

**ARCHAEOLOGICAL INVESTIGATION OF SITES ON A PORTION
OF THE FARM HATHERLEY 331JR, PRETORIA DISTRICT**

For:

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REPORT: 97KH19

Date of investigation: October 1997

Date of report: January 1998

**SUMMARY**

Archaeological investigation of sites on a portion of the farm Hatherley 331JR, Pretoria district.

It is proposed by the City Council of Pretoria to develop a portion of the farm Hatherley 331JR, east of Pretoria, for urban housing. During an impact assessment survey, a number of sites of cultural significance were identified.

It was decided to investigate these sites by means of archaeological methods:

- To confirm the original evaluation of their significance in order to determine if

they can be forfeited to the proposed development or not.

- To document the sites sufficiently in order to gather as much information possible, so that even if they are destroyed, the information concerning them will be retained for posterity.

After excavation and documentation took place, it is the viewpoint that our understanding and documentation of these sites is sufficient so that the proposed development can take place. It is, however, recommended in section 6 of this report that

- Appropriate measures must be taken to safeguard the cultural sites identified as of high significance, ie. the Sammy Marks bridge and the First South African War fortifications, so that they are not endangered during construction activities and afterwards.
- Archaeological objects and features, due to their specific nature, usually occur below ground level. It is therefore recommended that the developers be notified that archaeological sites might be exposed during construction. If anything is noticed, it should be reported immediately to a museum, preferably one at which an archaeologist is available, so that an investigation and evaluation of the find can be made.

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OF THE FARM HATHERLEY 331 JR, PRETORIA DISTRICT**

1. INTRODUCTION

During October 1997 the National Cultural History Museum carried out archaeological investigations on a portion of the farm Hatherley 331 JR, east of Pretoria. This was done on request of LTA Housing, as urban development (Nelmapius Ext. 3) is planned for the area. This followed on a survey that was previously done in the same area, during which a number of cultural resources were identified (see National Cultural History Museum, 1997).

As the proposed development would impact on a number of the identified sites, it was recommended that mitigation measures be implemented where possible. It was suggested that this take on the form of excavating and documenting of the sites, after which they possibly could be forfeited to the development.

A second category of sites was also identified during the survey. These were judged to be of high cultural and historical significance and should be conserved. As a safeguard against possible damage or destruction, it was recommended that these sites should be comprehensively documented by means of drawing and photography.

The terms of reference for this project were therefore formulated as follows:

To investigate the sites on the relevant portion of the farm Hatherley by means of archaeological and other methods. They must be documented sufficiently in order that, if they are destroyed, the information regarding them will be retained for posterity.

2. DESCRIPTION OF THE AREA

The area under consideration is located on sections of the farm Hatherley 331JR in the Pretoria district of Gauteng Province.

The geology of the area is made up of shale of the Magaliesberg Formation of the Pretoria Group of the Transvaal Sequence. Some later intrusions of diabase occur as outcrops in the area.

The original vegetation of the area is classified as Bankenveld (Acocks 1975:99). This is open savanna with **Acacia caffra** and **Celtis africana** trees dominating. A large variety of grass species occurs. Acocks indicate that intensive cultivation of this type of veld by Iron Age people resulted in **Hyparrhenia hirta** (blougras/steekgras) becoming very dominant in the disturbed areas. The next veld type, Sourish Mixed Bushveld (Acocks 1975:48), occurs just to the north of this and the change over is sometimes indistinct. This latter veldtype is sometimes found in the Bankenveld on rocky outcrops. It includes **Acacia karroo**, **Acacia caffra** and **Rhus sp** as some of the principal trees, with **Cymbopogon plurinades** and **Themeda trianda** as dominant grasses. Large sections of the area have been cultivated in the past, with the result that the original vegetation does not exist anymore.

A number of quarries and pits have been excavated in recent times in the area, but fortunately did not damage any of the archaeological sites.

3. THE EXCAVATIONS

The aim of the excavations was to determine the origin, nature and function of the structures (Fig. 1) and dating it through analysis of construction techniques and cultural material found during the excavation. The excavations were carried out according to generally accepted archaeological principles and methods, and all features and artifacts retrieved were documented and analyzed with these principles and methods in mind. Every structure and find was photographed, as well as drawn to scale.

Each excation will be discussed separately in this report.

EXCAVATION 1

Excavation 1 is located at 25°44'23" S and 28°22'23" E. A block, 12,5 x 2,0 m, was laid out over the southern wall of the remains of an old homestead. This structure is rectangular in plan, with a door in the centre of the southern wall. A courtyard existed for the whole length of the southern side of the building and is currently indicated only by an incomplete line of bricks (Fig. 2).

The walls of the building had collapsed into the structure. After removing this material, the outline of the wall became clear. It was constructed of irregular stones, and held together with clay and smaller stones wedged into openings. Over the total length, the thickness of the wall varied between 47 and 54 cm. The walls of the structure were plastered on the inside. The remains thereof, about 15 cm thick, were found all along the wall. This was found 70 cm from the current top of the wall and it is presumed that the plaster on the upper, exposed, sections were washed away over time. At least four different colours were used in various layers and different positions in the inside walls. The colours are red, green, yellow and white. All seems to be natural pigments.

The floor was also made of clay and received at least three different layers of plaster over a period of time. The original foundation for the floor seems to have been a trench that was dug, into which stones were laid.

The remains of two brick walls, dividing the structure into three rooms, were exposed on the inside. The structure therefore consists of a large central room and two smaller rooms (east and west). Each of these walls have an entrance in the middle to give access to the room.

A number of glass, ceramic and metal objects were collected on the surface during the clearing of the wall and area of the structure in general. The pieces of glass found are mainly from beer bottles. On two pieces, part of the **Ohlson's Cape Breweries Ltd** makers' mark is visible. Ohlson's Breweries became a limited company in 1889, and together with South African Breweries and United Breweries, amalgamated to form the South African Breweries Group (Lastovica & Lastovica 1982:39).

Ceramics make up the largest portion of this surface sample. A few dinner plates, and other ceramic articles are represented. A few pieces are decorated, with decoration similar to that found on other archaeological sites that date to the late 19th, early 20th century, such as Melrose House, Minnaar street and Pioneer House (National Cultural History Museum, 1996; Van Schalkwyk et al 1995).

Metal objects include pieces of barbed fence wire, a door hinge and a hoe. A brass fork, with a hole drilled through its handle and a personalised **IV** incised on the back of the handle, was also found. A maker's mark, **T.G. Ltd** with a date or number **1942**, is also visible on the fork. Another metal artefact is a part of a breadpan with the **Sunnyside Steam Bakery** logo on it.

One grinding stone was also found close to the structure. Whether this artefact is contemporary with the homestead or with Iron Age stone walling situated close-by is

uncertain.

Glass forms the majority of the material sample that was excavated. A large number of individual bottles and other glass containers are represented. Wine, beer, liquor, cool drink and medicine bottles are represented, as well as a few glass storage or preserve jars (Ball's). The exact age of the glass sample is not known, but it probably dates to between the early 20th and mid 20th centuries. A few pieces have partially visible makers' marks and/or registration numbers on them, but it is not useful for identification and dating purposes.

A small amount of ceramic pieces was also recovered. It includes a small piece of porcelain with blue coloured decoration, as well as two pieces of cream coloured stoneware, which formed part of a bowl. Fourteen pieces of Iron Age-type pottery, one piece with decoration, were also recovered. Last mentioned could be related with the Iron Age stone walling nearby, though this is by no means a certainty.

A fairly large number of metal artifacts were found. These include nails, screws, pieces of wire, pieces of tins, buckets and various unidentified metal artefacts. A door hinge, a bicycle wheel-cog, a piece of a cast-iron cooking pot and a large valve with the inscription **Made in France Agrique en France**, was also found. An axle for a small wagon was excavated in the eastern room.

A few pieces of bone was recovered. All the pieces are unidentifiable fragments, some of which are burnt. Unidentifiable means that they cannot be linked to species, age or sex, but they are in all probability from cattle and sheep. Two pieces of shell (mussel?) were also found. Other artifacts include pieces of the original wall and floor plaster, pieces of rubber pipe, pieces of leather shoes and two flat-headed beer bottle-stoppers made from bakelite. The name **Lion** is embossed on top of both the stoppers. Two Middle Stone Age stone tools (flakes) were also found, as well as four Venetian hexagonal blue glass beads. The ruins of three other structures are found next to the primary one (Fig. 2 & 3). Two of

these are rectangular in shape. One circular structure, located on the eastern side, seems to have been used as an initiation site. It probably dates to a later period than the homestead and was erected after the former was abandoned. This is deduced from its position and the large quantity of ash noticeable in the hearth of the structure.

EXCAVATION 2

Excavation 2 is located at 25°44'26" S and 28°22'30" E. A 2 x 1 m trench was laid out over a small rubbish dump which can be associated with the remains of a structure situated close-by (Fig. 4). In all, three layers were uncovered.

Layer 1 contains a lot of ash, light to dark grey in colour. Layer 1 is approximately 15 cm in depth. Layer 2 is also very ashy, but the colour changes to a very dark, nearly black coloured ash with lots of charcoal in it. This layer is about 10 cm deep. Layer 3 contains a good deal less ash than the previous two layers. The original, sterile, ground surface is about 8 cm lower down from the beginning of layer 3.

A few pieces of ceramic were collected on the surface in the vicinity of this excavation. A cup or mug, 2 plates and a tile are represented by the pieces. All are decorated, with one piece of porcelain containing a partially visible maker's mark. It is a depiction of a lion and the initials **L.H.S** inside a circle, with **Bavaria, Weimar** and ...(F) or (B) **ein Porzellan** also visible. It was possible to determine that it refers to Lorenz Hutschenreuter, who manufactured porcelain from 1856 onwards in Germany (Cushion 1980:89). It is doubtful if this piece is as old as that, and even if it was manufactured then, it would have ended up much later on the rubbish dump.

Layer 1

Ninety objects were recovered, with metal the most abundant. The glass found includes

pieces of plate glass, fragments of beer, medicine and other bottles and unidentifiable glass artefacts. Two complete bottles were also retrieved. One is a medicine bottle, 90 mm in height, and the other a small beehive shaped bottle 33 mm in height, which probably contained perfume. The seven pieces of ceramic found represents at least 3 plates, a serving dish and an unidentified electrical device. Two of these pieces are decorated, one with underglaze red flower patterns (serving dish) and the other with multicolour flower and leave patterns on the body and gold line on the rim (plate). Metal includes fragments, pieces of wire, nails, screws, washers, two steel knives, both incomplete and a copper tobacco-pipe lid, similar to ones excavated before at other sites dating to the late 19th/early 20th centuries. Another interesting metal artefact is a belt buckle with elaborate design, including a depiction of a longhorn ox on the front of the buckle. A piece of mussel or mother of pearl shell, 3 bone fragments, one with gnawmarks, and an identifiable fowl (chicken or other bird) bone was also found.

Other material found includes the pips of either apricots or peaches, plastic buttons, pieces of plastic and rubber and the tip of a pen with makers' mark **Velvet point made in USA** on the tip.

Layer 2

The material found in this layer is very similar to that found in layer 1. Pieces of plate glass as well as pieces of glass from different types of bottles (liquor, medicine) were retrieved. A small piece of milk-glass, which formed part of a salve/ointment container was found, as well as a small medicine bottle 84 mm in height, with the **Lennon** makers' mark on the rim. The eight pieces of ceramic recovered represents 4 small and 1 large plate and a bowl or pot. Three pieces are decorated, 2 with yellow, green and blue flower pattern and 1 with blue flower patterns. The bowl or pot, represented by a very thick piece of the rim, dates to the Iron Age. The metal sample from layer 2 includes pieces of wire, nails, screws, nuts, bolts, a button and a belt buckle. Interesting artefacts are a spanner and part of a cast-iron, 1930's type, toy car. Part of the makers' mark is visible. It

reads **Made in England...Y Toys**, probably Dinky Toys. Three pieces of shell (mother of pearl or mussel), from different individuals, were found, as well as some fragments of bone, one identifiable bone and three ribs of either chicken or some other bird species. Other material from layer 2 includes plastic buttons, pieces of unidentifiable plastic objects, peach or apricot pips, the bakelite mouthpiece of a tobacco-pipe, a plastic comb, a large plastic bead and seven small Iron Age-type glass beads.

Layer 3

Layer 3 contained fewer objects than the other two layers, again with metal dominating. Glass includes pieces of plate glass and pieces of different bottles. Six pieces of ceramic were found, representing 2 cups and 3 small and one large plate. One piece of porcelain, from a large cup, is decorated in blue Willow Pattern style and is of very high quality porcelain. It dates to the late 19th/early 20th centuries. Metal include fragments of wire, nails and some unidentified objects. Interesting artifacts are a knife blade with the stainless steel mark on it, a bicycle valve with makers' mark **Made in England Blue Mees** and part of an alarm clock. Most of the bone recovered are unidentifiable fragments, but four identifiable bones (chicken or other bird & cattle or sheep) were also found, as well as three teeth (cattle or sheep). Other artifacts include pieces of rubber tube, pieces of plastic, plastic caps of containers, a plastic button, a bakelite bottle stopper and a blue glass bead usually associated with the Iron Age.

Stone Heap

A number of stone heaps of different size are found in the vicinity of excavation 2. As their origin and function is not apparent, it was decided to excavate one in order determine this. The stone heap that was selected for excavation is situated a few metres east of excavation 2. It is 1,9 m in diameter. The excavation consisted of the careful removal of all the stones and cultural objects in order to determine if it possibly covered a pit. However, no evidence of a pit was detected and it does not seem as if any artifacts

were buried here.

More than 200 objects, mostly glass and metal, were found on and in the heap. The ages of the artifacts range between the late 19th/early 20th and mid 20th centuries, while the decorated Iron Age pottery could be much older.

Glass makes up the biggest part of the sample recovered from the stone heap, with 150 pieces found. A minimum of 40 bottles and other glass artifacts, such as a sugar bowl, is represented. The types of bottles represented are liquor, cooldrink, medicine, food (Bovril), and other household items, such as pieces of fruit preserve jars. Four complete bottles, one Eno and three fishpaste-type bottles were recovered. The makers' marks that could be distinguished are: **Shillings American Dry Ginger Ale**, **Gillet's Javel**, **Maryvale Mineral Water Works Joha[hannesburg]** and **Eno**. Three pieces of plate glass were found as well.

A few pieces of ceramic were found. This include pieces of green coloured earthenware from an ornament or vase and three pieces of decorated Iron Age-type pottery. In the latter case, the decoration is similar to that found on other Iron Age pottery dating from about AD 1200.

Various metal artifacts were found, including pieces of wire, nails, pieces of tins as well as complete tins (food, etc.), metal fragments and a number of unidentified metal artifacts. Interesting artifacts are a belt buckle, a fork with makers' mark **Nickel Plate Sheffield**, two horseshoes, a hoe and an axe head. Other artifacts are a piece of green and white coloured cement/concrete tile and three grinding stones, possibly dating to the Iron Age.

The reason for the existence of these heaps is still a bit of a mystery, but they probably came into being as a result of the clearing of the area for habitation or agricultural purposes at some time.

EXCAVATION 3

Excavation 3 is located at 25°44'01" S and 28°22'11" E. A test trench of 2 x 1,5 m was laid out on a section of the wall of an old structure, constructed mainly of clay and small stones (Fig. 5).

No evidence of a foundation could be determined, and it was deduced that the structure was built directly on the original surface. In contrast to the structure investigated in excavation 1, no evidence of plastering was found. Very little cultural material was found, in the excavation as well as on the surface and includes a few pieces of glass, porcelain and metal.

One large horseshoe was found on top of the wall, as well as a tablespoon made from either brass or copper. The makers' mark on the handle of the spoon is **Amaranthine WT & S**, with a personalised **M** inscribed on the handle. Only one small piece of bottle glass was found in the excavation. The metal is represented by a piece of barbed wire. Four pieces of ceramic were recovered, representing a plate, a cup or bowl and another unidentified vessel. The piece of plate has a dark blue band on the rim, while the cup or bowl has a thin gold line on the rim of its base. Both types of decoration are similar to that found at sites such as Minnaar street and Krugersdorp (National Cultural History Museum 1996), and date to the late 19th/early 20th centuries. It is however possible that this type of decoration also occurred on ceramics of a much later date. Because of the small amount of material found, it is impossible to date the structure with certainty.

EXCAVATION 4

This excavation is situated only a few metres west of excavation 3 and was laid out on a rubbish dump, possibly associated with the structure (Fig 5). A test trench, 1 x 1 m, was

excavated. The dump is approximately 8,5 m in diameter.

Two layers were excavated. Layer 1 is very ashy and roughly 23 cm deep, down to a greyish brown coloured ash layer with considerable charcoal included. Not much material was found in this layer. The material is very recent in age and includes glass, metal, plastic and bone. A lot more objects were found in layer 2 and also included material of more recent dating. Layer 2 is about 30 cm deep, making the dump approximately 53 cm in depth. Material found include glass, metal, bone, ceramics, plastic and cloth.

Layer 1

Six pieces of glass were retrieved from layer 1, one piece being part of the base of an ointment container. Part of the makers' mark are visible and reads **Pond...**, probably **Ponds**. The metal objects include fragments of artifacts, nails, screws, washers, wire, the metal part of a clothing peg and other unidentified artifacts. An interesting artefact is a belt buckle, with part of the belt, made of either leather or a synthetic material, still attached. Five bone fragments were found, as well as three identifiable bones, one of which is a piece of skull. Other material includes pieces of rubber and plastic, some unidentified objects, a yellow plastic button and the plastic cap of a container.

Layer 2

The glass recovered from layer 2 represents liquor, beer, cooldrink, medicine and food bottles, as well as plate glass, an oil or paraffin lamp and the lid of a sugar bowl. One piece of glass has an old **Pepsi** maker's mark on it. Two complete bottles, one a **Marmite** and the other a **Sloan's Liniment** (cough medicine) bottle was also found. Metal again includes fragments of wire, nails and screws. The lid of an aluminium tin, possibly a shoe polish tin, and a spring were also found. Fifteen bone fragments, three identifiable pelvic bones, one other identifiable bone, a tooth, a piece of skull and two complete sheep or

goat mandibles, both lower left, form the bone sample from layer 2. Quite a large number of objects fall into the "other material" category. This includes pieces of cloth, the heel of a ladies high heel shoe, plastic buttons, batteries, the arm of a plastic doll and two wings of a plastic toy aeroplane.

4. DOCUMENTATION OF SITES

In the original survey report (National Cultural History Museum, 1997), a number of sites were identified as having a high cultural and historical significance and could therefore not be altered, damaged or destroyed. However, it was decided that they should be extensively documented as a rise in population density might have an adverse impact on them over a period of time.

Other sites that do not show much promise for excavation was also documented, but in line with the original judgement, it is felt that they can be forfeited after documentation took place.

Bridge

According to oral history, this bridge (Fig. 6) was built by Sammy Marks. It is situated on a road that led from his house on the farm Zwartkoppies (east of the terrain where the excavations took place), to his factories at the site called Eerste Fabrieken.

The bridge is constructed primarily of dressed stone and cement. In some places bricks were used, in the construction as well as in later restoration. On the upstream side of the bridge, a culvert, also of stone, was built to channel the water under the bridge.

The road crossing the bridge is identified by a lane of pine trees, of which only a few

remains.

Fortifications

These structures date to the First War of Independence and relate to the Siege of Pretoria, more specifically the so-called Battle of Zwartkoppies. Some of these structures do not fall in the area to be developed, but, as it forms an integrated whole with the other structures, and because it will also be impacted upon in a derived manner by the proposed development, it should also be conserved. Though not very impressive, the significance of these sites increases if it is considered that of the original approximately 10 battelfields, all that remain is the Rooihuiskraal site in Centurion (see Van Ewyk 1986), which is conserved and made accessible to the public, and this site at Hatherley.

Two structures are found. The larger one is circular in plan and built of loosely packed stone. It is approximately 9,5 m in diameter (Fig. 7). The structure is very well preserved, with its walls approximately 1,5 m in height and 50 cm thick. It is, however, impossible to determine the original height of the walling, but it is estimated that it would not have been much higher than it is presently. The entrance of the fort faces in a north easterly direction. The fort is strategically well situated and has a commanding view in all directions over the surrounding area.

A second, smaller fortification is located approximately 50 m to the south east on a second hill (Fig. 7). It is also circular in plan and built in the same manner as the large structure. It is approximately 4 m in diameter. Its walls are not so well preserved and are less than a metre in height. The walls are also approximately 50 cm thick.

Both structures were constructed by taking the available stone in the area and piled it in a loose manner on top of each other. To obtain additional material, stone was dug up from the outcrop on which the structure is built, all round the structure, giving the impression

of a moat surrounding the fortification.

Iron age stone walling

Six half moon shaped structures built of stone (Fig. 8). The walls are very low and in some cases nearly undistinguishable. Some undecorated pieces of pottery were found here. These structures probably date to the Late Iron Age and can be related to similar ones found all over the larger geographical region (Van Schalkwyk et al 1996). Within the context of other sites, these are judged not to be significant and can be viewed as completely documented.

Irrigation ditch

An old irrigation ditch which is basically following the flood line of the river was also identified. This feature most probably dates to the same time as the old homestead on this section of the farm. The irrigation ditch has a total length of approximately 1150 m and is between 1 and 1,5 m wide. Another feature of the ditch is a line of trees, which seems to have been deliberately planted, that lines the ditch for large sections.

Old homestead

The remains (foundation) of rectangular structure, made from clay, stone and brick, with a refuse dump next to it (Fig. 9). It is approximately 250 m north west of the structure in excavation 3. After investigation, it was decided that it was similar in age and construction than the structure previously excavated. Excavation of this would not produce any more information and it was decided to only document it and to excavate.

5. CONCLUSIONS

Most of the artifacts found during the excavations at Nellmapius dates to between the early and mid 20th century. Some artifacts are even more recent (last 2 decades), specifically those recovered in excavation 4. Others, however, date to much earlier periods and can probably be associated with the Iron Age stone walling found in the area. Some decorated porcelain date to the late 19th/early 20th centuries and are similar to porcelain found at sites such as Minnaar Street and Krugersdorp (National Cultural History Museum, 1996).

A large variety of artifacts were found. They include artifacts of everyday use such as knives, forks, spoons, grindstones, pieces of plates and cups; personal artifacts such as buttons, beads, belt buckles and pieces of shoes; building components such as plaster, screws and washers, nails and wire; farming implements such as hoes and a host of other artifacts. Liquor, wine, beer, cooldrink, medicine and other household glass containers are represented by the glass sample. Although most of the bones are unidentifiable fragments, some of the identifiable bones indicate that

the inhabitants of the area at least had domesticated animals such as sheep/goat, cattle and chicken or some other fowl species which they slaughtered and consumed. Horses were also kept for transport. Small scale agriculture was also practised, as the hoes seem to indicate.

The evidence indicates that the excavated structures are the remains of homesteads inhabited by black labourers. The building techniques employed, as well as the glass beads, specifically the Venetian hexagonal blue beads and the pottery from excavation 1 seem to indicate this. Venetian glass beads are normally associated with Sotho, Venda and Tsonga-speaking people. In excavation 3 no such indications were found. Glass beads were also found in excavation 2. The grindstones and decorated Iron Age-type pottery found in the stone heap could also be indicative of black inhabitants, although these artifacts could very well be associated with Iron Age remains found in the area.

The variety of objects found in and around the structures indicate that they were occupied over long period of time, possibly as long as thirty years each. The age of the objects also indicate that the structure found in excavation 1 is older in time than the rest. On the basis of the evidence it seems as if this latter structure originated during the early part of this century and was in use till the mid 1940s.

The structure in excavation 4 seems to be the most recent, dating back to the early 1960s. The structures in excavation 2 and 3 seems to fall somewhere between these two.

The result of this excavation is that one now have some insight into the life of farm labourers on the edge of a large urban setting (Pretoria) over a period of at least 50 years. It is very clear that although they were close to town and had a variety of modern materials and artifacts available, they were also very close to their traditional culture (clay pots, glass beads, subsistence agriculture).

6. RECOMMENDATIONS

After completion of the excavations and documentation of the various features, it is our viewpoint that the proposed development can take place. It is, however, recommended that the following be considered

- Appropriate measures must be taken to safeguard the cultural sites identified as of high significance, ie. the Sammy Marks bridge and the First South

African War fortifications, so that they are not endangered during construction activities and afterwards.

- Archaeological objects and features, due to their specific nature, usually occur below ground level. It is therefore recommended that the developers be notified that archaeological sites might be exposed during construction. If anything is noticed, it should be reported immediately to a museum, preferably one at which an archaeologist is available, so that an investigation and evaluation of the find can be made.

7. PROJECT TEAM

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We would also like to thank the following people for their invaluable support during the excavations: Mauritz Naude, Tanya Verster, Johannes Masilela, Jaco Schoonraad, Carin Pelser, Wayne Harley, Sam Moifatswane, Welma Nothnagel and Christel Nothnagel.

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