

Figure 13: Topography mapping - District wide scale

3.3 Topography

3.3.1 The topography of South Cambridgeshire consists of flat and low-lying (below 10m AOD) fen peat to the north of Cambridge, higher (up to 80m AOD) rolling Gault Clay ridges to the west, and a broad chalk ridge (up to 150m AOD) to the south and east. The city of Cambridge and the area to the south of the city are low-lying, having been eroded into broad valleys by the main rivers that flow through the area (Figure 13).

Sensitivity to tall buildings

3.3.2 The relatively flat nature of the district allows for long panoramic views across the landscape from some vantage points, making the area sensitive to buildings and structures that rise above the treeline and are incongruous with its rural and village character.



Image 32: Clopton © Bogbumper



Image 33: View east towards Fulbourn © Sps1995

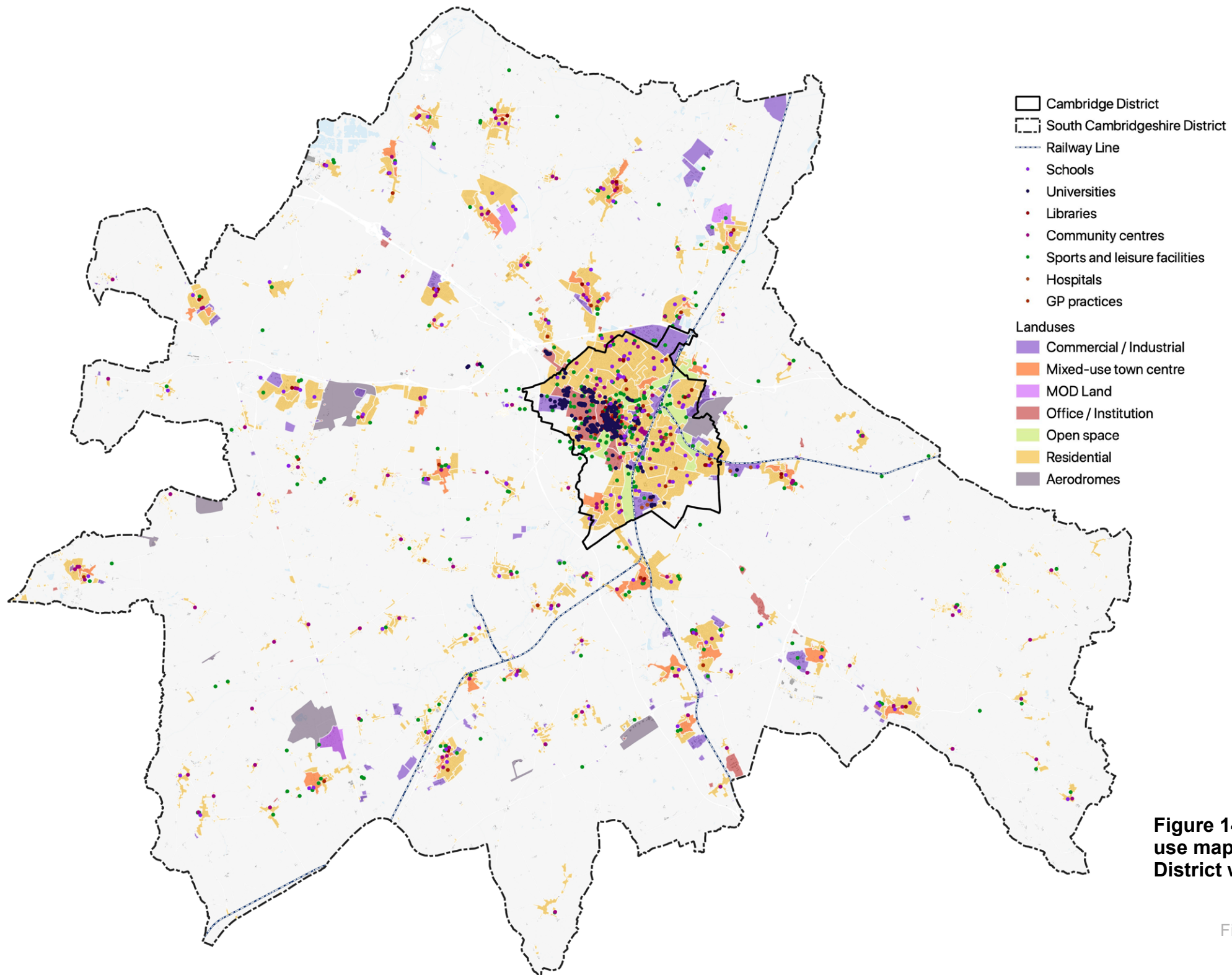


Figure 14: Land use mapping - District wide scale

3.4 Land uses

3.4.1 South Cambridgeshire is characterised by small villages that are set within the rural landscape. These villages are primarily residential use, with some mixed-use town centre type uses in some of the larger villages. There are also several areas of industrial or commercial use, which tend to be concentrated in the larger village centres and/or along the 'A' roads. The majority of the office and institutional uses are concentrated in Cambridge. Campus style employment centres are generally more common in South Cambs including Cambourne Business Park, Cambridge Innovation Centre in Waterbeach, Cambridge Science Park, ARM/Peterhouse Technology Park as well as the large bio/life science campus in the 'southern cluster' such as Babraham Research Campus and the Genome Campus (Figure 14).

Sensitivity to tall buildings

3.4.2 There is growing pressure in South Cambridgeshire for campus style employment centres. These are typically characterised by buildings with large floor plates which are not in keeping with the area's rural and village character. There is sensitivity to buildings and structures that are not only tall but also those that are bulky, as they do not reflect the rural context in terms of scale and massing. The district is also identified as location for significant new settlements. Naturally these will need to make an efficient use of available land, and specifically in new local centres, but also associated employment areas, aspire for increased densities and heights, possibly bringing forward pressures for taller buildings that the area has typically seen previously.

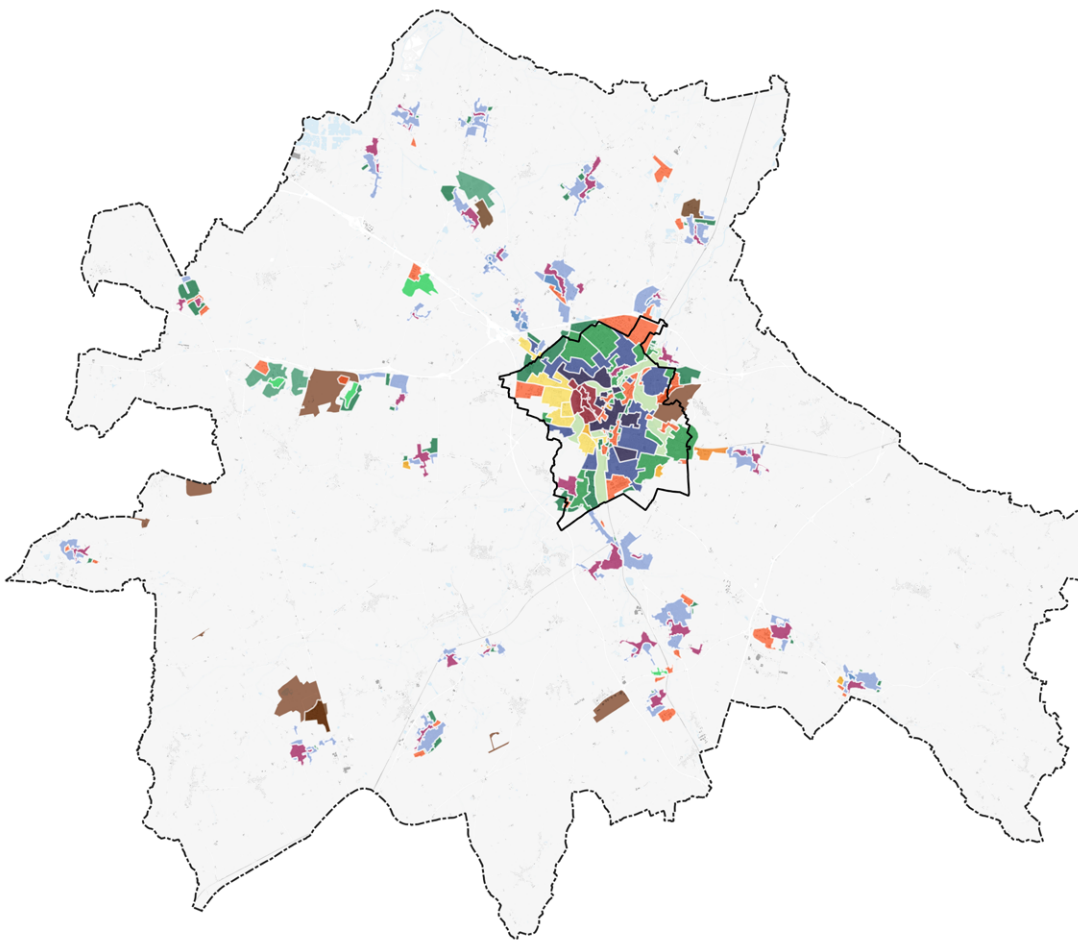


Figure 15: Character areas mapping - District wide scale

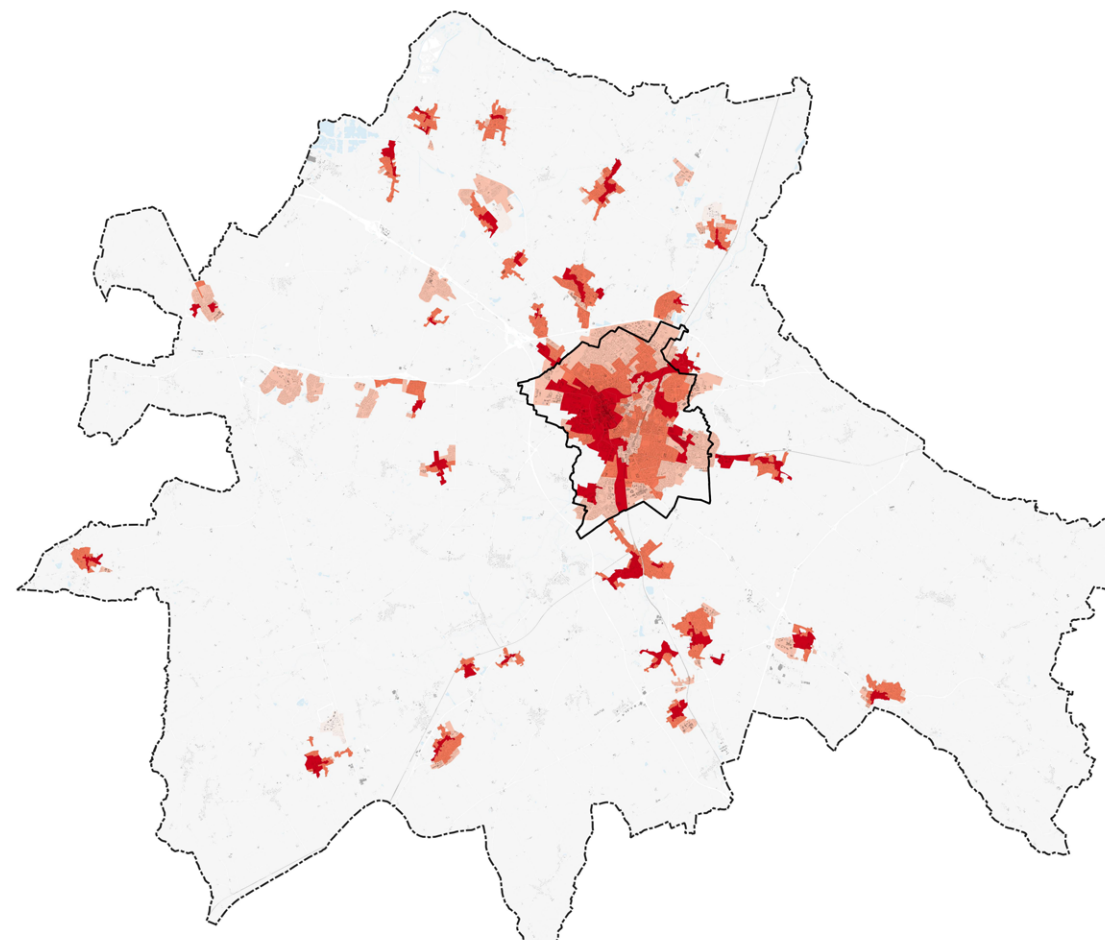
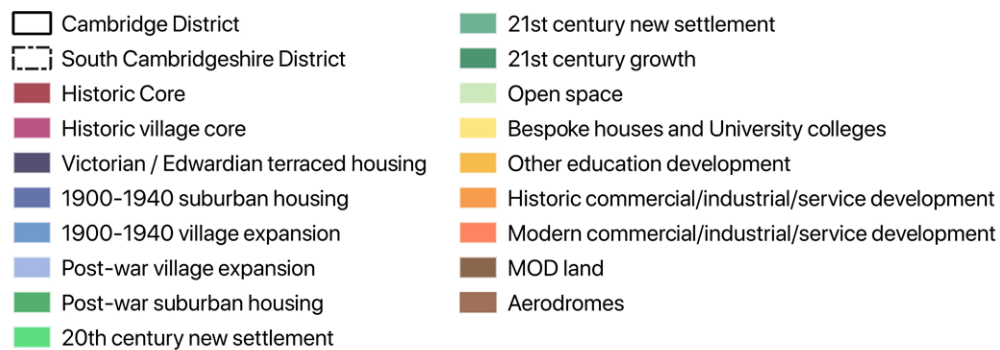
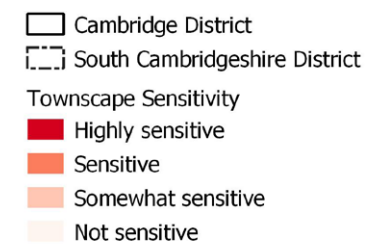


Figure 16: Townscape Character Sensitivity - District wide scale



3.5 Townscape character

3.5.1 As part of this commission, an updated character assessment for a number of villages / settlements in the district has been produced based on a review and analysis of existing development plan documents, designations, evidence base documents, and previous background studies.

3.5.2 The townscape character of the district is reflective of the historical development of the area. The majority of villages in the district are centred around an historic village core, from which the villages have expanded over time as the result of 1900s-1940s village expansion, post-war village expansion and 21st century village expansion.

3.5.3 There are several areas which are characterised by 20th and/or 21st century new settlement such as Cambourne, Bar Hill and emerging at Northstowe and Waterbeach.



Image 34: The Green, Duxford © Wikimedia

3.5.4 The district is also characterised by commercial/industrial and service development which tend to be concentrated in the larger village centres and/or along the 'A' roads (Figure 15).



Image 35: Bourn Windmill © Sps1995

Sensitivity to tall buildings

3.5.5 As described above, there is unprecedented pressure on the district for new commercial and residential development. The character area types of historic village and open spaces are of the highest sensitivity to tall incongruous development, while 1900s-1940s village expansion, post-war village expansion, 21st century village expansion are all considered sensitive. Areas of 20th and/or 21st century new settlement are considered somewhat sensitive (Figure 16).

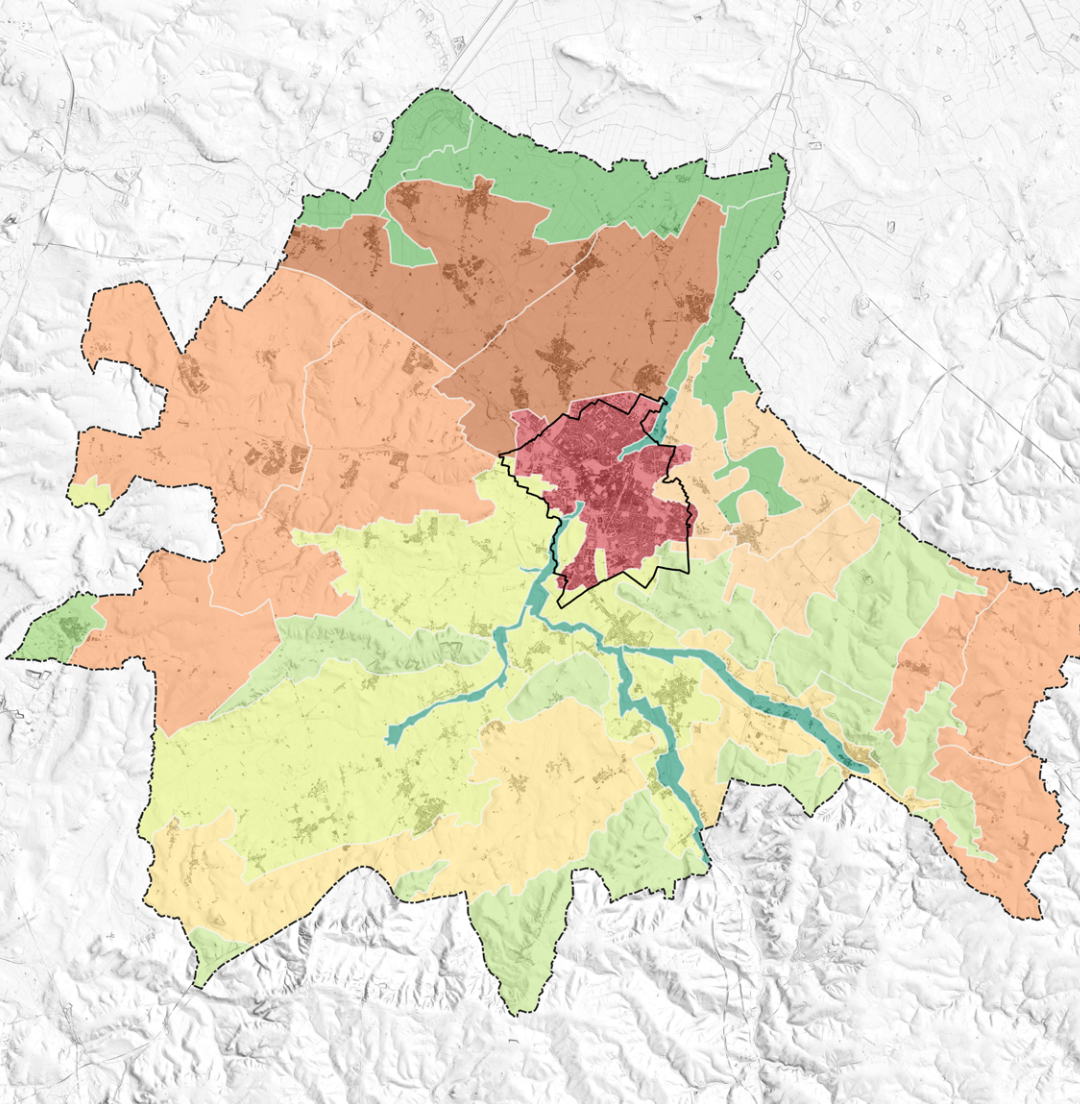


Figure 17: Landscape Character Areas mapping - District wide scale

- | | |
|--|---|
| <ul style="list-style-type: none"> Cambridge District South Cambridgeshire District | <ul style="list-style-type: none"> 5: Wooded Greensand Ridge 6: Fen Edge Chalklands |
| <p>Landscape Character Areas</p> <ul style="list-style-type: none"> 1: The Fens 2: Fen Edge Claylands 3: Lowland Farmlands 4: Wooded Claylands | <ul style="list-style-type: none"> 7: Chalk Hills 8: Lowland Chalklands 9: River Valleys 10: Cambridge Urban Area |

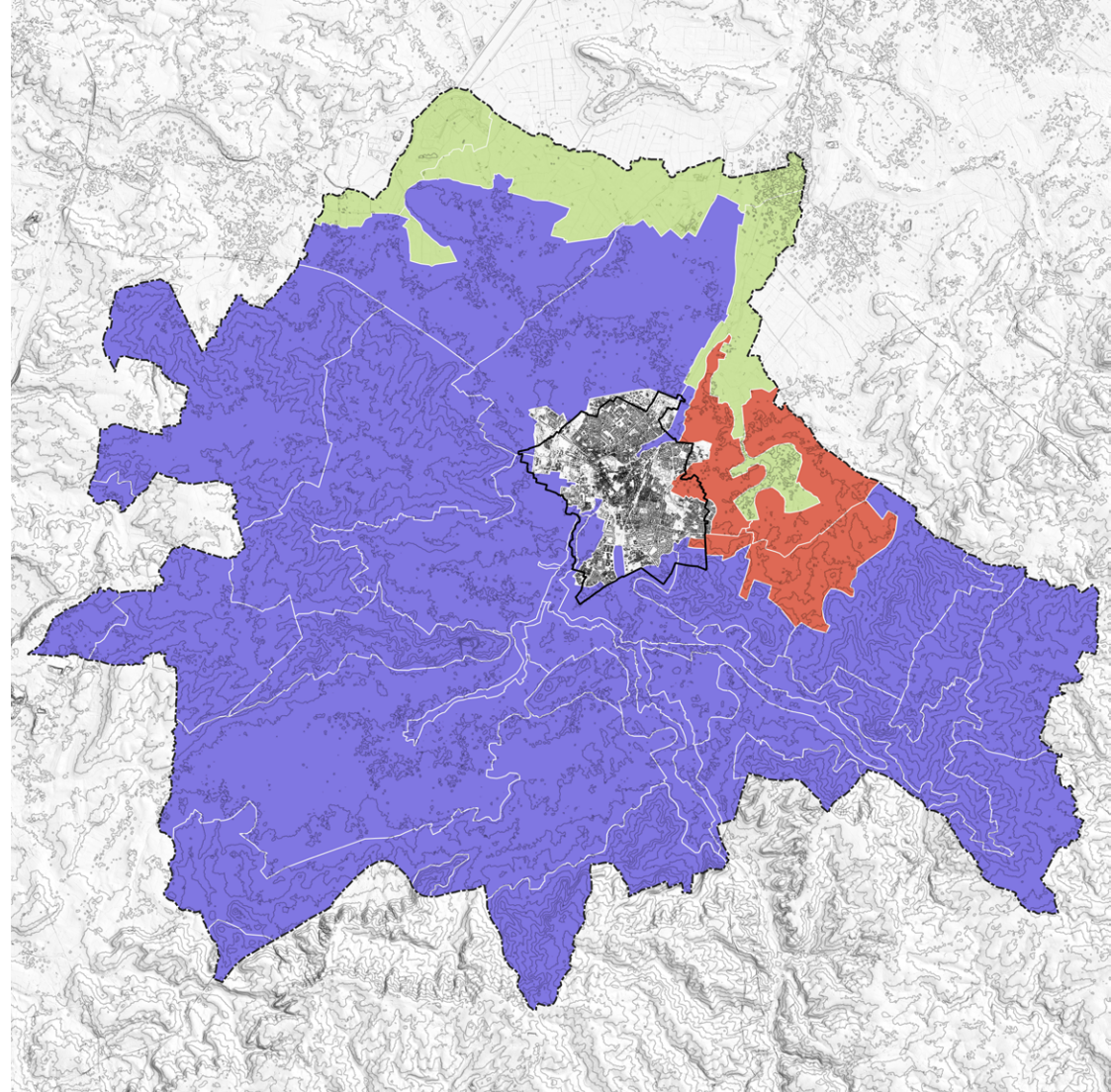


Figure 18: Landscape Management Objectives - District wide scale

- | |
|--|
| <ul style="list-style-type: none"> Cambridge District South Cambridgeshire District |
| <p>Landscape Management Objectives</p> <ul style="list-style-type: none"> Conserve Conserve & Enhance Enhance & Restore |

3.6 Landscape character

3.6.1 The South Cambridgeshire landscape has several distinctive and readily identified characters which are created by the underlying geology of the area, including “distinctive Chalklands, rolling Clay Hills and the wide expanses of the Fens to the north”.

3.6.2 The 2021 Cambridge Landscape Character Assessment assesses Greater Cambridge and provides an updated and consistent Landscape Character Assessment of the whole Greater Cambridge area (Figure 17). The study classifies areas into nine generic Landscape Character Types, which are:

- The Fens
- Fen Edge Clayland
- Lowland Farmlands
- Wooded Claylands
- Wooded Greensand Ridge
- Fen Edge Chalklands
- Chalk Hills
- Lowland Chalklands
- River Valleys

3.6.3 The distinct landscape character of the region is protected by SCDCLP(2018) Policy NH/2 which states that “development will only be permitted where it respects and retains, or enhances the local character and distinctiveness of the local landscape and of the individual National Character Area in which it is located.” This is supported by detailed guidance about landscape character areas in the District Design Guide Supplementary Planning Document (SPD) and the Landscape in New Developments SPD “to ensure that development respects both the distinctiveness of these National Character Areas and the more detailed local landscapes.”

Sensitivity to tall buildings

3.6.4 The landscape character of South Cambridgeshire is distinctive and contributes significantly to sense of place. The majority of the landscape characters of South Cambridgeshire are either classified within the 2021 Cambridge Landscape Character Assessment as “conserve” or “conserve and enhance”, and therefore will be particularly sensitive to taller buildings, as they can detract from the landscape characteristics and the way development is nested in the landscape (Figure 18). Landscape impact assessments will be required to establish if a taller building or increased building height may be appropriate in a certain area, and proposals will need to set out strategies how these impacts will be mitigated or avoided.

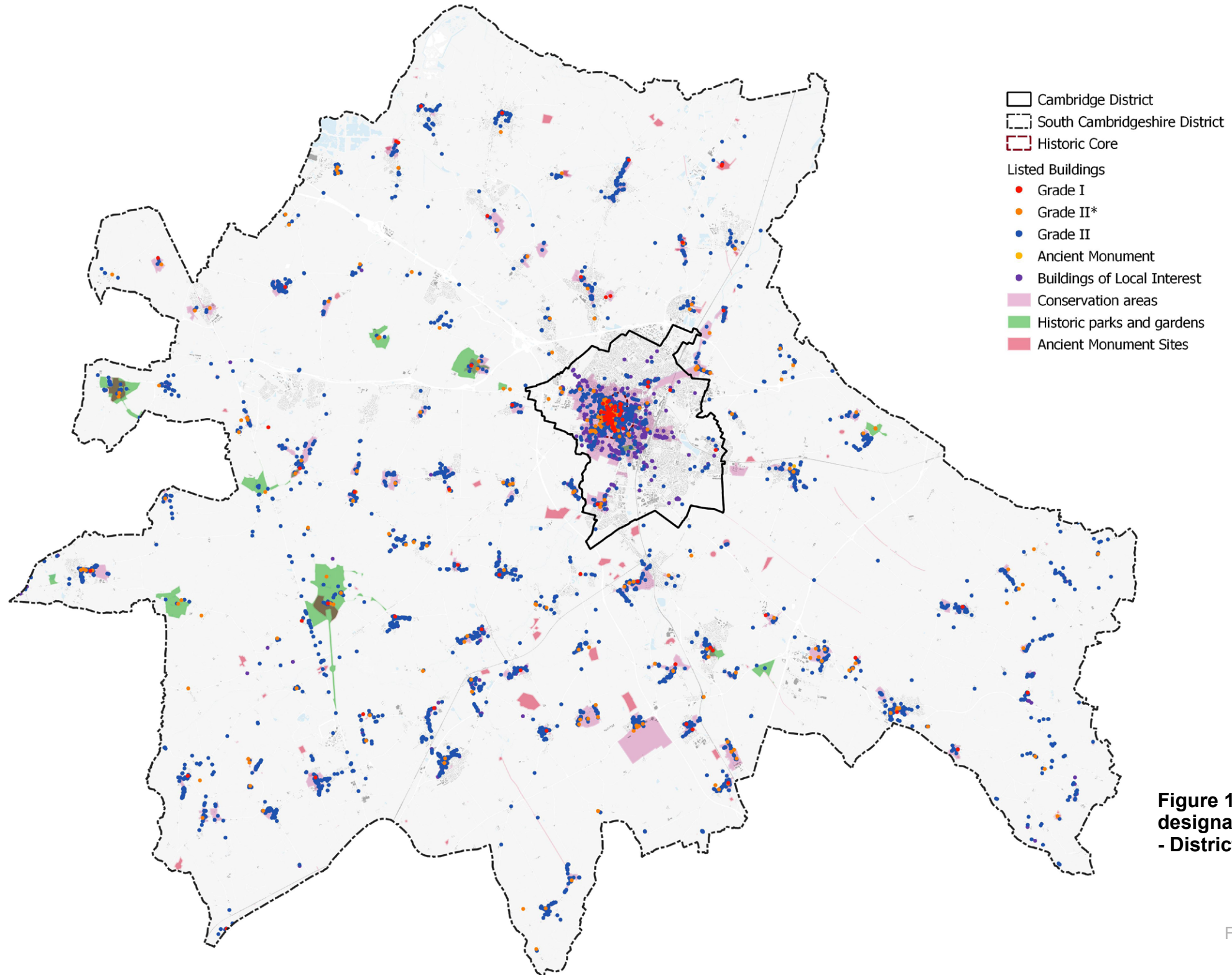


Figure 19: Heritage designations mapping - District wide scale

3.7 Heritage

3.7.1 South Cambridgeshire contains a diverse range of designated assets including registered parks and gardens, scheduled monuments, conservation areas, and listed buildings; these are set within a wider rural landscape with historic villages and settlements, many of which contain numerous historic buildings of local interest. In total there are 80 no. conservation areas and 12 no. Registered Parks and Gardens within South Cambridgeshire. There are 2697 no. Listed Buildings, 108 no. Scheduled Monuments and 93 no. Buildings of Local Interest in SCDC (Figure 19). Throughout the area there are known and potential concentrations of archaeology. The abundance of heritage is part of what contributes to the character of the place.

3.7.2 The character of the area varies considerably, as does the character of individual settlements and villages. For the most part the areas are not characterised by tall structures, apart from the distinctive church towers / steeples.

Sensitivity to tall buildings

3.7.3 Buildings that rise above the tree line or that through their massing, form or appearance become conspicuous and fail to blend in with the landscape can have a detrimental impact on the landscape character of an area, whether it appears natural and verdant, or developed and man-made.

3.7.4 A rural landscape setting is often an important characteristic of many of the Conservation Areas (historic villages), Listed buildings (especially large houses in their grounds), and Registered Parks and Gardens. Given the flat and open landscape taller or bulkier development can be seen over longer distances and may have an adverse impact on the significance of heritage assets with their setting.

3.7.5 In this context particular care will need to be taken in relation to:

- Safeguarding the prominence of church towers / steeples as key visual statements in the wider landscape

- Retaining the sense of rurality for the setting of designated assets and their setting by ensuring that tall development does not urbanise or reduce the rural context of assets and separation between settlements
- Ensuring that key views and vistas from parks and gardens are respected, and that tall buildings do not visibly intrude into designed landscapes
- Not overtopping historic buildings, conservation areas or parks and gardens with new tall development
- Conserving the foreground, fringes and backdrops of key views of designated assets
- Ensuring that views of designated assets from third points that feature both development and the assets are fully considered in development proposals. While views from assets are often important, views of them can also make a contribution to setting and significance.

3.7.6 Impacts will need to be thoroughly tested on an asset-by-asset basis at application stage.

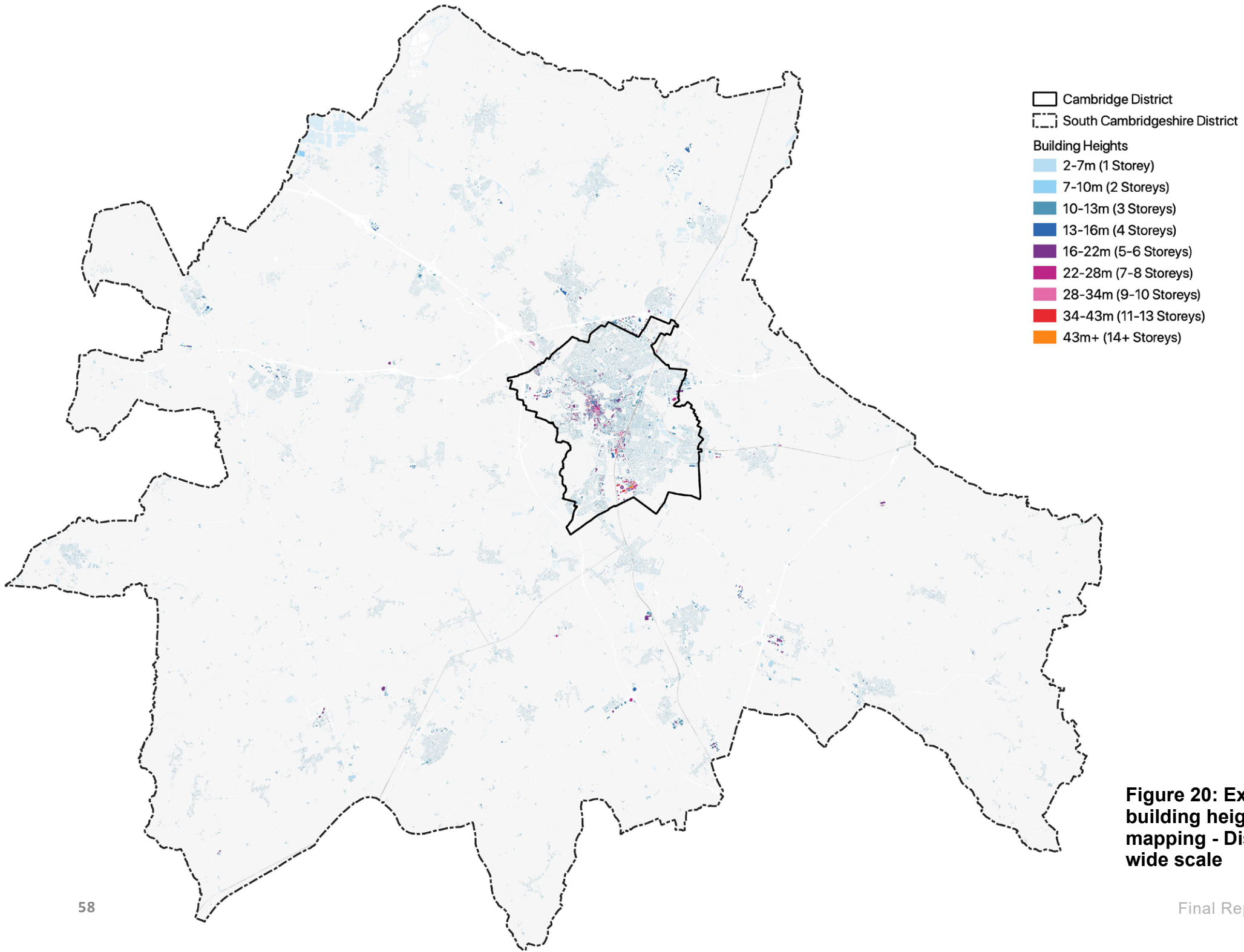


Figure 20: Existing building heights mapping - District wide scale

3.8 Building heights

3.8.1 The villages in South Cambridgeshire are characterised by low rise development that is typically between 1-2 storeys (2-10m). There are few areas within the district where taller and larger buildings are coming forward in business parks, research and development parks, new settlements such as a concentration of 4-6 storey buildings in Babraham Research Campus, Granta Park and the new developments at North East Cambridge. There are several other tall buildings associated with aerodrome infrastructure (IWM Duxford, Figure 20).

3.8.2 The Historic villages, farms and settlements typically are organically nested in the landscape with spaced out buildings and ensembles set behind landscaped margins and interspersed by mature trees and other vegetation. The only buildings that historically would stand out above the treeline and visible in long views would be the towers of parish churches. Occasionally farm sheds, industrial premise or commercial development break the pattern of fine grain low rise development with greater massing and height.



Image 36: Babraham Research Campus © Lenov

Sensitivity to tall buildings

3.8.3 Given building heights area generally lower in the settlements of South Cambridgeshire, more modest buildings of 3 to 4 storey may already be perceived as 'tall' in their context. This presents a significant difference to the more urban setting of Cambridge city itself, where generally buildings would need to be higher to be considered tall. Given the lower height tall buildings here will often also bring forward greater bulk and massing, as they seek efficient footprints for residential (apartments) or commercial uses. This can lead to an amplification of the impact of taller buildings in these areas that will need to be carefully considered.



Image 37: Cottenham © John Sutton

3.8.4 The district has had limited historic pressure for tall buildings, however there has been recent pressure for taller and larger buildings in the area due to new settlements and employment campuses. The characteristic low rise nature of the built form makes this area particularly sensitive to buildings or structures that break from the existing scale and massing and also to buildings that start to appear over the tree line.

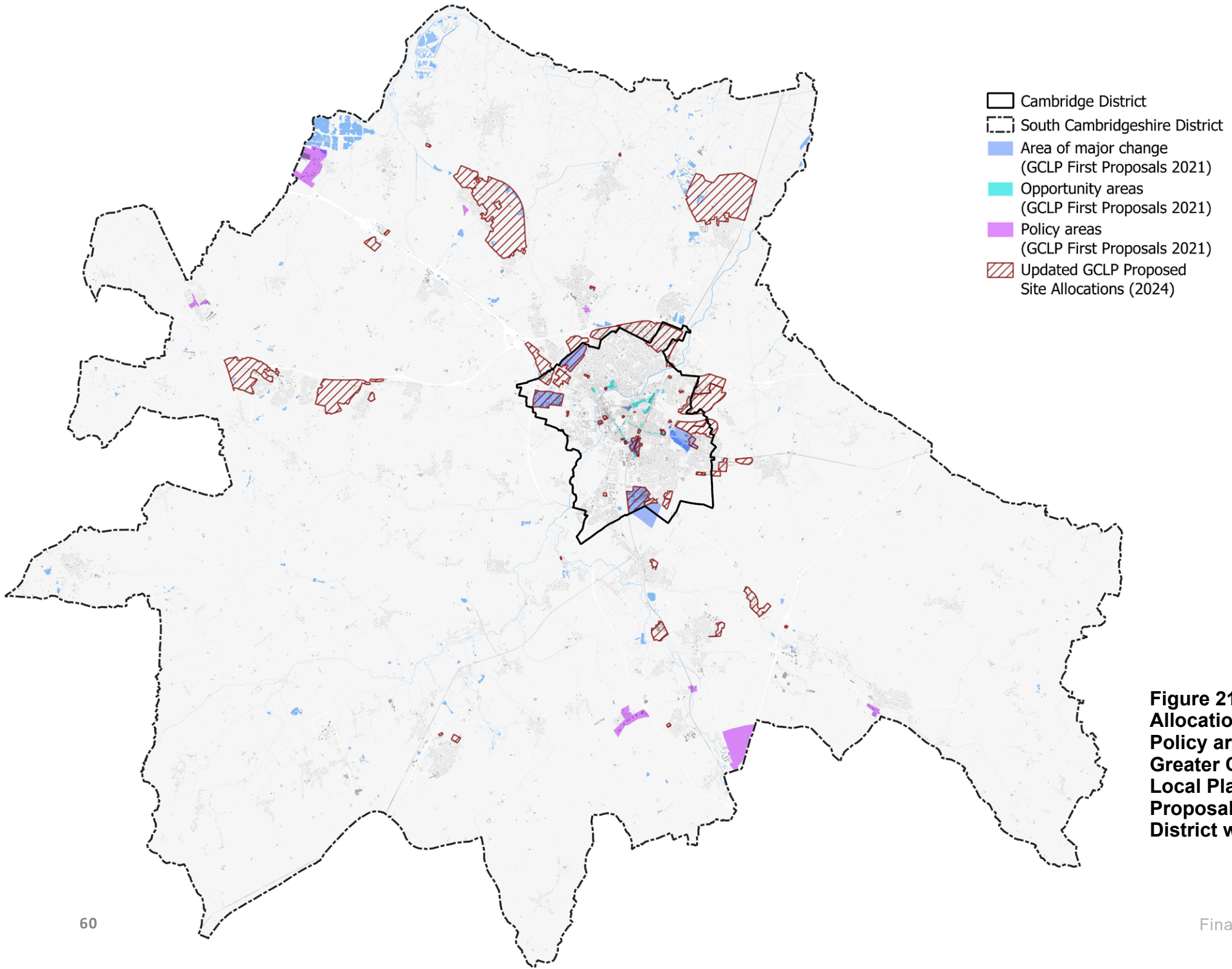


Figure 21: Site Allocations and Policy areas from Greater Cambridge Local Plan First Proposal 2021 - District wide scale

3.9 Regeneration

3.9.1 South Cambridgeshire faces considerable growth pressures, which have historically been addressed by focusing development in new settlements while restricting expansion within existing villages, particularly those lacking adequate facilities and public transport connections. The district is also home to several employment campuses of local, regional and, in some cases, global importance, placing further demands on infrastructure and planning.

3.9.2 In addition, recreational and tourism activity including at key heritage sites such as IWM Duxford, contributes to pressure on local infrastructures.

3.9.3 Looking ahead, key areas where development pressure is expected (Figure 21) include:

New Settlements:

- Waterbeach
- Northstowe
- Bourn
- Cambourne (expansion)

Research and Development Clusters:

- Wellcome Genome Campus
- Babraham Research Campus
- Other emerging R&D hubs across the district

Relevance

3.9.4 It is expected that the majority of growth will occur within these development areas. While it is expected that in some of these there will be aspirations to increase densities and heights, and that tall buildings will be promoted.

3.9.5 Proposals for greater height will need to be thoroughly tested to ensure they respond to the sensitivities in the area such as existing landscape and townscape character and heritage designations.



Revelopment of the Station Road area © CB1cambridge

4 Policy and Guidance

4.1 Introduction

4.1.1 This chapter summarises national and local policy and guidance and discusses their relevance to tall buildings and this study. Further detail can be found in Appendix C.

4.2 National Policy and Guidance

4.2.1 At a national level, the **NPPF (December 2024)** sets out that planning policy should ensure that developments are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities) (para 135.c). It also establishes that great weight should be given to the conservation of heritage assets, and clear justification would be needed for any harm to or loss of significance of a designated heritage assets from development within its setting, which should be wholly exceptional for assets of the highest significance.

4.2.2 The **National Design Guide (October 2019)** states that ‘Well-designed tall buildings play a positive urban design role in the built form. They act as landmarks, emphasising important places and making a positive contribution to views and the skyline.’ It also establishes that proposals for tall buildings require ‘special consideration’ due to their scale and massing.

4.2.3 The **National Model Design Code (January 2021)** and provides detailed guidance on the production of design codes, guides and policies to promote successful design. It identifies a number of design aspects that are particularly relevant to tall buildings including the form of the building, design of the top and base, materials, public realm interface and microclimate.

4.2.4 When considering tall buildings, one should also consider **Historic England 2022 Tall Buildings: Historic England Advice Note 4** which promotes a plan led and positive approach to the location and design of tall buildings. It sets out principles for an evidence-based approach which considers alternative locations, decision making informed by understanding of place, character and historic significance and tall building proposals which take account of local context and historic character (Section 1.3).

4.2.5 The advice note states that tall buildings can have “wide-ranging impacts” on the historic environment, depending significantly on their height, massing, and location. It reinforces that “tallness” is a relative concept, noting that, for example, “a five-storey building in a mainly two-storey neighbourhood could be considered tall, whereas in the centre of a large city it may not.” It further advises that “definitions of tall buildings can vary, but in general they should be informed by local character” (sections 3.4 & 3.5).

4.2.6 Advice Note 4 states that the scale and form of development should be assessed as part of the formulation of the local plan. It suggests the use of characterisation and tall building studies as well as heritage and urban design assessments to designate appropriate locations and policies for tall buildings, their role in place shaping, and how to minimise potential impacts on local character and significance of heritage assets.

4.2.7 The advice note presents Cambridge Local Plan (2018) as a good-practice example of implementing a criteria-based tall buildings policy that considers the impact on the unique historic environment, skyline and “key locally specific issues, such as requiring proposals to ensure that the character and appearance of Cambridge, as a city of spires and towers, remains dominant from identified viewpoints across the urban and rural landscape”.

4.3 Greater Cambridge Policy and Guidance

4.3.1 Cambridge City and South Cambridgeshire District Councils operate a joint planning service for the entire Greater Cambridge area. The Councils are currently in the process of developing a joint Greater Cambridge Local Plan. The forthcoming joint Local Plan will include a tall buildings policy for the Greater Cambridge area, which will build upon the existing Cambridge policy and will establish a more robust approach to understanding and assessing taller buildings within South Cambridgeshire.

4.3.2 The area is currently covered by two separate Local Plans which are outlined below.

4.3.3 The **South Cambridgeshire Local Plan** was adopted in 2018 and does not have a general Tall Buildings Policy as it has not experienced pressure for tall buildings historically.

4.3.4 The **Cambridge Local Plan** was also adopted in 2018 and sets the strategic vision for the city until 2031. The Local Plan has a clear strategic objective to

“protect and, where appropriate, enhance the character and quality of the Cambridge skyline”. The Local Plan also sets out the strategic approach for the city and region “based upon significant growth located on the edges of Cambridge and the delivery of new settlements in South Cambridgeshire” which has been jointly prepared with South Cambridgeshire District Council.

4.3.5 The Local Plan requires that new development respond to its context (Policy 55), including in terms of scale and massing of new buildings and be of high quality that creates a positive impact on their surroundings (Policy 56). It also seeks to ensure the conservation and enhancement of Cambridge’s historic environment” through Policy 61, the protection of local assets (Policy 62) and open spaces (Policy 67).

4.3.6 The Plan has a robust policy on Tall Buildings and the Skyline in Cambridge (Policy 60 and Appendix F) which sets out the criteria that must be met for “any proposal for a structure that breaks the

existing skyline and/or is significantly taller than the surrounding built form”. Appendix F provides additional guidance to support Policy 60; it clarifies that this policy would be automatically triggered for proposals over 6 storeys (19m) within the City Centre (though depending on context could be required for buildings of lesser height) and 4 storeys (13m) within the suburbs. The application of this policy is analysed in greater detail in Section 4.2 Defining Tall Buildings in Greater Cambridge.

4.3.7 This policy and guidance has been largely informed by a series of **previous Local Plan policies**, Policy 3/13 of the 2006 Cambridge Local Plan, and the Tall Buildings and Skyline Guidance produced by the City Council. For a review of the former Greater Cambridge Tall Building Policy see Appendix C.

4.3.8 The councils also have adopted a series of **Area Action Plans/ Development Frameworks, Supplementary Planning Documents and Neighbourhood Plans**, many of which establish additional criteria

and guidance for building heights. For further information refer to Appendix C.

4.3.9 For an overview of **existing tall building and skyline management strategies** from other Local Authorities see Appendix C.



Botanic House © Keith Evans

5 Defining Tall Buildings in Greater Cambridge

5.1 Relative and absolute definition of a tall building



context: 2 storeys / 10 storeys = tall building



context: 5-6 storeys / 10 storeys = local high point

Figure 22: A tall building is ‘tall’ relative to its context

5.1.1 Buildings are commonly understood as tall if they are of greater height in the context within which they are perceived. They may rise above their surrounding buildings, stand notably out on the skyline or are simply perceived as tall in the context of the local vernacular and the human scale.

5.1.2 Two principal definitions exist to define what constitutes a tall building, a relative and an absolute definition, which will be explained as follows.

Relative Definition

5.1.3 From an experiential spatial perspective a building is considered ‘tall’ if it is perceived as an exception in its context, and its height rises above what is commonly understood as the prevailing contextual building height. In this context a building is defined as ‘tall’ relative to the height of its context.

5.1.4 2022 Historic England Advice Note 4 similarly states that “what might be considered a tall building will vary according to the nature of the local area. A five-storey building in a mainly two-storey neighbourhood could be considered tall, whereas in the centre of a large city it may not” (Section 3.4).

5.1.5 Establishing whether or not a building is considered tall, will require a comparison of its height to the prevailing height in its surrounding area, called the context height.

5.1.6 The context height is the height that an observer would read as the typical or defining height of a particular area. In places where buildings have a relative consistent height, the context height may be the most commonly occurring building height. In areas where building height is more varied, the context height is the average height of around which the heights of buildings fluctuate.

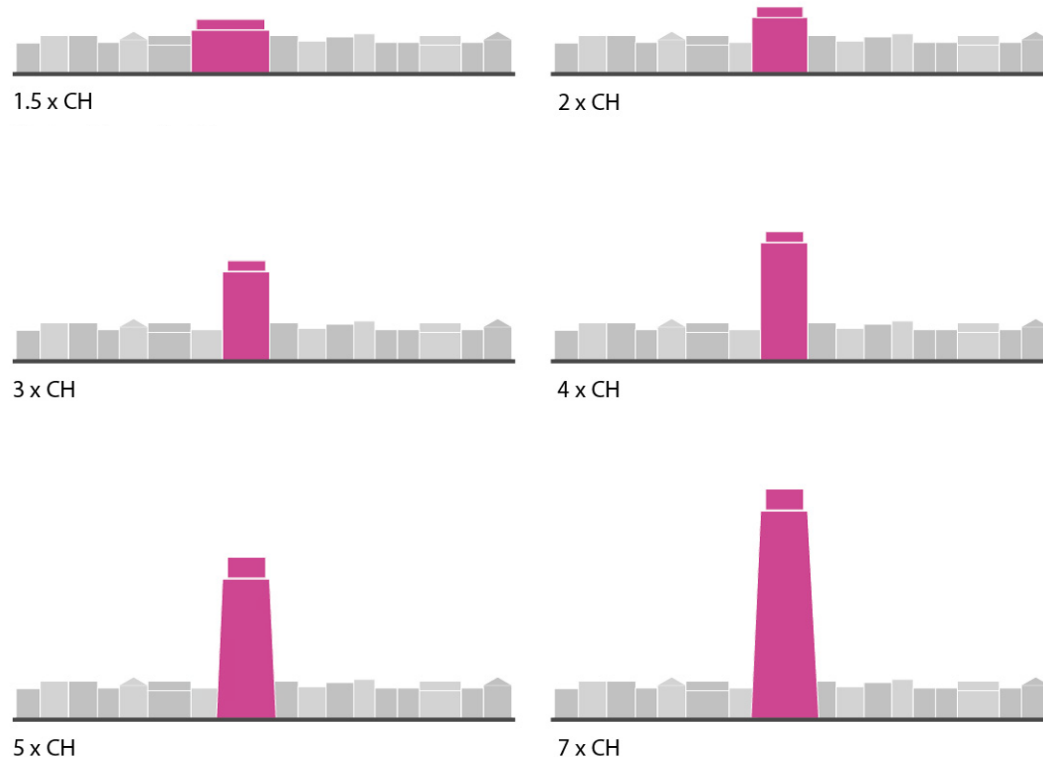


Figure 23: The height of buildings can be expressed as ‘context height ratio’

5.1.7 The ‘tallness’ of an individual tall building can be expressed as a multiplier of the context height. The context height ratio (CHR) sets out a factor of ‘how many times taller’ a building is compared to its context.

5.1.8 The CHR provides a relative measure of the height of a tall building in its context irrespective of the actual height (in meters or storeys) of either the context or the tall building (Figures 25). As such it provides a helpful indicator to discuss

the spatial and proportional relationship of a tall building within its surrounding townscape context notwithstanding whether it is in a suburban or urban spatial context.

5.1.9 Based on the context height ratio higher buildings can be classified into different height categories. The actual thresholds between categories can vary between places, subject to overall height characteristics.

5.1.10 In places with a more coherent pattern of modest heights, such as in Greater Cambridge, the following four classifications can be defined:

- **Higher building** – up to tall building threshold (TBTH, which is normally between 1.4 to 1.6x CH);
- **Tall building** - tall building threshold up to 2.5x context height;
- **Very tall building** - 2.5x up to 4.5x context height;
- **Super tall building** - 4.5x context height and above.

5.1.11 The extent of the area used to define the context height, in order to establish the context height ratio of a tall building, needs to reflect the tall building’s impact. The greater the height of a tall building, the further will be its impact, and the larger must be the area that should be considered. Higher and tall buildings can use the context height of the wider surrounding local context, whilst very tall or super tall buildings should consider heights across a wider district or city.

5.1.12 Each tall building classifications will have a different principal impact on its context and the skyline, as outlined below. Images 38 to Image 41 show examples of these tall building classifications in Cambridge.

5.1.13

Large/higher building

(Up to 1.5x CH)

Perception within context:

Contextual, accented building

Visual / skyline impact:

Limited impact primarily from adjoining space

Tall building

(Above 1.5x CH and up to 2.5x CH)

Perception within context:

Outstanding prominent exception, proportionate relationship with height context, perceived as constituent part the urban context

Visual impact on the skyline:

Tall building is notable, yet its impact on the skyline is mainly local.

Very Tall building

(Above 2.5x CH and up to 4.5x CH)

Perception within context:

Rising out of the urban fabric, markedly outstanding and pronounced contrast with prevailing urban context

Visual impact on the skyline:

Can be seen across the town and from surrounding county

Super Tall building

(Above 4.5x CH)

Perception within context:

Jarring contrast, disconnected from the prevailing urban context height across the place, often requires increased heights in its surrounding to mediate the impact on its context

Visual impact on the skyline:

Can be seen across the town, from surrounding county and from far away



Image 38: Tall Building - Context Height Ratio 1.5, Botanic House, Cambridge © Google Earth



Image 39: Tall Building - Context Height Ratio 2.2, Møller Institute, Cambridge © Google Earth

Other considerations

5.1.14 It is recognised that apart from the context height ratio, there are other contextual factors that may have an impact on how a tall building is perceived in its local context, and at what point it would be considered tall.

5.1.15 One important factor is the coherence or variation of heights in a certain context. In areas with generally relatively coherent and modest heights such as in Cambridge, the tall building threshold will generally be lower than in an area that has already significant height variation.

5.1.16 Other factors that may affect how a tall building with its height is experienced from its surrounding context are:

- **Topography** – whether it is located on lower or raised land, which affects its general visibility;
- **Integration with development** – whether it is situated on its own, at the edge or centre of a development, and how it is perceived from the street space;
- **Scale, massing and form** – whether its form is bulky and squat or slender and elegant;
- **Roof and townscape** – whether it responds to or contrasts with the scale,

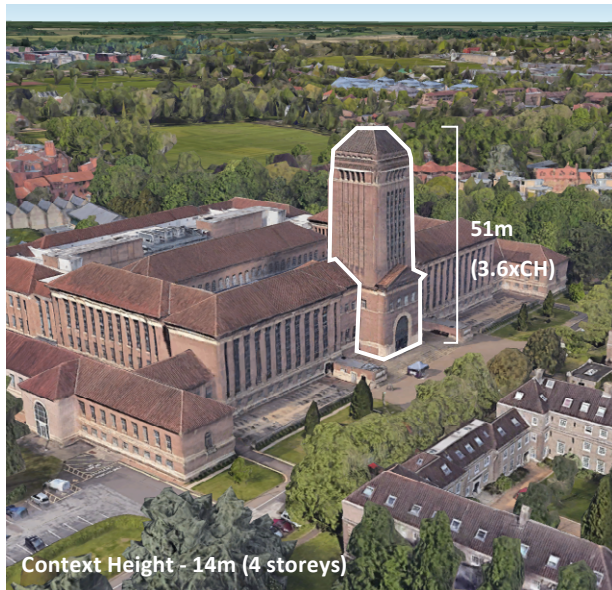


Image 40: Very Tall Building - Context Height Ratio 3.6, Cambridge University Library, Cambridge © Google Earth



Image 41: Super Tall Building - Context Height Ratio 5.2, St. Luke's Church, Cambridge © Google Earth