

M1 Widening Redbourn Hertfordshire



Archaeological Watching Brief Report



Oxford Archaeology

October 2005

Client: Balfour Beatty Skanska

Issue N^o: 1

OA Job N^o: 2775

NGR: TL 095 125

Client Name: Balfour Beatty Skanska

Client Ref No:

Document Title: M1 Widening, Redbourn, Hertfordshire

Document Type: Watching Brief

Issue Number: 1

National Grid Reference: TL 095 125

Planning Reference:

OA Job Number: 2775
Site Code: REM1W 05
Invoice Code: REM1WWB
Receiving Museum: St. Albans Museum Service
Museum Accession No: TBC

Prepared by: Mike Sims
Position: SWD Project Supervisor
Date: 7th September 2005

Checked by: Dan Dodds
Position: Head of Small Works
Date: 15th September 2005

Approved by: Nick Shepherd Signed.....
Position: Head of Fieldwork
Date: 19th September 2005

Document File Location H:\PROJECTS\Hertfordshire HE\6068 M1 widening
Redbourn WB\wbREP.doc

Graphics File Location Servergo:/oapubs
1_RtoZ*REM1W05*REM1WWB*M1 Widening,
Redbourn, Hertfordshire*jm*05.08.05

Illustrated by Julia Moxham

Disclaimer:

This document has been prepared for the titled project or named part thereof and should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authority of Oxford Archaeology being obtained. Oxford Archaeology accepts no responsibility or liability for the consequences of this document being used for a purpose other than the purposes for which it was commissioned. Any person/party using or relying on the document for such other purposes agrees, and will by such use or reliance be taken to confirm their agreement to indemnify Oxford Archaeology for all loss or damage resulting therefrom. Oxford Archaeology accepts no responsibility or liability for this document to any party other than the person/party by whom it was commissioned.

Oxford Archaeology
© Oxford Archaeological Unit Ltd 2005

Janus House
Osney Mead
Oxford OX2 0ES
t: (0044) 01865 263800
f: (0044) 01865 793496

e: info@oxfordarch.co.uk
w: www.oxfordarch.co.uk

Oxford Archaeological Unit Limited is a Registered Charity No: 285627

M1 Widening, Near Redbourn, Hertfordshire

ARCHAEOLOGICAL WATCHING BRIEF REPORT

CONTENTS

Summary	1
1 Introduction	1
1.1 Location and scope of work	1
1.2 Geology and topography	1
1.3 Archaeological and historical background	1
2 Project Aims and Methodology	4
2.1 Aims	4
2.2 Methodology	4
3 Results	4
3.1 Description of deposits	4
3.2 Finds	6
3.3 Palaeo-environmental remains	6
4 Discussion and Conclusions	6
Appendix 1 Archaeological Context Inventory	7
Appendix 2 Bibliography and references	7
Appendix 3 Summary of site details	8

LIST OF FIGURES

- Fig. 1 Site location
- Fig. 2 Area of watching brief
- Fig. 3 Strip map showing location of sections 1 and 2
- Fig. 4 Strip map showing location of sections 3 and 4
- Fig. 5 Strip map showing area of topsoil stripping and location of sections 5 and 6
- Fig. 6 Sections 1-6

SUMMARY

In July 2005 Oxford Archaeology (OA) carried out an archaeological watching brief between Junctions 8 and 10 of the M1 motorway near Redbourn, Hertfordshire (NGR: TL 094 075 to TL 088 184). The work was commissioned by Balfour Beatty Skanska in advance of groundworks associated with proposed widening of the M1 motorway. The watching brief revealed soils typical of modern agricultural practises, overlying natural deposits. A single probable Romano-British field drain was observed but no other features or deposits of archaeological significance were encountered during the course of the watching brief.

1 INTRODUCTION

1.1 Scope of work

1.1.1 In July 2005 Oxford Archaeology (OA) carried out an archaeological watching brief between Junctions 8 and 10 of the M1 motorway near Redbourn, Hertfordshire (NGR: TL 094 075 to TL 088 184). The work was commissioned by Balfour Beatty Skanska in respect of advance groundworks, including geo-technical pits, soil stripping and excavation of service trenches, associated with the proposed widening of the M1 motorway.

1.1.2 A specification for the watching brief was agreed with Balfour Beatty Skanska.

1.2 Location, geology and topography

1.2.1 The locations of the watching briefs are within an 11 km stretch of the M1 motorway running from Junction 8 (located at NGR: TL 094 075 and at a height of 135 m OD) to Junction 10 (located at NGR: TL 088 184 at a height of 155 m OD). All the areas of the watching briefs were situated within open countryside characterized by arable farming.

1.2.2 The conurbations of Hemel Hempstead and Redbourn encroach to within 300 m of the motorway, to the west and east respectively. The site occupies an area of approximately 165 hectares and the underlying geology is clay with flints overlying Middle Chalk (British Geological Survey Sheet No. 238).

1.3 Archaeological and historical background

1.3.1 The archaeological background to the watching brief has been prepared from the WSI for the proposed evaluation trenching along the route of the M1 widening scheme (OA 2005) and an abridged version is reproduced below.

1.3.2 An archaeological statement was produced as part of the Environmental Impact assessment (EIA) in September 1994 by St Albans Museum in association with Hertfordshire County Transportation Design services for the Highway Agency. Within a 500 m corridor of the scheme, approximately 16 sites were identified in the SMR and the records of the St. Albans Museum. In addition, a walk over survey, undertaken as part of the EIA, identified through surface collection and test pits a further 31 sites, indicated by the presence of archaeological finds (mostly medieval and later building materials, prehistoric chipped stone and pottery). Twenty three of these latter sites are considered to have represented very limited activity. Only a summary of the archaeological potential is presented below.

Early Prehistoric

- 1.3.3 Evidence for early Prehistoric activity is limited to artefact scatters and individual findspots (see details below).
- 1.3.4 The earliest evidence of human activity is represented by scatters of flint artefacts. Palaeolithic handaxes have been discovered at Slip End and in the vicinity of Redbourn.
- 1.3.5 A multi-period deposit of struck flints was found during a watching brief on Junction 9 of the motorway. It included Mesolithic implements as well as Neolithic and Bronze Age finds. This suggests continued occupation of certain sites along the scheme.
- 1.3.6 Evidence of a Neolithic presence is provided by the discovery of a polished Neolithic axe near Redbourn. Other undated finds suggest a dispersed occupation during the period.
- 1.3.7 A Bronze Age metal hoard found near Westwick Farm features on the SMR .

Iron Age

- 1.3.8 There is some evidence for Iron Age remains along the scheme, mostly localised to two areas.
- 1.3.9 The area between Blunts Lane and Bedmond Lane was identified in the St Albans District Plan as being of high archaeological potential due to scattered flint finds and suggested Iron Age enclosures revealed in aerial photographs. Three enclosures were destroyed in the original construction of the M1.
- 1.3.10 An Iron Age earthwork, the Aubreys, lies adjacent to, and has been clipped by, the M1 on its eastern boundary. The Aubreys is a Scheduled Ancient Monument (SAM) formed by a ditch and bank enclosure that has not been conclusively dated. It is commonly referred to as an Iron Age hillfort, though topographically it is positioned in the decline of the River Ver valley. Flint finds from the ditches have been dated to 4000BC, and the site seems to have been abandoned by the Roman era attesting to the multi-period occupation of the site. The results of trial trenching related to the scheme

have led to the suggestion that the defences date from approximately 300BC. A minor and inconclusive excavation occurred in the 1930s. Trial trenching and a geophysical survey have taken place in advance of the scheme and have established the continuance of the outer defences of the Aubreys.

- 1.3.11 The Iron Age is also represented along the scheme by a number of ringed enclosures, ditches and cropmarks.

Romano-British

- 1.3.12 The scheme lies close to St Albans (Roman Verulamium), and so Roman sites occur with frequency in the area. The NMR lists four Roman roads that are known or thought to exist along the scheme, or to cross it. The A5 follows the course of Watling Street and intersects with the M1 as well as the River Ver at Junction 9.
- 1.3.13 A Roman settlement has long been thought to exist in the vicinity of Junction 8 and finds of Roman building materials provide evidence of some kind of Roman activity on the site. Other archaeological evidence at the same site suggests a continuity of settlement and reuse of materials.
- 1.3.14 A Roman villa is thought to exist in the vicinity of Potters Crouch based on several Roman finds in a field immediately east of the current settlement. Cropmarks at Annables Farm are believed to represent a Roman temple complex.

Medieval

- 1.3.15 The medieval period is also well represented along the route. Many of the farmsteads and manorial complexes in the area have early medieval origins still evident in their fabric. Farming is the characteristic landuse of the area, reflected in the many farmsteads and ancient field boundaries.
- 1.3.16 Significant settlements close by the scheme also represent early medieval communities. Documentary evidence indicates the medieval origin of Potters Crouch as a centre of the pottery industry. Redbourn's medieval layout is also documented. The Grade I Listed Church of St Mary in Redbourn retains fabric from its origin around 1100.
- 1.3.17 The proliferation of medieval buildings along the route and the discovery of buried medieval archaeology mean that the existence of further unknown buried medieval remains is likely.

Post-medieval

- 1.3.18 The dominance of the agricultural economy continued into the post-medieval period, although in recent years the construction of the motorways and the expansion of London's satellite towns has changed the character of the area and has led to the growth of urban settlements in Hertfordshire such as Hemel Hempstead. Villages such as Redbourn have also expanded, this growth characterised by recent housing

estates. In themselves these changes are important in that they represent a time of significant development in Britain's 20th century cultural heritage.

2 PROJECT AIMS AND METHODOLOGY

2.1 Aims

- 2.1.1 To identify the presence or absence, extent, condition, character, quality and date of archaeological remains in the areas affected by the development.
- 2.1.2 To preserve by record any archaeological remains (if present) that the development may remove or damage within the impacted area.
- 2.1.3 To monitor all groundwork that may affect or reveal archaeological deposits. This included monitoring geo-technical pits, soil stripping and service trenches
- 2.1.4 To establish the eco-factual and environmental potential of archaeological deposits and features.
- 2.1.5 To make available the results of the investigation.

2.2 Methodology

- 2.2.1 The watching brief was conducted as a series of periodic site visits as work progressed, in order to observe and record the stratigraphy exposed.
- 2.2.2 Plans showing the location of all intrusive groundworks were prepared at a scale of 1:2500 (Figs. 2, 3, 4 and 5) and selected exposed sections were drawn at a scale of 1:20. Sections and any excavated features were photographed using colour slide and black and white print film. A general photographic record of the work was also made. Recording followed procedures detailed in the *OA Field Manual* (ed. D Wilkinson, 1992).

3 RESULTS

3.1 Description of deposits

Test Pit 1

- 3.1.1 This was located to the east of the motorway at Chainage 13+050 (Fig. 3), measured 4 m long by 0.6 m wide and was excavated to a depth of 4 m below ground level.
- 3.1.2 The natural, an orange-brown sand containing flint and chalk flecking (101) was encountered at 0.4 m below ground level. This was sealed by a 0.4 m thick layer of grey brown sand silt (100), the present day ploughsoil (Fig. 6, section 1).

Test Pit 2

- 3.1.3 This was located east of the motorway at Chainage 13+110 (Fig. 3) and measured 4 m long, 0.6 m wide and was excavated to a depth of 4 m below ground level.

- 3.1.4 At 0.8 m below ground level a natural orange clay (202) containing flint and chalk flecking was encountered. This was overlaid by a 0.55 m thick layer of brown sand-silt (201) which produced medium sized angular and sub-angular flints suggesting that this may be a layer of colluvium. Overlying this was a 0.25 m deep layer of grey-brown sand silt (200), the modern ploughsoil (Fig. 6, section 2).

Test Pit 3

- 3.1.5 This was located 100 m north of Junction 10 on the east side of the motorway, at Chainage 16+150 (Fig. 4). The pit measured 2.5 m long by 0.6 m wide and was excavated to a depth of 4 m below ground level.
- 3.1.6 A layer of natural sandy clay (301) producing flint and gravels was encountered at a depth of 0.3 m below ground level. This was sealed by a 0.3 m thick layer of grey-brown sandy silt (300), the present day ploughsoil (Fig. 6, section 3).

Test Pit 4

- 3.1.7 This was located at Chainage 16+330 (Fig. 4) on the eastern side of the motorway and measured 3.5 m long, by 0.6 m wide and was excavated to a depth of 4 m below ground level.
- 3.1.8 A brown sandy clay (402), a natural deposit producing flint nodules, was encountered at a depth of 0.7 m below ground level. This was sealed by a 0.4 m deep layer of brown clay silt (401) which contained flint fragments and probably represents a layer of colluvium. Overlying this was a 0.3 m thick layer of grey-brown clay silt (400), the present day ploughsoil (Fig. 6, section 4).

Topsoil stripping

- 3.1.9 Topsoil stripping for easements was monitored at 2 locations between Flamsteadbury Lane and the Lane to Nicholl's Farm, Chainages 9+600 and 10+200 (Fig. 5) respectively. The depth of stripping was such that the operation was wholly within the layer of the topsoil, a grey-brown sandy silt (1000) and no underlying strata were exposed.

Service trenching

- 3.1.10 Trenching of up to 1.8 m in depth, was monitored along the side of the easement mentioned above and in a spur connecting to Pylon PBB73. At Chainage 9+750 (Fig. 5) a layer of weathered chalk, (1004), was encountered at 0.35 m below ground level, this tipped down towards the north becoming overlain by an orange-brown sandy clay colluvium (1001) at approximately Chainage 10+050. This was overlain by a 0.35 m thick layer of the grey-brown sandy silt topsoil (1000) (Fig. 6, section 5). At Chainage 10+170 (Fig. 5) the underlying colluvium 1001 was reached at a depth of 0.4 m below ground level. Appearing in both sections of the trench and cutting into the surface of 1001 was a east-west running, 0.8 m wide by 0.95 m deep linear cut (1002) (Fig. 6, section 6). This was filled by a dark orange-brown clay silt (1003) which contained many large flint fragments and many fragments of Romano-British

pottery. The profile of the feature and the concentration of flints at the base suggest that was a probable field drain or less likely, a field boundary ditch with a cleaning slot at the base. The top of the feature was overlain by a 0.45 m deep layer of topsoil 1000.

3.2 **Finds**

- 3.2.1 The only finds recovered were the 33 fragments of flint tempered pottery including a fragment of a comb decorated black ware from within fill 1003. The fabric and the profile of the rim on three of the sherds suggest a locally produced pottery of Romano-British date.

3.3 **Palaeo-environmental remains**

- 3.3.1 Because of the location of Ditch 1002 within a deep trench it was unsafe to collect samples of the Fill 1003 for analysis. No other deposits suitable for Palaeo-environmental sampling were encountered during the course of the watching brief.

4 **DISCUSSION AND CONCLUSIONS**

- 4.1.1 The vast majority of the watching brief encountered modern agricultural soils directly overlying natural deposits. The only archaeological feature encountered was the field drain of probable Romano-British date observed at Chainage 10+170. This sparseness of archaeological evidence would suggest that the area evaluated had always been predominately agricultural in nature. There is the possibility that ploughing has removed earlier shallow features however the lack of residual finds and the absence of truncated deeper features other than 1002 would mitigate against this.

APPENDICES**APPENDIX 1 ARCHAEOLOGICAL CONTEXT INVENTORY**

<i>Context</i>	<i>Type</i>	<i>Depth</i>	<i>Width</i>	<i>Comments</i>	<i> Finds</i>	<i>Date</i>
100	Layer	0.4 m	-	Modern ploughsoil	-	C20th
101	Layer	> 3.6 m	-	Probable colluvium	-	-
200	Layer	0.25m	-	Modern ploughsoil	-	C20th
201	Layer	0.55 m	-	Probable colluvium	-	-
202	Layer	> 3.2 m	-	Natural clay	-	-
300	Layer	0.3 m	-	Modern ploughsoil	-	C20th
301	Layer	> 3.7 m	-	Probable colluvium	-	-
400	Layer	0.3 m	-	Modern ploughsoil	-	C20th
401	Layer	0.4 m	-	Probable colluvium	-	-
402	Layer	> 3.3 m	-	Natural clay	-	-
1000	Layer	0.35 m	-	Modern ploughsoil	-	C20th
1001	Layer	> 1.5 m	-	Probable colluvium	-	-
1002	Cut	0.95 m	0.8 m	Probable field drain	-	C1st - C3rd
1003	Fill	0.95 m	0.8 m	Backfill of 1002	Pottery	C1st - C3rd
1004	Layer	> 1.5 m	-	Weathered chalk	-	-

APPENDIX 2 BIBLIOGRAPHY AND REFERENCES

IFA, 2001 *Standard and Guidance for Archaeological Watching Briefs*

OA 2005 *M1 Widening, Junctions 6a - 10, Hertfordshire: Written Scheme of Investigation for an Archaeological Evaluation*

OAU, 1992 *Field Manual* (ed. D Wilkinson)

APPENDIX 3 SUMMARY OF SITE DETAILS

Site name: M1 Widening, Redbourn, Hertfordshire

Site code: REM1W 05

Grid reference: TL 095 125

Type of watching brief: Machine excavation of test pits, service trenching and topsoil stripping

Date and duration of project: 16.06.05 to 14.07.05, 8 site visits

Area of site: 165 hectares

Summary of results: Modern agricultural soils overlying natural deposits, single Romano-British field drain.

Location of archive: The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with St. Albans Museum Service in due course.



Scale 1:50,000

Reproduced from the Explorer 1:25,000 scale by permission of the Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office © Crown Copyright 1999. All rights reserved. Licence No. AL 10005569

Figure 1: Site location



Map from drawing 5028253/TE/DR/GEO/004. Copyright Highways Agency/Balfour Beatty/Skanska

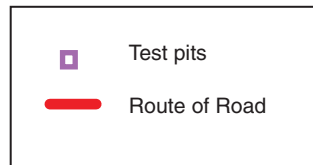
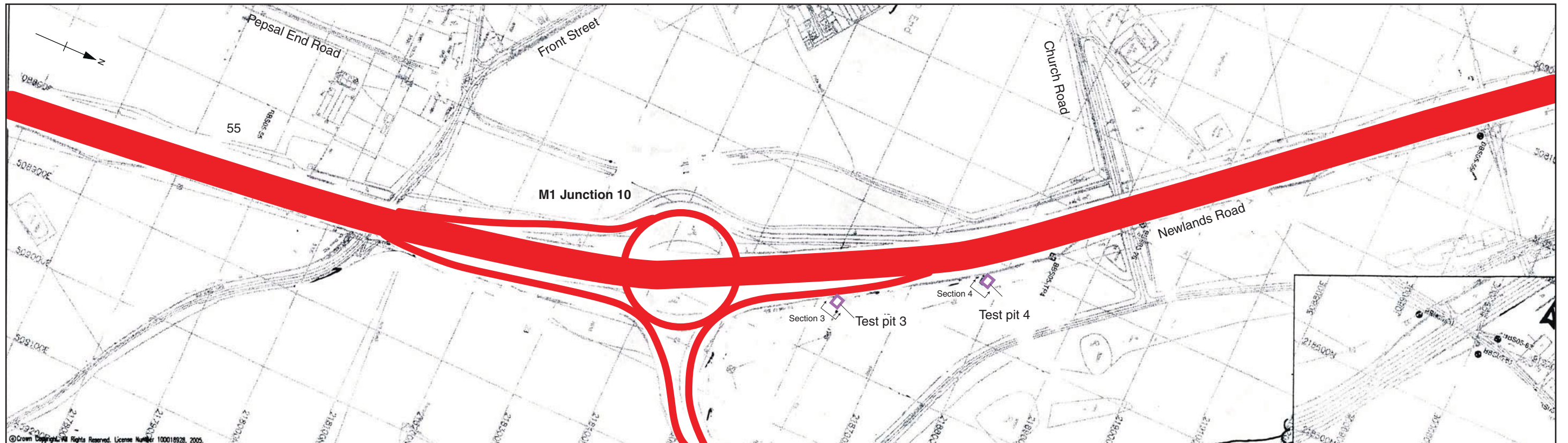


Figure 3: Strip map showing locations of sections 1 and 2



Map from drawing 5028253/TE/DR/GEO/004. Copyright Highways Agency/Balfour Beatty/Skanska

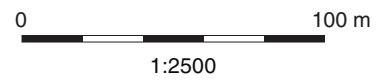
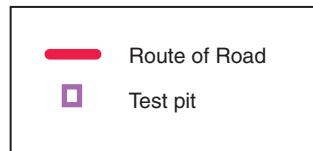
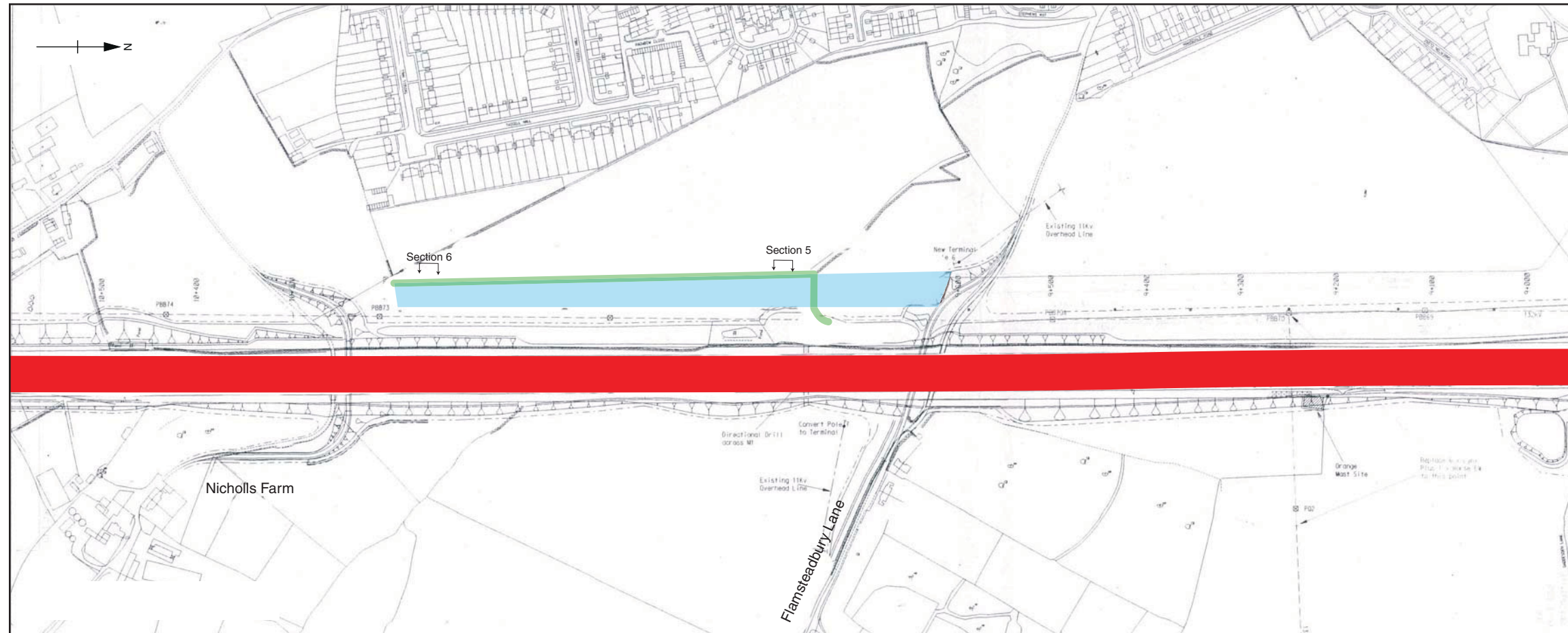


Figure 4: Strip map showing locations of sections 3 and 4



Map from drawing 5028253/TE/DR/GEO/004. Copyright Highways Agency/Balfour Beatty/Skanska

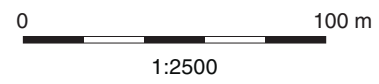
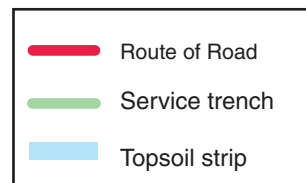


Figure 5: Strip map showing locations of sections 5 and 6

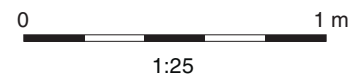
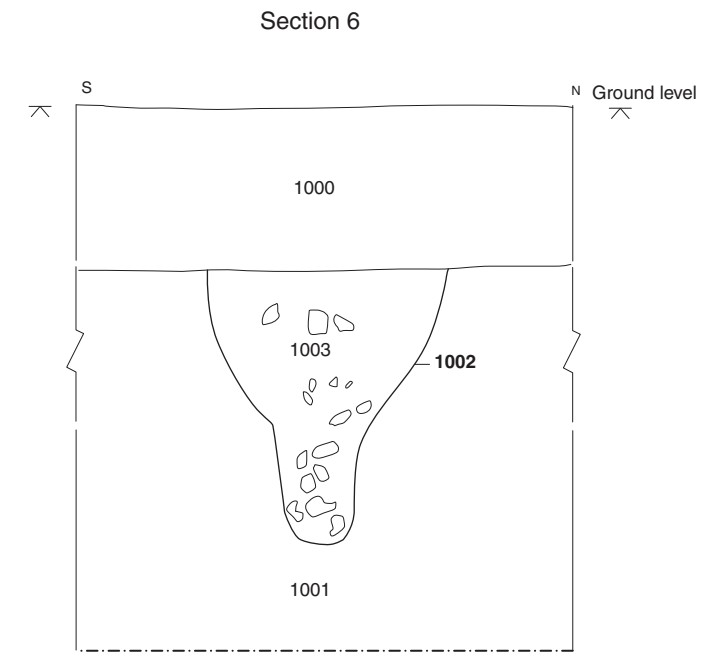
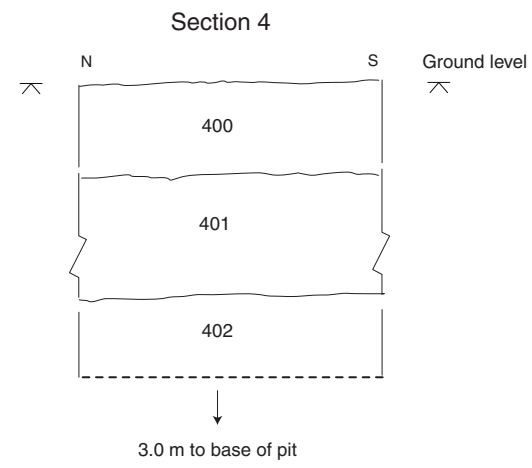
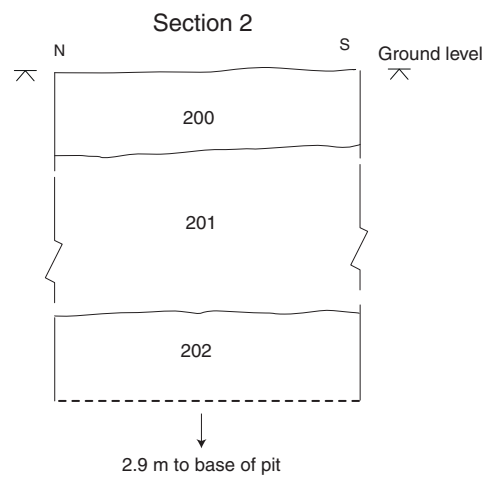
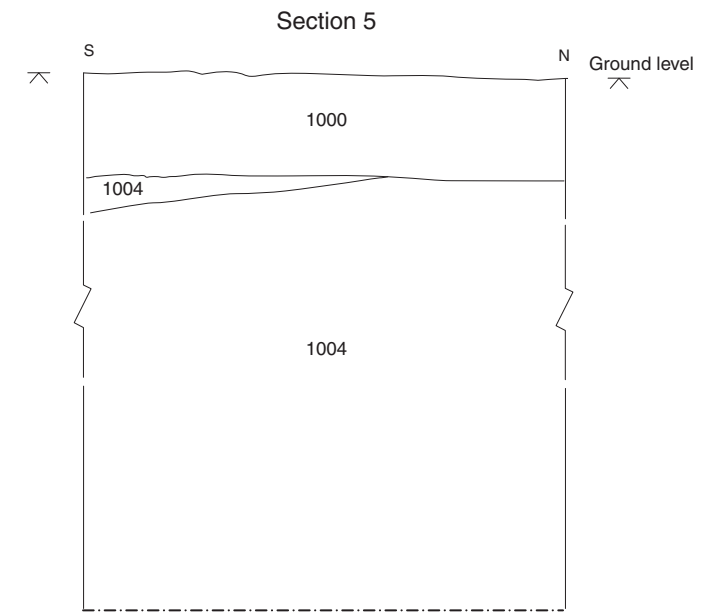
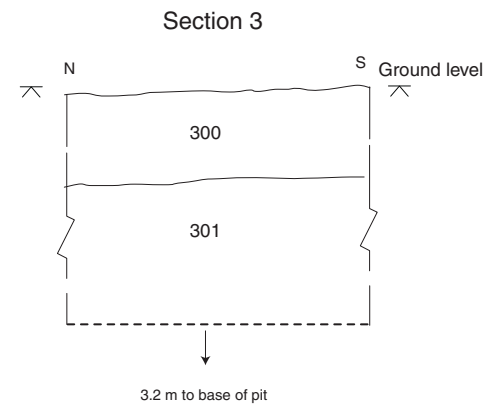
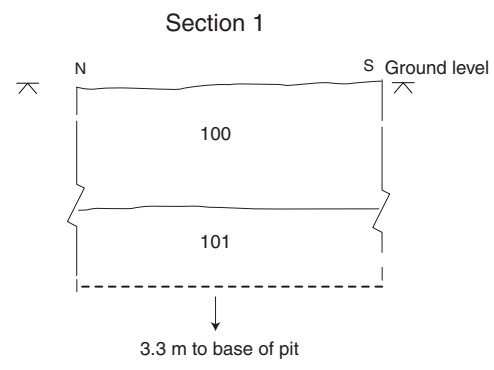


Figure 6: Sections 1-6