

Nuffield Orthopaedic Centre

**Proposed Musculoskeletal Science Centre  
Nuffield Orthopaedic Centre, Oxford  
*ARCHAEOLOGICAL EVALUATION REPORT***

NGR SP 54550660

© OXFORD ARCHAEOLOGICAL UNIT

January 2001

Nuffield Orthopaedic Centre

**Proposed Musculoskeletal Science Centre  
Nuffield Orthopaedic Centre, Oxford**  
*ARCHAEOLOGICAL EVALUATION REPORT*

NGR SP 54550660

© OXFORD ARCHAEOLOGICAL UNIT

January 2001

**Proposed Musculoskeletal Science Centre  
Nuffield Orthopaedic Centre, Oxford**

***ARCHAEOLOGICAL EVALUATION REPORT***

**NGR TQ 54550660**

Prepared by: Andrew Mayes

Date: 19/01/2001

Checked by Ken Welsh

Date: 29/01/2001

Approved by: ROBERT WILLIAMS  
ASSISTANT DIRECTOR

Signed: R. Williams

Date: 1/2/2001

**January 2001**

**Proposed Musculoskeletal Science Centre  
Nuffield Orthopaedic Centre, Oxford**

*ARCHAEOLOGICAL EVALUATION*

**CONTENTS**

1	Introduction.....	2
1.1	Location and scope of work.....	2
1.2	Geology, topography and landuse .....	2
1.3	Archaeological and historical background .....	2
1.4	Evaluation aims .....	3
1.5	Scope of fieldwork.....	3
1.6	Fieldwork methods and recording .....	3
1.7	Finds .....	4
1.8	Palaeoenvironmental evidence .....	4
1.9	Presentation of results.....	4
2	Results: General.....	4
2.1	Soils and ground conditions .....	4
3	Results: Descriptions .....	4
3.1	Trench 1.....	4
3.2	Trench 2.....	5
3.3	Trench 3.....	5
3.4	Trench 4.....	5
3.5	Finds .....	6
4	Discussion and interpretation .....	6
4.1	Significance .....	6
4.2	Reliability of field investigation .....	7

**LIST OF FIGURES**

Fig. 1 Site location map

Fig. 2 Trench location

Fig. 3 Trenches 1,2,3 & 4 Sections; Trench 4 Plan &Feature [406]



## SUMMARY

*In January 2001, the Oxford Archaeological Unit (OAU) carried out a field evaluation within the grounds of the Nuffield Orthopaedic Hospital, Oxford on behalf of Nuffield Orthopaedic Centre. Four trenches were excavated but revealed very little of archaeological significance. A single sherd of Roman pottery, dating from the 2nd century AD, was retrieved from a possible buried ploughsoil in Trench 4. A small pit or post hole, of unknown date, was also revealed in Trench 4. The other Trenches proved to be archaeologically sterile.*

## 1 INTRODUCTION

### 1.1 Location and scope of work

- 1.1.1 In January 2001, the Oxford Archaeological Unit carried out a field evaluation on behalf of Nuffield Orthopaedic Centre in the grounds of the hospital, in respect of a planning application (Ref.00/01445/nf) for a development of a new science building. The work was undertaken according to a Written Scheme of Investigation (OAU 2000) agreed with the Oxford City Archaeologist, Brian Durham. The development area (Fig.1) lies at the north-west corner of the Nuffield Orthopaedic Centre (NOC) site (NGR SP 54550660). It is bounded to the north by properties fronting onto Wilberforce Street, to the east and south by other buildings of the NOC and to the west by properties fronting onto Cecil Sharp Close. The application area is approximately 0.6 ha including the main structure, car park and landscape areas.

### 1.2 Geology, topography and landuse

- 1.2.1 The site lies at approximately 96 m above OD. The geology is Oxfordian Beckley sand member (British Geological Survey Sheet No.237). This is a sand and calcareous limestone. The site is presently occupied by a disused, tarmac tennis court.

### 1.3 Archaeological and historical background

- 1.3.1 The following is reproduced from the Written Scheme of Investigation.
- 1.3.2 The site lies within the vicinity of the East Oxford Roman pottery industry and there is considerable evidence of Roman activity close to the area of the development. The majority of this evidence is focused to the south, in the vicinity of the Churchill Hospital. A number of archaeological investigations have been carried out in this area during the late 19th and 20th centuries. These revealed kilns, potters workshops, wells, pottery dryers and buildings all dating to the Roman period. A 2nd century field system was also recorded.

1.3.3 Investigations within the grounds of the NOC itself have had mixed results. In 1965, sherds of Roman pottery, indicating the site of a kiln, were recorded just to the east of the proposed development. Unfortunately no investigations took place to confirm this and the area is now under NOC buildings. During the construction of Mary Marlborough Lodge in the 1970's, the architect observed a number of sherds of Roman pottery. An evaluation carried out by Oxford Archaeological Unit (OAU) in 1997 revealed a series of buried plough soils which contained Roman and post-medieval pottery (A geophysical survey of the site had indicated the possibility of a kiln, however no evidence for this feature was encountered). A watching brief and evaluation undertaken in 1997, by OAU (OAU 1998), revealed a similar sequence of plough soils on the eastern edge of the NOC site.

#### 1.4 Evaluation aims

- 1.4.1 To establish the presence/absence of archaeological remains within the development area and to determine the extent, thickness, condition, nature, character, quality, date, depth below ground surface and overall depth of any archaeological remains present.
- 1.4.2 To establish the ecofactual and environmental potential of archaeological deposits and features.
- 1.4.3 If significant archaeological remains are discovered, to determine what further mitigation measures may be required and to agree these with the Local Planning Authority and English Heritage.
- 1.4.4 To make available the results of the investigation.

#### 1.5 Scope of fieldwork

- 1.5.1 The evaluation consisted of four machine excavated trenches (Fig. 2). Trench 1 was orientated from north to south and measured 23 m long and was between 1.85 m and 1.15 m deep. Trench 2 was orientated from east to south and was 29 m long and approximately 1.35 deep. Trench 3 was orientated north to south and was 31 m long and had a maximum depth of 1.20 m. Trench 4 was orientated from north to south. and was 24.5 m long and 1.40 m deep. All of the trenches were 1.60 m wide.

#### 1.6 Fieldwork methods and recording

- 1.6.1 The Trenches were excavated under close archaeological supervision using a wheeled mechanical excavator fitted with a toothless bucket.
- 1.6.2 The trenches were cleaned by hand and the revealed features were sampled to determine their extent and nature, and to retrieve finds. All archaeological features were planned and where excavated their sections drawn at a scale of 1:20. All features were photographed using colour slide and black and white print film. Recording followed procedures laid down in the *OAU Fieldwork Manual* (ed D Wilkinson, 1992).



## 1.7 Finds

- 1.7.1 Finds were recovered by hand during the course of the excavation and bagged by context.

## 1.8 Palaeoenvironmental evidence

- 1.8.1 No deposits suitable for environmental sampling were encountered during the evaluation.

## 1.9 Presentation of results

- 1.9.1 In the following sections the deposits are described trench by trench. There is additional comment on the finds and the reliability of the results. A context inventory, including finds lists, is included in Appendix 1. The stratigraphy of each trench is described individually, from earliest to latest, and a discussion and interpretation of the archaeology then follows.

## 2 RESULTS: GENERAL

### 2.1 Soils and ground conditions

- 2.1.1 The garden soils consisted of sandy loam overlaying modern sandy make up and a buried topsoil of recent date.
- 2.1.2 Archaeological evidence was encountered only in Trench 4. This comprised a possible buried ploughsoil and a post hole.

## 3 RESULTS: DESCRIPTIONS

### 3.1 Trench 1.

- 3.1.1 No archaeology was present in this trench (Fig. 3).
- 3.1.2 A light yellow, compact, fine natural sand (103) was encountered at a depth of 1.40m below ground surface at the northern end of the trench, rising to 1.15m below ground surface at the southern end of the trench. This became more greenish in colour approximately 4 m from the northern end of the trench.
- 3.1.3 A buried topsoil of mid brown sandy loam (102) directly overlay the natural sand (103). The buried topsoil (102) varied in depth from 0.60 m towards the northern end of the trench to 0.27 m towards the southern end. The buried topsoil (102) was present throughout the trench and contained post medieval pottery
- 3.1.4 An east to west orientated hollow [104], of probable modern date, truncated the buried topsoil (103). It was 1.65 m wide and 0.35 m deep. The hollow [104] was located approximately 13.50 m from the northern end of the trench (not illustrated).

3.1.5 The hollow [104] was filled by a deposit of yellow sand which also extended beyond the feature as a layer, 0.50m thick, present throughout the trench.

3.1.6 A layer of tarmac (100), measuring 0.20 m thick, overlay the sand (101).

### 3.2 Trench 2

3.2.1 Trench 2 was orientated east to west and was located to the east of Trench 1. No archaeology was present in this trench (fig. 4).

3.2.2 A compacted, mid greenish yellow natural sand (205) was revealed at approximately 1.40 m below ground (94.76 OD). This deposit became more yellow in colour approximately 2 m from the western end of the trench. The natural sand (205) appeared to have undergone some localised root disturbance.

3.2.3 The natural sand (205) was overlaid by a mixed mid orange and yellow sand (204) layer, 0.25 m thick, which, was present throughout the trench. Context 204, became more mixed towards the eastern end of the trench.

3.2.4 A buried sandy topsoil (203) measuring 0.20 m thick overlaid the natural sand (204). It contained occasional pottery and glass fragments of a modern date.

3.2.5 A layer of compacted fine yellow sand (202), 0.50 m thick, overlay layer 203 and was overlain by a layer of tarmac (200) at the western end of the trench, and by topsoil and turf (201), 0.20 m thick, at the eastern end of the trench.

### 3.3 Trench 3

3.3.1 Trench 3 was orientated from east to west. No archaeology was present in this trench. All of the following deposits were present throughout the trench (Fig. 3).

3.3.2 A fine, compacted mid yellow natural sand (303), with lighter bands and irregular patches of dark red manganese staining within it, was encountered at a depth of approximately 1.20 m below ground.

3.3.3 A fine, silty sand subsoil (302), 0.30 m thick, overlaid the natural sand (303). This was overlain by a buried topsoil (301), 0.25 m thick, containing pottery and ceramic building material fragments of modern date.

3.3.4 A layer of tarmac (300), 0.25 m thick, overlaid the buried topsoil (301).

### 3.4 Trench 4

3.4.1 Trench 4 was orientated from north to south along the west side of the temporary science building. It contained evidence of a buried ploughsoil (403) of possible Roman date. This was located at a depth of approximately 1 m (96.02 OD) below current ground level.



- 3.4.2 An orangey-yellow natural sand (404) was encountered at a depth of 1.40 m (94.92 OD) below ground. Occasional dark reddish manganese staining was seen throughout the natural sand (404).
- 3.4.3 A small feature [406] cut the natural sand at the northern end of the trench. The feature was sub-rectangular in shape and measured approximately 0.60 m by 0.50 m in diameter and was 0.14 m deep. It was filled by a dark grey-brown sand (405) which contained occasional charcoal flecks. Fragments of bone, glass and ceramic building material of post medieval date were retrieved from the fill (405). It is likely, given the date of the artefacts, that this feature was cut from higher in the sequence but was not seen during machining.
- 3.4.4 Layer 404 was overlain by a layer of mixed yellow-orange sand (403) which was approximately 0.35 m thick throughout the trench. A single sherd of Roman pottery was retrieved from the base of Layer 403 which was otherwise devoid of artefacts. It is possible that this layer could be a buried ploughsoil of Roman date.
- 3.4.5 A dark brown buried topsoil (402), 0.80 m to 0.20 m in depth, overlay Layer 403. Pottery and ceramic building material of 19th century date were retrieved from Layer 402. A layer of fine yellow sand (401) with a maximum depth of 0.70 m overlay the buried topsoil (402) throughout the trench. A layer of turf and topsoil (400) approximately 0.20 m deep overlaid the sandy make up layer (401).

### 3.5 Finds

#### *Pottery by Paul Booth*

- 3.5.1 A single large sherd (103 g) of Roman pottery was recovered, from context 403. This was the rim of a dish in a sandy reduced coarse ware (OAU fabric group R30). The vessel is undoubtedly a local product, though the form is not exactly matched in Young's (1977) corpus. It is closest to his type R43, dated AD 100-300 (ibid., 220-221). A 2nd century date is likely for this piece.
- 3.5.2 A small assemblage of pottery was retrieved from the buried topsoil contexts (102, 203, 301, 402) in all of the trenches. The pottery comprised sherds of glazed stoneware, glazed earthenware and blue and white china all of which date to the 19th century and 20th century.

## 4 DISCUSSION AND INTERPRETATION

### 4.1 Significance

- 4.1.1 Some agricultural activity appears, therefore, to have taken place on the site in antiquity. Evidence for this, in the form of the probable buried ploughsoil (403), was only revealed towards the eastern boundaries of the site. This may have occurred

during the Roman period. Although this date is based on a single sherd of pottery, previous excavations in the immediate area have indicated the presence of a Roman period field system. It seems likely, therefore, that the buried ploughsoil relates to this field system. The post hole/pit in Trench 4 contained artefacts dating to the 19th/20th centuries. A linear feature in Trench 1 was also of relatively recent date as it truncated the buried topsoil containing 19th/20th century pot.

#### **4.2 Reliability of field investigation**

- 4.2.1 The integrity of the stratigraphic evidence encountered during the evaluation is believed to be good.

## Appendix 1 Archaeological Context Inventory

<i>Trench</i>	<i>Ctxt No</i>	<i>Type</i>	<i>Width (m)</i>	<i>Thick. (m)</i>	<i>Comment</i>	<i>Finds</i>	<i>No./wt</i>	<i>Date</i>
001								
	100	Layer	>1.60	0.20	Tarmac			
	101	Layer	>1.60	0.40	Sandy make up			
	102	Layer	>1.60	0.60	Modern topsoil	Pot		19th c
	103	Layer	>1.60	-	Natural sand			
	104	Layer	>1.60	0.35	Modern ditch f.b 101			
002								
	200	Layer	>1.60	0.20	Tarmac			
	201	Layer	>1.60	0.20	Sand make up	Pot		19th c
	202	Layer	>1.60	0.50	Fine sand			
	203	Layer	0.60	0.20	Fine sand			
	204	Layer	1.60	0.25	Natural sand			
	205	Cut	1.60	-	Natural sand			
	206	Fill	?	0.05	Sand			
	207	Cut	0.20	0.05	Root dist?			
003								
	300	Layer	1.60	0.25	Tarmac			
	301	Layer	1.60	0.25	Buried Topsoil	Pot		19th c
	302	Layer	1.60	0.30	subsoil			
	303	Layer	>1.60	0.22	Natural Sand			
004								
	400	Layer	1.60	0.20	Turf & Topsoil			Mod
	401	Layer	1.60	0.70	Sandy Make up			Mod
	402	Layer	>1.60	0.80	Buried soil	Pot		19th c
	403	Layer	>1.60	0.35	Weathered Natural Sand /buried Ploughsoil	Pot		2 nd c AD
	404	Layer	1.60	-	Natural Sand			
	405	Fill	0.50	0.14	Dark Brown Sand. F.O 406	Cbm, Bone, Glass		
	406	Cut	0.50	0.14	Post Hole ?			



**Appendix 2****Bibliography and references**

- |                       |   |
|-----------------------|---|
| OAU 2000              | Proposed Musculoskeletal Science Centre, Nuffield Orthopaedic Centre. Archaeological Evaluation, Written Scheme of Investigation (unpub.) |
| OAU 1998              | Relocation of ACE Centre, Nuffield Orthopaedic Centre, Oxford. Archaeological Evaluation Report (unpub)                                   |
| Wilkinson D (ed) 1992 | <i>Oxford Archaeological Unit Field Manual</i> (unpub.)   |
| Young, C J, 1977      | <i>The Roman pottery industry of the Oxford region</i> , Brit Archaeol Rep (Brit Ser) 43, Oxford  |



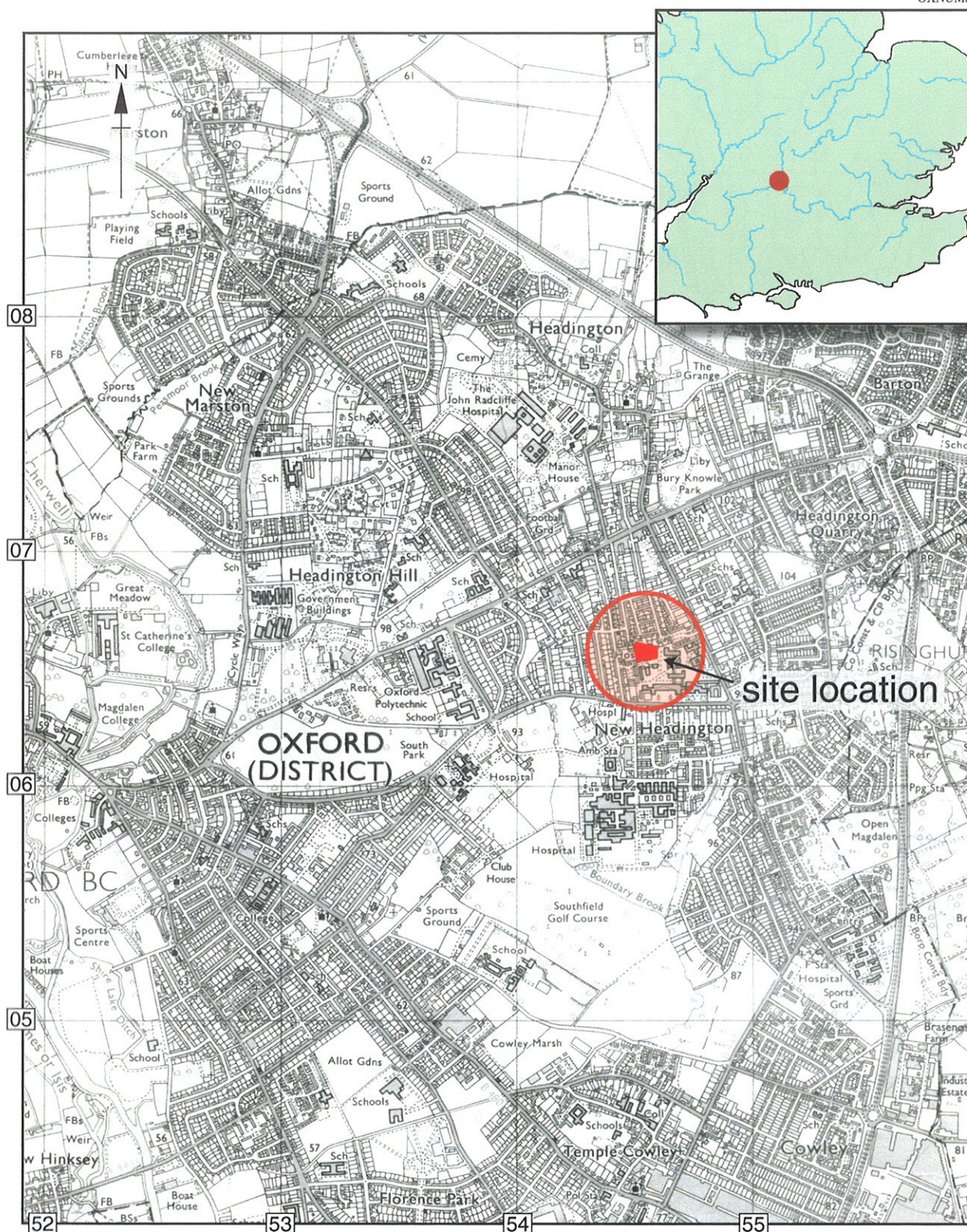


Figure 1: Site location



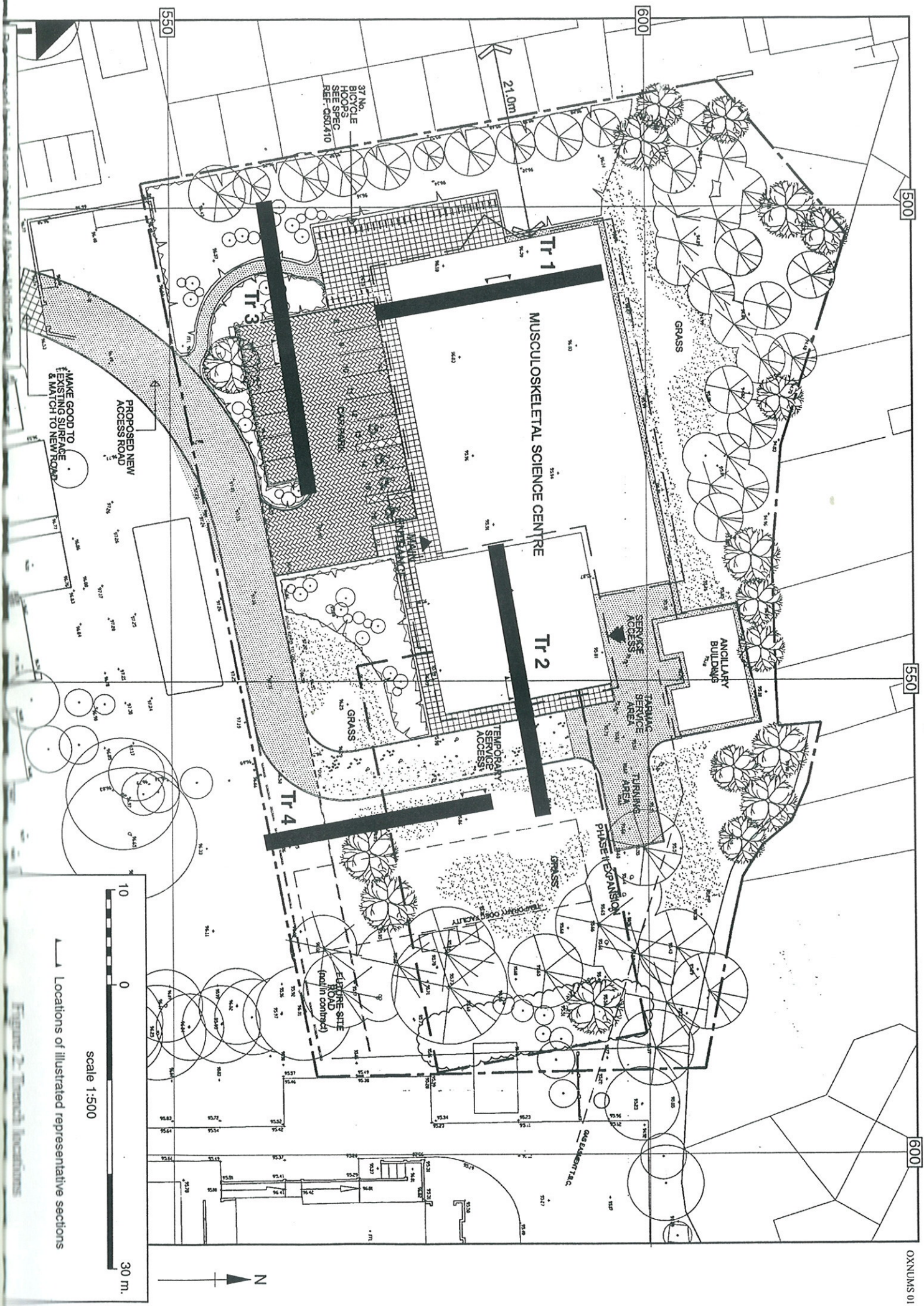
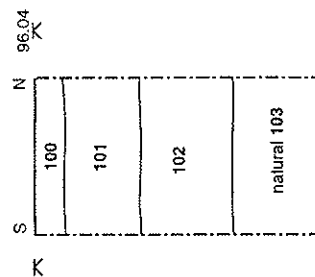


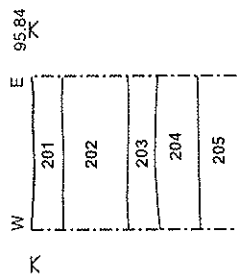
Figure 2: Transect locations



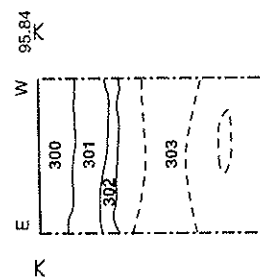
Trench 1 section



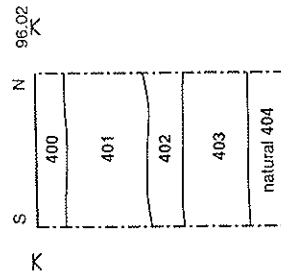
Trench 2 section



Trench 3 section



Trench 4 section



Trench 4  
plan of north end

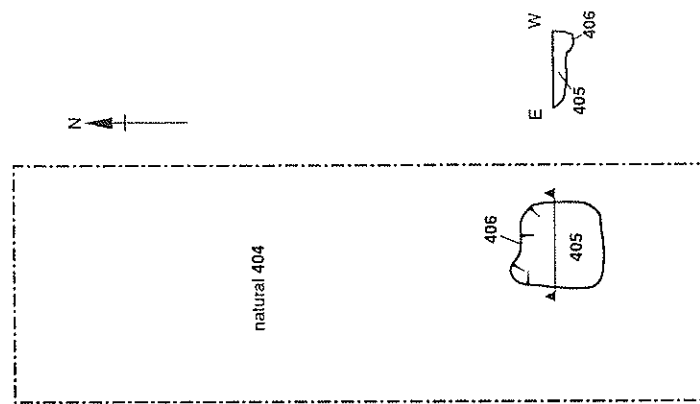


Figure 3: Sections and plan



## OXFORD ARCHAEOLOGICAL UNIT

Janus House, Osney Mead, Oxford, OX2 0ES

Tel: 01865 263800 Fax: 01865 793496

email: [postmaster@oau-oxford.com](mailto:postmaster@oau-oxford.com) [www.oau-oxford.com](http://www.oau-oxford.com)



---

Director and Chief Executive: David Jennings B.A., M.I.F.A. Oxford Archaeological Unit Limited.  
Private Limited Company Number: 1618597 Registered Charity Number: 285627.  
Registered Office: Janus House, Osney Mead, Oxford OX2 0ES