

HERITAGE IMPACT ASSESSMENT: PROPOSED STORAGE FACILITY ON A PORTION OF ERF 21277, AALWYNDAL, MOSSEL BAY MAGISTERIAL DISTRICT, WESTERN CAPE

Required under Section 38(8) of the National Heritage Resources Act (No. 25 of 1999)

HWC Case No.: 21051106SB0525E

Report for:

Kapp Environmental Consultants (Pty) Ltd
9 Wassung Street, Mossel Bay, 6506
Email: renier@kappec.co.za

On behalf of:

Dream Supreme Properties 14 cc



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Original submission: 31 October 2022
Revised SDP resubmission: 13 June 2024

SUMMARY

1. Site Name

n/a

2. Location

Off Nagtegaal Street, Aalwyndal, Mossel bay
Portion of Erf 21277
Centre point at S34° 09' 07.2" E22° 03' 58.2".

3. Locality Plan



Erf 21277 = yellow polygon 1.442 ha development site = red polygon.

4. Description of Proposed Development

A self-storage facility is proposed. The development will be on an approximately 1.44 ha portion of erf 21277 and will include an office and ablution area and 7 parking bays. There will be two blocks of standard storage units and one block of larger units. The buildings will have pitched roofs with the smaller units being 4.213 m high at their apices and the larger units 9.500 m. The site will be fenced.

5. **Heritage Resources Identified**

Palaeontological and archaeological resources were anticipated but the desktop palaeontological study suggested that no significant fossils were likely to occur and the field survey revealed no archaeological materials.

The landscape is considered to be a heritage resource but, in this case, it is a recently subdivided and only minimally developed rural smallholding area with no historical character. Nevertheless, there is no precedent for light industrial type developments, with the exception of the Mossel Bay Aerodrome which has to be located away from residential areas.

6. **Anticipated Impacts on Heritage Resources**

The only potentially significant impact identified is the visual intrusion that a relatively high-density development would have within a low-density rural context. This was assessed as a medium significance impact but with mitigation (landscape plan with screening vegetation) this can be reduced to low significance.

7. **Recommendations**

It is recommended that the proposed storage facility be authorised, but subject to the following recommendation which should be included as conditions of authorisation:

- The buildings must make use of visually recessive materials, colours and design principles;
- Fencing to be visually permeable and dark-coloured;
- A landscape plan that includes perimeter planting to screen the development must be compiled prior to the start of construction;
- Night time lighting must be minimised and light fittings must be designed to minimise light spillage;
- If any palaeontological material is found during the course of development then the HWC Fossil Find Procedure should be implemented and the find should be reported to the heritage authorities; and
- If any archaeological material or human burials are uncovered during the course of development then work in the immediate area should be halted. The find would need to be reported to the heritage authorities and may require inspection by an archaeologist. Such heritage is the property of the state and may require excavation and curation in an approved institution.

8. **Author/s and Date**

Heritage Impact Assessment: Jayson Orton, ASHA Consulting (Pty) Ltd, 13 June 2024

Palaeontological study: John Pether 31 October 2022

Visual impact assessment: Cara Holm June 2024

Glossary

Acheulean: An archaeological name for the period comprising the later part of the Early Stone Age. This period started about 1.7-1.5 million years ago and ended about 250-200 thousand years ago.

Early Stone Age: Period of the Stone Age extending approximately between 2 million and 200 000 years ago.

Handaxe: A bifacially flaked, pointed stone tool type typical of the Early Stone Age Acheulian Industry. It is also referred to as a large cutting tool.

Hominid: a group consisting of all modern and extinct great apes (i.e. gorillas, chimpanzees, orangutans and humans) and their ancestors.

Later Stone Age: Period of the Stone Age extending over the last approximately 20 000 years.

Middle Stone Age: Period of the Stone Age extending approximately between 200 000 and 20 000 years ago.

Abbreviations

APHP: Association of Professional Heritage Practitioners

ASAPA: Association of Southern African Professional Archaeologists

BA: Basic Assessment

CRM: Cultural Resources Management

DEA&DP: Department of Environmental Affairs and Development Planning

EA: Environmental Authorisation

ECO: Environmental Control Officer

EGI: Electricity Grid Infrastructure

EIA: Environmental Impact Assessment

EMPr: Environmental Management Program

ESA: Early Stone Age

GPS: global positioning system

HIA: Heritage Impact Assessment

HWC: Heritage Western Cape

LSA: Later Stone Age

MSA: Middle Stone Age

NCW: Not Conservation Worthy

NEMA: National Environmental Management Act (No. 107 of 1998)

NHRA: National Heritage Resources Act (No. 25) of 1999

NID: Notification of Intent to Develop

PPP: Public Participation Process

SAHRA: South African Heritage Resources Agency

SAHRIS: South African Heritage Resources Information System

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1. INTRODUCTION

ASHA Consulting (Pty) Ltd was appointed by Kapp Environmental Consultants (Pty) Ltd to conduct an assessment of the potential impacts to heritage resources that might occur through the proposed development of a self-storage facility on a portion of erf 21277, off Nagtegaal Street, Aalwyndal, Mossel Bay (Figures 1 & 2). Erf 21277 is 77 754 m² in extent, but the development would only cover 14 420 m² of the property. The centre of the site is at approximately S34° 09' 07.2" E22° 03' 58.2" and it is located close to the Mossel Bay Aerodrome and some 8 km northwest of the town centre (and historic core) of Mossel Bay.

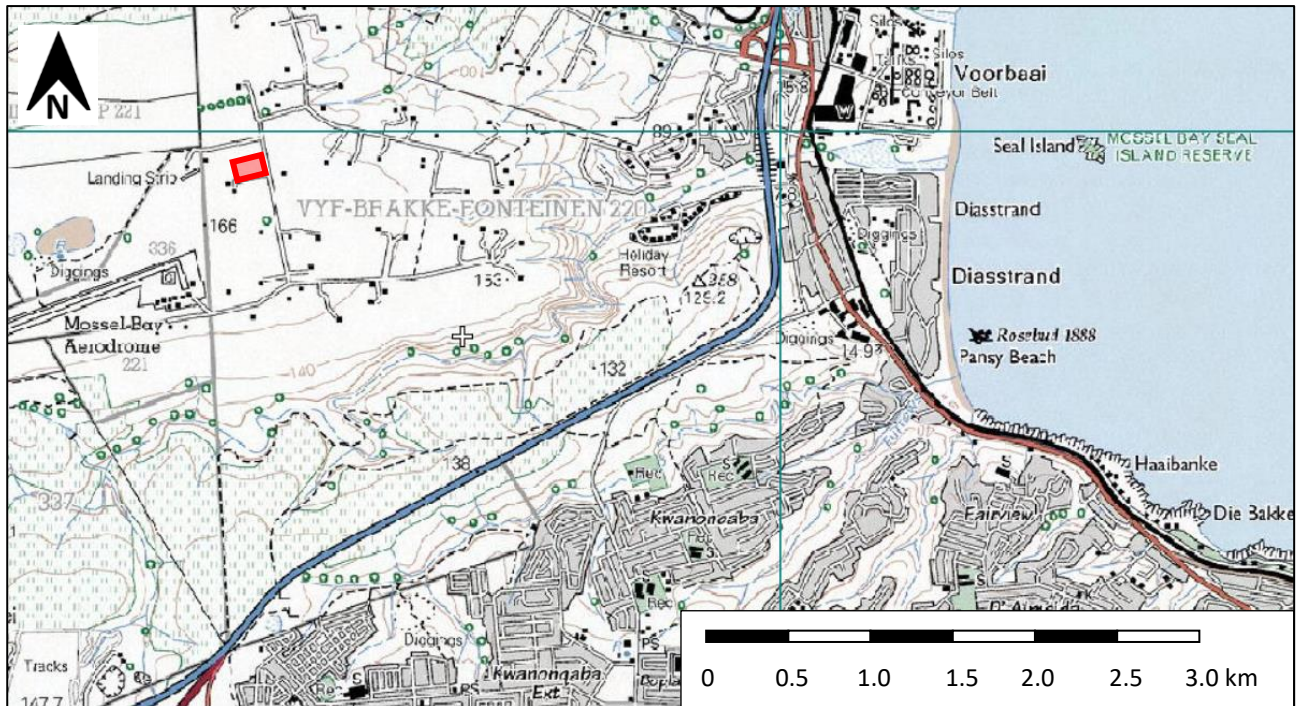


Figure 1: Extract from 1:50 000 topographic map 3422AA showing the location of the site (red polygon). Source of basemap: Chief Directorate: National Geo-Spatial Information. Website: www.ngi.gov.za.



Figure 2: Aerial view of the Aalwyndal area showing the location of the site (red polygon) within erf 21277 (shaded yellow polygon).

1.1. The proposed project

1.1.1. Project description

The Proponent wishes to develop a self-storage facility on an approximately 1.44 ha portion of Erf 21277, Aalwyndal. This will include the subdivision of Erf 21277 in terms of Section 15(2)(d) of the Mossel Bay Municipality By-Law on Municipal Land Use Planning (2019), as well as the Rezoning of a 1.442 ha portion of the subdivided property from Single Residential Zone 1 to Industrial Zone 1 (light industry).

The Proponent wishes to develop a storage facility on a 1.442 ha portion of Erf 21277, Aalwyndal. A total of 456 storage units are proposed on the site, to be constructed in two phases, with associated office and ablution area. There will be six blocks of storage units when all phases are complete with a total coverage of 6910m². Five blocks of storage units will be single storey, but the central block will have two floors (ground + 1). Entrance to the proposed development is located on Nagtegaal Street as indicated on the site plan (Figure 3). Parking bays (76 in total) have been positioned along the Eastern boundary bordering Nagtegaal Street and between blocks of storage units on the site. Parking bays to the Western portion of the site will be covered by shading structures.

The need for water, electricity and sewerage disposal is very limited due to the nature of the development proposal. A conservancy tank is proposed for the toilet facility of the administrative office building, to be serviced by a private contractor as the need occurs. A water connection is available for the basins and the toilet. Electricity connections are also readily available.

1.1.2. Identification of alternatives

No alternative sites or land uses are being considered, although the original proposal included a small solar plant which has since been omitted from the final proposal.

1.1.3. Aspects of the project relevant to the heritage study

All aspects of the proposed development are relevant, since excavations for foundations and/or services may impact on archaeological and/or palaeontological remains, while all above-ground aspects create potential visual (contextual) impacts to the cultural landscape and any significant heritage sites that might be visually sensitive.

1.2. Terms of reference

ASHA Consulting was asked to compile a Heritage Impact Assessment (HIA) that would meet the requirements of Heritage Western Cape (HWC; see below). ASHA was asked to subcontract a palaeontological specialist to obtain palaeontological specialist input. The HIA was to be based on a site visit and also contain a desktop study.

A Notification of Intent to Develop (NID) was earlier submitted to HWC. They responded as shown below. An HIA was duly compiled and submitted to HWC. This HIA was approved and a final comment was issued on 19 December 2022. His comment also appears below. However, the client has subsequently altered the layout of the project, necessitating a reworking of the reporting and resubmission of the Basic Assessment Report.

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Our Ref: HM/ GARDEN ROUTE / MOSSEL BAY / ERF 21277
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RESPONSE TO NOTIFICATION OF INTENT TO DEVELOP: HIA REQUIRED
In terms of Section 38(8) of the National Heritage Resources Act (Act 25 of 1999) and the Western Cape
Provincial Gazette 6061, Notice 298 of 2003

NOTIFICATION OF INTENT TO DEVELOP: PROPOSED LIGHT INDUSTRIAL DEVELOPMENT ON ERF 21277, AALWYNDAL, MOSSEL BAY, SUBMITTED IN TERMS OF SECTION 38(1) OF THE NATIONAL HERITAGE RESOURCES ACT (ACT 25 OF 1999)

CASE NUMBER: 21051106SB0525E

The matter above has reference.

Heritage Western Cape is in receipt of your application for the above matter received. This matter was discussed at the Heritage Officers Meeting held on 7 June 2021.

You are hereby notified that, since there is reason to believe that the proposed light industrial development on Erf 21277, Aalwyndal, Mossel Bay will impact on heritage resources, HWC requires that a Heritage Impact Assessment (HIA) that satisfies the provisions of Section 38(3) of the NHRA be submitted. Section 38(3) of the NHRA provides

- (3) *The responsible heritage resources authority must specify the information to be provided in a report required in terms of subsection (2)(a): **Provided that the following must be included:***
- (a) *The identification and mapping of all heritage resources in the area affected;*
 - (b) *an assessment of the significance of such resources in terms of the heritage assessment criteria set out in section 6(2) or prescribed under section 7;*
 - (c) *an assessment of the impact of the development on such heritage resources;*
 - (d) *an evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development;*
 - (e) *the results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources;*
 - (f) *if heritage resources will be adversely affected by the proposed development, The consideration of alternatives; and*
 - (g) *plans for mitigation of any adverse effects during and after the completion of the proposed development.*

(Our emphasis)

This HIA must in addition have specific reference to the following:

- Archaeological impact assessment
- Palaeontological impact assessment
- Visual impact assessment

PAGE 2 OF 2

Our Ref: HM/ GARDEN ROUTE / MOSSEL BAY / ERF 21277
Case No.: 21051106SB0525E
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The HIA must have an overall assessment of the impacts to heritage resources which are not limited to the specific studies referenced above.

The required HIA must have an integrated set of recommendations.

The comments of relevant registered conservation bodies; all Interested and Affected parties; and the relevant Municipality must be requested and included in the HIA where provided. Proof of these requests must be supplied.

Please note, should you require the HIA to be submitted as a Phased HIA, a written request must be submitted to HWC prior to submission. HWC reserves the right to determine whether a phased HIA is acceptable on a case-by-case basis.

If applicable, applicants are strongly advised to review and adhere to the time limits contained the Standard Operational Procedure (SOP) between DEADP and HWC. The SOP can be found using the following link <http://www.hwc.org.za/node/293>

Kindly take note of the HWC meeting dates and associated agenda closure date in order to ensure that comments are provided within as Reasonable time and that these times are factored into the project timeframes.

HWC reserves the right to request additional information as required.

Should you have any further queries, please contact the official above and quote the case number.

.....
Colette Scheermeyer
Acting Chief Executive Officer



Our Ref: HM / EDEN / MOSSEL BAY/ ERF 21277
Case No: 21051106SB0525E
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RESPONSE TO HERITAGE IMPACT ASSESSMENT: FINAL COMMENT
In terms of Section 38(8) of the National Heritage Resources Act (Act 25 of 1999) and the Western Cape
Provincial Gazette 6061, Notice 298 of 2003

HERITAGE IMPACT ASSESSMENT: PROPOSED INDUSTRIAL DEVELOPMENT ON ERF 21277 AALWYNDAL, MOSSEL BAY, SUBMITTED IN TERMS OF SECTION 38(1) OF THE NATIONAL HERITAGE RESOURCES ACT (ACT 25 OF 1999)

The matter above has reference.

This matter was discussed at the Heritage Officers Meeting (HOMS) held on 12 December 2022.

FINAL COMMENT

The Committee resolved to endorse the HIA prepared by ASHA Consulting dated 31 October 2022 as meeting the requirements of Section 38 (3) of the NHRA and the recommendations on page 26 of the report;

1. The buildings must make use of visually recessive materials, colours and design principles;
2. Fencing to be visually permeable and dark-coloured;
3. A landscape plan that includes perimeter planting to screen the development must be compiled prior to the start of construction;
4. Night time lighting must be minimised and light fittings must be designed to minimise light spillage;
5. If any palaeontological material is found during the course of development then the HWC Fossil Find Procedure should be implemented and the find should be reported to the heritage authorities; and
6. If any archaeological material or human burials are uncovered during the course of development then work in the immediate area should be halted. The find would need to be reported to the heritage authorities and may require inspection by an archaeologist. Such heritage is the property of the state and may require excavation and curation in an approved institution.

HWC reserves the right to request additional information as required.

Should you have any further queries, please contact the official above and quote the case number.


.....
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Deputy Director



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1.3. Scope and purpose of the report

An HIA is a means of identifying any significant heritage resources before development begins so that these can be managed in such a way as to allow the development to proceed (if appropriate) without undue impacts to the fragile heritage of South Africa. This HIA report aims to fulfil the requirements of the heritage authorities such that a comment can be issued by them for consideration by the Western Cape Department of Environmental Affairs and Development Planning (DEA&DP) who will review the Basic Assessment (BA) and grant or refuse authorisation. The HIA report will outline any management and/or mitigation requirements that will need to be complied with from a heritage point of view and that should be included in the conditions of authorisation should this be granted.

1.4. The author

Dr Jayson Orton has an MA (UCT, 2004) and a D.Phil (Oxford, UK, 2013), both in archaeology, and has been conducting Heritage Impact Assessments and archaeological specialist studies in South Africa (primarily in the Western Cape and Northern Cape provinces) since 2004 (please see curriculum vitae included as Appendix 1). He has also conducted research on aspects of the Later Stone Age in these provinces and published widely on the topic. He is an accredited heritage practitioner with the Association of Professional Heritage Practitioners (APHP; Member #43) and also holds archaeological accreditation with the Association of Southern African Professional Archaeologists (ASAPA) CRM section (Member #233) as follows:

- Principal Investigator: Stone Age, Shell Middens & Grave Relocation; and
- Field Director: Colonial Period & Rock Art.

1.5. Declaration of independence

ASHA Consulting (Pty) Ltd and its consultants have no financial or other interest in the proposed development and will derive no benefits other than fair remuneration for consulting services provided.

2. LEGISLATIVE CONTEXT

2.1. National Heritage Resources Act (NHRA) No. 25 of 1999

The NHRA protects a variety of heritage resources as follows:

- Section 34: structures older than 60 years;
- Section 35: prehistoric and historical material (including ruins) more than 100 years old as well as military remains more than 75 years old, palaeontological material and meteorites;
- Section 36: graves and human remains older than 60 years and located outside of a formal cemetery administered by a local authority; and
- Section 37: public monuments and memorials.

Following Section 2, the definitions applicable to the above protections are as follows:

- Structures: “any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith”;

- Palaeontological material: “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”;
- Archaeological material: 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, whether on land, in the internal waters, the territorial waters or in the maritime culture zone of the Republic, as defined respectively in sections 3, 4 and 6 of the Maritime Zones Act, 1994 (Act No. 15 of 1994), and any cargo, debris or artefacts found or associated therewith, which is older than 60 years or which SAHRA considers to be worthy of conservation”; and d) “features, structures and artefacts associated with military history which are older than 75 years and the sites on which they are found”;
- Grave: “means a place of interment and includes the contents, headstone or other marker of such a place and any other structure on or associated with such place”; and
- Public monuments and memorials: “all monuments and memorials a) “erected on land belonging to any branch of central, provincial or local 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.”

Section 3(3) describes the types of cultural significance that a place or object might have in order to be considered part of the national estate. These are as follows:

- a) its importance in the community, or pattern of South Africa’s history;
- b) its possession of uncommon, rare or endangered aspects of South Africa’s natural or cultural heritage;
- c) its potential to yield information that will contribute to an understanding of South Africa’s natural or cultural heritage;
- d) its importance in demonstrating the principal characteristics of a particular class of South Africa’s natural or cultural places or objects;
- e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
- f) its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- h) its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; and
- i) sites of significance relating to the history of slavery in South Africa.

While landscapes with cultural significance do not have a dedicated Section in the NHRA, they are protected under the definition of the National Estate (Section 3). Section 3(2)(c) and (d) list “historical settlements and townscapes” and “landscapes and natural features of cultural

significance” as part of the National Estate. Furthermore, some of the points in Section 3(3) speak directly to cultural landscapes.

2.2. Approvals and permits

2.2.1. Assessment Phase

Section 38(8) of the NHRA states that if an impact assessment is required under any legislation other than the NHRA then it must include a heritage component that satisfies the requirements of S.38(3). Furthermore, the comments of the relevant heritage authority must be sought and considered by the consenting authority prior to the issuing of a decision. Under the National Environmental Management Act (No. 107 of 1998; NEMA), as amended, the project is subject to a BA. The present report provides the heritage component. HWC is required to provide comment on the proposed project in order to facilitate final decision making by DEA&DP.

2.2.2. Construction Phase

If archaeological or palaeontological mitigation is required prior to construction, then the appointed archaeologist or palaeontologist would need to obtain a workplan approval from HWC. This would be issued in their name. This is so that the heritage authority can ensure that the appointed practitioner has proposed an appropriate methodology that will result in the mitigation being done properly.

2.3. Guidelines

HWC have issued minimum standards documents for HIAs and specialist studies. There is also a Western Cape Provincial guideline for heritage specialists working in an EIA context and which is generally useful. The reporting has been prepared in accordance with these guidelines. The relevant documents are as follows:

- Heritage Western Cape. 2016. Grading: purpose and management implications.
- Heritage Western Cape. 2019. Public consultation guidelines.
- Heritage Western Cape. 2021. Guide for Minimum Standards for Archaeology and Palaeontology reports submitted to Heritage Western Cape.
- Heritage Western Cape. 2021. Notification of Intent to Develop, Heritage Impact Assessment, (Pre-Application) Basic Assessment Reports, Scoping Reports and Environmental Impact Assessments, Guidelines for submission to Heritage Western Cape.
- Winter, S. & Baumann, N. 2005. Guideline for involving heritage specialists in EIA processes: Edition 1. CSIR Report No ENV-S-C 2005 053 E. Republic of South Africa, Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.

2.4. Application timeline

The application to DEA&DP under NEMA is currently in the pre-application phase with submission estimated to be in November 2022.

3. METHODS

3.1. Literature survey and information sources

A survey of available literature was carried out to assess the general heritage context into which the development would be set. The information sources used in this report are presented in Table 1 with relevant dates of each source referenced in the text as needed. Data were also collected via a field survey. The data quality is suitable for the purpose of informing this report.

Table 1: Information sources used in this assessment.

Data / Information	Source	Date	Type	Description
Maps	Chief Directorate: National Geo-Spatial Information	Various	Spatial	Historical and current 1:50 000 topographic maps of the study area and immediate surrounds
Aerial photographs	Chief Directorate: National Geo-Spatial Information	Various	Spatial	Historical aerial photography of the study area and immediate surrounds
Aerial photographs	Google Earth	Various	Spatial	Recent and historical aerial photography of the study area and immediate surrounds
Cadastral data	CapeFarmMapper (http://gis.elsenburg.com/apps/cfm/#)	Current	Spatial	Cadastral boundaries, extents and aerial photography
Cadastral data	Chief Directorate: National Geo-Spatial Information	Various	Survey diagrams	Historical and current survey diagrams, property survey and registration dates
Background data	South African Heritage Resources Information System (SAHRIS)	Various	Reports	Previous impact assessments for any developments in the vicinity of the study area
Palaeontological sensitivity	South African Heritage Resources Information System (SAHRIS)	Current	Spatial	Map showing palaeontological sensitivity and required actions based on the sensitivity.
Background data	Books, journals, websites	Various	Books, journals, websites	Historical and current literature describing the study area and any relevant aspects of cultural heritage.

3.2. Field survey

The site was subjected to a detailed foot survey on 26th March 2022. This was during autumn but, given the very low, scrubby vegetation, this did not significantly affect the archaeological survey since the ground was visible in a number of places across the site. Other heritage resources are not

affected by seasonality. During the survey the positions of finds and survey tracks were recorded on a hand-held Garmin Global Positioning System (GPS) receiver set to the WGS84 datum (Figure 4). Photographs were taken at times in order to capture representative samples of both the affected heritage and the landscape setting of the proposed development.

It should be noted that the amount of time between the dates of the field inspection and final report do not materially affect the outcome of the report.



Figure 4: Aerial view of the study area (red polygon) within erf 21277 (yellow shaded polygon) showing the survey tracks (turquoise lines).

3.3. Specialist studies

Three specialist studies were requested by HWC. The archaeological study was conducted by the present author and is included within the HIA. The palaeontological and visual studies were done by John Pether and Cara Holm respectively. These are summarised in the HIA and included in full as appendices to the HIA.

3.4. Grading

S.7(1) of the NHRA provides for the grading of heritage resources into those of National (Grade I), Provincial (Grade II) and Local (Grade III) significance. Grading is intended to allow for the identification of the appropriate level of management for any given heritage resource. Grade I and II resources are intended to be managed by the national and provincial heritage resources authorities respectively, while Grade III resources would be managed by the relevant local planning authority. These bodies are responsible for grading, but anyone may make recommendations for grading.

It is intended under S.7(2) that the various provincial authorities formulate a system for the further detailed grading of heritage resources of local significance but this is generally yet to happen. Heritage Western Cape (2016), however, uses a system in which resources of local significance are divided into Grade IIIA, IIIB and IIIC. These approximately equate to high, medium and low local significance, while sites of very low or no significance (and generally not requiring mitigation or other interventions) are referred to as Not Conservation Worthy (NCW).

3.5. Consultation

The draft HIA was submitted to relevant interested and affected parties as required by HWC in their response to the NID application (Section 1.2). The report was also included in the main public participation process (PPP) required under NEMA as part of the BA.

3.6. Assumptions and limitations

The field study was carried out at the surface only and hence any completely buried archaeological sites would not be readily located. Similarly, it is not always possible to determine the depth of archaeological material visible at the surface. Vegetation cover was low but moderately dense. Although this would have limited ground visibility to a degree, it is assumed that the intervening spaces would have revealed whether any artefacts were present on site. It is assumed that the desktop study would provide a reasonable overview of the types of heritage that might occur in the area.

4. PHYSICAL ENVIRONMENTAL CONTEXT

4.1. Site context

As is evident from Figure 5, the study area is within the western edge of an area of small holdings. Some of these are farm portions and others are erven. Most of these properties seem to be in use for residential purposes. To the west is agricultural land with the Mossel Bay Aerodrome situated directly southwest of erf 21277. The site itself currently serves as a horse paddock.

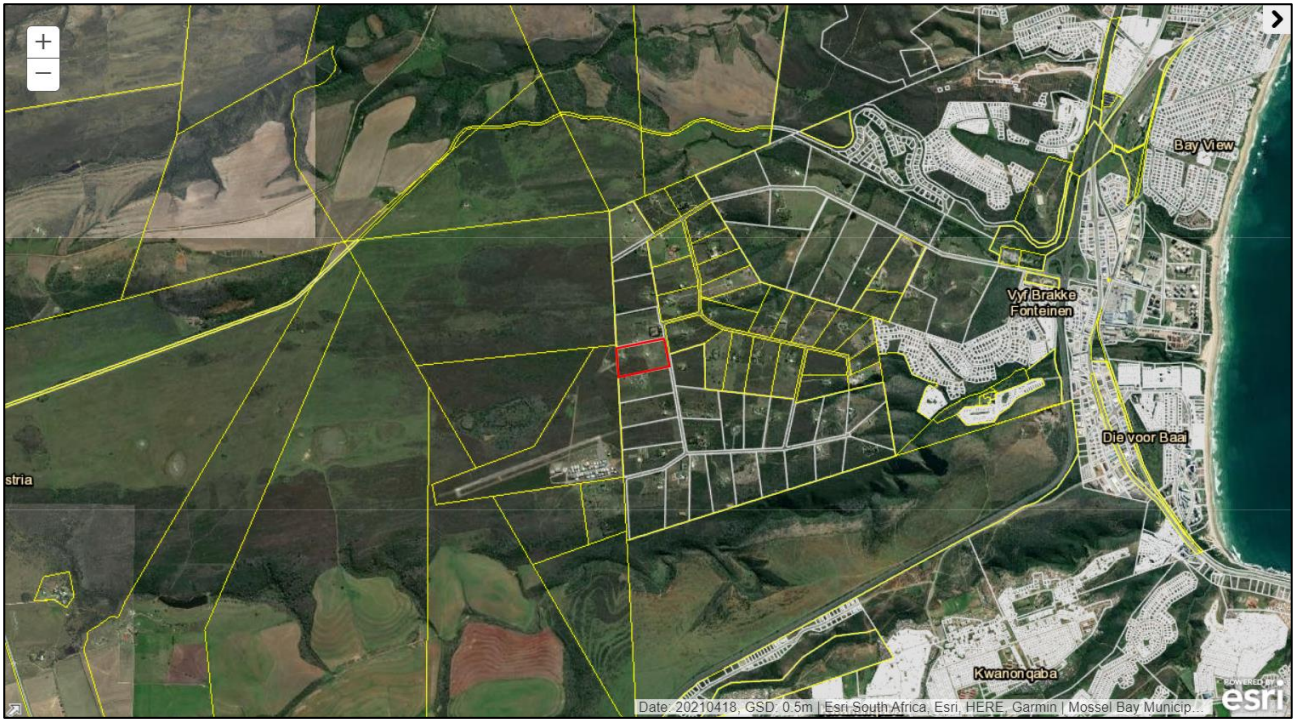


Figure 5: Aerial view of the study area (red polygon) and surrounds showing the cadastral boundaries. Farm portions are in yellow and erven in white.

4.2. Site description

The site lies off a tar road and it and neighbouring properties have wire fences. The landscape is flat with scattered trees which tend to be around buildings (Figures 6 to 9). Buildings on and around the site are all modern (Figures 9 to 11). The local landscape is very flat as shown by the panoramic views in Figures 7 and 12. The surface is covered in low, scrubby vegetation and grass with low density gravel visible in the sand in places and occasional small rocks (or perhaps outcrops of underlying bedrock) visible at the surface (Figures 9 to 15).



Figure 6: View towards the northwest from Nagtegaal Street with the site in mid-picture. The gate to the left is the neighbouring property.



Figure 7: Panoramic view towards the west from Nagtegaal Street looking directly into the study area.



Figure 8: View towards the south along Nagtegaal Street with the study area behind the fence to the right.



Figure 9: View towards the southwest across the site with a residential dwelling next door.



Figure 10: View towards the northwest across the study area. The building in view is on the remaining portion of erf 21277.



Figure 11: Looking east across the site with the neighbouring face brick house visible.



Figure 12: Panoramic view towards the northeast (left) and southeast (right) across the study area. The cluster of trees in mid-picture is at the house immediately across Nagtegaal Street from the site.



Figure 13: Surface of the site with vegetation, sand, gravel and scattered rocks.



Figure 14: Surface rocks (possibly bedrock exposures) and vegetation on the site.



Figure 15: Surface gravel on the site.

5. FINDINGS OF THE HERITAGE STUDY

This section describes the heritage resources recorded in the study area during the course of the project.

5.1. Palaeontology

The SAHRIS Palaeosensitivity Map shows the site to be of potentially high palaeontological sensitivity (Figure 16). John Pether was approached for a palaeontological specialist study and he noted that the SAHRIS map is incorrect due to a revision of the local geology that excludes the potentially highly sensitive Peninsula Formation and the low sensitivity Nardouw Subgroup. The study area lies over what is now listed as Skurweberg Formation which is of low sensitivity. As a result, the specialist work was conducted from the desktop. Pether (2022: i) summarises the palaeontology as follows:

The subsurface impact of the construction of the proposed storage facilities, workshops and offices will be limited to the **Skurweberg Formation** bedrock, its weathered zone and soil, and possibly grey windblown coversands in places. The Skurweberg Fm. (Nardouw Subgroup, Table Mountain Group) is of early Silurian age (~430 million years ago) and is mainly comprised of fluvial (riverine) braid-plain sandstones, with lesser muddier beds attributed to shallow marine or estuarine settings. The fossil content is sparse and only trace fossils have been recorded, mainly from the muddier interbeds (*e.g.* trilobite tracks, worm burrows). The palaeontological sensitivity of the Skurweberg Fm. is rated as LOW (Almond & Pether, 2008, 2009; Almond *et al.*, 2009). In this southern zone of the Cape Fold Belt the low sensitivity is further exacerbated by folding and deformation where the fossil potential is further reduced, and by the development of the weathering soil profile.



Figure 16: Extract from the SAHRIS Palaeosensitivity Map showing the site (red polygon) to be of high palaeontological sensitivity (orange shading).

5.2. Archaeology

5.2.1. Desktop study

The southern coastal plain of South Africa is well-known for the various important cave sites that occur in the coastal cliffs. In the Mossel Bay area there are the various shelters of the Pinnacle Point

Complex (Jacobs 2010; Marean 2010) and the Cape St. Blaize Cave at Mossel Bay (Goodwin & Malan 1935; Keller 1970) which have all yielded important Middle Stone Age (MSA) deposits. Another important aspect of south coast archaeology that is relevant to the present project is the many occurrences of Early Stone Age (ESA) artefacts that are routinely recorded in agricultural lands. The distribution of such artefacts varies massively. In some places there are no artefacts to be found, but in others they can be dense, as at the Robberg Quarry (Orton & Blackwood 2018) where a thick layer of artefact-bearing gravel occurs as a channel fill beneath the surface. Nilssen (2006) examined an area to the west of the study area and did report finding ESA artefacts. He also found ESA artefacts to the southwest of the study area along the N2, including large numbers collected from trenching excavations (Nilssen 2009). Amongst these were a number of Acheulean handaxes. Also to the west of the study area, just north of the PetroSA facility, Orton (personal observation 2021) recorded sparse ESA artefacts in an agricultural field. Working to the east of the site, Pelser (2008) recorded a scattering of ESA and MSA artefacts on the surface. In the same area, Orton (personal observation 2021) saw low density artefacts in the backfill of a roadside trench.

The above observations are good indications that the wider area should be regarded as potentially archaeologically sensitive, primarily for ESA materials.

5.2.2. Site visit

The site visit revealed no archaeological materials of any sort. The study area was quite small and fairly well-vegetated, but if artefacts were present in any significant quantity, it is almost certain that some would have been visible in the sandy and/or gravelly patches.

5.3. Graves

No graves were seen and none are expected to occur. Although unmarked graves can occur almost anywhere, the hard substrate makes it extremely unlikely that any will be present there.

5.4. Historical aspects and the Built environment

5.4.1. Desktop study

When Diaz first landed at Mossel Bay in 1487 he named it Angra dos Vagueros. Many other Europeans visited its shores to obtain fresh water and food. The Dutch East India Company (VOC) claimed Mossel Bay in 1734. After a 1784 visit from an English ship, the VOC decided to establish an outpost at Mossel Bay. This was done in 1787 when, after a bumper grain crop, they constructed a store to facilitate the export of the grain. Although a small settlement had sprung up around the store by the end of the 18th century, it was only in 1848 that a small village, then known as Aliwal, came into being. By 1852 there were 30 houses. Many 19th century buildings are preserved within the town and are generally built from local sandstone (Fransen 2004). The initial settlement was at the western end of the old town, but this is far away from the study area.

Figure 17 shows a historical aerial view of the study area from 1939. It is quite evident that there was no historical development in the area at that stage. This presumably indicates livestock grazing as the primary (or only) use of the immediate area.

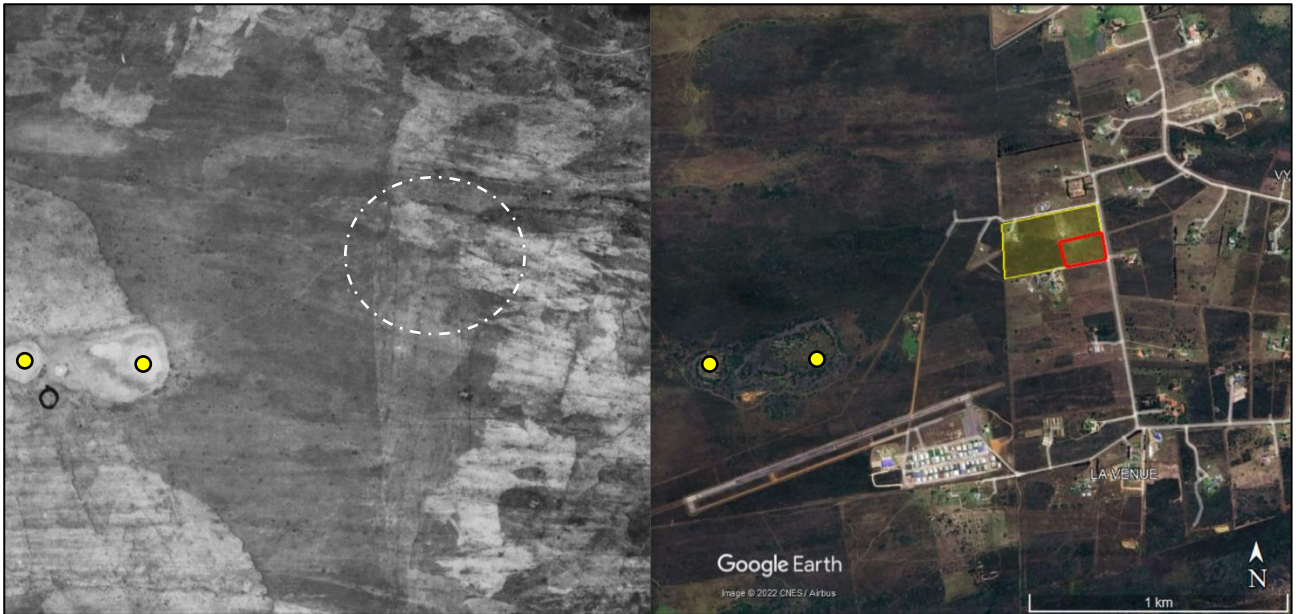


Figure 17: Comparative aerial photographs from 1939 (Job 140_042_34257) and 2021 (Google Earth) showing the general vicinity of the study area (red polygon in modern image, assumed to be within yellow dashed oval on historical image). Pans that are easily visible on both images are marked by yellow dots.

Figure 18 shows the same area in 1959, but with a wider view. Not much has changed in the vicinity of the study area (white dashed oval), but development has commenced in the vicinity of the industrial area between the R102 and the coast. The remainder of the area is all still rural with virtually no buildings visible away from the coastline.



Figure 18: Aerial photograph from 1957 (Job 403_011_03420) showing the wider area northwest of Mossel Bay. Some development has commenced in the vicinity of the industrial area behind the beach. In the south-eastern corner, the edge of Mossel Bay town is expanding and a few buildings lie along the shore. The R102 is obvious along the southern edge of the photograph but the new N2 had not yet been constructed.

It is evident that despite the late 18th century origins of Mossel Bay town, the surrounding area remained rural until very recently.

5.4.2. Site visit

No historical elements were seen in the study area or its surroundings. All structures were noted to be modern (see images in Section 4.2).

5.5. Cultural landscapes and scenic routes

Cultural landscapes are the product of the interactions between humans and nature in a particular area. Sauer (1925) defined them thus: “The cultural landscape is fashioned from a natural landscape by a cultural group. Culture is the agent, the natural area is the medium, the cultural landscape the result”. It is evident that the cultural landscape in this instance is a modern semi-rural landscape of smallholdings without any historical character. Nevertheless, there is no precedent for light industrial type developments, with the exception of the Mossel Bay Aerodrome which has to be located away from residential suburbs.

The site is located far from any tourist routes with its main access road effectively being a cul-de-sac as it leads only into the Aalwyndal area.

5.6. Visual impact assessment

The viewsheds produced in the VIA show that the site is not readily visible from most areas. This is largely due to the very flat land in the vicinity of the site and the presence of local screening vegetation and other structures. The visual summary is as follows (Holm 2024: 26):

The proposed development is in line with the future planning for Aalwyndal in terms of the Mossel Bay Spatial Development Framework and Aalwyndal Precinct Plan adopted by the Mossel Bay Municipality. The construction of the Mossel Bay Airfield in recent years has brought about visual changes to the character of Aalwyndal and the type of development that it attracts. The proposed new development on Portion A of Erf 21277 is of a similar type and scale as other developments in the near vicinity associated with the airfield.

The visual framework presents a mix of developed and undeveloped properties with areas of natural vegetation interspersed with grazing fields and a mix of exotic and indigenous vegetation planted near dwellings and along fence lines. Although Aalwyndal has a sense of rural charm it does not present a distinctive scenic or cultural sense of place that must be protected and scenic, cultural and historical significance of the area is rated as low. The topography of the area furthermore serves to visually isolate Aalwyndal and partially screen views towards the proposed new developments planned for Erf 21277, Mossel Bay, from surrounding developments and scenic routes.

Residents and receptors related to the holiday and tourist industry are rated as highly sensitive and tourism is one of the major economic drivers of the Southern Cape. Although there is some tourist activity in Aalwyndal associated with the Mossel Bay Airfield and Guest Houses and farm accommodation offered, this is not one of the major areas of Mossel Bay associated with the tourist trade. New developments could be partially visible from the N2 view corridor, which has been identified as an important scenic tourist route, but this is at a distance of more than 2 km from the proposed development site at which new developments would not be clearly noticeable to receptors and potential visual impact would be low provided appropriate mitigation measures are put in place.

Although the visual absorption of the development site itself is low due to a lack of screening vegetation and relatively flat topography, the visual absorption capacity of the area is moderate to high due to the screening effect of existing structures and taller vegetation in the areas surrounding the development site.

Screening along the Eastern boundary bordering Nagtegaal Street must be prioritized as planting along this boundary will not be continuous due to parking bays and entrance to the building complex from Nagtegaal Street that will be located along this boundary. The proponent must keep paved surfaces along this boundary to a minimum and allow the maximum amount of space for planting areas that will still allow functionality of the entrance, parking bays and refuse area. Mature, evergreen trees in large container sizes (500 liters or larger) with a canopy height and spread of >3m should be evenly spaced along this boundary in planting areas as indicated on the site plan (Appendix A). Trees must be waterwise and well adapted to the harsh coastal conditions and wind to ensure the best possible chance for growth and development to provide maximum screening from Nagtegaal street in the long term. Trees must be watered and maintained for a minimum period of 12 months and until they are well established and showing clear signs of new growth.

Changes will be brought about to the existing visual environment of Aalwyndal should the proposed development go ahead, but such changes could be absorbed within the existing visual character of the area. Where potential visual impacts can be rated as moderate to high without mitigation, the significance of these impacts can be reduced to moderate to low if appropriate mitigation measures are put in place. In light of the above it is recommended that the proposed development be approved subject to the implementation of mitigation measures to soften the potential visual impacts to integrate the new developments with the existing character of Aalwyndal.

5.7. Statement of significance and provisional grading

Section 38(3)(b) of the NHRA requires an assessment of the significance of all heritage resources. In terms of Section 2(vi), “cultural significance” means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance. The reasons that a place may have cultural significance are outlined in Section 3(3) of the NHRA (see Section 2 above).

Since no archaeological resources were seen, it is assumed that the chances of highly significant material being present are low. The archaeological landscape of the site is thus deemed to have very low to low cultural significance at the local level for its scientific value and is considered to be NCW or, possibly, IIIC at best in the event of subsurface artefacts being present.

Graves are deemed to have high cultural significance at the local level for their social value and would be allocated a grade of IIIA if present.

The cultural landscape is largely a modern semi-rural landscape with minimal aesthetic value and is rated as having low cultural significance at the local level. It can be graded IIIC.

There are no specific resources to present in a grade map and so none is shown here.

5.8. Summary of heritage indicators

Two indicators are proposed:

- Significant archaeological and palaeontological resources should not be unduly impacted during development.
- The proposed structures should not dominate the small holding landscape.
- Flat roofs are preferred over pitched roofs to reduce visibility.

6. ASSESSMENT OF IMPACTS

6.1. Construction Phase

6.1.1. Impacts to palaeontological and archaeological resources

Direct impacts to palaeontological and archaeological resources might occur during the construction phase when excavations for foundations and services are made. However, because fossils are not expected in the upper sediments and no archaeological artefacts were seen, the intensity and probability of impacts are considered to be low. Overall the significance will be **low negative** (Table 2). No mitigation is suggested since no fossils or archaeological materials are yet known on the site. A small possibility does still exist that such resources could be uncovered and these would need to be reported and dealt with during construction. Pether (2022) has included a link to the HWC Chance Finds Procedure for fossil heritage. Any archaeological resources (expected to be ESA stone artefacts if anything) would need to be reported to HWC and/or an archaeologist to determine an appropriate way forward.

There are no fatal flaws in terms of construction phase impacts to palaeontology or archaeology.

Table 2: Assessment of palaeontological impacts.

Potential impacts on palaeontological resources	
Nature and status of impact:	Direct, negative
Extent and duration of impact:	Site specific, permanent
Intensity	Very low
Probability of occurrence:	Very low
Degree to which the impact can be reversed:	Low
Degree to which the impact may cause irreplaceable loss of resources:	Low
Cumulative impact prior to mitigation:	Low
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be mitigated:	High (but not required at present)
Proposed mitigation:	Reporting of chance finds
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low

6.1.2. Impacts to the cultural landscape

Direct impacts to the cultural landscape would occur during the construction phases when construction equipment is brought onto site and the amount of activity in the area increases. Given that construction would normally occur from time to time as people build or extend structures on the various surrounding properties, this is not a high intensity impact. It would definitely occur if the project goes ahead, and the significance is considered to be **medium negative** (Table 3). The VIA finds construction phase impact significance to be **medium-low** (Holm 2024). Mitigation is feasible and will entail keeping the construction duration as short as possible as well as ensuring that the site and surroundings are kept neat and tidy and that rehabilitation of disturbed areas occurs timeously. Establishment of planted areas could also be considered during construction if they can

be feasibly protected during construction work. These measures would assist in reducing the significance to **low negative**. This is in agreement with the VIA rating (Holm 2024).

There are no fatal flaws in terms of construction phase impacts to the cultural landscape.

Table 4: Assessment of impacts to the cultural landscape.

Potential impacts on the cultural landscape	
Nature and status of impact:	Direct, negative
Extent and duration of impact:	Local, short term
Intensity	Low
Probability of occurrence:	Definite
Degree to which the impact can be reversed:	High
Degree to which the impact may cause irreplaceable loss of resources:	Low
Cumulative impact prior to mitigation:	Low
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	Minimise construction duration. Keep site neat and tidy. Establish planted areas with screening trees (if feasible during construction).
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low

6.2. Operation Phase

6.2.1. Impacts to the cultural landscape

Direct impacts to the cultural landscape would occur during the operation phase through the presence of the storage facility in the landscape. It would have a far higher density of buildings than any other nearby property and, due to the nature of the facility, there would be a steady but limited amount of traffic associated with it. These impacts would definitely occur and it is anticipated that an impact significance of **medium negative** would pertain (Table 4). The VIA also rates operation phase impact significance as **medium** (Holm 2024). Mitigation would entail the preparation of a landscape plan that includes planting around the periphery of the property to screen the higher density building and paving areas from the surrounding areas. These planted areas should be established as early as possible and preferably include young trees of at least 2 m height. Trees can also provide shaded parking areas and improve the general character of the facility. There is a precedent for tree lines in the area and the property immediately to the north has trees entirely enclosing its structures. Other measures include the selection of building materials and finishes that allow the new structures to be visually recessive and compliment the local sense of place of the landscape. This would reduce the impacts to **low negative**. The VIA rates post-mitigation operational impact significance as **medium-low** (Holm 2024).

There are no fatal flaws in terms of operation phase impacts to the cultural landscape.

Table 4: Assessment of impacts to the cultural landscape.

Potential impacts on the cultural landscape	
Nature and status of impact:	Direct, negative
Extent and duration of impact:	Local, long term
Intensity	Low
Probability of occurrence:	Definite
Degree to which the impact can be reversed:	High
Degree to which the impact may cause irreplaceable loss of resources:	Low
Cumulative impact prior to mitigation:	Low
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be mitigated:	High
Proposed mitigation:	Prepare a landscape plan that includes peripheral planting to screen the facility from the surrounding area. Use building materials and finishes that are recessive and complimentary to local landscape.
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low

6.3. Decommissioning Phase

No decommissioning phase is envisaged.

6.4. Cumulative impacts

Significant cumulative impacts are not expected due to the generally low density of development in the Aalwyndal area. They are rated as **low negative** for all aspects of heritage (Tables 2 to 4).

6.5. Evaluation of impacts relative to sustainable social and economic benefits

Section 38(3)(d) of the NHRA requires an evaluation of the impacts on heritage resources relative to the sustainable social and economic benefits to be derived from the development.

The project will create construction period employment and will also offer work opportunities during operation, both in terms of running the facility and in terms of the business that will be able to operate from the facility. Storage is also a common requirement in modern society and this has been identified by the proponent as a need in the area. These are clear economic and social benefits and, if mitigation is applied as suggested above, then the socio-economic benefits outweigh the residual impacts.

6.6. Existing impacts to heritage resources

There are currently no obvious threats to heritage resources on the site.

6.7. The No-Go alternative

If the project were not implemented then the site would stay as it currently is (impact significance of **neutral**). Heritage impacts are expected to be limited, so the loss of socio-economic benefits is more significant and suggests that the No-Go option is less desirable in heritage terms.

6.8. Levels of acceptable change

Any impact to an archaeological or palaeontological resource or a grave is deemed unacceptable until such time as the resource has been inspected and studied further if necessary. Impacts to the landscape are difficult to quantify but in general a development that visually dominates the landscape from many publicly accessible vantage points is undesirable.

7. INPUT TO THE ENVIRONMENTAL MANAGEMENT PROGRAM

The actions recorded in Table 5 should be included in the environmental management program (EMPr) for the project.

Table 5: Heritage considerations for inclusion in the EMPr.

Impact	Mitigation / management objectives & outcomes	Mitigation / management actions	Monitoring	Frequency	Responsibility
			Methodology		
Impacts to archaeology and graves					
Damage or destruction of palaeontological resources	Rescue information and fossils before extensive damage occurs	Reporting chance finds as early as possible, follow HWC Chance Finds Procedure	Inform staff to be vigilant and carry out inspections of excavations	Ongoing basis	Construction Manager or Contractor
				Whenever on site	ECO
Damage or destruction of archaeological sites or graves	Rescue information, artefacts or burials before extensive damage occurs	Reporting chance finds as early as possible, protect in situ and stop work in immediate area	Inform staff to be vigilant and carry out inspections of excavations	Ongoing basis	Construction Manager or Contractor
				Whenever on site	ECO
Impacts to the cultural landscape					
Visual intrusion of facility	Landscape plan in place	Compile landscape plan	Commission landscape plan	Once-off	Project developer
Visual intrusion of facility	Implement landscape plan	Ensure landscape plan gets implemented	Monitor implementation	Ongoing basis as needed	ECO
Damage to planted areas	Protect planted areas from harm	Ensure that construction work does not spill over into planted areas if already established.	Monitoring of planted areas	Ongoing basis	Construction Manager or Contractor
				Whenever on site	ECO

8. CONSULTATION WITH HERITAGE CONSERVATION BODIES

The report was sent to Heritage Mossel Bay and the Simon Van Der Stel Foundation Southern Cape for a 30 day comment period in November and December 2022. Only an automated response was received from the Municipality. HWC advised that a follow-up consultation of 14 days was sufficient for the revised HOA and also provided a recommended contact person in the Municipality to include in this consultation. The results are presented in a separate letter submitted with this HIA.

9. CONCLUSIONS

Table 6 lists the heritage indicators and how the project has responded to them.

Table 6: *Heritage indicators and project responses.*

Indicator	Project Response
Significant archaeological and palaeontological resources should not be unduly impacted during development.	Impacts are not expected so the project cannot respond before construction. Recommendations have been made to be alert for buried fossils and artefacts during construction.
The proposed structures should not dominate the small holding landscape.	The proposed central units are double storey with all others being single story. The development is not visible over long distances and planting has been recommended to screen the structures from the surroundings. A narrow strip has been left around the outside of the property to allow for planting.
Flat roofs are preferred over pitched roofs to reduce visibility.	Pitched roofs are proposed but their pitches are low and have been approved by the VIA.

The main concern for this project is the potential visual intrusion of a relatively high density development in what is otherwise a low density, rural (albeit modern) landscape. With mitigation (tree planting) the development will become less visible over time and is unlikely to pose a significant visual impact. This makes the project acceptable and there are no further concerns.

9.1. Reasoned opinion of the specialist

Given that the potential impacts after mitigation are all of low significance and the use of trees and visually recessive materials and finishes are likely to be successful in mitigating the visual intrusion, it is the opinion of the heritage specialist that the proposed project should be authorised in full.

10. RECOMMENDATIONS

It is recommended that the proposed storage facility be authorised, but subject to the following recommendation which should be included as conditions of authorisation:

- The buildings must make use of visually recessive materials, colours and design principles;
- Fencing to be visually permeable and dark-coloured;
- A landscape plan that includes perimeter planting to screen the development must be compiled prior to the start of construction;
- Night time lighting must be minimised and light fittings must be designed to minimise light spillage;
- If any palaeontological material is found during the course of development then the HWC Fossil Find Procedure should be implemented and the find should be reported to the heritage authorities; and

- If any archaeological material or human burials are uncovered during the course of development then work in the immediate area should be halted. The find would need to be reported to the heritage authorities and may require inspection by an archaeologist. Such heritage is the property of the state and may require excavation and curation in an approved institution.

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APPENDIX 1 – Curriculum Vitae



Curriculum Vitae

Jayson David John Orton

ARCHAEOLOGIST AND HERITAGE CONSULTANT

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Birth date and place: 22 June 1976, Cape Town, South Africa
Citizenship: South African
ID no: 760622 522 4085
Driver's License: Code 08
Marital Status: Married to Carol Orton
Languages spoken: English and Afrikaans

Education:

SA College High School	Matric	1994
University of Cape Town	B.A. (Archaeology, Environmental & Geographical Science) 1997	
University of Cape Town	B.A. (Honours) (Archaeology)*	1998
University of Cape Town	M.A. (Archaeology)	2004
University of Oxford	D.Phil. (Archaeology)	2013

*Frank Schweitzer memorial book prize for an outstanding student and the degree in the First Class.

Employment History:

Spatial Archaeology Research Unit, UCT	Research assistant	Jan 1996 – Dec 1998
Department of Archaeology, UCT	Field archaeologist	Jan 1998 – Dec 1998
UCT Archaeology Contracts Office	Field archaeologist	Jan 1999 – May 2004
UCT Archaeology Contracts Office	Heritage & archaeological consultant	Jun 2004 – May 2012
School of Archaeology, University of Oxford	Undergraduate Tutor	Oct 2008 – Dec 2008
ACO Associates cc	Associate, Heritage & archaeological consultant	Jan 2011 – Dec 2013
ASHA Consulting (Pty) Ltd	Director, Heritage & archaeological consultant	Jan 2014 –

Professional Accreditation:

Association of Southern African Professional Archaeologists (ASAPA) membership number: 233

CRM Section member with the following accreditation:

- Principal Investigator: Coastal shell middens (awarded 2007)
Stone Age archaeology (awarded 2007)
Grave relocation (awarded 2014)
- Field Director: Rock art (awarded 2007)
Colonial period archaeology (awarded 2007)

Association of Professional Heritage Practitioners (APHP) membership number: 43

- Accredited Professional Heritage Practitioner

➤ **Memberships and affiliations:**

South African Archaeological Society Council member	2004 – 2016
Assoc. Southern African Professional Archaeologists (ASAPA) member	2006 –
UCT Department of Archaeology Research Associate	2013 –
Heritage Western Cape APM Committee member	2013 –
UNISA Department of Archaeology and Anthropology Research Fellow	2014 –
Fish Hoek Valley Historical Association	2014 –
Kalk Bay Historical Association	2016 –
Association of Professional Heritage Practitioners member	2016 –

Fieldwork and project experience:

Extensive fieldwork and experience as both Field Director and Principle Investigator throughout the Western and Northern Cape, and also in the western parts of the Free State and Eastern Cape as follows:

Feasibility studies:

- Heritage feasibility studies examining all aspects of heritage from the desktop

Phase 1 surveys and impact assessments:

- Project types
 - Notification of Intent to Develop applications (for Heritage Western Cape)
 - Desktop-based Letter of Exemption (for the South African Heritage Resources Agency)
 - Heritage Impact Assessments (largely in the Environmental Impact Assessment or Basic Assessment context under NEMA and Section 38(8) of the NHRA, but also self-standing assessments under Section 38(1) of the NHRA)
 - Archaeological specialist studies
 - Phase 1 archaeological test excavations in historical and prehistoric sites
 - Archaeological research projects
- Development types
 - Mining and borrow pits
 - Roads (new and upgrades)
 - Residential, commercial and industrial development
 - Dams and pipe lines
 - Power lines and substations
 - Renewable energy facilities (wind energy, solar energy and hydro-electric facilities)

Phase 2 mitigation and research excavations:

- ESA open sites
 - Duinefontein, Gouda, Namaqualand
- MSA rock shelters
 - Fish Hoek, Yzerfontein, Cederberg, Namaqualand
- MSA open sites
 - Swartland, Bushmanland, Namaqualand
- LSA rock shelters
 - Cederberg, Namaqualand, Bushmanland
- LSA open sites (inland)
 - Swartland, Franschhoek, Namaqualand, Bushmanland
- LSA coastal shell middens
 - Melkbosstrand, Yzerfontein, Saldanha Bay, Paternoster, Dwarskersbos, Infanta, Knysna, Namaqualand
- LSA burials
 - Melkbosstrand, Saldanha Bay, Namaqualand, Knysna
- Historical sites
 - Franschhoek (farmstead and well), Waterfront (fort, dump and well), Noordhoek (cottage), variety of small excavations in central Cape Town and surrounding suburbs
- Historic burial grounds
 - Green Point (Prestwich Street), V&A Waterfront (Marina Residential), Paarl

Awards:

Western Cape Government Cultural Affairs Awards 2015/2016: Best Heritage Project.

APPENDIX 2 – PALAEOLOGICAL STUDY

APPENDIX 3 – VISUAL IMPACT ASSESSMENT