

Historic Landscape Report

Lincoln Eastern Bypass



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Produced for

Lincolnshire County Council

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1 Summary

- 1.1 Mouchel has been commissioned by Lincolnshire County Council to implement a programme of historic landscape survey prior to the commencement of construction works for the Lincoln Eastern Bypass scheme. The scheme will involve the loss of some historic landscape features and will change the shape and size of existing field patterns as well as long distance views across the landscape.
- 1.2 An Environmental Statement (ES) in support of the scheme was published in December 2012 and planning permission was granted in 2013 subject to planning conditions (including conditions for historic landscape survey). The Cultural Heritage chapter of the ES (Mouchel 2012) provides detailed information on the archaeological and historical background of the scheme corridor. The requirement for a level 1 landscape survey has been identified in the Lincoln Eastern Bypass Environmental Statement and subsequent planning conditions (Planning Application Reference L/01110/13, Conditions 8a and 8b).
- 1.3 This report forms part of the historic landscape survey undertaken within the area of the Lincoln Eastern Bypass scheme. The completed survey, which included a written, drawn and photographic record, and accompanying report is required to reduce adverse impacts on surviving historic landscape features by the proposed scheme and will be used to discharge the planning conditions.

2 Site Location and Description

2.1 Description of the Proposed Scheme

- 2.1.1 The Proposed Scheme will involve the construction of a 7.5km long single carriageway road linking the existing Northern Relief Road to the A15 south of Lincoln (see Figure 1). It will run east of the city of Lincoln and the villages of Canwick and Bracebridge Heath, and to the west of the outlying villages of North Greetwell, Cherry Willingham, Washingborough and Branston. It also provides a crossing of the River Witham, Lincoln to Market Rasen railway line and the Lincoln to Spalding railway Line (Mouchel 2012). The site commences at National Grid Reference (NGR) TF00557333 in the north and finishes at SK98816649 in the south.
- 2.1.2 Topography of the land along the northern and southern extents of the scheme are raised on plateau, with land sloping and dropping into a valley for the River Witham along the central portion of the proposed bypass.
- 2.1.3 Land use in the immediate vicinity of the Proposed Scheme is predominantly arable farmland with various habitats sparsely represented including: improved and semi improved grassland, broadleaved woodland and plantation, and hedgerows. An area of farmland along the River Witham is classified as Flood Plain Grazing Marsh.
- 2.1.4 A single SSSI, Greetwell Hollow Quarry, abuts the western edge of the proposed Greetwell Road roundabout and is designated for its geological interest and is in favourable condition.
- 2.1.5 There are five non statutory designated sites, but no statutory sites, for ecology and nature conservation within the study area. These include three Sites of Nature Conservation Interest (SNCIs) - Greetwell Wood, Washingborough Junction Canwick Hall Woods - plus two Local wildlife Sites (LWS) - Witham Corridor, and Greetwell Junction Railway Embankment.
- 2.1.6 A single Scheduled Monument - Greetwell Medieval Village, Cultivation and Post Medieval Garden Remains - has been identified in proximity to the Proposed Scheme, to the east of the proposed Greetwell Road roundabout. Archaeological remains have been found in the study area as far back as the Mesolithic period. Additionally, Lincoln was an important town in Roman Britain with the study area containing settlements and likely artefacts and findspots (Mouchel 2012).

2.2 Geology and Topography

- 2.2.1 North of the River Witham the study area contains limestone deposits of the Jurassic period with sections of Bilsworth Clay. There are alluvial deposits in the floodplain area of the river. South of the River Witham there are river terrace sands and gravels as far as Washingborough Road. Further south is the steep limestone escarpment with underlying deposits of Jurassic limestone and clay.

- 2.2.2 The study area is located along the slope of the Lincoln Edge which is a limestone ridge running north to south to the east of the city of Lincoln. It is broken by the Lincoln Gap where the River Witham passes through.
- 2.2.3 The average elevation of the northern portion of the Proposed Scheme (north of the river) is 33m AOD. The Witham valley cuts the scheme east to west with an elevation of 4m AOD at the river's edge. Further south the elevation begins to rise again to 40m AOD at Heighington Road and 66m at Sleaford Road.
- 2.2.4 The land is largely under agriculture. The field boundaries tend to be hedgerows with some post and wire fences. The area becomes more urban to the west, towards the city.

3 Planning Background

3.1 National Planning Policy

3.1.1 The National Planning Policy Framework (NPPF), published in 2012, sets out policies for managing heritage assets through development. Paragraph 141 of the NPPF details how heritage assets that are to be justifiably lost or harmed through development should be recorded. The recording should be proportionate to the loss and the significance of the asset.

3.1.2 The Hedgerows Regulations (1997) sets out the criteria for identifying Important Hedgerows including criteria based on historical or archaeological significance as follows:

- Hedgerow must have been in existence for 30 years or more and;
 - the hedgerow has marked/marks the boundary between parishes before 1850 (as shown on historic maps and other documents);
 - or, the hedgerow has marks the boundary of a Scheduled Monument or asset recorded on the Historic Environment Record;
 - or, the hedgerow has marked/ marks the boundary of a pre-1600 estate, manor or field system pre-dating the Enclosure Acts.

3.1.3 The regulations protect hedgerows that are deemed important and requires a Hedgerow Removal Notice to uproot part or whole sections of Important Hedgerows.

3.2 Guidance Documents

3.2.1 The following survey and report has been prepared in accordance with the following guidance documents:

- Understanding the Archaeology of Landscapes, English Heritage (2007)
- Archaeological Handbook, Lincolnshire County Council (2010)

3.3 Planning Background

3.3.1 An application for the Lincoln Eastern Bypass scheme was submitted in December 2012 (Planning Application Reference L/0110/13). The application was supported by an Environmental Statement which included an assessment of Cultural Heritage. The Cultural Heritage chapter recommended a number of mitigation measures relating to archaeological remains, built heritage assets and historic landscapes.

3.3.2 The scheme received planning permission in June 2013. The decision was subject to a number of conditions. Those relating to historic landscape are as follows:

Condition 8 (a): No development shall take place until the details of the historic landscape survey referred to in Chapter 12, Paragraph 12.6.15 of the Environmental Statement have been submitted to and approved in writing by the CPA. The submitted scheme shall provide for the recording of the identified Historic

Landscapes affected by the development (as identified by the Drawing No. 1030171-LEB-EIA-HER-003a contained within Section 12.7 (Volume 2) of the Environmental Statement) and should include measured survey of any field boundaries to be removed as well as photographic survey of the wider area and long views to and from the Historic Landscape Types. The historic landscape survey shall be carried out prior to any construction works taking place within the identified Historic Landscape areas, in full accordance with the approved scheme.

(b) A copy of the final report relating to the above shall be submitted within three months of the work to the County Planning Authority for approval (or according to an agreed programme). The material and paper archive shall be deposited with an appropriate archive in accordance with guidelines published in the Lincolnshire Archaeological Handbook.

4 Aims and Objectives

4.1 The principal aims of the historic landscape survey are as follows:

- To record surviving historic landscape features above ground that are likely to be affected by the proposed scheme;
- To determine the presence/absence, form and condition of archaeological remains visible above ground;
- To suggest likely date and chronological relationships, character and significance of features where possible.

5 Methodology

5.1 General Methodology

- 5.1.1 A level 1 landscape survey as defined by English Heritage 2007 *Understanding Archaeology in the Landscape* has been prepared. The survey has been undertaken by a suitably qualified archaeologist in accordance with the 'Archaeological Brief: for Scheme of Historic Landscape Survey' issued by the Lincolnshire Historic Environment Team and the Written Scheme of Investigation approved by Lincolnshire Historic Environment Team (Mouchel 2013).

5.2 Archive Research

- 5.2.1 A limited amount of archive research has been undertaken in order to understand the historical background of the landscape. This has involved an examination of available historic maps, photographs, plans and other records held by Lincoln Library and Lincolnshire Archives. Unfortunately not all Tithe and Enclosure maps are available for the area but where they were, these have been used and referred to in the text.

5.3 Written record

- 5.3.1 A written record has been made of the individual features using *pro forma* recording sheets. Each sheet included a general description including approximate sizes, shapes, material and any other observations; comment of condition; comment of significance and photograph(s). A gazetteer of the features can be seen in Appendix A.

5.4 Drawn record

- 5.4.1 The historic landscape features have already been subject to a detailed topographic survey as part of the proposed scheme. This survey has been used to map the historic landscape features and was checked and enhanced where necessary.
- 5.4.2 A numbering system has been used to identify the individual features to allow for cross referencing between the drawn, photographic and written records. The references are given in Appendix A.
- 5.4.3 Following the site survey, the drawings were prepared in AutoCAD and/or Adobe Illustrator. Plans are at 1:10000 and use appropriate conventions to show features.

5.5 Photographic record

- 5.5.1 A detailed photographic record has been made using a 35 mm single lens reflex digital camera with a tripod where necessary. An appropriately-sized graduated scale (1m or 2m) has been used in photographs where access and health and safety allowed. A full photographic register detailing the frame, description, direction of view and date, has been made and can be viewed in Appendix B. The location and direction of photographs have been shown on Figures 3.1 to 3.10 and can be cross referenced with the gazetteer. The full set of photographic prints will be deposited

with a copy of this report at The Collection, Lincoln (Museum accession code LCNCC : 2013.169 and site code LEB13).

6 Archaeological and Historical Background

6.1 Historic Landscape Character

6.1.1 The Proposed Scheme falls within three different Historic Landscape Character regions as defined by Lincolnshire County Council (2011). These regions include Regional Character Area 2: Northern Cliff, Regional Character Area 7: Southern Cliff and Regional Character Area 9: The Fens. These regions can be further subdivided into character zones. The Historic Landscape Character zones as defined by Lincolnshire County Council within the study area include the city of Lincoln (not assessed in detailed since it is a built up area); the Lincoln satellite settlements within the Northern Cliff; the Witham Fens; the Southern Cliff heath and the Fen Edge settlements within the Southern Cliff. The landscape types can be seen in Drawing No. 1030171-LEB-EIA-HER-003a and Drawing No. 1030171-LEB-EIA-HER-003b. The historical background of individual features can be seen in Appendix A.

City of Lincoln (LIN)

6.1.2 The City of Lincoln is not described by the Historic Landscape Characterisation Project due to its complex urban nature. The older part of the city dominates the skyline of its surrounding hinterland as a result of its location on the limestone edge. At the very height of the edge is the Cathedral and Castle. The sections of the city which fall within the study area urban in character and consist of post-medieval residential, industrial and institutional buildings. These buildings tend to have been built in the 19th and 20th centuries as the city began to expand. The construction materials vary from red brick to limestone rubble and to later concrete and steel structures. Larger buildings tend to line the main streets whilst rows of terraced housing span from these routes. The main roads are the A15 (a former Roman road), B1190 and B1308.

The Lincoln Satellite Settlements (NCL1)

6.1.3 The south western tip of this character zone falls within the study area. The zone is characterised by small nucleated settlements which most likely have origins in the medieval period and have gradually grown to the size of small towns. The closest of these to the Proposed Scheme are North Greetwell and Cherry Willingham. The buildings of these areas tend to be residential and were built in the mid to late 20th century. Some historic buildings remain at the core of the villages and tend to be 18th or 19th century cottages with larger buildings such as churches and public houses. Amongst the nucleated settlements are scattered farmsteads which tend to date from the 18th and 19th centuries and include farmhouses and associated contemporary farm buildings. The rural areas of the character zones tend to comprise flat fields of rectangular shape demonstrating the enclosure of the land in the 18th and 19th centuries.

6.1.4 Prehistoric, Romano-British and Roman features have been found throughout the study area within this character zone. It is likely that the area, therefore, acted as the Roman hinterland to the city of Lincoln with some isolated farmsteads. The agricultural use of the land continued into the Saxon and medieval periods. Some of

land is likely to have been held by the local monasteries and would have been sold to local gentry at the time of the dissolution. The land was largely enclosed in the 18th and 19th centuries. Some of these rectangular fields were amalgamated in the 20th century to accommodate increased use of machinery (Lincolnshire County Council 2011).

The Witham Fens (FEN1)

6.1.5 The western end of the Witham Fens character zone falls within the centre of the study area between the two railway lines. This character zone was probably reclaimed during the Roman period and used for salt extraction during this period. Shrinkage of the peat fen due to low water table levels led to some flooding meaning that it probably was not occupied by permanent settlements in the post Roman period. However, Greetwell medieval village stands within this character area although is located on higher ground. Today it remains as a small isolated farmstead of Greetwell Hall with adjacent church.

6.1.6 The area is largely made up of regular fields as a result of planned enclosure in the 18th and 19th centuries. Some of these fields were amalgamated in the mid 20th century onwards. Many of the surviving farmsteads within this zone are isolated farmsteads (Lincolnshire County Council 2011, 90-91).

Southern Cliff Heath (SCL1)

6.1.7 The Southern Cliff Heath character zone covers the majority of the south section of the study area, south of the river. The limestone scarp runs north to south through this zone, dropping gradually to the east. It is truncated by the main A15 road (formerly a Roman road) and smaller roads running east to west. The zone is characterised by nucleated settlements of which Bracebridge Heath and Branston are the closest to the study area. These settlements tend to have a historic core with later 20th century development around the periphery. The landscape is also composed of isolated farmsteads, many of which date from the 18th or 19th century and are constructed of limestone rubble with slate or pantile roofs.

6.1.8 The Roman roads of Ermine Street and Mareham Lane are still largely discernible along modern roads and connected the city with its hinterland and other Roman settlements. A possible Roman villa is located in the northern part of the character zone, south of the river. During the medieval period the zone was characterised by nucleated settlements with open field systems. Some of the lands were held by monasteries and were worked by the monks or by tenant farmers. One such grange is Sheepwash Grange, located south of the river. Like much of the study area, the character zone was subject to planned enclosure in the 18th and 19th centuries resulting in the regular fields which largely remain today. New roads and railways were also developed and truncate the zone from east to west. During the 20th century the south edge of the study area became used for airfields including Bracebridge and RAF Waddington. This in turn led to further development of residential areas on the edges of existing settlements (Lincolnshire County Council 2011).

The Fen Edge Settlements (SCL2)

- 6.1.9 A small section of this character zone at its western tip falls within the study area where the land slopes downwards to the east from the limestone ridge. Like the Witham Fens character zone, this area was most likely occupied during the Iron Age and Roman period as the land was reclaimed. During the medieval period there were nucleated settlements, such as Washingborough, with associated open field systems. The land was then largely enclosed as part of planned enclosure in the 18th and 19th centuries (Lincolnshire County Council 2011, 73-74). The section of the character zone within the study area is largely composed of residential housing constructed in the 20th century that has grown up around the periphery of the village of Washingborough.

7 Description

7.1 Introduction

7.1.1 For the purposes of identification and description, the survey area has been divided into separate areas as defined by existing roads. Each area is described from north to south. Descriptions and photographs of individual features can be viewed in Appendix A. The following section offers a summary of the historical, evidential and physical significance of the historic landscape and its features.

7.2 Bunkers Hill/ Wragby Road East (A15/ A158) to Greetwell Road (B1308) (Figures 3.1 to 3.3)

7.2.1 This section of the landscape is located within an area characterised as the Lincoln Satellite Settlements. It is located along the north eastern fringe of the city of Lincoln and the nearest residential settlement is modern (constructed early 21st century) to the north-west. Historically the area falls within the parish of Greetwell.

7.2.2 The area covered by the proposed scheme comprises arable fields separated by hedgerows. The majority of these hedgerows follow historic boundaries shown on historic mapping dating to 1848 (Greetwell Tithe) but the boundaries may be earlier (Reference H6, H9, H11 and H12). The hedgerow which follows the A15/ A158 roundabout (Reference H1), however, is likely to be contemporary with the roundabout itself which was introduced in the late 1970s/ 1980s according to historic mapping. The hedgerow to the south of this (Reference H2) is not shown until recent OS mapping and is, therefore, likely to be contemporary with the 21st century housing development to the west. The boundaries running alongside the roads (Hawthorn Road, Reference Rd2; Greetwell Fields, Reference Rd3 and Greetwell Road, Reference Rd4) are likely to be contemporary with the roads themselves which are shown on the 1848 Greetwell Tithe map (Reference H3, H4, H5, H7, H8 and H10). However, Hawthorn Road and Greetwell Road are likely to have been widened in the modern period to accommodate increasing numbers of modern vehicles and the boundaries would have moved accordingly.

7.2.3 The drain which runs under the A15/A158 and south/ south-east (Reference D1) and the drain from the unnamed lane to the east (Reference D2) together with the pond (Reference P1), form a natural boundary although their regularity and straight course suggests they are manmade features or has been modified to drain the land in the post-medieval period (probably in the 18th or early 19th centuries). Both drains are shown on the 1848 Tithe map.

7.2.4 The small area of woodland at the corner of Hawthorn Lane and Greetwell Fields (Reference W1) is also shown on the 1848 Greetwell Tithe map in 1848.

7.2.5 The fields within this section are irregular and of different, odd shapes. All of the fields are used for arable farming meaning that any earthworks of earlier features that may have been located in these areas have been removed. Deeper archaeological deposits including evidence of prehistoric and Roman activity,

however, are known to survive.

7.2.6 Greetwell Quarry (Reference Q1) is a modern ironstone quarry which forms an extensive and deep cut in the landscape. The quarry is an extension of the Ironstone Mines which were formerly operated to the west between the late 19th century and 1939. The land above the quarry remains in arable use but there is a modern fenced area around the edges of the quarry for safety reasons.

7.3 Greetwell Road (B1308) to Washingborough Road (B1190) (Figures 3.3 to 3.5)

7.3.1 This section of the landscape is located within three different character areas. The first of these is the Lincolnshire Satellite Settlements which covers the area from Greetwell Road to the railway. The nearest settlement, however, is located to the west and is part of the periphery of the city of Lincoln. Greetwell was formerly a larger settlement but is now reduced to Greetwell Hall Farm, Greetwell Hall and Greetwell Church. The earthworks of the Deserted Medieval Settlement can be seen in the surrounding fields of these properties. The development proposals do not impact upon the earthworks.

7.3.2 South of the railway line the area is characterised as South Cliff Heath to the south-west and the Witham Fens to the south-east. The whole of the area between Greetwell Road and the River Witham is historically part of the Greetwell parish.

7.3.3 North of the railway the land is composed of large arable fields separated from the road and railway by hedgerows (Reference H14 and H15). As explained above, Greetwell Road is shown on the 1848 Tithe map but the hedgerow itself may be later or may have been moved if the road has been widened in the modern period.

7.3.4 The Sheffield and Lincolnshire Extension Railway, Market Rasen Branch (Reference R1), was opened in 1848 and continues to operate a regular service. It is set within a slight cut and is well screened by the hedgerows either side of it (Reference H15 and H16). The fields to the south of the railway are currently used as arable and again, are separated by hedgerows. The track which runs from Greetwell in the north-east to the west and north-west towards Lincoln is shown on the 1848 Greetwell Tithe map and was probably a route for the farmer to access his land (Reference T1). The fact that the route travels to a crossing along the railway suggests it is of mid 19th century date.

7.3.5 The fields between the track and the Spalding and Lincoln Railway line (Reference R4) are currently used as pasture fields. The field boundaries are currently marked with hedgerows (Reference H17 to H19). The boundaries themselves are shown on the Greetwell 1848 Tithe map. Hedgerow H18 marks the modern parish boundary of Greetwell. The fields contain the remains of a Bronze Age barrow cemetery but no earthworks relating to the barrows are visible from the ground. Barrows have been identified as cropmarks on aerial photographs.

7.3.6 The small section of woodland (Reference W2) is also shown on the 1848 Tithe map

and remains as a bank of dense trees. The small pond to the north of the river (Reference P2) is not shown on historic maps and is likely to be a modern feature intended to relieve some of the water from the fields. The spoil from the pond is located immediately north of it.

- 7.3.7 The River Witham (Reference WC2) was extended and made navigable from Lincoln to Boston during the Roman period. During this time and largely until the advent of the railways, the Witham Navigation was an important communication link which transported goods in and out of Lincoln and to and from the port at Boston. The Lincoln Corporation took responsibility for the navigation and in 1762 an Act was passed to improve it. Various Acts were passed during the early 19th century to improve the navigation and drainage but these were largely associated with improving the locks and drainage in and around Boston (NMR record 1343043). The North and South Delph are probably associated with the works undertaken in the late 18th and early 19th centuries, particularly given their straight course (Reference WC1 and WC3).
- 7.3.8 The East Lincolnshire Railway (Reference R2), later the Great Northern Lincolnshire Loop line, formerly ran along the raised embankment located between the South Delph and the River Witham. It was opened in 1848 but closed between 1964 and 1970. The line is now a fully tarmaced public footpath. Washingborough Station is located along the former line to the east of the proposed scheme.
- 7.3.9 The Spalding and Lincoln Railway to the north of Washingborough Road (Reference R4) also passes through the proposed scheme. In this area the railway is located on a high embankment and continues to operate a regular freight service. The line was opened in 1882 as a freight line to transport goods (mainly coal) between Cambridgeshire and Yorkshire (Brodrigg 1988, 133). The railway underpass (Reference U1) which passes underneath the railway in the area of the proposed scheme was probably constructed at around the same time in order to maintain access to the farmer's land. The railway later became the Great Northern and Great Eastern Joint Railway (as shown on the 1889 Ordnance Survey map) and then the London and North Eastern Railway (as shown on the 1932 Ordnance Survey map). The railway embankment immediately to the north of the GNR and GER Railway is the former GNR Avoiding Line (Reference R3). This branch travelled north-east and between the North and South Delph to join the East Lincolnshire Railway or Lincolnshire Loop branch. The line has since been closed and only the embankment remains.
- 7.3.10 Washingborough Road (Reference Rd5) is shown on the 1889 Ordnance Survey map and has continued to be one of the main routes from Lincoln to Washingborough. The road itself is a modern single carriageway road. The hedgerows either side of the road (Reference H20 and H21) are probably contemporary with it but may have been moved if the road has been widened to accommodate modern traffic.

7.4 Washingborough Road (B1190) to Heighington Road (Figures 3.5 to 3.6)

7.4.1 The section of landscape between Washingborough and Heighington Road is located within the Witham Fens and Southern Cliff Heath character areas. It is historically within the parishes of Washingborough and Canwick and is composed of long strips of fields. The field boundaries are marked with hedgerows (Reference H22) and are shown on the 1889 Ordnance Survey map but the boundaries may be much earlier, particularly given the proximity of a former monastic grange site to the east of the proposed scheme known as Sheepwash Grange. The farm is an 18th century farm located on the site of a medieval Cistercian Grange wool store. The parish boundary of Washingborough follows the northern end of hedgerow H22 (see Figure 3.5) but this is a modern parish boundary (not pre-1850).

7.4.2 Heighington Road (Reference Rd6) is shown on the 1889 Ordnance Survey map. The hedgerows (References H23 to H26) either side of the road may be contemporary with it but if the road has been widened to accommodate modern traffic, it is likely that these have been moved.

7.5 Heighington Road to Lincoln Road (B1188) (Figures 3.6 to 3.8)

7.5.1 The whole of this part of the landscape is located within the Southern Cliff Heath. The topography is steep with a slope down from Heighington Road to Lincoln Road. Historically, this section of the landscape is part of the Canwick parish. Unfortunately, the tithe and enclosure plans for the parish are not publicly available.

7.5.2 The long and thin field patterns in this area were probably laid out in the early 19th century as part of the enclosure of the land but it is possible that the field patterns have earlier origins. The boundaries are all shown on the 1889 Ordnance Survey map and are currently marked by hedgerows (References H27 to H31). The track from Lincoln Road (Track T3) is also shown on the 1889 map. The drain or stream to the south end of this area (Reference D3) is a natural feature and is again shown on the 1889 OS map.

7.5.3 Lincoln Road (Reference Rd7) is a main single carriageway which is shown on the 1889 Ordnance Survey map. Again, the hedgerows (Reference H32 and H33) are likely to be contemporary with the road but may have been moved if the road was widened to accommodate modern traffic.

7.6 Lincoln Road (B1188) to Sleaford Road (A15) (Figures 3.8 to 3.10)

7.6.1 The section of landscape between Lincoln Road and Sleaford Road is contained within the Southern Cliff Heath character area. Historically, it is contained within the parishes of Canwick and Bracebridge Heath. The topography is generally flat and all the fields are currently used for arable agriculture which is the use that the Bracebridge Tithe also records in 1842. The field patterns are generally regular but of odd shapes and sizes. Unfortunately the Tithe map for Canwick is not publicly available but the 1889 Ordnance Survey map shows that all of the field boundaries which exist at the time of writing (December 2013). This is with the exception of a field boundary which has been removed to the south of Canwick Hall Farm but which

survives as an earthwork (Reference EW1). The Bracebridge Heath Tithe map shows that many of the field boundaries existed in 1842 (References H42 to H47). Hedgerows H43, H44, H46 and H47 mark the historic parish boundaries of Bracebridge Heath and Canwick (see Figure 3.10) as shown on the 1842 Tithe map of Bracebridge Heath. These hedgerows are classed as Important Hedgerows under the Hedgerows Regulations Act 1997.

- 7.6.2 Bloxholm Lane (Rd 8) and Sleaford Road (Rd9) are believed to be Roman roads. The former is believed to be a continuation of Mareham Lane and ditches can be seen alongside the present road. The road is shown on the 1842 Tithe map but has a bend along it which is no longer discernible suggesting the road has been straightened and, therefore the boundaries either side of the road, currently marked by hedgerows (References H48 and H49), are likely to have been moved since 1842. The current A15 Sleaford Road is also believed to be a continuation of Mareham Lane to Sleaford. This road forms the A15 high speed single carriageway road to and from Lincoln city centre. The hedgerows either side (Reference H50 and H51) are likely to have been moved when the road was widened for modern traffic.

8 Interpretation

- 8.1 An examination and survey of the historic landscape to be affected by the Lincoln Eastern Bypass has not identified any earthworks or features relating to possible archaeological activity. This is with the exception of the earthwork of a former field boundary which is visible as a raised earthwork (Reference EW1). It is possible that earthworks have been removed by ploughing which certainly seems to be the case with the barrow cemeteries to the north and south of the river where the barrows can only be identified from aerial photographs.
- 8.2 There are three Important Hedgerows within the proposed scheme as identified using criteria within the Hedgerow Regulations (1997). These are Hedgerows H43, H44, H46 and H47 (Figure 3.10) which mark the parish boundaries between Canwick and Bracebridge Heath and are shown on the 1842 Bracebridge Tithe map.
- 8.3 The majority of the features of this area are most likely date to the 18th and 19th centuries at a time when the city of Lincoln was expanding. The Witham Navigation was used from the Roman period onwards but was used to its full potential in the 18th century to be replaced in the mid 19th century by the railways. Both of these networks encouraged people to travel to the city to find work which in turn led to an increase in building and manufacture. At the same time, the hinterland of the city was an important resource to provide food and resources to the ever increasing population. This agricultural landscape is largely what can be seen within the area of the proposed scheme.
- 8.4 However, archaeological evidence of Prehistoric, Roman and Medieval activity has been uncovered within and around the proposed scheme that may relate to some of the existing field boundaries and roads that remain in use. The archaeological investigations that will take place as part of the construction of the scheme may help to understand the date of the landscape features, particularly the field boundaries.

9 Conclusion

- 9.1 The historic landscape survey has identified and recorded features of the post-medieval landscape which remain visible above ground. Archaeological evidence of prehistoric, Roman and Medieval activity and further archaeological investigation of this evidence, may help to understand whether the landscape features have earlier origins.
- 9.2 The survey has provided a comprehensive record of the landscape features. The proposed scheme will remove whole or part of features but the historic landscape will still be understood from the surviving field boundaries.
- 9.3 A Hedgerow Removal Notice will be required for the removal of part of Hedgerows H43, H44, H46 and H47 since these mark the historic parish boundaries of Canwick and Bracebridge Heath parishes.

10 References

10.1 Bibliographic References

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Mouchel 2012 *Lincoln Eastern Bypass: Environmental Statement*.

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10.2 Archive References

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1841 Branston Tithe Award and Plan. DIOC/TITHEAWARD/E541

1859 Cherry Willingham Tithe Award and Plan. LINDSEYAWARD/181

1848 Greetwell Tithe Apportionment and Plan. DIOC/TITHEAWARD/E492

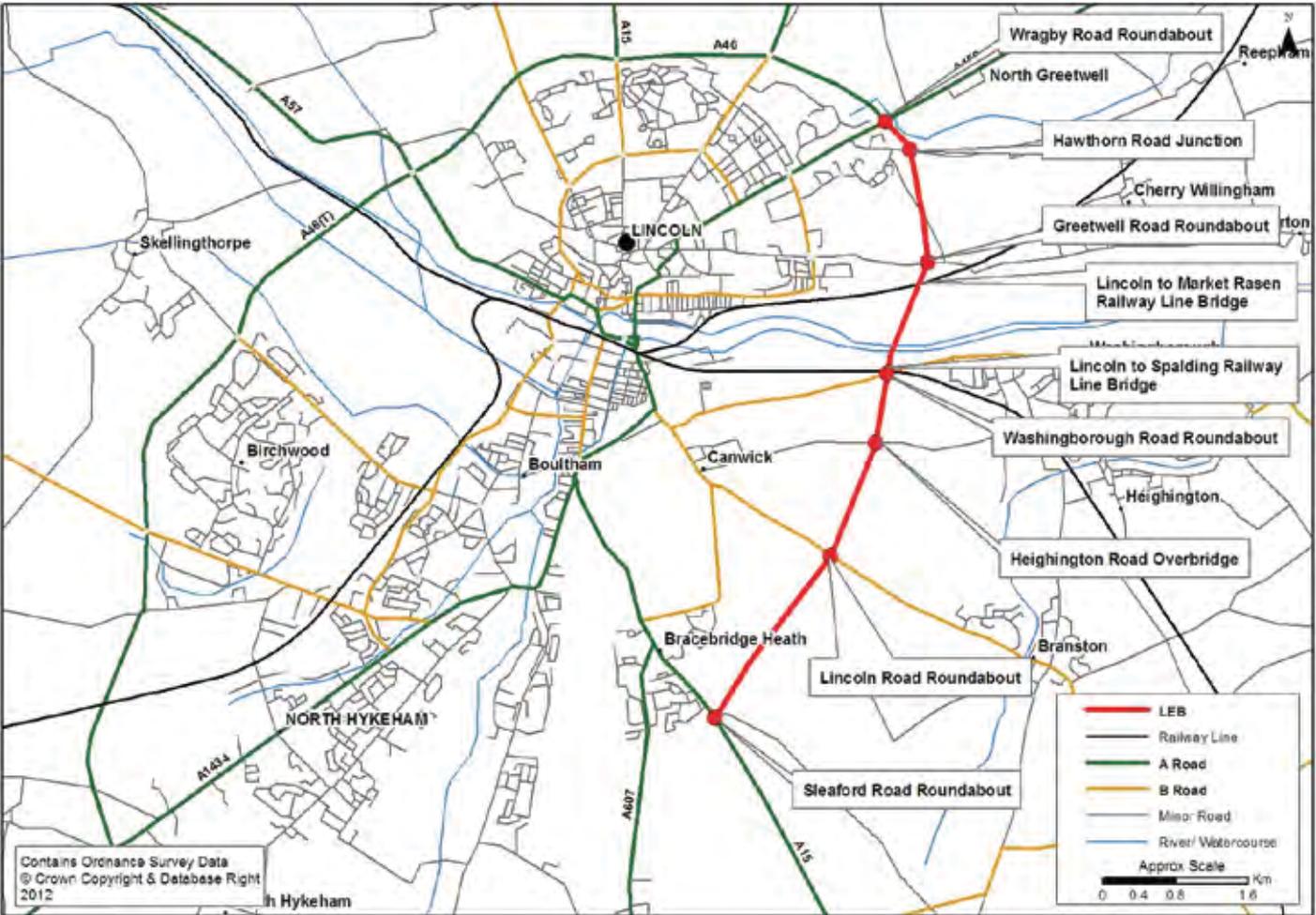
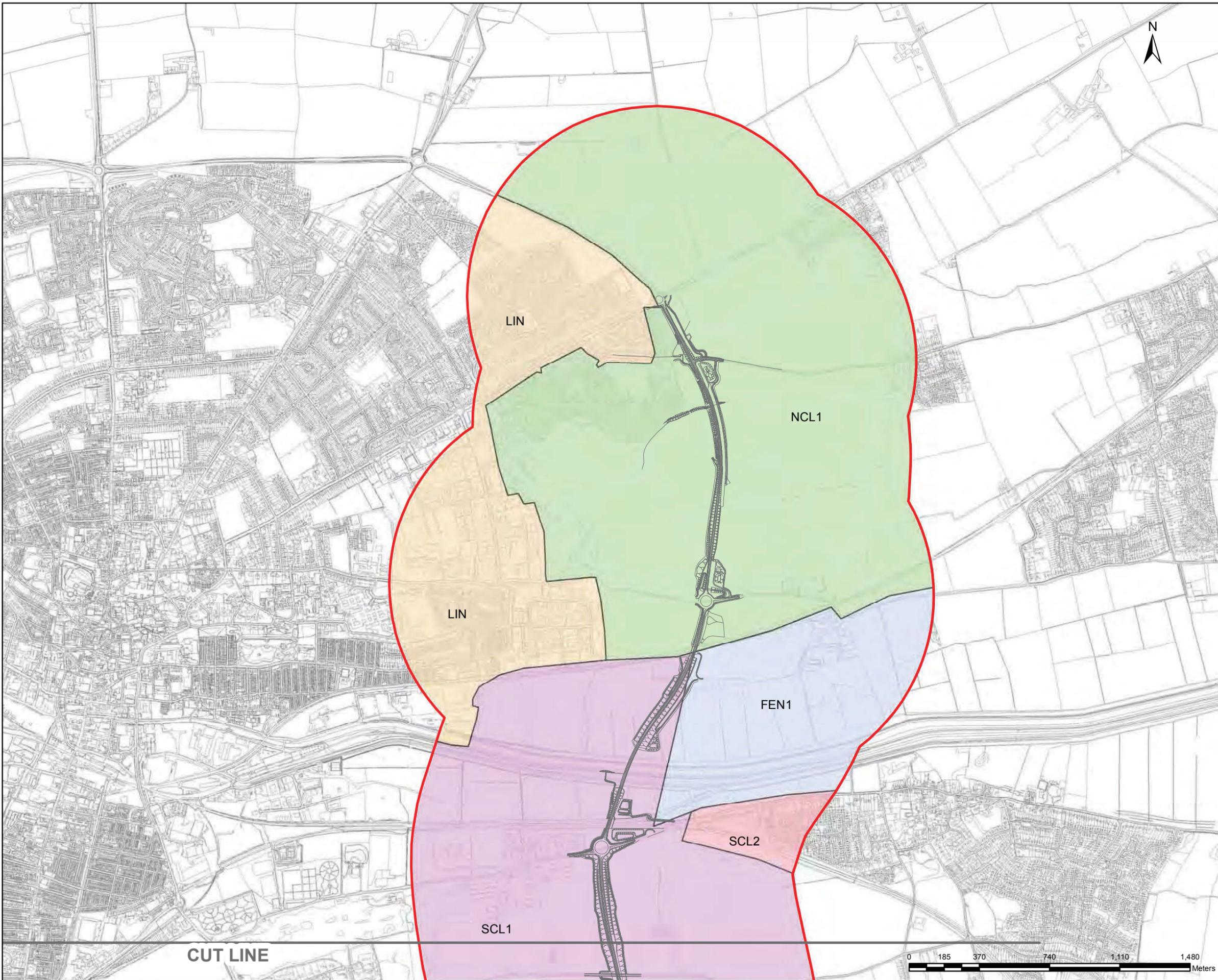


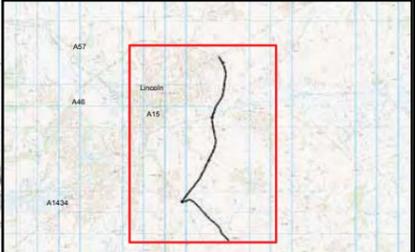
Figure 1: Location of Lincoln Eastern Bypass Scheme



NOTES:

KEY

- 1000m Buffer
- Proposed Road
- Southern Cliff Heath (SCL1)
- The Fen Edge Settlements (SCL2)
- The Witham Fens (FEN1)
- The Lincoln Satellite Settlements (NCL1)
- City of Lincoln (LIN)



A	First Issue	LT	CH	OE	07/11/12	

Amendment Details:			
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Drawn Designed by:	CH	GIS Drawing Creation Created by:	LT
		Date:	30/11/2012

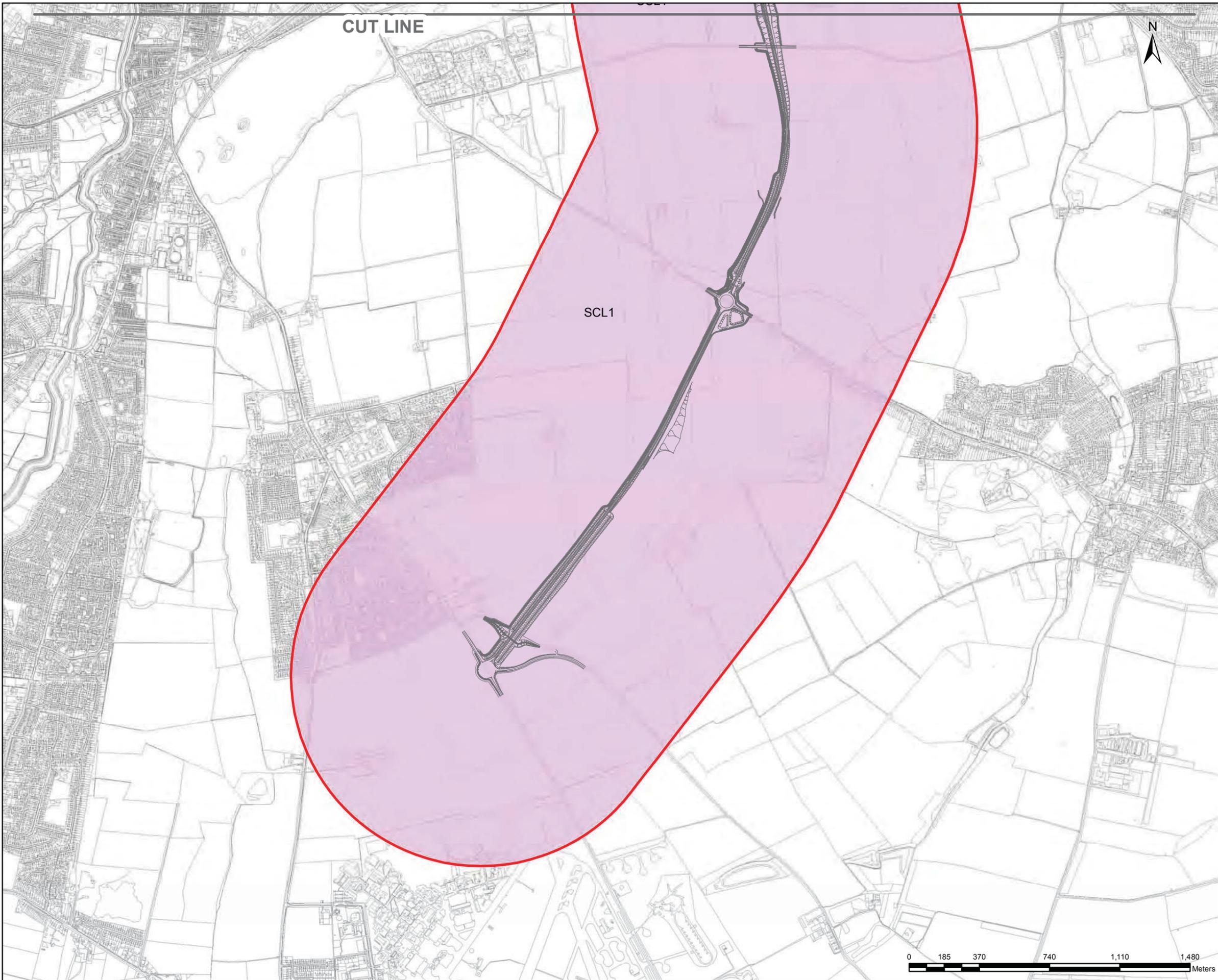
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Paper Size A3	Figure 2.1	Rev: A
Project: LINCOLN EASTERN BYPASS		
Description: Historic Landscape Characterisation		

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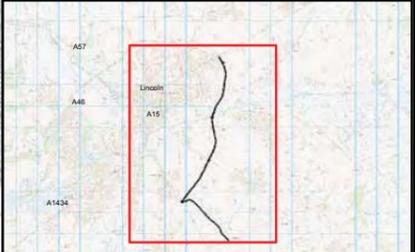
SCL1



NOTES:

KEY

- 1000m Buffer
- Proposed Road
- Southern Cliff Heath (SCL1)
- The Fen Edge Settlements (SCL2)
- The Witham Fens (FEN1)
- The Lincoln Satellite Settlements (NCL1)
- City of Lincoln (LIN)



A	First Issue	LT	CH	OE	DB	11/12	11/12

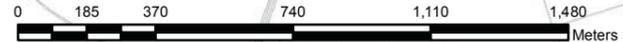
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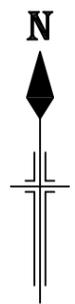
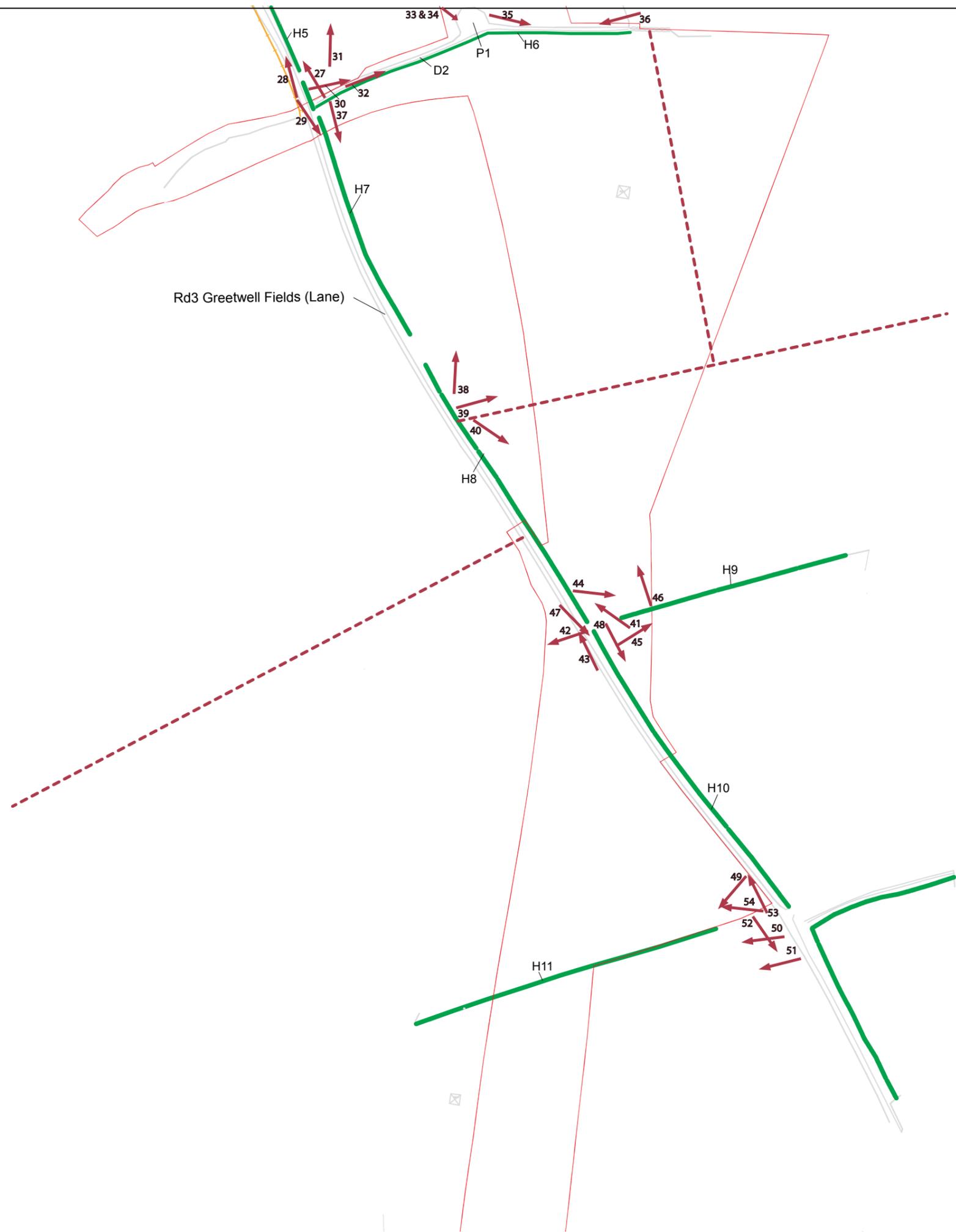
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Paper Size A3	Figure 2.2	Rev: A
Project: LINCOLN EASTERN BYPASS		
Description: Historic Landscape Characterisation		

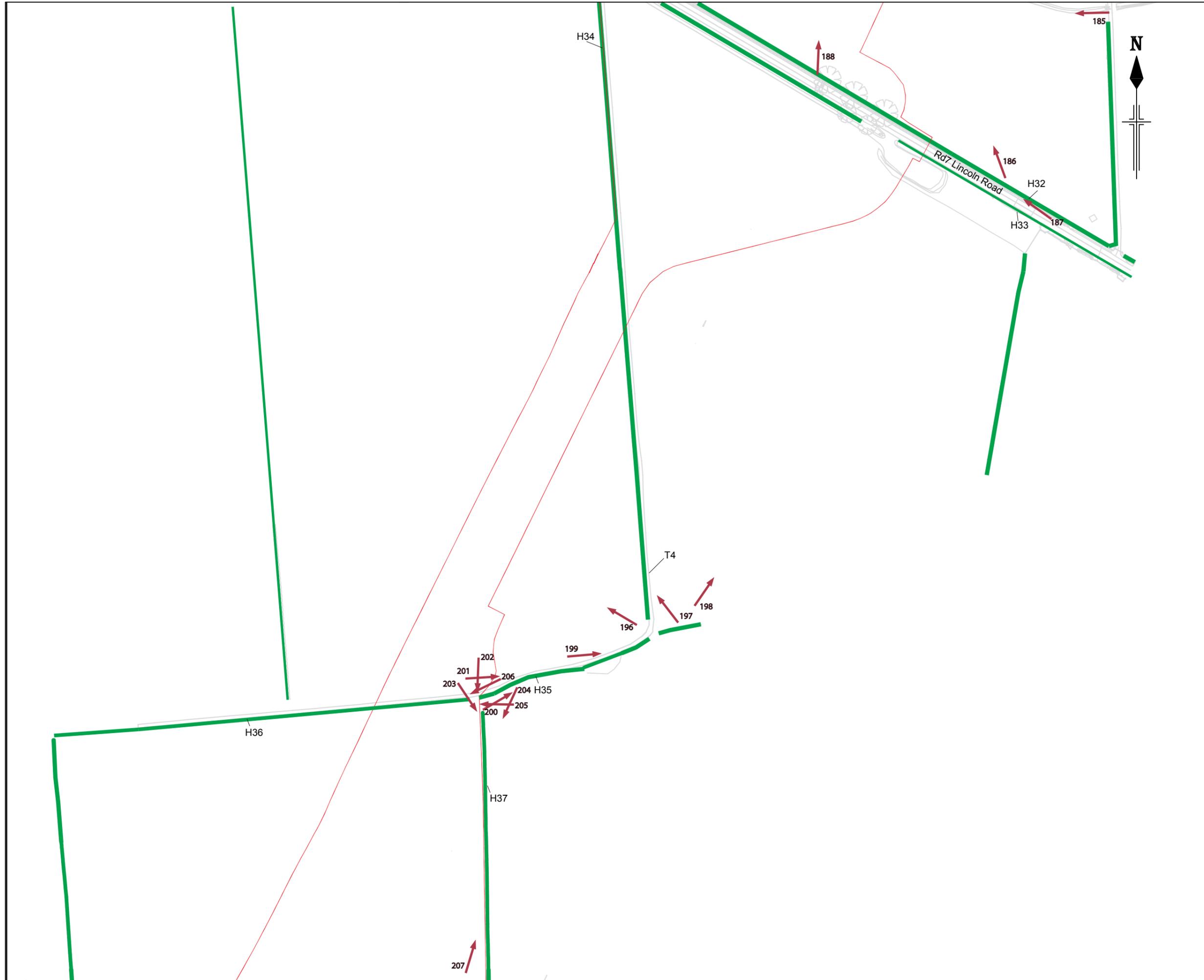


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- Legend**
- Application boundary
 - Hedgerow
 - Former field boundary (identified from historic maps)
 - Parish Boundary
 - Modern fence
 - Public footpath
 - Woodland
 - Quarry
 - 17** Photograph number
 - ➔ Location and direction of photograph

ISSUE			
Amendment Details			
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		Created By: LT	Date: 16/09/2013
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 Highways Alliance			
<small>TECHNICAL SERVICES PARTNERSHIP WETMAN PARK HOUSE WATERSIDE SOUTH LINCOLN LN 5 Customer Service Centre (01422) 780070</small>			
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Drawing Number		REVA	
Lincoln Eastern Bypass			
Historic Landscape Plan			
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- Legend**
- Application boundary
 - Hedgerow
 - Former field boundary (identified from historic maps)
 - Parish Boundary
 - Modern fence
 - Public footpath
 - Woodland
 - Quarry
 - 17** Photograph number
 - Location and direction of photograph

ISSUE			
A			
Amendment Details			
Drawing 1st Approval		Date: 9/12/13	
1st Approval by: SH			
Drawn/Designed by: LT		CAD Drawing Creation Created By: LT	Date: 16/09/2013
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TECHNICAL SERVICES PARTNERSHIP WEPHAM PARK HOUSE, WEPHAM PARK, WATERBURY SOUTH LINCOLN LN17 7JH Customer Service Centre: (01522) 789010			
A3	FIGURE 3.8	REVA	
Lincoln Eastern Bypass			
Historic Landscape Plan			
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Appendix A: Gazetteer of Landscape Features

The following gazetteer has been compiled from the fieldwork survey. It identifies individual landscape features that are visible above ground. The survey information has been supplemented by the documentary and cartographic evidence. The references can be cross referenced with the text in the main report and Figures 3.1 to 3.10.

Ref	Figure ref	Feature type	Historic evidence (ie map evidence for feature)	Description	Size	Condition	Significance	Photo
Rd1	3.1	Road	Road shown on 1848 Greetwell Tithe map. Roundabout introduced between 1976 and 1989 according to the OS maps.	Single carriageway road with pavement.	c.9 to 10m wide	Good	Low	 <p style="text-align: center;"><i>Road facing west</i></p>

B1	3.1	Bridge	Datestone 1937	Concrete bridge forming part of the road over drain. Parapets either side of road with datestone 1937.	c.1.3 m high x 3m wide (length of parapet)	Good	Low	 <p><i>Bridge facing south-west</i></p>
H1	3.1	Hedgerow	Hedgerow follows shape of roundabout and is, therefore, likely to be contemporary with it. Roundabout was introduced between 1976 and 1989 according to OS maps.	Tall hedgerow containing some small trees. Bounded by fence to south. Hedgerow follows shape of roundabout and road (A15/A158).	c.3 to 5m high x c.2m wide	Good	Negligible	 <p><i>Hedgerow facing west</i></p>

D1	3.1	Drain	Shown on 1848 Greetwell Tithe map as parish boundary between Greetwell and CherryWillingham .	Drain runs along Wragby Road East then turns right to form the eastern edge of arable field before heading in a south-easterly direction. Small section along road has stone walling and pipe (modern) which are probably contemporary with roundabout (c.1976 to 1989).	c.1.5 to 2m deep x c.1m to 2.5m wide	Good	Low	 <p><i>Drain facing south</i></p>
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H2	3.1	Hedgerow	Hedgerow not shown on 1848 Greetwell Tithe or 1889 to 1989 OS mapping and is likely to be contemporary with housing estate/recreational area (early 21 st century).	Bounded by modern fence to west. Fairly uneven hedgerow marking edge of field and housing estate.	c.2m to 3m high x c.2m to 3m wide	Good	Negligible	 <p><i>Hedgerow facing north</i></p>
H3	3.1	Hedgerow	Hawthorn Road (formerly Green Lane on 1848 Tithe and Stocking Lane on 1889 OS map) shown on 1848 Greetwell Tithe map and hedgerow likely to be contemporary with road.	Hedgerow along north side of Hawthorn Road.	c.2m high x 1.5m wide	Fair	Low	 <p><i>Hedgerow facing east</i></p>

Rd2	3.1	Road	Hawthorn Road (formerly Green Lane on 1848 Tithe and Stocking Lane on 1889 OS map) shown on 1848 Greetwell Tithe map	Single carriageway road with pavements either side.	c.6 to 8m wide	Good	Low	 <p><i>Road facing west</i></p>
H4	3.1	Hedgerow	Hawthorn Road (formerly Green Lane on 1848 Tithe and Stocking Lane on 1889 OS map) shown on 1848 Greetwell Tithe map and hedgerow likely to be contemporary with road.	Hedgerow along south side of Hawthorn Road	c.1.5 to 2m high x c.1 to 1.5m wide	Fair	Low	 <p><i>Hedgerow facing east</i></p>

W1	3.1	Woodland	Small piece of woodland shown in this area on 1848 Greetwell Tithe map.	Small area of woodland/ plantation to the north-west corner of field.		Fair	Low	 <p><i>Woodland/ plantation facing north</i></p>
H5	3.1	Hedgerow	Lane to west is shown on 1848 Greetwell Tithe map and hedgerow is likely to be contemporary with road.	Hedgerow forming western boundary of arable field and eastern edge of lane.	c.2m x c.1,5 m	Good	Low	 <p><i>Hedgerow facing south</i></p>

Rd3	3.1 to 3.2	Road	Road known as Greetwell Fields is shown on 1848 Greetwell Tithe map.	Single track road running from Greetwell Road in the south and formerly running to Hawthorn Road in the north. Recent development (early 21 st century) to the north-west has changed the road layout so that the lane exits onto a new road known as St Augustine's Way.	c.3.5 m wide	Poor	Low	 <p data-bbox="1330 826 1541 853"><i>Lane facing north</i></p>
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D2	3.2	Drain	Drain shown on 1848 Greetwell Tithe map and both drain and associated pond on 1889 OS map	Drain running along field boundary	c.0.5 m to 1m deep x 0.5 to 1m wide	Good	Low	 <p><i>Drain facing east</i></p>
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P1	3.2	Pond	Small pond shown on 1889 OS map	Small roughly semi-circular pond at south edge of field. Well concealed by trees and vegetation. Mostly likely introduced with the drain (D2).	c.17 m x c.16 m	Good	Low	 <p><i>Pond facing south-east</i></p>
H6	3.2	Hedgerow	Field boundary in this location on 1848 Greetwell Tithe map	Hedgerow marking boundary between arable fields. Drain runs along north side of boundary.	c.1m to 1.5m high x c.1m wide	Fair	Low	 <p><i>Hedgerow facing east</i></p>

H7	3.2	Hedgerow	Lane to west is shown on 1848 Greetwell Tithe map and hedgerow is likely to be contemporary with road.	Hedgerow forming western boundary of arable field and eastern edge of lane.	c.2m high x c.1,5 m wide	Fair	Low	 <p><i>Hedgerow facing south</i></p>
H8	3.2	Hedgerow	Lane to west is shown on 1848 Greetwell Tithe map and hedgerow is likely to be contemporary with road.	Hedgerow forming western boundary of arable field and eastern edge of lane.	c.2m high x c.1,5 m wide	Fair	Low	 <p><i>Hedgerow facing north-west</i></p>

H9	3.2	Hedgerow	Boundary is shown on 1848 Greetwell Tithe map.	Hedgerow forming boundary between arable fields.	c.1.7 5m to 2m high x c.1m wide	Fair	Low	 <p><i>Hedgerow facing east</i></p>
H10	3.2	Hedgerow	Lane to west is shown on 1848 Greetwell Tithe map and hedgerow is likely to be contemporary with road.	Hedgerow forming western boundary of arable field and eastern edge of lane.	c.1.7 5 to 2m high x c.1.5 m wide	Fair	Low	 <p><i>Hedgerow facing south</i></p>

H11	3.2	Hedgerow	Boundary shown on 1848 Greetwell Tithe map with track running along it.	Hedgerow forming boundary between arable fields. Track no longer discernible.	c.1,75m high x 1.5m wide	Poor	Low	 <p><i>Hedgerow facing south-west</i></p>
H12	3.3	Hedgerow	Boundary shown on 1848 Greetwell Tithe map.	Broken hedgerow marking boundary between arable fields.	c.1 to 1.5m high x c.1m wide	Poor	Low	 <p><i>Hedgerow facing north-west</i></p>

Q1	3.3	Quarry	Quarry is a modern feature of the landscape created post 1989 according to OS mapping.	Deep stone quarry creating a vast gorge within the landscape. Modern fencing surrounding site.	c.200 m wide x c.130 m long. Unkn own depth .	Good	Negligible	 <p><i>Quarry facing south</i></p>
H13	3.3	Hedgerow	Greetwell Road shown on 1848 Greetwell Tithe map and boundary likely to be contemporary with road although road may have been widened to accommodate increased numbers of traffic and modern vehicles. Boundaries either side would have moved accordingly.	Tall hedgerow marking southern boundary of field and north edge of road.	c.5m high x c.2 to 2.5m wide	Good	Low	 <p><i>Hedgerow facing east</i></p>

Rd4	3.3	Road	Greetwell Road shown on 1848 Greetwell Tithe map although road may have been widened to accommodate increased numbers of traffic and modern vehicles.	High speed single carriageway road with pavement to north side.	c.9 to 10m wide	Good	Low	 <p><i>Road facing west</i></p>
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H14	3.3	Hedgerow	Greetwell Road shown on 1889 OS map and boundary likely to be contemporary with road although road may have been widened to accommodate increased numbers of traffic and modern vehicles. Boundaries will have moved accordingly.	Boundary marks the north edge of the field and south edge of the road.	c.1.5 m high x c.1.5 m wide	Fair	Low	 <p style="text-align: center;"><i>Hedgerow facing east</i></p>
H15	3.3	Hedgerow	Hedgerow is located alongside the railway and is possibly contemporary with it. The Sheffield and Lincolnshire Extension Railway was opened in 1848.	Hedgerow marking north side of railway line and southern boundary of arable field.	c.2m high x c.1.5 m wide	Good	Low	 <p style="text-align: center;"><i>Hedgerow facing south</i></p>

R1	3.3	Railway	The Sheffield and Lincolnshire Extension Railway was opened in 1848. The railway line remains operational.	Double track railway line within a shallow cut and continuing over embankment to west.	c.6m to 8m wide	Good	Low	 <p><i>Railway facing north</i></p>
H16	3.3	Hedgerow	Hedgerow is located alongside the railway and is possibly contemporary with it. The Sheffield and Lincolnshire Extension Railway was opened in 1848.	Hedgerow with some trees marked the southern boundary of the railway track and northern boundary of the arable field.	c.4m to 8m high x c. 2 to 3m wide	Fair	Low	 <p><i>Hedgerow facing north-west</i></p>

T1	3.4	Track	Track shown on 1848 Greetwell Tithe map.	Rough track which extends from Greetwell Road to the north-east, through Greetwell, along the south field boundary and then north-west over railway line.	c.2.5 m wide	Fair	Low	 <p><i>Track facing east</i></p>
H17	3.4	Hedgerow	Boundary shown on 1848 Greetwell Tithe map.	Hedgerow containing some trees marking boundary between arable and pasture fields. Track runs to north of hedgerow.	c.3 to 5m high x c.2,5 m wide	Good	Low	 <p><i>Hedgerow facing east</i></p>

W2	3.4	Woodland	Small area of woodland shown on 1848 Greetwell Tithe map.	Long thin strip of dense woodland. Track is located to the north of woodland.	c.30 m wide x c.140 m long	Good	Low	 <p><i>Woodland facing north-east</i></p>
H18	3.4	Hedgerow	Boundary shown on 1848 Greetwell Tithe map.	Broken hedgerow contained within post and wire modern fence.	c.1.5 to 2.5m x c.1.5 m	Poor	Low	 <p><i>Hedgerow facing south-east</i></p>

H19	3.4	Hedgerow	Boundary shown on 1848 Greetwell Tithe map.	Hedgerow marking boundary between pasture fields.	c.2 to 2.5m high x 2m wide	Good	Low	 <p><i>Hedgerow facing south-east</i></p>
P2	3.4	Pond	Pond not shown on historic maps pre 1989 therefore, likely to be a modern feature probably created as part of recent Environmental Stewardship schemes for biodiversity reasons.	Roughly oval pond aligned east to west. Mound immediately to north of pond is likely to be spoil excavated to create pond.	c.8.5 m wide x c. 30m long. Unkn own depth .	Good	Negligible	 <p><i>Pond facing east</i></p>

WC1	3.4	Watercourse	North Delph shown on the 1848 Greetwell Tithe map.	North Delph of the River Witham. Embankments to either side of watercourse. Tall embankment between North Delph and Witham (now public footpath).	c.7m wide	Good	Low	
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North Delph facing east

WC2	3.4	Watercourse	<p>The River was extended from Lincoln (or Lindum) and made navigable to Boston in the Roman period. In 1762 an Act was passed for drainage and navigation works. Various Acts were passed in the early 19th century to improve the river and drainage. Its present course and arrangement with North and South Delph is shown on 1848 Greetwell Tithe map.</p>	<p>Main branch of the River Witham with high embankments either side.</p>	c.30 m wide	Good	Low	 <p><i>River Witham facing east</i></p>
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R2	3.4	Railway	East Lincolnshire Railway opened in 1848 and closed between 1964 and 1970.	Dismantled railway but embankment for railway remains along with some of the infrastructure including the station further to the east at Washingborough. The line has now been opened as a public footpath. Trees to either side of former track. Embankment is located between the River Witham and the South Delph.	c.3 to 8m wide	Good	Low	 <p><i>Railway footpath facing west</i></p>
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WC3	3.4	Watercourse	South Delph shown on 1848 Greetwell Tithe map.	South Delph located to south side of River Witham with high embankments either side. The north embankment is the former railway line (R2).	c.13 m wide	Good	Low	
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South Delph facing west

D3	3.4 to 3.5	Drain	Drain shown on 1889 Ordnance Survey map. Probably added in the 18 th / 19 th century to drain the land for agricultural use.	Drain is largely overgrown/ filled in but appears as a straight cut across the field.	c.2 to 3m wide	Fair	Low	 <p><i>Drain facing south</i></p>
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R3	3.5	Railway	Spalding and Lincoln Avoiding line opened in 1882.	Dismantled railway line running alongside the present London and North East Railway line and then travelling in a north-easterly direction to meet the East Lincolnshire Railway line.	c.9 to 10m wide	Fair	Low	 <p><i>Railway facing east</i></p>
R4	3.5	Railway	Spalding and Lincoln railway line (later the London and North Eastern Railway) opened in 1882 and remaining in use.	Working railway. The railway is located over an embankment. There is an underpass passing through the embankment.	c.9 to 10m wide	Good	Low	 <p><i>Railway facing north-east</i></p>

U1	3.5	Underpass	Underpass which passes underneath the Spalding and Lincoln Railway line and the Avoiding line. Probably built in 1882 with the railway.	Two underpasses directly next to each other. The southernmost is constructed of red brick with barrel vaulted tunnel whilst the second, northern underpass is constructed of engineering brick with a flat concrete span over.	c.30 m long x c.4m wide	Good	Low	
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Underpass facing north

T2	3.5	Track	Track most likely to be contemporary with railway and underpass (c.1882) providing access for farm traffic.	Rough farm track from gate along Washingborough Road. The track travels north before turning west and then north again to pass underneath the railway via the underpass.	c.4 to 5m wide	Fair	Low	 <p><i>Track facing south-east</i></p>
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H20	3.5	Hedgerow	Washingborough Road is shown on the 1889 OS map and the boundary is likely to be contemporary with road.	Hedgerow marking boundary between arable field and north side of road.	c.2 to 2.5m high x 1.5m wide	Good	Low	 <p data-bbox="1330 754 1671 782"><i>Hedgerow facing south-west</i></p>
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Rd6	3.5	Road	Washingborough Road is shown on the 1889 OS map.	Single carriageway road known as Washingborough Road.	c.7m wide	Good	Low	
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Road facing east

H21	3.5	Hedgerow	Washingborough Road is shown on the 1889 OS map and the boundary is likely to be contemporary with road.	Hedgerow marking south side of road and north side of arable field. Modern timber fence in places to reinforce boundary.	c.1.75 to 2m high x 1 to 1.5m wide	Good	Low	 <p><i>Hedgerow facing west</i></p>
H22	3.5 to 3.6	Hedgerow	Boundary shown on 1889 OS map.	Hedgerow marking boundary between arable fields. Long single hedgerow runs between Washingborough Road and Heighington Road.	c.2.5m high x c.1.5m wide	Good	Low	 <p><i>Hedgerow facing south-west</i></p>

H23	3.6	Hedgerow	Heighington Road shown on 1889 OS map and boundary likely to be contemporary with road.	Hedgerow marking field boundary and north side of road.	c.2m high x c.1m wide	Fair	Low	 <p><i>Hedgerow facing west</i></p>
H24	3.6	Hedgerow	Heighington Road shown on 1889 OS map and boundary likely to be contemporary with road.	Hedgerow marking field boundary and north side of road.	c.2m high x c.1,5 m wide	Good	Low	 <p><i>Hedgerow facing east</i></p>

Rd6	3.6	Road	Heighington Road shown on 1889 OS map	Heighington Road is a high speed single carriageway road.	c.7m wide	Good	Low	 <p><i>Heighington Road facing west</i></p>
H25	3.6	Hedgerow	Heighington Road shown on 1889 OS map and boundary likely to be contemporary with road.	Hedgerow marking field boundary and south side of road.	c.2m high x c.1.5 m wide	Good	Low	 <p><i>Hedgerow facing north-west</i></p>

H26	3.6	Hedgerow	Heighington Road shown on 1889 OS map and boundary likely to be contemporary with road.	Hedgerow marking field boundary and south side of road.	c.2 to 2.5m high x 1.5m wide	Good	Low	 <p><i>Hedgerow facing north-east</i></p>
H27	3.6	Hedgerow	Boundary shown on 1889 OS map.	Hedgerow marking boundary between arable fields.	c.2 to 2.5m high x c.1.5 to 2m wide	Good	Low	 <p><i>Hedgerow facing south-west</i></p>

H28	3.6	Hedgerow	Boundary shown on 1889 OS map.	Hedgerow marking boundary between arable fields.	c.2m high x c.1.5m wide	Good	Low	 <p><i>Hedgerow facing east</i></p>
H29	3.7	Hedgerow	Boundary shown on 1889 OS map.	Hedgerow marking boundary between arable fields.	c.2.5 to 3m high x c.2 to 2.5m wide	Good	Low	 <p><i>Hedgerow facing east</i></p>

H30	3.7	Hedgerow	Boundary shown on 1889 OS map.	Hedgerow marking boundary between arable fields. Hedgerow is of two different sizes and probably of two different phases with the eastern end being smaller.	c.1.5 m to 2m high x 1.5 to 2m wide	Good	Low	 <p><i>Hedgerow facing west</i></p>
H31	3.7	Hedgerow	Boundary shown on 1889 OS map.	Hedgerow marking boundary between arable fields.	c.1.7 5 to 2m high x c.1.5 to 2m wide	Good	Low	 <p><i>Hedgerow facing south</i></p>

T3	3.7	Track	Track shown on 1889 OS map	Rough farm track running to east of hedgerow (H31) before turning north to travel north of hedgerow (H30).	c.3m wide	Fair	Low	 <p><i>Track facing west</i></p>
D4	3.7	Drain	Drain is shown on 1889 OS map.	Drain across fields also creates boundary between arable fields.	c.1.5 to 3 m deep x c.1.5 to 2m wide	Good	Low	 <p><i>Drain facing west</i></p>

H32	3.7 to 3.8	Hedgerow	Lincoln Road is shown on the 1889 OS map and the boundary is likely to be contemporary with the road.	Hedgerow marking boundary of arable field and north side of Lincoln Road.	c.1.5 to 1.75 m high x c.1.5 m wide	Good	Low	 <p><i>Hedgerow facing east</i></p>
Rd7	3.7 to 3.8	Road	Lincoln Road is shown on the 1889 OS map	High speed single carriageway with footpath on north side of road.	c.9m wide	Good	Low	 <p><i>Road facing east</i></p>

H33	3.7 to 3.8	Hedgerow	Lincoln Road is shown on the 1889 OS map and the boundary is likely to be contemporary with the road.	Hedgerow marking boundary of arable field and south side of Lincoln Road.	c.1.75 to 2m high x c.1.5m wide	Good	Low	 <p><i>Hedgerow facing east</i></p>
H34	3.7 to 3.8	Hedgerow	Boundary shown on 1889 OS map.	Hedgerow marking boundary between arable fields. Track runs to east of boundary.	c.1.5 to 2m high x c.1 to 1.5m wide	Fair	Low	 <p><i>Hedgerow facing north</i></p>

T4	3.7 to 3.8	Track	Track is likely to be contemporary with boundary which is shown on 1889 OS map.	Rough farm track running west to east along H36 and H35 before turning northwards along H34.	c.2.5 m wide	Fair	Low	 <p><i>Track facing south</i></p>
H35	3.8	Hedgerow	Boundary marked on 1889 OS and marked as Root of Hedge.	Hedgerow marking boundary between arable fields.	c.2m high x c.1 to 1.5m wide	Good	Low	 <p><i>Hedgerow facing east</i></p>

H36	3.8	Hedgerow	Boundary marked on 1889 OS and marked as Root of Hedge.	Hedgerow marking boundary between arable fields.	c.2 to 2.5m high x c.1.5 to 2m wide	Good	Low	 <p><i>Hedgerow facing west</i></p>
H37	3.8 to 3.9	Hedgerow	Boundary marked on 1889 OS and marked as Root of Hedge.	Hedgerow marking boundary between arable fields.	c.2 to 2.5m high x c.1,5 to 2m wide	Good	Low	 <p><i>Hedgerow facing south</i></p>

H38	3.9	Hedgerow	Boundary marked on 1889 OS.	Hedgerow marking boundary between arable fields. Post and wire fence to north side to reinforce boundary.	c.1.5 to 2m high x 1.5 to 2m wide	Fair	Low	 <p><i>Hedgerow facing west</i></p>
H39	3.9	Hedgerow	Boundary marked on 1889 OS.	Hedgerow marking boundary between arable fields. Post and wire fence to north side to reinforce boundary.	c.2.5 to 3m high x c.2.5 m wide	Good	Low	 <p><i>Hedgerow facing east</i></p>

H40	3.9	Hedgerow	Boundary marked on 1889 OS.	Hedgerow marking boundary between arable fields.	c.2.5 to 3m high x c.1.5 to 2m wide	Good	Low	 <p data-bbox="1330 754 1601 783"><i>Hedgerow facing north</i></p>
H41	3.9	Hedgerow	Boundary marked on 1889 OS.	Hedgerow marking boundary between arable fields.	c.3 to 3.5m high x 1.5 to 2m wide	Good	Low	 <p data-bbox="1330 1318 1601 1348"><i>Hedgerow facing west</i></p>

EW1	3.9	Earthwork	Raised embankment shown as boundary on 1889 OS map	Raised embankment across field most likely a former field boundary as indicated by the OS map	c.2m wide x c.0.2m high	Fair	Low	 <p><i>Earthwork facing north-west</i></p>
T5	3.9	Track	Track first shown on 1970s OS maps.	Track leading to Canwick Manor Farm.	c.4m wide	Good	Low	 <p><i>Track facing north</i></p>

H42	3.9	Hedgerow	Boundary shown on 1889 OS map.	Well maintained hedgerow marking boundary of arable field and west side of track.	c.2m high x c.1.5m wide	Good	Low	 <p><i>Hedgerow facing north</i></p>
H43	3.9 to 3.10	Hedgerow	Boundary marked on 1842 Bracebridge Tithe map and shown as part of the parish parliamentary boundary on 1889 OS map.	Hedgerow marking boundary between arable fields. Some trees included along hedgerow.	c.2 to 2.5m high x 2.5 to 3m wide	Good	Medium	 <p><i>Hedgerow facing west</i></p>

H44	3.10	Hedgerow	Boundary marked on 1842 Bracebridge Tithe map and shown as part of the parish parliamentary boundary on 1889 OS map.	Hedgerow marking boundary between arable fields.	c.3 to 3.5m high x c.2m wide	Good	Medium	 <p><i>Hedgerow facing north-west</i></p>
H45	3.10	Hedgerow	Boundary shown on 1842 Bracebridge Tithe map but then not on OS maps until 1932 OS map.	Hedgerow marking boundary between arable fields. The hedgerow is located between two parliamentary boundaries.	c.2.7 5 to 3.5m high x c.2m wide	Good	Low	 <p><i>Hedgerow facing north</i></p>

H46	3.10	Hedgerow	Boundary marked on 1842 Bracebridge Tithe map and shown as part of the parish parliamentary boundary on 1889 OS map.	Hedgerow marking boundary between arable fields.	c.3 to 3.5m high x c.2m wide	Good	Medium	 <p><i>Hedgerow facing north-east</i></p>
H47	3.10	Hedgerow	Boundary shown on 1842 Bracebridge Tithe map and marked as parliamentary boundary on 1889 OS map.	Hedgerow marking division between arable fields.	c.3m high x c.2 to 2.5m wide	Good	Low	 <p><i>Hedgerow facing east</i></p>

H48	3.10	Hedgerow	Bloxholm Lane is shown on 1842 Bracebridge Tithe map and the hedgerow is likely to be contemporary with road. It has been suggested that the road has Roman origins.	Hedgerow marking field boundary and north side of road. Ditch to south side of hedgerow.	c.2.5 m high x c.0.5 to 1m wide	Good	Low	 <p><i>Hedgerow facing east</i></p>
Rd8	3.10	Road	Bloxholm Lane is shown on 1842 Bracebridge Tithe map but is believed to have Roman origins. The course of the road may have been straightened since the 1842 Tithe map shows an unusual bend which is no longer discernible in the road itself.	Unmarked single carriageway road which remains in use.	c.6m wide	Good	Low	 <p><i>Road facing east</i></p>

H49	3.10	Hedgerow	Bloxholm Lane is shown on 1842 Bracebridge Tithe map and the hedgerow is likely to be contemporary with road. It has been suggested that the road has Roman origins.	Hedgerow marking field boundary and south side of road. Ditch to north side of hedgerow.	c.2.5 m high x 1.5 to 2m wide	Good	Low	 <p><i>Hedgerow facing north-east</i></p>
H50	3.10	Hedgerow	Sleaford Road (A15) shown on 1842 Bracebridge Tithe map but believed to have Roman origins. Boundary most likely contemporary with road, although the road may have been widened and the boundaries moved accordingly.	Hedgerow marking field boundary and north-east side of Sleaford Road.	c.3 to 3.5m high x c.2 to 2.5m wide	Good	Low	 <p><i>Hedgerow facing south</i></p>

Rd9	3.10	Road	Sleaford Road (A15) shown on 1842 Bracebridge Tithe map but believed to have Roman origins.	High speed single carriageway road.	c.8.5 m wide	Good	Low		<p><i>Road facing south-east</i></p>
H51	3.10	Hedgerow	Sleaford Road (A15) shown on 1842 Bracebridge Tithe map but believed to have Roman origins. Boundary most likely contemporary with road, although the road may have been widened and the boundaries moved accordingly.	Hedgerow marking field boundary and south-west side of Sleaford Road.	c.1.7 5 to 3m high x c.2m wide	Fair	Low		<p><i>Hedgerow facing south</i></p>

Appendix B: Photograph Record

The following photograph register records the photographs taken in black and white film. The photographs will be deposited with a copy of this report to The Collection, Lincoln (Museum accession code LCNCC: 2013.168 and site code RUW13).

Frame No.	Description	Direction of photograph
1	View of Wragby Road (Rd1) and hedgerow (H1)	SW
2	View of Bridge (B1)	SW
3	View of drain along Wragby Road (D1)	SW
4	View of hedgerow (H1)	SW
5	View of hedgerow (H1)	SW
6	View of drain (D1)	SE
7	View of drain (D1)	SE
8	View of hedgerow (H1)	SW
9	General view of landscape from Wragby Road	SE
10	View of hedgerow (H2)	SE
11	View of hedgerow (H2)	NW
12	General view of landscape towards Wragby Road	N
13	View of hedgerow (H2)	NW
14	General view of landscape towards Hawthorn Road	SE
15	General view of landscape	E
16	General view of landscape towards modern housing estate	NW
17	View of hedgerow (H3)	E
18	View of hedgerow (H3)	E
19	View of Hawthorn Road (Rd2)	W
20	View of Hawthorn Road (Rd2)	E
21	View of St Augustine's Way	N
22	View of hedgerow (H4)	E
23	General view of landscape from Hawthorn Road	SE
24	General view of landscape from Hawthorn Road	SW
25	View of hedgerow (H4)	E
26	View of hedgerow (H5)	S
27	View of hedgerow (H5)	N
28	View of hedgerow (H5)	N
29	View of hedgerow (H7)	S
30	View of hedgerow (H6) and drain (D2)	E
31	General view of landscape from Greetwell Fields	N
32	View of drain (D2)	E
33	View of pond (P1)	SE
34	View of pond (P1)	SE
35	View of hedgerow (H6)	SE
36	View of hedgerow (H6)	SW
37	View of hedgerow (H7)	SE
38	General view of landscape from Greetwell Fields	N
39	General view of landscape from Greetwell Fields	E
40	General view of landscape from Greetwell Fields	SE
41	View of hedgerow (H8)	NW
42	General view of landscape from Greetwell Fields	W
43	View of hedgerow (H8) and Greetwell Fields (Lane) (Rd3)	NW
44	View of hedgerow (H9)	E
45	View of hedgerow (H9)	NE
46	General view of landscape from Greetwell Fields	N
47	View of hedgerow (H10)	SE

48	View of hedgerow (H10)	SE
49	View of hedgerow (H11)	SW
50	View of hedgerow (H11)	W
51	General view of landscape from Greetwell Fields	W
52	General view of landscape from Greetwell Fields	W
53	General view of landscape from Greetwell Fields	N
54	General view of landscape from Greetwell Fields	NW
55	General view of landscape	SW
56	General view of landscape from Greetwell Road	W
57	General view of landscape	W
58	General view of landscape	N
59	View of hedgerow (H12)	SE
60	View of quarry (Q1)	SW
61	View of quarry (Q1)	SW
62	View of hedgerow (H12)	NW
63	General view of landscape	S
64	View of quarry (Q1)	W
65	View of quarry (Q1)	SW
66	View of quarry (Q1)	W
67	General view of landscape	W
68	General view of landscape	N
69	General view of landscape	E
70	View of hedgerow (H13)	E
71	View of Greetwell Road (Rd4) and hedgerow (H14)	W
72	View of hedgerow (H15)	SE
73	View of hedgerow (H14)	E
74	View of hedgerow (H16)	W
75	View of railway (R1)	N
76	View of hedgerow (H16)	E
77	General view of landscape	E
78	General view of landscape	SW
79	General view of landscape	SW
80	General view of landscape	SW
81	View of track (T1)	W
82	General view of landscape	SW
83	General view of landscape	W
84	General view of landscape	NW
85	General view of landscape	E
86	General view of landscape	N
87	View of track (T1) and hedgerow (H17)	E
88	General view of landscape	E
89	General view of landscape	SE
90	General view of landscape	SW
91	General view of landscape	W
92	View of hedgerow	NW
93	View of hedgerow (H18)	SE
94	General view of landscape	S
95	View of hedgerow (H18)	S
96	General view of landscape	NE
97	View of hedgerow (H19)	SE
98	View of woodland (W2)	NE
99	General view of landscape	NW
100	General view of landscape	N
101	General view of landscape	S
102	View of spoil from pond (P2)	E
103	View of pond (P2)	E
104	General view of landscape	N
105	General view of landscape	S

106	General view of landscape	N
107	General view of landscape	NW
108	General view of landscape	NE
109	View of North Delph Watercourse (WC1)	SE
110	View of North Delph Watercourse (WC1)	SW
111	View of hedgerow (H18)	NE
112	General view of landscape	NW
113	General view of landscape	N
114	General view of landscape	W
115	General view of landscape	W
116	General view of landscape	NW
117	View of North Delph Watercourse (WC1)	W
118	View of South Delph Watercourse (WC3)	W
119	View of former railway (R2)	W
120	General view of landscape	NW
121	General view of landscape	N
122	General view of landscape	NE
123	View of drain (D3)	S
124	General view of landscape	NE
125	General view of landscape	NW
126	General view of landscape	N
127	View of underpass (U1)	SW
128	View of underpass (U1)	N
129	View of track (T2)	SE
130	General view of landscape	S
131	General view of landscape	E
132	General view of landscape	W
133	View of hedgerow (H20)	SW
134	View of Washingborough Road (Rd5)	W
135	View of hedgerow (H21)	W
136	General view of landscape	W
137	View of hedgerow (H21)	W
138	View of hedgerow (H22)	N
139	General view of landscape	N
140	General view of landscape	NE
141	General view of landscape	SE
142	View of hedgerow (H22)	N
143	View of hedgerow (H22)	S
144	General view of landscape	SW
145	View of hedgerow (H22)	S
146	General view of landscape	NW
147	General view of landscape	N
148	View of hedgerow (H24)	SE
149	General view of landscape	NW
150	View of hedgerow (H23) and Heighington Road (Rd6)	SE
151	View of hedgerow (H26)	NW
152	View of hedgerow (H26) and Heighington Road (Rd6)	W
153	View of hedgerow (H25)	NE
154	View of hedgerow (H25) and Heighington Road (Rd6)	E
155	View of hedgerow (H27)	S
156	General view of landscape	S
157	General view of landscape	SW
158	General view of landscape	SE
159	View of hedgerow (H27)	N
160	General view of landscape	NW
161	General view of landscape	W
162	View of hedgerow (H27)	N
163	General view of landscape	NE

164	View of hedgerow (H28)	SE
165	View of hedgerow (H28)	NE
166	General view of landscape	N
167	General view of landscape	E
168	View of hedgerow (H27)	S
169	View of hedgerow (H27)	N
170	View of hedgerow (H27)	NE
171	View of hedgerow (H29)	E
172	View of hedgerow (H29)	SE
173	View of hedgerow (H30)	W
174	View of hedgerow (H30)	W
175	General view of landscape	N
176	General view of landscape	NW
177	General view of landscape	SW
178	View of hedgerow (H31) and track (T3)	S
179	View of hedgerow (H31)	S
180	General view of landscape	W
181	General view of landscape	NW
182	View of hedgerow (H31)	N
183	General view of landscape	NW
184	General view of landscape	SW
185	View of drain (D4)	NW
186	General view of landscape	NW
187	View of Lincoln Road (Rd7)	W
188	General view of landscape	NW
189	View of hedgerow (H32)	SE
190	View of hedgerow (H33)	NW
191	View of hedgerow (H33)	NW
192	View of hedgerow (H33)	SE
193	View of hedgerow (H33)	SE
194	View of hedgerow (H34)	S
195	View of hedgerow (H34) and track (T4)	SW
196	General view of landscape	NW
197	View of hedgerow (H34) and track (T4)	N
198	General view of landscape	NE
199	View of hedgerow (H35)	E
200	View of hedgerow (H35)	E
201	View of hedgerow (H35)	E
202	General view of landscape	S
203	View of hedgerow (H37)	S
204	View of hedgerow (H37)	SW
205	View of hedgerow (H36)	W
206	View of hedgerow (H36)	W
207	View of hedgerow (H37)	N
208	General view of landscape	NW
209	View of hedgerow (H37)	N
210	View of hedgerow (H38)	W
211	View of hedgerow (H38)	E
212	View of hedgerow (H38)	W
213	View of hedgerow (H39)	E
214	General view of landscape	SW
215	View of hedgerow (H39)	E
216	View of hedgerow (H40)	N
217	View of hedgerow (H41)	W
218	View of earthwork (EW1)	NW
219	General view of landscape	NE
220	General view of landscape	NW
221	View of hedgerow (H42)	N

222	View of hedgerow (H43)	W
223	View of hedgerow (H41)	SW
224	View of hedgerow (H44)	NW
225	View of hedgerow (H43 and H44)	NE
226	View of hedgerow (H44 and H45)	N
227	View of hedgerow (H46)	SW
228	View of hedgerow (H46)	NE
229	View of hedgerow (H47)	SE
230	View of hedgerow (H48)	SE
231	View of hedgerow (H48)	SE
232	View of hedgerow (H49)	E
233	General view of landscape	NW
234	General view of landscape	NW
235	General view of landscape	NE
236	View of hedgerow (H49)	SE
237	View of Bloxholm Lane (Rd8)	SE
238	General view of landscape	W
239	General view of landscape	NW
240	General view of landscape	NE
241	View of hedgerow (H50)	SE
242	View of hedgerow (H50)	SE
243	View of hedgerow (H51)	SE
244	View of Sleaford Road (Rd9)	SE
245	View of Sleaford Road (Rd9)	NW

Lincolnshire County Council
Historic Environment Team
Archaeological Brief for Scheme of Historic Landscape
Survey

Site Name: Lincoln Eastern Bypass
Planning Authority: Lincolnshire County Council
Planning Application Ref: L/0110/13
Grid Reference:
northern end TF00557333; southern end SK98816649
Issued: 10th September 2013

**This brief covers the historic landscape survey required by
condition 8 only.**

Issued by Lincolnshire County Council

This archaeological brief is only valid for a period of six months from issue. Any specification or project design resulting from this brief shall only be considered valid for a period of six months from its issue.

1.1 Notes for the applicant

This document sets out the brief for a scheme of landscape recording. A full report shall be prepared, and it is in the developer's interest to ensure the report is to an adequate standard.

This brief should be sent to archaeological contractors as the basis for the preparation of a detailed archaeological project specification. In response to this brief contractors will be expected to provide details of the proposed working methods, timescales and staffing levels necessary to complete the work.

Detailed specifications should be submitted by the applicant for approval by the planning archaeologist. Unless the specification is approved no groundworks should commence.

A phased approach to fieldwork may be adopted, with one stage leading on to another (if necessary) after each phase is reported upon and reviewed.

Employing an archaeologist is similar to employing any professional undertaking work on your behalf; you are free to get several quotations before making your final decision. Details of archaeological contractors may be found on www.archaeologists.net, www.bajr.org or the yellow pages.

The planning archaeologist will require at least ten working days' notice prior to the commencement of the work.

1.2 Notes for the contractor

The contractor's specification should be prepared according to requirements of this brief and the Lincolnshire Archaeological Handbook's section 'Standard Briefs for Archaeological Projects in Lincolnshire' (August 1997, revised 2010).

The professional archaeological contractors invited to tender for the work must be able to demonstrate, within their specification or project design, that they can provide sufficient staffing, relevant expertise and the appropriate experience in dealing with technology of the type and nature required in this brief.

Contractors will operate in line with professional Institute for Archaeologists (IfA) guidelines and standards and the IfA Code of Conduct.

The scheme of archaeological works will include, as appropriate, background research, fieldwork, assessment, analysis, preparation of report, publication and deposition of the project archive.

Specifications will be rejected if it is determined that they

- are insufficiently documented,
- do not meet the requirements specified in the brief, or
- the specification fails to demonstrate the archaeological contractor's competence and ability to undertake the project in accordance with the Lincolnshire Archaeological Handbook.

The relevant experience of the project team must be articulated within the specifications. In particular the person leading the project in the field must have significant experience of current archaeological methods, theory and safe practice.

The full report including all specialist assessments of artefact assemblages shall be submitted within three months of completion of the fieldwork phase. If this is not possible then the planning archaeologist must be consulted at the earliest possible opportunity.

A copy of the final report can be sent to the planning archaeologist for approval prior to its submission to the Local Planning Authority, but please be advised that Lincolnshire County Council Historic Environment Team is not responsible for writing, proof-reading or copy-editing draft reports.

It should be noted that the planning archaeologist will not recommend the discharge of any planning conditions until they have approved the report and the archive has been deposited.

An additional copy of the report should be submitted to the curator in a single PDF format.

1.3 Summary of brief

A planning application has been approved for Lincoln Eastern Bypass, this was subject to among others to an archaeological condition.

This brief sets out the requirements for producing the historic landscape survey to the level of an English Heritage Level 1 Landscape Survey as stipulated by the local planning authority.

1.4 Site location and description

The site is located across the districts of West Lindsey, Lincoln City and North Kesteven in the parishes of Greetwell, Lincoln, Washingborough, Canwick and Bracebridge Heath. The site grid reference is TF00557333 in the north to SK98816649 in the south.

The specification should include details of the area's geology, land use, vegetation and current land use.

1.5 Planning background

Planning permission for Lincoln Eastern Bypass has been granted by Lincolnshire County Council. This scheme has had extensive evaluative works undertaken over the years including:

2002 & 2004 assessments
2003 fieldwalking & geophysical survey
2004 trial trenching
2004 topographic and auger survey
2006 fieldwalking and geophysical survey
2008 geophysical survey
2008 trial trenching

As a result of the evaluation phases it was agreed that the historic landscape survey could be undertaken by condition.

Condition:

- 8 (a) *No development shall take place until the details of the historic landscape survey referred to in Chapter 12, Paragraph 12.6.15 of the Environmental Statement have been submitted to and approved in writing by the CPA. The submitted scheme shall provide for the recording of the identified Historic Landscapes affected by the development (as identified by the Drawing No. 1030171-LEB-EIA-HER-003a contained within Section 12.7 (Volume 2) of the Environmental Statement) and should include measured survey of any field boundaries to be removed as well as photographic survey of the wider area and long views to and from the Historic Landscape Types. The historic landscape survey shall be carried out prior to any construction works taking place within the identified Historic Landscape areas, in full accordance with the approved scheme.*
- (b) *A copy of the final report relating to the above shall be submitted within three months of the work to the County Planning Authority for approval (or according to an agreed programme). The material and paper archive shall be deposited with an appropriate archive in accordance with guidelines published in The Lincolnshire Archaeological Handbook.*

1.6 Archaeological and historical background

Extensive archaeological evaluation has occurred along the proposed route of the Lincoln Eastern Bypass. There has been a wide variety of archaeological sites of differing significance identified along the route which include:

Evidence for the Mesolithic and Neolithic periods is found in flint scatters and a possible Neolithic Long Barrow.

An extensive Bronze Age barrow cemetery stretches both sides of the River Witham and there is evidence for other Bronze Age activity across the river basin.

There is evidence for an Iron Age settlement as well as the triple ditch system which stretches along the Lincoln Edge.

During the Roman period Lincoln was an important military town and fort and there are several Roman roads which fan out from Lincoln. There is evidence for several Roman settlements and industrial sites in the area including sites on the route of the bypass. This includes evidence for a robbed out high status villa.

Anglo-Saxon artefacts and features identified during the evaluation have been interpreted as a settlement site.

The Medieval landscape included various settlement sites including the original site of Sheepwash Grange which was a monastic outlying grange. Other evidence includes ridge and furrow evidence and artefact scatters.

The Post Medieval period saw the canalisation of the river, the draining of the peat deposits for agriculture and the construction of the railways. Ironstone mines were opened up to the north of the river, and this included both opencast mining and subterranean mining.

1.7 Requirement for work

The archaeological research aims and objectives of the project will be clearly stated, and the method statement or specification will demonstrate how these will be met. Appropriate reference will be made to the East Midlands Research Frameworks and strategies or any national period-specific research frameworks.

The Historic Landscape Survey will be at the level of an English Heritage Level 1 Landscape Survey. This should include measured survey of any field boundaries to be removed as well as photographic survey of the wider area and long views to and from the Historic Landscape Types.

This should be followed by a written report supported by any specialist reports as appropriate and the submission of the complete archive to the museum.

1.8 Methodology

In consideration of methodology the following details should be given in the contractor's specification:

- 1.8.1 An agreed projected timetable for the various stages of work (fieldwork and production of report and archive).
- 1.8.2 Details of the staff structure and numbers.
- 1.8.3 Compliance with the relevant Health and Safety legislation and due consideration of site security.
- 1.8.4 A full description of the recovery and recording strategies to be used.
- 1.8.5 A programme of investigation that provides a sound basis for developing the archaeological scientific component within the specification for any subsequent mitigation strategy.
- 1.8.6 An estimate of time and resources allocated for the post excavation work and report production.
- 1.8.7 The normal preferred policy for the scale of archaeological site plans is 1:20 and sections at 1:10, unless circumstances indicate that other scales would be more appropriate.
- 1.8.8 The site grid will be tied to the national grid.

1.9 Monitoring arrangements

The planning archaeologist, will be responsible for monitoring progress and standards throughout the project and will require at least ten working days' notice prior to the commencement of the work. The planning archaeologist should be kept informed of any unexpected discoveries and regularly updated on the project's progress. Any variations to the specification shall be agreed with the planning archaeologist in writing prior to them being carried out.

1.10 Health and Safety

All work should be carried out in a way that complies fully with the Health and Safety at Work Act 1974.

1.11 Standards

Archaeological contractors should note that the Lincolnshire Archaeological Handbook stipulates basic *methodological* standards. It is considered axiomatic that all contractors will strive to achieve the

highest possible *qualitative* standards, with the application of the most advanced and appropriate techniques possible within a context of continuous improvement aimed at maximising the recovery of archaeological data and contributing to the development of a greater understanding of Lincolnshire's historic environment. Monitoring officers will seek and expect clear evidence of commitment to the historic resource of Lincolnshire, with specifications being drawn up within a context of added value.

1.12 Reporting Requirements

The report content should conform to the minimum standards as defined in Section 14.6 of the Lincolnshire Archaeological Handbook, including:

- 1.12.1 Location plans of the proposed development area at a minimum scale of 1:10 000.
- 1.12.2 Location plans of the area/s which have been investigated and the position of any features.
- 1.12.3 Tables summarising features and artefacts together with a full description and brief interpretation.
- 1.12.4 Accurate section and plan drawings, with ground level, Ordnance Datum, vertical and horizontal scales as appropriate.
- 1.12.5 Photographs of the site scanned at a high resolution in colour. Photocopies are not acceptable.
- 1.12.6 A consideration of the significance of the findings on a local, regional and national basis.
- 1.12.7 A critical review of the effectiveness of the methodology.
- 1.12.8 A complete bibliography of all reference material including sources consulted but not referred to in the text.
- 1.12.9 The online OASIS form <http://ads.ac.uk/projects/oasis> must be completed and the cover sheet included in the report.
- 1.12.10 The following appendices:
 - All specialist reports or assessments.
 - Context register with brief descriptions.
 - Photographic register.
 - Summary of archive contents, location and date of deposition.
 - Archaeological brief.Any recommendations for further work are the responsibility of the planning archaeologist. The report produced by the contractor, therefore, should not include any written recommendations concerning further works. Should the contractor wish to make recommendations to the planning archaeologist, this may be done in writing, separately from the submitted report (IfA standard and Guidance for Archaeological Field Evaluation, paragraph 3.2.8).

1.13 Archive deposition

The integrity of the site archive should be maintained. All finds and records should preferably be properly curated by a single organisation, and be available for public consultation. The archive should be deposited within six months of the completed project or prior to the request for discharge of any relevant planning condition.

The archive consists of all written records and materials recovered, drawn and photographic records, including a single copy of the final report. It will be quantified, ordered, indexed and internally consistent. It should also contain site matrices, a site summary and brief written observations on the artefactual and environmental data. **An accession number must be drawn prior to the commencement of archaeological works. An expected archive deposition date should also be included, this should be applied for at the same time as the museum accession code and site code. This is a compulsory requirement for the specification.**

If the receiving museum is to be The Collection, Lincoln then the archive should be produced in the form outlined in that museum's document 'Conditions for the Acceptance of Project Archives', Chapter 16 in the Lincolnshire Archaeological Handbook.

1.14 Public Dissemination

The deposition of a copy of the report with the Lincolnshire Historic Environment Record and with the planning archaeologist will be deemed to put all information into the public domain, unless a special request is made for confidentiality.

See Chapter 15 of the Lincolnshire Archaeological Handbook for further details.

1.15 Other factors (including contingency)

The specification should make adequate provision in contingency to allow for unexpected finds. The archaeological contractor should provide details of adequate insurance policies. Contingency for unexpected costs e.g. due to more artefacts or ecofacts recovered than expected. This should only be activated after discussion with the planning archaeologist and the client.

1.16 Useful contact details

Karen Waite
Lincolnshire County Council Planning Archaeologist
Development Directorate
Historic Environment Team
Unit 16 Witham Park House
Waterside South
Lincoln LN5 7JN
01522 550382
Karen.waite@lincolnshire.gov.uk

Adam Daubney
Lincolnshire County Council Finds Liaison Officer
Address as above.
01522 552361
Adam.Daubney@lincolnshire.gov.uk

Museum/Archives
The Collection
1 Danes Terrace
Lincoln
LN2 1LP
01522 550961
www.thecollection.lincoln.museum

English Heritage – East Midlands Region
01604 735400
www.english-heritage.org.uk

1.17 Planning and The Historic Environment

There is a presumption in favour of preservation in situ of all important archaeological remains, whether they are designated or not. The National Planning Policy Framework, section 12 para. 141 states 'Local planning authorities should make information about the significance of the historic environment gathered as part of the plan-making or development management publically accessible. They should also require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact and top make this evidence (and any archive generated) publically accessible. However the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted.'