



Lincolnshire Minerals and Waste Local Plan Core Strategy and Development Management Policies

Adopted June 2016



LINCOLNSHIRE MINERALS AND WASTE LOCAL PLAN

CORE STRATEGY AND DEVELOPMENT MANAGEMENT POLICIES

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1 INTRODUCTION

- 1.1 Lincolnshire County Council is responsible for minerals and waste planning in the County. It has prepared this document, the **Core Strategy and Development Management Policies** document, as the first part of a new **Lincolnshire Minerals and Waste Local Plan**. This Core Strategy and Development Management Policies document sets out the key principles to guide the future winning and working of minerals and the form of waste management development in the County up to 2031. It also sets out the development management policies against which planning applications for minerals and waste development will be considered. The second part of the Lincolnshire Minerals and Waste Local Plan, the **Site Locations** document, is still in preparation and will in due course include specific proposals and policies for the provision of land for mineral and waste development.
- 1.2 The Core Strategy and Development Management Policies document replaces the Lincolnshire Minerals Local Plan (1991) and most of the policies in the Lincolnshire Waste Local Plan (2006) with the exception of Policies WLP2, WLP6 and WLP12 of that document. These policies are saved until the Site Locations document has been adopted (see Appendix 1).

The Scope and Nature of the Core Strategy and Development Management Policies

- 1.3 This document includes the vision, objectives, spatial strategy and development management policies for minerals and waste development in Lincolnshire over the period to the end of 2031. It should provide the minerals and waste industry, the general public, interest groups and all other interested parties with a clear understanding of the strategy in Lincolnshire regarding the future scale and pattern of mineral working and waste facilities, and how they will be controlled. It does not include site allocations as these will be identified through the Site Locations document.
- 1.4 The document consists of a written statement and reasoned justification in support of the policies and proposals. The document also includes a monitoring framework which identifies the targets and indicators to review the effectiveness of the policies.
- 1.5 The document is to be read as a whole and policies should not be interpreted in isolation. Phrases or terms with a particular meaning within the policies are defined in the glossary. Policies are not listed in priority order and where a policy includes specific criteria or proposals these are not in any order of priority, unless specifically stated. The document has been developed in line with national legislation and policy. However, national policy is not repeated in policies.

- 1.6 The document is supported by the following background and evidence base documents:
- Sustainability Appraisal
 - Habitats Regulations Assessment
 - Local Aggregate Assessment
 - Waste Needs Assessment
 - Minerals Background Paper
 - Minerals Safeguarding Background Paper
 - Restoration Background Paper
 - Consultation Statement
 - Duty to Cooperate Statement

Sustainability Appraisal

- 1.7 The production of a Sustainability Appraisal (SA) report is mandatory under Section 39(2) of the Planning and Compulsory Purchase Act 2004. The purpose of an SA is to promote sustainable development through the integration of social, environmental and economic considerations into the preparation of planning policy documents. It also fulfils the requirements of the EU Strategic Environmental Assessment Directive. The Council has to date had sustainability reports carried out on all the consultation documents listed above. This document has also been subject to sustainability appraisal. A key element of this is the testing of Mineral and Waste policies against SA objectives in order to identify likely impacts of the policies and any mitigation required.

Habitats Regulations Assessment

- 1.8 Appropriate Assessment/Habitat Regulations Assessment (HRA) of land use plans is required under the European Communities (1992) Council Directive 92/43/EEC (the 'Habitats Directive'). HRA provides for the protection of 'European Sites' (also known as 'Natura 2000' or 'N2K' sites), these are sites which are of exceptional importance in respect of rare, endangered or vulnerable natural habitats and species within the European Community.
- 1.9 A Habitat Regulations Assessment (HRA) Scoping Report of the potential effects of the Local Plan Core Strategy and Development Management Policies on the *Natura 2000* network has been undertaken. The policies within the document have been 'screened out' as not requiring a full Appropriate Assessment, largely due to the wording of the policy regarding the protection of internationally important biodiversity sites (DM7). The HRA concludes that there are no likely significant effects from the policies either alone or in combination with other projects and plans.
- 1.10 A HRA Scoping Report was prepared for the draft Core Strategy and Development Management Policies document. Changes were made to policies at that stage in the light of the recommendations contained in the HRA. One European Site ('Baston Fen' SAC) falls within a proposed area of search for Sand and Gravel extraction. This consists of a 2km long main drain, the Counterdrain, which runs alongside the Fen. The HRA recommends that any proposals for new sand and gravel

extraction/washing works within the catchment of Baston Fen SAC should either ensure that they remain above the water table and/or do not abstract water for gravel washing or undertake a project-level HRA to demonstrate that no likely significant effects on the SAC will occur. Reference to project level HRA is included in paragraph 7.57 of this document and the nature of working at new sites within the areas of search will be looked at further as part of the development of the Site Locations document when specific sites are to be identified.

Duty to Co-operate

- 1.11 Under Section 33A of the Planning and Compulsory Purchase Act 2004, as inserted by s110 of the Localism Act 2011, the Council is now required to formally co-operate with other local planning authorities and bodies prescribed in regulation 4(1) of The Town and Country Planning (Local Planning) (England) Regulations 2012. This is to maximise the effectiveness of the preparation of the Local Plan and supporting activities so far as it relates to strategic matters. The Council and others are required to engage constructively, actively and on an ongoing basis. Regard must also be had, under section 33A(9) and regulation 4(2), to the activities of the Local Enterprise Partnership as they relate to the Local Plan and supporting activities. The Council has carried out engagement with other local planning authorities and bodies throughout the preparation of the Local Plan.

2 LEGISLATIVE AND POLICY CONTEXT

Introduction

- 2.1 The Plan has been prepared to comply with the legal requirements of the Planning and Compulsory Purchase Act 2004, the Planning Act 2008, the Town and Country Planning (Local Planning) (England) Regulations 2012 and the National Planning Policy Framework. The Minerals and Waste Local Plan must be consistent with European and National policy.

Sustainable Development

- 2.2 Sustainable Development is at the centre of the planning system. The UK Sustainable Development Strategy "Securing the Future" has five guiding principles, namely living within the planet's environmental limits; ensuring a strong, healthy and just society; achieving a sustainable economy; promoting good governance; and using sound science responsibly. This builds upon strategies and policies in place at the international level to promote sustainable development and tackle climate change.

European Legislation

- 2.3 The Minerals and Waste Local Plan must reflect and where appropriate comply with European directives and legislation. This includes those relating to waste and environmental protection.
- 2.4 The EU Waste Directive¹ is the overarching legislative framework for the collection, transport, recovery and disposal of waste and sets out the requirements of Member States in relation to the management of waste and the basic waste management definitions. These regulations have been transposed into English law under the Waste (England and Wales) Regulations 2011. Guidance on the implementation of the planning requirements of the Waste Framework Directive has been published by the Department of Communities and Local Government². In addition the Landfill Directive³ sets targets for the reduction of biodegradable waste going to landfill and sets the technical criteria for preventing and reducing the adverse effects of landfilling on the environment as well as a reduction in the amount of waste being sent to landfill. Other relevant Directives include those relating to the management of end of life of vehicles and waste electrical and electronic equipment (WEEE)⁴.
- 2.5 For plan making the requirements of the Strategic Environmental Assessment Directive and the Habitats Directive must be taken into

¹ Directive on Waste (2008/98/EC) (transposed into English law under the Waste (England and Wales) Regulations 2011 and the Waste (England and Wales) Amendment Regulations 2012)

² Guidance for local authorities on implementing planning requirements of the European Union Waste Framework Directive (2008/98/EC)

³ Directive on the Landfill of Waste (99/31/EC) (transposed into English law under the landfill (England & Wales) Regulations 2002)

⁴ Waste Electrical and Electronic Equipment Directive (2002/96/EC); Restriction of Hazardous Substances in Electronic and Electronic Equipment (RoHS) (2002/95/EC)

account⁵. A Sustainability Appraisal incorporating the requirements of the Strategic Environmental Assessment Directive and a Habitats Regulation Assessment Screening Report as required by Habitats Directive has been carried out. The policies in the plan must also take into account Directives in relation to wild birds, noise, air quality and water⁶.

National Planning Policy

- 2.6 The National Planning Policy Framework (NPPF, March 2012), known as the Framework, sets out the Government's overarching planning policies for England. This is supported by online Planning Practice Guidance. The overarching aim of the NPPF is to achieve sustainable development by ensuring economic, social and environmental gains are sought jointly and simultaneously through the planning system. At the centre of this is a presumption in favour of sustainable development. For plan making this means that Local Plans must positively seek to meet the development needs of the area with clear guidance on how the presumption in favour of sustainable development will be applied locally.
- 2.7 Local Plans must have regard to national policies and advice. The Framework includes general policies that must be taken into account in plan making as well as specific policies for minerals development. However, it does not contain specific waste policies, as these are set out in the separate National Planning Policy for Waste (October 2014).
- 2.8 In relation to minerals the Framework sets out how Local Planning Authorities should facilitate the sustainable use of minerals. Local Plans should include policies for the extraction of minerals of local and national importance in the plan's area and wherever possible substitute secondary and recycled materials for primary materials to preserve natural resources. Mineral safeguarding areas must also be identified to safeguard mineral resources from non-mineral development as well as policies setting out the environmental criteria and requirements for restoration and aftercare against which planning applications for mineral development will be assessed.
- 2.9 For waste planning, the National Planning Policy for Waste sets the national framework for planning for waste management. It outlines the planning system's key roles in delivering the new facilities that are essential for implementing sustainable waste management and protecting the environment and human health. The emphasis is on delivering sustainable development, driving waste up the waste hierarchy, seeing waste as a resource and disposal as the last option. It requires communities to take responsibility for their own waste and for planning authorities to assist in delivering waste management facilities required.

⁵ The Conservation of Natural Habitats and Wild Flora and Fauna Directive (92/43/EC) (transposed into UK law under the Conservation of Habitats Species Regulations 2010); The Strategic Environmental Assessment Directive (transposed into UK law under the Environmental Assessment of Plans and Programmes Regulations 2004)

⁶ Conservation of Wild Birds Directive (2009/147/EC); Water Framework Directive (2000/60/EC); Air Quality Directive (2008/50/EC); Environmental Noise Directive (2002/49/EC)

These must be in appropriate locations and for a range of waste management facilities including for disposal.

- 2.10 The National Planning Policy for Waste sits alongside the National Waste Management Plan, published in December 2013, which sets out how England will support and implement the requirements of the Waste Framework Directive including the application of the waste hierarchy and proximity principle. It includes the current waste management situation in England and an assessment of the need for new waste management infrastructure. The Plan includes a commitment to a more sustainable approach to the use of waste materials, delivering environmental benefits and supporting economic growth. It prioritises the management of waste in line with the waste hierarchy and in a manner that reduces the carbon footprint. There is also an emphasis on encouraging waste prevention and reuse and greater resource efficiency.

Existing Planning Policies and Strategies

- 2.11 The policies in this Core Strategy and Development Management Policies document replace those in the former Lincolnshire Minerals Local Plan (1991) (MLP) and the majority of the policies in the adopted Lincolnshire Waste Local Plan (2006) (WLP). Some of the policies in the WLP (2006) will be retained until the Site Locations document is also adopted. A table showing the relationship between the policies in this document, the Site Locations Document and policies to be retained/replaced in the MLP and WLP is set out in Appendix 1.
- 2.12 The **Waste Local Plan** (WLP) was adopted in 2006. All of its policies were saved by the Secretary of State in 2009. The WLP contains the following main aim: *'To provide a strategy and policy framework for sustainable waste management in Lincolnshire in accordance with the principles and objectives of the national waste strategy and the principles of regional self-sufficiency and the proximity principle.'*
- 2.13 The **Statement of Community Involvement** (SCI) was adopted in September 2007, and subsequently updated in autumn 2014. It is a clear statement of how and when the County Council intends to achieve continuous, meaningful and mutually beneficial community involvement on planning matters. The SCI sets out what the community will be consulted on and when and how this will be carried out.
- 2.14 There are seven districts in Lincolnshire: Boston, City of Lincoln, East Lindsey, North Kesteven, South Holland, South Kesteven and West Lindsey. A new planning area has been agreed between the Districts of West Lindsey, City of Lincoln and North Kesteven District Councils to produce a Central Lincolnshire Local Plan, currently proposed to be adopted in 2016. South Kesteven DC adopted its Core Strategy in July 2010 and its Site Allocation and Policies DPD in April 2014. East Lindsey DC consulted on a draft Core Strategy in October 2012. Boston BC and South Holland DC are also working together with the County Council to prepare a Local Plan for South East Lincolnshire and are hoping to adopt the Plan in 2016.

Relationship to other Council Plans and Strategies

- 2.15 The Minerals and Waste Local Plan is one of the key delivery documents for the priorities and development needs of Lincolnshire. It supports the delivery of other plans and strategies of the County Council including the Corporate Plan, the Joint Municipal Waste Management Strategy and the Local Transport Plan.
- 2.16 The **Joint Municipal Waste Management Strategy** (JMWMS) provides a structure that will enable the eight partnering authorities of Lincolnshire and the Environment Agency to effectively manage the municipal waste produced in the County. Collectively these partnering authorities are known as the Lincolnshire Waste Partnership (LWP). The Strategy was adopted by the County Council in June 2008 and contains ten key objectives for the management of municipal waste.
- 2.17 The LWP are in the process of reviewing the JMWMS, including looking at options for closer joint working, and suitable objectives and targets which reflect the use of Energy from Waste as opposed to landfill.
- 2.18 **Lincolnshire County Council's Natural Environment Strategy** was published in 2012. The Strategy along with a number of other documents forms part of the Council's overarching Environmental Management Strategy. It sets out a clear set of priorities within a national framework, and within the Council's corporate vision and objectives, in order to provide Council services, local communities and businesses and partner organisations with clarity and confidence about the approach the Council will take in working with the natural environment.
- 2.19 The County Council, as Lead Local Flood Authority, is required to implement and monitor a Local Flood Risk Management Strategy. Accordingly, the Joint **Lincolnshire Flood Risk and Drainage Management Strategy** was developed through public and stakeholder consultation during 2011 and 2012, and was approved by the County Council's Executive on 4th December 2012. The purpose of the Strategy is to increase the safety of people across Lincolnshire by reducing the number of people at risk of flooding, increasing the resilience of local communities and reducing the impact of flooding.
- 2.20 NHS Lincolnshire and Lincolnshire County Council have now agreed the **Joint Health and Wellbeing Strategy for Lincolnshire 2013 – 2018**. This is the first Joint Health and Wellbeing Strategy (JHWS) for Lincolnshire. It has been produced by the Lincolnshire Shadow Health and Wellbeing Board and is based on the five priorities identified in the Joint Strategic Needs Assessment for Lincolnshire. The JHWS is a document that aims to inform and influence decisions about health and social care services in Lincolnshire so that they are focused on the needs of the people who use them and tackle the factors that affect everyone's health and wellbeing.
- 2.21 Lincolnshire's 4th **Local Transport Plan** (LTP4) covers the Council's transport strategy for the period from 2013/14 to 2022/23. Its policies

are set within an overall vision of how Lincolnshire's transport system will develop in the longer term beyond 2022/23. The 'Vision for 2030' shown below was adopted for previous LTPs and has been carried forward to LTP4:

- There is a good inter- and intra- regional access to support a growing economy.
- There is good access by a choice of modes to services, jobs and for leisure within Lincolnshire.
- Our streets in built-up areas are seen primarily as places where people can carry on their activities in a pleasant environment.
- There is a well-managed and safe road network to maximise the reliability of journeys and reduce the impact of traffic on communities.
- Our sensitive rural areas are managed in ways that retain, and where possible, enhance the value of the natural environment.

3. SPATIAL PORTRAIT AND ENVIRONMENTAL ASSETS

Settlement Character

- 3.1 The settlement pattern of Lincolnshire is made up of the Principal Urban Area of Lincoln; the Sub-Regional Centres of Boston, Grantham and Spalding and several market towns, smaller villages and hamlets. Growth Point status was previously granted to Lincoln, Grantham and Gainsborough. The East Midlands Regional Plan 2009 (revoked in 2013) listed Bourne, Gainsborough, Louth, Skegness, Sleaford and Stamford as 'Main Towns'. Although the RSS has been revoked, the Minerals and Waste Local Plan has retained reference to the 'main towns' to guide future waste and minerals requirements.

Administrative Boundaries and Neighbours

- 3.2 Lincolnshire is within the East Midlands Region, bounded by the Yorkshire and Humber Region to the north and the East of England Region to the south. Nottinghamshire, Leicestershire, Rutland, Northamptonshire, City of Peterborough, Cambridgeshire, Norfolk, North-East Lincolnshire and North Lincolnshire border the county – along with 80km of North Sea coastline.
- 3.3 There are seven districts in Lincolnshire: Boston, City of Lincoln, East Lindsey, North Kesteven, South Holland, South Kesteven and West Lindsey.
- 3.4 Lincolnshire is a predominantly rural shire covering 5,921sq km (2,286sq miles) with a population of 724,500⁷, dispersed across the County; it is the fourth largest county in England and the fourth most sparsely populated (density of approximately 122 per sq. km). This provides fundamental difficulties concerning the provision of a comprehensive and modern infrastructure network. Lincolnshire had 307,000 households as at the 2011 Census and the number is expected to grow significantly over the plan period to 2031.

Transport

- 3.5 The highway network in Lincolnshire is extensive, totalling over 9,000km of road; however there are no motorways in Lincolnshire and only 66km of dual carriageway. The A1 trunk road runs down the western boundary of the county and the A46, A57, A52, A15, A16, A17 routes link settlements throughout Lincolnshire. Accessibility is an issue throughout Lincolnshire, but more so in the more rural isolated parts of the County. There are particular problems in travelling east/west.
- 3.6 Local rail services operate within the county and connect the main towns/villages to the surrounding regions. Midland Trains operate a daily direct service to London via Nottingham, as does East Coast Mainline from

⁷ Office for National Statistics – Mid-2013 Estimates

Lincoln to London. The East Coast Mainline runs along the western side of the county, through Grantham, to London.

- 3.7 There are ports at Boston and Sutton Bridge. The ports of Grimsby and Immingham, just outside the county, are also significant and generate commercial traffic that impacts on Lincolnshire's transport networks. The River Trent runs along some of the County's western border and has established routes for waterway traffic.

Land-use & the Economy

- 3.8 Farming is still a major industry in Lincolnshire, as is manufacturing. A broad estimate (constructed from BRES 2010 and DEFRA data) suggests around 15,000 are employed in agriculture and around 31,500 in manufacturing. Both activities are restricted to certain parts of the County. The food industry is concentrated to the south of the County. Tourism is significant along the coast, in and around the Lincolnshire Wolds and historic settlements.
- 3.9 Unemployment rates have fallen recently, and are relatively low in Lincolnshire. The unemployment claimant rate for October 2014 was 1.9%, compared with 2.1% for England and Wales.
- 3.10 The Business Monitor PA1007, covering Minerals Extraction in Great Britain, indicates that 268 jobs were involved with mineral extraction in Lincolnshire in 2010. Of these, 67% were directly employed, 5% were contractors and 28% were drivers. Most jobs were at limestone and sand and gravel quarries, which employed 53% and 46% of total employees involved with mineral extraction respectively.
- 3.11 The south of the County contains some of the highest grade agricultural land in England; 44% of all agricultural land in the county is classified as being of either Grade 1 or 2 quality. Most of this land is within the eastern and southern parts of the County.

Landscape

- 3.12 The county of Lincolnshire has a diverse and distinctive landscape. Landscape character – what makes a particular area unique – is an important aspect to be taken into account when considering the impacts of development; in this case the location, operation and restoration of mineral and waste sites.
- 3.13 England is divided into 159 National Character Areas (NCA), each defined by a unique combination of landscape, biodiversity, geodiversity and

cultural and economic activity⁸. While several NCAs cover the county of Lincolnshire, three are of particular relevance to this Plan:

- NCA 44 – Central Lincolnshire Vale (covering the Central Lincolnshire Area of Search)
- NCA 46 – The Fens (covering most of the South Lincolnshire Area of Search)
- NCA 48 – Trent and Belvoir vales (covering the Lincoln-Trent Valley Area of Search).

3.14 Environmental assets and "Statements of Environmental Opportunity" for each area, as published by Natural England, will be taken into account in the implementation of policies within this Plan, particularly those relating to the restoration of mineral sites.

Natural Environment

3.15 The countryside and its associated natural environment have long been recognised as one of Lincolnshire's principal assets. In addition to nationally designated areas such as the Lincolnshire Wolds AONB, the Wash and Gibraltar Point, the county's whole character and distinctiveness is framed by its essentially open, rural and tranquil image. The coastal area of Lincolnshire is a defining feature of the county; it has a variety of land-uses linked to agriculture, settlements and tourism, and plays an important role in terms of the natural environment. The County's main assets, areas and features, along with associated landscape scale initiatives, are summarised below.

3.16 The **Lincolnshire Wolds Area of Outstanding Natural Beauty** (AONB) lies in the north-eastern quarter of the County, mid-way between Lincoln and the coast, surrounded by relatively flat fens, coastal marsh and the Lincoln Clay Vale. The AONB comprises an area of 558 km² (216 miles²), while the wider Lincolnshire Wolds National Character Area incorporates the two neighbouring areas of the 'Spilsby Crescent' to the south and the remaining chalk uplands to the north. The Lincolnshire Wolds is one of only two nationally protected landscapes in the East Midlands and provides the principal aquifers for the nationally important Lincolnshire Chalk Streams resource. The statutory Lincolnshire Wolds AONB Management Plan (2013-2018) includes the strategic and action plan for protecting and enhancing the highly scenic landscapes of the Wolds.

3.17 The **Coversands** of north-west Lincolnshire are fine windblown deposits laid down around the shores of a large lake which filled the Trent valley in late glacial times. The blown sand gave rise to special landscape features such as sandy warrens and inland dune systems. The Coversands heaths include dry heath, wet heath, lichen heaths and extensive communities of acid grassland, forming a rich mosaic of habitats. Historical evidence suggests there were once some 60,000 hectares of Coversands heaths, most of which would have been heathland. But there has been a dramatic loss due to competing land uses - primarily forestry, sand and gravel quarrying, intensive agriculture and urban expansion. Today, around 700

⁸ <http://www.naturalengland.org.uk/publications/nca/default.aspx>

hectares of Coversands heathland remain. In 2003, a five-year project was launched to restore and re-create Coversands heathlands.

- 3.18 The **Lincolnshire Limewoods** area includes a concentration of woodland between Wragby, Bardney and Woodhall Spa to the east of Lincoln. The woodlands themselves cover 382 hectares and are collectively designated as the Bardney Limewoods National Nature Reserve. The woods in this area are special because they are one of the few areas of woodlands characterized by small-leaved lime remaining in Britain. Many of the woods have ancient origins dating back to the Domesday Survey. Unfortunately, over time, many of the woods have been lost or dramatically changed. Those that remain are important habitats for species that are locally or nationally threatened. One of the aims of the Lincolnshire Limewoods Project, which started in 2005, was to restore habitat linkages by extending the existing woodlands. To date, over 130 hectares of new native woodland and over 26km of new hedgerows have been planted across the Limewoods area.
- 3.19 The **Lincolnshire Coastal Grazing Marshes** stretch from Grimsby to Gibraltar Point just inland from the coast. The marshes are particularly important for a number of wading and other bird species. For these birds, the seasonally wet grassland is key for feeding and roosting. Coastal and floodplain grazing marshes are identified as habitats of principal importance within the Natural Environment and Rural Communities Act (2006) and there are a number of important nature reserves in the area. Although much of the traditional grazing marsh has disappeared, there are still pockets of land which show us how this pastoral landscape would have looked 100 years ago, and where some of its native flora and fauna can still be found. The Lincolnshire Coastal Grazing Marshes Project is a partnership project which supports local farmers and landowners to conserve the remaining traditional grazing marsh landscape and heritage.
- 3.20 The **Lincolnshire Coastal Country Park** is located between Sandilands and Chapel St Leonard's, covering approximately five miles of coastline and up to 22 square miles of coastal hinterland. The area comprises working farmland, established nature reserves (reedbeds and wetlands) and coastal dunes, providing accessible natural greenspace for residents and visitors. The partnership, led by Lincolnshire County Council, is working to link together existing wildlife sites by creating new nature reserves with wetland, reedbed and grazing marsh habitats, along with creating new access routes and supporting the development of a year-round tourist destination.
- 3.21 Situated to the south-west of Lincoln, the concept of the **Witham Valley Country Park** is to create an easily accessible network of managed outdoor places to encourage residents and visitors to make the most of the green spaces, historic sites and leisure facilities that are available to them in and around Lincoln. The idea is not to create new facilities, but simply make the most of what Lincolnshire already has by improving accessibility and raising awareness. Restoration of mineral sites in the area will play an important role in developing the Park's assets.

- 3.22 The **South Lincolnshire Fenlands Project area** covers approximately 7000 hectares of land centred on the nationally important Baston and Thurlby Fens Nature Reserves and Sites of Special Scientific Interest (SSSI). The South Lincolnshire Fenlands Partnership aims to restore and re-create up to 800 hectares of fenland between Bourne, Spalding and Market Deeping as part of the Fens for the Future Partnership. Habitat restoration includes creation of wet grasslands for grazing and hay production; reedbeds, wet woodland and open water. Restoration of mineral sites in this area will provide opportunities for fenland habitat creation and wider multifunctional benefits through well thought out landscape scale restoration for, agriculture, the environment, water resources, flood defence and access to the countryside.
- 3.23 The **Kirkby Moor / Bain Valley** area, centered on the Lincolnshire Wildlife Trust reserves at Kirkby Moor and Kirkby Gravel Pit, provides an opportunity to develop an extensive area of new wildlife habitat including heathland, wet woodland and acid grassland. Restoration of mineral sites along the River Bain will provide further opportunities for habitat creation in this area.
- 3.24 The **Trent Valley / floodplain** is an important area for mineral production, incorporating one of the "Areas of Search" for sand and gravel extraction. The RSPB's Trent and Tame Futurescape programme aims to create "a wetland corridor from Birmingham to the Humber that is rich in nature and an inspirational place to live, work and visit".

Internationally, nationally and locally protected nature conservation sites

- 3.25 There are five Special Areas of Conservation (SACs) in Lincolnshire: Baston Fen, Grimsthorpe, part of the Humber Estuary, the Coast (Saltfleetby-Theddlethorpe Dunes and Gibraltar Point) and part of the Wash (and North Norfolk Coast). The Wash is the largest estuarine system in the UK. Gibraltar Point, Saltfleetby-Theddlethorpe Dunes, the Humber Estuary and the Wash (and North Norfolk Coast) are also Special Protection Areas (SPA) and Ramsar sites.
- 3.26 **The Wash**, shared between Lincolnshire and Norfolk, is one of the UK's most important estuaries. It is a complex ecosystem influenced by various factors such as the amount of marine water entering from the North Sea and the amount of fresh water entering from five rivers; Steeping, Witham, Welland, Nene and Great Ouse. In addition, the estuary is of international nature conservation significance.

- 3.27 Other natural features⁹ within the county include:
- 94 Sites of Special Scientific Interest (SSSIs), several of which are in existing or disused quarries
 - 17 Local Nature Reserves (LNRs)
 - 5 National Nature Reserves (NNRs):
 - The Wash and North Norfolk Coast
 - Bardney Limewoods
 - Donna Nook
 - Gibraltar Point
 - Saltfleetby-Theddlethorpe Dunes
 - 1654 Local Sites (863 Local Wildlife Sites; 723 Sites of Nature Conservation Importance; 47 Local Geological Sites; 21 Regionally Important Geological and Geomorphological Sites).
- 3.28 In addition to statutorily protected sites, Local Sites are selected at a local level for their wildlife or geological value. Local Sites are referred to within national policy and guidance aimed at protecting biodiversity and geodiversity, and are recognised in local planning policy.

Woodland

- 3.29 Only 4% of Lincolnshire is covered by woodland, making it one of the least wooded counties in Britain. Ancient woodland in England is defined as an area that has been wooded continuously since at least 1600 AD. Woodland of all kinds in Lincolnshire today only covers 22,500 hectares (ha) but only about 6,300ha (28% of the total) is considered to be ancient semi-natural woodland. Three concentrations of ancient woodland remain: the Bourne woods area on the Kesteven uplands, the Wragby to Woodhall Spa group (including the Limewoods) on the central Clay Vale and the eastern Wolds edge on the Middle Marsh.

Biodiversity

- 3.30 The England Biodiversity Strategy (2011) exists to "halt overall biodiversity loss, support well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people". A key target is an increase in the overall extent of priority habitats by at least 200,000ha by 2020. Similarly, the Natural Environment White Paper, The Natural Choice (2011) recognizes the need to create a resilient ecological network across England. The National Planning Policy Framework (2012) requires local

⁹ Natural England/Greater Lincolnshire Nature Partnership

authorities, through the planning system/planning policies to:

- Contribute to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- Plan positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure;
- Plan for biodiversity at a landscape-scale across local authority boundaries;
- Identify and map components of local ecological networks;
- Promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations.

3.31 The first **Lincolnshire Biodiversity Action Plan (LBAP)** was published in May 2000 by a partnership of organisations including the County Council. The LBAP places the emphasis towards action within the environment as a whole, to protect and enhance current natural resources and restore past losses. The Third Action Plan was published in October 2011; the update reflects the changes in wildlife legislation and sets the agenda for action, establishing priorities for increasing biodiversity in the county and the adjoining North Sea over the next ten years and beyond. Only small pockets of high quality habitat remain in Lincolnshire. The LBAP provides targets for priority habitat creation and restoration. As an LBAP partner, the County Council will work with others to achieve the aims of the LBAP and contribute to habitat creation targets. The landscape-scale initiatives outlined above contribute towards the development of resilient ecological networks, including biodiversity enhancements, across Lincolnshire, and carried out as part of such long-term initiatives, the restoration of mineral sites has the potential to contribute significantly to these targets.

Geodiversity

3.32 The first Lincolnshire Geodiversity Action Plan (LGAP) was published in May 2010 by a partnership of organizations including the County Council. The LGAP places the emphasis towards enhancing understanding and action to conserve and develop the geodiversity of Lincolnshire, whilst promoting and managing its sustainable use. Geodiversity in Lincolnshire encompasses not only the bedrock and superficial geological deposits, of most interest to the extractive industries and building trade, but also both inland and coastal geomorphology and soils.

Historic Environment

3.33 Lincolnshire is a county rich in historic assets. The County is interspersed with Conservation Areas; has a Civil War battlefield at Winceby, near Horncastle; and is home to a varied archaeological heritage, including remains of national and international importance of all dates, from the Palaeolithic period to the last century. Lincolnshire has many pleasant and appealing market towns and villages, vernacular cottages, farm buildings and great country houses but the historic centre of Lincoln is one of the County's greatest attractions. These examples and the unique combinations of various architectural forms, styles and materials are

representative of the economic, social and aesthetic influences on Lincolnshire during different periods in history. Many of these buildings are recognised as significant and are protected as Listed Buildings. There are 383 Grade I, 533 Grade II* and 6052 Grade II listings in Lincolnshire.

- 3.34 Lincolnshire's wealth of very important archaeological remains include the flint tools of the early "Palaeolithic" inhabitants, the prehistoric burial mounds of the Wolds, the waterlogged landscapes of the Witham and Trent Valleys. Structures include medieval castles and monasteries and the industrial buildings of Lincolnshire's major towns and the agri-industrial buildings in the countryside, plus Second World War sites and defences.
- 3.35 There are 477 nationally important and legally protected Scheduled Monuments, as well as many thousands of locally important archaeological sites covering all types of site from pre-history to the recently modern period. Lincolnshire retains important examples of the nation's air-warfare heritage dating from the Second World War, in particular, and the Cold War.

Historic Landscape

- 3.36 The historic fabric of the county's towns, villages and individual buildings, archaeological features, historic parks and gardens, battlefields and the wider historic landscape, together with wildlife and geological and landform features, all need to be recognised, understood and conserved. There are 162 designated Conservation Areas in the County. There is also one registered battlefield at Winceby in the Lincolnshire Wolds.
- 3.37 Historic landscapes are an important part of Lincolnshire's physical and cultural resource. They contain innumerable visible traces of human interaction with nature over several millennia. They contribute to the identity of the County, provide settings for everyday life, attract tourism and business, and are a source of enjoyment and inspiration.
- 3.38 The County Council has produced a Historical Landscape Character Assessment covering the whole historic county; this follows on from the mapping of The Wash Historical Landscape Character Assessment. The County Historic Landscape Characterisation project describes the modern landscape of the historic county of Lincolnshire in terms of the existing features seen today and of the processes by which they were formed.
- 3.39 Lincolnshire County Council in partnership with Groundwork Archaeology Ltd and Historic England, completed a Lincolnshire Aggregates Landscape Project (LALP) in 2008 using funding from the Government's Aggregates Levy Sustainability Fund, derived from a tax on the aggregate industry. LALP aims to establish the archaeological knowledge for all the aggregate areas of the historic county of Lincolnshire, in order to provide the high quality information needed for its effective management in the face of pressures from the minerals industry.

Parks and Gardens

- 3.40 There are 28 historic parks and gardens within the county which are listed on the National Heritage List for England database maintained by Historic England. All of these are of at least national importance, some, such as that at Belton are of International importance. In total they cover about 2,948 hectares and constitute a unique Lincolnshire resource.

Heritage at Risk

- 3.41 The Historic England 'Heritage at Risk' Register records that there are 67 listed buildings at risk in Lincolnshire (Grade I and Grade II* listed buildings and Places of Worship only). There are also 63 Scheduled Monuments, 2 Registered Parks and Gardens and 21 Conservation Areas recorded as at risk by Historic England within the County.

4. SPATIAL VISION & STRATEGIC OBJECTIVES

- 4.1 The spatial vision shapes the overall direction of the Lincolnshire Minerals and Waste Local Plan. The spatial vision recognises the balance that must be struck in Lincolnshire between making provision for minerals and waste developments to meet future requirements, whilst at the same time ensuring that such developments seek social, environmental and economic gains.
- 4.2 Future mineral extraction and waste management in the County must be based on the principles of sustainable development. The Minerals and Waste Local Plan will strive to ensure that minerals are available at the right time and in the right locations to support levels of growth in terms of new housing, commercial, industrial development and essential infrastructure; and that waste is managed near to where it is produced in accordance with the waste hierarchy. Lincolnshire County Council will through the policies in the Plan seek to provide for future minerals and waste needs; conserve the County's resources; maximise the recovery of waste; provide local jobs; and protect and improve the environment.
- 4.3 The Spatial Vision takes into account other plans and strategies that impact on minerals and waste planning, along with local issues relating to Lincolnshire.

Spatial Vision

Over the period to 2031 Lincolnshire County Council will provide a strategic planning framework to facilitate the sustainable supply and use of minerals and to manage waste sustainably in accordance with the waste hierarchy and recognising it as a resource. This will ensure the economic, environmental and social benefits of mineral and waste development are considered whilst Lincolnshire's natural, built and historic environment is protected and enhanced, economic growth is supported, and the health and amenity of local communities is protected. New development will take positive action to mitigate and adapt to climate change.

The Council will identify and safeguard important minerals resources and provide a network of sustainable waste management facilities directed at achieving net self-sufficiency in Lincolnshire to provide certainty to both the minerals industry and local communities.

Strategic Objectives

- 4.4 To assist in the delivery of the Spatial Vision and in delivering sustainable development, the following key objectives provide a framework for policy development. The Minerals and Waste Local Plan must have regard to national policies and advice, and take account of other relevant strategies and programmes such as the Lincolnshire Biodiversity Action Plan,

Lincolnshire Geodiversity Action Plan and the national strategy Biodiversity 2020.

4.5 The Strategic Objectives are listed in no particular order and should be considered on an equal basis. **The Strategic Objectives of the Lincolnshire Minerals and Waste Local Plan are as follows:**

a. Protect the environment and local communities from negative impacts of minerals and waste development, reduce residual impacts and deliver improvements where possible. Ensure new facilities include high standards of design and layout, sustainable construction methods, good working practices and environmental protection measures;

b. Ensure that the minerals extracted in Lincolnshire supplies industry in line with national guidance and contributes to local and national requirements;

c. Seek to ensure that minerals are supplied from appropriately located and environmentally acceptable sources;

d. Through prioritising movement of waste up the waste hierarchy, minimise greenhouse gas emissions by reducing the reliance on landfill; maximise opportunities for the re-use and recycling of waste; facilitate new technologies to maximise the renewable energy potential of waste as a resource; and promote the use of carbon capture technology;

e. Deliver adequate capacity for managing waste more sustainably when it is needed; to ensure waste is managed as near as possible to where it is produced, including the need for waste water infrastructure;

f. Safeguard key mineral resources from sterilisation by other forms of development;

g. Provide for a steady and adequate supply of minerals and ensuring the efficient use of primary minerals and encourage the production and use of good quality secondary and recycled aggregates;

h. Protect Lincolnshire's high quality agricultural land (Grades 1, 2 and 3a) and soil where practicable from development; and in cases where it is affected, safeguard its long term potential by encouraging restoration back to agriculture, or protection of soils through restoration schemes to biodiversity where soils are cared for in a sustainable manner, enabling habitat creation in addition to soil preservation for future agricultural needs;

i. Consider the restoration of mineral sites at the beginning of the proposal; after-uses will be identified which best meet local circumstances. The enhancement of existing and the creation of

new priority habitats, in line with National Guidance, the Lincolnshire Biodiversity Action Plan, Lincolnshire Geodiversity Action Plan; the national strategy Biodiversity 2020 and green infrastructure will be key objectives;

j. Ensure the unique historical heritage of Lincolnshire, including its built, archaeological and natural landscape features and their wider settings are protected from the adverse impacts of mineral and waste developments;

k. Ensure that local sources of building stone are available to contribute towards the maintenance and enhancement of locally distinctive buildings. Stone for Lincoln Cathedral will be specifically protected;

l. Protect Lincolnshire's coastal and fluvial high flood risk areas from inappropriate minerals and waste development and reduce flood risk through development opportunities wherever possible;

m. Protect and enhance the Lincolnshire Wolds AONB, coastline and other nature conservation areas ranging from International (Natura 2000 sites) through to local designations;

n. Sustainable alternative modes of transport will be given priority and vehicular-tonne miles movements will be minimised wherever practicable.

5. PROVIDING FOR MINERALS

- 5.1 The National Planning Policy Framework (NPPF) states that local planning authorities should identify and include policies for extraction of mineral resource of local and national importance in their area. Lincolnshire contains a wide variety of mineral resources and is a major minerals producer. Both aggregate and non-aggregate minerals are produced within the County. Aggregates are derived from sand and gravel, limestone or chalk and are used in the construction industry for building purposes. Sand and gravel and limestone are the most significant minerals produced in the County. Non-aggregate minerals in Lincolnshire currently include building stone and energy minerals such as oil and gas, but in the past also included clay and ironstone. There are also reserves of silica sand and coal within the county, although these are not exploited at present.
- 5.2 The NPPF states that minerals are essential to support sustainable economic growth and our quality of life. It is therefore important that there is a sufficient supply of material to provide the infrastructure, buildings, energy and goods that the country needs. However, since minerals are a finite natural resource, and can only be worked where they are found, it is important to make best use of them to secure their long-term conservation.
- 5.3 In order to ensure continuity of supply, the Government advises that landbanks should be used as an indicator of when new permissions are likely to be needed. A landbank is the sum (in tonnes) of all the permitted reserves with valid planning permission (this includes sites that are currently not working, but excludes those sites which are dormant as set out under the Planning and Compensation Act 1991 and Environment Act 1995, for which a review is required before operations can resume).
- 5.4 The recommended landbank period for sand and gravel is at least seven years, while for crushed rock and silica sand sites it is at least 10 years. National Planning Practice Guidance on the Managed Aggregate Supply System advises that the landbank should be based on projected rates of future demand set out in the latest Local Aggregate Assessment (LAA), which should consider the past 10 years average sales and other relevant local information. Landbanks are not appropriate for energy minerals (coal, oil and gas) as the Government advises that it is not for the planning system to limit any particular source or level of energy supply. It is important to note that landbanks can only be maintained in practice if the minerals industry comes forward with planning applications in the right place and at the right time.
- 5.5 Extensions to existing mineral workings (comprising the extraction of minerals on land in close proximity to an existing quarry where extracted mineral is moved to an existing quarry processing plant and access via means other than the public highway) commonly have less environmental impacts than a wholly new proposal and there is the advantage of continuity of production as existing sites have infrastructure already in

place. They can also help retain the existing workforce and provide a mechanism for the full recovery of the resource thus avoiding the unnecessary sterilisation of the mineral. Proposals at sites which over time have become split between two or more operators will be assessed against the total permitted reserves remaining at the site.

- 5.6 Extensions can, however, have the disadvantage of prolonging mineral extraction within areas which have already been affected for many years by mineral operations, so having adverse impacts on local communities. This could lead to cumulative impacts in a concentrated area caused by incremental extensions to existing sites. In addition, if an existing site is not well located to the transport system the impacts could be exacerbated.

AGGREGATES

- 5.7 The NPPF states that mineral planning authorities should plan for a steady and adequate supply of aggregates. It indicates that authorities should take account of published National and Sub National Guidelines on future provision which should be used as a guideline when planning for the future demand for and supply of aggregates.
- 5.8 The latest National and Regional Guidelines for Aggregate Provision in England were published by the Government in June 2009 for the period 2005 to 2020. These set out guidelines for land won aggregates and assumptions for supplies of marine, alternative aggregates and those supplied from outside England. The Guidelines require the East Midlands region to provide 500 million tonnes of crushed rock, 174 million tonnes of sand and gravel, and 110 million tonnes of alternative materials between 2005 and 2020.
- 5.9 A Sub-Regional Apportionment (SRA) for the East Midlands was agreed by East Midlands Aggregates Working Party (EMAWP) on 8th January 2010. The SRA would require Lincolnshire to provide 52.48 million tonnes of sand and gravel and 18 million tonnes of crushed rock (specifically limestone) from 2005 to 2020. This amounts to an average of about 3.28 million tonnes of sand and gravel and 1.1 million tonnes of crushed rock each year over this 16-year period.
- 5.10 At its meeting on 5th March 2010, the East Midlands Regional Assembly's Housing, Planning & Transport Joint Board subsequently agreed that the revised SRA figures be included in the draft replacement Regional Plan Policies for submission to the Secretary of State. The Partial Review was submitted to the Secretary of State on 26th March 2010 as a Revised Draft East Midlands Regional Plan. However, the Secretary of State did not progress this review following the revocation of Regional Spatial Strategies.
- 5.11 Since the SRA was agreed, sales of sand and gravel and limestone in the county have been significantly lower than the annual averages set by the SRA. Indeed, for the 10 year period 2004-2013, sales of sand and gravel averaged only 2.37 million tonnes per annum, which is 0.91 million tonnes

(28%) less than the SRA annual average. For limestone the difference has been even more marked with annual sales averaging only 0.62 Million tonnes, which is 0.48 million tonnes (43%) less than the SRA annual average. As a result the County Council considers the SRA no longer provides a reliable forecast of aggregate demand and that it would be more appropriate to base the level of future provision on average sales over the period 2004-2013. This would require Lincolnshire to make provision for 42.66 million tonnes of sand and gravel and 11.16 million tonnes of limestone over the period 2014-2031(inclusive).

Recycled and Secondary Aggregates

- 5.12 The NPPF states that local planning authorities should so far as practicable, take account of the contribution that substitute or secondary and recycled materials and minerals waste would make to the supply of materials, before considering extraction of primary materials, whilst aiming to source minerals supplies indigenously.
- 5.13 It should be noted that the Environment Agency needs to be consulted when the recycling of soils and aggregate is being considered, as it may require permitting and some extraction activities may require Mining Waste permits.
- 5.14 The use of secondary and recycled aggregates in construction projects and highways development (sub-base for roads) contributes to more sustainable development. The substitution of part of the primary won aggregate by alternative products lessens the need for quarrying with the associated benefits of reduced social and environmental impacts.
- 5.15 Recycled aggregates can comprise of construction, demolition and excavation wastes, asphalt road planings and used railway ballast. The main source of alternative aggregates in Lincolnshire arises from construction, demolition and excavated waste (often referred to as CD & E waste). 'Secondary aggregates' are by-products of other processes, and will not have been used previously as aggregates.
- 5.16 The National and Regional Guidelines for Aggregate Provision have taken into account alternative (secondary/recycled) materials and so the subsequent sub regional apportionment figures already include deductions for these (see paragraph 5.8 above). Whilst the bulk of aggregates required for the construction industry are likely to continue to be won from primary resources, the Council recognises that a sustainable minerals supply strategy should make provision for maximising the recovery and use of recycled and secondary materials.
- 5.17 There are clear links between Policy M1, which encourages facilities for recycling and reprocessing of materials for use as aggregates, and the policies for the processing of construction and demolition waste, road planings and other waste suitable for aggregate production contained in Section 6, Providing for Waste (see in particular Policies W3 and W4). All new or expanded facilities for handling, recycling and distributing recycled

and secondary aggregates will also need to be assessed against a range of policy criteria, as set out in Section 7, Development Management Policies.

Policy M1: Recycled and Secondary Aggregates

Planning permission will be granted for recycling/reprocessing of materials for use as secondary or recycled aggregates in appropriate locations as specified in Policy W4, provided that proposals accord with all relevant Development Management Policies set out in the Plan.

Sand and Gravel

- 5.18 Sand and gravel resources are the most important of the County's aggregate minerals. Over the ten year period 2004 to 2013, sales from Lincolnshire averaged 2.37 million tonnes (Mt) per annum. This represented 31.1% of sand and gravel sales within the East Midlands. The resources are used primarily in the construction industry as building sand or in the manufacture of concrete and tend to serve local markets.
- 5.19 Whilst deposits occur across large parts of the County, historically sand and gravel production has been concentrated in three main areas: the Trent Valley generally southwest of Lincoln; the Lower Bain Valley (around Woodhall Spa and Tattershall); and the Baston-Langtoft/West Deeping area in the south of the County. Some sites within these areas have been active for very long periods of time. From recent discussions with the minerals industry it is clear that in general it will be the industry's preference for this to continue during the plan period – thereby maintaining the overall spatial pattern of existing production.
- 5.20 As stated in paragraph 5.11 above, the level of provision for Lincolnshire is 2.37Mt per annum. At the end of 2013, the County had 22.90Mt of permitted reserves. These reserves would be more or less depleted by 2022 if sales achieved the 10 year average rate calculated for the period 2004-2013 and no further planning permissions were granted.
- 5.21 Table 1 below provides a calculation of potential future requirements for sand and gravel for the period 2014-2031. The calculation assumes that the requirement will continue throughout this period at the same average rate as for the period 2004-2013. The calculation takes account of the level of permitted reserves as at 31st December 2013. The permitted reserves include active and inactive sites, but exclude dormant sites. The table indicates that there would be a shortfall of sand and gravel reserves over the period 2014-2031 of some 19.76 million tonnes.

Table 1: Calculation of Sand and Gravel Provision 2014 – 2031

A	Annual Requirement	2.37Mt
B	Total Requirement 2014-2031	42.66Mt
	Reserves	
C	Permitted Reserves at 31/12/2013	22.90Mt
	Shortfall	
D(B-C)	Shortfall 2014 – 2031	19.76Mt

- 5.22 The County Council recognises that calculating estimates of demand are increasingly uncertain when considering a period of 18 years. Whilst demand at the current time is low (1.88Mt in 2013) and average sales over the last 10 years are below the SRA (see paragraph 5.9), it is crucial that sufficient mineral is provided to realise ambitions for growth within the County. The projected population growth rate is higher than the national growth rate, which allied to increasing demand for new built development will result in more pressure on primary resources and the need to plan for the release of additional reserves to service this increased demand. The situation will however be carefully monitored as any increase in annual outputs very much depends on operational and economic factors outside the control of the County Council. This will be done annually through the County Council's Local Aggregate Assessment. If production rates vary significantly to the annual requirement set out in Table 1 for an extended period, then the overall requirement will need to be re-evaluated through a review of this Plan.
- 5.23 A Call for Sites exercise was carried out by the Council between October 2009 and January 2010 and a "refresh exercise" between March 2014 and April 2014. This resulted in the minerals industry and other landowners submitting proposals for new/extended extraction areas. This exercise resulted in a significant amount of additional sand and gravel resource being proposed by the minerals industry. Provision will be made in the Site Locations Document for the release of additional sand and gravel reserves. This document will include specific proposals and policies for the release of sites, including the provision of appropriate safeguards and reclamation and after-use details.

Spatial Strategy for Sand and Gravel.

- 5.24 The cost of transporting high bulk/low value materials such as aggregate means that, in general, sand and gravel quarries normally only serve relatively local markets. Therefore, given the large area covered by the County, together with the uneven distribution of active sand and gravel quarries (which are mainly clustered into three areas), the County has historically been subdivided into areas reflecting the markets served by the common centres of production. This practice began in the 1940s when the country was divided into gravel regions, each sub-divided into service areas, with Lincolnshire falling within three gravel regions and five service areas. By the time the 1991 Lincolnshire Minerals Local Plan was

being prepared there had been a move away from a strict adherence to the historical service areas. However, based on information supplied by the industry relating to the patterns of distribution, it was recognised that production in the County should be divided between three broad areas. As a result, three Production Areas were established as shown on the key diagram, namely: Lincoln/Trent Valley; Central Lincolnshire; and South Lincolnshire.

- 5.25 The County Council will continue its approach of dividing the County into three Production Areas within which to allocate the overall County demand forecast as it considers that:
- the Production Areas broadly reflect the markets served;
 - it assists in spreading the burden of provision and dispersing the effects of mineral working to different areas (thereby avoiding an over concentration of works in a single area); and
 - it will facilitate any future comparative studies on aggregate sales/distribution.
- 5.26 Over the last 10 years (2004 to 2013), 42.1% of the County's sales have come from the Lincoln/Trent Valley Production Area, 36.6% from the South Lincolnshire Production Area and 21.3% from the Central Lincolnshire Production Area. Over this period, annual sales have averaged: 1.00 million tonnes from the Lincoln/Trent Valley; 0.50 million tonnes from Central Lincolnshire; and 0.87 million tonnes from South Lincolnshire. The County demand forecast will be divided between the three Production Areas based on their relative contributions to sand and gravel sales in the County over the 10 year period 2004-2013.
- 5.27 Table 2 below provides a calculation of potential future requirements for sand and gravel for each production area for the period 2014-2031 (inclusive). The county has sufficient quantities of sand and gravel in the three production areas to meet demand over the period of the Plan. More than enough reserves have been put forward through the call for sites exercise to meet the potential shortfalls.

Table 2: Calculation of sand and gravel provision for 2014-2031 by Production Area

	Lincoln/Trent Valley	Central Lincs.	South Lincs.
Annual provision	1.00Mt	0.50Mt	0.87Mt
Required provision 2014-2031 (18yr period)	18.00Mt	9.00Mt	15.66Mt
Permitted Reserves @ 31/12/13	11.24Mt	4.23Mt	7.43Mt
Shortfall	6.76Mt	4.77Mt	8.23Mt

- 5.28 The County Council's preferred spatial strategy will be to secure the County's future supplies of sand and gravel from extensions to existing operational sites (Active Mining Sites) wherever possible and where this will not have unacceptable impacts on local communities or the environment. The County Council considers that this approach:
- avoids a proliferation of sites and ensures that future extraction is confined to areas where disturbance to the local environment has already taken place;
 - permits the County Council to exercise greater control over the release of reserves as a new quarry would invariably require the release of substantial reserves to justify expenditure in new plant and equipment; and
 - potentially provides an opportunity for higher overall standards of restoration.
- 5.29 The NPPF states that provision for land won aggregates in mineral plans should take the form of specific sites, preferred areas and/or areas of search and locational criteria as appropriate. Specific sites will generally be where viable mineral resources are known to exist, where landowners are supportive of mineral development taking place and where the Council considers that any planning applications which are made are likely to be acceptable in planning terms. Preferred areas are areas of known resources where planning permission might reasonably be expected. Areas of search will be broader areas where knowledge of mineral resources may be less certain but within which planning permission could be granted to meet any shortfall in supply.
- 5.30 The County Council does not consider that there are "strategic" sites which would be central to a strategy for the location of future sand and gravel operations. This document consequently does not identify any specific sites. Rather it is proposed that the strategy be delivered through the identification of Areas of Search within this document, followed by the allocation of specific sites in the Site Locations Document (Development Plan Document).
- 5.31 The County Council has designated three areas of search, one in each Production Area as shown on the Key Diagram, namely:
- West of Lincoln and north/south of Gainsborough for the Lincoln/Trent Valley Production Area;
 - Tattershall Thorpe for the Central Lincolnshire Production Area; and
 - West Deeping/Langtoft for the South Lincolnshire Production Area.

- 5.32 The proposed Areas of Search extend those contained in the 1991 Minerals Local Plan to include the most viable sand and gravel resource based on a recent assessment of resources within the County carried out by the British Geological Survey (BGS) in 2010. These do, however, exclude some areas shown as having a high grade resource. In particular, a large area of sub-alluvial sand and gravel covering the Witham Valley has not been included because this has not been subject to any industry interest and is known to contain extensive archaeological features. The sub-alluvial deposit in the South Lincolnshire area has similarly been excluded.
- 5.33 The County Council recognises that the BGS study does not cover the whole of the county. There will therefore be instances where there are existing permitted active sand and gravel sites with potential viable reserves not falling within the proposed areas of search. In these circumstances it is not the Council's intention to prevent such quarries operating in the future by refusing permission for extensions because the site is outside an Area of Search.
- 5.34 The County Council will make provision in the Site Locations Document for the release of additional reserves sufficient to meet the shortfall set out in Table 2 adjusted to take into account any additional reserves that have been granted planning permission in the interim.
- 5.35 In allocating sites in that document, the County Council will give preference to extensions to existing workings (Active Mining Sites) provided that these do not have unacceptable impacts on local communities or the environment. Where new sites are required to replace sites that will become exhausted during the plan period, preference will be given to sites located within the Areas of Search. This does not, however, imply that the new quarry must be operated by the company whose quarry it will replace.
- 5.36 The spatial strategy recognises that minerals can only be worked where they are found, and as such are restricted in their ability to achieve more sustainable transport options. However, the Areas of Search cover extensive areas so there may be potential for replacement sites to either reduce transportation distances or facilitate more sustainable means of transport. For example, a new quarry in the Gainsborough area could provide locally sourced aggregate to the town for building projects and could potentially utilise the Trent River for transportation purposes. Through Policy DM13: Sustainable Transport Movements and its supporting text, the plan sets out its approach to achieving sustainable transport of minerals and this is a key consideration of the spatial strategy and any development which comes forward.

Policy M2: Providing for an Adequate Supply of Sand and Gravel

The County Council will ensure a steady and adequate supply of sand and gravel for aggregate purposes by making provision over the period 2014 - 2031 (inclusive) for the extraction of 42.66 million tonnes of sand and gravel (2.37 million tonnes per annum). This will be divided between the three Production Areas (as shown on the Key Diagram) as follows:

- **18.00 million tonnes (1.00 million tonnes per annum) from the Lincoln/Trent Valley Production Area;**
- **9.00 million tonnes (0.50 million tonnes per annum) from the Central Lincolnshire Production Area; and**
- **15.66 million tonnes (0.87 million tonnes per annum) from the South Lincolnshire Production Area.**

The County Council will make provision for the release of sand and gravel reserves in the Site Locations Document. This will give priority to extensions to existing Active Mining Sites. New quarries will be allocated where they are required to replace existing Active Mining Sites that will become exhausted during the Plan period and where they are located in the relevant Areas of Search as shown on the Policies Map (Figure 5), namely:

- **west of Lincoln and north/south of Gainsborough for the Lincoln/Trent Valley Production Area;**
- **Tattershall Thorpe for the Central Lincolnshire Production Area; and**
- **West Deeping/Langtoft for the South Lincolnshire Production Area.**

5.37 Although the County Council will be making provision for the release of additional reserves in each Production Area sufficient to maintain production levels to the end of the Plan period based on average sales over the period 2004-2013, it needs to be recognised that actual production levels may vary significantly from those forecast. The County Council will therefore review the situation, including the method for calculating the landbank, each year through its Local Aggregate Assessment. As set out in paragraph 5.22, if production levels deviate significantly from the levels forecast, this may trigger a need to review this Plan. The County Council is committed to a programme of regular reviews of the Plan and will bring forward such a review if monitoring shows that either low landbanks or falling productive capacity demonstrates that provision of a steady and adequate supply of sand and gravel is at risk.

Policy M3: Landbank of Sand and Gravel

In order to ensure a steady and adequate supply of sand and gravel for aggregate purposes, the County Council will seek to maintain a landbank of permitted reserves of sand and gravel of at least 7 years within each of the Production Areas based on the County Council's latest Local Aggregate Assessment which includes provision for the preservation of production capacity.

- 5.38 The County Council will seek to maintain the landbank of sand and gravel within each Production Area through granting planning permission for sites allocated in the Site Locations Document. These sites will be allocated on the basis that they represent the best means for the County Council to meet the provisions set out in Table 2 following a Strategic Environmental Assessment and Sustainability Appraisal. The County Council recognises that the 7 year landbank is a minimum, not a target, and that in order to maintain the level of output in each Production Area the landbank may on occasions need to significantly exceed this level. This is likely to arise particularly where the level of permitted reserves, although high overall, are unevenly distributed amongst the various quarries.
- 5.39 It is possible that a shortfall could develop in the landbank of a Production Area if an application for an allocated site is not forthcoming or is refused. In these circumstances the County Council will grant planning permission for unallocated sites where the site is an extension to an existing quarry or a replacement for a quarry that is nearing exhaustion, and in the case of a replacement site is located within the appropriate Area of Search. All such applications should demonstrate that they would not have unacceptable impacts on local communities or the environment. Where a replacement quarry is required, this does not imply that the new quarry would have to be operated by the company whose quarry it will replace.
- 5.40 Irrespective of the size of the landbank, there may be exceptional circumstances over the life of the Plan when an additional quarry is justified, such as when a deposit has special characteristics not found in other deposits worked locally. When such a need is demonstrated, planning permission will be granted provided that the development does not have unacceptable impacts on local communities or the environment.

Policy M4: Proposals for Sand and Gravel Extraction

Sites allocated in the Site Locations Document will be granted planning permission for sand and gravel extraction for aggregate purposes provided that:

- **in the case of an extension to an existing Active Mining Site, extraction would follow on after the cessation of sand and gravel extraction from the existing areas supplying the plant site; and**
- **in the case of a new quarry, it is required to replace an existing Active Mining Site that is nearing exhaustion.**

For sites not allocated in the Site Locations Document, planning permission will be granted for sand and gravel extraction for aggregate purposes where the site is required to meet:

- **a proven need that cannot be met from the existing permitted reserves; or**
- **a specific shortfall in the landbank of the relevant Production Area and either:**
 - (i) forms an extension to an existing Active Mining Site; or**
 - (ii) is located in the relevant Area of Search as shown on the Policies Map (Figure 5) and will replace an existing Active Mining Site that is nearing exhaustion.**

In all cases the proposal must accord with all relevant Development Management Policies and Restoration Policies set out in the Plan.

Limestone

5.41 Normally crushed Lincolnshire Limestone aggregate is of relatively low strength with poor resistance to frost damage. It is therefore generally only suitable for use as constructional fill. Whilst the main use for the limestone is aggregate, since the year 2000 sales have declined sharply from 1.5 million tonnes in that year to less than 0.5 million tonnes in 2013. As a result a growing proportion of output has been used for non-aggregate purposes, notably agricultural lime and building stone.

5.42 Table 3 below provides a calculation of potential future requirements for limestone for aggregate purposes for the period up to 2031. The calculation assumes that the requirement will continue throughout this period at the same average annual rate as for the period 2004-2013. The calculation takes account of the level of permitted reserves as at 31st December 2013. The permitted reserves include active and inactive sites, but exclude dormant sites.

Table 3: Calculation of Limestone (Aggregate) Provision 2014-2031

A	Annual Requirement	0.62Mt
B	Total Requirement 2014-2031	11.16Mt
	Reserves	
C	Total permitted reserves, excluding reserves in dormant sites, at 31/12/2013	40.25Mt
	Surplus	
D(B-C)	Surplus 2014 – 2031	29.09Mt

- 5.43 The table indicates that there would be more than sufficient limestone reserves to meet future requirements (a surplus of around 29 million tonnes). These reserves are split between 13 quarries that are widely distributed over the limestone deposit between Lincoln and Stamford. This would suggest that there is no need for any additional provision to be made for aggregate. There may however be exceptional circumstances over the life of the plan when the release of additional reserves may be justified, such as where the mineral deposit has special characteristics not found in other deposits being worked locally or where it is essential to maintain continuity of supply due to special demand factors which would have an impact on the local economy. There may also be benefits in allowing a "swap" whereby an existing permission for a site which is causing environmental damage would be revoked in exchange for new site with minimal environmental impact.
- 5.44 Although the county has sufficient permitted reserves to cover the Plan period, the County Council will monitor the situation through its annual Local Aggregates Assessments. Should supply issues arise this may trigger a need to review the Plan.
- 5.45 There is no specific target output or apportionment for non-aggregate. Proposals for small scale building stone operations to be carried out primarily for conservation works are dealt with below under "Historic Building Stone". In all other cases, including larger scale building stone quarries, the County Council does not propose to restrict such development geographically but to judge proposals on the quality and quantity of the stone, the proportion of aggregate that is likely to be generated as a by-product and the intended markets.

Policy M5: Limestone

Proposals for extensions to existing limestone extraction sites or new limestone extraction sites (other than for the small scale extraction of building stone covered by Policy M7) will be permitted provided that they meet a proven need that cannot be met by existing sites/sources, and accord with all relevant Development Management Policies and Restoration Policies set out in the Plan.

Chalk

- 5.46 Chalk has been extracted within Lincolnshire for both aggregate and industrial purposes, including iron making, lime production for steel manufacture and industrial fillers, for constructional purposes and agricultural use. Chalk is of relatively low quality and the sites, which produce it, are either on the border or within the Lincolnshire Wolds AONB. There are currently only two operational quarries in the County, one located within the Wolds A.O.N.B and the other immediately adjacent to it.
- 5.47 There is no specific regional apportionment for chalk in Lincolnshire. At the end of 2013, there were 6.22Mt of permitted reserves of chalk in the County (aggregate and non-aggregate) in both active sites and inactive sites, but excluding dormant sites. No sales information is available since 2010, but by then total sales had been in decline for three years falling from just under 250,000 tonnes in 2007 to 5,000 tonnes in 2010. Since then it is likely that production levels have been well below the level reached in 2007. The County Council therefore considers that there are more than sufficient chalk reserves to meet the low demand for chalk over the plan period.
- 5.48 The County Council is also seeking the progressive reduction of mineral production within the AONB to help conserve the landscape and scenic beauty of this area in line with the NPPF. As a result, the County Council does not propose to make any additional provision for chalk extraction.
- 5.49 As for limestone (see above), the County Council recognises that there may however be exceptional circumstances over the life of the plan when the release of additional chalk reserves may be justified.

Policy M6: Chalk

Proposals for extensions to existing chalk extraction sites or new chalk extraction sites will be permitted provided that they meet a proven need that cannot be met by existing sites, and accord with all relevant Development Management Policies and Restoration Policies set out in the Plan.

NON-AGGREGATES

Historic Building Stone

- 5.50 Historically, Lincolnshire has produced and used a wide range of indigenous stones for building purposes. Parts of Lincolnshire have developed their own unique and locally distinctive character which in many respects depends upon locally available building materials. English Heritage (now Historic England) published the Lincolnshire Strategic Stone Study in July 2013 which provides a detailed analysis of building stone types within the County. Specific building stone is needed for repairing historic structures across the County and for maintaining local distinctiveness with appropriate new buildings. Stone selected for the repair of historic buildings and structures has to closely match the original stone to avoid differences in appearance. Building Stone therefore has an important role to play in the conservation, management and enhancement of the historic environment, and in tackling heritage at risk. Lincolnshire building stone also has an important role beyond the County, where relatively small quantities are exported to neighbouring areas for use in repair of historic buildings.
- 5.51 The only building stone resource that is exploited in the county is limestone from the Lincolnshire Limestone Formation. There are four "historic" limestone quarries in the County that exclusively produce building stone. These are the Cathedral Quarry located in the City of Lincoln and operated by the Dean and Chapter to supply stone principally for conservation work at the Cathedral; two quarries in the Wilsford/Heydour area that produce Ancaster Stone; and the Holywell Quarry near Stamford that produces Clipsham Stone. In addition, a number of aggregate and former aggregate quarries also produce building stone as the principal product.
- 5.52 The NPPF states that local planning authorities should, when determining planning applications, consider how to meet any demand for small-scale extraction of building stone at, or close to, relic quarries needed for the repair of heritage assets, taking account of the need to protect designated sites; and recognise the small-scale nature and impact of building and roofing stone quarries, and the need for a flexible approach to the potentially long duration of planning permissions reflecting the intermittent or low rate of working at many sites.
- 5.53 In general such proposals should demonstrate a specific need for the stone which cannot be met from existing quarries as well as reflecting the Government's view that such quarries should be small scale and of low impact. Proposals which are primarily a means to extract aggregate will be assessed against Policy M5. The County Council does, however, recognise that building stone quarries often contain beds of varying quality. As a result, a quarry that produces nationally important stone for use in some of the nation's most important historic buildings may also need to produce stone for other building stone markets, such as new build, to be economically viable.

5.54 The historic building stone quarries are significantly smaller than aggregate quarries in terms of scale of operation, and their levels of potential impacts such as noise, vehicle movements and dust, rate of working and scale of impacts on people and the environment are generally considerably less.

Policy M7: Historic Building Stone

Proposals for the small-scale extraction of building stone will be permitted where it can be demonstrated that:

- **there is a specific need for the stone; and**
- **the stone cannot be obtained from permitted reserves at existing sites; and**
- **the proposals accord with all relevant Development Management Policies and Restoration Policies set out in the Plan.**

Silica Sand

5.55 Silica sand is sand which contains a high proportion of silica in the form of quartz and is marketed for purposes other than for direct use in the construction industry. Silica sands are essential raw materials for glassmaking and a wide range of other industrial and horticultural applications. Silica sand is geologically and geographically sparsely distributed and, consequently, the mineral is a valuable resource of recognised national importance.

5.56 The NPPF states that minerals planning authorities should plan for a steady and adequate supply of industrial minerals by providing a stock of permitted reserves of at least 10 years for individual silica sand sites (or 15 years where significant new capital is required) to support the level of actual and proposed investment required for new or existing plant and the maintenance and improvement of existing plant and equipment.

5.57 In the north of the County, there are deposits of blown sand which extend into the neighbouring North Lincolnshire Authority, where they have been extensively worked for silica sand in the Messingham area.

Policy M8: Silica Sand

Planning permission will be granted for silica sand extraction where required to provide a stock of permitted reserves of at least 10 years for an individual silica sand site (or 15 years where significant new capital is required), provided that proposals accord with all relevant Development Management Policies and Restoration Policies set out in the Plan.

ENERGY MINERALS

- 5.58 The Government's energy policy is to have a secure and diverse supply of energy sources. The Government does not consider it appropriate for planning policy to set targets for or limits on different technologies. Oil and gas are important mineral resources and primary sources of energy in the United Kingdom. Oil products provide around 33% of the primary energy used. Significant reductions in demand are not expected over the next 10-15 years because the transport sector, the main consumer of oil, will continue to be heavily dependent on it over this period.
- 5.59 Oil and Gas resources can be broadly split into two categories: Conventional and Unconventional. 'Conventional' oil and gas refers to oil and gas resources ('hydrocarbons') which are located in relatively porous rock formations such as limestone and sandstone. Conventional extraction methods generally involve drilling a borehole down to the porous rock where oil or gas has formed in a reservoir. The oil and gas resources are then pumped out of the ground using beam pumps (known as 'nodding donkeys') or electric pumps.
- 5.60 Lincolnshire has a long history associated with the production of conventional oil and gas going back to the 1940s, and large parts of the County are licensed for production. Welton oilfield is the second largest on-shore field in the UK after Wytch Farm in Dorset. It started oil production in 1984 and to date peak production has reached 0.16mt per annum. Gas has also been previously produced from the Saltfleetby field, to the east of the county, on a significant scale. Currently permitted oil and gas sites are listed in Appendix 2 and shown on Figures 6-12 in Appendix 3.
- 5.61 "Unconventional" oil and gas resources require methods for extraction which are not normally necessary in the conventional extraction of hydrocarbons. Such resources are generally obtained from less porous rock formations that were previously considered too impermeable ('tight') to allow economic recovery, however technological advancements over the last decade have made them economically viable. Examples of unconventional hydrocarbons include Coal Bed Methane (CBM) and Shale Gas. Methods involved in the extraction of unconventional hydrocarbons can include hydraulic fracturing.
- 5.62 The deep coal reserves in Lincolnshire have the potential for Coal Bed Methane (CBM) extraction. CBM development provides an opportunity to extract methane from deep coal seams as part of the Government's strategy for clean coal technology. In recent years some interest has been shown in assessing the prospect of CBM in Lincolnshire, with exploration activities previously undertaken in an area to the north of Lincoln. However, at present no subsequent proposals or planning applications for production of CBM within Lincolnshire have come forward.
- 5.63 Shale Gas is a natural gas produced from shale rock, and is most commonly associated with the process of hydraulic fracturing in order to enable the gas to be extracted from the Shale rock. As unconventional

hydrocarbons have become more economically viable in recent years, a number of studies have been undertaken to assess the potential for Shale Gas recovery across the UK. The British Geological Survey (BGS) has undertaken research in association with the Department of Energy and Climate Change (DECC), and in 2013 completed a study which estimates the resource (gas-in-place) of shale gas associated with the 'Bowland Shale' in Central Britain. The Infrastructure Act 2015 defines associated hydraulic fracturing as hydraulic fracturing of shale or strata encased in shale which:

- Is carried out in connection with the use of the relevant well to search or bore for or get petroleum;
- Involves, or is expected to involve the injection of more than 1,000 cubic metres of fluid at each stage, or expected stage of the hydraulic fracturing or more than 10,000 cubic metres of fluid in total.

- 5.64 Pursuant to Section 50, subsection 4a of the Infrastructure Act, hydraulic fracturing cannot take place within 'protected ground water source areas' or 'other protected areas'. Associated Regulations will define a protected ground source area as any land at a depth of less than 1,200 metres beneath a relevant surface area and in relation to 'other protected areas' these are a National Park; the Broads; an Area of Outstanding Natural Beauty; and a World Heritage Site.
- 5.65 The BGS study area includes the northern half of Lincolnshire, and identifies an area referred to as the 'Gainsborough Trough' as being prospective for shale gas. This area lies partly within Lincolnshire, to the south and east of Gainsborough, and extends westwards into adjoining Nottinghamshire and North Lincolnshire. Whilst interest has been shown in the above area, Shale Gas development does not currently take place in Lincolnshire, and until any exploratory wells are sought and drilled, the location and extent of any resource, and prospect for economic recovery in Lincolnshire is unknown.
- 5.66 Another emerging new technology is Underground Coal Gasification (UCG), the in situ conversion of deep coal resources into gases after ignition under pressure. This technology is still experimental and no such schemes are currently in operation within the County.
- 5.67 The regulatory process of obtaining consent to drill a well is the same whether the well is targeting conventional or unconventional hydrocarbons. The Department of Energy and Climate Change (DECC) issue Petroleum Exploration and Development Licence's (PEDL) in competitive offerings (licence rounds) which grant exclusivity to operators who receive a licence in the area. PEDL licences do not give consent for drilling or any other operations. An operator must seek Planning Permission from the Minerals Planning Authority. An operator can only seek planning permission in areas covered by a licence. The operator must also negotiate access with affected landowners.
- 5.68 The operator must also obtain a Permit from the Environment Agency (EA) but this is usually sought after planning permission is obtained. The

Health and Safety Executive (HSE) are also involved in regulating well design and operation. The EA and HSE's regulatory roles in relation to conventional and unconventional hydrocarbon development are wide ranging and include for example the protection of surface water, and ground water (and its supply), from any negative impacts through comprehensive monitoring of well operations. Any induced seismicity would also be addressed although there are no documented cases of fracturing operations causing subsidence or tremors large enough to cause damage at the surface.

- 5.69 Conventional and unconventional hydrocarbon development has several different stages including the exploration of oil and gas prospects, appraisal of any oil and gas reserves found, and production and distribution. All stages require planning permission. There will be no presumption in favour of permission being granted for subsequent stages if an earlier stage be permitted, nor will possible effects of a later stage not yet applied for constitute grounds for refusal of an earlier stage.
- 5.70 Exploration activities involve drilling which is often the most intrusive part of the development through visual, lighting and noise disturbance and impacts on local roads. There will be a need for night time drilling to ensure the borehole does not close up during any break in drilling which would significantly extend the period the drilling rig remained on site. The limited duration of exploratory operations will be reflected in the nature of any planning permission that may be granted. Appraisal takes the form of longer-term testing of an exploratory well. The long-term suitability of the site of appraisal wells will be taken into account since such wells may subsequently be required for production purposes. The production phase generally involves additional facilities such as pipelines, storage facilities and export terminals.
- 5.71 Policy M9 is a criteria-based policy which seeks to ensure that activities related to the exploration, appraisal and production of conventional and unconventional hydrocarbons take place in an environmentally acceptable manner, in accordance with all relevant Development Management Policies set out in the Plan. Applications for energy mineral development should contain sufficient information to adequately assess the impact of the proposal on the local community and the environment, and include detailed field development plans at the production stage. Conditions and legal agreements, if necessary will be attached to planning permissions to ensure that operations do not have an unacceptable impact on local residents or the environment. Permission for wells will be conditioned for the life of the well.

Policy M9: Energy Minerals

Planning permission will be granted for exploration, appraisal and/or production of conventional and unconventional hydrocarbons provided that proposals accord with all relevant Development Management Policies set out in the Plan.

Underground Gas Storage

- 5.72 The NPPF states that minerals planning authorities should encourage underground gas and carbon storage and associated infrastructure if local geological circumstances indicate its feasibility.
- 5.73 The most important type of gas storage is in underground reservoirs. There are three principal types — depleted gas reservoirs, aquifer reservoirs and salt cavern reservoirs. Each of these types possesses distinct physical and economic characteristics which govern the suitability of a particular type of storage type for a given application.
- 5.74 The hazards and risk associated with the storage of natural gas relate to many areas such as systems integrity, health and safety and environmental effects, economic risks and risks related to public perception and trust. The main hazard associated with underground gas storage is the leakage of gas through the surrounding strata and reaching ground surface, where it could represent a significant health and safety risk. Such developments are also comprehensively regulated by DECC, the HSE and EA.
- 5.75 In Lincolnshire, planning permission was granted in 2010 for an underground gas storage facility within the Saltfleetby gas field. The facility would provide up to 800 million cubic metres of storage and boost the UK's storage capacity by 15%.

Policy M10: Underground Gas Storage

Planning permission will be granted for the development of underground gas storage facilities provided that proposals accord with all relevant Development Management Policies set out in the Plan.

OTHER MINERALS

- 5.76 Lincolnshire has a long history of **clay** working. However, competition from the major brick-working areas of South Humberside and Peterborough led to the decline of these local industries and in 1945 only a handful of active clay workings survived. The last workings closed in the mid-1970s with the one remaining brickworks at that time obtaining its supplies from outside the County. That brickworks, located in Stamford, closed around 2003.
- 5.77 Lincolnshire contains substantial deposits of **ironstone**. From the late nineteenth century to the 1970s, it was extensively worked both by underground and opencast methods. There are substantial areas of land with planning permission for ironstone working in the south west and north of the county but these areas are all dormant except for one site at South Witham which is worked exclusively for the overlying limestone. Because of the decline of the steel industry in the UK and the low grade quality of the ironstone in Lincolnshire, it is considered unlikely that ironstone working will take place in the foreseeable future, other than as a source of building stone.
- 5.78 A major part of the county is underlain by Lower and Middle **Coal** Measures strata entirely concealed by a thick Permian and Mesozoic cover. These coal measures have never been worked, although the Witham Prospect area, to the south west of Lincoln, may be classed as a valuable resource in the future.
- 5.79 Proposals for these minerals together with any other minerals not currently worked in Lincolnshire will be considered on their merits, judged against the policies in the Development Management and Restoration sections.

MINERAL SAFEGUARDING

Safeguarding Mineral Resources

- 5.80 The NPPF states that, in preparing Local Plans, local planning authorities should:
- define Minerals Safeguarding Areas and adopt appropriate policies in order that known locations of specific minerals resources of local and national importance are not needlessly sterilised by non-mineral development, whilst not creating a presumption that resources defined will be worked; and define Minerals Consultation Areas based on these Minerals Safeguarding Areas;
 - set out policies to encourage the prior extraction of minerals, where practicable and environmentally feasible, if it is necessary for non-mineral development to take place.
- 5.81 A Mineral Safeguarding Area is not a proposed area of extraction and does not mean that proposals will be permitted within the area. The main purpose of the MSA is to protect a mineral resource for the long term for future generations. It should also be borne in mind that just because there may be no economic need for the minerals now that may not be the case in the future.
- 5.82 The British Geological Survey (BGS) publication, 'Mineral safeguarding in England: good practice advice' (2011), recommends that a good starting point for identifying MSAs is the BGS's mineral resources maps. It suggests that modifications to the resource extent are most likely to result from the provision of additional or more detailed geological information obtained through consultation. The BGS good practice advice states that MSAs that are not considered of any great national or regional importance and that occur extensively over the area of a MPA could be reduced in size.
- 5.83 A combination of expert geological opinion and knowledge on the extent of mineral resources together with consultation with the minerals industry has provided the County Council with broad geological resource information for minerals within Lincolnshire. Information contained on the Minerals Resources map published by the BGS in the 'Mineral Resource Information in Support of National, Regional and Local Planning: Lincolnshire' report (2002) has been supplemented by work carried out by the BGS for the County Council in 2010 to assess which sand and gravel deposits are of economic importance and where they are located.
- 5.84 The County Council has concluded that deposits of sand and gravel, limestone and blown sand in Lincolnshire are of current or future economic importance. The broad extent of these deposits is indicated on Figure 1.
- 5.85 The County Council does not have sufficient detailed knowledge of the nature and extent of suitable building stone resources to identify potentially workable materials. The quality of stone and suitability for working as building stone is very variable. It would therefore be difficult to

identify potentially workable building stone resources for safeguarding except on a detailed site specific basis.

- 5.86 It is, however, proposed to safeguard potential sources of building stone for the repair and conservation of Lincoln Cathedral and Lincoln Castle, due to their importance not just as historic buildings but also as a major tourist attraction and symbol of Lincoln and indeed the County. The location of these potential sources is indicated on Figure 2.
- 5.87 The County Council does not consider that chalk is an economically important mineral in Lincolnshire and that, given its widespread occurrence, it does not need to be safeguarded, with the exception of permitted chalk workings as shown in Figure 3. Chalk is not a nationally important resource, and it is not a scarce mineral. The majority of the chalk resource in Lincolnshire also lies within the Lincolnshire Wolds Area of Outstanding Natural Beauty.
- 5.88 Ironstone deposits in the county are not considered to have any future economic significance as a source of iron, given the decline of the steel industry in the UK and their low grade quality. Whilst they could be worked as a source of building stone or low quality aggregate, they are not considered to be of current or future economic importance.
- 5.89 It is not proposed to define MSAs for hydrocarbons as prospects can only be identified after extensive exploration activity. In any event, oil and gas deposits are found at much greater depths than other minerals exploited within the County and are therefore less threatened by surface development.
- 5.90 Incompatible development close to a MSA may lead to sterilisation of part of the resource. The BGS good practice advice suggests that it may therefore often be appropriate to extend the MSA beyond the resource boundary to take account of such risks, the extent of which will vary between minerals and the likely method of extraction. The County Council proposes to extend the boundary of MSAs beyond the area of the resource to prevent residential development encroaching on a mineral extraction to the extent that the amenity of residents could be affected by noise, visual intrusion or blast vibration. The resource areas shown on Figure 1 include a buffer zone of 250m around sand and gravel and blown sand resources and 500m around limestone resources to ensure an adequate safeguarding margin.
- 5.91 The BGS guidance advises that, in urban areas, MPAs should define MSAs to highlight the potential for extracting minerals beneath large regeneration projects and brownfield sites. In Lincolnshire, however, such opportunities are probably limited to small scale building stone operations to provide stone for Lincoln Cathedral/ Lincoln Castle. Other mineral resources that are present do not generally lend themselves to prior extraction in built-up areas because of the nature of their extraction methods, and the possibility of such circumstances arising seems too slim to warrant safeguarding. The resource areas shown on Figure 1 consequently exclude mineral deposits within settlements with a

population in excess of 1000 and a minimum area of 20 hectares, however in such cases a 250m buffer extending into the urban area has been retained in order to avoid sterilisation by proximal development at the urban edge.

- 5.92 In two-tier planning areas such as Lincolnshire, safeguarding of mineral resources can be achieved only through county and district councils co-operating in the exercise of their respective planning powers over land with potential for mineral extraction. This can be facilitated by defining Minerals Consultation Areas (MCA). This will provide the mechanism for district councils to consult the County Council before granting planning permission, on any planning applications they receive for non-mineral developments which fall within the boundary of a MCA, and which would be likely to affect the winning and working of minerals.
- 5.93 The County has therefore defined Minerals Consultation Areas (MCA) to coincide with the extent of the resources within the Mineral Safeguarding Areas. The MCA will also cover the safeguarding of mineral sites and associated infrastructure (Policy M12). District Councils within the County will be supplied with a copy of the MCA along with the development criteria that the County Council wish to be consulted on. It will be the responsibility of the District Councils to ensure that the MCA is used when considering planning applications or future developments and that the County Council is consulted on developments located within the MCA.
- 5.94 Within a Minerals Safeguarding Area, except for the exemptions set out in policy M11, applications for non-minerals development should be accompanied by a Minerals Assessment in accordance with the latest guidance from the British Geological Survey (currently set out in Mineral Safeguarding in England: Good Practice Advice, reference OR/11/046). This should provide an appropriate assessment of the minerals resource including an estimate of the economic value, its potential for use in the forthcoming development and an assessment of whether it is feasible and viable to extract the mineral resource ahead of development to prevent unnecessary sterilisation. Where prior extraction can be undertaken, the assessment should also include an explanation of how this will be carried out as part of the overall scheme.
- 5.95 Following the assessment of the mineral resource, the Mineral Planning Authority will make a judgement about the likelihood of the mineral being worked in an environmentally acceptable manner and may advise the District Council that any development on or near mineral reserves should not proceed before the mineral is extracted, or that steps are taken to avoid sterilisation of the deposit.
- 5.96 Some minor development is unlikely to sterilise mineral reserves, such as small extensions to existing buildings or sites. However, this will depend on the location of the development and the type and extent of the mineral concerned. For instance a building proposed in the middle of a small building stone resource could lead to sterilisation.

Policy M11: Safeguarding of Mineral Resources

Sand and gravel, blown sand and limestone resources that are considered to be of current or future economic importance within the Minerals Safeguarding Areas shown on Figure 1, together with potential sources of dimension stone for use in building and restoration projects connected to Lincoln Cathedral/Lincoln Castle within the areas shown on Figure 2, and chalk resources included on Figure 3, will be protected from permanent sterilisation by other development.

Applications for non-minerals development in a minerals safeguarding area must be accompanied by a Minerals Assessment. Planning permission will be granted for development within a Minerals Safeguarding Area provided that it would not sterilise mineral resources within the Mineral Safeguarding Areas or prevent future minerals extraction on neighbouring land. Where this is not the case, planning permission will be granted when:

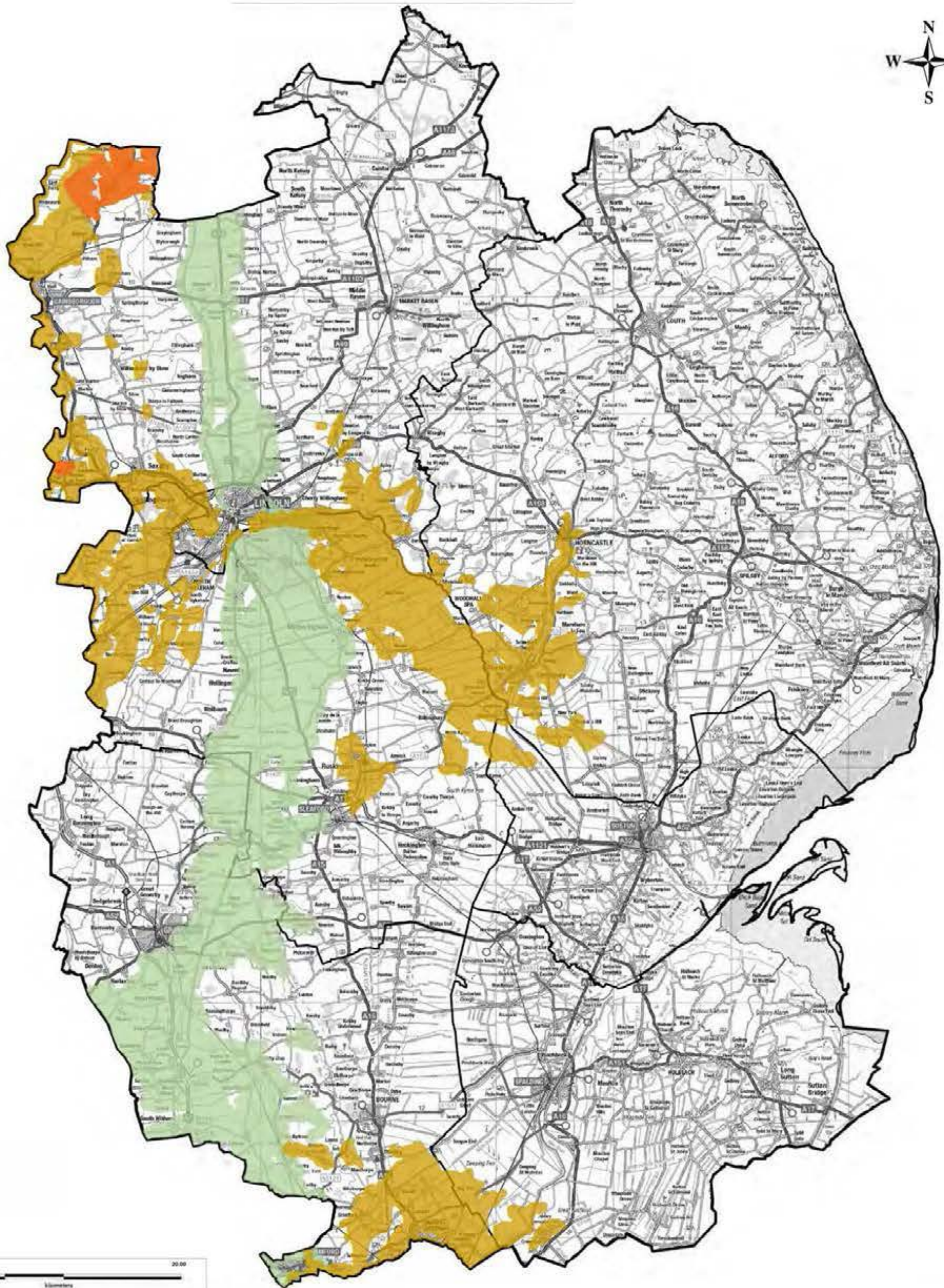
- **the applicant can demonstrate to the Mineral Planning Authority that prior extraction of the mineral would be impracticable, and that the development could not reasonably be sited elsewhere; or**
- **the incompatible development is of a temporary nature and can be completed and the site restored to a condition that does not inhibit extraction within the timescale that the mineral is likely to be needed; or**
- **there is an overriding need for the development to meet local economic needs, and the development could not reasonably be sited elsewhere; or**
- **the development is of a minor nature which would have a negligible impact with respect to sterilising the mineral resource; or**
- **the development is, or forms part of, an allocation in the Development Plan.**

Exemptions

This policy does not apply to the following:

- ***Applications for householder development***
- ***Applications for alterations to existing buildings and for change of use of existing development, unless intensifying activity on site***
- ***Applications for Advertisement Consent***
- ***Applications for Listed Building Consent***
- ***Applications for reserved matters including subsequent applications after outline consent has been granted***
- ***Prior Notifications (telecommunications; forestry; agriculture; demolition)***
- ***Certificates of Lawfulness of Existing or Proposed Use or Development (CLEUDs and CLOPUDs)***
- ***Applications for Tree Works***

Figure 1: Lincolnshire Minerals Safeguarding Areas Map



Lincolnshire County Council

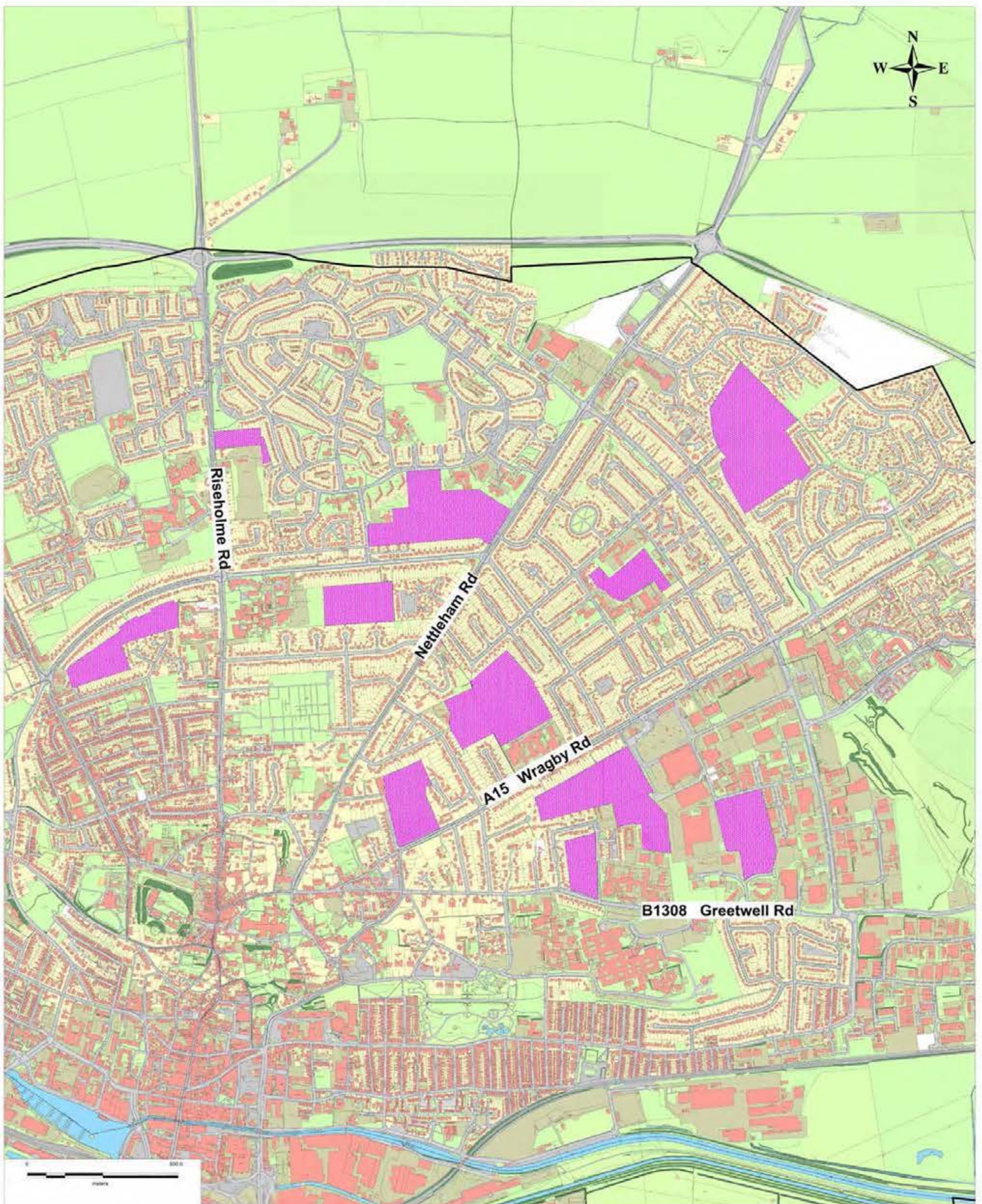
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Key

-  Limestone Mineral Safeguarding Area
-  Sand & Gravel Minerals Safeguarding Area
-  Wind Blown Sand Minerals Safeguarding Area



Figure 2 Lincoln Stone Minerals Safeguarding Areas Inset Map




Lincolnshire County Council

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Key

 Lincoln Stone Minerals Safeguarding Area

Lincolnshire
COUNTY COUNCIL
Working for a better future

Safeguarding of Existing Mineral Sites and Associated Minerals Infrastructure

- 5.97 The NPPF states that, in preparing Local Plans, local planning authorities should safeguard:
- existing, planned and potential rail heads, rail links to quarries, wharfage and associated storage, handling and processing facilities for the bulk transport by rail, sea or inland waterways of minerals, including recycled, secondary and marine-dredged materials; and
 - existing, planned and potential sites for concrete batching, the manufacture of coated materials, other concrete products and the handling, processing and distribution of substitute, recycled and secondary aggregate material
- 5.98 The future use of mineral sites and associated infrastructure could be constrained if sensitive developments such as housing are permitted nearby. In order to ensure that the supply of minerals is not interrupted, the County Council therefore considers that mineral sites and their associated infrastructure should be safeguarded. This includes aggregates recycling sites; sand and gravel quarries; limestone extraction quarries; chalk extraction quarries; and energy mineral development sites. The sites and facilities to be safeguarded are listed in Appendix 2 and shown on figures 6-12 in Appendix 3.
- 5.99 Most of the concrete batching plants and other associated minerals infrastructure are co-located at quarries or producers of recycled aggregates. The safeguarded list will indicate those sites which carry out these activities.
- 5.100 The MCA to be issued by the County Council (see paragraph 5.93 above) will include the mineral sites and associated infrastructure safeguarded by Policy M12, including a 250 metre buffer zone around sites as shown in Figure 3. Local planning authorities will be expected to consult the County Council on proposals for non-minerals development which could affect the use of such sites and facilities. The County Council may advise that development should not be permitted if it would constrain the effective operation of existing sites, or future use of land or associated infrastructure identified for mineral use.

Policy M12: Safeguarding of Existing Mineral Sites and Associated Minerals Infrastructure

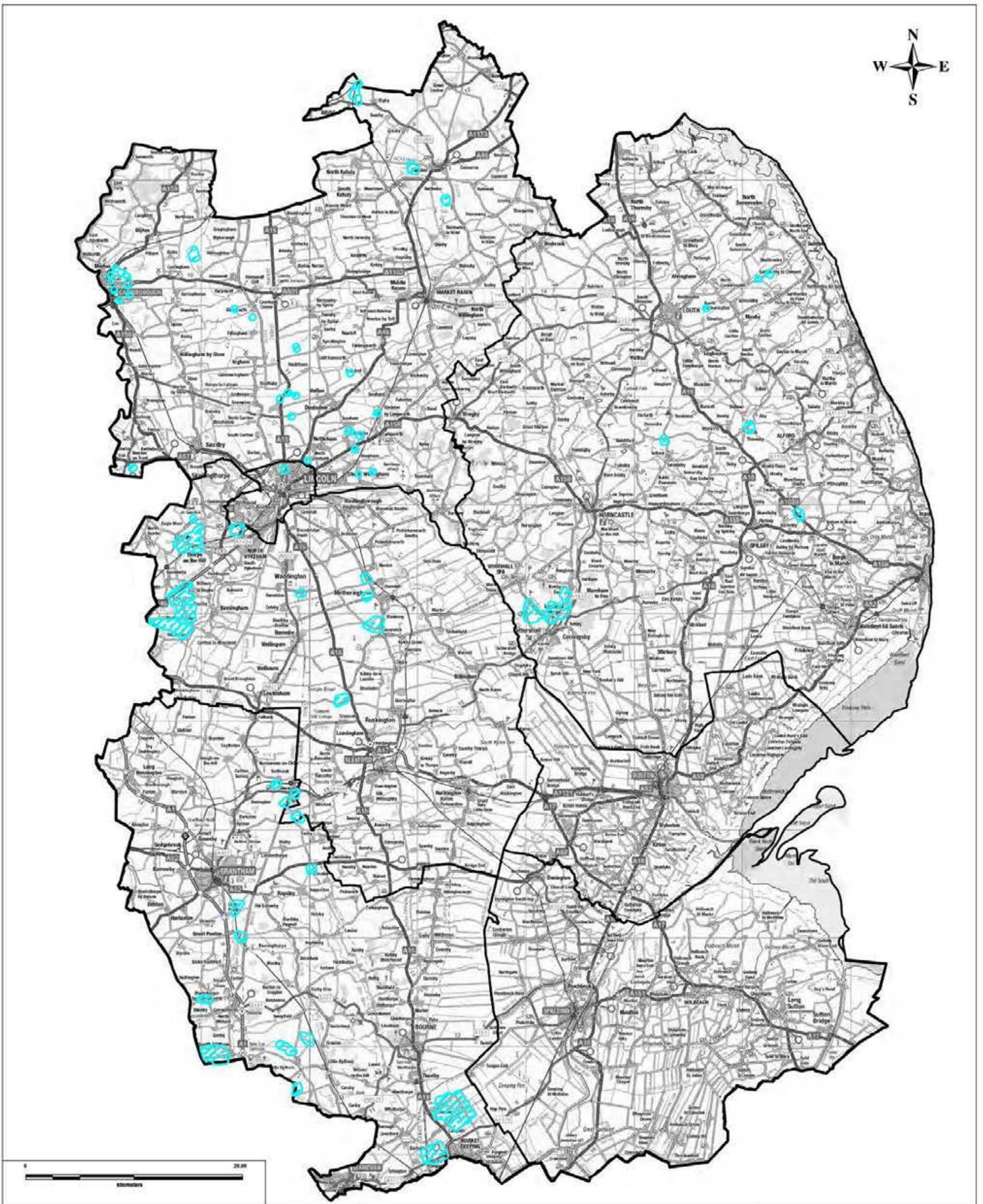
Mineral sites (excluding dormant sites) and associated infrastructure that supports the supply of minerals in the County will be safeguarded against development that would unnecessarily sterilise the sites and infrastructure or prejudice or jeopardise their use by creating incompatible land uses nearby.

Exemptions

This policy does not apply to the following:

- *Applications for householder development*
- *Applications for alterations to existing buildings and for change of use of existing development, unless intensifying activity on site*
- *Applications for Advertisement Consent*
- *Applications for Listed Building Consent*
- *Applications for reserved matters including subsequent applications after outline consent has been granted*
- *Prior Notifications (telecommunications; forestry; agriculture; demolition)*
- *Certificates of Lawfulness of Existing or Proposed Use or Development (CLEUDs and CLOPUDs)*
- *Applications for Tree Works*

Figure 3 Lincolnshire Site Specific Minerals Safeguarding Areas Map



Lincolnshire County Council
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Key
 Site Specific Minerals Safeguarding Area

Lincolnshire
 COUNTY COUNCIL
Working for a better future

OTHER MINERAL DEVELOPMENTS

Associated Industrial Development

- 5.101 In addition to the plant, machinery and buildings directly associated with the working of the mineral, there are certain industrial activities which are sometimes located at mineral extraction sites. A limited range of development is permitted under the Town and Country Planning (General Permitted Development) (England) Order (GPDO) 2015 without the prior approval of the Mineral Planning Authority (MPA), although this may only be carried out on land that is used as a mine. It must be for purposes principally in connection with the winning and working of minerals from the mine, and includes the treatment, storage or removal of minerals and derived wastes. A wider range of development, including secondary industry is also permitted under the GPDO but subject to the prior approval of the MPA, including ready mixed concrete and coating plants.
- 5.102 There may be benefits for certain industrial development directly associated with the processing of minerals to be located in close proximity to where the mineral is extracted, such as ready-mixed concrete batching plants at sand and gravel sites. Policy M13 deals with proposals for industrial development that are beyond the scope of the GPDO. Such development will only be approved where it can be demonstrated that there are clear environmental benefits in providing a close link between the industrial activities and associated mineral operation. In particular, regard will be given to any environmental effects, transportation implications, visual amenity and proposed time scales.
- 5.103 Where planning permission is granted, conditions will be imposed to ensure that minerals supplying the development are sourced principally from the adjacent extraction site and that, upon cessation of mineral extraction, the development will be removed and the site restored unless there are overriding reasons for its retention or exceptional circumstances.

Policy M13: Associated Industrial Development

Planning permission will be granted for ancillary industrial development within or in proximity to mineral sites where it can be demonstrated that there are close links with the mineral development and the proposals accord with all relevant Development Management Policies set out in the Plan. Where permission is granted, the operation and retention of the development will be limited to the life of the permitted reserves.

Irrigation Reservoirs

- 5.104 Agricultural irrigation reservoirs are functional installations providing water to a particular site. There are various benefits for farming and water management but also for wildlife and people if appropriately designed. Irrigation reservoirs could provide opportunities for multifunctional benefits including biodiversity enhancements and flood risk management (e.g. abstraction from rivers during high flows). Their construction can involve the extraction of mineral. Most irrigation reservoirs can be constructed under permitted development rights if excavated material is kept on-site following prior approval from the District Council. However, these developments sometimes have the potential to be used primarily as a means to extract aggregate so that the reservoir itself is not really needed.
- 5.105 It is important, therefore, that such developments are controlled and only allowed for the primary purpose of agricultural improvement. In this respect the design of the reservoir must be fit for purpose and the applicant will be expected to properly demonstrate that the reservoir is needed for agricultural improvement and that it is not simply a means to extract aggregate. For instance, it may be more acceptable in some cases to construct an above ground facility, which would avoid the need to remove significant amounts of mineral off-site and applicants will be expected to demonstrate why an above ground facility could not be used. In either case, it will be particularly important to ensure that any ground works do not impact on the historic or natural environment i.e. archaeological features or Local Wildlife Sites.
- 5.106 The size of reservoir will be a compromise of engineering, financial, and agronomic issues. The main starting point will be the total seasonal irrigation need in a dry year for a chosen return period (the probability of a dry year occurring). This will depend on the various crops grown and their total irrigated area. Allowance for future expansion or changes in cropping intensity will also need to be considered.
- 5.107 Early discussions with the Environment Agency are essential. Most substantial streams and rivers, and groundwater aquifers are already gauged by the Agency. The Agency can give advice on licensing and the expected reliability of existing and proposed abstractions. Additional low (summer) flow abstractions may not be available. But most rivers still have water available for abstraction at times of high (winter) flow. It is also recommended that discussions are held with relevant Internal Drainage Boards.
- 5.108 The County Council will seek full co-operation from the District Councils on this matter and will request that proposals which appear to be primarily intended for aggregate extraction are forwarded to the County Council for determination.

Policy M14: Irrigation Reservoirs

Planning permission will be granted for new or extensions to existing irrigation reservoirs that involve the extraction and off site removal of minerals where it can be demonstrated that:

- **there is a proven agricultural justification for the reservoir; and**
- **the need can be met by an irrigation facility; and**
- **an abstraction licence has been granted by the Environment Agency; and**
- **the design is fit for purpose; and**
- **the environmental impacts of removing material off-site would be less than constructing an above ground facility; and**
- **the proposals accord with all relevant Development Management Policies set out in the Plan.**

Borrow Pits

5.109 Borrow pits are temporary mineral workings sited adjacent to major construction projects, particularly new road schemes, and are used solely to supply aggregates and/or fill material for this purpose. The void created by the extraction can be used for the disposal of unsuitable and/or surplus materials arising from the project, or it could be left to fill with water to develop into a wetland site for wildlife, or to assist in flood alleviation, therefore providing multifunctional benefits. In certain circumstances they can have advantages over established sites by reducing the impact of concentrated flows of heavy goods traffic on the public highway and meeting peaks of demand without disrupting supplies elsewhere. They may also assist in the sustainable use of minerals by conserving resources of higher quality aggregates through the use of locally sourced materials and thereby reducing the need to make additional provision. Clay borrow pits may also be appropriate in certain circumstances such as for flood defence schemes and landfill restoration.

5.110 Borrow pit proposals must demonstrate that a balance can be struck between the need for the mineral and the impact on the environment and any local communities, ensuring that adequate mitigation or compensation is provided for the effects of the proposed development. It will also be necessary to demonstrate that, in overall terms, the borrow pit would result in environmental benefits over alternative sources of supply.

Policy M15: Borrow Pits

Planning permission will be granted for borrow pits to supply materials for major construction projects where:

- **there is a need for a particular type of mineral which cannot reasonably be supplied from existing sites, including alternative materials; and**
- **the transport of mineral from existing sites to the construction project would be seriously detrimental to the environment and local amenities because of the scale, location and timing of the operations; and**
- **in the case of proposals involving the extraction of aggregates, the site lies on or in close proximity to the project; and**
- **the mineral can be transported to the point of use without leading to harmful conditions on a public highway; and**
- **the site can be restored to a satisfactory after-use without the need to import material other than that generated by the construction project itself and which can be brought to the site without leading to harmful conditions on a public highway; and**
- **the proposals accord with all relevant Development Management Policies set out in the Plan.**

Where planning permission is granted, conditions will be imposed to ensure that operations are time-limited and that all mineral extracted is used only for the specified project.

6. PROVIDING FOR WASTE

Background

- 6.1 Lincolnshire County Council as Waste Planning Authority (WPA) must provide a policy framework for managing all of Lincolnshire's controlled waste. Such waste, by definition is controlled by legislation and its storage, handling and disposal must meet certain legal requirements. Controlled waste comes from many sources including homes, shops, offices, factories, farms and hospitals. The principal waste streams are *Local Authority Collected Waste, commercial & industrial, construction & demolition, agricultural, and hazardous.*

Box 1: Definitions of different waste types

Local Authority Collected Waste (LACW)

This waste stream was previously referred to as Municipal Solid Waste, and the new name reflects a slight expansion in the range of wastes it covers. Most is generated by householders, whether it is collected from the kerbside or taken to recycling points such as Household Waste Recycling Centres. It also includes small quantities of commercial waste which is collected from small businesses by the local authority, as well as non-household waste such as road and pavement sweepings and gully-emptying wastes. Waste collection is largely undertaken by the Waste Collection Authorities' own operatives, but recovery and disposal activities are controlled by the county Waste Disposal Authority in conjunction with third party waste management companies.

Commercial & Industrial Waste (C&I Waste)

These wastes are collected, managed and disposed by private waste companies serving businesses of all sizes across all industry sectors. A large proportion of *Commercial* waste is a mix of plastics, paper, card, glass and food waste collected from offices, shops, food outlets, etc. as well as waste metals (equipment, vehicles, machinery) and smaller quantities of chemicals, timber and other waste. The *Industrial* part of the stream comprises a similar range of materials but in different proportions, with larger quantities of chemicals, metals, textiles, and a variety of processing and packaging wastes, but with mixed office wastes also.

Construction, Demolition and Excavation Waste (CD& E Waste)

These wastes come from a wide range of new build and regeneration projects as well as road schemes and railway maintenance. Construction & Demolition wastes include structural and groundworks waste (bricks, asphalt, concrete, insulation material) and fittings (wood, plastic, glass, metal). Most of the waste is chemically inert but insulation materials are usually hazardous because they contain asbestos. Excavation waste is primarily soil and stones. As they are often bulky and of low value, these wastes tend to be recycled or re-used at or close to where they are created. In the case of excavation wastes greater quantities are removed for disposal locally at landfill. Therefore, a greater proportion

of this waste stream (compared to others) may be managed at source.

Agricultural Waste

Agricultural waste is mostly uncontrolled animal slurry and vegetable matter but many farms also produce 'non-natural' wastes that are controlled, such as scrap metals, batteries, oils, tyres, rubber, glass, plastic and veterinary pharmaceuticals. Virtually all of these wastes are normally managed on the agricultural holdings where they are created.

Hazardous Waste

The term hazardous waste has traditionally been used to describe materials such as asbestos, oils, solvents and healthcare wastes. However, broadening of this definition means it now includes everyday items such as fluorescent tubes, televisions, computer monitors (known as Waste Electronic and Electrical Equipment (WEEE) and scrap cars. All of the above waste streams contain variable, but generally small, quantities of hazardous wastes.

- 6.2 Just under 2 million tonnes of controlled waste was produced in Lincolnshire in 2012 (the latest year for which information is available on all the streams referred to above) and until recently a large percentage of this was disposed of at landfill sites. There is a need to break this cycle and manage waste more sustainably, by moving away from landfill, seeking waste prevention/minimisation and ensuring that as much waste as possible is reused, recycled, composted or subjected to energy recovery. The recent completion of the new Energy from Waste (EfW) facility at Hykeham has resulted in the diversion of a significant quantity of LACW previously sent to landfill. Lincolnshire is already achieving high rates of LACW recycling but it is important to continue to divert more waste away from disposal and to provide the facilities to increase the recycling rates of other waste streams, in particular, for producers of commercial and industrial waste.
- 6.3 The planning system has a vital role to play in ensuring that suitable sites are identified for waste facilities and that the negative impacts are reduced and the benefits can be positively managed.

WASTE ARISING IN LINCOLNSHIRE

- 6.4 Detailed data on the estimated current arisings, forecasts and indicative capacity gaps (the difference between the current operational waste management capacity and the predicted arisings) have been produced separately from this document and can be found within the latest Lincolnshire Waste Needs Assessment (July 2014) and subsequent addendums dated May 2015 and October 2015 which are available to view or download at www.lincolnshire.gov.uk/mineralsandwaste. The text below summarises the position.
- 6.5 Future requirements for facilities to manage all waste streams were evaluated through the Waste Needs Assessment (July 2014) which looked at 3 scenarios based on different rates of growth in these wastes, and a

further 3 scenarios assuming different levels of recycling, composting and diversion from landfill.

- 6.6 The subsequent sections present details of the Council's chosen option of growth with median recycling¹⁰ and details of additional capacity that will be needed reflecting the chosen scenario, which the Council considers to be the most realistic, achievable and delivers the best combination of value for money and resource efficiency.

Local Authority Collected Waste (LACW) Arisings

- 6.7 Unlike other waste streams, Lincolnshire County Council has up to date information on LACW and in 2012 342,000 tonnes of LACW was generated. The assumptions summarised above have been used to project quantities forward to 2014 and beyond.
- 6.8 Table 4 shows the quantities of waste forecast under the chosen scenario which includes assumptions about growth and improvement in the quantities of waste diverted from landfill by greater levels of recycling, composting and energy recovery. It indicates the quantity of LACW to be managed will increase by almost 75,000 tonnes over the Plan period. The detailed analysis identifies that small quantities of LACW will need to be managed at sites recycling inert wastes or at hazardous landfill sites.

**Table 4: LACW arisings and management requirements 2014-2031
Growth with Median Recycling scenario**

	Total arisings	Non-inert recycling	Inert recycling	Composting	Energy recovery	Non-hazardous landfill	Hazardous landfill
2014	400,270	109,462	14,705	81,508	156,038	36,282	2,275
2015	405,934	111,011	14,913	82,662	158,246	36,795	2,307
2016	410,656	112,302	15,087	83,623	160,087	37,223	2,334
2017	415,432	113,608	15,262	84,596	161,949	37,656	2,361
2018	420,265	114,930	15,440	85,580	163,833	38,094	2,388
2019	425,154	116,267	15,619	86,576	165,739	38,537	2,416
2020	430,100	117,619	15,801	87,583	167,667	38,986	2,444
2021	434,021	118,692	15,945	88,381	169,195	39,341	2,467
2022	437,978	119,774	16,090	89,187	170,738	39,700	2,489
2023	441,971	120,866	16,237	90,000	172,294	40,062	2,512
2024	446,001	121,968	16,385	90,821	173,865	40,427	2,535
2025	450,067	123,080	16,535	91,649	175,450	40,795	2,558
2026	454,169	124,202	16,685	92,484	177,050	41,167	2,581
2027	458,310	125,334	16,837	93,327	178,664	41,543	2,605
2028	462,486	126,476	16,991	94,178	180,292	41,921	2,628
2029	466,703	127,629	17,146	95,037	181,936	42,303	2,652
2030	470,959	128,793	17,302	95,903	183,595	42,689	2,677
2031	475,251	129,967	17,460	96,777	185,268	43,078	2,701

[All figures in tonnes]

Source: Lincolnshire Waste Needs Assessment Model 2014

¹⁰ The recycling levels for each waste stream proposed under median recycling are set out in Table 3 of the "Waste Needs Assessment Report 2014".

- 6.9 Comparison of the 2014 total arisings with data for preceding years shows an apparent jump in the quantity of waste that has to be managed. This reflects the effect of the opening of the North Hykeham Energy from Waste facility which generates secondary materials in the form of incinerator bottom ash and air pollution control residues. Both are wastes that have to be managed and therefore the quantity produced must be taken into account when assessing the type and quantity of capacity that is needed.
- 6.10 The assumptions used to derive these forecasts assume that the high existing level of recycling/composting, and the rapid diversion of a large proportion of residual LACW to the North Hykeham facility means that by 2014/15 the mix of management methods for this stream will have stabilised. This means there is no further increase in landfill diversion and the main issue is therefore the continuing growth of the stream and its impact on the capacity gap for the different management facilities.

Commercial and Industrial Waste (C&I) Arisings

- 6.11 C&I data specific for Lincolnshire does not exist and the County Council is reliant upon national and comparable regional studies in order to extrapolate county-level estimates. This revision of the needs assessment compared results produced from studies in 2010 (national) and 2009 (for the North West region) and concluded that the latter provided a better estimate of waste quantities and how they are being managed.
- 6.12 Table 5 shows the arisings and management requirements forecast for the chosen scenario which incorporates assumptions about future waste growth and the quantities requiring different management methods. The total quantity of C&I waste created rises from around 554,600 tonnes in 2014 to almost 609,800 tonnes in 2031 (9.9% growth in total).

**Table 5: C&I arisings and management requirements¹¹ 2014-2031
Growth with Median Recycling scenario**

	Commercial arisings	Industrial arisings	Recycling (mixed)	Recycling (metals)	Composting	Transfer & treatment	Energy recovery	Thermal (no recovery)	Land recovery	Landfill
2014	323,175	231,496	232,658	22,653	9,397	48,246	26,361	17,539	28,887	168,930
2015	324,949	232,910	238,171	22,778	9,449	41,488	44,207	17,635	28,371	155,760
2016	326,739	234,331	243,738	22,904	9,500	34,657	62,249	17,733	27,848	142,441
2017	328,534	235,761	249,359	23,029	9,553	27,748	80,488	17,830	27,319	128,989
2018	330,341	237,200	255,035	23,157	9,605	20,761	98,926	17,928	26,782	115,347
2019	332,159	238,647	260,765	23,283	9,659	13,699	117,564	18,027	26,240	101,569
2020	333,985	240,102	266,551	23,411	9,711	6,557	136,404	18,126	25,690	87,637
2021	335,822	241,425	270,554	23,541	9,765	6,593	140,092	18,226	25,831	82,645
2022	337,669	242,751	274,592	23,670	9,819	6,629	143,817	18,325	25,973	77,595
2023	339,527	244,086	278,667	23,800	9,873	6,666	147,579	18,426	26,116	72,486
2024	341,393	245,429	282,778	23,931	9,927	6,702	151,377	18,527	26,260	67,320
2025	343,270	246,778	286,926	24,062	9,981	6,739	155,212	18,630	26,404	62,094
2026	345,159	248,135	291,111	24,195	10,036	6,776	159,086	18,732	26,549	56,809
2027	347,058	249,502	295,334	24,328	10,091	6,813	162,998	18,836	26,695	51,465
2028	348,966	250,874	299,594	24,462	10,147	6,851	166,947	18,938	26,842	46,059
2029	350,887	252,253	303,892	24,596	10,203	6,889	170,935	19,043	26,990	40,592
2030	352,817	253,640	308,228	24,732	10,259	6,927	174,962	19,147	27,138	35,064
2031	354,756	255,036	312,602	24,868	10,315	6,965	179,028	19,253	27,288	29,473

[All figures in tonnes]

Source: Lincolnshire Waste Needs Assessment Model 2014

6.13 The quantities of Commercial and Industrial waste to be managed rise by around 31,500 tonnes and 23,500 tonnes respectively. Collectively, the proportion that is recycled or composted grows from 48% to 57% over the same period (individually the commercial stream achieves 59% recycling and the industrial stream 60%) while the proportion sent for thermal treatment collectively rises from 8% to 33% (individually the commercial stream achieves 35% recovery and the industrial stream 24%) with virtually all the increase being waste from which energy is recovered. As a result of these changes the proportion sent to landfill falls from 30% to 5% for both commercial and industrial. The assumptions used in the model refer specifically to energy recovery using thermal treatment and as a result an increasing proportion of waste is shifted from non-thermal to thermal treatment.

Construction Demolition & Excavation Waste (CD&E)

6.14 As noted previously this stream comprises two distinct elements: C&D wastes which are primarily material from the external and interior structures, fixtures and fittings of demolished buildings, as well as material such as concrete and asphalt from demolition sites and unused aggregates and other wastes arising during subsequent construction. Excavation wastes comprise soil and stones only. In line with paragraphs 1 and 8 of the National Planning Policy for Waste, it is recognised that Local Planning Authorities have a role to play in encouraging sustainable construction practices in developments in order to minimise the level of

¹¹ Land recovery relates to land spreading of materials from the industrial waste stream including paper sludges, gypsum, organic wastes, treated food processing waste (via anaerobic) as digestates and composted food wastes as set out in the Commercial and Industrial Waste Survey 2009 Final Report May 2011 (Jacobs for DEFRA).

C&D waste and ensure the best use of resources. This would be achieved through imposing appropriate planning conditions such as introducing requirements for construction management plans/waste audit programmes.

- 6.15 As with C&I data, information on these arisings is subject to limitations, the principal source being information reported to the Environment Agency. Material that is re-used at source (for example, crushed concrete and asphalt for sub-base for parking areas; or soil and stones used in landscaping the site) or which is sent to a site deemed to be exempt from waste permitting and reporting and the quantity of these wastes are not recorded. However these wastes are managed using mobile plant and make no demand of the third-party merchant capacity which the Plan must provide for. Moreover, in both cases, any mobile plant and other mobile capacity lies outside the control/remit of the County Council. This means that the quantity of waste estimated using the Environment Agency data is a lower-bound estimate of how much waste is actually being generated but it is still a reasonably accurate indicator of the total management capacity that is needed.
- 6.16 There is a further complication because much of the waste removed from its source is taken to waste transfer stations where metal, glass, building rubble, etc. is separated and on some of the larger sites the latter material may be reprocessed (crushed into a secondary aggregate) and/or then sent to another site for use or to another transfer station. As a result there is a risk of over-estimating the size of the waste stream by double-counting material as it moves from one waste site to another.
- 6.17 Data provided by the Environment Agency shows C&D arisings fell from almost 400,000 tonnes in 2008 to around 130,000 tonnes in 2011 although the total rose to just over 220,000 tonnes in 2012. This increase reflects the resumption of house-building, infrastructure and other regeneration projects as the economy began to emerge from recession. Of the 2012 total, only 27% was exported from the county for re-use or disposal elsewhere. As a result a total of just under 165,000 tonnes of local C&D waste was managed at facilities in the county together with over 19,000 tonnes of material imported from elsewhere.
- 6.18 In contrast the quantity of Excavation waste created has been more erratic, though this is unsurprising as much of it is created in large quantities as a result of specific development projects over a limited time and therefore waste is not necessarily created repetitively each year as is the case for the LACW and C&I streams. Arisings of both Excavation and C&D wastes showed a marked increase in 2012 which reflect initial site preparation work for the North Hykeham EfW plant.
- 6.19 Table 6 summarises the forecast growth in arisings and how these wastes will be managed over the period 2014-2031. The forecast assumes slow growth in employment rates which will reflect industrial activity and waste creation rates in the mining/quarrying and construction sectors throughout this period. The forecast anticipates 90% of C&D wastes will be recycled by 2031.

**Table 6: CD&E waste arisings and management methods 2014-2031
Growth with Median Recycling scenario**

	C&D arisings	E arisings	Transfer	Recycling & re-use	Treatment	Landfill
2014	453,150	503,500	330,042	217,885	172,064	236,660
2015	456,322	507,025	325,003	230,960	169,068	238,317
2016	459,517	510,574	319,877	244,208	166,021	239,985
2017	462,733	514,148	314,664	257,629	162,923	241,665
2018	465,971	517,746	309,361	271,226	159,774	243,356
2019	469,234	521,371	303,970	285,003	156,572	245,060
2020	472,519	525,020	298,487	298,957	153,319	246,775
2021	475,827	528,695	292,913	313,094	150,012	248,503
2022	479,157	532,397	287,247	327,413	146,651	250,243
2023	482,511	536,123	281,486	341,918	143,236	251,994
2024	485,888	539,876	275,631	356,610	139,765	253,758
2025	489,289	543,657	269,681	371,491	136,241	255,535
2026	492,715	547,462	263,633	386,563	132,658	257,323
2027	496,164	551,293	257,487	401,827	129,019	259,124
2028	499,637	555,152	251,242	417,286	125,323	260,938
2029	503,135	559,038	244,898	432,941	121,568	262,765
2030	506,656	562,952	238,452	448,797	117,756	264,604
2031	510,203	566,893	231,904	464,852	113,883	266,457

[All figures in tonnes]

Source: Lincolnshire Waste Needs Assessment Model 2014

6.20 Table 6 forecasts an additional 60,000 tonnes each of C&D and E wastes would need to be managed by 2031 compared to the current position.

Hazardous Waste

6.21 The Hazardous Waste (England and Wales) Regulations 2005 redefined the range of waste materials that are defined as hazardous. As a result a number of commonplace items such as televisions and fridges now fall within the scope of the Act because they contain materials or components that are now classified as hazardous. These materials join other hazardous wastes such as residues from chemical production, manufacturing and a wide range of industrial activities which generate most of these materials.

6.22 These materials are normally managed at facilities that handle hazardous wastes exclusively. Unlike LACW and C&I wastes their hazardous properties prevent management of a mixture of materials. They are usually only created in small quantities and this factor combined with the need for specialised facilities means it is unlikely that it will be economically viable to provide a full range of treatment or disposal facilities within a single Plan area. The county currently contains a limited number of hazardous waste sites that provide mainly transfer and bulking capacity with treatment, recycling (where feasible) and disposal occurring at facilities elsewhere and as a result of the factors mentioned above it is unlikely that the Council could plan for a position in which the county becomes fully self-sufficient in managing these materials. Nevertheless,

should proposals for hazardous waste facilities come forward to meet an identified need within the County, they would be favourably considered, subject to accordance with all relevant policies in the Plan.

- 6.23 In 2012 the county produced 65,800 tonnes of hazardous wastes including large quantities of waste oil and contaminated soil and stones. Around 17,800 tonnes of this material – mainly the former – was managed at facilities in the county with the rest (almost 49,000 tonnes) being sent to specialised treatment or landfill sites elsewhere in the country. At the same time 15,400 tonnes of material was imported for management locally with the result that the county is a net exporter of hazardous waste.
- 6.24 Table 7 summarises the forecast arisings of hazardous waste over the Plan period. Linking waste creation rates to growth in employment in local industry gives rise to a very modest increase in the total waste created of around 6000 tonnes (10%) over the period to 2031. Hazardous waste transfer stations currently take some wastes from neighbouring authorities but the lack of local treatment, recycling or landfill capacity means this material is bulked into larger loads locally and then removed to facilities elsewhere in the UK. Even when this transiting material is taken into account, the county still has a surplus of 13,400 tonnes of transfer station capacity.

Table 7: Hazardous waste arisings and management requirements 2014-2031 – Growth with Median Recycling scenario

	Arisings	Transfer station	Recycling	Non-thermal treatment	Thermal treatment	Landfill
2014	66,163	17,066	28,664	926	870	18,637
2015	66,527	17,160	28,821	931	876	18,739
2016	66,894	17,255	28,980	936	880	18,843
2017	67,261	17,349	29,139	941	886	18,946
2018	67,632	17,445	29,300	947	890	19,050
2019	68,004	17,541	29,461	952	895	19,155
2020	68,377	17,637	29,623	957	900	19,260
2021	68,753	17,734	29,786	962	905	19,366
2022	69,132	17,832	29,950	968	909	19,473
2023	69,512	17,930	30,114	973	915	19,580
2024	69,895	18,029	30,280	978	920	19,688
2025	70,279	18,128	30,446	984	925	19,796
2026	70,665	18,227	30,614	989	930	19,905
2027	71,055	18,328	30,782	995	936	20,014
2028	71,444	18,428	30,952	1,000	940	20,124
2029	71,837	18,530	31,122	1,005	945	20,235
2030	72,233	18,632	31,293	1,011	951	20,346
2031	72,630	18,734	31,465	1,017	956	20,458

[All figures in tonnes]

Source: Lincolnshire Waste Needs Assessment Model 2014

- 6.25 The lack of local recycling, treatment or landfill capacity for this stream means that the arisings figures in Table 7 also define the capacity gaps for each management method, which collectively total 49,000 tonnes. Correspondence with authorities in which the majority of Lincolnshire's hazardous waste is managed at present suggests that there is sufficient capacity to continue to accept this waste until at least 2026. For the reasons explained in the opening paragraphs of this section, the economics of managing hazardous waste and the cost justification for new facilities is subject to limitations that do not apply to the same degree to other wastes. As a result the Council considers it unlikely that any type of hazardous waste landfill or treatment plant would be viable within Lincolnshire in the immediate future. Nevertheless the development of sites will be supported provided the capacity available does not exceed the quantity of hazardous wastes generated in the County at the time.

Agricultural Waste

- 6.26 The limited data on the quantities, types and methods used to manage agricultural wastes comes primarily from Environment Agency surveys in 2003 and 2005, and from Defra surveys of the number of agricultural holdings the last of which was undertaken in 2010. These sources indicate there were 3,680 farm holdings in the county in 2010 producing just over 2,089,000 tonnes of material, making this by far the largest controlled waste stream in Lincolnshire. Over 99% of these wastes are described as organic by-products such as waste milk, straw and slurry which are managed where they originate by burial, disposal to sewer, burning or spreading the material on land for agricultural improvement. Less than 1% of these materials (17,700 tonnes) fall within the category of controlled waste which requires off-site management capacity for recycling (agricultural plastics and other packaging, batteries, tyres and waste equipment and machinery) or incineration (particularly animal by-products and used syringes or needles, all of which are hazardous wastes).
- 6.27 Table 8 summarises the quantities of waste forecast and management methods required. The assessment assumes that there will be no substantive change in intensity, scale or farming techniques during the Plan period and therefore these requirements remain constant over the period 2014-2031. The only exception to this has been the roll-out of Anaerobic Digestion facilities across the county over the last five years. Several of these facilities operate on a merchant basis, taking waste from the same holding and from other sites. However this capacity provides an alternative to existing practices of land-spreading of slurry which may still be the most practical and economically attractive disposal method in most cases.

Table 8: Agricultural waste arisings and management requirements

Total arisings	Managed on-farm	Managed off-farm	Recycling	Thermal treatment	Special incineration	Landfill
2,089,136	2,071,435	17,701	7,066	4,342	5,520	773

[All figures in tonnes]

Source: Lincolnshire Waste Needs Assessment Model 2014

- 6.28 The residual waste requiring off-site treatment is similar in content to C&I wastes and, therefore, could be managed in existing facilities. There may be a need for a small number of very small transfer facilities in rural locations to aggregate these wastes into larger loads for delivery to C&I waste facilities in the vicinity of the larger towns, however this role can also be performed by the existing network of small non-municipal transfer stations.

Capacity Gaps

- 6.29 Tables 4-8 present the waste forecasts and establish the capacity requirements throughout the Plan. Local capacity of different waste management facilities has been identified from records provided by the Environment Agency. These figures take account of some new facilities and of known closures but total capacity will be subject to change if other facilities are permitted and become operational in the future, and as new forecasts are published on the waste arisings and their uses. Updates to these will be published in the County Council's Annual Monitoring Reports and should the arisings significantly decrease or increase it would allow the Council to react, in terms of waste site provision, rapidly to changes in economic circumstances. The forecasts are indicative and it is not possible to predict the number or types of facilities required with absolute certainty. However, the tables (4 - 8) do present the best available forecasts and suggest that a broad range of facilities may be required to deal with the treatment of waste up to 2030/31.
- 6.30 The capacity at some waste management facilities is dedicated to handling a particular waste but it is increasingly common for sites to offer the capability to handle a more diverse range of materials. In some instances this is because some streams comprise similar mixes of wastes (LACW and C&I) or because facilities serve particular groups of users who generate a range of inert and non-inert wastes (Household Waste Recycling Centres). For this reason it is more appropriate to assess capacity gaps according to the waste management function performed. Evaluating the requirements for each waste stream in isolation can mean that the available capacity is over-estimated if part of it is already used to manage other waste streams.
- 6.31 Table 9 summarises the predicted capacity gaps at three intervals corresponding to key points in achieving the assumed recycling and landfill diversion performance rates. Negative figures identify capacity surpluses. Further detailed information is provided in the Lincolnshire Waste Needs Assessment 2014.

Table 9: Forecast Capacity Gaps by Facility Type 2014, 2020, 2025 and 2031 – Growth with Median Recycling scenario

Function	Wastes	Gap 2014	Gap 2020	Gap 2025	Gap 2031
Mixed waste recycling	LACW / C&I / Agric.	74,743	117,752	144,411	172,273
Specialised recycling	LACW / C&I / Agric.	-334,205	-333,447	-332,796	-332,126
Composting	LACW / C&I	-412,290	-439,901	-435,565	-431,033
Treatment plant	LACW / C&I / Agric.	-123,727	-158,190	-175,059	-193,329
Energy recovery	LACW / C&I	37,988	131,663	158,256	186,153
Specialised incineration	Mainly Haz. / Agric.	22,682	23,296	23,823	24,364
Aggregates recycling	CD&E	-411,410	-114,242	-20,974	157,099
Non-hazardous landfill	LACW / C&I / Agric.	-36,452	-66,990	-90,724	-115,860
Inert landfill	Mainly CD&E but other non-haz.	-11,938	50,875	137,635	148,557
Hazardous landfill	Hazardous	21,685	22,477	23,127	23,796

[All figures in tonnes (rounded)]

Source: Lincolnshire Waste Needs Assessment Model 2014

6.32 The County Council is maintaining its objective of not providing for new inert or non-hazardous landfill capacity above current levels. The needs assessment has identified a capacity gap for inert waste disposal from 2019 gradually increasing to the end of the plan period. Notwithstanding the fact that there is an identified capacity gap from 2019 the County Council maintains the position of not allocating additional sites for new landfill based on the following factors:

- there is a recognised surplus in non-hazardous landfill throughout the plan period;
- a number of existing inert waste landfill sites have end dates extending beyond the Plan period with no planning restrictions on the rate of infilling, the rates could therefore be increased to meet demand and reduce the identified capacity gap; and
- there is the potential for C&D recycling rates to increase over the plan period beyond those planned for in the Waste Needs Assessment, and in such circumstances this would lead to an associated reduction in inert waste landfill requirements.

Notwithstanding the above, if it becomes apparent through the monitoring of the Plan that additional landfill suitable for inert disposal is required, this Plan will be reviewed accordingly. The principal concern now is maintaining improvements in recycling and recovery in line with the waste hierarchy and Strategic Objective d but not on such a scale that landfill operations in the county are no longer economically viable.

6.33 Table 10 shows a summary of the number of new waste facilities that it is considered would address the identified capacity gaps and indicates the average annual capacity that has been assumed in each case. Waste functions for which there is already a surplus are not included.

Table 10: Predicted Requirements for New Facilities

Facility type	Annual capacity	New facilities needed			
		Short term	By 2020	By 2025	By 2031
Mixed LACW & C&I waste recycling	75,000	1	1		1
Energy recovery from LACW & C&I	200,000	1			
Specialised thermal treatment	25,000	1			
CD&E and aggregates recycling	50,000			1	2
Hazardous waste landfill	25,000	1			

[Annual capacity in tonnes]

6.34 Many operational minerals sites that appear capable of recycling waste CD&E materials are currently categorised as transfer stations and it is not clear what capacity is currently available. The requirements above should therefore be regarded as an upper or pessimistic estimate and elements of this capacity may be in use now or be capable of being brought forward as co-located ancillary development, though the contribution it could meet to closing the capacity gap cannot be estimated accurately. Conversely, it has not been possible to model the pattern of waste arisings across the county and there is no certainty that the existing network of sites matches the pattern of need closely. Most facilities are clustered in or near the principal settlements but need for additional, probably small, sites may arise elsewhere although the timing and location cannot be predicted at present. New developments in those locations would have the benefit of serving local requirements, reducing the need to move these bulky wastes some distance across the County.

6.35 The need or not for further waste transfer stations (WTS) has not been included in the assessment of the requirement for future waste sites except where these sites also provide ancillary functions such as aggregates recycling. Such facilities are essential elements of a network of facilities to manage waste but do not actively contribute to recycling

and recovery capacity. The scale of these facilities will depend on many factors, including location and types of waste being dealt with.

- 6.36 The intention of the County Council is to ensure that sufficient opportunities are identified to allow for new sites to be developed in Lincolnshire to enable the waste tonnages predicted to arise in Lincolnshire to be managed within the County. This would mean that, purely on arisings, the area would be net self-sufficient. But, movements of waste in and out of the County would continue subject to contracts and/or proximity to the nearest waste facility. There may also be specialist facilities which are not present in Lincolnshire to which waste may need to be sent for management. The identified capacity gaps for specialised thermal treatment (typically of agricultural wastes) and hazardous landfill exist already and the management requirement is being met by exporting the wastes to disposal facilities outside the County. The small quantity of materials involved may provide insufficient incentive for the waste industry to bring forward new capacity locally and the County would then continue to rely on external capacity. In order to achieve net self-sufficiency the Plan will still need to provide for a corresponding amount of new capacity for other waste management methods therefore this situation does not reduce the number of new sites that are needed. The Council will also need to co-operate with the Authorities which provide external management capacity to make sure that the facilities will remain available for the duration of the Plan.

Policy W1: Future requirements for new waste facilities

The County Council will, through the Site Locations document, identify locations for a range of new or extended waste management facilities within Lincolnshire where these are necessary to meet the predicted capacity gaps for waste arisings in the County up to and including 2031, as presented in Table 9, subject to any new forecasts published in the Council's Annual Monitoring Reports.

Low level non-nuclear radioactive waste

- 6.37 Low level non-nuclear radioactive waste is classified separately from hazardous waste and is that waste produced by non-nuclear industries such as hospitals, and research and educational establishments. Solid low level radioactive waste is similar in its physical and chemical nature to municipal, industrial and commercial wastes but it is radioactive. The majority of this waste and its subcategory of very low level radioactive waste are disposed of either by landfill or incineration. No such incineration facility exists within Lincolnshire but the landfill at North Hykeham can take low level wastes. Data on solid low level radioactive waste show that in 2008 Lincolnshire produced 1.10m³ of this waste and North Hykeham Landfill received 2.0m³ of low level radioactive waste consisting of paper, disposable gloves, and small quantities of metal and glass. By 2013 this figure had fallen back to 1.0m³.

- 6.38 Nationally, there are sufficient facilities until 2130 for the management of low level waste but for very low level waste there is a requirement to plan for further capacity post 2015. However, this requirement appears to be a result of current facilities requiring an extension to their current permissions rather than a need for new sites.
- 6.39 The above shows that Lincolnshire currently has capacity to continue to manage its low level non-nuclear radioactive waste where this involves burial, however the availability of capacity at North Hykeham landfill throughout the Plan period cannot be guaranteed. Moreover, there is a desire for the management of such wastes to be moved away from disposal to some form of recovery, where possible. Given the very small quantity of waste produced within Lincolnshire it would not be economically viable for such a facility to recover this waste in isolation, instead, as with disposal, such waste would be managed alongside other MSW/C&I wastes. Proposals for such facilities will be assessed against Policy W2 and other relevant policies in the plan.

Policy W2: Low Level Non-Nuclear Radioactive Waste

Planning permission will be granted for the management of low level non-nuclear radioactive waste where:

- **there is a proven need for the facility; and**
- **locating in Lincolnshire is the most viable locale for managing such waste; and**
- **the proposals accord with all relevant Development Management Policies set out in the Plan.**

WASTE SPATIAL STRATEGY

6.40 The County Council is not allocating specific sites in this document as it considers there are none which are critical to the delivery of the strategy. Instead, suitable individual sites will be allocated in the Site Locations document. However, in line with the National Planning Policy for Waste, the Council has identified *areas of search* which are considered to be suitable for new or enhanced waste management facilities to meet the needs of Lincolnshire. Also, in accordance with Planning Practice Guidance, the Council will not be prescribing waste management technologies that will be used to deal with specific waste streams. This is to enable the sites and areas which come forward to accommodate a range of types and sizes of waste management facility in order for the plan to be flexible enough to cope with changes in waste practices and to allow the development of new and emerging waste technologies to come forward during the plan period.

6.41 The main types of waste facility that could be developed include waste transfer stations, materials recycling facilities, composting, anaerobic

digestion, energy from waste, and landfill. Although the management of waste is moving away from landfill it is unlikely that landfill will be totally phased out over the life of the plan period.

- 6.42 In keeping with the requirements of the National Planning Policy for Waste and communities taking responsibility for their waste, the spatial strategy is focussing new waste sites in the four largest settlements to achieve a reduction in the miles that untreated waste travels, by virtue of their location in proximity to the large centres of waste generation in Lincolnshire. This work would also build on other key settlements and recognised growth areas by the Lincolnshire District Local Plans, and would bring in areas such as the town of Gainsborough which has been designated as an economic growth point (alongside Grantham and Lincoln). To address this, the strategy expands the pattern of where the larger waste facilities could be located to include the main towns of: Bourne; Gainsborough; Louth; Skegness; Sleaford; and Stamford. These key urban areas therefore provide the *areas of search* for new waste management facilities. The 'urban area' is considered to comprise the defined boundary of the particular settlement as shown on the key diagram and 'around' means the areas directly adjacent to the edge of the defined urban areas. It also includes settlements on an A Class road connecting directly into one of the main urban areas set out within Policy W3 and that have an existing and/or planned employment or industrial areas within their defined boundary, suitable for consideration for a waste management use in line with the principles of the National Planning Policy for Waste.
- 6.43 A key consideration of waste is ensuring that waste is managed as close to source as possible, where waste has to travel, the spatial strategy seeks to promote the sustainable transportation of waste. The key principles to be considered are set out in Policy DM13: 'Sustainable Transport Movements' and its supporting text. The key points to be considered in the spatial strategy are set out below:
- locate larger waste facilities within the Areas of Search (in and around the main urban areas set out in Policy W3);
 - encourage smaller facilities (outside of the main urban areas set out in Policy W3) to locate in areas which serve local communities;
 - encourage large waste sites to locate on or close to A Class Roads in the county to reduce impacts on local communities;
 - encourage the co-location of waste facilities to reduce the level of movements of waste on the county's road network.
- 6.44 Locating waste facilities in the urban areas also allows a greater potential for decentralised renewable energy projects to be located in close proximity to potential customers for their heat and/or electricity. Of course, a waste facility in the urban areas provides a greater conflict between these operations and the amenity of the community. Therefore, where applicable, proposed waste facilities shall be suitably enclosed within a building or structure to minimise their impact on local amenity, the surrounding environment, and any nearby sensitive receptors. Most waste management activities are now suitable for industrial locations and may fall within the general industrial class in the Use Classes Order. With

advancement in mitigation techniques, some waste management facilities may also be considered as light industrial in nature and therefore compatible with residential development.

- 6.45 Notwithstanding the above spatial strategy there are a limited number of facility types which would be acceptable to be located outside of or away from the main urban areas. In the main, landfills occur following mineral extraction which itself only occurs where the geological conditions are suitable. Therefore, such sites are frequently within the countryside and it would not be appropriate to direct such facilities to urban areas. There are also facilities which by their nature may be best placed outside areas of high population due to their potential amenity impacts (in the main, odour), such as facilities for the open windrow composting of green waste, anaerobic digestion, and the treatment of sewage.
- 6.46 Lincolnshire is a large rural county with small settlements scattered across its extensive countryside and to restrict all new waste facilities to the main urban areas would not allow all waste to be treated in close proximity to its production. Also, there is probably a greater need than in other East Midlands' counties to have a widely dispersed network of small waste facilities. Such facilities would only be acceptable where there is a good relationship between the location of the site and where the waste arises. To assist with the development of small scale facilities, Policy W7: 'Small Scale Waste Facilities' sets out the requirements to be met and the locations where such development would be appropriate, in keeping with the Spatial Strategy and policy DM13.
- 6.47 Historically waste facilities in the East Midlands were located in countryside locations linked to landfills and, potentially, well located to the road network but poorly to arisings. Therefore, for existing sites which wish to extend their operations significantly through a physical extension outside of the area permitted for waste management or the throughput of the site (where planning permission is needed) it must be demonstrated how the proposal will not undermine the spatial strategy for waste set out in Policy W3. Given that some existing sites are not located in or around the urban areas identified in Policy W3, the policy includes provision for proposals to come forward for larger extensions to such sites (over and above those allowed under Policy W7 Small Scale Waste Facilities) in certain circumstances. Such proposals will need to demonstrate how the additional capacity contributes to the network of waste management facilities in Lincolnshire; meets a need identified in the Waste Needs Assessment; and is in a sustainable location well connected to where the waste it will manage will arise. This is to recognise that not all existing sites are in remote and/or unsustainable locations and extensions to their existing operations may deliver greater resource efficiency for the business than relocation, as well as contributing to the network of waste management facilities in Lincolnshire without undermining the Spatial Strategy for waste. Policy W3 will be used to assist the County Council in identifying specific sites in the Site Locations document, alongside, for example, the carrying out of sequential testing in relation to flood risk, in order to ensure any sites allocated are in the most sustainable locations possible.

6.48 This spatial strategy does not mean that any of the above exceptions cannot be accommodated in or around the main urban areas but that the Council is accepting that for these types of waste management a countryside location may be appropriate.

Policy W3: Spatial Strategy for New Waste Facilities

Proposals for new waste facilities, including extensions to existing waste facilities, will be permitted in and around the following main urban areas as indicated on the key diagram subject to the criteria of Policy W4:

- **Lincoln;**
- **Boston;**
- **Grantham;**
- **Spalding;**
- **Bourne;**
- **Gainsborough;**
- **Louth;**
- **Skegness;**
- **Sleaford; and**
- **Stamford.**

Proposals for new waste facilities, outside the above areas will only be permitted where they are:

- **facilities for the biological treatment of waste including anaerobic digestion and open-air windrow composting (see Policy W5);**
- **the treatment of waste water and sewage (see Policy W9);**
- **landfilling of waste (see Policy W6);**
- **small scale waste facilities (see Policy W7).**

Proposals for large extensions to existing facilities, outside of the above areas will only be permitted where it can be demonstrated that they meet an identified waste management need, are well located to the arisings of the waste it would manage and are on or close to an A class road and meet the criteria of Policy W4.

LOCATIONAL CRITERIA FOR NEW WASTE FACILITIES IN AND AROUND THE MAIN URBAN AREAS

- 6.49 The above waste spatial strategy is based on directing new waste facilities, including extensions, to the areas where the highest levels of waste are expected to be generated and, therefore, encouraging the proximity of a site to the most likely source of the waste leading to a reduction in the miles untreated waste travels.
- 6.50 The aim of the spatial strategy is to promote new waste infrastructure away from greenfield sites. The countryside's intrinsic character and beauty should be recognised and protected and the use of suitable previously developed land encouraged. Therefore, new facilities and extensions of existing operations (physical extensions outside of the area permitted for waste management or extensions of the throughput of the site) should be on vacant brownfield land, existing/planned industrial estates or land already with a waste management use in line with the principles of the National Planning Policy for Waste which supports the co-location of waste management facilities. The strategy recognises that some facilities may be considered acceptable on greenfield land, such as the recycling of construction and demolition waste and/or the production of secondary aggregates within existing mineral operations (mineral operations are classed as greenfield land where provision for restoration exists through development control procedures). To be considered appropriate, the site must be capable of accommodating such a facility and it should not impinge on any existing operations. Any planning permission for C&D recycling in an active quarry shall be temporary, and linked to the lifespan of the quarry. Also, any new or extended recycling operations must not cause or significantly increase the environmental impact of the site, in terms of noise, dust, vibration, traffic disturbance or visual impact (cumulative impacts). In this respect, limestone and chalk quarries are likely to be more suitable than sand and gravel sites because they are deeper, providing opportunities to locate recycling operations in the base of the quarry thereby minimising visual intrusion and noise and dust emissions. The strategy also recognises that some developments are likely to be developed outside the areas highlighted in Policy W3. The types of developments expected outside these areas include the biological treatment of waste including digestion and open-air windrow composting. The specific matters which need to be considered for such developments are set through Policy W5.
- 6.51 Sites should not be permitted where they would result in any significant adverse environmental impacts, so, harm to the landscape, biodiversity, the historic environment and the amenity of nearby residents (for example) should be avoided. For particular operations, like biological treatment, the use of a 'stand-off' between residential properties and the waste facility would be necessary.

Policy W4: Locational Criteria for New Waste Facilities in and around main urban areas.

Proposals for new waste facilities, including extensions to existing waste facilities, in and around the main urban areas set out in Policy W3 will be permitted provided that they would be located on:

- **previously developed and/or contaminated land; or**
- **existing or planned industrial/employment land and buildings; or**
- **land already in waste management use; or**
- **sites allocated in the Site Locations Document; or**
- **in the case of biological treatment the land identified in Policy W5.**

Proposals for the recycling of construction and demolition waste and/or the production of recycled aggregates in and around the main urban areas set out in Policy W3 will also be permitted at existing Active Mining Sites.

In the case of large extensions to existing waste facilities, where the proposals do not accord with the main urban areas set out in Policy W3, proposals will be permitted where they can demonstrate they have met the above criteria. Small scale facilities that are not in and around the main urban areas will be considered under Policy W7.

Proposals must accord with all relevant Development Management Policies set out in the Plan.

BIOLOGICAL TREATMENT OF WASTE

6.52 Biological treatment of biodegradable organic waste is the process by which micro-organisms are used to convert waste organic matter into, amongst other things, a liquid and/or solid to be used as a soil conditioner. Composting is undertaken in the presence of oxygen, producing the by-products of carbon dioxide and water vapour and the soil conditioner. Frequently, these take place in the open air on concrete pads and are typically located in rural or urban fringe sites. Waste taken to these sites is mainly that collected at civic amenity sites and source-segregated kerbside collected garden waste.

6.53 Anaerobic digestion differs from composting by virtue that it is the biological treatment of biodegradable organic waste in the absence of oxygen. By its nature this has to be done in a controlled environment, i.e. a sealed vessel. Anaerobic digestion results in the generation of:

- **Biogas**, which is rich in methane and can be used to generate heat and/or renewable electricity, vehicle fuel or for grid injection;
- **Fibre**, (or digestate) which is nutrient rich and can potentially be used as a soil conditioner; and
- **Liquor**, which can potentially be used as a liquid fertiliser.

- 6.54 Both forms of biological treatment present a realistic opportunity for the discharge of malodours and for this reason they are best located away from any sensitive receptors through provision of a 'stand-off' to ensure amenity is not harmed. Environment Agency research suggests that facilities within 250 metres of an occupied building will need to undertake a detailed assessment of the potential bio-aerosol releases. An odour management plan will need to be submitted as part of the permitting process for such facilities. Thus, siting these operations away from the main urban areas would be acceptable but, where they may be around the main urban areas then, in the first instance, they should be assessed against the spatial requirements of Policies W3 and W4.
- 6.55 Much of the waste for these processes will arise from the urban areas and, though locating sites away from these areas is not ideal (in terms of miles covered by the untreated waste) it provides an opportunity for agricultural wastes to be treated alongside other wastes. For example, anaerobic digestion can take poultry and bovine manures and produce a digestate which is less odorous and more readily available to plants than the untreated, raw manure. A countryside location also allows the end product, i.e. the soil improver, to be applied to land in the vicinity of the waste site thereby reducing the distance travelled by the resultant product. It is expected that proposals in rural areas justify the selection of the site in terms of the opportunities the site offers for treating agricultural wastes and the spreading of the end product on adjacent land.
- 6.56 Where operations include the spreading of compost or other residues over land, the material spread must meet the recognised quality standards to be no longer regarded as waste (BSI PAS 100 for compost and BSI PAS 110 for digestate from anaerobic digesters).

Policy W5: Biological Treatment of Waste Including Anaerobic Digestion and Open-Air Composting

Planning permission will be granted for anaerobic digestion, open air composting, and other forms of biological treatment of waste outside of those areas specified in Policy W3 provided that proposals accord with all relevant Development Management Policies set out in the Plan; where they would be located at a suitable 'stand-off' distance from any sensitive receptors; and where they would be located on either:

- **land which constitutes previously developed and/or contaminated land, existing or planned industrial/employment land, or redundant agricultural and forestry buildings and their curtilages; or**
- **land associated with an existing agricultural, livestock, food processing or waste management use where it has been demonstrated that there are close links with that use.**

LANDFILL

- 6.57 Lincolnshire has around a dozen landfills with extant permission which are principally restoring former mineral extraction sites. Several of these landfills are now inactive as a large amount of residual LACW is being diverted to the new EfW facility in North Hykeham. Landfill, both inert and non-inert can play an important role in reclaiming mineral workings and bringing land back into use, be that for biodiversity, agriculture or recreation. However, there is a requirement to move away from using landfill as a means of disposing of our waste.
- 6.58 Application of the waste hierarchy requires disposal (of which landfill is one possible route) to be undertaken once the steps above disposal (prevention, reuse, recycling etc.) have been undertaken and, in effect, there is no better use for the waste. The Waste Management Plan for England sets out the government's ambition to work towards a more sustainable and efficient approach to resource use and management, for which positive planning will play a pivotal role as set out through the National Planning Policy for Waste (NPPW).
- 6.59 Notwithstanding the desire to move away from using landfill such a move cannot be achieved with immediate effect, it takes time to have the necessary infrastructure in place to enable such a transition and there will still be a need to utilise it as a means of disposal for those elements of the waste stream for which no other use can be found. No requirement for further landfill capacity above that already existing has been found through the chosen Waste Needs Assessment scenarios. Therefore, any proposal for a new landfill site, or a physical extension to an existing site, or an increase to the total waste throughput of the site would only be acceptable if it was required to fulfil a previously unplanned shortfall (such as a current inert or non-hazardous landfill ceasing operations earlier than anticipated) and provided that such a shortfall could not be accommodated through the reactivation of any inactive sites with void space remaining. However, it would not be acceptable for the County to provide an excess of capacity and any requirement would need to be monitored annually.
- 6.60 There are no hazardous landfills within Lincolnshire and given the amount that arises within the County and the County's poor links to other potential sources of such waste it would seem unlikely that Lincolnshire would be a likely location for such a site. However, a policy for landfill should cover all eventualities and, therefore, a proposal for a hazardous waste landfill is not precluded.
- 6.61 Any proposal for landfilling would be expected to be operated to the highest standards but the Council would also seek a high level of restoration which would, once completed, improve the local landscape and character of the area. This may include the return of land to a use of scarcity but of high value to the area in order to ensure that appropriate habitats are restored in the appropriate place, ensuring that there is a net gain for biodiversity from the proposal. Landfilling also provides the opportunity to improve, through upgrading and increasing the length of,

the local public rights of way network. For non-hazardous or hazardous waste landfills this may be a longer term aspiration with access being restricted over the landfill during the settlement of the waste but for these sites, in the first instance, the network should be improved around the periphery of the active landfill. Any proposal for landfilling would also need to demonstrate that it would not cause a significant delay to the restoration of already permitted waste disposal sites, in particular mineral extraction sites which require infilling to achieve their final reclamation.

Policy W6: Landfill

Planning permission will only be granted for new landfills or extensions to existing landfills (inert, non-hazardous and hazardous) provided that:

- **it has been demonstrated that the current capacity is insufficient to manage that waste arising in Lincolnshire or its equivalent, which requires disposal to landfill in the County; and**
- **there is a long term improvement to the local landscape and character of the area, with enhanced public access where appropriate; and**
- **the development would not cause a significant delay to the restoration of existing waste disposal sites; and**
- **the proposals accord with all relevant Development Management and Restoration Policies set out in the Plan.**

SMALL SCALE WASTE FACILITIES

6.62 To ensure that Lincolnshire has a network of waste management facilities it is essential that the County has a range of facilities beyond the main urban areas to support a sustainable development of infrastructure for Lincolnshire. Policy W3 allows specific facility types, such as composting and landfills outside of the main urban areas but there will still be a need for some smaller waste facilities in the rural areas of the County. Such facilities could include small recycling facilities, transfer stations, treatment, vehicle depollution or facilities linked directly to rural activities and the wastes they generate, where the throughputs are small and where it is demonstrated that such a location is necessary to achieve close proximity to arisings.

6.63 As set out in the previous Draft Core Strategy and Development Management Policies document, the key point for such a policy is to define what a 'larger' facility is or conversely what is a small facility that may be acceptable to be outside of the preferred urban areas. So, the Council has utilised the data from the Environment Agency's permit returns from 2010 for waste sites in Lincolnshire to ascertain the threshold when a waste facility in Lincolnshire could be considered to be a small facility. Sites operated by the County Council for municipal waste management were removed so that the analysis focussed only on sites operated on a commercial basis to ascertain what is economically viable. Sites were split

into broad groupings of similar types of operations and the second quartile (the median) was used to establish the threshold (in tonnes per annum (tpa)) for what is a small waste facility in Lincolnshire. The indicative scale for small facilities is the following: 3,000tpa for C&D recycling facilities; 9,000tpa for C&I transfer and/or recycling facilities; 500tpa for End of Life Vehicle (ELV) facilities; and 3,000tpa for metal recycling facilities. These indicative thresholds set the cut-off point for the scale of site that it is acceptable to locate outside of the main urban areas but only where there is a good relationship between the location of the site and where the waste arises. Also, the emphasis is for these small scale sites not to be upon greenfield land but on land upon which there has previously been development, including the conversion of redundant agricultural buildings.

Policy W7: Small Scale Waste Facilities

Planning permission will be granted for small scale waste facilities, including small extensions to existing waste facilities, outside of those areas specified in Policy W3 provided that:

- **there is a proven need to locate such a facility outside of the main urban areas; and**
- **the proposals accord with all relevant Development Management Policies set out in the Plan; and**
- **the facility would be well located to the arisings of the waste it would manage; and**
- **they would be located on land which constitutes previously developed and/or contaminated land, existing or planned industrial/employment land, or redundant agricultural and forestry buildings and their curtilages.**

SAFEGUARDING WASTE MANAGEMENT SITES

6.64 Waste sites are an important element of a community's infrastructure, ensuring that waste is dealt with at appropriate locations and that communities take responsibility for their own waste. Gaining permission for such facilities can be a challenging and protracted process in direct opposition to the wishes of parts of the host community. Because of this the Council considers it essential that those waste management sites should be protected. This document is the first stage of replacing the extant Waste Local Plan, the next shall be the production of a Site Locations document where land will be identified as being suitable for future waste uses. To allocate land for waste uses an assessment has to be made of their potential suitability. Once the assessment has been undertaken and the land allocated the Council would not wish to see the ability of the land to be utilised for waste uses prejudiced. Therefore, sites allocated in the Site Locations document will also be protected.

- 6.65 Such protection should be twofold: to ensure that a site permitted or allocated with a waste use is not redeveloped to another use to retain capacity; and that there remains a sufficient distance between the waste facility and other forms of development or sensitive land uses (for example, housing). The latter requirement is to make certain that non-waste developments are not permitted within the vicinity of a waste management facility, if it would either prevent or prejudice the effective use of that facility. Where new non-waste development involving buildings which would normally be occupied is proposed within 400m of a water recycling centre, the application should be accompanied by an odour assessment report, which considers existing odour emissions of the works at different times of the year and in a range of different weather conditions.
- 6.66 In two-tier planning areas such as Lincolnshire, the safeguarding of waste sites can be achieved only through county and district councils co-operating in the exercise of their respective planning powers. District Councils will be provided with details on the waste sites in the County and it will be the responsibility of the District Councils to ensure that they are used when considering planning applications or future developments within or near to the boundary of a waste site and that the County Council is consulted. The sites and facilities to be safeguarded are listed in Appendix 2 and mapped in Appendix 3.
- 6.67 Clearly, if evidence was put forward that there remained no market need for the waste facility in its current location or the operations could be relocated to another acceptable site then a proposal would be acceptable.

Policy W8: Safeguarding Waste Management Sites

The County Council will seek to safeguard existing and allocated waste management facilities from redevelopment to a non-waste use and/or the encroachment of incompatible development unless:

- **alternative provision in the vicinity can be made in accordance with the Development Plan; or**
- **it can be demonstrated that there is no longer a need for a waste facility at that location.**

SEWAGE TREATMENT WORKS AND RELATED INFRASTRUCTURE

- 6.68 Sewage Treatment Works (STWs) are a vital element of the County's infrastructure ensuring waste water is effectively treated to protect human health and water quality. By 2031, there will be a requirement for extra sewerage capacity to serve growth in and around Lincoln, Gainsborough and Grantham. At present, the exact form this will take is unknown but it is anticipated that much will be accommodated by upgrading existing works. However, circumstances may arise where the location of new growth makes sewer access to existing STWs difficult and it may be more cost effective to develop new works.
- 6.69 By their very nature, sewage works need to be in close proximity to a suitable watercourse to accept their discharge and, therefore, may be located upon land subject to flooding. In these cases, the development may be an acceptable land use in a floodplain but this would have to be tested, applying, as applicable, the sequential and exception tests as set out in National Planning Practice Guidance. The development would also need to ensure there would not be an unacceptable increase in the risk of flooding to other areas.
- 6.70 The treatment of waste water can be an odorous process caused by periods of septicity. For this reason, new STWs will need to be located a sufficient distance from existing residential homes and sensitive places of work (such as offices) to ensure that the users of these buildings are not subject to nuisance and a decline in their amenity. Also, an appropriate distance between STWs and sensitive receptors would ensure that additional constraints are not imposed on the operation of the waste water works. STWs are built to such a variety of sizes and technologies that to specify an absolute distance would not be suitable and an appropriate distance has to be judged on a case-by-case basis.
- 6.71 It is important that new sewage treatment works install phosphate removal technology. The removal of phosphate from the effluent of a sewage works comes under the Urban Waste Water Treatment Directive (UWWTD) (91/271/EEC) and the Water Framework Directive (WFD) (2000/60/EC) which require the control of phosphorus input into water bodies by specifying minimum treatment requirements to be achieved. The Local Planning Authority and the Environment Agency have a duty to ensure the WFD requirements are met in new developments. This will be achieved through the assessment of applications during the planning process. The WFD allows in certain circumstances the development to be exempt from the WFD requirements where it is not realistically possible to meet targets which are set out in the Technical Report 2009-027 produced by the European Commission "Common Implementation Strategy for the Water Framework Directive (2000/60/EC), Guidance Document No.20, Guidance on Exemptions to the Environmental Objectives".

Policy W9: Waste Water and Sewage Treatment Works

Proposals for new sewage treatment works, including the improvement or extension of existing works, will be permitted provided that it can be demonstrated that:

- **there is a suitable watercourse to accept discharged treated water and there would be no unacceptable increase in the risk of flooding to other areas; and**
- **there would be no deterioration in the ecological status of the affected watercourse (to comply with the Water Framework Directive); and**
- **the proposals accord with all relevant Development Management Policies set out in the Plan.**

7. DEVELOPMENT MANAGEMENT POLICIES

- 7.1 This section sets out the development management policies of the Minerals and Waste Local Plan. The policies within this section aim to establish detailed criteria against which minerals and waste development proposals will be judged.

The Development Management Process

- 7.2 Development management is the process of determining planning applications for mineral and waste developments. Planning applications should contain the justification for the development, details of how the operations will be managed, and any measures proposed to reduce or remove adverse effects. The County Planning Authority will consider all the community, economic and environmental issues that are relevant to each planning decision.
- 7.3 Sufficient information must be provided with planning applications so that the likely effects of the development together with proposals for appropriate control or mitigation can be considered. In some cases detailed assessments of particular issues may be required.
- 7.4 Applicants are encouraged to discuss their proposals with the County Planning Authority before submitting a planning application. Early discussion will help to identify potential impacts from proposals, and possible measures to avoid or minimise them. Applicants will also be advised if their proposals are unlikely to be acceptable. The County Planning Authority may suggest that applicants seek advice from statutory or other bodies about the need to carry out detailed assessment work. Pre-application consultation with such bodies together with the local community and local interest groups will help to establish potential impacts of a proposed development and improve the quality of decisions on planning applications. The Statement of Community Involvement provides information on how consultation on planning applications will be carried out.
- 7.5 If planning permission is granted, conditions will usually be attached to regulate the operation of the development. These can be used to agree the specific details about parts of the proposal (such as a landscape scheme) or to ensure that the effects on local communities or the environment are reduced (such as control of working hours).
- 7.6 The County Council will also seek to conclude legal agreements, known as planning obligations, where appropriate to achieve suitable control over and to mitigate and/or compensate for the effects of minerals and waste development where such objectives cannot be achieved by planning conditions. Matters to be covered by such planning obligations may include:
- highways and access improvements;
 - traffic management measures including the regulation of lorry traffic;
 - long-term site management provision to establish beneficial after-use;

- improvement of the rights of way network;
- financial guarantees to ensure restoration is undertaken;
- measures for environmental, recreational/sport, economic and community gain in mitigation or compensation for the effects of mineral development.

The Community Infrastructure Levy is a new levy that District authorities can choose to charge on new developments to fund local infrastructure. It applies to most new buildings that people normally use, with charges based on the size and type of new development. It cannot be charged on structure and buildings that people only enter for the purpose of inspecting or maintaining fixed plant or machinery.

Environmental Impact Assessment

- 7.7 Environmental Impact Assessment (EIA) is often required for major developments that are likely to have significant impacts on the environment. Most proposals for large scale mineral extraction and waste developments are likely to fall within this category. An EIA will identify the likelihood of significant impacts occurring as a result of a development, how these could be mitigated, and alternative ways in which the development could be carried out.
- 7.8 All mineral and waste planning applications that meet the appropriate thresholds and criteria set out in the EIA Regulations (2011) will be screened to determine whether or not they require an EIA. The screening process determines whether the proposal is likely to have significant environmental effects. If requested, the County Council will provide a scoping opinion which sets out the issues which the assessment should address. An Environmental Statement must accompany a planning application for EIA development.

Review of Mineral Permissions

- 7.9 Mineral planning permissions are subject to review in accordance with the legislative requirements of the Planning and Compensation Act 1991 and the Environment Act 1995. Such reviews provide an opportunity for the County Council to ensure mineral sites continue to work under modern conditions which reflect sustainability aspirations and offer appropriate environmental protection.
- 7.10 Subject to certain legal provisions, the review determination process is conducted in a similar way to the processing of a planning application, and may be subject to Environmental Impact Assessment in the same way as a planning application. However, review submissions cannot be refused, and compensation liabilities can arise if working rights are unreasonably affected. Applicants submitting review schemes should have regard to the requirements of policies contained in this document, and ensure that all the environmental issues are satisfactorily addressed.

Material Considerations

- 7.11 Every planning application for development is decided on its merits, and should be determined in accordance with the development plan unless material considerations indicate otherwise. When planning applications are determined, all the relevant policies in the Local Plan will be taken into account, and used as the basis for decision-making.
- 7.12 Material considerations include issues such as the impacts on local communities, national planning policy/guidance, and the need for the development. There are no firm rules about the range and type of material considerations, or about the weight that should be attached to them in individual decisions. This is because:
- material considerations are subject to change in the light of government guidance and court judgements;
 - the development plan cannot explain which considerations will be material to a particular planning decision because the circumstances of each application will be different; and
 - the weight given to material considerations when making decisions on planning applications will be affected by individual circumstances.

Monitoring and Enforcement

- 7.13 The effective monitoring of operational sites is very important. Requirements for the monitoring of impacts such as noise and dust may be imposed through planning conditions. However, there is an important role for the County Council as an independent regulator, which can help to increase confidence among local communities. The County Council also works closely with the Environment Agency in monitoring and enforcing waste sites. Efficient and effective monitoring and enforcement can often identify potential problems early, before they are perceptible to local residents, and ensure that they are resolved satisfactorily.

Sustainable Development

- 7.14 The National Planning Policy Framework states that policies in Local Plans should follow the approach of the presumption in favour of sustainable development so that it is clear that development which is sustainable can be approved without delay. All plans should be based upon and reflect the presumption in favour of sustainable development, with clear policies that will guide how the presumption should be applied locally.
- 7.15 The Plan is based on the principle of delivering sustainable minerals and waste development in Lincolnshire (see Chapter 4). Any development that accords with the Plan is therefore sustainable and the County Council will aim to progress it without delay. Development management will be the main means by which the Plan will deliver sustainable minerals and waste development in Lincolnshire.

Policy DM1: Presumption in favour of sustainable development

When considering development proposals, the County Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. It will always work proactively with applicants jointly to find solutions which mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area.

Planning applications that accord with the policies in this Local Plan will be approved without delay, unless material considerations indicate otherwise.

Where there are no policies relevant to the application or relevant policies are out of date at the time of making the decision then the County Council will grant permission unless material considerations indicate otherwise – taking into account whether:

- Any adverse impacts of granting permission would significantly and demonstrably outweigh the benefits, when assessed against the policies in the National Planning Policy Framework taken as a whole; or**
- Specific policies in that Framework indicate that development should be restricted.**

Climate Change

7.16 The NPPF states that Local Plans should take account of climate change over the longer term, including factors such as flood risk, coastal change, water supply and changes to biodiversity and landscape. New development should be planned to avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure and habitat connectivity.

7.17 The Minerals and Waste Local Plan is being completed in line with the National Adaptation Programme (NAP) and will cover a number of the sector areas featured within the National Climate Change Risk Assessment (CCRA). The built and natural environment objectives of the NAP are addressed within the Minerals and Waste Local Plan wherever practical and also includes taking account of flood risk in flood prone areas when developing or extending current infrastructure for minerals and waste. The Minerals and Waste Local Plan seeks to build resilience to the impacts of climate change and addresses associated risks through effective consultations with appropriate bodies and the public thus enabling well informed decisions to be made in a timely manner.

- 7.18 Transport is a significant source of carbon emissions by minerals and waste developments due to the distance travelled by HGVs in supplying minerals and transporting waste. The County Council will therefore encourage the use of alternative modes to road based transport (see Policy DM13); seek locations for future minerals developments near to the markets that they serve; encourage proposals for waste developments to locate as near as possible to main centres of population; and promote good practice in transport related matters to reduce vehicle miles.
- 7.19 The extraction of minerals is an energy intensive business. There are many ways in which individual quarry sites can reduce their carbon footprints/energy use. Practices should therefore be adopted to help reduce the energy use of individual quarries, particularly the larger ones, so as to lower their carbon footprint. The County Council will encourage increased energy efficiency measures in plant, buildings and operations. Reductions in carbon emissions can provide significant cost savings.
- 7.20 The prudent, efficient and sustainable use of minerals and recycling of suitable materials will ensure materials are used for the purposes for which they are most suitable and minimise the requirement for new primary extraction. The use of recycled/secondary aggregates over primary won sources helps to reduce the overall carbon footprint of aggregate provision by savings on energy use. The County Council therefore encourages the use of more recycled/secondary aggregates (see Policy M1).
- 7.21 The County Council will also encourage the creation of carbon sinks through habitat creation (e.g. wetland or woodland creation) as part of restoration/landscaping schemes, particularly on mineral sites (see Policy R2). Well-planned restoration schemes, developed as part of larger landscape-scale initiatives and in conjunction with specialist agencies, can assist in establishing ecological networks (particularly new priority habitat) which are more resilient and which enable the movement of wildlife as it adapts to changing climate.
- 7.22 Waste management is significant in tackling greenhouse gas emissions because the treatment and disposal of waste generates carbon dioxide and methane. Methane emissions from biodegradable waste in landfill accounts for around 40% of all UK methane emissions. This equals about 3% of UK greenhouse gas emissions. Methane is more damaging than carbon dioxide as a greenhouse gas. Waste management therefore has an important role in mitigating the levels of greenhouse gases emitted into the atmosphere.

- 7.23 The Waste Hierarchy is a key policy objective in terms of mitigating impacts on climate change by focusing on reducing the amount of waste produced, and increasing the amount of waste that is reused, recycled, composted or has energy recovered. This is important in terms of diverting biodegradable waste from landfill and reducing associated methane emissions. In addition, in terms of maximising the potential for reuse, recycling and recovery of resources, it also helps to minimise the demand for new resources and the greenhouse gases generated in their production.
- 7.24 Maintaining high recycling rates is therefore a key part of the Council's climate change strategy in order to divert as much biodegradable waste away from landfill as possible to lower methane emissions. The Council will also encourage proposals for new waste technologies/processes which bring about reduced levels of biodegradable waste being disposed of to landfill.
- 7.25 The objective of minimising impacts on climate change will be focused on carbon reduction/capture measures, efficient use of resources and renewable energy (where practicable and viable), and on minimising traffic generation. It will be important that proposals demonstrate how these factors have been taken into account in their design.
- 7.26 The objective of reducing greenhouse gas emissions will be achieved by encouraging:
- waste treatment processes that reduce the amount of waste going to landfill (with all waste management facilities being required to provide evidence of how much waste will be diverted from landfill);
 - decentralised, low-carbon/renewable energy generation and carbon reduction measures at new mineral working sites and waste management developments (including landfill gas collection);
 - low carbon energy recovery facilities, such as combined heat and power (CHP), where possible, to be suitably sited in close proximity to suitable potential heat customers to enable the utilisation of the heat produced as an energy source;
 - increased energy efficiency measures in plant, buildings and operations; and
 - good practice in transport related matters to reduce vehicle miles.
- Any planning applications for waste management facilities should incorporate opportunities for sustainable energy recovery wherever practicable.
- 7.27 The Council intends to produce an operational code of practice for minerals and waste developments which will include measures to reduce CO₂ emissions, energy efficiency and sustainable design. The Code will supplement the policies included in this document.

Policy DM2: Climate Change

Proposals for minerals and waste management developments should address the following matters where applicable:

Minerals and Waste

- **Identify locations which reduce distances travelled by HGVs in the supply of minerals and the treatment of waste, unless other environmental/sustainability and, for minerals, geological considerations override this aim.**

Waste

- **Implement the Waste Hierarchy, and in particular reduce waste to landfill;**
- **Identify locations suitable for renewable energy generation;**
- **Encourage carbon reduction/capture measures to be implemented where appropriate.**

Minerals

- **Encourage ways of working which reduce the overall carbon footprint of a mineral site;**
- **Promote new/enhanced biodiversity levels/habitats as part of restoration proposals to provide carbon sinks and/or better connected ecological networks;**
- **Encourage the most efficient use of primary minerals.**

CONTROLLING IMPACTS ON THE LOCAL ENVIRONMENT AND COMMUNITIES

Protection of residential amenity

7.28 Minerals extraction and waste management facilities by their nature are likely to have some negative effects on local communities. Minerals can only be worked where they exist and this can lead to the development of quarries in close proximity to communities. The Council's waste strategy is to locate most waste sites near to the largest concentrations of population to maximise sustainability potential. It will consequently be necessary to overcome impacts through appropriate mitigation measures to avoid a negative effect on the local communities in question. To ensure such impacts are avoided, it may be necessary to impose suitable planning conditions to secure good working practices, as discussed in more detail in this section. Such conditions could include (but would not be limited to) hours of working, appropriate sheeting of vehicles and wheel cleaning.

- 7.29 The NPPF states that local planning authorities should ensure, in granting planning permission for mineral development, that there are no unacceptable adverse impacts on human health. The National Planning Policy for Waste (2014) Paragraph 7 states that, in considering planning applications for waste management facilities, waste planning authorities should consider the likely impact on the local environment and on amenity. The County Council must therefore ensure that an acceptable balance is maintained between meeting identified mineral and waste needs and protecting the local environment and amenity of residents living close to mineral or waste operations.
- 7.30 Proposals, which may give rise to pollution and health issues, should be submitted with details of these issues, and where applicable the relevant health and pollution control authorities will be consulted. Likewise, amenity issues will be addressed in consultation with the local authority environmental health officer and other appropriate advisers.
- 7.31 Pollution control authorities such as the Environment Agency and local Environmental Health authorities are responsible for regulating polluting activities. However, pollution and health issues are a legitimate planning consideration, which can be taken into account when considering applications.
- 7.32 Possible impacts include noise (refer to PPG paragraphs: 019-021 for noise standards) and vibrations from quarry/waste traffic, processing plant and site activity; visual intrusion; dust during dry periods; debris on the roads & litter; odour; run-off from sites to protected waters and the impact of Heavy Goods Vehicles. Such impacts can cause understandable concern from communities living near these types of development. It is important to ensure that these impacts are kept to an absolute minimum.
- 7.33 It is possible for quarry operators and waste facilities to take measures that can make living near a quarry/waste site acceptable to local residents. By landscaping to create bunds and using natural vegetation for screening, taking into account local landscape character, the visual impact and potential noise nuisance caused by the site can be reduced to acceptable levels. It is however acknowledged that some noisy short term activities, which may otherwise be regarded as unacceptable are unavoidable to facilitate minerals extraction (NPPF paragraph 143). There are also various controls that can be used to manage dust, litter and odour problems. Wheel washing and sheeting of lorries can prevent debris from being deposited on the road network.
- 7.34 Other important factors that can influence the acceptability of a site to local residents is the sequence of mineral working, and the choice of route, location and suitability of access arrangements for vehicles entering and leaving the site.
- 7.35 In relation to minerals development, the NPPF states that local planning authorities should ensure that any unavoidable noise, dust and particle emissions and any blasting vibrations are controlled, mitigated or removed at source, and establish appropriate noise limits for extraction in

proximity to noise sensitive properties. However, in accordance with Policy DM3, where adverse effects cannot be adequately controlled or prevented, planning permission will be refused.

7.36 National Planning Practice Guidance states that in some circumstances, new or extended permissions for minerals extraction close to residential property may not provide adequate protection. In such cases, the guidance indicates that it may be justified to consider adequate separation distances. Any such distance should be effective but reasonable, taking into account:

- the nature of the mineral extraction activity (including its duration);
- the need to avoid undue sterilisation of mineral resources, location and topography;
- the characteristics of the various environmental effects likely to arise; and
- the various amelioration measures that can be applied.

The Guidance states that working in proximity to residential property may be necessary where there are clear, specific achievable objectives such as the removal of instability and preparing land for subsequent development. Such working should be for a limited and specified period, without scope for extension.

7.37 The National Planning Policy for Waste does not give precise guidance on separation distances, but does give advice on site requirements related to waste sites. In such cases, it advises that waste planning authorities should consider:

- The likely impact on the local environment and on amenity;
- The physical and environmental constraints on development, including existing and proposed neighbouring land uses;
- The cumulative effect of previous waste disposal facilities on the well-being of the local community, including any significant adverse impacts on environmental quality, social cohesion and inclusion or economic potential.

In addition, paragraph 7 of the NPPW sets out the considerations waste planning authorities need to take account of when determining planning applications. This includes consideration of the consistency of the application with the Local Plan, delivery of the waste hierarchy, the impact on the local environment and amenity, the design of the facility in order for it to contribute positively to the character of the area in which it is to be located and the achievement of restoration that offers a beneficial after use whilst delivering high environmental standards.

7.38 Other land uses apart from residential areas may also be affected by mineral and waste operations such as hospitals, schools, farms, and other places of employment. In such cases, it may also be appropriate to consider the use of separation distances depending on the sensitivity of the use or facility affected.

7.39 Government Circular 1/2003 identifies mineral extraction (especially where water areas form part of the restoration proposals) together with facilities for the handling, compaction, treatment and disposal of household or commercial wastes, and sewage disposal and treatment

plant as development which attracts a variety of bird species and can create a bird hazard, including bird flight lines across aircraft flight paths (see Policy R2).

- 7.40 This is a particularly important issue for minerals and waste sites in proximity to RAF and civilian aerodromes located within or close to the County. It may be possible to overcome bird strike issues through the design of the development. In the event however that, following consultation with the appropriate authorities, the nature of the proposal is considered to give rise to new or increased risks to aerodromes and associated uses, planning permission should not be granted (see Policy R2).

Policy DM3: Quality of Life and Amenity

Planning permission will be granted for minerals and waste development provided that it does not generate unacceptable adverse impacts arising from:

- **noise,**
- **dust,**
- **vibration,**
- **odour,**
- **litter,**
- **emissions,**
- **the migration of contamination,**
- **illumination,**
- **visual intrusion,**
- **run off to protected waters,**
- **traffic,**
- **tip- and quarry- slope stability,**
- **differential settlement of quarry backfill, or**
- **mining subsidence**

to occupants of nearby dwellings and other sensitive receptors.

And in respect of waste development is well designed and contributes positively to the character and quality of the area in which it is to be located.

Where unacceptable impacts are identified, which cannot be addressed through appropriate mitigation measures, planning permission will be refused.

Natural and Historic Environment

- 7.41 The NPPF states that, in preparing Local Plans, local planning authorities should set out environmental criteria, in line with the policies in the Framework, against which planning applications will be assessed so as to ensure that permitted operations do not have unacceptable adverse impacts on the natural and historic environment. When determining planning applications, it states that local planning authorities should ensure, in granting planning permission for mineral development, that there are no unacceptable adverse impacts on the natural and historic environment.
- 7.42 As detailed in the Spatial Portrait of Lincolnshire (Chapter 3), there are many natural and built environmental assets, high-grade agricultural land and areas at risk of flooding within the County. It is important to protect certain areas or features from the negative aspects of minerals and waste development. The plan therefore provides for the protection and enhancement of all Lincolnshire's environmental assets: the historic environment; the natural environment incorporating designated sites and areas, landscape and biodiversity; and water resources. The policies are also aimed at protecting assets that do not already have protection through national policy such as aspects of the historic environment; Lincolnshire's landscape; water resources, including flooding; and matters relating to biodiversity and geodiversity. Each of these is considered in more detail in the following paragraphs.

Historic Environment

- 7.43 The NPPF defines a heritage asset as a building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage assets are an irreplaceable resource and should be conserved in a manner appropriate to their significance. These assets include both designated and non-designated assets. Designated heritage assets have statutory protection and are assessed at the highest significance, they include scheduled monuments, protected wreck sites, battlefields, grade I and II* listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites. Non-designated assets are usually recorded in the County Historic Environment Record (HER) along with designated assets, these are generally of regional and local importance but may have an equal significance to designated assets. The significance of a heritage asset derives not only from its physical presence, but also from its setting.
- 7.44 Lincolnshire's identity and sense of place is closely linked with its rich heritage, it is a unique resource that contributes to the character of the county and can be vulnerable to damage from development. Historic assets can be harmed or lost through alteration or destruction of the asset itself or its setting and weight will be given to its conservation. Conflicts may arise between protecting our heritage and meeting the need for minerals or providing important waste facilities. Proposals for minerals and waste development should therefore include appropriate measures to

minimise the impact of development on Lincolnshire's heritage, historic environment and archaeology.

- 7.45 By addressing heritage considerations before planning applications are submitted, there is greater scope to avoid or minimise any potential adverse impacts. The Council will advise on the need for applicants to discuss their proposals with in-house specialist officers and bodies such as Historic England. Local history groups and societies can also be a source of useful information. The County Historic Environment Record (HER) holds information on known heritage assets, and should help in the prediction of the likelihood of encountering currently unknown heritage assets of historic and archaeological interest.
- 7.46 Where development proposals have the potential to affect heritage assets including features of historic or archaeological importance (whether known or unknown), they should be accompanied by an assessment of the significance and setting of the assets and the potential impact of the development proposal on those assets. Such an assessment should be proportionate to the significance of the asset and include consultation of the HER, and where appropriate, the results of field evaluation. More detailed evaluation could be required dependent on site specific details.
- 7.47 Details of any proposed mitigation measures should also be provided, along with provision for the recording and archiving of information in relation to any heritage assets to be lost. Where the potential exists for unknown assets to be encountered in the course of the development, provision must be made for monitoring and recording. The Lincolnshire Archaeological Handbook provides more detailed guidance to developers and is freely available from the Lincolnshire County Council website.
- 7.48 The NPPF states that, when considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. It states that substantial harm to or loss of designated heritage assets of the highest significance should be wholly exceptional. Where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, the NPPF states that local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss.

Policy DM4: Historic Environment

Proposals that have the potential to affect heritage assets including features of historic or archaeological importance (whether known or unknown) should be accompanied by an assessment of the significance of the assets and the potential impact of the development proposal on those assets and their settings.

Planning permission will be granted for minerals and waste development where heritage assets, and their settings, are conserved and, where possible enhanced.

Where any impact on heritage assets is identified, the assessment should provide details of the proposed mitigation measures that would be implemented. These should include details of any conservation of assets and also of any further investigation and recording of heritage assets to be lost and provision for the results to be made publicly available.

Where adverse impacts are identified planning permission will only be granted for minerals and waste development provided that:

- the proposal cannot reasonably be located on an alternative site to avoid harm; and**
- the harmful aspects can be satisfactorily mitigated; or**
- there are exceptional overriding reasons which outweigh the need to safeguard the significance of heritage assets which would be harmed.**

Lincolnshire Wolds Area of Outstanding Natural Beauty

7.49 The NPPF states that great weight should be given to conserving landscape and scenic beauty in Areas of Outstanding Natural Beauty (AONB), which (together with National Parks and the Broads) have the highest status of protection in relation to landscape and scenic beauty. It states that the conservation of wildlife and cultural heritage are important considerations in all these areas.

7.50 The main purpose of AONB designation is the conservation and enhancement of the natural beauty of the area – landscape, flora and fauna, geographical interests and heritage, including archaeology and settlement character. The attractive landscape and character of the Lincolnshire Wolds has been recognised by Central Government through its designation as an AONB in 1973. The key characteristics of the Wolds include its unique physiography (geology and topography); its scenic, working landscape based upon the area's use for agriculture; major archaeological resources; and its cultural associations. As highlighted in the statutory Lincolnshire Wolds AONB Management Plan (2013-2018), the main challenge is to ensure that the Wolds retains its unique

landscape and undeniable special character, whilst maintaining and supporting its communities. The Council will expect development proposals within, or within the setting of a protected landscape to carry out a Landscape and Visual Impact Assessment (LVIA).

Policy DM5: Lincolnshire Wolds Area of Outstanding Natural Beauty

Planning permission will only be granted for minerals and waste development within or affecting the character or setting of the Lincolnshire Wolds Area of Outstanding Natural Beauty (AONB) in exceptional circumstances where it can be demonstrated that:

- **there is a proven public interest; and**
- **there is a lack of alternative sites not affecting the AONB to serve the market need; and**
- **the impact on the special qualities of the AONB can be satisfactorily mitigated.**

Landscape

- 7.51 The NPPF states that planning should recognise the intrinsic character and beauty of the countryside. It states that planning policies and decisions should aim to ensure that developments are visually attractive as a result of good architecture and appropriate landscaping.
- 7.52 Applicants should therefore consider the potential visual impact of their proposals and design accordingly; this may include appropriate design in keeping with the locality or prior landscaping and planting work. Applicants will be expected to show how their proposals will appropriately address impacts on landscape and townscape. This would normally be undertaken through a study and evaluation of local landscape and townscape character and an assessment of how the proposal will impact on it, with reference to any relevant landscape character assessment or design guide. Alternatively, it could be carried out through a local assessment using a suitable methodology, appropriate to the scale of the development proposed. Landscape and visual impact assessment should follow the appropriate industry guidelines, currently Guidelines for Landscape and Visual Impact Assessment, 3rd Edition.
- 7.53 Provided that the proposal meets the requirements of other policies in this plan, the County Planning Authority will endeavour to agree appropriate design, screening and other mitigation measures to allow the development to go ahead. Maintenance of landscaping will be normally required for a minimum period of 10 years.

Policy DM6: Impact on Landscape and Townscape

Planning permission will be granted for minerals and waste development provided that due regard has been given to the likely impact of the proposed development on landscape and townscape, including landscape character, valued or distinctive landscape features and elements, and important views. If considered necessary by the County Council, additional design, landscaping, planting and screening will be required. Where planting is required it will be subject to a minimum 10 year maintenance period.

Development that would result in residual, adverse landscape and visual impacts will only be approved if the impacts are acceptable when weighed against the benefits of the scheme. Where there would be significant adverse impacts on a valued landscape considerable weight will be given to conservation of that landscape.

Biodiversity and Geodiversity

- 7.54 Sustainable development is the key principal of the NPPF and part of this is to minimise the impacts on biodiversity and provide net gains in biodiversity where possible, as well as protecting and enhancing geodiversity. The Government is committed to halting the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures. Opportunities to provide net gains in biodiversity through the protection, restoration, creation, and recovery of habitats and species, and enhancement of geodiversity, should be sought where possible as part of proposals for minerals and waste development.
- 7.55 The NPPF states that local planning authorities should set criteria based policies against which proposals for any development on or affecting protected wildlife or geodiversity sites or landscape areas will be judged. Distinctions should be made between the hierarchy of international, national and locally designated sites, so that protection is commensurate with their status and gives appropriate weight to their importance and the contribution that they make to wider ecological networks. The NPPF goes on to state that consideration should also be given to Nature Improvement Areas and to supporting these areas where they have been identified.
- 7.56 The County Council is required by law (Regulation 61-62 of the Conservation of Habitats and Species Regulations 2010 (as amended)) to undertake an Appropriate Assessment prior to determining a planning application which is:
- likely to have a significant effect on a European site or European offshore marine site (either alone or in combination with other projects); and
 - is not directly connected with or necessary to the management of that site.

If an Appropriate Assessment is required, the presumption in favour of sustainable development, set out in paragraph 14 of the NPPF, does not apply. In Lincolnshire, European sites include Special Areas of Conservation and Special Protection Areas. It is UK policy that the Government also applies the above procedures in respect of Ramsar sites, even though these sites are not European sites as a matter of law, rather they are *international* wetland sites declared under the Ramsar Convention. The following wildlife sites are also given the same protection as European sites: potential Special Protection Areas, possible Special Areas of Conservation, proposed Ramsar sites and sites identified or required as compensatory measures for adverse effects on European sites.

- 7.57 Applicants will be required to supply sufficient information to enable the County Council to undertake an Appropriate Assessment. The HRA Scoping Report related to this document provides guidance as to when the need for project level assessments are likely to be triggered in respect of proposals for minerals and waste developments. The accompanying HRA Scoping Report also provides advice on site specific considerations for

proposals in proximity to European sites and requirements for project level HRA. The site selection exercise as part of the Site Locations document will take into account these recommendations.

7.58 Development will be permitted if an Appropriate Assessment indicates the proposal(s) will not adversely affect the integrity of the site. Where development will adversely affect the integrity of the site, it will only be permitted if:

- there are no alternative solutions;
- it is to be carried out for imperative reasons of overriding public interest as set out in Regulation 62 of the Conservation of Habitats and Species Regulations 2010 (as amended); and that
- appropriate compensatory measures can be secured (in accordance with Regulation 66).

Where the requirements of Regulations 62 and 66 are satisfied, planning permission will be granted subject to planning conditions and/or agreements to protect biodiversity interests of the designated site (including providing necessary mitigation and/or compensation). Otherwise, where the requirements of Regulations 62 and 66 are not met, planning permission will be refused.

Policy DM7: Internationally Designated Sites of Biodiversity Conservation Value

Proposals for minerals and waste development that are likely to have significant effects on internationally important wildlife sites should be supported by sufficient, current information for the purposes of an appropriate assessment of the implications of the proposal, alone or in combination with other plans and projects, for any Special Area of Conservation (SAC), Special Protection Area (SPA) or Ramsar site. Where the conclusions of the appropriate assessment, carried out in accordance with Council Directive 92/42 EEC and the Conservation of Habitats and Species Regulations 2010 (as amended), show that a proposal can be delivered without adverse effect on the integrity of any SAC, SPA or Ramsar site, planning permission will be granted.

7.59 Sites of Special Scientific Interest provide statutory protection for some of the best examples of the UK's flora, fauna or geological or physiographical features. As such, they are of national importance. The NPPF states that proposed development on land within or outside a Site of Special Scientific Interest likely to have an adverse effect on a Site of Special Scientific Interest should not normally be permitted. Exceptions should only be made where the benefit of the development in that location clearly outweighs both the impacts on the features of that site and on the wider national network of Sites of Special Scientific Interest.

7.60 The NPPF also states that planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and geological features, including

fossils unless the need for, and benefits of, the development in that location clearly outweigh the loss.

Policy DM8: Nationally Designated Sites of Biodiversity and Geological Conservation Value

Sites of Special Scientific Interest, National Nature Reserves and irreplaceable habitats (including Ancient Woodland and veteran trees) will be safeguarded from inappropriate minerals and waste development. Planning permission will be granted for minerals and waste development on or affecting such sites, provided that it can be demonstrated that the development, either individually or in combination with other developments, would not conflict with the conservation, management and enhancement of the site, or have any other adverse impact on the site. Where this is not the case, planning permission will be granted provided that:

- **the proposal cannot reasonably be located on an alternative site to avoid harm; and**
- **the benefit of the development would clearly outweigh the impacts that the proposal would have on the key features of the site; and**
- **the harmful aspects can be satisfactorily mitigated or, as a last resort, compensated by measures that provide a net gain in biodiversity/geodiversity; and**
- **in the case of a SSSI, there would be no broader impact on the national network of SSSIs.**

7.61 Local Wildlife Sites are non-statutory areas of importance for nature conservation that complement nationally and internationally designated sites. Proposals for minerals and waste development may lead to loss, degradation or fragmentation of important areas that are rich in biodiversity. The NPPF states that, when determining planning applications, local planning authorities should aim to conserve and enhance biodiversity. It states that if significant harm resulting from a development cannot be avoided, adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused. Minerals and waste development will therefore only be permitted if due regard has been given to the likely effects of the proposed development on Local Wildlife Sites or sites meeting Local Wildlife Site criteria.

7.62 In the absence of alternatives, the local planning authority will ensure that, before development commences, adequate mitigation measures are put in place. Where a planning decision would result in significant harm to biodiversity interests which cannot be prevented or adequately mitigated against, appropriate compensation measures will be sought. If significant harm cannot be prevented, adequately mitigated against, or compensated for, then planning permission will be refused.

7.63 The County Council recognises, however, that there is also the opportunity for such minerals and waste development to impact positively on the natural environment. Opportunities for biodiversity enhancement will be sought in all cases, and particularly through the restoration of sites in line with Policies R2-4.

Policy DM9: Local Sites of Biodiversity Conservation Value

Planning permission will be granted for minerals and waste development on or affecting locally designated sites (including Local Wildlife Sites and their predecessors: Sites of Nature Conservation Importance; County Wildlife Sites; Local Nature Reserves; Critical Natural Assets), sites meeting Local Wildlife Site criteria and un-designated priority habitats identified in the Lincolnshire Biodiversity Action Plan, provided that it can be demonstrated that the development would not have any significant adverse impacts on the site. Where this is not the case, planning permission will be granted provided that:

- **The merits of development outweigh the likely impact; and**
- **Any adverse effects are adequately mitigated or, as a last resort compensated for, with proposals resulting in a net-gain in biodiversity through the creation of new priority habitat in excess of that lost.**

7.64 The NPPF states that, to minimise impacts on geodiversity, planning policies should aim to prevent harm to geological conservation interests. Proposals for minerals and waste development may lead to loss or degradation of important local areas that are rich in geo-diversity. Minerals and waste development will therefore only be permitted if due regard has been given to the likely effects of the proposed development on Local Geological Sites or sites meeting Local Geological Site criteria.

7.65 In the absence of alternatives, and if significant harm cannot be prevented, adequately mitigated against, or compensated for, then planning permission will be refused.

7.66 The County Council recognises, however, that there is also the opportunity for such minerals and waste development to impact positively on the natural environment. Opportunities for geodiversity enhancement through the restoration of sites will be sought in all cases in line with Policies R2-4.

Policy DM10: Local Sites of Geological Conservation Value

Planning permission will be granted for minerals and waste development on or affecting locally designated sites (including Local Geological Sites and their predecessors: Regionally Important Geological and Geomorphological Sites) and sites meeting Local Geological Site criteria provided that it can be demonstrated that the development would not have any significant adverse impacts on the site. Where this is not the case, planning permission will be granted provided that:

- **The merits of development outweigh the likely impact; and**
- **Any adverse effects are adequately mitigated or, as a last resort compensated for, with proposals resulting in geodiversity enhancements.**

Agricultural Land and Soils

7.67 Proposals for minerals and waste development should take into account their impact on soil resources, agricultural land quality and farming, and other established rural land uses. This assessment should be informed by a soil and land quality survey and a soil handling and replacement strategy, where appropriate.

7.68 Soil is a finite resource which takes many years to develop but which can be quickly lost or degraded. Good soil management and conservation are therefore critical to sustainable land management practices in minerals and waste development. The NPPF states that soils should be protected and enhanced.

7.69 Where soil is not required for restoration purposes on the site, other options for the sustainable use of the soil include using it for restoring other nearby sites (subject to planning permission for the areas involved) or storing the soil "permanently" on site in appropriately designed bunds – potentially allowing its use at a later date if the need arises.

7.70 Biodiversity-led restoration also provides an opportunity to protect soils, enabling habitat creation in addition to soil conservation for future agricultural needs.

Policy DM11: Soils

Proposals for minerals and waste development should protect and, wherever possible, enhance soils.

- 7.71 The NPPF states that local planning authorities should take into account the economic and other benefits of the best and most versatile agricultural land. Where significant development of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of higher quality. In addition, it states that local planning authorities should put in place policies to ensure that the reclamation of mineral sites safeguard the long term potential of best and most versatile agricultural land.
- 7.72 The Agricultural Land Classification (ALC) system classifies land into five grades with Grade 3 subdivided into 3a and 3b. Best and most versatile agricultural land is defined as Grades 1, 2 and 3a. Lincolnshire has a high proportion of best and most versatile agricultural land, which is the basis for its prosperous agricultural industry. As a result, it will not always be practicable to locate development on lower quality agricultural land, particularly minerals development that can only take place where the minerals are found. For mineral sites containing "significant" areas of best and most versatile agricultural land, the long term potential of this agricultural land should still be safeguarded. This can be achieved by restoring the land back to agriculture using, if appropriate, the low level restoration techniques outlined in Chapter 8. Alternatively, such techniques could also be used for providing opportunities for nature conservation after-uses, whilst at the same time protecting the potential of the best and most versatile agricultural land. For example, wet grassland could be created by managing the water levels to allow for both livestock grazing and to encourage birds. Such land could then be re-drained for arable use, should the need arise in the future. In considering whether a site contains "significant" areas of best and most versatile agricultural land, the County Council will have regard to the amount of land involved, what proportion of the overall site this constitutes and how this land is distributed within the site.

Policy DM12: Best and Most Versatile Agricultural Land

Proposals for minerals and waste development that include significant areas of best and most versatile agricultural land will only be permitted where it can be demonstrated that:

- **no reasonable alternative exists; and**
- **for mineral sites, the site will be restored to an after-use that safeguards the long-term potential of the best and most versatile agricultural land.**

Transport

- 7.73 The NPPF states that plans and decisions should consider whether opportunities for sustainable transport modes have been taken up depending on the nature and location of the site and should ensure developments that generate significant movement are located where the need to travel will be minimised and the use of sustainable transport modes can be maximised. It states that planning strategies should protect and exploit opportunities for the use of sustainable transport modes for the movement of goods.
- 7.74 One of the objectives of the Lincolnshire Local Transport Plan is to remove unnecessary HGVs from affected communities through appropriate traffic management measures, highway improvements and encouraging the use of alternative modes of transport.
- 7.75 The majority of minerals and waste produced in Lincolnshire is transported over relatively short distances. Minerals are a high bulk, low profit commodity which generally restricts their use to locally based markets accessed by road based transport. The transportation of aggregates by rail and water is generally only economic over longer distances and is dependent on network capacity and adequate loading and reception facilities. Whilst waste is managed locally wherever possible, in some cases, for example due to need for specialist treatment or the nature of commercial contracts, some waste can be transported a long way out of the County.
- 7.76 There are currently limited facilities for rail freight in the county and the River Trent is currently the only navigable waterway that is used in any major way to transport freight by water, although none of this is currently loaded or off-loaded in Lincolnshire. The only aggregates terminal in Lincolnshire was at the Port of Boston but this is no longer in operation. Boston and the Humber ports could however be a potential destination for onward shipping for certain waste arisings.
- 7.77 Road haulage will therefore remain the predominant mode of transport for minerals and waste for the foreseeable future. Planning applications for mineral and waste development will nevertheless be expected to show that non road-based options for transporting minerals or waste have been considered.
- 7.78 The location of mineral extraction areas, unlike waste sites, are determined by the existence of the resource and thereby restricted as to achieving more sustainable transport options. However, the Council will:
- consider favourably sites with good access to the county's Strategic Road Network;
 - encourage more use of the rail network in the county;
 - encourage the use of facilities/potential of waterborne transport on the River Trent;
 - encourage the use of conveyors to reduce the impacts of road haulage.

- 7.79 To maximise the opportunities for improving the sustainability of the transport of waste in Lincolnshire, the Plan seeks to:
- locate larger waste facilities within the Areas of Search (in and around the main urban areas set out in Policy W3);
 - encourage smaller facilities (outside of the main urban areas set out in Policy W3) to locate in areas which serve local communities;
 - encourage large waste sites to locate on or close to A Class Roads in the county to reduce impacts on local communities;
 - encourage the co-location of waste facilities to reduce the level of movements of waste on the county's road network.

Policy DM13: Sustainable Transport Movements

Proposals for minerals and waste development should seek to minimise road based transport and seek to maximise where possible the use of the most sustainable transport option.

- 7.80 The NPPF states that plans and decisions should take account of whether safe and suitable access to a site can be achieved for all people; and improvements can be undertaken within the transport network that cost-effectively limit the significant impacts of the development. It states that development should only be prevented or refused on transport grounds where the residual impacts of development are severe.
- 7.81 The transportation of most waste and minerals by road is a major challenge in Lincolnshire. The Local Transport Plan states that the majority of the Strategic Road Network falls well below current design standards with consequential low speeds and safety problems. The highway network in Lincolnshire is extensive, but there are no motorways and only 66km of dual carriageway. The A1 trunk road runs down the western boundary of the county and the A46, A57, A158, A15, A16, A17 routes link settlements throughout Lincolnshire. Accessibility is an issue throughout Lincolnshire, but more so in the more rural isolated parts of the County. There are particular problems in travelling east/west.
- 7.82 It is important to ensure that the effects of traffic generated by minerals and waste developments are minimised, particularly in relation to effects on local communities, the environment and the local road network. The County Council will seek mitigation measures to control the impact of road haulage by controlling the operation of sites through routing agreements, output limits and hours of operation.

- 7.83 On a site by site basis reducing the impacts of transporting materials by road on local communities can be achieved by:
- The use of conveyor belt systems which provide the inter-site movement of material within or to other nearby sites for further processing. This system reduces the level of HGVs on the local road network;
 - Internal haul roads on sites also reduce the use of local roads by HGVs;
 - The use of voluntary site transport plans in consultation with local communities, relating to issues such as routing, hours of movement and considerate driving can help reduce the worst impacts of road freight.
- 7.84 The NPPF states that all developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Unless the number of lorry movements is insignificant, all planning applications should therefore be accompanied by a transport impact assessment (usually as part of the Environmental Statement) and a site transport plan.
- 7.85 The level of traffic which is considered to be significant will depend on the characteristics of the site including the integrity of the local highway network, proximity to sensitive properties and, if applicable, current HGV movements from the site. The County Planning Authority will advise applicants of the need to discuss proposals with the Highways Authority and of any specific access issues to be considered as part of their application.

Policy DM14: Transport by Road

Planning permission will be granted for minerals and waste development involving transport by road where:

- **the highway network is of, or will be made up to, an appropriate standard for use by the traffic generated by the development; and**
- **arrangements for site access and the traffic generated by the development would not have an unacceptable impact on highway safety, free flow of traffic, residential amenity or the environment; and**
- **a suitable travel plan is in place.**

Flood Risk

- 7.86 The NPPF states that inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk, but where development is necessary, making it safe without increasing flood risk elsewhere. It states that Local Plans should be supported by Strategic Flood Risk Assessment and develop policies to

manage flood risk from all sources, taking account of advice from the Environment Agency and other relevant flood risk management bodies, such as lead local flood authorities and internal drainage boards; and that Local Plans should apply a sequential, risk-based approach to the location of development to avoid where possible flood risk to people and property and manage any residual risk, taking account of the impacts of climate change. The whole county of Lincolnshire is now covered by the Joint Lincolnshire Flood Risk and Drainage Management Strategy which is a statutory document and deals with all sources of flooding.

- 7.87 Rivers and floodplains are very important features within the overall water environment. To prevent an increase in flood risk, it will be necessary to maintain the capacity of the floodplain and the free flow of floodwater. Mineral working in floodplain areas can however have both beneficial and detrimental effects. For instance, although there may be some flood risk during operations, subsequent restoration and use of the land may help to provide flood alleviation. Therefore both short and long term impacts will be considered in determination of applications.
- 7.88 Proposals should include appropriate measures to minimise any increase in flood risk. Increased risks of flooding associated with mineral workings and waste management developments can be avoided through a number of measures, which include:
- locating all buildings on land at a lower risk of flooding within the site;
 - locating site bunds, ancillary structures and stockpiles of materials so as not to prevent flood water flowing through the site or prevent water flowing on the functional floodplain;
 - ensuring that de-watering and surface water disposal will not increase the risk of flooding;
 - providing additional flood water storage areas, reducing flood risk in the surrounding area;
 - providing Sustainable Drainage Systems (SuDS) features in open spaces such as basins, ponds, wetlands with linking swales and control structures, which also have the potential to link with Biodiversity targets and habitat linkages.
- 7.89 In accordance with the requirements of National Planning Practice Guidance, applications for planning permission, for proposals with an area greater than 1 hectare, or within flood risk zones 2, 3a and 3b, shall be accompanied by a Flood Risk Assessment. Flood Risk Assessments shall be considered as part of determination of the application and where relevant the advice of the Environment Agency will be sought and its views will be given due weight. Failure to submit a Flood Risk Assessment, where one is required, will usually result in the application not being validated.
- 7.90 From 6 April 2015 the Lead Local Flood Authority will take on responsibility for assessing risk of flooding associated with surface water (pluvial) for all Major Planning Applications (including minerals and waste developments). From this date the Environment Agency will continue to assess risk of flooding associated with rivers (fluvial) and the sea (tidal) within flood risk zones 2, 3a and 3b. Flood Risk Assessments will need to

be produced in line with the NPPF and the relevant organisation will need to consider them accordingly.

- 7.91 A sequential risk-based approach to determining the suitability of land for development in flood risk areas should be applied as indicated in the National Planning Practice Guidance with the aim of locating new development in areas with the lowest probability of flooding (flood Zone 1). Where flood risk is identified, proposals will only be approved in exceptional circumstances where the Exception Test in National Planning Practice Guidance is met.
- 7.92 The flood risk vulnerability of mineral and waste management sites as indicated in the National Planning Practice Guidance will be taken into account in allocating land within the Site Locations Document and in determining planning applications for development outside Flood Zone 1. Where it is considered acceptable for development to take place within a flood risk area, any buildings should be designed to be flood resilient in order to reduce the consequences of flooding and facilitate recovery from the effects of flooding.

Policy DM15: Flooding and Flood Risk

Proposals for minerals and waste developments will need to demonstrate that they can be developed without increasing the risk of flooding both to the site of the proposal and the surrounding area, taking into account all potential sources of flooding and increased risks from climate change induced flooding.

Minerals and waste development proposals should be designed to avoid and wherever possible reduce the risk of flooding both during and following the completion of operations. Development that is likely to create a material increase in the risk of off-site flooding will not be permitted.

- 7.93 Applications for minerals and waste development should address the likely effects of proposed development on surface water and groundwater, in terms of changes to flow (including groundwater flow), water table, water temperature and quality (development should not impact upon the current Water Framework Directive status of adjacent or downstream waterbodies). Although the Environment Agency is responsible for pollution control through its various permitting regimes, it is still important to consider the impact on water resources as far as it might affect land use and planning generally. The extent of this assessment will depend on the nature of the development and its location.
- 7.94 Internal Drainage Boards also have permissive powers to manage water levels within their respective drainage districts. Lincolnshire County Council is now a Lead Local Flood Authority, established by the Flood and

Water Management Act 2010 in order to provide a leadership and co-ordinating role in flood risk and water resource management.

- 7.95 Proposals should include appropriate measures to minimise any detrimental impacts on the availability and quality of water resources. Proposals for mineral extractions are likely to require a Hydrological/Hydrogeological Assessment(s), in order to satisfy the concerns of the Environment Agency.
- 7.96 The NPPF and National Planning Practice Guidance promotes Sustainable Drainage Systems (SuDS) as the principle means for development proposals to address surface water. SuDS are designed to control surface water run off close to where it falls and mimic natural drainage as closely as possible. The guidance notes that whether SuDS should be considered depends on the proposed development and its location. For major development SuDS should be provided unless demonstrated to be inappropriate, however it is acknowledged that they may not be practicable for some forms of development, for example, mineral extraction. Local Planning Authorities are responsible for approving SuDS designs, in consultation with the Lead Local Flood Authority and other relevant flood risk management bodies, with future maintenance monitored through planning enforcement procedures.
- 7.97 The sustainable management of surface water and land drainage should be considered at an early stage to manage/mitigate associated flood risk from surface water runoff, improve water quality and minimise environmental impact. In the interests of improving sustainability and conserving water resources, applicants will be expected to demonstrate that the need to conserve water resources has been taken to account and that appropriate water efficiency and sustainability measures have been included. Consent will also be needed under the Land Drainage Act 1991 if a development involves the building of a culvert or structure (such as a weir) which is likely to affect flow in an ordinary watercourse.

Policy DM16: Water Resources

Planning permission will be granted for minerals and waste developments where they would not have an unacceptable impact on surface or ground waters and due regard is given to water conservation and efficiency.

Cumulative Impacts

- 7.98 The NPPF states that, in preparing Local Plans, local planning authorities should take into account the cumulative effects of multiple impacts from individual sites and/or a number of sites in a locality; and that, when determining planning applications, local planning authorities should take into account the cumulative effect of multiple impacts from individual sites and/or from a number of sites in a locality.
- 7.99 It is important to consider the suitability of granting permission for sites which would be in close proximity to other minerals or waste sites. Proposals for simultaneous and/or successive operations at a number of sites in a wider area of commercially-viable deposits may impact on the amenity of communities and localities over an extended period, depending on the nature, age and size of the site(s). Such cumulative impacts can occur in a number of ways:
- the cumulative impact of a number of separate effects from a single site;
 - the cumulative effects from two or more active sites, including sites being restored or used for waste disposal;
 - the combined effect on the landscape and ecology from the working, re-working and restoration of a number of sites; or
 - the cumulative impact on the quality of life of local communities from a relatively unbroken sequence of working and restoration.
- 7.100 Adverse cumulative impacts could include increased levels of noise, vibration, dust and artificial lighting. The highway network could also be affected by increased HGV movements with additional hazards related to road safety.
- 7.101 In Lincolnshire, there are parts of the county where there has been a gradual build-up of sites in close proximity to other mineral sites. For example, sand and gravel extraction has been concentrated in 3 particular areas of the County. The cumulative impacts on amenity to local communities in these areas and on the existing landscape will need careful consideration when considering future developments.

Policy DM17: Cumulative Impacts

Planning permission will be granted for minerals and waste developments where the cumulative impact would not result in significant adverse impacts on the environment of an area or on the amenity of a local community, either in relation to the collective effect of different impacts of an individual proposal, or in relation to the effects of a number of developments occurring either concurrently or successively.

8. RESTORATION

Restoration and Aftercare

- 8.1 The NPPF states that, when determining planning applications, local planning authorities should provide for restoration and aftercare at the earliest opportunity to be carried out to high environmental standards, through the application of appropriate conditions, where necessary.
- 8.2 It is vital to ensure that the restoration and future use of sites is addressed at the outset of preparing planning applications. It is also important to acknowledge that the way land is restored and its subsequent management offer the means to enhance the character of land taken for mineral working or waste operations, so that a valuable asset can be passed on to future generations. To do this effectively will involve collaboration between key interest groups including mineral operators, land owners, local authorities, local communities, statutory agencies and non-government organisations.
- 8.3 The restoration of mineral workings and landfill operations should be completed at the earliest opportunity to ensure that dereliction of the land does not occur and where appropriate, progressive restoration will be required in order to minimise any blight on the landscape
- 8.4 It is essential that proposals for mineral extraction and landfill establish an appropriate after-use to ensure that resources are secured for the after-use to be successfully implemented once restoration is complete. All after-uses will be considered in the light of realistic assumptions about the availability of restoration materials, particularly inert waste.
- 8.5 Schemes that are designed to develop as an appropriate habitat for the prevailing conditions, and demonstrated to be both technically and economically feasible, will be supported. On large sites, a mix of compatible uses may provide the best balance for the future, for example low intensity agricultural use, tourism, sport and nature conservation.
- 8.6 However, restoration schemes should also contain a degree of flexibility so they can be amended in the future if circumstances change. The aim should be to achieve phased restoration to minimise the area of land disturbed and the total period of mineral working and landfill operations. Phased restoration also helps to gauge the initial success of the restoration scheme by observing which aspects have worked well, as well as identifying which aspects have been less successful.
- 8.7 It is also important that agreed sustainable and beneficial after-uses are managed and maintained following restoration. Where appropriate, aftercare schemes and/or long-term management and maintenance agreements will need to be secured. This may be for a period of 10 years (or longer) depending on the site and could include matters such as maintenance of public rights of way, public access or long term pumping.

Policy R1: Restoration and Aftercare

Proposals must demonstrate that the restoration of mineral workings and landfill operations will be of high quality, and carried out at the earliest opportunity.

Proposals for mineral extraction or landfill should be accompanied by detailed proposals for restoration, including an appropriate after-use of the site. All proposals should demonstrate that:

- **restoration will be undertaken using best practice to secure a high standard of restoration and aftercare; and**
- **restoration will be completed within a reasonable timescale and is progressive; and**
- **the restoration is appropriate for the natural and historic landscape and geological and wildlife interest of the area and measures to create, protect, restore and enhance geodiversity and biodiversity conservation features, and the historic landscape are practical, of a high quality appropriate to the area and secure their long term safeguarding and maintenance; and**
- **there is an aftercare management programme, appropriate to the objectives of the site, to ensure that the restoration of the site is established successfully.**

Afteruse

8.8 The NPPF states that local planning authorities should put in place policies to ensure worked land is reclaimed at the earliest opportunity, taking account of aviation safety, and that high quality restoration and aftercare of mineral sites takes place, including for agriculture (safeguarding the long term potential of best and most versatile agricultural land and conserving soil resources), geodiversity, biodiversity, native woodland, the historic environment and recreation.

8.9 It is particularly important that temporary development sites such as quarries and landfill sites are properly restored and the types of restoration measures taken are appropriate. Sites should be restored in a way that is sympathetic to the character of the area and that will positively enhance the site and contribute to the landscape in which it is set. In this context, restoration proposals should have regard to the Lincolnshire Historical Landscape Character assessment, which is housed in the County Historic Environment Record, and any relevant local landscape character assessment. Sites should also, where appropriate, be in line with the strategic aim of an area (for example to create a Country Park in the Witham Valley or to restore fenland in South Lincolnshire).

8.10 Restoration can provide opportunities to secure a net-gain in **biodiversity**, facilitate adaptation to climate change and address past losses. The Lincolnshire Biodiversity Action Plan 2011 (BAP) identifies

priority habitats for the county. The BAP indicates that the restoration of mineral sites offers significant opportunities for habitat creation, such as fenland, wetlands, lowland dry acid grassland heathland and wet woodland. Biodiversity Opportunity Mapping (BOM) studies identify specific opportunities for creating and restoring priority habitats and therefore provide important information which can be utilized in the development of restoration schemes. The Council will therefore expect all restoration schemes to contribute to BAP objectives using relevant opportunity mapping studies and priority habitat targets to inform restoration proposals, and where possible deliver a net-gain in biodiversity through the landscape-scale creation of priority habitat, thereby contributing to the establishment of a coherent and resilient ecological network. Where restoration could assist or achieve in the creation of priority habitats, and/or Lincolnshire BAP targets, thereby improving overall biodiversity levels in the county, the relevant biodiversity after use should be incorporated within the restoration scheme.

- 8.11 The BAP considers it important that planning policies seek to enlarge or link together existing habitats, thus helping to offset the effects of habitat fragmentation. The Council will therefore encourage larger blocks of habitat creation, as they deliver greater ecological benefits. Biodiversity Opportunity Mapping studies are based on this principle, including proposals for landscape-scale approaches to habitat creation. Existing landscape-scale initiatives such as the Witham Valley Country Park, Trent Vale / Trent Valley "Futurescape" and South Lincolnshire Fenlands Partnership can also assist in this process.
- 8.12 Restoration can provide opportunities to secure a net gain in accessible **geodiversity** and address past losses. The Lincolnshire Geodiversity Action Plan 2010 (LGAP) indicates that the restoration of extractive sites offers significant opportunities for accessible geodiversity interest, in particular for educational use. The County Council will therefore expect all restoration schemes to contribute to LGAP objectives where possible. Where restoration could assist or achieve in the creation of geodiversity features, and/or LGAP targets the relevant after use should be incorporated within the restoration scheme.
- 8.13 Restoration schemes need to be resilient to future **climate change** impacts. Habitat creation can act as a living carbon sink and well-designed schemes, in appropriate locations, may also offer benefits in terms of provision of climate change mitigation measures such as greater flood storage capacity allied to recreational or biodiversity after-uses. Furthermore, the restoration of mineral sites to BAP habitats can help wildlife adapt to climate change, creating 'stepping stones' and increasing the permeability of the landscape enabling climate change induced range shifts.
- 8.14 Sand and gravel extraction in Lincolnshire causes the greatest loss of land; although generally shallow it often extends below the water table and would therefore normally fill with water. This creates challenges when restoration to **agriculture** is considered, particularly as over 70% of

agricultural land in Lincolnshire is classified as best and most versatile, i.e. Grade 1 or 2 or 3a, and when there is pressure to restore land back to agricultural use in order to safeguard food supplies. Low level restoration techniques have been developed however which involve sealing the floor and sides of the excavation with an impermeable material to prevent the entry of ground water and replacing soils together with a suitable drainage system. The only water then entering the site is rainwater which is regulated by pumping when necessary.

- 8.15 Whilst best and most versatile agricultural land should be safeguarded (in line with Policy DM12), and soils on all sites should be protected (in line with Policy DM11) this will not necessarily require sites to be restored to agriculture. Other uses, some in combination, could be considered in order to provide a net-gain in biodiversity. This could involve restoration of wildlife habitats that may have declined as a consequence of development at the site or within the local area, strengthening regional and functional ecological and green infrastructure networks, and contributing to the national strategy and Lincolnshire Biodiversity Action Plan targets.
- 8.16 Afforestation can make a potentially significant contribution to the achievement of carbon sequestration targets but only 4% of Lincolnshire is covered by **woodland**, making it one of the least wooded counties in Britain. The best suited areas for woodland creation within the county are probably the sand and gravel lowlands closely followed by the clay lowlands. Sand and gravel extraction areas have a specific type of soil and tend to be less fertile and more suitable to tree growth. The Trent and Bain Valley production areas are therefore the most suitable for woodland creation, particularly wet woodland which is a BAP target. The silt fens, however, contain more fertile soils such that a balance between biodiversity and agricultural restoration will have to be met.
- 8.17 The Lincolnshire BAP states that the most significant contribution for restoration/creation of wet woodlands is likely to be through mineral site restoration plans. New wet woodland planting will therefore be encouraged where appropriate, which will make a potential contribution to carbon sequestration and assist in meeting BAP targets. Furthermore, restoration to wet woodland, along with other priority habitats, will safeguard high grade soils from further drainage and wind-blown erosion so that should there be a need in the future for the land to be converted back to agriculture the soils will remain in situ.
- 8.18 The restoration of worked-out sites can also provide opportunities to add to the County's **Green Infrastructure**. A strategic framework and key evidence for guiding the planning and delivery of green infrastructure across Central Lincolnshire is set out in the Green Infrastructure Study for Central Lincolnshire (Dec 2011). Its overall objective is to enhance, develop and provide a multi-functional network of greenspaces, parks, rivers and other corridors, along with outdoor sports provision, within and around settlements that connect them to each other and the wider countryside, improving access, environmental quality and biodiversity. The Study identifies priority locations for action. The Witham Valley

Country Park, located to the south west of Lincoln, is one such location that is constantly evolving as mineral sites are restored. The Central Lincolnshire Biodiversity Opportunity Mapping Study (2013) also identifies potential projects for landscape-scale habitat creation and restoration which can contribute towards such a network, with additional detail provided for the Witham Valley Country Park area.

- 8.19 A significant amount of restoration schemes in the county have resulted in large areas of standing **water**, particularly in the sand and gravel production areas, where there is a high water table. Strategically, this type of restoration may be reaching saturation point whereby the characteristics of parts of the county have been irreversibly changed, often to the detriment of that particular area.
- 8.20 The high amount of RAF activity within the County also provides a potential conflict with extensive and sometimes numerous water bodies owing to increased bird activity and therefore the potential of bird strike on aircraft. Proposals for the creation of large open water bodies will therefore need to be closely scrutinised. A change in restoration to BAP habitats such as reedbed and wet woodland can help alleviate the problem of bird strike, creating less open water while forming a barrier between any open water and potential grazing sources, making it less attractive to geese. The Central Lincolnshire Biodiversity Opportunity Mapping Study takes these constraints into account.

Policy R2: After-use

The proposed after-use should be designed in a way that is not detrimental to the local economy and conserves and where possible enhances the landscape character and the natural and historic environment of the area in which the site is located.

After-uses should enhance and secure a net gain in biodiversity and geological conservation interests, conserve soil resources, safeguard the potential of the best and most versatile agricultural land, and decrease the risk of adverse climate change effects. Such after-uses could include: agriculture, nature conservation, leisure, recreation/sport, and woodland.

Where appropriate, the proposed restoration should provide improvements for public access to the countryside including access links to surrounding green infrastructure.

Restoration proposals should be designed to ensure that they do not give rise to new or increased hazards to aviation.

Restoration of sand and gravel operations within proposed Areas of Search.

- 8.21 Historically, Lincolnshire has produced the vast majority of its sand and gravel from three main areas: the Witham Valley, the Bain Valley and The Deepings/Baston area. The strategy is to concentrate new or extended workings within areas of search based on these production areas (see Policy M2). Restoration proposals for future extraction within the Areas of Search should be designed to best meet the particular characteristics and future aspirations for these areas, provided that these meet the requirements of Policies DM11 and DM12.
- 8.22 Proposals for extraction within the **Trent Valley** Area of Search to the north of Lincoln should be restored sensitively in-line with the broader habitat-scale aspirations for the Trent Valley. Priority habitats for mineral restoration in this area include reedbeds, wet woodland and wet grassland. Further detail on habitat creation opportunities are identified in the Central Lincolnshire Biodiversity Opportunity Mapping Study (2013), and the draft Trent Valley Biodiversity Opportunity Mapping Project (2013).
- 8.23 The development of the **Witham Valley Country Park** is a partnership initiative to provide linked accessible greenspace from the centre of Lincoln City to the surrounding countryside, enriching the natural environment. The Country Park covers around 40 square miles to the south west of Lincoln, the location of which is shown on the Key Diagram. Proposals for sand and gravel extraction within this area should include restoration proposals to create local and national priority habitats as identified within the Central Lincolnshire Biodiversity Opportunity Mapping Study including wet woodland, reedbeds, heathland and acid grassland. Restoration of minerals sites should also be planned as part of a strategy linked to the development of the Country Park as well as providing accessible natural greenspace and contributing to green infrastructure and the enhanced provision of leisure and recreation facilities.
- 8.24 Sand and gravel operations within the **Central Lincolnshire** Area of Search provide opportunities to create priority habitats to compliment habitats existing in the wider Bain Valley area such as heathland, acid grassland and wet woodland. The creation of such habitats would also help meet the aim of the Lincolnshire Wildlife Trust's Living Landscape project in the Kirkby Moor and Bain Valley area, which aims to create an extensive area of new wildlife habitat to expand, buffer and link existing habitats of national importance.
- 8.25 Much of the **South Lincolnshire** Area of Search lies within the South Lincolnshire Fenlands Project area. This project is seeking to re-create sustainable wetland areas between Bourne and Market Deeping adjacent and linked to the internationally important nature reserves in Baston and Thurlby Fens and within the wider fenland locality. Proposed habitat restoration will include areas of wet grasslands, utilised for grazing and hay production, reedbeds, fenland, wet woodlands and open water.

- 8.26 The Lincolnshire BAP indicates that fens, as part of larger wetland habitats, are of immense conservation value, supporting rare plants and animals. Fens are also important carbon dioxide sinks and banks, because of the way they capture and store organic material (carbon) derived from atmospheric gases. Fen habitat was once extensive in Lincolnshire but is now rare. It is an objective of the BAP to achieve landscape scale fen habitat recreation – especially through the South Lincolnshire Fenlands initiative and wider partnerships. Sand and gravel operations within this area provide opportunities to create wet fenland habitat or enhance existing wetland habitats, which would help meet the project’s targets together with targets within the Lincolnshire BAP.
- 8.27 The Site Locations document, through allocation of sites for future development, and consideration of site specific restoration requirements, will build upon the framework established in this Core Strategy and Development Management Policies document.

Policy R3: Restoration of Sand and Gravel Operations within Areas of Search

Restoration proposals for sand and gravel operations within the Areas of Search (other than those involving best and most versatile agricultural land that would be restored back to agricultural land of a comparable quality) should have regard to the landscape scale objectives of the area and should reflect the following priorities:

- **Trent Valley (north of Lincoln): creation of reedbed, wet woodland and lowland wet grassland habitats**
- **Trent Valley (south west of Lincoln within the Witham Valley Country Park): creation of habitats (including wet woodland, reedbed, acid grassland and heathland) to enhance local nature conservation and biodiversity value; provision of improved public access including links to surrounding green infrastructure; and the development of additional recreational/sport facilities**
- **Central Lincolnshire (Tattershall Thorpe): creation of wet woodland and heathland and acid grassland habitats together with reedbed in areas of high water table**
- **South Lincolnshire (West Deeping/Langtoft): creation of wet fenland habitat or enhancement of existing wetland habitats.**

Restoration of limestone/chalk workings

- 8.28 Calcareous grasslands in Lincolnshire are found on the lime-rich soils of the chalk Wolds and of the Jurassic limestone uplands. The thin lime-rich soils found here can support a very high biodiversity if limestone grassland can be conserved. It has been estimated that more than 55% of chalk grassland and more than 35% of limestone grassland was lost from Lincolnshire between 1940 and 1995. Limestone grassland now only occupies a tiny proportion (0.05%) of this area where it was once a characteristic part of the landscape. The little that remains of this habitat is among the most fragmented of its kind in the country.
- 8.29 It is an objective of the Lincolnshire BAP to re-create extensive areas of well-managed flower-rich calcareous grassland in appropriate areas, linking and buffering existing fragmented sites. Limestone and chalk operations provide opportunities to create limestone grassland habitat and to expose features of geological interest. This would help meet the targets for calcareous grassland within the Lincolnshire BAP as well as providing accessible natural greenspace and contributing to green infrastructure. Any restoration proposals would however need to address the requirements of Policies DM11 and DM12.

Policy R4: Restoration of limestone and chalk workings

Restoration proposals for limestone and chalk operations should be sympathetic to the surrounding landscape and prioritise the creation of calcareous grassland habitat, except on best and most versatile agricultural land that would be restored back to agricultural land of a comparable quality. Restoration should also seek to retain suitable exposures for geological educational use where appropriate.

9 MONITORING AND IMPLEMENTATION

Monitoring

- 9.1 Developing a monitoring system is a key means of assessing the effectiveness of this plan and whether the spatial vision, and objectives are being delivered. It will determine:
- whether policies and related targets or milestones have been met or progress is being made towards meeting them or, where they are not being met or on track to being achieved, the reasons why;
 - what impact the policies are having in respect of national and local policy targets and any other targets identified in the plan;
 - whether the policies need adjusting or replacing because they are not working as intended;
 - if policies or proposals need changing, the actions needed to achieve this.
- 9.2 In order to monitor the effectiveness of the plan, it is necessary to compile performance targets linked to output indicators, which provide a benchmark for measuring policy implementation. These are set out in Table 11 below. The monitoring framework also includes provision to monitor the Sustainability Appraisal (SA) Objectives and these are also included in Table 11. The Council's Annual Monitoring Report (AMR) will report on the effectiveness of the policies and identify any changes needed if a policy is not working or the targets are not being met. Therefore, the monitoring will assist the Council in ascertaining if there is any need to review the Plan.
- 9.3 The provisions in Table 11 are directed at measuring the success of the various policies in the Plan. In addition, and to assist in this task, in relation to waste the County Council will routinely monitor matters such as take-up in allocated sites and areas; existing stock and changes in stock and capacities; waste arisings; and the amounts of waste recycled, recovered or going for disposal. In relation to minerals, the County Council will monitor the number and nature of applications that involve the extraction of mineral types which are not covered by specific policies in this Plan. The information from this monitoring will help to inform the decisions on when to review the Plan, and the matters that need to be covered.

Implementation

- 9.4 Lincolnshire County Council as mineral and waste planning authority will take the lead role in the implementation of the objectives and the policies of this plan in a variety of ways, including:
- determine planning applications in accordance with the Development Plan, government policy and guidance and other material considerations;
 - attach conditions to planning permissions;
 - seek legal agreements with developers where appropriate;
 - enforce breaches of planning control as necessary;
 - maintain a dialogue with the minerals and waste management industry and local communities through participation in local liaison committees and other means;
 - liaise and co-operate with other departments within the Council and bodies such as District Councils, Parish Councils, adjoining mineral and waste planning authorities, the Environment Agency, Natural England, Historic England, Health and Safety Executive (HSE), Department for Environment Food and Rural Affairs (DEFRA), Highways England, and interest groups;
 - work with the minerals and waste management industry and others to identify and develop suitable initiatives and sites.

Table 11: Policy Related Indicators and Targets

Plan Objective (Para.4.5)	SA Objective	Policy	Indicator	Target
g.	10	M1: Recycled and Secondary Aggregates	Percentage of relevant planning applications determined in accordance with Policy M1.	100%
b.	12	M2: Providing for an Adequate Supply of Sand and Gravel	<ol style="list-style-type: none"> 1. Delivery of the identified annual provision by Production Area. 2. Type of sites: extensions/new. 3. Location of new quarries by Production Area. 4. Allocation of sites meeting the required annual and plan-period provision. 5. Permissions for non-allocated sites. 	<ol style="list-style-type: none"> 1. 100% accordance with policy M2. 2. Priority to extensions. 3. 100% location within Areas of Search. 4. Through adopted Sites Location Plan. 5. Zero.
b.	11, 12	M3: Landbank of Sand and Gravel	Level of landbank for sand and gravel aggregate within each Production Area.	Minimum landbank of 7 years within each Production Area calculated in accordance with the latest LAA.
a., c.	7, 8	M4: Proposals for Sand and Gravel Extraction	Percentage of relevant planning applications determined in accordance with policy M4.	100%

Plan Objective (Para.4.5)	SA Objective	Policy	Indicator	Target
a., c.	7, 8	M5: Limestone	<ol style="list-style-type: none"> 1. Percentage of relevant planning applications determined in accordance with policy M5. 2. The delivery of the identified annual provision. 	<ol style="list-style-type: none"> 1. 100% 2. 100%
a., c.	7, 8	M6: Chalk	Percentage of relevant planning applications determined in accordance with Policy M6.	100%
a., b., c., k.	7, 8	M7: Historic Building Stone	Percentage of relevant planning applications determined in accordance with Policy M7.	100%
a., b., c.	7, 8	M8: Silica Sand	Percentage of relevant planning applications determined in accordance with policy M8.	100%
a., c.	7, 8	M9: Energy Minerals	Percentage of relevant planning applications determined in accordance with policy M9.	100%
a., c.	7, 8	M10: Underground Gas Storage	Percentage of relevant planning applications determined in accordance with policy M10.	100%
f., k.	10	M11: Safeguarding of Mineral Resources	Number of planning applications that are granted planning permission where the County Council has expressed the view that the proposals would be contrary to Policy M11.	Zero.

Plan Objective (Para.4.5)	SA Objective	Policy	Indicator	Target
a., f., k.	7, 8	M12: Safeguarding of Existing Mineral Sites and Associated Minerals Infrastructure	Number of planning applications that are granted planning permission where the County Council has expressed the view that the proposals would be contrary to Policy M12.	Zero.
a.	7, 8	M13: Associated Industrial Development	Percentage of relevant planning applications determined in accordance with policy M13.	100%
a.	7, 8	M14: Irrigation Reservoirs	Percentage of relevant planning applications determined in accordance with policy M14.	100%
a., c.	7, 8	M15: Borrow Pits	Percentage of relevant planning applications determined in accordance with policy M15.	100%
a., d., e.	5, 7, 8, 12	W1: Future requirements for new waste facilities	<ol style="list-style-type: none"> 1. Allocation of sites to meet the capacity gaps identified in Table 9, except for inert landfill and hazardous landfill. 2. Review of capacity gaps. 	<ol style="list-style-type: none"> 1. Through adopted Site Locations Document. 2. Accordance with Annual Monitoring Report.
a., e.	7, 8	W2: Low Level Non-Nuclear Radioactive Waste	Percentage of relevant planning applications determined in accordance with Policy W2.	100%
a., e.	7, 8, 11	W3: Spatial Strategy for New Waste Facilities	Percentage of relevant planning applications determined in accordance with Policy W3.	100%

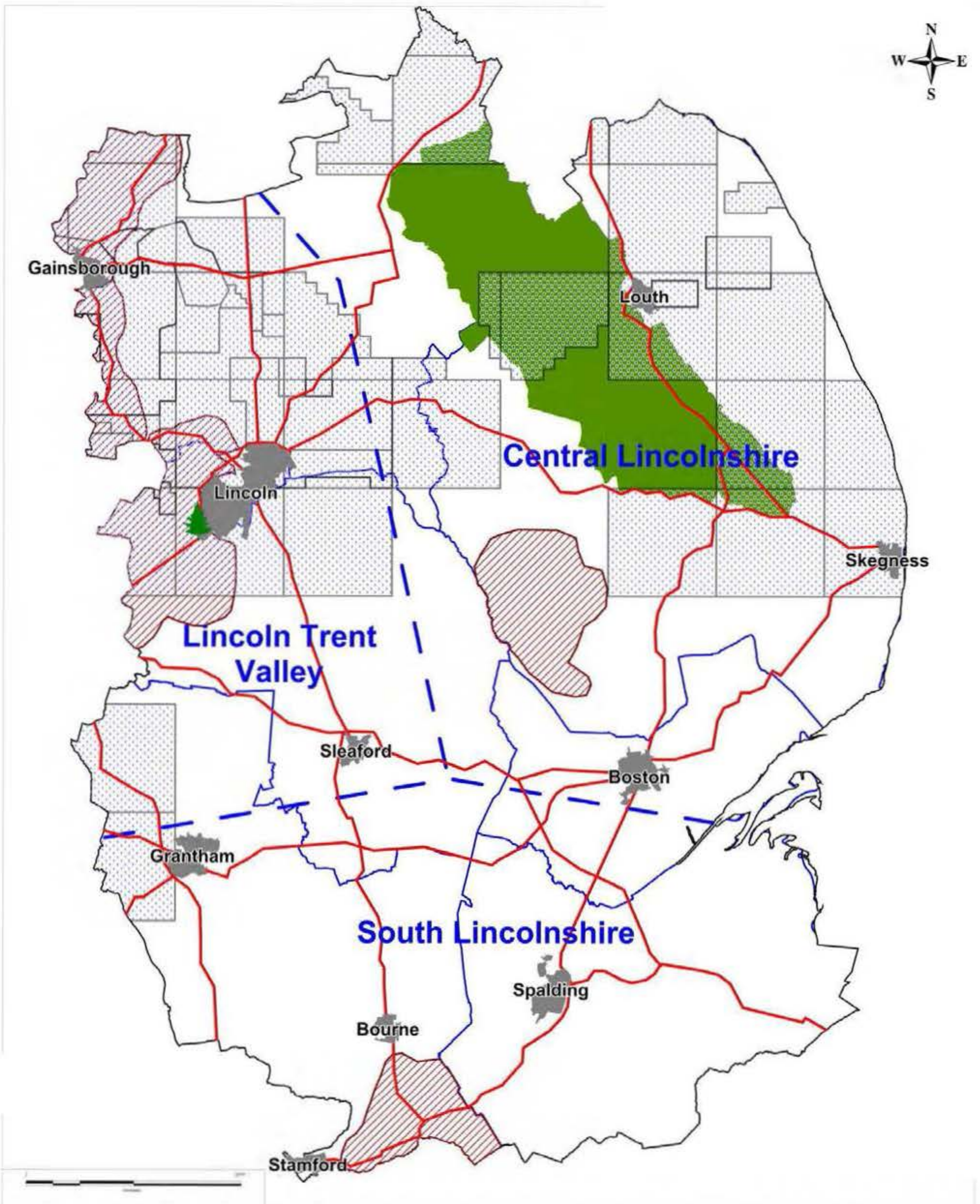
Plan Objective (Para.4.5)	SA Objective	Policy	Indicator	Target
a., e.	7, 8	W4: Locational Criteria for New Waste Facilities in and around main urban areas	Percentage of relevant planning applications determined in accordance with Policy W4.	100%
a., e.	7, 8	W5: Biological Treatment of Waste Including Anaerobic Digestion and Open-Air Windrow Composting	Percentage of relevant planning applications determined in accordance with Policy W5.	100%
a., e.	7, 8	W6: Landfill	Percentage of relevant planning applications determined in accordance with Policy W6.	100%
a., e.	7, 8	W7: Small Scale Waste Facilities	Percentage of relevant planning applications determined in accordance with Policy W7.	100%
a.	7, 8	W8: Safeguarding Waste Management Sites	Number of planning applications granted planning permission where the County Council has expressed the view that the proposals would be contrary to Policy W8.	Zero.
a., e.	7, 8	W9: Waste Water and Sewage Treatment Works	Percentage of relevant planning applications determined in accordance with Policy W9.	100%
a.	5, 7, 8	DM1: Presumption in favour of sustainable development	Percentage of relevant planning applications determined in accordance with Policy DM1.	100%
d.	4, 5	DM2: Climate Change	Percentage of relevant planning applications determined in accordance with Policy DM2.	100%

Plan Objective (Para.4.5)	SA Objective	Policy	Indicator	Target
a.	7, 8	DM3: Quality of life and amenity	Percentage of relevant planning applications determined in accordance with Policy DM3.	100%
a., j.	2, 7, 8	DM4: Historic Environment	Percentage of relevant planning applications determined in accordance with Policy DM4.	100%
a., j., m.	2, 7, 8	DM5: Lincolnshire Wolds Area of Outstanding Natural Beauty	Percentage of relevant planning applications determined in accordance with Policy DM5.	100%
a., j.	2, 7, 8	DM6: Impact on Landscape and Townscape	Percentage of relevant planning applications determined in accordance with Policy DM6.	100%
a., m.	1, 7, 8	DM7: Internationally Designated Sites of Biodiversity Conservation Value	Percentage of relevant planning applications determined in accordance with Policy DM7.	100%
a., m.	1, 7, 8	DM8: Nationally Designated Sites of Biodiversity and Geological Conservation Value	Percentage of relevant planning applications determined in accordance with Policy DM8.	100%
a., m.	1, 7, 8	DM9: Local Sites of Biodiversity Conservation Value	Percentage of relevant planning applications determined in accordance with Policy DM9.	100%
a.	7, 8	DM10: Local Sites of Geological Conservation Value	Percentage of relevant planning applications determined in accordance with Policy DM10.	100%

Plan Objective (Para.4.5)	SA Objective	Policy	Indicator	Target
a., h.	7, 8, 9	DM11: Soils	Percentage of relevant planning applications determined in accordance with Policy DM11.	100%
a., h.	7, 8, 9	DM12: Best and Most Versatile Agricultural Land	Percentage of relevant planning applications determined in accordance with Policy DM12.	100%
a., n.	5, 7, 8	DM13: Sustainable Transport Movements	Percentage of relevant planning applications determined in accordance with policy DM13.	100%
a.	7, 8	DM14: Transport by road	Percentage of relevant planning applications determined in accordance with Policy DM14.	100%
a., l.	6, 7, 8	DM15: Flooding and Flood Risk	Percentage of relevant planning applications determined in accordance with Policy DM15.	100%
a.	3, 7, 8	DM16: Water Resources	Percentage of relevant planning applications determined in accordance with Policy DM16.	100%
a., h., j., l., m.	7, 8	DM17: Cumulative Impacts	Percentage of relevant planning applications determined in accordance with Policy DM17.	100%
i.	9	R1: Restoration and Aftercare	Percentage of relevant planning applications determined in accordance with Policy R1.	100%
h., i.	9	R2: After-use	Percentage of relevant planning applications determined in accordance with Policy R2.	100%

Plan Objective (Para.4.5)	SA Objective	Policy	Indicator	Target
h., i.	9	R3: Restoration of Sand and Gravel Operations within Areas of Search	Percentage of relevant planning applications determined in accordance with Policy R3.	100%
i.	9	R4: Restoration of limestone and chalk workings	Percentage of relevant planning applications determined in accordance with Policy R4.	100%

Figure 4 Key Diagram



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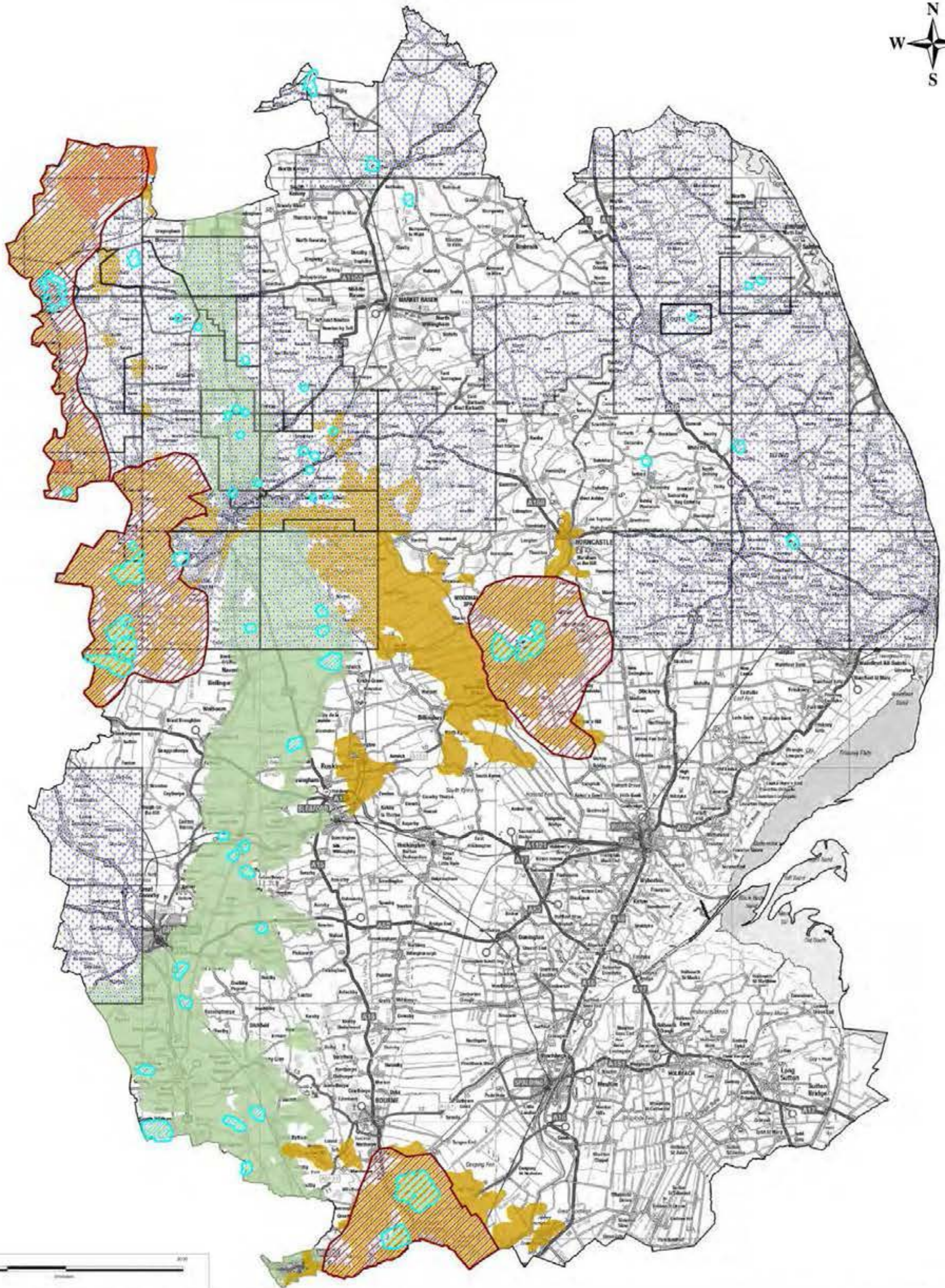
Key

-  Witham Valley Country Park
-  Minerals Production Area
-  Main Urban Areas
-  Main Roads
-  Area of Outstanding Natural Beauty
-  Petroleum Exploration Development Licence (PEDL) Blocks*
-  Sand & Gravel Areas of Search
-  County Boundary
-  District Boundary

*Includes blocks offered for award under the 14th licensing round. The latest PEDL mapping can be accessed via www.gov.uk/oga

Lincolnshire
 COUNTY COUNCIL
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Figure 5 Policies Map





Lincolnshire County Council

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Key

- | | | | |
|-------------------------------------------------------------------------------------|--------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------|
|  | Limestone Minerals Safeguarding Area |  | Site Specific Minerals Safeguarding Area |
|  | Sand & Gravel Minerals Safeguarding Area |  | Sand & Gravel Areas of Search |
|  | Wind Blown Sand Minerals Safeguarding Area |  | Petroleum Exploration Development Licence Blocks* |

*Includes blocks offered for award under the 14th licensing round. The latest PEDL mapping can be accessed via www.gov.uk/oga



Appendix 1: Relationship between Policies

The following table shows the relationship between the policies in this document and saved policies in the Lincolnshire Minerals Local Plan (1991) and the Lincolnshire Waste Local Plan (2006).

Core Strategy and Development Management Policies	Minerals Local Plan and Waste Local Plan Policies
M1: Recycled and Secondary Aggregates	New Policy
M2: Providing for an Adequate Supply of Sand and Gravel	New Policy
M3: Landbank of Sand and Gravel	New Policy
M4: Proposals for Sand and Gravel Extraction	Replacing M3
M5: Limestone	Replacing M3
M6: Chalk	New Policy
M7: Building Stone	New Policy
M8: Silica Sand	New Policy
M9: Energy Minerals	Replacing M21, M24 and M26
M10: Underground Gas Storage	New Policy
M11: Safeguarding of Mineral Resources	Replacing M16 and M30
M12: Safeguarding of Existing Mineral Sites and Associated Minerals Infrastructure	New Policy
M13: Associated Industrial Development	Replacing M18
M14: Irrigation Reservoirs	New Policy
M15: Borrow Pits	Replacing M17
W1: Future requirements for new waste facilities	New Policy
W2: Low Level Non-Nuclear Radioactive Waste	New Policy
W3: Spatial Strategy for New Waste Facilities	Replacing WLP3, WLP 4 WLP5 WLP8
W4: Locational Criteria for New Waste Facilities in and around main urban areas.	Replacing WLP3, WLP 4 WLP5 WLP8
W5: Biological Treatment of Waste Including Anaerobic Digestion and Open-Air Windrow Composting	Replacing WLP9, WLP10 and WLP11
W6: Landfill	Replacing WLP13
W7: Small Scale Waste Facilities	Replacing WLP7
W8: Safeguarding Waste Management Sites	Replacing WLP20
W9: Waste Water and Sewage Treatment Works	Replacing WLP18

DM1: Presumption in favour of sustainable development	New Policy
DM2: Climate Change	New Policy
DM3: Quality of life and amenity	Replacing WLP21
DM4: Historic Environment	Replacing M8 and WLP21
DM5: Lincolnshire Wolds Area of Outstanding Natural Beauty	Replacing M6
DM6: Impact on Landscape and Townscape	Replacing M7, M13 and WLP21
DM7: Internationally Designated Sites of Biodiversity Conservation Value	Replacing M8 and WLP21
DM8: Nationally Designated Sites of Biodiversity and Geological Conservation Value	Replacing M5, M8 and WLP21
DM9: Local Sites of Biodiversity Conservation Value	Replacing M5, M8 WLP21
DM10: Local Sites of Geological Conservation Value	Replacing M8 and WLP21
DM11: Soils	Replacing M4 and WLP21
DM12: Best and Most Versatile Agricultural Land	Replacing M4 and WLP21
DM13: Sustainable Transport Movements	New Policy
DM14: Transport by road	Replacing M12 and WLP21
DM15: Flooding and Flood Risk	Replacing WLP 21
DM16: Water Resources	Replacing WLP 21
DM17: Cumulative Impacts	
R1: Restoration and Aftercare	Replacing M10 and M15
R2: After-use	Replacing M14
R3: Restoration of Sand and Gravel Operations within Areas of Search	New Policy
R4: Restoration of limestone and chalk workings	New Policy

The following policies in the Minerals Local Plan and Waste Local Plan are not directly replaced, but are not proposed to be saved once the current document has been adopted:

M9 Planning Permission for Surface Mineral Working – Supporting Information

M19 Marine Dredged Aggregates and Development of Wharf Facilities

M22 Planning Applications for Oil and Gas – Supporting Information

M23 Requirement to Submit an Overall Development Scheme for the Exploration of a Commercial Field

M25 Oil and Gas Field, provision for Central Gathering Facility

M27 Underground Pipelines

M29 Deep Mined Coal

WLP1: Objective of the Plan

WLP14: Mining of Waste

WLP15: Extraction and Utilisation of Landfill Gas

WLP16: Agricultural Improvement

WLP17: Landspreading
WLP19: Hazardous Waste

The following policies in the **Waste Local Plan** are proposed to be saved until the Site Locations document has been adopted:

WLP2: Household Waste Recycling Centres

WLP6: Materials Recovery Facilities

WLP12: Energy from Waste

Appendix 2: Waste and Mineral Sites in Lincolnshire

Lincolnshire Mineral Sites (Excluding Dormant Sites)

Ref	Site	Status	Commodity	Easting	Northing
1	Ancaster Quarry, Heydour	Active	Limestone	499200	341000
2	Baston No 1 Quarry	Active	Sand & Gravel	513800	314800
3	Baston No 2 Quarry	Active	Sand & Gravel	514300	313600
5	Brauncewell Quarry	Active	Limestone	502958	351800
6	Castle Quarry	Active	Limestone	498680	343350
7	Cathedral Quarry	Active	Limestone	497735	373300
8	Cold Hanworth Oilwell	Active	Oil	503786	382185
9	Colsterworth	Inactive	Limestone	490546	324384
10	Colsterworth triangle	Inactive	Limestone	490016	324351
11	Copper Hill Quarry	Active	Limestone	497860	342670
12	Corringham Oilfield	Active	Oil	489368	392929
13	Creeton Quarry	Active	Limestone	499900	320688
14	Dunston Quarry	Active	Limestone	505300	363200
15	Glentworth J	Active	Oil	494762	387340
16	Fiskerton Airfield Oilwell	Active	Oil	505250	372600
17	Gainsborough Oilfield	Active	Oil	482000	390000
18	Glebe Quarry	Active	Limestone	498960	341070
19	Glentworth K	Active	Oil	494500	389000
20	Great Ponton	Active	Limestone	493520	330110
21	Harmston Heath	Inactive	Limestone	499100	361800
22	Holywell Quarry	Active	Limestone	498820	315900
23	Keddington Oilwell	Active	Oil	536655	388180
25	Kettleby	Active in North Lincs	Sand & Gravel	504190	408190
26	King Street	Inactive	Sand & Gravel	511171	310014
27	Little Ponton	Inactive	Limestone	493364	332933
28	Longwood Quarry	Active	Limestone	506185	358810
29	Metheringham	Active	Limestone	505380	361555
30	Nettleham Oilfield	Active	Oil	499849	374130
31	Nettleton Bottom	Inactive	Chalk	512500	398200
32	Newton on trent oil	Active	Oil	483747	373447
33	North Kelsey Road Quarry	Active	Sand	509600	401000
34	Kirkby on Bain Quarry	Active	Sand & Gravel	522600	360300
35	Norton Bottoms Quarry	Active	Sand & Gravel	486700	358900
36	Norton Disney Quarry	Active	Sand & Gravel	488100	360200
37	Red Barn Pit	Active	Sand & Gravel	498244	319638
38	Reepham Oil	Active	Oil	504541	372873
39	Ropsley	Inactive	Limestone	500145	336355
40	Saltfleetby A Gaswell	Active	Natural Gas	541455	390880
41	Saltfleetby B Gaswell	Active	Natural Gas	542460	391350
42	Scampton A B and C	Active	Oil	497294	379845
43	Scampton South Oil Site	Active	Oil	498335	378178
44	South Thoresby Quarry	Active	Chalk	540650	377300
45	South Witham (East)	Active	Limestone	491700	319000

Ref	Site	Status	Commodity	Easting	Northing
46	Stainton Oil	Active	Oil	506276	378509
47	Swinderby	Inactive	Sand & Gravel	488130	361612
48	Tattershall (Park Farm) Quarry	Active	Sand & Gravel	520416	360033
49	Tetford Hill	Inactive	Chalk	532875	375975
50	Welton A Oil	Active	Oil	503658	376809
51	Welton B Oil	Active	Oil	504679	376429
52	Welton C oil	Active	Oil	504225	375152
53	West Deeping Quarry	Active	Sand & Gravel	510700	309800
54	West Firsby Oil	Active	Oil	498831	384440
55	Whisby A	Active	Oil	489278	368770
56	Whisby Quarry	Active	Sand & Gravel	489650	366700
82	Baston Manor Pit	Active	Sand & Gravel	512146	313500
83	Welton le Marsh Quarry	Active	Chalk	545200	369000
86	North Hykeham Quarry	Inactive	Sand & Gravel	493104	367860
87	South Witham (West)	Active	Limestone	491500	318900

Lincolnshire Dormant Mineral Sites

Ref	Site	Status	Commodity	Easting	Northing
57	Belchford	Dormant	Chalk	530580	376660
58	Biscathorpe	Dormant	Sand & Gravel	522818	385576
59	Buckminster	Dormant	Ironstone	490500	322500
60	Burton Coggles	Dormant	Ironstone	496000	325700
61	Burton	Dormant	Sand & Gravel	494754	373698
62	Colsterworth	Dormant	Ironstone	490500	324000
63	Colsterworth/North	Dormant	Ironstone	491800	325000
64	Colsterworth/Gunby/ Stainby	Dormant	Ironstone	491500	323500
65	Colsterworth/Skillington	Dormant	Ironstone	489900	325000
66	Denton Harlaxton	Dormant	Ironstone	488500	331000
67	Fir Hill	Dormant	Chalk	536040	382890
68	Fiskerton Clay pit	Dormant	Clay	508294	371850
69	Grange Farm (Little Bytham)	Dormant	Limestone/ Clay	501200	317600
70	Kirkstead	Dormant	Sand & Gravel	519400	360200
71	Muckton Bottom	Dormant	Chalk	536535	382395
72	Nettleton Mine (Opencast)	Dormant	Ironstone	512000	398000
73	Nettleton Mine (Underground)	Dormant	Ironstone	512000	398000
74	North Kelsey silica sand pit	Dormant	Silica Sand	504300	401400
75	Saturday Pits	Dormant	Chalk	533970	385150
76	Scopwick	Dormant	Limestone	505300	357005
77	Skegness	Dormant	Clay	554955	364881
78	Sudbrook	Dormant	Sand & Gravel	497000	344300
79	Thunderbolt & Willow	Dormant	Sand & Gravel & Limestone	499801	318201

80	Thistleton/South Witham	Dormant	Ironstone	492500	318900
81	Welton le Wold	Dormant	Sand & Gravel	527875	388260
84	North Ormsby Quarry	Dormant	Chalk	528767	393572

Lincolnshire Waste Sites

Ref	Site Name	Postcode	Easting	Northing
1	Gainsborough Landfill	DN21 1AF	481500	388000
2	North Hykeham Landfill Site	LN6 3QZ	493050	367630
3	Whisby Quarry	LN6 9BT	489841	366898
3	Whisby Quarry	LN6 9BT	489841	366898
4	Leadenham Landfill Site	LN5 0QF	496190	352300
4	Leadenham Household Waste Site	LN5 0QF	496400	352400
5	Colsterworth Landfill Site	NG33 5QT	490500	324400
6	Kirkby on Bain Landfill site	LN10 6YN	523340	361400
7	Boston Landfill Site	PE21 7AA	534500	341500
8	Middlemarsh Landfill	PE24 5AD	553690	363550
10	Nettleton Bottom Quarry	LN7 6SR	512730	397880
11	South Witham (East)	NG33 5QL	491700	319000
13	Inert Treatment Facility	LN4 2JA	499500	361800
13	Harmston Quarry	LN4 2JA	499183	361926
14	Brauncewell Quarry Transfer Station	NG34 8RL	502735	351711
14	Brauncewell Quarry	NG34 8RL	502730	351710
16	2 Recycling Ltd	NG31 7XF	489610	334935
17	East Kirkby AD Plant	PE23 4BU	534153	362298
18	The Scrapyrd	LN9 5AA	526000	370200
19	RRR (Horncastle) Ltd	LN9 6SB	526779	368484
20	Agri-Cycle Ltd	PE23 4AY	538202	360940
21	Alchemy Farms Ltd	PE21 7PJ	533898	342597
22	Andigestion Ltd	NG33 4SW	496892	319468
23	Bardney Tyre Recycling Facility	LN3 5UF	511312	369150
24	Nocton Fen Farm	LN4 2AY	509026	365734
25	Bio Convertors In-Vessel Composting Facility	NG32 3EW	494740	348550
26	Blue Sky Plastic & Electrical Recycling	PE10 0DN	514268	318775
27	B W T O R Ltd	PE24 4TB	555020	367563
28	Norton Bottoms Quarry	LN6 9JN	486154	359086
29	Bourne Waste Transfer Station	PE10 0DL	510700	319600
30	Bulldog Remoulds Ltd	PE10 9LA	510659	319536
31	Bourne Household Waste Recycling Centre	PE10 9HT	510550	320500
31	Bourne Waste Transfer Station & Civic Amenity Site	PE10 9HT	510500	320500
32	H C I Transfer Station	LN3 5AG	509650	384060
33	Lissinglea House Farm	LN3 5AG	509400	384000
34	Carousel Recycling Ltd	PE25 3TB	555508	362798
35	Manor Pit Quarry	PE6 9PT	512388	314679
36	Park Farm Quarry	LN4 4JT	521400	361400
37	Norton Disney Quarry	LN6 9JT	488027	359922

Ref	Site Name	Postcode	Easting	Northing
38	Clarkeson Organic Recycling	DN37 8NQ	518574	408539
39	Central Depot Transfer Station (Stamp End Depot)	LN5 7JD	498170	371070
40	Composting Facility	PE22 8LA	541500	358400
41	Day Lee Auto Breakers	NG31 9SE	493841	337205
42	Department Of Trucking Vehicle Depollution	PE22 7HR	529986	352835
43	Glebe Farm	LN11 0UT	532012	390981
44	Spittlegate Level	NG31 7UH	491900	333400
45	Reed Point	PE20 2EP	527530	335193
46	European Metal Recycling Ltd - A T F & Scrap Yard	LN6 7AD	496200	371120
47	Caenby Hall Waste Transfer Station	LN8 2BU	496930	388430
47	Fox Plant (Caenby Hall)	LN8 2BU	496874	388466
48	Boardsides Recycling	PE11 4DS	527488	330498
49	G W Lords (Gainsborough)Y	DN21 3DB		
50	G B M Waste Management	LN11 0WN	532706	388929
51	G B M Waste Management	LN6 9NQ	492920	364808
51	Building 3, Roe House	LN6 9NQ	492897	364816
52	Winchester Marine (Brookenby) Ltd	LN8 6HF	519627	395298
53	G B M Waste Management	LN11 8UZ	538592	386613
54	Greentech Waste Managment Ltd	LN2 3QF	499128	378360
55	Greenworld Composting Site	NG33 5LY	494003	321589
56	Mushroom Farm	LN6 9NQ	492834	364823
57	Heron Renewable Energy A D	LN9 6QU	532148	372015
58	Autby House Materials Recycling Facility	DN36 5SB	528118	397107
59	J P Skips	LN8 3HA	510405	389488
60	B W Riddle A T F And Scrap Yard	PE10 0DN	514470	318760
61	West Deeping Quarry	PE6 9JB	510624	310184
62	Sturgate Airfield	DN21 5DT	488236	387895
63	Dunston Quarry	LN4 2EX	505320	363200
64	Grantham Waste Transfer Station	NG32 2BP	489045	339219
65	Sleaford Waste Transfer Station	NG34 8GL	507311	346846
65	Sleaford Waste Transfer Station	NG34 8GL	507221	346827
66	Boston Waste Transfer Station	PE21 7AA	534065	341584
66	Boston Hwrc/transfer Station/mrf	PE21 7AA	534148	341536
67	Gainsborough Household Waste Recycling Centre	DN21 1AF	481812	388375
68	Skegness Household Waste Recycling Centre	PE25 2JS	555200	364300
69	Gainsborough Waste Transfer Station	DN21 1GD	483185	389519
70	Whisby Landfill Site	LN6 9BT	489880	368130
71	Lindum Group Ltd	LN1 2LR	491150	374580
72	Longwood Quarry	LN4 3BN	506300	358870
73	Belvoir Way	LN11 0LQ	532800	388900
74	Ansons Farm	LN6 9HS	488126	363478
75	Four Acre Farm	PE10 0DN	511082	319300

Ref	Site Name	Postcode	Easting	Northing
76	A A V Exports	PE12 6BW	526733	320849
77	The Ring Way Depot	NG34 7EW	507484	346518
78	Thompson Metals Ltd	DN21 1AH	481883	388392
79	Riverside Auto Breakers	PE21 7TN	533713	342533
80	Materials Recycling Facility	NG32 3EW	494702	348562
81	The Recycling Centre	PE6 8AR	514071	311311
82	Midland Skip Hire	LN4 3HX	507963	361576
83	Monksview Demolition Ltd	PE12 0NT	534081	312393
84	Anaerobic Digestion Plant	DN21 5TU	494756	390481
85	Bourne Skip Hire & Recycling	PE10 9LA	510600	319700
86	Lincs Rubbish Clearance Services	LN6 3QY	494018	367754
87	Greenaway Green Waste Services	LN13 0LW	545600	381575
88	Copper Hill Quarry	NG32 3PY	498451	342667
89	Tunnel Bank	PE10 0DJ	510620	319279
90	The Recycling Centre	LN9 5PN	526077	370279
91	Willow Tree Farm Recycling Centre	LN1 2NX	487816	376669
92	Decoy Farm	PE6 0LX	526200	312800
92	Decoy Farm	PE6 0LX	525821	312856
93	Baston Fen Mrf	PE6 9PU	512468	314658
93	Baston Fen Mrf	PE6 9PU	512620	314880
94	Barff Farm	LN8 2AG	501162	390059
95	Prince's Skip Hire	NG31 7AP	491000	335400
96	Grange Farm	PE23 5DD	540129	361734
97	Skirbeck Bulk Store WEEE ATF & Non-hazardous W T S	PE21 6BN	533200	343200
98	Track Recycling Ltd	PE23 4BU	533955	362390
99	Home Farm	LN9 6JB	526408	366109
100	Sid Dennis & Sons Ltd	PE24 4RE	553700	362400
101	The Warehouse, Riverside Ind Est, Boston	PE21 7TN	533605	342563
102	Spalding Pallets Ltd	PE11 3HA	523041	316796
103	Hanbeck Farm	NG32 3PB	500544	343173
104	Station Farm Anaerobic Digestion Facility	PE22 0SE	536529	350539
105	Tessmill - Woodland Drive	NG31 9SR	494200	337500
106	The Boundary	NG31 7UE	490400	333300
107	U K Tyre Technicians Ltd	NG31 7UH	491800	333200
108	Waste Away Solutions Ltd Transfer Station	NG34 7EW	507528	346647
109	Highfield Quarry	PE23 5SX	545200	369000
110	The Pig Farm	NG33 5LZ	494182	322254
111	Wildmore Renewables Ltd	PE22 7AN	526057	349346
112	N K R Motors Ltd	PE12 0SS	530851	315079
113	Balcan Engineering Ltd	LN9 6JR	526687	368494
114	Plot 7 (Also Known As 6a) Dale Street	LN5 8LL	498889	370659
115	County Waste	LN6 3QY	493640	367660
116	Eco Plastics Ltd	DN21 5TU	494773	390417
117	Lincolnshire EfW Facility	LN6 3QZ	493950	367850

Ref	Site Name	Postcode	Easting	Northing
118	Westville Farm Transfer Station	PE22 7HR	529900	352900
119	Boardsides Recycling	PE21 7PB	529715	343879
120	Hambleton Brothers	LN7 6RX	511188	402371
121	Manor Farm A D Plant	PE12 8LR	540431	328455
122	I Mole Autospares	LN6 5UA	491000	372200
123	South Elkington Estate	LN11 0RY	529741	389319
124	Len Kirk Plant Hire Ltd	LN6 3QZ	493400	367900
125	Barrowby Waste Transfer Station	NG32 1BX	488900	336300
126	Louth Non-hazardous & Hazardous Household Waste Amenity Site	LN11 0WA	532897	389110
127	Louth Waste Transfer Station	LN11 0WA	532988	389264
128	Great Northern Terrace Household Waste Recycling Centre	LN5 8HJ	498650	370771
129	Market Rasen Household Waste Recycling Centre	LN8 3HA	509943	389638
130	Grantham Household Waste Recycling Centre	NG31 7AS	490800	335300
131	Sleaford Household Waste Recycling Centre	NG34 8SU	507300	344700
132	Spalding Household Waste Recycling Centre	PE11 2BB	526104	324962
133	Whisby Civic Amenity Site	LN6 9DD	489800	368300
134	Kirkby On Bain Civic Amenity Site	LN10 6YN	523400	361500
135	Lincoln Road Transfer Station	LN1 2NF	490799	375120
136	East Road Salvage A T F	NG34 7EH	507551	346369
137	The Salvage Yard	LN11 7NU	542752	397921
138	Brown's Autobreakers	LN5 9NT	497868	364504
139	Lincolnshire Processed Scrap Metal	NG31 6HN	491800	335100
140	South Witham Quarry - West	NG33 5QL	491100	318800
141	Barkstone Heath Warehousing Facility	NG32 3PY	497646	341758
142	Part Of O S Field No 0023	LN9 5AA	526000	370200
143	Gainsborough Skip Hire	DN21 3ET	480566	392859
144	Gainsborough Skip Hire	DN21 3ET	480681	392761
145	3 F Pallets	LN1 2RG	496700	375300
146	The Grey House	PE21 7JD	529482	343033
147	Alford Road TS	LN13 9RB	550800	376500
148	The Orange Skip Company	LN6 3QY	493948	367746
149	Camp Farm	PE6 9QF	515500	313200
150	Nationwide Metal Recycling Ltd	PE12 8QA	536100	324300
151	Caythorpe Biomass Energy Recovery Plant	NG32 3EQ	494700	348400
152	T Shooter (boston) Ltd	PE21 7AA	532200	343400
153	Primetake Storage Facility	d	504576	372517
154	Skirbeck Road, Port Of Boston	PE21 6BN	533290	343430
155	Rilmac Holding Skip	LN3 4NJ	499941	371789
156	Sky Lane	LN5 9FE	491108	363936
157	The Ranch Scrapyard (transfer)	PE12 6BL	525200	320800
158	The Breakers Yard	PE10 0TU	514800	328900

Ref	Site Name	Postcode	Easting	Northing
159	Dale Street Transfer Station	LN5 8LL	498930	370700
160	A T F & Fridge Storage Site	LN5 8LG	498760	370710
161	Alexander Road Depot	NG31 7AP	490880	335440
162	Wrangle A D Plant	PE22 9HE	544660	350590
163	Gorse Lane, Grantham	NG31 7UF	491900	333900
164	Vacu Lug Traction Tyres Limited	NG31 8HE	490400	337500
165	North Warren Road Depot	DN21 2TH	480578	390822
166	Windley's Salvage Ltd	LN4 4JS	519800	360100
167	Pimlico Farm A D Plant	DN37 8LL	511374	407858
168	Global Auto Salvage	LN3 5TP	514306	370458
169	Fiddlers Elbow Dredging Tip	LN1 2BE	493700	373100
170	Kettleby Quarry	DN20 9HL	504190	408190
171	Kirkby on Bain Quarry	PE22 7TA	523290	360355
172	Mansgate: Riddel	LN7 6FW	512450	400250
173	South Thoresby Quarry	LN13 0AN	540650	377300
174	Swinderby Quarry	LN6 9UD	488217	361720
175	Colsterworth Triangle		490024	324397
176	Creeton Quarry		499729	320676

Sewage Treatment Works

Ref	Site Name	Postcode	Easting	Northing
Anglican Water				
AW01	NORTH KELSEY STW	LN7 6JU	504783	402458
AW02	NORTH THORESBY STW	DN36 5QG	529021	398943
AW03	LEGBOURNE STW	LN11 8LW	537034	384216
AW04	ALFORD STW	LN13 9BN	546082	375900
AW05	OLD BOLINGBROKE STW	PE23 4HB	535189	364486
AW06	TOYNTON STW	PE23 5AX	540291	362808
AW07	MAREHAM LE FEN STW	PE22 7SF	528073	360371
AW08	EAST KIRKBY STW	PE23 4DB	533296	361559
AW09	NEW LEAKE STW	PE22 8JT	540049	357278
AW10	SPILSBY STW	PE23 5PF	541684	364497
AW11	STICKNEY STW	PE22 8DG	534861	356741
AW12	SWATON STW	NG34 0JQ	513092	337044
AW13	HELPRINGHAM STW	NG34 0RP	514071	341005
AW14	SWINESHEAD STW (LINCS)	PE20 3NB	522698	341902
AW15	SOUTH KYME STW	LN4 4AB	516156	350227
AW16	AMBER HILL STW	PE20 3RQ	523149	347361
AW17	SUTTON BRIDGE STW	PE12 9QF	546405	322991
AW18	GEDNEY DROVE END HOLBOURN STW	PE12 9PF	546075	329338
AW19	MANTHORPE STW	PE10 0JE	506793	316263
AW20	WADDINGHAM STW	DN21 4ST	498953	396273
AW21	FALDINGWORTH MOD STW	LN8 3NQ	504032	387220
AW22	MARKET RASEN STW	LN8 3TT	507461	388992
AW23	CLAXBY STW	LN8 3YS	511183	394281
AW24	KIRKBY CUM OSGODBY STW	LN8 3PE	506306	392963
AW25	OWMBY STW	LN8 2HP	500517	387313

Ref	Site Name	Postcode	Easting	Northing
AW26	FALDINGWORTH STW	LN8 3SF	507058	384182
AW27	GLENTHAM STW	LN8 2ER	500343	390757
AW28	WELTON-LE-WOLD STW	LN11 0QT	528124	387801
AW29	LOUTH STW	LN11 7DX	535938	390238
AW30	COVENHAM PACKAGED STW	LN11 0PA	534618	396174
AW31	STOKE ROCHFORD STW	NG33 5EJ	491803	328268
AW32	HARLAXTON STW	NG32 1AG	489134	333066
AW33	GREAT PONTON STW	NG33 5DY	493071	330604
AW34	LITTLE PONTON STW	NG33 5BS	492620	332470
AW35	MARSTON STW (LINCS)	NG32 2HX	490629	342581
AW36	LONDONTHORPE STW	NG31 9RX	495228	338348
AW37	SWINDERBY STW	LN6 9QD	489878	361882
AW38	SOUTH HYKEHAM STW	LN6 9TU	494209	364803
AW39	NORTH HYKEHAM STW	LN5 9AJ	495795	366079
AW40	SAXILBY STW	LN1 2PB	488615	375042
AW41	SKELLINGTHORPE STW	LN6 5TY	493659	372608
AW42	DEEPING STW	PE6 8RQ	517393	308548
AW43	SUTTERTON-ROPER LA STW	PE20 2HZ	528651	336985
AW44	FRAMPTON STW	PE20 1BW	531566	339893
AW45	FRITHVILLE STW	PE22 7EX	531634	350571
AW46	GIPSEY BRIDGE STW	PE22 7BN	529383	348483
AW47	INGOLDMELLS STW	PE25 1JH	555968	367615
AW48	CANWICK STW	LN4 1EF	499679	370408
AW49	SPRIDLINGTON STW	LN8 2DF	501281	384462
AW50	NETTLEHAM STW	LN2 2QQ	501915	375699
AW51	KEELBY STW	DN41 8SL	516886	409806
AW52	HOLTON LE CLAY STW	DN36 5AS	529698	403083
AW53	NORTH COTES STW	DN36 5UT	535440	400280
AW54	CAISTOR STW	LN7 6NH	510755	401080
AW55	BIGBY STW	DN38 6EE	505722	407111
AW56	GRASBY STW	DN38 6AP	508669	404254
AW57	BURTON COGGLES STW	NG33 4JP	498169	325859
AW58	IRNHAM STW	NG33 4JD	502817	326918
AW59	CORBY GLEN STW	NG33 4LA	499315	324682
AW60	BOOTHBY PAGNELL STW	NG33 4DG	497335	330726
AW61	ROPSLEY STW	NG33 4HW	500100	333661
AW62	INGOLDSBY STW	NG33 4HA	502147	330184
AW63	OLD SOMERBY STW	NG33 4AE	496962	333686
AW64	EDENHAM STW	PE10 0LS	506622	321577
AW65	BOURNE STW	PE10 0AT	510896	320121
AW66	DUNSBY STW	PE10 0ST	510524	327510
AW67	PICKWORTH STW (GRANTHAM)	NG34 0TQ	504241	333535
AW68	CRANWELL STW	NG34 8HU	501641	350221
AW69	SOUTH RAUCEBY STW	NG34 8QF	503157	344880
AW70	ANCASTER STW	NG32 3QQ	498990	344192
AW71	AUNSBY VILLAGE STW	NG34 8SA	504842	338897
AW72	SILK WILLOUGHBY STW	NG34 8PE	505930	342934
AW73	KIRKBY LA THORPE STW	NG34 9NS	510078	344895
AW74	SLEAFORD DROVE LANE (WP)STW	NG34 8JQ	505554	346228

Ref	Site Name	Postcode	Easting	Northing
AW75	SLEAFORD STW	NG34 9PA	508378	347304
AW76	MANBY STW	LN11 8HL	540507	386280
AW77	NORTH SOMERCOTES STW	LN11 7PD	541832	398318
AW78	WELTON LE MARSH (WTW) STW	PE23 5TA	547313	368522
AW79	STRUBBY STW	LN13 0DZ	544704	379089
AW80	MABLETHORPE STW	LN12 2QN	548984	382527
AW81	ANDERBY-SEA ROAD STW	PE24 5XY	553929	375976
AW82	LEASINGHAM STW	NG34 8LJ	506270	349078
AW83	HORBLING STW	NG34 0PW	512334	334622
AW84	DONINGTON STW	PE11 4XE	519644	334839
AW85	GOSBERTON STW	PE11 4PN	522649	332227
AW86	SUTTERTON-WIGTOFT STW	PE20 2EN	527175	335586
AW87	SURFLEET STW	PE11 4BH	525728	329448
AW88	MARTIN STW	LN4 3QU	512383	359469
AW89	BILLINGHAY STW	LN4 4AZ	516069	355470
AW90	WOODHALL SPA STW	LN10 6QY	518434	363287
AW91	CONINGSBY STW	LN4 4TE	521658	356842
AW92	HORNCastle STW	LN9 5LB	526045	367488
AW93	MOULTON STW	PE12 6PY	529844	324385
AW94	FOSDYKE BELL LANE STW	PE20 2BS	531801	333614
AW95	GEDNEY DYKE ANVIL CLOSE STW	PE12 0BG	541449	326173
AW96	SKILLINGTON STW	NG33 5HF	490363	325646
AW97	STAINBY STW	NG33 5QT	490804	322970
AW98	SCAMPTON RAF STW	LN1 2SE	496545	378844
AW99	NORTH CARLTON STW	LN1 2RU	494261	377603
AW100	AISTHORPE STW	LN1 2SG	494227	380190
AW101	STURTON BY STOW STW	LN1 2YX	489378	380837
AW102	NORTH COTES (RAF) STW	DN36 5XE	536551	402848
AW103	BECKINGHAM STW	LN5 0RN	487609	354074
AW104	SWALLOW STW	LN7 6DN	517757	403202
AW105	DORRINGTON STW	LN4 3QA	508856	352924
AW106	ROWSTON STW	LN4 3LU	508494	356940
AW107	ASHBY DE LA LAUNDE STW	LN4 3JG	504984	355011
AW108	LITTLE BYTHAM STW	NG33 4RX	500783	318077
AW109	BRANSTON BOOTHS STW	LN4 1AJ	506308	369225
AW110	WASHINGBOROUGH STW	LN4 1AE	504232	370684
AW111	REEPHAM STW (LINCS)	LN2 2QX	504260	374762
AW112	FISKERTON STW	LN3 4HN	505351	371893
AW113	UPTON (LINCS) STW	DN21 5NR	487678	386792
AW114	WILLINGHAM STW	DN21 5LH	487996	384559
AW115	TATHWELL STW	LN11 9SR	532120	382987
AW116	TETFORD STW	LN9 6QF	533849	374191
AW117	SKENDLEBY STW	PE23 4QE	543279	369816
AW118	FISHTOFT STW	PE21 0RD	536537	344465
AW119	SIBSEY STW	PE22 0SG	536138	351055
AW120	OLD LEAKE-SKIPMARSH LANE STW	PE22 9LT	538955	350171
AW121	FULBECK STW	NG32 3JG	494206	350684
AW122	CARLTON SCROOP STW	NG32 3AR	495121	345411

Ref	Site Name	Postcode	Easting	Northing
AW123	CAYTHORPE STW	NG32 3BG	494359	347169
AW124	HOUGH ON THE HILL STW	NG32 2BB	492324	346853
AW125	CANDLESBY STW	PE23 5RR	545333	367041
AW126	CROFT STW	PE24 4RR	551005	361561
AW127	ALLINGTON STW	NG32 2FS	486105	339916
AW128	NAVENBY STW	LN5 0EX	498116	357684
AW129	HOLTON CUM BECKERING STW	LN8 5NG	511794	380997
AW130	SUTTON ST JAMES-NEEDHAM DR ST	PE12 0EG	539536	318154
AW131	COWBIT STW	PE12 6DN	528723	319122
AW132	GLENTWORTH STW	DN21 5ED	494351	387863
AW133	HEMSWELL R A F STW	DN21 5XP	495625	389955
AW134	SALTFLEET STW	LN11 7SA	545773	393557
AW135	LAND OFF STOWE ROAD STW		509213	311876
AW136	FRISKNEY STW	PE22 8NU	546563	356460
AW137	WAINFLEET STW	PE24 4QY	549213	359677
AW138	SKELLINGTHORPE #2 STW	LN6 5TY	493597	372571
AW139	BROCKLESBY STW	DN41 8PP	514155	411725
AW140	TETNEY-NEWTON MARSH STW	DN36 5LA	533247	403284
AW141	BOSTON STW	PE21 0SH	535483	341088
AW142	ROTHWELL STW (LINCS)	LN7 6DT	515890	399754
AW143	LUDFORD STW	LN8 6AS	520821	389307
AW144	BINBROOK STW	LN8 6HU	520664	394819
AW145	TEALBY STW	LN8 3XL	515086	390472
AW146	CLAYPOLE STW	NG23 5AJ	483869	349682
AW147	LONG BENNINGTON STW	NG23 5DW	483993	345169
AW148	STUBTON STW	NG23 5DD	487463	349127
AW149	CROWLAND STW	PE6 0BZ	524551	309146
AW150	METHERINGHAM STW	LN4 3HX	507982	361449
AW151	WELTON (WTW) STW	LN2 3PB	501485	381467
AW152	DUNHOLME STW	LN2 3QZ	503435	379687
AW153	BASSINGHAM STW	LN5 9HA	490484	359895
AW154	BRANT BROUGHTON STW	LN5 0SP	492358	354218
AW155	LEADENHAM STW	LN5 0PG	495374	353163
AW156	SPALDING STW	PE11 2BB	526185	325111
AW157	BARDNEY STW	LN3 5SU	512655	368218
AW158	HEMINGBY-MAIN RD STW	LN9 5QF	523500	374337
AW159	MINTING STW	LN9 5SB	518589	373285
AW160	DONINGTON ON BAIN STW	LN11 9TN	523287	382708
AW161	BUCKNALL STW	LN10 5DT	517158	368729
AW162	MARKET STAINTON STW	LN8 5LJ	523108	380119
AW163	WILSFORD STW	NG32 3PD	501100	342689
AW164	OSBOURNBY STW	NG34 0DL	507542	338243
AW165	ANWICK STW	NG34 9SP	511404	349997
AW166	TATTERSHALL BRIDGE STW	LN4 4JJ	519103	356161
AW167	CHAPEL HILL STW	LN4 4ZL	520038	354641
AW168	HOLBEACH STW	PE12 8AD	535673	325826
AW169	DEEPING ST NICH - WREN CL STW	PE11 3DX	520889	315225
AW170	CORRINGHAM STW	DN21 5QP	487316	390557

Ref	Site Name	Postcode	Easting	Northing
AW171	COLSTERWORTH STW	NG33 5NT	492683	324697
AW172	INGHAM STW	LN1 2YP	494338	383077
AW173	NOCTON (RAF) STW	LN4 2DB	506577	364692
AW174	HECKINGTON STW	NG34 9PT	515048	345529
AW175	WILSTHORPE STW	PE9 4PD	508102	314867
AW176	WRAGBY STW	LN8 5QZ	512617	377961
AW177	SOUTH WITHAM STW	NG33 5PN	492818	319720
AW178	SUTTON ST JAMES SUTTON GATE STW	PE12 0HP	540398	317900
AW179	SALTFLEETBY ST PETER STW	LN11 7SZ	542908	390341
AW180	THEDDLETHORPE SILVER ST STW	LN12 1PA	547299	386886
AW181	OASBY MILL LANE STW	NG32 3NA	500309	338768
AW182	PICKWORTH CHURCH LANE STW	NG34 0TE	504613	333870
AW183	FENTON PUMP LANE STW	NG23 5DF	488441	350908
AW184	DEEPING ST NICHOLAS NEW RD STW	PE11 3DU	521582	314804
AW185	LAND OFF WILSTHORPE LANE STW		509317	313467
AW186	WOODCOTE LANE STW		495623	374649
Seven Trent Water				
ST01	Land Opposite Park Farm Cottage STW	-	485579	374183
ST02	Blyton STW	DN21 3LA	485650	395033
ST03	Gainsborough STW	-	481782	387469
ST04	Scotter Riverside STW	DN21 3UG	488639	401057
ST05	Heapham Road STW	DN21 1PT	483056	389287
ST06	East Stockworth STW	DN21 3DH	478616	394472
ST07	Pilham STW	DN21 3NU	486092	393966
ST08	Willoughton STW	DN21 5RT	492541	393738
ST09	Laughterton STW	LN1 2BD	484023	376143
ST10	Northorpe STW	DN21 4AQ	489579	396887
ST11	Marton STW	DN21 1AF	481885	388546

Appendix 3: Minerals and Waste Site Mapping by District

Figure 6 Existing Minerals and Waste Sites West Lindsey District

Figure 7 Existing Minerals and Waste Sites East Lindsey District

Figure 8 Existing Minerals and Waste Sites Lincoln District

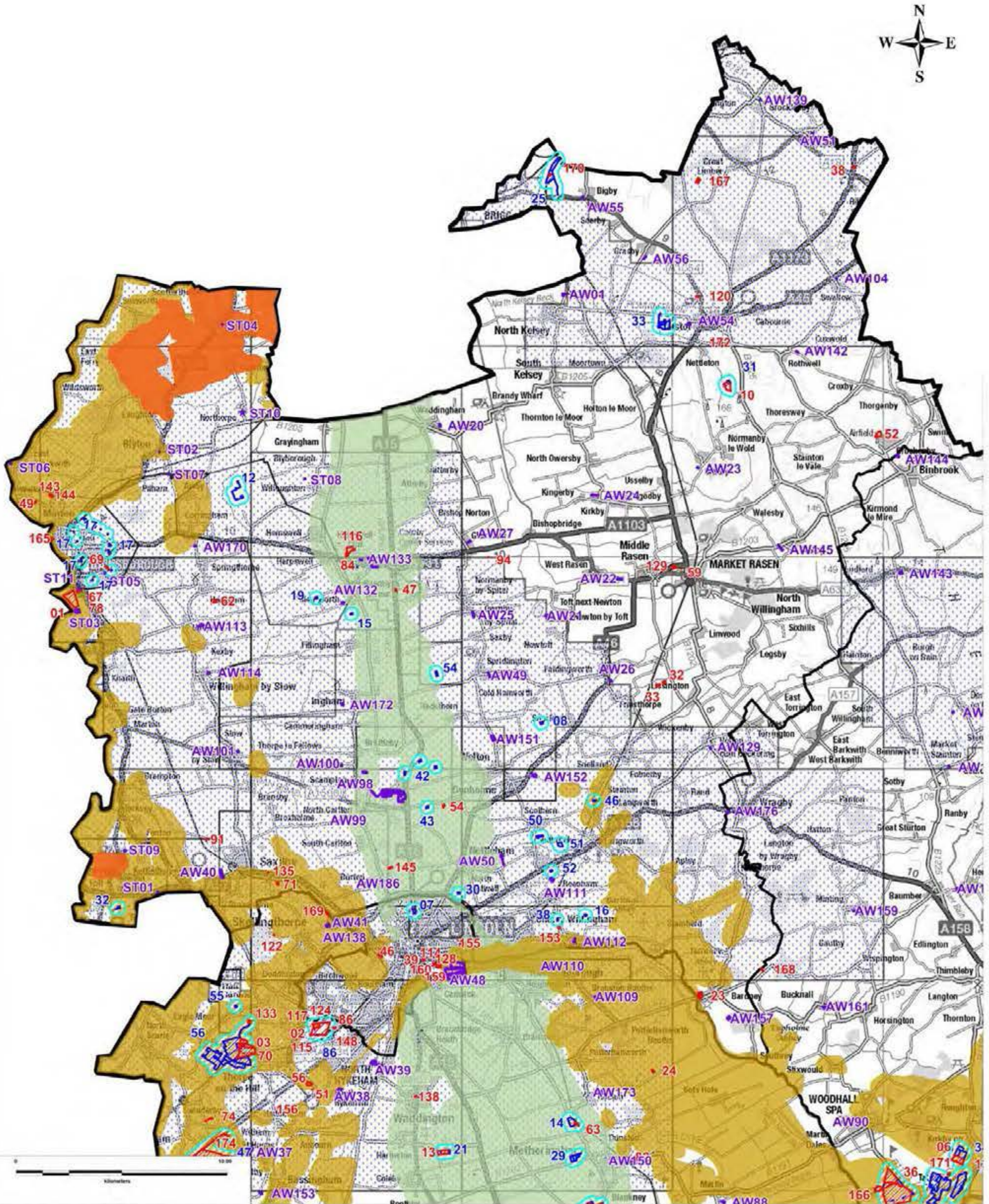
Figure 9 Existing Minerals and Waste Sites North Kesteven District

Figure 10 Existing Minerals and Waste Sites Boston District

Figure 11 Existing Minerals and Waste Sites South Kesteven District

Figure 12 Existing Minerals and Waste Sites South Holland District

**Figure 6 Existing Minerals and Waste Sites
West Lindsey District**



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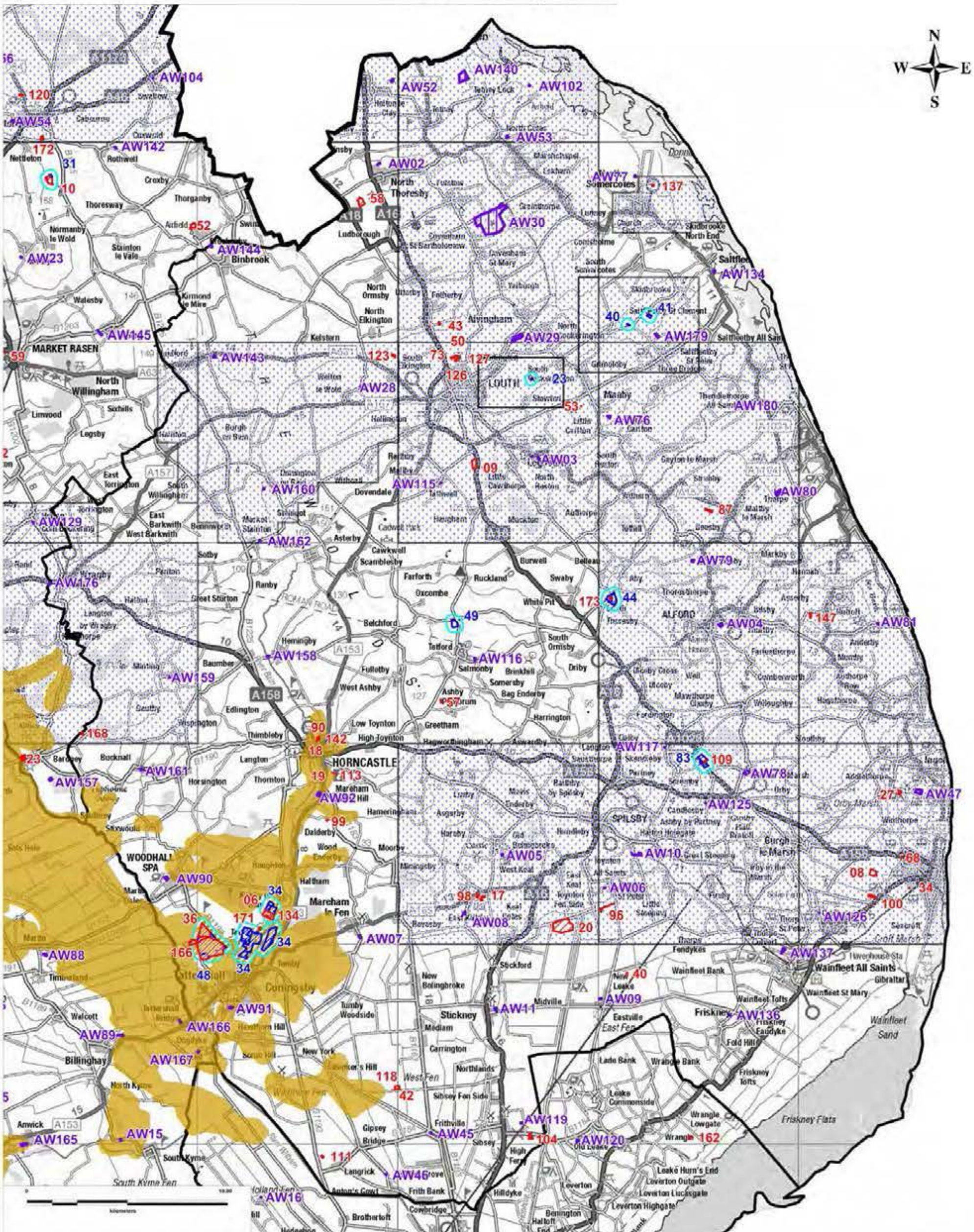
Key

- Limestone Minerals Safeguarding Area
- Sand & Gravel Minerals Safeguarding Area
- Wind Blown Sand Minerals Safeguarding Area
- Site Specific Minerals Safeguarding Area
- Existing Waste Site
- Existing Minerals Site
- Sewage Treatment Works
- Petroleum Exploration Development Licence Blocks*

*Includes blocks offered for award under the 14th licensing round. The latest PEDL mapping can be accessed via www.gov.uk/oga



**Figure 7 Existing Minerals and Waste Sites
East Lindsey District**











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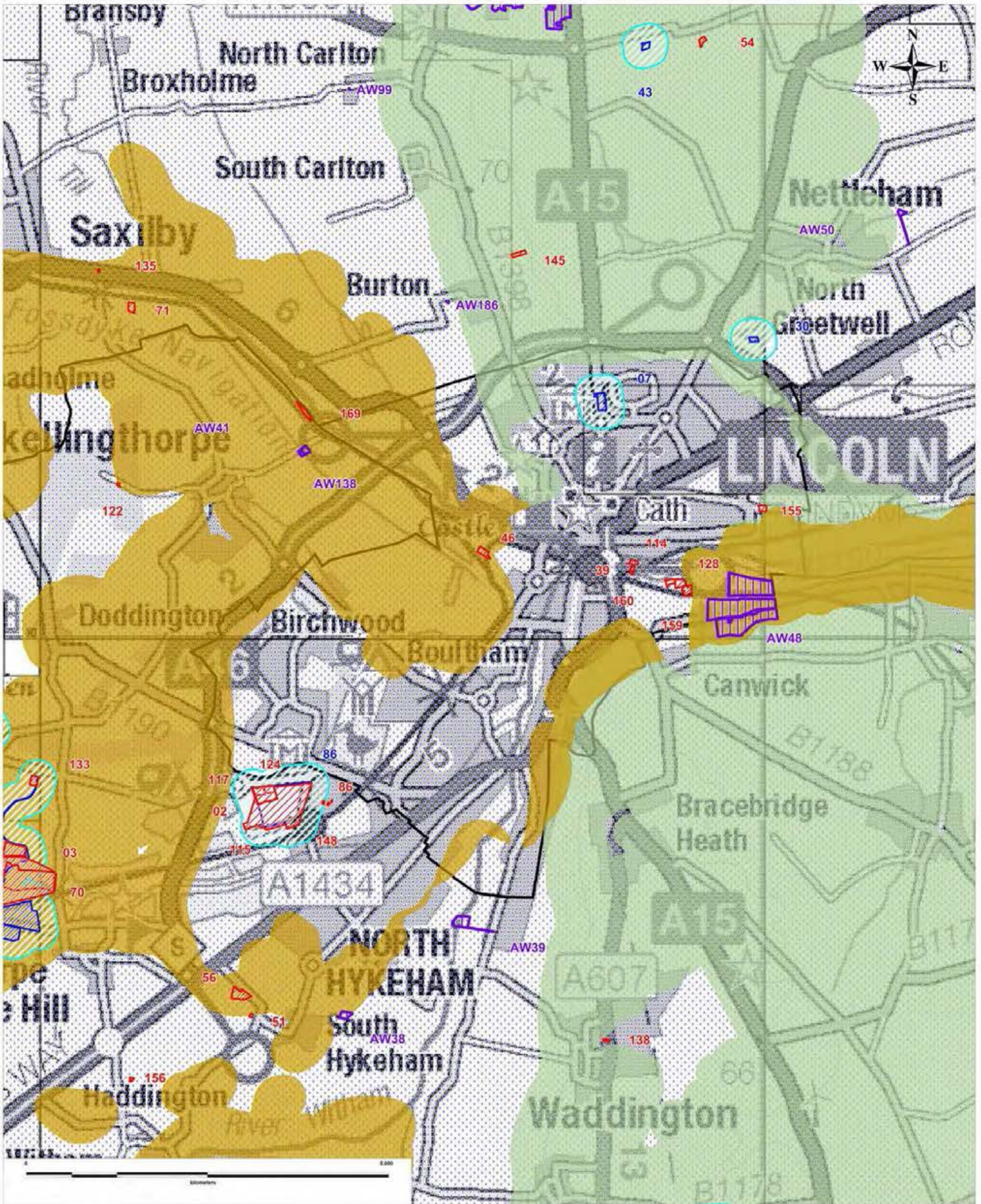
Key

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-  Sand & Gravel Minerals Safeguarding Area
-  Wind Blown Sand Minerals Safeguarding Area
-  Site Specific Minerals Safeguarding Area
-  Existing Waste Site
-  Existing Minerals Site
-  Sewage Treatment Works
-  Petroleum Exploration Development Licence Blocks*

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**Figure 8 Existing Minerals and Waste Sites
Lincoln District**



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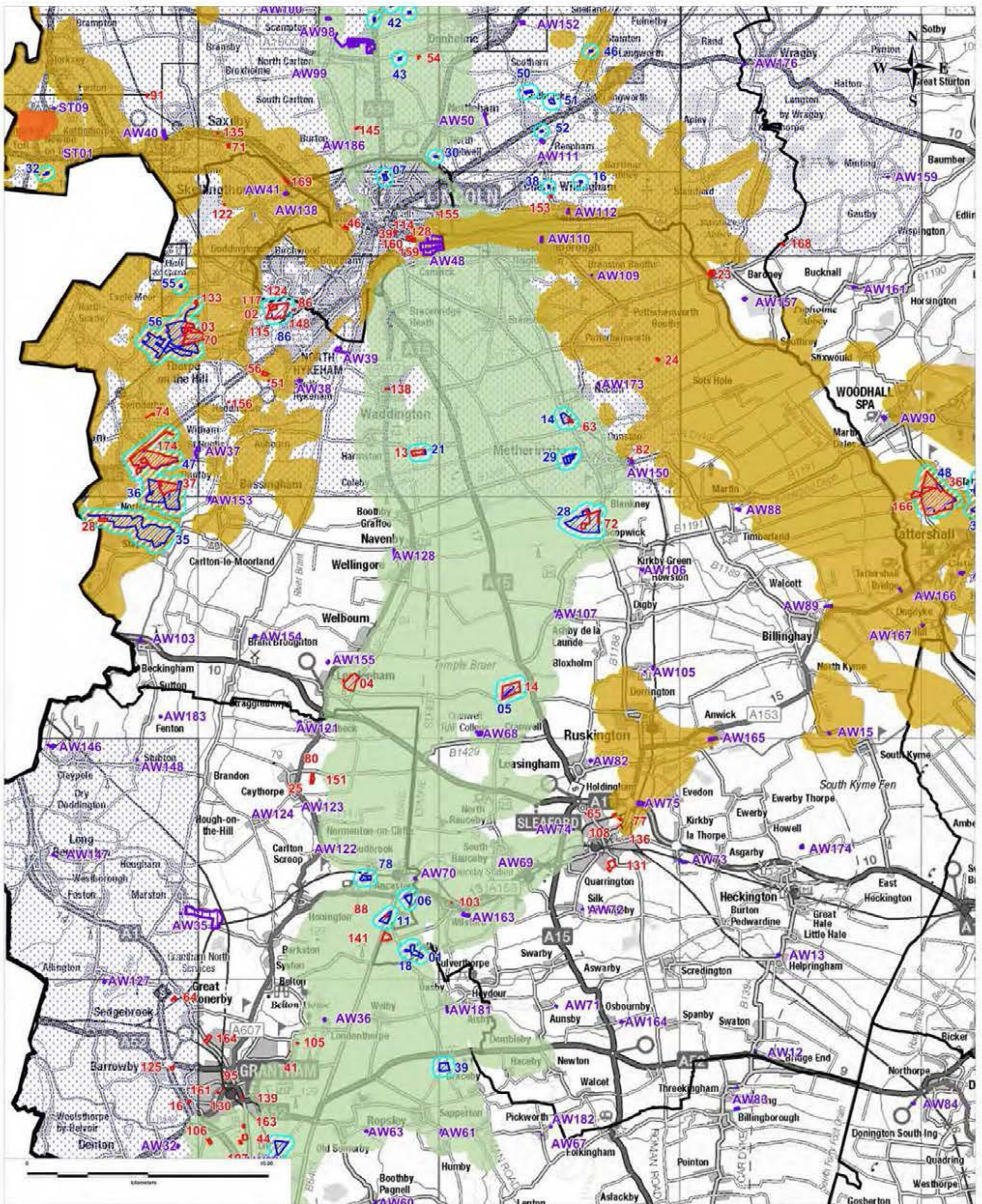
Key

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- Sand & Gravel Minerals Safeguarding Area
- Wind Blown Sand Minerals Safeguarding Area
- Site Specific Minerals Safeguarding Area
- Existing Waste Site
- Existing Minerals Site
- Sewage Treatment Works
- Petroleum Exploration Development Licence Blocks*

*Includes blocks offered for award under the 14th licensing round. The latest PEDL mapping can be accessed via www.gov.uk/oga



**Figure 9 Existing Minerals and Waste Sites
North Kesteven District**



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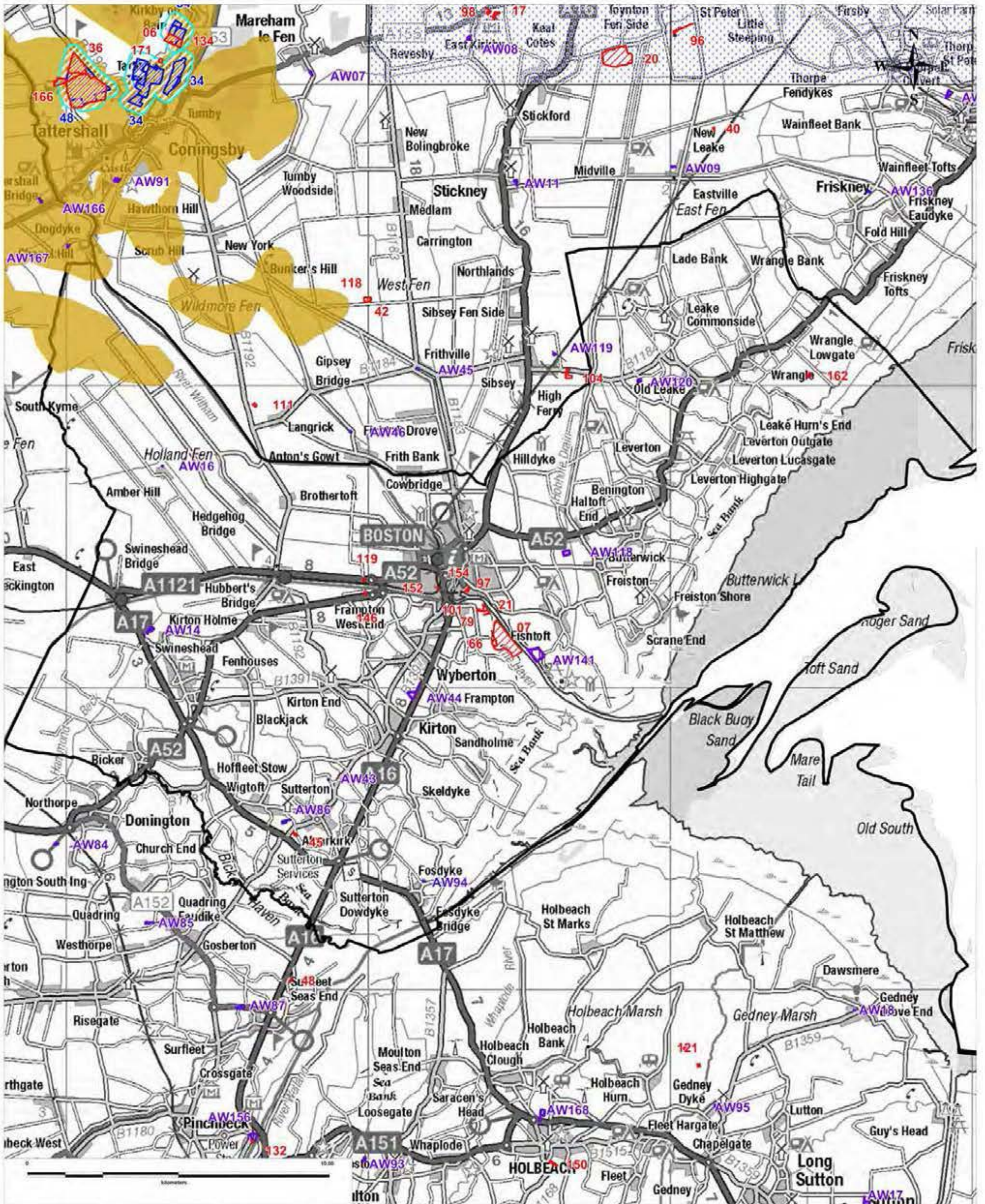
Key

- Limestone Minerals Safeguarding Area
- Sand & Gravel Minerals Safeguarding Area
- Wind Blown Sand Minerals Safeguarding Area
- Site Specific Minerals Safeguarding Area
- Existing Waste Site
- Existing Minerals Site
- Sewage Treatment Works
- Petroleum Exploration Development Licence Blocks*

*Includes blocks offered for award under the 14th licensing round. The latest PEDL mapping can be accessed via www.gov.uk/oga



**Figure 10 Existing Minerals and Waste Sites
Boston District**



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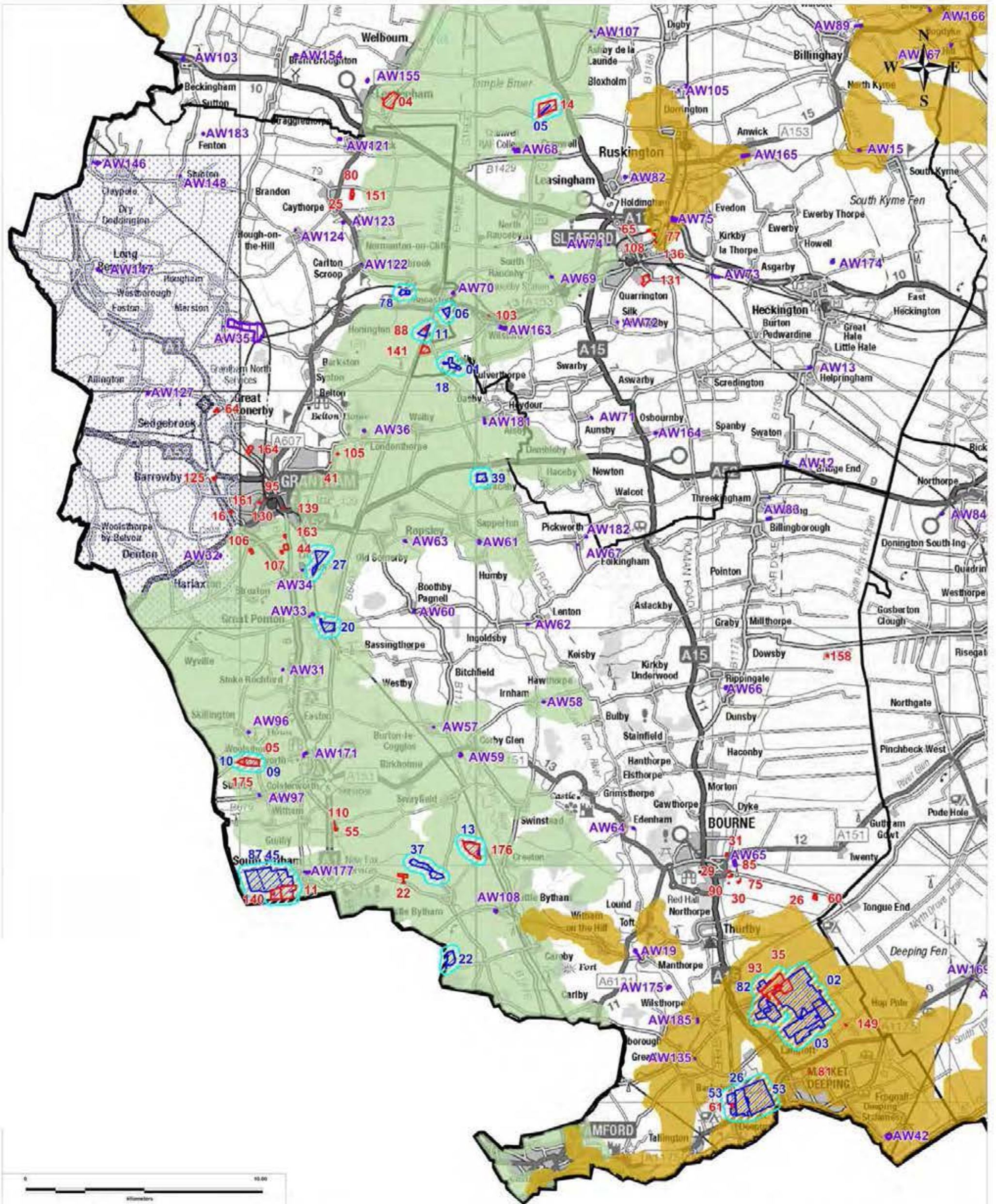
Key

- Limestone Minerals Safeguarding Area
- Sand & Gravel Minerals Safeguarding Area
- Wind Blown Sand Minerals Safeguarding Area
- Site Specific Minerals Safeguarding Area
- Existing Waste Site
- Existing Minerals Site
- Sewage Treatment Works
- Petroleum Exploration Development Licence Blocks*

*Includes blocks offered for award under the 14th licensing round. The latest PEDL mapping can be accessed via www.gov.uk/oga



**Figure 11 Existing Minerals and Waste Sites
South Kesteven District**



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Key

- Limestone Minerals Safeguarding Area
- Sand & Gravel Minerals Safeguarding Area
- Wind Blown Sand Minerals Safeguarding Area
- Site Specific Minerals Safeguarding Area
- Existing Waste Site
- Existing Minerals Site
- Sewage Treatment Works
- Petroleum Exploration Development Licence Blocks*

*Includes blocks offered for award under the 14th licensing round. The latest PEDL mapping can be accessed via www.gov.uk/oga



**Figure 12 Existing Minerals and Waste Sites
South Holland District**











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Key

-  Limestone Minerals Safeguarding Area
-  Sand & Gravel Minerals Safeguarding Area
-  Wind Blown Sand Minerals Safeguarding Area
-  Site Specific Minerals Safeguarding Area
-  Existing Waste Site
-  Existing Minerals Site
-  Sewage Treatment Works
-  Petroleum Exploration Development Licence Blocks*

*Includes blocks offered for award under the 14th licensing round. The latest PEDL mapping can be accessed via www.gov.uk/oga



Appendix 4: Glossary of Terms

Active Mining Site: Mineral workings that are classified as active under the Planning and Compensation Act 1991 or the Environment Act 1995.

Aftercare: An agreed programme of work designed to bring a restored mineral or waste site to a satisfactory standard for agriculture, amenity or nature conservation use. Normally imposed in the form of a planning condition once a site has been granted permission to operate.

After-use: The use to which a mineral or waste site is put to on completion of restoration and any aftercare provisions e.g. agriculture, forestry, amenity (including nature conservation). Planning permission will be required to develop more formal uses of land (e.g. change of use of land to create a leisure facility).

Aggregates: Materials used in construction work or as fill consisting of rock crushed by nature (sands and gravels) or crushed by man (quarried rock, such as limestone which is then crushed on site).

Alternative (Secondary) Aggregates: The re-use of construction materials e.g. from demolition or road maintenance or the use or reprocessing of waste materials from other industries such as power station ash or colliery spoil, to replace primary aggregates.

Ancient Woodland: An area of woodland which has had a continuous history of tree cover since at least 1600.

Apportionment: The County's share of Regional aggregate provision.

Appropriate Assessment: A process required by the Habitats Directive 92/43/EEC- the Conservation of Natural Habitats and Wild Flora and Fauna to avoid adverse effects of plans, programmes and projects on Natura 2000 sites and thereby maintain the integrity of the Natura 2000 network and its features. To comply with the Directive, Lincolnshire County Council has carried out an Appropriate Assessment screening exercise.

Area of Outstanding Natural Beauty (AONB): AONB is a statutory designation in recognition of their national importance and to ensure that their character and qualities are protected for all to enjoy. The legal framework for Areas of Outstanding Natural Beauty is provided by the Countryside and Rights of Way Act 2000.

Area of Search: An extensive area of land believed to contain significant, but generally unproven mineral resources within which the Mineral Planning Authority would have no objection in principle to mineral working, on at least part of the site subject to satisfactory proposals to protect the range of interests of acknowledged importance within and adjoining the area (see also "Preferred Areas").

Biodiversity: Summarises the phrase biological diversity – the variety of life on earth around us (mammals, birds, reptiles, amphibians, fish, invertebrates, plants, fungi and microorganisms) and the systems that support that variety.

Biodiversity Action Plan (BAP): A strategy for conserving species and enhancing, restoring, and creating habitats of importance.

Biodiversity Opportunity Mapping (BOM): Collation and assessment of existing data to provide guidance on the most suitable areas for landscape-scale biodiversity enhancement.

Biodiversity 2020: The national (England) strategy for the conservation of biodiversity 2011-2020.

Borrow pit: A temporary mineral working to supply material for a specific construction project.

Coal Bed Methane: Clean coal technology and a potential long-term source of indigenous natural gas which can be extracted from underground coal seams.

C&I Waste (*Commercial and Industrial Waste*): Definition provided at beginning of Chapter 6 – Waste.

C&D Waste (*Construction and Demolition Waste*): Definition provided at beginning of Chapter 6 – Waste.

Core Strategy: Sets out the key elements of the planning framework for the area, including a long term spatial vision, the spatial objectives, and the strategic policies to deliver that vision. All other Development Plan Documents in the Local Development Framework (LDF) must be in conformity with the Core Strategy.

Development Plan: Sets out policies and proposals for the development and use of land within the area of the application.

Development Management Policies: A suite of criteria-based policies which are required to ensure that all development within the area meets the vision and strategy set out in the core strategy.

Dormant Mineral Sites: Mineral Sites and Old Mining Permissions that are classified as dormant under the Environment Act 1995 or the Planning and Compensation Act 1991 respectively.

Geodiversity: Summarises the phase geological diversity - the variety of rocks, minerals, fossils, soils and landscapes, together with the natural processes which form them. It is the link between geology, landscape, biodiversity and people.

Geodiversity Action Plan (GAP): A strategy for promoting and managing the sustainable use of geodiversity resources.

Green infrastructure: a strategically planned and delivered network of high quality green spaces and other environmental features. It should be a multifunctional resource capable of delivering a wide range of environmental and quality of life benefits for local communities. Green Infrastructure includes parks, open spaces, playing fields, woodlands, allotments and private gardens.

Groundwater: Water associated with soils or rocks below the ground surface, usually taken to mean water in the saturated zone, below the water table.

Hydraulic Fracturing ('Fracking'): Hydraulic fracturing - or, as it is commonly known, fracking - is a process used to extract natural gas from rock (including shale). In simple terms, the technique involves pumping water into the ground at high pressure to make narrow fractures in the rock. The water contains sand and chemicals to help stimulate the gas. The process of fracking allows the gas or oil that's trapped inside the rock to be released so it can be recovered on the surface. The Department of Energy and Climate Change (DECC) and numerous independent organisations have published papers which provide guidance about shale oil and gas and 'fracking'.

Inert Waste: waste that is biologically, chemically and physically unreactive with the environment.

Landbank: A stock of planning permissions (permitted reserves) for the winning and working of minerals generally expressed in 'years worth of supply'.

Lincolnshire Geodiversity Action Plan (LGAP): The local GAP that covers the historic county of Lincolnshire, i.e. the areas administered by Lincolnshire County Council, North Lincolnshire Council and North East Lincolnshire Council.

Local Aggregate Assessment: A Local Aggregate Assessment is an annual assessment of the demand for and supply of aggregates in a mineral planning authority's area.

LACW (*Local Authority Collected Waste*): Definition provided at beginning of Chapter 6 – Waste.

Local Development Document: Local Development Documents are statutory documents prepared under the Planning and Compulsory Purchase Act 2004, which set out the spatial planning strategy and policies for an area. They have the weight of development plan and are subject to community involvement, public consultation and independent examination.

Local Development Scheme (LDS): Describes the Local Plan documents which the authority intends to prepare and the timetable for their preparation.

Local Geological Sites: Geological or geomorphological sites that are considered worthy of protection for their educational, research, historical or aesthetic importance. One of a number of designations under the umbrella term Local Sites.

Local Nature Reserves (LNR): Sites for people and wildlife offering special opportunities to study or learn about nature or simply to enjoy it. They are declared by principal authorities under Section 21 of the National Parks and Access to the Countryside Act 1949, and amended by Schedule 11 of the Natural Environment and Rural Communities Act 2006.

Local Plan: A Local Development Document which provides a written statement of the policies for delivering the spatial strategy and vision for an authority area, supported by a reasoned justification.

Local Wildlife Sites (LWS): Local Wildlife Sites are usually selected within a local authority area and support both locally and nationally threatened wildlife. Many sites will contain habitats and species that are priorities under the county or UK Biodiversity Action Plans (BAP).

Localism Act 2011: Is an Act of Parliament that changes the powers of local government in England. The aim of the act is to facilitate the devolution of decision-making powers from central government control to individuals and communities.

Marine Protected Area (MPA): zones of the seas and coasts where wildlife is protected from damage and disturbance. The Government is committed to establishing a well-managed ecologically coherent network of MPAs in our seas.

Mineral Planning Authority (MPA): The Local Planning Authority responsible for overseeing all aspects of mineral operations. In the case of the County of Lincolnshire, these powers rest with the County Council.

Municipal Waste: See definition of Local Authority Collected Waste (LACW) provided at beginning of Chapter 6 – Waste.

National Character Area (NCA): subdivide England into 159 areas of similar landscape character. Each NCA has a unique identity resulting from the interaction of wildlife, landforms, geology, land use and human impact.

National Nature Reserve (NNR): NNRs are the finest sites in England for wildlife and / or geology. They are a selection of the very best parts of England's Sites of Special Scientific Interest and many also have European nature conservation designations.

National Planning Policy Framework (NPPF): The National Planning Policy Framework sets out the Government's planning policies for England and how these are expected to be applied.

The Natural Environment White Paper: Sets out how the value of nature can be mainstreamed across society by facilitating local action; strengthening the connections between people and nature; creating a green economy and showing leadership in the EU and internationally. It sets out 92 specific commitments for action.

Non-Inert Waste: waste not classified as inert and thus in some manner will react with the environment. Also known as 'Active Waste'.

Permitted Reserves: Mineral reserves for which planning permission has been granted (usually expressed in million tonnes). The MPA will not release details of reserves for individual quarries or quarry operators to ensure 'commercial confidentiality'.

Planning and Compulsory Purchase Act 2004: The legislation that introduced the new development planning system, which at the local level is based on Local Development Frameworks. The Act commenced in September 2004.

Preferred Areas: An area of known mineral resource, proven by survey information, where planning permission might reasonably be anticipated, subject to all other considerations being met.

Priority habitat/species: Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 details the list of habitats and species which are of principal importance for the conservation of biodiversity in England.

Ramsar sites: wetlands of international importance, designated under the Ramsar Convention.

Recycled Aggregates: Aggregates produced from recycled construction and demolition wastes such as crushed concrete, road planings etc.

Regionally Important Geological and Geomorphological Site (RIGS/RIGGS): Established in 1990 by the Nature Conservancy Council (NCC), RIGSs were the predecessor to Local Geological Sites. One of a number of designations under the umbrella term Local Sites.

Reserves: Mineral deposits which have been tested to establish the quality and quantity of material present which could be economically and technically exploited. Permitted reserves are those with benefit of planning permission for extraction.

Restoration: Process of returning a site to its former or a new use following mineral extraction. Involves reinstatement of land by contouring and the spreading of soils or soil making materials.

Secondary (Alternative) Aggregates: Aggregates derived from by-products of the extractive industry, e.g. china/ball clay waste, colliery spoil, blast furnace slag, pulverised fuel ash, etc.

Sensitive Receptors: Land uses that are sensitive to the impacts of Minerals and Waste development. These include, but are not limited to, residential and commercial properties, places of employment, schools, and leisure activities (whether passive or active).

Site of Nature Conservation Importance (SNCI): Sites referred to in a Local Plan, selected as being of importance for nature conservation on the basis of local knowledge and were the predecessor of Local Wildlife Sites. One of a number of designations under the umbrella term Local Sites.

Sites of Special Scientific Interest (SSSIs): the national suite of sites providing statutory protection for the best examples of the UK's flora, fauna, or geological or physiographical features. These sites are also used to underpin other national and international nature conservation designations. Currently designated under the Wildlife and Countryside Act 1981.

Special Area of Conservation (SAC): An area which has been given special protection under the European Union's Habitat's Directive. SACs provide increased protection to a variety of wild animals, plants and habitats and are a vital part of global efforts to conserve the world's biodiversity.

Special Protection Area (SPA): A Special Protection Area (SPA) is an area of land, water or sea which has been identified as being of international importance for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds found within the European Union. SPAs are European designated sites, classified under the European Wild Birds Directive which affords them enhanced protection.

Statement of Community Involvement (SCI): Statement of the local authority's proposed standards and approach to involving the local community and stakeholders in the preparation, alteration and review of all Local Development Documents and development control decisions.

Sterilisation: Where minerals cannot be extracted because of surface level development.

Strategic Environmental Assessment (SEA): The European SEA Directive requires a formal environmental assessment of certain plans and programmes which are likely to have significant effects on the environment, including those in the field of planning and land use. Local authorities are advised to take an integrated approach towards Sustainability Appraisal and Strategic Environmental Assessment to avoid unnecessary duplication and confusion. Together they will play an important part in testing the soundness of Local Development Documents, ensuring that they contribute towards sustainable development.

Sustainability Appraisal (SA): Local Planning Authorities are bound by legislation to appraise the degree to which their plans and policies contribute to the achievement of sustainable development. The process of Sustainability Appraisal is similar to Strategic Environmental Assessment but is broader in context, examining the effects of plans and policies on a range of social, economic and environmental factors. To comply with Government policy, Lincolnshire County Council is producing a Sustainability Appraisal that incorporates a Strategic Environmental Assessment of all its LDDs.

Sustainable Development: Resolution 24/187 of the United Nations General Assembly defined sustainable development as meeting the needs of the present without compromising the ability of future generations to meet their own needs. The UK Sustainable Development Strategy *Securing the Future* set out five 'guiding principles' of sustainable development: living within the planet's environmental limits; ensuring a strong, healthy and just society; achieving a sustainable economy; promoting good governance; and using sound science responsibly. The policies in paragraphs 18 to 219 of the NPPF, taken as a whole, constitute the Government's view of what sustainable development in England means in practice for the planning system.

Waste Planning Authority (WPA): The Local Planning Authority responsible for land-use planning control for waste management. In the case of the County of Lincolnshire, these powers rest with the County Council.

Lincolnshire County Council
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This information can be provided in another language
or format.

For all enquiries please contact the above number.