ARCHAEOLOGICAL EVALUATION AND RECORDINGON THE LINE OF THE LEE MOOR (RIDDING DOWN) CHINA CLAY PIPELINE, CORNWOOD, IVYBRIDGE, DEVON

Prepared for Sibelco UK

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1. INTRODUCTION

This report has been prepared for WBB Minerals (now Sibelco UK) and presents the results of archaeological evaluation and recording undertaken by Exeter Archaeology (EA) in August 2008 along the route of the new Lee Moor (Ridding Down) China Clay pipeline, Cornwood. The pipeline extended between Headon China Clay Works (SX 584 603) and the Lee Moor operational area to the north-west (SX 5777 6205) (Fig. 1). The archaeological work was required under condition 3 attached to the grant of planning permission by Devon County Council (ref: 12/42/49/0740/08/CM) to WBB Minerals Ltd (now Sibelco UK).

1.1 The pipeline route and the known archaeological background (Fig. 2)

The southern part of the route passed through an area of enclosed fields. The central portion crossed an area of open rough pasture. To the north it crossed a series of historic boundaries and a modern farm trackway, ending at the Lee Moor Tramway embankment.

Specifically, the pipeline route crossed an area of known archaeological sensitivity, with surviving remains and deposits from the prehistoric to the post-medieval period, including elements of a Bronze Age reave system (*these systems consisted of rectilinear fields defined by low stone walls or stone/earth fieldbanks - sometimes associated with ditches - known, on Dartmoor, as reaves. Some reaves are several kilometres long. Parallel banks laid out in regular patterns over wide areas were intersected at right-angles by so-called 'transverse reaves'. This highly-organised system of land organisation was initiated c. 1600 BC in the Middle Bronze Age). Further discussion of the reave system and the archaeology of the area is found in Fleming, 1979 and 1994, and in a report produced by English Heritage (Fletcher, 2002). However, see conclusions below, no conclusive evidence for prehistoric reaves was recovered in the evaluation exercise.*

There are a number of Scheduled Ancient Monuments in the vicinity of the route, including two Bronze Age barrows (Scheduled Monument number Devon 721), located on Ridding Down to the west of pipeline. Although not significantly close to the barrows, it was considered that construction could impact on potential prehistoric and/or medieval boundary features identified in an earlier assessment report (EA 2008), both within the surviving area of moorland and to the south-east.

2. AIMS

The principal aims of the project were to investigate and record all significant archaeological deposits exposed during groundworks and to report on the findings of the project as appropriate.

3. METHOD

No formal brief for the archaeological work was provided. The scope of works and methodology were agreed following discussions between the Devon County Historic Environment Service (DCHES), Sibelco UK, and EA, and were set out in a written scheme of investigation subsequently prepared by EA and approved by DCHES.

Evaluation

The evaluation comprised the excavation of eight trenches totalling 48.2m in length. The trenches were positioned to target specific field boundaries identified in the assessment report. Trenches were opened using a tracked machine fitted with a 1.5m toothless grading bucket; machining continuing until either natural subsoil or archaeological deposits were

reached. Where archaeological deposits were exposed, machining ceased, trenches were cleaned back by hand and the deposits investigated and recorded.

Monitoring and recording

All topsoil stripping along the line of the pipe-trench was undertaken under archaeological supervision using a tracked excavator fitted with a narrow grading bucket. Machining continued until either natural subsoil or archaeological deposits were reached. The trench was then cleaned by hand and deposits investigated and recorded.

The hand excavation of archaeological deposits comprised the full excavation of small discrete features, half-sectioning (50% excavation) of larger discrete features and 20% sampling of long linear features.

During both the evaluation and the monitoring and recording, and in accordance with standard EA procedure, stratigraphic information was recorded on evaluation trench record sheets and single context record sheets and a drawn record in plan and section was compiled at scales of 1:10, 1:20 or 1:50 as appropriate. A photographic record was made in black and white print and colour (digital) format. Registers were maintained for photographs, drawings and context sheets. Finds and samples were labelled and bagged on site and taken to the EA premises for processing and cataloguing.

4. RESULTS

Boundaries referred to are as numbered in the assessment report (EA 2008). It should be noted that the nomenclature for the various features is that taken from the English Heritage assessment report (Fletcher, 2002). It should be noted also that boundary alignments (where shown as continuous earthworks or banks on the English Heritage survey mapping) were not necessarily continuous and extant above ground but plotted by extrapolation of an alignment based upon extant sections or aerial photographic evidence. This is particularly relevant for example at Trench 4, discussed below, where the route of the pipeline was proposed to cut through a stone-faced boundary bank where above ground remains were not visible.

4.1 Trench evaluation

Trench 1 (Figs. 3 and 6)

This trench was 5.7m long and was excavated to a maximum depth of 600mm. It was positioned to investigate field boundary No. 2 which was identified as a boundary wall in the English Heritage field survey (Fletcher, 2002).

The boundary consisted of a granite rubble wall (206) set on a low bank that comprised two layers of upcast material (203 & 204). On the north side of the wall was a small E-W aligned drainage ditch (201). There was no clear evidence to suggest that the ditch and bank had formed an earlier phase of the boundary. The ditch contained a homogeneous, silty clay fill (202) derived from weathering and slumping of the adjacent bank. A cultivation soil had formed to either side of the wall, (208) to the north and a single layer (210) to the south which was overlain by a recently formed deposit of bracken rhizomes (209) encompassing in places tumbled stone (207). No perceptible turf layer was observed above the modern rhizome mat (209) on either side of the wall. Standing bracken had been removed and thin vegetation (not shown on section) completed the sequence.

Trench 2 (Fig. 3)

This trench was 5.95m long and was excavated to a maximum depth of 550mm. It was positioned to investigate field boundary No. 3 which was identified as a boundary bank in the English Heritage field survey (Fletcher, 2002)

Undisturbed natural subsoil was encountered at a depth of 320mm and was overlain by a layer of subsoil (301). The boundary consisted of an irregular line of large granite boulders (304) lain directly onto subsoil layer 301 and partially overlain by topsoil. Its inconsistent and ragged nature suggested that it had been partially robbed for re-use of the stone.

Trench 3 (Figs. 4 and 6: section 3)

This trench was 7.15m long and excavated to a maximum depth of 500mm. It was positioned to investigate field boundary No. 5 which was identified as a boundary wall in the English Heritage field survey (Fletcher, 2002).

The boundary exhibited two phases of construction. The first comprised a narrow NW-SE aligned ditch (508) with an upcast bank (509) on its south-west side, substantially reduced by later slumping. The ditch contained two fills derived from the slumped material; a base fill of dark grey silty loam (507) overlain by sandy silt (506). A layer of granite fragments (505) partially overlay the fills of ditch 508 and may represent material consolidating the original bank. A soil layer (501), possibly subject to cultivation, had subsequently formed on both sides of this early boundary, partially extending over both bank and ditch. The second phase of construction comprised an earthen bank (504) with a randomly coursed granite revetment (503) on its north-east side whilst vegetation had grown up on the south-west side (510). A thick (100mm) turf/topsoil covering (500) was recorded to the southwest of the bank but this was not present on its north-east side due to modern disturbance.

Trench 4 (Figs. 4 and 7: section 4)

This trench was 4.93m long, 3.62m wide and excavated to a maximum depth of 720mm. It was positioned to investigate field boundary 7 which was identified as a parallel reave boundary and recorded as a low, stony, bank in the English Heritage field survey (Fletcher, 2002).

The bank was not seen above ground at the trench location. However, upon excavation the bank at its foundation level was identified. It comprised a layer of redeposited natural subsoil (706) faced on both sides by limestone, quartz and granite boulders (702, 703). The bank, which overlay very stony degraded natural subsoil (701) measured approximately 1.4m wide and was flanked to the east by a 1.1m wide and 0.6m deep ditch (704). The redeposited clay (706) which formed the bank core is likely to have derived from the excavation of the ditch. The ditch contained two soft, sandy clay-based fills (705, 709), both of which contained abundant medium to large stone fragments from the collapse of the adjacent stone facing of 703, and an upper fill of dark silty loam (707). Where layer 701 was recognised to the west of the boundary (as recognised by the base stone course 702) it appeared possibly to have been subject to cultivation at some stage as the larger stones characteristic of the layer, where sealed by 706, were absent. A further distinct soil (710), also to the west of the boundary, was identified above 701, it was localised and may represent slumped bank material.

Trench 5 (Fig. 4, Fig. 7: section 5)

Trench 5 was 5.8m long, 3.65m wide and excavated to a maximum depth of 600mm. Undisturbed natural ground was encountered at a depth of approximately 250mm. A narrow

east-west aligned terrace cut the natural subsoil across the slope of the hill, forming a flatbottomed construction cut (805), within which were the collapsed primary courses of a limestone wall (803) and its corework (806). Immediately to the south, on the upslope side of this wall, a layer of bank material (804) overlay the natural ground surface as it was in antiquity. This bank was most likely created from the upcast material of the wall terrace. The bank was originally retained on its northern side by wall 803. Subsequently the stonework from revetment wall 803 has collapsed with the lower courses of the wall falling forward (i.e. down-slope to the north-west).

On either side of the wall and bank a stony soil layer (801) overlay undisturbed natural. On the south-western, uphill side the boundary bank 804 was overlain in part by layer 801. The layer (801) on this side of the bank is likely to be the result of intermittent or brief cultivation. On the north-western, terraced side the equivalent layer (801) had built up against the lower courses of wall 803 prior to the collapse of the wall; the layer did not display any signs of having been cultivated. A layer of topsoil sealed 801 and the boundary deposits.

Trench 6 (Figs. 5 and 8: section 6)

This trench was 6.8m long and excavated to a maximum depth of 840mm. It was positioned to investigate field boundary No. 20 which was identified as a boundary ditch in the English Heritage field survey (Fletcher, 2002).

The boundary comprised an earthen bank, consisting of a primary, thin layer of mixed soil and natural subsoil (2004) overlain by a thick deposit of mixed white clay (2001) which formed the core of the bank. The first of these deposits was the result of upcast from the excavation of an associated ditch (2003) that lay on the NW side of the bank. The second appears to be derived from elsewhere, being unlike the natural subsoil in composition. Sealed beneath the bank was a layer of silty loam, representing a buried soil (2004). This in turn overlay a layer of grey, leached subsoil (2006), which overlay undisturbed natural. The boundary ditch (2003) measured 1.4m wide by 400mm deep and contained mixed white clay and grey soil (2002), derived from silting and slumping of the adjacent bank. A thin layer of topsoil sealed the bank and directly overlay the natural ground surface to the north-west of the ditch.

Trench **7** (Figs 5 and 8: section 7)

This trench was 5.50m long and excavated to a maximum depth of 600mm. It was positioned to investigate field boundary No. 22 which was identified as a boundary in the English Heritage field survey (Fletcher, 2002)

The boundary comprised a low earth mound formed by a single deposit of clay silt (2201) representing upcast from the excavation of an adjacent ditch (2207). The bank sealed two deposits; a buried soil (2202), and beneath this a layer degraded natural clay subsoil (2205). The buried soil (2202) was poorly preserved and had suffered extensive root disturbance rendering it unsuitable for environmental analysis. The ditch measured 1.8m wide and 250mm deep. It contained two fills (2206, 2204) formed by silting, and weathering of the ditch sides.

Trench 8 Figs. 5 and 8: section 8)

This trench was 6.4m long and excavated to a maximum depth of 860mm. It was positioned to investigate field boundary No. 25 which was identified as a boundary bank in the English Heritage field survey (Fletcher, 2002)

The boundary bank appeared to be represented by two phases of construction. The first comprised a thick (250mm) layer of dark greyish-brown soil (2503), directly overlaying natural subsoil and containing abundant medium to large granite and quartz stones. This layer spread beyond the north-eastern limit of the excavation. The second phase consisted of a NE-SW aligned ditch (2507) extending along the south-east side of deposit 2503, with a bank on its north-west side comprising two layers of upcast material (2502, 2501) deposit 2503. The ditch contained two layers of dark brown silty clay fill (2505, 2504), both likely to be the result of slumping of the adjacent bank. To the east, a layer of sandy clay (2508) overlay the ditch fill (2504), and the lower bank. The origin of this soil layer is uncertain but its spread over ditch 2507 may be the result of cultivation. A topsoil layer (2500) sealed all the deposits.

4.2 Monitoring of topsoil stripping

Topsoil removal along the route of the pipe trench was observed between field boundary 1 (south) and the Lee Moor tramway embankment (north). The total length of the corridor was approximately 1.36km, and it was on average 600mm wide. The general sequence of deposits consisted of undisturbed natural, encountered at a depth of approximately 300mm, overlain by 200mm of degraded natural subsoil, and a thin layer of topsoil or turf although in places the topsoil was considerably thicker and where this occurs this seems likely to have derived from a period or periods of cultivation in antiquity. Excavation for the pipe-trench breached boundary 1, and revealed two small pits of probable prehistoric date to the south of boundary 2 (see below). No further features or deposits were observed.

There was a marked change in the natural deposit just to the north of boundary 5. To the south, the natural was sandy producing a relatively thick layer of soft, easily cultivated soil, while to the north it consisted of hard-bedded sandstone resulting in an extremely stony soil, with poor potential for cultivation.

Boundary 1 (Figs 3 and 6: section 1)

This boundary appeared to be the result of three phases of construction. The first phase consisted of a NE-SW aligned ditch (5006) cut into the natural subsoil, with a low upcast bank (5007) on its north-west side. The ditch contained two fills (5008, 5009) derived from slumping of the bank. Subsequently a layer of humic topsoil (5010) appears to have formed over the slumped bank.

The second phase consisted of a shallow NE-SW aligned ditch (5011) cutting soil layer 5010 and the upper fill of ditch 5006, with a small upcast bank (5012) on its north-west side, which buried and preserved soil 5010. Soil layers continued to develop to either side of this boundary: shallow soil layer 5017 to the south-east, and what appeared to be a thick cultivation soil (5000) to the north-west, which also abuts bank 5012.

The third phase of construction consisted of a wall (5013) consisting of irregular granite boulders and stones ranging, from very large at the base to medium sized at the top. This wall was positioned over bank 5012 with large footing stones infilling cut 5011. A small ditch (5018), containing a very loose humic fill (5019), appeared to be a late addition to the boundary. A layer of humic topsoil and turf sealed soil layers 5000 and 5017, and abutted wall 5013.

Pits (Figs 3 and 9)

Two small intercutting circular pits (5003 and 5005) were exposed approximately 16.9m to the south of boundary 2. Each pit was approximately 0.95m in diameter, with steep sides and a flattish concave base. Both contained a similar fill of mottled greyish-brown clay silt (5002 and 5004 respectively), with occasional medium to large granite inclusions. Pit 5003 may have cut the northern edge of pit 5005 although this is uncertain due to the similarity of fills. A layer of topsoil (5000), possibly having been subject to cultivation, sealed the two features. Three sherds of coarse, low-fired pottery, dating from the Middle Bronze Age, were recovered from fill 5004 in pit 5005. Quantities of charcoal were also found at the base of each pit, and samples <1> and <2> were taken from 5002 (pit 5003) and 5004 (pit 5005) respectively.

5. DISCUSSION

5.1 **Prehistoric**

No boundaries that could be identified as prehistoric reaves were located during the investigations. The prehistoric period was represented by pits 5003 and 5004, which are of probable Middle Bronze Age date. The presence of charcoal lenses within their fills suggests deliberate backfilling, possibly with hearth waste. The marked similarity in the form and backfill of these pits suggests that they had a common function and were broadly contemporaneous.

5.2 Medieval

The medieval period is represented by field boundaries 5, 7 and 8, with boundaries 22, 25 and the first phase of boundary 1 also possibly of medieval origin.

Boundaries 7 (trench 4) and 8 (trench 5), previously thought to be part of the Bronze Age reave system (Fletcher 2002; RCHME 1985 aerial survey), are now considered more likely to represent the original extent of the medieval farm of Broomage. The nature of these features was not typical of other known reaves, and indeed no clear evidence of the anticipated reave system was detected north of boundary 8 during the investigations. The inclusion of these fields in the original layout of the medieval farm would place the farm buildings towards the centre of an area of enclosed land, rather than in their current position on the north-western corner of the extant field system.

For example boundary 8 (seen in trench 5) had previously been described as a transverse reave of Bronze Age origin (Fletcher 2002; RCHME 1985 aerial survey), however, evidence from the excavation did not support this interpretation. With a single revetment wall on the down slope side of the boundary, supporting an earth bank on the up slope side, the form of the boundary seemed more in line with a truncated corn-ditch of early medieval date (Fleming and Ralph 1982). Its form is consistent with it having been the outer boundary of an enclosed area of land. The vertical, stone-revetted northern face would have impeded the access of livestock into the enclosed fields, whilst the sloping earthen bank on the south side would have permitted easy escape. The lack of an actual ditch on the northern side of the feature may be due to the position of the boundary on a natural slope lessening the need for a ditch to emphasis the height.

These northernmost fields may have been relatively short-lived and only intermittently cultivated, the soil here being very shallow. The excavation of boundary 5 (trench 3) revealed two phases of construction: initially it took the form of a simple low ditch and bank, but was

subsequently rebuilt as a far more substantial barrier. Except for the absence of an associated ditch, the morphology of the later boundary conforms closely with that of a corn ditch, characterised as an 'earthen bank(s) with a markedly asymmetrical profile produced by a ditch and vertical stone wall face on the front, the rear sloping gradually to ground level' (Fleming and Ralph 1982). A 12th-century date has been suggested for other such corn ditches on Dartmoor, their construction being a response to specific changes in Forest Law. The presence of a possible earlier bank incorporated within the boundary suggests that its original morphology and function had been altered. Boundary 5 may therefore have evolved from an internal division within the enclosed field system to become the northern limit of a shrunken system. There is, however, a lack of dating evidence for the original field system or any later partial abandonment.

Field boundary 1 displayed three possible phases of construction. The initial phases of ditch and bank construction are likely to be of medieval origin. The later stone wall is post-medieval in character.

At the northern end of the pipeline, boundaries 22 (trench 7) and 25 (trench 8) may also date to the medieval period. Boundary 22 is a simple low ditch and upcast bank. No finds were recovered and no earlier phases observed, but it is likely to represent the medieval parish boundary between Cornwood and Plympton St Mary.

Boundary 25 revealed two phases of construction, both of which may date to the medieval period. The initial bank was possibly a low clearance wall. Additional boundaries running off from this feature to the north-west are recorded as possible prehistoric reaves (RCHME 1985), so it is possible that this phase has earlier origins.

5.3 Post-medieval

The post-medieval period is represented by boundaries 2 and 20, and by the final phase of boundary 1. Boundary 1 was constructed on the line of a former ditch and bank of possible medieval date. Boundary 2, however, was entirely of post-medieval origin being part of a phase of wall construction truncating the southern end of a medieval field system. The latest feature investigated was boundary 20, which was apparently built of quarried china clay waste material.

6. CONCLUSION

No clear evidence was found of a fossilised Bronze Age reave system in the fields around the medieval farm of Broomage, nor of reaves continuing northwards onto the open moorland. The field boundaries investigated appeared to be almost exclusively medieval in origin, with the exception of boundaries 2 and 6 (and the final phase of boundary 1), which were of post-medieval date.

Boundaries 7 (trench 4) and 8 (trench 5), previously thought to be of likely prehistoric origin, appeared to be part of a medieval field system that had retreated southward, possibly due to the poor soil on this part of the down. However, in the absence of any finds or other dating evidence, the boundaries were dated by their nature and character alone.

Prehistoric activity along the course of the pipeline route was confined to two small pits, which were fully excavated and recorded before the excavation of the pipe-trench.

The pipeline route utilised existing breaches in field boundaries wherever possible, and consequently disturbance to the surviving archaeological features and deposits was minimal.

7. PROJECT ARCHIVE AND 'OASIS' REPORT

A fully integrated project archive has been compiled and will be deposited at the Plymouth City Museum & Art Gallery, under museum accession number AR2008.36

A report of the evaluation (including a pdf version of this document) will be submitted to the on-line database OASIS (On-line AccesS to the Index of archaeological investigationS), under OASIS ID: exeterar1-66780

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SOURCES CONSULTED

Unpublished sources

DCC Devon County Council

HER Devon County Historic Environment Record, various PRN entries and RCHME 1985 survey

Printed sources

- Austin D. 1978 'Excavations in Okehampton Deer Park, Devon 1976–1978', Proc. Devon Archaeol. Soc. 36, 191–240.
- Exeter Archaeology 2008 Archaeological Assessment of Lee Moor Pipeline (Ridding Down) Devon, EA Rep. 08.19.
- Exeter Archaeology 23 July 2008 Written Scheme of Investigation for Archaeological Recording of the Lee Moor (Ridding Down) China Clay Pipeline, Cornwood, Ivybridge, Devon (Project 6585).
- Fleming A. 1979 'The Dartmoor Reaves: Boundary Patterns and Behaviour Patterns in the Second Millennium bc', *Proc. Devon Archaeol. Soc.* **37**, 115–131.
- Fleming A. 1994 'The Reaves Reviewed', Proc. Devon Archaeol. Soc. 52, 63–74.
- Fleming A. & Ralph N. 1982 'Medieval Settlement and Land Use on Holne Moor, Dartmoor: The Evidence', *Medieval Archaeology* **26**, 101–137.
- Fletcher, M. 2002 The archaeological landscape of Crownhill Down and Ridding Down, South Hams, Devon: an archaeological survey by English Heritage, EH Archaeological Investigation Report AI/31/2002.
- Gawne E. & Somers Cocks J. V. 1968 'Parallel Reaves on Dartmoor', *Rep. Trans. Devonshire Ass.* 100, 277–291.

APPENDIX 1: Finds list

Context	Context Date	Prehistoric pottery	
		Qty	Weight (g)
5004	Middle Bronze Age	3	4

Pottery

Three sherds from the same vessel (weight 4gm). Prehistoric pot, internal and external oxidised surfaces with reduced core, some mica plates visible: Middle Bronze Age.

APPENDIX 2: Charcoal assessment (by Dana Challinor)

Two samples were submitted for assessment of the charcoal

The samples were scanned under a binocular microscope at up to x45 magnification. Charcoal caught on the 2mm sieve was considered identifiable and quantified; fragments were randomly extracted, fractured if necessary and examined in transverse section. While this provides a reliable method for the identification for ring porous taxa (e.g. *Quercus* sp.), identifications for the diffuse-porous taxa should be considered as 'type' and require confirmation. The samples were also assessed for suitability for radiocarbon dating, and a single fragment was selected and identified in full at high magnification.

Both samples produced abundant assemblages of charcoal, mostly dominated by *Quercus* sp. (oak) and *Alnus/Corylus* (alder/hazel). The confirmed identification of hazel for the dating samples suggests that this species is represented. Context 5004 appeared to be little more diverse and included Maloideae (hawthorn group).

Sample	Context	Quantity	Identifications	C14
1	5002	++++	Alnus/Corylus, Quercus sp.	Corylus rw x 1
2	5004	++++	Alnus/Corylus, Quercus sp., Maloideae	Corylus rw x 1

+= present; ++ = occasional; +++ = common; ++++ = abundant; r-w = roundwood, s-w = sapwood, h-w=heartwood

Table 1: Results of the charcoal assessment

Further work on the charcoal from these assemblages would probably confirm and extent the species list, but in the absence of other, comparable samples, this is of limited interpretative value. The assessment indicates that the fuelwood used is consistent with other sites of prehistoric date in the South West region.

APPENDIX 3: Context listing

Table 1: Trench 1

Context	Depth b.g.s.	Description	Interpretation
200	0.4m +	Strong brown friable silty clay with occasional small to medium sub-angular stones and a single large boulder.	Undisturbed Natural
201	0.45m- 0.6m	Cut of east-west aligned ditch, measuring 0.80-1.00m across and 0.20m deep, running parallel with earth bank (203) on its northern side.	Drainage ditch.
202	0.25m- 0.6m	Greyish-brown soft slightly sandy silty clay containing occasional small sub-angular stones.	Backfill of ditch 201, probably derived from the slumping of bank 204.
203	0.3m- 0.55m	Greyish-brown sandy clay containing occasional small to medium sub-angular stones. Forms the primary material of an upcast bank measuring 1.75m across.	Lower material of bank.
204	0.10m- 0.45m	Pale greyish-brown soft slightly sandy clay containing occasional small to medium sub-angular stones. Forms the upper part of an upcast bank measuring 1.75m across.	Upper material of bank.
205	0.25m- 0.45m	Dark brown, friable sandy clay.	Cultivation soil
206		Field wall constructed of unbonded granite stones and boulders up to 0.8 x 0.8 x 0.4m in size. The wall was oriented east-west, had a width of 1.05m and a surviving height of 1.35m. The wall sat upon bank (203) (204) and it is uncertain whether all are contemporary or if the bank and ditch are significantly earlier in date.	Field wall.
207		Recently formed root mat encompassing tumbled wall stones	Rhizome mat
208	010m- 0.25m	Dark brown soft slightly sandy clay with occasional small sub-angular stones. Overlies infilled ditch [201] (202) and bank (203) (204) but does not appear to continue beneath wall (206). Located on the northern side of field wall.	Cultivation soil
209		Very dark brown soft silty sandy clay containing frequent very small and small sub-angular stones.	Topsoil with considerable Rhizome disturbance.
210	0.15m- 0.40m	Dark brown soft slightly sandy clay with occasional small sub-angular stones. Overlies bank (203) (204) but does not appear to continue beneath wall (206). Located on the southern side of field wall.	Cultivation soil

Table 2: Trench 2

Context	Depth b.g.s.	Description	Interpretation
300	0mm- 180mm	Very dark brown, soft, loam with frequent root disturbance.	Topsoil
301	180mm- 320mm	Greyish-brown moderately compact clay silt with frequent root disturbance	Subsoil
302	320mm- 390mm+	Light brown, moderately compact, clay silt with frequent small granite frags.	Degraded Natural
303			Void
304		Irregular linear alignment of large granite boulders on N-S orientation.	Remnants of field boundary wall.

Table 3: Trench 3

Context	Depth b.g.s.	Description	Interpretation
500	0mm- 100mm	Very dark brown, soft, loam with frequent root disturbance.	turf
501	100mm- 400mm	Dark greyish-brown clay silt with frequent small stones and roots.	Soil formation, possible cultivation soil
502	400mm-	Yellowish-brown, clay silt with frequent small stone inclusions	Undisturbed Natural
503		Random coursed dry stone wall, large weathered granite boulders	Boundary wall
504		Mid-dark greyish-brown, friable, clay loam,	Earth bank
505	0m- 350mm	Greyish-brown, friable, silty clay with common medium – large granite stones	Upper consolidation layer of earth early bank
506	0m- 450mm	Mottled yellowish brown, friable-loose, sandy silt with moderate small stones and granite frags.	Fill of ditch 508 derived from slumping of upcast bank
507	150mm-	Dark grey - black, loose, silt with occasional small stones	Lower fill of ditch 508 derived from

	550mm	and granite frags.	slumping of the upcast bank
508	0.25m-	Shallow linear cut aligned NW-SE	shallow ditch
	0.55m		
509	0.30m-	Mid grey, loose friable, clay silt with moderate small	Base of possible early bank.
	0.45m	stones and granite frags	
510	n/a	Bank material with vegetation adhering to southwest side	Earth bank
		of bank 504	

Table 4: Trench 4

Context	Depth b.g.s.	Description	Interpretation
700	0.21m+	Mixed yellowish-brown and greyish-brown compact, sandy clay	Undisturbed Natural
701	0.15m- 0.40m	Dark brown, compact, sandy clay with frequent small granite sandstone and quartz frags.	Possible cultivation soil
702	0.06m- 0.28m	Linear stone alignment, N-S oriented, granite, quartz and sandstone.	Stone revetment on west edge of field boundary.
703	0.05m- 0.36m	Linear stone alignment, N-S oriented, granite, quartz and sandstone.	Stone revetment on east side of field boundary.
704	0.12m- 0.70m	Shallow ditch cut, aligned N-S, running along eastern side of field boundary	Ditch cut.
705	0.38m- 0.70m	Dark greyish-brown, compact, sandy clay with intrusion of granite and sandstone blocks	Primary fill of ditch 704. Intrusion of collapsed walling stones
706	0.14m- 0.26m	Light greyish-brown, compact, sandy clay	Layer of probable upcast material from excavation of ditch 704 forming core of bank
707	0.12m- 0.21m	Very dark brown-black, friable, peaty/humic sandy clay, with rare small sandstone and granite frags.	Upper fill of ditch 704
708	0m-0.18m	Very dark brown-black, friable, humic sandy clay, rare very small granite frags.	Topsoil
709	0/18m- 0.42m	Light greyish-brown, compact, sandy clay with frequent medium - large angular stones granite and sandstone blocks	Upper fill of ditch 704. Contains collapsed walling stones
710	0.15m- 0.22m	Greyish-brown, sandy clay	Possible decayed and slumped bank material

Table 5: Trench 5

Context	Depth	Description	Interpretation
	b.g.s.		_
800	0mm-	Black clay silt, friable, humic sandy clay, frequent root	Topsoil
	350mm	activity, rare very small granite frags	-
801	100mm-	Very dark greyish-brown, compact, clay silt, frequent	Possible Cultivation soil
	370mm	small granite and limestone frags.	
802	150mm-	Mottled strong yellowish-brown and black, compact clay	Undisturbed Natural
	620mm	silt, abundant limestone.	
803	140mm-	Dry wall, random coursed, granite, quartz and limestone.	Revetment wall.
	620mm	Constructed within cut 805	
804	080mm-	Mid greyish-brown, moderately compact, silty clay,	Bank material from excavation of cut 805.
	370mm	occasional small sub angular stones.	
805	080mm-	Linear E-W aligned cut follows approximately the natural	terrace
	620mm	contour creating a narrow terrace.	
806	0mm-	Brown moderately compact, silty clay, occasional small	Slumped bank material
	620mm	stone frags	

Table 6: Trench 6

Context	Depth	Description	Interpretation
	b.g.s.		
2000	0mm-	Greyish-brown, friable, sandy clay silt.	Topsoil
	160mm		
2001	140mm-	Pale grey-white, compact, silty clay.	Bank material
	560mm		
2002	0mm-	Mottled white and greyish-brown, compact, silty clay,	Fill of ditch 2003 derived from slumped
	440mm	occasional very small stones.	bank material
2003	0mm-	Linear NE-SW aligned cut. Sharp break of slope top,	Ditch cut.
	440mm	concave sides and base.	
2004	560mm-	Mottled yellowish brown and grey, compact, clay silt.	Primary bank material Up cast from
	690mm		excavation of ditch 2003.
2005	580mm-	Very dark brown-black, soft, loam	Buried soil layer overlain by bank material
	720mm		2001.
2006	720mm-	Grey, clay silt, occasional small sub angular stones.	Subsoil layer truncated by ditch 2003.

	840mm		
2007	100mm-	Strong yellowish-brown with dark brown mottling,	Undisturbed natural
	460mm+	compact, silty clay, frequent limestone and quartz.	

Table 7: Trench 7

Context	Depth b.g.s.	Description	Interpretation
2200	0mm- 038mm	Very dark brown, moderately compact, clay silt.	Topsoil
2201	180mm- 340mm	Mid brown, clay silt	Bank material derived from up cast of ditch 2207
2202	340mm- 480mm	Black, compact, peaty clay silt	Buried soil layer sealed by bank 2201
2203			Void
2204	150mm- 300mm	Greyish-brown, moderately compact, silt, occasional granite fragments.	upper fill of ditch 2207.
2205	480mm- 590mm	Mid-dark brown, clay silt.	Subsoil layer
2206	300mm- 420mm	Dark brown, compact, clay sand, frequent quartz flecking	Lower fill of ditch 2207
2207	150mm- 420mm	Linear N-S aligned cut. Sharp break of slope top, concave sides and flat base.	Ditch associated with bank to the east.
2208	590mm+	Strong yellowish-brown, compacted, clay silt, moderate quartz fragments	Undisturbed Natural

Table 8: Trench 8

Context	Depth	Description	Interpretation
	b.g.s.		
2500	0m-0.15m	Dark greyish-brown, friable, humic sandy clay, rare granite fragments	Topsoil
2501	0.10m-	Mid brown, friable, sandy silty clay, frequent medium to	Uppermost layer of bank material.
	0.30m	large granite and quartz stones	
2502	0.3m-	Yellowish brown, friable silty sandy clay, occasional	Bank material upcast from the excavation
	0.55m	small granite and sandstone fragments.	of ditch 2507
2503	0.55m-	Dark grey to mid greyish-brown, friable sandy clay,	Primary bank material
	0.85m	abundant angular and sub angular medium to large granite	
		and quartz stones, frequent small granite and sandstone	
		fragments	
2504	0.30m-	Mid to dark brown, compacted, silty clay sand, occasional	Upper fill of ditch 2507
	0.45m	small granite fragments	
2505	0.40m-	Mid brown, compact clay silt, occasional granite flecking	Primary fill of ditch 2507
	0.55m		
2506	0.30m+	Yellowish brown, compact, silty sand.	Natural
2507	0.25m-	Linear N-S aligned cut. Wide shallow 'u' shaped profile.	Ditch associated with adjacent bank to the
	0.55m		west.
2508	0.15m-	Dark brown, friable, silty clay	Soil, possible cultivation soil
	0.30m		<u>^</u>

Table 9: Watching Brief

Context	Depth b.g.s.	Description	Interpretation
5000		Dark brown, soft, silty sand, rare granite fragments	Topsoil (possible cultivation soil)
5001			Undisturbed Natural
5002		Greyish-brown, moderately compact clay silt, occ small- large granite pieces, concentrations of charcoal	Prehistoric pit fill (of 5003)
5003		Circular cut with 'u'shaped profile	Cut of prehistoric pit
5004		Greyish-brown, soft, clay silt occasional medium-large granite pieces, concentrations of charcoal	Prehistoric pit fill (of 5005)
5005		Circular cut, 'u'shaped profile	Cut of prehistoric pit
5006		Wide linear ditch cut	Cut of ditch
5007		Mottled strong yellowish-brown and dark greyish-brown, friable, silty sand	Upcast bank material
5008		Mottled strong yellowish-brown and dark greyish-brown, friable, slightly clay silty sand	Lower fill of ditch 5006
5009		Dark greyish-brown, soft, silty sandy clay	Upper fill of ditch 5006
5010		Very dark brown, soft, silty sand, very small stone fragments.	Buried topsoil layer
5011		Shallow linear cut	Shallow ditch cut
5012		Dark greyish-brown, moderately compact, sandy silt, moderate small-medium granite frags	Bank material, upcast from cut 5011
5013		Unbonded, random coursed, granite rubble wall	Field wall
5014		Strong brown, friable, silty sand	Weathered natural
5015			Void

5016		Void
5017	Dark greyish-brown, friable, sandy silt, occ. small granite	Topsoil
	frags.	
5018	Linear 'u' shaped ditch	Drainage ditch
5019	Very dark brown, loose, friable, silty sand	Fill of ditch 5018
5020	Very dark brown, loose, silty sandy loam	Turf layer
5021	Yellowish brown, soft, friable, silty sand	Dump of redeposited natural from recent
		excavation. Modern

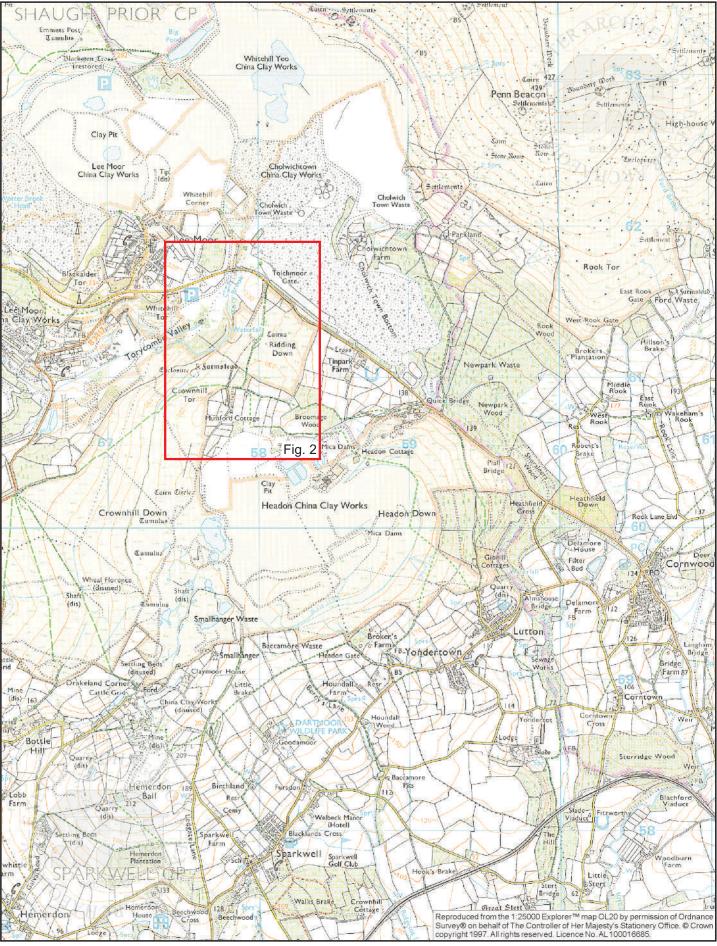


Fig. 1 Location of site.

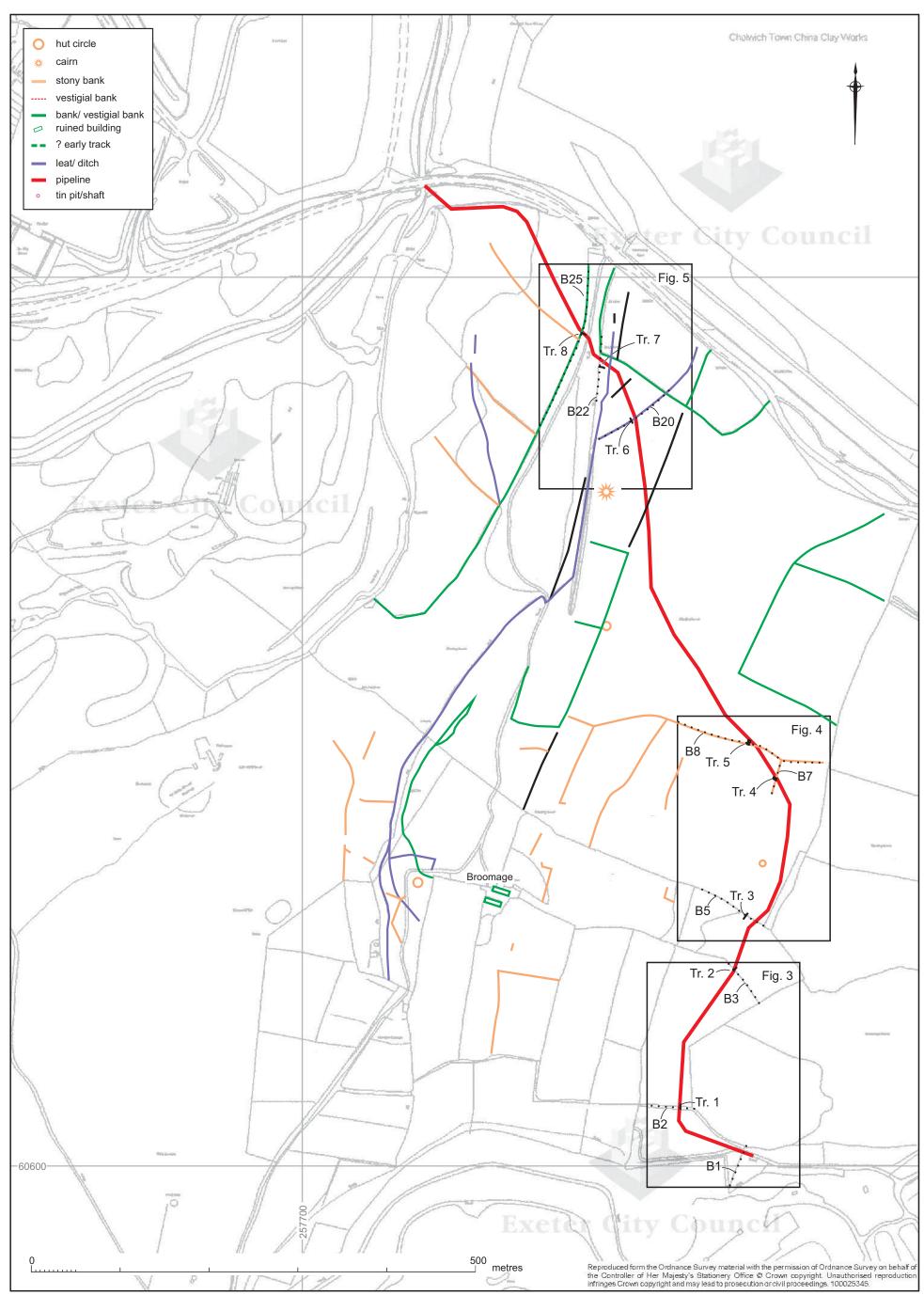


Fig. 2 The pipeline route showing features surveyed by English Heritage in 2001/2 (Fletcher 2002), and location of evaluation trenches and boundary features.

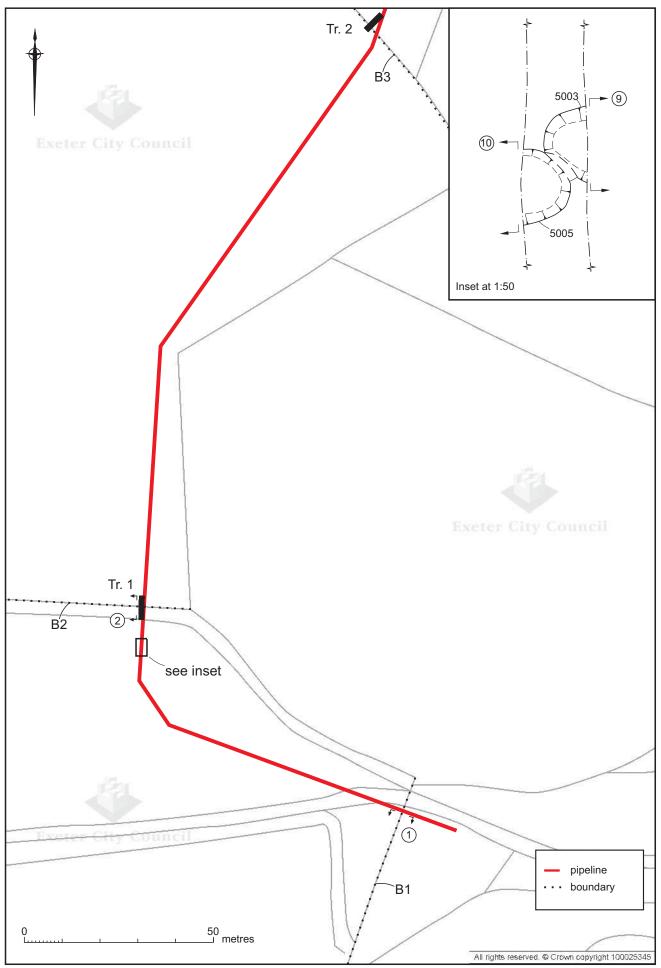


Fig. 3 Location of trenches 1–2, sections 1–2, and pits 5003 and 5005 (inset, with location of sections 9–10).

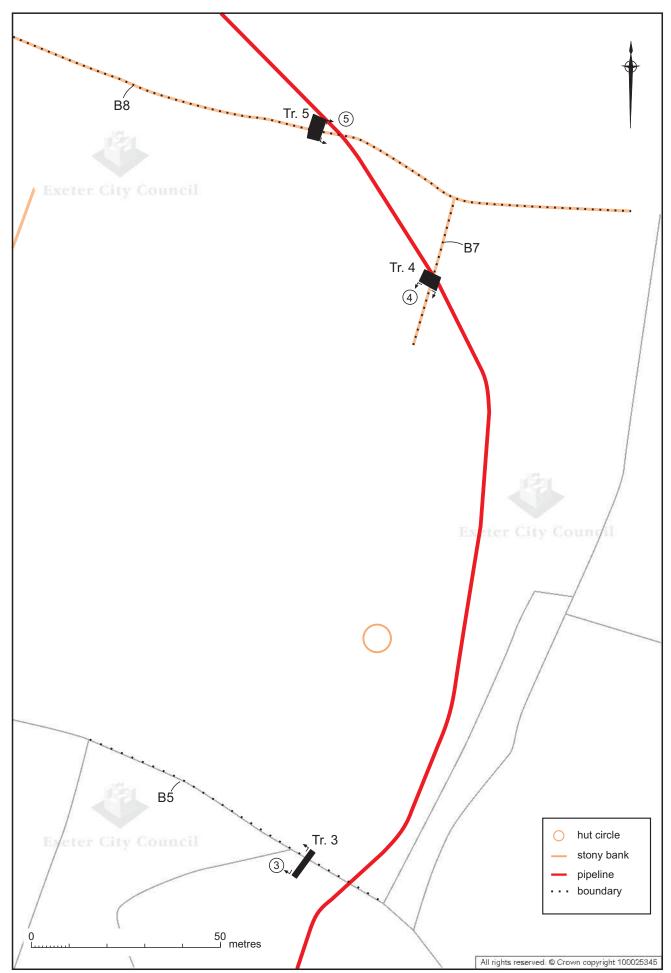


Fig. 4 The pipeline route showing features surveyed by English Heritage in 2001/2 (Fletcher 2002) and location of trenches 3–5.

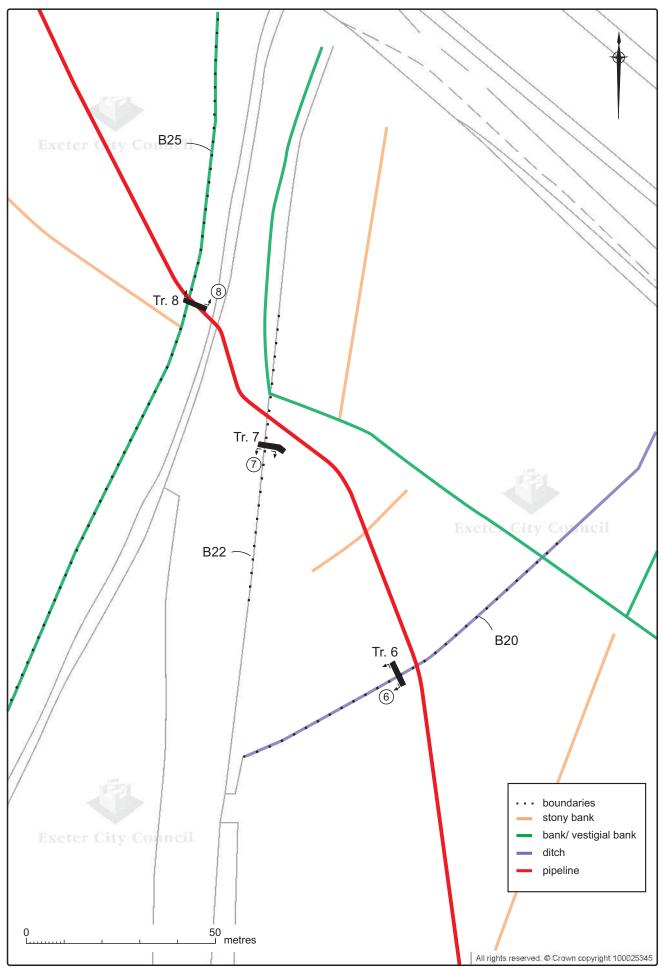


Fig. 5 The pipeline route showing features surveyed by English Heritage in 2001/2 (Fletcher 2002) and location of trenches 6–8.

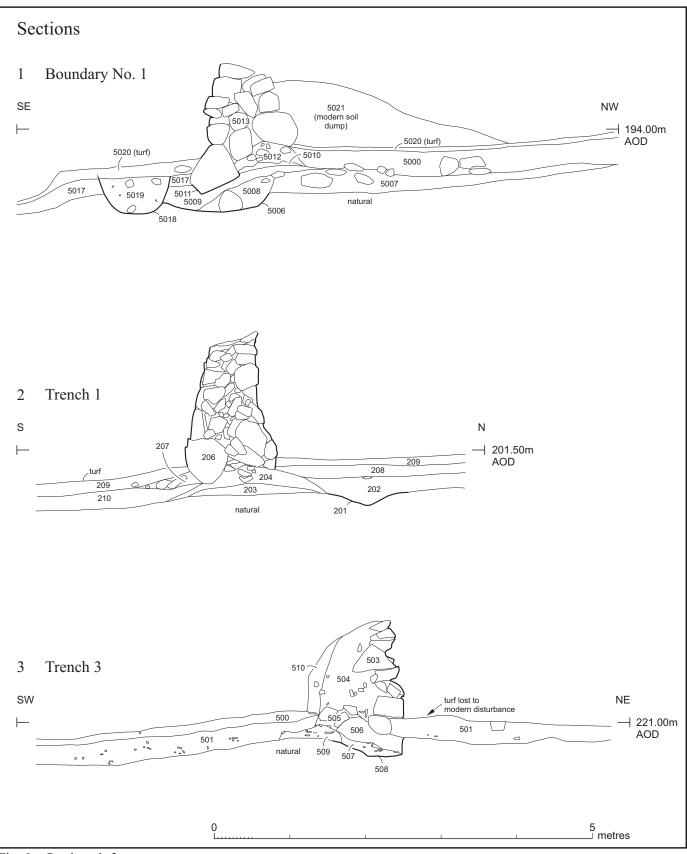
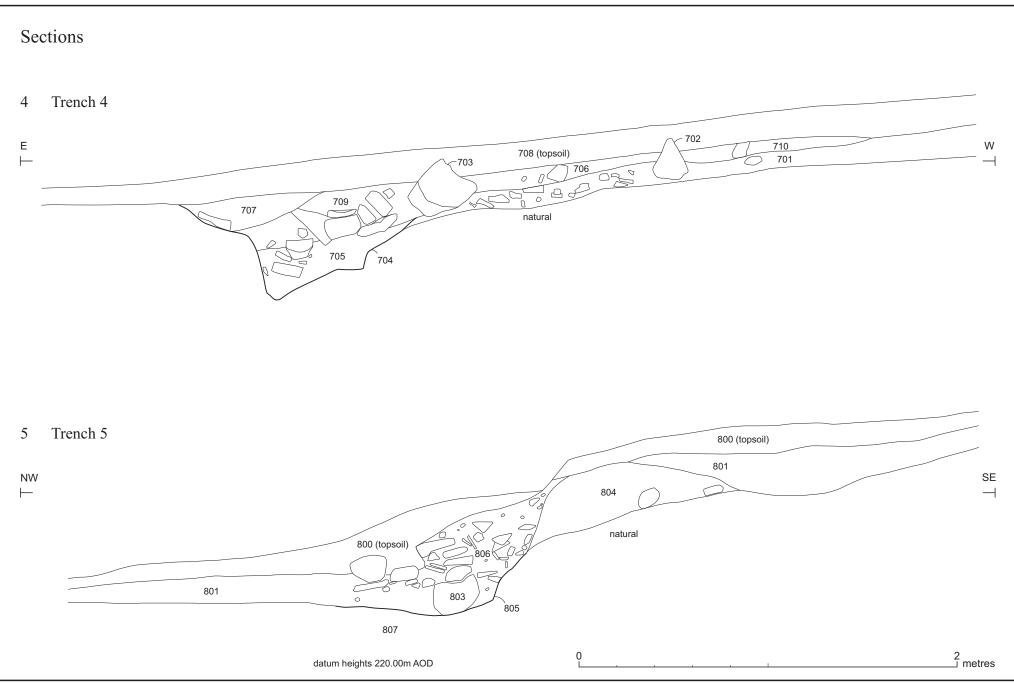


Fig. 6 Sections 1–3.



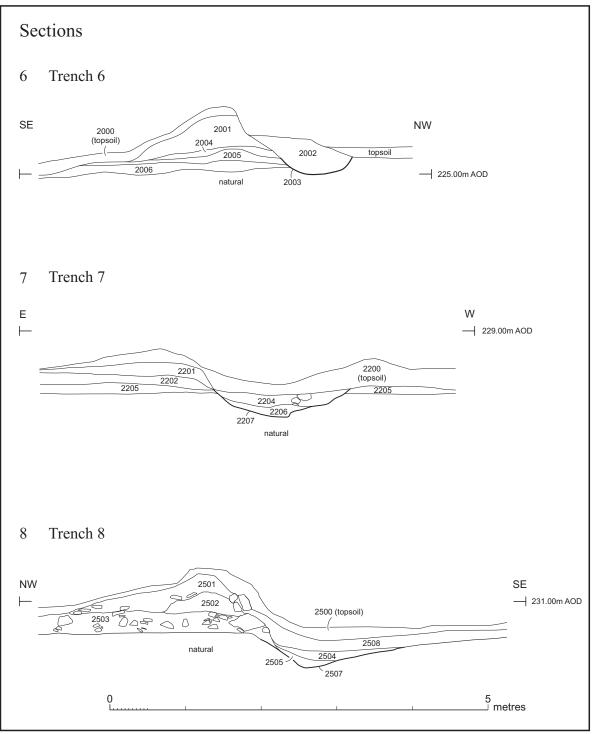


Fig. 8 Sections 6–8.

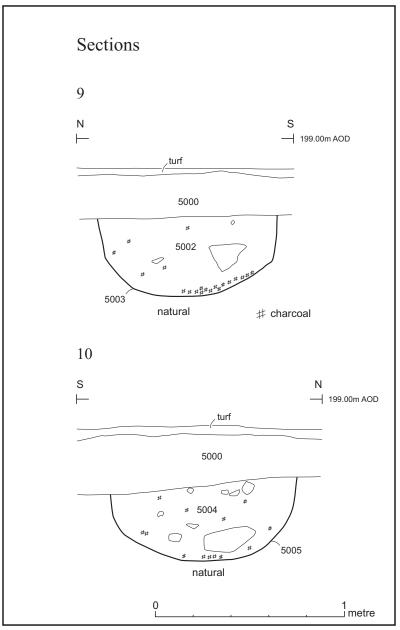


Fig. 9 Sections 9–10 (see Fig. 3, inset).