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SUMMARY

An archaeological evaluation and earthwork survey was carried out by Oxford Archaeology North (formerly Lancaster University Archaeological Unit), at Pottal Pool, Cannock Chase in Staffordshire (NGR SJ 976 152), in February 2002. The work was undertaken as mitigation in advance of the extension of a sand and gravel quarry and involved the investigation of a series of banks within the forested landscape. The work was commissioned by Hanson Aggregates and followed an earlier archaeological assessment by Lancaster University Archaeological Unit (LUAU 2000).

An earlier walk-over survey, undertaken as part of the assessment, identified a series of linear banks, up to 2.5m wide, and 0.5m-1.0m high, which predate the present forestry planting. They were probably of post-medieval date, but potentially had earlier origins, although not necessarily in their present form. A provision was therefore made to assess the archaeological significance of these banks in accordance with a verbal brief by the Staffordshire County Archaeologist.

The programme of works involved a topographic survey of the principal boundary banks (Sites 08-13), and the excavation of 17 evaluation trenches undertaken along and across these banks, in order to ascertain their character, date and any evidence of earlier forms of boundary. The topographic survey and trenching programme established that the prime component of the features was the root boles of decayed trees, surrounded by a humic deposit formed by the decay of these and other vegetation. With the exception of Bank 13, there was little evidence that the earthen component of the bank had been deliberately constructed. Instead, the banks appear to have been former hedge / tree boundaries against which there has been a build up, over time, of humic soils forming the present bank components. No artefactual dating evidence was identified, but the alignment of the banks follows the arrangement of forest tracks shown on the Ordnance Survey (OS) 1st edition map (1887) and it is considered that they are of at least nineteenth century date, if not earlier.

The trenches (1 and 2) across Bank 13 identified that the earthen bank was a deliberately constructed feature, although it included a considerable number of tree root boles. Underneath the bank was a pair of post holes, probably for fence posts, which formed an east/west orientation along the line of the bank, suggesting the alignment of an earlier boundary.

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The evaluation was undertaken by Sean McPhillips and John Onraet, and the survey by Daniel Elsworth and Neil Wearing. Emma Carter produced the illustrations. The report was written by Sean McPhillips and Daniel Elsworth, and was edited by Jamie Quartermaine and Rachel Newman. The project was managed by Jamie Quartermaine.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

- 1.1.1 Oxford Archaeology North (OAN), formerly Lancaster University Archaeological Unit (LUAU), was commissioned to undertake a topographical survey, and archaeological evaluation, on behalf of Hanson Aggregates, prior to an extension of the Pottal Pool sand and gravel quarry, near Cannock, Staffordshire (centred on SJ 976/152).
- 1.1.2 The purpose of the evaluation was to investigate the character, date and archaeological significance of a series of forest banks; it also served to provide a mitigative record of the banks in advance of their destruction. The present programme follows on from an earlier desk-based assessment and walk-over survey by LUAU (2000).

1.2 SITE LOCATION AND GEOLOGY

- 1.2.1 The study area is heavily wooded, and lies on the eastern edge of Teddesley Hay parish. It is situated to the east of the A34 (T), Hednesford to Stafford road, and north of the Rugeley to Penkridge road. The existing Pottal Pool Quarry is to the south of the study area, which is known as Badger Slade Wood.
- 1.2.2 The underlying solid geology of the area is Lower Triassic Sandstone, with Kidderminster/Chester Pebble Bed formations (OS 1990). The overlying drift deposits comprise Boulder Clay and Moraine drift deposits (OS 1977) of sand and gravel.

1.3 HISTORICAL BACKGROUND

- 1.3.1 The historical background of the site has been thoroughly reviewed in the earlier assessment (LUAU 2000), which describes and assesses the available documentary and historical resources in some detail. A summary of the background history is presented below.
- 1.3.2 The proposed area of development at Pottal Pool has the potential to contain sites of all periods but particularly from the medieval and post-medieval periods. The study area is within Cannock Forest, a Royal Forest. The Royal Forests were a legal system first imposed on parts of England by the Norman Kings (Grant 1991, 3), and Cannock Forest was first documented in the 1140s (Greenslade and Jenkins 1967, 338). The forests were generally placed in more sparsely populated areas where poorer land did not encourage cultivation and where often there were existing large tracts of woodland (hence the modern day usage of the word forest has become linked with woodland). Within Cannock Forest was a smaller area, called Cannock Chase, which included the study area. A chase was typically a part of the forest where the right to hunt venison was granted to a particular subject and in this case it was granted to the Bishop of Lichfield in 1290 (Grant 1991, 6).
- 1.3.3 Cannock Forest contained a number of hays, or heys. Although the name 'Hay' usually refers to a hedged or fenced enclosure (Cameron 1977, 218), in Cannock

the hays were so large, comprising extensive areas of woodland, that this traditional explanation does not hold true. In this instance the hays were administrative divisions of the Forest usually known elsewhere as bailiwicks (Grant 1991, 30). The study area lies entirely within the modern civil parish of Teddesley Hay, a name probably deriving from 'Teddes-' a personal name, and the Old English *leah*, which means wood or woodland clearing or glade, and later came to mean pasture or meadow land (Mills 1991, 382). Teddesley Hay appears to have been in existence by the reign of Henry I (1100-1135), and is mentioned by name in 1235 (Greenslade and Jenkins 1967, 338). It remained a division of the royal forest until 1550, when it was granted by the Crown, with all but one of the other hays, to John Dudley, Earl of Warwick (Midgley 1959, 183; Greenslade and Jenkins 1967, 343).

- 1.3.4 In 1558 Teddesley Hay came into the possession of Sir Edward Littleton who undertook to enclose much of the land. This was opposed by Lord Stafford and the Earl of Oxford, whose tenants had a common way through the Hay for driving their cattle to Cannock Wood and Heath (Midgley 1959, 182). Sir Edward turned much of Teddesley Hay into a park, documented in 1589, and his son held *le cobby* (coppice) of the king in 1610 (*ibid*). Both park and coppice enclosures were opposed by the inhabitants of neighbouring Penkridge and Bednall (*ibid*), as they resulted in fencing off land. The common land was enclosed in 1827 (SRO Q/RDc 22a).
- 1.3.5 From at least the eighteenth century the study area was part of a warren, and place name evidence indicates the former presence of keepers' lodges in the vicinity. In the nineteenth century the area was extensively landscaped and the commons were enclosed. Some of the broad-leaved woodland at Teddesley Hay was felled during the Second World War (Midgley 1959, 183) and considerable replanting took place in the late 1970s by the Forestry Commission (P21fc/57).

1.4 PREVIOUS WORK

- 1.4.1 In 2000, LUAU undertook a systematic site inspection to investigate the survival of surface archaeological features within the area of the proposed quarry extension, apart from those areas covered in dense forest (LUAU 2000). Traverses were adjusted to take account of ground cover and included visual inspection of all paths and fire-breaks within the more densely forested parts of the study area. The whole of the area subjected to field walking was either recently felled, or thinned forest, and was walked on 20m transects to identify earthworks. The identification survey specifically excluded areas of forestry that were shown as planted in 1979 on the Forest Enterprise Felling plan (P21fc/57), as these areas were too densely wooded to enable examination, although in reality some linear features were identified in these areas from tracks and firebreaks. This left an area of 11ha of mature woodland. In areas where the topsoil had been disturbed by tree felling, an artefact survey was also carried out. Areas of anomalous vegetation were investigated by the selective manual excavation of topsoil to investigate the underlying deposits and identify the cause of the anomaly.

2. METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 A project design (*Appendix 1*) was submitted by OAN in response to a verbal brief by Chris Welch, of Staffordshire County Council's Archaeology Department (SCCAD). Following acceptance of the project design by SCCAD, OAN was commissioned by Hanson Aggregates to undertake the work. The project design was adhered to in full, and the work was consistent with the relevant standards and procedures of the Institute of Field Archaeologists, and generally accepted best practice.

2.2 TOPOGRAPHIC SURVEY

2.2.1 A detailed instrument survey was undertaken of selected banks (Sites 08-13 (LUAU 2000)) within the study area. The recording was undertaken to an OAN level 3 standard (OAN 2002), which is equivalent to an RCHM(E) level 3 survey. Survey control was established over the site by closed traverse tied to selected points recorded by GPS. In practice only some GPS control points could be obtained and therefore the banks were linked by EDM traverse. Internally, the control was accurate to +/-15mm, but was no better than 0.6m with respect to the Ordnance Survey (OS) National Grid.

2.2.2 The surface features were surveyed by EDM tacheometry using a total station linked to a pen computer data logger, the accuracy of detail generation being appropriate for a 1:250 output. The survey was enhanced by manual survey on-site using AutoCAD 14 within the pen computer. Most topographic detail was also surveyed, particularly if it was archaeologically significant or was in the vicinity of archaeological features.

2.2.3 **Photographic Survey:** in conjunction with the topographic survey, a photographic archive was generated, which recorded significant features and general landscapes. It was undertaken using 35mm black and white, colour slide film, and digital photography.

2.3 EVALUATION TRENCHING

2.3.1 Seventeen trenches were excavated across linear banks 08-14 (LUAU 2000) in positions which were, for the most part, as defined in the project design (*Appendix 1*). In some instances the dimensions of the trenches, and their positions, varied from those defined in the project design, as machine access to these banks was severely restricted. The project design proposed the excavation of three trenches across Banks 9, 10, 11, and 12 and two trenches across Banks 8, 13, and 14. In the event one trench was excavated across each of Banks 11 and 14, two trenches were excavated across each of Banks 12, 13, and 15, and three trenches were excavated across each of Banks 8, 9, and 10, making a total of 17 trenches.

2.3.2 The trenches were mechanically excavated across the banks down to the buried ground surfaces, where identified. The trenches were typically 7m long by 3m wide.

- 2.3.3 The trenches were excavated by a combination of mechanised and manual techniques. The topsoil was mechanically excavated using a JCB fitted with a 1.6m wide toothless bucket, and where identified stratified archaeological deposits beneath were partially excavated by hand. Initially the turf / topsoil was removed, by mechanical excavator, from the top of the bank and the underlying subsoil was cleaned in order to investigate the potential for fence posts on top of the bank. Thence the excavation was continued mechanically to the base of the bank. All machine excavation was undertaken under careful archaeological supervision and manual excavation techniques were used to evaluate sensitive deposits, and assess their nature, date, survival and depth. The trenches could not be excavated deeper than 1.25m, in accordance with health and safety constraints.
- 2.3.4 All trenches were excavated in a stratigraphical manner, both by machine and by hand. The trenches were located on the ground by use of survey instrumentation and tied into the results of the topographic survey. On completion, the trenches were backfilled with the topsoil replaced on the top.
- 2.3.5 **Recording:** all information identified in the course of the site works was recorded stratigraphically, with sufficient pictorial record from both photography (both black and white and colour photographs) and accurate plans and sections at an appropriate scale (1:20, and 1:10). Primary, objective, written records were also made for all the observed archaeological remains, using a paper system adapted from that used by the Centre for Archaeology of English Heritage.

2.4 FINDS STRATEGY

- 2.4.1 No finds were recovered in the course of the trial trenching programme and consequently there was no need for the implementation of a finds strategy.

2.5 ARCHIVE

- 2.5.1 A full archive of the desk-based study, field survey and evaluation has been produced to a professional standard in accordance with the current English Heritage guidelines (English Heritage 1991). The archive will be deposited with the Staffordshire County Record Office and a copy of the report given to the SMR. A summary archive will also be available for deposition with the National Monuments Record in Swindon.

3. TOPOGRAPHIC SURVEY

3.1 SURVEY RESULTS

- 3.1.1 The topographic survey provided a detailed record of Banks 08-13 (LUAU 2000) (Figs 2 and 3), and detailed descriptions of each bank are provided within the gazetteer (*Appendix 3*). With the exception of Bank 13 (*Section 4.7*, below), all of the banks surveyed were broadly comparable. Banks 8-12 and 14-15 had no particularly distinctive features; they were typically between 2m and 5m wide and up to 1m high (Figs 2 and 3); each bank comprised very humic material, with mostly decayed tree stumps at regular intervals along their lines. The edges of the banks were very poorly defined, with no real break of slope, and they were discontinuous, being more substantial around the tree stumps. In some cases they were in discernible pieces, often the result of minor forestry or animal tracks cutting through them; Banks 9, 10 and 15 were cut by a forestry track, while Bank 8 was cut by a probable animal track. In some cases there were young silver birch trees growing on the banks. Bank 14 had a mound of spoil around its west end, but this too was very organic and appeared only to be a slightly greater build up of material than elsewhere. In general, the monuments could be interpreted as tree alignments / hedges, and the insubstantial nature of the earthen component would suggest that these low earthen banks had formed over time against hedged boundary lines.
- 3.1.2 **Bank 13:** only Bank 13 was noticeably different in appearance as it was constructed from soil rather than organic matter (Plates 3 and 5). It was relatively wide, up to 4.5m across, 1m high, and was also cut by several narrow tracks, probably created by animals. Unlike the other banks, it had a discernible structure, with a clearly defined top and bottom break of slope, and had an enlarged spoil heap at the south-west end. Also at the south-west end was a large depression running along the side of the adjacent forest track, which was 7m long, 2.3m wide and c0.3m deep. The proximity of this to the track suggests that it may in fact relate to relatively recent drainage work carried out along the edge of the track, and did not necessarily relate to the bank. The north face of the bank was relatively smooth and lacking in distinguishing features, while the south face had a series of regularly spaced bays cut into it, each being on average 3m wide and 1-2m deep, with a shallow bowl-shape. These were particularly obvious at the south-west end and it was apparent that their position seemed to correspond to the row of trees within the plantation to the south. It is suggested, therefore, that the bays were formed as a result of damage during the mechanical tree planting. The bank was also covered by a larger number of relatively recent silver birch trees, probably reflecting its higher soil content.
- 3.1.3 **Conclusions:** the banks did not appear to form any discernible field system or agricultural units as there were no areas fully enclosed. All of the banks, except Banks 13 and 14, were orientated roughly east/west; Banks 13 and 14 were orientated north-east/south-west. In some instances the banks were orientated parallel to forest roads, notably Bank 15, which was adjacent and parallel to a forest road immediately to the south, and Bank 13, which was parallel to a road to its immediate north; however, others, such as Banks 11 and 12, were orientated on parallel alignments to Banks 10 and 15, but were at a different alignment to the nearby forest track. In general, the banks terminated at the extant forestry roads,

although Banks 9 and 10 were cut by a north-west/south-east forest road. There was clearly some relationship between the banks and the forestry roads; those tracks which have a clear relationship with banks are all shown on the OS 1st edition map (1887), but significantly, the diagonal road which cut Banks 9 and 10 was not shown on the 1st edition map. It would appear that the banks related to the earlier land divisions of the area, that were of mid to late nineteenth century or earlier date.

4. TRIAL TRENCHING RESULTS

4.1 INTRODUCTION

4.1.1 Trenches were excavated across the banks where access could be gained from the forest tracks, as the woodland was generally too dense to allow movement of a mechanical excavator (Figs 2 and 3). For the most part, therefore, the terminals of the banks were investigated and sometimes the trenches had to be positioned close together because of access restrictions. The trenches were not excavated in any systematic order, and the following breakdown of the trench results is ordered by the bank that they were investigating.

4.2 BANK 8 (FIG 2)

4.2.1 **Trench 10:** the trench was positioned across the eastern terminal of Bank 8, adjacent to Trench 11, and was aligned north/south. The trench was 6.0m long, 1.5m wide, and was excavated to a depth of 1.1m. The lowest excavated deposit in the trench consisted of a sandy gravel yellow/pale red natural subsoil, **41**, which was excavated to a depth of 0.25m. This was overlain by a 0.20m thick band of dark-grey sand, **42**. Above the sand was a topsoil, **43**, which had been redeposited as a result of disturbance from an adjacent tree bole. No clear bank profile was identified within the trench.

4.2.2 **Trench 11:** Trench 11 was positioned on a north-west/south-east alignment, adjacent to Trench 10 and measured 6.0m in length, 1.5m in width, and 1.0m in depth. The stratigraphy within the trench was almost identical to that described for Trench 10, although, on the central line of the bank, was a 3m wide, and 0.4m high mound overlying a 0.65m deep decayed tree bole.

4.2.3 **Trench 12:** the trench was positioned at the western terminal of the bank and was orientated north/south. It measured 4.6m in length, 2.40m in width, and was excavated to a depth of 1.10m.

4.2.4 The underlying deposit was a natural sandy gravel, **44**, which had a slightly different colour from that seen in other banks, which were universally yellow/pale red. This was overlain by a 0.25m depth of dark grey sand, **58**. Overlying this was a thin humic layer, **45**, below a thick deposit of decayed tree matter. No obvious bank profile was identified in the cross-section.

4.3 BANK 9 (FIG 3)

4.3.1 **Trench 3:** this trench was positioned on a north-east/south-west alignment, across the eastern terminal of Bank 9. The extent of the cut was severely limited due to the presence of dense woodland and the resultant reduced dimensions of the trench were 4.4m long, 1.65m wide, and with a depth of 0.60m.

4.3.2 The base of the trench had a consistent spread of natural yellow / pale red sandy gravel, **24**, sloping slightly to the south and following the slope of the east/west track bordering the bank. Above the gravel was a band of grey sand, **25**, 0.3m thick, which ran throughout the trench. The bank was seen to lie over the sand, and was a

maximum of 0.57m in thickness. The bank comprised disturbed topsoil incorporating the debris of decayed tree foliage (Plate 6). There was no evidence that the earthen component was deliberately constructed.

- 4.3.3 **Trench 13:** Trench 13 was positioned midway along Bank 9, west of the north-east/south-west aligned forest track, and was orientated north/south. The size of the trench was reduced because of dense woodland, and it measured 5.60m in length, 2.0m in width, and had a maximum depth of 1.30m.
- 4.3.4 The surface of the natural sandy gravel, **46**, was encountered at a depth of 0.50m from the present ground surface. Above this was a 0.2m thick subsoil of clean yellow sand, **47**. Overlying this was a dark grey silty sand, **48**, containing small rounded pebbles, apparently a buried soil. This was sealed by a 0.05m thick band of humified tree roots, which were most dense in the centre of the bank. The bank consisted mainly of decomposed trees, extending sporadically along the mound, and there was no evidence that the earthen component of the bank was a deliberately constructed feature.
- 4.3.5 **Trench 17:** the trench was positioned on the extended alignment of Bank 9, and was aligned north/south. It measured 7.0m long, 1.30m wide, and was excavated to a depth of 1.3m.
- 4.3.6 No positive indication of a boundary bank was detected in this area. The natural subsoil deposits in this trench mirrored those recorded in Trench 13 (*Section 4.3.4*). There was, however, a localised mound over a 0.5m wide tree bole, which was surrounded by disturbed sandy topsoil, **46**.

4.4 BANK 10 (FIG 3)

- 4.4.1 **Trench 4:** the trench was located at the eastern terminal of Bank 10 on a north/south alignment; it was 7.4m long, 1.6m wide, and was excavated to a depth of 1.0m.
- 4.4.2 The underlying subsoil was a natural sandy gravel, **27**, which had a slightly undulating surface, but was generally flat. Within these undulations were pockets of dark silty gravel, **28**, which were visible as an horizontal 0.1m thick horizon in the east-facing section.
- 4.4.3 Overlying the subsoil was a thick band (0.8m thick) of dark grey silty sand, **29**, containing debris from decayed wood, and tree roots forming the bank's profile. There was, however, little evidence that the bank was a deliberately constructed feature.
- 4.4.4 **Trench 14:** Trench 14 was positioned midway along Bank 10, at the point of a divisional break caused by a north-east / south-west aligned forest track. The trench measured 6.7m in length, 3.0m in width, was excavated to a depth of 1.3m, and was orientated north/south.
- 4.4.5 The sandy gravel natural subsoil, **49**, sloped to the west, following the contour of the hill. Lying above this subsoil was an extensive level of dark-grey silty sand, **50**, with very few inclusions; this was 0.86m thick, contained well-rounded stones and few roots, and constituted the underlying deposit of the bank. Above this deposit

was a 0.25m thick, mound-shaped profile, formed by remnants of decayed trees and disturbed topsoil, **59** (Plate 1).

4.4.6 **Trench 16:** Trench 16 was positioned to the west of the north-east to south-west aligned track, which has cut the bank. The trench was 7.5m long, 2.8m wide, was excavated to a depth of 1.4m, and was orientated north/south.

4.4.7 The underlying natural subsoil was a sandy gravel, **53**, which was excavated to a depth of 0.45m to establish the character of the deposit. Overlying the subsoil was a dark-grey clean sand, **54**, similar to that observed in Trench 17. This sandy deposit was 0.27m thick, and was possibly the remnants of a boundary bank. Sealing the grey sand was a thin layer of humified tree bark, **55**, extending across the trench. This was overlain by an undulating deposit of decayed tree stumps and redeposited grey sand, **56**, which was thickest at the northern end of the trench, measuring 0.65m in depth. No intrusive features were observed in the trench.

4.5 BANK 11 (FIG 3)

4.5.1 **Trench 5:** the trench was positioned over the western terminal of Bank 11, and was orientated north/south. The trench size was severely restricted due to the surrounding dense woodland, and was consequently only 3.8m long, 3.3m wide, and 0.7m deep. No other trenches were excavated on this bank due to the lack of access through the woodland.

4.5.2 The underlying natural subsoil was a sandy gravel, **30**, encountered at a depth of 0.65m below the surface. Above this was a thin, level layer of silvery grey sand, **31**, which was in turn overlain by topsoil comprising redeposited sand, **57**, caused by tree disturbance (Plate 2). No intrusive features were observed.

4.6 BANK 12 (FIG 3)

4.6.1 **Trench 6:** the trench was positioned at the eastern terminal of Bank 12, on a north/south alignment; the trench was 6.0m long, 1.8m wide, and was excavated to a depth of 0.7m.

4.6.2 The upper surface of the natural sand and gravel deposit, **32**, was identified at a depth of 0.65m from the surface. This was overlain by a 0.2m thick layer of grey silty sand, **33**. There was no evidence of a bank in this trench.

4.6.3 **Trench 15:** Trench 15 was positioned at the western terminal of Bank 12, on a north-east/south-west alignment, and it was 4.8m long, 2.6m wide, and excavated to a depth of 1.3m.

4.6.4 The sandy gravel natural subsoil, **51**, was sloping slightly to the west at the base, and was overlain by a consistent, 0.4m thick, spread of dark-silty sand, **60**, with frequent stones. Above this was a 0.05m thick layer of humified tree bark, **52**. The bank's profile there was formed by two tree stumps, set 1.0m apart, surrounded by a 0.8m depth of disturbed topsoil. There is no evidence that the earthen component of the site was deliberately constructed.

4.7 BANK 13 (FIGS 2, 4 AND 5)

- 4.7.1 **Trench 1:** the trench was positioned near to the west end of Bank 13, and was orientated north/south; it was 7m long, 2.9m wide, and a maximum depth of 0.9m.
- 4.7.2 The natural subsoil horizon comprised a yellow/orange sandy gravel, **7**. The stones within subsoil **7** ranged from sub-angular, sub-rectangular, to rounded pebbles, measuring 50-100mm. These stone inclusions were a consistent component in the subsequent overlying deposits throughout the trench. This horizon sloped northwards from a depth of 0.3m following that of the surrounding terrain.
- 4.7.3 Overlying subsoil **7** was a dark-brown humified silty-sand deposit, **6**, with frequent stone inclusions. This appeared to run north for 4.8m from the southern edge of the trench but abruptly stopped 2.2m from the northern edge (Plate 4). The humic component of this layer was probably due to the remnants of decayed trees.
- 4.7.4 Above this layer was a silvery grey sand, **3**, which underlay the bank. The layer extended over the whole of the trench and probably represents a buried ground surface.
- 4.7.5 Cutting layer **3** was a shallow posthole, **4**, which was at the southern side of the bank and was 0.4m in diameter. The fill, **5**, was composed of small packing stones, measuring 50-100mm, within a dark-brown silty matrix. No other postholes were encountered in this trench.
- 4.7.6 Overlying layer **3** was a thin layer of rotting tree bark, **19**, which was a component of the gradual sloping bank, **9**. Above layer **19** was a deposit of dark reddish-brown silty sand, **2**, which was 0.3m thick, and provided trace evidence of the original bank construction (Plate 3). Above the bank and below the turf was evidence of decayed tree stumps, **1**, representing an apparent secondary use of the earthwork. The bank had a maximum height of 0.80m and gently sloped to the north.
- 4.7.7 **Trench 2:** Trench 2 was positioned midway along Bank 13 on a north/south alignment. The trench was expanded, so as to explore the character and form of a ditch in front of the bank; it was 7.5m long, 3.6m wide, and had a maximum depth of 1.3m.
- 4.7.8 The natural sandy gravel subsoil, **18**, followed the apparent line of a 'U'-shaped ditch running to the north of the bank. The deposit was identical to the natural subsoil encountered in Trench 1, both sloping to the north, and it was excavated to a depth of 0.5m.
- 4.7.9 Above **18** was a dark silty layer with frequent stone inclusions, **11**, similar to layer **6** in Trench 1, which was observed as a lens showing through the overlying ground surface in the southern part of the trench. This was overlain by a buried ground surface, **10**, which comprised a grey sand similar to layer **3**, encountered in Trench 1. The deposit ran the length and width of the excavated area, had a varying thickness, and was at its densest underlying the bank.
- 4.7.10 Cutting layer **10** were two postholes, **12** and **14**, positioned diagonally 1.2m apart on a north-east/south-west alignment. Posthole **14** was underneath the western part of the bank, and posthole **12** was to the north of the bank. The postholes were 0.4m in diameter and were filled by a similar deposit material comprising small sub-rectangular pebbles in a dark silt sand matrix, **13** and **15**.
- 4.7.11 The bank, **9**, was 0.8m in height, and consisted of a reddish-brown silty sand which was a very similar material to that encountered in Trench 1 (Plate 5). A deep cut

posthole, **22**, observed in the east-facing section, was seen to cut the front of the northern slope of the bank. The profile was 'U'-shaped, had an east/west alignment, was 0.5m in diameter, and had a maximum depth of 0.7m. The fill, **23**, comprised loose orange sand with few stone inclusions, reflecting a marked difference in composition and size to the aligned postholes, **12** and **14**, that cut the lower level of buried ground surface.

- 4.7.12 Cutting the edge of this isolated posthole, **22**, was a shallow east/west aligned, flat-bottomed ditch, **16**, which would appear to post-date the bank, given the nature of the undisturbed buried ground surface beneath the cut. Further dating evidence was provided by a beer can recovered from the redeposited orange sand fill, **17**.

4.8 BANK 14 (FIG 2)

- 4.8.1 **Trench 9:** the trench was positioned at the western end of Bank 14, on a north/south alignment; it was 7.3m long, 3.2m wide, and was excavated to a depth of 1.8m.
- 4.8.2 The sandy gravel natural deposits, **39**, consisted of a mixture of sandy gravels and tree debris. In the south-eastern part of the trench was a cut line, **40**, for a probable ditch running on a north-west/south-east alignment, which was partially obscured to the north by redeposited sandy gravel natural material. This was probably a drainage ditch for the adjacent track.
- 4.8.3 The bank consisted mainly of decomposed trees, **61**, aligned erratically along the mound, and there was no evidence of a deliberately constructed earthwork in association.

4.9 BANK 15 (FIG 3)

- 4.9.1 **Trench 7:** the trench was cut on a north/south alignment, near the western terminal of Bank 15; it was 10.3m long, 1.5m wide, and was excavated to a depth of 1.2m.
- 4.9.2 The natural subsoil consisted of a very stony sandy gravel, **34**, which followed the slope of the hill. Overlying this was a 0.12m thick deposit of light-grey sand, **35**, which was probably a buried ground surface. Sealing the sand was a thin layer of decayed/humic material, **36**, formed by tree debris; this horizon abruptly stopped at the southern part of the trench beyond the line of the trees. Above the humic deposit was a thick band of redeposited topsoil and bank material, **57**.
- 4.9.3 The line of the bank was seen in the west-facing section, beginning at the northern edge of the trench and rising to a maximum of 0.92m above the humic deposit, **38**. The bank gradually followed the line of the hill and at the southern end of the trench was 0.2m above the grey sand. No intrusive features were detected.
- 4.9.4 **Trench 8:** Trench 8 was positioned midway along Bank 15, on a north/south alignment; it was 6.90m long, 0.7m wide, and was excavated to a depth of 0.7m.
- 4.9.5 The bottom of the trench revealed the sandy gravel natural subsoil, **37**, with a similar depth of grey sand, **38**, as encountered in Trench 7. However, the overlying deposits in this trench were significantly lower, possibly suggesting the absence of bank material, perhaps as a result of erosion or hillwash.

5. CONCLUSIONS

5.1 THE FOREST BANKS

- 5.1.1 The survey and excavation have revealed relatively consistent results as to the form and character of the forest banks. With the exception of Bank 13, they comprised the erratic alignments of decayed trees boles. There was little evidence for a deliberately constructed bank associated with these alignments, although humic soils have built up over time around the root boles, forming irregular, low-lying and, in places, discontinuous banks. The amount of humic material is greater than would be expected simply from an accumulation associated with tree roots and may suggest the former existence of further, now decayed, vegetation on the line, such as would be typified by a hedge. While these features were clearly not constructed as banks, the deliberate planting of trees, and potentially hedges, on long and continuous alignments, would suggest that they were boundaries, although their function is uncertain.
- 5.1.2 **Bank 13:** only Bank 13 was noticeably different in form and structure, as revealed by both the survey and the excavation. The bank had a clearly defined profile (Fig 5; Plate 3), and there were beneath the banks a pair of postholes, probably for a fence. The enlarged spoil heap at the south-west end of Bank 13 may have been caused by the adjacent forestry track cutting through the end of the bank and the resulting soil being piled onto the end of the bank, away from the forest track.
- 5.1.4 **Dating:** the absence of any palaeoenvironmental or dating evidence from the excavation limits the ability to date these features, but some indication of their chronology can be established from cartographic evidence. The alignment of the banks correspond to the arrangement of tracks shown on the Ordnance Survey 1st edition mapping; many of these tracks have continued through to the present day forest layout, but where they differ the banks coincide with the alignments of the nineteenth century layout rather than the modern one. The considerable decay of the root boles, coupled with the formation of humic deposits associated with the features, would further reinforce the supposition that they are not of recent date.
- 5.1.5 The function of the boundaries is uncertain; they do not form enclosures consistent with fields or conventional agricultural activity. They do, however, have very consistent, mostly parallel alignments and align with the tracks within the nineteenth century woodland. This would suggest that they may have been early woodland divisions.

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APPENDIX 1
PROJECT DESIGN

OXFORD
ARCHAEOLOGY
NORTH

November 2001

POTTAL POOL QUARRY, PROPOSED EXTENSION

STAFFORDSHIRE

ARCHAEOLOGICAL SURVEY AND EVALUATION

Proposals

The following project design is offered in response to a request from Hanson Aggregates for an archaeological survey and evaluation in advance of a sand and gravel quarry extension at Pottal Pool, Staffordshire.

1. INTRODUCTION

- 1.1.1 **Contract Background:** Oxford Archaeology North (formerly Lancaster University Archaeological Unit) has been requested by Hanson Aggregates to define a programme of archaeological works, in order to satisfy the requirements of a planning condition by Staffordshire County Council. This follows on from an assessment undertaken by LUAU (2000) which identified a locally important archaeological resource within the extent of the study area. The present project design is produced in accordance with a verbal brief from Chris Welch, Staffordshire County Council.
- 1.1.2 **Historical Background:** the proposed development at Pottal Pool, near Cannock, has the potential to contain sites of all periods but particularly from the medieval and post-medieval periods. By 1236 Cannock Chase was a part of the Cannock Royal Forest but in the 1570's much of the woodland was sold off for iron production. From at least the eighteenth century the study area was part of a warren, and place name evidence indicates the former presence of keeper's lodges in the vicinity. In the nineteenth century the area was extensively landscaped and the commons were enclosed. The earlier walk-over survey identified a series of linear banks, up to 2.5m wide, and 0.5m – 1.0m high; these predate the present forestry planting. They are apparently relict elements of a former boundary system, probably of post-medieval date, but potential had earlier origins, although not necessarily in their present form.
- 1.1.3 **Oxford Archaeology North:** Oxford Archaeology North (formerly Lancaster University Archaeological Unit) has considerable experience of the evaluation and assessment of sites of all periods, having undertaken a great number of small and large scale projects during the past 15 years. Evaluations and assessments have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables. OAN has been involved in extensive artefact survey work in Staffordshire as part of the North West Wetlands Survey (NWS) and OAN has also undertaken archaeological work associated with a number of mineral extraction developments throughout the north of England, including an evaluation at Conover, Shropshire for Hanson Aggregates, and has also undertaken the assessment phase of the present programme. OAN has the professional expertise and resource to undertake the project detailed below to a high level of quality and efficiency. OAN and all its members of staff operate subject to the Institute of Field Archaeologists (IFA) Code of Conduct and is a registered organisation with the IFA (No 17).

2. OBJECTIVES

- 2.1 The following programme has been designed, in accordance with a verbal brief by Chris Welch of Staffordshire County Council's Archaeology Department to provide an evaluation of the archaeological resource within the study area. The required stages to achieve these ends are as follows:
- 2.2 **Earthwork Survey of Boundary Banks:** a topographic survey of the principal linear banks (Sites 08-13) will be undertaken. This will record the form and character of the monuments.
- 2.3 **Evaluation Trenching of the Boundary Banks:** a series of trenches will be undertaken along and across the Pottal Pool boundary banks in order to ascertain their character, date and any evidence of earlier forms of boundary. Trenches will be excavated across the banks to establish sectional information and to examine evidence for boundaries preceding the present banks. In addition trenches will be excavated along the top of the banks to investigate the potential for top fencing.
- 2.4 **Evaluation Report:** a written assessment report will consider the significance of the data generated by this programme, within a local and regional context.

3. METHODS STATEMENT

- 3.1 The following work programme is submitted in line with the stages and objectives of the archaeological work summarised above.

3.2 EARTHWORK SURVEY OF BOUNDARY BANKS

- 3.2.1 It is proposed to undertake a level 3 survey (see OAN survey levels, *Appendix 1*) of the boundary banks, which is equivalent to RCHM(E) level 3 within the extent of the development area, and will record Sites 08-13 (LUAU 2000). The survey will include the full extent of the site and will be at 1:1000 scale. Appropriate topographic detail, will be recorded to provide an appropriate context for the archaeological detail.
- 3.2.2 **Survey Control:** survey control will be established over each individual site by closed traverse and internally will be accurate to +/- 15mm; each site will be located onto the Ordnance Survey National Grid by the use of Global Positioning Survey (GPS). The use of GPS techniques has proved to be an essential and extremely cost effective means of locating monuments, which can achieve accuracy of better than +/- 0.2m. The principal control points will be located within the forestry rides and firebreaks in order to be able to capture GPS locations.
- 3.2.3 The surface features will be surveyed by EDM tacheometry techniques. The total station will be linked to a data logger and the digital data will be transferred onto a portable computer for manipulation and later transfer to other digital or hard mediums. Film plots will be output via a plotter. The archaeological detail will be drawn up in the field as a dimensioned drawing on the plots with respect to survey markers. Most topographic detail will also be surveyed, particularly if it is archaeologically significant or is in the vicinity of archaeological features. The survey drawings will be generated within a CAD system and can be output at any scale. The output of the CAD mapping will allow its adaptation for presentational purposes.
- 3.2.4 The survey would be accompanied by a gazetteer description of individual archaeological features, which will relate directly to the survey mapping. This stage of the survey will involve a detailed assessment of the site and its general context and will be undertaken by an experienced landscape archaeologist.

3.3 TRIAL TRENCHING

- 3.3.1 A programme of trenching will examine the character and form of the earthen boundary linear banks (Sites 08-14) (LUAU 2000). The trenching will aim to establish the development of the bank, and if there were earlier phases of boundary marker. It will examine the underside of the banks for evidence of fencing and also if there was any fencing established on top of the banks. It will examine the junctions and terminals of the banks
- 3.3.2 Mechanically excavated trenches will be excavated across the banks and down to any buried ground surfaces; they will investigate the development of the banks and the potential for any underlying fence post holes. The trenches will be at least 7m long (7m x 3m) so as to ensure that at least two posts of any fence will be exposed. In the first stage of excavation the turf / topsoil will be removed from the top of the bank and then cleaned in order to investigate the potential for fence posts on the top of the bank. It is proposed to excavate three trenches across each of banks 9, 10, 11, and 12, and two trenches across banks 8, 13 and 14; in all 18 trenches will be excavated. The precise locations of the trenches will be subject to the results of the initial topographic survey, and will target key sections of the banks such as terminals and any intersections with other boundaries.
- 3.3.2 Although the excavation will be primarily by mechanical means, using a JCB type excavator with a toothless ditching bucket, this will be excavated in spits and the base of each spit will be manually cleaned so as to reveal any cut features. The evaluation will result in a profile through the banks and will include any side ditches. The excavation will establish the depth of natural horizons.
- 3.3.3 All trenches will be excavated in a stratigraphical manner, pits and post-holes will be excavated by half sectioning. Trenches will be accurately located by means of total station survey and will be tied into the topographic survey. All typologically significant and closely datable finds will be contextually recorded. All archaeological features within the trenches will be planned by manual techniques.
- 3.3.4 **Finds and Sampling Strategy:** finds recovery and sampling programmes will be in accordance with best practice (current IFA guidelines) and subject to expert advice. Samples will be collected for technological, pedological, palaeoenvironmental and chronological analysis as appropriate. The Unit has close contact with Ancient Monuments Laboratory staff at the Universities of Durham and York and, in addition, employs in-house finds and palaeoecology specialists, who are readily

available for consultation. Finds storage during fieldwork and any site archive preparation will follow professional guidelines (UKIC).

- 3.3.5 A contingency is defined in the event that material suitable for Carbon 14 dating is recovered from the excavations, and would cover for the processing of the dates. The cost provides for an accelerator Carbon 14 dates, however, there may be a requirement for multiple dates and there is also a possibility that samples are recovered sufficient for a conventional date in which case the costs will be reduced. The costs for this element will need to be subject to discussions with the County Archaeologist and the client.
- 3.3.6 **Recording:** all information identified in the course of the site works will be recorded stratigraphically, with sufficient pictorial record (plans, sections and both black and white and colour photographs) to identify and illustrate individual features. Primary records will be available for inspection at all times.
- 3.3.7 Results of the field investigation will be recorded using a paper system, adapted from that used by Centre for Archaeology of English Heritage. The archive will include both a photographic record and accurate large scale plans and sections at an appropriate scale (1:50, 1:20, and 1:10). All artefacts and ecofacts will be recorded using the same system, and will be handled and stored according to standard practice (following current Institute of Field Archaeologists guidelines) in order to minimise deterioration.

3.4 EVALUATION REPORT

- 3.4.1 **Archive:** the results of the fieldwork will form the basis of a full archive to professional standards, in accordance with current English Heritage guidelines (1991). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. It will include summary processing and analysis of all features, finds, or palaeoenvironmental data recovered during fieldwork, which will be catalogued by context. This archive can be provided in the English Heritage Centre for Archaeology format, both as a printed document and on computer disks as ASCII files. A copy of the archive can also be made available for deposition with the National Archaeological Record. The archive inclusive of the material archive (artefacts, ecofacts, and samples) will be deposited with the Potteries Museum, Stoke on Trent. The curator of the Potteries Museum will be contacted at the outset of the project to discuss the submission of the archive.
- 3.4.2 **Evaluation Report:** one bound and one unbound copy of a written synthetic report will be submitted to the Client, and two copies submitted to the Staffordshire Sites and Monuments Record. The report will include a copy of this project design, and indications of any agreed departure from that design. It will present, summarise, and interpret the results of the programme detailed above and will include a full index of archaeological features identified in the course of the project, with an assessment of the overall stratigraphy, together with appropriate illustrations, including detailed plans and sections indicating the locations of archaeological features. Any finds recovered from the excavations will be assessed with reference to other local material, any particular or unusual features of the assemblage will be highlighted, and the potential of the site for palaeoenvironmental analysis will be considered. The report will also include a complete bibliography of sources from which data has been derived, and a list of further sources identified during the programme of work, but not examined in detail.
- 3.4.3 This report will identify areas of defined archaeology, the location of the trench, and whether the results of the sampling were positive or negative. An assessment and statement of the actual and potential archaeological significance of the site within the broader context of regional and national archaeological priorities will be made. Illustrative material will include a location map, and section drawings and plans if appropriate; it can be tailored to the specific requests of the client (eg particular scales etc), subject to discussion.
- 3.4.4 **Further Work:** subject to the results of the evaluation, and discussions with the Staffordshire County Archaeologist and the client there may be requirements for an additional phase of archaeological investigation. Such work would typically involve a watching brief during the top-

soil stripping and may be targeted on areas identified as being of particular archaeological importance.

- 3.4.5 **Publication:** subject to the results of the evaluation programme there may be a need to disseminate the results of the programme within an appropriate local journal, and would be subject to discussions with the Staffordshire County Archaeologist and the client. If a watching brief is implemented then the publication would typically be compiled following that stage of exploration, and the costs for the overall publication would be incorporated into the watching brief costs. However, if a publication is required, without a corresponding watching brief then there will be a requirement for additional costs.

3.5 GENERAL CONDITIONS

- 3.5.1 **Access:** liaison for basic site access will be undertaken through Hanson Aggregates and it is understood that there will be access for both pedestrian and plant traffic to the site.
- 3.5.2 **Health and Safety:** full regard will, of course, be given to all constraints (services) during the survey, as well as to all Health and Safety considerations. The OAN Health and Safety Statement conforms to all the provisions of the SCAUM (Standing Conference of Unit Managers) Health and Safety manual. Risk assessments are undertaken as a matter of course for all projects. The Unit Safety Policy Statement will be provided to the client, if required. If there is a requirement to excavate trenches deeper than 1.25m the trenches will be stepped out to minimise section collapse.
- 3.5.3 **Confidentiality:** the report is designed as a document for the specific use of the client for the particular purpose as defined in this project design, and should be treated as such. Any requirement to revise or reorder the material for submission or presentation to third parties or for any other explicit purpose can be fulfilled, but will require separate discussion and funding.
- 3.5.4 **Insurance:** the insurance in respect of claims for personal injury to or the death of any person under a contract of service with the unit and arising out of an in the course of such person's employment shall comply with the employers' liability (Compulsory Insurance) Act 1969 and any statutory orders made there under. For all other claims to cover the liability of OAN, in respect of personal injury or damage to property by negligence of OAN or any of its employees, there applies the insurance cover of £10m for any one occurrence or series of occurrences arising out of one event.
- 3.5.5 **Reinstatement:** it is understood that there will be no requirement for reinstatement of the ground beyond backfilling. The ground will be backfilled so that the topsoil is laid on the top, and the ground will be roughly graded with the machine.

4. PROJECT MONITORING

4.1 HANSON AGGREGATES

- 4.1.1 OAN will consult with Hanson Aggregates regarding access to land within the study area. This consultation will include, if required, the attendance of a representative of that company at any meetings convened with the Head of Archaeology of Staffordshire County Council or his representative to discuss progress or the report.

4.2 STAFFORDSHIRE COUNTY COUNCIL

- 4.2.1 Any proposed changes to the project brief or the project design will be agreed with the head of Archaeology of Staffordshire County Council in conjunction with the client. OAN will arrange with the County Archaeologist for a preliminary meeting at the commencement of the contract, if required.

5. WORK TIMETABLE

The phases of work would comprise:

5.1 ***Earthwork Survey***

A five day period is required to undertake the field survey.

5.2 ***Evaluation Trenching***

A nine day period will be required to undertaken the trenching programme

5.3 ***Evaluation Report***

To be completed within three weeks of completion of fieldwork

5.4 OAN can execute projects at very short notice once an agreement has been signed with the client. OAN would be able to submit the report to the client within four weeks from the commencement of the project.

5.5 The project will be under the direct line management of **James Quartermaine BA Surv Dip MIFA** (Unit Project Manager) to whom all correspondence should be addressed. All OAN staff are experienced, qualified archaeologists, each with several years professional expertise.

APPENDIX 2 CONTEXT LIST

Context	Trench	Description
1	1	Turf/Topsoil
2	1	Silty-sand layer
3	1	Grey sand layer
4	1	Posthole
5	1	Fill of 4
6	1	Dark brown silt buried soil
7	1	Sandy gravel natural subsoil
8	2	Turf
9	2	Bank
10	2	Grey sand layer
11	2	Dark brown silt buried soil layer
12	2	Posthole
13	2	Fill of 12
14	2	Posthole
15	2	Fill of 14
16	2	Ditch
17	2	Fill of 16
18	2	Sandy gravel natural subsoil
19	1	Humic layer
20	2	Redeposited topsoil
21	2	Humic layer
22	2	Posthole
23	2	Fill of 22
24	3	Sandy gravel natural subsoil
25	3	Grey sand layer
26	3	Topsoil
27	4	Sandy gravel natural subsoil
28	4	Silty gravel layer
29	4	Silty sand layer

30	5	Sandy gravel natural subsoil
31	5	Grey sand layer
32	6	Sandy gravel natural subsoil
33	6	Grey silty sand layer
34	7	Sandy gravel natural subsoil
35	7	Grey sand layer
36	7	Decayed tree / humic material
37	8	Sandy gravel natural subsoil
38	8	Grey sand layer
39	9	Sandy gravel natural subsoil
40	9	Cut for ditch
41	10, 11	Sandy gravel natural subsoil
42	10, 11	Grey sand layer
43	10, 11	Topsoil
44	12	Sandy gravel natural subsoil
45	12	Humic layer
46	13, 17	Sandy gravel topsoil
47	13, 17	Yellow sand subsoil
48	13, 17	Silty sand layer
49	14	Sandy gravel natural subsoil
50	14	Silty sand layer
51	15	Sandy gravel natural subsoil
52	15	Layer of humified tree bark
53	16	Sandy gravel natural subsoil
54	16	Dark grey sand layer
55	16	Humified tree bark layer
56	16	Decayed stumps and grey sand layer
57	7	Redeposited topsoil
58	12	Dark grey sand layer
59	14	Disturbed sandy topsoil
60	15	Dark silty sand layer
61	9	Humified bank deposit including decomposed trees

APPENDIX 3

GAZETTEER OF SITES EXAMINED DURING EVALUATION

The gazetteer is based upon that of the earlier identification survey (LUAU 2000) and has been enhanced in the light of the present topographic survey. The site numbering is based on that of the earlier survey (*ibid*) and only those sites examined as part of the present study are incorporated below.

Site Number	08
Site name	Warren Hill
NGR	SJ 3975 3158
Site type	Linear bank
Period	Post-medieval
Source	LUAU 2000; Topographic Survey

Description

A linear bank of earthen construction is c2.5-4m wide and 0.5-1.0m high. It consists mainly of tree stumps, up to 0.4m in diameter, the majority of which appear to be silver birch. There are also a few young silver birch trees growing on top. The bank is over 200m long and continues outside the study area to the west. At the east end it is partially cut by a 0.5m wide animal track. It is orientated roughly east/west.

Assessment

The site lies partly within the study area and will be destroyed by the proposed extension to the sand and gravel quarry.

Site Number	09
Site name	Warren Hill
NGR	SJ 3976 3156
Site type	Linear bank
Period	Post-medieval
Source	LUAU 2000; Topographic Survey

Description

A linear bank of earthen construction (c2.5-3m wide and 0.5-1.0m high) consists mainly of tree stumps, up to 0.4m in diameter, the majority of which appear to be silver birch. There are also a few young silver birch trees growing on top. The bank is at least 120m long and continues outside the study area to the west. It is cut near the middle by a minor forestry track and there is a greater amount of spoil piled up around this point than elsewhere. It is orientated roughly east/west.

Assessment

The site lies partly within the study area and will be destroyed by any extension to the sand and gravel quarry.

Site Number	10
Site name	Deer Slade
NGR	SJ 3975 3156
Site type	Linear bank
Period	Post-medieval
Source	LUAU 2000; Topographic Survey

Description

A linear bank of earthen construction (c2.5-5m wide and 0.5-1.0m high) consists mainly of tree stumps, up to 0.4m in diameter, the majority of which appear to be silver birch. There are also a few young silver birch trees growing on top. The bank is at least 150m long and continues outside the study area to the west. It is cut near the west of centre by a minor forestry track. It is orientated roughly east/west.

Assessment

The site lies partly within the study area and will be destroyed by the proposed extension to the sand and gravel quarry.

Site Number 11
Site name Badger Slade
NGR SJ 3976 3154 - 3978 3154
Site type Linear bank
Period Post-medieval
Source LUAU 2000; Topographic Survey

Description

A linear bank, of earthen construction, c2.5-3m wide and 0.5-1.0m high, consists mainly of tree stumps, up to 0.4m in diameter, the majority of which appear to be silver birch. There are also a few young silver birch trees growing on top. The bank is at least 210m long but was not observed in the clear/felled area to the east, and may have been truncated by quarrying. It is broken and fragmentary at the west end and the structure is much less well defined at this point. It is orientated roughly north-west/south-east.

Assessment

The site lies within the study area and will be destroyed by the proposed extension to the sand and gravel quarry.

Site Number 12
Site name Deer Slade/Badger Slade Wood
NGR SJ 3976 3155 - 3978 3155
Site type Linear bank
Period Post-medieval
Source LUAU 2000; Topographic Survey

Description

A linear bank of earthen construction, c2.5-3.5m wide and 0.5-1.0m high, consists mainly of tree stumps, up to 0.4m in diameter, most of which appear to be silver birch. There are also a few young silver birch trees growing on top. The bank is at least 150m long and was not observed beyond the forestry track which forms its north-eastern boundary. It is orientated roughly north-west/south-east.

Assessment

The site lies within the study area and will be destroyed by the proposed extension to the sand and gravel quarry.

Site Number 13
Site name Dark Slade Wood
NGR NY 0560 2193
Site type Linear bank
Period Post-medieval
Source LUAU 2000; Topographic Survey

Description

A linear earthen bank, c3–4m wide and 0.7–1m high, is made up of soil and stones, with several young silver birch trees growing on top. It is cut by at least three narrow tracks, probably caused by animals, and the south face has several bays cut into it, each of which is 3m wide by 1m deep. At the south-west end is a large spoil heap covering the end of the bank, c5m in diameter and 1.6m high, and to the north-east of this is a large shallow ditch, 7.5m long and 2.5m wide, which has been cut between the side of the road and the bank's north face. The bank is almost 120m long and orientated roughly north-east/south-west.

Assessment

The site lies within the study area and will be destroyed by the proposed extension to the sand and gravel quarry.

Site Number 14
Site name Dark Slade Wood
NGR SJ 3975 3161
Site type Linear bank

Period Post-medieval
Source LUAU 2000; Topographic Survey

Description

A linear bank of earthen construction, c2.5m wide and 0.5-1.0m high, consists mainly of tree stumps, up to 0.4m in diameter, most of which appear to be silver birch. It also has a few young silver birch trees growing on top. At the south-west end is a large pile of spoil, 9m long by 6m wide and almost 1.2m high, nearly covering the end of the bank. The bank is orientated north-east/south-west and continues outside the study area to the north-east.

Assessment

The site lies partly within the study area and will be destroyed by the proposed extension to the sand and gravel quarry.

Site Number 15
Site name Deer Slade
NGR SJ 3975 3155
Site type Linear bank
Period Post-medieval
Source LUAU 2000; Topographic Survey

Description

A linear bank of earthen construction, c2.5-3m wide and 0.5-1.0m high, consists mainly of tree stumps, up to 0.4m in diameter, most of which appear to be silver birch. It also has a few young silver birch trees growing on top. It is discontinuous, being broken into several sections, and is much less well defined in comparison with the other banks. The bank is orientated north-west/south-east and continues outside the study area to the south-west.

Assessment

The site lies partly within the study area and will be destroyed by the proposed extension to the sand and gravel quarry.

ILLUSTRATIONS

- Figure 1 Pottal Pool: Location Map
- Figure 2 Topographic Survey and Trench Location Map - North
- Figure 3 Topographic Survey and Trench Location Map - South
- Figure 4 Plans of Trenches 1 and 2
- Figure 5 Sections through Trenches 1 and 2



based upon the Ordnance Survey 1:50000
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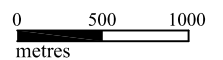


Figure 1: Pottal Pool: Location Map



Oxford Archaeology North
 Storey Institute
 Meeting House Lane
 Lancaster
 LA1 1TF
 Tel 01524 848666
 Fax 01524 848606

PROJECT: Pottal Pool
DRAWING NO: 02
SCALE:
DRAWN BY: ELC
DATE: May 2002
LOCATION:
KEY: Study Area Bank and Evaluation Trench
TITLE: Topographic Survey and Trench Location Map - North
COMMISSIONED BY: Hanson Aggregates

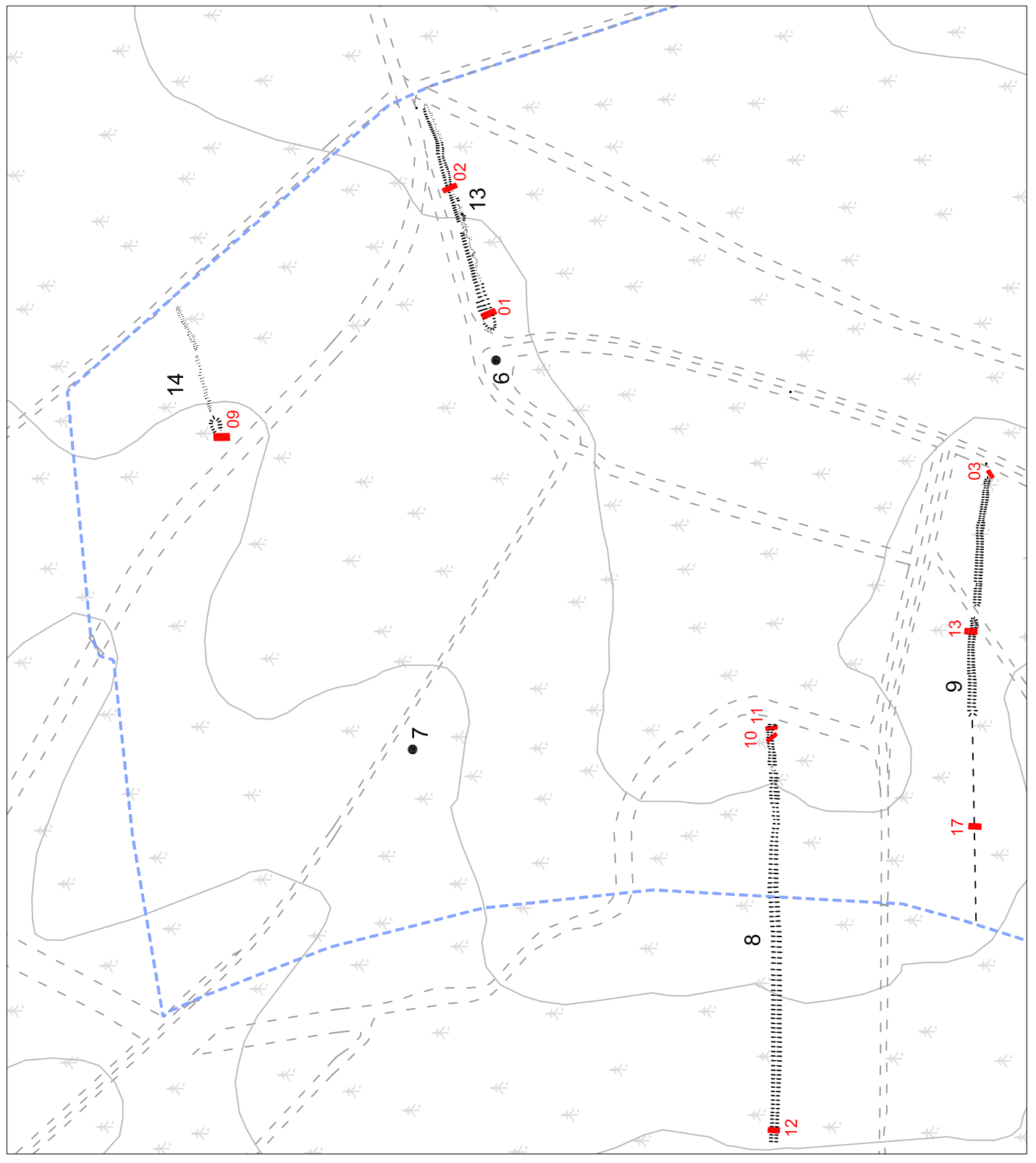


Figure 2: Topographic Survey and Trench Location Map - North



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PROJECT:

Pottal Pool

DRAWING No:

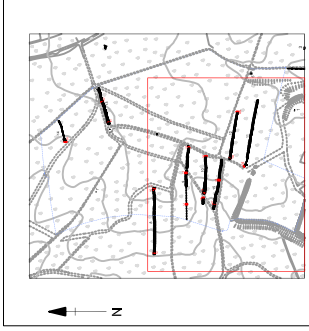
03



DRAWN BY: ELC

DATE: May 2002

LOCATION:



KEY



TITLE:

Topographic Survey and Trench Location
Map - South

COMMISSIONED BY:

Hanson Aggregates

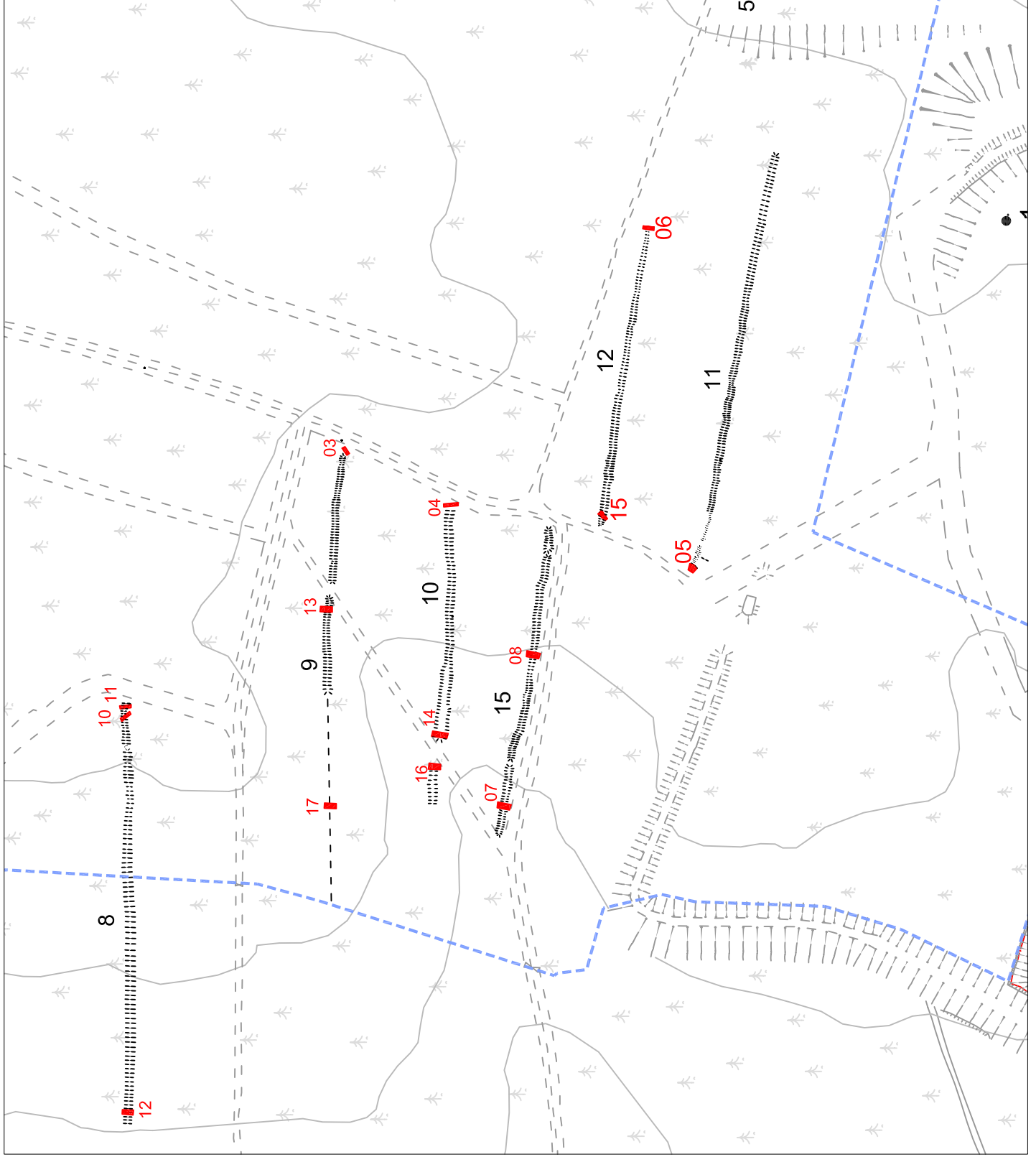


Figure 3: Topographic Survey and Trench Location Map - South



Oxford Archaeology North
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Meeting House Lane
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Fax 01524 848606

PROJECT:

Pottal Pool

DRAWING No:

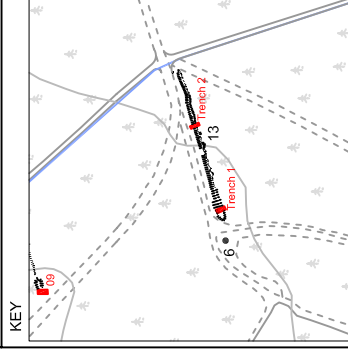
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0 1m

DRAWN BY: ELC

DATE: April 2002

LOCATION:

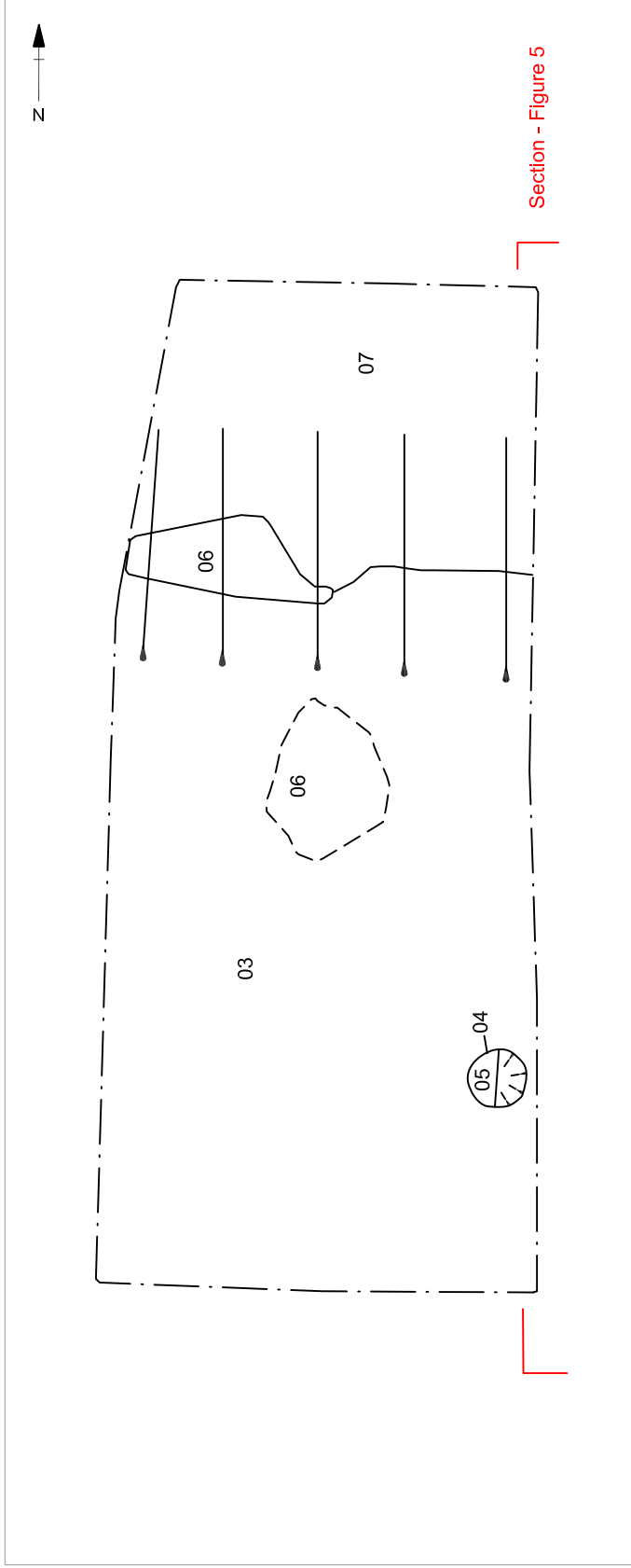


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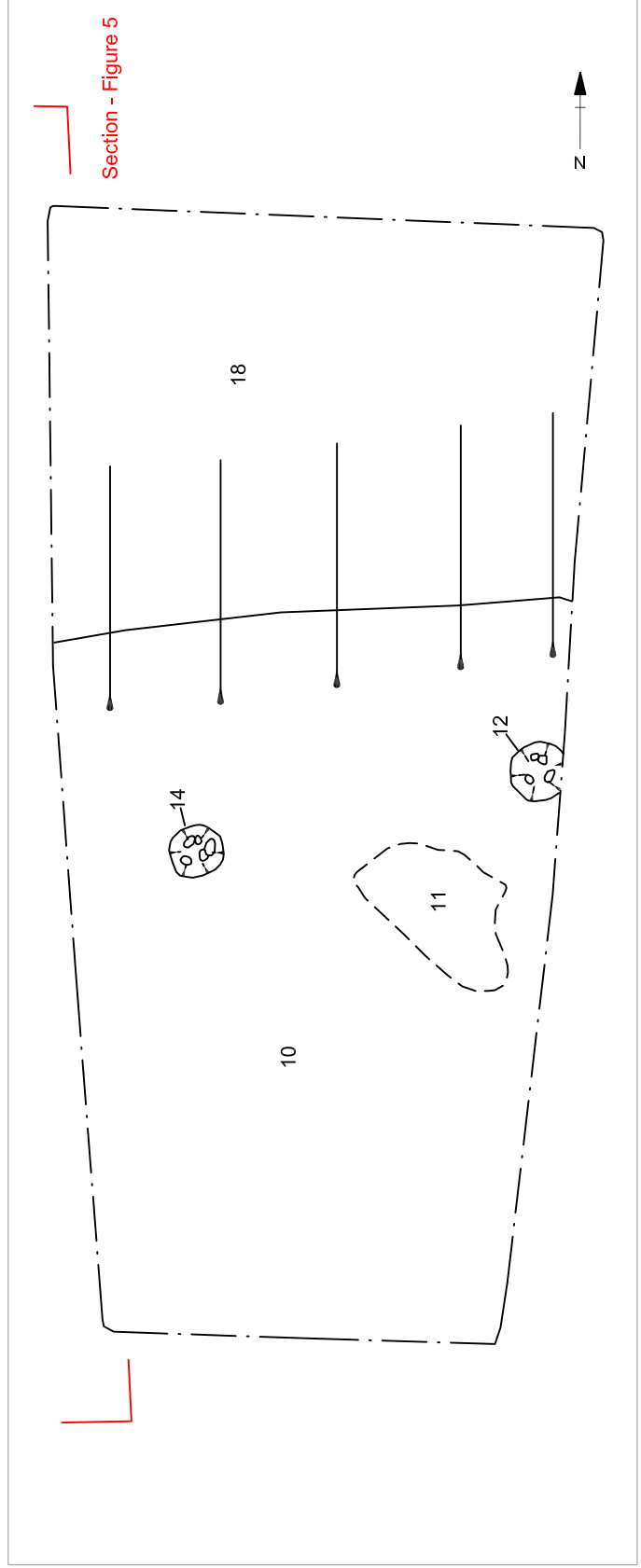
Plans of Trenches 1 and 2

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Plan of Trench 1



Plan of Trench 2

Figure 4: Plans of Trenches 1 and 2



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PROJECT:

Pottal Pool

DRAWING No:

5



DRAWN BY: ELC

DATE: April 2002

LOCATION:

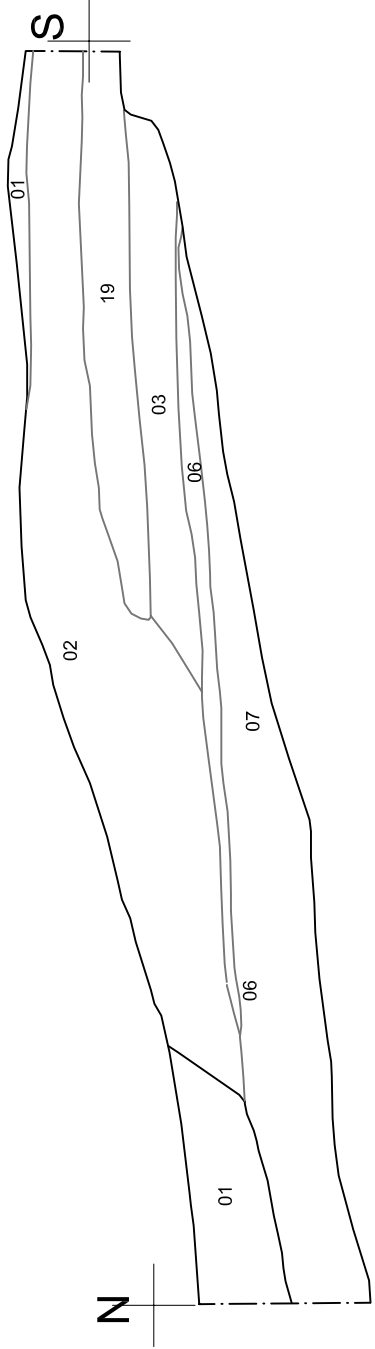
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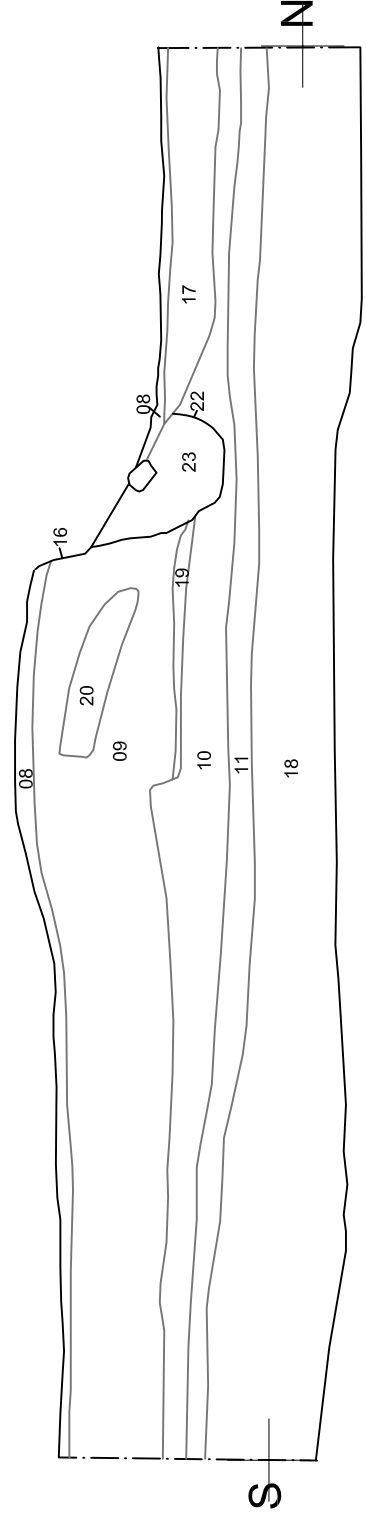
Sections through Trenches 1 and 2

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West-facing section through Trench 1 at 1:25



East-facing section through Trench 2 at 1:25

Figure 5: Sections Through Trenches 1 and 2

PLATES

Plate 1: Trench 14, Section through Bank 10, looking east

Plate 2: Trench 5, Section through Bank 11 looking south-east

Plate 3: Trench 1, Section through Bank 13 looking west

Plate 4 : Trench 1 looking south

Plate 5: Trench 2, Section through Bank 13 looking south

Plate 6: Trench 3, Section through Bank 9 looking north-west



Plate 1: Trench 14, Section through Bank 10, looking east



Plate 2: Trench 5, Section through Bank 11 looking south-east



Plate 3: Trench 1, Section through Bank 13 looking west



Plate 4 : Trench 1 looking south



Plate 5: Trench 2, Section through Bank 13 looking south



Plate 6: Trench 3, Section through Bank 9 looking north-west