BOARS HILL MAIN
OXFORDSHIRE

Archaeological Watching Brief

NETWORK ARCHAEOLOGY LTD

for

THAMES WATER UTILITIES LTD

Report 230

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Contents

1 SUMMARY

A permanent-presence watching brief was carried out in July 1999 along the Thames Water Boars Hill Main at Harcourt Hill, Oxford. The project yielded nearly sixty sherds of locally made Romano-British pottery, along with several worked flints and sherds of prehistoric and post-Roman pottery. Most of the finds were collected from the ground surface immediately prior to stripping. Excavation of the pipe trench revealed two layers of hillwash containing burnt clay and charcoal flecks but no securely datable material.

2 INTRODUCTION

2.1 General

In July 1999 Network Archaeology Ltd was commissioned by Thames Water to carry out a permanent-presence archaeological watching brief of the construction of a 250mm diameter gravity feed, laid by O.C. Summers Ltd. The 200m long pipe connects existing pipes near North Hinksey, Oxford (Figure 1). This report presents the results of the archaeological watching brief.

2.2 Requirements of the Brief

As part of their invitation to tender, Thames Water issued Network Archaeology Ltd with a *Brief for Archaeological Monitoring,* prepared by Claire Cable (19/2/99). Following the award of contract to Network Archaeology Ltd, a *Method Statement and Specification* was produced (March 1999) and a copy was supplied to the County Archaeological Officer for Oxfordshire.

The subsequent fieldwork conformed to the Institute of Field Archaeologists' (IFA) *Code of Conduct (1997)*, and the IFA's *Standard and Guidance for Archaeological Watching Briefs* (1994).

2.3 Pipeline Assessments

Any development has the potential to damage the archaeological resource, but this can be transformed by the opportunity to investigate any archaeological remains. The 200m long transect examined by archaeologists during the construction of the Boars Hill main has contributed to the body of knowledge in an area of previously undetermined archaeological potential.

2.4 Archaeological Background

Network Archaeology Ltd conducted a Sites and Monuments Record (SMR) search of archaeological sites in the vicinity of the pipeline. The findings are summarised in Appendix A and shown in Figure 2.

Prehistoric Finds

The main evidence of prehistoric activity in the area are surface flint scatters. The earliest of these are Mesolithic (PRN 7678 and 9082), but the most significant local scatters are Neolithic/Bronze Age (PRN 7491, 9081, 9087, 9090 and 10590). A Late Neolithic/Early Bronze Age flint scatter has been found approximately 400m to the

Figure 1: Location of Boars Hill Main and SMR map

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east (PRN 9089). Further prehistoric activity is represented by flints at Hurst Hill, less than one kilometre to the south-west of the pipeline (PRN 7677 and PRN 4698), and a circular cropmark roughly 500m to the north-west and thought to be a Bronze Age ring ditch (PRN 15029). Iron Age pottery has been found to the south-east.

Roman Road
The Roman road between North Hinksey and Bessels Leigh is recorded as running immediately to the south-east of the pipeline (PRN 9541) on the line of a prehistoric trackway (PRN 6344). There are three references to Roman pottery found within 150m of the route (PRN 9529, PRN 6344 and PRN 10790), and a fourth location is a little further south (PRN 11869).

Fieldwalking Studies
The bias of past fieldwalking studies towards fields on either side of the Roman road, has created a distorted picture of the distribution and density of archaeological finds in the region. Nevertheless, the quantity of Roman material found in the vicinity of the pipeline over the years suggests there was significant activity of this period in the area.

Fieldwalking first appears to have been conducted in 1928 by Reverend C. Overy, who found Romano-British pottery (PRN 9529). A survey in 1970 produced three Roman sherds (PRN 6344). Another survey, in 1976, recorded a scatter of Romano-British potsherds nearby (PRN 6344 and PRN 9529). Fieldwalking in the field to the east of the Roman road produced "one to two pounds" of Romano-British pottery in 1977 (PRN 10790).

Settlement Evidence
Evaluation trenching by the Oxford Archaeological Unit approximately 500m to the east of the route revealed a possible hearth along with pits, ditches and postholes and finds of prehistoric and Roman date (PRN 15935). This potential settlement site may be the origin of some of the material recorded nearby.

Cemetery Evidence
An iron spear (PRN 14170) may be evidence of an Anglo-Saxon cemetery, approximately one kilometre to the south-west of the pipeline.

2.5 Objectives of the Watching Brief

- to locate, recover, identify, and conserve (as appropriate) any archaeological artefacts exposed during the pipeline's construction;
- to locate, excavate, interpret and record any archaeological deposits exposed during the pipeline's construction;
- to gather sufficient information to establish the presence or absence, extent, condition, character, quality and date of any archaeological remains along the pipeline route;
- to sample (and submit for analysis) any deposits with the potential to yield palaeo-environmental data;
- to recommend mitigatory measures for preservation *in situ* of any archaeological deposits (where feasible and desirable).

3 DESCRIPTION OF THE ROUTE

3.1 Location and Topography

The pipeline runs for approximately 220m through farmland to the south-west of North Hinksey village, parallel with an earlier, cast iron main.

Beginning at an existing main (SP 4855 0431), approximately 500m south-west of North Hinksey village (120m OD), the pipeline descends slowly south-westwards across one field (Plot 1) before reaching a track from Chilswell Farm to Chawley (SP 4841 0413; 117m OD).

There is a distinct depression in the middle of the pipeline route (see section 5).

The southern edge of Plot 1 is marked by a clipped thorn hedge, whilst the eastern side of the field is bounded by a narrow strip of mature deciduous woodland, through which a public footpath runs.

3.2 Geology, Soils and Landuse

The geological deposit along the route is a Jurassic Limestone (BGS 1979, 1994). This bedrock gives rise to a shallow, well-drained brashy, calcareous fine loamy soil (*Elmton 1*), suited to cereals, sugar beet and potatoes (SSEW 1983). Plot 1 is currently arable.

4 PROCEDURES

4.1 Pipeline Construction

The strategy of the watching brief was dictated by the method of pipeline construction. A JCB with a narrow, three-toothed bucket was used to strip the topsoil (this was placed on the west baulk) and excavate the pipe trench (subsoil was laid on the east baulk). Although the width allowed for the easement was 6m, the maximum width of topsoil stripped was only *c*.1.5m. The pipe trench was *c*.1.2m deep and 0.5m wide at its base. The machine progressed downhill in a southerly direction, stripping and trenching a length of approximately 3m at a time. It was not possible to achieve a cleanly stripped surface with the toothed machine bucket and only a small area of stripped ground was visible at any one time. The final 5m of the trench was stripped using a back acting machine fitted with a toothless grading bucket.

Pipe-laying began soon after the excavating commenced. The two processes were conducted simultaneously, requiring the JCB to break off from trenching and track back up the hill to lay each newly-prepared length of pipe. The pipe sections were assembled above ground and slid into the trench from the north end. Usually, this provided enough time to inspect the freshly excavated sections to the south, but occasionally it was necessary to temporarily halt the pipe-laying so that an archaeological record could be made.

When solid limestone bedrock was encountered at the southern end of the pipe trench, a hydraulic breaker was used to break up the limestone for removal.

The pipe-trench was backfilled using the JCB, once the pipe had been placed in the ground.

4.2 Archaeological Watching Brief

A permanent-presence watching brief was carried out by one archaeologist. The topsoil stripping and pipe-trenching process was carefully monitored, and all archaeological remains investigated and recorded.

No features were found during topsoil stripping. Where archaeological deposits were observed during trenching, the section was cleaned by hand, photographed and drawn at an appropriate scale. Proforma record sheets were completed for the archaeological deposits. When this had been done, the deposits were part-excavated to recover any artefacts that might be present.

In addition to the project code (BHM 99), each archaeological deposit was assigned a unique context number from 100 to 104. All artefacts found in a stratified context were numbered accordingly. In addition to this, all surface finds were collected from the easement. These were given an 'unstratified find' number from 001 to 031, and their location recorded to the nearest 10m (Appendix B).

5 RESULTS

The watching brief produced a significant quantity of Roman pottery along with some prehistoric material. A sequence of hill-wash deposits containing charcoal and burnt clay overlay a natural hollow (108) (see Figure 4a) in the limestone bedrock. A periglacial feature (109) (see Figure 4b) corresponded with the position of the depression observed within the middle of the pipeline route (see 3.1).

5.1 Geological and Pedological Deposits (Appendix B)

The bedrock (110), a fossiliferous-rich limestone was only 100-250mm beneath the ground surface at the southern end of the trench. The limestone was massively bedded; excavated blocks measured up to *c.* 1.5 x 2.5 x 0.4m. The fracturing of the natural rock initially had the appearance of a road surface comprised of large stones, but this was not the case. Towards the north end of the trench, the bedrock dipped down, and had weathered to produce patches of brashy clay.

Two natural, silty clay subsoil layers (103 and 105) with very frequent limestone fragments, had developed over the brashy clay substrate. Layer 103 was intermittent, and had developed within Hollow 108 (see below).

The ploughsoil (100), a calcareous silty clay was variably deep.

5.2 Archaeological Artefacts (Appendices B and C)

At the time of the watching brief, Plot 1 had been ploughed, harrowed and weathered, providing excellent visibility and maximising the retrieval of surface finds. The majority of the finds (85%) were recovered by fieldwalking the surface of the pipeline route prior to stripping, or were recovered from the spoilheap. Fewer finds (15%)

were produced by the excavation of archaeological deposits (see below). The finds included pottery, animal bone, flint, ceramic building material and burnt stone (see Table 1).

Context	Prehistoric Pottery	LIA/Roman Pottery	Medieval Pottery	Post-Medieval Pottery	Animal Bone	Flint	Ceramic Building Material	Burnt Stone
001		✓						
002		✓						
003		✓						
004		✓						
005							✓	
006		✓						
007								✓
008							✓	
009		✓						
010		✓						
011		✓						
012		✓					✓	
013		✓						
014		✓						
015		✓		✓				
016						✓		
017				✓				
018		✓					✓	
019		✓						
020		✓					✓	
021		✓						
022		✓						
023		✓						
024		✓				✓		
025							✓	
026		✓						
027		✓						
028		✓						
029		✓						
030		✓						
031			✓					
101	✓				✓			
102						✓	✓	✓
104							✓	

Table 1: Archaeological artefacts by context

5.3 Distribution of Archaeological Artefacts

The distribution of the finds varied across the field. Most finds came from the stretch of easement 50 to 120m from the southern end of the field, concentrating particularly around the 100m mark. Smaller clusters of finds came from the northern end of the pipeline and from the vicinity of the visible natural depression near the middle. There was a notable lack of finds in the southernmost 50m of the field, coinciding with the rising bedrock and diminishing topsoil.

5.4 Archaeological Deposits (Appendix B)

Two layers of hillwash (contexts 101 and 102) had accumulated above a natural hollow (108) (see Figure 4a) in the limestone bedrock and were recorded during pipe-trenching:

> ***Hillwash 101*** a silty clay with limestone fragments containing poorly preserved pottery, fragments of bone, flecks of burnt clay and charcoal.
>
> ***Hillwash 102*** a silty clay with small limestone fragments, ?waterworn pebbles, burnt stone, burnt clay and charcoal flecks. A small animal burrow near the south end of this layer was filled with material (104) redeposited from the hillwash layer (102).

Both deposits were above the natural subsoil layer 103, and appeared to lie across a natural hollow (108) rather than a cut feature (Figure 4a). The small, abraded nature of the natural (and archaeological) inclusions suggested a gradual migration into the hollow from the north or west, brought about by factors such as ploughing, soil creep, and wind and water erosion (hillwash). There were no securely datable finds from either layer, but poorly preserved pottery in 101 may be prehistoric (Appendix C - Lyne).

The greatest concentration of surface and spoilheap finds corresponded with the position of layer 101. A lesser scatter of material extending downhill to the southwest, may have resulted from some of the accumulated material in the natural hollow migrating down the slope through ploughing.

5.5 Drains (Appendix B)

Trenching revealed two modern land drains approximately 6.5m apart, crossing the pipe trench at 90°. The drains cut through two hillwash layers (101, 102 - see below) located in the central section of the trench, where there was a natural hollow visible on the ground surface.

5.6 Natural Features

Periglacial Feature 109

Two periglacial deposits (106 and 107) were observed within a natural feature (109) roughly twelve metres long and at least one metre deep (see Figure 4b). This coincided with a large depression observed on the ground surface during field reconnaissance (see 3.1). The southern limit of the depression was truncated by a land drain, but appeared to end at about this point, whilst the northern extent had a distinct edge.

Natural Hollow 108

A natural hollow (see Figure 4a), approximately two and a half metres wide contained a natural subsoil layer 103.

6 DISCUSSION

In addition to the material excavated during the watching brief, surface finds of flint and pottery discovered along the pipeline route during the watching brief provide evidence of activity in the vicinity since prehistoric times.

Mesolithic (c.10,000 - 4,500 BC)
The earliest remains are Mesolithic flint tools, found at various points along the route, and indicating prehistoric human activity in the area from *c.*10,000 years ago. Some of these finds may have been deposited with hill-wash from the higher ground to the north, where Mesolithic activity is known to have been focused along a natural spring line (Holgate *pers. comm.*).

Late Iron Age (c.300BC - 43AD)
This period was represented by two potsherds from the spoil heap and another from the surface. The pottery is not as robust as the Roman material which dominates the sample so the Late Iron Age may be underrepresented. One of the hillwash deposits seen in the southern half of the pipe trench contained pottery which could date from this period.

Romano-British (43 - 410AD)
Remains of the Roman road running south-westwards from North Hinksey towards Bessels Leigh were not found during the watching brief. The road is now thought to lie several metres to the east of the pipeline.

The project yielded nearly sixty sherds of locally made Romano-British pottery, including ten different fabric types. The assemblage suggests significant levels of activity in the area between 70 and 300AD (Appendix C - Lyne). Three fragments of possible Roman brick/tile may indicate the presence of a nearby building, although on the basis of their abraded edges they are more likely to be the result of manuring (Appendix C - Moore).

Post-Roman Activity
Very little post-Roman material was recovered from the pipeline route. Only three of the sixty-five pot sherds retrieved were post-Roman, and only two fragments of brick/tile are of this date, which suggests a lack of archaeological activity of this period in the immediate area of the pipeline. Furthermore, there are no nearby sites dating from the Anglo-Saxon period (c.450 - 1066 AD) or the Medieval era (c.1066 - 1500 AD) listed in the County's Sites and Monuments Record, although there is thought to have been an Anglo-Saxon cemetery somewhere between Chawley and Cumnor, about 2km from the pipeline. The nearest post-Medieval site (after c.1500AD) mentioned is Chawley Brickworks, approximately one kilometre to the east of the pipeline (PRN 7469).

The finds from the watching brief support the view that this area was frequented during the prehistoric and Roman periods and that there has been very little subsequent activity. The burnt material in the hillwash deposits 102 and 103 could be debris from industrial or domestic hearths or be the result of trees or buildings burning down. The burnt clay and charcoal fragments were fairly small, abraded and evenly

distributed throughout the deposits, suggesting that they may have traveled a considerable distance. The contours suggest an origin somewhere to the north of 102 and 103, so it is unlikely that the material derives from the possible settlement site excavated by the OAU (see section 2.4). It may be significant that the pottery scatters PRN 9529 and PRN 6344 both lie to the north of the pipeline.

7 ARCHIVE

The site records, drawings, photographs and artefacts have been prepared in accordance with the *Required Procedures for Transference of Archaeological Archives to Oxfordshire Museums*. This archive is currently held by Network Archaeology Ltd at their Buckinghamshire Office, but shortly it will be deposited at Oxfordshire Museums Store, Standlake, Oxfordshire.

8 ACKNOWLEDGEMENTS

Thanks are due to Claire Cable, Rob Parsons and Lawrence Smith of Thames Water, and to Mark Bidwell and Tony Kellher of O.C. Summers for their help and assistance.

The fieldwork was undertaken, and the report prepared by Network Archaeology Ltd for Thames Water Utilities: watching brief undertaken by Rosie Burton; report written by Rosie Burton and edited by David Bonner; illustrations by Debbie Meadowcroft and Nicola Smith. The finds were studied by Malcolm Lyne, Richard Moore and David Bonner.

9 REFERENCES

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APPENDICES

Appendix A -	**Gazetteer of SMR Data**
Appendix B -	**Gazetteer of archaeological deposits and table of archaeological finds**
Appendix C -	**Specialist reports**
Appendix D -	**Figures 2 - 4**

APPENDIX A

Gazetteer of SMR Data

PRN	Source	Description	Period	Distance from Pipeline	Quarter Sheet	NGR
4698	Oxon. SMR	flint implements	Prehistoric	0.5 - 1 km	SP40SE	4773 0394
6344	Oxon. SMR	pottery scatter	Roman	0 - 0.5 km	SP40SE	4843 0421
7469	Oxon. SMR	Chawley Brickworks	Post Medieval	0.5 - 1 km	SP40SE	474 043
7491	Oxon. SMR	three flint scrapers	Neolithic	0.5 - 1 km	SP40SE	4878 0333
7677	Oxon. SMR	microlithic core	Prehistoric	0.5 - 1 km	SP40SE	4778 0404
7678	Oxon. SMR	flint artefacts	Mesolithic	0.5 - 1 km	SP40SE	4881 0341
7700	Oxon. SMR	flint-working area	Neolithic	0.5 - 1 km	SP40SE	48 03
9081	Oxon. SMR	flint scatter	Neolithic/Bronze Age	0.5 - 1 km	SP40SE	489 034
9082	Oxon. SMR	flint artefacts: 4 bladelets	Mesolithic	0.5 - 1 km	SP40SE	489 034
9087	Oxon. SMR	flint artefact: 1 scraper	Neolithic/Bronze Age	0.5 - 1 km	SP40SE	480 048
9089	Oxon. SMR	9 retouched flakes and a transverse arrowhead	Late Neolithic/ Early Bronze Age	0 - 0.5 km	SP40SE	488 041
9090	Oxon. SMR	flint scatter, incl. flakes, core, knife, and	Neolithic/Bronze Age	0.5 - 1 km	SP40SE	478 038
9096	Oxon. SMR	pottery scatter	Iron Age	0.5 - 1 km	SP40SE	490 035
9178	Oxon. SMR	human bones, swords and armour	Anglo-Saxon	1.5 - 2 km	SP40SE	463 046
9529	Oxon. SMR	pottery scatter	Roman	0 - 0.5 km	SP40SE	4841 0430
9541	Oxon. SMR	road	Roman	0 km	SP40SE	SP40 to SU4984
9548	Oxon. SMR	cinerary urn	Roman (1st century AD)	uncertain	SP40SE	48 02
10590	Oxon. SMR	leaf-shaped arrowhead	Neolithic	0.5 - 1 km	SP40SE	486 034
10790	Oxon. SMR	pottery scatter: 1-2lbs of potsherds collected during fieldwalking	Romano-British	0 - 0.5 km	SP40SE	4850 0415
11869	Oxon. SMR	pottery scatter	Romano-British	0.5 - 1 km	SP40SE	4882 0343
14170	Oxon. SMR	iron spearhead	Anglo-Saxon	0.5 - 1 km	SP40SE	480 037
15029	Oxon. SMR	cropmark: ring ditch	Bronze Age?	0.5 km	SP40SE	48 19
15935	Oxon. SMR	pottery, possible hearth, scattered pits and ditches	Prehistoric and Roman	0.5 km	SP40SE	4904 0424

APPENDIX B

Gazetteer of archaeological deposits and table of archaeological finds

Gazetteer of Archaeological Deposits

Ploughsoil 100 dark brown, friable silty clay with moderate fine and medium waterworn gravel and occasional to moderate sand (average depth 300mm)

Hillwash 101 mid orange brown, tenacious silty clay with mid brown mottles, moderate limestone fragments (averaging 50mm across) and flecks of burnt clay and charcoal; soil accumulation above Natural Hollow 108; seen in both trench sections; runs northwards from a point 70m from the south end of the trench; north-south extent 19m; average depth 470mm; overlies layer 103

Hillwash 102 mid to dark grey brown, friable silty clay with moderate limestone fragments (averaging under 50mm across) and occasional to moderate burnt clay and charcoal flecks and occasional patches of waterworn pebbles towards the southern end; soil accumulation above Natural Hollow 108; seen in both trench sections; overlain by layer 101; overlies natural subsoil (103 and 105); north-south extent 7m; average depth 260mm

Burrow fill 104 mid to dark brown, friable to loose silty clay with occasional small limestone chips and occasional burnt clay and charcoal flecks; material (redeposited from 102) filling an animal burrow; located within layer 103; north-south extent 220mm; average depth 150mm

Natural Subsoil 105 mid brown to pale/mid orange brown, firm slightly silty clay with 80% limestone fragments up to 50mm in diameter; located north of layer 102; overlies layer 103; average depth 380mm.

Natural Hollow 108 irregular base and sides of assumed natural origin; north-south extent *c.*3m, *c.*0.3m deep.
Subsoil layer/fill103 mid orange, tenacious, gritty, clay with 70% small limestone fragments; patchy deposit, found within Hollow 108, and intermittently throughout northern 140m of the pipe trench; always directly overlay bedrock; average depth 100mm

Periglacial Feature 109 steep NE side, SW side truncated by land drain and not therefore seen; north-south extent *c.*12m, 0.9m+ deep; the base was not seen
Fill 106 mid brown, friable silty clay with 20% limestone fragments; cut by the southernmost land drain; average depth 800mm.
Fill 107 mid orange brown, plastic clay with occasional small stones and limestone fragments; overlain by layer 106 and truncated by southernmost land drain; not fully excavated (depth exceeds 150mm).

Bedrock 110 fossiliferous-rich limestone; between 0.1 and 1m beneath surface

Table of Archaeological Finds

Context	Prehistoric Pottery	LIA/ Roman Pottery	Medieval Pottery	Post-Medieval Pottery	Animal Bone	Flint	Ceramic Building Material	Burnt Stone
001		2/10g						
002		1/10g						
003		1/6g						
004		1/10g						
005							1/25g	
006		1/4g						
007								1/30g
008							1/115g	
009		1/8g						
010		1/39g						
011		1/7g						
012		1/4g					1/10g	
013		2/7g						
014		4/10g						
015		6/58g		1/4g				
016						1/7g		
017				1/2g				
018		1/4g					1/5g	
019		8/62g						
020		3/10g					1/10g	
021		1/2g						
022		1/6g						
023		1/8g						
024		11/62g				2/3g		
025							1/30g	
026		2/8g						
027		3/8g						
028		2/34g						
029		3/12g						
030		2/6g						
031			1/20g					
101	2/1g				3/18g			
102						1/2g	5/3g	1/32g
104							1/5g	
Totals	**2/1g**	**60/394g**	**1/20g**	**2/6g**	**3/18g**	**4/12g**	**12/103g**	**2/62g**

APPENDIX C

Specialist Reports

Pottery	*Malcolm Lyne*
Animal Bone	*Richard Moore*
Flint	*David Bonner*
Burnt Stone	*David Bonner*
Ceramic Building Material	*Richard Moore*

ROMAN AND OTHER POTTERY
Assessment Report

Malcolm Lyne

The watching brief yielded a total of sixty-five sherds (421g) of pottery, of which all but three sherds (26g) are Late Iron Age or Roman in date. All of the Roman pottery comes from the Oxfordshire industry kilns, which is not surprising as the nearest production site is at Boars Hill, Overdale only three kilometres to the south and the Churchill Hospital, Oxford kilns are seven kilometres to the east.

Most of the pottery consists of featureless greyware body sherds, which are impossible to give precise dates to. Nevertheless, the indications are that the bulk of the Roman sherds belong to the period c.AD.70-300, although there are two 'Belgic' grog-tempered ware sherds of Late Iron Age or Pre-Flavian date from contexts 015 and 030. Three handmade shell-tempered sherds from 023 and 101 may be of similar date: the two crumbs from the only dug context (101) are so minute, however, that very little can be deduced from them and they may be earlier.

The argument for a site cut-off around AD.300 lies in the absence of certain distinctive fourth century fabrics for the area. These include Late Roman Shell-tempered wares and Alice Holt/Farnham industry greywares. The paucity of Oxfordshire Red Colour-coated wares is also indicative of a deficiency in fourth-century pottery.

FABRIC TYPES

Fine and specialised wares

Fabric	Description
R.1.	Oxfordshire Grey wares
R.2.	Coarse Boar's Hill variant
R.3.	Handmade shell-tempered black fabric
R.4.	Oxfordshire Coarse White ware
R.5.	Sandfree greyware
R.6.	Coarse handmade grog-tempered ware
R.7.	Oxfordshire White-Slipped ware
R.8.	Oxfordshire Fine Oxidised ware
R.9.	Oxfordshire Parchment ware
R.10.	Oxfordshire Red Colour-coated ware

CATALOGUE OF POTTERY SHERDS

Context	Fabric	Form	No.of sherds	Weight	Date range
001	R.7	motarium	1	8g	AD. 240-400
	R.8		1	2g	AD. 50-400
002	R.2	jar	1	10g	AD. 70-200
003	R.1	closed	1	6g	AD. 70-400
004	R.1	closed	1	10g	AD. 70-400
006	R.1	closed	1	4g	AD. 70-400
009	R.8	0.41 dish	1	8g	AD. 100-300
010	R.1	base	2	46g	AD. 70-400
012	R.1	closed	1	4g	AD. 70-400
013	R.1	R.20.4 jar	1	4g	AD. 70-400
		closed	1	2g	AD. 70-400
014	R.2	closed	3	8g	AD. 70-200
	R.8		1	2g	AD. 70-400
015	R.1	base	2	40g	AD. 70-400
		closed	2	14g	AD. 70-400
		cordoned jar	1	2g	Mid-late 1st C.
	R.6	closed	1	2g	LIA - c.AD. 70
	-	-	1	4g	18th-19th
017	-	-	1	2g	post-medieval
018	R.9	platter	1	4g	AD. 240-400
019	R.1	R21 jar	1	2g	AD. 70-150
		R20 JAR	4	46g	AD. 70-400
	R.2	closed	1	6g	AD. 70-200
	R.10	C49 dish	1	2g	AD. 240-400
		C16 jar	1	6g	AD. 270-400
020	R.1	closed	2	8g	AD. 70-400
	R.2	closed	1	2g	AD. 70-200
021	R.1	closed	1	2g	AD. 70-400
022	R.1	closed	1	6g	AD. 70-400
023	R.3	closed	1	8g	LIA
024	R.1	closed	1	2g	AD. 70-150
		closed	5	26g	AD. 70-400
	R.4	closed	4	18g	AD. 70-400
	R.5	Basal sherd	1	16g	AD. 70-300
026	R.5	beaker	2	8g	AD. 70-150
027	R.1	ev. rim beaker	3	8g	AD. 120-150
028	R.1	jar base	1	6g	AD. 70-400
		R55 dish	1	28g	AD. 150-400+ (Young 1977)
029	R.1	closed	2	10g	Roman
	R.2	closed	1	2g	AD. 70-200
030	R.1		1	2g	AD. 70-400
	R.6	closed	1	4g	LIA-AD. 70
031	-	cooking pot	1	20g	c.1150-1250
101	R.3	-	2	1g	?prehistoric

Animal Bone

Richard Moore

There were only three pieces of bone, weighing 18g, recovered from this site. One piece is probably a cattle right metacarpal and the other two pieces are shaft fragments. All have a similar appearance and may all be from the same bone, although they do not re-fit. The bone is pale creamy buff with a slightly chalky, flakey surface, but quite hard in texture. The edges have been eroded, suggesting that the material may have been disturbed, or have lain around for some time before burial. The breaks in the bone are old, and it may have been deliberately cracked, to extract marrow or as a prelude to rendering down by boiling. There is no meat on the lower part of the legs of domestic ungulates, but they may have been used for cooking stock or for preparation of gelatine-based glues.

Bone List

The table lists all the bones found. The species of animal has been given where there is reasonable confidence about its identification. An indication of the general size and robustness of bones is given in uncertain cases, as, for instance, 'cow-sized'. Small fragments that defy even this level of identification are listed as 'unidentified'. Uncertain identifications are generally indicated in the comments column. This is also used to record the parts of the bone present where it is incomplete, its size where this is significant, and also whether there are signs of burning or of butchery marks.

Context	Animal	Bone	Weight	Comments
101	Cow-sized	Metapodium	3g	Fragment of proximal end.
101	Cow-sized	?Metapodium	4g	Shaft fragment, may be same bone as above.
101	Cow-sized	?Metapodium	11g	Shaft fragment, may be same bone as above.

Flint

David Bonner

Four flints, weighing 12g, were found during the watching brief. These included a blade, a bladelet and a flake of Mesolithic date, and an undetermined shattered piece. These flints indicate a low level of Mesolithic activity, possibly the result of hunting/foraging expeditions. Given the frequency of prehistoric finds made previously in this area, those flints found by the current survey are not surprising.

Context	Class	Description	Count	Weight	Date
16	blade	soft hammer, patinated	1	7g	Mesolithic
24	bladelet frag.	?serrated edge, patinated	1	1g	Mesolithic
24	flake	hard hammer struck	1	2g	Mesolithic
102	shattered piece	partly patinated	1	2g	Undetermined

Burnt Stone

David Bonner

Two heat-affected pebbles, weighing 62g, were found. Both had been heated in an oxidising environment and could be the result of stubble burning. One pebble, found within a layer of hillwash (102), appeared to have been subjected to prolonged heating.

Context	Count	Weight	Comment
7	1	30g	Pebble, scorched
102	1	32g	Pebble frag., burnt

Ceramic Building Material

Richard Moore

Ceramic building material was recovered from eight contexts. It mostly consisted of small, irregular lumps, making identification difficult. The types and dates given in the table below are very tentative. One piece, from (025), has one outer surface which had been wiped smooth before firing, and a tiny area of surface is also visible on the piece from (012).

The fabrics are generally red-buff, though the piece from (012) and the largest of the small lumps from (102) have pale blue-grey reduced centres. The small lump from context (018) has a different appearance, and may be a piece of fire-hardened clay, rather than building material.

The surfaces of are mostly very abraded with no sharp angles to the broken edges. This is especially true of the five tiny lumps from (102) and the piece from (104). The extent of this erosional damage suggests that the material was disturbed prior to its final deposition and is likely to be residual.

An irregular, angular fragment of fire-darkened sandstone from (026) was included with the ceramic building material. Weighing 85g and with a maximum dimension of 67mm, this has a small area (20x12mm) of flat, mortared surface, indicating that it was part of a building stone.

Context	Type	Count	Weight	Date	Comment
005	?Brick/Tile	1	25g	RB/Med	Abraded edges
008	?Brick	1	115g	RB/Med	Layered fabric, with paler buff streaks
012	?Brick/Tile	1	10g	?Post-med	Has tiny area of smoothed surface
018	?	1	5g	?	Dark pinkish red and dark grey lump
020	?Tile	1	10g	RB/Med	Abraded
025	?Tile	1	30g	Med/Post-med	Smoothed surface on one side
102	?	5	3g	?	Very abraded
104	?	1	5g	?	Very abraded

APPENDIX D

Figures 2 - 4

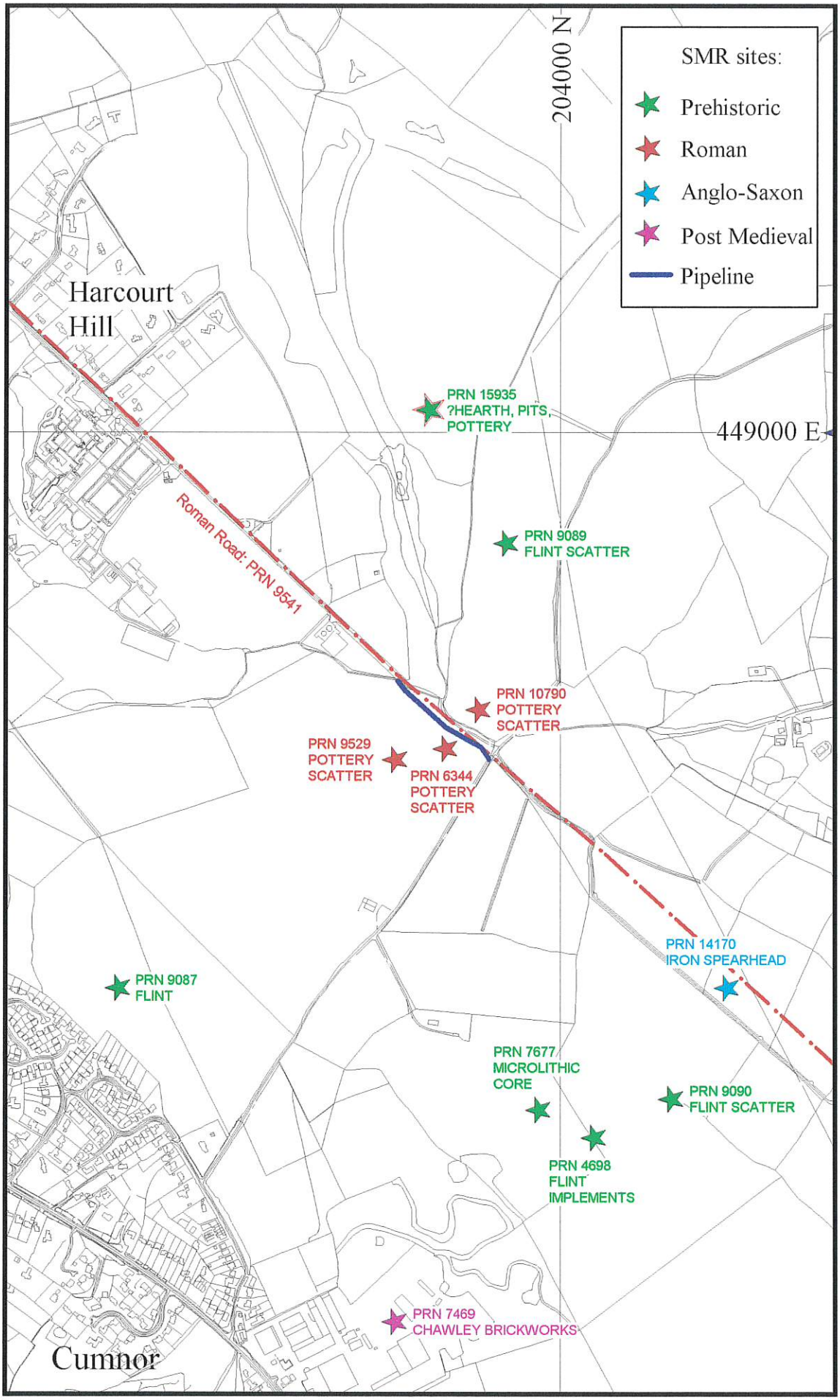

Figure 2: Boars Hill Main and Oxfordshire Sites and Monuments Record sites

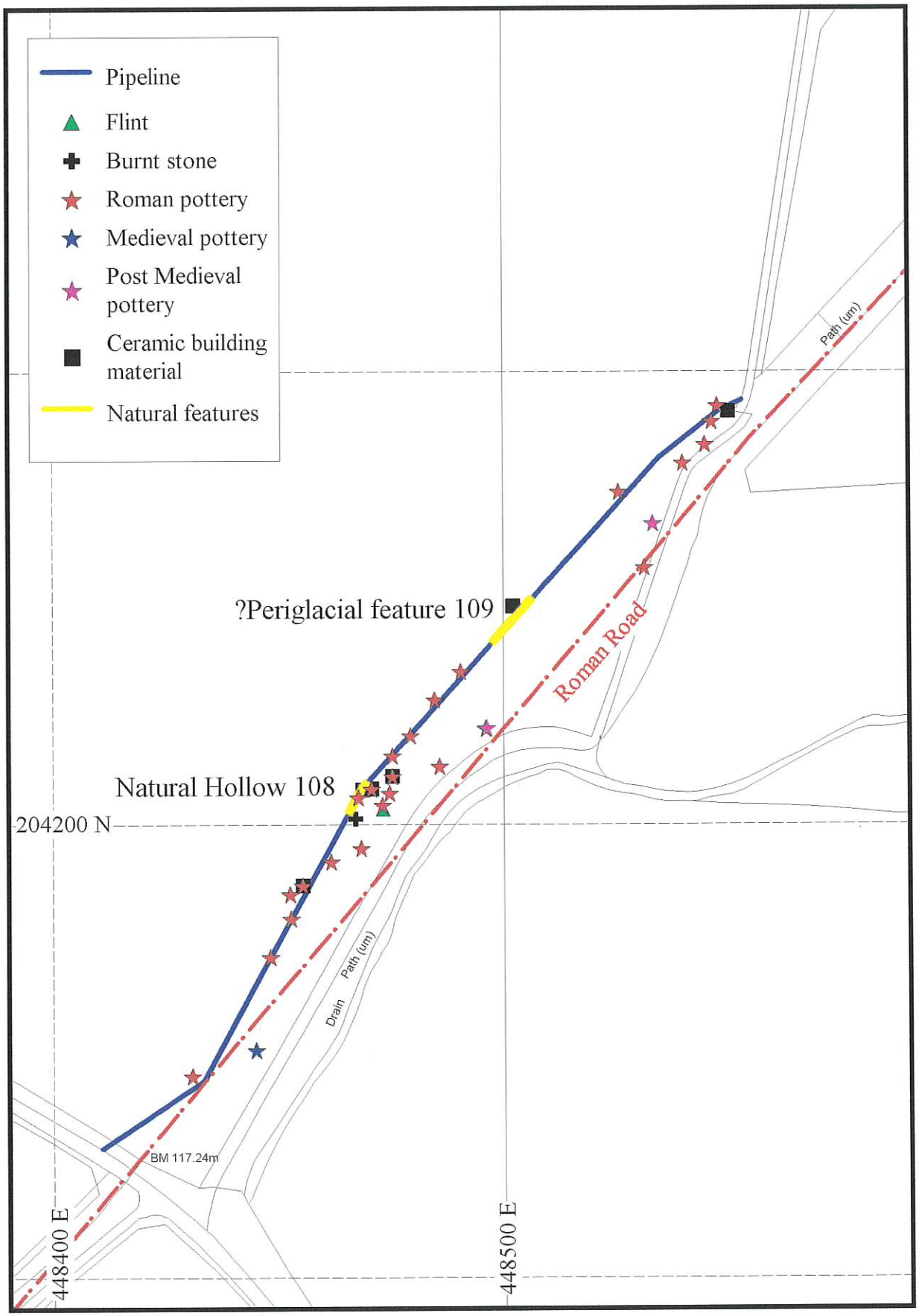

Figure 3: Location of Natural Hollow 108 and Periglacial Feature 109 and finds in relation to pipeline

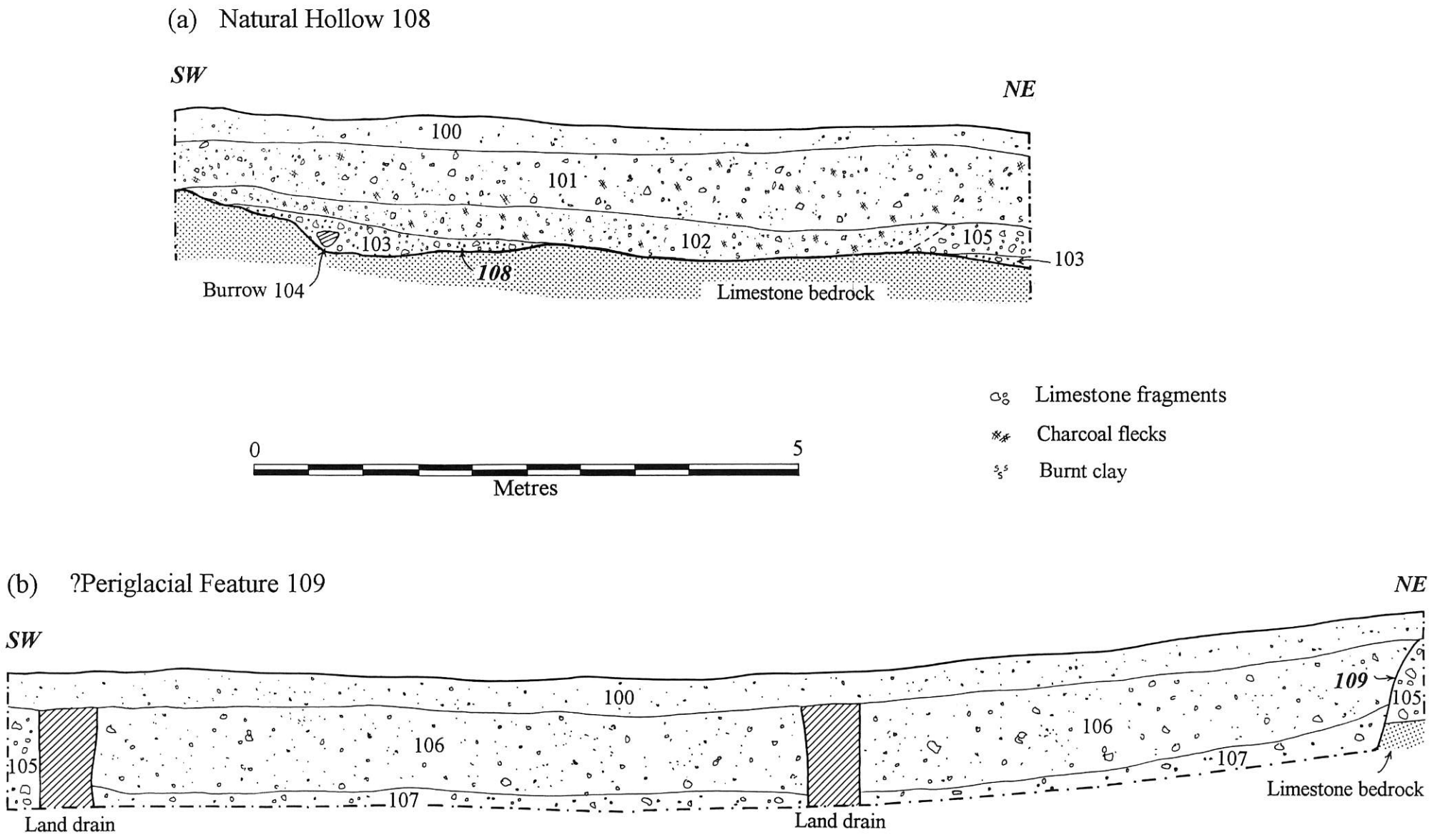

Figure 4: Sections through (a) Natural Hollow 108, showing hillwash 101 and 102, and (b) ?Periglacial Feature 109 [scale 1:50]