

Archaeological Services & Consultancy Ltd

WATCHING BRIEF: HORKESELEY TO LEXDEN MAIN, NEAR COLCHESTER, ESSEX

*on behalf of
Anglian Water Services Ltd*



By
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August 2007

ASC: 908/CLW/1

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Site Data

<i>ASC project code:</i>	CLW	<i>ASC Project No:</i>	908
<i>County:</i>	Essex		
<i>Village/Town:</i>	West Bergholt		
<i>Civil Parish:</i>	West Bergholt		
<i>National Grid Reference</i>	TL 956 282 to TL 959 262		
<i>Present use:</i>	Agricultural		
<i>Planning proposal:</i>	Construction of water main		
<i>Planning application ref/date:</i>	Statutory Authority		
<i>Local Planning Authority:</i>	Colchester		
<i>Date of fieldwork:</i>	April 2007		
<i>Client:</i>	Anglian Water Services Ltd Thorpe Wood House Thorpe Wood Peterborough PE3 6WT		
<i>Contact name:</i>	Kevin Collyer		

Internal Quality Check

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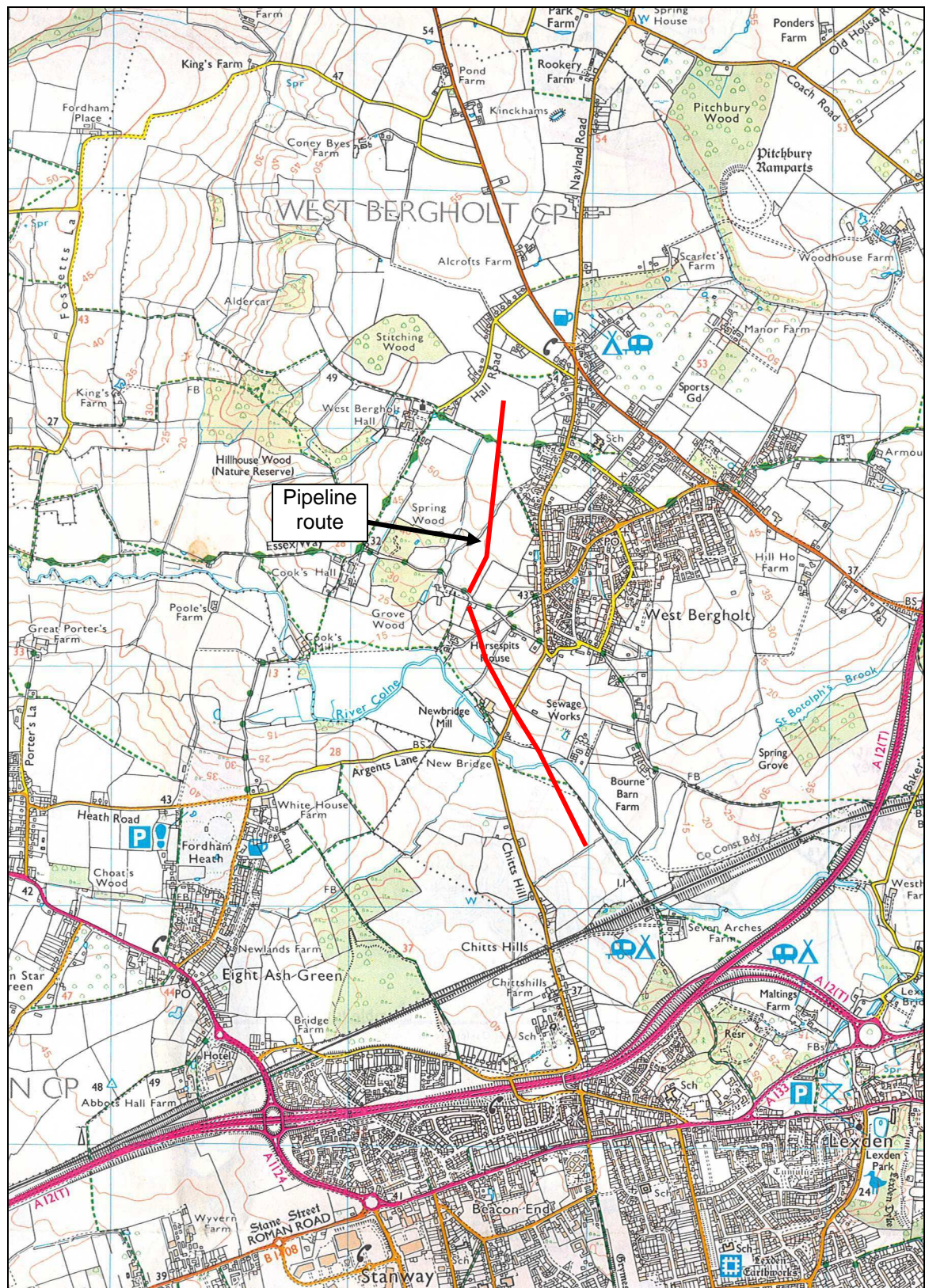


Figure 1: General location (Scale 1:25,000)

Summary

In 2007 Archaeological Services & Consultancy Ltd undertook a watching brief on behalf of Anglian Water Services Ltd following the stripping of the easement of a water pipe line to the west of West Bergholt, Essex. With the exception of a small area at the south end of the route, the easement had already been stripped and disturbed by vehicle tracks, prior to the commissioning of the watching brief. No archaeological features or artefacts were observed.

1 Introduction

1.1 In April 2007 *Archaeological Services and Consultancy Ltd* (ASC) carried out a watching brief during the construction of a water main at West Bergholt, near Colchester in Essex. The project was commissioned by *Anglian Water Services Ltd*, and was carried out according to a standard *brief* (IFA 2001) on the advice of the archaeological advisor (AA) to the local planning authority, *Colchester Borough Council*, (letter dated August 7th 2006).

1.2 Planning Background

This watching brief was required by *Anglian Water Services Ltd* in accordance with their statutory environmental obligations. The work was required as a mitigation strategy during the construction of water pipeline at West Bergholt, Essex.

1.3 Location

The water main route runs through the parish of West Bergholt, in the administrative district of Colchester, Essex (Fig. 1). It follows a slightly sinuous north to south course, to the west and south of the village.

The north terminus of the main is located at Ordnance Survey National Grid Reference (NGR) TL 956 282, south east of Hall Road. The route follows an approximately north to south course, parallel to the Nayland Road, before crossing a minor road linking West Bergholt with Cook's Hall, adjacent to Grove Wood. South of Grove Wood it follows a straight course and continues in a south easterly direction for a distance of c.0.7km, at which point it crosses the river Colne. It then continues for a further 400m, terminating at NGR TL 959 262, adjacent to a track leading from Chitts Hill.

1.4 Geology & Topography

The terrain is gently undulating with a variation in altitude not exceeding 25m, and falls into what is classified as the '*Mid Essex Zone*' (Hunter 1999, 12). The highest ground is to the north above the 50m contour, while the lowest is to the south, adjacent to the river Colne at c.25m OD. The northern part of the route crosses soils of the *Hornbeam 3 Association*; namely deep fine loamy and clayey soils, derived from Chalky till (Soil Survey 1983, 582d). derived from Chalky till. The southern part, which traverses the valley of the river Colne, which comprises Fluvio-glacial drift over Eocene clay. The soils in this area comprise the *Wix Association*, which comprises deep permeable coarse loamy soils, affected by groundwater (*ibid*, 573b).

2 Aims and Methods

2.1 Aims

The aims of the watching brief were:

- To ensure the archaeological monitoring of all aspects of the development programme likely to affect archaeological remains.
- To secure the adequate recording of any archaeological remains revealed by the development programme.
- To secure the analysis, conservation and long-term storage of any artefactual / ecofactual material recovered from the site.

2.2 Standards

The work conformed to the project design, to the relevant sections of the Institute of Archaeologists' *Code of Conduct* (IFA 2000) and *Standard & Guidance Notes* (IFA 2001), to the Association of Local Government Archaeological Officers East of England Region *Standards for Field Archaeology in the East of England* (ALGAO 2003), and to the relevant sections of ASC's own *Operations Manual*.

2.2 Methods

The following methods were employed for the watching brief:

- Soil and overburden stripping under archaeological supervision;
- Inspection of subsoil for archaeological features;
- The excavation and recording of any archaeological features/deposits;
- Subsoil stripping under archaeological supervision;
- Examination of the pipe trench, and recording of any exposed archaeological deposits;
- Rapid examination of spoil heaps for archaeological material;
- A programme of post-fieldwork analysis, archiving and publication

2.3 Constraints

2.3.1 Due to a communications failure, most of the route had been before ASC was commissioned to undertake the watching brief. In addition, visibility over much of the easement was severely reduced due to disturbance caused by the tracks of construction vehicles. Only in parts of the south end of the route, in a small area between the river Colne and the terminus, was the soil stripping operation on-going.

2.3.2 Within the constraints of the ongoing works, every effort was made to look for archaeological features and artefacts. The spoil heaps were visually scanned for artefacts and the entire length of the easement was walked and visually scanned by two archaeologists with experience of watching briefs of this type.

3 Archaeological and Historical Background

SMR = Sites and Monuments Record number

3.1 Prehistory

- 3.1.1 The valley of the river Stour to the north west of Colchester is an area of considerable archaeological importance. A number of archaeological sites have been identified in the area and the focus of interest lies in the prehistoric periods.
- 3.1.2 The south end of the route passes close to the river Colne. The river has developed a distinct valley at this point and a number of sites have been identified close to the southern terminus of the water main, on the west side of the river.
- 3.1.3 An enclosure of probable prehistoric date has been identified through aerial photography close to the southern terminal of the route (SMR 1668) and further enclosures and a ring ditch (ploughed out burial mound) have been identified on Chitts Hill c.0.5km west of the route (SMR 11666).
- 3.1.4 Much of the field to the east of Chitts Hill has been subject to quarrying, and excavations in advance of gravel extraction revealed a Bronze Age cemetery (SMR 11660; Crummy 1977). Seven ring ditches and over thirty urned cremations were identified, and it has been suggested that the cemetery may have had two phases, with the cremations post-dating the ring ditches.
- 3.1.5 In contrast there is less evidence for the prehistoric periods in the north half of the route, where the water main passes through higher ground, away from the river valley. Flints dated to the Mesolithic or Neolithic periods have been recorded close to the northern terminus, on Hall Road (SMR 12730). Iron Age pottery has been recorded near Horsepits House (SMR 12731). In addition, a sub-rectangular enclosure has been identified northeast of Grove Wood (SMR 14320), which may be of Iron Age date (SMR 14320).

3.1.6 Lexden

The area to the south of the water main route, now largely occupied by the suburban areas of Lexden and Stanway, was of considerable importance during the late Iron Age and was the site of an *oppidum* (defended settlement). The area was defined by a number of earth defences referred to as 'dykes' and was known as *Camulodunum* (Romanised form), meaning the 'stronghold' or 'fortification' of *Camulos* (Crummy 1997, 13-15; Hunter 1999, 53). The minor road linking West Bergholt with Lexden follows the same alignment as *Gryme's Dyke*, but it has not been firmly established if the dyke extended northwards beyond Lexden, towards Chitts Hill (*ibid*, 14).

3.2 Roman (43AD – c.450)

- 3.2.1 There is little evidence for Roman period remains in this area of the Colne valley and the focus of interest in this period lies to the south of the route. Shortly after the Roman invasion of Britain in 43AD a fort was constructed at Gosbecks Farm and a legionary fortress was established to the east of Lexden, on the site of the later city of Colchester (e.g. Crummy 1997).
- 3.2.2 The Roman city of Colchester (*Camulodunum*) was situated c.4km southeast of the south end of the pipeline route (Wacher 1995). It was constructed on the site of the fortress and had the status of a *colonia*.
- 3.2.3 The Roman town lay on a major Roman road, now known as *Stane Street* (OS 1979), which linked *Camulodunum* with *Londinium* (London). The Roman road followed the approximate line of the modern A1124 and B1408 roads and passed c.1.5km south of the southern terminal of the water main.

3.3 Saxon and Medieval (c.450-1066)

- 3.3.1 Little is known of the West Bergholt area during the Saxon period but by the 7th century the kingdom of the East Saxons had been created (Hunter 1999, 66-70). In comparison with the preceding period there is a relative lack of coinage and ceramics and this period is often difficult to trace in the archaeological record.
- 3.3.2 The place-name 'Bergholt' may have early origins and may be derived from the Old English '*beorg-holt*' meaning a copse by a hill (Ekwall 1977, 38).
- 3.3.3 At the time of the Domesday survey (1086) West Bergholt was held by *Richard* son of *Count Gilbert* and *Roger of Poitou*. (Morris 1983). The number of smallholders had increased in the twenty years since the Norman Conquest perhaps suggests assarting in the late 11th century (Fletcher 2001, 31). The amount of woodland was assessed at 316 swine.
- 3.3.4 In the medieval period West Bergholt was part of '*Cestrewald*' or the wood of Colchester (Fletcher 2001, 23-38). In the 1327 it was one of the poorest parishes in the hundred (*ibid.*) and was held by two manors with a three-field system of husbandry (*ibid.*).

3.4 Post-Medieval to modern (1500 – present)

- 3.4.1 West Bergholt grew in prosperity in the later Middle Ages due to the development of the cloth and brick-making industries (Ryan 1999, 178). Pottery was also produced in the 17th century and commercial brewing flourished (Fletcher 2001, 23-38).
- 3.4.2 Bergholt Hall Manor lies c.0.5km west of the north terminal of the pipeline and the manorial records survive from the 13th century. In the mid-16th century it comprised 963 acres made up of 278 acres in demesne, 283 acres in freehold and 402 acres as copyhold.

- 3.4.3 The layout of the area in 1777 is shown on Chapman and Andre's map of Essex (Fig. 2) and shows that the principal elements of the modern landscape had been established by the mid 18th century. The principal north to south route (Chitts Hill) was in existence and a mill, labelled '*New Bridge Mill*' was situated where the road crossed the river. The outline of Bergholt Heath is shown, with the road to Cooks Hall leading to the west. West Bergholt Hall is also shown and was held by *John Hadley Esq.*
- 3.4.4 The first large-scale edition Ordnance Survey map was published in 1876 (Fig. 3) and shows the layout of the area in the second half of the nineteenth century. Most of the existing fields and land boundaries had been laid out and the local farms (Whitehouse Farm, Horsepits Farm, etc.) had become established. The map was revised in 1946 (Fig. 4) but little change had taken place since the previous edition.
- 3.4.5 The field between the river and Chitts Hill was subject to mineral extraction during the 1970s and archaeological work took place in advance of the quarrying operation (above, section 3.1.4). The quarry has now been backfilled, but the site is visible as cropmarks on modern aerial photographs.

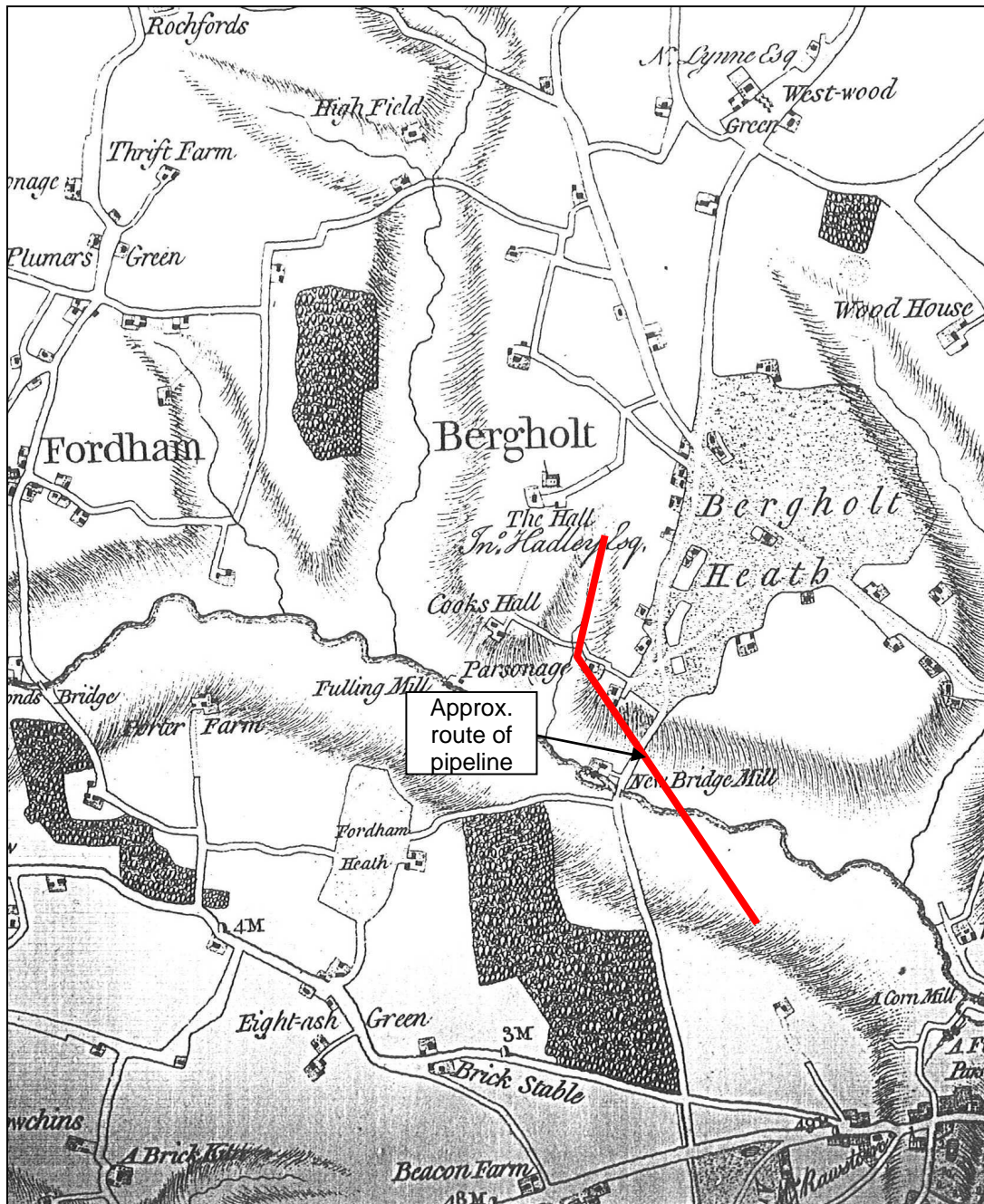


Figure 2: Extract from Chapman & Andre's map of Essex, 1777

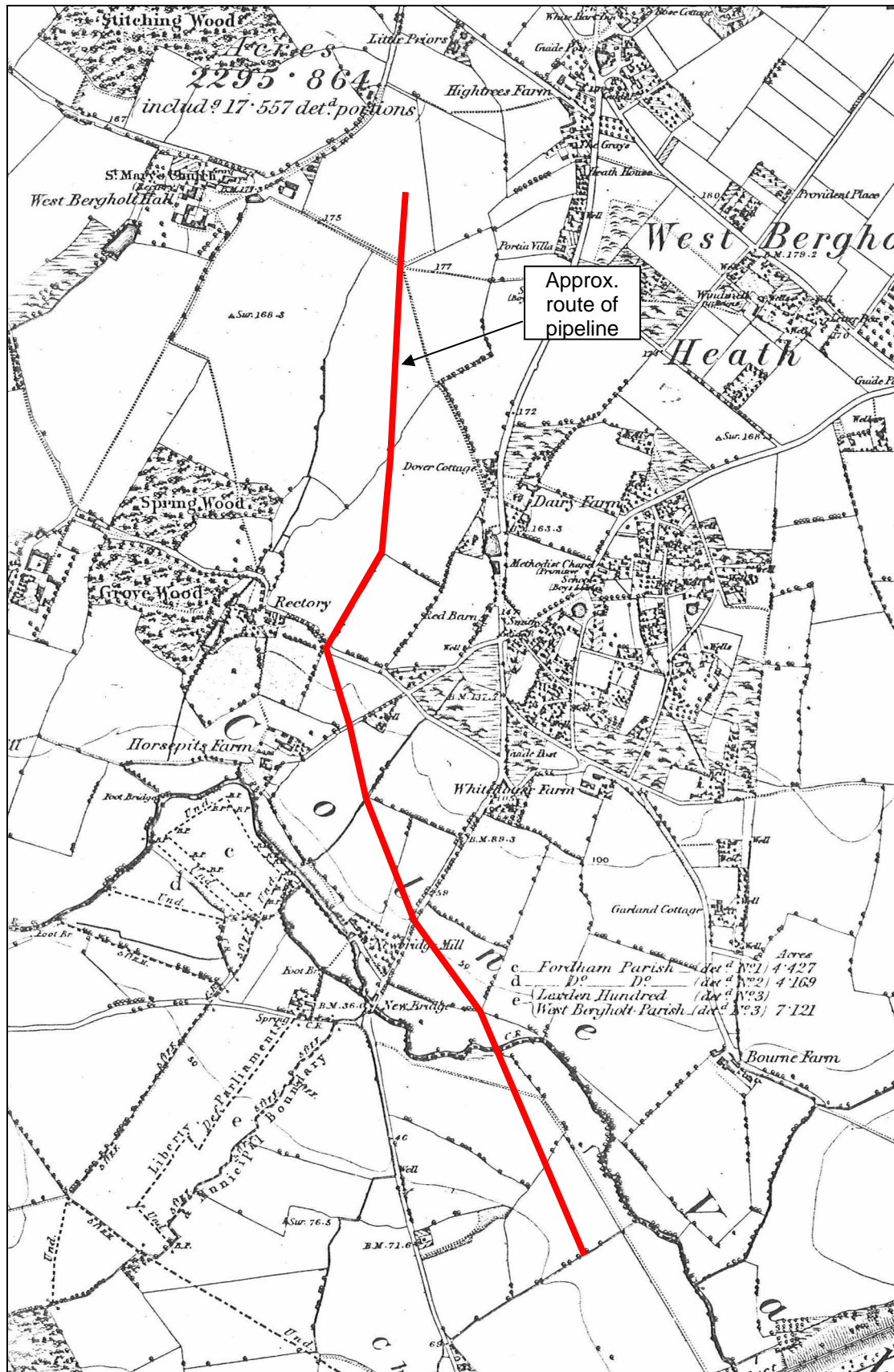


Figure 3: Extract from the 1876 edition 6 inch scale Ordnance Survey map (Essex sheet. 27)

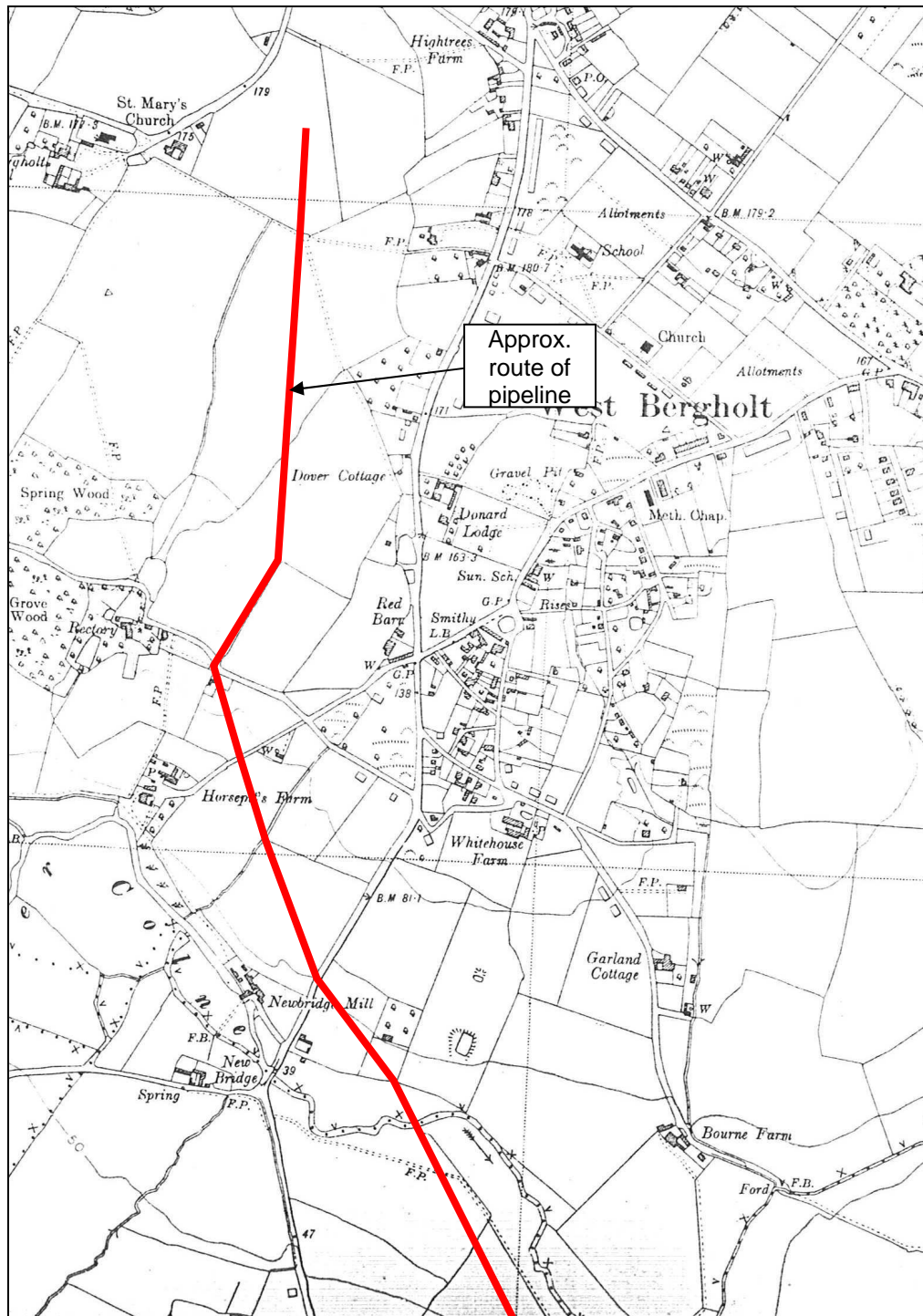


Figure 4: Extract from the 1946 edition 6 inch scale Ordnance Survey map (Essex sheet. 27)

4 Results and Conclusions

4.1 Results

Most of the route had been stripped before ASC had been approached to undertake the work (above, section 2.4). The entire route north of the river had been stripped several weeks previously, and had also been heavily disturbed by the movement of vehicles along the easement (*e.g.* Plates 2 and 4). This seriously limited visibility.

- 4.2 The only area where the ongoing stripping operation could be observed was in a short length at the southern end of the route. The undisturbed natural gravel was observed beneath the topsoil and subsoil but no archaeological remains were observed. This area was adjacent to the area of known quarrying (above, section 3.4.5) but there was little sign of disturbance, and it is likely that the pipeline easement lies to the east of the edge of the former quarry.

- 4.3 In much of the northern part of the route the spoil heaps had been compacted prior to the commencement of the watching brief (Plates 1 and 4). This severely restricted visibility and considerably reduced the opportunity to locate artefacts. The spoil heaps towards the south end of the route were scanned before the compacting operation had been performed (Plate 2) and thus offered greater potential. With the exception of obviously modern debris, no significant artefacts were observed in the spoil heaps.

4.4 Conclusions

- 4.4.1 Archaeological remains were not observed during the site visits. Visibility over much of the route was severely hampered due to the fact that the route had been stripped prior to the commencement of the watching brief, and the surfaces had been disturbed by the tracks of vehicles. The spoil heaps had also compacted, making it difficult to spot any artefacts which may have been disturbed during the stripping process.

- 4.4.2 The ongoing stripping operation was monitored for only a short area at the southern end of the route. In this area, the natural gravel and sand was observed. Archaeological visibility in this area was good. Archaeological features and artefacts were not observed and it is likely that the sites recorded as cropmarks (*e.g.* SMR 1668, etc.) are situated beyond the limits of the easement. The natural strata at this end of the route appeared relatively undisturbed, indicating that it lay beyond the limit of the quarry, which probably did not extend as far east as the easement (above, section 3.1.4).

- 4.4.3 A lesser degree of confidence should be attached to the results elsewhere along the route.



Plate 1: View looking south from the north terminal of the route.



Plate 2: View looking south towards the south terminal of the route



Plate 3: Former quarried area east of Chitts Hill



Plate 4: View looking south towards Horsepits House

5. Acknowledgements

The writer is grateful to Kevin Collyer for commissioning the project on behalf of *Anglian Water Services Ltd* and to Martin Winter, Archaeological Officer of *Colchester Borough Council* for acting as curatorial monitor. The assistance of the staff of the *Essex Record Office* is also gratefully acknowledged.

The fieldwork was led for ASC Ltd by David Fell BA MA MIFA, assisted by Caroline Barclay BA MA, Zoe Clark and Chris Swain. Background research was undertaken by Jonathan Hunn BA PhD MIFA. The report was prepared by Jonathan Hunn and David Fell and edited by Bob Zeepvat BA MIFA.

6. Archive

6.1 The project archive will comprise:

1. Site Monitoring Sheets
2. List of photographs
3. B/W prints & negatives
4. CDROM with copies of all digital files.

6.2 The archive will be deposited with *Colchester Museum*. Accession number pending

7. References

Standards & Specifications

- ALGAO 2003 *Standards for Field Archaeology in the East of England*. East Anglian Archaeology Occasional Paper **14**.
- EH 1991 *The Management of Archaeological Projects*, 2nd edition. English Heritage (London).
- IFA 2000a Institute of Field Archaeologists' *Code of Conduct*.
- IFA 2000b Institute of Field Archaeologists' *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology*.
- IFA 2001 Institute of Field Archaeologists' *Standard & Guidance documents (Desk-Based Assessments, Watching Briefs, Evaluations, Excavations, Investigation and Recording of Standing Buildings, Finds)*.

Secondary Sources

- Crummy P 1977 'A Bronze Age Cemetery at Chitts Hill, Colchester' *Transactions of the Essex Archaeological Society* **9**
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- Ordnance Survey 1979 *Ordnance Survey map of Roman Britain*. Southampton
- Ryan, P. 1999: *Brick in Essex*. Privately published (Chelmsford).
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- Youngs, F. A. 1991: *Guide to the Local Administrative Units of England: Vol II Northern England*. Royal Hist Soc. Univ of London (London)

Appendix 1: Monitoring Sheets

A.S.C. LTD		ARCHAEOLOGICAL FIELD MONITORING RECORD			
Project: COLCHESTER, LEXDEN -		Project No/Code: 908 / CLW		Sheet: 1 of 2	
WEST BENSCHOLT MAIN		Date of visit: 11 APRIL 2007			
Client/Developer: ANSLIAN WATER					
Contact: STEVE CAVE (Site Manager)				Phone: 07887 801263	
Duration of Visit (inc. travel):		Start: 8:30		Finish: 5:30	
Completed by: DFC / VISIT BY DAVID FELL & CAROLINE BARCLAY					
Development Type:					
Footings	Services	Roads	Levelling	Quarrying	Pipelines <input checked="" type="checkbox"/>
Other (specify):					
Site & weather conditions: WARM & SUNNY					
Observations:					
ARRIVED ON SITE c 11.45. GIVEN SITE INDUCTION					
WALKED 90% OF ROUTE - ONLY SOUTHERNMOST SECTION					
NOT SEEN					
THE ROUTE HAD BEEN STRIPPED SEVERAL WEEKS					
PREVIOUSLY AND NO CLEAN SURFACES SURVIVED ON					
THE MAJORITY OF THE ROUTE					
NATURAL STRATA IS GRAVEL - BECOMING MORE					
SANDY AWAY FROM THE COLNE VALLEY AT N. & S.					
ENDS OF THE ROUTE					
SPOIL HEAPS VISUALLY SCANNED FOR ARTEFACTS - NONE					
OBSERVED					
ONE SMALL AREA TO BE COMPLETED STRIPPING AT THE					
SOUTH TERMINAL - WILL REQUIRE A FURTHER VISIT					
Comments:					
ONE FURTHER VISIT REQUIRED TO VIEW SOUTHERN					
END					

For sketch plan, use reverse

©ASC, 2003



Project: COLCHESTER, LEADEN		Project No/Code: 908 / CLW		Sheet: 2 of 2	
WEST BENSFOLD MAIN		Date of visit: 18 APRIL 2007			
Client/Developer: ANGLIAN WATER					
Contact: STEVE CAVE			Phone: 07887 801263		
Duration of Visit (inc. travel):		Start:		Finish:	
Completed by:					
Development Type:					
Footings	Services	Roads	Levelling	Quarrying	Pipelines
Other (specify):					
Site & weather conditions: DAY, WARM AND SUNNY.					
Observations: OBSERVATION OF SOUTHERN END OF THE ROUTE, TO SOUTH TERMINUS. AREA APPEARS TO BE BEYOND LIMITS OF FORMER QUARRIED AREA. STRIPPINGS OF TOPSOIL/SUBSOIL OBSERVED REVEALING NATURAL GRAVEL DEPOSITS, SOIL HEDGES VULNERABLY CHECKED NO ARCHAEOLOGICAL FEATURES OR REMAINS SEEN.					
Comments:					

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Appendix 2: ASC OASIS Form

PROJECT DETAILS			
Project Name:	Horkesley to Lexden Water Main		
Short Description:	In 2007 Archaeological Services & Consultancy Ltd undertook a watching brief on behalf of Anglian Water Services Ltd following the stripping of the easement of a water pipe line to the west of West Bergholt, Essex. With the exception of a small area at the south end of the route, the easement had been stripped and disturbed by vehicle tracks prior to the commissioning of the archaeologist. No archaeological features or artefacts were observed.		
Project Type: (indicate all that apply)	Watching Brief		
Site status: (eg. none, SAM, Listed)	none	Previous work: (eg. SMR refs)	none
Current land use:	arable	Future work: (yes / no / unknown)	no
Monument type:	none	Monument period:	none
Significant finds: (artefact type & period)	none		
PROJECT LOCATION			
County:	Essex	OS reference: (8 figs min)	TL 9550-2765 to 9570-2801 (section 1) and TL 9595-2649 (section 2)
District:	Colchester	Parish:	West Bergholt
Site address:	N/A		
Study area: (sq. m. or ha)	c. 800m x 12m	Height OD: (metres)	50m
PROJECT CREATORS			
Organisation:	Archaeological Services & Consultancy Ltd		
Project brief originator:	M. Winter	Project design originator:	N/A
Project Manager:	D. Fell	Director/Supervisor:	D. Fell
Sponsor / funding body:	Anglian Water Services Ltd		
PROJECT DATE			
Start date:	April 11 th 2007	End date:	April 18 th 2007
PROJECT ARCHIVES			
	Location (Accession no.)	Content (eg. pottery, animal bone, files/sheets)	
Physical:	No	1 box file	
Paper:	Yes		
Digital:	yes		
BIBLIOGRAPHY (Journal/monograph, published or forthcoming, or unpublished client report)			
Title:	Watching Brief: Horkesley to Lexden Main, near Colchester, Essex		
Serial title & volume:	ASC: 908/CLW/1		
Author(s):	David Fell & Jonathan Hunn		