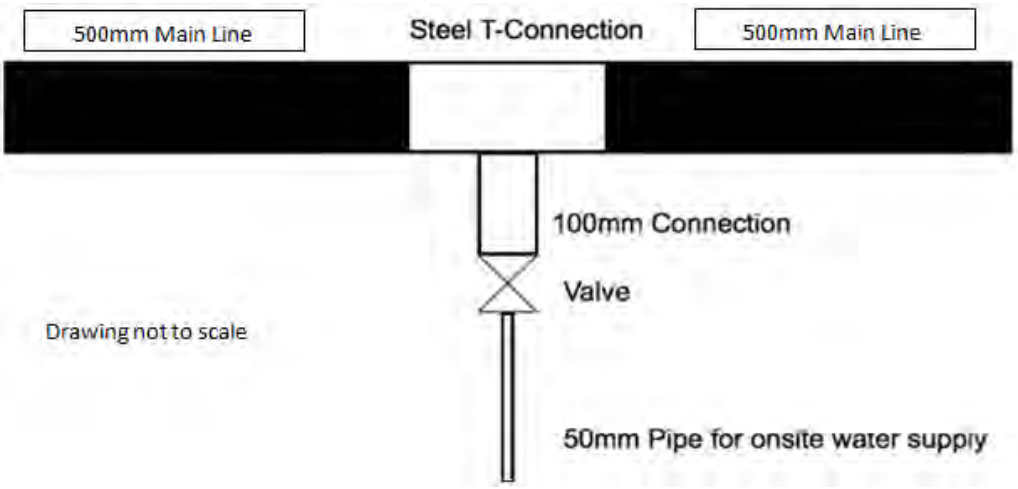


Figure 24 - Steel T-Connection

A water meter must also be installed inside the site perimeter by the Department of Water and Sanitation. The water meter will be enclosed in a safe box placed at ground level, with a locking cover to prevent vandalism. A design for the water meter can be viewed in Appendix F.

3.3.3.1 Showers

One outdoor shower tower with 2 showerheads and 2 water taps will be built on site. The shower will be 2 meters in height and enclosed by mesh fencing with shrubs planted around the fence for privacy and aesthetic purposes. Specifications for the showers can be found in Appendix K.

The shower will be located in a relatively high flat area with an elevation of approximately 34 metres so that during the rainy season, the shower facility will not be flooded.

The shower will be located approximately 25 metres from the northern perimeter and 55 metres from the eastern perimeter, a location in proximity to where initiation huts appear to be concentrated. Shower water should be carefully managed so as not to pond or run across surface

in ways encouraging disease spread. Health professionals and appropriate agencies should be consulted.

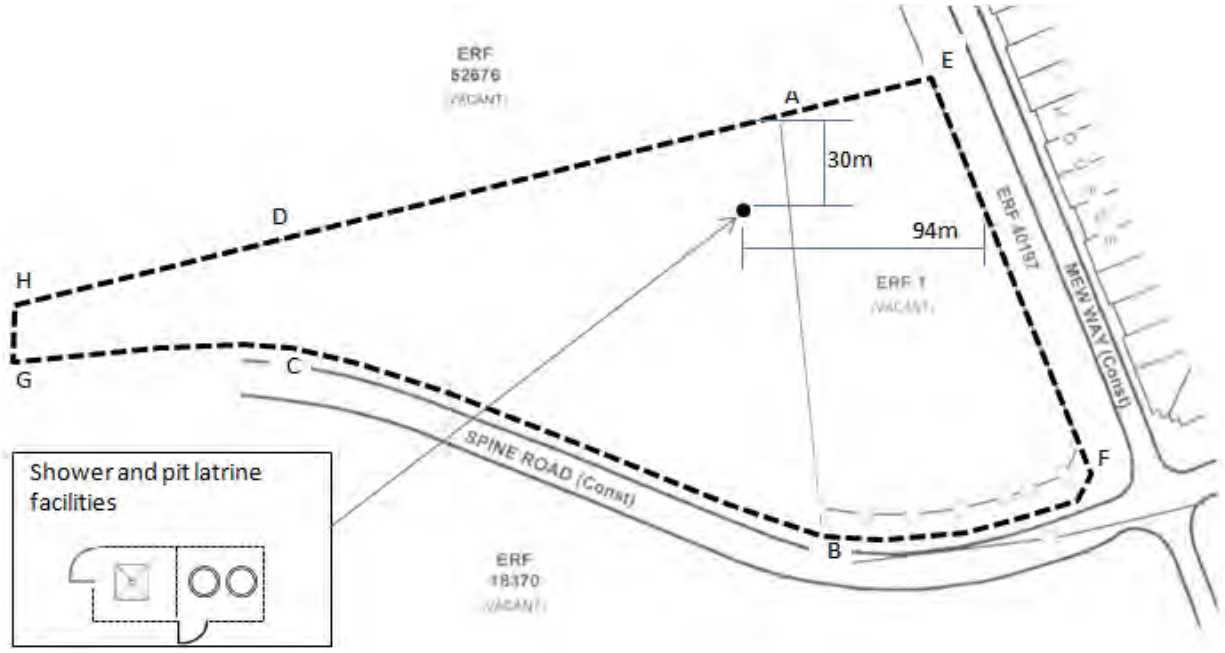


Figure 25 - Location of Toilets and Pit latrines

3.3.3.2 Irrigation

A bubbler irrigation system must be installed to provide water for the hedges on the site perimeter. The irrigation system should be installed immediately after the shrubs/trees have been planted. Bubblers should be placed at the base of the trees and two metres apart between shrubs.

Specifications for the irrigation system are detailed in Appendix D.

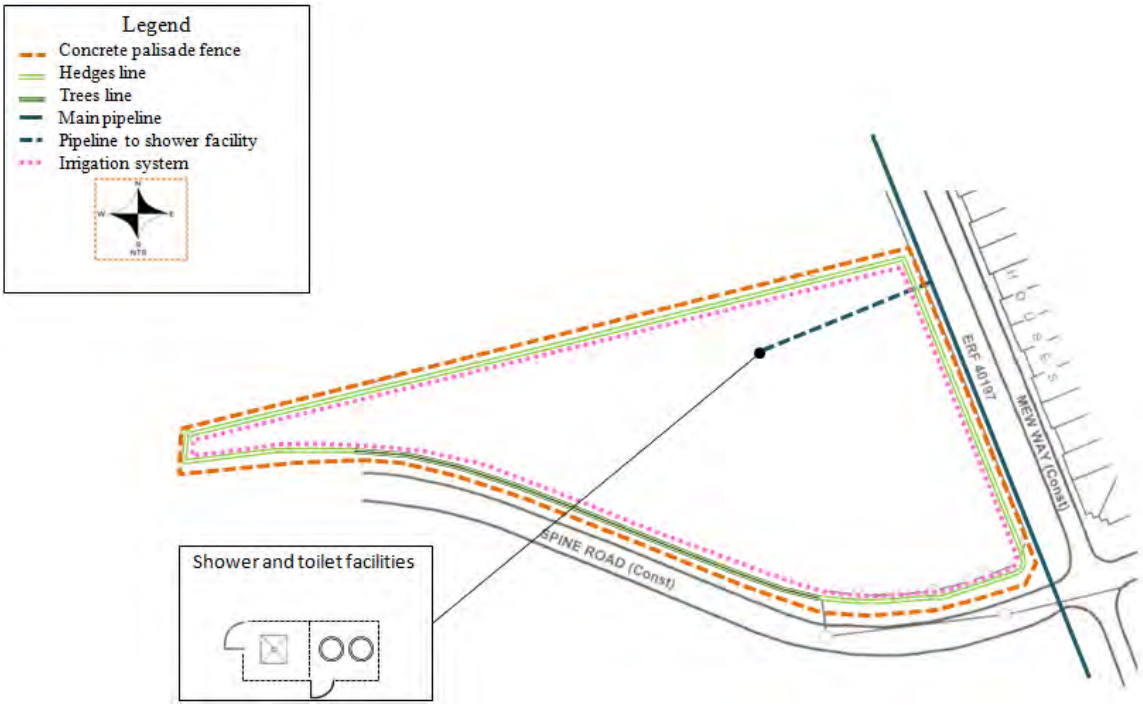


Figure 26 - Irrigation, Vegetation and Pipeline for Phase I

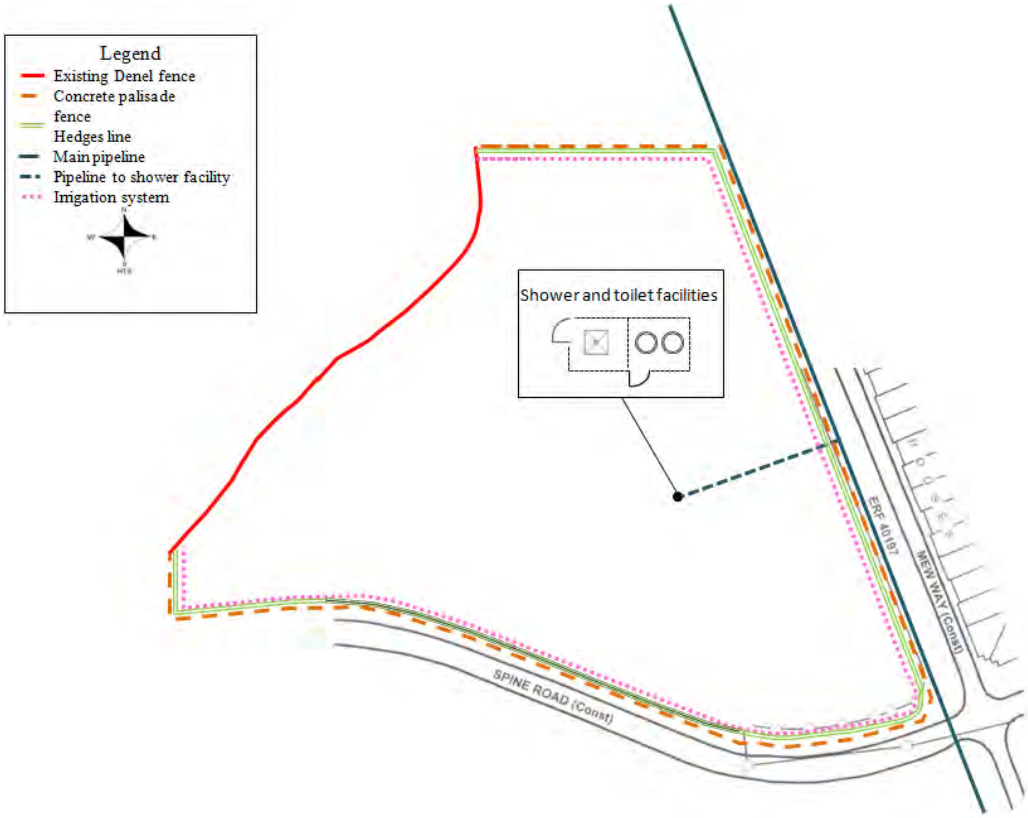


Figure 27 - Irrigation, Vegetation and Pipeline for Phase I

3.3.3.2 Toilets

Two toilets are recommended to be constructed at the Good Hope Initiation Site. Currently, initiates have been reported to dig holes on the site premises, and then fill them back in. This is an unsanitary method that can draw flies and other potential infection and disease vectors. Given the challenges with toilets in Khayelitsha, the team has left the decision regarding the type of toilets to be constructed to the Department of Social Development.

In the case of installation, recommendations have been made as to the location of the toilets. The toilets should be located in close proximity to the shower tower to ensure that the initiates will be able to wash their hands after using the facility. They will preferably be placed closer to the car gate and car drive way along the fence so that all maintenance for the type of toilet system chosen can be performed without coming into unnecessary contact with initiates. The toilets should be located on the side opposite the showers from the initiates to help ensure that they are far enough away to assure no cross-contamination of areas – i.e., avoid shower water running near toilets, or any problems of contaminating shower or hut areas should toilets malfunction or not be regularly serviced. Health professionals and appropriate agencies should be consulted.

Important to note is the location of the nearest sewer line, which is located along the side of Mew Way Road, opposite the proposed initiation site. Any system that requires connection with this line will likely also incur considerable expenses.

Chapter 4: Phase I - Good Hope College Initiation Site Management Plan

4.1 Site Management

The Good Hope College Initiation Site management shall consist of an initiation site committee, site manager, and associated government officials. The Langa Initiation Site Committee is composed of 6-7 volunteer community members, and it is recommended that the Good Hope College Initiation Site Committee be of similar size. Much of the success of this site will rely on the involvement of these site committee members in the community.

4.2 Role of the Site Committee

The Good Hope College Initiation Site Committee will need to create awareness in the community about the initiation seasons and tell prospective initiates what needs to be done to be initiated. As is done by the Langa Site Committee, an advertisement will need to placed in the local newspaper and on the radio, if possible, to spread news of the upcoming initiation season to the families of eligible males in Khayelitsha. The site committee must then hold a meeting where the steps to be initiated are outlined. It is advisable that the Good Hope College Initiation Site Committee follow the Langa Site Committee's lead, and recommend trusted *ikhankathas* to the community. This is another reason why the Site Committee members must be well-informed and involved in the Khayelitsha initiation community.

For safety reasons, the Good Hope College Initiation Site Committee needs to require that all initiates who undergo the ritual provide the *ingcibi* with a medical certificate that affirms their health status. Provision of the certificate to the surgeon prior to the date of circumcision (the first day of initiation) is suggested.

4.3 Site Manager

A site manager is needed to manage the site throughout the year. The Good Hope College Initiation Site Committee shall recommend candidates to the South African Heritage Resource Agency and the Department of Arts and Culture, who will then hire an individual for the position.

The site manager is responsible for registering initiates, overseeing the site conditions, controlling access to the site, and enforcing site regulations. When a boy arrives, the site manager will make sure he has a valid medical certificate in his possession, and proceed to register him. The site manager must know how many initiates are on site at all times for their safety. If there are any major issues or problems, the site manager will alert the site committee in a timely manner.The manager should be able to be on site any day at any time to ensure the safety and security of initiates in the case of an emergency.

As part of his role to oversee site conditions, the site manager will evaluate the initiation site and report these conditions to the site committee, who then submits a monthly report to the Department of Arts and Culture and the Department of Social Development so that they may make the necessary repairs and adjustments, and request a budget allocation when necessary.

Two site access gates, one swinging gate entrance and one pedestrian entrance, will be located on the northern side of the site. Cars shall only be permitted by the site manager to be on site for maintenance and emergency purposes.

The vehicular gate entrance allows for waste management trucks to enter the site in order to pick up the tires, sand, rubble, and miscellaneous trash items are dumped on site. Trash left on site presents health issues for the initiates and needs to be removed. The Initiation Site Committee shall evaluate the site's conditions once every month, and then provide a written report to the City of Cape Town's Department of Solid Waste to arrange trash pickups. Trash pickups should be arranged more frequently during the initiation seasons.

The pedestrian gate will remain open during the day but closed at night, to allow families and *ikhankathas* to enter the site on a regular basis so as not to inhibit the ritual while keeping the site secure at night. The site manager shall ensure that both gates are closed during the off-season, and will only open them for maintenance purposes.

All vegetation currently on site should be left to grow, including the Port Jackson tree, which is preferred for its ability to provide screening and create a forest-like environment. The site manager shall enforce these regulations (and check irrigation working, monitor toilets, etc.).

A list of regulations shall be created by the site committee and site manager to ensure the safety of initiates and the preservation of the initiation site. The proposed Langa rules discussed in 2.2 Role of the Site Committee should be used initially in developing the rules for the Good Hope College Initiation Site.

Chapter 5: Phase I Cost Estimates

Phase I cost estimates are outlined and recommended initially because it has been determined that it is not feasible to develop the entire site at once. Cost estimates for phase I are as follows:

5.1 Capital Costs

The cost estimates provided in this report are based on data provided by relevant city departments, or consultant firms. Some have been specifically calculated for the project, while others are based on estimates of similar work undertaken in other projects. In the case of the showers, the cost of the installation of the showers at the Langa Initiation site has been increased by 30% to take into account price escalation during the five years since installation. The only item for which no reliable cost is available is the cost of filling the area in the vicinity of the Spine Road fence. An allowance of R100 000 has been made for fill, which could be a combination of builder's rubble and local soil type.

Table 2 - Total Cost Estimates for Phase I

Item	Number of Units	Units	Unit Cost (Rands)	Total Costs (Rands)
Fencing	1 003	metres	210	210 630
Gates	1	estimate	6 800	6 800
Fill	800	$metres^3$	250	200 000
Shrubs	502	4 kg./ bag	12	6 024
Trees	101	20 kg/ bag	60	6 060
Irrigation	1	system (estimate)	192 990	192 990
Water supply	1	system (estimate)	17 600	17 600
Showers	1	shower	50 000	50 000
Curb drop	1	estimate	6 000	6 000
			Total Cost	**690 044**

Costing Notes

- ALL COSTS ARE EXCLUSIVE OF VAT OR CONTINGENCIES
- Fencing (1,000 m): based on current Annual Tender contractor prices of R1 900 per 10 meters for concrete palisade fencing, escalated by 10%. The tender is managed by the City's Environmental Design Branch
- Steel Palisade Gates: Price is listed in the annual tender managed bythe City's Environmental Design Branch, and escalated by 10%
- Fill: Uninformed set-aside amount. Cost will be affected by type of fill and distance from which transported
- Dropped Curb: based on estimate from Roads & transportation Dept
- Water Supply: The cost of installing the T-break to the mainline is approximately R20 000. Cost to install a 50mm open trench pipeline to the shower is approximately R200/metre and is included in shower installation cost
- Showers/taps: based on Langa Initiation Site 2006 estimate of approximately R40 000, escalated by 30%
- Irrigation: The specification and pricing was provided by Turf-Ag. (A local irrigation company). The cost irrigation system is based on installation of bubblers spaced 2m apart
- Shrub hedge: Costing is based on rate of R12 per shrub, with shrubs planted 2m apart

5.2 Site Management and Operational Costs

The only operational cost that will be incurred is the cost to employ the site manager. The site manager at Langa currently earns a wage estimated to be approximately R15 000 per year.

Chapter 6: Implementation of Good Hope College Initiation Site

6.1 Land Transfer

Development of the site can only commence once the property has been transferred to the Social Welfare Department. The application for the transfer of land has already been made. It is assumed that the transfer will be completed in January 2011 in order to begin development before the end of the fiscal year.

6.2 Waivers

To ensure that the proposed site fencing does not interfere with underground utilities, applications for waivers will have to be submitted to Telkom (telephone cables), Eskom (electrical cables), and water supply and sewage lines (Water and Sanitation Department).

6.3 Environmental Clearance

A Notification of Intent to Develop (NID) will have to be submitted to Heritage Western Cape for permission to construct the fence without having to follow the full Environmental Impact Assessment process. The NID must be submitted to the City's Heritage Resource Section, Environmental Resources Management Department

6.4 Building Plan Approval

Fencing and shower building plans must be submitted to the Building Development Management Department for building plan approval.

6.5 Tendering Process

In the absence of experienced project management staff, it is recommended that the Social Development Department seeks the assistance of relevant line departments when tendering for contractor services for the implementation of all capital projects. However, the Department must first make the necessary reservation of funds for each capital project.

- Fill: a contractor should be contacted by the City of Cape Town
- Fencing: The Urban Design Department manages an annual tender for concrete palisade fencing.
- Irrigation and Planting: Contact the City Parks Department

- Water Supply: Contact the Khayelitsha office of the Water and Sanitation Department
- Dropping of Curb: Contact Roads and Stormwater Department at Mitchells Plain

Chapter 7: Phase II

This report has focused on Phase I of the development of the Good Hope College Initiation Site.

The completion of Phase II will be dependent upon the success of the City's application to the National Department of Public Works for the sale or lease of the required portion of the Denel site.

We wish, however, to highlight the following:

- In the application to the National Department of Public Works, Appendix L – Phase II, in this report may be used as the basis of the description of the recommended site that is required. Special reference should be made of the fact that the land requested is located outside the Denel fence, the topography of the site renders it useless for commercial development, and that initiation initiatives are supported by the national government
- The enclosure of the whole site at one time will be R20 000 cheaper than the cost of the two phase development, however, the total development is likely not feasible in a timely manner. Cost would be reduced because concrete palisade fencing is not required on the western boundary because of the existing Denel fence.
- In the two phase development, most, if not all of the concrete palisade fencing along the Phase I northern boundary can be dismantled and re-used to increase the size of the site.

Appendix A - Fencing Specifications

SPECIFICATION

FOR

HEAVY DUTY PRE-CAST CONCRETE PALISADE SECURITY FENCING

1 SCOPE OF SPECIFICATION

The specification provides for the manufacture and erection of heavy duty 2,4 m high precast palisade fencing and gates for substation sites measuring ± 16 m x 12 m as indicated on drawing No. DR 3103A.

2 APPLICABLE STANDARDS AND DRAWING

2.1 Drawing Details

DR 3103A Concrete palisade security fencing.

2.2 SABS Specifications

SABS 135 ISO Metric Black Bolts, Screws and Nuts (hexagon and square)

SABS 763 Hot-dip (galvanised) Zinc Coatings

SABS 471 Portland Cement (Ordinary, rapid hardening and sulphate resisting)

SABS 626 Portland Blast Furnace Cement

SABS 831 Portland Cement 15 and Rapid-hardening Portland Cement 15

SABS 1083 Aggregate from Natural Sources

SABS 920 Steel Bars for Concrete Reinforcement

SABS Code of Practice 0100 The Structural use of Concrete Part 2

SABS Method 863 Compressive Strength of Concrete

BS 4482 Hard Drawn Mild Steel Reinforcing Wire 480 MPa

BS 5896 Specification for high tensile steel wire strand for the prestressing of concrete.

3 MATERIALS

3.1 Bolts, Nuts and Washers

3.1.1 Hinge bolts, bolts, nuts and washers shall comply with the relevant requirements of SABS 135, CKS 264 and paragraph 3.1.11 of CKS 451.

3.1.2 All nuts, bolts and washers shall be electro-galvanised (Zinc and chrome passivated).

3.2 Finish Welding

The welding shall be such that the profiles of the welds merge smoothly into the adjacent surface of the parent metal without excessive overlap. The weld faces shall be reasonably uniform and shall be free from excessive porosity, cavities and trapped slag. The weld metal, the heat-affected zone and the adjacent parent metal shall be free from cracks.

3.3 Galvanising

A class A heavy galvanised coating complying with the relevant requirements of SABS 763 and SABS 675, except that any surface on which the galvanising is removed or damaged shall be re-coated with a zinc-rich epoxy primer complying with the requirements of SABS 926.

3.4 Pre-fabricated Concrete Elements

3.4.1 Workmanship and finish in general : All concrete elements shall be manufactured from sound concrete, free of structural defects complying with any sample if previously submitted. All elements shall have off-shutter finish on three sides, whereas the fourth side shall be wood floated finish.

3.4.2 Shape and dimensions : All elements shall retain that required shape and be true to the respective and specified dimensions as indicated on the drawings.

3.4.3 Performance requirement (strength) : The required concrete compressive strength in all prefabricated prestressed elements shall be a minimum of 40 MPa at 28 days determined in accordance with SABS method 863.

3.4.4 Curing : All concrete elements shall be cured in accordance with the recommendations given in SABS method 863.

3.4.5 Reinforcement : All steel used or reinforcement in prefabricated elements shall be high yield steel with a minimum characteristic strength (fy) of 410 MPa, and shall be free of rust, loose scale, flux, grease or oily substances and shall in general comply with SABS 920 and BS 4482.

3.4.6 Prestressing steel : All wires shall be of the crimped variety and shall be free of rust, loose scale, flux, grease or oily substances and shall in general comply with SS 5896.

3.4.7 Concrete tests : Compressive strength tests of a minimum of 3 cubes per test in accordance with SABS method 863 shall be conducted on every batch of 600 pales but not less than one set of tests per job.

3.5 Post (Concrete)

3.5.1 The post shall be 3,0 m long and slotted, as per DR 3103A to take the horizontal load bearing rails. The front edge shall be curved. The curved section shall be 80 mm wide tapering to the back to 140 mm. The thickness of the post shall be 225 mm. Posts shall be spaced at 2,0 m crs.

3.5.2 The post shall be prestressed with six 4 mm wires grade 1550/1700 MPa stressed to 75% of U.T.S. (Ultimate tensile strength). Prestressed wires shall be cut at surface level and covered with two component epoxy mortar colour grey. The top of the post shall be angled at 45°.

3.6 Pales (Concrete)

3.6.1 The pales shall be 2,4 m long with two 10 mm holes to take 8 mm carriage type bolts. The front edge shall be curved. The "curved" section shall be 80 mm wide tapering to the back to 100 mm. The thickness of the pales shall be 75 mm. Pales are to be spaced at 200 mm crs.

3.6.2 The pales shall be prestressed with four 4 mm wires grade 1550/1700 MPa stressed to 75% of the U.T.S. (Ultimate tensile strength). Prestressed wires shall be cut at surface level and covered with two component epoxy mortar colour grey. The top and bottom of the pales shall be angled at 45°.

3.7 Rails (Concrete)

3.7.1 The rails shall be 1,98 m long with nine 10 mm holes to take 8 mm carriage type bolts. The rails shall be 150 mm wide and 80 mm deep. All rails are to be grouted into the posts.

3.7.2 The rails shall be prestressed with four 4 mm wires graded 1550/1700 MPa stressed to 75% of the U.T.S. (Ultimate tensile strength). Prestressed wires shall be cut at surface level and covered with two component epoxy mortar colour grey.

3.8 Bolts

3.8.1 All bolts used for the erection of the fence shall have their ends burred over. The holes shall be filled with epoxy.

3.8.2 All nuts, bolts and washers used for the erection of the fence shall be electro-galvanised (zinc and chrome passivated.)

3.9 Gates - 16 x 12 m Enclosures

3.9.1 Gates 3,0 m wide x 2,25 m high with serrations on top rail.

3.9.2 Frame manufactured from 2,0 mm thick tube all welded together.

Vertical stiles	40 mm x 40 mm
Horizontal rails	60 mm x 40 mm
Vertical bars	27 mm diameter at 150 mm centres
Slam plate	10 mm thick flat plate welded to end of one gate leaf

3.9.3 Lock mechanism 10 mm thick flat slotted plate welded to and set projecting from closing stiles of each leaf to take padlock, supplied by others.

3.9.4 Drop bolts Manufactured from 16 mm diameter bar once bent with housing externally welded to face of frame, the other end housed in 32 mm diameter tubular gate stops 300 mm long concreted in open and closed position for each leaf.

3.9.5 Gate leaves hung on posts size 3,0 m x 127 mm diameter x 2,50 mm wall thickness by means of steel collars with pintle hinges four times bolted on, concreted in position in bases size 450 x 450 x 600 mm and tied back to concrete precast end posts with 10 mm threaded rod turned into 10 mm diameter u-pat USA wedge anchor or similar in post.

3.9.6 All components hot dip galvanised after manufacture.

4 ERECTION

4.1 Foundations

4.1.1 Each post shall be embedded to full depth in concrete in a foundation hole of at least the relevant of the following sizes:

Post Concrete 450 mm x 450 mm and a depth of 600 mm.

4.1.3 The filling and foundation holes and pouring of the concrete shall comply with paragraph 4.2.1 of CKS 451.

4.1.4 Foundations shall be a minimum of 15 MPa at 28 days.

5 PRESTRESSING

5.1 The prestressing shall be carried out using suitable hydraulic equipment accurately calibrated by a recognised authority to ensure that the prestressing force is correctly and evenly applied.

5.2 Suitable approved grips shall be used to hold the wires at both ends to ensure the prestressing force is maintained on the wires at all times during concreting and curing.

5.3 **Covering of prestressed wires**

All surfaces to be covered with two components epoxy mortar must be clean and dry to covering. A minimum cover of 1 mm shall be applied. All epoxy surfaces must be smoothed.

6 GUARANTEE

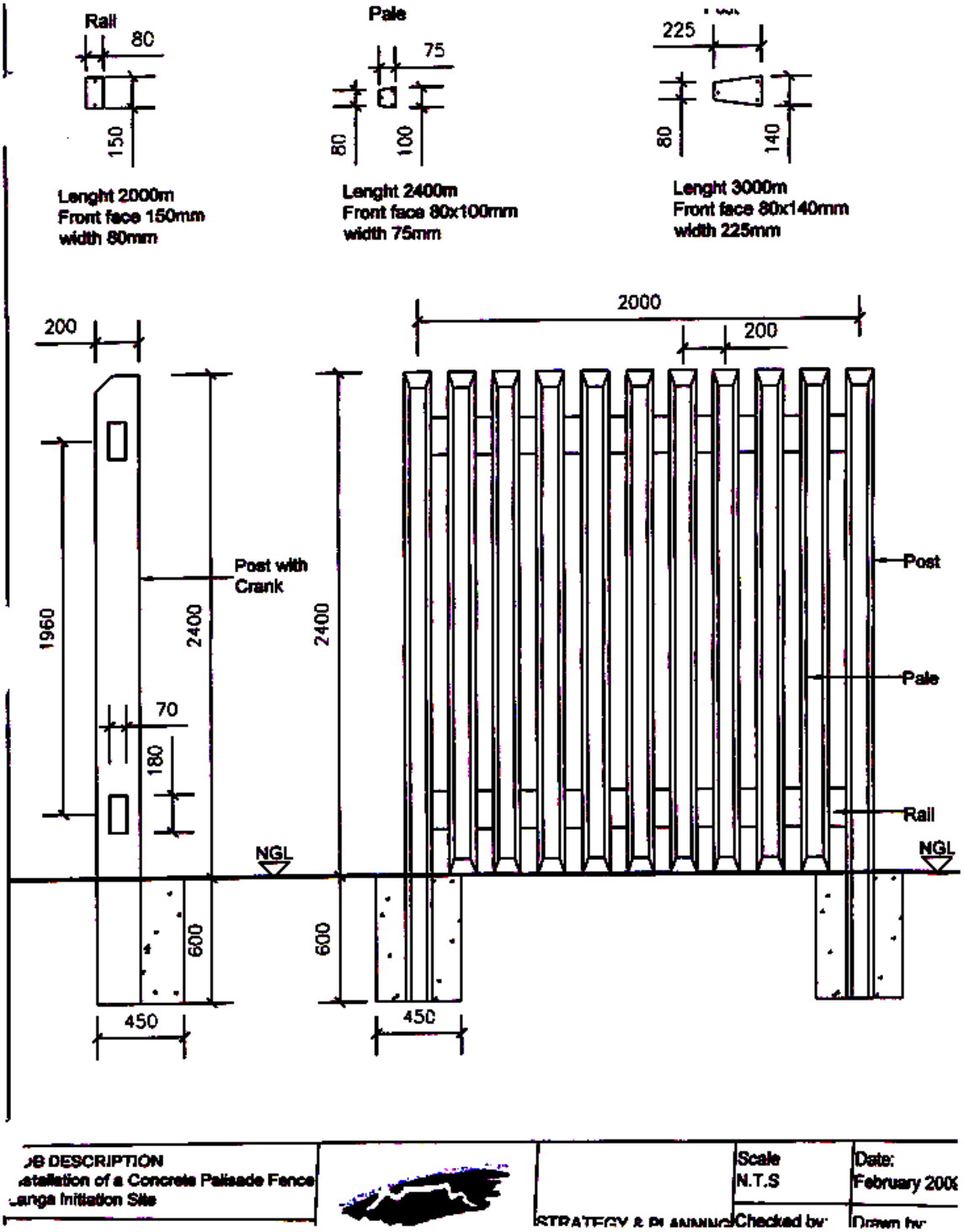
The Tenderer shall guarantee that the fencing offered will give satisfactory service for a period of one year, from the date of completion of installation to the Council, and to replace or repair with a minimum of delay and free of charge any components which may fail during this period, fair wear and tear excepted.

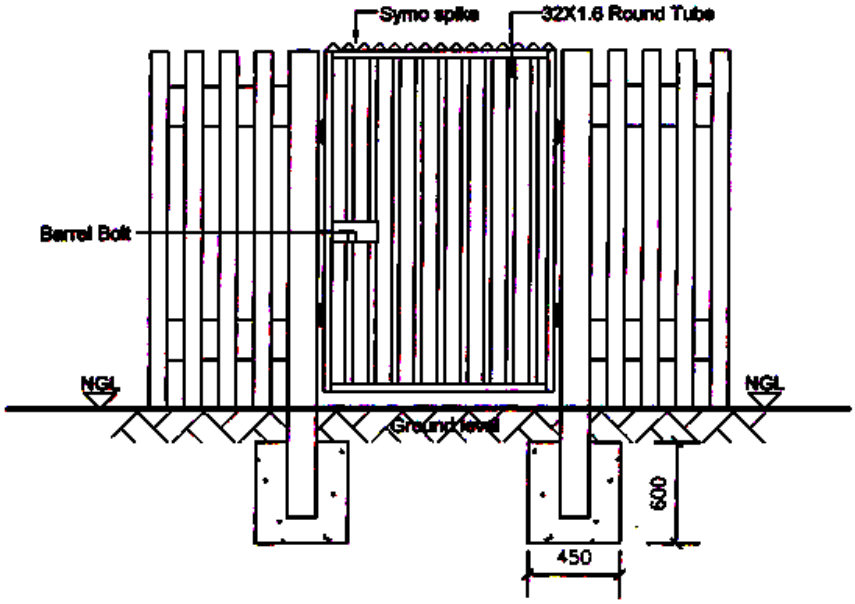
CITY ELECTRICAL ENGINEER

Civic Centre
12 Hertzog Boulevard
CAPE TOWN
8001

1996-10-10

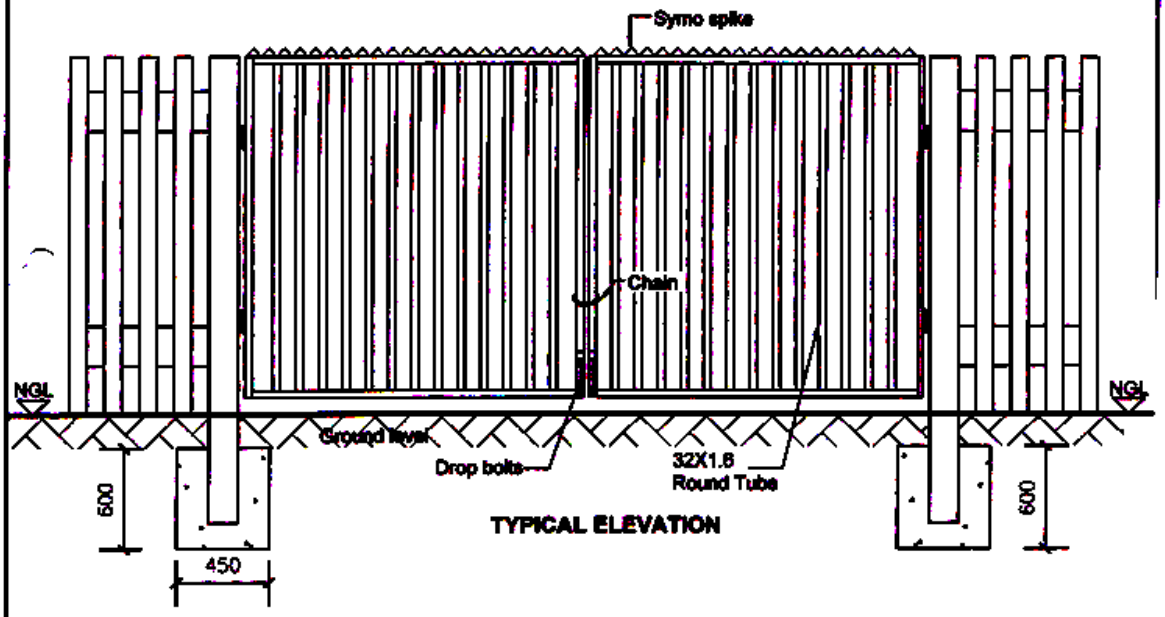
Appendix B - Gate Specification





TYPICAL ELEVATION

DOUBLE GATE



TYPICAL ELEVATION

JOB DESCRIPTION Installation of a Concrete Palisade Fence Langa Initiation Site		STRATEGY & PLANNING	Scale N.T.S	Date: February 2009
			Checked by:	Drawn by:

Appendix C - Planting Specifications

TREE PLANTING- LANGA INITIATION SITE

SCOPE OF WORK:

Planting of 105 *Ficus Natufensis* trees within a section of the concrete palisade fence enclosing the Langa Initiation Site.

The work includes:

A. Digging of tree holes
B. preparation of tree holes.
C. Planting of trees.
D. Staking of trees.

SITE INSTRUCTIONS

1. As per site visits and instructions.
2. NO Excavation machinery to be used – only hand digging allowed.
3. In certain locations the digging of test holes to check on underground services will be compulsory. These sites will be indicated by Council before work commence.
4. Contractor responsible to provide all material to be used eg. Fertilizers, compost, topsoil etc. Trees to be collected from Newlands Nursery.
5. Contractor to ensure safe working conditions for workers, public and traffic. Open tree holes to be fenced off properly e.g. danger tape etc.
6. Refuse,and stones, surplus soil, litter etc to be removed, surplus soil to be evenly distributed on site and site to be left in clean condition.
7. Contractor to comply with all National, Provincial and Municipal Legislations - including Occupational Health and Safety Acts.
8. Contractor to produce a copy of his Company's Public Liability Insurance cover to the value of a minimum of R500,000 at the time of appointment of contract. Insurance cover to be applicable to the type of work to be performed.
9. The top of the tree stakes to be painted with a 100mm wide blue band as a colour coding identification.

Rmillion.

TREE PLANTING SPECIFICATIONS

A. TREE HOLE EXCAVATION:

- Digging 2 or more test holes to locate concrete canal cover.
- Tree holes size must be – 1000mm x 1000mm deep.
- Good in situ topsoil should be stockpiled for re-use.
- Unusable subsoil can be spread over site but rocks and debris must be removed from the site.
- The bottom of the hole must be broken up – 200mm deep to assist drainage and root penetration.
- **Holes to be dug 10m apart and 2m from the palisade fence. The first hole to be located 2m from the Waste Transfer Station wire fence**

B. BACK FILLING OF HOLES:

- Retain 50% of good soil from the hole and mix thoroughly with the following:
  - A. 2 Wheel barrows approved well decomposed compost.
  - B. 1 kg Super Phosphate.
  - C. 500 Gram 3:1:5 Fertilizer
  - D. 300 Gram Bonemeal
- Backfill the holes
- The remaining subsoil to be used for earth shaping or if not needed – to be spread or removed from the site.

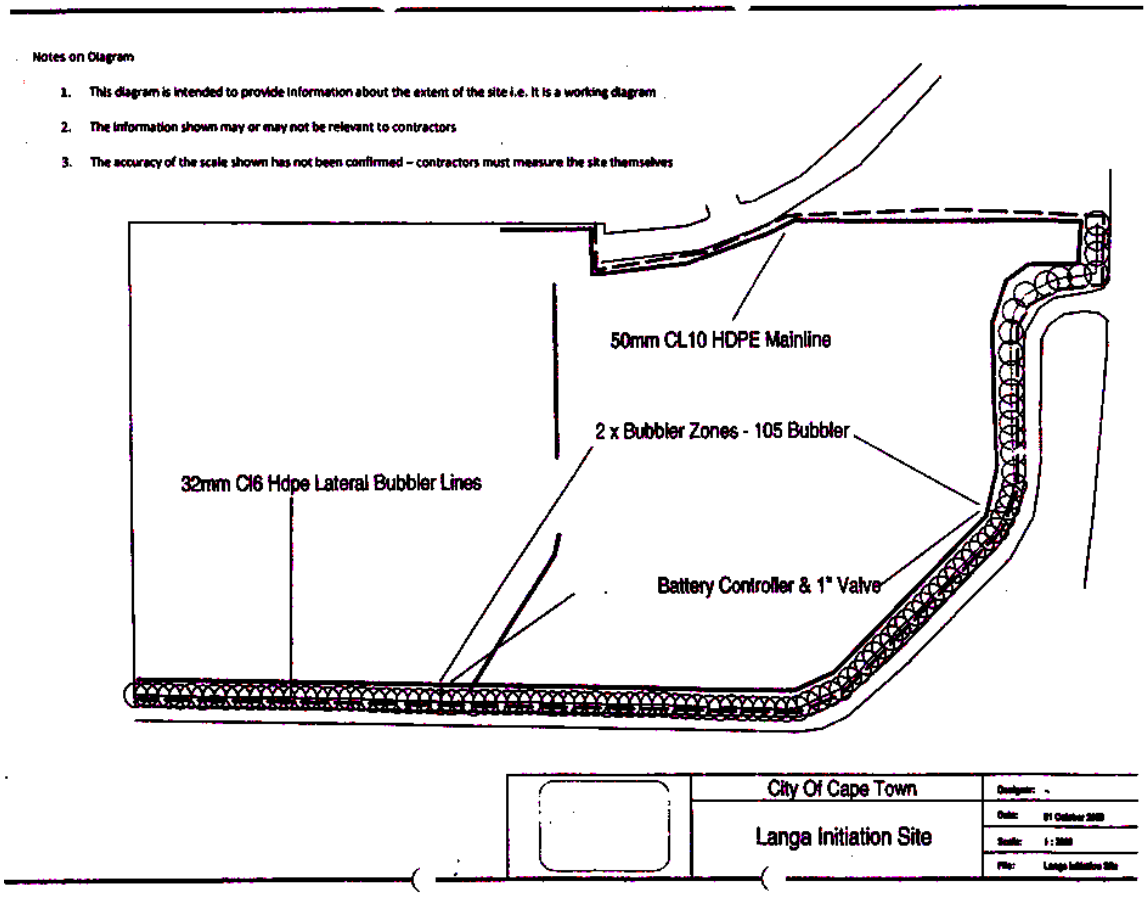
C. PLANTING OF TREES

- Trees to be collected from Newlands Nursery or local Depots – arrange prior with relevant official.
- Trees should be loaded and off-loaded carefully to avoid damage and transported in such a manner to avoid windburn damage.
- Trees to be planted by carefully removing the rootball (keeping the soil intact) from the bag into the centre of the tree hole and in straight line with other trees and to the correct ground level.
- The soil mixture can now be backfilled into the planting hole by compacting it around the rootball, to eliminate air pockets,
- When the planting hole is 2/3rd full it must be filled with water and the soil allowed to settle around the roots.
- After the water has been absorbed – the plant hole must be filled with the remaining soil mixture once again compacted. The trees must again be thoroughly watered to ensure deep water penetration.
- Ensure trees are planted upright and in a straight line – if required e.g. along streets, sidewalks etc.
- Allow for a proper watering basin – 100mm below ground level – as large as the excavated planting hole area.
- The remaining subsoil to be used for earth shaping or if not needed removed from site.
- All trees to have a 100mm diameter black PVC pipe sleeve placed around the base of the tree trunk as protection against weed eater damage.

D. TREE STAKING/SUPPORTS:

- **Each tree to be braced upright in position by 2 Tanalith stakes as per attached drawing specifications and detail.**
- **Stakes should be driven vertically into the ground in such a manner not to injure the tree, tree roots and adjacent underground services – eg. Irrigation pipes, electric cables etc.**
- **Stakes should be at least ¾ the height of the tree.**
- **Plastic tubing , rope, wire etc to be tied in such a manner not to become loose or untidy.**

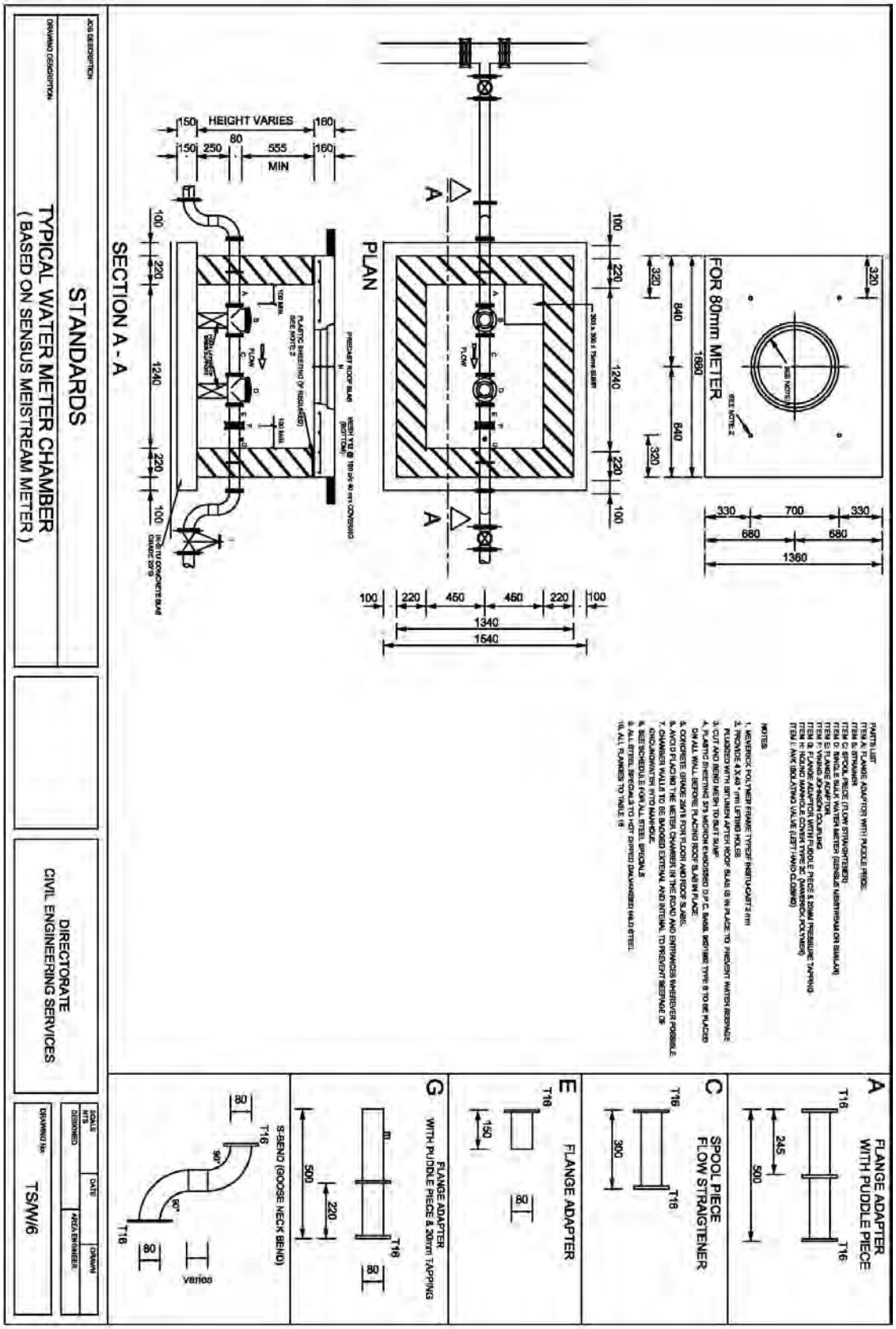
Appendix D - Irrigation Diagram



Appendix E - Irrigation System Materials List

Installation of Irrigation System: Langa Initiation Site				
	Bill of Quantity			
Nr	Description	Qty	Unit Price	Total
	A. Mainline			
A1	Water Connection to Main Supply	1		
A2	40mm Ball Balve	1		
A3	50mm x 11/2" Compression Male Adaptor	1		
A4	50mm Compression Elbow	4		
A5	50mm Compression End Plug	1		
A6	50mm Compression Coupling	9		
A7	50mm Cl 10 PE 100 HDPE Pipe SABS	1100		
A8	Rectangular Valve Box	1		
	B. Lateral Sprinkler Lines			
B1	50mm x 1" Compression Saddle	2		
B2	25m Polyprop Nipple	4		
B3	25mm Ball Valve	2		
B4	25mm Hunter TPV Valve 12 Bar Rated with DC Coils	2		
B5	Rectangular Valve Box	2		
B6	32mm x 1" Compressor Male Adaptor	2		
B7	32mm Compression Tee	2		
B8	32mm Compression End Plug	2		
B9	32mm x 1/2" Saddle	105		
B10	15mm Hunter Funny Pipe Barbed Elbow	210		
B11	15mm Hunter Funny Pipe 30m	2		
B12	Hunter 570 4" Pop-Up Sprinkler	105		
B13	Hunter Pressure Compensating Bubbler	105		
	C. Control System			
C1	Hunter 6 St DDC Battery Controller	2		
C2	9V Battery	4		
C3	3m 314- Wire Connectors	4		
	D. Labour			
D1	Connection to mains	1		
D2	Maine & Lateral Line - Trenching & Back Fill	1100		
			SUB TOTAL	
			VAT 14%	
			Total	

Appendix F - Water Meter Diagram



Appendix G - Utility Services - Water & Sanitation

SERVICES RENDERED	UNIT	REMARKS	2009/10 R excl. VAT	VAT Yes/No	2010/11 R excl. VAT
MISCELLANEOUS TARIFFS					
PERMANENT WATER CONNECTIONS COMPLETE		Not allowed for construction purposes only - use temporary connection. See separate schedule below should Water Management Device be included.			
15mm complete (stop cock+meter box+meter)			1 788.00	y	1 888.13
20mm complete (stop cock+meter box+meter)			2 064.00	y	2 179.58
25mm complete (stop cock+meter box+meter)			4 316.00	y	4 557.70
40mm complete (stop cock+meter box+meter)			7 208.00	y	7 611.65
50 mm complete (stop cock+meter box+meter)		New connection proccessor to check with the Depot/Projects regarding the availability and appropriateness of pre-fabricated meter unit	11 180.00	y	11 806.08
PERMANENT WATER CONNECTIONS (CHAMBER, FITTINGS & METER)					
50mm complete (chamber + fittings + meter)		To be used only when pre fabricated 50mm can not be used (Ref R11 806.08 tariff above)	29 195.00	y	30 829.92

SERVICES RENDERED	UNIT	REMARKS	2009/10 R excl. VAT	VAT Yes/No	2010/11 R excl. VAT
80mm complete (chamber + fittings + meter)			35 787.00	y	37 791.07
100mm complete (chamber + fittings + meter)			43 387.00	y	45 816.67
150mm complete (chamber + fittings + meter)			64 451.00	y	68 060.26
>150mm			Cost+R184.00 Admin Charge	y	Cost+R194.30 Admin Charge

Appendix H - Notification of Intent of Development

Heritage Western Cape

Notification of Intent to Develop

Section 38 of the National Heritage Resources Act (Act No. 25, 1999)

Section 38 of the National Heritage Resources Act requires that any person who intends to undertake certain categories of development in the Western Cape (see Part 1) must notify Heritage Western Cape at the very earliest stage of initiating such a development and must furnish details of the location, nature and extent of the proposed development.

This form is designed to assist the developer to provide the necessary information to enable Heritage Western Cape to decide whether a Heritage Impact Assessment will be required.

Note: This form is to be completed when the proposed development does not fulfil the criteria for EIA as set out in the EIA regulations. It may be completed as part of the EIA process to assist in establishing the requirements of Heritage Western Cape with respect to the EIA.

1. **It is recommended that the form be completed by a professional familiar with heritage conservation issues.**
2. **The completion of Section 7 by heritage specialists is not mandatory, but is recommended in order to expedite decision-making at notification stage.**
3. **Section 7.1 must be completed by a professional archaeologist or palaeontologist.**
4. **Section 7.2 must be completed by a professional heritage practitioner with skills and experience appropriate to the nature of the property and the development proposals.**
5. **Should Section 7 be completed, each page of the form must be signed by the archaeologist/ palaeontologist and heritage practitioner**
6. **Additional information may be provided on separate sheets.**
7. **This form is available in electronic format so that it can be completed on computer.**

FOR OFFICIAL USE

PART 1: BASE INFORMATION

1.1 PROPERTY	
Name of property	
Street address or location *(e.g. off R44)*	
Erf or farm number/s	
Town or District	
Responsible Local Authority	
Magisterial District	
Current use	
Current zoning	
Predominant land use of surrounding properties	
Extent of the property	

1.2 CATEGORY OF DEVELOPMENT (S. 38 (1))	X	*Brief description of the nature and extent of the proposed development or activity (See also Part 3.1)*
1. Construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier over 300m in length		
2. Construction of a bridge or similar structure exceeding 50 m in length		
3. Any development or activity that will change the character of a site–		
a) exceeding 5 000 m^2 in extent		
b) involving three or more existing erven or subdivisions thereof		
c) involving three or more erven or divisions thereof which have been consolidated within the past five years		
4. Rezoning of a site exceeding 10 000 m^2		
5. Other (state)		

1.3 INITIATION STAGE OF PROPOSED DEVELOPMENT		
Exploratory (e.g. viability study)		*Notes:*
Conceptual		
Outline proposals		
Draft / Sketch plans		
Other (state)		

PART 2: HERITAGE ISSUES

2.1 CONTEXT		
X	*(check box of all relevant categories)*	*Brief description/explanation*
	Urban environmental context	
	Rural environmental context	
	Natural environmental context	
Formal protection (NHRA)		
	Is the property part of a protected area (S. 28)?	
	Is the property part of a heritage area (S. 31)?	
Other		
	Is the property near to or visible from any protected heritage sites?	
	Is the property part of a conservation area or special area in terms of the Zoning Scheme?	
	Does the site form part of a historical settlement or townscape?	
	Does the site form part of a rural cultural landscape?	
	Does the site form part of a natural landscape of cultural significance?	
	Is the site within or adjacent to a scenic route?	
	Is the property within or adjacent to any other area which has special environmental or heritage protection?	
	Does the general context or any adjoining properties have cultural significance[1]?	

2.2 PROPERTY FEATURES AND CHARACTERISTICS		
X	*(check box if YES)*	*Brief description*
	Has the site been previously cultivated or developed?	
	Are there any significant landscape features on the property?	
	Are there any sites or features of geological significance on the property?	
	Does the property have any rocky outcrops on it?	
	Does the property have any fresh water sources (springs, streams, rivers) on or alongside it?	
	Does the property have any sea frontage?	
	Does the property form part of a coastal dune system?	
	Are there any marine shell heaps or scatters on the property?	
	Is the property or part thereof on land reclaimed from the sea?	

2.3 HERITAGE RESOURCES[2] ON THE PROPERTY		
X	*(check box if present on the property)*	*Name / List / Brief description*
Formal protections (NHRA)		
	National heritage site (S. 27)	
	Provincial heritage site (S. 27)	
	Provisional protection (s.29)	
	Place listed in heritage register (S. 30)	
General protections (NHRA)		
	structures older than 60 years (S. 34)	
	archaeological[3] site or material (S. 35)	
	palaeontological[4] site or material (S. 35)	
	graves or burial grounds (S. 36)	
	public monuments or memorials[5] (S. 37)	
Other		
	Any heritage resource identified in a heritage survey (state author and date of survey and survey grading/s)	
	Any other heritage resources (describe)	

2.4 PROPERTY HISTORY AND ASSOCIATIONS		
X	*(check box if YES)*	*Brief description/explanation*
	Provide a brief history of the property (e.g. when granted, previous owners and uses).	
	Is the property associated with any important persons or groups?	
	Is the property associated with any important events, activities or public memory?	
	Does the property have any direct association with the history of slavery?	
	Is the property associated with or used for living heritage[6]?	
	Are there any oral traditions attached to the property?	

2.6	SUMMARY OF CULTURAL SIGNIFICANCE OF THE PROPERTY (OR ANY PART OF THE PROPERTY) (S. 3(3))	
X	*(check box of all relevant categories)*	*Brief description/explanation*
	Important in the community or **pattern of South Africa's (or Western Cape's) history.**	
	Associated with the life or work of a **person, group or organisation** of importance in history.	
	Associated with the history of **slavery**	
	Strong or special association with a particular community or cultural group for **social, cultural or spiritual** reasons	
	Exhibits particular **aesthetic** characteristics valued by a community or cultural group	
	Demonstrates a high degree of **creative or technical achievement** at a particular period	
	Has **potential to yield information** that will contribute to an understanding of natural or cultural heritage	
	Typical: Demonstrates the principal characteristics of a particular class of natural or cultural places	
	Rare: Possesses uncommon, rare or endangered aspects of natural or cultural heritage	
Please provide a brief **statement of significance**		

PART 3: POTENTIAL IMPACT OF DEVELOPMENT

3.1 PROPOSED DEVELOPMENT	
Brief description of proposed development.	
Monetary value.	
Anticipated starting date.	
Anticipated duration of work.	
Does it involve change in land use?	
Extent of land coverage of the proposed development.	
Does it require the provision of additional services? (e.g. roads, sewerage, water, electricity)	
Does it involve excavation or earth moving?	
Does it involve landscaping?	
Does it involve construction work?	
What is the total floor area?	
How many storeys including parking?	
What is the maximum height above natural ground level?	

3.2 POTENTIAL IMPACT	
What impact will the proposed development have on the heritage values of the context of the property? (e.g. visibility, change in character)	
Are any heritage resources listed in Part 2 affected by the proposed development? If so, how?	
Please summarise any public/social benefits of the proposed development.	

PART 4: POLICY, PLANNING AND LEGAL CONTEXT

X	*(check box if YES)*	*Details/explanation*
	Does the proposed development conform with regional and local planning policies? (e.g. SDF, Sectoral Plans)	
	Does the development require any departures or consent use in terms of the Zoning Scheme?	
	Has an application been submitted to the planning authority?	
	Has their comment or approval been obtained? (attach copy)	
	Is planning permission required for any subdivision or consolidation?	
	Has an application been submitted to the planning authority?	
	Has their comment or approval been obtained? (attach copy)	
	Are there title deed restrictions linked to the property?	
	Does the property have any special conservation status?	
	Are there any other restrictions on the property?	
	Is the proposed development subject to the EIA regulations of the Environment Conservation Act (Act 73 of 1989)?	
	Has an application (or environmental checklist) been submitted to DECAS? What are the requirements of DECAS?	
	At what stage in the IEM process is the application (scoping phase, EIA etc.)	
	Has any assessment of the heritage impact of the proposed development been undertaken in terms of the EIA or planning process?	
	Are any such studies currently being undertaken?	

	Is approval from any other authority required?	
	Has permission for similar development on this site been refused by any authority in the past?	
	Have interested and affected bodies have been consulted? Please list them and attach any responses.	

PART 5: APPLICANT DETAILS

REGISTERED PROPERTY OWNER			
Name			
Address			
Telephone			
Fax			
E-mail			
Signature		Date	

DEVELOPER			
Name			
Address			
Telephone			
Fax			
E-mail			
Signature		Date	

PERSON RESPONSIBLE FOR COMPLETING THE FORM			
Name			
Address			
Telephone			
Fax			
E-mail			
Field of expertise & qualifications			
Signature		Date	

PART 6: ATTACHMENTS

	Plan, aerial photo and/or orthophoto clearly showing location and context of property.
	Site plan or aerial photograph clearly indicating the position of all heritage resources and features.
	Photographs of the site, showing its characteristics and heritage resources.
	Relevant sketch proposals, development plans, architectural and engineering drawings and landscaping plans.
	Responses from other authorities.
	Responses from any interested and affected parties.
	Any archaeological reports or other reports that may have been carried out on the property or properties within the immediate area.
	Any other pertinent information to assist with decision-making.

PART 7. RECOMMENDATIONS BY HERITAGE SPECIALISTS

It is recommended that this section be completed in order to expedite the approval process.

7.1 RECOMMENDATIONS OF ARCHAEOLOGIST/PALAEONTOLOGIST		
Further investigation required	*Yes/No*	*Describe issues and concerns*
Palaeontology		
Pre-colonial archaeology		
Historical archaeology		
Industrial archaeology		
No further archaeological or palaeontological investigation		
Other recommendations (use additional pages if necessary)		

I have reviewed the property and the proposed development and this completed form and make the recommendations above.

Name of Archaeologist/Palaeontologist .....

Qualifications, field of expertise .....

Signature ..... Date .....

7.2 RECOMMENDATIONS OF GENERALIST HERITAGE PRACTITIONER		
Further investigation required	*Yes/No*	*Describe issues and concerns*
Existing Conservation and Planning Documentation		
Planning		
Urban Design		
Built Environment		
Architecture		
Cultural Landscape		
Visual Impact		
History		
Archival		
Title Deeds Survey		
Published Information		
Oral History		
Social History		
Other specialist study (specify) S		
Public Consultation		
Specialist Groups		
Neighbours		
Open House		
Public Meeting		
Public Advertisement		
Other		
No further specialist conservation studies required		
Heritage Impact Assessment required, to be co-ordinated by a generalist heritage practitioner		
Other recommendations (use additional pages if necessary)		

I have reviewed the property and the proposed development and this completed form and make the recommendations above.

Name of Heritage Practitioner .....

Qualifications, field of expertise .....

Signature ..... Date .....

Notes:

[1] Cultural significance means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance.

[2] Heritage resource means any place or object of cultural significance.
"Place" includes –
(a) a site, area or region;
(b) a building or other structure which may include equipment, furniture, fittings and other articles associated with or connected with such building or other structure;
(c) a group of buildings or other structures [and associated equipment, fittings, etc];
(d) an open space, including a public square, street or park; and
(e) in relation to the management of a place, includes the immediate surroundings.

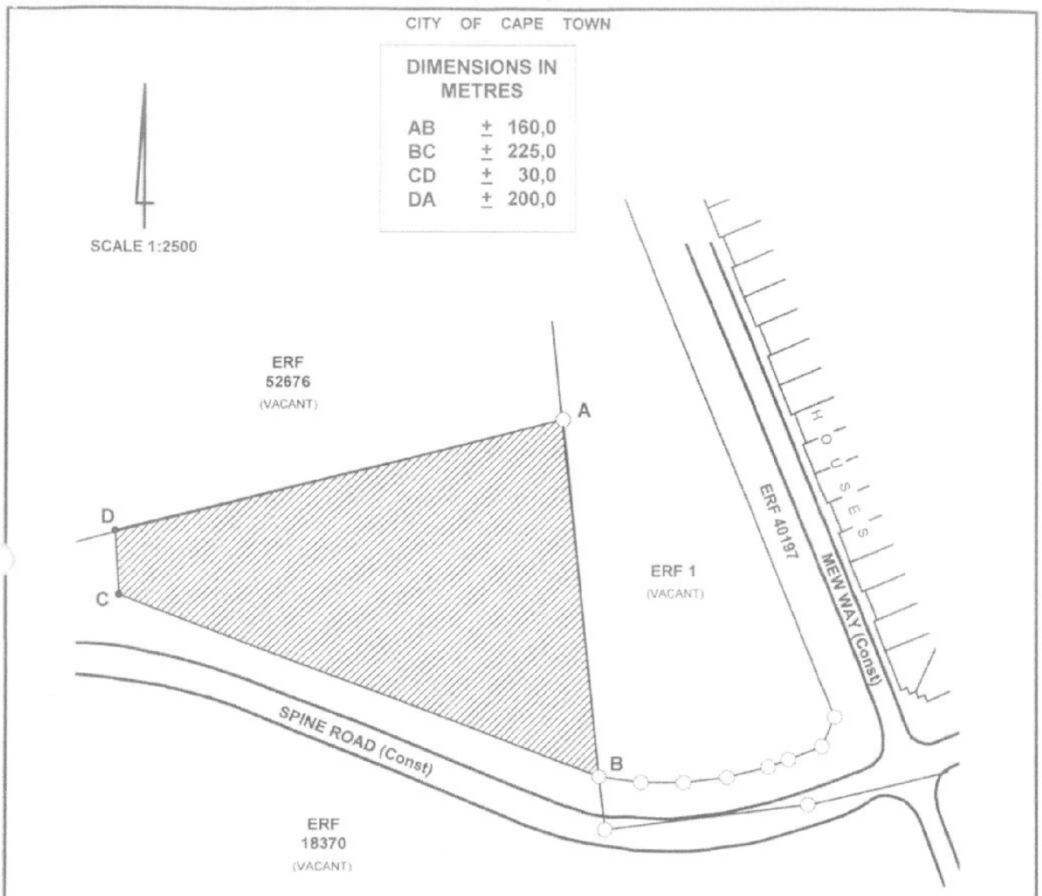
[3] Archaeological means —
(a) material remains resulting from human activity which are in a state of disuse and are in or on land and which are older than 100 years, including artefacts, human and hominid remains and artificial features and structures;
(b) rock art, being any form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years, including any area within 10m of such representation;
(c) wrecks, being any vessel or aircraft, or any part thereof, which was wrecked in South Africa or in the maritime zone of the Republic, any cargo, debris or artefacts found or associated therewith, which is older than 60 years or which Heritage Western Cape considers to be worthy of conservation; and
(d) features, structures and artefacts associated with military history which are older than 75 years and the site on which they are found.

[4] Palaeontologicial means any fossilised remains or fossil trace of animals or plants which lived in the geological past, other than fossil fuels or fossiliferous rock intended for industrial use, and any site which contains such fossilised remains or trace.

[5] Public monuments and memorials means all monuments and memorials –
(a) erected on land belonging to any branch of ... government or on land belonging to any organisation funded by or established in terms of the legislation of such a branch of government; or
(b) which were paid for by public subscription, government funds, or a public-spirited or military organisation, and are on land belonging to any private individual.

[6] Living heritage means the intangible aspects of inherited culture, and may include cultural tradition, oral history, performance, ritual, popular memory, skills and techniques, indigenous knowledge systems and the holistic approach to nature, society and social relationships.

Appendix I - Original Application for the Khayelitsha Site



RESERVATION OF CITY LAND FOR INITIATION PURPOSES - SPINE ROAD - KHAYELITSHA

The figure ABCD shown hatched represents City Land, portion of Erf 18370 Khayelitsha in extent approximately 1,8 Hectares applied for by

SOCIAL DEVELOPMENT

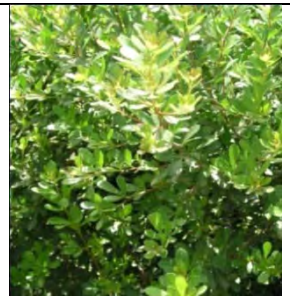
Property of the above shown hatched and zoned: Undetermined

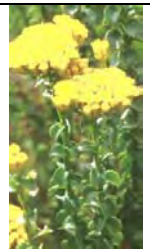
Note: 1. Erf 18370 Khayelitsha is registered in the name of the City of Cape Town D/T 6667 dated 1986-02-24.

WARD 79

REFER TO	M 1984	R SCHNAKENBERG REGIONAL HEAD EASTERN REGION W D ANDERSON MANAGER PROPERTY SERVICES	SURVEYOR	
			DRAUGHTSMAN	R SWINTON 2010-09-01
PROP. REF	TYG 0176 726		SKETCH	
FILE/REC	T/CO 14/3/12/2/6 (31569)			
MEMO DATE	2010-03-31			

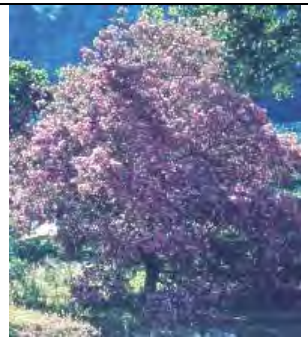
Appendix J - Suggested Vegetation

For Picture	Type of Vegetation	Common Name	Height (m)	Cost per Plant
	*Rhus crunata*	N/A	3	N/A
	*Chrysanthemoides monilifera*	Tick berry	3	N/A
	*Metalasia muricata*	White bristle bush	2-4	R12 (4 kg)

	*Salvia africana-lutea*	Dune salvia	2	R11 (4kg)
	*Athanasia dentata*	Geel blombos (Daisy family)	1.5	N/A
	*Buddleja salviifolia*	Sage wood	4	R12 (4 kg)
	*Tecoma capensis*	Cape honeysuckle	3	N/A

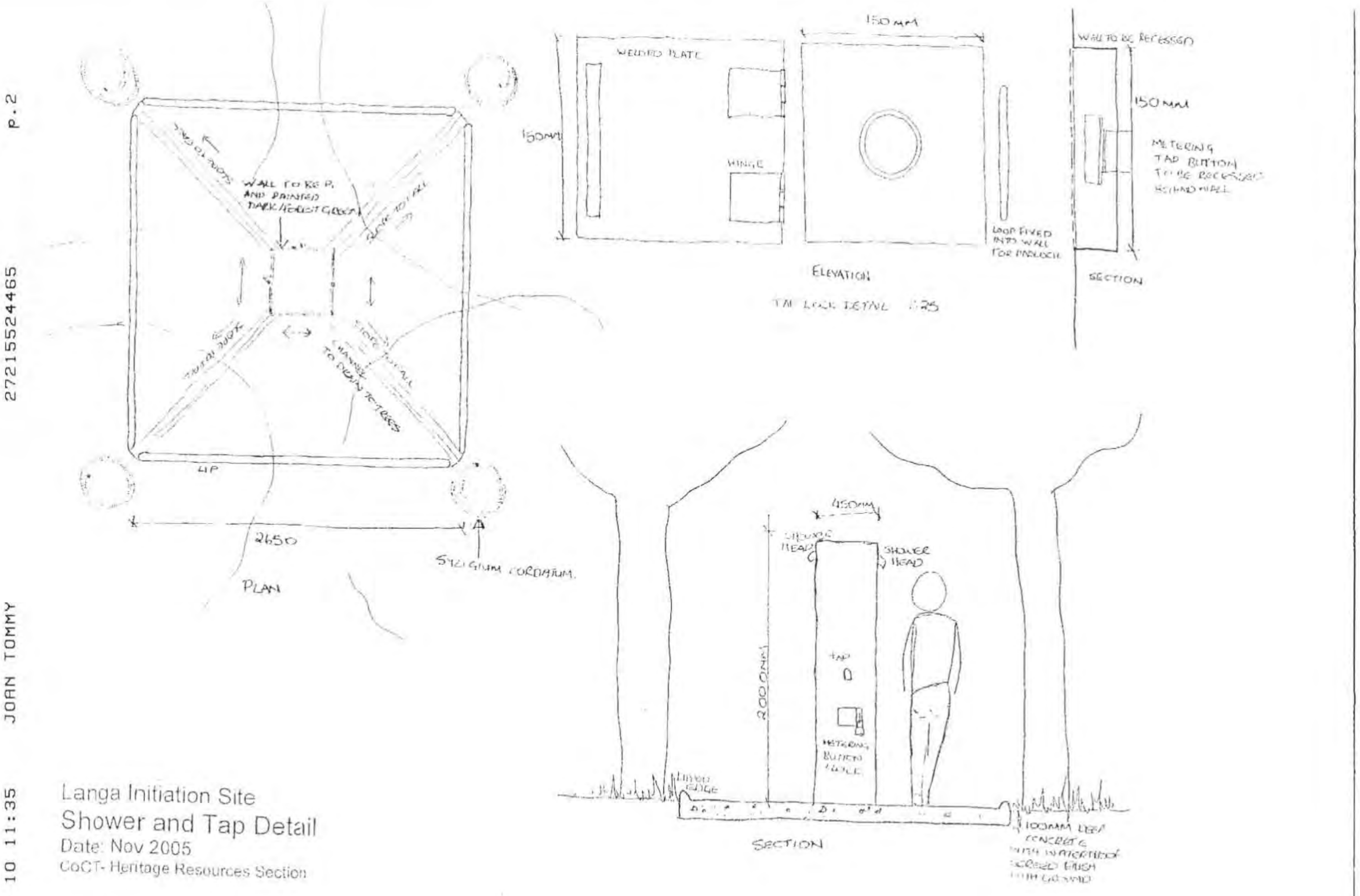
	*Eriocephalus africanus*	Wild rosemary	2	R11 (4 kg)
	*Leonotis leonurus*	Wild dagga	3	R8 (2 kg)
	*Euryops virgineus*	Honey euryops	3	N/A
	*Brachylaena discolor*	Coast silver oak	4-10	R60 (20 kg)

	*Curtissia dentata*	Assegai bush	2-12	R62 (20 kg)
	*Diospyros whyteana*	Bladder nut	4	R32 (10 kg)
	*Ekerbergia capensis*	Cape ash	±15	

	*Searsia pendulina*	White karee	4-9	
	*Syzguim cordatum*	Water berry	5-10	
	*Virgilia oroboides*	Blossom tree	8-13	

Appendix K - Specification for Showers in Langa

ITEM	DESCRIPTION
1	CIVIL WORKS
1.1	Establishment
	All fixed charges, value related and time related Items
1.2	Site clearance
	Clear and grub area (weeds and structures)
1.3	Paving
	Supply and lay in situ-concrete paving with fall of slope as specified on plan, 100mm thick incl. leveling. Brush finish and comp-action of bed to 100 mod AASHTO with screed and non slip finish, including lip surrounding concrete edge and drainage channels
1.4	Block wall
	Supply and construct block wall- 450*450*2000mm in centre of concrete plinth as per dwg. To be plastered and painted with waterproof paint in dark/forest green colour to clients approval
1.5	Supply, construct and install shower head as per detail dwg. Including installation of water pipes and necessary fittings
1.6	Supply, construct and install drinking tap head as per detail dwg, including installation of water pipes and necessary fittings
1.7	Supply construct and install metering tap button recessed into wall as per detail dwg
1.8	Supply, construct and install galvanized steel plate and hoop tap locking mechanism as per detail dwg to be securely fixed to wall to clients satisfaction
1.9	Supply and install water pipe including stopcock and spring-loaded non return valve from water main to shower facility

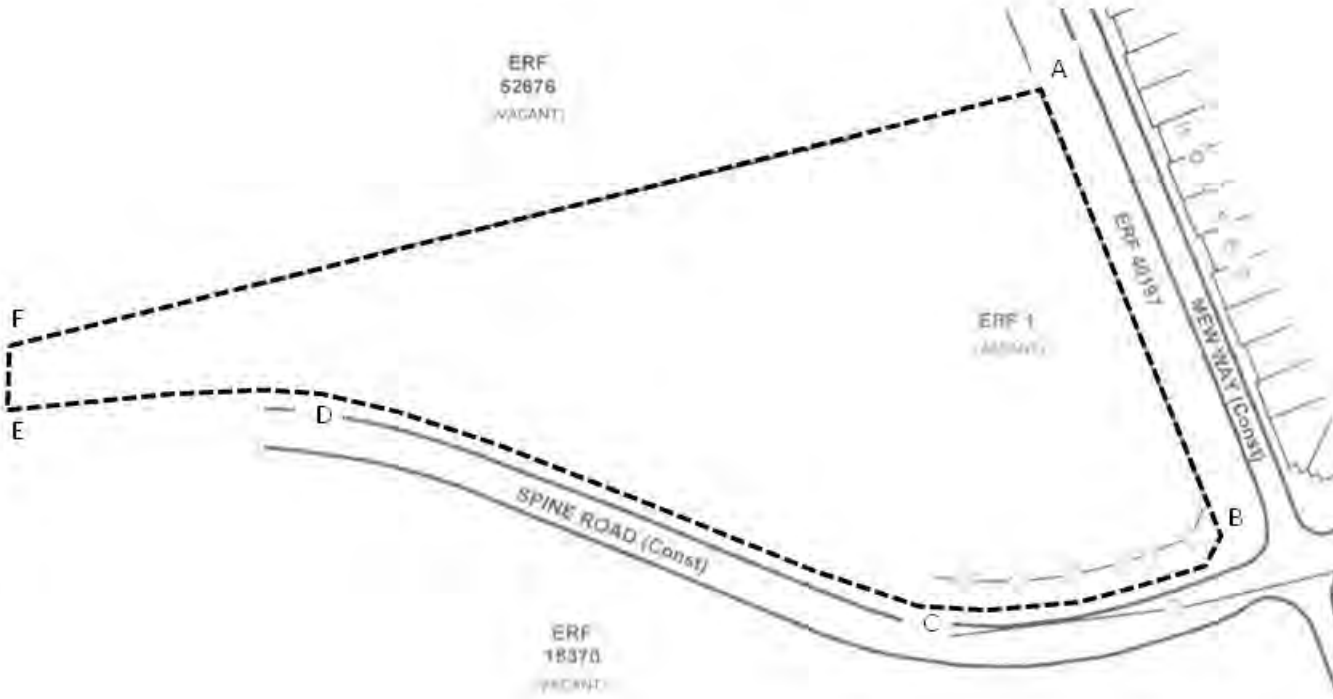


Langa Initiation Site
Shower and Tap Detail
Date: Nov 2005
CoCT- Heritage Resources Section

Appendix L - Reservation of City Land for Initiation Purposes

RESERVATION OF CITY LAND FOR INITIATION PURPOSES – SPINE ROAD – KHAYELITSHA – PHASE I

SOCIAL DEVELOPMENT



Segment	Distance (metres)
AB	168
BC	117
CD	221
DE	105
EF	22
FA	373

Total Area = 3,8 Hectares

Perimeter = 1006 metres

KEY

Site Area Required

SCALE 1:2500

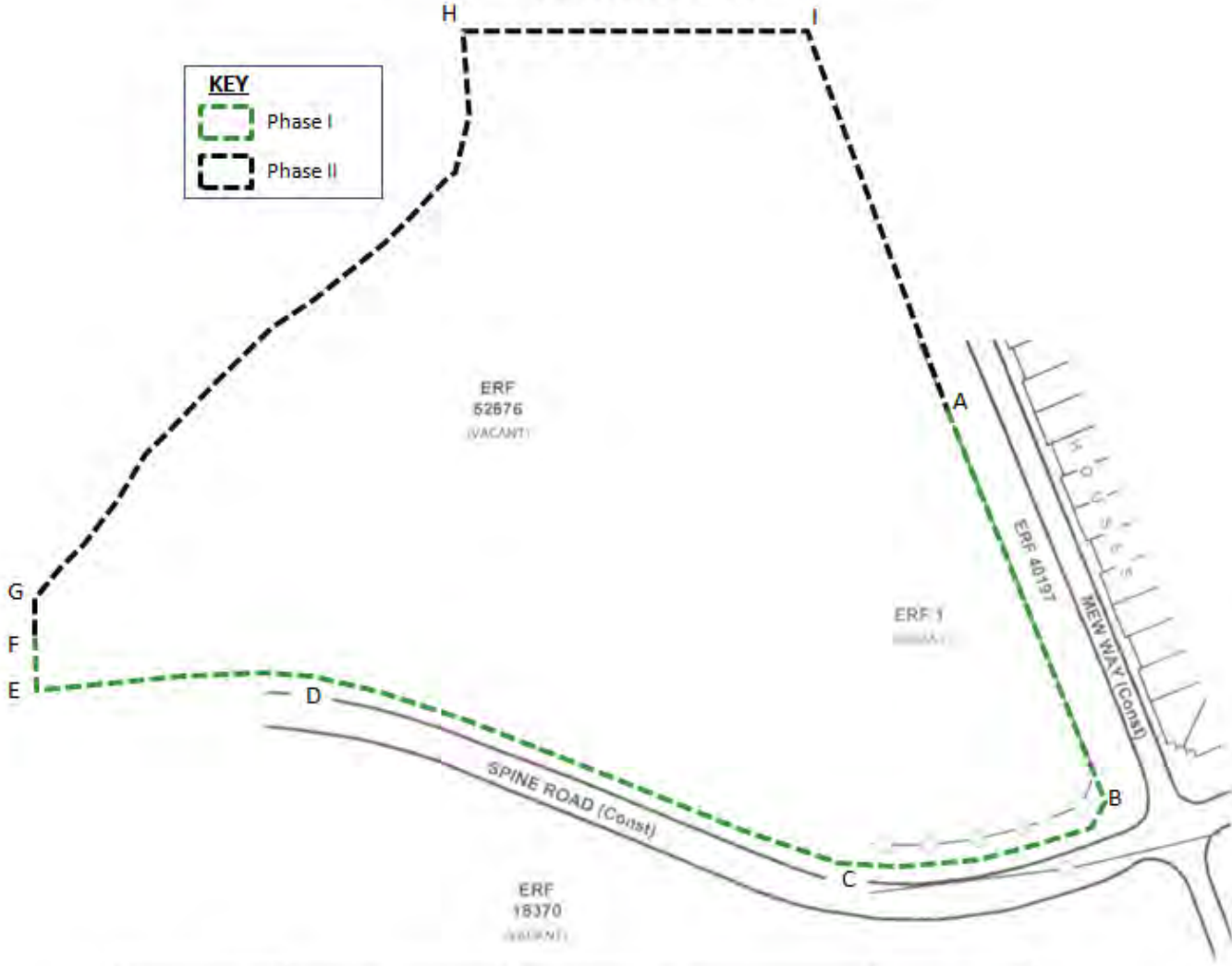
Note:

Distance between proposed fence and Spine Road = 10 metres

Drawing prepared by Worcester Polytechnic Institute Initiation Site Development Team

RESERVATION OF CITY LAND FOR INITIATION PURPOSES – SPINE ROAD – KHAYELITSHA – PHASE II

SOCIAL DEVELOPMENT



Segment	Distance (metres)
AB	168
BC	117
CD	221
DE	105
EF	22
FG	16
GH	297
HI	137
IA	158

Total Area = 8,2 Hectares

Perimeter = 1006 metres

KEY

Site Area Required

SCALE 1:2500

Note:

Distance between proposed fence and Spine Road = 10 metres

Drawing prepared by Worcester Polytechnic Institute Initiation Site Development Team