



Oxford Flood Alleviation Scheme: Old Abingdon Road, Oxford Archaeological Evaluation Report

June 2017

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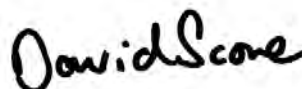
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Oxford Flood Alleviation Scheme: Old Abingdon Road, Oxford

Archaeological Evaluation Report

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Summary

The evaluation which consisted of a 36m long borehole transect (at 1m centres), and four trenches within the live modern carriageway of Old Abingdon Road revealed evidence for, the truncated remains of 13th – 14th century medieval road surfaces and an associated although earlier roadside ditch, early and later post-medieval road surfaces, including an early 17th to 18th century phase of major rebuilding, plus the remains of a stone structure, probably a bridge/culvert abutment of medieval or post-medieval date associated with historic southern route to and from Oxford survive within the route of the proposed new Oxford FAS culverts.

Un-truncated natural gravel levels to the southwest of Trench 2 were covered by robust alluvial/colluvial deposits. These overlying deposits were absent in the northeastern half of the site.

Medieval archaeology survived under the northern side of the modern carriageway. The northern edge of a potential road surface encountered at 53.60m OD contained pottery dated to 1175-1350. This had encroached over the fills of an earlier NE-SW aligned linear feature, probably a roadside ditch, whose lowest fills yielded a C14 date (SUERC-72944) of 1165 – 1215 calAD (68.2%), and uppermost fills yielded pottery that dated to 1225-1400. Potentially contemporary similar surfaces, which did not yield any dating evidence, were identified under the southern side of the modern carriageway overlying the alluvium/colluvium at the southeastern end of the site.

Part of an ashlar Wheatley limestone block structure with a rubble core only surviving to 2-3 courses in height, was probably an abutment for a bridge/culvert over an adjacent NW-SE orientated channel, and is similar to the Scheduled culverts further to the northeast, may be of medieval date. No remains of an arch survived its' later demolition.

Following a period of alluviation, post-medieval road surfaces and levelling deposits were lain within a large construction cut lined on its northern edge by large kerb stones (possibly the base of a roadside stone parapet). An iron horseshoe that dated to the late 17th – early 18th centuries was recovered from the earliest of these deposits. It is possible that the bridge or culvert structure revealed in Trench 2 was constructed over a NW-SE aligned palaeochannel during this phase of activity. This activity removed any surviving medieval archaeology present under much of the southern carriageway of the modern road. It extended to the northeast beyond the limits of the investigations, and possibly extended beyond Trench 2 to the southeast.

The stone kerbing/parapet appears to have defined the northern limit of the causeway until relatively late in the sequence, with only the latest surfaces extending over and to the north of it. This may have been associated with the construction and remodeling of the road associated with the construction of the railway bridge in the first half of the 19th century.

Acknowledgements

Oxford Archaeology would like to thank J T Mackley & Co. who acted as Principal Contractor and supplied all the attendances and traffic management that was required to complete the works. Thanks are also extended to David Radford and Richard Oram, who monitored the work on behalf of Oxford City Council, and County Council respectively, as well as David Wilkinson, Assistant Inspector of Ancient Monuments from Historic England, and Catherine Grindey, Senior Archaeologist for the Environment Agency for their advice and guidance during the project.

Team composition

The project was managed for Oxford Archaeology by Ben Ford MCIFA. The Fieldwork was directed by Ben Attfield, who was assisted by Robin Bashford, Adam Fellingham, Richard Kevill, Martin Locker, Chris Richardson, and Georgia Wood. Survey was carried out by Conan Parsons. Geoarchaeological work was carried out by Magda Benysek and Christof Heistermann (with management support from Liz Stafford) who supervised the drilling team from CC Ground Investigations.

1 INTRODUCTION

1.1 Scope of work

1.1.1 Oxford Archaeology (OA) was commissioned by J T Mackley & Co, on behalf of the Environment Agency (EA), to undertake an archaeological evaluation located within the Old Abingdon Road, Oxford, to the West of the bridge over the main Oxford to Didcot railway line and adjacent to the junction with Kennington Road (Fig. 1). This evaluation was undertaken between 31st October and 8th December 2016 as part of the wider preparatory works required in association with the EA's proposal, and subsequent Planning Application (later in 2017), for the Oxford Flood Alleviation Scheme (FAS). At the Old Abingdon Road the proposal is to contain the flood channel within a series of three adjacent large concrete culvert structures which will pass at an oblique angle, on a NE – SW orientation, below the line of the existing carriageway.

1.1.2 The original brief/specification was detailed by the Environment Agency (EA, 2016) and a written scheme of investigation (WSI) was produced by OA (OA, Sept 2016, Issue 1 which was revised OA, Oct 2016a, Issue 2); the methodology was entirely reviewed due to logistical issues relating to traffic management constraints and the WSI revised a third time (OA, Oct 2016b, Issue 3) before it was finalized (OA, Oct 2016c, Issue 4). The scope and methods detailed within the first two WSI's were initially discussed and agreed between Ben Ford, OA; Richard Oram, Oxford County Archaeological Officer, Oxfordshire County Council Archaeological Services (Directorate Environment & Economy); Richard Lewis of J T Mackley – the Principal Contractor; David Wilkinson, Historic Monuments Inspector, Planning Group SE, for Historic England (HE), and various project leaders from the EA during a meeting held on the 20th July 2016. The general principles that underpinned the revised approach presented in Issues 3 and 4 of the WSI, were agreed between Oxford Archaeology, the EA, Mackleys, and David Radford, Archaeologist for Oxford City Council during a meeting held on the 13th October 2016, these were endorsed by Richard Oram by e-mail the following day.

1.1.3 Amendments, during the fieldwork, to the trench positions as detailed in Issue 4 of the WSI were agreed either on site and/or via e-mail with Richard Oram, David Radford, David Wilkinson, and Catherine Grindey.

1.2 Location, topography and geology

1.2.1 The site lies circa 125m to the North of the A423, Southern Bypass Road, within the existing modern carriageway of Old Abingdon Road between its junctions with Red Bridge Hollow to the West, and Kennington Road to the East at NGR SP 515 036 (Fig. 1).

1.2.2 At this location the existing carriageways tarmacadam surface slopes down from the west at the start of the ramp up to the junction with the A423, then levels off before rising up towards the east at the start of the ramp for the railway bridge, recording heights from west to east of 56.25mOD, 56.08m OD and 56.4m OD.

1.2.3 British Geological Survey mapping of the area records predominantly Holocene Alluvium, overlying Pleistocene river gravel of the Northmoor Floodplain terrace, deposited towards the end of the last (Devensian) glaciation.

1.2.4 Recent geoarchaeological work on the line of the Oxford FAS route has found the upper horizon of the gravel, in meadows immediately north of the Old Abingdon Road at c 53.9m OD at the northern end falling to 53.6 at the southern end. This work also notes that the deposit overlying the gravels immediately to the north of the Old Abingdon Road is characterized by having a firmer texture, with higher sand content than elsewhere, suggesting perhaps historic agricultural activity but also a probable colluvial component deriving from Hinksey Hill to the west (Liz Stafford *pers comm*; OA, forthcoming).

1.3 Archaeological and historical background (Figs 3a, b and c)

1.3.1 The archaeological and historical background of the entire route is set out in the desk-based assessment (OA, Dec 2016 Issue 4) and will not be repeated here. A digest specific to the site was given in the final WSI (OA Oct 2016c). Some historical context to the south-western/southern route in and out of Oxford is given below, followed by specific information relating to more recent work on the Scheduled Monuments along the Old Abingdon Road.

1.3.2 Lambrick, in her 1969 article entitled 'Some Old Roads of North Berkshire' states of the routeway from the south / south-west,

"the stretch which runs from the Thames valley up Hinksey Hill. That section is known, in four different sets of Anglo-Saxon charter boundaries, as the hay-way 'hig weg'. The origin of this lay in the fact that part of the island of 'berige' an eyot lying between two channels of the river near Cold Harbour, was at some date allotted to the hamlet of Wootton as a water-meadow, and the hay had to be carted from the riverside right over Boars Hill to the three-mile distant settlement. Its value to that community may be judged from the fact that 'berige' under its later name of Berry Mead was parcelled out among the landowners of Wootton under the Inclosure Award of 1797, and was still being farmed from there at the beginning of [the 20th century]."

"It seems very likely that even before Robert d'Oilly's time the southern arm of the Carfax cross-road, after running along the gravel spit, turned across the South Hinksey gravel patch at a spot known to the Anglo-Saxons as the Stone Ford, or 'stanford' ... [the name given to the two existing historic culverts immediately east of the area of the current evaluation]... There are two stretches of road mentioned in charter boundaries of the middle or late 10th century, lying on the eastern end of Boars Hill; one is called 'port straete' and the other 'port weg'."

1.3.3 She goes on to say,

"H. E. Salter has shown from references in the Osney Cartulary that the ferry at North Hinksey was operating in the 14th century; and there are still earlier references to it or its ferryman in the 13th century, in two deeds in the Lyell Cartulary of Abingdon Abbey." In that same cartulary, however, there is copied a final concord of 1248 which gives as a boundary line a section of highway running from Pinnesgrove, which was just beyond the north-west corner of Bagley Wood, to the boundary of Wootton i.e. near the top of Foxcombe Hill; this road is there called the 'via regalis' from Oxford to Faringdon. It is undoubtedly the route from Oxford to the west through the South Gate and the causeway of Grandpont; and it is almost equally certain that this road must have been regarded as a highway of some importance for at least 150 years earlier, ever since Robert d'Oilly, in the late 11th century, built the Grandpont bridge and causeway southwards from Oxford."

1.3.4 A plan, by New College, Oxford, dating from the 16th or 17th century (Fig. 3a) focuses on representing the complexity of the multiple channels and islands/eyots to the south of the eastern end of Old Abingdon Road (just before it turns north to head along Grandpont). Old Abingdon Road is shown as a narrow raised causeway (apparently with no parapet, although the image is very much a sketch and so perhaps shouldn't be taken too literally) within which three round-headed arches are shown over three streams. The central stream leads directly south from 'Hinksey / Langford Mill' (later New Hinksey Mill, Paper Mill or Towles Mill) and can be equated to the modern watercourse of Hinksey Stream and therefore probably represents the Mayweed Culvert. The arch to its east probably indicates the Lesser Mayweed Culvert, and to its west a representation of one (possibly the westernmost Stanford culvert – Stanford 1, which is in line with the current Hinksey Drain watercourse), or indeed a visual amalgam, or shorthand, for the two Stanford culverts, or indeed all the Redbridge and Stanford culverts.

1.3.5 At the time of the Dissolution in the 1530's, John Leland, in his *'Itinerary through England'*, has this description "*From Oxford through the Southgate and bridge of sundrie arches over Isis and along causey in ultra ripa in Barkshir by a good quarter of a mile or more, and so up to Hinxey hille about a mile from Oxford.*" (Lambrick 1969).

1.3.6 Use of the southern entrance to Oxford is also mentioned in descriptions of Civil War troop movements in the 1640's.

1.3.7 The southern route from Oxford is clearly shown on Roques pre-enclosure map of Berkshire dated 1762 (Fig. 3b), where it veers to the west it shows that it traverses three principal streams, the central one of which is spanned to the north by a structure labelled 'Paper Mill'.

1.3.8 The Abingdon Road/Grandpont – leading south out of Oxford to Old Abingdon Road is known from late 18th century inclosure documents as the 'ancient road', and Andrews and Durys map of 1777 clearly shows three principal streams along the west turning section, now Old Abingdon Road (Fig. 3c).

1.3.9 On the 1814 enclosure map of the general area Old Abingdon Road is called the 'Turnpike Road', and shows Kennington Road heading south, and to its east a number of channels running up to and away from the road. The position of (Mayweed south of the Mill), and Lesser Mayweed to its east. No details of bridges have been illustrated, but to the west of Mayweed a channel approaches the road to the north but is not seen on the south (this is possibly Redbridge Culvert), and another further east is seen south of the road but not to the north (Stanford Culvert). No channels are depicted to the west of the junction with Kennington Road.

1.3.10 The 1842 Oxford and Great Western Railway plan showing the route of the new line has limited detail but shows the mill with its channel and two other principal streams, one to east and west, that equate to those on earlier plans. Again, no channels are shown west of Kennington Road.

1.3.11 The presence and survival of Norman and medieval culvert structures below Old Abingdon Road was demonstrated by a programme of archaeological inspection carried out in 2006-7 (Jacobs, 2007) and further investigated as part of a programme of archaeological recording in 2008-9 (Jacobs, 2009).

1.3.12 The following has been taken from the Jacobs 2009 descriptions of the Stanford Culverts which are the nearest structures to the area of this evaluation, and the Redbridge Culverts that lie further to their east;

Eastern Stanford Culvert

Section 3 has been identified as the earliest surviving element of the eastern culvert at Stanford Bridge. The construction details of Section 3 include radiating voussoirs with fine joints and a coursed rubblestone vault. The voussoirs on the north facing elevation were weathered suggesting this was originally an external face of the culvert. There is some evidence for rough tooling and striated diagonal tooling on the abutments on the east side of the culvert.

Section 3 shows clear evidence for episodes of repair. Modifications are apparent in the design of the elevations which are characterised by a round headed north arch and a pointed (2-centred) south arch. The culvert measured 3.9 metres wide.

The construction details for Section 1 includes squared blocks with wide mortar joints. Section 2 is of rubblestone construction throughout.

Western Stanford Culvert

Section 3 of the western culvert was similar in construction to Section 3 of the eastern culvert. The pointed arch evident on the northern face was more compressed on the southern elevation. The construction of the culvert was characterised by dressed stones on the abutments, a rubblestone vault and limestone voussoirs.

The remaining two sections of culvert were of rubblestone construction.

Eastern Redbridge Culvert

The eastern culvert consists of five phases of construction representing four phases of widening. Section 3 has been positively identified as of Norman period construction as it is characterised by large ashlar masonry blocks with diagnostic diagonal striated tooling and fine joints of approximately 10mm. The arch follows a shallow arc form a low spring point and terminates in a round head arch of rubblestone construction. Section 3 is 3.8 metres wide and with a span of 1.75 metres.

The remaining four sections are of rubblestone construction.

Western Redbridge Culvert

The western culvert consists of six phases of construction representing five phases of widening. The two sections (Sections 2 and 4) flanking the narrow central section have been identified as the earliest elements of the culvert.

Section 4 has been identified as the earliest surviving element of the western culvert at Redbridge. The construction details of Section 4 includes abutments extending from a stone footing or step that extends approximately 120 mm from the abutment face. Two courses of this masonry footing were visible. The abutment above footing level consists of two courses of ashlar masonry with vertical striated tooling. Above this were two courses of rubblestone masonry from which the springing for the barrel arched head of the culvert started. The face of this section of culvert was dressed with limestone voussoirs. The head of the arch consisted of longer, narrower blocks. Section 4 was 3.98 metres wide. The character of Section 4 is more

consistent with the positively identified Norman period construction in the Redbridge eastern culvert.

Section 2 comprised roughly squared abutments on a rubblestone footing. The vault was of rubblestone construction with limestone voussoirs. Section 2 was 3.2 metres wide.

The remaining four sections are of rubblestone construction.

1.3.13 And in the discussion section Jacobs conclude;

The earliest sections of the Old Abingdon Road culverts have been identified from their construction details. The characteristics of these earliest elements of the Old Abingdon Road culverts can be summarised as follows:

- *Dressed stone courses for abutments;*
- *Rubblestone vaults with dressed stone voussoirs.*

The phase 1 sections of culvert are considered to date from the Norman to medieval period. Variations in construction and design details suggest that they are not contemporary. Only one of these (Section 3 of the Redbridge east culvert) has been positively identified as of Norman date. Section 3 of Lesser Mayweed is also of predominantly dressed stone construction but did not yield any positive clues to its date of construction. Similarities between this culvert and the culverts at the northern end of the Grandpont were noted.

The remaining culvert details consistently include the bullet-pointed details above with some variation such as the pointed arches observed for the Stanford Bridge culverts. The culverts were scheduled by the Secretary of State, advised by English Heritage (now Historic England) in October 2012 (Name: Old Abingdon Road Culverts, List entry no: 1408790). As with the section immediately to the south of Folly Bridge there is evidence for medieval stonework within the later bridge and culvert structures.

1.3.14 The following information has been taken from the Scheduled Monument Record for the Old Abingdon Road Culverts on the Historic England website (<https://historicengland.org.uk/listing/the-list/list-entry/1408790>).

The road now known as the Old Abingdon Road is considered to be a part of the 'Grandpont', built by Robert d'Oilly, who also built Oxford Castle in 1071. This consists of a causeway with more than thirty culverts or arches which lie underneath the Abingdon Road and continue for approx. 650m south of Folly Bridge. Old Abingdon Road has 7 known culverts. These culverts allowed water to pass underneath a causeway which was constructed above, crossing small rivers, streams, and marshy areas, often replacing or supplementing earlier fords. It is possible that some of these structures may be concealed behind later stonework and that earlier, timber structures, may be preserved to some extent below them. It is also possible that the causeway (constructed of stone or earth) on the Old Abingdon Road may have its origins in the Saxon period, as two fords are mentioned in charter evidence crossing the river in the South Hinksey area. The New College map of the Land in South Hinksey, circa 16th- 17th century shows a road labelled 'The Bridge or Horse way from Oxford to Abingdon' and depicts three round headed arches and a road surface without a parapet.

Working from west to east, the monument consists of 7 named separate culverts;

Stanford Culverts 1 and 2 [top of internal openings at 54.78m OD and 55.07m OD respectively];

Redbridge 1 [top of structure at 55.39m OD, top of internal opening at 54.82m OD];

Redbridge 2 [top of structure at 55.86m OD, top of internal opening at 55.16m OD];

Mayweed Culvert [top of both internal openings at 54.84m OD];

Mayweed Lesser Culvert [top of structure at 55.72m OD, top of internal opening at 55.22m OD.

Approximately speaking, they are 4m in width with a span between 2.3 - 1.7m. They are constructed variously, from rubble, ashlar blocks, limestone voussoirs, and squared blocks with mortar joints. The causeway above is circa 0.3m in thickness.

2 EVALUATION AIMS AND METHODOLOGY

2.1 Aims

2.1.1 The project aims and objectives were as laid out in the WSI (OA, Oct 2016c):

- i. To ascertain the nature and extent of any surviving archaeology that would be impacted by the construction of the proposed culverts.
- ii. To understand the form, date, and preservation of any surviving archaeological remains within the areas of the trenches, specifically related, but not exclusive to, any causeway and or culverts that may be present. If any such structures are present, they will be partially revealed and recorded, but left *in-situ*, and suitably protected when backfilled.
- iii. To ascertain the position and orientation of any causeway to allow a borehole transect to be targeted along its length across the width of the proposed impact area (services allowing)
- iv. To undertake a 1m centered borehole transect without damaging any *in-situ* structural remains of possible culverts. [To identify the positions of 'obstructions' (i.e. something preventing the progress of deeper drilling) below the existing road surface which could equate to in-situ historic stone culverts, these locations could then be investigated further with targeted archaeological trenching.] To log the cores and model the deposits to form a full cross section along the centre-line.
- v. To reveal an understand by archaeological excavation of 3 x 1.5m trial trenches obstructions encountered by the boreholes (up to four in number).
- vi. In the absence of obstructions to archaeologically excavate a trial trench measuring 5 x 1.5m through archaeological deposits to obtain ecofacts and artefacts to augment the profile generated from the borehole log.
- vii. To assess the significance of any heritage assets that may be present.
- viii. To ensure that an accurate and comprehensive record and report of any archaeological deposits found during works is produced and disseminated to the appropriate organisations, including the County Historic Environment Record (HER).

2.2 Methodology

2.2.1 Initially, Trenches 1 and 2 were excavated, perpendicular to, and within the south side of the existing carriageway, using a mechanical excavator fitted with a toothless bucket and supervised by an archaeologist, to depths of c. 0.80m b.g.l. These trenches were orientated SW-NE and measured 3.34m x 1.64m, and Trench 2 similarly orientated measured 2.74m x 2.74m. They revealed surfaces beneath the current tarmac surface and base levels. Although there was no dating evidence, these initial excavations demonstrated that these were former stone road surfaces related to the historic routeway running along the southern side of the existing Old Abingdon Road, and were in alignment with the Scheduled Monuments (Phase 1 elements of the Stanford Culverts 1 and 2) to the north-east. A 0.60m wide slot against the NE baulks of Trenches 1 and 2 was excavated through these surfaces to depths of 54.25m and 54.6m OD respectively, they revealed sequences of earlier stone road surfaces and make-up layers.

2.2.2 The borehole transect was aligned on the Scheduled Phase 1 structural elements of the Stanford 1 (West) and 2 (East) culverts as well as the historic surfaces revealed during the initial exploratory hand excavation in Trenches 1 and 2. A total of 36 boreholes were taken along the length of Old Abingdon Road that will be impacted by the proposed flood channel culverts. The borehole drilling was carried out at 1m centres (where possible) by a Dando Type Terrier percussive rig retrieving cores in 1m lengths. All drilling was supervised by a geoarchaeologist. Seven boreholes to the north-east of the transect (OABH 207 – 209, OABH 201 – 203, and OABH 210(A)) were moved due to the proximity of buried services discovered during fieldwork. Three boreholes (OABH 204 – 206), could not be relocated and were abandoned entirely due to the presence of services.

2.2.3 Trench 3 was located over an obstruction encountered in OABH 227 at an approximate height of 54.55m OD, analogous to the known heights of the crowns of the internal arches in the Stanford Culverts.

2.2.4 Trench 2 was extended to the north-east (to a total length of 6.17m), after encountering two consecutive obstructions, OABH218 at 53.90m OD and OABH 217 at 54.50m OD. The obstructions appeared to be association with possible channel deposits encountered overlying the natural gravel in adjacent OABH's 216 and 215. Due to the presence of a live service between OABH's 218 and 217 the trench could not be extended much beyond OABH218.

2.2.5 No further obstructions at heights comparable with the known Scheduled Monuments were encountered in any of the other boreholes.

2.2.6 Trench 1 was extended over to the northern side of the existing Old Abingdon Road ('Trench 1 extension') to obtain the full width of the archaeological sequences below the modern carriageway. It was initially machine-excavated to a depth of approximately 54.20m OD before a 0.60m wide slot was hand-excavated to approximately 53.17m OD. The position of the trench had to be moved c. 2.50m to the NE, and widened due to logistical issues relating to traffic management and modern services (Fig. 2).

2.2.7 Trenches 1, 2, and 3 were excavated to depths of 53.55m OD, 53.35m OD, and 53.88m OD respectively.

2.2.8 Variations in the positions, size and number of the boreholes and trenches from those set out in the WSI (OA Oct 2016c) were agreed between OA, J T Mackleys & Co., Richard Oram (OCC, County), David Radford (OC, City), David Wilkinson (HE), and Catherine Grindey (EA).

3 RESULTS

3.1 Introduction and presentation of results

3.1.1 The results of the evaluation are presented below, and include a summarized stratigraphic description of the trenches that contained archaeological remains. The full details of all trenches with dimensions and depths of all deposits form the content of Appendix A. Finds data and spot dates are tabulated in Appendix B.

3.2 General soils and ground conditions

3.2.1 In all trenches the natural geology of Pleistocene river gravel was overlain directly by either alluvium/colluvium, medieval, and / or post-medieval archaeology, which in turn was overlain by modern road surfaces and make-up.

3.2.2 Ground conditions throughout the evaluation were challenging. Trench 2 suffered with severe inundation of rain and groundwater due to its position at the bottom of the slope of Old Abingdon Road, which made excavation problematic.

3.2.3 The compact nature of some of the deposits encountered meant that hand tools such as digging spikes were used instead of mattocks.

3.2.4 As the excavations in the trenches were up to 2.50m below the existing operational road surface, the trenches were heavily shored, which reduced the working room within the trenches, and in some cases made photography problematic.

3.2.5 The presence of modern services, and the restrictive operating space within which the work could be undertaken due traffic management of the existing carriageway (which was kept open using traffic light controls) did affect the position and size of trenches and the ability to complete a few of the boreholes. However, a good even coverage of both boreholes and trenches was achieved across the entire width of the proposed impact.

3.3 General distribution of archaeological deposits

3.3.1 Although the integrity of the archaeological sequences in the cores were somewhat compromised by voids due to the nature of the compacted deposits at the site

3.3.2 Archaeological deposits were present in all the trenches. A NE-SW aligned linear feature of medieval, or earlier date was observed in the Trench 1 extension, along with the northern extents of similarly aligned medieval and the earliest post-medieval surfaces. An undated palaeochannel, probably orientated NW-SE, was identified in Trench 2 (as well as adjacent boreholes). The south-western extent of a part-demolished limestone block structure, possibly a culvert abutment, was partially revealed in the NE end of Trench 2, it had been constructed on the southwestern edge of the paleochannel and extended beyond the northern, southern and eastern trench limits, as did the paleochannel. Other large pieces of limestone were used as kerbing, or the lowest course of a parapet, demarcating the northern extent of post-medieval road surfaces in Trench 1. All the trenches revealed NE-SW aligned post-medieval road surfaces and levelling deposits directly underneath the modern road make-up.

3.3.3 Given the general 'soil' conditions as described above (Section 3.2), more complete borehole cores were extracted from the SW half of the transect than the NE half.

3.4 Boreholes (Fig. 4 and Appendix D)

3.4.1 The general sequences obtained from the boreholes were, on the whole the same as those recorded in Trenches 1, 2 and 3 in the southern side of the modern carriageway (see below).

3.4.2 The first 15m of the transect from the SW revealed deposits of colluvium/alluvium above natural gravel, which was absent further to the NE. At the southwestern end of the transect possible road surfaces directly overlay the alluvium/colluvium, these were not observed in the Trenches 1, 2 and 3 and may equate to the medieval and early post-medieval surfaces seen in Trench 1 extension.

3.4.3 Nearly all the boreholes in the NE half of the transect hit obstructions, but many of these were at levels that did not equate with the known heights of the Scheduled culvert structures. Boreholes 218 and 217 encountered obstructions at heights that corresponded with the known Scheduled culverts, this was investigated in Trench 2.

3.4.4 Boreholes 216 and 215 immediately to the NE of the obstructions encountered in 218 and 217 did not encounter any obstructions (although there were significant units of limestone rubble) but were notable because the Pleistocene gravels were encountered at levels c 0.90m lower than in boreholes 213 and 220 to the NE and SW. These levels suggest a localised truncation of the natural gravel, the extrapolated profile of which is shown in Figure 4. Within this truncation borehole 216 recovered deposits of organic silts having a strong organic smell (Appendix D), indicative of waterlogged conditions.

3.5 Trench 1 (Figs 4 and 5, Plates 1, 2 and 3)

3.5.1 Natural gravel was encountered at approximately 53.65m OD, and no alluvial deposits were encountered. The gravels were cut by 1037, either a pit or a linear feature which was sealed by deposit 1035, interpreted as a make-up deposit for the overlying road surface, 1033 (Plate 2), at 53.75m OD. Feature 1037, and deposit 1035 are undated. Immediately above 1035 lay circa 1.30m of post-medieval road surfaces and make-up / levelling deposits (see Plate 3 for general shot of the upper sequence of these deposits). The earliest of these surfaces, 1033, consisted of sand and cobbles and contained a horseshoe dated to the late 17th or early 18th century. A similar surface, 1030 (Plate 1), was cut by a drainage gully or wheel rut, 1040, and was dated to the same period by a clay pipe fragment. A number of further surfaces consisting of compact silts and pebbles, 1003, 1004, 1005, 1006, 1007, & 1008 (Plate 3), lay directly beneath the modern road deposits. Levelling deposits 1009, 1010, 1013 & 1030, consisted of limestone rubble and silts (see Appendix A, and Fig. 4).

3.6 Trench 1 Extension (Fig. 5, Plates 4 and 5)

3.6.1 Natural gravel was encountered at 53.37m OD. This was overlain by a deposit, 1092, of indeterminate origin (possibly alluvial in origin) which potentially equates to deposits 1035 or 1036, the fills of feature 1037 in Trench 1, although they differed in composition. This deposit was cut by 1091 (Plate 4), a NE-SW aligned linear feature, with a depth of 0.90m and a width exceeding 2.50m. The second fill of this feature, context 1089 did not yield any artefactual evidence but waterlogged seeds recovered from soil sample 1003 was carbon-dated (SUERC-72944) to 1165 – 1215 calAD (68.2%). Pottery dated to 1225-1400, along with a T-Shaped hasp for a harness was recovered from clay-rich layer 1084, which appears to

represent one of the features latest fills. The southern edge of linear 1091 contained slumping deposits 1085, overlain by the north-eastern edge of a surface of densely laid limestone pieces / cobbles 1079 (Plate 4). These two contexts contained pottery dated to 1175-1350 (one sherd from each context belonged to the same vessel – which may have been at the boundary between the two). The northern limit of surface 1079 was truncated by linear 1083 (a possible roadside gully or wheel rut, whose fill contained another pottery sherd that co-joined with a sherd from 1079 (and was therefore redeposited, possibly during the archaeological excavation). Surface 1079 was overlain by deposits of limestone rubble, 1078, alluvium, 1074, and a further surface of compacted cobbles, 1070, containing pieces of early brick dated to 15th – 17th century, but most likely late 16th – 17th century. Above this was a further alluvial deposit 1069, which contained clay pipe and glass dated to the 17th century. This was cut by 1073, the construction cut within which were installed large vertical limestone slabs (not ashlar), 1072, forming an edge or kerb to deposits that extended beyond the southern limit of the trench but probably equate to the road surfaces revealed in Trench 1. The latest deposits sealed the construction cut for the kerbing, and consisted in sequence of sands and gravels, 1065, and deposits of silt, 1063, and 1064 which did not equate with any deposits seen in Trench 1 (see Figure 5). Modern make up and tarmacadam layers overlay this sequence and were cut by a modern service trench which removed the southern extent of the latest layers, and cut down directly on top of the kerbing structure 1072.

3.7 Trench 2 (Fig 4, and Plates 6 and 7)

3.7.1 Natural gravel was encountered at approximately 53.65m OD. There were no alluvial deposits present. The gravel was cut by 1044, a NW-SE aligned palaeochannel, its fill, 1067, contained a nail fragment (possibly post-medieval). A soil sample (1000) contained wood and grass fragments along with other plant stems, insect remains and waterlogged seeds. The full depth of the feature was not observed within the trench, however to the east it was located within boreholes 215 and 216 (see above). Part of the western extent of a mainly demolished and disturbed stone structure 1052 was built directly on to the natural gravels at the western edge of paleochannel 1044. The structure was only partially revealed and consisted of Wheatley limestone blockwork (from Lye Hill) and Milton stone rubble (similar to Taynton limestone). The blockwork consisted of non-uniform sizes and shapes forming a structural face at its' eastern extent with a rubble core immediately behind this to the west. The visible elements showed that the majority of the facing stones had been either entirely or partially dressed so each face was broadly flat with some evidence of diagonal tooling (Plate 7) giving way to a roughly worked back. The face of the structure was not clearly visible as it coincided with the edge of the trench, but probably survived up to 3 courses in height; the joints between the blockwork appeared quite wide, but this could have been a result of demolition. Much of the bonding mortar between the facing stones had either degraded or been washed away, but within the limestone rubble core remnants of a clayey-sand mortar were present. Covering this structure was 1029 a deposit of limestone rubble and dust that measured 0.9m thick. A similar deposit of loosely packed limestone pieces and mortar, 1068, was only revealed in the west facing section of Trench 2; it was originally thought to be a structural part of 1052, but was seen to abut the interior (east facing face of 1052). Together deposits 1029 and 1068 probably represent the demolished remains of structure 1052. A successive sequence of multiple limestone pieces and river pebble surfaces, as well as levelling deposits lay above this thick rubble layer and below the current road surfaces. Deposits 1028, 1027,

and 1026 represent a series of ground raising / levelling events, underlying 1022, and 1021, surfaces of compact pebbles and cobbles. These surfaces were overlain by 1020, a layer of compact silting, and 1019, a gravel bedding layer. Above 1019, and directly below the modern road make-up, was another surface of pebbles and compact silty sand, 1018, which contained a nail fragment (probably post-medieval).

3.8 Trench 3 (Fig. 4)

3.8.1 Natural gravel was encountered at approximately 53.88m OD. This was overlain by deposits of alluvial clay, 1081, gravels, 1086, and silts, 1066. These were underlying a deposit of limestone rubble, 1051, similar with deposit 1029 in Trench 2. Overlying this were deposits representative of surfaces and episodes of levelling, underlying the current road surface and make-up. These deposits, 1050, 1049, 1048, 1047, and 1046, consisted of sand and pebbles and were all fairly uniform in their thickness of circa 0.10m. No finds or datable evidence were recovered from the trench, although it is assumed that they are of a similar date as the deposits in Trench 2 (see Appendix A & fig. 3).

3.9 Finds summary

3.9.1 Full finds reports can be found in Appendix B. The finds assemblage was quite modest, although this was not entirely unexpected due to the nature of the archaeological deposits encountered, and the limited amount of hand excavation that took place.

3.9.2 A total of six pottery sherds, four pieces of clay tobacco pipe, two pieces of ceramic building material, six iron finds, and seven pieces of glass were recovered in total. All the pottery was dated to the medieval period.

3.9.3 Given the function and interpretation of the deposits revealed there were two notable metal artefacts; a single post-medieval horseshoe, recovered from road surface 1033, and a T shaped hasp for a horse harness from context 1084 associated with pottery dated to AD 1225-1400.

3.9.4 All the other finds were dated to the post-medieval period.

4 DISCUSSION

4.1 Reliability of field investigation

4.1.1 The results of the field investigation, although limited by issues of services and traffic management, can be assumed to be representative of the archaeology present within the wider area of the evaluation. Trenches were positioned in alignment with the known Scheduled Monuments further to the north-east along the Old Abingdon Road to ascertain whether further similar structures were present. The extension to Trench 1, on the northern side of the modern carriageway, provided a good opportunity to look at the stratigraphy outside of this alignment, demonstrating the extant nature of medieval levels.

4.1.2 The results of the boreholes, although adequately providing information on the location of obstructions at depths that indicated the presence of potential historic structures, were slightly problematic for producing an accurate deposit model. This was due to voids within the cores which meant the true level in metres OD and thickness of deposits within a sequence could not be relied on.

4.1.3 It is evident that the trenches allowed for a much more reliable interpretation of the deposits present within the area of study than the boreholes as it was possible to view the stratigraphy in situ.

4.2 Evaluation objectives and results

4.2.1 The broad aims of the evaluation were to ascertain the nature and extent of any surviving archaeology that may be impacted by the construction of the proposed Oxford Flood Alleviation Scheme culverts. This was specifically related, but not exclusive to, any causeway or culvert structures associated with the historic route of the road out of Oxford to the South and South-west, as well as any culvert/bridging structures (especially those similar to the known Scheduled Monuments that exist to the north-east of the site along the Old Abingdon Road).

4.2.2 The voids in the borehole cores were due to the compaction and porosity of sediments, obstructions encountered whilst drilling, and slippage of sediment within the cores themselves. The percussive nature of the terrier type rig used seemed to exacerbate these issues (M. Benysek, *pers. comm.*). Cores particularly affected by this were OABH233, and OABH231. Therefore, the results presented in cross section AA, although providing a useful 'broad brush' overview of the stratigraphy, should not be considered truly accurate.

4.2.3 The results of the evaluation trenching augment, refine and provide reliable detail to the understanding of the sequences gained from the boreholes.

4.2.4 The trenches clearly demonstrate surviving post-medieval road levels from the 16th – 19th century below the current modern road surface and make up deposits.

4.2.5 A limestone block structure was identified in Trench 2 associated with a paleochannel, partially revealed in Trench 2 but also recorded in OABHs 215 and 216. Very limited dating evidence, in the form of a single piece of iron nail, possibly post-medieval, was recovered from deposits filling the channel associated with this structure.

4.2.6 Surviving medieval archaeology exists along the northern side of the modern carriageway of the Old Abingdon Road, and are the truncated remains of a stone roadway,

and roadside ditch. The borehole transect provides evidence that surfaces, potentially of medieval date, may be extant at the south-western extent of the evaluation area.

4.3 Interpretation (Figs 3, 4, 5 and 6)

4.3.1 Natural gravels were encountered in all the trenches as well as the majority of the successful boreholes. Un-truncated gravels were seen in boreholes OABH237-221 (between 53.0 – 53.8m OD) and Trench 3 at 53.88m OD. Given that the borehole heights are unreliable, as stated above, and may have given lower readings than expected, it should be noted that the higher values are commensurate with the known height of the natural gravel horizon in the meadows immediately north of the Old Abingdon Road (see Section 1.2.4, and OA, 2017 forthcoming). It is assumed that the gravels revealed elsewhere have at some stage been truncated from their natural levels.

4.3.2 Overlying the gravel in the western half of the area (OABH237-221 and Trench 3) were sandy-silty-clay deposits, which were characteristically stiffer than the alluvium would be expected to be in this area. The rigidity of this deposit may have resulted from agricultural activity mixed with a colluvial component (derived from Hinksey Hill). It is likely that it is partly the nature of these soils on the western edge of the Thames floodplain that made this location attractive as a crossing point.

4.3.3 Medieval archaeology was encountered in the Trench 1 extension, on the northern side of the modern carriageway of the Old Abingdon road at an uppermost height of approximately 53.65m OD. The earliest feature, linear 1091 (Plate 3) is part of a NE-SW roadside ditch probably running along, and draining, the northern side of a contemporary road/causeway (which was not observed within the limits of the evaluation trench). Its' secondary fill 1089 did not contain any artefacts but waterlogged seeds in sample 1003 from the fill yielded a C14 determination (SUERC-72944) of 1165 – 1215 calAD (68.2%), and the latest fills of the ditch contained pottery dating between AD 1225 – 1400. The evidence strongly suggests the roadside ditch originated in the second half of the 12th century or earlier. Deposit 1079 which contained pottery dated to 1175 – 1350 appears to be the remnant of the northern edge of a later medieval road surface which had partially encroached over the fills of and slumped into an earlier ditch 1091 (Fig. 5), which had by then nearly filled up. The dating of the surfaces observed in boreholes OABH 237, OABH 235, OABH 233, and OABH 231 is uncertain, and they could be either of medieval, or post-medieval date (Fig. 4).

4.3.4 The medieval causeway was characterised by surfaces consisting of limestone pieces, overlain by silty occupation and use layers, perhaps incorporating alluvial deposits. It is likely the surface of the causeway was cambered, and that there would have been a ditch on both sides of the causeway which were part of the drainage network of multiple streams of the Thames that ran under the causeway in stone-built culverts.

4.3.5 The limestone block built structure, 1052, partly revealed in Trench 2 is probably the southwestern abutment of a culvert structure that spans the small relict channel located to its immediate northeast. The structure had been mainly demolished and only survived to a height of 2-3 courses of squared ashlar Wheatley limestone blocks (with a limestone rubble core), therefore its original form can only be suggested. Certainly, the building materials are similar to those of the Scheduled elements of Stanford and Redbridge culverts which are considered to be Norman or medieval in date. Any comparisons between this excavated structure and the extant Scheduled examples is problematic as the archaeological structure

was revealed from the rear i.e. the structures rubble core, with no clear view of the dressed internal face. This is in direct contrast to the descriptions of the Scheduled culverts where observations were only possible from the channels flowing through them and thus only describe the dressed faces. Comparisons between the archaeological and extant culverts is also problematic as the archaeological structure had a limited amount of bonding material remaining, whereas the extant structures internal faces have probably been repointed on a number of occasions.

4.3.6 Natural gravel heights in boreholes 213, 215, 216 and 220, combined with evidence from Trench 2 suggest the profile for cut 1044 (the construction cut for the culvert combined with the channel itself) was c 5m in width. If limestone structure 1052 has a similar abutment on the channels northeast bank then it would have spanned a distance of c 3.5m (which is much wider than the Scheduled Culverts (see Section 1.3.14, and the suggested form in Figure 4).

4.3.7 If the structure had a round-headed or pointed arch, as the Scheduled culverts do, then medieval road surfaces over the structure would have been at levels approximating to modern existing road surfaces. If the medieval road surfaces in Trench 1 extension are contemporary, then the structure would have presented as a hump-back within the causeway. It is possible the abutment carried a level timber deck (see Figure 4).

4.3.8 The rubble that overlay the structure and filled the adjacent channel may have derived from its demolition. There is lack of dating evidence immediately associated with the structure.

4.3.9 At some point in the late 17th – 18th century a major rebuild of this part of the southern route into Oxford was rebuilt. This remodelling, comprised a construction cut that entirely removed any earlier sequences. This was restricted to the southern side of the modern carriageway, extending to the northeast beyond the limits of the study area, and possibly extending south-eastwards beyond Trench 2. This phase of rebuild could have been the cause of the demolition of the stone structure in Trench 2. The majority of the deposits encountered relate to this remodelling and the subsequent multiple resurfacing episodes prior to the advent of tarmacadam.

4.3.10 Post-medieval archaeology was encountered in all the trenches. Following periods of alluviation, it is apparent that the surfaces present in the southern carriageway of the modern road were re-lain during the late 17th – early 18th centuries. These deposits were contained within a series of large kerb stones evident in the Trench 1 extension. Post-medieval rubble layers and surfaces continue to the south-west along the Old Abingdon Road, and were present in Trenches 2 & 3. The structure in Trench 2 was possibly part of this post-medieval re-modelling of the road. The height of the top of this structure is of a similar height to the known Scheduled Monuments to the north-west at 54.50m OD (heights of the underside of the arches of known Monuments all fall between 54.66 – 55.45m OD, see OA 2016a). The deposits forming the post-medieval road survive directly underneath the modern road build-up, and truncate the remains of medieval levels that may have been present on the southern side of the modern carriageway.

4.4 Significance

4.4.1 The archaeological evaluation which consisted of a 36m long borehole transect (at 1m centres), and four small trenches within the modern carriageway of Old Abingdon Road revealed evidence for the truncated remains of medieval road surfaces and an earlier roadside ditch, early and later post-medieval and modern road surfaces, plus the remains of a stone structure, probably a bridge/culvert abutment of medieval or post-medieval date associated with historic southern route to and from Oxford survive within the route of the proposed new Oxford FAS culverts.

4.4.2 Remnants of the medieval and early post-medieval surfaces were only positively identified on the northern side of the modern carriageway of Old Abingdon Road, along with the earlier roadside ditch that lay to the north. The surfaces and ditch probably date to the 13th century or earlier.

4.4.3 Potential, although undated, medieval road surfaces were encountered immediately above the alluvium/colluvium on the southern side of the modern carriageway in the boreholes at the southwestern end of the transect. If these surfaces are contemporary with those in Trench 1 extension, then it is likely the full width of the medieval road/causeway could be preserved in this area of the site.

4.4.4 If the structure in Trench 2 is a medieval culvert, then it should be considered as a continuation of the multiple culverts constructed to bridge the streams that are a characteristic of the southern route into Oxford. However later demolition has severely compromised the original form of the structure and, apparently, any physical link to contemporary road surfaces.

4.4.5 If the stone structure is post-medieval then it is clearly an addition to a pre-existing pattern, and possibly part of a major rebuild of the causeway along with the installation of large limestone kerbing delimiting its northern edge, which due to the presence of a single horseshoe in one of the earliest deposits associated with this remodelling suggest a late 17th – 18th century date to this activity.

4.4.6 The surfaces and stone structure represent the westernmost remains of Oxford's southern route that have yet been found. Together the evidence illustrates the multiple efforts, since the medieval period, to maintain and improve the southern route to Oxford.

APPENDIX A TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

Trench 1		
General description	Orientation	NW-SE
Trench consisted of a number of successive road surfaces and levelling / make up deposits, of modern, and post-medieval date, overlying a natural geology of sandy gravel.	Length (m)	3.34
	Width (m)	1.64
	Avg. depth (m)	2.30

Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
1000	Layer	-	0.06	Road Make up deposit.	-	-
1001	Layer	-	0.20	Clay and limestone cobbles. Road Make up deposit.	-	-
1002	Layer	-	0.20	Clay and pebbles. Bedding Layer for road.	-	-
1003	Layer	-	0.04	Compact Silt and Pebble Surface.	-	-
1004	Layer	-	0.06	Compact Silt and Pebble Surface.	-	-
1005	Layer	-	0.12	Compact Silt and Pebble Surface.	-	-
1006	Layer	-	0.08	Compact Silt and Pebble Surface.	-	-
1007	Layer	1.10	0.12	Silty Sand.	-	-
1008	Layer	1.10	0.10	Compact Silt and Pebble Surface.	-	-
1009	Layer	-	0.40	Silt and Large Limestone Rubble Layer.	Fe Nail	Post-Medieval
1010	Layer	-	0.20	Silt and Limestone Rubble Layer.	-	-
1011	Layer	-	0.06	Silt and Limestone Rubble Layer.	-	-
1012	Layer	-	0.04	Silt and Limestone Rubble Layer.	-	-
1013	Layer	-	0.04+	Silty Sand.	-	-
1014	Cut	0.42+	0.26	Possible Drainage Gully.	-	-
1015	Fill	0.42+	0.26	Sandy Silt fill of 1014.	-	-
1016	Layer	-	0.44	Modern Road Surface.	-	-
1030	Layer	-	0.18	Sand and Limestone Cobble Layer.	Clay Pipe	Late 17 th – Early 18 th Century
1031	Fill	0.34	0.27	Compact Sand fill of 1040.	-	-
1032	Layer	-	0.24	Compact Limestone Rubble.	-	-
1033	Layer	2.15+	0.18	Sand and Rounded Cobble Surface.	Horseshoe	Late 17 th / 18 th century

Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
1034	Layer	-	0.03	Layer of Trampled Silt.	-	-
1035	Layer	1.10	0.12	Sandy Layer.	-	-
1036	Fill	0.36+	0.26	Sandy Fill of 1037.	-	-
1037	Cut	0.36+	0.26	Cut of Feature.	-	-
1038	Layer	-	-	Natural Gravels.	-	-
1039	Layer	1.0+	0.16	Compact Clay	-	-
1040	Cut	0.34	0.20	NE-SW drain or wheel rut, respecting surface 1030	-	-

Trench 1(A)			
General description		Orientation	NW-SE
Trench Consisted of Successive modern road surfaces and leveling / make up deposits, overlying post-medieval deposits and a stone kerb. A medieval road surface overlay a roadside ditch / channel. The natural geology of sandy gravel was present in the base of the trench.		Length (m)	3.40
		Width (m)	2.43
		Avg. depth (m)	2.50

Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
1038	Layer	-	-	Natural Gravels	-	-
1055	Layer	-	0.12	Tarmac Road Surface.	-	-
1056	Service	0.84+	1.50	Modern Service truncation.	-	-
1057	Layer	0.70+	0.20	Modern Concrete.	-	-
1058	Layer	0.70+	0.24	Sandy Silt Layer.	-	-
1059	Layer	1.90	0.42	Tarmac and Stone Make up Layer.	-	-
1060	Layer	2.50+	0.20	Compact limestone layer with pebbles.	-	-
1061	Layer	2.50+	0.20	Clay.	-	-
1062	Layer	2.50+	0.18	Compact Sand and Pebble Surface.	-	-
1063	Layer	1.74+	0.30	Sandy Silt.	-	-
1064	Layer	2.60+	0.70	Sandy Silt.	-	-
1065	Layer	2.30+	0.40	Gravelly Sand Layer.	-	-
1069	Layer	2.20+	0.18	Alluvial Clay	Clay Pipe, glass	17 th Century
1070	Layer	0.94	0.10	Cobbled Surface	-	-
1071	Fill	0.22	0.40	Sandy Silt fill of 1073	Fe Nail fragment	Post-medieval
1072	Structure	-	0.70	Large Limestone Blocks forming part of a Kerb.	-	-
1073	Cut	0.22+	0.40	Construction Cut for 1072	-	-
1074	Layer	2.00+	0.27	Alluvial Clay	CBM	Late 15 th – 17 th Century

Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
1078	Layer	0.90	0.26	Clay and Limestone Rubble Make up Layer	CBM, Bone	Late 15 th – 17 th Century
1079	Layer	1.10+	0.12	Cobbled Surface	Pot	c.1175-1350
1080	Layer	1.20+	0.08	Alluvial Clay	-	-
1082	Fill	0.42	0.24	Clay Fill of 1083	Pot	c.1175-1350
1083	Cut	0.42	0.24	Cut of Gully	-	-
1084	Layer	1.30+	0.12	Clay Layer	Fe T shaped hasp for harness, Pot	Post-medieval, c.1225-1400
1085	Layer	1.0	0.14	Alluvial Clay	Pot	c.1175-1350
1088	Fill	2.06+	0.20	Clay fill of 1091	-	-
1089	Fill	1.80	0.22	Clay fill of 1091	-	-
1090	Fill	0.80	0.06	Sandy Gravel fill of 1091	-	-
1091	Cut	2.20	0.74	Cut of Ditch / Channel	-	-
1092	Layer	0.30	0.26	Silty Clay and Limestone Fragments.	-	-

Trench 2

General description

Trench consisted of successive modern and post-medieval road surfaces and levelling deposits, overlying a stone built structure which was built over a palaeochannel. A natural geology of sandy gravel was present at the base of the trench.

Orientation

NE-SW

Length (m)

6.17

Width (m)

2.74

Avg. depth (m)

2.30

Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
1016	Layer	-	0.32	Modern road surface	-	-
1017	Services	-	-	Modern Services	-	-
1018	Layer	-	0.04	Gravel and pebbles	Fe Nail Fragment	Post-medieval
1019	Layer	-	0.12	Silty Sand and Gravel	-	-
1020	Layer	-	0.10	Sandy Silt	-	-
1021	Layer	-	0.04	Silty Sand and frequent pebbles	-	-
1022	Layer	-	0.08	Clayey Sand and frequent pebbles	-	-
1023	Cut	0.70	0.30	Cut Feature	-	-
1024	Fill	0.70	0.30	Clayey Sandy Silt – fill of 1023	-	-

Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
1025	Layer	-	0.44	Road surface and make up material	-	-
1026	Layer	0.60+	0.14	Silty Sand with frequent gravel	-	-
1027	Layer	0.90+	0.20	Silty Sand with frequent gravel	-	-
1028	Layer	-	0.30	Silty Sand with frequent fine gavel	-	-
1029	Layer	-	0.90	Silty Sand with frequent Large Stones, Rubble and Gravel	-	-
1041	Fill	1.30	0.08	Clayey Sand. Fill of 1044	-	-
1042	Layer	0.60+	0.08	Silty Sand with 50% gravel	-	-
1043	Fill	1.30	0.10	Sandy Clay with 5% gravel. Fill of 1044	-	-
1044	Cut	2.40+	0.20+	Palaeochannel	-	-
1052	Structure		0.70+	Stone Structure	-	-
1053	Layer	-	0.17	Silty Sand with 20% pebbles	-	-
1054	Layer	-	0.20	Crushed Limestone	-	-
1067	Fill	0.60+	0.20+	Clay Palaeochannel Fill	Fe Nail fragment	Post-medieval/Medieval?
1068	Structure	-	1.0+	Stone Structure	-	-
1075	Layer	1.80	0.04	Clayey Silt and Sub Angular Limestone	-	-
1076	Layer	0.80	0.10	Sandy Silt and Pebbles	-	-
1077	Layer	1.80	0.12	Sand and gravel	-	-
1093	Layer	-	-	Natural gravels	-	-

Trench 3

General description	Orientation	NE-SW
Trench consisted of successive Modern and Post Medieval road surfaces and levelling deposits overlying potential colluvial and alluvial deposits and natural gravels.	Length (m)	3.32
	Width (m)	2.24
	Avg. depth (m)	2.30

Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
1045	Layer	-	0.80	Tarmac and modern road surfaces	-	-
1046	Layer	-	0.10	Sandy Silt and Cobbles	-	-
1047	Layer	-	0.10	Silty Sand and Ash with pea grit and sub angular stone	-	-

Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
1048	Layer	-	0.20	Silt and sub rounded cobbles	-	-
1049	Layer	-	0.12	Whitish grey sand and occasional rounded stone	-	-
1050	Layer	-	0.12	Sand and Rubble	-	-
1051	Layer	-	0.24	Silt with frequent stones and rubble	-	-
1066	Layer	-	0.22	Clayey Silt	-	-
1081	Layer	-	0.30	Blueish Grey Clay	-	-
1086	Layer	-	0.32	Silt and frequent gravel	-	-
1087	Layer	-	-	Natural gravels	-	-

APPENDIX B FINDS AND SCIENTIFIC DATING REPORTS

B.1 Pottery

by John Cotter

Introduction

A total of six sherds of pottery weighing 93g were recovered from four contexts. This is all medieval and probably all 13th or early 14th century. The condition of the material fairly poor. Cross-joining sherds from the same two jugs were noted in three of the contexts (see below). Domestic pottery typical of Oxford sites is represented. Given the small size of the assemblage a separate catalogue has not been constructed and instead the pottery is simply described and spot-dated below. Fabric codes referred to for the medieval wares are those of the Oxfordshire type series (Mellor 1994). No further work is recommended.

Context (1079) Spot-date: c 1175-1350

Description: 2 sherds (50g). 2x early Brill/Boarstall ware (OXAW) including damaged jug rim with narrow strap handle with a row of deeply stabbed decoration down the back. Buff fabric with leached very pale grey surfaces with a patchy greenish-yellow glaze ext. This JOINS with a handle fragment in (1082). Smaller OXAW jug body sherd with traces of red slip decoration under a yellowish glaze. See also JOIN with (1085).

Context (1082) Spot-date: c 1175-1350

Description: 1 sherd (30g). Early Brill/Boarstall ware (OXAW) fresh jug handle with stabbed dec. This JOINS jug rim in (1079) above. The break is fairly fresh and possibly recent?

Context (1084) Spot-date: c 1225-1400

Description: 1 sherd (5g). Brill/Boarstall ware (OXAM). Unglazed body sherd from shoulder of a jug. Fairly fresh.

Context (1085) Spot-date: c 1175-1350

Description: 2 sherds (8g). 2x early Brill/Boarstall ware (OXAW). Both body sherds from glazed jugs. The larger sherd almost certainly JOINS the rim sherd in (1079) and handle in (1082) above. It represents a shoulder sherd with an allover light greenish-yellow glaze. Fairly worn. The second smaller sherd almost certainly JOINS the smaller jug body sherd (with red slip dec) also in (1079).

B.2 Clay Tobacco Pipe

by John Cotter

A total of four pieces of clay pipe weighing 7g were recovered from two contexts. The material is in fairly poor condition. Given the small size of the assemblage a separate catalogue has not been constructed and instead the pipes are simply described and spot-dated below.

Context (1030) Spot-date: Late 17th to early 18th century

Description: 3 pieces (4g): Joining pieces (splinters) from a single pipe stem of fairly 'chunky' early type with a stem bore diameter of c 2.5mm.

Context (1069) Spot-date: 17th century

Description: 1 piece (3g): Stem fragment. Fairly chunky with bore diameter of c 3mm.

B.2 Ceramic Building Material (CBM)

by John Cotter

Two pieces (31g) of CBM were recovered from two contexts. These have not been separately catalogued but are described below. No further work is recommended.

Context (1074) Spot-date: Late 15th to 17th century?

Description: 1 piece (20g). Very worn fragment of soft orange-red brick with partial surface surviving. Abundant inclusions and streaks of cream clay typical of many early bricks from Oxford sites.

Context (1078) Spot-date: Late 15th to 17th century?

Description: 1 piece (11g). Very worn scrap of soft orange-red brick as in (1074) above.

B.4 Metal

by Ian R Scott

Introduction

There six metal finds from six contexts. All the finds are iron.

Context 1009 (1) **Nail** with almost flat sub rectangular head and tapering chisel like stem of rectangular section. Encrusted under the head. Complete. Fe. L: 75mm.

Context 1018 (2) **Nail stem fragment**, bent and encrusted. Rectangular section stem tapering to a point. Fe. No measured

Context 1033 (3) **Horseshoe**. Incomplete, part of one branch is eroded away. The extant branch is of uniform width, though worn towards to toe. It has angled heel, and three rectangular nail holes. The incomplete branch has two extant nail holes. Fe. L: 106mm; W extant: 98mm.
The form of the shoe, in particular the angle heel strongly suggests a post medieval date, probably late 17th- or 18th-century.

Context 1067 (4) **Nail stem fragment**, of square section tapering to a point. Fe. Not measured. Sample <1000>

Context 1071 (5) **Nail stem fragment**, bent and heavily encrusted. Fe. Not measured

Context 1084 (6) **T-shaped hasp for harness**. Fe. L: 51mm; W: 70mm. Sf 1000.
This is a harness fitting acting as a connector between a broad strap and hook, or a narrow fitting or strap.

None of the metal objects need date earlier than the post-medieval period and most may well date much later. Only the horseshoe (3) can be dated at all closely.

B.5 Stone

by Ruth Shaffrey

Description

Two samples of shelly limestone with relatively small fragmented shell inclusions from context 1052, the potential culvert abutment in Trench 2, were compared to samples of stone in the OA reference collection and to the 'Stone in Archaeology' reference collection at Southampton University. These are of two different limestone types. One is Wheatley limestone with a closest match to samples from Lye Hill. Wheatley limestone was in common use in Oxford from the 13th century (Arkeil 1947, 37). A second fragment is most similar to Milton stone, a limestone from the same geological horizon as Taynton stone but of inferior quality (Arkeil 1947, 64). Milton stone was exploited on a small scale from the early 14th century (*ibid*).

B.6 Glass

by Ian R Scott

Introduction

There seven pieces of glass from four contexts. Find from contexts 2108 and 2109 are from borehole 207, and the single piece of glass from context 2085 is from borehole 216. comprising two pieces of vessel and a single thin piece of flat colourless window glass. All three sherds are from context 100. Three pieces of vessel glass were recovered from context 1069.

Context 1069 (1) **Vessel glass**. Two small refitting strongly curved body sherds, possibly from near the heel or base of a small flask or bottle, and a sherd from the crown of the pushup or kick from a similar flask or bottle if not the same vessel. All three sherds are in the same dark green glass with a hint of blue. Probably free blown, but not closely datable. Post medieval or later. Not measured.

Context 2085 (2) **Small chip** with opaque light green weathering. Undiagnostic. Not measured. Borehole 216

Context 2108 (3) **Window glass?** Two small narrow fragments of possible colourless window glass. Not closely datable. Both measure 21mm x 6mm; Th: 1.7mm. Borehole 207

Context 2109 (4) **Window glass?** Small fragment appears to two thin pieces of colourless glass fused together. Not closely datable. 19mm x 7mm, Th: 1.2mm.

None of the glass is closely datable, it is likely to be post medieval or modern.

B.7 Radio-Carbon dates



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RADIOCARBON DATING CERTIFICATE


28 April 2017

Laboratory Code	SUERC-72944 (GU44009)
Submitter	Rebecca Nicholson Oxford Archaeology South Janus House Osney Mead Oxford OX2 0ES
Site Reference	OXFLOD16
Context Reference	1089
Sample Reference	1003
Material	waterlogged seeds : Rumex sp. fruit+perianths
$\delta^{13}\text{C}$ relative to VPDB	-28.5 ‰
Radiocarbon Age BP	857 \pm 26

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email Gordon.Cook@glasgow.ac.uk or telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :-  Date :- 28/04/2017

Checked and signed off by :-  Date :- 28/04/2017

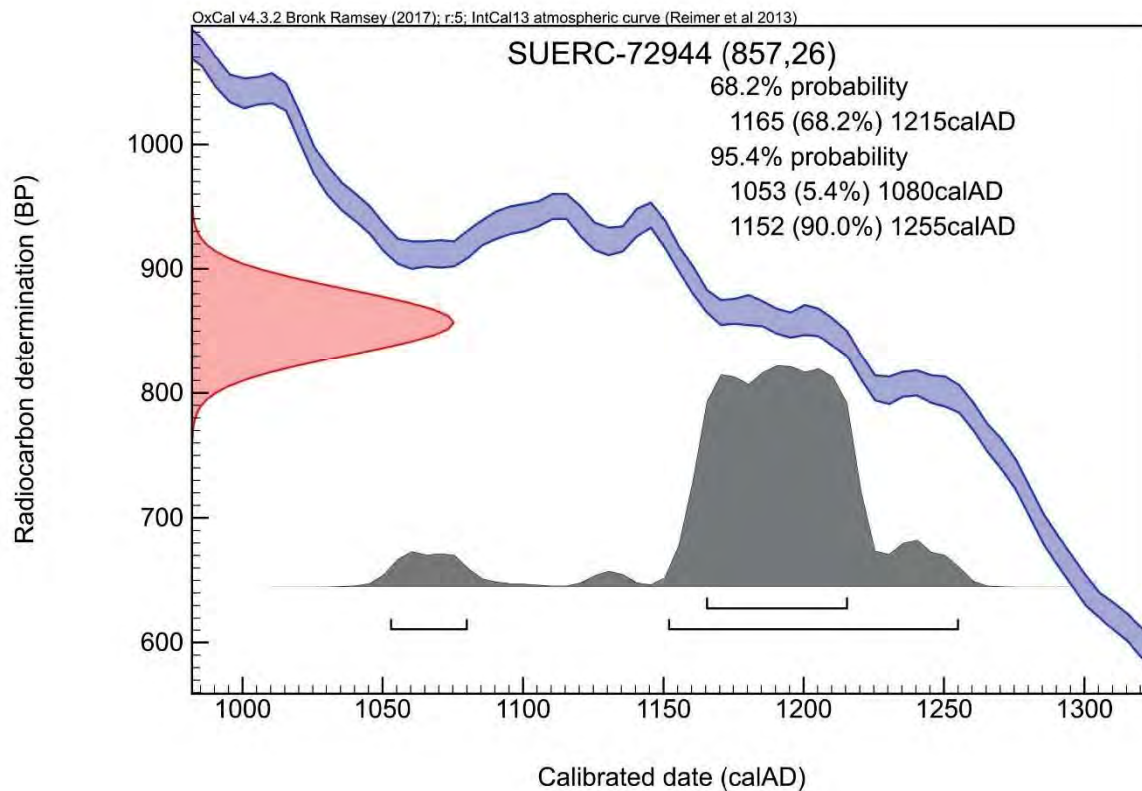


The University of Glasgow, charity number SC004401



The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC003338

Calibration Plot



APPENDIX C ENVIRONMENTAL REPORTS

C.1 Environmental Samples

by Julia Meen

Introduction

Eight samples were taken for the recovery of environmental remains during archaeological evaluation works on the route of the proposed Flood Alleviation Scheme in Oxford. Of these, one sample (sample 1000) was taken from the fill of a suspected palaeochannel, one (sample 1001) from an alluvial deposit encountered in Trench 3, two samples (1002 and 1003) were taken from the fills of a road-side ditch, and four samples (1004-1007) were taken from alluvial deposits overlying the road-side ditch.

Due to the deep stratigraphy present in the excavated trenches and the low lying position of the site on the Thames floodplain, waterlogged deposits were present. The anoxic conditions present in permanently waterlogged deposits inhibit decay so that a wide range of organic remains may potentially be preserved. Therefore, sampling was undertaken with the aim of assessing preservation of waterlogged plant macrofossils and insect remains as well as plant remains preserved by charring.

Methodology

For each sample, a 1L subsample was processed for waterlogged remains using the 'wash-over' technique. The flot and residue for each sample were collected separately on 250µm mesh and retained wet in sealed plastic bags. For those samples where initial inspection of the flot suggested that waterlogged remains were preserved, a proportion of the remaining sample (5 to 9 litres) was retained in case further work is required. The rest of the sediment from each sample was processed for charred plant remains by water flotation using a modified Siraf style flotation machine. The flots were collected on 250µm mesh and the heavy residues were sieved to 500µm and dried in a heated room, after which the residues were sorted by eye for artefacts and ecofactual remains.

The dried flots were scanned using a binocular microscope at approximately x15 magnification to establish presence of charred plant remains. A proportion of each waterlogged flot (approximately 5ml) was also scanned to establish presence of waterlogged plant remains and insects. A brief assessment of the molluscan assemblage was also made for each sample. Identifications of this material were made with reference to published guides and the comparative seed collection held at OAS. Plant nomenclature follows Stace (2010) and molluscan nomenclature follows Anderson (2005). Ecological interpretation of mollusc assemblages is based on Kerney (1999).

Results and Discussion

Results for waterlogged plant remains are given in Table 1, and for molluscs in Table 2.

Charred Plant Remains and Charcoal

Charcoal flecks were present in all samples, however, with the exception of sample 1004, no charcoal was of sufficient size to permit identification. Sample 1004 was seen to contain frequent black material, much of which was on closer inspection found to be coal/clinker; however, the small quantity

of charcoal also present included one larger fragment provisionally identified as beech (*Fagus sylvatica*). Sample 1007 contains a single charred grain of wheat (*Triticum* sp.).

Waterlogged Plant Remains and Molluscs

Sample 1000, from the fill 1067 of a palaeochannel 1044, was composed predominately of wood fragments, grass fragments and other plant stems. Insect remains were frequent and well preserved. Waterlogged seeds are also well preserved, with a mixture of waterside and grassland/waste ground taxa represented. Snails were also present.

Sample 1001, from an alluvial layer, was very poor for organic remains, with no identifiable plant remains or insects, although a small number of snails were preserved.

Both samples from the fills of the road-side ditch (samples 1002 and 1003) showed excellent preservation for waterlogged plant remains and for insects. The flots from both samples were predominately composed of plant stem material and wood fragments, and well-preserved wild seeds were abundant. Insects were mostly Coleoptera (beetles) and Acari (mites). Both deposits contained taxa indicative of damp ground, such as sedge (*Carex* sp.), gypsywort (*Lycopus europaeus*), waterplantain (*Alisma* sp.) and crowfoot (*Ranunculus* subgenus *Batractium*), but also contained a high proportion of taxa indicative of grassland or waste ground. These included several species of thistle (including *Sonchus asper*, *Cirsium arvense* and *C. vulgare*), plantains (cf *Plantago major* and *P. media*), vervain (*Verbena officinalis*) and foxglove (*Digitalis* sp.). No cultivated taxa were observed in the deposits, although some of the wild seeds, such as *Raphanus raphanistrum* (wild radish), may be found in association with cultivated ground.

Although there are many similarities in the seed assemblages from the two ditch fills, it is notable that the lower fill (sample 1003) contains very frequent occurrences of henbane (*Hyoscyamus niger*), common chickweed (*Stellaria media*) and particularly dock (*Rumex* sp), which is abundant both as well-preserved perianths and as fruits. Another significant difference is that whilst snails are common from the middle fill (sample 1002), they are almost absent from the lower fill. The snails from the middle fill are mostly either freshwater taxa associated with standing or slow-moving water (*Planorbis planorbis*, *Bithynia tentaculata*, *Radix balthica*) or terrestrial taxa that can be indicative of 'swamp' conditions when found in association with freshwater molluscs (*Vallonia* sp, *Carychium* sp.). A similar range of species was found in borehole samples from the Oxford floodplain taken as part of the current project (Meen 2016), and from studies of modern snails on the Oxford floodplain (Robinson 1988).

The remaining four samples were from layers of alluvium sealing the road-side ditch. Sample 1004 contained few organic remains in its waterlogged subsample, although single non-charred seeds of sun spurge (*Euphorbia helioscopia*) and probable pale persicaria (*Persicaria* cf *lapathifolia*) were recovered from the charred flot. Both species are indicative of waste or cultivated ground. Snails were present in fairly low numbers in this sample, but included both terrestrial and aquatic taxa.

Sample 1005 showed a far more limited range of waterlogged remains, with only seeds of rush (*Juncus* sp) observed, although these were abundant. Insect remains were present in small numbers although were often fragmented. Snails however occurred very frequently in this sample, with a range of taxa that includes those of slowly flowing water (*Bithynia tentaculata*, *Valvata piscinalis*), those which commonly inhabit streamside vegetation (*Succinea/Oxyloma*) and terrestrial species suggestive of sheltered grassland or woodland habitats (*Cochlicopa* sp, *Discus rotundatus*). Such a mixture is not

uncommon in alluvial deposits, which can be expected to include both taxa living on the floodplain and those washed in from elsewhere in the stream catchment.

Sample 1006 was fairly poor for preservation of organic remains, with only a small number of waterlogged seeds and snails present. The deposit which this seals, however, from the very top of the road-side ditch (sample 1007), shows good preservation, with a range of waterlogged seeds present as well as frequent, well preserved insect remains. The plant remains are similar in character to those recovered from the lower fills of the ditch. The snail assemblage includes *Theodoxus fluviatilis*, a species indicative of flowing, well-oxygenated water.

Conclusions and Recommendations

Although found only in small quantity, the presence of charred material in the samples demonstrates that conditions at the site are suitable for the preservation of such material, and gives an indication that human activity was occurring in the vicinity.

The presence of abundant, extremely well preserved waterlogged remains in many of the sampled contexts from this site, particularly from the sealed deposits of the road-side ditch, demonstrates that conditions are suitable for the preservation of waterlogged plant remains, insects and snails. The ditch samples can provide valuable information about the local environment through which the road passed, and samples 1002 and 1003 in particular could be considered for further analysis. Although no obviously cultivated species were present in the samples, the excellent preservation means that, if further deposits of this type are encountered, more samples should be taken as they could potentially contain evidence of human activity on the floodplain. In particular, waterlogged evidence of flax retting dating to the Saxon period has been discovered at several floodplain locations around Oxford (Robinson 2003).

If radiocarbon dating of the ditch deposits is required, there is ample material in both samples 1002 and 1003. It is suggested that some of the larger seeds from sample 1002, such as *Ranunculus* sp, and some of the frequent fruits and perianths of *Rumex* sp. in sample 1003, would be most suitable for dating.

	Sample No.	1000	1002	1003	1005	1006	1007
	Context No.	1067	1088	1089	1074	1080	1084
	Sample Volume	1L	39L	1L	1L	1L	1L
	Feature Type	Palaeo-channel	Middle fill of road-side ditch	Lower fill of road-side ditch	Alluvium	Alluvium	Alluvium
<i>Ranunculus acris/repens/bulbosus</i>	Meadow/Creeping/ Bulbous Buttercup	*	*	*			*
<i>Ranunculus</i> subgenus <i>Batrachium</i>	Crowfoot	*	*	*		*	
<i>Lathyrus/Vicia</i> type	Pea/Vetch		*				
<i>Potentilla anserina</i> L.	Silverweed			*			
<i>Potentilla</i> sp.	Cinquefoil	*	*				*
<i>Urtica dioica</i> L.	Common Nettle	*		*			*
<i>Hypericum</i> sp.	St John's-wort			*			
cf <i>Raphanus raphanistrum</i> L.	Wild Radish		*				
<i>Persicaria</i> sp.	Knotweed		*	*			
<i>Polygonum</i> sp.	Knotgrass	*	*				
<i>Rumex</i> sp.	Dock		*	*			
<i>Stellaria media</i> (L.) Vill.	Common Chickweed	*		*			
cf <i>Cerastium</i> sp.	Mouse-ear		*				
cf <i>Dianthus</i> sp.	Pinks			*		*	
<i>Chenopodium</i> sp.	Goosefoot	*	*				
<i>Hyoscyamus niger</i> L.	Henbane		*	*		*	*
<i>Digitalis</i> sp.	Foxglove		*				
cf <i>Plantago major</i> L.	Greater Plantain	*		*			*
cf <i>Plantago media</i> L.	Hoary Plantain		*				
<i>Lycopus europaeus</i> L.	Gypsywort		*	*			*
<i>Mentha</i> sp.	Mint	*	*	*			
<i>Verbena officinalis</i> L.	Vervain		*	*			*
<i>Cirsium</i> cf <i>vulgare</i> (Savi) Ten.	Spear Thistle		*				
<i>Cirsium</i> cf <i>arvense</i> (L.) Scop	Creeping Thistle		*				
<i>Cirsium</i> sp.	Thistle			*			*
<i>Leontodon</i> sp.	Hawkbit	*					
<i>Picris</i> sp.	Hawkweed Oxtongue	*					
<i>Leontodon/Picris</i> sp.	Hawkbit/ Hawkweed Oxtongue			*			
cf <i>Sonchus asper</i> (L.) Hill	Prickly Sowthistle			*		*	
Asteraceae	Daisy Family			*			
cf <i>Apium</i> sp.	Marshwort			*			
<i>Alisma</i> sp.	Water-plantain	*	*	*			*

<i>Juncus</i> sp.	Rush		*	*	*		*
<i>Carex</i> sp.	Sedge	*	*	*			*
Poaceae	Grass		*				

Table 1: Waterlogged plants from OXFLOD16

	1000	1002	1003	1004	1005	1006	1007
	1067	1088	1089	1069	1074	1080	1084
	Palaeo-channel	Middle fill of road-side ditch	Lower fill of road-side ditch	Alluvium	Alluvium	Alluvium	Alluvium
<i>Theodoxus fluviatilis</i>							*
<i>Valvata cristata</i>	*			*			
<i>Valvata piscinalis</i>					*	*	
<i>Bithynia tentaculata</i>	*	*			*	*	*
<i>Carychium</i> sp.	*	*		*	*	*	*
<i>Physa fontinalis</i>		*					
<i>Galba truncatula</i>	*	*		*	*	*	*
<i>Radix balthica</i>		*			*		
<i>Planorbis planorbis</i>		*		*	*	*	*
<i>Anisus leucostoma</i>	*	*		*		*	*
<i>Anisus vortex</i>		*		*			*
<i>Bathyomphalus contortus</i>	*	*		*	*	*	*
<i>Gyraulus albus</i>					*	*	*
<i>Succinea/Oxyloma</i>				*	*	*	*
<i>Cochlicopa</i> sp.					*	*	*
<i>Discus rotundatus</i>					*		
<i>Vallonia</i> sp.	*	*		*		*	
<i>Trochulus</i> sp.				*			
<i>Psidium</i> sp.		*	*	*		*	*

Table 2: Molluscs from OXFLOD16

C.2 Animal Bone

by Lee G. Broderick

Introduction

C.2.1 A total of 16 animal bones were recovered from the site, mostly from contexts which contained no datable material (Table 1). Most of the material was recovered through sampling (13 bones – 81.3%). With just 3 specimens being recovered by hand.

C.2.2 These hand-collected specimens were in moderate condition and belonged to large mammals, including domestic cattle (*Bos taurus taurus*). This was identified through part of a right-sided mandible from a probable post-medieval context (1021), although no datable evidence was found in it.

C.2.3 The samples taken during excavation contained, exclusively, amphibian bones, including both the common frog (*Rana temporaria*) and the common toad (*Bufo bufo*). Since this sample <1000> was taken from a palaeochannel (context (1067)) it should probably come as no surprise that the local environment was rather damp – it is difficult to read any more than this into these remains.

C.2.4 Although no further information can be gained from such a small sample of bones it is recommended that if further excavations take place on the site, the bones should be included in the full excavation report.

APPENDIX D GEOARCHAEOLOGY BOREHOLE LOGS

APPENDIX E BIBLIOGRAPHY

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OA, Oct 2016c Issue 4 Oxford Flood Alleviation Scheme (FAS), Old Abingdon Road, Oxford. Written Scheme of Investigation for an Archaeological Evaluation. Unpublished client report.

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APPENDIX F SITE SUMMARY DETAILS

Site name:	Oxford Flood Alleviation Scheme, Old Abingdon Road, Oxford
Site code:	OXFLOD16
Grid Reference	NGR SP 515 036
Type:	Evaluation
Date and duration:	Fieldwork took place between 31 st October and 8 th December 2016
Summary of Results:	<p>The evaluation which consisted of a 36m long borehole transect (at 1m centres), and four trenches within the live modern carriageway of Old Abingdon Road revealed evidence for, the truncated remains of 13th – 14th century medieval road surfaces and an associated although earlier roadside ditch, early and later post-medieval road surfaces, including an early 17th to 18th century phase of major rebuilding, plus the remains of a stone structure, probably a bridge/culvert abutment of medieval or post-medieval date associated with historic southern route to and from Oxford survive within the route of the proposed new Oxford FAS culverts.</p> <p>Un-truncated natural gravel levels to the southwest of Trench 2 were covered by robust alluvial/colluvial deposits. These overlying deposits were absent in the northeastern half of the site.</p> <p>Medieval archaeology survived under the northern side of the modern carriageway. The northern edge of a potential road surface encountered at 53.60m OD contained pottery dated to 1175-1350. This had encroached over the fills of an earlier NE-SW aligned linear feature, probably a roadside ditch, whose lowest fills yielded a C14 date (SUERC-72944) of 1165 – 1215 calAD (68.2%), and uppermost fills yielded pottery that dated to 1225-1400. Potentially contemporary similar surfaces, which did not yield any dating evidence, were identified under the southern side of the modern carriageway overlying the alluvium/colluvium at the southeastern end of the site.</p> <p>Part of an ashlar Wheatley limestone block structure with a rubble core only surviving to 2-3 courses in height, was probably an abutment for a bridge/culvert over an adjacent NW-SE orientated channel, and is similar to the Scheduled culverts further to the northeast, may be of medieval date. No remains of an arch survived its' later demolition.</p> <p>Following a period of alluviation, post-medieval road surfaces and levelling deposits were laid within a large construction cut lined on its northern edge by large kerb stones (possibly the base of a roadside stone parapet). An iron horseshoe that dated to the late 17th – early 18th centuries was recovered from the earliest of these deposits. It is possible that the bridge or culvert structure revealed in Trench 2 was constructed over a NW-SE aligned palaeochannel during this phase of activity. This activity removed any surviving medieval archaeology present under much of the southern carriageway of the modern road. It extended to the northeast beyond the limits of the investigations, and possibly extended beyond Trench 2 to the southeast.</p> <p>The stone kerbing/parapet appears to have defined the northern limit of the causeway until relatively late in the sequence, with only the latest</p>

surfaces extending over and to the north of it. This may have been associated with the construction and remodeling of the road associated with the construction of the railway bridge in the first half of the 19th century.

Location of archive:

The archive is currently held at OA, Janus House, Osney Mead, Oxford OX1 0ES, and will be deposited with Oxfordshire Museums Service in due course, under the following accession number: OXCMS:2016.200.

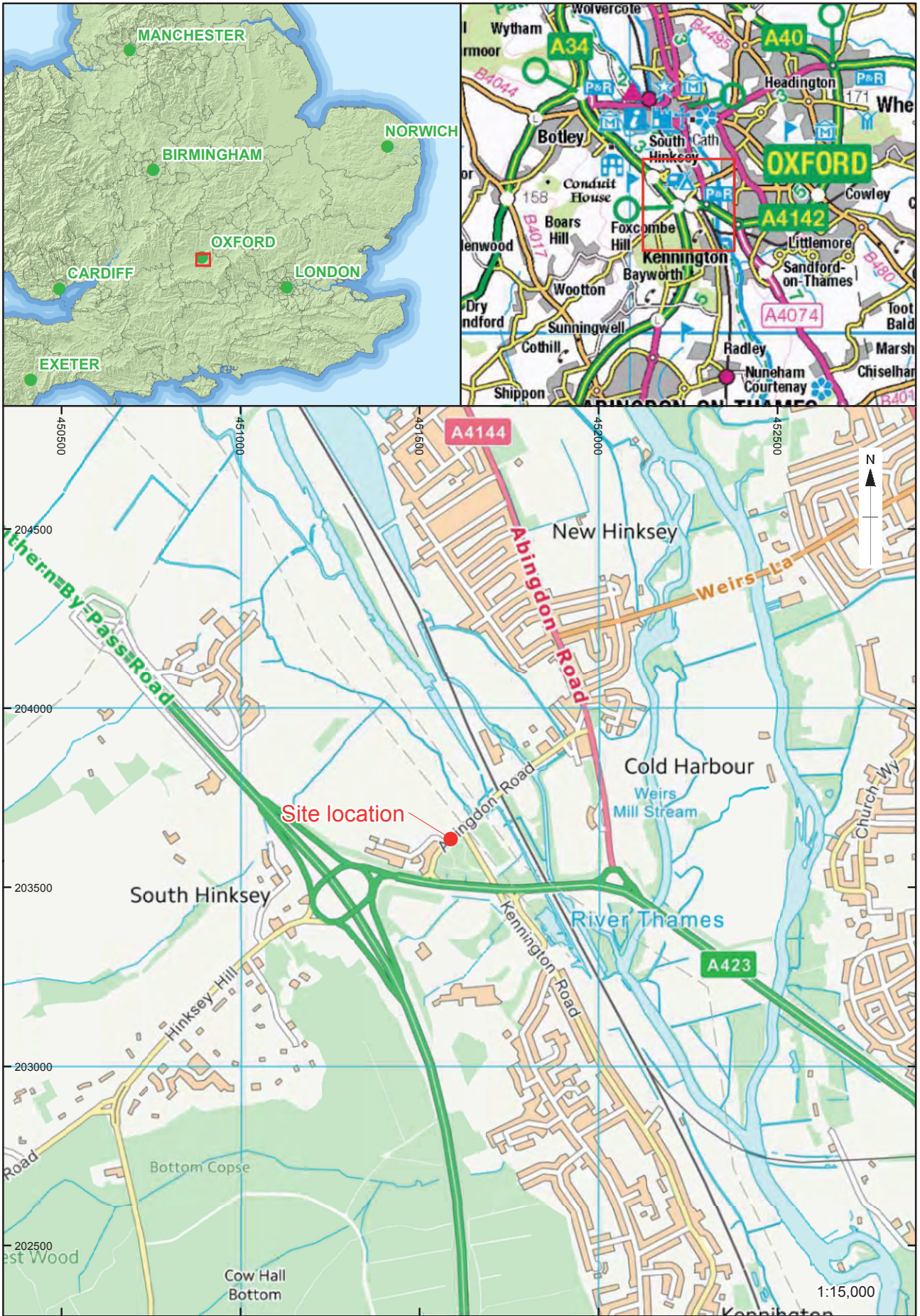


Figure 1: Site location

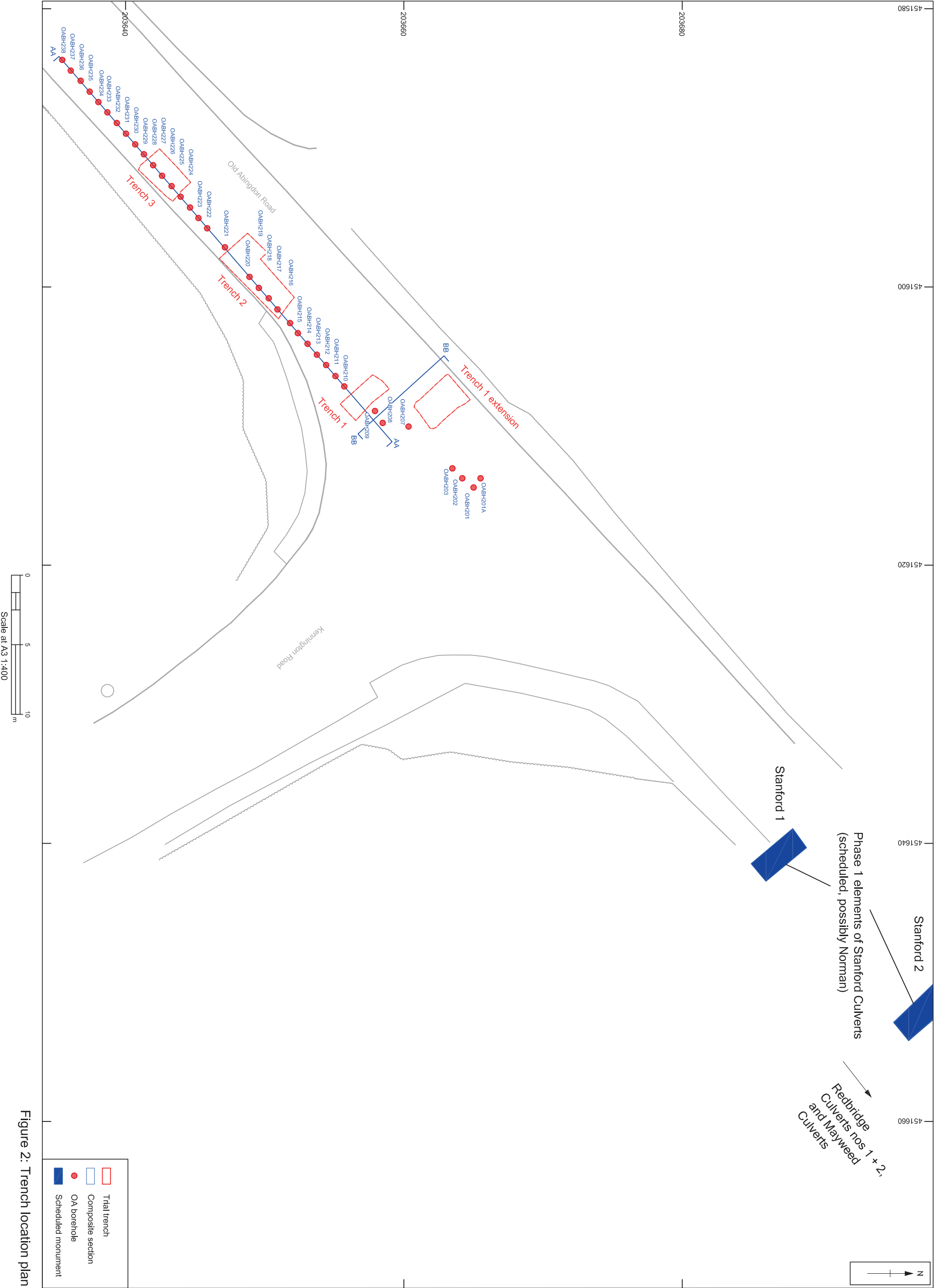


Figure 2: Trench location plan

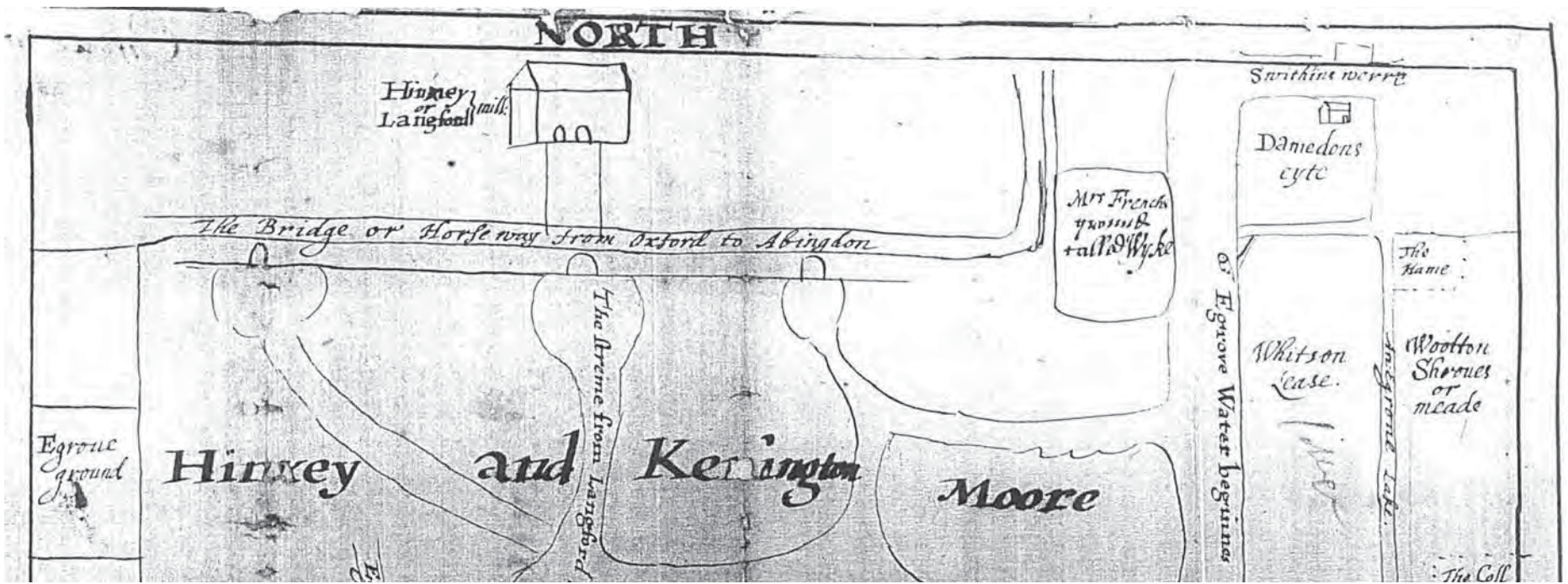


Figure 3a: 16-17th century plan by New College Oxford (extract)

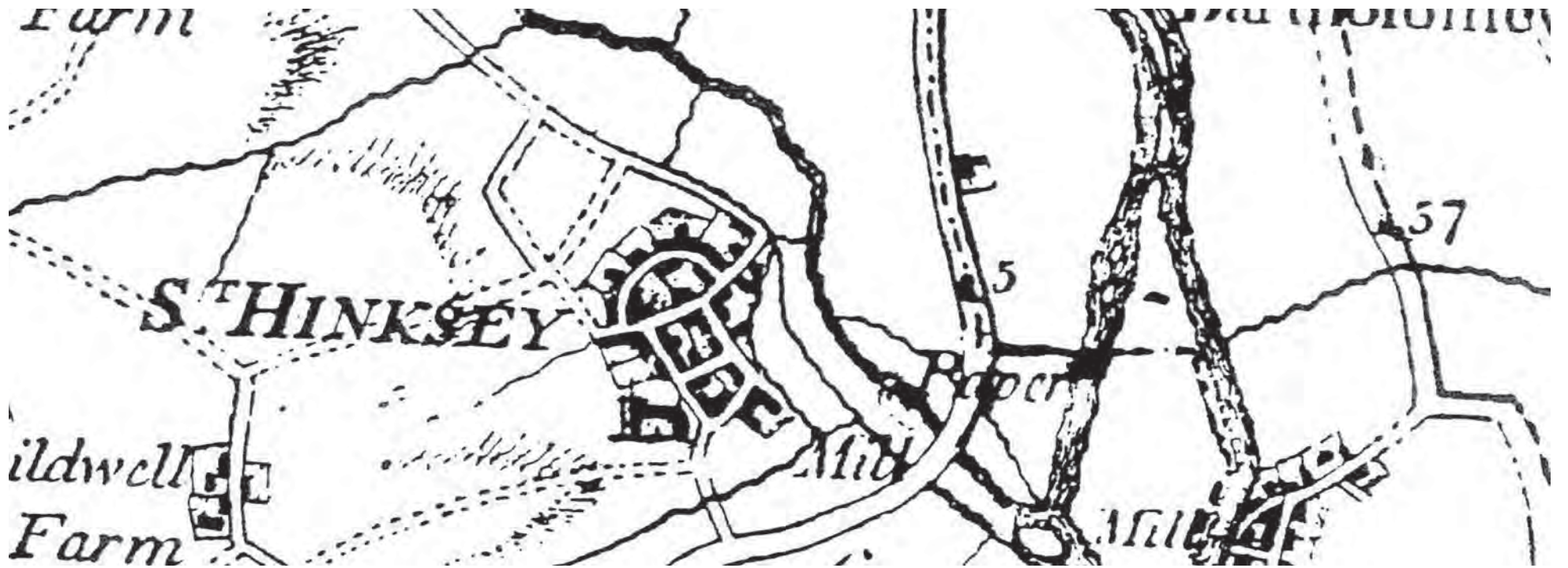


Figure 3b: 1777 Andrews and Durys Plan Oxford (extract)

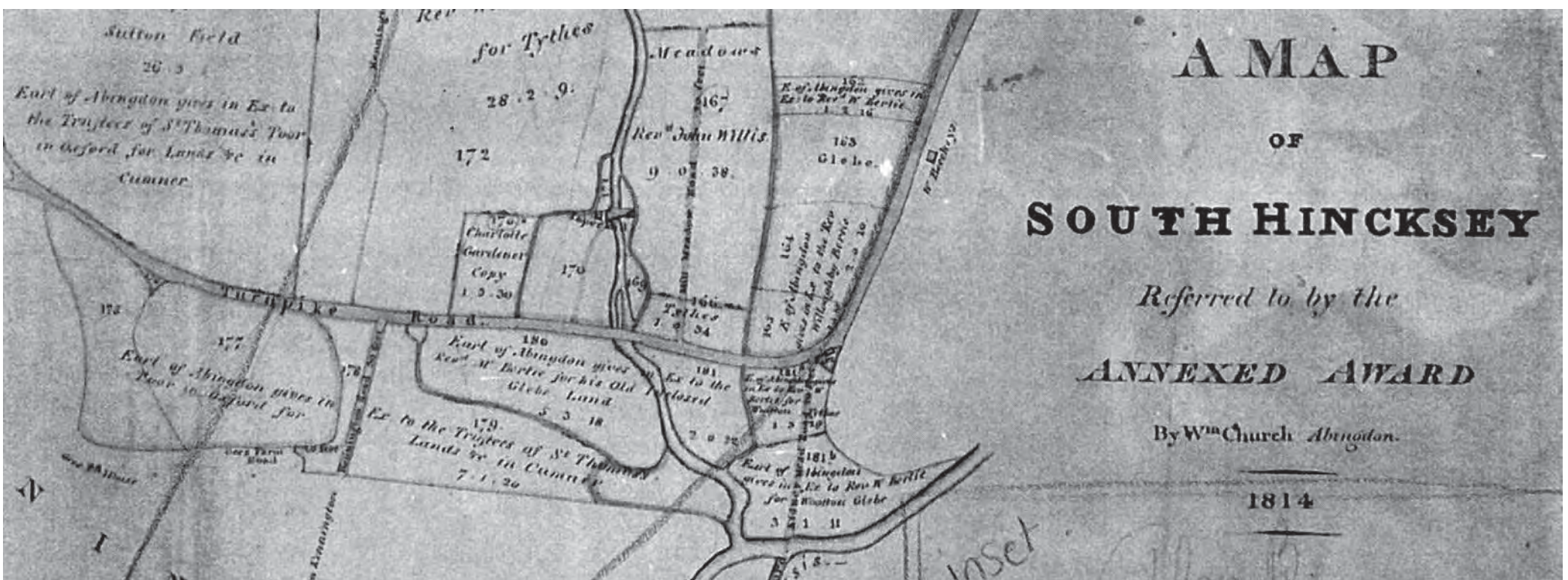


Figure 3c: 1814 enclosure plan of South Hinksey (extract)

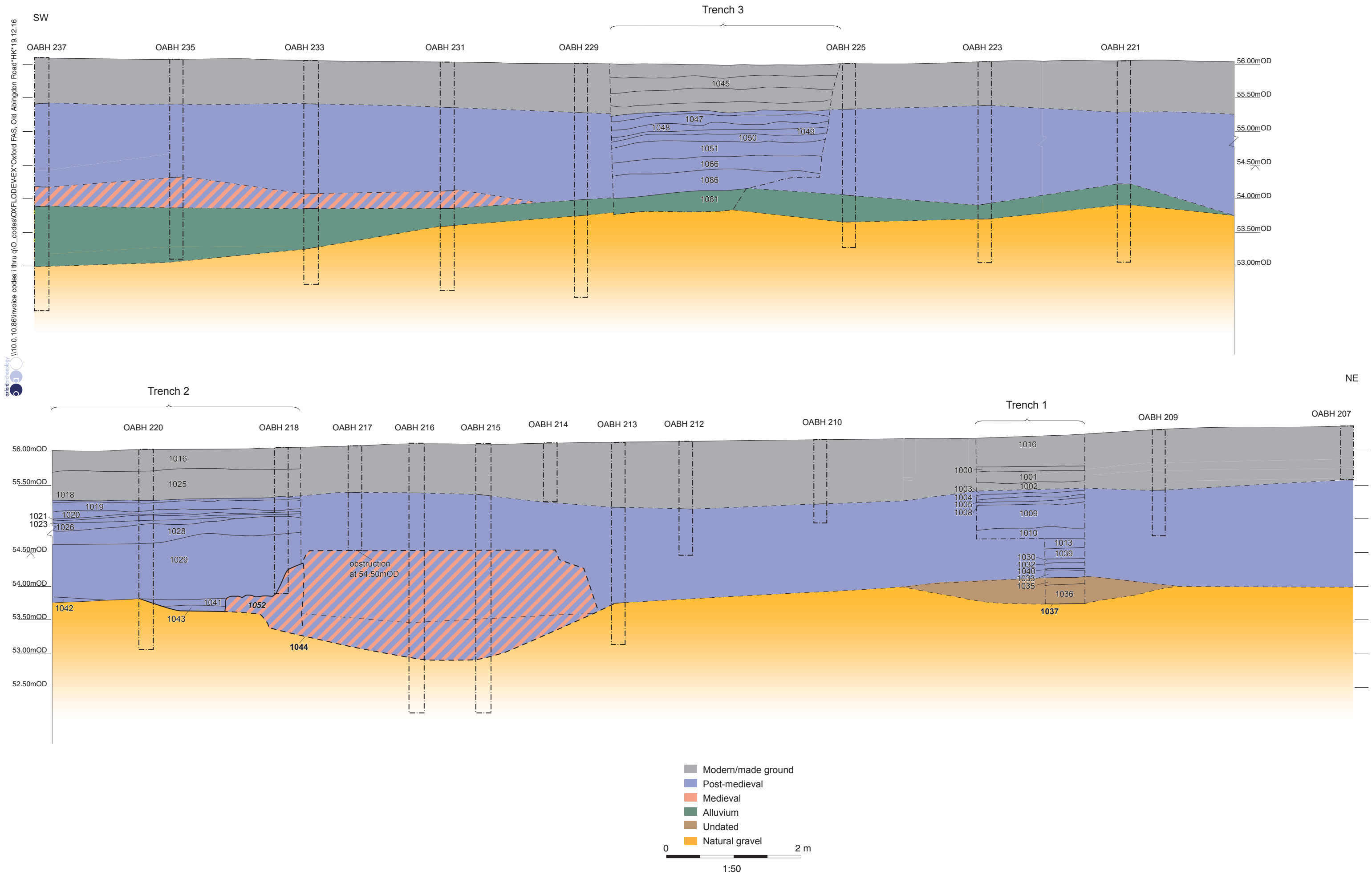


Figure 4: Section AA, long section SW – NE through boreholes and Trenches 1, 2 and 3

Section BB

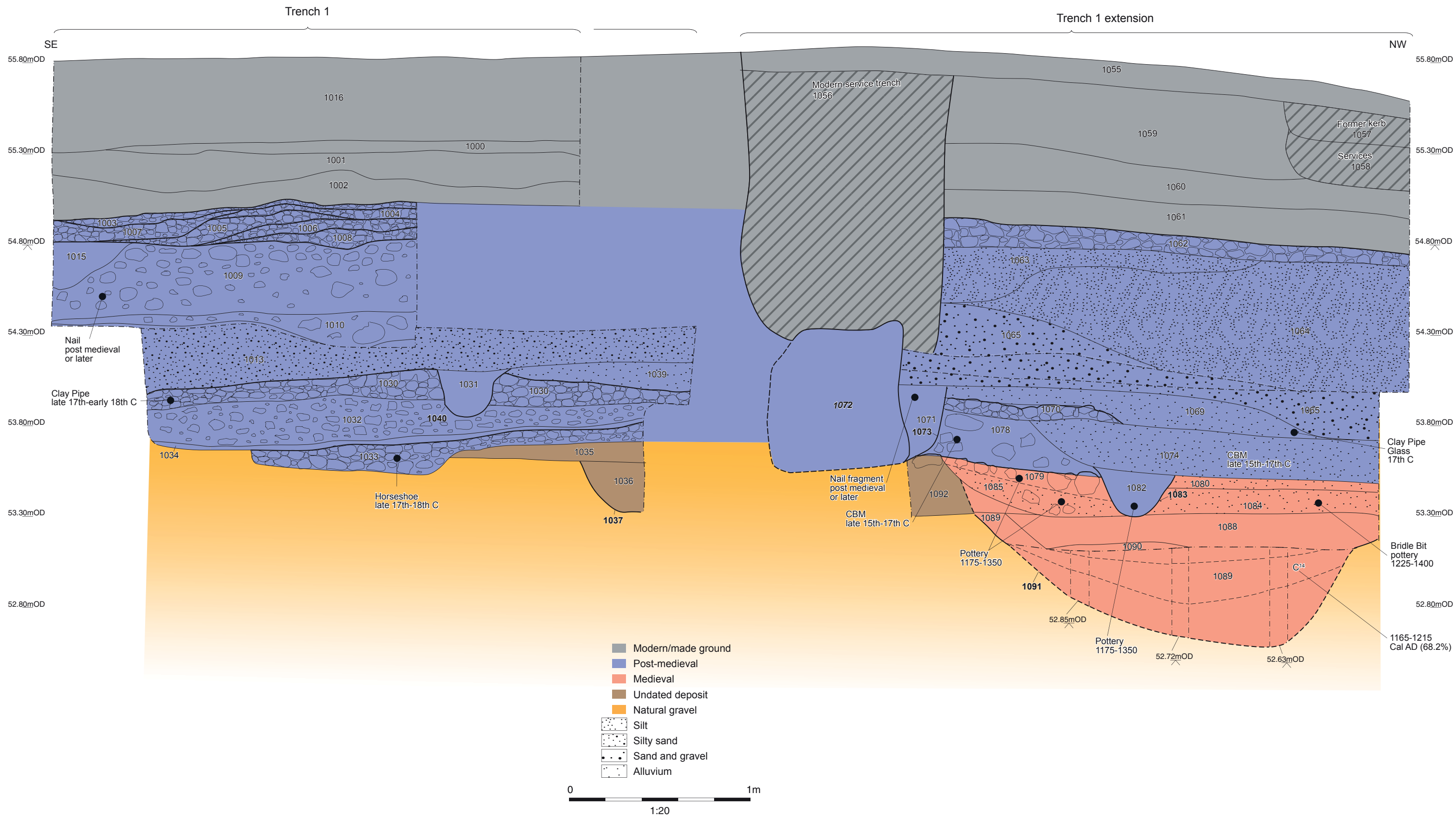


Figure 5: Section BB, composite section SE - NW through Trench 1, and Trench 1 Extension

Contains Ordnance Survey data supplied by client

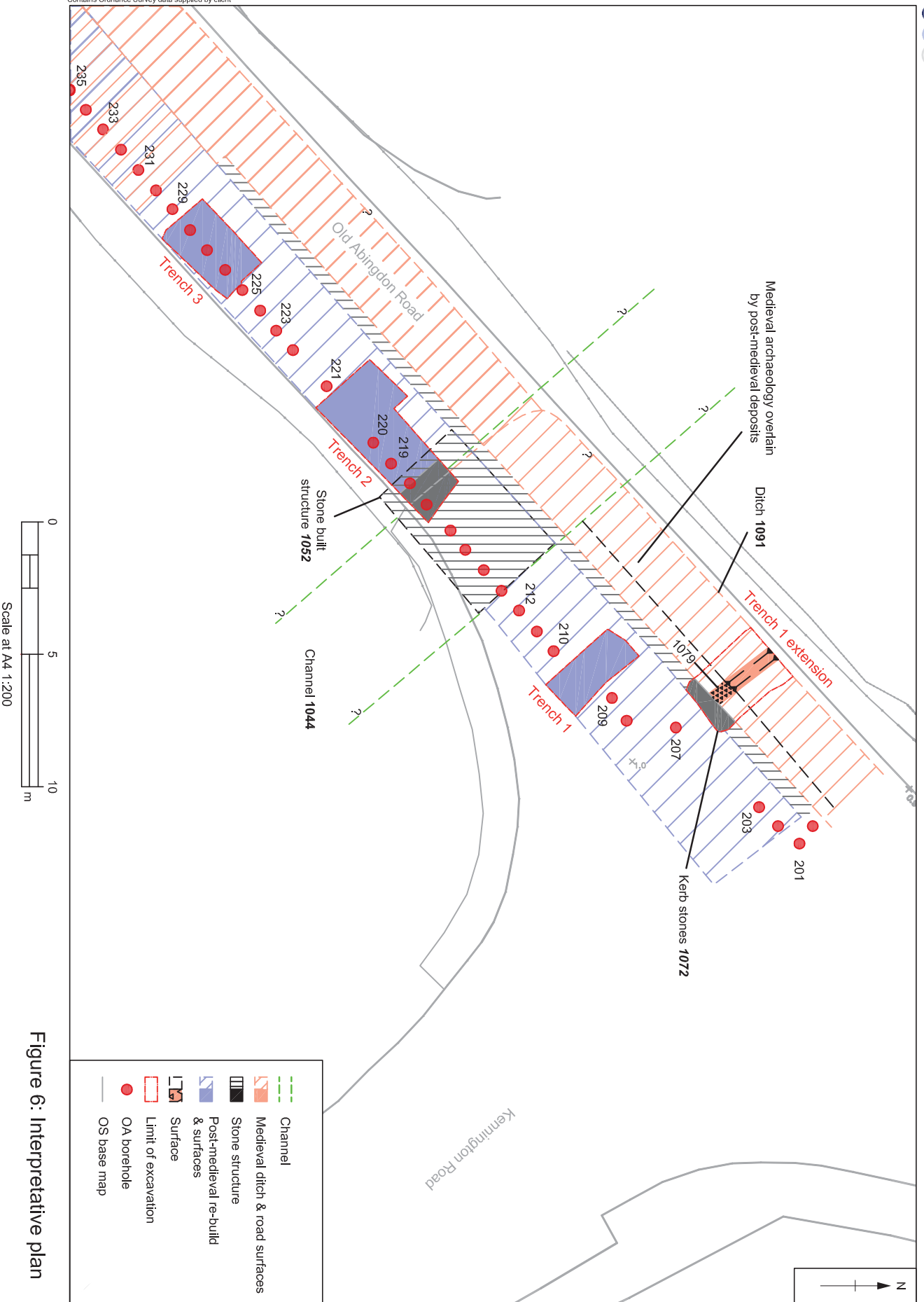


Figure 6: Interpretative plan

CHECKED BY: CP*16/01/2017



Plate 1: Trench 1, surface 1030, water sits in possible wheel rut 1040, and overlying layer 1013 to left. Scale 1m, looking north-west



Plate 2: Trench 1, surface 1033. Scale 1m, looking north-west



Plate 3: Trench 1, showing general nature of post-medieval road surfaces. Scale 1m, looking north-east



Plate 4: Trench 1 (extension), surface 1079 overlying linear feature 1091, showing kerb stones 1072. Scale 1m, looking south



Plate 5: Trench 1 (extension), post excavation, showing linear feature 1091, with kerb stones 1072 toward bottom left of photograph. Scale 1m, looking south-west



Plate 6: Trench 2, structure 1052. Scale 1m, looking north-east



Plate 7: Trench 2, showing structure 1052 with structure 1068 behind, overlying palaeochannel 1044. Scale 1m, looking north

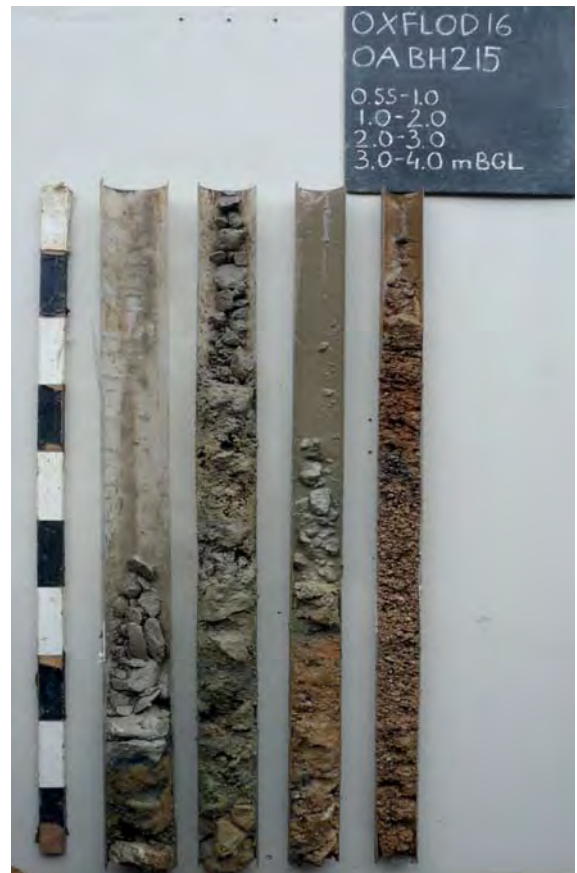


Plate 8. Borelohes OABH213, OABH215, OABH216 and OABH220.



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