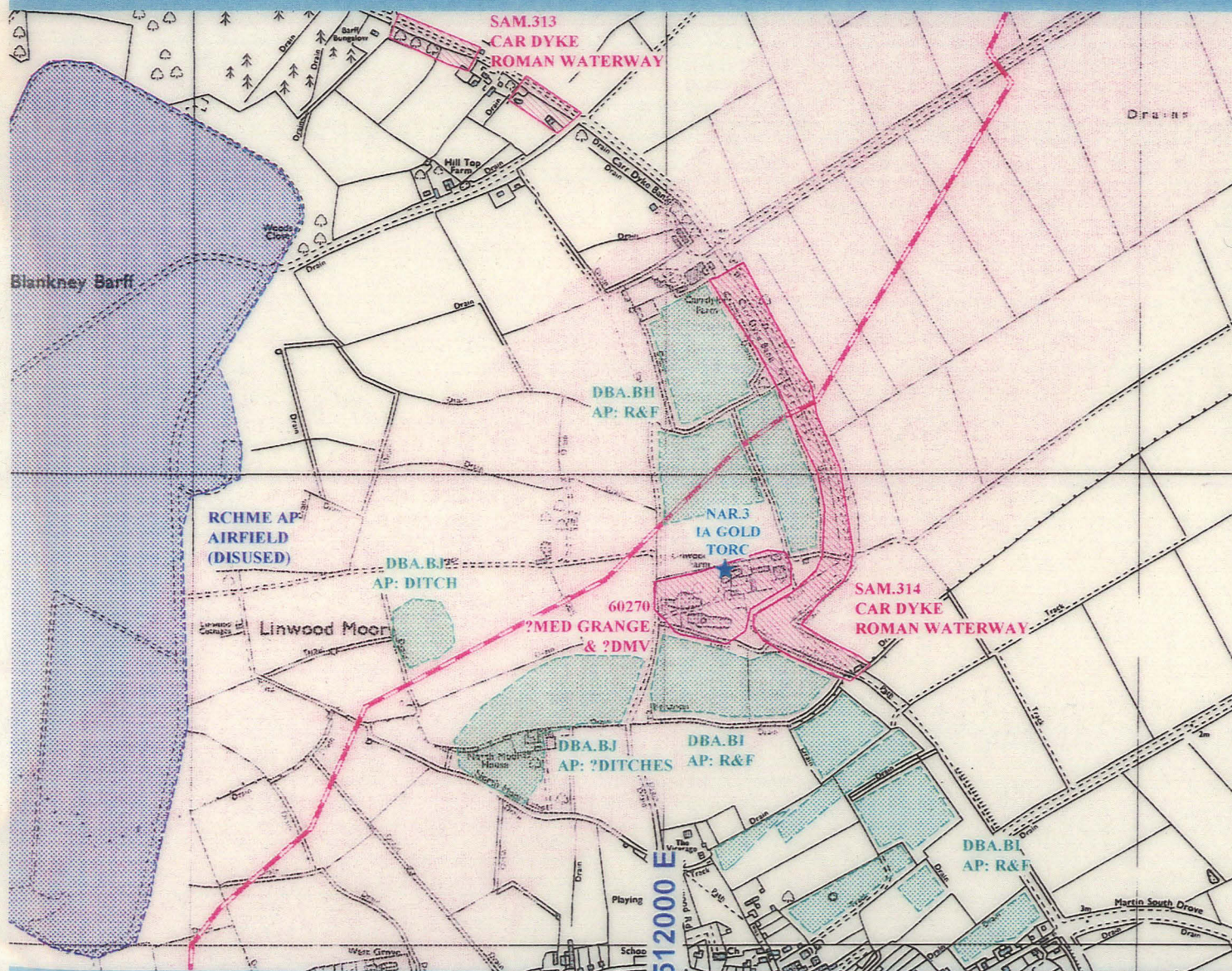


Proposed Hatton to Silk Willoughby Gas Pipeline

Archaeological Desk-Based Assessment



Event Source
L12748 L17377

MON
L180398 60979
L180430 61011
L182557 62056

Proposed

HATTON to SILK WILLOUGHBY

Gas Pipeline

ARCHAEOLOGICAL
DESK-BASED ASSESSMENT

Prepared by

NETWORK ARCHAEOLOGY LTD

For

BRITISH GAS TRANSCO

Report No.103

January 1997

CONTENTS

	Page
1 SUMMARY	1
1.1 General	1
1.2 Results	1
1.3 Recommendations	2
2 INTRODUCTION	3
2.1 General	3
2.2 Requirements of the existing brief	3
2.3 The present context of pipeline assessments in relation to the pipeline project	3
2.4 Objectives of the assessment	3
2.5 Previous archaeological investigations	4
2.6 Scope of archaeological/historical data search	5
2.7 Scope of report	5
3 METHODOLOGY	6
3.1 Study corridor	6
3.2 Data collection and collation	6
3.3 Categorization of archaeological sites	6
3.4 Reliability of data	7
4 PHYSICAL DESCRIPTION OF THE PIPELINE CORRIDOR	8
4.1 General	8
4.2 Topography and Geology	8
4.3 Soils and Landuse	8
5 KNOWN ARCHAEOLOGY WITHIN THE STUDY CORRIDOR	9
5.1 General	9
5.2 Density of archaeological sites along the proposed pipeline route	9
5.3 Archaeological and Historical background	10
5.4 Description of known archaeological sites within the study corridor	12
5.4.1 Category A sites	12
5.4.2 Category B sites	15
5.4.3 Category C sites	19
5.4.4 Category D sites	20
5.4.5 Category E sites	21
5.5 Potential for further sites	22

6 DISCUSSION	23
6.1 Overall impact of the proposed pipeline route on the archaeological resource	23
6.2 Category A, B and C sites crossed by the proposed pipeline route	23
6.3 Category B sites lying close to the proposed pipeline route	23
6.4 Category D sites crossed by the proposed pipeline route	24
6.5 Category E sites crossed by the proposed pipeline route	24
7 RECOMMENDATIONS	25
7.1 General	25
7.1.1 Overall route	25
7.1.2 The Witham Fenlands	25
7.1.3 Known sites	26
7.1.4 Car Dyke	26
7.1.5 The area adjacent to The Mareham Lane Roman road	26
7.2 The Investigatory Stages	26
7.2.1 Field Reconnaissance Survey (Stage 2b)	26
7.2.2 Fieldwalking (Stage 3a)	27
7.2.3 Earthwork Survey (Stage 3b)	27
7.2.4 Archaeogeophysical Survey (Stage 3c)	27
7.2.4.1 Magnetic Susceptibility Survey and Magnetometer Scan	28
7.2.4.2 Detailed Magnetometer Scan	28
7.2.4.3 Detailed Geophysical Survey	28
7.2.5 Field Evaluation (Stage 4)	29
7.2.5.1 Hand-Dug Test-Trenches (Stage 4a)	29
7.2.5.2 Auger Survey (Stage 4b)	29
7.2.5.3 Machine-Trench Evaluation (Stage 4c)	29
7.2.6 Area excavation	29
7.3 Summary of Recommendations	30
8 CONCLUSION	31
9 ACKNOWLEDGEMENTS	31
10 REFERENCES	32

FIGURES

Figure 1 : Location of proposed Hatton to Silk Willoughby gas pipeline (3-4)

TABLES

Table 1 : Categorization of archaeological sites and findspots/scatters	7
Table 2 : Total number of archaeological sites/findspots by county and category	9
Table 3 : Category B sites lying close to the proposed pipeline route	24
Table 4 : Selected Category D sites along the proposed pipeline corridor	24
Table 5 : Summary of Recommendations	30

APPENDICES

Appendix 1 : The Brief issued for this project by British Gas TransCo
Appendix 2 : The Investigatory Stages
Appendix 3 : Details of sources consulted during the assessment
Appendix 4 : Desk-Based Assessment sites
Appendix 5 : Gazetteer of Archaeological Sites
Appendix 6 : Archaeological Constraint Maps 1-6

1 SUMMARY

1.1 General

This report is the archaeological Desk-Based Assessment of the proposed British Gas "*Hatton to Silk Willoughby Pipeline*" between Hatton Above Ground Installation (A.G.I.) and Silk Willoughby A.G.I. , in the county of Lincolnshire.

The proposed route runs roughly north to south through the central part of the county, its middle section crossing the Witham Valley Fenlands. A fairly low density of archaeological remains were recorded for the whole route, although a significant proportion of these are, as Scheduled Ancient Monuments or SAM's, of national importance. Most of the more important sites relate to the Middle Ages, with ten of the fifteen recorded SAMs belonging to this period. The majority of these comprise Deserted and Shrunken Medieval Settlements, or religious establishments such as abbeys and priors, the latter attesting to the former influence of the church in this part of the county.

Although few prehistoric sites are known along the study corridor, a possible Neolithic Long Barrow (Scheduled) does lie particularly close to the proposed pipeline route. If authentic, it is a rare example of such a monument in Lincolnshire outside the Wolds.

A similar paucity of Roman sites was recorded along the study corridor, although a Scheduled section of the Romano-British watercourse known as Car Dyke is actually crossed by it. Scheduled Monument Consent has been granted by the Department of National Heritage to bore the pipeline beneath this monument.

Despite the fairly sparse concentration of known archaeological sites along the study corridor, there is considerable potential for the existence of important remains along the proposed pipeline route. This is particularly likely to be the case in the Witham Fenlands, where former settlements and burial sites are already being exposed in areas where peat deposits are being eroded away.

1.2 Results

The assessment collected and collated information on 211 archaeological sites and findspots/scatters within a 1km study corridor centred on the proposed pipeline route. Each site has been placed into one of five categories (A-E), ranging from Scheduled Ancient Monuments to single findspots. About a third of all sites (74) belong to Categories A, B or C, that is, those considered to be of sufficient archaeological importance to merit avoidance prior to any field survey. In addition to the Scheduled section of Car Dyke, one Category B site, and one Category C site, are crossed by the proposed pipeline, although seven Category B and C sites do lie sufficiently close for the pipeline to be of potential impact. A total of 19 Category D sites (largely ridge and furrow field systems), and 37 Category E sites (most of these recent field boundaries) are crossed by the proposed route.

1.3 Recommendations

Outline recommendations suggest an initial (Stage 3) programme of fieldwalking, field reconnaissance survey and geophysical survey (magnetic scanning and magnetic susceptibility) of the proposed pipeline route. This programme is intended to:

- Assess more fully the archaeological potential of known sites which are certain or likely to be affected by the proposed pipeline.
- Identify as yet undiscovered sites along the proposed route.
- Facilitate the implementation of a programme of further investigation (Stage 4) for any sites or areas of archaeological potential identified during the earlier stages of assessment (Stages 2a and 3).

2 INTRODUCTION

2.1 General

British Gas TransCo is currently planning to construct a 38km, 1050mm diameter high pressure pipeline, the "*Hatton to Silk Willoughby Pipeline*" (Project No. M112), to transport natural gas between an A.G.I situated 0.75km south-west of the village of Hatton (TF 173762), and an A.G.I lying 3.5km north-east of the village of Silk Willoughby (TF 084436), both within the county of Lincolnshire (Figure 1).

In November 1996, Network Archaeology Ltd was commissioned to carry out an archaeological Desk-Based Assessment (Stage 2a), in order to quantify and assess the known and potential archaeological resource within the proposed route corridor, and to make outline recommendations for further investigation.

2.2 Requirements of the existing brief

British Gas TransCo issued Network Archaeology Ltd with the existing brief for undertaking archaeological desk-based assessments (Appendix 1).

2.3 The present context of pipeline assessments in relation to the pipeline project

Linear developments such as pipelines provide an opportunity to examine a transect across the landscape and the spatial and temporal variability of human activity within it. They can also be enormously deleterious to the archaeological resource. However, through the mutual co-operation and constant liaison between archaeologist and engineer at all stages of a project, a route which minimises the disturbance of archaeological remains can be achieved. The relatively long period of time between the inception/planning and the construction of the Hatton to Silk Willoughby Pipeline means that archaeological implications can be considered at an early opportunity. This desk-based assessment marks one of the first stages in what is expected to be a detailed, investigative programme of mitigation, designed to prevent the unnecessary destruction of the archaeological resource along the proposed pipeline. In order for this programme to succeed, continuous liaison between British Gas and the archaeologists involved in the next stage of the project is essential.

2.4 Objectives of the assessment

The overall objective may be defined as...

...assisting the British Gas project engineers in the selection of an archaeologically least-damaging provisional pipeline route.

More specifically, the aims were broadly defined as follows :

- To identify and define the known extent of the archaeological deposits within the 1km study corridor, and to provide a preliminary evaluation of their importance.
- To assess the potential for new sites as yet unrecorded.
- To assess the potential for evaluatory field survey and make appropriate recommendations (Stage 2a and 3 - see Appendix 2).

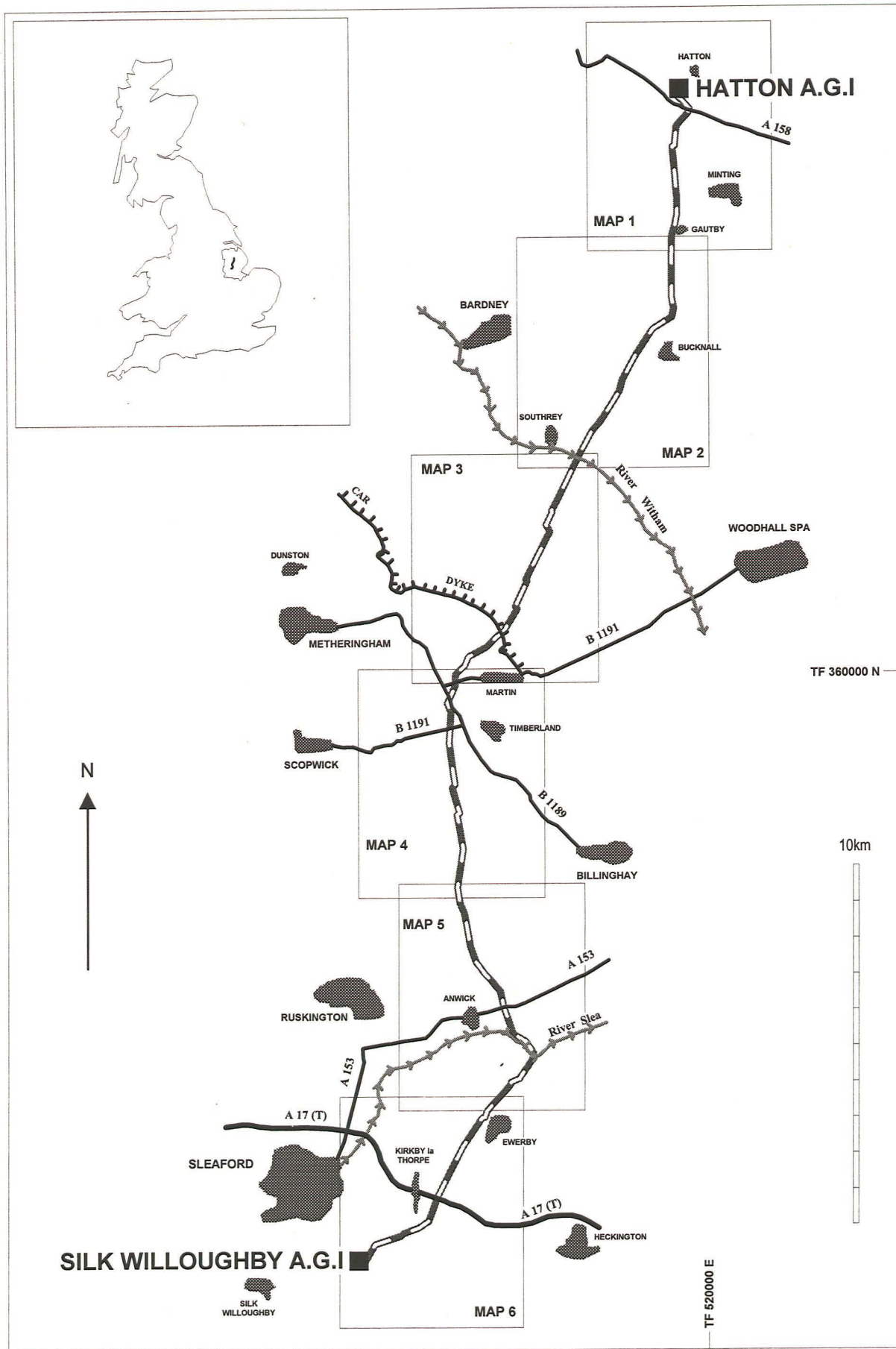


Figure 1 : Location of proposed Hatton to Silk Willoughby pipeline

2.5 Previous archaeological investigations

The original construction date for the Hatton to Silk Willoughby pipeline project was Spring 1994. Prior to this date, a preliminary archaeological study had been carried out, although this could not be located for reference by the authors of the present assessment. Fieldwalking did, though, take place (in accordance with the existing British Gas Brief for 'Pre-Construction Survey'), in January 1993. No record, however, was found of any geophysical survey having been carried out along the proposed pipeline route, except for a detailed magnetometer survey over a Roman pottery scatter at Greenfield Farm (see below). The following is a summary of the fieldwalking report (Brooks *et al*, January 1993).

In all, 67% of the fields were walked, the remainder being largely pasture, set-aside, under root-crop or unavailable due to the absence of landowner consent. A total of 424 artefacts were recovered, almost all of them either prehistoric flint, or Roman and medieval pottery. Few finds were recovered from the central part of the proposed route in the areas covered by peat and alluvial deposits, particularly between Great Park, Gautby (TF 171711) and Rowston Grange, Digby (TF 111563). This was 'due to the local geology, with the peat deposits of Blankney Fen sealing any potential archaeological sites' (*ibid*, 1). The other areas of the proposed route produced a low background scatter of artefacts.

Of the 161 flint artefacts recovered, none produced any major concentrations, and most were found south of the Car Dyke. This southmost assemblage (137 artefacts) included 23 formal tools, most of these scrapers. Of the latter, the majority appeared to be Late Neolithic to Early Bronze Age in date, although there were four possible Early to Middle Neolithic examples. Amongst the tools was also a small number of fine denticulates, a retouched tanged blade (both with a suggested Early to Middle Neolithic date), and a fragment of a blade core, probably of Early Neolithic type and which may have been used as a fabricator. The assemblage also included four cores and core fragments, and 'a full range of flint flakes' (*ibid*).

The 24 flint artefacts recovered from north of the River Witham were largely flakes, and included no tools or cores.

The wide range of flint colour and texture, and the eroded nature of the cortex, suggested that there was no single flint source for the artefacts, and that it would have been extracted from derived deposits such as till sheets or gravel deposits.

In summary, the majority of the flint appeared to date from the Late Neolithic to Bronze Age periods, although probable Earlier Neolithic material was also recovered. The presence of the latter in particular, was taken to indicate the potential existence of prehistoric sites along the proposed route, since the tools represented are likely to be associated with human settlement.

Of the few Roman pottery sherds recovered, most were found at the southern end of the proposed route: in the area north of the River Sleas (between TF 129498 and TF 108462) and also between Ewerby and Bargate Hill (TF 118477 to TF 108462). The low densities were not thought to be an indication of any Roman settlement, but were attributed to Romano-British agricultural activity.

One specific area of archaeological potential was discovered around Greenfield Farm, Minting (MAP 1, centred on TF 171750). Here, twenty Romano-British sherds, largely third to fourth century AD domestic coarse wares, were collected from a 400m length of the proposed route. A detailed magnetometer survey was carried out over the area, but no significant archaeological

anomalies were detected. Since the geophysical survey was undertaken, the proposed pipeline route at this point has been moved, and now lies *c.*100m to the east.

Most of the medieval pottery was discovered south of the River Slea, with no major concentrations. The overall densities were suggested to be the result of agricultural practices around medieval villages.

The report concluded that there were no indications of any archaeological sites along the proposed pipeline route, although it did suggest that peat deposits in the Witham Valley could be sealing archaeological remains.

2.6 Scope of archaeological/historical data search

The archaeological assessment consisted of a thorough search of the county-based Sites and Monuments Records (SMR) within a 1km-wide study corridor (see 3.1), and a detailed examination of aerial photographic data from a variety of sources (see 3.2). It also involved some study of Ordnance Survey and other historical maps, and some analysis of place-names. A field visit was not feasible at this stage, but Field Reconnaissance Survey is recommended for Stage 2b (see 7.2.1).

2.7 Scope of report

This report should be regarded as a detailed assessment of the archaeological resource (sites and artefacts) within the 1km study corridor. It places less emphasis on the historical (study of individual parishes, of enclosure award, tithe and estate maps, and of place-names *etc.*) since the primary objective was to facilitate the avoidance of the known archaeology of the area (see above, 2.4). The assessment does, however, provide a brief summary of the known history and archaeology of the region, in order to place the recorded sites into a broader historical and archaeological context.

With respect to the archaeological constraint maps (Appendix 6), the depiction of cropmark and soilmark sites discovered by aerial photography is limited to their known extents, rather than to the drawing in detail of their component parts. These details, however, were recorded during the data-collection phase, they will be available for the field survey stages, and are to form part of the project archive. The drawn details of any new sites discovered during the assessment ('DBA' sites - listed in Appendix 4) will be forwarded to Lincolnshire SMR in due course.

3 METHODOLOGY

3.1 Study corridor

The focus of the desk-based assessment was a 1km-wide study corridor based upon a proposed pipeline route selected by British Gas in 1992. Although data-collection was generally restricted to this 1km corridor, some sites lying just outside were recorded, in order to provide a more complete archaeological and historical context for the sites lying within the corridor. Scheduled Ancient Monuments (SAMs - legally protected under the Ancient Monuments and Archaeological Areas Act 1979) were additionally recorded if they appeared at any location on the archaeological constraint maps (Appendix 6).

3.2 Data collection and collation

The main source of information was the county-based Sites and Monuments Record (SMR), held in Lincoln. This contains records of all known archaeological sites and finds relating to the county. It should be pointed out that SMRs are never completely up to date, since in most cases there is a delay between archaeological data being recovered, and processed information being lodged with the relevant SMR office. It is therefore possible that some known sites will exist within the 1km study corridor, but will not have been included in this assessment.

Details of all archaeological sites on the National Archaeological Register (NAR, or 'Monarch' list), held by the National Monuments Record Centre (NMR) in Swindon, were obtained for the 1:10,000 scale Ordnance Survey quarter sheets crossed by the proposed pipeline. Many of these coincided with sites recorded at the SMR.

Scheduled Ancient Monuments were recorded from both county SMRs and from the NMR, whilst Listed Buildings within the 1km study corridor were identified either from Lincoln SMR, or from the NAR in Swindon.

Aerial photographic data formed a large proportion of the information collected. Most of Lincolnshire has now been covered by the National Mapping Programme, a survey being carried out by the Royal Commission on the Historical Monuments of England (RCHME); all relevant sites plotted by the Royal Commission were therefore examined during the assessment.

One of the most important national repositories for aerial photographs, the National Library of Air Photographs (held by the RCHME in Swindon) was visited for obliques, whilst sets of both black and white and colour verticals held by Lincolnshire City Council were studied for the whole route. The aerial photographs taken for the geomorphological report were also examined (Dames and Moore International, 1992).

A limited amount of cartographic and documentary data was examined at Lincoln Record Office and Lincoln Reference Library, including early editions of the large scale (6") Ordnance Survey maps. Libraries were also visited in order to consult published books, articles and periodicals for general background information on the archaeology and topography/geology of the region. Fuller details of the various sources consulted can be found in Appendix 3.

3.3 Categorization of archaeological sites

The archaeological sites identified during the desk-based assessment were placed into one of five categories, A to E; A sites being Scheduled Ancient Monuments, and E sites largely being single findspots. Categorization was based on subjective analysis of all collated information, including

information recovered from the SMRs and other data-holding bodies. These categories are not, however, intended to be a definitive statement about the importance or significance of any particular archaeological site or artefact scatter. Rather, their use has been regarded primarily as a means of assisting the British Gas engineers in the selection of an archaeologically least-damaging pipeline route. It therefore follows that such categories are not fixed: there is every possibility that a site's category may change as a result of findings made during later field survey.

Table 1 below lists a number of examples for each category of site, together with the corresponding mitigation strategies as recommended by Network Archaeology Ltd to British Gas TransCo.

	A	B	C	D	E
Description	Scheduled Ancient Monument (SAM)	Archaeological site of known character/date	Archaeological site of uncertain character/date	Other archaeological sites and some artefact scatters	Single findspot & modern field boundary
Examples	Burial Site, Villa, DMV	Settlement, Burial Site, Villa, Roman Road, Castle, Existing Building (some Listed), DMV	Probable or possible settlement, field-system, enclosure	Possible enclosure, Ridge and Furrow, probable modern field boundary	As above, Pottery of various periods, Coins
Mitigation	To be avoided	To be avoided	Avoidance recommended	Avoidance not recommended at this stage	Avoidance unlikely

Table 1 : Categorization of archaeological sites and findspots/scatters

3.4 Reliability of data

Account should be taken of the variability in the reliability of data collated from secondary sources. In order to make some assessment of this variability, in the Gazetteer (Appendix 5) each site was given a reliability rating of High, Medium or Low. In many cases, inadequate information prevented reliable rating; such sites were generally allocated a Medium or Low rating. Sites given a High reliability value were those with substantial documentation (particularly from a variety of sources) as well as aerial photograph sites plotted as part of the Royal Commission's National Mapping Programme, and those identified and sketch-plotted during the assessment by Network Archaeology Ltd (referred to by the prefix 'DBA').

4 PHYSICAL DESCRIPTION OF THE PIPELINE CORRIDOR

4.1 General

The proposed pipeline lies in the central part of Lincolnshire, beginning just under 1km south-west of the village of Hatton, 20km east of Lincoln (TF 173762). It travels in a south by south-westerly direction for 38km, finishing 3.5km north-east of the village of Silk Willoughby and 2km south-east of Sleaford (TF 084436) (Figure 1).

4.2 Topography and Geology

The upper third of the proposed pipeline route crosses the southern part of the Lincoln Clay Vale; it then passes into the Fenlands of the Witham Valley for its central portion, and finally traverses part of Lincoln Heath for its lower third.

The land along the route is low lying and of low relief, with ground elevations generally ranging from 10-15m above Ordnance Datum, although the northern and southern ends do reach 20-30m O.D., and the Fenlands drop as low as 2m O.D. The geomorphological survey (Dames and Moore International, 1992, 5) did not identify any sharp gradient changes from either aerial photography study or visual inspection, apart from the less than 2m relief of the roddons (extinct rivers) of the Fenlands, which carry drainage channels and small rivers (*eg.* The River Sleas, TF 132493).

The solid geology along the route is Upper Jurassic clays and Corallian mudstones (Blisworth and Oxford Clays). In the northern and southern parts of the route, these clays are overlain in places by a thick mantle of Quaternary drift deposits comprising glacial till (Boulder Clay), pockets of fluvial sands and gravels, and occasional deposits of alluvium. The Witham Fenlands comprise recent marine, estuarine and fluvial sediments over glacial deposits, lying within a basin of Oxford Clay and Kellaway Beds, and all overlain by successions of peat and silt deposits (*ibid.*).

The Witham Fens, forming one part of the Lincolnshire Fens, were created by the gradual infilling of a lowland basin with a succession of alluvial deposits. Rises in sea-level from prehistoric times led to the obstruction of the natural discharge of the rivers, and caused their waters to back up and overflow. This initiated the many series of complex flooding episodes that eventually filled-in the Fen basin, and also led to the formation of peat. Many of these early peat deposits were subsequently overlain by marine clays, silts and sands. The sequence of flooding and regression of the Fen areas with salt or fresh water, and the build-up of the Fens in general, remain a very complicated and localised process (Hayes and Lane, 1992, 1).

4.3 Soils and Landuse

The low lying nature of the land in this part of Lincolnshire, and the underlying clay geologies, have generally resulted in fairly heavy soils, naturally prone to waterlogging and agriculturally less manageable than, say, the lands of the Wolds which lie to the north-east. Because of this, however, a long history of drainage has helped to develop the area for arable farming, making it today, one of the more important arable regions in England. The Witham Fenland in particular, extensively drained in the past to prevent flooding, is one of the most fertile agricultural areas in the country. This change to intensive farming has unfortunately produced a gradual lowering of the water table, and an acceleration in the erosion of the peat deposits.

5 KNOWN ARCHAEOLOGY WITHIN THE STUDY CORRIDOR

5.1 General

Data was collected for 211 archaeological sites and findspots/scatters. The totals for each category are listed in the following table.

A	15
B	41
C	18
D	56
E	81
TOTAL	211

Table 2 : Total numbers of archaeological sites/findspots by category

5.2 Density of archaeological sites along the proposed pipeline route

The density of known sites and findspots within the 1km study corridor is generally quite low. There are, however, areas which contain higher than average (for the whole route) concentrations of sites, and others with few or no known archaeological remains at all. Five broad distributions were recognised:

- (A) Hatton A.G.I to the River Witham : a fairly low distribution of sites and findspots/scatters.
- (B) River Witham to Car Dyke : virtually no known archaeological remains.
- (C) Car Dyke to Walcott Common : very few known archaeological remains.
- (D) Walcott Common to the River Slea : very few known archaeological remains.
- (E) River Slea to Silk Willoughby A.G.I : a fairly low distribution of sites and findspots.

In addition, three notable concentrations of sites/findspots are apparent along the proposed route:

- (a) Walcott Common, south-west of Walcott village (Map 4, TF 1155).
- (b) East of Anwick village (Map 5, TF 1349).
- (c) South and east of Kirkby La Thorpe village (Map 6, TF 1045).

These distributions correlate well with topographical and geological variations along the route: those areas with fewest archaeological remains (B, C and D) are on the lower lying Witham Fenlands, whilst the majority of the sites (A and C) are situated on the significantly higher clay

ground (with pockets of sand and gravel) which lie at the northern and southern ends of the proposed pipeline route.

The three notable clusters of sites also appear to respect the more hospitable land: the sites found at Walcott Common (a) lie on slightly raised ground just north of Digby Fen; those near Anwick (b) lies just off the southern margin of the Witham Fens, either side of the River Sleas; whilst those south and east of Kirkby La Thorpe (c) are again on higher ground, with slightly lower land immediately to the south.

Despite the overall low density of known sites within the 1km study corridor, the areas at present possessing few or no known archaeological remains should nevertheless be viewed as having *uncertain*, rather than *little* or *no*, archaeological potential. This is particularly the case in the Witham Valley, where the potential for peat deposits to mask archaeological remains is undisputed. This should be borne in mind when evaluating the known and potential impact of the proposed pipeline on the existing archaeological resource (see 6.1).

5.3 Archaeological and historical background

The proposed pipeline passes through a part of Lincolnshire known to have been settled at various periods throughout the past. Archaeological evidence has demonstrated that the Fens, for example, were intermittently and densely occupied from at least the Roman times, and, as new research is beginning to show, in prehistoric times too. Such is the importance of the Fenland region, enhanced by the high potential for well-preserved environmental remains, that it has been highlighted as being of international archaeological importance (Coles, 1986, 238). Although at present the majority of the evidence has come from the silt Fens, those peat-dominated areas such as the Witham Valley, are also recognised as having considerable archaeological potential.

Much of the evidence for prehistoric activity in Lincolnshire consists of flint artefacts. Geographical distributions of these findspots show a marked paucity over the peat Fenlands. Rather than representing a real lack of human activity, this is likely to reflect the sealing of prehistoric land surfaces with expanses of peat.

The few early sites in Lincolnshire with structural evidence include Tattershall Thorpe, which lies a few kilometres to the east of the proposed pipeline route, whilst the probable Neolithic Long Barrow on Walcott Common, and the two probable Bronze Age Barrow Cemeteries (on Walcott Common and Anwick Fen), actually lie within the 1km study corridor. These latter sites have come to light through the erosion of the peat, so it is quite probable that similar prehistoric remains lie buried beneath the peat deposits of the Witham Valley. A radiocarbon date of 590 +/- 100 B.C has been recorded for peat overlying the barrow cemetery in Walcott, suggesting that most of the peat in this vicinity was probably laid down in the Bronze Age (Chowne and Healey, 1989, 38).

Iron Age Lincolnshire formed part of the territory of the tribal grouping known as the *Corielt-avi*. The heart of their power lay in the district of Lindsey, at Lincoln, and also in centres such as Sleaford (only 2km kilometres to the north-west of the proposed route) which was an important centre during the Later Iron Age. The settlement is surrounded by an abundance of cropmarks, for example, just to the east of the modern town (TF 824460), where cropmarks show part of an organised street system aligned onto an earlier linear boundary ditch. A mint of the *Coritani* has been excavated in the town, the overall density of sites in the area suggesting that it may well

have been the site of an *Oppidum* in the Late Iron Age. (Pickering, *Current Archaeology*, 1995, 24).

There is a marked absence of both Roman and Iron Age sites on the Witham Fen east of Lincoln. Again, this could merely reflect the sealing of archaeological remains beneath peat and or silt, although it has also been suggested that the tendency for the area to flood may have resulted in a genuinely lower density of settlement (May, 1992, 92). By way of contrast, there is much greater evidence for Romano-British settlement on the marine silt fenlands further east. Here, it is believed that the lowering of the sea level from around Iron Age times until about 100 AD, meant that more land was available in the silt fen zone, thereby encouraging Roman settlement.

Iron Age (and later) salt-making sites are numerous in the salt marsh areas of the Lower Witham Fens, and along the Fen Edge and Lincolnshire coastal areas; none were recorded during the present assessment. The actual Iron Age coastline and its marshy hinterlands are thought to have reached as far west as the present day villages of Heckington and Billingborough, both of which lie on the Fen Edge, a considerable distance south of Silk Willoughby A.G.I. (May, 1976). Recent evidence of Iron Age settlement was recorded in the close vicinity of the proposed pipeline, when Middle Iron Age remains were discovered near Osbournby (TF 082385) during the construction of the Silk Willoughby to Peterborough British Gas pipeline in 1993 (Brooks *et al*, 1993).

Evidence for the Romano-British occupation of Lincolnshire is reflected not only in the settlement sites which exist in different parts of the county, but also in the network of Roman roads which cross it. The most important was Ermine Street, which connected London with the North via Lincoln. Another major highway, the Fosse Way, meets Ermine Street just south of Lincoln, whilst a further, King Street, runs south from Lincoln, passing through Bourne and connecting Lincoln with the south. The proposed pipeline route enters the Silk Willoughby A.G.I immediately east of Mareham Lane, a stretch of King Street running from Bourne to Sleaford, and continuing less clearly northwards towards Washingborough on the river Witham and probably beyond. It is of interest to note that several of the Roman roads appear to have prehistoric origins, for example, Ermine Street, which follows the line of the Jurassic Way (May, 1976, 9).

In terms of water communication, of major relevance to the present study are the Rivers Witham and Slea, and in particular, the Romano-British watercourse known as Car Dyke, since the pipeline is expected to be auger-bored beneath all of these waterways. The Car Dyke, possibly built in the early second century A.D., connects the River Nene east of Peterborough with the Witham two or three miles east of Lincoln, a total length of some 56 miles. Controversy as to its main function revolves around the suggestions of whether the whole length of the monument would have been navigable and so utilised as a canal (Whitwell, 1992) or whether it was merely a means of draining the Fenlands (Simmons, 1975). Irrespective of its function, the construction of such an earthwork would have required large teams who would probably have stayed in temporary labour camps during construction, as, for example, was the case with the construction of Hadrian's Wall. (May, 1976, 9).

Archaeological and historical evidence suggests that many of the nucleated villages in Lincolnshire came into existence during the Anglo-Scandinavian period. The Domesday Survey therefore provides an insight into the settlement patterns of this time. Most of the more densely-populated areas within and adjacent to the pipeline corridor are believed to have been concentrated off the peat, in the northern and southern parts of the proposed route. Many of the

so-called 'villages' may actually have been loose collections of farms with a common identifying name, rather than nucleated settlements proper.

Over 235 Deserted Medieval Villages (DMVs) exist in Lincolnshire, with even this thought to be an underestimation (Start, 1995, 52). The majority were deserted from the fourteenth to eighteenth centuries, as a result of various factors including the Black Death, rises in sea-level, changes in agricultural practices (from arable to favour sheep farming), and the changes caused by enclosure. In the fen peatlands, few totally deserted settlements exist, most medieval settlements having shrunk to a lesser or greater degree. A number of DMVs and SMVs were recorded within the study corridor, one of them a Scheduled Ancient Monument.

A major feature related to the above and still discernible in the landscape (or identifiable from aerial photographs if now destroyed by modern ploughing), is ridge and furrow field systems. Most of that recorded during the assessment is concentrated in the north and south part of the study corridor, with very little being noted in the Witham Valley. Enclosure appears to have taken place earlier outside these peat fenlands since it was largely voluntary. In contrast, parliamentary enclosure of the Witham Peat Fen took place in the eighteenth and nineteenth centuries. Although ridge and furrow is normally associated with the Medieval period (up to around 1500 AD), land could still have been farmed in the same way for some time afterwards, before the effects of enclosure would have created a dramatically altered system of fields. The ridge and furrow recorded during the assessment could, therefore, belong either to the Medieval or the earlier Post-Medieval periods.

Thirteenth-century Lincolnshire witnessed a considerable rise in sea-levels. This led to the flooding of many parts of the Fens, making the peatlands wetter and generally less hospitable. As a consequence, the Witham Fens were subject to major drainage operations in the eighteenth century: between 1777 and 1797 some 25,000 acres of this fenland was drained and enclosed (Robinson, 1995, 72).

The Medieval period also saw the establishment of many religious houses in the county. A considerable number were recorded within or close to the 1km study corridor; these include those at Minting (Benedictine), Tupholme (Alien Priory, Premonstratensian), Walcott (hospital for lepers), Catley (Gilbertine order) and Haverholme (Gilbertine order).

Most of the Post-Medieval sites within the study corridor are standing buildings situated within modern villages (churches, blacksmiths', dovecotes *etc*).

5.4 Description of known archaeological sites within the study corridor

In the descriptions which follow, discussion has largely been restricted to those archaeological sites lying sufficiently close to the proposed pipeline route to be of concern, in particular, to those which are crossed by it. Sites which lie outside the 1km study area may also be discussed, if their reference is needed to place the archaeology within the corridor into a broader context. Mention of specific sites is accompanied by the relevant Map number, the source reference, and the national grid reference for the 1km square in which the site lies.

5.4.1 Category A sites

Fifteen Scheduled Ancient Monuments (SAMs) were recorded during the assessment. Of these, one is crossed by the proposed pipeline route:

SAM 314 (MAP 4: TF 1261) Car Dyke at Linwood Hall

This section is one of four Scheduled stretches of the Romano-British watercourse situated in the locality. The monument as a whole, probably built in early 2nd century AD either as a canal or a drainage channel, has been discussed more fully above (5.3). This particular portion is well-preserved, surviving as a reedy stream with 1m high banks on both sides. Approximately 450m south of where it is met by the proposed pipeline, the earthwork contains one of the more notable bends of its entire length.

Scheduled Monument Consent has been granted for the auger-boring of the earthwork at TF 12306113. It has been agreed that the launch and the reception pits for the bore will lie outside the Scheduled area, and that the top of the pipe will be inserted at least 1.55m below the modern base of the feature to stop any damage to it. A temporary bridge and track will be constructed to avoid disturbance to the site.

Three SAMs lie within the study corridor:

SAM 27900 (MAP 4: TF 1155) Neolithic Long Barrow

A possible Neolithic Long Barrow identified from a soilmark lies some 450m to the east of the proposed pipeline route. The monument can no longer be identified on the ground. The mound identified from aerial photographs is roughly rectilinear in form and enclosed by a ditch, the feature being badly degraded by ploughing. It is aligned north-south and measures c.38m by 20m. Its location within a fenland setting is rare, although parallels are known from Cambridgeshire.

SAM 22634 (MAP 6: TF 1247) Medieval Market Cross

The remains of a medieval market cross lie some 500m to the east of the proposed pipeline route in the village of Ewerby, west of the church on a small 'Green'. The cross was supposedly erected by Sir Ranulph Roze in the reign of Edward I, and was probably connected with the granting of a market charter.

SAM 310 (MAP 6: TF 0843) Deserted Medieval village of Mareham or Cold Mareham

The site of this village lies some 500m to the south of the proposed pipeline route and only 50m from Mareham Lane, the course of a Romano-British road. A settlement appears to have been in existence at the time of the Conquest, the sokeland in Aswarby being said to belong to *Marram* (Healey and Roffe, 191). White's Lincolnshire Directory states "in the reign of Elizabeth, the manor was held by Sir Thomas Horsman who had a mansion on the north of the parish called Mareham Grange". A moated area does surround the area of Mareham Grange. The latter was the property of Sempringham Priory, and was temporarily held for Elizabeth I by Sir Thomas Horsman, Lord of the Manor. The site's enclosure has been ploughed for some 20 years and only remnants of the infilled moat survive. Before the moats were filled, and the enclosed area deep-drained, the site was fieldwalked. This produced pottery of fourteenth to sixteenth century date, together with a scatter of clay tile and numerous small stones. Buried stone walls were seen in the drainage trenches. A heavy scatter of rough building stone marks the site of the grange. To the north of the site towards the A.G.I., ridge and furrow is visible on 1940s aerial photographs. Healy and Roffe suggest that from the archaeological evidence alone tends to support the identification of the site as that of the grange alone, and not the medieval village (*ibid*, 2).

Eleven scheduled sites lie outside the 1km corridor:

SAM 293 (MAP 1: TF 1873) Minting Priory

A scheduled Alien Priory lies some 1200m to the east of the proposed pipeline route. A Benedictine cell of St. Benoit-Sur-Loire was founded in 1129 and dissolved in 1414. The site survives as earthworks which represent the priory, stock compounds, yards, ponds and the grange building situated within a small moat. A broad holloway connects the moat to the village. The ponds have been cleaned out and enlarged but the earthworks themselves represent a well-preserved grange of Late Medieval type.

The RCHME has plotted this site from aerial photographs: this shows earthworks close to the village, and a series of ridge and furrow surrounding the site, the densest group situated to the east of the priory around the settlement of Minting.

SAM 10 (MAP 2: TF 1468) Tupholme Abbey

Tupholme Abbey was a premonstratensian abbey founded in 1155-1166 and suppressed in 1536. The remains of the monastic building, as well as earthworks and cropmarks relating to the precinct boundary, ditches and fishponds, can be determined and have been plotted by the Royal Commission (RCHME). Earthworks and the remains of a Post-Medieval house and formal gardens lie on the abbey site along with an abandoned Post-Medieval farmstead which survives as standing buildings. This scheduled area lies some 1200m from the proposed pipeline route.

SAM 242 (MAP 2: TF 1569) Burreth Deserted Medieval Village

This deserted settlement lies some 700m from the proposed pipeline route. The village was mentioned in the Domesday survey:

"In Burreth and Thorley 1 carucate of land and 3 bovates and the third part of a bovate taxable. Arable land for as much. 9 Freemen have ploughs. Meadow, 175 acres; woodland pasture, 180 acres; underwood, 500 acres" (Morris, 1986).

The site is identified from earthworks and cropmarks where the remains of a moat, church, enclosures, holloway, tofts, crofts and buildings can be seen (RCHME Plot).

SAM 322 (MAP 2: TF 1767) All Hallows church

All Hallows church and graveyard is no longer surviving as a building but it is known from illustrations to have been standing in 1786. No visible remains survive except for a large, badly disturbed mound, believed to be the site of the church. The church is thought to date to the 16th-17th centuries. The site lies 2km to the east of the proposed route.

SAM 313 (MAP 3: TF 1161) Car Dyke SE of Blankney Wood

A scheduled stretch of this Romano-British watercourse lies some 750m from the proposed pipeline route.

SAM 315 (MAP 4: TF 1258) Car Dyke

A scheduled stretch of Car Dyke lies to the south-west of Martin Wood, some 1.6km to the east of the proposed pipeline route.

SAM 298 (MAP 4: TF 1258) Car Dyke

A scheduled stretch of Car Dyke east of Timberland lies some 1.9km to the east of the proposed pipeline route.

SAM 251 (MAP 4: TF 1155) Catley Abbey

Catley Abbey lies some 600m to the east of the proposed pipeline route. The abbey belonged to the Gilbertine order and was founded as a double house between 1148 and 1154 in the reign of Stephen and was dissolved in 1538. Traces remain of what may have been the cloister garth with the church to the north and 'robber trenches' outlining a smaller building to the west. In the south-west corner of the partly filled precinct moat is an irregular system of channels, one of which once formed a fish pond. A considerable amount of building material has come from this site, including roof and floor tiles. Indeed, fragments of a kiln structure were exposed in part of a dyke to the east of the monument. A 16th century thimble has also been found on the site (CI.C). The probable burial ground of this Abbey lies directly to the west (PRN 60312).

SAM 178 (MAP 5: TF 1049) Haverholme Priory

Haverholme Priory site is situated 2.1km to the west of the proposed pipeline route. The priory was a Gilbertine order, being founded in 1139 by Peter of Billingham and dissolved in 1539. It is said to have comprised 50 monks and 100 nuns. Excavations in 1961-1964 produced evidence of the priory foundations and a well or storage pit. The present Haverholme dates to the 18th-19th century.

SAM 22636 (MAP 5: TF 1150) Medieval Cross

A medieval cross in St.Edith's churchyard, Anwick lies some 900m to the west of the proposed pipeline route.

SAM 22641 (MAP 6: TF 0842) Medieval Cross

The remains of a 15th century wayside cross lie on the side of the Mareham Lane, some 1600m south of the Silk Willoughby A.G.I site.

5.4.2 Category B sites

A total of 41 Category B sites were recorded, 21 within the 1km study corridor. Of these, one is just crossed by the proposed pipeline route:

RCHME Plot (MAP 6: TF 1045) ?Medieval Village

This site has been identified and plotted by the RCHME from aerial photographs. It comprises a series of cropmarks, probably pertaining to medieval settlement and forming crofts and a holloway running north-south. The site seems to be associated with further cropmarks immediately to its west, and may form part of the medieval settlement of Thorpe or Laythorpe which has similar crofts and a chapel site (CI.C/CM, MAP 6: TF 0945). The study of aerial photographs during the assessment suggests that the RCHME site is more complex, with possible pits and other smaller features covering the site (DBA.CV/CW). Immediately to the west of this area lies further cropmark evidence suggestive of medieval crofts (RCHME Plot, MAP 6: TF 1045/1044). Additional cropmarks (possible crofts and ponds) indicating probable medieval settlement continue northwards towards the present village of Kirkby La Thorpe (NAR.17, MAP 6: TF 0946 and PRN 60346, MAP 6: TF 0946/1045/0945). This evidence, coupled with documentary reference to medieval settlement in this area, suggests the proposed route is travelling through a fairly extensive medieval landscape. The proposed pipeline easement is at present routed between two

areas of cropmarks, and may just come into contact with a supposed croft feature at TF 10344510.

Category B sites which were not crossed by the proposed pipeline, but which do lie close to it, are briefly described below. It is possible or likely that some of them will be affected by the proposed pipeline; these particular sites are also listed in Table 3, Section 6.3.

PRN 40025 (MAP 1: TF 1772) Gautby Hall and Fishpond

Gautby Hall and fishpond is now "The Rookery". Gautby Hall is the ancient seat of the Vyners and was probably built by Matthew Brettingham in 1874, though has since been destroyed. The proposed route lies some 500m from this site, but crosses through an area of associated parkland.

PRN 42958/PRN 42956 (MAP 1: TF 1772) Shrunken Medieval Village of Gautby

PRN 42958 is the site of the Shrunken Medieval Village of Gautby, located to the south-east of the present village. It consists of ridge and furrow, crew yards, building platform, crofts, ponds and a holloway identified as earthworks and cropmarks, all situated 300m to the east of the proposed pipeline route.

Evidence for shrinkage is evident to the north of the present village (PRN 42956), where aerial photographic study has identified ridge and furrow and possible crofts, some of the former being crossed by the proposed route. Other areas of Ridge and furrow are also crossed by the proposed pipeline route (PRN 42957, MAP 1: TF 1772) (DBA.AL, MAP 1/2: TF 1772) (DBA.AM, MAP 2, TF 1771). A dense scatter of medieval pottery has also been recorded from the area (NAR.7) and is suggested to indicate the site of a possible Manor House. Unfortunately, the location of the finds can only be estimated to within a kilometre square (TF 1772).

PRN 4066 (MAP 2: TF 1769) Grange Farm and Post Medieval Pond

The proposed route runs some 450m to the west of "Grange Farm", and a Post-Medieval horseshoe-shaped farm pond which was previously alleged to be a moat. The RCHME Plot shows ridge and furrow to the east and west of the farm, and it may be the farm has earlier origins (unless the ridge and furrow is post-medieval). The place-name "Grange" does though, suggest a site of some antiquity.

PRN 40398, 40399, 40400, 40067 (MAP 2: TF 1668) ?Medieval Village

This probable medieval settlement lies south of the present village of Bucknall (mentioned in Domesday), and comprises crofts, mounds, fishponds, quarries, tofts, boundaries and field systems surviving in part as earthworks and largely seen on aerial photographs. The field systems lie some 400m from the proposed pipeline route, with the main density of the earthworks and cropmarks lying some 700m away. The church at Bucknall (NAR 4, MAP 2: TF 1668) is of medieval date, and has a decorated late Norman font.

PRN 60270 (MAP 3: TF 1260) Linwood Hall and Deserted Medieval village of Cotes

The proposed pipeline route runs some 100m from the probable Deserted Medieval Village of Cotes and Linwood Hall. Linwood Hall was built in 1935, possibly on the site of a former moated Grange belonging to Bardney Abbey. The Grange was indeed moated but was infilled in 1935. Ridge and furrow has been recorded to the north and south of this area (DBA.BH/DBA.BI, MAP 3: TF 1260/TF 1261).

PRN 60343 (MAP 4: TF 1157) Deserted Medieval Village

The Deserted Medieval Village site at Thorpe Tilney known as Thorpe Tilnet or Tilney, lies some 400m to the east of the proposed pipeline route in the area of Thorpe Tilney Hall. The village is mentioned in two charters registered in the Cartulary of Thurgaton Priory, now in Southwell Minster. On the 4th of July 1545, John Broxholme and John Bellowe received a royal grant of three houses in Thorpe Tylney, being the possessions of the dissolved Priory of Kyme. Earthworks survive of this site on aerial photographs (British Gas 1992, now in Lincoln SMR). Probable associated field systems of ridge and furrow lie to the north of Tilney Hall (PRN 60341/60342, MAP 4: TF 1157), some 400m to the east of the proposed pipeline route.

PRN 60277 (MAP 4: TF 1055) Digby Grange and Moated site

The proposed pipe route lies some 300m to the east of the site of Digby Grange and moated site. The site has been identified from its earthworks and from aerial photographs, even though the majority of it has now been heavily ploughed. From documentary sources, the site is possibly that of a Grange of Catley Priory of the Gilbertine order.

PRN 60312 (MAP 4: TF 1155) Burial Mounds

A series of mounds, three of which survived as earthworks until at least the 1960's, lie only 300m from the proposed pipeline route. Two of the mounds produced medieval human remains and wooden coffins in 1871, suggesting that the site was a burial ground for Catley Priory which lies due east (SAM 251, TF 1155). It may also be, however, that other burials in the vicinity formed an extensive prehistoric burial ground. Indeed, a possible Bronze Age barrow cemetery lies only 400m to the east (NAR 15: TF 1255). The RCHME have plotted at least seventeen probable barrows in the area of the medieval burials, whilst a potentially highly significant site, the cropmark of a possible Neolithic Long Barrow (SAM.27900) also lies amongst the burials of PRN 60312. It is clear that the proposed pipeline passes through an area of high archaeological potential for both the prehistoric and the medieval periods.

PRN 60315 and 60316 (MAP 5:TF 1349) Anwick Fen Barrow Cemetery

Another important prehistoric site lies in Anwick Fen some 200m to the west of the proposed pipeline route. A barrow cemetery is known from aerial photographic soilmark evidence plotted by Brian Simmons in 1975. To confirm the nature of these barrows, his work was followed up with a field-based survey of the area. As a result of this combined research, up to ten barrows were identified, some surviving as slight mounds in the field. The barrows are located on a ridge of eroded sandy peat adjacent to an extinct course of the river Slea. A radiocarbon date of 590 +/- 100 B.C recorded from peat overlying a barrow cemetery in Walcott situated c.1km to the east of the proposed route and three kilometres north of the Anwick site, suggests that most of the peat was probably deposited in the Bronze Age (Chowne and Healey, 1989, 38).

Artefactual evidence from the area supports the mounds' antiquity. These comprise 1,362 artefacts recovered from a fieldwalking project as part of the same evaluation carried out in 1976, the majority of which were recovered from the areas around the barrows. The flint assemblage has elements dating to the Mesolithic, Neolithic and Bronze Age periods, with the earlier pieces suggesting some form of settlement (*ibid.*, 43). It is suggested that the site, like many locations on the Fen edge, may have been occupied or frequented many times over several millennia. Other similar partially buried barrow cemeteries have been found in Lincolnshire.

CLX (MAP 6: TF 1146) ?Manorial Pond and ?Hall site

An earthwork, possibly that of a manorial pond, lies some 450m to the east of the proposed pipeline route, to the south of Ewerby. It is not categorised as a moated site, but is probably an ornamental pond associated with a medieval Hall. Evidence of foundations have been discovered to the east of this feature, and tradition suggests there is a hall upon this site. Building remains have been ploughed up in the vicinity, but their exact location is uncertain.

PRN 60590 and 60591 (MAP 6 : TF 1145) Cropmarks

This site is evident from aerial photographs, part of which lies some 200m to the east of the proposed pipeline route. The feature comprises a crossed set of triple and double linear ditches, one aligned north to south, the other north-north-west to south-south-east. Where the features meet, a enigmatic circular feature is evident. The RCHME Plot suggests the site has a single stretch of outlying ditch 50m in length, 200m from the proposed route running to Half Mile Lane. This cropmark site holds great archaeological potential and may form a feature related to ceremonial activities in the Prehistoric or later periods.

PRN 60346 (MAP 6: TF 1046) Medieval Village

A complex of medieval features exists to the west of the proposed pipeline (the nearest of these 500m away), and comprise cropmark evidence of a shrunken settlement at Kirkby La Thorpe (PRN 60346). Here, possible village remains are seen on aerial photographs, surviving in part as earthworks. To the east of Kirkby La Thorpe, additional village evidence exists (NAR.17, MAP 6: TF 0946), where crofts and ponds can be seen as cropmarks and earthworks, aswell as the site of St. Peter's church. The place-name "The Grange" (NAR 18, MAP 6: TF 0946) supports the former existence of a medieval settlement, whilst the existing medieval church, with Norman decoration and fragments of an Anglo-Saxon cross built into the church tower (NAR.16/.5, MAP 6: TF 0946) also hint at early occupation.

To the south of the present village of Kirkby La Thorpe is more evidence of medieval settlement with CLC (MAP 6: TF 0945), a series of crofts and other cropmarks, and CIM, the site of a chapel. To the south of this lies the site discussed earlier (RCHME Plot, MAP 6: TF 1045) where the proposed route is likely to cross the eastern side of the identified crofts and other cropmarks.

PRN 60345 (MAP 6: TF 1153) ?Medieval Village

Remains of probable medieval village features, identified as earthworks from aerial photographs, lie some 800m to the east of the proposed pipeline route.

CI.U (MAP 6: TF 08 43) The Mareham Lane, course of Roman Road

Silk Willoughby A.G.I is located on the eastern side of the course of the Roman Road known as The Mareham Lane. This road, termed by Margary as Road 260, runs for approximately 15.5 miles from Bourne to Sleaford (Margary, 195, 206). The first part of the road, from Bourne to Threkingham, is not as pronounced as the stretch adjacent to the Silk Willoughby A.G.I. The course of the road in this stretch is very straight, and well raised-up, to half a metre or so in places. One kilometre north of the A.G.I, the course of the modern road turns west, whilst the Roman road continues north, traceable in hedgerows and by a track, although part of it (NAR.43) has been said to be a medieval headland. Parish boundaries follow the road continuously from Threkingham to Sleaford. The destination of the road is uncertain beyond Sleaford, though it is thought that it may have turned eastwards across the fens towards Horncastle or Woodhall Spa to link up with the roads on the Wolds (*ibid.*).

5.4.3 Category C sites

A total of 18 Category C sites were recorded, 14 of them lying within the 1km study corridor. Of these, one is crossed by the proposed pipeline route:

PRN 40030 (MAP 2: TF 1771) Cropmark

The proposed pipeline route crosses a soilmark comprising two parallel linear features, probably ditches, 400m in length and about 50m apart.

Category C sites which were not crossed by the proposed pipeline but which do lie close to it, are briefly described below. It is possible or likely that some of them will be affected by the proposed pipeline; these particular sites are also listed in Table 3, Section 6.2.

PRN 40304 (MAP 1: TF 1676) ?Deserted Medieval Village

The purported Deserted Medieval Village of Shankeston lies some 500m to the north-west of the proposed pipeline route. The site has been perambulated (SMR), but no evidence of desertion was found. Areas of ridge and furrow do lie in the vicinity (NAR.20, MAP 1: TF 1676/TF 1775/TF 1775) but these may relate to agricultural activity at Hatton.

PRN 42997 and PRN 42996 (MAP 1: TF 1674) Minting Wood

The proposed route runs 250m and 300m respectively from Minting Wood and Hatton Wood, both of these being probable ancient woodland.

PRN 42983 (MAP 2: TF 1669) Bucknall Wood

Bucknall Wood lies 50m from the proposed pipeline route, and may also be ancient woodland.

NAR 12 (MAP 2: TF 1870) Cropmarks

The proposed route runs some 850m west of a possible medieval site. The features identified from cropmarks comprise a series of conjoined enclosures.

PRN 40070 (MAP 2: TF 1567) ?Medieval Settlement

This is the site of a purported medieval site in the vicinity of Campney Grange Farm, which lies 400m to the east of the proposed pipeline. This could be the site of the medieval hamlet of Campney, though there are no surface indications of such a settlement to indicate desertion. The present building dates to the 18th-20th centuries.

PRN 42959 (MAP 2: TF 1566) Cropmarks

An undetermined cropmark site lies some 350m from the proposed pipeline route. The cropmark was seen at the NMR (DBA.AZ) to be a very distinct curvilinear feature, possibly forming part of an enclosure.

PRN 40395 (MAP 2: TF 1466) Cropmarks

The proposed pipeline route runs 300m to the west of an undetermined rectilinear cropmark.

RCHME Plot (MAP 3: TF 1060) Blankney Airfield

The proposed pipeline route runs within 100m of the disused site of Blankney Airfield.

DBA.CK (MAP 5: TF 1148) Brick and Tile Works

The site of Ewerby brick and tile works, brickyard and brickyard cottages lie some 500m to the west of the proposed pipeline route.

DBA.CQ (MAP 6: TF 1145) Building

A building was located on the second edition 6" Ordnance Survey map of this area; it is no longer shown on the modern maps. The proposed pipeline lies 200m to the east of this feature.

DBA.DA (MAP 6: TF 0944) Cropmark

A cropmark feature, possibly forming part of an enclosure, lies some 550m to the west of the proposed pipeline route. It may be associated with the probable medieval feature to the north (RCHME Plot, MAP 6: TF 1045).

NAR 43 (MAP 6: TF 08 44) Cropmark

This site, identified from a cropmark, may be a continuation of Mareham Lane Roman road, although it has also been suggested that it could be a medieval plough headland.

5.4.4 Category D Sites

A total of 56 Category D sites were recorded, 49 of these within the 1km study corridor. Of the latter, 19 are crossed by the proposed pipeline. Route modification to avoid these sites was not recommended at this stage. Below is a summary of each site that is crossed by the proposed pipeline route with a more detailed appraisal of two sites which occur on MAP 6:

- NMR.21 (MAP 1: TF 1775) ridge and furrow
- DBA.AA (MAP 1: TF 1775) Romano-British pot scatter and negative geophysical results
- DBA.AF (MAP 1: TF 1774) ridge and furrow
- PRN 42956 (MAP 1: TF 1772) ridge and furrow
- PRN 42975 (MAP 1: TF 1772) ridge and furrow
- DBA.AL (MAPS 1/2: TF 1771/1772) ridge and furrow
- DBA.AM (MAP 2: TF 1771) ridge and furrow
- DBA.AO (MAP 2: TF 1771) ridge and furrow
- PRN 60474 (MAP 3: TF 1465) prehistoric boat
- DBA.BD (MAP 3: TF 1465) ditches, possibly part of an enclosure
- DBA.BG (MAP 3: TF 1363) ?ditches, ?field boundaries and geological marks
- DBA.AH (MAP 3: TF 1260/1261) ridge and furrow
- DBA.BN (MAP 4: TF 1058) pond
- DBA.BO (MAP 4: TF 1057) pond
- DBA.BS (MAP 4: TF 1057) linear, ?continuation of road from Thorpe Tilney Hall
- DBA.BV (MAP 4: TF 1055) field-names
- DBA.BX (MAP 4: TF 1155) ?ditch or field boundary
- DBA.CF (MAP 5: TF 1249) ?ditches, ?enclosure
- DBA.CO (MAP 6: TF 1146) ?pond

PRN 60292 (MAP 6: TF 0844/0944) ?Hillfort

This purported site is roughly sketched onto the SMR map as an arc at the base of Kirkby Mount. Identified from aerial photographs, it is recorded as a possible hillfort, but no other details are known (except the initials of the recorder; KRF.). The aerial photographs and documentary sources consulted during the course of the assessment, no evidence of such a feature was noted.

CLCG (MAP 6: TF 0943/1943) Kirkby Mount and Beacon Hill

Information on Kirkby Mount and Beacon Hill was recorded from the SMR. The site was visited in 1945 and the narrative states that:

"Canon Foster thinks that Kirkby Mount may be *"ILLEUM MONTEM QUI VAOCATUM THINGHOU JUXTA CALD MARHAM"* which is mentioned in the charters of Sempringham Priory. The plantation which now covers it cannot be more than fifty years old. The whole of the mount has been under plough, and if there ever were any antiquities on it they may have been destroyed. The wood is not too thick to make the examination of the ground too difficult. The Beacon Hill has no visible antiquities. It is possible that Kirkby Mount and/or Beacon Hill may have been a meeting place of the Wapentake of Aswardham" (Lincoln SMR).

Beacon Hill, with the "Beacon Hill Stone" at its summit, is suggested to have been an ancient meeting place.

5.4.5 Category E sites

81 Category E sites were recorded, 76 of these within the 1km study corridor, 37 of these are crossed by the proposed pipeline route. As with the Category D sites, route modification was not recommended. The D sites which are crossed by the proposed pipeline are listed below:

- DBA.AC (MAP 1: TF 1775) ?Post-Medieval/Modern field boundaries
- DBA.AD (MAP 1: TF 1774) ?Post-Medieval/Modern field boundaries
- DBA.AG (MAP 1: TF 1773) ?Post-Medieval/Modern footpath
- DBA.AI (MAP 1: TF 1773) ?Modern drainage
- DBA.AJ (MAP 1: TF 1772) ?Post-Medieval/Modern footpath
- DBA.AN (MAP 2: TF 1771) ?Post-Medieval/Modern field boundary
- PRN 40020 (MAP 2: TF 1771) Medieval pottery scatter
- DBA.AP (MAP 2: TF 1671) ?Post-Medieval/Modern field boundaries
- DBA.AR (MAP 2: TF 1770) ?Post-Medieval/Modern field boundaries
- DBA.AT (MAP 2: TF 1669) ?Post-Medieval/Modern footpath
- DBA.AV (MAP 2: TF 1567) ?Post-Medieval/Modern footpath
- DBA.AT (MAP 2: TF 1566) ?Post-Medieval/Modern footpath
- DBA:AY (MAP 2: TF 1567) ?Post-Medieval/Modern field boundary
- DBA.BA (MAP 2: TF 11466) ?Post-Medieval/Modern field boundary
- DBA.BB (MAP 2: TF 1466) ?ditch, probably a field boundary
- DBA.BC (MAP 3: TF 1365) ?Post-Medieval/Modern field boundary
- DBA.AF (MAP 3: TF 1364/1464) ?Post-Medieval/Modern field boundaries
- DBA.BK (MAP 4: TF 1159) ?Post-Medieval/Modern field boundary
- DBA.BM (MAP 4: TF 1058) ?Post-Medieval/Modern field boundary
- DBA.BN (MAP 4: TF 1058) ?Post-Medieval/Modern field boundary
- DBA.BP (MAP 4: TF 1058) ?Post-Medieval/Modern field boundary
- DBA.BR (MAP 4: TF 1057) ?Post-Medieval/Modern footpath
- DBA.BT (MAP 4: TF 1155) ?Post-Medieval/Modern field boundary
- CI H (MAP 4: TF 1154) Prehistoric flint axe
- DBA.BZ (MAP 5: TF 1153/1152) ?Post-Medieval/Modern field boundaries
- DBA.CC (MAP 5: TF 1151) ?Post-Medieval/Modern field boundary
- DBA.CD (MAP 5: TF 1151) ?Post-Medieval/Modern field boundary and footpath
- DBA.CE (MAP 5: TF 1250/1249) ?Post-Medieval/Modern field boundaries
- DBA.DE (MAP 5: TF 1349) old river courses of River Slea
- DBA.CI (MAP 5: TF 1349) ?Post-Medieval/Modern footpath
- DBA.CJ (MAP 5 TF 1248) ?Post-Medieval/Modern field boundary and footpath
- DBA.CL (MAP 6: TF 1147) ?Post-Medieval/Modern field boundary and laid out trees
- DBA.CN (MAP 6: TF 1147) ?Post-Medieval/Modern footpath

- DBA.CR (MAP 6: TF 1045) ?Post-Medieval/Modern footpath
- DBA.CS (MAP 6: TF 1045) ?Post-Medieval/Modern field boundary
- DBA.CY (MAP 6: TF 0944) ?Post-Medieval/Modern field boundary
- DBA.CZ (MAP 6: TF 0944) ?Post-Medieval/Modern field boundary

As can be seen, the majority of the sites crossed by the proposed pipeline route in this category are field boundaries, probably of recent date. Nearly all were recorded from aerial photographs or were seen on 1st edition 6" Ordnance Survey maps. Though of relatively little value archaeologically, knowing the location of these field boundaries should prevent unnecessary time and effort being spent investigating such features, in the mistaken belief that they represent more important archaeological remains.

5.5 Potential for further sites

Potential exists along the whole of the proposed pipeline route for the discovery of further archaeological sites, although specific areas of sensitivity are:

- Where it passes beneath the Scheduled section of Car Dyke (SAM.314: MAP 3, TF 1261). Although precautions for the preservation of this monument have been taken, it is possible that related occupation evidence could exist either side of the feature.
- Where it ends immediately east of Mareham Lane Roman road (CI.U: MAP 6, TF 0843). Here, there is potential for the location of roadside settlement or 'ribbon development'.
- Where it passes between areas of medieval settlement cropmarks, and actually crosses the eastern part of one Category B complex (RCHME Plot: MAP 6, TF 1045).
- Where it crosses the Category C parallel linear features (PRN 40030: MAP 2, TF 1771).
- Where it passes through the Witham Valley Fenlands (MAPS 3-5). This area has considerable archaeological potential since the peats here may well be sealing archaeological remains. This can be seen to be the case where peat has already been eroded and exposed prehistoric sites, notably the Walcott Commons Barrow Cemetery (NAR 15: MAP 4, TF 1255), the Anwick Fen Barrow Cemetery (PRN 60315: MAP 5, TF 1349) and the probable Neolithic Long Barrow on Walcott Commons (SAM.27900: MAP 4, TF 1155). The potential discovery of such sites also indicates the possibility of high quality preservation of archaeological deposits (including organic remains), and the potential for the recovery of associated environmental evidence.

6 DISCUSSION

6.1 Overall impact of the proposed pipeline route on the archaeological resource

The proposed pipeline passes through an area containing a fairly low density of known archaeological remains, ranging in date from prehistoric to post-medieval but largely relating to the medieval period onwards. Most of the sites are Category D (mainly ridge and furrow) or Category E (recent field boundaries and findspots). The proposed route does, however, cross one Category A, one Category B, and one Category C site (see below, 6.2). It also passes close to a number of other known archaeological sites (Categories A, B and C; mainly medieval or prehistoric), so may have a direct impact upon these. In addition, the potential for further, as yet unrecorded, archaeological sites, especially within the Witham Valley peat fens, increases the potential impact of the pipeline route.

6.2 Category A, B and C sites crossed by the proposed pipeline route

A Scheduled section of Car Dyke (Map 3, SAM.314, TF 1261) lies in the direct path of the proposed pipeline; Scheduled Monument Consent has been granted by the Department of National Heritage to auger-bore the pipe beneath it. Although the land immediately either side of the monument will not be disturbed by the pipeline, the two areas where the pipe construction trench will disturb the ground, should be considered as having a reasonable archaeological potential due to their proximity to such a major Romano-British earthwork.

The Category B site crossed by the proposed route comes from a Royal Commission aerial photograph plot (RCHME, Map 6, TF 1045), and is a group of cropmarks representing part of a Deserted Medieval Village. Although constraint Map 6 shows the proposed pipeline not quite touching the limits of the cropmark, it is likely that the pipeline easement will encroach upon the site. Similar cropmarks lie just to the east of the pipeline route (see below, 6.3), increasing the possibility of there being archaeological remains between the two cropmarks complexes, which lie only 100m apart.

The Category C site crossed by the proposed pipeline consists of a pair of parallel linear features, probably ditches, identified by aerial photography (PRN 40030, Map 2, TF 1771), and possibly representing the former course of an early track or driveway. It is recommended that both this and the Category B site mentioned above are avoided (see below, 7.1.3).

6.3 Category B sites lying close to the proposed pipeline route

Seven Category B sites lie particularly close to the proposed pipeline route. The precise limits of many of these sites (particularly those plotted from ill-defined cropmarks) are uncertain, and it is therefore likely that some sites may extend into the path of the proposed route. Table 3 below lists those sites lying within approximately 250m of the proposed pipeline route.

Map No	NGR	Source Reference	Description
1	TF 1772	PRN 42958	AP: SMV earthworks
3	TF 1260	PRN 60270/NAR.1	Linwood Hall: possible moated Grange & DMV of Cotes
4	TF 1155	PRN 60312	AP: ?prehistoric Barrow Cemetery and ?medieval burial ground
5	TF 1349	PRN 60315/NAR.18	AP: Anwick Fen Barrow Cemetery

6	TF 1045	PRN 60590/60591	AP: Parallel double/triple ditch complex
6	TF 1045	RCHME /DBA.CV	AP: cropmarks associated with probable DMV
6	TF 0843	CI.U	Mareham Lane, course of Roman road

Table 3 : Category B sites lying close to the proposed pipeline route

6.4 Category D sites crossed by the proposed pipeline route

A total of 19 Category D sites are crossed by the proposed pipeline route (see 5.4.4 for full list). Many of these are areas of ridge and furrow, most of which is likely to be ploughed out. It will be possible to record any surviving earthwork ridge and furrow during the Field Reconnaissance Survey (Stage 2b) (see below, 7.2.1). Eight other Category D sites are, however, of potential significance; these are listed in Table 4 below.

Map No	NGR	Source Reference	Description
3	TF 1465	PRN 60474	Prehistoric Boat find location
3	TF 1465	DBA.BD	AP: possible enclosure or ditches
4	TF 1057	DBA.BS	AP: linear feature: ?track/road
5	TF 1249	DBA.CF	AP: possible enclosure
5	TF 1249	DBA.DC	'Cobbler's Lock' - reputed Bronze Age site
6	TF 1045	DBA.DD	Sardenson's Farm - reputed Roman site
6	TF 0844	CI.G	Kirkby Mount - ?ancient meeting place
6	TF 0844	PRN 60292	Kirkby Mount - suggested Hillfort

Table 4 : Selected Category D sites along the proposed pipeline corridor

6.5 Category E sites crossed by the proposed pipeline route

Thirty-seven of these sites are crossed by the proposed pipeline, most of them recent field boundaries. A number of others comprise prehistoric axe findspots, which may suggest forest clearance in the past. The recovery of some of the prehistoric finds from the peatland areas hints at the utilisation of the area in this period. As stated earlier (5.4.5), the knowledge of where these early boundaries lie will prove useful during field survey, since it should prevent unnecessary time and effort being spent investigating such features.

7 RECOMMENDATIONS

7.1 General

The assessment has identified 5 levels of impact on the known and potential archaeological resource of the proposed pipeline route:

- A an overall impact along the proposed route (see 7.1.1).
- B a potential impact in the Witham peat Fenlands, with respect to the discovery of buried archaeological sites and the associated potential for the recovery of preserved organic remains (see 7.1.2).
- C a high site-specific impact where the proposed route crosses or passes close to known archaeological sites (see 7.1.3).
- D a high potential impact on the area adjacent to Car Dyke (see 7.1.4).
- E a high potential impact adjacent to The Mareham Lane Roman road, with the possibility of 'ribbon development' settlement (see 7.1.5).

In addition to the impact of the proposed pipeline itself, provision should also be made for the archaeological inspection and/or monitoring of a number of other engineering works, namely, the locations of pipe storage areas and compounds, and of any wider-stripped easements such as at road crossings and block valve sites.

7.1.1 Overall route

Much of the proposed route crosses areas of little or no known archaeology, particularly in the Witham Fenlands. These areas should generally be regarded as areas of uncertain potential rather than those of no potential. For this reason, and in accordance with current practice for assessing linear developments, it is recommended that the entire proposed route be subject to:

- field reconnaissance survey (Stage 2b - see 7.2.1).
- fieldwalking (Stage 3a - see 7.2.2).
- earthwork survey (Stage 3b - see 7.2.3).
- archaeogeophysical survey (Stage 3c - see 7.2.4).

7.1.2 The Witham Fenlands

For this wetland zone, particular attention should be paid during the topographical survey to any changes in soils and sediments along the route (particularly the nature and extent of peat deposits), as such variations can influence the detection of archaeological sites. From experience, this area, like other wetlands, will produce apparently negative results due to the masking effect of the peat; earlier, prehistoric sites will often be too deeply buried for detection by techniques such as fieldwalking. Wetland archaeology is an expert discipline, and liaison with a specialist is needed to ascertain further strategies to be implemented for specific areas after the initial survey has been completed.

The possibility of well-preserved archaeological sites lying buried beneath peat deposits, and the potential for the recovery of preserved organic items such as wood, leather, pollen and seed, should not be underestimated. In addition to the work carried out along the entire route, it is therefore recommended that adequate provision be made for the retrieval, consolidation and analysis of any resultant organic and environmental remains. It may also be necessary to carry-out a programme of test-pitting and auger survey to ascertain the depth, nature and deposition sequence of the peat deposits.

7.1.3 Known sites

Most Category A, B and C sites were not crossed by the proposed pipeline route, although one of each of these Categories of site is crossed by it (see 6.2). The Category A site, Car Dyke (SAM.314), is discussed below (7.1.4). It is recommended that the other two, a Category B medieval settlement cropmark complex (RCHME Plot) and the Category C parallel linear features (PRN 40030), be avoided. For the seven Category B sites lying close to the route (Table 3, 6.3), and eight of the 37 Category D sites crossed by it (Table 4, 6.4), particular attention should be paid during the Stage 2b (field reconnaissance) and Stage 3 (fieldwalking and geophysical) surveys.

7.1.4 Car Dyke

Although the proposed pipeline will be auger-bored beneath this Scheduled Ancient Monument outside the Scheduled area, there is still the potential for the existence of associated archaeological remains in the non-Scheduled areas adjacent to it. It is therefore recommended that all ground disturbances associated with the auger-boring are archaeologically monitored, and that the archaeological contractor commissioned to carry out such monitoring is made aware at the earliest opportunity of any work taking place in the this vicinity.

7.1.5 The area adjacent to Mareham Lane Roman Road

The potential for the existence of roadside settlement or 'ribbon development' alongside this important Roman highway has to be regarded as considerable. Furthermore, despite the fact that the area immediately adjacent to the road is taken up by the existing A.G.I at Silk Willoughby, this potential still exists, since such 'ribbon development' can often extend 50-100m or more from Roman roads. It is therefore advised that the area immediately east of Silk Willoughby A.G.I. is, as an initial evaluatory technique, subject to detailed magnetic scanning.

7.2 The Investigatory Stages

A staged approach (see Appendix 2) is recommended for the assessment of the various impacts identified and discussed above, where each investigative stage corresponds to a different field evaluatory technique. The following section outlines the investigative stages in relation to the impacts of the proposed route.

7.2.1 Field Reconnaissance Survey (Stage 2b)

It is recommended that the entire length of the proposed pipeline route is subject to a visual inspection to record:

- the location and character of any previously unknown extant earthworks.
- the level of preservation of any known earthworks.
- the location and nature of any soil and/or vegetative changes, thought to indicate sub-surface archaeological deposits.

- present (and former) landuse.
- topographic variations.
- visible geology.
- health and safety implications.

7.2.2 Fieldwalking (Stage 3a)

Although this took place along the proposed route in 1993, a number of factors indicate that a renewed programme of fieldwalking ought to be carried out. Firstly, as a result of various factors, a third of all fields could not be walked in 1993; they may well be available now. Secondly, it appears that the route has been modified slightly in places, so that some other areas along the present route will have never been walked. Thirdly, the distribution of artefacts on the surface of a ploughed field alters each time the land is ploughed. Furthermore, the ploughing episodes that have taken place between 1993 and 1997 are almost certain to have disturbed some archaeological deposits for the first time, particularly in the fenland area where the ground surface is constantly being reduced by the erosion of the peat.

It is therefore recommended that agricultural land along the length of the proposed pipeline be subject to a programme of systematic fieldwalking to be carried out in accordance with the current British Gas Brief for 'Pre-construction Survey.' The specific objectives of this survey would be to:

- locate, delimit and date any previously unknown sites
- determine the date and spatial extent of those sites previously identified by the desk-based
- assessment (Stage 2a), and which either could not be avoided by a re-route, or were shown by the fieldwalking to extend onto the proposed pipeline route.

Fieldwalking needs visible bare earth. It follows therefore that fieldwalking is rarely possible during spring, and that late autumn/winter is the optimum period for this work.

7.2.3 Earthwork Survey (Stage 3b)

Earthwork sites identified during the Stage 2 surveys should be recorded by means of detailed topographic survey, normally using a total-station theodolite. The survey will enable an assessment of the suitability of any earthwork site for further investigation (*eg.* Stages 3c and 4 - see 7.2.4 and 7.2.5).

7.2.4 Archaeogeophysical Survey (Stage 3c)

Archaeogeophysical survey should be carried out along the proposed pipeline route in order to:

- locate any unknown archaeological sites (see 7.2.4.1)
- determine more fully the nature and extent of any known sites (see 7.2.4.2 and 7.2.4.3), identified during previous stages of investigation.

The survey will normally be undertaken in a phased approach: first, a continuous magnetometer scan and fixed-interval magnetic susceptibility survey (using a field coil), to identify areas of potential archaeological activity; second, a detailed magnetometer survey to provide intra-site detail, such as the shape and magnetic intensity of sub-surface features such as ditches, pits or kilns. Either phase may be accompanied by an auger survey (and laboratory analysis), in cases where further investigation of the soils' magnetic characteristics are needed to clarify results.

A specialist archaeogeophysical appraisal of the proposed route would be of great benefit, since it could assess the efficacy of the various geophysical techniques in respect of the various lithologies; for example, resistivity survey may be more appropriate than magnetic survey on certain parts of the route.

7.2.4.1 Magnetic Susceptibility Survey and Magnetometer Scan

It is recommended that a combined magnetometer scan and magnetic susceptibility survey be conducted along the proposed route. It is anticipated that these surveys would be carried out in conjunction with the fieldwalking (Stage 3a), so that the combined results could be assessed together.

7.2.4.2 Detailed Magnetometer Scan

A more detailed scan is recommended for the following areas:

- adjacent to Car Dyke, in the areas which will be disturbed by thrust-boring of the pipe underneath the monument.
- immediately east of Silk Willoughby A.G.I, to identify and determine the character, extent, date and overall archaeological potential of any associated archaeological evidence, and also to determine their true courses.

Where such rapid and detailed scanning produces anomalies considered to be of archaeological potential, then detailed geophysical survey should follow.

7.2.4.3 Detailed Geophysical Survey

Detailed (gridded) archaeogeophysical survey (following detailed scanning - see above, 7.2.4.2), is recommended for all known sites (found during Stages 2 and 3 and of Category B or C status) that are directly crossed by the proposed pipeline easement. These may include:

- sites identified by field reconnaissance survey (Stage 2b).
- sites identified by fieldwalking (Stage 3a).
- sites identified by earthwork survey (Stage 3b)
- the two Category B and C sites at present crossed by the pipeline, if these cannot be avoided, and if magnetic scanning produces positive results.
- the areas adjacent to the Car Dyke and The Mareham Lane Roman road, if the results of the magnetic scanning are positive.
- other sites (other than those specified above) identified by magnetometer scanning (Stage 3c).

The geophysical survey should normally be restricted to the width of the proposed route easement and the immediate area to either side, sufficient to determine more fully the spatial extent and character of the site.

The type of detailed geophysical survey employed will depend upon the responsiveness of the underlying geology to the particular technique. In general, the clays and peats may be relatively unresponsive, whilst the consistency of most riverine gravels tends to make them relatively conducive to survey, although iron concentrations within river gravel terraces can produce spurious magnetic patterns. An early scan of certain sites might help determine the best technique to be applied. Specialist archaeogeophysical advice should be sought on these matters.

7.2.5 Field Evaluation (Stage 4)

This stage of fieldwork would be expected to follow for sites identified during previous stages of investigation, and for which it was not possible to avoid. Although specific sites/areas requiring Field Evaluation can not be anticipated at this stage, it does seem useful, however, to outline the three main evaluatory techniques: hand-dug test-pits, auger survey and machine trenches.

These techniques can be used to determine the presence/absence, extent, character, date and level of preservation of sub-surface archaeological deposits, at sites identified in Stages 2 and 3. Precise methodologies would largely depend on site-specific factors.

7.2.5.1 Hand-dug test-trenches (Stage 4a)

The use of small, hand-excavated test-pits may be envisaged in the following cases:

- Where fieldwalking has identified a significant artefact scatter, and where geophysical survey is either impossible or considered inappropriate.
- Where geophysical scanning has identified significant anomalies, and trial-trenching is either impossible or considered inappropriate.
- Where magnetic scanning has failed to locate significant anomalies over known Category B or C sites with high archaeological potential.

7.2.5.2 Auger Survey (Stage 4b)

The use of auger survey to recover sub-surface soil samples is envisaged:

- in areas sealed by peat (the Witham Valley)
- in areas sealed by alluvium.
- on sensitive sites (*eg.* earthworks), in order to assess the presence or absence, and preservation of, archaeological deposits.

7.2.5.3 Machine-Trench Evaluation (Stage 4c)

The machine excavation of evaluation trenches may be necessary to investigate:

- sites which have had positive Stage 3 results.
- apparently 'blank' areas, if of particularly high archaeological potential.

7.2.6 Area Excavation

Excavation may be necessary for a limited number of sites which cannot be avoided by re-routing the proposed pipeline.

7.3 Summary of Recommendations

The following recommendations are put forward:

- Field Reconnaissance Survey along the whole of the proposed route.
- Fieldwalking along the whole of the proposed route.
- Magnetic Scanning and Magnetic Susceptibility Survey of the proposed route.
- Detailed Magnetic Scanning:
 - in the areas adjacent to Car Dyke.
 - in the area adjacent to The Mareham Lane Roman road.

Table 5 provides a summary of the recommendations in relation to the investigative stages:

	overall route	Areas adjacent to Car Dyke and The Mareham Lane Roman road
Stage 2b (field reconnaissance survey)	*	
Stage 3a (fieldwalking)	*	
Stage 3b (earthwork survey)	*	
Stage 3c (archaeogeophysical survey):		
magnetic scan & magnetic susceptibility survey	*	
detailed magnetometer scan		*
detailed magnetometer or resistivity survey		*
Stage 4 (field evaluation)		*

Table 5: Summary of Recommendations

Key to Table: * recommended at next stage of investigation
 * possible at later stage of investigation

8 CONCLUSION

The proposed Hatton to Silk Willoughby gas pipeline is likely to have a moderate effect on the known archaeological resource along the proposed route. The combined results from both this desk-based assessment and the recommended field survey should, however, provide the necessary information from which to formulate further mitigation strategies aimed at minimizing the destruction of these archaeological remains. In order for this to be achieved, and in order to avoid delays in the British Gas construction programme, field survey should begin at the earliest opportunity, preferably during the winter months.

9 ACKNOWLEDGEMENTS

Thanks are due firstly to British Gas who commissioned the archaeological assessment, in particular to Barry Robinson and Richard Fairs for their constant co-operation, and to Peter Lockwood and Tom Prior for their help with the production of the archaeological constraints maps. The authors also acknowledge the help of the staff at the Sites and Monuments Records and the Public Record Offices in Lincoln, the National Monuments Record Centre (NMR) in Swindon, the Royal Commission for the Historical Monuments of England in York, and Jon Watson of the planning department of City Hall, Lincoln, for his assistance when studying the council's aerial photograph collection.

10 REFERENCES

- Bonner, L., 1993. *Archaeology Along the Skitter to Hatton British Gas Pipeline*. British Gas Report (copy in Lincoln SMR).
- Brooks, I.P., Lingard, C., 1993. *Archaeology Along the Silk Willoughby to Peterborough British Gas Pipeline*. British Gas Report (copy in Lincoln SMR).
- Brooks, I.P., *et al*, 1993. *Hatton to Silk Willoughby: Initial Archaeological Field Work*. British Gas Internal Report.
- Brooks, I.P., 1993. *Hatton to Silk Willoughby Pipeline 1994: Pre-Construction Flint Work*. British Gas Internal Report.
- Chowne, P. and Healy, F., 1989. "Artefacts from a Prehistoric Cemetery and Settlement in Anwick Fen, Lincolnshire" *Lincolnshire History and Archaeology* Vol.18, 1989 p.37-46.
- Coles, J.M., 1986. "Precision purpose and priorities in wetland archaeology" *Antiquity*, 66, Part 2, 227-47
- Hayes, P.P. and Lane, T.W., 1992. *The Fenland Project Number 5: Lincolnshire Survey, The South-West Fens*. East Anglian Archaeology Report, Fenland Project Committee, Heritage Trust of Lincolnshire.
- Margary, I.D., 1957. *Roman Roads in Britain, Volume 1: South of the Fosseway to Bristol*. The Bowering Press, Plymouth.
- May, J., 1976. *Prehistoric Lincolnshire*, History of Lincolnshire Volume I. The History of Lincolnshire Committee.
- Morris, J. (general editor), Morgan, M. and Thorn, C., 1986. *Domesday Book Lincolnshire* 31 (Part One). Phillimore and CO. LTD.
- Photo-Geomorphological Survey Hatton - Peterborough for British Gas PLC, Volume 1 Hatton to Silk Willoughby, 1992. Dames and Moore International. British Gas Report.
- Pickering, J., *Current Archaeology*, No.145, 1995.
- Roberts, D., 1975. "Drainage and Reclamation" in Bennett, S., and Bennett, N. (eds.) (second reprint). *An Historical Atlas of Lincolnshire*. The University of Hull Press.
- Roffe, D., 1995. "Domesday Settlement" in Bennett, S., and Bennett, N. (eds.) (second reprint). *An Historical Atlas of Lincolnshire*. The University of Hull Press.
- Simmons, B.B., 1975. *The Lincolnshire Car Dyke*. The Car Dyke Research Group, Boston, Lincolnshire.
- Start, D., 1975. "Deserted Medieval Villages" in Bennett, S., and Bennett N. (eds.) (second reprint). *An Historical Atlas of Lincolnshire*. The University of Hull Press.

White's Lincolnshire Directory, 1882.

Whitwell, J.B., 1976. 1992 (revised edition). Roman Lincolnshire, History of Lincolnshire
Volume II. The History of Lincolnshire Committee.

APPENDICES

APPENDIX 1

THE BRIEF ISSUED FOR THIS PROJECT BY BRITISH GAS TRANSCO.

- 1.0 DESKTOP ASSESSMENT
- 1.1 British Gas will provide 1:10000 maps of the proposed corridor of interest.
- 1.2 The relevant sites and monuments records will be consulted and details of all archaeological information obtained.
- 1.3 Aerial photographic records will be consulted and details and plots of any sites obtained.
- 1.4 Details of all listed buildings and their curtilagers will be obtained.
- 1.5 Any relevant local records will be consulted.
- 1.6 The information so obtained from all these sources will be plotted on the maps provided.
- 1.7 A report detailing areas of archaeological concern along the proposed corridor of interest will be prepared, together with a gazetteer of the information obtained.

APPENDIX 2

THE INVESTIGATORY STAGES

Network Archaeology Ltd identifies the following key stages in the archaeological input to pipeline schemes:

- Stage 1 - Appraisal (desk-based review of existing data held in the relevant County Sites and Monuments Record(s))
- Stage 2a** - ***Archaeological Desk-Based Assessment***
- Stage 2b - Field Reconnaissance Survey (rapid walkover)
- Stage 3a - Fieldwalking
- Stage 3b - Earthwork Survey
- Stage 3c - Archaeogeophysical Survey
- Stage 4 - Field Evaluation
 - a. Hand-dug test-trenches
 - b. Auger Survey
 - c. Machine-excavated trenches
- Stage 5 - Excavation (detailed excavation of those sites which it is not possible or desirable to protect)
- Stage 6 - Watching Brief (during construction)
- Stage 7 - Archive and Publication (synthesis and dissemination of results; this stage leads on from each of the stages 2-6)

NB. The section in ***italic bold*** represents the relevant stage to the current project.

APPENDIX 3

DETAILS OF SOURCES CONSULTED DURING ASSESSMENT

Sites and Monuments Record (SMR):

Lincolnshire County Council Archaeology Section, 12 Friars Lane, Lincoln

County Record Office:

Lincolnshire Archives, St. Rumbold Street, Lincoln

Aerial Photographic Sources:

National Monuments Record Centre Kemble Drive, Swindon

City Hall, Lincoln City Hall, Beaumont Fee, Lincoln

Photo-Geomorphological Study Hatton-Silk Willoughby, 1992, Dames and Moore International, British Gas Internal report

Royal Commission on the Historical Monuments of England (RCHME), Shelley House, Acomb Road, York

Library:

Lincoln Central Library, Free School Lane, Lincoln

APPENDIX 4 : Desk-Based Assessment Sites

DBA Code	Source Location	Source Details	Description	Map No	Category	NGR
DBA:AA	British Gas records	British Gas internal report	Scatter of Romano-British pot and negative geophysical results	1	D	TF1775
DBA:AB	Lincs. R.O	1st edition 6" O.S. map surveyed 1887, published 1890	Minting windmill (corn). Also on present maps Windmill cottages	1	B	TF1775
DBA:AC	Lincs. R.O	1st edition 6" O.S map surveyed 1887, published 1890	Field boundaries	1	E	TF 1775
DBA:AD	City Hall	V.AP:b/w., Aerofilms, 1:10,000, 92/134, 1/5601	Field boundaries	1	E	TF1775
DBA:AE	Lincs. R.O	1st edition 6" O.S map surveyed 1887, published 1890	Field boundaries and several trees	1	E	TF1773
DBA:AF	City Hall	V.AP:b/w., Aerofilms, 1:12,000, 17/71/0132	Ridge and furrow	1	D	TF1774
DBA:AG	Lincs. R.O	1st edition 6" O.S map surveyed 1887, published 1890	Footpath which cuts the proposed route and field boundary some 60m to E	1	E	TF 1773
DBA:AH	Lincs. R.O	1st edition 6" O.S map surveyed 1887, published 1890	Row of trees along Red Rd (track)	1	E	TF1673
DBA:AI	City Hall	V.AP:col., 1:25,000, 114/93/275	Parallel lines ?recent drainage	1	E	TF1773
DBA:AJ	Lincs. R.O	1st edition 6" O.S map surveyed 1887, published 1890	Footpath	1	E	TF1772
DBA:AK	NMR	O.AP:b/w., TF1772/1;13/4/77;CRW	Ridge and furrow in 4 fields to the NE and SE of Gautby	1	D	TF1772
DBA:AL	NMR	O.AP:b/w., TF1772/1;13/4/77;CRW	Ridge and furrow in three fields to the SW of Gautby	1	D	TF1772
DBA:AM	City Hall	V.AP:b/w., Hunting Surveys Ltd., London, 1:12,000, 2/5/1971, 17/0128	Ridge and furrow seen as an earthwork	2	D	TF1771
DBA:AN	City Hall	V.AP:b/w., Hunting Surveys Ltd., London, 1:12,000, 2/5/1971, 17/0128	Field boundary	2	E	TF1771
DBA:AO	City Hall	V.AP:b/w., Hunting Surveys Ltd., London, 1:12,000, 2/5/1971, 17/0128	Ridge and furrow seen as earthwork	2	D	TF1771

DBA Code	Source Location	Source Details	Description	Map No	Category	NGR
DBA:AP	Lincs. R.O	1st edition 6" O.S map surveyed 1887, published 1890	Field boundaries	2	E	TF1671
DBA:AQ	Lincs. R.O	1st edition 6" O.S map surveyed 1887, published 1890	"Old sand-pit"	2	D	TF1771
DBA:AR	Lincs. R.O	1st edition 6" O.S map surveyed 1887, published 1890	Field boundaries	2	E	TF1670 TF1770
DBA:AS	Lincs. R.O	1st edition 6" O.S map surveyed 1887, published 1890	Field boundary	2	E	TF 1770
DBA:AT	Lincs. R.O	1st edition 6" O.S map surveyed 1887, published 1890	Footpath	2	E	TF 1669
DBA:AU	Lincs. R.O	1st edition 6" O.S map surveyed 1887, published 1890	Field boundary	2	E	TF1667
DBA:AV	Lincs. R.O	1st edition 6" O.S map surveyed 1887, published 1890	Footpath	2	E	TF1567
DBA:AW	Lincs. R.O	1st edition 6" O.S map surveyed 1887, published 1890	Field boundaries	2	E	TF 1568 TF1567
DBA:AX	Lincs. R.O	1st edition 6" O.S map surveyed 1887, published 1890	Footpath	2	E	TF1567
DBA:AY	Lincs. R.O	1st edition 6" O.S map surveyed 1887, published 1890	Field boundaries	2	E	TF1567
DBA:AZ	NMR	O.AP:b/w/col.,TF1566/1-5;11/8/92;CRW	Possible enclosure ditch, very distinct	2	E	TF1566
DBA:BA	Lincs. R.O	1st edition 6" O.S map surveyed 1887, published 1890	A series of field boundaries one of which crosses the route	2	E	TF1466 TF1566
DBA:BB	City Hall	V.AP:col., 1:25,000, 16/94/005	A ditch probably a field boundary	2	E	TF1466
DBA:BC	City Hall	V.AP:b/w., Hunting Surveys Ltd.,1:12,000, 17/71/0132	Field boundary	3	E	TF1365
DBA:BD	City Hall	V.AP:b/w., Hunting Surveys Ltd.,1:12,000, 17/71/0132	Ditches, possibly an enclosure?	3	D	TF1465
DBA:BE	Lincs. R.O	1st edition 6" O.S map surveyed 1887, published 1890	Four field boundaries	3	E	TF1465

DBA Code	Source Location	Source Details	Description	Map No	Category	NGR
DBA:BF	City Hall	V.AP:b/w., Hunting Surveys Ltd., 1:12,000, 13/71/2119	Three field boundaries	3	E	TF1364
DBA:BG	City Hall	V.AP:b/w., Hunting Surveys Ltd., 1:12,000, 13/71/2119	Lots of marks, possibly geological but two may be undetermined ditches or field boundaries?	3	D	TF 1364
DBA:BH	NMR	O.AP:b/w., TF1260/1, TF1261/1;1/1/30;CRW	Ridge and furrow to the S and E of Car Dyke	3	D	TF1261 TF1260
DBA:BI	NMR	O.AP:b/w., TF1260/1, TF1261/1;1/1/30;CRW	Ridge and furrow to the S of Car Dyke	3	D	TF1260
DBA:BJ	City Hall	V.AP:col., 1:2,500, 114/93/085	Probable ?ditches	3	D	TF1160
DBA:BK	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Field boundaries	4	E	TF1159
DBA:BL	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	"Old gravel pits"	4	D	TF1159
DBA:BM	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Field boundary and Bogle holt slightly larger than on the present O.S map	4	E/D	TF1159
DBA:BN	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Field boundary and possible ?pond	4	E/D	TF1058
DBA:BO	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Two possible ?ponds	4	D	TF1058 TF1057
DBA:BP	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Field boundary	4	E	TF1058
DBA:BQ	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Woods larger and a building or a pond	4	D	TF1057
DBA:BR	Lincs.R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Footpath	4	E	TF1057
DBA:BS	City Hall	V.AP:col., 1:2,500, National Remote Sensing Centre, 94/93/184	Linear feature, possibly continuation of roadway leading up to Thorpe Tilney Hall	4	D	TF1057
DBA:BT	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Field boundary	4	E	TF 1155

DBA Code	Source Location	Source Details	Description	Map No	Category	NGR
DBA:BU	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Field boundaries	4	E	TF1056
DBA:BV	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Fieldnames: "Grange Field", "Little Quern Dyke" and "The Quern Dyke Field"	4	D	TF1055 TF1155
DBA:BW	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	field boundary	4	E	TF1155
DBA:BX	NMR	O.AP:b/w., TF1055/1-13;15/7/76, 31/7/81, 31/7/81:CRW	Field boundary or ditch	4	D	TF1155
DBA:BY	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Field boundary	5	E	TF1153
DBA:BZ	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Field boundary	5	E	TF1153
DBA:CA	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Placename "Low Field House"	5	D	TF1152
DBA:CB	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Pond	5	D	TF1152
DBA:CC	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Field boundary	5	E	TF1151
DBA:CD	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Footpath and field boundaries	5	E	TF1151
DBA:CE	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	A series of field boundaries crossing the proposed route	5	E	TF1250 TF1249
DBA:CF	City Hall	V.AP:b/w., Hunting Surveys Ltd., 1:12,000, 13/71/2134	Possible enclosure, undefined	5	D	TF1249
DBA:CG	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Building	5	C	TF1349
DBA:CH	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Field boundary and field boundary around DBA:CG;building	5	E	TF1349
DBA:CI	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Footpath	5	E	TF1349

DBA Code	Source Location	Source Details	Description	Map No	Category	NGR
DBA:CJ	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Footpaths and field boundaries and pond	5	E	TF1248
DBA:CK	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Ewerby brick and tile works and Brickyard cottages	5	C	TF1148
DBA:CL	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Field boundary and laid out trees	6	E	TF1147
DBA:CM	City Hall	V.AP:col., Geonex UK Ltd, 1:25,000, 19/93/76	Probable geological circular soilmark	6	D	TF1147
DBA:CN	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Footpath	6	E	TF1147
DBA:CO	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Probable ?ponds, one cut by the proposed route	6	D	TF1146 TF1046
DBA:CP	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Field boundaries	6	E	TF1146
DBA:CQ	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Building	6	C	TF1146
DBA:CR	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Footpath and field boundary	6	E	TF1046
DBA:CS	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Field boundaries and probable ?ponds	6	E/D	TF1045
DBA:CT	City Hall	V.AP:National Remote Sensing Centre, 1:25, 000, 94/93/184	Field boundaries	6	E	TF1045
DBA:CU	NMR	O.A.P:b/w, TF1045/9, TF1045/10, 22/8/81:JAP	Circular feature at the junction of linear features PRN 60290/1	6	C	TF1145
DBA:CV	NMR	O.A.P:b/w, TF 1044/1-7, 14/7/84, 21/7/83, 1/1/81:JAP/SLU	Cropmarks seen, the NMR plot is not as complicated as the photograph shows, the cropmarks seem to be the main ditches and they ignore the many pit-like and linear features	6	C	TF1044

DBA Code	Source Location	Source Details	Description	Map No	Category	NGR
DBA:CW	NMR	O.AP:b/w, TF0944/1-3, 2/7/81:JAP	Cropmarks seen, the NMR plot is not as complicated as the photograph shows, the cropmarks seem to be the main ditches and they ignore the many pit-like and linear features	6	C	TF1045
DBA:CX	NMR	O.AP:b/w., TF0944/1-3, 2/7/81:JAP	Probable drainage	6	E	TF1045
DBA:CY	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Field boundary and pond	6	E	TF0944
DBA:CZ	Lincs. R.O	2nd edition 6" O.S map surveyed 1887, revised 1904, published 1906	Field boundary	6	E	TF0944
DBA:DA	NMR	O.AP:b/w., TF0944/1-3, 2/7/81:JAP	Possible ?enclosure, with NAR 44-possible field boundaries (category D)	6	C	TF0944
DBA:DB	British Gas	British Gas internal correspondence	"The Claims" ??Anglo-Saxon cemetery (owners suggestion)	5	D	TF1349
DBA:DC	British Gas	British Gas internal correspondence	"Cobblers Lock" ?? Bronze Age site (owners suggestion)	5	D	TF1349
DBA:DD	British Gas	British Gas internal correspondence	"Sardesons Farm" ??Roman site (owners suggestion)	5	D	TF1045
DBA:DE	LHA	Lincolnshire History and Archaeology, Vol. 18, 1983	Extinct watercourses of the River Slea	5	D	TF1349

SOURCE KEY:

Lincs. R.O	Lincoln Record Office
City Hall	City Hall, Lincoln
NMR	National Monuments Record, Swindon
LHA	Lindsey History and Archaeology Journal
British Gas	Records residing with British Gas

EXPLANATION OF AERIAL PHOTOGRAPHIC SOURCE DETAILS:

NMR	oblique/black and white or colour/Grid reference/date taken/copyright
City Hall	vertical/black and white or colour/frame of photographic company/scale/date taken/run and frame number

GAZETTEER OF ARCHAEOLOGICAL SITES

(APPENDIX 5)

Gazetteer of Archaeological Sites: Explanatory Notes

The gazetteer records the sites and findspots/scatters identified during the archaeological Desk-Based Assessment, listed by archaeological constraint map number (Appendix 5). Since there is a slight overlap from one map to another, some sites are repeated, both on the maps themselves, and in the gazetteer. Below is a brief explanation of abbreviations and conventions used in the gazetteer.

'Data Source' and Source Location' columns:

PRN - Public Record (SMR) Number.

NAR - National Archaeological Record Centre, Swindon.

NMR - National Monuments Record, Swindon.

*DBA - Site identified by the Desk-Based Assessment (largely from aerial photographs).

SAM - Scheduled Ancient Monument.

*LBN - Listed Building Number.

CI - Card Index, one of the systems used by the Lincoln SMR.

Margary - Roman Roads identified by I.D. Margary (see References); following number refers to Margary's unique identification number.

*RCHME Plot - Site plotted from aerial photographs by the Royal Commission on the Historic Monuments of England.

*British Gas - Internal literature and reports.

*Chowne and Healy, "*Artefacts from a Prehistoric Cemetery and Settlement in Anwick Fen, Lincolnshire*" *Lincolnshire History and Archaeology* Vol.18, 1989, p.37-46

*These conventions were adopted for ease of reference during the assessment; they are not terms used by the respective data-holding bodies.

'Description' column:

AP - Site known from Aerial Photographs.

'Proximity to Proposed Route' column:

The distance of a recorded site from the proposed pipeline

'Category' column:

This records the category into which a site was placed; explanations can be found in the report (3.3).

'Reliability of Source' column:

The sites have been ascribed a reliability of source rating: L (Low), M (Medium) or H (High); a fuller explanation is given in the report (3.4).

APPENDIX 5 : Gazetteer of Archaeological Sites

Lincolnshire								
MAP 1								
Data Source	Source Location	Description	Period	Category	Proximity to Proposed Route	1:10, 000 Quarter Sheet	National Grid Reference	Reliability of Source
DBA:AA	British Gas records	Scatter of Romano-British pot and negative geophysical results	Romano-British/ ?Modern	D	0	17NE/ 17SE	TF 171 750	H
DBA:AB	Lincs. R.O	Minting windmill (corn). Also on present maps Windmill cottages	Undetermined	B	400m	17NE/ 17SE	TF 1765 7645	H
DBA:AC	Lincs. R.O	AP:field boundaries	?Post-Medieval- Modern	E	0	17NE/ 17SE	TF 172 750	H
DBA:AD	City Hall	AP:field boundaries	?Post-Medieval- Modern	E	0	17SE	TF 1715 7480	H
DBA:AE	Lincs. R.O	Field boundaries and several trees seen in 1887	?Post-Medieval- Modern	E	50m	17SE	TF 1730 7380	H
DBA:AF	City Hall	AP:ridge and furrow	?Medieval	D	0	17SE	TF 171 747	H
DBA:AG	Lincs. R.O	Footpath seen in 1887 which cuts the proposed route and a field boundary which lies some 60m to the E	?Post-Medieval- Modern	E	0	17SE	TF 1720 7345/ TF 1728 7350	H
DBA:AH	Lincs. R.O	Row of trees seen in 1887 along the N side of Red Road (track)	Modern	E	150m	17SE	TF 1690 7354	H
DBA:AI	City Hall	AP:parallel lines of ?recent drainage	?Modern	E	0	17SE	TF 1725 7300	H
DBA:AJ	Lincs. R.O	Footpath seen in 1887	?Post-Medieval- Modern	E	0	17SE	TF 1722 7295	H
DBA:AK	NMR	AP:ridge and furrow seen in four fields to the NE and SE of Gautby	?Medieval	D	300m	17SE	TF 177 729 TF 177 726 TF 179 726 TF 178 723 TF 176 758	H
DBA:AL	NMR	Ridge and furrow in three fields to the SW of Gautby	?Medieval	D	0	17SE	TF 170 722 TF 172 721 TF 171 718	H
CI G NAR 5	Lincs. SMR Swindon	Neolithic stone axe found in 1928	Neolithic	E	300m	17NE	TF 1770 7555	H

Data Source	Source Location	Description	Period	Category	Proximity to Proposed Route	1:10,000 Quarter Sheet	National Grid Reference	Reliability of Source
NAR 1	Swindon	Alleged deserted Medieval Village. There are no earthwork remains and it is not visible on air photographs	Medieval	C	1400m	17SE	TF 1574 7300	H
NAR 2	Swindon	Cropmark:Medieval or later moat	?Medieval	B	1200m	17SE	TF 1586 7231	H
NAR 7	Swindon	Scatter of medieval pottery possibly suggesting the site of a Manor House, exact location uncertain	Medieval	D	n/a	17SE	TF 17 72	M
NAR 9	Swindon	Bronze Age barbed and tanged arrowhead, Iron Age and Romano-British pot sherds and a Romano-British Inumation, all found in a gravel pit in 1935 and now in Lincoln museum	Bronze Age- Iron Age- Romano-British	B	800m	17NE	TF 184 764	H
NAR 16 RCHME Plot	Swindon York	Medieval field system, ridge and furrow seen as earthworks	?Medieval	D	900m	17SE	TF 1818 7403 TF 1807 7346 TF 1892 7373 TF 1879 7314	H
NAR 17 RCHME Plot	Swindon York	Probable Medieval fields seen as cropmarks	?Medieval	D	1110m	17SE	TF 1831 7418	H
NAR 20 RCHME Plot	Swindon York	Probable Medieval field system (ridge and furrow), seen as earthworks	?Medieval	D	300m	17NE	TF 1712 7585 TF 1680 7637 TF 1753 7528	H
NAR 21 RCHME Plot	Swindon York	Medieval settlement remains (ridge and furrow and crofts) seen as earthworks around Hatton	Medieval	B/D	0	17NE	TF 1793 7685 TF 1784 7660 TF 1758 7692 TF 1805 7656	H
NAR 546131	Swindon	1667...1699 Farm House. Listed Building Grade II	Post-Medieval	B	1200m	17NE	TF 18 73	H
PRN 40024	Lincs. SMR	All Saints church built 1756	Post-Medieval	B	300m	17SE	TF 1747 7244	H
PRN 40025	Lincs. SMR	Gautby Hall and fishpond, now the Rookery. Gautby Hall "The ancient seat of the Vyners" probably built by Matthew Brettingham, but was destroyed in 1874, and pond attached	Undetermined	B	500m	17SE	TF 1769 7202	H

Data Source	Source Location	Description	Period	Category	Proximity to Proposed Route	1:10,000 Quarter Sheet	National Grid Reference	Reliability of Source
PRN 40304 NAR 10	Lincs. SMR Swindon	Supposed site of extinct hamlet of Shankeston, Hatton. The indicated area was perambulated (SMR), but no evidence of desertion was apparent	Medieval	C	500m	17NE	TF 1670 7640	M
PRN 40306 NAR 13	Lincs. SMR Swindon	Middle Bronze Age blade end of palstave with central rib, found near gas pipeline	Bronze Age	E	100m	17NE	TF 1715 7539	H
PRN 42956 NAR 15 RCHME Plot	Lincs. SMR Swindon York	Medieval village and field system remains N of Gautby	Medieval	B/D	0	17SE	TF 1739 7260	H
PRN 42957 NAR 17 RCHME Plot	Lincs. SMR Swindon York	Ridge and furrow west of Gautby, earthworks	?Medieval	D	0	17SE	TF 1711 7228	H
PRN 42958 NAR 17 RCHME Plot	Lincs. SMR Swindon York	Shrunken Medieval Village earthworks-possible remains of Medieval village of Gautby located SE of present day village. Consisting of ridge and furrow, crew yards, building platform, crofts, ponds and holloways seen as cropmarks and earthworks	?Medieval	B/D	300m	17SE	TF 1751 7231	H
PRN 42996	Lincs. SMR	Minting Wood. An area of woodland (16 hectares of which classified as semi-natural and the remaining 19 hectares classified as plantation) included in the Nature Conservancy Council's Inventory of ancient woodland. Ancient woodland status considered to be highly probable	?Medieval Post-Medieval	C	250m	17SE	TF 1640 7400	H
PRN 42997	Lincs. SMR	Hatton Wood, remains of extant ancient woodland. An area of woodland (all of which is classified as semi-natural) included in the Nature Conservancy Council's Inventory of ancient woodland. Ancient woodland status to be highly probable. SSSI	?Medieval- Post-Medieval	C	300m	17NE 17SE	TF 1640 7490	H

Data Source	Source Location	Description	Period	Category	Proximity to Proposed Route	1:10,000 Quarter Sheet	National Grid Reference	Reliability of Source
SAM 293	Lincs. SMR	Site of Alien Priory of Minting, suppressed by 1403. Grange, Religious House and Priory earthworks. The site was granted in 1421 to Mount Grace Priory, North Yorkshire as a Grange. The earthworks visible represent stock compounds, yards, ponds and the Grange building within a small moat. A broad holloway connects the moat to the village. the ponds have been cleaned out and enlarged but the earthworks represent a well preserved Grange of Late Medieval type. Benedictine cell of St. Benoit-Sur-Loire, founded 1129, earliest mention of Prior 1231. Dissolved in 1414.	Medieval	A	1200m	17SE	TF 1845 735	H

Data Source	Source Location	Description	Period	Category	Proximity to Proposed Route	1:10, 000 Quarter Sheet	National Grid Reference	Reliability of Source
MAP 2								
DBA:AL	NMR	Ridge and furrow in three fields to the SW of Gautby	?Medieval	D	0	17SE	TF 170 722 TF 172 721 TF 171 718	H
DBA:AM	City Hall	AP:ridge and furrow	?Medieval	D	0	17SEE	TF 171 716	H
DBA:AN	City Hall	AP:Field boundary	?Post-Medieval-Modern	E	0	17SE	TF 171 719	H
DBA:AO	City Hall	AP:Ridge and furrow seen as earthwork	?Medieval	D	0	17SE	TF 1725 7145	H
DBA:AP	Lincs. R.O	Field boundaries	?Post-Medieval-Modern	E	0	17SE	TF 1695 7136 TF 1685 7116	H
DBA:AQ	Lincs. R.O	"Old sand-pit"	?Post-Medieval-Modern	D	150m	17SE	TF 1720 7115	H
DBA:AR	Lincs. R.O	Field boundaries	?Post-Medieval-Modern	E	0	17SE	TF 1700 7073 TF 1695 7057 TF 1693 7040 TF 1730 7028 TF 1750 7026	H
DBA:AS	Lincs. R.O	Field boundary	?Post-Medieval-Modern	E	250m	16NE	TF 1745 7005	H
DBA:AT	Lincs. R.O	Footpath	?Post-Medieval-Modern	E	0	16NE	TF 1675 6980	H
DBA:AU	Lincs. R.O	Field boundary	?Post-Medieval-Modern	E	150m	16NE	TF 1625 6895	H
DBA:AV	Lincs. R.O	Footpath	?Post-Medieval-Modern	E	0	16NE	TF 1560 6795	H
DBA:AW	Lincs. R.O	Field boundaries	?Post-Medieval-Modern	E	150m	16NE	TF 1535 6800 TF 1545 6800	H
DBA:AX	Lincs. R.O	Footpath	?Post-Medieval-Modern	E	0	16NE	TF 1530 6682	H
DBA:AY	Lincs. R.O	Field boundaries, one of which crosses the proposed route, seen in 1887	?Post-Medieval-Modern	E	0	16NE	TF 1530 6720 TF 1540 6711 TF 1540 6730	H

Data Source	Source Location	Description	Period	Category	Proximity to Proposed Route	1:10, 000 Quarter Sheet	National Grid Reference	Reliability of Source
DBA:AZ	NMR	AP:possible enclosure ditch, very distinct, also PRN 42959	Undetermined	C	400m	16NE	TF 1530 6682	H
DBA:BA	Lincs. O.S	A series of field boundaries one of which crosses the route, seen in 1887	?Post-Medieval-Modern	E	0	16NE	TF 1460 6690 TF 1465 6695 TF 1490 6665 TF 1515 6677 TF 1510 1674	H
DBA:BB	City Hall	AP: ditch probably a field boundary	?Post-Medieval-Modern	E	0	16NE	TF 1455 6626	H
NAR 2	Swindon	At Silverys or Sellars was a hermitage, mentioned in 1395 and 1526. No physical remains and exact location uncertain	Medieval	B	n/a	16NE	TF 15 69	M
NAR 4	Swindon	St. Margaret's church, early English and decorated with a late Norman font. The chancel was restored in 1884. The inverted base of the churchyard cross stands near the south door. It is known as a tithe stone. Listed Building Grade I	Medieval	B	700m	16NE	TF 1689 6886	H
NAR 5	Swindon	Seney Place, Medieval and Post-Medieval moat, interpreted as part of a Grange of Bardney Abbey from documentary sources, seen as earthworks	Medieval/ Post-Medieval	B	1500m	16NW	TF 1339 6705	H
NAR 6	Swindon	Middle Bronze Age bronze axe, exact location uncertain	Bronze Age	E	n/a	16NW	TF 13 66	M
NAR 7	Swindon	Bronze Age stone axe-hammer, exact location uncertain	Bronze Age	E	n/a	16NW	TF 13 66	M
NAR 9	Swindon	Anglo-Saxon shield boss found in the River Witham, exact location uncertain	Anglo-Saxon	E	n/a	16NW	TF 14 66	M
NAR 11 RCHME Plot	Swindon York	Probable Medieval ridge and furrow seen as earthworks	?Medieval	D	700m	17SE	TF 1606 7065 TF 1626 7029	H
NAR 12 RCHME Plot	Swindon York	Cropmark:possible Medieval conjoined enclosures	?Medieval	C	850m	17SE	TF 1805 7076	H
NAR 30 RCHME Plot	Swindon York	Probable Medieval ridge and furrow seen as an earthworks	?Medieval	D	300m	16NE	TF 1605 6799	H

Data Source	Source Location	Description	Period	Category	Proximity to Proposed Route	1:10,000 Quarter Sheet	National Grid Reference	Reliability of Source
NAR 22 RCHME Plot	Swindon York	Medieval ridge and furrow seen as earthworks	Medieval	D	300m	16NW	TF 1468 6717	H
PRN 40020	Lincs. SMR	Pottery scatter, Gautby Park. Ploughing produced 14th and 15th century pottery	Medieval	E	0	17SE	TF 171 718	H
PRN 40030	Lincs. SMR	Soilmark:undated linear feature	Undetermined	C	0	17SE	TF 1720 7100	H
PRN 40066 NAR 7 RCHME Plot	Lincs. SMR Swindon York	A horseshoe-shaped Post-Medieval farm pond, previously alleged to be a moat, seen as an earthwork. The farm known as "Grange Farm". RCHME Plot shows field systems to the east and the west of this farm	Post-Medieval ?Medieval	B	400m	16NE	TF 1755 6986	H
PRN 40070 NAR 14	Lincs. SMR Swindon	Campney Grange Farm, Bucknall, possible deserted Medieval site. Campney Grange could be the site of the hamlet of Campney. No surface indications of desertion. The present building dates from the 18th-20th century	?Medieval	C	200m	16NE	TF 1583 6762	H
PRN 40079 NAR 18	Lincs. SMR Swindon	Bronze Age flanged axe, spearhead and socketed axe have been found in this area, exact location uncertain	Bronze Age	E	n/a	16NE	TF 15 66 TF 19 68	L
PRN 40395	Lincs. SMR	Rectangular cropmark, Bucknall. Three sides of what appears to be a rectangular cropmark. The cropmark stops at a field boundary due to crop differences	Undetermined	C	300m	16NE	TF 1492 6621	H
PRN 40398 PRN 40399 PRN 40400 PRN 40067 NAR 3 RCHME Plot	Lincs. SMR Lincs. SMR Lincs. SMR Lincs. SMR Swindon York	Probable Medieval settlement (crofts, mounds, fishpond, quarries, tofts boundaries and field systems) seen as earthworks, Bucknall	Medieval	B/D	400m	16NE	TF 1676 6866 TF 1746 6855 TF 1727 6907	H
PRN 42959	Lincs. SMR	Unidentified cropmarks SW of Campney Grange	Undetermined	C	350m	16NE	TF 1534 6679	H
PRN 42983	Lincs. SMR	Bucknall Wood. an area of woodland (all of which is classified as plantation. Included in the Nature Conservancy Council's Inventory of ancient woodland. Ancient woodland status considered to be probable	?Medieval Post-Medieval	C	50m	16NE	TF 1630 6970	H

Data Source	Source Location	Description	Period	Category	Proximity to Proposed Route	1:10, 000 Quarter Sheet	National Grid Reference	Reliability of Source
PRN 60475 NAR 24	Lincs. SMR Swindon	Possible Medieval fishponds seen as earthworks	Medieval	B	1000m	16NW	TF 1371 6671	H
RCHME Plot	York	Probable Medieval ridge and furrow	?Medieval	D	300m	17SE	TF 176 717	H
SAM 10	Lincs. SMR	Tupholme Abbey, a Medieval Premonstratensian abbey, founded 1155-1166 and suppressed in 1536, with remains of monastic building: also earthwork and cropmark evidence of precinct boundary ditches and fishponds. Earthworks and remains of post-medieval house and formal gardens on the site of the former abbey and an abandoned post-Medieval farmstead on this site also, survives as standing buildings and earthworks. Listed Building Grade I	Medieval- Post-Medieval	A	1200m	16NW	TF 1441 6819	H
SAM 242	Lincs. SMR	Deserted Medieval Village of Burreth, documented in Domesday. The remains of a moat, church, enclosure, holloway, tofts, crofts and buildings seen as cropmarks	Medieval	A	950m	16NE	TF 1534 6949	H
SAM 322	Lincs. SMR	All Hallows church. Known from a drawing to have been standing in 1786, no visible remains, except for a large badly disturbed mound, which is believed to have been the site of the church, which is thought to have been built in the 16th-17th century	Medieval	A	2000m	16NE	TF 1778 6781	H

Data Source	Source Location	Description	Period	Category	Proximity to Proposed Route	1:10, 000 Quarter Sheet	National Grid Reference	Reliability of Source
MAP 3								
DBA:BC	City Hall	AP:field boundary	?Post-Medieval-Modern	E	0	16NW	TF 139 651	H
DBA:BD	City Hall	AP:ditches, possibly an enclosure?	?Post-Medieval-Modern	D	0	16NW	TF 1404 6510	H
DBA:BE	Lincs. R.O	Four field boundaries, seen in 1887	?Post-Medieval-Modern	E	150m	16NW	TF 1430 6525 TF 1445 6535 TF 1460 6540 TF 1470 6550	H
DBA:BF	City Hall	AP:three field boundaries	?Post-Medieval-Modern	E	0	16SW	TF 1360 6450 TF 1385 6465 TF 1403 6475	H
DBA:BG	City Hall	AP:lots of marks, possibly geological but two may be undetermined ditches or field boundaries?	Undetermined	D	0	16SW	TF 1370 6460 TF 1365 6475	H
DBA:BH	NMR	AP:ridge and furrow to the S and E of Car Dyke	?Medieval	D	0	16SW	TF 121 612 TF 121 609 TF 122 610	H
DBA:BI	NMR	AP:ridge and furrow to the S of Car Dyke	?Medieval	D	200m	16SW	TF 122 605 TF 124 604 TF 123 603 TF 125 603 TF 122 602 TF 1245 6025 TF 1245 6015 TF 1255 6010 TF 1230 6005	H
DBA:BJ	City Hall	AP:probable ?ditches	?Post-Medieval-Modern	D	50m	16SW	TF 1150 6065 TF 1180 6050	H
NAR 2	Swindon	Eight Prehistoric longboats found during the drainage of Martin Mere, exact location uncertain	Prehistoric	D	n/a	16SW	TF 14 61	M
NAR 3	Swindon	Iron Age gold torc was found at Linwood Hall and later melted down	Iron Age	E	150m	16SW	TF 121 608	M

Data Source	Source Location	Description	Period	Category	Proximity to Proposed Route	1:10,000 Quarter Sheet	National Grid Reference	Reliability of Source
PRN 60270 NAR 1	Lincs. SMR Swindon	Linwood Hall built 1935 possibly on the site of former moated Grange of Bardney Abbey, site of religious house. Associated with Deserted Medieval Village of Cotes. The Grange was moated but infilled in 1935	Medieval (Norman)	B	100m	16SW	TF 1210 6077	H
PRN 60474 NAR 10	Lincs. SMR Swindon	Dug-out boat found at Metheringham Washway. Found in May 1912. A fragment of the boat is preserved in Lincoln Museum store. The boat originally measured 21' 6" wide and had cross pieces under the stern	Prehistoric	D	0	16NW	TF 1422 6560 card index has TF 1420 6557	M
RCHME Plot	York	Blankney Airfield seen from aerial photographs	Modern	C	100m	16SW	TF 10 60	H
SAM 313	Lincs. SMR	Car Dyke SE of Blankney wood. Short section of Car Dyke: The E bank lies under the modern road and has been substantially flattened. The W bank and the channel stood in good contrast, the bank is 1.50m high in places, but it is most irregular and clearly the channel has been divided in more recent times. However much still survives <i>insitu</i>	Romano-British	A	750m	16SW	TF 1153 6191 TF 1171 6180	H
SAM 314	Lincs. SMR	Car Dyke at Linwood Hall under a considerable variety of uses; within orchards, laid out as gardens and in pasture fields. The majority of this length survives as a reedy stream, with bank about 1m high on both sides, particularly the more northerly portion. This portion contains one of the more notable bends on the whole of its length	Romano-British	A	0	16SW	TF 1211 6145 TF 1230 6059	H

Data Source	Source Location	Description	Period	Category	Proximity to Proposed Route	1:10,000 Quarter Sheet	National Grid Reference	Reliability of Source
MAP 4								
DBA:BK	Lincs. R.O	Field boundaries, seen in 1904	?Post-Medieval-Modern	E	0	15NW	TF 1105 5960 TF 1115 5972	H
DBA:BL	Lincs. R.O	"Old gravel pits", seen in 1904	?Post-Medieval-Modern	D	150m	15NW	TF 1105 5930	H
DBA:BM	Lincs. R.O	Field boundary which cuts the proposed route and Bogle Holt slightly larger than on the present O.S map which lies some 100m from it, seen in 1904	?Post-Medieval-Modern	E/D	0	15NW	TF 1090 5897 TF 1000 5898	H
DBA:BN	Lincs. R.O	Field boundary and possible ?pond, seen in 1904	?Post-Medieval-Modern	E/D	0	15NW	TF 1082 5819 TF 1083 5824	H
DBA:BO	Lincs. R.O	Two possible ?ponds, seen in 1904	?Post-Medieval-Modern	D	0	15NW	TF 1080 5789	H
DBA:BP	Lincs. R.O	Field boundary, seen in 1904	?Post-Medieval-Modern	E	0	15NW	TF 1083 5800	H
DBA:BQ	Lincs. R.O	Woods larger and a building or a pond, seen in 1904	?Post-Medieval-Modern	D	250m	15NW	TF 1060 5775	H
DBA:BR	Lincs. R.O	Footpath, seen in 1904	?Post-Medieval-Modern	E	0	15NW	TF 1085 5775	H
DBA:BS	City Hall	AP:linear feature, possibly continuation of roadway leading up to Thorpe Tilney Hall	Undetermined	D	0	15NW	TF 1094 5724	H
DBA:BT	Lincs. R.O	Field boundary, seen in 1904	?Post-Medieval-Modern	E	0	15NW	TF 110 558	H
DBA:BU	Lincs. R.O	Field boundaries, seen in 1904	?Post-Medieval-Modern	E	50m	15NW	TF 110 558	H
DBA:BV	Lincs. R.O	Fieldnames: "Grange Field", "Little Quern Dyke" and "The Quern Dyke Field"	?Post-Medieval-Modern	D	0	15NW	TF 106 553 TF 109 552	H
DBA:BW	Lincs. R.O	Field boundary, seen in 1904	?Post-Medieval-Modern	E	0	15NW	TF 1115 5540	H
DBA:BX	NMR	AP:field boundary or ditch	?Post-Medieval-Modern	D	0	15NW	TF 1113 5555	H
CI C	Lincs. SMR	Flint arrowheads, exact location uncertain	Prehistoric	E	n/a	15SW	c.TF 110 548	M

Data Source	Source Location	Description	Period	Category	Proximity to Proposed Route	1:10, 000 Quarter Sheet	National Grid Reference	Reliability of Source
CI C	Lincs. SMR	Tiles including roof and floor types with fragments of kiln structure exposed in dyke edge of scheduled monument 251	Medieval	A	700m	15NW	TF 1189 5545	H
CI E	Lincs. SMR	Polished flint axe	Prehistoric	E	300m	15SW	TF 11 54	M
CI F NAR 1	Lincs. SMR Swindon	Polished greenstone axe, exact location uncertain co-ordinate on map different to that on card index	Prehistoric	E	200m or 10m	15NW	TF 112 551 (CI), TF 1090 5567 on (SMR map)	L
CI G	Lincs. SMR	Pottery from fields 49, 50, 51, 52 and 53	Romano-British	E	400m	15SW	TF 105 540 (centre)	H
CI H	Lincs. SMR	Polished flint axe found 1956	Prehistoric	E	0	15SW	TF 1109 5439	H
CI H NAR 3	Lincs. SMR Swindon	Early Bronze Age metal axe with zig-zag markings on blade	Bronze Age	E	450m	15NW	TF 115 560	H
CI I	Lincs. SMR	Butt fragment of Neolithic stone axe, confusion with exact location	Neolithic	E	250m	15SW	TF c.107 540	L
CI P	Lincs. SMR	Polished stone axe and possible rubbing or crushing stone	Prehistoric	E	400m	15SW	TF 1126 5401	H
CI W NAR 10	Lincs. SMR Swindon	Pot sherd	Romano-British	E	200m	15NW	c.TF 108 558	H
NAR 5	Swindon	Neolithic polished flint axe, exact location uncertain	Neolithic	E	n/a	15NW	TF 10 55	M
NAR 15 RCHME Plot	Swindon York	Earthwork remains of a probable Barrow cemetery on Walcott Commons. RCHME show at least 17	?Bronze Age	B	1000m	15NW	TF 123 557	H
PRN 60277 NAR 2 RCHME Plot	Lincs. SMR Swindon York	Site of Digby Grange and moated site. Earthworks of a possible moat and desertion, possibly the site of a grange of Catley Priory (Gilbertine), now ploughed down	Medieval	B	300m	15NW	TF 1070 5545	H
PRN 60305	Lincs. SMR	Bronze Age spearhead found NE of Rowston Grange	Bronze Age	E	200m	15NW	TF 1090 5580	H

Data Source	Source Location	Description	Period	Category	Proximity to Proposed Route	1:10,000 Quarter Sheet	National Grid Reference	Reliability of Source
PRN 60312 NAR 5	Lincs. SMR Swindon	Barrow cemetery near Catley Priory. Several tumuli or barrows here and in two of them several coffins and human bones found in 1871. Crop and soilmarks of at least ten barrows of a dispersed cemetery visible on St. Joseph AP's. Three barrows seem to have survived as earthworks into the 1960's. Some of the mounds contained Medieval inhumations within wooden coffins. Thought to be part of Catley Priory burial ground	?Prehistoric/ Medieval	B	300m	15NW	TF 1172 5558	H
PRN 60341	Lincs. SMR	Medieval ridge and furrow at Thorpe Tilney associated with the Medieval settlement of Thorpe Tilney (PRN 60343)	Medieval	D	500m	15NW	TF 1140 5783	H
PRN 60342	Lincs. SMR	Medieval ridge and furrow at Thorpe Tilney associated with the Medieval settlement of Thorpe Tilney (PRN 60343)	Medieval	D	450m	15NW	TF 1140 5766	H
PRN 60343	Lincs. SMR	Deserted Medieval Village at Thorpe Tilney. Thorpe Tilnet (or just Tilney) is an extinct hamlet in the parish of Timberland. It is mentioned in two charters registered in the Cartulary of Thurgaton Priory, now in Southwell Minster. On 4th July 1545 John Broxholme and John Bellowe received a royal grant of three houses in Thorpe Tylney, being the possessions of the dissolved Priory of Kyme. Earthworks survive on aerial photographs (1992)	Medieval	B	400m	15NW	TF 1145 5754	H
SAM 251	Lincs. SMR	Catley Abbey. Gilbertine Priory of St. Mary, Catley was founded as a double house between 1148 and 1154 and dissolved in 1538. Traces remain of what appears to be the cloister garth with church to the N with robber trenches outlining a smaller building to the west. In the SW corner of the partly filled precinct moat is an irregular system of channels one of which was probably a fishpond. Much building material found	Medieval (Norman)	A	600m	15NW	TF 1185 5560	H

Data Source	Source Location	Description	Period	Category	Proximity to Proposed Route	1:10, 000 Quarter Sheet	National Grid Reference	Reliability of Source
SAM 298	Lincoln. SMR	Scheduled section of watercourse Car Dyke	Romano-British	A	1900m	15NW	TF 1272 5821	H
SAM 315	Lincoln. SMR	Scheduled section of watercourse Car Dyke	Romano-British	A	1600m	15NW	TF 1241 5899	H
SAM 27900	Lincs. SMR	Neolithic long barrow cropmark 770m ESE of Rowston Grange. A possible long barrow identified from a soilmark on an aerial photograph. The barrow cannot be seen on the ground. It has been recorded on aerial photographs as a cropmark representing a roughly oblong mound, now degraded by ploughing and enclosed by a ditch. It is aligned N-S and measures c.38m by 20m. The location of this long barrow in a Fenland setting is currently unique in Lincolnshire though parallels are known in Cambridgeshire Fens	Neolithic	A	450m	15NW	TF 1155 5559	H

Data Source	Source Location	Description	Period	Category	Proximity to Proposed Route	1:10, 000 Quarter Sheet	National Grid Reference	Reliability of Source
MAP 5								
DBA:BY	Lincs. R.O	Field boundary, seen in 1904	?Post-Medieval-Modern	E	150m	15SW	TF 1092 5360 TF 1085 5381 TF 1002 5325	H
DBA:BZ	Lincs. R.O	Field boundary, seen in 1904	?Post-Medieval-Modern	E	0	15SW	TF 1109 5382 1100 5286	H
DBA:CA	Lincs. R.O	Placename "Low Field House", seen in 1904	Undetermined	D	200m	15SW	TF 1165 5235	H
DBA:CB	Lincs. R.O	Pond, seen in 1904	?Post-Medieval-Modern	D	150m	15SW	TF 1158 5237	H
DBA:CC	Lincs. R.O	Field boundary, seen in 1904	?Post-Medieval-Modern	E	0	15SW	TF 117 518	H
DBA:CD	Lincs. R.O	Footpath and field boundaries, seen in 1904	?Post-Medieval-Modern	E	0	15SW	TF 1190 5150 TF 1215 5120	H
DBA:CE	Lincs. R.O	A series of field boundaries crossing the proposed route, seen in 1904	?Post-Medieval-Modern	E	0	15SW	TF 1200 5065 TF 1199 5069 TF 1220 5074 TF 1235 5079 TF 1240 5057 TF 1245 5041 TF 1241 5025 TF 1225 5040 TF 1270 4995	H
DBA:CF	City Hall	AP:?enclosure, undefined, not very clear on AP	Undetermined	D	0	14NW	TF 1287 4979	H
DBA:CG	Lincs. R.O	Building, seen in 1904	?Post-Medieval-Modern	C	200m	14NW	TF 1326 4918	H
DBA:CH	Lincs. R.O	Field boundary and field boundary around DBA:CG;building, seen in 1904	?Post-Medieval-Modern	E	200m	14NW	TF 1332 4922 TF 4930 4915	H
DBA:CI	Lincs. R.O	Footpath, seen in 1904	?Post-Medieval-Modern	E	0	14NW	TF 1310 4925	H
DBA:CJ	Lincs. R.O	Footpaths and field boundaries and pond, seen in 1904	?Post-Medieval-Modern	E	0	14NW	TF 1245 4850 TF 1259 4965 TF 1275 4860 TF 1286 4851	H

Data Source	Source Location	Description	Period	Category	Proximity to Proposed Route	1:10,000 Quarter Sheet	National Grid Reference	Reliability of Source
DBA:CK	Lincs. R.O	Ewerby brick and tile works and Brickyard cottages, seen in 1904	?Modern	C	500m	14NW	TF 115 482	H
DBA:DB	British Gas	"The Claims" Owners suggestion of a reputed Anglo-Saxon cemetery S of the River Slea. Site visit by Gas archaeologist (1992) produced no further evidence, exact location uncertain	??Anglo-Saxon	D	n/a	14NW	TF 129 489	L
DBA:DC	British Gas	"Cobbler's Lock" Owners suggestion of a reputed Bronze Age site, immediately S of Catchwater Drain. Site visit by Gas archaeologist (1992) produced a piece of bog oak which suggests preserved timber in the area, exact location uncertain	??Bronze Age	D	n/a	14NW	TF 129 489	L
DBA:DE	Chowne and Healy, 1993	Old river courses of the River Slea	Undetermined	D	0	14NW	TF 130 497	H
CI D	Lincs. SMR	St. Ediths Church, Anwick	Medieval	B	900m	15SW	TF 1144 5063	H
CI G	Lincs. SMR	Pottery from fields 49, 50, 51, 52 and 53	Romano-British	E	400m	15SW	TF 105 540 (centre)	H
CI I	Lincs. SMR	Butt fragment of Neolithic stone axe, confusion with exact location	Neolithic	E	250m	15SW	TF c.107 540	L
CI J	Lincs. SMR	Scatter of 3rd 4th century pottery on Fen House Farm	Romano-British	E	350m	15SW	TF 106 536	H
CI L	Lincs. SMR	Lead socketed axe found in unlocated field in 1845 after a possible barrow had been destroyed. Late Bronze Age votive or constructional	Bronze Age	D	n/a	15SW	TF 11 50	L
CI P	Lincs. SMR	Polished stone axe and possible rubbing or crushing stone	Prehistoric	E	400m	15SW	TF 1126 5401	H
CI Q	Lincs. SMR	Spearhead	Romano-British	E	150m	15SW	TF 1122 5388	H
CI R	Lincs. SMR	Barbed and tanged arrowheads	Prehistoric	E	350m	15SW	TF 11 53	H
CI S	Lincs. SMR	Polished stone axe	Prehistoric	E	450m	15SW	TF 1149 5393	H
CI T	Lincs. SMR	Polished stone axe-excavated up from a dike in 1952	Prehistoric	E	50m	15SW	TF 112 530	H

Data Source	Source Location	Description	Period	Category	Proximity to Proposed Route	1:10,000 Quarter Sheet	National Grid Reference	Reliability of Source
PRN 60315 NAR 18	Lincs. SMR Swindon	Anwick Fen Barrow cemetery. A round barrow cemetery visible as a soilmark. Field survey of part of the cemetery was carried out in 1976 when up to 10 barrows were visible as slight earthworks and soilmarks, protruding through a layer of peat. The barrows are located on a ridge of sandy peat adjacent to an extinct course of the river Slea. Another watercourse (a tributary of the Slea) was visible to the N of the barrows. Geology:gravel	Prehistoric	B	200m	15SW	TF 1330 4970	H
PRN 60316 NAR 18	Lincs. SMR Swindon	Artefacts from Anwick Barrow cemetery. Fieldwalking over this area in 1976 recovered 1,362 artefacts, most of which were found around the barrows. The collection consisted 1 very abraded pottery sherd, 10 pot-boilers, 2 flint hammerstone fragments, 63 flint cores, 1180 flint flakes, 79 retouched and 27 possibly retouched, a flake from a polished stone tool (probably an axe), which appears to be Great Langdale Tuff (Group VI). The retouched pieces formed 2 main groups: a Mesolithic group of 14 microliths and related forms and a later Neolithic/Early Bronze Age group of a barbed and tanged arrowhead, 2 stone axe flakes, a leaf shaped arrowhead, 5 bifaces, 26 scrapers, 6 borers, 2 knives, a fabricator, a chisel, 2 shouldered blades, a denticulated flake and the pottery sherd	Prehistoric	B	100m	14NW	TF 1330 4970	H
SAM 178	Lincs. SMR	Haverholme Priory of St. Mary. Gilbertine Priory founded in 1139 and dissolved in 1539. Said to have consisted of 50 monks and 100 Nuns. Excavations and fieldwork 1961-4 when a well/storage pit was found and the foundations of the old priory. The present Haverholme dates to 18-19th century	Medieval	A	21000m	14NW	TF 1090 4940	H
SAM 22636	Lincs. SMR	Cross from St. Ediths Churchyard, Anwick	Medieval	A	900m	15SW	TF 1145 5062	H

Data Source	Source Location	Description	Period	Category	Proximity to Proposed Route	1:10, 000 Quarter Sheet	National Grid Reference	Reliability of Source
MAP 6								
CI AB	Lincs. SMR	Medieval tile, quern and slate from Mareham Grange (SAM 310). Found before the site was levelled	Medieval	A	500m	04NE	TF 085 431	H
CI B	Lincs. SMR	Barbarous radiate coin and Roman and Iron Age pottery	Iron Age/ Romano-British	E	550m	14NW	TF 117 465	H
CI C NAR 15	Lincs. SMR Swindon	Possible Medieval settlement (crofts) seen as cropmarks also documentary evidence	Medieval	B	500m	04NE	TF 099 453	H
CI CM	Lincs. SMR	Thorpe or Laythorpe Deserted Medieval Village site of chapel	Medieval	B	500m	04NE	TF 0985 4504	H
CI G	Lincs. SMR	Kirkby Mount. Cannon Foster thinks that this may be "ileum montem qui vaocatum thinghou juxta cald marham" mentioned in the charters of Sempringham Priory. The plantation which now covers it cannot be more than 50 years old. The whole of the mount has been under plough and if there ever was any antiquities on it they have been destroyed. The wood is not too thick to make the examination of the ground too difficult. It is possible that Kirkby Mount may have been a meeting place of the Wapentake of Aswardham. The Beacon Hill has no visible antiquities. Also Beacon Hill stone on Beacon Hill to the east, an unworked stone, possibly a meeting place. Information on both these sites is unclear	Undetermined	D	10m	04SE	TF 094 440 TF 101 437	M
CI J	Lincs. SMR	Decorated Iron Age pottery found	Iron Age	E	350m	14NW	TF 1155 4671	H
CI T	Lincs. SMR	Two Romano-British coins found on scheduled site SAM 310	Romano-British	A	500m	04SE	TF 121 421	H
CI U	Lincs. SMR	Mareham Lane course of Romano-British Road, running N-S and forming western parish boundary. Margary No. 260	Romano-British	B	20m	04SE	TF 0843 4221 TF 0842 4335	H
CI W NAR 4	Lincs. SMR Swindon	St.Andrews church, Ewerby (decorated), effigy of Sir Alexander Aunsell (d.1160). Base of font is Norman also an Anglo-Saxon tomb stone	Medieval	B	500m	14NW	TF 1216 4727	H

Data Source	Source Location	Description	Period	Category	Proximity to Proposed Route	1:10,000 Quarter Sheet	National Grid Reference	Reliability of Source
CI X NAR 5	Lincs. SMR Swindon	Manorial pond?-not a moated site but probably an ornamental pond associated with a Medieval Hall site. Evidence of foundations to the E and a tradition of a hall on the site. Building remains have been ploughed up in the vicinity	?Medieval	B	450m	14NW	TF 1175 4675	H
DBA:CL	Lincs. R.O	Field boundary and laid out trees, seen in 1904	?Post-Medieval-Modern	E	0	14NW	TF 1167 4756	H
DBA:CM	City Hall	AP:probable geological circular soilmark	Undetermined	D	20m	14NW	TF 1140 4721	H
DBA:CN	Lincs. R.O	Footpath, seen in 1904	?Post-Medieval-Modern	E	0	14NW	TF 1145 4724	H
DBA:CO	Lincs. R.O	Probable ?ponds, one cut by the proposed route, seen in 1904	?Post-Medieval-Modern	D	0	14NW	TF 1130 4670 TF 1097 4654 TF 1072 4634	H
DBA:CP	Lincs. R.O	Field boundaries, seen in 1904	?Post-Medieval-Modern	E	200m	14NW	TF 114 465	H
DBA:CQ	Lincs. R.O	Building, seen in 1904	?Post-Medieval-Modern	C	200m	14NW	TF 1101 4596	H
DBA:CR	Lincs. R.O	Footpath and field boundary, seen in 1904	?Post-Medieval-Modern	E	0	14NW	TF 1071 4592	H
DBA:CS	Lincs. R.O	Field boundaries and probable ?ponds, seen in 1904	?Post-Medieval-Modern	E/D	0	14NW	TF 1022 4536 TF 1045 4524 TF 1037 4544 TF 1049 4554	H
DBA:CT	City Hall	AP:field boundaries	?Post-Medieval-Modern	E	30m	14NW	TF 1000 4505 TF 1027 4508	H
DBA:CU	NMR	AP:circular feature at the junction of linear features PRN 60590/1. The triple linear ditch feature is very apparent	Undetermined	B	500m	14NW	TF 1110 4550	H
DBA:CV	NMR	AP:cropmarks seen, the RCHME plot is not as complicated as the photograph shows, the cropmarks seem to be the main ditches and they ignore the many pit-like and linear features	?Medieval	B	200m	14SW	TF 107 448	H

Data Source	Source Location	Description	Period	Category	Proximity to Proposed Route	1:10, 000 Quarter Sheet	National Grid Reference	Reliability of Source
DBA:CW	NMR	AP:cropmarks seen, the RCHME plot is not as complicated as the photograph shows, the cropmarks seem to be the main ditches and they ignore the many pit-like and linear features	?Medieval	B	50m	14SE	TF 101 451	H
DBA:CX	NMR	AP:probable drainage	?Post-Medieval-Modern	E	100m	14SW	TF 103 450	H
DBA:CY	Lincs. R.O	Field boundary and pond, seen in 1904. The field boundary cuts the proposed route	Post-Medieval-Modern	E	0	04SE	TF 0965 4445 TF09674445	H
DBA:CZ	Lincs. R.O	Field boundary, seen in 1904	?Post-Medieval-Modern	E	0	04SE	TF 0920 4425	H
DBA:DA	NMR	AP:possible ?enclosure, with NAR 44-possible field boundaries (category D)	Undetermined	C	550m	04SE	TF 0965 4480	H
DBA:DD	British Gas	A suggestion from the owner that a Roman settlement extends from immediately S of the A17 to S of the railway line, c.1km S-E of Kirkby-La-Thorpe. The area investigated by Gas archaeologist (1992) with negative results, exact location unsure	??Romano-British	D	n/a	04NE	TF 103 450	L
NAR 5	Swindon	Two fragments of an Anglo-Saxon cross are built into the west face of the church tower at Kirkby La Thorpe	Anglo-Saxon	B	800m	04NE	TF 0990 4609	H
NAR 7 RCHME Plot	Swindon York	Site of Deserted Medieval Village of Bacton or Boughton recorded in 1334. Earthwork remains of ridge and furrow	Medieval	B	1600m	14NW	TF 123 455	H
NAR 11	Swindon	An early Medieval brooch, wrist clasp, belt ornament, probably from a burial found near Mareham Lane, exact location uncertain	Early Medieval	C	n/a	04SE	TF 07 44	M
NAR 13	Swindon	A Bronze Age perforated stone mace-head and Medieval lead ampulla found in this area	Bronze Age	E	n/a	14NW	TF 12 47 TF 14 49	M
NAR 16	Lincs. SMR	St. Deny's church, Kirkby La Thorpe, contains Norman decoration	Medieval	B	800m	04NE	TF 0990 4608	H
NAR 17	Swindon	Site of a possible Roman coin hoard discovered in the 16th century? Exact location uncertain	Romano-British	E	n/a	14NW	TF 12 47	L

Data Source	Source Location	Description	Period	Category	Proximity to Proposed Route	1:10, 000 Quarter Sheet	National Grid Reference	Reliability of Source
NAR 17 RCHME Plot	Swindon York	Possible Medieval settlement (crofts and ponds) seen as cropmarks and earthworks. Site of St. Peters church, Kirkby La Thorpe. Also documentary evidence available	Medieval	B	1000m	04NE	TF 0978 4633	H
NAR 18	Swindon	The Grange-probably retains late 15th early 16th century traces. There is a 17th century stone wing and an early 17th century stone wing and an early 19th century addition of brick	Post-Medieval	B	800m	04NE	TF 0981 4622	H
NAR 22	Swindon	Neolithic greenstone axe, exact location uncertain	Neolithic	E	n/a	14NW	TF 10 47	M
NAR 25	Swindon	An early Bronze Age cremation contained in a food vessel, exact location uncertain	Bronze Age	B	n/a	04NE	TF 09 45	M
NAR 26	Swindon	Roman coin of Septimus Severus, Faustina the younger and Constantine II have been found in Kirkby La Thorpe parish, exact location uncertain	Romano-British	E	n/a	04NE	TF 09 45	M
NAR 43 RCHME Plot	Swindon York	Cropmark:possible selection of Roman road, seen as a cropmark, continuing the line of the Mareham Lane; alternately it may be a plough headland	?Romano-British	C	400m	04SE	TF 0841 4476 TF 0840 4419'	H
NAR 44 RCHME Plot	Swindon York	Cropmark:possible field boundaries of unknown date seen as cropmarks	Undetermined	D	300m	04SE	TF 0960 4481	H
NAR 83	Swindon	Probable Prehistoric or Roman rectilinear enclosures and hut circle seen as cropmarks, rectilinear enclosure and hut circle	Prehistoric/ Romano-British	B	900m	04NE	TF 0913 4528	H
NAR 90	Swindon	Probable Roman road seen as cropmarks, possibly a continuation of Mareham Lane	Romano-British	C	1100m	04NE	TF 0842 4562 TF 0842 4516	L
PRN 60292	Lincs. SMR	?Hillfort? suggested from air photograph	?Iron Age	D	0	04SE	TF 094 440	H
PRN 60317 NAR 6	Lincs. SMR Swindon	St. Andrews church, Asgarby. Decorated and perpendicular. Listed Building Grade I	Medieval	B	1000m	14NW	TF 1162 4538	H
PRN 60344	Lincs. SMR	Ridge and furrow earthworks in three small fields to the S of Ewerby	Medieval	D	400m	14NW	TF 1186 4703	H

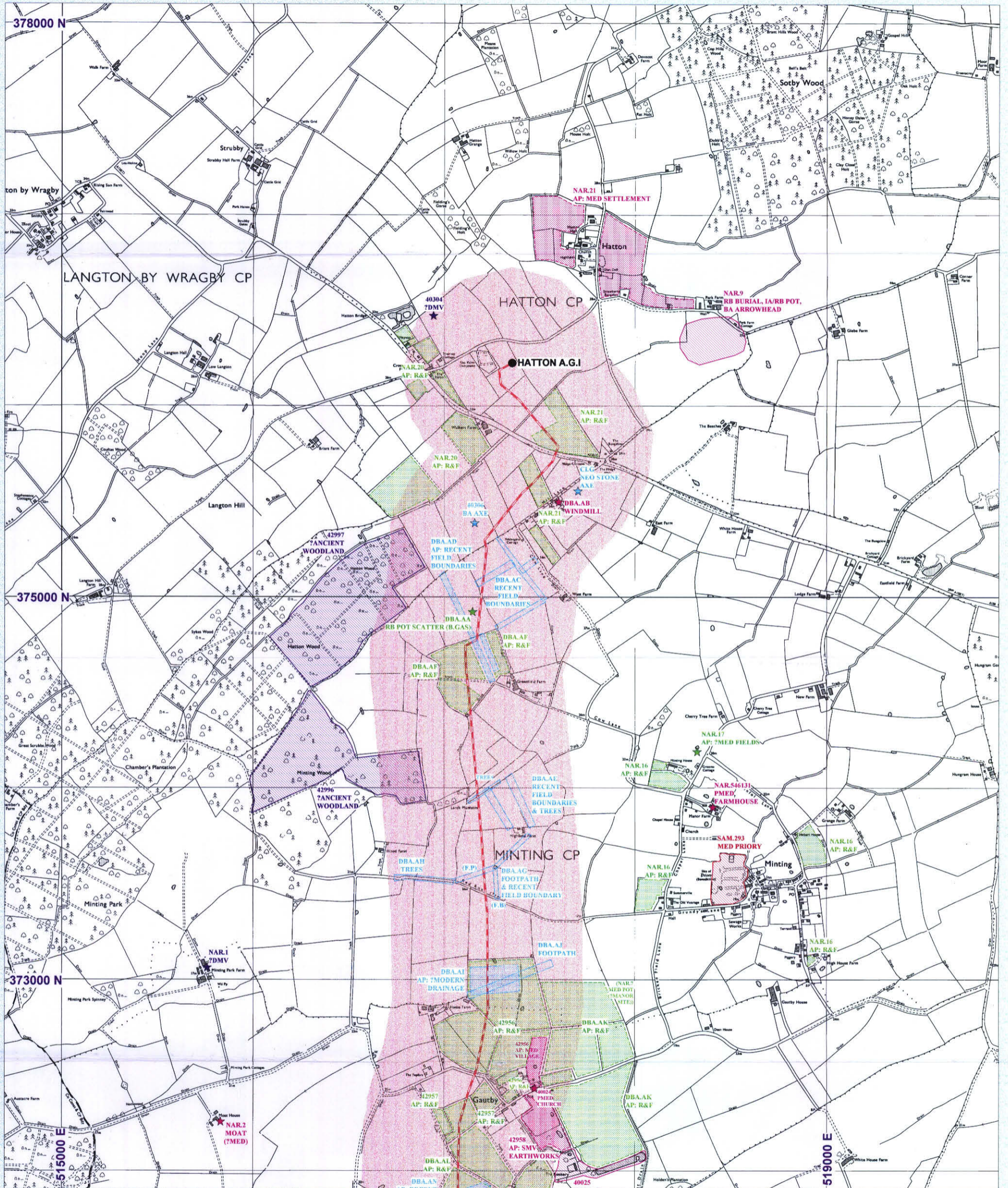
Data Source	Source Location	Description	Period	Category	Proximity to Proposed Route	1:10, 000 Quarter Sheet	National Grid Reference	Reliability of Source
PRN 60345	Lincs. SMR	Remains of Medieval ridge and furrow and possible village remains seen as earthworks from aerial photographs	Medieval	B/D	800m	14NW	TF 1145 4538	H
PRN 60346 NAR 21	Lincs. SMR Swindon	Possible Medieval settlement (crofts and ridge and furrow) seen as earthworks	Medieval	B/D	500m	04NE	TF 0985 4602 TF 1003 4590 TF 0966 4592	H
PRN 60586	Lincs. SMR	Viking Brooch and pottery found, possibly Stamford ware	Early Medieval	E	500m	14NW	TF 1180 4674	H
PRN 60587	Lincs. SMR	Medieval pottery found near Ewerby and a cut Medieval penny	Medieval	E	550m	14NW	TF 1180 4674	H
PRN 60588 NAR 14	Lincs. SMR Swindon	Iron Age and Roman pottery found near Ewerby, grey wares and colour coated wares and a 4th century Roman coin. Roman pottery has also been found at TF 117 466. NAR reference TF 115 464. Possibly indicates a settlement site	Iron Age/ Romano-British	D	500m	14NW	TF 1180 4674	M
PRN 60590 RCHME Plot	Lincs. SMR York	AP:triple linear ditches running NNW-SSE, possible funerary feature unique in this area. Part of PRN 60591. Circular feature where the two ditches meet. RCHME suggest a probably related ditch running up to Halfmile Lane. Probably funerary	?Prehistoric/ ?Romano-British	B	200m	04NE	TF 111455	H
PRN 60591 RCHME Plot	Lincs. SMR York	AP:triple linear ditches running N-S, possible funerary feature, unique in this area. Part of PRN 60590. Circular feature where ditches meet. RCHME suggest a probably related ditch running up to Halfmile Lane. Probably funerary	?Prehistoric- ?Romano-British	B	200m	04NE	TF 111 455	H
RCHME Plot	York	Cropmarks:possible Medieval crofts and road, part of a Deserted Medieval settlement	?Medieval	B	0	14NW 14SW 04NE 04SE	TF 103 451	H
RCHME Plot	York	Cropmarks:possible Medieval crofts and road, part of a Deserted Medieval settlement	?Medieval	B	150m	14NW 14SW	TF 107 450 TF 109 449	H

Data Source	Source Location	Description	Period	Category	Proximity to Proposed Route	1:10, 000 Quarter Sheet	National Grid Reference	Reliability of Source
SAM 310	Lincs. SMR	<p>The site of the lost village of Mareham (earthworks) which gave its name to the Mareham Lane. Deserted Medieval Village of Mareham or Cold Mareham. The Roman road from Bourne to Sleaford is marked by the moat enclosing the foundations of Mareham Grange.</p> <p>The Grange earlier the property of Sempringham Priory was temporary held by Elizabeth I by Sir Thomas Horsman, Lord of the Manor. The enclosure has been ploughed for some 20 years and only remnants of the moat survive. A heavy scatter of rough building stone marks the published site of the Grange</p>	Medieval	A	500m	04SE	TF 0858 4312 TF 086 431	H
SAM 22634	Lincs. SMR	<p>Remains of Medieval Market Cross Ewerby, to the west of the church on a small "Green". Supposedly erected by Sir Ranulph Roye in the reign of Edward I connected with the granting of a market charter. Erected between 1272 and 1307. The cross has been restored. Listed Building Grade II</p>	Medieval	A	500m	14NW	TF 1211 4728	H
SAM 22641	Lincs. SMR	<p>Remains of 15th century wayside cross on the Mareham Road. Listed Building Grade II</p>	Medieval	A	1600m	04SE	TF 0841 4203	H

**ARCHAEOLOGICAL
CONSTRAINT
MAPS**

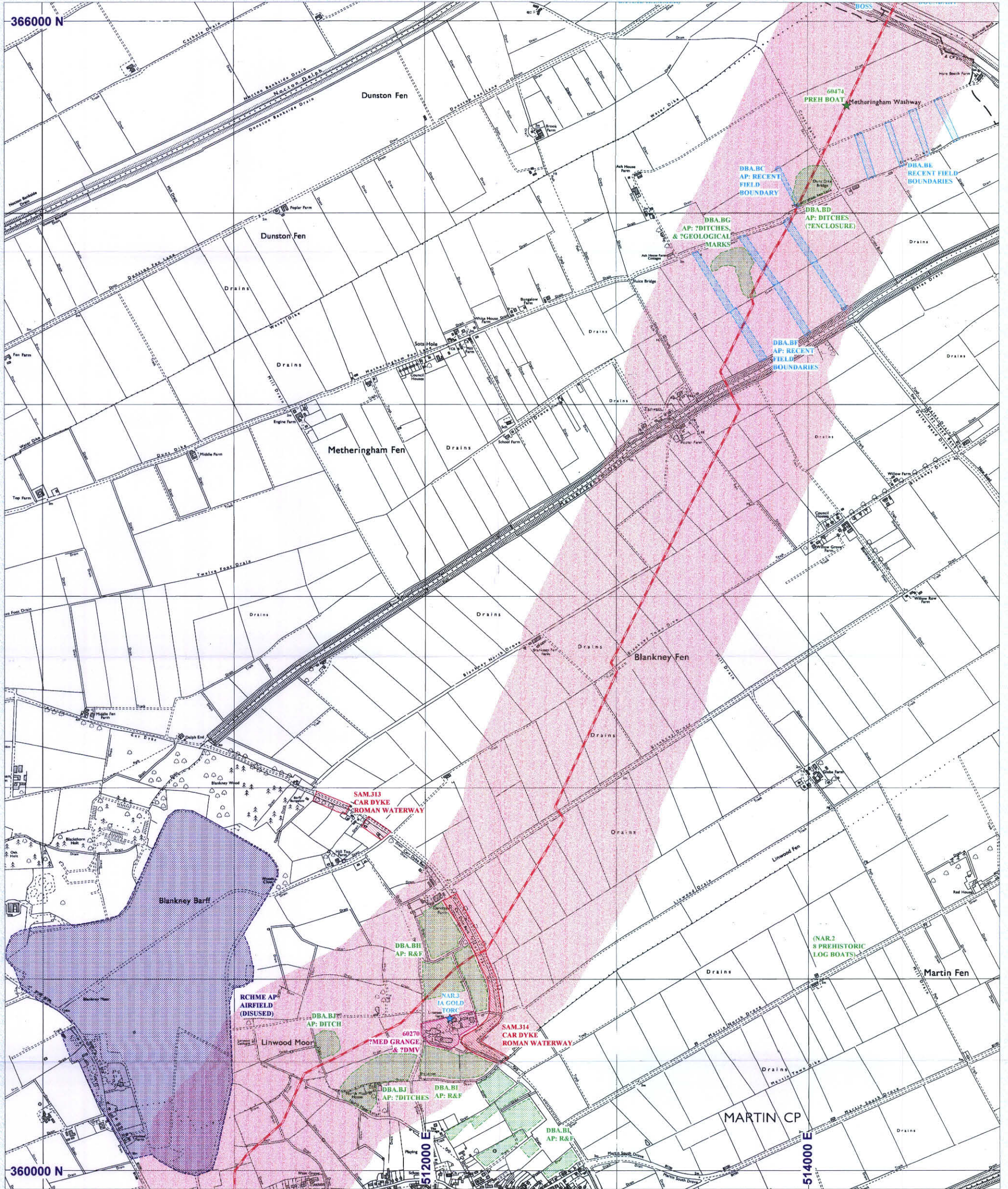
(APPENDIX 6)








Hatton to Silk Willoughby Pipeline Archaeological Constraints





<p> Proposed Pipeline Route</p> <p> 1km Study Corridor based on proposed pipeline route</p> <p> Category A Site</p> <p> Category B Site</p> <p> Category C Site</p> <p> Category D Site</p> <p> Category E Site</p>	<p> Known extent of archaeological site or find (coloured according to category)</p> <p> Known extent of archaeological site discovered by aerial photography (coloured according to category)</p> <p>Data Sources:</p> <p>60474 PRN Site (Lines SMR)</p> <p>SAM.313 Scheduled Ancient Monument</p> <p>NAR.1/546131 National Archaeological Record Site</p> <p>RCHME Royal Commission Aerial Photo (NMP)</p> <p>CLC Card Index Site (Lines SMR)</p> <p>DBAAA Desk-Based Assessment Site</p>	<p>Abbreviations:</p> <p>PREH PREHISTORIC</p> <p>NEO NEOLITHIC</p> <p>BA BRONZE AGE</p> <p>IA IRON AGE</p> <p>RB ROMANO-BRITISH</p> <p>AS ANGLO-SAXON</p> <p>MED MEDIEVAL</p> <p>PMED POST-MEDIEVAL</p> <p>DMV DESERTED MEDIEVAL VILLAGE</p> <p>SMV SHRUNKEN MEDIEVAL VILLAGE</p> <p>R&F RIDGE AND FURROW</p> <p>AP AERIAL PHOTOGRAPH</p>	<p>Produced by Network Archaeology Ltd for British Gas Transco</p> <p>Scale 1:10 000 JAN 1997</p> <p>Ordnance Survey mapping reproduced with the permission of the controller of HMSO. Crown Copyright reserved.</p> <p>Map 1 of 6</p>
---	--	--	---

Hatton to Silk Willoughby Pipeline Archaeological Constraints



-  Proposed Pipeline Route
-  1km Study Corridor based on proposed pipeline route
-  Category A Site
-  Category B Site
-  Category C Site
-  Category D Site
-  Category E Site

-  Known extent of archaeological site or find (coloured according to category)
-  Known extent of archaeological site discovered by aerial photography (coloured according to category)
- Data Sources:**
- 60474 PRN Site (Lines SMR)
- SAM.313 Scheduled Ancient Monument
- NAR.1/546131 National Archaeological Record Site
- RCHME Royal Commission Aerial Photo (NMP)
- CLC Card Index Site (Lines SMR)
- DBA.AA Desk-Based Assessment Site

- Abbreviations:**
- PREH PREHISTORIC
 - NEO NEOLITHIC
 - BA BRONZE AGE
 - IA IRON AGE
 - RB ROMANO-BRITISH
 - A/S ANGLIO-SAXON
 - MED MEDIEVAL
 - PMED POST-MEDIEVAL
 - DMV DESERTED MEDIEVAL VILLAGE
 - SMV SHRUNKEN MEDIEVAL VILLAGE
 - R&F RIDGE AND FURROW
 - AP AERIAL PHOTOGRAPH

Produced by Network Archaeology Ltd
for British Gas Transco

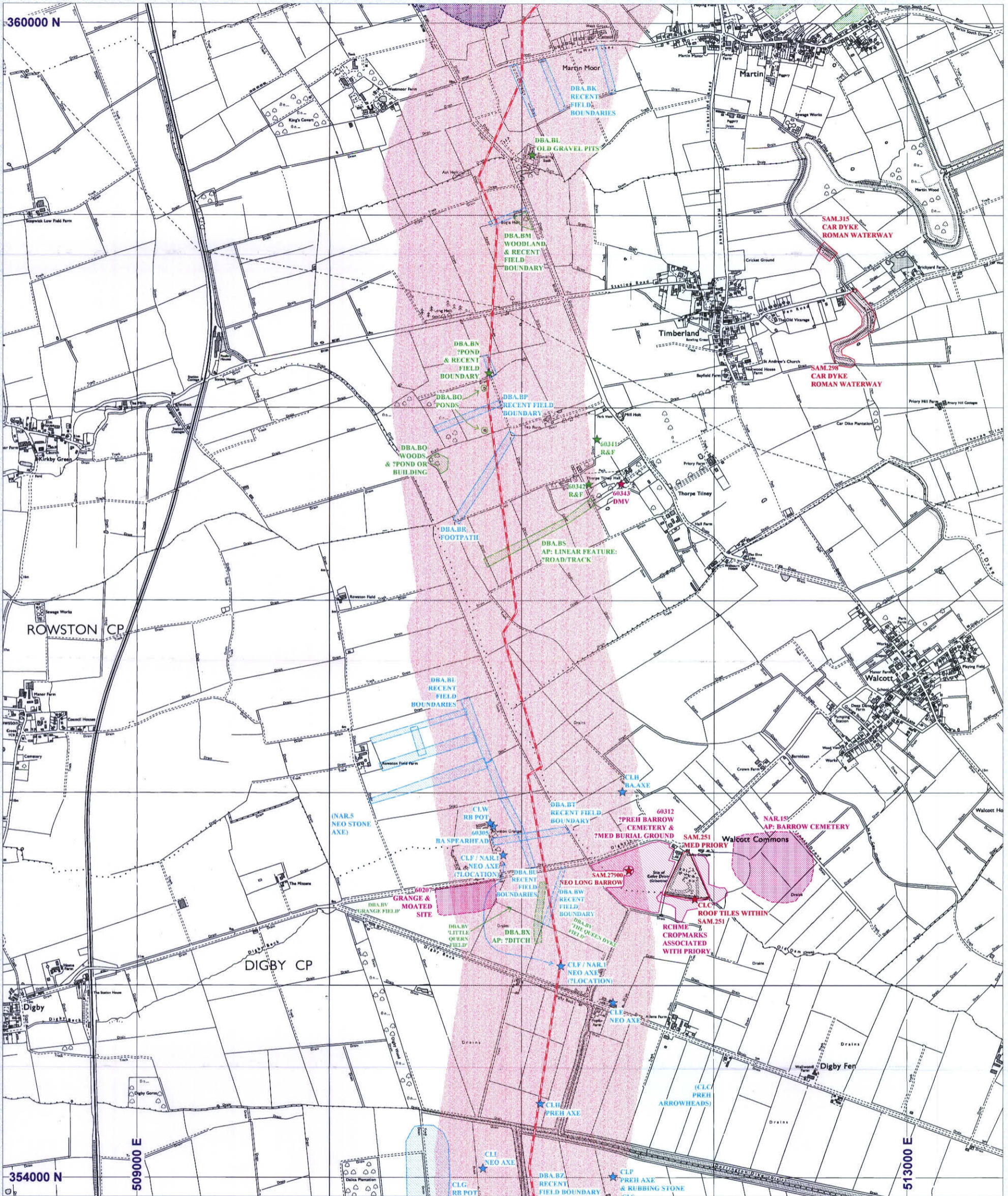
Scale 1:10 000

JAN 1997

Ordnance Survey mapping reproduced
with the permission of the controller of
HMSO. Crown Copyright reserved.

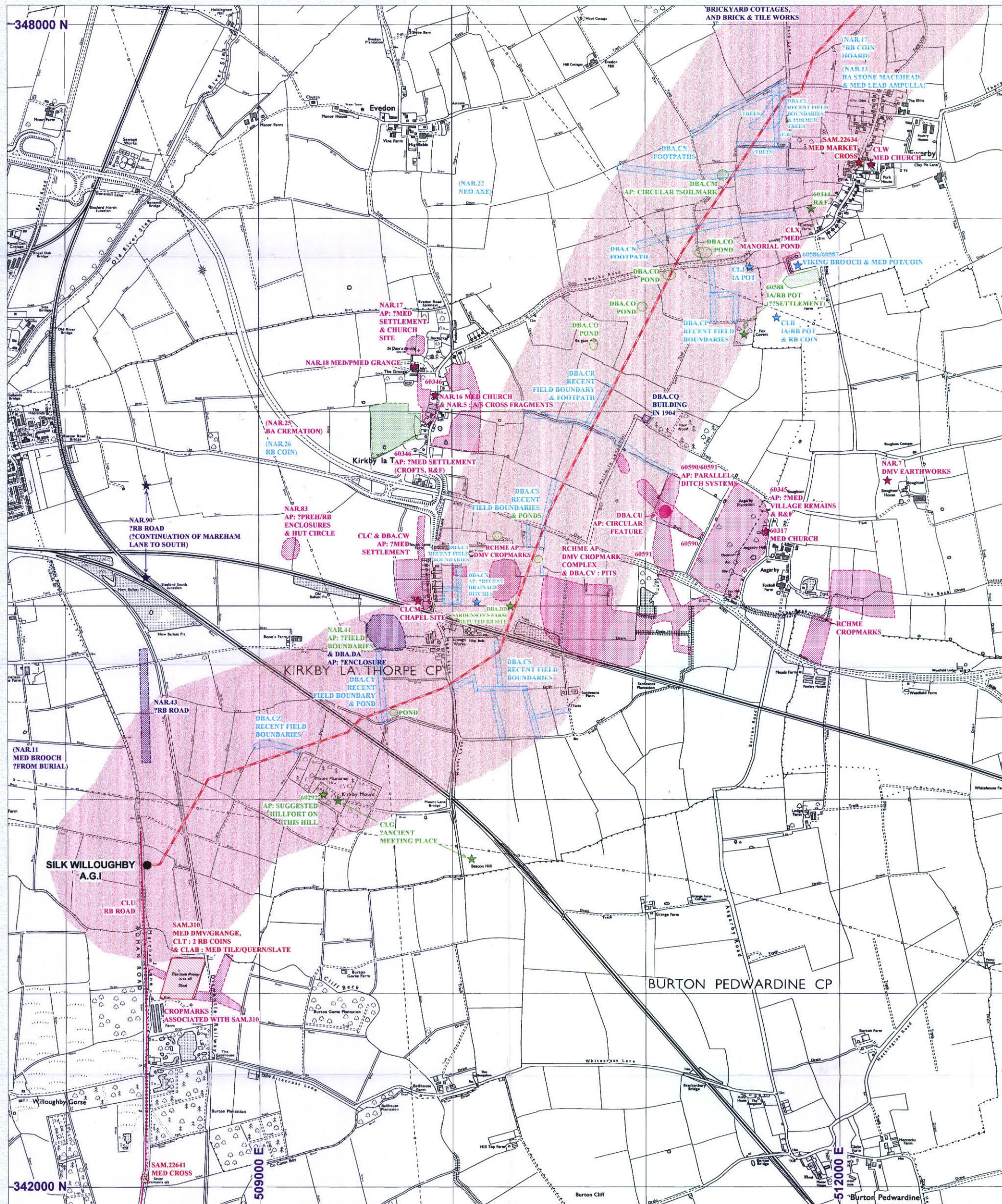
Map 3 of 6

Hatton to Silk Willoughby Pipeline Archaeological Constraints



<p> Proposed Pipeline Route</p> <p> 1km Study Corridor based on proposed pipeline route</p> <p> Category A Site</p> <p> Category B Site</p> <p> Category C Site</p> <p> Category D Site</p> <p> Category E Site</p>	<p> Known extent of archaeological site or find (coloured according to category)</p> <p> Known extent of archaeological site discovered by aerial photography (coloured according to category)</p> <p>Data Sources:</p> <p>60474 PRN Site (Lines SMR)</p> <p>SAM.313 Scheduled Ancient Monument</p> <p>NAR.1/546131 National Archaeological Record Site</p> <p>RCHME Royal Commission Aerial Photo (NMP)</p> <p>CLC Card Index Site (Lines SMR)</p> <p>DBA.AA Desk-Based Assessment Site</p>	<p>Abbreviations:</p> <p>PREH PREHISTORIC</p> <p>NEO NEOLITHIC</p> <p>BA BRONZE AGE</p> <p>IA IRON AGE</p> <p>RB ROMANO-BRITISH</p> <p>AS ANGLO-SAXON</p> <p>MED MEDIEVAL</p> <p>PMED POST-MEDIEVAL</p> <p>DMV DESERTED MEDIEVAL VILLAGE</p> <p>SMV SHRUNKEN MEDIEVAL VILLAGE</p> <p>R&F RIDGE AND FURROW</p> <p>AP AERIAL PHOTOGRAPHY</p>	<p>Produced by Network Archaeology Ltd for British Gas Transco</p> <p>Scale 1:10 000 JAN 1997</p> <p>Ordnance Survey mapping reproduced with the permission of the controller of HMSO. Crown Copyright reserved.</p> <p>Map 4 of 6</p>
---	---	---	---

Hatton to Silk Willoughby Pipeline Archaeological Constraints



Proposed Pipeline Route 1km Study Corridor based on proposed pipeline route	Known extent of archaeological site or find (coloured according to category) Known extent of archaeological site discovered by aerial photography (coloured according to category)	Abbreviations: PREH PREHISTORIC NEO NEOLITHIC BA BRONZE AGE IA IRON AGE RB ROMANO-BRITISH AS ANGLO-SAXON MED MEDIEVAL PMED POST-MEDIEVAL DMV DESERTED MEDIEVAL VILLAGE SMV SHRUNKEN MEDIEVAL VILLAGE R&F RIDGE AND FURROW AP AERIAL PHOTOGRAPHY	Produced by Network Archaeology Ltd for British Gas Transco Scale 1:10 000 JAN 1997
Category A Site Category B Site Category C Site Category D Site Category E Site	Data Sources: 60474 PRN Site (Lines SMR) SAM 313 Scheduled Ancient Monument NAR 17/546131 National Archaeological Record Site RCHME Royal Commission Aerial Photo (NMP) CLC Canil Index Site (Lines SMR) DBA-AA Desk-Based Assessment Site	Map 6 of 6 <small>Ordnance Survey mapping reproduced with the permission of the controller of HMSO. Crown Copyright reserved.</small>	