



Middleton Common, Middleton, Derbyshire

Archaeological Watching Brief

ARCUS report 1131b.1(1)

April 2009

Client: Severn Trent Water plc

Archaeological Watching Brief



Middleton Common, Middleton, Derbyshire.

National Grid Reference: 417290 363010 (centred)

Archaeological Watching Brief

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OASIS SUMMARY FORM

PROJECT DETAILS		
OASIS identifier	Arcus2-56127	
Project title	Middleton Common	
Short description of the project	<p>ARCUS were commissioned by Severn Trent Water plc to undertake an archaeological watching brief on a pipeline route on Middleton Common, Derbyshire. The route of the pipeline ran from Green Lane across open pasture to an underground reservoir 0.5km south of Arbor Low, a Neolithic monument.</p> <p>The first stage of the watching brief comprised a photographic record of the sections of drystone wall due to be demolished to allow access for pipeline construction. The second phase entailed archaeological monitoring of the pipeline construction process. The monitored works did not impact upon any other structures or preserved archaeological features, although three flint objects were recovered from the subsoil and subjected to analysis by a specialist. A tentative Mesolithic date was ascribed to one of the flints.</p>	
Project dates	11-08-08 to 18-08-08	
Previous/future work	Desk-based assessment/none	
Monument type and period	Lead rakes, post medieval. Arbor Low Neolithic stone circle within 0.5 km.	
Significant finds (artefact type and period)	Flint artefact, tentative Mesolithic date.	
PROJECT LOCATION		
County/Parish	Derbyshire/Middleton	
Site address	Green Lane, Middleton Common, Derbyshire.	
Site co-ordinates	SK 1729 6301	
Site area	c. 1.2 ha	
Height OD		
PROJECT CREATORS		
Organisation	ARCUS	
Project brief originator	PDNPA	
Project design originator	Glyn Davies	
Project supervisor	Richard Jackson	
Project manager	Glyn Davies	
Sponsor or funding body	Severn Trent	
PROJECT ARCHIVES		
Archive Type	Location/Accession no.	Content (e.g. pottery, metalwork, etc)
Physical	Derby Museum/Archive	Flint
Paper	Derby Museum/Archive/SMR	report, context sheets, plans, photographs
Digital	SMR	pdf copy of report
BIBLIOGRAPHY		
Title	Archaeological watching brief at Middleton Common, Derbyshire.	
Report no	1131b.1(1)	
Author	Richard Jackson	
Date	February 2009	

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NON-TECHNICAL SUMMARY

ARCUS were commissioned by Severn Trent Water plc to undertake an archaeological watching brief on a pipeline route on Middleton Common, Derbyshire. The route of the pipeline ran from Green Lane across open pasture to an underground reservoir 0.5km south of Arbor Low, a Neolithic monument.

The first stage of the watching brief comprised a photographic record of the sections of drystone wall due to be demolished to allow access for pipeline construction. The second phase entailed archaeological monitoring of the pipeline construction process. The monitored works did not impact upon any other structures or preserved archaeological features, although three flint objects were recovered from the subsoil and subjected to analysis by a specialist. A tentative Mesolithic date was ascribed to one of the flints.

1 INTRODUCTION

The pipeline route was located in an area of notable prehistoric remains and lead mining remains and a desk-based assessment was undertaken by ARCUS (ARCUS 2007). The route did not impact on any known prehistoric remains but ran adjacent to a known mining feature, a lead rake, identified during the desk-based assessment and walkover survey; this is marked on the Severn Trent Action Plan. The line of the pipeline was adjusted to avoid the mining features and run adjacent to it. The pipeline also cut through drystone walls on its route. These were reinstated following pipeline construction.

2 AIMS AND METHODOLOGY

2.1 Aims

The aims of the archaeological watching brief were to:

- photograph the drystone walls prior to their demolition,
- identify any archaeological remains along the route of the pipeline;
- record all archaeological remains disturbed by the open cut;
- recover artefacts disturbed by the site works;
- produce an accurate and comprehensive record and report on the archaeology disturbed by the site works.

2.2 Methodology

The archaeological monitoring of the pipeline instatement fell into two categories; photographic recording of drystone walls impacted upon by the pipeline route, and the watching brief on the excavation of the pipeline easement and pipe trench.

2.3 Recording the drystone walls

The sections of drystone walls cut through by the pipeline were recorded prior to demolition. The record of the drystone walls was made by photographic survey. Colour slides and B/W prints were taken of the sections of walls to be demolished. All photographs contained a photographic scale and a register of the photographs was made.

Following the demolition of the walls the underlying surfaces were examined to determine if any early boundaries were located on the same line, and to look for artefacts in or at the base of the walls which could provide dating evidence for their construction.

2.4 Watching Brief on Groundworks

The pipeline route from Green Lane to the reservoir was subject to a watching brief.

The watching brief monitored all machine excavation of the stripping of the easement and excavation of the pipe trench. The removal of all topsoil and subsoil deposits was strictly monitored by a qualified ARCUS field archaeologist.

2.5 Recording

A full written, drawn and photographic record of all uncovered archaeological features was made during the course of the works.

Each context was described in full on a pro forma context record sheet with each context was given a unique number. These field records were checked and indexes compiled.

General shots, photographs of work in progress, and excavated features were taken. General area views, features, sections etc. were also taken. The photographic record comprised 35mm format colour slides and black and white prints and included a graduated scale where appropriate.

Registers for contexts, drawings, samples, photographs, levels and recorded finds were kept.

2.6 Finds

Artefactual material was collected according to an explicit sampling strategy. Material which was obviously modern in date, and derived from unstratified contexts, was not kept. Preference was given to the collection and retention of stratified assemblages from in-situ deposits.

All other finds were cleaned, marked, catalogued and packed in materials suitable for long term storage in accordance with the UKIC's document 'Guidelines for the preparation of excavation archives for long term storage'. Appropriate tests and analyses were undertaken as necessary, by qualified archaeologists. All finds were treated in accordance with the English Heritage guidance document 'A strategy for the care and investigation of finds' (1995).

3 RESULTS

The results of this watching brief fall into two categories. The first stage of monitoring entailed the photographic recording of the sections of drystone walls selected for demolition in advance of pipeline construction. The second stage of monitoring entailed the watching brief on the topsoil stripping and pipe trench. These results will be discussed separately in the following sections

3.1 Recording the drystone walls

The site was visited in advance of pipeline construction to photograph the sections of the drystone walls selected for demolition. The relevant maps of the pipeline route were used to ensure the appropriate sections were photographed. Any upstanding vegetation was removed or flattened prior to photographing. The walls were photographed in 5m sections with a total photographed extent of 15m. A visual inspection was made of the truncated sections of drystone wall. No artefacts were recovered from this procedure. The photographic record of the drystone walls can be found in the plates section of this report (**Plates 1-24**). The walls were photographed in sequence from the north end of the pipeline route back towards Green Lane, so the photographic sequence matches the subsequent monitoring sequence. The specific boundary numbers relate to the allocated field numbers as follows:

Field boundary 1- between field 1 and 2

Field boundary 2- between field 2 and 3

Field boundary 3- between field 3 and 4, west edge of field 4

Field boundary 4- between field 4 and 5, south edge of field 4

Field boundary 5- between field 5 and 6

Field boundary 6- between field 6 and Green Lane

3.2 The watching brief

The watching brief focused on two specific aspects of the pipeline construction; Firstly, the initial stripping of topsoil along the route of the pipeline to create an easement, and secondly the excavation of the central pipe trench.

The initial easement stripping commenced from the west end of the pipeline route, adjacent to the reservoir (**Plate 25**). Topsoil was removed to a depth of 0.2-0.3m by a 360° tracked machine fitted with a ditching bucket. This methodology was employed to ensure a track was available to allow heavy machinery and materials to be moved along the route of the pipeline. The easement was then backfilled and seeded following insertion of the pipeline to prevent any visible and lasting damage to the landscape. To this end, the easement was excavated in its entirety before pipeline insertion commenced. The added benefit of this methodology was that it allowed time for the monitoring archaeologist to examine the topsoil and subsoil as it was stripped, and also to re-examine areas of the pipeline following periods of inclement weather to ensure no further artefacts had weathered out of the soil in the intervening period.

The initial easement excavation followed the route of the pipeline and proceeded in an easterly direction. The general surrounding landscape sloped downwards towards the first field boundary. The excavated easement was generally level, with a slight slope off towards the north.

Topsoil [100] comprised a homogenous deposit of dark brown clay-silt. The topsoil was of a firm consistency, with occasional inclusions of small rounded pebbles and sub-angular fragments of natural flint.

The flint fragments were evenly dispersed throughout the topsoil and the subsoil, typically in fragments no larger than 2-3cm, although larger abraded nodules were occasionally exposed by groundworks. The local flint was generally pale cream in colour. All of the examined fragments were opaque and blunt, and as such was interpreted as local deposits within the topsoil and subsoil, rather than evidence of anthropogenic activity.

Occasional larger fragments of limestone were exposed by the easement stripping. These fragments were typically 15-20 cm in length. Some of the fragments were found in proximity to the adjacent drystone wall, suggesting the fragments were deposited as a result of wastage from construction or repair activities. However, as these rocks were also clearly analogous to the underlying bedrock, it is quite possible that the limestone fragments in the topsoil and subsoil were generated by geological weathering processes without any interference from human agency. Occasional small (8-10 cm) fragments of quartzite were recovered from the topsoil-subsoil interface.

Subsoil [101] comprised an orange-brown clay-sand. The context was frequently mottled due to continued root disturbance and animal burrows. Nevertheless, all of these disturbances were investigated by hand to ensure that no potential features were missed.

In addition to the irregular impact of bio-turbation, a series of parallel scars were observed in the exposed subsoil. These features were typically 1-2m in length, and were all orientated northeast-southwest. As these features were all aligned with the prevailing direction of slope, they may be interpreted as either plough scars or naturally formed drainage gullies. These features were prevalent in the initial 50m of the easement, and were systematically excavated for artefacts. No anthropogenic material was recovered from the features.

The work carried out on the first day of monitoring entailed easement stripping from the reservoir to the first field boundary. Due to the relative proximity of this end of the pipeline to Arbor Low, considerable care was taken to ensure that all potential features were investigated.

The easement stripping continued through the first field boundary and into the second field, whereupon the pipeline route crossed the top of a small hill. It became clear on stripping of topsoil that this undulation was caused by an underlying outcropping of limestone bedrock. The nature of the underlying subsoil in this area was considerably more clay-like than was observed in the preceding field (**Plate 26**).

Although no discrete features were impacted upon by the easement excavation in field 2, a single flint artefact was recovered from the subsoil [101]. This sherd was designated as Small Find 1 (SF1). The location of SF1 relative to adjacent field boundaries was recorded (**Illustration 2**). The find was removed for analysis and subsequently illustrated (**Illustration 3**).

The excavated easement in field 3 was slightly narrower than the preceding segments due to the proximity of standing drystone walls on each side of the pipeline route. The excavated topsoil in this field was virtually identical to the previous topsoil [100], and was therefore not ascribed a separate number. The underlying subsoil was also very similar in character to the subsoil in the preceding fields. A distribution of limestone fragments was visible at the gateway through to the next field (**Plate 27**). The fragments measured 20-30cm in size, and were comparable to the material used in the construction of nearby drystone walls. As with previously noted distributions of limestone fragments in field 1, the possibility exists that these fragments became included in the soil over time as a result of construction and maintenance of the adjacent drystone walls. However, given the proximity of this particular scatter to one of the access points through a nearby wall, the stones in this instance were interpreted as an attempt to prevent excessive soil erosion by cattle during periods of wet weather.

The route of the pipeline through the fourth field was shifted slightly to the east during planning stages to avoid directly impacting upon the remains of the Lead Rakes, which lay just to the west of the finalised pipeline route. Upon removal of topsoil [100] in this area, the presence of several irregular potential features was observed. The largest of these features was excavated by hand, but yielded no evidence to suggest anthropogenic origins. The fill of the 'feature' was no different in terms of colour, composition and consistency to the overlying topsoil, although one piece of flint was recovered during excavation of the initial slot across the feature. This feature was allocated context numbers [104] for the 'cut' and [105] for the fill. The feature was of an irregular shape and very shallow profile. The feature was 100% excavated, but provided no further artefacts. Context [104] was therefore interpreted as a bioturbation feature, most likely the result of animal burrowing.

The general appearance of the subsoil in this excavated section suggests the presence of 'features' in this area was due to slight undulations in the subsoil (**Plate**

28).

No further objects or features of interest were observed during the archaeological monitoring in field 4.

The easement excavation then continued into the final two fields adjacent to Green Lane. The local landscape of this stage of the pipeline was quite level in comparison to the earlier stages, with a slight slope down towards the south-east (**Plate 29**). The topsoil and subsoil deposits were contiguous with the areas excavated previously, and were therefore ascribed the same context numbers as the topsoil and subsoil in the previous sections. The only item of note in this section was the occurrence of a single isolated piece of flint found on top of subsoil [101]. The flint was designated as Small Find 2 (SF2) and recovered for subsequent analysis (**Appendix B**).

Monitored easement stripping continued into the final field, adjacent to Green Lane. No further features or artefacts were either impacted upon or exposed by the excavations (**Plate 30**).

The final aspect of pipeline construction subject to monitoring comprised the cutting of the pipe trench along the route of the excavated easement. This was carried out by a mechanical tracked trench cutting machine, which once in operation continuously excavated a trench 0.5m wide with the use of a machine mounted large chainsaw blade (**Plate 31**). Although this methodology was quite destructive, the operation of the machine was monitored to allow the archaeologist to inspect the excavated sections before pipeline insertion and subsequent backfilling. The geological sequence comprised subsoil directly overlying natural limestone bedrock deposits. Aside from the occasional presence of natural faults in the bedrock which had subsequently been filled by the natural accretion of subsoil, the geological sequence was unremarkable and showed no evidence of anthropogenic activity.

4 CONCLUSION

The watching brief undertaken at Middleton Common did not find any evidence of *in-situ* archaeological features or deposits. Although the interface between subsoil and natural was slightly more irregular in the vicinity of the lead rakes, no direct evidence of anthropogenic activity was found during monitoring. The only artefact of interest was the single residual flint object, which has been ascribed a tentative Mesolithic date following specialist analysis (**Appendix B**). As this object was found in the subsoil, no further interpretation is appropriate beyond the suggestion that the artefact became included in the stratigraphical sequence due to loss or discard, rather than as a deliberate and meaningful deposition.

5 BIBLIOGRAPHY

Clark, J. G. D. 1934 The classification of a Microlithic Culture: The Tardenosian of Horsham. *Archaeological Journal* 90: 57-77.

Davies, G. 2007 Middleton Common Pipeline Phase 2 Environmental Impact assessment: Archaeological and Cultural Heritage assessment. ARCUS report 1131.1.

Hind, D. 2000 *Landscape and technology in the Peak District of Derbyshire : the fifth and fourth millennia BC*. Unpublished PhD Thesis, University of Sheffield.

Jacobi, R. 1978 The Mesolithic of Sussex, in P.L. Drewett (ed.), *Archaeology in Sussex*

to AD 1500. London: CBA Research Report 29. pp 15-22.

6 PLATES AND ILLUSTRATIONS



Plate 1: Field boundary 1, west end of photographed section, viewed facing southeast.



Plate 2: Field boundary 1, mid-west section, viewed facing southeast.



Plate 3: Field boundary 1, mid-east section, viewed facing southeast.



Plate 4: Field boundary 1, east end of photographed section, viewed facing southeast.



Plate 5: Field Boundary 2, east end viewed facing southeast.



Plate 6: Field boundary 2, mid-east end viewed facing southeast.



Plate 7: Field Boundary 2, mid-west end viewed facing southeast.



Plate 8: Field boundary 2, west end viewed facing southeast.



Plate 9: Field boundary 3, south end, viewed facing west.



Plate 10: Field boundary 3, mid-south section, viewed facing west.



Plate 11: Field boundary 3, mid-north section, viewed facing west.



Plate 12: Field boundary 3, north end, viewed facing west.



Plate 13: Field boundary 4, west end, viewed facing north.



Plate 14: Field boundary 4, mid-west section, viewed facing north.



Plate 15: Field boundary 4, mid-east section, viewed facing north.



Plate 16: Field boundary 4, east end, viewed facing north.



Plate 17: Field boundary 5, West end, viewed facing north.



Plate 18: Field boundary 5, Mid-west section, viewed facing north.



Plate 19: Field boundary 5, Mid-east section, viewed facing north.



Plate 20: Field boundary 5, east end, viewed facing north.



Plate 21: Field boundary 6, east end, viewed facing south.



Plate 22: Field boundary 6, mid-east section, viewed facing south.



Plate 23: Field boundary 6, mid-west section, viewed facing south.



Plate 24: Field boundary 6, west end, viewed facing south.



Plate 25: Northern end of pipeline easement, viewed facing north-west.



Plate 26: Excavated pipeline easement in field 2, viewed facing north-west.



Plate 27: Spread of stones exposed by easement, field 3, viewed facing north-west.



Plate 28: Working shot of easement excavation in field 4, viewed facing south.



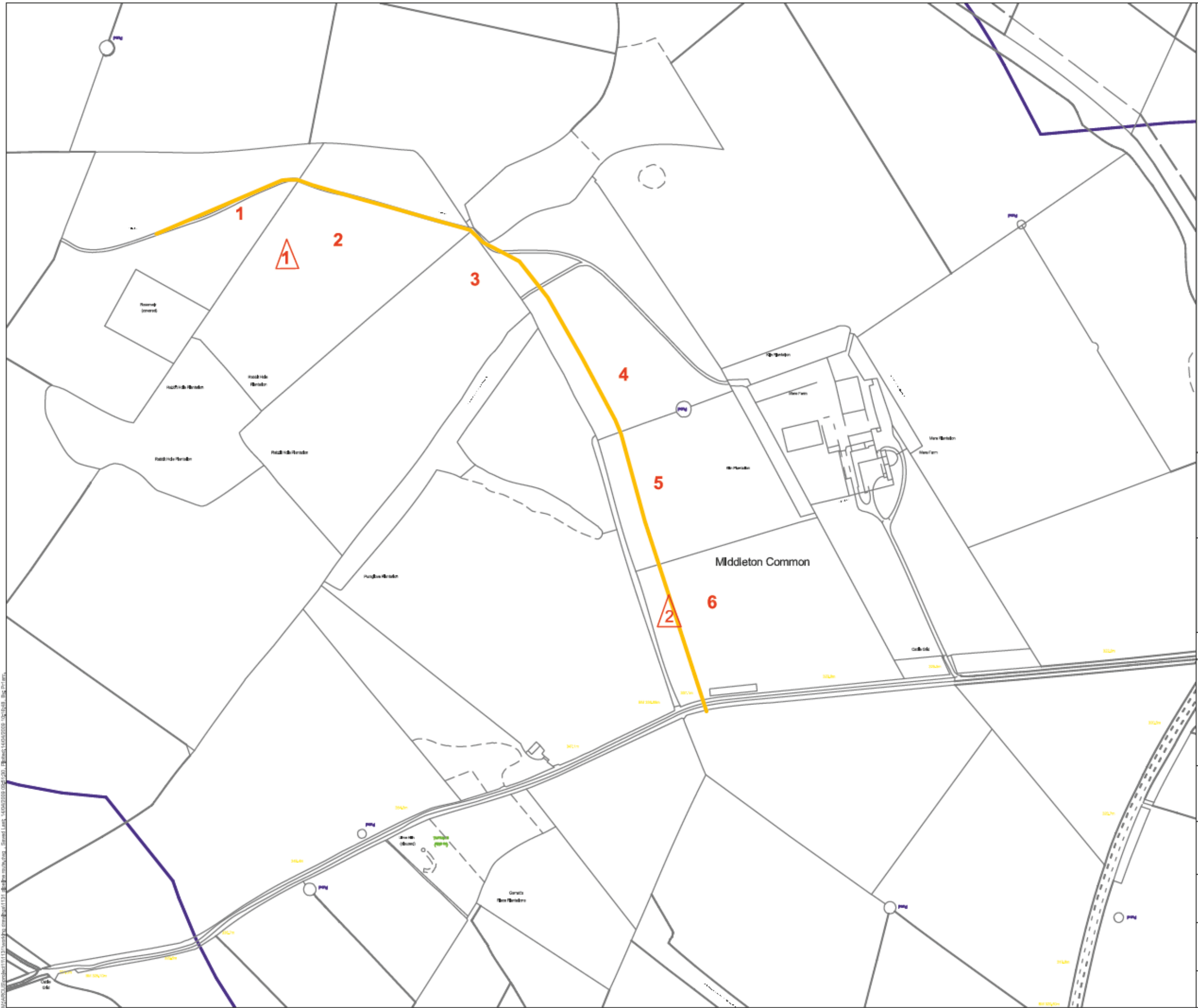
Plate 29: Working shot of easement excavation in field 5, viewed facing south.



Plate 30: Working shot of easement excavation in field 6, viewed facing south.



Plate 31: Commencement of pipeline excavation in field 1, viewed facing north-east.



- 1-6: Field numbers
- Small finds
- Dry stone walls
- Farm Tracks

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Project:
Middleton Common pipeline

Title:
Pipeline route showing small find locations

Scale	Date
nts	April 2009
NGR	Drawn
SK 1729 6301	Jo Mincher
Project No. 1131b.1(1)	Ill No. 2

1131b.1(1) Middleton Common Pipeline route showing small find locations
 Drawn: Jo Mincher
 Date: April 2009
 Scale: nts
 NGR: SK 1729 6301
 Project No: 1131b.1(1)
 Ill No: 2
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APPENDIX A: LIST OF CONTEXTS

Site sub-division	Context number	Context type	Description
All fields	100	Deposit	Topsoil
All fields	101	Deposit	Subsoil
Field 5	102	Cut	Intermittent drainage gully
Field 5	103	Deposit	Fill of 102, very similar to 100
Field 4	104	Cut	Irregular shallow blob, similar to 102
Field 4	105	Deposit	Homogenous fill of 104

APPENDIX B: LITHIOS

By Dr B. Chan

A small assemblage of worked flint has been retrieved from a watching brief conducted at Middleton Common, Derbyshire. Due to the small size of the assemblage no metrical analysis was conducted, however, a full description has been provided for each piece (Table 1).

The assemblage consists of three pieces of worked flint and a single piece of probably worked chert. The varied range of raw materials is entirely in keeping with chipped stone assemblages from the Peak District. Due to the small size of the assemblage and its residual nature it holds little archaeological potential. The microlith is an exception to this as it is a diagnostic piece.

The microlith is of a crude type and has been formed by steep angled retouch or "backing" along one lateral margin of a presumed blade blank. Unusually the microlith has been made on the proximal segment of the blade and the butt and bulb of the blade are still intact. A series of hinge fractures on the dorsal surface near the butt of the blade suggest that the original attempts to remove the blade failed and a new striking area on the platform had to be selected. This blank was then successfully removed without a need to rejuvenate the platform. The morphology of the artefact does not easily fit within current microlith typologies (Clark 1934, Jacobi 1978) and it could be described as an obliquely blunted point, a backed bladelet or an isosceles triangle. On balance it is felt that it most closely fits the category of an isosceles triangle. Given this assignation a tentative middle to late Mesolithic date can be suggested.

Context	SF No.	Raw Material	Description
105	-	White chert	A piece of irregular waste. The artefact shows few signs of working and may potentially be the result of natural weathering/fracturing
101	1	Dark grey opaque flint with white speckled inclusions. Possible Wolds flint.	A piece of irregular waste.
101	2	Translucent brown flint.	A chip (approx. 1cm x 1cm) of high quality translucent flint.
101	2	Pale grey opaque patinated flint. Possible Wolds flint.	Crude microlith made on a blank with blade scars on the dorsal surface. The butt and bulb of the blank still survive.

Table 1: The details of the assemblage

As suggested the only artefact of archaeological potential within the assemblage is the microlith. Given this it needs to be understood within its landscape context. The

watching brief occurred 1km southeast of Arbor Low. The general area around the henge has been surveyed through fieldwalking (Hind 2000) and seems to have been a focal point for lithic working activities throughout later prehistory resulting in comparatively dense scatters of worked stone in the fields surrounding the monument. It has been noted that these scatters contain a significant component of late Mesolithic flintwork (*ibid.*, Section 6.1.4.2). Hence it would seem that the microlith fits within this established sequence of later Mesolithic activity in the environs of Arbor Low.

Due to its small size, no further work is recommended for the assemblage, however, it is recommended that the microlith be illustrated for inclusion with this report.