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ENVIRONMENT

CENTRAL LINCOLNSHIRE LOCAL PLAN
STRATEGIC FLOOD RISK ASSESSMENT
LEVEL 2

ENVIRONMENT

CENTRAL LINCOLNSHIRE LOCAL PLAN

STRATEGIC FLOOD RISK ASSESSMENT LEVEL 2

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1.0 INTRODUCTION

Background

- 1.1 The Central Lincolnshire Joint Strategic Planning Committee (CLJSPC) was established in October 2009 and the Central Lincolnshire Local Plan Team, (CLLPT), previously called the Joint Planning Unit, was established in May 2010.
- 1.2 The CLLPT is responsible for producing the Central Lincolnshire Local Plan which will contain planning policies that relate to the delivery and management of development in Central Lincolnshire. The Central Lincolnshire Local Plan will progressively replace the Local Plans of the City of Lincoln, West Lindsey and North Kesteven District Councils.
- 1.3 The planning policies in the Central Lincolnshire Local Plan will be used to help determine planning applications within the Central Lincolnshire area, the policies will set out what can be built and where.
- 1.4 An initial review of the three existing Strategic Flood Risk Assessments (SFRAs) covering the area was undertaken and concluded that one SFRA covering the combined area would provide a more robust evidence base.

Flood Risk Planning Policy

National Planning Policy Framework

- 1.5 The National Planning Policy Framework, (NPPF¹), sets out the Government's national policies on different aspects of land use planning in England in relation to flood risk. Planning Practice Guidance is also available online².
- 1.6 The Planning Practice Guidance sets out the vulnerability to flooding of different land uses. It encourages development to be located in areas of lower flood risk where possible, and stresses the importance of preventing increases in flood risk off site to the wider catchment area.
- 1.7 Local Plans should be supported by a SFRA 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. Local Plans should apply a sequential, risk-based approach to the location of development to avoid flood risk to people and property where possible and manage any residual risk, taking account of the impacts of climate change by:
 - applying the Sequential Test;
 - if necessary, applying the Exception Test;
 - safeguarding land from development that is required for current and future flood management;
 - using opportunities offered by new development to reduce the causes and impact of flooding;

¹ National Planning Policy Framework, CLG, March 2012

² Planning Practice Guidance. <http://planningguidance.planningportal.gov.uk/>.

- where climate change is expected to increase flood risk so that some existing development may not be sustainable in the long-term, seeking opportunities to facilitate the relocation of development, including housing, to more sustainable locations.

1.8 This SFRA is written in accordance with the NPPF and Planning Practice Guidance.

The SFRA Structure

1.9 The two stages of the SFRA are:

- Level 1 SFRA – The Level 1 SFRA (dated 30th March 2015), presented sufficient information which enabled the CLLPT to apply the Sequential Test to potential development sites and assisted in identifying whether the application of the Exception Test was necessary,
- Level 2 SFRA – (This report) will increase the scope of the SFRA for sites where the Exception Test is required.

2.0 CENTRAL LINCOLNSHIRE LEVEL 2 SFRA

- 2.1 This Level 2 SFRA is compliant with the requirements set out in the NPPF and the associated Planning Practice Guidance. The SFRA has been produced on behalf of the CLLPT as part of the evidence base for the next stage (submission version) of the Central Lincolnshire Local Plan.
- 2.2 The Level 1 SFRA was used to inform the Site Allocations Sequential Test undertaken in October 2015 which supported the consultation on the Further Draft Local Plan between 15th October 2015 and 25th November 2015.
- 2.3 The Sequential Test of Site Allocations October 2015 and consultation process identified 72 sites that either have a significant portion of their area located in Flood Zone 2 or 3 or are located in Flood Zone 1 with a potential surface water flooding issue.

Level 2 SFRA Scope

- 2.4 Following discussions between the CLLPT, the Environment Agency and Lincolnshire County Council regarding the scope of a Level 2 SFRA to inform the Exception Test for the proposed allocations in the Local Plan the following scope has been agreed.
- 2.5 Proposed allocations will be reviewed against readily available flood risk data as follows:
 - Flood Map for Planning to identify Flood Zones.
 - Historical flooding.
 - Modelled fluvial and tidal flood levels.
 - Modelled surface water risk including depth and velocity.
 - Risk of flooding from a reservoir.
 - Ground conditions as shown on the British Geological Survey maps.
- 2.6 The possible mitigation measures will be identified to give an indication as to the suitability of the proposed allocations. These possible mitigation measures will need to be further investigated in site specific Flood Risk Assessments (FRAs).

Study Area

- 2.7 Central Lincolnshire covers the combined area of the City of Lincoln, North Kesteven and West Lindsey, totalling an area of 2116km², with a population of 290,500 (Census 2011). The boundary of the study area is shown below.

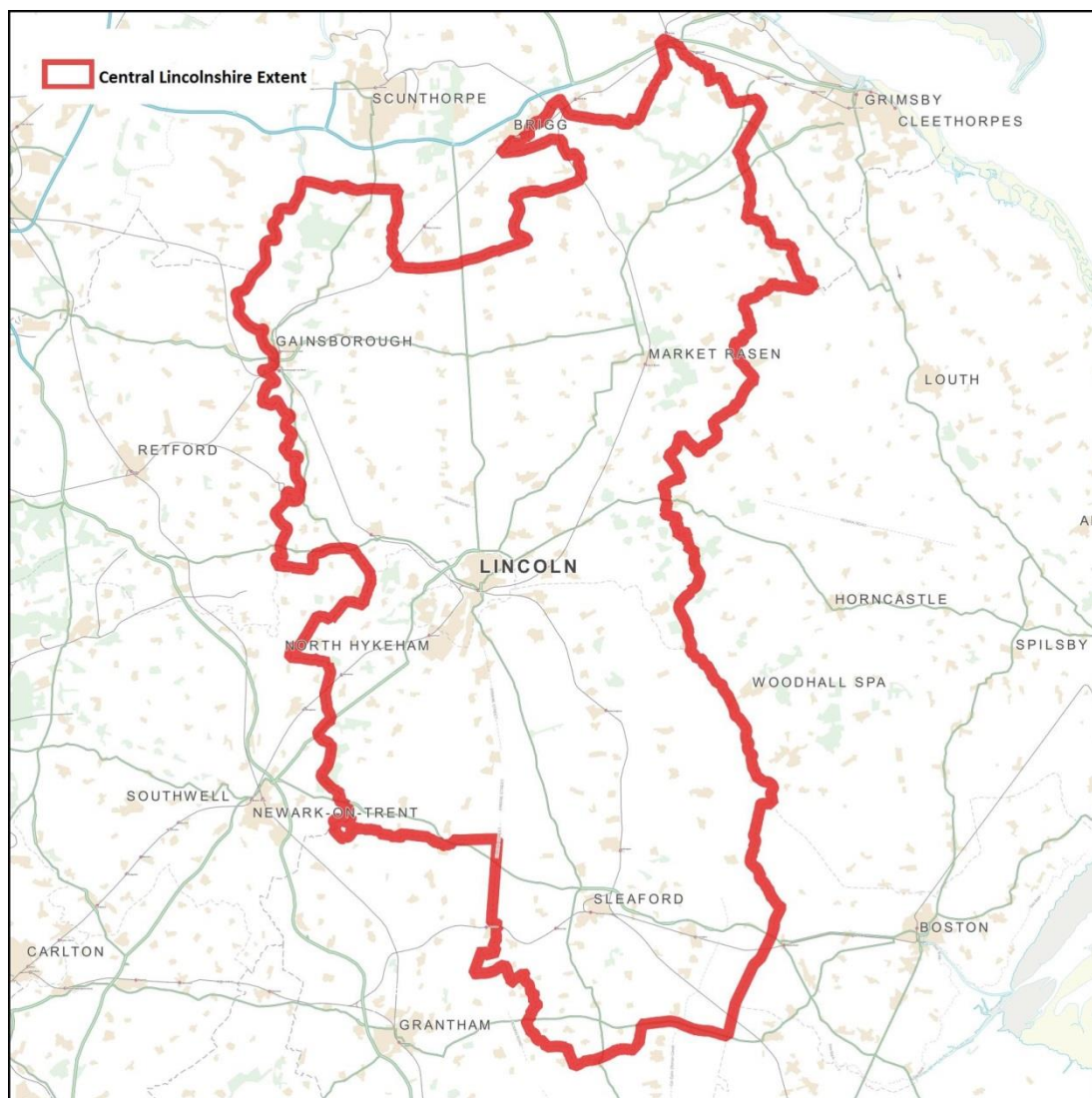


Figure 2.1 - Study Area

Sources of Data

- 2.8 The report is based on the following information:
- (i) Start-up meeting with CLLPT 7th November 2015.
 - (ii) Meeting with Environment Agency 13th November 2015.
 - (iii) Meeting with Lincolnshire County Council as Lead Local Flood Authority 27th November 2016.
 - (iv) Hydraulic Flood Model Results, provided by the Environment Agency.

Climate Change

- 2.9 The NPPF sets out how the planning process should help minimise vulnerability and provide resilience to the impacts of climate change. The NPPF and supporting Planning Practice Guidance on Flood Risk and Coastal Change explain when and how FRAs should be used. This includes demonstrating how flood risk will be managed now and over the development's lifetime, taking climate change into account.
- 2.10 The Environment Agency data to support this SFRA was provided in January 2016 and included allowances for climate change, which were considered appropriate at that time, and the proposed allocation reports have been based on that data.
- 2.11 On the 19th February 2016 the Environment Agency issued updated climate change allowances. However, the revised flood risk data is not yet available from the Environment Agency and site specific FRAs produced to support planning applications will need to incorporate these new allowances.

Breaching and Overtopping of Flood Defences

- 2.12 The information made available by the Environment Agency for this SFRA does not provide sufficient data to report on the flood risk due to breaching or overtopping of defences. However, the Environment Agency's hydraulic flood models would allow for this analysis to be undertaken to understand this residual risk. This analysis should be included in a site specific FRA to support a planning application for any site, where necessary.

Housing Zone Local Development Orders

- 2.13 Local Development Orders (LDOs) are made by local planning authorities and give a grant of planning permission to specific types of development within a defined area. They streamline the planning process by removing the need for developers to make a planning application to a local planning authority.
- 2.14 The Central Lincolnshire Local Plan area includes the following Housing Zone LDOs
- CL4686 Gateway Riverside Housing Zone, Gainsborough
 - CL4687 Town Centre Riverside Housing Zone a, Gainsborough
 - CL4688 Town Centre Riverside Housing Zone b, Gainsborough
 - CL4689 Riverside North Housing Zone, Gainsborough
 - CL4690 Amp Rose Housing Zone, Gainsborough
 - CL4691 Former Castle Hills Community College Site, Gainsborough
- 2.15 These LDOs will undergo separate detailed consultation supported by technical evidence, including site specific FRAs, and have therefore been excluded from this SFRA.

Broad Locations for Growth

2.16 Within the Central Lincolnshire Local Plan area the following Broad Locations for Growth, (BLG), have been identified.

- CL1240 Land East of White's Wood Farm, Gainsborough
- CL1001 Land at Quarrington
- CL4679 Land south of Bracebridge Heath, east of Grantham Rd
- CL4680 Land south of Waddington Low Fields

2.17 As these BLG areas are undefined at this stage they have been excluded from this SFRA.

3.0 Proposed Allocations

- 3.1 During the Local Plan consultation and evaluation process a number of the sites have not been taken forward as proposed allocations and a total of 45 proposed allocations have been identified that either have a significant portion of their area located in Flood Zone 2 or 3 or are located in Flood Zone 1 with a potential surface water flooding issue.
- 3.2 Where proposed allocations have been granted planning permission they have been excluded from this SFRA.
- 3.3 Part of the proposed allocation CL4615 is shown to have a potential surface water flooding issue. However, that portion of the site has been granted planning permission and therefore CL4615 has been excluded from this SFRA as the remainder of the site is at little or no flood risk.
- 3.4 The following proposed allocations have therefore been reviewed in more detail regarding the potential flood risk and individual reports are included in **Appendix 1**.
- CL415 Land South of Bracebridge Heath
 - CL428 South East Quadrant, Canwick owned by Jesus College
 - CL525 Former Cegb Power Station, Spa Road, Lincoln
 - CL526 Former Main Hospital Complex, St Anne's Road, Lincoln
 - CL572 Home Farm, Boultham Park Road, Lincoln, LN6 7ST
 - CL699 Land at Nettleham Road, (Junction with Searby Road), Lincoln
 - CL703 Land adjacent to Yarborough School, Riseholme Road, Lincoln
 - CL705 Site of Moorland Infant and Nursery School, Westwick Drive, Lincoln
 - CL818 North East Quadrant, (Greetwell Quarry), Lincoln
 - CL819 Western Growth Corridor
 - CL875 Land opposite the cemetery, Boston Road, Heckington
 - CL907 Land off Winton Road, Navenby
 - CL965 Land at Whitehouse Road, Ruskington
 - CL1002 Land at Stump Cross Hill, Quarrington, Sleaford
 - CL1007 The Hoplands Depot, Boston Road, Sleaford
 - CL1013a Land to the East of CL1013, Poplar Farm, South of A17, Sleaford (Part A)
 - CL1100 Land to the north of Witham St. Hughs (Phase 3)
 - CL1170 Land at Sunnyside, Caistor, west of Tennyson Close
 - CL1179 Land North of Rudgard Ave, Cherry Willingham
 - CL1208 Off Lincoln Road, Skellingthorpe
 - CL1241 Land East of Belt Farm, Gainsborough
 - CL1244 Site between Wembley/Hickman St, Gainsborough
 - CL1246 West of Primrose Street, Gainsborough
 - CL1247 Site at Thornton St, land enclosed between Thornton St, Bridge St, King St and Bridge Rd, Gainsborough
 - CL1253 Sinclairs, Ropery Road, Gainsborough
 - CL1305 Land at Church Lane, Keelby, Lincs
 - CL1337 Land off Trent Port Road, Marton
 - CL1358 Land off Gallamore Lane, Market Rasen, Lincolnshire
 - CL1359 Land off Linwood Road & The Ridings, Market Rasen
 - CL1364 Caistor Road, Market Rasen
 - CL1432 Land off Church lane, Saxilby

- CL1491 Land to East of Prebend Lane, Welton and incorporates SHLAA 2008 site W/NPD/1
- CL1892 South of Winchelsea Road, Ruskington
- CL2091 Land off West Street, Billingham
- CL3031 Land to the south of the Whyche, Billingham
- CL3036 The Drove, Sleaford West Quadrant
- CL3044 Land south of Willingham Road, Lea, Gainsborough
- CL3086 Land to the South of North Kelsey Road, Caistor
- CL4028 Field between properties known as "Mayfield" & "Wodelyn Cottage", Linwood
- CL4394 Land North of Hainton Road, Lincoln
- CL4652 Land at North of Usher Junior School
- CL4668 Grange Farm
- CL4675 Washingborough rd
- CL4704 Land off Western Avenue, Lincoln
- CL4725 Land off Meadowsweet Lane, Witham St Hughs

3.5 Flood risk at the remaining sites has been identified as sufficiently low such that appropriate mitigation measures can be incorporated into the development proposals through site specific FRAs to support a planning applications for the sites.

3.6 The following sites have been identified as having a residual flood risk should the river defences near the sites be overtopped or breached. Further analysis will need to be undertaken to understand this residual risk, together with consideration of the appropriate management measures, which should be included in site specific FRAs to support planning applications for the sites.

CL525, CL1208, CL1244, CL1246, CL1247, CL1253, CL1337, CL4652, CL4675.

Site Specific Flood Risk Assessments

3.7 Having used the Level 1 SFRA to apply the Sequential Test to proposed allocations the information contained in this Level 2 SFRA is sufficient to allow the CLLPT to apply the Exception Test to those allocations.

3.8 Site specific FRAs will be required to support planning applications by developers of the sites to further define the flood risk and determine any specific flood risk mitigation and management measures which may be required.

Surface Water Drainage

3.9 Sustainable drainage systems (SuDS) are an effective way to reduce the risk of flooding which can occur when rainwater rapidly flows into the public sewerage and drainage system.

3.10 The SuDS approach is about slowing down and reducing the quantity of surface water runoff at source to manage flood risk and reducing the risk of that runoff causing pollution. This is achieved by infiltrating, slowing, storing and treating runoff on site and, where possible, on the surface rather than underground.

3.11 Local planning authorities are expected to ensure that sustainable drainage systems are put in place on planning applications relating to major development, unless demonstrated to be inappropriate.

- 3.12 Subsequent planning applications for the sites will need to be supported by specific FRAs and/or surface water drainage strategies in-line with Lincolnshire County Council guidance as the Lead Local Flood Authority

APPENDIX 1

Proposed Allocations Reports

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