

Archaeological Field Unit

Archaeological Investigations on the Thetford Aqueduct

S Bray and G Haley 1993

Cambridgeshire County Council

Report No A22

Commissioned By The Cambridge Water Company

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NON-TECHNICAL SUMMARY

An archaeological watching brief was commissioned by the Cambridge Water Company in adherence with planning constraints regarding the construction of a new aqueduct between the Cherry Hinton reservoirs and Euston, near Thetford (Figure 1). The course of the pipeline disturbed a swathe of land 25 kilometres long and up to 12 metres wide. It was positioned adjacent to three sites of national importance: an Iron-Age settlement at Caudle Corner Farm, Fulbourn (Scheduled Ancient Monument (SAM) Cambs 95), War Ditches, Cherry Hinton (SMR 4963) and Howe Hill (SAM Camb 54), a Bronze Age tumulus. In addition several minor sites and individual findspots ranging in date from the Mesolithic to Medieval periods were known to be adjacent to the route of the pipeline.

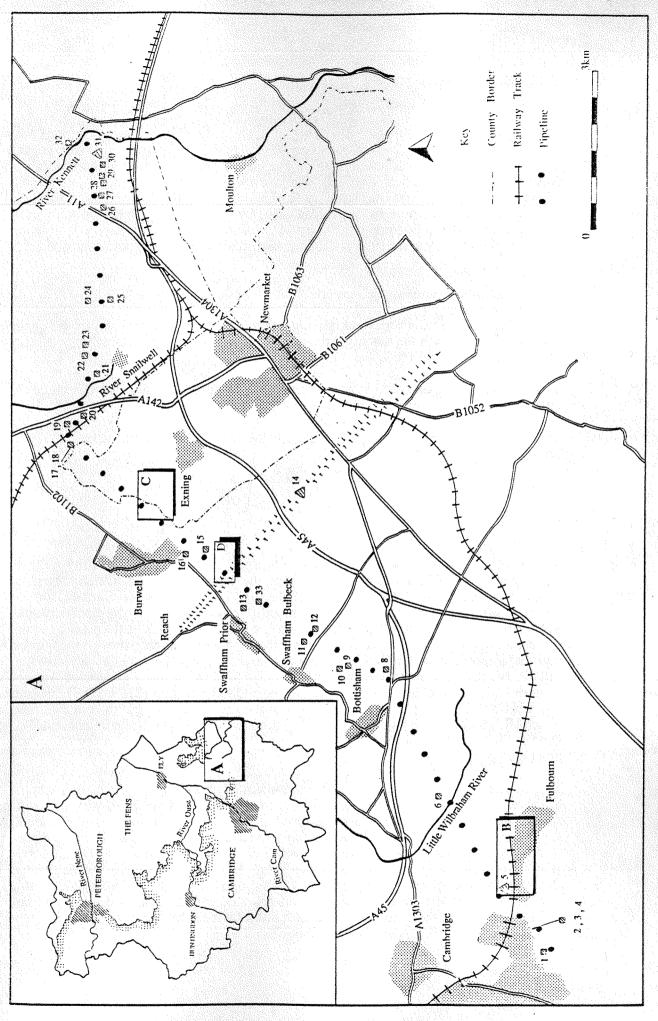
In addition the pipeline crossed a fourth monument of national importance, The Devils Dyke (SAM Camb 5), a massive Anglo-Saxon defensive bank and ditch. This monument required partial excavation which demonstrated that little silting-up of the ditch had occurred since it had fallen out of use.

Apart from the results of the excavations at Devils Dyke few other archaeologically sensitive deposits were detected. The only features identified were two Post-Medieval gullies and an inhumation of uncertain date which had been disturbed by the pipetrench.

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Find Spot No.	Description of Find/Sites (with SMR No.)
	War ditches, now quarried away (4963)
2 3	Ring ditch, cropmark (4776)
3	Roman Coin (4841)
4 5 6	Worked flint (4896)
5	Iron Site (SAM Camb 95; SMR 6315)
6	Neolithic flint (6246)
8	Mesolithic/Neolithic (6630)
9	Anglo-Saxon Cemetery (6629/66228)
10	Roman building (9989)
11	Ridge & Furrow (6693)
12	Possible Ring-ditch (10128)
13	Anglo-Saxon Cemetery/Roman ritual site (11054)
14	Devils Dyke (SAM Camb 5)
15	Undated ring ditch (6491/6781)
16	Undated cropmark/earthwork(6490)
17	Neolithic Axe (7737)
18	Bronze-Age Spearhead (7432)
19	Undated Ring Ditch, cropmark (9025)
20	Undated Enclosure, cropmark (9026)
21	Roman Villa? (9483)
22	Roman? (7746a)
23	Roman Finds Scatter (7432)
24	Bronze-Age Beaker Burial found in 1941 (7478)
25	Neolithic Axe (7477)
26	Neolithic/Bronze Age Finds Scatter (7488)
27	Mesolithic/Neolithic
28	Bronze Age Settlement (1181)
29	Acheulian Hand Axe (7490)
30	Flints (7592)
31	Howes Hill, Bronze Age Tumulus (SAM Camb 54; 7447)
32	Neolithic Axe (7679)
33	Prehistoric cropmark ring ditch(6690)
Table 1	Gazetteer of Archaeological Sites and Findspots



1 INTRODUCTION

- 1.1 The Archaeological Field Unit of Cambridgeshire County Council was commissioned by the Cambridge Water Company (CWC) to provide advice and conduct an archaeological watching brief on a 25 km long pipeline between Cambridge Reservoirs and Euston, near Thetford. The work was conducted over seventeen months between August 1991 and December 1992. The initial negotiations and the majority of the monitoring of the pipeline were conducted by Mr. G. Haley, but were completed, from March 1992 to December 1992 by Mr. S. Bray. Final completion of the report was completed in October 1993 following assimilation of finds, records and specialist reports.
- 1.2 The aims of the project were to:
- 1.2.1 Advise the client on the known archaeology along the proposed route of the pipeline, liaising with the County Archaeologist and CWC in order to, where possible, avoid sites of National and Local importance.
- 1.2.2 Highlight and excavate areas of specific archaeological significance that could not be avoided by the construction of the pipeline.
- 1.2.3 Monitor the construction of the pipeline, recording and excavating any sites uncovered by the works.

2 BACKGROUND

The pipeline crosses a wide tract of Cambridgeshire and Suffolk, mainly over an underlying Lower Chalk geology which forms the gently undulating hills characteristic of the region. Along the actual route of the pipeline there are few finds or sites of antiquity on the County's Sites and Monuments Record (SMR). However, thirty sites and individual findspots occur in the vicinity, within 200 metres of the pipeline route representing the Mesolithic to Medieval periods. In addition three sites of recognised national importance are immediately adjacent to the pipeline (Figure 1): an Iron-Age settlement at Caudle Corner Farm, Fulbourn (Figure 2; Plate 1&2; Scheduled Ancient Monument (SAM) Camb 95) the War Ditches, Cherry Hinton (SMR 4963), an Iron Age Hillfort destroyed by chalk quarrying in the late 19th to mid 20th centuries, and Howe Hill (SAM Camb 54), an Bronze-Age tumulus. An Anglo-Saxon monument, The Devils' Dyke (SAM Camb 5) was also found to be within the area affected by the pipeline.

The Devils Dyke is the longest and most massive in a series of dykes in southern Cambridgeshire and adjacent counties. All are aligned from the north-west to southeast, crossing the chalk hills. All are believed to have had natural defences on either end - rivers or fen on the north and forested clay plateaux to the south-east. They all appear to cross existing Roman and earlier roadways, e.g. The Icknield Way, and so by association have long been interpreted as being Anglo-Saxon defensive monuments. However, in light of recent work in Essex, particularly in advance of Stansted Airport, beyond the southern ends of the monuments suggests a rather well-used, if not intensively settled farming landscape. This in effect leaves the Dykes without any natural defences at their south-eastern ends.

Alternative functions for the Dykes have been suggested as being grandiose boundary marker of the limits of a kingdom or territory.

3 METHODOLOGY

- 3.1 The method and sequence of pipelaying is to initially cut an easement through the topsoil, between 8-12 metres wide, as a roadway for the contractors vehicles. The pipetrench is then excavated to one side of the easement cutting into the natural geology, usually well below any surviving archaeological remains. The easement over completed sections of the pipeline, 5 km in length, is then be left open until the pipeline can be tested before reinstatement.
- 3.2 The archaeological monitoring of a pipeline involves three main stages:
- 3.2.1 **Desktop Evaluation** Initially, the Sites and Monuments Record and County Record Office (CRO) is consulted for all recorded sites and findspots on or adjacent to the proposed pipeline. In this case wherever such sites occurred where possible they were avoided by the pipeline.
- 3.2.2 Watching Brief Any sites adjacent to or of National or Local importance are then subjected to a detailed watching brief during the topsoiling of the easement and during the excavation of the pipetrench. For the remainder of the easement and pipetrench an inspection on a more *ad hoc* basis is maintained, allowing the contractors to open stretches of between 500 1000 metres before walking along the exposed easement is walked and the spoilheap checked for artefacts.
- 3.2.3 Rescue Excavation The process of excavation can be sub-divided into two main categories:
- a) Sites identified in the initial desktop evaluation which cannot be avoided during the construction will usually require excavation.
- b) Previously unknown sites detected during the Watching Brief will usually require limited rescue excavation involving a plan of the features and sample excavation to gain an idea as to the type, function and date of the site.
- 3.2.4 Excavation of the Devils' Dyke was expected in accordance with the situation identified in 3.2.3a above. The route of the pipeline could not avoid The Devils' Dyke and so it was initially anticipated that a section across both the bank and ditch would have to be excavated The CWC overcame this problem by thrust-boring beneath the bank. As thrust boring was still likely to disturb the lower ditch silts, a smaller rescue excavation was still required to gain Scheduled Monument Consent for the works.

The scrub tree cover was cleared and a 8 x 3 metre trench was laid out across the base of the ditch. The fill of the ditch was hand excavated, recorded, drawn and photographed.

4 RESULTS

The results of the archaeological investigations along the Thetford Aqueduct were minimal. Only two previously unknown areas of archaeological activity were identified at Caudle Corner Farm, Fulbourn and near Burwell. At the latter two Post-Medieval ditches were recorded and excavated and at the former the remains of an undated human inhumation were located and recorded. The excavation of Devils Dyke, carried out prior to the construction of the pipeline, has added to our knowledge of the monument, suggesting that it quickly achieved its present stable profile and was not constructed as a defensive structure but rather as an earthwork (G. Wait, 1991).

4.1 Caudle Corner Farm, Fulbourn (Figure 2; Plates 1&2) The section of pipeline running northwards from the Cambridge-Newmarket railway to Caudle Corner Farm is adjacent to Scheduled Ancient Monument (SAM 95 (TL503-/567-)). This represents an Iron-Age settlement site showing as cropmarks and an artefact scatter.

Unfortunately, the majority of this section of pipeline was not excavated to the right level, with any potential archaeology being masked by approximately 0.10 m of plough-mixed subsoil. A small section of the easement had been taken down to the right level and here two east-west aligned Medieval shallow gullies were recorded (Figure. 2). However, upon later inspection of the pipetrench no archaeological features were noted. The lack of prehistoric features observed in the pipetrench suggests that the Iron-Age settlement does not extend as far west as the pipetrench, or that it has suffered considerable plough damage and nothing remains of the site.

4.2 TL603-/667- (Burwell) (Figure 3) This section of the easement had again not been excavated to the right level. Inspection of the spoilheap and surface of easement revealed no archaeological deposits or artefacts. However, upon excavation of the pipetrench a inhumation was disturbed. Bob Carr, Suffolk County Council Archaeology Section, was informed by the contractors and completed the archaeological investigations of this feature. No grave goods were found (Appendix A) and examination of the pipetrench showed no other features. Thus the date of the burial is not known.

4.3 Section Through Devil's Dyke TL5845/6438 (Figure 4.1,2,3) By G. Wait, PhD

The Section (Figure 4.2) and the short list of archaeological contexts indicate how stratigraphically simple the fill of the ditch of the Devils Dyke is at this point. Layers 1, 2, 3, 4 and 15 all contain recent artefacts. These layers represent tertiary fills and could have accumulated within the last century or two. Layers 5, 6, 7 and 18 would seem to represent some 1000 to 1300 years worth of slow accumulation. These layers are bedded at the angle of repose (35-60 degrees from the horizontal) suggesting that the ditch very quickly reached a state of relative stability. However, Limbrey (1975) discusses the fills of ditches by simple wind and water action, and the resulting fill morphology closely matches that observed here. The downward movement of artefacts (like glass or shotgun shells) through soil layers by earthworm and rodent action is increased, and could thus explain the observed artefact distribution. This argues that the observed fill is the result of natural processes acting over the intervening millennium. The lower layers - 8, 10, 11, 12, 13, 14, 16 and 17 are largely comprised of chalk plates and angular blocks, typical of the accumulation of frost-fractured "talus" in the angles of a ditch (Limbrey 1975). These probably date to the first few years after the Dyke was constructed. It is apparent that, in this stretch at least, there is no mass rubble or silt deriving from the bank side which might be used to argue for there ever having been a rampart (nor for a counterscarp on the south-west side). Devils Dyke would appear to been built purely as an earthwork.

The amount of frost talus is too small to indicate that the ditch was vertical sided with a wide berm between the ditch and bank, i.e. its present shape faithfully mirrors its original profile. Alternatively, it indicates that the first years frost talus had accumulated in the base of the ditch establishing a stable profile after which the ditch was regularly cleaned out.

The collection of molluscan samples from layers 1, 2, 6, 7, 8, 12, 14, 15, 16 and 18 allows the reconstruction of the land-use along the Dyke. Until quite recently this was an open grassland environment. It is particularly interesting to know that the present scrub cover supports a distinctive molluscan population, as opposed to an open grassland, arable or woodland type. The finds provide no basis for refining the dating of the construction of the Dyke. It is however interesting that, in this area at least, the Dyke's profile has been very stable for most of the time since construction.

5 DISCUSSION OF RESULTS

5.1 The construction of the pipeline revealed few significant stratified archaeological deposits despite its length and close proximity to several sites. On previous road construction schemes in the south of England it was found that a site was discovered approximately every 1/2 mile. A pipeline by the National Rivers Authority (NRA) running parallel to the Thetford Aqueduct recorded five important sites ranging in date from the Late Iron-Age through to the Post-Medieval (Robinson, 1992). The presence of such a density of sites makes its imperative that any scheme that traverses large tracts of the countryside be monitored by an archaeologist. This type of project also allows us to view how modern land management is affecting archaeological remains and how man has managed the landscape throughout history.

Two main contributing factors were seen to be responsible for the poor results:

- 5.2.1 Insufficient topsoil removal This was found to be the primary factor responsible for the poor results. This was caused by the contractors responsible for excavating the easement; they did this to an arbitrary level, regardless of whether any ploughsoil remained. From an archaeological viewpoint "topsoiling" requires the removal of all the ploughsoil and plough-mixed subsoil to the archaeological horizon from which features and layers are apparent. The upper layers, ploughsoil and plough-mixed subsoil are largely archaeologically barren, having been disturbed by agriculture and thus losing any stratigraphical value they once might have contained.
- 5.2.2 Pipe-laying operations To a lesser extent the pipe-lying operation was found to contribute to the disappointing results. Sites should normally be detected before the excavation of the pipetrench so that the exposed trench only has to serves as a verification to the archaeologist that no sites or features have been missed. The procedure employed in laying pipes for the aqueduct proved to hinder the completion of an effective watching brief programme. The policy of backfilling trenches immediately following pipes being fixed in position meant that at no time during the working day could the archaeologist inspect more than a few metres of open trench. As a consequence of this only the most peripheral check could be maintained on the destruction of archaeological resources by this work.

Under these circumstances the problem could only be overcome by maintaining a permanent watching brief at each pipe-laying operation; an option that was not possible under the limited funding on this project.

The above reasons should adequately explain the low recovery of "background" archaeology, and therefore the results do not necessarily indicate a relatively sterile archaeological landscape as would first appear from the lack of identifiable remains.

5.3 Where the right level of topsoiling was achieved features and artefacts were recorded (*Figures 2&3*). During the excavation of the pipetrench near Burwell an inhumation was uncovered, not visible from the excavated level of the easement (*Figure 3*).

Where sites were anticipated before the pipelines construction, e.g. The Devils Dyke, adequate archaeological work was completed and useful information retrieved.

- 5.4 In the interests of conducting a more effective archaeological programme the following recommendations are suggested for future pipe-laying operations
- 5.4.1 In most cases the amount of topsoil/subsoil remaining after initial 'topsoiling is minimal, between 0.10-0.20 m. An indication of the archaeology present could be gained by excavating a single buckets width through the remaining 'topsoil' down one side of the easement. This would allow an adequate window to the underlying archaeology and the area could then be expanded if a site is detected.
- 5.4.2 The backfilling of the pipe trench could be delayed until later in the working day. To do this should not hinder the on-going programme of work and would leave open an adequate length of trench, for a number of hours, to allow effective monitoring to take place.
- 5.4.3 If it proves impossible to strip to the levels required by the archaeological contractor then the pipetrench must be left open until it has been examined and recorded.

6 ACKNOWLEDGEMENTS

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In addition: Paul Spoerry and Gerry Wait, the Project Managers; Bob Carr, Suffolk County Council Archaeology Section, for collecting and recording the skeletal remains; Alison Taylor and Tim Malim for proof reading the report; Corrine Duhig for examining the human remains; Sarah Ryan for producing the illustrations included in this report, Caroline Gait for quality control on the illustrations included in the report. Finally to Jenny Goode for helping with the final preparation of the report.

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Figure 2 Location of Post-Medieval Ditches

561

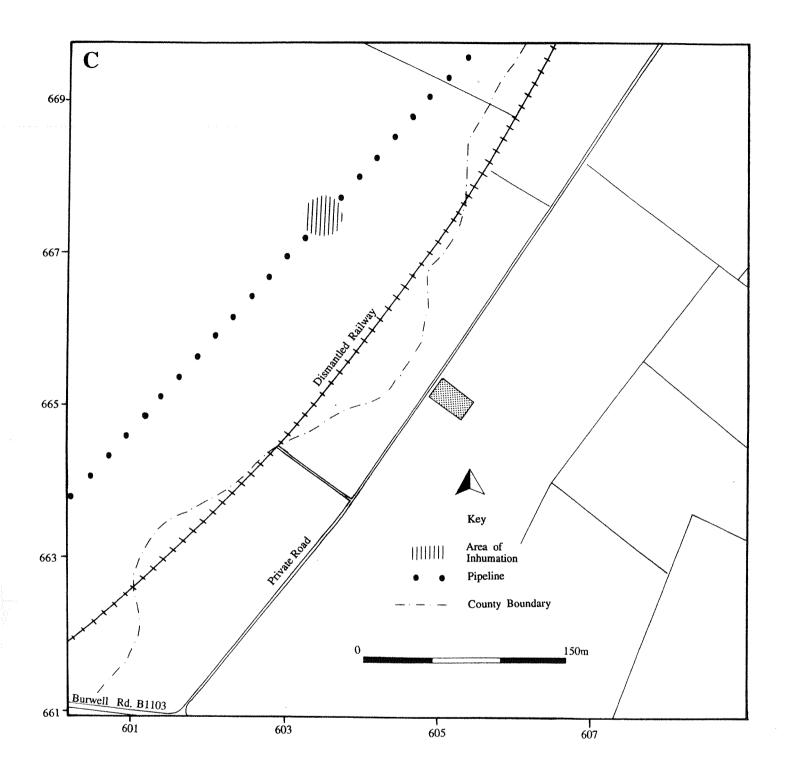
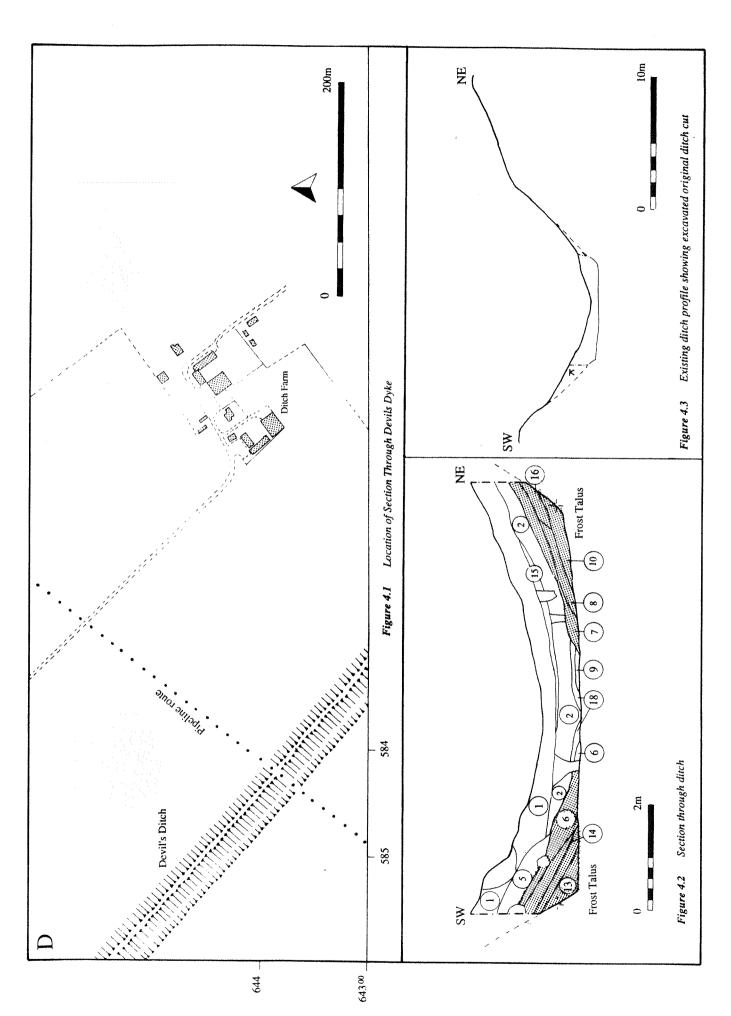


Figure 3 Location of Human Inhumation



11

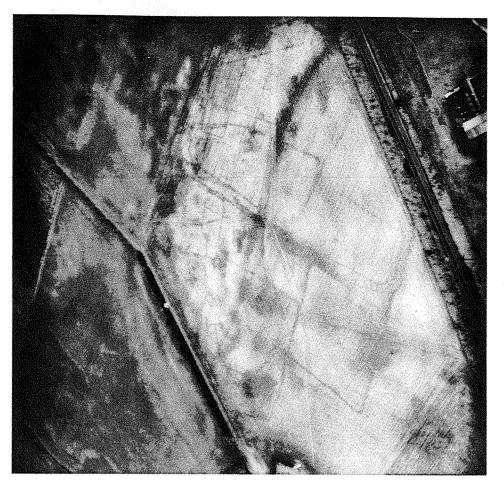


Plate 2 Aerial Photograph (BLS 44) showing Iron Age settlment at Caudle Corner Farm (SAM 95), from the south-west.



Plate I Aerial Photograph (BLS 42) showing Iron Age settlment at Caudle Corner Farm (SAM 95), from the south.

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APPENDIX A

SKELETAL MATERIAL FROM BURWELL (CWC PIPELINE)

By Corinne Duhig

The remains are those of one individual, represented by part of the skull vault, most of the mandible, portions of all long bones, and a few fragments of the axial skeleton. For purposes of sexing, although very little of the pelvis was recovered, the features which could be assessed on the skull are all those of a male individual, and the bones are also extremely robust. Dental attrition is slight, conforming to Brothwell's (1972) Stage 1, giving an age range of approximately 17–25 years.

No pathological conditions were found on the bones. However, the femora and tibiae were, respectively, platymeric and platycnemic (having shafts abnormally flattened). Certain muscular markings were exceptionally pronounced: the insertions of the muscles gluteus maximus and adductor magnus on the femora and sartorius, gracilis and semitendinosus on the tibiae. Considering these muscles together, their common actions are as thigh adductors and rotators, and as supporters of the trunk, so that they would be used in actions such as horse riding or otherwise maintaining balance whilst sitting astride. Given the pronounced origin of brachialis, a forearm flexor, on the right humerus, an occupation such as thatching or reed-cutting is tentatively suggested, although the absence of any dating or context for this skeleton prevents further research or speculation.

REFERENCES

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max

INVENTORY

Metacarpals/metatarsals

Cranium frontal: supraorbital area and trigons; both petrous; L F; 24 vault Fs Mandible L body/ramus; R ramus Teeth R max: L max: R mand: L mand: 2345678 Left clavicle sh/dist glen/cora C2-5; T x 2; T/L body Right scapula Vertebrae Ribs Fs $\times 5$ Innominates ilium Fs x 2 Sacrum Fx1 Left humerus head + sh/dist prox/sh Right humerus Left ulna complete (x 2) Right ulna sh/dist (x 2) Left radius dist Right radius dist Left femur prox/sh (x 2) Right femur almost complete (x 3) Left tibia complete Right tibia dist + sh F Left fibula prox + sh tube (x 3)Right fibula dist Left tarsals calc Right metatarsals mt5

mt shaft

Devils Dyke

	ŭ		
Ctx. No.	Colour	Nature	Comments
1	Very dark grey/brown	Loose silty chalk	Topsoil
2	Light red brown	Loose silty chalk	Deep layer across most of ditch, roots and burrows. 2 animal bones, tile, pot, 20th century shotgun shells
3	Light red brown	Moderately compact silt with occasional chalk	Silt at west end
4	Dark brown	Moderately compact silt with frequent silt	Silt at west end. under 3, over 5, over 2
5	Light red brown	with chalk lumps up to 3cm dia.	Silt at west end, under 4, over 6; 1 tile frag, 1 stone (volcanic?)
6	Light red brown	Compact silty chalk	Hard chalky rubble layer at west end, initial frost-talus
7	Light yellow brown	Soft/compact silt	Roots and burrows at east end under 2,3,4; over 8; animal bones, potsherd, 20th century bottle glass?
8	Light yellow brown	Compact silt with chalk fragments	Chalky layer at east end; frost-talus; 1 unidentified iron object; 1 unidentified small potsherd
9	Light grey	Very hard silt with large chalk rubble	Thin layer frost fractured chalk on bottom/centre of ditch
10	Pale brown	Loose chalky silty rubble	rubble layer at east end over 9
11	Light yellow brown	Compact silty	West end, over 9, 12, under 6, 14
12	White	Compact silt with frequent chalk flecks	Frost-talus at west end, thin chalk plates and angular blocks
13	Light grey	Compact silty	Frost-talus, chalk plates and blocks at west end
14	Pale brown	Compact silty chalk	Frost-talus at west end, under 6, over 13 and 17
15	Light red brown	Very loose silty chalk	Over 2 in centre
16	Light yellow brown	Loose sandy silt with chalk frags	
17	Light brown/grey	Loose silty chalk blocks	Pocket of rubble over 13 at west end
18	Light yellow brown	Loose silty chalk, occasional chalk lumps	Below 2, over 9 and 7 in centre
[19]		Cut of ditch	Flat bottomed, 7.5m wide, lower sides at 60 degrees from horizontal, width at present ground surface 18m (overall present angle of ditch sides 45-48 degrees from horizontal)

Caudle Corner Farm

Ctx. Colour No. Light grey Loose silty clay, occasional chalk stones and flecks Mid brown Loose silty chalk Compact chalky silt Cut of ditch Dark brown Compact chalky Mid grey/white Cout of ditch Mid grey/white Cut of ditch The bottomed, 1m wide at top of ditch, 0.85m at base, aligned nor west/south-east small fragment of clay pipe stem silt Cut of ditch "V" shaped, steep sided, 1m wide at top of feature, aligned nw/se Electricity cable at base of trench (low voltage?) Flat bottomed, straight-sided, 0.80m deep, sealed by ploughsoil cable trench					
Light grey Loose silty clay, occasional chalk stones and flecks Mid brown Dark grey/brown Loose silty chalk Compact chalky silt Cut of ditch Dark brown Compact chalky silt Cut of ditch Mid grey/white Loose silt chalk rubble Cut electricity Loose silty clay, occasional chalk stones and flecks Loose silty chalk Plough mixed natural, 10-15cm deep 2 small potsherd of abraded post-medieval pottery silt Cut of ditch Flat bottomed, 1m wide at top of ditch, 0.85m at base, aligned nort west/south-east 1 small fragment of clay pipe stem "V" shaped, steep sided, 1m wide at top of feature, aligned nw/se Electricity cable at base of trench (low voltage?) Flat bottomed, straight-sided, 0.80m deep, sealed by ploughsoil		Colour	Nature	Comments	
Mid brown Dark grey/brown Dark bottomed, 1m wide at top of feature, aligned nw/se Dark brown Dark grey/brown Dark grey	1	Light grey	occasional chalk	Ploughsoil, 30cm deep	
Dark grey/brown Compact chalky silt Cut of ditch Dark brown Compact chalky silt Cut of ditch Compact chalky silt Cut of ditch Compact chalky silt Cut of ditch Cut o	2	Mid brown		Plough mixed natural, 10-15cm deep	
5 Dark brown Compact chalky silt Cut of ditch The disconnect chalky silt Cut of ditch Cut of ditch The disconnect chalky silt Cut of ditch Cut of ditch Loose silt chalk rubble Cut electricity Flat bottomed, straight-sided, 0.80m deep, sealed by ploughsoil	3		Compact chalky	2 small potsherd of abraded post-medieval pottery	
silt Cut of ditch The discharge of the control of t	[4]		Cut of ditch	west/south-east	ed north-
7 Mid grey/white Loose silt chalk Electricity cable at base of trench (low voltage?) rubble [8] Cut electricity Flat bottomed, straight-sided, 0.80m deep, sealed by ploughsoil	5	Dark brown			
7 Mid grey/white Loose silt chalk Electricity cable at base of trench (low voltage?) rubble [8] Cut electricity Flat bottomed, straight-sided, 0.80m deep, sealed by ploughsoil	[6]		Cut of ditch	"V" shaped, steep sided, 1m wide at top of feature, aligned nw.	/se
[8] Cut electricity Flat bottomed, straight-sided, 0.80m deep, sealed by ploughsoil	7	Mid grey/white	rubble		
	[8]		Cut electricity	Flat bottomed, straight-sided, 0.80m deep, sealed by ploughso	oil

APPENDIX C

GLOSSARY OF ARCHAEOLOGICAL TERMS

Anglo-Saxon The period dating between the withdrawal of the Roman legions in 410 and the Norman invasion of 1066. Within this period several ethnic groups from northern Europe vied for control of the British Isles, including the Angles, Saxons, Jutes, Danes, and Norwegians. The latter two groups are collectively known as the Vikings and became involved in British politics from the eighth century, later than the others. The Vikings were successful in occupying a large part of the north and Midlands of England, before providing a King (Cnut) for the whole of England. For most of this time England was divided up into several kingdoms until Saxon resistance to Viking incursions led to the unification of England under Aethelstan and Alfred.

Artefact Any object made by people. Generally, this word is used for finds such as pottery, stone tools, or metal objects, but it can be used in a much wider context in that the landscape we have today is a product of human activity and is thus an artefact itself.

Bronze Age Prehistoric period c. 2000 - 700 BC when bronze was used for many types of tools and weapons.

Contracted/Crouched Burial A burial of the body with the limbs tightly flexed in a 'foetal' position, commonly used in the Bronze Age. It can save labour in grave digging as it takes up less space.

Cropmarks Archaeological features below the ploughsoil can affect the growth of sensitive crops through moisture retention or loss. For example, the growth of cereal crops over buried ditches or pits will encourage rapid growth leading to tall, dark coloured plants, whereas walls and roads will lead to stunting and faster yellowing of the crop. These discrepancies in crop growth can be easily detected from the air, and by taking photographs the cropmark patterns can be plotted onto maps and given provisional interpretation.

Enclosures An area defined by a continuous surrounding ditch. These may be enclosures around human settlements, fields, or paddocks for stock. Rectilinear enclosures are ones with straight sides and corners, whilst curvilinear enclosures are ones with rounded sides.

Fieldwalking Technique of archaeological survey. Walking over ploughed and weathered soil, an experienced observer can collect many ancient artefacts, and by plotting the distribution of such find spots on maps an idea of the use of the landscape can be built up for each period of the past.

Geophysical Survey Investigation of changes occurring in the magnetic and electrical characteristics of the soil, which can often be induced by human activity.

Iron Age Prehistoric period c. 700 BC - AD 43 when iron was used extensively for tools and weapons. The period traditionally ends with the Roman invasions of AD 43 but in fact there was a considerable time of adjustment after this date when the Iron Age way of life continued with little change from Roman influence.

Medieval Historic period that begins with William the Conqueror's invasion in 1066. Post-Medieval is generally considered to date from 1500.

Modern The period since modern industrialisation, roughly corresponding to 1800 onwards.

Natural The local subsoil that is unaltered, in nature and location, by human action.

Palaeosol A preserved soil which does not owe its origin to the existing land surface.

Penannular In the form of a complete circle, except for a single break in the ring.

Pit alignment A line of pits, usually dated to the Iron Age or Roman period. They are thought to be a native means of boundary marking. The pits do not often have rubbish in them and so are not thought to be rubbish pits.

Posthole A hole dug to receive a post. They can also result from driving posts into the ground. The latter, however, do not have distinct fills such as packing and a post pipe. A post pipe is the fill of a posthole which formed in the place of a removed post.

Post-Medieval This period is generally considered to date from 1500, and is not used for dates after about 1800.

Ridge and Furrow Medieval cultivation techniques led to a phenomenon of corrugated fields. Strips of land were allotted to individuals and a furrow was left between one person's strip and the next, leading to a corrugated ridge and furrow effect. Ridge and furrow shows up as cropmarks on air photographs and more rarely as earthworks in pasture fields.

Ring-ditch A continuous circular ditch which is all that remains of a ploughed out round barrow, or the drainage ditch (eavesdrip gully) that surrounded a round-house.

Roman Historic period AD 43 - 410 when much of Britain was part of the Roman empire. The term Romano-British is now widely used to describe the people of this period, as few were Roman themselves, but they were a provincial manifestation of the empire developing in a unique way. AD 410 was the date the legions were withdrawn, but the Romano-British culture continued for some time into the 5th century in tandem with Anglo-Saxon migration.

Round barrow A Bronze Age burial mound formed by heaping up earth over a central burial. They have several forms, including numbers of encircling ditches and can have many burials in them. The first burial is known as the primary burial, subsequent ones are referred to as secondary burials. It has been suggested that these burial mounds are a way of marking tribal territories, and they are often placed in prominent locations. They can occur in clusters known as 'barrow cemeteries'.

SMR (Sites and Monuments Record) This is a computer and mapped database of all known archaeological site and find spots, currently over 12,000, within the County. This information is available to archaeologists and members of the public involved in research. The database also provides planning guidance to developers and the local government planning offices.

SAM (Scheduled Ancient Monument) An archaeological site deemed of sufficient national importance to have legal protection. Any work on these sites require Scheduled Ancient Monument consent from the Secretary of State.

Stratigraphy Order and relative position of strata. Deposits in archaeological sites will be layered one on top of another, with the highest layer being the latest being the latest deposits, thus giving a chronological relationship to the layers and the artefacts within them. Features (such as ditches, pits, or walls) cut through these layers will obviously date to later events, and will in turn contain their own discrete sequence of deposits. On the other hand features that have been covered by layers are obviously earlier than the deposition of those layers that seal them.

Terminus ante quem, terminus post quem Archaeological dating is rarely exact, but will frequently show that something cannot be later than, or earlier than, something else. Datable material accumulated in use on a floor by the law of Stratigraphy gives a terminus ante quem for that floor, which cannot have been inserted beneath the material after it was deposited. Material sealed beneath a floor gives a terminus post quem for that floor, since it cannot have got there after the floor was laid.





