

**A PHASE 1 ARCHAEOLOGICAL HERITAGE IMPACT ASSESSMENT FOR THE REZONING AND SUBDIVISION FOR THE ESTABLISHMENT OF A RURAL RESIDENTIAL DEVELOPMENT ON PORTION 87 OF THE FARM CRAGGA KAMMA NO 23, PORT ELIZABETH, NELSON MANDELA BAY MUNICIPALITY, EASTERN CAPE**

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**Note:** This report follows the minimum standard guidelines required by the South African Heritage Resources Agency for compiling Archaeological Heritage Phase 1 Impact Assessment (AHIA) reports.

## **SUMMARY**

### **Proposal**

The original proposal was to conduct a survey of possible archaeological heritage sites for the rezoning and subdivision for the establishment of a rural residential development on Portion 87 of the Farm Cragga Kamma No. 23, Port Elizabeth, Eastern Cape; to establish the range and importance of the heritage sites, the potential impact of the development and to make recommendations to minimize possible damage to these sites.

### **The investigation**

No visible archaeological sites were found during the investigation. The entire property is covered by dense grass, patches of alien vegetation. Sites and/or material may be exposed during development.

### **Cultural sensitivity**

The area investigated appears to be of low cultural sensitivity, but important material may be exposed after the top soil is removed (for example human remains).

### **Recommendations**

If any concentrations of archaeological material are uncovered during development it should be reported immediately to the nearest archaeologist, museum and/or the South African Heritage Resources Agency.

## **PROJECT INFORMATION**

### **Status**

The report is part of an Environmental Impact Assessment.

### **The type of development**

Rezoning and subdivision of Portion 87 of the Farm Cragga Kamma No 23, Chelsea, Port Elizabeth, Eastern Cape to establish a rural residential development.

### **The Developer**

Kragga Kamma Development Trust of Port Elizabeth  
Contact person: Mr L. de Villiers  
Tel/Fax: 041 3975219  
Cell: 0835779694

### **The Consultant**

Anton Bok Aquatic Consultants cc  
5 Young Lane, Mill Park  
Port Elizabeth  
6001  
Tel./Fax: 041 3733 464  
Cell: 083 4491801  
email: antonbok@aquabok.co.za

### **Terms of reference**

Conduct a survey of possible archaeological heritage sites for rezoning and subdivision for the establishment of a rural residential development on Portion 87 of the Farm Cragga Kamma No. 23, Port Elizabeth, Eastern Cape; to establish the range and importance of the heritage sites, the potential impact of the development and to make recommendations to minimize possible damage to these sites.

## **BRIEF ARCHAEOLOGICAL BACKGROUND**

### **Literature review**

Little is known about the archaeology of the immediate area, mainly because no systematic research has been conducted there. The oldest evidence of the early inhabitants in this area are large stone tools, called handaxes and cleavers, which can be found amongst river gravels and in old spring deposits in the region (Deacon 1970). These large stone tools are from a time period called the Earlier Stone Age (ESA) and may date between 1 million and 250 000 years old. The large Handaxes and cleavers were replaced by smaller stone tools called the Middle Stone Age (MSA) flake and blade industries. Evidence of MSA sites occur throughout the region and date between 200 000 and 30 000 years old. Fossil bone may in rare cases be associated with MSA occurrences. (Deacon & Deacon 1999).

The majority of archaeological sites found in the area date from the past 10 000 years (called the Later Stone Age) and are associated with the campsites of San hunter-gatherers and Khoi pastoralists. These sites are difficult to find because they are in the open veld and often covered by

vegetation and sand. Sometimes these sites are only represented by a few stone tools and fragments of bone. The preservation of these sites is poor and it is not always possible to date them Africa (Deacon & Deacon 1999). There are many San hunter-gatherers sites in the nearby Elandsberg and Groot Winterhoekberg Mountains. Here caves and rock shelters were occupied by the San during the Later Stone Age and contain paintings along the walls. The last San/KhoiSan group was killed by Commando's in the Groendal area in the 1880s.

Some 2 000 years ago Khoi pastoralists occupied the region and lived mainly in small settlements. They were the first food producers in South Africa and introduced domesticated animals (sheep, goat and cattle) and ceramic vessels to southern.

The most common archaeological sites along the nearby coast are shell middens (relatively large piles of marine shell) found usually concentrated opposite rocky coasts, but also along sandy beaches (people refer to these as 'strandloper middens') (Rudner 1968). These were campsites of San hunter-gatherers, Khoi herders and KhoiSan peoples who lived along the immediate coast (up to 5 km) and collected marine foods. Mixed with the shell are other food remains, cultural material and often human remains are found in the middens. In general middens date from the past 6 000 years. Also associated with middens are large stone floors which were probably used as cooking platforms (Binneman 2001, 2005).

### References

- Binneman, J.N.F. 2001. An introduction to a Later Stone Age coastal research project along the south-eastern Cape coast. *Southern African Field Archaeology* 10:75-87.
- Binneman, J.N.F. 2005. Archaeological research along the south-eastern Cape coast part1: open-air shell middens *Southern African Field Archaeology* 13 & 14:49-77. 2004/2005.
- Deacon, H.J. 1970. The Acheulian occupation at Amanzi Springs, Uitenhage District, Cape Province. *Annals of the Cape Provincial Museums*. 8:89-189.
- Deacon, H.J. & Deacon, J. *Human beginnings in South Africa*. Cape Town: David Phillips Publishers.
- Rudner, J. 1968. Strandloper pottery from South and South West Africa. *Annals of the South African Museum* 49:441-663.

### Relevant impact assessments

None nearby

### DESCRIPTION OF THE PROPERTY

#### Area surveyed

#### Location data

The proposed establishment of a rural residential development on Portion 87 of the Farm Cragga Kamma No. 23, Port Elizabeth, Nelson Mandela Bay Municipality, Eastern Cape is situated northwest of the Lakeside Road and Kragga Kamma Road intersection (Maps 1 & 2), and is approximately 19.17 ha in size. The property is covered mainly by dense grass and isolated patches of alien vegetation. A drainage line marks the western boundary running in a south-westerly direction (Figs 1- 4).

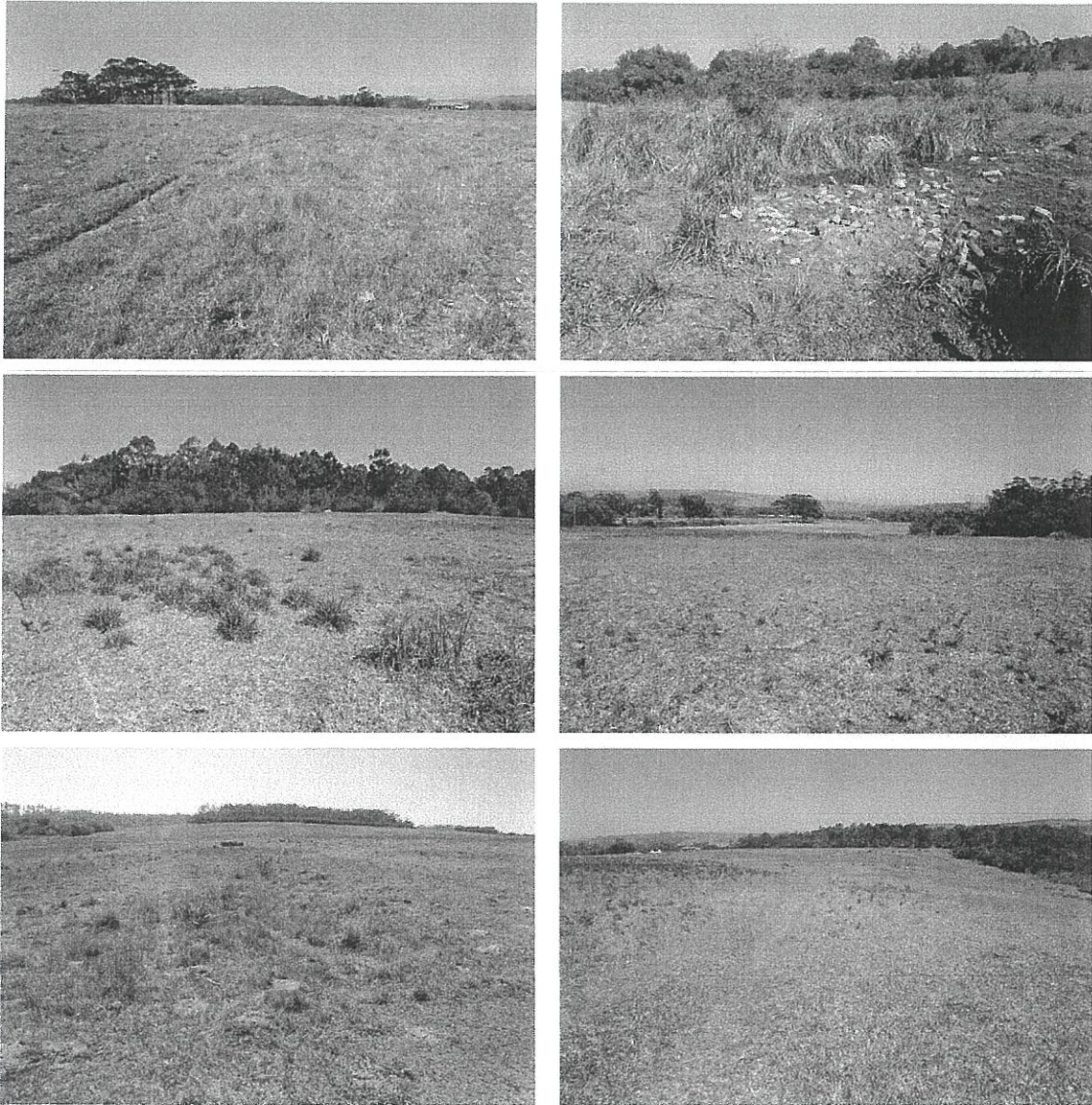
#### Map

1:50 000 3425 DC , 3425 DD & 3425BA Port Elizabeth

## Methodology

GPS readings were taken with a Garmin Plus II

The property was investigated on foot, but no archaeological sites/materials were found. The dense grass and patches of thicket vegetation which cover the property made it virtually impossible to locate archaeological sites/material (Figs 1-6). GPS reading at 33.58.25,75S; 25.24.54,04E.



**Figs 1-6. Different views of the dense grass cover of the Cragga Kamma property.**

## Survey/Description of sites

No visible archaeological sites/materials were found.

## Discussion

The proposed area for development is of low cultural sensitivity. The area investigated is situated

further than 5 km from the coast and falls outside the maximum distance shell middens are expected to be found from the beach. It is unlikely that any archaeological or historical material of any value will be found *in situ* or of any contextual value. Notwithstanding, there is always a possibility that human remains and/or other archaeological and historical material may be uncovered during the development removed. Such material must be reported to the nearest museum, archaeologist or to the South African Heritage Resources Agency if exposed (see general remarks and conditions below).

#### **RECOMMENDATIONS**

1. In the unlikely event that any concentrations of archaeological material are exposed during construction, all work in that area should stop and it should be reported immediately to the nearest museum/archaeologist or to the South African Heritage Resources Agency so that a systematic and professional investigation can be undertaken. Sufficient time should be allowed to remove/collect such material (See appendix 1 for a list of possible archaeological sites that maybe found in the area).
2. Construction managers/foremen should be informed before construction starts on the possible types of heritage sites and cultural material they may encounter and the procedures to follow when they find sites.

## GENERAL REMARKS AND CONDITIONS

**Note:** This report is a phase 1 archaeological heritage impact assessment/investigation only and does not include or exempt other required heritage impact assessments (see below).

The National Heritage Resources Act (Act No. 25 of 1999, section 35) requires a full Heritage Impact Assessment (HIA) in order that all heritage resources, that is, all places or objects of aesthetics, architectural, historic, scientific, social, spiritual linguistic or technological value or significance are protected. Thus any assessment should make provision for the protection of all these heritage components, including archaeology, shipwrecks, battlefields, graves, and structures older than 60 years, living heritage, historical settlements, landscapes, geological sites, palaeontological sites and objects.

It must be emphasised that the conclusions and recommendations expressed in this archaeological heritage sensitivity investigation are based on the visibility of archaeological sites/features and may not therefore, reflect the true state of affairs. Many sites/features may be covered by soil and vegetation and will only be located once this has been removed. In the event of such finds being uncovered, (such as during any phase of construction work), archaeologists must be informed immediately so that they can investigate the importance of the sites and excavate or collect material before it is destroyed. The onus is on the developer to ensure that this agreement is honoured in accordance with the National Heritage Act No. 25 of 1999.

It must also be clear that Archaeological Specialist Reports (AIAs) will be assessed by the relevant heritage resources authority. The final decision rests with the heritage resources authority, which should grant a permit or a formal letter of permission for the destruction of any cultural sites.

## **APPENDIX 1: IDENTIFICATION OF ARCHAEOLOGICAL FEATURES AND MATERIAL FROM INLAND AREAS: guidelines and procedures for developers**

### 1. Human skeletal material

Human remains, whether the complete remains of an individual buried during the past, or scattered human remains resulting from disturbance of the grave, should be reported. In general the remains are buried in a flexed position on their sides, but are also found buried in a sitting position with a flat stone capping and developers are requested to be on the alert for this.

### 2. Fossil bone

Fossil bones may be found embedded in calcrete deposits at the site. Any concentrations of bones, whether fossilized or not, should be reported.

### 3. Stone artefacts

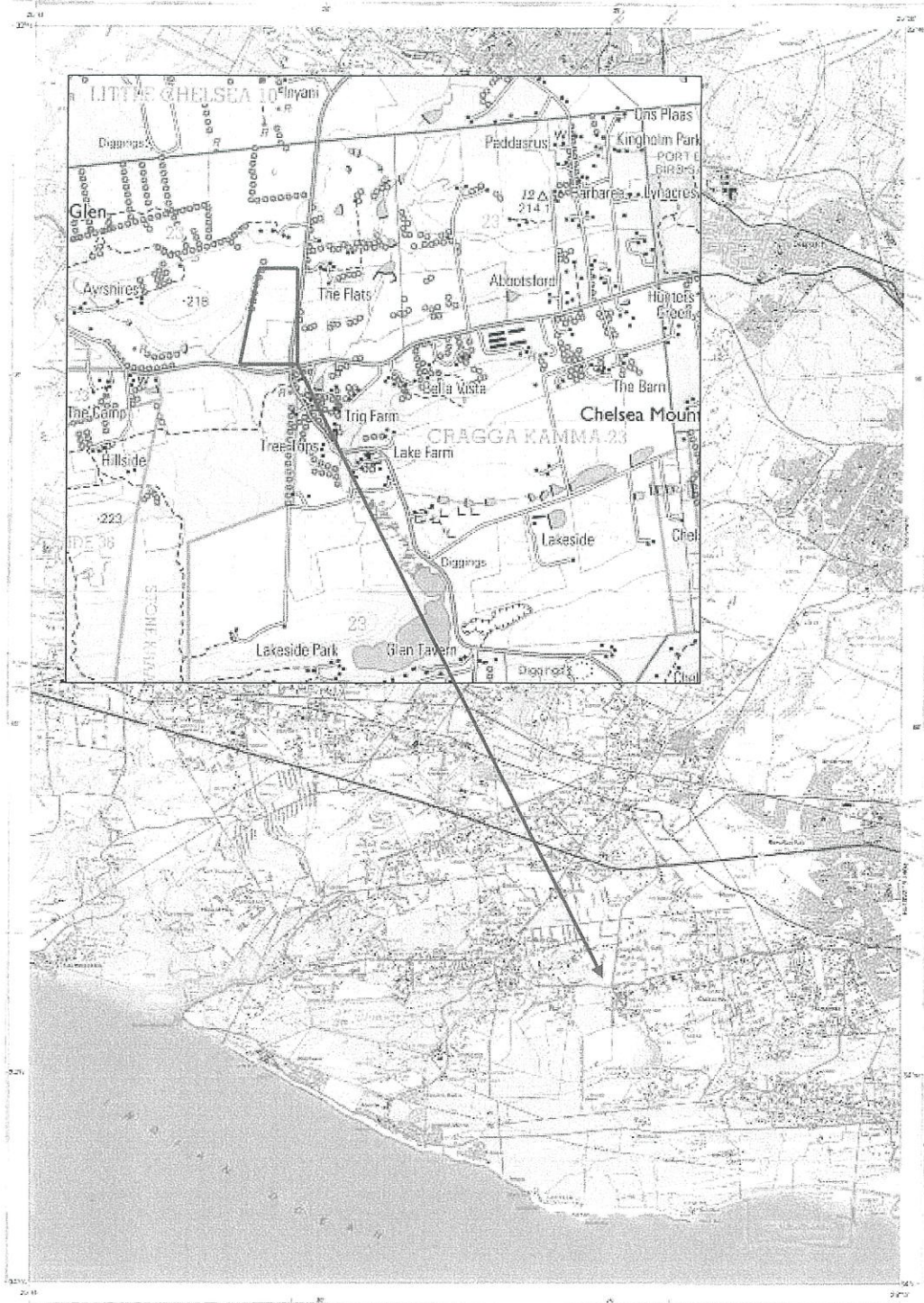
These are difficult for the layman to identify. However, large accumulations of flaked stones which do not appear to have been distributed naturally should be reported. If the stone tools are associated with bone remains, development should be halted immediately and archaeologists notified.

### 4. Stone features and platforms

They come in different forms and sizes, but are easy to identify. The most common are an accumulation of roughly circular fire cracked stones tightly spaced and often filled in with charcoal. They are usually 1-2 metres in diameter and may represent cooking platforms. Others may resemble circular single row cobble stone markers. These are different sizes and may be the remains of wind breaks or cooking shelters.

### 5. Historical artefacts or features

These are easy to identified and include foundations of buildings or other construction features and items from domestic and military activities.



Map 1. 1:50 000 map with insert, indicating the location of the proposed Cragga Kamma development.





Map 2. Aerial photograph indicating the location of the proposed Cragga Kamma development.

BACKGROUND INFORMATION DOCUMENT:

**BASIC ENVIRONMENTAL IMPACT ASSESSMENT**

**1. PROJECT TITLE:**

**Rezoning and Subdivision for the Establishment of a Rural Residential Development**

**2. PROJECT APPLICANT:**

Kragga Kamma Development Trust  
Contact Person: Mr. Leon de Villiers  
Telephone / Fax: 041 397 5219 / 083 577 9694

**3. PROJECT CONSULTANT:**

Anton Bok & Associates cc  
Tel / Fax: 041 - 3733 464  
Cell: 083 4492801  
E-mail: [antonbok@aquabok.co.za](mailto:antonbok@aquabok.co.za)

**4. LANDOWNER**

Judith Diane de Villiers/Mr. Leon de Villiers  
Telephone 041 397 5219 / 083 577 9694

**5. LOCAL AUTHORITY**

Nelson Mandela Bay Municipality  
Business Unit Manager: Housing and Land  
Contact Person: Mr. Sethsolisile Maqetuka  
Address: P O Box 116, Port Elizabeth  
6001  
Telephone: 041 506 3110

**6. PROPERTY :**

Portion of PTN 87 of the Farm Cragga Kamma No. 23,  
Port Elizabeth (see Map below).

**7. LISTED ACTIVITIES TO BE APPLIED FOR:**

<b>EIA Notice</b>	<b>Activity Number</b>	<b>Activity</b>
GN No. R 386, s24 and s24D, 21 April 2006	16	The transformation of undeveloped, vacant or derelict land to - (a) establish infill development covering an area of 5 hectares or more, but less than 20 hectares
GN No. R 386, s24 and s24D, 21 April 2006	1 (k)	The construction of facilities or infrastructure, including associated structures or infrastructure, for – (k) the bulk transportation of sewage and water, including storm water, in pipelines with – (i) and internal diameter of 0.36 metres or more, or (ii) a peak throughput of 120 litres per second or more.
<b>EIA Notice</b>	<b>Activity</b>	<b>Activity</b>

	Number	
GN No. R 386, s24 and s24D, 21 April 2006	15	The construction of a road that is wider than 4 metres or that has a reserve wider than 6 metres, excluding roads that fall within the ambit of another listed activity or which are access roads of less than 30 metres long.
GN No. R 386, s24 and s24D, 21 April 2006	16	The transformation of undeveloped, vacant or derelict land to - (a) establish infill development covering an area of 5 hectares or more, but less than 20 hectares; or (b) residential, mixed, retail, commercial, industrial or institutional use where such development does not constitute infill and where the total area to be transformed is bigger than 1 hectare.
GN No. R 386, s24 and s24D, 21 April 2006	18	The subdivision of portions of land of 9 hectares or larger into portions of 5 hectares or less.

## 8. OUTLINE OF PROJECT

### Concept

The proposal is to subdivide a 19.1 ha portion of Portion 87 of the Farm Cragga Kamma No. 23 into 9 erven of approximately 2 ha each, for the purpose of establishing a rural residential development (see attached Figure 2)

### Zoning and Land Use

The proposed scheme is located in an area with a predominately rural character and is situated outside the Urban Edge, within the so-called Hinterland Rural Development Zone of the proposed new Rural Management Policy of the NMBM. The property is currently zoned agricultural and it is proposed to rezone the land to rural residential purposes in terms of the new proposed Integrated Zoning Scheme for the NMBM (in preparation).

The land is not highly suitable for commercial farming purposes and the Department of Agriculture granted permission in May 2002 to subdivide the 124 ha farm (Portion 87 of Farm Cragga Kamma No. 23) into six portions in terms of the Agricultural Land Act, 70 of 1970.

## 9. LOCALITY AND CHARACTERISTICS OF SITE

A locality map of the Portion 87 of Farm Cragga Kamma No. 23 is given below in Figure 1.

The proposed 19.17 ha subdivisional area (PTN A) is located in the south-eastern corner of the property and is bounded by Lakeside Road D1907 in the east and by Kragga Kamma Road MN452 in the south, as shown in Figure 2. The land consists of gently undulating open grass pastures and clumps of alien trees. The original vegetation type found in this area, namely Colleen Glen grassy fynbos, has been almost totally transformed by previous farming practices. It appears from initial investigations that the present vegetation has thus little conservation value.

## **10 CONSULTATION WITH AUTHORITIES**

Application has been made to the Department of Agriculture for the subdivision and rezonation of the land and application to the NMBM in terms of LUPO (1985) has been undertaken on behalf of the Applicant by Johan Meiring (Land Surveyors).

## **11 SPECIALIST STUDIES**

- a) A botanical study by local specialist botanist Mr. Wesley Berrington has been commissioned.
- b) Mrs Jenny Benny (Bay World Historian) has been commissioned to conduct a Built Environment Heritage Impact Assessment.
- c) Dr Johan Binneman, an accredited archaeologist, has been commissioned to conduct a specialist archaeological impact assessment of the proposed development site.

## **12 PUBLIC PARTICIPATION**

### *(i) Advertisement in newspapers*

A Notice of EIA Process (English) was placed in The Herald and Kennisgewing Omgewingsimpakstudie: Publike Deelname (Afrikaans) in Die Burger on 15 August 2008.

### *(ii) Notices*

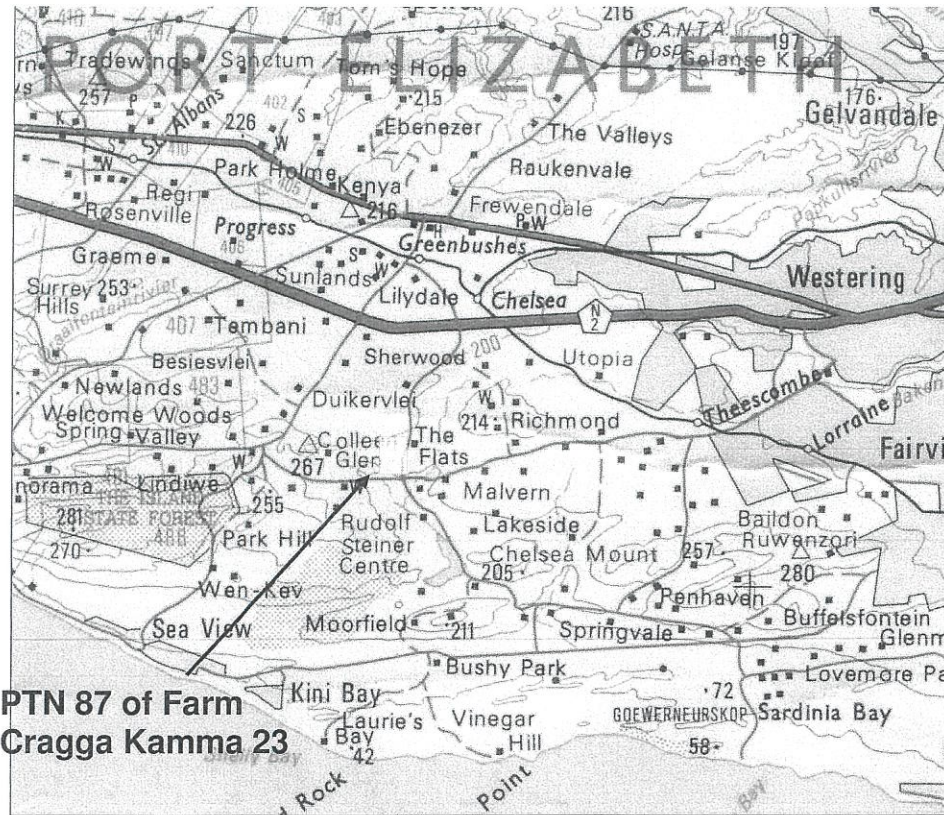
Notices of EIA Public Participation process, in English (laminated A2 size) will be placed on the fence around the property at strategic spots.

### *(iii) Direct contact*

Individual abutting properties, as well as the relevant Ward Councillor, will be contacted directly by e-mail, fax and/or telephone.

## **13. REGISTRATION AS INTERESTED AND AFFECTED PART**

If you would like to participate in the process, receive further correspondence and information regarding any reports produced, and submit your concerns or comments, please register as an interested and/or affected party. This can be done by submitting your name, contact information and interest in the matter, in writing (letter, fax or e-mail), to the consultant mentioned above. Contact details of the consultant are given in paragraph 3 above.



**Figure 1.** Locality Map of the Study Area in relation to Port Elizabeth, natural features and main roads in the area.

**Figure 2.** Proposed subdivision of Portion 87 of the Farm Cragga Kamma No. 23, located in the SE portion of the property.

(see attached pdf. File -- PTN87\_23)