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.

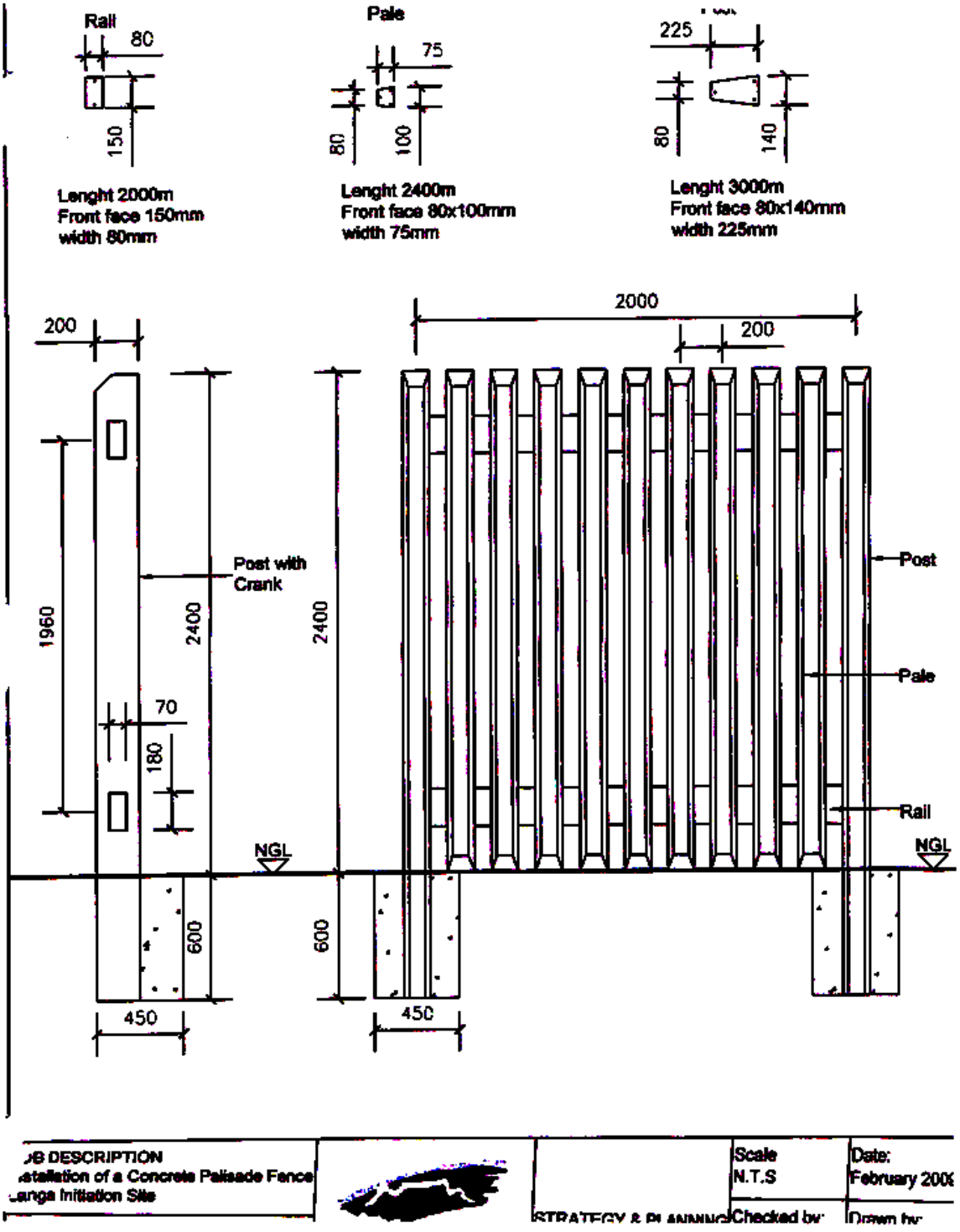
CITY ELECTRICAL ENGINEER

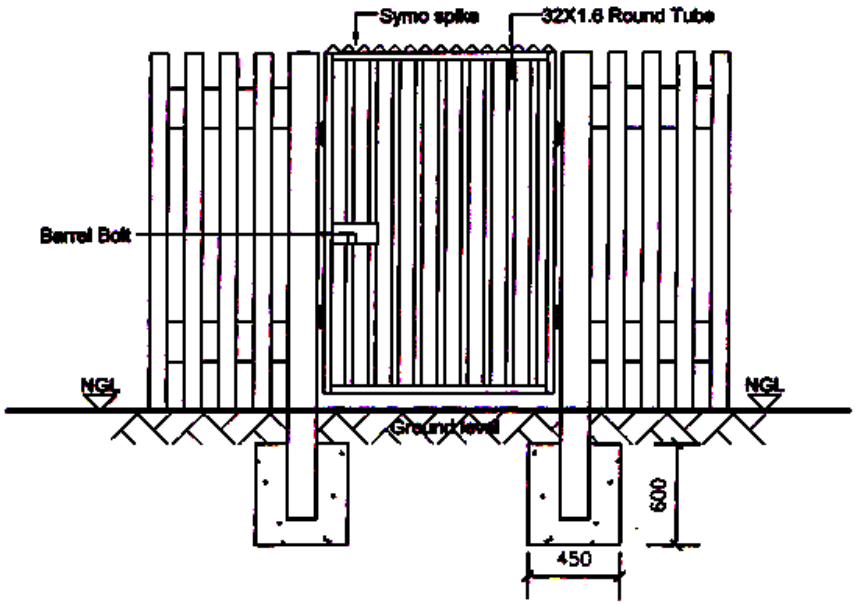
Civic Centre
12 Hertzog Boulevard
CAPE TOWN
8001

1996-10-10

[redacted]

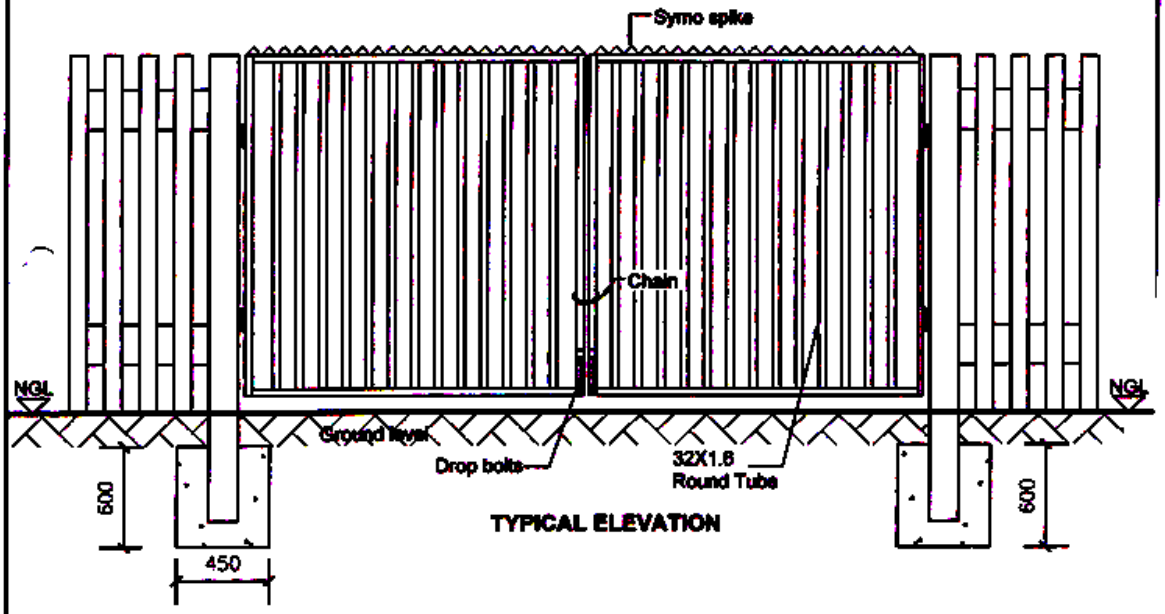
Appendix B - Gate Specification





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.

R1 million.

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.

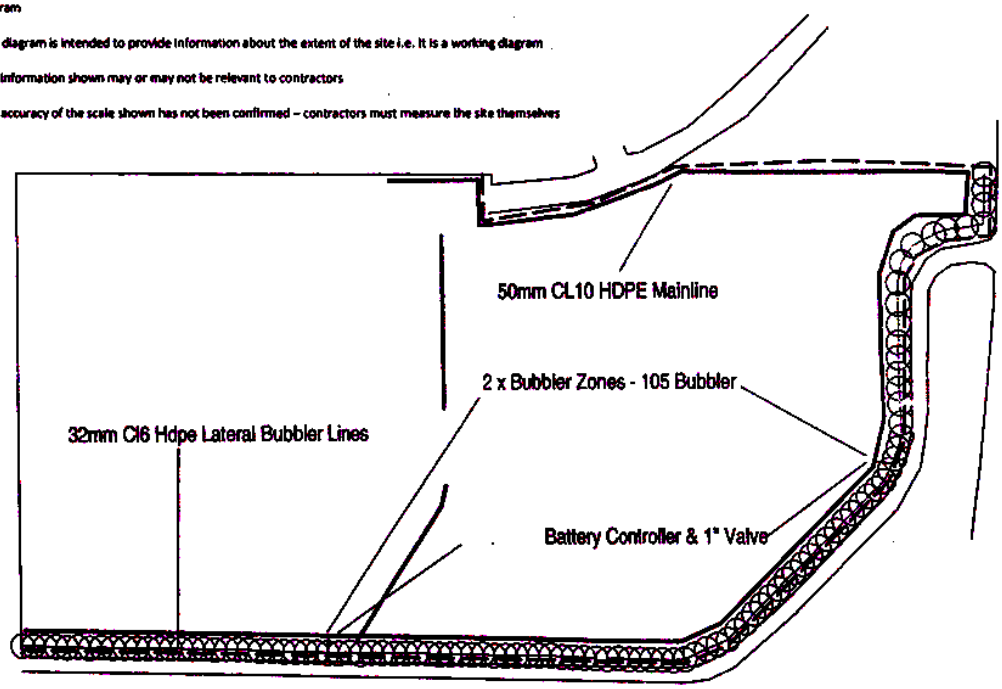
D. TREE STAKING/SUPPORTS:

- 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

Notes on Diagram

1. This diagram is intended to provide information about the extent of the site i.e. it is a working diagram
2. The information shown may or may not be relevant to contractors
3. The accuracy of the scale shown has not been confirmed – contractors must measure the site themselves



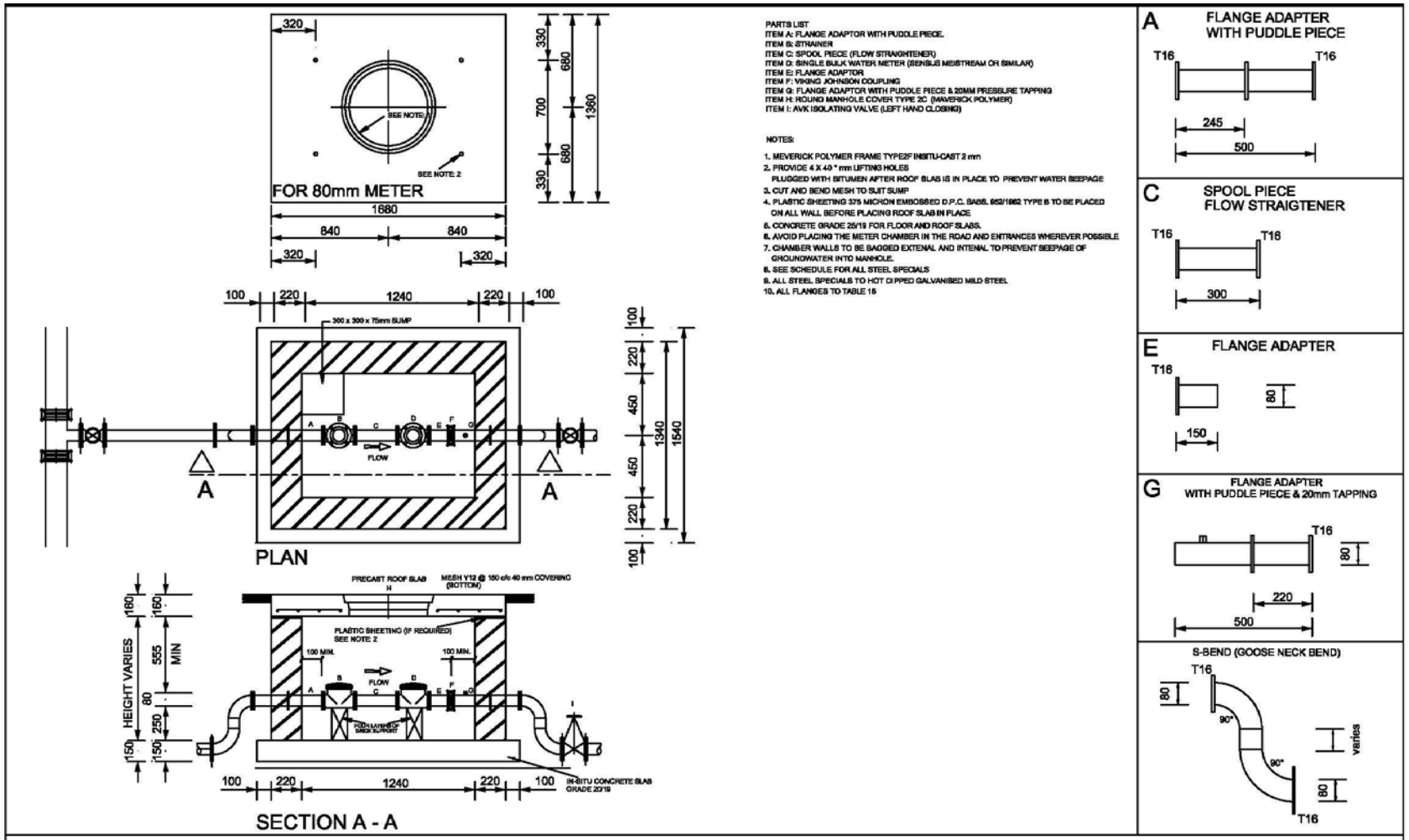
City Of Cape Town

Langa Initiation Site

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



JOB DESCRIPTION: STANDARDS		DIRECTORATE CIVIL ENGINEERING SERVICES	SCALE: NTS; DATE; DRAWN; DESIGNED; AREA ENGINEER
DRAWING DESCRIPTION: TYPICAL WATER METER CHAMBER (BASED ON SENSUS MEISTREAM METER)			DRAWING No: TS/W/6

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
80mm complete (chamber +			35 787.00	y	37 791.07

SERVICES RENDERED	UNIT	REMARKS	2009/10 R excl. VAT	VAT Yes/No	2010/11 R excl. VAT
fittings + meter)					
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 under-taken 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.

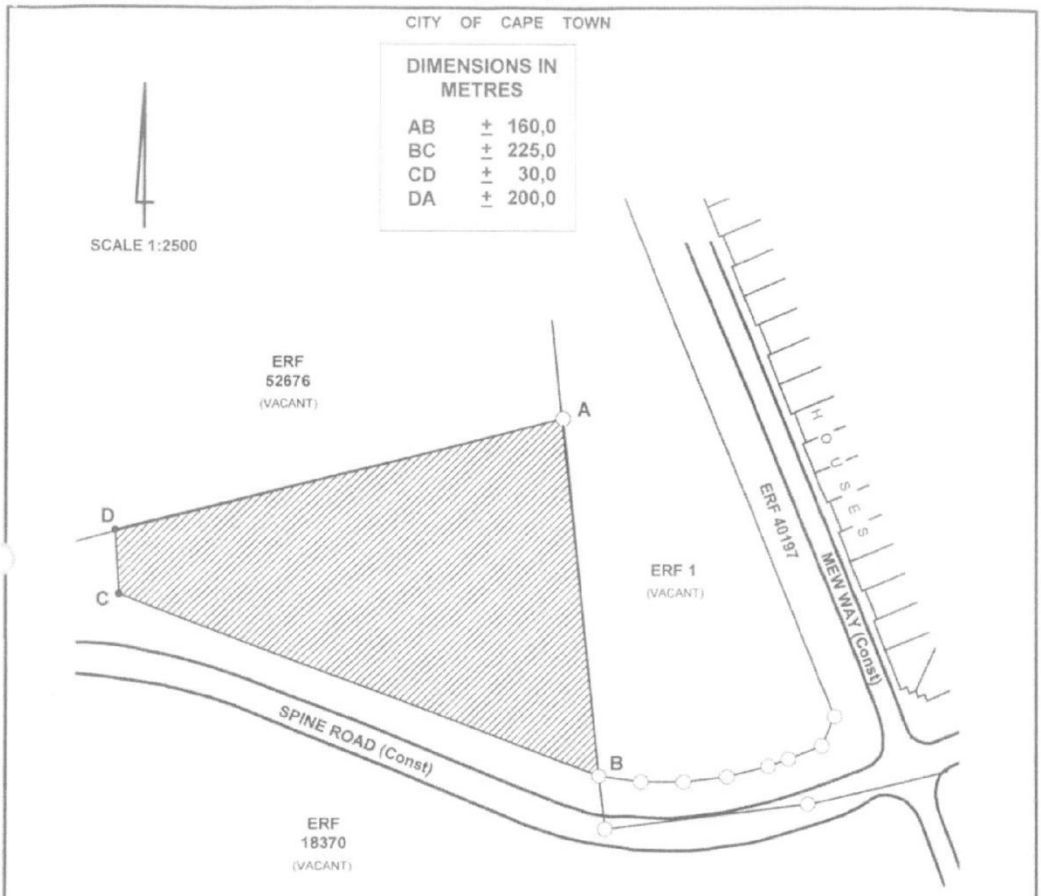
[3] Archaeological means –-
(a) material remains resulting from human activity which are in a state of disuse and are in or on land and which are older than 100 years, including artefacts, human and hominid remains and artificial features and structures;
(b) rock art, being any form of painting, engraving 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

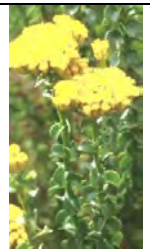
Note: 1. Erf 18370 Khayelitsha is registered in the name of the City of Cape Town D/T 6667 dated 1986-02-24.

WARD 79

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

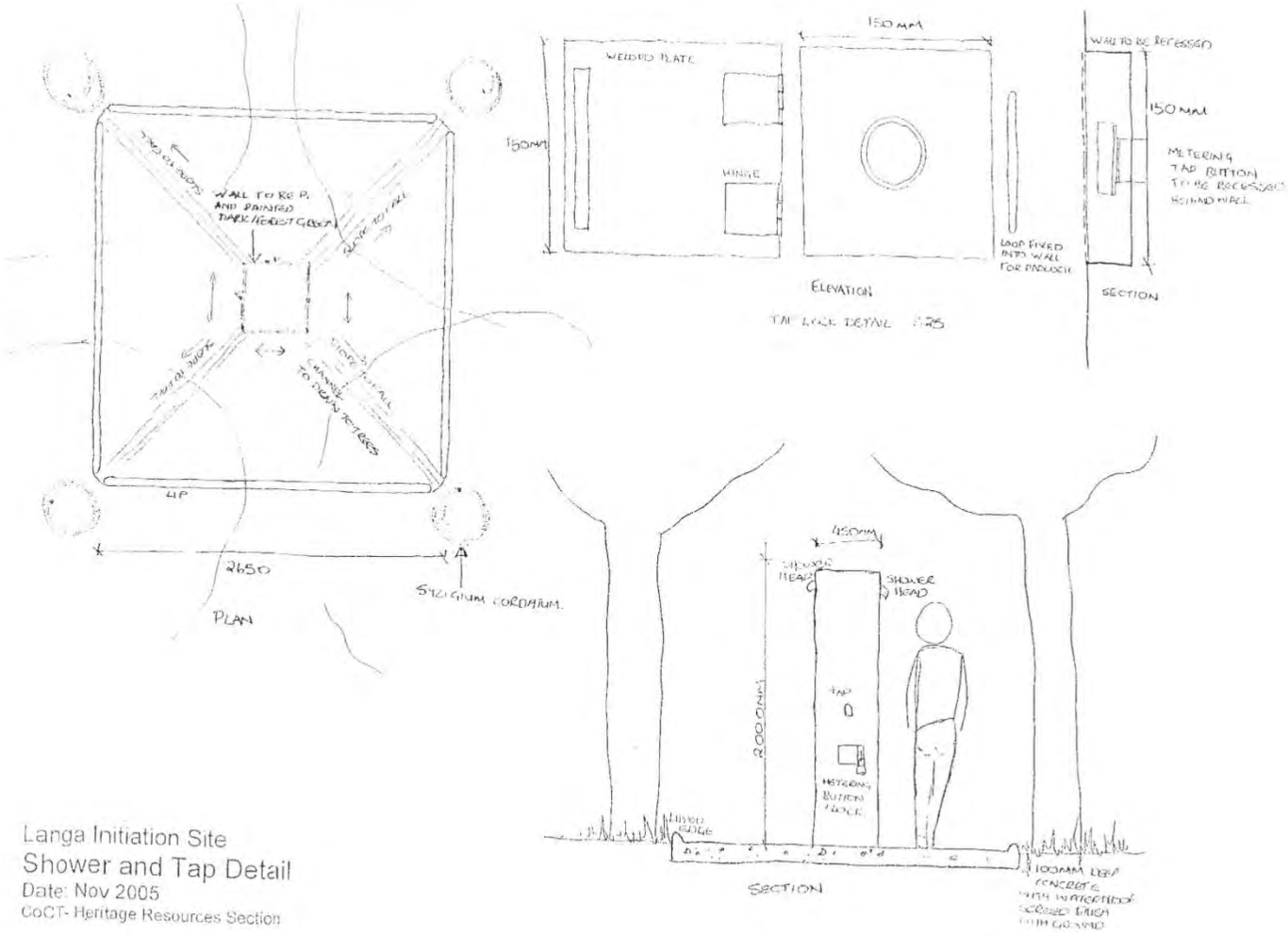
	*Eriocephalus africanus*	Wild rosemary	2	R11 (4 kg)
	*Leonotis leonurus*	Wild dagga	3	R8 (2 kg)
	*Euryops virgineus*	Honey euryops	3	N/A
	*Brachylaena discolor*	Coast silver oak	4-10	R60 (20 kg)

	*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

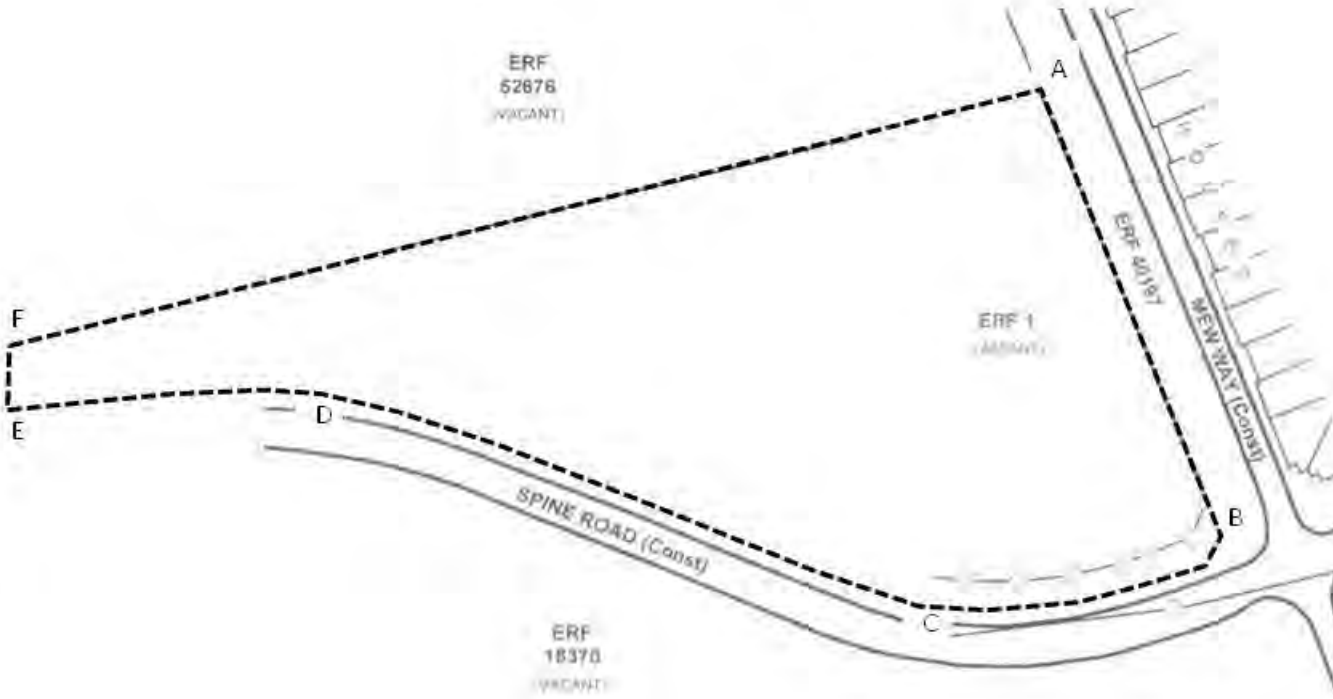
Date: Nov 2005

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

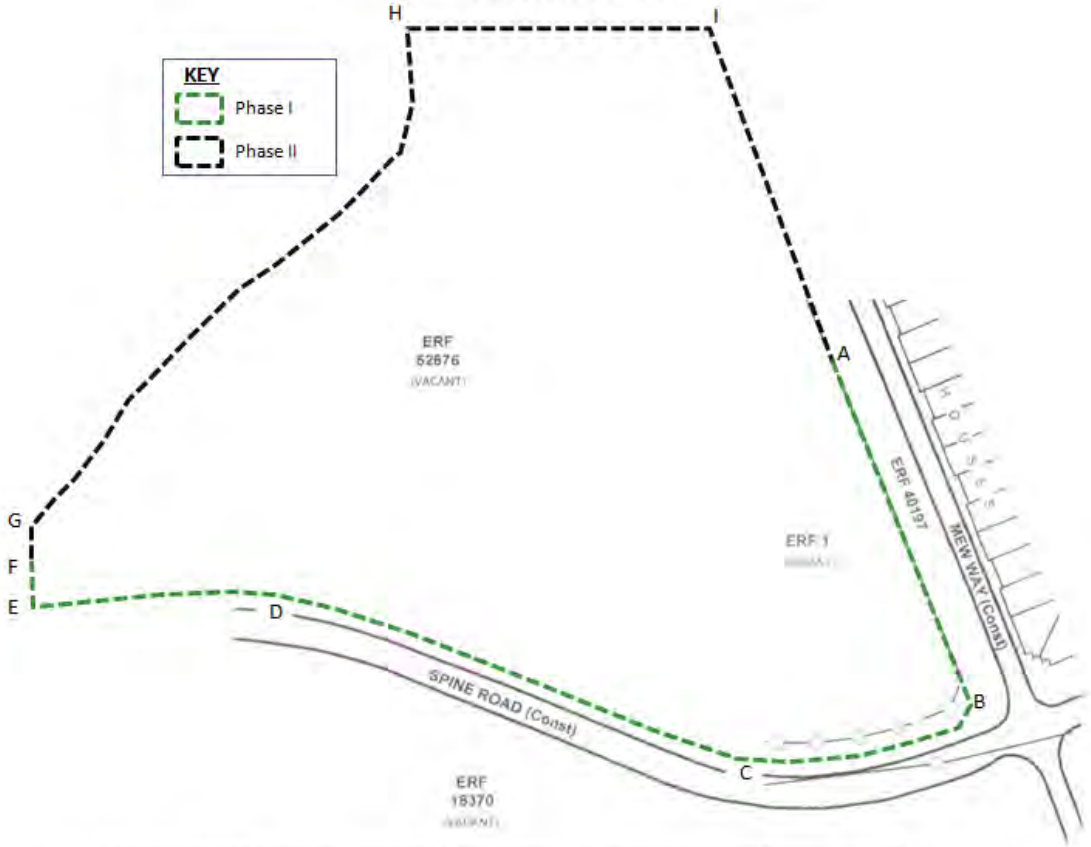
Note:

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