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**M25 WIDENING: JUNCTIONS 15-16
ARCHAEOLOGICAL ASSESSMENT
STAGES 1 AND 2**

**EVALUATION REPORT
AND GAZETTEER**

**BUCKINGHAMSHIRE COUNTY MUSEUM
ARCHAEOLOGICAL SERVICE**

FOR

**SIR WILLIAM HALCROW AND PARTNERS
AND
DEPARTMENT OF TRANSPORT**

SEPTEMBER 1992

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Note: Additional data is presented in the companion volume to this report, the Data Supplement Volume.

1. INTRODUCTION

This report has been commissioned by Sir William Halcrow and Partners Ltd. on behalf of the Department of Transport.

The preparation of this report has been greatly aided by numerous individuals. Research at the County Record Office was facilitated by the staff there, particularly Mr Roger Bettridge, Senior Assistant Archivist. We also owe a special debt of gratitude to the landowners and tenants along the route who kindly gave permission to walk across their land. Only one landowner denied access.

Some archaeological survey work had been carried out several years previously during the initial construction of the M25, although this was somewhat limited in scope by constraints of both funding and time.

Over the past three or four years the context in which archaeological input is provided to the development of road schemes at both national and local level has changed significantly. Archaeology now has a much higher profile in the planning process. The concept of an evaluation of the archaeological potential of the area affected by a particular development being undertaken as a matter of course before a decision is made on the proposals is linked to the publication in 1990 of Planning Policy Guidance note 16 (PPG 16) on Archaeology and Planning. PPG 16 places the responsibility for furnishing an archaeological evaluation of a development's consequences with the developer.

Of equal importance are the arrangements recently agreed between English Heritage and the Department of Transport. These provide for the direct funding by DTP of assessments on DTP road schemes. Full scale investigations occasioned by such schemes are provided for by a block grant administered by English Heritage.

Linear developments such as roads can be enormously deleterious to the archaeological resource. However they provide an opportunity to examine a transect across the landscape and the spatial and temporal variability of human behaviour within it. In addition the relatively long period of time between inception and construction means that archaeological implications can be taken on board at the earliest opportunity, and a detailed investigative and mitigatory programme can be developed. In order to achieve this, dialogue between developers, planners and archaeologists is crucially important. A paper on Road Schemes and Archaeology in Buckinghamshire was recently discussed by Officers of the Engineer's Department and the County Museum Archaeology Section. The paper proposes a six-stage model programme of archaeological work and suggests how these stages might best be accommodated within the overall development of a road scheme.

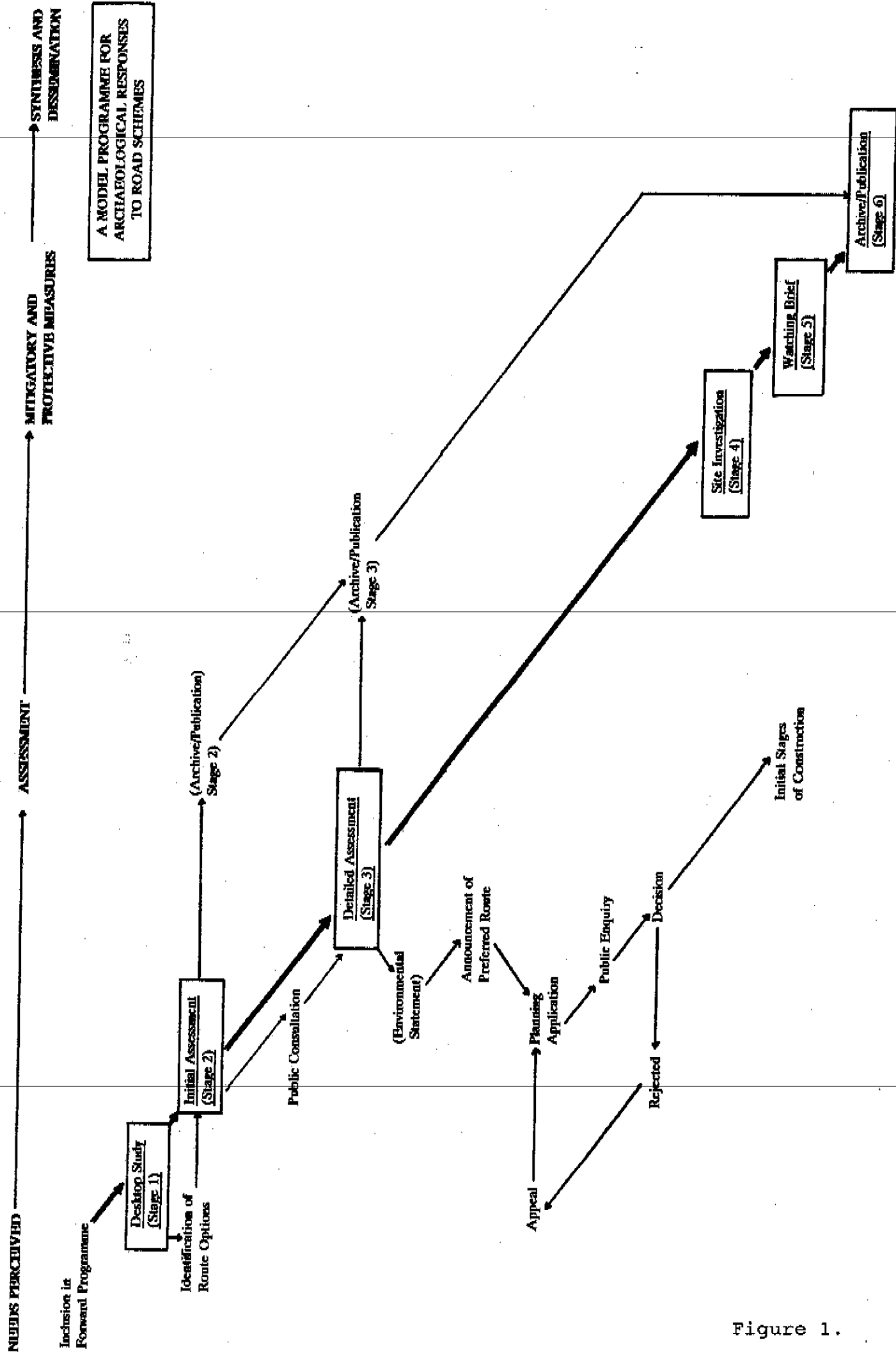


Figure 1.

These stages are:

1. Desktop Study (review of existing data held in the County Sites and Monuments Record)
2. Initial Assessment (Documentary study and initial rapid field study)
3. Detailed Assessment (Fieldwork including systematic fieldwalking, geophysical survey and trial excavation)
4. Site Investigation (detailed excavation of those sites which it is not possible or desirable to protect)
5. Watching Brief (during initial stages of construction)
6. Archive and Publication (synthesis and dissemination of results)

In the context of this six stage model programme, the work presented in this report is equivalent to Stages 1 and 2.

The objectives of this study are:

- a. To define the known extent of the archaeological deposits within the immediate vicinity of the M25 between junctions 15 to 16 and to provide a preliminary evaluation of their importance.
- b. To assess the potential for new sites as yet unrecorded.
- c. To establish the present land use character and the potential for evaluatory survey.
- d. To make recommendations for evaluatory survey.
- e. To make recommendations where appropriate concerning mitigatory measures to be undertaken in respect of known archaeological sites.
- f. To produce a free standing report summarising the above.

The report is presented together with a supplementary paper, the field data supplement volume.

Whilst every effort has been taken in the preparation and submission of this report in order to provide as complete an assessment as possible within the terms of the brief, the County Museum Archaeology Section cannot accept responsibility for consequences arising as a result of unknown and undiscovered sites or artefacts. Proposals regarding contingency arrangements in respect of unexpected discoveries arising during the course of construction works should be made as a part of the recommendations arising from the next (detailed assessment) stage of archaeological work.

2. DESCRIPTION OF THE STUDY AREA

The study area is based on a strip of land extending for 100m on either side of the edge of the existing route as defined by the fence line beside the motorway. The route study corridor, is approximately 7.5 km (4.7 miles) long and passes through only one parish, Iver.

The study area consists mostly of agricultural land, gravel pits and water treatment/ sewage works. There are only a few small areas of woodland. The agricultural regime is mixed, with a trend towards pasture and horse keeping with some arable, market gardening and turf production. Some areas of land are derelict pasture, probably as a result of "set-aside" policy.

The topography to the south consists of flat river valley and terraces. To the north of Iver village, hills in the west slope down to the Colne Brook and the river flood plain. North of the A4007, the Slough Road, the route skirts the side of the Alderbourne valley and climbs up towards the Denham plateau before meeting the M40 at Junction 16.

Geological information along the route is derived from boreholes taken for the original construction of the motorway, supplemented by data collected during the archaeological survey carried out at that time.

The geology is significant for three reasons. In the first place the underlying geology will affect various criteria, such as drainage, soil pH, and biotic characteristics, influencing the potential for settlement and exploitation. In the second place the surface geology will influence the visibility of any archaeological activity which may be registered within those deposits. For example, alluvial deposits may often mask archaeological evidence, whilst features such as pits and ditches cut into lightly drained soils will generally be conducive to detection by aerial survey under certain conditions, or discovery by geophysical prospecting. Thirdly, the surface geology (particularly the soil type) will affect the preservation of the archaeological evidence; for instance, acidic soils generally cause poor preservation of bone and poorly fired pottery, whilst waterlogged deposits tend to be favourable to the preservation of a wide range of organic materials including important palaeoenvironmental evidence.

These geological factors, then, will have influenced the nature of the available archaeological data. The survey bias will be discussed further in section 4 below.

3. METHODOLOGY ADOPTED FOR THE ASSESSMENT.

The data presented in this report has been compiled from various sources, both field data and non-field data.

Field data was gathered as follows. Following contact being made with landowners and/or tenants, each individual parcel of land was visited. When permission to walk over was not available, the parcel was inspected if possible from public rights of way. In the one instance where access was denied (survey record 099) it was not possible to inspect the area concerned from a public right of way. The basic unit for data collection was the Ordnance Survey land parcel, as shown on 1:2500 plans. However due to the recent construction of the motorway there has been some revision of parcels since the last survey was updated. In these cases no numbers are available. Therefore the primary numbering system consists of a set of consecutive survey numbers which relate solely to this project and were assigned to land parcels observed in the field. For each land parcel a field visit report was completed.

The following categories of data were recorded:

- Date of visit(s)
- OS Parcel no
- Civil parish
- Other descriptive name in current use
- Owner/tenant (where different from or supplementary to existing data)
- Present land use
- Former land use (where evident, or where volunteered by the owner/tenant)
- Topography (Flat/ hillcrest/ hillslope/valley floor)
- Direction of slope(s)
- Presence and location of watercourses
- Visible geology (ie where exposed in pits &c. This field was rarely used)
- Potential hazards (such as might affect further investigations, e.g. pipe trenches, power lines &c)
- Description (other field notes, comparison with previously recorded information, description of all potentially archaeological features or artefacts seen).

Field visits were brief, taking only the length of time required to collate the data required at this stage. This was sufficient to detect any possible earthworks and to describe local topography and land-use. Quantitative data collection (such as artefact retrieval from systematic fieldwalking of sample areas) did not form a component of this stage of the assessment.

Non-field data was collected from a variety of sources. The most important of these is the County Archaeological Survey (CAS), which is the County Sites and Monuments Record held and curated at the County Museum. This is a record of all archaeological sites and finds relating to the County. CAS data has been compiled from a wide range of sources over a

period of some twenty years. It represents the repository for virtually all collated archaeological data, and is continually being updated and developed.

The County Museum also holds a series of 1:10,000 maps showing relict ridge and furrow (mostly plotted from air photographs), as well as microfiche copies of first edition OS maps.

The County Museum holds a large collection of air photographs, both vertical and oblique. Prints from all relevant vertical runs were scanned. Oblique photographs within the survey corridor were also examined. In addition two runs of aerial photographs in possession of Sir William Halcrow and Partners Ltd were examined. One was a vertical run made in 1977 of the proposed route of the then yet-to-be-built M25, and the other was an oblique run of the existing motorway made in 1990/1.

Whilst several known sites within the project area can be seen on aerial photographs, no new sites were revealed by these studies.

Documents and maps held at the Buckinghamshire County Record Office were examined. The tithe maps and awards were examined for each parish, and field names were collected. Earlier maps, including parish terriers, glebe surveys and estate maps were also examined. The maps and documents consulted are listed in appendix 2 at the end of this volume.

Fieldwork and non-fieldwork data were amalgamated, using survey numbers as the basic unit, and entered on to Land Parcel Data Record forms. These forms are presented separately in the Data Supplement Volume.

4. EVALUATION OF RELIABILITY OF FIELD DATA

This study should not be seen as a substitute for a detailed field assessment, but as a prelude to it. Virtually all field studies will contain some form of inherent bias. It is important to recognise where such biases may lie. The following factors will inevitably have influenced the reliability of the field data:

A. Time constraints. The field visits were undertaken over a period of a week: allowing for time involved in contacting landowners this meant that only a few minutes were spent in each of the fields (of which there were nearly one hundred). Field observations were therefore deliberately limited in their scope, and were intended to do no more than to address the question of whether there were any obvious archaeological features or artefacts in the fields. It was not intended to walk the fields under arable to locate concentrations of artefacts; this type of site must therefore be under-represented in this assessment.

B. Differential visibility due to land use/ agricultural regime. The accompanying figures (figs 2-4) show the land-use at the time of the field inspection. Earthwork sites will tend to be visible in grass, particularly where little arable cultivation has taken place (ploughing will rapidly degrade upstanding earthwork features). Artefact scatters will be visible in arable fields; the degree of visibility will depend on the state of the crop and whether the surface has weathered since ploughing. Woodland and rough ground will tend to mask features. In addition horizons associated with early prehistoric activity can be masked by later alluvium.

C. Aerial photographic cover. The aerial photographic cover of the Colne Valley is extremely limited compared to other regions because of the proximity of Heathrow Airport which has restricted flights specifically intended to locate archaeological sites. Areas of gravel are usually well suited for locating cropmark sites from the air. This is due to the excellent drainage which may enhance differential growth and ripening of crops over archaeological features. Both flying restrictions and the fact that some areas of gravel are under pasture has restricted the number of sites identified from aerial photographs. This is in contrast to other areas where a dense scatter of sites are visible along the gravel terraces beside the rivers. Because the Colne Valley contains areas of clay and brickearth, as well as gravel, this may also have resulted in a bias against sites situated on less well drained soils. Most of the known sites are restricted to gravel areas or to where specifically archaeological survey work was carried out. The spatial correlation of CAS sites with underlying drift or solid geology is expressed in figures 2-4.

5. THE POTENTIAL OF THE STUDY AREA

A. Introduction

Sixteen sites are identified as being within the project area. A further five are identified as being situated immediately adjacent to the project area. These are described in the gazetteer which forms appendix 1 of this report.

Some of these sites are of demonstrably higher potential than others. Some have already been destroyed or substantially damaged and therefore have little potential remaining. The extensive extraction of gravel and brickearth along the Colne Valley, together with the construction of sewage works, water pumping stations and the M25 itself have all led to significant destruction of archaeological resources, mostly without proper investigation.

B. Known Archaeological Sites

These are summarised under six categories: artefact findspots, cropmark sites, sites observed during mineral extraction, sites known from historical documentation, sites presently or recently extant as standing structures, sites known from archaeological excavation, and sites discovered during the present survey work.

(i) Artefact findspots

Five of the sites on the route consist of findspots of artefacts. Three were located during the construction of the present M25, one was a chance discovery in a gravel pit, and one was located as a result of a visit to a gravel pit in an area where cropmarks and archaeological features were known to be present. Bearing in mind the limited amount of fieldwork carried out in the area and the small proportion of land under cultivation, the fact that artefacts make up a relatively small proportion of the known sites is not surprising. Assessing the importance of these sites is difficult in the absence of detailed fieldwork to provide a context. While the find of an isolated flint flake in an arable field may only represents low-level activity, such secondary sites are nevertheless of significance in that they define the level of "background noise" (i.e. non-site orientated or off-site activity) against which denser concentrations of activity are to be viewed. It is however difficult to assess at this stage whether a particular density of artefacts is significant.

Significance will vary with context; half a dozen sherds of Romano-British or post-Medieval pottery would probably be of little significance; the same quantity of Neolithic or Saxon material would be of much greater interest.

All fields invariably contain some artefacts within them. The deposition of this material is related to various "off-site" processes (e.g. casual loss, small scale activities taking place away from settlements or ritual areas, rubbish

management, and manuring). These processes will not necessarily result in a uniform distribution. Many finds may therefore be of little or indeterminate archaeological significance, but are the background noise to which denser concentrations of artefacts must be related.

Two of the artefact finds probably fall into the category of "background noise" or of indeterminate significance. CAS 5492 consists of a single flint flake recovered during a walkover of the route prior to the construction of the original M25. CAS 4377 consists of a dozen Palaeolithic hand axes found in a gravel pit during the nineteenth century at what is now Iver Court Farm. It is difficult to fully assess either of these sites. The flint flake is probably "background noise". The palaeoliths are from a pit where brickearth and gravel were excavated. The brickearth in the Iver area are known to contain well preserved Levalloisian artefacts¹. The Levalloisian period occurs at the end of the Palaeolithic (early stone age) period prior to the latest major glaciation which happened about 26,000 B.C. Much of the former brick and gravel works area is now under water treatment works, although the area around the farm has not been extracted. Neither of the two sites where the finds were made now exist, although there is potential for other material to exist in adjoining but undisturbed locations. If any Palaeolithic sites exist in the area, they would be considered to be of great significance as all sites from this period are rare and make significant contributions to the understanding of the period.

The other artefact findspots are of more obvious significance. CAS 0240 consists of a find of flint flakes from an area adjacent both to a cropmark site, CAS 0243, and a settlement site, CAS 0239, which has produced Iron Age, Romano-British and Medieval material. The finds (CAS 0240) came from a ditch exposed at the edge of a gravel pit. They are clearly associated with the two adjacent sites and probably make up part of one much larger multi-period site, only part of which shows as a cropmark owing to different geological conditions and land use. Despite being significantly disturbed, any remaining portions of this complex site or group of sites have considerable potential for providing important information, particularly as so little excavation has been carried out in this region. Because of the lowering of the water table caused by nearby mineral extraction it is unlikely that important waterlogged deposits survive.

CAS 4870 is a flint scatter in a field to the south of the motorway. The scatter was briefly examined during the construction of the M25. It seemed to consist of Neolithic/Bronze Age flintwork. Such scatters may relate to settlements or may be evidence of 'activity areas'. The site certainly has archaeological potential, not only in the artefact scatter but also in the possibility of there being buried features present relating to a settlement. Flint

¹ Roe, D.A. *The Lower and Middle Palaeolithic Periods in Britain*. 1981, p.218.

scatters are generally less common on the plateau gravels than they are either on the Thames gravels or on the Chilterns.

CAS 5319 consists of finds from service trenches passing to the east of Iver Church, found during road diversions relating to the motorway construction. The finds included Saxon and Medieval pottery, obviously associated with the early settlement of Iver, and a Mesolithic transept axe. The area between the church and the river is of some archaeological potential both for Medieval deposits and earlier prehistoric remains. Its low-lying position also makes it likely that the area has good potential for containing well-preserved environmental remains due to waterlogging.

(ii) Cropmark sites

Only two sites on the route are known through cropmark evidence. Due to the constraints outlined above (Section 4), few cropmark sites are known in the Colne Valley as a whole. A further two cropmark sites are located in fields adjacent to the corridor. Cropmark sites are generally easier to interpret than artefact finds, their type and function can often be identified on the basis of parallels with other excavated sites. Most cropmark sites need to be fairly substantial before they can be seen, and thus tend to consist of settlements with deeply dug features, funerary monuments and field boundaries. Such sites are of considerable archaeological potential.

Part of one of the two cropmark sites, CAS 0243 mentioned above, has been removed by gravel extraction; the double ring ditch here is a Scheduled Ancient Monument (no.84). The gravel digging may have removed the edge of part of the outer ring ditch, although the principal area of the site (as defined by the cropmarks) survives. The ring ditch is probably Neolithic or early Bronze Age; some of the linear ditches visible on the aerial photographs are probably Iron Age or Romano-British in date based on finds of pottery, and the smaller circular cropmarks may be hut-circles. The quality of preservation at this site is questionable, as the area may have been stripped of topsoil along with the rest of the area and several service trenches also may cross the site although these probably do not cross the ring ditch. Nevertheless, the site has good archaeological potential as little is known about either the prehistoric or Romano-British settlement of this area.

The other cropmark site, CAS 4822, an extensive area of mostly linear features covering several fields, lies mostly outside the road corridor, although the northern part of two of the fields lies within it. Some of the cropmarks may be associated with Second World War gun emplacements. Further investigation of the site is needed to determine whether there is anything of archaeological interest in the area in the road corridor.

(iii) Sites observed during mineral extraction

Two further sites have been recorded in the process of their destruction in advance of mineral extraction; these sites consisted of archaeological features, probably relating to settlements, together with associated finds. One of these sites was close to a known cropmark site. The degree of destruction caused by mineral extraction is usually severe, although sites can extend beyond the area of quarrying, particularly where planning constraints or property ownership has limited the extraction rather than the extent of mineral resources. In the case of at least one of the sites identified on the route (CAS 0239), it is clear that some archaeological features have survived the extraction. Other than the knowledge of their former existence, such sites have some limited archaeological potential if they have not been completely obliterated.

Of the two sites, both apparently settlements, which were observed during mineral extraction, one, CAS 2518/ 0799, a site with features dating from the Mesolithic, Neolithic, Bronze Age and Roman periods, has probably been completely destroyed. The area where the site was located now underlies the northern part of junction 15 between the M4 and the M25. The other site, CAS 0239, already mentioned above in conjunction with cropmark site CAS 0243 and finds at 0240, consisted of what were apparently Iron Age pits and possibly some Romano-British features as well. Since these features were close to the edge of the gravel pit, it is likely that the site extends into the area closer to Thorney Farm where no gravel was dug out. It is not known what the impact of recent golf course construction has been on this area. This part of the site probably has reasonably good archaeological potential although most of it lies outside the study corridor except for a small parcel situated between the old Thorney Hill Road, and its replacement, to the west of Thorney Croft.

(iv) Sites known from historical documentation

A further two sites are known through historical documentation. Such sites usually have an undetermined potential, which can only be assessed by detailed survey.

No remains are visible of either of the two sites concerned. CAS 1680, the site of a Medieval fishery located on the Colne Brook below Iver village, is situated in an area where considerable gravel extraction has been carried out and may now lie under the motorway. With the amount of disturbance which has taken place in the recent past it is unlikely that much has survived if the site's supposed location is accurate. CAS 2829, the site of a watermill on the Colne Brook, above Bridgefoot House, Iver, has not been recently disturbed and the weir and sluices are still intact; the latest mill, a cotton mill, was burned down in about 1850. The site has great archaeological potential for examining the series of mills which have stood on the site since Domesday. It is unlikely that all traces have been eradicated and the

waterlogging likely to be present adjacent to the stream will have preserved any timbers relating to the site.

(v) Sites presently or recently extant as standing structures

Three sites are recorded as extant remains (at the time of entry in the County Sites and Monuments Record), either in the form of standing buildings (which may also overlie earlier sites), or other structures. One of these has subsequently been destroyed. A standing structure has clear potential although the fact that it usually remains in some sort of use means that there has been an ongoing process of modification to and destruction of the archaeological resources present.

All three extant sites date from the Post-Medieval period. One, a fishpond, was probably nineteenth century in date; it was extant at the time of the original construction of the M25 and was recorded at that time. It has since been destroyed and therefore has no archaeological potential. The other two, CAS 4383, Delaford Manor, and CAS 5136, Iver Court Farm (formerly Court Lodge) both date, at least on external evidence, to the eighteenth century, although Court Lodge was in existence at least as early as 1640, and Delaford Manor is mentioned as early as 1344. Both sites have good archaeological evidence for both the Medieval and early Post-Medieval period. Delaford Manor still sits in landscaped grounds; Iver Court Farm is situated right next to the motorway in the midst of a small light industrial estate. On the basis of map and aerial photographic evidence there has not been significant destruction to the surrounding farmyard and buildings. Both sites are also grade II listed buildings.

In addition to the three structures recorded in the County Sites and Monuments Record, there are several other buildings in the road corridor have significant archaeological potential for the Post-Medieval period. Mansfield Farm dates from the sixteenth century and lies on the edge of the study corridor; its out-buildings include a seventeenth century barn and a slightly later dovecote. To the east, away from the motorway, is the site of the former manor house (CAS 4384). The whole farm is thus of some archaeological potential. Mansfield Farm and some of its outbuildings are grade II listed buildings. Huntsmoor Park Farm, which lies right next to the present motorway is also a grade II listed building which in its existing exterior form dates to the eighteenth century; one of its barns dates to the seventeenth century. It is not unlikely that the farm has late Medieval antecedents. The Tower Arms, Richings Park, is an eighteenth century grade II listed building and may have been an inn. These buildings are not included in the accompanying gazetteer. However all have considerable archaeological potential for providing information on the late-Medieval and early Post-Medieval settlement of the region.

6. RECOMMENDATIONS FOR FURTHER ACTION

At this stage it is possible to identify various areas which may be considered as archaeologically sensitive. These consist of the nineteen known sites, fifteen of which are within the study corridor (listed in the gazetteer and discussed in section 5B above), and the eight additional areas of unknown potential (discussed in section 5C above). Except in the instances where the sites are known to have been destroyed previously, these sites and areas will all require further assessment. One site, the double ring ditch CAS 0243 is a Scheduled Ancient Monument; its statutory protection implies a presumption in favour of preservation in situ. Without prejudice to the results of further stages of investigation, and the views of English Heritage, on the basis of the available evidence, there are no other sites which appear to be of schedulable quality.

The present study and the data offered here are subject to various limitations. There are problems of sample bias: some types of site are in general harder to detect at this level of survey and some types of land use restrict the visibility of all sites. It should be emphasized that the recommendations presented in this section of the report are made on the basis of evidence which is far from complete.

In order to rectify these limitations a further programme of assessment work will need to be undertaken, equivalent to the stage 3 identified in our model programme for assessment of road schemes. This additional assessment will result in the formulation of a detailed set of recommendations for mitigatory procedures. In practice, these recommendations will be for (a) modification of the route or construction details so as to permit total or partial preservation of the site, or (b) full or partial investigation/ excavation prior to construction.

Stage 3 will need to utilise a number of different techniques in order to facilitate a more detailed field investigation. These will include fieldwalking on areas of arable cultivation at the appropriate time of year (October to February/March), and geophysical survey (particularly in areas where below-ground structures may be suspected). A fourth stage will involve trial trenching. This last activity should encompass a 2.5% sample of the entire area within the eventual limits of the landtake, except for the areas of made ground.

It is this last technique of trial trenching that will result in the detection of other features which are otherwise resistant to detection from the surface. On the basis of the work done so far it has generally been impossible to demonstrate that a blank area on the map means that there is no archaeology below the surface. A recent programme of field assessment carried out by Buckinghamshire County Museum Archaeological Service and Thames Valley Archaeological Services for the National Rivers Authority demonstrated the existence of a number of previously undiscovered sites along a development corridor approximately 5km in length and between

100 and 200m wide. Four sites were previously known; six new sites were revealed by subsequent fieldwalking, and these were characterised in part by geophysical work, but the trial trenching raised the number of sites to twenty-one definite sites, nine possible sites, and a further three of palaeoenvironmental interest. Even where subsurface features are detected by other means (e.g. geophysical survey), trial trenching will be necessary in order to characterise them adequately.

These techniques will need to be incorporated into a phased programme of work, with the geophysical survey and fieldwalking being undertaken prior to trial trenching. A preliminary geophysical field study should be undertaken in order to confirm the suitability of this technique in this context.

Sufficient time and resources will need to be incorporated into this programme for the necessary negotiation with land owners, particularly as it is probable that these stages of the assessment will need to be undertaken before CPO's have been served.

It is important too that the areas likely to be developed as contractors' compounds should be evaluated and subjected to the same criteria for further action as the actual road line.

This programme of work should be initiated once the preferred route has been selected, following public consultation.

It is possible that this further stage of work may result in the discovery of new sites (or enhance the understanding of existing ones) for which the most appropriate recommendation might be preservation. It is probably unlikely that any sites would be discovered which would warrant protection by addition to the Schedule of the 1979 Ancient Monuments and Archaeological Areas Act. However, ultimately such Scheduling is the prerogative of the Secretary of State for the National Heritage.

Recommendation 1: A further programme of archaeological assessment and evaluation should be undertaken subsequent to the selection of a preferred route. This programme should utilise a range of field techniques. Stage 3 should include systematic fieldwalking, and geophysical survey. Stage 4 will consist of trial trenching. This should involve a 2.5% sample of all land within the limits of the road development area and associated works compounds, but excluding (a) made ground, (b) those areas defined upon the maps accompanying this report where archaeological deposits have been removed by mineral extraction, and (c) such other areas as may be identified during stage 3.

(vi) Sites known from archaeological excavation

The one site on the route to have received more than cursory archaeological attention in the past is CAS 5053. A Mesolithic flint scatter and peat deposit next to the Alderbourn River was examined in 1981. Later in 1983 in the same area, further peat deposits were examined, and an early Neolithic wooden stake was found. The area in the vicinity of the Alderbourn has great archaeological potential for producing waterlogged material, both artefactual and environmental, dating from the Mesolithic and Neolithic periods. While the areas examined are now destroyed, it is almost certain that archaeological deposits here extend on either side of the motorway.

(vii) Sites discovered during the present survey work

One new possible site was recorded in the preliminary survey, located on the periphery of the project area at Palmer's Moor. The site consists of indistinct earthworks in two fields (survey records 36 and 37). The earthworks are more pronounced in the field which is further from the motorway. It was not possible to define the function of the earthworks during a walkover; some may be field boundaries and others former drainage courses.

C. Additional Areas of Archaeological Potential

In addition to the archaeological sites already identified in the corridor of the proposed widening, other areas have the potential to contain significant archaeological remains which can only be identified by further investigation. These areas of potential are discussed from south to north along the route; the field survey numbers refer to the records in the appendix and data supplement volume.

1. Survey record 011 refers to the area northwest of junction 15 between the M25 and the M4. Most of the area has been quarried for gravel and brickearth. However, available information suggests that the central field has not been quarried. In 1945 aerial photographs show the field under arable; 1977 aerial photographs show it covered with an orchard, surrounded by quarry workings on three sides. During a field visit, the field was observed as being newly planted with trees as part of a nature park under the care of Buckinghamshire County Council. It was not possible to ascertain whether the area was undisturbed or not. If undisturbed by the gravel digging, the field would have considerable archaeological potential as known sites exist 300 metres to the south (CAS 0799 and 2518), 300 metres to the northwest (CAS 0239, 0240, 0243) and 100 metres to the east (CAS 1479). This last site is reputed to be that of an island (*Thornige*) where according to the tenth century chronicler Aethelweard the Danes were besieged by the Saxons in 893 AD. The site may have been adjacent to a

Saxon settlement². The documented field name of this plot of land in 1801 and in 1844 is Mill Field, from the nearby Thorney Mill (CAS 2834) to the east. Thorney Mill is one of the three Domesday mills recorded for Iver.

2. Borehole data indicates that the area beneath the railway to the east of Iver Station has not been quarried. There is some made ground in the vicinity, but this seems to overlie relatively undisturbed soils. Quarrying on both sides of the railway has produced archaeological finds and so this area does have some archaeological potential. Survey record 007, just north of the railway, to the west of the motorway, includes part of a field which may not have been quarried; information from boreholes taken along the centre line of the road indicate quarrying and made ground, but it not clear how far the work went towards Thorney Lane. Survey record 016, immediately to the north of 007, just south of the canal, appears undisturbed by gravel workings, although the eastern half may have been quarried. The area from Iver Court Farm (CAS 5136) westwards seems undisturbed, although the electrical substation may have led to some disturbance, as did the construction of the M25 itself which crosses this area. Other than the potential of the farm itself, the rest of the parcel probably has fair potential for containing archaeological remains.
3. Three fields to the north of the canal, survey records 019, 020, 021, although bisected by the motorway, have good archaeological potential as there is no indication of quarrying, and borehole data shows an undisturbed soil profile, with alluvium overlying river gravels.
4. Survey record 022, the field to the east of Iver Church, has definite archaeological potential; CAS 5319, the findspot of Saxon pottery and a flint axe lies immediately to the west. There is also good potential for waterlogged remains and environmental evidence in this area owing to their proximity to the river.
5. To the north of 098 up to the area of survey records 039 and 048 (Delaforde Manor) the ground surveyed has not been subject to mineral extraction and hence any archaeological sites located in this area are less likely to have suffered major disturbance. The motorway also follows a route away from the river which should have enhanced the possibility of waterlogged environmental remains surviving. North of Delaforde Manor, the west bank of the river where Elk Meadows is located (survey record 099; the former Woodlands Park), the area has not suffered major disturbance other than the excavation of a small lake in the grounds. It was not possible to survey this area (survey record 099) as access was refused. Nevertheless any archaeological sites in this area are

² FM Stenton "The Danes at Thorney Island in 893" *English Historical Review* 27 (1912), 512-3.

likely to be well preserved.

6. To the east of the river, north of Delaford Manor to Lower Lodge on the Slough Road, gravel extraction has resulted in the destruction of any archaeological sites which might have been present except at the margins of the pit and along the river's edge. Even here the construction of the existing motorway has resulted in the diversion of parts of the river's course. Based on borehole information, two small parcels (survey records 058 and 060) seem to have some undisturbed areas which owing to their proximity to the junction of the Colne and the Alderbourne may retain some archaeological potential. Borehole B450/1 in 058 has a layer of alluvial clay overlying river gravel but also sealed by about four metres of river gravel. This might represent an old river channel of considerable antiquity and might contain important palaeoenvironmental data.
7. North of the Slough Road, recent disturbance to archaeological resources on either side of the motorway has been minimal with the exception of survey record 097 where gravel extraction has taken place, and part of 074 where a small gravel pit may have been dug. Areas of better than average potential for the presence of significant archaeological resources exist in the vicinity of the Alderbourne river (survey records 067, 078 and 079), the area around an unnamed tributary of the Alderbourne where significant environmental deposits were observed during the construction of the motorway (survey records 72, 73, and 74). The area of the route overlooking the confluence of the Alderbourne and the Colne is a possible location for archaeological sites lying at the junction of several different environmental regions, namely the hills of the gravel plateau and the valley floor and river. Such a site would offer a wide range of resources to prehistoric people. The prehistoric site (CAS 4824) just to the east of the corridor in survey record 077 and the flint scatter in 064 (CAS 4870) are evidence that the area was exploited during the prehistoric period. Lack of previous fieldwork and the small number of arable fields where finds of artefacts could be made has probably caused the limited number of sites along this stretch of the route, rather than its lack of potential.
8. The river itself is of some archaeological potential, as it is unlikely to have been thoroughly dredged at any time. The silts in the river bed may contain important environmental evidence as well as deposits of prehistoric artifacts. Throughout most of prehistory waterways and marshland seem to have been favoured places for the ritual deposition of fine artefacts, particularly metalwork, and possibly human remains. While no metalwork has been recovered from the Colne, this is probably because it has never been dredged. It is only the activity of dredging on larger rivers which has brought archaeological finds to light.

APPENDIX 1

**GAZETTEER OF SITES
IDENTIFIED WITHIN THE
STUDY AREA**

SURVEY RECORD NO: 6 OS PARCEL NO:
PARISH: Iver GRID REF: TQ 0440 8020
CAS NO: 0843
SITE TYPE/ PERIOD: Axe, Neolithic

SYNOPSIS: A Neolithic greenstone polished axe was found at
this location in 1932.

SURVEY RECORD NO: 10 OS PARCEL NO:
PARISH: Iver GRID REF: TQ 0418 7860
CAS NO: 0799; 2518
SITE TYPE/ PERIOD: Settlement, pottery/ Roman
Ditch, core, flake, pottery/ Mesolithic, Neolithic
SYNOPSIS: Finds and features recorded during gravel
extraction in this area

SURVEY RECORD NO: 11 OS PARCEL NO: *
PARISH: Iver GRID REF: TQ 0468 7915
CAS NO: 1479
SITE TYPE/ PERIOD: Settlement/ Saxon

SYNOPSIS: The site where the Danish army was beseiged by
the Saxon army in 893, at Thorney, was probably
in this area.
Not within the study corridor

SURVEY RECORD NO: 14 OS PARCEL NO: 0076,5700
PARISH: Iver GRID REF: TQ 0430 7975
CAS NO: 0239, 0240
SITE TYPE/ PERIOD: Settlement, cropmark/ iron age, Roman
Findspot, blade, flake/ mesolithic
SYNOPSIS: A number of archaeological features were
encountered during the digging of a gravel pit
and its subsequent reinstatement. These included
iron age pits, Roman pits and a hearth, and a
ditch containing flint flakes of possible
mesolithic date. In addition an enclosure is
visible on aerial photographs.

SURVEY RECORD NO: 15 OS PARCEL NO: 0076
PARISH: Iver GRID REF: TQ 0403 7970
CAS NO: 0243
SITE TYPE/ PERIOD: Cropmarks, ring ditch/ neolithic, iron age

SYNOPSIS: Aerial photographs show a concentric double ring ditch together with other ditches. Some excavation was carried out in the early 1960s producing evidence of neolithic and iron age activity at the site. There is some confusion as to what was actually excavated, what was removed by quarrying and how much survives. Part of the area is a scheduled ancient monument (no.84).

SURVEY RECORD NO: 16 OS PARCEL NO:
PARISH: Iver GRID REF: TQ 0420 8045
CAS NO: 2262, 4377, 5136
SITE TYPE/ PERIOD: Findspot/ palaeolithic
Manor/ post-medieval

SYNOPSIS: A palaeolithic axe and flint flakes were found in gravel workings at this location. A number of other hand axes are recorded as being from Stubbs or Studds pit which has been identified with this site. The manorhouse, Iver Court Farm is recorded as being in existence by 1640. The present building is a grade II listed building dating from the late 18th century.

SURVEY RECORD NO: 22 OS PARCEL NO: *
PARISH: Iver GRID REF: TQ 0413 8110
CAS NO: 1680, 5319
SITE TYPE/ PERIOD: Fishery/ medieval, post-medieval
Findspot/ medieval, saxon, medieval

SYNOPSIS: Documentary evidence indicates that a fishery was located at the edge of this field on the Colne from the eleventh to the nineteenth century. Saxon and medieval pottery and a mesolithic tranche axe were found in service trenches between the churchyard and M25.

SURVEY RECORD NO: 23 OS PARCEL NO:
PARISH: Iver GRID REF: TQ 0411 8135
CAS NO: 2829
SITE TYPE/ PERIOD: Watermill/ Medieval; Post-Medieval

SYNOPSIS: Documentary sources indicate the presence of a mill here since the eleventh century. The latest mill on the site was burned down in c.1850. The remains of the weir and sluices are still visible.

SURVEY RECORD NO: 38 OS PARCEL NO: *
PARISH: Iver GRID REF: TQ 0440 8228
CAS NO: 5304
SITE TYPE/ PERIOD: Cropmark; enclosure, field system/ undated

SYNOPSIS: Part of a rectangular enclosure and associated linear features are visible as cropmarks on the edge of a gravel pit.
Not in area of study corridor.

SURVEY RECORD NO: 48 OS PARCEL NO: 0014, 9511
PARISH: Iver GRID REF: TQ 0407 8216
CAS NO: 4383, 5320
SITE TYPE/ PERIOD: Dovecote, manor; Medieval/ Post-Medieval
Fishpond, watermill ?; Post-Medieval

SYNOPSIS: Probable site of the medieval manor of Iver.
Existing buildings are 18th century. The fishpond, now under the M25, was an elongated pond with a wall dividing it into two halves, and is shown on the 1932 OS maps but not on the first edition.

SURVEY RECORD NO: 62 OS PARCEL NO: 4600 (part)
PARISH: Iver GRID REF: TQ 0340 8380
CAS NO: 4822
SITE TYPE/ PERIOD: Cropmark; enclosure/ undated

SYNOPSIS: Vague linear features on aerial photographs in addition to enclosures and buildings. However gun pits are visible on 1947 and 1951 RAF a/p.

SURVEY RECORD NO: 64 OS PARCEL NO: 2500
PARISH: Iver GRID REF: TQ 0316 8405
CAS NO: 4870
SITE TYPE/ PERIOD: Flint scatter/ Neo/BA

SYNOPSIS: Flint flakes and scraper recovered during fieldwalking in adjacent field.

SURVEY RECORD NO: 66 OS PARCEL NO: 4647
PARISH: Iver GRID REF: TQ 0346 8345
CAS NO: 4822
SITE TYPE/ PERIOD: Cropmarks; enclosure/ undated

SYNOPSIS: Vague linear features are visible together with enclosures and buildings as cropmarks. However gun pits are visible on RAF a/p of 1947 and 1951; cf. record no. 62.

SURVEY RECORD NO: 67 OS PARCEL NO: 8656,57 (pts)
PARISH: Iver GRID REF: TQ 0382 8349
CAS NO: 5053
SITE TYPE/ PERIOD: Settlement; flint scatter/ mesolithic

SYNOPSIS: Trial trenches in 1981 demonstrated the presence of a 'shore-line' deposit of a calcareous nature together with mesolithic flintwork and peat deposits. Further work in 1983 produced a wooden stake dated to the late Neolithic/ Bronze Age, and further peat deposits.

SURVEY RECORD NO: 77 OS PARCEL NO: 0001+
PARISH: Iver GRID REF: TQ 0390 8414
CAS NO: 4824
SITE TYPE/ PERIOD: Cropmark; enclosure/ undated

SYNOPSIS: Cropmarks on aerial photo depict a broad ring in the centre of an oblong area of disturbance. The whole could represent infilled quarrying. Not within study corridor.

SURVEY RECORD NO: 78 OS PARCEL NO: 0057
PARISH: Iver GRID REF: TQ 0406 8357
CAS NO: 4384
SITE TYPE/ PERIOD: Manor/ Medieval, Post-Medieval

SYNOPSIS: Documentary evidence indicates that there was a manor here, from as early as the thirteenth century. Not within study corridor.

SURVEY RECORD NO: 86 OS PARCEL NO: 6346 (part)
PARISH: Iver GRID REF: TQ 0260 8436
CAS NO: 5492
SITE TYPE/ PERIOD: Flint scatter/ Neo/BA

SYNOPSIS: Findspot of flint flake.

SURVEY RECORD NO: 96 OS PARCEL NO: 6346 (part)
PARISH: Iver GRID REF: TQ 0268 8448
CAS NO: 5492
SITE TYPE/ PERIOD: Artefact/ Neolithic; Bronze Age

SYNOPSIS: Findspot of a flint flake.

SURVEY RECORD NO: 98 OS PARCEL NO: ?
PARISH: Iver GRID REF: TQ 0441 8089
CAS NO: 1680
SITE TYPE/ PERIOD: Fishery/ Medieval, Post-Medieval

SYNOPSIS: Documentary evidence describes the location of a fishery on the Colne in this area, from the eleventh to the nineteenth century.

APPENDIX 2

CARTOGRAPHIC SOURCES

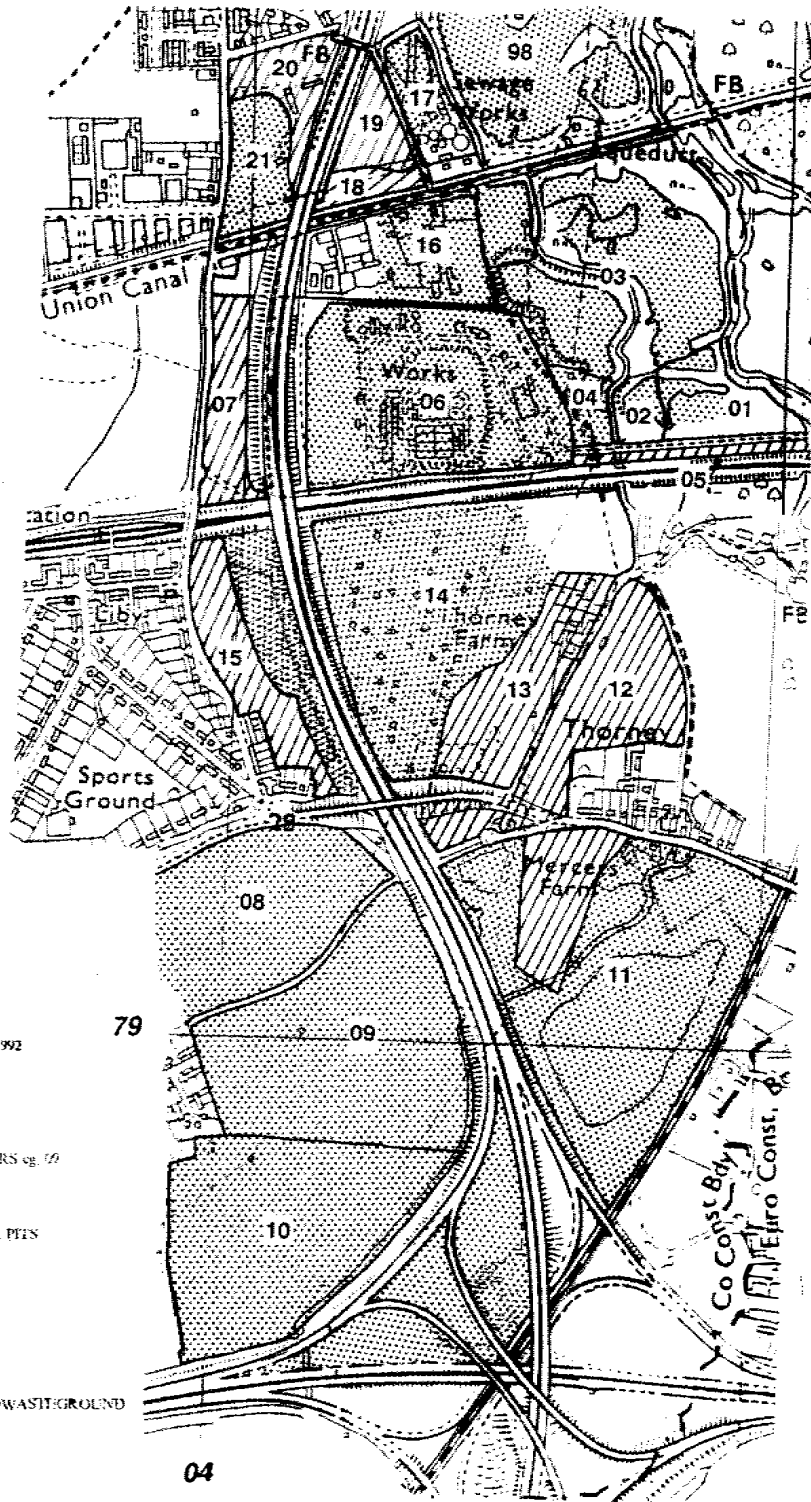
REFERRED TO

DURING THIS ASSESSMENT

Cartographic sources used during this study:

1794/1801 Iver Inclosure and survey
1844 Iver Tithe Award

1875	Ordnance Survey 25" (first edition)	54:13
"	" "	53:16
"	" "	53:12
"	" "	54:9
"	" "	57:1
1876	" "	56:4
"	" "	53:8
1878	" " 6" "	53/2
1900	" " 25" 10NE	
"	" " " 10SE	
"	" " " 10SW	
1926	" " " 10NW	
1958	" " 6" (1:10560) TQ 84NE	
"	" " " " TQ 84NW	
"	" " " " TQ 84SW	
1960	" " " " TQ 93NW	
1972	" " 1:10,000 TQ 84SE	
1974	" " " " TQ 08SW	
1975	" " " " TQ 07NW	
1983	" " " " TQ 94SW	
1987	" " " " TQ 83NE	



LAND USE, SEPTEMBER 1992

1:10 000

SURVEY PARCEL NUMBERS eg. 19

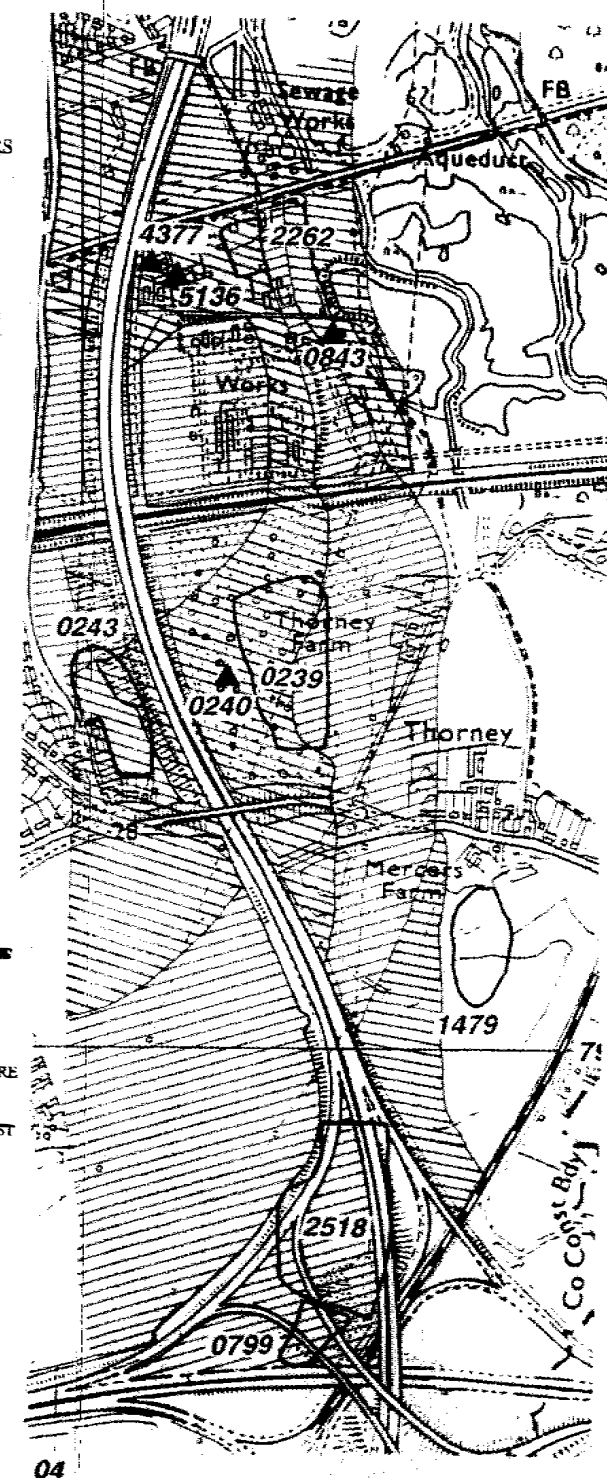
- FORMER GRAVEL PTS
- ARABLE
- RECREATIONAL
- ROUGH PASTURE/WASTE/GROUND

BUCKINGHAMSHIRE COUNTY MUSEUM
ARCHAEOLOGICAL SERVICE
FOR DEPARTMENT OF TRANSPORT
AND SIR WILLIAM HALCROW AND PARTNERS
M25 WIDENING JUNCTIONS 15 - 16
ARCHAEOLOGICAL SURVEY

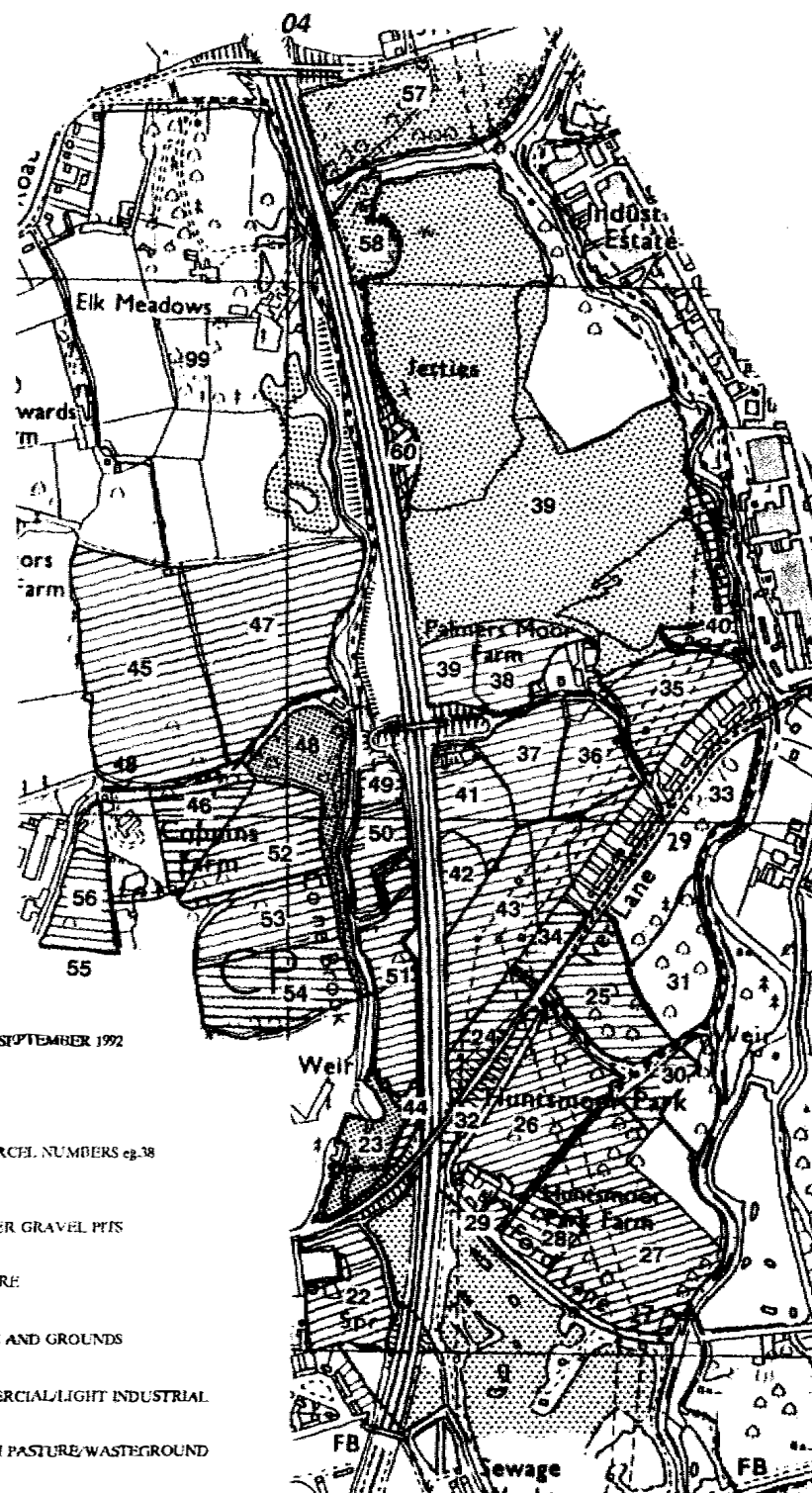
GEOLOGY AND KNOWN ARCHAEOLOGICAL SITES

1:10 000

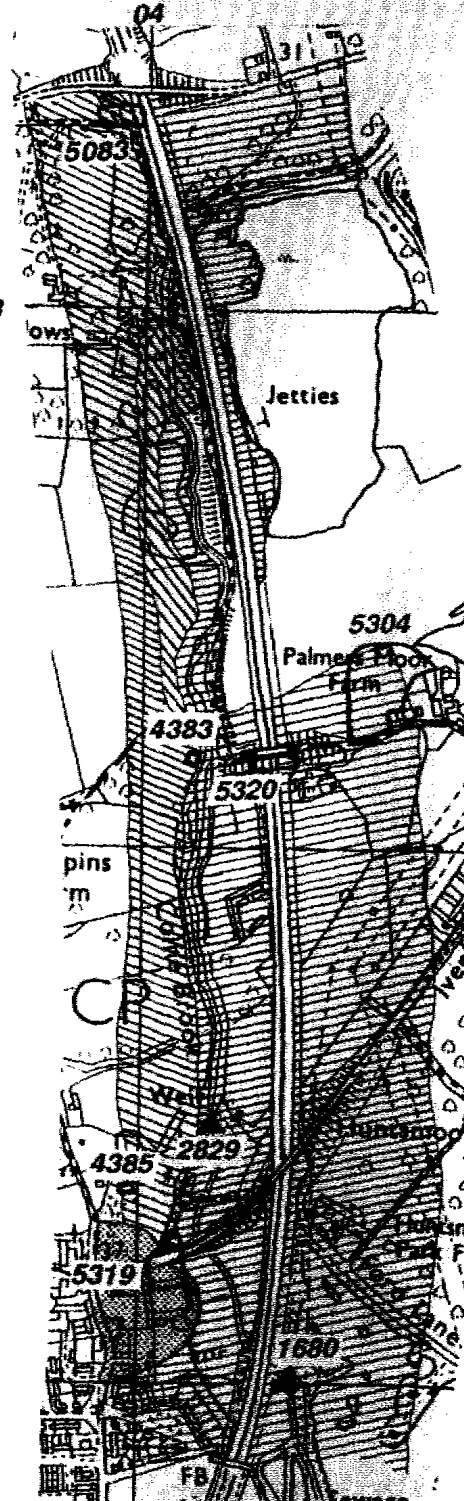
- SPECIFIC ARCHAEOLOGICAL FIND OR FEATURE
- KNOWN AREA OF ARCHAEOLOGICAL INTEREST AND CAS NUMBER
- RIVER BRICK EARTH
- TERRACE GRAVEL
- LONDON CLAY
- ALLUVIUM



83



83



GEOLOGY AND KNOWN ARCHAEOLOGICAL SITES

1:10 000

▲ SPECIFIC ARCHAEOLOGICAL FIND OR FEATURE

◡ KNOWN AREA OF ARCHAEOLOGICAL INTEREST AND CAS NUMBER

TERRACE GRAVEL

LONDON CLAY

ALLUVIUM

GLACIAL SAND AND GRAVEL







GRAVEL (FLOOD PLAIN TERRACE)

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AND SIR WILLIAM HALCROW AND PARTNERSM25 WIDENING JUNCTIONS 15 - 16
ARCHAEOLOGICAL SURVEY

LAND USE, SEPTEMBER 1992

1:10 000

SURVEY PARCEL NOS. eg.62

-  FORMER GRAVEL PITS
-  PASTURE
-  ARABLE
-  RECREATIONAL
-  WOODLAND
-  HOUSE AND GARDENS
-  ROUGH PASTURE/WASTEGROUND

GEOLOGY AND KNOWN ARCHAEOLOGICAL SITES


1:10 000

 SPECIFIC ARCHAEOLOGICAL FIND OR FEATURE

 KNOWN AREA OF ARCHAEOLOGICAL INTEREST AND CAS NUMBER

 LONDON CLAY

 ALLUVIUM

 GLACIAL SAND AND GRAVEL

 MOTTLED CLAY AND SAND

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ARCHAEOLOGICAL SERVICE

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M25 WIDENING JUNCTIONS 15 - 16
ARCHAEOLOGICAL SURVEY

