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**REPORT ON AN ARCHAEOLOGICAL IMPACT ASSESSMENT
FOR THE EXPANSION OF THE LAFARGE AGGREGATE QUARRY
NEAR POLOKWANE, LIMPOPO PROVINCE**

For:

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SUMMARY

At the end of August Anton Pelsler Archaeological Consulting was requested by Lafarge Mining SA (Pty) Ltd to investigate the accidental discovery of a number of human skeletons at their Lafarge Aggregates quarry near Polokwane in Limpopo. The discoveries were made during blasting operations for the expansion of the existing quarry. At least 5 fairly complete skeletons were recovered in the process and taken to the District Coroner, under supervision of the SAPS. It seems that these remains were not part of a formal, historical cemetery, and Anton Pelsler was therefore called in to assess these discoveries. It was clear that these burials dated to the Iron Age, and possibly to the Eiland facies.

During the site visit conducted during the 24th of August we were accompanied to the area by the Quarry Manager Me. Melaney Beneke, who also indicated an existing, fenced-off, cemetery to us, as well as a fenced-off stone walled Iron Age site on the property. Both these sites could possibly be negatively impacted upon in the future by mining expansion and it was decided that an Archaeological Impact Assessment should be conducted on the property of the Quarry. This assessment was also required by DME. Over and above the known remains and sites, more archaeological sites and remains were identified and recorded during the recent survey, and this document discusses the results of this and puts forward a number of recommendations regarding the mitigation of the impacts of future mining expansion on these heritage resources, as well as the archaeological investigation and rescue of the exposed human skeletal and other Iron Age cultural remains.

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1. INTRODUCTION

At the end of August Anton Pelsler Archaeological Consulting was requested by Lafarge Mining SA (Pty) Ltd to investigate the accidental discovery of a number of human skeletons at their Lafarge Aggregates quarry near Polokwane in Limpopo. The discoveries were made during blasting operations for the expansion of the existing quarry. At least 5 fairly complete skeletons were recovered in the process and taken to the District Coroner, under supervision of the SAPS. It seems that these remains were not part of a formal, historical cemetery, and Anton Pelsler was therefore called in to assess these discoveries. It was clear that these burials dated to the Iron Age, and possibly to the Eiland facies. During the site visit the remains of at least another 5 individuals were also identified.

An existing, fenced-off, cemetery to us, as well as a fenced-off stone walled Iron Age site were known to exist on the property as well. Both these sites could possibly be negatively impacted upon in the future by mining expansion and it was decided that an Archaeological Impact Assessment should be conducted on the property of the Quarry. This assessment was also required by DME. Over and above these known remains and sites, more archaeological sites and remains were identified and recorded during the September AIA.

The client indicated the boundaries of the area to be assessed and the fieldwork focused on this.

2. TERMS OF REFERENCE

The Terms of Reference for the study were to:

1. Conduct a desktop study regarding the archaeology and history of the area, and to undertake a physical survey in the area of proposed development
2. Identify all objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located in the area;
3. Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value;
4. Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions;
5. Propose suitable mitigation measures to minimize possible further negative impacts on the cultural resources;
6. Review applicable legislative requirements;

3. LEGISLATIVE REQUIREMENTS

Aspects concerning the conservation of cultural resources are dealt with mainly in two acts. These are the National Heritage Resources Act (Act 25 of 1999) and the National Environmental Management Act (Act 107 of 1998).

3.1 The National Heritage Resources Act

According to the above-mentioned act the following is protected as cultural heritage resources:

- a. **Archaeological artifacts, structures and sites older than 100 years**
- b. Ethnographic art objects (e.g. prehistoric rock art) and ethnography
- c. Objects of decorative and visual arts
- d. Military objects, structures and sites older than 75 years
- e. Historical objects, structures and sites older than 60 years
- f. Proclaimed heritage sites
- g. **Grave yards and graves older than 60 years**
- h. Meteorites and fossils
- i. Objects, structures and sites of scientific or technological value.

The national estate includes the following:

- a. Places, buildings, structures and equipment of cultural significance
- b. Places to which oral traditions are attached or which are associated with living heritage
- c. Historical settlements and townscapes
- d. Landscapes and features of cultural significance
- e. Geological sites of scientific or cultural importance
- f. **Sites of Archaeological and palaeontological importance**
- g. **Graves and burial grounds**
- h. Sites of significance relating to the history of slavery
- i. **Movable objects (e.g. archaeological, palaeontological, meteorites, geological specimens, military, ethnographic, books etc.)**

A Heritage Impact Assessment (HIA) is the process to be followed in order to determine whether any heritage resources are located within the area to be developed as well as the possible impact of the proposed development on these resources. An Archaeological Impact Assessment (AIA) only looks at archaeological resources. An HIA must be done under the following circumstances:

- a. The construction of a linear development (road, wall, power line, canal etc.) exceeding 300m in length
- b. The construction of a bridge or similar structure exceeding 50m in length
- c. Any development or other activity that will change the character of a site and exceed 5 000m² or involve three or more existing erven or subdivisions thereof
- d. Re-zoning of a site exceeding 10 000 m²
- e. Any other category provided for in the regulations of SAHRA or a provincial heritage authority

Structures

Section 34 (1) of the mentioned act states that no person may demolish any structure or part thereof which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

A structure means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith.

Alter means any action affecting the structure, appearance or physical properties of a place or object, whether by way of structural or other works, by painting, plastering or the decoration or any other means.

Archaeology, palaeontology and meteorites

Section 35(4) of this act deals with archaeology, palaeontology and meteorites. The act states that no person may, without a permit issued by the responsible heritage resources authority (national or provincial):

- a. destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
- b. destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
- c. trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or
- d. bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.
- e. alter or demolish any structure or part of a structure which is older than 60 years as protected.

The above mentioned may only be disturbed or moved by an archaeologist, after receiving a permit from the South African Heritage Resources Agency (SAHRA). In order to demolish such a site or structure, a destruction permit from SAHRA will also be needed.

Human remains

Graves and burial grounds are divided into the following:

- a. ancestral graves
- b. royal graves and graves of traditional leaders
- c. graves of victims of conflict
- d. graves designated by the Minister
- e. historical graves and cemeteries
- f. human remains

In terms of Section 36(3) of the National Heritage Resources Act, no person may, without a permit issued by the relevant heritage resources authority:

- a. destroy, damage, alter, exhume or remove from its original position of otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;

- b. destroy, damage, alter, exhume or remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
- c. bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation, or any equipment which assists in the detection or recovery of metals.

Human remains that are less than 60 years old are subject to provisions of the Human Tissue Act (Act 65 of 1983) and to local regulations. Exhumation of graves must conform to the standards set out in the **Ordinance on Excavations (Ordinance no. 12 of 1980)** (replacing the old Transvaal Ordinance no. 7 of 1925).

Permission must also be gained from the descendants (where known), the National Department of Health, Provincial Department of Health, Premier of the Province and local police. Furthermore, permission must also be gained from the various landowners (i.e. where the graves are located and where they are to be relocated to) before exhumation can take place.

Human remains can only be handled by a registered undertaker or an institution declared under the **Human Tissues Act (Act 65 of 1983 as amended)**.

Unidentified/unknown graves are also handled as older than 60 until proven otherwise.

3.2 The National Environmental Management Act

This act states that a survey and evaluation of cultural resources must be done in areas where development projects, that will change the face of the environment, will be undertaken. The impact of the development on these resources should be determined and proposals for the mitigation thereof are made.

Environmental management should also take the cultural and social needs of people into account. Any disturbance of landscapes and sites that constitute the nation's cultural heritage should be avoided as far as possible and where this is not possible the disturbance should be minimized and remedied.

4. METHODOLOGY

4.1 Survey of literature

A survey of literature, was undertaken in order to place the development area in an archaeological and historical context. The sources consulted in this regard are indicated in the bibliography.

4.2 Field Survey

The assessment was conducted according to generally accepted AIA/HIA practices and was aimed at locating all possible objects, sites and features of cultural heritage (archaeological and historical) significance in the area of the proposed development. The location/position of

all sites, features and objects was determined by means of a Global Positioning System (GPS), while photographs were also taken where needed.

The assessment was undertaken both on foot and by driving through the area under scrutiny. Areas with the potential of containing archaeological and other sites were focused on during the survey. This included rocky outcrops, erosion dongas and unnatural clumps of trees and other vegetation.

4.3 Oral histories

People from local communities are sometimes interviewed in order to obtain information relating to the surveyed area. It needs to be stated that this is not applicable under all circumstances. When applicable, the information is included in the text and referred to in the bibliography.

4.4 Documentation

All sites, objects, features and structures identified are documented according to the general minimum standards accepted by the archaeological profession. Co-ordinates of individual localities are determined by means of the Global Positioning System (GPS). The information is added to the description in order to facilitate the identification of each locality.

5. DESCRIPTION OF THE AREA

The Lafarge Aggregate Quarry in Polokwane is located close to the Polokwane Nature Reserve and on portions of the farm Weltevreden 746LS, in Limpopo. Most of the area surveyed has been disturbed or destroyed by mining activities, and as a result very little of the original topography and vegetation still exist. Only a few small sections of the bushveld vegetation and granite hills and outcrops are still present. Past and recent expansion of the quarry has impacted on the heritage of the area, resulting in the disturbance of earlier Iron Age sites and burials. It was the accidental discovery of human skeletal remains that warranted the current assessment of the area for possible future expansion of the aggregate quarry.

It should be mentioned that the area where the Iron Age remains were disturbed had no indication of any stone walling, and the discoveries should be seen as purely accidental. Other known heritage sites on the property had been previously fenced-in and are being protected to a certain extent.

Dense grass cover and vegetation in certain sections made visibility difficult and areas around existing portions of granite outcrops were virtually impossible to reach. The assessment focused on the area directly bordering the existing quarry operations and inside the quarry itself (disturbed areas).

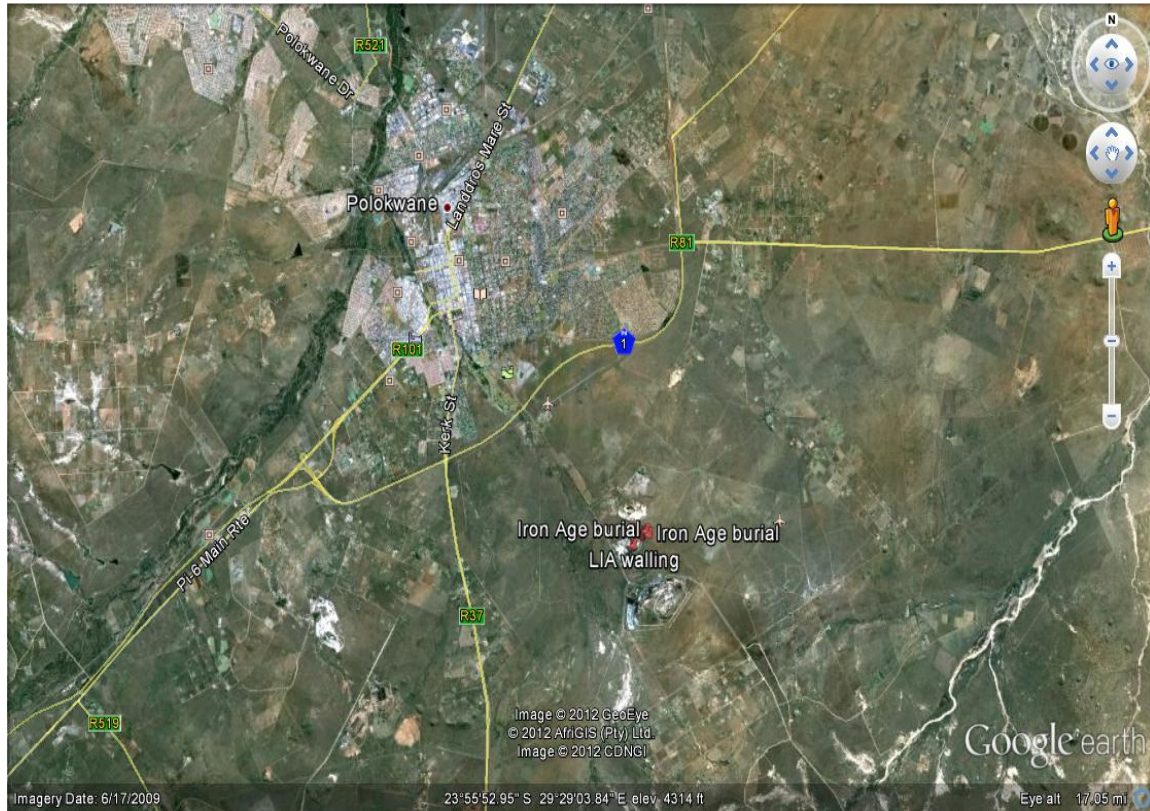


Fig. 1: Google location of area and sites found (Google Earth 2012 – Image date 2009/06/17).



Fig. 2: View from quarry to area fairly undisturbed vegetation.



Fig. 3: Dense vegetation in certain portions around the quarry.



Fig. 4: Small sections of granite hill still exist, but could not be reached due to dense vegetation.



**Fig. 5: Rock overhang (close-up of previous photo).
This section should be investigated before quarrying work is undertaken.**



**Fig. 6: View from the quarry of another undisturbed area.
No sites were visible here.**



Fig. 7: View of the main quarry area.

6. DISCUSSION

All the sites (known and newly identified) belong to the Iron Age and more recent Historical (Colonial) time periods. A general background to archaeology is given in the next section, while a short historical background is also provided.

The Stone Age is the period in human history when lithic (stone) material was mainly used to produce tools. In South Africa the Stone Age can be divided into basically three periods. It is however important to note that dates are relative and only provide a broad framework for interpretation. A basic sequence for the South African Stone Age (Lombard et.al 2012) is as follows:

- Earlier Stone Age (ESA) up to 2 million – more than 200 000 years ago
- Middle Stone Age (MSA) less than 300 000 – 20 000 years ago
- Later Stone Age (LSA) 40 000 years ago – 2000 years ago

It should also be noted that these dates are not a neat fit because of variability and overlapping ages between sites (Lombard et.al 2012: 125).

According to Bergh (1999) no Stone Age sites or occurrences are known in the direct area, although some MSA sites, including rock paintings, are known in the larger geographical area around Polokwane (Bergh 1999:4-5). This includes a site called Grace Dieu and another called Mwulu's Cave.

Stone Age material is frequently found close to rivers or other watercourses, but none was located during this assessment. It is possible that sites occurred close to the granite hills and outcrops (most of which had been destroyed by the quarrying), while the one shelter (see **Fig. 5**) that could not be reached due to the inaccessibility of the site in the area could possibly contain cultural material. **This site should be investigated before quarrying work continues here.**

The Iron Age is the name given to the period of human history when metal was mainly used to produce artifacts. In South Africa it can be divided in two separate phases according to Van der Ryst & Meyer (in Berg 1999: 96-98), namely:

Early Iron Age (EIA) 200 – 1000 A.D.
Late Iron Age (LIA) 1000 – 1850 A.D.

Huffman (2007: xiii) however indicates that a Middle Iron Age should be included. His dates, which now seem to be widely accepted in archaeological circles, are:

Early Iron Age (EIA) 250 – 900 A.D.
Middle Iron Age (MIA) 900 – 1300 A.D.
Late Iron Age (LIA) 1300 – 1840 A.D.

Bergh does not indicate the presence of any known EIA sites in close proximity to Polokwane, although LIA stone walled sites are shown (Bergh 1999: 6-7). Iron smelting terrains are known as well (p.8). Northern Sotho (Tlokwa), the Koni of Matlala and Northern Ndebele (e.g. Langa of Mapela) settled in the area from the 1700's onwards (Bergh 1999: 107-108).

Based on Tom Huffman's research it is possible that EIA, MIA and LIA sites, features or material could be present in the larger area. This could include the Mzonjani facies of the Urewe Tradition, dating to between AD450 and AD750 (Huffman 2007: 127); the Doornkop facies of the Kalundu Tradition (AD750 to AD1000) [p.275]; the Eiland facies of the same tradition dating between AD1000 and AD1300 (p.227); the Icon facies of the Urewe Tradition (AD1300-1500)[p.183], as well as the Letaba facies of Kalundu, dating to between AD1600 – AD1840 (p.267).

Most of the sites, features and material identified during the assessment date to the Iron Age. These will be discussed in more detail further on in the report.

The historical age started with the first recorded oral histories in the area. It includes the moving into the area of people that were able to read and write. The first Europeans to move through this area were the Voortrekkers (under Trichardt & Van Rensburg) who moved through the area around 1836 (Bergh 1999: 14). The town of Pietersburg (Polokwane) was established officially in 1886 (Bergh 1999: 20). During the Anglo-Boer War (1899-1902) a number of skirmishes were fought around the area, while there was also a Concentration Camp for Boer Women and Children in Pietersburg at the time (Bergh 1999: 54).

Two sites dating to the very recent historical period were identified during the assessment.

Discussion of Sites Recorded

The first site located on the property is a recent historical cemetery with at least 2 stone packed graves, although there might be more here. According to the Quarry Manager (Me. M.Beneke) community members do visit the site from time to time, and it has been fenced-off. It is located very close to the quarry and fly-rock from blasting activities was visible on the site. Future expansion of the quarry would also negatively impact on the site and the exhumation and relocation of the graves on the site should be considered. From a cultural

heritage point of view graves are always highly significant and negative impacts by development should be mitigated. Should their relocation be considered extensive social consultation should be undertaken and the necessary permits be obtained.

Site Location: **S23.95823 E29.49928.**



Fig. 8: Fenced-in historical cemetery on the property.

The second historical site consist of some stone walling and old drills that are possibly related to recent historical quarrying in the area. The site is located close to some granite outcrops. The age and significance is difficult to determine, but the recording of the site during the assessment is seen as sufficient. If the site is impacted on by future mining activities no further mitigation is required.

Site Location: **S23.95689 E29.49659.**



Fig. 9: Recent stone walling near granite outcrop.

During the end of August site visit two sites were recorded and assessed by the archaeologist. The first site is located inside the main quarry area, and was discovered accidentally during blasting activities. The skeletal remains of at least 5 individuals were uncovered as a result and has been removed by the SAPS Polokwane and is currently housed at the provincial coroners' office. During the site visit the remains of a further number (around 5 as well) of skeletons were observed, and although scattered some might be close to their original burial positions. Pottery was also observed during the visit, and although no stone walling or other features were seen it is possible that an Iron Age settlement was once situated here.

Preliminary observations (based on decorated fragments of pottery) seem to indicate that the site and burials could date to the so-called Eiland facies of the Iron Age (AD1000-AD1300). The site has been cordoned off and archaeological mitigation of the site and the skeletal remains has been proposed. The client has indicated that they are willing for this to be done, and a permit will be applied for at SAHRA as a matter of urgency.

Site Location: **S23.95745 E29.49955.**



Fig. 10: Location of Iron Age site and burials.



Fig. 11: Scattered human remains in the quarry area.



Fig. 12: More scattered human remains on the site.

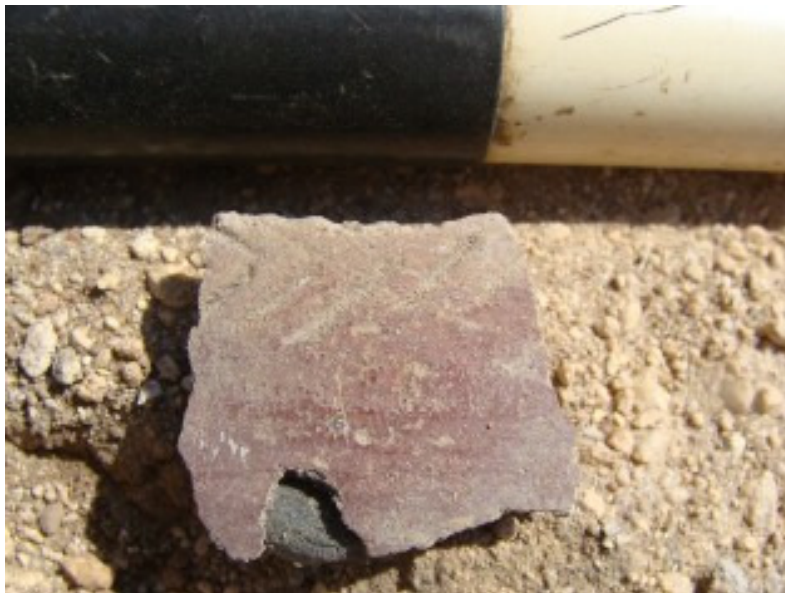


Fig. 13: Small fragment of decorated pottery on the site.

The other Iron Age site recorded during the site visit was a fenced-in Late Iron Age site and sign-posted as an Archaeological site. The current Quarry Manager knew about its existence but was not sure when the site was identified and fenced-off. The site consist of some low stone walling and terraces, situated close to granite outcrops and boulders where some cultural material (pottery and animal bones) are visible. The site is located very close to the edge of the quarry and future expansion will undoubtedly impact negatively on the site. It is recommended that should this happen mitigation measures should be included which could include controlled archaeological excavations. Alternatively an Archaeological Heritage Management Plan should be drafted and implemented.

Site Location: **S23.95689 E29.49690.**



Fig. 14: Fenced-off Archaeological Site on the property.

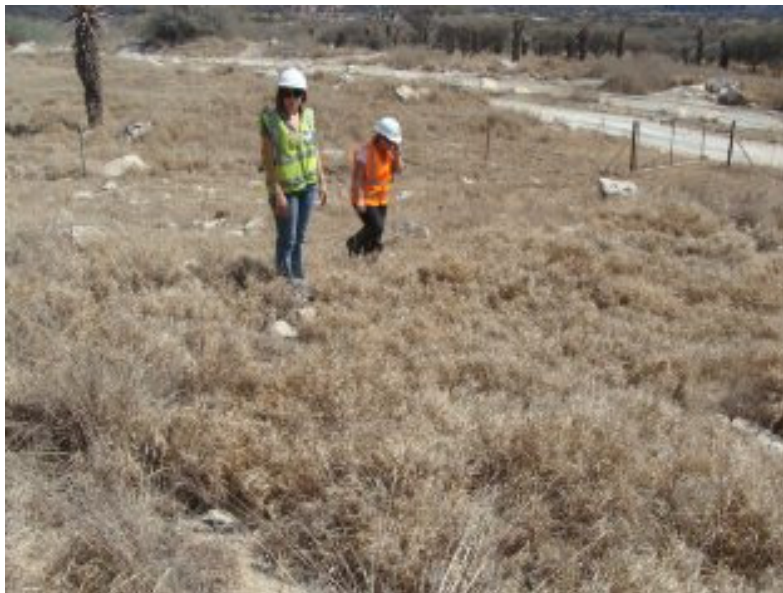


Fig. 15: Stone walling (terracing) at the site.

During the formal archaeological assessment of the property further Iron Age sites and features were identified and recorded. Close to the historical walling, and next to the granite outcrop here, a few bleached human skull fragments were found. The pieces as probably out of context and was more than likely “dragged” here by animals (porcupines, jackals) at some point recently.



Fig. 16: Pieces of human skull.

The next site was the vague remnants of possible LIA stone walling close to some granite boulders. The site has been nearly completely destroyed by quarrying activities, with fly-rock from blasting covering most of what could have been a small stone walled homestead. Due to the disturbance caused it is not possible to conduct any mitigation and this assessment is deemed as sufficient recording.

Site Location: **S23.95980 E29.49730.**



Fig. 17: Remnants of LIA stone walling.

The next three sites are all burials and scattered Iron Age skeletal remains found in an area where site clearance and trenching has happened recently as part of ongoing quarrying activities. No stone walling or remnants of stone walling are visible anywhere here, but other

cultural material (pottery and pieces of hut clay) is further evidence of an earlier Iron Age settlement in the area. The remains of at least 3 individuals were identified, with one of them seemingly nearly complete and in position.

The decorated pottery found in the area and in close proximity to some the human skeletal remains provide a preliminary date of between AD1000 and AD1300 for the site and the burials. This indicates that the site possibly then belong to the Eiland facies of the Kalundu Iron Age Pottery Tradition (Huffman 2007: 227). These remains will have to be rescued and investigated together with those accidentally discovered inside the main quarry area.

Site Locations: **S23.95724 E29.50060; S23.95696 E29.50054; S23.95774 E29.50120.**



Fig. 19: Location of Iron Age burials and other material.



Fig. 20: Femur and pottery in area.



Fig. 21: Decorated pottery. Possibly Eiland (AD1000-AD1300).



Fig. 22: Hut clay found in the area.



Fig. 23: Another femur found.



Fig. 24: More human remains.



Fig. 25: In situ human skull. Part of one of the burials found in the area.



Fig. 26: Google view of area location and sites identified (Google Earth 2012 – Image date 2009/6/17).

7. CONCLUSIONS AND RECOMMENDATIONS

In conclusion it can be said that the archaeological assessment of the area in and around the Lafarge Aggregate Quarry in Polokwane has been completed successfully. The assessment was necessitated by the recent accidental discovery of Iron Age human remains and other material, while the Department of Minerals and Energy (DME) also requested Lafarge that such a study be undertaken for future quarry expansion.

Besides the exposed skeletons and other Iron Age material, a number of other sites and features were identified and recorded during earlier site visits and the AIA conducted in September. This included a fenced-in Iron Age site, as well as a recent historical cemetery. If these sites are to be impacted by future expansion mitigation measures will have to be employed. The following recommendations are made:

1. The rescue of the exposed Iron Age skeletons at the site is of extreme importance and should be finalized as soon as possible. This would include the skeletons already removed and currently kept at the Coroner. As part of the rescue some archaeological excavations to recover as much cultural material as possible from the site should also be undertaken, while the skeletons need to be investigated by a Forensic Anthropologist in order to determine age, sex and cultural affinity.

The process involved for the above include the application for an Archaeological Excavation Permit from the South African Heritage Resources Agency (SAHRA).

2. That any negative impacts on the formal cemetery, as well as the Fenced-in Archaeological Site on the property should be determined and that mitigation measures should be employed. This could include exhumation and relocation of the graves (after following the required processes and social consultation) and the excavation of the Iron Age site. Alternatively detailed Cultural Heritage Management Plans for these sites should be drafted and implemented.

3. Finally it is recommended that an Information Plaque on the archaeological discoveries at the sites be developed and erected at the Lafarge Plant.

Finally the subterranean presence of archaeological and/or historical sites, features or artifacts are always a distinct possibility, and this aspect needs to be kept in mind at all times. Care should therefore be taken during any development activities that if any of these are accidentally discovered, a qualified archaeologist be called in to investigate. This would include the discovery of previously unknown graves.

8. REFERENCES

Aerial views of the area and site distribution – Google Earth 2012: Image date 2009/06/17.

Bergh, J.S. (red.). 1999. **Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies.** Pretoria: J.L. van Schaik.

Knudson, S.J. 1978. **Culture in retrospect.** Chicago: Rand McNally College Publishing Company.

Huffman, T.N. 2007. **Handbook to the Iron Age: The Archaeology of Pre-Colonial Farming Societies in Southern Africa**. Scottsville: University of KwaZulu-Natal Press.

Lombard, M., L. Wadley, J. Deacon, S. Wurz, I. Parsons, M. Mohapi, J. Swart & P. Mitchell. 2012. **South African and Lesotho Stone Age Sequence Updated (I)**. South African Archaeological Bulletin **67** (195): 120–144, 2012.

Republic of South Africa. 1999. **National Heritage Resources Act** (No 25 of 1999). Pretoria: the Government Printer.

Republic of South Africa. 1998. **National Environmental Management Act** (no 107 of 1998). Pretoria: The Government Printer.

APPENDIX A

DEFINITION OF TERMS:

Site: A large place with extensive structures and related cultural objects. It can also be a large assemblage of cultural artifacts, found on a single location.

Structure: A permanent building found in isolation or which forms a site in conjunction with other structures.

Feature: A coincidental find of movable cultural objects.

Object: Artifact (cultural object).

(Also see Knudson 1978: 20).

APPENDIX B

DEFINITION/ STATEMENT OF HERITAGE SIGNIFICANCE:

- Historic value: Important in the community or pattern of history or has an association with the life or work of a person, group or organization of importance in history.
- Aesthetic value: Important in exhibiting particular aesthetic characteristics valued by a community or cultural group.
- Scientific value: Potential to yield information that will contribute to an understanding of natural or cultural history or is important in demonstrating a high degree of creative or technical achievement of a particular period
- Social value: Have a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.
- Rarity: Does it possess uncommon, rare or endangered aspects of natural or cultural heritage.
- Representivity: Important in demonstrating the principal characteristics of a particular class of natural or cultural places or object or a range of landscapes or environments characteristic of its class or of human activities (including way of life, philosophy, custom, process, land-use, function, design or technique) in the environment of the nation, province region or locality.

APPENDIX C

SIGNIFICANCE AND FIELD RATING:

Cultural significance:

- Low A cultural object being found out of context, not being part of a site or without any related feature/structure in its surroundings.
- Medium Any site, structure or feature being regarded less important due to a number of factors, such as date and frequency. Also any important object found out of context.
- High Any site, structure or feature regarded as important because of its age or uniqueness. Graves are always categorized as of a high importance. Also any important object found within a specific context.

Heritage significance:

- Grade I Heritage resources with exceptional qualities to the extent that they are of national significance
- Grade II Heritage resources with qualities giving it provincial or regional importance although it may form part of the national estate
- Grade III Other heritage resources of local importance and therefore worthy of conservation

Field ratings:

- i. National Grade I significance should be managed as part of the national estate
- ii. Provincial Grade II significance should be managed as part of the provincial estate
- iii. Local Grade IIIA should be included in the heritage register and not be mitigated (high significance)
- iv. Local Grade IIIB should be included in the heritage register and may be mitigated (high/ medium significance)
- v. General protection A (IV A) site should be mitigated before destruction (high/ medium significance)
- vi. General protection B (IV B) site should be recorded before destruction (medium significance)
- vii. General protection C (IV C) phase 1 is seen as sufficient recording and it may be demolished (low significance)

APPENDIX D

PROTECTION OF HERITAGE RESOURCES:

Formal protection:

National heritage sites and Provincial heritage sites – Grade I and II

Protected areas - An area surrounding a heritage site

Provisional protection – For a maximum period of two years

Heritage registers – Listing Grades II and III

Heritage areas – Areas with more than one heritage site included

Heritage objects – e.g. Archaeological, palaeontological, meteorites, geological specimens, visual art, military, numismatic, books, etc.

General protection:

Objects protected by the laws of foreign states

Structures – Older than 60 years

Archaeology, palaeontology and meteorites

Burial grounds and graves

Public monuments and memorials

APPENDIX E

HERITAGE IMPACT ASSESSMENT PHASES

1. Pre-assessment or Scoping phase – Establishment of the scope of the project and terms of reference.
2. Baseline Assessment – Establishment of a broad framework of the potential heritage of an area.
3. Phase I Impact Assessment – Identifying sites, assess their significance, make comments on the impact of the development and makes recommendations for mitigation or conservation.
4. Letter of Recommendation for Exemption – If there is no likelihood that any sites will be impacted.
5. Phase II Mitigation or Rescue – Planning for the protection of significant sites or sampling through excavation or collection (after receiving a permit) of sites that may be lost.
6. Phase III Management Plan – For rare cases where sites are so important that development cannot be allowed.