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Archaeological Field Evaluation Report

Southwest Bourne, Lincolnshire

Volume 1

produced by

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of behalf of

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*Archaeological Field Evaluation Report:
Southwest Bourne, Lincolnshire*

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Summary

This report details the results of twelve trial trenches excavated as the final phase of a programme of works evaluating the archaeological potential of land southwest of Bourne, Lincolnshire. It follows a detailed desk-based assessment and geophysical (magnetometer) survey.

The trench locations were placed by the South Kesteven Community Archaeologist in order to test the validity and significance of a series of anomalies highlighted by the geophysical survey. The trenches were surveyed in by Midland Surveying using GPS, and machine excavated to the first archaeological horizon, or sterile natural deposit.

Four trenches were excavated in the north of the site, resulting in the exposure of a number of post-medieval features, including a large quarry pit, brick structure, and post holes/pits.

The remaining trenches were excavated in the south of the application area. Most of these produced minimal remains, but a dense cluster of archaeological features dating to the Romano-British period were exposed on a slight rise or knoll. These appear to signify a localised focus of domestic and industrial activity outside of the Roman town during the third century, and are considered to be of local importance.

The remains include possible structural features that have been robbed in antiquity, and more recently truncated by ploughing, and industrial remains. The remains are not considered worthy of preservation in situ, but do hold some potential for furthering the understanding of Romano-British iron working which is currently poorly understood. They also hold the potential for the investigation of either a previously unidentified process utilising briquetage type industry, or else the first in land salt processing/refining site yet identified.

The identified Romano-British site is not of sufficient importance to preclude development, but will require further investigation prior to development commencing within a specified area (Figure 16). This can be secured by the standard negative condition based on PPG 16, paragraph 30.

1.0 Introduction

- 1.1 Allison Homes have applied for outline planning permission for the residential development of 120 ha of land circuiting the south west of Bourne, Lincolnshire.
- 1.2 The site is centred on NGR TF 092 195 and lies at an altitude of approximately 9m AOD. It is currently under a mixed agricultural regime characterised by pasture and arable cropping.
- 1.3 This report details the results of a programme of trial trenching undertaken under the provisions of a written scheme (*JSAC 190/99/04*) approved by the local planning authority. It has been written by Simon Johnson, BA, AIFA, in consultation with John Samuels, BA, Ph.D, FSA, MIFA. It conforms to 'Archaeology and Planning' *Planning Policy Guidance Note 16*, is in accordance with current best archaeological practice, and the appropriate national standards and guidelines, including:

Management of Archaeological Projects (English Heritage 1991);

Code of Conduct (Institute of Field Archaeologists 1997);

Standard and Guidance for Archaeological Field Evaluations (Institute of Field Archaeologists 1994);

Archaeological Handbook (Lincolnshire County Council, 1998)

2.0 Archaeological and historic background

- 2.1 Bourne's position on the edge of the Lincolnshire fens ensured rapid settlement expansion during the Roman period (Hayes and Lane 1992). It has been noted that other areas of the Fenland generally show a poorer standard of pottery than that recovered from the Lincolnshire fens, and this has been taken that this area had an economic or social advantage (Samuels 1993; Hall and Coles 1994). This may have been connected to the production of salt which was more extensive in eastern Lincolnshire than any other area of the fens.
- 2.2 Casual finds and evidence recovered from systematic archaeological fieldwork has indicated that Bourne was a relatively large, if undefined, settlement during the Roman period. Bourne's apparent strategic location with the Roman Road which branches north-west from King Street - Mareham Lane line at Bourne, the Car Dyke and the possible location of the coastline further inland have prompted some discussion as to whether Bourne may have actually been a Roman 'small town' or a harbour. (Simmons 1980; Whitwell 1982, p.140; Samuels 1983).
- 2.5 An excavation was carried out in December 1996, on land immediately north of the main application area. This confirmed the position of King Street Roman Road and identified a number of pits and ditches. Four oven bases were excavated probably associated with domestic rather than industrial production. Pottery dated these remains to the second-third century. It was also concluded that the area, despite its prominent position, was likely to have been external to the main focus of the Roman small town of Bourne (Williams 1997).
- 2.6 The current works were undertaken in order to investigate a series of anomalies and apparent blank areas highlighted by a detailed magnetometer survey. They commenced in accordance with a written scheme approved by the local planning authority following trench locations supplied by the Community Archaeologist for South Kesteven.

3.0 Research framework

- 3.1 The objective of field evaluation is to assess the site's archaeological significance so that the local planning authority can decide the granting, or refusal, of planning permission on archaeological grounds.
- 3.2 To this end, the primary aim of the fieldwork element is to determine the presence, or otherwise, of archaeological remains, and to investigate and record any remains within the limits defined by the project specification.
- 3.3 Where remains are identified, an evaluation seeks to discover their date, extent, density, state of preservation and (where possible) nature and function. This is done primarily through analysis and comparison of the results of the evaluation, but may also require further research. This forms the basis of an *assessment of importance* of the remains, in relation to what information they may add to the current state of knowledge at local, regional and national levels. Where remains are shown to be of national importance, then there is a presumption of their physical preservation *in situ*.
- 3.4 Presently, no specific regional research frameworks identifying the academic priorities for archaeological fieldwork have been developed. Consequently, the importance of the site is assessed by what contribution it can make to current knowledge regarding the socio-economic development of Bourne.
- 3.5 At the time of writing there is no nationally agreed method of measuring the relative importance of archaeological monuments. PPG16 (paragraph 8) draws a distinction between nationally important remains and those of lesser distinction. On this basis it is possible to distinguish between monuments of national, regional, local or negligible importance:

National	Monuments that are scheduled and protected under the Ancient Monuments and Archaeological Areas Act (1979), those suitable for scheduling, or considered to be of national importance but not covered by the Secretary of State's criteria for scheduling.
Regional	Sites listed in the Sites and Monuments Record (SMR) or other sources which are of a reasonably well defined extent, nature and date and significant examples in the regional context.
Local	Sites listed in the SMR or other sources which are of very low potential or minor importance.
Negligible	Areas in which investigative techniques have produced negative or minimal evidence of antiquity, or where large scale destruction of deposits has taken place (eg by mineral extraction).

- 3.6 The potential of a site to contain archaeological remains is based upon a consideration of its topography and the distribution and nature of recorded archaeological finds in the locality. It is measured on the basis of High, Medium, Low and Negligible.

4.0 Methodology

- 4.1 Twelve trial excavation trenches were excavated to investigate a series of geophysical anomalies and apparent blank areas, with each being machine excavated to either the first significant archaeological or sterile horizon. The trench locations were surveyed by Midland Surveying using GPS to ensure sub-centimetre accuracy. Machining was undertaken by 360⁰ plant fitted with a smooth ditching bucket and proceeded under continual archaeological supervision. The spoil generated during machining was mounded along the edges of the trial trenches with a safe working distance between spoil and the trench side. Mechanical excavation ceased when archaeological features were identified. All subsequent excavation was by hand.
- 4.2 The sections and bases of each trench were cleaned by hand. Discrete archaeological features were investigated to determine (where possible) their date, extent, sequence and depth. Plans and sections of trenches are included in the report.
- 4.3 The recording system was based upon the Museum of London's *Archaeological Site Manual* (1994). The system is centred upon scale drawing in both plan and section format supplemented with proforma-context sheets for the description of discrete deposits. The locations of the trenches were plotted according to the site boundaries and levels were related to Ordnance Datum by a calibrated engineering grade level.
- 4.4 A full photographic record was maintained during fieldwork in colour slide, black and white, and colour print. Each trench was photographed before excavation of individual features, and single/groups of features following half-sectioning.
- 4.5 All artefacts were treated according to the UKIC guidelines, *'First Aid for Finds'* (1981). The finds were bagged and marked according to the deposit (context) where they were recovered, and (following completion of fieldwork) the finds were processed in-house and submitted for assessment.
- 4.6 Copies of this report will be sent to the client, the Local Planning Authority, the County Sites and Monuments Record, and the South Kesteven Community Archaeologist.
- 4.7 Following project completion, an ordered site archive will be prepared according to *Conditions for the Acceptance of Archaeological Archives* (City & County Museum, Lincoln). Once deposited, it may be accessed by quoting accession no:
LCNCC SWB 149.99
- 4.9 Acceptance of this report by the Local Planning Authority and its deposition with the County Sites and Monuments Record will effectively place the results of the evaluation in the public domain. A summary report, however, will be submitted to the county journal *Lincolnshire History and Archaeology* for inclusion in a future edition.

5.0 Results

5.1 Constraints

- 5.1.1 The landowners required the evaluation trenches to cause minimal disturbance to the site and requested that all field drains Broken during machining be replaced. This did not affect the quality of the archaeological works, but did result in lost time as the trenches had to be reached on foot from the nearest track or road. Replacement of the field drains also caused the trenches to be backfilled later than would ordinarily occur.
- 5.1.2 Weather conditions during the project were variable, but given the clay based deposits trenches became unworkable after even modest rainfall. This was managed through works being undertaken in different phases in different trenches. In practice this meant that when conditions were fair trenches were cleaned, excavated and basic recording undertaken; and when the trenches were unworkable context sheets and drawings were cross-referenced and samples from completed trenches taken
- 5.1.3 The only major constraint was following particularly heavy rainfall when a field drain backed-up and flooded Trench 8. Despite efforts at de-watering over successive days, there was no appreciable change in the level of the water, and the trench was written off with the approval of the Community Archaeologist. On balance, however, the project proceeded well, and the confidence rating for the evaluation is considered high.
- 5.1.4 There follows a descriptive account of the deposits exposed in each trench, with a discussion of their significance in section 6.0 below.

5.2 Geological deposits and site soil profile

- 5.2.1 Machining exposed a typical weathering profile comprised of cohesive soils, which may be summarised as:

Context	Interpretation	Depth	Description
(01)	Topsoil	variable to 0.400m	Mid greyish brown undifferentiated dark-earth comprised of a silty clay with common rounded to sub-angular flint inclusions
(02)	Subsoil	variable to 0.220m	Mid brown silty clay with common rounded to sub-angular flint inclusions. Only survived in Trenches 2 & 9, and was characteristic of an agricultural panning rather than a true subsoil horizon
(03)	Natural	>1.000m	Mid yellow-brown plastic gravelly clay with occasional grey patches

5.3 Trench 1

- 5.3.1 Trench 1 was located in the southeast quadrant of Field 1 and had finished dimensions of

20.00m x 2.50m, and a maximum depth of 1.20m.

- 5.3.2 Removal of the recent topsoil revealed a series of three pits, [018], [020] & [022], at the north end of the trench. They contained fills (017), (019) & (021) which were comprised of dark brown clayey loam with brick fragments and charcoal flecks. Additionally, pit [020] incorporated limestone packing around a post-pipe indicating that the feature was a post hole; and the same interpretation may be applied to the other two pits.
- 5.3.3 Post hole [022] also truncated part of a series of irregular features (generic context (024)A & [024]B) which were interpreted as robbing trenches for a brick structure (09).
- 5.3.4 This continued through the north end of the trench, and although badly disturbed, appeared to be the remains of a brick set floor. It was comprised of red bricks (L: 221mm; B: 114mm; H: 57mm) bonded with clay. Some of these had been over fired, but there was no sign of *in situ* burning. It was contained within a construction cut, [08]A, which was cut into the underlying natural. This comprised a broad scrape, rather than a footing in the usual sense, and contained a dark grey-brown clayey loam fill (08)A which had almost completely been destroyed by later robbing. The original purpose of the structure was not determined, but its crude construction and lack of substantial walls was seen to imply a design of low status.
- 5.3.5 South of the above, machining revealed a series of deposits, (016)A-M which characterized the remainder of the trench. Initially, these were thought to be discrete archaeological features, but following excavation it was demonstrated that they were different fill deposits within a single feature, [015]. Most of this feature lay beyond the limits of the trial trench, but the sample exposed suggested that it was a large pit with a stepped profile. The fill series was comprised of clay-loam matrices with varying percentages of brick fragments and occasional limestones. They appeared to have been dumped successively from the north east giving a superimposed sequence, and contained a mixed range of late/post-medieval pottery fabrics. No turf line or other factor which may have indicated that the edge was left exposed for an extended period was identified, and it is thus concluded that the feature was backfilled within a relatively short period of having been dug. The purpose for the original excavation is unknown, but given Bourne's situation as an important pottery producing centre it is suggested that the pit was dug for clay extraction.
- 5.3.6 The above truncated the earliest feature, [013], exposed in the trench. This was a pit containing a dark grey-brown clayey silt (014) and the remains of a bovid carcass.

5.4 Trench 2

- 5.4.1 Trench 2 was located west of Trench 1 to investigate a possible kiln-type anomaly highlighted by preceding magnetometer survey. It had finished dimensions of 10.00m x 2.50m, and a maximum depth of 1.15m.
- 5.4.2 Topsoil and subsoil were machine excavated to expose the natural underlying clay. At the south end of the trench, the natural clay had been cut by a large sub-rectangular pit [06] adjacent to the west section. This was sealed by the subsoil and contained a primary fill

(010) comprised of a light brown fine clayey silt with rare small sub-rounded gravel inclusions. This was sealed by a secondary reddish brown fill, (011), that was overlain by an upper fill, (012), of dark grey-brown clayey silt. Pottery recovered from this feature dated between the mid seventeenth to mid eighteenth centuries.

5.4.3 North of the above, two features were recorded as a pit [05] and the terminal of a linear feature [04]. These appeared spatially distinct, but they shared a common dark reddish brown clayey silt fill suggesting that they may in fact be localised depressions in the base of the same shallow feature. The fill was arbitrarily split in to (07)A and (07)B in order to segregate finds which may have implied a chronological division. The pottery recovered dates to the period spanning the seventeenth and eighteenth centuries.

5.5 *Trench 3 and 4*

5.5.1 Trenches 3 and 4 were located in Field 2. Previous geophysical (magnetometer) survey failed to identify any possible archaeological features, despite a large rectilinear cropmark having been identified by aerial photography. In order to test the validity of the survey, the trenches were sited by the Community Archaeologist to intercept perpendicular sides of the cropmark.

5.5.2 Both trenches were machine excavated down to the natural underlying clay. A series of modern field drains and plough furrows were exposed in both trenches, but no archaeological features were identified.

5.6 *Trench 5*

5.6.1 Trench 5 was located in the eastern half of Field 13, immediately south of a metalled track that cuts through the application area. It was excavated on a north-south alignment to investigate a series of anomalies highlighted by the magnetometer survey, and had finished dimensions of 2.50m x 20.00m.

5.6.2 Again, there was no subsoil horizon surviving in the trench; and following removal of the topsoil a series of amorphous features, (025)A-D, were exposed.

5.6.3 These were defined by grey clay along their lateral margins, and contained homogenous lower fills of a coarse sandy, patchy, yellow-grey clay sealed by mid grey clay. The site interpretation of these was that they were periglacial channels caused by melt water running into the fen basin, but the environmentalist raised an additional theory that they might also be localised quarry pits for clay extraction. In order to address this, a soil sample was taken in order to determine if the fills contained any cultural inclusions that would confirm the quarry pit interpretation. Analysis of the sample did not result in the identification of any cultural remains, but the flots included a few small fragments of charcoal, charred grain/pulse fragments and a few snails. These inclusions were all very small and may have been transported down through the soil profile, and as such the results are inconclusive.

5.7 *Trench 6*

- 5.7.1 Trench 6 was located in the southeast corner of Field 13 to investigate a series of probable archaeological anomalies, and had finished dimensions of 2.50m x 25.00m. Removal of the topsoil down on to the natural clay revealed a series of archaeological features.
- 5.7.2 A stone filled post pit [035] was exposed at the north end of the trench. It was sub-rounded in plan and had sub-square post-pipe defined by stone packing and a dark grey-brown fine clayey silt fill (038). This was exposed following partial removal of the stone fill, suggesting that the post had been removed rather than decaying *in situ*. The stone packing was comprised of small-medium sized angular limestones which were discoloured red. The staining was very uniform and appeared to be a result of iron inclusions within the stone, rather than having been caused by burning. A few sherds of Romano-British pottery were recovered from the fill of this feature, but given the recurring problem of residuality of pottery on roman sites, cannot be taken as being contemporary with it. The pit cut an isolated earlier gully/slot [131] which contained an undated charcoal rich fill (130). Analysis of a soil sample did not identify any cultural or environmental remains, except for the charcoal, suggesting the feature may have been a beam slot.
- 5.7.3 South of the above in the centre of the trench, a further sub-rounded pit [032] was identified. This had a bowl shaped profile and a maximum depth of 0.60m. It contained a primary fill (039) comprised of a mixed yellow and grey gritty clay that was sealed by a dark/mid grey gritty clay (034) with a high incidence of charcoal inclusions. The upper fill (033) had a light grey-brown gritty clay texture with small sandstone and medium sized limestone inclusions. Pottery recovered from the upper fills dated to the third century. A soil sample from the secondary fill (034) contained a few sherds of pottery, bone, hammer scale and coal.
- 5.7.4 The south end of the trench was dominated by two large pit features joined by a small narrow slot. Although no distinction in the fills was noted, it seems likely that this was a gully similar to [131] cut by the pits. The southern most pit [027] was quarter sectioned to reveal a primary fill (026)B of dark grey sandy silty clay with angular flint inclusions and orange mottles. It became increasingly coarse grained towards the edge of the feature suggesting that the feature had been left open for some time prior to filling. The primary fill was sealed by (026)A comprised of a dark grey sandy clay with limestone inclusions. The pottery recovered from the fills was dominated by Nene Valley and Bourne type wares dating within the second to third centuries. A soil sample was taken from the primary fill to gain data regarding the local environment at the time of deposition. In common with the range from other samples, the molluscs contained within the sample point towards a damp, open grassland habitat.
- 5.7.5 The other pit, north of the above, had been truncated by a field drain and continued through the west section. It appeared, however, to be sub-rectangular in plan with an open bowl shaped profile. It contained a primary fill (031) of light-mid brown clay which was sealed by a charcoal rich dark grey fine clayey silt (030). A soil sample of this horizon contained material suggesting a domestic rubbish pit interpretation. The upper fill (029) was a dark grey/orange-brown clayey silt. Pottery recovered from the feature was again characterised by third century forms including a carinated jar.

5.8 Trench 7

- 5.8.1 Trench 7 was excavated in the north of Field 14. It had finished dimensions of 20.00m x 2.50m, and was excavated to a maximum depth of 1.10m
- 5.8.2 Removal of the topsoil down onto the natural clay revealed a series of features including a linear ditch [050] containing a single undifferentiated fill (051) of mid grey-brown silty clay with occasional small sub-rounded stone inclusions. It contained pottery spanning a broad date range between the mid fifteenth to mid seventeenth centuries. Examination of a soil sample resulted in no archaeological material being identified. Another linear feature [048] exposed in the northeast corner of the trench contained pottery dating between the late twelfth to late thirteenth century. Three other pit type features, [044]; [046] & [052] were also recorded. Pit [044] was dated to the late seventeenth to mid eighteenth centuries, but the other two features were undated.
- 5.9 *Trench 8*
- 5.9.1 Trench 8 was excavated approximately 90m south of Trench 7, and had finished dimensions of approximately 20.00m x 2.50m, and a maximum depth of *c.* 0.45m. As noted above, works in this trench were limited, but it was possible to identify a single linear feature and a land drain prior to flooding. The feature was not sampled, but it seems likely that it represents a former field boundary/drainage ditch of undetermined date.
- 5.10 *Trench 9*
- 5.10.1 This trench was located close to the modern ditch forming the north boundary of Field 14, and was excavated in order to establish the significance of a series of anomalies highlighted by the magnetometer survey. It had finished dimensions of 30.00m x 4.00m. Removal of the current topsoil (01) and subsoil (02) revealed a series of archaeological features. These spread throughout the trench, but clustered towards the east end.
- 5.10.1 A north-south linear feature [076] was exposed at the extreme east end of the trench, continuing through the section. Its west edge was slightly concave sloping at approximately 25°, and it contained an upper fill (077). This was comprised of a compact reddish brown clayey silt with common small stone inclusions, and sealed a lower deposit (093) consisting of a similar matrix but with a greater proportion of stone inclusions. Removal of this resulted in the exposure of small angular-rounded stones compacted into the underlying natural.
- 5.10.2 West of the above, and lying against the south section, was an irregular ditch [072] containing a mid brown silty-clay fill (073). It was truncated by a short linear slot [074] with rounded terminals. It contained a dark reddish brown fill with charcoal flecks, but its purpose was not determined. North of these features, a further pit [054] was exposed adjacent to the north section. This contained a primary fill (055) of greyish brown sandy clay with charcoal flecks sealed by an upper fill (056) comprised of greyish red-brown sandy clay.
- 5.10.3 A second linear feature [068], also on a north-south alignment, was exposed cutting through iron panning west of the above. This had a uniform profile with *c.* 45° sides and a flat base. It contained a single fill (069) which consisted of a homogenous dark reddish

brown sandy clay. It had been truncated by a modern field drain which also disturbed an irregular pit [065] against the north section. This contained a series of limestone blocks and a compact dark brown clayey silt matrix (067). This may have been merely a pit with limestone blocks, but may also represent the vestiges of a stone cill wall.

- 5.10.4 A similar feature [070] was exposed adjacent to the south section, but was narrower with rounded terminals. Northeast of this were three post holes, [59]; [061] & [078], representing at least two phases, but the lack of horizontal stratigraphy makes it impossible to infer any structural reference to these features with certainty.
- 5.10.5 North of [070], an east-west aligned linear or sub-rectangular feature [057] was exposed. It fell short of ditch [068] at its east end and butted the south section. It contained a single fill (058) consisting of a mid grey-brown clayey silt, and was cut by a sub-rectangular feature [063], containing a similar dark-earth type fill (064).
- 5.10.6 Both of these features were truncated by a small rectangular cut [094] that may have been a drip gully for a small building. It also truncated an earlier gully [097] which contained a charcoal rich grey-brown clayey silt matrix (096) with orange-brown fired inclusions. This cut a further east-west aligned linear ditch feature [090] which characterised the remaining extent of the south section. It contained a typical undifferentiated fill (091), and was cut by a large post-pit [082] which contained limestone and clay packing. Towards the west end of the trench, ditch [090] also cut an earlier gully [088]. This was also truncated by a large round pit [086]. This contained two distinct fills, (087) & (092), of typical dark earths.
- 5.10.7 Virtually all the pottery recovered from the trench dates to the third century suggesting a relatively short-lived occupation. Of note are an almost complete indented jar from context (055) and a base from a South Gaulish Samian vessel (form Dr 37/38) from (058).
- 5.10.8 Five soil samples were taken from this trench for further study. All of them contained archaeological material indicating industrial and domestic occupation on the site. The sample taken from the fill of pit [086] contained a typical range of remains indicative of a domestic rubbish pit, together with a series of concretions generally taken as signifiers of cess. In contrast, samples from contexts (096) & (098) were dominated by fired silty sand and charcoal. An initial assessment of this material (see Cowgill below) has identified it as *briquetage* type material. Briquetage is a low-fired disposable ceramic linked to salt production sites and is defined by form and (to a lesser extent) fabric and colour. During the third century, the coast was too far to the east for this material to be linked to primary salt production. Its presence on the site is thus problematic, but a possible interpretation would be further processing/refining of salt brought to the site from the salterns located along the east coast (Cowgill *pers comm*).

5.11 *Trench 10*

- 5.11.1 Trench 10 was excavated south of Trench 9, and was extended by 10m to the west to define a series of features observed during machining. It was characterised by a series of north-south aligned ditches and gullies; pits, and a few amorphous features.

- 5.11.2 At the east end of the trench, a rounded pit [124] contained a dark grey clayey silt fill (125). It was cut through the fill (127) of an earlier ditch [126] which truncated an earlier feature [128]. Both of these had typical dark earth fills. Pottery recovered from (125) was dated to the third century
- 5.11.3 Further west, there was a group of three broadly linear ditch like features, [114]; [117]& [120] all containing similar dark earth clayey silt fills. Soil samples taken from the fills of [117] and [114] indicated further domestic debris but also included hammer scale and a small quantity of slag. Ditch [117] truncated an earlier pit [118] which lay immediately north of another pit or terminal [122]. Again, the fills of these features were undifferentiated clayey silt matrices, but rich in charcoal. A soil sample taken from the fill of [124] contained in excess of two kg of slag and well preserved hammer scale indicating iron working was being undertaken on the site. The sample also included a quantity of fired clay possibly from a hearth.
- 5.11.4 West of the above, was a further cluster of north-south aligned features, [103]-[109]. These also contained clayey fills and pottery. Again, the dominant fabrics were Nene Valley and Bourne type wares, dating to the second and third centuries,
- 5.11.5 The west end of the trench was characterised by a curvilinear feature [099] which butted the north section, its fill (100) was cut by an amorphous feature [101]. Again, the pottery recovered from these features is typical of the second-third centuries, but context (106) also contained a small quantity dating to the mid fifteenth to mid seventeenth centuries. Unfortunately, the small quantity and condition of the pottery from (106) gave no conclusive indication of whether the Roman pottery was residual or if the context had become contaminated with later material.

5.12 *Trench 11*

- 5.12.1 This trench was located in order to bisect the east ditch of King Street. It had finished dimensions of 20.50m x 2.50m, and was excavated to a maximum depth of 1.30m.
- 5.12.2 A single linear ditch [132] was exposed at the west end of the trench. It contained a primary fill (133) comprised of a dark brown sandy silt below an upper fill (134) of dark grey clayey silt with small gravel and charcoal inclusions. The only dating evidence recovered from this feature dated to the modern era, and is thought to be intrusive on the basis of being associated with modern flora identified during analysis of a soil sample.
- 5.12.3 Further east, a deposit (135) was exposed. This was indistinct and comprised a yellow-grey clay with decayed bone which did not survive lifting, and may be the basal remains of a small pit

5.13 *Trench 12*

- 5.13.1 Trench 12 was located in the southeast corner of the application area. It was excavated in order to test a series of weak curvilinear and pit-type responses detected by the magnetometer survey. It had finished dimensions of 40.00m x 2.50m, and was excavated to a maximum depth of 0.75m.

5.13.2 Machining of the topsoil revealed the natural underlying clay, but no archaeological features were exposed. Following hand cleaning, localised changes, similar to those previously sampled in Trench 5 & 7 in the natural were noted.

6.0 Discussion

6.1 The results detailed above form a descriptive account of the remains exposed during the evaluation. The purpose of this section is to present an interpretive overview of the remains in terms of their potential for furthering current knowledge, and to assess their vulnerability from any future development.

6.2 Palaeoenvironment and economy

6.2.1 Organic preservation across the site is very poor owing to the soils being well drained through the open sandy texture of the soils themselves and by deliberate drainage regimes. The only environmental indicators, therefore, were snails and small vertebrates. These indicate an essentially open country/grassland environment with damp/aquatic areas.

6.2.2 Similarly, charred remains were also poorly preserved and although assessment has identified a typical assemblage of cereals and possible pulses, most are not identifiable to species. In contrast, the animal bones were generally well preserved with degradation only noted in two contexts. Cattle bones dominate the assemblage with a typical range of other domestic and wild species and egg shell present. The bone and charred remains are representative of typical Romano-British domestic food debris.

6.3 Chronology

6.3.1 The remains exposed in the north of the application area, to the west of the town, all dated to the post-medieval period. There was also a small cluster of late medieval/post-medieval features exposed in Trench 7 (see below).

6.3.2 The majority of the archaeological remains, however, date to the Romano-British period. The earliest possible date for any of the pottery is the second century, but the overall impression is of a short lived occupation within the third century. Nene Valley and Bourne/Greatam ware types characterise the assemblage, but Samian ware from Central and South Gaul, and a possible Parisian ware vessel have also been noted.

6.4 Trenches 1-4

6.4.1 These form a distinct unit on the west side of the present town and were excavated in order to test the results of geophysical survey which highlighted a number of magnetic anomalies, but failed to identify a cropmark.

6.4.3 Excavation revealed that the anomalies were a series of post-medieval pits and a very disturbed brick structure. The cluster of small features exposed in Trench 2 were all sample excavated and are not considered to hold any potential for further study. The large feature interpreted as a clay extraction pit in Trench 1 contained a very mixed range of material consistent with the site interpretation of a quarry pit backfilled with reworked material. The sequence and chronology of the local post-medieval pottery industry is presently poorly understood, but the assemblage from this trench included several sherds which have been deemed suitable for deposition within a preliminary fabric type series. This represents the full research potential of these finds since, coming from a secondary

context, no chronological data can be gathered.

6.4.4 No evidence of the cropmark to the south of trenches 1 & 2 was exposed, and thus the geophysical survey is considered sound. The reasons for this are not clear, but it seems likely that the enclosure has been destroyed by ploughing.

6.5 Trench 5

6.5.1 The series of amorphous features exposed in this trench were considered to be peri-glacial channels carrying melt waters into the Fen basin. Alternatively, they may have been shallow, small-scale, clay extraction pits. Environmental sampling and analysis failed to determine if a geological or archaeological interpretation should be applied to these features, but regardless of their formation their research potential is considered to be negligible.

6.6 Trenches 6 & 9-11

6.6.1 These trenches produced the most dense and informative remains exposed within the site. They formed a tight cluster on a slight rise or knoll and contained a series of archaeological remains indicating a mix of domestic and industrial occupation. The main focus of activity was exposed within Trenches 9 & 10. The remains exposed confirm the general impression of small scale settlement adjacent and west of the Roman Road highlighted by the magnetometer survey. Morphologically, the remains were characterised by a series of linear ditches/gullies running perpendicular to the road alignment, and are interpreted as property markers. Additionally, there are a number of smaller gullies/slots and pits which may be the truncated remains of structures, and larger intrusions interpreted as rubbish pits.

6.6.2 Analysis of finds recovered through routine and targeted bulk sampling have identified evidence for iron working on the site, and also the identification of briquetage type material. These are perhaps the most significant remains exposed during the evaluation. Iron working remains are not uncommon within the Romano-British period, but their identification is problematic. This is primarily due to field methodologies not being able to recognise them at an early stage, with the result that most have only been identified during post-excavation analysis. Having identified iron working within the evaluation, the site is considered to hold the potential for further study of iron working during the third century.

6.6.3 The briquetage material was an unexpected find and difficult to explain. It has only been identified (in primary contexts) associated with salt processing sites, generally along the east coast. During the Roman period, Bourne was, as now, inland and no major brackish water channel has been identified. It is unlikely, therefore, that the briquetage type remains from the site are associated with primary salt production. It may be that salt produced in the coastal margins was brought inland to Bourne for further refining (*Cowgill pers comm*), or else briquetage technology was being utilised for some other process.

6.6.4 As noted above, possible structural remains were exposed in the form of truncated gullies

and possible robbed-out sill walls. Since no evidence for floors or associated occupation layers were identified, any further remains associated with either of the two industrial activities are also likely to have been truncated, with the physical remains of these activities surviving in secondary contexts only. Therefore, although these remains still hold potential for the extraction of further information, their condition and survival does not require their protection *in situ*.

6.6.5 Trench 6 contained limited structural evidence in the form of possible truncated gullies and a group of three large rubbish pits. Less dense than the remains immediately south, it appears that the focus of occupation is petering out towards the north. A similar interpretation is offered for Trench 11, where the east roadside ditch was exposed but only negligible remains further east.

6.7 *Trenches 7*

6.7.1 Trench 7 contained a cluster of features dating primarily to the post-medieval period. As with the remains exposed in Trenches 1 & 2, they are not considered to hold any potential for further study.

6.8 *Trenches 8 & 12*

6.8.1 Trench 8 contained a single linear feature which, as noted above, was not investigated. On the basis of the other remains more fully investigated, however, it is likely not to date earlier than the third century, but regardless of its date a single seemingly isolated feature is not considered significant. Similarly, Trench 12 was devoid of any archaeological features, and it appears that the west and east margins of the south of the application area are of negligible archaeological interest.

7.0 Conclusions

- 7.1 In summary, the site is generally of little archaeological interest with the exception of the remains exposed in Trenches 6, 9-11. These appear to signify a localised focus of domestic and industrial activity outside of the Roman town during the third century.
- 7.2 Possible structural remains have been robbed in antiquity, and more recently truncated by ploughing. The remains are not considered worthy of preservation *in situ*, but do hold the potential for furthering the understanding of Romano-British iron working which is currently poorly understood. They also hold the potential for the investigation of either a previously unidentified process utilising briquetage type industry, or else the first inland salt processing/refining site discovered to date.
- 7.3 The identified Romano-British site is considered to be of no more than local importance, and is insufficient significance to preclude development. However, it is of sufficient interest to require excavation prior to development commencing within the area delimited in Figure 16. This can be secured by a negative planning condition on the basis of the model in PPG 16, paragraph 30.

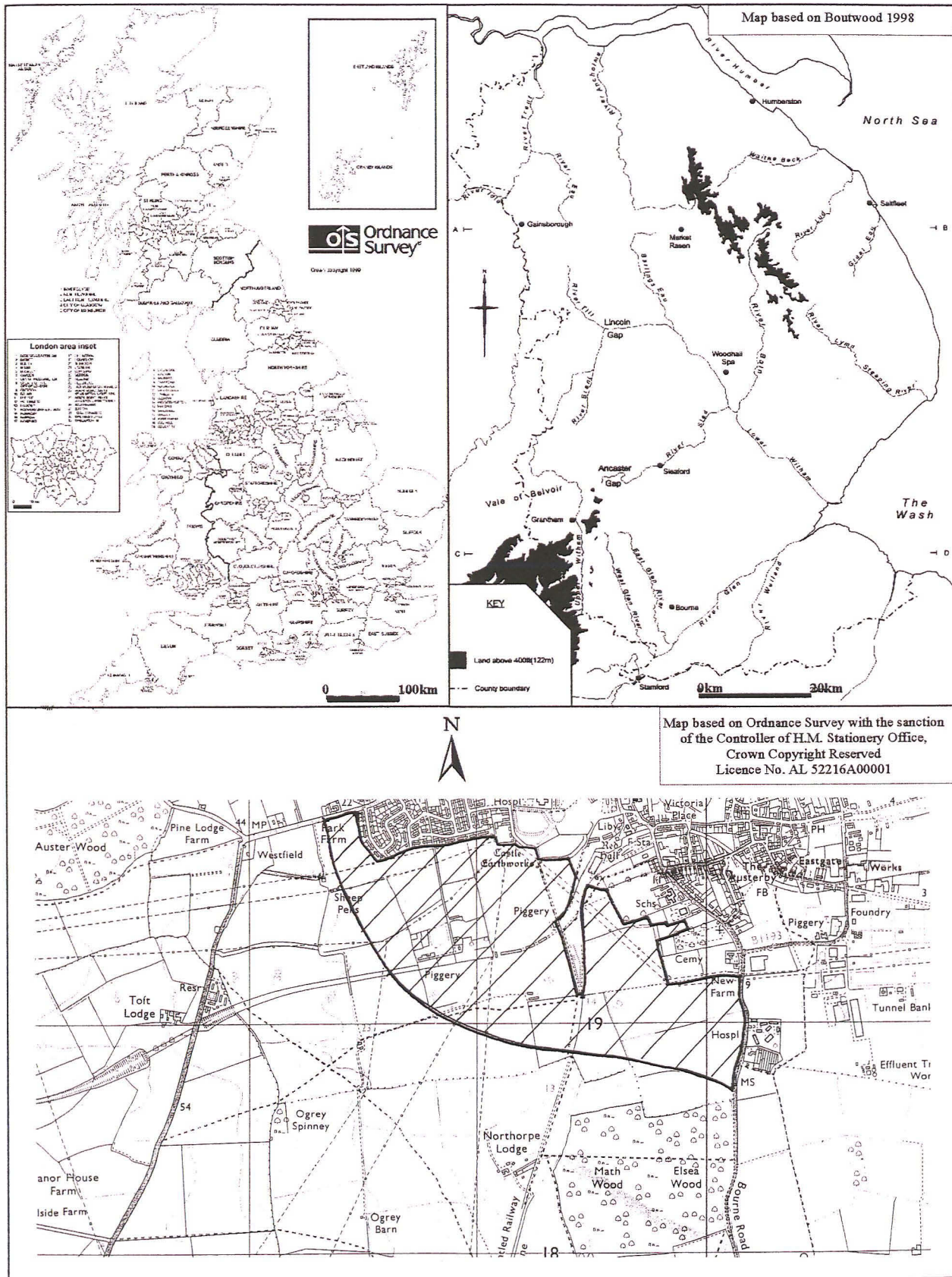
8.0 References and select bibliography

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9.0 Figures

- Figure 1: Site Location
- Figure 2: Trench Location
- Figure 3: Trench 1, plan and section
- Figure 4: Trench 2, plan and section
- Figure 5: Trench 3, plan and section
- Figure 6: Trench 4, plan and section
- Figure 7: Trench 5, plan and section
- Figure 8: Trench 6, plan and section
- Figure 9: Trench 7, plan and section
- Figure 10: Trench 9, plan and section
- Figure 11: Trench 10, plan and section
- Figure 12: Trench 11, plan and section
- Figure 13: Trench 12, plan and section
- Figure 14: Trench 1, 2 & 6, feature profiles
- Figure 15: Trench 9, feature profiles
- Figure 16: Plan showing area of archaeological interest

**Archaeological Field Evaluation Report:
Southwest Bourne, Lincolnshire**



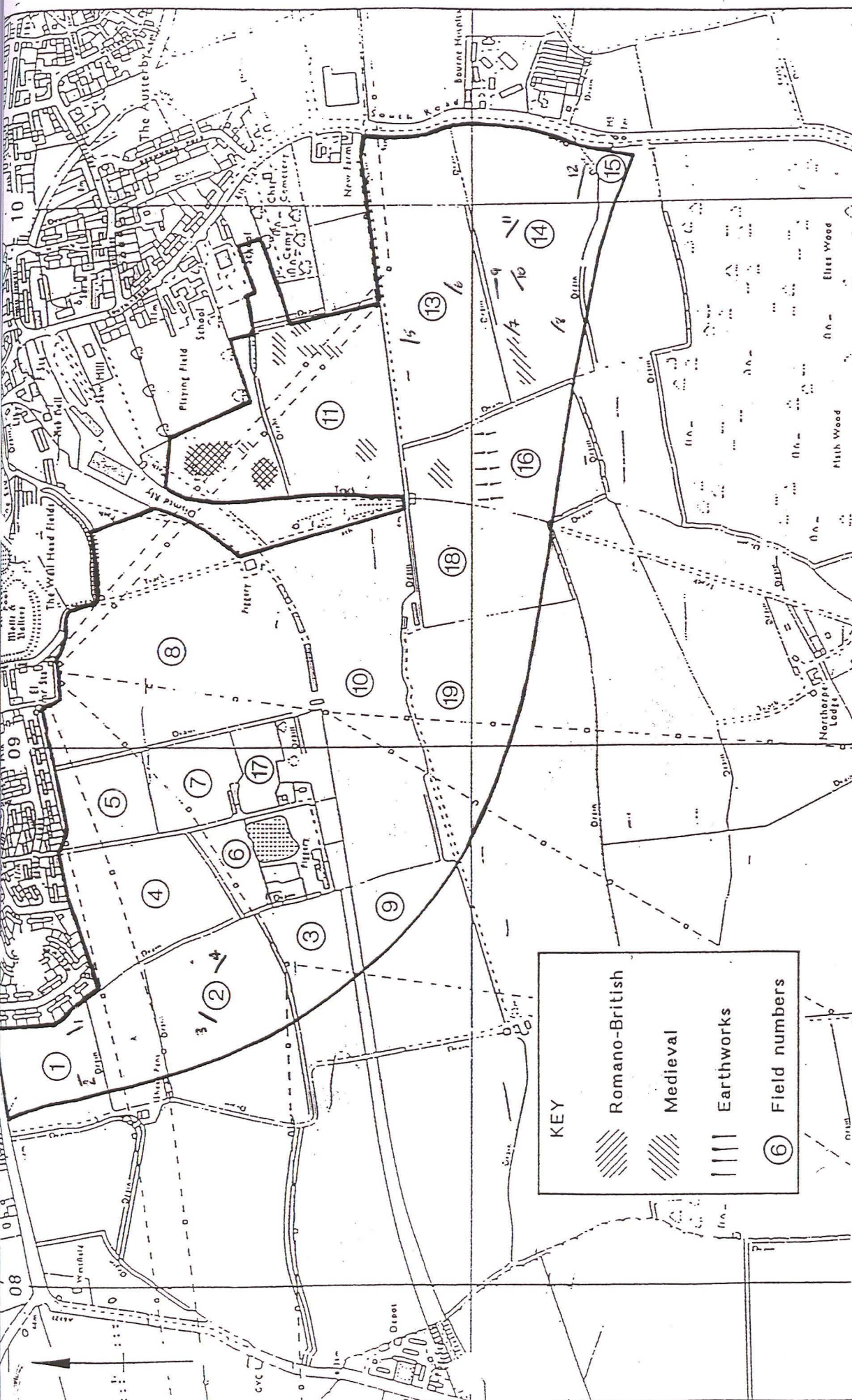
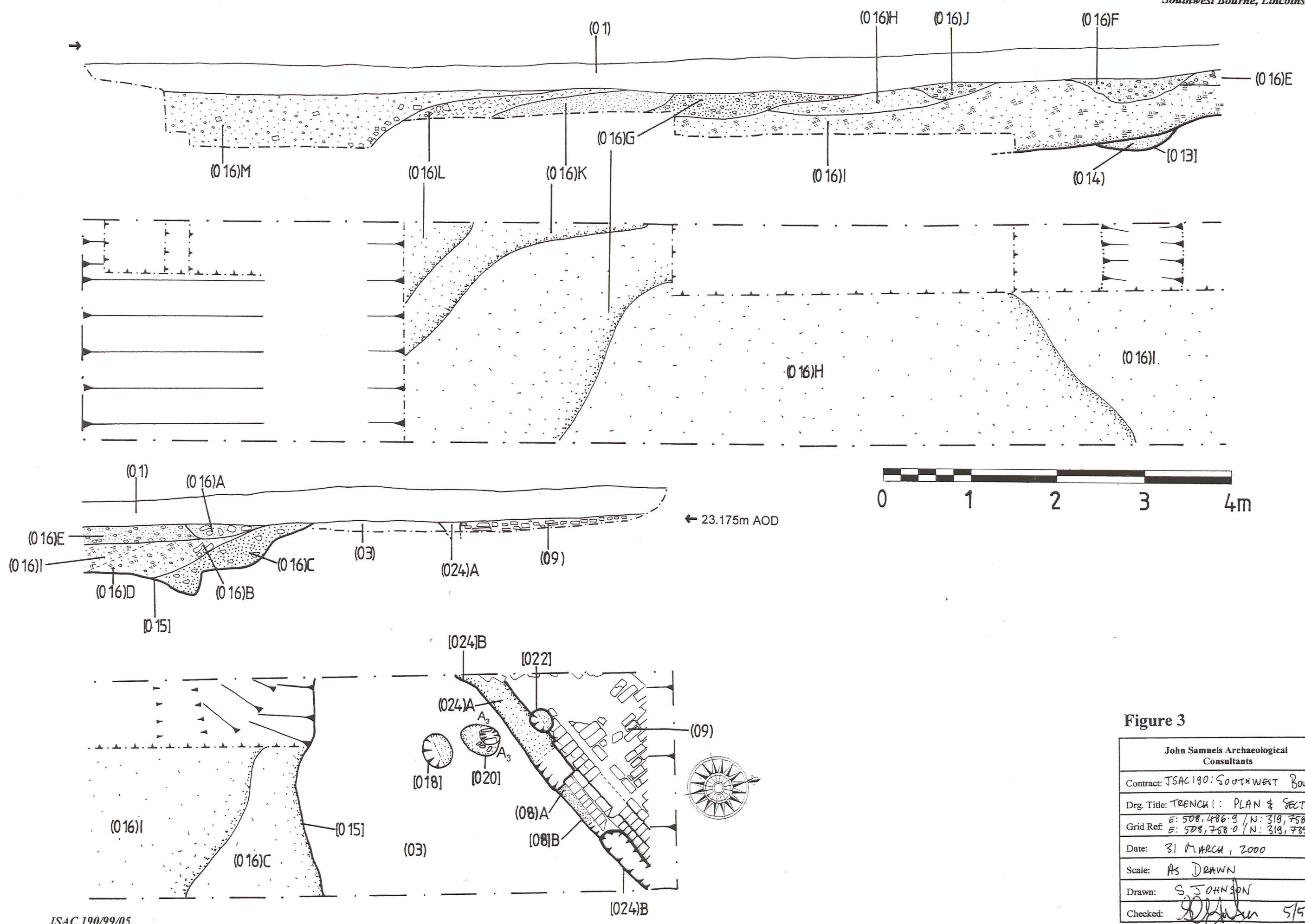


Figure 2: Trench Location



JSAC 190/99/05

Figure 3

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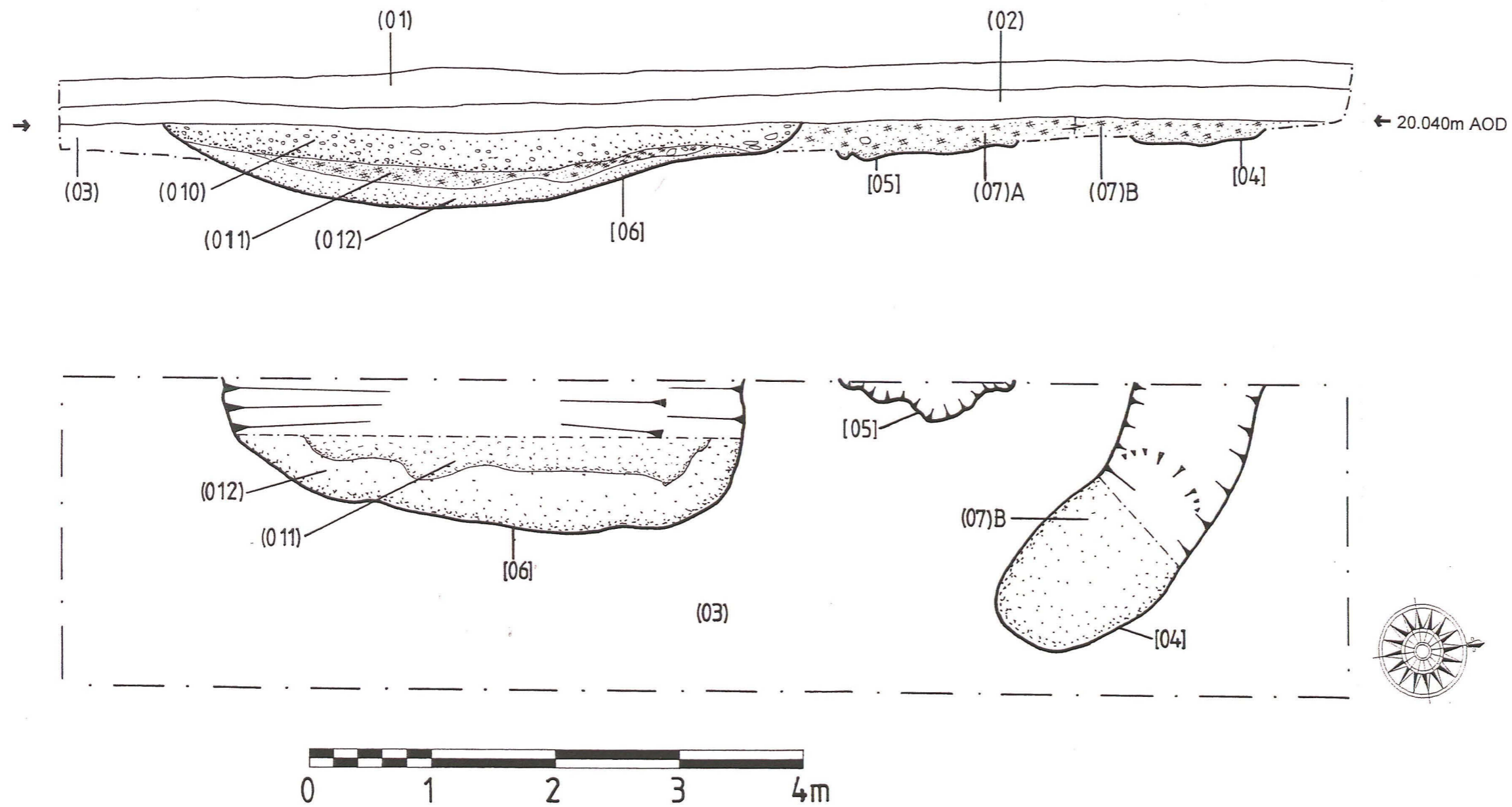


Figure 4

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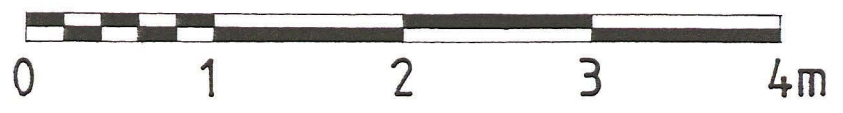
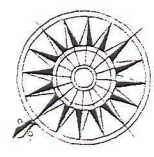
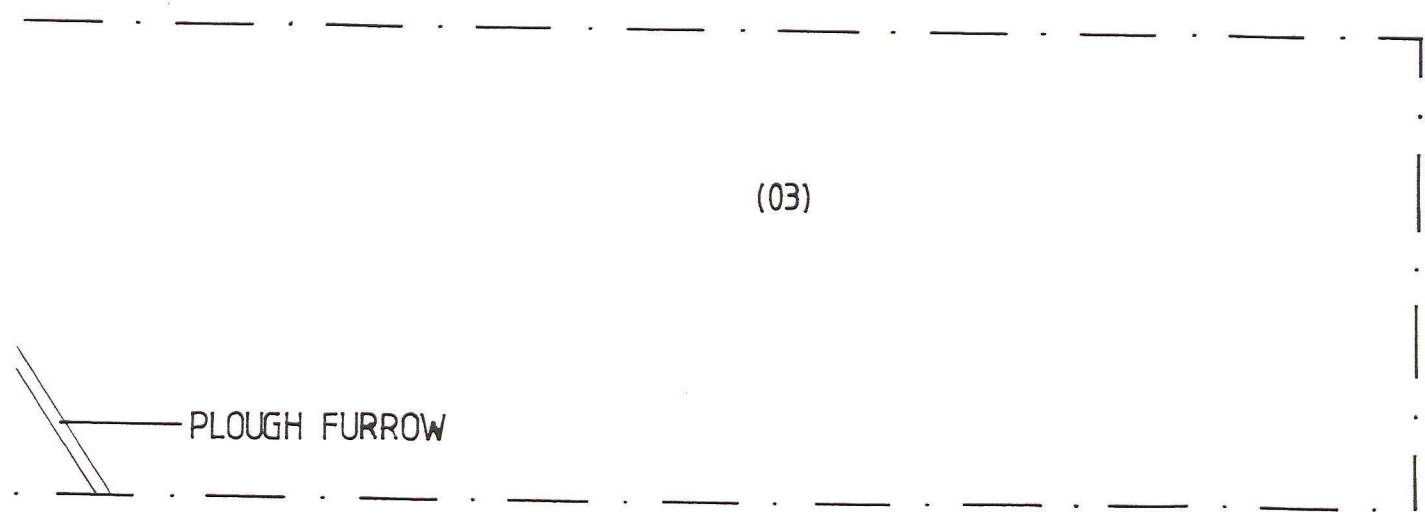
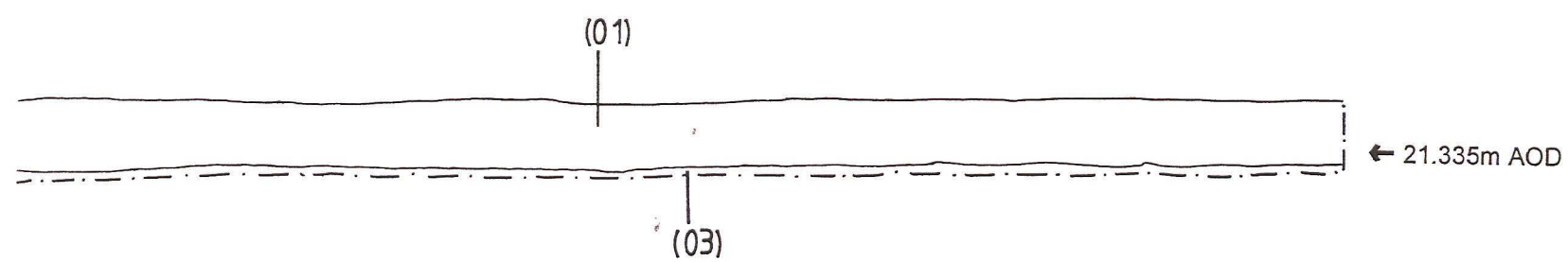
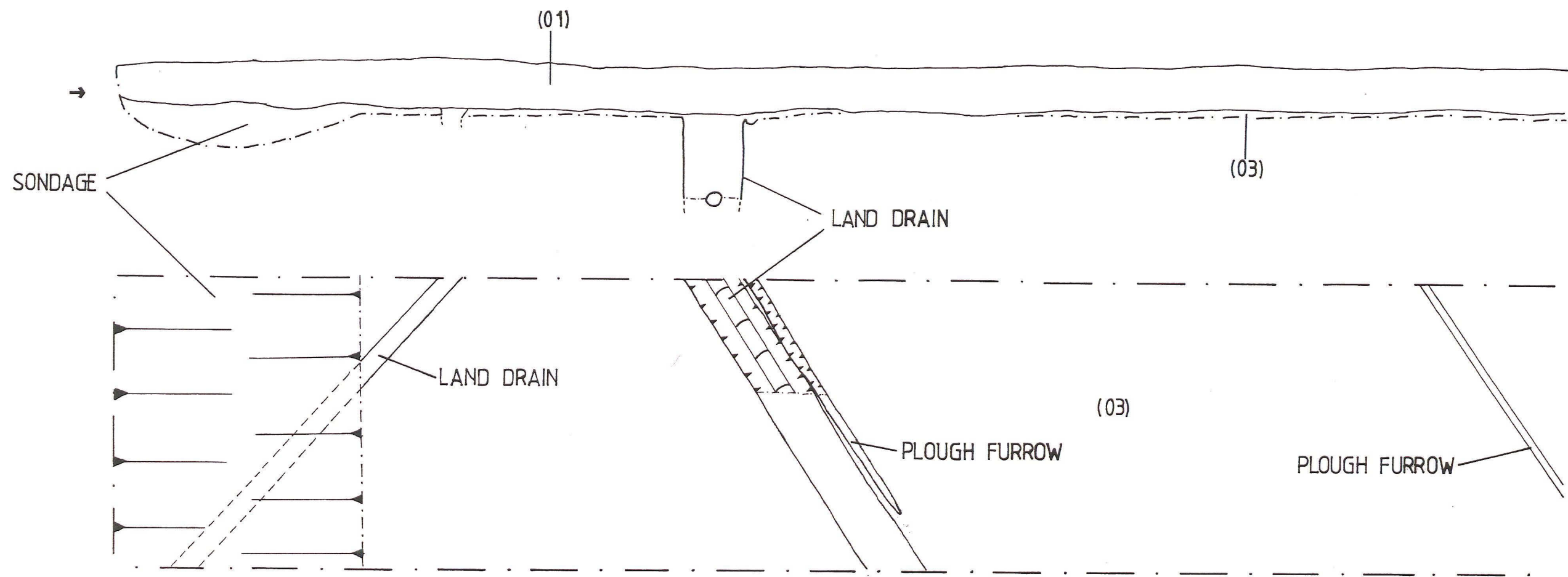


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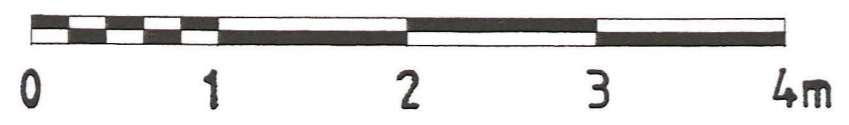
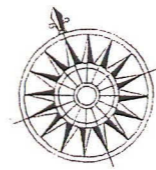
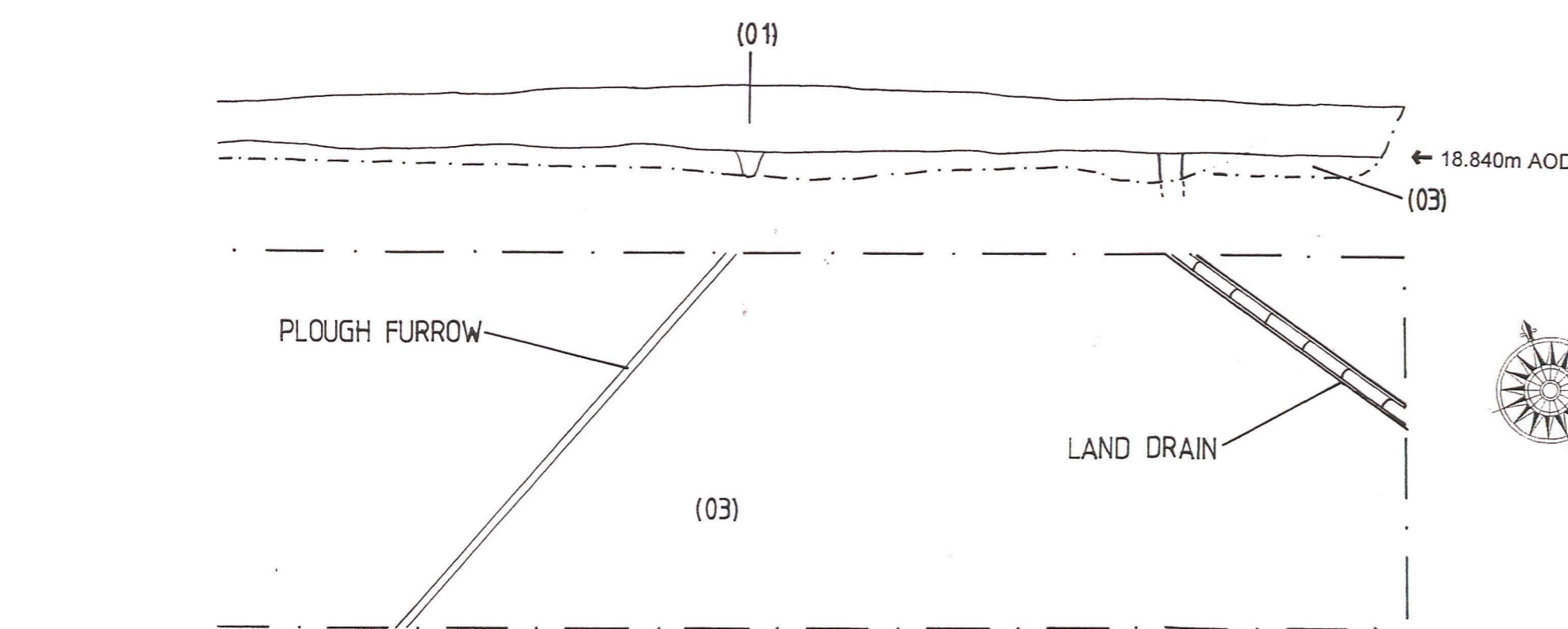
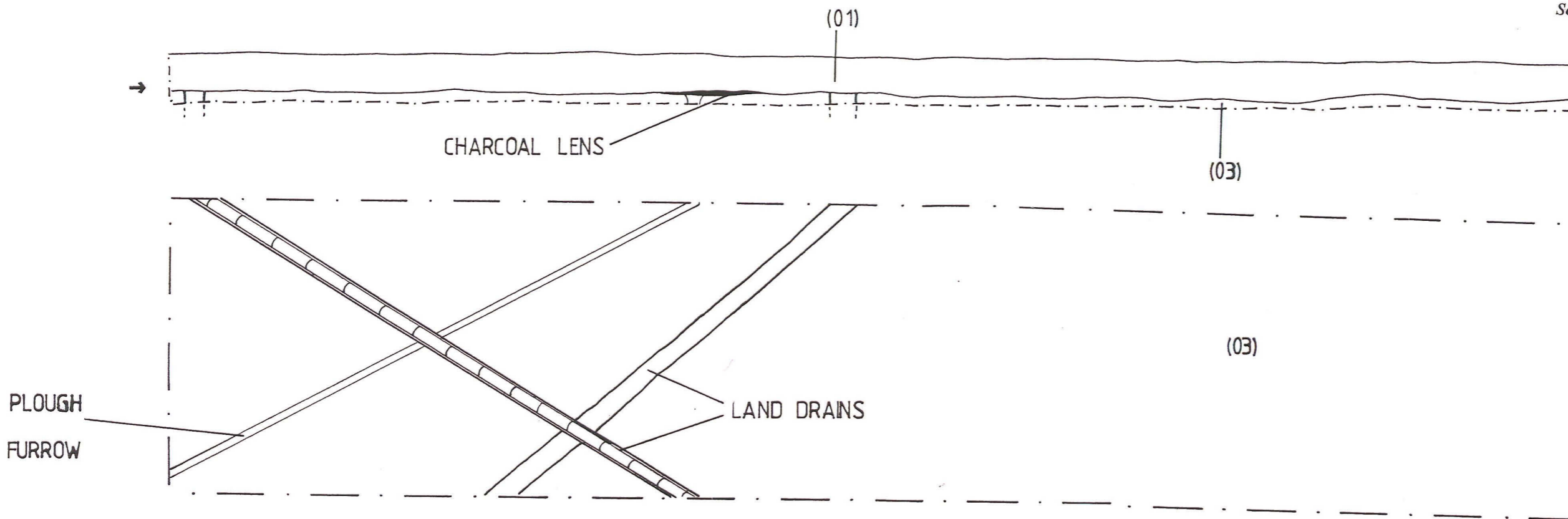


Figure 6

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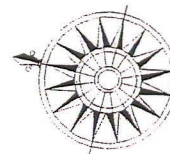
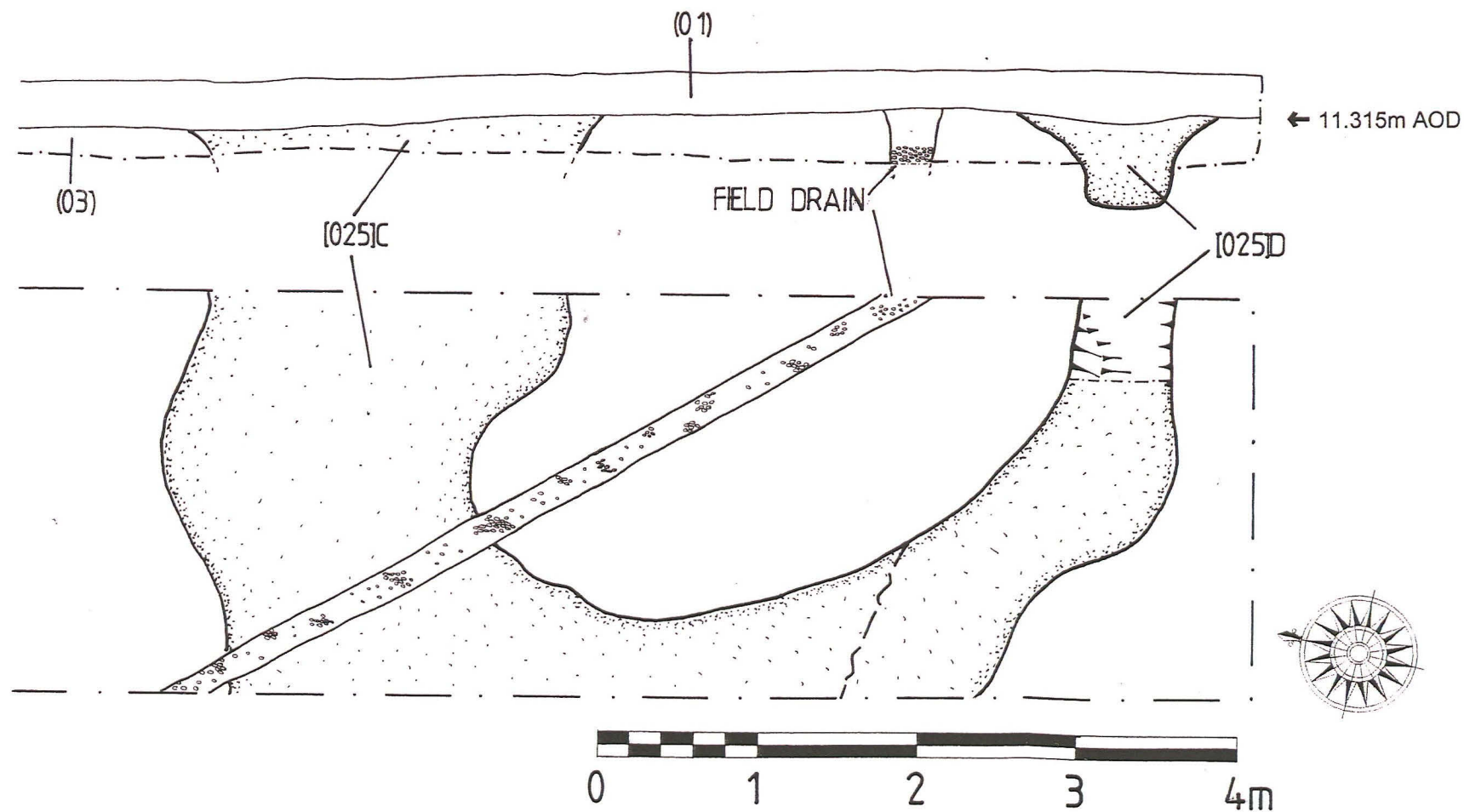
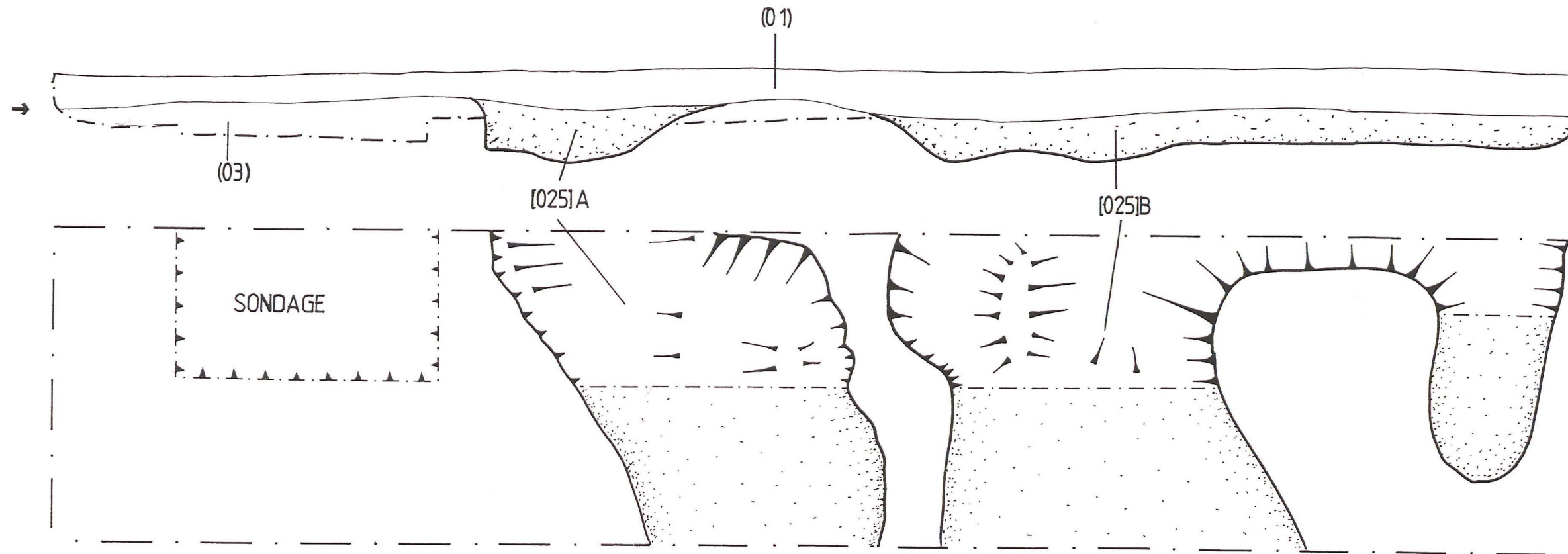


Figure 7

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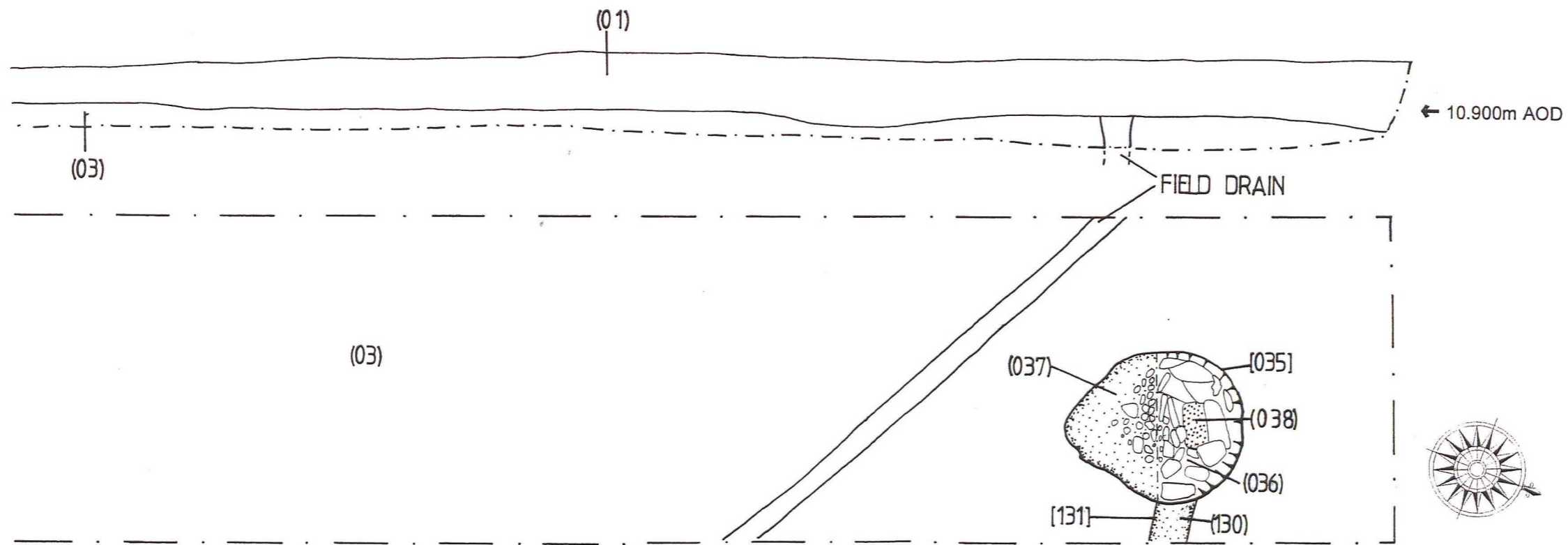
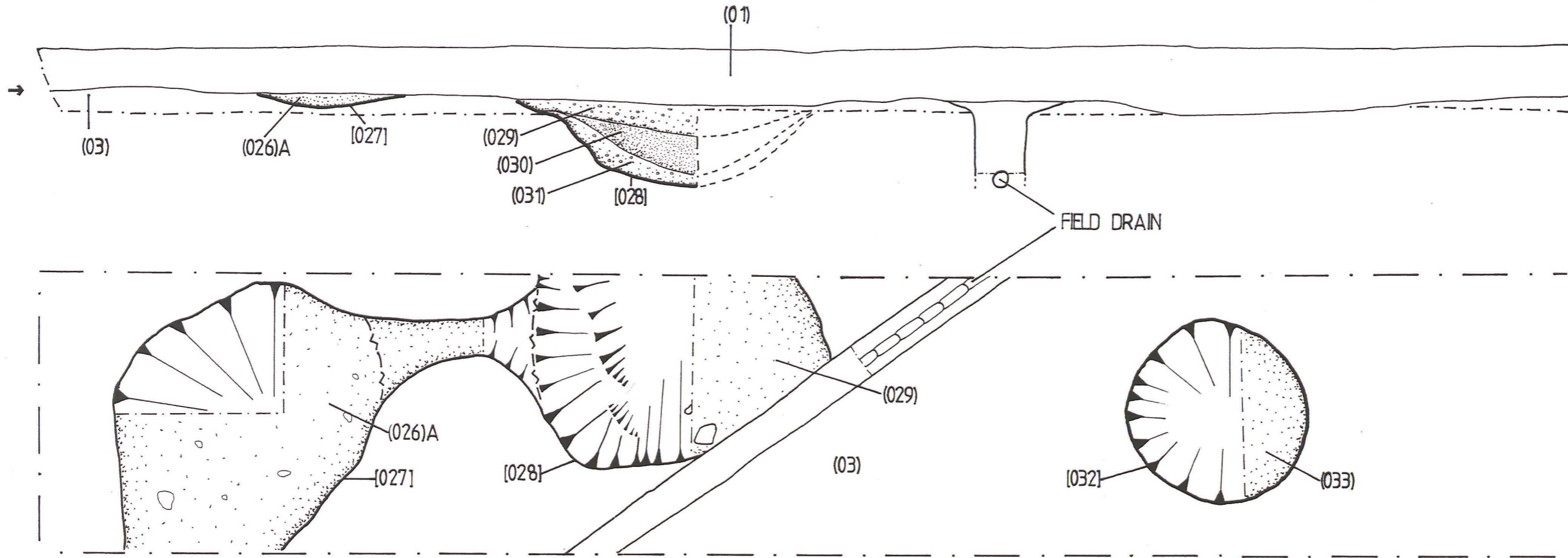


Figure 8

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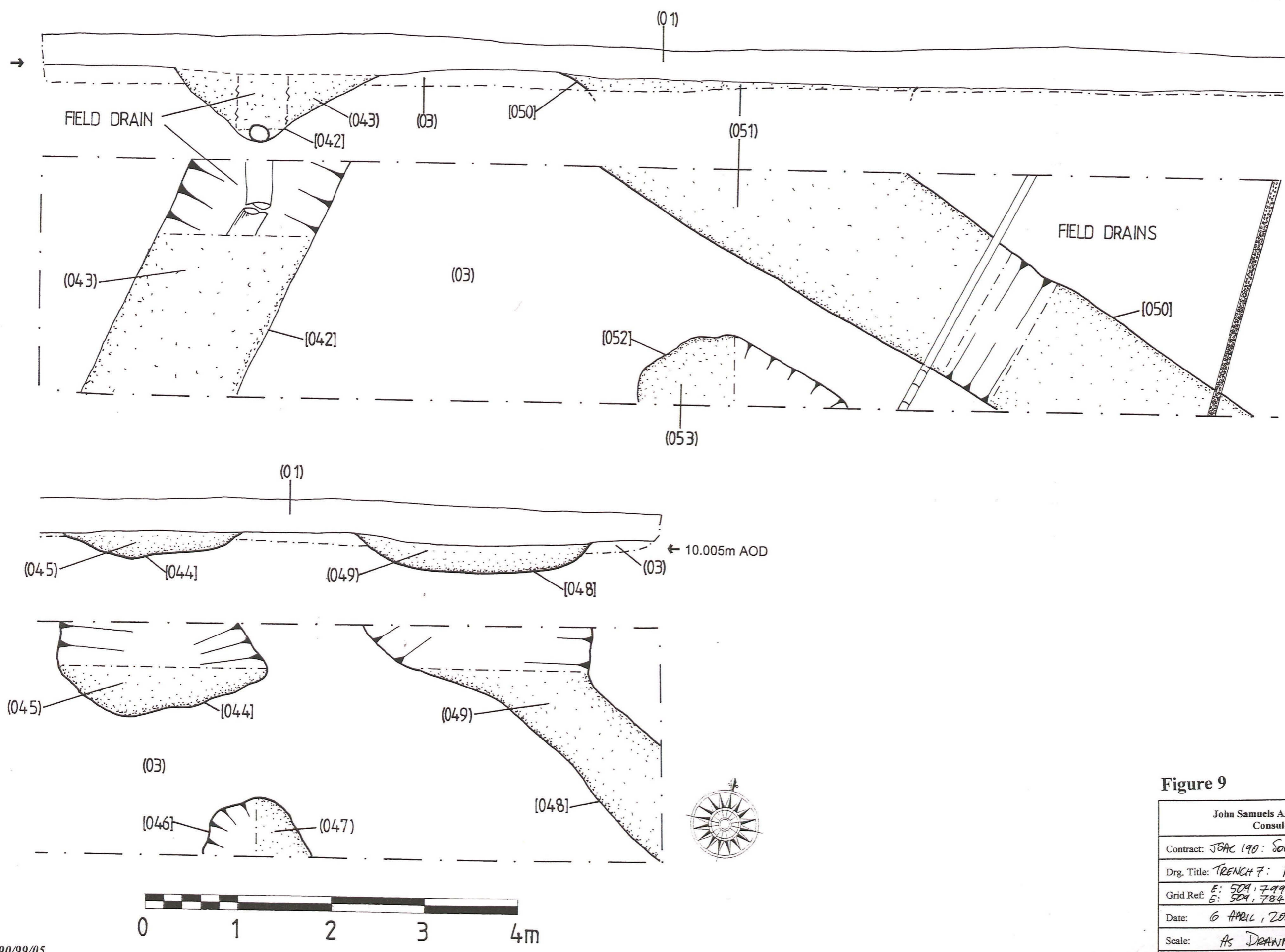


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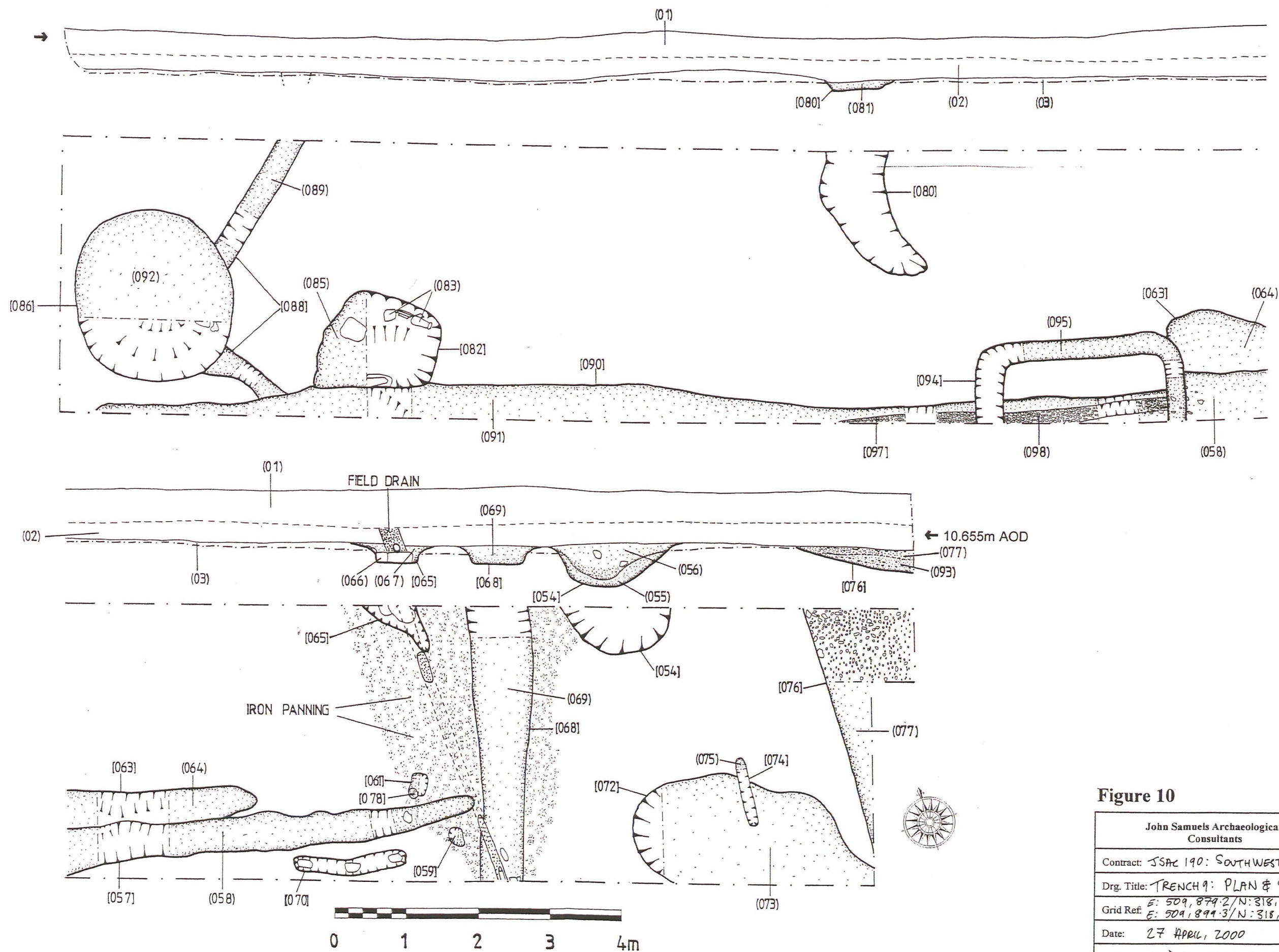


Figure 10

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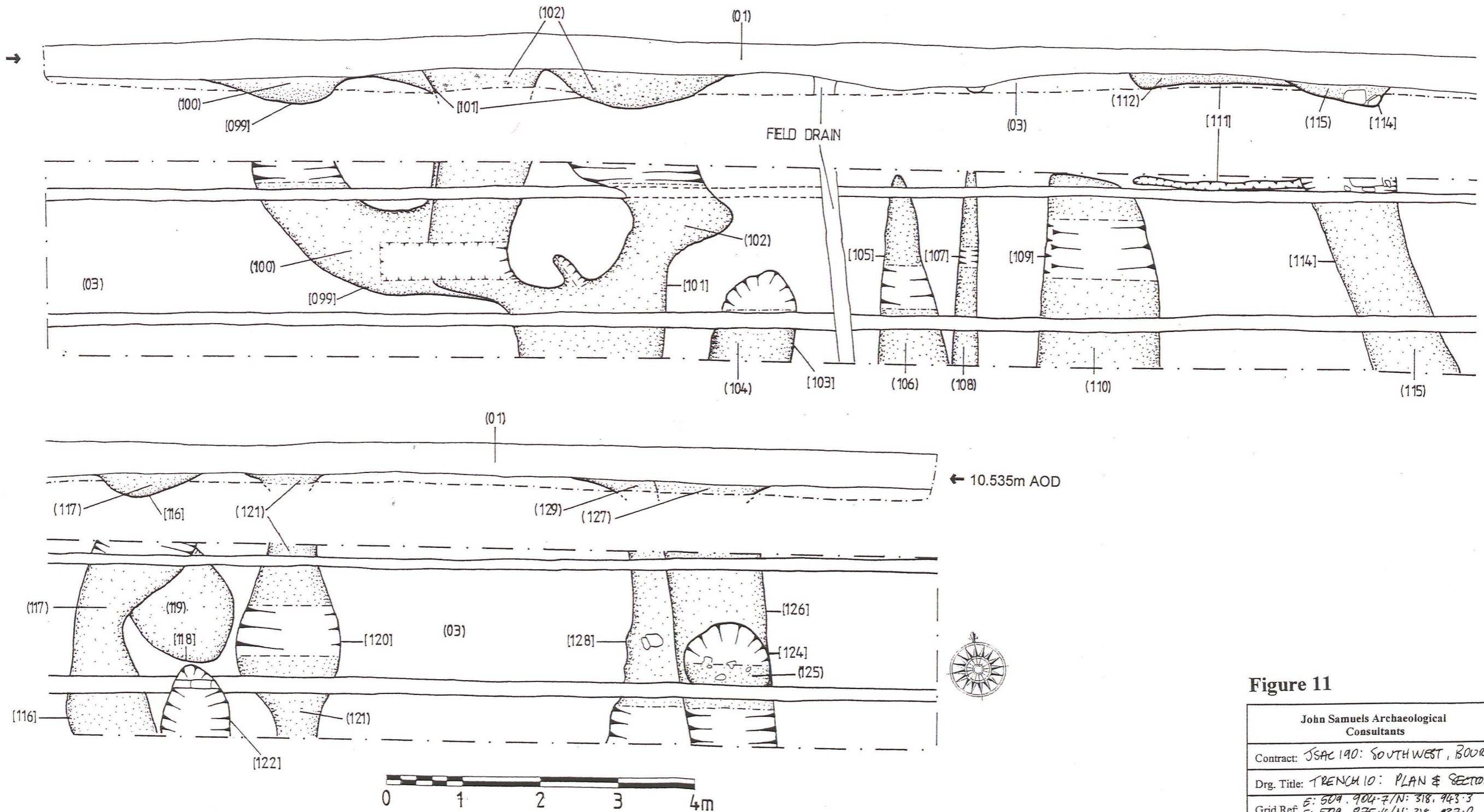


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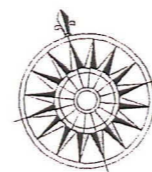
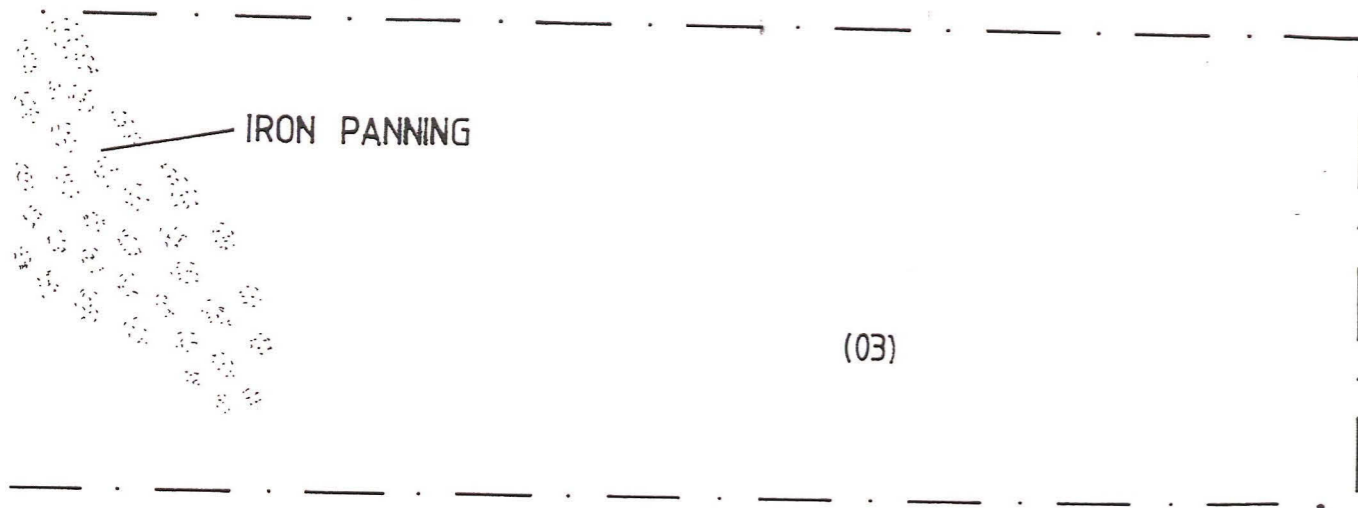
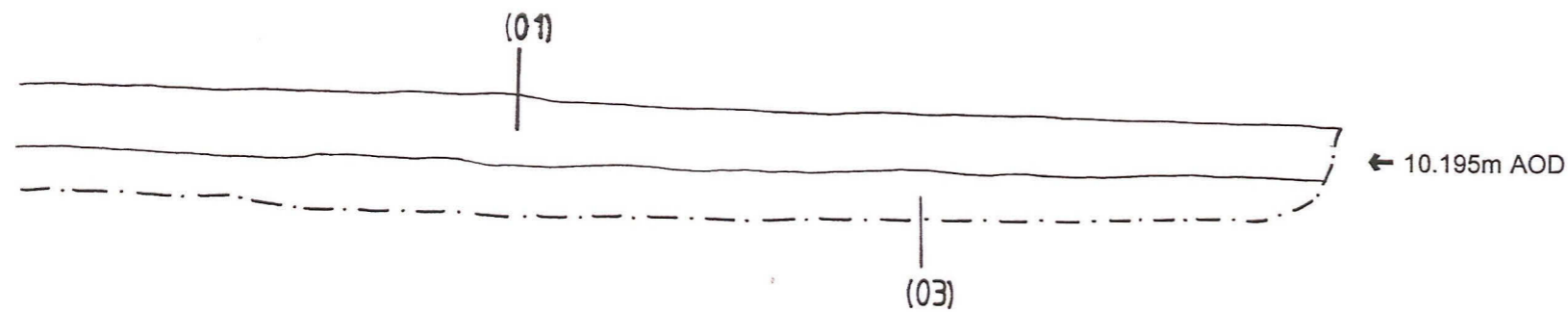
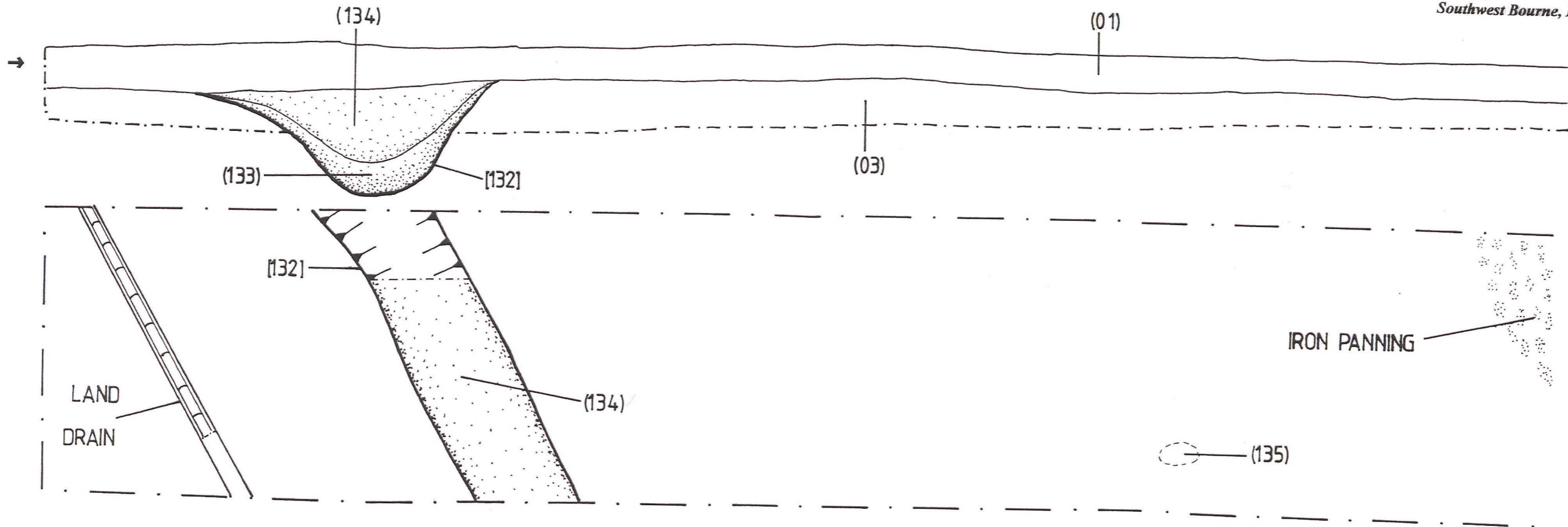


Figure 12

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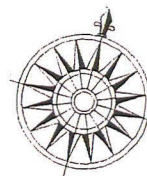
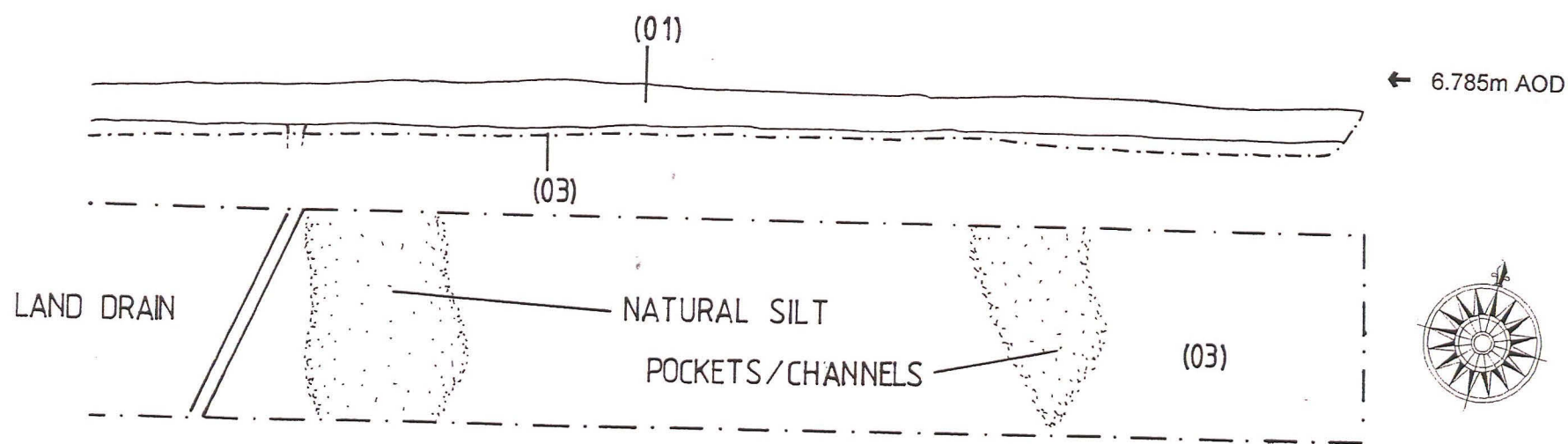
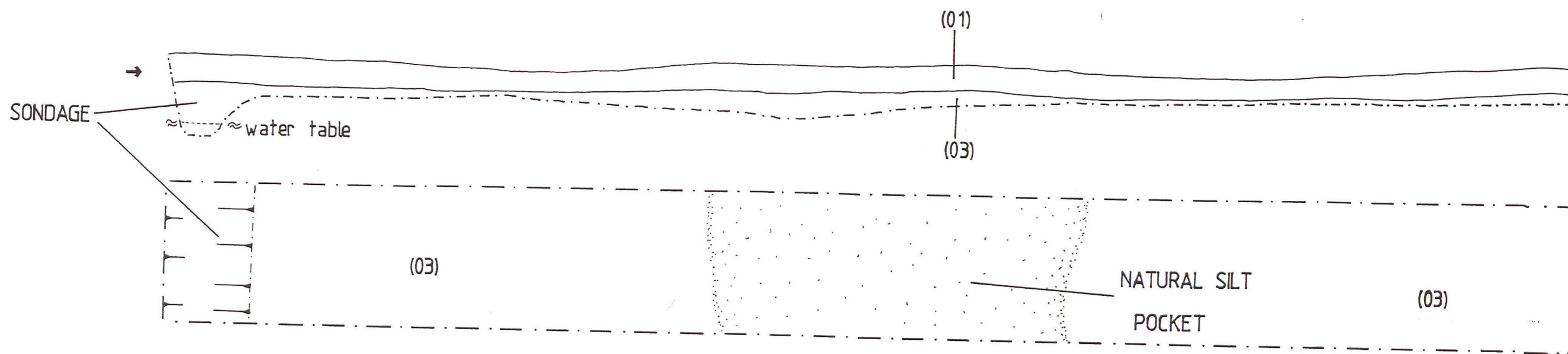


Figure 13

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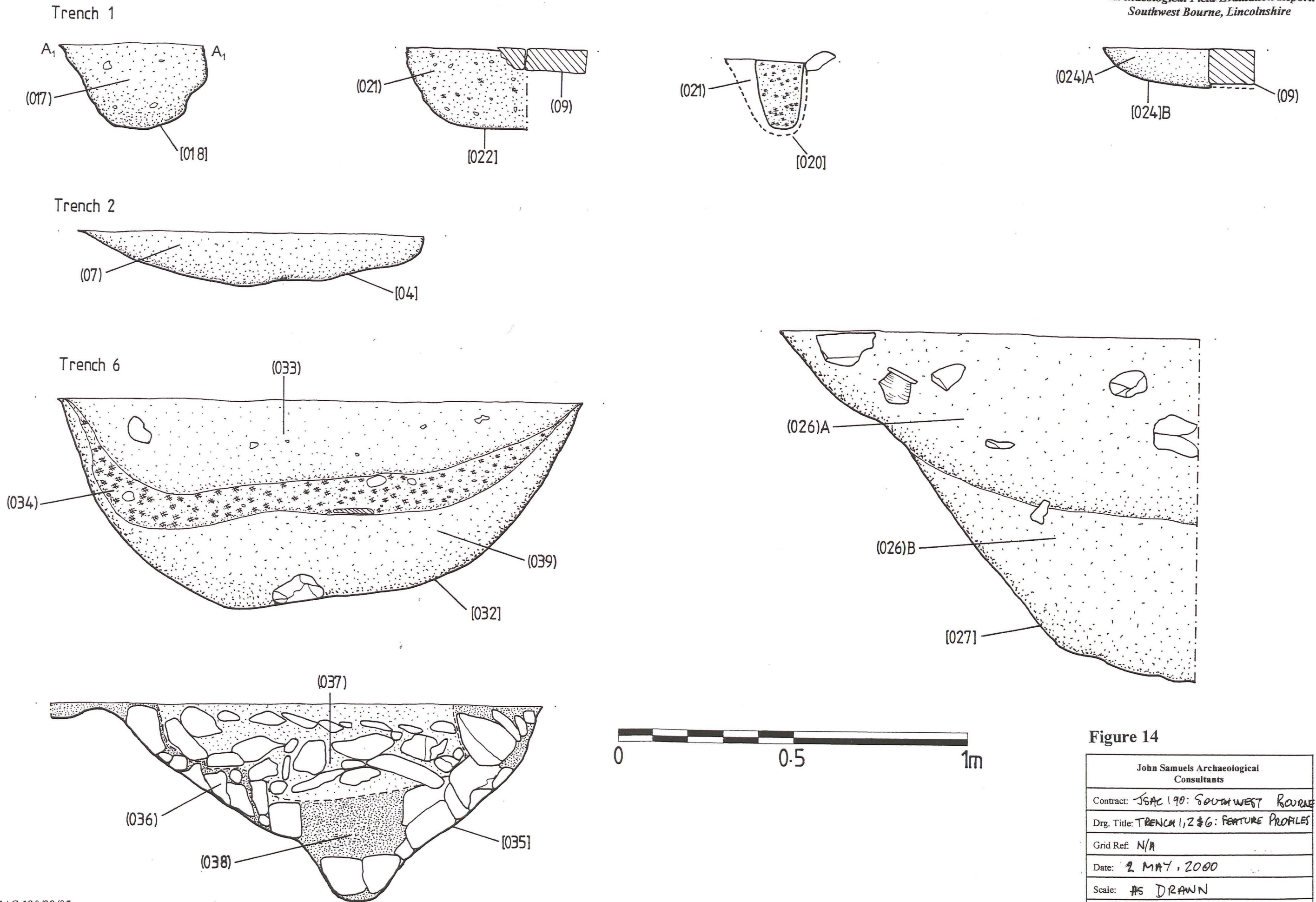


Figure 14

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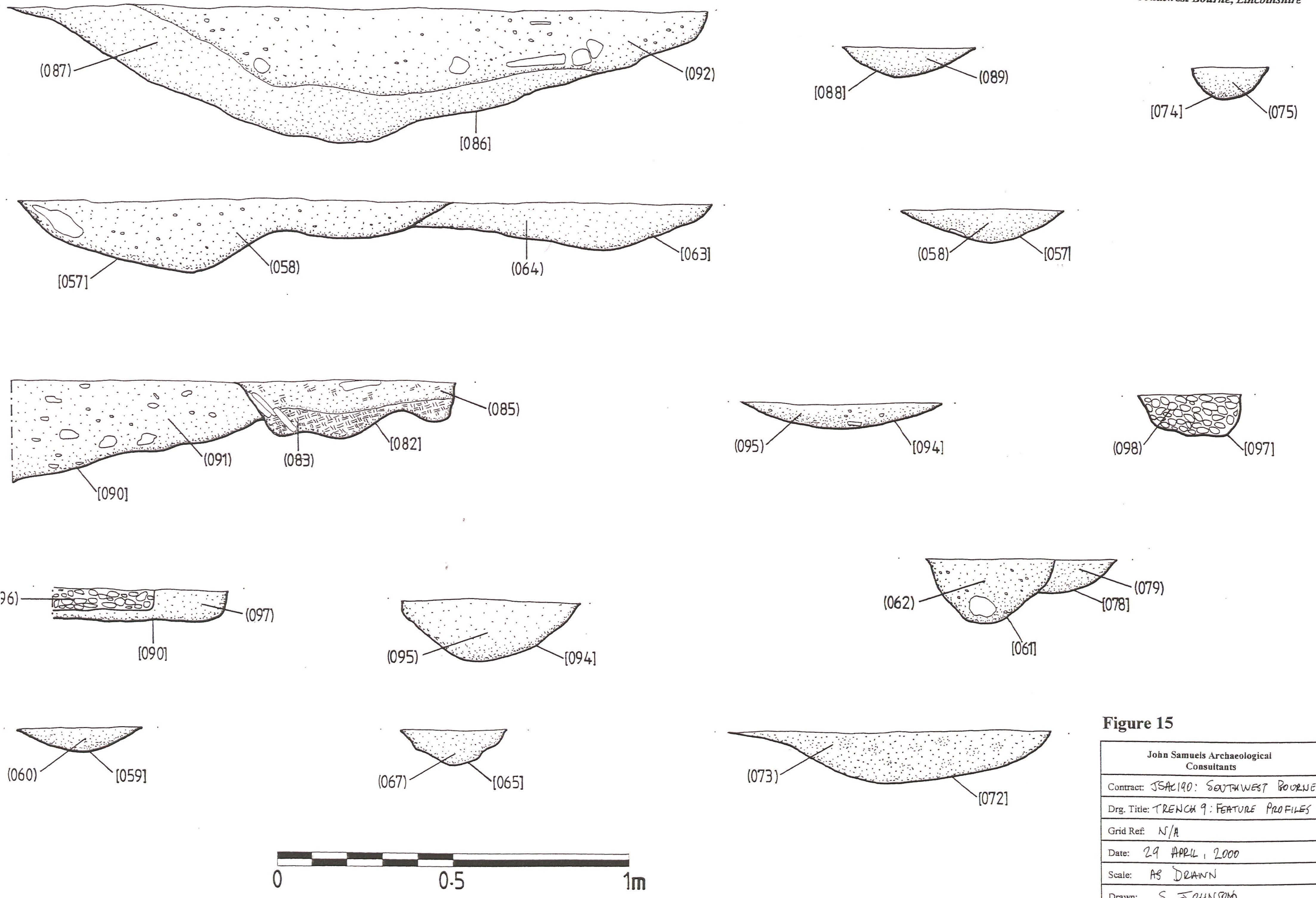


Figure 15

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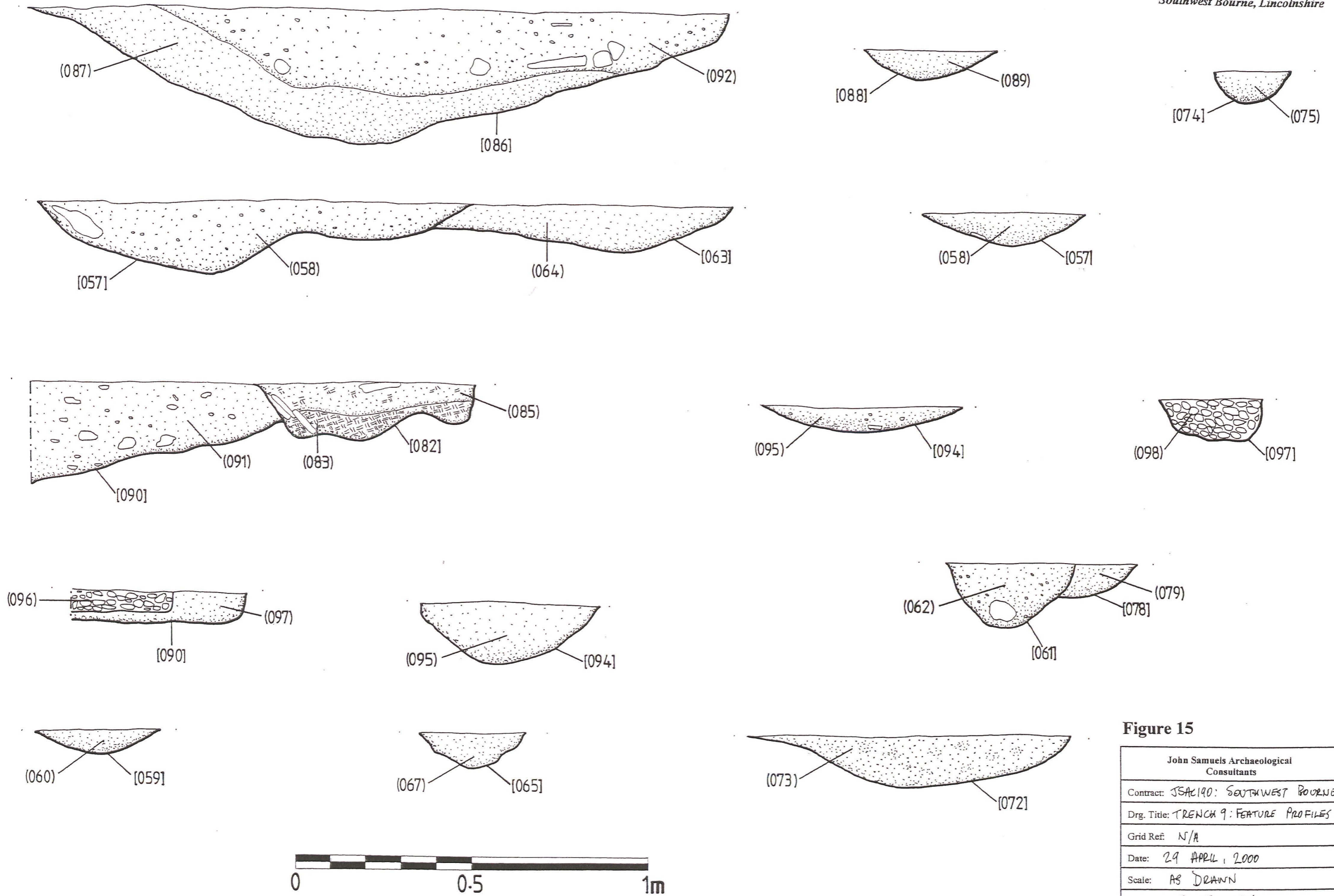


Figure 15

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Figure 16

John Samuels Archaeological Consultants
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10.0 Colour plates

S



Plate 1

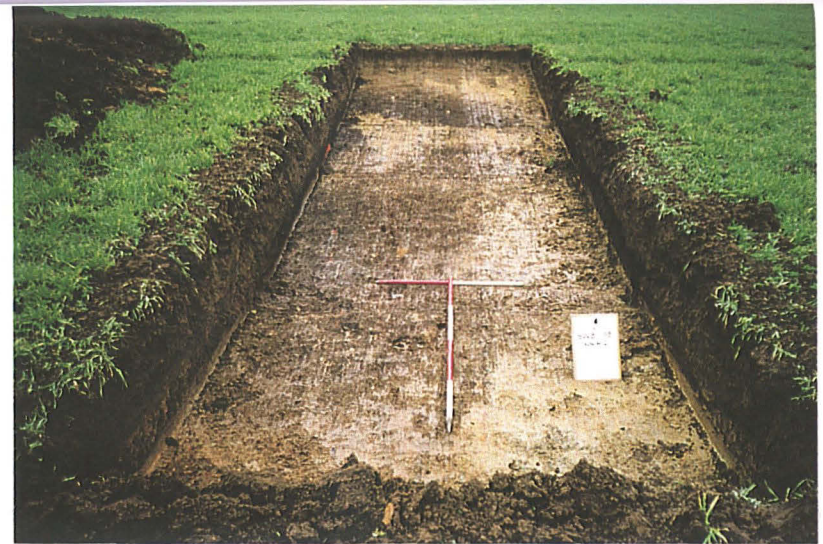


Plate 3



Plate 2



Plate 4



Plate 5

Plate 1: Trench 1, post excavation, showing section through quarry pit

Plate 2: Trench 1, north end, showing structure (09)

Plate 3: Trench 2, pre-excitation, looking north

Plate 4: Trench 3, looking north

Plate 5: Trench 4, looking west



Plate 6



Plate 7



Plate 8



Plate 9



Plate 10

Plate 6: Trench 5, showing peri-glacial feature (025)B, looking east

Plate 7: Trench 6, pre-excitation, looking north

Plate 8: Trench 6, south end, post-excitation, looking north

Plate 9: Trench 6, looking north, showing profile of pit [032]

Plate 10: Trench 6, looking south, showing profile through [035]



Plate 11



Plate 13



Plate 14

Plate 11: Trench 9, pre-excitation, looking west

Plate 12: Trench 9, post-excitation, east end

Plate 13: Trench 9, looking east, showing briquetage *in situ*

Plate 14: Trench 9, looking west, showing profile through [082]/[090]

Plate 15: Trench 10, pre-excitation, looking west

Plate 16: Trench 10 showing profile through [124], looking south



Plate 12



Plate 15



Plate 16