6 Dorchester Road
Drayton St Leonard
Oxfordshire

Archaeological Evaluation Report

oxfordarchaeology southsouthsouth

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Client: Mr and Mrs M Emmett

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Archaeological Evaluation Report

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6 Dorchester Rd, Drayton St Leonard

Archaeological Evaluation Report

Written by Kevin Moon

with contributions from John Cotter, Lena Strid and Julia Meen, and illustrations by Georgina Slater and Hannah Kennedy

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Summary

In June 2013, Oxford Archaeology South undertook an archaeological evaluation for David Parker Architects on behalf of Mr and Mrs Emmett at 6 Dorchester Rd, Drayton St Leonard, Oxfordshire, prior to redevelopment for housing. The evaluation was requested due to the presence of cropmark features of probable prehistoric and Roman date in the fields to the west, and Roman finds to the north.

One trench was excavated revealing a sequence of topsoil and subsoil overlying the natural sandy gravel. Part of a large pond of post-medieval date was revealed filling more than half of the area of the trench.

The pond clearly covers a substantial area, suggesting that truncation has bee extensive. No features of prehistoric or Roman date were found to suggest that activity of these periods extends into the area of development. One small residual Roman sherd was found, and this is likely to derive from manuring.

1 INTRODUCTION

1.1 Scope of work

1.1.1 The site is situated at National Grid Reference SU 5961 9622.

1.1.2 Oxford Archaeology (OA) was commissioned by David Parker Architects to undertake a trial trench evaluation at 6 Dorchester Road, Drayton St Leonard, Oxfordshire, OX10 7BH (the site) on behalf of Mr and Mrs M Emmett. Planning permission was granted by South Oxfordshire District Council for the removal of the existing garage block, toilet block and shed and their replacement by a two storey 4 bed dwelling (P12/S2552/FUL). The evaluation was carried out as part of archaeological conditions 14 and 15 attached to the planning consent.

1.1.3 A Design Brief for Archaeological Field Evaluation was been produced by Planning Archaeologist OCC Richard Oram (Oram 2013), and OA produced a Written Scheme of Investigation outlining how OA would implement the requirements of the brief (OA 2013).

1.1.4 All work was undertaken in accordance with local and national planning policies.

1.2 Location, geology and topography

1.2.1 The site lies on the south-west side of the village of Drayton St Leonard, and is an enclosed plot of land belonging to a private house on the north side of Dorchester road (Figs 1 and 2). The land to the north-east and south-east is built up by housing and by office accommodation respectively, but there are open fields to the south, west and north-west, and a plantation or orchard and another area of open ground to the north-west.

1.2.2 The land is broadly level, sloping very gently towards the south-east, and lies at c. 51m above Ordnance Datum. It is just over 300m from the river Thame, which lies to the south-east.

1.2.3 The geology of the site is sands and gravels of the Northmoor Member (first terrace gravel deposits), overlying Mudstone of the Gault formation.

1.3 Archaeological and historical background

1.3.1 The site lies immediately east of a wide trackway and enclosure- or field-system identified through aerial photographs (Fig. 2, PRN 15248; OA 2013). The cropmarks consist of a series of enclosures on the south side of a wide trackway which has been traced to the south-west corner of this application site. A scatter of pits are visible south of the enclosures or fields, and one larger feature, possibly a well, within the westernmost enclosure or field. Some of the pits may instead be large postholes.

1.3.2 North of the trackway there is a circular cropmark about 20m in diameter, which may represent a Bronze Age ring ditch or a later prehistoric house enclosure. This lies only 60m west of the west corner of the application site.

1.3.3 This is crossed, and probably superseded, by a further trackway running south-east, which crosses, or is crossed by, the east-west trackway, suggesting at least two phases

of trackway here. There are other linear features north of the east-west trackway that probably indicate further fields or enclosures.

1.3.4 Roman pottery has been recovered 80m north of the application site and it is therefore likely that the trackway and enclosures are of a Roman date (Fig. 2, PRN 7676).

2 Evaluation Aims and Methodology

2.1 Aims

2.2 General

(i) To determine the presence or absence of any archaeological remains which may survive.
(ii) To determine or confirm the approximate extent of any surviving remains
(iii) To determine the date range of any surviving remains by artefactual or other means.
(iv) To determine the condition and state of preservation of any remains.
(v) To determine the degree of complexity of any surviving horizontal or vertical stratigraphy.
(vi) To assess the associations and implications of any remains encountered with reference to the historic landscape.
(vii) To determine the potential of the site to provide palaeoenvironmental and/or economic evidence, and the forms in which such evidence may survive.
(viii) To determine the implications of any remains with reference to economy, status, utility and social activity.
(ix) To determine or confirm the likely range, quality and quantity of the artifactual evidence present.

2.3 Specific aims and objectives

2.3.1 The specific aims and objectives of the evaluation are:

(x) To determine whether Roman activity extends into the application site, and, if linear features are encountered, to see if these can be related to the orientations indicated by the cropmark evidence to the west.
(xi) To determine whether prehistoric activity of Bronze Age or Iron Age date, relating to the cropmark ring-ditch to the west, is present within the site.
(xii) In the light of the large Neolithic monument complex known to the north, to establish whether Neolithic activity is present within the site.

2.4 Methodology

2.4.1 The evaluation was undertaken using a wheeled mechanical excavator fitted with a 1.60m toothless ditching bucket operating under close archaeological supervision.

2.4.2 One trench was opened, 10m long with two arms of 3.40m and 1.60m protruding from it (Figs 3 and 4; Plates 1-3). As the brief had requested, the trench was laid out within the footprint of the proposed new house, but the detailed layout was constrained by existing below-ground services and overhead cables.

2.4.3 A sewer pipe was found within the topsoil part way along the trench, so a baulk of subsoil and topsoil was left *in situ* to support this (Fig. 4).

2.4.4 Roughly one quarter of a large circular feature was found cut into the gravel (Fig. 4). This was sampled by hand excavation towards the edge in two places, and proved to have two fills, but no finds or visible environmental remains were recovered from either.

2.4.5 It was decided to carry out further excavation towards the presumed centre of the feature, in order to establish whether the depth of the feature, and the fill sequence, was constant across the area of the trench. As groundwater was entering the feature as

hand-excavation proceeded (Plates 2 and 3), making detailed observation and recording of the fills difficult, it was decided to excavate these further slots by machine under close archaeological supervision, and to sort the spoil on the side of the trench. A single sherd of pottery was recovered from the upper fill, and an environmental sample was taken (see Appendix B).

3 Results

3.1 Introduction and presentation of results

3.1.1 A description of the evaluation trench is presented below. A comprehensive listing of individual contexts and associated data can be found in Appendix A. This should be referred to for information such as dimensions which are not otherwise included within the descriptive text unless pertinent to the description.

3.2 General soils and ground conditions

3.2.1 The natural sandy gravel (104) was encountered across the trench. This was overlain by a layer of subsoil (101) with an average depth of 0.55m which in turn was overlain by a layer of topsoil (100) with an average depth 0.50m (Fig. 5). The topsoil was overlain by a layer of concrete rubble (108) approximately 0.30m deep. This was the broken-up floor of the recently demolished garages.

3.3 Distribution of archaeological deposits

3.3.1 A single pond feature (107) filled the eastern part of the trench, but was not fully revealed within it (Fig. 4; Plates 1-3). This measured at least 8m east-west by 4m north-south, with a steep north edge and a shelving west edge, presumably for access. The base was flat, and the maximum depth observed was 0.70m. The cut contained two fills (103) and (106) (Fig. 5), the upper of which contained a single sherd of post-medieval pottery.

3.3.2 The lower fill (106) was very sandy, presumably due to erosion from the surrounding natural. Some mineral accretion appears to have occurred around sandy lenses, perhaps from leaching. The upper fill (103) was more clayey and less sandy, perhaps because there was less of the sides exposed to erode. An environmental sample (Sample 1) from the upper fill towards the centre of the feature contained waterlogged seeds of duckweed, confirming the identification of this feature as a pond.

3.4 Summary of finds and environmental evidence

The pottery
identified by John Cotter and Paul Booth

3.4.1 One very small sherd of Roman pottery, and one larger sherd of post-medieval pottery, were recovered from the upper fill of feature 107. The Roman sherd is clearly residual.

Context	Description	Date
103	1 sherd internally glazed post medieval redware (PMR), 25g. Sample <1>1 sherd black burnished ware BB1, residual, 4g	17-18th c 120-410AD

The Ceramic Building Material *identified by John Cotter*

3.4.2 Ceramic building material was recovered from the topsoil and subsoil. All is of post-medieval date.

Context	Description	Date

100	1 fragment roof tile, 95g.	17-19th c
101	1 fragment post medieval roof tile 2 scraps post medieval brick, 60g.	18-19th c Post medieval

The animal bone *identified by Lena Strid*

3.4.3 Fragments of the leg of a dog were recovered from the topsoil, probably from a disturbed recent burial. A number of small fragments of bone were recovered from the pond, none of which could be identified to species. The assemblage is of low potential and requires no further work.

Context	Description
100	2 fragments dog tibia, 17g.
103	Sample <1> 1 large mammal & 1 small mammal vertebra fragment, 18 unidentifiable fragments, 17g

The plant remains *by Julia Meen*

3.4.4 An environmental sample from layer 103 within the large feature contained preserved duckweed seeds, although the deposit was not fully waterlogged. These support the identification of this feature as a pond.

4 Discussion

4.1 Reliability of field investigation

4.1.1 The evaluation trench was excavated in sunny weather. The feature revealed during the trenching was clearly identifiable in relation to the underlying geology. Groundwater hindered the excavation of the fills of this feature, but all excavated soil was scanned on the side of the trench, and it is not believed that any significant finds were missed.

4.2 Evaluation objectives and results

4.2.1 The depth and character of the existing soil sequence within the trench was clearly established.

4.2.2 One very small Roman sherd was found in the upper fill of the post-medieval pond, and is clearly residual. A background of stray sherds is to be expected in the vicinity of the settlement suggested by cropmarks to the west, and may derive from manuring onto fields. No Roman or prehistoric features were encountered in the trench, so there was no indication that the settlement activity of these periods identified to the west and north continued into the area of development.

4.2.3 A large post-medieval feature occupied most of the trench, and clearly extended further to the east and south (Fig. 4). The broad and relatively shallow nature of this feature suggests a pond or waterhole, and the shallow west side (Figs. 4 and 5) may be where animals had access to drink. Preserved duckweed seeds from the fill confirm this interpretation. The date at this pond was dug is uncertain, but it was still likely to be holding water when the potsherd was deposited in the 17th or 18th century. Neither fill suggested good environmental preservation.

4.2.4 This pond is not shown on the OS maps of the area, supporting the evidence from the subsoil suggesting that this might be of 18th or early 19th century date, and that the pond had gone out of use prior to the later 19th century

4.3 Interpretation and significance

4.3.1 Much of the area of proposed development appears to be occupied by a large post-medieval pond, and thus has little or no archaeological potential. No features of earlier date were found to suggest the proximity of earlier activity. Occasional small residual Roman sherds like the one recovered are to be expected.

Appendix A. Trench Descriptions and Context Inventory

Trench 1						
General description					**Orientation**	NE-SW
Trench contained a single circular pond feature in its Eastern side. This was overlain by a sequence of subsoil and topsoil, in turn overlain by concrete rubble.					**Avg. depth (m)**	0.80
					Width (m)	1.60
					Length (m)	10m
Contexts						
context no	**type**	**Width (m)**	**Depth (m)**	**Description**	**finds**	**date**
100	Topsoil	-	0.50	Firm greyish-brown sandy silt, occ. Small stones	Bone	Modern
101	Subsoil	-	0.55	Soft greyish-brown sandy silt, more small stones	Roof tile and brick	18th-19th century
103	Upper fill 107	-	0.35	Yellowish-grey sandy clay	Pottery	17th-18th century
104	Layer		-	Sandy gravel natural	-	-
105				NOT USED		
106	Lower fill 107		0.60	Soft brownish-grey clayey sand, orange sandy lenses towards top	-	-
107	Cut		0.70	Pond, steep N side, shelving W side, flat base	-	-
108	Layer		0.30	Concrete Rubble	-	-

Appendix B. Evaluation of an Environmental Sample

By Julia Meen

Introduction

B.1.1 A single sample was taken for the recovery of environmental material including plant remains, bone and other artefacts. The sampled feature, cut [107], was provisionally identified in the field as a pond, and two phases of infilling were determined. Sample <1> was taken from the upper fill (103), where this dipped almost to the base of the feature, and is dated to the post medieval period.

B.1.2 The sediment was a light olive brown (2.5Y 5/3) sandy clay with occasional subangular, pebble sized flint inclusions. The sediment had a high water content but did not display the characteristics typical of being waterlogged. Little organic material was observed besides frequent intrusive modern roots.

Methodology

B.1.3 Sample <1> was 25L in volume and was processed in its entirety by water flotation using a modified Siraf style flotation machine. The flot was collected on a 250µm mesh and the heavy residues sieved to 500µm and dried in a heated room, after which the residues were sorted by eye for artefacts and ecofactual remains. The flots were scanned for plant remains using a binocular microscope at approximately x15 magnification. Identifications were made under the guidance of Sheila Boardman and Kath Hunter, and nomenclature for the plant remains follows Stace (2010).

Results

B.1.4 Animal bones. A small quantity of mammal bone was recovered from the heavy residues. This was mostly fragmented and could not be identified to species. Part of a vertebra from a large mammal was noted (identification by Lena Strid).

B.1.5 Plant Remains. Sample <1> produced a flot 15ml in volume, 100% of which was scanned to establish the preservation and abundance of plant remains within the sample. Much of the flot was composed of modern roots and sand. Very small flecks of charcoal and a single charred straw culm node were observed. A small number of *Chenopodium* type seeds (goosefoot) were present, although those that were fractured could be seen to be uncharred inside and hence are most likely to be modern. Several uncharred seeds of *Lemna* sp. (duckweed) were also present.

Discussion and Recommendations

B.1.6 The most common way for plant remains to be preserved on archaeological sites is through charring, which occurs where organic material has been converted to carbon through accidental or deliberate burning. Little material had been preserved in this way in the sample, with occasional items of charcoal all of an unidentifiable size. However, there were a number of uncharred seeds of duckweed present. The deposit was well sealed, making modern contamination unlikely. Their uncharred state suggests that decay has been inhibited by anoxic conditions such as those found in permanently waterlogged contexts. At the time of excavation the deposit was at the boundary of the

modern water-table, and saturation of the soil at this depth may have prevented the seeds from decaying. However, the sample was otherwise poor for plant remains, both waterlogged and charred, and it may be that the fluctuating water-table produced episodes of wetting and drying that caused physical fracturing as well as increased organic decomposition of the less robust material.

B.1.7 Duckweed is an aquatic plant, found in ponds, ditches and canals. Its presence in the sample supports the initial interpretation of the feature as a pond. Their identification as an aquatic species further indicates that the seeds are subfossil rather than modern intrusions, as habitats of this type were not noted at the modern site. The apparent preservation of waterlogged organic material suggests that there is potential for further remains of this type to be recovered, especially if deeper deposits are excavated.

Appendix C. Bibliography and References

British Geological Survey Geology of Britain Viewer 2013

Oram, R, 2013 6 Dorchester Road, Drayton St Leonard. Design Brief for Archaeological Field Evaluation, unpublished document provided on behalf of Oxfordshire County Council

OA, 2013 Written Scheme of Investigation for an evaluation at 6 Dorchester Road, Drayton St Leonard, Oxfordshire. Unpublished client document by Oxford Archaeology

Stace, C, 2010 *New Flora of the British Isles*, CUP, Cambridge

Appendix D. Summary of Site Details

Site name: 6 Dorchester Road, Drayton St Leonard, Oxfordshire

Site code: DRDR13

Grid reference: NGR SU 5961 9622

Type: Archaeological Evaluation

Date and duration: 6/6/13 – 7/6/13

Area of site: 15m x 1.60m

Summary of results:

In June 2013, Oxford Archaeology undertook an evaluation for David Parker Architects at 6 Dorchester Rd, Drayton St. Leonard, Oxfordshire on behalf of Mr and Mrs Emmett. The work was carried out to fulfil planning conditions prior to redevelopment.

One trench was excavated revealing topsoil and subsoil overlying a single feature cut into the sandy natural gravel. This feature was a large pond of post-medieval date.

No features of Roman or prehistoric date were found to suggest the continuation of the adjacent cropmarks of these periods into the area of development. One small residual Roman sherd may derive from manuring.

Location of archive: The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with the Oxfordshire County Museums Service due course, under accession number OXCMS: 2013.89

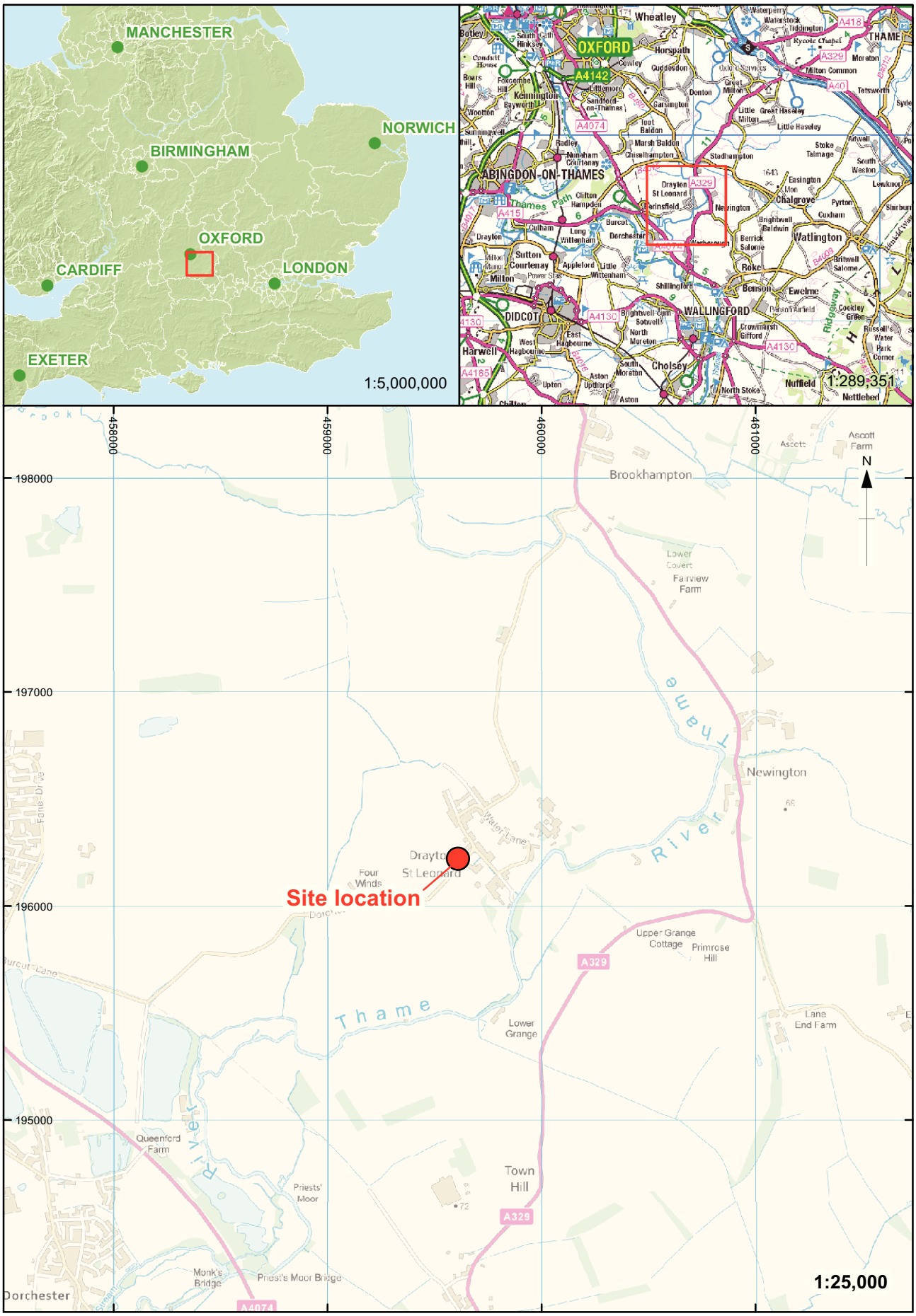

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Figure 1: Site location

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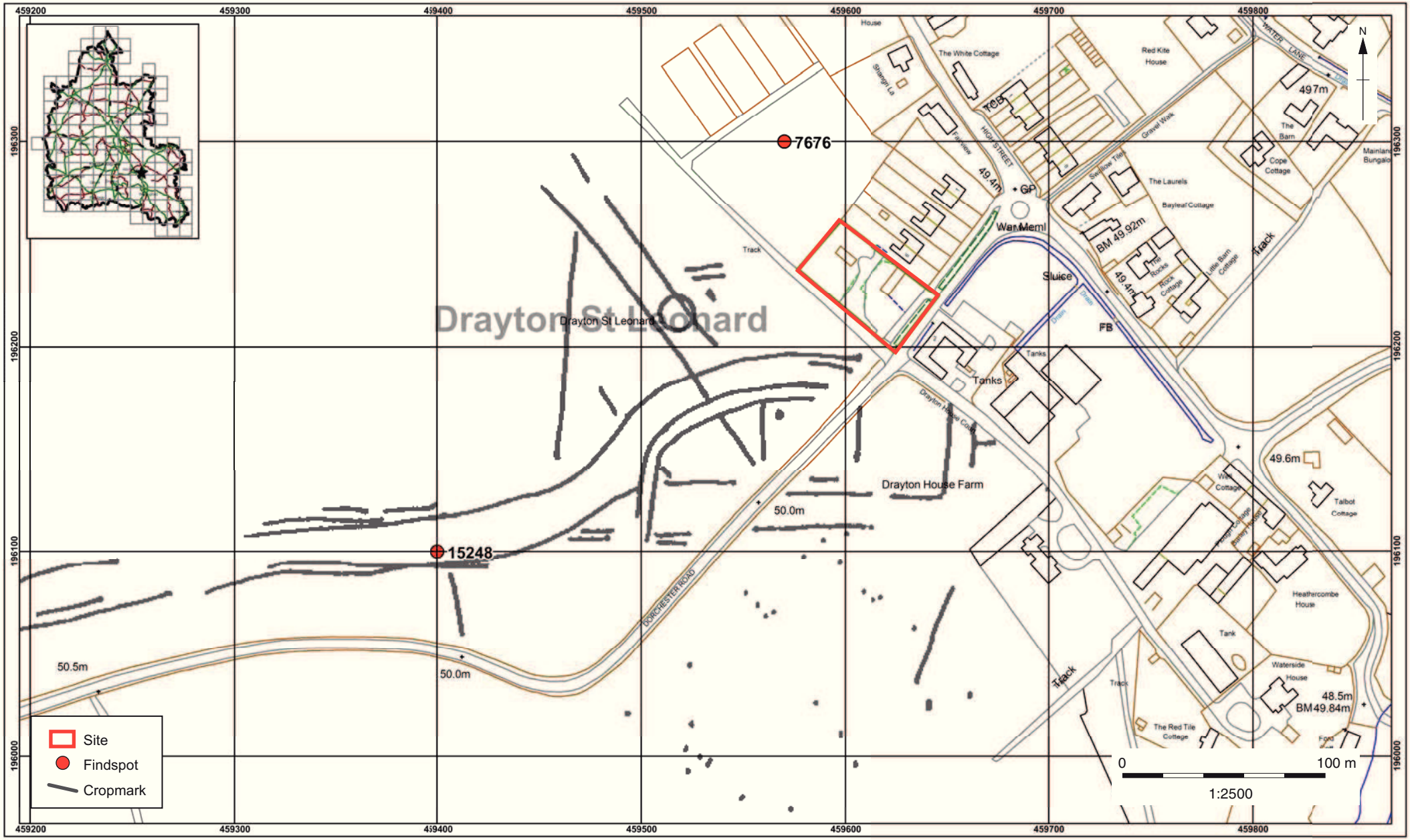

Figure 2: Archaeological cropmarks and findspots in the vicinity of the site (after Oxfordshire County Council)

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1:200 at A4

Figure 3: Trench location plan.

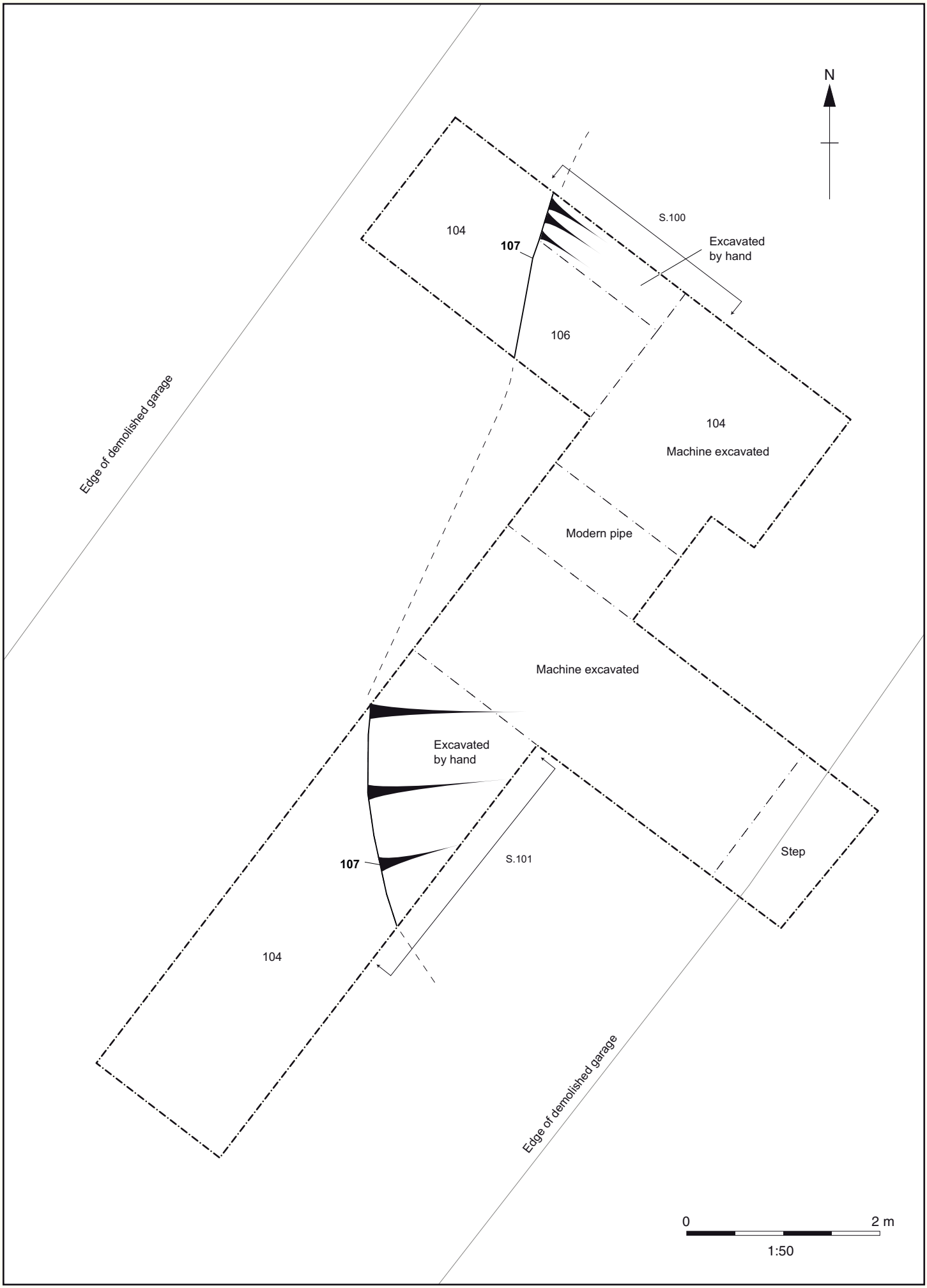
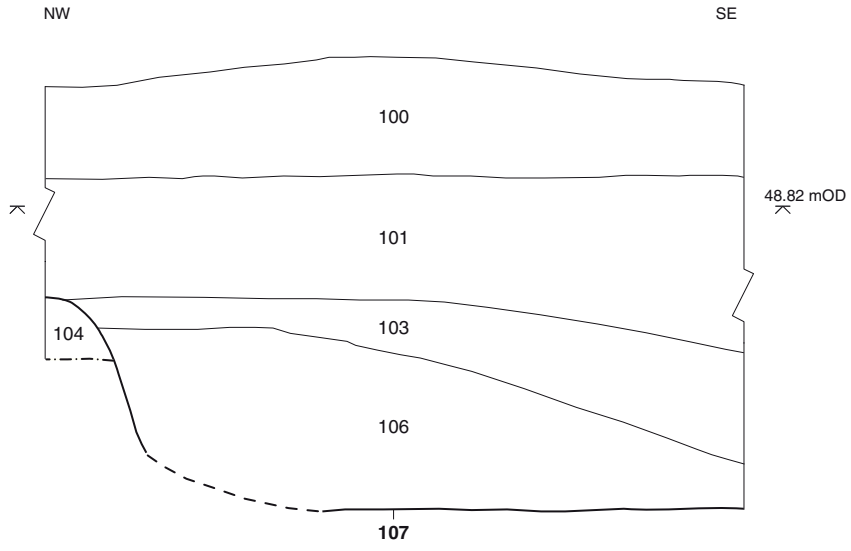


Figure 4: Detailed trench plan

Section 100



Section 101

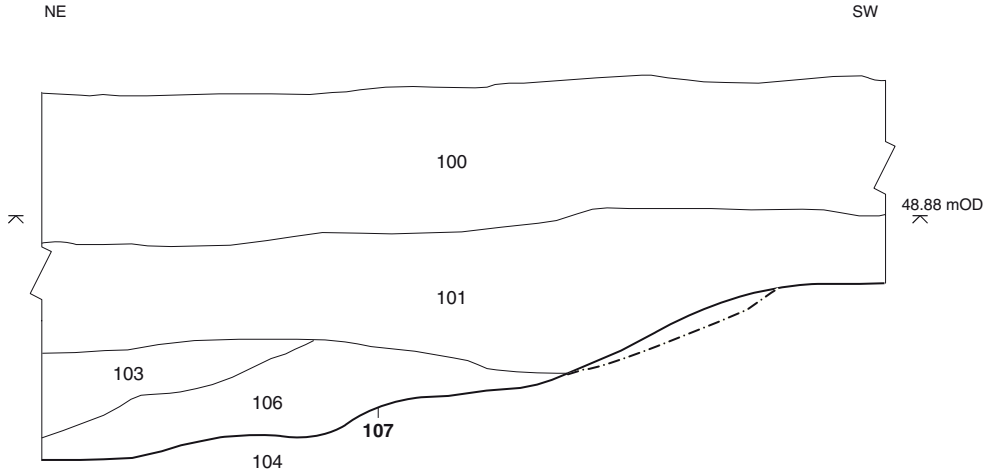


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Figure 5: Sections

Plate 1: Trench looking north-east after machining

Plate 2: East end of trench looking north-west

Plate 3: Section 100 showing pond cutting gravel, looking north-east

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