# EVALUATION AT WANSTEAD HOSPITAL 

## AREA B

An Archaeological Evaluation of the Proposed Housing Development at Wanstead Hospital, Hermon hill, Wanstead, London borough of Redbridge.

WT-WH:93

## LDPEM/ACWT/247

N.G.R. 405892

Level III Report
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Fig. 1 Site Location.
Fig. 2 Trench Location.

## 1. Abstract

The site is located within the grounds of Wanstead Hospital, Hermon Hill, Wanstead. Three trenches were excavated, and numbered 3 to 5 , measuring $10 \mathrm{~m} \times 5 \mathrm{~m}$. None of the trenches produced evidence of any activity earlier than the nineteenth century or predating the construction of the Hospital. It is felt that the construction of the Hospital, the attendant ground-work and subsequent landscaping have affected the underlying "natural" deposits to such an extent that there is little or no likelihood of any significant archaeological survival.

## 2. Report Introduction

This report is on the evaluation undertaken at Wanstead Hospital, Area B, for Barretts Ltd. (see fig. 1). It contains three main sections. The first is an introduction to the site with a brief description of the methodology used. This is followed by a brief description of the results obtained, discussed in terms of phases or different periods of activity. A matrix for each trench, to illustrate the archaeological sequences observed on site, is provided in the appendices. A more detailed presentation of the results can also be found in the appendices.

The site was recorded using a single context recording system, to allow the stratigraphic analysis of the site. The basic unit of recording is called a Context; this refers to any event leaving an archaeological trace, such as a ditch being cut. The archaeological trace is given a unique number, a written record is made on a pro-forma sheet, and a plan and/or profile drawn to scale ( usually at 1:20 and 1:10 respectively).

The stratigraphical relationship between contexts is shown in the form of a matrix:

In this example 1 is a backfill of a cut, 2 , which is cut through a layer, 3 .

Contexts are assigned to groups which represent features or groups of features which relate to the same event, such as all features which are part of the same structure, for example a building during its construction event. Thus the features in a trench will be divided into several groups and numbered, e. g. gp. 1.05 would refer to group 5 in trench number 1 . The contexts are listed with brief descriptions; the group is then briefly described and the numbers of any relevant photographs is added.

A level III Index is appended at the rear of this report. This consists of a numerical listing of all the contexts, against each of which is included its phase number, group number, and the numbers of any drawings. This should enable the Site Archive to be used more easily for cross-referencing and checking. The Site Archive is held by Newham Museum Services in the Archaeology and Local History Centre at 31 Stock Street, Plaistow, London, E13 0BX

I would like to take this opportunity to thank Barretts P.L.C. for their help and assistance on site, including provision of site-accommodation and machines. I would also like to
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The evaluation was funded by Barretts P.L.C. , negotiated and directed by Dr. F. Meddens, and supervised on site by the author.

## 3. Site Introduction and Methodology.

This report is of the archaeological evaluation undertaken at Wanstead Hospital, in Area B , of a development by Barretts Ltd. ., who commissioned the work. The report was needed to fulfill condition 10 of a decision notice granted to Ideal Homes (Southern) ltd. and Forest Health Care, (reference no. 0595/93) and sold on to Barretts Ltd..

The condition was imposed because of the spot finds of Roman material shown on the Sites and Monuments Record for the locality. There was also the potential survival of medieval material, scattered sherds of which were found during the evaluation of Area A.

Work took place on site from $4 / 2 / 93$ to $10 / 2 / 93$. Three trenches were excavated, numbered 3 to 5 , measuring 10 mx 5 m . Trench 3 was located approximately 25 metres to the south of the main Hospital building (see fig. 2); this would locate the trench in the area of the car park of the proposed development. Trench 4 was located approximately 35 $m$ east of the exit on to Hermon Hill, placing it within the area of the northern block of the proposed housing development. Trench 5 was located approximately 35 m east of the boundary wall along Hermon Hill and 37 m south of trench 4; this would place the trench in the area of the southern block of the proposed housing development. The location of trench 3 was altered slightly from the placing originally agreed by turning it 45 degrees and moving it approximately 3 metres to the south in order to avoid a telecommunications duct serving the modern Galleon and Heron Wards complex to the east.

The trenches were opened by machine, to remove a piling mat of demolition rubble (over trenches 4 and 5) and to remove the over burden covering any archaeological remains. The sections exposed were then drawn at a scale of 1:10, and the trench floors planned at $1: 20$. The deposits were recorded stratigraphically using a single context recording system with the relationships shown using the Harris matrix (see Appendix II for site matrices).

## 4. Phase discussion.

Four phases were identified, of which three were probably anthropogenic, the fourth being natural. A brief description of each phase is given below; more detailed descriptions of each phase and the various groups of contexts that go to make them up are included in the appendices.

Phase 1
This phase represents the underlying "natural" deposits. These consist of naturally formed banded gravels and clays, resulting from glacial and post-glacial processes.

## Phase 2

This phase was only observed in trench 3 , and consists of a sub-circular pit of unknown function cut into a layer of a disturbed but naturally derived silty clay. This layer may itself be a fill of an irregular cut, which may be related to ground-working on the site prior to, or relating to the construction of the hospital. No datable material was recovered from any of the contexts in this phase.

## Phase 3

This represents a period of nineteenth century activity. In trench 3 this is comprised of a cut with three fills in the northern half of the trench. This is probably associated with the construction of the Hospital or with subsequent landscaping of the site. Trench 4 has a large soakaway, consisting of a cut containing a layer of crushed brick over a layer of sharp sand. The bricks are of a type that could be either nineteenth or twentieth century date, but similar to those used in the construction of the hospital.This phase is represented in trench 5 by two features containing nineteenth century pottery. They take the form of sub-circular and irregular cuts, probably the impressions left by uprooted trees, filled with earth (topsoil) and burnt domestic refuse. It would appear that this relates to the removal of trees in the vicinity during the construction of the hospital, or possibly during the construction of two accommodation blocks in this part of the hospital grounds during the later twentieth century. The latter is less likely however, based on the pottery found in the fills of these features).

## Phase 4

This phase represents Twentieth century activity on the site. In trench 3 this consists of a cut containing a L.E.B. duct running north-south from a now decommissioned sub-station into the main building of the hospital, and a build -up of topsoil. Trench 4 also contained
a modern cut, this with a single p.v.c. cable for electricity supply (not live). Again there is a covering of topsoil, which contained a lot of building materials from demolished twentieth century buildings. On top of this was a piling mat of demolition rubble from the buildings which had stood near by, and of later twentieth century date. This piling mat also covered the area of trench 5 , recently laid over the topsoil. In the southern end of this trench was a large duct for the hospital heating system vents.
5. Summary and Conclusions.

The evaluation in Area B, in the grounds to the south and south-west of Wanstead Hospital produced no evidence for any activity of earlier date than the Nineteenth century. The lowest horizons investigated comprise mixed, banded gravels and clays which are the product of weathering and erosion of peri- and post-glacial deposits. In trenches 3 and 4 these "natural" deposits appear to have been thoroughly disturbed by some human agency, most likely the result of groundworking to prepare the locality for the construction of the main hospital building in the 1860's, and landscaping of the site after the construction and later. These disturbed deposits were very wet , the ground water being encountered at 1 m below ground level in trench 3, and even higher in trench 4, although in the latter trench the water level may well have been affected by the presence of a crushed brick and sharp sand soakaway (this feature appeared to be broadly contemporary with the main hospital building, as the brick used in both was of the same type). The "natural" gravels and clays appeared to be much less disturbed in trench 5. This may indicate that this area was beyond the area of the construction site for the hospital, although the two features represented by group 5.03 may indicate the removal of trees .

There are no datable features in any of the trenches earlier than the nineteenth century. The pit represented by group 3.03 could be earlier in date, but produced no finds. Other than the soak-away in trench 4 and the filled-in tree-bowls in trench 5 (group 5.03), the remaining visible features are all twentieth century service trenches. The topsoils are fairly high in organic, humic content and the result of gardening and landscaping of the hospital grounds up until recently when the hospital was closed down.

Before the construction of Wanstead hospital the area seems to have been under woodland for some time; certainly maps from 1777 and 1746 show the area as being wooded, probably a remnant of Epping forest. (Chapman \& Andre 1777; Roque 1746).

In conclusion, this evaluation produced no evidence for any activity on this site before the nineteenth century. Such evidence as was recovered points to the site being solely the product of the construction of the hospital, and its subsequent use. The chance of the survival of significant archaeological remains is poor due to the disturbance of even "natural" deposits as a result of the construction of the hospital. It is likely that this chance of archaeological survival is better further away from the main building, but there is no evidence of any material from earlier than the nineteenth century. There would appear to be no grounds on which to recommend further investigation of the site, or to prevent the development from going ahead as proposed.

## 6. Bibliography

Chapman \& Andre; 1777

Roque, J. ;1746
"A map of the country 65 miles round London." Plate XVI.
"Carte Topographique des Villes de Londres, et de Westminster, du Bourg de Southwark et des Leurs Environs." Sheet 4.

## Appendix I - Results by Phase and Group.

## PHASE 1.

This is a phase of naturally derived banded gravels and clays, and is represented by groups 3.01, 4.01, and 5.01.

Group 3.01.

```
|
125
|
128
```

Heights O.D. in metres Max. Min.
(125) layer; a mid-grey "dirty" gravel.
24.12 ---- 24.00
(128) layer; orange to grey gravel in bands.
23.79 ---- 23.55

Photo's B/W 5 -- 4.5. C/S 6 -- 1.2.3.
This group represents "naturally" deposited gravels, although (125) contained a little silt and showed a few C.B.M. fragments. This may in fact be redeposited.

Group 4.01

(113) layer; a yellow to orange -brown sandy silt, with variable amounts of clay and gravel in lenses, with small stone inclusions.
24.70 ---- 25.56
(114) layer; yellow-brown silty-sand with some admixture of gravel.
24.96 ---- 24.81

## Photo's B/W 5 -- 1.2. C/S 6 -- 4.

These contexts form the lowest layers in this trench and form the "natural" here. Context no. One hundred and thirteen (113) may be redeposited and is disturbed. It also contains a large spread or lens of yellow-grey clay originally recorded as context no. one hundred and twenty (120).Context no. one hundred and fourteen (114) is similar with no distinct boundary with one hundred and thirteen (113).

Group 5.01
(108) fill; a mid-grey silty -clay with gravel.
(109) cut; sub-circular, with vertical sides and a flatish base.
23.36
(111) layer; yellow-brown to grey banded silty gravels with thick lenses of clay and brickearth in patches.
24.30 ----
24.30 ----

```
Photo's B/W 5 -- 1.2. C/S 6 -- 5.6.
```

This group represents natural activity. The fill and cut are the result of peri- or post glacial action, as the melting of an ice-wedge leaves a void which subsequently silted up, and gravel was incorporated into the fill due to erosion and weathering of the sides of the hole. Context no. one hundred and eleven (111) is a naturally formed layer of banded gravels, again formed in post-glacial conditions.

## Phase 1 Discussion

This is a phase of naturally deposited material, some of which appears to have been disturbed or redeposited because of the silt content and due to the occurrence of flecks of ceramic building material ( C.B.M.). This could have been incorporated into these deposits from above by natural soil processes and bioturbation. If some of these deposits have been disturbed by anthropogenic activity, it is difficult to characterise the nature of the disturbance. However, it is possible that any disturbance is the result of ground working in advance of, during, and after the construction of the hospital.

## PHASE 2.

This phase is only represented in trench 3, and is not datable. It contains groups 3.02 and 3.03.

Group 3.02

(126) fill?; yellow-grey silty-clay, gravel and small pebble inclusions. 24.04 ---- 24.00
(127) fill?; orange to grey silty-clay.
23.95 ---- 23.82
(129) fill?; orange to yellow clay, occasional gravel inclusions. 23.85 ---- 23.77
(133) cut; irregular.

## Photo's B/W 5 -- 4.5. C/S 6 -- 1.2.3.

This group consists of three deposits in a possible cut (only recorded in section). All of the deposits appear to be "natural" in origin but may be redeposited here if the cut is assumed to be man-made. If this is the case then the feature could be explained as the product of ground-working associated with the construction of the hospital, either as levelling before construction or during landscaping of the site afterwards.

Group 3.03.

(100) fill; grey to black silty-clay, small pebble inclusions.
23.45 -----
(101) cut; sub-circular, concave sides and base.
23.15 -----

$$
\text { Photo's B/W } 5 \text {-- 4.5. C/S } 6 \text {-- 1.2.3. }
$$

This group represents a sub-circular feature as a pit. The function of this feature is unknown and no datable material was recovered from the fill.

Phase 2 Discussion
This phase includes one definite and one possible anthropogenic feature. Dating is not possible .Group 3.02 is lower in the stratigraphic sequence, with group 3.03 being cut into context no. one hundred and twenty-seven (127). The feature represented by group 3.03 is truncated above by group 3.04 in the succeeding phase (phase 3 ).

PHASE 3.
This phase is represented in all trenches, and comprises groups 3.04, 4.02, and 5.03.

Group 3.04.

```
122
    |
123
    |
1 2 4
    |
1 3 2
    |
```

(122) fill?; orange-brown silty-clay with gravel.
24.17 ---- 24.03
(123) fill?; dark-grey to black ash and cinders, with moderate charcoal and brick frags. 24.06 ---- 24.03
(124) fill?; brick-red crushed brick.
23.97 ----- 23.92
(132) cut; irregular?
24.05 ---- 23.85

$$
\text { Photo's B/W } 5 \text {-- 4.5. C/S } 6 \text {-- 1.2.3. }
$$

This group represents the cut and fills of a feature of unknown function, although it probably relates to the construction of the hospital. The cut as recorded in section was approximately 2.90 m long, occupying the northern half of the trench; the fills may have served to level up the ground, using crushed brick and demolition material. All the fills may be from the construction site for the hospital and were placed here when the site was landscaped after the building was completed.

Group 4.02.

(117) fill; red crushed brick.
24.34 ---- 24.23
(118) fill; yellow coarse (sharp) sand.
24.24 ---- 24.11
(119) cut; irregular (sub-circular?).
24.34 ----

Photo's B/W 5 -- $3.8 . \quad$ C/S 6 -- 4.
These contexts represent a feature interpreted as a soakaway. It was 6.5 m long, and emerged from the eastern section for approximately 2.5 m into the trench. The brick is of a type that could be nineteenth or twentieth century in date, and is assumed to be Victorian in this instance because the brick appears to be the same as that used in the construction of the main hospital building (erected in 1861).

Group 5.03

(102) fill; dark grey-brown to black sandy-silt.

$$
24.05 \text {---- }
$$

(103) fill; brown sandy-silt.
23.63 ----
(104) cut; sub-circular (oval), sides slope gently to a flat base.
24.05 ---- 23.53
(105) fill; dark grey-brown to black sandy-silt.
23.98 ----
(106) fill; brown sandy-silt.
23.74 ----
(107) cut; sub-circular (oval), sides concave, rounded base.

$$
\text { Photo's B/W } 5 \text {-- 1.2. C/S } 6 \text {-- 5.6. }
$$

This group is comprised of two features interpreted as the impressions left by the uprooting of trees which have been filled with earth (off the root-ball as the trees were lifted) and levelled up with burnt material. This burnt fill (context numbers (102) and (105)) included brick and pottery, both Victorian in appearance.

Phase 3 Discussion
This phase of activity is seen in all the trenches, and consists of a later nineteenth century soakaway in trench 4 , two irregular pits and their associated fills in Trench 5, and a cut containing brick rubble and other material presumably used as make-up in Trench 3. All the features are cut into layers of apparently disturbed local naturally derived material, except the features represented in group 5.03 , which were cut into a layer of undisturbed banded gravels (context no. one hundred and eleven (111), group 5.01 in phase 1).

## PHASE 4.

This phase represents the modern (twentieth century) activity on site, and consists of groups 3.05, 3.06, 4.03, 4.04, and 5.04.

Group 3.05
(130) fill; dark grey-brown sandy-silt with gravel.
24.20 ---- 24.15
(131) cut; linear, near vertical sides, flat base?

Photo's B/W 5 -- 4.5. C/S 6 -- 1.2.3.
This group consists of a cut and fill for a trench containing an L.E.B. cable duct. The duct is concrete covered and runs north-south into the hospital from a decommissioned substation to the south.

Group 3.06.

$$
\begin{aligned}
& 121 \\
& \\
& 24.32---24.19
\end{aligned}
$$

(121) layer; dark grey-brown sandy-silt.
Photo's
B/W 5 -- 4.5.
C/S 6 -- 1.2.3.

This group represents the topsoil, supporting turf and shrubs.

Group 4.03

(116) fill; dark grey sandy-silt.
24.92 ---- 24.78
(115) cut; linear, a shallow U-shape in profile.

Photo's B/W 5 --3.8. C/S 6 -- 4.
This represents the cut and fill for a modern L.E.B. cable (service disconnected).

Group 4.04

Photo's B/W 5 -- $3.8 . \quad$ C/S 6 -- 4.
This context represents the topsoil in this area of the site. It contained much building material from the demolition of a later twentieth century building. The demolition debris was spread on the ground surface to form a rough piling mat for the contractor's piling rig.

Group 5.04.

110
|
(110) layer; grey-brown sandy-silt.
24.57 ---- 24.52

$$
\text { Photo's B/W } 5 \text {-- 1.2. C/S } 6 \text {-- 5.6. }
$$

This layer is similar to that represented in group 4.04, and is a topsoil covered with a spread of demolition debris used to form a piling mat.

Group 4 Discussion
This phase represents twentieth century activity on this site. There are two service trenches (for electricity supply) and the topsoil. In trench 3 the topsoil supports turf and shrubs as part of the hospital gardens, whilst the topsoil in trenches 4 and 5 has had a mat of demolition debris spread on it in advance of piling work, to support the contractors piling rig. This material comes from two later twentieth century buildings (formerly accommodation blocks) which have recently been demolished to make way for development.

## Appendix II Site Matrices

Trench 3
121



Trench 4 Matrix
112



Trench 5


## Appendix III Level III Index

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Context Trench No. Plan Section Group Phase

| 100 | 3 |  |  | 3.03 | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 101 | 3 | 101 |  | 3.03 | 2 |
| 102 | 5 |  |  | 5.03 | 3 |
| 103 | 5 |  |  | 5.03 | 3 |
| 104 | 5 | 104 |  | 5.03 | 3 |
| 105 | 5 |  |  | 5.03 | 3 |
| 106 | 5 |  |  | 5.03 | 3 |
| 107 | 5 | 107 |  | 5.03 | 3 |
| 108 | 5 |  |  | 5.02 | 1 |
| 109 | 5 | 109 |  | 5.02 | 1 |
| 110 | 5 |  | 4 | 5.04 | 4 |
| 111 | 5 |  | 4 | 5.01 | 1 |
| 112 | 4 |  | 3 | 4.04 | 4 |
| 113 | 4 |  | 3 | 4.01 | 1 |
| 114 | 4 | 11 | 3 | 4.01 | 1 |
| 115 | 4 |  | 3 | 4.03 | 4 |
| 116 | 4 |  | 3 | 4.03 | 4 |
| 117 | 4 | 11 |  | 4.02 | 3 |
| 118 | 4 | 11 |  | 4.02 | 3 |
| 119 | 4 | 11 |  | 4.02 | 3 |
| 120 | 4 | 11 |  | 4.01 | 1 |
| 121 | 3 |  | 5 | 3.05 | 4 |
| 122 | 3 |  | 5 | 3.04 | 3 |
| 123 | 3 |  | 5 | 3.04 | 3 |
| 124 | 3 |  | 5 | 3.04 | 3 |
| 125 | 3 |  | 5 | 3.01 | 1 |
| 126 | 3 |  | 5 | 3.02 | 2 |
| 127 | 3 |  | 5 | 3.02 | 2 |
| 128 | 3 |  | 5 | 3.01 | 1 |
| 129 | 3 |  | 5 | 3.02 | 2 |
| 130 | 3 | 12 | 5 | 3.05 | 4 |
| 131 | 3 |  | 5 | 3.05 | 4 |
| 132 | 3 |  | 5 | 3.04 | 3 |
| 133 | 3 |  | 5 | 3.02 | 2 |

## Illustrations

Fig 1.

