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REPORT ON THE ARCHAEOLOGICAL INVESTIGATION OF THE EASTERN REDOUBT (EAST FORT), A BRITISH MILITARY FORTIFICATION, DATING TO THE ANGLO-BOER WAR (1899-1902)

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1. BACKGROUND TO THE PROJECT

The director of Archaetnos, Dr AC van Vollenhoven, has been involved in archaeological research relating to the Anglo-Boer War (1899-1902) for almost 30 years. His research interests mainly focused on military structures and camps in Pretoria and the Kruger National Park. He also is assisting the Environmental Management Department of the City of Tshwane with the development of cultural heritage management plans for their nature reserves and resorts.

Over the last number of years more and more people has been in contact with him, indicating that they would somehow like to get involved and learn first-hand by doing archaeological excavations. This included students who are looking for practical experience in the field. For the last few years many parent have contacted him indicating that they would like their children to get involved especially as this could assist them in making a career choice.

The research on the Eastern Redoubt, sometimes called the East Fort, stems from the mentioned need. However, it was necessary to make use of an archaeological site easily accessible to the large cities, but also one that has the potential for sound scientific archaeological research.

A site visit to the Strubenkop Nature Reserve in 2011, where the fort is located, revealed that the remains of the Eastern Redoubt needed to be conserved, preserved and protected. It was therefore recommended that the site be researched via archaeological and historical means, since it is very unique, has already been damaged and is in danger of being demolished by natural processes (Van Vollenhoven 2011: 35).

With this in mind it was decided to make use of archaeological methods, supplemented by other historical sources, to write a comprehensive history of this British fortification. The location of site, within Pretoria and close to the city centre, therefore could provide a site which could be utilized with both these objectives in mind.

This report only deals with the scientific objectives. The social issues are being handled in alternative ways. The results of the excavations is therefore discussed. It includes detailed findings of the excavations and the documentation of the site as well as other research aimed at providing the historical context. The cultural material that was excavated is also discussed.

2. LOCATION

The Eastern Redoubt is located within the Strubenkop Nature Reserve, which is managed by the City of Tshwane (CoT). The reserve is situated on a portion of the original farm Hartebeestpoort 362 JR. Today this is in an area known as Lynnwood (Figure 1-4) which is in the central east of the CoT. The northern boundary of the property is formed by the original farm boundary between the farms Hartebeestpoort 362 JR and Koedoespoort 299 JR.

The site can be found on map 2528CD, Rietvleidam, of the South African 1:50 000 topographic series. A GPS co-ordinate taken at a central point on the site is 25°45'300"S; 28°15'533"E.



Figure 1: Google image indicating the Strubenkop Nature Reserve within the City of Tshwane. North reference is to the top of the map.



Figure 2: Google image of the Strubenkop Nature Reserve within the City of Tshwane.

North reference is to the top of the map.



Figure 3: Closer Google view of the Strubenkop Nature Reserve. North reference is to the top.



Figure 4: Aerial Google view of the Strubenkop Nature Reserve. The two circular structures in the center are water reservoirs.

3. PROBLEM FORMULATION

The problem investigated is derived from the recommendations from the Management Plan which was compiled for the Strubenkop Nature Reserve (Van Vollenhoven 2011). It indicates that there is only one cultural heritage resource in the reserve, being the remains of the Eastern Redoubt.

The following particular recommendations are applicable:

- Archaeological and historical research should be implemented as a matter of urgency and in accordance with legislative requirements.
- Information educating visitors with regards to the National Heritage Resources Act and indicating that it is an offence to damage historical resources should be included in a brochure or information panel at the reserve.
- Information should be placed in a brochure with a map or on a plaque at the site so as to enhance visitor experience.
- The tourism potential of the reserve should not be under estimated.
- Visitors to the site should be monitored in order to prevent any damage thereto. This should form part of the reserve's tourism development plan.
- The staff at the reserve as well as others involved in the management thereof (including new appointees) should be trained.
- Partnerships should be formed with concerned parties order to get these people involved in the preservation and conservation of the cultural heritage (fortification) of the reserve.

3.1 Main aim:

To make use of archaeological methods, supplemented by other historical sources, to write a comprehensive history of the British fortification called the Eastern Redoubt in Pretoria.

3.2 Objectives:

The following objectives were developed for the research project:

- To obtain first-hand knowledge of the site, the building methods and materials used as well as other aspects related thereto;
- To obtain additional background information on the East Fort by using archival and other historical sources:
- To obtain information on the lifestyle and way of life of British soldiers at this site during the Anglo-Boer War;
- To compare the above mentioned with other known military sites from the same time period;
- To recommend preservation and management measures for the site;
- To make recommendations for cultural tourism opportunities and the management of the site.

Of course the archaeological and historical research would initially be focussed on the first two objectives, while the others will only be possible afterwards.

3.3 Key questions:

- Does the archaeological data from the Eastern Redoubt site support the historical information that it is associated with the Anglo-Boer War and the British?
- Does the collection of archival and other historical information relating to the Eastern Redoubt add to the comprehensive and representative writing of the history of the site?
- Does the comparison of excavated material from the site assist in obtaining information on the lifestyle of British soldiers during the Anglo-Boer War?
- Can the comparison of artefacts from the site with that of other similar sites be utilised to understand more about this time period in the history of South-Africa?
- Can the study of the site add to the monitoring of erosion and site degradation in order to be able to recommend preservation and heritage management measures?
- To what extent can the assessment of the site, regarding location, accessibility and extent of cultural material and features be used to recommend opportunities for cultural tourism and the management of thereof?
- Does the information obtained add to our knowledge of the Anglo-Boer War?
- Does the information obtained add to our knowledge relating to the everyday activities and the way of life of British soldiers?

4. RESEARCH METHODS

In order to reach the objectives, different methods had to be used. These included archival and literature research as well as archaeological excavation, followed by the careful collection and preservation of artefacts from the site, the documentation of the process and the analysis and interpretation of all data collected

4.1 Archival research:

Archival research into relevant data in the South African National archives and British National archives was conducted and is continuing in order to obtain more background information on the East Fort. This is used to obtain background information.

4.2 Historical (literature and oral) research:

A vast variety of sources was consulted with the aim of obtaining information on the East Fort. This includes historical literature relating to the different artefacts excavated in order to make an accurate identification thereof. This was placed within a chronological context that can be utilised to link it to the Anglo-Boer War.

4.3 Archaeological excavation:

Excavations were done with the aim of retrieving archaeological material. The main focus was on opening up the walls and other site features, in order to reconstruct the fort building. Secondly, cultural objects found would be used to interpret functional areas and possible events during the time the fort was in operation.

The amount of archaeological deposit that will eventually be removed shall be determined by the depth of the archaeological deposit. The aim is to conduct excavations depending on the time available due to natural factors such as rain and also from what can be determined from the first few excavations.

A permit for excavating was obtained from the South African Heritage Resources Agency (SAHRA). In accordance with the permit, the appropriate archaeological methods of data gathering and recording will be used. This includes surveying the site, drawing maps and plans, taking photographs and documenting.

Through excavation it will be possible to identify artefacts of the time period (roughly 1885-1910) and specifically to identify military objects, such as uniform buttons, ammunition and household objects known to have been used by the British army.

4.4 Collection and preservation:

Collection of cultural material remains is done during the process of excavating the site. The objects are packed with care and handled as fragile. In accordance with the National Heritage Resources act (25 of 1999) as well as the standards of archaeological curation, this will be kept, preserved and curated by an approved cultural institution accredited for this purpose. The permitting and therefore curation is controlled by the SAHRA, which has approved the City of Tshwane's Anglo-Boer War Museum, the Fort Klapperkop Heritage Site, for this purpose.

The material will however be made available to the City of Tshwane's Section Nature Conservation and Resorts for purposes such as displays. This is since this department is the responsible land owner of the Strubenkop Nature Reserve.

4.5 Documentation:

Documentation of the site is done according to standardised archaeological methodology. This includes location on 1:50 000 maps, taking GPS co-ordinates and photographing and describing the sites, features associated therewith and excavations. It also includes surveying the site and drawing maps and plans¹.

4.6 Analysis and interpretation:

The excavated material from each individual area is analysed and interpreted with the help of specialists. It is believed that artefacts uncovered will be of the time period (roughly 1885-1910). A specific aim would be to identify military objects, such as uniform buttons, ammunition and household objects known to have been used by the British army.

Thereafter it will be compared with the material from other sites in order to highlight differences and similarities. This will help in answering the indicated research questions and therefore to write a comprehensive history of the Eastern Redoubt and its role during the Anglo-Boer War.

5. SITE DESCRIPTION

1 Most of the photographs, maps and plans were done by A.C. van Vollenhoven. When done by someone else, this is indicated in the text.

The northern boundary of the reserve is formed by the experimental farm of the University of Pretoria. The eastern, western and southern boundaries are residential properties in the township of Lynnwood.

A tar road, The Old Fort Road ends on the south-western edge of the reserve. The name of the road incidentally comes from the fort on the hill. The hill referred to is Struben Hill and the reserve comprises most of the top part of the hill. As a result the vegetation here consists of natural species, including mostly grass and a few medium sized indigenous trees. It is quite clear that area was disturbed at some stage resulting in barren patches here-and-there as well as the vegetation not being dense.

The hill is reasonably steep with a flat top (Figure 5). This flatness of course made it possible to erect an extensive structure up here. What can be seen on site today, is the remains of the structure that had been built here, namely a fortification built by the British during the Anglo-Boer War (1899-1902). This was also the main reason for disturbance on site.

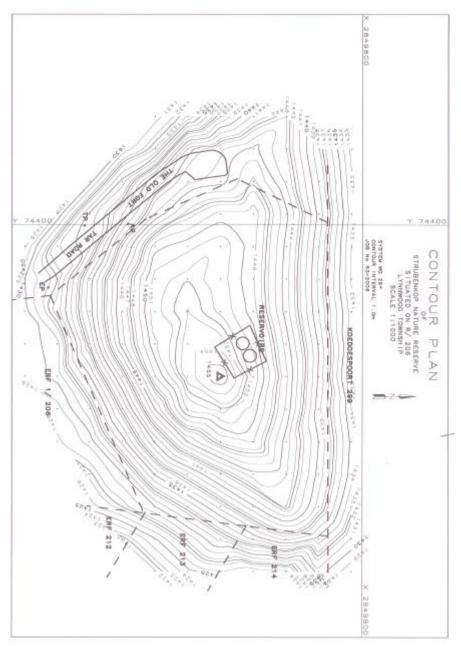


Figure 5: Contour map of the reserve (City of Tshwane).

GPS co-ordinates (Figure 6) taken at different locations inside of the fort is:

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25°45'297"S
28°15'520"E – remains of stone wall (Figure 7-8)
25°45'299"S
28°15'526"E – remains of stone wall (Figure 9)
25°45'297"S
28°15'532"E – remains of stone wall at possible lookout point (Figure 10)
25°45'300"S
28°15'533"E – remains of lookout point (Figure 11)
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25°45'274"S
28°15'564"E – remains of stone wall at another possible lookout point (Figure 12)
25°45'256"S
28°15'580"E – piece of corrugated iron which may have been part of a building (Figure 13)
25°45'281"S
28°15'548"E – remains of circular stone wall which may have been the canon position or part of a blockhouse (Figure 14-16)
25°45'281"S
28°15'547"E – remains of stone wall (Figure 17)
25°45'278"S
28°15'509"E – heap of stones that may have been a platform for a blockhouse (Figure 18)
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At another wall to the south-east (Figure 19) no GPS co-ordinate was taken. To the south and against the slopes of the hill some loose stones were identified (Figure 20). These probably came from the walls of the original structure.

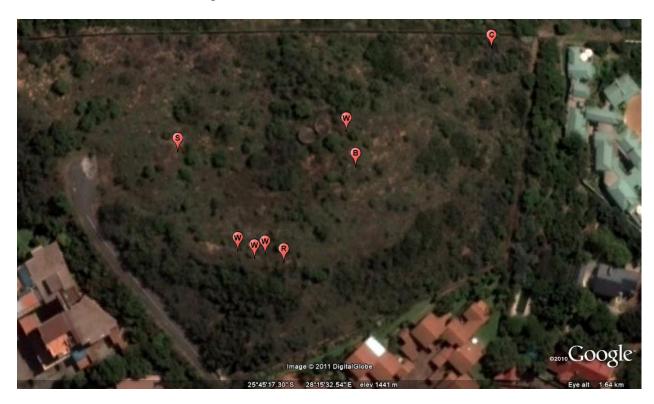


Figure 6: GPS co-ordinates on the fort in the Strubenkop Nature Reserve (Google). $W-Stone\ wall$ $R-Lookout\ point$ $C-Cultural\ material\ (corrugated\ iron)$ $S-Heap\ of\ stones$ $B-Possible\ lookout\ point$



Figure 7: Remains of stone wall on the south-western side.



Figure 8: Corner junction between wall on the western and one on the southern side.



Figure 9: Remains of stone wall to the south.



Figure 10: Remains of wall close to possible lookout point (south).



Figure 11: Remains of possible lookout point (south).



Figure 12: Remains of another possible lookout point (south-east).



Figure 13: Corrugated iron which may have originally been part of one of the walls of the fortification.



Figure 14: Remains of a circular wall where a blockhouse may have been placed.



Figure 15: Another view of the mentioned circular wall.



Figure 16: The mentioned circular wall is at the top of the hill at the trigonometrical beacon.



Figure 17: Remains of a wall on the northern side.



Figure 18: Heap of stones where a blockhouse may have been placed.



Figure 19: Remains of another wall on the south-eastern side.



Figure 20: Heap of loose stones against the southern slope.

6. HISTORICAL CONTEXT

The history of the Anglo-Boer War in Pretoria has been quite well documented. The War took place between 1899 and 1902. It was a war between the two Boer Republics (the Transvaal or Zuid-Afrikaansche Republiek and the Orange Free State) and Great Britain (Pretorius 1998:247).

By January 1901 many blockhouses (small fortifications) have been erected. These were mainly corrugated iron structures (called Rice pattern blockhouses) as these were prefabricated and could be built in a short period of time (Figure 21). From March 1901 blockhouses were also placed on other strategic position such as main routes. By January 1902 the blockhouse lines have been completed. It has been calculated that as much as 8 000 blockhouses were eventually completed stretching over a distance of about 6 000 kilometre (Hattingh & Wessels 1999: 41; Van Vollenhoven 1999a: 81).

After the fall of Pretoria on 5 June 1900, the British erected fortified posts at strategic position all over South-Africa. The main aim was to protect railway lines and other routes as well as to limit the movement of the Boer commando's (Van Vollenhoven 1992: 176; Van Vollenhoven 1999: 80). The system of blockhouses (small fortifications) was erected since the railway links was to a large extent being left defenceless. As this was an important communication system, the British decided to have it protected. The importance of the railway line is emphasized by the fact that the Boers also implemented protective measures at the time they were still in control thereof (NAD, SS0, R8496/00).

The first of these fortified posts were erected in July 1900. Most of these blockhouses were double storied and took about three months to build (Van Vollenhoven 1999a: 80-81). By January 1901 the large scale erection of blockhouses along railway lines was at the order of the day. These were mainly corrugated iron structures (called Rice pattern blockhouses) as these were pre-fabricated, much smaller than those built from stone and could be built in a short period of time.

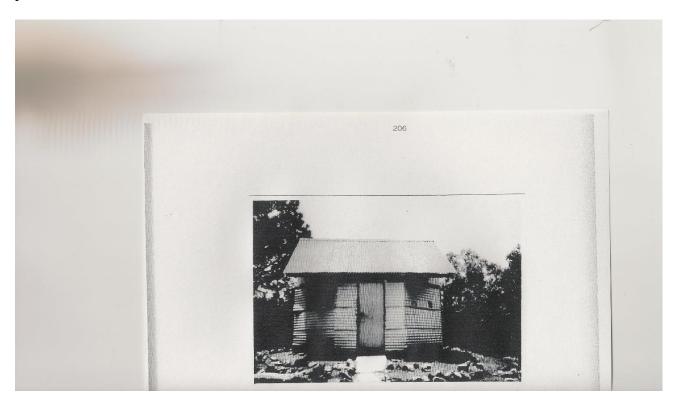


Figure 21: Example of a Rice pattern blockhouse in Pretoria (Van Vollenhoven 1992: 206).

From March 1901 blockhouses were also placed on other strategic position such as main routes. By January 1902 the blockhouse lines have been completed. Blockhouses were placed more or less three quarters to one and a half mile apart (1,20 - 2,40km). It has been calculated that as much as 8 000 blockhouses were eventually completed stretching over a distance of about 6 000 kilometer (Hattingh & Wessels 1999: 41; Van Vollenhoven 1999a: 81). These were manned by about 50 000 troops and 16 000 black scouts and guards (Pakenham 1986: 215).

For the British it was of particular importance to protect Pretoria after they had occupied it. Therefore they built additional fortifications here (Van Vollenhoven 1992: 180). Pretoria already had four forts - Fort Klapperkop, Fort Schanskop, Fort Wonderboompoort and Fort Daspoortrand – which were erected by the Boers prior to the War (Van Vollenhoven 1995: 54-61). In order to turn the town into a complete fortified town the British added to this. A list of blockhouses dated 1 June 1902 indicates that 85 blockhouses were built in and around Pretoria (War Museum of the Boer Republics, CRE 5659, List of Blockhouses in the Pretoria District and on the Northern line, 1902-05-16). Information about these is limited as it was mostly destroyed since the War. Specific information on only 61 of these could be found. These consist of 36 stone-and-masonry blockhouses and 25 corrugated iron ones (Van Vollenhoven 1992: 180-181). Three larger forts were also built in the vicinity of Pretoria, namely one at Rietfontein (Ifafi), the Quagga Redoubt and the East Fort (Tomlinson 1994: 19).

The fortification built on Strubenkop, was one of these. Officially it is called the Eastern Redoubt, but sometimes it is also referred to as East Fort. Strubenkop was strategically important to safeguard the town from the east. The Boers also planned to build a fort here, but this never materialized. The site was even used by the British during the Anglo-Transvaal War (1880-1881) as a signal station and lookout point (Van Vollenhoven 1992: 182). According to Tomlinson (1994: 13) it was built during 1900 or at least building was well-advanced by December of this year (Tomlinson 1997: 1).

The Eastern Redoubt was the largest fortification built by the British in Pretoria. It is described as having been built from stone and with a corrugated iron roof. Parts of the walls also were made from corrugated iron with loopholes (Van Vollenhoven 1994: 71). Two photographs of the fort during the War had been found (Figure 78 and 82). These will however be discussed with the excavations.

The fort was vacated shortly after the War. Apparently it still was in a good condition in 1963. A photograph from the early 1970's indicates that it had deteriorated much further by then (Figure 22). In 1992 the site was visited and only one short low wall could be identified (Van Vollenhoven 1992: 182), probably due to the vegetation cover being much denser than now (Figure 23).



Figure 22: Photograph of a part of the Eastern Redoubt during the early 1970's (Van Vollenhoven 1992: 204).



Figure 23: Photograph of remains of a wall of the Eastern Redoubt in 1992 (Van Vollenhoven 1992: 204)

In 1979 Mervyn Emms draw a plan of the fort (Figure 24). As the fort has by then already deteriorated much the plan may not be correct, but at least it does give a fair indication of the layout thereof.

It seems as if the fort was less formal than the Boer forts mentioned. One gets the idea of a surrounding wall and inner courtyard with. Some of the wall may have been completed with corrugated iron. The fort had three blockhouses and at least two canon positions and was armed by a five inch canon (Van Vollenhoven 1999b: 27). This means that blockhouses must have been placed at strategic positions inside or on the walls of the fort.

The fort is also indicated on a sketched diagram of Pretoria during the Anglo-Boer War indicating the communication lines between fortifications (Van Vollenhoven 1992: 210). It shows East Fort to the south-east of a military camp (Figure 25).

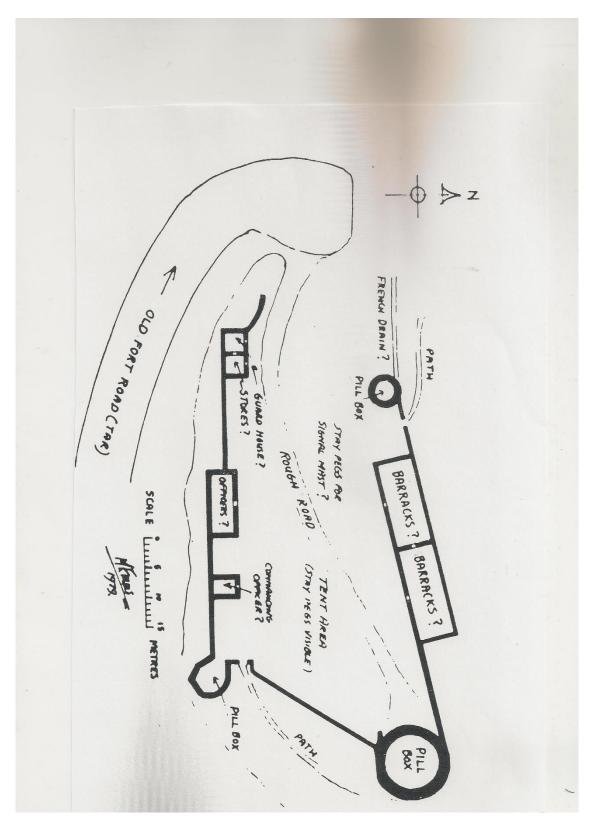


Figure 24: Plan of the Eastern Redoubt drawn up by Mervyn Emms in 1979 (Van Vollenhoven 1992: 205).

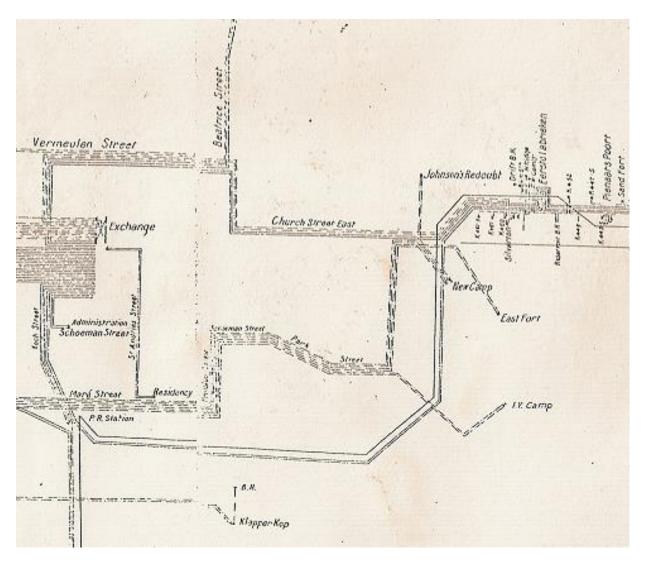


Figure 25: Diagram showing the position of East Fort in Pretoria (Van Vollenhoven 1992: 210).

7. THE EXCAVATIONS

Although the site map drawn (Figure 26) makes use of the South African national grid system, no specific grid was laid over the site. The decision was rather to concentrate on specific site features which could assist in answering specific questions. However, at each individual excavation a grid system was used consisting of primary datum lines and blocks.

Five excavations were conducted. These were all done in order to learn more about the construction and building material of the site as well as to unearth artefacts, which could shed light on the function of different sections of the fort.

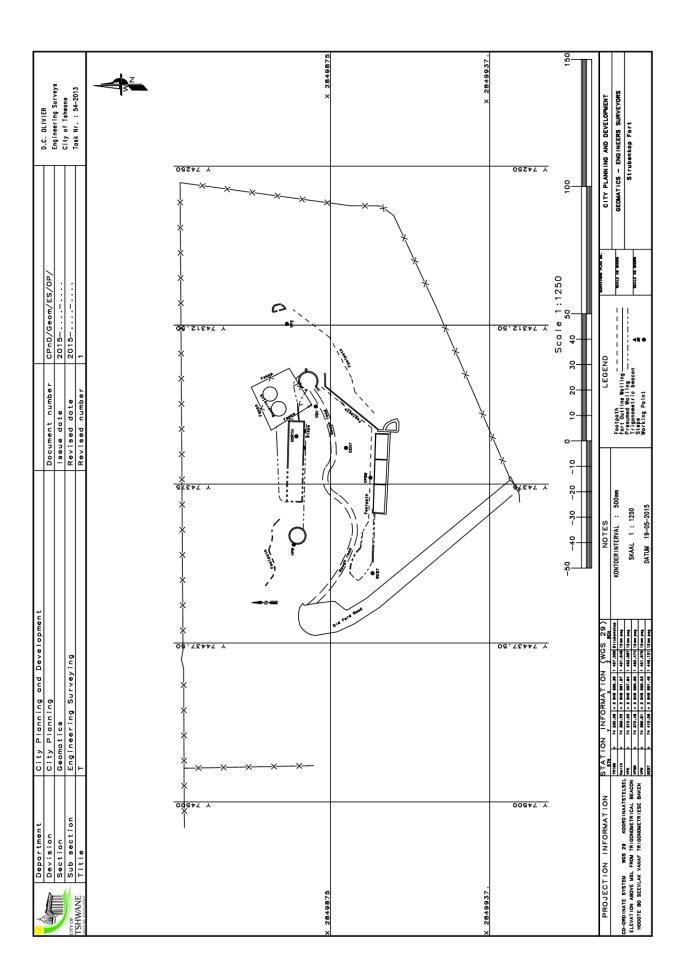


Figure 26: Site map of the fort (D. Olivier).

7.1 Excavation 1

Excavation 1 was done at an area to the north of the fort believed to be the barracks (Figure 27-28). The area consisted of the remains of rectangular shaped stone walls which were connected to other stone walling of the fort. No indication of possible doors or other features were visible. The aim of the excavation was to open and locate the walls and ultimately to find the floor level.



Figure 27: Excavation 1 after site clearance.

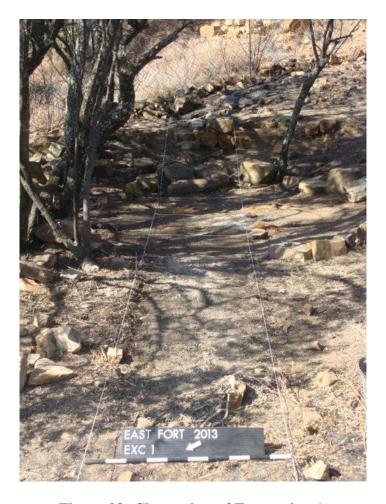


Figure 28: Closer view of Excavation 1.

The eastern and northern wall of the feature could be defined with relative ease. Therefore the north wall was used as the primary east-west datum. As the intension was to work from the known to the unknown, an 18 m line was placed on the outside edge of this wall. The line was divided into 1 m sections and was numbered A-Q. A similar line was installed from the north-eastern corner of the same wall, running 8 m to the south. This basically means that the eastern wall was used as primary north-south datum (Figure 29-30). This line was also divided into 1 m sections and was numbered 1-7. The measured out excavation grid therefore was 18 x 8 m in an east-west direction, but only certain 1 m squares within this were to be excavated and the idea was to extend the excavation, if needed, determining on the results of what had been unearthed (Figure 31).



Figure 29: Excavation 1 showing the primary datums (G. Reeks).

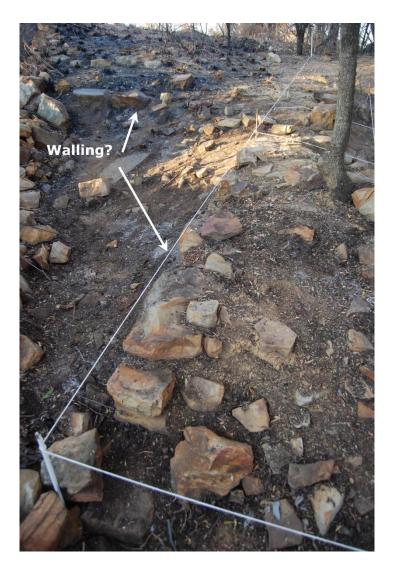


Figure 30: The northeastern corner of the structure and the two primary datums at Excavation 1 (G. Reeks).

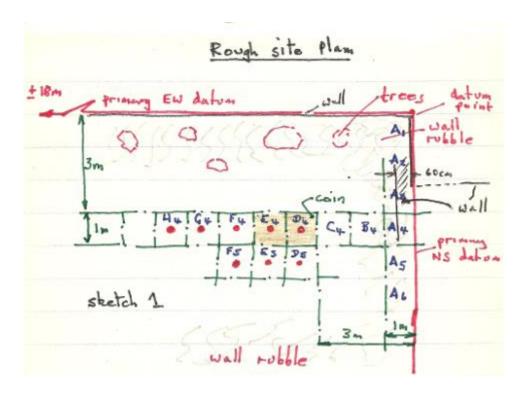


Figure 31: Rough site plan of Excavation 1 after day 1 of excavation (G. Reeks).

After site clearance, it however became clear that the first 3 m rows (1, 2 and 3) represent a problem to the grid due to trees and wall rubble. Therefore two parallel lines placed at 3 and 4 m (towards the south) and to also subdivide these into 1 m squares, thus A4-H4. D4 became the primary setting out square and its north-south boundary line was extended by 3 m to the south. In doing this the original north-south primary datum line could be confirmed to be at a 90° angle to the eats-west primary datum line.

Eight blocks were augered in order to test the depth of the deposit, being D4, E4, F4, G4, H4, D5, E5 and F5. At approximately 18 cm resistance were encountered. The soil colour changed from light brown soil to orange. No artefacts were raised. Notable finds during clearance included a 1930 silver 3 pence coin, various pieces of thick clear moulded glass, a small item of wire, a 10 x 10 mm piece of corrugated iron, a wood screw and embossed green glass (see Appendix A - analysis of cultural material).

The first two squares to be excavated were D4 and E4 (Figure 32). These were excavated to a depth of 10 cm. At this depth the soil was a pale yellowish in colour, well compacted, fine and generally free of stone. E4 had no stone features, but D4 had one stone at 70 cm north and 70 cm east, in the south-eastern corner of the grid. On the east line a glass bottle fragment was found (see Appendix A - analysis of cultural material). Square D4 was later extended northward with 1 x 0,5 inside of square D3 in order to cover the border where the coin was found in D4.



Figure 32: Excavation 1, with some of the squares being indicated (G. Reeks).

Right against the wall in squares A4-A6, a trench of 0,5 m was opened in order to determine a possible floor level. This was later extended to also include A3 and A2. It was excavated to a depth of 60 cm (Figure 33-36). Various glass fragments were unearthed here, including some from Shilling United Mineral – Pretoria (see Appendix A - analysis of cultural material).



Figure 33: Partially excavated wall at square A1 and A2 (G. Reeks).



Figure 34: Excavated outside wall on square A3 (G. Reeks).







Figure 36: Excavated walls and square A6, A7, B6 and B7 (G. Reeks).

Squares B5 and B6 were now also opened up to 60 cm. This was at a level that seemed to consist of concrete or plaster, possible floor fragments (Figure 37-39). These were left in situ until the next excavation season. The squares contained similar glass (Shilling) and pieces of a ceramic cup as well as a brass button (see Appendix A - analysis of cultural material).



Figure 37: Concrete pieces in square B5 (G. Reeks).



Figure 38: Pieces of concrete against the inner side of the wall at Excavation 1 (G. Reeks).

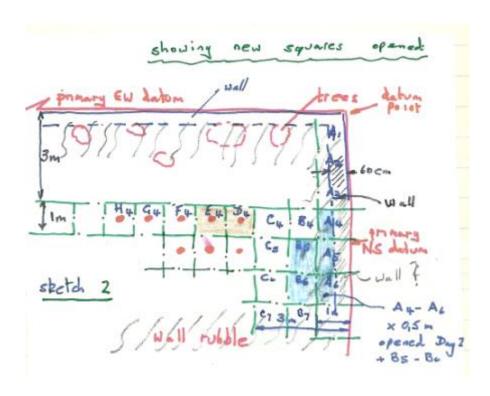
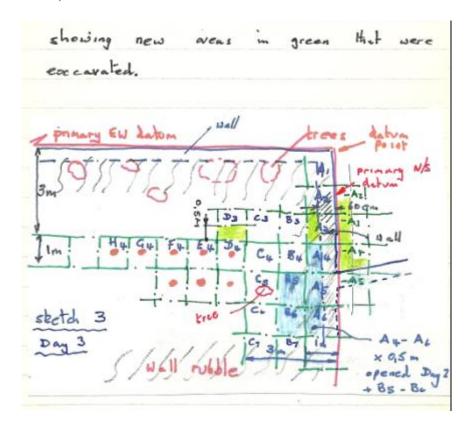
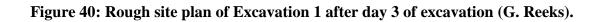


Figure 39: Rough site plan of Excavation 1 after day 2 of excavation (G. Reeks).

The top of the eastern wall was also cleared (Figure 40). As a result the excavation was extended further to the east in order to investigate the exact nature of the wall and its linking with other walls on site. This resulted in square -A3, -A4 and -B4 being excavated (Figure 41-42). One of the artefacts found here was part of a kaolin pipe stem (see Appendix A - analysis of cultural material).





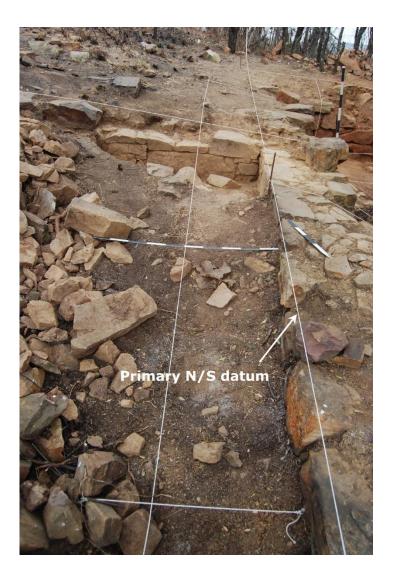


Figure 41: Excavated walling squares -A2,-A3,-A4,-A5 and -A6 (G. Reeks).



Figure: 42: Excavated walling squares -A2, -A3, -A4, -A5 and -A6 (G. Reeks).

Square C6, C7 and B7 was also opened and exposed a wall, which seems to be the southern wall of this feature (room). The wall is 70 cm thick. This wall was traced for about 30 m further to the west, but not excavated in full (Figure 43-48). It seems as if the inner line of the wall is located in square A7-C7. In C6 more fragments of the tea cup found in B5 and B6 was exposed (see Appendix A - analysis of cultural material).



Figure 43: Excavated squares B5, B6, C6 and C7 (G. Reeks).



Figure 44: Excavated wall at square A6 and square B6 and B7 (G. Reeks).



Figure 45: Excavated wall and squares B6, B7, C6 and C7 (G. Reeks).



Figure 46: Square B5, B6 and B7 (G. Reeks).



Figure 47: Square B5, B6, B7, C5, C6 and C7 (G. Reeks).

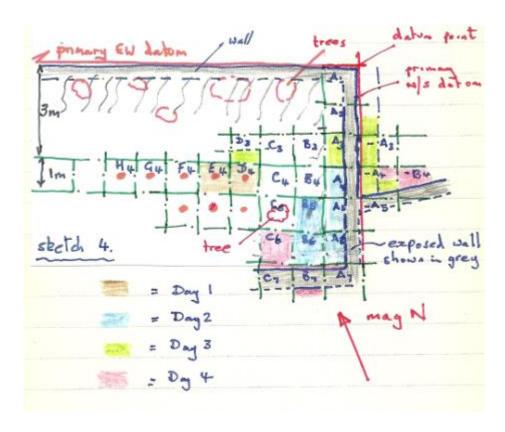


Figure 48 Rough site plan of Excavation 1 after day 4 of excavation (G. Reeks).

On completion of the excavation season at least three walls of the structure were partially excavated (Figure 49-57). These are the southern, eastern and northern wall thereof. Sand

bags were used to fill the excavation so that it could be continued in the following excavation season. The depth of the excavation varies considerably due to the natural sloping, erosion of soil and whether stone walling are present or not. Levels that were measured indicate that the current soil level outside of the walls has a fall of 4 cm on the eastern side, but 46 cm on the western side. The slope from east to west along the northern wall is 38 cm. Inside of the walls the levels fall both from south to north and from east to west by 8 cm. this means that the slope runs from south to north and from east to west and that the walls protects the washing away of soil, resulting in less of a slope inside of the walls. It also indicates that the possible floor may have only survived close to the eastern wall as the excavation was already deeper towards the west than the concrete found at the east.

Only one cultural layer was recorded. The preliminary findings are that the area most likely represents a room or rooms which most likely had a domestic function. The cultural material found here (see Appendix A - analysis of cultural material in Appendix A) certainly suggests this.



Figure 49: Excavated eastern wall before extending the excavation (G. Reeks).



Figure 50: Excavated eastern wall (G. Reeks).



Figure 51: The completed section of excavation1 to the outside of the eastern wall of the room.



Figure 52: Excavated east wall and wall extending to the east (G. Reeks).

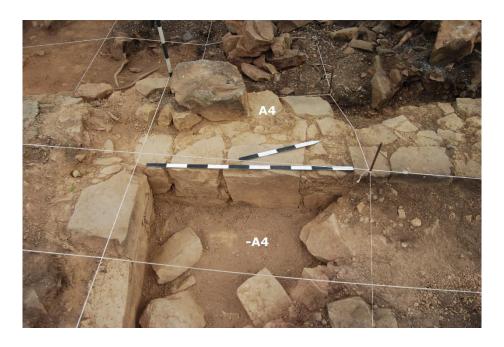


Figure 53: Excavated outside wall extending from the eastern wall towards the east (G. Reeks).



Figure 54: Excavated internal wall (south) (G. Reeks).



Figure 55: Excavated external and internal walling (east and south) (G. Reeks).



Figure 56: The completed Excavation 1.

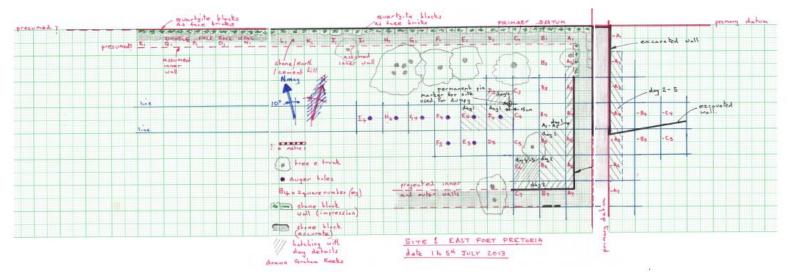


Figure 57: Map of the completed excavation 1 (G. Reeks).

7.2 Excavation 2

This excavation was measured out to the east of the fort at a feature that seemed to be associated, but loose from the rest of the building. Only a low curved stone wall was visible. This position was not indicated on the Emms-plan. The aim was therefore to investigate the wall to learn more about its construction and to determine its function and possible linkage with the rest of the fort. The excavation was measured out in an east-west direction with sides of 5×4 m (Figure 58).

It was an extremely difficult area to excavate as there were almost no soil before the hard rock surface of the mountain was reached. The bit of soil left was shallow, consisted of fine light brown sand and did not hold the excavation pegs.



Figure 58: Excavation 2 after being cleared, but before excavation.

The excavation revealed a more or less D-shaped structure packed with stone, although the southern part thereof was not excavated as it was outside of the excavation rectangle (Figure 59-61). The stone walling seems to keep more sand and the excavation here was 15cm deep, both on the in- and outside of the structure. The stone walls of the structure seem to have been placed on the hard rock surface without any foundation, as it was not possible to dig a foundation here. The depth of the excavation varied between 18 and 20 cm as a result of the natural slope. Only one layer was excavated.

The larger stones were filled in with small stones. In fact the structure most likely consisted of low stone walling around a D-shaped corrugated iron building, most likely with a double corrugated walls (Figure 62-65). The large number of typical roof screws and washers corroborate that this area was covered by a corrugated iron building, most likely with double walling filled in with stones. This was a very typical construction method for military structures e.g. block houses during the War (Van Vollenhoven 1999a: 81). This is similar to the Rice-pattern blockhouses invented by the British during the Anglo-Boer War.²

² The Rice pattern refers to a type of blockhouse, invented by Maj. SR Rice of the Royal Artillery. It consisted of different shapes made out of galvanized corrugated iron. These usually had a wooden frame, with a double corrugated iron wall attached thereto and with small stones in between (see Van Vollenhoven 1999a: 81).



Figure 59: Excavation 2 showing the structure partially exposed.



Figure 60: The completed Excavation 2.

EAST FORT, EXCAVATION 2, 2013

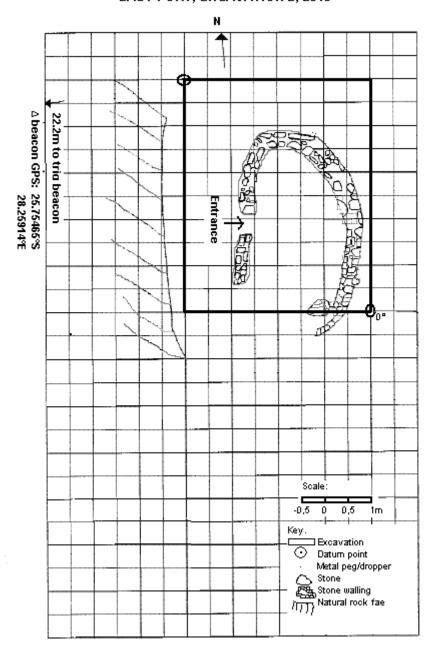


Figure 61: Site plan of Excavation 2 and the stone walling of the structure identified.



Figure 62: Detail of wall curving from north-west to north-east.



Figure 63: Detail of eastern wall.



Figure 64: Detail of eastern wall at southern edge of excavation.



Figure 65: Detail of wall curving from south-east to south.

At the north-eastern side two steel droppers and a large steel bolt for wood was exposed, with another dropper at the northwest. The droppers were likely used to strengthen the structure as it certainly would need something to keep it steady as it had no proper foundation. The bolt was probably used in the wooden structure to which the corrugated iron sheets were fitted.

On the western side, facing the natural rock face sloping up the hill, an entrance of approximately 1 m wide as found. This is close to north-western corner of the structure and makes sense since this would be the safe side as it faces the fort (Figure 66-68).

A substantial number of fired ammunition rounds and bullet points were also found here (see Appendix A - analysis of cultural material). These were either from .303 calibre rifles (Lee Metford or Lee Enfield) as well as .577/.450 calibre Martini-Henry rifles, both known arms of the British forces during the Anglo-Boer War (Van Vollenhoven 2010: 159; Van Vollenhoven & Van der Walt 2002: 65-69). This seems to indicate that this feature served as lookout point and additional security measure to the fort.



Figure 66: Section of walling from the southern side of the excavation to the entrance.



Figure 67: Entrance to the structure.



Figure 68: Detail of wall between entrance and north-western corner.

7.3 Excavation 3

Excavation 3 was measured out at an area indicated to be a pillbox³ by Emms (Figure 69). This is at the most southern of the pillboxes at East Fort. The excavation had sides of 4 x 4 m. The excavation was divided into four 2 m squares, named A, B, C and D, with A being the northwestern quadrant and D the south-eastern one. These were then further divided into 1 m subsquares. These were numbered A1- A4, following the same sequence throughout and starting at the north-west.

Again the main aim with the excavation was to learn more about the construction of the feature and to determine the function thereof. For the latter the aim of course was to find artefacts which could shed light on functionality. The excavation followed the lines of stones in order to find a possible floor or floor level and as the stones were opened up it was extended to the rest of each square.



Figure 69: Excavation 3 before excavation commenced.

3 Pillboxes are concrete dug-in guard posts, normally equipped with loopholes through which to fire weapons. The originally jocular name arose from their perceived similarity to the cylindrical and hexagonal boxes in which medical pills were once sold. They are in effect a trench firing step hardened to protect against small-arms fire and grenades and raised to improve the field of fire. The concrete nature of pillboxes means that they are a feature of prepared positions. Although it seems as if this word was first used during the First World War, it nowadays is also used for similar structures from predating this war.

The soil here was reddish brown, hard and very gritty along the walls of the structure, but soft and sandy with a dark brown colour in other parts of the excavation. It seems as if most in situ finds came from square A1 (see Appendix A - analysis of cultural material).

The depth of the excavation was between 1 and 16 cm from north to south due to the natural slope falling towards the south where the structure needed to be built-up in order to create a level surface. Only one layer was excavated. The remainder of the walls extended to a higher level than the top edge of the excavation and was exposed to between 15 and 30 cm high (Figure 70-76). A piece of corrugated iron was also identified in situ on the outside of the wall in square B, indicating the use of a combination of stones and corrugated iron in the construction of this structure (Figure 77).

Cultural objects found were mainly part of the building material (screws and washers), domestic material (e.g. household bottles) and ammunition similar to what has been found elsewhere (see Appendix A - analysis of cultural material).



Figure 70: Detail of stone walling at Excavation 3. This is the western wall of the structure which is straight north-south, linking with a circular wall running to the east.



Figure 71: Circular wall on the south-west ending in a straight wall running north-south.



Figure 72: Curved stone walling at south-western corner at Excavation 3.



Figure 73: Detail of cement floor next to curved stone wall at south-western corner.



Figure 74: The part of Excavation 4 to the east of the above floor showing walling and loose stones.



Figure 75: Outer side of walling at the north-eastern side of the excavation.



Figure 76: View of the completed excavation 3.



Figure 77: Corrugated iron next to circular wall at the north-west.

From a historical photograph discovered recently in the British National Archives, his feature could partially be reconstructed and the excavation assisted in this regard (Figure 78). The other known photographs of this area (Figure 79) show loopholes in a corrugated iron wall, indicating a lookout/ security point raised to a high level, possibly indicating that there could be a room below (also see Figure 22). It faces the south-east. Although the structure was built to look like a semi-circle, it actually has sharp corners and the western wall thereof is a straight one running from south to north (Figure 80).



Figure 78: Photograph of the East Fort during the War. Note the corrugated iron buildings. Also note the loopholes in the structure to the left (British National Archives, WO/108/342, p. 9).



Figure 79: The southern pillbox structure at the East Fort photographed during the 1950's (Photograph: Courtesy of Stan Cantor).

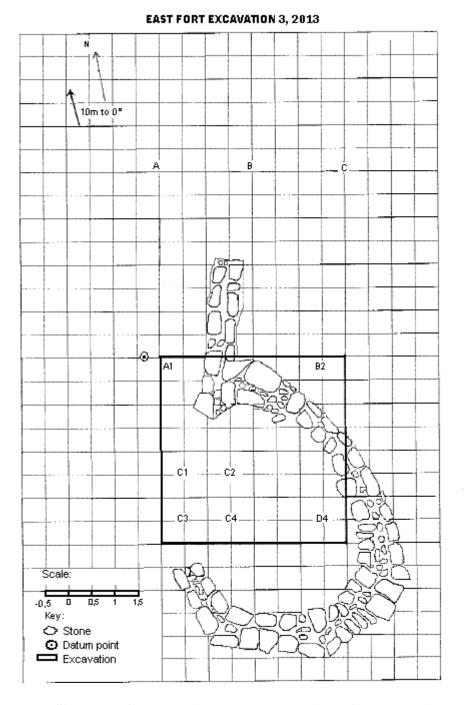


Figure 80: Site plan of Excavation 3 and the remains of stone walling at the southern pillbox.

7.4 Excavation 4

This excavation was done at the highest point of the fort at a pillbox which most likely has been the canon position. The aim was therefore to investigate the area to learn more about its construction and to determine its function. The excavation was measured out in an east-west direction with sides of 4×2 m (Figure 81). This is the largest pillbox and a historical

photograph which was studied indicates this area as the canon position (Figure 82). This was determined by comparing the skyline on the photograph to the current one.

The excavation was done against the inner side of the protective wall in order to find the lowest level thereof (bottom side of wall) or perhaps a floor level. As with most of the other walls at the fort, the stones in this one were mortared together.

The topsoil in the excavation was soft and sandy and dark brown in colour with ashy patches in between, most likely caused by recent veld fires or people having a braai on site. This was followed by a hard orange-red gravel-like soil. This seems to have been compacted to form a floor level. The depth of the excavation was 30 cm in the west and 40 cm in the east due to the natural slope running from east to west. Only one layer was excavated. A north-south section of 1 x 2 m against the wall (eastern side of the excavation) was now excavated further in order to find the bottom of the wall and to investigate the compacted material (Figure 83). The latter was found to be between 8 and 22 cm thick from west to east at the point where the bottom of the wall was reached (Figure 84). This was included in layer 1.

In the south of the excavation some stones with concrete attached thereto were found (Figure 85) and hard sandstone pieces were found against the wall (east). This may be an indication of the floor level. The structure investigated had a semi-circular shape, facing east. No additional information on the possibility of this being the gun emplacement was found (Figure 86).



Figure 81: Excavation 4 before excavation commenced.

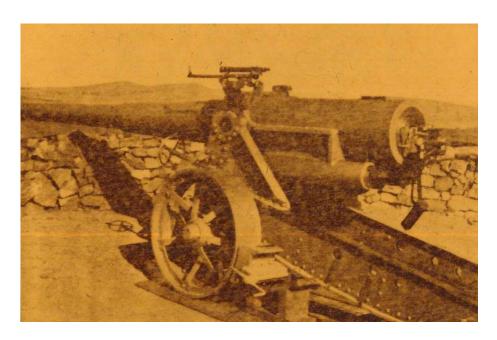


Figure 82: A canon in the canon emplacement at the East Fort during the Anglo-Boer War (Photograph: Courtesy of Stan Cantor).



Figure 83: Excavation 4 showing the sub-excavation on its eastern side.



Figure 84: The completed excavation 4. Note the stones inside of the excavation against the wall and the sandstone pieces to the south.



Figure 85: Detail of sandstone pieces in the excavation.

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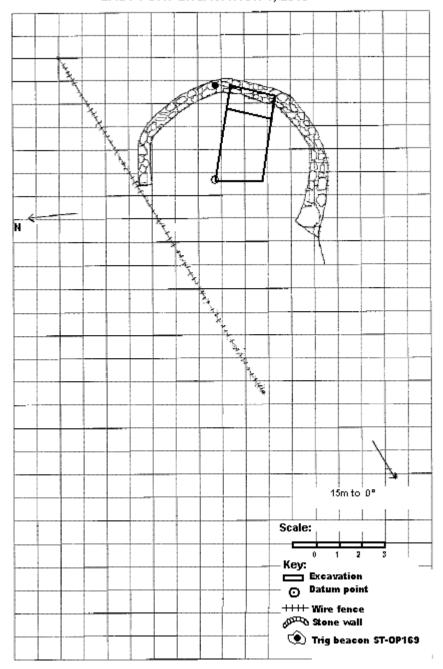


Figure 86: Plan of excavation 4, including the semi-circular stone walling of the structure.

Most of the artefacts found here were fairly recent and are most likely linked to the surrounding community having picnics here over the last number of years. Pieces of barbed wire excavated may be part of defensive system of the fort. A few artefacts that are contemporary with the occupation of the fort, were however also identified (see Appendix A - analysis of cultural material).

7.5 Excavation 5

Excavation 5 was done at the western side of the fort, at the first flattened surface on the hill. Further to the west some stone walling and the entrance to the fort were situated, but these are against the slope. The aim was to investigate this flat surface and walling to determine the function of a possible room, suggested by Emms to be the officers' quarters. In the process, the construction of the walling could also be investigated. The excavation was measured out as a 4×4 m square.

At first the area was swept clean and levelled (Figure 87). Many small stones, similar to those found at other excavations, were found. These seem to indicate either a double stone wall filled in with the small stones or a corrugated iron structure where the small stones were used as fill between the double corrugate sheeting. A section of stone walling was identified in the north-western corner of the excavation (Figure 88-89) and another section was found, more or less in the centre of the excavation.



Figure 87: Excavation 5 after being measured out and swept clean.



Figure 88: Indications of stone walling in the north-western corner of Excavation 5.



Figure 89: Detail of the stone walling in the north-western corner of the excavation.

The section of stone walling in the corner of the excavation clearly lined up with walling towards the east and west thereof. In order to determine the nature and of the other walling, only the section of stone walling found in the centre of the excavation was now investigated further by a 4×1 m trench in an east-west direction and between 1 and 2 m from the northern

side of the excavation. Even this sub-excavation was later-on decreased to a 1,7 x 1 m section to concentrate on exposing the bottom of the wall (Figure 90-92). The height of the wall exposed eventually was 18 cm. It was also found to be in line with other sections of walling seen on the surface and seems to indicate that the other 'remains of walls' to be seen on the surface, may not all be walls, but perhaps the stones that had fallen from original walls or may have been additional walls of which the function are yet unknown. It therefore seems as if the area excavated could be a room, but that there are linking walls that needs to be clarified.



Figure 90: Sub-trenching investigating section of stone walling found in Excavation 5.



Figure 91: Top view of stone walling in sub-trench.



Figure 92: Another view of the stone walling in the sub-trench.

On completion of the excavation, the north-eastern side thereof had soil that was soft, reddish and sandy, but hard against the walls. On the south-western side it was soft, sandy and yellow in colour. Two ashy patches were identified, but these seem to have a recent origin. The excavation was done in 10 cm spits, although this only came into functionality at the deepest section thereof. The depth of the excavation varied between 3 and 30 cm (south-west to northeast) due to the level created by stone walling preventing soil to wash away in certain areas (Figure 93-94). There were therefore 3 layers, but these were arbitrary and did not differ in age.

At excavation 5 mostly building material were found, indicating that floor levels may not have been reached yet or that this was rather a working station than sleeping quarters. Emms suggested that this could have been the officers' quarters, but it was not possible to determine this. Ammunition was also found (see Appendix A - analysis of cultural material). Again a large amount of recent artefacts were uncovered.



Figure 93: The completed excavation 5.

EAST FORT EXCAVATION 5, 2013

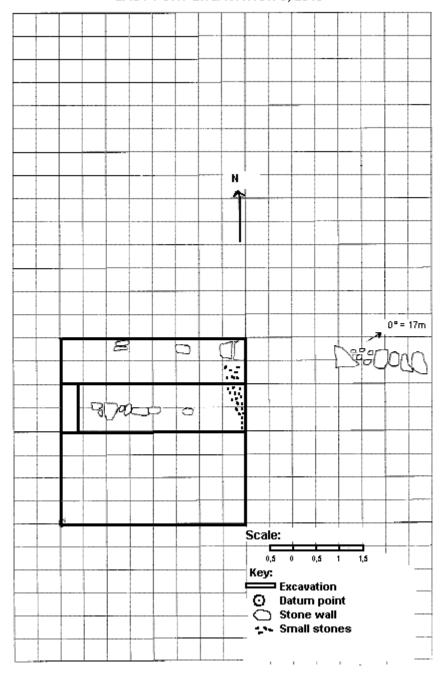


Figure 94: Plan of Excavation 5 showing indications of stone walling.

8. DISCUSSION AND CONCLUSION

It is a well-known fact that the history of the Anglo-Boer War (1899-1902) has been the topic of research for many years and therefore is reasonably widely known. The same goes for events in Pretoria during this time. After the fall of Pretoria on 5 June 1900, the British erected fortified posts at strategic position all over South-Africa. These were commonly known as blockhouses. The first of these were erected in July 1900. Initially these were double storied stone and masonry buildings which took up a lot of time to build. Therefore pre-fabricated corrugated

iron structures (called Rice pattern blockhouses) were introduced which could be erected in a few hours.

For the British it was of particular importance to protect Pretoria after they had occupied it and therefore they built additional fortifications here, including one on Strubenkop. Officially it is called the Eastern Redoubt, but sometimes it is also referred to as the East Fort. Strubenkop was strategically important to safeguard the town from the east. Prior to the Anglo-Boer War the Boers also planned to build a fort here, but this never materialized. The site was also used by the British during the Anglo-Transvaal War (1880-1881) as a signal station and lookout point.

The Eastern Redoubt was the largest fortification built by the British in Pretoria. It is described as having been built from stone, with a corrugated iron roof. Parts of the walls also were made from corrugated iron with loopholes. Two photographs of the fort during the War had been found (Figure 78 and 82). Together with the information obtained from the excavations on site, these were used in reconstructing what the fort may have looked like (Figure 95-100).

The fort was vacated shortly after the War. A photograph dating to the 1950's (Figure 79) and to the 1970's (Figure 22) indicate that at least the southern pillbox was still standing during this time, including its corrugated iron top. A plan drawn in 1979 (Figure 24) indicates that enough could still be seen on site to enable such a drawing. The plan is not entirely accurate, most likely due to the growth of vegetation on site making it impossible to see certain features, but it nevertheless gave a good indication of the layout of the fort. These documents were also used in the reconstruction. By the early 1990's however, the site has deteriorated much with only foundation walls being visible.

Strubenkop is a reasonably steep hill with a flat top which made it possible to erect an extensive structure up here. What can be seen on site are the remains of a large building/ buildings that had been constructed here. The artefacts uncovered during excavation, indicate an occupation of the site during the late 19th/ early 20th Century. Many objects had a military function. Coupled with historical information, it brings one to the conclusion that the structure on Strubenkop is a fortification built by the British during the Anglo-Boer War. As it is known that the British captured Pretoria on 5 June 1900, the fort dates to the period of the British occupation of the town during the War.

It needs to be indicated that all of the areas excavated at the East Fort needs further investigation, as do other sections thereof. Conclusions made here therefore can only go as far as the information being available at this stage of the research and will be changed as the research continues.

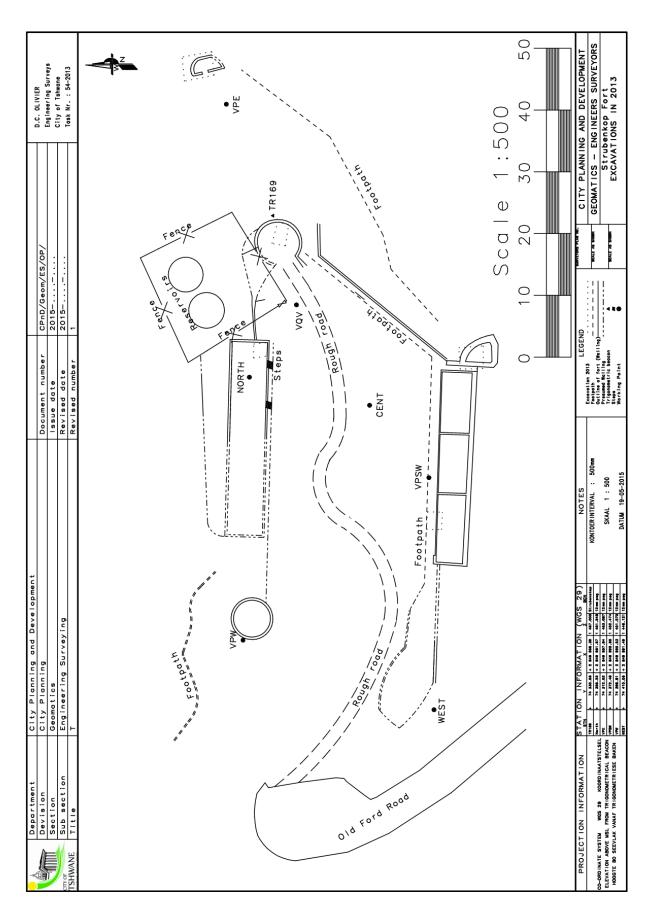


Figure 95: Plan of East Fort indicating excavations (D. Olivier).

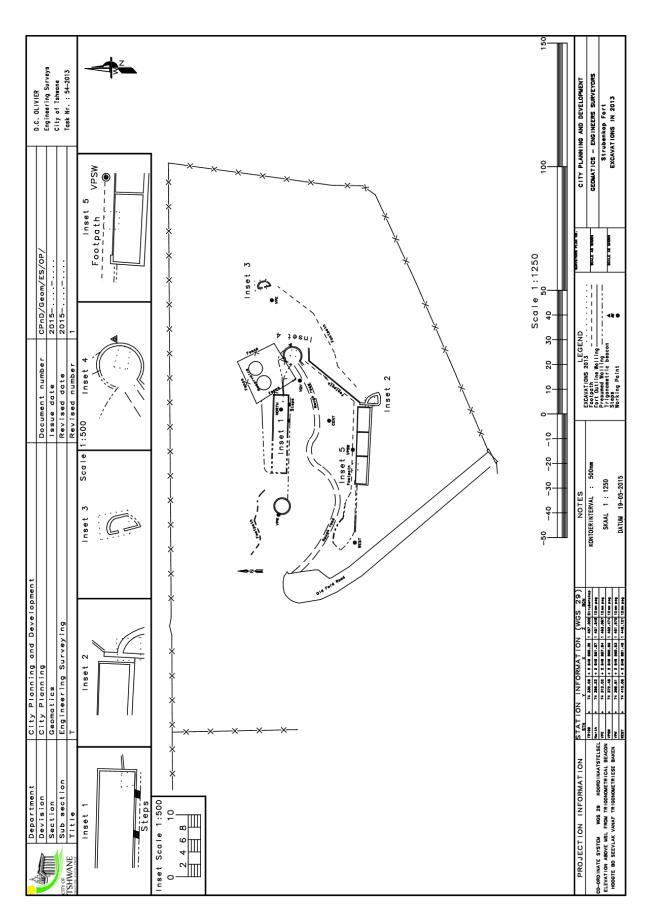


Figure 96: Plan of East Fort with a detailed inset of the excavtions (D. Olivier).

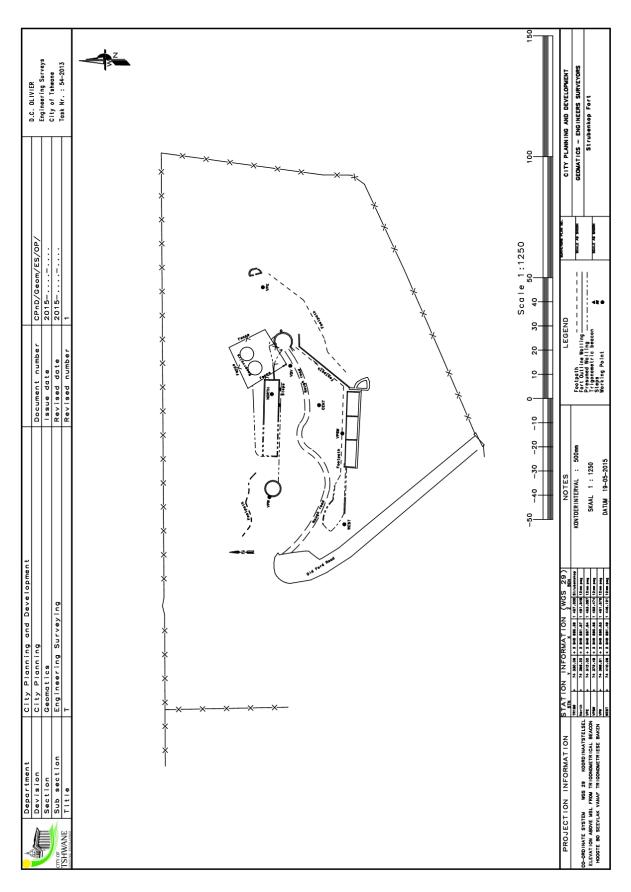


Figure 97: Plan of East Fort including fence of the nature reserve (D. Olivier).

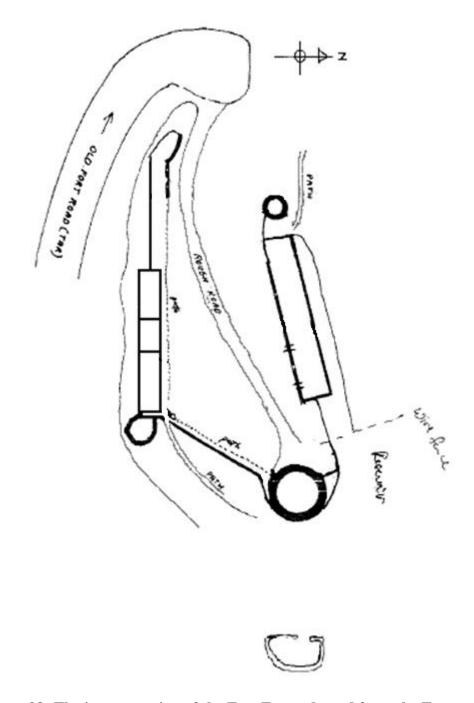


Figure 98: The interpretation of the East Fort, adapted from the Emms-plan.

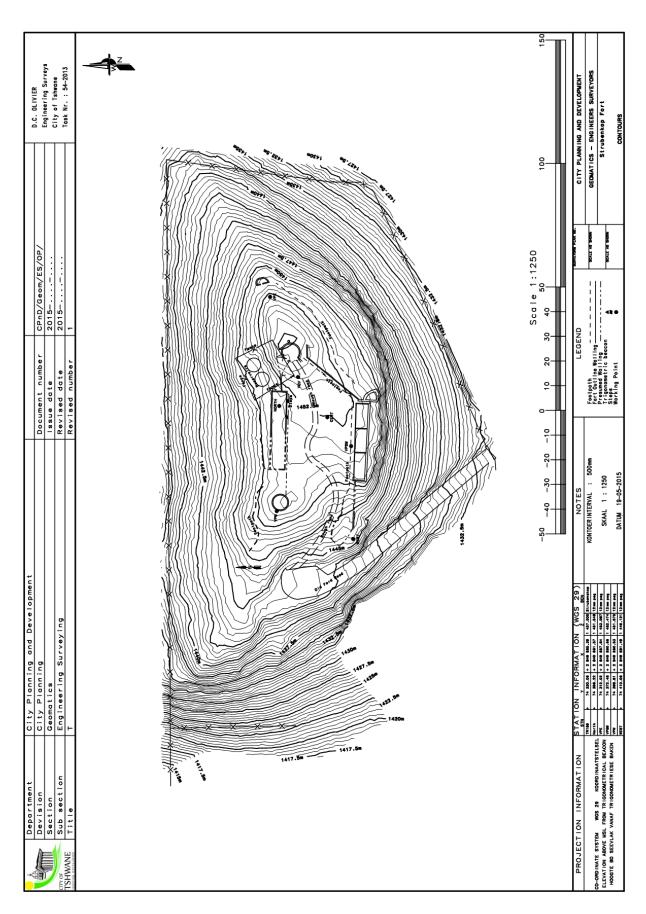


Figure 99: Contour map of East Fort (D.Olivier).

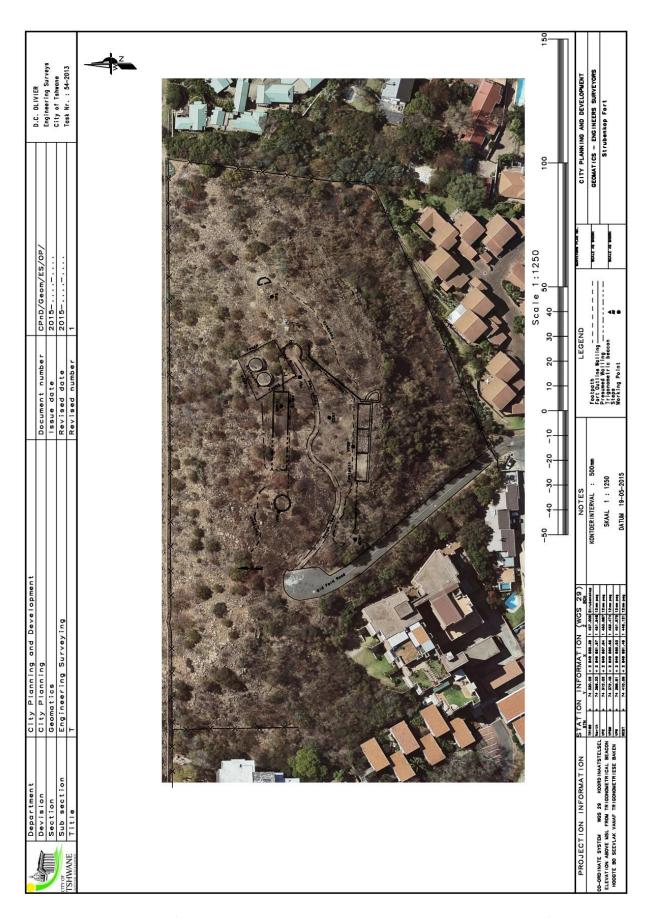


Figure 100: Plan of East Fort superimposed on an aerial photograph (D. Olivier).

It seems as if the fort was less formal than the Boer forts built just prior to the Anglo-Boer War in Pretoria. Most of the walls were built from stone and mortar, but on the inside of the fort these may have been nothing more than a foundation. At the feature in the north (suggested by Emms to be the barracks) the inner wall may have been higher, but most likely not roof high. Corrugated iron structures were then placed within the outer and inner wall, to form rooms. The corrugated iron rooms on the southern side of the fort were also separated from each other by a stone wall.

Some dry stone walling were also used inside of the fort as well as on the eastern and northern side, as protective measure. On the eastern side, outside of the fort, a D-shaped structure was placed. This was built with a stone mortared foundation and corrugated iron walls. In all cases the corrugated iron walls may have been double walls on a wooden frame, filled in with small stones. The only exception may have been the 'barracks' where this may have been only a single corrugated wall.

It looks as if the wind posed a problem with the corrugated iron roofs of the fort. One of the historical photographs clearly shows that stones were placed on top of the roof at the southern side of the fort, in order to counter this. The roofs were most likely also fixed with screws to the frames of the structures.

There also was a pillbox on the north-western edge of the fort. Only a stone and mortared circular shaped foundation wall is currently visible here, but loose stones lying around suggest that it had a dry semi-circular wall around it. This most likely was a typical blockhouse made of a double corrugated iron wall, filled in with small stones.

The entrance to the fort is on the west, facing the town and the fort was most likely reached by the same road than the one tarred today, coming from the south-west. The entrance is edged by the outer wall of the fort on its southern side and a steep natural rock face to the north. The entrance does not seem to be protected, but since the enemy would most likely not be on this side, it may not have been a problem. The loose D-shaped structure has an entrance to the west where it is protected by a natural stone edge, running up-slope to the west and separating the fort from this auxiliary feature.

A courtyard existed within the fort, where tents or other equipment may have been placed. There were also pathways running parallel to the rooms on the south (i.e. in an east-west direction), and from the southern pillbox to the eastern one, along a dry stone wall (i.e. from south-east to north-east). Other pathways may also have existed. The pathways were indicated by a stone wall on one side and a white washed line of stones on the other side. Similar white washed stones were used to demarcate functional areas in the court yard. The corners of these demarcated areas seems to have been marked by piles of white washed stones as was the entrances to the rooms on the southern side of the fort.

What remains on site today exists mainly of the foundations of buildings, loose stones and artefacts lying around. The excavations revealed much more artefacts than what was expected. This gives an indication of the richness of the archaeological deposit and the information it contains as the deposit seems to be much deeper on site than previously believed. This will be further investigated in future. The artefacts will be a valuable source in doing comparative

studies with other military structures from this time period. Similarities are already clear, but the in depth analysis will bring more clarity in this regard.

No midden could be identified thus far. There may be many reasons for this, which presently can only be speculated about. Refuse could have been buried somewhere on site during the War. It also may have been covered by modern developments, e.g. the tarred road to site or the houses which are only a few metres from the site. Lastly it is also possible that due to the close proximity to Pretoria, refuse was removed on regular intervals during the War.

Five excavations were conducted. These were all done in order to learn more about the construction and building material of the site as well as to unearth artefacts, which could shed light on the function of different sections of the fort.

Excavation 1 was done at an area to the north of the fort suggested to be the barracks. The stone walled remains of the eastern and southern wall of the feature could be defined with relative ease and the northern became visible during excavation. Possible floor fragments, consisting of concrete were identified close to the eastern wall. This suggests that the room may have been used for people rather than it being a storage area.

On completion of the excavation season at the three mentioned walls of the structure were partially excavated. These are the southern, eastern and northern wall thereof. It is concluded that the area most likely represents a room or rooms which most likely had a domestic function as most of the artefacts contemporary with the Anglo-Boer War excavated here, had a domestic function. This mostly included glass bottle fragments which counted almost two thirds of contemporary material excavated here.

Excavation 2 was done at the auxiliary structure to the east of the fort. Although the excavation will only be completed during the next excavation season, it already was clear that the structure most likely consisted of low stone walling around a D-shaped corrugated iron building, most likely with a double corrugated walls. The large number of typical roof screws and washers corroborate that this area was covered by a corrugated iron building, most likely with double walling filled in with stones. It had an entrance to the west, protected by the main fort and a natural rock face sloping up the hill.

The large amount of remains of ammunition found here indicates that this feature served as lookout point and additional security measure to the fort, perhaps covering an area which the main fortification could not cover. The calibres identified (.303 Lee Metford or Lee Enfield rifles and .577/.450 Martini-Henry rifles) were known arms used by the British forces during the Anglo-Boer War. As this was a work station the domestic type artefacts are limited.

Excavation 3 was done at the southern of the pillboxes at East Fort. It proved that this pillbox was built with a semi-circular eastern side and a cornered southern wall forming four different facades, most likely to give a better defensive view. It is believed that the structure had a ground and upper level, with the upper being a lookout and defensive function. Remains of ammunition found here corroborate this as do historical photographs indicating loopholes. Cultural objects found were mainly part of the building material again indicating that corrugated iron has been used.

A large amount of domestic material (e.g. ceramic and glass fragments) was also found. In fact these categories count more than 77% of the total artefactual material here. This indicates

that the lower level may have had a more domestic function. It is suggested that it may have been a storage area as the artefacts found had showed a large variety. Historical photographs indicate that the entrance was towards the north and that the structure was separated from other rooms on the southern side of the fort, by a stone wall.

Excavation 4 was done at the highest point of the fort at a pillbox which most likely has been the canon position. Although this could not be proved during excavation, a historical photograph showing the canon at the fort does seem to indicate this area and therefore this is taken as to be the case. The specific area is the best vantage point on site with almost a 360° view.

Artefacts found here were mostly fairly recent and also did not shed light on the issue. Pieces of barbed wire excavated may be part of defensive system of the fort. The many nails excavated here may have been part of a wooden platform on which the canon may have been mounted. It is known that this was common practice during this time (see Van Vollenhoven 1999:a 58). The lack of domestic type artefacts makes sense since this was a work station.

Excavation 5 was done at the western side of the fort, at the first flattened surface on the hill. The area was clearly prepared so that some kind of a structure could be placed here and the earlier mentioned historical photograph does indicate a corrugated iron structure here. It therefore clearly was a building/ room.

Artefacts excavated here mostly only consisted of building material, indicating that floor levels may not have been reached yet or that this was rather a working station than sleeping quarters. Since the excavation was no more than a surface sweep (except for the small section of stone walling investigated), it shows that more excavation is needed. Emms suggested that this could have been the officers' quarters, but it was not possible to determine this.

It was calculated that only 731 (14,75%) of all artefacts unearthed at the Eastern Redoubt are deemed to be contemporary with the occupation of the fort (see Appendix A - analysis of cultural material). This is a result of the site being surrounded by residential areas and the hill being reasonably low, resulting in many visitors over the last century. Looking at the figures, the cultural material at East Fort can be divided into the following: ceramics -28 (3,8%), glass -240 (32,8%), metal -432 (59,1%), building material -19 (2,6%) and miscellaneous -13 (1,7%).

Metal artefacts clearly dominate the collection, especially since it mainly consists of building material. This is a reflection of the corrugated iron structures erected at the fort. Ammunition is well represented and was identified at all excavations. Since the fort was a military installation it makes sense. The locations of the ammunition found indicate that these mostly came from Excavations 2 and 3, both areas interpreted as having an operational role, being lookout/ defensive positions. Unspent cartridges found may also indicate that the pillbox at Excavation 3 had a storage function as suggested earlier.

As indicated the contemporary ceramics and glass artefacts from the site is typical of the late 19th/ early 20th century. It includes liquor, non-alcoholic, possible ink, medicine and poison bottles as well as food and storage containers. The latter have mainly been found at Excavation 1 and 3, areas which therefore seem to have had a domestic function (e.g. sleeping quarters, storage, cooking and eating).

In conclusion it can be stated that the artefactual evidence corroborates that the site was extensively used during the late 19th/ early 20th century, placing the site within the Anglo-Boer War (1899-1902). Many of the objects are similar to those found at other Anglo-Boer War sites. The specific identification of military objects corroborates that the site was used during this war. Archival and other historical information confirms this and indicate that this was the site of the East Fort, the largest fortification built by the British in Pretoria during this war.

9. RECOMMENDATIONS

- **9.1** The research on site should continue since the site is very unique and also under threat of natural processes.
- **9.2** The City of Tshwane should continue to manage the site as a valuable cultural heritage resource and should grasp the opportunity to utilize it as public space and educational opportunity.

10. PROJECT TEAM

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12. REFERENCES

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⁴ A temporary display of excavated material from East Fort is being hosted at Fort Klapperkop.

- Bergh, J.S. (ed.) 1999. **Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies**. (Pretoria: J.L. van Schaik).
- British National Archives, WO/108/342, p. 9.
- Cameron, T. & Spies, S.B. (eds.), 1986. **Nuwe Geskiedenis van Suid-Afrika in Woord en Beeld**. (Cape Town: Human & Rousseau).
- Cantor, Stan. photographic collection.
- Hattingh, J. & Wessels, A. 1999. Life in the British blockhouses during the Anglo Boer War, 1899-1902. **Suid-Afrikaanse Tydskrif vir Kultuurgeskiedenis**. 13 (2), November.
- National Archives Depot, Pretoria, Transvaal Archives Depot, Staatssekretaris Oorlogstukke, SS 0, R 8496/00.
- Pakenham, T. Die Tweede Anglo-Boereoorlog, 1899-1902, in T. Cameron & S.B. Spies (eds.), **Nuwe Geskiedenis van Suid-Afrika in Woord en Beeld**. (Cape Town: Human & Rousseau).
- Pretorius, F. 1999. Die Anglo-Boereoorlog 1899-1902. Bergh, J.S. (ed.). **Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies**. (Pretoria: J.L van Schaik).
- Republic of South Africa. 1999. National Heritage Resources Act (No 25 of 1999). Pretoria: the Government Printer.
- Tomlinson, R. 1994. British Blockhouses in the Pretoria area 1900-1902, **Pretoriana**. (1994.03).
- Tomlinson, R. 1997. Britain's last castles. Masonry blockhouses of the South African War, 1899-1902, **Military History Journal**. 10 (6) (on-line version).
- Van Vollenhoven, A.C. 1992. 'n Histories-argeologiese ondersoek na die militêre fortifikasies van Pretoria (1880-1902). (Unpublished M.A.-dissertation, Pretoria, University of Pretoria).
- Van Vollenhoven, A.C. 1994. 'n Oorsig van die militêre fortifikasies van Pretoria (1880-1902). **Research by the National Cultural History Museum**. (3).
- Van Vollenhoven, 1995. **Die militêre fortifikasies van Pretoria 1880-1902. 'n Studie in die historiese argeologie**. Pretoria: Heinekor.
- Van Vollenhoven, A.C. 1999a. **The military fortifications of Pretoria 1880-1902. A study in historical archaeology**. (Pretoria: Technikon Pretoria).
- Van Vollenhoven, A.C. 1999b. Britse blokhuise in Pretoria gedurende die Anglo-Boereoorlog (1899-1902). **Pretoriana**. (112), October.
- Van Vollenhoven, A.C. 2010. Die Britse vrywilligerseenheid Steinaecker's Horse in die Anglo-Boereoorlog (1899-1902): 'n Kultuurhistoriese studie. (Unpublished DPhilthesis, Stellenbosch, University of Stellenbosch).
- Van Vollenhoven, A.C. 2011. A cultural heritage management plan for the Strubenkop Nature Reserve, City of Tshwane. (Unpublished report, Groenkloof, Archaetnos).
- Van Vollenhoven, A.C. & Van der Walt, J. 2002. 'n Reddingsondersoek na Anglo-Boereoorlog-ammunisie, gevind by Ifafi, Noordwes Provinsie. *South African Journal of Cultural History*. 16(1): 62-72.
- War Museum of the Boer Republics, CRE 5659, List of Blockhouses in the Pretoria District and on the Northern line, 1902-05-16.

APPENDIX A

A REPORT ON THE ANALYSIS OF CULTURAL MATERIAL RECOVERED FROM THE FIRST EXCAVATION SEASONS' EXCAVATIONS AT EAST FORT, PRETORIA

REPORT: AE01473V

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INTRODUCTION

The first part of this report will consist of a list of artefacts/objects from the different excavations conducted on the site as well as a basic description of the material recovered. A preliminary interpretation of the finds will be given at the end. The final interpretation is given in the main report.

The cultural material recovered during the fieldwork session included the following categories:

Charcoal
Ceramics
Glass
Metal
Building material (excluding metal)
Miscellaneous
Faunal remains

Last mentioned were analysed and discussed by an Archaeozoologist, Karin Scott, in a separate report as part of the work done. Besides the excavations, material was also collected from the general surface of the site.

Ceramics are divided into different sub-categories. The most important of these, usually to be found on historical-archaeological sites, are stoneware, porcelain, earthenware and pottery (Iron Age type earthenware) (Klose & Malan 1993: 2-3). No factory maker's mark, which assists in determining date and origin (Cushion 1996: 1), was found on any of the ceramic pieces. Therefore nothing more can be said than what is indicated in this report.

GENERAL SURFACE COLLECTION

The surface collection was limited to only three artefacts as it was believed it may get damaged/lost as it were lying in areas with much site traffic. It consisted of:

Ceramics – 1 shard Metal - 2 artefacts

Total number of artefacts: 3

Ceramics

• 1 x glazed earthen ware shard from a pot lid with an under glazed dark brown colour (Figure 1). The shard most likely represents the period of the late 19th to the early 20th century.



Figure 1 Earthenware shard from the surface collection of the site.

Metal

• 1 x lead seal with the inscription 'WEIHEN STEPHAN' (Figure 2). It is from a beer bottle.

The Weihanstephan brewery is in Freising, Bavaria, Germany. It is the world's oldest beer brewery and was founded in 725 A.D.. In 1852 the Central Agricultural School was moved to Weihenstephan which became an academy in 1895. The seal dates from this time period. The Academy became the University for Agriculture and Brewing in 1919 and was incorporated into the University of Munich in 1030.

Similar lead seals of liquor bottles, including beer, have been found on other sites from the Anglo Boer War period (Van Vollenhoven 2010: 161-162).



Figure 2 Lead seal from the Weihanstephan beer brewery.

Ammunition

• 1 x .303 cartridge from a Lee-Enfield/ Lee-Metford rifle (Figure 3). The headstamp shows the following: 'II R^L C', indicating that it is a mark II cordite round manufactured at the Royal Laboratory in Woolwhich, England (Van Vollenhoven & Van der Walt 2002: 68-70).



Figure 3 .303 bullet casing.

EXCAVATION 1

The following types of artefacts were unearthed:

Ceramics – 15 pieces Glass – 800 shards Metal – 28 pieces Building material – 15 artefacts Miscellaneous – 14 artefacts

Total number of artefacts: 872

Square A3

Ceramics

- 2 x Ceramic shards from a stoneware Geneva5 bottle (Figure 4). Many of these have been found on other sites from this time period (Van Vollenhoven 2010: 97, 134, 198).
- 2 x kaolin pipe stem pieces (Figure 5), MNI⁶ = 1. These date to the late 19th early 20th century and were sometimes found as an incentive in cases with Gin (Lastovica & Lastovica 1990: 37, 73).



Figure 4 Ceramic shards from a Geneva bottle.

⁵ Geneva refers to the Dutch product and should not be confused with the similar English product called Gin. 6 MNI – Minimum number of individuals



Figure 5 Kaolin pipe stem.

Glass

- 46 x Dark/Olive green shards 2 x necks; 1 x top; 3 x bottom, one of which has the wording "INDEP..." (Independent.....) and another "N SIX" (Figure 6). These are mostly from bottles of alcoholic beverages from the time (Lastovica & Lastovica 1990: 17-19). The word 'independent' could refer to something like 'independent breweries'.
- 11 x Brown shards (Figure 6). These were mainly used for poison or medicine (Lastovica & Lastovica 1990: 47).
- 4 x Clear White fragments with wording from Coke bottles
- 46 x clear fragments
- 4 x recent green fragments from beer bottles
- 43 x recent brown fragments from beer bottles
- 3 x clear tops from screw top bottles
- 1 x clear and very thin glass fragment with wording "E SI"

Only the first two groups on the list are contemporary with the fort. The others are much more recent and most likely have to do with people having braais and picnics on site, after the fort was abandoned.



Figure 6 Glass shards excavated at East Fort and contemporary with its period of occupation.

Metal

- 1 x screw cap of bottle, most likely from a period after the fort was abandoned
- 3 x nails (figure 7)
- 1 x piece of wire



Figure 7 Nails from Excavtion 1.

Ammunition

• 2 x round nose bullet points from a .303 calibre from a Lee-Metford or Lee-Enfield rifle (Personal communication: T Prinsloo). Both are bent and therefore may have been fired (Figure 8).



Figure 8 Spent .303 bullet points from Excavation 1.

Building material

- 3 x concrete pieces originating from the floor of the fort (Figure 9)
- 12 x other concrete pieces

Miscellaneous

• 1 x piece of bark which may be from a pipe bowl (Figure 10)



Figure 9 Pieces of concrete from Excavation 1. The smooth surface indicates that it most like is from a floor and therefore that the buildings here had a concrete floor.



Figure 10 Piece of bark from Excavation 1.

Block A4, A5 and A6

Building material

• 3 x concrete pieces

Square B5 and B6

Glass

- 6 X Olive/dark green fragments from alcoholic beverages dating to the late 19th/ early 20th century (Lastovica & Lastovica 1990: 17-19)
- 16 x Brown fragments 2 of these fit together and show the wording "CORPORA..." (corporation) (Figure 11). Brown glass was mostly used for poison during the late 19th/early 20th Century (Lastovica & Lastovica 1990: 47).
- 42 x recent brown fragments from beer bottles
- 55 x recent clear fragments one is from a Coke bottle
- 7 x recent green fragments from beer bottles



Figure 11 Dark green fragments from the same bottle dating to the late 19^{th} / early 20^{th} century.

Square B5, B6, C6 and D4

Metal

• Recent bottle caps

Square B5 and B6

Metal

• 1x large bolt (Figure 12)

- 1 x lead tip that seems to have been fitted onto something else (e.g. a sergeant-majors staff?) (Figure 12)
- 1 x washer from B6



Figure 12 Metal bolt, most likely contemporary with the occupation period of the fort. The lead tip is more difficult to explain.

Square B7

Glass

- 3 x Dark/olive green fragments from alcoholic beverages dating from the late 19th to early 20th Century (Lastovica & Lastovica 1990: 17-19)
- 4 x Clear fragments from the GW Shilling soda/ mineral water factory. The company was based in Pretoria and manufactured soda and mineral water. They also manufactured ginger beer which was sold in stoneware bottles. The company was established in 1885 and were based in Church Street, close to Lion Bridge (Lastovica 2000: 57, 137). They were in production until 1910 (Van Vollenhoven 2010: 275).
- 4 x Clear fragments

Miscellaneous

• 1 x Piece of cloth which may have been used as bedding

Building material

• 2 x small pieces of concrete

Square C

Glass

- 20 x recent green fragments from beer bottles
- 15 x recent brown fragments from beer bottles
- 49 x recent clear fragments two of these are from Smirnoff bottles

Metal

- 2 x pieces of corrugated iron (Figure 13)
- 3 x unidentified fragments
- 1 x tube-shaped fragment (Figure 13)
- 1 x small nail (Figure 13)
- 1 x 50c coin dated 2005



Figure 13 Different pieces of metal and a small nail, all which seem to be contemporary with the period of occupation of the fort. The corrugated iron was most likely used as walls or roof of a building in the fort.

Building material

• 1 x piece of concrete

Square D3 and D4

Glass

All the glass fragments excavated here are recent and consist of:

- 124 x clear fragments 3 are clear fragments from milk bottles
- 38 x brown beer bottle fragments
- 1 x green beer bottle fragment

Metal

• 1 x 1930 South African King George 5th 3 pence silver coin. This could not be contemporary with the fort, but indicates that the site has been visited during later times, as does other coins and more recent material found.

Miscellaneous

- 1 x plastic head of a toy dog from square D4
- 1 x section of a rope (Figure 14)



Figure 14 A section of rope which may be contemporary with the period of occupation of the fort.

Square E3

Surface finds:

Glass

All glass fragments found are of a recent origin and include:

- 43 x clear fragments one from a Coke bottle; 3 from a Smirnoff bottle; one from a Brutal Fruit bottle)
- 7 x green fragments from beer bottles

• 37 x brown fragments from beer bottles

Metal

- 1 x washer
- 1 x fragment
- 1 x electrical connector, clearly recent

Square E4

Glass

All glass fragments found are of a recent origin and include:

- 144 x clear fragments one from a Coke bottle; one from a Smirnoff bottle; 11 from Rose's lime cordial)
- 3 x green beer bottle fragments
- 2 x brown beer bottle fragments
- 1 x light green bottle top

Metal

- 3 x nails (Figure 15)
- 2 x washers (Figure 15)
- 2 x unidentified pieces
- 1 x head of a screw
- 1 x trouser button with wording "...XCF...O" (Figure 15)



Figure 15 Nails, washers and a button from Excavation 1.

Excavation Squares not specified⁷

Ceramics

• 11 x porcelain shards from the same tea cup. The cup is white and glazed with a yellow top and black bands. It is fairly recent and dates to the 1950's - 60's (Figure 16).



Figure 16 Reconstructed cup from porcelain shards excavated at Excavation 1. It dates to the 1950's-1960's and was most likely left on site by casual visitors.

Glass

• 11 x fragments of clear glass. These all originated from a single bottle and one fragment still has the cap on. It shows the wording "... E PROPERTY OF...SHILLING UNITED MINERALS PRETORIA". The cap is the type to be opened by a bottle opener (Figure 17-18).

The company was based in Pretoria and manufactured soda and mineral water. They also manufactured ginger beer which was sold in stoneware bottles. The company was established in 1885 and were based in Church Street, close to Lion Bridge (Lastovica 2000: 57, 137). They were in production until 1910 (Van Vollenhoven 2010: 275).

7 The specific blocks where these shards and fragments came from are not specified since it came from different blocks, but clearly originated from a single object.



Figure 17 Reconstructed soda water bottled from the GW Shilling factory in Pretoria.



Figure 18 Legible information on the bottle as well as the bottle top with the cap still in position.

The following types of artefacts were unearthed:

Glass – 6 shards Metal – 231pieces Building material – 1

Total number of artefacts: 238

Surface finds

Metal

- 2 x pieces of tin (Figure 19)
- 1 x screw and washer (Figure 19). These are the typical ones used to fit corrugated iron sheeting together.
- 1 x washer



Figure 19 Piece of tin and a typical screw and washer used for fitting corrugated iron sheets.

Level 1

Glass

• 6 x light green fragments from soda/ mineral water bottles (Figure 20). These date to the late 19th/ early 20th Century (Lastovica & Lastovica 1990: 25-28).



Figure 20 Soda/ mineral water shards from Excavation 2.

Metal

• 1 x lead seal, orange in colour with wording "...E & MACKAYECIAL SCOTCH GLASGOW". This is from the make Whyte & Mackay Special Scotch Whiskey Glasgow (Figure 21). The company was founded by James Whyte and Charles Mackay on the docks of Glasgow in 1844.



Figure 21 Lead seal from Whyte & Mackay special Scotch Whiskey, made in Scotland.

- 31 x nails (Figure 22)
- 48 x roof type screws (some partial)
- 73 x washers
- 56 x screws with washers (Figure 22)
- 1 x large timber bolt (Figure 23)
- 2 x heavy hinges (Figure 23)
- 1 x fragment
- 1 x trouser button (Figure 24)



Figure 22 Nails, washers and screws from Excavation 2.



Figure 23 Two hinges and a timber bolt found at Excavation 2. Corrugated iron structures were fixed to a timber frame.



Figure 24 Trouser button from Excavation 2.

Ammunition

- 1 x .22 bullet casing
- 6 x round nose .303 bullet points
- 6 x .303 bullet casings. The following head stamps were found: 4 x C II R \land L; 1 x II; 1 x K II.
- 2 x unspent .303 bullets both with the same makers mark of the Royal Laboratory in London (the head stamp has the following letters C II R^L -). These were used in Lee-Metford and Lee-Enfield rifles of the time (Figure 25-26).

The II stands for Mark II. The C indicates that it is a cordite round. The other markings indicate the factory where it was manufactured. $R \land L$ is the Royal Laboratory in Woolwich, England and the K is the Kynoch factory (Personal communication: T. Prinsloo).



Figure 25 Spent bullet points and cartridges as well as unspent ones from .303 rifles.



Figure 26 Head stamp of one of the .303 bullets.

Building materials

• 1 x concrete piece

EXCAVATION 3

The following types of artefacts were unearthed:

Ceramics – 20 shards Glass – 407 fragments Metal – 45pieces

Total number of artefacts: 472

Ceramics

Square C1 and C3

• 19 x shards of stoneware from ginger pots (5 fit together; 5 others fit together; 8 others fit together – MNI = 1-3). These pots are mostly light grey in colour with a brown top, but other colours are also sometimes found (Lastovica & Lastovica 1990: 58) (Figure 27).



Figure 27 Stoneware shards, parts of one or more ginger jars.

Square A1

• 1 x pipe stem from kaolin (Figure 28). These date to the late 19th - early 20th century and were sometimes found as an incentive in cases with Gin (Lastovica & Lastovica 1990: 37, 73).



Figure 28 Kaolin pipe stem from Excavation 3.

Glass

Surface and layer 1

- 4 x dark/ olive green fragments from alcoholic beverages, dating to the late 19th/ early 20th Century (Lastovica & Lastovica 1990: 17-19)
- 32 x recent green fragments from beer bottles
- 82 x recent brown fragments from beer bottles
- 76 x recent clear fragments

Square A1 layer 1

- 2 x clear shards from an Eno's bottle with makers marks (Figure 29). Eno's fruit salts were first manufactured in the 1870's by J.C. Eno in Newcastle, England (Lastovica & Lastovica 1990: 46). The ones found here dates to the late 19th/ early 20th Century and was excavated on various sites dating to the Anglo-Boer War (Van Vollenhoven 2010: 119, 122, 130, 250, 260).
- 1 x bottle stopper from Eno's bottle with lettering "PREPARED BY PATENT ENOS" (Figure 29-30)
- 63 x clear fragments
- 4 x light blue fragments (Figure 31). Blue glass was usually used for medicine or ink pots and sometimes poison during the late 19th/ early 20th Century (Lastovica & Lastovica 1990: 47, 53). The latter usually would be much thicker and therefore these are most likely from medicine such as castor oil.
- 1 x brown fragments. Brown glass was mostly used for poison during the late 19th/early 20th Century (Lastovica & Lastovica 1990: 47).



Figure 29 Bottom and bottle stopper of an Eno's bottle.



Figure 30 Eno's bottle stopper.



Figure 31 Fine blue glass fragments from Excavation 3.

Square C1 and C3

Most of the glass found is of a recent origin:

- 11 x clear fragments
- 5 x green fragments one with lettering "...VORGU..." (Figure 32)
- 14 x brown fragments
- 4 x olive/ dark green fragments



Figure 32 Glass from Excavation 3.

Square D2 and D4

- 11 x clear fragments (one from Rose's lime cordial) The latter may be contemporary with the period of occupation of the fort as the company was already established in 1865 and the product in general use during the late 19th and early 20th Century (Lastovica & Lastovica 1990: 63). Similar glass was found on other sites dating to the Anglo Boer War period (Van Vollenhoven 2010: 247).
- 1 x light green from soda/ mineral water dating to the late 19th/ early 20th Century (Lastovica & Lastovica 1990: 25-28)
- 2 x olive green from alcoholic beverages also dating to this time period (Lastovica & Lastovica 1990: 17-19)
- 9 x recent green fragments from beer bottles
- 85 x recent brown fragments from beer bottles

Metal

Surface

- 2 x fragments
- 1 x purse top (Figure 33)
- 1 x nail (Figure 33)
- 1 x screw (Figure 33)
- 1 x 1c from 1967

Square A1 layer 1

- 3 x screws (Figure 33)
- 1 x wire from champagne bottle (Figure 33)
- 2 x trouser buttons one with wording "SMITH & WRIGHT LIM^D BIRM" and one unclear, both written on back side (Figure 33-34). These may be from the uniforms of British soldiers. The company were in operation between 1882 and 1960.



Figure 33 Various metal artefacts from Excavation 3.



Figure 34 Detailed view of the trouser buttons excavated.

Square B layer 1

- 2 x pieces of wire one formed into a hook which could have been used as some kind of a tool
- 7 x washers similar to others excavated on site
- 1 x roof screw similar to others excavated on site
- 3 x nails

Square A4 layer 1

• 1 x nail

Square C1 and C3 layer 1

- 4 x washers similar to others excavated on site
- 4 x roof screws similar to others excavated on site
- 1 x nail

Ammunition

Square A1 layer 1

• 1 x .303 bullet casing from a Lee-Metford or Lee- Enfield rifle with the following on the headstone: 'II K C'. It therefore is a from a Mark II Cordite round from the Kynoch factory (Personal communication: T. Prinsloo) (Figure 35)

Square B layer 1

• 1 x .303 bullet casing from a Lee-Metford or Lee-Enfield rifle with the following on the headstone: 'II R^L C'. It therefore is a from a Mark II Cordite round from the Royal Laboratory in Woolwich, England (Personal communication: T. Prinsloo) (Figure 35).

Square C1 and C3 layer 1

• 1 x .303 bullet casing from a Lee-Metford or Lee-Enfield rifle with the following on the headstone: 'II K C'. It therefore is a from a Mark II Cordite round from the Kynoch factory in Birmingham, England (Personal communication: T. Prinsloo) (Figure 35).

Square D layer 1

- 4 x round nose Martini-Henry casings. It could also be for a Maxim machine gun. The calibre is .577/.450 and it was made of drawn brass (Figure 35). It has no markings and therefore is expected to rather be Martini-Henry than Maxim (Personal communication: T. Prinsloo).
- 1 x partial Martini-Henry or Maxim casing. It has no markings and therefore is expected to rather be Martini-Henry than Maxim (Personal communication: T. Prinsloo).

Similar bullet casings were also found on various other sites associated with Anglo-Boer War (Van Vollenhoven 2010: 282-284).

Square A4 layer 2

• 1 x .22 casing – this calibre only became in use after the Anglo-Boer War.



Figure 35 .303 and Martini-Henry bullet casings excavated at Excavation 3.

EXCAVATION 4

The following types of artefacts were unearthed:

Charcoal

Ceramics – 3 shards
Glass – 3161 fragments
Metal – 70pieces
Building material – pieces of rubble

Total number of artefacts: >3234

Surface

Glass

These were all from recent glass bottles, being:

- 83 x fragments from brown beer bottles
- 70 x fragments from clear bottles
- 44 x fragments from green beer bottles

Layer 1

Glass

Again these were all from recent bottles being:

- 1384 x fragments from brown beer bottles
- 855 x fragments from green beer bottles
- 725 x fragments from clear bottles

Ceramics

- 2 x glazed white stoneware shards from a saucer (both rim pieces). MNI = 1 (Figure 36)
- 1 x earthen ware glazed rim piece with blue willow pattern probably from a cup (Figure 36).

All these shards are difficult to date without maker's marks, but these may well date to the time the fort was occupied.



Figure 36 Ceramics from Excavation 4.

Metal

- 7 x pieces of wire (Figure 37)
- 49 x nails (Figure 37)
- 2 x trouser buttons without markings (Figure 37)
- 2 x pieces of corrugated iron
- 1 x screw (Figure 37)
- 1 x thick metal bar (Figure 37)
- 1 x washer (Figure 37)



Figure 37 Metal artefacts from Excavation4.

- 1 x stud from an ear ring
- 1 x R2 coin (1989)
- 1 x 2c coin (1981)
- 1 x 1c coin (1976)

Ammunition

- 1 x .22 bullet casing
- 1 x .303 bullet point from a Lee-Metford or Lee-Enfield rifle. The point has been fired and expanded as a result thereof (Personal communication: T. Prinsloo) (Figure 38)
- 1 x soft metal casing of ammunition? (Figure 38)



Figure 38 soft metal casing and expanded .303 bullet point.

Building material

Pieces of concrete and pieces of brick

EXCAVATION 5

The following types of artefacts were unearthed:

Glass – 53fragments Metal – 70 pieces Building material – 2 pieces

Total number of artefacts: 125

Glass

Level 1

All the glass excavated here is of a recent origin and consisted of:

- 3 x fragments of green beer bottles
- 1 x light green fragments
- 4 x fragments of brown beer bottles
- 13 x clear fragments

Level 2

Again all the glass excavated is of a recent origin, being:

- 18 x fragments from green beer bottles
- 10 x fragments from brown beer bottles
- 2 x clear fragments

Level 3

Again all the glass excavated is of a recent origin, being:

• 2 x clear fragments

Metal

Level 1

- 4 x roof screws similar to others from the site
- 4 x washers similar to others from the site
- 1 x piece of tin
- 9 x nails
- 1 x eye of tent/sail (Figure 39)

Level 2

- 2 x roof screws similar to others from the site
- 7 x washers similar to others from the site
- 16 x roof screws with washers similar to others from the site (Figure 39)
- 1 x piece of tin

- 1 x tent peg (Figure 39)
- 1 x screw (Figure 39)
- 3 x nails (Figure 39)

Level 3

- 3 x roof screws similar to others from the site
- 2 x washers similar to others from the site
- 6 x roof screws with washers similar to others from the site
- 4 x nails (Figure 39)
- 1 x piece of metal
- 1 x trouser button with unclear wording (Figure 39)



Figure 39 Metal artefacts from Excavation 5.

Ammunition

Level 2

• 1 x .303 round nosed bullet point (Personal communication: T. Prinsloo) (Figure 40)

Level 3

• 1 x .303 bullet casing from a Lee-Metford or Lee-Enfield rifle. The markings on the head stamp are 'KN C II'. This indicates that it is a Mark II cordite round made at the Kings Norton Metal Factory in Birmingham, UK Personal communication: T. Prinsloo) (Figure 40).



Figure 40 .303 ammunition from Excavation 5.

Building material

Level 1

• 2 x pieces of brick

DISCUSSION AND CONCLUSION

At the East Fort one would hope to unearth artefacts dating to the late 19th/ early 20th Century as this is the time period of the Anglo-Boer War and the fort. One would also want to find objects specifically linked to the military as the site had a military function. Other objects would be used to determine functional areas in the fort.

The number of objects recovered from the East Fort during the second excavation season totals more than **4943** (excluding charcoal, faunal material and uncounted rubble). This compares well to other similar excavations.

The largest number came from Excavation 4 totalling 65,4% of all artefacts found. The other percentages are: Excavation 1 - 17,7%; Excavation 3 - 9,5%; Excavation 2 - 4,8%; Excavation 5 - 2,5% and the surface collection - 0,1%. Of course the size and depth of certain excavations resulted in more objects being found here than at the other excavations, but it does give an indication of these areas being used more frequently than others or of the functions thereof being more related to everyday use and people spending larger quantities of time here than at other areas excavated. This would especially be true of Excavation 1 and 4 which seem to had rather a domestic than a work related function.

One can rarely learn much from artefacts collected via the surface collection. The reason is that these does rather reflect a broad idea of the site that specific features. One therefore

needs more information in order to interpret this further. In this case objects lying around on site, which had the potential to provide additional information and which were in danger of being lost (due to reasons such as site traffic etc.), were collected. It therefore would do nothing more than add to general information on the site. In this case the artefacts date to the late 19th/ early 20th Century and therefore could be associated with the fort. One of the artefacts (.303 bullet casing) has a definite military origin.

At Excavation 1, a number of 872 (16,4%) artefacts were collected. These are divided into ceramics - 1,7% (15), glass - 91,8% (800), metal - 3,2% (28), building material - 1,7% (15) and miscellaneous 1,6 (14). It has to be stated however that 689 of the glass shards seem to be very recent and therefore this percentage would drop to a much lower level, although it would still be the most dominant artefact type found, consisting of 111 shards. One therefore needs to consider this aspect, but also needs to bear in mind that some of the other artefact types may also include fairly recent objects which one may not be able to calculate (as some may or may not be recent – e.g. metal objects). This brings the total number of artefacts down to 167.8 One also needs to remember that building material will always be misrepresented as many objects are calculated with metal and because the stone walling is not removed from site. It would therefore be almost impossible to get an accurate view, which means that one will merely be working with trends at a specific excavation or site.

The types of artefacts have to be adapted accordingly resulting in the following percentage changes: ceramics -4 pieces (2,4%), glass -111 shards (66,5%); metal -24 artefacts (14,4%), building material -15 pieces (8,9%) and miscellaneous -13 artefacts (7,8%). The same could be said of the other excavations.

It therefore seems at Excavation 1 that domestic type artefacts (ceramics and glass) dominate the collection. One of the miscellaneous pieces, if indeed part of a pipe bowl, corroborates this, as does the possible bedding. The metal found includes nails, which may have been used in the construction of the building or in storage cases. It also includes barbed wire which may have been used as security measure – a barrier to keep intruders out. Most of these seem to date to the late 19th/ early 20th Century, which is exactly the time period expected. The other metal artefacts found is .303 bullet points, which is an indication of the military presence at the site. Lastly the piece of concrete flooring indicate that the building here were important enough to warrant a proper floor. It therefore suggests something like an office or garrisons quarters. The latter is in line with the suggestion of Emms (see map in main report).

As the same goes for the other excavations, only the necessary information will be given. It will include all the figures at it is interesting to note the large number recent artefacts on site, clearly explaining the utilisation thereof by casual visitors over a period of more than 100 years.

At Excavation 2, a number of 238 (4,8%) artefacts were collected. These are divided into glass - 2,5% (6), metal - 97% (231) and building material - 0,5% (1). The calculation after subtracting the recent artefacts in this case makes not much of a difference and are as follows: the total number is 237, consisting of : glass - 6 shards (2,5%); metal - 230 artefacts (97%)

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⁸ The total number of artefacts at Excavation 1, which seem to be within the time period of the occupation of East Fort.

and building material -1 piece (0,5%). Only one .22 bullet casing was found to be of recent origin and was probably left by someone doing some target shooting on site.

It therefore seems at Excavation 2 that metal artefacts dominate the collection. These are mostly parts of building material. It also includes typical Anglo-Boer War ammunition (.303 bullets) placing the excavated area within the time period expected. The remainder include a possible uniform trouser button and a lead seal from a whiskey bottle of the late 19th/ early 20th Century. The latter corroborates with remains of soda/ mineral water bottles from this time period. Lastly the piece of concrete indicates that concrete may have been used in the construction of a structure here. It is suggested that a corrugated iron structure, fixed to a timber framework, was erected here and served some military function, such as a lookout post. As this was a work station the domestic type artefacts are limited.

At Excavation 3, a number of 472 (9,5%) artefacts were collected. These are divided into ceramics - 4,3% (20), glass - 86,2% (407) and metal - 9,5% (45). The calculation after subtracting the recent artefacts are as follows: the total number is 185, consisting of: ceramics - 20 fragments (10,8%), glass - 123 shards (66,5%) and metal – 42 artefacts (22,7%). Recent artefacts consisted of glass shards and only one .22 bullet casing and a coin.

As was the case with Excavation 1, domestic type artefacts (ceramics and glass) dominate the collection at Excavation 3. The metal found again includes building material (nails, screws etc.), buttons perhaps from uniforms and Anglo-Boer War ammunition. Wire excavated could also be part of the defensive system around the fort. The dateable artefacts are from the late 19th/ early 20th Century. Some of the domestic artefacts do however seem to indicate the storage of provisions, e.g. the Eno's bottle and the ginger pot. Although too little has been found to be sure, it does seem to indicate a possible storage area. It is known that the structure here was built from stone and it is suggested that it may be a storage room for provisions. It however had a corrugated iron top floor, used as a lookout with loopholes. The ammunition found here therefore also makes sense.

At Excavation 4, a number of 3234 (65,4%) artefacts were collected. These are divided into ceramics – 0,1% (3), glass – 97,7% (3161), and metal - 2,2% (70). The calculation after subtracting the recent artefacts in this case makes a notable difference and is as follows: the total number is merely 67, consisting of: ceramics - 3% (2) and metal – 97% (65) artefacts. Note therefore that all glass artefacts were found to be of recent origin and were likely left on site by casual visitors (before the fence was erected it was a common drinking place for students as the site borders the university). The specific area is a good vantage point as it is the highest on the hill. One .22 bullet casing was found to be of recent origin and was probably left by someone doing some target shooting on site. A few recent coins and an ear ring stud were also found.

This shows how skew interpretation can be if recent artefacts are counted. Although difficult and with inaccurate calculations, subtracting these definitely gives a more accurate sense of the site. It therefore seems at Excavation 4 that metal artefacts dominate the collection. These are mostly parts of building material, but also include wire which may have been used as part of the defensive system of the fort. It also includes typical Anglo-Boer War ammunition (.303 bullets) placing the excavated area within the time period expected as well as possible trouser buttons. The ceramics found dates to the late 19th/ early 20th Century. It is believed that this area is the canon position and that nails may have been part of a wooden

platform. The amount of nails identified is 49, which is far more than any other artefact type found. Again, as this was a work station the domestic type artefacts are limited.

At Excavation 5, a number of 125 (2,5%) artefacts were collected. These are divided into glass - 42,4% (53), metal - 56% (70) and building material - 1,6% (2). The calculation after subtracting the recent artefacts are as follows: the total number is 72, consisting of: metal – 70 artefacts (97,2%) and building material – 2 artefacts (2,8%). Again note that all glass artefacts were found to be of recent origin and were likely left on site by casual visitors. The specific area is a good vantage point towards the south with level areas where one can sit and enjoy the view.

Metal artefacts therefore dominate the collection at Excavation 5. This again includes building material (nails, screws etc.), a trouser button perhaps from a uniform and Anglo-Boer War ammunition. The dateable artefacts are from the late 19th/early 20th Century. Cultural material also includes a tent peg and the eye of a sail/tent. The typical white British Bell tents were frequently used during the War and it is known that some were pitched at the Boer forts of Pretoria after these have been manned by the British (Van Vollenhoven 1992: 129). Building material is the dominant artefacts type and therefore it is suggested that a corrugated iron building was also erected here. The function of this room cannot be determined yet as very few other artefacts were found. None with a domestic purpose was identified which may indicate that the building here rather was used as a work station than sleeping quarters.

In effect this means that only 731 (14,75%) of all artefacts identified are deemed to be contemporary with the occupation of the fort. This is probably a result of the site being surrounded by residential areas and the hill being reasonably low, resulting in many visitors over the last century. Looking at the remaining figures, the cultural material at East Fort can be divided into the following: ceramics -28 (3,8%), glass -240 (32,8%), metal -432 (59,1%), building material -19 (2,6%) and miscellaneous -13 (1,7%).

It is no surprise that metal artefacts now dominate the collection, especially since it mainly consists of building material. Ammunition is also well represented and was identified at all excavations. This is a reflection of the corrugated iron structures erected at the fort and the ammunition used since it was a military installation. The metal and other building material was mostly found at Excavation 2. This seem to make sense as the corrugated iron structure here seems to not have had high stone walling around it or the stone walling was informal due to the difficulty of erecting a structure here on the solid rock. At other excavations the number of artefacts typed as building material is less due to some of the stone walling still being in tact and therefore not being removed from site.

Excavation 5 was nothing more than a surface sweep and was later concentrated on a stone wall identified. Therefore almost all artefacts (except for ammunition) found here were related to the building. At Excavation 4 artefacts are mixed and may have had many different functions. This makes sense since this was an open area where different objects may have been used along the canon.

A closer look at the locations of the ammunition found is also necessary in order to elucidate possible information deducted from this. In total 30 artefacts were found. Of this, 24 (80%) were .303 (Lee-Metford/ Enfield) calibre and 6 (20%) were .577/.450 (Martini-Henry). It is common knowledge that the .303 were a more advanced rifle and that it was used more

during the latter part of the War (Bester 1994: 48). The figures therefore makes sense Five of the Martini-Henry casings were found at Excavation 3 and one at Excavation 4. Those at Excavation 3 were unspent and may have been stored there (if this included a storage room as suggested earlier).

The figures for the different areas on site (including all Anglo-Boer War ammunition), is as follows: Surface collection -1 (3.33%); Excavation 1-2 (6,66%); Excavation 2-14 (46,66%); Excavation 3-9 (30%); Excavation 4-2 (6,66%) and Excavation 5-2 (6,66%). It confirms that the structure excavated at Excavation 2 had an operational role, most likely a lookout and security position. The same goes for Excavation 3 where there seems to have been a dual function of perhaps a storage room below and a lookout position on the upper level. Since the fort was a military installation, finding ammunition all over does make sense, but the quantities are much less in other areas.

As indicated the contemporary ceramics and glass artefacts from the site is typical of the late 19th/ early 20th century. It includes liquor, non-alcoholic, possible ink, medicine and poison bottles as well as food and storage containers. The latter have mainly been found at Excavation 1 and 3, areas which therefore seem to have had a domestic function (e.g. sleeping quarters, cooking and eating). Although not much ceramics were found, most of what was identified were also excavated here. This corroborates with the areas as having a domestic function. At Excavation 1, as also suggested by the plan op the fort drawn by Emms, this most likely was a garrison area (sleeping quarters/ mess hall or something similar). The possible storage room at Excavation 3 gives an explanation for finding domestic type artefacts here.

In conclusion it can be stated that the artefactual evidence corroborates that the site was extensively used during the late 19th/ early 20th century, placing the site within the Anglo-Boer War (1899-1902). Many of the objects are similar to those found at other Anglo-Boer War sites. The specific identification of military objects corroborates that the site was used during the Anglo-Boer War (1899-1902). Archival and other historical information confirms this and indicate that this was the site of the East Fort, the largest fortification built by the British in Pretoria during this war.

<u>REFERENCES</u>

- Bester, R. 1994. **Boer rifles and carbines of the Anglo-Boer War**. (Bloemfontein: War Museum of the Boer Republics).
- Cushion, J.P. 1996 (5th Ed.). **Handbook of pottery and porcelain marks**. (London: Faber & Faber).
- Klose, J. & Malan, A. 1993. Ceramics of the Southwestern Cape 1650-1850. A guide to the analysis and interpretation of ceramic assemblages excavated from archaeological sites. HARG Handbook no. 1. (Cape Town: University of Cape Town).
- Lastovica, E. 2000. **Ginger beer bottles for South African collectors**. (Cape Town: Gaffer Press).
- Lastovica, E & A. Lastovica. 1990. **Bottle and Bygones: A Guide for South African Collectors**. (Cape Town: Don Nelson).
- Prinsloo, T. Amateur Military Historian, Personal Communication, 2013.10.14.

- Van Vollenhoven, 1992. **A Historic-archaeological survey of the military fortifications of Pretoria (1880-1902)**. (Unpublished M.A.-dissertation, Pretoria, University of Pretoria).
- Van Vollenhoven, A.C. 2010. **Die Britse vrywilligerseenheid Steinaecker's Horse in die Anglo-Boereoorlog (1899-1902): 'n kultuurhistoriese studie** (Unpublished DPhil thesis, Stellenbosch, University of Stellenbosch).
- Van Vollenhoven, A.C. & Van der Walt, J. 2002. 'n Reddingsondersoek na Anglo-Boereoorlog-ammunisie, gevind by Ifafi, Noordwes Provinsie. **South African Journal of Cultural History**. 16(1).

APPENDIX B

A REPORT ON THE ANALYSIS OF CULTURAL MATERIAL RECOVERED FROM THE SECOND SEASONS' EXCAVATIONS AT EAST FORT, PRETORIA

REPORT: AE01531V

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INTRODUCTION

The first part of this report will consist of a list of artefacts/objects from the different excavations conducted on the site during the second excavation season, as well as a basic description of the material recovered. A preliminary interpretation of the finds will be given at the end. The final interpretation is given in the main report.

The cultural material recovered during the second excavation seasons' fieldwork session included the following categories:

Ceramics
Glass
Metal
Building material (excluding metal)
Miscellaneous
Faunal remains

Last mentioned were analysed and discussed by an Archaeozoologist, Karin Scott, in a separate report as part of the work done. The assistance of Graham and Ian Reeks and Heidi Fivaz in analysing some of the artefacts also needs to be acknowledged.

Besides the excavations, material was also collected from the general surface of the site. Ceramics are divided into different sub-categories. The most important of these, usually to be found on historical-archaeological sites, are stoneware, porcelain, earthenware and pottery (Iron Age type earthenware) (Klose & Malan 1993: 2-3). No factory maker's mark, which assists in determining date and origin (Cushion 1996: 1), was found on any of the ceramic pieces from the second excavation seasons' excavations.

Horn (2005) gives information that assist in broadly defining and dating historical artefacts. However the artefacts identified at East Fort mostly fall in the category after 1880 and are not always well-defined from later ones until more or less the 1930's. This makes it difficult, especially when working with metal objects to distinguish between those associated with the fort and those from a few years later. Therefore nothing more can be said than what is indicated in this report.

GENERAL SURFACE COLLECTION

The surface collection was limited to a few artefacts as it was believed it may get damaged/lost as it were lying in areas with much site traffic. It consisted of:

Ceramics – 1 shard Glass – 6 artefacts Metal - 2 artefacts

Total number of artefacts: 9

Ceramics

• 1 x glazed stoneware shard with a white underglaze and black wording on side – "JO...EY – POU..." and perhaps a "D" on bottom (Figure 1). The shard represents a

mustard pot from late 19^{th} to the early 20^{th} century. The company of Grey and Poupon was started in 1777 in the town of Dijon in France. At first the pots had cork stoppers (Figure 2), but later on it became metal caps (Figure 3). Much later during the 20^{th} century it became screw caps.



Figure 1: Stoneware shard from a mustard pot, collected on the surface of the site.



Figure 2: 19th Century Dijon Grey-Poupon mustard jar.



Figure 3: Early 20th Century Dijon Grey-Poupon mustard jar.

Glass

- 1 x light green bottle stopper from an ENO's bottle with the following wording visible: "PA...P...ENO" (Figure 4). Eno's fruit salts were first manufactured in the 1870's by J.C. Eno in Newcastle, England (Lastovica & Lastovica 1990: 46). The one found here dates to the late 19th/ early 20th century and similar ones were also excavated on various sites dating to the Anglo-Boer War (Van Vollenhoven 2010: 119, 122, 130, 250, 260). The "PA" stands for "Patent".
- 1 x light green marble used as stopper in a soda or mineral water bottle from the late 19th/ early 20th century (Figure 4)
- 1 x light green bottom shard with wording "...NARD &..." on the side and "D" on the bottom (Figure 5). It comes from a soda/ mineral water bottle from the late 19th/ early 20th century.
- 1 x olive green body shard with wording "E (or "F") T…" on the side (Figure 5). It comes from an alcoholic beverage bottle from the late 19th/ early 20th century.
- 1 x light green bottom shard with embossed inscription "1780" and "J" on the bottom. Although an old shard, it most likely dates to a period after the Anglo-Boer War.

• 1 x clear glass top representing the lid of a sauce bottle. Although an old shard, it most likely dates to a period after the Anglo-Boer War.



Figure 4: ENO's bottle stopper and marble bottle stopper.



Figure 5: Late 19th/ early 20th century glass from the surface collection at East Fort.

Metal

Ammunition

• 1 x .303 cartridge casing from a Lee-Enfield/ Lee-Metford rifle (Figure 6-7). The headstamp shows the following: 'K'. \uparrow I .', indicating that it is from a mark II round nosed cupronickel round, manufactured at the Kirkee Arsenal in Poona, India. It dates to the late 19th/ early 20th century (Personal communication: T. Prinsloo).



Figure 6: .303 bullet casing.



Figure 7: Headstamp of the .303 bullet casing.

EXCAVATION 1

The following types of artefacts were unearthed:

Ceramics – 29 pieces Glass – 1117 shards Metal – 78 pieces Building material – 6 artefacts

Total number of artefacts: 1230

Ceramics

Square H7

• 1 x white stoneware shard with underglazed black line motif (Figure 8)

Square K6

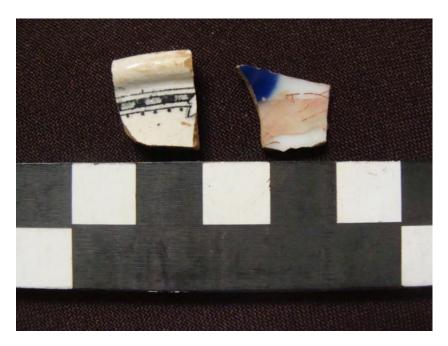
• 26 x white underglazed stoneware pieces, most likely from one vessel, MNI⁹ = 1. Six are rim pieces of which 5 fit together with 2 body sherds; 2 are bottom pieces which fit with a shard from Square K7 (Figure 9).

Square K7

• 1 x white underglazed stoneware pieces, from the same vessel as above. The piece fit with the two bottom pieces from Square K6 (Figure 9).

Square O7

• 1 x very fine white porcelain shard with underglazed pink and blue motif (Figure 8)



⁹ MNI = Minimum Number of Individuals.

Figure 8: Stoneware and porcelain shards from Excavation 1.



Figure 9: Stoneware shards from Square K6 and K7 (with red marker).

Glass

The following recent glass shards were excavated:

- Square D6 (9 x brown [including Castle beer]; 38 x green [including Grolsch beer]; 52 x clear [including Smirnoff])
- Square D7 (6 x green [including Grolsch beer]; 1 x clear [Smirnoff])
- Square E6 (9 x brown; 18 x green [including Grolsch beer]; 46 x clear [including Smirnoff and Brutal Fruit])
- Square E7 (3 x brown; 38 x green [including Grolsch beer]; 10 x clear [including Smirnoff])
- Square E8 (11 x green [including Grolsch beer]; 1 x clear [Brutal Fruit])
- Squares E7 and F7 (123 x clear [including Smirnoff])
- Square F6 (26 x brown [including Castle beer]; 9 x green; 40 x clear [including Smirnoff])
- Square F7 (6 x brown [including Castle beer]; 8 x green; 10 x clear [including Smirnoff])
- Square G6 (51x brown [including Castle beer 1970's-1980's]; 21 x green [including Grolsch beer]; 14 x clear [including Smirnoff])
- Square H6 (101 x brown; 95 x green [wording in Afrikaans therefore beer from the 1970's-1980's]; 22 x clear [including Coke])
- Square H7 (10 x brown x green [including Grolsch beer]; 4 x clear)
- Square I6 (22 x brown; 19 x green; 27 x clear)
- Square I7 (5 x brown; 2 x green; 3 x clear)
- Square J7 (32 x brown [including Castle beer]; 7 x clear)
- Square K6 (13 x brown; 10 x clear)

- Square K7 (42 x brown; 5 x clear)
- Square M6 (1 x clear [Coke])
- Square O6 (5 x brown; 4 x clear)
- Square O7 (29 x brown; 1 x green; 10 x clear)
- Square O8 (1 x green)

Historical shards were the following:

Square H6

• 12 x clear glass shards from one bottle with enscription: STANDA... INERAL WATER WORKS P..ETORIA, as well as a makers mark of a triangle with wording BRFOS (Figure 48-49). The Standard Mineral Water Factory is a Pretoria based company which have already existed in 1906, but may have existed before that (Lastovica & Lastovica 1990: 95). In fact, finding this bottle in this location, more than likely proves that. The company is still in existence, with its premises at no 117 Church Street, Pretoria. They also manufactured ginger beer (Lastovica 2000: 137).

Square H7

- 2 x Dark/Olive green shards (Figure 10) most likely from bottles of alcoholic beverages from the time (Lastovica & Lastovica 1990: 17-19).
- 1 x light green part of a bottle stopper (Figure 10). This seems to be from a food sauce bottle, such as Worcestershire sauce bottle rom the late 19th/ early 20th century (Lastovica & Lastovica 1990: 65).

Square K6

• 5 x tiny blue shards which may be from medicine bottles of the late 19th/ early 20th century (Lastovica &Lastovica 1990: 47, 53).



Figure 10: Glass shards from Square D7 at Excavation 1.

Metal

Square D7

• 1 x recent screw cap from Smirnoff Spin

Square D8

• 2 x nails (Figure 11)

Square E7

• 1 x roof washer

Square F6

• 2 x bolts with threading on both sides (Figure 11). These were most likely used to tie wooden beams together (as one would suspect in the frames of corrugated iron buildings from the time).

Square F7

- 1 x roof screw
- 1 x section of a metal rod (Figure 11)

Square E8

• 1 x strand of wire

Square G6

- 4 x parts of metal rods/ pegs
- 1 x part of curved peg
- 1 x strand of wire
- 1 x bolt similar to those from Square F6 with threading on both sides (Figure 11)
- 1 x large square nut fitting the above bolt (Figure 11)
- 6 x fragments



Figure 11: Metal from Excavation 1. Note the square nut that fits onto one of the bolts with threading on both sides.

Square H6

- 1 x roof screw
- 1 x roof washer
- 1 x small piece of corrugated iron
- 1 x strand of wire
- 1 x square nut, the same size as the one in Square G6 (Figure 12)

Square H7

- 9 x nails (Figure 12)
- 1 x strand of wire
- 1 x circular piece (remains of tin can?) (Figure 12)
- 1 x large nail (Figure 12)
- 1 x piece of flat metal
- 1 x heel of boot from British uniform (Figure 13)
- 1 x button with no markings from uniform (Figure 13)
- 4 x fragments
- 1 x large piece of corrugated iron (Figure 14)



Figure 12: Metal artefacts from Excavation 1.



Figure 13: Heel iron from a British uniform boot as well as a button.



Figure 14: Piece of corrugated iron from Square H7 at Excavation 1.

Ammunition

- 1 x round nose cupronickel bullet point (Figure 15) from a .303 calibre from a Lee-Metford or Lee-Enfield rifle (Personal communication: T Prinsloo).
- 1 x .303 bullet casing (Figure 15). This one is a Mark II cordite round from the Royal Laboratory in Woolwich, England as it shows the markings 'C II R ^ L' (Van Vollenhoven & Van der Walt 2002: 68-70; Personal communication: T. Prinsloo).
- 1 x partial .22 calibre bullet casing with acorn on head stamp from a recent fire-arm (Personal communication: T. Prinsloo) (Figure 15)



Figure 15: Ammunition from Square H7 and I6 at Excavation 1.

Square I5

• 1 x section of a dropper

Square I6

- 1 x strand of barbed wire. Barbed wire used as additional security measure at forts and blockhouses (see historical photographs in main report).
- 1 x fragment

Ammunition

- 1 x round nose cupronickel bullet point (Figure 15) from a .303 calibre from a Lee-Metford or Lee-Enfield rifle (Personal communication: T Prinsloo).
- 1 x .303 bullet casing (Figure 15). This one is a Mark II cordite round from the Royal Laboratory in Woolwich, England as it shows the markings 'C II R ^ L'. This type is frequently found on sites associated with the Anglo-Boer War (Van Vollenhoven & Van der Walt 2002: 68-70; Personal communication: T. Prinsloo).

Square K7

- 12 x fragments
- 1 x small piece of corrugated iron
- 1 x strand of barbed wire (Figure 16). Barbed wire used as additional security measure at forts and blockhouses (see historical photographs in main report).
- 2 x nails
- 3 x parts of nails
- 1 x piece of lead
- 1 x head of a screw
- 1 x button with no markings from uniform (Figure 16)

Square M6

• 1 x strand of thin wire

Square O7

• 1 x part of a nail



Figure 16: Strand of barbed wire and a button from Square K7 at Excavation 1.

Building material

Square E8

• 1 x concrete piece (Figure 17)

Square G6

• 1 x concrete piece with flat side (possible floor) (Figure 17)

Square H6

• 1 x concrete piece with flat side (possible floor)

Square I6

• 3 x concrete pieces



Figure 17: Concrete pieces from Excavation 1. Note the flattened side on the larger piece.

EXCAVATION 2

The following types of artefacts were unearthed:

Glass – 5 shards Metal – 232pieces

Total number of artefacts: 237

Glass

- 4 x brown fragments from recent glass.
- 1 x green fragments from a recent glass bottle.

Metal

- 32 x roof screws, some clearly very old (Figure 18). These were used in corrugated iron structures of the time.
- 42 x roof washers/ partial washers also used in corrugated iron structures of the time (Figure 18)
- 13 x roof screws with washers similar to the above ones (Figure 18)
- 18 x heads of roof screws indicating the weathering thereto over a period of more than 100 years (Figure 18)
- 1 x wood screw (Figure 18)
- 2 x small nuts and bolts (Figure 18)
- 1 x large bolt with nut (Figure 18). This type is used to fit wood together as one would find in the frame of a corrugated iron structure.

- 1 x piece of barbed wire
- 2 x pieces of wire
- 30 nails/ sections of nails
- 73 x metal fragments
- 1 x button from a British coat (Figure 19-22). The button shows the British coat of arms on the front side. At the back it shows the wording 'BIRMINGHAM SMITH & WRIGHT LIMITED'. This is the general service button which was worn on British uniform coat between 1902 and 1952. It was made by the company of Smith & Wright in Birmingham, England. The company started in 1862.



Figure 18: Metal artefacts from Excavation 2.



Figure 19: Front side of British general service button from Excavation 2.



Figure 20: Picture of a similar button.



Figure 21: Back side of British general service button from Excavation 2.



Figure 22: Picture of the back side of a similar button.

Ammunition

- 12 x round nose cupronickel .303 bullet points from Lee-Metford and Lee-Enfield rifles of the time (Figure 23). Some of these show signs of being shot from a rifle (Personal communication: T. Prinsloo).
- 4 x .303 bullet casings (Figure 23). These were used in Lee-Metford and Lee-Enfield rifles of the time. The following head stamps were identified: 3 x C II R∧L (one was fired and one unfired); 1 x C I II (also unfired). The II stands for Mark II. The C indicates that it is a cordite round. The other markings for the first three indicate the factory where it was manufactured being the Royal Laboratory in Woolwich, England. The 'I' on the headstamp of the fourth indicate that it is from the Birmingham Metals and Munitions Company in Birmingham, England (Van Vollenhoven & Van der Walt 2002: 68-70; Personal communication: T. Prinsloo).



Figure 23: Ammunition excavated at Excavation 2.

EXCAVATION 3

The following types of artefacts were unearthed:

Ceramics – 7 shards Glass – 496 fragments Metal – 208 pieces Miscellaneous – 1 piece

Total number of artefacts: 712

The Excavation is divided into an East and West section. The East section is a continuation of the structure excavated earlier, whereas the West section actually is done on an adjacent structure, which may be linked to the first. Therefore the squares were given very distinctive numbers with East containing A-D and West containing P-R.

Since it now is clear that these are two different (although perhaps linked) structures, the artefacts should also be divided. The numbers for the two sections of the excavations are therefore as follows:

East:

Ceramics – 1 shard Glass – 71 fragments Metal – 16 pieces

Total number of artefacts: 88

West:

Ceramics – 6 shards

Glass – 425 fragments Metal – 192 pieces Miscellaneous – 1 piece

Total number of artefacts: 624

EAST:

Ceramics

Surface

• 1 x thin white underglazed porcelain rim shard (Figure 24). It is difficult to date, even relatively, but since it was found on the surface it most likely is not contemporary with the fort, but from a later era.

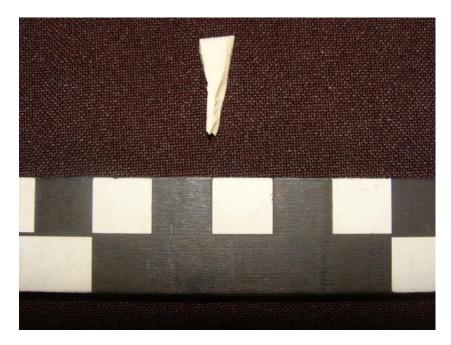


Figure 24: Porcelain shard from Excavation 3 East.

Glass

The following recent glass shards were excavated:

- Surface sweep (22 x brown; 4 x green; 15 x clear; 1 x mirror glass)
- Square A1 (8 x clear)
- Square C1 (4 x clear)
- Square C7 (4 x brown; 3 x clear)

Historical glass was the following:

Square A1

• 4 x dark/ olive green fragments from alcoholic beverages, dating to the late 19th/ early 20th century (Lastovica & Lastovica 1990: 17-19).

Square C3

• 2 x light green shards from soda or mineral water bottles dating to the late 19th/ early 20th century (Lastovica & Lastovica 1990: 25-28).

Metal

Surface sweep

- 1 x washers similar to others excavated on site
- 1 x wood screw
- 1 x nail
- 1 x fragment

Square A1

• 1 x lead seal of glass bottle with the following wording legible: "TRUTH AND LIGHT" and "ENOS SALT". It is the seal from an Eno's glass bottle stopper (Figure 25-26). Eno's fruit salts were first manufactured in the 1870's by J.C. Eno in Newcastle, England (Lastovica & Lastovica 1990: 46). The ones found here dates to the late 19th/early 20th century and was excavated on various sites dating to the Anglo-Boer War (Van Vollenhoven 2010: 119, 122, 130, 250, 260).



Figure 25: One side of the Eno's fruit salt bottle's lead seal.



Figure 26: Other side of the Eno's lead seal.

Square C1

- 1 x partial nail (Figure 27)
- 1 x long nail (Figure 27)
- 2 x roof screws (Figure 27)
- 1 x button with wording "PLAYER BROS BIRMINGHAM" on back side (Figure 28-29). The Player Brothers manufactured buttons during the 1880's. This specimen most likely comes from a shirt.



Figure 27: Metal artefacts from Excavation 3, East.



Figure 28: Front side of the button found in Square C1 of Excavation 3, East.



Figure 29: Back side of the button found in Square C1 of Excavation 3, East.

Square C3

- 1 x nail (Figure 27)
- 3 x roof washers (Figure 27)
- 2 x roof screws (Figure 27)

WEST:

Ceramics

Square P6 (0-10 cm)

• 1 x piece of pipe stem made from kaolin (Figure 30). These date to the late 19th - early 20th century and were sometimes found as an incentive in cases with Gin (Lastovica & Lastovica 1990: 37, 73).

Square P5 & 6 (20-30 cm)

• 1 x piece of pipe stem made from kaolin (Figure 30). These date to the late 19th - early 20th century and were sometimes found as an incentive in cases with Gin (Lastovica & Lastovica 1990: 37, 73).

Square Q6 (0-10 cm)

• 2 x pieces of pipe stem made from kaolin (Figure 30). These date to the late 19th - early 20th century and were sometimes found as an incentive in cases with Gin (Lastovica & Lastovica 1990: 37, 73).



Figure 30: Kaolin pipe stem pieces from Excavation 3 West.

Square Q8

• 1 x thin white underglazed stoneware shard with red and pink flower motif (Figure 31). It is difficult to date, but it is most likely contemporary with the fort.

Square R6 (0-10 cm)

• 1 x thin white underglazed stoneware rim shard with green plant motif (Figure 31). It possibly is part of a dinner service dish and although it is difficult to date, it most likely is contemporary with the fort.



Figure 31: Stoneware shards from Excavation 3 West.

Glass

The following recent glass shards were excavated:

- Square p4 surface sweep (1 x clear)
- Square P5 surface (1 x clear)
- Square P5 0-10 cm (37 green including Amstel beer; 9 x clear including Smirnoff)
- Square P5 10-20 cm (1 x clear)
- P6 surface (3 x clear)
- P6 0-10 cm (4 x green; 21 x clear including milk bottles)
- P6 10-20 cm (14 x clear)
- Q5 surface (1 x green)
- Q5 10-20 cm (15 x green; 3 x clear)
- Q6 10-20 cm (1 x green; 3 x clear)
- Q7 surface (2 x green; 54 x clear)
- Q7 0-10 cm (4 x clear)
- Q8 surface (10 x clear; 1 x light blue)
- Q8 0-10 cm (1 x recent)
- Q9 surface (3 x clear)
- R4 surface (1 x clear Sparletta)
- R5 0-10 cm (2 x brown)
- R6 0-10 cm (2 x brown)

- R7 surface (1 x clear rim from screw cap)
- R7 0-10 cm (2 x clear one rim from screw cap)
- R8 surface (1 x green)

The following historical glass shards were excavated:

Square P5 (10-20 cm)

• 4 x dark/ olive green fragments (Figure 32) from alcoholic beverages, dating to the late 19th/ early 20th century (Lastovica & Lastovica 1990: 17-19).

Square P6 (surface)

• 1 x light green bottom shard with the letter "O" on its inside (Figure 32). This is most likely from a soda/ mineral water bottle. These date to the late 19th/ early 20th century (Lastovica & Lastovica 1990: 25-28).

Square P6 (0-10 cm)

- 12 x olive green shards coming from alcoholic beverage bottles dating to the late 19th/early 20th century (Lastovica & Lastovica 1990: 17-19).
- 1 x olive green bottle top also from an alcoholic beverage bottle dating to the late 19th/ early 20th century (Lastovica & Lastovica 1990: 17-19).

Square P6 (10-20 cm)

• 4 x olive green shards coming from alcoholic beverage bottles dating to the late 19th/ early 20th century (Lastovica & Lastovica 1990: 17-19).

Square Q4 (surface)

- 1 x olive green shard coming from an alcoholic beverage bottle dating to the late 19th/ early 20th century (Lastovica & Lastovica 1990: 17-19).
- 1 x clear shard most likely also dating to this time period (Figure 32). It is very thin and may be from a wine glass.

Square Q5 (0-10 cm)

• 15 x olive green shards coming from alcoholic beverage bottles dating to the late 19th/ early 20th century (Lastovica & Lastovica 1990: 17-19).

Square Q6 (10-20 cm)

• 22 x olive green shards coming from alcoholic beverage bottles dating to the late 19th/ early 20th century (Lastovica & Lastovica 1990: 17-19).



Figure 32: Glass shards from Excavation 3 West.

Square Q7 (surface)

• 5 x olive green shards coming from alcoholic beverage bottles dating to the late 19th/ early 20th century (Lastovica & Lastovica 1990: 17-19).

Square Q7 (0-10 cm)

• 6 x olive green shards coming from alcoholic beverage bottles dating to the late 19th/ early 20th century (Lastovica & Lastovica 1990: 17-19).

Square Q8 (0-10 cm)

• 3 x olive green shards coming from alcoholic beverage bottles dating to the late 19th/ early 20th century (Lastovica & Lastovica 1990: 17-19).

Square Q9

- 15 x clear shards most likely from the late 19th/ early 20th century.
- 2 x olive green shards coming from alcoholic beverage bottles dating to the late 19th/early 20th century (Lastovica & Lastovica 1990: 17-19).

Square Q10 (0-10 cm)

- 21 x clear shards likely from the late 19^{th} / early 20^{th} century.
- 5 x olive green shards coming from alcoholic beverage bottles dating to the late 19th/ early 20th century (Lastovica & Lastovica 1990: 17-19).

• 30 x brown shards with a pattern of which some fit together (Figure 33-35). Some of these fit together and the MNI¹⁰ is two. The following letters is legible: 'S' on the one and 'HILL' on others fitted together. It dates from the late 19th/ early 20th century. Brown glass was usually used for poison and medicine, but these come from the GW Shillings soda/ mineral water factory in Pretoria. The company manufactured soda and mineral water. They also manufactured ginger beer which was sold in stoneware bottles. The company was established in 1885 and were based in Church Street, close to Lion Bridge (Lastovica 2000: 57, 137). They were in production until 1910 (Van Vollenhoven 2010: 275). It is suggested that these brown bottles was most likely used for ginger beer. Lastovica (2000: 137) does indicate that GW Shillings also manufactured ginger beer.

Square R5 (0-10 cm)

• 5 x olive green shards coming from alcoholic beverage bottles dating to the late 19th/ early 20th century (Lastovica & Lastovica 1990: 17-19).

Square R6 (0-10 cm)

- 1 x thin clear shard which may be from window glass.
- 4 x olive green shards coming from alcoholic beverage bottles dating to the late 19th/ early 20th century (Lastovica & Lastovica 1990: 17-19).

Square R7 (surface)

• 1 x olive green shard coming from alcoholic beverage bottles dating to the late 19th/ early 20th century (Lastovica & Lastovica 1990: 17-19).



Figure 33: Brown coloured glass shards from the company of GW Shillings.

¹⁰ MNI - minimum number of individuals, in this case two bottles.



Figure 34: Some of the shards of the 'Shillings' bottle fitted together.



Figure 35: Shards of another brown 'Shillings' bottled fitted together.

Square R8 (surface)

- 1 x clear rim shard likely from the late 19th/ early 20th century.
- 1 x olive green shard coming from alcoholic beverage bottles dating to the late 19th/early 20th century (Lastovica & Lastovica 1990: 17-19).

Square R8 (0-10 cm)

• 1 x clear shard likely from the late 19th/ early 20th century.

Square R9 (surface)

- 2 x clear shards (one a rim shard) likely from the late 19th/ early 20th century.
- 1 x olive green shard coming from alcoholic beverage bottles dating to the late 19th/ early 20thcentury (Lastovica & Lastovica 1990: 17-19).

Square R9 (0-10 cm)

- 29 x clear shards likely from the late 19th/ early 20th century.
- 1 x brown shard from the late 19th/ early 20th century.

Metal

Square P5 (0-10 cm)

• 1 x bent nail (Figure 36)

Square P5 (10-20 cm)

- 1 x roof screw (Figure 36)
- 1 x bolt, similar to what was found in other excavations (Figure 36)
- 9 x fragments

Squares P5 and P6 (20-30 cm)

- 3 x fragments
- 1 x roof washer (Figure 36)
- 4 x nails (Figure 36)
- 1 x small chain, likely from a pocket watch (Figure 37). It shows green colouring and therefore must be a copper alloy.



Figure 36: Metal artefacts from Excavation 3 West.



Figure 37: Metal chain from Excavation 3, West.

Ammunition

• 1 x unfired .303 bullet casing from a Lee-Metford or Lee-Enfield rifle with the following on the headstamp: 'II K C' (Figure 38). It therefore is from a Mark II Cordite round from the Kynoch factory in Birmingham, England (Personal communication: T. Prinsloo).



Figure 38: Unfired .303 bullet from block P5/6 as well as .303 and .577/.450 bullet points from the same excavation.

Square P6 (0-10 cm)

2 x fragments

Square P6 (10-20 cm)

- 10 x fragments
- 1 x fragment from a tin (e.g. bully beef)
- 1 x partial nail (Figure 36)

Squares P6-Q6 (0-10 cm)

- 4 x fragments
- 1 x partial stud (for clothing or shoes)
- 1 x hook for holding a door in position (Figure 39)
- 1 x nail (Figure 40)

Square Q4 (surface)

• 1 x nail (Figure 40)



Figure 39: Metal hook.



Figure 40: Different nails from different Squares at Excavation 3 West.

Square Q5 (0-10 cm)

- 1 x piece of wire bent to form a hook (Figure 41)
- 4 x fragments
- 2 x heads of nails
- 2 x fragments fitting together to form a disk (Figure 42)



Figure 41: Various metal artefacts from Excavation 3 West.



Figure 42: Disc from Excavation 3 West.

Square Q5 (10-20 cm)

- 1 x piece of bent copper wire (Figure 41)
- 8 x fragments
- 1 x nail (Figure 40)
- 1 x button with wording at back, but which is illegible (Figure 43). It comes most likely from a shirt.



Figure 43: Different metal buttons from Excavation 3 West.

Square Q6 (0-10 cm)

- 2 x partial nails (Figure 40)
- 1 x roof screw
- 1 x partial button (Figure 43)
- 1 x button with wording 'BEST RING EDGE' at front side (Figure 43)

Ammunition

- 2 x .303 bullet points (Lee Metford or Lee Enfield) (Figure 38)
- 1 x .22 bullet casing with a 'U' on its headstamp. This dates to after the Anglo-Boer War.

Square Q6 (10-20 cm)

- 1 x partial nail
- 1 x roof screw

Square Q7 (0-10 cm)

- 7 x partial nails
- 1 x screw
- 3 x fragments
- 1 x button with wording on front side 'Our own make' (Figure 43)
- 1 x lead seal from a glass whiskey bottle (Figure 44)



Figure 44: Lead seal from a whisky bottle.

Square Q8 (0-10 cm)

- 2 x nails (Figure 40)
- 1 x screw head (Figure 40)

Square Q9 (surface)

• 1 x piece of wire

Square Q9 (0-10 cm)

- 1 x piece of two entangled wires (Figure 41)
- 1 x roof screw
- 3 x nails (Figure 40)
- 1 x fragment
- 2 x fragments of a lead glass bottle seal. The wording is illegible (Figure 45)

Square Q10 (0-10 cm)

- 1 x roof screw and washer
- 8 x nails with some bent to form hooks (Figure 40)
- 2 x wood screws
- 1 x lead seal from a glass bottle with illegible wording (Figure 45)



Figure 45: Lead seals from whisky and other bottles.

Square R5 (surface)

- 1 x head of nail
- 1 x piece of corrugated iron (Figure 46)



Figure 46: Metal artefacts from Excavation 3 West.

Square R5 (0-10 cm)

• 7 x partial or complete nails (Figure 40)

- 1 x roof screw
- 3 x metal disks, one with a screw attached (Figure 46)
- 1 x trouser button with wording 'BIRMINGHAM OS' (Figure 43)
- 1 x top section of a tin, e.g. from a condensed milk tin (Figure 41)

Ammunition

- 1 x .303 bullet point from a Lee Metford or Lee Enfield rifle (Figure 38)
- 1 x unfired .577/.450 Martini-Henry bullet point (Figure 38)

Square R6

- 4 x partial nails
- 1 x nut
- 1 x tiny piece of wire (Figure 41)
- 1 x split pin (Figure 41)

Square R7 (0-10 cm)

- 25 x fragments
- 2 x nail fragments
- 1 x nail (Figure 40)
- 1 x shirt button with no wording legible (Figure 43)

Square R8

- 12 x nails (Figure 42)
- 4 x fragments

Square R9

- 8 x nails
- 2 x fragments
- 1 x trouser button with wording on back side 'BR THERS:. (Figure 43)

Miscellaneous

Square R9

• 1 x piece of graphite which could be from a pencil (Figure 47)



Figure 47: Piece of graphite from Excavation 3 West.

DISCUSSION AND CONCLUSION

At the East Fort one would hope to unearth artefacts dating to the late 19th/ early 20th century as this is the time period of the Anglo-Boer War and the fort. One would also want to find objects specifically linked to the military as the site had a military function. Other objects would be used to determine functional areas in the fort.

The number of objects recovered from the East Fort during the second excavation season totals more than **2188** (excluding charcoal, faunal material and uncounted rubble). This is less than half of what was excavated during the first season, but with fewer people on site and only working on three (versus five) excavations it does compare well to other similar excavations.

One always strives to fit sections of artefacts that comes from one artefact together in order to get a clear view thereof. A bottle excavated at Excavation 1, is a good example of this (Figure 48-49). This may also assist with interpretation.



Figure 48: Reconstructed mineral water bottle from Excavation 1.



Figure 49: Note the inscription on the mentioned bottle. It is from the Standard Mineral Water Works in Pretoria.

The largest number came from Excavation 1 totalling 56,3% of all artefacts found. The other percentages are: Excavation 3-32,5%; Excavation 2-10,6% and the surface collection -0,4%. However, Excavation 3 needs to be divided into the East and West sections thereof as it is now clear that these represent two different structures at the fort. The percentages for these are West -28,5% and East -4%. In volume the order will therefore be Excavation 1, Excavation 3 West, Excavation 2, Excavation 3 East and then the surface collection.

Of course the size and depth of certain excavations resulted in more objects being found here than at the other excavations, but it does give an indication of these areas being used more frequently than others or of the functions thereof being more related to everyday use and people spending larger quantities of time here than at other areas excavated. This would especially be true of Excavation 1 (and perhaps 3) which seem to have had rather a domestic function.

One can rarely learn much from artefacts collected via the surface collection. The reason is that these do rather reflect a broad idea of the site than specific features does. It also definitely is a biased way of collection, especially when done more than once as one tend to only collect artefacts which can add to your knowledge of the site or those seen as being special for whatever reason. The percentage in this case is higher that during the first season, although less artefacts were collected and this is purely due to the lesser number of artefacts in total being excavated. One therefore needs more information in order to interpret this further. During the second excavation season objects lying around on site, which had the potential to provide additional information or which were in danger of being lost (due to reasons such as site traffic etc.), were collected. It therefore would do nothing more than add to general information on the site. The artefacts collected date to the late 19th/ early 20th century and therefore could be associated with the fort. One of the artefacts (.303 bullet casing) has a definite military origin.

At Excavation 1, a number of 1230 (56,3%) artefacts were collected. This is almost 50% more than during the first season, but rather has to do with more effort being concentrated here than the deposit suddenly revealing more artefacts. These are divided into ceramics -2.4% (29), glass -90.8% (1117), metal -6.3% (78) and building material -0.5% (6). As was the case during the previous year, it has to be stated that 1097 of the glass shards seem to be very recent and therefore this percentage would drop to a much lower level. In fact this decrease is so much that it would not be the most dominant artefact type as it was during the previous year of excavation. One therefore needs to consider this aspect, but also needs to bear in mind that some of the other artefact types may also include fairly recent objects which one may not be able to calculate (as some may or may not be recent - e.g. metal objects which are very difficult to determine). This brings the total number of artefacts down to 130. One also needs to remember that building material will always be misrepresented as many objects originating from the building are calculated with metal and because the stone walling is not removed from site and therefore no counted. It would therefore be almost impossible to get an accurate view, which means that one will merely be working with trends at a specific excavation or site.

The types of artefacts have to be adapted accordingly by only including those which are more than likely to date to the late 19^{th} / early 20^{th} century, which is the time period expected. This results in the following percentage changes for Excavation 1: ceramics – 29 pieces (22,3%), glass - 20 shards (15,4%); metal – 75 artefacts (57,7%) and building material - 6 pieces (4,6%). The same could be said of the other excavations. It also needs to be stated that 12 of the glass shards represents one bottle; an indication of how skew such interpretations can be. However, it nevertheless assists in setting trends.

During the first year of excavation it seems that at Excavation 1 domestic type artefacts (ceramics and glass) dominate the collection. For the second year (being analysed here) it is clear that metal is the dominant artefact type. The problem with metal is that it actually includes

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¹¹ The total number of artefacts at Excavation 1, which seem to be within the time period of the occupation of East Fort.

various functional types, e.g. building material, domestic and arms and ammunition. Nails for instance have more than one function. It could have been used as building material, been part of a piece of furniture or an ammunition case. Coupled with the fact that domestic type artefacts dominated the assemblage during the previous year, and that it is reasonably high again this time, one can state that this is still the case, but that more building material has been uncovered this time around.

Metal artefacts with a domestic function found include the heel from an army boot and a button. As indicated nails may have various functions, but bolts, washers and roof screws most likely had to do with the construction of a corrugated iron building here. The other metal artefacts found is .303 bullet points, which is an indication of the military presence at the site. Lastly the piece of concrete found was clearly smoothed and flattened to be part of either plaster or a floor. This indicates that the building here were important enough to warrant a proper floor or plastered walls (most likely the first mentioned). It therefore suggests something like an office or garrisons quarters. The latter is in line with the suggestion of Emms (see map in main report).

As the same goes for the other excavations, only the necessary information will be given. It will include all the figures as it is interesting to note the large number of recent artefacts on site, clearly explaining the utilisation thereof by casual visitors over a period of more than 100 years.

At Excavation 2, a number of 237 (10,9%) artefacts were collected. These are divided into glass - 2,1% (5) and metal - 97,9% (232). The figures are almost identical to that of the previous year. The calculation after subtracting the recent artefacts in this case makes not much of a difference and are as follows: the total number is 232, only consisting of metal - (100%).

It therefore is clear, just as during the previous excavation season, that at Excavation 2 metal artefacts dominate the collection. These are mostly parts of building material and barbed wire which had different functions, one being to serve as additional security measure around fortifications. It also includes a British general service uniform button and Anglo-Boer War ammunition (.303 bullets) placing the excavated area within the time period expected. It is therefore still suggested that a corrugated iron structure, fixed to a timber framework, was erected here and served some military function, such as a lookout post. As this was a work station the domestic type artefacts are limited.

As indicated, Excavation 3 East and West need to be discussed separately. The Eastern one actually was a completion of the structure excavated earlier (then called Excavation 3), with the Western one being on another structure, something that was only realised as the excavations progressed.

At Excavation 3 East, a number of 88 (4%) artefacts were collected. These are divided into ceramics -1,1% (1), glass -80,7% (71) and metal -18,2% (16). The calculation after subtracting the recent artefacts are as follows: the total number is 22, consisting of: glass -6 shards (27,3%) and metal -16 artefacts (72,7%). Recent artefacts consisted of glass shards.

Again the metal dominates whereas domestic type artefacts dominate during the previous excavation season. However the total number of artefacts is much fewer than those excavated during the first season and therefore the same conclusion can be made here, being that domestic artefacts dominate, especially once domestic metal artefacts and those of the two excavation

seasons are counted together. Other metal artefacts found again include building material (nails, screws etc.) and buttons perhaps from uniforms. No ammunition was identified, but during the previous season some were found. The side of the structure excavated during the first season however faces the enemy and the part excavated during the second excavation season not, which may explain this. The dateable artefacts are from the late 19th/ early 20th century. Some of the domestic artefacts do however seem to indicate the storage of provisions, e.g. the lead seal from an Eno's bottle and bottle glass. Although too little has been found to be sure, it does seem to indicate a possible storage area. It is known that the structure here was built from stone and it is suggested that it may be a storage room for provisions. It however had a corrugated iron top floor, used as a lookout with loopholes. The ammunition found here during the first excavation season therefore also makes sense.

At Excavation 3 West, a number of 624 (28,7%) artefacts were collected. These are divided into ceramics - 1% (6), glass - 68,1% (425), metal - 30,8% (192) and miscellaneous 0,1% (1). The calculation after subtracting the recent artefacts are as follows: the total number is 393, consisting of: ceramics - 6 fragments (1,5%), glass - 195 shards (49,1%), metal - 191 artefacts (48,1%) and miscellaneous artefacts - 1 (0,3%). Recent artefacts consisted of glass shards and one .22 bullet casing.

Domestic type artefacts (ceramics and glass) together are just more than half of the artefacts excavated here. This includes sections of smoking pipe stems, ceramics from eating services and glass from alcoholic and non-alcoholic beverages of the time. A specific identifiable bottle was that of a brown coloured ginger beer bottle from GW Shilling, a Pretoria based company from the time of which various shards were excavated. The miscellaneous one is a piece of graphite from a slate pencil which may also have a domestic or work related function (such as education). It is for instance known that the Boer artillerists received education in the forts (Van Vollenhoven 1992: 113-115). It therefore is possible that British soldiers also had to undergo some kind of training. As indicated earlier many metal artefacts are also the result of domestic activities, in this case including a chain from a pocket watch, remains of food tins, clothing items (shoe studs and buttons) and lead seals from glass bottles. The latter refers to seals from whisky bottles. It therefore does seem as if domestic type artefacts are dominant.

Other metal artefacts are mostly building material, including nails, pieces of corrugated iron, washers, roof screws etc. Many nails were however bent to form hooks, perhaps for the hanging of clothes or tools – this points to either a domestic function or that the building may have been a work station. Wire excavated could also be part of the defensive system around the fort. Ammunition were also excavated here and consisted of .303 bullet casings and points all associated with the Anglo-Boer War. One .22 bullet was found, which dates to after the War.

Historical photographs found (see main report), clearly indicate this to be a corrugated iron structure. It may have had a stone wall on the outside and definitely a stone foundation. The only thing that remains is to define the function thereof. It seems that it was either a working station (which of course is very vague) or living quarters. The Emms plan (see main report) does not indicate a structure here apart from the outer wall of the fort, but do suggests that the office and officers' quarters could have been nearby.

In effect this means that only 765 (35,15%) of all artefacts identified are deemed to be contemporary with the occupation of the fort. This figure was much lower during the previous excavation season being (14,75%). The large number of artefacts post-dating the military

occupation of the hill is probably a result of the site being surrounded by residential areas and the hill being reasonably low, resulting in many visitors over the last century. Looking at the remaining figures, the cultural material at East Fort can be divided into the following: ceramics -35 (4,5% - during the first excavation season it was 3,8%), glass -209 (27,32% - during the first excavation season it was 32,8%), metal -514 (67,18% - during the first excavation season it was 59,1%), building material -6 (0,78% - during the first excavation season it was 2,6%) and miscellaneous -1 (0,13% - during the first excavation season it was 1,7%). The overall trend seems similar.

It is no surprise that metal artefacts now dominate the collection (and also did so for the first excavation season), especially since it mainly consists of building material. Ammunition is also well represented and was identified at all excavations. This is a reflection of the corrugated iron structures erected at the fort and the ammunition used since it was a military installation. The metal and other building material was mostly found at Excavation 2. This seem to make sense as the corrugated iron structure here seems to not have had high stone walling around it or the stone walling was informal due to the difficulty of erecting a structure here on the solid rock. At other excavations the number of artefacts typed as building material is less due to some of the stone walling still being in tact and therefore not being removed from site.

Excavation 5 was nothing more than a surface sweep and was later concentrated on a stone wall identified. Therefore almost all artefacts (except for ammunition) found here were related to the building. At Excavation 4 artefacts are mixed and may have had many different functions. This makes sense since this was an open area where different objects may have been used along the canon.

A closer look at the locations of the ammunition found is also necessary in order to elucidate possible information deducted from this. During the first excavation season a total of 30 artefacts were found. Of this, 24 (80%) were .303 (Lee-Metford/ Enfield) calibre and 6 (20%) were .577/.450 (Martini-Henry). It is common knowledge that the .303 were a more advanced rifle and that it was used more during the latter part of the War (Bester 1994: 48). The figures therefore make sense. Five of the Martini-Henry casings were found at Excavation 3 and one at Excavation 4. Those at Excavation 3 were unspent and may have been stored there (if this included a storage room as suggested earlier).

The second excavation seasons' figures corroborate this. In the second excavation season a total number of 26 Anglo-Boer War related artefacts were identified. Of this 25 (96,2%) were .303 (Lee-Metford/ Enfield) calibre and 1 (3,8%) was .577/.450 Martini-Henry. One of the .303 artefacts found was an unspent bullet from Excavation 3 West. Some of the bullet points, including the only Martini-Henry point found also were unfired meaning it was removed from the casing in another way.

The figures for the different areas on site (including all Anglo-Boer War ammunition), is as follows:

First Excavation Season

Surface collection -1 (3,33%)

Excavation 1 - 2 (6,66%)

Excavation 2 - 14 (46,66%)

Excavation 3 - 9 (30%)

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Excavation 4 - 2 (6,66%)
Excavation 5 - 2 (6,66%)
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Second Excavation Season

Surface collection -1 (3,84%)

Excavation 1 - 4 (15,38%)

Excavation 2 - 16 (61,53%)

Excavation 3 West - 5 (19,23%)

Combined excavation seasons (56 artefacts)

Surface collection -2 (3,6%)

Excavation 1 - 6 (10,7%)

Excavation 2 - 30 (53,6%)

Excavation 3 (which is the same structure as Excavation 3 East) -9 (16%)

Excavation 3 West - 5 (8.9%)

Excavation 4-2 (3,6%)

Excavation 5 - 2 (3,6%)

Of course the figures are skew since some features were excavated more than once, but it does again indicate trends. It nevertheless confirms that the structure excavated at Excavation 2 had an operational role, most likely a lookout and security position. The same goes for Excavation 3 (East) where there seems to have been a dual function of perhaps a storage room below and a lookout position on the upper level. Since the fort was a military installation, finding ammunition all over does make sense, but the quantities are much less in other areas. The number at Excavation 1 has however increased, although it still only represents 6 artefacts. If it was sleeping quarters, soldiers may have been allowed to take their rifles and ammunition with them. This aspect however will be kept under scrutiny in the following excavation season.

As indicated the contemporary ceramics and glass artefacts from the site is typical of the late 19th/ early 20th century. It includes liquor, non-alcoholic, possible ink, medicine and poison bottles as well as food and storage containers. The latter have mainly been found at Excavation 1 and 3 (East and West), areas which therefore may have had a domestic function (e.g. sleeping quarters, cooking and eating). Although not much ceramics were found, most of what was identified were also excavated here. This corroborates with the areas as having a domestic function. At Excavation 1, as also suggested by the plan op the fort drawn by Emms, this most likely was a garrison area (sleeping quarters/ mess hall or something similar). The possible storage room at Excavation 3 (East) gives an explanation for finding domestic type artefacts here with Excavation 3 West perhaps being offices, a storage area or work station, but then where soldiers may have been allowed to eat and drink.

In conclusion it can be stated that the artefactual evidence corroborates that the site was extensively used during the late 19th/ early 20th century, placing the site within the Anglo-Boer War (1899-1902). Many of the objects are similar to those found at other Anglo-Boer War sites. The specific identification of military objects corroborates that the site was used during the Anglo-Boer War (1899-1902). Archival and other historical information confirms this and indicate that this was the site of the East Fort, the largest fortification built by the British in Pretoria during this war.

REFERENCES

- Bester, R. 1994. **Boer rifles and carbines of the Anglo-Boer War**. (Bloemfontein: War Museum of the Boer Republics).
- Cushion, J.P. 1996 (5th Ed.). **Handbook of pottery and porcelain marks**. (London: Faber & Faber).
- Horn, J.C. 2005. **Historic Artifact Handbook**. (Montrose: Alpine Archaeological Consultants Inc.).
- Klose, J. & Malan, A. 1993. Ceramics of the Southwestern Cape 1650-1850. A guide to the analysis and interpretation of ceramic assemblages excavated from archaeological sites. HARG Handbook no. 1. (Cape Town: University of Cape Town).
- Lastovica, E. 2000. **Ginger beer bottles for South African collectors**. (Cape Town: Gaffer Press).
- Lastovica, E & A. Lastovica. 1990. **Bottle and Bygones: A Guide for South African Collectors**. (Cape Town: Don Nelson).
- Prinsloo, T. Amateur Military Historian, Personal Communication, 2014.09.10.
- Van Vollenhoven, A.C. 1992. 'n Histories-argeologiese ondersoek na die militêre fortifikasies van Pretoria (1880-1902) (Unpublished MA thesis, Pretoria, University of Pretoria).
- Van Vollenhoven, A.C. 2010. **Die Britse vrywilligerseenheid Steinaecker's Horse in die Anglo-Boereoorlog (1899-1902): 'n kultuurhistoriese studie** (Unpublished DPhil thesis, Stellenbosch, University of Stellenbosch).
- Van Vollenhoven, A.C. & Van der Walt, J. 2002. 'n Reddingsondersoek na Anglo-Boereoorlog-ammunisie, gevind by Ifafi, Noordwes Provinsie. **South African Journal of Cultural History** 16(1).