LAND NORTH OF CHERRY HINTON



SUPPLEMENTARY PLANNING DOCUMENT

July 2017





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INTRODUCTION

Overview of the Site

- 1.1 The Land North of Cherry Hinton (LNCH) is located between Airport Way and Cambridge Airport, north of Coldhams Jane.
- 1.2 LNCH comprises 47ha in area. The largest part of the site is currently in agricultural use with the western-most areas comprising part of the airport land. The site has been allocated for new housing supported by the emerging Local Plans and the Cambridge East Area Action Plan (AAP). LNCH presents an opportunity to assist in meeting the demand for housing in South Cambridgeshire.
- 1.3 The surrounding area is predominately characterised by residential neighbourhoods of Cherry Hinton to the south, Teversham to the north and Cambridge to the west. The remaining land of Cambridge Airport borders the western boundary, with agricultural land to the immediate north. An industrial estate lies to the south of the site within Cherry Hinton. It is recognised, in principle, that residential-led development of the land adjoining the airport can now come forward without prejudicing Marshall's Aerospace business operations at Cambridge Airport. Where necessary, appropriate mitigation of environmental and health impacts will be required

within any proposal to ensure future residents are provided with a satisfactory living environment.

Purpose of the development framework

- 1.4 This Supplementary Planning Document (SPD) is a planning guidance document which will support policy in both the draft Cambridge City Local Plan and the draft South Cambridgeshire District Local Plan. SPDs fall within one of two categories: the first relates to guidance supporting a city or district-wide objective; the second is guidance for a specific site or area development brief including framework master plans. This SPD falls within the second category.
- 1.5 This document will form a material consideration to be taken into account by Cambridge City Council and South Cambridgeshire District Council who, together with Cambridgeshire County Council, appoint members of the Joint Development Control Committee (JDCC) to determine major applications on the fringes of the City. The JDCC will determine the eventual planning application for LNCH.
- 1.6 This SPD has been prepared in line with the requirements of the Town and Country Planning (Local Planning) (England) Regulations 2012.

Structure of the development brief

- 1.7 The SPD is structured as follows:
- Chapter 1 provides an introduction to the document and illustrates the process for achieving a high quality development.
- Chapter 2 provides an overview of the planning policy context.
- Chapter 3 provides an analysis of the site and the wider area.
- · Chapter 4 sets out the vision for the site.
- Chapter 5 sets out the framework principles for achieving the vision and masterplan.



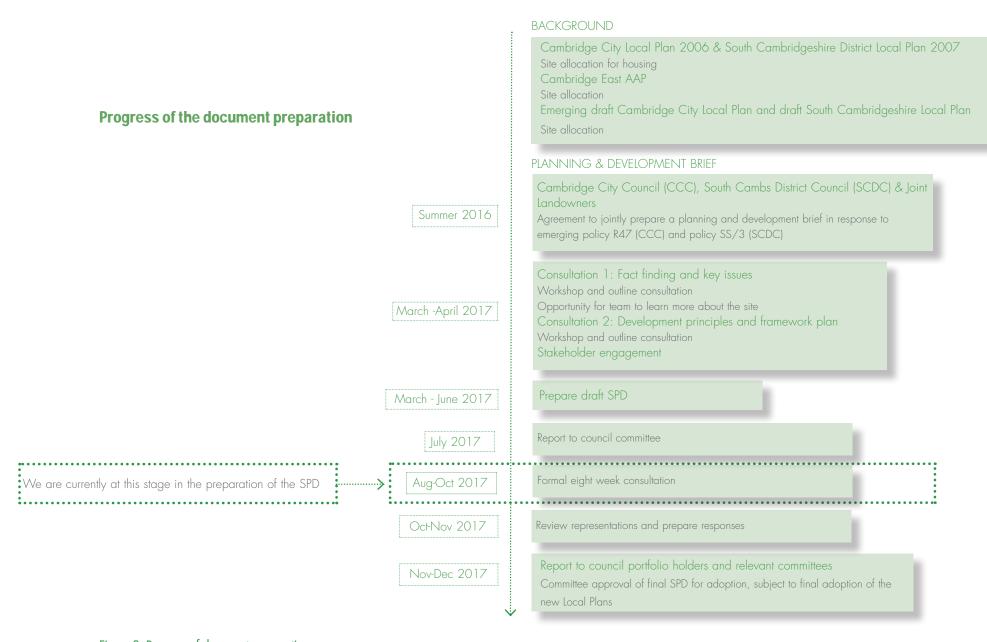


Figure 2: Progress of document preparation



Achieving a high quality development

The Land North of Cherry Hinton will be a vibrant, high-quality and distinctive extension to the existing settlement, reflecting and enhancing the special character of the surrounding area, whilst working in synergy with Cambridge as a whole.

1.8 The vision will be realised through the following process, for which this SPD forms the first step. The initial vision and development principles outlined within this SPD should be built upon and strengthened through this process to establish a compelling narrative for the new neighbourhood with a strong identity.





Stage 3: Design code

- 1.12 A design code will set rules for the design of the new development and will provide a tool to achieve the objectives and characters set out in the outline proposals. Design codes will typically follow an outline planning application and require approval prior to submission of the reserved matters. Design codes will typically comprise the following:
- The nature and purpose of the document and the planning context
- Summary of the local context, and the characteristics and constraints that have influenced the master plan and design code
- Comprehensive design guidelines and coding for the master plan area including, among others, density and building heights, spatial arrangement and block types, building types and materials palette.

Stage 4: Reserved matters

1.13 Detailed design development proposals at reserved matters stage will deal with some or all of the outstanding details of the outline application proposal, focusing on compliance with design code and outline parameters in respect to layout, scale, appearance, access and landscaping.





Introduction

- 2.1 The land included within this SPD falls within two local authorities: Cambridge City and South Cambridgeshire District.
- 2.2 The Cambridge East Area Action Plan (AAP) was adopted in February 2008 with an objective to "create a new and distinctive sustainable community on the eastern edge of Cambridge which will enhance the special character of the city and its setting and is connected to the rest of the city by high quality public transport and non-motorised modes of transport." (Objective B/a, page 5). This plan was based on the assumption that the airport would relocate operations away from the area in the medium term. The document identified three areas that form Cambridge East:
- Cambridge Airport
- · Land North of Newmarket Road, and
- Land North of Cherry Hinton.

- 2.3 The document sets out aspirations for the area and objectives in terms of creating district and local centres, housing, employment, leisure and community facilities, and guiding principles relating to landscape, biodiversity, water strategy and sustainability. The overall AAP concept diagram is included in figure 4.
- 2.4 The document represents a long term vision for the area, however since its publication there have been a number of changes in circumstance, both local and national, including an announcement from Marshall's of its intentions to remain in Cambridge for the foreseeable future.
- 2.5 In November 2016 planning permission was granted at Land North of Newmarket Road for up to 1,300 homes, primary school, food store, community facilities, open space, landscaping and associated infrastructure and other development (S/2682/13/OL and 13/1837/OUT and identified as Phase 1 in the AAP). To the south of this site, Marshall as operators of Cambridge Airport, has committed to continuing airport operations for the foreseeable future.

- 2.6 In addition, national and local policy has evolved, and new local plans are currently being prepared for both Cambridge City Council and South Cambridgeshire District Council. The plans were submitted jointly to the Secretary of State in March 2014 for independent examination. As part of the examination, a number of hearing sessions have taken place from 2014 to 2017.
- 2.7 Except as superseded by the emerging new Local Plans of both Council's, the AAP remains an important consideration in regard to the development of Land North of Cherry Hinton.

Local plan policies

- 2.8 In the emerging Cambridge Local Plan Proposed Modifications (2016) consultation, Land North of Cherry Hinton (R47) is allocated for approximately 780 dwellings during the plan period, along with adjoining land allocated in policy SS/3 of the emerging South Cambridgeshire Local Plan (2016) for approximately 420 dwellings.
- **2.9** Proposals for residential development will be supported if:
- "acceptable mitigation of environmental and health impacts (including noise) from the airport can be provided; and
- A masterplan is submitted for the development of site R47 and adjoining land in South Cambridgeshire which safeguards the appropriate future development of the wider safeguarded land; and
- the continued authorised use of Cambridge Airport does not pose a safety risk".
- 2.10 The master plan should make "provision for a primary and secondary school, a local centre with a community hub, open space and a spine road connecting Coldham's Lane with Cherry Hinton Road."

- 2.11 In addition, "the rest of the Cambridge East site is safeguarded for longer term development beyond 2031. Development on safeguarded land will only occur once the site becomes available and following a review of both this plan and the Cambridge East Area Action Plan.
- 2.12 The policy replaces Policies CE/3 and CE/35 of the Cambridge East AAP. All other policies in the Cambridge East AAP are retained." (Modifications PM/SC/3/A PM/CC/3/A from South Cambs DC and Cambridge CC Schedule of proposed modifications, March 2016 respectively).
- 2.13 This SPD is a planning guidance document which will support policy in the draft Cambridge Local Plan (CCC) and make reference to the South Cambridgeshire District Council (SCDC). This SPD provides guidance for a specific site through the evolution of the associated framework master plan, referring to modified proposed policies within the emerging local plans.

- 2.14 Long term transport strategy (LTTS)
- 2.15 Cambridgeshire County Council adopted the Long Term Transport Statement (LTTS) in July 2015. It was prepared collaboratively with district and neighbouring authorities.
- 2.16 The LTTS supports sustainable growth across Cambridgeshire to 2031, encourages sustainable transport modes and efficient use of the network, and seeks to reduce the need to travel and the impact of transport on the environment.

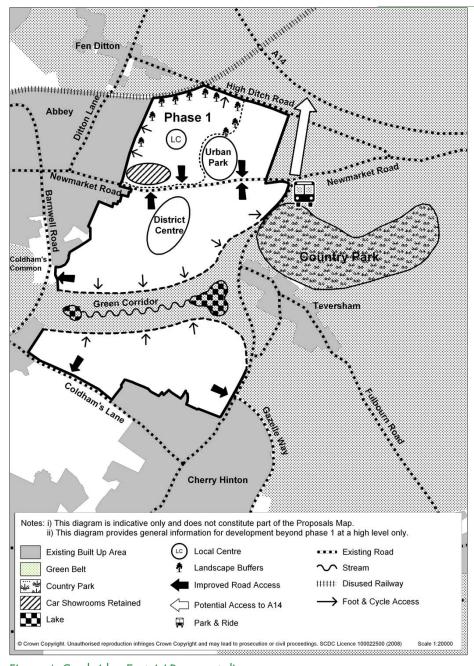


Figure 4: Cambridge East AAP concept diagram

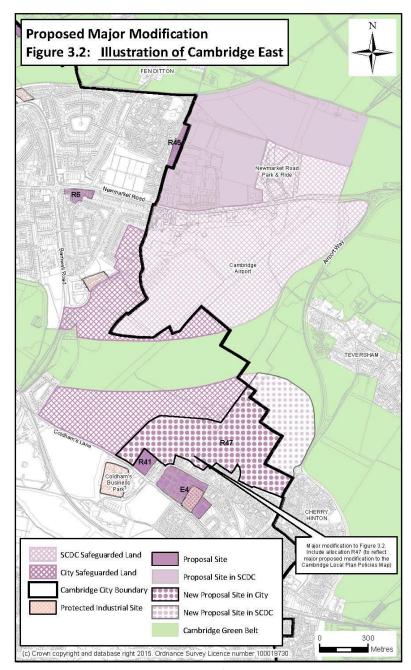


Figure 5: Cambridge Local Plan Modifications (March 2016)

Green Belt

- 2.17 The area to the north of the site is Green Belt.
- 2.18 Both the Cambridge and South Cambs Local Plan (respective submission drafts), state that the established purposes of the Cambridge Green Belt are to:
- Preserve the unique character of Cambridge as a compact, dynamic city with a thriving historic centre;
- · Maintain and enhance the quality of this setting; and
- Prevent communities in the environs of Cambridge from merging into one another and with the city. (para 2.29) (policy 12 (R47)).
- 2.19 The policy for Land East of Cambridge notes that the land has been taken out of the green belt, but reiterates that "the corridor of Green Belt running from Coldham's Common to Teversham will remain as Green Belt" (modification PM/SL/3/B).
- 2.20 The SPD does not include land in the Green Belt for built development. However there may be a requirement for the playing fields associated with the school to be located in Green Belt land. As per the modification proposed to the Cambridge Local Plan, development in the Green Belt will only be approved in accordance with green belt Policy in the National Planning Policy Framework (CLP policy 4).

2.21 As stated in the proposed modification to CLP policy 12 (Cambridge East) "As an exception to policy CE/6 of the Cambridge East AAP, the secondary school need not be included in the local centre" (para 3.18). In common with practice elsewhere around Cambridge and in line with national policy on Green Belt, it will be acceptable for school playing fields to be located in the retained Green Belt" (para 3.18).

3 THE SITE AND SURROUNDING AREA

Surrounding areas and adjacent uses

- 3.1 The site is located on the eastern fringe of Cambridge (see figure 6), to the north of Cherry Hinton and adjacent to both residential and non-residential uses, bordering dwellings along Teversham Drift, March Lane and Church End to the south, Cambridge Airport and associated land to the west and north, and Cherry Hinton Road / Airport Way to the east, with agricultural land and the village of Teversham just beyond. The remaining area to the north of the site is in agricultural use.
- **3.2** Allocated site R41 is located immediately adjacent to the site, along Coldham's Lane. Planning consent at this site was obtained in February 2017 for:
- 3.3 'Reserved matters application pursuant to outline approval 14/0028/OUT, as varied by application 16/0970/S73, for the erection of 57 dwellings including 10 No. 1-bed and 19 No. 2-bed apartments together with 20 No. 3-bed and 8 No. 4-bedroom dwellings, open space, car parking and circulation space.'





Transport and movement

- **3.4** The site is adjacent to two major roads connecting it to Cherry Hinton and nearby villages, as well as to the centre of Cambridge.
- 3.5 There are a number of bus stops within close proximity of the site, as shown in figure 7. Bus stops along Coldham's Lane are served twice daily by the in and outbound no. 17, service which connects Newmarket, Fulbourn and Teversham with Cambridge at the start and end of the working day. The Citi 1 service from the Cherry Hinton Road bus stops provides frequent services (every 10 minutes) connecting Cambridge to Addenbrookes, Cherry Hinton and Fulbourn.
- 3.6 LNCH is approximately 2.5km from Cambridge Rail Station, which provides regular services to London within approximately 1 hour, and to other nearby settlements. Further, the site is in easy reach of the new Cambridge North rail station, approximately 5.6km to the north west.
- 3.7 As shown in figure 8, a public right of way (PRoVV) runs north-south through the site, linking Cherry Hinton to Teversham. The footpath is accessed from March Lane, leading through to the north-west corner of the site.
- 3.8 Traffic free cycle routes run along the Tins cycle route and adjacent to the site, via Airport Way. A number of other on- and off-road cycle-ways run through Cherry Hinton and into Cambridge.

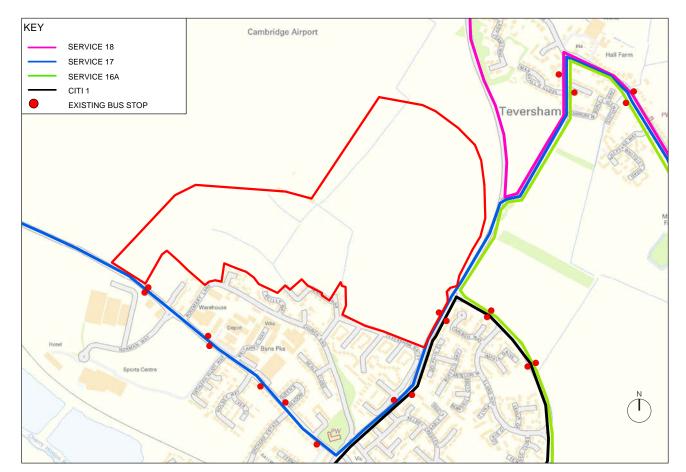


Figure 7: Existing bus network

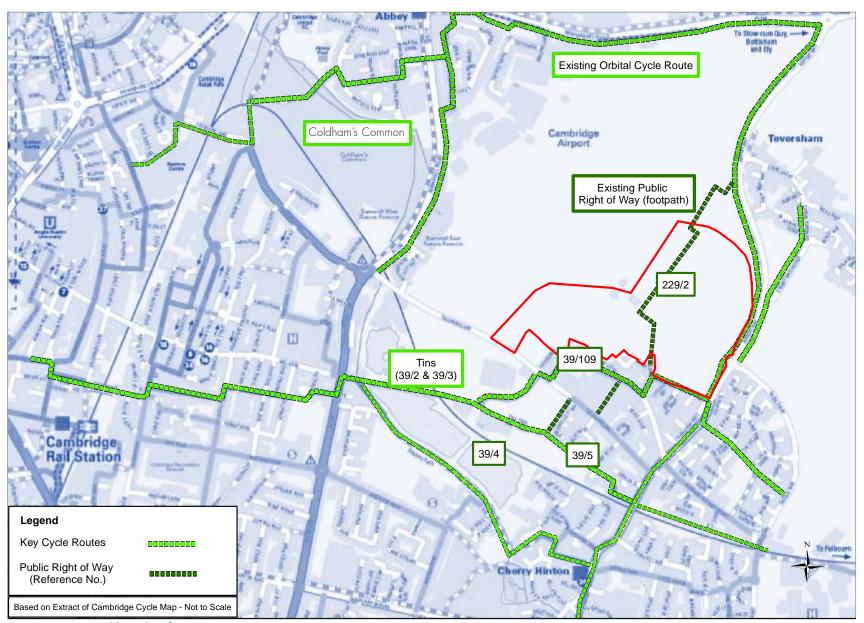


Figure 8: Existing Public Rights of Way

Services and facilities in Cambridge

- 3.9 The site is located approximately 5km east of Cambridge city centre, which has a good provision of services and facilities, including convenience and comparison retail stores and restaurants (see figure 9).
- 3.10 There are a number of primary and secondary schools and higher and further education establishments across Cambridge, including the University of Cambridge and Anglia Ruskin University.
- **3.11** The city also benefits from a number of employment, research and business centres, including the Cambridge Science Park.
- **3.12** Cambridge city centre offers a good public transport network, including a number of bus services and Cambridge and Cambridge North railway stations, providing direct links to London.

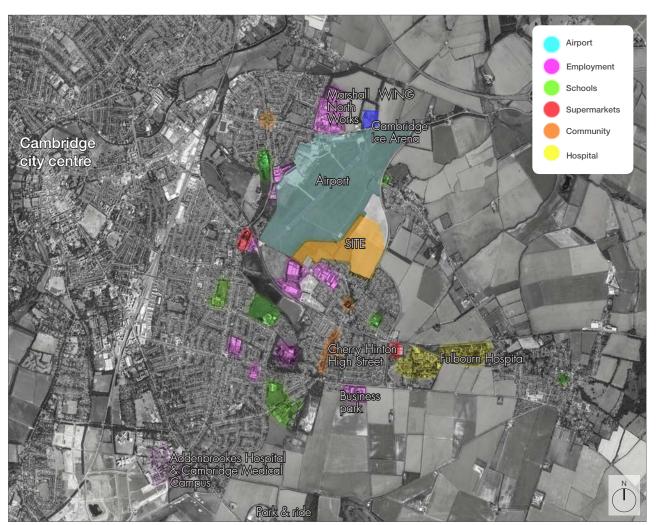


Figure 9: Cambridge East Facilities

Local facilities

3.13 LNCH is located approximately 1 km north of Cherry Hinton village centre. The majority of facilities available within Cherry Hinton can be reached by foot, bike or by public transport within a reasonable time frame.

- Cambridge Airport
- Cherry Hinton Doctors Surgery
- Fulbourn Hospital (mental health care facility)
- Employment, Industrial Estate, Business Park
- Education, school
- Large scale retail
- Small scale retail
- Cherry Hinton High Street
- Church
- Village centre
- Library
- Restaurant, pub
- Hotel
- Playground
- Leisure centre
- Allotments



Figure 10: Local facilities

Education

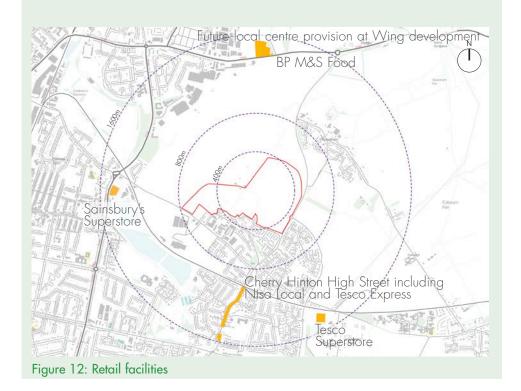
3.14 There are a number of state funded primary and secondary schools in the area, covering the villages of Cherry Hinton and Teversham. The new primary school at the Land North of Newmarket Road will also be within a reasonable walking distance.



Figure 11: Education facilities

Retail

3.15 There are a number of convenience and comparison retail stores within the local area, including local facilities at Cherry Hinton, which also include a number of restaurants, a bakery and a pharmacy.



Note: Distance of facilities from the centre of the Site are shown at 400m, 800m and 1600m (which broadly relate to a 5, 10 and 20 minute walk distances). These walking times are subject to the directness of the route available and therefore can be longer.

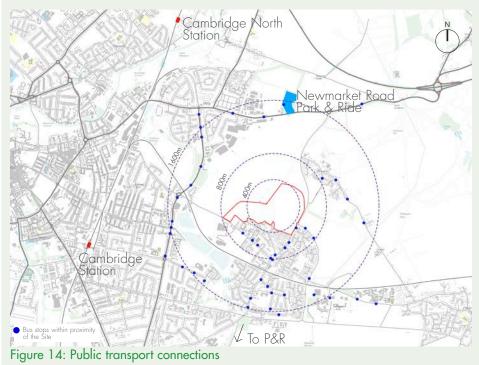
Hospitals and doctors

3.16 The site is located within easy reach of the Cherry Hinton Doctor's Surgery, Brookfields Health Centre and Fulbourn Hospital. In addition, Addenbrooke's Hospital is located approximately 4km south west of the site.



Public transport connections

3.17 Existing bus stops are located on Cherry Hinton Road and Coldham's Lane, which provide connection to Cherry Hinton and the surrounding areas. Cambridge station is located approximately 2.5km from the site. The Babraham Road Park and Ride is located approximately 4.3 km south of the site.



Green infrastructure

Landscape framework

- 3.18 The site lies within a transitional landscape, situated between urban areas of Cambridge city and Cambridge Airport, and the wider rural landscape of South Cambridgeshire. In general, the landscape of the wider area is characterised by relatively low lying land, comprising a variety of land uses, including arable and pastoral fields, roads and settlements.
- **3.19** The immediate surroundings of the site are characterised by a relatively flat agricultural landscape, with field boundary hedgerows and a number of trees within them. The site itself is relatively void of vegetation (see figure 15).
- **3.20** The hedgerow and buffer tree planted strip between the residential development directly to the south of the site is a City Wildlife Site. Hedges either side of Airport Way are County Wildlife Sites. In addition, the road verge along Airport Way has Protected Road Verge status.

Drainage features

3.21 Appropriate sustainable drainage features should be incorporated into the landscape framework to mitigate potential surface water flooding. Such features have the added benefit of enhancing biodiversity and recreational amenity. Development

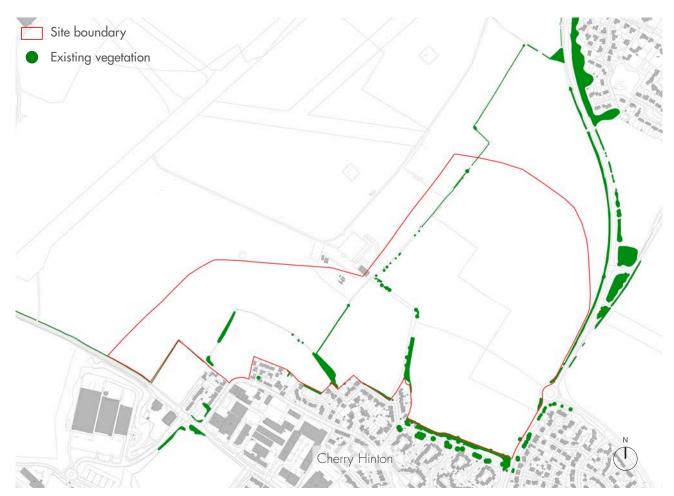


Figure 15: Existing vegetation

generated surface water discharge rates should not exceed existing greenfield discharge rates from the site with onsite attenuation provided to mitigate risk to the wider catchment.

3.22 Open spaces & recreation

- 3.23 There are a number of public open spaces within close proximity of the site (see figure 16), including the following:
- Church End Green (approximately 0.3km from LNCH)
- Cherry Hinton recreation ground and park (approximately 1.2km from LNCH)
- **5.24** Cherry Hinton Hall and Park (approximately 2km from LNCH)
- The Plains playing field to be provided as part of the Wing development (approximately 2.8km from LNCH)
- Coldham's Common (approximately 3km from LNCH)
- Cambridge parks including Parker's Piece, Jesus Green, and Midsummer Common (all within 5km of LNCH)
- Wandlebury Country Park (approximately 5.9km from LNCH)

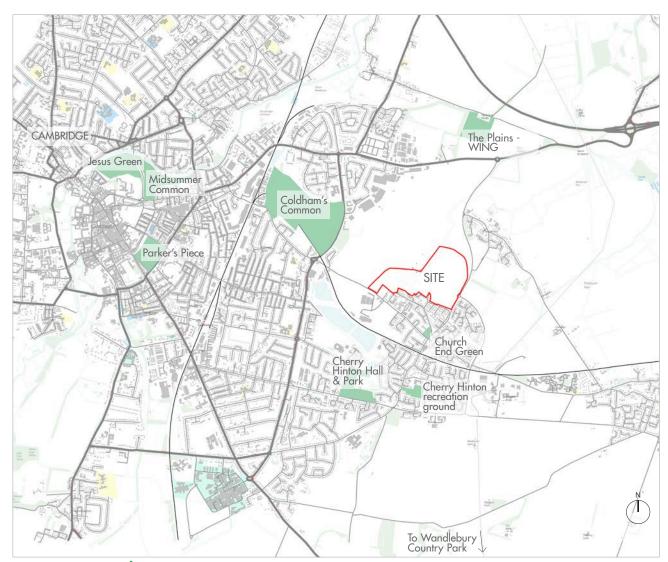


Figure 16: Location of open spaces

Ecology

- **3.25** Ecological surveys have been undertaken within the site. These include an extended Phase 1 habitat survey (see figure 17) and survey work for protected species (water vole and bats) and birds.
- 3.26 The site supports arable fields, and semi-improved and improved grassland. A combination of hedgerows, ditches and trees are present on field and site boundaries. The semi-improved and improved grassland, and the field margin habitats are assessed to be of low ecological value. The hedgerows within the site, a Habitat of Principal Importance, are of ecological value. Water vole, a Species of Principal Importance, is present within the drainage ditches.
- **3.27** Three non-statutory designated sites are present on the site boundaries:
- Airport Way RSV County Wildlife Site (CWS)
 is located along the eastern site boundary. The
 CWS includes the road verges and associated
 hedgerows/scrub on Airport Way. It is of interest for
 its population of perennial flax, a nationally scarce
 plant.
- Teversham Drift Hedgerow City Wildlife Site (CiWS) forms part of the south site boundary.
- Teversham Protected Road Verge (PRV) forms part of the east site boundary. The PRV includes the road verges and associated hedgerows/scrub on Airport way and Cherry Hinton Road. It is of interest for the quality of the grassland habitat present in the road verge.



Figure 17: Extended Phase 1 Habitat Survey results plan

LAND NORTH OF CHERRY HINTON SUPPLEMENTARY PLANNING DOCUMEN

Local statutory and non-statutory designations

- **3.28** There are no statutory or local landscape designations that cover the site, as shown in figure 18.
- **3.29** There are a number of listed buildings to the south of the site, within Cherry Hinton, including The Red Lion pub (grade II listed), Cherry Hinton Hall (grade II listed) and the grade I listed St Andrew's Church. Teversham village to the north of the site, also contains a number of listed buildings including the grade II* listed Church of All Saints. In addition, the Marshall Airport Control and Office Building located north of the site is grade II listed.
- **3.30** There are no conservation areas immediately adjacent to the site.
- 3.31 The moated site at Manor Farm located some 650m east of the site is a scheduled Ancient monument. The settlement by Caudle Corner Farm, approximately 1.6km south east of the site is also a designated scheduled monument.
- 3.32 The site falls within an area where archaeological assets have previously been identified. Preliminary archaeological investigations have taken place; reporting of the findings will determine whether areas of detailed excavation are required.
- **3.33** Teversham Drift City Wildlife Site lies between the site and existing settlement.
- **3.34** In addition to the above, there are also a number of non-designated heritage assets within proximity of the site which contribute to the character of the area.

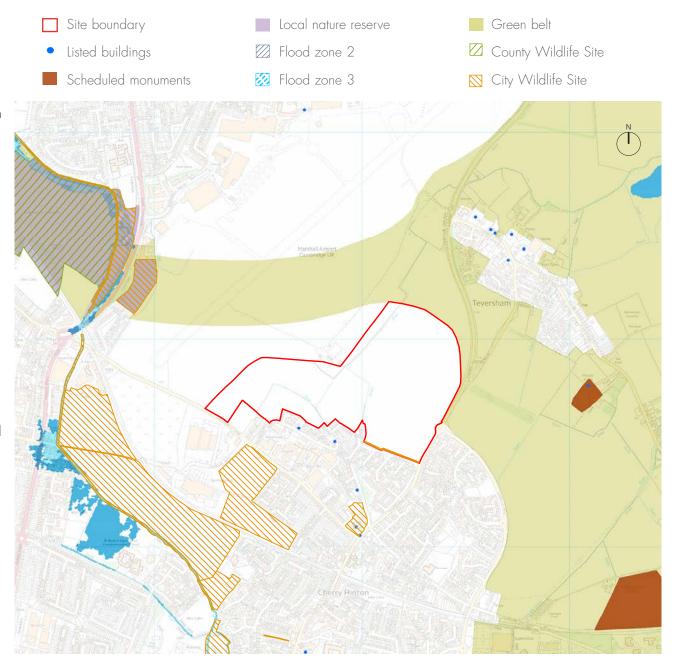


Figure 18: Designations

Historic growth and urban grain

3.35 The site has historically been used for agricultural purposes. The maps below show the growth of the area immediately surrounding the site and illustrate the growth of Cherry Hinton from a small village parish in the late 1800s to its current compact suburban form. The footpath extending through from March Lane to the existing ditch on the site should be retained, together with the historic hedgerow which is still present on the site.

3.36 The historic core of Cherry Hinton is organised along the high street, with later phases of development extending out from this core. Thus the built form in the locality originates from different periods and features different styles and scales. There is no single morphology that is characteristic of the area.

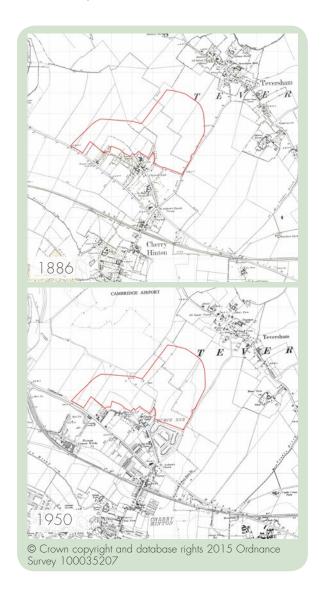




Figure 19: Current urban grain - figure ground plan

Neighbourhood context analysis

- **3.37** A study of the existing features and trends apparent within Cherry Hinton will help inform the emerging development principles and design concepts for LNCH.
- **3.38** The following pages detail the key characteristics of Cherry Hinton, followed by a short summary and conclusion of the key findings used to inform the development principles set out in section 5.

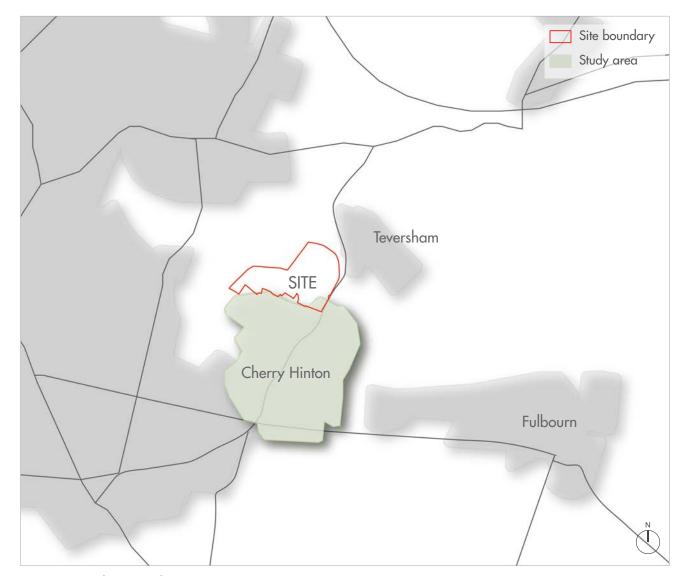


Figure 20: Settlement study area

Cherry Hinton characteristics

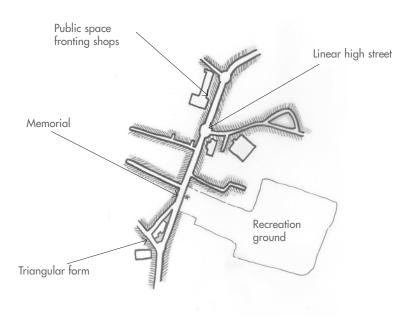
Urban form and grain

- **3.39** Cherry Hinton village is located immediately south of the site and 4 miles east of Cambridge city centre.
- **3.40** The residential areas of Cherry Hinton largely comprise a mix of 2-3 storey semi-detached, terraced and detached dwellings with pitched roofs. 'Traditional' streets with detached housing and rear gardens are the most common typology, although in the immediate vicinity of the site (Teversham Drift) housing is arranged around internal courtyards.
- **3.41** The historic morphology shows clear plot layouts with buildings fronting main streets; the later additions of the 60s and 70s along Teversham Drift are 'Radburn' type layouts, characterised by back gardens facing the streets, and the fronts of houses facing each other across communal gardens.



Village centre

- **3.42** The village centre comprises a linear high street running north south through the village. The southern end of the high street is characterised by a triangular form.
- **3.43** The village comprises a mix of uses including The Red Lion pub, St Andrew's Church, village hall and sports centre, and a range of shops.



Open spaces

3.44 Cherry Hinton has a good range of open spaces, including Cherry Hinton Hall and Park, the recreation grounds, allotment provision and a range of natural and semi-natural green spaces. The quality of natural and semi-natural green spaces varies, with evidence of a lack of maintenance.



Figure 21: Cherry Hinton open spaces

Key features and materials

- 3.45 Analysis of Cherry Hinton identified the following key features:
- · Mix of semi-detached, terraced and detached dwellings
- Predominately red brick buildings with some render and textured brick on traditional properties and cladding on contemporary dwellings
- Chimneys on dwellings along 'traditional' streets
- Mix of boundary treatments, predominately brick walls along traditional streets and low level fencing or hedgerows fronting more contemporary dwellings
- · Mature cherry trees are characteristic of the village
- · Triangular form to southern end of village centre.





Neighbourhood analysis - summary of key findings

- **3.46** Findings from the analysis should be taken into consideration in the development of design proposals for the site.
- **3.47** Key findings from the analysis are detailed below. The key precedents to apply to LNCH to ensure a high-quality development that is reflective of the local area include the following:
- Triangular openings to key spaces
- Mix of materials, predominately brick with cladding details
- Chimneys on dwellings to add interest to roofscape.
 Chimneys should form a functional role in the design
- Predominately linear street patterns
- Mix of low level hedging and brick wall boundary treatments.

Density & mixed-use

- Varied densities with lower densities adjoining the Site
- · Mixed use located along village centre approach
- Varied building heights and plot widths but 2/3 storey residential buildings predominate

Urban form

- Detached housing and 'traditional' streets most common
- Large front gardens to many residential dwellings
- Internal courtyards

Village centres

- Street widening to create triangular forms
- Historic buildings in core areas create attractive vistas and play an important role in the public realm

Vernacular

- Mix of architectural styles; contemporary architecture can be found toward the edge of Cherry Hinton
- Traditional housing typically characterised by brick wall boundaries; contemporary dwellings with low level hedgerow / small front lawn boundary treatment
- Chimneys on traditional housing; no chimneys on contemporary dwellings

Residential street pattern

- Linear street pattern with some curved residential roads
- Some streets characterised by Radburn-style layouts
- Core of village is defined by a connected street pattern centred on the linear high street

Landscape & open space

- Cherry trees are a common feature of Cherry Hinton
- Limited public open space in vicinity of the site

The site

3.48 The following pages set out the site's constraints and opportunities.



Figure 22: Photo location plan

Site images







3 View of site from Church End







5 View south east towards, Cherry Hinton Road



6 View of site from Cherry Hinton Road



Edges

Southern edge - residential use

- **3.49** The southern edge of the site is predominately characterised by residential streets and dwellings.
- 3.50 The southern edge includes the Teversham Drift City Wildlife Site. This narrow wooded buffer strip screens the edge of the developed village from the green belt / wider area and will continue to play a role in buffering the existing developments from the new. The buffer strip will remain a City Wildlife Site and should be protected and enhanced.



Figure 23: View of residential street adjacent to site



Figure 24: View along March Lane

Western edge - Cambridge Airport and Green Belt

- **3.51** Cambridge Airport land borders the site to the west. The airport land is characterised by regularly mown grass and open views across to the airport and city beyond.
- **3.52** The openness of the Green Belt land should be retained in order to prevent coalescence with Teversham.

Figure 25: Vew across Airport from public footpath

Eastern edge - Cherry Hinton Road / Airport Way

- **3.53** The east of the site is contained by Cherry Hinton Road and Airport Way, connecting the Site to Cherry Hinton, Teversham, Cambridge and the A14.
- **3.54** Visual and noise screening should be incorporated along this edge as well as opportunities for enhancing wildlife.



Figure 26: View into site from Airport Way

Green belt

3.55 The area immediately north of the site is within a green belt corridor. As noted on page 11, the green belt purposes seek to preserve the character of Cambridge, maintain and enhance the quality of this setting, and prevent coalescence of communities. Proposals should ensure no impact on the openness of Green Belt land to the north of the site, which has been retained to prevent coalescence with Teversham.

Safeguarded land

3.56 The area immediately west of the site has been identified as having long term potential for further housing development outside of the draft Local Plan time frame and in accordance with the spatial strategy set out in the Cambridge East AAP.



Figure 27: Green Belt land



Figure 28: Safeguarded land

Topography

3.57 The site is in a generally low lying area, which is typical of this part of Cambridge and Cherry Hinton. The site is located some 2km north of the Magog Hills, which lie just south of Cherry Hinton. There are some changes in levels across the site. Within the south eastern portion of the site, there is a distinct ridge which falls away in all directions. At its highest point, the ridge is approximately 5 metres above the general site levels.

Flooding

3.58 The site falls within Flood Zone 1, and is therefore at low risk from fluvial flooding. The site is at risk from surface water flooding, instances of surface water flooding are known to have occurred in the area immediately adjacent the existing drainage ditches within the site.

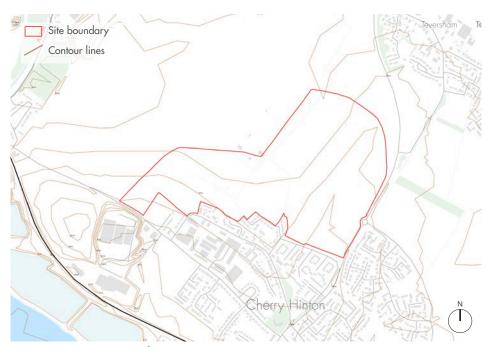


Figure 29: Site topography

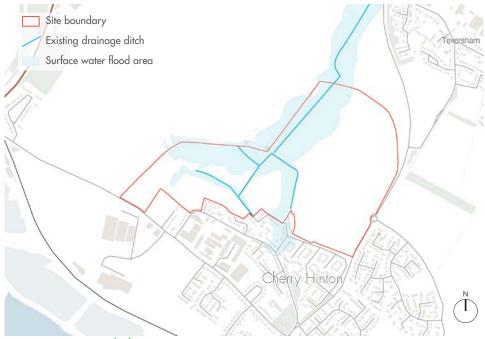


Figure 30: Existing ditch

Vegetation

- 3.59 There is a lack of existing vegetation within the site.
- **3.60** Due to the location of the site adjacent to the International Airport, any future landscaping scheme should ensure bird populations that pose a threat to the airfield are discouraged; other farmland birds should be encouraged as mitigation for loss of farmland.

Public footpath

3.61 A public footpath (Cambridgeshire County Council path no. 109) runs north-south through the site, providing a footpath link from Cherry Hinton to Teversham. This footpath link should be retained.



Figure 31: Existing vegetation

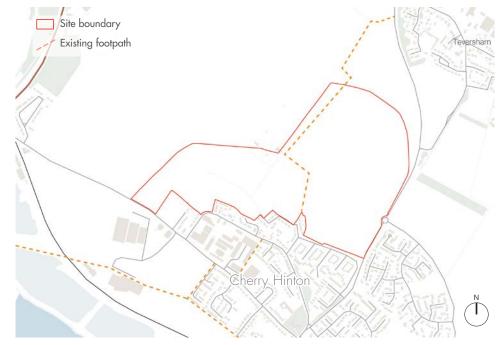


Figure 32: Existing public footpath

Access

3.62 There is currently no vehicular access to the site, given it is in use for agricultural purposes and, in part, airport land. Agricultural vehicles access the site via Airport Way. Gated entrances exist via Rosemary Lane and March Lane into the airport land. Pedestrian access to the land is limited to the public footpath which crosses the site.

Utilities

3.63 An Intermediate Pressure Gas Main currently runs through the southern half of the site. There is potential to re-route the gas main and associated restrictions on building around it to ensure the route of the pipe is compatible with the development principles of the site, as part of an integrated design solution.



Figure 33: Existing site access

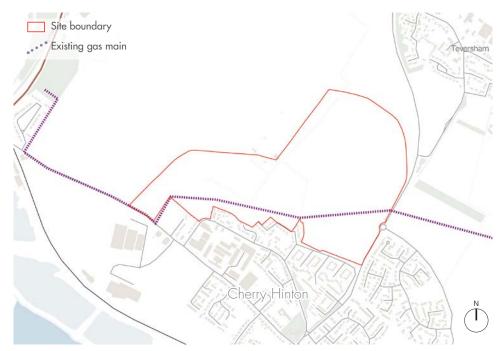


Figure 34: Existing gas main

Air quality

- **3.64** Both local authorities have declared Air Quality Management Areas (AQMAs) for exceedances of air quality objectives. See figure 35.
- **3.65** Air quality conditions at the site will be affected by a range of local emission sources, including those from local road traffic. Activities at Cambridge Airport will give rise to emissions of air pollutants, and possibly odour, which could have an effect on air quality across the site.
- **3.66** The construction and operation of the proposed development has the potential to affect local air quality at existing residential properties, including those within the AQMAs. Key considerations for air quality include the following:
- · Presence of AQMA's
- · Potential impact on air quality within the AQMA
- Need to mitigate so the development does not have an adverse impact upon air quality within the AQMA's.
- Mitigation at the construction phase to minimise impact on the local air quality for existing residential properties
- Mitigation at the operational phases of the development to minimise impact on the local air quality not only on existing residential properties but also proposed residential properties
- Appropriate mitigation measures should be incorporated in the development proposals to avoid or lessen potential impacts.

Ground conditions

3.67 Preliminary ground investigation works undertaken to date on-site have identified some potential localised soil contamination which is associated with current and historical land uses. As it stands, the principle of the development take into account these potential areas of contamination and, where possible, locates more sensitive land uses away from them accordingly.

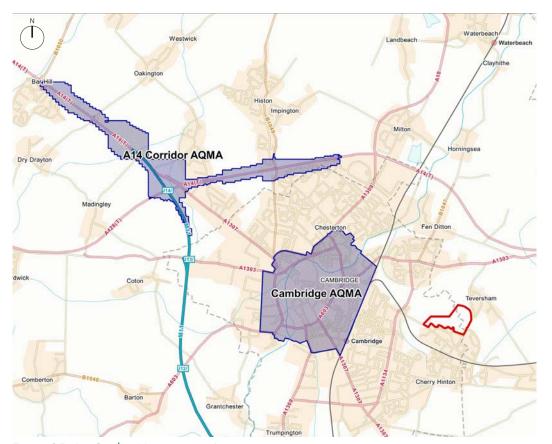
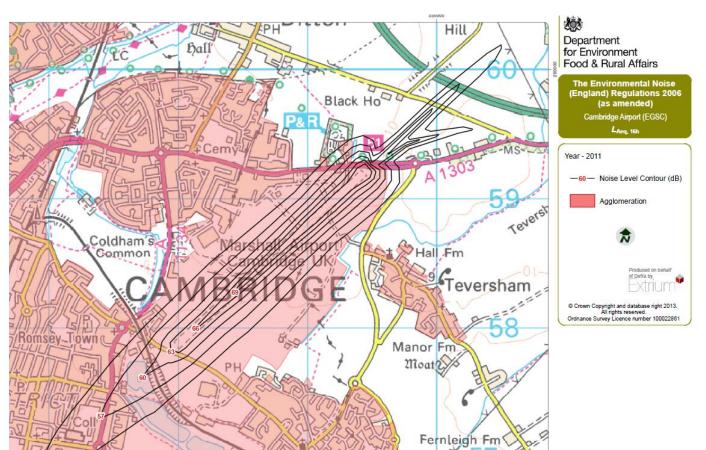


Figure 35: Air Quality Management Areas

3.68 Further detailed ground investigation works will be undertaken to better define the exact extent of any contamination on-site and provide remediation techniques and mitigation measures where necessary to facilitate the development.

Noise

- **3.69** It is accepted that the site is adjacent to an airport and that noise is a key consideration. The allocated area is affected by both airport and other external noise (i.e. road traffic).
- 3.70 Under the process of Environmental Impact Assessment (EIA), the applicants' will be required to prepare a Noise Assessment submitted as part of the outline planning application. This should consider existing noise levels at and around the site from a range of sources (e.g. road and rail) and also specific activities at Cambridge Airport (e.g. take offs and landings, taxiing aircraft, and aircraft engine testing). It will be necessary in each case to make a prediction of noise impact upon the proposed development area, and where necessary to identify mitigation to achieve satisfactory levels of noise, both internally and for relevant amenity areas.
- **3.71** Mitigation may include consideration of the development layout, building orientation and building heights, positioning of sensitive land uses or open spaces, as well as the design and acoustic insulation of properties (where appropriate).
- 3.72 In taking the decision to allocate the site for development, the Council took into account noise evidence prepared by an expert noise consultant, which demonstrates on a preliminary basis that noise effects are expected to be within acceptable ranges and can be dealt with through normal design measures (see figure 36). The EIA process and detailed noise assessment will need to develop this further in support of a planning application, to the satisfaction of the Local Planning Authority.



within acceptable ranges and can be dealt with through normal Figure 36: Noise contour plan (extract from Cambridge Airport Noise Action Plan, 2014-2019)

Airport safety

Primary surveillance radar

3.73 The airport radar is a key tool to allow Air Traffic Control to safely manage the airspace near to the airport. The current location of the airport radar, and its associated safeguarding criteria, imposes height restrictions across the site to ensure the radar remains fully effective and to maintain aircraft safety. The radar in its current position would limit building heights and compromise the capacity of the site to deliver housing and other uses. The radar will need to be relocated to allow the development to proceed.

Fire training ground (FTG)

3.74 The airport fire crews must be fully drilled and ready to respond to a potential incident on the airfield. Training is currently delivered on site, using the airport's Fire Training Ground located adjacent to the western boundary of the site. It is recognised that fire training in close proximity to new development may cause concerns for new residents. Marshall has committed to ceasing activity at the current fire training ground to allow the development to proceed. It is anticipated that a \$106 agreement will place a positive obligation on Marshall to cease use of the fire training ground before first occupation of homes, thus protecting the amenity of future residents. Preliminary enquiries suggest that it would be viable to undertake training of the Airport

Fire Crew at alternative third party airport locations. At the current time, there are no proposals to relocate the facility within the Airport site.

Navigational aids

3.75 The airport uses a range of other airport navigational aids to safely manage aircraft arrivals and departures. The potential impacts of the development on all airport infrastructure will need to be assessed on an ongoing basis to influence the design, and to ensure navigational aids are appropriately calibrated as development comes forward.

Other airport constraints

3.76 As the site is located adjacent to Cambridge Airport, there are other constraints that apply. These are not ultimate constraints to the development, but will have an impact on the form of the development and the design of open space. Industry guidance and best practice on matters such as lighting, landscaping, drainage and construction management will be applied to ensure structures are not built in locations that create safety risks, and to ensure design solutions and maintenance regimes are put in place to proactively manage potential risks to aircraft. These constraints are set out in Safeguarding of Aerodromes Advice Notes, published by the Airport Operators Association, as follows:

- · ANO2 Lighting
- ANO3 Potential Bird Hazards from Amenity Landscaping and Building Design
- ANO6 Potential Bird Hazards from Sustainable Urban Drainage Schemes
- ANO8 Potential Bird Hazards from Building Design.
- **3.77** In addition, the following airport constraints have been considered:
- Obstacle Limitation Surfaces height restrictions associated with the airport's runways
- Public Safety Zones areas that are protected from development in the interests of public safety, which are located at the runway ends and thus are not impacted by the proposed development
- Navigation Equipment the continued safe operation of the airport's navigational equipment in accordance with CAA Guidance Note CAP670: Air Traffic Services Safety Requirements
- Instrumental Landing System (Localiser)
- · VHF Direction Finder
- Distance Measuring Equipment.

Summary of constraints

- **3.78** Whilst not an exhaustive list, the following constraints should be taken into account when developing design proposals for LNCH:
- · Green belt boundary
- Retention of public footpath
- Protected grass verge along Airport Way
- · City Wildlife Site along Teversham Drift (hedgerow)
- · Retention of existing vegetation where appropriate
- Surface water flooding and the incorporation of a Sustainable Urban Drainage System
- Gas pipe and easement
- Response to noise from the Airport / GRE and traffic along Airport Way / Cherry Hinton Road
- Protection of the amenity of residential dwellings immediately bordering the site
- Limited height under Coldham's Lane Bridge.





Figure 37: Summary of site constraints

04 vision

- 4.1 Analysis of the site and surrounding area has informed the overarching vision for LNCH. The vision for LNCH reflects the Cambridgeshire Quality Charter for Growth which promotes planned growth of sustainable and vibrant new communities in accordance with four themes: Community, Character, Connectivity and Climate.
- 4.2 The Land to the North of Cherry Hinton will be a vibrant, high-quality and distinctive extension to the existing settlement, reflecting and enhancing the special character of the surrounding area, whilst working in synergy with Cambridge as a whole. It will be an integrated and well-connected neighbourhood that is in harmony with its natural setting. Design cues taken from the surrounding area will create a unique neighbourhood that will include a distinctive entrance to Cherry Hinton, a transition from rural to urban, a celebration of views across the airport, and the incorporation of existing pedestrian and cycle links.

Community



3.3 A vibrant and liveable community with a provision of a mix of tenure and social infrastructure

- Provide open spaces, formal play and community facilities
- Encourage social interaction and a sense of belonging
- Create a strong green framework
- · New, centrally located centre





Character



3.4 An attractive extension to Cherry Hinton inspired by the unique characteristics of the existing settlement and surrounding area. Distinctive entrance into Cherry Hinton.

- High quality landscape framework comprising native plants including cherry trees and enhancing the countryside setting
- Celebrate of views across the airport and outwards to the countryside
- Materials palette comprising brick with cladding details







Connectivity



3.5 A community with strong connections to Cherry Hinton and the surrounding neighbourhoods and the city. Encouraging sustainable travel choices through the incorporation of cycle links and access to public transport links.

- Sustainable connections across site and beyond
- Safe and direct routes
- Access to public transport links
- Access to services and facilities within Cherry Hinton and Cambridge city centre
- Walkable neighbourhood
- Clear hierarchy of streets







Climate



3.6 In harmony with existing and historic landscape features, protecting and enhancing environmental qualities of the surrounding area. Promoting a low carbon lifestyle.

- Incorporate the existing countryside walk into a linear park
- Support biodiversity and protect existing habitats of value
- Utilise energy efficient technologies
- Be adaptable to our changing climate









05

FRAMEWORK PRINCIPLES AND MASTERPLAN

Overview

- **5.1** This chapter provides planning and design guidance on how the development principles will be used to guide future planning applications.
- 5.2 The main guiding principles are defined in a series of parameter drawings with supporting text. These are supported by a range of illustrative drawings which depict how the principles could be realised to create a high quality development.
- 5.3 As well as following the planning and design guidance set out in this SPD, any future planning applications should comply with extant policies contained within the Cambridge East AAP, the Cambridge Local Plan (2006) and South Cambridgeshire Core Strategy (2007) and their replacements, which are currently the subject of examination.

- 5.4 This chapter is structured as follows:
- Summary of consultation to date
- Movement
- Environmental considerations and sustainability
- Landscape and open space
- Land uses
- Character and form
- Environmental considerations and sustainability
- · Planning obligations
- · Overview of key development principles

Summary of consultation to date: SPD workshops

- 5.5 The principles set out in this section have been informed by consultation events and feedback. A summary of the key findings are provided below. Findings have informed the development principles set out on the following pages.
- **5.6** A number of key stakeholders were identified and included neighbourhood groups, local councillors and key councillors from Cambridge City Council and South Cambridgeshire District Council.
- **5.7** Two stakeholder workshops were held in preparation for the drafting of the SPD:
- Workshop 1. Key stakeholders were informed that the Site was being brought forward as part of the local plan and were invited to attend a Planning Workshop. The workshop was held at St. Andrew's Church Centre on 9th March 2017.
- Workshop 2. Having reviewed and input feedback, key stakeholders were invited to a follow up planning workshop. The workshop was held on 7th April 2017 at St. Andrew's Church Centre.

Movement and transport:

- Spine Road strong desire to avoid rat running
- Concern over congestion caused by development
- Cycling consensus that cycle routes could play an important role in minimising traffic through the development and providing sustainable access to key destinations and local facilities
- Public transport lack of bus transport in the village
- Footpaths questions raised over the future of the footpath through the site

Social infrastructure:

- Primary school should be located near the local centre
- Secondary school should be placed carefully in relation to transport routes, possibly on the edge of development
- Allotments should be located between the built development and existing village
- Community facilities extra would be needed; a square or open space could hold community events
- Local centre ingredients suggestions included a pub, shop, greengrocer, library, pharmacy, cafe, charity shops, community space, health centre, faith space, hotel, meeting rooms

Landscape and environment:

- Buffer zone between the development site and airport land should be lined with vegetation
- There should be a clear green edge with Teversham
- · Airport felt to be an interesting view
- Green space should integrate recreational opportunities and should maintain views to countryside
- Urban edge careful thought should be given to the interaction of the urban edge with the countryside

Placemaking and character:

- Character a mix of styles are found in Cherry Hinton
- Density view that apartments should not extend beyond 4/5 storeys; higher density could be close to transport interchanges
- Mixed-use considered a positive

Housing:

- Open spaces should be prioritised over gardens
- Height 4/5 storey maximum

Movement

- 5.8 The development of a transport and movement strategy for the site relies on the relationship of several key components. It is important that these work together to encourage walking, cycling and the use of public transport as the most desirable modes of travel.
- 5.9 The components considered in this section are:
- · Access and primary routes
- Primary street options
- · Cycle and pedestrian movement
- Public transport
- · Cars and parking
- 5.10 Relevant planning policies include CEAAP (Cambridge East Area Action Plan 2008) policy CE/10 (road infrastructure), policy CE/11 (alternative modes and parking), CLP (Cambridge Local Plan 2014) policy 80 (Supporting sustainable access), CLP policy 81 (mitigating transport impact), and SCLP (Proposed Submission South Cambridge Local Plan 2013) policy TI/2 (Planning for sustainable transport) prioritise sustainable travel methods, and seek to ensure development mitigates transport impacts.
- **5.11** The movement strategy, as illustrated in figure 39, capitalises on the unique opportunity that the location of the site offers in the east of Cambridge, promoting sustainable travel for existing and future residents in the area. Three key principles that are incorporated in the strategy include:
- Reducing the need to travel by car within the development through offering excellent permeability within the site for pedestrians, cyclists and public transport.

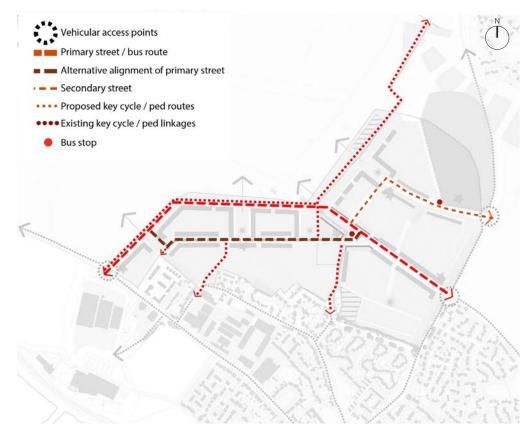


Figure 39: Overview of movement strategy

- Encouraging journeys on foot and by bicycle through providing direct connections to important routes off-site including Cherry Hinton High Street, Airport Way, Coldham's Lane and the Tins route.
- Encouraging travel by bus by ensuring main routes within the site accommodate buses and are designed to maximise the number of residents located within walking distance of a regular service.

Access and primary routes

- **5.12** As shown in figure 40, vehicular access to the site will be from Coldhams Lane and Cherry Hinton Road / Airport Way, as required by CLP policy 12 (R47) and SCDC policy SS/3.
- 5.13 Any future planning application will need to demonstrate appropriate capacity at each of the access junctions for all vehicles, including emergency and refuse vehicules, travelling to and from the site through provision of a Transport Assessment. This assessment should also consider the development impacts on the local highway network (including Cherry Hinton Road and Coldhams Lane), and local junctions (Coldhams Lane / High Street, Coldham's Lane / Barnwell Drive).
- **5.14** Developers will be encouraged to incorporate a traffic calmed environment using street design and intersecting cross routes to create a natural reduction in speeds. Shared surface environments should be employed. The spine road speed limit should be agreed with Highways Development Control however a design speed of below 20mph is considered most appropriate.

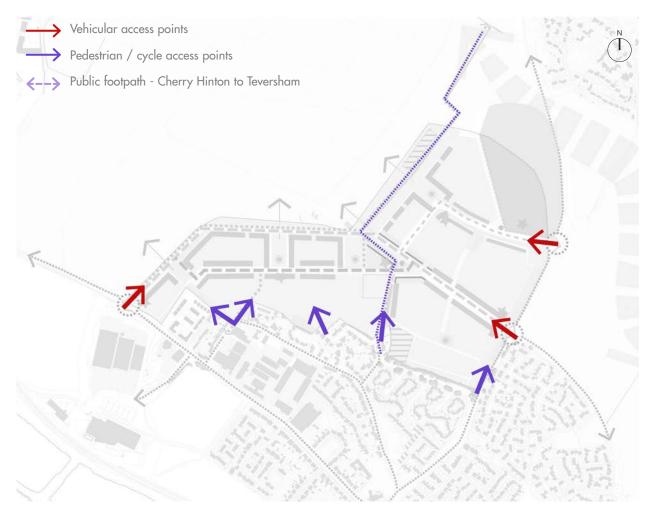


Figure 40: Connectivity

Primary routes

- **5.15** As set out in part 3 of policy 12, the master plan for site R47, 'will make provision for a primary and secondary school, a local centre with community hub, open space and a spine road connecting Coldham's Lane with Cherry Hinton Road. Vehicular access to the site will only be permitted via the new spine road unless needed for emergency access'.
- 5.16 There has been discussion through the initial technical work and stakeholder workshops on the route, form and function of the spine road. Two primary street options are presented which show different ways that the spine road could form a flexible primary route through the site. The requirements of the final spine road design will be determined by CCC and local authorities through the planning application process.
- **5.17** Consideration should be given to landscape when deciding on the design of primary routes in order to ensure the usability of open spaces within the site.
- 5.18 Elements to consider include, but are not restricted to, the following:
- The visual impact of the design
- · Impact on drainage
- The amenity value of adjoining open spaces
- Impact on residential amenity
- The location of the relocated gas main.

Main vehicular access points to the Site

- 5.19 Weston Homes have obtained planning permission for up to 57 homes on land at Hatherdene Close, near to the western access into the Site. The Weston Homes development will become the immediate eastern boundary to the site in this location. Housing proposed on this site will be accessed via a new priority junction from Coldham's Lane and in order to maximise spacing between the two junctions, the Coldham's Lane access to the Land North of Cherry Hinton site is required to be located to the west of the site boundary, on Coldhams Lane. Local design guidance recommends minimum spacing between junctions on the same side of the road, to ensure that the visibility splays at each of the junctions do not interfere and result in safety issues. The visibility splays agreed for the Weston Homes site were 4.5m x 120m and therefore the location of the access to the far west of the boundary seeks to reduce the potential for impact on the Weston Homes visibility splay.
- **5.20** The County Council has recommended that the main access from the eastern side of the site is to be from the existing roundabout at the Cherry Hinton Road / Gazelle Way. This is due to the fact that the existing roundabout already requires vehicles to slow down and presents an opportunity for a main access point that has the least impact on vehicular movements as well as keeping this access point within the urban area of the city.
- 5.21 There are as such two options for a spine road connecting these two main access points. The first of these options (Option A adjacent) runs the main spine road through the site along the northern boundary of the site; the second brings the main spine road away from the northern boundary and through the heart of the site (Option B adjacent).

Primary street options

Option A

5.22 A spine road which runs through the local centre of the site and continues along the northern perimeter allowing the provision of direct, traffic free or low traffic cycle and pedestrian routes through the central belt of the site.



Advantages

- Allows for a traffic calmed / free central spine through residential areas
- Aids in reducing the noise impact on residential areas by keeping noise generating activities along the airport edge, with a landscape park buffer to the residential blocks
- Opportunity to integrate the new gas main along the footpaths and verges, keeping landscaped areas and parks free from constraint

Disadvantages

- Requires a thoughtful design considerations for traffic calming, to ensure it does not turn into a bypass peripheral route
- Requires consideration of landscape design to achieve high quality park and open spaces

Option B

- 5.23 A spine road which runs through the centre of the site allowing the provision of traffic-free cycle and pedestrian routes along the perimeter of the site rather than through the centre.
- 5.24 For Options A and B, there is also the possibility to introduce a bus gate along the spine road which would offer the opportunity to only allow through-connections between Cherry Hinton Road and Coldham's Lane for buses, pedestrians and cyclists.



Figure 42: Primary street option B

Advantages

- Places the primary vehicular movement through the centre of the development
- Allows traffic free landscape edge and cycle pedestrian movement along the airport edge

Disadvantages

Requires careful considerations of density and building heights along the primary street due to proximity to the existing residential edge

Cycle and pedestrian movement - potential links

- 5.25 Proposals for the site should be as permeable for cyclists and pedestrians as possible, exploring potential connections to the wider strategic cycle networks surrounding the site such as the Chisholm Trail and the existing Airport path as well as connections on foot to local facilities. Proposals will be required to demonstrate an appropriate walking and cycling strategy in terms of the site, and acknowledge the wider walking and cycling journeys which interface with it.
- 5.26 On-site, direct routes should be provided between areas of housing and community facilities. Local cycle and pedestrian only connections will be encouraged on the site. Pedestrian and cycle connections will also be accommodated on primary and secondary routes. Proposals should incorporate openings and cut throughs for cyclists and pedestrians where possible.
- 5.27 Cycle routes should be well integrated into the proposals and utilise the green corridors and low order less trafficked streets. Off road cycle links within the site that are shared by cyclists and pedestrians should be at least 3.5m wide.

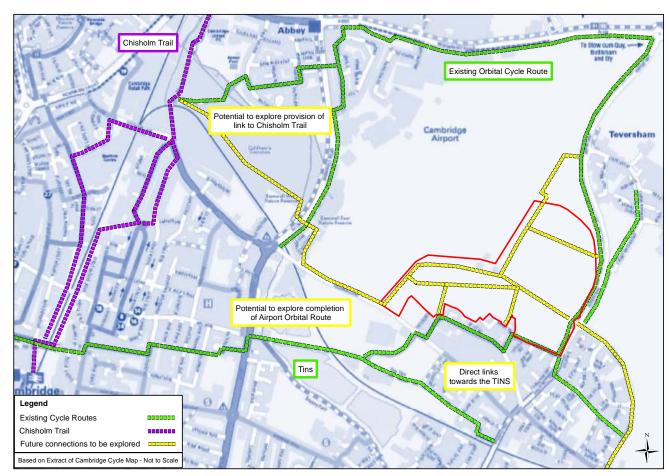


Figure 43: Potential wider cycle connections

- **5.28** Proposals should make full provision of the existing public right of way running south-north through the site, connecting Cherry Hinton to Teversham.
- **5.29** Pedestrian and cycle connections should be delivered by the proposals to facilitate both local and more strategic movements between the site, existing communities and key local services.
- **5.30** In response to consultation feedback, safe cycle and pedestrian linkages through the development with minimum interaction with vehicular traffic should be encouraged.

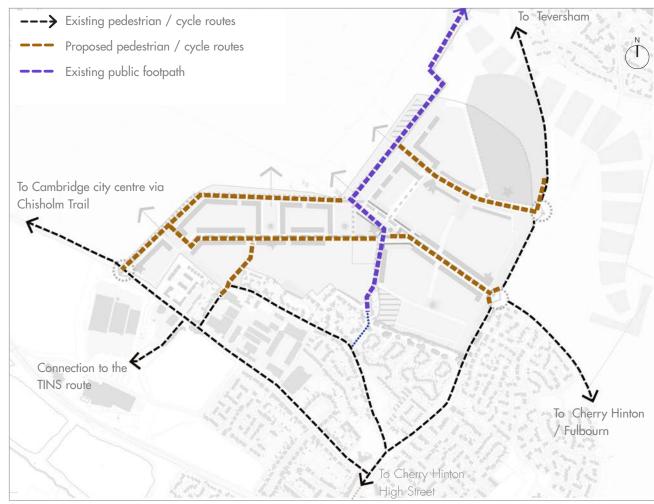


Figure 44: Indicative pedestrian and cycle routes

Central spine cycle options

5.31 There is the opportunity to provide a dedicated cycle and pedestrian route through the site. Based on the two options for the primary street route, this dedicated network could come forward as shown in figure 45. Guidance contained with Making Space for Cycling 2014 should be followed when developing proposals for the cycle route.

5.32 Options for the primary street include:

- A wholly segregated cycle route is available on the northern boundary of the site for cyclists, providing a completely segregated route between Airport Way and Coldham's Lane.
- There is also a central spine within the development which will be a pedestrian / cycle priority link, with limited or no access for vehicles. The design and arrangement of the blocks around this central spine seek to reduce the volumes of turning traffic potentially conflicting with cyclists.
- External pedestrian and cycle connections are also provided from this central spine through the site to the south, linking with the Tins route and to the east to Cherry Hinton High Street, including access to the existing bus stop which is served by the Citi 1.



Safe and attractive cycle routes (Southern Fringe, Cambridge)

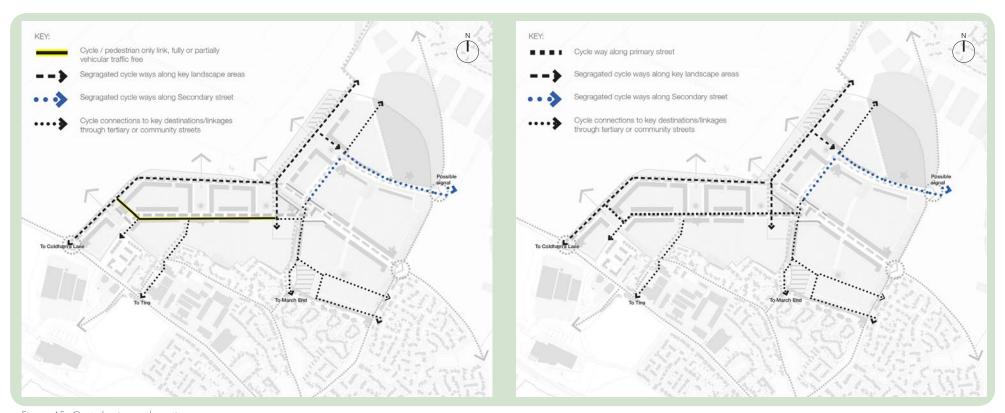


Figure 45: Central spine cycle options

Public transport

- **5.33** Any strategy for public transport must be led by the County Council, in partnership with the local authorities, bus companies and developers. The proposed public transport strategy for the site will build upon the existing network.
- 5.34 Proposals will provide well-connected, high quality pedestrian and cycle routes that connect with the public transport network to help make sustainable travel modes more attractive than use of the private car. The majority of the development should aim to be no more than a 5 minute or 400m walk to bus stops. Figure 46 illustrates how the bus route could come forward.
- **5.35** Any planning application will be accompanied by a public transport strategy, setting out how the site will be served by public transport. Consideration should be given to the restricted height of Coldham's lane Bridge.



Figure 46: Indicative bus route

Car parking

- 5.36 Proposals should accord with Cambridge City Council's parking standards, which are expressed as maximum standards in line with national guidance and the council's sustainability aims, and with CEAAP policy CE/11 (alternative modes and parking), CLP policy 82 (parking management) and SCLP policy T1/3 (parking provision), which seek to ensure appropriate parking provision for new developments for motor vehicles and cycles.
- Car parking should be designed to minimise impact on the urban form. The majority of car parking spaces should be provided 'on plot' with parking courts avoided.
- 5.38 Facilities for electric charge points should be incorporated into design proposals with consideration given for provision of EV charge points (In line with Policy 35 of the National Planning Policy Framework (NPPF)).

Integral parking along streets creates a high quality streetscene

Cycle parking

5.39 Safe and secure cycle parking should be provided and should accord with both Cambridge City Council and South Cambs District Council's policy requirements and cycle parking guidelines, following guidance contained with the Cambridge Cycle Parking Guide February 2010. Cycle parking should be considered early in the design process with an emphasis on Sheffield stands or within garages where appropriate.



Well designed cycle parking in public realm (Sheffield stands)

ENVIRONMENTAL CONSIDERATIONS & SUSTAINABILITY SITE-WIDE SUSTAINABILITY

- 5.40 The development plan policies of relevance are CEAAP policy CE/25 (sustainable building and materials), CE/26 (noise), CE/27 (air quality), CE/28 (an exemplar in sustainability), CLP policy 27 (carbon reduction, community energy networks, sustainable design and construction), policy 33 (contaminated land), policy 34 (light pollution control), policy 35 (protection from noise and vibration), policy 36 (air quality, odour and dust), and SCLP policy CC/1 mitigation and adaption to climate change), CC/4 (sustainable design and construction), and CC/6 (construction methods).
- 5.41 Creating a sustainable development should be a priority underpinning the development of the Land North of Cherry Hinton. An integrated and site-wide approach should be employed to address the environmental, social and economic principles of sustainable design and construction. Development should seek to comply with all essential design considerations set out in the Sustainable Design and Construction SPD (June 2007), or as superseded, and should be strongly encouraged to adopt the recommended design considerations where appropriate.
- 5.42 As the site is within an area of water stress, a key priority for development is to promote water efficiency and water-sensitive design. All dwellings should seek to limit internal potable water consumption to 110 litres/person/day through measures such as low-/dual-flush toilets, using flow restrictors on basin taps, smaller capacity baths and low-flow showers. Opportunities for incorporating rainwater harvesting systems for irrigation purposes, as well as greywater recycling systems, should also be explored.

5.43 Promoters of development should prepare a Sustainability Statement that proposes strategies for addressing the relevant sustainability criteria including water conservation, urban design, biodiversity, pollution and sustainable drainage.

Energy, carbon reduction and adaption to climate change

- **5.44** Development should be designed and built in accordance with the energy hierarchy of:
- Reducing energy demand in the first instance through careful consideration of site layout and by adopting a "fabric-first" approach to building design;
- Using energy efficiently by, for example, using highly efficient systems to provide space heating and hot water and, where appropriate, heat recovery technologies; and
- 3. Only then supplying clean, renewable and low carbon energy to seek to meet the council's 10% on-site energy target, where it is appropriate to do so. Where renewable and low carbon technologies are proposed, applicants should demonstrate that potential adverse impacts on the environment will be reduced as far as possible.
- **5.45** Development should demonstrate how adaptability will be built in so that future building occupants, particularly the vulnerable, are not exposed to unnecessary risks associated with the East of England's changing climate. Proposals should consider options to reduce potential overheating and reliance on

air condition systems in accordance with the following cooling hierarchy of:

- 1. Reducing internal heat generation through energyefficient design;
- 2. Reducing the amount of heat entering a building in summer through measures such as orientation, shading, albedo, fenestration, insulation and, where appropriate, green roofs and walls;
- 3. Managing heat within the building, e.g. through use of thermal mass and consideration of window sizes;
- 4. Passive ventilation;
- 5. Mechanical ventilation;
- 6. Only then considering cooling systems (using low carbon options).
- **5.46** Planning applications should be supported by an Energy Statement outlining the proposed strategy for conforming with the energy and cooling hierarchies outlined above

Air quality

5.47 Air quality should be considered at the design stage, with consideration given to mitigating emissions ant the site wide level. Development should comply with best practice guidance set out in the IAQM Land Use Planning & Development Control: Planning for Air Quality (2017), or as superseded. Consideration should be given to the following (please note the below list is not exhaustive):

- Combustion Emissions Consideration should be given at an early stage to the
 method of energy provision in the context of its impact on air quality including
 location of combustion emissions away from receptors through well cited vents
 or chimney stacks; scale of delivery e.g. district heating or CHP; height of
 chimney stacks in relation to dispersion and corresponding design constraints
- Incorporate facilities for electric charge points Consideration should be given for provision of EV charge points across all appropriate land uses.
- Design should ensure there are no 'street canyons' which could inhibit effective pollution dispersion and lead to future air quality problems.

Energy

- **5.48** The relevant policies are CEEAP policy CE/24 (energy), CLP policy 29 (renewable and low carbon generation), and SCLP policy CC/2 (renewable and low carbon energy), and CC/3 (renewable and low carbon energy in new developments).
- **5.49** The development at LNCH will be designed and built in accordance with the energy hierarchy of reducing energy demand in the first instance (Be Lean), using energy efficiently (Be Clean) and, only then, supplying clean renewable and low carbon energy, where it is appropriate to do so (Be Green). The energy hierarchy is illustrated in figure 47.
- 5.50 Any planning application(s) for development will be supported by an Energy Statement presenting passive energy demand reduction measures adopted in the masterplan, options for further reducing demand through building designs, and options for efficiently supplying heating and cooling to buildings. The Statement(s) will include a preliminary feasibility study identifying opportunities for incorporating building-integrated or standalone renewable and low carbon technologies and, where appropriate, opportunities for 'exemplar' energy efficiency projects and consideration of smart grid approaches.

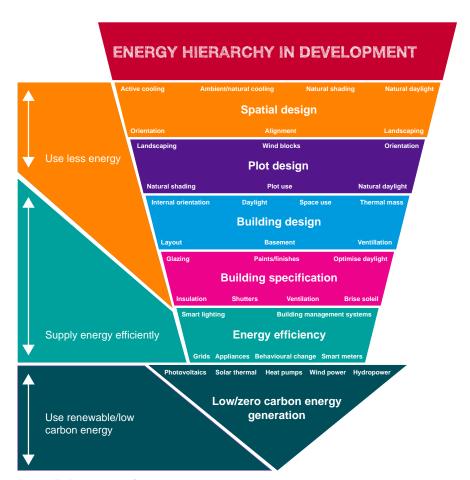


Figure 47: Energy Hierarchy

Surface water drainage strategy

5.51 The development plan policies of relevance are CLP policy 31 (integrated water management and water cycle), policy 32 (flood risk), and SCLP policy CC/7 (water quality), CC/8 (sustainable drainage systems), and CC/9 (managing flood risk). In addition the emerging flood risk and drainage design will follow best practice and planning regulations, including the Cambridge Flood and Water Supplementary Planning Document (SPD) 2016 which aims to guide the approach taken to manage flood risk and the water environment as part of new development proposals. Sustainable drainage must be considered early in the planning process in order to integrate it into the design.

Flood Risk and existing watercourses

- 5.52 The Environment Agency's (EA) flood risk maps show the site as low risk for fluvial flooding, but with some areas as potentially at risk of flooding from surface water. Fluvial flooding is typically defined as flooding caused by water in rivers rising above bank levels, while surface water flooding is flooding caused by heavy rainfall running off land and ponding in areas of low topography, as it flows towards a watercourse or land drain. In reality, flooding is often caused by both sources of flood water combining together.
- 5.53 Modelling of the current surface water flood risk illustrated at the site is currently being undertaken to provide more confidence in the flood extents and

to inform the site layout and master planning process. This follows the planning principles of making space for water and placing the most vulnerable land uses in areas of lowest flood risk. Flood compensatory works are proposed at the site to allow for areas currently shown within the surface water flood risk extent to be incorporated within the emerging masterplan. The form of the flood compensation areas will be designed in agreement with the approving authorities and ensure there is no detriment to offsite areas. These areas will be visually in keeping with the current landscape.

Sustainable surface water drainage strategy

- 5.54 The proposed surface water drainage strategy for the site is being developed and informed by the existing site constraints and hydrological catchments. The surface water drainage will be carefully developed to address the proposed landscape and visual requirements, identified during the baseline analysis for the project. Sustainable drainage will be considered at the outset of the outline planning application process in order to fully integrate the proposed Sustainable drainage into the development proposals.
- 5.55 The proposed development will include a comprehensive Sustainable Drainage System (SuDS) which will play an integral part of the green infrastructure (GI) for the project. The proposed SuDS seeks to deliver long term mitigation by attenuating and treating the development generated surface water runoff and where possible provide betterment. The SuDS

will be designed so it will integrate within the wider landscape proposals and will provide opportunities, where possible, to enhance biodiversity and recreation facilities.

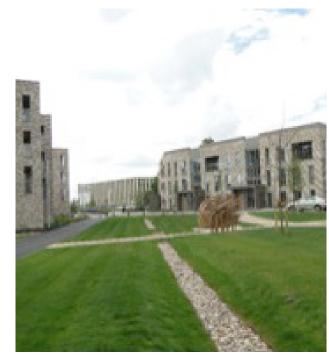
- **5.56** As well as providing a drainage function, the SuDS will also form an important part of the project's biodiversity strategy. The proposed SuDS features will be designed so that they maximise opportunities for habitat creation and wildlife. This will include the introduction of appropriate native planting.
- 5.57 The prevailing surface water strategy to be adopted is a network of on-site planted and unplanted channels and urban rills which will provide attenuation and water quality treatment. Other strategic attenuation areas will also be required, including features such as linear dry swales and landscaped detention areas, providing dual use facilities such as play areas / recreational space in order to provide the necessary storage for extreme rainfall events and overland flow storage. Upstream on plot drainage solutions such as bio-retention planters and permeable paving will also provide pre-treatment for hard standing surfaces such a parking areas. Roof runoff, where feasible, will outfall directly into smaller on plot urban rill arrangements, bioretention planters, porous paving or rainwater gardens. Piped networks will still be appropriate in some areas of the site due to the gradients which prevent the use of open channels and rills. The incorporation of large permanent open water features, attractive to wildfowl,

will be discouraged in order to avoid the risk of bird strike. It should also be noted that proposals for below ground attenuation will be considered as a last resort.

- **5.58** Due to the site's close proximity to Cambridge Airport, the SuDS will need to be designed to take into account the risks from bird strike. Therefore, ongoing discussions are being undertaken with the aviation authorities to ensure the proposed SuDS is designed in accordance with best practice.
- **5.59** High groundwater levels and some isolated areas of soil contamination (subject to confirmation) may potentially exist in parts of the site, this will need to be considered and any results used to inform the emerging drainage strategy.

Foul Water Drainage

5.60 Foul water drainage will discharge from the development to a local foul public sewer. This will be subject to agreed discharge rates with Anglian Water and is likely to require the presence of pumping station/s within the proposed development. Previous discussions with Anglian Water, as part of the pre-application process, indicates foul storage will be required. The storage can either be provided within the site boundary or at a local pumping station. Ongoing consultation with Anglian Water will be undertaken to ensure the development proposal meets their requirements.



Dry swale, Bell School Cambridge



Planted urban conveyance rills (Robert Bray Assoc.)



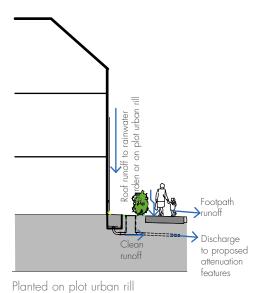
Bio-retention planter, Bell School Cambridge

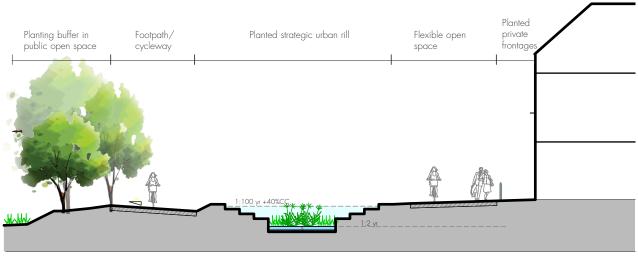


Planted urban conveyance rills (Robert Bray Assoc.)

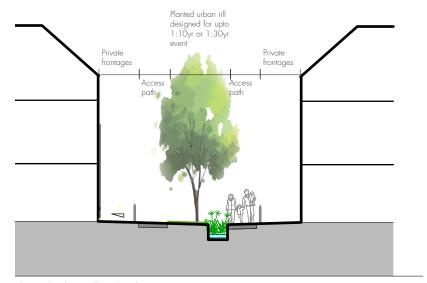


Figure 48: Sustainable drainage strategy



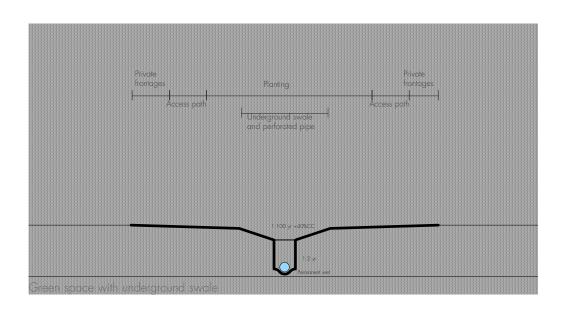


Typical planted strategic urban rill



Planted urban rill within housing area

Figure 49: Typical SuDS sections illustrating a range of range of attenuation features



LANDSCAPE AND OPEN SPACE

- **5.61** The development of the site provides the opportunity to create an attractive green framework of public open spaces and wildlife habitats and to encourage sustainable lifestyles. The landscape strategy should be built around the existing landscape and will provide greenways, formal and natural play, pocket parks and allotments in line with policy requirements.
- 5.62 This section considers the following:
- Open spaces and recreation
- Trees
- Ecology
- 5.63 The relevant policies in the emerging development plans are CEAAP policy CE/20 (public open space and sports provision), CE/21 (countryside recreation), CLP policy 55 (responding to context), policy 56 (creating successful places), policy 59 (designing landscape and the public realm), policy 68 (open space and recreation provision through new development), SCLP policy HQ/1 (design principles), policy NH/2 (protecting and enhancing landscape character), policy NH/6 (green infrastructure), NH.7policy NH/8 (mitigating the impact of development in and adjoining the green belt), policy NH/12 (local green space), and policy SC/7 (outdoor play space, informal open space and new developments), SC/8 (open space standards).

General strategy

- **5.64** Development should seek to ensure an optimum distribution of open space so that all residents enjoy proximity and easy access to open space without having to overcome barriers to movement, such as major roads. Figure 50 and table 1 illustrate how open space could be provided across the site.
- **5.65** The accessibility of open spaces and play areas will have a direct impact on their functional success. More accessible spaces usually tend to attract a greater level and range of activities, thereby increasing levels of natural surveillance that can help deter anti-social behaviour and potentially reduce the need for repair.
- **5.66** A mix of spaces will be required to meet recreation needs. A balanced approach will be required to resolve potential conflicting demands, for example demands between natural, tranquil spaces and those for children's play. Open spaces should be connected through the incorporation of street trees and SuDS features.

Public realm

5.67 The development framework plan establishes a series of key nodal public spaces along the main routes. These are important to provide a strong sense of place. Principal among these will be the local centre which is intended to be a busy public space where the community congregate. This square should be designed based on a shared space philosophy and be of the highest quality.

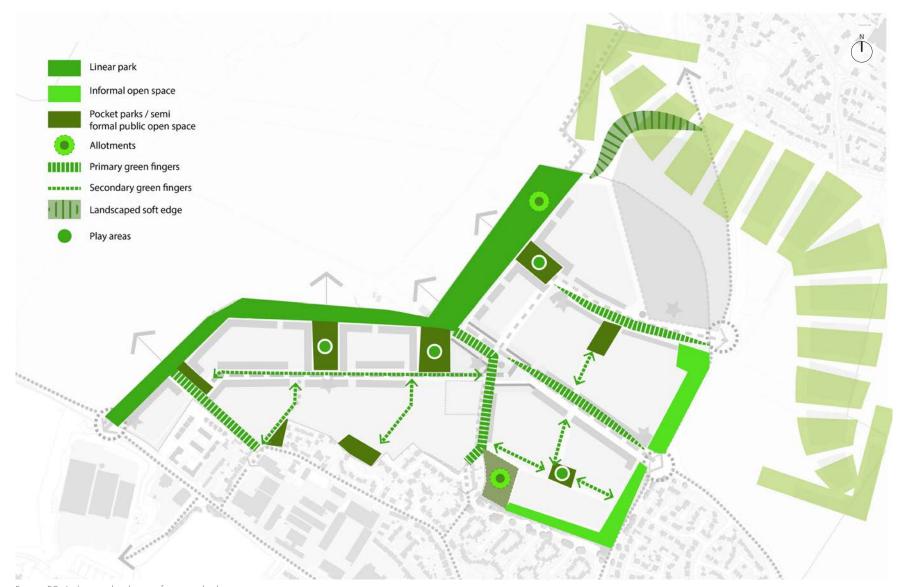


Figure 50: Indicative landscape framework plan

	Precedent	Description
Linear park		 Informal open space provides a green setting Semi-natural in character with opportunity for tree planting and well maintained edges Pedestrian cycle access along corridor Buffer between residential dwellings and airport land
Green fingers		 Informal open space provides a green setting Semi-natural in character with opportunity for tree planting Linking green spaces across site and connecting residents to linear park
Pocket parks		 Designed to provide usable open space Informal in appearance Use of native trees, shrub planting and low hedging, with amenity grass Opportunity for informal, natural play spaces and neighbourhood meeting areas
SuDS (incl. Dry swales and bio-retention planters)		 Provides a green setting Provides mitigation of surface water flooding Ensures landscaping permeates through the site as a whole
Street trees		 Provide a green setting Use of native trees
Allotments		 Important to local identity Informal in appearance Use of native trees, limited shrub planting and low hedging, with amenity grass

Table 1: Green infrastructure

Open space and recreation

- 5.68 The relevant planning policies are CEEAP policy CE/20 (public open space and sports provision), CLP policy 68 (open space and recreation provision through new development), SCLP SC/7 (outdoor play space, informal open space and new developments), and SC/8 (open space standards).
- **5.69** The integration of semi-natural habitats within new developments lies at the heart of much current thinking on urban nature conservation. The extension of this concept to form wildlife corridors, green grids or networks has added benefits where these include public open spaces and green routes providing alternative green recreational routes for pedestrians and cyclists.
- 5.70 Development of the site will include a green corridor and series of smaller linked green spaces, comprising an informal linear park, play space and allotments. As well as reinforcing the city-wide green network, connected open spaces can play an important part in helping to integrate new development into the existing area. Green spaces will be linked by street trees and SuDS features
- **5.71** Development of the site should ensure that an adequate level and mix of recreation space is provided to serve the new community. This provision should be of a high and durable quality, designed

to ensure they are accessible, well-connected and integrated with new and existing communities. They should also encourage healthy lifestyles and the use of sustainable travel modes, such as cycling.

Open space requirements

- 5.72 Table 2 outlines the public open space (POS) requirements based on the emerging policy position as set out in Cambridge City Council Proposed Submission July 2014 (Policy 68 requires open space provision as per table 1.1 Open space and recreation standards from Appendix 1).
- **5.73** This table sets out the requirements, resultant land take, based on 1200 units, using the agreed population multipliers.

Type	Policy standard	Multiplier
	hectares per 1000	2.3/1000
	population	
Informal open space	2.2	6.07 ha
Allotments	0.4	1.10 ha
Outdoor sports facilities	1.2	3.31 ha
Indoor sports facilities	1 sports hall per 13,000 people. 1 swimming pool per 50,000 people	N/A
Children and teenagers play space	0.3	0.83 ha
Total	4.1	11.30 ha

Table 2: Open space provision requirements

5.74 It must be demonstrated through the detailed design that open space located adjacent to the primary street is of a high quality.

Formal sports provision

- 5.75 Provision may be made for formal sports pitches in part through community access to pitches and facilities at the secondary school, and / or via improvements to existing facilities in Cherry Hinton. Final provision of sports pitches should be decided in consultation with the relevant stakeholders and will be secured through the planning application process.
- 5.76 The full benefits and requirements of open space and recreation are documented in further guidance published by the city council in 2014, including Open Space and Recreation Strategy, Parks for Cambridge People and Cambridge Sports Strategy.

Play space and sports provision

5.77 Children's play space for a range of ages should be provided within the development. It is estimated that approximately 0.8ha of equipped play space / outdoor provision would be required on site. It is anticipated that this will comprise a minimum of two local equipped areas of play (LEAP) and one neighbourhood equipped area of play (NEAP). Local areas for play (LAPs) will be dealt with at a later stage as part of the outline planning application.

Informal open space

5.78 Some informal open space should be provided within the new built-up areas, for example, green access corridors, informal kick-about areas and small buffer areas adjacent to equipped areas of play. The majority of provision is likely to be located along the green corridor, which should include approximately 6ha of natural green space.

Allotments

5.79 Allotments should be provided in close proximity to overlooking homes and be accessible for new and existing residents. The likely requirement for the provision of allotments across the site is approximately 1.1ha, although the exact extent will be determined as part of the outline planning application.

Trees

5.80 Existing trees are an important factor on development sites and a material consideration in the UK planning system. There are a number of trees on the site alongside the PRoW. These should be retained and incorporated into landscape proposals where possible.

5.81 Trees play an important role in the public realm and in enhancing existing landscape features. Street trees should be planted along streets and within public open spaces. Species should be selected to establish a sense of hierarchy through the streets and spaces, with larger trees on key routes and spaces.

Ecology

- **5.82** Three non-statutory designated ecological sites are present on the site boundaries:
- Airport Way RSV County Wildlife Site (CWS)
 is located along the eastern boundary. The
 CWS includes the road verges and associated
 hedgerows/scrub on Airport way. It is of interest for
 its population of perennial flax, a nationally scarce
 plant
- Teversham Drift Hedgerow City Wildlife Site (CiWS) forms part of the south boundary
- Teversham Protected Road Verge (PRV) forms part
 of the east boundary. The PRV includes the road
 verges and associated hedgerows/scrub on Airport
 Way and Cherry Hinton Road. It is of interest for the
 quality of the grassland habitat present in the road
 verge.

- **5.83** Design measures to minimise impacts of the development on these features are as follows:
- Retention and protection of hedgerows during construction where possible; planting of additional hedgerow using a diverse species mix to achieve net enhancement of this habitat resource
- Retention and protection of non-statutory designated sites on the boundaries of the site during construction through the use of buffer zones and the provision of adjacent public open space. Creation of speciesrich grassland to achieve net enhancement of this habitat resource
- Retention of drainage ditches with a buffer to avoid impacts on water vole and enhancement of water vole habitat (creation of pools and re-profiling of drainage ditches, and provision of SUDs features)
- Retention and enhancement of habitat features, such as hedgerows and ditches, suitable for bats. Using a lighting scheme which avoids illumination of these retained habitat features. The incorporation of bat roosting features in buildings within the proposed development.

LAND USES

Housing

- 5.84 The relevant policies in the development plan are CEAAP policy CE/7 (Cambridge East housing), CLP policy 45 (affordable housing and dwelling mix), policy 50 (residential space standards), policy 51 (lifetime homes and lifetime neighbourhoods), SCLP H/7 (housing density), policy H/8 (housing mix), policy H/9 (affordable housing), and H/11 (residential spaces standards for market housing).
- **5.85** In line with the allocation, the primary land use will be residential housing. LNCH has capacity for up to 1,200 homes during the local plan period to 2031.
- **5.86** Based on initial capacity studies the 1,200 residential units are likely to comprises a mix of 35% apartments and 65% houses, although the exact mix is flexible and will be informed by consideration of the housing market dynamics and evolving urban character.
- **5.87** The average overall net housing density proposed for the site will be 40-50 dwellings per hectare (dph). Lower densities will be located on the southern edge of the site adjacent to the existing settlement, with density increasing northwards. The higher densities will focussed around the local centre and main activity zone.

- **5.88** The site is suitable for a range of housing typologies. A wide choice, type and mix of housing will be provided to meet the needs of different groups in the community, including families with children, older people and people with disabilities. This will assist the creation of a sustainable, mixed community within the site. The site may provide specific homes for the elderly depending on market demand.
- 5.89 The affordable housing policies require a minimum of 40% to be delivered on the site. Developments should include a mix of dwelling sizes, types and tenures to meet projected future household needs within Cambridge. The development will be tenure blind with the affordable homes integrated with market housing and not identified through location, segregation or the appearance of buildings.
- **5.90** Dwellings will be designed to provide future occupiers with efficient internal layouts, room sizes and access to the private amenity space. Dwellings will aim to provide adaptability and flexibility.

Education

- **5.91** The relevant policies are CEAAP CE/9 (community services), CLP policy 74 (education facilities), and SCLP policy SC/4 (meeting community needs).
- **5.92** The site allocation requires provision of a primary school and secondary school. The primary school should be located within close proximity of other community facilities. The secondary school should be located close to the edge of the development and within relation to key transport routes.
- **5.93** In respect of the new primary school, provision should be made for a 2 form entry (FE) primary school and 2.3 hectares to serve the needs of the community.
- **5.94** To ensure the secondary school is educationally and financially viable and to serve the wider needs of Cambridge, it will need to be a minimum of 6 FE. The final site size will be determined through further detailed planning and negotiation.
- 5.95 The preferred locations for the primary and secondary schools are shown indicatively on figure 31. The design of the school buildings will be expected to perform a positive role within the urban environment.

Community & other non-residential uses

- **5.96** The relevant development plan policies for community uses are CEAAP CE/9 (community services), CLP policy 73 (community, sports and leisure facilities), and SCLP policy SC/4 (meeting community needs).
- 5.97 Community facilities should be centrally located within the development site and within easy reach of all residents of the new community. The facilities should also be accessible for existing residents of Cherry Hinton. It is intended that the development will not compete with the Cherry Hinton High Street offer.
- **5.98** The local centre will reflect the needs of the likely future population whilst supplementing facilities already available within Cherry Hinton and should include a number of small local shops and a nursery, although the final provision of the social infrastructure has to be determined as part of any outline planning application.









CHARACTER AND FORM

5.99 The relevant development plan policies are CLP policy 55 (responding to context), policy 56 (creating successful places), policy 57 (designing new buildings), policy 59 (designing the landscape and the public realm) and SCLP HQ/1 (design principles).

Layout

- 5.100 The proposals for Land North of Cherry Hinton must create a clear identity that is cognisant of the 'village' character that existing residents of Cherry Hinton cherish. It will ensure placemaking is central to the layout, with the highest quality materials, architecture, landscape and public realm.
- 5.101 Existing features of the site, including the distinctive topography, treed public right of way, historic hedgerow and attractive views across the airport and towards Teversham, should be woven into the layout to create a memorable and attractive new neighbourhood.
- **5.102** The initial vision and design principles outlined in this SPD will build upon and strengthened to establish a compelling narrative for the new neighbourhood with a strong identity.













Successful contemporary development at Cherry Hinton and Southern Fringe including Accordia, Ninewells and Abode

Building heights and density

- **5.103** Figure 51 shows an indicative building heights strategy for the site, setting out the broad principles. The final strategy will be agreed through the outline planning application and informed by further analysis and the local context
- 5.104 Based on the net residential area (including the local centre) of between 27 and 30 ha, the average overall net housing density proposed for the site will be 40-50 dwellings per hectare (dph). This excludes primary infrastructure such as public open space and the main street, along with non-residential land uses such as the primary and secondary schools. Lower densities will be located on the southern edge of the site adjacent to the existing settlement, with density increasing northwards across the site. The higher densities will be focussed around the local centre and main activity zone.
- **5.105** A range of building and housing types should be provided across the site. This range of typologies will help create an integrated community, with homes suitable for a range of household types and sizes. Careful consideration should be given the landscape and visual impact of building heights across the site.
- **5.106** New homes should maximise the benefit of solar orientation and outlook, whilst providing a robust street and block layout.



Figure 51: Indicative building heights strategy

5.107 A range of building heights should be provided across the site and create visual interest and character. In broad terms, building heights should increase around the local centre and along key movement corridors. Building heights should respond

to the higher ridgeline, minimising the impact on long distance views. Building heights should ensure an appropriate edge to the green belt and take account of the potential to help mitigate airport noise.

Street typologies

- 5.108 Streets are to be designed to be safe and legible and must add to the richness of the built environment. For the primary street a number of options are currently shown, and the final configuration will be determined via the outline application. The primary street must be legible and be perceived as the main route through the scheme. Built form and elevational treatment should reflect its primary role, with a high proportion of the 3-4 storey dwellings along this route. The intended design speed limit is 20mph.
- **5.109** The majority of streets will be lower order in character, with reduced traffic speeds to slow traffic and encourage cycle and pedestrian movements.
- 5.110 Tree planting along all streets will be fundamental to establishing a green setting to the housing, reflecting the local character of Cherry Hinton and connecting the green spaces and site with the surrounding area. A high proportion of smaller ornamental flowering trees should be used along lower order streets, with larger trees on primary routes focused within the open space and key public spaces.

Utilities

- **5.111** The gas main is intended to be realigned along the primary street. The detailed realignment will be subject to further evolution of the master plan principles and consultation with National Grid Gas (NGG).
- 5.112 An appropriate easement for the realigned gas main should be incorporated into design proposals. This may be a negotiated easement of 3m either side of the gas main. An appropriate building proximity distance of 3m either side of the new gas main should also be incorporated in the design proposals, however any building must not impact the maintenance or access to the gas main.
- **5.113** Any proposals to locate a feeder road over the new gas main would need to be agreed with NGG, as would proposals to lay of any future new utility services within the easement.





DEVELOPMENT PRINCIPLES

5.114 Figure 52 illustrates the key development principles. The plan establishes a robust framework for development of LNCH. Figure 52 is shown for indicative purposes only, with the final layout to be agreed through the outline planning application.

Constraints and challenges

- Mitigating significant additional traffic congestion in the immediate locality
- · Noise intrusion from airport and Cherry Hinton Road
- Gas main crossing the site could compromise the layout unless diverted
- · Protecting existing habitats of value
- · Mitigating surface water flooding
- Providing safe pedestrian and cycle connections to existing facilities
- Retaining distinct 'village' character of Cherry Hinton
- Maintaining soft green edge to Teversham

Opportunities

- Create an attractive new urban edge and memorable gateway to Cherry Hinton
- Improve cycle and pedestrian connections between Cherry Hinton and Teversham
- Integrate with the existing village and support local facilities
- · Celebrate views across the airport
- Built form should positively respond to the distinct topography of the Site
- Create new civic square in central location
- Secondary school to serve wider community and aid integration
- Provide a new dedicated cycle/pedestrian link between Cherry Hinton Road and Coldhams Lane
- Use of the existing water course as a basis of a SuDS system to mitigate surface water flooding and as a basis for green corridors through the development

Key development principles

- Provide safe and direct cycle routes between the settlements of Cherry Hinton and Teversham and between Coldhams Lane and Cherry Hinton Road
- A new, centrally located civic centre with local shops, community hall and primary school
- Incorporate a bus loop from Airport Way that passes through the local centre
- Celebrate views across the airport by designed vistas along greenways
- Play provision within the primary and secondary school should be available for community use outside of school hours
- Establish a strong green framework that includes greenways, formal and natural play, pocket parks and allotments
- Promote of low carbon principles and the integrate SuDS into the landscape
- Establish a linear nature park along the airport edge incorporating the existing countryside walk along the existing public footpath
- Create a clear hierarchy of streets which are attractive and safe routes for pedestrians and cyclists.



Figure 52: Indicative plan illustrating key development principles

PLANNING OBLIGATIONS

Introduction

5.115 This section provides a general overview on the planning obligations framework and requirements for the development. At the time of finalising this SPD for public consultation purposes, the joint Cambridge City Council/ South Cambridgeshire District Council Local Plan process is ongoing, aiming for adoption in spring 2018. At present, there is no date scheduled for the Community Infrastructure Levy (CIL) hearing and the programme for this is currently under discussion with the Local Plan Inspector. In addition, the evolution of the outline applications is at a very early stage of development and a number of principles relating to key infrastructure requirements are still under discussion with the district councils, Cambridgeshire County Council and other public service stakeholders. This section therefore provides a starting point for establishing the planning obligations requirements for the development but this will be an iterative process which will be developed further, as the project progresses. Key documents that will inform the planning obligations requirements in more detail will include the outline planning application Environmental Statement and Transport Assessment; together with any work commissioned /carried out by the local authorities and other public service stakeholders and the outcomes of the public consultation on both the SPD and the outline application in due course. The schedule below is therefore not comprehensive or final but based upon the best information available at the present time.

5.116 Given the likely timing of the submission of outline applications, towards the end of 2017, it is likely that this development will be considered under the \$106 regime rather than the CIL regime but this will be formally confirmed by the district councils in due course. A particular consideration will be the extent of key on-site infrastructure such as the primary and secondary schools and community facilities which need a high level of certainty in terms of timing of delivery.

Planning Policy Framework

National context

- CIL Regulations 2010 -introduced the three statutory tests against with which all planning obligations requirements must be compliant namely: necessary to make the development acceptable in planning terms; directly related to the development; fairly and reasonably related in scale and kind to the development.
- National Planning Policy Framework (NPPF) 2012

Local Context

- Joint Cambridge East Area Action Plan (CEAAP) Adopted February 2008
- · Cambridge Local Plan 2006

- SCDC Core Strategy 2007
- SCDC DC Policies DPD 2007
- Emerging Cambridge Local Plan 2014
- Emerging SCDC Local Plan 2014
- Cambridge City Council Affordable Housing SPD 2008
- Cambridge City Council Planning Obligations SPD 2010
- Cambridge City Council Sustainable Design and Construction SPD 2007
- Cambridgeshire Flood and Water adopted by SCDC in November 2016/ City Council has yet to formally adopt –has emerging SPD status 2016.
- 5.117 Other topic-specific SPDs and guidance e.g. Public Art (2010), Open Space and Recreation Strategy 2010.CIL Regulations 2010 –introduced the three statutory tests against with which all planning obligations requirements must be compliant namely: necessary to make the development acceptable in planning terms; directly related to the development; fairly and reasonably related in scale and kind to the development.
- **5.118** Issues such as timing of delivery, triggers and amount of financial contributions where applicable will be considered as the pre-application process moves forward on the outline applications.

Category of Infrastructure	Requirements
Housing	Affordable Housing –on-site provision of 40% or more subject to viability; affordable housing tenure split to be agreed in detail but starting point will be the requirements set out in the City Council's Affordable Housing SPD
Education - secondary	Land (8ha) for and financial contributions (equivalent to maximum of 2FE) towards provision of 8 FE secondary school. Shared community use encouraged subject to further discussions. School to be delivered in 2 phases. Specification similar to Trumpington Community College
Education - primary	Land (2.3ha with potential to expand to 3ha) for and financial contributions towards provision of 2 FE primary school with 2no. early years classes (with potential to expand to 3FE). Shared community use (not playing pitches) encouraged subject to further discussions. Specification similar to Wing primary school
Education - revenue	Any school revenue support requirements to be confirmed
Library / lifelong learning	Financial contributions towards improvements /expansion of existing library facilities within the Cherry Hinton area
Transport - strategic road network / capacity improvements	To be confirmed through Transport Assessment process
Transport –walking, cycling and equestrian	To be confirmed through Transport Assessment process
Transport –bus service and associated Passenger Transport strategy	To be confirmed through Transport Assessment process
Transport -travel plans	To be confirmed through Transport Assessment process
Highways -road junction, crossing and other local improvements	To be confirmed through Transport Assessment process
Community centre/hall	Likely to include provision of a community centre/hall on site – further discussions ongoing to confirm requirements
Faith provision	Will need to be addressed through consideration of community facilities requirements
Primary health care facilities	Financial contributions towards new GP facilities or improvements to /expansion of existing GP facilities off-site within Cherry Hinton area
Community development workers, youth and project workers, sports development worker	Financial contributions for an initial fixed period to support the early residential community
Community chest	Financial contribution to provide start up grants for community projects
Open space –outdoor sports facilities	Provision for/contributions towards outdoor sports facilities including playing pitches and other outdoor sports facilities; changing facilities. Likely to be a mixture of on-site provision and off-site contributions. There is scope to consider co-location of community sports pitches with the secondary school subject to further discussion. To note CEAAP position that co-located shared grass pitch provision does not count towards the open space standards
Open space –Indoor sports facilities	Provision for/contributions towards indoor sports facilities including sports hall and swimming —could be a mixture of on-site and off-site provision or contributions to off-site provision within the Cherry Hinton area

Category of Infrastructure	Requirements
Open space –allotments	On-site provision in accordance with the City Council's open space standards
Open space-informal open space	On-site provision in accordance with the City Council's open space standards
Open space –provision for children and teenagers	On-site provision in accordance with the City Council's open space standards
Open space maintenance	Financial contributions will be sought for a 12 year maintenance period in the event that any open space facilities are agreed to be adopted by Cambridge City Council
Public realm including street trees and associated maintenance	Site-specific requirements to be identified through the outline pre-application process
Archaeology	Requirements to be identified through the EIA/outline pre-application process
Ecological mitigation /biodiversity enhancement	Requirements to be identified through the EIA/outline pre-application application process
Renewable energy	Strategy to be developed as part of the EIA/ outline pre-application process
Waste -strategic household waste recycling centre	Financial contributions towards new strategic facilities to be delivered off-site and procured by the County Council
Waste -individual household waste and recycling receptacles	Financial contributions or direct provision –to be confirmed as part of the outline application pre-application process
Local recycling facility	Requirements to be identified through the outline pre-application process
Air quality mitigation	Requirements to be identified through the EIA/outline planning application process
Sustainability (including sustainable drainage)	Requirements to be identified through the EIA/outline planning application process. Any bespoke sustainable drainage elements agreed to be adopted by Cambridge City Council will require a 25 year maintenance contribution
Utilities including electricity substations, sewage pumping stations, Super-Fast Broadband installation, provision of sprinklers/fire hydrants	Requirements to be identified through the outline pre-application process
Public art	A site-wide public art strategy will need to be submitted as part of the outline application documentation , setting out the principles for public art provision, funding and delivery
S106 monitoring contributions	Financial contributions to provide for the monitoring of planning obligations
Local construction employment scheme/apprenticeships	Requirements to be identified through the EIA/outline pre-application process
Other site specific requirements	To be identified through the EIA/outline pre-application process

APPENDIX 1: GLOSSARY OF KEY TERMS

- Air Quality Management Areas: Any location within the boundaries of a Local Authority where the Air Quality Objectives are not likely to be achieved must be declared as an Air Quality Management Area (AQMA). The area may encompass just one or two streets, or it could be much bigger. The Local Authority is subsequently required to put together a plan to improve air quality in that area - a Local Air Quality Action Plan.
- · Built form: Buildings and their structures.
- Cambridge Local Plan 2006: This is the currently adopted Local Plan which sets out the policies and proposals for developments within Cambridge up until 2016. It includes a number of detailed policies and allocations where the Council would like new development to occur.
- Cambridge Local Plan 2014 Proposed
 Submission: Provides the policies and proposals for accommodating future developments within
 Cambridge up until 2031. The Plan is currently the subject of an independent examination. If found sound, the Plan will be adopted and will at that point replace the 2006 Local Plan. At this stage, this emerging document is in draft form only. It includes a number of detailed polices and draft allocations setting out how and where the Council would like future development to occur.

- Character and Form: A combination of: the layout of buildings and streets; the height and appearance of the buildings; the amount and distribution of open space; and the density of a development.
- Concept plan: The concept design represents the initial response to the project brief.
- Development principles: A set of principles which underpin the redevelopment of the Mill Road Depot site.
- Density: Density is a method of measuring the intensity of development within a specified area.
 Density is calculated by dividing the number of homes by the site area in hectares.
- Design Code: A set of illustrated design rules and requirements which instruct and advise on the appearance, layout and form of development.
- Framework Plan: A plan used to illustrate how established development principles and site constraints have directly informed the design of the masterplan.
- Green Belt: A policy for controlling urban growth.
 The fundamental aim of green belt policy is to

- prevent urban sprawl by keeping land permanently open, and consequently the most important attribute of green belts is their openness.
- Green infrastructure: A strategically planned and delivered network comprising the broadest range of high quality green spaces and other environmental features.
- Ground run up enclosure: A three-sided, open top facility, able to accommodate an aircraft while maintenance mechanics conduct high-power engine run-up inspections.
- Hectare: An area of 10,000 square metres
- Legibility/Legible: The degree to which a place can be easily understood and navigated.
- Local Plan: Abbreviation used to describe the statutory plan adopted by the City Council.
- Mitigation: The purpose of mitigation is to avoid, reduce and where possible remedy or offset any significant negative (adverse) effects on the environment etc. arising from the proposed development.
- · Parking Standards: Document setting out maximum

permissible levels of car parking for various land uses, along with minimum levels of cycle parking.

- Planning Applications: There are two possible approaches for the submission of a planning application. An 'outline' application establishes the broad principles of a development and sets development parameters, with more detailed matters submitted later as 'Reserved Matters' applications. Alternatively, a 'full application' would provide all details of the proposed development at the outset.
- Public Realm: The areas of city or town (whether publicly or privately owned) that are available, without charge for everyone to use or see, including streets, parks and open spaces.
- Planning and Development Brief: A planning policy document to help guide the preparation and assessment of future planning applications for specific sites coming forward for redevelopment.
- Planning obligations: an established and valuable mechanism for securing planning matters arising from a development proposal. They are commonly used to bring development in line with the objectives of sustainable development as articulated through the relevant local, regional and national planning policies.

- Radburn layout: A concept for planned housing estates, based on a design that was originally used in Radburn, New Jersey, United States.
- South Cambridgeshire District Council Core Strategy 2007: The Core Strategy Development Plan
 Document (DPD) sets out the overall approach to development in the district. It reflects the strategy in the Cambridgeshire & Peterborough Structure Plan 2003 with the focus on locating new development in the most sustainable locations, in this case close to Cambridge and in the proposed new town of Northstowe. These proposals are developed in detailed Area Action Plans. The emphasis of the new development is on housing, to help redress the current imbalance between jobs and houses.
- Draft South Cambridgeshire District Local Plan: The Local Plan is a set of policies and land allocations that will guide the future of South Cambridgeshire district up to 2031.
- Sustainability Appraisal (SA): Sustainability Appraisal (SA) is a compulsory requirement under the 2004 Planning and Compulsory Purchase Act and the 2001/42/ EEC European Directive. A process used to appraise planning policy documents in order to promote sustainable development. Social, environmental and economic aspects are all taken into consideration.

- Sustainable Design and Construction SPD: This SPD provides guidance on the policies within the Cambridge Local Plan 2006 that relate to sustainability.
- Sustainable Development: Sustainable Development
 is a broad term that encompasses many different
 aspects and issues from global to local level.
 Sustainable development can be described as
 'Development, which meets the needs of the present
 without compromising the ability for the future
 generations to meet their own needs' (after the 1987
 Report of the World Commission on Environment and
 Development the Brundtland Commission).
- Sustainable Urban Drainage Strategy (SuDS):
 Sustainable urban drainage systems control and slow down surface water run off by mimicking natural drainage process in built-up areas. These systems include: areas for surface water storage; areas for water to infiltrate the ground slowly; and systems for limiting water flow.
- Supplementary Planning Document (SPD): SPDs were established as part of the Planning and Compulsory Purchase Act 2004 in United Kingdom law. They may cover a range of issues, be broadly thematic or sitespecific.
- Urban morphology: The study of the form of human settlements and the process of their formation and transformation.

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