

9/2/0462  
9/12/042/6

**ARCHAEOLOGICAL STUDY  
PROPOSED PUBLIC ACCESS ROAD TO THE  
PORT OF SALDANHA**

Prepared for

**CROWTHER CAMPBELL AND ASSOCIATES**

By

AGENCY FOR CULTURAL RESOURCE MANAGEMENT

P.O. Box 159

Riebeeck West

7306

Ph/Fax: 022 461 2755

E-mail: [gillker@iafrica.com](mailto:gillker@iafrica.com)

**JUNE  
1998**

## EXECUTIVE SUMMARY

Apart from a handful of Middle Stone Age and Later Stone Age flakes, and a piece of ostrich eggshell, no significant archaeological or historical sites were located during a study of the proposed public access road to the port of Saldanha, on the Cape west coast.

Large numbers of widely scattered, whole and fragmented white and black mussel shell were located around the site of the proposed administration building, as well as at the southern end of the proposed road. These shell scatters are most likely related to natural predation/scavenging by seagulls.

The probability of locating significant surface archaeological sites during implementation of the project is considered to be low to negligible.

Construction of the proposed road, and the excavation of service trenches and foundations for the proposed administration building, may, however, expose or uncover important vertebrate fossils and archaeological occurrences in the Langebaan Limestone (calcrete) deposits, in the southern portion of the site. It is well established that such fossil and archaeological occurrences are valuable sources of information on the sedimentary, chronological, palaeoenvironmental and palaeoecological context of modern human behaviour development during the Middle Stone Age in Saldanha Bay.

Removal or modification of the low vegetated dunes at the southern end of the proposed access road may also expose human burial remains.

The following archaeological recommendations are proposed.

- An archaeological monitoring plan should be implemented during construction of the proposed public access road and administration building.
- Should excavations intend to penetrate the limestone or associated sediments on the site, appropriate strategies aimed at sampling the fossils that might be encountered will need to be developed and applied.
- Scheduled visits to take place during the construction phase of the project, focusing specifically on deep excavations for trenches, and foundations for the proposed administration building.
- Monitoring of dune modification.
- Any archaeological, fossil or human burial remains uncovered during implementation of the project should immediately be reported to a professional archaeologist. Contractors and workers should therefore be informed of the likelihood of such remains being uncovered during the construction phase of the project.

## **1. INTRODUCTION**

### **1.1 Background and brief**

The Agency for Cultural Resource Management (ACRM) has been requested by Crowther Campbell and Associates to undertake a baseline archaeological study of the proposed public access road to the port of Saldanha Bay on the Cape west coast.

The aim of the archaeological study is to locate, identify and map archaeological or historical sites that may be impacted by the planning, construction and implementation of the proposed project and to propose measures to mitigate against the impact.

## **2. TERMS OF REFERENCE**

The terms of reference for the archaeological and historical study were:

1. to provide a brief description of the archaeological history of the site and surrounding area;
2. to determine whether there are any likely to be any archaeological or historical sites of significance on the site;
3. to identify and map any sites of archaeological and/or cultural significance;
4. to assess the status and significance of any impacts resulting from the proposed development; and
5. to identify mitigatory measures to protect and maintain any valuable archaeological and historical sites may exist.

## **3. THE STUDY SITE**

The study site for the proposed public access road to the port of Saldanha is illustrated in Figure 1.

The focus of the study was on the proposed access road, including the 45 m corridor across the ISCOR and PORTNET-owned land. The study also included the proposed site for a new administration building.

The section of the road across the ISCOR land is reasonably well vegetated, with open spaces occurring in places. The site is relatively undisturbed. Archaeological visibility is high.

The section of the road across the PORTNET land which includes the proposed administration building is scarred and eroded, with some vegetation cover. Archaeological visibility is high.

## 4. STUDY APPROACH AND DOCUMENTATION OF ARCHAEOLOGICAL SITES

### 4.1 Method of survey.

The approach followed in the archaeological study entailed a detailed foot survey of the proposed road (including the 45 m corridor) and the proposed administration building (Figure 1).

In addition to the field study, a brief review of the archaeology and cultural history of the surrounding area was also undertaken.

According to the records of the South African Museum Archaeological Data Recording Centre, no archaeological sites have been recorded in the study area. Low level concentrations of archaeological remains were, however, recorded during a survey of the Spreeuwal Dunes (Kaplan 1994). Middle Stone Age flakes and a mussel scraper were also found amongst consolidated calccrete sediments on older red sands behind the Portnet Mariculture Ponds (Kaplan 1994).

## 5. A REGIONAL ARCHAEOLOGICAL AND HISTORICAL OVERVIEW

The archaeological significance of the Vredenburg/Saldanha Bay/Langebaan (VSL) area has been well established, where more than 400 sites have been recorded and mapped (Kaplan 1993).

Archaeological remains were located during studies for the proposed Saldanha Steel Project (SSP) (Kaplan 1994), the proposed Alpha Saldanha Cement Project (Kaplan 1997a), the proposed Salamander Cove Project (Kaplan 1997b), and the proposed Dufferco Steel Project (Kaplan 1997c). These projects were all located within a 2 kilometre radius of the proposed public access road to the port of Saldanha. The material, however, included finds of only a few Middle Stone Age<sup>1</sup> and Later Stone Age<sup>2</sup> implements in mostly disturbed contexts. The archaeological significance of these finds was rated low. As a result no mitigation was required.

A surface collection of late nineteenth to early twentieth century glass, ceramics, bone, buttons and other cultural artefacts from a shepherd's hut (veewagterhuis) was carried out on the SSP site. Test excavations also shed light on the early history of the Strandveld during this time (Kaplan 1996).

It is also well established that vertebrate fossils and archaeological occurrences in the Langebaan Limestone Formations (calcareous) and associated deposits are extremely valuable sources of information on the sedimentary, chronological, palaeoenvironmental and palaeoecological context of the development of modern behaviour during the Middle Stone Age and perhaps even the Early Stone Age<sup>3</sup>.

<sup>1</sup> A term referring to the period between 200 000 and 20 000 years ago.

<sup>2</sup> A term referring to the last 20 000 years of pre colonial history in southern Africa

<sup>3</sup> A term referring to the period between 2 million and 200 000 years ago.

Referring to the Alpha Saldanha Cement Project, Avery (1997:1) has argued that excavation of any kind in establishing infrastructure in the Langebaan Limestone and associated deposits will "potentially impact on Pleistocene archaeological remains".

According to Avery (1997), Middle Pleistocene archaeological occurrences and the recovery of human remains from hyena lairs in the Langebaan Limestone at Saldanha Bay have provided some of the earliest evidence we have of human exploitation of coastal resources. These will contribute significantly to evidence concerning the development of modern human behaviour.

Roberts (1997a) has also demonstrated the significant palaeontological (fossil) potential of the VSL area, generated primarily from the limestone deposits in the area. Earthworks by SSP also exposed important fossil remains from the Miocene period about 5 million years ago, from deposits underlying calcareous formations during excavations for descaling pits (Roberts 1997b).

## **6. RESULTS OF THE IMPACT ASSESSMENT**

A few Middle Stone Age (MSA) flakes and a piece of ostrich eggshell were found during the study of the proposed access road across the ISCOR-owned land.

MSA and Later Stone Age flakes were also found during the study of the proposed access road across the PORTNET-owned land, which included a study of the proposed administration building (Figure 1).

Large numbers of widely scattered, whole and fragmented white and black mussel shell were located around the site of the proposed administration building, as well as at the southern end of the proposed road. These concentrations are, however, most likely related to natural predation/scavenging by seagulls.

## **7. IMPACT ASSESSMENT AND DESCRIPTION**

Impact assessment and description is illustrated in Tables 1 and 2.

## **8. IMPACT STATEMENT**

The northern portion of the study site (on the ISCOR-owned land) is reasonably well vegetated and undisturbed, with open spaces appearing in places. The impact of the proposed access road through this land on surface archaeological sites is considered to be low to negligible.

The southern portion of the study site (on the PORTNET-owned land) is scarred and eroded. The impact of the proposed access road and administration building on surface archaeological sites on this land is also considered to be low to negligible.

Excavations into the limestone (calcrete) and associated deposits on the site may, however, expose or uncover important vertebrate fossil or archaeological remains.

Removal or modification of the vegetated dunes at the lower-end of the proposed access road near the PORTNET mariculture pond, may also uncover or disturb human burial remains.

## 9 LEGISLATION

All archaeological and palaeontological sites, including human burials are protected by the National Monuments Act (Act No. 28 of 1969 as amended). It is an offence to disturb, remove or destroy from its original site, or excavate any such site without a permit from the National Monuments Council.

Human burial remains are also protected under the Human Tissues Act.

## 10 RECOMMENDATIONS

With regard to the proposed construction of the public access road to the port of Saldanha, including the proposed administration building, the following archaeological recommendations are made.

1. An archaeological monitoring plan should be implemented during construction of the proposed public access road and administration building.
2. Should excavations intend to penetrate the limestone or associated sediments on the site, appropriate strategies aimed at sampling the fossils that might be encountered will need to be developed and applied.
3. Scheduled visits to take place during the construction phase of the project, focusing specifically on deep excavations for trenches, and foundations for the proposed administration building.
4. Monitoring of dune modification should be carried out in case human burial remains are uncovered.
5. Any archaeological, fossil or human burial remains uncovered during implementation of the project should immediately be reported to a professional archaeologist. Contractors and workers should therefore be informed of the possibility of such remains being uncovered during construction.

The above recommendations are subject to the approval of the National Monuments Plan Committee.

## 11. REFERENCES

- Avery, G. 1997. Alpha Ltd Saldanha Cement Project: archaeological potential of limestone and other calcareous deposits. Unpublished report prepared for Mark Wood Consultants.
- Kaplan, J. 1993. The state of archaeological information in the coastal zone from the Orange River to Ponto do Ouro. Report prepared for the Department of Environmental Affairs and Tourism. Riebeeck West: Agency for Cultural Resource Management.
- Kaplan, J. 1994. Archaeological study: Saldanha Steel Project Phase 2 Environmental Impact Assessment. Report prepared for CSIR Environmental Services. Riebeeck West: Agency for Cultural Resource Management.
- Kaplan, J. 1996. Report on archaeological surface collection and test excavations: Saldanha Steel Mini Mill. Report prepared for Saldanha Steel Project (Pty) Ltd. Riebeeck West: Agency for Cultural Resource Management
- Kaplan, J. 1997a. Archaeological study: Alpha Saldanha Cement Project. Report prepared for Mark Wood Consultants. Riebeeck West: Agency for Cultural Resource Management.
- Kaplan, J. 1997b. Archaeological study: Salamander Cove. Report prepared for the Salamander Cove Development Company (Pty) Ltd. Riebeeck West: Agency for Cultural Resource Management.
- Kaplan, J. 1997c. Archaeological study: Dufferco Steel Mill Project. Report prepared for Dufferco Steel Processing (Pty) Ltd. Riebeeck West: Agency for Cultural Resource Management
- Roberts, D.L. 1997a. Palaeontological Impact Assessment Alpha Cement Project. Draft report prepared for Mark Wood Consultants. Pretoria: Council for Geoscience Geological Survey.
- Roberts, D.L. 1997b. Fossil occurrence at the Saldanha Steel site. Report prepared for Saldanha Steel Project (Pty) Ltd. Pretoria: Council for Geoscience Geological Survey.

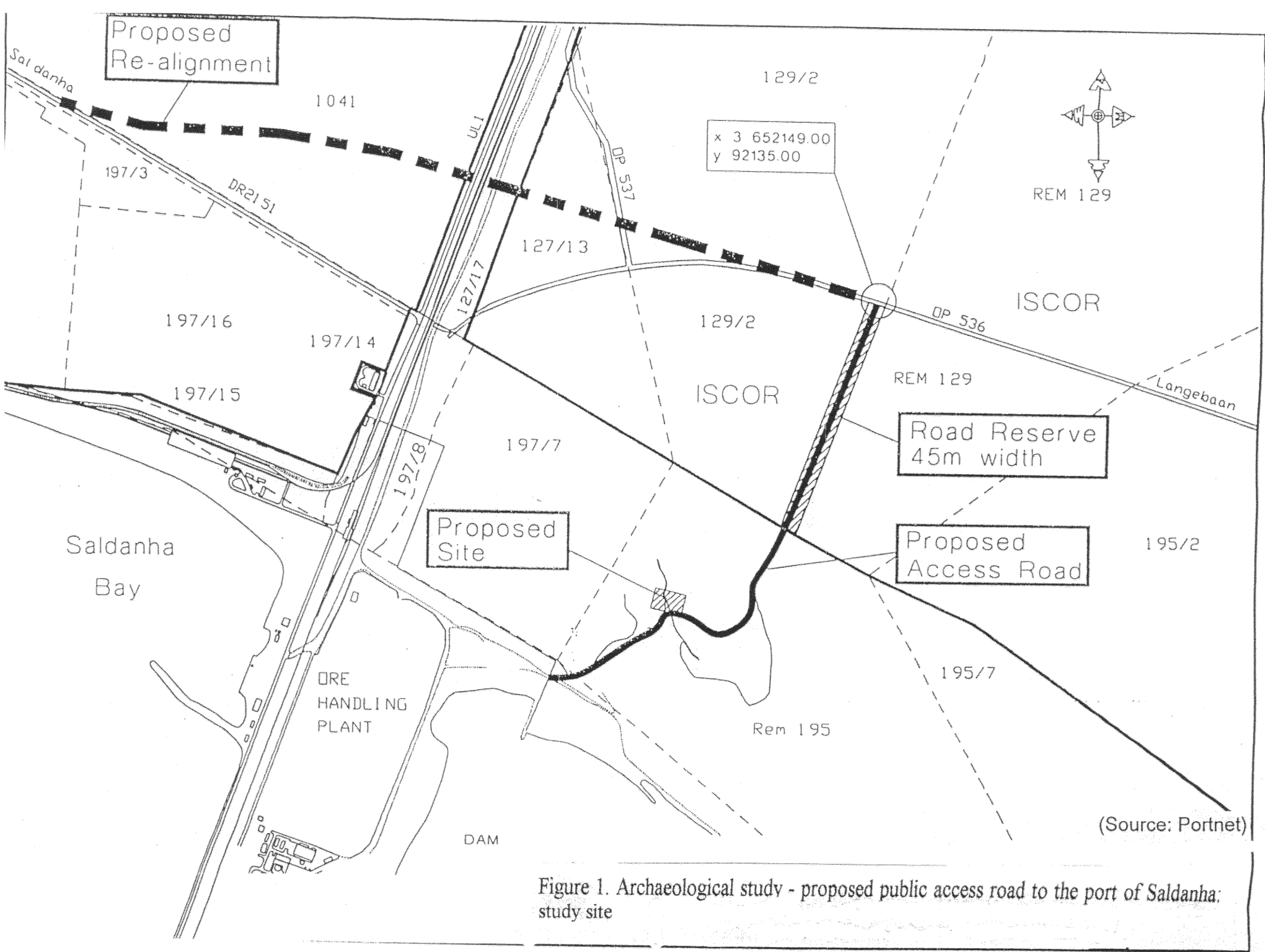
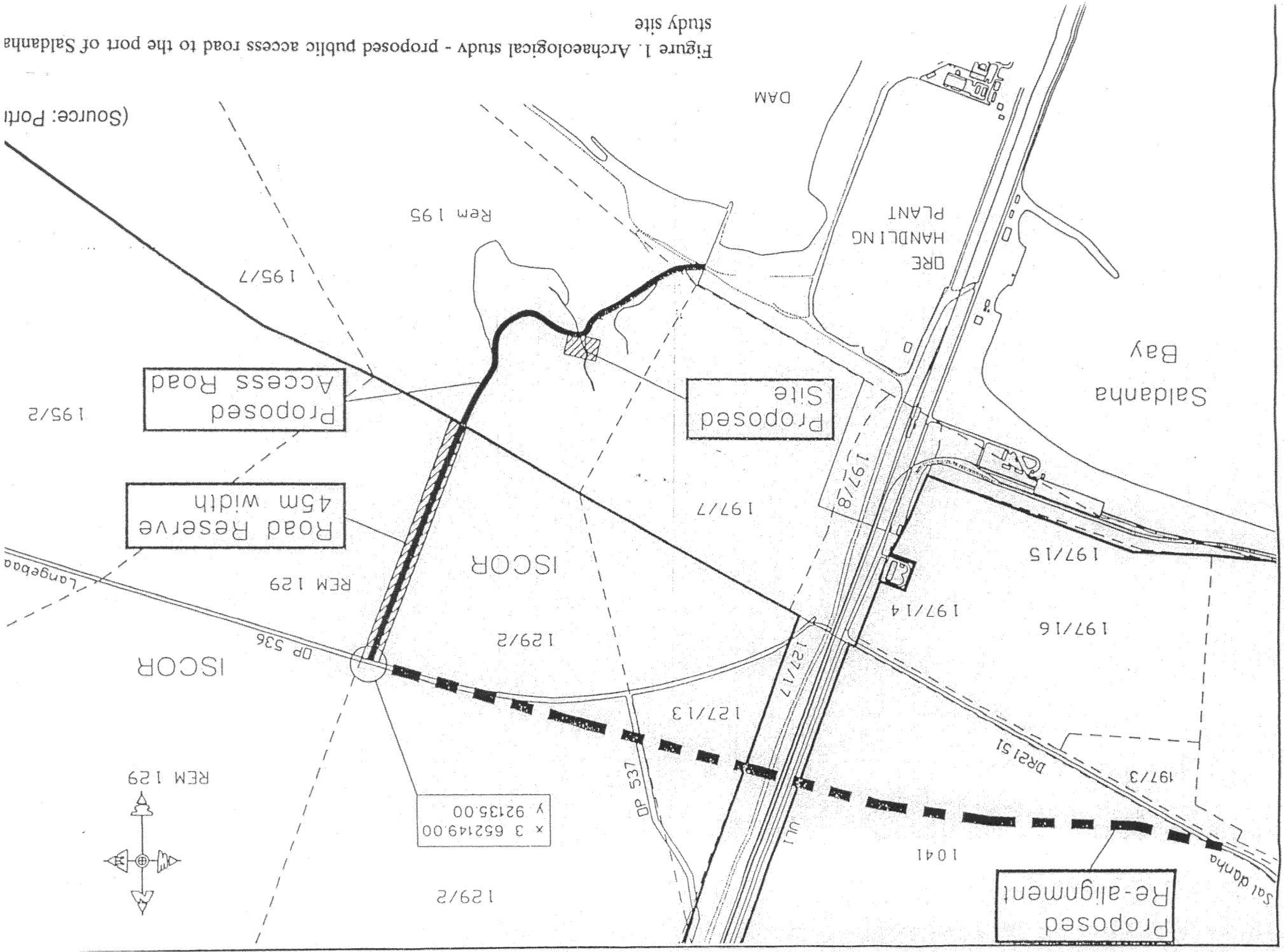


Figure 1. Archaeological study - proposed public access road to the port of Saldanha: study site





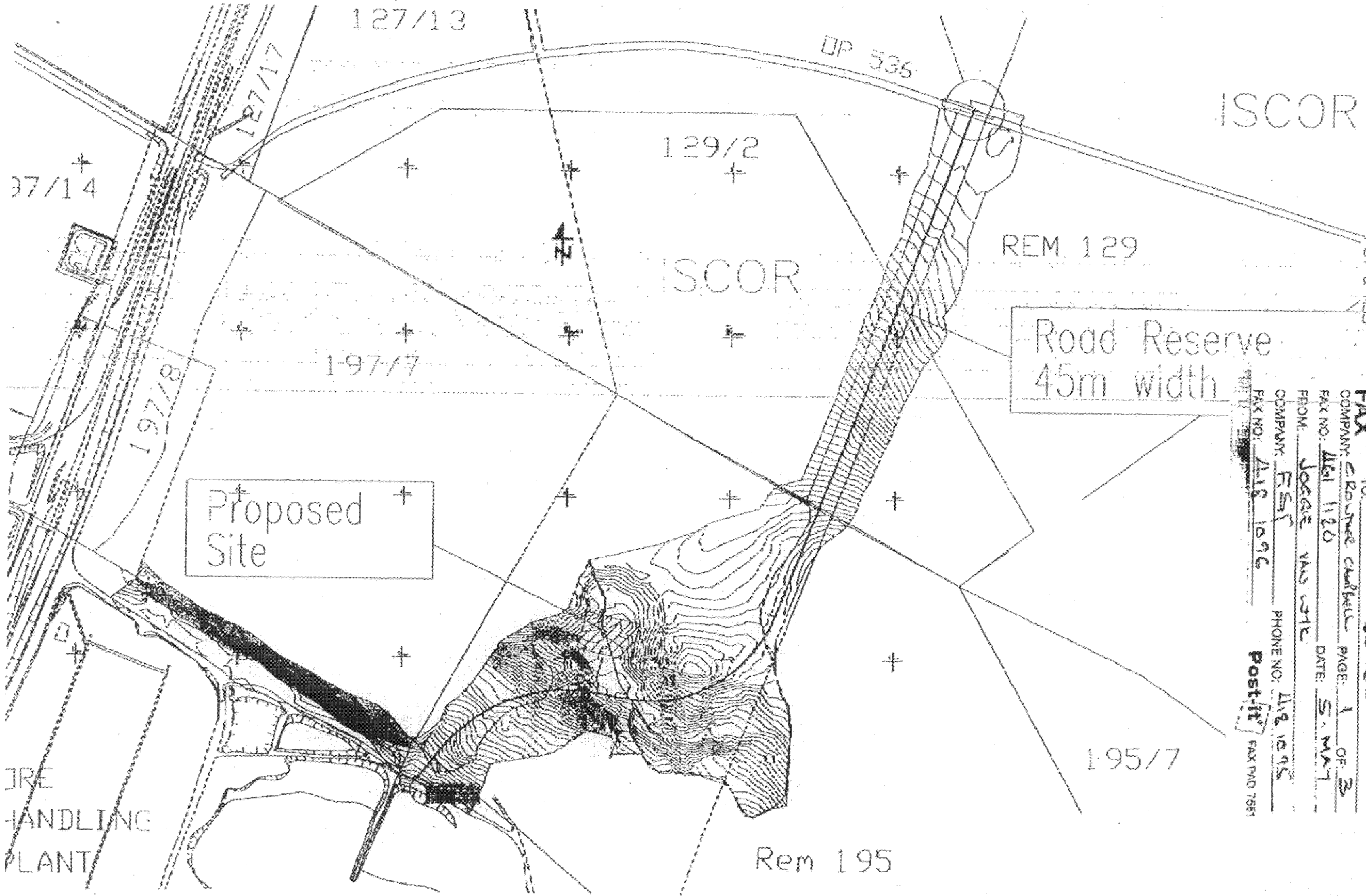
Figure 1. Archaeological study - proposed public access road to the port of Saldanha study site



(Source: Port)

1.6 km

MAY. 5 '98 2:31PM FST & ASS  
FST & ASS



Proposed Site

Road Reserve  
45m width

**FAX** TO: **MS (4181096) MOLLER** P. 1  
 COMPANY: **ROSTRA CONSULTANTS** PAGE: **1 OF 3**  
 FAX NO: **418 1120** DATE: **5 MAY**  
 FROM: **JORGIE VAN WIT**  
 COMPANY: **FST** PHONE NO: **418 1096**  
 FAX NO: **418 1096** **Post-it** FAX PID 7551

IRE  
HANDLING  
PLANT

Rem 195

195/7

REM 129

129/2

127/13

127/17

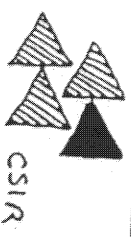
127/14

197/7

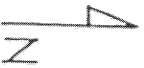
197/8

Proposed Site

Saldanha Steel Project Phase 2  
 Environmental Impact Assessment  
 DRAFT SITE BASELINE MAP



Scale 1:20 000



calcrete sediments

- Roads
- Railways
- Towns/buildings
- Power lines
- Excavations/  
quarries  
spot heights
- Iron ore  
stockpiles
- Approximate  
boundary of  
Iscor land

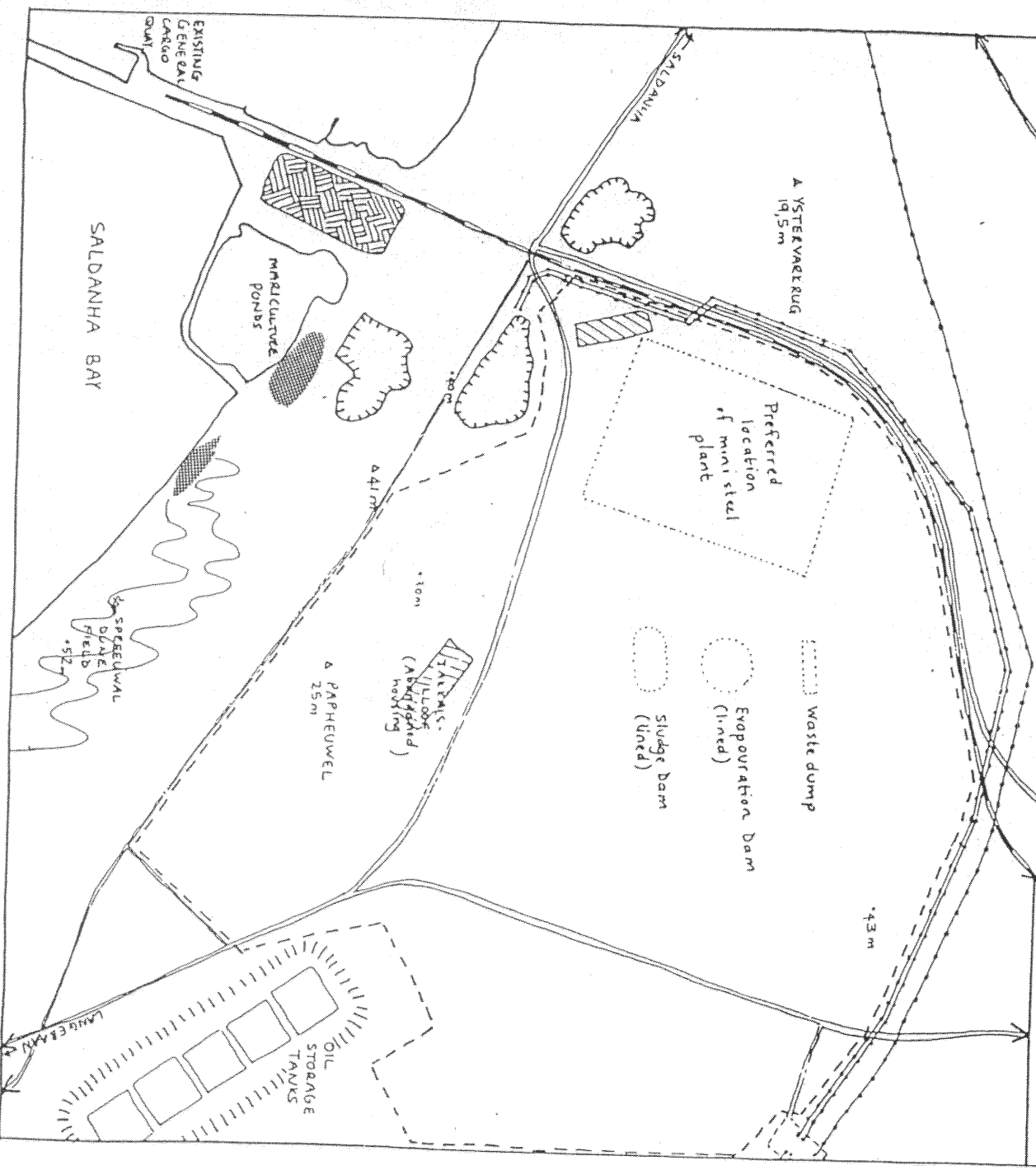
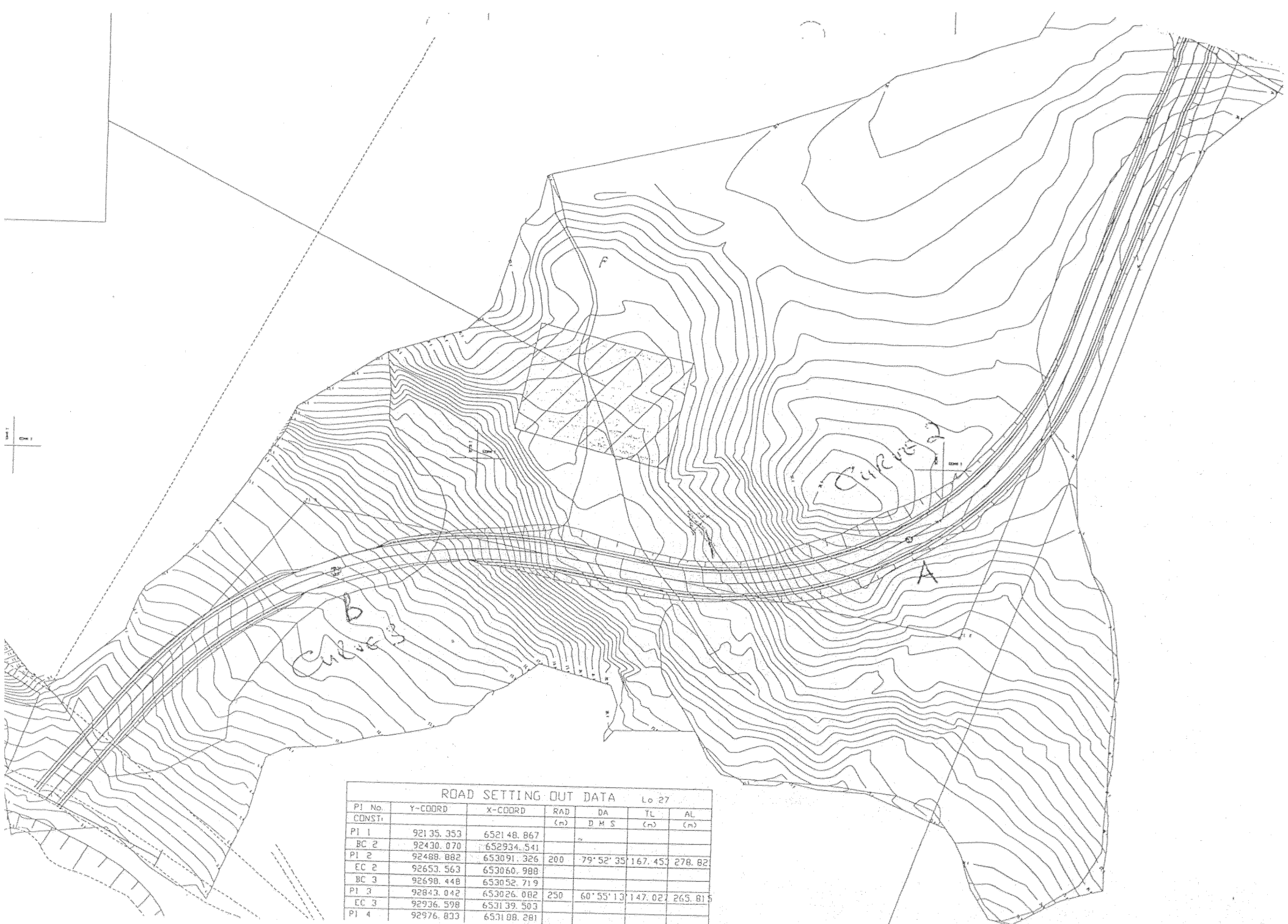
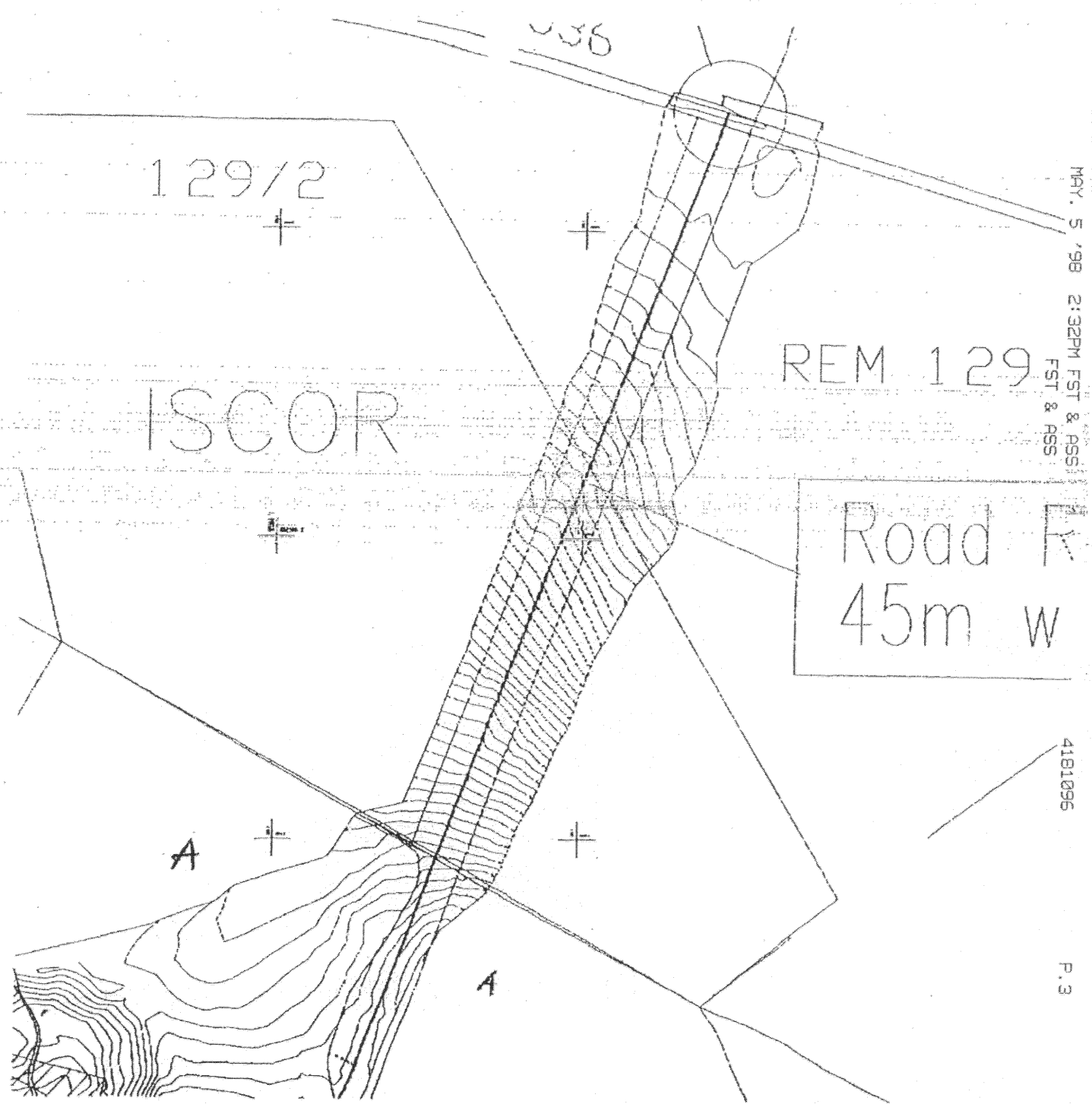


Figure 1. Saldanha Steel Project Phase 2 Environmental Impact Assessment - Archaeological Study.



**ROAD SETTING OUT DATA**      Lo 27

PI No.	Y-COORD	X-COORD	RAD	DA	TL	AL
CONST.			(m)	D M S	(m)	(m)
PI 1	92135.353	652148.867				
BC 2	92430.070	652934.541				
PI 2	92488.882	653091.326	200	79° 52' 35"	167.45	278.82
EC 2	92653.563	653060.988				
BC 3	92698.448	653052.719				
PI 3	92843.042	653026.082	250	60° 55' 13"	147.02	265.815
EC 3	92936.598	653139.503				
PI 4	92976.833	653108.281				



MAY. 5 '98 2:32PM FST & ASS  
FST & ASS

4181896

P.3

