

# Warneford Hospital Oxford



## Archaeological Evaluation Report



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## **Warneford Hospital, Oxford (SP538 059)**

*Archaeological Evaluation Report*

*by Brian Dean*

*with illustrations by Markus Dylewski*

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## **Summary**

*Between 4th and 21st January 2010 Oxford Archaeology carried out an archaeological evaluation at Warneford Hospital, Headington, Oxford on behalf of GBS Consulting.*

*Five evaluation trenches were excavated to assess the presence and condition of any archaeological deposits within the site of a proposed development. These trenches were located to provide maximum coverage of areas of potential development impact whilst taking into consideration the results of a previous geophysical survey.*

*Archaeological deposits were observed in only a single trench, indicating a low level of early activity on the site. A single linear ditch containing pottery of Roman date was observed as was a single small undated posthole nearby to the west.*



## 1 INTRODUCTION

### 1.1 Location and scope of work

1.1.1 The site is located to the south-east of the main Warneford Hospital building, in the Headington area of Oxford, centred at grid reference SP 538 059. It is bounded by fields to the north and east, by residential buildings to the south-west and by hospital buildings to the north-west.

1.1.2 The site, which is currently a sports field attached to the Warneford Hospital, is proposed as the location for a new building to form part of the Warneford Hospital complex. The evaluation was undertaken in accordance with a Written Scheme of Investigation based on a brief from Oxford City Council (OCC 2009) prior to the determination of an application for this development and subsequent to an archaeological desk-based assessment and geophysical survey (see below). The evaluation comprised the excavation of 70 linear metres of 2 m-wide trial trenches, and was undertaken in the form of 5 trenches (4 measuring 15 m by 2 m and one measuring 10 m by 2 m) laid out as shown on the trench plan (Fig. 2).

1.1.3 It was envisaged that the work would be undertaken in approximately 5 days by a team comprising a Project Supervisor and one archaeological technician under a Project Manager. The majority of the work was undertaken on January 4th and 5th, but completion of the work and backfilling of the site were delayed for two weeks by heavy snowfall.

### 1.2 Geology and topography

1.2.1 The site lies on a Corallian formation of Beckley Sand Member (sand and calcareous sandstone). The ground level is at approximately 90 m OD (OA 2009).

### 1.3 Archaeological and historical background

1.3.1 The archaeological and historical background has already been discussed in a report produced by OA (2009). Only a very brief summary of the relevant results from this report is presented below.

1.3.2 There are no Scheduled Monuments within the site. Neither the NMR or HER record any archaeological entities within the site.

1.3.3 The OA Desk-based Assessment (2009) identified two slight undated linear earthworks aligned north-east to south-west. These lay in the north-eastern part of the site and did not clearly extend into the evaluated area. They may have been related to possible trackway ditches identified further to the east by a magnetometer survey (OCC 2009).

1.3.4 In general the site lies close to elements of the major Roman pottery industry centred in east Oxford and amongst the most important of such industries in Britain in the late Roman period. The nearest known production site is centred at the Churchill Hospital c 750 m to the east. Recent work in the area of the Churchill Hospital and in Warneford Meadow, immediately east and south-east of the present site, has produced evidence for low-level Roman activity including probable field boundary ditches, but no further indications of pottery production.

1.3.5 A geophysical (magnetometer) survey of the present site was undertaken prior to the evaluation by Alistair Bartlett of the Bartlett-Clark Consultancy. The results of this were inconclusive. Several features considered to be of possible archaeological significance were identified, but the most convincing of these, a possible NE-SW aligned ditch (shown in red at the top centre of Fig. 2), did not appear to extend into the area of proposed development. The interpretation of other discrete magnetic anomalies was considered very uncertain in terms of



both function and date. Anomalies of a type characteristic of Roman pottery productions sites were clearly absent.

1.3.6 In the absence of other evidence the results of the geophysical survey were used as a guide in determining the precise location and alignment of the evaluation trenches. Trenches 2, 3 and 4 were specifically targeted on magnetic anomalies within the main part of the proposed development area, while Trenches 1 and 5 provided coverage of the northern and southern parts of the area.





## 2 EVALUATION AIMS AND METHODOLOGY

### 2.1 Aims

2.1.1 The aims of the evaluation were to determine the location, extent, date, character and state of preservation of any archaeological remains surviving within the site. Attention was to be given to remains of all periods, including evidence for past environments, with provision for environmental sampling.

2.1.2 The aims and objectives were as follows:

- (i) To determine or confirm the general nature of any remains present.
- (ii) To determine or confirm the approximate date or date range of any remains, by means of artefactual or other evidence.
- (iii) To determine or confirm the approximate extent of any remains.
- (iv) To determine the condition and state of preservation of any remains.
- (v) To determine the degree of complexity of the horizontal and/or vertical stratigraphy present.
- (vi) To determine or confirm the likely range, quality and quantity of any artefactual evidence present.
- (vii) To determine the potential of the site to provide palaeo-environmental and/or economic evidence and the forms in which such evidence may be present.

### 2.2 Methodology

2.2.1 All trenches were laid out precisely by an experienced surveyor and accurately related to the national grid. All levels were taken in relation to Ordnance Survey datum.

2.2.2 Trenches were machine excavated using a JCB with a toothless ditching bucket down to the first archaeological deposit or natural geology (whichever was encountered first). Care was taken not to damage archaeological deposits through excessive use of mechanical excavation.

2.2.3 The surface of any exposed archaeological horizon was cleaned for the purpose of clarifying remains. However, archaeological features were only be sampled sufficiently to characterise and date them. Site procedures were as defined in the OA Field Manual (ed. Wilkinson 1992).

2.2.4 All machining of deposits was undertaken under the supervision of the Project Supervisor. The topsoil and subsoil were stored separately on either side of the trench. Trenches were enclosed with Heras-type fencing while open.

2.2.5 Where archaeological features were thought to be present they were investigated by hand to allow their date, nature and degree of survival to be assessed. All features thus investigated were recorded in plan and section and all finds recovered from them were retained for analysis.

2.2.6 The site archive includes plans and sections at an appropriate scale, a photographic record and full stratigraphic records on trench record forms and context record forms or their electronic equivalent.



2.2.7 The record of the extent and vulnerability of features will be sufficiently detailed to assess the need for preservation beneath any future potential development, or any other mitigation measures, including further excavation or recording.

2.2.8 Sufficient features were sampled by hand excavation to achieve the project objectives, although only two such features were identified. For discrete features such as pits and postholes this involved excavation of 50% of selected features. Sample sections through linear features were excavated.



## 3 RESULTS

### 3.1 Introduction and presentation of results

3.1.1 A description of soil and ground conditions is given and the distribution of archaeological deposits described. The results of the evaluation are summarised with each trench being described individually. This is followed by a discussion and interpretation of the results. A summarised table of contexts is provided.

### 3.2 General soils and ground conditions

3.2.1 The ground conditions across site were very good at the time that the trenches were opened. The site contained well drained sandy deposits overlain by a slightly clayey sand topsoil. There was a very slight incline to the south.

3.2.2 The topsoil was a friable mid brown clayey sand with no inclusions. This varied in thickness from 0.35 m to 0.4 m across the site. Underlying this was a mid orange sand subsoil layer varying in thickness from 0.4 m to 0.5 m. In two trenches a layer of darker sand with very rare charcoal inclusions was observed. This was on average 0.2 m thick and formed a relatively regular deposit. The natural subsoil was a light yellow sand with occasional mottling of darker orange hues.

### 3.3 General distribution of archaeological deposits

3.3.1 The recovery of archaeological deposits was confined to a single trench, Trench 2. This trench was located in the northern part of the site in the area of the cricket square. Within this trench two features were observed, sampled and recorded. A small sub-circular feature (2005), interpreted as a small posthole or stakehole, was located close to the centre of the trench. It was 0.20-0.22 m across and 0.16 m deep. No artefactual evidence was recovered. Slightly to the east of this was a linear feature, (2003), which upon excavation was revealed to be the cut of a ditch aligned NW-SE. The ditch measured 0.94 m wide and 0.26 m deep. It consisted of shallow but steep concave sides leading to a flat base. No evidence of any cut was visible within the matrix of the subsoil. The ditch was therefore either cut from this level or else its upper parts had been truncated by activity which eventually led to or was followed by the formation of the subsoil. The fact that the base of the ditch was at a depth of 0.96 m below the modern ground surface suggests that this may have been a significant feature. Two small pottery sherds were recovered from the single fill of the ditch. One of these was a fragment of Oxford white ware dated to the 2nd century AD or later, the other was a tiny indeterminate grog-tempered fragment.

3.3.2 The remaining trenches were devoid of archaeological features.

### 3.4 Finds and environmental remains summary

3.4.1 A total of two pottery sherds were recovered from stratified contexts, both from the fill of ditch (2003). These are Roman in date. No other stratified finds of any kind were recovered. A few sherds of 19th-20th century date from the topsoil were not retained.

3.4.2 No deposits suitable for sampling for environmental remains were identified and therefore no such samples were taken.



## 4 DISCUSSION

### 4.1 Reliability of field investigation

4.1.1 The trenches were located to target the main impacts from the proposed development. The trenches also targeted anomalies illustrated through geophysical survey. The ground conditions during machine excavation were good. The natural horizon was clearly identified.

### 4.2 Interpretation

4.2.1 The limited archaeological deposits observed suggest that the area was at least in use during the Romano-British period. The pottery recovered from the linear ditch does not allow close dating of this activity. The larger of the two sherds simply has a *terminus post quem* of c AD 100 and could indicate that the ditch was filled at any time in the Roman period thereafter, or even later if the sherds were completely residual. The latter seems unlikely, however, and the character of the ditch is consistent with a Roman date. This interpretation is in turn consistent with the evidence from adjacent sites, particularly from Warneford Meadow, suggesting use of the area in the Roman period. The function of the ditch cannot be ascertained from the small segment excavated, but it can be argued that it was a relatively significant feature and probably functioned as a field boundary. The fill deposits do not clearly indicate a specific drainage function, but although this is a typical characteristic of field boundaries the friable nature of the sandy soils on the site would tend to make it difficult to identify particular fill deposits that represented such a function. Although no dating was recovered from the small posthole or stakehole to the west of the ditch the juxtaposition of the two (and the clear absence of cut features elsewhere) suggests that they may well have been contemporary and that the posthole had a function related to the ditch feature.

### 4.3 Significance

4.3.1 The evaluation shows that the site contains a low density of archaeological features and that those that were revealed are certainly or probably of Roman date. The ditch identified in Trench 2 will extend beyond the trench and if projected on a straight alignment will lie directly within the footprint of the proposed development.



## Appendix A. TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

Trench 1						
<b>General description</b>				<b>Orientation</b>		WNW-ESE
Trench devoid of archaeology. Consists of soil and subsoil overlying a natural sand.				<b>Avg. depth (m)</b>		0.55
				<b>Width (m)</b>		2
				<b>Length (m)</b>		10
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
1000	Layer	-	0.2	Topsoil	-	-
1001	Layer	-	0.4	Subsoil	-	-
1002	Layer	-	-	Natural	-	-

Trench 2						
<b>General description</b>				<b>Orientation</b>		NE-SW
Trench contained two archaeological features. A linear ditch (2003) was observed as was a small posthole (2005).				<b>Avg. depth (m)</b>		0.7
				<b>Width (m)</b>		2
				<b>Length (m)</b>		15
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
2000	Layer	-	0.34	Topsoil	-	-
2001	Layer	-	0.38	Subsoil	-	-
2002	Layer	-	-	Natural	-	-
2003	Cut	0.94	0.26	Cut of linear ditch	-	-
2004	Fill	0.94	0.26	Fill of linear ditch	Pottery	2nd century AD or later
2005	Cut	0.22	0.16	Cut of posthole	-	-
2006	Fill	0.22	0.16	Fill of posthole	-	-

Trench 3						
<b>General description</b>				<b>Orientation</b>		WNW-ESE
Trench devoid of archaeology. Consists of soil and subsoil overlying a natural sand.				<b>Avg. depth (m)</b>		1
				<b>Width (m)</b>		2
				<b>Length (m)</b>		15



**Contexts**

context no	type	Width (m)	Depth (m)	comment	finds	date
3000	Layer	-	0.4	Topsoil	-	-
3001	Layer	-	0.2	Subsoil	-	-
3002	Layer	-	0.4	Subsoil	-	-
3003	Layer	-	-	Natural	-	-

**Trench 4**

General description	Orientation
Trench devoid of archaeology. Consists of soil and subsoil overlying a natural sand.	E-W
	<b>Avg. depth (m)</b> 1
	<b>Width (m)</b> 2
	<b>Length (m)</b> 15

**Contexts**

context no	type	Width (m)	Depth (m)	comment	finds	date
4000	Layer	-	0.35	Topsoil	Pot	Post-Med/Modern
4001	Layer	-	0.2	Subsoil	-	-
4002	Layer	-	0.5	Subsoil	-	-
4003	Layer	-	-	Natural	-	-

**Trench 5**

General description	Orientation
Trench devoid of archaeology. Consists of soil and subsoil overlying a natural sand.	N-S
	<b>Avg. depth (m)</b> 0.8
	<b>Width (m)</b> 2
	<b>Length (m)</b> 15

**Contexts**

context no	type	Width (m)	Depth (m)	comment	finds	date
5000	Layer	-	0.4	Topsoil	Pottery	Post-Med/Modern
5001	Layer	-	0.4	Subsoil	-	-
5002	Layer	-	-	Natural	-	-



## Appendix B. FINDS REPORTS

### B.1 Pottery

*By Paul Booth*

#### *Introduction and methodology*

B.1.1 Two sherds of pottery were recovered from ditch fill 2004 in Trench 2. These were a slightly abraded sherd (3 g) of white ware from the nearby Oxford kilns (Young 1977, 93, fabric 1; fabric OXF WH in the national Roman fabric reference collection (Tomber and Dore 1998, 174-5), and a tiny fragment (< 1 g) of grog and shell-tempered material. The latter was not certainly pottery, but a late Iron Age-early Roman date is likely on the basis of the fabric. The white ware sherd is not closely dateable, and merely gives a *terminus post quem* of c AD 100 for the fill of the ditch.

B.1.2 Some half a dozen sherds 19th-20th century date were noted in the topsoil deposits. These were not retained.



## Appendix C. REFERENCES

Oxford Archaeology, 1992 *Fieldwork Manual*, (ed. D Wilkinson)

Oxford Archaeology, 2009 Warneford Hospital, Headington, Oxford, Desk-based assessment, unpublished client report

Oxford City Council, 2009 Brief for an Archaeological Field Evaluation (Geophysical Survey) at Warneford Hospital.

Tomber, R and Dore, J, 1998 *The national Roman fabric reference collection: a handbook*, Museum of London Archaeol Services Mono No 2, London

Young, C J, 1977 *The Roman pottery industry of the Oxford region*, *Brit Archaeol Rep (Brit Ser)* 43, Oxford





## Appendix D. SUMMARY OF SITE DETAILS

**Site name:** Warneford Hospital

**Site code:** OXWARN10

**Grid reference:** SP 538 059

**Type:** Trenched evaluation

**Date and duration:** 4/1./2010 - 21/1/2010

**Area of site:** 15534.5 square metres

**Summary of results:** Between 4th and 21st January 2010 Oxford Archaeology carried out an archaeological evaluation at Warneford Hospital, Headington, Oxford on behalf of GBS Consulting.

A total of five evaluation trenches were excavated to assess the presence and condition of any archaeological deposits within the site of a proposed development. These trenches were located to provide maximum coverage of the proposed development impact areas whilst taking into consideration the results of a previous geophysical survey.

Archaeological deposits were observed in only a single trench, indicating a low concentration of previous activity on the site. A single linear ditch containing pottery of Roman date was observed as was a single small undated posthole nearby to the west.

**Location of archive:** The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with the Oxford County Museums Service in due course, under the following accession number: OXCMS:2010.3





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Figure 1: Site location









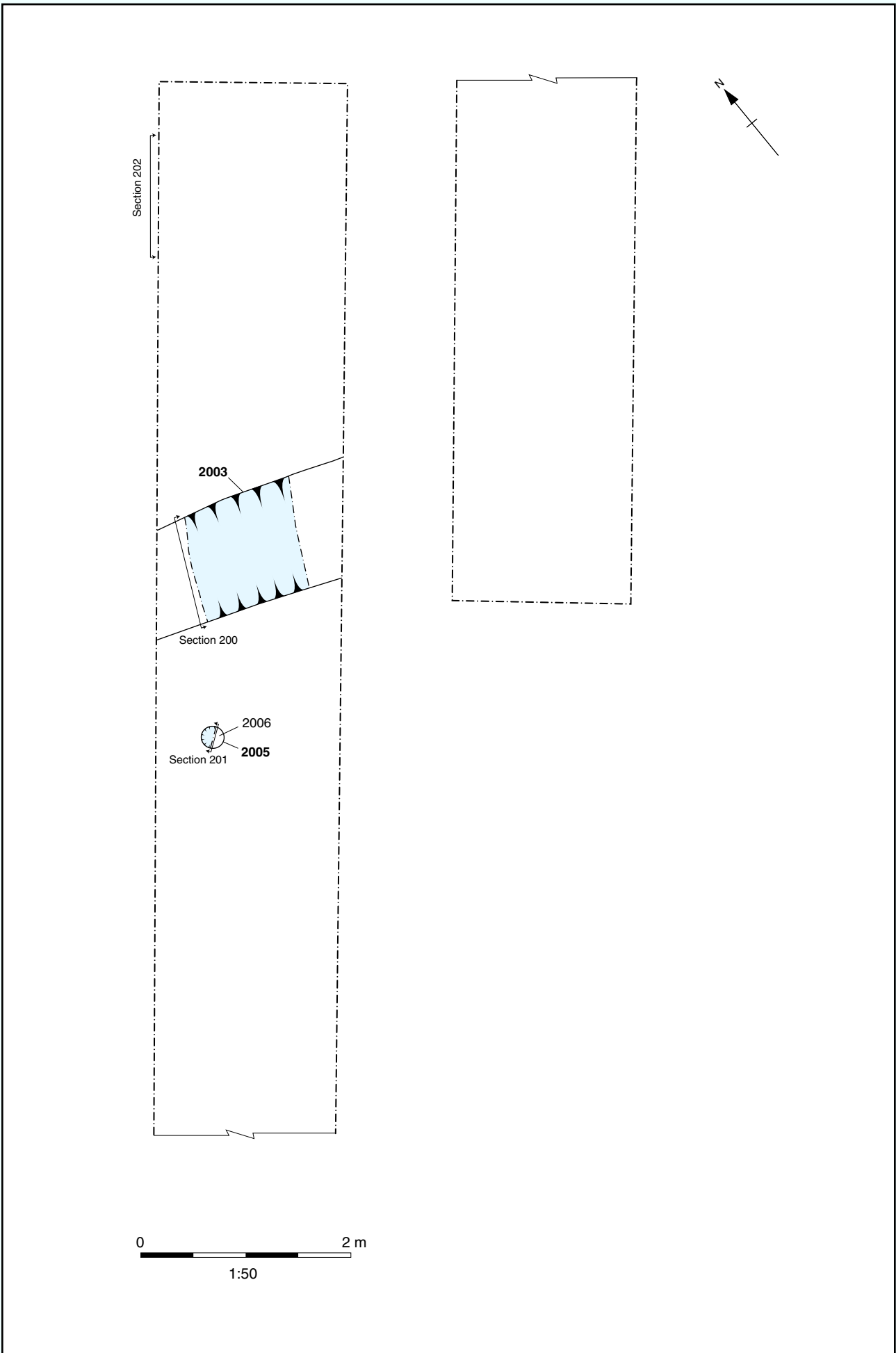


Figure 3: Trench 2 plans





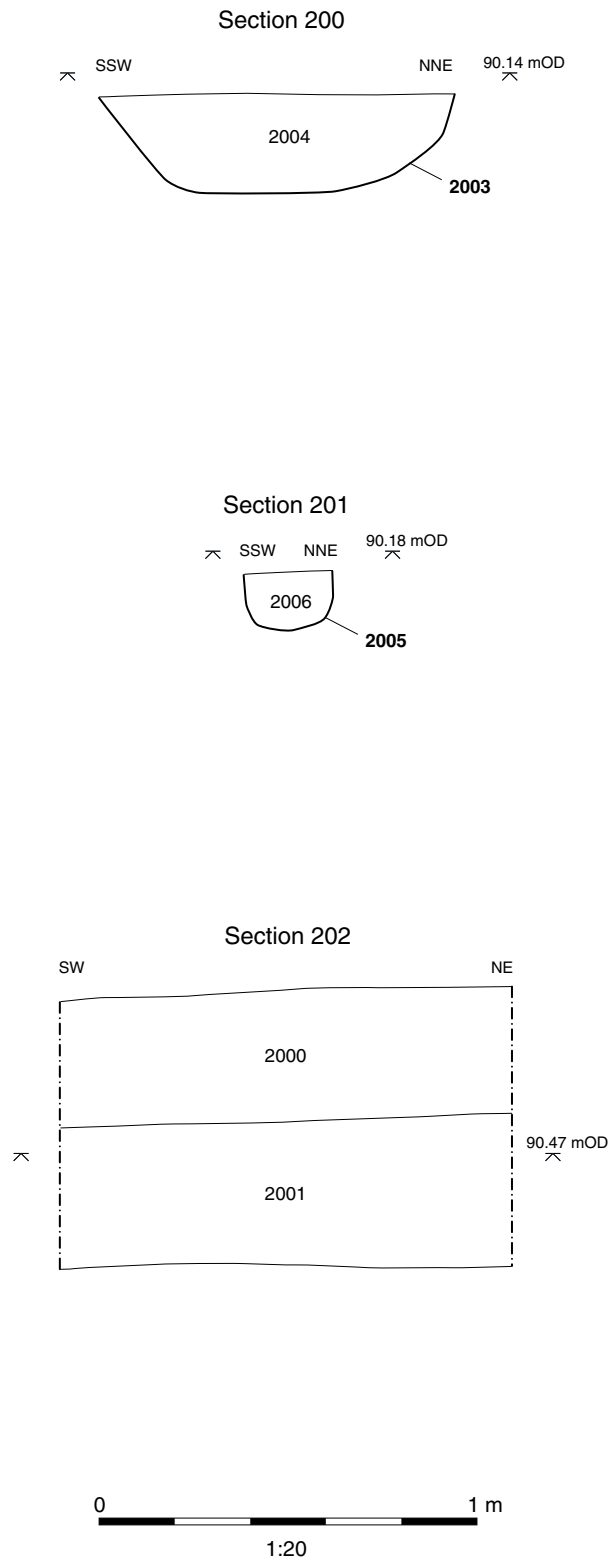


Figure 4: Trench 2 sections



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