



Archaeological Field Unit

A605 Peterborough to Whittlesey Improvements: An Archaeological Desktop Study

S Kenney

October 1997

Cambridgeshire County Council

Report No. A117

Commissioned By WS Atkins Consultants Ltd

**A605 Peterborough to Whittlesey Improvements:
An Archaeological Desktop Study**

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SUMMARY

This study attempts to define the archaeological potential of land along the route of the proposed A605 Peterborough to Whittlesey improvement scheme, centred on TL 225/963. It also attempts to determine the potential impact of the development proposals upon the archaeological resource and suggests possible mitigation strategies. The study was commissioned by WS Atkins Consultants Ltd, on behalf of Cambridgeshire County Council. It is largely based on existing sources, and the results of recent excavations along the proposed route.

The proposed route approximately follows the existing A605 between Whittlesey and Horsey Bridge, deviating to the south of Stanground and north of Farcet, eventually joining up with the proposed Peterborough Southern Township development.

The study area lies within a zone of high archaeological potential crossing the Fen Edge, and islands within the Fen. The entire area is rich in sites from the later prehistoric and Roman periods

Prehistoric finds have also been discovered very close to the route, and further abroad in the Fen, while the Bronze Age site of Flag Fen is only 2.5km to the north, and the potential exists to find similar sites.

The greatest potential of the development corridor is for the discovery of further Roman artefacts, of which numerous examples have already been recovered, both as stray finds and during excavations. The route converges to within c500m of the Roman Fen Causeway at its eastern end.

Around Horsey Hill Civil War Fort, any developments may reveal 17th century artefacts, both military and civilian, and could potentially reveal the location of any earthworks that have been subsequently ploughed out.

Alluvium and peat cover, coupled with modern landuse mean that aerial photography and geophysical survey are of limited use in establishing the precise location of archaeological remains within the study area. Fieldwalking and trial trenching, along with other intrusive methods, would be the best ways of characterising these remains.

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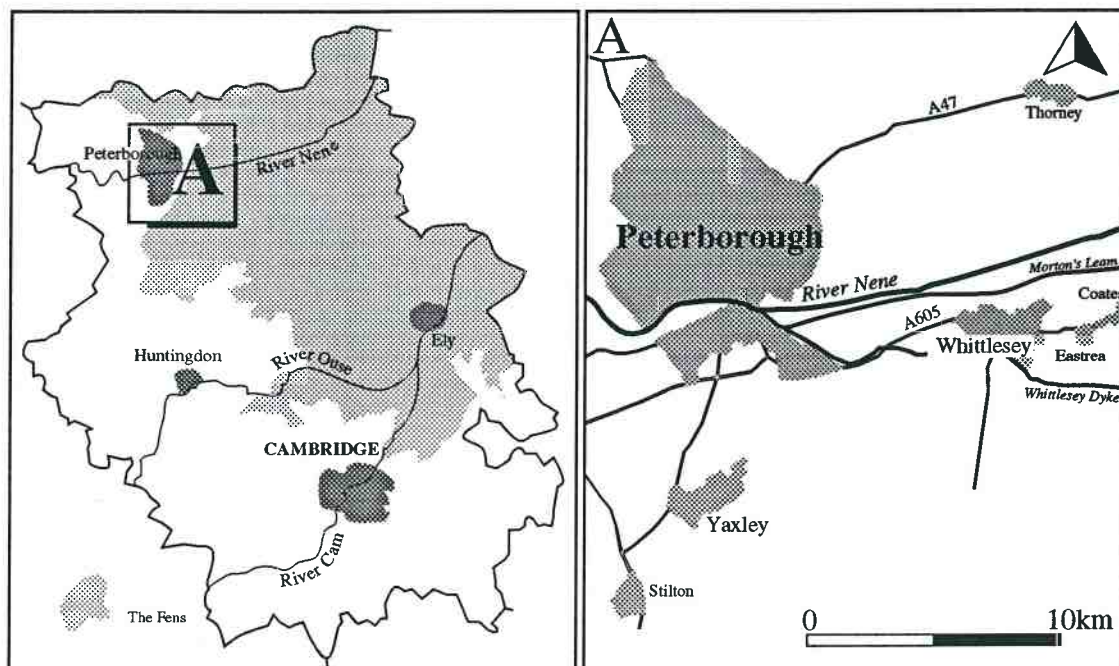
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A605 PETERBOROUGH TO WHITTLESEY IMPROVEMENTS: AN ARCHAEOLOGICAL DESKTOP STUDY

1 INTRODUCTION

- 1.1 This desktop study was commissioned by WS Atkins Consultants Ltd on behalf of Cambridgeshire County Council in order to define the archaeological potential of land in a corridor 1km either side of the proposed route of the A605 improvements. Additionally, this study is intended to assess the possible impact of the development.
- 1.2 The route deviates south from that of the current A605 just to the west of Church Field, outside Whittlesey, crossing back to the north before the railway and rejoining at a new roundabout at the access road to the industrial units. From there, it crosses to the north of the current route again, avoiding the houses of King's Dyke and skirting Horsey Hill Civil War Fort. It crosses the current A605 again at Horsey Bridge, where another new roundabout is planned, and then runs off westwards to the south of Stanground and to the north of Farcet. The road is intended to link up with the Peterborough Southern Township Road Proposals.



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Figure 1 Location Map

2 GEOLOGY, TOPOGRAPHY AND LAND USE

- 2.1 At the western end of the proposed bypass between Farcet and Horsey Toll, the route is underlain by glacial lake deposits (GLD), which in turn overlie the Oxford Clay. At Horsey Toll, alluvium directly underlies the route, giving way to Nordelph Peat over Oxford Clay to the east as far as Field's End Bridge. Beyond this to the east, the March Gravels overlie the Oxford Clay.
- 2.2 The corridor of the proposed route skirts the higher ground of Peterborough to the north and Farcet and Yaxley to the south, continuing through almost flat Fenland towards the fen island upon which Whittlesey sits. Most of the route is below 5m AOD, except the small islands at Horsey Hill and just to the south.
- 2.3 Between Farcet and Field's End Bridge, the land is almost wholly agricultural, classified by the Ministry of Agriculture, Fisheries and Food (MAFF) as Grade 3. Beyond that point, the land is and has been disturbed by mineral extraction, largely removing Oxford Clay for brickmaking, which occurs on-site. A small part of the study area to the south of King's Dike is classified as MAFF Grade 2. Grades 2 and 3 are considered to be the best agricultural lands.

3 THE ARCHAEOLOGICAL AND HISTORIC CHARACTER OF THE STUDY AREA

3.1 Past Landscape and Environmental Change

- 3.1.1 The changing nature of the Fen over the past 7000 years has undoubtedly influenced the placement of settlement and restricted the areas available for agriculture.
- 3.1.2 Prior to the Mesolithic, the entire fen basin was dry, but by the early Neolithic, the first peat fen had formed, and the marine deposits of the Barroway Drove Beds encroached upon this peat during the late Neolithic. By the early Bronze Age, this marine flooding had ceased and peat again formed on the surface. This was followed by further marine incursions of the Upper Barroway Drove Beds and yet another peat formation. The probable Neolithic course of the Nene is shown on *fig 2*, cutting across the study area.
- 3.1.3 During the Iron Age, the Terrington Beds were deposited, but these only occupy the north-eastern part of Cambridgeshire, and most of the fen was under peat. In the Roman period, the water table fell and it can clearly be seen from the distribution of finds on *fig 3* that the local inhabitants were using land within the fen itself for industrial and agricultural purposes. The Iron Age peat would have suffered wastage and hence the drainage pattern has disappeared.

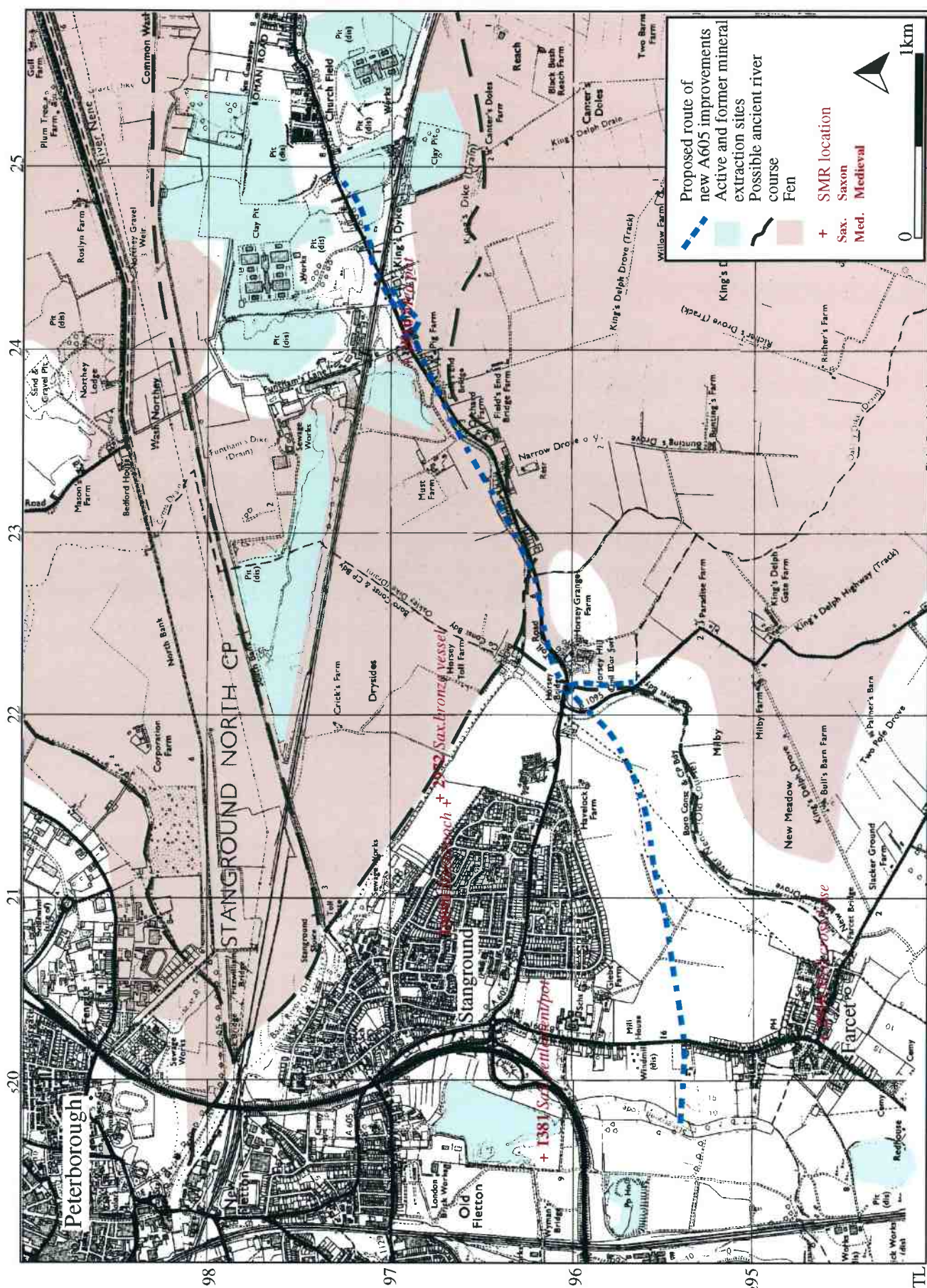
- 3.1.4 In the Saxon period the drainage system seems to have been in chaos and the record is confused, but generally, the water table was rising, and by Medieval times, the fen islands had shrunk slightly, and the fen itself would have been much wetter.
- 3.1.5 As can be seen from *figures 2, 3, 4, and 5*, the fen edge did not change dramatically in this area until the Medieval period, but the course of the Nene has altered quite profoundly, and the presence of its Neolithic palaeochannel crossing the study area has implications for any programme of archaeological investigations.

3.2 Early Settlement (*figure 2*)

- 3.2.1 Little material and few sites have been found in the western Fenland bordering Peterborough that date from the early prehistoric periods. A Palaeolithic handaxe found "at Fletton" is in Peterborough Museum (SMR 1632), and animal bone was found in a pit of the same date near the old watercourse in the Fletton Brick Co's No 1 Yard (SMR 1633a).
- 3.2.2 No definitively Mesolithic or Neolithic finds have been recovered from the study area, although two dugout canoes found in 1828 at Horsey Bridge and possibly left *in situ* probably date from the latter period (SMR 2955).
- 3.2.3 The Bronze Age is well represented in this area. Although not within the road corridor, the Bronze age site at Flag Fen is one of the most important in the eastern counties, and is of national significance. Locally, within the Fenland, it is without peer, and is extensively discussed elsewhere (see bibliography). It lies about 2.5km almost due north of Horsey Hill.
- 3.2.4 Within the corridor, several Bronze Age sites and find spots have been recorded. Ring ditches were found at the junction of Narrow Drove and King's Delph Drove (SMR 8156) and just south of Milby Farm (SMR 6804). Burials were recorded from gravel pits near the present Fletton Lake (SMR 1633) and from north of King's Dyke (SMR 2740). A socketed axe came from south of Farcet (SMR 2936), and a leaf shaped Late Bronze Age sword from just NW of the depot at Horsey Toll Farm (SMR 2937). Sherds of Bronze Age pottery were found at Field's End Bridge Pit, very close to the proposed route (SMR 3154).

3.3 Iron Age and Roman (*figure 3*)

- 3.3.1 Apart from sherds of pottery found west of Bunting's Farm (SMR 1719), the only instance of Iron Age finds is at Funtham's Pits, where material recovered from ditches and pits is suggestive of settlement.



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Figure 4 Saxon and Medieval SMR entries within the study area

- 3.3.2 Roman finds are numerous from the study area. Sites and find spots of varying character and quality have been discovered from the entire length of the proposed route, particularly to the north and southeast of Horsey Toll. Of particular interest are the kilns northwest of Horsey Toll (SMR 3127, SMR 3128), and building material found just northeast of Horsey Hill Fort (SMR 4015). Also found close to the route were pottery, coins, a bronze vessel, and a sword (SMR 2940, SMR 3154). The Fen Causeway, an extremely important crossing between fen islands, crosses the Northeast corner of the subject area, and approaches to within 500m of the proposed route.

3.4 Saxon and Medieval (*figure 4*)

- 3.4.1 After the Roman period, there is a dearth of Saxon and Medieval finds. A Saxon bronze vessel and a brooch were found northwest of the Roman kilns mentioned above (SMR 2972, SMR 10090). Sherds of Medieval pottery were found close to the route at Field's End Bridge Pit (SMR 3154b).
- 3.4.2 The two significant drainage improvement schemes along the route both date from these periods. The King's Dike is a possibly late Saxon canalisation of the ancient course of the Nene, hence its somewhat weaving appearance. In contrast, Morton's Leam, commissioned by Bishop Morton and constructed from 1478-90, is a straight cut, one of the earliest of its type.
- 3.4.3 The name Whittlesey is first recorded c. 972 in an Anglo-Saxon Charter, as 'Witlesig', meaning 'Wittel's Island' (Reaney 1943, after Robertson 1939). Witel is the name of a moneyer, and is a diminutive of Witta.

3.5 Post-Medieval and Modern (*figure 5*)

- 3.5.1 Aerial photographs analysed for this study revealed the presence of ridge and furrow around the built-up area of Stanground, but nowhere else in the study area (see appendix A).
- 3.5.2 Two wind pumps are located near to the route (SMR 2908, SMR 2899), but the most obvious Post-Medieval site is that of Horsey Hill Civil War Fort (SM 27189). The Fort was constructed to control the bridge across the Nene, and was first referred to in 1644. A contemporary plan exists and is in the British Library. Present day survival of the Fort is good, with only the northwest rampart being slightly truncated by the later road. Within the ramparts, there is also a modern house, the access road to which has cut through two of the banks (*figure 6*).
- 3.5.3 A possible World War II Airfield was also revealed during the analysis of aerial photographs, located to the north of Horsey Toll (see appendix A).

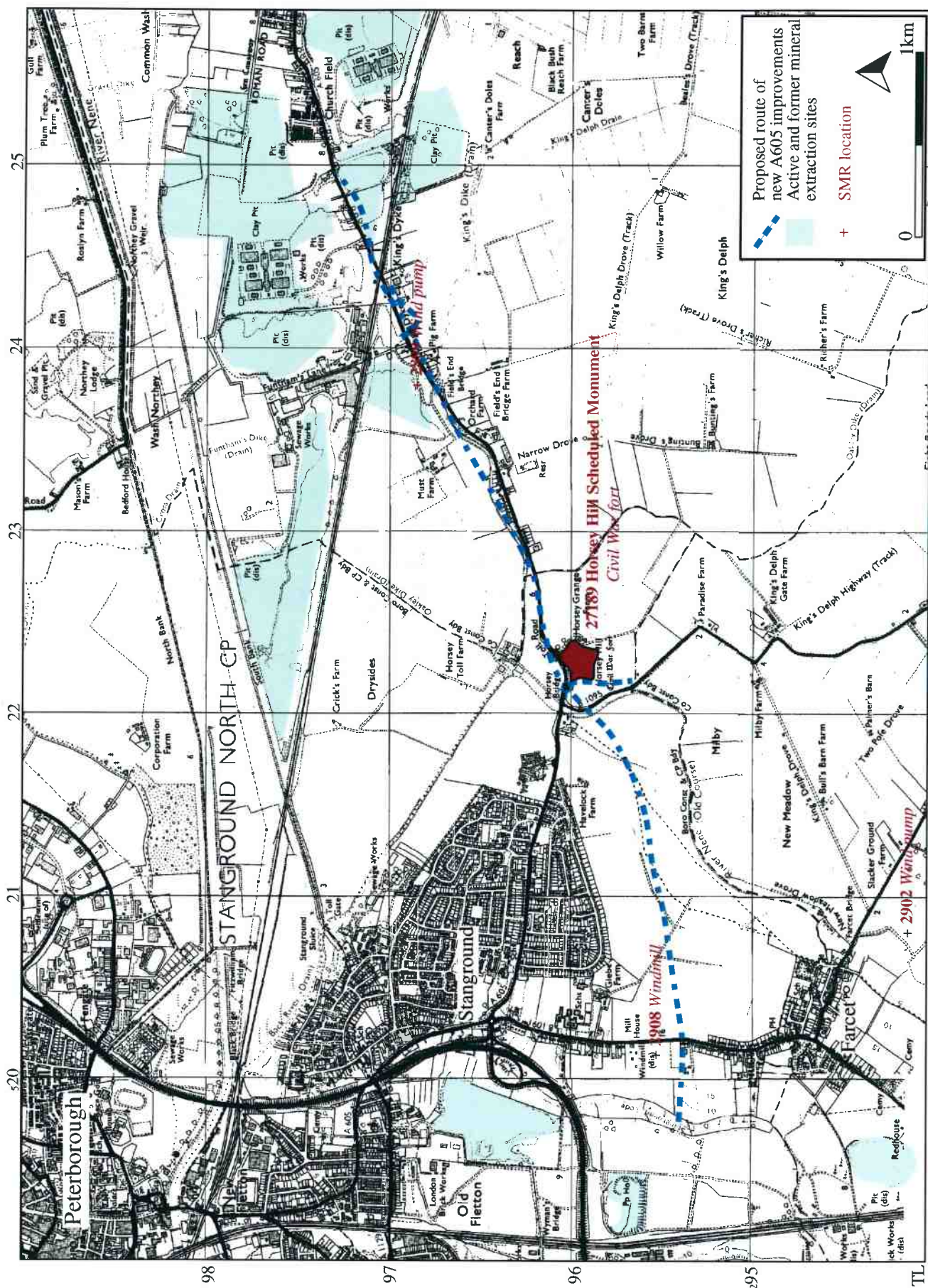


Figure 5 Post-Medieval SMR entries within the study area

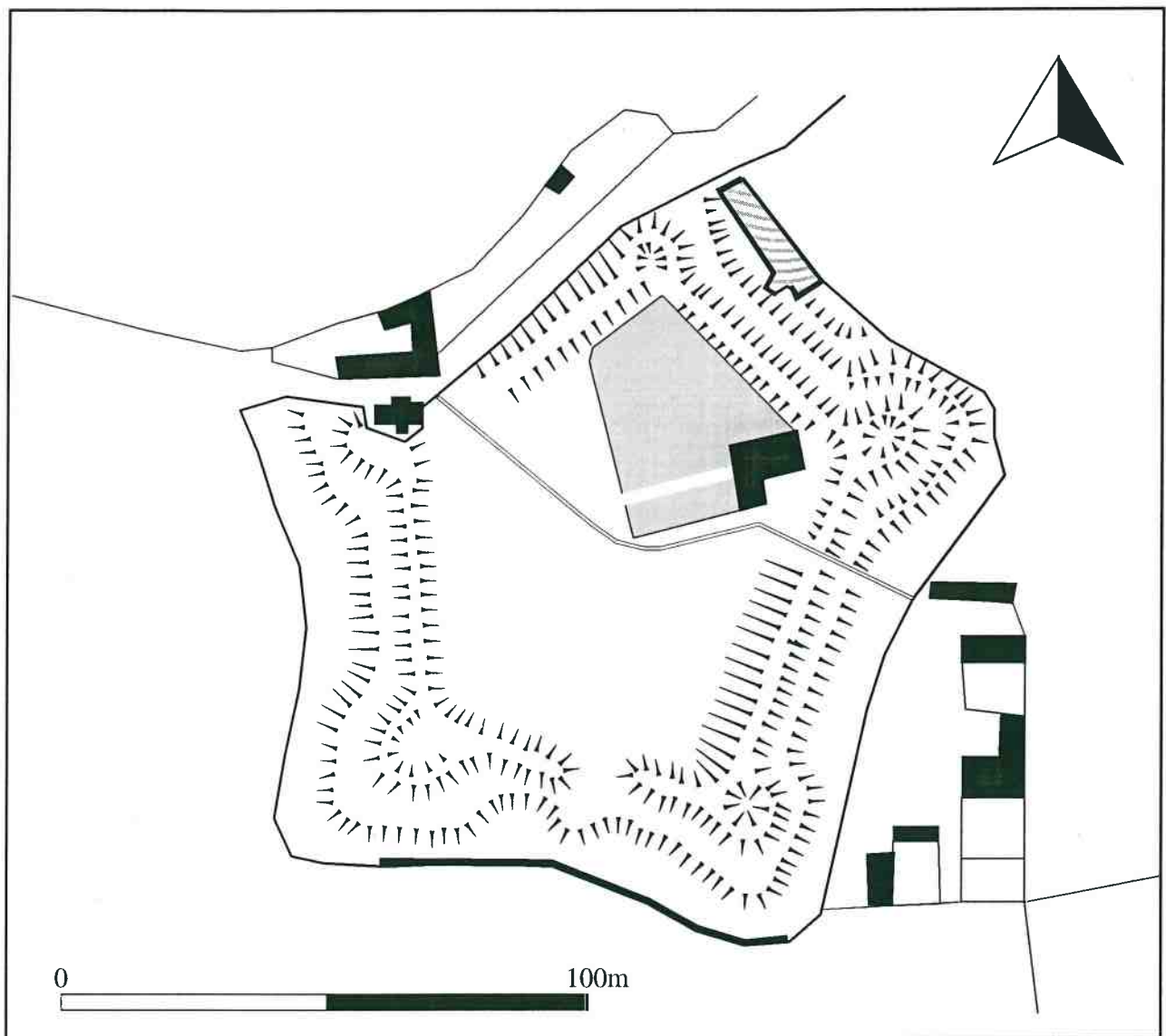


Figure 6 *Plan of Horsey Hill Civil War fort*

4 THE POTENTIAL SURVIVAL OF ARCHAEOLOGICAL DEPOSITS

- 4.1 In the areas of clay and gravel extraction at the eastern end of the study corridor, any archaeology will have been completely destroyed, although it may survive in the narrow strips between pits, and between the edges of the pits and field boundaries.
- 4.2 The remainder of the route passes through land which is largely arable, and hence disturbance will have been restricted to the depth of ploughing in most areas. This has obvious ramifications for the survival of sites masked by alluvium and the Nordelph Peat, and as has been demonstrated in the Fengate area, preservation of waterlogged deposits can be excellent.

5 THE POTENTIAL IMPACT OF THE PROPOSED DEVELOPMENT

- 5.1 Any intrusion below the level of the ploughsoil has the potential to destroy archaeological deposits in all areas except where quarrying has taken place. This will include the entire road line and its easement.
- 5.2 Although the road itself may be eventually raised above the surrounding ground level, any landscaping or "borrow" pits will have an impact on any underlying archaeology.
- 5.3 The moving of services, insertion of drains, and cutting of new roadside ditches will destroy any archaeological deposits which survive in those areas.
- 5.4 Due to the soft nature of the peat and alluvium, heavy plant will have a profound impact upon the underlying archaeology, and this will increase in wet conditions.
- 5.5 Any alteration in the water table due to extraction or abstraction will potentially result in the loss of waterlogged archaeological deposits, and this could be the single largest cause of damage to the archaeological resource.

6 THE ARCHAEOLOGICAL POTENTIAL OF THE STUDY AREA

- 6.1 Although by no means certain, it is possible that the Neolithic dugout canoes found in 1828 were left *in situ*, and their location is so close to the route that if this proved to be the case, they would likely be rediscovered during construction. Even if they are not located, the route will cross the Neolithic palaeochannel of the Nene at least once, and the potential for finding waterlogged remains is great. Additionally, the opportunity for research into past environmental conditions should not be ignored.
- 6.2 The local Fen Edge has been demonstrated through numerous investigations to be an area of outstanding importance in the Bronze Age. The sites at Fengate and Flag Fen in particular have proven the survival of large, complex sites beneath the alluvium and peat cover. Finds made near to the route indicate a strong likelihood of finding further remains of this period. Because the route crosses a large swathe of Fen Edge, which has been an important area for settlement from Neolithic and Bronze Age times onwards, as well as potentially identifying further discrete sites in addition to those already known, any groundworks are likely to reveal evidence of field systems between sites. Evidence may be preserved which contains important information about environmental and landscape change, and landuse from these periods.

- 6.3 The quantity and variety of Roman remains from the study area make it almost certain that further finds from the period will be located during groundworks. The location of several kilns close to Horsey Toll is of particular interest.
- 6.4 The Saxon and Medieval periods are not well-represented in the record for this area, but stray finds have been found and further examples and/or the originating deposits, might be expected to be uncovered near previous findspots.

7 RECOMMENDATIONS

- 7.1 The areas of clay and gravel extraction around the brickworks will not require further archaeological work.
- 7.2 Geophysical survey is unlikely to be helpful in locating areas of archaeology because of the masking effect of the alluvium and peat.
- 7.3 Aerial photographic assessment of the area has shown little other than Medieval ridge and furrow around Stanground.
- 7.4 Fieldwalking the easement would probably give some indication as to the location of buried sites if ploughing has begun to truncate them, incorporating finds into the topsoil. This technique would be most appropriate for areas under arable cultivation, but its effectiveness may be reduced in areas where there has been alluviation. Negative results from fieldwalking cannot be taken as indicative of archaeologically blank areas. Fieldwalking should be employed selectively in appropriate areas to inform the targeting of more intrusive methods of investigation, such as trial trenching and test pitting. A programme of fieldwalking could commence once crops had been harvested. Although the latter generally implies a late autumn and winter opportunity for fieldwalking, specific crop regimes may affect the timetabling of such investigations.
- 7.5 Following fieldwalking, a programme of linear trenching and test-pitting is recommended to focus on areas that have demonstrated archaeological potential. Within these defined areas, a 2% sample is considered normal to form a reasonable hypothesis as to the nature of the site.
- 7.6 The area north of Horsey Toll is of major interest and has great potential to produce waterlogged archaeological remains of the highest quality, including further Neolithic and Bronze Age deposits. The previously discovered artefacts tend to suggest Neolithic occupation nearby. In addition to the other non-intrusive, techniques mentioned, an auger survey in the immediate area might reveal the presence of preserved wood. This would allow for better targeting of areas for intrusive investigation. There is also the strong likelihood of encountering additional Roman kiln sites and their associated features, which would require sample excavation.

- 7.7 Since the route crosses the Neolithic course of the Nene around the Field's End Bridge area, there will be an opportunity to examine the waterlogged deposits therein and recover evidence of environmental change, as well as any preserved artefactual material, including wooden vessels and tools.
- 7.8 Between these two areas mentioned above, in the surviving narrow strip south of Field's End Bridge Pit, there could be material related to previous findspots close to the route, and trial trenches would help to clarify the extent of these sites.

ACKNOWLEDGEMENTS

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BIBLIOGRAPHY

Cambridgeshire Sites and Monuments Record (SMR)

- | | |
|-------------------------------|--|
| Fox, C , 1923 | <i>The Archaeology of the Cambridgeshire Region</i> ,
Cambridge University Press |
| Hall, D, 1987 | <i>The Fenland Project No 2-Cambridgeshire Survey, Peterborough to March</i> , East Anglian Archaeology Report No 35 |
| Hall, D, 1992 | <i>The Fenland Project No 6-The South-Western Cambridgeshire Fenland</i> , East Anglian Archaeology Report No 56 |
| Hall, D, and Coles, J
1994 | <i>Fenland Survey-An Essay in Landscape and Persistence</i> , English Heritage Archaeological Report No 1 |

- Lucas, G, 1997 *Archaeological Investigations at Star Pit, King's Dyke (Area C), Whittlesey, Cambridgeshire, Cambridge Archaeological Unit Report No 207*
- Pryor, F, 1997 *Peterborough East-A guide to curation in an area of outstanding archaeological importance, Fenland Archaeological Trust/English Heritage*
- Pryor, F, 1997 *Archaeological evaluation at Murden's Former Depot, Fengate, Peterborough, Cambridgeshire, Fenland Archaeological Trust Report 97/1*
- Pryor, F, 1997 *Archaeological Evaluation at Flag Fen Sewage Treatment Works, Fenland Archaeological Trust Report 97/2*
- Reaney, PH , 1943 *The Place-Names of Cambridgeshire and the Isle of Ely, English Place-Name Society No 19, Cambridge*
- Rumble, A , (ed), 1981 *The Domesday Book, Phillimore*
- Taylor, CC , 1973 *The Cambridgeshire Landscape, Hodder and Stoughton*
- Wilkes, JJ , & Elrington, CR, (eds), 1978 *A History of the County of Cambridge and the Isle of Ely, Vol VII, Roman Cambridgeshire, The University of London Institute for Historical Research*
- Williams, PJ, 1996 *A605 Peterborough to Whittlesey Improvements, Environmental Assessment, Volume 1, WS Atkins Draft Report*
- Wright, APM, (ed), 1982 *A History of the County of Cambridge and the Isle of Ely, Vol VIII, The University of London Institute for Historical Research*

Maps consulted

Ordnance Survey, Draft 1", 1821

Ordnance Survey 1:25000 Pathfinder sheet 919, Whittlesey, 1986

Ordnance Survey 1:50000 Landranger sheet 142 Peterborough, 1991

British Geological Survey 1:50000, sheet 158, Peterborough, Solid and Drift Edition, 1984

**A605 PETERBOROUGH to WHITTLESEY IMPROVEMENTS,
TL197953 to TL250973,
CAMBRIDGESHIRE:
AERIAL PHOTOGRAPHIC ASSESSMENT**

SUMMARY

This assessment of aerial photographs examined a corridor 500m each side of the route of the A605 improvements in order to identify and accurately map archaeological and natural features prior to field evaluation.

The proposed route of the new A605 cuts across remains of now-levelled medieval fields in the Stanground area.

No other archaeological features were identified that are likely to be affected by construction of the new road.

Mapping was at 1:2500.

A605 PETERBOROUGH to WHITTLESEY IMPROVEMENTS,

TL198953 to TL250973,

CAMBRIDGESHIRE:

AERIAL PHOTOGRAPHIC ASSESSMENT

Rog Palmer MA MIFA

INTRODUCTION

This assessment of aerial photographs was commissioned to examine a corridor of at least 500m each side of the route of the A605 improvements in order to identify and accurately map archaeological and natural features and thus provide a guide for field evaluation. Mapping was to be at 1:2500.

ARCHAEOLOGICAL AND NATURAL FEATURES FROM AERIAL PHOTOGRAPHS

In suitable soils, sub-surface archaeological features – including ditches, banks, pits, walls or foundations – may be recorded from the air in different ways in different seasons. In spring and summer these may show through their effect on crops growing above them. Such indications tend to be at their most visible in ripe cereal crops, in June or July in this part of Britain, although their appearance cannot accurately be predicted and their absence cannot be taken to imply evidence of archaeological absence. In winter months, when the soil is bare or crop cover is thin (when viewed from above), features may show by virtue of their different soils. Upstanding remains are also best recorded in winter months when vegetation is sparse and the low angle of the sun helps pick out slight differences of height and slope.

Grass rarely shows such marks but instead may reveal sub-surface features through the withering of the plants above them. These may occur towards the end of very dry summers and usually indicate the presence of buried walls or foundations. Such dry summers occurred in Britain in 1949, 1959, 1975, 1976, 1984, 1989 and 1990 (Bewley 1994, 25) and more recently in 1995 and 1996. This does not imply that every grass field will reveal its buried remains on these dates as local variations in weather and field management will affect parching. However, it does provide a list of years in which photographs taken from, say, mid July to the end of August may prove informative.

Natural faults and deposits can cause similar differences in crop growth and may also appear as startling colour changes in bare winter soils. In the area of this assessment area we may expect indications of the Fen edge on some winter photographs and there is the possibility of periglacial cracks – which may be mistaken for archaeological ditches – on gravel deposits. The latter can affect the growth of crops and become visible at the same times as archaeological features.

The most informative aerial photographs of archaeological subjects tend to be those resulting from specialist reconnaissance. This activity is usually undertaken by an experienced

archaeological observer who will fly at seasons and times of day when optimum results are expected. Oblique photographs, taken using a hand-held camera, are the usual product of such investigation. Although oblique photographs are able to provide a very detailed view, they are biased in providing a record that is mainly of features noticed by the observer, understood, and thought to be of archaeological relevance. To be able to map accurately from these photographs it is necessary that they have been taken from a sufficient height to include surrounding control information.

Vertical photographs cover the whole of Britain and can provide scenes on a series of dates between (usually) 1946-7 and the present. Unfortunately these vertical surveys are not necessarily flown at times of year that are best to record the crop and soil responses that may be seen above sub-surface features. Vertical photographs are taken by a camera fixed inside an aircraft and adjusted to take a series of overlapping views that can be examined stereoscopically. They are often of relatively small scale and their interpretation requires higher perceptive powers and a more cautious approach than that necessary for examination of obliques. Use of these small-scale images can also lead to errors of location and size when they are rectified or re-scaled to match a larger map scale.

PHOTO INTERPRETATION AND MAPPING

Photographs examined

Cover searches were obtained from the Cambridge University Collection of Aerial Photographs (CUCAP) and the National Library of Air Photographs (NLAP), Swindon. Photographs included those resulting from specialist archaeological reconnaissance and routine vertical surveys.

Photographs consulted are listed in the Appendix to this report.

Base maps

A base map at a scale of 1:10000 was provided by the client. Parts of this were enlarged to provide the 1:2500 backgrounds for Figures 2 and 3 in this report.

Photo interpretation and mapping

All photographs were examined by eye and under slight (1.5x) magnification, viewing them as stereoscopic pairs when possible. Vertical photographs were also examined stereoscopically using a 1.5x magnification stereoscope. All information relevant to this assessment has been interpreted and mapped from vertical photographs at 1:10000 or 1:7500 scale. Interpretations were marked on overlays to individual prints following procedures described by Palmer and Cox (1993). All rectification was computer assisted and carried out using AERIAL 4.2 software (Haigh 1993).

AERIAL computes values for error of control point match between the photograph and map. In the 1:2500 rectifications prepared for this assessment these were less than $\pm 2.0\text{m}$. Rectified and

plotted output was combined to form the basis of the digital plans that illustrate this assessment (Figure 2-3).

COMMENTARY

Soils

The Soil Survey of England and Wales (SSEW 1983) shows the area to include deposits of Chalky till (series 411d) and River terrace drift (series 573a) separated by a band of river alluvium over peat (series 813a). The first two deposits correspond to the west and east high ground shown in Figure 1 and provide the land on which most of the known archaeological features have been recognised. Hall (1987, 55-56; 1992, 15) provides more detail on the Flandrian deposits of the area.

Archaeological features (Figure 1)

The context map combines information interpreted for two current assessments that have a common boundary along the existing A605. It would seem logical for these to share the increased area of small-scale information shown in Figure 1.

Almost all of the information in the context map has been interpreted from vertical photographs taken between 1946 and 1982. Archaeological reconnaissance has taken place in the area (at very least by CUCAP, and RCHME plus myself) but although parts of the Whittlesey gravels have shown crop-marked features, there is little to be seen on the low ground or in the immediate environs of east Peterborough. Within the area examined there has been a mass of recent development including the expansion of Peterborough and Stanground and the opening of new pits for the Whittlesey brick works. Many of the features recorded for the first time in this assessment had been destroyed before they were identified.

The main context provided for the A605 improvements tends to be of medieval fields, with ridge and furrow and headlands being patchily recorded on the edges of Stanground. [Most of the area of present houses was formerly medieval fields, but these have not been mapped due, partly, to problems of matching 1940s photographs with a 1990s map!] One area, on the then-east edge of Stanground (TL219963) was the subject of an earlier APS aerial photographic assessment (Cox 1994) and the relevant information on Figure 1 was reduced from that mapping. Other than one small group of ridge and furrow that remained in earthwork condition in 1988 (centred TL205957), it is unlikely that any of the medieval fields will now show any surface relief.

Little has been recorded from the air on the south side of Whittlesey island. On the upland side of the Fen edge most of the available ground has been quarried or is land associated with that activity: buildings or areas of rough pasture. Fields in the Fen but abutting the Fen edge have also had more use as pasture than those on the deeper peat.

Notes on specific sites, mostly within the 500m corridor, follow in a west-to-east order:

Area TL2096 (Figure 2)

This multi-ditched linear feature was identified on one set of photographs only. It may indicate the route of a former ditched trackway in which the broader, central, linear may result from hollowing. It crosses, or is crossed by, medieval ridge and furrow. Although this is beyond the 500m corridor it has been included because of the apparent continuity with the headland to its south (see Figure 1). It is unknown whether headland and ditches are contemporary or whether, for example, the headland follows the course of an earlier track or boundary. Similar examples are known near Royston, in the south of Cambridgeshire.

Area TL219963 (Figure 1)

No changes have been made to the mapping and report produced by Cox (1994).

Civil War fort, TL223960 (Figure 1)

No additional information has been interpreted from photographs showing this site. Outer works were searched for, but none were apparent on the photographs examined. CUCAP hold many obliques of the fort taken between 1947 and 1982. Most of these have not been listed in this report. Some of the photographs show the line of the Fen edge and this corresponds well with that shown by Hall (1992, fig 7). There was no evidence of sub-surface features in the area of Hall's site 1 – a Roman structure at TL22429608 – or for any other activity on this relatively small island.

Possible World War II airfield, area TL225964 (Figure 1)

Attention was drawn to this area on 1946 vertical photographs by the presence of a large circle, some 50m in diameter, marked with a light-toned (possibly concrete?) boundary. Other smaller 'spots' were also noticed, plus a small T, and the presence of uncharacteristically large 'barns'. Adjacent fields were in pasture, still ditch divided, and showed marks of much vehicular traffic. It is suggested that this may be the location of a former airfield of the type where aircraft were assembled rather than an operational unit. The large circle could be a compass swinging area, the smaller spots may indicate defensive positions and the T may be a moveable wind-direction indicator. Despite the numerous wheel marks, none suggested the position of a permanently marked runway. In 1947 the west, south and east parts of the perimeter were used for storage of unidentified, but large, items to which there was frequent vehicular access. This had been cleared by 1950 and the field ditches appeared to have been cleared or recut. The large circle remained and was later marked by a ring of shrubs or trees.

If this was an airfield, or some other military establishment [the map used by Atkins notes it as 'Depot'] there may be metal, or other, remains which may affect the clarity of any surface investigation.

Area TL2396 (Figure 3)

This small group of features showed on several photographs taken before quarrying destroyed or masked the area. They are thought unlikely to be archaeological and may show the location of small enclosures (?pens) attached to former field boundaries. Although matching of control information was unexpectedly good when mapping this site, it remains unclear how much, if any, of the mapped features survive.

Area TL256978 (Figure 1)

A rectilinear enclosure was mapped in this position as part of a previous assessment (Area B: Palmer 1994). At that time the features were noted as possible, but suspect, archaeological ditches. The mapped features cut across a tongue of deep soil, possibly a former inlet, and may relate to recent drainage.

Non-archaeological features

There was little clear indication of the Fen edge on the photographs examined nor of any other features that may affect archaeological understanding within the corridor.

Land use

Other than as noted above, most fields within the corridor have been in arable use on most of the dates of photography.

REFERENCES

- Bewley, R. H., 1994. *Prehistoric Settlements*. Batsford/English Heritage, London.
- Cox, C., 1994. *Park Farm, Stanground, Peterborough: aerial photographic assessment*. Air Photo Services Report for Northamptonshire Archaeology.
- Haigh, J.G.B., 1993. A new issue of AERIAL – Version 4.20. *AARGnews* 7, 22-25.
- Hall, D. N., 1987. *The Fenland Project Number 2: Fenland Landscapes and Settlement between Peterborough and March*, *E. Anglian Archaeol.* 35.
- Hall, D. N., 1992. *The Fenland Project Number 6: The South-western Cambridgeshire Fenlands*, *E Anglian Archaeol* 56.
- Palmer, R., 1994. *Whittlesey Brick Pits, area TL2497, Cambridgeshire, aerial photographic assessment*, Air Photo Services Report for Cambridge Archaeological Unit.
- Palmer, R. and Cox, C., 1993. *Uses of aerial photography in archaeological evaluations*. *IFA Technical Paper* 12.
- SSEW, 1983. *Soils of England and Wales: sheet 4: Eastern England (1:250,000)*. Soil Survey of England and Wales, Harpenden.

Figure 1. Stanground to Whittlesey: combined context for road and extraction areas.
Features identified from aerial photographs.

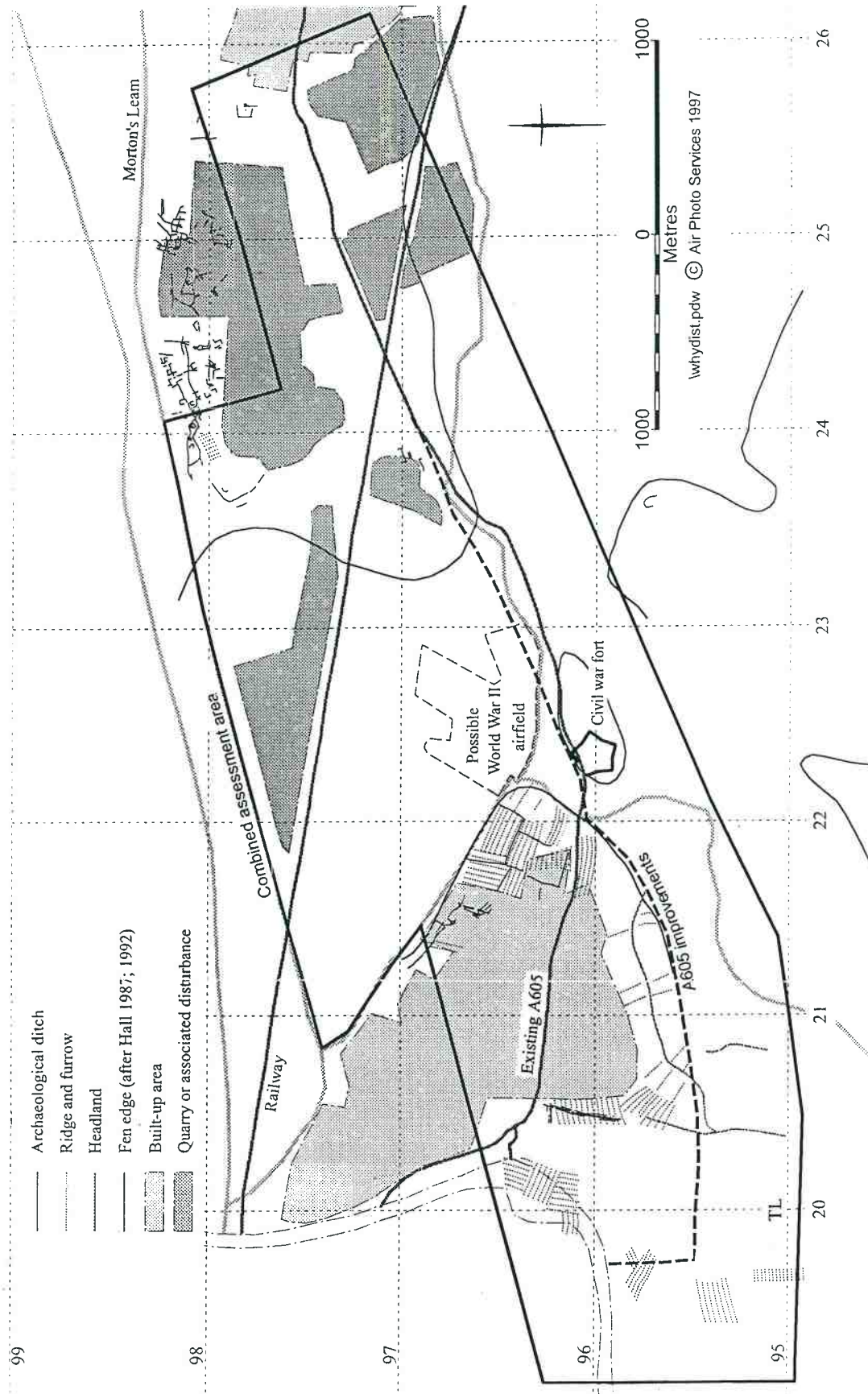


Figure 2. A605 improvements. Area TL2096.

Features mapped from aerial photographs

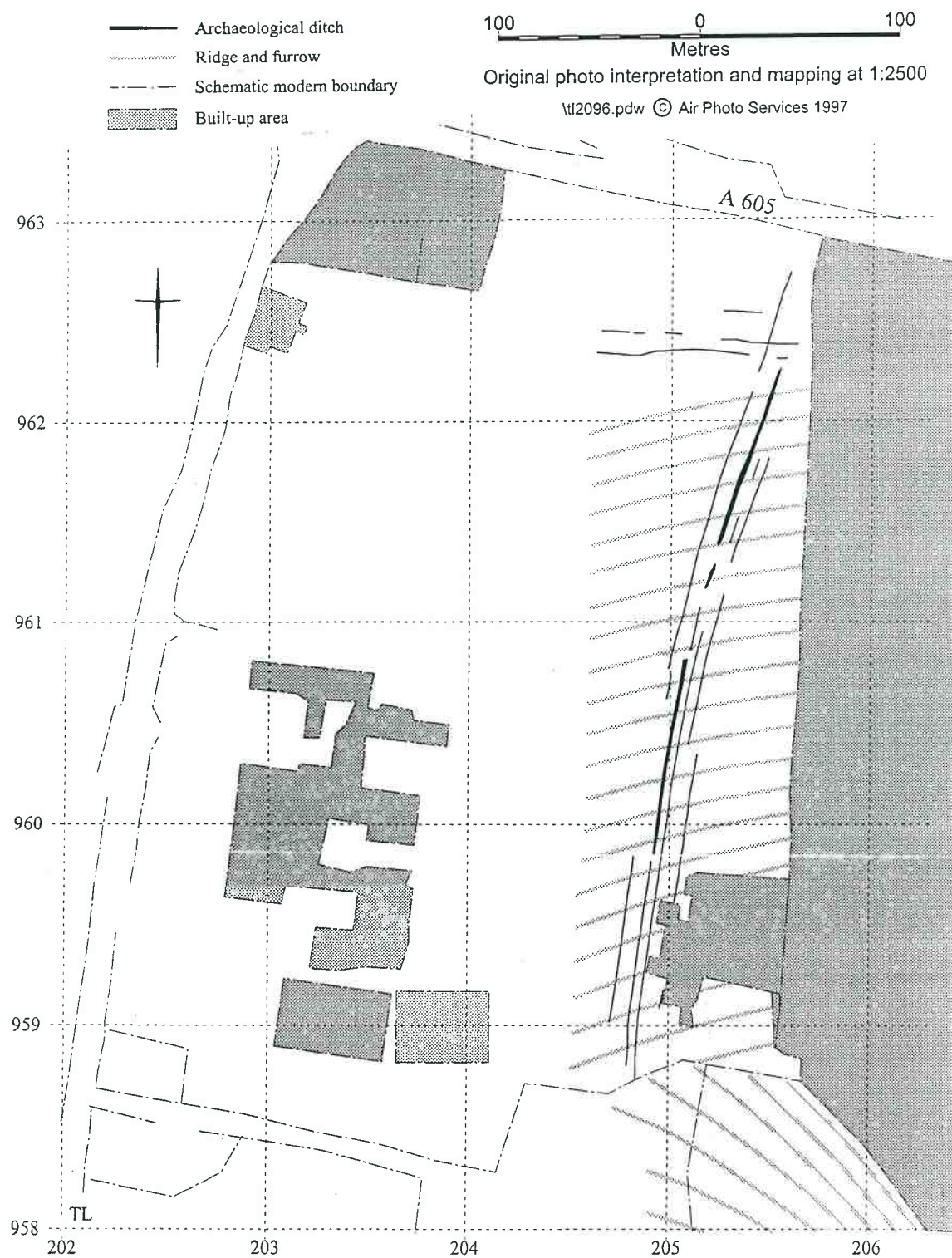
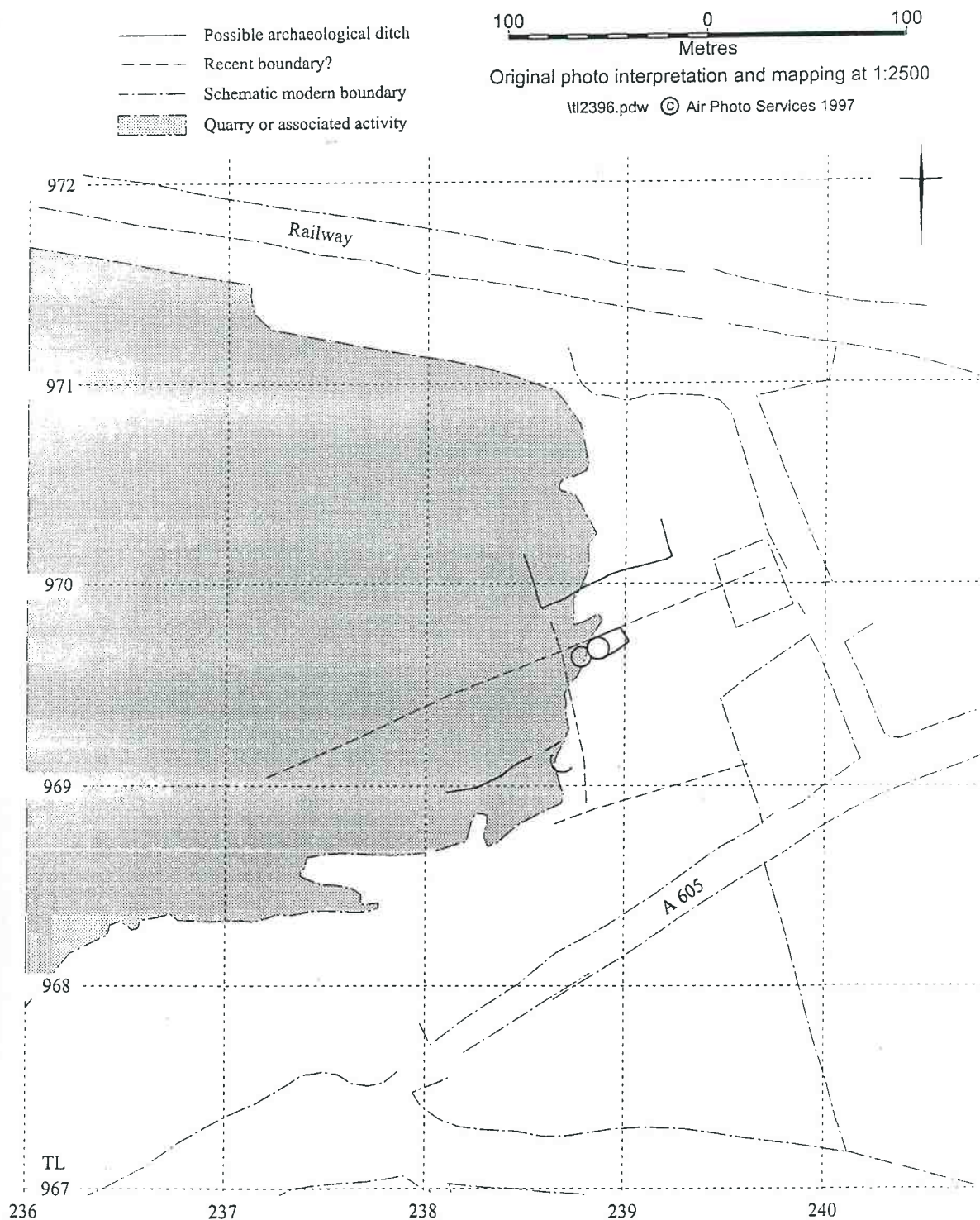


Figure 3. A605 improvements. Area TL2396.

Features mapped from aerial photographs



APPENDIX

*Aerial photographs examined**Source: Cambridge University Collection of Aerial Photographs*

Oblique photographs (Civil War fort)

S 30	11 July 1947
S 79-81	12 July 1947

Vertical photographs

RC8-AT 37-38	17 March 1975	1:13650
RC8-AT 95-97	17 March 1975	1:13650
RC8-EF 76-78	25 March 1982	1:10000
RC8-EF 147, 149-152	25 March 1982	1:10000
RC8-EF 174-178	25 March 1982	1:10000
RC8-EF 253-255	25 March 1982	1:10000
RC8-KnBI 86-90, 92	13 June 1988	1:10000
RC8-KnBI 152, 154	13 June 1988	1:10000
RC8-KnBI 156, 158	13 June 1988	1:10000
RC8-KnCP 186-188	19 July 1990	1:6000
RC8-KnDF 167-169	6 May 1992	1:10000

Source: National Library of Air Photographs

Specialist collection

None of archaeological relevance.

Vertical collection

106G/UK/928: 3056-3057	16 October 1945	1:10200
106G/UK/928: 3070-3078	16 October 1945	1:10200
106G/UK/928: 4047-4059	16 October 1945	1:10200
106G/UK/928: 4064-4078	16 October 1945	1:10200
106G/UK/1634: 3264-3266	9 July 1946	1:10000
CPE/UK/1891: 1010-1022	10 December 1946	1:9840
CPE/UK/1891: 2159-2166	10 December 1946	1:9840
CPE/UK/1891: 4153-4163	10 December 1946	1:9840
CPE/UK/1891: 4187-4191	10 December 1946	1:9840
CPE/UK/1925: 2076-2084	16 January 1947	1:9840
CPE/UK/2317: 5002-5019	22 September 1947	1:4800
CPE/UK/2532: 5183-5187	24 March 1948	1:4600
540/474: 3071-3077	22 April 1951	1:9960
540/1117: 29-41	30 March 1953	1:5000
540/1117: 98-102	30 March 1953	1:5000
82/796: 266-270	10 June 1953	1:5100
82/796: 284-293	10 June 1953	1:5100
82/796: 294-303	10 June 1953	1:5100
F21.82/865: 137-149	8 March 1954	1:10000
F22.82/865: 137-145	8 March 1954	1:10000
F21.540/1312: 41-51	26 May 1954	1:10000
F22.540/1312: 14-22	26 May 1954	1:10000
F21.58/2305: 21-27	8 November 1957	1:9360
F21.58/2305: 55-58	8 November 1957	1:9360

F21.58/2305: 93-96	8 November 1957	1:9360
F21.58/2305: 99-105	8 November 1957	1:9360
F22.58/2305: 100-105	8 November 1957	1:9360
1F41.543/1107: 239-256	5 November 1960	1:4000
1F42.543/1107: 238-247	5 November 1960	1:4000
V.543/1107: 59-63	5 November 1960	1:12000
OS/64199: 1-6	13 September 1964	1:7500
OS/64199: 38-43	13 September 1964	1:7500
OS/64199: 44	13 September 1964	1:7500
OS/64199: 45-51	13 September 1964	1:7500
OS/64199: 70-76	13 September 1964	1:7500
OS/64199: 80-87	13 September 1964	1:7500
OS/64199: 99	13 September 1964	1:7500
OS/64199: 101-102	13 September 1964	1:7500
MAL/65092: 15-21	29 October 1965	1:12000
MAL/65092: 39-42	29 October 1965	1:12000
OS/67033: 150-152	16 April 1967	1:7500
OS/67033: 160-164	16 April 1967	1:7500
OS/67033: 165-166	16 April 1967	1:7500
OS/67033: 178-179	16 April 1967	1:7500
OS/68136: 829-839	1 June 1968	1:7500
OS/68136: 875-881	1 June 1968	1:7500
OS/68136: 896-905	1 June 1968	1:7500
OS/68136: 934-941	1 June 1968	1:7500
MAL/68061: 178-181	12 August 1968	1:10000
MAL/68061: 182-185	12 August 1968	1:10000
MAL/68061: 198-199	12 August 1968	1:10000
MAL/69020: 186-192	6 March 1969	1:5000
MAL/69020: 193-200	6 March 1969	1:5000
MAL/69058: 152-153	10 June 1969	1:10500
MAL/69058: 154	10 June 1969	1:10500
MAL/69058: 155-156	10 June 1969	1:10500
MAL/69058: 208-213	10 June 1969	1:10500
MAL/69059: 1-5	10 June 1969	1:10500
58/0445: 7-12	24 April 1970	1:10000
58/0445: 46-50	24 April 1970	1:10000
58/0445: 51-53	24 April 1970	1:10000
OS/71455: 1-5	5 September 1971	1:7300
OS/73209: 1-2	1 June 1973	1:7500
OS/73209: 48-50	1 June 1973	1:7500
OS/73209: 51-52	1 June 1973	1:7500
OS/73209: 99-100	1 June 1973	1:7500
OS/73209: 101	1 June 1973	1:7500
OS/74010: 13-15	29 March 1974	1:7500
OS/74010: 26-27	29 March 1974	1:7500
OS/81002: 1-2	13 April 1981	1:5000

Most informative photographs

Area TL2096	82/796: 270
Area TL2396	F21.82/865: 144

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