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YORK



ARCHAEOLOGICAL
TRUST

**FIELD 5700,
HURDISS SAND QUARRY,
NORTH KELSEY ROAD,
CAISTOR,
LINCOLNSHIRE**

**REPORT ON AN
ARCHAEOLOGICAL
EVALUATION**



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NORTH KELSEY ROAD, CAISTOR
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ABSTRACT

In April 2000 York Archaeological Trust excavated seven trenches during an archaeological evaluation of land set aside from quarrying at the Hurdiss sand quarry, North Kelsey Road, Caistor. The area had been identified by geophysical survey as of possible archaeological significance. No features of archaeological interest were encountered though a number of pieces of worked flint were recovered. Plough scars cutting into natural deposits are of modern origin. All other finds were of 19th – 20th century date.

1. INTRODUCTION

Between 13th and 20th April 2000 York Archaeological Trust carried out an archaeological evaluation at the Hurdiss sand quarry, O.S. field 5700, North Kelsey Road, Caistor, Lincolnshire (NGR TA 0955 0085)(Figure 1, Site location map). The works comprised seven archaeological trenches and forms the latest of a series of archaeological investigations at the site carried out in advance of quarrying operations.

The site lies approximately 2 km west of Caistor on sandy loam soils above drift geology of glaciofluvial sands. A deeply incised stream with steep banks bounds the site to the south whilst the northern limits are marked by a quarry. Lands to the east and west are under agriculture and woodland.

The works were designed to evaluate the part of the proposed quarry extension in an area where geophysical survey had located anomalies that it was thought may be of archaeological origin. All works were carried out on behalf of J.W. Hurdiss Ltd.

2. HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

The site lies approximately 2 km to the west of the Roman town of Caistor and less than 1km south of North Kelsey Road, which again may be of Roman origin. The Lincolnshire SMR lists a number of cropmarks in the vicinity of the site that may span the prehistoric to post-medieval periods. None of these extend into the area of the quarry itself. The Lincolnshire Sites and Monuments Record Office (SMR) has only one entry for the site, namely a scatter of worked flints at NGR TA 095 009. Worked flint has also been found in nearby fields. Whilst little is known of medieval land use at the site a remnant of ridge and furrow adjacent to the site suggests the likelihood of its agricultural use. The area was not enclosed until 1814.

Previous archaeological work at the site consists of a desk-top study of April 1995 and a geophysical survey, also of 1995, (Wardell Armstrong, 1995). The desk-top study examined cartographic data, SMR entries, aerial photographs and documentary sources as

a first step of archaeological enquiry so as to enable the Lincolnshire County Council Archaeology Section to advise on the mitigation of potential threats to the archaeology. The geophysical survey examined five blocks of land within the site lettered A, B, C, D, and E. Areas A and B produced responses suggestive of geological origin whilst areas C and D produced responses that were thought most likely to be indicative of the presence of iron objects. Area E produced some strong magnetic responses which were interpreted as "more likely to be archaeological than geological". Subsequent to the desk-top study and geophysical survey a watching brief has been maintained by York Archaeological Trust during periods of topsoil stripping at the quarry, (YAT, 1997). During these observations finds of 19th – 20th century date together with five pieces of worked flint were recovered. Unfortunately, the worked flint (all unretouched blades) were undiagnostic and could not be dated typologically. The present programme of archaeological works is located in the area E of the geophysical survey.

3. METHODOLOGY

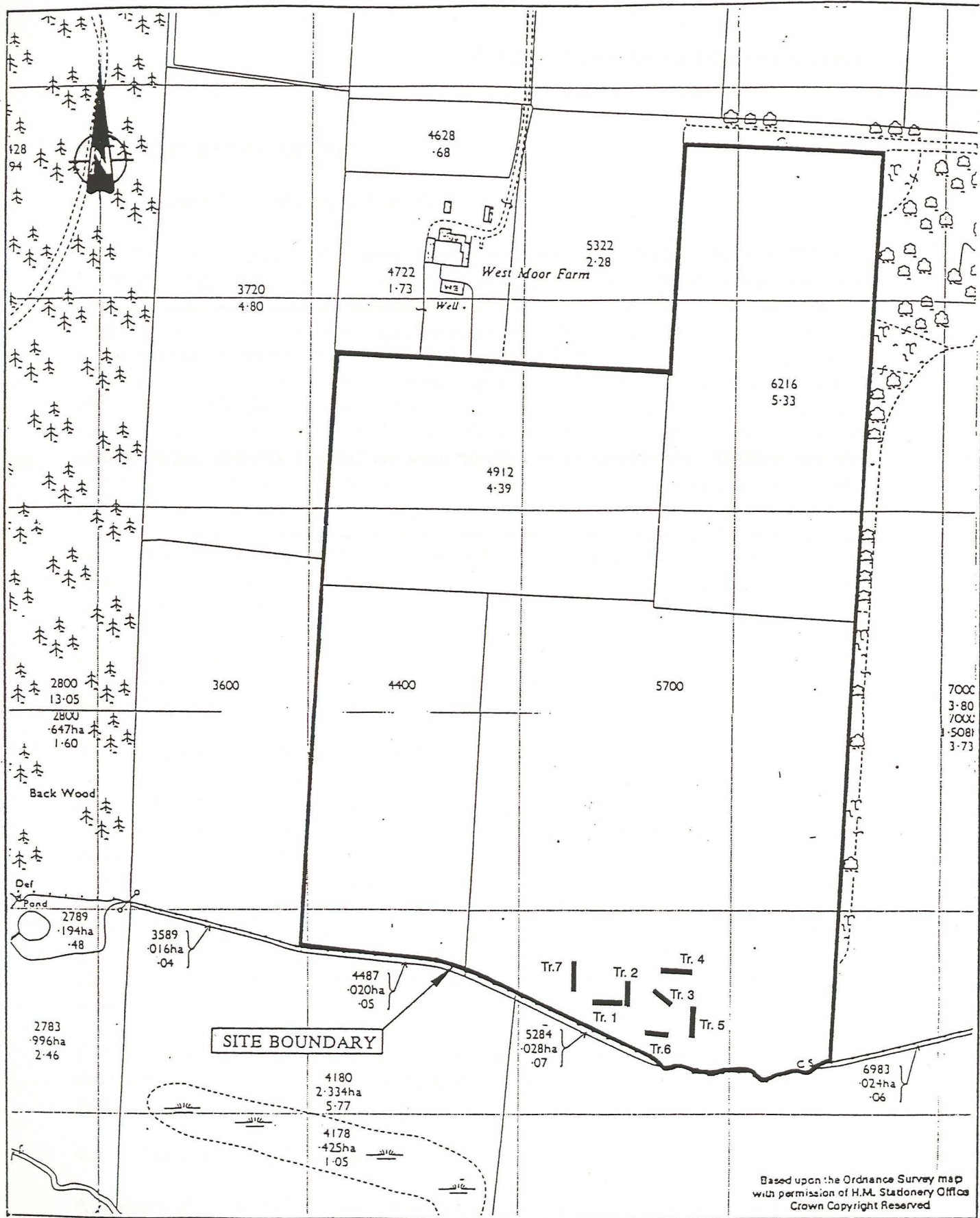
The archaeological works consisted of the excavation of seven trenches, numbered 1 – 7, in an area (E) of the quarry extension that geophysical survey had suggested may contain archaeological remains. Three of the trenches, 1, 2 and 3, were located so as to intercept the geophysical anomalies, the remaining four, 4, 5, 6 and 7, being adjacent to these. Due to steep ground close to the stream bank and the presence of large animal burrows, possibly the residences of foxes or badgers, Trench 6 was perforce located in a different alignment and of a different length to that initially intended. Trench 1 measured 14m x 2.5m, Trench 2 10m x 2.5m, Trench 3 10m x 2.5m, Trench 4 14m x 2.5m, Trench 5 15m x 2.5m, Trench 6 9.6 x 2.5m and Trench 7 15m x 2.5m. Each trench was mechanically stripped of overburden in thin spits of between 0.05m – 0.10m down to archaeologically significant deposits or natural sands. Each trench was subsequently hand cleaned and selectively excavated as required. All contexts encountered were individually recorded on separate pro-forma record sheets. Plans and sections were drawn at scales of 1:20 and 1:10. A number of colour photographic prints were taken of each trench before, during and after excavation. Animal burrows proved to be ubiquitous within the trenches and indeed across the area as a whole. As such, mention of these is not made within individual trenches except where their presence was particularly intense: their presence can be assumed in each case. All finds and site records are currently stored by York Archaeological Trust under the accession code LCNCC:CSQ89.99 prior to their deposition with the City and County Museum, Lincoln.



scale 1: 25000

BASED UPON ORDNANCE SURVEY 1:25000 MAP DATA WITH PERMISSION OF THE CONTROLLER OF HER MAJESTY'S STATIONERY OFFICE, CROWN COPYRIGHT, YORK ARCHAEOLOGICAL TRUST CROMWELL HOUSE, 13 OGLEFORTH, YORK, YO17FG. LICENCE NUMBER AL854123

Figure 1, Site location map



scale 1: 2500

Figure 2, Trench location plan

4. THE EXCAVATIONS

4.1 Trench 1 (Figure 3, Plate 3)

Natural deposits, context 1004, were located in Trench 1 at a depth of between 0.35m – 0.40m below ground level. The bulk of this material was composed of yellow, soft, pure sands. Within the central and eastern parts of the trench however two large areas (up to 4.1m across) of orange tinted, compact sand were noted. Similar material was also noted in the north-east corner of the trench. It is probable that these materials represent a developing iron-pan. Three small patches, up to 0.70m across, of pinkish red, compact clayey sand were also observed in the east central part of the trench. The convoluted nature of these latter deposits in relation to the yellow sand indicates that they too are of natural origin, possibly formed via some process of mineralisation. Cutting into the uppermost part of natural 1004, was a series of narrow, shallow, linear cuts, collectively numbered context 1003, aligned south-east – north-west. A lesser number of identical cuts were aligned at 90 degrees to these. The brown, friable, silty sand fills of the cuts were collectively numbered 1002. It is clear that these cuts represent plough scars. The uppermost deposit in the trench, context 1001, was composed of mid brown, friable, silty sand topsoil, that until recently served as a plough soil.

In the absence of archaeological features that could explain the geophysical anomalies it would seem that these must be due to the observed variations in the natural deposits detailed above.

4.2 Trench 2 (Figure 4, Plate 4)

At a depth generally of around 0.35m below ground level, natural deposits, context 2003, were observed across the entirety of the base of Trench 2. For the most part this consisted of yellow, soft, sands. As was the case with Trench 1 however, patches of compact slightly iron panned sand together with small areas of compact, pink-red clayey sand were also present. Small areas of slightly gravelly sand were also noted. In a few places narrow, shallow plough scars aligned north-west – south-east, together with a lesser number at 90 degrees to these, context 2004, were recorded. Sealing the plough scars was the present brown, silty sand top/plough soil, context 2002, that now supports a dense turf, context 2001.

No features of archaeological origin were present within Trench 2. It is highly likely that the reported geophysical anomalies relate to the observed variations within the natural drift.

4.3 Trench 3 (Figure 5)

At a depth of 0.30m below ground level, or a little over, natural deposits, context 3004, were recorded across the base of Trench 3. This consisted of yellow, soft, pure sand through which two particularly large concentrations of animal burrows had cut. A series

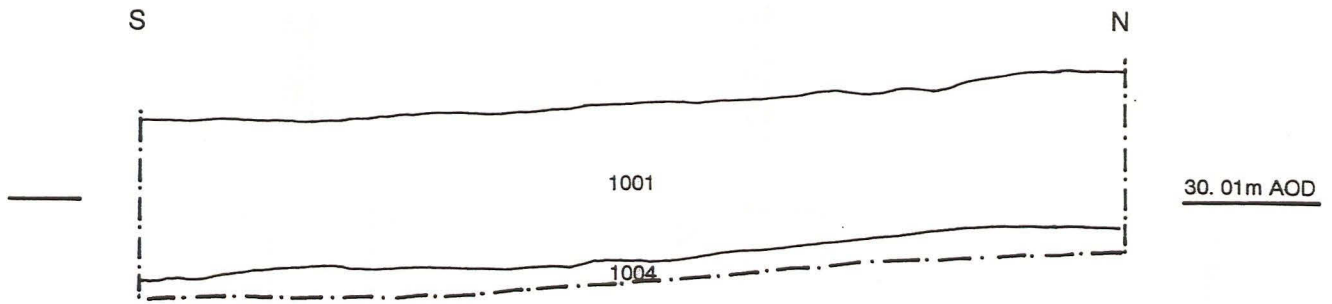


Figure 3, East facing section, trench 1

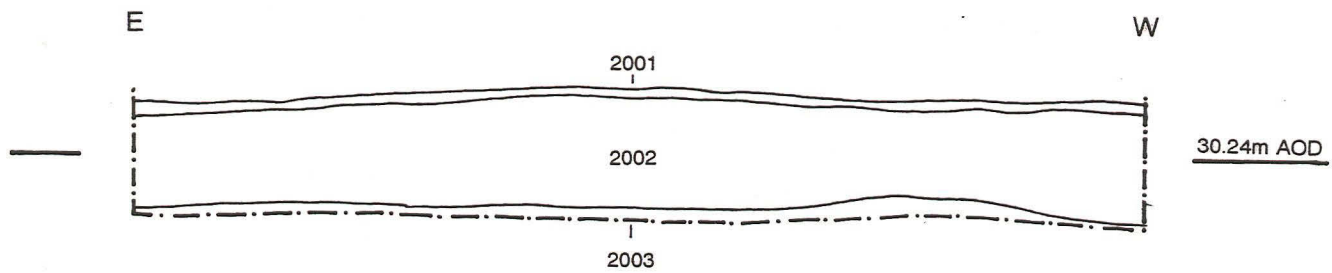
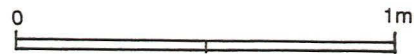


Figure 4, North facing section, trench 2



Figures 3 and 4, Trench 1 and 2 sections

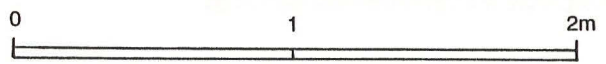
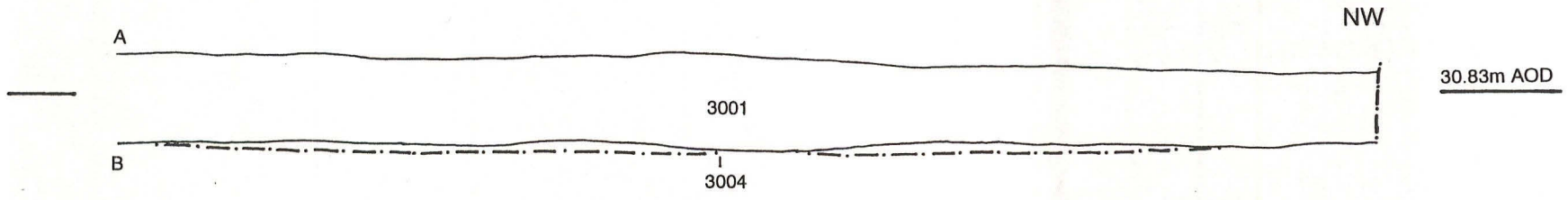
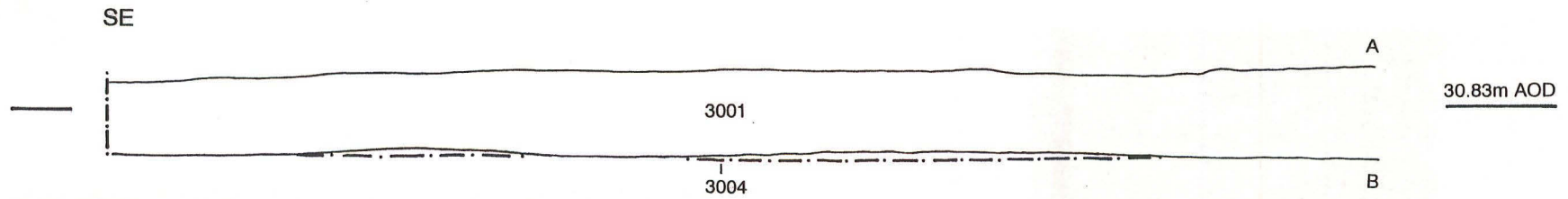


Figure 5, North-east facing section, trench 3



Plate 1, Overall view of site - facing east.



Plate 2, Trench 5, after cleaning, facing north.



Plate 3, Trench 1 facing east, Trench 2 at left centre



Plate 4, Trench 2 facing north

of north-west – south-east aligned plough scars, context 3003, and their fills, context 3002, with a few also present at 90 degrees to this, were noted cutting into 3004. Sealing these was the existing mid brown, friable, silty sand, top/plough soil, context 3001.

Again, the absence of archaeological features within Trench 3 precludes the geophysical anomalies being a direct product of man. Given the relative constancy of the natural sands within this trench it must be assumed that the anomalies are indicative of the observed major animal burrow concentrations.

4.4 Trench 4 (Figure 6)

Clean yellow sands, all heavily burrowed, context 4005, were exposed across most of the base of Trench 4, these occurring at around 0.32m below ground level at the western end of the trench and at around 0.56m at the east. This variation in depth indicates the presence of a slight, but marked, hollow towards the east of the trench. Immediately above 4005 was a layer of mixed and burrowed sands whose upper and lower boundary limits could only be approximately ascertained, context 4004. There is little reason to believe that 4004 is of archaeological origin, rather it seems to be a product of intense animal burrowing activity at the upper horizon of the drift in this part of the site. Sealing 4004 at the eastern end of the trench was context 4003. This thin lense of greyish brown fine silty sand may be part of an in-situ sub soil located within a slight hollow at the eastern end of the trench. Above 4003 lay context 4002, this being very similar to 4003 in colour, texture and consistency though slightly browner and containing minutely more silt. It is likely that 4002 forms a sub soil. Cutting through 4002 was a modern ceramic land drain, fill 4006, within a north-east – south-west aligned cut, context 4007. The mid brown, friable, silty sand top/plough soil, context 4001 sealed the land drain and sub soil 4002. Quite why a sub soil should survive on a part of the site that appears, on the ground surface at least, to be level whilst it has been removed by ploughing in trenches not far distant is not entirely certain. It will be noted however that what may be a part of this sub soil, context 4003, occupied a hollow at the eastern end of the trench. It may, by the same token, be that a sub surface hollow of even greater proportions than this exists around this hollow. Some support for this may be found in the fact that as noted above natural deposits at the west of the trench occur at a higher level than those at the east. As such, sub soil 4002 may occupy a hollow in the profile of the natural sands that has ensured its survival.

4.5 Trench 5 (Figure 7, Plate 2)

Yellow, friable sands of the natural drift, context 5005, were located at the base of Trench 5 at depths ranging from 0.26m at the north of the trench to 0.54m at the south. Several small patches of pinkish red, compact, clayey sand were noted across the trench whilst a single area of orangish coloured compact sand – presumably representing a developing iron-pan, was noted towards the southern end of the trench. That natural occurred at greater depth towards the south is due to its being down slope from the north. This has led, via a process of down slope movement of soils, to a build up of soils at this end of

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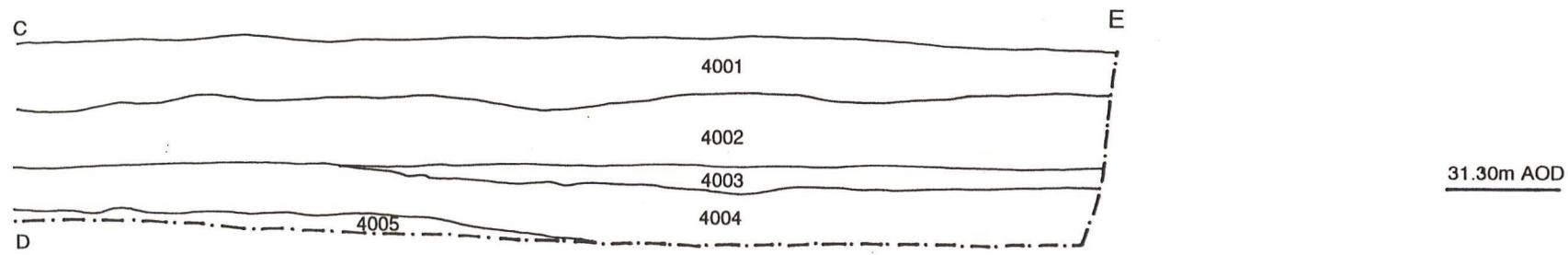
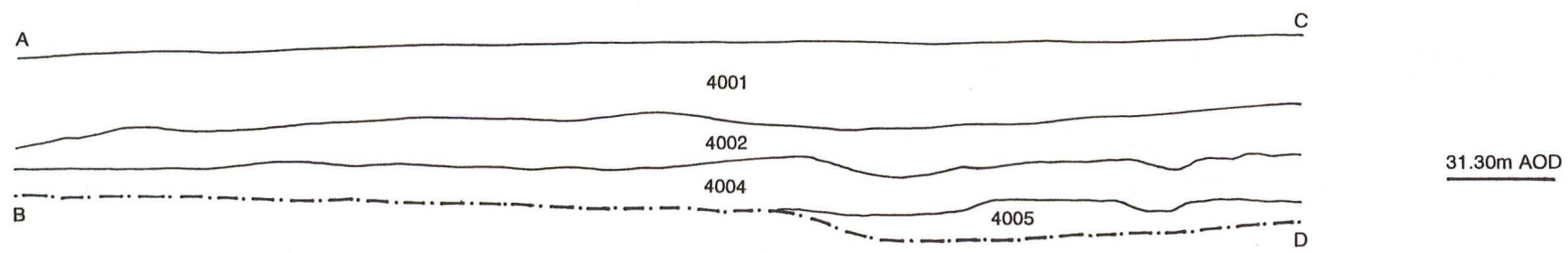
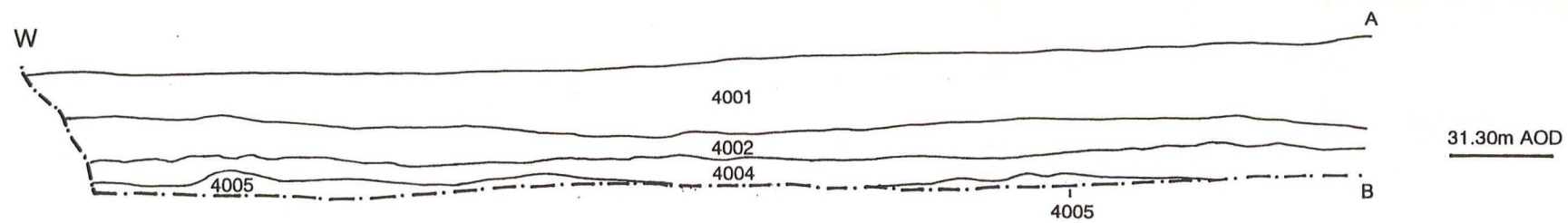
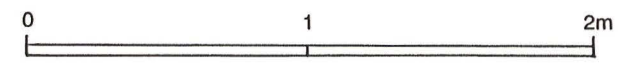


Figure 6, South facing section, trench 4



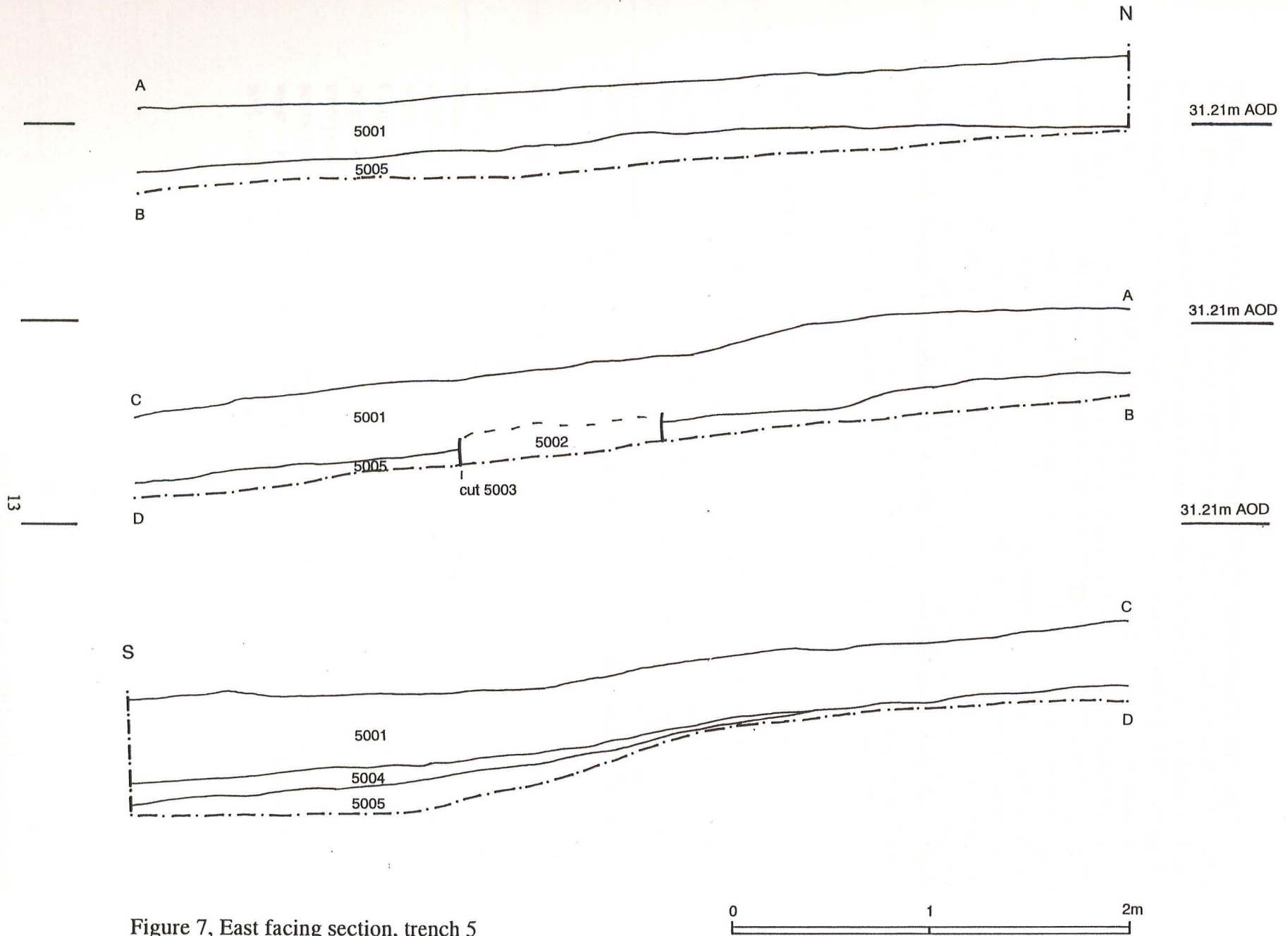


Figure 7, East facing section, trench 5

the trench. What appears to be a minor terrace, perhaps originating through water action, is also present at the extreme south of the trench, (see also Trenches 6 and 7 for similar feature/s). Sealing 5005 in the southern part of the trench only, was a deposit of mid brown (with a slight greyish hue), friable, silty sand, context 5004. It is likely that this material represents a partially intact sub-soil. That 5004 does not occur towards the shallower northern parts of the trench would appear to be due to its removal by plough action. Only a single feature was noted in Trench 5. This was a 0.75m wide, vertically sided, deep cut, context 5003, located in the north central part of the trench and aligned north-east – south-west. The fill of this cut, context 5002, was a mixture of brown silty sands and yellow sands. Excavation of cut 5003 ceased at a depth of 1.10m below ground level, though its base was not reached. Given the sheer vertical sides together with little evident intermixing of the backfill components it appears certain that a modern date for this feature is implied. A function as a modern land drain is a likely interpretation; an example of which was confirmed within the adjacent Trench 4. Sealing 5002 was the existing mid brown, friable, silty sand top/plough soil, context 5001.

4.6 Trench 6 (Figure 8)

Natural, yellow – yellow-orange, sands, slightly iron-panned in places, context 6004, were revealed at the northern part of the base of Trench 6. This material dipped down on the northern side of the trench into what may be the same slight terrace that was noted in Trench 5. Occupying the hollow of this putative terrace was context 6003, a mid greyish brown, slightly silty sand. It is likely that 6003 represents an in-situ subsoil. Sealing 6003 was the extant mid brown, friable silty sand top/plough soil, context 6002, the upper part of which supports the turf 6001.

4.7 Trench 7 (Figure 9)

The profile of natural sand deposits in Trench 7, context 7004, broadly mirrored that of Trenches 5 and 6, namely one of ground sloping from the north down to the south, in the direction of the stream, together with a marked terrace type effect towards the extreme south. Some iron-panning was noted within 7004 at the extreme south of the trench. Confined within the hollow area of the “terrace” at the southern part of Trench 7 a layer of greyish brown, slightly silty sand, context 7003, was observed. This material is likely to represent an in-situ subsoil as was the case in Trenches 5 and 6. A series of plough scars, context 7005, were present across the base of the trench, these being aligned north-west – south-east and east – west. The extant mid brown, friable, silty sand top/plough soil, context 7001 sealed all earlier deposits within the trench.

The floor plan
Some of the plans

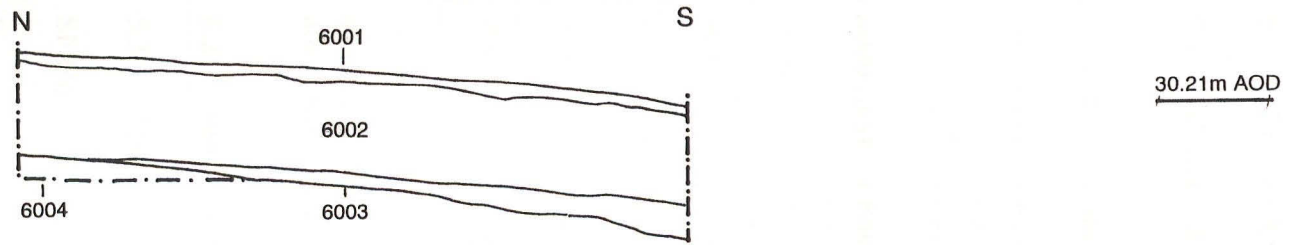


Figure 8, West facing section, trench 6

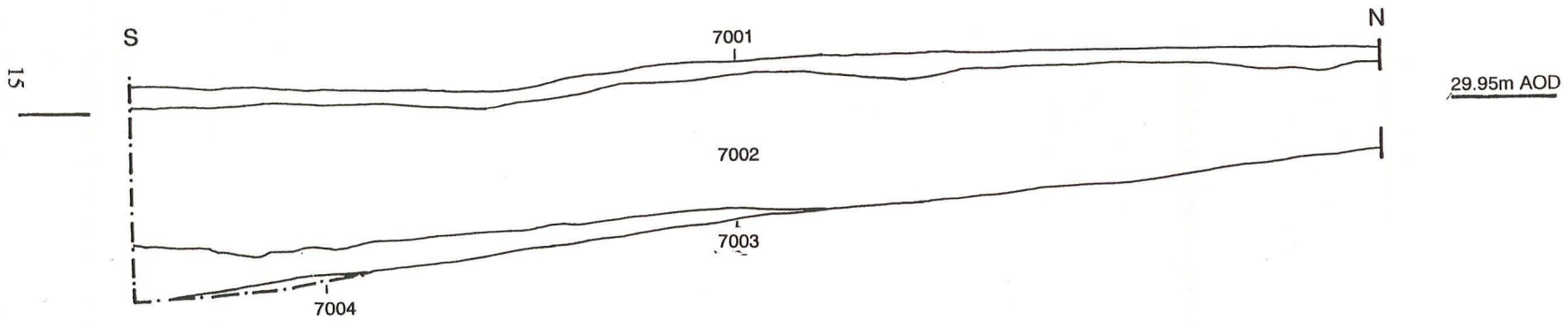
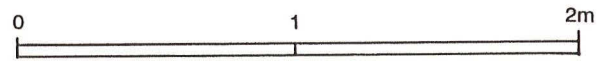


Figure 9, Southern part east facing section, trench 7

Figures 8 and 9, Trench 6 and 7 sections



5. FINDS ASSESSMENT

5.1 Pottery Report

Context	Spot date	no. of sherds	Description
1000 (u/s)	Post med-modern	3	tin-glazed earthenware and post-medieval red wares
2000 (u/s)	Late 19 th /20 th	2	
3000 (u/s)	Post-med - late 19 th /20 th	6	Includes one post-medieval red ware
4000 (u/s)	Late 19 th /20 th	9	tin-glazed earthenware, porcelain
4001	Late 19 th /20 th	3	Includes figurine head
5000 (u/s)	Late 19 th /20 th	2	
6001	Late 19 th /20 th	2	tin-glazed earthenwares
7002	Late 19 th /20 th	2	tin-glazed earthenwares

summary: This is a small assemblage of post-medieval and modern sherds all of which are of small size and may well represent material caught up with manuring for the fields.

5.2 Flints and other finds

5.2.1 The Flint

SF No. Description.

1. Context 6000. Is a secondary flake with less than 50% cortex. There is no sign of working and it probably represents part of initial processing, forming a blank.
2. Context 6000. Two fragments.
 I) is a small flake fragment.
 II) is a secondary flake with less than 50% cortex. One edge shows sign of use as a scraper.

The flints from context 6000 show signs of primary reduction and the defining of blanks. Some of the flakes have been used but have not been specifically made as tools.

3. Context 7003. Three fragments.
I) is a primary flake with less than 50% cortex but has not been worked. The whole edge shows signs of use as a scraper.
II) is a secondary flake with some edge damage but no sign of use.
III) is a very small secondary flake with no signs of working or use.

The flints from context 7003 show signs of primary reduction and the defining of blanks. Some of the flakes have been used but have not been specifically made as tools.

4. Context 8000 U/S. Two fragments.
I) is a primary flake, probably the result of reduction. No sign of use.
II) is a tertiary flake with no sign of cortex.

The flints from context 8000 show signs of primary reduction and the defining of blanks only.

6. Context 5001. Four fragments.
I) is a tertiary flake.
II) is a tertiary flake.
III) is a tertiary flake.
IV) is a secondary flake showing signs of heating.

The flints from context 5001 show signs of the defining of blanks and tool making. There is some evidence for the heating of flakes. This may be the result of accidental contact with fire rather than deliberate heating to harden the flint as working appears to have taken place prior to heating.

7. Context 4002. Single fragment.
Is a tertiary flake showing use on part of the edge. The patina suggests heating.

The flint from context 4002 shows sign of tool making and then the use of waste fragments. In this case heating may have taken place before or after the flake was discarded.

8. Context 3002. Single fragment.
Is a tertiary flake that has been heated.

The flint from context 3002 is waste from the tool making process. It has been heated either before or after the flake was discarded.

10. Context 1000. Single Thumb-nail Scraper.
Is a primary flake.

The flint from context 1000 has been made and used as a thumb-nail scraper.

11. Context 1002. Single fragment.
Is a tertiary flake. No evidence of use.
12. Context 2000 U/S. Single fragment.
Possibly a core but too damaged by heating to tell.
13. Context 4000 U/S. Single fragment.
Is a tertiary flake showing heat crazing.
14. Context 5000 U/S. 2 fragments.
I) Is a tertiary flake.
II) Is a primary flake.

Summary

The assemblage of 20 flint fragments is dominated by unworked flakes, many from the cortex of flint nodules. There is evidence of primary reduction of flint nodules, the defining of blanks and some tool making. Several show thermal damage with some displaying fractures. There are two broken blades and one thumb-nail scraper. The assemblage is likely to be of post-Mesolithic date but there are few diagnostic elements.

The Tobacco Pipe and Carbon Rod.

These finds are post-medieval in date. The carbon rod was used as a writing implement.

6. DISCUSSION AND CONCLUSIONS

The evaluation trenches found no deposits or features that could be related directly to ancient human activity. 19th – 20th century finds from the plough and sub soils relate entirely recent activity. These can be equated with the evidence for ploughing and land drainage revealed in several of the trenches. The 20 pieces of worked flint recovered from the site leaves little doubt that in the prehistoric past mankind did have some kind of presence here, though not one that left below ground features (in the area of the trenches at least). It may be that the site forms part of an area that in the past was exploited but not occupied.

With regard to the geophysical anomalies, it would appear that these can be accounted for by geological variations within the natural drift and in one probable instance by the presence of a maze of animal burrows.

7. LIST OF SOURCES

Wardell Armstrong 1995

North Kelsey Road, Caistor, Lincolnshire.
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Prepared for J.W. Hurdiss Limited

YAT 1997

North Kelsey Road, Caistor, Lincolnshire.
A Report on an Archaeological Watching
Brief.

8. LIST OF CONTRIBUTORS

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