The Historic Landscape Characterisation Project for Lincolnshire

The Historic Character of
The County of Lincolnshire
English Heritage Project No. 4661 Main

The Historic Landscape Character Zones

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The Lincolnshire Historic Landscape Character Zones

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Character Zone Template

Name of Area: The name given to the character zone by the project team and the code given to the character zone.


Total area: In square kilometres.

Percentage of Regional Character Area: The proportion of the character zone area compared to the total area of the Character Area of which it forms a part, expressed as a percentage.

Percentage of project Area: The proportion of the character zone area compared with the project area as a whole expressed as a percentage.

The statement includes a map to indicate the location and extent of the character zone within the project area.

Description
This is a written description of the present character of the zone under discussion. It is based on statistical analysis of HLC data, background research and site visits. It is intended to be an overall description of the essential elements that, taken together, create the distinct character of a zone. The description is intended to be objective, free of value-laden terminology and accessible to the general public, as well as those within the planning and heritage sectors.

The description includes a consideration of some or all of
- Topography
- Land use
- Settlement patterns
- Communications
- Above-ground heritage assets

Historic Landscape Evolution
Complementing the description of the present landscape, this section endeavours to describe the historical processes and events that have shaped the character of the zone. The description is arranged chronologically, where possible, and describes past landscapes, their surviving elements and their impact on subsequent landscape features. It is intended that this should act as a guide to understanding historical developments within the landscape, and is not an exhaustive guide to the history or archaeology of the zone.

Legibility
The concept of legibility is applied to all records in the HLC database. It is a measure of the extent to which past landscapes can be identified in later ones. For example, it may be possible to identify areas of former ridge and furrow cultivation by the characteristic S-shaped field boundaries left when it was enclosed. This section attempts to describe the survival of past landscapes into the present, and to show the specific features in the modern landscape which demonstrate a high degree of legibility.
Character Zone CON1

The Don Floodplain within The Confluence Character Area

ARS sub-province: CTRNT

Natural England National Character Areas:
39 Humberhead Levels
41 Humber Estuary

Total area: 61.3 km²

Percentage of Regional Character Area: 19.2%

Percentage of Overall Project Area: 0.88%

Description
This is an zone of broad, flat arable land to the west of the River Trent. It is bounded to the east by the high ground of the Isle of Axholme, and to the south by the line of the Stainforth and Keadby Canal. Although the River Trent forms the main western boundary of the zone, it is not readily visible due to the high flood bank along much of its length.

Unlike the other drained landscapes in the Confluence Character Area, the roads and lanes found in the Don Floodplains are sinuous and indirect, giving a much less planned feel to the rural landscape. They are also noticeably raised above their surroundings due to the historic risk of flooding.

Despite the name of the zone, the River Don no longer flows through it, having been diverted as part of the seventeenth-century drainage system. The former course of the Don can be traced across the zone, most interestingly at the settlements of Garthorpe and Fockerby, which used to be separated by the river. This is also the case at Eastoft, where the river once formed the county boundary with Yorkshire, and at Luddington, which also sat on the course of the Don.

These villages, along with Amcotts on the River Trent, are the main settlement foci of the zone. Although some modern buildings have been constructed in each of them, their built character remains largely unchanged from the late nineteenth century, and each settlement retains a well preserved historic core.

Away from these nucleated settlements, there are several isolated farmsteads, some of which have been significantly altered by late twentieth-century additions, such as prefabricated barns. The general built character of the zone is one of red-brick buildings with pantile roofs, and much of the more recent construction follows this pattern.

The rural landscape is flat and open, with few vertical intrusions. Modern developments in the zone, such as the pylons running north from Keadby, have a significant visual impact.
proportional to their vertical height. Views across the landscape encompass great distances, and there is a strong sense of isolation away from the main settlements.

**Historic Landscape Evolution**

The development of the character of this zone has been driven by the rivers flowing through it, both current and historical. All of the settlements in the zone were established on the course of a river, and were built on areas of higher ground. Before the zone was drained in the seventeenth century, the inhabitants made their living from the excellent seasonal grazing provided by the annual inundation, and from the many natural resources provided by the marsh. These included wildfowl, fish and reeds. The rivers Trent and Don provided the means by which surplus produce could be traded elsewhere.

As part of his attempts to drain the fenland of the Isle of Axholme, Sir Cornelius Vermuyden caused the River Don to be straightened and diverted from its historic course. Those settlements on the former course were left stranded, and the seasonal inundations of the marsh were much reduced, leading to a marked decline in productivity.

When the land had been drained, it was divided up into new planned fields, with straight boundaries created by the ditches and drains necessary to keep the land dry. The drained and enclosed land was later subject to warping, a process whereby the land is deliberately inundated with river water in order to deposit new sediment and to raise its level. As part of the new farming regime instituted after drainage and enclosure, new farmsteads were built in the eighteenth and nineteenth centuries by landowners in the midst of their new holdings.

The farmland of the zone is extremely productive, due to the rich peaty soil, and the history of farming in the zone since the seventeenth century reflects the desire of landowners to maximise both the output of the land and the efficiency with which it can be harvested. In the twentieth century, the mechanisation of farming and harvesting processes increased rapidly, and the landscape has changed to reflect this. Many field boundaries have been removed to create larger fields that can be worked more efficiently by tractors and harvesters. There is also a tendency towards the dereliction of isolated farm complexes, most especially in the ancillary buildings, perhaps resulting from their obsolescence in the face of the decline of mixed farming practices.

The main settlements have grown, albeit slowly, during the last century, creating ribbon developments on the peripheries along the main roads. Vacant plots within the historic cores of the settlements have also been filled in by modern housing. These processes are, however, on a small scale compared to other settlements in the wider area of the Confluence.

**Legibility**

The processes of drainage and enclosure removed almost all traces of previous land use. Some small areas of ancient enclosure can still be found at the edges of the historic settlements, especially at Luddington, and these are indicative of the small areas of open strip fields that once existed on the higher ground. Some of the main field boundaries in the zone follow the course of the old River Don, which can be traced for much of its former length across the zone.

Much of the post drainage landscape is still recognisable, primarily in the network of drains and dykes that were created. The planned enclosure field patterns remain intact in much of the western half of the zone. In the rest of the zone, where modern fields have replaced the planned enclosures, enough of the rectilinear boundaries remain to provide high legibility of the seventeenth-century landscape.
Character Zone CON2

The Isle of Axholme within The Confluence Character Area

**ARS sub-province:** CTRNT

**Natural England National Character Area:**
39 Humberhead Levels

**Total area:** 49.7 km²

**Percentage of Regional Character Area:** 15.5%

**Percentage of Overall Project Area:** 0.71%

**Description**
The Isle of Axholme is an area of high ground set amidst a drained fen landscape. Historically, the Isle was formed by the courses of three rivers, the Trent, the Don and the Idle. The Don and the Idle have both had their courses altered, and the former fen land has been drained. In the modern landscape it is now more appropriate to refer to the central area of high ground as ‘the Isle’ rather than the whole area once defined by the three rivers. The island character of the high ground is especially clear when the area is viewed or approached from the surrounding countryside. The hills of the Isle rise to approximately thirty metres above the surrounding fens, and are visible across the wider character area. The zone forms an inverse ‘T’ shape beginning at Crowle in the north, then heading south through Belton and Epworth to Haxey, with the arms of the ‘T’ spreading westwards to Westwoodside, and eastwards to Owston Ferry. The nearby town of Wroot has also been included in the character zone.

The historic settlements of the Isle are very well preserved, although there has been some infill development of vacant plots with modern housing. There are also several modern developments to be found on the edges of each settlement, along with ribbon developments stretching along the connecting roads between them. The village cores are characterised by the use of red brick as a construction material, although a significant proportion of houses are painted or whitewashed. Pantile is the most common roofing material on older buildings, while modern houses tend to favour grey tiles.

The Confluence Character Area as a whole is marked by clear contrasts between the high ground and the low, reflecting the limited availability of dry land in the area before drainage. Where the character of the drained fen is largely planned, with origins in the agricultural improvements of the early post medieval period, the Isle reflects a much longer period of use and occupation. The clearest example of this is the nationally significant survival of medieval open field farmland. This type of farming produces a very different landscape than more modern techniques. The fields are divided into strips, which are long and thin with a curvilinear form. The strips are not separated by hard boundaries, such as hedges or ditches, and, as adjacent strips can be owned by different farmers, different crops can be grown in them, often creating a patchwork effect.
The ownership of strips is transferable, and there has been some consolidation of strips in modern times, as adjacent strips come into the possession of a single owner. This can have the effect of allowing more traditional farming techniques to be employed leading to a dilution of the historic character of the open fields. In some cases, this consolidation has been accompanied by the erection of fences and the conversion of the land to pasture, in order to facilitate the keeping of horses. This process is broadly similar to the historic enclosure of open fields that occurred across much of the rest of the county in the medieval period.

Aside from the open strip fields, the rural landscape is largely characterised by large, modern fields, exhibiting significant loss of boundaries since the nineteenth century. There is limited survival of planned enclosure around Crowle, in the north, but elsewhere most of it has been consolidated into larger fields. There is widespread survival of ancient enclosures throughout the Isle, but especially around the southern settlements, centred on Haxey.

The Isle is largely free of woodland, reflecting the historic pressure on available land. However, the large numbers of suburban-style domestic gardens provide a certain amount of tree cover within settlements. The Axholme Line Nature Reserve, an overgrown railway cutting that traverses the zone, also provides an area of woodland habitat, contributing significantly to the biodiversity of the zone.

**Historic Landscape Evolution**

The development of the Isle has been governed by the lack of permanently dry land on which to build and to grow crops. The Confluence Character Area as a whole is divided into the high ground, upon which are found all the historic settlements and the former open fields, and the drained fenland, which is, essentially, a post medieval landscape.

Prior to the drainage of the surrounding land, the inhabitants of the Isle communities used the fens for seasonal grazing, hunting, fishing and gathering reeds. During the periods of inundation, it is likely that cattle and sheep would have been pastured in some of the ancient enclosures found on the high ground. Cultivation of crops was limited to the open fields surrounding the Isle villages. This system provided sufficient food and resources for the Islanders, along with a surplus of some goods for trade with neighbouring areas via the network of rivers through the zone.

Each of the settlements seen in the zone today, with the exception of Wroot, is recorded in the Domesday survey of 1086. Most of the settlements appear, from their names, to be predominantly Danish rather than Anglo-Saxon. Settlements in the north of the Isle are nucleated in character, while those in the south, particularly Haxey, Westwoodside, Upperthorpe and Craiselound, are dispersed hamlets.

Although the surrounding fens were drained and enclosed, the open fields and commons on the Island survived, in some cases until the present day. The common grazing land on the high ground was enclosed in two Acts: Epworth, Haxey, Owston and Belton in 1795; and Crowle and surroundings in 1822.

Much of the built form of the Isle settlements is from the eighteenth century or later, and there are many village based farmsteads. Another significant feature of the Isle is the high proportion of non-conformist religious buildings, all the more notable because of the historic connection of the Isle to John Wesley and the early years of Methodism.

Subsequent development on the Isle is largely the result of twentieth-century processes. The settlements have grown significantly since the nineteenth century, with two distinct types of modern development in evidence. The first of these is linear ribbon development along the main roads between settlements, generally dating from the 1920s and 1930s. After the Second World War, new housing was constructed in planned estates set back from the main
axis of each village. This pattern continues to this day, along with occasional infill of vacant plots within historic settlements.

**Legibility**

Perhaps more than any other part of the county, the Isle of Axholme retains many strong elements of its historic formations within its present landscape. The clearest example of this is the survival of the ancient open fields around Belton, Epworth and Haxey. These are unique within Lincolnshire and very rare in the country as a whole. The open fields retain much of their historic character, although crop-rotation is no longer practiced. There are several threats to the open fields, which have the potential to damage or destroy them. The first is the ongoing process of private enclosure, brought about by the consolidation of strips. This may result in the adoption of more modern arable farming techniques, effectively removing the characteristic stripy appearance. It may also be undertaken for the purposes of pasturing livestock, in which case not only is the land-use changed, but new fences are built to create paddocks. Another potential threat to the open fields is the expansion of neighbouring settlements by the construction of new housing estates.

The extensive survival of ancient enclosures throughout the zone is indicative of historic farming practices, such as the over-wintering of livestock or the enclosure by agreement of parts of the open fields. Although there is some survival of planned enclosure, much of it has been lost as fields have been consolidated in the past fifty years. The resulting modern fields have little legibility of preceding landscape types and are generally very irregular in shape.

The historic settlements of the Isle are well preserved, with distinct historic cores. The historic settlement pattern is potentially at risk from ribbon development, which threatens to link separate settlements, especially around Haxey.
Character Zone CON3

The Axholme Fens within The Confluence Character Area

**ARS sub-province:** CTRNT

**Natural England National Character Area:**
39 Humberhead Levels
45 Northern Lincolnshire Edge with Coversands

**Total area:** 209 km²

**Percentage of Regional Character Area:** 65.3%

**Percentage of Overall Project Area:** 3%

**Description**

The Axholme Fens lie in the extreme north-west of the historic county of Lincolnshire and are found entirely within the boundary of the North Lincolnshire unitary authority. It is bounded by the Northern Cliff Character Area to the east, the Humber to the north, and the county boundary to the south and west.

The zone is made up of drained fen and marshland resulting in a flat arable landscape with broad views across long distances. These views are mostly unrelieved by vertical intrusions, as there is little woodland to be found in the zone. Field boundaries are predominantly formed by the hierarchy of drainage ditches, or by the long, straight roads that traverse the landscape.

There are relatively few settlements to be found in the zone, apart from those at historic crossing points along the course of the River Trent. These can be seen at places such as Owston Ferry, with its counterpart on the opposite bank, East Ferry. Aside from toponymic evidence such as this, crossing points can be inferred from the course of roads.

Much of the settlement in the zone is found in the form of isolated farms set in the midst of the drained fen fields. These are often accompanied by historic farm buildings, which are increasingly subject to dereliction. There may also be modern farm buildings such as barns and warehouses, which are often much larger than the associated farm dwellings and are typically made from different building materials, such as concrete and corrugated iron.

The wetland heritage of the zone is still very much in evidence. There are numerous long, straight drainage ditches, which feed into purpose built drains, straightened rivers or canals, before flowing into the Trent. There are also many nature reserves in the zone, including a new area of wetland that has been created at Alkborough Flats.

The landscape on the east bank of the Trent is very like that on the west bank, but the influence of the nearby city of Scunthorpe is much more powerful. There is more industrial development, principally at Flixborough and Gunness. The city itself is a visible presence on the eastern skyline, especially at night when streetlamps are lit.
Historic Landscape Evolution

Prior to drainage, the fens provided many resources to the inhabitants of the neighbouring Isle of Axholme, including fish, fowl and seasonal grazing land. The fens were inundated by the nearby rivers each winter, and when the flood water receded it left behind rich sediment that encouraged the growth of grass. The rich grazing thus provided was used during the summer by the settlements on the island, and also by neighbouring settlements in Nottinghamshire.

When the fens were drained, much of their former productivity was temporarily lost. The drainage was intended to replace the former common fenland grazing with quality arable land, which was enclosed in a rectilinear fashion and distributed between the Crown and the drainage engineers, led by Cornelius Vermuyden. The common grazing land was thus reduced to a third of its former size, reducing the ability of the Islanders to obtain a living from it. Furthermore, the inundations which had once deposited rich silt upon the pastures, encouraging the rapid growth of grass, were deprived of much of their power, further decreasing the productivity of the land that was left.

The initial results of drainage were less than satisfactory, but later improvements to the drainage system during the eighteenth and nineteenth centuries, including more effective pumping technologies, led to greater productivity from the new enclosures. In addition to this, the introduction of warping, a technique by which the land was deliberately flooded by river water, increased the fertility of the land and also raised its height by depositing several feet of silt over the course of decades, thus decreasing the risk of flooding and allowing year-round cultivation.

The landscape has been altered in the years since the Second World War. Much of the zone has been subject to the loss of field boundaries, resulting in much larger fields. It is unlikely that this has affected the visual character of the landscape to any great degree, as the boundaries lost have typically been ditches rather than hedges.

Legibility

Although the historic wetland character of the zone has been largely swept away by drainage and other processes, the landscape of today is a direct descendent of it. In order to create the modern arable landscape, the historic fen was drained by means of a hierarchy of ditches, many of which remain in their original form. Despite the loss of boundaries in the twentieth century, enough remain that the landscape retains a strong rectilinear character. There are also extensive areas of surviving drainage landscape throughout the character zone that appear to be unchanged from the nineteenth century.

Some areas of wet pasture were left after enclosure in the form of designated turbaries, which were not used for the purpose of cutting turves and have subsequently become communal open space or nature reserves. The name ‘turbary’ has also been preserved to this day on maps.

Settlements have remained largely unchanged, although there has been a tendency towards infill development, and also some dereliction of public buildings such as chapels and pubs. Isolated farms are still found throughout the zone, many with derelict outbuildings or modern facilities attached.
Character Zone NCL1

The Lincoln Satellite Settlements within The Northern Cliff Character Area

**ARS sub-province:** CLNSC

**Natural England National Character Areas:**
- 44 – Central Lincolnshire Vale
- 45 – Northern Lincolnshire Edge

**Total area:** 44 km²

**Percentage of Regional Character Area:** 13.1%

**Percentage of Overall Project Area:** 0.6%

**Description**

The settlement pattern of this character zone owes much of its present character to its proximity to the City of Lincoln. The historic settlements of Welton, Dunholme, Nettleham, Sudbrooke, Reepham, Cherry Willingham and Fiskerton have all been heavily developed over the twentieth century, to the extent that several of them are now approaching the size of small towns rather than villages.

This development is largely residential in nature, with associated infrastructure such as schools and recreational facilities. Housing developments from the early to mid twentieth century were generally built along the roads connecting one village to another, typically taking the form of detached or semi-detached housing on large plots. These houses are typically of irregular design, reflecting the greater individuality with which houses used to be designed. Later development, from the nineteen-eighties onwards, is in the form of discrete housing estates, with sinuous street patterns and uniform, brick-built, detached housing. These estates are often set back from main roads behind the ‘ribbon’ development of the earlier periods of expansion.

Despite the recent expansion of these villages, their historic cores tend to be well preserved. High streets retain many historic buildings, especially pubs and churches, and areas of open space, such as the village greens of Welton and Dunholme, are tranquil and well-kept. Although there has been some infill of vacant plots by modern houses, there are many examples of surviving eighteenth- and nineteenth-century cottages, constructed of red-brick with pantile roofs.

As well as the dominant nucleated settlement pattern of villages, there is a secondary pattern of small isolated farmsteads. The farmhouses are typically eighteenth or nineteenth century in origin, and in many cases they have associated outbuildings, such as barns or stables, that date from the same period. However, in many cases these outbuildings have fallen into disuse and can be found in varying stages of dereliction. Some have also been
replaced by large modern farm buildings constructed of concrete, breeze blocks and corrugated iron.

The rural landscape of this zone is characterised by flat fields with wide views across large areas. The pattern of fields is generally rectilinear, reflecting the regular planned enclosure of this landscape during the eighteenth and nineteenth centuries. The planned enclosure pattern survives largely intact around the villages of Nettleham, Scothern and Welton, but elsewhere has been superseded by larger modern fields formed by the amalgamation of smaller historic fields, such as the planned enclosures.

**Historic Landscape Evolution**

The nearby City of Lincoln was a major Roman settlement, and it is likely that this zone formed part of its hinterland. Although there are no Roman remains to be seen above ground today, the modern Wragby Road, the A158, follows the course of a former Roman road.

After the Roman occupation, new settlements were established by Anglo-Saxon and later Danish settlers. These were the forebears of most of the current settlements, which are mentioned in the Domesday survey of 1086. Like most other Midland’s settlements, these would have been set among two or three large open strip fields, with common grazing on land that was unsuitable for cultivation, such as dry upland heath. In this zone, it is likely that such land was found immediately adjacent to the Roman road, which may explain why the historic settlements are found at some distance from the road itself.

The medieval landscape may also have been influenced by the proximity of religious foundations, such as Barlings Abbey, whose holdings extended into the zone. It is possible that farms such as Scothern Grange and Reepham Grange were once operated as farming estates on behalf of these abbeys. On the dissolution of the monasteries in the fifteen-thirties such farms would have been sold to local gentry, and it is possible that the name ‘grange’ is indicative of this process.

The zone was subject to planned enclosure in the eighteenth and nineteenth centuries. This process removed the medieval system of open field farming and common grazing, and replaced it with enclosed fields, which were allocated to the village landowners according to the extent of their former holdings. These fields have a characteristic rectilinear form, with straight boundaries and right angled corners, resulting from the division of the former landscape by professional surveyors. The pattern of isolated farms seen in the modern landscape is partially a result of the enclosure process, as those farmers who formerly lived in the villages moved outside to be closer to their new holdings.

The twentieth century saw further change to the landscape of the zone. The primary change being caused by the amalgamation of fields, either to facilitate the use of mechanised techniques or by the purchase of adjacent farmland by farmers looking to increase their holdings. As described above, the villages in the zone expanded greatly with the addition of many new houses. This expansion was primarily caused by the need to provide housing for those who worked in the City of Lincoln, but choose not to live within its boundaries, although there is also a sizable number of bungalows in the zone, which suggests the presence of a significant retired population.

**Legibility**

Although somewhat masked by peripheral modern development, the medieval nucleated settlement pattern remains largely intact. However, it is possible that some villages may in the future be merged with each other if care is not taken to prevent development stretching along connecting roads.
The extensive survival of planned enclosures provides a high degree of legibility of the eighteenth-century landscape. This is enhanced by the presence of Sudbrooke Park, which was established in the eighteenth century and retains much of its original form.
Character Zone NCL2

The Northern Cliff Farmlands within The Northern Cliff Character Area

ARS sub-province: CLNSC

Natural England National Character Areas: 45 Northern Lincolnshire Edge with Coversands

Total area: 79.3 km²

Percentage of Regional Character Area: 23.6%

Percentage of Overall Project Area: 1.14%

Description
The general appearance of the zone is governed by its topography. The landscape is generally flat with a shallow eastward slope that drops approximately twenty metres. The westward boundary of the zone is formed by the A15, which is a long straight road which runs due north from Lincoln. The minor roads in the area are generally aligned from west to east, and are often very straight with wide grass verges.

The settlements in this area are nucleated in nature, and are arranged in an irregularly spaced line from Hackthorn in the south to Waddingham in the north. They are all connected to the A15 by straight minor roads, and to each other by a sinuous, meandering north-south road that runs the length of the zone. The line of nucleated settlements is situated on a series of streams that run from west to east across the area and are fed by a spring line to the west. The settlements are a mixture of historic buildings from the eighteenth and nineteenth centuries and more modern houses of individual design. There has been little outward expansion of the settlements from their historic footprints, and most recent additions have tended to be built as infill developments of vacant plots. This has resulted in an unplanned, organic feel to the settlements in which many different architectural styles contribute to their character.

Most of the historic settlements survive to this day, but there are several areas where earthwork remains indicate the presence of historic settlements that have since been abandoned. At Caenby, Hackthorn and Riseholme, there are small settlements set within areas of earthworks. At West Firsby the entire village has disappeared.

A secondary settlement pattern of isolated farmsteads can be observed set within the rural landscape, away from the main nucleated settlements. These farmsteads range in size from single farmhouses to large complexes of ancillary buildings such as barns and animal pens. The older buildings are typically built of limestone or brick while newer additions tend to be constructed of concrete and corrugated iron. Many of the farm outbuildings have fallen into disrepair as they have become obsolete.
The rural landscape is characterised by long, straight field boundaries, set at right-angles to each other. The fields themselves are a roughly equal mixture of very large, prairie-style fields and smaller fields with a strict rectilinear form. These two types make up the bulk of the agricultural land in the zone, and are typically found at a distance of 200 to 300m away from the settlements. The fields immediately adjacent to the villages are typically irregular in shape, with curvilinear boundaries, and are often used for pasture.

The rural landscape is relieved at regular intervals by the presence of small, rectilinear woodland plantations which are generally on the same alignment as the fields and roads. Some of these are long and thin and were probably planted as shelterbelts to prevent the erosion of topsoil during ploughing.

**Historic Landscape Evolution**

Although there is evidence for occupation of the area in the Prehistoric and Roman eras in the form of cropmarks and scattered finds, no extant visible remains are now apparent, apart from the A15, which follows the line of a Roman road and forms the western boundary of this character zone. The nucleated settlements appear from their names to be a mixture of Anglo-Saxon and Danish foundation.

The medieval, farming landscape would have been a mixture of arable and pastoral areas. The surviving areas of ancient enclosure indicate that the open strip arable fields would have been situated in close proximity to the settlements. The dry heath to the west of the zone was used for grazing sheep. Some of the isolated farms in that area probably have their origins as grange farms operated on behalf of local religious houses. Parts of the southern portion of the character zone were used for sheep farms at this time, for example the Grange-de-Lings area, which was associated with Barlings Abbey.

The heath and parts of the open fields were fully enclosed during the eighteenth and nineteenth centuries. This was undertaken either by private agreement between local landowners, or by Act of Parliament. The resulting landscape was one of small rectilinear fields, which were bounded by hedges or stone walls. In some cases the owners of the new fields built farmsteads set among their holdings. Some of the isolated farmsteads seem to be associated with deserted village earthworks, and it is possible that these are remnants of the earlier settlement cores as opposed to isolated farmsteads established as a result of the enclosure movement.

During the twentieth century, landscape change was brought about by the need to increase the efficiency of farming techniques. New mechanical farming aids, such as combine harvesters, could be employed more effectively on larger fields, and many hedges were removed in order to facilitate the use of such techniques.

**Legibility**

The irregular fields immediately adjacent to the settlements are indicative of early enclosure of an ancient, strip farming system, an interpretation supported by the widespread survival of ridge and furrow earthworks in these fields.

The historic settlement cores still retain much of their historic character. Modern buildings tend to be individually designed and constructed and are sympathetic to the scale and aesthetic of the historic villages.

The modern landscape displays field consolidation indicative of mechanised agricultural practices. This has led to the partial re-establishment of a more open landscape, reminiscent of the pre-enclosure common grazing use of the landscape in this area.
Character Zone NCL3

The Cliff Edge Airfields within The Northern Cliff Character Area

ARS sub-provinces:
CLNSC
CTRNT

Natural England National Character Areas:
44 Central Lincolnshire Vale
45 Northern Lincolnshire Edge with Coversands
48 Trent and Belvoir Vales

Total area: 104.9 km²

Percentage of Regional Character Area: 31.2%

Percentage of Overall Project Area: 1.5%

Description
There is some survival of planned enclosure landscapes across the character zone, particularly in the north. The modern fields, produced through a process of consolidation in the twentieth century seem to retain much of the rectilinear character of the underlying planned enclosures. Most of the modern fields and planned enclosures have a strong east to west orientation, evident from the long boundaries that have survived the process of consolidation. Close to the historic settlements on the western edge of the character zone there is a preponderance of surviving ancient enclosures characterised by small field sizes.

The settlements in this character zone are all in the western half of the zone, arranged along the base break of slope of the cliff. They are nucleated in nature and are typically arranged in an irregularly spaced north to south alignment. None of the settlements have expanded much beyond their historic cores and have little peripheral modern development. Most of the isolated farmsteads in the character zone are found in the eastern half. There are four areas of historic village earthworks representing deserted or shrunken settlements within the zone.

Much of the road network reflects the strong east to west alignment of the fieldscapes, apart from the road in the centre of the zone, which is aligned north to south and follows the top of the Cliff. The east to west aligned roads are generally characterised by their straight, planned nature, although there are few which are much more sinuous. The eastern edge of the character zone is formed by the north to south aligned A15 road, which generally follows the line of the Roman road, Ermine Street.

This character zone has a particularly high number of military airfields (9.9% of the total land area of the zone) which are either in use or retain enough of their visible character to be confidently assigned to this category.

Historic Landscape Evolution
Although there is evidence for occupation of the zone in the Prehistoric and Roman eras, in the form of crop marks and scattered finds, no extant visible remains are now apparent,
apart from the A15, which follows the line of a Roman road and forms the western boundary of this character zone. It is clear that the Roman road continued to be an important landscape feature in the post Roman era, as many of the parish boundaries within this character zone follow the road. It is possible that the road which follows the top of the cliff edge (the B1398) also has its origins in an earlier era, as a long distance track way which followed a prominent ridge line.

There is evidence for occupation of the zone during the early medieval period with estates sharing the names of current settlements and deserted settlements being recorded within the Domesday survey. It is likely that the parish boundaries and the historic settlement cores were established during this early medieval period. The area immediately adjacent to the Roman road was probably used as common grazing land during this period, being away from the settlement cores and beyond the open field system used for arable crops.

Much of the zone was subject to planned enclosure in the eighteenth and nineteenth centuries, and much of this survives now, along with its associated isolated farmsteads. Some of the isolated farmsteads seem to be associated with deserted village earthworks, and it is possible that these are remnants of the earlier settlement cores, as opposed to isolated farmsteads established as a result of the post medieval enclosure process. The post Second World War period saw the consolidation and enlargement of many of the fields within the character zone by the removal of some of the field boundaries.

Although many of the airfields within this character zone have their origins in the First World War, some were constructed during the early years of the Second World War. The earlier airfields were significantly expanded and altered immediately before and during the Second World War. The majority were disposed of by the RAF in the aftermath of the Second World War, apart from Scampton and Kirton-in-Lindsey, which continue in RAF use to the present day. The designation of RAF Scampton as a V-bomber base in the mid-1950s necessitated the lengthening of the main runway to the north-east, which resulted in the diversion of the A15 to the east, away from its original Roman course.

**Legibility**

Legibility of the medieval landscape is evident in the survival of the settlement pattern and long east to west orientated field and parish boundaries. The historic settlement cores still retain much of their historic character with most modern development being small scale.

Legibility of the post medieval landscape is evident in the extensive survival of planned enclosure and isolated farmsteads across the character zone.

The modern landscape shows field consolidation indicative of contemporary agricultural practices. In some ways this field consolidation close to the A15 has led to the partial re-establishment of a more open landscape, reminiscent of the pre-enclosure common grazing use of the landscape in this zone.
Character Zone NCL4

The Broughton Woodlands within The Northern Cliff Character Area

ARS sub-provinces:
CLNSC
CTRNT

Natural England National Character Areas:
44 Central Lincolnshire Vale
45 Northern Lincolnshire Edge with Coversands

Total area: 49.3 km²

Percentage of Regional Character Area: 14.7%

Percentage of Overall Project Area: 0.71%

Description
Despite its proximity to Scunthorpe, this zone retains a strongly rural character. This is due to a large, wide belt of woodland, mainly on the west side of the Roman road, which acts a screen between Scunthorpe and the towns and open countryside to the east. The woodland is made up of a mixture of tree types, with several blocks of conifer plantation, such as Rowland Plantation, scattered around a large central area of ancient broad-leaved woodland.

The two main settlements in the zone, Broughton and Scawby, are at the northern end of a line of settlement that runs along the east side of Ermine Street from Nettleham in the south. However unlike the smaller villages to the south, both Broughton and, to a lesser extent, Scawby have grown into commuter towns to accommodate workers from nearby Scunthorpe. Older housing stock is constructed in red brick, with local pantile roofs. The more modern estates of detached and semi-detached housing are more generic, using building materials that are found throughout the country. Away from the two towns, rural settlement is limited to a handful of isolated farmsteads, usually found at the end of long farm tracks.

The zone is traversed by several important transport links. The main north to south road is a continuation of the Roman Ermine Street, which runs the length of the Northern Cliff Character Area. Between Broughton and Scawby, the M180 runs from east to west, connecting Scunthorpe to Grimsby and Immingham on the Lincolnshire coast. The southern boundary of the zone roughly corresponds with the line of the Manchester, Sheffield and Lincolnshire Railway which is still in use.

The rural landscape is an approximately equal mix of medium-sized rectilinear fields and large modern fields. The former make up the central part of the zone around the two main settlements, while the latter are found towards the edges of the character zone.
**Historic Landscape Evolution**

The farmland of the zone is an outgrowth of a typical medieval open field farming regime, with nucleated settlements surrounded by their open fields. It appears that Scawby maintained two fields, with common grazing to the west of the Roman road and down on the Ancholme Carrs to the east. It is likely that Broughton would have followed a similar regime. During the eighteenth century these parishes were enclosed by Act of Parliament, creating a new landscape pattern of rectilinear fields with long, straight hedge boundaries. Instead of being farmed by residents of the villages, as before, the new fields were worked by farmers who lived among their fields in isolated farms. As part of the new landscape several woodland plantations were created and these also have straight, planned boundaries.

The planned landscape remained largely unaltered until the middle of the twentieth century, when new mechanised arable farming techniques were introduced after the Second World War. These methods required larger fields in order to achieve maximum efficiency, necessitating the removal of hedges to create the large modern fields seen on the edges of the zone today. It is possible that the planned enclosures survived in the centre of the zone as the land was less suited to arable farming. It is also possible that hedges have been reinstated in the central area, giving the impression of survival.

Broughton appears to have begun growing beyond its historic boundaries in the late nineteenth and early twentieth centuries, perhaps as a result of the expansion of the iron works at Scunthorpe. There are some unusual examples of early twentieth-century semi-detached housing on the north side of South View with plots of up to twenty metres in length, resulting in long, thin gardens to the rear. This layout is reminiscent of Land Settlement Association allotments and housing, but there is no record of Land Settlement Association activity in this part of Lincolnshire.

**Legibility**

There is little evidence of Prehistoric activity forming a major component of the modern landscape. There are some examples of earthworks in the woods around Broughton, but these are not readily identifiable from maps, and do not affect nearby boundaries. Roman activity is represented by the presence of the main north to south road, Ermine Street. The presence of this road governed the establishment of later settlements, which exist in a line parallel to it. There is no standing archaeology or other landscape objects to indicate Roman activity.

The medieval landscape is not readily discernible in the character zone. The two settlements have grown significantly beyond their historic boundaries, and this has largely removed any traces of the former open fields. Specifically, the ancient enclosures, which might have retained ridge and furrow earthworks, have been built upon or ploughed over. Some parts of the pre-enclosure landscape are identifiable from names, such as Broughton Common. It is likely that much of the ancient woodland found in the zone is of late medieval origin, but the boundaries of the historic woodland have been blurred somewhat by the creation of later plantations at the edge, and by modern developments encroaching upon it, such as the Forest Pines golf club.

The enclosure landscape is well represented throughout the zone, with the survival of large areas of planned enclosure. There are also several examples of rectilinear copses, indicative of planting at this time. Nineteenth-century isolated farmsteads are found throughout the zone, and these are a typical outgrowth of the post enclosure farming regime.
Character Zone NCL5

The Normanby Scarp within The Northern Cliff Character Area

ARS sub-provinces:
CLNSC
CTRNT

Natural England National Character Areas:
39 Humberhead Levels
41 Humber Estuary
45 Northern Lincolnshire Edge with Coversands

Total area: 58.9 km²

Percentage of Regional Character Area: 17.5%

Percentage of Overall Project Area: 0.84%

Description
Unlike the rest of the Character Area, this zone is marked by the presence of two distinct scarps which are outcrops of very different material. The western scarp is made up of a typical mudstone, overlying the same limestone formation that forms most of the length of the Northern Cliff Character Area. The eastern cliff is partly made up of ironstone, a resource which has caused the wholesale transformation of the zone by direct and indirect means over the past 150 years.

The western scarp is particularly pronounced between the villages of Alkborough and Flixborough, which are found at the top of the cliff. Immediately to the west of these villages, the scarp drops away by approximately sixty metres, providing broad views over the Confluence Character Area. The eastern scarp runs approximately parallel to the western scarp between the settlements of West Halton and Low Risby.

The zone has a nucleated settlement pattern, and most villages exhibit a well preserved village core. Despite the proximity of the zone to Scunthorpe, there is very little modern development in most settlements. The exception to this is Burton-upon-Stather, the largest village in the zone, which includes a variety of twentieth-century housing developments, including 1920s’ ribbon development along the main roads, and extensive private and social housing estates. The general nucleated pattern is interrupted away from the main settlements, with a substantial number of brick-built isolated farmsteads.

The rural landscape is dominated by large modern fields of generally irregular shape. However, elements of the modern fieldscape, such as relict boundaries and drainage ditches, create a strongly rectilinear pattern. There are also several pockets of well preserved planned enclosure spread throughout the zone. Ancient enclosures occur in close proximity to some of the settlements, including the deserted settlements of Sawcliffe and High Risby.
Much of the zone once formed part of the Normanby Estate, some of which survives in the form of Normanby Hall Country Park, owned and administered by North Lincolnshire Council. This area of landscape parkland is surrounded by estate woodland, providing a recreational space that is cut off from the industrial influence of Scunthorpe. Aside from the estate woodland at Normanby, most of the woodland in the zone is found in rectilinear plantations of varying sizes.

There are large areas of disused open-cast ironstone workings in the eastern half of the zone, some parts of which now form large bodies of standing water. The workings are connected by a purpose-built railway that continues out of the character zone into the steelworks at Scunthorpe.

Risby Warren, on the eastern side of the character zone, is a notable survival of unenclosed land. It is a designated Site of Special Scientific Interest (SSSI), and represents the largest intact area of heathland in the county. The area is accessible to the public via a network of paths and bridleways. It is strongly influenced by the heavy industry of Scunthorpe to the south, and is traversed by two parallel power lines supported by large pylons.

Although the zone is predominantly rural, some recent industrial development has taken place in the south of the zone at the Foxhills Industrial Park. This is a typical 1980s’ industrial estate, with large office buildings and warehouses spread along a sinuous branching network of roads. A wind farm has been constructed in the same area, just south of Normanby Park, and this development is visible across the character zone. Taken together, these industrial developments are indicative of the growth of Scunthorpe to the south, a trend that will continue to influence the surrounding rural landscape.

**Historic Landscape Evolution**

As with other parts of the Northern Cliff Character Area, the landscape that exists to day is largely an outgrowth of the medieval open field farming regime, in which the nucleated settlements would have been surrounded by their great fields and, beyond these, the common grazing land. Several settlements are strung out along the top of the western scarp with former heathland to the east.

The settlements of the western scarp are set in an area of sandy soil that proved ideal for rabbit warrens. Elsewhere in the county, these features were removed by later enclosure, but here, especially near Risby, the warren has survived and retains its historic character. This may be due to the unstable nature of the sandy soil, which has been significantly eroded by wind action, and may have been unsuitable for early pastoral enclosure or eighteenth-century planned enclosure.

Elsewhere, much of the medieval pattern was removed by the enclosures of the eighteenth and nineteenth centuries, which created new rectilinear field patterns over the ancient unenclosed land. The new fields were bounded by hedges which were laid out in straight lines by professional surveyors. New isolated farm complexes were established away from the villages in the years following enclosure, creating a secondary dispersed settlement pattern in parallel to the original pattern of nucleation. The present-day rural landscape is primarily the result of modern farming practices which have caused the removal of numerous field boundaries.

After the establishment of the Scunthorpe iron industry in the late nineteenth century, the zone was subject to open-cast mining for ironstone. The mines were connected to the iron foundries by a new railway which cut across the rectilinear planned enclosure landscape.
Legibility
The zone is particularly notable for the survival of the pre-enclosure landscape at Risby Warren. This may either be as a result of the unsuitability of the soil for cultivation or because the land was purchased for its mineral resources which have remained unused. As the warren has been designated as a Site of Special Scientific Interest, it will continue to enjoy a high degree of protection in the future.

There is limited survival of ancient enclosures in the zone, most of which are found in the immediate vicinity of historic settlements. The sinuous shapes of these enclosures offer limited legibility of the medieval open fields that preceded them.

The eighteenth- and nineteenth-century enclosure landscape can be seen throughout the zone in isolated pockets of intact rectilinear fields. Although most of the rural landscape is the result of twentieth-century consolidation of fields, there are enough surviving boundaries to provide a high legibility of the former landscape.

There are several sites of former open cast ironstone mining which have not, as yet, been backfilled. These pits are in the process of being colonised by rough vegetation and have the potential to provide significant amenity value to the zone. They also bear witness to the decline of the industrial power of the zone.
Character Zone NOM1

The Humber Bank
within The Northern Marshes Character Area

**ARS sub-province:** CLNSC

**Natural England National Character Areas:**
41 Humber Estuary
42 Lincolnshire Coast and Marshes
43 Lincolnshire Wolds

**Total area:** 112.4 km²

**Percentage of Regional Character Area:** 39.9%

**Percentage of Overall Project Area:** 1.61%

**Description**

The landscape of the Humber Bank Character Zone is primarily rural, although there are several small towns and villages to be found throughout. Much of the rural landscape comprises large open fields, with few hedges to interrupt the wide views across the zone, and across the river Humber to the north. Many of these fields have a strongly rectilinear character, indicative of the planned drainage and enclosure of the historic marshland which once covered the zone. The influence of the Humber Estuary can be seen in many parts of the zone, especially in the maritime character of the major settlement, Barton-upon-Humber.

The historic settlements in the zone occupy two distinct lines running parallel to the shore. The eastern line, from Habrough to East Halton, is notable for the survival of several moated sites and areas of deserted village earthworks. The western line, from Ulceby to Barton, follows the main road through the zone. The historic cores are readily identifiable in most settlements, despite the encroachment of modern development. This is mainly due to the use of locally-produced brick and pantile in the construction of historic buildings.

Away from the main settlements, isolated farmsteads are evenly distributed across the character zone, also typically constructed of brick. Many are associated with redundant out-buildings in varying states of decrepitude. In some cases these have been replaced by modern barns and sheds, but in most cases there is a mix of types, creating a jumbled, utilitarian character.

The major town within the character zone is Barton-upon-Humber, situated in the north of the character zone. At its heart, Barton remains largely unchanged from the nineteenth century. The haven, to the north of the town centre, retains much of the character of its maritime origins, including the Ropewalk, an active boatyard and the former customs house. The bank of the Humber to the east and west of the haven is heavily influenced by the former brick and tile industry, with former clay pits having been reused as nature reserves and for watersport facilities. Towards the edges of the town, modern residential and industrial developments have been constructed in recent years.

There are two former RAF airfields within the character zone, at North Killingholme and Goxhill. Both of these are in use as industrial estates, but retain such features as hangars and runways in identifiable forms.
Historic Landscape Evolution

Although the drainage of this zone dates from the eighteenth and nineteenth centuries, there were active settlements and farming systems in place by the time of the Domesday survey. From the surviving place-names, these appear to be an even mix of Anglo-Saxon and Danish foundations.

Although much of the coastal area would have comprised low-lying saltmarsh, the area between the two lines of settlement is generally higher, and appears from relict ridge and furrow earthworks to have been part of an open-field farming regime. The saltmarsh to the east would have provided common grazing land for sheep and cattle.

In the early part of the twelfth century, Thornton Abbey was established on a promontory of slightly higher ground, at approximately 8m above sea level, which at the time would have been isolated on the edge of the coastal marshes. It is also possible that some of the isolated farmsteads identified within the zone were founded at this time as granges attached to the relevant monastic estate. Some of these granges were probably enclosed, perhaps for the purposes of livestock rearing.

The zone was subject to planned enclosure and drainage in the eighteenth and nineteenth centuries, and much of this survives now, along with its associated isolated farmsteads. The post Second World War period saw the consolidation and enlargement of many of the fields within the character zone by the removal of some of the field boundaries.

Legibility

Legibility of the medieval landscape is evident in the survival of the settlement pattern with historic settlement cores still retain much of their historic character and local building materials. A number of earthwork sites which represent former monasteries and medieval high status residences are locally highly legible. Within the landscape, elements of the wider influence of these establishments are apparent, in the high legibility of early enclosures, which have been subsumed into later planned fieldscape, and centred on certain isolated farmsteads.

Much of the planned character of the landscape survives to the present day. In some cases the eighteenth-century field pattern remains largely unchanged. Where field boundaries have been removed in modern times, the underlying rectilinear character is usually identifiable from field drains.
Character Zone NOM2

The Immingham Coastal Marsh within The Northern Marshes Character Area

ARS sub-province: CLNSC

Natural England National Character Area:
41 Humber Estuary

Total area: 40.4 km²

Percentage of Regional Character Area: 14.4%

Percentage of Overall Project Area: 0.58%

Description

This character zone is dominated by industrial activity, in particular installations related to the petrochemical industry and docks. The ‘Industrial’ broad type accounts for 36% of the total land area within this character zone.

Immingham is the only settlement within this character zone. It has seen considerable expansion in the twentieth century to the extent that the historic core is now largely invisible. The main focus of the settlement has shifted to the civic centre, which was built in the mid-1960s. There are still a few, scattered isolated farmsteads within the character zone, which are all on the western periphery of the character zone. Several isolated farmsteads have been subsumed into industrial sites.

As a proportion of the total land area there are very few fields of any type within the character zone when compared to other character zones within this study, due in the main to the development of fields during the twentieth century for industrial and port use. Those areas of surviving fields are fairly evenly split between modern consolidated fields and surviving planned enclosure, with some examples of ancient enclosure in the vicinity of settlements.

Historic Landscape Evolution

Before the drainage and enclosure movements of the eighteenth century, the coastal landscape of this zone mainly comprised saltmarsh grazing for the settlements to the west. Certain areas of higher ground, especially in the immediate vicinity of Immingham, were used for arable farming in a traditional open field regime.

Much of the zone was subject to planned enclosure and drainage in the eighteenth and nineteenth centuries, when many of the isolated farmsteads within the zone would have been established. The post Second World War period saw the consolidation and enlargement of many of the fields within the character zone by the removal of some of the field boundaries.

The early twentieth century saw the development of Immingham Port, which opened in 1913. The presence of the Great Central Railway was probably the deciding factor in the location of the port, providing good transport links to the rest of the country.
The development of the port facility led to the establishment of other industrial facilities in the surrounding area, some to provide supporting infrastructure to the port, others to take advantage of imported materials or to export finished products. Perhaps the most significant of these is the Lindsey Oil Refinery, which occupies an area of the marsh comparable in size to the port itself.

**Legibility**
Although most of the zone is of modern origin, it is still possible to identify historic elements within the landscape. The historic core of Immingham is largely gone, but the church of St Andrew remains as an indicator of its location. There is a monument in the town itself commemorating the departure of the Pilgrim Fathers in 1608.

The eighteenth-century planned enclosure landscape survives largely intact in the coastal area to the east of the Lindsey Oil Refinery, largely because of the impracticality of removing boundaries that are formed by field drains.

Although the modern industries do not immediately appear to retain any vestiges of preceding landscapes, they are typically aligned according to the planned field systems over which they were built. The internal roads and tracks of the Lindsey Oil Refinery in particular follow the courses of former field drains that can be seen on historic map data.
Character Zone NOM3

The Grimsby Commuter Belt within The Northern Marshes Character Area

ARS sub-province: CLNSC

Natural England National Character Area:
42 Lincolnshire Coast and Marshes

Total area: 128.3 km²

Percentage of Regional Character Area: 45.6%

Percentage of Overall Project Area: 1.82%

Description
The main settlements in the character zone form an arc to the south and east of Grimsby, stretching from Humberston to Healing. The cores of these settlements are generally well-preserved and readily identifiable from medieval churches and eighteenth- and nineteenth-century red brick buildings.

As Grimsby has grown in size, the surrounding villages have also expanded. New housing developments have appeared at the edges of all the villages in the zone, with a dominant character of cul-de-sac estates made up of bungalows and other small dwellings. In some areas, particularly between Humberston, New Waltham and Grimsby, so-called ‘ribbon developments’ have all but connected what were once individual settlements into a single suburb. Similar developments along the roads connecting the settlements to Grimsby may eventually cause the whole zone to coalesce into a single large conurbation. An example of this can perhaps be seen in the merging of Grimsby and Cleethorpes.

The rural landscape is mostly made up of large modern fields that have been formed from the loss of field boundaries and the consolidation of adjacent fields. However, a significant proportion of the fields in the zone are the result of eighteenth-century planned enclosure, and display the straight boundaries and rectilinear pattern characteristic of this period. On a more limited scale, there are areas of irregular fields in the vicinity of some of the settlements, which are interpreted as ancient enclosure of medieval open fields.

The zone is also notable for the high proportion of golf courses, six in all. These may be an outgrowth of the tourist trade, but may equally exist to service the retirees in the commuter villages.

Much of the road network to the west of the character zone reflects those areas of higher ground and is fairly sinuous in nature, in contrast to those roads which extend out into areas of former marsh, which are generally straight and rectilinear in nature.

Historic Landscape Evolution
Although there is evidence for occupation of the zone in the Prehistoric and Roman eras in the form of crop marks and scattered finds, no extant visible remains are now apparent. It is likely that these features were situated on areas of higher ground that would have been
visible from the surrounding marsh land, and the existence of modern settlements on some of these areas of higher ground hints at continuity of use.

Estates sharing the names of most of the current settlements are mentioned within the Domesday Survey. The settlements as seen today do not display any features dating from this period, but it is likely that they occupy the same locations.

Remnant ridge and furrow earthworks around Humberston suggest that the area to the west of that village was suitable for traditional open field farming methods. To the east, however, it is likely that there was common marshland grazing which may have been shared with those parishes away from the coast, and arrangement seen around Immingham and Killingholme to the north. It is also possible that the coastal part of the zone was used for salt making, which was an important medieval industry along the shoreline of much of medieval Lincolnshire.

During the eighteenth and nineteenth centuries, the landscape of the zone was substantially reorganised by two forces. In common with much of the rest of the county, the open field farming regime was abolished in favour of rectilinear planned enclosure. This meant that land which was once farmed in common was parcelled out amongst individual owners. The new holdings were bounded by long, straight hedges or ditches in a rectilinear pattern. It became increasingly attractive for landowners to live among their new holdings, and many new isolated farm complexes were constructed as a result. The second process that took place at this time was the drainage and reclamation of the common grazing marshes, which were then reallocated in the same planned way as the open fields had been.

The twentieth-century expansion of Grimsby caused a number of changes to the surrounding villages. As motorised transport became available to the public, it became possible to live some distance away from one’s place of work. This resulted in the growth of the villages surrounding Grimsby into a substantial commuter belt. The demand for housing was so great that an entirely new settlement was created at New Waltham.

Legibility
At the present time, the settlement pattern in this zone retains much of its historic character, with a mixture of nucleated medieval settlements and dispersed isolated farms. However, the character of the towns and villages in the zone may in the future be lost if ‘ribbon development’ and outward growth are not contained.

The rural landscape retains a high degree of legibility of planned enclosure landscapes, especially around Waltham and Humberston. Further field boundary loss may cause this type of landscape to be eroded, and much of the zone is occupied by large modern fields formed by this process of consolidation.
Character Zone WOL1

The Brocklesby Heath within The Wolds Character Area

**ARS sub-province:** CLNSC

**Natural England National Character Areas:**
42 Lincolnshire Coast and Marshes
43 Lincolnshire Wolds

**Total area:** 116 km²

**Percentage of The Wolds Character Area:** 10.3%

**Percentage of Overall Project Area:** 1.66%

**Description**

The rural landscape of the zone is characterised by roughly equal areas of surviving planned enclosure and large twentieth-century arable fields formed from the consolidation of older fields by the removal of boundaries and hedges. As in other zones, ancient enclosures, possibly dating to the late medieval period, are found in close proximity to the historic settlements. Today, these small, irregular fields are mostly used for grazing.

The settlements in this zone are generally small and are irregularly scattered throughout the character zone. Many of the buildings within the character zone are brick-built with pantile roofs, materials which were easily available from the brick-kilns of the Humber Estuary. The village cores are typically well-preserved with little modern development either as infill or in the form of peripheral housing estates.

As well as the main estate villages of Brocklesby and Great Limber, there are examples of estate housing in villages throughout the zone, identifiable by their ornamented appearance and by the presence of family crests in prominent positions. These tend to be constructed in stone, although the more modern examples are largely indistinguishable from other twentieth-century housing except for the presence of heraldic shields.

There are many small to medium sized areas of woodland throughout the character zone, which appear from their names, and from their rectilinear form, to be predominantly eighteenth- and nineteenth-century plantations. Some of these were intended to form a designed hunting landscape, a use which can be inferred from the fact that many of them are called ‘coverts’. In the area around Brocklesby there are also several large areas of sinuous woodland, which were planted in the nineteenth century to form the boundary of Brocklesby Park.

Brocklesby Park, a major feature of the zone, was created by the Pelham family who have owned an estate here since the sixteenth century. Charles Anderson Pelham was created Earl of Yarborough in 1837 and the park continues to be maintained and developed by the present Earl. The park was landscaped in the eighteenth century by Lancelot ‘Capability’ Brown. However it is not quite so extensive as it once was, with some of the former parkland having been ploughed up for arable cultivation.
Humberside Airport, in the western part of the character zone, is a former Second World War RAF airfield, which was subsequently developed as a civilian facility. Its runway has been lengthened in recent years, and a number of other facilities developed on the site in association with its use as a civilian airfield.

**Historic Landscape Evolution**

There is evidence in the character zone for activity in the landscape during the Prehistoric and Roman periods. It is possible that the line of the A1077, which in places forms the eastern edge of the character zone, dates from the Prehistoric period.

There is evidence for occupation of the zone during the early medieval period with estates sharing the names of many of the current settlements being mentioned in the Domesday survey. It is likely that during the medieval period certain elements of the present landscape were established. Most of the historic parish boundaries and village settlement cores were established during this period.

Much of the zone was subject to planned enclosure in the eighteenth and nineteenth century and much of this survives, along with its associated isolated farmsteads. Some of the isolated farmsteads are associated with deserted village earthworks, and it is possible that these are remnants of the earlier settlement cores as opposed to isolated farmsteads established as a result of the enclosure movement.

From the early part of the twentieth century there was a reduction in the numbers of large country house estates after they became subject to inheritance tax following the extension, in 1894, of the old probate duty to all the possessions of a deceased person. One result of this has been the conversion to agricultural use of many of the parkland landscapes that were associated with country houses.

The Second World War saw the establishment of at least one airfield in the character zone, which has subsequently been redeveloped as a civilian airport. The post war period saw the consolidation and enlargement of many of the fields within the character zone by the removal of some of the field boundaries. There is evidence of post Second World War field consolidation and some expansion of the rural settlements in the twentieth century. Much of this later nineteenth- and early twentieth-century development survives to the present.

**Legibility**

The medieval landscape is well represented in the form of extant ridge and furrow earthworks, which are typically associated with small irregular enclosures at the edge of settlements. Areas of surviving landscape parks also provide a setting for survival of ridge and furrow, as they have not been ploughed for several hundred years. The historic settlement cores are generally identifiable in smaller villages. Many of the deserted or shrunken village sites are visible as earthworks and are a particular characteristic of this character zone.

Humberside Airport retains some features associated with its use as a Second World War bomber airfield. Some of the dispersal pads and elements of the A-shaped runway arrangement are retained.

Much of Brocklesby Park retains its designed form, and the areas that have been converted to arable cultivation typically retain the woodland boundaries indicative of their origins. In some cases, isolated trees are found in the middle of cultivated areas, representing survivals from the preceding designed landscape.

Modern fields often retain significant legibility through their remaining boundaries. Where the preceding fields were planned enclosures, the modern fields often retain long, straight
boundaries. Those fields formed from the consolidation of ancient enclosures often retain sinuous boundaries, which are indicative of the early enclosure of former open field farmland.
Character Zone WOL2

The Caistor Spring-Line within The Wolds Character Area

ARS sub-province: CLNSC

Natural England National Character Area:
41 Humber Estuary
43 Lincolnshire Wolds
44 Central Lincolnshire Vale

Total area: 112.4 km²

Percentage of Regional Character Area: 10%

Percentage of Overall Project Area: 1.61%

Description
The character zone includes a line of small nucleated settlements, starting with Nettleton in the south and terminating with South Ferriby in the north. To the north they are situated on the B1204 road, approximately following the 20m contour line. While the settlements are fairly small, they do have much more modern development within and around them than those settlements elsewhere in the Wolds Character Area, perhaps because of their proximity to Scunthorpe and Grimsby. Traditional buildings are typically brick-built with pantile roofs. Many buildings in the north are whitewashed. Settlement cores are generally well defined and well preserved with modern developments limited to the edges. Away from the villages there are many examples of isolated farmsteads. These are typically found on the plateau at the top of the slope and are set among large areas of rectilinear fields.

Much of the farmland in this zone is the result of modern boundary removal, resulting in large irregularly shaped fields. Many examples of modern consolidated fields occur on the top of the scarp, which gives this zone an open character. There are older enclosures throughout the character zone which are typically small with irregular shapes. These are often used as grazing land for livestock, or as paddocks for horses, and are typically found adjacent to the nucleated settlements in the zone.

There are small to medium sized areas of woodland throughout the character zone, which appear to be predominantly eighteenth- and nineteenth-century plantations. There are several areas of sinuous narrow woodland, which may have once formed part of the boundary of small landscape parks. There is at least one former park in the zone.

There are two former military airfields within this character zone both of which retain enough of their military character to confidently be assigned to the ‘Military’ broad type. The technical site at the former RAF Elsham Wolds is now an industrial estate and the airfield has reverted to agricultural land, but the lines of the runways and some taxiways are still visible. The perimeter track at the site of the former RAF Caistor is still visible, as are the three ‘Thor’ ballistic missile launch pads dating from the early 1960s.
**Historic Landscape Evolution**

There is evidence for occupation of the zone during the early medieval period. Estates with the names of many of the current settlements are mentioned within the Domesday survey. It is likely that any settlement associated with these estates was located in the vicinity of the present historic settlement cores within the zone.

Much of the zone was subject to planned enclosure of the open fields and commons in the eighteenth and nineteenth centuries. This new fieldscape was subsequently populated by isolated farmsteads occupied by the owners of the newly enclosed fields.

Both of the airfields within the character zone were established during the Second World War. RAF Elsham Wolds was closed at the end of the war and partially returned to agricultural use before the site was developed as an industrial estate in the 1970s. RAF Caistor was used as a nuclear missile base between 1958 and 1963, before reverting to agricultural use. The post Second World War period also saw the consolidation and enlargement of many of the fields within the character zone by the removal of some of the field boundaries.

**Legibility**

Elements of the medieval landscape can still be seen in the survival of the settlement pattern and the long east to west orientated field and parish boundaries. The historic settlement cores still retain some of their historic character, but in some cases the scale of modern development reduces the legibility of the historic core.

The widespread survival of planned enclosure and isolated nineteenth-century farmsteads across the character zone are survivals from the late post medieval period. Modern fields, which have been primarily formed from the loss of boundaries of older field patterns, often retain significant legibility through their external boundaries.

The legibility of the former military airfields within the character zone is evident in the good survival of many of their Second World War elements, despite the airfields having gone out of use.
Character Zone WOL3

The Upper Wolds within The Wolds Character Area

ARS sub-province: CLNSC

Natural England National Character Area:
42 Lincolnshire Coast and Marshes
43 Lincolnshire Wolds

Total area: 313.7 km²

Percentage of Regional Character Area: 27.9%

Percentage of Overall Project Area: 4.5%

Description
There is a large number of small nucleated settlements, scattered fairly evenly across the character zone, which gives an impression of dispersal. Many of the settlements nestle in dry valleys, providing only limited intervisibility between settlements, giving a sense of isolation which is further emphasised by the rolling nature of the topography.

The settlements are generally small with very little modern development within, or around, them. In the west of the character zone many buildings are constructed of limestone under pantile roofs. As one travels east though the character zone these give way to brick and pantile as building materials. A few surviving examples of mud and stud cottages, under thatched roofs, survive across the character zone. Older churches tend to be built using either local limestone, or ochre-coloured ironstone, across much of the rest of the zone, with more recent examples being brick built.

The settlement pattern in the zone is nucleated throughout, but individual villages are arranged in a variety of forms. The most common plan in the north of the character zone is for a small cluster of buildings to be arranged around, or in the vicinity of, a small church. In the south the most common arrangement is a rectangular plan with lanes enclosing a central area of cottages, farmhouses and paddocks. There is a third village form, which consists of settlement strung out along roads and arranged in separate groups of three or four buildings. This gives a somewhat dispersed feel to these settlements.

There are few isolated farm complexes. Many of these are associated with historic earthwork sites, which suggests that they are the survivors of lost settlements rather than more recent additions associated with planned enclosure. Settlement cores are generally well defined and well preserved with modern developments limited to the periphery. Roads tend to follow physical features, such as valley bases, and as such are very sinuous.

Earthwork sites of deserted settlements and high status residences are a particular feature of the east of the character zone. There is a distinct cluster of these sites in the area surrounding Wold Newton, and particular mention should be made of the village and abbey remains at North Ormsby, which as well as being exceptionally well preserved, also dominate the valley in which they are situated.
There are several modest country houses and small parklands distributed evenly throughout the character zone. Surviving parkland is typically under pasture with many examples of isolated veteran trees dotted throughout. There are several areas of woodland associated with these parks, which form distinctive belt patterns around their current and former boundaries.

There are three former military airfields within this character zone all of which retain enough of their military character to confidently be assigned to the ‘Military’ broad type. RAF Ludford Magna and RAF Kelstern both reverted to agriculture after their use as active bases ceased, but both still retain their perimeter tracks and, in the case of RAF Ludford Magna, the ‘Thor’ nuclear missile launch pads. At RAF Binbrook the hangers and technical buildings are now part of an industrial estate, and the former married quarters are now the village of Brokenby. Also within this character zone is RAF Stenigot, which, although not an airfield, is one of the few sites within the UK which retains a Second World War Chain Home radar transmitter tower. Also on this site are the remains of the Ace High communications relay equipment, installed in 1960 and in use until the early 1990s.

**Historic Landscape Evolution**

There is evidence for activity in the character zone in the Prehistoric and Roman periods. There are several Neolithic long barrows, predominantly in the south, with stone tools from this period being widely distributed across the character zone. Bronze Age round barrows are found across the character zone, and there is some evidence for farming in the zone during the Neolithic and Bronze Age periods.

The apparent dispersed pattern of some settlements in the character zone is probably due, in the main, to settlement desertion and shrinkage. There are various factors which might have led to depopulation in these settlements. Village populations increased from the eleventh to the thirteenth centuries, and the need for more land caused people to establish themselves on marginal land. However in the fourteenth century, a combination of economic decline, worsening climate and repeated outbreaks of pestilence led to a general fall in rural population numbers. Consequently, some settlements were totally abandoned and others saw substantial reductions in the size of their inhabited areas. In later centuries other factors also led to settlement desertion. The enclosure of plough land, pasture and common land, as a result of fluctuations in the prices of secondary animal products, is recorded as a reason for the desertion of some of settlements. There are, in addition, repeated references in the seventeenth century to landlords converting arable fields into pasture and sheepwalks. Finally, the association of village earthwork remains with country parks suggests that emparkment was an additional factor leading to the desertion of settlements in this part of the character zone.

Much of the zone was subject to planned enclosure in the eighteenth and nineteenth centuries and much of this survives. Some of the isolated farmsteads are associated with deserted village earthworks and may not have been established at enclosure, but rather be earlier survivals.

All of the airfields within the character zone date from the Second World War, with RAF Kelstern being closed at the end of the war and returned to agricultural use. RAF Ludford Magna was also closed, handed to the Ministry of Agriculture and returned to agricultural use in the areas between the runways and buildings. In 1958 part of the old airfield was returned to military use as a ‘Thor’ missile base until 1963, when it was again returned to agricultural use. RAF Binbrook continued in use as an RAF station until 1988, when the Lightning aircraft went out of service. Many of the airfield buildings were then converted to industrial use, while the married quarters were sold off into private ownership.
The post Second World War period saw the consolidation and enlargement of many of the fields within the character zone by the removal of some of the field boundaries. Also during this period many of the small parklands in character zone were converted to productive farmland.

**Legibility**

Elements of the medieval landscape survive in the form of extant ridge and furrow earthworks which are typically associated with small irregular enclosures at the edge of settlements. Areas of surviving landscape parks often have good survival of ridge and furrow as they have not been ploughed for several hundred years.

The historic settlement cores are generally identifiable in smaller villages. Many of the deserted and shrunken village sites are visible as earthworks and are a particular characteristic of this character zone.

RAF Binbrook and the village of Brookenby, which is the former married quarters of RAF Binbrook, retain strong legibility of their former RAF use.

Many of the former parklands within the character zone have retained their shelterbelt woodland boundaries, but are otherwise invisible.
Character Zone WOL4

The Dry Valleys within The Wolds Character Area

ARS sub-province: CLNSC

Natural England National Character Area:
43 Lincolnshire Wolds
44 Central Lincolnshire Vale

Total area: 255.9 km²

Percentage of Regional Character Area: 22.7%

Percentage of Overall Project Area: 3.67%

Description
Settlements in the zone are typically small, and are often situated along the base of dry river valleys. This results in an enclosed, intimate character to the villages. Most of the buildings in the settlements are eighteenth century, or later, and tend to be brick-built with pantile roofs. However, a few examples of mud and stud cottages, with thatched roofs, survive throughout the character zone. Churches and other major public buildings tend to be built using the local Spilsby sandstone. Settlement cores are generally well defined, and well preserved, with modern developments on the periphery of the villages.

There are few isolated farm complexes and those that are present are often associated with historic earthwork sites. Earthwork sites of deserted settlements and moated sites are a particular feature of the south-east of this character zone. There is a distinct cluster of these sites within Brinkhill and surrounding settlements.

Although there are many surviving examples of ancient enclosures and nineteenth-century rectilinear fields, the farmland of the zone is dominated by large modern fields, with an open character resulting from the removal of hedgerows and other boundaries.

A major feature of the south of the character zone is the high density of country houses with small parklands. These are distributed evenly with many parishes having at least one example. There are several areas of woodland associated with these parks, and these woodlands form distinctive belt patterns around the current and former boundaries of the parks.

Historic Landscape Evolution
There are examples of Prehistoric earthworks scattered throughout the zone but although they are significant monuments they have little major landscape impact.

Although the zone is now very sparsely populated, with relatively few surviving villages, it was once very populous and has a high proportion of village earthworks. The medieval economy of the zone was predominantly rural, and it seems likely that the open field farming methods practiced elsewhere in the county were also used here. However, the poorer quality of the upland soils may have caused a greater reliance on pastoral farming than in other
zones, and it is recorded that farmers in the Wolds used to rent grazing land in the fens and marshes for the purpose of fattening their livestock.

The causes of settlement desertion are much debated, but there is little doubt that there are several reasons why this zone was so heavily affected by the phenomenon. The increasing prices of wool during the medieval period, combined with local export opportunities in Boston and other coastal towns, may have encouraged landowners to depopulate parishes in order to rear sheep. The large numbers of small parks and houses in the zone may also indicate that villages were lost to emparking. Regardless of the causes, deserted settlements are an important component of the landscape of the zone.

During the eighteenth and nineteenth centuries, the zone was subject to widespread planned enclosure, especially on higher ground. This process created a new landscape of planned, rectilinear fields where there were once areas of heath and open field farming. The owners of these new fields often built new farmhouses and associated buildings in the midst of their holdings, and there are several isolated farmsteads in the zone.

The planned enclosure landscape survived largely unchanged into the twentieth century, but has been much diminished by modern processes of field consolidation and boundary removal. Many of the historic farm buildings, created to serve a nineteenth-century farming system, have fallen into disrepair. New farm buildings of corrugated iron and concrete have been erected throughout the zone, greatly expanding the physical area of the original farmsteads.

**Legibility**
The historic settlement cores are generally identifiable in smaller villages, and surviving earthworks of former medieval settlement are found in the zone.

Much of the planned enclosure landscape is still identifiable in the remnant boundaries of large modern fields. Likewise, the sinuous boundaries of ancient enclosures are indicative of the ridge and furrow farming techniques applied to the medieval open fields, some of which still survive as earthworks in areas of pasture.

Although settlement desertion and depopulation have strongly affected this zone, the earthworks left behind are still highly visible in the landscape, and are important heritage assets.
Character Zone WOL5

The Western Wolds Foothills within The Wolds Character Area

**ARS sub-province:** CLNSC

**Natural England National Character Area:**
43 Lincolnshire Wolds
44 Central Lincolnshire Vale

**Total area:** 167.2Km²

**Percentage of Regional Character Area:** 14.8%

**Percentage of Overall Project Area:** 2.4%

**Description**

The character zone includes a large number of small nucleated settlements, with one group found on the spring line along the western edge of the Wolds, and another around the town of Horncastle, which acts as a centre for surrounding settlements. With the exception of Horncastle, the settlements are generally very small, with very little modern development within or around them. The settlement pattern in the zone is nucleated but there are several isolated farm complexes scattered across the character zone. Some of these farmsteads are close to areas of ancient enclosure, suggesting that they are may be the remains of deserted settlements.

Most of the field pattern in this zone has been influenced by modern boundary removal resulting in large irregularly shaped fields. There is survival of planned enclosure in distinct blocks throughout the character zone. Ancient enclosures are found most frequently in the south of the character zone, in close proximity to settlements. These are typically small fields with irregular shapes, and are often used for grazing or as paddocks for horses.

An important feature of the south of the character zone is the high density of modest country houses with small parklands. Much of the parkland is under pasture, but retains some of its historic character. There are several areas of woodland associated with these parks which form distinctive belts of trees around their boundaries.

**Historic Landscape Evolution**

The earliest features with a significant landscape impact in the south of this zone date from the Roman occupation. The market town of Horncastle is built on the site of a Roman settlement, and some of the plan form of the Roman fortified enclosure is still visible in the street pattern of the modern town.

The character zone has features typical of open field farming development during the medieval and early post medieval periods – namely the nucleated settlement pattern and some ancient enclosure and extant ridge and furrow focused around the settlement cores.

Some of the apparent dispersed settlement pattern in the character zone is probably due in part to settlement desertion and shrinkage. In the fourteenth century there was a combination of economic decline, worsening climate and repeated outbreaks of plague, all of
which led to a general decline in rural populations. Some settlements were abandoned while others experienced substantial reductions in size. Additional factors which may have led to abandonment and shrinkage of these settlements in later centuries included the enclosure of ploughlands, pastures and commons as a result of increases in the price of wool.

Alongside a typical medieval open-field system of agriculture and associated nucleated settlement pattern, there are a significant number of small post medieval country parks in the south of the character zone which have in some cases caused the relocation or shrinkage of settlements. The presence of the country parks suggests that the post medieval planned enclosure in these areas is likely to have been initiated privately by landowners rather than by Act of Parliament.

There is evidence of post Second World War field consolidation and some expansion of the rural settlements in the twentieth century. Horncastle has seen significant development on its fringes from the later nineteenth century onwards, including the construction of industrial estates in the late twentieth century.

**Legibility**

The historic settlement pattern is well preserved throughout the zone, especially along the spring line and in the satellite settlements of Horncastle. Each historic village remains a discrete entity, and there has been little modern development along connecting roads. Although the historic core of Horncastle is hemmed in on all sides by later development, it is still highly legible, including significant elements of the Roman fort layout from the third century.

There is little direct evidence of the medieval farming landscape, although the ancient enclosures found near to the historic settlements have their origins in medieval strip farming. The planned enclosure landscape is quite well preserved throughout the zone, and even where boundaries have been removed, the resulting modern fields retain a strongly rectilinear character.
Character Zone WOL6

The Spilsby Crescent within The Wolds Character Area

ARS sub-province: CLNSC

Natural England National Character Area:
42 Lincolnshire Coast and Marshes
43 Lincolnshire Wolds
44 Central Lincolnshire Vale

Total area: 160.6 km²

Percentage of Regional Character Area: 14.3%

Percentage of Overall Project Area: 2.3%

Description
The current land use in this zone is mostly agricultural, of which the greater part is arable cultivation. Grazing land is limited to small fields in close proximity to settlements and to areas within the boundaries of surviving landscape parks. Several old country house estates are currently used as farm complexes. There are limited areas of former, small scale mineral extraction in the character zone. There is some recreational use of the land, for example a golf course at Kenwick Park.

The character zone includes a large number of small nucleated settlements. There is a line of these, which probably equates to a spring line, that runs down the centre of the character zone, roughly adhering to the 45m contour line.

The settlement pattern in the zone is strongly nucleated in the west and the north, with few isolated farm complexes, but is more dispersed in the east as the land drops towards the coastal marshes. Settlement cores are generally well defined and well preserved.

Historic cores are generally aligned along roadways, many of which link the high Wold settlements with the coastal grazing marshes and fens. Roadways themselves tend to be aligned to allow through passage from the higher ground to the lower, wetter ground.

Typically, surviving parkland is under pasture with many examples of isolated veteran trees dotted throughout. There are several areas of woodland associated with these parks, which form distinctive belts around the boundaries. The best preserved example of a landscape park in the character zone is at Gunby Hall, currently owned by the National Trust; it is an important visitor attraction.

Historic Landscape Evolution
Both the modern settlement pattern and fieldscape of the zone are a natural outgrowth of the medieval open field farming system. Each settlement was once set among two or three open arable fields, which were farmed in rotation with various crops. Further away from the settlement there were areas of common grazing land, typically on less productive land such as the thin upland soils found in the western part of the character zone.
During the eighteenth and nineteenth centuries, these farming practices were superseded by newer methods. Perhaps the most significant change was the planned enclosure of the open fields and the commons, which resulted in new rectilinear field patterns throughout the zone. At the same time, farmers began to construct new farmhouses in their new fields and away from the historic villages where farm buildings had hitherto been located.

This landscape prevailed until the latter half of the twentieth century, when many field boundaries were removed to facilitate modern mechanised farming techniques. The historic farmsteads have also undergone significant changes, as new sheds and barns have been erected, while older brick-built outbuildings have fallen into dereliction and disuse.

Quite apart from the changing face of the agricultural landscape, the aristocracy living in the zone created new, designed landscapes throughout the seventeenth, eighteenth and nineteenth centuries. The formation of these parks and gardens may well have resulted in the relocation of some settlements.

The shared borders of this character zone, most notably with the coastal grazing marshes to the east and the fens to the south, are likely to have driven much of its historical development. Many of the settlements here stood on the droveways from the High Wolds to the grazing lands on the fens and coastal marshes.

**Legibility**

The medieval landscape is well represented in the form of extant ridge and furrow earthworks, which are typically associated with small irregular enclosures at the edge of settlements. Areas of surviving landscape parks also provide for good survival of ridge and furrow, as they have not been ploughed for several hundred years. The historic settlement cores are generally identifiable in smaller villages, but modern residential development obscures the historic settlement core of Legbourne.

The former parklands within the character zone have retained their shelterbelt woodland boundaries, but otherwise are invisible. The area of Burwell Park is now modern fields, and the area of Kenwick Park is now a golf course. However there is surviving parkland further south in the character zone including Well and Gunby Parks which are both registered parks.

Modern fields, which have been primarily formed from the loss of boundaries of older field patterns, often retain significant legibility through their external boundaries. Where the previous fields were planned enclosures, the modern fields often retain long, straight boundaries. Similarly, those fields formed from the consolidation of older enclosures often retain sinuous boundaries, which are indicative of former open field farming.
Character Zone CLV1

The Witham Abbeys within The Clay Vale Character Area

ARS sub-province:
CLNSC
EWASHW

Natural England National Character Areas:
44 – Central Lincolnshire Vale
46 – The Fens

Total area: 77 km²

Percentage of Regional Character Area: 12%

Percentage of Overall Project Area: 1.1%

Description
There is some survival of planned enclosure landscapes across the character zone, particularly in the centre of the character zone. The modern fields, produced through a process of consolidation in the twentieth century retain much of the character of the underlying planned enclosures. The orientation of the modern fields and planned enclosures seems to be determined by the former fen edge revealed by LiDAR survey data. There is some survival of ancient enclosures with this character zone, all of which is centred around historic settlement cores.

The nucleated settlements in this zone are irregularly spaced across the zone, generally arranged on higher ground (6m to 7m above sea level) on the fen edge. In the northern half of the character zone few of the nucleated settlements have expanded much beyond their historic cores with modern development being very piecemeal in nature. Local building materials are commonly used, comprising brick and pantile. Isolated farmsteads are apparent throughout the zone. To the south of the character zone a number of ribbon settlements, consisting of scattered homesteads and farmsteads, extend along many of the roads. In particular, the settlements of Tattershall and Coningsby have seen considerable expansion since the Second World War with the two settlements now being linked by extensive areas of modern housing. Historic cores in this area have been somewhat obscured by later development, resulting in limited legibility of their original forms. This part of the character zone is heavily influenced by the presence of RAF Coningsby, which, although not the sole military airfield in the zone, is the only one still active. There are five areas of earthworks representing former monastic establishments within the character zone, which are spread fairly evenly across the zone. The zone as a whole displays a nucleated pattern of settlement.

In the north of the character zone, the road network appears to have been built on historically higher ground. Away from the fen, the road network is more rectilinear in nature. Some of the roads serve settlements on the banks of the River Witham and do not extend onto the opposite bank of the river.
Historic Landscape Evolution
Although there is evidence for occupation of the zone in the Prehistoric and Roman eras, in the form of crop marks and scattered finds, no extant visible remains are now apparent. It is possible that a number of causeways crossing the fen were established during the Prehistoric period, and these routes may have survived into the present.

There is evidence for occupation of the zone during the early medieval period, in the form of settlements, and in one case for a religious complex. Estates sharing the names all of the current settlements are mentioned within the Domesday survey.

In the early part of the twelfth century a number of religious complexes were established on the edge of the Witham Fens, located on promontories and within embayments, usually on the present 5m contour line. It has been shown that some of these complexes were associated with earlier religious sites and each may have been associated with causeways across the fenland and associated crossing points on the river itself.

It is likely that the parish boundaries and the historic settlement cores as seen now were established during the medieval period. It is also possible that some of the isolated farmsteads identified within the zone were founded at this time, as granges or farms of the religious foundations in the zone.

The zone was subject to planned enclosure in the eighteenth and nineteenth centuries, and much of this survives now, along with its associated isolated farmsteads. The post Second World War period saw the consolidation and enlargement of many of the fields within the character zone by the removal of some of the field boundaries.

Legibility
Legibility of the medieval landscape is evident in the survival of the settlement pattern. The five earthwork sites which represent former monasteries and other religious complexes are locally highly legible. These religious foundations have had a lasting impact on the landscape, and even today it is possible to identify their associated farms and ancient enclosures.
Character Zone CLV2

The Limewoods
within The Clay Vale Character Area

ARS sub-provinces:
CLNSC
EWASHW

Natural England National Character Area:
44 – Central Lincolnshire Vale

Total area: 136.8 km²

Percentage of Regional Character Area: 21.3%

Percentage of Overall Project Area: 1.96%

Description

The character of the zone is heavily influenced by the presence of numerous islands of woodland situated within a more typical rural landscape of fields and villages. The topography of the landscape is gently rolling rather than flat, like the fens to the west, or noticeably hilly, like the Wolds to the east. There are several becks and drains which run across the zone from the Wolds to the drainage system of the Witham valley. These watercourses often form boundaries between parishes.

The woodland in the zone comprises many different species in various combinations depending on soil types and conditions. There are several areas of ancient semi-natural woodland which provide valuable habitats for many species of plants and animals. The small-leaved lime, *Tilia cordata*, which gives the zone its name, is a significant component of woodlands across the zone. In addition to the surviving ancient semi-natural woodland, there are many areas of post medieval and modern plantations, which are populated by oaks and conifers. Although the plantations do not display the same levels of biodiversity as the ancient semi-natural woodlands they are an important local wildlife habitat. While much of the woodland in the zone is privately owned and managed, significant areas are open to the public. Chambers Farm Wood is an example of how multi-purpose forestry can achieve a balance between timber production, nature conservation and public recreation and amenity. The zone is recognised as containing Britain’s greatest concentration of woodlands dominated by small-leaved lime with several of the woodlands designated as the Bardney Limewoods National Nature Reserve.

The agricultural landscape of the zone mostly comprises arable fields with straight boundaries. There are also several areas where field boundaries have been lost, producing very large irregularly-shaped ‘prairie’ fields, especially in the area around Bardney Dairies.

The modern settlement pattern is highly dispersed. There are several small nucleated settlements, such as Bucknall and Kirkby-on-Bain, but most of the settlement in the zone comprises small isolated farmsteads and occasional individual detached houses. These are scattered throughout the Limewoods zone at a very low density, giving the zone an
unpopulated character and a feeling of isolation. The largest settlement in the zone is the Victorian town of Woodhall Spa. The town has a nineteenth-century core made up of large villas and hotels along a straight main road, with surrounding twentieth-century housing developments extending off the main axis to the north and south. The town is set within a large area of plantation woodland, and many of the roads and streets within the town are heavily planted with broadleaved trees.

**Historic Landscape Evolution**

The ancient woodland that survives throughout the zone may be the earliest surviving landscape feature in the whole county, exhibiting a species composition believed to have been prevalent in lowland Britain some 5000 to 8000 years ago. The small-leaved lime, a characteristic species found in the ancient woods, was a dominant species in mixed deciduous woods which once probably covered much of the better soils in lowland Britain and Europe. Since the small-leaved lime is palatable to grazing livestock, tended to be associated with soils preferentially cleared for agriculture and, in recent centuries, has suffered from poor, or non-existent, seed generation, much of this woodland cover has now been lost. The presence of these Lincolnshire woodlands characterised by small-leaved lime, therefore, indicates areas which may have been continuously wooded since the species first arrived. Although it is difficult to prove this theory, it is certainly the case that extensive areas of woodland were recorded in this zone in the Domesday survey of 1086, and it seems likely that the ancient woodland in the zone dates to at least this time.

It is thought that the majority of the Limewoods zone was cleared of woodland in prehistory, leaving a landscape of wooded 'islands' albeit more extensive than those seen today. The woodland would have provided the backbone of the medieval economy in this zone. As the underlying soils would not have been very productive in medieval arable cultivation, it is likely that the woodlands themselves would have been used for fuel-gathering and as hunting grounds, with consistent management as coppice and high forest being a feature since the eleventh century. In addition to coppice management, livestock would have grazed in wooded areas once the coppiced trees had matured sufficiently. There would also have been, scattered within the woodland proper, areas of wood pasture which would have been areas of open grassland with sporadically occurring mature trees.

The woodland and much of the farmland in the zone would have formed part of the estates of the neighbouring abbeys to the west, and may have been partially administered from granges within the Limewoods zone. It is possible that at least some of the existing isolated farmsteads in the zone have their origins as grange farms.

The historic nucleated settlements in the zone would have been farmed according to a typical open field strip farming regime. There are few of these settlements in evidence today, but earthwork and cropmark evidence suggest that the surviving settlements, such as Apley, were once much more extensive, and also that there were additional settlements that have not survived to the present day, such as Burreth in the parish of Tupholme. It is possible that the prevailing phenomena of settlement shrinkage and desertion were due to the dominating presence of the abbeys to the west and perhaps also to the relatively poor clay soil.

After the monasteries were dissolved in the sixteenth century, ownership of their land was either gifted to members of the aristocracy or bought by wealthy farmers. Much of the land was then transferred from arable to pasture, and this is reflected in the modern landscape by the presence of large areas of private planned enclosure and by the presence of numerous isolated farmsteads.

During the second half of the twentieth century, the landscape was further altered by the removal of many field boundaries, resulting in the creation of large 'prairie' fields across much of the zone.
Legibility
The ancient woodlands of the Limewoods zone may represent some of the earliest surviving landscape features in the county. Although much diminished from their medieval size, they retain much of the ‘island’ character of the landscape that is thought to have existed in the medieval period. It may be possible to trace former woodland patterns in the modern landscape by the presence of sinuous banked field boundaries. Partners in the ongoing Lincolnshire Limewoods Project are not only acting to conserve and manage the ancient woodland but are also raising local awareness of it as a recreational asset. New woodlands have been planted to expand and link together the remaining ancient woodlands and this may continue in the future, perhaps impacting on neighbouring historic landscape features.

The zone is also notable for the widespread survival of historic earthworks, which represent the sites of former villages and religious establishments. These earthworks provide a tangible link to the medieval landscape but are highly vulnerable to ploughing.

Later landscapes are also well preserved, and the planned enclosures dating from the eighteenth and nineteenth centuries can be seen across the zone. The associated farmsteads are also a significant element of the rural landscape, although some have fallen into disuse as farm holdings have been amalgamated. Where historic farms are still in use, it is often the case that their outbuildings will have become obsolete, and are now in danger of dereliction.
Character Zone CLV3

The Central Clay Vale
within The Clay Vale Character Area

ARS sub-province: CLNSC

Natural England National Character Area:
44 – Central Lincolnshire Vale

Total area: 176 km²

Percentage of Regional Character Area: 27.4%

Percentage of Overall Project Area: 2.52%

Description

This zone occupies a flat, low-lying area of land to the north-east of Lincoln. It is drained by two main watercourses, the Rase and the Barlings Ea. These rivers are fed by a network of drainage channels and carry water, that has drained from the Wolds, to the Rivers Ancholme and Witham, and thence to the sea. The topography of the landscape exhibits a gentle fall from higher ground on the eastern and western edges to the centre of the zone. Throughout the zone there are distant views to the Wolds in the east and the limestone cliff to the west.

The rural landscape of the zone is dominated by large open arable fields, whose boundaries are made up of degraded hedges. Some areas of the zone are characterised by smaller rectilinear fields with intact hedge boundaries, and the landscape around Newton-by-Toft is a good example of this planned fieldscape.

The zone is traversed by several main roads, including the A46, which links Market Rasen to Lincoln. There are also numerous minor roads and tracks which are typically long and straight with wide, grassed verges, for example, Linwood Road to the south of Market Rasen.

Although not a dominant landscape feature, there is still a significant amount of woodland in the zone, including areas of ancient semi-natural woods at Wickenby and Linwood and several small plantations throughout the zone.

Isolated farmsteads are a significant and widespread element of the landscape. They are typically constructed of red brick, and are often associated with outbuildings such as barns or stables. In several cases the outbuildings have become obsolete, and have been replaced or supplemented by the construction of modern agricultural buildings. In some instances the farmhouse itself has fallen into disuse.

The zone is populated by a network of small historic villages, some of which comprise only one or two houses along with a church. Many of these settlements are found in association
with historic earthworks indicating historic desertion of large parts of the zone. The remaining buildings are typically red brick with orange pantile roofs. In most cases these small villages have seen no modern development apart from the occasional individual house.

The exception to this pattern of small settlements is the town of Market Rasen, which is characterised by a well preserved historic core surrounded by succeeding areas of nineteenth- and twentieth-century housing and infrastructure.

RAF Faldingworth in the north-west of the zone is a significant component of the modern landscape. Although no longer in use as a Royal Air Force facility it remains a heavily guarded and secure installation, with all the associated security measures. Activities at the site sometimes involve setting off explosions, which occasionally disturb the otherwise tranquil rural landscape of the zone.

**Historic Landscape Evolution**

Most of the surviving settlements within the zone were founded in the early medieval period. The survival of ridge and furrow earthworks throughout the zone suggests that some of the surrounding land was farmed in a typical open strip field system. These earthworks are not extensive however, and, as the underlying clay soils are heavy and difficult to plough, it may be that livestock rearing played a more important and extensive role in the economy than in neighbouring areas.

There are several deserted or shrunken settlements in the zone, some of which are marked by surviving earthwork remains such as those at Cold Hanworth and Linwood. These remains suggest a larger medieval population than is indicated by the surviving settlement pattern. There are many reasons why medieval settlements such as these shrank or were deserted, including early enclosure of arable land for sheep pasture. There are several areas where such enclosures survive in the modern landscape, including West Barkwith, which is itself a shrunken settlement.

During the eighteenth and nineteenth centuries those parts of the zone that remained as open fields or common land were enclosed either by private agreement or by Act of Parliament. The resulting landscape was divided in a planned fashion, replacing the open landscape with many new fields bounded by hedges. Although much of the planned character of the zone has been lost due to the removal of field boundaries, there are several surviving islands of planned enclosure, including sizeable areas around Snarford and Bleasby Moor.

In Market Rasen the construction of the station on the railway line between Lincoln and Grimsby caused significant changes. Prior to this point Market Rasen had been no different to neighbouring villages, and may in fact have been smaller than either East or Middle Rasen. With easier transport to nearby cities, the town became attractive to commuters and has gradually expanded since then.

In the later twentieth century, much of the rural landscape was subject to alteration by the removal of field boundaries. This occurred, in part, to facilitate the use of modern large-scale farming techniques, such as crop-spraying and combine-harvesting.

The conflicts of the twentieth century have also left their mark on the landscape. RAF Wickenby was once a bomber base, and is now a civil airfield. RAF Faldingworth was, likewise, a Second World War bomber base, but later became a depot for the nuclear weapons carried by V-Bombers from nearby RAF Scampton. The reinforced storage sheds are now used as secure storage by the current occupiers of the site.
Legibility
As well as the surviving historic settlements, there are several sites where earthworks indicate the presence of deserted or shrunken villages. The two together provide strong legibility of the medieval settlement pattern. There are also several areas where ancient enclosures survive in the modern landscape, including West Barkwith, which is itself a shrunken settlement.

Although much of the planned character of the zone has been lost due to the removal of field boundaries, there are several surviving islands of planned enclosure, including sizeable areas around Snarford and Bleasby Moor. The associated pattern of isolated farmsteads is also well preserved, although several of these buildings are in danger of dereliction.

The weapon storage facilities at RAF Faldingworth appear from recent aerial photography to retain much of their Cold War form, perhaps as they have been put to a similar use by the new owners. However, these features are not easily visible within the wider landscape due to the extensive security measures, such as razor-wire fences, that have been erected around the edge of the facility.
Character Zone CLV4

The Ancholme Carrs
within The Clay Vale Character Area

**ARS sub-province:** CLNSC

**Natural England National Character Area:**
41 Humber Estuary
44 Central Lincolnshire Vale
45 Northern Lincolnshire Edge with Coversands

**Total area:** 186.1 km²

**Percentage of Regional Character Area:** 29%

**Percentage of Overall Project Area:** 2.67%

**Description**

The Ancholme Valley is characterised by flat arable countryside situated on either side of the long and straight New River Ancholme, which runs through the zone from Bishopbridge near Market Rasen in the south to the Humber Estuary in the north, a distance of over 30 kilometres. The course of this man-made river is almost completely straight, with a slight curve at its northern end. The old River Ancholme is still present in the landscape as a series of watercourses which meander to either side of the man-made channel, creating a pattern of long thin islands.

There is some survival of planned enclosure which is distributed fairly evenly across the character zone. The modern fields, produced through a process of consolidation in the twentieth century seem to retain much of the rectilinear character of the underlying planned enclosures. Most of the modern fields and planned enclosures have a strong orientation to the cut of the New River Ancholme. Close to the historic settlements there is a preponderance of surviving ancient enclosures characterised by small field sizes.

There are only a few nucleated settlements within this character zone. These are generally larger than those elsewhere in the Clay Vale Character Area, and are scattered irregularly across the northern half of the character zone. The southern half of the character zone is notable by the absence of any significant nucleated settlements, with the main settlement type being isolated farmsteads. The nucleated settlements are arranged primarily on the slightly higher ground which flanks the Ancholme flood plain. All of the nucleated settlements have expanded beyond their historic cores, with much development comprising planned housing. However, in most cases the historic core is still highly visible, comprising brick built structures under pantile roofs.

Much of the road network reflects the drained river valley nature of the character zone, with most major roadways orientated north to south and hugging the higher ground. The majority of the east to west aligned roads terminate at the cut of the New River Ancholme or prior to this if their primary purpose is to serve isolated farmsteads. Only a handful of the roads cross the river channel, the most major of these being in the vicinity of Brigg. The east to west aligned roads on the carrs are generally characterised by their straight, planned nature,
with those on the higher ground being more sinuous in nature. The exception to this is the line of the north to south aligned Ermine Street, which follows the line of the modern B1207 just to the north of Appleby, where it becomes a minor road.

There are two main areas of industry in this character zone, the first being on the west side of Brigg, the second being the South Ferriby Cement Works, located on the far northern edge of the character zone, on the banks of the River Humber.

**Historic Landscape Evolution**

Prior to the drainage of the zone in the post medieval period the landscape was characterised by seasonally waterlogged carr woodland, resulting from the uncontrolled flooding of the River Ancholme. Although largely useless for growing crops, the Carrs may have provided opportunities for hunting wildfowl, fishing and gathering useful building materials such as reeds and timber, which would have been exploited by settlements in neighbouring areas.

Settlement within the zone itself appears to have been as sparse in the past as it is now. Brigg, the major settlement in the zone, does not appear in the Domesday survey. Other settlements which do appear in the survey, such as Cadney, Winterton and Appleby, are typically situated on the edge of the zone on areas of slightly higher ground.

The course of the River Ancholme has been subject to alteration and management since the medieval period, when the earliest attempts were made to drain the surrounding land. The process accelerated in the sixteenth century, and was largely complete by the eighteenth century. As the land was drained, it was also enclosed, creating the field pattern that can be seen in the zone to this day.

Following the enclosure of the carrs, many isolated farmsteads were established on the former floodplain. These are much more prevalent in the area to the south of Brigg than in the north. This may be because the lower Ancholme Valley was more prone to flooding. The characteristic disjointed pattern of minor roads was created to provide access to these farmsteads and even today many such roads only lead to one or two farm complexes before reaching a dead end.

Although there is no remaining carr woodland in the zone today, there are several areas of more recent plantation to be found across the Ancholme Valley. These are typically rectilinear in form, indicating that they were planted either at the point of enclosure or subsequently to it. Some of these blocks of woodland may have been created as part of a wider fox-hunting landscape, as indicated by plantations such as New Covert in the parish of Glentham.

The agricultural landscape of the zone was altered in several ways during the twentieth century. The most wide-ranging change is the removal of field boundaries across the zone, which has in places transformed the preceding enclosed landscape of small rectilinear fields to an open landscape of large irregular ‘prairies’. The transfer of pasture to arable is another ongoing trend in the landscape.

**Legibility**

The old river Ancholme remains visible for much of its former length, and still forms an important part of the drainage system of the zone. Although the carr woodland has long since been removed the wetland character of the islands between the courses of the old and new rivers can still be seen, as these areas are frequently flooded and retain standing pools of water for much of the winter. This makes it difficult to grow crops, as can be seen on aerial photographs where large brown dead patches appear in these areas.
Although much of the zone has been subject to boundary loss in recent years, it is still possible to identify several large areas where the planned enclosure landscape remains largely unchanged particularly in the area of Worlaby Carrs just north of Brigg. The associated pattern of isolated farmsteads is also well preserved, although the farm complexes have often been expanded by the addition of modern barns and other outbuildings.

Although much added to in recent years, the town of Brigg retains a well preserved historic centre with many Georgian buildings to be seen along the main street. Other settlements in the zone are equally well-preserved with only limited areas of modern development to be seen.
Character Zone CLV5

The Kelsey Moors within The Clay Vale Character Area

ARS sub-province: CLNSC

Natural England National Character Area:
44 – Central Lincolnshire Vale

Total area: 66.9 km²

Percentage of Regional Character Area: 10.4%

Percentage of Overall Project Area: 0.96%

Description
This zone is a transitional landscape between the carrs of the Ancholme Valley and the foothills of the Wolds in the east. The topography is largely flat with occasional undulations of around two or three metres. The zone is dominated by arable fields, although some pasture can still be found especially in areas adjacent to settlements. The fields are typically separated from each other by ditches rather than hedges, creating an open character with wide views in most directions.

Settlements are arranged in two irregularly spaced north to south aligned lines on the eastern and western edges of the zone. Buildings in the villages are typically constructed of red brick with pantile roofs, materials that are easily available from nearby sources, such as Barton-upon-Humber. The villages themselves have not expanded much beyond their historic cores, with modern housing development generally limited to infill development of vacant plots within village cores.

There is a secondary pattern of isolated farms throughout the zone. These are also generally of brick construction and often include numerous outbuildings of the same materials. In some cases these farms have been expanded by the addition of modern agricultural buildings such as barns and animal sheds.

There are four areas of historic village earthworks representing deserted or shrunken settlements within the character zone, which are located towards the middle of the western side of the character zone. Some of these areas of historic earthworks seem to be associated with isolated farmsteads.

There is no overriding orientation to the layout of the fieldscapes within the character zone. Close to the historic settlements on the western edge of the character zone there is a preponderance of surviving ancient enclosures, characterised by small field sizes.

Historic Landscape Evolution
Although there is evidence for occupation of the zone in the Prehistoric and Roman eras in the form of cropmarks and scattered finds, no extant visible remains are now apparent. This character zone is located on a ridge of higher ground between the Ancholme Carrs and the
narrow valley leading up to the Wolds, that would have been a prominent feature in the landscape in the Prehistoric period.

The settlements in this zone probably practiced a typical mixed farming regime, with areas of open arable fields near to the settlements and areas of common grazing land in the centre of the zone. However, the presence of so many place names including the word ‘moor’ may indicate that a high proportion of the medieval landscape was used for grazing. The settlements in this zone may, therefore, have relied more heavily on animal products such as meat and wool than those in neighbouring areas.

Estates sharing the names all of the current settlements and deserted settlements visible as earthworks are mentioned within the Domesday survey. Whilst it is not clear from the evidence available, it is likely that any settlement associated with these estates was located in the vicinity of the present historic settlement cores within the zone. It also seems likely that the road layout linking these settlements was established, at least in part, at this time.

It is likely that the parish boundaries and the historic settlement cores as seen now were established during the early medieval period. There is extensive cropmark and earthwork evidence for ridge and furrow ploughing throughout the character zone and this, along with some of the longer, more sinuous field boundaries probably date from the medieval period.

There are several areas of historic earthworks in the zone. These are found on the line of settlements running from North Owersby to North Kelsey. Some of these are the remains of high status sites, such as the former manor house at South Kelsey Park. Others are indicative of the desertion or shrinkage of historic settlements, perhaps as a result of early post medieval enclosure of the land for animal grazing. Some of the isolated farmsteads seem to be associated with deserted village earthworks, such as those at Thornton-le-Moor and North Owersby, and it is possible that these are remnants of the earlier settlement cores.

The zone was subject to planned enclosure in the eighteenth and nineteenth centuries, a process whereby the open arable fields and unenclosed commons were divided and enclosed. The pattern of small isolated farms in the zone is thought to be associated with the process of enclosure, as landowners moved away from village centres in order to work their holdings more efficiently.

**Legibility**

The historic settlement cores still retain much of their historic character with most modern development being small scale and limited to the edges of villages. As well as the surviving settlements, there are also several examples of well-preserved earthworks indicating the locations of villages that have been abandoned. It is therefore possible to see the medieval settlement pattern in the landscape with a high degree of legibility.

There are several areas of ancient enclosure throughout the zone. Some are in the immediate vicinity of settlements. Others, such as those to the east of North Kelsey, are found at greater distances and are indicative of the widespread conversion of arable land to pasture, a process that may have led to the abandonment of some of the medieval settlements in the zone. Those areas of early enclosure that have been subsequently been absorbed into areas of modern fields generally have a high legibility through the survival of characteristically irregular field boundaries.

The post medieval landscape is evident in the survival of planned enclosure and isolated farmsteads across the character zone. Particularly extensive areas have been preserved around North Kelsey, but smaller blocks of both private and parliamentary planned enclosure can be seen throughout the zone. Although much of the landscape of planned enclosure has
been superseded by modern fields through the processes of consolidation and boundary loss, the remaining field boundaries often retain their characteristic straightness and overall rectilinear plan.
Character Zone TVL1

The Northern Cliff Foothills
within The Trent Valley Character Area

ARS sub-province: CTRNT

Natural England National Character Areas:
48 Trent and Belvoir Vales
45 Northern Lincolnshire Edge with Coversands
39 Humberhead Levels

Total area: 317.9 km²

Percentage of Regional Character Area: 46.6%

Percentage of Overall Project Area: 4.6%

Description
The landscape of this zone is largely flat, with a gentle upward slope from the River Trent in the west to the foot of the Northern Cliff in the east. The level topography allows wide views of large features the landscape, especially the large power stations on the west bank of the Trent whose exhaust plumes can be seen across the zone.

A line of settlements, aligned approximately north to south, runs through the middle of the zone from Messingham in the north to Sturton-by-Stow in the south. The settlements retain much of their historic character, with organic infill development on vacant plots and occasional large-scale modern development at their edges. There are also, scattered across the zone, several isolated farmsteads the majority of which have expanded significantly from their original size to include modern barns and animal pens.

The largest settlement in the zone is Gainsborough, an historic town situated on the east bank of the River Trent. The town displays a mixture of residential types, but the two most dominant are the strict grid-pattern, nineteenth-century terraces in the centre and the sinuous branching mid to late twentieth-century housing estates on the edge. The boundary between the two is marked by the railway line. The town is also home to a number of industrial facilities, both active and historic. The Britannia Iron Works was once the largest of these and its former premises at Marshall’s Yard have now been converted into office space and retail outlets, while retaining much of its former industrial character. The port facilities along the Trent are now largely disused and there are several areas of overgrown derelict land.

The fields in the zone comprise a balanced mix of types. Close to the historic settlements at the western edge of the zone there is a preponderance of surviving ancient enclosures, characterised by small field sizes. Away from the settlements there are a number of ancient enclosures of larger size which seem to be associated with specific isolated farmsteads. There is also strong survival of planned enclosure landscapes across the character zone, and the modern fields, produced through a process of consolidation in the twentieth century, seem to retain much of the rectilinear character of the underlying planned enclosures. Most
of the modern fields and planned enclosures have a strong east to west orientation, evident from the long boundaries that have survived the process of consolidation.

Much of the road network reflects the strong east to west alignment of the fieldscapes, apart from the road linking the central settlement line, which is aligned north to south and roughly follows the 20m contour line. The east to west aligned roads are all characterised by their wide, sinuous nature.

**Historic Landscape Evolution**

The earliest identifiable landscape features in this zone date from the Roman period. The modern A1500, also known as Till Bridge Lane, follows the course of a Roman road from Ermine Street on the top of the cliff to the former river crossing on the Trent to the west of Marton. To the south of this road the Foss Dyke, that may be a Roman canal, meets the River Trent at Torksey. The Anglo-Saxon town of Torksey was sizable and important, being considerably larger than Nottingham in 1066. It declined later and is now a relatively small village on the banks of the Trent.

The main line of settlement, running through the centre of the zone, appears to have been in existence by the time of the Domesday survey, with most settlements recorded. The villages are situated at some distance from the river, presumably to minimise the risk of flooding. The settlements on this line appear to have had typical, medieval, open field farming systems, with two or three strip fields in close proximity to each settlement and common grazing land on the marshes adjacent to the river.

Three large deer parks were established in the north of character zone in the twelfth the fourteenth centuries, at Gainsborough, Stow and Kettlethorpe. All three of these parks have since been enclosed, but there are still identifiable elements, such as continuous field boundaries, that reflect the former park outline in the landscape today.

As well as the enclosure of former deer parks, there are several examples of early enclosure of former open field strips to be found in close proximity to most of the villages in the zone. There are also several examples of ancient enclosures associated with isolated farmsteads.

The zone as a whole was largely enclosed, in a planned fashion, between the seventeenth and nineteenth centuries. This is evident from the strongly rectilinear field boundaries that survive to this day. These planned enclosures resulted form private agreements and Parliamentary Acts in approximately equal measure, judging by the survival of these types in the modern landscape. The process of planned enclosure also created a new settlement pattern of many isolated farmsteads in the landscape.

The nineteenth century saw a massive expansion in the population of Gainsborough, as people forced from the land by enclosure found employment in the factories and docks. The town itself took on a new character with the construction of large factories such as Marshall's Ironworks, and the large numbers of small terraced houses constructed to accommodate the workforce.

**Legibility**

Legibility of the medieval landscape is evident in the survival of the linear settlement pattern and long east to west orientated field and parish boundaries. Some surviving ridge and furrow, visible as extant earthworks and as cropmarks on aerial photographs, is also present within the ancient enclosures near to settlements.

Legibility of the post medieval landscape is evident in the good survival of planned enclosure and isolated farmsteads across the character zone, which gives the zone its dispersed character.
The modern landscape shows field consolidation from contemporary agricultural practices. Sturgate Airfield retains some of its character from its construction during the Second World War and is still in use as a civilian airfield. Most modern housing is centred on ancient settlements, but these settlements retain their historic character.
Character Zone TVL2

The Fosse Way within The Trent Valley Character Area

ARS sub-province: CTRNT

Natural England National Character Area:
48 Trent and Belvoir Vales

Total area: 46.4 km²

Percentage of Regional Character Area: 7.7%

Percentage of Overall Project Area: 0.7%

Description

The landscape of this zone is slightly elevated above the surrounding floodplains of the Trent and the Witham. It is a mixed landscape of woodland, open water and modern arable farmland. It is bisected by the A46, a modern dual-carriageway road which follows the course of the Roman Fosse Way. Despite this the character of each half remains similar to that of the other.

Villages in this zone are characterised by red-brick buildings with pantile roofs. In many cases there are active farms set within the village boundaries, giving the settlements an active rural character. Modern development is generally limited to individual buildings constructed on vacant plots or gardens. There are few instances of large homogenous blocks of modern housing in the vicinity of most historic settlements. The exception to this is Skellingthorpe in the north of the character zone, whose character is predominantly modern, with several cul-de-sac estates arranged around a highly denuded historic core. The village is separated from the City of Lincoln by a thin block of woodland, a strip of fields and the western bypass road.

Further modern development can also be seen at Witham St Hughs, which is entirely of twentieth-century origin. The earliest housing development was constructed as living quarters for RAF personnel from RAF Swinderby. This has been added to in recent years with modern sinuous estates, creating a large new village adjacent to the A46.

As well as the primary nucleated settlement pattern, there is also a secondary pattern of isolated farmsteads dispersed throughout the zone. Many of these are still in active use as farms, and have associated agricultural buildings such as barns and sheds. In some cases these ancillary buildings have become obsolete and are at risk of dereliction or demolition in favour of modern buildings.

The rural landscape is mostly made up of arable fields, which are arranged in a generally rectilinear pattern with straight field boundaries at right-angles to each other. This pattern is somewhat diminished across the zone by the loss of field boundaries, which has in places
created a more irregular pattern of larger fields. Field boundaries are more often formed by hedges rather than drainage ditches, perhaps as a result of the sandy soil which underlies the zone. There is a considerable area of small irregular pasture fields around the villages of Thurlby, Haddington and Aubourn. These fields often contain well-preserved ridge-and-furrow earthworks, especially adjacent to the village cores.

The zone is notable for its extensive woodland cover of various types. There are two areas of ancient woodland, one at Ash Lound close to Doddington and another at Norton Big Wood near Norton Disney. The greater part of the woodland is made up of rectilinear plantations and game coverts. As well as the blocks of woodland, there are often small strips of woodland immediately adjacent to minor roads across the zone. This intensifies the woodland aspect of the zone, and contributes to its enclosed, intimate character.

The underlying sand and gravel terraces of the zone have long been valued as a source of raw material. This has led to large scale extraction of these materials across the zone. Some quarries are still in use, while others have either been reinstated or allowed to flood producing new areas of open water and wetland vegetation. Some of the flooded pits have been designated as nature reserves, providing recreational and tourist opportunities.

**Historic Landscape Evolution**

The existing pattern of nucleated settlements has its roots in the early medieval period, during which Anglo-Saxon and Danish settlers established farms and hamlets on the sand and gravel terraces. It is possible that this early settlement continued a tradition of earlier Romano-British settlements. Examples of these have been found on similar gravel terraces throughout the Trent Valley.

Surviving ridge and furrow earthworks around the villages suggests that the medieval farming landscape in the zone was a typical open field system, with arable land on the high ground adjacent to the settlements and grazing land on the marshy areas below. The survival of ancient enclosures near Aubourn indicates early enclosure of the open fields for the purpose of raising livestock.

During the eighteenth and nineteenth centuries much of the rural landscape of the zone was subject to enclosure, either by Act of Parliament or through private agreement between landowners. Although the resulting landscape is the same, there is a clear distinction between the area north of the Fosse Way, which was subject to parliamentary enclosure, and the area to the south, where enclosure was brought about by private agreement. Many of the isolated farms found in the modern landscape were established at this time, with no real division between the Parliamentary and private enclosure landscapes.

The Second World War influenced the development of the landscape by the establishment of the military base at Swinderby and by the construction of RAF service personnel’s quarters at Skellingthorpe.

The rural landscape underwent significant change after the Second World War as field boundaries were removed, both as a result of the consolidation of farm holdings and in order to facilitate the use of new farm machinery. The loss of boundaries has resulted in a diminution of the planned character of the landscape, especially on areas of former moorland away from the historic settlements.

The twentieth-century expansion of settlements, both within the zone and throughout the county, has created a demand for building materials, which has been partially served by the large sand and gravel quarries in the centre of the zone. The resulting impact has been twofold. Where extraction is active, the character of the landscape has become industrial, with large conveyor belts, processing plants and heavy machinery. Where extraction has
ceased the former quarry sites have developed a more recreational character, as nature reserves and as venues for watersport activities.

**Legibility**
The historic Fosse Way remains an important feature of the modern landscape. It follows the course of a major Roman road, but has recently been upgraded to a dual-carriageway. As well as providing a tangible link to the past, it now also acts as a barrier between the two halves of this zone. Although both halves currently display very similar characteristics, it is likely that their respective characters will begin to diverge.

The ongoing tension between the historic landscape and the pressures of development is well illustrated by the ongoing changes to the site of RAF Swinderby, where the formerly well-preserved wartime character is in the process of being changed by the erection of new modern housing around the base, and by the extension of nearby gravel extraction to the area within the perimeter track.

There are partially legible remnants of the medieval farming landscape to be found throughout the zone, primarily focussed on the nucleated settlements. These include ancient enclosures with irregular boundaries, and extant ridge and furrow earthworks. The post medieval landscape is visible in the extensive survival of planned enclosure throughout the zone. Although many of the fields on the former moorland have been consolidated, they currently still retain their planned enclosure character.
Character Zone TVL3

The Valley Fens
within The Trent Valley Character Area

**ARS sub-province:** CTRNT

**Natural England National Character Area:**
48 Trent and Belvoir Vales

**Total area:** 160.8 km²

**Percentage of Regional Character Area:** 26.8%

**Percentage of Overall Project Area:** 2.3%

**Description**
This zone is divided into two unequal parts. The small area to the north of the City of Lincoln is centred on the River Till, while the larger area to the south of the city is centred on the River Brant. These two watercourses are tributaries of the River Witham, and the landscapes that have formed around them have very similar characteristics.

The northern part of the zone is bounded by the foot of the Northern Cliff to the east and by the edge of a gravel terrace to the west. The River Till runs through the centre of the area, through a rural landscape of fields and isolated farms.

The landscape around the River Till is almost entirely rural. There are no historic nucleated settlements, only a few isolated farmsteads. In recent years, a new settlement at Burton Waters has been created which is unique in Lincolnshire as a combined housing and marina development. The fields comprise a mixture of small to medium sized rectilinear fields bounded by hedges and ditches, and large irregularly-shaped fields where internal boundaries have been removed. There is little woodland, and vertical features, such as flood banks and pylons, tend to be disproportionately visible as elements of the landscape in the absence of other features.

The southern part of the zone displays a very similar rural landscape to that of the northern part. The River Brant rises near Gelston, just outside the zone, and flows northwards through the zone, past a floodplain landscape of flat fields. To the east of the river, these fields are referred to as fens on the modern Ordnance Survey maps, and they display many of the same characteristics as the fields in the Witham Fens on the other side of the Cliff. They typically have long, straight boundaries formed by drainage ditches, and there is little woodland cover to provide a vertical element to the flat, open landscape. To the west of the river the landscape begins to rise towards the base of the cliff, producing a slightly less fen-like character. Fields in this area are typically known as ‘low fields’.
There is little settlement in this part of the zone, with only a few small nucleated villages in the south-west and a scattering of isolated farmsteads set within the rural landscape. The nucleated settlements generally comprise eighteenth- and nineteenth-century red-brick buildings, with some modern houses built on vacant plots.

**Historic Landscape Evolution**

There is relatively little evidence available for the pre-medieval use of this landscape, especially of the area surrounding the River Brant. However, the settlement of Brant Broughton is recorded in the Domesday survey of 1086, indicating that the landscape was in productive use by that time. There are numerous areas of relict ridge and furrow earthworks on the west bank of the Brant, indicating that the open fields of the settlements just outside the zone were quite extensive. Conversely, there is little or no evidence of open field farming on the land to the east of the Brant, between the river and the foot of the cliff, perhaps indicating that this land was used for grazing livestock. In the north-west of the zone is an area of former fenland which may have been used for seasonal grazing or hunting.

Although there are few surviving settlements in the zone today, there are two sites where earthwork remains and cropmarks indicate former medieval settlement. The first is the deserted village of Skinnand, which declined slowly until the middle of the nineteenth century, and has now been largely ploughed away. The second is Somerton Castle in the parish of Boothby Graffoe, which was built over the remains of a settlement which was deserted in the fourteenth century, perhaps after the Black Death.

There is a clear difference between the types of planned enclosure practised on either side of the Brant. To the west of the river, the land was generally privately enclosed, either by agreement between several landowners or by a single landowner who was able to act by himself. To the east, the landscape was enclosed primarily by Act of Parliament. Although the resulting landscape appears very similar, the underlying pattern of medieval landownership may well have been very different in these two areas. The former fenland around Bassingham was probably drained at this time, much like the fenland of the Witham valley on the other side of the Cliff.

During the twentieth century the main changes to the landscape came from the consolidation of historic fields into larger blocks by the removal of boundaries. This process was particularly prevalent in the upper Brant Valley, especially in the landscape around Brandon in Hough-on-the-Hill parish.

**Legibility**

Remnants of the medieval landscape can be found throughout the zone. As well as the surviving settlement of Brant Broughton, there are several sites where former medieval settlements can be seen in earthwork form. The surviving areas of ancient enclosure are often found in isolated blocks away from historic settlements.

The planned enclosure landscape survives in various degrees throughout the zone. It is particularly well preserved in the fenland landscape east of Bassingham. The isolated farmsteads scattered throughout the rural landscape are also indicative of nineteenth century farming practices.
Character Zone TVL4

The West Grantham Farmlands within The Trent Valley Character Area

ARS sub-province: CLNSC

Natural England National Character Area:
48 Trent and Belvoir Vales

Total area: 76.8 km²

Percentage of Regional Character Area: 12.8%

Percentage of Overall Project Area: 1.1%

Description

The landscape of this zone is divided between the flat, low lying areas of farmland and several small hills, on which the historic nucleated settlements are found. There are several watercourses that pass through the zone, including the River Witham and the Foston Beck. The Witham in particular is bounded by flood banks for much of its length, restricting views of the river itself but ensuring that it remains highly visible in the landscape.

The settlements in the zone are found in a rough crescent from Caythorpe in the east to Claypole in the west, and are all nucleated in character. Most of these settlements have not been altered or added to since the nineteenth century, and display extensive use of red-brick and pantile in their built form. The exceptions to this are Long Bennington and Caythorpe, which are situated on the A1 and the A607 respectively. These two villages have been extended by the addition of modern housing developments, perhaps because they provide better access to main roads, as described above. The nucleated settlement pattern is well preserved throughout the zone, except at Caythorpe where the expansion of that village has linked it to the neighbouring village of Frieston. There are several important heritage assets to be found within the settlements, including the castle and the Anglo-Saxon church at Hough-on-the-Hill and a moated medieval site at Hougham.

The rural landscape surrounding the main settlements displays a strongly planned character which is especially clear in the fields surrounding Dry Doddington. Elsewhere, for example around Caythorpe and Hough-on-the-Hill, the fields are larger and more irregular, although the character of straight, hedged boundaries is still prevalent. A less dominant pattern of small irregularly-shaped fields with sinuous boundaries can be seen on the higher ground in the immediate vicinity of some settlements, such as Gelston. These are typically pasture fields, and many of them contain well-preserved ridge and furrow earthworks.

There is little woodland in the zone as a whole, and what there is concentrated in a small area to the west of Carlton Scroop. Where woodland exists it typically conforms to the overarching rectilinear pattern of the rural landscape.
Historic Landscape Evolution

There is evidence from aerial photography for the settlement of this zone in pre-medieval periods. However, the limited amount of archaeological fieldwork undertaken to date means that it is not possible to assign a more accurate date to many of these remains. In particular, there is an extensive pattern of cropmarks in the area between the River Witham and the Foston Beck which may date from the late Iron Age, as indicated by field survey of one site.

The modern settlement pattern appears to have its origins in the early medieval period, as all of the surviving villages are mentioned in the Domesday survey of 1086. Most of the place-names indicate that the villages were founded by Anglo-Saxon settlers, although Caythorpe may be a later Danish settlement.

There is extensive survival of ridge and furrow earthworks on the higher ground throughout the zone, but little evidence for its existence on the lower-lying floodplains. This may indicate that the medieval strip fields were situated on the high ground surrounding the medieval villages, and possibly on the slopes of hills throughout the zone. The land between may have been less suitable for crops, being less well drained and more prone to flooding. However, these same qualities also provide suitable land for raising livestock, and it is likely that the common grazing land would have been situated in these floodplain areas.

During the later medieval period, and immediately afterwards, parts of the former open fields were gradually enclosed in a piecemeal fashion. This may have been undertaken in order to expand the amount of land available for grazing sheep. Examples of ancient enclosures can be found immediately adjacent to many of the historic settlements in the zone, but are particularly well preserved around Hougham, Long Bennington and Gelston.

The process of enclosure was largely haphazard and piecemeal until the eighteenth century, when the remaining unenclosed commons and open fields were divided and enclosed either by private landowners or by Act of Parliament. These later enclosures were undertaken by professional surveyors using relatively modern techniques, resulting in a landscape of strictly regimented rectilinear fields with straight boundaries. This sort of landscape is particularly well preserved in the area between Dry Doddington, Westborough and Long Bennington, which was enclosed in 1770. As well as creating a new agricultural landscape, the process of enclosure also created a secondary settlement pattern of dispersed isolated farmsteads, from which the landowners were able to work their consolidated holdings more efficiently.

The planned enclosure landscape has also been heavily modified in some areas as a result of twentieth-century agricultural processes. The trend towards mechanisation of farming techniques has resulted in the removal of field boundaries in order to create larger fields that can be worked more efficiently. Another factor has been the consolidation of farm holdings by sale or inheritance, which has also resulted in the removal of some boundaries. The resulting landscape of large prairie-style fields can be seen clearly in the area to the east of Hougham and Marston.

The nucleated settlements were also modified during the twentieth century as population increase necessitated the construction of many new houses. Most of the additions to the villages have been limited to small developments of five or six houses on plots at the edge of the village core, with occasional infill development of vacant plots. There are two exceptions to this, Long Bennington and Caythorpe. These villages are situated on the A1 and the A607 respectively, and have seen much greater growth as a result of their greater desirability to commuters. New housing in these villages has been on a greater scale, with estates of small detached homes being constructed on agricultural land surrounding the village. This has had a disproportionate effect on the survival of ancient enclosures around Caythorpe.
Legibility
It is possible to identify several levels of time-depth in the landscape of this zone. The medieval agricultural landscape was largely removed by the nineteenth-century enclosures, but the modern settlement pattern of nucleated villages is much the same today as it was at the time of the Domesday survey. However, this pattern is potentially threatened by the expansion of adjacent villages towards each other, which has already resulted in the unification of the villages of Caythorpe and Frieston.

Ancient enclosures dating from the late medieval period survive in many places, especially on the edges of historic settlement cores. In some places modern housing has encroached on these enclosures.

Large areas of eighteenth- and nineteenth-century planned enclosure survive across the zone, despite the consolidation of field boundaries in the post-war period.
Character Zone SCL1

The Southern Cliff Heath
within The Southern Cliff Character Area

ARS sub-provinces:
CLNSC
EWASHW
CEMID
CTRNT

Natural England National Character Areas:
47 – Southern Lincolnshire Edge
48 – Trent and Belvoir Vales
74 – Leicestershire and Nottinghamshire Wolds
75 – Kesteven Uplands

Total area: 441.9 km²

Percentage of Regional Character Area: 37.8%

Percentage of Overall Project Area: 6.33%

Description
The topography of this character zone is a continuation of the limestone scarp which runs north to south down the length of the county. The western edge of the zone is formed by this feature. The landscape then gradually drops away towards the Witham Fens in the east. Between these two strong boundaries, the landscape is one of broad open views. The grain of the landscape is predominantly governed by the main north to south roads, the A607 and the A15, and by the minor roads running between them from east to west.

There are two main lines of settlement in the character zone. To the west, a line of nucleated villages runs from Bracebridge Heath in the north, down the top of the cliff through Navenby, and around the north and west of Grantham through Ancaster and Barkston before terminating at Harlaxton. This string of settlements generally follows the line of the cliff edge, perhaps taking advantage of a historic spring-line. To the east, a second line of settlements runs from Branston, through Metheringham, to Ruskington. This line forms the eastern edge of the zone, beyond which lies the fen edge.

The individual settlements on both lines typically display a well preserved historic core, in which most of the buildings are constructed of local limestone with red pantile roofs. In most cases, the cores have been surrounded by later development. This mostly takes the form of late twentieth-century housing estates, which are generally brick built. The builders of some later estates have used limestone cladding in an attempt to blend in with the prevailing local character, but this effect is generally undermined by the uniform design of the houses.

Between the two lines of settlement, there is an even distribution of small isolated farmsteads. These are typically brick-built, with associated out-buildings. They tend to date from the eighteenth and nineteenth century, and many have fallen into disrepair as newer farming practices have rendered them obsolete. Others have kept pace with these changes by constructing large ancillary buildings such as barns and animal pens. These tend to be made of concrete and corrugated iron, rather than traditional building materials.
The rural landscape is strongly rectilinear in character. The east to west aligned field boundaries tend to be long and straight, often running parallel to minor roads or tracks. The north to south boundaries are typically shorter, but are equally straight. The result is a regimented field system in which right-angles and straight lines provide the defining character. The boundaries themselves are typically formed by hedges rather than ditches. This landscape prevails throughout the character zone, although there has been some consolidation of these rectilinear fields into much larger, more irregular fields in the years since the Second World War.

Like the Northern Cliff Character Area, the Southern Cliff is home to a number of RAF bases. Three of these bases are currently active. RAF Waddington is home to a number of large aircraft, including the E3 Sentry, which are frequently seen circling above the character zone. RAF Cranwell has an important role as the RAF officer training college, and as such marries the character of a typical airfield with that of a large educational establishment. RAF Barkston Heath, in the south of the zone, is used for flight training, but is also a very well preserved Second World War airfield. As it has never been used for large modern aircraft, the runways have never been extended and so the wartime layout remains largely intact.

**Historic Landscape Evolution**

The earliest surviving landscape features in the zone date from the Roman occupation. Ermine Street, which once ran from London to York, is still identifiable for much of its length through this zone. It runs south from RAF Waddington as the High Dyke, passing through the centre of the heath until it meets Ancaster, which was itself once a Roman town.

It is clear that the Roman road continued to be an important landscape feature, as it forms the boundary for parishes to either side of it. This may be because it provides a convenient mid-point between the two main lines of settlement, dividing the heath equitably between them.

The medieval landscape was one of nucleated settlements set amidst a typical open field farming system. The open fields were situated immediately adjacent to the settlements, as can be seen from the ancient enclosures and ridge and furrow earthworks seen today. Beyond the open fields lay the common grazing lands, with dry, heath grazing at the centre of the zone and wet fenland grazing outside the zone in the Trent Valley to the west and the Witham Fens to the east. The Domesday survey of 1086 records, as estates, the names of the present day nucleated settlements in the zone, indicating a degree of settlement continuity since at least the eleventh century.

Surprisingly there are very few deserted settlements in the zone, perhaps suggesting that the medieval economy of this zone was more resilient to the factors that caused desertion elsewhere. For example, the medieval farming regime may have been more heavily weighted towards pastoral farming, and so post medieval pressure to enclose the land for sheep farming was perhaps less strong here than in other areas, such as the Wolds.

During the eighteenth and nineteenth centuries the zone was subject to planned enclosure of many of the open fields surrounding the villages and of the large areas of open heath. The new fields were laid out by professional surveyors, resulting in a new landscape of straight lines and right-angles. New roads were also laid out at this time, and these also were long and straight, with wide verges. Where the land had previously been farmed in common, with one man’s holdings intermingled with those of his fellows, it was at this time re-distributed to the landowners in large contiguous blocks. This meant that it was possible, and more convenient, for landowners to live in the midst of their holdings, and the following decades saw the foundation of many isolated farmsteads on the heath.
During the twentieth century, the landscape was again subjected to wide ranging changes. The establishment of airfields during the First and Second World Wars not only created new physical objects in the landscape, such as hangars, runways and perimeter tracks, but also brought an influx of people to work on the bases, to supply and maintain them, and to provide the families of personnel based at them with goods and services. After the Second World War some of the bases were closed down or re-purposed. RAF Coleby Grange, for example, still retains the concrete launch pads built in the 1950s to accommodate American Thor intermediate range ballistic missiles.

The settlements in the zone have all expanded to some extent in the last century. This expansion has been caused by a number of factors, including natural population growth, the addition of new housing by the RAF and by the proximity of the villages to Lincoln, Grantham and transport links to London.

**Legibility**

Although the medieval landscape has been largely over-written by the planned enclosures of subsequent years, elements of it can still be identified. There are areas of irregular ancient enclosures to be found in the vicinity of most settlements, the boundaries of which typically reflect the sinuous forms of the open fields from which they were derived. The tower of the Templar preceptory at Temple Bruer still exists as a standing monument, although denuded of its landscape context by later development.

The planned enclosure landscape of the eighteenth and nineteenth centuries is extremely well preserved throughout the zone. Where modern fields have been created they retain the essential rectilinear character of the underlying planned landscape. The isolated farms, which are an essential part of this landscape, are also well preserved, although they and their outbuildings are increasingly subject to dereliction and abandonment.

The airfields in the zone are a visible reminder of more recent historic processes. As well as the obvious links to the Second World War, exemplified by the layout of RAF Barkston Heath, there are physical manifestations of the Cold War to be found at RAF Waddington with its extended runway for the operation of Vulcan nuclear bombers, and at RAF Coleby Grange with its Thor IRBM launch pads.
Character Zone SCL2

The Fen Edge Settlements within The Southern Cliff Character Area

*ARS sub-provinces:*
CLNSC
CEMID
EWASHW

*Natural England National Character Areas:*
46 – The Fens
47 – Southern Lincolnshire Edge
75 – Kesteven Uplands

**Total area:** 241.3 km²

**Percentage of Regional Character Area:** 20.7%

**Percentage of Overall Project Area:** 3.46%

**Description**
This long, thin character zone runs from the very north of the Southern Cliff Character Area to its southern extremity. The western edge marks the top of the downward slope from the plateau at the top of the cliff. The eastern edge is defined by the beginning of the fens, and for much of its length roughly follows the line of the ancient Car Dyke.

The zone is most heavily settled in its southern half, where a line of nucleated settlements runs from Market Deeping to Heckington along the A15, the B1177 and the B1394. The older buildings within these settlements are generally constructed from local limestone, presumably quarried from the top of the Cliff. More modern buildings, from the nineteenth century onwards, tend to be brick-built, reflecting the greater availability and affordability of these materials following the arrival of the railways. Many of the smaller settlements remain largely unchanged since the nineteenth century. Larger villages, such as Heckington and Bourne, have expanded due to the construction of housing estates in the twentieth century. In some places there has been a tendency for new housing to follow existing main roads, resulting in ‘ribbon’ development. This is particularly in evidence at Heckington, where twentieth-century development has caused it to be linked to Great Hale to the south, resulting in a loss of the discrete nucleated character of these fen-edge villages.

Sleaford is the largest settlement in the character zone, and acts as a local hub for shopping and services. Much of the present town centre dates from the nineteenth century, but older buildings can be found in the vicinity of the Church of St Denys. Away from the town centre, much of the built-up area comprises mid to late twentieth-century housing. This initially developed gradually along the main roads out of Sleaford in the 1930s. Later estates were then constructed behind these houses, creating blocks of large modern estates, which are the dominant housing type in Sleaford today.

There is some survival of ancient enclosure, most usually located on the periphery of historic settlement cores which have not been subject to significant expansion in the post Second
World War period. There is a strong survival of planned enclosure landscapes across the character zone, and the modern fields, produced through a process of consolidation in the twentieth century seem to retain much of the rectilinear character of the underlying planned enclosures. Most of the modern fields and planned enclosures have a strong east to west orientation, evident from the long boundaries that have survived the process of consolidation. Isolated farmsteads are scattered fairly evenly throughout the character zone.

There are several gravel extraction sites in the south of the character zone, in the vicinity of Market Deeping. Some of these workings have now been flooded and converted to leisure use.

**Historic Landscape Evolution**

There is archaeological evidence for the occupation of the fen edge from the Iron Age onwards. The Car Dyke, which runs along the eastern edge of the zone, is a Roman feature, and several sections of it survive to this day and are protected as scheduled ancient monuments. The Car Dyke is thought to have been created in order to allow drainage of the adjacent fenland and, as such, represents one of the first recognisable attempts in Lincolnshire to control the water system for agricultural purposes.

The settlements along the fen edge were almost certainly in existence, in some form, by the time of the Domesday survey of 1086. The actual shape of the villages as seen today is probably the result of later growth or planning. Prior to the enclosures that occurred in the post medieval period, the villages were set within a pattern of open arable fields, farmed in strips by the tenants and rotated annually on a three-field system. The arable land was complemented by areas of grazing land at the edge of each parish, used in common. In the Fen Edge character zone, this comprised areas of dry heathland grazing to the west and seasonal wetland grazing on the fens to the east. It is conceivable that cattle and sheep were grazed on the fens in summer, when the land was drier, and over-wintered either on the heath, or in small closes adjacent to the villages.

The main axis of many of the towns and villages in the south of the character zone seems to be east to west – namely aligned with the routes from settlements in Southern Cliff Character Area 3 (the Kesteven Parklands character zone) towards the fens. This could indicate that these settlements developed to serve the movement of livestock from the west to grazing on the fens. The axis of the larger settlements, situated on the route of the A15, seems to have rotated by 90º in the recent past, to reflect the growing prominence of this route way.

The open field farming system remained in place until the eighteenth and nineteenth centuries. It was removed by two processes. The first was the enclosure movement, which took away the strip allocations and common grazing rights from the landholders and returned them in the form of consolidated blocks of land which were owned outright. These blocks were set out according to a strict rectilinear pattern devised by professional surveyors, resulting in the straight field boundaries set at right-angles to each other that can be seen in the landscape today. The second process was the drainage of the fens by means of new watercourses and channels. This resulted in a very similar landscape to the planned enclosures described above. Both of these processes were undertaken either by private agreement between major landowners, or, where this could not be arranged, through an Act of Parliament. In practice there was little difference in the resulting landscape.

**Legibility**

The zone retains and displays significant legibility from several periods. The Car Dyke, which survives in several areas, illustrates both the antiquity of settlement in this zone and the long history of drainage and reclamation which has influenced that settlement. The long line of villages running north to south through the zone is medieval in origin, and the original pattern
of nucleated settlements remains largely intact, despite some ‘ribbon’ development. In some areas, mostly adjacent to historic villages, it is possible to discern the irregular curved field boundaries of ancient enclosures, which represent the earliest transfer of land holdings from the communal to the individual. The irregular shape of these fields often results from the sinuous nature of the ploughed strips in the former open fields. They are therefore a tangible reminder in the modern landscape of farming practices that disappeared up to two hundred years ago.
Character Zone SCL2

The Kesteven Parklands within The Southern Cliff Character Area

**ARS sub-province:** CEMID

**Natural England National Character Areas:**
47 – Southern Lincolnshire Edge
48 – Trent and Belvoir Vales
75 – Kesteven Uplands
92 – Rockingham Forest

**Total area:** 484.7 km²

**Percentage of Regional Character Area:** 41.5%

**Percentage of Overall Project Area:** 6.95%

**Description**

The physical landscape of this character zone is characterised by rolling countryside similar to that found in the Lincolnshire Wolds. Unlike the heath to the north, there are many small hills and sheltered valleys, providing an intimate landscape of enclosure and shade. This is enhanced by the extensive woodland found throughout the zone, much of it arranged in plantations.

The zone is particularly notable for the large number of country parks and associated country houses that are located within its boundaries. These range in size from large examples such as Grimsthorpe Park, which occupies an area of approximately 1200ha, to smaller parks such as Irnham or Bulby. These parks are characterised by large areas of grassland with large areas of woodland around their edges. In some cases, the grassland has been ploughed up for arable cultivation, often leaving veteran parkland trees isolated within fields of crops.

The largest settlement in the zone is Grantham, a historic market town, which is situated in a small depression to the east of the cliff edge. The town has many important historic elements, such as St Wulfram’s Church, the well-preserved ‘moustachioed’ Georgian terraces and the nineteenth-century industrial townscape of factories and terraced housing. More recently, there has been extensive construction of modern housing on the periphery of the town, taking advantage of Grantham’s transport infrastructure. Grantham is on the main east coast rail route from London to the north.

The next largest settlement is Stamford, also an historic market town, which is notable for the exceptional preservation of its historic core. Much of the old town is built from locally-quarried limestone with slate roofs. The town is situated adjacent to the A1 and is close to the main east coast rail route to London. These transport links make the town popular with commuters, and several large estates of modern housing have been constructed on its edges to accommodate them. These estates generally comprise typical small brick-built detached houses in cul-de-sac developments. However, some more recent examples have been built with stone façades in an attempt to reflect the historic character of the town.
The villages in this zone are generally small, with a nucleated character. These villages typically possess a well-preserved historic core, with few buildings having been constructed in the twentieth century. Apart from the two market towns, the exceptions to this are those towns, such as Colsterworth and Corby Glen, which are within easy reach of the A1. In these cases there has been considerable modern expansion to provide homes for commuters. Many of the settlements have been strongly influenced by the presence of nearby country parks, either by the addition of estate cottages and buildings or by historic adjustment of the layout of a village by an important landowner.

There is significant survival of planned enclosure landscapes across the character zone, particularly in the south and west of the character zone. The modern fields, produced through a process of consolidation in the twentieth century seem to retain much of the rectilinear character of the underlying planned enclosures. Close to many of the historic settlements there is a preponderance of surviving ancient enclosures, characterised by small field sizes and irregular boundaries. There are also a number of estate fields within this character zone, situated in the vicinity of the many landscape parks.

**Historic Landscape Evolution**

Estates sharing the names of many of the current settlements and deserted settlements visible as earthworks are mentioned within the Domesday Survey. Whilst it is not clear from the evidence available, it is likely that any settlement associated with these estates was located in the vicinity of the present historic settlement cores within the zone.

Given the nucleated settlement pattern and the survival of ridge and furrow earthworks throughout the zone it is likely that the land was cultivated according to a typical open field system from the medieval period until the eighteenth century. This entailed the rotation of crops on an annual basis between two or three large open fields. In addition to the arable fields, the zone supported many flocks of sheep, and wool production was a vital part of the medieval economy. Indeed, the profits from the wool trade provided much of the wealth that allowed the local aristocracy to begin constructing large houses and creating large areas of parkland.

Much of the zone was subject to planned enclosure in the eighteenth and nineteenth centuries, and much of this survives now, along with its associated isolated farmsteads. Some of the isolated farmsteads seem to be associated with deserted village and moated site earthworks, and it is possible that these are remnants of the earlier settlement cores as opposed to isolated farmsteads established as a result of the enclosure movement.

Many of the designed landscape parks were also established during this period. In some cases, the enclosure of fields and the establishment of the parklands and associated buildings may have occurred at the same time. From the early part of the twentieth century there was a reduction in the number of country houses and the conversion of many of their associated parkland landscapes to agricultural use, through the liability of the estates to inheritance tax.

The nearby villages were often altered in order to accommodate the needs of the estate. Some villages, such as Manthorpe near Belton Park and Edenham near Grimsthorpe, were completely remodelled by the local aristocrats, who demolished the former village buildings in favour of new uniform cottages for their estate workers. These cottages are found in many other villages throughout the character zone, and usually carry the crest of their patron family in a prominent place. Thus the influence of the landed gentry is felt throughout the zone, and not merely within the formal parks and gardens.
Legibility
The landscape of the zone is rich in historical elements. As well as the extensive preservation of the nineteenth-century planned enclosure landscape, there are many examples of pre-enclosure fields with irregular boundaries. The historic wealth of the zone, brought about by the wool trade, can be seen on many levels. The many landscape parks and country houses are a highly visible example of this, but so too are the well preserved stone buildings found in almost every village in the zone. Those settlements which were associated and built by estates generally retain much of their ‘corporate’ character, with villages from one estate generally being distinguishable from others associated with a different estate through their differing architectural details.

Many of those parks in the character zone retain much of their character as designed landscapes, despite the fact that large areas of former parkland have been converted to arable cultivation. In most cases, the estate woodlands planted at the edge of parks remain in their original form and the isolated trees commonly found within parkland are often preserved in the midst of modern arable farmland.
Character Zone GRM1

The Middle Marsh within The Grazing Marshes Character Area

*ARS sub-provinces:*
EWASH
CLNSC

*Natural England National Character Areas:*
42 - Lincolnshire Coast and Marshes

*Total area:* 160.4 km²

*Percentage of Regional Character Area:* 29.4%

*Percentage of Overall Project Area:* 2.3%

**Description**

The eastern edge of the north of the zone is marked by a line of settlements, aligned approximately north to south, which follow the 10m contour line. At the western edge of the zone is a similar line of settlements, generally adhering to the 20m contour line, which straddles the border between this character zone and the Wolds Character Area. The settlements retain much of their historic character, with little additional development. There are also several isolated farmsteads, scattered across the zone, the majority of which have expanded significantly from their original size to include modern barns and animal pens. The character zone as a whole displays a nucleated pattern of settlement.

The fields in the zone comprise a balanced mix of types. Close to the historic settlements at the edge of the zone, there is some survival of ancient enclosures of the former open field systems. A distinct area of ancient enclosure survives around Keddington Grange.

There is also a strong survival of planned enclosure landscapes across the character zone, and the modern fields, produced through a process of consolidation in the twentieth century, seem to retain much of the rectilinear character of the underlying planned enclosures. Most of the modern fields and planned enclosures have a strong east to west orientation, evident from the long boundaries that have survived the process of consolidation.

The south of the zone displays two distinct settlement types. Larger settlements, such as Alford, Willoughby or Orby, are situated on higher ground and are highly nucleated. On the lower lying, drained marshland settlement is restricted to isolated farm complexes, which are scattered evenly throughout the zone, and linear settlement strings, such as Irby-in-the-Marsh, which are situated on a series of small mounds rising two or three metres above the surrounding land.

Generally speaking, modern development is situated on lower lying ground, while older settlements, that predate the drainage of the landscape, are found on higher ground.
The agricultural land in this part of the zone retains a high proportion of old enclosures, mostly resulting from early marshland drainage and reclamation. There are some areas of planned enclosure, probably dating from the eighteenth and nineteenth centuries. More than 50% of the agricultural land in this zone is the result of modern consolidation of fields. Throughout the character zone, there are well preserved and maintained hedgerows, especially along roads. This gives a feeling of enclosure, and has the effect of restricting viewing distances on low lying ground. This is a marked contrast to the more modern reclamation seen in neighbouring character zones.

There is a concentration of woodland on the high ground to the west of the zone, which can be divided into two types. The greater part of the woodland is made up of small rectilinear plantations, but there is also a block of ancient woodland near Greenfield Priory.

**Historic Landscape Evolution**

The earliest line of settlement lies on the east in the north of the character zone; it is situated on the marsh edge. This line extends from Covenham St Bartholomew in the north to Great Carlton in the south and comprises a series of nucleated settlements, which generally do not seem to have shrunk significantly in size. To the west of these settlements there was a typical open field arable and common grazing regime. There is some survival of early enclosures in this area centred on the late medieval grange at Keddington. Much of the zone was subject to planned enclosure in the eighteenth and nineteenth centuries, but little of this survives now, as the dominant field type is post Second World War consolidated modern fields. In general, this zone follows the typical evolution of an open field farming system, from strip fields to planned enclosure to modern field consolidation.

In contrast, to the south of the character zone, the general settlement pattern results from the depopulation of medieval villages. There are various factors which might have led to the depopulation, partial abandonment and subsequent shrinkage of these settlements. Village populations grew rapidly in the eleventh to thirteenth centuries, causing the utilisation and occupation of marginal land. However, in the fourteenth century there was a combination of economic decline, worsening climate and repeated outbreaks of pestilence which led to a general decline in rural population numbers, with some settlements being partially or totally abandoned. Additional factors which led to the abandonment of settlements in later centuries included the enclosure of open fields, pastures and commons as a result of the fluctuations in the prices of wool and meat, and by the removal of villages to facilitate emparking, the creation of landscape parks within large country estates.

The area around Greenfield Priory demonstrates an alternative landscape evolution and development. Here, ancient woodland seems to have been cleared and enclosed by private irregular enclosure. Although the date of this enclosure is unknown, it is probably associated either with the establishment of the Cistercian priory in the twelfth century, or with the post dissolution use of the landscape, when a small hamlet was established on the site of the former Priory.

The south of the zone displays two distinct settlement types. Larger settlements, such as Alford and Orby, are situated on higher ground, and are highly nucleated. On the lower lying drained marshland, settlement is restricted to isolated farm complexes and linear settlement strings, such as Irby-in-the-Marsh.

The agricultural land in this part of the zone retains a high proportion of old enclosures, mostly resulting from early marshland drainage and reclamation. There are some areas of planned enclosure, probably dating from the eighteenth and nineteenth centuries.

Throughout the character zone, there are well preserved and maintained hedgerows, especially along roads. This gives a feeling of enclosure, and has the effect of restricting
viewing distances on low lying ground. This is a marked contrast to the more modern reclamation seen in neighbouring character zones.

Legibility
Legibility of the medieval landscape is evident in the survival of the linear settlement pattern and long east to west orientated field and parish boundaries. Some surviving ridge and furrow, visible as extant earthworks and as cropmarks on aerial photographs, is also present within the ancient enclosures near to settlements. The area around Keddington Grange displays a high legibility from this period.

Legibility of the post medieval landscape is evident in the good survival of planned enclosure and isolated farmsteads across the character zone, which gives the zone its dispersed settlement character.

The modern landscape shows field consolidation, the result of contemporary agricultural practices. Industrial activity is centred on Manby Airfield, which retains its character from its construction during the airfield expansion period of the 1930s. Most modern housing is centred on ancient settlements, but these settlements generally retain their historic character.
Character Zone GRM2

The Salterns within The Grazing Marshes Character Area

ARS sub-province: EWASHW

Natural England National Character Areas:  
42 - Lincolnshire Coast and Marshes

Total area: 64.1 km²

Percentage of Regional Character Area: 11.8%

Percentage of Overall Project Area: 0.9%

Description

The predominant land use in this character zone is arable farming in large, consolidated modern fields, with small pastoral fields near main areas of settlement. A large reservoir with high banks provides recreational/tourist opportunities.

The settlements in this zone form a line, stretching from North Cotes to Grainthorpe along the A1031, parallel to the coast. The settlement character is mixed, including dispersed linear villages, such as Wragholme, and more traditional nucleated settlements, such as Grainthorpe.

The rural character of the zone is dominated by large modern fields, resulting from post Second World War consolidation processes. These fields show a markedly different character on either side of the settlement line. Those to the west of the line have largely straight boundaries, indicative of planned enclosure of a typical open field farming regime. The fields to the east have sinuous boundaries, usually formed by drainage ditches rather than hedges, which provides a more open landscape with wider views.

It is still possible to see much of the built form of the former RAF North Cotes, which is now used for a variety of light industrial purposes. The base is also home to a local flying club.

Covenham Reservoir, as well as providing water for Grimsby, is used for a variety of recreational purposes. It is built above the level of the surrounding land, and is widely visible throughout the eastern half of the character zone.

Historic Landscape Evolution

Most of the settlements in this zone were founded as satellites of villages of earlier foundation to the west. They evolved from seasonal salt production and marsh grazing – Wragholme is an example of this process. However, Grainthorpe may perhaps have earlier origins. It is the only one of these settlements mentioned in the Domesday Survey, and it had direct access to a haven at that time and so may well have been an important local centre for the transport of salt by land and by sea from this area.
The medieval salt industry is responsible both for the initial reclamation of the eastern half of the zone, and for the sinuous field boundaries visible in the landscape around Marshchapel and Tetney Lock. The salt-making process resulted in large quantities of unwanted spoil which were piled up in mounds. Eventually, enough spoil was collected to create higher and dryer land where it was possible to plant crops. The water draining off the high ground to the west into the sea naturally followed courses that ran around the new areas of high ground, creating the sinuous boundaries seen in the landscape today.

The historic landscape of the western half of the character zone is largely the result of post medieval processes, particularly the planned enclosure of formerly open fields and common grazing during the eighteenth and nineteenth centuries. This resulted in a landscape of rectilinear field boundaries, running in straight lines across the landscape. Land that was once worked communally fell into the ownership of specific individuals, who, in some cases, built farmsteads set among their new holdings.

**Legibility**
The modern consolidated fields to the west of the main axis of settlement retain their historic character of old enclosure close to the settlement. Some earthwork ridge and furrow is evident in the immediate vicinity of the main settlements.

The fields to the east of the main settlement axis are of a modern, consolidated character, with most internal boundaries having been lost. However, sinuous streams clearly indicate the salt marsh origins of this area. Almost all of the saltern earthworks have been ploughed out, but are clearly visible as cropmarks and soilmarks on aerial photographs.

Although some elements of the former RAF North Coates are still visible, the runways, Bloodhound missile launching pads, and perimeter track have been destroyed by ploughing since 2000.
Character Zone GRM3

The Mablethorpe Outmarsh within The Grazing Marshes Character Area

**ARS sub-province:** EWASH

**Natural England National Character Area:**
42 - Lincolnshire Coast and Marshes

**Total area:** 163.6 km²

**Percentage of Regional Character Area:** 30%

**Percentage of Overall Project Area:** 2.3%

**Description**

The settlements in this zone are predominantly aligned along an east to west axis. They are also highly dispersed, with a linear character, and are generally spread along roads. There are numerous isolated farmsteads which is in keeping with the dominant planned enclosure landscape of the character zone. In general, low lying areas are served by straight roads, while those roads on higher ground are more sinuous.

The largest area of settlement in the zone is found along the coast from Sandilands in the south to Mablethorpe in the north. The formerly distinct settlements along the coast have been connected into a single conurbation by the establishment of caravan parks along the connecting roads.

The seaside villages are heavily influenced by the tourist economy, with many shops existing to provide goods to holidaymakers. There are also many amusement arcades and fast-food shops to be found in these villages, especially close to the seafront. During the winter months, these features are generally closed and shuttered, providing a very different character from the bustle and activity of the summer months.

Most of the agricultural land in this zone displays a strongly rectilinear pattern, with long, straight boundaries laid out at right-angles to roads and drains. In some parts of the character zone these rectilinear fields have been consolidated through boundary removal creating large open areas with irregular shapes.

There are several small onshore wind farms in the character zone which are a widely visible vertical component of the landscape. The gas terminal at Theddlethorpe is also a significant and visible industrial feature of the zone.

**Historic Landscape Evolution**

Early settlement in this zone was located on ‘islands’ of high ground within the undrained marsh. Associated with these settlements were strip fields which were located adjacent to the settlements, but the predominant landscape type was undrained marsh land, which would have been used for salt production and grazing. The marshland was drained in the
eighteenth and nineteenth centuries, with isolated farmsteads being built among the new agricultural land.

Mablethorpe expanded in the nineteenth and twentieth centuries, from a small fishing village to a seaside resort, to become the largest settlement in this character zone. The underlying landscape of planned enclosure and drainage upon which the nineteenth-century town was built can be readily identified in the rigid grid pattern of its streets.

Since the Second World War, the rural landscape has been somewhat altered by the widespread removal of field boundaries, resulting in the creation of some large modern fields in the zone. However, this effect has not been as widespread in this zone as elsewhere in the Character Area.

Although the zone was too remote to be much affected by nineteenth-century industrialisation, there have been a number of late twentieth-century additions that have added an industrial component to the landscape. The Theddlethorpe gas terminal was constructed in 1972 after the discovery and exploitation of gas deposits in the North Sea. This large installation occupies an area to the north of Mablethorpe, and continues to be used today. More recently, a small wind farm was constructed to the south-west of Mablethorpe. This type of development may become more common in the future as renewable energy forms a greater part of the nation’s energy supply.

**Legibility**

There are partially legible remnants of the medieval landscape to be found on higher ground, primarily focused on the few nucleated settlements. These include old enclosures with irregular boundaries and extant ridge and furrow earthworks. The post medieval landscape is visible in the extensive survival of planned enclosure throughout the zone.
Character Zone GRM4

The Saltfleet Storm Beach
within The Grazing Marshes Character Area

ARS sub-province: EWASHW

Natural England National Character Areas:
42 - Lincolnshire Coast and Marshes

Total area: 52.3 km²

Percentage of Regional Character Area: 9.6%

Percentage of Overall Project Area: 0.8%

Description
The settlement character of this zone is highly dispersed. There are numerous isolated farmsteads, and villages are generally strung out along east to west aligned roads.

The villages of Saltfleet and North Somercotes form an arc to the north-east of the character zone. These two settlements also have a dispersed linear character, albeit more dense than the villages inland due to modern infill development.

The rural landscape of the zone is very open, with few hedges or hedge remnants along major roads. However, there has been very little consolidation of fields, and most original boundaries remain as dykes or ditches. These boundaries are generally irregular and are indicative of early enclosure of medieval strip fields.

There is good survival of ridge and furrow earthworks, which generally respect the alignment of the old enclosures. To the north-east of the zone there is a patch of surviving planned enclosure, indicating planned marshland reclamation in the eighteenth and nineteenth centuries.

Historic Landscape Evolution
The earliest use of the zone is likely to have been as seasonal grazing and salt making. As both Somercotes and Saltfleet are mentioned in Domesday it is highly likely that both of these settlements were established as seasonal settlements in the pre-Conquest period.

The development of a storm beach in the eleventh and twelfth centuries led to the permanent settlement of North Somercotes and Saltfleet on this feature, the drainage of the marsh and establishment of the strip farming patterns inland. The earlier salterns fell out of use. The strip farming was aligned perpendicular to drove and access roads, which may date from the pre-storm beach landscape.

The eighteenth and nineteenth centuries saw the drainage and planned enclosure of the salt marshes, to the seaward side of the storm beach, resulting in the strongly rectilinear field pattern visible to this day. Although many of the fields have been consolidated in the post
Second World War period, the underlying planned enclosure system remains the dominant feature in this part of the landscape.

Legibility
The Saltfleet-North Somercotes settlement arc reflects the formation in the eleventh and twelfth centuries of a storm beach upon which the settlements were established, which in turn is likely to have covered elements of the earlier landscape evolution. Modern settlement has reoriented the alignment of Saltfleet by 90° to now respect the line of the A1031 road, although the earlier orientation of the settlement remains along the line of Pump Lane and the associated public right-of-way which extends the lane to the west. It is likely that this orientation reflects the position of early medieval settlement on this site. The linear character of inshore settlement persists and may reflect the alignment of early medieval droveways.

There is strong legibility of the medieval farming patterns and drainage in this zone, visible in the irregular pattern of drains and field boundaries. The field pattern to the west of the storm beach arc is aligned perpendicular to the road system. This suggests that the fields were laid out to respect an earlier road system and it is likely, therefore, that the roads in this character zone date from the pre-storm beach era and originated as drove roads and access routes to the early seasonal settlements.
Character Zone GRM5

The Skegness Holiday Coast within The Grazing Marshes Character Area

**ARS sub-provinces:**
EWASHW
CLNSC

**Natural England National Character Areas:**
42 - Lincolnshire Coast and Marshes

**Total area:** 93 km²

**Percentage of Regional Character Area:** 17.1%

**Percentage of Overall Project Area:** 1.3%

**Description**

This zone is dominated by large modern fields largely formed by consolidation of older field patterns. The area of Burgh Marsh north of the Skegness Road (A158) is strongly rectilinear, suggesting a previous pattern of planned marshland drainage and enclosure. This is also true for the area between Anderby Creek and Chapel St Leonards. The part of Burgh Marsh to the south of Skegness Road is, by contrast, very irregular, with long sinuous streams forming the majority of field boundaries. These may be the courses of creeks in the former marshland. Settlements in the area are sparse and much dispersed, and mostly comprise isolated farm complexes.

Throughout the character zone, the landscape is very open with few hedges to obscure the wide views, but there are significant areas with surviving hedgerows, which give a feeling of enclosure and having the effect of restricting viewing distances on low-lying ground. The agricultural land in this zone retains some old enclosures, mostly resulting from early marshland drainage and reclamation.

This zone displays two distinct settlement types. Larger settlements, such as Burgh-le-Marsh, are situated on higher ground and are highly nucleated. Smaller settlements such as Thorpe St Peter are on low mounds two or three metres above the surrounding land. On the lower lying drained marshland, settlement is mostly restricted to isolated farm complexes, which are scattered evenly throughout the zone.

The largest settlements in the character zone are found on the coast and owe their growth to the holiday industry. The original settlement cores of these towns are still identifiable, but have been overshadowed by late nineteenth- and twentieth-century developments. The residential areas of these settlements were, for the most part, built in the latter half of the twentieth century. However, the planned nineteenth-century resort at Skegness, centred on St Matthew’s Church, remains largely unaltered. There is also a sizeable seasonal population that is catered for by large static caravan parks which are found throughout the zone.
In addition to the many caravan parks, there is also the large Butlins holiday camp at Ingoldmells. Although much of the camp is of recent construction, the general layout still reflects the origins of the complex in 1936, with lines of chalets and cottages, and a grid pattern layout.

Generally speaking, modern development seems to be situated on lower lying ground, while older settlements, that predate the drainage of the landscape, are found on higher ground. This can be seen at Burgh-le-Marsh, which retains a very distinct historic core on higher land, with modern estates built on the periphery of the village on former marshland.

**Historic Landscape Evolution**

Much of the land initially would have been salt marsh utilised for seasonal grazing. The draining of the salt marsh to create arable farmland seems to have occurred in various different phases, demonstrated by the variation in field patterns and orientation of the field systems across the character zone.

There is evidence of some traditional open field agricultural development on higher ground at the southern edge of the character zone, which is at the far end of the Townlands character zone (WSH6), and was later subject to planned enclosure. Early drainage close to the settlements allowed arable farming and use of the wetlands for grazing. Prior to the large scale drainage of the marsh in the eighteenth and nineteenth centuries the marshlands were used for grazing.

The earliest nucleated settlements in the character zone were situated on higher ground, which afforded good visibility across the marsh and protection from flooding. The coastal resorts developed in the late nineteenth and early twentieth centuries. The planned resort expansion of Skegness began in 1877 and may have been spurred on by the establishment of several miners’ convalescent homes for workers from the Nottinghamshire and Derbyshire coalfields. Butlins opened the first holiday camp at Ingoldmells in 1936, although this has seen substantial redevelopment since. In the post Second World War period a number of fun fairs and several large caravan parks were established throughout the coastal part of the zone.

**Legibility**

The marshland character of the zone is clearly visible in numerous wide drains, with associated wetland plants, such as reeds. The medieval landscape can be seen in the survival of well preserved irregular enclosures and, close to settlements, well preserved ridge and furrow earthworks.

Modern fields in the zone often retain significant boundaries, which are indicative of the former field types that have been consolidated. Areas of former planned enclosure are indicated by long, straight boundaries, while former early enclosures are identifiable by sinuous or curvilinear field boundaries. Rectilinear modern fields indicate previous planned drainage and enclosure, while irregular boundaries may be indicative of old enclosures on higher ground. On lower ground near to the coast, irregular drains and streams may be surviving salt marsh watercourses.

In Skegness, the historic settlement core is still identifiable in the sinuous course of Main Street. The planned elements of the nineteenth-century resort at Skegness are also largely unchanged, especially the residential area around St Matthew’s Church and on the Victorian promenade.
Character Zone FEN1

The Witham Fens
within The Fens Character Area

ARS sub-province: EWASHW

Natural England National Character Areas:
44 – Central Lincolnshire Vale
46 – The Fens
47 – Southern Lincolnshire Edge

Total area: 390.5 km²

Percentage of Regional Character Area: 37.1%

Percentage of Overall Project Area: 5.6%

Description
There are very few nucleated settlements in the character zone, the only examples being a line of six villages on a low ridge of land, from South Kyme in the south to Martin in the north. Other settlements in the character zone comprise a combination of isolated farmsteads and irregular linear settlements along some of the routeways. There is little intervisibility between many of the isolated farmsteads in this character zone, due to the distance between them, which gives each farmstead a feeling of isolation. The character zone as a whole displays a dispersed pattern of settlement.

There is extensive survival of planned enclosure in the north and south of the character zone, perhaps because most of the field boundaries are ditches rather than hedges, forming part of the drainage system, and therefore not easily removed. Another effect of the lack of hedges is the open character of the zone, which is particularly prevalent in the north of the character zone. There are few areas of surviving ancient enclosure, and those which remain are focussed around the nucleated settlements on the low ridge of land from South Kyme to Martin.

The landscape is generally flat with any rises being very slight, only around half a metre above the surrounding land. Most areas of settlement are situated on these slight rises. The zone is also crossed by extensive drainage ditches, varying in width from a metre or so, to the South Forty Foot Drain (more than 20m wide), part of which forms the boundary of this character zone.

Historic Landscape Evolution
There is evidence for the use of substantial parts of the character zone during the Roman period. It seems likely that some fenland reclamation took place during this period. The Car Dyke was dug during this period, in order to provide drainage and control over flood waters and to provide a measure of drainage of reclaimed fen. Some sections of this feature survive in the modern landscape. The Lincolnshire HER contains numerous records of salterns dating from this period many of which are located on the fen side of the Car Dyke. Although very few of these survive as features in the modern landscape, the location of them gives an indication of the land use at this time. It is likely that the fens were used for grazing and for
salt production during this time. There is some evidence for settlement within the fen during this period, although no visible evidence of this survives now. The only visible clue to possible locations is likely to be slightly sinuous roadways extending beyond the Car Dyke. This road layout could also be associated with providing access to saltern sites or grazing.

In the post Roman period, the low level of the natural water table caused the peat fen to shrink, leading to drainage problems: essentially, the ancient drainage channels would have been too high to drain the fen, resulting in flooding. The former river channels, marked by heavier silty clay soils, were left standing above the now shrunken peat soils. They can be seen to this day and are known as ‘roddons’.

There was probably very little or no settlement within the character zone during the early medieval period, with any settlement comprising isolated buildings associated with seasonal use of the fen for grazing and salterns. It is likely that Prehistoric causeways in the north of the character zone, or at least their successors, continued to be used during this period. Several of the monastic institutions in neighbouring zones were founded during the medieval period at the ends of these causeways.

In the later medieval period it is likely that some fen reclamation took place, although this was probably fairly limited in extent and located mainly around the fen edge. The zone was subject to planned enclosure and drainage in the eighteenth and nineteenth centuries and much of this survives now, along with its associated isolated farmsteads.

The post Second World War period saw the consolidation and enlargement of some of the fields within the character zone by the removal of hedged field boundaries, although this was fairly limited in extent because most field boundaries were also drainage ditches.

**Legibility**

The legibility of the early landscape, although not that conspicuous, is evident in the modern roadways which cross the character zone, particularly in the north. It seems to be the case that those modern roadways which cross the Witham Valley follow the line of medieval or perhaps even earlier causeways. The legibility of the Roman landscape is limited to the line of the Car Dyke and possibly to some of the roadways which cross the Car Dyke, which were established primarily to provide access for grazing and to saltern sites. Some of these roadways may have also provided access to settlements on the fen, although there is now no visible evidence of these in the modern landscape. The slight rises on which many of the modern isolated farmsteads in the former fen are situated on areas of higher ground or roddons corresponding to former river courses.

Legibility of the medieval landscape is evident in the survival of the nucleated settlement pattern in the Billinghay area. Elements of the ridge and furrow open field system of agriculture are visible in the survival of some field boundaries in this area. The historic settlement cores still retain much of their historic character with most modern development being small scale. Across the rest of the character zone there is very little or no legibility of the medieval landscape, due to the drainage of the fens in the eighteenth and nineteenth centuries.

Legibility of the post medieval landscape is evident in the survival of planned enclosure and isolated farmsteads across the character zone.
Character Zone FEN2

The Eastern Fens within The Fens Character Area

**ARS sub-province:** EWASHW

**Natural England National Character Areas:**
- 44 – Central Lincolnshire Vale
- 46 – The Fens

**Total area:** 661.8 km²

**Percentage of Regional Character Area:** 62.9%

**Percentage of Overall Project Area:** 9.5%

**Description**
There are some nucleated settlements scattered throughout the character zone, located on ridges of slightly higher ground. There are also some linear settlements, which are formed by the infilling of several dispersed settlement types within the character zone. All other settlements in the character zone comprise a combination of isolated farmsteads and ragged linear settlements along the main roads. It is generally possible to see several farmsteads or other houses in every direction from any position within the character zone. Although the overall settlement pattern is dispersed, the density of settlement is quite high by comparison to other areas of fen or marsh in the county as a whole.

Much of the planned enclosure landscape survives to this day, although this survival is probably due to the necessity of retaining field boundary drains to ensure the continued viability of the agricultural land. Certainly throughout the character zone there is a strong feeling of openness, with few hedges demarcating fields. Those areas of modern consolidated fields generally have more surviving elements of hedgerows within their field boundaries than those areas of surviving planned enclosure. There are some areas of surviving ancient enclosure which are focussed around the nucleated settlements in the north and south of the character zone and around the linear settlements in the centre of the character zone.

**Historic Landscape Evolution**
There is little evidence for occupation in this character zone during the Prehistoric, but extensive evidence that the land within it was utilised at this time. There have been many artefact finds made throughout the zone from the Prehistoric period. There is evidence of settlement on the ridge of higher ground around Stickney and Sibsey, and in the Pinchbeck area.

Generally, there was probably very little or no settlement within the character zone during the early medieval period, with possible exceptions of settlement in the Stickney/Sibsey area and around Crowland. Outside of the areas of possible settlement, any settlement was probably isolated and associated with seasonal use of the fen for grazing or salt production. It is not clear whether any of the Roman settlements continued into the early medieval period, although given the gradual inundation of the fens towards the end of the Roman period this seems unlikely. Crowland Abbey was established in the eighth century. In the
later medieval period some fen reclamation took place, although this was probably fairly limited in extent and mainly around the fen edge.

Reclamation of the fenland landscape began in earnest during the eighteenth and nineteenth centuries. During this time many new drainage channels were cut and pumping stations constructed to overcome the challenge of draining land that was below sea-level. These engines were initially wind-powered, but steam engines became common throughout the zone. Indeed, it is likely that the clean air and skies for which the zone is so valued today are largely a modern phenomenon. The reclaimed land was divided into a pattern of rectilinear fields, separated from one another by drains rather than hedges.

This pattern is still much in evidence today, as the consolidation of fields that occurred elsewhere in the county could not be undertaken here due to the necessity of retaining the boundary ditches for drainage purposes.

**Legibility**

The legibility of the Prehistoric and Roman landscape is relatively minimal, due in part to the inundations which have covered the landscape from this period.

Legibility of the medieval landscape is evident in the survival of the nucleated settlement pattern in the Stickney and Crowland areas. Elements of the ridge and furrow open field system of agriculture are visible in the survival of some field boundaries. The historic settlement cores still retain much of their historic character with most modern development being small scale. Across the rest of the character zone there is very little or no legibility of the medieval landscape, due in the main to the drainage of the fens in the eighteenth and nineteenth centuries.

The planned enclosure landscapes of the eighteenth and nineteenth centuries are the most readily identifiable historic landscapes in the character zone, due to their extensive survival.
Character Zone WSH1

Reclaimed Coastal Fringe within The Wash Character Area

**ARS sub-province:** EWASHW

**Natural England National Character Areas:**
46 The Fens

**Total area:** 88.22 km²

**Percentage of Regional Character Area:** 13.36%

**Percentage of Overall Project Area:** 1.26%

**Description**
Land in the zone is predominantly agricultural, with fields intensively cultivated and the sea-banks and outlying saltmarsh grazed. Tourism is generally nucleated and is mainly nature based. Traditional bait digging, wildfowling and samphire picking continue throughout the coastal fringe of the zone. Two bombing ranges at RAF Wainfleet and RAF Holbeach occupy large swaths of the saltmarsh.

The zone is characterised by a network of active and relict earthen sea-banks aligned parallel and perpendicular to the coastline. The landscape is agricultural in appearance, being composed of rectilinear fields bounded by narrow and shallow wet dykes, reflecting an organised and recent pattern of land division associated with modern coastal land drainage.

Settlement density is very low, with buildings almost entirely limited to a handful of individual nineteenth- and twentieth-century farmsteads and isolated barns predominantly located within more inland parts of the character zone. Much of the land immediately adjacent to the coast is entirely unpopulated.

Infrastructure in the area is confined to small, straight minor roads and trackways which follow the field/drainage morphology.

The zone is dissected by a number of navigable canalised river outlets: the Nene, Witham, and Welland. Water features are few and comprise a small number of agricultural reservoirs and drains.

Woodland and natural vegetation is extremely sparse and where evident are limited to small scale rectilinear twentieth-century plantations and isolated patches of scrub. Wet dykes and small areas of wetland are often the foci of wetland species.

**Historic Landscape Evolution**
The entire zone was reclaimed from predominantly semi-natural saltmarsh which had accreted on the coastal side of sea banks constructed between the thirteenth and the
seventeenth centuries. Prior to reclamation the expansive coastal marshes would have been used as common grazing lands and for wildfowling.

Reclamation occurred in stages, with successive tracts of saltmarsh embanked and drained as marine silts accreted outside the most recent sea-banks. The size of intake varied according to the available land and the available finance. The largest single reclamation in the zone (4.695 acres) was achieved by the construction of the South Holland Embankment (1793-1811), although successive reclamations in Wainfleet and Friskney in 1809, 1948, and 1976 reclaimed considerable tracts of saltmarsh. Land reclamation from the mid nineteenth century became comparatively more piecemeal in fashion, enclosing smaller parcels of land as individual areas of saltmarsh became available.

When embanked, land was drained and enclosed using the existing creek system and series of rectilinear field drains, however the intakes were usually not suitable to be ploughed until up to a decade later.

Once firm enough to be ploughed the land was fully enclosed in an organised fashion, often infilling natural drainage channels in favour of a rectilinear pattern of land division and drainage. Some relict natural drainage channels remain.

Subsequent re-organisation of field boundaries has occurred in this zone, including boundary loss and sub-division of fields. Enclosures are frequently large in scale, deriving from the amalgamation of fields mainly from the 1950s onwards.

In places field patterns appear to correspond across one or more sea-banks providing tangible confirmation that, in certain parishes, coastal land ownership was extended directly into the saltmarsh and any reclaimed area of it.

A moratorium on further coastal drainage was enacted in 1985.

**Legibility**

Despite its comparatively recent and straightforward evolution, a fundamental element of the zone’s character is its clarity of time-depth. This is most starkly illustrated at Freiston Shore managed re-alignment site where the sea-bank has been purposely breached to allow once agricultural land to revert to saltmarsh. The Second World War infrastructure inland of the breached defences clarifies the evolution of the landscape, albeit succinct.
Character Zone WSH2

The Tofts
within The Wash Character Area

ARS sub-province: EWASHW

Natural England National Character Areas:
46 The Fens

Total area: 19.37 km²

Percentage of Regional Character area: 2.93%

Percentage of Overall Project Area: 0.28%

Description
The landscape of the zone is intensively cultivated for arable and horticultural produce, with few areas reserved for grazing purposes. Light industry associated with the agricultural sector has emerged in recent years, mainly expanding on existing farm sites. The A52 is a heavily used road, specifically for summer traffic between Boston and Skegness and for the transport of agricultural produce.

The landscape of the zone is dominated by agriculture. Field systems within the zone comprise a parallel arrangement of thin rectilinear fields running perpendicular to the relict sea-bank (dating to about 1300) and a later seventeenth-century sea-bank which forms the south-easterly limit of the zone. Fields are defined by narrow and shallow wet dykes.

Central to the character of the area is a band of undulating relief with patchy areas of higher ground running parallel to, and either side of, the A52 and known as 'The Tofts'. The change in relief, produced as a result of salt manufacture, provides a stark contrast to the surrounding landscape.

Settlement density is dispersed and linear, predominantly adhering to the main road (A52) and the Eau Dyke Road in Friskney. Buildings are mainly medium to large farm complexes, interspersed with detached and often isolated domestic properties.

Infrastructure in the area comprises several small straight minor roads and trackways running perpendicular to the sea-banks. The minor road infrastructure is linked via two routes, the A52 and Low Road although there is also a trackway which runs along the later seventeenth-century sea-bank. There is a notable dearth of other south-west to north-east aligned roads in the zone and hence many of the straight minor roads and trackways running towards the coast are not interconnected.

Woodland and vegetation cover is extremely sparse comprising small areas of rough grassland and non-coniferous trees. The overwhelming majority of this vegetation cover is located along the A52 and may derive from small scale domestic and roadside planting.
Historic Landscape Evolution

This is very much a landscape that owes its existence to human activity. The zone was reclaimed from natural and semi-natural saltmarsh during the thirteenth and seventeenth centuries. The coastal extent of the initial intake of land is marked by the continuous earthen sea bank constructed about 1300 along the former coastline of East Lindsey, Boston, and South Holland. The later stage of reclamation occurred in about 1641, engineered by Sir Cornelius Vermuyden, embanking land from the River Steeping up to and including the former Wrangle Haven which had warped up by the early sixteenth century. Prior to its disconnection with the estuary, Wrangle Haven had its own fishing fleet and was an important exporter of salt.

From at least late Anglo-Saxon times, the ‘tofts’ (meaning areas of higher ground) were important centres of salt production, the vestiges of which can be seen as saltern mounds. The production of salt required direct access to tidal creeks, and resulted in the deposition of large mounds of silt and debitage. As tidal creeks silted up salt working sites would move towards the coast to access the brine. As a result, the toft lands represent a succession of medieval salt working sites. The higher land produced as a consequence formed integral components of early coastal sea defences.

The parallel rectilinear pattern of fields in the zone appear to derive from a system of medieval strip fields originating on the earlier reclaimed land and marginally higher silt ridge to the north-west. The field morphology is replicated in a more organised fashion across the later reclaimed land suggesting that coastal land owners had proportionate claim to the outlying saltmarsh beyond their plots.

Fields in the zone appear to have undergone sub-division, probably during the eighteenth and nineteenth centuries. Later twentieth-century boundary loss is widespread and has lead to the amalgamation of fields and larger-sized enclosures, with the result that there has been a loss of continuity of field patterns across sea-banks in places.

Legibility

The two stages of coastal reclamation and the associated sea-banks provide tangible evidence for the landscape’s genesis. The grain of the landscape with field boundaries and tracks running from the north-west to the south-east, at right angles to the old sea-banks, is still highly visible today and has been a consistent part of this landscape since its formation.
Character Zone WSH3

Cross Keys Wash
within The Wash Character Area

**ARS sub-province:** EWASHW

**Natural England National Character Area:**
46 The Fens

**Total area:** 18.67 km

**Percentage of Regional Character Area:** 2.83%

**Percentage of Overall Project Area:** 0.27%

**Description**

The overwhelming majority of land is intensively cultivated, with a sparse distribution of farmsteads, and a growing number of private dwellings. Land use in the centre of the zone is industrial, with smaller individual industrial sites in the south of the zone, including a sewage works, an electricity transformer station and large farm-based storage and distribution complexes.

The zone’s landscape is primarily agricultural in character. A late enclosure landscape of large rectilinear fields interspersed with frequently truncated curvilinear and sinuous field boundaries prevails throughout the zone. Field boundaries are defined by thin and shallow wet dykes.

The zone is intersected by active and relict earthen flood defence banks, associated with the piecemeal intake of coastal land in the nineteenth and twentieth centuries, and the canalised River Nene which forms the western boundary of the zone.

Settlement density in the zone is low, comprising dispersed linear post medieval and modern hamlets and villages concentrated along a network of straight minor roads and tracks which run alongside field boundaries.

The centre of the zone is more industrial in character being dominated by the Sutton Bridge gas-fired power station, the A17 and other industrial works.

Woodland is extremely sparse and, where evident, is limited to small scale twentieth-century rectilinear plantations, notably in the north-east of the zone.

**Historic Landscape Evolution**

Prior to its reclamation, the zone was the estuarine outfall of the River Nene, and was an expanse of saltmarsh and braided river channels. The estuary was passable at low tide, and was frequently negotiated by travellers and drove herds passing between Norfolk and Lincolnshire. Passage was often under escort, as the area was renowned for its changeable
character. Accessible saltmarsh and higher pasture in the area would have been grazed in common up until its reclamation in the mid eighteenth and nineteenth centuries.

Initial reclamation up to Gunthorpe Sluice successfully embanked land north of Wisbech and west of the ‘Roman Bank’ (dated about 1300) in Norfolk up to the Lincolnshire boundary. This boundary forms most of the eastern boundary of the zone. This stage of reclamation necessitated the canalisation of the Nene from Wisbech to a new outfall at Gunthorpe Sluice in 1770-72. Through a succession of increasingly smaller intakes of land, the remainder of the zone was reclaimed between 1830 and 1910. The reclamations entailed a further canalisation of the River Nene from Gunthorpe Sluice to its current outfall at Skate’s Corner in 1828-31. The new canalised river channel took the Nene through land previously reclaimed in 1720 by Guy’s Hospital.

Reclaimed land appears to have been drained using natural saltmarsh creeks with subsequent enclosure with rectilinear field drains. The existence of curvilinear field boundaries, many of which are truncated, suggests that the method of enclosure incorporated part of the natural drainage infrastructure which is retained in the modern landscape.

Road infrastructure in the zone appears to be contemporary with the drainage and organised enclosure of the land. Minor roads and trackways are straight in form and run parallel or perpendicular to the sea banks associated with each stage of reclamation. Bridging of the new Nene Outfall Cut in 1830 provoked the development of Sutton Bridge and the construction of the Cross Keys Bank in 1831 upon which the main road to King’s Lynn was sited.

The dispersed and linear pattern of settlement indicates a small expansion of a late parliamentary enclosure style landscape. Initial settlement in the form of isolated farmsteads, would have occurred shortly after enclosure. Subsequent dispersed infill with semi-detached and detached dwellings alongside the established road network occurred mainly during the post-war period.

Little sub-division of land appears to have been undertaken since reclamation. The amalgamation of fields throughout the zone, mainly from 1950, has resulted in a landscape of medium to large enclosures frequently containing truncated field boundaries.

**Legibility**

Traces of the landscape’s recent evolution are visible throughout the zone, but are most apparent around Sutton Bridge where communication, trade, military and flood defence infrastructure, each representative of different stages of landscape evolution, all occur within a local area.

The administrative landscape also demonstrates an element of time/depth, as the canalised Nene (c.1828-31) cuts through land reclaimed by Guy’s Hospital in 1720. The eastern extent of the reclamation, and not the canalised Nene, marks the modern-day Lincolnshire County boundary and the former bank of the Nene estuary.
Character Zone WSH4

Reclaimed Wash Farmlands within The Wash Character Area

ARS sub-province: EWASHW

Natural England National Character Area:
46 The Fens

Total area: 138 km²

Percentage of Regional Character Area: 20.9%

Percentage of Overall Project Area: 1.98%

Description
Land use throughout the entire zone is primarily agricultural, and there are a number of large scale farmsteads of industrial size in the zone. A small number of orchards exist in the south-west of the zone.

Industrial sites are few, comprising light industry along the A17 corridor as well as storage, processing and distribution sites associated with expanded farmsteads.

The agricultural landscape of the zone comprises a semi-regular pattern of field enclosures, with occasional areas of coherent rectilinear field divisions in the east of the zone and around Moulton Common. Field boundaries predominantly comprise narrow and shallow wet dykes, although embanked natural watercourses form continuous linear boundaries across the zone. A small number of fields around Holbeach St Matthew and Dawesmere are bounded by hedgerows.

Relict sea-banks around the periphery of the zone are associated with successive stages of coastal land reclamation. Sea-banks run roughly parallel to the coastline, with few perpendicular banks dividing inland areas.

The west edge of the zone is formed by the canalised river channel of the Welland, while the east edge of the zone is the large straight drainage channel of the North Level Main Drain and the canalised River Nene.

Settlement in the area is mainly dispersed and, where grouped, is linear. It mostly adheres to the road infrastructure, with the exception of some large, often industrial sized and isolated, farm complexes which are located along dedicated trackways. The southern limits of the zone have a higher population density, with settlement following the course of the ‘Roman Bank’ (a sea-bank dating to about 1300) and forming more nucleated settlements, such as Holbeach Hurn or Moulton Seas End, that are satellite villages to inland market towns. The northern limits of the zone similarly feature a string of smaller post medieval satellite hamlets such as Gedney Drove End and Holbeach St Marks. The far east of the zone is dominated by the port of Sutton Bridge.
Western parts of the zones are characterised by a network of curvilinear minor roads and tracks running perpendicular to the coast, connecting satellite settlements with their larger parent market towns in the Townlands Zone (WSH6) to the south. Towards the coast, the road system is aligned more east to west and connects the outlying settlements. Road infrastructure in the east of the zone is more organised in nature, with a rectilinear layout of minor roads and trackways.

Woodland in the zone is sparsely distributed throughout, and mainly consists of thin rectilinear plantations and holts located along field boundaries or adjacent to buildings. The south-west of the zone has a limited number of orchards. Numerous small agricultural reservoirs are scattered within the zone.

**Historic Landscape Evolution**

The entire zone was reclaimed from semi-natural and natural saltmarsh between 1660 and 1811. Prior to embankment and drainage, the saltmarsh was an extensive common grazing area serving livestock from the market towns inland.

Interest from the Crown under James I led to the reclamation of coastal land from the mid seventeenth century. Inhabitants of local villages had the opportunity to purchase their common marsh providing they embanked and drained the land. Tenancies on the remaining land was offered to private individuals who had to embank and drain the shares of Common, Crown and private land as part of their tenure agreement.

Land reclamation occurred from the mid seventeenth century with 17,374 acres of saltmarsh embanked between Moulton and Gedney. The size of the intake suggests that the extent of saltmarsh during this period was substantial. Semi-regular field patterns in the zone, and retained small scale natural watercourses indicate that drainage and enclosure utilised the existing natural drainage infrastructure (Lutton Leam, Fleet, Moulton and Whaplode River systems and the saltmarsh creeks). Areas of more organised enclosure patterns around Moulton and Long Sutton correlate with common land purchased by the villages prior to reclamation, and represents possibly later parliamentary style enclosure of common lands during the eighteenth and nineteenth centuries.

Reclamation and drainage of land provoked the development of post medieval satellite villages and hamlets on the seaward side of the ‘Roman Bank’, and inland of the new seabank. A new network of roads, accessing and interlinking the satellite villages, formed subsequent to the reclamations. Isolated farmsteads, associated with Crown and private estates, will have been constructed soon after enclosure. Further coastal reclamation between 1793 and 1811 was carried out under the South Holland Embankment Act, increasing the total area reclaimed by 4,695 acres.

Large drainage infrastructure in the south-east of the zone includes the canalised River Nene (1770-72 Wisbech to Gunthorpe Sluice and 1827-30 Gunthorpe Sluice to current outfall), the North Level Main Drain (about 1828), and the South Holland Main Drain (about 1793). The channels cut across former seventeenth- and eighteenth-century coastal reclamation landscapes in the zone, and derive from the drainage of vast tracts of former freshwater fenland in southern Lincolnshire, Cambridgeshire and Bedfordshire.

Canalisation of the River Nene and subsequent land reclamation in the Cross Keys Wash Zone (WSH4) led to the development of the port of Sutton Bridge in the late nineteenth century. Although the original Victorian port was short lived, the modern day port was opened in 1987 and continues to operate today.
Elsewhere in the zone, the pattern of settlement indicates twentieth-century expansion of the more southerly satellite villages, with infill and suburban development along linear features such as sea-banks and minor roads. The northerly satellite villages underwent comparatively less expansion, and in some cases their populations have diminished as industrialised farming techniques reduced the demand for labour.

The modern landscape is a result of widespread amalgamation of enclosures into larger field units mainly from the 1950s, and the growth of eighteenth- and nineteenth-century farmsteads into agricultural complexes of industrial size.

**Legibility**

The zone clearly demonstrates the successive reclamation of coastal marsh from the thirteenth century onwards, and shows in particular the different approaches to land drainage and enclosure. Subsequent colonisation of the area is visible in the pattern of settlement and infrastructure, and in the place-name evidence of satellite hamlets and villages.

Eighteenth- and nineteenth-century freshwater drainage channels in the zone provide clear evidence for the episodic evolution of the landscape in this zone and the drained fen landscapes lying inland.
Character Zone WSH5

Bicker Haven
within The Wash Character Area

ARS sub-province: EWASHW

Natural England National Character Area:
46 The Fens

Total area: 13.97 km²

Percentage of Regional Character Area: 2.12%

Percentage of Overall Project Area: 0.2%

Description

By far the greater part of the agricultural land in this area is under arable cultivation. While there are some small areas of pastoral land, these are invariably found in close proximity to isolated farmsteads. Settlement in the area is predominantly made up of working farm complexes, with only a few examples of individual private houses. The character of settlement in this area is entirely dispersed, with no nucleation. There are no civic buildings or amenities in the character zone.

The landscape of the southern part of the zone is a juxtaposition of irregular geometric field boundaries and small sinuous relict natural drainage channels aligned in a north-west to south-east direction. The pattern reflects the retention of the larger natural waterways when the land was drained and enclosed in the late seventeenth century. Field boundaries are discontinuous and in the form of shallow wet dykes which connect to form a drainage network discharging into canalised embanked watercourses. The south of this area is characterised by a landscape of later parliamentary enclosure with strict rectilinear field morphology.

The upper reaches of the former haven is characterised by more irregular fields and localised areas of gently undulating relief. The change in topography is a result of waste produced during extended periods of medieval salt manufacture.

The borders of the zone are delineated by the course of the ‘Roman Bank’ (a sea-bank dating to about 1300) which remains extant in part. The south-east limit of the zone is defined by the canalised and embanked River Welland.

The zone is sparsely settled, comprising a small number of twentieth-century dwellings along minor roads, with earlier eighteenth- and nineteenth-century isolated brick farm buildings and large houses located mainly along the fringes of the zone. A large proportion of farmsteads have glasshouses. Road infrastructure in the zone is likely to be contemporary with the zone’s enclosure, and is almost entirely composed of straight minor roads and trackways aligned south-west to north-east across the former haven. A small number of often ‘dead
end' trackways associated with individual farmsteads are oriented along the main axis of the zone.

Woodland in the zone is extremely sparse, and consists of small scale twentieth-century plantations around domestic or farm buildings. A number of small water features including ponds and reservoirs are found in the north-west of the zone.

**Historic Landscape Evolution**

During the medieval period, the haven was a tidal estuary providing navigable access to the village of Bicker. Its access to the main Wash estuary prompted the development of satellite hamlets of Donington Eaudike and Quadring Eaudike. During the late thirteenth century the perimeter of the haven was defined by the 'Roman Bank' protecting inland areas from rising floodwaters.

Access to saltwater at the head of the haven encouraged the manufacturing of salt during the medieval period, resulting in the creation of large debris mounds known as salterns. Higher ground associated with the waste deposits provided a natural barrier to rising flood waters and caused areas of the upper Haven to dry out.

Falling sea levels in the sixteenth and seventeenth centuries caused the haven to warp up, leaving navigable creek ports inaccessible from the sea. During the mid seventeenth century the land was drained and enclosed. The field pattern suggests that land was enclosed in an organised and rectilinear fashion, similar to parliamentary enclosure, however, parts of the existing natural drainage was retained and interlinked with the new network of straight field drains. As part of the enclosure a new cut was made to carry the Risegate Eau from Lampson’s Clough to its modern outlet on the River Welland.

The lower southern part of the Zone was reclaimed in about 1838 alongside works to create a new cut for the River Welland under an Act of Parliament. The later enclosure of this area is manifested in the more organised and parliamentary style field morphology typical of eighteenth- and nineteenth-century landscapes.

Drained land would have become sparsely populated soon after enclosure, with dedicated trackways and minor roads serving the farms scattered through the zone.

The removal of field boundaries in the zone was most intense during the mid to late twentieth century, with the majority of modern enclosures deriving from three or more amalgamated fields.

**Legibility**

The rectilinear field systems dating to the eighteenth and nineteenth centuries in the southern part of this zone are still recognisable despite twentieth-century boundary loss.

Similarly the curvilinear field boundaries and trackways in the northern parts of the zone originally respected the higher mounds and hills of the Bicker salterns. These surviving sinuous boundaries fossilize parts of a much earlier landscape that possibly dates back to the early medieval period.

The original line of Bicker Creek survives as a parish and district administrative boundary down the length of the character zone. This has helped it to survive as a physical boundary, in the form of wet dykes and water courses as part of the drainage system, in places along its length.
Character Zone WSH6

Townlands within The Wash Character Area

ARS sub-provinces:
EWASHW
CLNSC

Natural England National Character Areas:
46 The Fens

Total area: 379.7 km²

Percentage of Regional Character Area: 57.5%

Percentage of Overall Project Area: 5.44%

Description
The greater part of this area is made up of arable fields, which are used to cultivate a variety of food and cash crops. There are some areas of pasture most of which is found in close proximity to historic settlements. Grazing animals are often allowed onto fields that have been harvested, where they devour the stubble and stalks.

Although predominantly agricultural, this character zone encompasses most of the nucleated settlements in the wider Wash region. The two largest settlements, Boston and Spalding, have markedly different roles within the local area. Boston, a medieval port, retains a strong maritime character, with working docks and associated infrastructure. Spalding, although possessing a roughly equivalent proportion of industrial types, is very much the hub of the food production industry in the region, with an assortment of processing plants, canneries and distribution centres. The smaller settlements in the area are primarily residential, although there are several examples of smaller industrial areas on the outskirts of these towns.

The zone is largely agricultural in character. Field morphology consists of a combination of irregular enclosures of early medieval origin, subdivided by straight field boundaries along the seaward edge of the zone. Most of the zone’s seaward edges are defined by the ‘Roman Bank’, a medieval sea defence constructed in about 1300.

Field patterns in more inland parts of the zone comprise series of thin parallel strips within large irregular fields. Many of which have been amalgamated through extensive boundary removal in the mid to late twentieth century.

The pattern of settlement in the zone is distinct, with a string of nucleated medieval market towns and villages running roughly parallel to the coastline. Several small hamlets bridge, or lie adjacent, to the ‘Roman Bank’, some of which are satellite communities of the larger market towns. Settlements are of late Anglo-Saxon origin, with later medieval and subsequently twentieth-century expansion.
The main market towns and villages retain minor roads through their centres, however, peripheral road infrastructure has been upgraded to single carriageway ‘A’ roads which bypass the settlements. Remaining road infrastructure consists of an organic network of minor roads and trackways. Roads towards the inland parts of the zone are arranged more perpendicular to the coastline, and tend to form less of a network than those nearer the medieval sea-bank.

The zone is divided by large straight embanked river channels, mainly canalised during the nineteenth and twentieth centuries. Minor rivers and sewers are more sinuous in character, but nonetheless have been straightened and embanked from the at least the sixteenth century.

Large scale drainage infrastructure includes the early nineteenth-century Cowbridge and Hobhole Drains, north and east of Boston, and the modern relief channel of the river Welland. Standing water features in the zone are infrequent, and where apparent they are small ponds and embanked agricultural reservoirs. The latter are often associated with large glass houses. A number of small fishing lakes in the north-east of the zone have developed during the late twentieth century. Some small water features are associated with former brickwork sites, or moated houses.

Tree cover is the zone is sparse, comprising deciduous and non-deciduous, small scale, nineteenth- and twentieth-century plantations located in field edges and corners, around settlements and as shelter belts around farmsteads.

**Historic Landscape Evolution**

During the Prehistoric and Roman periods the zone was coastal in character, consisting of areas of intertidal saltmarsh with localised areas of marginally higher ground. Early occupation would have been based around the manufacture of salt and hunting of wildfowl.

Falling sea levels from the mid Anglo-Saxon period allowed settlement on drier areas in the form of isolated ranches and salt manufacturing sites. By the late Anglo-Saxon period a landscape of small villages within an irregular field pattern was established on a long curve of higher silt land running from King’s Lynn to Wainfleet. The linear pattern widened at Kirton, where a broader band of marginally higher silt land enabled the settlement pattern to be more dispersed. By 1086, the modern day settlement pattern of market towns had been established.

During the early medieval period, fields comprised a mixture of arable and meadow land. Common meadows, known as ‘ings,’ and open fields for grazing and arable were in use during the medieval period. Fields were irregular in nature, with many subdivided into selions, or strips, divided by thin dykes, allotted to individual land owners or tenants. The pattern of fields created by this method of allotment appears fossilised in the modern landscape and is more prevalent in, although not entirely restricted to, the inland areas of the zone bordering the freshwater fen.

Population expansion during the twelfth and thirteenth centuries occurred at the same time as reclamation of saltmarsh and freshwater fen on both sides of the established settlement zone. Land was protected from inundation by raising flood banks both in the fen and on the saltmarsh. Banks such as the Hurdletree Bank and ‘Roman Bank’ (that dates to about 1300). Droveways and trackways, which would later influence the modern day pattern of infrastructure, would have developed alongside this reclamation.

In the Middle Ages villages became more urbanised, developing into towns, many of which had both a market and fair licensed by the Crown. Burgage tenements were also laid out in port centres such as Boston and Wainfleet. Satellite villages developed along the flood
banks, allowing increased access to marsh and fen grazing lands and meadows. Flocks and herds from as far away as Ireland and Scotland came to graze on fen pastures, before moving onto London to be sold. Several of the settlements were small port towns, with access to The Wash via navigable creeks. During the late medieval period, many of the creeks serving the small ports warped up resulting in their abandonment or relocation further downstream.

Drainage was a continual preoccupation of all communities within this zone, as the onus on digging, embanking, and maintaining drains and watercourses rested on local inhabitants and landowners. During the Middle Ages the enclosure of marginal meadow and grazing land, which allowed marsh and silt fen to be ploughed, resulted in the laying out of thousands of miles of field drainage. Medieval works also included the embankment and canalisation of small watercourses, the creation of navigable drains and the diversion of river and sewer outfalls into major river estuaries such as the Welland and the Nene. Later post medieval and modern works consisted more massive engineering works, tackling the difficult tidal outfalls of major rivers and cutting large man-made drains from the peat fens through to the canalised river outfalls.

Throughout the post medieval period fields were amalgamated and re-enclosed through piecemeal agreements between individual landowners and tenants. The resulting subdivision and re-organisation of the land divided the organic pattern of fields and curvilinear arrangement of parallel strips with straight and geometric boundaries.

During the second half of the twentieth century, the zone has experienced considerable field boundary loss, resulting in an increased enclosure size that has dissipated the earlier field morphologies. Market towns within the zone have undergone large scale peri-urban residential and commercial expansion, coupled with the creation of new road infrastructures.

**Legibility**

The area is the oldest character zone within the reclaimed marsh and fen landscapes and, as such, displays the greatest range of time depth. Economic trends, climatic changes and ever more ambitious drainage engineering works since the late Anglo-Saxon period are visible within the fabric of the historic landscape.

The zone is distinct from other zones around The Wash due to the higher density of settlement, and more irregular field boundary morphology. The ‘island-like’ colonisation of the zone and its subsequent prosperity through the exploitation of surrounding marsh and fen is clearly manifested in the landscape, giving the area a national distinct historic character.