CASTLE STEDE, HORNBY Lancashire



Archaeological Evaluation



Oxford Archaeology North

January 2003

United Utilities Ltd

Issue No.: 2002-03/054 OA(N) Job No.: L9064 NGR: SD 3583 5697 **Document Title:**

CASTLE STEDE, HORNBY, LANCASHIRE

Document Type:

Archaeological Evaluation

Client Name:

United Utilities Ltd

Issue Number:

2002-2003/054

OA Job Number:

L9064

National Grid Reference:

SD 3583 5697

Prepared by:

Andrew Bates

Position: Date: Project Supervisor

January 2003

Checked by:

Alison Plummer

Position:

Senior Project Manager

Date:

January 2003

Approved by:

Carol Allen

Position:

Senior Project Manager

Date:

January 2003

Document File Location

Alison/Projects/9064/Rep

Oxford Archaeology North

© Oxford Archaeological Unit Ltd 2003

Signed Cour Aller

Storey Institute Meeting House Lane Lancaster LA1 1TF Janus House Osney Mead Oxford OX2 0EA

t: (0044) 01524 848666 f: (0044) 01524 848606 t: (0044) 01865 263800 f: (0044) 01865 793496

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

Oxford Archaeological Unit Limited is a Registered Charity No: 285627

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.

© OAN: December 2002

CONTENTS

Con	NTENTS	1
Sum	MARY	2
ACK	KNOWLEDGEMENTS	3 3 4 5 5 5 5 5 5 5 5 5
1. In	NTRODUCTION	
	1.1 Circumstances of the Project	
	1.2 Site Location	
	1.4 Topography	4
2. A	ARCHAEOLOGICAL AND HISTORICAL BACKGROUND	
	2.1 Prehistoric	
	2.2 Roman	
	2.3 Early Medieval	
	2.4 Medieval	
	2.5 Post-medieval	7
3. M	ЛЕТНОDOLOGY	9
	3.1 Project Design	9
	3.2 Trial Trenching	
	3.3 Plant Macrofossil Laboratory Methods	
	3.4 The Archive	10
4. R	RESULTS	11
	4.1 Introduction	11
	4.1 Trench 1	11
	4.2 Trench 2	
	4.3 Trench 3	
	4.4 Trench 4	
	4.5 Trench 5	
	4.6 Trench 6	
	4.7 Trench 7	13
5. C	CONCLUSIONS	
	5.1 Discussion	
	5.2 Impact of the Development	
	5.3 Recommendations	14
6. B	BIBLIOGRAPHY	15
APP	ENDICIES	17
	Appendix 1: Project Brief	17
	Appendix 2: Project Design	
	Appendix 3: Context List	
Illi	USTRATIONS	20

SUMMARY

An archaeological evaluation was undertaken by Oxford Archaeology North (OAN), on behalf of United Utilities Ltd, within part of the easement of a new water pipeline which runs between Jackson's Pasture and Borwick, Lancashire, in September of 2001. The area evaluated was located in the immediate vicinity of the eleventh century motte and bailey, Castle Stede near Hornby, overlooking the river Lune. This is a scheduled monument. Documentary investigation suggested the possibility of archaeological remains of various periods might be in the area. A number of trenches were therefore located on the southern side of the river, skirting the perimeter of Castle Stede, with a single trench on the opposing side.

A single archaeological feature was found during the course of the evaluation, comprising of a small truncated pit within which a quantity of burnt material had been deposited, located on the higher ground of the river terrace. Palaeobotanical remains indicate a date of post Mesolithic (3200BC), but without further dating evidence any interpretation is merely speculative.

The impact of the development on archaeological remains is therefore considered to be low, and no further archaeological investigation was recommended.

ACKNOWLEDGEMENTS

The evaluation was conducted on behalf of United Utilities Ltd and thanks go to them and Morgans Ltd for their co-operation during the course projects. Thanks also go to Lawnds Farm for their assistance and understanding.

The evaluation was undertaken by Andrew Bates, Gunner Hellström and Tony Platt. The illustrations were completed by Emma Carter, and the report compiled by Andrew Bates; the report was edited by Alison Plummer and Carol Allen. The project was managed by Alison Plummer.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

- 1.1.1 United Utilities Ltd applied for planning permission for a new water pipeline from Jacksons Pasture to Borwick. As the pipeline route passed in close proximity to Castle Stede (Scheduled Monument Number 13413; NGR SD 3583 5697), an eleventh century motte and bailey, an archaeological condition was placed on the planning consent by Lancashire County Council Archaeological Services (LCAS) (Plate 1, Fig 1). An evaluation had to be undertaken within the pipeline easement in the immediate vicinity of Castle Stede.
- 1.1.2 Oxford Archaeology North (OAN) was commissioned by United Utilities Ltd to undertake the evaluation. A project design (*Appendix 2*) was formulated by OAN in accordance with a project brief by LCAS (*Appendix 1*). The project was undertaken in September of 2002.

1.2 SITE LOCATION

1.2.1 The site lies on the southern river terrace, overlooking the river Lune, adjacent to the Loyn Bridge. The area is within the territory of the Iron Age tribe of the Brigantes (Cunliffe 1975), and the medieval borough of Hornby (Crosby 1994), between the medieval settlements of Hornby and Gressingham.

1.3 PHYSICAL BACKGROUND

1.3.1 The majority of the underlying geology is made up of Carboniferous rocks, in particular of the lower Millstone Grit groups (Brandon *et al*, 1998). The gritstones of the Quernmore fault in particular, run north/south to the east of Lancaster, and passes through Caton. The overlying soil is almost entirely glacially derived and part of a drumlin field, scattered bedrock outcrops and to a lesser extent it is also produced by fluvial deposits collected in the Lune valley, which consist of various rock types (*ibid*).

1.4 TOPOGRAPHY

1.4.1 The landscape of the area largely consists of undulating pasture, with several variations caused by the numerous river valleys (Countryside Commission 1998). The fields tend to be small and well maintained with a relatively large amount of woodland and parkland, partially due to the favourable climate (*ibid*).

2. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 PREHISTORIC

- 2.1.1 There is no evidence for activity of this period within the immediate vicinity. Evidence for human activity within the region prior to the Neolithic is very limited. One site in Halton Park consists of a scatter of flint tools (Penney 1978), roughly dated to the Mesolithic. Cave sites have been discovered to the north, which show evidence of activity during the Late Upper Palaeolithic (Cowell 1996). Further Mesolithic sites are known in Lancashire but these tend to concentrate on the Penines (ibid), or along the coast (Middleton et al 1995), and these are places where erosion has exposed the artefacts. Evidence for the Neolithic is similarly sparse, although activity is recorded from across Lancashire, particularly in the form of flint artefact scatters and axe finds (Middleton 1996). Axes seem to be particularly common in north Lancashire (*ibid*, 44). The adoption of pottery and sedentary farming practices are also attested in other parts of the county (ibid), and it is likely that by the end of the Neolithic some settlements were well established and areas of the landscape would have been heavily modified.
- Activity during the Bronze Age is slightly more evident within the region, but is also largely represented by artefact finds such as axe hammers which occur quite frequently in north Lancashire (Middleton 1996, 43). Actual settlement evidence in north Lancashire during the Bronze Age is extremely scarce and is apparently represented only by flint scatters (ibid, 54). Although there have been several burials excavated within Lancashire as a whole (ibid, 49-53) these can only give limited information about the extent of Bronze Age activity. One site in particular, Manor Farm near Borwick, revealed a complex funerary monument reused several times throughout the Bronze Age, which incorporated several metal items (Olivier 1988). The Iron Age is also poorly represented within the area, and there is a paucity of excavated sites within Lancashire as a whole (Hazelgrove 1996, 61). There are, however, potential settlement sites known within the wider area and these tend to take the form of irregular enclosures, including several examples from the Lune valley (*ibid*, 65) including one at Claughton and one at Quernmore (English Heritage 1996). There are no finds of metalwork from the immediate area however, and the nearest hillforts are mostly to the north and west.

2.2 ROMAN

2.2.1 The Roman period was, the first to leave easily identifiable monuments in the region. This includes presumed sections of a Roman road, identified after the discovery of a milestone near Caton. Several writers claim to have been able to identify the course of the road. Baines stated with some certainty that it passed through Caton (1824, 5), Harrison suggested that it turned several times before using an existing road into Hornby (1913), while Crump stated that it most probably utilised a natural pass into the area (1939). More recently several sections of the road have been positively identified giving a much better picture of

- the exact route (Shotter and White 1995, 58-62). The discovery of a milestone in Artle Beck near Caton (Site 46) further emphasises the certainty that the road passed through the area (*ibid*, 60).
- 2.2.2 The discovery of two second century coins near Halton (PRN 1887) perhaps indicates how likely the existence of further settlement sites is, and Dr David Shotter has suggested that the area south of Caton near Quernmore has the potential for future discoveries of Roman kilns, as well as the road running east (pers comm; Baines 1824, 30; Farrer and Brownbill 1914, 74). The discovery of an altar in the churchyard of Halton-on-Lune (Baines 1824, 3) dedicated to a unit of boatmen (*RIB* 601) might also suggest a settlement in the location although it is thought to derive from Lancaster (Shotter and White 1995, 90-91), and Chippendall suggests that there is possibly Roman settlement at nearby Gressingham (1919).
- 2.2.3 Within the immediate vicinity of Castle Stede is an earthwork visible on an aerial photograph, and marked on a Tithe Map as the site of a Roman Camp (PRN 1967), adjacent to Lawnds Farm. However, these earthworks may possibly be of medieval origin.

2.3 EARLY MEDIEVAL

- 2.3.1 No known sites of this period are located within the area. However, a stone cross was located within a later wall in Gressingham, located to the east of the site. Although the evidence is limited, it suggest that early Christian buildings and related settlements must have existed in the area in the centuries following the Roman occupation.
- 2.3.2 Several churches within the immediate region have early Anglian dedications (Tupling 1948) but there is a strong Irish-Norse influence (Wainright 1946). It would appear that the early Anglian inhabitants were mingling with Norse settlers by the tenth century (Howson 1959), and by the time of the Norman conquest a large part of the area was under the influence of Earl Tostig (*ibid*). The cross at Halton churchyard also shows Anglo-Saxon and Norse influences with unusual figurative descriptions, which are also seen at Hornby (Newman 1996, 98). The concentration of such sculpture along the Lune valley suggests it is an area of some significance, possibly even the site of an early monastery (*ibid*). Baines also suggests that there was a Saxon fortification in Hornby (1824, 664) although this is likely to refer to a medieval site.
- 2.3.3 The evidence from place names also suggests a mixed, very changeable, period under the influence of several cultures (Kenyon 1991), although it is difficult to be sure whether these demonstrate a definite socio-political influence or merely a local survival of earlier languages (Newman 1996, 96).

2.4 MEDIEVAL

- 2.4.1 The implementation of Norman control lead to an increased development of the region, and a number of sites representing the newly defined infrastructure occur within the area. These include the churches of Gressingham and Tatham, and the motte and bailey at Hornby, Castle Stede itself.
- Castle Stede was constructed in the eleventh century, although the precise date is unknown. Lancashire was not immediately reorganised after the Conquest, and in the eleventh century it continued to be grouped around a series of earlier estates (Kenyon 1991, 139). Shortly after the Norman conquest, following rebellion and retribution in the north, Roger de Poitou was granted control of a large amount of the estates (152). Placing such a large part of Lancashire under the control of one person did a great deal in establishing unity and defining the extent of the county of Lancashire (154). As a result the centre of administration moved from Halton to Lancaster, and the modern county began to develop. As the county grew so did its settlements and a greater urbanisation developed after the eleventh century, and numerous settlements were granted borough status and markets, including Hornby (Crosby 1994). As the new ruling class became established, fortified sites such as Castle Stede, began to be established, but also at Melling-with-Wrayton, and Priest Hutton (English Heritage 1996). Hornby was particularly significant as the seat of Montbegon family who came to hold the fee of Hornby (Kenyon 1991, 165). As the medieval period progressed further halls and fortified houses were built in the vicinity, including Borwick Hall, in the fourteenth century (Robinson 1991, 164). The importance of Lancashire itself gradually grew until Edward III raised it to the status of county palatine giving it a greater level of autonomy and power (Kenyon 1991, 177).
 - 2.4.3 Aside from these high status sites there was a general population growth throughout the twelfth and thirteenth centuries (Newman 1996, 117). By contrast, in the fourteenth century a series of disasters, notably the Black Death, reduced the population considerably which left several deserted and shrunken settlements across Lancashire (*ibid*). Hornby is a good example of how a settlement, planted by a powerful local ruler, can all but disappear, only leaving evidence for the major structures such as the castle and priory, even without the necessary influence of the Black Death (White 1996, 128). There has been, however, a distinct lack of archaeological work on smaller medieval town sites within Lancashire so it is difficult to say much with any certainty on sites other than those of high status (*ibid*, 132).

2.5 POST-MEDIEVAL

2.5.1 The majority of sites within the area relate to the seventeenth century and later, in particular a large number of farmhouses built in the seventeenth and eighteenth centuries. The well-established and increasingly wealthy county could obviously afford such an expansion in property at this time, and it continued into the nineteenth century with several more houses and halls. The eighteenth century and the industrial revolution had a particularly large impact on the area with the development of several textile mills, and corresponding bobbin mills. A greatly improved transport infrastructure inevitably occurred at the same time, with new

bridges being built, some of which replaced earlier structures. Milestones demonstrate the improvements made to roads, and ultimately the introduction of rail brought the network into the twentieth century. The government sanctioned enclosure of the rural landscape during the late nineteenth century and this meant the enclosure of older field systems. Industrial activity within the area is represented, apart from the textile mills, by coal mining which was particularly focused around the Hornby Castle estate (Hudson 1996), and by several smaller scale stone quarries and a lime kiln.

3. METHODOLOGY

3.1 PROJECT DESIGN

3.1.1 The fieldwork was conducted in accordance with a project design produced by OAN (*Appendix 2*), which was based upon a project brief issued by Lancashire County Archaeological Services (*Appendix 1*). The project design provided for trial trenching in the two fields adjacent to Castle Stede, and one trench on the opposing side of the river, within the pipeline easement (Fig 2).

3.2 TRIAL TRENCHING

- 3.2.1 The work consisted of the excavation of seven trenches, covering 5% of the pipeline corridor in the vicinity of Castle Stede, and included the examination of any horizons and exposed, together with the accurate recording of all archaeological features, horizons and any artefacts found during the excavation.
- 3.2.2 Each trench was excavated initially by a mechanical excavator fitted with a 1.5m wide ditching bucket down to either the first archaeological deposits or natural geology. Thereafter all excavation was by hand. All spoil was scanned for finds during the excavation.
- 3.2.3 **Recording:** the recording methods employed by OAN accord with those recommended by English Heritage's Centre for Archaeology. Recording was principally in the form of *pro forma* Trench Sheets for each trench, which recorded the orientation, length, and depth of machining, and described the nature of the topsoil, subsoil where applicable, and geological deposits. Where there were anticipated significant archaeological features, or where significant features were identified, the features and deposits were recorded using *pro forma* context sheets based on those designed by MoLAS and English Heritage's Centre for Archaeology. A full textual, drawn, and photographic record was maintained for all deposits and features.
- 3.2.4 The positions of the trenches were recorded by using a Global Positioning System (GPS). The locational information was incorporated with digital map data within a CAD system to create the location map (Fig 2).
- 3.2.5 *Finds:* all finds recovered were bagged and recorded by context number; all significant finds were retained and have been processed and temporarily stored according to standard practice (following current Institute of Field Archaeologists guidelines).

3.3 PLANT MACROFOSSIL LABORATORY METHODS

3.3.1 A bulk sample was taken for palaeoenvironmental assessment and this was floated for charred plant remains, which included the entirety of the fill of pit 13 (approximately five cubic litres). The flot was collected on a 500mµ mesh and air

dried. The flot and residue were examined microscopically with a Leitz/Wild binocular microscope. All readily identifiable plant material was recorded

3.4 THE ARCHIVE

3.4.1 A full professional archive has been compiled in accordance with the project design (*Appendix 1*) and in accordance with current IFA and English Heritage guidelines (English Heritage 1991). The archive will be deposited in the Lancashire Records Office with a copy to the Lancashire Sites and Monuments Records.

4. RESULTS

4.1 Introduction

4.1.1 All trenches were excavated within the stripped easement of the pipeline. Therefore, approximately 0.30m of topsoil had already been removed prior to the excavation of the evaluation trenches.

4.2 TRENCH 1

- 4.2.1 Trench 1 measured 11m in length and 2m in width, with a maximum depth of 2.2m, orientated in an east-west direction. The trench was stepped to prevent collapse, but was not entered for health and safety reasons, and was therefore recorded from the surface.
- 4.2.2 Beneath 0.2m of mid orange brown silty clay sub-soil, *I*, was a mid to dark brown grey silt, *2*. This latter deposit contained frequent wood fragments, of a maximum size of 1.3m in length and 0.5m in diameter. There were no signs of the wood having been worked. Also present were occasional large sub-rounded sandstone inclusions. This material appeared to represent a natural collection of debris within a fluvial sediment. At the base of the trench river gravels, *3*, were briefly visible prior to flooding by ground water. It is highly likely that these deposits represent a palaeochannel, relating to a prior coarse of the River Lune. No archaeological deposits were located within the trench

4.3 TRENCH 2

- 4.3.1 Trench 2 measured 10m in length and 2m wide, with a maximum depth of 2.3m, orientated in an east-west direction. The trench was stepped to prevent collapse, but was not entered for health and safety reasons, and was therefore also recorded from the surface.
- 4.3.2 A friable dark yellowish brown sandy silt, with less than 1% charcoal flecks and occasional small rounded stone, 4, was present throughout the entire depth of the trench. A natural dark grey silty clay, 5, was visible at the eastern end of the trench prior to flooding. No archaeological features were noted.

4.4 TRENCH 3

4.4.1 Trench 3 measured 10m in length and 2m wide, with a maximum depth of 0.8m, orientated in an east-west direction. A mid orange brown silty loam sub-soil, 6, with less than 1% charcoal flecks, and occasional small rounded stone, was excavated to a maximum depth of 0.5m. At the base of the trench, river gravel, 7, was located, made up of sub-angular and rounded stone of a maximum size of 30mm x 30mm x 30mm. This was excavated at the western end for a further 0.3m, for 5.0m in length.

4.4.2 Recording was hampered by rapid flooding of the trench, however, no archaeology was located during the course of its excavation.

4.5 TRENCH 4

- 4.5.1 Trench 4 measured 10m in length and 2m wide, with a maximum depth of 2.9m, orientated in an east-west direction. The depth of the trench was limited to 1.5m, with a sondage excavated to 3.0m at the eastern end of the trench. The trench was stepped to prevent collapse but the sondage was not entered due to health and safety considerations, and this area was therefore recorded from the surface.
- 4.5.2 Within the sondage a sub-soil, 8, a mid to dark grey, friable, silty clay was excavated to a depth of 1.8m. Below this was a layer of light grey sandy silt, 9, 1.10m thick. At the base of the trench a river gravel, 10, was reached consisting of small to medium sized rounded pebbles of a maximum size of 0.12m x 0.10m x 0.08m.
- 4.5.3 No archaeology was found due the course of the excavation of this trench.

4.6 TRENCH 5

- 4.6.1 Trench 5 measured 20m in length and 1.6m wide, with a maximum depth of 0.5m, orientated in an north-west/south-east direction. Excavation proceeded through 0.50m of mid grey silty clay sub-soil, 11, onto a light grey glacial clay natural, 12, with 50% small to medium sized greyish orange mottles being the result of root action.
- 4.6.2 No features or layers of an archaeological nature were located in this trench.

4.7 TRENCH 6

- 4.7.1 Trench 6 measured 30m in length and 1.7m wide, with a maximum depth of 1.50m, orientated in an north-west/south-east direction (Fig 3).
- 4.7.2 The depth of the subsoil, 16, varied from 0.8m to 1.10m. This comprised a dark grey silty clay with 1% to 10% sub-rounded sandstone inclusions of a maximum size of 0.14m x 0.10m x 0.05m. Below this was a mid brown red fine sand clay natural, 15, with 10% to 20% sub-rounded and irregular sandstone inclusions of a maximum size of 0.30m x 0.28m x 0.20m.
- 4.7.3 Towards the north-east end of the trench, cutting the natural, below subsoil *16*, was a small sub-circular pit, *13*. This measured 0.35m to 0.38m in diameter with concave sides and base, and was only 0.06m in depth (Plate 2 and Fig 3). It was filled with a very dark grey, friable, silty sand, *14*, with 20% charcoal flecks or small charcoal fragments.
- 4.7.4 The small flot from this pit contained fragments of charred hazel (*Corylus avellana*) nuts, a single cereal grain (possibly oat, *Avena*) with some fragments from another type of cereal, some charred weed seeds including Pale Persicaria

- (*Polygonum lapathifolium*), docks (*Polygonum*) and grasses and charcoal. The charcoal was not Oak (*Quercus*) but possibly from a Pomoideae species for example Hawthorn (*Crataegus*) or Mountain ash (*Sorbus*).
- 4.7.5 It was hoped that the assessment of the charred plant remains might give some indication as to the age of the fill but this was not possible. However the record of charred cereal grains does suggest that the fill is more recent than the Mesolithic, as cereal cultivation is thought to have originated at the Mesolithic-Neolithic transition.
- 4.7.6 The sample did, however, contain some waste from food plants. There is no potential for further analysis of plant remains from this sample, although the fragments of charred hazelnuts, cereal fragments and weed seeds would be very suitable for radiocarbon dating, if archaeologically it was important to know the date of the fill.
- 4.7.7 There was no sign of the natural surrounding the feature having been scorched or burnt, and this feature is not, therefore, thought to represent *in-situ* burning. Deposit *13* is considered to be a dump of charred material within a small pit, almost certainly originally deeper than the surviving 60mm, but having been truncated by later activity and soil formation processes.

4.8 TRENCH 7

- 4.8.1 Trench 7 measured 30m in length and 1.7m wide, and had a maximum depth of 1.7m, excavated in a north-west/south-east orientation. Sub-soil, 17, 0.8m thick, consisted of a dark brown grey silty clay subsoil, excavated on to a mid reddish brown fine sandy clay layer, 19. This earlier layer is effectively an interface between the subsoil and natural, but with some week soil structure. A further 0.30m was excavated, removing 19, to reveal a mid reddish brown fine sandy glacial till, 18.
- 4.8.2 No features or layers of archaeological significance were located within the trench.

5. CONCLUSIONS

5.1 DISCUSSION

- 5.1.1 Only one feature of archaeological significance was found during the course of the evaluation, in Trench 6, although various fluvial and alluvial deposits associated with the river Lune were located in trenches 1 to 4.
- 5.1.2 The small, undoubtedly truncated pit, located within Trench 6, contained the remains of a deposit of a mix burnt material, including the charred remains of weed species, Pale Persicaria (*Polgonum lapathifolium*), dock (*Polgonum*), and grasses. There was also charcoal originating from Pomoideae species, possibly Hawthorn (*Crataegus*) or Mountain Ash (*Sorbus*), (but not oak (*Quercus*)).
- 5.1.3 The feature is interpreted as burnt material deposited into a pit, rather than *in-situ* burning as there were no signs of the scorching of the surrounding natural. The material is considered suitable for accelerated mass spectrometry (AMS) radio carbon dating, a process which would give us a clearer indication of the age of the deposit.
- 5.1.4 A feature of this type, containing this variety of plant species, is difficult to interpret without further dating evidence. These types of plant remains may be found in deposits dating from the Mesolithic-Neolithic transition through to the post-medieval period.

5.2 IMPACT OF THE DEVELOPMENT

5.2.1 It is not considered that the proposed development will have any substantial effect on the known archaeology of the area, although it is evident from the evaluation that their is the possibility of disturbing some archaeological features.

5.3 RECOMMENDATIONS

5.3.1 No further excavation is considered necessary within the area of the pipeline easement skirting the perimeter of Castle Stede. However an archaeological watching brief is recommended to excavated and record any archaeological features that may be located during the excavation of the pipe trench.

6. BIBLIOGRAPHY

PRIMARY SOURCES

RIB 601 in Collingwood and Wright 1965

SECONDARY SOURCES

Baines, E 1824	History, Directory and Gazetteer of the County Palatine of Lancashire, Newton Abbot (David and Charles reprint)
Brandon, A, Aitkenson,	N, Crofts, RG, Ellison, RA, Evans, DJ and Riley, NJ 1998 Geology of the country around Lancaster: Memoirs for 1:50,000 Geological Sheet 59 (England and Wales), London
Chippindall, WH 1919	History of the Township of Gressingham, Newton Abbot (David and Charles reprint)
Collingwood, RD, and	Wright, RP 1965 The Roman inscriptions of Britain 1: Inscriptions on stone, Oxford
Countryside Commission	1998 Countryside Character Volume 2: North West, Cheltenham
Cowell, R 1996	The Upper Palaeolithic and Mesolithic, in The Archaeology of Lancashire, Newman, R ed, Lancaster
Crosby, A 1994	The Towns of Medieval Lancashire: An Overview, Lancaster University Centre for North-West Regional Studies Regional Bulletin, n ser, 8
Crump, WB 1939	Saltways from the Cheshire Wiches, <i>Trans Lancashire Cheshire Antiq Soc</i> , 54, 84-112
Cunliffe, B, 1975	Iron Age Communities in Britain: an account of England, Scotland and Wales from the seventh century BC until the Roman conquest, London
English Heritage 1991	Management of Archaeological Projects, 2nd edn, London
English Heritage 1996	County List of Scheduled Monuments, London

Farrer, W and Brownbill, J eds 1914 The Victoria County History of Lancashire, London

The Roman Road Between Ribchester and Overborough,

Trans Lancashire Cheshire Antiq Soc, 31, 69-87

Harrison, W 1913

Hazelgrove, C 1996	The Iron Age, in The Archaeology of Lancashire, Newman, R ed, Lancaster				
Howson, MF 1959	Aughton, Near Lancaster: The Story of a North-Western Hamlet through the Centuries, <i>Trans Lancashire Cheshire Antiq Soc</i> , 69, 15-34				
Hudson, PJ 1996	The Hornby Castle Estate Coal Mines, Lancaster University Centre for North-West Regional Studies Regional Bulletin, n ser, 10				
Kenyon, D 1991	The Origins of Lancashire, Manchester				
Middleton, R 1996	The Neolithic and Bronze Age, in The Archaeology of Lancashire, Newman, R ed, Lancaster				
Middleton, R, Wells, CE and Huckerby, E 1995 <i>The Wetlands of North Lancashire</i> , Lancaster					
Newman, R 1996	Medieval Rural Settlement, in The Archaeology of Lancashire, Newman, R ed, Lancaster				
Newman, R 1996	The Dark Ages, in The Archaeology of Lancashire, Newman, R ed, Lancaster				
Olivier, ACH 1988	The Excavation of a Bronze Age Funerary Cairn at Manor Farm, Near Borwick, North Lancashire, <i>Proc Prehist Soc</i> , 53, 129-86				
Penney, SH 1978	Gazetteer, Contrebis, 6, 43				
Robinson, JM 1991	A Guide to the Country Houses of the North-West, London				
Shotter, DCA 1997	Romans and Britons in North-West England, Lancaster				
Shotter, DCA and White, A 1995 The Romans in Lunesdale, Lancaster					
Tupling, GH 1948	The Pre-Conquest and Norman Churches of Lancashire, Trans Lancashire Cheshire Antiq Soc, 60				
Wainwright, FT 1946	The Scandinavians in Lancashire, <i>Trans Lancashire Cheshire Antiq Soc</i> , 58				
White, A 1996	Medieval Towns, in The Archaeology of Lancashire, Newman, R ed, Lancaster				

© OAN: December 2002

APPENDIX 1: PROJECT BRIEF

BRIEF FOR AN ARCHAEOLOGICAL EVALUATION AND RECORDING

Location: Ribble TA Pipelines - Lancaster to Caton, Lords Lot to Caton, Borwick to Jackson's Pasture, Burkes Farm to Lowgill

Proposal: New Water Mains

1. Summary

- In order to improve the quality of drinking water supply United Utilities is proposing to lay new pipelines from Lancaster to Caton, from Lords Lot to Caton, from Borwick to Jackson's Pasture and from Burkes Farm to Lowgill. An appraisal of the route on using the Lancashire Sites and Monuments Record (SMR) showed that there are a significant number of sites potentially affected by the works, including the Scheduled Ancient Monument at Castle Stede, Hornby and the site of Dunald Mill, Nether Kellet. A rapid identification survey has been carried out by the Lancaster University Archaeology Unit (now Oxford Archaeology North, OAN) and a further series of archaeological sites identified along the pipe corridor.
- 1.2 Following a meeting between the County Archaeology Service, a representative of United Utilities and OAN a piece of further investigation and a scheme of impact mitigation was agreed. This work comprises:
 - 1.2.1 Geophysical survey and trial trenching in the vicinity of Castle Stede, Hornby.
 - 1.2.2 Topographic survey and photographic recording of a number of features before construction commences.
 - 1.2.3 A watching brief during topsoil stripping for the entire pipe corridor.
 - 1.2.4 A limited programme of watching briefs during pipe trench excavation.

2. Site Location and Description

The lines of the pipes are shown on the attached plans (REF).

They are located in the mid and lower Lune Valley, passing through land that is generally in pastoral use although there are both areas of arable land and woodland. The landscape here is generally rolling, but with some steep slopes and includes areas of both limestone and sandstone geologies. This is generally overlain with fluvio-glacial or riverine deposits that vary from thin to very thick.

3. Archaeological Background

- 3.1 Archaeological sites along the proposed pipe route, identified from the Lancashire Sites and Monuments Record and the OAN field study are attached as Appendix 2. The potential effect of the pipeline on these sites has been identified by OAN.
- Where the pipeline passes Castle Stede, Hornby, there is thought to be a reasonable potential for the discovery of important medieval remains relating to the castle and a possible deserted village associated with it (sites 45, 55, 59). It was agreed that this area should be subject to geophysical survey and trial trenching, so that any buried remains could be identified and a suitable mitigation scheme devised.
- 3.3 A series of sites which are threatened by the pipeline construction but which do not merit preservation in situ were also identified. These sites (106, 110, 111, 113, 118, 119, 121, © February 2002 Lancashire County Archaeology Service

- Brief for an Archaeological Evaluation and Recording Ribble TA Pipelines
 122, 123, 124, 127, 128, 129, 142) require recording by means of topographical survey and photographs before construction works commence.
- 3.4 A watching brief will be necessary during the topsoil stripping phase, along the whole length and width of the pipeline corridor. This work will need to be coordinated with the work programme of the pipeline contractors and will also need to include a contingency plan for the discovery of archaeological remains which may need (a) rapid recording or (b) full excavation prior to the construction of the pipeline.
- Any site that reveals archaeological remains during topsoil stripping will also require a watching brief during trenching for the pipe laying unless otherwise agreed with the County Archaeology Service and United Utilities.

4. Requirements – Investigations at Castle Stede

- The proposed construction of the pipelines would damage or destroy archaeological remains that may be present in the vicinity of Castle Stede, Hornby. It has therefore been recommended that geophysical survey and trial trenching should be undertaken along the pipeline corridor from the River Lune at SD 58216980 to the field boundary between Lawnds Farm and Holme Head at SD 58546969. This work should be designed to detect the presence, attempt to interpret the function and assess the state of preservation of any archaeological features and deposits.
- 4.2 The work should include geophysical survey of the pipe corridor between the two limits above. It should be undertaken by such methods as may be deemed appropriate by a specialist geophysical consultant or contractor. The results of this work should include a written report, maps and diagrams, indicating the methods employed, the results obtained and the conclusions drawn. Paper and digital versions of the report and survey results should be submitted to the County Archaeology Service for inclusion in the SMR and to the Archaeology Data Service at York.
- Following the geophysical survey trial trenches should be excavated to cover at least 5% of the area of the pipeline corridor between the two limits above. Trenches should be located to investigate any anomalies detected by the geophysical survey and if appropriate to confirm the absence of archaeological deposits in areas where no anomalies were detected. Trenching should be undertaken in a stratigraphic manner and may employ suitable machine excavation provided it is under appropriate archaeological supervision and does not proceed deeper than the surface of the first significant archaeological deposit. Deposits should be then cleaned by hand. An appropriate sampling strategy for intact archaeological deposits, features and finds should be employed and disturbance and damage to important remains minimised as far as is possible. The results of this work should include a written report, maps and diagrams, indicating the methods employed, the results obtained and the conclusions drawn. Recommendations for further work may be included in the report following discussion with the County Archaeology Service. Paper and digital versions of the report should be submitted to the County Archaeology Service for inclusion in the SMR.

5. Requirements - Recording in Advance of Construction

- A series of sites that are threatened by the pipeline construction do not merit preservation in situ. These sites, numbers 106, 110, 111, 113, 118, 119, 121, 122, 123, 124, 127, 128, 129 and 142 in the OAN survey, require recording by means of topographical survey and photographs before construction works commence.
 - © February 2002 Lancashire County Archaeology Service

- The sites listed above should normally be recorded by 35mm or medium-format photography (colour slides and black and white prints) although digital photography may be acceptable if it is to a sufficient quality and appropriate storage of the images can be ensured. Photographic logs must accompany the recording, indicating camera and film ensured photographic logs must accompany the views provided. Paper and digital versions type, frame numbers, subjects and details of the views provided. Paper and digital versions of the report should be submitted to the County Archaeology Service for inclusion in the SMR. Photographic negatives should be retained with the project archive and be deposited in the County Record Office at the end of the project.
- 5.3 Topographic survey shall produce line and hachure surveys at scales of 1:500, 1:1,000 or 1:2,500 as appropriate. Each survey should be linked into the Ordnance Survey national grid by surveying or GPS methods to an accuracy of +/- 10cm. A report describing the techniques utilised and an estimate of error should accompany the survey. Paper and digital versions of the report should be submitted to the County Archaeology Service for inclusion in the SMR. If electronic methods of survey are utilised, a digital version of the survey should accompany the paper survey in either DWG or AutoCAD DXF format as agreed with the County Archaeology Service.

6 Requirements - Watching Brief During Topsoil Stripping

- 6.1 This work will cover the whole of the topsoil stripping process and any associated earthmoving activities including the preparation of access routes, site compounds and material/equipment stores.
- Appropriately qualified archaeologists shall systematically observe the above works and record any surviving archaeological remains revealed. All records shall include an accurate location, a description of the remains encountered and at least one photograph. Where appropriate plans and/or section drawings should be made. Photographs should normally be 35mm (colour slides and black and white prints) although digital photography may be acceptable if it is to a sufficient quality and appropriate storage of the images can be ensured. The report shall include a gazetteer and plan locating all the remains recorded.
- 6.3 Whilst it is anticipated that the archaeological contractor will have the ability to stop works for up to one hour to allow the recording of significant archaeological deposits, the contractor should ensure that an agreement is included in their contract and that methods of invoking it are robust and sufficient.
 - 6.4 The archaeological contractor should have a contingency plan to deal with particularly important remains that may require more extensive recording or excavation in advance of construction and an agreement on how such recording is to be invoked.

7 Requirements – Further Watching Brief

7.1 Where significant archaeological remains were identified during the topsoil stripping (above), a further phase of watching brief shall be undertaken during pipeline trenching. The methodology should be the same as that above.

Other Considerations

- All appropriate health and safety matters should be taken into account when projects are being designed. In particular the hazards of undertaking the watching brief work and the 8.1 possible need to undergo formal safety inductions with pipeline contractors need to be considered.
- All work shall be undertaken to the standards and guidance set out by the Institute of Field 8.2 Archaeologists.

Reporting and Archive 9

- The project will result in the production of a series of formal reports on the separate requirements above. All should include an executive summary, methodology, results and 9.1 discussion sections. Where appropriate digital data sets (survey and geophysical survey, digital photography) should be included. All appropriate plans, drawings and maps should be included, and a copy of the project design should be included as an appendix.
- Copies of the reports will be supplied to the County Archaeological Officer and to the Lancashire Sites and Monuments Record on the understanding that it will become a public 9.2 document after an appropriate period (a maximum of 6 months after the completion of the assessment unless another date is agreed in writing with the County Archaeological Officer). They should be provided both as bound paper documents and in an agreed digital format on CD-ROM.
 - A digital version of the geophysical survey should be deposited in an acceptable form with 9.3 the Archaeology Data Service in York.
- The site archive, including finds and environmental material, shall be conserved and stored according to the UKIC Guidelines for the preparation of excavation archives for long-term 9.4 storage (1990) and the Museum and Galleries Commission Standards in the Museum Care of Archaeological collections (1992) 'Standards for the preparation and transfer of archaeological archives'.
- Provision and agreement will be made for the appropriate academic publication of any results that are not to form part of any further work. A brief summary report of fieldwork, 9.5 to appear in the Council for British Archaeology North West Archaeology North West will be produced, even when a project encountered no archaeological deposits. This will be sent to the editor of Archaeology North West in time for it to appear within a calendar year of the completion of fieldwork.

Further Details 10

- 10.1 Further information about the proposed pipelines can be obtained from United Utilities.
- 10.2 Any queries about the contents of the brief should be addressed to the Lancashire County Archaeology Service, Lancashire County Council Environment Directorate, Guild House, Cross Street, Preston PPR1 8RD Tel 01772 2261550, fax 01772 2634203
- The document entitled "General Conditions for Appropriate Archaeological Contractors in Lancashire" is in use as a model of expected practices and procedures. A copy of that document is attached as Appendix One.
 - © February 2002 Lancashire County Archaeology Service

APPENDIX 2: PROJECT DESIGN

January 2002

RIBBLE TA PIPELINES, LANCASHIRE

GEOPHYSICAL SURVEY AND ARCHAEOLOGICAL EVALUATION PROJECT DESIGN

Proposals

The following project design is offered in response to a request from United Utilities for a geophysical survey and archaeological evaluation to be carried out at Castle Stede, Hornby, prior to the ground disturbance for the Ribble TA Pipeline, Lancashire.

1 INTRODUCTION

- United Utilities (hereafter the client) propose to lay new pipelines from Lancaster to Caton, from Lords Lot to Caton, from Borwick to Jackson's Pasture and from Burkes Farm to Lowgill, Lancaster. An archaeological desk-based assessment and programme of fieldwalking undertaken in 2001 by Oxford Archaeology (North) has indicated that a significant number of archaeological sites will be affected by the works associated with the laying of the pipeline.
- 1.2 Following discussions with the Sites and Monuments Record Officer, a programme of geophysical investigation and archaeological evaluation has been specified, for the length of pipeline that runs to the north of Castle Stede, Hornby, between the track running adjacent to the river Lune and the track to Holme Head farm, an approximate length of 220m.
- Oxford Archaeology (North) (OA(N)) has considerable experience of excavation of sites of all periods, having undertaken a great number of small and large scale projects throughout Northern England during the past 20 years. Evaluations, assessments, watching briefs and excavations have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables. OA(N) has the professional expertise and resources to undertake the project detailed below to a high level of quality and efficiency. Of most relevance OA(N) has carried out extensive works on pipelines on behalf of United Utilities; current projects include Grasmere to Windermere, Garnet Bridge to Watchgate, Coalpit Wood and Caldbeck.
- OA(N) is an Institute of Field Archaeologists (IFA) registered organisation, registration number 17, and all its members of staff operate subject to the IFA Code of Conduct.

2. OBJECTIVES

- The following programme has been designed to evaluate the archaeological deposits affected by the proposed developments. The required stages to achieve these ends are as follows:
- 2.1.1 *Geophysical Investigation:* to undertake a programme of gradiometry and resistance survey to inform the archaeological evaluation.
- 2.1.2 **Archaeological Evaluation:** to undertake evaluation trenching of at least 5% of the proposal area (an area of c 4400m²) to determine the quality, extent and importance of any archaeological remains on the site.
- 2.1.3 **Report and Archive:** a report will be produced for the client within six weeks of completion of the fieldwork. A site archive will be produced to English Heritage guidelines (MAP 2) and in accordance with the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (UKIC 1990).

3. METHODS STATEMENT

3.1 The following work programme is submitted in line with the stages and objectives of the archaeological work summarised above.

3.2 GEOPHYSICAL INVESTIGATION

- 3.2.1 A 20m wide x c. 220m long corridor will be investigated using a combination of the following techniques:
- 3.2.2 Magnetometer Survey: the survey area will be divided into 20m x 20m grids within which data collection is undertaken. Survey measurements are collected with a geoscan research FM36 instrument, sampling at 2 readings per metre with intertransect distances being 1m. The individual grids are matched together to produce an overall plan of the surveyed area. The results are analysed using a variety of commercial software.
- 3.2.3 **Resistivity Survey:** a Geoscan RM15 comprises a box of electronics mounted on a frame with probes attached to the base. The operator inserts the probes at fixed intervals to a depth of approximately 1cm. The survey area will be divided into 20mx 20m grids within which data collection is undertaken.

3.3 TRIAL TRENCHING

- 3.3.1 Following initial topsoil removal by machine a minimum 5% sample of the proposal area will be subject to evaluation trenching (approximately 7 x 1.5m x 20m trenches). The trenches will be positioned following the results of the geophysical survey. The topsoil will be removed by machine (fitted with a toothless ditching bucket) under archaeological supervision to the surface of the first significant archaeological deposit. This deposit will be cleaned by hand, using either hoes, shovel scraping, and/or trowels depending on the subsoil conditions, and inspected for archaeological features. Thereafter all excavation will proceed by hand in a stratigraphic manner.
- 3.3.2 Any investigation of intact archaeological deposits will be exclusively manual. Selected pits and postholes will normally only be half-sectioned, linear features will be subject to no more than a 10% sample, and extensive layers will, where possible, be sampled by partial rather than complete removal. It is hoped that in terms of the vertical stratigraphy, maximum information retrieval will be achieved through the examination of sections of cut features. All excavation, whether by machine or by hand, will be undertaken with a view to avoiding damage to any archaeological features which appear worthy of preservation in situ.
- 3.3.3 All information identified in the course of the site works will be recorded stratigraphically, using a system, adapted from that used by Centre for Archaeology Service of English Heritage, with sufficient pictorial record (plans, sections and both black and white and colour photographs) to identify

- and illustrate individual features. Primary records will be available for inspection at all times.
- 3.3.4 Results of all field investigations will be recorded on *pro forma* context sheets. The site archive will include both a photographic record and accurate large scale plans and sections at an appropriate scale (1:50, 1:20 and 1:10). All artefacts and ecofacts will be recorded using the same system, and will be handled and stored according to standard practice (following current Institute of Field Archaeologists guidelines) in order to minimise deterioration.
- 3.3.5 The deposition and disposal of any artefacts recovered in the evaluation will be agreed with the legal owner and an appropriate recipient museum prior to the work taking place.
- 3.3.6 Where environmental deposits are encountered, an appropriate sampling strategy will be agreed with the DCO. (Environmental sampling would be subject to a variation to this project design).
- 3.3.7 Health and Safety: OA(N) provides a Health and Safety Statement for all projects and maintains a Unit Safety policy. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Archaeological Unit Managers (1997). A written risk assessment will be undertaken in advance of project commencement and copies will be made available on request to all interested parties.
- 3.3.8 OA(N) has professional indemnity to a value of £2,000,000, employer's liability cover to a value of £10,000,000 and public liability to a value of £15,000,000. Written details of insurance cover can be provided if required.

3.4 REPORT AND ARCHIVE PRODUCTION

- 3.4.1 Archive: the results of Stage 3.2 to 3.3 will form the basis of a full archive to professional standards, in accordance with current English Heritage guidelines (Management of Archaeological Projects, 2nd edition, 1991) and the Guidelines for the Preparation of Excavation Archives for Long Term Storage (UKIC 1990). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. The deposition of a properly ordered and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the IFA in that organisation's code of conduct.
- 3.4.2 This archive can be provided in the English Heritage Centre for Archaeology format, both as a printed document and on computer disks as ASCii files (as appropriate). The paper archive will be deposited with the Lancashire Record Office within six months of the completion of the fieldwork. The material archive (artefacts and ecofacts) will be deposited with an appropriate museum following agreement with the client. A synthesis of the archive will also be available for deposition in the National Monuments Record.

- 3.4.3 **Report:** one bound and one unbound copy of the report will be submitted to the client within six weeks of completion of the fieldwork. A further copy of the collated final report will be submitted to the County SMR within six months of the completion of the fieldwork. The final report will include a copy of this project design, and indications of any agreed departure from that design. It will present, summarise, and interpret the results of the programme detailed above, and will include recommendations for any further mitigation works and details of the final deposition of the project archive.
- 3.4.4 Confidentiality: the final report is designed as a document for the specific use of the client, and should be treated as such; it is not suitable for publication as an academic report, or otherwise, without amendment or revision. Any requirement to revise or reorder the material for submission or presentation to third parties beyond the project brief and project design, or for any other explicit purpose, can be fulfilled, but will require separate discussion and funding.

4. WORK TIMETABLE

- 4.1 The various stages of the project outlined above will fall into four distinct phases, which would follow on consecutively, where appropriate. The phases of work would comprise:
- 4.1.2 **Geophysical Investigation:** it is anticipated that the geophysical surveying should take in the region of five days in the field to be followed by the production of a report.
- 4.1.3 *Trial Trenching:* the evaluation trenches should take in the region of six days in the field.
- 4.1.4 *Archive/Report:* the report and archive will be produced following the completion of all the fieldwork. The final report will be submitted within six weeks of completion of the fieldwork and the archive deposited within six months.

5. OUTLINE RESOURCES

- The project will be managed by **Alison Plummer**, **BSc** (Hons) (OA(N) Project Manager) to whom all correspondence should be addressed.
- Present timetabling constraints preclude detailing exactly who will be carrying out each specific task, but all elements of the project are likely to be supervised by an OA(N) project supervisor experienced in this type of project. All OA(N) project officers and supervisors are experienced field archaeologists capable of carrying out projects of all sizes.
- Assessment of the finds from the watching brief will be undertaken by OA(N)'s in-house finds specialist **Christine Howard-Davis BA MIFA** (OA(N) project officer). Christine acts as OA(N)'s in-house finds specialist and has extensive knowledge of all finds of all periods from archaeological sites in northern England.

6. MONITORING

- 6.1 Monitoring of the project will be undertaken by the Sites and Monuments Record Officer (SMRO).
- Access to the site for monitoring purposes will be afforded to the SMRO at all times.

© OAN: December 2002

APPENDIX 3: CONTEXT LIST

Context	Trench	Description
Number		•
1	1	Subsoil
2	1	Natural fluvial deposit
3	1	River Gravel
4	2	Subsoil
5	2	Glacial clay
6	3	Subsoil
7	3	River gravel
8	4	Subsoil
9	4	Layer
10	4	River gravel
11	5	Subsoil
12	5	Glacial clay
13	6	Cut of small pit
14	6	Fill of pit 13
15	6	Natural deposit
16	6	Subsoil
17	7	Subsoil
18	7	Natural deposit
19	7	Layer, interface between subsoil 17 and natural 18

ILLUSTRATIONS

LIST OF FIGURES

Figure 1: Location Map

Figure 2: Trench Location Plan

Figure 3: Plan of Trench 6 and Section of Pit 13

PLATES

Plate 1: Tree covered moote of Castle Stede, as seen from pipeline easement, facing east

Plate 2: Pit 13, Trench 6, with burnt fill 14 facing south-west

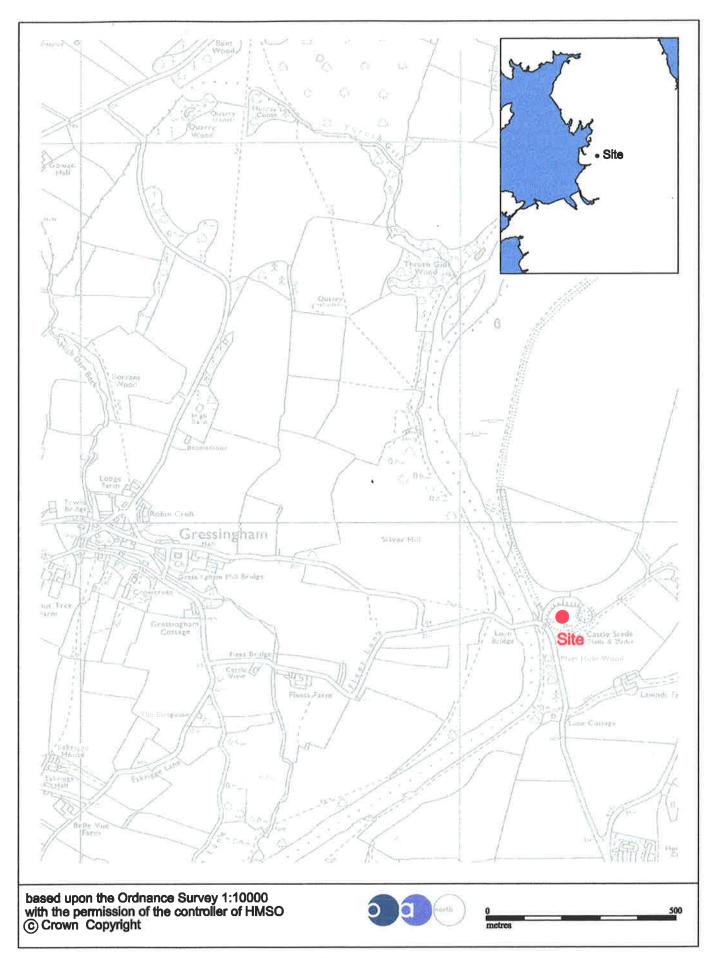


Figure 1: Location Map

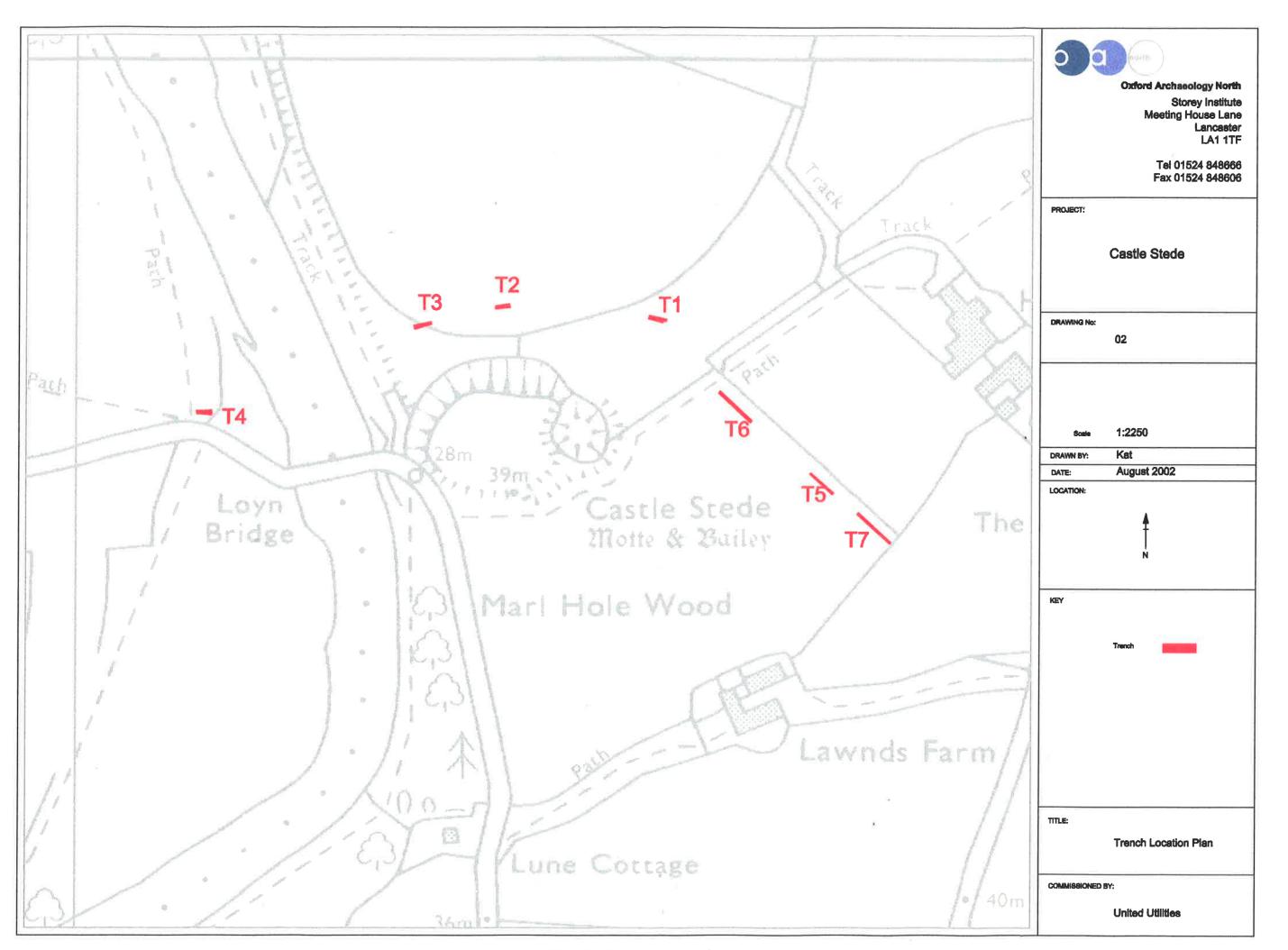


Figure 2: Trench Location Plan

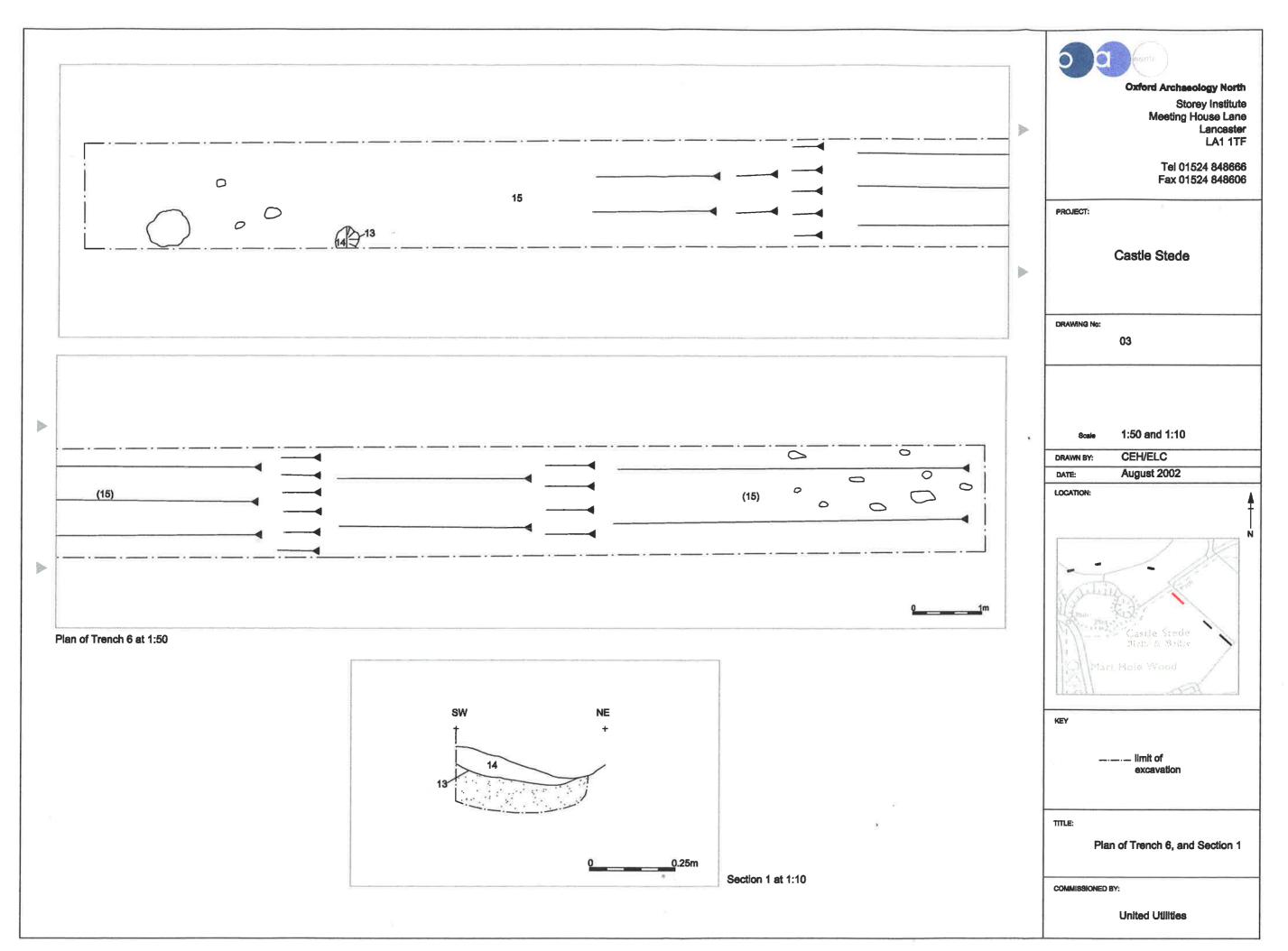


Figure 3: Plan of Trench 6, and Section 1



Plate 1: Pit 13, Trench 6, with burnt fill 14 facing south-west



Plate 2: Tree covered motte of Castle Stede, as seen from pipeline easement, facing east





Head Office/Registered Office/ OA South

Janus House Osney Mead Oxford OX20ES

t: +44(0)1865 263800 f: +44(0)1865 793496

e:info@oxfordarchaeology.com w:http://oxfordarchaeology.com

OA North

Mill3 MoorLane LancasterLA11QD

t:+44(0)1524 541000 f:+44(0)1524 848606 e:oanorth@oxfordarchaeology.com w:http://oxfordarchaeology.com

OAEast

15 Trafalgar Way Bar Hill Cambridgeshire CB238SQ

t:+44(0)1223 850500 e:oaeast@oxfordarchaeology.com w:http://oxfordarchaeology.com



Director: Gill Hey, BA PhD FSA MClfA Oxford Archaeology Ltd is a Private Limited Company, N^o: 1618597 and a Registered Charity, N^o: 285627