

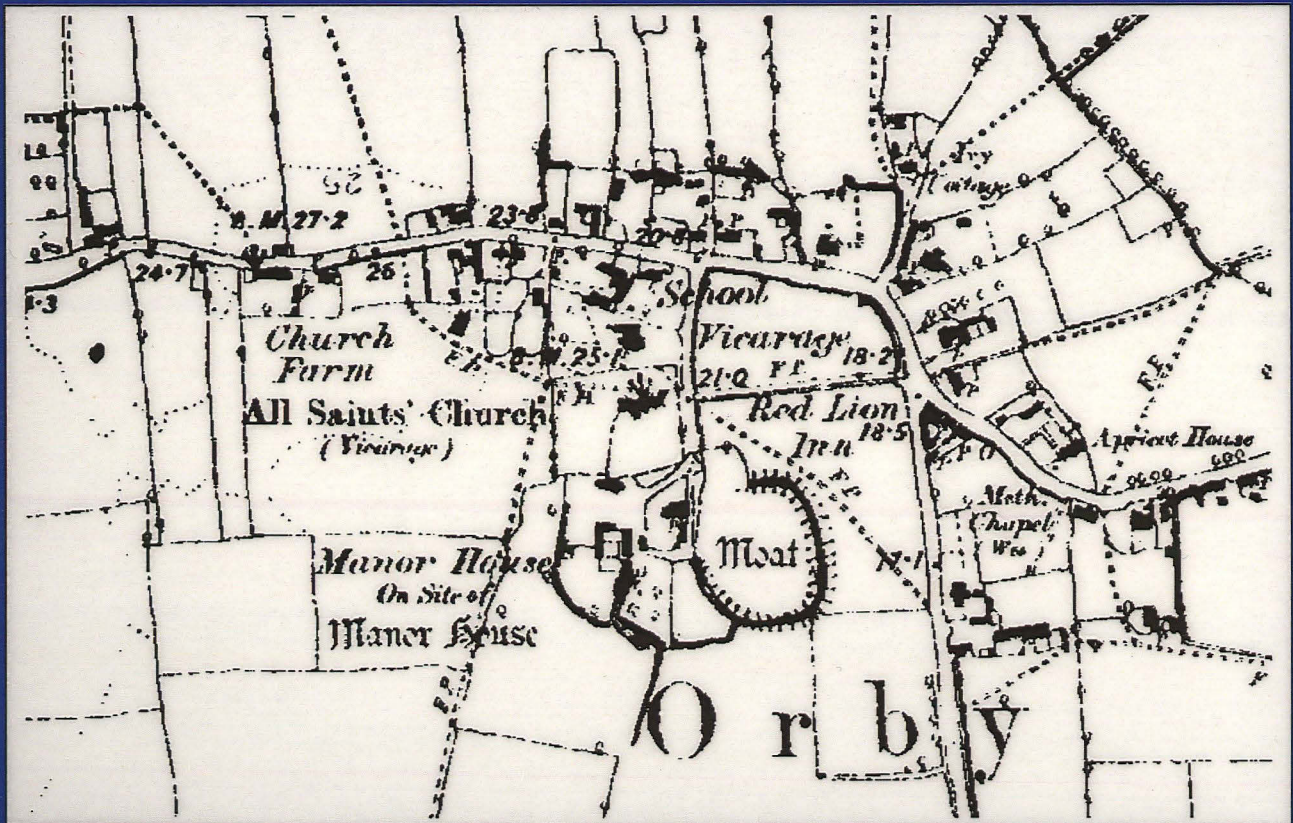
Lincolnshire County Council

A158/C541 Coastal Access Route

A158 Burgh le Marsh Bypass & C541 Orby Bypass Archaeological Desk-Based Assessment

BTI 202063 June 2003

Babtie Group Pearl House, 32 Queen Street, Wakefield WF1 1LE
Tel 01924 362915 Fax 01924 367193



28/7

Lincolnshire County Council East Coast Access Route

A158 Burgh le Marsh & C541 Orby Bypass: Archaeological Desk-Based Assessment

Contents

Introduction	page 1
Methodology	page 2
Policy Background	page 4
Baseline Conditions	page 6
Assessment of Archaeological Risk	page 12
Conclusion	page 14
Mitigation	page 16
References	page 17



Appendix A

Gazetteer of Identified Sites of Cultural Heritage Interest

Figures

Figure 1: Sites of Cultural Heritage Interest (Dwg No.202063/Archaeology/03)

© Copyright Bابتie Group Limited. All Rights reserved.

No part of this report may be copied or reproduced by any means without prior written permission from Bابتie Group Limited. If you have received this report in error, please destroy all copies in your possession or control and notify Bابتie Group Limited.

This report has been prepared for the exclusive use of the commissioning party and unless otherwise agreed in writing by Bابتie Group Limited, no other party may use, make use of or rely on the contents of the report. No liability is accepted by Bابتie Group Limited for any use of this report, other than the purposes for which it was originally prepared and provided.

Opinions and information provided in the report are on the basis of the Bابتie Group Limited using due skill, care and diligence in preparation of the same and no explicit warranty is provided as to their accuracy. It should be noted and it is expressly stated that no independent verification of any of the documents or information supplied to Bابتie Group Limited has been made.

Lincolnshire County Council
A158/C541 Coastal Access Improvement
Archaeological Desk-Based Assessment

Introduction

- 1.1 Babtie Group has been commissioned by Lincolnshire County Council to prepare planning applications for the proposed A158 Burgh le Marsh and C541 Orby bypasses, as part of A158/C541 Coastal Access Improvement Scheme.
- 1.2 Babtie's commission includes the production of preliminary archaeological scoping studies, a desk-based assessment and the procurement and management of intrusive and non-intrusive evaluation works to obtain further information about known or potential archaeological sites that may be affected by the advancement of the scheme. The results of these works will be used to inform an Environmental Impact Assessment and in the preparation of an Environmental Statement.
- 1.3 This report sets out the methodology and sources used and the results of a desk-based assessment of the proposed route. This work has been undertaken at the request of the Technical Services Group and the County Archaeological Section of Lincolnshire County Council and conforms to the *Standards and Guidance for Archaeological Desk-Based Assessments* (IFA 1999) and the *Lincolnshire Archaeological Handbook: a manual of archaeological practice* (LCC 1998). Copies of this report will be deposited with the Lincolnshire County Sites and Monuments Record as a public document, within 6 months of issue.
- 1.4 **Aims and objectives**
- 1.4.1 A desk-based assessment is defined as **"a programme of assessment of the known or potential archaeological resource within a specified area or site on land, inter-tidal zone or underwater. It consists of a collation of existing written, graphic, photographic and electronic information in order to identify the likely character, extent, quality and worth of the known or potential archaeological resource in a local, regional, national or international context as appropriate"** (IFA 1999).
- 1.4.2 The purpose of this desk-based assessment is to collate and assess available information regarding the known and potential archaeological resource of the A158 and C541 bypass study corridors, including, where possible, the presence or absence, character and extent, date, integrity, state of preservation and relative quality of the archaeological resource, in order to make an assessment of merit in an appropriate context (IFA 1999).
- 1.4.3 Additional objectives of this assessment are to assist in the formulation of a strategy for further archaeological investigation where the character and value of the archaeological resource is not sufficiently defined or understood to permit a detailed mitigation strategy or other response to be designed; or where the character of the archaeological resource is well defined, to assist in the development of an appropriate mitigation strategy to ensure the recording, preservation or management of the archaeological resource (IFA 1999).

Methodology

- 2.1 This report is based primarily on a series of initial scoping studies, detailed desk-based assessment and consultations undertaken between March 2000 and May 2003. The report presents detailed information for a study area defined as a linear corridor extending 300m to either side of the proposed routes; however, information collected for a number of alternative routes has also been taken into account. Some additional background information was also gathered from a wider area, particularly with reference to the regional and national archaeological/historical context.
- 2.2 Data was obtained from a number of sources, including:
- Lincolnshire County Sites and Monuments Record;
 - English Heritage, National Monuments Record (Air Photos, Register of Parks and Gardens of Special Historic Interest, Register of Battlefields and Listed Buildings);
 - English Heritage, Scheduled Ancient Monuments Section;
 - Historic maps and plans held in the Lincolnshire County Archive;
 - Ordnance Survey maps;
 - Published archaeological books and journals;
 - Unpublished reports, including the results of geotechnical investigations undertaken for the scheme;
 - Site Inspections.
- 2.3 As yet no intrusive or non-intrusive evaluation works have been undertaken for either scheme.
- 2.4 In addition to the above data gathering, qualitative comment was invited from English Heritage and the County Archaeological Section (CAS). A detailed response was received from the County Archaeological Service, which noted that the A158 Burgh le Marsh bypass would have no physical impact on any listed buildings or Scheduled Ancient Monuments. However, further assessment and evaluation works would be required to appraise in more detail the likely impact upon a number of sites of Local to Regional importance, including the Roman road from Lincoln to Burgh le Marsh, several cropmark boundaries of probable Medieval or early Post-Medieval date and a number of artefact scatters. Similar comments were received with regards to the C541 Orby bypass, while the potential for the discovery of additional, as yet unknown, archaeological sites was raised for both routes.
- 2.5 Individual sites of Cultural Heritage interest identified from any of the above sources are listed in the gazetteer (Appendix A). Key sources are given in the bibliography at the end of this report. Figure 1 shows the extent of the study area and the distribution of cultural heritage sites.
- 2.6 **Assessment of Cultural Heritage Value**
- 2.6.1 A provisional assessment of the grade of importance of each archaeological site within the study area was made on a three-point scale of National, Regional or Local significance.

Lincolnshire County Council
A158/C541 Coastal Access Improvement
Archaeological Desk-Based Assessment

- 2.2.2 Limited information was available for most sites in the study area, with relatively few having been archaeologically tested or subject to detailed survey or recording. This initial assessment was therefore based partly on professional experience and discussions with the County Archaeological Service and English Heritage. However, it also took into account the Secretary of State's non-statutory criteria for the designation of Scheduled Ancient Monuments. These criteria are period, rarity, documentation, group value, survival/condition, fragility/vulnerability, diversity and potential.
- 2.2.3 Buildings of cultural heritage significance were assessed against criteria outlined in Planning Policy Guidance Note 15: Planning and the Historic Environment. The criteria used are Age, Rarity, Architectural Interest, Historic Interest, Close Historical Association and Group Value.
- 2.2.4 Irrespective of the above, statutory designations were taken into account as follows:
- Scheduled Ancient Monuments – National Importance;
 - Grade I and II* Listed Buildings – National Importance;
 - Grade II Listed Buildings – Regional Importance.

Policy Background

- 3.1 Scheduled Ancient Monuments (SAM) are protected by law under the Ancient Monuments and Archaeological Areas Act 1979, and are by definition of National Importance. Any works that would affect a SAM or its setting require Scheduled Monument Consent, obtained from the Department for Culture, Media and Sport (DCMS), who are advised by English Heritage.
- 3.2 Section 54a of the Town and Country Planning Act 1990 requires planning decisions to be taken in accordance with policies contained in the appropriate Local Development Plan. Material considerations, including national policy guidelines, should also be taken into account as they provide an overall context for the consideration of planning applications and set out Government policy. The relevant guidance notes for archaeology and the built historic environment are *PPG 15: Planning and the Historic Environment* (1994) and *PPG 16: Archaeology and Planning* (1990).
- 3.3 Listed buildings benefit from statutory protection, under the Planning (Listed Buildings and Conservation Areas) Act 1990, and any works that would affect a listed building or its setting require Listed Building Consent, obtained through the Local Planning Authority.
- 3.4 Key government guidance on archaeological remains in PPG16 states that *"where nationally important archaeological remains, whether Scheduled or not, and their settings, are affected by proposed development there should be a presumption in favour of their physical preservation"*. In relation to less important sites, PPG16 states that *"the desirability of preserving an ancient monument and its setting is a material consideration in determining planning applications whether that monument is scheduled or unscheduled"*.
- 3.5 Guidance given in PPG15 and PPG16 is expanded in the *Lincolnshire County Structure Plan (Policies Proposed for Adoption, November 2000)*, Policies 62 to 65. Similar policies are contained in the earlier *Deposit Draft (1998)*. Policy 63 (Archaeological Heritage) states:

"Development adversely affecting an archaeological site of National importance (whether Scheduled or not) or its setting will not be permitted.

Development proposals which would affect known or suspected archaeological sites will be the subject of an archaeological assessment, and should be considered within this context having regard to other material considerations.

Where development is permitted, satisfactory arrangements for the preservation in situ of archaeology within the development or, as appropriate, the excavation and recording of the archaeological remains will be required.

Lincolnshire County Council
A158/C541 Coastal Access Improvement
Archaeological Desk-Based Assessment

The information recorded should be archived and the results published as appropriate".

- 3.6 Historic Buildings, Archaeology and Historic Landscapes are covered by Policies C5 to C7 of the *East Lindsey Local Plan - Alteration 1999*. Policy C6 (Archaeology), states:

"A planning application for development on, or affecting, a known or suspected site of archaeological interest must be accompanied by a site evaluation sufficient to allow the Council to determine the site's archaeological significance.

The Council will not permit development which would harm the site or setting of:

- a scheduled ancient monument;*
- any unscheduled nationally important archaeological site or monument; or*
- any locally important archaeological site deemed worthy of preservation in situ.*

On other archaeological sites where preservation in situ is not warranted, development will be permitted provided:

- a) any disturbance is kept to a minimum or avoided altogether;*
- b) the developer makes satisfactory provision for the excavation, recording, archiving and publication of any archaeological remains which will be affected by the development ; and*
- c) its form, scale, proportions, siting, materials, boundary treatment and associated landscaping respect and complement the setting or archaeological significance of the site.*

- 3.7 Policy C7, Historic Landscapes, also states:

"The Council will not permit development which would harm the character, appearance or setting of the following historic landscapes:

a) the parks and gardens of:

- 1) Gunby Hall*
- 2) Hainton Hall*
- 3) Harrington Hall*
- 4) Revesby Abbey*
- 5) Scrivelsby Court*
- 6) Well Hall*

b) Winceby Battlefield".

Baseline Conditions

4.1 A158 Burgh le Marsh Bypass

4.2 Burgh le Marsh is situated approximately 5km to the west of Skegness, in the administrative district of East Lindsey. The historic core of the existing settlement is situated on an island of glacial sand and gravels, at approximately 5m AOD, rising above the surrounding boulder clays, on which more recent development has taken place, particularly to the east of the historic core. Land to the north and south of the town remains at a similar elevation, while to the west the land rises gently to approximately 22 AOD at Gunby Hall (4km from Burgh le Marsh). To the east of the town, skirted by Victorian and later housing development, the topography levels out onto reclaimed salt marsh and alluvial deposits. The boundary between glacial tills and marine deposits is shown in Figure 1.

4.3 The proposed route commences from the existing A158, near Gunby Hall and runs south east, skirting around to the north of the town, crossing Orby Lane, Common Lane and Ingoldmells Road, before tying back into the existing A158 to the east of the town. The predominant land use in the area is agriculture, with much of the route under arable cultivation, particularly cereals and potatoes. Excluding the more mature hedgerows, shelterbelts and coverts around Gunby Park, there is little woodland along the route.

4.4 Archaeological Background

4.4.1 Seventeen sites or extended areas of cultural heritage interest have been identified to date within the study area, one of which, Gunby Park, is included on the Register of Parks and Gardens of Special Historic Interest and is protected under Policy C7 of the *East Lindsey Local Plan – Alteration 1999*. None of the remaining sites are individually designated or protected; however, they are considered to be a “material factor” in the planning process and may be of any degree of importance, ranging from Local or Regional up to National importance. A number of the sites identified within the study area are situated in excess of 100m away from the bypass route, or in built-up areas, and are unlikely to be affected by the proposed development.

4.4.2 Lincolnshire possesses a rich and varied archaeological record, with the upland areas of the Wolds being particularly rich in archaeological remains, including agricultural and settlement complexes, religious sites and funerary monuments. However, past patterns of settlement and land use in the Lincolnshire Marsh and Fens have until relatively recently been subject to less detailed/intensive programmes of fieldwork than in other areas of the County (Simmons 2001). Furthermore, the A158/C541 study corridors are situated in an area of the fens/marsh that was not included in any of the major fenland/wetland research projects undertaken over the past thirty years, although a substantial amount of work was undertaken to the north-east of Orby, in the parishes of Addlethorpe and Ingoldmells (Hayes & Lane 1992, Crowson, Lane & Reeve 2000, Fenwick *et-al* 2001). Similarly, the study corridors are also situated in an area that

Lincolnshire County Council
A158/C541 Coastal Access Improvement
Archaeological Desk-Based Assessment

was not covered by either the National Mapping Programme (Kershaw 1998) or the Lincolnshire Fenland Mapping Project (Palmer 1996).

- 4.4.3 During the Mesolithic period sea levels were approximately 30 metres lower than at present. Over the next six thousand years sea levels rose gradually until, at the beginning of the Iron Age, the sea level was higher than that of today and much land around the coastal fringe which had previously been exploited was inundated. Within a period of approximately 500 to 600 years sea levels again receded so that by AD 100 large tracts of marshland were available for settlement and exploitation; more so that at any point since the Bronze Age. By about AD 375 deteriorating weather conditions and rising sea levels (the Romano-British Transgression) once again necessitated the abandonment of the marshlands (Simmons 2001).
- 4.4.5 Finds of Neolithic stone axes across most of the County suggest that settlement during this period was widespread and extensive programs of woodland clearance were probably taking place across the Wolds and Cliff by c.2500 BC. However, very little evidence for the settlement and exploitation of the Fens prior to the Iron Age has been recovered, largely because any Neolithic or Bronze Age land surfaces have been buried by subsequent periods of alluvial deposition and peat growth (May 2001).
- 4.4.6 Iron Age Lincolnshire formed part of the tribal territory of the Corieltavi, stretching from the Humber to the River Nene. At this time much of the eastern part of the study area appears to have been open sea and tidal marsh and is unlikely to have been suitable for large-scale settlement or exploitation until the Romano-British period. Consequently, evidence for Iron Age occupation in the area, other than in the form of salterns, is scant (Simmons 2001).
- 4.4.7 The Lincolnshire marsh was the setting for one of the county's more significant early industries, that of salt production. Significant remains of this process, in the form of briquetage and other industrial waste, have been documented on the coast at Ingoldmells and further inland at Orby, Addlethorpe and Hogsthorpe (Lane 2001). Domestic pottery found in association with Iron Age salterns in the south-western fens can be broadly dated to the period 400 – 150 BC (Lane 2001), while evidence suggests that a series of salterns discovered during construction of the Burgh le Marsh, Orby, Addlethorpe, Ingoldmells Rising Main were predominantly Romano-British in date, although precise dating is lacking.
- 4.4.8 Evidence suggests that Lincolnshire was a prosperous region at the time of the Roman conquest in AD 43. The Ninth Legion overran Lincolnshire, establishing a fortress at Lincoln c. AD 54-68, and villas were quickly established on the limestone uplands and chalk Wolds (Whitwell 2001). However, rural settlement patterns often show little variation between the Iron Age and Romano-British period, with much evidence to suggest a continuity of occupation.
- 4.4.9 Recent studies have shown that the fenlands and marsh were heavily exploited during the Roman period. Evidence suggests that there was a Roman settlement at Burgh-le-Marsh, although little is known about it. However, its position on the main Roman road from Lincoln to the coast, which crosses the study corridors on a

Lincolnshire County Council
A158/C541 Coastal Access Improvement
Archaeological Desk-Based Assessment

northwest to southeast alignment, could have been a significant one. The settlement, which may not have been large, or consisted of many buildings, was situated on an island of glacial sands and gravels where the topography begins to lift from the coastal marshes onto higher ground. Archaeological investigations at Burgh-le-Marsh have recorded burials as well as finds of pottery, tile and two coins; a denarius of Claudius and a gold aureus of Constantine and it has been suggested that the town may have played a significant role in the defence against sea-borne Germanic raiders in the fourth century (Whitwell 2001) or that alternatively the Roman road may have continued on past Burgh to a now lost Saxon Shore Fort (Whitwell 1970).

- 4.4.10 A series of Romano-British pottery find spots to the south of Orby (LSMR 41567) and to the east of Burgh-le-Marsh suggest further settlement activity in the area during this period; however, abandonment of the fens and marshlands in the late 4th/early 5th century appears to have been almost complete and the fens were to remain largely unsettled until the late fifth or early sixth century, and then only in isolated pockets (Simmons 2001).
- 4.4.11 Evidence from across Lincolnshire suggests that the county may have seen an influx of Germanic settlers in the late 4th and early 5th centuries, with an increasing body of evidence to suggest widespread Anglian occupation of the county. Due to the often-ephemeral nature of the archaeology of this early period the location of contemporary settlements are often difficult to detect, although it has been suggested that occupation tended towards lighter soils, sands and gravels and the uplands. Evidence for funerary practice is, however, more often encountered.
- 4.4.12 There are several sites within the study area that, collectively, would seem to suggest an Anglian presence from at least the sixth century onwards. During the 6th and 7th centuries high status burials took the form of interment in barrows and barrow groups. Surviving examples, although contentious, can still be seen at Burgh-le-Marsh, Bardney and Caenby. The mound at Burgh-le-Marsh, known as Cock Hill, contained a primary burial accompanied by a bronze buckle of Anglo-Saxon date. Another barrow, also of sixth century date, survived at nearby Partney until the 1950's, when it was destroyed during the course of road improvements (Thompson 1954).
- 4.4.12 The late ninth century saw Lindsey fall under Scandinavian control, with the area now comprising Lincolnshire ceded to the Vikings following the defeat of the Mercian king, Burgred, at Repton in AD874. The Lindsey coastal marshlands and fenland fringes are characterised by a more dispersed settlement pattern than other areas of the county (Everson 2002) and Domesday Book suggests a fairly dispersed pattern of land holding at the time of the Conquest. Burgh itself appears to have been an important center by the late 11th century; six plough teams (with eight oxen to each team) are recorded, as well as a church and 500 acres of meadow (Williams & Martin 1992), which may indicate that reclaimed marshland was being exploited for stock raising, although it is unclear at what date the present nucleated settlement came into existence. The name Burgh is derived from the Old English *burh*, meaning fort or fortified place; however, its exact context at Burgh is unclear and it is currently unknown whether this refers to a Saxon or Scandinavian fortification or may be a reference to an earlier, now lost, Roman fortification. The affix *le Marsh* – in the Marsh – was added later in

Lincolnshire County Council
A158/C541 Coastal Access Improvement
Archaeological Desk-Based Assessment

the medieval period, to give a place-name which can be rendered literally as *the fortified place in the marsh* (Gelling 1993).

- 4.4.13 During the economic and social upheaval of the 14th and 15th centuries, a general retreat from marginal land took place as the population declined and land-hunger eased. Large-scale tax relief was granted in the period 1352 – 54 and a considerable amount of land passed out of arable cultivation, reverting to pasture. Surviving parcels of medieval ridge and furrow earthworks are still extant at several locations within the study corridor, particularly in and around Gunby Park, where incorporation within the parkland has protected them from later agricultural activity, although the date at which these blocks became relict is unknown.
- 4.4.14 Following the Restoration, in 1660, the deer park, a traditional symbol of gentry status, enjoyed renewed popularity and their function, as the setting for the country house, was an important one. The small manor house of Gunby Hall first appears in the documentary evidence in the 17th century. In 1700 a new house was commissioned here by Sir William Massingberd to replace the family's manor house in Bratoft. The main building has three storeys and seven bays of red brick construction with flat lead roof. A new park was laid out around the house in 1730 and then enlarged by 1780. In the early 19th century a thin boundary plantation known as The Belt was created to the north, west and along part of the southern perimeter, terminating in the ornamental planting surrounding Icehouse Pond. The park covers an area of c 32 ha.
- 4.4.15 Social and economic developments in the second half of the 18th century influenced a transition in the appearance and function of parklands, manifested in the removal of walled gardens and enclosures around the house, thereby creating open landscape parks. Many new parks were laid out, while others were increased in size, with the result that in many cases existing settlements were moved, the diversion of roads and the planting of dense perimeter belts. These developments reflected an increased polarisation of society, typified by the withdrawal of the gentry from the local community and the use of parks as places of entertainment for the elite (Williamson 1997).
- 4.4.16 Pursuits such as hunting and shooting rose in popularity from the middle of the 18th century and influenced landscape design, particularly through the need to provide cover for pheasants and foxes. As a result, small clumps or coverts and thin perimeter belts were planted (Williamson 1997), many of which still survive as features in the modern landscape. Examples in and around Gunby include The Belt, The Stripe and numerous holts
- 4.4.17 The 'railway revolution' took hold during the 1840s with the construction of many new railway lines. Burgh-le-Marsh railway station was opened in 1848 and consists of a platform, booking hall, signal box, railway workers house, a brick goods shed and a waiting room, although the line itself is now disused and has been largely dismantled.

Lincolnshire County Council
A158/C541 Coastal Access Improvement
Archaeological Desk-Based Assessment

4.5.1 C541 Orby Bypass

4.5.2 The small village of Orby lies approximately 8km to the northwest of Skegness, in the administrative district of East Lindsey. The village is situated on low-lying glacial tills (chalk-rich sandy gravelly boulder clay) on the fringe of the Terrington Beds, an area of salt marsh and tidal creek deposits (mainly silts and clays). The proposed bypass would commence from the junction of the A158 and C541, running northeast to cross the Welton Beck, before turning in an easterly direction to skirt around to the north of the village, crossing the Orby Beck and tying back into the existing C541.

4.5.3 Nine sites or extended areas of cultural heritage interest were identified within the study area, although a number of important sites, including a moated site are situated immediately outside the study corridor, to the south of the village. Boothby Grange, a Grade II listed building benefits from statutory protection under the Planning (Listed Buildings and Conservation Areas) Act 1990. None of the remaining sites identified are individually protected, although they are considered to be a "material factor" in the planning process under guidance contained in PPG 16: Archaeology and Planning.

4.5.4 As at Burgh le Marsh, there is little evidence for sites of pre-Roman date in the study area, although, as noted, salt production was an important industry along the coastal fringes from at least the Bronze Age, and more particularly, the Iron Age onwards. Large numbers of salterns are known to survive in Orby Marsh (J. Bonnor pers comm.) and during construction of the Burgh le Marsh, Orby, Addlethorpe, Ingoldmells Rising Main in 1995 traces of briquetage from at least 11 saltern sites was noted below post-Roman flood deposits (the so-called Romano-British transgression). One site produced several sherds of Iron Age pottery, while the other sites were thought to be Romano-British in date.

4.5.5 Finds of Romano-British pottery from the Burgh/Orby area suggest that the marsh was actively being re-colonised following a retreat in sea levels during the late Iron Age and Roman periods. Occupation appears to have been confined to low-lying islands, with the tidal marshlands exploited for salt, fish and fowl, and is likely to have been seasonal, with fresh water flooding in the third century AD, followed by the Romano-British transgression and deteriorating weather conditions in the late 4th and early 5th centuries leading to a general abandonment of the fens and salt marsh.

4.5.6 The Roman road from Lincoln to Burgh le Marsh passes through the study area on a northwest to southeast alignment, and is crossed by the proposed bypass. Although situated outside the study corridor, a series of Romano-British pottery findspots to the south of Orby (LSMR 41567) and to the east of Burgh-le-Marsh demonstrate further settlement activity in the area at this time.

4.5.7 There appears to have been some form of settlement at Orby by the 10th century, while reference to detached lands, held in Herdetop (Addlethorpe) was made at Domesday. The name Orby is derived from the old Norse name *orri* meaning 'black cock', suggesting that the present settlement was probably a Scandinavian foundation.

Lincolnshire County Council
A158/C541 Coastal Access Improvement
Archaeological Desk-Based Assessment

- 4.5.8 During the 13th and 14th centuries a large number of moated sites were constructed across England, primarily as prestigious aristocratic and seigneurial residences, with the moat enclosing secular or ecclesiastical buildings and gardens etc. The greatest concentration of these sites is in the central Midlands and eastern England and a number of these sites are located in the Lincolnshire Marsh, including examples at Orby and nearby Bratoft. The moat at Orby, which is protected as a Scheduled Ancient Monument, partly encloses a curvilinear island approximately 80m by 70m in extent and contains a number of earthwork features identified as a possible house platform and the remains of ornamental garden features.
- 4.5.9 The presence of the moated site, in close proximity to the parish church and a number of conjoined rectangular ditched enclosures which have been interpreted as the remains of manorial enclosures and crofts, suggests that the site was a focal point for settlement and was probably the manorial centre during the medieval period.
- 4.5.10 Later patterns of land use in the Orby area are characterized by attempts at land improvement and drainage and the planting of shelterbelts, coverts and clumps, associated with game rearing and hunting. The current land use is predominantly agricultural, with a mixed farming regime of cereal, sugar beet and potato cultivation, with smaller areas of pasture closer to the historic village core.

Assessment of Archaeological Risk

5.1 A detailed assessment of the impact of the scheme upon individual sites will be given in the Environmental Statement. However, an outline discussion of impacts is given below. Further non-intrusive and intrusive surveys are also likely to be required in order to confirm that our current understanding of the archaeological potential of these routes is correct and to identify any as yet unknown archaeological deposits which may be affected by construction works.

5.2 The bypasses pass through, or adjacent to, a number of sites of archaeological interest, identified from various sources. Impacts are likely to occur primarily during construction of the road, particularly within the immediate footprint of the road and the adjacent working width. Elements of these sites would almost certainly be damaged or destroyed by construction.

5.3. A158 Burgh le Marsh Bypass

5.3.1 Sixteen sites of cultural heritage interest have been identified within the A158 study area. Gunby Park, which is Grade II registered Park of Special Historic interest, and the Roman road from Lincoln to Burgh le Marsh are both of regional significance, while the site remaining sites are all of local significance. A detailed assessment of the impact of the scheme upon individual sites will be given in the Environmental Statement. However, an outline discussion of impacts is given below.

5.3.2 Depending on the final design of the scheme, construction of the road may result in a number of impacts on the archaeological resource. Six sites would suffer direct impacts, namely; the Roman road from Lincoln to Burgh le Marsh (Site 2) and five post-medieval trackways (Sites 18, 19, 20, 21 and 22). However, with the exception of the Roman road, these sites are of very low archaeological significance.

5.3.3 A scatter of Romano-British occupation debris (Site 12) may be indicative of Romano-British settlement, the full extent of which is currently unknown, while there may also be further impacts on archaeological deposits associated with an area of cropmarks (Site 13) located within 50 m of the scheme, the full extent of which is again unknown. At the eastern end of the scheme, Romano-British building material and medieval pottery (Sites 15, 16 and 17) noted during a watching brief indicates the potential for past activity in the vicinity; however, no cut features or other archaeological were recorded in association with these finds and they may simply represent material imported into the fields through agricultural practices e.g. manuring.

5.4 C541 Orby Bypass

5.4.1 Nine sites of Cultural Heritage interest have been identified within the C541 study area. With the exception of the Roman road from Lincoln to Burgh le Marsh and Boothby Grange (Grade II listed), all of the sites identified within the study area are of regional significance, although one Scheduled Ancient Monument, a moated medieval manorial site, is situated immediately to the south of the study area (SAM 30211).

Lincolnshire County Council
A158/C541 Coastal Access Improvement
Archaeological Desk-Based Assessment

- 5.4.2 Depending on the final design of the scheme, construction of the road may result in a number of impacts on the archaeological resource. Six sites would suffer direct impacts, namely; the Roman road from Lincoln to Burgh le Marsh (Site 2) and five post-medieval trackways (Sites 3, 4, 5, 6 and 7), while there may be some limited impact on the setting of Boothby Grange (Site 23). However, with the exception of Boothby Grange and the Roman road, these sites are of very low or negligible archaeological significance.
- 5.4.4 The study corridor includes a segment of the northeastern part of the medieval settlement of Orby (Site 8). Areas around the northern half of the village have been subject to geophysical survey, in connection with general development works, which collectively suggests that below-ground archaeological deposits are present in this area. Other features, including earthworks and ridge and furrow, also survive on the fringes of the village. As a result of this, the potential exists for further impacts on as yet unknown archaeological deposits on the northern edge of the village.

Conclusion

- 6.1 This report, in conjunction with previous scoping studies undertaken for the scheme, suggests that both routes pass through a sparsely settled landscape, with relatively little evidence for past settlement activity. Both routes skirt the existing historic settlement foci (Burgh le Marsh and Orby) and at present each route would only impact directly upon one feature of Regional importance, the Roman road from Lincoln to Burgh le Marsh, as well as a series of track/footways of Local importance.
- 6.2 One listed building, the Grade II listed Boothby Grange (Site 23), falls within the study area; however, it is situated at some distance from the proposed C541 Orby Bypass and there would be no direct physical impact upon the building or its curtilage. Furthermore, due to the distance at which the building is situated from the proposed bypass (approximately 300m), it is unlikely that advancement of the scheme would result in any significantly adverse impact upon its setting.
- 6.3 Advancement of both bypass schemes would also result in a general reduction in traffic levels through Burgh le Marsh and Orby, which is likely to have a beneficial effect upon the setting of listed buildings and Conservation Areas within the historic settlement cores, which are currently affected by high traffic volume and pollution.
- 6.4 While the apparent lack of archaeological sites within the study area may to some extent be a genuine reflection of past settlement patterns, it is equally likely that this may be the result of a lack of previous detailed archaeological fieldwork in the area. As a result of this there is a high potential for the discovery of previously unknown sites in those parts of the study area where little archaeological fieldwork has previously taken place.
- 6.5 The data available at this stage suggests that construction of the two bypass schemes would result in a number of adverse impacts on the archaeological record. However, the data available is not sufficient to provide all the information which would be required in the Environmental Statement, in that the number, extent and significance of any potential impacts cannot be defined, while there is not enough information to design an impact reduction/mitigation strategy. Under these circumstances, the guidance set out in PPG16, as amplified in the County Structure Plan and Local Plans, would require a programme of preliminary archaeological investigations to obtain the necessary information.
- 6.6 In order to answer these questions a detailed programme of field evaluation, namely geophysical survey and trial trenching, is required to provide site specific information, both to inform an Environmental Impact Assessment and as an aid in the development of an appropriate mitigation strategy.
- 6.7 The need for, nature and scope of the investigations required has been discussed with the Senior Built Environment Officer, within the County Archaeological Section. A staged programme of archaeological evaluation would be required, with the results

Lincolnshire County Council
A158/C541 Coastal Access Improvement
Archaeological Desk-Based Assessment

of each stage influencing the design of the next. The likely scope of works would include:

- Geophysical surveys over all or most of the route;
- fieldwalking (i.e. systematic collection of artefacts on the ground surface);
- a review of geotechnical records;
- extensive archaeological trial excavations along the route.

Mitigation

- 7.1 It is likely that if planning consent is granted it will be subject to a planning condition requiring the implementation of a programme of archaeological recording works in advance of and during construction. It is often possible to minimise or reduce the scope of archaeological mitigation works through sensitive design, including localised reroutes and changes to the alignment and/or informed drainage, structures and embankment design.
- 7.3 At this stage it is not possible to define the requirements for mitigation works on a site by site basis, however, the possible range of options may include (without limitation) any of the following, or a combination of them:
- design solutions to avoid or minimise any impact (the preferred option under PPG16);
 - investigation and recording of archaeological remains in advance of development (including where necessary detailed archaeological excavation);
 - investigation and recording of archaeological remains or standing buildings during the course of construction (archaeological watching brief);
 - enhancement measures including, where possible, presentation of the remains and/or interpretative displays to the public as part of the development, or changes in management to ensure the long-term preservation in situ of other remains in the immediate vicinity (i.e. incorporation in soft-landscaped areas).
- 7.4 While sites listed in the Gazetteer as destroyed should not be viewed as a constraint on scheme design, they may highlight the potential for other archaeological deposits to survive in the area, particularly where the original record refers only to localised intrusions. Other sites may constrain scheme design in order to avoid or reduce the significance of any impact, or the need for potentially costly mitigation works.
- 7.6 Where preservation in-situ is not feasible, then the appropriate mitigation strategy would be preservation by record, usually by detailed archaeological excavation in advance of construction. Where significant archaeological deposits are discovered during construction, principally as a result of the archaeological watching brief, time and resources will need to be made available for the excavation and recording of any such deposits prior to their removal/truncation.

Lincolnshire County Council
A158/C541 Coastal Access Improvement
Archaeological Desk-Based Assessment

References

- Crowson, A, Lane, T. & Reeve, J. (2000) *Fenland Management Project Excavations 1991 – 1995*. Sleaford, Heritage Trust of Lincolnshire.
- DoE. (1990) *Planning Policy Guidance Note 16: Archaeology and Planning*. London, HMSO.
- DoE. (1994) *Planning Policy Guidance Note 15: Planning and the Historic Environment*. London, HMSO.
- Fenwick, H. *et al.* (2001) "The archaeological survey of the Lincolnshire Marsh" in, S. Ellis, H. Fenwick, M. Lillie & R. Van de Noort (ed.), *Wetland Heritage of the Lincolnshire Marsh*. Hull, Humber Wetlands Project.
- Everson, P. (2002) *An Archaeological Resource Assessment of Medieval Lincolnshire*. Unpublished report.
- Gelling, M. (1993) *Place-names in the Landscape: the geographical roots of Britain's place-names*. London, J.M. Dent.
- Hayes, P.P & Lane. T.W. (1992) *The Fenland Project Number 5: Lincolnshire Survey, The South-West Fens*. Boston, Heritage Trust of Lincolnshire.
- Kershaw, A. (1998) "The Lincolnshire National Mapping Programme Project" in, R.H. Bewley (ed.), *Occasional Papers in Lincolnshire History and Archaeology No. 11: Lincolnshire's Archaeology from the Air*. Gainsborough, Society for Lincolnshire History and Archaeology. pp. 18 – 22.
- Lane, T. (2001) "Salt Making", in S. Bennet and N. Bennet (ed.), *An Historical Atlas of Lincolnshire*. Chichester, Phillimore. pp. 26 – 27.
- Leahy, K. (1993) "The Anglo-Saxon Settlement of Lindsey" in A. Vince (ed.), *Pre-Viking Lindsey*. Lincoln, CLAU. pp. 29 – 44.
- May, J. (2001a) "The beginnings of farming: the Neolithic period", in S. Bennet and N. Bennet (ed.), *An Historical Atlas of Lincolnshire*. Chichester, Phillimore. pp. 10 – 11.
- May, J. (2001b) "The later Iron Age", in S. Bennet and N. Bennet (ed.), *An Historical Atlas of Lincolnshire*. Chichester, Phillimore. pp. 12 – 13.
- Palmer, R. (1996) "Air photo interpretation and the Lincolnshire Fenland", *Landscape History* Vol. 18. pp. 5 – 16.
- Simmons, B. (2001) "Iron Age and Roman Coasts around the Wash", in S. Bennet and N. Bennet (ed.), *An Historical Atlas of Lincolnshire*. Chichester, Phillimore. pp. 18 - 21.
- Thompson, F.H. (1954) "Anglo-Saxon Discoveries at Partney, Lincolnshire", *Antiquaries Journal* Vol. 34. pp. 229 – 232.
- Whitwell, J.B. (1970) *Roman Lincolnshire*. Lincoln, History of Lincolnshire Committee Lincolnshire Local History Society.
- Whitwell, J.B. (2001) "Roman Lincolnshire", in S. Bennet and N. Bennet (ed.), *An Historical Atlas of Lincolnshire*. Chichester, Phillimore. pp. 14 - 15.

Lincolnshire County Council
A158/C541 Coastal Access Improvement
Archaeological Desk-Based Assessment

Williams, A & Martin, G.H. (1992) *Domesday Book: A Complete Translation*. London, Penguin Books.

Williamson, T. (1997) "Fish, fur and feather: Man and nature in the post-medieval landscape" in K. Barker & T. Darvill (eds.), *Making English Landscapes: Changing Perspectives*. Oxford, Oxbow Books. pp. 92 – 117.

Cartographic Sources

Ordnance Survey 1st Edition 6" County Series-Lincolnshire c.1892. Sheet LXXV, LXXVI, LXXXIII, LXXXIV.

Ordnance Survey 2nd Edition 1:2500 County Series-Lincolnshire 1906. Sheet LXXV 13, LXXV 15, LXXXIII 3, LXXX111 4, LXXXIII 7.

LDAP 4/16 – Gunby, Enclosure Act and Plan, 1776.

Lindsey Encl. 93 – Welton in the Marsh, Enclosure Act and Plan, 1795.
S.ANC 5/A/8 – Welton le Marsh, Plan, 1890.

HIG 18/2/1 – Orby Wood, Plan, 1790.

3LRA 6/4 – Bratoft, Plan of the Lowlands and Drains, 1818.

D333 – Bratoft, Tithe Award and Plan, 1843.

Lincolnshire County Council
A158/C541 Coastal Access Improvement
Archaeological Desk-Based Assessment

Appendix A: Gazetteer of Sites of Cultural Heritage Interest

Site No 1 **SMR No** LI392.2.15 **Site Type** Ridge and furrow
Period Medieval **Status** Undesignated **Significance** Local
Admin Area Burgh le Marsh, East Lindsey, Lincolnshire **NGR** TF 4750 6750
Description Area of ridge and furrow located to the east of the junction of the A158 and C541.
Source 1 Lincolnshire Sites and Monuments Record

Site No 2 **SMR No** LI42944 **Site Type** Road
Period Roman **Status** Undesignated **Significance** Regional
Admin Area Burgh le Marsh, East Lindsey, Lincolnshire **NGR** TF 5000 6520
Description Roman road, 42 km long from Lincoln to Burgh le Marsh. The course of the road appears as a line of gravel or a light coloured soilmark.
Source 1 Lincolnshire Sites and Monuments Record

Site No 3 **SMR No** **Site Type** Trackway
Period Post-medieval **Status** Undesignated **Significance** Local
Admin Area Orby, East Lindsey, Lincolnshire **NGR** TF 4850 6750
Description Trackway running north from the C541 (1).
Source 1 Ordnance Survey 1st edition County Series c.1892

Site No 4 **SMR No** **Site Type** Trackway
Period Post-medieval **Status** Undesignated **Significance** Local
Admin Area Orby, East Lindsey, Lincolnshire **NGR** TF 4850 6750
Description Trackway running north from the C541 (1).
Source 1 Ordnance Survey 1st edition County Series c.1892

Lincolnshire County Council
A158/C541 Coastal Access Improvement
 Archaeological Desk-Based Assessment

Site No 5 **SMR No** **Site Type** Trackway
Period Post-medieval **Status** Undesignated **Significance** Local
Admin Area Orby, East Lindsey, Lincolnshire **NGR** TF 4850 6750
Description Trackway running north from the C541 (1).
Source 1 Ordnance Survey 1st edition County Series c.1892

Site No 6 **SMR No** **Site Type** Trackway
Period Post-medieval **Status** Undesignated **Significance** Local
Admin Area Orby, East Lindsey, Lincolnshire **NGR** TF 4950 6750
Description Trackway running north from the C541 (1).
Source 1 Ordnance Survey 1st edition County Series c.1892

Site No 7 **SMR No** **Site Type** Trackway
Period Post-medieval **Status** Undesignated **Significance** Local
Admin Area Orby, East Lindsey, Lincolnshire **NGR** TF 4950 6750
Description Trackway running north from the C541 (1).
Source 1 Ordnance Survey 1st edition County Series c.1892

Site No 8 **SMR No** LI43701/43701 **Site Type** Settlement
Period Medieval **Status** Undesignated **Significance** Local
Admin Area Orby, East Lindsey, Lincolnshire **NGR** TF 4910 6730
Description Medieval settlement remains in the form of earthworks and cropmarks are visible in and around the present village (1). A substantial moated site (SAM 30211) containing the remains of house platforms and formal gardens is situated within the village core, immediately to the south of the study corridor [2]
Source 1 Lincolnshire Sites and Monuments Record
Source 2 Schedule of Monuments: DCMS/English Heritage

Site No 9 **SMR No** **Site Type** Gunby Park - Historic Park
Period Post-medieval **Status** Grade II [1] **Significance** Regional
Admin Area Burgh le Marsh, East Lindsey, Lincolnshire **NGR** TF 4666
Description 18th century park surrounding the remains of early 18th century formal gardens with 19th century and 20th century additions, which together form the setting for an 18th century house [1].
Source 1 English Heritage Register of Historic Parks and Gardens.

Lincolnshire County Council
A158/C541 Coastal Access Improvement
 Archaeological Desk-Based Assessment

Site No 10 **SMR No** **Site Type** Ridge and furrow
Period Medieval **Status** Undesignated **Significance** Local
Admin Area Burgh le Marsh, East Lindsey, Lincolnshire **NGR** TF 4750 6650
Description Area of ridge and furrow flanking the eastern and western sides of Burgh le Marsh railway station.
Source 1 Lincolnshire Sites and Monuments Record

Site No 11 **SMR No** LI43309 **Site Type** Railway station
Period Post-medieval **Status** Undesignated **Significance** Local
Admin Area Burgh le Marsh, East Lindsey, Lincolnshire **NGR** TF 4770 6650
Description Burgh le Marsh railway station consists of platforms, booking hall, signal box, railway workers house, a brick goods shed and a waiting room. The signal box is on the north platform and is brick with a slate roof. The waiting room is on the west platform and is also brick with a slate roof. There is also a goods platform. It was opened on the 4th September 1848. It has also been a museum.
Source 1 Lincolnshire Sites and Monuments Record.

Site No 12 **SMR No** LI41567 **Site Type** Pottery scatter
Period Roman **Status** Undesignated **Significance** Local
Admin Area Burgh le Marsh, East Lindsey, Lincolnshire **NGR** TF 4920 6650
Description Romano-British shelly-ware potsherds found in a field to the NW of Burgh le Marsh.
Source 1 Lincolnshire Sites and Monuments Record

Site No 13 **SMR No** LI393.2 **Site Type** Cropmark/earthworks?
Period Unknown **Status** Undesignated **Significance** Local
Admin Area Burgh le Marsh, East Lindsey, Lincolnshire **NGR** TF 4950 6550
Description Medieval enclosures and a boundary
Source 1 Lincolnshire Sites and Monuments Record

Site No 14 **SMR No** LI451.4 **Site Type** Field system
Period Medieval **Status** Undesignated **Significance** Local
Admin Area Burgh le Marsh, East Lindsey, Lincolnshire **NGR** TF 5050 6550
Description Cropmarks/earthworks of medieval field system.
Source 1 Lincolnshire Sites and Monuments Record

Lincolnshire County Council
A158/C541 Coastal Access Improvement
 Archaeological Desk-Based Assessment

Site No 15 **SMR No** LI43662 **Site Type** Tile fragment
Period Romano-British **Status** Undesignated **Significance** Local
Admin Area Burgh le Marsh, East Lindsey, Lincolnshire **NGR** TF 5100 6520
Description A Romano-British tile fragment was found during a watching brief on the Burgh le Marsh – Ingoldmells Rising Main (1).
Source 1 Lincolnshire Sites and Monuments Record

Site No 16 **SMR No** LI43663 **Site Type** Settlement
Period Medieval **Status** Undesignated **Significance** Local
Admin Area Burgh le Marsh, East Lindsey, Lincolnshire **NGR** TF 5100 6520
Description A sherd of medieval pottery found during a watching brief on the Burgh le Marsh – Ingoldmells Rising Main (1).
Source 1 Lincolnshire Sites and Monuments Record

Site No 17 **SMR No** LI43664 **Site Type** Pottery scatter
Period Medieval **Status** Undesignated **Significance** Local
Admin Area Burgh le Marsh, East Lindsey, Lincolnshire **NGR** TF 5100 6520
Description A scatter of medieval pottery was found during a watching brief on the Burgh le Marsh – Ingoldmells Rising Main.
Source 1 Lincolnshire Sites and Monuments Record

Site No 18 **SMR No** **Site Type** Trackway
Period Post-medieval **Status** Undesignated **Significance** Local
Admin Area Burgh le Marsh, East Lindsey, Lincolnshire **NGR** TF 4850 6650
Description Trackway
Source 1 Ordnance Survey 1st edition County Series c.1892

Site No 19 **SMR No** **Site Type** Trackway
Period Post-medieval **Status** Undesignated **Significance** Local
Admin Area Burgh le Marsh, East Lindsey, Lincolnshire **NGR** TF 4950 6650
Description Trackway leading off from Orby Lane
Source 1 Ordnance Survey 1st edition County Series c.1892

Lincolnshire County Council
A158/C541 Coastal Access Improvement
 Archaeological Desk-Based Assessment







Site No 20 **SMR No** **Site Type** Trackway
Period Post-medieval **Status** Undesignated **Significance** Local
Admin Area Burgh le Marsh, East Lindsey, Lincolnshire **NGR** TF 5050 6550
Description Trackway between the Catchwater Drain and fields to the north of Common Lane (1).
Source 1 Ordnance Survey 1st edition County Series c.1892

Site No 21 **SMR No** **Site Type** Trackway
Period Post-medieval **Status** Undesignated **Significance** Local
Admin Area Burgh le Marsh, East Lindsey, Lincolnshire **NGR** TF 5050 6550
Description Trackway running northward from main road to the east of Burgh le Marsh (1).
Source 1 Ordnance Survey 1st edition County Series c.1892

Site No 22 **SMR No** **Site Type** Trackway
Period Post-medieval **Status** Undesignated **Significance** Local
Admin Area Burgh le Marsh, East Lindsey, Lincolnshire **NGR** TF 5050 6550
Description Trackway leading off from and running parallel to the main road to the east of Burgh le Marsh (1).
Source 1 Ordnance Survey 1st edition County Series c.1892

Site No 23 **SMR No** **Site Type** Structure - house
Period Early Modern **Status** Grade II [1] **Significance** Regional
Admin Area Welton le Marsh, East Lindsey, Lincolnshire **NGR** TF 46 NE
Description Farmhouse. Late 18th century. Red brick in English Bond, stucco dressings, deeply hipped pantile roof with 3 red brick wall stacks. 2 Storey, 3 bay front having central glazed door plus overlights, flanked by single glazing bar sashes. To first floor three similar smaller windows. All opening have splayed stucco lintels [1].
Source 1 English Heritage



	- A158 Proposed Route		- Glacial fill
	- C541 Proposed Route		- Glacial sand and gravel
	- Sites of Cultural Heritage Interest		- Marine deposits

LINCOLNSHIRE COUNTY COUNCIL
 Reproduced from the 1996 OS
 Mapping with the permission of
 Her Majesty's Stationary Office
 © Crown Copyright.
 Unauthorised reproduction
 infringes Crown Copyright and
 may lead to civil proceedings
 OS LICENCE LA076732

Lincolnshire - Part of the East Midlands Region
 LINCOLNSHIRE COUNTY COUNCIL
 HIGHWAYS & PLANNING DIRECTORATE
 YILSONG, B.Sc., C.Eng., M.I.C.E., M.I.H.T. Head of Design and Construction
 Witham Park House, Witham Park, Waterside South, Lincoln LN3 7JN

DRG.No. **B1202063/Archaeology/03**
 Structure No.

Rd No. Parish:
 Scheme: **EAST COAST ACCESS**
 Drg. Description **A158/C541 Coastal Access Improvement**
 A158 Burgh Le Marsh & C541 Orby Bypass

CONTRACT SHEET No:
 SCALE: Approved by (Snr. Design Eng.): G. Willis
 1:10 000 DATE: June 2002
 Draughted By: M.S Checked by: G.W DATE: May 2002

