



**ARCHAEOLOGICAL
TRIAL TRENCHING
REPORT**

Northern Archaeological Associates Ltd.

Marwood House
Harmire Enterprise Park
Barnard Castle
Co. Durham
DL12 8BN

t: 01833 690800

f: 01833 690801

e: oc@naa.gb.com

w: www.naa.gb.com

**KIMBLESWORTH MWTS
COUNTY DURHAM**

Project No.: 1329
Text: Oliver Cooper
Illustrations: Dawn Knowles

prepared for

J N Bentley

on behalf of

The Coal Authority

NAA 16/125
revised November 2016

NAA Document Authorisation

Project name		Kimblesworth MwTS		Project number	
Report title		Kimblesworth MwTS, County Durham: Archaeological Trial Trenching Report		1329	
Report No.		16/125			
Revision	Date	Filename	NAA_1329_Rpt_16-125_Eval.pdf		
v.1	12/9/16	Description	Report on the results of archaeological trial trenching		
v.2	30/11/16		Revised report incorporating consultant's comments		
			Prepared by	Edited by	Approved by
		Name	Craig Huddart	Oliver Cooper	Richard Fraser

This document has been approved for release by:



**KIMBLESWORTH MWTS, COUNTY DURHAM
ARCHAEOLOGICAL TRIAL TRENCHING REPORT**

Contents

1.0	Introduction	1
2.0	Location, topography and geology	1
3.0	Archaeological background	2
4.0	Aims and objectives	3
5.0	Methodology	3
6.0	Results	3
7.0	Discussion	7
8.0	Conclusions	7
	Appendix A Context catalogue	9

KIMBLESWORTH MWTS, COUNTY DURHAM

ARCHAEOLOGICAL TRIAL TRENCHING REPORT

Summary

This document presents the interim results of archaeological trial trenching on agricultural land to the north of Cocken Road and west of Ford Cottage, near Kimblesworth, County Durham (NZ 28004 47408). The evaluation was carried out by Northern Archaeological Associates Ltd (NAA) for J N Bentley Ltd, in consultation with Mott MacDonald Ltd on behalf of the Coal Authority in advance of the construction of a Minewater Treatment Scheme (MwTS). The proposed MwTS covers some 0.8 hectares, and the trial trenching amounted to approximately 6% of the total area.

Twelve trial trenches were excavated in locations that had been agreed with Durham County Council Archaeology Service. The trenches represented a random sample of the proposed development.

The twelve trenches identified only three features of archaeological potential: a ditch, identified during the walkover survey and seen to be in alignment with a field boundary documented on Ordnance Survey (OS) mapping as recently as 1960, and two rubble 'French drains', of probably post-medieval date. The only dating evidence from the evaluation was from the boundary ditch, where modern pottery and glass fragments were observed, but not retained.

Of note was the variation in thickness of the subsoils and topsoil across the site, generally shallowest at the southern end and deepest towards the centre of the site. This is probably due to the riverside location, which will have seen differential erosion, and is likely to have been under pasture for a long period of time. All of the post-medieval features examined were cut into the subsoil, and it may represent an entirely natural soil horizon rather than having an anthropogenic origin.

Trial trenching at Kimblesworth has highlighted the low archaeological potential of the site. It is concluded that no further archaeological mitigation is required for this site.

KIMBLESWORTH MWTS, COUNTY DURHAM

ARCHAEOLOGICAL TRIAL TRENCHING REPORT

1.0 INTRODUCTION

- 1.1 Northern Archaeological Associates Ltd (NAA) was commissioned by J N Bentley Ltd, in consultation with Mott MacDonald Ltd, to undertake a programme of archaeological evaluation, comprising twelve trial trenches, on land to the north of Cocken Road, Kimblesworth (NZ 28004 47408: Figure 1). The trenching was required to evaluate the site of a new Minewater Treatment Scheme (MwTS), comprising two wetland treatment areas, two vehicle turning areas, landscape planting and an aeration zone. In total, the treatment site will cover some 0.8 ha, and the trial trenching amounts to approximately 6% of the total area.
- 1.2 The archaeological evaluation was undertaken in consultation with Durham County Council in order to identify whether any archaeological features or deposits would be affected by the development and propose suitable mitigation, if required. It was undertaken in accordance with a Written Scheme of Investigation (WSI) (Mott MacDonald 2016). This document presents the results of the evaluation, which was carried out in July 2016.

2.0 LOCATION, TOPOGRAPHY AND GEOLOGY

- 2.1 The development area (hereafter referred to as 'the site') was located approximately 1.5km due east of the village of Kimblesworth, County Durham and approximately 5km north of the city of Durham (Figure 1). The site was bounded on the north and west sides by pasture land, on the south side by Cocken Road and on the east side by the gardens of Ford Cottage and beyond, the River Wear. It measured approximately 0.8 hectares and the entirety of the site undulated (Plate 1), due to being situated on a floodplain associated with the adjacent River Wear.
- 2.2 The underlying bedrock consists of sandstone, mudstone and siltstone, which is overlain by superficial alluvium deposits (British Geological Survey online).

3.0 ARCHAEOLOGICAL BACKGROUND

3.1 The following account is derived from the Written Scheme of Investigation (Mott MacDonald 2016).

Prehistoric to Roman period

3.2 Mesolithic flint tools have been discovered approximately 2.5km south east of the site, on the banks of the River Wear. The area surrounding the development has also shown evidence of Iron Age or Romano-British settlement in the form of a circular enclosure and trackways identified in cropmarks approximately 500m to the north of the development area. A rectilinear enclosure of an unknown period was also identified using aerial photographs approximately 100m west of the development area.

Medieval

3.3 There is evidence of medieval ridge and furrow within 550m of the development area and a ruined 13th-century manorial chapel 800m to the north. The County Durham and Darlington Historic Landscape Characterisation (HLC) indicates that the northern section of the proposed development area formed part of Harbourhouse Park during the post-medieval period. The southern section is shown as enclosed farmland and post-medieval ridge and furrow has been identified approximately 120m to the west.

Post-medieval and modern

3.4 Ford Cottage which lies approximately 50m east of the development area was replaced in the modern period and in the late 20th century the field boundary which formed the boundary of Harbourhouse Park was removed.

Walkover survey

3.5 A walkover survey was carried out prior to the commencement of works. No unrecorded heritage assets were identified during the walkover survey. The remains of a tributary of the River Wear were observed immediately to the south west of the development area. The flat bottom of the valley in which the development area sits features multiple small irregular mounds. A linear ditch on an east /west alignment was attributed to an extinct field boundary identified on historic mapping of 1960.

4.0 AIMS AND OBJECTIVES

4.1 The aim of the archaeological evaluation was to determine the presence or absence of, and characterise (nature, date, complexity and extent), any archaeological remains present.

4.2 The results of the evaluation will determine the need, or otherwise, for any further archaeological mitigation which may be required in advance of construction. The objectives of the evaluation are to:

- Characterise the nature, date, complexity and extent of topographical anomalies identified during the walkover survey; and
- Identify the location, nature and extent of any archaeological features or deposits within the development area.

5.0 METHODOLOGY

5.1 Twelve trenches were excavated within the development area in positions that had been agreed during consultations with Durham County Council (Figure 2). The trench locations were set out in advance by J N Bentley, the principal contractor; each trench was 20m in length and just under 2m in width.

5.2 The trenches were stripped using a mechanical excavator fitted with a toothless ditching bucket, under archaeological supervision at all times. The machine removed topsoil and subsoils down to a level at which archaeological deposits were identified or down to natural deposits. Topsoil was stored by the edge of each trench and was kept separate from any subsoils. The first six trenches were inspected by the Durham County Council archaeologist, who agreed that each trench could be backfilled upon the conclusion of the fieldwork.

5.3 The trenches were photographed and where features were identified, a post-excavation plan was hand-drawn. All potential archaeological features and deposits were investigated by hand excavation. All archaeological features were then photographed and recorded.

6.0 RESULTS

6.1 Throughout the site, the natural subsoils comprised mixed clays and sands (001). In general, there was a sandy silt subsoil (002) which varied in colour and depth from

trench to trench but appeared to be the same material. The topsoil comprised a light orange-brown silt (003). These three context numbers are omitted below for clarity, although the respective depths of each soil horizon are discussed.

Trench 1

6.2 Trench 1 was located in the north-west corner of the site, orientated approximately north-east to south-west.

6.3 Natural subsoils were encountered at a depth of approximately 0.71m. These were overlain by 0.42m of subsoil and up to 0.29m of topsoil.

6.4 No significant archaeological features or deposits were present within this trench, although a modern ceramic field drain (004) was recorded on a north-west to south-east orientation.

Trench 2

6.5 Trench 2 was located in the north-east corner of the site and was orientated north-west to south east.

6.6 The soil horizons encountered were the same as for Trench 1, but the subsoil and topsoil were 0.54m and 0.18m thick respectively.

6.7 No archaeological features or deposits were present within this trench.

Trench 3

6.8 Trench 3 was located approximately 20m to the south west of Trench 2 and was orientated north-west to south-east.

6.9 Natural clays and sands were encountered at a depth of 0.72m, and sealed by 0.29m of subsoil. These were cut by two stone drains (016) and (019). Drain 016 was recorded on an east to west orientation, extending for 2.1m across the trench. It was 0.82 in width and 0.55m in depth, and was composed of ill-sorted and irregular stones (Plate 2). Drain 019 was seen to have a similar form as 016, but on a roughly north to south orientation (Plate 3), and was therefore planned but not fully excavated. Given the orientation of the two drains, they probably constituted part of a larger herringbone-style drainage system and appeared to be 18th or 19th century in date.

6.10 Overlying the subsoil and drains was 0.36m of topsoil.

Trench 4

- 6.11 Trench 4 was located approximately 10m to the south-east of Trench 3, on a north-east to south-west orientation, and was intended to evaluate an undulation in the topography. The natural clays and sands were encountered a depth of 1.08m. These were overlain by up to 0.8m of subsoil and 0.28m of topsoil.
- 6.12 No archaeological features or deposits were present within this trench, and the undulation was seen to be due to variable thickness of subsoil, presumably due to erosion.

Trench 5

- 6.13 Trench 5 was located approximately 15m to the south-west of Trench 4, on a north-west to south-east orientation. The natural clays and sands were encountered at a depth of 0.88m, overlain by up to 0.55m of subsoil and 0.23m of topsoil.
- 6.14 No archaeological features or deposits were present within this trench.

Trench 6

- 6.15 Trench 6 was located approximately 10m to the south-east of Trench 5, on a north-east to south-west orientation.
- 6.16 Natural clays and sands were encountered at a depth of 0.86m. These were overlain by subsoil up to 0.60m thick, in turn sealed by 0.26m of topsoil.
- 6.17 No significant archaeological features or deposits were present; however a modern ceramic field drain (010) was recorded on a north to south orientation at the north-eastern end of the trench.

Trench 7

- 6.18 Trench 7 was located approximately 10m due south of Trench 6, on a north-west to south-east orientation. Its maximum depth was 1.25m and the subsoil and topsoil measured up to 0.89m and 0.36m in thickness respectively.
- 6.19 No significant archaeological features or deposits were present; however a modern ceramic field drain (013) was recorded on a north to south orientation at the south-eastern end of this trench, possibly the same drain identified in Trench 6.

Trench 8

- 6.20 Trench 8 was located approximately 10m to the south-west of Trench 7, on a north-east to south-west orientation, placed to examine a boundary ditch identified during the site walkover and recorded on historic OS mapping (Mott MacDonald 2016).
- 6.21 Natural clays and sands were encountered at a depth of 1.22m. These were overlain by subsoil up to 0.81m thick. Cutting through the subsoil in the south-western portion of this trench was a relatively shallow ditch (022), running on an east to west orientation. It was some 0.41m in width and 0.68m in depth and continued across the full width of the trench. Topsoil in this trench was up to 0.41m deep.

Trench 9

- 6.22 Trench 9 was located approximately 10m to the south east of Trench 8, on a north-west to south-east orientation and was excavated to a depth of 0.5m. The subsoil (203) in this trench was shallow, being only 0.15m thick.
- 6.23 A shallow ditch (201; Plate 4) was observed in the north-western corner of this trench. It was assumed to be the same ditch as 022 in Trench 8, but was much shallower (0.35m) here, and unlike ditch 022, there was no surface evidence for this feature. A sherd of modern pottery and a fragment of modern glass were noted in this segment of the ditch, which was sealed by 0.4m of topsoil (200).

Trench 10

- 6.24 Trench 10 was located approximately 25m to the south west of Trench 9, on a north-west to south-east orientation, and was excavated to a depth of 0.3m. The subsoil and topsoil were very shallow (at no more than 0.15m each) and there were no archaeological features or deposits present

Trench 11

- 6.25 Trench 11 was located approximately 10m to the south east of Trench 10, on a north-east to south-west orientation. In contrast with Trench 10, the natural horizons were at a depth of between 0.4m and 1m. Overlain by a variable thickness of subsoil and sealed by approximately 0.3m of topsoil.
- 6.26 No archaeological features or deposits were present within this trench.

Trench 12

- 6.27 Trench 12 was located approximately 10m to the south west of Trench 11, on a north-west to south-east orientation. Natural clays and sands were encountered at a depth of 0.6m, overlain by subsoil and 0.2m of topsoil. Again there were no archaeological remains.

Finds

- 6.28 There were no pre-modern finds from any of the trenches. Context 202, the fill of Ditch 201 in Trench 9, contained a fragment of 'amber' bottle glass of late 19th to 20th century date, and a sherd of modern whiteware pottery. Given their recent date, these were not retained for further study.

Archive

- 6.29 The archive will be compiled in accordance with the project brief (Mott MacDonald 2016) and deposited with Palace Green Museum in Durham.

7.0 DISCUSSION

- 7.1 The twelve trenches identified only three features of archaeological potential: a ditch, identified during the walkover survey and which corresponded with a field boundary documented on OS mapping as recently as 1960, and two rubble 'French drains', of probably post-medieval date. There were also more recent ceramic drains in two trenches. The only dating evidence from the evaluation was from the boundary ditch, where modern pottery and glass fragments were observed, but not retained.
- 7.2 Of note was the variation in thickness of the subsoils and topsoil across the site, generally shallowest at the southern end and deepest towards the centre of the site. This appears to have given rise to the undulating topography, and was probably due to the riverside location, which will have seen differential erosion, and was likely to have been under pasture (and therefore not ploughed) for a considerable time. All of the post-medieval features examined were cut into the subsoil, which may represent an entirely natural soil horizon rather than having an anthropogenic origin.

8.0 CONCLUSIONS

- 8.1 Trial trenching at Kimbleworth has highlighted the low archaeological potential of the site. It is concluded that no further archaeological mitigation is required for this site.

REFERENCES

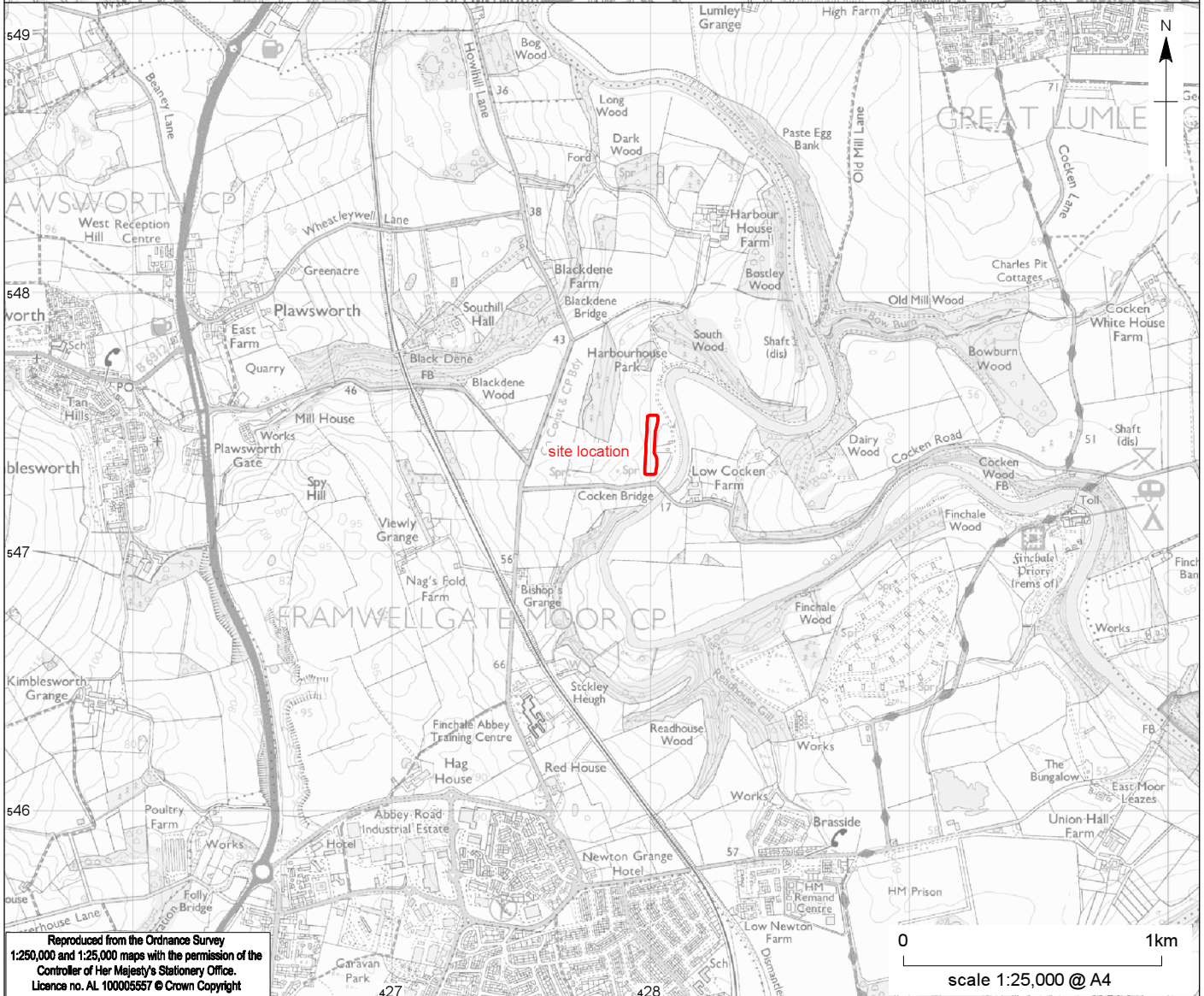
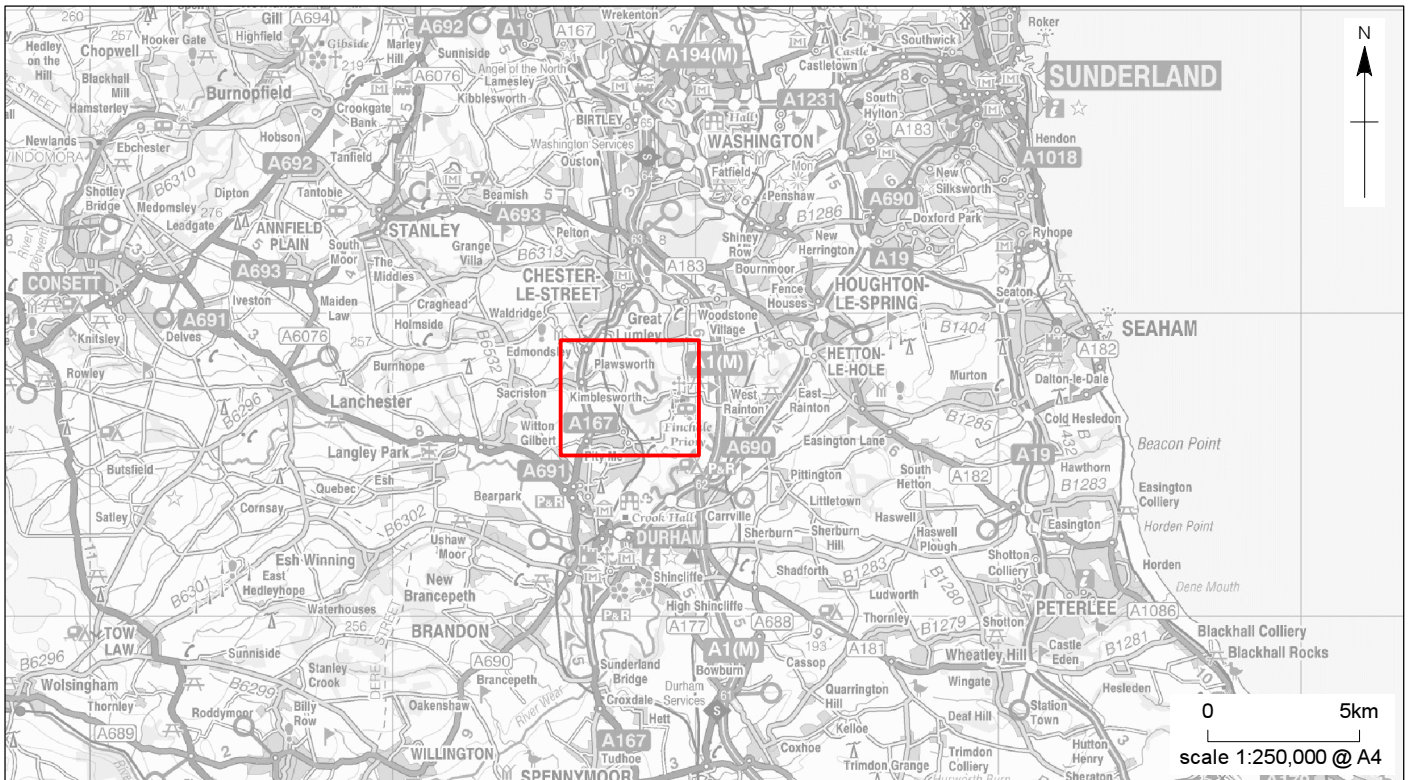
British Geological Survey (online) *Map Viewer* . (accessed 01 August 2016)

<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>

Mott MacDonald (2016) *Kimbleworth MwTS: Written Scheme of Investigation for Archaeological Evaluation*. Unpublished client report.

APPENDIX A
CONTEXT CATALOGUE

Context	Interpretative Description	Trench	Notes
001	Natural	1-12	
002	Subsoil	1-8, 10-12	
003	Topsoil	1-8, 10-12	
004	Cut of field drain	1	
005	Field drain	1	
006	Fill of field drain cut	1	
007	Cut of field drain	4	
008	Field drain	4	
009	Fill of field drain cut	4	
010	Cut of field drain	6	
011	Field drain	6	
012	Fill of field drain cut	6	
013	Cut of field drain	7	
014	Field drain	7	
015	Fill of field drain cut	7	
016	Cut of stone drain	3	
017	Fill of (016) – stones	3	
018	Orange fill at base of (016)	3	
019	Cut of stone drain	3	
020	Fill of (019)	3	
021	Fill around stones in (016)	3	
022	Cut of boundary ditch	8	
023	Primary fill of (022)	8	
024	Secondary fill of (022)	8	
200	Topsoil	9	
201	Cut of boundary ditch	9	
202	Fill of (201)	9	One sherd of recent pottery and one fragment of modern glass identified, but not retained.
203	Subsoil	9	

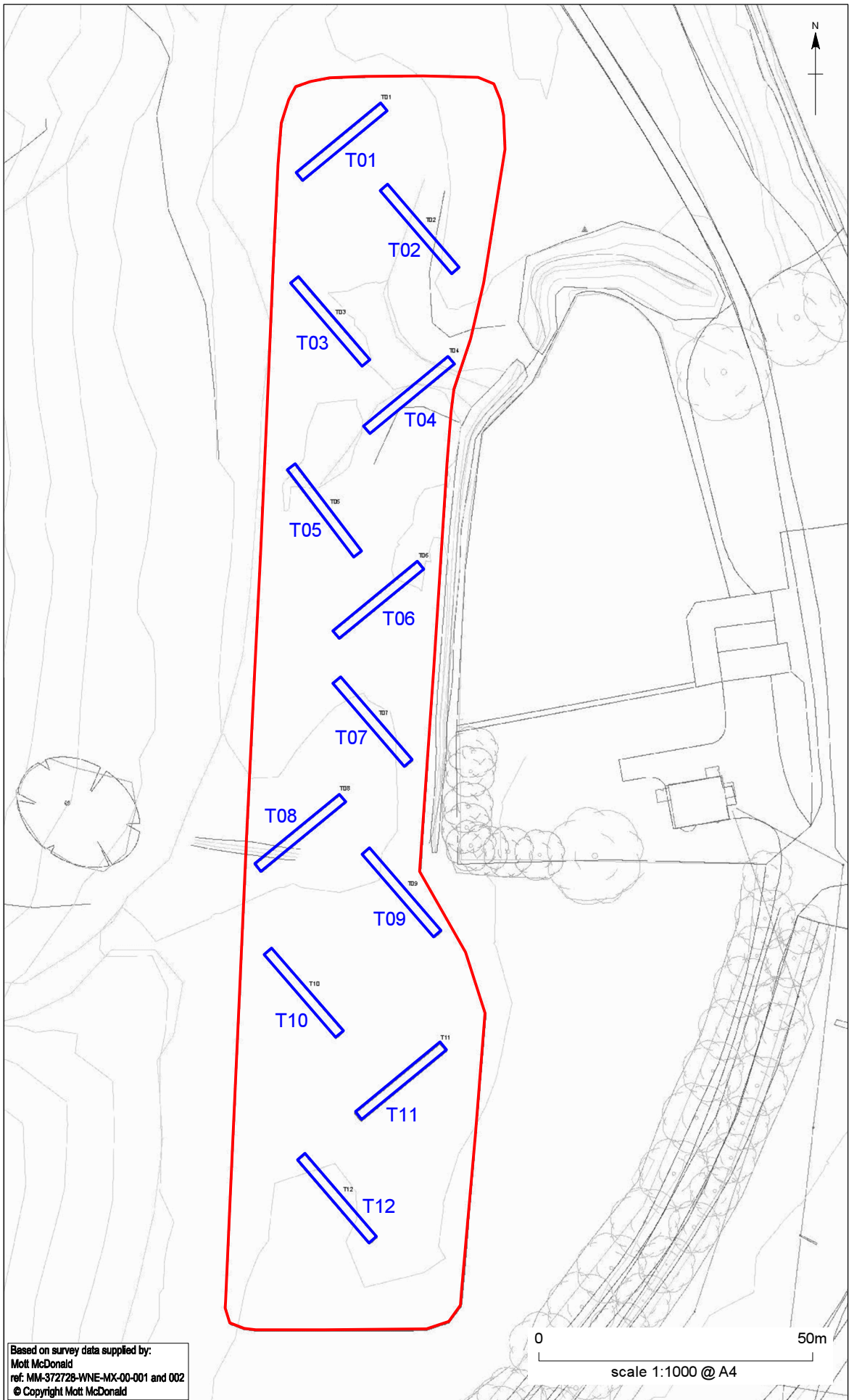


Reproduced from the Ordnance Survey
1:250,000 and 1:25,000 maps with the permission of the
Controller of Her Majesty's Stationery Office.
Licence no. AL 10000557 © Crown Copyright

©NAA 2016

Kimbleworth: site location

Figure 1





©NAA 2015

Kimblesworth: general view of the site

Plate 1



©NAA 2015

Kimblesworth: stone drain 16 in Trench 3

Plate 2



©NAA 2015

*Kimbleworth: stone drain 19
(unexcavated) in Trench 3*

Plate 3



©NAA 2015

Kimbleworth: ditch 201 in Trench 2

Plate 4