

Archaeological Services & Consultancy Ltd

**WATCHING BRIEF:
BIO PRODUCTS LABORATORY PIPELINE
DAGGER LANE, ELSTREE
HERTFORDSHIRE**

on behalf of Bio Products Laboratory



Bob Zeepvat BA MIFA

September 2004

ASC: 553/EDL/02

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Site Data

ASC site code:	EDL	Project no:	553
County:	Hertfordshire		
District:	Hertsmere		
Village/Town:	Elstree		
Parish:	Elstree and Borehamwood CP		
NGR:	TQ 169 957 to TQ 174 963		
Present land use:	Farm and park/agricultural land		
Planning proposal:	Pipeline		
Planning application ref/date:	Not known		
Client:	Bio Products Laboratory Dagger Lane Elstree Hertfordshire WD6 3BX		
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Internal Quality Check

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Edited/Checked By:		Date:	
Revisions:		Date:	
Edited/Checked By:		Date:	

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

Summary

Between July and September 2004 a watching brief was maintained on the construction of a waste water pipeline near Elstree, Herts. The pipeline route was 0.8km in length, from a point north of Aldenham Reservoir to a brook east of Tykes Water. A desk-based assessment completed in 2003 had indicated that the pipeline route might be archaeologically sensitive. No significant archaeological features or finds were revealed in the watching brief. The only discovery was a brick wall footing close to Home Farm, which may be the remains of a former farm building or boundary wall of 18th-century or later date.

1 Introduction

1.1 Between July and September 2004 *Archaeological Services and Consultancy Ltd* (ASC) carried out a watching brief on the construction of a pipeline being laid through land at Elstree, Hertfordshire (NGR TQ 169 957 to TQ 174 963: Fig. 1). The project was commissioned by *Bio Products Laboratory*, and was carried out according to a written scheme of investigation prepared by ASC (Fell 2004), and agreed with the *Hertfordshire County Archaeology Office* (CAO).

1.2 Reason for Work

The watching brief was requested by the CAO following a desk-based assessment of the route prepared by ASC (Fell 2003, 23). The assessment revealed that archaeological remains may be present along, or close to, the route of the pipeline. The excavation of the pipeline trench and any associated works had the potential to disturb or destroy any such archaeological remains.

1.3 Setting

1.3.1 Location and description

The pipe was laid in Hertfordshire, in the administrative district of Hertsmere (Fig. 1). The pipeline route extends for c.800m through the civil parish of Elstree and Borehamwood (Fig. 2) from a point north-east of Aldenham Reservoir (NGR TQ 169 957) to a stream on the south-west side of South Medburn Farm (NGR TQ 174 963).

1.3.2 Geology and topography

The soils of the area comprise the *Windsor Association*, namely slowly permeable seasonally waterlogged clayey soils over tertiary clay (Soil Survey 1983, 712c). The area through which the pipeline route passes is essentially flat, but slopes slightly to the Tykes Water Brook. It lies at an average elevation of c.101m AOD.

1.3.3 Archaeological and historical background

A full account of the archaeological and historical background to the route has been provided in the desk-based assessment (Fell 2003).

No prehistoric remains are known from the route of the pipeline, but the area was of importance during the Roman period. Several Roman sites are known in the area and at one site is known along the pipeline route (Sites and Monuments Record (SMR) 790). A number of others are known close to the route.

The route passes through *Home Farm*. The farm may have a medieval origin and a number of finds of this period have been made in the surrounding area. The present farm, including the farmyard and buildings, were developed during the 19th century as a model farm and lies within Aldenham Park. The park is included in the English Heritage *Register of Parks and Gardens*, and the pipeline has the potential to affect land or structures within the registered park.

1.3.4 *Nature and route of the pipeline*

The pipeline route crosses essentially agricultural land. It commences on the north-east side of Aldenham Reservoir and traverses an open field in a north-easterly direction before crossing Aldenham Road, immediately to the west of Home Farm. The route then follows a stream, known as *Tykes Water* through the farm, avoiding the farm buildings. On the northwest side of the farm it crosses an avenue leading to Aldenham Park House before continuing to the north-east, close to *Tykes Water Lake*. It terminates at an intersection with a small stream close to the A5183 road.

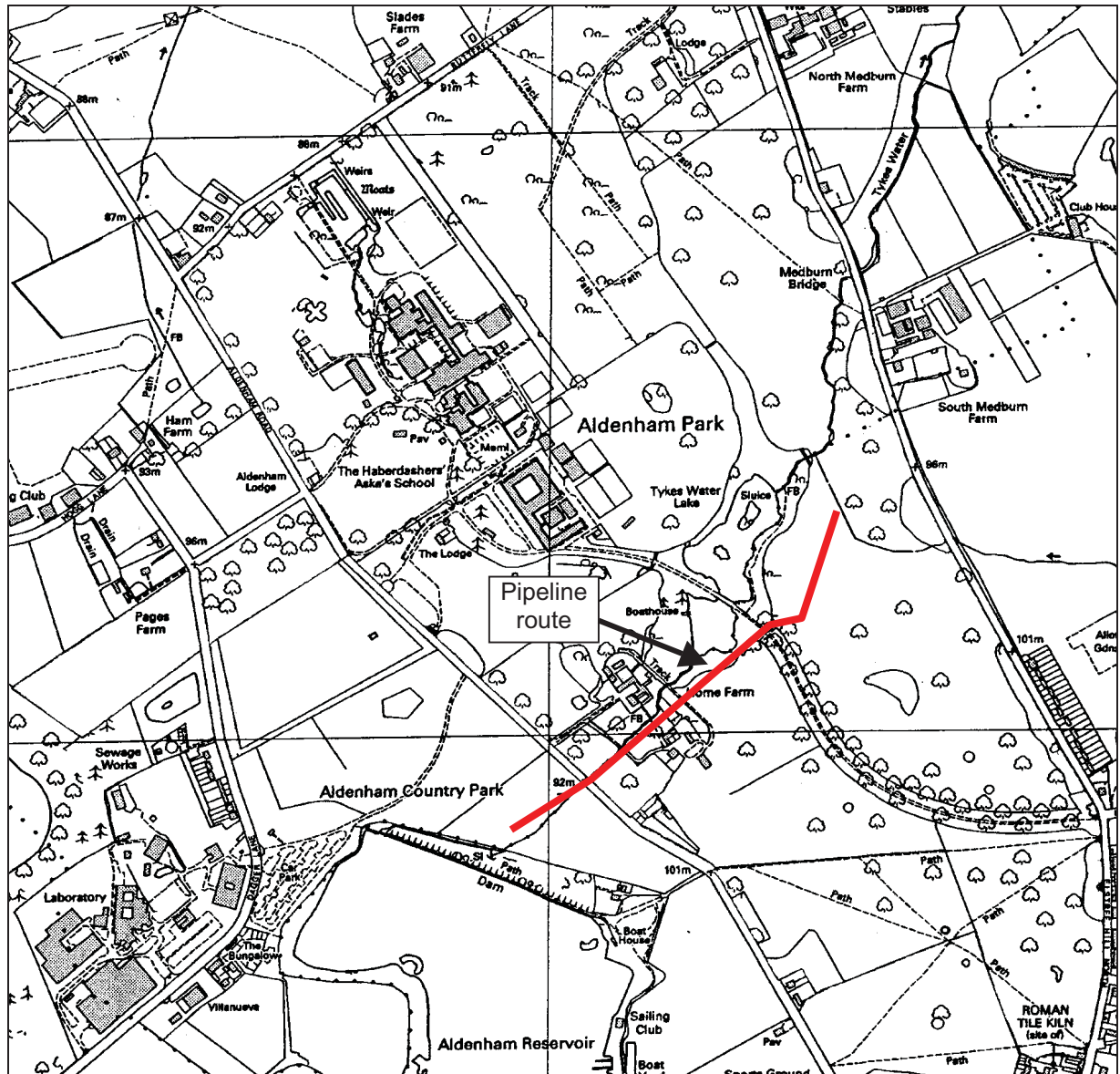


Figure 2: Plan of the pipeline route (scale 1:10,000)

2 Aims & Methods

2.1 Aims

As described in the project design (Section 2), 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 Methods

The work was carried out according to Section 2 of the project design, which required:

- Soil and overburden stripping under archaeological supervision
- Inspection of sub-soil for archaeological features
- Excavation and recording of any archaeological features/deposits
- Examination of any service and foundation trenches and subsequent recording of any exposed archaeological deposits
- Rapid examination of spoil heaps for archaeological material
- An appropriate programme of post-fieldwork analysis, archiving and publication

2.3 Standards

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

3 Results

3.1 *General*

Because parts of the pipeline trench were deep (up to 5m in places), or cut thorough difficult ground, progress was slow. Consequently, seventeen monitoring visits were made during the course of construction. Information from these visits appears in tabular form in Appendix 1: any sketches made on the sheets are also reproduced there.

3.2 *The Archaeology*

No significant archaeological features or finds were observed along the pipeline route. The only feature worthy of note was a brick wall footing, encountered near Home Farm at NGR TQ 1720 9602. The wall footing, located at a depth of *c.*0.3m, was aligned approximately NNW-SSE. The structure was 0.45m wide, and was composed of grey unfrogged bricks ($214 \times 97 \times 64\text{mm}$), set in a creamy brown lime mortar. To either side of the wall was a mortary spread. This wall was probably associated with a building belonging to the farm.



Plate 1: Brick foundation, view SE



Plate 2: Brick foundation in relation to farm buildings

3.3 *General Views of Pipeline Works*



Plate 3: Outflow point at eastern end of pipeline



Plate 4: East end of pipe route, looking south



Plate 5: Example of typical soil horizons encountered



Plate 6: General view of construction, eastern part of route



Plate 7: Typical excavated section of pipe trench



Plate 8: Excavation for inspection chamber



Plate 9: General shot of works in progress



Plate 10: Ceramic drain pipe encountered in pipe trench



Plate 11: Pipeline route west of Tykes Water



Plate 12: Typical trench cut by trenching machine



Plate 13: Section through track east of Home Farm



Plate 14: Middle section of pipeline route

4. Conclusions

- 4.1 The watching brief did not reveal any features or finds of archaeological significance along the pipeline route. The only feature revealed was a brick wall footing, evidently part of a former structure or a boundary wall associated with Home Farm. From the materials used in its construction, the wall appears to be 18th-century or later in date.
- 4.2 The desk-based assessment indicated that Roman remains were present close to the central and eastern parts of the pipeline route. The watching brief did not reveal any such remains along the route, indicating that the construction of the pipeline has not had any significant impact on the archaeology of the area through which it passes.
- 4.3 Observations on the pipeline route were mostly made in dry, sunny weather. A high confidence rating is therefore assigned to the results of the watching brief.

5. Acknowledgements

The writer is grateful to John Murray of Bio Products Laboratory for commissioning the watching brief, and for his assistance and interest. The project was monitored for the County Archaeology Office by Jonathan Smith. The watching brief was carried out by Jonathan Hunn BA PhD MIFA, and the report was edited by David Fell BA MA MIFA

6. Archive

6.1 The project archive will comprise:

1. Project Design
2. Desk-Based Assessment
3. Watching Brief Report
4. Clients site plans
5. Site Monitoring Sheets
6. List of photographs/slides
7. B/W prints & negatives
8. CDROM with copies of all digital files.

6.2 The archive will be deposited with *Bushey Museum*

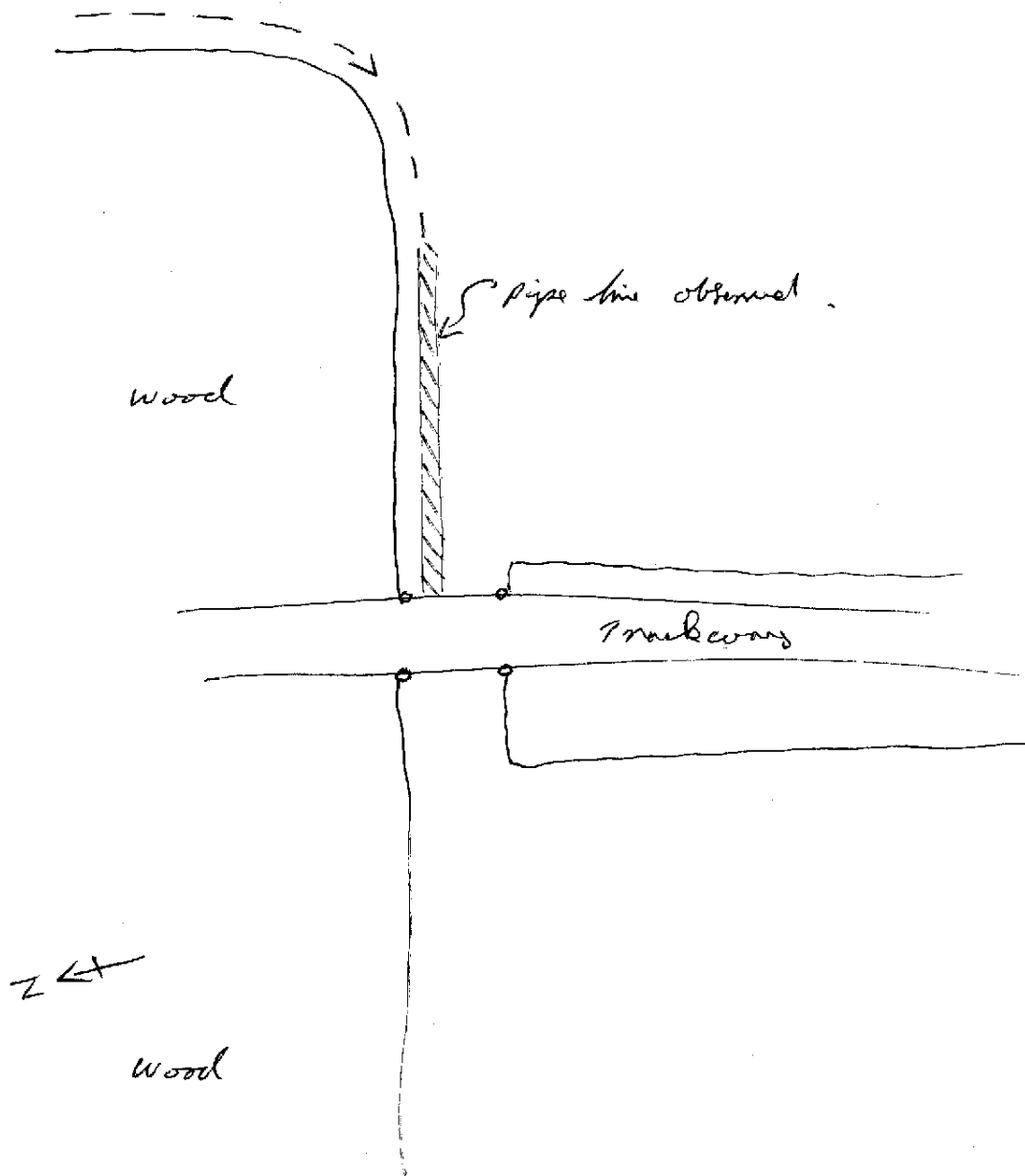
7. References

- Brown N & Glazebrook J (eds) 2000 *Research and Archaeology: a Framework for the Eastern Counties, 2. research agenda and strategy*. East Anglian Archaeology Occasional paper **8**
- Fell D 2003 *Archaeological Desk-Based Assessment: Dagger Lane, Elstree, Hertfordshire*. Archaeological Services and Consultancy Ltd, ref. 506/EBP/01
- Fell D 2004 *Bio Products Laboratory, Dagger Lane, Elstree, Hertfordshire: Project Design for an Archaeological Watching Brief on behalf of Bio Products Laboratory*. Archaeological Services and Consultancy Ltd, ref. 553/EBP/01
- Gurney D 2003 *Standards for Field Archaeology in the East of England*. East Anglian Archaeology Occasional Paper **14**
- IFA 2000 Institute of Field Archaeologists' *Code of Conduct*.
- IFA 2001 Institute of Field Archaeologists' *Standard & Guidance documents (Desk-Based Assessments, Watching Briefs, Evaluations, Excavations, Investigation and Recording of Standing Buildings, Finds)*.
- Soil Survey 1983 *1:250,000 Soil Map of England and Wales, and accompanying legend* (Harpenden).

Appendix 1: Monitoring Information

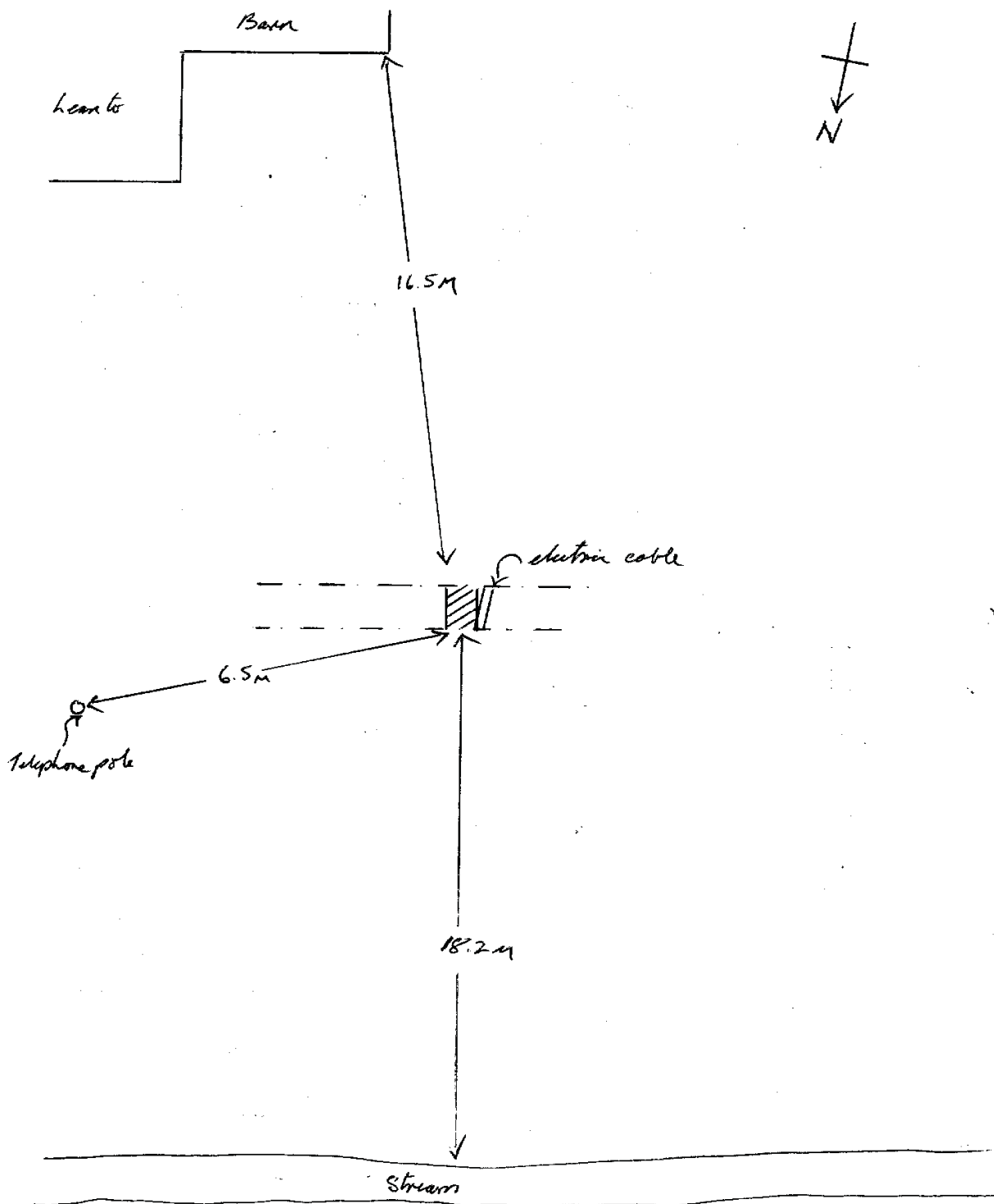
The following table has been compiled from the monitoring sheets completed for each site visit. All visits were half-day.

Sheet	Date	Observations made
1	23/07	Observed a cleared ditch, c.60m in length, and c.35m of machine-cut trench, 1.3m deep and 0.5m wide at its eastern end. Topsoil c.0.25m deep, above natural Tertiary clay. No features or finds observed.
2	24/07	Observed another 70m (ie 112m in all) of pipe trench. Soils the same as before – odd fragments of broken land drain and glass only.
3	26/07	Deep excavations taking place, so progress slow – probably no more than 20m. Same conditions and characteristics as before
4	29/07	Observed c.40m of deep cut trench, about 4m deep. Topsoil again very shallow, but otherwise quite ‘clean’. No features or finds noted.
5	31/07	Observed the section that goes to the turn in the pipe route. Trench c.4m deep – no features or finds noted.
6	05/08	Observed the trench up to the gate on the trackway leading to Tykes Water. The trench is becoming shallower (c.3m). The trench looks quite clear, except at the gate, where a deposit of brick metallurg for the entrance was encountered. No features or finds noted. (Sketch plan 1)
7	07/08	Pipeline delayed by storm, so only a short length of trench excavated. Now almost to middle of section leading to Tykes Water. Nothing of significance observed
8	12/08	Still trenching close to the trackway leading to Tykes Water. Several existing drains encountered on route. No features or finds noted.
9	16/08	A further 15m of trench excavated in field to west of trackway. Now only c.2m deep. Same soils as before: no features or finds.
10	20/08	Trench progressed another 10m: depth now about 1.5m. Topsoil disturbed. No features or finds
11	23/08	No progress with trench since last visit.
12	02/09	Observed 70m or so of trench infield to west of lake. Also examined several test pits, dug to locate buried services on route. One, to the north of the wooden barn which lies near to but separate from Home Farm on the opposite side of the stream, revealed the footings of a brick wall at a depth of 0.3m. Wall is 0.45m wide, on a bearing 30° west of north. It was composed of grey unfrogged bricks (214 x 97 x 64mm)), set in a creamy brown lime mortar. To either side of the wall was a mortary spread. This wall is probably associated with a building belonging to the earlier farm. (Sketch plan 2)
13	03/09	Observed another 100m or so, up to and beyond the wooden barn mentioned on the previous sheet. The only feature encountered was a trackway adjacent to the barn, comprised of brick and tile rubble. Soils in this section as previously described
14	07/09	Observed c.60m of trench, to the west of the barn. This cut across the track from the farm buildings to Home Farm. No other features or finds observed
15	10/09	Saw a further 50m or so of trench, to a point c.10m south of the stream. No features or finds observed.
16	13/09	Observed the drilling chambers (3 x 4m) to west of Aldenham Lane. No features or finds observed.
17	16/09	Saw the final section to the west of Aldenham Lane. No features or finds observed.



5/8/04
J.R.H

FIELD SKETCH 1 (back of sheet for 05/08/04)



FIELD SKETCH 2 (back of sheet for 02/09/04)

Appendix 2: SMR Summary Sheet

Site name and address: Site name: Dagger Lane		
County: Hertfordshire		District: Hertsmere
Village/Town: Elstree		Parish: Elstree & Borehamwood CP
Planning application reference:		
Client name, address, & tel. no: Bio Products Laboratory Dagger Lane Elstree Hertfordshire WD6 3BX		
Nature of application: construction of waste water pipeline		
Present land use:		
Size of application area: 800m length		Size of area investigated: n/a
NGR (to 8 figures): TQ 169 957-TQ 174 963		Site code: 553/EDL
Site director/Organization: Bob Zeepvat / ASC Ltd		
Type of work: Watching brief		
Date of work:	Start: 23 rd July 2004	Finish: 16 th September 2004
Curating museum: Bushey		
Related SMR nos:		Periods represented: Post-medieval
Relevant previous summaries/reports DBA: ASC report ref. ASC: 506/EBP/01		
<p>Summary of fieldwork results:</p> <p><i>Between July and September 2004 a watching brief was maintained on the construction of a waste water pipeline near Elstree, Herts. The pipeline route was 0.8km in length, from a point north of Aldenham Reservoir to a brook east of Tykes Water. A desk-based assessment completed in 2003 had indicated that the pipeline route might be archaeologically sensitive. No significant archaeological features or finds were revealed in the watching brief. The only discovery was a brick wall footing close to Home Farm, which may be the remains of a former farm building or boundary wall of 18th-century or later date.</i></p>		
Author: Bob Zeepvat		Date: 24 th September 2004