

# HERITAGE IMPACT ASSESSMENT

In terms of Section 38(8) of the NHRA for the  
**PROPOSED EXTENSION OF AN EXISTING GRANITE QUARRY**  
Portion 1 of Farm 814 and Remainder Farm 830, Malmesbury  
HWC Ref: 16072706AS0823E



Prepared by Heritage CTS



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**CK Rumboll**

**November 2016**



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## EXECUTIVE SUMMARY

Application is made for a granite quarry on a portion of Farm 814/1 and a portion of remainder Farm 830. There is an old existent quarry (image on cover page) on a portion of remainder farm 830 that has very low botanical conservation value due to the high level of transformation. This quarry will form part of the proposed mining area.

The area proposed for mining is located on the boundary of two farms located along the R302, hidden from the road by a series of low-lying hills, situated approximately 8 km from Malmesbury. As with the surrounding farms, the farms in question were historically used for grain cultivation and as such, have been much transformed (Cape Farm Mapper). Predominant land use in the immediate vicinity includes grain and wine cultivation, natural conservation areas, urban development and some mining (Figure 2).

Granite will be accessed at the quarry face by drilling and blasting at an incline of 10 degree holes using a down hole hydraulic drill rig. The holes will be drilled in three single rows with an 89mm diameter and extended to 1 meter below the quarry floor. The holes are then filled with explosives. The quarry sides will be benched to allow for ease of access and stability. The benches will be rehabilitated with the overburden removed prior to the quarrying.

No significant heritage resources were identified within the footprint of the proposed granite quarry. Two farm werfs are located within the boundaries of portion 1 of Farm 814 and Remainder of Portion 830 (Figure 12). While the exact age of these werfs has not been obtained, there is no evidence of either of these farm werfs on the Cape Malmesbury Map (1890). In the Swartland Rural Heritage Survey, these structure have been graded as being of moderate local significance and having a grade of IIIB. Nevertheless, these farm werfs will not be impacted by the proposed granite mine, and the mine is not visible from either farm werf. Five archaeological artefacts were identified during the archaeological foot survey however these have been deemed Not Conservation Worthy.

As no significant heritage resources have been identified on within the proposed development footprint, no direct impacts to heritage resources are anticipated. As the proposed quarry is screened from the R302 by a series of low hills, no impact to the landscape character of the area is anticipated.

As such, the following recommendations are made:

1. There is no heritage objection to the proposed development
2. The preferred alternative (Alternative 1) is supported.



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## 1. INTRODUCTION

### 1.1 Background Information on Project

Application is made for a granite quarry on a portion of Farm 814/1 and a portion of remainder Farm 830. There is an old existent quarry (image on cover page) on a portion of remainder farm 830 that has very low botanical conservation value due to the high level of transformation. This quarry will form part of the proposed mining area. An application in terms of the Mineral and Petroleum Development Act, Act 28 of 2002, will also be submitted to obtain the necessary approvals for a mining license and to address environmental issues. CK Rumboll is the Environmental Assessment Practitioner managing the process for this project.

The intent is to re-use the topsoil on the quarry benches to create a cultivatable surface area of  $\pm 2.85$  ha of productive land. Velvet Mountain Aggregates (VMA) want to start quarrying from 2017 once all approvals are in place. The life of mine is 30 years at various depths depending on the surface contours. Economies of scale and prevailing commodity prices will determine the final depth of the opencast operations. VMA has budget to extract approximately 280 000 tons in 2018 that could further be increased to 380 000 tons a year, subject to market demand. The opportunity exists in the concrete market where there is a shortage of 19mm stone. When using granite stone in concrete, it improves the Mpa strength dramatically, hence the market demand for granite. Velvet Mountain Aggregates will also sell 6.7mm, 9.5mm and 13.2mm into the market.

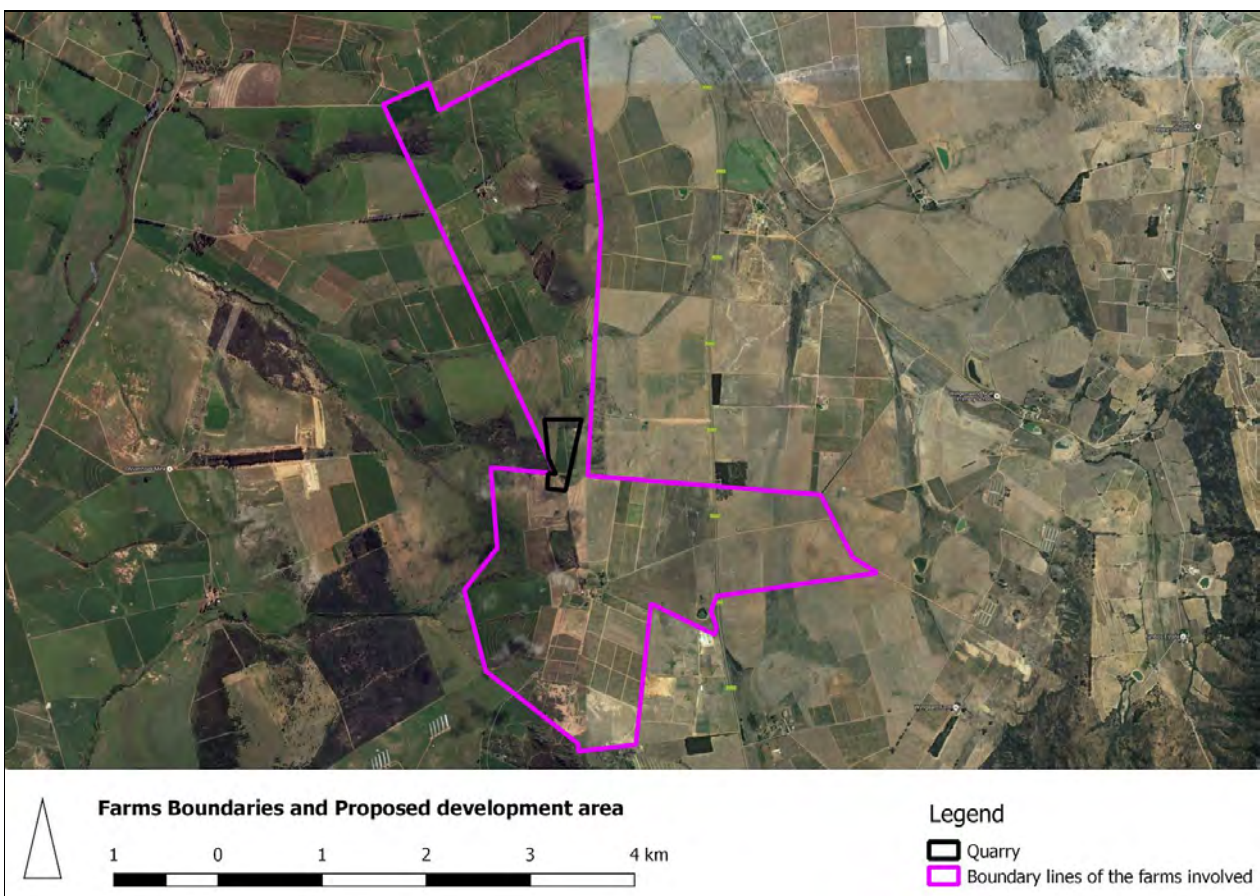


Figure 1: A portion of Farm 814/1 and a portion of remainder Farm 830 with the proposed development indicated





## 1.2 Description of Property and affected Environment

The area proposed for mining is located on the boundary of two farms located along the R302, hidden from the road by a series of low-lying hills, situated approximately 8 km from Malmesbury. As with the surrounding farms, the farms in question were historically used for grain cultivation and as such, have been much transformed (Cape Farm Mapper). Predominant land use in the immediate vicinity includes grain and wine cultivation, natural conservation areas, urban development and some mining (Figure 2).

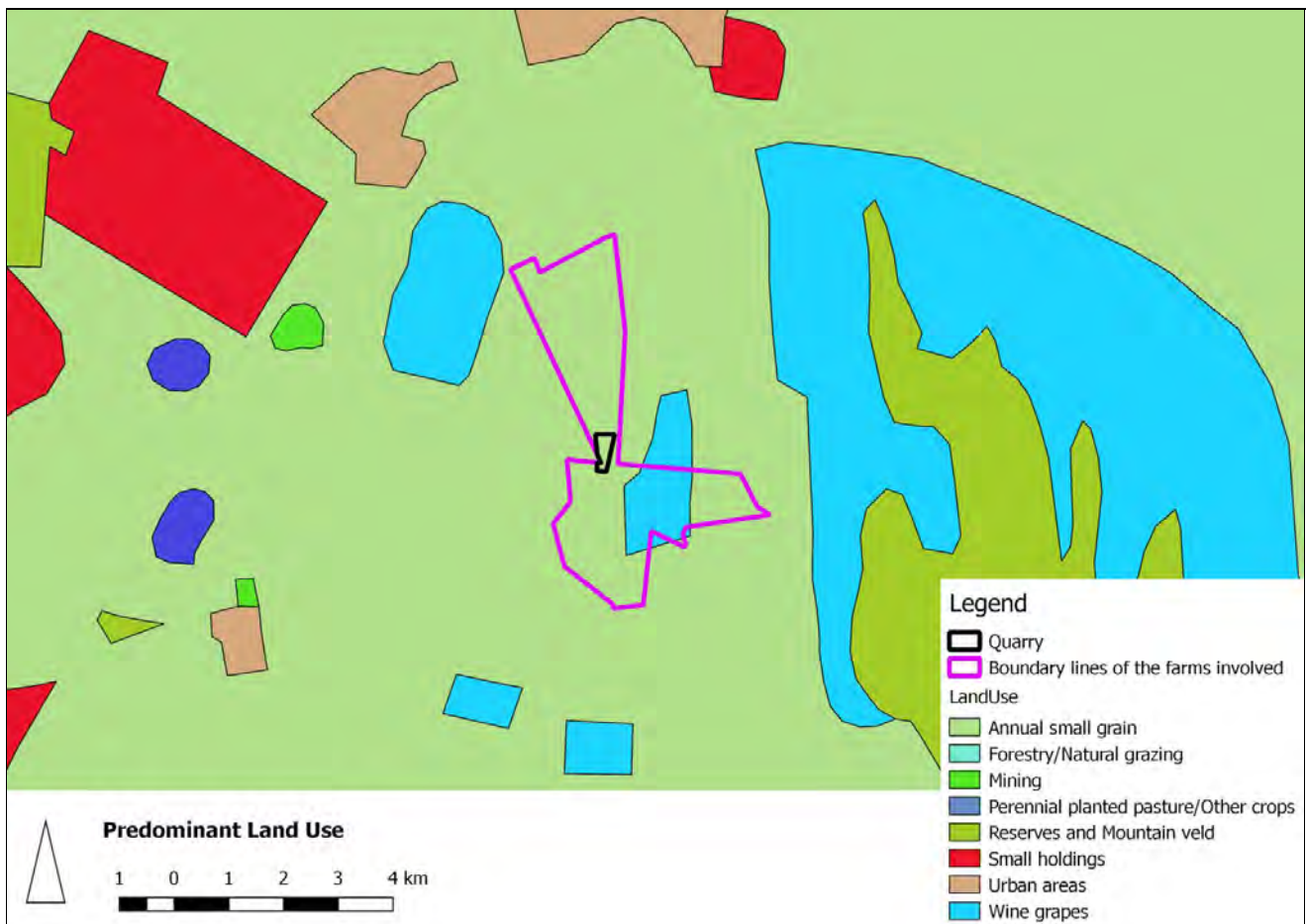


Figure 2: Predominant land uses in the vicinity of the development area

## 2. METHODOLOGY

### 2.1 Purpose of HIA

The purpose of this Heritage Impact Assessment (HIA) is to satisfy the requirements of section 38(8), and therefore section 38(3) of the National Heritage Resources Act (Act 25 of 1999). This HIA is drafted in response to the "Response to NID" letter received from HWC dated 5 September 2016. HWC requires that an HIA be submitted with specific reference to impacts on archaeological heritage resources.



## 2.2 Summary of steps followed

- A desktop study (Heritage Screener, Appendix 1) was conducted for the proposed development area
- An archaeologist was contracted to conduct a survey of archaeological resources likely to be impacted by the proposed development (AIA, Appendix 2)
- 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
- The report was circulated to the Local Authority for comment for 30 days from 29 November 2016 to 20 December 2016. There are no registered Conservation Bodies for this area.
- Comments received as part of the commenting period were integrated into the report and the report was amended accordingly.



Figure 2: Aerial Image of proposed quarry area

## 3. HISTORY AND EVOLUTION OF THE SITE AND CONTEXT

### 3.1 Definition of the property

The purpose of this application is for the Rezoning of a portion of Farm 814/1 ( $\pm 14.1$ ha) and a Portion of farm RE/830 ( $\pm 4.5$ ha) from Agricultural Zone 1 to Industrial Zone 4, in order to operate a granite quarry on a  $\pm 18.6$ ha site.



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The proposed development will entail the clearance of existing vegetation (wheat fields, see Figure 3) to excavate of granite (15.7 Ha) through opencast dip-mining for 30 years. Proposed activities will include drilling, blasting and crushing. Granite will be accessed at the quarry face by drilling and blasting at an incline of 10 degree holes using a down hole hydraulic drill rig. The holes will be drilled in three single rows with an 89mm diameter and extended to 1 meter below the quarry floor. The holes are then filled with explosives. The quarry sides will be benched to allow for ease of access and stability. The benches will be rehabilitated with the overburden removed prior to the quarrying.



**Figure 3: Image of the area proposed for the expansion of the granite quarry, currently used for wheat cultivation**

### **3.2 Geology, geomorphology, climate and vegetation**

The area proposed for development is underlain by Paardeberg Granite and is therefore very suitable for granite mining. Granite sediments have no palaeontological sensitivity. There is an old existing quarry on a portion of remainder farm 830 that has very low botanical conservation value due to the high level of transformation. This quarry will form part of the proposed mining area. There is very little natural vegetation on the site itself due to extensive land transformation from cultivation and agricultural activities.





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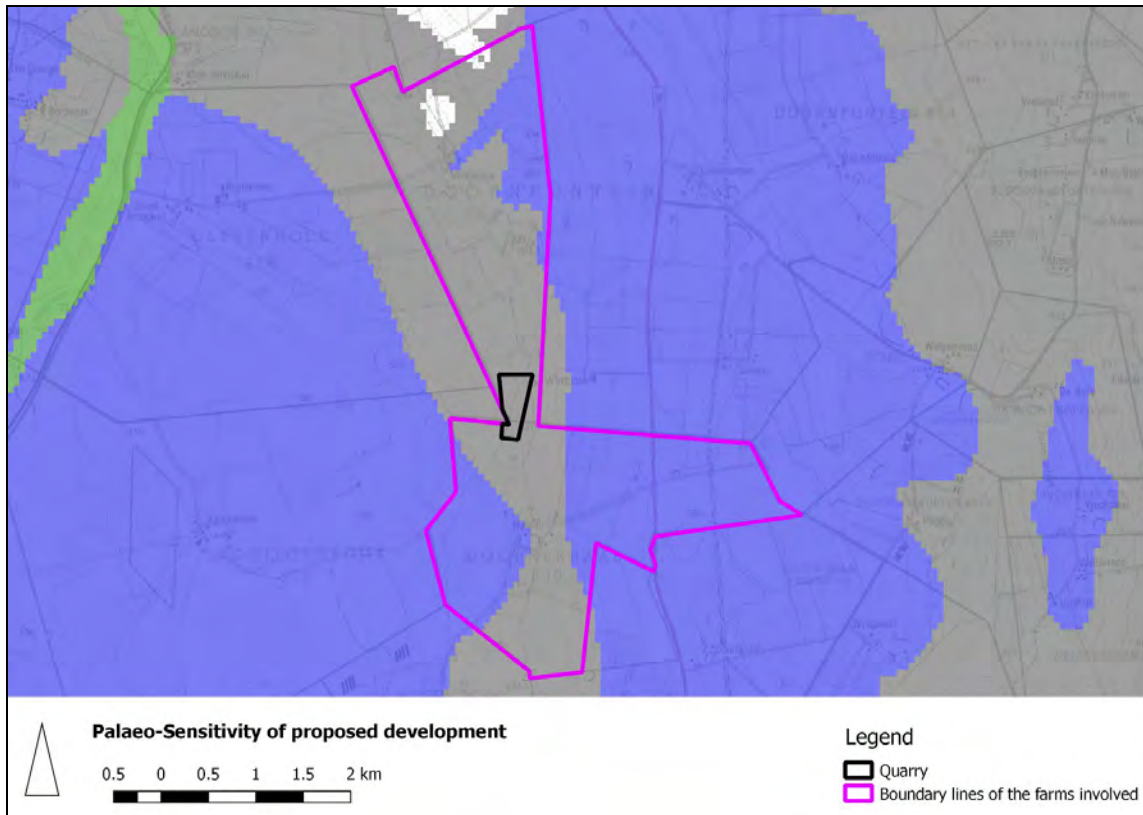


Figure 4: Palaeontological Sensitivity of the proposed mining area (grey = no palaeontological sensitivity)

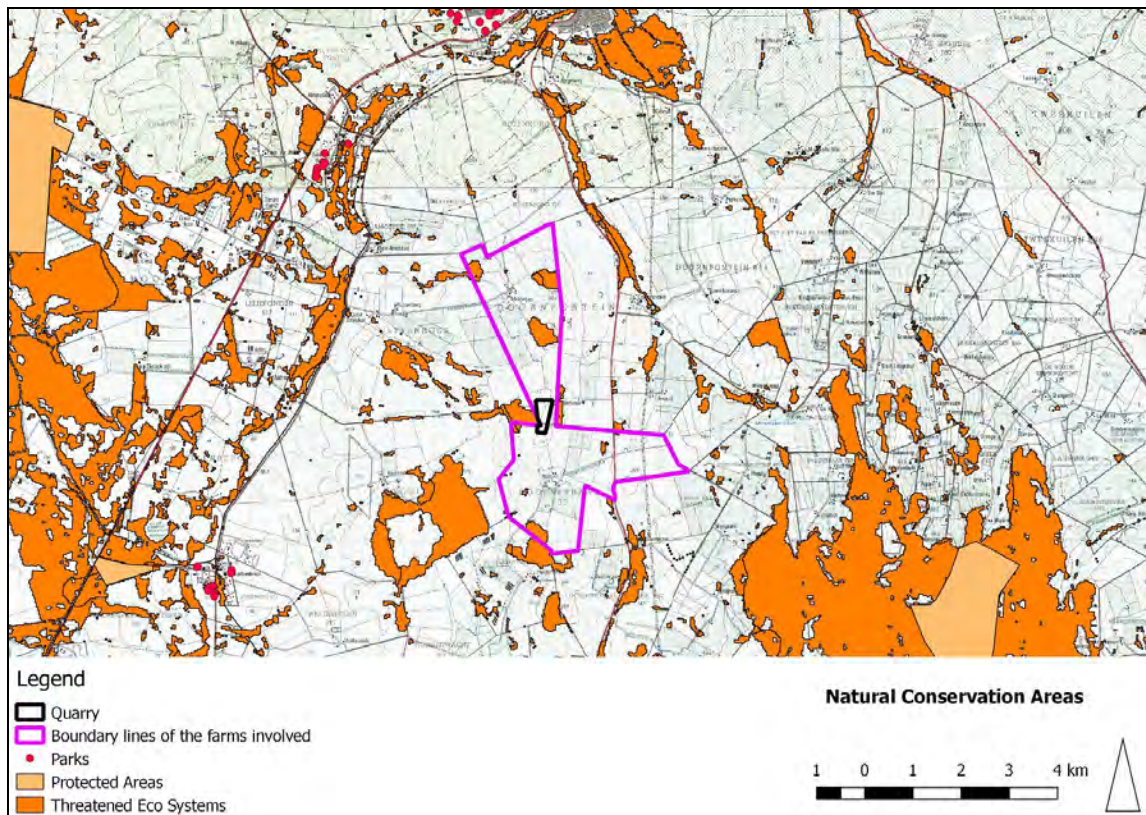


Figure 5: Declared Protected areas threatened eco-systems in the vicinity of the proposed mine





### 3.3 Archaeological and Historical Background of the Southern Cape

The area has been extensively cultivated and the existing quarry on Doornkraal 830 had already been in use in 2004. A total of 13 Archaeological Impact Assessments (AIAs) have been conducted within 10km of the area proposed for development, the earliest having been done in 1995, giving a relatively reliable characterisation of the area. As has been discussed in these reports, it is common to find Stone Age artefactual material across the landscape, as well as historical heritage resources such as buildings and farmsteads. The total number of previously recorded heritage resources located within the inclusion zone of 10km is 11, the majority being Grade II Provincial Heritage Sites in the town of Malmesbury.

Two Archaeological Impact Assessments (AIA) have previously been undertaken in the area immediately surrounding the proposed development area. In Deacon's (2007, NID 3926) assessment, he noted that the area in general has been extensively disturbed through agricultural activities. In particular, the area assessed by Deacon (2007) had been disturbed by sand mining, however this had provided good exposures of the subsurface. No archaeological materials were observed in sections through undisturbed ground or in the piles of disturbed ground. Deacon (2007) concluded that the proposed development will have minimal impact on archaeological resources. In 2006, Kaplan (NID 4422) identified several low density Later Stone Age scatters (SID 34056 and 34057) on a neighbouring property, including several pieces of pottery. These resources were determined to have "medium-low significance" and have as such been graded IIIc. Kaplan (2006) also identified Earlier Stone Age artefacts on the same property of low local significance.

No previous Palaeontological Impact Assessments (PIA) have been done in this area. However according to the SAHRIS Palaeosensitivity Map (Figure 3), the area is underlain by formations of low to no fossil sensitivity. It is therefore unlikely that the proposed development will impact on significant palaeontological heritage.

**Table 1: Sites previously identified within the vicinity of the proposed mine (Figure 6)**

Site ID	Site no	Full Site Name	Site Type	Grading
34056	OHK1	Olyvenhoek 1	Artefacts	Grade IIIc
34057	OHK2	Olyvenhoek 2	Artefacts	Grade IIIc

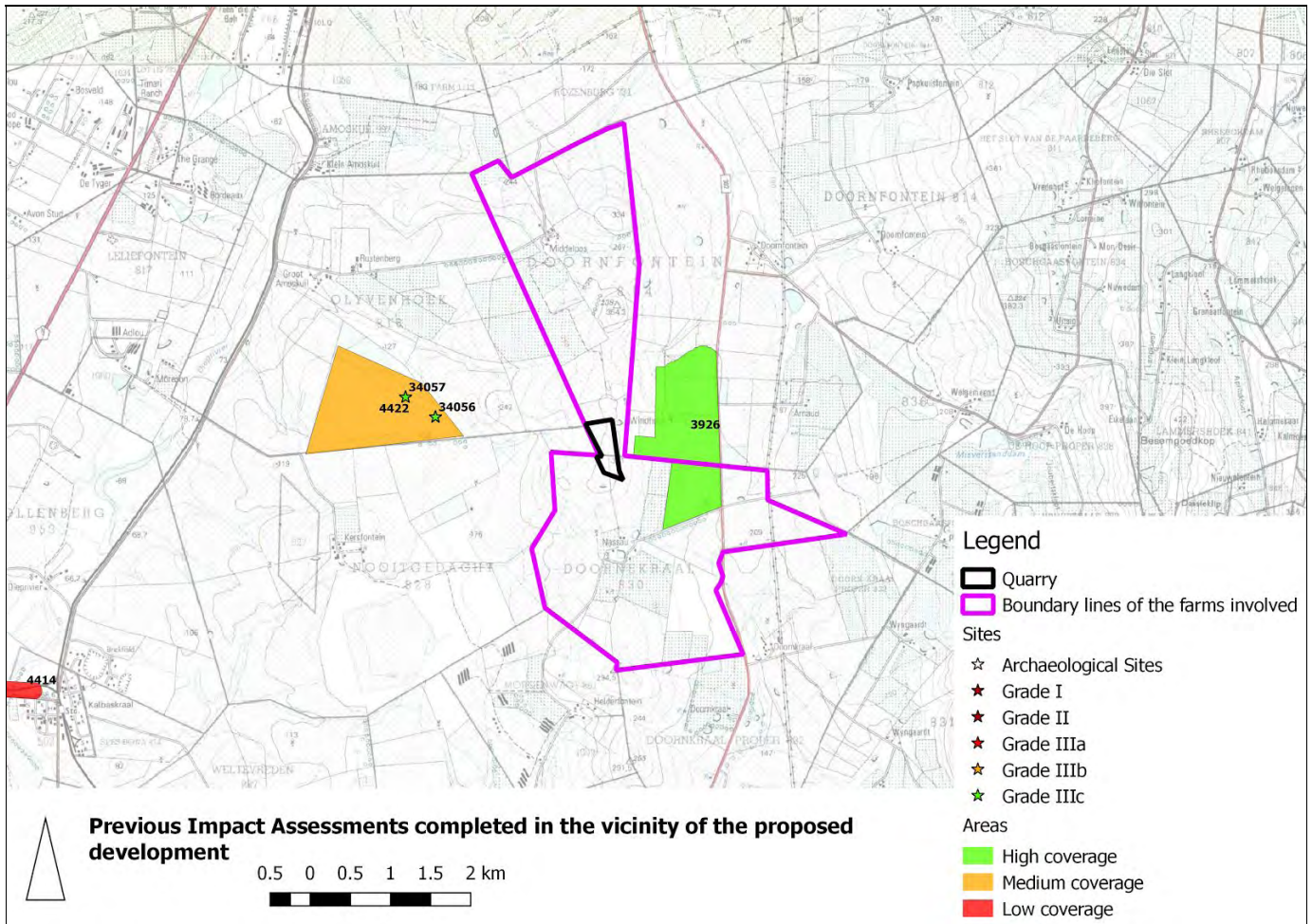


Figure 6: Spatialisation of known heritage resources in the vicinity of the proposed mine

Table 2: HIA's previously conducted in the vicinity of the proposed mine (Figure 6)

Nid	Report Type	Author/s	Date	Title
3926	AIA	Hilary Deacon	13/07/2007	Archaeological Impact Assessment: St Dicks Aeroport.
4414	AIA	Jonathan Kaplan	03/12/2001	Contract No. C683: Poverty Alleviation Project P04-009-00/1: Kalbaskraal and Chatsworth/Riverlands Access Roads
4422	AIA	Jonathan Kaplan	01/08/2006	Phase 1 Archaeological Impact Assessment Proposed Sand Mining on a Part of the Farm Olyvenhoek 818, Remainder Malmesbury, Western Cape Province



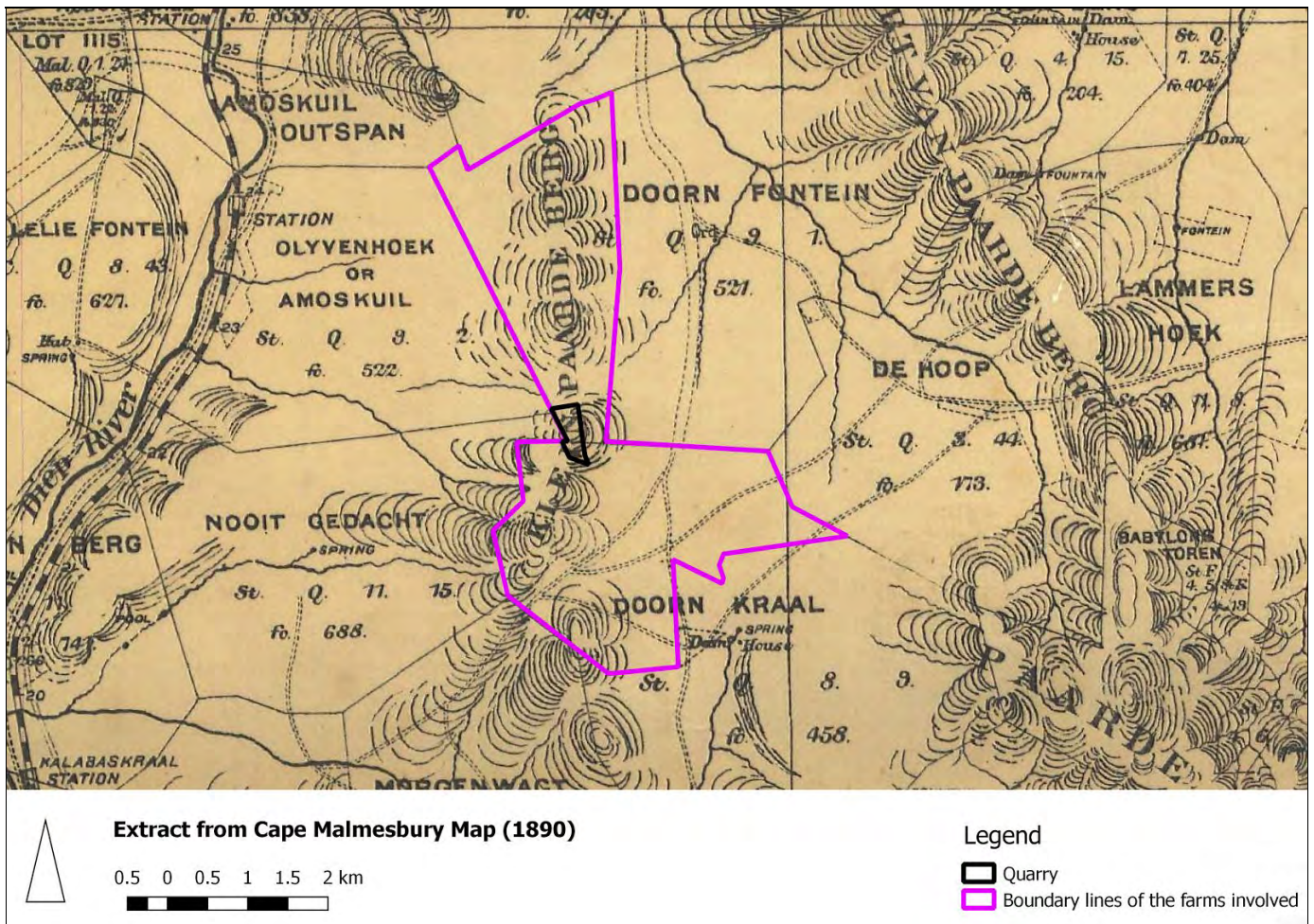


Figure 7: Extract from Cape Malmesbury Map indicating the proposed mine area (1890 - 1900)

#### 4. IDENTIFICATION OF HERITAGE RESOURCES

##### 4.1 Summary of findings of Specialist Reports

No significant heritage resources were identified within the footprint of the proposed granite quarry.

##### 4.2 Heritage Resources identified

No significant heritage resources were identified within the footprint of the proposed granite quarry. Two farm werfs are located within the boundaries of portion 1 of Farm 814 and Remainder of Portion 830 (Figure 12). While the exact age of these werfs has not been obtained, there is no evidence of either of these farm werfs on the Cape Malmesbury Map (1890). In the Swartland Rural Heritage Survey, these structure have been graded as follows in Table 3. Nevertheless, these farm werfs will not be impacted by the proposed granite mine, and the mine is not visible from either farm werf. Five archaeological artefacts were identified during the foot survey however these have been deemed Not Conservation Worthy.



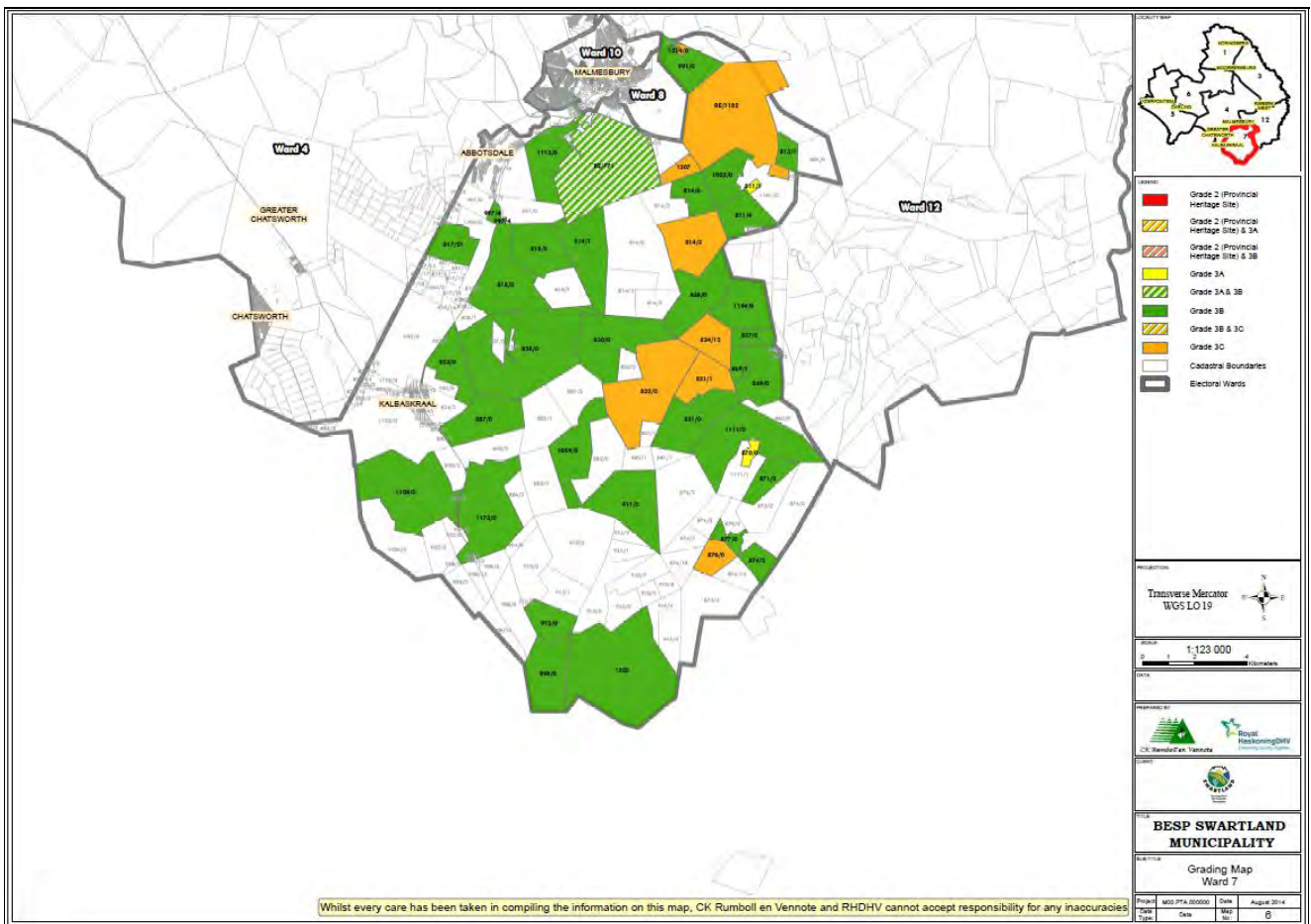


**Table 3: Information on the significance of the Farm Werfs from the Swartland Rural Heritage Inventory**

Farm Name	Farm Number	Approved Grading	Figure No.
Nassau	Remainder Farm 830	IIIB	Figure 8
	Portion 1 of Farm 814	IIIB	Figure 9

### 4.3 Mapping and spatialisation of heritage resources

#### Built Environment



**Figure 8: Extract from Swartland Rural Heritage Inventory approved by HWC 2016**



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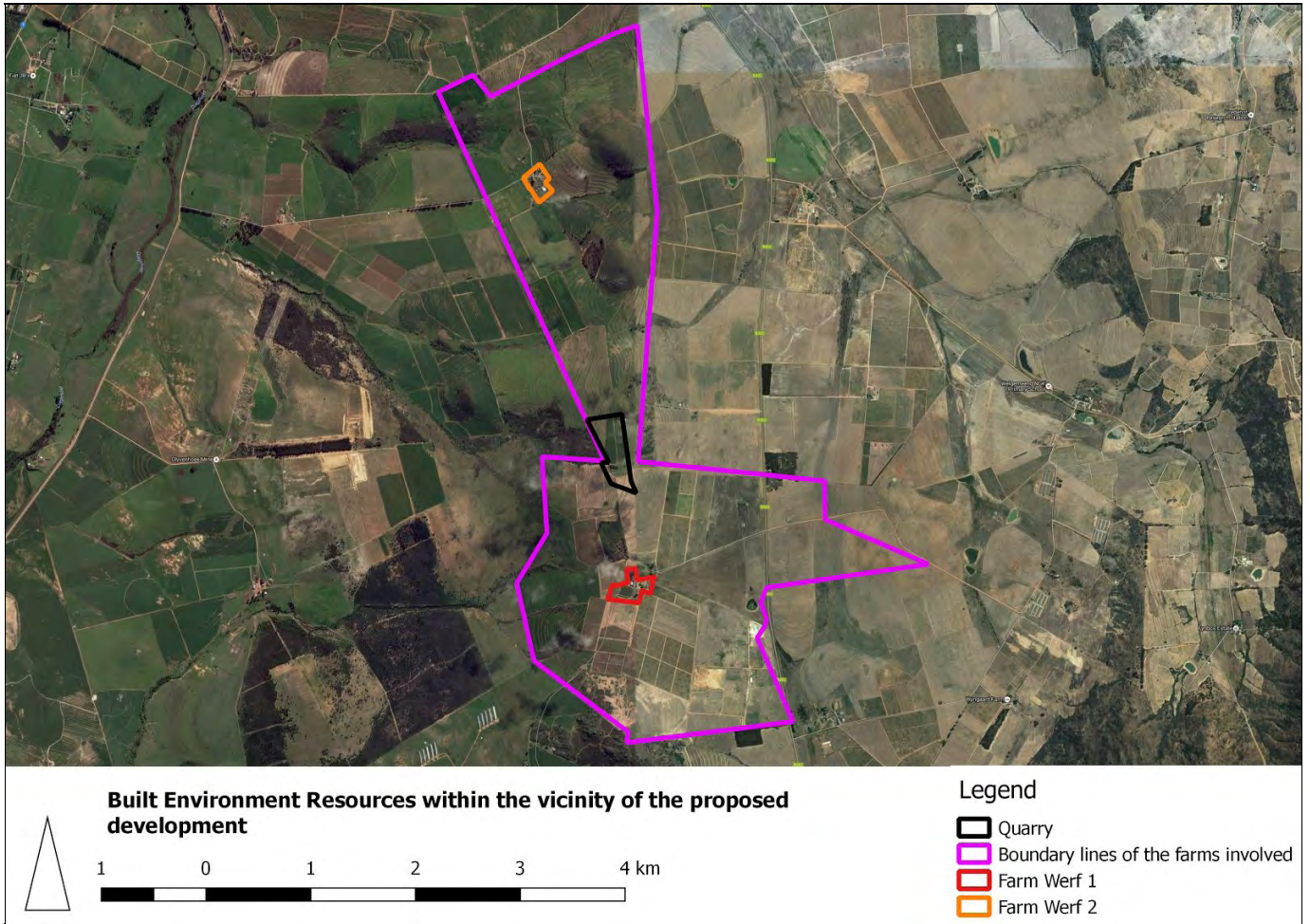


Figure 9: Location of Built Environment Resources within the vicinity of the proposed mine



Figure 10 and 11: Zoomed in aerial image of Farm Werfs 1 and 2





**Figure 12: The homestead at Farm Werf 1 on Rem Farm 830 graded IIIB**

### ***Archaeology***

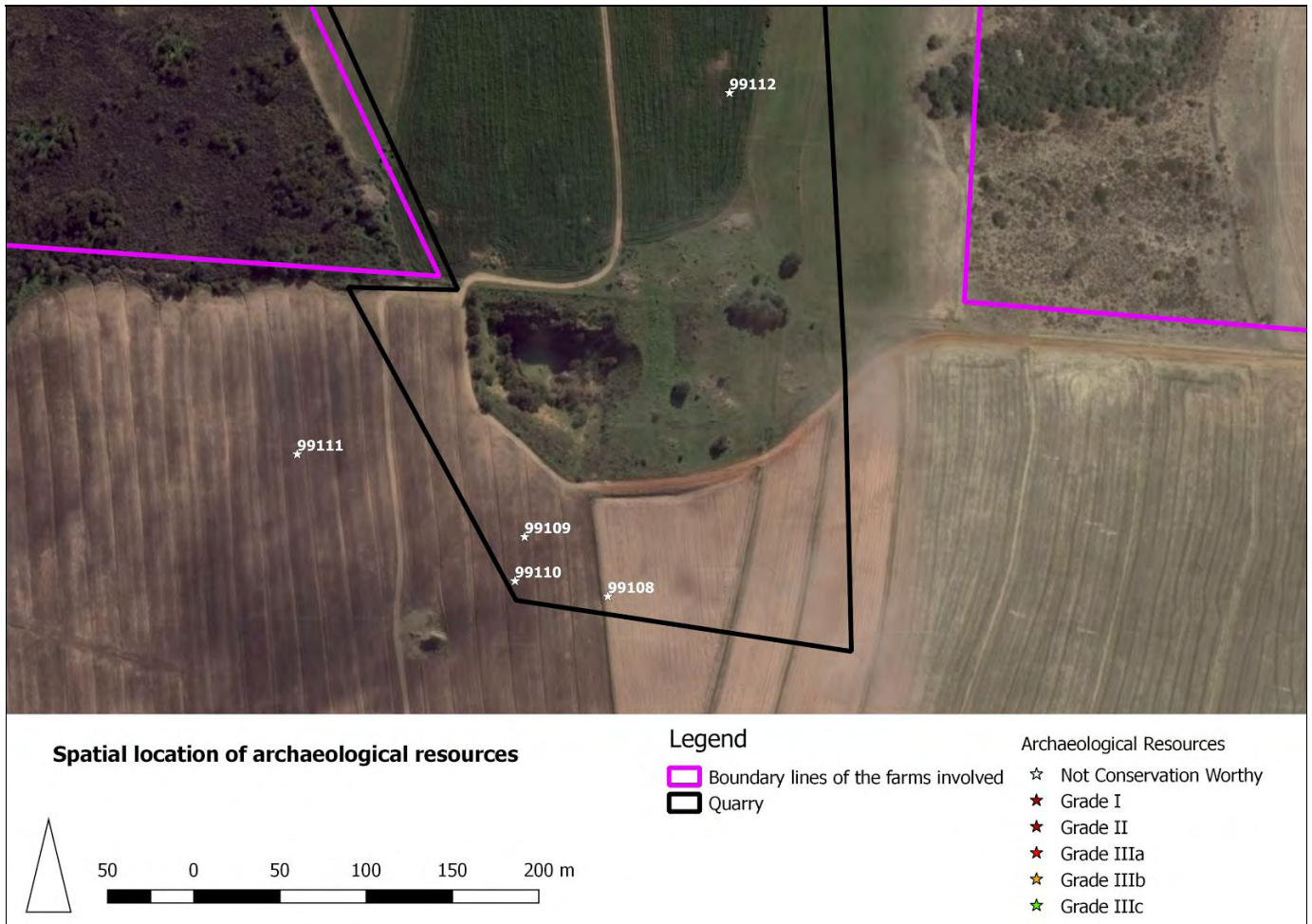
No archaeological sites were identified during the foot survey. However five silcrete Earlier and Middle Stone Age artefacts were identified. These artefacts were located on the surface and all were out of context. Each artefact was photographed and its GPS location recorded. All the artefacts identified were graded Not Conservation Worthy. The foot survey conducted provided a good characterisation of the heritage resources in the area and our findings were consistent with that of other studies in the immediate vicinity (Table 2).

Please see the AIA attached as an Appendix for more information.

**Table 4: Artefacts identified during the foot survey**

<b>SAHRIS Site ID</b>	<b>Artefact Number</b>	<b>Description</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Grading</b>
99108	NAS001	Silcrete Flake	33.54581	18.72106	NCW
99109	NAS002	Silcrete Flake	33.54550	18.72054	NCW
99110	NAS003	Silcrete Flaked Piece	33.54573	18.72048	NCW
99111	NAS004	Silcrete Flaked Piece	33.54507	18.71912	NCW
99112	NAS005	Silcrete Flaked Piece	33.54319	18.72182	NCW





**Figure 13: Spatial location of identified artefacts in relation to the proposed quarry**

## 5. ASSESSMENT OF THE IMPACT OF THE DEVELOPMENT

### 5.1 Assessment of impact to Heritage Resources

Granite will be accessed at the quarry face by drilling and blasting at an incline of 10 degree holes using a down hole hydraulic drill rig. The holes will be drilled in three single rows with an 89mm diameter and extended to 1 meter below the quarry floor. The holes are then filled with explosives. The quarry sides will be benched to allow for ease of access and stability. The benches will be rehabilitated with the overburden removed prior to the quarrying.

As no significant heritage resources have been identified on within the proposed development footprint, no direct impacts to heritage resources are anticipated. As the proposed quarry is screened from the R302 by a series of low hills, no impact to the landscape character of the area is anticipated.

### 5.2 Sustainable Social and Economic Benefit



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According to the motivational report drafted by CK Rumboll, The application for rezoning to operate a quarry on portions of Farms 814/1 and RE/830, Division Malmesbury is desirable as:

- There are adequate reserves for mining and rehabilitation;
- There are enough resources available to mine in a sustainable manner;
- The application for a rezoning to Industrial Zone 4 to operate a granite mine is consistent with the SDF as Strategy 3 under Ward 7 supports sustainable mining opportunities ;
- A Mitigation and Rehabilitation Plan will be drawn up;
- Employment opportunities will be created which will have a positive economic and social impact in the area;
- No additional municipal services are required;
- The proposed mine will provide valuable construction materials to the surrounding area;
- The proposed mining area is not located in a Critical Biodiversity Area;
- The mining area does not consist of soils considered to be of significant value with regards to agricultural uses.



**Figure 14: Panoramic of the area proposed for the granite quarry**

### **5.3 Proposed development alternatives**

#### **ALTERNATIVE 1:**

Please see Figure 15 below (preferred).

#### **ALTERNATIVE 2:**

No-go alternative.



**Figure 15: Extent of proposed granite quarry**

## 6. RESULTS OF PUBLIC CONSULTATION

There is no registered Conservation Body for this area. The Draft HIA was made available via the CTS Website and was made available to the Malmesbury Municipality for comment for 30 days. The results of the public consultation process are included in Appendix 3.





## 7. CONCLUSION AND RECOMMENDATIONS

The proposed development of a granite quarry on portion 1 of Farm 814 and Remainder of Farm 830 will have no direct impact on significant heritage resources. No archaeological resources were identified within the proposed development footprint.

As the proposed quarry is not visible from the R302, nor from either Farm werf on the properties, the following recommendations are made:

3. There is no heritage objection to the proposed development
4. The preferred alternative (Alternative 1) is supported.

## 8. REFERENCES

Impact Assessment References				
Nid	Report Type	Author/s	Date	Title
3926	AIA	Hilary Deacon	13/07/2007	Archaeological Impact Assessment: St Dicks Aeroport.
4405	AIA	Jonathan Kaplan	01/12/2006	Phase 1 Archaeological Impact Assessment: Proposed Development Schoonspruit Country Estate Portion of Erf 317, Portion of Erf 7455 & Erf 882, Malmesbury, Western Cape Province
4407	AIA	Jonathan Kaplan	15/06/2007	Phase 1 Archaeological Impact Assessment: Proposed Development Precinct 2, 3, 4, 5 & 6 Malmesbury, Western Cape Province: Portion of Erf 317, a Portion of Erf 7455, a Portion of Farm Oranje Fontein 1113, Portion of Farm 771 Rozenburg, Portion of Portion 1
4414	AIA	Jonathan Kaplan	03/12/2001	Contract No. C683: Poverty Alleviation Project P04-009-00/1: Kalbaskraal and Chatsworth/Riverlands Access Roads
4416	AIA	Jonathan Kaplan	11/02/2005	Phase 1 Proposed Development of a Portion of Farm 688 Malmesbury Western Cape Province
4421	AIA	Sarah Wurz	01/01/2006	Heritage Impact Assessment: Scoping Study for Dudleyvale Farm No 876, Malmesbury, Western Cape
4422	AIA	Jonathan Kaplan	01/08/2006	Phase 1 Archaeological Impact Assessment Proposed Sand Mining on a Part of the Farm Olyvenhoek 818, Remainder Malmesbury, Western Cape Province
6499	AIA	Dave Halkett	01/03/1995	Report on the Phase One Archaeological Investigation of Aspects of the Site Known as Die Bron in Malmesbury
6770	AIA	Jonathan Kaplan	01/01/2007	Phase 1 Archaeological Impact Assessment for a Proposed Housing Development on Portion 2 of Farm 690 and Remainder of the Farm Klipfontein 688 (Glen Lily) Malmesbury, Western Cape Province
7276	AIA	Hilary Deacon	17/12/2008	Archaeological and Heritage Impact Assessment: Diep and Platteklip River Clearing Project (Malmesbury)
7403	AIA	Hilary Deacon	17/12/2008	Archaeological and Heritage Impact Assessment: No Go River Clearing Project (Moorreesberg)
8109	AIA	Jonathan Kaplan	01/10/2008	Phase 1 Archaeological Impact Assessment the Proposed Swartland Shopping Mall Remainder Farm Tweefontein No. 696, Erf 2654 (Portion of Erf 327), Erf 9215 (Portion of Erf 2654) & Portion of Erf 327 Malmesbury



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## **APPENDICES**





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## **APPENDIX 1: Heritage Screener**



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## HERITAGE SCREENER

CTS Reference Number:	<b>CTS16_052</b>
HWC Case Number:	<b>16072706</b>
Client:	<b>CK Rumboll</b>
Date:	<b>18 October 2016</b>
Title:	<b>Proposed granite quarry near Malmesbury</b>

Figure 1a. Satellite Map indicating the location of the proposed development near Malmesbury in the Western Cape

Recommendation by CTS Heritage Specialists: <b>(Type 1)</b>	<b>RECOMMENDATION: (1) The heritage resources in the area proposed for development are sufficiently recorded - The proposed development is unlikely to impact on significant heritage resources. There are no known sites which require mitigation or management plans. No further heritage work is recommended for the proposed development.</b>
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## 1. Proposed Development Summary

The purpose of this application is for the Rezoning of a portion of Farm 814/1 ( $\pm 14.1$ ha) and a Portion of farm RE/830 ( $\pm 4.5$ ha) from Agricultural Zone 1 to Industrial Zone 4, in order to operate a granite quarry on a  $\pm 18.6$ ha site. The proposed development will entail the clearance of existing vegetation to execute excavations of granite (15.7ha) through opencast dip-mining for 30 years (production period). Proposed activities will include drilling, blasting and crushing.

## 2. Application References

<b>Name of relevant heritage authority(s)</b>	Heritage Western Cape (HWC)
<b>Name of decision making authority(s)</b>	Department of Mineral Resources

## 3. Property Information

<b>Latitude / Longitude</b>	-3967429.83184 S 2084061.47967 E
<b>Erf number / Farm number</b>	Portion 1 of Farm 814 and Remainder Farm 830, Malmesbury
<b>Local Municipality</b>	Swartland Municipality
<b>District Municipality</b>	West Coast District Municipality
<b>Previous Magisterial District</b>	Malmesbury
<b>Province</b>	Western Cape
<b>Current Use</b>	Agriculture
<b>Current Zoning</b>	Agricultural Zone 1
<b>Total Extent</b>	1 049,730 ha

## 4. Nature of the Proposed Development

<b>Surface area to be affected/destroyed</b>	18.6ha
<b>Depth of excavation (m)</b>	Dependent on granite availability.
<b>Height of development (m)</b>	None anticipated



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## 5. Category of Development

<b>Triggers: Section 38(8) of the National Heritage Resources Act</b>	<b>X</b>
<b>Triggers: Section 38(1) of the National Heritage Resources Act</b>	
1. Construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier over 300m in length.	
2. Construction of a bridge or similar structure exceeding 50m in length.	
3. Any development or activity that will change the character of a site-	
a) exceeding 5 000m <sup>2</sup> in extent	
b) involving three or more existing erven or subdivisions thereof	
c) involving three or more erven or divisions thereof which have been consolidated within the past five years	
4. Rezoning of a site exceeding 10 000m <sup>2</sup>	
5. Other (state):	

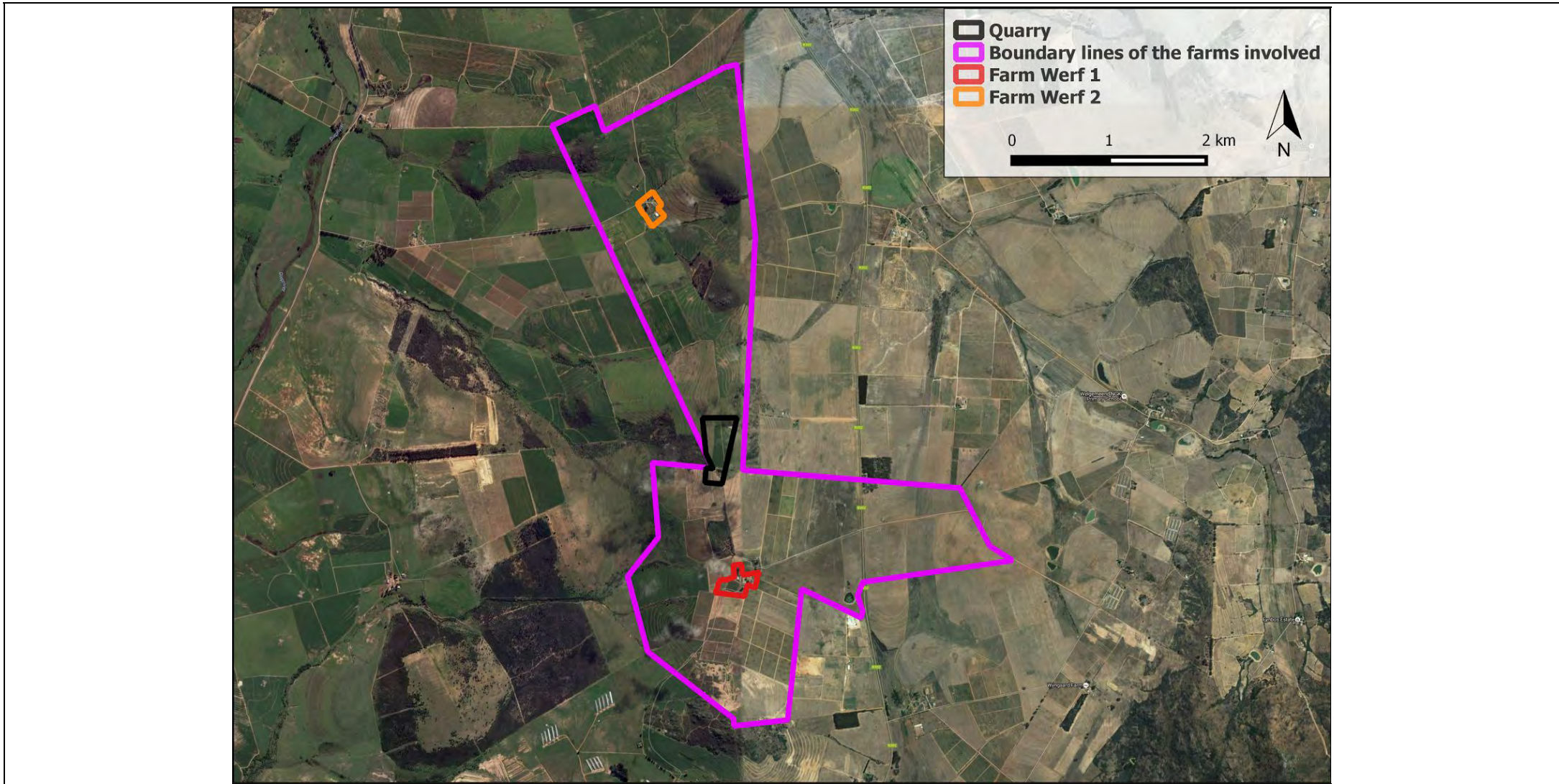
## 6. Additional Infrastructure Required for this Development

No additional services are required.
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## 7. Mapping (please see Appendix 3 and 4 for a full description of our methodology and map legends)



**Figure 1b. Overview Map.** Satellite image indicating the proposed development area at closer range. See figures 1c and 1d for detail of the Farm Werfs, and 1e for the detail of the quarry





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**Figure 1c. Farm Werf 1.** Satellite image of the farm werf on Remainder of Farm 830





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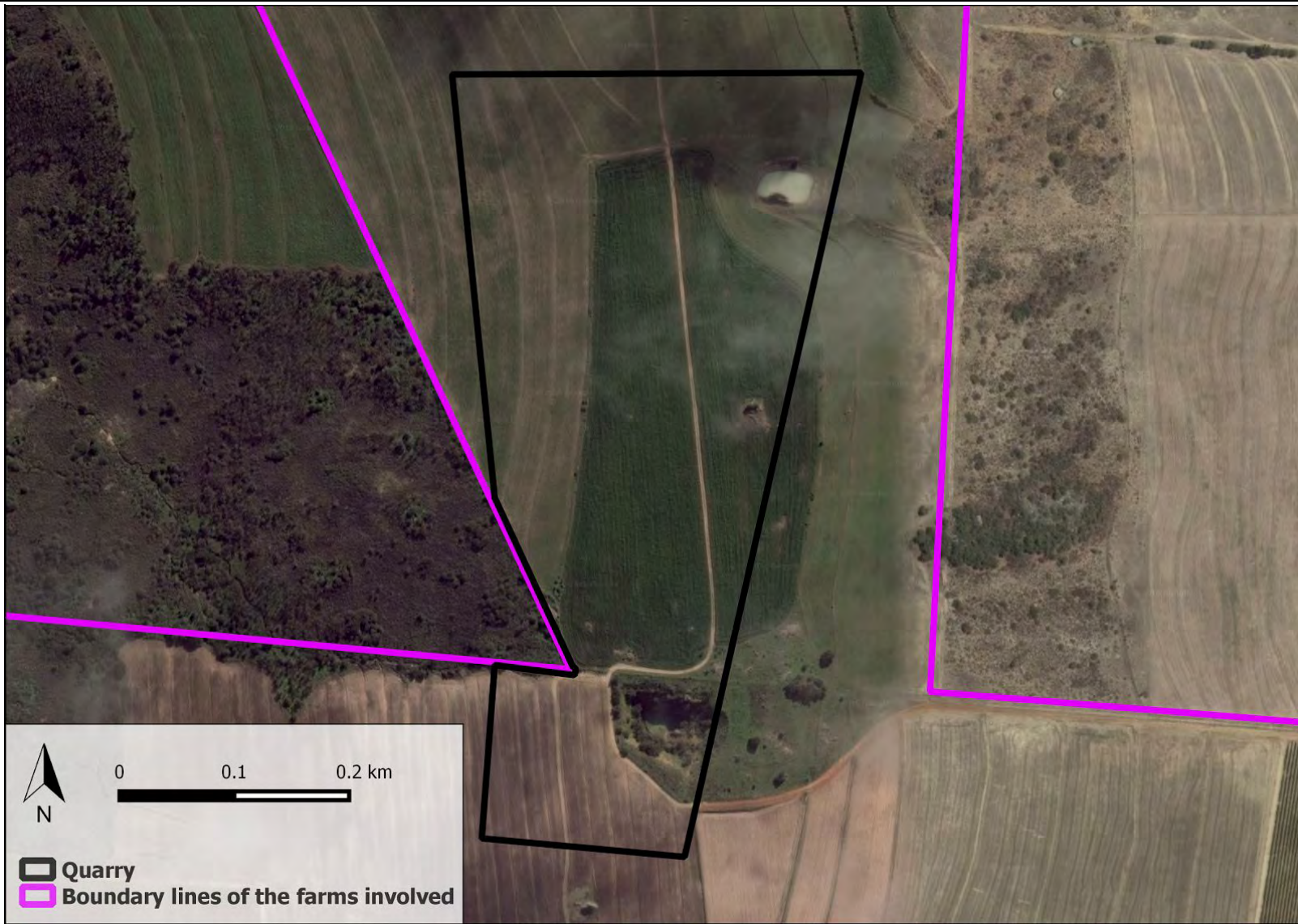


**Figure 1d. Farm Werf 2.** Satellite image of the farm werf on portion 1 of Farm 814, Malmesbury





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**Figure 1e. Quarry site.** Satellite image indicating the proposed development area at closer range.





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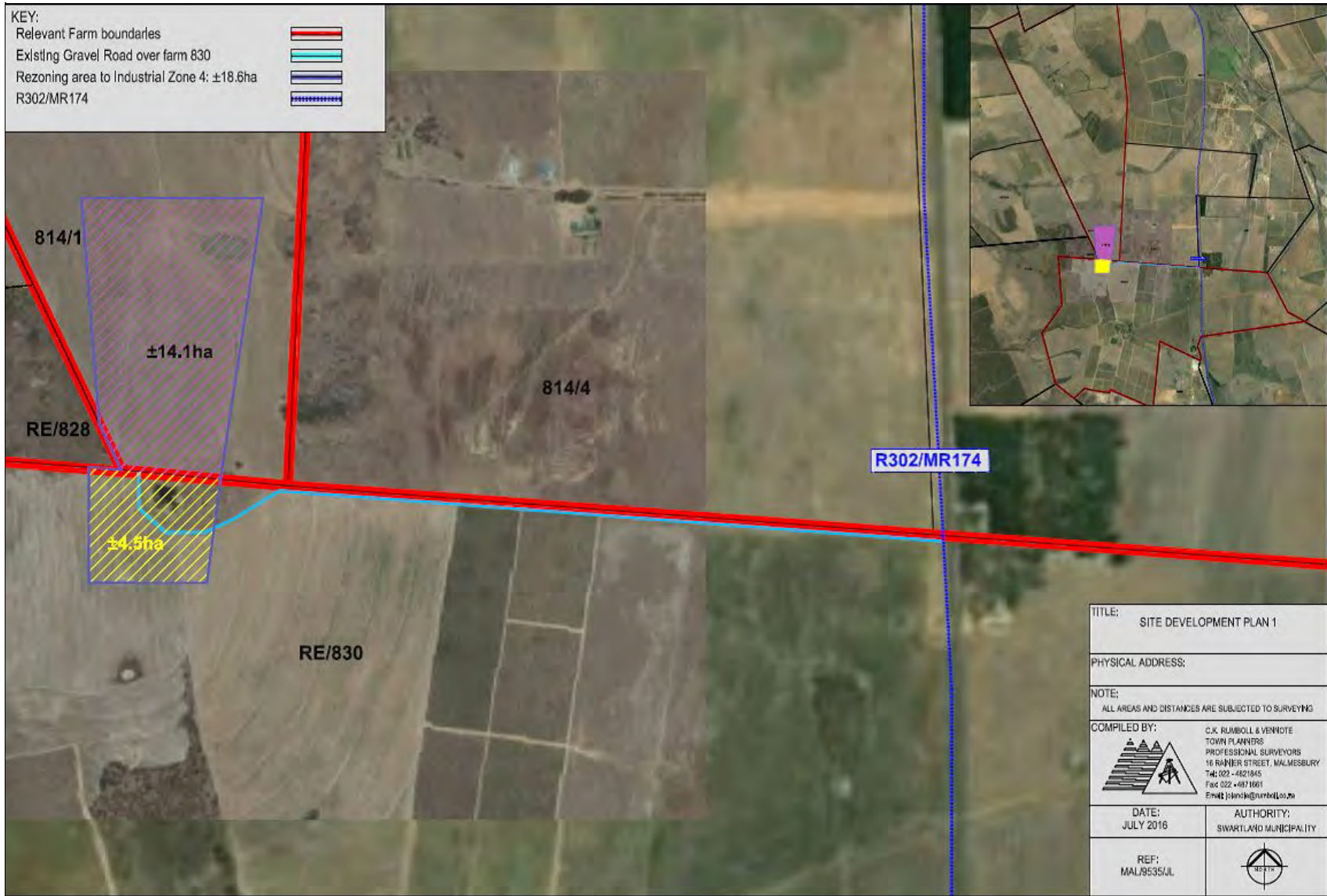
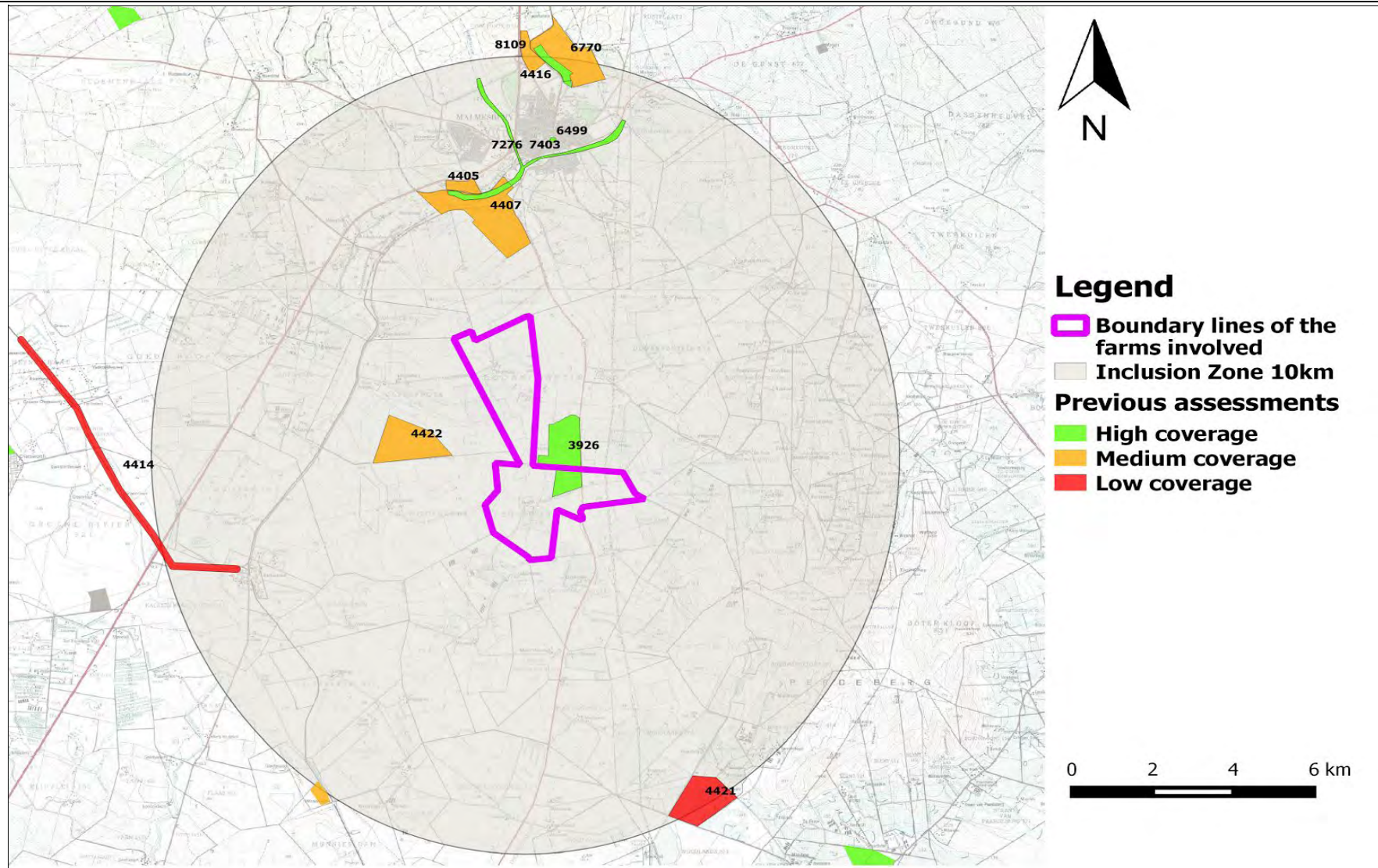


Figure 1f. Quarry site. Details of satellite image indicating the proposed development area at closer range (CK Rumboll)



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**Figure 2. Previous surveys map.** Previous Heritage Impact Assessments surrounding the proposed development area, with SAHRIS NIDS indicated (please see Appendix 2 for full reference list).





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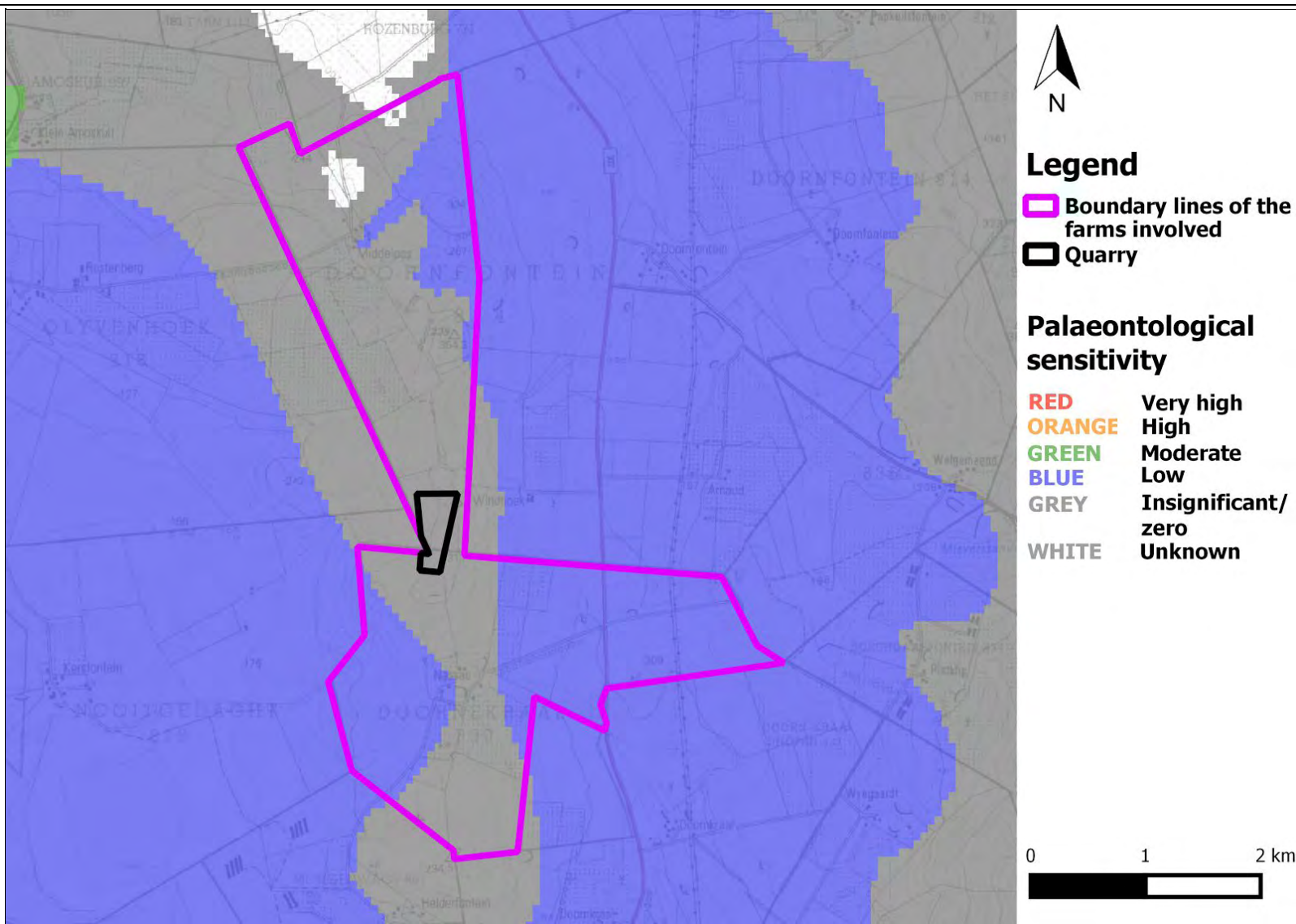
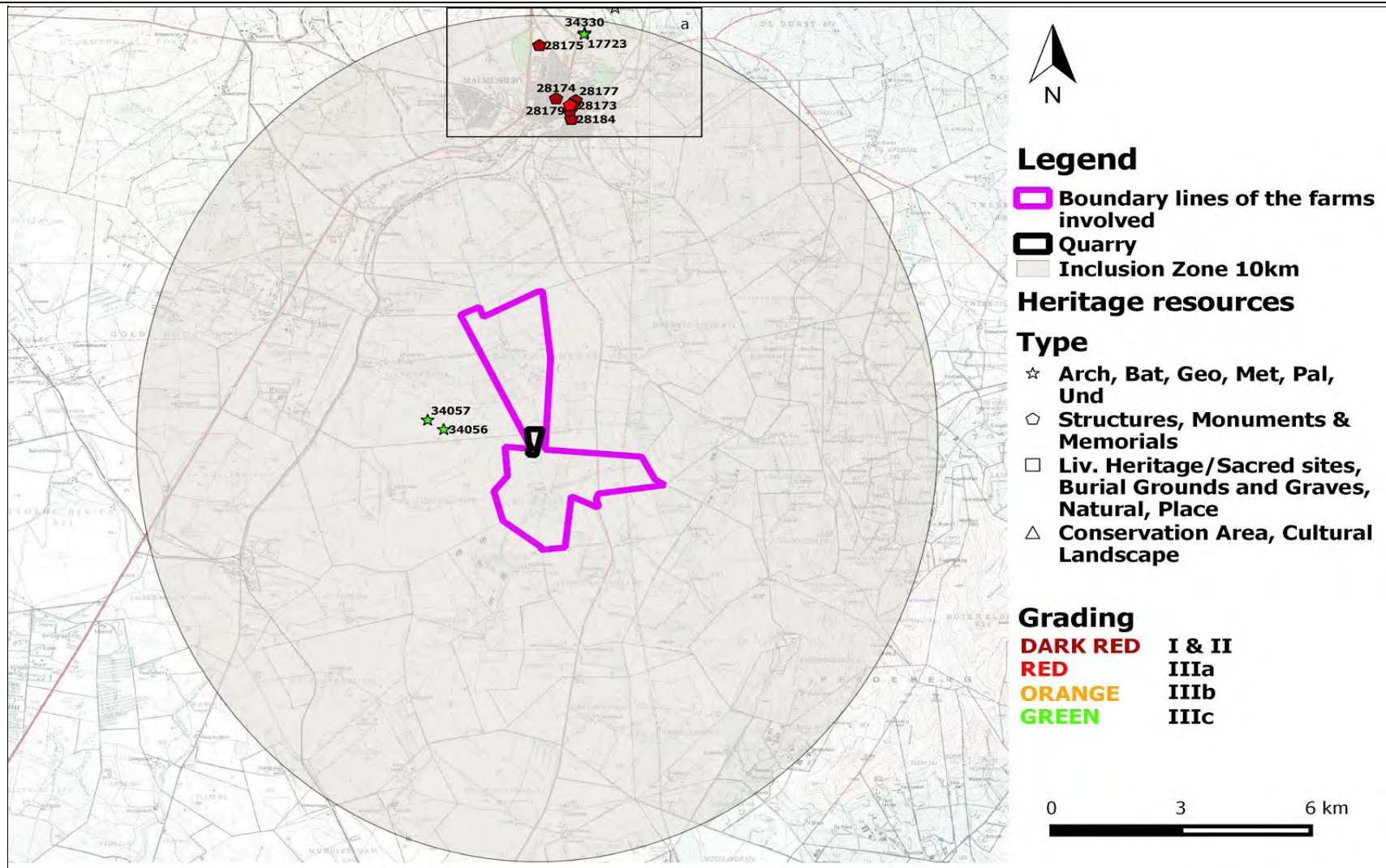


Figure 3a. Palaeosensitivity Map. Fossil sensitivity of the study area. See Appendix 3 for full guide to the legend.





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**Figure 4a. Heritage Resources Map.** Heritage resources previously identified in and near the study area, with SAHRIS Site Names indicated (see Figures 4b for inset). See Appendix 4 for full description of heritage resource types.



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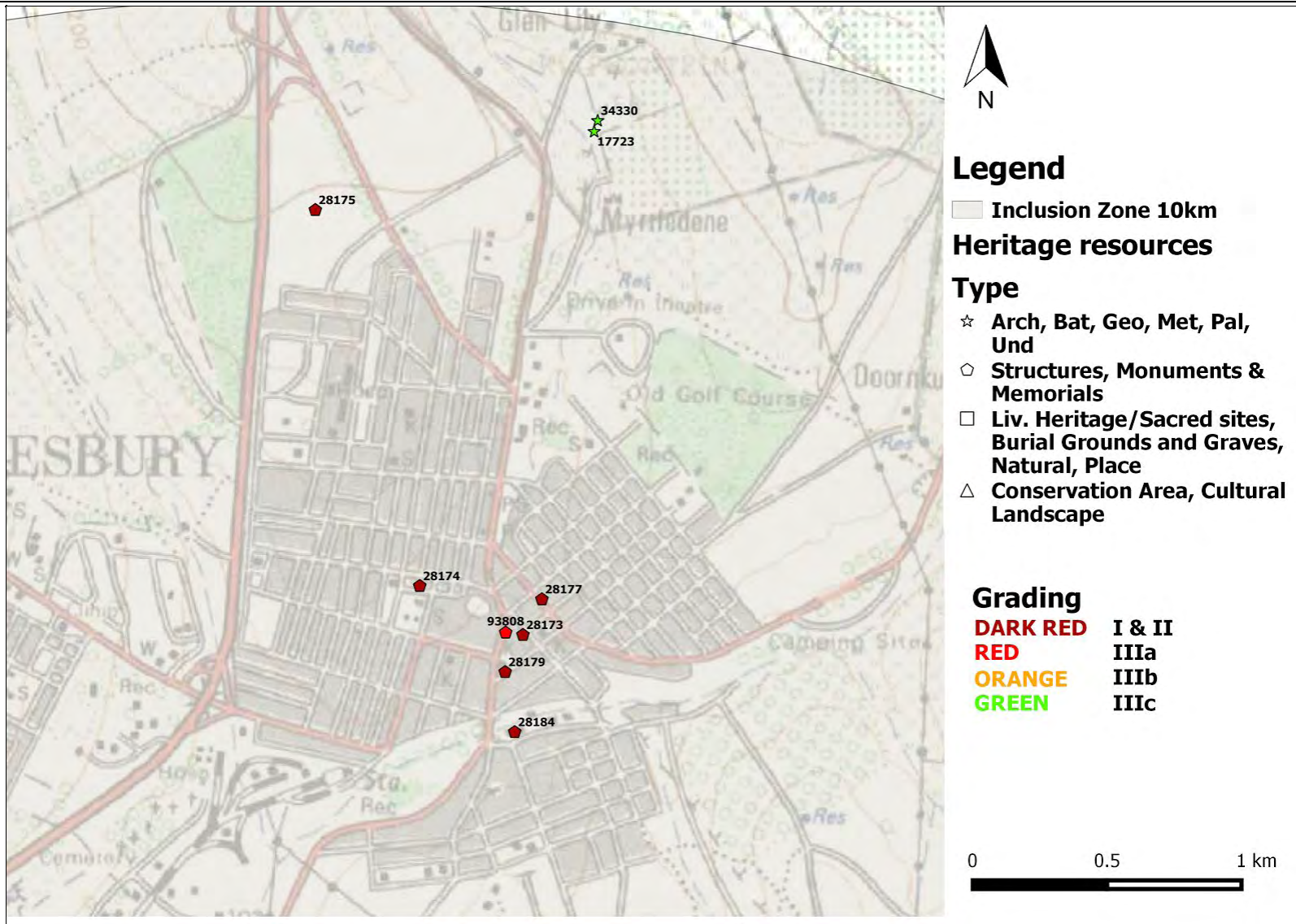


Figure 4b. Inset map. Old National Monuments and other heritage resources located within and around Malmesbury





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## 8. Heritage statement and character of the area

The purpose of this application is for the Rezoning of a portion of Farm 814/1 ( $\pm 14.1$ ha) and a Portion of farm RE/830 ( $\pm 4.5$ ha) from Agricultural Zone 1 to Industrial Zone 4, in order to operate a granite quarry on a  $\pm 18.6$ ha site. The proposed development will entail the clearance of existing vegetation to execute excavations of granite (15.7 Ha) through opencast dip-mining for 30 years (production period). Proposed activities will include drilling, blasting and crushing. There is an old existing quarry on a portion of remainder farm 830 that has very low botanical conservation value due to the high level of transformation. This quarry will form part of the proposed mining area. There is very little natural vegetation on the site itself. Granite will be accessed at the quarry face by drilling and blasting at an incline of 10 degree holes using a down hole hydraulic drill rig. The holes will be drilled in three single rows with an 89mm diameter and extended to 1 meter below the quarry floor. The holes are then filled with explosives. The quarry sides will be benched to allow for ease of access and stability. The benches will be rehabilitated with the overburden removed prior to the quarrying.

The area has been extensively cultivated and the existing quarry on Doornkraal 830 had already been in use in 2004. A total of 13 Archaeological Impact Assessments (AIAs) have been conducted within 10km of the area proposed for development, the earliest having been done in 1995, giving a relatively reliable characterisation of the area. As has been discussed in these reports, it is common to find Stone Age artefactual material across the landscape, as well as historical heritage resources such as buildings and farmsteads. The total number of previously recorded heritage resources located within the inclusion zone of 10km is 11, the majority being Grade II Provincial Heritage Sites in the town of Malmesbury.

Two Archaeological Impact Assessments (AIA) has previously been undertaken in the area immediately surrounding the proposed development area. In Deacon's (2007, NID 3926) assessment, he noted that the area in general has been extensively disturbed through agricultural activities. In particular, the area assessed by Deacon (2007) had been disturbed by sand mining, however this had provided good exposures of the subsurface. No archaeological materials were observed in sections through undisturbed ground or in the piles of disturbed ground. Deacon (2007) concluded that the proposed development will have minimal impact on archaeological resources. In 2006, Kaplan (NID 4422) identified several low density Later Stone Age scatters (SID 34056 and 34057) on a neighbouring property, including several pieces of pottery. These resources were determined to have "medium-low significance" and have as such been graded IIIc. Kaplan (2006) also identified Earlier Stone Age artefacts on the same property of low local significance.

Two farm werfs of unknown significance are located within the boundaries of portion 1 of Farm 814 and Remainder of Portion 830. While the exact age of these werfs has not been obtained, there is no evidence of either of these farm werfs on the Cape Malmesbury Map (1890). Nevertheless, these farm werfs will not be impacted by the proposed granite mine.

No previous Palaeontological Impact Assessments (PIA) have been done in this area. However according to the SAHRIS Palaeosensitivity Map (Figure 3), the area is underlain by formations of low fossil sensitivity. It is therefore unlikely that the proposed development will impact on significant palaeontological heritage.

It is unlikely that, due to the already disturbed nature of the quarry area, the proposed granite mine will impact on significant heritage resources.

### RECOMMENDATION:

- **The heritage resources in the area proposed for development are sufficiently recorded**
- **The proposed development is unlikely to impact on significant heritage resources. There are no known sites which require mitigation or management plans. No further heritage work is recommended for the proposed development.**

## APPENDIX 1





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### List of heritage resources within 10km inclusion zone

Site ID	Site no	Full Site Name	Site Type	Grading
28184	9/2/060/0016	Malmesbury Museum, Prospect Street, Malmesbury	Building	Grade II
28177	9/2/060/0018	Old well, Lewis Stores, 11 Piet Retief Street, Malmesbury	Building	Grade II
28179	9/2/060/0020	New Apostolic Church, 42 Voortrekker Road, Malmesbury	Building	Grade II
28173	9/2/060/0023	Dutch Reformed Church, Church Street, Malmesbury	Building	Grade II
28174	9/2/060/0024	14 Faure Street, Malmesbury	Building	Grade II
28175	9/2/060/0029	Klawervallei, Malmesbury District	Building	Grade II
93808	De Bron Malmesbury	De Bron Malmesbury	Building	Grade IIIa
34056	OHK1	Olyvenhoek 1	Artefacts	Grade IIIc
34057	OHK2	Olyvenhoek 2	Artefacts	Grade IIIc
34330	KLIF1	Klipfontein	Artefacts	Grade IIIc
17723	GLENLILY1	Glen Lily 1	Artefacts	Grade IIIc

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## APPENDIX 2 Reference List

Impact Assessment References				
Nid	Report Type	Author/s	Date	Title
3926	AIA	Hilary Deacon	13/07/2007	Archaeological Impact Assessment: St Dicks Aeroport.
4405	AIA	Jonathan Kaplan	01/12/2006	Phase 1 Archaeological Impact Assessment: Proposed Development Schoonspruit Country Estate Portion of Erf 317, Portion of Erf 7455 & Erf 882, Malmesbury, Western Cape Province
4407	AIA	Jonathan Kaplan	15/06/2007	Phase 1 Archaeological Impact Assessment: Proposed Development Precinct 2, 3, 4, 5 & 6 Malmesbury, Western Cape Province: Portion of Erf 317, a Portion of Erf 7455, a Portion of Farm Oranje Fontein 1113, Portion of Farm 771 Rozenburg, Portion of Portion 1
4414	AIA	Jonathan Kaplan	03/12/2001	Contract No. C683: Poverty Alleviation Project P04-009-00/1: Kalbaskraal and Chatsworth/Riverlands Access Roads
4416	AIA	Jonathan Kaplan	11/02/2005	Phase 1 Proposed Development of a Portion of Farm 688 Malmesbury Western Cape Province
4421	AIA	Sarah Wurz	01/01/2006	Heritage Impact Assessment: Scoping Study for Dudleyvale Farm No 876, Malmesbury, Western Cape
4422	AIA	Jonathan Kaplan	01/08/2006	Phase 1 Archaeological Impact Assessment Proposed Sand Mining on a Part of the Farm Olyvenhoek 818, Remainder Malmesbury, Western Cape Province
6499	AIA	Dave Halkett	01/03/1995	Report on the Phase One Archaeological Investigation of Aspects of the Site Known as Die Bron in Malmesbury
6770	AIA	Jonathan Kaplan	01/01/2007	Phase 1 Archaeological Impact Assessment for a Proposed Housing Development on Portion 2 of Farm 690 and Remainder of the Farm Klipfontein 688 (Glen Lily) Malmesbury, Western Cape Province
7276	AIA	Hilary Deacon	17/12/2008	Archaeological and Heritage Impact Assessment: Diep and Platteklip River Clearing Project (Malmesbury)
7403	AIA	Hilary Deacon	17/12/2008	Archaeological and Heritage Impact Assessment: No Go River Clearing Project (Moorreesberg)
8109	AIA	Jonathan Kaplan	01/10/2008	Phase 1 Archaeological Impact Assessment the Proposed Swartland Shopping Mall Remainder Farm Tweefontein No. 696, Erf 2654 (Portion of Erf 327), Erf 9215 (Portion of Erf 2654) & Portion of Erf 327 Malmesbury



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## APPENDIX 3 - Keys/Guides

### Key/Guide to Acronyms

<b>AIA</b>	Archaeological Impact Assessment
<b>DARD</b>	Department of Agriculture and Rural Development (KwaZulu-Natal)
<b>DEA</b>	Department of Environmental Affairs
<b>DEADP</b>	Department of Environmental Affairs and Development Planning (Western Cape)
<b>DEDEAT</b>	Department of Economic Development, Environmental Affairs and Tourism (Eastern Cape)
<b>DEDECT</b>	Department of Economic Development, Environment, Conservation and Tourism (North West)
<b>DEDT</b>	Department of Economic Development and Tourism (Mpumalanga)
<b>DEDTEA</b>	Department Of economic Development, Tourism And Environmental Affairs (free State)
<b>Denc</b>	Department Of Environment And Nature Conservation (northern Cape)
<b>DMR</b>	Department of Mineral Resources
<b>Gdard</b>	Gauteng Department Of Agriculture And Rural Development (gauteng)
<b>HIA</b>	Heritage Impact Assessment
<b>Ledet</b>	Department Of Economic Development, Environment and Tourism (Limpopo)
<b>MPRDA</b>	Mineral and Petroleum Resources Development Act, no 28 of 2002
<b>NEMA</b>	National Environmental Management Act, no 107 of 1998
<b>NHRA</b>	National Heritage Resources Act, no 25 of 1999
<b>PIA</b>	Palaeontological Impact Assessment
<b>SAHRA</b>	South African Heritage Resources Agency
<b>SAHRIS</b>	South African Heritage Resources Information System
<b>VIA</b>	Visual Impact Assessment

### Full guide to Palaeosensitivity Map legend

	<b>RED:</b>	VERY HIGH - field assessment and protocol for finds is required
	<b>ORANGE/YELLOW:</b>	HIGH - desktop study is required and based on the outcome of the desktop study, a field assessment is likely
	<b>GREEN:</b>	MODERATE - desktop study is required
	<b>BLUE/PURPLE:</b>	LOW - no palaeontological studies are required however a protocol for chance finds is required
	<b>GREY:</b>	INSIGNIFICANT/ZERO - no palaeontological studies are required
	<b>WHITE/CLEAR:</b>	UNKNOWN - these areas will require a minimum of a desktop study.





## APPENDIX 4 - Methodology

The Heritage Screener summarises the heritage impact assessments and studies previously undertaken within the area of the proposed development and its surroundings. Heritage resources identified in these reports are assessed by our team during the screening process.

The heritage resources will be described both in terms of **type**:

- Group 1: Archaeological, Underwater, Palaeontological and Geological sites, Meteorites, and Battlefields
- Group 2: Structures, Monuments and Memorials
- Group 3: Burial Grounds and Graves, Living Heritage, Sacred and Natural sites
- Group 4: Cultural Landscapes, Conservation Areas and Scenic routes

and **significance** (Grade I, II, IIIa, b or c, ungraded), as determined by the author of the original heritage impact assessment report or by formal grading and/or protection by the heritage authorities. Sites identified and mapped during research projects will also be considered.

### DETERMINATION OF THE EXTENT OF THE INCLUSION ZONE TO BE TAKEN INTO CONSIDERATION

The extent of the inclusion zone to be considered for the Heritage Screener will be determined by CTS based on:

- the size of the development,
- the number and outcome of previous surveys existing in the area
- the potential cumulative impact of the application.

The inclusion zone will be considered as the region within a maximum distance of 50 km from the boundary of the proposed development.

### DETERMINATION OF THE PALAEOLOGICAL SENSITIVITY

The possible impact of the proposed development on palaeontological resources is gauged by:

- reviewing the fossil sensitivity maps available on the South African Heritage Resources Information System (SAHRIS)
- considering the nature of the proposed development
- when available, taking information provided by the applicant related to the geological background of the area into account

### DETERMINATION OF THE COVERAGE RATING ASCRIBED TO A REPORT POLYGON

Each report assessed for the compilation of the Heritage Screener is colour-coded according to the level of coverage accomplished. The extent of the surveyed coverage is labeled in three categories, namely low, medium and high. In most instances the extent of the map corresponds to the extent of the development for which the specific report was undertaken.



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**Low coverage** will be used for:

- desktop studies where no field assessment of the area was undertaken;
- reports where the sites are listed and described but no GPS coordinates were provided.
- older reports with GPS coordinates with low accuracy ratings;
- reports where the entire property was mapped, but only a small/limited area was surveyed.
- uploads on the National Inventory which are not properly mapped.

**Medium coverage** will be used for

- reports for which a field survey was undertaken but the area was not extensively covered. This may apply to instances where some impediments did not allow for full coverage such as thick vegetation, etc.
- reports for which the entire property was mapped, but only a specific area was surveyed thoroughly. This is differentiated from low ratings listed above when these surveys cover up to around 50% of the property.

**High coverage** will be used for

- reports where the area highlighted in the map was extensively surveyed as shown by the GPS track coordinates. This category will also apply to permit reports.

## RECOMMENDATION GUIDE

The Heritage Screener includes a set of recommendations to the applicant based on whether an impact on heritage resources is anticipated. One of three possible recommendations is formulated:

**(1) The heritage resources in the area proposed for development are sufficiently recorded - The surveys undertaken in the area adequately captured the heritage resources. There are no known sites which require mitigation or management plans. No further heritage work is recommended for the proposed development.**

This recommendation is made when:

- enough work has been undertaken in the area
- it is the professional opinion of CTS that the area has already been assessed adequately from a heritage perspective for the type of development proposed

**(2) The heritage resources and the area proposed for development are only partially recorded - The surveys undertaken in the area have not adequately captured the heritage resources and/or there are sites which require mitigation or management plans. Further specific heritage work is recommended for the proposed development.**

This recommendation is made in instances in which there are already some studies undertaken in the area and/or in the adjacent area for the proposed development. Further studies in a limited HIA may include:

- improvement on some components of the heritage assessments already undertaken, for instance with a renewed field survey and/or with a specific specialist for the type of heritage resources expected in the area



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- compilation of a report for a component of a heritage impact assessment not already undertaken in the area
- undertaking mitigation measures requested in previous assessments/records of decision.

**(3) The heritage resources within the area proposed for the development have not been adequately surveyed yet - Few or no surveys have been undertaken in the area proposed for development. A full Heritage Impact Assessment with a detailed field component is recommended for the proposed development.**

**Note:**

The responsibility for generating a response detailing the requirements for the development lies with the heritage authority. However, since the methodology utilised for the compilation of the Heritage Screeners is thorough and consistent, contradictory outcomes to the recommendations made by CTS should rarely occur. Should a discrepancy arise, CTS will immediately take up the matter with the heritage authority to clarify the dispute.

The compilation of the Heritage Screener will not include any field assessment. The Heritage Screener will be submitted to the applicant within 24 hours from receipt of full payment. **If the 24-hour deadline is not met by CTS, the applicant will be refunded in full.**

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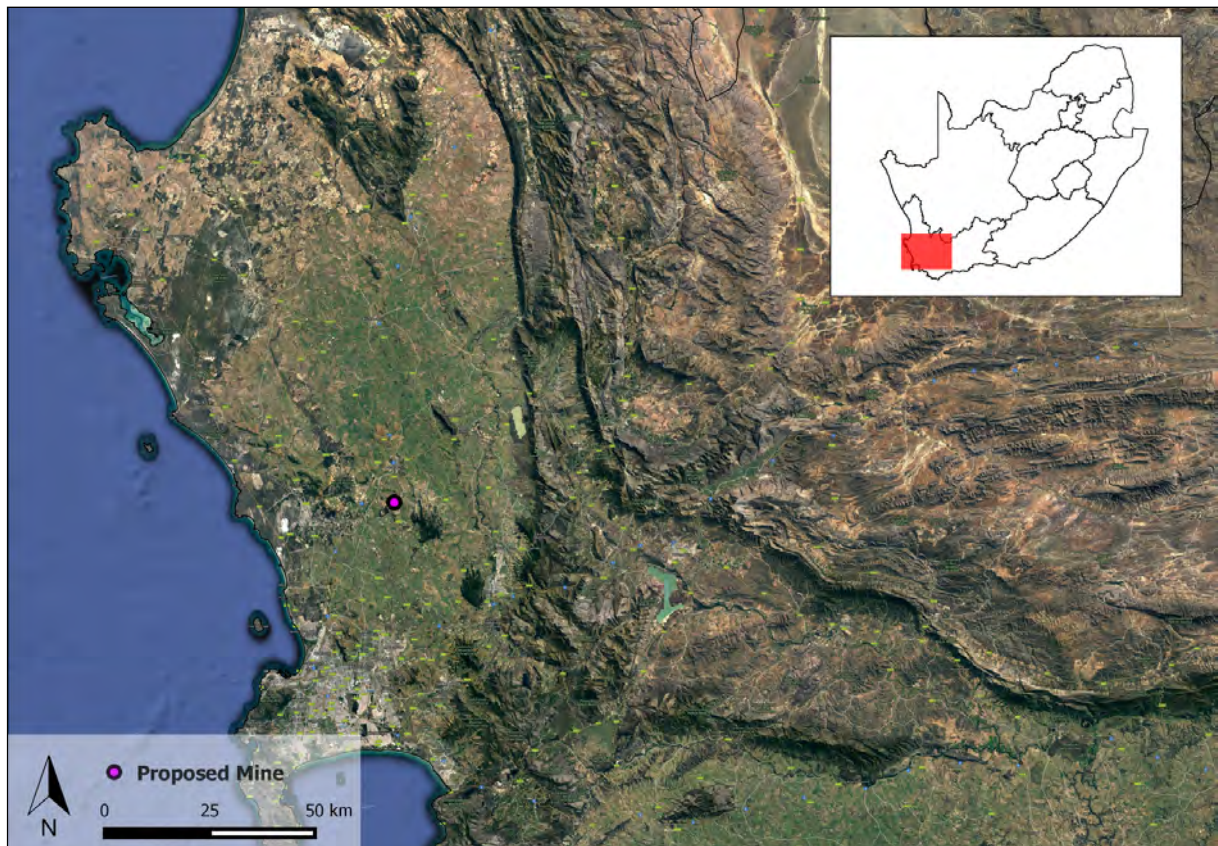


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## **APPENDIX 2: Archaeological Impact Assessment**

# **SPECIALIST ARCHAEOLOGICAL ASSESSMENT**

In terms of Section 38(8) of the NHRA for the  
**PROPOSED EXTENSION OF AN EXISTING GRANITE QUARRY**  
**Portion 1 of Farm 814 and Remainder Farm 830, Malmesbury**  
**HWC Ref: 16072706AS0823E**



**Prepared by CTS Heritage**



for  
**CK Rumboll**  
**November 2016**



## **EXECUTIVE SUMMARY**

Application is made for a granite quarry on a portion of Farm 814/1 and a portion of remainder Farm 830. There is an existing quarry (currently not in use) on a portion of remainder farm 830 that has very low botanical conservation value due to the high level of transformation. This quarry will form part of the proposed mining area.

The area proposed for mining is located on the boundary of two farms located along the R302, hidden from the road by a series of low-lying hills, situated approximately 8 km south of Malmesbury. As with the surrounding farms, the farms in question were historically used for grain cultivation and as such, have been much transformed (Cape Farm Mapper). Predominant land use in the immediate vicinity includes grain and wine cultivation, natural conservation areas, urban development and some mining.

The area proposed for development was visited by two archaeologists on Friday 18 November 2016. Visibility on site was excellent as the crops had just been harvested. Despite this excellent visibility, no archaeological sites were identified during the foot survey. However five silcrete Earlier and Middle Stone Age artefacts were identified. These artefacts were located on the surface and all were out of context. Each artefact was photographed and its GPS location recorded. All the artefacts identified were graded Not Conservation Worthy. The foot survey conducted provided a good characterisation of the heritage resources in the area and our findings were consistent with that of other studies in the immediate vicinity (Table 2).

Granite will be accessed at the quarry face by drilling and blasting at an incline of 10 degree holes using a down hole hydraulic drill rig. The holes will be drilled in three single rows with an 89mm diameter and extended to 1 meter below the quarry floor. The holes are then filled with explosives. The quarry sides will be benched to allow for ease of access and stability. The benches will be rehabilitated with the overburden removed prior to the quarrying.

Five archaeological artefacts were identified during the foot survey of the proposed development area. These artefacts were clearly out of context as a result of the extensive cultivation of the proposed development area. Due to their lack of context, the artefacts identified are recommended as being Not Conservation Worthy.

The proposed development will not negatively impact on any significant archaeological resources.





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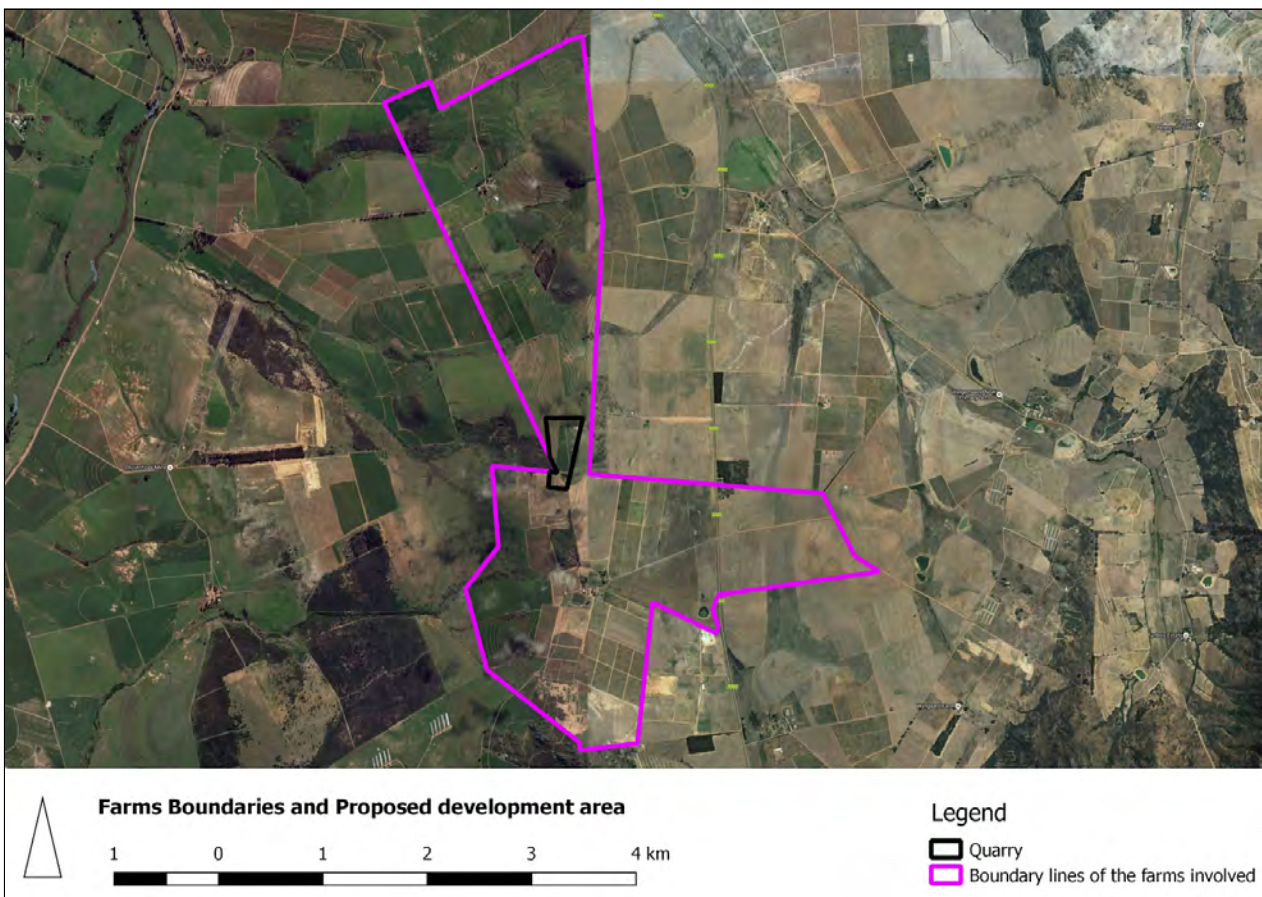
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## 1. INTRODUCTION

### 1.1 Background Information on Project

Application is made for a granite quarry on a portion of Farm 814/1 and a portion of remainder Farm 830. There is an existing quarry (currently not in use) on a portion of remainder farm 830 that has very low botanical conservation value due to the high level of transformation. This quarry will form part of the proposed mining area. An application in terms of the Mineral and Petroleum Development Act, Act 28 of 2002, will also be submitted to obtain the necessary approvals for a mining license and to address environmental issues. CK Rumboll is the Environmental Assessment Practitioner managing the process for this project.

The intent is to re-use the topsoil on the quarry benches to create a cultivatable surface area of  $\pm 2.85$  ha of productive land. Velvet Mountain Aggregates (VMA) want to start quarrying from 2017 once all approvals are in place. The life of the mine is 30 years at various depths depending on the surface contours. Economies of scale and prevailing commodity prices will determine the final depth of the opencast operations. VMA has budget to extract approximately 280 000 tons in 2018 that could further be increased to 380 000 tons a year, subject to market demand. The opportunity exists in the concrete market where there is a shortage of 19mm stone. When using granite stone in concrete, it improves the Mpa strength dramatically, hence the market demand for granite. Velvet Mountain Aggregates will also sell 6.7mm, 9.5mm and 13.2mm into the market.



**Figure 1: A portion of Farm 814/1 and a portion of remainder Farm 830 with the proposed development indicated**



## **1.2 Description of Property and affected Environment**

The area proposed for mining is located on the boundary of two farms located along the R302, hidden from the road by a series of low-lying hills, situated approximately 8 km south of Malmesbury. As with the surrounding farms, the farms in question were historically used for grain cultivation and as such, have been much transformed (Cape Farm Mapper). Predominant land use in the immediate vicinity includes grain and wine cultivation, natural conservation areas, urban development and some mining.

## **2. METHODOLOGY**

### **2.1 Scope of Work**

The purpose of this Heritage Impact Assessment (HIA) is to satisfy the requirements of section 38(8), and therefore section 38(3) of the National Heritage Resources Act (Act 25 of 1999). This HIA is drafted in response to the "Response to NID" letter received from HWC dated 5 September 2016. HWC requires that an HIA be submitted with specific reference to impacts on archaeological heritage resources.

### **2.2 Summary of steps followed**

- The landowners were contacted for access to the property
- The site was visited on Friday 18 November 2016 by two archaeologists
- The proposed quarry area was traversed on foot in transects and any identified archaeological resources were recorded using a digital camera and a Garmin GPS
- The farm werfs were visited and photographed

## **3. HISTORY AND EVOLUTION OF THE SITE AND CONTEXT**

### **3.1 Definition of the property**

The purpose of this application is for the Rezoning of a portion of Farm 814/1 ( $\pm 14.1$ ha) and a Portion of farm RE/830 ( $\pm 4.5$ ha) from Agricultural Zone 1 to Industrial Zone 4, in order to operate a granite quarry on a  $\pm 18.6$ ha site. The proposed development will entail the clearance of existing vegetation to execute excavations of granite (15.7 Ha) through opencast dip-mining for 30 years (production period).





**Figure 2: Aerial Image of proposed quarry area**

### 3.2 Archaeological and Historical Background

The area has been extensively cultivated and the existing quarry on Doornkraal 830 had already been in use in 2004. A total of 13 Archaeological Impact Assessments (AIAs) have been conducted within 10km of the area proposed for development, the earliest having been done in 1995, giving a relatively reliable characterisation of the area. As has been discussed in these reports, it is common to find Stone Age artefactual material across the landscape, as well as historical heritage resources such as buildings and farmsteads. The total number of previously recorded heritage resources located within the inclusion zone of 10km is 11, the majority being Grade II Provincial Heritage Sites in the town of Malmesbury.

Two Archaeological Impact Assessments (AIA) have previously been undertaken in the area immediately surrounding the proposed development area. In Deacon's (2007, NID 3926) assessment, he noted that the area in general has been extensively disturbed through agricultural activities. In particular, the area assessed by Deacon (2007) had been disturbed by sand mining, however this had provided good exposures of the subsurface. No archaeological materials were observed in sections through undisturbed ground or in the piles of disturbed ground. Deacon (2007) concluded that the proposed development will have minimal impact on archaeological

resources. In 2006, Kaplan (NID 4422) identified several low density Later Stone Age scatters (SID 34056 and 34057) on a neighbouring property, including several pieces of pottery. These resources were determined to have “medium-low significance” and have as such been graded IIIc. Kaplan (2006) also identified Earlier Stone Age artefacts on the same property of low local significance. No previous Palaeontological Impact Assessments (PIA) have been done in this area. However according to the SAHRIS Palaeosensitivity Map (Figure 3), the area is underlain by formations of low to no fossil sensitivity. It is therefore unlikely that the proposed development will impact on significant palaeontological heritage.

**Table 1: Sites previously identified within the vicinity of the proposed mine (Figure 5)**

Site ID	Site no	Full Site Name	Site Type	Grading
34056	OHK1	Olyvenhoek 1	Artefacts	Grade IIIc
34057	OHK2	Olyvenhoek 2	Artefacts	Grade IIIc

**Table 2: HIA’s previously conducted in the vicinity of the proposed mine (Figure 5)**

Nid	Report Type	Author/s	Date	Title
3926	AIA	Hilary Deacon	13/07/2007	Archaeological Impact Assessment: St Dicks Aeroport.
4414	AIA	Jonathan Kaplan	03/12/2001	Contract No. C683: Poverty Alleviation Project P04-009-00/1: Kalbaskraal and Chatsworth/Riverlands Access Roads
4422	AIA	Jonathan Kaplan	01/08/2006	Phase 1 Archaeological Impact Assessment Proposed Sand Mining on a Part of the Farm Olyvenhoek 818, Remainder Malmesbury, Western Cape Province



**Figure 5: Panoramic of the area for the proposed granite quarry**



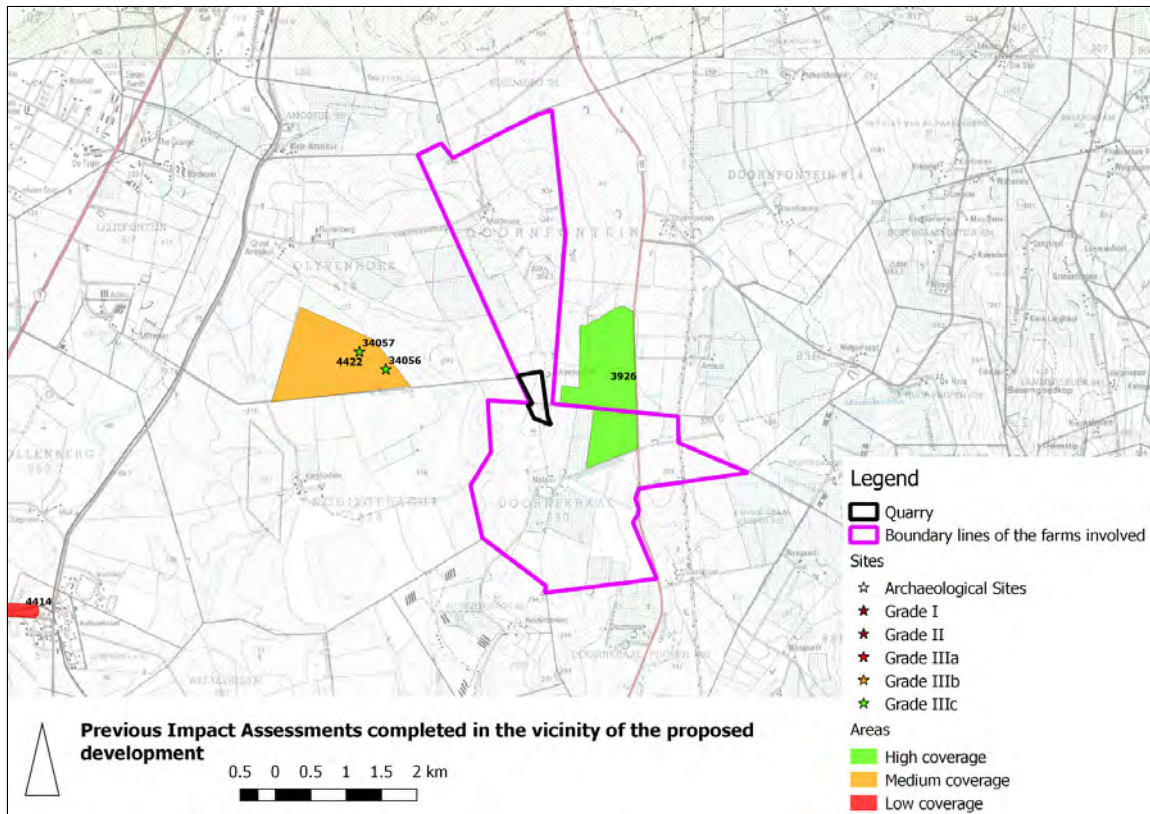


Figure 6: Spatialisation of known heritage resources in the vicinity of the proposed mine

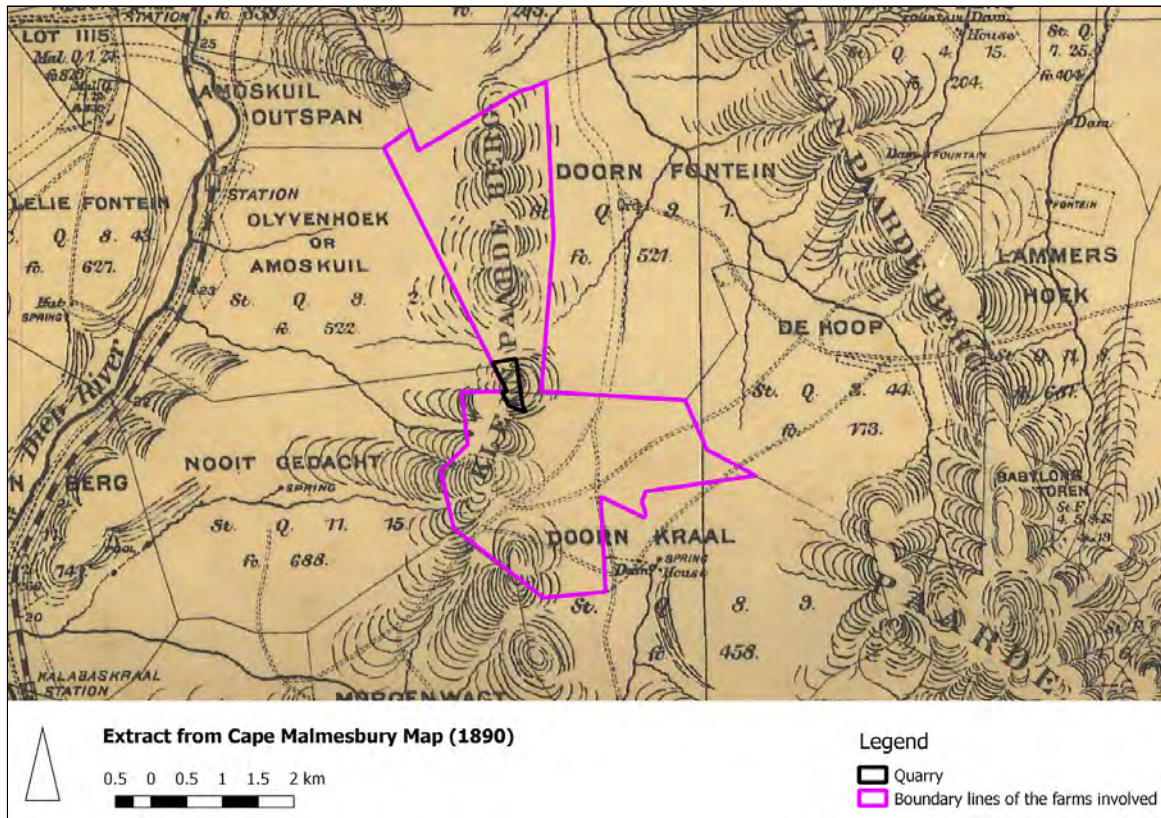


Figure 7: Extract from Cape Malmesbury Map indicating the proposed mine area (1890 - 1900)



#### 4. DESCRIPTION OF HERITAGE RESOURCES

##### 4.1 Details of Sites

The area proposed for development was visited by two archaeologists on Friday 18 November 2016. Visibility on site was excellent as the crops had just been harvested. Despite this excellent visibility, no archaeological sites were identified during the foot survey. However five silcrete Earlier and Middle Stone Age artefacts were identified. These artefacts were located on the surface and all were out of context. Each artefact was photographed and its GPS location recorded. All the artefacts identified were graded Not Conservation Worthy. The foot survey conducted provided a good characterisation of the heritage resources in the area and our findings were consistent with that of other studies in the immediate vicinity (Table 2).

**Table 3: Artefacts identified during the foot survey**

SAHRIS Site ID	Artefact Number	Description	Latitude	Longitude	Grading
99108	NAS001	Silcrete Flake	33.54581	18.72106	NCW
99109	NAS002	Silcrete Flake	33.54550	18.72054	NCW
99110	NAS003	Silcrete Flaked Piece	33.54573	18.72048	NCW
99111	NAS004	Silcrete Flaked Piece	33.54507	18.71912	NCW
99112	NAS005	Silcrete Flaked Piece	33.54319	18.72182	NCW

##### 4.2 Photographic Record



**Figure 8: View from old quarry looking south**





**Figure 9: View from old quarry looking south-west**



**Figure 10: Context of find NAS001**





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**Figure 11: Profile of drainage trench indicating granite pebbles, but no archaeological sediments**





**Figure 12: View from quarry looking east**



**Figure 13: Piles of granite cobbles, likely originating from the old quarry. No archaeological material was found here**





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**Figures 14 and 15: NAS001 and NAS001 in its original location**



**Figures 16 and 17: NAS002 and NAS003**





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**Figures 18 and 19: NAS004, both sides**



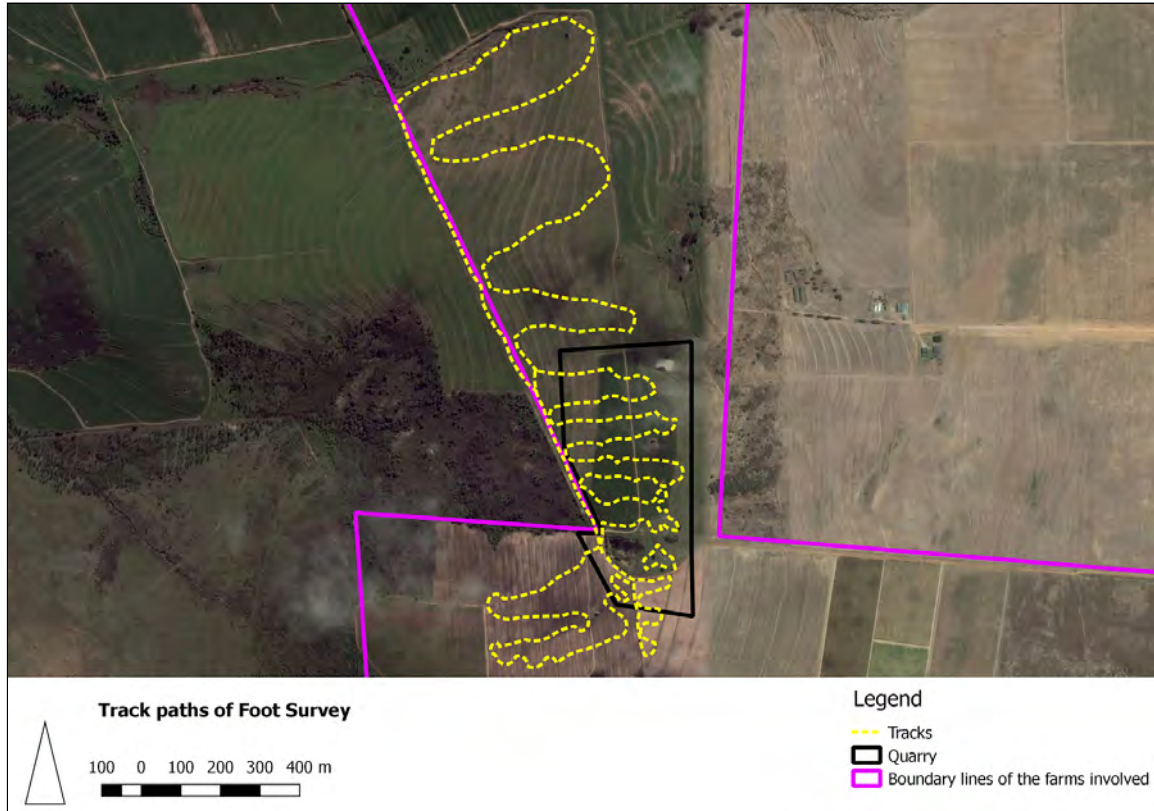
**Figures 20 and 21: NAS005, both sides**



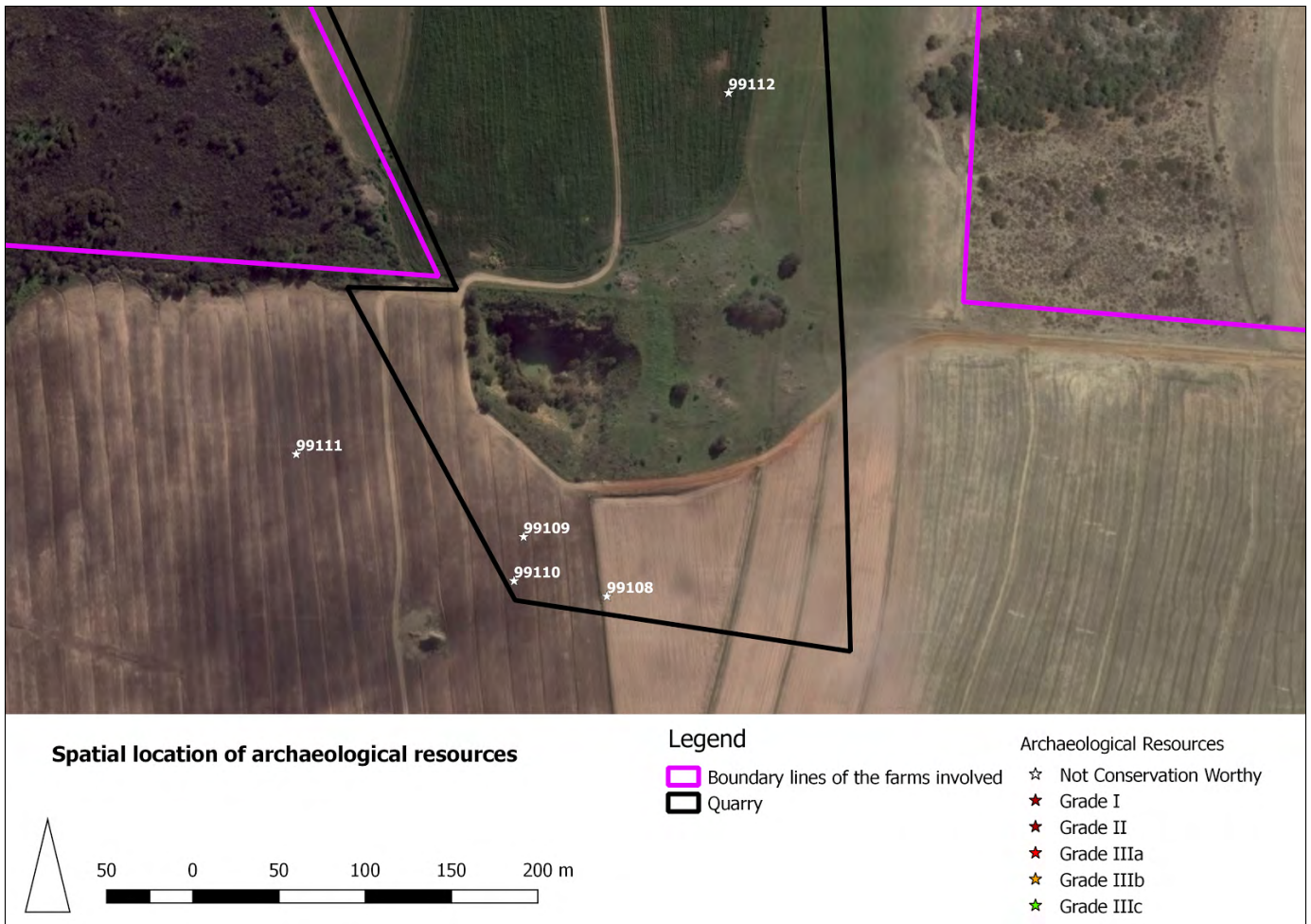


**Figure 22: View of the location of the proposed quarry looking towards Malmesbury**

### 4.3 Mapping and spatialisation of heritage resources



**Figure 23: Track paths of foot survey**



**Figure 24: Spatial location of identified artefacts in relation to the proposed quarry**

## 5. ASSESSMENT OF THE IMPACTS OF THE DEVELOPMENT

Granite will be accessed at the quarry face by drilling and blasting at an incline of 10 degree holes using a down hole hydraulic drill rig. The holes will be drilled in three single rows with an 89mm diameter and extended to 1 meter below the quarry floor. The holes are then filled with explosives. The quarry sides will be benched to allow for ease of access and stability. The benches will be rehabilitated with the overburden removed prior to the quarrying.

As no heritage resources of significance have been identified within the proposed development footprint, no direct impacts to heritage resources are anticipated.

## 6. DISCUSSION OF SIGNIFICANCE

Five archaeological artefacts were identified during the foot survey of the proposed development area. These artefacts were clearly out of context as a result of the extensive cultivation of the proposed development area. Due to their lack of context, the artefacts identified are recommended as being Not Conservation Worthy.



The proposed development will not negatively impact on any significant archaeological resources.

## **7. CONCLUSION AND RECOMMENDATIONS**

The proposed development of a granite quarry on portion 1 of Farm 814 and Remainder of Farm 830 will have no direct impact on significant heritage resources. No archaeological resources were identified within the proposed development footprint.

As the proposed quarry is not visible from the R302, nor from either Farm werf on the property, the following recommendations are made:

1. There is no heritage objection to the proposed development



## 8. REFERENCES

Impact Assessment References				
Nid	Report Type	Author/s	Date	Title
3926	AIA	Hilary Deacon	13/07/2007	Archaeological Impact Assessment: St Dicks Airport.
4405	AIA	Jonathan Kaplan	01/12/2006	Phase 1 Archaeological Impact Assessment: Proposed Development Schoonspruit Country Estate Portion of Erf 317, Portion of Erf 7455 & Erf 882, Malmesbury, Western Cape Province
4407	AIA	Jonathan Kaplan	15/06/2007	Phase 1 Archaeological Impact Assessment: Proposed Development Precinct 2, 3, 4, 5 & 6 Malmesbury, Western Cape Province: Portion of Erf 317, a Portion of Erf 7455, a Portion of Farm Oranje Fontein 1113, Portion of Farm 771 Rozenburg, Portion of Portion 1
4414	AIA	Jonathan Kaplan	03/12/2001	Contract No. C683: Poverty Alleviation Project P04-009-00/1: Kalbaskraal and Chatsworth/Riverlands Access Roads
4416	AIA	Jonathan Kaplan	11/02/2005	Phase 1 Proposed Development of a Portion of Farm 688 Malmesbury Western Cape Province
4421	AIA	Sarah Wurz	01/01/2006	Heritage Impact Assessment: Scoping Study for Dudleyvale Farm No 876, Malmesbury, Western Cape
4422	AIA	Jonathan Kaplan	01/08/2006	Phase 1 Archaeological Impact Assessment Proposed Sand Mining on a Part of the Farm Olyvenhoek 818, Remainder Malmesbury, Western Cape Province
6499	AIA	Dave Halkett	01/03/1995	Report on the Phase One Archaeological Investigation of Aspects of the Site Known as Die Bron in Malmesbury
6770	AIA	Jonathan Kaplan	01/01/2007	Phase 1 Archaeological Impact Assessment for a Proposed Housing Development on Portion 2 of Farm 690 and Remainder of the Farm Klipfontein 688 (Glen Lily) Malmesbury, Western Cape Province
7276	AIA	Hilary Deacon	17/12/2008	Archaeological and Heritage Impact Assessment: Diep and Platteklip River Clearing Project (Malmesbury)
7403	AIA	Hilary Deacon	17/12/2008	Archaeological and Heritage Impact Assessment: No Go River Clearing Project (Moorreesberg)
8109	AIA	Jonathan Kaplan	01/10/2008	Phase 1 Archaeological Impact Assessment the Proposed Swartland Shopping Mall Remainder Farm Tweefontein No. 696, Erf 2654 (Portion of Erf 327), Erf 9215 (Portion of Erf 2654) & Portion of Erf 327 Malmesbury



CEDAR TOWER  
SERVICES

### **APPENDIX 3: Results of Public Consultation**



Jenna Lavin &lt;jenna.ctsheritage@gmail.com&gt;

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**HIA: Malmesbury Granite Quarry**

11 messages

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Jenna Lavin <jenna.lavin@cedartower.co.za>  
To: AlwynBurger@swartland.org.za  
Cc: Jolandie <Jolandie@rumboll.co.za>

Mon, Nov 28, 2016 at 11:46 AM

Dear Mr Burger,

Upon the request of CK Rumboll and Heritage Western Cape, we have drafted a Heritage Impact Assessment for the proposed Malmesbury Granite Quarry. We have also conducted a specialist Archaeological study.

Please find a copy of the HIA report attached to this email. I will send the Archaeological specialist assessment and the Heritage Screener in a separate email.

In terms of HWC requirements, registered conservation bodies and the relevant municipality must be provided with 30 days to comment on a report before that report can be submitted to HWC.

There are no registered conservation bodies for the area proposed for the quarry.

As such, it would be greatly appreciated if you could apply your mind to the attached reports and provide comment as soon as is convenient, but no later than 6 January 2017.


Please feel free to contact me should you have any queries or concerns.

Kind regards



Jenna Lavin  
Director: Heritage  
Cedar Tower Services (Pty) Ltd  
34 Harries Street, Plumstead, Cape Town, 7800  
Tel: +27 (0)21 013 0131, Cell: +27 (0)83 619 0854  
[info@cedartower.co.za](mailto:info@cedartower.co.za) \* [www.cedartower.co.za](http://www.cedartower.co.za)

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 HIAGraniteQuarry\_Reduced.pdf  
2027K

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Jenna Lavin <jenna.lavin@cedartower.co.za>  
To: AlwynBurger@swartland.org.za  
Cc: Jolandie <Jolandie@rumboll.co.za>

Mon, Nov 28, 2016 at 11:47 AM

Dear Mr Burger,

As per my previous email, please find the Archaeological specialist assessment attached.

Kind regards


Jenna



Jenna Lavin  
Director: Heritage  
Cedar Tower Services (Pty) Ltd  
34 Harries Street, Plumstead, Cape Town, 7800  
Tel: +27 (0)21 013 0131, Cell: +27 (0)83 619 0854  
[info@cedartower.co.za](mailto:info@cedartower.co.za) \* [www.cedartower.co.za](http://www.cedartower.co.za)

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 AIAGraniteQuarry\_reduced.pdf  
3005K

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Jenna Lavin <jenna.lavin@cedartower.co.za>  
To: AlwynBurger@swartland.org.za  
Cc: Jolandie <Jolandie@rumboll.co.za>

Mon, Nov 28, 2016 at 11:48 AM

Dear Mr Burger,

As per my previous email, please find the Heritage Screener attached.

Kind regards


Jenna



Jenna Lavin  
Director: Heritage  
Cedar Tower Services (Pty) Ltd  
34 Harries Street, Plumstead, Cape Town, 7800  
Tel: +27 (0)21 013 0131, Cell: +27 (0)83 619 0854  
[info@cedartower.co.za](mailto:info@cedartower.co.za) \* [www.cedartower.co.za](http://www.cedartower.co.za)

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 CTS16\_052\_CKRumboll\_GraniteQuarry.pdf  
2876K

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Jenna Lavin <jenna.lavin@cedartower.co.za>  
To: AlwynBurger@swartland.org.za  
Cc: Jolandie <Jolandie@rumboll.co.za>

Tue, Nov 29, 2016 at 2:24 PM

Dear Mr Burger,

Have you received my previous emails with the reports attached?

Please advise.

Kind regards

Jenna



Jenna Lavin  
Director: Heritage  
Cedar Tower Services (Pty) Ltd  
34 Harries Street, Plumstead, Cape Town, 7800  
Tel: +27 (0)21 013 0131, Cell: +27 (0)83 619 0854  
[info@cedartower.co.za](mailto:info@cedartower.co.za) \* [www.cedartower.co.za](http://www.cedartower.co.za)

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---

Alwyn Burger <AlwynBurger@swartland.org.za>  
To: Jenna Lavin <jenna.lavin@cedartower.co.za>

Tue, Nov 29, 2016 at 2:51 PM

Hi Jenna

This is the first email I receive from you.

Regards

*Alwyn Burger*

*Senior Town Planner / Senior Stadsbeplanner*

**Swartland Munisipaliteit / Municipality**

**Tel no : 022-487 9400**

**Faks no : 022-487 9440**

**Sel no : 076 480 9870**

**From :** Jenna Lavin [mailto:[jenna.lavin@cedartower.co.za](mailto:jenna.lavin@cedartower.co.za)]  
**Sent :** Tuesday, November 29, 2016 2:25 PM  
**To :** Alwyn Burger  
**Cc :** Jolandie  
**Subject :** Re: HIA: Malmesbury Granite Quarry

Dear Mr Burger,

Have you received my previous emails with the reports attached?

Please advise.

Kind regards

Jenna

	Jenna Lavin Director: Heritage Cedar Tower Services (Pty) Ltd 34 Harries Street, Plumstead, Cape Town, 7800 Tel: +27 (0)21 013 0131, Cell: +27 (0)83 619 0854 <a href="mailto:info@cedartower.co.za">info@cedartower.co.za</a> * <a href="http://www.cedartower.co.za">www.cedartower.co.za</a>
--	--

On Mon, Nov 28, 2016 at 11:48 AM, Jenna Lavin <[jenna.lavin@cedartower.co.za](mailto:jenna.lavin@cedartower.co.za)> wrote:

Dear Mr Burger,

As per my previous email, please find the Heritage Screener attached.

Kind regards

Jenna

	Jenna Lavin Director: Heritage Cedar Tower Services (Pty) Ltd 34 Harries Street, Plumstead, Cape Town, 7800 Tel: +27 (0)21 013 0131, Cell: +27 (0)83 619 0854 <a href="mailto:info@cedartower.co.za">info@cedartower.co.za</a> * <a href="http://www.cedartower.co.za">www.cedartower.co.za</a>
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Jenna

	Jenna Lavin Director: Heritage Cedar Tower Services (Pty) Ltd 34 Harries Street, Plumstead, Cape Town, 7800 Tel: +27 (0)21 013 0131, Cell: +27 (0)83 619 0854 <a href="mailto:info@cedartower.co.za">info@cedartower.co.za</a> * <a href="http://www.cedartower.co.za">www.cedartower.co.za</a>
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On Mon, Nov 28, 2016 at 11:46 AM, Jenna Lavin <[jenna.lavin@cedartower.co.za](mailto:jenna.lavin@cedartower.co.za)> wrote:

Dear Mr Burger,

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Please feel free to contact me should you have any queries or concerns.

Kind regards

	<p>Jenna Lavin Director: Heritage Cedar Tower Services (Pty) Ltd 34 Harries Street, Plumstead, Cape Town, 7800 Tel: +27 (0)21 013 0131, Cell: +27 (0)83 619 0854 <a href="mailto:info@cedartower.co.za">info@cedartower.co.za</a> * <a href="http://www.cedartower.co.za">www.cedartower.co.za</a></p>
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---

Jenna Lavin <[jenna.lavin@cedartower.co.za](mailto:jenna.lavin@cedartower.co.za)>  
To: Alwyn Burger <[AlwynBurger@swartland.org.za](mailto:AlwynBurger@swartland.org.za)>

Tue, Nov 29, 2016 at 2:56 PM

Dear Mr Burger,

I have sent you the files via a site called We Transfer. Please let me know if you receive them?

Kind regards

Jenna



Jenna Lavin  
Director: Heritage  
Cedar Tower Services (Pty) Ltd  
34 Harries Street, Plumstead, Cape Town, 7800  
Tel: +27 (0)21 013 0131, Cell: +27 (0)83 619 0854  
[info@cedartower.co.za](mailto:info@cedartower.co.za) \* [www.cedartower.co.za](http://www.cedartower.co.za)

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Alwyn Burger <[AlwynBurger@swartland.org.za](mailto:AlwynBurger@swartland.org.za)>  
To: Jenna Lavin <[jenna.lavin@cedartower.co.za](mailto:jenna.lavin@cedartower.co.za)>

Wed, Nov 30, 2016 at 8:52 AM

Morning Jenna

I have received the files. I shall comment as soon as possible.

Regards

*Alwyn Burger*

*Senior Town Planner / Senior Stadsbeplanner*

**Swartland Munisipaliteit / Municipality**

Tel no : 022-487 9400

Faks no : 022-487 9440

Sel no : 076 480 9870

From: Jenna Lavin [mailto:[jenna.lavin@cedartower.co.za](mailto:jenna.lavin@cedartower.co.za)]  
Sent: Tuesday, November 29, 2016 2:57 PM  
To: Alwyn Burger  
Subject: Re: HIA: Malmesbury Granite Quarry

Dear Mr Burger,

I have sent you the files via a site called We Transfer. Please let me know if you receive them?

Kind regards

Jenna

Jenna Lavin  
Director: Heritage  
Cedar Tower Services (Pty) Ltd  
34 Harries Street, Plumstead, Cape Town, 7800  
Tel: +27 (0)21 013 0131, Cell: +27 (0)83 619 0854  
[info@cedartower.co.za](mailto:info@cedartower.co.za) \* [www.cedartower.co.za](http://www.cedartower.co.za)

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Jenna Lavin <jenna.lavin@cedartower.co.za>  
To: Alwyn Burger <AlwynBurger@swartland.org.za>

Mon, Dec 5, 2016 at 8:16 AM

Dear Mr Burger,

Please feel free to contact me should you have any questions regarding the HIA. I am happy to assist.

I look forward to receiving your comment at your earliest convenience.

Kind regards

Jenna



Jenna Lavin  
Director: Heritage  
Cedar Tower Services (Pty) Ltd  
34 Harries Street, Plumstead, Cape Town, 7800  
Tel: +27 (0)21 013 0131, Cell: +27 (0)83 619 0854  
[info@cedartower.co.za](mailto:info@cedartower.co.za) \* [www.cedartower.co.za](http://www.cedartower.co.za)

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Jenna Lavin <jenna.lavin@cedartower.co.za>  
To: Alwyn Burger <AlwynBurger@swartland.org.za>

Tue, Dec 13, 2016 at 8:45 AM

Dear Mr Burger,

Have you had an opportunity to look at the documents I have sent through?

Please feel free to contact me should you have any questions.

Best wishes for the festive season and kind regards

Jenna



Jenna Lavin  
Director: Heritage  
Cedar Tower Services (Pty) Ltd  
34 Harries Street, Plumstead, Cape Town, 7800  
Tel: +27 (0)21 013 0131, Cell: +27 (0)83 619 0854  
[info@cedartower.co.za](mailto:info@cedartower.co.za) \* [www.cedartower.co.za](http://www.cedartower.co.za)

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---

Alwyn Burger <AlwynBurger@swartland.org.za>  
To: Jenna Lavin <jenna.lavin@cedartower.co.za>  
Cc: Alwyn Zaayman <AlwynZaayman@swartland.org.za>

Tue, Dec 13, 2016 at 8:54 AM

Morning Jenna



I have read the documents and written you a letter which you will receive hopefully this week

Swartland Municipality supports the findings of the study.

Regards

*Alwyn Burger*

*Senior Town Planner / Senior Stadsbeplanner*

Swartland Munisipaliteit / Municipality

Tel no : 022-487 9400

Faks no : 022-487 9440

Sel no : 076 480 9870

From: Jenna Lavin [mailto:[jenna.lavin@cedartower.co.za](mailto:jenna.lavin@cedartower.co.za)]  
Sent: Tuesday, December 13, 2016 8:45 AM  
To: Alwyn Burger  
Subject: Re: HIA: Malmesbury Granite Quarry

Dear Mr Burger,

Have you had an opportunity to look at the documents I have sent through?

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Best wishes for the festive season and kind regards

Jenna

	<p>Jenna Lavin Director: Heritage Cedar Tower Services (Pty) Ltd 34 Harries Street, Plumstead, Cape Town, 7800 Tel: +27 (0)21 013 0131, Cell: +27 (0)83 619 0854 <a href="mailto:info@cedartower.co.za">info@cedartower.co.za</a> * <a href="http://www.cedartower.co.za">www.cedartower.co.za</a></p>
--	--

On Mon, Dec 5, 2016 at 8:16 AM, Jenna Lavin <[jenna.lavin@cedartower.co.za](mailto:jenna.lavin@cedartower.co.za)> wrote:

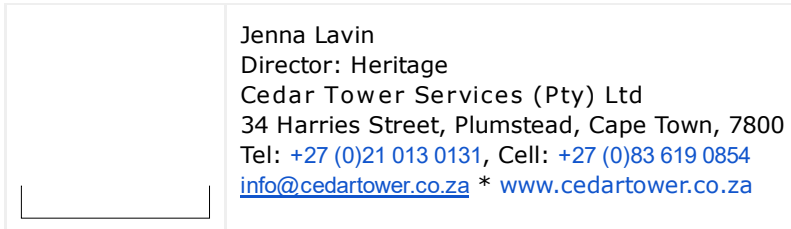
Dear Mr Burger,

Please feel free to contact me should you have any questions regarding the HIA. I am happy to assist.

I look forward to receiving your comment at your earliest convenience.

Kind regards

Jenna



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[Quoted text hidden]

---

Jenna Lavin <[jenna.lavin@cedartower.co.za](mailto:jenna.lavin@cedartower.co.za)>  
To: Alwyn Burger <[AlwynBurger@swartland.org.za](mailto:AlwynBurger@swartland.org.za)>  
Cc: Alwyn Zaayman <[AlwynZaayman@swartland.org.za](mailto:AlwynZaayman@swartland.org.za)>

Tue, Dec 13, 2016 at 9:00 AM

Dear Mr Burger,

Many thanks for your time and prompt response.

I hope you have a wonderful December.

Kind regards

Jenna



Jenna Lavin  
Director: Heritage  
Cedar Tower Services (Pty) Ltd  
34 Harries Street, Plumstead, Cape Town, 7800  
Tel: +27 (0)21 013 0131, Cell: +27 (0)83 619 0854  
[info@cedartower.co.za](mailto:info@cedartower.co.za) \* [www.cedartower.co.za](http://www.cedartower.co.za)

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CONSECUTIVE CLEAN AUDITS  
2011 - 2015



Munisipaliteit  
Municipality  
Umasipala

Verbind tot uitnemende dienslewering  
Dedicated to service excellence  
Ukuzimisela ukwenza umsebenzi ogqwesileyo

Lêer verw/  
File ref: 15/3/1

Navrae/Enquiries  
Mr A J Burger

9 December 2016

Cedar Tower Services (Pty) Ltd  
34 Harries Street  
Plumstead  
CAPE TOWN  
7800

Attention: Jenna Lavin

Madam

**HERITAGE IMPACT ASSESSMENT : PROPOSED EXTENSION OF AN EXISTING GRANITE QUARRY ON PORTION 1 OF FARM 814 AND REMAINDER OF FARM 830, DIVISION MALMESBURY**

**HWC Ref: 16072706AS0823E**

You emails dated 29 November 2016 regarding the subject refers.

Swartland Municipality supports the findings of the heritage impact assessment.

Yours faithfully

  
**MUNICIPAL MANAGER**  
per Department Development Services  
AJB/ds