PRETORIA

"OUT OF THE ASHES"

Report on the 1880-1900 dump in Pretoria

By: GERARD CHRISTIAAN DE KAMPER

JUNE 2002

INTRODUCTION

People throw things away everyday. This is done for various reasons: it is garbage like containers we buy our food in, it broke or we just do not use it anymore. This garbage goes to a central place where it is dumped and later the dumpsite is rehabilitated for other uses. This method of getting rid of the unwanted has been in use, in Pretoria, since 1880 when the dumpsite in question was opened.

"*Pretoria, out of the ashes*", is research from the point of view that yesterday's garbage can tell an important story of how the people lived, what they consumed and from where they obtained these things. This is therefore a study of the Pretoria dump, dated 1880 – 1900, presently the site of the South African Police Service's Medico-Legal Laboratories, in short the Mortuary. Furthermore this gives a special view of the artefacts of the time, with statistical calculations of usage and an indication of trade with foreign nations.

This study's main objective is therefore to show the importance of Archaeology in the writing of History and to prove that, discarded objects previously seen as unimportant can tell the untold story of the past. It is therefore important to see that these resources are mostly easily discarded and seldom researched. The main attraction of these cultural resources is collecting and in the past large town dumps were past off with a reference.

In this study the words "ash" or "ashes" are used to signify the refuse dumped and photographs, except where stated otherwise, are all from artefacts excavated as explained in **Chapter 1**.

CHAPTER 1

RESEARCH METHODOLOGY

This chapter concerns itself with the method and reason behind the excavation and study of the artefacts.

1.1 PROBLEM STATEMENT

This study concerns itself with rubbish. By looking at people's rubbish one can deduce quite accurately what the people used and how they obtained it. The problem this study is looking at is the usage of various items and the consumption of various foods and beverages by the people living in Pretoria between 1896 and 1900.

1.2 METHOD OF EXCAVATION

a. Excavation Permit

The excavation Permit was issued by the South African Heritage Resource Agency (SAHRA) on the 31 of July 2001, Permit No. 80/01/05/020/51, and complies with the National Heritage Resources Act 25 of 1999. The first report on activities is due 1st of August 2002 and the final report on the 1st of August 2003. The temporary report or first report, as stated in the permit issued, will consist of the title page, the introduction, the 1st Chapter on research methodology, the 3rd Chapter that would be dating and Appendix 1 Map #1 and Map #2.

b. Excavation types

Three excavations are to be done on the site:

The first excavation is a quantitative excavation. The excavation is done to determine how much of an individual object can be found in a two-by-two-by-two-meter block. The specifics of the artefacts are unimportant; it is all about quantity.

The second excavation is the main excavation. In this excavation artefacts are removed selectively. This means that not all the glass, metal and ceramics are removed. The reasoning behind the selection of items is explained in **Methods of artefact analysis: Artefact selection.**

The third excavation is a control excavation. This excavation is done to prove and check the findings of the statistical analysis of the second excavation.

c. Site description

The site is situated in South Africa, Gauteng, Pretoria District, Pretoria Central, Dr Savage Avenue, on the South African Police Service's Medico-Legal Laboratories property. The Coordinates of the site is approximately 25°43'90" S and 28°11'90" E.

The size of the site (including the spillover on the next property on the South) is about 106mX52m, which gives an area of 5512m².

d. Excavation placement

There are two major factors in placing the excavations.

The first hereof is the agreement with the owners. When an agreement was reached with the South African Police Service's Medico-Legal Laboratory, on whose property the dump is situated, the agreement stated

that excavation would only be permitted where the Commanding officer feels comfortable with it.

The second and more important factor is finding an undisturbed spot. This proved to be very difficult because 'illegal' bottle diggers had dug out most of the dump for their private collections. This problem is generally encountered at most dumps. To solve this problem, the problem itself is used. A bottle digger / collector, whose interest stretches further than the bottles, was approached to be of assistance at the site. He pointed out the spots that had not been dug before and of these, three were selected for the excavations.

The placement of the excavations in relation to the whole site can be found in **Appendix A [Maps & Sketches] #1**, hereafter called **A.1**.

The placement of the excavations in relation to each other and the direct sketching of the site plan can be found in **Appendix A [Maps & Sketches] #2**, hereafter called **A.2**.

e. **Excavation description**

SURFACE

On the surface, on various parts of the site several artefacts are found. These artefacts are called surface artefacts. Except for description there are no actual use for these artefacts.

EXCAVATION 1

As mentioned before this excavation is a quantitative excavation. The excavation is 2mX2m. The excavation is 2,3m deep and consists of two layers. The first layer is 0.3m and is called the surface layer. The next layer is 2m deep. This is explained in **1.2d Layering**.

EXCAVATION 2

This is the main excavation. The excavation is 4mX5m with a step of 2mX2m on the West side of the excavation. The step is used to make access to the excavation easier and will be removed just before the excavation is completed. The first layer is 0.3m deep and the second 2m. This excavation is $24m^2$.

EXCAVATION 3

This is the control excavation. The excavation is 2mX2m with two layers, the first 0.3m and the second 2m.

f.   Layering

Two Layers are identified in the excavation: the topsoil with a depth of about 0.3 meters and a 2-meter ash layer. The reason for this is that the topsoil was laid in the 1930's when the Mortuary was built. For this reason all of the things found in the topsoil are of a more recent age. The second layer is 2 meters deep. This is done because of the fact that the heavier items dumped move downward as time progresses. For this reason most metal and ceramic-earthenware artefacts are only found at the bottom of this layer. At the depth of two meters a seal overlay is found. This overlay was put on refuse lower down to seal off the rotting refuse and to establishing some form of hygiene. Everything below the seal overlay is from an earlier period. Thus everything between the top seal and the next seal overlay is seen as one layer. Only one layer was dug in the excavation due to a three-meter industrial ash layer before the next layer that contains artefacts.
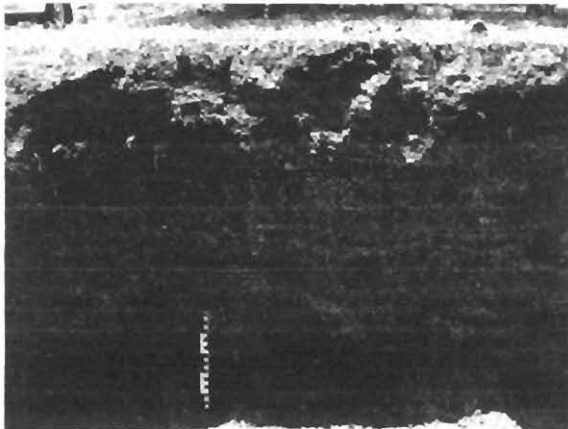
PHOTO 1 [PROFILE PHOTO EXCAVATION 2]   **THE PHOTO WAS TAKEN FROM NORTH TO SOUTH.**

A sketch of the profile of excavation 2, showing the layers (1 and 2) as well as the placement of different kinds of artefact, can be found in **Appendix A [Maps & Sketches] #3**, Hereafter called **A.3**.

1.3 METHOD OF ARTEFACT ANALYSIS

a. Artefact selection

Not all the artefacts that are dug out can be used. For statistical and identification purposes only certain items were taken. In the first excavation, being of a quantitative nature, everything was taken out and no selections were made. The second and third excavations were done selectively.

In the category Glass only whole bottles, bottle lips, bottle pieces with embossing on and glass from other objects are removed. Unmarked pieces of glass are rejected. The reason behind this selection is as follows. Bottle lips can be identified as complete bottles, with these and whole bottles a statistical calculation can be made of approximately how

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many bottles could be found in the dump. This calculation can shed some light on usage and consumption.

In the category Ceramics only potters marks, decorated ceramic pieces and other identifiable ceramics are removed. Selecting potters marks and decorated pieces of ceramic serves two purposes. The first is dating of the layer and the second the establishing of origin and thus trade probabilities. Unmarked and very commonly decorated pieces are rejected.

In the category Metals all identifiable pieces are kept, other pieces are rejected. This is simply because unidentifiable metal is of no use. It must be borne in mind that most of the metal was unidentifiable because of the high acid content of the soil.

b.   Dating

As mentioned under the sub-heading **Artefact selection**, ceramics are used to date the layer. This process has several steps:

The first step is to take the different potters marks and decorated ceramics and identify them. The marks are mostly easy to identify because of the name connected to the mark. The decorations are more difficult and not all decorations can be dated precisely, some cannot be dated at all. This identification is done with the use of ceramic encyclopedias and catalogues as well as the assistance of several specialists in the field of ceramics.

The second step stands in close relationship to the first. By utilizing the same resources, the companies involved in the ceramic production, the specific marks or the specific decorations are dated. The following rules to dating can also be used:

❖ In 1862 the British 'Trademark Act of 1862' was proclaimed. In terms of the Act the words "Trademark" must be printed on ceramic works. Ceramics with the words "Trademark" on the potter's mark must therefore have been made after 1862.[1]

❖ From 1891 the name of the country of origin must be shown on the mark. This follows the American "McKinley Tariff Act".[2]

❖ From about 1920 the words "MADE IN" started to appear before the name of the country of origin.[3] There are some exceptions to the rule: for instance "Petrus Regout" used "Made in Holland" as early as 1890.[4]

This set of rules as well as the dating of individual pieces gives a range of dates for the different ceramics.

Step three is the complicated one. The method of dating is called American-MEAN-dating. For an example:[5]

PHOTO 2 [SOCIÉTÉ CÉRAMIQUE BAKERS-MARK] *MARK OUT OF EXCAVATION 1 LAYER 2.*

This mark is dated 1863-1865.[6] It must be noted that this mark has an exact dating. If this is not available the company's dating can be used as

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[1] S.W.Fisher, English pottery and porcelain marks, p. 74.

[2] J.P.Cushion, Pocket book of British ceramic marks, p. 95.

[3] J.P.Cushion, Pocket book of British ceramic marks, p. 95.

[4] A.Polling, Maastrichtse ceramiek, p. 30.

[5] R.J.Barber, Doing Historical Archaeology, p. 63.

well. Now the median of the date must be found. The median of the mark is found by adding the two dates and dividing the sum by two. This piece's median is therefore 1864. All the pieces that are involved in the dating follows this process. In the end a whole range of dates give a whole range of medians. Example:

	Dates	Median
1	1887 – 1893	1890
2	1886 – 1900	1893
3	1886 – 1912	1899
4	1863 – 1865	1864

The sum of the medians must be calculated. If there are more than one of a certain kind of mark the median must be multiplied by that number. Thus if there are two pieces of median 2, it must be multiplied by two. After the sum is calculated it must be divided by the number of medians used. Thus MEAN-Date = [Median 1 + (Median 2 x 2) + Median 3 + Median 4] / # of medians used.

Example:

MEAN-date   = [1890 + (1893 x 2) + 1899 + 1864] / 5
            = [9439] / 5
            = 1888 (Approximation)

The layer dates approximately 1888. With this method there are two exceptions. Very old pieces are rejected. This is done because of long use. The piece might have been in a family for two or three generations before it broke and was thrown away. This pieces only distorts the calculations out and are normally discarded with a mention. Pieces that

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[6] A.Polling, Maastrichtse ceramiek, p. 79.

are too recent could have been thrown away at a later stage and are also discarded with a mention.

The MEAN-Dating of this dump has one difference. The date is not taken as an Absolute. The dump was closed in 1900 when a new dump South of Pretoria was opened.[7] The MEAN-Date will be used as median for the date used in statistical calculations. For example, if the MEAN-Date is 1898 the date range of the layer would be calculated as 1896 – 1900 (5 years). The reasons for this are explained under the heading **2.1d Layering**.

c.   **Statistical analysis**

In doing the statistical calculations the following are used:

  a.   The MEAN-Dating of the excavation (**1.3b**)
  b.   The size of the Excavation (**1.2a, d**)
  c.   The dept of the Excavation
  d.   The size of the dump (**A.1**)
  e.   The Amount of people in Pretoria at the years used in MEAN-Dating.

First the area of the dump, say 100mX100m, is divided into the area of the excavation, for example 10mX10m. The excavation is one 100th of the total area of the dump. Thus all the results from the dump must be multiplied by 100. The excavation is 2m deep therefore calculations are done on 2m.

Example: If there are 50 beer bottles in the excavation the possibility is that there are 5000 bottles in the whole dump.

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[7] Personal Correspondence: CN Welman, South African Bottle collector, Pretoria: 2002\01\04.

Now if we use the date of 5 years (Example used **1.3b**). The number of bottles must be divided by the number of years; this leaves a 1000 bottles a year. Here we must bear in mind that on many bottles there was a deposit on return. With this out of calculation it leaves us with 1 bottle of beer per person per annum if there was 1000 people in Pretoria. It must be borne in mind that there are various factors that need to be taken into calculation. This various factors will be looked at in more detail later in the study. For example we can accept that some of the 1000 people would be children or woman and that the Black people of the time was not allowed to buy alcohol. The various calculations and their impact will be taken into consideration in **Chapter 3**.

CHAPTER 3

DATING OF LAYERS

3.1   EXCAVATION 1 LAYER 2

Type	Amount	Median	Range of dates	
Burgess & Leigh	1	1885.5	1880	1891
Baker & Co Ltd.	1	1905.5	1891	1920
Bistro	1	1909.5	1899	1920
Benjamin Floyd	1	1843.5	1843	1844
Boch Freres	3	1907	1841	1973
Boch Freres (Tile)	1	1891.5	1863	1920
Bridgewood & Son	1	1905.5	1891	1920
Doulton	1	1892	1882	1902
Empire Works Co	1	1904	1896	1912
Grimwades Bros.	2	1893	1886	1900
WH Grindley & Co (US Patent)	3	1906.5	1899	1914
WH Grindley & Co (Ironstone)	1	1910	1900	1920
Johnson Bros. Ltd.	2	1901.5	1883	1920
Meissen	1	1871	1818	1924
Petrus Regout (R in diamond)	1	1900	1890	1910
Petrus Regout (BM90, TB)	1	1911	1892	1930
Petrus Regout (BM80, T A&B)	1	1891.5	1890	1893
Société Céramique (Lion Picture)	1	1928.5	1900	1957
Société Céramique (SC)	1	1864	1863	1865
Thomas Till & Sons	1	1889	1850	1928
Registration 221056	1	1893.5	1893	1894

TOTAL	27	MEAN	1897

The Specific MEAN-date of Excavation 1 Layer 2 is therefore 1897. This makes the range 1900-1894 (7-years).

3.2 EXCAVATION 2 LAYER 1

Type	Amount	Median	Range of dates	
Alton Stoke pottery	1	1975.5	1950	2001
Louis Regout	1	1916.5	1883	1950
Royal Doulton	1	1951.5	1902	2001

TOTAL	3	MEAN	1948

The Specific MEAN-date of Excavation 2 Layer 1 is therefore 1948. This makes the layer post date the excavation.

3.3 EXCAVATION 2 LAYER 2

Type	Amount	Median	Range of dates	
Benjamin Floyd Keramis	1	1843.5	1843	1844
Bistro	1	1909.5	1899	1920
Boch Freres	4	1907	1841	1973
Boch Freres (BF)	1	1907	1841	1973
Booths Thomas, & Co	4	1879.5	1868	1891
Bridgewood & Son	2	1857.5	1805	1910
Bridgewood & Son Vitrified	1	1857.5	1805	1910
British Anchor Potter Co Ltd.	1	1898.5	1884	1913
Burgess & Leigh, Globe	2	1885.5	1880	1891
Burslem Pottery Co	1	1902	1894	1910
Chapman	1	1902	1898	1906
Cauldon works	1	1821	1802	1840

Creil et Montereau	1	1852.5	1810	1895
Doulton Unknown	1	1892	1882	1902
Empire Works Co	2	1904	1896	1912
Empire Works Co	1	1908	1896	1920
Foster & Sons, Thomas	1	1921	1883	1959
WH Grindley & Co	7	1906.5	1899	1914
WH Grindley & Co (US Patent)	7	1906.5	1899	1914
WH Grindley & Co (Ironstone)	2	1910	1900	1920
WH Grindley (Globe mark)	1	1897	1880	1914
Hope & Co	2	1909.5	1885	1934
John Goodwin, Stoddard & Co	1	1904.5	1899	1910
Johnson Bros. Ltd.	3	1901.5	1883	1920
Mintons with duck incised	2	1895.5	1895	1896
Petrus Regout (Blindmerk 10, Type B)	1	1900	1890	1910
Petrus Regout (Beeldmerk 80, Type B)	3	1891.5	1890	1893
Petrus Regout (Beeldmerk 81, Type B)	1	1891.5	1890	1893
Petrus Regout (Beeldmerk 82)	5	1891.5	1890	1893
Petrus Regout (Beeldmerk 86, Type B)	2	1891.5	1890	1893
Petrus Regout (Beeldmerk 90, Type B)	9	1911	1892	1930
Petrus Regout?	3	1897	1836	1958
Ridgeways	5	1880	1840	1920
Royal Worchester	1	1898.5	1898	1899
Selb	2	1890	1880	1900
Société Céramique (Lion Picture)	6	1928.5	1900	1957
Société Céramique (SC embossed)	1	1900	1899	1901
Société Céramique (Lion with Depose)	1	1897.5	1895	1900
Tielsch C. & Co.	2	1881.5	1845	1918
Teraquay Terra-Cotta Co. Ltd.	1	1892	1875	1909
Utzschneider & Co	1	1850	1800	1900
Villeroy & Boch	1	1873.5	1789	1958

Wedgwood & Co	1	1881	1862	1900
William Lowe	1	1892.5	1892	1893
Williamson & Sons	1	1893.5	1879	1908
RdNo 212857	1	1893.5	1893	1894

TOTAL	100	MEAN	1897

The Specific MEAN-date of Excavation 2 Layer 2 is therefore 1897. This makes the range 1900-1894 (7-years).

3.4 EXCAVATION 3 LAYER 2

Type	Amount	Median	Range of dates	
Benjamin Floyd	1	1843.5	1843	1844
Coalport	1	1905.5	1891	1920
Creil et Montereau	1	1852.5	1810	1895
Grimwade Bros.	1	1893	1886	1900
WH Grindley	1	1906.5	1899	1914
New Wharf Pottery	1	1886	1878	1894
Petrus Regout (Beeldmerk 80, Type B)	1	1891.5	1890	1893
Richard G & Co	1	1949.5	1897	2002
Tielsch C & Co	1	1881.5	1845	1918
Wessel, L	1	1951	1900	2002

TOTAL	10	MEAN	1896

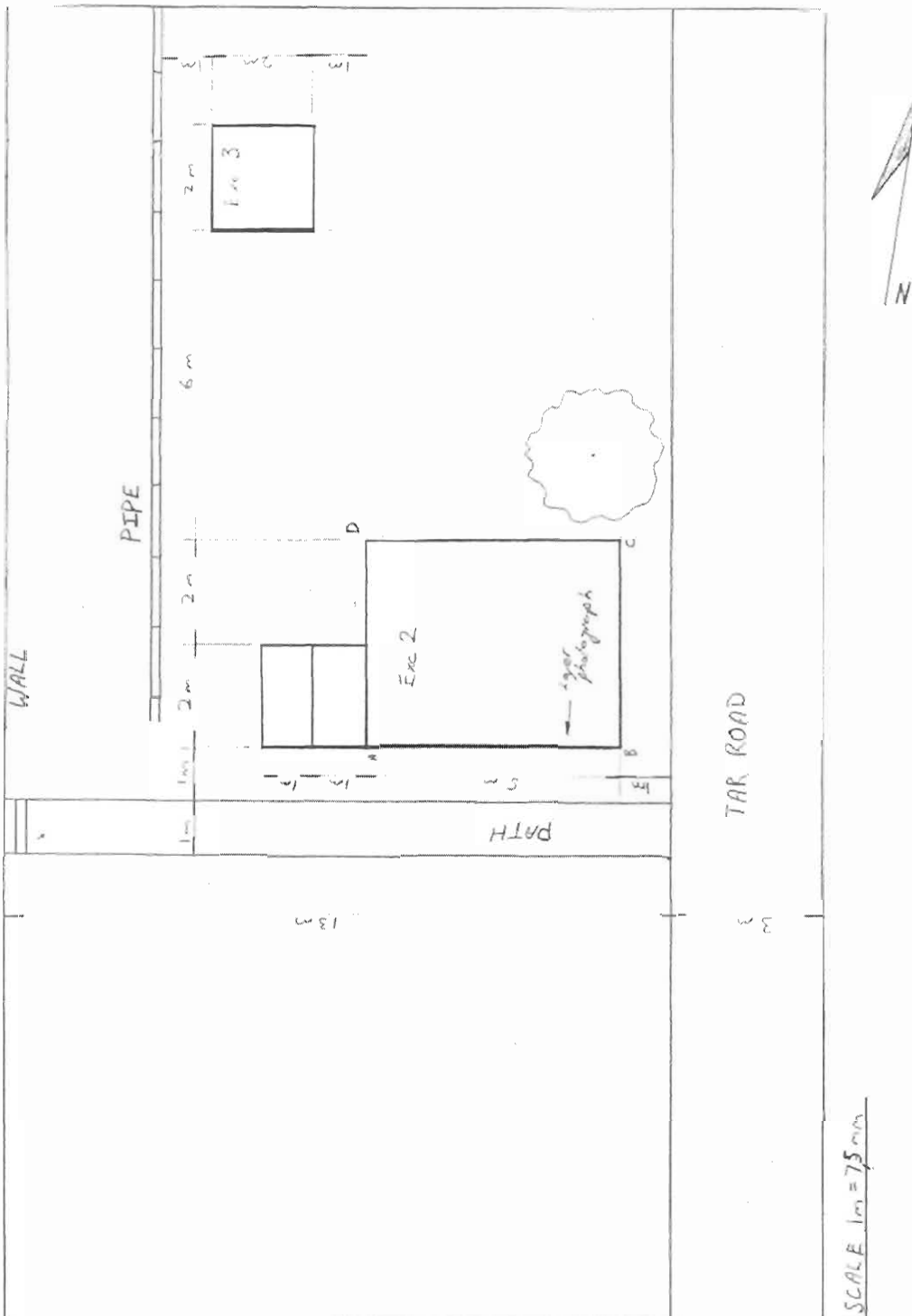The Specific MEAN-date of Excavation 3 Layer 2 is therefore 1896. This makes the range 1900-1892 (9-years).

APPENDIX A.1

Map of Site and excavation placement. No scale were used.
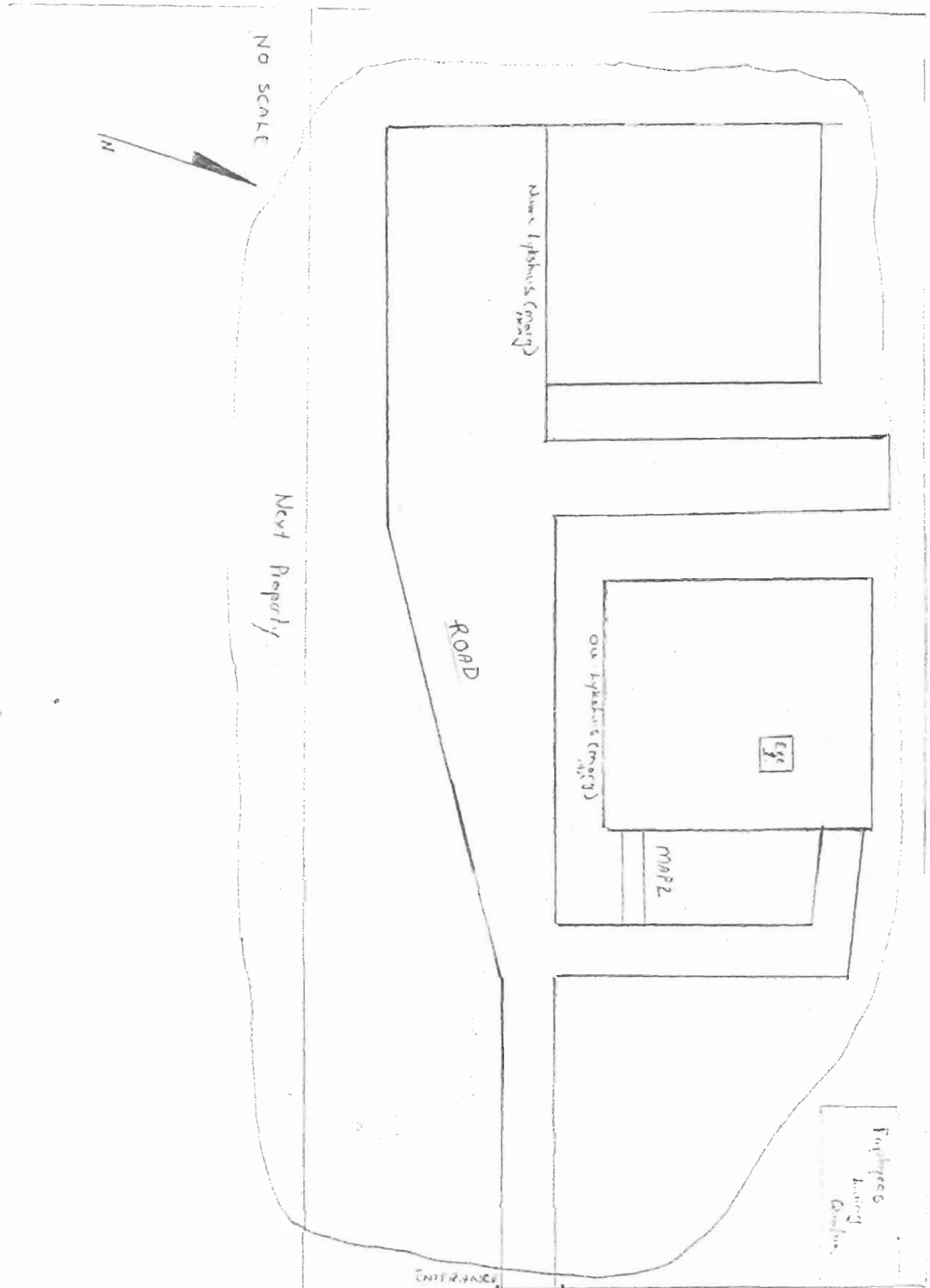
APPENDIX A.2

Map of excavations 2 and 3 drawn on a scale of 7,5mm = 1 m[1]

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[1] Map drawn by Adriaan de Kamper as measured by Gerard de Kamper and Nick Welman