

# Springwell Solar Farm

Environmental Statement

## Appendix 10.2: Baseline Landscape Character Appraisal

Volume 3

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## 1.1. Introduction

- 1.1.1. This appendix presents a detailed analysis of the baseline landscape character within the LVIA study area as defined in **ES Volume 1, Chapter 10: Landscape and Visual [EN010149/APP/6.1]**.
- 1.1.2. It firstly collates, reviews and where necessary provides commentary on relevant extracts from the following published landscape character assessments which cover the study area:
- National Character Area Profile 47 – Southern Lincolnshire Edge [**Ref 1**]
  - North Kesteven Landscape Character Assessment [**Ref 2**]
- 1.1.3. The following document which provides an additional layer of understanding regarding the historic character of the landscape is also reviewed:
- The Historic Character of the County of Lincolnshire [**Ref 3**]
- 1.1.4. Thereafter, this appendix provides further analysis of the baseline landscape character within the defined LVIA study area drawing on the above documents but also observations made during site assessment. In doing so it provides a finer grain of detail to the baseline landscape analysis recognising subtle variations in character across the study area.

## 1.2. National Character Area 47 – Southern Lincolnshire Edge

- 1.2.1. At a national level the site falls within National Character Area 47 (NCA 47) – Southern Lincolnshire Edge and the majority of the study area also falls within this NCA. There would be a negligible effect on the character of the landscape beyond this NCA.
- 1.2.2. NCA 47 is located between the limestone cliff to the west and the dip slope that drops gently away to the edge of the fens in the east. The summary description of the NCA describes the landscape as follows:
- “An open landscape with far-reaching views over the Trent and Belvoir Vales and up to Lincoln Cathedral. On the free draining higher ground, landcover is primarily arable, in large geometric fields divided by limestone walls, with few trees or woodland. On the wetter, heavier clay soils to the east and south-west, pasture is more prevalent; hedgerows are the predominant boundary and the landscape has a more intimate, enclosed feel, with more trees, woodland and parkland.”*
- 1.2.3. In relation to the above statement, it is noted that there are no far reaching views over the Trent and Belvoir Vales or towards Lincoln Cathedral within the LVIA study area. Views of the vales are found further to the west in the NCA and views towards the cathedral are found further north in the NCA.

1.2.4. The summary description goes on to state that:

*“The underlying Jurassic Limestone geology has a defining impact on the landscape, not just through the distinctive topography, but also through its widespread use for construction of walls and buildings and numerous limestone quarries, both active and disused. Semi-natural habitats – including calcareous and neutral grassland and broadleaved woodland – are fragmented and sparsely scattered. Wide verges along roads and tracks provide important refuges for unimproved flower-rich grassland. There are many visible reminders of early human activity in the form of Roman roads and canals, such as Ermine Street and Car Dyke, medieval ridge and furrow, deserted medieval villages and moated sites. The 20th-century heritage includes a number of airfields created during the World Wars.”*

1.2.5. Finally, the summary description notes that:

*“The primary ecosystem services provided by this area include food provision, biomass provision, water availability, sense of place and sense of history. Enhancements in management of soil, water, habitats and landscape features on agricultural land could help to strengthen the provision of many of these services.”* and

*“The protection of archaeology, historic buildings and traditional villages is key to preserving sense of place and sense of history.”*

1.2.6. The key characteristics of NCA 47 are recorded as follows:

- *“Elevated arable escarpment with a distinct cliff running north–south along the western boundary, providing far-reaching views over the Trent and Belvoir Vales NCA.*
- *Productive loamy soils on the limestone plateau, giving rise to a large-scale open landscape of arable cultivation with large, regular fields and few boundaries of tightly cut hedgerows or rubble limestone walls.*
- *Heavy clay soils in the east and south-west of the area, which support more grazing land in smaller, less regular fields, along with small areas of woodland and parkland.*
- *Semi-natural habitats in small, isolated fragments, with pockets of woodland on clay soils, fen at the foot of the dip slope and flower rich limestone grassland, particularly along road verges.*
- *Sparse settlement on higher land, with spring line villages along the foot of the cliff, parklands and country estates such as Rauceby and Belton on lower ground, and larger settlements – including Sleaford, Ruskington and Metheringham – to the east of the dip slope.*
- *Active and re-used airfields prominent on the ridgetop.*

- *Long, straight roads and tracks, often with wide verges, including Ermine Street, which follows the route of a key Roman north–south route.*
- *Vernacular architecture and walling, especially in villages, of local warm-coloured limestone with dark brown pantiles.”*

1.2.7. Under the heading of ‘*Physical and functional links to other National Character Areas*’, the NCA profile notes that:

- *“Major road routes include the A15 linking Sleaford to Lincoln. Railways run ..... north–south linking Sleaford to Lincoln and Spalding.”*

1.2.8. Under the heading of ‘*The Southern Lincolnshire Edge Today*’, the NCA describes the landform and drainage of the NCA as an:

- *“elevated, gently sloping plateau with a sharply defined western boundary.”*
- *“On lower land to the eastern edge, where the dip slope falls to meet the fens, deposits of glacial till result in heavier land that is slower draining and prone to waterlogging in winter. This landscape has a more enclosed, wooded feel, with smaller, less regular fields and more hedgerows, hedgerow trees, parkland and woodland.”*
- *“Dry valleys indicate the free-draining nature of the underlying geology. The agricultural land has a dense network of ditches, particularly on the heavier land, and many have farm reservoirs.”*

1.2.9. The NCA notes that:

- *“Settlement is concentrated around the perimeter of the NCA, along the cliff foot, where villages have been founded on springlines, and at the foot of the dip slope”.*
- *“Industry in the area, both historically and today, focuses on limestone and aggregate quarrying and agriculture. Major transport links include busy A roads, such as the A15 between Lincoln and Sleaford, and railway lines.”*
- *“Publicly accessible routes and areas are less prolific than in some NCAs; there are only 0.9 km per km<sup>2</sup> of public rights of way and no country parks or National Nature Reserves.”*
- *“The area is moderately tranquil; less-disturbed areas include the more remote parts of the sparsely settled areas, the open landscape of the dip slope and the more sheltered, enclosed, traditional landscapes of the claylands.”*

1.2.10. Under the heading of ‘*The Landscape through Time*’ the NCA provides commentary on the evolution of the landscape over time. The following extracts are relevant in the context of the study area:

- *“Roman activity is visible in structures such as..... Ermine Street”.*
- *“Saxon and medieval settlement developed in a series of small villages along the springlines on the western scarp, and on the lower claylands of the dip slope to the east.”*
- *“Archaeological and placename evidence suggests that the area was substantially cleared of woodland by the 11th century and, on higher land, largely unsettled heath was used as common grazing until it was enclosed for farmland from the late 18th century.”*
- *“Enclosure of fields from the common land under the Parliamentary Enclosures Acts of the 18th and 19th centuries resulted in a large-scale regular field boundary network away from the villages.”*
- *“The latter half of the 20th century saw widespread agricultural intensification, involving comprehensive drainage schemes, removal of drystone walls and hedgerows to create bigger fields, and an increase in arable production. It also saw an increase in the size of the major settlements and the upgrading of major transport routes. All of these served to reduce and fragment seminatural habitats.”*

### 1.3. North Kesteven Landscape Character Assessment

1.3.1. At a district level, the North Kesteven Landscape Character Assessment identifies four regional Landscape Character Types (LCTs). The Proposed Development site and the entire study area falls within the Central Plateau LCT.

1.3.2. The LCTs are further subdivided into Landscape Character Sub-Areas (LCAs). The western and central parcels of the site fall within LCA 7: The Limestone Heath LCA whilst the eastern parcel of land falls within LCA 11: The Central Clays and Gravels LCA. The district LCAs are illustrated on **ES Volume 2, Figure 10.2: Landscape Character Areas [EN010149/APP/6.2]**.

#### LCA 7 - Limestone Heath

1.3.3. Relevant key characteristics of LCA 7 – Limestone Heath include:

- *“This is a large landscape character sub-area situated in the centre of the District between the ridge of the Lincoln Cliff and the Central Clays and Gravels to the east.*
- *Its position on the upper reaches of the cliff’s dip slope gives it a feeling of relative elevation and exposure.*
- *It is predominantly an empty, open landscape with wide views to the skyline in all directions.*

- *The landform is a gently undulating plateau which dips gently towards the east.*
- *Generally the whole area is dry, with no obvious surface drainage as a consequence of the underlying limestone geology.*
- *Scattered woodland copses pepper the whole of the sub-area, which although relatively small are prominent features because of the openness of the landscape.*
- *Roadside hedgerows are often found with mature trees within.*
- *Limestone dry stone walls are apparent along roadside and some field boundaries, but are generally in poor condition.*
- *Fields are very large and rectilinear. Field boundaries are often absent, broken or delineated by a strip of rough grass or remnant hedgerow or wall.*
- *The soil colour is a striking reddish brown colour with visually prominent stone content giving it a rough texture.*
- *Intensive arable agriculture dominates land use with wheat and root crop common.*
- *The central plateau area is generally unsettled except for isolated farmsteads and occasional ribbon development along the A15. Larger settlements are situated on the edge of the sub-area characterised by having historic cores with limestone buildings but often surrounded by significant levels of 20th Century development.*
- *Utility Infrastructure, which although sparse, makes an impact on the landscape including prominent pylons and the main A15 running north to south.*
- *RAF installations have made a significant impact on the landscape sub-area with several large bases and training centres.*
- *Mineral working is a feature of the sub-area with several large limestone quarries.*
- *Pressures for change on the Plateau predominately relate to minerals operations, decline of field boundaries, particularly walls, and intensive agricultural practices.*
- *Opportunities for landscape strengthening and enhancement mainly lie in field boundary reinstatement, particularly of dry stone walls and for more appropriately designed development on the outskirts of settlements.”*

1.3.4. Other relevant extracts relating to LCA 7 include the following:

- *“The landform consists of an open, gently undulating plateau with the gradient sloping down from west to east (approx. 80m down to 25m). The ridges and dips run in an east-west direction following shallow ‘dry’*

*valleys, and this is particularly apparent when travelling along the A15 which falls and rises with the topography.”*

- *“There are extensive 360 degree views throughout the sub-area afforded by the generally low relief, large field size and absence of field boundaries. The sense of relative elevation is obvious and the general lack of tree cover or other features accentuates the feeling of exposure and emptiness.”*
- *“There are a number of small copses, mostly broadleaved, throughout the sub-area which because of the general openness of the landscape are prominent and make important features. The copses often abut the many scattered farmsteads and agricultural buildings.”*
- *“There are several active stone quarries at a number of sites including Scopwick, Dunston and Harmston Heath, which is operated as a waste disposal site. These are generally well screened by earth bund walls and landscaping and therefore not immediately obvious in the landscape. There is also evidence of a number of small scale abandoned quarries and minerals workings which have become naturalised and overgrown.”*
- *“Obtrusive infrastructure elements are present in the two lines of large pylons and high voltage electricity cables running across the landscape to the eastern fringe of the area and also across its south-west quadrant..... The flat and open landscape does not afford any softening landscape backdrop and so their prominence is emphasised and visually significant from relatively long distances.”*
- *“RAF establishments are a current and important historic feature of the area within the open, exposed and largely flat landscape.”*
- *“There are very few settlements in the central parts of this landscape character subarea and the lasting impression is of an empty landscape. There are a few isolated farmsteads and agricultural buildings and occasional sporadic ribbon development along the A15.”*
- *“The road pattern is distinctive with the straight main road (A15) running from north to south (Lincoln to Sleaford) dividing the character sub-area in two and acting as a central communications spine, with straight and parallel minor roads dissecting the area into a grid pattern, running generally north-east to south-west.”*
- *“The only other settlements of any size in the sub-area are Ashby de Launde and Bloxham which are attractive estate villages with old manor houses and distinctive cottages. Both are framed by attractive treescapes to give an enclosed, intimate setting in contrast to surrounding open landscape. Ashby de Launde has a prominent church steeple and water tower.”*

1.3.5. It should be noted that the character assessment makes reference to radio masts at RAF Digby. These are no longer present in the landscape and have been removed.



1.3.6. The following ‘*Opportunities for Enhancement*’ are identified in the character assessment and are relevant in the context of the Proposed Development:

- *“Replacement hedgerow planting where these have been lost or degraded.*
- *Reinstatement and repair of the dry stone walls.*
- *There are steps that could be taken to improve the dominant appearance of the RAF establishments, such as additional tree and hedge planting around some buildings and around and away from the perimeter fences.*
- *Habitat friendly limestone grass management regimes should be investigated.”*

## LCA 11 - Central Clays and Gravels

1.3.7. Relevant key characteristics of LCA 11 – Central Clays and Gravels include:

- *“Landscape sub-area runs the entire length of the District.*
- *The western edge is defined by the Limestone Heath, whilst the Fens lie to the east along its full extent.*
- *A gently undulating lowland, edged by areas of woodland in the north.*
- *Fields are generally smaller and more varied in shape than on the adjacent limestone plateau with some grazing land as well as arable.*
- *Surface water drains into small streams running from west to east and drainage ditches run by the sides of the fields.*
- *Well kept hedgerows along roadsides and sometimes between fields.*
- *Dark brown coloured soil.*
- *Small copses of broadleaved woodland throughout the sub-area and larger areas of woodland on the eastern edge.*
- *Three distinctive lines of settlements – the limestone villages following the spring lines coming off the limestone plateau; the line of villages on the clay strip; and the villages edging the fens to the south.*
- *Road network orientated with the main roads running from north to south (Lincoln to Sleaford) with smaller roads running west to east.*
- *Pressures for change in the sub-area relate to inappropriate development on the edge of villages and the loss of hedgerows and tree cover.*
- *Opportunities for landscape enhancement mainly rest with increased hedgerow and tree planting and maintaining the character of the villages”*

1.3.8. Other relevant extracts relating to LCA 11 include the following:

- *“The landform consists of a gently undulating lowland clay vale, underlain with boulder clay and gravel deposits. The gradient slopes gently down from west to east (approx. 20m down to 5m).”*
- *“Surface water emerging from springs at the limestone plateau edge drains into small streams which run from west to east. Often these streams run through villages as a central feature. Drainage ditches by the side of the fields are indicative of the change in porosity from the dry landscapes of the plateau.”*
- *“This is generally a mid-scaled landscape. There are some very large fields but also fields of mixed shape and size. Although generally flat and of low relief, this sub-area differs from its immediate neighbours, it does not have the same emptiness and exposure of the limestone heath nor the uniform flatness of the Fens. The general impression of this sub-area is of a gentle, agricultural landscape which is well managed and settled.”*
- *“There are a few scattered agricultural buildings mostly associated with farmsteads and occasional poultry units. The only industrial and commercial uses are located on the edges of the larger settlements such as Metheringham and Ruskington, which has a large food processing factory on its southern edge and is conspicuous in the landscape.”*
- *“The main infrastructure feature in the sub-area is the main line Lincoln-Sleaford railway line.”*
- *“High voltage power lines and pylons cross the area but whilst massive, are generally less prominent in the landscape than in the more open landscapes of the Fens or the Limestone Heath.”*
- *“A line of villages comprising Potterhanworth, Nocton, Dunston, Digby and Scopwick, follow the spring lines rising from the limestone heath plateau and, as a result, present a linear distribution of settlement. Metheringham and Ruskington are the largest villages in the sub-area, which both have a significant level of modern development around their historic cores.”*
- *“There are other scattered villages which do not fit into an obvious pattern, particularly the estate village of Blankney.”*
- *“The road network is orientated with the main roads running from north to south (Lincoln to Sleaford) with minor connector routes roads running west to east. The B1188 north of Sleaford was once a major trading route known as the ‘Low Road’.”*
- *“The spring-line settlements all have similar characteristics, with the original buildings constructed of honey coloured limestone walls with pantiled roofs. The streams often running beside the central village streets with adjacent greenspaces are an attractive feature of these villages.”*
- *“Blankney has a distinctly different and strong identity as an estate village with dwellings built in dressed and coursed limestone in a pseudo-*

*Elizabethan or Tudor style with mullioned windows and elaborate chimneys.”*

1.3.9. The following ‘*Opportunities for Enhancement*’ are identified in the character assessment and are relevant in the context of the Proposed Development:

- *“Replacement hedgerow planting where these have been lost or degraded.*
- *An increase in grassland and pasture would help to restore a more mixed pattern of land use, returning to a more visually varied and traditional landscape.*
- *Maintaining the distinctive character of the villages in this unit is very important.”*

## 1.4. The Historic Character of the County of Lincolnshire

1.4.1. The *Historic Character of the County of Lincolnshire* report [Ref 3] aimed to categorise and characterise the landscape of the county with specific reference to its development over time. Unlike the published landscape character assessments outlined above, this study contains a degree of conjecture and the prose on occasions is somewhat opinionated.

1.4.2. It is reviewed here in the LVIA to provide contextual information regarding the development of the contemporary landscape and to aide understand of how the landscape has been influenced by different human forces over time.

1.4.3. The study identifies Character Types, Character Areas and Character Zones. These should not be confused with the National Character Areas and Landscape Character Types and Areas identified above in Section 1.2 and 1.3 of this appendix which are the primary source of baseline information regarding contemporary landscape character.

1.4.4. The Character Types are defined at a ‘micro’ field scale and repeat throughout the entire study area. The Character Areas are regional in scale. The most valuable output of the study is the analysis relating to the identified Character Zones.

1.4.5. The Proposed Development falls within Character Zone SCL1: The Southern Cliff Heath which is in the Southern Cliff Character Area.

1.4.6. The description of Character Zone SCL1 explains that:

*“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 [...]. 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 Metherringham, to Ruskington. This line forms the eastern edge of the zone, beyond which lies the fen edge.”*

- 1.4.7. The description goes on to explain that the settlements on both lines typically have a historic core surrounded by more modern development. It also notes that:

*“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.”*

- 1.4.8. Regarding the pattern of the landscape, the description notes:

*“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.*

*[...] the Southern Cliff is home to a number of RAF bases.”*

- 1.4.9. In relation to the historic evolution of the landscape, the study notes that the earliest surviving landscape features in the zone date from the Roman occupation highlighting Ermine Street in particular which runs south from RAF Waddington as the High Dyke, passing through the centre of the heath.

1.4.10. The study notes that:

*“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 [...]. Beyond the open fields lay the common grazing lands, with dry, heath grazing at the centre of the zone.”*

*“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.”*

*“The settlements in the zone have all expanded to some extent in the last century.”*

1.4.11. In terms of historic legibility, the study suggests that the medieval landscape has been “largely overwritten” except where areas of irregular ancient enclosures can be found immediately around settlements. The study notes that:

*“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 [...].”*

*“The airfields in the zone are a visible reminder of more recent historic processes.”*

## 1.5. Detailed Description of Baseline Landscape Character Within the Study Area

- 1.5.1. The following project specific description of landscape character is focussed on the LVIA study area defined in **ES Volume 1, Chapter 10: Landscape and Visual [EN010149/APP/6.1]**. Where relevant it identifies subtle differences in landscape character across the two LCAs identified in Section 1.3 of this appendix.

### Geology and soils

- 1.5.2. As noted in the NCA description, the entire study area is underlain by sedimentary bedrock - limestone formed during the Jurassic period. Superficial deposits are localised and relatively thin across the Order Limits but become increasingly common north, east and south of Springwell East. Soils across the study area are variable in depth and quality but are predominantly in productive agricultural use. Full details of the geology and soils within the Order Limits can be found in **ES Volume 1, Chapter 11: Land, Soil and Groundwater [EN010149/APP/6.1]**.
- 1.5.3. The underlying geology has a strong influence on the landform, hydrology and vegetation cover across the study area.
- 1.5.4. There are two notable active limestone quarries adjacent to the Order Limits: Brauncewell Quarry adjoining the A15 and Longwood Quarry adjoining the B1188. A former quarry pit is also located adjacent to RAF Digby, south of the B1191. Mineral extraction also takes place in the study area north of Metheringham.

### Landform

- 1.5.5. There are no dramatic variations in landform across the study area. A scarp slope (Lincoln Cliff) is located beyond the study area to the west of Navenby and Wellingore but this is not discernible from within the study area. Beyond the study area to the east, the Lincolnshire Fens are uniformly flat.
- 1.5.6. The land between these two areas (across which the Order Limits are located) is gently undulating and there is a general west to east dip slope which becomes broadly flat in the vicinity of Springwell East.
- 1.5.7. The maximum elevation within the study area is approximately 80m AOD close to Wellingore whilst the lowest elevation in the study area is approximately 5m AOD approaching the Lincolnshire Fens in the east.
- 1.5.8. More specifically within the Order Limits, the maximum elevation is approximately 55m AOD in Springwell West near the southern corner of Field Tb2 and the minimum elevation is below 10m AOD on the eastern edge of Springwell East.

- 1.5.9. Within Springwell West and more generally along the route of the A15, a series of shallow, dry valleys cut across the landscape west to east and this results in as a series of gentle, low ridges. These can be observed when travelling along the A15. The crest of the ridges enable long distance views whilst the dips in between have more restricted views across the surrounding landscape.
- 1.5.10. Within Springwell Central, south of the B1191 (Heath Road) and running west to east between RAF Digby and Scopwick, there is a low ridge which rises to a plateau south of the road and falls to Scopwick Heath north of the road.
- 1.5.11. Within Springwell East, although there is a gentle fall in landform from west to east, the change in level is indiscernible.
- 1.5.12. Aside from the aforementioned quarries, other notable human alterations to landform are:
- an artificial raised reservoir which is enclosed by engineered embankments along Navenby Lane;
  - Blankney Golf Club (bunkers and greens etc);
  - railway embankments along the eastern boundary of Springwell East;
  - fishing lakes east of Springwell East;
  - localised bunds around RAF Digby and some of the larger, modern agricultural complexes in the wider landscape.

### Hydrology, watercourses and waterbodies

- 1.5.13. Due to the free draining nature of the underlying limestone, there are relatively few natural surface water features within the study area (this is particularly the case across Springwell West and Springwell Central).
- 1.5.14. A number of spring lines emerge east of the B1191 (Heath Road) and flow in an easterly direction, generally in channelled field drains.
- 1.5.15. Springwell Brook rises to the surface at Springwell Plantation south of the Ashby de la Launde, just beyond the Order Limits. Another small brook flows through the centre of Scopwick village where it is a key feature of the public open space in the settlement.
- 1.5.16. Towards the east of the study area, including the eastern part of Springwell East, farmland lies within an area of flood risk and field drainage channels are more frequent. Full details of water and flood risk within the Order Limits can be found in **ES Volume 1, Chapter 15: Water [EN010149/APP/6.1]**.
- 1.5.17. Overall however, natural watercourses and water bodies are conspicuous by their absence.

- 1.5.18. A number of artificial raised reservoirs have been constructed within the study area; most notably within the Order Limits near Ashby Lodge on Navenby Lane.

## Land use

- 1.5.19. Land use across the entire study area is dominated by agriculture; specifically arable farming. Field size is typically large scale and often vast (particularly in Springwell West and Springwell Central). Field size in Springwell East is generally smaller than elsewhere within the Order Limits but still relatively large to medium scale.
- 1.5.20. The main exceptions to this agricultural land use are dispersed settlements, RAF bases and airfields, scattered blocks of woodland, Blankney Golf Course and several limestone quarries as outlined above.

## Settlement and built infrastructure

- 1.5.21. Settlement in the study area is generally nucleated within small villages which feel relatively detached from the main urban centres of Lincolnshire. Within the study area the main settlements are Durston, Metheringham, Blankney, Timberland, Kirkby Green, Scopwick, RAF Digby, Digby, Ashby de la Launde, Cranwell, Navenby and Wellingore.
- 1.5.22. Of these Metheringham, Navenby and Wellingore are slightly larger and contain several shops, community facilities and services. The other settlements are typically characterised by a place of worship, a public house and occasionally other local community facilities (eg a village hall).
- 1.5.23. Villages within LCA 7: Limestone Heath and specifically along the A15, which forms the spine of Springwell West, are particularly sparse.
- 1.5.24. Within LCA 11: Central Clays and Gravels, spring line villages are more frequent along the B1188.
- 1.5.25. Each settlement has a distinct character but typically contains a historic core of limestone buildings with pantile roofs and a perimeter of modern buildings. Blankney has a unique estate village character of its own.
- 1.5.26. RAF Digby again has a unique character comprising mainly of post war military buildings and residential barracks surrounded by security fencing.
- 1.5.27. Beyond the main villages, isolated residential properties and estate cottages are occasionally scattered throughout the landscape but the density is low across most of the study area. Most of the farmsteads within the landscape contain one or two original buildings constructed in the vernacular limestone but are surrounded by modern utilitarian barns constructed in brick or corrugated steel. Some of these have been converted to industrial use.



- 1.5.28. The main transport infrastructure in the study area is orientated with roads and a railway running north to south. The A15 is a major linear road which carries a high volume of fast moving traffic and this has a strong influence on the character of the landscape surrounding Springwell West. The parallel B1188 is slightly more sinuous, is typically more enclosed by hedgerows and carries a smaller volume of fast moving traffic. East to west roads including the B1191 (Heath Road) link the main north to south arterial routes.
- 1.5.29. Aside from public roads, the agricultural landscape contains numerous field access tracks which are frequently wide and well made of crushed stone. These tend to follow field boundaries and the rectilinear grain of the landscape. Footpaths are relatively frequent in the east of the study area but are particularly sparse across Springwell Central and Springwell West in the centre of the study area.
- 1.5.30. Full details of the highways and public rights of way within the Order Limits can be found in **ES Volume 1, Chapter 14: Traffic and Transport [EN010149/APP/6.1]**.
- 1.5.31. Existing energy infrastructure (high voltage overhead power lines and pylons) is prominent running north to south through the western part of the study area, broadly parallel with the A15. Lower voltage lines also have a more localised effect in the eastern part of the study area.
- 1.5.32. The only other infrastructure which is widely visible across the landscape within the study area is a water tower at Ashby de la Launde.

## Flora and Fauna

- 1.5.33. Intensive arable crop production dominates the landscape throughout the study area. This introduces seasonal variety in vegetation cover into the landscape. Summertime monocultures of arable crop and subsequently ploughed fields with bare soil are frequently visible and typically characteristic of this landscape.
- 1.5.34. Despite the title of LCA 7: Limestone Heath, no heathland vegetation (with the exception of very small pockets) is actually present today in the landscape.
- 1.5.35. Woodland, hedgerow and tree cover is variable across the study area ranging from relatively sparse in the west to more frequent in the east. However there are no large swathes of woodland or forestry.
- 1.5.36. Scattered woodland copses and shelter belts are peppered across the landscape some of which are historic estate woodland belts. Due to the large open arable fields which dominate the landscape in the west of the study area, these tree copses are often clearly visible on the horizon and terminate far reaching views across flat fields.

- 1.5.37. There are several pockets of calcareous grassland, mainly alongside road verges, but these are relatively small in scale and whilst of ecological interest do not have a strong influence the character of the landscape.
- 1.5.38. Hedgerows in Springwell West and are typically gappy, low cut and there has evidently been extensive removal of historic hedgerow boundaries in the post war period to aid agricultural intensification. Hedgerows boundaries along the A15 throughout Springwell West are mostly absent enabling long distance views across the surrounding landscape. However further north and south of the Order Limits, hedgerows are common place alongside the A15.
- 1.5.39. A notable feature of the landscape west of the Order Limits in Springwell West is a series of tree lined avenues. These tend to terminate views in a westerly direction from Springwell West.
- 1.5.40. Another less obviously feature of the landscape spanning Springwell West is a series of limestone walls which are mostly in an advanced state of disrepair and as such are not particularly prominent.
- 1.5.41. South of the B1191 (Heath Road) in Springwell Central, hedgerows are more frequent, particularly on the boundaries of fields rising up a low ridge of land but larger fields on the plateau have evidently lost former hedgerow boundaries.
- 1.5.42. In Springwell East, by contrast, the hedgerows appear to have survived to a greater extent and these tend to be denser and of higher quality in terms of species mix.
- 1.5.43. On the eastern edge of Springwell East, there is extensive mature vegetation along the line of a railway line and this forms a strongly linear visual barrier within the eastern part of the study area.
- 1.5.44. Typically around each of the villages the hedgerows and trees are denser and more mature creating enclosure to the settlements.
- 1.5.45. The landscape within the study area is host to various species of fauna which are frequently observed in the landscape and make a contribution to its character. Various farmland birds, hare and deer are all frequently seen in the landscape.
- 1.5.46. Full details of the flora and fauna within the Order Limits can be found in **ES Volume 1, Chapter 7: Biodiversity [EN010149/APP/6.1]**.

### Landscape pattern and colour

- 1.5.47. The arable landscape across the majority of the study area, but particularly across the limestone heath in which Springwell West and Springwell Central are located, displays a strongly rectilinear pattern established during the planned enclosure of the eighteenth and nineteenth

century. The straight roads, overhead power lines and shelter belts reinforce this linear pattern in the landscape.

- 1.5.48. In Springwell East, the fields are also largely rectilinear although this is not as discernible as in other parts of the study area.
- 1.5.49. Some of the settlements within the study area retain a series of smaller and more irregular fields and paddocks around the periphery.
- 1.5.50. Due to the arable nature of the farming within the study area, there are frequent and seasonal changes in the colour of the landscape. Ploughed soils typically exhibit a reddish brown colour with prominent limestone content. This contrasts with the various hues of green, yellow and brown observed as the crops grow and are then harvested.
- 1.5.51. Autumnal changes in leaf colour are more noticeable in the east of the study area where tree and hedgerow cover is more prevalent.

### Scale, openness and enclosure

- 1.5.52. Due to a combination of gently undulating topography, intensive agriculture with large rectilinear fields and sparse field boundary vegetation, the landscape which spans much of the study area (including Springwell West and Springwell Central) has a very large scale with far reaching views and 'open skies'.
- 1.5.53. The sense of openness is most acutely evident from the crests of the gentle ridges which traverse the former heath from east to west and the top of the plateau south of Springwell Central.
- 1.5.54. East of the B1188, the slightly smaller field size coupled with more mature vegetation results in a landscape which is less open and with fewer long distance views. This landscape could not be described as intimate but is certainly smaller in scale.
- 1.5.55. Infrequently across the landscape, adjacent to woodland blocks or along lanes where there are mature hedgerows, a greater sense of enclosure can be experienced. This is evident for example along Trundle Lane in Springwell East or at Bloxholm Woods near Springwell West.
- 1.5.56. The settlements within the study area are often enclosed by smaller fields and mature vegetation and the two storey dwellings lend the settlements a more intimate and human scale character.

### Tranquillity and human activity

- 1.5.57. The landscape across the study area has a dynamic, working agricultural character. Farming activity and the movement of machinery and HGVs is a constant presence throughout the year.

- 1.5.58. The landscape exhibits a sense of detachedness from the main urban centres of Lincolnshire but is not remote. Settlement is nucleated within a series of small villages but these are well connected by busy roads.
- 1.5.59. Some of these roads carry large volumes of traffic such as the A15 and to a slightly lesser degree also the B1188, the B1189 and the B1191. Vehicular movement along the A15 is particularly prominent and audible from the landscape surrounding Springwell West as there are few roadside hedgerows.
- 1.5.60. RAF Digby is a focal point of human activity in the centre of the study area and is particularly busy at certain times of the day whilst the quarries have a localised impact on tranquillity.
- 1.5.61. Due to the proximity of various airfields, training jets and other aircraft are frequently observed in the skies above the study area.
- 1.5.62. Notwithstanding the above, there are multiple opportunities for peaceful walks in the countryside, more so in Springwell East than in Springwell West, but again here a railway line along the eastern boundary of the Order Limits introduces occasional activity.

### Intervisibility with adjoining landscapes and key views

- 1.5.63. Whilst there is gentle undulation across parts of the study area, there are no dramatic changes in topography either within the study area or discernible within the wider landscape.
- 1.5.64. There are frequent far reaching views across the fields within the study area but no distant landforms which constitute a backdrop horizon or a focal point to views.
- 1.5.65. Conversely, there are no views into the study area from elevated or distant landscapes.
- 1.5.66. Locally, church towers, the water tower at Ashby de la Launde and the Windmill on the B1191 form focal features of interest in the landscape but these do not define the landscape.
- 1.5.67. To the west of the Order Limits, a series of linear tree lined avenues channel views along them.

### Time depth

- 1.5.68. The *Historic Character of the County of Lincolnshire* report [Ref 3] as reviewed in Section 1.4 above outlines the evolution of the landscape across the study area.
- 1.5.69. The dominance of modern day intensive agriculture detracts from a common or wide appreciation of the time depth in the landscape.

- 1.5.70. A connection with the past is most obvious within the villages of the study area but these settlements typically have little influence on the surrounding agricultural landscape beyond the immediately surrounding fields.
- 1.5.71. Whilst there are some individual farmsteads and buildings in the wider landscape of recognised heritage interest, they tend not to have a strong influence on contemporary landscape character due to their diminutive size and sparse distribution compared to the scale of the farmland.
- 1.5.72. An exception to this is the Windmill (Scopwick Windmill) on the B1191 (Heath Road) west of Scopwick which is locally prominent between Scopwick and RAF Digby.
- 1.5.73. The church of St John the Baptist at Temple Bruer to the west of the Order Limits is the fulcrum of several tree lined avenues which radiate from it.
- 1.5.74. A small number of well vegetated lanes such as Trundle Lane in Springwell East and New England Lane near Springwell West also evidently have long established, historic roots.
- 1.5.75. There are several visible connections and historic associations with the presence of the RAF over the past century in the landscape. Most obviously there remains an active RAF presence at Digby but also just beyond the study area at Cranwell and Waddington. There are also several monuments and cemeteries associated with past service men and women in the area.
- 1.5.76. Full details of the heritage assets within the Order Limits can be found in **ES Volume 1, Chapter 9: Cultural Heritage [EN010149/APP/6.1]**.

## 1.6. References

- **Ref 1:** *National Character Area Profile 47 – Southern Lincolnshire Edge* (2014) Natural England. Available online: [REDACTED]
- **Ref 2:** *North Kesteven Landscape Character Assessment* (2007) David Tyldesley and Associates for North Kesteven District Council. Available online: [North Kesteven Landscape Character Assessment Report \(n-kesteven.gov.uk\)](http://www.n-kesteven.gov.uk)
- **Ref 3:** *The Historic Character of the County of Lincolnshire – English Heritage Project No 4661 - The Historic Landscape Character Zones* (2011) John Lord and Alastair Macintosh, Lincolnshire County Council. Available online: <https://www.lincolnshire.gov.uk/downloads/file/2206/the-historic-landscape-character-zones-pdf>



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