LINCOLNSHIRE LAKES POSITION STATEMENT

November 2022

NORTH LINCOLNSHIRE COUNCIL

Contents

1 Introduction

1.1 The purpose of this document is to provide an up-to-date position on the Lincolnshire Lakes project and updates to the associated evidence base to justify the current proposals for Lincolnshire Lakes set out in the new Local Plan to 2038.

2 Policy Background

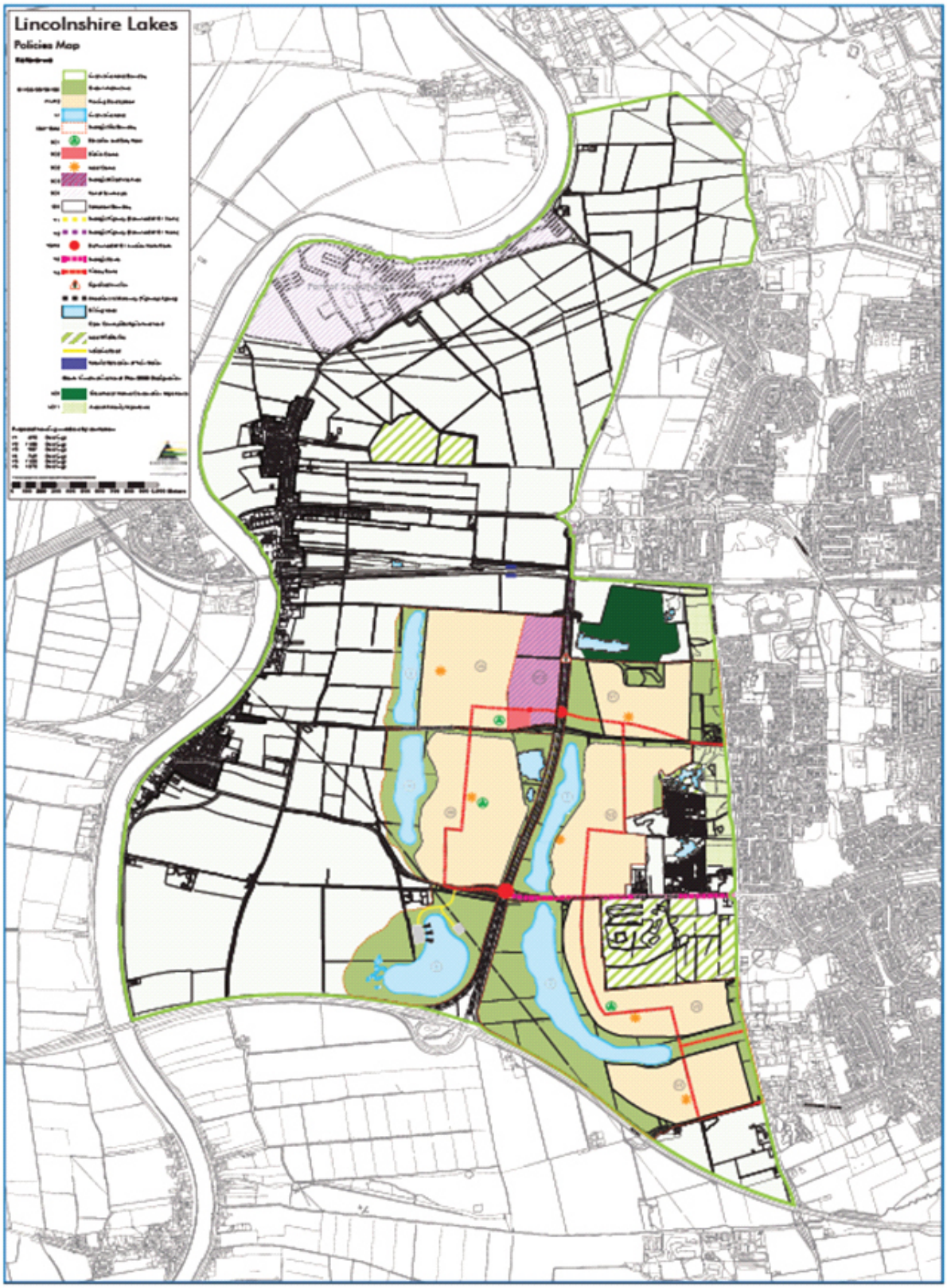
2.1 The Lincolnshire Lakes was conceived in 2004 as part of the 'Scunthorpe Framework' with a vision to transform the setting of Scunthorpe by creating a vista of lakes and woodland.

2.2 Over the following years the project was refined to focus on land to the west of the main Scunthorpe area between the urban fringe and the River Trent. A requirement was set out in the North Lincolnshire Core Strategy (NLCS), adopted in 2011, to deliver 6000 homes at the transformational site and to bring an area renaissance through the creation of a lakeside landscape.

2.3 Following the adoption of the NLCS, the Council began work on the Lincolnshire Lakes Area Action Plan (LLAAP). This document set out the range of land use policies on land to the east and western sides of the M181 to deliver 6000 homes in six villages set amongst five lakes. Two new junctions were proposed to the M181 providing access into the development site. Immediately to the west of the northern junction a commercial park and district centre was proposed. The LLAAP was adopted by the Council in 2016.

2.4 The Council commissioned Tibbald's to work with the Council and produce the Lincolnshire Lakes Strategic Design Guide. This document formed two parts, the first being a site-wide masterplan and the second part being a design code for Lincolnshire Lakes. This document was adopted by the Council as a Supplementary Planning Document (SPD) in 2016.

2.5 The image below shows the policies map and development areas as set out by the LLAAP 2016.


Lincolnshire Lakes
Policies Map

3 Planning Background

3.1 In 2013 the Council received four planning applications by KMG (formerly Lucent Group) under PA/2013/1000, PA/2013/1001,PA/2013/1002 and PA/2013/1003 which sought to deliver 3000 homes in two villages with local centres and a three form primary school on land forming the northernmost third of the Lincolnshire Lakes development area set out in the LLAAP. A series of lakes and wetlands were also proposed in addition to significant landscaping works. A new junction was proposed to the M181 with land immediately to the west being proposed for use as a commercial park. A new east-west link road connecting Scunthorpe to the Northern junction, being part of the critical infrastructure for the development was also proposed.

3.2 In 2015 Maltgrade submitted three applications (PA/2015/0396, PA/2015/0627 and PA/2015/0628) covering the central third of land proposed for development by the LLAAP (southern part of villages 2 and 6). The proposal sought to deliver 2,500 homes in two villages on land to the east and west of the M181 each with local centre. A series of lakes and wetlands were proposed to the west of each of the villages in addition to a large recreational lake and open space on land to the northwest of the M180/M181 motorway junction (Lake 5). A terminating motorway junction (southern junction) was proposed to the M181 slightly to the north of the B1450 Burringham Road overbridge.

3.3 Later in 2015, Scunthorpe United Football Club (SUFC) submitted an application (PA/2015/0025) to develop a 12,000 capacity stadium mixed use development.

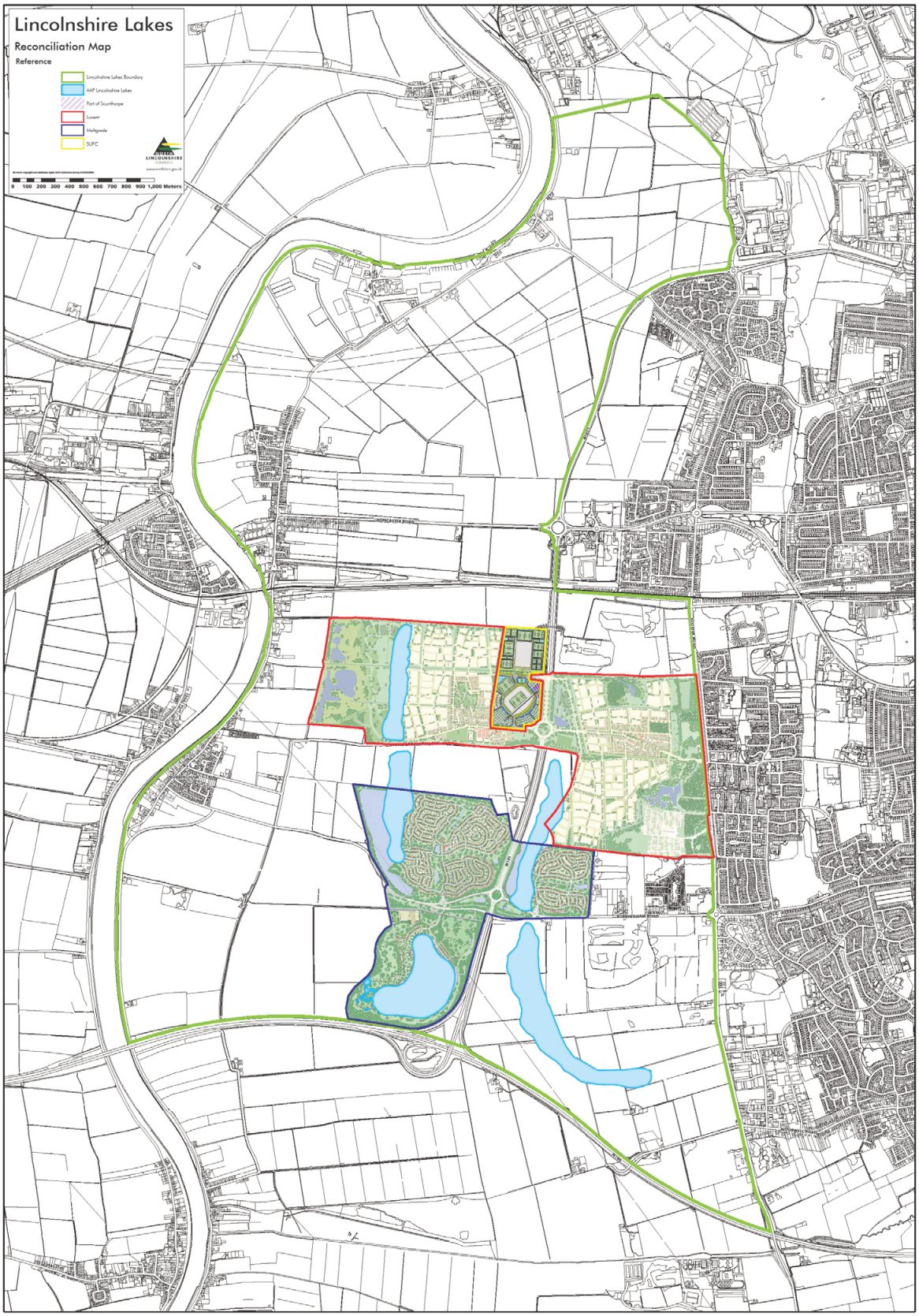
3.4 With regard to development on land subject to the Lucent/KMG application to the northwest of the northern junction the first lake was submitted for planning permission in 2016 (2016/1736). This lake was designated as 'Lake 1' in the LLAAP and was 1km in length on land to the east of the M181 in land subject to both the Lucent/KMG and Maltgrade applications.

3.5 In 2017 an amended design for the southern terminating junction was submitted to the Council (PA/2017/1386). A planning application was also submitted (PA/2017/1977) for the delivery of the Lincolnshire Lakes Trent Bank Flood Defence Scheme.

3.6 The above planning applications are detailed below:

Lucent / KMG	
PA/2013/1000	Outline application (access not reserved) for erection of a maximum of 2550 dwellings including a care/retirement home (Use Classes C2 and C3), primary school and community facilities (Use Class D1), village centres (Use Classes A1, A2, A3, A4, A5 and B1), new roads and footpaths, informal areas of open space, play areas and sports pitches and new wildlife habitat, lakes and wetland
PA/2013/1001	Outline planning permission (with access not reserved) for the erection of a maximum of 450 dwellings including a care/retirement home (Use Classes C2 and C3), a Village Centre (Use Classes A1, A2, A3, A4, A5, B1 and D1), health care facility and community facility (Use Class D1), new roads and footpaths, informal areas of open space, play areas and sports pitches
PA/2013/1002	Full planning permission for highway works to create new junction to the M181 motorway and construction of the western section of the east-west link road
PA/2013/1003	Outline application (access not reserved) for a commercial park comprising Use Classes A1 (food) A2, A3, A4, A5, B1, C1 and D2
Maltgrade	
PA/2015/0396	Outline planning permission for the development of up to 2500 new homes including a village centre (Use Classes A1, A2, A3, A4, A5, B1 and D1), a health care facility (Use Class D1), community facilities (Use Class D1), a 3 form of entry primary school (Use Class D1), new roads and footpaths, informal areas of open space, play spaces and new wildlife habitats, water bodies and wetlands with all matters reserved for subsequent approval
PA/2015/0627	Planning permission for highway works to deliver the new terminating junction to the M181 motorway (due to the de-trunked section of the highway to the north and south of the terminating junction) and the development of the eastern and western sections of the east west link road connecting to the B1450 Burringham Road
PA/2015/0628	Hybrid application for full planning permission for new road and footpaths, informal areas of open space, parklands, play areas and new wildlife habitats, attenuation ponds, recreational lakes and wetlands community; and outline planning permission with all matters reserved for non-residential institutions (Use Classes D1 and D2), leisure facilities (Use Classes A1 and A3) and storage (Use Class B8)
Scunthorpe United Football Club	
PA/2015/0025	Hybrid planning permission for 12,000 capacity football stadium (Class D2); cafe/bar (A3/A4); offices (Class B1); 94-bed hotel (Class C1); gymnasium (Class D2); craiche (Class D1); launderette (Sui Generis); show venue (Sui Generis); outdoor training football pitch (Class D2); site access, car parking and associated infrastructure, landscaping and drainage. Outline planning application for multi-use arena (Class D2) and outdoor football pitches (Class D2), with all matters reserved save for access.
North Lincolnshire Council	
PA/2016/1736	Planning permission for engineering and excavation to form a lake (Lake 1) as part of the wider Lincolnshire Lakes proposal
PA/2017/1977	Planning permission for the construction of a Flood Defence Scheme comprising of sheet piling along the right bank of the River Trent; the placing of scour protection along the right bank of the River Trent; localised property protection within a managed overflow area at land to the north of the M180 Bridge; the raising of existing earth embankments and flood walls; and associated construction works.
Highways England	
PA/2017/1386	Planning permission for highway works to deliver a new terminating junction to the M181 motorway comprising a new at-grade roundabout to access the B1450 Burringham Road from the M181, new B1450 side roads and realignment of the existing B1450, two new additional roundabouts on the realigned B1450, drainage ponds and outfalls, landscaping and associated re-profiling and ancillary works

3.7 The map below illustrates the masterplans of those planning applications submitted by Lucent/KMG/ Maltgrade and Scunthorpe United Football Club within the former LLAAP boundary for the Lincolnshire Lakes development.


Lincolnshire Lakes
Reconciliation Map
Reference
Lincolnshire Lakes Boundary
AAP Lincolnshire Lakes
Port of Scunthorpe
Lusent
Maltgrade
SUFC
0 100 200 300 400 500 600 700 800 900 1,000 Meters

4 Current Planning Position

4.1 All planning permissions secured by Lucent/KMG have since lapsed except for PA/2013/1002 which has been developed out as the at-grade northern junction roundabout to the M181/Brumby Common Lane.

4.2 The three applications submitted by Maltgrade have been determined by Members of the Planning Committee who have resolved to grant permission subject to conditions and S106 Agreement. The three planning applications were formally granted permission on 05/08/2021 following completion of the S106 Agreement.

4.3 The application submitted by SUFC to deliver a 12,000 capacity mixed use stadium has lapsed. The football club now intends to redevelop its existing stadium, Glanford Park, to the north of the Lincolnshire Lakes development area.

4.4 PA/2016/1736 for the construction of a 1km lake on land within the Lucent/KMG and Maltgrade areas has also lapsed.

4.5 Maltgrade continue to work with the Council and National Highways to deliver the Southern Terminating Junction and PA/2017/1386 is extant.

4.6 Works to deliver the flood mitigation works pursuant to PA/2017/1977 have been completed in 2019.

5 Proposed Policy Position

5.1 The Council remains committed to the delivery of the Lincolnshire Lakes scheme. The ultimate vision for the project is to deliver 6,000 homes in a series of villages within a waterside setting on land to the east and west of the M181 has not changed. However, the Council acknowledges that a number of the planning permissions have since lapsed but is working proactively with partners to deliver the scheme.

5.2 Given the delays to the delivery of the project, the Council is less ambitious in its approach to the timescales for delivery of Lincolnshire Lakes. Therefore, the Council aims to deliver 2,150 homes at the eastern side of the site by 2038 with the further 4000 homes being developed after the plan period including Maltgrade planning application to deliver 1,900 on the western side of the M181. The Council considers this approach to be in accordance with paragraph 22 of the National Planning Policy Framework (NPPF) 2021. The North Lincolnshire Infrastructure Delivery Plan – April 2022 sets out the infrastructure requirements and funding mechanisms required to deliver the growth proposed in North lincolnshire's emerging Local Plan, including Lincolnshire Lakes up to 2038.

5.3 To assist with the delivery of Lincolnshire Lakes, the Council has secured a total of £23m of funding to bring forward critical high cost infrastructure in advance of development The provision of critical infrastructure up front will assist the wider viability and deliverability of the project. This includes the following

- £13.3m was secured through the Humber Local Enterprise Partnership (LEP) to deliver 3.8km of continuous steel piling to improve the existing flood defence and associated works reduce the risk of flooding to the Lincolnshire Lakes site and existing communities.
- £4.5m of funding was secured for the northern junction by the Greater Lincolnshire LEP.
- £7.9m has been secured for the delivery of the southern junction through the Housing and Growth Fund by National Highways.

5.4 The Council in 2021 was successful in securing £21.9m as part of the Towns Fund with £5m being apportioned to the delivery of an Advanced Manufacturing Park. Advanced

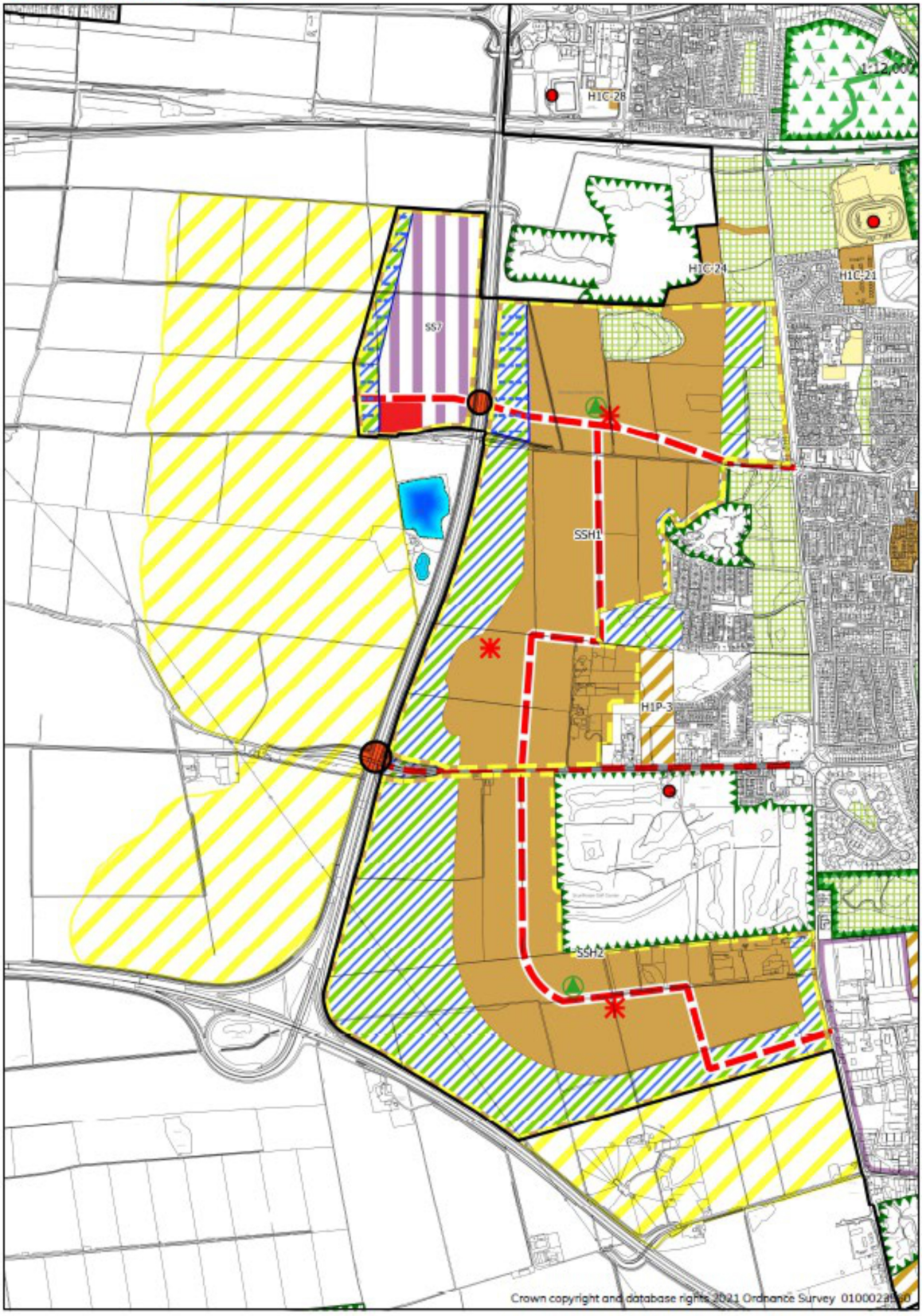
manufacturing involves the use of innovative technologies and methodologies for improved competitiveness in the manufacturing sectors. The advanced manufacturing uses within the strategic mixed use area will combine manufacturing facilities alongside an innovation centre, which will bring together the public, private and education sector to collaborate on research and development projects, to explore decarbonisation, renewable energies and productivity improvements within existing and new markets.

5.5 Furthermore, the Council has amended planning policy for Lincolnshire Lakes to be less prescriptive in terms of land use to provide flexibility for developers. The policy provides broad locations for residential development and blue/green infrastructure without a prescriptive masterplan as to where villages or waterbodies should be precisely sited.

5.6 The Council intends to update the Lincolnshire Lakes Strategic Design Guide following the adoption of the Local Plan. This will provide an updated masterplan and design code for the Lincolnshire Lakes development site following amendments to the scheme in new planning policy. The Council considers that this approach will be in conformity with Chapter 12 of the NPPF 2021.

5.7 The proposed policies map for Lincolnshire Lakes as part of the North Lincolnshire Local Plan 2020-2038 is show below.

87 - Lincolnshire Lakes



6 Evidence Base Updates

Highways and Transport

6.1 In terms of highways and transport matters, the former LLAAP evidence base comprised of the following:

- Lincolnshire Lakes Transport Strategy, Pell Frischmann, (October 2010)
- Lincolnshire Lakes AAP Support Highways Assessment, URS, (April 2013)
- Lincolnshire Lakes AAP Support M181 Junction Location Assessment, URS, (October 2012)
- Lincolnshire Lakes AAP Support AAP Sustainable Transport Strategy, URS (August 2014)

6.2 Together, these documents informed the movement framework and policies set out by the LLAAP to deliver the proposed village developments in the locations identified. To support the development of the allocation set out in the Lincolnshire Lakes policy SS7, significant works are required to the highway network. The necessary highway works were identified in the former LLAAP evidence base for development to the eastern side of the M181 (northern and southern strategic allocations (SSA7-1 and SSA7-2)) and the delivery of the strategic mixed use area to the west of the M181 (SSA7-3). These highways improvements are set out within the Lincolnshire Lakes policy (SSA7) and include:

- Development of the southern terminating junction to the M181 in the form of an at grade roundabout and create access from the strategic highway network to the B1450 Burringham Road and the southern strategic allocation (SSA7-2).
- Development of the northern junction to the A1077(m) (former M181) in the form of an at grade roundabout and create access from the A1077(m) to the unclassified Brumby Common Lane, the northern strategic allocation (SSA7-2) and the strategic mixed use area (SSA7-3).
- Development of the east/west link road to provide access from the northern junction through to Scotter Road at its junction with West Common Lane and Brumby Common Lane which itself will require upgrade.
- Upgrading the existing B1450 Burringham Road through widening and the creation of a footpath along its length and improvements to the roundabout junction with it and Scotter Road (Asda rounabout).
- Upgrades to the Moorwell Road and Scotter Road junction with new access into the southern strategic allocation (SSA7-2).
- Upgrades to the junction of Moorwell Road and the South Park Industrial Estate.
- Development of a new primary link road to connect the villages within the allocation running from the northern local centre within the northern allocation (SSA7-1) on the East/West link road to the roundabout junction on the B1450 Burringham Road. Then continuing southwards through the southern strategic allocation to the upgraded Moorwell Road and Scotter Road junction.

6.3 Additional requirements set out within the former LLAAP evidence base for development of the eastern side of the M181 include the provision of a bus route, public footpaths and cycleways that run east/west through the site incorporating the former Brumby Common Lane and Burringham Road (B1450) M181 motorway overbridges and an appropriate level of car parking to service the dwellings and commercial and community developments proposed at the site. It is intended that Brumby Common Lane is to become a designated route for Non Motorised users.

Ecology

6.4 In 2012, URS Infrastructure & Environment UK Limited ("URS") prepared an Ecology Topic Paper on behalf of GVA Grimley and North Lincolnshire Council, to consider the development options for the Lincolnshire Lakes Area Action Plan (AAP). An earlier Baseline Review identified local, regional and national policy relevant to the AAP, provided a description of baseline ecological conditions and identified the main potential effects (beneficial and adverse) and opportunities for biodiversity gain arising from development within the AAP study area. The topic paper excluded aspects relating to Habitats Regulations Assessment, which were addressed separately.

6.5 This document is an update of the previous Topic Paper. It will apply the same principles to the reduced area proposed for development in the North Lincolnshire Local Plan Publication Draft (May 2021). It will also provide some insight into the changing baseline conditions, with particular reference to priority habitats and species (Habitats and Species of Principal Importance, as described in section 41 of the Natural Environment and Rural Communities Act 2006). Finally, it will provide updated references to biodiversity policy.

6.6 The Baseline Review was based on a search of existing biological records combined with a Phase 1 Habitat Survey and a winter bird survey. These were reported in the Baseline Review document and summarised in the 2012 Topic Paper as follows:

"The majority of the landuse within, and in the vicinity of, the site comprises arable farmland with drainage ditches. There are no statutory designated sites within the site boundary, but four designations are located adjacent to the site; the Humber Estuary Ramsar, SAC and SSSI located directly adjacent to the western boundary from Keadby Bridge north, and Silica Lodge LNR located next to the eastern site boundary. The Humber Estuary SPA is located approximately 8km to the north. There are four non-statutory designated sites within and two immediately adjacent to the site boundary; which [...] are designated primarily for their habitats.

There are no ancient woodland stands within the site boundary; with the closest located approximately 0.5km east at Brumby Wood. There are 12 Lincolnshire BAP habitats within the site boundary. Of those habitats, the ones considered of most ecological value, including the lowland mixed deciduous woodland, ponds, lakes and reservoirs, lowland meadows, springs and flushes and lowland acid grassland are largely confined to the boundaries of designated LWS, SNCI or nature reserves.

The Baseline Review identified opportunities associated with creation and enhancement of Green Infrastructure, and specific opportunities to protect and strengthen existing habitat corridors and stepping stone habitats, based around the existing designated areas as well as areas of Green Infrastructure identified by a Natural England Study, particularly the River Trent Regional Corridor to the west and the Jurassic Escarpment sub-regional corridor to the east.

The Lincolnshire Lakes AAP creates high potential for a significant gain in biodiversity which in turn would contribute towards delivery of wider nature conservation goals and Biodiversity Action Plan (BAP) targets. Existing habitats and the creation of new habitats can provide significant green infrastructure and contribute to a range of ecosystem services."

6.7 The majority of the land use in the area still comprises arable farmland with drainage ditches, with little large-scale change being discernable. Minor habitats, in terms of land cover, are still much as mapped for the Baseline Review. During 2020/21), work began on the new northern junction of the M181 with the roundabout now completed and in operation. This has led to localised ground disturbance around the M181/Brumby Common Lane, both in terms of the permanent construction of road surfaces, new slopes and drainage structures and the temporary use of land for construction and laydown.

6.8 The biodiversity management plan for this scheme delivers:

- Amenity grassland
- Species-rich grassland
- scrub and scattered trees
- native species-rich hedgerow
- reptile and amphibian hibernacula

6.9 In 2019, outline planning permission was granted for 36 dwellings, including new access road and adoptable sewage pumping station, on arable land just outside the northern edge of the AAP area, east of Brumby Common West Local Wildlife Site (LWS) . The proposed access road would lead to the loss of broadleaf plantation woodland (Faulconbridge 2018). A reserved matters application PA/2021/1990 pursuant to PA/2018/2186 is currently pending consideration.

6.10 PA/2020/1333 granted outline planning permission for up to 144 dwellings, immediately east of the AAP area, off Burringham Road A planning condition secures a 10% net gain in biodiversity value for this scheme. There is another pending application to erect 88 dwellings on land south of Silica Lodge Garden Centre, Scotter Road South (PA/2019/1607). There is also a pending undermined application for residential development immediately south of the AAP area at the former brickworks (PA/2018/1608).

6.11 There have been various planning applications within the AAP area some of which have lapsed and some which have not led to development as yet: These applications are set out below;

PA/2013/1000	Outline application (access not reserved) for erection of a maximum of 2550 dwellings including a care/retirement home (Use Classes C2 and C3), primary school and community facilities (Use Class D1), village centres (Use Classes A1, A2, A3, A4, A5 and B1), new roads and footpaths, informal areas of open space, play areas and sports pitches and new wildlife habitat, lakes and wetland - planning permission has lapsed
PA/2013/1001	Outline planning permission (with access not reserved) for the erection of a maximum of 450 dwellings including a care/retirement home (Use Classes C2 and C3), a Village Centre (Use Classes A1, A2, A3, A4, A5, B1 and D1), health care facility and community facility (Use Class D1), new roads and footpaths, informal areas of open space, play areas and sports pitches - planning permission has lapsed
PA/2013/1003	Outline application (access not reserved) for a commercial park comprising Use Classes A1 (food) A2, A3, A4, A5, B1, C1 and D2 - planning permission has lapsed
PA/2015/0396	Outline planning permission for the development of up to 2500 new homes including a village centre (Use Classes A1, A2, A3, A4, A5, B1 and D1), a health care facility (Use Class D1), community facilities (Use Class D1), a 3 form of entry primary school (Use Class D1), new roads and footpaths, informal areas of open space, play spaces and new wildlife habitats, water bodies and wetlands with all matters reserved for subsequent approval - planning permission is live
PA/2015/0627	Planning permission for highway works to deliver the new terminating junction to the M181 motorway (due to the de-trunked section of the highway to the north and south of the terminating junction) and the development of the eastern and western sections of the east west link road connecting to the B1450 Burringham Road - planning permission is live
PA/2015/0628	Hybrid application for full planning permission for new road and footpaths, informal areas of open space, parklands, play areas and new wildlife habitats, attenuation ponds, recreational lakes and wetlands community; and outline planning permission with all matters reserved for non-residential institutions (Use Classes D1 and D2), leisure facilities (Use Classes A1 and A3) and storage (Use Class B8)
PA/2016/1736	Planning permission for engineering and excavation to form a lake (Lake 1) as part of the wider Lincolnshire Lakes proposal - planning permission has lapsed

6.12 In terms of the Habitats Regulations, the Baseline Review recorded no likely significant effect on the Humber Estuary Ramsar, SAC or SSSI but potential effects on SPA arising from changes in land-use and disturbance causing displacement of foraging and/or roosting (qualifying) bird species from agricultural land. Surveys in winter 2011-2012 recorded golden plover and lapwing with larger flocks consistently restricted to north of the A18. The Baseline Review recommended that these areas should remain undeveloped and protected against significant disturbance, and that adverse effects, if any, could be addressed by enhancement effects of appropriate wetland creation with benefits for a range of bird species as well as other flora and fauna.

6.13 In the North Lincolnshire Local Plan Publication Draft, Strategic Site Allocation SS7 (Lincolnshire Lakes) allocates a much smaller area for development than was the case in the AAP. No development is proposed near Gunness Wharf or the areas where flocks of golden plover and lapwing have been recorded. Nevertheless, the shadow Habitats Regulations Assessment of the new Local Plan records that Allocation SS7 could have a likely significant effect alone on the Humber Estuary SAC, SPA and Ramsar site. Potential impact pathways include water discharge and increased recreational pressure. However proposed Policy DQE3 and Allocation SS7 both include protective measures requiring protection of the environment, including international nature conservation sites. For this reason, it has been possible to ascertain that the Allocation will have no adverse effect on the integrity of the Humber Estuary SAC, SPA and Ramsar site.

6.14 For non-statutory sites, the Baseline Review recognised opportunities for enhancement of the local ecological network, improving connectivity, buffer effects and management, and increasing the resilience of the sites to disturbance and also to climate change effects. This was focused largely on opportunities for wetland habitat creation, enhancing the existing drainage network within the AAP area and also creating new wetland areas as part of a sustainable drainage and green infrastructure approach, including areas with ecology and biodiversity interests as a primary objective.

6.15 The following non-statutory Local Wildlife Sites lie within, or adjacent to, the reduced area allocated under Strategic Allocation SS7:

Local Wildlife Site Name	Qualifying Features
Brumby Common West	Lowland Dry Acid Grassland, Mosaics, Wetland
Westcliff Lagoon	Lowland Dry Acid Grassland, Standing Water, Wetland
Ashby Decoy Golf Course	Lowland Dry Acid Grassland
Silica Park	Lowland Dry Acid Grassland, Neutral Grassland, Mosaics, Wetland
Yaddlethorpe Fish Ponds	Wetland, Neutral Grassland, Wet Woodland

6.16 The Baseline Review identified a low risk of adverse effects on protected and notable flora and fauna, including those listed as species and habitats of principal importance and within the UK and Lincolnshire Biodiversity Action Plan. Since 2012, more detailed habitat and species surveys have been carried out – notably for the 2013 and 2015 planning applications set out in section 2.2 above. Relevant species and habitats considered in the 2012 Topic Paper and later planning applications for protection, creation and/or enhancement included the following:

Habitats	When and Where Recorded (2012-2021)		
	2013 “Lucent” Applications Northern Area	2015 “Maltgrade” Applications (with 2019 updates) Southern Area	2016 “Lake 1” Application Eastern Area
Lowland mixed deciduous woodland	✓	✓	✓
Rivers and Wetlands	✓	✓	✓
Lowland Meadows			
Springs and flushes			
Acid grassland	✓		
Farmland and Grassland	✓	✓	✓
Canals and Drains	✓	✓	✓
Hedgerows and Trees	✓	✓	✓
Urban Habitats (open space, parks etc)			
Species			
Otter			
Water Vole	✓	✓	
Bats	✓	✓	
Amphibians	✓		
SPA qualifying birds	✓		
Farmland birds	✓	✓	✓
Common reptile species	✓		
Badger			
Terrestrial invertebrates	✓		
Aquatic invertebrates	✓		
Hedgehog		✓	
Brown Hare	✓	✓	
Aquatic plants	✓	✓	

6.17 In terms of habitats, the more detailed surveys have revealed drains with diverse aquatic flora and have provided more detail about the quality and condition of woodlands, scrub, open mosaic habitats and areas of acid and neutral grassland.

6.18 More detailed species surveys have revealed:

- up to seven species of foraging bat;
- small numbers of SPA-qualifying birds;
- communities of farmland birds;
- pockets of common (viviparous lizard) populations;
- no clear evidence of otter and a general absence of badger and great crested newt.

6.19 Water vole survey results have been very variable over the years and in different areas (See Appendix 1). This is thought to reflect:

- Different survey methodologies and different standards of evidence required to record water vole presence in the different surveys;
- Very variable rainfall and consequent water levels in drains, with drier drains being generally less likely to support active water vole populations;
- Varying levels of ditch management, with shaded and overgrown drains being generally less likely to support active water vole populations;
- A general increase in the presence of American Mink over time, leading to a general reduction in water vole presence, abundance and geographic spread across North Lincolnshire.

6.20 The Humberhead Levels NIA straddled the Yorkshire, Lincolnshire and Nottinghamshire borders and covers 49,700 hectares. The NIA had a focus on significant wetland creation within some of the most productive arable land in the UK. It aimed to enhance existing internationally important wetlands (the Humber and the Humberhead Peatlands), other SSSIs and Local Wildlife Sites by reconnecting these sites, working with landowners to create ribbons of habitat along drains, headlands and in field corners.

6.21 Funding for NIA work has now ceased. However, the Humberhead Levels Partnership continues to promote landscape-scale nature recovery in the area.

6.22 The 2012 Topic Paper noted that:

"Natural England have identified wildlife corridors to the east and west of the AAP area. The River Trent Regional Corridor lies to the west and the Jurassic Escarpment sub-regional corridor to the east. Both of these corridors continue into the Central Lincolnshire area via the 'Trent Link; and 'Scunthorpe Link', as described within the Green Infrastructure Study commissioned for the Central Lincolnshire Joint Planning Unit and published in December 2011. These corridors comprise existing green infrastructure and are also aspirational in that they indicate areas where existing green infrastructure may be connected and increased or enhanced."

and

"Sufficient high quality open space is required in order to address effects of increased population on designated sites, particularly European Designations. This is addressed more specifically in the shadow Habitats Regulations Assessment..."

6.23 Since then, guidance on the delivery of wildlife corridors and habitat networks has evolved and strengthened. The Lincolnshire Lakes Strategic Design Guide (2016) gives detailed guidance for the area (Appendix 2):

6.24 The North Lincolnshire Biodiversity Opportunity Map produced in 2019 (see Appendix 3) records the SS7 Allocation Area and surrounding farmland as having potential, in different identified zones, to create habitat networks for:

- Lowland dry acid grassland and Lowland mixed deciduous woodland.
- Lowland mixed deciduous woodland and Rivers and wetland habitats.

6.25 The National Planning Policy Framework 2021) gives the following guidance on wildlife corridors and green infrastructure:

- 171. Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.
- 174. To protect and enhance biodiversity and geodiversity, plans should:

a. Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and

b. promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

6.26 The Environment Act 2021 requires the production of local nature recovery strategies as follows:

Content of local nature recovery strategies

A local nature recovery strategy relating to an area ("the strategy area") is to include-

a. statement of biodiversity priorities for the strategy area, and

b. local habitat map for the whole strategy area or two or more local habitat maps which together cover the whole strategy area.

6.27 Schedule 14 of the Act sets out requirements for planning permissions to have a deemed planning condition requiring the delivery of a net gain in biodiversity of at least 10%, as measured in accordance with a biodiversity metric to be produced by the Secretary of State.

6.28 Schedule 14 of the Act sets out requirements for planning permissions to have a deemed planning condition requiring the delivery of a net gain in biodiversity of at least 10%, as measured in accordance with a biodiversity metric to be produced by the Secretary of State.

6.29 Policy DQE3 of the North Lincolnshire Local Plan Publication Draft puts the latest guidance into practice at the local level.

6.30 The 2012 Topic Paper made various recommendations, which are reproduced below in updated and amended form:

- Development proposals should respond to both the existing baseline conditions as well as other development areas within and outside the strategic allocation area, in order to ensure that opportunities for habitat connectivity are taken and that development design does not result in fragmentation or discontinuity. Development design should be undertaken through consultation with the local authority and relevant stakeholders to assist this process and ensure that design addresses targets in the Biodiversity Opportunity Map and any future Local Nature Recovery Strategy.
- Development design should respond to detailed baseline condition surveys for protected and notable flora and fauna, including species and habitats of principal importance for conservation in England. Scope of ecological surveys and other investigations (e.g. soil survey) should be agreed with the local authority.
- Waterscape zones identified must include significant areas with a strong biodiversity function, with less intensive or formal amenity uses. Outside of major waterbodies, development plans should include smaller scale wetland habitat creation to maintain and improve north-south and east-west connectivity through physical connection of existing and new wetland 'blue corridor' habitats as well as 'stepping stone' features.
- Development proposals should include provisions for monitoring and management of Local Wildlife Sites; including monitoring, habitat management and defining trigger levels to redress adverse effects on ecological integrity arising from increased visitor pressure, including Gunness Common, Brumby Wood, Brumby Common West, Westcliff Lagoon, Ashby Decoy Golf Course and Yaddlethorpe Fish Ponds. Mechanisms to secure financial provision for long term management and monitoring of green and blue infrastructure will be required.
- Careful design, integrated across village/development areas, of new grey infrastructure (including highways) is necessary to maintain connectivity and minimise fragmentation of biodiverse habitats in east-west and north-south directions. This should include consideration of bypass, underpass and overpass features to promote permeability of the landscape for flora and fauna, with a focus on wetland connectivity which is a strong theme and objective of the Humberhead Levels Partnership.
- A careful balance of access and biodiversity functions is required within and adjacent to existing Green Corridors and a strong emphasis on biodiversity functions of the green

infrastructure linkage between the River Trent and Jurassic EscarpmentGreen corridors is necessary.

- Development design should include Green Infrastructure (with biodiversity functions) within the village areas, within and around business park areas, and through enhancement of areas identified as open countryside/agricultural land. With regard to agricultural land identified outside village areas, the design should account for agricultural soil quality and aim to provide biodiversity gains without significant loss of best and most versatile high grade agricultural soils.
- Visitor pressure on distant designated sites should be assessed for each phase or stage of development and design for open space provision made to mitigate for identified potential adverse effects on ecological integrity
- All phases of development should deliver a measurable net gain in biodiversity of at least 10%, prioritising the enhancement and creation of habitats identified as local priorities in the Biodiversity Opportunity Map and any future Local Nature Recovery Strategy.

References

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GVA Grimley Ltd 2011 Lincolnshire Lakes Area Action Plan Evidence Base.

Mellor, R. & Turnock, L. 2012 Lincolnshire Lakes Area Action Plan Topic Paper – Ecology. URS Infrastructure & Environment UK Limited ("URS")

Tibbalds Planning and Urban Design 2016 Lincolnshire Lakes Strategic Design Guide. Part B: Village and Lake Design Guidance, June 2016

Ecological survey reports for the planning applications referenced in this Topic Paper are available at: https://apps.northlincs.gov.uk/

Historic Environment

6.31 In terms of the Historic Environment, there is a greater understanding of the archaeological potential of the site due to the archaeological fieldwork that has taken place pursuant to the planning permissions at the site.

6.32 This large allocation site has moderate/high potential to contain archaeological remains and palaeo-environmental evidence of high/very high significance.

6.33 The site lies on the Trent floodplain, an area where heritage assets of archaeological significance from all periods, in particular the prehistoric periods, are to be anticipated. Evidence of the earliest Mesolithic hunters and Neolithic settlers may be present on what was dry land adjacent to former river channels and on sandhills raised above the floodplain that became increasingly boggy as water levels rose from the beginning of the Bronze Age and peat deposits formed over the sandy heath. Such peat deposits have the potential to preserve organic remains and palaeoenvironmental evidence. Former land surfaces may also be preserved beneath water-lain warp deposits dating from the 18th/19th centuries.

6.34 There are no known assets dating to the Palaeolithic period within the Site or in the surrounding area, however, evaluation work to the west of Scunthorpe in 2007 identified peat deposits that were considered to be early prehistoric in date.

6.35 Mesolithic archaeology recorded within North Lincolnshire generally comprises lithic scatters in the topsoil. The nearest example of this is on slightly higher ground (c. 8m aOD) to the east of the Site. The post-glacial landscape is likely to have been significantly dryer than it has been more recently, probably comprising sandy heath. This opens the possibility of its exploitation by Mesolithic hunter-gatherers, while Neolithic activity (c.4000 to 2300 BC) and settlement is also a possibility. The development of peat

deposits and the intermittent marine and freshwater alluvium inundations over the Trent floodplain have the potential to have buried Mesolithic, and later, remains.

6.36 The Neolithic period is represented in the wider area by three find spots comprising a flint point, scatters of flakes and scrapers and a polished flint axe.

6.37 Evidence for Bronze Age activity is well-represented in the area around the Site by flint scatters including an early Bronze Age barbed and tanged arrowhead, and Beaker Ware pottery sherds. Several other contemporary finds have been made to the east of the M181, on the fringes of Scunthorpe.

6.38 Burringham Common has yielded several significant discoveries. Two relate to high-status metalwork. A hoard of Bronze Age weapons was found at some point prior to 1747 and in 1843 preparations associated with warping the land led to the discovery of a fine round-type Bronze Age shield. Another hoard comprised of between six and 30 Bronze Age socketed axe heads was found 3m below the riverbed during the construction of Keadby Bridge.

6.39 There are no known Iron Age assets within the Site or immediate area but this does not preclude their existence buried within the site. Liminal areas between dryland and wetlands are known to have held particular significance during later prehistory with ceremonial causeways, votive deposits and ritual burials known from river valleys in the wider region.

6.40 Two possible prehistoric logboats are recorded in the area of the Site; the first discovery was made in 1815 at Yaddlethorpe Grange to the south and the second recorded in 1967 from the peat at White House Farm, Burringham.

6.41 The Romano-British period is represented around the Site by a bronze Roman coin of Claudius

6.42 dating to AD41-54, found near the eastern bank of the Trent and a Roman settlement at Althorpe on the western bank.

6.43 The limited evidence for activity of the later prehistoric and Roman periods almost certainly reflects a lack of data and this may suggest the presence of potential domestic sites. This was a period of marine regression post c.500BC and the land to the east of the M181 may have offered drier conditions suitable for occupation, providing a base from which to exploit the adjacent marshland and moor to the west.

6.44 There are no known Early Medieval heritage assets recorded within the Site or the surrounding area. The Medieval period is represented within the study area by a number of sites. The predominant sites being those of the key settlements such as Burringham to the south that may have originated as part of the estate of the Burgredingas, or Althorpe to the west, Gunness to the north, the last two were mentioned in the Domesday Book. Within Burringham, a human skeleton was found with associated pottery dating the burial to the 14th-15th century. Within Althorpe 16th century records mention a medieval chapel dedicated to St James within the grounds of St Oswald's.

6.45 As with the earlier periods while the Site would have comprised marginal, unsettled ground, the exploitation of its natural resources during the medieval period should be expected, with continuation of these practices into post-medieval times.

6.46 The Post-Medieval period is represented by the site of the Althorpe to Burringham ferry and the road or track known as the Frodingham Causeway that linked Frodingham village to the ferry prior to the drainage and warping of the heath and marshes. The line of the Causeway passes through the northern area of the Site.

6.47 Ashby decoy duck pond survives within the golf course within the southern area of the Site. The pond was constructed in 1833 and was used until 1918. To the north of the Site lies the line of the Barnsley to Barnetby railway. The Trent, Ancholme and Grimsby Railway line opened in 1866 and included two branches to Gunness and Gunness Wharf on the Trent. The line later became part of the Manchester, Sheffield and Lincolnshire Railway, which in turn was renamed the Great Central Railway.

6.48 As well as the natural inundations of alluvium across the River Trent floodplain, the soils within the Site were warped during the during the 18th and 19th centuries. This involves the process of flooding agricultural land with turbid river water and allowing the sediment to settle on to the land surface before draining the water away. This results in the enrichment of the soil. There is extensive evidence for 18th to 19th century warping drains visible as soilmarks on aerial photograph and as low earthworks on LIDAR across much of the wider landscape of the Site. In archaeological terms, warping has the effect of burying earlier land horizons under a considerable depth of sediment.

6.49 Earl Beauchamp's Warping Drain and associated channels traversed the northern Site with a similar major system to the south. This area was the latest of the warping in the 19th century. Physical remains of the warping process that may be present include the drains and embankments as well as sluices and pumping engines to control the water levels and flow.

6.50 There are a number of modern assets around the Site, including the remains of a Second WorldWar bombing decoy, known as a "Starfish" site. This site comprises the record of the starfish site along with some crop marks visible on aerial photography that may relate to the generators/bomb shelters associated with its operation. This Decoy was likely to represent the industrial areas to the East of Scunthorpe.

6.51 Archaeological investigations in connection with individual planning applications on the Lincolnshire Lakes site have taken place since 2013 covering various sections of the Site. In the main these have comprised non-intrusive surveys across the northern and central areas of the present allocation site with some focussed work in the central and southern areas. These investigations include:

- Fieldwalking and metal detecting surveys across the northern and central areas of the Site that indicated that warping of the soils was widespread across the local landscape and that pre 18th to 19th century land surfaces remain buried beneath warp deposits.
- Geophysical surveys to the east and west of the M181 identifying numerous features including a potential prehistoric round barrow, warping drains and features and former field boundaries. The depth of alluvium and warp deposits is likely to have masked earlier and deeper buried features from identification using this survey technique.
- Geo-archaeological and palaeoenvironmental surveys including of the area of the Site to the west of the M181 where boreholes identified peat layers that likely formed from the Neolithic
- period onwards until being sealed by deposits of warp in to late 18th to 19th centuries, and areas of sand that may represent an ancient land surface as well as disturbance from later quarrying.
- The east of the M181 within the Site, boreholes revealed a sequence of deposits from the earliest to latest consisted of sands lying below peat deposits of varying thickness, followed by a silty to clay buried soil which was sealed by 19th century flood deposits associated with warping. Monolith samples taken from the boreholes and trial trenches of the peat deposits proved excellent preservation of pollen, spores and microcharcoal. Radiocarbon dating of selected peat samples showed that peat deposits had begun to develop in different locations and at different times across the evaluation area. The earliest date obtained (6631-6479 cal. BC) indicates the first peat deposits began to accumulate in the Mesolithic period.

- Recent excavation of trial trenches and test pits in the area of the M181 Northern Junction in the north half of site identified a deep deposit of peat and features associated with warping. A further series of geoarchaeological boreholes within the M181 Southern junction at the southern end of the Site has provided a deposit sequence of the earliest Sutton Sands forming relic river valleys that were then infilled during wetter conditions. The organic deposits are overlain by up to 2m of silty sand to clay representing natural overbank deposition or human induced floodplain accretion (Warp).
- Fewer archaeological investigations have taken place within the southern allocation Site but augering and geotechnical data has revealed the presence of peat deposits north of Grange Farm and on the western fringe of Scunthorpe.
- The results of the geoarchaeological deposit sequencing is enabling a deposit model of the Site to be built up, albeit in a piecemeal fashion, capable of informing the potential archaeological and palaeoenvironmental resource across the Site and the potential development impacts.
- The organic deposits have particular potential for well-preserved evidence of floodplain exploitation across 8000 years of human activity including very high potential for further palaeoenvironmental investigation relating to landscape reconstruction and potentially the recognition of human activity within the landscape.

6.52 Contribution of the site to the Significance of the Heritage Assets:

- The known and potential archaeology and palaeoenvironmental resource within the allocation site has evidential value to enhance the public understanding of the occupation and exploitation of this area from the early prehistoric to post-medieval periods. The sequence of deposits on the site, including the Sutton Sands and peat, has the potential to contain well-preserved artefacts and organic material of very high significance.
- However, the significance of the archaeological and palaeo-environmental interest is not fully understood across the allocation Sites due to large areas not yet investigated or where evaluation is incomplete, together with the lack of a full chronology for the peat and deposit sequence and an assessment of the preservation potential of the peat.
- The evidential value of the archaeological and palaeoenvironmental potential of the application site will contribute to the public understanding of the occupation and exploitation of the landscape of the Trent floodplain from early prehistory to modern times, a strategic objective of the East Midlands Historic Environment Research Framework https://researchframeworks.org/emherf/.
- The site also has high potential to contribute to the Research Agenda and Strategic Objectives relating to the prehistoric, Roman, Medieval and Post-Medieval periods and specific research agenda topics.
- The allocation site requires further assessment of the heritage significance. The results of additional archaeological field evaluation are necessary to inform this assessment. The field evaluation should comprise a geo-archaeological borehole survey of the Site to produce a deposit model of the underlying stratigraphic sequence, to target the taking of samples of the deposits for scientific dating purposes to establish a chronological framework for the site, and to assess the preservation potential for archaeological and palaeo-environmental remains.
- The results from these boreholes and sampling programme and a programme of geophysical survey will target the excavation of test pits and/or trial excavations to determine the nature and significance of remains. The results of these stages will inform the potential for mitigation to avoid harm and conserve the significance of the heritage assets, or where the harm is unavoidable and justified, a programme of appropriate recording.
- The drainage and warping of the area continued into the 19th century and created the modern-day characteristic flat treeless landscape drained by a network of drains and dykes. The Lincolnshire Historic Landscape Character data characterises the majority of the Site as Modern Fields with smaller areas of Parliamentary Planned Enclosure to the

north and south of the Site, and areas of plantation, woodlands and nature reserve. The historic landscape character does not contribute to the significance of the known heritage assets.

6.53 Likely Impact of Allocation on Heritage Significance:

- Development of this allocation site may result in the destruction of heritage assets of archaeological and palaeo-environmental interest that are potentially of high/very high significance.
- Engineering works, excavations and other groundworks associated with construction that result in the total loss of the archaeological significance is highly likely; this level of harm would be substantial.
- Development that overlies waterlogged deposits and remains left in situ is likely to compact deposits and alter the hydrology resulting in irreversible harm. Development would also prevent the possibility for future meaningful investigation of underlying remains, also amounting to loss of significance and substantial harm. Furthermore, drainage of this low-lying site would result in the dewatering of deposits likely to preserve significant remains, resulting in desiccation and total loss of significance.
- Future development will imprint itself on the historic landscape character, removing field boundaries replacing the existing pattern of the Parliamentary enclosure and modern fields in their entirety.

6.54 Heritage Constraints and Opportunities:

- The results of further geo-archaeological, archaeological and palaeo-environmental evaluation and assessment are required to identify to identify any constraints, mitigation requirements and opportunities for historic environment enhancements.
- Where such assessment leads to the identification of heritage assets that development would impact in the ways described above, measures to avoid or minimise the effects on areas of archaeological significance may be possible. This may involve, for example, modifying the layout of the development to avoid disturbing areas of high sensitivity, or employing construction design techniques to achieve in situ preservation where this does not conflict with the preservation conditions or the ability to carry out future investigation.
- Because the Site is so large and incorporates extensive areas of green space, avoiding areas of high sensitivity identified through further assessment may be possible. There should be opportunities to increase public understanding of the heritage assets through the provision of information and interpretation for significant archaeology and heritage sites.
- There are also opportunities to increase understanding of the heritage assets on this site through research and recording at assessment and mitigation stages.
- Where development that would result in the loss of archaeological heritage assets that may be considered justified in accordance with the tests of planning policies, provision should be made to record the evidence before it is lost either in advance of, or during, development. This may involve for example, full excavation of areas of the site followed by programmes of post-excavation assessment and analysis, the conservation of artefacts, and the publication of results and archiving the records.

6.55 The following recommendations have been made by the Council's Historic Environment Advisor and have been incorporated into the Lincolnshire Lakes policy SS7:

- The site contains known and potential heritage assets of archaeological interest including the palaeo-environment, potentially of high significance. The full extent and significance of the archaeological interest is currently unknown.
- Further assessment based on the results of geo- archaeological and archaeological field evaluation is required before the archaeological significance and the impact of

development can be adequately understood, however based on the current data, it may be possible to mitigate the adverse harm.

- Carry out the archaeological field evaluation and heritage assessment as outlined above at the earliest opportunity.
- Include a site-specific policy:
- Planning applications are to include a Heritage Statement comprising assessment of the non-designated heritage assets, including the results of geo-archaeological and archaeological field evaluation, demonstrating how the assessment has informed the development design. The Heritage Statement will describe the impacts on settings and significance and identify any constraints, mitigation requirements and opportunities for historic environment enhancements.

Flood Risk

6.56 Completion of the flood mitigation works to the Trent bank pursuant to PA/2017/1977. 3.9km of continuous steel sheet piling has been installed to reduce the likelihood of a breach. The works reinstated the flood embankment levels on the eastern side of the River Trent to the EA's original blue book level . A managed overflow area has been created, which will further mitigate the impact of any flood events, diverting flood water away from residential properties

6.57 All proposals will be required to submit a Flood Risk and Drainage Assessment in accordance with the site-wide Lincolnshire Lakes Flood Risk Assessment and Lincolnshire Lakes Drainage Strategy. In order to meet the minimum acceptable flood risk standard, the minimum floor level of proposed new development should be no lower than the 0.5% AEP plus Climate change flood level, plus 300mm freeboard allowance. Minimum floor levels for proposed new development should be checked against updated flood levels for the 0.1% AEP plus climate change event. An Integrated Flood Evacuation Plan will be prepared and implemented by the council, for the Lincolnshire Lakes development and the existing surrounding villages, through negotiations with individual developers and emergency planners. The plan will require a safe access route to be provided between the villages and Burringham and Gunness and the Lincolnshire Lakes development. The drainage of new development shall be designed to reduce surface water run-off rates to include the implementation of Sustainable Drainage Systems (SUDS), unless it can be demonstrated that it is not technically feasible. Surface Water should be managed in accordance with the Drainage Hierarchy, with methods to re-use and recycle water at source, employed where feasible to achieve high water efficiency in accordance with Policy DQE5: Managing Flood Risk and Policy DQE6: Sustainable Drainage Systems in this Plan

6.58 The Integrated Flood Risk and Drainage Mitigation Strategy determines platform levels across the site and calculates volumes required for surface water attenuation from the development parcels. Requirements of 95,050 cubic metres for the northern allocation (SSA7-1) and 35,150 cubic metres for the southern allocations (SSA7-2) have been incorporated into the policy to be secured through lakes, ponds and wetlands in the allocated zones for blue and green infrastructure. Detailed design to be left to developers of the site.

Open Space

6.59 A minimum of 40ha of blue and green infrastructure will be delivered as part of the strategic allocation, including a number of strategic green linkages between the villages and the existing urban area. These linkages will perform a multi-functional role for recreation, movement, biodiversity and flood mitigation. The flood mitigation solution must also include a fully considered geotechnical assessment demonstrating that the proposed flood mitigation solution is deliverable.. They will be multi functional to accommodate habitat creation and service water drainage in addition to maximising opportunities for recreational pursuits. Formal playing pitch provision will be

multifunctional and located adjacent/ within the primary schools to serve the needs of the primary schools and the local community. The council will require a equipped play provision to be integrated within the open space within each of the villages.

6.60 The Lincolnshire Lakes area will incorporate an interconnected network of good quality, multi-functional green infrastructure, including an adequate supply of different new junctions, following the de-trunking and de-classification of the M181 motorway. Alongside the Northern and Southern Junctions, strategic infrastructure interventions including green and blue infrastructure will be required to interlink these communities providing for recreational and leisure opportunities, biodiversity enhancement and surface water attenuation. All types of open space, in accordance with Policy DQE11: Green Infrastructure Network, Policy CSC3: Protection and Provision of Open Space, Sports and Recreation Facilities and Policy DQE3: Biodiversity and Geodiversity in this Plan

Employment

6.61 Creation of an advanced manufacturing park in place of the commercial park and previously approved football stadium.

6.62 The delivery of an Advanced Manufacturing Park at Lincolnshire Lakes on 25.15ha of land to the west of the Northern Junction will provide approximately 390,000m² of commercial floorspace to support the advanced manufacturing sector as well as create new and highly skilled jobs in Scunthorpe.

6.63 The Scunthorpe Advanced Manufacturing Park is a prime location for tier 1 and 2 supply chain to support existing businesses in the Yorkshire and Humber including Off-Shore Wind Manufacturers on the South Humber Bank, with excellent connectivity to Hull and Lincolnshire Universities, Able Marine Energy Park, gigabyte fibre to the premise and green energy.

6.64 The Advanced Manufacturing Park at Lincolnshire Lakes gives opportunity to be one of the first carbon neutral advanced manufacturing parks in the UK, supported by world class Research and Development to translational to prototype to assembly / manufacture.

6.65 Manufacturing is undergoing a historic transformation. Firms are diversifying their focus across different stages of the manufacturing process. Manufacturers are recognising the need to compete on value rather than cost. It is against this background that the Towns Fund Board seeks to provide opportunities for 'advanced manufacturer', to create higher level skilled jobs. Local firms are already seeking to reinvent themselves and seize new opportunities along the value chain. The Towns Fund will provide monies to buy land, infrastructure and develop governance and links to other AMPs.

6.66 Greater Lincolnshire is home to leading companies with specialisations including defence, agricultural, automotive and power systems technologies, as well as cutting-edge innovators in industrial robotics, automation and process industry systems. UK leading Industry 4.0 expertise, in areas including AI, machine learning, Data Analytics and the Internet of Things, extends across multiple research centres and businesses, working in partnership to improve productivity, efficiency and sustainability. The Advanced Manufacturing Park at Lincolnshire Lakes takes and develops Greater Lincolnshire's technological strengths which are complemented by a skilled advanced manufacturing workforce that is outstanding in the UK, supported by education providers working closely with businesses to deliver the skills they need. Additional benefits include an available cost-effective site, nearby Freeport incentives, and the connectivity and logistics required for fast access to UK and global markets.

6.67 The proposal is also in accordance and supported by the Greater Lincolnshire's Economic Plan for Growth (March 2021) which seeks to allowing innovation to thrive in Greater Lincolnshire, and upgrading business – such as from manufacturing to advanced manufacturing. It is also supported and aligned with the economic goals highlighted within the Council Plan and the Economic Growth Plan both of which seek to attract innovate investment and development whilst demonstrating the ability to evolve, innovate, progress and support the creation of new and highly skilled jobs

Retail and Community Facilities

6.68 The vision for Lincolnshire Lakes seeks to create a series of sustainable lakeside villages. In order to achieve this, it is important to consider the necessary commercial and community based land uses required to promote the creation of sustainable communities within each village. Each village is to be served by its own local centre to provide for immediate needs of the community. The policy supports a variety of commercial and community uses within each local of the centres to support the development of sustainable communities. The policy therefore supports the development of local centres each with an element of retail through the creation of a convenience store, other commercial, business, service and community uses, such as restaurants, cafes, professional services, creche, public house, health centre and community hall.

6.69 Consideration has been given towards the potential for retail development and possible impacts on Scunthorpe Town Centre. Whilst no updated retail impact assessment has been carried out, the former LLAAP evidence base methodology has been utilised to inform the quantum of retail floorspace appropriate to each allocation with regard to the number of dwellings proposed. In the northern allocation (SSA7-1) 1,275 dwellings are to be provided which equates to a retail floorspace requirement of 1,400sqm, split equally into two local centres, and in the southern allocation (SSA7-2) 875 dwelling are to be provided which equates to a retail floorspace requirement of 500sqm. Both retail thresholds have been set out in the policy.

6.70 A Health Infrastructure Needs and Capacity Assessment has been prepared to support the development of the local plan and ensure new development does not adversely impact health care infrastructure within the district. The report acknowledges that the development of Lincolnshire Lakes will increase the demand placed upon primary health care facilities. However, the report states that this need could be met through the expansion of nearby GP practices or through the establishment of new practices or satellite practices within the Lincolnshire Lakes area. Accordingly, policy SS7 has included health centres as permitted uses within the local centres alongside community halls which may accommodate satellite practice services.

6.71 Education, primary and secondary. A new three form entry primary school and associated playing pitches will be provided of a scale which will meet the expected requirement for school places generated by the new housing development. The primary school should be readily accessible to public transport, walking and cycling routes. Secondary education needs to be met through existing capacity in nearby secondary schools and through appropriate extensions as required proportionate to needs generated through residential development at Lincolnshire Lakes.

Viability

6.72 Plan wide viability to be produced by HEB. This will consider the Lincolnshire Lakes Strategic Site Allocation and provide robust assessment of the viability of the site. The site demonstrated its viability through the granting of planning permissions with s106 Agreements to provided the necessary on site infrastructure. The Council has completed the development of the River Trent bank flood mitigation works and the northern junction to the former M181 motorway. The delivery of these schemes have assisted with the

overall viability of the site and the Council will continue to secure public sector funding where appropriate to further deliver critical on site infrastructure.

7 Appendix 1 Summary of Water Vole Survey Results for the Lincolnshire Lakes Area (2012-2021)

Date	Surveyors	Methods	Results	Evidence	Comments
15 – 17 May 2012	Nicholas Pearson Associates	Area 4- spot checks every 50 metres. 20 minutes search per ditch Each ditch was then assigned one of the following categories: • No evidence of Water Voles found • Low activity e.g. only single latrine / feeding stations • Medium activity –(e.g. more than 2 latrines found, together with other evidence such as feeding stations, burrows etc.) • High activity - numerous signs recorded, e.g. typically 5 or more latrines recorded, often in conjunction with other evidence. Lucent Area 4 (Lake 1 north end) Northern Lincolnshire Lakes (Lucent) Area	Ditches which had previously found to be completely dry in September 2011 were found to hold water in May 2012 High activity and low activity ditches noted.	No detail of which drains had which field signs for Area 4. No photos of any field signs	A low activity ditch could be recorded on the basis of a single feeding station, giving potential for misidentification. 20 minutes per ditch perhaps suggests that searches were carried out from the crest of the banks.
Dec 2015	Haycock and Jay Associates Ltd	Extended Phase 1 Habitat survey Lake 1 Area	Potential habitat present	Wet drains are abundant through the site. Drains are generally , steeply sloped (approximately 45°-70°) with soil banks and bottom. The drains have a still to slow flow of a few centimetres depth,approximately1m wide water, with clear water and no signs of pollution. Tall grassland, marginal and swamp vegetation in combination with the drain conditions described above are ideal for water vole to shelter, forage, commute and burrow. Potential burrows noted.	A few centimetres depth may not be enough to support water vole. Water voles are generally inactive in December.
May-July 2016	Andrew Chick & Rod Strawson	All water courses were assessed for their potential to support water voles and a search was made for signs of use by water voles including feeding stations, burrows, latrine sites/droppings, runs through the vegetation, characteristic 'plop' sound as the animals enter the water and cropped grass around burrow entrances. Maltgrade area (inc Lake 1 south end)	There was superficial evidence suggesting the presence of water voles along several of the drainage ditches inspected. Small mammal burrows, feeding remains and small mammal tracks were recorded. No latrines were recorded during the Phase 1 survey.	Small mammal burrows, feeding remains and small mammal tracks were recorded. No latrines were recorded. Photos of drains, but not field signs.	

Date	Surveyors	Methods	Results	Evidence	Comments
14th June 2016	Andrew Chick & Rod Strawson	The water courses were assessed for their potential to support water voles and a search was made for signs of use by water voles including feeding stations, burrows, latrine sites/droppings, runs through the vegetation, characteristic 'plop' sound as the animals enter the water and cropped grass around burrow entrances. All field signs were marked onto a water vole recording form and a sketch map of the drain was produced. The survey was undertaken from within the ditches A small inflatable boat was employed to survey the section of Healey's drain. Maltgrade area (inc Lake 1 south end)	"During the June 2016 survey work water voles were recorded in TN1, TN2, TN9 and were considered highly likely to occur in TN12. No evidence of this species was found in TN5." Note – only TN9 and TN12 are in the Lake 1 Area.	TN1- two burrows, feeding remains, tracks (no latrines) Healey's drain- feeding remains and burrows (no latrines) TN5- too little water to support water voles. TN9 - two burrows, feeding remains and droppings in spring, nothing in June. TN12- no evidence Photos of feeding remains + burrows Note –only TN9 and TN12 are in the Lake 1 Area.	It should be noted that June 2016 was notable for a period of sustained rainfall and although no significant rain had been recorded within the 24 hours prior to the survey, it was considered that water levels (particularly in Healey's Drain) were higher than would be expected at the time of year.
11th October 2016	Haycock and Jay Associates Ltd	Water Vole Conservation Handbook - 3rd Edition The survey was undertaken from within the ditches. Evidence of water vole includes, but is not limited to, the presence of latrines, feeding stations, footprints, lawns, burrow entrances, paths and sightings of water vole themselves. Limitations of evidence and potential for confusion species noted. Lake 1 Area.	No conclusive evidence of water vole presence was identified at any of the drains (D1– 4) surveyed. Evidence of field vole activity, latrines and feeding stations, were identified throughout the drain.	Evidence of field vole activity, latrines and feeding stations, were identified throughout the drain. Drains dry or only 10-15cm deep No photos of any field signs.	Survey late, but still within survey period. Drains D5 and D6 not surveyed.
June and September 2017	Delta Simons	The survey focused on areas along, and immediately surrounding, the banks of the 34 on-Site drains. Suitably experienced ecologists undertook a search for evidence of water vole activity on 2nd, 5th and 26th June 2017 in the first half of the survey season and the 26th and 28th September 2017 in the second half of the survey season, which involved entering the water to undertake a fingertip search of the toe of the banks to at least 1 m either direction from the water's edge. This allowed for the identification of field signs associated with this species, including any burrow entrances, lawns, prints, latrines, droppings, mammal runs and feeding stations that may be present. The location of all water vole activity was recorded and mapped. In addition, evidence of any other riparian mammal activity, such as otter Lutra Lutra and American mink Neovison vison, was recorded. Northern Lincolnshire Lakes (Lucent) Area	Nine drains located within the Site boundaries were found to support water voles during the June 2017 surveys, however, water vole activity was only recorded on a single drain in September 2017. The Site was assessed to support a medium relative population that appears to utilise the Site seasonally, or as conditions allow.	Burrows, latrines and feeding stations identified. No photos of any field signs.	In June 2017 in particular, a number of watercourses were overgrown with dense bankside vegetation that obstructed the channel. Where sections of the watercourses were accessible 'spot checks' were undertaken. In September 2017, the banks of a number of watercourses had recently been flailed which gave greater access to the waterbody, but meant that the long vegetation potentially covered any recent evidence of riparian mammals. Seven drains (D1, D2, D2.5, D2.8, D3, D4, and D16) were not accessible during either survey due to their proximity to the M181. Drains D3.10, D3.11, D3.11a, D9, D10, D15ii, and D15ii were dry at the time of the June and September surveys, all were walked in their entirety on both occasions.

Date	Surveyors	Methods	Results	Evidence	Comments
June and September 2017	Delta Simons	The survey focused on areas along, and immediately surrounding, the banks of the 34 on-Site drains. Suitably experienced ecologists undertook a search for evidence of water vole activity on 2nd, 5th and 26th June 2017 in the first half of the survey season and the 26th and 28th September 2017 in the second half of the survey season, which involved entering the water to undertake a fingertip search of the toe of the banks to at least 1 m either direction from the water's edge. This allowed for the identification of field signs associated with this species, including any burrow entrances, lawns, prints, latrines, droppings, mammal runs and feeding stations that may be present. The location of all water vole activity was recorded and mapped. In addition, evidence of any other riparian mammal activity, such as otter Lutra Lutra and American mink Neovison vison, was recorded. Northern Lincolnshire Lakes (Lucent) Area	Nine drains located within the Site boundaries were found to support water voles during the June 2017 surveys, however, water vole activity was only recorded on a single drain in September 2017. The Site was assessed to support a medium relative population that appears to utilise the Site seasonally, or as conditions allow.	Burrows, latrines and feeding stations identified. No photos of any field signs.	In June 2017 in particular, a number of watercourses were overgrown with dense bankside vegetation that obstructed the channel. Where sections of the watercourses were accessible 'spot checks' were undertaken. In September 2017, the banks of a number of watercourses had recently been flailed which gave greater access to the waterbody, but meant that the long vegetation potentially covered any recent evidence of riparian mammals. Seven drains (D1, D2, D2.5, D2.8, D3, D4, and D16) were not accessible during either survey due to their proximity to the M181. Drains D3.10, D3.11, D3.11a, D9, D10, D15ii, and D15ii were dry at the time of the June and September surveys, all were walked in their entirety on both occasions.
May 2020	WSP	Water Vole Conservation Handbook - 3rd Edition The survey comprised one visit within the appropriate season, incorporating three elements: ▪ A walked survey of the entire length of the watercourses within the Survey Area to conduct a thorough visual inspection of the banks and immediate vicinity for water vole or their field signs. (Field signs include faeces, latrines, feeding stations, burrows, 'lawns', nests, footprints and runways in vegetation); ▪ The recording of habitat variables and features relevant to water vole ▪ The recording of any field signs or evidence relating to otter Lutra lutra, mink Neovision vison or brown rat Rattus norvegicus). M181 Northern Junction Area	Water vole were confirmed to be present within Earl Beauchamp's Warping Drain (D3.1). Connected channels were largely dry and overshadowed by shrub vegetation and therefore unsuitable for water vole.	Evidence spread across the length of the ditch. A total of 19 burrows, 17 latrines and seven feeding stations. Medium population density. Photos of field signs provided.	Ditches D2 and D16 adjacent to the M181 carriageway could not be accessed due to health and safety restrictions. These were surveyed at a distance of approximately 3m from beyond the fence line. They were heavily scrubbed over, part canalized to the north and unlikely to support water vole. As the survey was completed during the spring period only and not able to be supplemented with a subsequent survey visit during autumn, during or following the main breeding season, survey data should be considered representative of the minimum distribution of water vole within the Survey Area.

8 Appendix 2 The Lincolnshire Lakes Strategic Design Guide (2016): Landscape and ecology

Landscape

Strategic Objectives Strategic Objectives

- Retain existing landscape features of woodlands, hedgerows, grasslands and ditches and integrate with proposed development
- Create strategic east-west and north-south green infrastructure links
- Use landscapes to provide separation between villages
- Integrate wildlife habitats throughout the proposed development
- Prepare a typology of landscape planting to contribute to sense of place

Landscape setting

- Provide a landscape setting that contributes to the identity of each village
- Landscape setting to integrate development into wider area

Edges to Lincolnshire lakes

- Propose landscape edges appropriate to the location

Green infrastructure links

- Create green infrastructure (GI) links along existing network of ditches and drains
- Propose new links to extend GI coverage
- Use links to accommodate pedestrian and cycle movement

Village landscapes

- Network of village greenspaces to contribute to distinctive character

Ecology

Strategic Objectives

- Retain existing valued ecological features
- Create new habitats which contribute towards English Priority and Lincolnshire Biodiversity Action Plans
- Accommodate appropriate habitats in green infrastructure links to ensure connectivity between existing and proposed habitats.

Key elements to be delivered:

- Series of freshwater bodies
- Wetland habitat mosaics including open water, ponds, wet grassland, marsh, reed bed and wet woodland.
- Crossing points of built infrastructure for wildlife

Habitats creation and enhancement

- Appropriate broadleaved woodland including canopy trees, understorey, shrub layer, ground flora, dead wood, rides and glades.
- Location – to greenspaces west and south of village 1 and greenspaces to the east and south of villages 3 and 4

Acid grassland

- Dry grasslands on sandier substrates
- Seasonally flooded grasslands on deeper peaty soils
- Location:
- East of villages 1-4
- Greenspaces linking village 3 and 4

Neutral grassland

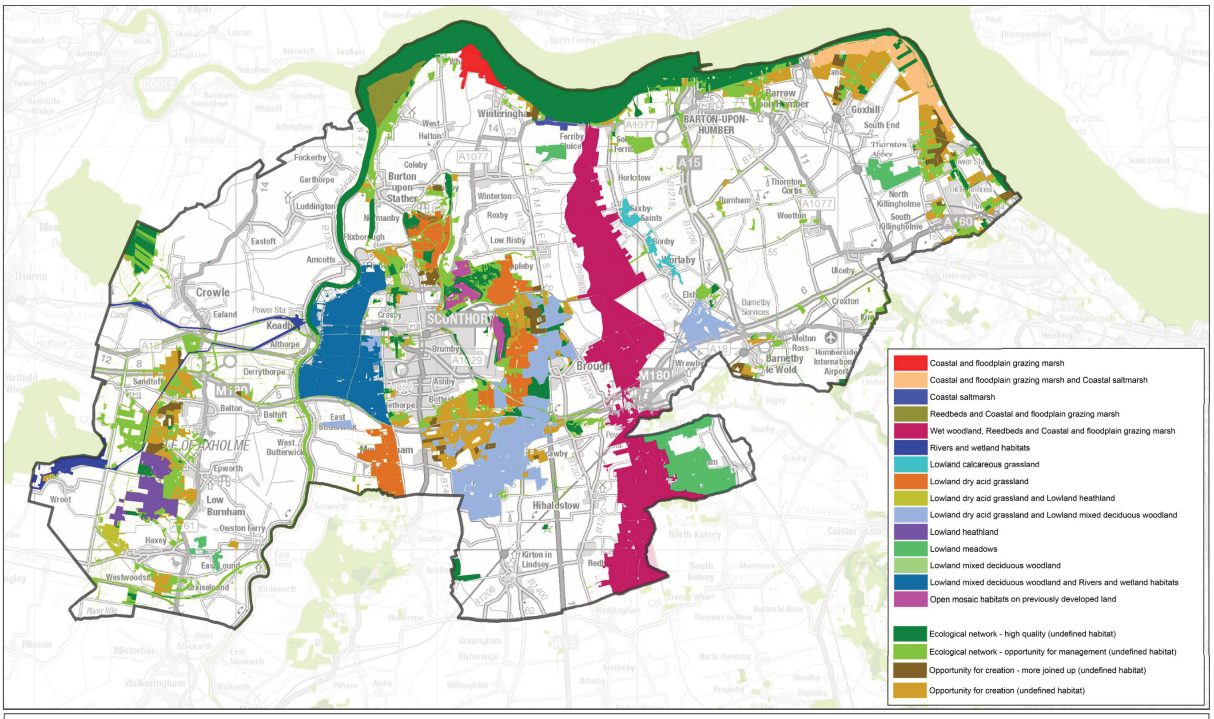
- Location – greenspaces west of villages 5 and 6

Wetlands

- Location – perimeter of lakes 3 and 4

9 Appendix 3 North Lincolnshire Biodiversity Opportunity Mapping: Habitat Opportunities

North Lincolnshire Biodiversity Opportunity Mapping
Habitat opportunities



Map created: 11/06/2019	Created by: CB