

ANNEXURE A

Town

Letter of Authority - City of Cape



CITY OF CAPE TOWN | ISIXEKO SASEKAPA | STAD KAAPSTAD

Civic Centre
12 Hertzog Boulevard
P O Box 1694 298, Cape Town 8000
Ask for: Ms Susan Brice
Tel: 021 400-2329
Fax: 021 425-2685

E-mail: Susan.Brice@capetown.gov.za
Ref: Cemetery Strategy Initiatives/mah

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Cela: Ms Susan Brice
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Posbus 1694 298, Kaapstad 8000
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COMMUNITY SERVICES DIRECTORATE — City Parks Department — Cemeteries

06-03-2012

Heritage Western Cape

To Whom it May Concern

LETTER OF AUTHORITY TO SUBMIT NOTICE OF INTENTION TO DEVELOP (NID) FARMS 981, 981/2, 981/18 AND PORTION OF STRAND ROAD, ON BEHALF OF CITY OF CAPE TOWN

This letter serves to inform you of the fact that Andre Pentz of Urban Design Services was appointed by City Parks Department to prepare and submit a Heritage Statement to Heritage Western Cape for the proposed Metro South East Cemetery, Mfuleni (Farm 981; 981/2; 981/18 and portion of Strand Road)

Andre Pentz is therefore fully authorised to act on the City's behalf as our appointed Professional Heritage Consultant, to submit the NID to Heritage Western Cape.

Yours Faithfully

Susan Brice
Cemetery Coordinator
City Parks Department
Community Services Directorate
City of Cape Town

ANNEXURE B

Archaeological Assessment and Heritage Western Cape Record of Decision

**Archaeological Assessment and Heritage Western Cape Record of
Decision**

Agency for Cultural Resource Management

If a human burial is encountered by accident during construction, the remains must be left as undisturbed as possible. The local police must be informed as well as the South African Heritage Resources Agency (SAHRA) (Mrs. Mary Leslie 021 4624502). If the burial is deemed to be over 60 years old and no foul play is suspected, an emergency exhumation permit may be issued by SAHRA for an archaeologist to exhume the remains under such provisions as SAHRA deems appropriate.

The study has shown that the proposed site is suitable for development.

The assessment of the proposed project has rated the potential impacts to archaeological material as being low provided that:

- Human burials uncovered during bulk earthworks not be disturbed or removed until inspected by the archaeologist.

Yours sincerely

A handwritten signature in black ink, appearing to be 'JK' with a long horizontal stroke extending to the right.

Jonathan Kaplan



Figure 1. The site facing south-west.



Figure 2. The site facing west.

HERITAGE WESTERN CAPE

Provincial Heritage Resources Authority of the Western Cape
Private Bag X9067
Cape Town
8000

Tel: 021.483.9685
Fax: 021.483.9842

11 March 2005

Mr. Neville van der Westhuizen
Settlement Planning Services
PO Box 3405
CAPE TOWN
8000
Fax: 021.424.3490

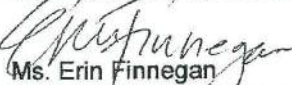
RECORD OF DECISION PHASE 1 ARCHAEOLOGICAL ASSESSMENT METROPOLITAN CEMETERY STUDY PHASE II – METRO SOUTH-EAST (HWC Ref. No. C13/3/6/2/1/1/1/1/A7)

An Archaeological Assessment of the above property undertaken by the Agency for Cultural Resource Management was discussed by the Archaeology, Palaeontology and Meteorites Committee of the Western Cape provincial heritage resources authority, Heritage Western Cape (HWC), at a meeting on 8 March 2005.

It was noted that no archaeological remains were seen on the property and that there are no old buildings, structures or features that are protected in terms of the National Heritage Resources Act (No. 25 of 1999). From the point of view of heritage resources, there were no objections to the development proceeding.

If any archaeological remains are discovered they must be reported to Heritage Western Cape immediately.

If any human remains are discovered, they must be treated with respect and the South African Heritage Resources Agency, SAHRA, (Mrs Mary Leslie, 021-462 4502) must be notified immediately. An archaeologist must be contracted to remove the remains at the expense of the developer.



Ms. Erin Finnegan
SENIOR HERITAGE OFFICER: ARCHAEOLOGIST

COPY TO:

Mr. Jonathan Kaplan, Agency for Cultural Resources Management P O Box 159 Riebeeck West 7306,
Fax: 022-461 2755

ANNEXURE C

From:

To: 00214252685

22/12/2011 09:12

#858 P.001/001



DEPARTMENT of
ENVIRONMENTAL AFFAIRS
& DEVELOPMENT PLANNING

Provincial Government of the Western Cape

Directorate: Land Management
(Region 1)

E-mail: Andrea.Thomas@pgwc.gov.za

Tel: +27 21 483 2790/2792

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1 Dorp Street, Cape Town, 8001

www.westerncape.gov.za/eadd

REFERENCE: E12/2/3/5-Z4/134-BJ0219/08

ENQUIRIES: ANDREA THOMAS

DATE:

22 DEC 2011

The Municipal Manager

City of Cape Town

PO Box 1694

CAPE TOWN

8000

Attention: Ms S Brice

Tel: (021) 400 2329

Fax: (021) 425 2685

Dear Madam

RE: METRO SOUTH-EAST CEMETERY: DOCUMENTATION IN SUPPORT OF DEVELOPMENT COMMENCEMENT.

1. Your correspondence dated 14 December 2011, as received by this Department on 21 December 2011, refers.
2. Your attention is drawn to the listed activities in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") Environmental Impact Assessment ("EIA") Regulations, 2010 as defined in Government Notice ("GN") No. R. 544, R. 545 and R. 546 of 18 June 2010. Please be advised that, based on the information provided, the Department deems the undertakings conducted **DEADP** **Letter of** as substantive commencement of the construction activities of the cemetery. Written authorisation is therefore not required from the relevant authority prior to the continuation of the said activity.
3. The above is based on the following:
 - A Topographical Survey, cadastral pegging and subdivision, alien vegetation clearing and a search and rescue exercise were undertaken before the promulgation of the NEMA EIA Regulations, 2010.
4. However, should any revision of the proposed development comprise any activities that constitute a listed activity as defined in the NEMA EIA Regulations, 2010, an application for authorisation must be submitted to the relevant authority and authorisation obtained before such activity(ies) may commence.
5. Please note that the applicant must comply with any other statutory requirements that may be applicable to the undertaking of the activity.
6. This Department reserves the right to revise its initial comments and request further information from you based on any new or revised information received.

Yours faithfully

HEAD OF DEPARTMENT
DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING

Cc: (1) Mr D Janeke [DJ Environmental Consultants]

Fax: (021) 851 0933

Support

ANNEXURE D

Development Motivation Report, Site Development Plan

METRO SOUTH-EAST CEMETERY

DEVELOPMENT MOTIVATION REPORT

**PROPOSED SUBDIVISION AND REZONING OF A PORTION
OF FARMS 981 (REM), 981/2, 981/18 AND PORTION OF
STRAND ROAD**

**(i.e. Remainder of Farm Eersriv No 981, Portion 2 of the
Farm Eersriv No 981, Portion 18 of the Farm Eersriv No
981 and Portion of Strand Road)**

Report No: 1438/R1.3
August 2005

METRO SOUTH-EAST CEMETERY

DEVELOPMENT MOTIVATION REPORT

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Farm Eersriv No 981, Portion 18 of the Farm Eersriv No
981 and Portion of Strand Road)**

Submitted on behalf of:

**City of Cape Town
Directorate: City Parks and Nature Conservation**

Compiled by:

**Setplan – DJ Environmental Consultants
Joint Venture**

Report No: 1438/R1.3
August 2005

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1.0 PURPOSE OF THIS REPORT

This report serves as motivation for the development of the proposed Metro South-East cemetery, as well as serving as background and motivation for the following:

- i. Site identification and reservation of the land for cemetery purposes.
- ii. Subdivision/consolidation of the land portion and rezoning for cemetery purposes in terms of the Land Use Planning Ordinance, 1985 (Ordinance 15 of 1985).
- iii. ROD application in terms of the Environment Conservation Act, 1989 (Act 73 of 1989).
- iv. HIA application in terms of the Heritage Resources Act, 1999 (Act 25 of 1999).

2.0 BACKGROUND

Phase 1 of the Metropolitan Cemetery Study conducted by the City of Cape Town in 2003, has the following amongst its objectives:

- i. To integrate cemetery planning with complimentary city-wide initiatives (e.g. conservation, open space and recreation planning).
- ii. To assess the current metropolitan cemetery provision and future requirement.
- iii. To ensure adequate cemetery provision, focusing on short-term needs and ensuring adequate long-term burial capacity.
- iv. To ensure optimum environmental performance of cemeteries, that is both from a geohydrological and botanical point of view.

An assessment of the current cemetery performance, given population trends, impact of AIDS, type of internment and geographic area characteristics, highlighted the following:

- i. The greatest cemetery requirement (2003-2011) will be in the magisterial districts of Mitchells Plain (i.e. Mitchells Plain, Khayelitsha) (42,96ha) and Wynberg (Southern Suburbs – Philippi) (20,4ha), given that these two districts collectively accommodate 49% of the metropolitan population. Furthermore, the Wynberg magisterial district is densely populated (20 persons/ha) and accommodates 18% of the metropolitan population.
- ii. Both Wynberg and Mitchells Plain magisterial districts are expected to experience higher than average death rates due to AIDS related deaths, which together with their high populations will result in increased burial demand.
- iii. Cemeteries serving the southern suburbs (Wynberg magisterial district), Gugulethu/Philippi areas are either full or nearing capacity (2003-2004). The imminent closure of Klip, Modderdam, Ottery and Gugulethu cemeteries, given their high burial rate, will have a profound affect on the abovementioned area, necessitating use of more distant cemeteries (e.g. Khayelitsha, Muizenberg), both of which have only limited capacity.
- iv. Cemeteries serving the Metro South-East are restricted, with a single cemetery at Khayelitsha and no cemetery provision within Mitchells Plain. Welmoed cemetery (adequate capacity) is located on the eastern periphery of the area, some distance away.

- v. Private Muslim cemeteries, although not a City responsibility, mainly located in the southern suburbs, are also nearing capacity, with three of eight closed as they are full.

Phase 1 of the Metropolitan Cemetery Study, established that there is a looming cemetery crisis facing Cape Town, raising particular concern regarding the following:

- i. The City is facing a shortfall in grave sites, especially in close proximity to population concentrations, specifically within the so-called Metro South-East.
- ii. Many existing cemeteries are not functioning optimally due to adverse geohydrological conditions.

Subsequently Phase II of the Metropolitan Cemetery Study (2004), which conducted a detail assessment of potential new cemetery sites identified in Phase 1, put forward the following priority recommendations (refer Figure 1 for location of cemeteries):

- i. Land reservation (i.e. land use and use right approval) together with first phase of development be effected during the 2005/2006 financial year for Klip North, Klip West and Delft cemeteries in order to meet short-term geographic grave demand.
- ii. Land reservation for the other short-term priority cemeteries (e.g. Khayelitsha, Delft, Metro South-East and Vaalfontein Outspan) be effected during the 2005/2006 financial year, in order to facilitate a first phase of development during the 2006 financial year.
- iii. New cemetery sites target high-lying deep sands (e.g. dune-fields) in order to ensure optimum geohydrological conditions and avoid anaerobic grave conditions resulting from the high winter water table prevalent in the Cape Flats.
- iv. Implementation of a cemetery design and landscape principles directed at achieving more efficient space utilisation, improved operational capacity, improved environmental performance and cost-effective maintenance.

3.0 PROPOSED METRO SOUTH-EAST SITE

Figures 2 and 3 illustrate the locality of the site within the metropolitan and local context respectively. The 26ha site is located immediately south of Mfuleni, located adjacent to Old Strand Road, just west of Eersriv Way (Spine Road Extension) and the Juvenile Awaiting Trial Centre.

4.0 METRO SOUTH-EAST SITE ASSESSMENT

The following assessment serves to highlight opportunities and constraints to cemetery development at the proposed site:

4.1 Grave Demand and Target Communities

Apart from the geographical grave shortfall in the Metro South-East highlighted in the Phase I of the Metropolitan Cemetery Study given the imminent closure of Modderdam and Gugulethu cemeteries, the planning of Mfuleni and environs has not

provided for adequate cemetery space within the spatial frameworks or urban layouts.

This is highlighted by the following:

- i. The original Mfuleni cemetery being closed down by the Provincial Government due to excessive wet conditions.
- ii. The current Mfuleni cemetery being inadequate, with capacity being reached during 2005 and burials having to take place at Welmoed, some 10 kilometers distant.
- iii. No other cemetery serving the Metro South-East, with peripheral cemeteries (e.g. Modderdam, Stikland, Kuilsriver and Khayelitsha) either having limited capacity or located at an inconvenient distance.
- iv. Increasing population settlement within the Metro South-East, especially in the vicinity of the N2 (e.g. Khayelitsha, Sikhumbule).
- v. The requirement for a multi-denominational and multi-cultural City cemetery to serve the diverse cultural groups (e.g. Mfuleni, Mitchells Plain, Philippi East, Blue Downs, etc.).

Phase 1 of the Metropolitan Cemetery Study (2003) identified a 2003 – 2011 cemetery land demand of 42,96ha for the magisterial district of Mitchells Plain (i.e. including Khayelitsha and Mitchells Plain).

4.2 Site Topography (refer Figure 4 and Photo 1)

The site is characterized by a longitudinal and mixed dune field with the main dunes traversing the site in a south-east north-west direction. The dunes, which are more elevated in the north-west (up to 4,0m elevation), are interspersed with dune slacks, which represent flatter “plains” in the southern and eastern portion.

The area abutting Old Strand Road is relatively flat, with a lower and wetter area in the north. The dune system is eroded in east in the vicinity of the 1:100 year flood line and flood plain of the Kuils River. It is noted that the Kuils River does not abut the site, with the river course located to the west and south of the N2. However, during periods of flooding, the lower lying portions of the area between the site and the N2 can become inundated, hence the 1:100 year flood line illustrated on Figure 10.

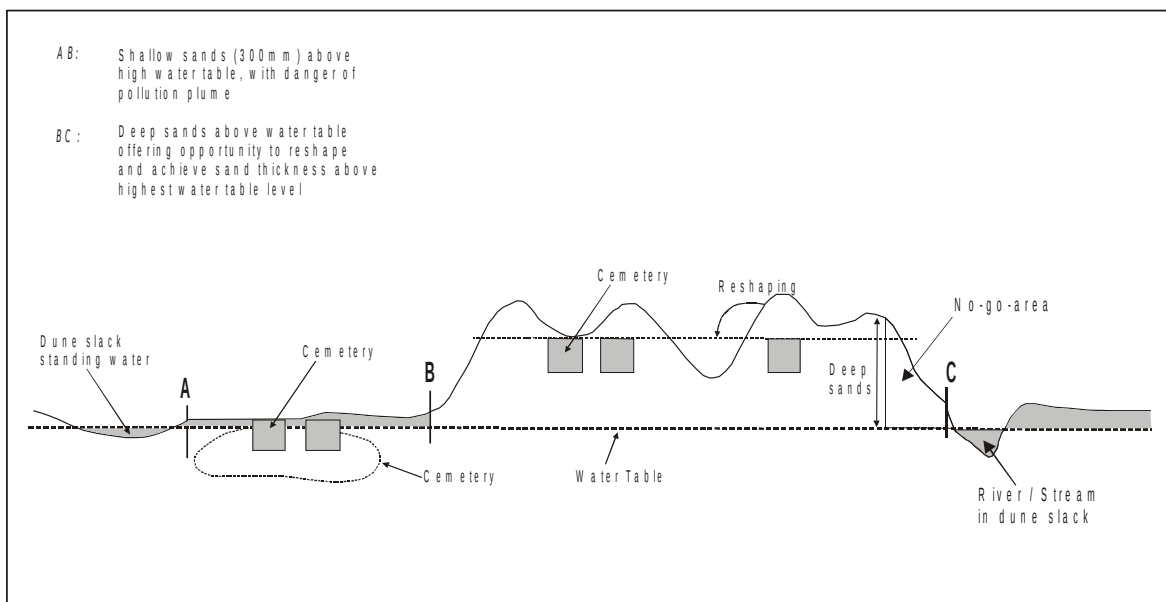
4.3 Geohydrological Conditions

Poor historical siting of cemeteries resulting in 16 of the 31 municipal cemeteries being subject to high winter water-table conditions highlights the significance of geohydrological considerations in the siting of the Metro South-East Cemetery. The Council for Geoscience, CSIR and the Department of Water Affairs and Forestry highlighted this consideration, with the following being noted:

- i. The achievement of a “basal buffer zone” comprising soil layers between the base of the deepest grave and the water table (i.e. permanent or perched). Such a buffer zone will form a barrier (i.e. an aeration zone or attenuation zone) between the potential source of pollution (i.e. grave) and the water table, with processes of filtration and absorption in the soil preventing microbiological pollutants from reaching the water table.

Figure 5 illustrates the above within the context of the Cape Flats which is characterized by shallow sands (300mm) above a high water-table, with the danger of pollution plume development below cemeteries developed in such conditions. Figure 5 also illustrates the deep sands of the “dune sea” which offer opportunity through reshaping to achieve sand thickness (i.e. “basal buffer zone”) above the highest water table.

Figure 5: Establishment of a “Basal Buffer Zone”



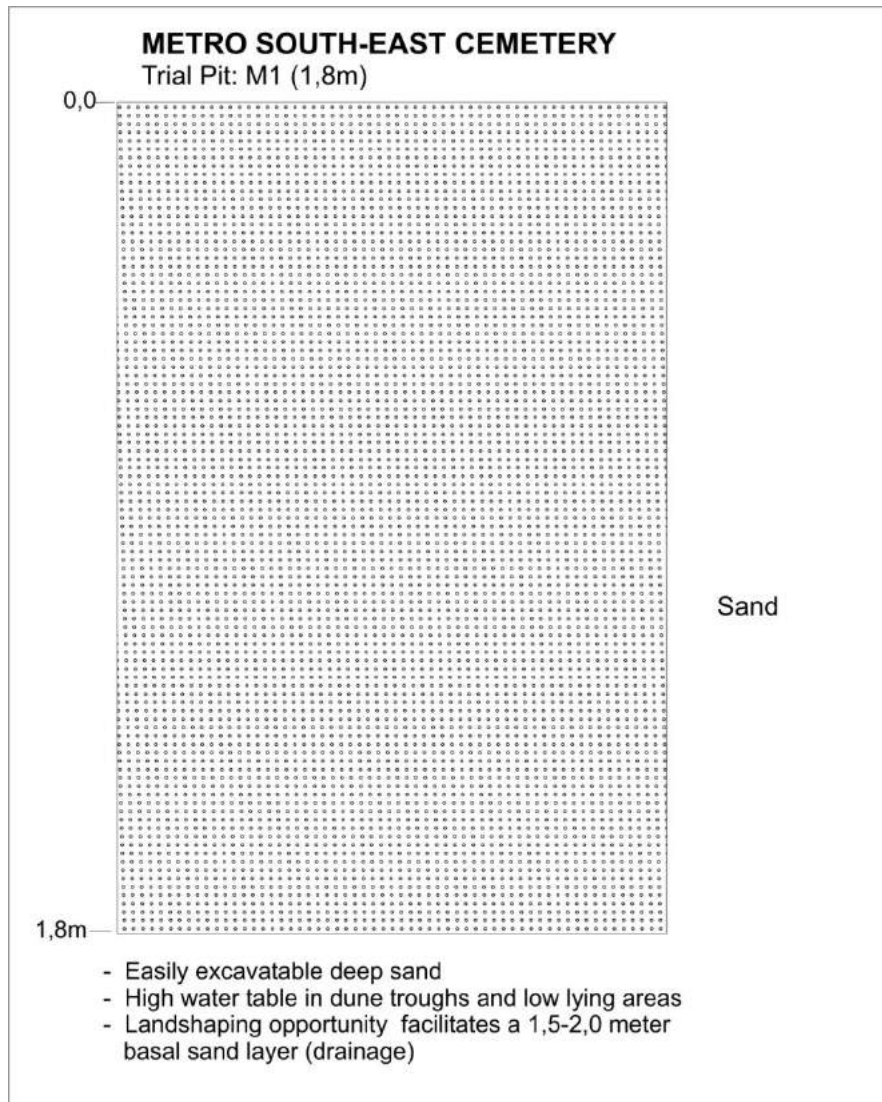
- ii. Specific reference to cemeteries and recognition of the potential for pollution caused by poorly site cemeteries, as detailed in a 2000 directive (refer Annexure A), which assesses cemeteries in accordance with the National Water Act, local authority responsibility and possible action in the event of a pollution threat.

Selection of new cemetery sites focuses on areas comprising elevated dune ridges, given the ability, through landshaping, to achieve modified sand platforms ($\pm 1,5$ metre above normal ground level), thereby significantly reducing the groundwater table constraint.

The Metro South-East site, given its dune structure and height ($\pm 4-5$ m) offers an opportunity to achieve an effective “basal buffer zone” between the graves and the winter water-table.

Sub-surface conditions as reflected in hand-dug trial pits (refer diagrammatic profile) to a depth of 1,8m revealed the following:

- i. No excavation problems, being suited to hand digging, but requiring surface stabilization to prevent surface slumping.
- ii. No free water (January).



4.4 Vegetation (refer Photos 1 and 2 and Figure 4)

Vegetation on the site is relatively undisturbed, with stands of high quality Strandveld dune thicket, grassland and a mosaic between the two. The open spaces or undulating flats between the dunes are well grassed and vegetated, with *Imperata cylindrical* (beddinggrass) dominating in grassland areas and *Rhus laevigata* (duinetaaibos), *Zygophyllum flexuosum* (spekbos) and *Aspalathus hispida* (wasblommetjies) making up the mosaic between thicket and grassland.

Vegetation is impacted by acacia infestation, primarily Port Jackson willow (*Acacia saligna*), informal footpaths and indiscriminate dumping along Old Strand Road.

Proximity to the Driftsands Nature Reserve and the Kuils River Corridor increases the likely occurrence of several Red Data species, including the succulent vingerpol, *Euphorbia marlotthiara* and *Otholobium fruiticans* (skaapbostee), the latter being widespread in the Reserve, together with several other species of landscaping, restoration, medicinal or other value.

The significance of the vegetation has led to the site being included in the City's Biodiversity Network (refer Section 5.3).

4.5 Archaeological Status

A site visit by the Agency for Cultural Resource Management was undertaken. The findings of this assessment (refer Annexure B) confirm the site suitable for development given the potential impacts to archaeological material being low, provided that any human burials uncovered during bulk earthworks not be disturbed or removed until inspected by an archaeologist. Refer to Annexure B for Heritage Western Cape's Record of Decision stating no objection to cemetery development.

4.6 Existing Site Condition

As illustrated in Photos 1 and 2, and Figure 4 the site is relatively undisturbed apart from the following:

- i. Portions being infested with alien vegetation.
- ii. Limited dumping along Old Strand Road.
- iii. Numerous footpaths and tracks, which traverse the site.
- iv. Impact of services routing (i.e. water pipeline, water tower and power lines).

While no buildings occur on the site, it accommodates the following infrastructure (refer Figure 4 and Figure 9).

- i. Bulk water transfer pipelines (up to 21m servitude) traversing the site from east to west, together with an associated pump station.
- ii. 11kV overhead powerline extending north of Old Strand Road to the pumpstation.
- iii. Elevated reservoir located in the north-western portion.
- iv. Access track to the pipeline, pumpstation and elevated tower.

5.0 PLANNING CONTEXT AND LAND USE ALLOCATION

Land use is informed by the following:

5.1 Southern Service Area: Spatial Development Framework (1999):

This framework puts forward the identified site as a “major community facility” (refer Figure 6). The detail land use allocation, as illustrated in Figure 6, comprises the following:

- i. Portion 20 (±36,0ha): Institutional.
- ii. Portion 21 (±6,0ha): Institutional (subject to deproclamation of the N7 Road Reserve).
- iii. Portion 22 (±23,0ha): Institutional/MOSS (i.e. within the Kuils River 1:100 year floodline).

Existing land uses (1999) included the following:

- i. Portion 20: Portion developed for Rosendal Care Centre/Juvenile Awaiting Trial Facility located on Eersriv/Old Strand Road intersection.
- ii. Portion 22: ARK/Faure School for Boys located on the western part of Portion 22, abutting the Kuils River 1:100 year floodline in the west and south.

5.2 City of Cape Town MOSS (Kuils River MOSS)

In accordance with a preliminary pilot study area of the MOSS (refer Figure 7), the proposed cemetery site falls within the Kuilsriver MOSS, with the following conservation requirements being set for the land portions identified for cemetery purposes:

- i. Portion of Portions 20, 21 and 22 to be retained for conservation purposes.
- ii. Natural wetlands within floodline/floodplain to be reserved.

5.3 City of Cape Town Biodiversity Network

As illustrated in Figure 8, the land portions underlying the proposed cemetery site are included in the City’s Biodiversity Network. The Biodiversity Network categorises conservation worthy areas into either Category A (core conservation areas), Category B (conservation areas) and Category C (mixed use with conservation).

The proposed Metro South-East cemetery is classified as a Category B, identifying it as a multi-purpose Conservation Resource Area, suitable for resource harvesting, eco-tourism, etc.

Scrutiny of the Phase I and Phase II of the Cemetery Study by the Environmental Directorate (City of Cape Town: CMC), together with formal discussion revealed the following:

- i. Need for co-ordinated development between conservation and other uses (e.g. cemetery).
- ii. Siting of the Metro South-East cemetery is supported given the following:
 - Physical provision of natural corridors between platforms being introduced, linking conservation areas.
 - Plant identification (e.g. Red Data species) prior to development of each phase, with planting outside development area for later reintroduction.
 - Planting within cemetery to be restricted to indigenous species.
 - Cemetery management plan to include a landscape plan to safeguard and reinforce biodiversity.
 - Cemetery platforms to form integral part of corridor and “stepping stone approach”.
 - Development to be managed in accordance with an Environmental Management Plan (EMP).

6.0 ADMINISTRATIVE CONTEXT AND ZONING

The proposed cemetery is located on the Eersriv Farm 981 (Stellenbosch RD), with the 24ha site comprising portions of the following (refer Annexure C):

- i. Farm 981/2 measuring 6,1304ha and currently registered in the name the “Suid Afrikaanse Padraad”.
- ii. Farm 981/18 measuring 35,5959ha and currently registered in the name of “Nasionale Behuisingsraad”.
- iii. Remainder Farm Eersriv No 981 (i.e. Farm Eersriv No 981) : remaining extent of unknown extent and currently registered in the name of the Republic of South Africa (i.e. Dept. of Public Works).
- iv. Portion of Strand Road.

It is noted that Portion 2 of Farm 981 was reserved for the alignment of the N7 route. This routing is no longer required and has subsequently been deproclaimed (refer Annexure D for gazetted deproclamation dated 22 April 2003). Redeployment of the N7 reserve within the City’s road network has been rationalized, with the road reserve south of Old Strand Road no longer being required. The proposed widening of Eersriv Way (i.e. to the west) is not impacted by the cemetery development. Similarly, the southern portion of Strand Road extending south of Old Strand road is no longer required given the deproclamation of the N7 (i.e. Portion 2 of Farm No 981).

As illustrated on Figure 9 and the SG Diagram (refer Annexure C), the following registered servitudes traverse the site:

- (i) Diagram 10341/1995 : 12,0m pipeline servitude traversing Rem. 981
- (ii) Diagram 10343/1995 : 21,0m pipeline servitude traversing 981/2
- (iii) Diagram 10342/1995 : 21,0m pipeline servitude traversing 981/18
- (iv) Diagram 3383/1976 : 3,0m pipeline servitude traversing Rem. 981

Furthermore, servitudes/reserves are required for the following:

- (i) Overhead electrical powerlines traversing the north-western corner of the site.
- (ii) The water tower (and trig beacon) and pipeline extending to the transfer pipeline (i.e. within the 12,0m servitude).

- (iii) Overhead electrical powerline extending from the electrical sub-station (i.e. within the 21,0m servitude).
- (iv) The 4-5m wide gravel pipeline access (maintenance) road aligned along the northern edge of the pipeline servitude.
- (v) A telephone line located some 12,0m east of the western boundary.
- (vi) Fixing the southern road-reserve of Old Strand Road, that is 67,5m south of the northern reserve edge.

Furthermore, it is noted that all four portions are identified for being transferred to the City of Cape Town.

The current zoning is "Rural" in terms of the old CMC zoning scheme. The change of land use application is submitted in terms of the Land Use Planning Ordinance, 1985 (Ordinance 15 of 1985).

7.0 SURROUNDING LAND USE AND ZONING

As illustrated in Figures 4 and 9, the proposed site is abutted by the following land use and zoning:

- i. The ARK/Faure School for Boys to the west, being zoned Institutional zone III.
- ii. The Rosendal Care Centre/Juvenile Awaiting Trial Facility to the east, being zoned Institutional zone III.
- iii. Farm 952/4 (i.e. north of Old Strand Road) currently zoned undetermined, but being planned for residential development (refer Plan 10) and to be zoned Informal Residential Zone.
- iv. Vacant underdeveloped land to the south, falling within the Kuils River 1:100 year floodline and being zoned Rural Zone (i.e. Farm Driftsands No 544).

8.0 LAND USE APPROVAL

In accordance with the designated status of the land portions concerned, the following is required:

- i. Completion of ownership transfer to City of Cape Town.
- ii. Rezoning of the required 26,4576ha portion depicted as ABCDEFG (refer Figure 9) from Rural Zone to Open Space Zone to permit cemetery as a designated use.
- iii. Subdivision and consolidation of the required 26,4576ha portion (refer ABCDEFG in Figure 9) from the Remainder of Farm Eersriv No 981, 981/2, 981/18 and Portion of Strand Road, together with the compilation of a new site diagram.
- iv. A ROD, given that in terms of the Draft NEMA EIA regulations (2004) the establishment of cemeteries have been listed in Schedule 3 as activities that may not be undertaken prior to the issuing of an environmental authorisation by the competent authority, and must at least be subjected to an initial environmental assessment. A checklist as requested, is being submitted to DEA&DP to meet these requirements.
- v. An Archeological Assessment (refer Annexure B for assessment). The assessment, forming an initial scoping (HIA) has been submitted to Heritage

Western Cape for comment, with their Record of Decision stating no objection to the development also included in Annexure B.

- vi. Upon instruction, a subdivision of agricultural land application in terms of the Sub-division of Agricultural Land Act, 1970 (Act 70 of 1970) will be lodged if required.

9.0 DEVELOPMENT PROPOSALS (refer Figure 10)

The Priority Assessment (Phase II) of the Metropolitan Cemetery Study (2004) identifies the Metro South-East cemetery as a short-term priority cemetery with the necessary pre-design and cost estimate having informed the 2004/2005 budget cycle. Infrastructure development (Phase I) is programmed for the 2005/2006 financial year, with grave availability in mid-2006.

Figure 10 illustrates a proto-typical layout design for the Metro South-East Cemetery comprising the following:

- i. Cemetery access from Old Strand Road, with the intersection being aligned with the access to the proposed residential development on Farm 952/4 (located north of Old Strand Road).
- ii. A civic forecourt accommodating the necessary office structures, parking and hero's acre.
- iii. Burial superblocs with a total grave capacity of 20704 graves accessed via roads and parking alcoves.
- iv. Natural veld corridors (i.e. retention of indigenous vegetation) located within and between superblocs to facilitate integration within the biodiversity corridor.
- v. Landscaped forecourt (i.e. shaded seating and garden areas) as well as perimeter indigenous planting (double row) to afford the necessary land use interface, cemetery definition, climatic protection, and a visual and noise buffer. All cemetery urban and natural area interface to include:
 - Set-back of graves to prevent boundary undercutting, with setback including 5,0m verge (double tree-row) and 10m access road.
 - 1,8m vibracrete walling along abutting rear or side boundaries of adjoining developed properties (e.g. ARK, Juvenile Centre).
 - 1,8m palisade fencing abutting all public areas and roadways.
- vi. A phased implementation including appropriate soil stabilization to prevent windblown sand/dust.
- vii. The implementation of specific landscape components (refer Metropolitan Cemetery Study Phase II, 2004) which focus on achieving more efficient space utilisation, improved operational capacity, improved environmental performance and cost-effective maintenance.
- viii. Incorporation of existing infrastructure (e.g. water transfer pipeline, elevated water tower, powerline) within areas of indigenous planting.
- ix. Remainder of land portions allocated to conservation as part of the biodiversity corridor.
- x. Incorporation of the low-lying area (west) as a detention pond, given run-off from Old Strand Road.

Given the significance of the Biodiversity Corridor, the Priority Assessment (Phase II) of the Metropolitan Cemetery Study (2004) set the following guidelines for cemetery development within or abutting conservation worthy areas:

- i. **Design guidelines**, including:
- A modular design (i.e. layout) being suited as it facilitates cemetery layout flexibility capable of adaption to varying terrain and biodiversity conditions. It allows for individual modules (i.e. superblock) to be developed as platforms in sloping or undulating terrain and the introduction or retention of natural vegetation corridors between superblocks in conservation worthy areas (e.g. biodiversity corridors).
 - Allowing for phased implementation (e.g. superblock), thereby ensuring improved environmental performance through allowing for the retention of natural veld conditions during land banking phases required in cemetery development, providing for manageable development units (i.e. for topsoil and seedbank stockpiling), as well as for wind erosion protection during development.
- ii. **Landscaping guidelines** to facilitate increased use of indigenous vegetation and improved integration of cemeteries with natural systems (e.g. conservation areas, drainage systems, etc.), including the following:
- Landscaping in conservation worthy areas, including:
 - Eradication of all invasive exotics from the site.
 - Mapping and collection of all indigenous material prior to construction from the areas to be disturbed, with storage for use during revegetation.
 - Topsoil to be removed and stockpiled prior to leveling of the site. Once leveled, topsoil to be spread over entire area, and straw or woodchip stabilized (i.e. seedless of invasive weeds).
 - Burial area to be revegetated with appropriate indigenous plant material or indigenous plant material collected prior to construction. In areas of endemic vegetation (e.g. Metro South-East), cemeteries are to be revegetated with material from the site in accordance with search and rescue, and seed collection according to specialist recommendations.
 - Tree planting in conservation worthy areas, including:
 - Retention of indigenous vegetation along perimeter and roadways as natural corridors, and within landscaped sections of civic forecourt.
 - Retention and incorporation of rocky outcrops and copse as landscape features in order to increase the landscape diversity within the cemetery.
 - A phased development of new and extension cemeteries to ensure minimum disturbance of natural vegetation and systems (e.g. soil erosion). This is especially applicable where land banking occurs in conservation worthy areas, with future phases being retained and managed as part of the biodiversity network.
 - Preparation of an Environmental Management Plan (EMP) for sensitive areas, especially with endemic vegetation (e.g. Metro South-East).
 - Preparation of a detailed topographic plan (survey). This was completed in May 2005 and forms the basis of Figure 9.
 - Undertaking an alien vegetation removal program (undertaken May 2005).

10.0 SITE SUITABILITY

It can be concluded that the proposed site is highly suitable for the development of the Metro South-East cemetery given the following:

- i. Being vacant and state-owned, with ownership currently being transferred to the City of Cape Town.
- ii. Being located in a biodiversity corridor it offers an opportunity to co-ordinate and integrate conservation and appropriate development (i.e. a cemetery). As illustrated in Figures 9 and 10, the proposed cemetery development will only comprise some 16,4ha (or 62%) of the 26ha site, with the residual being conservation.
- iii. Compliance with the existing Spatial Development Framework and designated land use, namely an institutional/community facility.
- iv. Compliance with the Kuils River MOSS Pilot Study, through the retention of significant portions of the three affected land portions for conservation purposes.
- v. Suitable geotechnical conditions given the opportunity of landshaping and achieving a basal sand layer.
- vi. Serves as a functional interface between Mfuleni (urban area) and the Kuils River floodplain and N2 corridor.
- vii. Location meets both the cultural needs of the local Mfuleni community, as well as the broader multi-cultural needs of surrounding communities (e.g. Mitchells Plain, Blue Downs, etc.).
- viii. Offers a demonstration opportunity to integrate indigenous planting within a civic space and demonstrate the biodiversity and maintenance value of such vegetation. Furthermore it facilitates the retention and improvement of indigenous vegetation in future use areas during the land banking process, a necessary component of cemetery development.
- ix. Not being located within a 1:100 year flood line.

11.0 RECOMMENDATION

It is recommended that the following be favourably considered:

- i. Subdivision and consolidation of the required portion ABCDEFG totalling 26,4576ha from Farms 981 (Rem), 981/2, 981/18 and Portion of Strand Road, and the compilation of a new diagram (refer Figure 12).
- ii. Rezoning of the required 26,4576ha portion depicted as ABCDEFG in Figures 11 and 12 from Rural Zone to Open Space Zone to permit cemetery as a designated use.

It is noted that an environmental checklist has been completed and is being submitted to the Department of Environmental Affairs and Development Planning.

Similarly, a copy of the Archeological Assessment has been submitted to Heritage Western Cape for consideration (Phase 1 Archaeological Assessment), with the Record of Decision received from Heritage Western Cape stating no objection to the cemetery development proceeding (refer Annexure B).

Upon instruction, a subdivision of agricultural land application in terms of the Subdivision of Agricultural Land Act, 1970 will be submitted if required.

METRO SOUTH-EAST CEMETERY SDP

Based on the block layout and circulation plan prepared by Asch and discussed and amended recently, attached please find the Draft Site Development Plan (SDP) for discussion at the Cemetery Planning Meeting on 12 August 2010. The SDP will serve for both the MOU (City Parks, ERM and CapeNature) and Land Use Applications (e.g. rezoning).

The SDP (i.e. Figure 1) details the following for the 26,45ha Metro South-East cemetery site:

- 1.0 A 0,44ha Civic Forecourt for accommodating the cemetery administration offices, storeroom, staff and public ablutions, public meeting and seating area and a “hero’s acre”.
- 2.0 A composite parking area, comprising separate vehicle, taxi and bus parking areas, providing for 8 bus bays, 18 taxi bays and 88 standard vehicle bays. Refer Figure 1 for parking bay dimensions.
- 3.0 Burial superblocs arranged in accordance with earth-shaped platforms and biodiversity movement and drainage corridors which traverse the site from north to south. Such burial superblocs represent two development phases, with the following grave potential:
 - Phase 1 : 5,98ha or 13 156 graves
 - Phase 2 : 3,63ha or 7 986 graves
 - TOTAL **21 142** graves

4.0 Access and Circulation / Movement

Cemetery access is via a single access point on Strand Road, with traffic separation to bus, taxi and standard vehicle parking areas and the cemetery circulation roads. Traffic movement through all 3 parking areas is “one-way”, with a dedicated exit onto Strand Road. Cemetery circulation roads comprise varying reserve width and surface roadway dimensions as illustrated in Figure 1. Also provided are alcove parking areas to accommodate hearse and family vehicle parking in close proximity to burial sites. Such alcoves also serve to facilitate vehicle passing in the burial block areas (refer Figure 1 for alcove parking area dimensions). Alcove areas also provide for the following cemetery furniture on a hardened surface adjacent to the vehicle parking bays:

- Shaded seating structure
- Drinking fountain
- Irrigation connection point

5.0 Conservation

In accordance with the MOU and location of the cemetery site within the C of CT and CapeNature identified Kuils River Biodiversity Corridor and the Biodiversity Network Classification of the Area (i.e. CBA1C), all areas not being utilized for cemetery purposes will be retained and managed as conservation areas (including pipeline servitudes which traverse the area). As illustrated in Figure 1, such conservation areas comprise 13,72ha or 52% of the 26,45ha site. All land to the south and east of the cemetery site (i.e. Farms 981/2 and 981/18) is also being acquired by City Parks for conservation purposes.

6.0 Land Use Acquisition, Subdivision, Consolidation and Rezoning

Metro South-East Cemetery SDP#1505: August 2010
Neville van der Westhuizen: 021-854 4260

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portions:

- (i) Farm Eersriv No 981 – 5,0ha
- (ii) Portion 2 of Farm 981 – 6,1304ha
- (iii) Portion 18 of Farm 981 – 35,5959ha
- (iv) Portion of Strand Road 1895 – 0,45ha

Of the 47,1763ha being acquired the following allocation will apply:

- (i) Cemetery purposes – 12,73ha
- (ii) Conservation within the cemetery site – 13,72ha
- (iii) Conservation outside the cemetery site – 20,7263ha

6.2 Subdivision and Consolidation of the following land portions:

- (i) 5,0ha of Farm 981
- (ii) 4,0ha of Farm 981/2
- (iii) 17,0ha of Farm 981/18
- (iv) 0,45ha of Strand Road 1895

6.3 Rezoning:

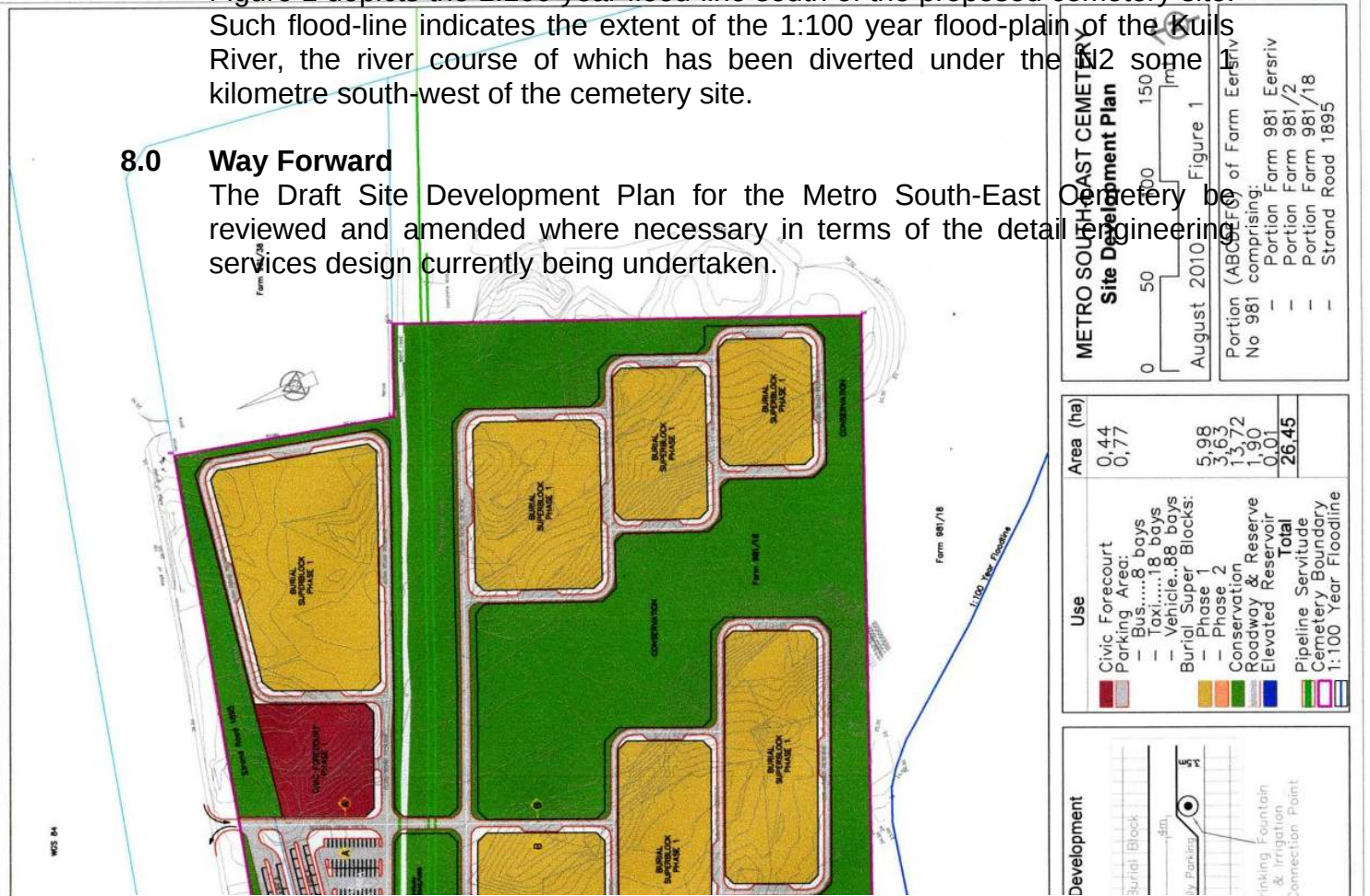
Rezoning of consolidated portion from Transport II (0,45ha) and “Rural” (26,0ha) to Private Open Space in terms of LUPO.

7.0 Flood-line

Figure 1 depicts the 1:100 year flood-line south of the proposed cemetery site. Such flood-line indicates the extent of the 1:100 year flood-plain of the Kullis River, the river course of which has been diverted under the bridge some kilometre south-west of the cemetery site.

8.0 Way Forward

The Draft Site Development Plan for the Metro South-East Cemetery is being reviewed and amended where necessary in terms of the detail engineering services design currently being undertaken.



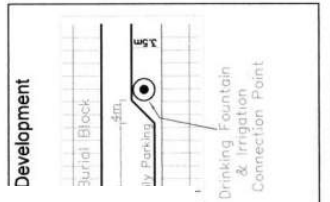
Metro South-East Cemetery SDP#1505: August 2010
Neville van der Westhuizen: 021-854 4260

**METRO SOUTH-EAST CEMETERY
Site Development Plan 2**

August 2010 Figure 1

Portion (ABOVE) of Farm Eersriv No 981 comprising:
 - Portion Farm 981 Eersriv
 - Portion Farm 981/2
 - Portion Farm 981/18
 - Strand Road 1895

Use	Area (ha)
Civic Forecourt	0,44
Parking Area:	0,77
- Bus.....8 bays	
- Taxi.....18 bays	
- Vehicle.....88 bays	
Burial Super Blocks:	
- Phase 1	5,98
- Phase 2	3,63
Conservation	1,372
Roadway & Reserve	1,90
Elevated Reservoir	0,01
Total	26,45
Pipeline Servitude	
Cemetery Boundary	
1:100 Year Floodline	

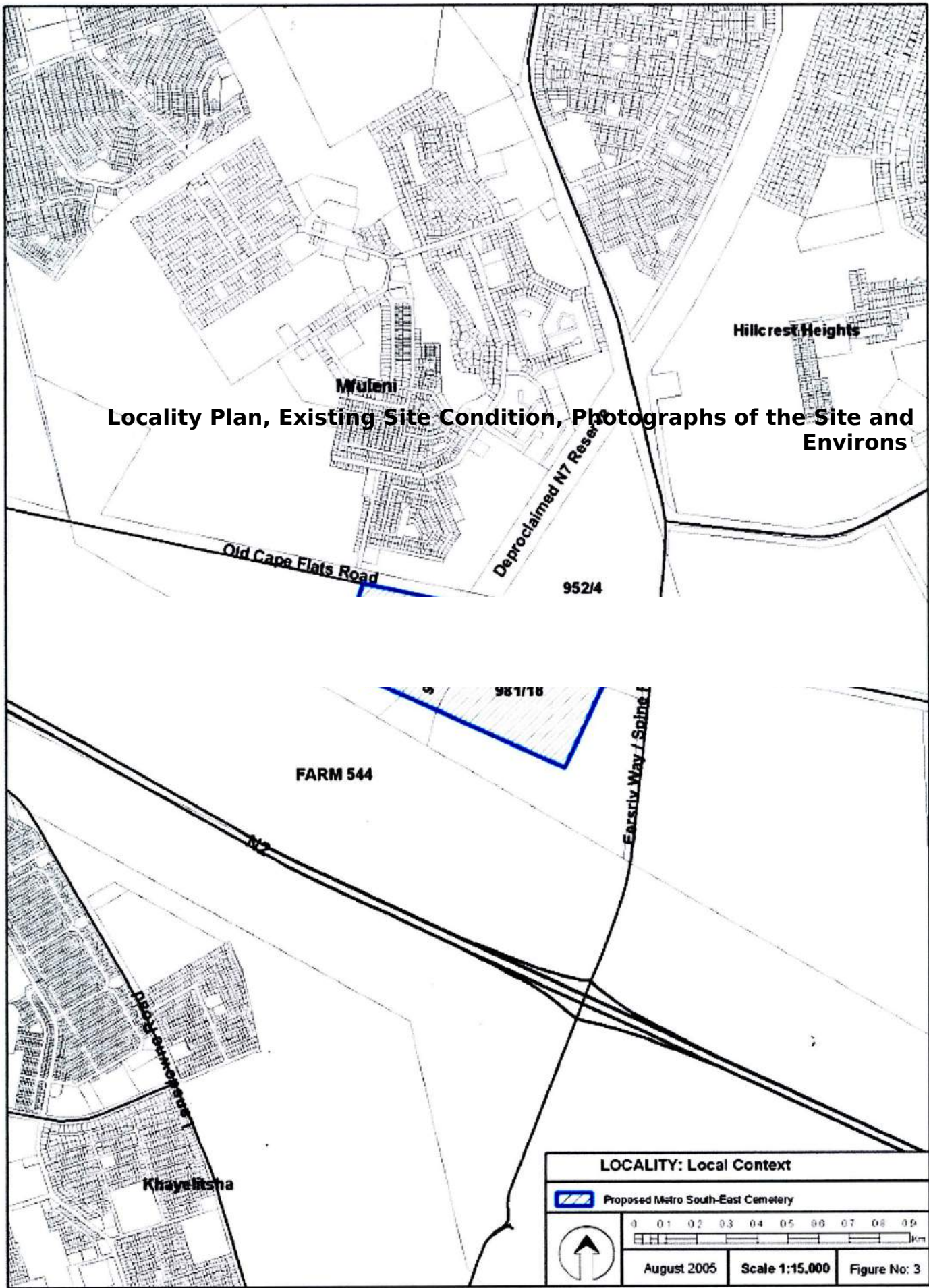


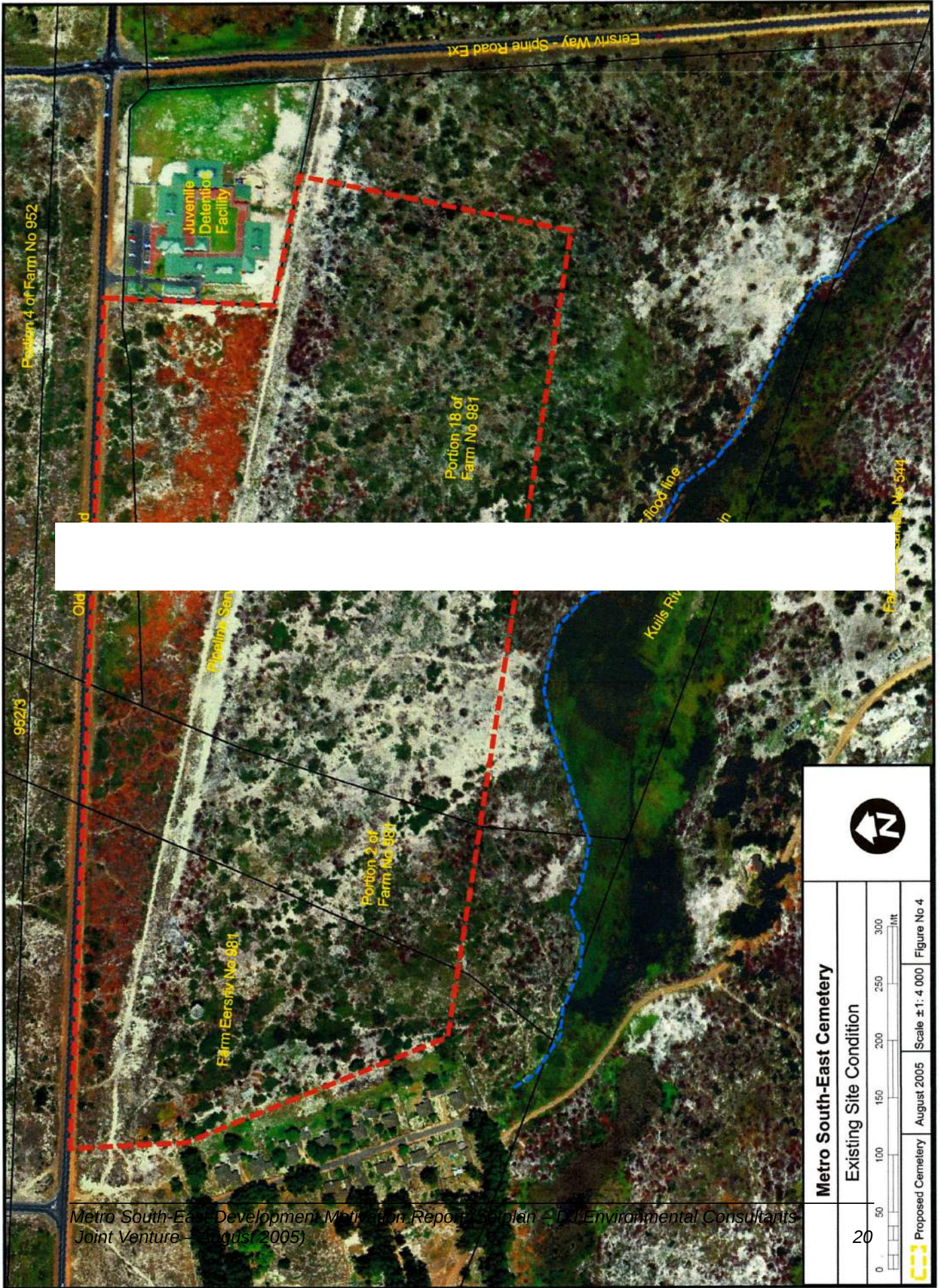
Metro South-East Development Motivation Report (Setplan – DJ Environmental Consultants Joint Venture – August 2005)

2




Section	Alcove	Parking Bay Dimensions	Road Cross-sections
Section A			
Section B			
Section C-C			

ANNEXURE E





Metro South-East Development Motivation Report, Section 4 - D1 Environmental Consultants Joint Venture - August 2005

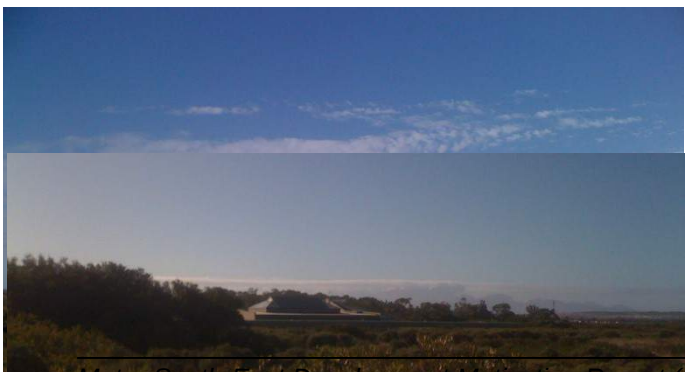
	
Metro South-East Cemetery	
Existing Site Condition	
20	0 50 100 150 200 250 300
	m
	Proposed Cemetery
August 2005 Scale ±1: 4 000 Figure No 4	



View of site looking west towards Table Mountain



View of the adjoining Horizon Youth Community Centre



METI View looking north from the March site



View of RDP Housing to the north east of the site

PHOTOGRAPHS OF THE SITE AND ENVIRONS