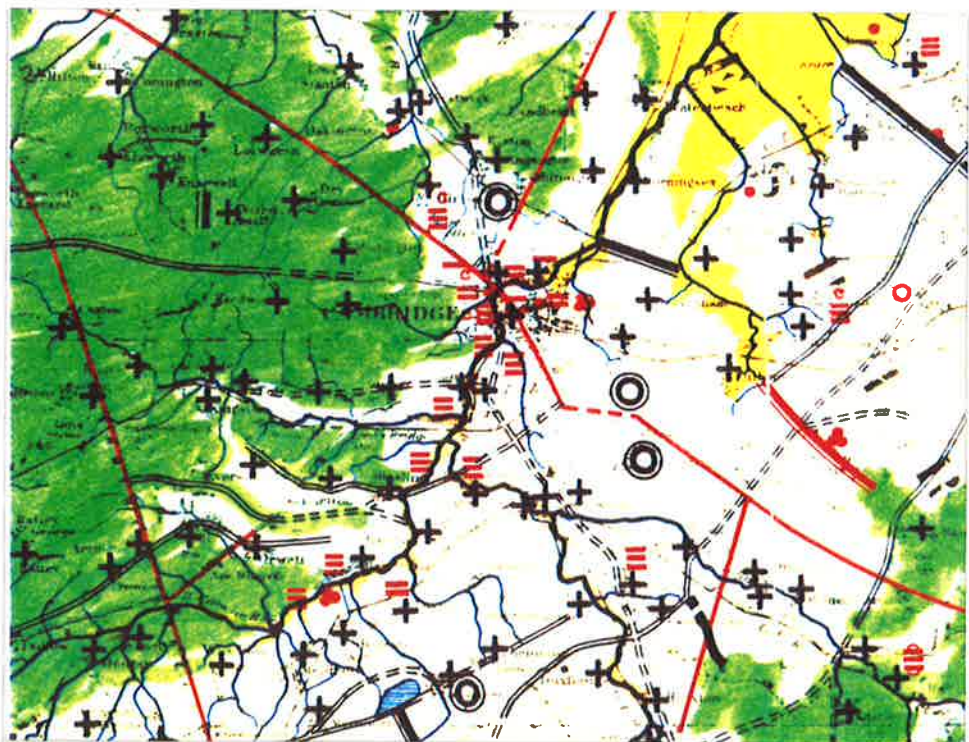


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# A45(T) Cambridge Northern Relief Road



Cambridgeshire  
County Council  
Rural Strategy

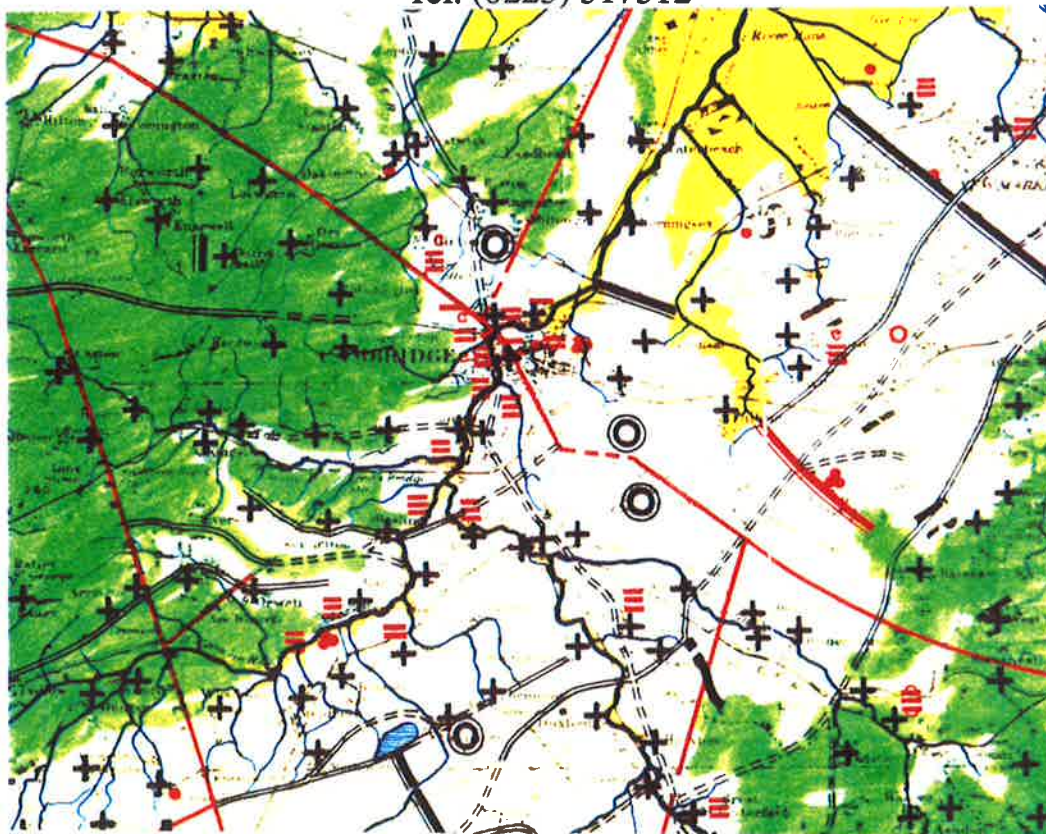
# A45(T) Cambridge Northern Relief Road

- an Archaeological Desk-Top Assessment

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July 1992

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Report no. 61 *Anglo-Saxon Finds in Cambridgeshire. From Fox, 1923, The Archaeology of the Cambridge Region.*

✚ = Domesday Settlements

— = Roman Roads

⊙ = Ring-Works





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## Summary

An archaeological desk-top study has been carried out along the route of the Cambridge Northern by-pass (A45) in order to assess the possible impact of road-widening proposals on the archaeological resource.

The report contains detailed archaeological and historical information. The collected data has been used to draw up detailed recommendations for future action in advance of road construction, and in some cases in advance of detailed design proposals. Sites highlighted for preservation should be protected from all construction works.

Figs 5 & 6 details the constraint areas showing archaeological sites which will require preservation or evaluation based on information recorded in the Cambridgeshire Sites and Monuments Record.

## Introduction

The purpose of this assessment is to define the likely impacts of the widening proposals for the A45 north of Cambridge on the archaeological resource, and to recognise the quantity and quality of the archaeological resource. The need for other investigative techniques in advance of road works is recognised.

The route of the A45(T) skirts the north of Cambridge, separating the villages of Girton, Histon, Impington and Milton from the urban and residential centres of Cambridge and Chesterton (see fig 1).

A full appraisal of this resource is recommended according to national and local guidelines for archaeology . This has led to the definition of an area within which environmental impacts are to be recognised (figs. 3 & 4).

Analysis of the archaeological resource draws on information from the County Sites and Monuments Record (SMR), recent archaeological work and secondary historical documentation.

The report is divided into two sections. "Background Information" covers the geological framework, and the historical and archaeological background. The "Archaeological Implications" contains recommendations for the protection and analysis of the archaeological remains.

This work has been commissioned by Travis Morgan on behalf of the Department of Transport.



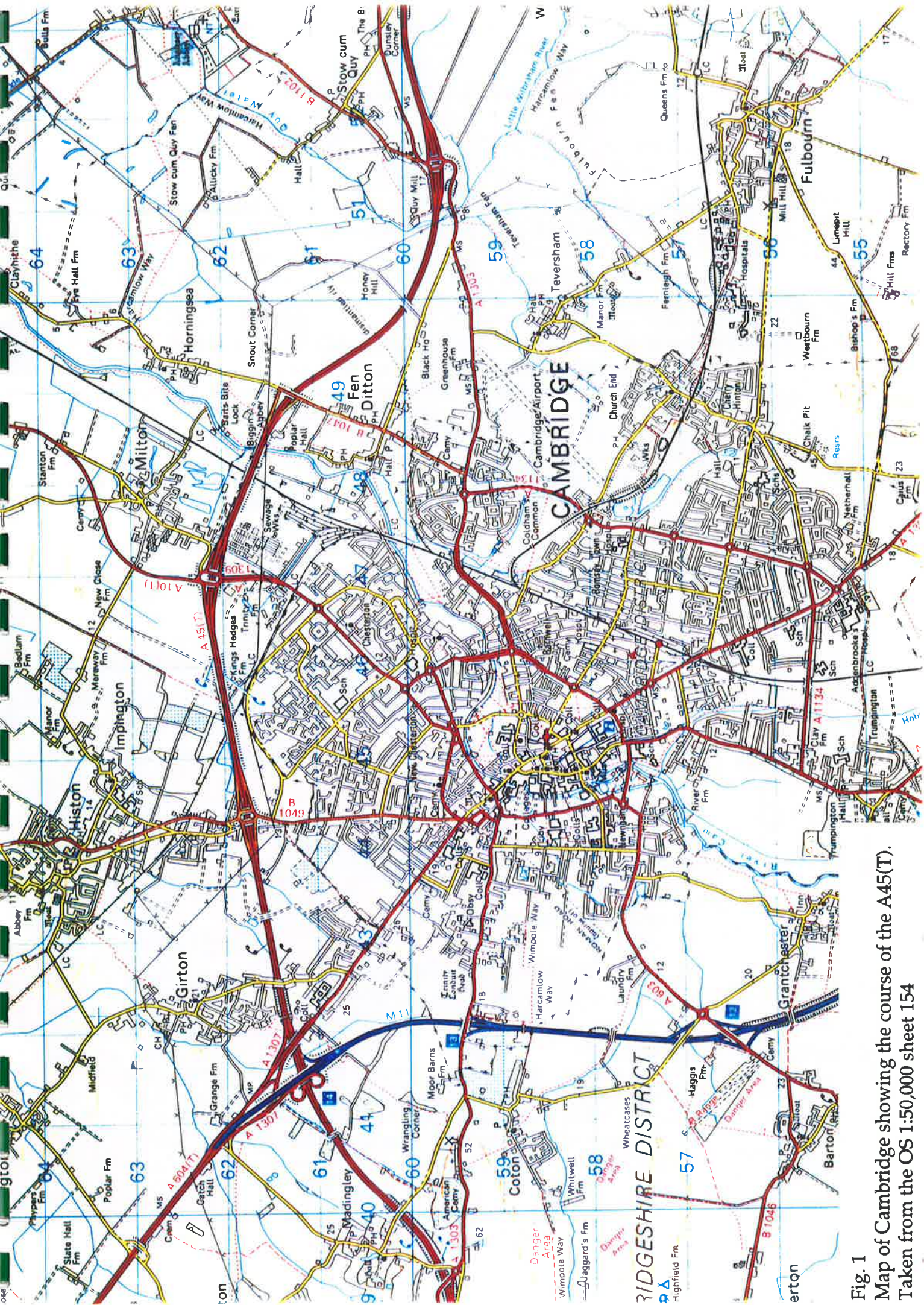


Fig. 1  
 Map of Cambridge showing the course of the A45(T).  
 Taken from the OS 1:50,000 sheet 154



## Background Information

### 1.0. Sources

- 1.0.1 The archaeological documentation consulted in this analysis is based on the SMR held by Cambridgeshire County Council at Shire Hall, Cambridge. Published excavation reports have also been consulted to provide a more detailed understanding of the archaeological resource.
- 1.0.2 Secondary sources include the Victoria County Histories for Cambridgeshire and the Isle of Ely (VCH), The Royal Commission of Historic Monuments for England's (RCHM) inventory of historic monuments in Cambridgeshire, The Proceedings for the Cambridge Antiquarian Society and various parish surveys. The County Records Office archives held at Shire Hall, Cambridge, were accessed for cartographic (Tithe, Enclosure and Estate maps) and other relevant documentation.
- 1.0.3 Geological, and topographical information was gathered from the 1:50,000 series geological map (British Geological Survey (BGS) Sheet 188) supplemented by the aforementioned publications and a report by the Institute of Geological Sciences (BGS) detailing the sand and gravel resources for the Cambridge area (Dixon 1980).
- 1.0.4 This information has been supplemented by a rapid field survey assessing present land use, the field conditions of specific archaeological remains (Biggin Abbey and Mere Way), and their state of preservation.
- 1.0.5 The timing of this assessment precluded any systematic field survey of the archaeological remains. The crops were too advanced for field walking.

### 1.1. Geological and Topographical Background

- 1.1.1 The 1:50,000 geological map (BGS sheet 188 fig 2) shows the major geological layers in the area. These consist of Cretaceous gault, lower chalk, and Quaternary deposits including head, terrace gravel and alluvium.
- 1.1.2 The solid geology is shown to dip to the south-east with the gault exposed to the north and west of Cambridge, and the lower chalk to the north-east and east. Occasional outliers of the lower chalk can be found to the north and west of Cambridge. The Gault is overlain in many areas by the Quaternary deposits.



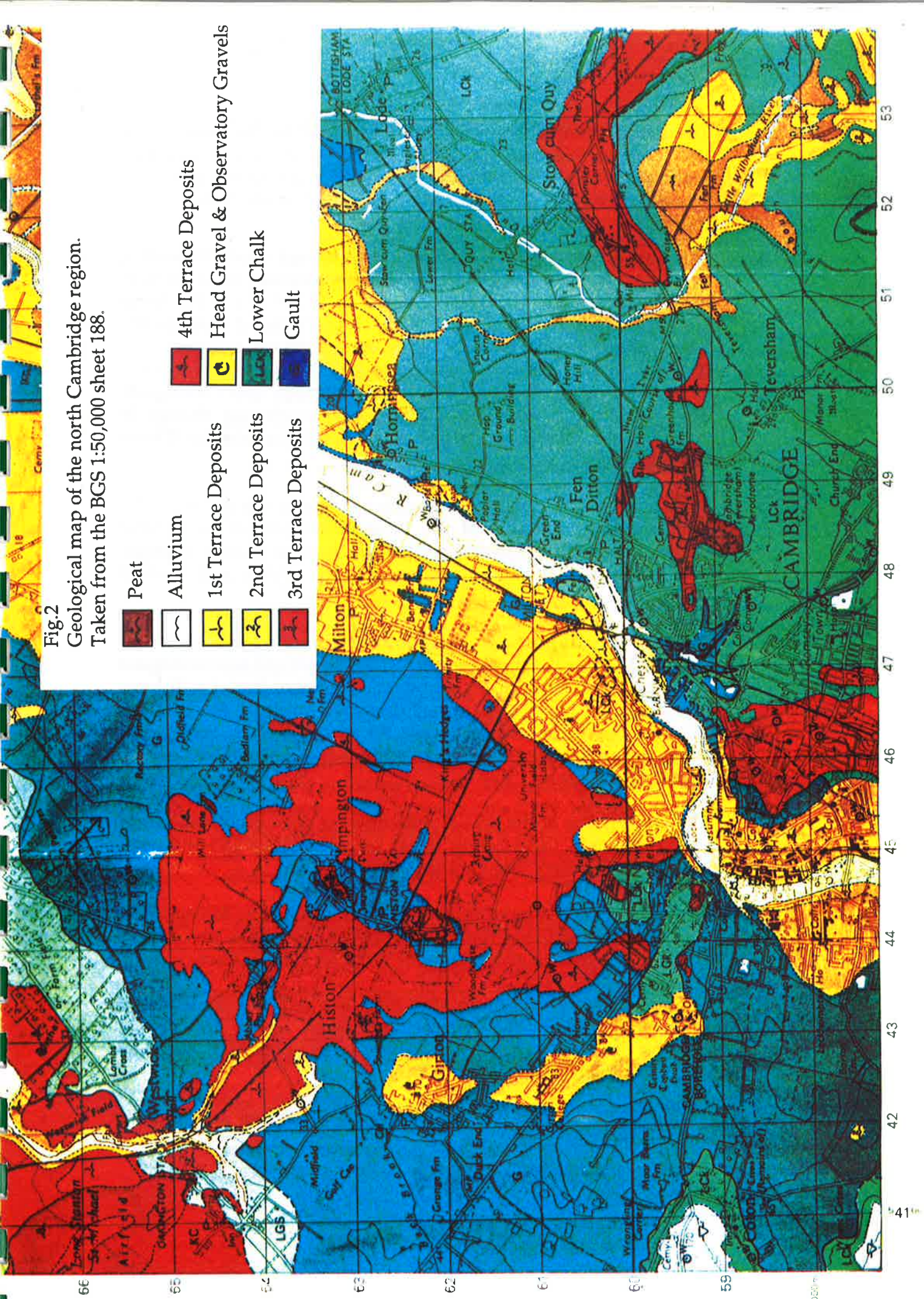


Fig.2  
 Geological map of the north Cambridge region.  
 Taken from the BGS 1:50,000 sheet 188.

- |  |                      |  |                                   |
|--|----------------------|--|-----------------------------------|
|  | Peat                 |  | 4th Terrace Deposits              |
|  | Alluvium             |  | Head Gravel & Observatory Gravels |
|  | 1st Terrace Deposits |  | Lower Chalk                       |
|  | 2nd Terrace Deposits |  | Gault                             |
|  | 3rd Terrace Deposits |  |                                   |



- 1.1.3 The present outcrops are heavily influenced by the presence of the Anglian Icesheet, initially eroding and then depositing material (boulder clay) across the region. The Observatory beds (gravels), exposed at Girton, were deposited towards the end of this period of glaciation (Dixon 1980).
- 1.1.4 At Histon, Impington and Milton, river terrace deposits relating to an earlier Cam and Ouse river system survive. Four terraces have been described. Terrace 1 dated to  $19,500 \pm 650$  B.P lying along the course of the present River Cam; Terrace 2 dated to the Late Ipswichian/Devensian at Milton; Terrace 3 Ipswichian deposits located between Cambridge and Willingham; Terrace 4 early Ipswichian (?) found between Cambridge and Oakington. This reflects a progressive north-west to north-east change in course of the River Cam following the Anglian glaciation (Dixon 1980).
- 1.1.5 The dating of these terrace formations indicates the potential for archaeological remains of the Palaeolithic period to survive within the corridor. However the fluvial nature of such deposits may suggest that these remains will lie within a disturbed context.
- 1.1.6 Alluvium dating to the Romano-British marine transgression (Searle 1975) will almost certainly have preserved archaeological remains intact beneath the alluvium. The act of burial will have preserved archaeological material out of reach of the modern plough; the alluvium also masks the traces of such occupation from the archaeologist using reconnaissance techniques such as aerial photography.
- 1.1.7 The topography of the area is generally flat with occasional areas of higher land. Land height varies between 23.8m OD at Girton to 3.4m OD at Baits Bite Lock on the River Cam.
- 1.1.8 The VCH (1989) describes the parishes of Girton, Milton, and Chesterton as virtually flat. Stow-Cum-Quy lies on a low area of chalk which rises to about 15m OD to the east of the Cam.
- 1.1.9 A limited field excursion in May 1992 showed that the majority of the land within the corridor was under arable. Occasional areas of rough and improved pasture were observed. Areas of disturbed lands were also noted.
- 1.1.10 The VCH (1989) lists arable and market gardening as the main agricultural activities of the area.

## 1.2 Historical and Archaeological Framework

1.2.0 The following information has been taken from a number of secondary sources written in the last century this is designed to provide background and contextual information for the development of the parishes and the archaeological resources. This should not be seen as a definitive history, in many cases the evidence needs revision in light of recent discoveries.

### 1.2.1 *Girton*

1.2.1.1 The earliest evidence of human activity consists of Lower Palaeolithic artefacts found within Observatory beds (VCH 1989). This material is unlikely to part of an occupation centre due to the fluvial nature of the deposit, though occupation is likely to have occurred along the river terraces. Excavation of similar cultural material within Britain shows that occupation (though probably on a seasonal migratory basis) in the region may extend back as far as 200,000 yrs before present.

1.2.1.2 Barrows and the enclosed fields dated to the Bronze Age and Iron Age finds from Girton suggests that the area was at least utilised during the Prehistoric period. Iron Age and Roman pottery and a burial were discovered during excavations at SMR 05720 (Croft 1977) in advance of road construction. The closest complex Iron age remains can be found at Arbury. It is likely that these Iron Age people lived in scattered rural settlements which have not yet been traced by archaeologists working in the area.

1.2.1.3 The Roman period is better represented with evidence for settlement at Girton college. This settlement was associated with a cemetery dated between the C2<sup>nd</sup> AD and the early Anglo-Saxon period. The size and time span of the cemetery along with its location may suggest a much larger settlement than the present evidence records existing along side the Roman road.

1.2.1.4 The post-Roman period is represented by a number of early (Pagan) Saxon graves at Girton College. Bashford and Bolgar (1959) suggest the presence of a substantial Anglo-Saxon settlement on this site. Few other traces for the Anglo-Saxons have been found at Girton College or on the gravels where the present settlement is located. The Anglo-Saxon name for Girton is Greetton interpreted as meaning a settlement on the gravels.

1.2.1.5 The VCH (1989) suggests that Girton suffered mixed fortunes during the Medieval period. The population rose during the early Medieval period, drastically shrinking in the later middle ages. The population increased up to the early C17<sup>th</sup>, declining by 1650. At the time of the Poll Tax of 1377, 196 adults paid; in the reign of Charles II (1660-1685) the population numbered 111 adults in 40 dwellings. In 1811 there were 30 houses occupied by 47 families.



- 1.2.1.6 Sheep rearing was profitable during the C16<sup>th</sup> and C17<sup>th</sup>, many woods were cut down to make pasture (Bashford and Bolgar 1959). By the late C19<sup>th</sup> the surrounding lands were devoted mainly to arable with only 253 acres of meadow and pasture and no common land following enclosure (VCH 1989).
- 1.2.1.7 The 1808 plan of the parish of Girton (CRO QRD C.17) shows the land within the study area as allotments held by Sir Vincent Cotton, Clare Hall, and the Girton Charity.
- 1.2.1.8 The hamlet of Howes, within the parish, is recorded from C13<sup>th</sup>. The village was located along the Roman road running between Godmanchester and Cambridge. By the 1800's only 1 or 2 dwellings remained (VCH 1989). The locations of these cottages and gardens are shown on the parish map of 1808 (CRO QRD C.17).
- 1.2.2 *Histon and Impington*
- 1.2.2.1 No significant sites dated before the C11<sup>th</sup> have been recognised within the parishes of Histon and Impington. Though the eastern boundary of the parish Impington is marked by Mere Way, a Roman road (CRO Q/RD C.3 1806 enclosure map), no associated remains have yet been discovered.
- 1.2.2.2 During the Medieval period Histon was divided into two parishes. The parish churches St.Etheldreda's and St. Andrew's were merged in the C17<sup>th</sup> (VCH 1989 p 90).
- 1.2.2.3 The parish of Histon had close ties with Impington during the middle ages. From the C13<sup>th</sup> much of the land in the Impington township was held by Histon manor. The parishes were enclosed at the same time in 1806 when the parish boundary appears to have been re-organised.
- 1.2.2.4 Histon is one of a string of villages lying along the main Medieval route between Cambridge and Ely. The village, probably laid out by the C11<sup>th</sup>, appears to have had two early foci, lying to the south of the present High St. and at Church End. In the early Medieval period Histon was one of the largest villages in the county with 103 Poll Tax payers in 1327. The numbers appear to have been much reduced by the Black Death (VCH 1989).
- 1.2.2.5 Impington remained small in size until the C19<sup>th</sup>, and has now been largely subsumed by the growth of its neighbour, Histon. In 1086 the village had 24 families. There were 45 land holders by 1279, and in 1377 there were 57 inhabitants compared to Girton's 196 (VCH 1989). The Medieval village is presumably located near to the church (VCH 1989) where substantial Medieval earthworks survive. The lands of the parish were enclosed in 1806. These were almost entirely arable by the C19<sup>th</sup>. Though a

small park was located on the eastern side of the village. (CRO Q/RD C.8)

### 1.2.3 *Milton*

1.2.3.1 Prehistoric sites in the parish of Milton are presently unknown. Humphries sees stone age people as utilising the landscape, only with the arrival of the Romans did permanent settlement occur (1962).

1.2.3.2 The earliest recognisable archaeological evidence in Milton is of Roman date. A Romano-British settlement was situated on the river margins of the Cam. It has been suggested that the Roman road went out of use early on, with the river and Car Dyke maintaining a position as the prime means of communication for the region (Humphries 1962). Clay (1869) saw the use of this road route extending into the late Post-Medieval period. Humphries recognised Romano-British Milton as an important centre because for its local clay deposits and convenient meadows for sheep farming.

1.2.3.3 The name of Milton stems from the Anglo-Saxon name of Middel-tun meaning middle place or place amidst the marshes. Few Saxon remains have been found in Milton. The monks of Ely recorded the continuation of settlement in the area post-conquest.

1.2.3.4 The Medieval village of Milton is at the centre of the ancient parish on the Cambridge to Ely turnpike Rd. (1763-1874). The straight western boundary to the parish follows the Roman Rd. of Mere Way / Akeman St. The road continued in use as track providing a toll-free route until the enclosure of Chesterton parish (Clay 1869).

1.2.3.5 146 adults paid poll tax in 1377 suggesting a village slightly smaller than Girton at this time. Many of the older houses of the village of Milton were destroyed during the fire of 1735 (VCH 1989)

1.2.3.6 The lands of Milton, enclosed 1802 were largely devoted to arable farming. The Milton fens were drained in the C17<sup>th</sup> opening up the area for agricultural expansion (VCH 1989). After 1800 market gardening and gravel quarrying became an increasingly important part of the village economy (VCH 1989), presumably supplying the 'populous' market town of Cambridge.

### 1.2.4 *Chesterton*

1.2.4.1 Chesterton has archaeological evidence dating back to the Palaeolithic and Bronze Age periods. Remains include the Iron Age ring works and the Romano-British settlements of Arbury as early occupation and activity centres. The VCH (1989) suggests Arbury camp was totally obliterated by the 1800's, an opinion



which has been proved wrong by recent excavations (C.Evans 1991)

- 1.2.4.2 In 1225 there were 190 people taxable. In more recent periods natural growth was augmented by immigration, 69 households in 1563, up to 105 dwellings by the reign of Charles II (1660-1685) compared with 40 dwellings with 111 people at Girton. By 1728 some 500-600 people lived in Chesterton. This has steadily increased through to the present day (VCH 1989). Evidence thus suggests that Chesterton has been a thriving centre since at least the late Medieval period.
- 1.2.4.3 Two hundred acres of the parish of Chesterton were covered in fen in 1567. Reduced to 47 ha. by 1637. (VCH 1989).
- 1.2.4.4 The plan of the parish of Chesterton CRO Q/RDc.59 (1939) shows that Mere Way was maintained as a track until at least 1840, and was largely used for access to the fields around Kings Hedges Farm. The Tithe and Apportionment map (1839) shows Mere way as a dashed line in places. This may suggest a gradual decline as the emphasis shifted to the Third Private Rd. The apportionment's for this map mark the northern fields of the parish of Chesterton as under arable cultivation.
- 1.2.5 *Horningsea*
- 1.2.5.1 Evidence for Romano-British occupation has been recorded within the parish spreading over an area of about 40 acres. Finds show that in addition to extensive pottery making activity a domestic settlement of considerable size is located here.
- 1.2.5.2 The Hundred Rolls of 1279 suggests the parish consisted of three settlements, Horningsea, Eye Hall and Clayhithe. Village earthwork remains of an earlier Medieval settlement can be found at Eye Hall. The present village of Horningsea is of a linear nature with the earlier buildings, including the church situated on the western side close to the river (RCHM 1972).
- 1.2.6 *Fen Ditton*
- 1.2.6.1 Fen Ditton is not mentioned in the Domesday book. This probably means that it formed part of a the parish of Horningsea. The boundary between Fen Ditton and Horningsea was not determined until 1412 (RCHM 1972).
- 1.2.6.2 Green End reflects the position of the earlier riverside settlement along the edge of the flood plain of the Cam. In the late Medieval period the focus of occupation shifted from the river side location to an east-west orientation along the line of Fleam Dyke (RCHM 1972).
- 1.2.6.3 Most of the common fields had been enclosed prior to the enclosure award of 1807.

### 1.2.7 *Stow Cum Quy*

- 1.2.7.1 Stow Cum Quy sees the union of two parishes. Stow the early centre is defined by the church and the manor of Engayne (D'Engayne's farm) lying on the gravel capped ridge. Quy is defined by the church lying close to the modern cross roads, situated on a low chalk ridge projecting into the fens (RCHM 1972).
- 1.2.7.2 The parish names were first associated in 1279, and the church of Quy fell into disuse in the later Medieval period (ibid.).
- 1.2.7.3 Both villages appear to have had primary streets running north-west to south-east but the increasing importance of the road linking the two villages lessened the emphasis of this alignment. In 1840 the old street was replaced and the linking road became the main street of the parish (ibid.).
- 1.2.7.4 The present park was established in the mid C18 around a late C16<sup>th</sup> mansion and was extended in the 1840's (CCC 1990). An earlier park existed to the north-west of the village.

## 1.3 **Archaeological Background**

- 1.3.0 The intense alluviation which occurred during the Romano-British period (Searle 1980) may have affected the visibility of the archaeological record, masking and preserving sites of all periods prior to the Medieval period.
- 1.3.1 *Palaeolithic & Mesolithic*
- 1.3.1.1 Only two find sites of this period are known from within the study area. A number of bifaces (handaxes) were discovered during gravel extraction at Chesterton. The VCH (1989) records the discovery of Palaeolithic artefacts at Girton. Although these may not be directly associated with occupation areas (in their primary context) there is the potential for further discoveries from the river gravels.
- 1.3.1.2. Of particular importance in this respect is the possibility of finding lower, middle & upper Palaeolithic artefacts along the earlier courses of the Cam. In many instances these sites are likely to be disturbed, but they may provide valuable environmental evidence. The later upper Palaeolithic and Mesolithic sites may offer greater potential for the recovery of cultural, economic and environmental information. These are less likely to have been affected by the major climatic fluctuations associated with the preceding glaciations. Such sites may lie concealed under the alluvium deposited by the Cam in succeeding periods.



1.3.2 *Neolithic*

1.3.2.1 Although the landscape would have been well favoured by these early farmers, there are no recorded Neolithic remains within the corridor. The lack of information may be a result of problems with site recognition, and confusion between Neolithic and Bronze Age flint stone artefact assemblages. Pockets of alluvium may also be masking sites of this period. The presumption must be that sites of this period await discovery.

1.3.3 *Bronze Age*

1.3.3.1 Recorded Bronze Age finds include a flint scatter on the south side of the low fen drove way (SMR 07812) and a Bronze Age arrowhead, discovered during excavations on the Arbury estate in 1975 (SMR 05527).

1.3.3.2 Site 07812 is more likely to represent a zone of industrial activity rather than settlement as there appears to be no traces of occupation debris. However such scatters may be suggestive of the proximity to settlement areas.

1.3.3.3 Documentary evidence suggests that a barrow lay adjacent to the Roman road. The barrow has been dated by association, and may be of Bronze Age date (SMR 05178).

1.3.4 *Iron Age*

1.3.4.1 Two Iron Age sites lie within the corridor. Iron Age pottery (SMR 08890) was found during gardening activities at Girton.

1.3.4.2 The buried remains of Arbury Camp, an Iron Age 'hill' fort (ringwork) situated on low lying land (12.50m OD) lie within the study area. This is a single ditched enclosure approximately 300m in diameter. The monument has been affected by the construction of the Histon road and the A45 and is still under plough. This monument is the most important site of this period in the study area and has been *recommended for scheduling* through the *Monument Protection Programme* sponsored by English Heritage.

1.3.4.3 Early work at Arbury camp was carried out by Prof. McKenny Hughes in 1904. In 1970 J. Alexander and D. Trump excavated eight trenches across the perimeter and a small proportion of the camp interior. Recently excavations have been carried out by the Cambridge Archaeological Unit (Evans 1991a). On the basis of these excavations Evans has suggested that the site was used as a fort-cum-stock enclosure. Little occupation/domestic refuse was discovered. Such an interpretation would not exclude other activities including gatherings, nor buildings being located within the enclosure, though no evidence has been found for either at the present time (ibid.).

1.3.4.4 Further excavations at Kings Hedges farm (Etté 1991) Trinity hall Fields (Evans 1991c) and the Gypsy and Unex lands (Evans 1991b) have shown that there is no Iron Age occupation directly to the east of Arbury camp. It is possible that an associated settlement was located at the present village of Girton and some of the undated cropmark enclosures may prove to be the remains for Iron Age farmsteads scattered throughout these low lying lands, on the hinterland between the fens and the chalk lands.

### 1.3.5 *Roman*

1.3.5.1 The large number of Romano-British sites known from the study area may be a bias on the part of earlier field workers in recognising sites and artefacts, as well Anglo-Saxon the nature of Roman sites which may included 'large scale' industrial activity.

1.3.5.2 Discoveries of building material at Girton College along the Roman road (SMR 05274), running between Godmanchester and Cambridge suggests the presence of a settlement with associated cemetery. This may suggest that the finds so far discovered lie on the fringes of this settlement. Documentary evidence suggests that a Roman barrow lay adjacent to the Romano-British road.

1.3.5.3 Cropmarks to the east of Impington are thought to indicate the presence of a Romano-British villa, the aerial photographic evidence has also been interpreted as showing recent seed beds.

1.3.5.4 A distinct spread of Romano-British finds was discovered during field walking and trial trenching at Arbury Camp in 1990 (Evans 1991a) suggesting that a significant Romano-British settlement may lay in the vicinity. The occupiers probably reused the Arbury Camp. A large number of such finds have been discovered immediately east of Cawcutt's Farm (C.Evans 1991a).

1.3.5.5 During the 1950's and 60's a series of rescue excavations were carried out by archaeologists during residential development in the Arbury area. The cropmark complex of SMR 05432 and SMR 05352 produced remains of buildings, burials and pottery. The site appears to extend northwards up to the A45 and Kings Hedges Farm where a single Romano-British cremation was discovered during trial trenching (Etté 1991).

1.3.5.6 The Roman road of Mere Way survives to the north of the Arbury estate as a green lane. Excavations along this road were carried out in advance of pipe laying activities (Ozanne 1992). The road appeared to be metalled and have flanking ditches. The present ditches however, are probably associated with its Medieval and Post-Medieval use.

1.3.5.7 Other known sites in the area include cropmarks associated with pottery (05308), a Romano-British kiln (05679), and a settlement site at the sewage farm, which was partially excavated in 1903

(SMR 05281). This complex to the south of Milton appears to have appears to have been affected by the construction of the A45 and gravel extraction. Three other settlements lie within the study area, two to the south of Horningsea (to the north and east of Biggin Abbey), and the another to the south west of Stow Cum Quy.

### 1.3.6 *Anglo-Saxon*

1.3.6.1 No settlement sites of this period have been found in the study area. Two cemeteries (Girton College and Fleam Dyke) indicate the existence of early settlements in the vicinity. Later Saxon settlements are likely to exist within later Medieval villages.

1.3.6.2 Fleam Dyke is one of several linear earth bank and ditches in Cambridgeshire 'traditionally' interpreted as a defensive work barring access to and from East Anglia but may represent more of a social rather than functional statement on the landscape.

### 1.3.7 *Medieval & Post-Medieval*

1.3.7.1 The location of the Medieval villages has been largely dealt with in the historical background. Only in the cases of Fen Ditton, Stow Cum Quy and the hamlet of Howes has there been any significant shift in foci or shrinkage and therefore the medieval remains are more (exposed) susceptible to the development threats of this particular road scheme.

1.3.7.2 The corridor is largely under arable cultivation. No traces of the recorded ridge and furrow (SMR 05611, 05612, 05468, 05471 & 06696) were observed during the field visits. It is therefore assumed that these traces of the Medieval field systems have already been lost from the archaeological record largely through ploughing and levelling of the land. A number of furlong boundaries existed to the west and south west of Stow. These have also been largely destroyed by ploughing.

1.3.7.3 The SMR records an oblong linear enclosure surviving as earthworks (05608). 1960's visits interpreted this as a series of hedge banks and ridge and furrow. This area was under plough and no earthwork remains exist today.

1.3.7.4 The remains of a former moated residence of the Bishops of Ely lie at Biggin Abbey (01095). Surviving buildings have been converted into a farm house. The buildings are presently surrounded by substantial earthworks. No access was afforded to the site to check on the nature of these earthworks. Surrounding the site is an extensive series of cropmarks (08327), thought to be associated with coprolite mining. The present earthworks bounding the house may be as the result of such extraction activities.



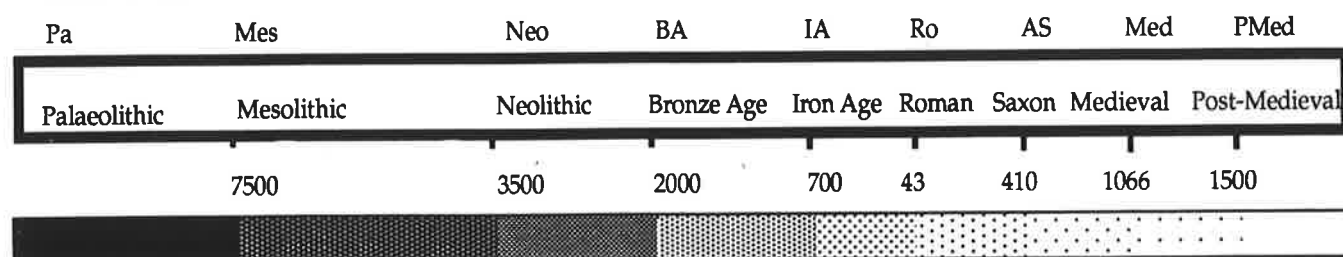
- 1.3.7.5 The SMR suggests that the rectilinear enclosures with hut sites shown on aerial photographs (09005) are of Medieval date. The area in question is under plough, and no earthwork remains survive.
- 1.3.7.6 The location of Quy church is still open to question, but is believed to be located west of Park Farm within the Post-Medieval deer park. The Medieval deer park at Quy was located further to the north west of the village.
- 1.3.7.7 The early village of Girton is likely to have been located near the church of St. Andrews. The church at Stow was also founded in the Medieval period close to the village, and altered during the Post-Medieval period.
- 1.3.7.8 The Post-Medieval remains within the study area include two windmills (05310 & 05171) and a watermill (06225). To the south of Horningsea lies a C19th kiln.
- 1.3.7.9 The Cambridge to Ely and the Cambridge to Huntingdon roads were maintained by a turn-pike trusts during the C19th.
- 1.3.7.10 Two farm houses dating to this period lie within the corridor. One is the much altered Medieval Biggin Abbey (*Grade II listed building*), the other is Poplar Hall (05489). A series of low circular conjoined mounds can be seen running from Poplar hall and south westwards towards the river. No access was gained to the land in order to assess the nature of these earthworks.
- 1.3.8 *Unknown*
- 1.3.8.1 A large number of undated cropmarks exist in the study area. It is likely that these will fill in details of settlement patterns for both Preh and Romano-British periods. This will probably have particular relevance to Iron Age settlements which are generally of a size and complex nature that can be recognised on aerial photographs. Sites consisting of a series of pits or post-holes may not be distinguished from the background noise of geological and small scale anthropogenic diggings of later periods. These may have been discriminated against by the level of analysis and recording of archaeological and aerial photographic technicians, and the quality of the data.

## 1.4 Detailed Archaeological Appraisal

- 1.4.1 Figures 3 & 4 show the locations of archaeological sites lying in the study area.
- 1.4.2 The SMR is a computer and map based database providing detailed information on known archaeological sites within a regional (County wide) context. 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.
- 1.4.3 The SMR is held at Shire Hall, Cambridge by Cambridgeshire County Council.
- 1.4.4 The data presented is based on currently available information, and therefore should not be seen as a definitive list of archaeological sites within the development corridor. Other sites of varying degrees of importance are likely to be discovered during further levels of archaeological evaluation. It is often through the disturbance of archaeological remains that they become observable to the archaeologist; ploughing is a common example.
- 1.4.5 The information contained in this record is only as accurate as the original source material whether the VCH, the RCHM Inventories, parish histories or excavation reports. Finds scatters with a six figure grid reference (based on a 1:10,000 map) should be seen as coming from an area of approximately 50m in radius centred on the indicated grid reference to give an appropriate scale of accuracy of information. A circle of the appropriate size has been used to indicate the location of the site on the maps prepared for this report.
- 1.4.6 The maps within this report contain coded information. The five figure number is the SMR primary number. The SMR number will be associated with the period code (see time chart).

### Timechart

#### Period Code



Time in calendar years

1.4.7 A colour coded circle or area is used to indicate the grid reference at which the archaeological remains were discovered:

Green	Earthworks and buildings
Blue	Finds Scatters
Black	Documentary evidence.
Orange	Cropmarks

1.4.8 Abbreviations

AP	Aerial Photograph
CAU	Cambridge Archaeological Unit
CCC	Cambridgeshire County Council
CUCAP	Cambridge University Committee on Aerial Photography
NMR	National Monuments Record
RAF	Royal Air Force
SMR	Sites and Monuments Record



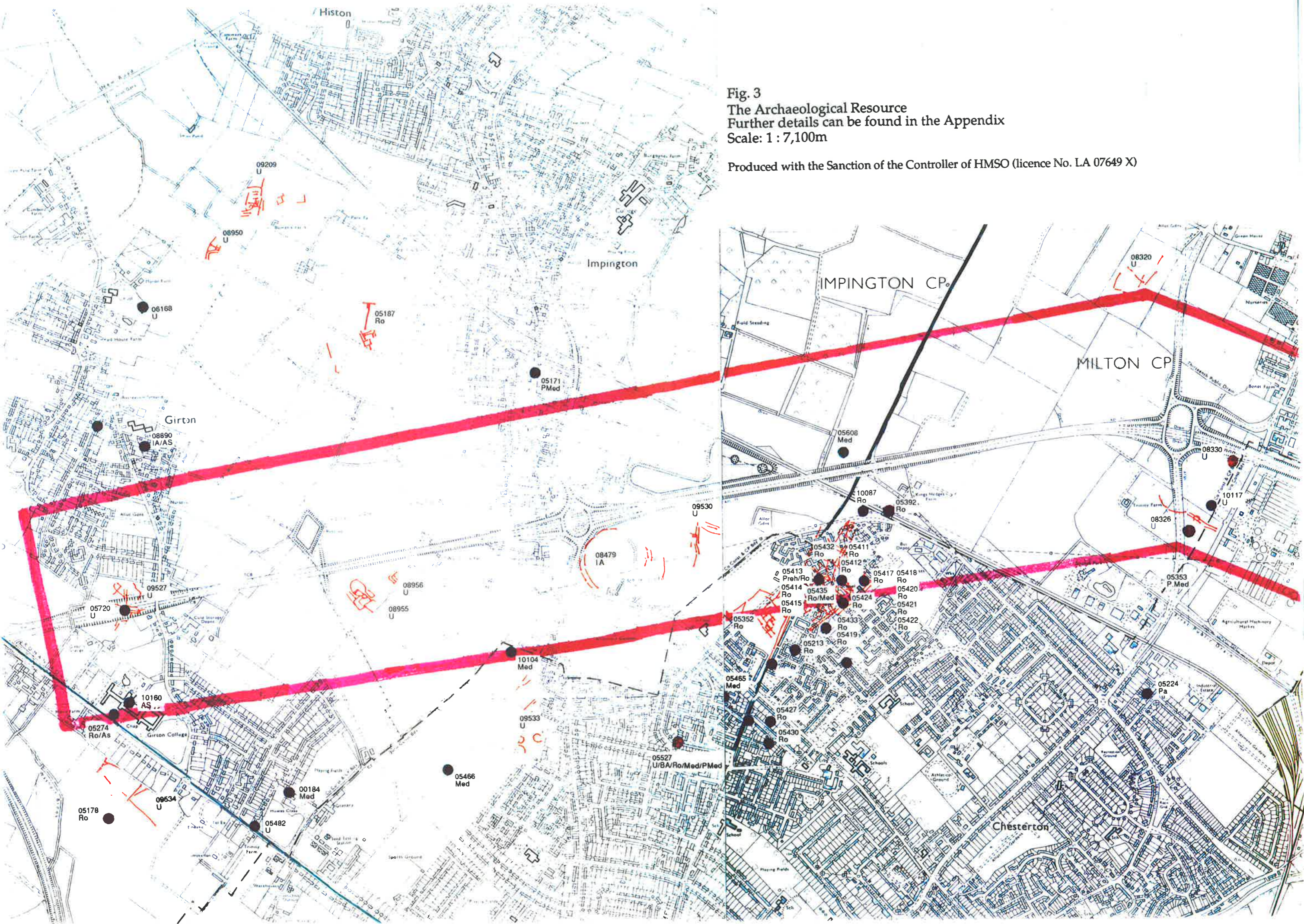


Fig. 3  
The Archaeological Resource  
Further details can be found in the Appendix  
Scale: 1 : 7,100m

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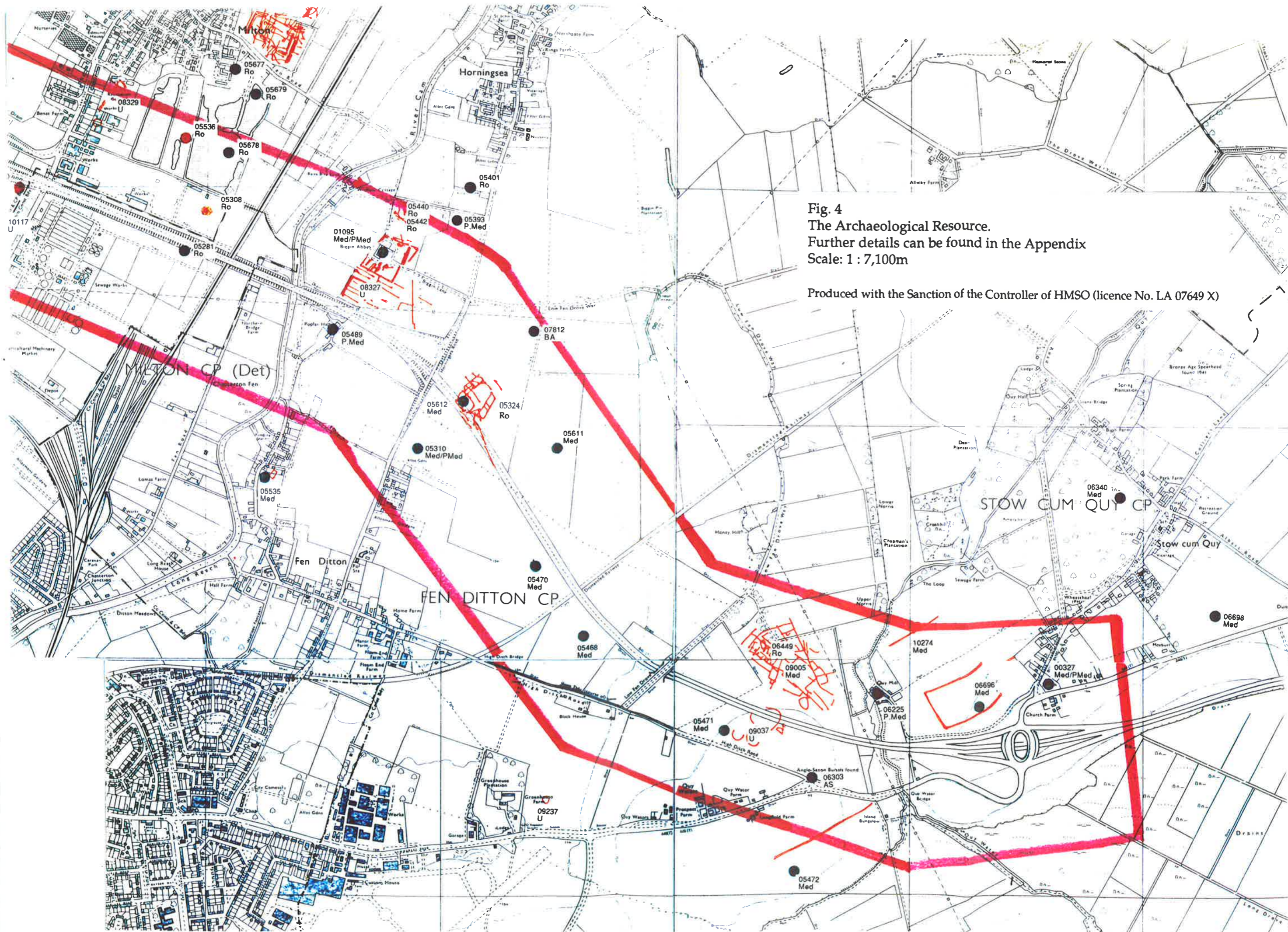


Fig. 4  
The Archaeological Resource.  
Further details can be found in the Appendix  
Scale: 1 : 7,100m

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## 1.5 Archaeological Gazetteer

SMR	NGR	Description	Evidence	Date
05306	423/623	St. Andrew's church.	Building	Medieval
05274	4234/6095	A large amount of building material including hypocaust and roof tiles excavated by FJH Jenkinson in 1881 suggests the presence of Roman buildings in this area.. Over 150 cremations and between 75 and 80 inhumations dated to the Anglo-Saxon period were discovered.	Excavation	Roman /Anglo-Saxon
10160	424/610	Anglo-Saxon cremation urns probably found at Girton College. If so these may be associated with the Anglo-Saxon cemetery at Girton SMR 05274.	Documentary	Anglo-Saxon
05720	424/614	Cropmarks shown on 1959 CUCAP AP. Consists of ring ditches and other features. Excavations in 1975 found flint flakes, Iron Age and Roman pottery. One burial was discovered in a Roman ? ditch.	Cropmark / Excavation	Unknown
09527	424/614	Cropmark track and enclosure on CUCAP AP 1959.	Cropmark	Unknown
09534	425/606	Linear and curvilinear features shown on 1971 CUCAP APs.	Cropmark	Unknown
08890	425/621	Iron Age pottery, Anglo-Saxon comb and spindle whorl found in 1990.	Finds Scatter	Iron Age /Anglo-Saxon
06168	425/627	Moat shown on 1814 Estate map CRO 124/P47.	Documentary	Unknown
08950	428/629	Double ditched enclosure on CUCAP APs 1977 and NMR 1979.	Cropmark	Unknown
09209	429/631	Part of enclosure complex shown on CUCAP AP 1977.	Cropmark	Unknown
05482	4295/6045	Howe house is located on the site of How House.	Documentary	Unknown
05178	4295/6046	A barrow adjacent to the Roman road at Howe House was destroyed during the construction of the present road.	Documentary	Roman
00184	431/606	Deserted Mediaeval Village of Howes.	Documentary	Medieval
08955	434/614	Curvilinear enclosure with trackway on NMR APs 1977.	Cropmark	Unknown
05187	435/626	Rectilinear enclosures on CUCAP AP 1962. VCH (1978 p.50) suggests that a Roman Villa may have existed here. More recent visits suggest that the rectilinear seed test beds may be showing on the APs.	Cropmark	Roman
08956	436/615	Doubled ditch feature, Enclosure ? on CUCAP APs 1977.	Cropmark	Unknown
05466	438/607	Ridge and furrow recorded in 1959.	Earthworks	Medieval
10104	441/612	Ridge and furrow.	Earthworks	Medieval
09533	442/608	Ring ditches and other linear features shown on CUCAP APs 1976.	Cropmark	Unknown
05171	442/624	Wind mill	Building	Post-Medieval



SMR	NGR	Description	Evidence	Date
08479	446/616	Arbury Camp an Iron Age ringwork/hill fort surviving Anglo-Saxon earthworks up to 0.7m in height at least until 1968. Excavations have been undertaken by J. Alexander and D. Trump in 1970 and C. Evans in 1991. The 1991 excavations revealed a "tower like" gateway at the eastern entrance. No occupation traces have yet been revealed inside. The site has been described as primarily a fort cum stock enclosure. (C.Evans 1991). A large number of Roman finds were discovered over the north side of the Arbury ringworks. These extend northwards and may relate to the Cawcutt's farm site.	Cropmark / Earthworks / Excavation	Iron Age
05527	448/608	Enclosure predating Medieval ridge and furrow shown on CUCAP AP 1948. Roman pottery, Bronze Age arrowhead and a Post-Medieval pit discovered during rescue excavations in 1975.	Cropmark/ Excavation	Unknown / Bronze Age / Roman / Medieval / Post-Medieval
09530	449/616	Trackway ?shown on CUCAP APs 1973. This area was trenched in 1990 by the CAU. No traces of the cropmark were discovered.	Cropmark	Unknown
05465	450/610	Ridge and furrow lying on both sides of the Arbury Rd.	Cropmark	Medieval
05425	4511/6091	Roman cemetery excavated in 1952 during the construction of a new housing estate. 6 burials were uncovered. A further 7 were discovered nearby in 1953.	Excavation	Roman
05288	4512/6093	Roman burials and pottery found in 1937.	Finds Scatter	Roman
05430	452/608	Large number of Roman finds including building material and burials found during excavations along Humphrey's road during the 1950s. This area is associated with a settlement extending over 7 acres. Mediaeval pottery and a pit were discovered during the excavations of 1952-3.	Excavation	Roman
05427	452/609	Roman burials, pottery and kiln debris excavated in the 1950's.	Excavation	Roman
05352	4520/6114	Possible road on RAF AP.	Cropmark	Roman
05213	453/612	During construction work at the King's Hedges Estate in 1970 Roman burials and pits were excavated. The site would appear to represent extra-settlement activity dated to the Roman period Along the line of the nearby Roman road.	Excavation	Roman

SMR	NGR	Description	Evidence	Date
05415	454/615	1968-9 excavation of the Roman settlement at Arbury.	Excavation	Roman
05433	4544/6128	Fragments of building material. Site under the plough.	Finds Scatter	Roman
05419	455/613	1966-7 excavation of the Roman settlement and Preh earthworks at Arbury.	Excavation	Roman
05424	455/614	1951-52 excavations discovered structural remains and material from Roman buildings at Manor farm, Arbury. Other finds of Iron Age and Anglo-Saxon date were also discovered.	Excavation	Roman
05412	455/615	Roman pottery scatter.	Finds Scatter	Roman
05435	455/615	A pattern of field boundaries overlain by ridge and furrow shown on a CUCAP AP.	Cropmark	Roman/ Medieval
05417	455/616	Roman earthwork enclosure excavated 1966-7. See also 05424.	Excavation	Roman
05411	4553/6145	Roman building excavated in 1951-2. Excavations in 1965-6 by Alexander, Farrar and Trump revealed part of a large dwelling parallel to a Roman road. Probably the same site described in 05424.	Excavation	Roman
10087	4555/6180	Excavations at Gypsy fields and the Unex lands by the CAU. The pits, ditches and the metalling of a Roman road (Akeman St.), were recorded from their trenches.	Excavation	Roman
05418	456/615	1965-7 excavation of the Roman settlement at Arbury.	Excavation	Roman
05420	456/615	1965-6 excavation of the Roman settlement at Arbury.	Excavation	Roman
05421	456/615	1951-2 excavation of the Roman settlement at Arbury revealed structural remains and building debris. Excavations 1965-7 discovered traces of Roman roads, building debris, Roman burials and Medieval pottery.	Excavation	Roman
05422	456/615	1965-7 Excavations at the Roman settlement of Arbury.	Excavation	Roman
05608	4565/6204	A large oblong enclosure on the south side of the Roman road at Kings Hedges. Visits to the site during the 1950's and 60's suggest that the earthworks may represent hedge banks and ridge and furrow.	Earthworks	Medieval
05392	457/618	A single cremation and several Roman pots were discovered near the Roman road at the site of Kings Hedges Farm during excavations by CCC in 1990.	Excavation	Roman
05353	4625/6060	Turnpike road to Ely.	Documentary	Post- Medieval
08326	470/617	Ring ditch showing on CUCAP APs 1975.	Cropmark	Unknown

SMR	NGR	Description	Evidence	Date
08329	475/623	Ring ditch shown on CUCAP APs 1959. A watching brief (1991) on associated cropmarks showed no trace of these features.	Cropmark	Unknown
05536	479/622	Roman pottery associated with ditches.	Finds Scatter	Roman
05281	4792/6173	Roman settlement along the river terraces north of the R. Cam. Roman burials and buildings found in 1903 on the site of sewage Farm at Milton excavated by Mckenny-Hughes.	Excavation	Roman
05308	480/619	Cropmark associated with Roman pottery	Cropmark	Roman
05678	4808/6216	Scatter of Roman pottery associated with ditches.	Finds Scatter	Roman
05677	481/625	Roman pottery scatter.	Finds Scatter	Roman
05679	482/624	Roman kiln found at Milton Fen End during gravel working.	Finds Scatter	Roman
05535	483/606	A shrunken Medieval village. The Medieval village of Fen Ditton was originally located at Green End moving to its present location during the later Middle Ages. House platforms shown on NMR APs 1969.	Documentary	Medieval
05489	4851/6137	Poplar Hall a Post-Medieval farmhouse.	Building	Post-Medieval
08327	486/616	Coprolite mining ? shown on CUCAP APs 1975.	Cropmark	Unknown
01095	4873/6171	The remains of a former moated residence of the Bishops of Ely, converted into a farmhouse. Listed Building Grade 2.	Documentary / Building / Earthworks	Medieval / Post-Medieval
05440	488/619X	Roman settlement of about 2 ha. It is suggested that this is a single farm of typical Fenland type.	Cropmark	Roman
05442	488/619	Roman settlement.	Cropmark / Finds Scatter	Roman
05310	489/610	Windmill.	Documentary	Medieval / Post-Medieval
05393	4905/6187	C19 kiln.	Documentary.	Post-Medieval
05612	491/611	Ridge and furrow.	Earthworks	Medieval
05324	4915/6113	Roman settlement. A complex series of enclosures covering about 5 acres associated with Roman pottery.	cropmark / finds scatter.	Roman
05401	491/620	Roman pottery.	Finds Scatter	Roman
05470	494/604	Ridge and furrow.	Earthworks	Medieval
07812	494/614	Flint scatter discovered in 1976.	Finds Scatter	Bronze Age
09237	495/594	Cropmark ring ditch shown on 1969,1970 and 1972 CUCAP APs.	Cropmark	Unknown
05611	495/609	Ridge and furrow	Earthworks	Medieval
05468	496/601	Ridge and furrow.	Earthworks	Medieval
05471	502/597	Ridge and furrow.	Earthworks	Medieval
06449	5035/6008	Roman settlement.	Cropmark	Roman



SMR	NGR	Description	Evidence	Date
09005	506/598	Complex of rectilinear enclosures and hut sites shown on CUCAP APs 1969. These may be associated with the enclosures of SMR 09037.	Cropmarks	Medieval
06225	5086/5982	Water mill.	Building	Post-Medieval
10274	512/602	Linear feature/furlong boundary.	Earthworks	Medieval
06696	513/598	Ridge and furrow.	Earthworks	Medieval
00327	5159/5990	Church.	Building	Medieval / Post-Medieval
06340	519/607	Quy church stood west of Park Farm within the Medieval deer park.	Documentary	Medieval
06698	523/602	Ridge and furrow.	Earthworks	Medieval

## Archaeological Implications

### 2.1 National and County Planning Guidelines

#### National Guidelines

##### Planning Policy Guideline 16 (PPG 16)

- Para 6 Archaeological remains should be seen as a finite, and non-renewable resource, in many cases highly fragile and vulnerable to damage and destruction.
- Para 8 Where nationally important remains, whether scheduled or not, and their settings, are affected by proposed development there should be a presumption in favour of their physical preservation.
- Para 13 If physical preservation *in situ* is not feasible, an archaeological excavation for the purposes of 'preservation by record', may be an acceptable alternative. From the archaeological point of view this should be regarded as a second best option.

#### Cambridgeshire County Council Guidelines

##### Structure Plan

- Policy P14/2 The local plan authorities will exercise their powers of development control to preserve scheduled monuments and other important archaeological sites in the county.
- Policy P14/13 Where there is no overriding case for the preservation of an archaeological site, opportunities will be sought prior to the granting of planning permission, for excavation and recording of the site.

### 2.2 County Archaeological Guidelines for Road Schemes

- 2.2.1 The implications and recommendations detailed below are based on the evidence provided by the SMR for Cambridgeshire and deal specifically with the proposed widening of the A45(T). This material has been used to provide information on the archaeological resource in order to recognise sites of national or local importance requiring preservation in line with PPG 16. An initial programme of archaeological works is required to meet with the Structure Plan policies for Cambridgeshire.

2.2.2 Guidelines for road schemes have been written by Cambridgeshire County Council Archaeology section detailing a series of investigatory stages in order to define the extent, nature and state of preservation of a site.

**Stage 1** The whole route should be fieldwalked in order to locate any presently unrecorded sites and define areas requiring further field evaluation, allowing archaeologists to carry out the next stage of works with only limited destruction of the site.

**Stage 2** Those areas defined for field evaluation on the basis of this desk-top assessment and field walking should be evaluated by *limited* trial trenching/test pitting and geophysical survey. Details concerning the type of archaeological field work required should be sought from the County Archaeological Office. On the basis of this information an informed judgement can be made by the County Archaeologists as to whether a site should be preserved, excavated or requires no further analysis.

**Stage 3** Archaeologically significant sites judged not to be of suitable condition or importance to require preservation may dictate the need for excavation including analysis, conservation, archiving and publication of all excavated materials.

**Stage 4** Archaeologists should be employed to monitor top-soil stripping and carry out a recording brief. This is in order to preserve by record sites not examined in stages 2 and 3. In certain cases excavation may be required at this level.

2.2.3 Some sites will require preservation, others will be wholly or partly destroyed and will require evaluating in the first instance in order to assess the nature of the site and the state of preservation. (See figures 5 & 6 for areas defined for further analysis in addition to those sites located by stage one analysis; field walking of the study area).



SMR	Implication	Recommendation
Arbury Estate Roman Settlement Preh and Historic remains.	A major Roman settlement was discovered during the construction of the Arbury Estates. The Roman road of Mere Way passes through the settlement heading north-east.	Few Roman remains have been discovered north of Kings Hedges Road (10087 & 05392). The area to the north-west of the Roman road of Mere Way requires <b>evaluation</b> to define the extent and nature of the Roman occupation. The Roman and Medieval road should be <b>preserved</b> .
05608 4565/6204 Medieval	Medieval earthworks are recorded on the north side of the A45 near Arbury. The earthworks have been levelled.	This area should be <b>evaluated</b> .
05353 4625/6060 Post- Medieval	Turnpike road to Ely.	No comment.
05224 4680/6100 Palaeolithic	Palaeolithic finds scatter found within the gravels at Milton.	<b>Evaluation</b> of associated deposits. Field walking may provide initial information on the presence of such sites, though Lower Palaeolithic sites often tend to be deeply buried. Due to the problem of locating such sites within the gravels, these deposits need to be taken into special consideration. This may require the recording of disturbed remains during soil stripping for road construction. These gravels will obviously require a <i>high level of monitoring</i> due to the delicate nature of the resource and the rarity of such sites.
08320 469/629 Unknown	Cropmark lying on the northern boundary of the study area.	Should construction work occur within the vicinity of this site an <b>evaluation</b> will be required.
08329 475/623 Unknown	Cropmarks lying at the recreation ground Milton, near the northern boundary to the corridor.	Should this area be disturbed an <b>evaluation</b> will be required.

SMR	Implication	Recommendation
05489 4851/6137 Post-Medieval	Poplar Hall a Post-Medieval farmhouse with associated earthworks lying next to the house.	This site should be <b>preserved</b> , otherwise detailed recording of the earthwork remains and building will be required.
08327 486/616 Unknown	Cropmark to the south of Biggin Abbey which has been interpreted as coprolite mining.	This area should be <b>evaluated</b> in order to check on the nature of these remains. It is likely that coprolite mining has removed most if not all traces of the Medieval palace to the south of the present farmhouse. The more significant archaeological remains associated with the palace are likely to occur close to the farm buildings.
01095 4873/6171 Medieval / Post-Medieval	Biggin Abbey.	The building and surrounding earthworks should be <b>preserved</b> .
05440 488/619 05442 488/619 05401 491/620	Roman settlement to the north of Biggin Abbey.	Should construction work occur in this area evaluation will be required
05310 489/610 Medieval / Post-Medieval	Post-Medieval windmill mound. During the recent field visit this area was found to be ploughed.	It is likely that this mound no longer exists. A field visit would answer this question. Should the area remain upstanding preservation or evaluation will be required.
05612 491/611 Medieval	This area is under plough and the ridge and furrow has been destroyed.	No comment.
05324 4915/6113 Roman	Roman settlement. Site partially destroyed by the A45(T).	<b>Evaluate</b> . Excavation will be required in the event of significant archaeological remains being discovered.
05470 494/604 Medieval	This area is under plough and the ridge and furrow has been destroyed.	No comment.
07812 494/614 Bronze Age	Flint scatter lying on the northern boundary near Low Fen Drove Way.	Will require evaluation should construction work be carried out in this area.

SMR	Implication	Recommendation
05468 496/601 Medieval	This area is under plough and the ridge and furrow has been destroyed.	No comment.
05471 502/597 Medieval	This area is under plough and the ridge and furrow has been destroyed.	No comment.
06449 5035/6008 Roman	Roman settlement lying to the north of the A45 near Quy Mill.	Areas affected by the proposals will require <b>evaluation</b> probably leading to excavation. Excavation will be required in the event of significant archaeological remains being discovered.
09037 505/596 Unknown	Cropmark lying to the south of 06449 disturbed by the construction of the A45(T).	This area will require <b>evaluation</b> . Excavation will be required in the event of significant archaeological remains being discovered.
06303 5057/5948 Anglo-Saxon	Anglo-Saxon burials found buried in Fleam Dyke.	Should construction work progress this far south of the present course a major evaluation may be required along High Ditch road in order define the course of Fleam Dyke and assess the likelihood of further burials.
09005 506/598 Medieval ?	Cropmark probably associated with 09037 or 06449.	This area will require <b>evaluation</b> . Excavation will be required in the event of significant archaeological remains being discovered.
06225 5086/5982 Post-Medieval	Quy Mill.	This site should be <b>preserved</b> .
10274 512/602 Medieval	Furlong boundaries. This area is under plough. It is unlikely that earthwork remains survive.	No comment.
06696 513/598 Medieval	This area is under plough and the ridge and furrow has been destroyed.	No comment.
00327 5159/5990 Medieval / Post-Medieval	Medieval church at Stow.	Should be <b>preserved</b> .



## Conclusion

This desk-top assessment has defined a number of archaeological sites which will be affected by the proposed widening of the A45(T). These sites include buildings, cropmarks, and finds scatters dating from the Palaeolithic (c.200,000 years ago) to recent times.

The report recognises a series of locally important sites within the study area which will require preservation. These include the Iron Age site of Arbury Camp, and the Medieval bishop's palace at Biggin Abbey. No soil stripping or ground disturbance activities should occur within the immediate vicinity of these sites. Other areas of known archaeology will require evaluation as indicated in Figures 5 & 6. This work should be preceded by field walking to better define areas of interest.

Where the process of widening (including ancillary works) 'disturbs' underlying deposits containing archaeological material field evaluation will be required in order to record or preserve the archaeological resource. An evaluation is required to report on the nature, extent and preservation of the resource.

The first stage of this field evaluation should include systematic finds collecting (field walking) along the route. This may provide information concerning the extent of a site, discover presently unrecorded sites and provide data allowing an archaeologist to formulate a strategic programme for the next stage of field analysis.

The second stage of analysis will include the field investigation of the known archaeological resource, areas of high archaeological potential and where ground conditions are known to be unresponsive (i.e. alluviated) by limited trial trenching and geophysical surveys. An '*Archaeological Brief*' should be sought from the County Archaeological Office to allow for the monitoring of all levels of archaeological activity.

The second stage of field analysis may recognise areas of national or local importance which may require preservation. Particularly significant sites may merit larger scale excavations, sites where it is believed that this may be necessary on the basis of present information, an indication occurs within the recommendations section where it is thought that this may be necessary. It is also recommended that all soil stripping activities are monitored by the contracted archaeological officers.

The sites which have been indicate for preservation should be analysed by non-destructive techniques such as geophysical, architectural and earthwork surveys, these methods should be considered to allow a fuller appreciation of such monuments within their settings. This may allow options on the presentation

and management of these sites to the public through an appropriate medium. Information from past excavation supplemented by future work within the environs will allow archaeologists and the public to better understand past landscape utilisation and social organisation.

All phases of archaeological analysis should be carried out well in advance of construction work by professional archaeological contractors recognised by the County Council. All archaeological analysis should be funded by the developer, including fieldwork, post-fieldwork analyses, conservation, finds storage and publication costs.

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## Glossary of Archaeological Terms

- 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 artifact itself. Artifact scatters (finds scatters) are collections of artifacts found together at one location.
- Barrow:** Burial mound. Barrows can be long, round, or even square, and were generally surrounded by at least one ditch. Barrows are further subdivided by form into various types belonging to these general categories. Barrows are a means for burying selected individuals, they were used through out the later Prehistoric, Roman and Saxon period.
- Bronze Age:** Prehistoric period c.2000-700 BC when bronze was used for many types of tool and weapon.
- Croft:** An enclosed piece of land or small holding, usually attached to a house.
- 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 and 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 detected easily from the air, and by taking photographs the cropmark patterns can be plotted onto maps and given provisional interpretation.
- DMV:** Deserted Medieval Village. For various reasons Medieval settlements were sometimes abandoned or shifted their location. Earthworks of the old village can often be seen showing the position of house platforms, crofts, lanes, and ponds.
- Earthworks:** Archaeological features that are still extant above ground as banks and ditches, platforms, roads, ponds, canals, etc. They were either constructed of soil or became covered by it at a later date, leaving the archaeology showing in relief.
- Enclosures:** An area defined by a continuous surrounding ditch. These may be enclosures around human settlement, fields, or paddocks for stock. Rectilinear enclosures are ones with straight sides and corners, whilst curvilinear enclosures are ones with rounded sides.

- Field system:** An area with ditches or banks that show a systematic pattern of enclosures, trackways, and features that can be seen to run parallel to one another, or lead off from one another to form an intelligible pattern.
- Fieldwalking:** Technique of archaeological survey. Walking over ploughed and weathered soil an experienced observer can collect many ancient artifacts, and by plotting the distribution of such find spots on maps an idea of the occupation and use of the landscape can be built up for each period of the past.
- Finds scatter:** Finds are artifacts, or other objects associated with human activity, for example bones or fire-cracked flint. A finds scatter is a localised collection of such objects.
- Flints:** Flint is a type of stone that can be worked by chipping to make fine and sharp tools, such as arrowheads, blades for knives or sickles, scraping tools, or even axes. It can be polished to make a smooth finish, and good quality flint could be brought in to an area from far away. Worked flint can often be found in the fields, showing human activity. Sometimes these are tools, but often they are just the by-products of flint working.
- Furlong:** This term is used for a piece of land in edieval cultivation that had a group f ridge and furrow all lying in the same direction. Later this term became used as a measurement of length. A furlong boundary was the edge to such a piece of land, and often survives today in the form of a low bank visible on the ground and from the air.
- Holloway:** A track that as been hollowed out by long usage.
- Iron Age:** Prehistoric period c.700 BC - 43 AD when iron was used extensively for tools and weapons. The period traditionally ends with the Roman invasions of 43 AD 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.
- Mesolithic:** Prehistoric period c.7500-3500 BC with a predominantly hunter-gatherer economy leading on to herding and farming, spanning the period between the last Ice Age and more settled farming communities of the Neolithic.

- Moat:** In the Medieval period moated enclosures proliferated. An area surrounded by water filled ditches would leave a platform or island on which to build a house. Several reasons have been suggested for these moated sites: defence in times of lawlessness, a ready source of water for the needs of the house and an anti-fire measure, a handy reservoir for fish and water-fowl, and in the response to the demands of fashion and prestige. These moated sites were often manors, and occasionally old manor houses are still to be found enclosed by their moat.
- Neolithic:** Prehistoric period c.3500-2000 BC when farming and pottery were introduced. Stone tools of fine workmanship were produced and exchanged over long distances, whilst metal was not used.
- Palaeolithic:** Prehistoric period before c.7500 BC spanning the early development of mankind from hominid species through to modern humans. Stone and bone tools were made and a hunting-gathering lifestyle was followed.
- Ridge & 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 the corrugated ridge & furrow effect. An area of land with all these strips running parallel was called a furlong. These strips usually followed a slightly sinuous course, an elongated reversed S shape to help in turning the plough at the end. Where the strips ended and the ploughs turned soil would be deposited and a "head" would be created. After a time these may form a boundary in their own right and are called headland boundaries. 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.
- Roddon:** Dried out waterway. The silts laid down by the water in the original creek remain when peat wastage occurs, and thus they stand above the surrounding ground level.
- Roman:** Historic period 43-410 AD when most 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. 410 AD was the date the legions were withdrawn, but Romano-British culture continued for some time into the 5th century in tandem with Anglo-Saxon migration.



- SMV: Shrunken (shifted) medieval village. (see DMV).
- Soilmarks: Archaeological remains often show in ploughed fields by reason of the different soil of which they consist. They can be visible at ground level but like cropmarks they are most clearly seen and interpreted from the air.
- 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 deposit, thus giving a chronological relationship to the layers and the artifacts 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.

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