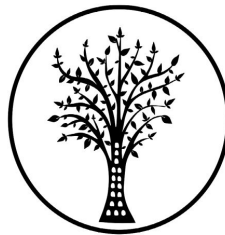


ARCHAEOLOGICAL IMPACT ASSESSMENT

In terms of Section 38(8) of the NHRA for a

Amalinda Downs Residential Development

Prepared by



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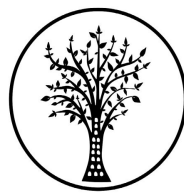
for SKG Properties (Pty) Ltd

March 2018

Report by:

Jenna Lavin

Karen van Ryneveld



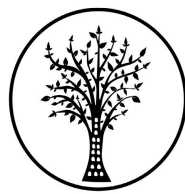
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Nicholas Wiltshire is the Director of CTS which was established in 2013. Nic has a MSc in Archaeology from the University of Cape Town and his archaeological expertise focus on rock art, Stone Age and GIS studies. He has more than 13 years of experience in the heritage industry and has carried out a number of Heritage and Archaeological Impact Assessments as well as working as a senior heritage officer, archaeology at Heritage Western Cape from 2008 - 2010. Nic was the SAHRIS Project Manager and developer of SAHRIS from 2011 - 2013 before setting up CTS and OpenHeritage. Since then, he has rolled out similar national heritage systems in Namibia (2014-2017) and Kenya (2017 - ongoing).

As part of the eastern Cederberg Rock Art Group, HWC and SAHRA, Nic has been closely involved in the compilation of a number of Heritage and Conservation Management Plans and various guidelines and policies related to minimum standards and best practice in conservation management. He was also responsible for the declaration of three Provincial Heritage Sites whilst working for HWC.

Jenna Lavin (MSc), an archaeologist, has 8 years of experience in various South African heritage authorities, including, most recently as the Assistant Director for Policy, Research and Planning at Heritage Western Cape. She has drafted numerous HIAs and is Chair of the Association of Professional Heritage Practitioners.

Karen has been involved in CRM archaeology since 2003 and has been the author (including selected co-authored reports) of approximately 400 Phase 1 AIA studies. Phase 1 AIA work is centred in South Africa, focusing on the Northern and Eastern Cape provinces and the Free State. She has also conducted Phase 1 work in Botswana (2006/2007). In 2007 she started ArchaeoMaps, an independent archaeological consultancy. In 2010 she was awarded ASAPA CRM Principle Investigator (PI) status based on large scale Phase 2 Stone Age mitigation work (De Beers Consolidated Mines – Rooipoort, Northern Cape – 2008/2009) and has also been involved in a number of other Phase 2 projects including Stone Age, Shell Middens, Grave / Cemetery projects and Iron Age sites. In addition to CRM archaeology she has been involved in research, including the international collaborations at Maloney's Kloof and Grootkloof, Ghaap plateau, Northern Cape (2005/2006). Archaeological compliance experience includes her position as Head of the Archaeology, Palaeontology and Meteorites (APM) Unit at AMAFA aKwa-Zulu Natali (2004).



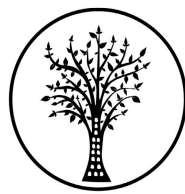
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EXECUTIVE SUMMARY

The Amalinda Downs site is located in Circle Road just west of Fitchett Road, Amalinda, East London. Presently there is no development on the property. It is proposed to develop the site for 170 low-income residential erven that will be 150 square metres in size. The land is currently zoned Agricultural and will be rezoned to Residential Zone 3A. The Municipality is currently addressing the rezoning and subdivision of two erven 2370 & 2376. These erven will be sold as plots. The development will include access roads and stormwater management structures. The approximate area covered by the proposed development is 4,4 hectares.

No significant archaeological or other heritage resources were identified during the field assessment. One already demolished historical structure was identified (Site ADS 01), however this site has been determined to have low heritage significance and is already essentially demolished.

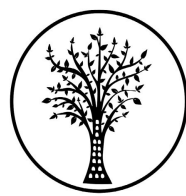
As such, there is no heritage objection to the proposed development and no further heritage processes are required for this proposed development.



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1. INTRODUCTION

1.1 Background Information on Project

The Amalinda Downs site is located in Circle Road just west of Fitchett Road, Amalinda, East London. Presently there is no development on the property. It is proposed to develop the site for 170 low-income residential erven that will be 150 square metres in size. The land is currently zoned Agricultural and will be rezoned to Residential Zone 3A. The Municipality is currently addressing the rezoning and subdivision of two erven 2370 & 2376. These erven will be sold as plots. The development will include access roads and stormwater management structures. The approximate area covered by the proposed development is 4,4 hectares.

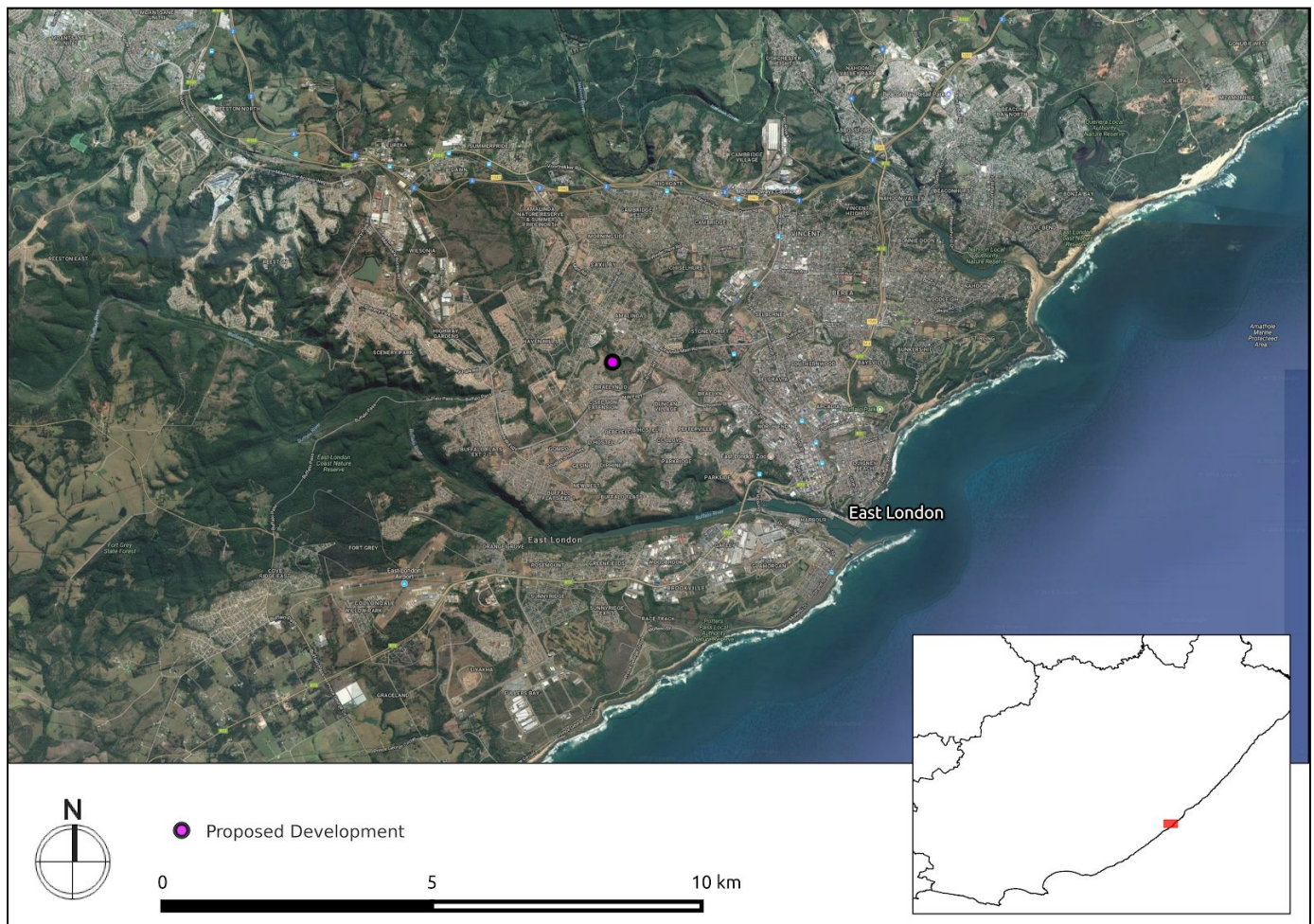
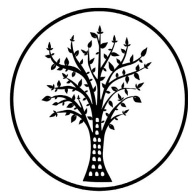


Figure 1: A satellite image of the study area with the proposed development indicated

1.2 Description of Property and affected Environment

The site proposed for development is located within an area that is already developed. The site is overgrown with vegetation and has been previously impacted by agricultural activities.



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2. METHODOLOGY

2.1 Purpose of HIA

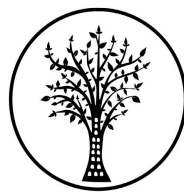
The purpose of this Archaeological Study is to satisfy the requirements of section 38(8), and therefore section 38(3) of the National Heritage Resources Act (Act 25 of 1999).

2.2 Summary of steps followed

- A desktop study (Heritage Screener, Appendix 1) was conducted for the farms that form part of the proposed development area
- An archaeologist was contracted to conduct a survey of archaeological resources likely to be impacted by the proposed development. The archaeologist visited the proposed development area on 15 February 2018.
- The identified resources were mapped and assessed to evaluate their heritage significance in terms of the grading system outlined in section 3 of the NHRA (Act 25 of 1999).
- Alternatives and mitigation options were discussed with the Environmental Assessment Practitioner



Figure 2: Aerial Image of proposed development area



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3. HISTORY AND EVOLUTION OF THE SITE AND CONTEXT

3.1 Definition of the property

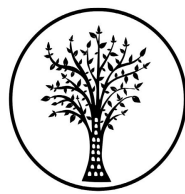
This application is for the proposed subdivision of erven 2370 and 2376 into 140 erven. Please see figure 3 below.



Figure 3: Proposed sub-division plan



Figures 4 and 5: Contextual Images of area proposed for development



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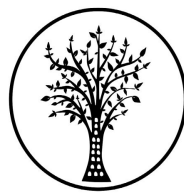
Figures 6 and 7: Contextual Images of area proposed for development



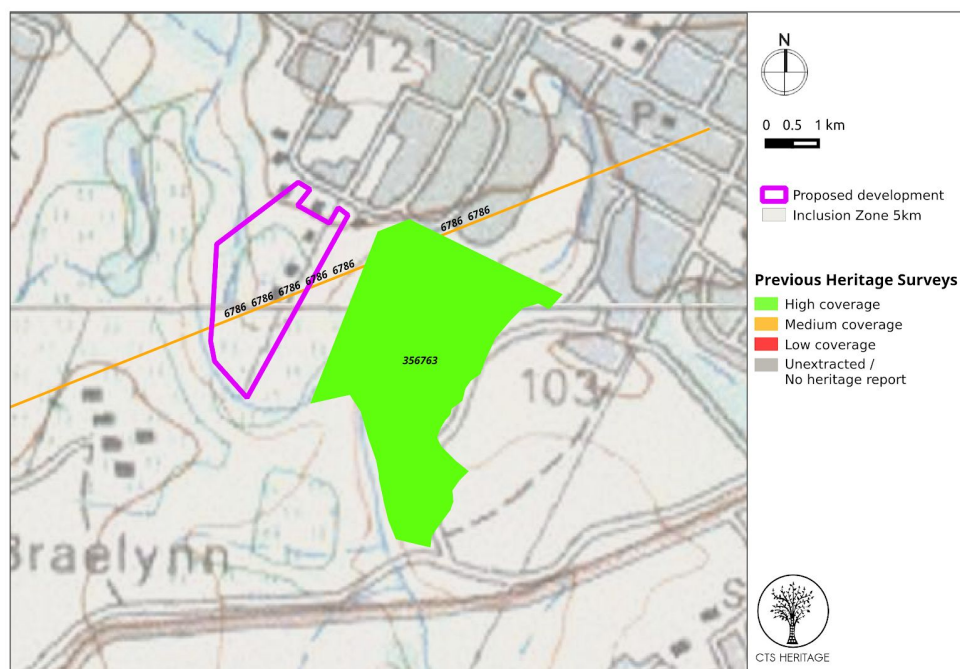
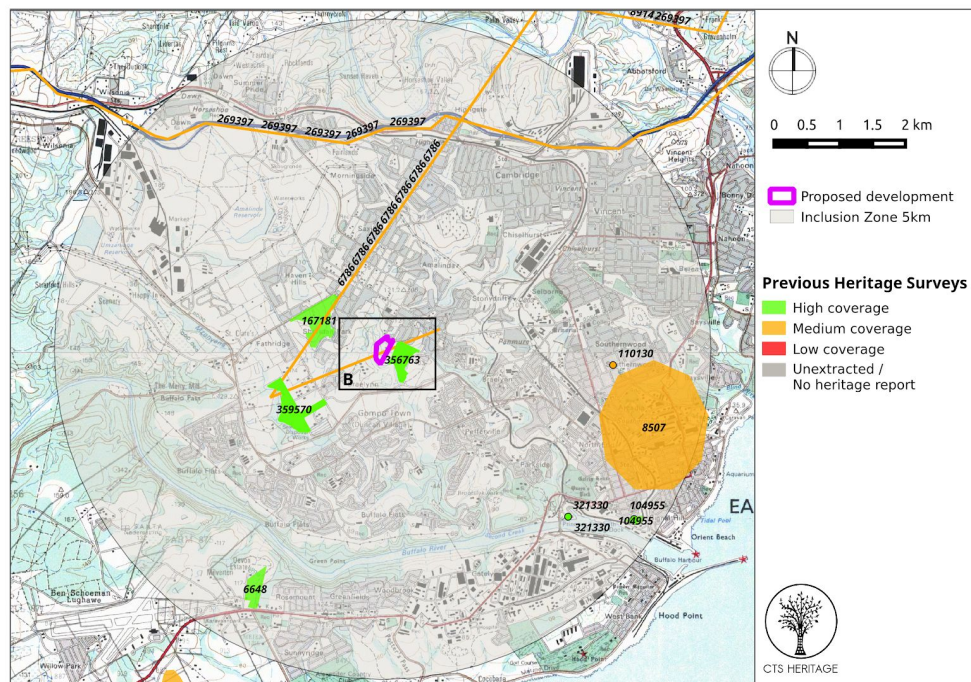
Figure 8: Contextual Images of area proposed for development

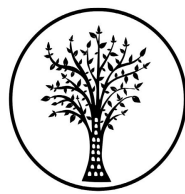
3.2 Archaeological and Historical Background of the Eastern Cape

Several Heritage Impact Assessments (HIAs) and Archaeological Impact Assessments (AIAs) have been conducted in the vicinity, dating back to 1996. No previous assessments have been conducted within this development location but the immediately adjacent property was assessed for the Bengal Heights development (2016 - SAHRIS NID 356764). The nearby Second Creek in the proposed development area may contain Stone Age material, although this is unlikely given the disturbed nature of the surrounding landscape. Several buildings and structures of provincial significance are located nearby (Grade II), however none of these resources will be impacted by the development. According to the 2002 Google Earth satellite map, the area seems to have been used for farming and there is evidence of possible kraals and stone walling. However, in the 2015 image, it can be seen that vegetation has grown densely in most areas and the northern and south-eastern portions appear to have been cleared and disturbed (see Screener in Appendix 2). Furthermore, the AIA conducted by van Ryneveld (2014) nearby for the similar development of Calypso Heights, ~ 1 km north-west, recorded no heritage resources but advised caution for the possibility of graves in the area.



Van Ryneveld conducted a field assessment for the proposed Bengal Heights development (2016 - SAHRIS NID 356764) on the neighbouring property in which she identified Site BHR-S1, the possible remains of a Later Iron Age homestead which was initially graded IIIB. Mitigation was later carried out by PGS to establish whether significant archaeological material was hidden by dense vegetation after the screening and field assessment but they did not find any further material of significance (Terreco, pers. comm.).





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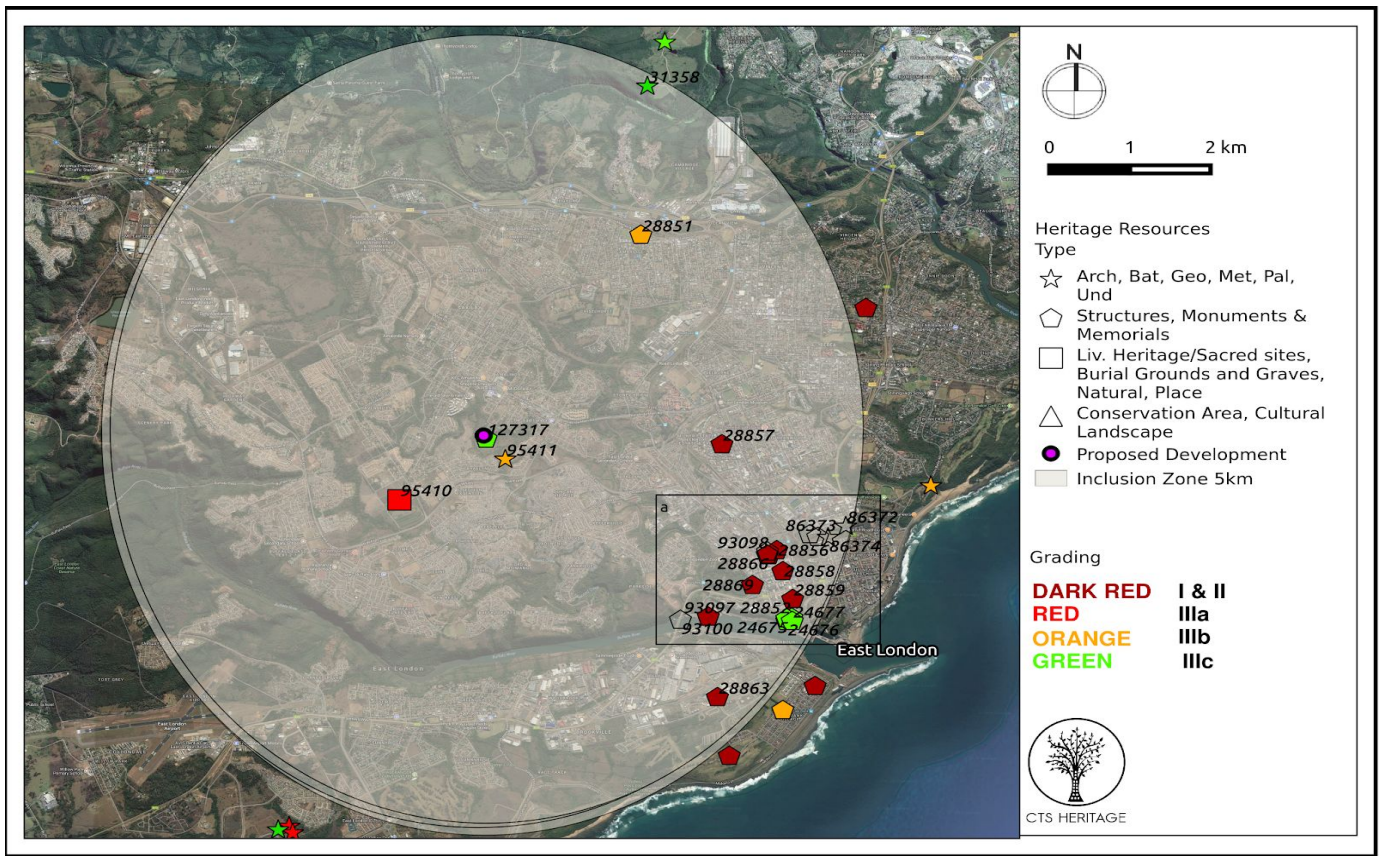


Figure 10: Spatialisation of known heritage resources in the vicinity of the proposed development

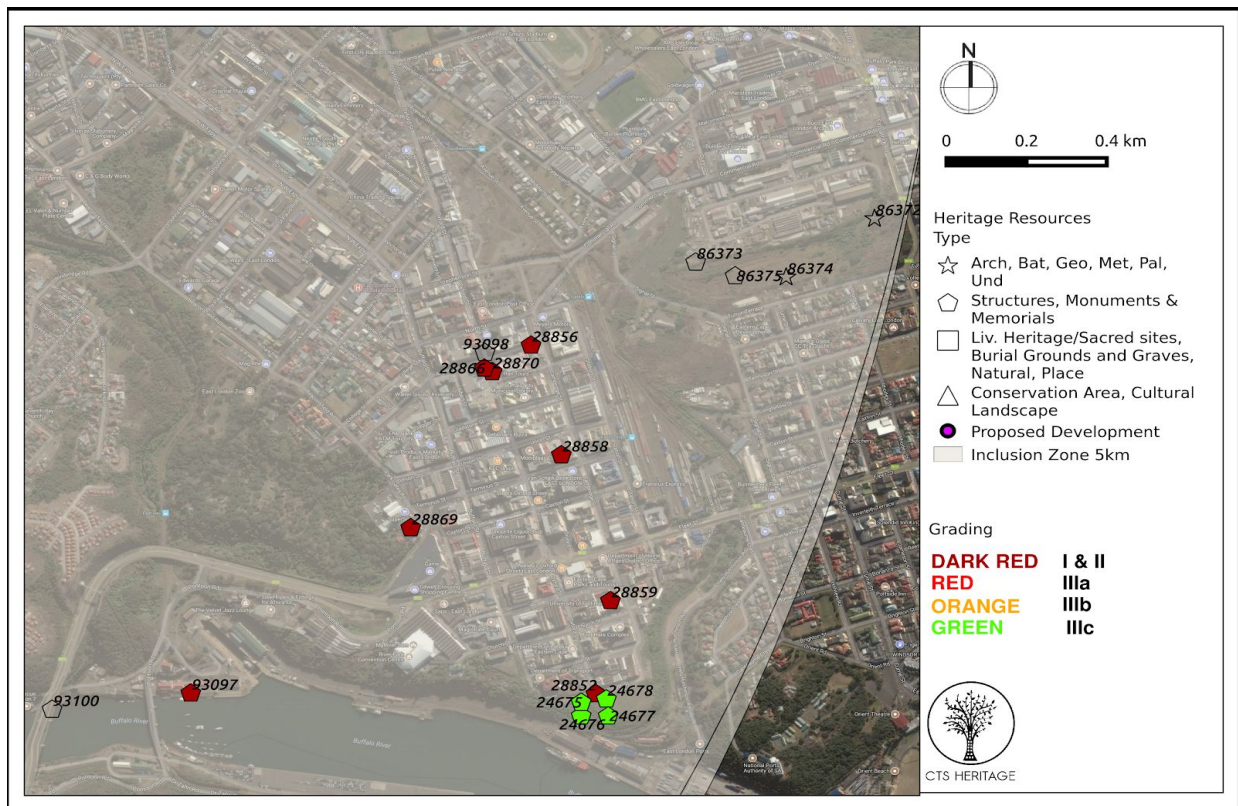
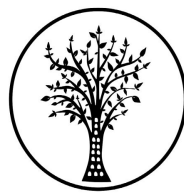


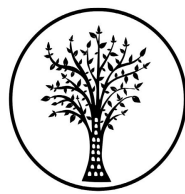
Figure 10b: Spatialisation of known heritage resources in the vicinity of the proposed development



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Table 1: Heritage Resources identified within 5km of the proposed development (Figure 10)

Site ID	Site no	Full Site Name	Site Type	Grading	Declaration
24675	OHV004	Oxford Harbour View - OHV004	Archaeological, Structures	Grade IIIc	NA
24676	OHV003	Oxford Harbour View - OHV003	Structures	Grade IIIc	NA
24677	OHV002	Oxford Harbour View - OHV002	Structures	Grade IIIc	NA
24678	OHV001	Oxford Harbour View - OHV001	Archaeological, Structures	Grade IIIc	NA
28851	9/2/026/0032	Cambridge Primary School, Brabant Street, East London	Building	NA	Heritage Register
28852	9/2/026/0034	Customs and Excise Building, East London	Building	Grade II	Provincial Heritage Site
28856	9/2/026/0014	Old Public Library, Argyle Street, East London	Building	Grade II	Provincial Heritage Site
28857	9/2/026/0015	Ann Bryant Art Gallery, St Lukes Road, East London	Building	Grade II	Provincial Heritage Site
28858	9/2/026/0016	Old Standard Bank Building, 64 Terminus Street, East London	Building	Grade II	Provincial Heritage Site
28859	9/2/026/0017	Wool Exchange Building, Rhodes University, 50 Church Street, East London	Building	Grade II	Provincial Heritage Site
28863	9/2/026/0010	Old Powder Magazine, Fort Glamorgan, East London	Building	Grade II	Provincial Heritage Site
28866	9/2/026/0013	Cuthbert's Building, 110 Oxford Street, East London	Building	Grade II	Provincial Heritage Site
28869	9/2/026/0003	Gately House, 1 Park Gates Road, East London	Building	Grade II	Provincial Heritage Site
28870	9/2/026/0005	City Hall, Oxford Street, East London	Building	Grade II	Provincial Heritage Site
86372	BC001	Buffalo City 001	Deposit	Ungraded	NA
86373	BC002	Buffalo City 002	Building	Ungraded	NA
86374	BC003	Buffalo City 003	Archaeological	Ungraded	NA
86375	BC004	Buffalo City 004	Structures	Ungraded	NA
93097	Latimer's Landing jetty	Latimer's Landing jetty, East London Port	Structures	Grade II	NA
93098	Steve Biko Statue	Steve Biko Statue	Monuments & Memorials	NA	NA
93100	Steve Biko Bridge	Steve Biko Bridge	Bridge	NA	NA
95410	HHC-S1	Heaven Hills Cemetery Site 1	Burial Grounds Graves	Grade IIIa	NA
95411	BHR-S1	Bengal Heights Residential	Settlement	Grade IIIb - now	NA



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				NCW	
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4. IDENTIFICATION OF HERITAGE RESOURCES

4.1 Summary of findings

Surface visibility was poor due to thick vegetation cover. Stream sections were inspected, however these proved to be anthropogenically sterile. No additional sub-surface sections were observed at the study site.

Based on poor surface (and sub-surface) visibility the probability of archaeological and cultural heritage resource being encountered during the course of construction cannot be excluded, however it is highly unlikely.

Due to the small area of the proposed development, the entire footprint was surveyed where the dense vegetation permitted.

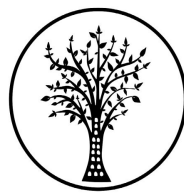
4.2 Archaeological Resources identified

No archaeological heritage resources were identified during the field assessment. A historical period homestead and associated cultural remains was identified during the field investigation, namely Site ADS-01 (see below).

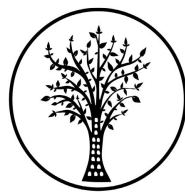
At co-ordinate C1 (S32°59'57.6"; E27°51'54.9") a contemporary structure remains of an informal dwelling and in the vicinity of co-ordinate C2 (S32°59'55.6"; E27°51'59.0"), scatters of contemporary features, including the partial remains of a tarmac road, cement platform and infrastructure remains were visible. The structures identified at C1 and C2 are not heritage resources and are not protected in terms of the NHRA.



Figure 12 and 13: Images indicating the structures at C1 and C2



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Site ADS-01 : Colonial/historical Period, Homestead Remains – S33°00'01.1"; E27°51'58.1"

[SAHRIS Site ID: 127317]

Site ADS-01 primarily comprise the burnt, rubble remains of a Colonial Period homestead, with only partial walling still standing. Rubble and partial wall remains are scattered across an area of approximately 60x50m.

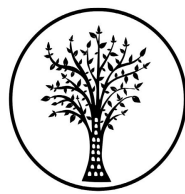
The site, effectively already destroyed, is assessed as having low heritage significance and is graded IIIc or even NCW (not conservation worthy).



Figure 14 and 15: Images of Site ADS 01



Figure 16 and 17: Images of Site ADS 01



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4.3 Mapping and spatialisation of findings

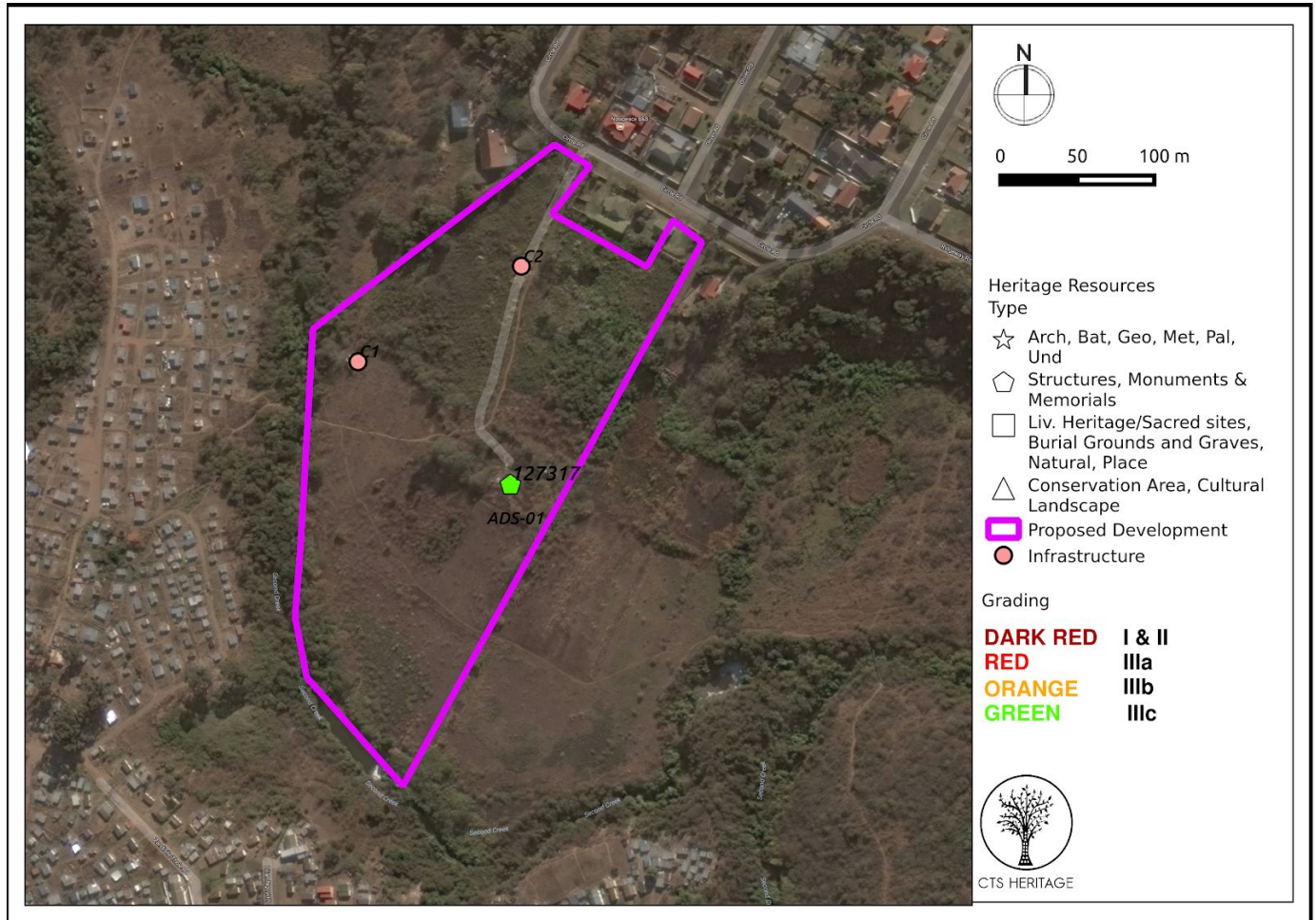
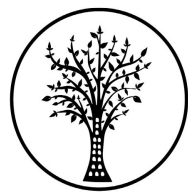


Figure 18: Map indicating the location of all identified features in relation to proposed development boundary



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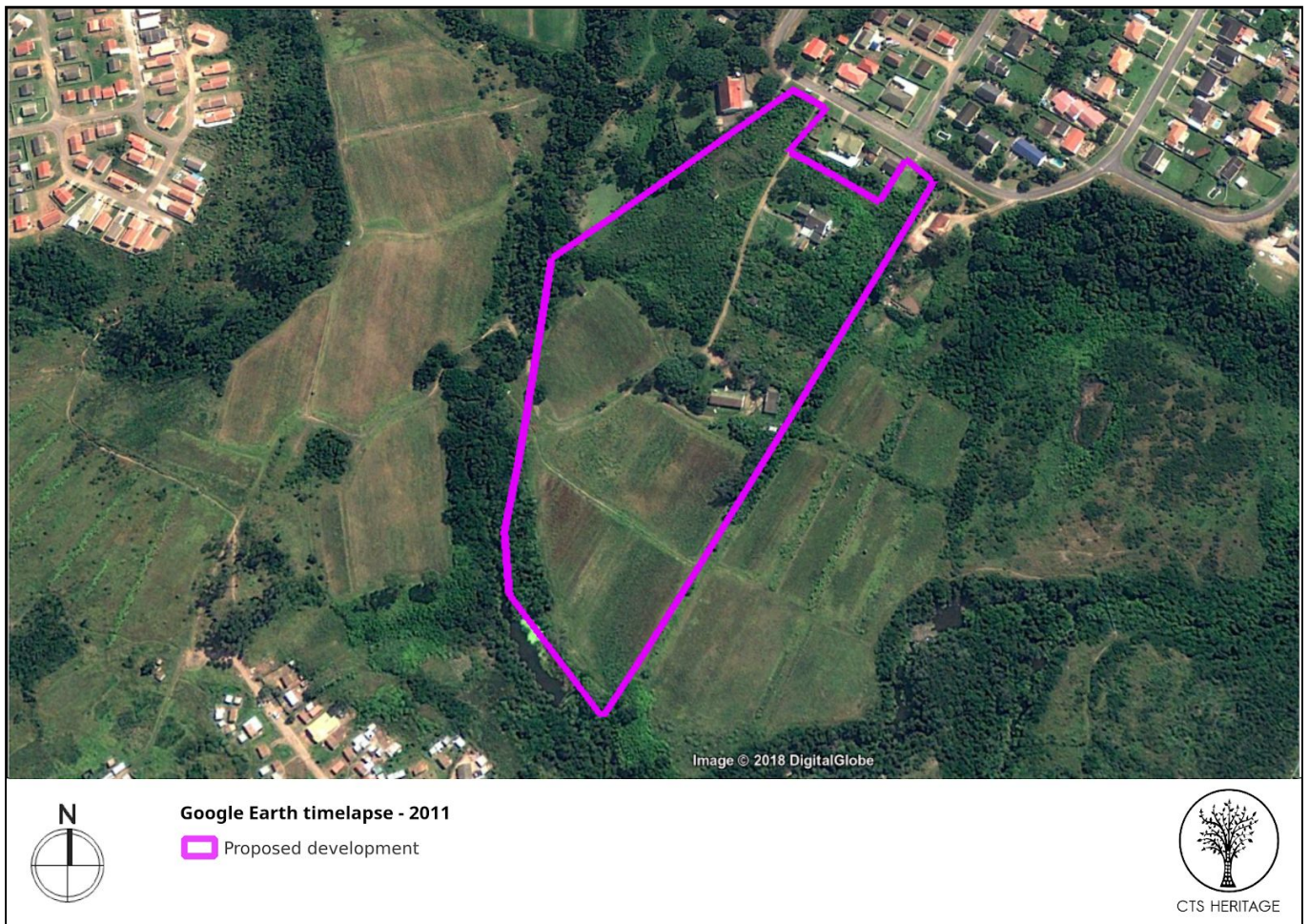


Figure 19: Site ADS-01 located on GoogleEarth map from 2011, note the existing structures on the property

5. ASSESSMENT OF THE IMPACT OF THE DEVELOPMENT

5.1 Assessment of Impacts to Archaeological Resources

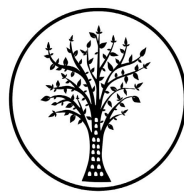
No heritage resources of any significance have been identified within the survey area. As such, the proposed development will not impact on any significant archaeological resources.

5.2 Development Alternatives

The property was selected for the proposed Amalinda Downs Residential Development based on its location and vacancy. Furthermore, the Applicant owns the land. No site alternatives have therefore been considered. The primary alternative for this project is the 'NO-GO' alternative, whereby the developer does not proceed with the development.

6. RESULTS OF PUBLIC CONSULTATION

This process is ongoing. A public meeting was held and no member of the public attended. To date, there have been no comments on the development from the public, stakeholders (municipality and other authorities). This is the



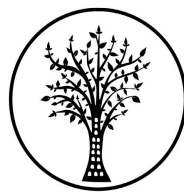
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case after notices for Interested & Affected Party registration were made through a newspaper advert, noticeboard at the proposed site and distribution of BIDS.

7. CONCLUSION AND RECOMMENDATIONS

No significant archaeological or other heritage resources were identified during the field assessment. One already demolished historical structure was identified (Site ADS 01), however this site has been determined to have low heritage significance and is already essentially demolished.

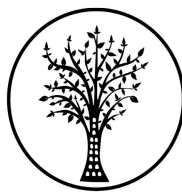
As such, there is no heritage objection to the proposed development and no further heritage processes are required for this proposed development.



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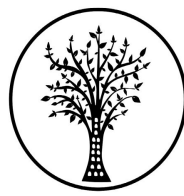
8. REFERENCES

Impact Assessment References				
Nid	Report Type	Author/s	Date	Title
6648	AIA	Karen Van Ryneveld	18/07/2008	Phase 1 Archaeological Impact Assessment: Industrial Development, Erven 17532 & 49336, Orange Grove, East London, Eastern Cape, South Africa
6786	HIA	Robert De Jong	06/02/2011	HERITAGE IMPACT ASSESSMENT REPORT: INSTALLATION OF LONG-HAUL DARK FIBRE DUCTING INFRASTRUCTURE ALONG THE N 2 BETWEEN DURBAN AND EAST LONDON, KWA-ZULU NATAL AND EASTERN CAPE PROVINCES
6788	AIA	Mary Patrick, J Blackenburg	01/03/2007	Fort Glamorgan a First Phase Archaeological Investigation of Historic Graves Associated With Erf 20433 East London
8507	HIA	Lita Webley, Gillian Vernon	30/01/2008	Phase 1 Heritage Impact Assessment: The Construction of a Dual Carriageway Linking Fitzpatrick Road and Currie Street on the "Sleeper Site", Erf 15835 Buffalo City, Eastern Cape
104955	AIA	Karen Van Ryneveld	05/11/2012	PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT - OXFORD HARBOUR VIEW DEVELOPMENT, ERVEN 15833, 15834, 15835 AND 33367, EAST LONDON, EASTERN CAPE, SOUTH AFRICA
104956	PIA	Lloyd Rossouw	03/11/2012	Phase 1 Palaeontological Impact Assessment of a proposed new conference and development center near the Port of East London, EC Province.
110130	AIA	Karen Van Ryneveld	01/28/2013	PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT: WILLOWVALE-DWESA BORROW PITS PROJECT, AMATHOLE DISTRICT MUNICIPALITY, EASTERN CAPE, SOUTH AFRICA
110131	PIA	Lloyd Rossouw	01/28/2013	Phase 1 Palaeontological Impact Assessment of 2 Quarries and 6 Borrow Pits, between Willowvale and Dwesa, EC Province.
167181	AIA	Karen Van Ryneveld	30/06/2014	Phase 1 Archaeological Impact Assessment - Calypso Heights Commercial and Residential Development, off Woolwash Road, Amalinda, East London, BCMM, Eastern Cape, South Africa
167183	PIA	Lloyd Rossouw	30/06/2014	Phase 1 Palaeontological Impact Assessment - Calypso Heights Commercial and Residential Development, off Woolwash Road, Amalinda, East London, BCMM, Eastern Cape, South Africa



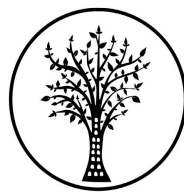
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269397	AIA	Celeste Booth	02/03/2015	ADDENDUM: ARCHAEOLOGICAL AND HERITAGE INVESTIGATION OF PROPOSED DEVIATIONS AND REPEATER SITES FOR AN ENVIRONMENTAL AUTHORISATION AMENDMENT FOR FIBRECO ROUTE 4 (GEORGE TO PORT ELIZABETH) AND 5 (PORT ELIZABETH TO DURBAN)
321032	PIA	Lloyd Rossouw	20/07/2015	Palaeontological Impact Assessment for the Proposed Rehabilitation and Refurbishment of the existing Latimer's Landing jetty at the Port of East London (Part 1 of HIA)
321330	PIA	Lloyd Rossouw	20/07/2015	Phase 1 Archaeological Impact Assessment Report for the for the proposed rehabilitation and refurbishment of the existing Latimer's Landing jetty at the Port of East London
356763	Heritage Screener	Mariagrazia Galimberti, Kyla Bluff, Nicholas Wiltshire	11/02/2016	CTS16_010 Terreco Bengal Heights East London
359570	AIA	Karen Van Ryneveld	11/03/2016	AIA[P1]-haven Hills Cemetery Expansion, Erven 1829, 1830, 2382, 2383, 2385, 2388 and 2389, East London, Buffalo City Metropolitan Municipality, Eastern Cape
361011	AIA	Karen Van Ryneveld	01/04/2016	Phase 1 Archaeological & Cultural Heritage Impact Assessment - Proposed Bengal Heights Residential Development, Erf RE/2368, Amalinda, East London, Buffalo City Metropolitan Municipality, Eastern Cape



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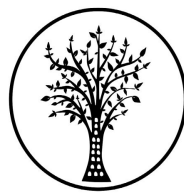
APPENDICES



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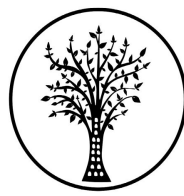
APPENDIX 1: Impact Assessment Tables

CRITERIA	CATEGORIES	EXPLANATION
Overall nature	Negative	Negative impact on affected biophysical or human environment.
	Positive	Benefit to the affected biophysical or human environment.
Type	Direct	Are caused by the action and occur at the same time and place.
	Indirect or Secondary	Are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. May include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.
	Cumulative	Is the impact on the environment, which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.
Spatial Extent over which impact may be experienced	Site	Immediate area of activity incorporating a 50m zone which extends from the edge of the affected area.
	Local	Area up to and/or within 10km of the 'Site' as defined above.
	Regional	Entire community, drainage basin, landscape etc.
	National	South Africa.
Duration of impact	Short-term	Impact would last for the duration of activities such as land clearing, land preparation, fertilising, weeding, pruning and thinning. Quickly reversible.
	Medium-term	Impact would after the project activity such as harvesting. Reversible over time.
	Long-term	Impact would continue beyond harvesting/ extraction of the trees.
	Permanent	Impact would continue beyond decommissioning.
Severity	Low, Medium, High Negative	Based on separately described categories examining whether the impact is destructive or benign, whether it destroys the impacted environment, alters its functioning or slightly alters the environment itself.
	Low, Medium, High Positive	
Reversibility	Completely Reversible	The impact can be completely reversed with the implementation of correct mitigation and rehabilitation measures.



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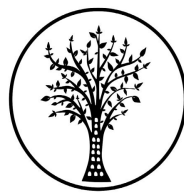
	Partly Reversible	The impact can be partly reversed providing mitigation measures are implemented and rehabilitation measures are undertaken
	Irreversible	The impact cannot be reversed, regardless of the mitigation or rehabilitation measures.
Irreplaceable Loss	Resource will not be lost	The resource will not be lost or destroyed provided mitigation and rehabilitation measures are implemented.
	Resource may be partly destroyed	Partial loss or destruction of the resource will occur even though all management and mitigation measures are implemented.
	Resource cannot be replaced	The resource cannot be replaced no matter which management or mitigation measures are implemented.
Probability of occurrence	Unlikely	<40% probability.
	Possible	40% probability.
	Probable	>70% probability.
	Definite	>90% probability.
Mitigation Potential [i.e. the ability to manage or mitigate an impact given the necessary resources and feasibility of application.]	High or Completely Mitigatable	Relatively easy and cheap to manage. Specialist expertise or equipment is generally not required. The nature of the impact is understood and may be mitigated through the implementation of a management plan or through 'good housekeeping'. Regular monitoring needs to be undertaken to ensure that any negative consequences remain within acceptable limits. The significance of the impact after mitigation is likely to be low or negligible.
	Moderate or Partially Mitigatable	Management of this impact requires a higher level of expertise and resources to maintain impacts within acceptable levels. Such mitigation can be tied up in the design of the Project. The significance of the impacts after mitigation is likely to be low to moderate. May not be possible to mitigate the impact entirely, with a residual impact(s) resulting.
	Low or Unmitigatable	Will not be possible to mitigate this impact entirely regardless of the expertise and resources applied. The potential to manage the impact may be beyond the scope of the Project.



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		Management of this impact is not likely to result in a measurable change in the level of significance.
Impact Significance	Negligible	-
	Low	Largely of HIGH mitigation potential, <u>after</u> considering the other criteria.
	Moderate	Largely of MODERATE or partial mitigation potential <u>after</u> considering the other criteria.
	Substantial	Largely of LOW mitigation potential <u>after</u> considering the other criteria.

POTENTIAL IMPACTS (in order of impact as described in Impact Matrix)	ASPECT (refer to Impact Matrix)	Nature	Type	Extent	Duration	S e v e r i t y	Reversibility	Irreplaceable Loss	Probability	MITIGATION POTENTIAL	IMPACT SIGNIFICANCE		MITIGATION MEASURES
											Without Mitigation	With Mitigation	
CONSTRUCTION PHASE													
Impacts on heritage resources	NONE	NONE	NONE	NONE	NONE	NONE	IRREVERSIBLE	NONE	NONE	NONE	NONE	NONE	NONE
Impacts on archaeological resources	NONE	NONE	NONE	NONE	NONE	NONE	IRREVERSIBLE	NONE	NONE	NONE	NONE	NONE	NONE
Impacts on palaeontological resources	NONE	NONE	NONE	NONE	NONE	NONE	IRREVERSIBLE	NONE	NON	NON	NON	NON	NON
OPERATIONS PHASE													
None													



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APPENDIX 2: Heritage Screener