

CAMBRIDGE SOUTH

Environmental Appraisal



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Introduction

Purpose of this Report

- 1.1 The purpose of this Environmental Appraisal is to set out the key environmental constraints associated with Cambridge South acknowledging the value, sensitivity and importance of assets within the study area and its surrounding area in the context of Greater Cambridge. This Appraisal also explores how growth at Cambridge South could respond to these local constraints, as well as to the national and local aspirations for clean growth and nature recovery.
- 1.2 The work undertaken as part of this Environmental Appraisal has informed the emerging masterplan for Cambridge South developed by Allies and Morrison.

Background

- 1.3 The Cambridge Biomedical Campus (CBC) has prepared the '*Cambridge Biomedical Campus Vision 2050: Creating a life sciences quarter for Cambridge*' (the 'CBC Vision 2050') which sets out a series of goals and governing principles intended to inform future development at CBC.
- 1.4 While CBC Vision 2050 does not detail specific development requirements, if CBC is to realise its potential as a world leading Life Sciences innovation district, it will need to answer certain key development challenges. Answering these challenges will need more development land in close proximity to the existing site.
- 1.5 Four major landowners (Jesus College, St John's College, Cambridgeshire County Council and a private family trust) (the 'Landowners') own in excess of 400 hectares (ha) to the south and west of CBC, referred to as Cambridge South. These landowners have come together to propose how the needs of CBC could be met through a sustainable urban extension at Cambridge South.
- 1.6 This Environmental Appraisal has been prepared on behalf of the Landowners who are working together to respond to the CBC Vision 2050.

The Cambridge South Study Area and Proposals

- 1.7 The Cambridge South study area considered extends to approximately 466ha and is illustrated in Figure 1 of this Environmental Appraisal. The study area spans the administrative boundaries of Cambridge City Council and South Cambridgeshire District Council and is centred at TL 459 536.
- 1.8 The study area encompasses land that forms two gateways to Cambridge from the south east and south west, divided by existing linear development along Cambridge Road. The Cambridge South study area is bordered to the north by Hauxton Road and Addenbrooke's Road with Trumpington and CBC beyond the local road network, to the west by the M11 and to the east by Babraham Road. To the south, the study area is enclosed by the River Cam corridor, the King's Cross branch of the Cambridge to London Railway line, the village of Great

Shelford and Hinton Way. Beyond Cambridge South to the south east land rises towards the Gog Magog Hills.

- 1.9 Whilst the proposals are at an early stage, it is envisaged that development at Cambridge South could deliver approximately 5,000 new homes together with approximately 4,800,000 sq ft of clinical and research floorspace (with supporting offices and logistics), education, retail, leisure, hotel and conference facilities. These uses would be provided across two main development zones at Cambridge South.
- 1.10 The proposals are designed to deliver a globally leading and locally rooted vibrant community, providing a rich mix of uses and green spaces, to serve not only the campus itself, but also the neighbouring communities and meet the needs of CBC locally.
- 1.11 As part of the future proposals for Cambridge South, a network of active travel and public transport connections will be delivered, providing linkages with the emerging transport infrastructure in South Cambridge (including the new guided busway connection from Granta Park to CBC, the Cambridge South railway station and the Cambridge South West Travel Hub). The new neighbourhood will therefore leverage the accessibility and sustainability benefits that can be realised from these initiatives to provide a wider range of active and low carbon travel options for residents. In doing so, the design establishes a neighbourhood that embeds the characteristics of a 20-minute neighbourhood where possible, mixing uses to ensure easy access from homes to schools, workplaces, social and community facilities.
- 1.12 Minimal parking provision (except for those with specific mobility needs) and consolidated delivery networks are two examples of how transport impacts will be managed. The Landowners will explore opportunities to provide a new east-west active travel route that crosses Cambridge Road.
- 1.13 In addition, mobility hubs would be situated across Cambridge South and will provide a focal point for onward mobility options such as walking, cycling and buses as well as more innovative solutions including autonomous pods, micro-mobility and integration with demand responsive transport. These hubs would also be placed close to consolidated areas of car parking to provide onward travel solutions to neighbourhoods and park and ride facilities to the wider surrounding area. Further details on the transport vision for Cambridge South are provided in the accompanying Transport Strategy.
- 1.14 The Landowners have made a commitment to protect the landscape by delivering one hectare of enhanced green space for every one hectare developed as part of Cambridge South. These spaces will be designed for wildlife, recreation and landscape value and will be delivered through a phased approach to ensure development at Cambridge South is appropriately mitigated at every stage.

Structure of this Report

- 1.15 Section 2 provides an overview of key policy drivers at national, regional and local levels, as well as vision documents for the wider region which have informed the identified opportunities.
- 1.16 Section 3 provides an Environmental Appraisal which is broken down into a series of themes. These themes have been developed from the emerging themes and aspirations set out in the GCSP Emerging Joint Local Plan documentation, in particular those defined in the Local Plan

Issues and Options Report, Sustainability Appraisal Objectives and the Green Infrastructure Opportunity Mapping Baseline Report (references for these documents are provided in Section 2).

1.17 The themes used in the Environmental Appraisal are as follows:

- Climate Change
- Landscape and Visual
- Historic Environment
- Biodiversity, Geodiversity and Green Infrastructure
- The Water Environment
- Land and Agriculture
- Air Quality
- The Noise Environment
- Wellbeing and Social Inclusion
- Transport*
- Infrastructure*
- Natural Resources

1.18 Vectos and Buro Happold have undertaken initial testing to inform the emerging masterplan for the Cambridge South Land with respect to transport and infrastructure. The results of that initial testing are reported in the Transport Strategy and Utilities Appraisal that accompanies this submission. The key themes, Transport and Infrastructure, identified above are comprehensively covered in these documents and have therefore not been considered further within this Environmental Appraisal.

1.19 Section 4 summarises the key findings and opportunities for Cambridge South identified through this Environmental Appraisal.

1.20 Overall, the analysis undertaken by Quod and the project team as part of this Environmental Appraisal demonstrates that there are no environmental constraints that would prevent delivery of the planned growth at Cambridge South. The location and scale of the Cambridge South study area offers a unique range of opportunities to facilitate clean growth which is capable of sensitively responding to its existing environment and helping to tackle the challenges of climate change, nature recovery, water resources and flood risk, sustainable travel and health and wellbeing.

Evidence Base

- 2.1 In preparing this Environmental Appraisal, Quod has assessed the requirements and intentions of adopted and emerging national, regional and local policy and guidance to determine how best to accommodate development in South Cambridge, minimising possible impact whilst also meeting the long-term needs of CBC and the communities who work there and live nearby. Available published evidence base documents related to the emerging GCSP Joint Local Plan and other plan or policy documents have also been assessed. Other sources used to inform the Appraisal include previous representations to the Local Plan process, recent EIA scoping studies in the locality for transport infrastructure projects, planning applications submitted in the locality, and other publicly available site-specific information/studies.
- 2.2 Given the location of Cambridge South, planning policy for both South Cambridgeshire District Council (SCDC) and Cambridge City Council (CCC) have been considered.
- 2.3 This section provides a high-level summary of policy drivers to inform and provide context to the Appraisal. The key elements of the relevant policy as outlined below have directly informed the emerging design of the proposals and mitigation where required, as well as informing the identification of opportunities that Cambridge South can provide. The Planning Report provides a more detailed analysis of relevant planning policy. A list of all sources used to inform this Environmental Appraisal is provided at the back of this document.

National

- 2.4 The National Planning Policy Framework (NPPF) (2019) provides the overarching planning policies and principles that have framed this Environmental Appraisal. The NPPF is supported by the National Planning Practice Guidance (NPPG).
- 2.5 Defra's A Green Future: Our 25 Year Plan to Improve the Environment sets long-term targets for environmental improvement to which Government will be legally bound. It recognises the social, economic and environmental benefits of the provision of Green Infrastructure (GI) and the importance of recovering nature and enhancing the beauty of landscapes. The Plan commits to embed the principle of 'environmental net gain'¹ to development, such as housing and infrastructure, and calls for wildlife creation and targeted action within 'nature recovery areas' as important parts of developing ecological networks. Ambitions of the Plan include the creation or restoration of 500,000ha of wildlife-rich habitat outside the protected site network, i.e. outside of areas already subject to statutory ecological designations. The nature recovery network is designed to help deal with the challenges of biodiversity loss, climate change and wellbeing.
- 2.6 The Environment Bill, currently in draft, aims to manage the impact of human activity on the environment, creating a more sustainable and resilient economy, and enhancing well-being and quality of life. It will also engage citizens, local government and businesses to deliver

¹ Defined by Defra as 'achieving environmental net gain means achieving biodiversity net gain first, and going further to achieve net increases in the capacity of affected natural capital to deliver ecosystem services.'

environmental outcomes and create a positive legacy for future generations. The Bill will legally oblige policy-makers to have due regard to an Environmental Principles Policy Statement when choosing policy options, for example by considering the policies which cause the least environmental harm.

- 2.7 The Climate Change Act 2008 (2050 Target Amendment) Order 2019 commits UK government to ensure that the net UK carbon account for the year 2050 is net zero. This legally binding target is one of the most ambitious in the world, and will be challenging to achieve in the absence of meaningful action. While specific measurable actions to achieve this have not been worked through at all levels of government, it is recognised that green infrastructure has potential to mitigate climate change by providing carbon sequestration opportunities, as well as providing wider climate adaptation benefits.

Regional

- 2.8 Whilst produced by Government at the national level, the Oxford-Cambridge Arc visionary document provides a framework for significant growth in Greater Cambridge as part of the wider strategic growth area. More recently, the Government released the first introductory Oxford-Cambridge Arc Spatial Framework (February 2021) which will be subject to consultation before being finalised in 2022. The initial visionary document outlined the objectives of the Spatial Framework within a number of key areas – economy, environment, transport and infrastructure, and housing and planning. The framework for the Arc's environment focuses on a Natural Capital approach in setting policy to:

- Improve key existing and potential new habitats and improve access to nature and accessible green space;
- Set high standards for new development with respect to carbon emissions, water management and green infrastructure;
- Support an integrated water management approach with consideration for water abstraction, quality and flood risk; and
- Support clean air outcomes in tandem with housing and transport policies.

- 2.9 Importantly, the Government's response to previous studies undertaken by the National Infrastructure Commission (NIC) recognised that delivering ambitious growth on this scale had to go hand in hand with environmental enhancement to maximise the benefits to local people and leave the environment in a better state for future generations.

- 2.10 The Cambridgeshire and Peterborough Local Industrial Strategy (LIS) (July 2019), recognises that the area's natural capital and environmental infrastructure underpins and supports the local economy, offering flood protection and providing clean water and natural spaces. The LIS also recognises that the changing climate will require us to create climate resilient places and infrastructure and that the Arc presents a unique opportunity to deliver flood risk and water management.

- 2.11 To ensure that the environment in the Arc is left in a better state for future generations, the LIS states that policy should embody the aspirations defined by the 25 Year Environment Plan which move to a policy of net environmental gain in future, considering issues such as landscapes, climate resilience, water management, biodiversity net gain.

- 2.12 The [Cambridgeshire and Peterborough Doubling Nature Vision \(2019\)](#) sets out Natural Cambridgeshire's aims to double the area of rich wildlife habitats and natural greenspace within Cambridgeshire and Peterborough from 8.5% to 17%. Enhancing existing, and creating new large areas of, rich wildlife habitat and more accessible green space through development, and ensuring these are better connected, are the key mechanisms set out in the Doubling Nature report.
- 2.13 The [Cambridgeshire and Peterborough Minerals and Waste Local Development Framework 2011](#) is in the process of being reviewed by Cambridgeshire County Council and Peterborough City Council. The current Core Strategy Development Plan Document (DPD) was adopted in 2011 and Site Specific Proposals DPD was adopted in 2012. These two plans are being reviewed and a single joint Minerals and Waste Local Plan (MWLP) covering the two authority areas is being produced to replace them. The MWLP is at Proposed Submission Local Plan stage (November 2019).

Local

Greater Cambridge Emerging Local Plan

- 2.14 GCSP has been developing the evidence base for a new Joint Local Plan and testing possible growth levels and strategic spatial options for the Plan. The Plan would cover the areas of both South Cambridgeshire and Cambridge City.
- 2.15 The [First Conversation \(Issues and Options\)](#) consultation document, including accompanying Equality Impact Assessments by [Cambridge City Council](#) and [South Cambridgeshire City Council](#), [Habitat Regulations Assessment Scoping Report](#), [Sustainability Appraisal of Issues and Options](#) and the [Sustainability Appraisal Scoping Report](#) provide the first consultation documents released as part of the emerging Joint Local Plan.
- 2.16 The big themes arising from the Issues and Options consultation documents published in January 2020 were:
- Climate change
 - Biodiversity and green spaces
 - Wellbeing and social inclusion
 - Great places
 - Jobs
 - Homes
 - Infrastructure
- 2.17 GCSP shared key initial evidence base findings and development strategy options assessments in November 2020 as part of its emerging, comprehensive evidence base. Those relevant to this Environmental Appraisal include:
- [Implications for carbon emissions](#)
 - [Integrated Water Management Study](#)
 - [Green Infrastructure Opportunities Mapping Baseline Report](#)
 - [Green Infrastructure Opportunities Mapping](#)
 - [Habitats Regulations Assessment](#)
 - [Equalities Impact Assessment](#)
 - [Landscape & Townscape \(interim report – full report due spring 2021\)](#)
 - [Infrastructure Delivery Plan](#)
 - [Sustainability Appraisal](#)

2.18 In addition to the above, we understand the following studies are ongoing for Cambridge and South Cambridgeshire:

- Net Zero Carbon Study – this will look at the policies and targets required to meet net zero carbon for new development to inform the emerging Joint Local Plan.
- Outline and Detailed Water Cycle Studies – this will look at issues of both water supply and flood risk, wastewater and water quality for the emerging Joint Local Plan. Initial findings have been published.

South Cambridgeshire District Council Development Plan

2.19 SCDC's current Local Plan was adopted in September 2018 and includes the Adopted South Cambridgeshire Local Plan and the Adopted Policies Map.

2.20 The Cambridge Southern Fringe Area Action Plan (AAP) 2008 included some of the Cambridge South land and formed part of the SCDC Local Development Framework. The AAP established an overall vision for a new sustainable urban extension to Cambridge. The sites identified for development are now largely built out.

2.21 The South Cambridgeshire Zero Carbon Strategy was published in May 2020 and sets out SCDC's vision to achieve its target of a 50% reduction in carbon emissions from the South Cambridgeshire area by 2030, reducing to net zero by 2050. The strategy sets out their approach to reducing emissions in homes, workplaces, transport, recycling and waste, energy and land and trees.

Cambridge City Council Development Plan

2.22 The current Development Plan for CCC comprises the Cambridge Local Plan and Adopted Policies Map which were adopted in October 2018 as well as the Cambridgeshire and Peterborough Minerals and Waste Local Development Framework 2011.

2.23 Neither of the Area Action Plans prepared under the CCC Development Plan apply to Cambridge South.

2.24 CCC is currently working on a new Climate Change Strategy for 2021-2026 following on from the Climate Change Strategy (2016-2021) which set out the five key objectives for addressing the causes and consequences of climate change.

2.25 In addition, outside of the emerging Greater Cambridge Local Plan but an important consideration for both SCDC and CCC Local Plans is the Greater Cambridge Sustainable Design and Construction Supplementary Planning Document (SPD), adopted January 2020. This SPD sets out standards required to meet the objectives and policies of the SCDC and CCC Local Plans. It includes detailed guidance on issues such as renewable energy and seeks to encourage developers to start making the changes necessary to support net zero carbon, including the electrification of heat ahead of government proposals to ban gas boilers in new homes from 2025.

Site Specific Studies

2.26 A number of site-specific studies have been reviewed as part of this Environmental Appraisal. These have predominantly been obtained from planning applications submitted in the locality,

in particular those for the area's emerging transport infrastructure and previous representations. The key studies used comprise:

- Cambridge South East Transport (CEST) Phase 2 Scoping Report (October 2020) (ref: 20/04320/CTY, SCDC);
- Cambridge South Infrastructure Enhancements Scoping Report (December 2020) (ref: 20/05054/CTY, SCDC);
- Cambridge South West Travel Hub Scoping Report (July 2019) and Environmental Statement (May 2020) (ref: CCC/20/040/FUL, Cambridgeshire County Council);
- Newbury Farm Environmental Statement (August 2019) (ref: 19/1168/OUT);
- Cambridge South Archaeological Desktop Assessment (June 2009); and
- SCDC Local Plan Representations (October 2016) for 'Phase 3' of the CBC Expansion Land which comprises the northern most plot of the study area. The supporting evidence included a series of supporting studies including a Flood Modelling and Drainage Strategy Report, Landscape and Visual Appraisal, Ecological Appraisal and Arboricultural Assessment.

2.27 Documentation prepared as part of the CBC Vision 2050 has also been reviewed as part of this Environmental Appraisal.

Environmental Appraisal

- 3.1 This section focuses on the key environmental considerations across Cambridge South and its surrounding area to understand if there are any environmental factors that may constrain development at Cambridge South. The section outlines how the vision for Cambridge South can respond to the requirements of these considerations as well as identifying the opportunities that growth at Cambridge South provides and how these align to the aspirations of adopted and emerging policy.

Climate Change

Key Considerations

- 3.2 Climate change does not present any direct constraints to development at Cambridge South. Integral to national, regional and local planning policy however is the need to adapt to climate change by ensuring sufficient resilience of future development as well as ensuring comprehensive climate change mitigation.
- 3.3 The emerging Joint Local Plan Issues and Options Report recognises that climate change is a defining issue of today and will have serious impacts for future generations. In response to the climate crisis, SCDC and CCC and the County Council have committed to achieve net zero carbon by 2050.
- 3.4 Both SCDC and CCC have targets for new developments to hit a 10% reduction on baseline carbon emissions and have adopted and emerging climate change strategies to address the causes and consequences of the globe's changing climate, as set out in the policy section above.
- 3.5 A carbon assessment of the spatial strategies of the emerging Local Plan undertaken by Bioregional indicate that with the implementation of zero carbon policies, the emissions associated with buildings' energy use can be reduced to near-zero and their embodied carbon can also be significantly reduced. Bioregional conclude that transport emissions are the deciding factor in the carbon differences between spatial options. These transport emissions are most strongly affected by where development takes place. The performance of spatial options in terms of carbon emissions is also largely related to the existing and proposed public transport links of the site. It therefore follows that sites close to major public transport links, such as a train station, perform better in terms of carbon emissions. This is also the case for sites whose location reduces the need to travel by virtue of being close to major employment locations and benefiting from access to appropriate facilities.
- 3.6 The report concludes that *“With a full shift to electric vehicles still a long way off..., from a carbon point of view it is best to focus growth choices on minimising car dependence. The choice of spatial option (and public transport provision, if not in a central urban location) is therefore crucial to reduce carbon emissions from transport associated with growth.”*

Cambridge South Response

- 3.7 As outlined above, transport emissions are critical to the choice of spatial option. Transport emissions are largely determined by access to public and active travel modes, and proximity to amenity and employment.
- 3.8 Cambridge South would deliver a new neighbourhood designed to the best principles of local, inclusive, sustainable development and provide homes, employment, education, leisure and greenspace. The proposals are principally designed to collocate uses and homes, to meet the needs of CBC employees locally, thereby reducing the need to travel and ultimately reducing reliance on cars. At the heart of the proposals is the delivery of a 20-minute neighbourhood with a focus on active travel. The development would deliver a network of safe, active travel routes including footpaths, cyclepaths and bridleways which would connect with the surrounding countryside. In addition, Cambridge South is already well served by public transport (buses) and by the time this development would be on site (anticipated date 2028 given the Local Plan and subsequent planning permission timetables) major public transport infrastructure improvements including the South Cambridge railway station, the Cambridge South West Travel Hub and Phase 2 of the Cambridge South East Transport scheme are likely to be already operational. By integrating the development at Cambridge South with this expanded public transport network, residents will be able to drastically reduce their need to use private car transport compared to other less accessible communities in the area.
- 3.9 Climate change is expected to lead to changes in rainfall including increases in extreme rainfall events and flood risk. The masterplan seeks to avoid development in areas prone to fluvial flood risk associated with the River Cam and will incorporate natural flood management, SuDS and a flood resilient design to mitigate against the increased risk of flooding associated with climate change. Appropriate allowances for the influence of climate change will therefore be applied to the flood risk and drainage strategy.
- 3.10 As outlined in the Water Environment theme below, measures to encourage grey / green water recycling and educate the public on the need for sensitive and efficient water use will be critical. The Landowners are committed to maximising opportunities for chalk river catchment protection and groundwater recharge opportunities in line with GCSP's emerging GI objectives.
- 3.11 Whilst new developments are designed to meet industry standards and regulatory requirements, growth at Cambridge South provides the opportunity to plan at a sufficient scale to invest in new energy networks and solutions. The Landowners are committed to exploring the potential advantages that development at this scale may bring with respect to energy efficiency and generation.
- 3.12 To further mitigate climate change and minimise the emissions associated with future growth at CBC, development at Cambridge South will also seek to maximise the role of GI, in particular wetlands and trees, and blue infrastructure to help offset carbon emissions arising from the development through carbon sequestration and storage in plant biomass. This will include enhancing the existing biodiversity value across Cambridge South to increase the carbon sequestration capability of these areas and land management of any residual agricultural land.

Summary of Cambridge South Response

- Implementation of a **sustainable transport strategy** to discourage car use and maximise pedestrian, cyclist and public transport provision to deliver a '20-minute neighbourhood'.
- Development will **incorporate natural flood management and SuDS** to ensure resilience to increased risk of flooding associated with climate change.
- Integrated **water efficiency measures**.
- Provision of high quality, **energy efficient buildings and places** using best practice in low carbon design, manufacture, construction and performance.

Landscape and Visual

Key Considerations

- 3.13 The entirety of Cambridge South is designated as Green Belt and the proposals would need to satisfy the exceptional circumstances set out in national policy to release the Green Belt for future development. This is considered further in the accompanying Planning Report.
- 3.14 Cambridge South and its wider landscape context are not subject to any other national, local or other landscape designations. There are a small number of listed buildings, three Scheduled Monuments and a Local Nature Reserve within the study area.
- 3.15 At a broad landscape scale, Cambridge South sits within Natural England's National Character Area (NCA) 87 'East Anglian Chalk' which is characterised by remnant chalk grassland and rolling downlands mostly in arable production with sparse tree cover. It identifies that settlement within the NCA is focused in small towns and villages, with a number of expanding commuter villages located within valleys. In the Statements for Environmental Opportunity section the following is of relevance to Cambridge South and the proposed allocation; *"SEO 4: Conserve the settlement character and create or enhance sustainable urban drainage systems and green infrastructure within existing and new developments, particularly in relation to the urban fringe and growth areas such as south-east Cambridge, to provide recreation opportunities, increase soil and water quality and enhance landscape character."*
- 3.16 The NCA provides examples how this could be achieved, including:
- Avoiding or minimising further erosion of tranquillity by ensuring that development is appropriate to the setting and incorporates suitable measures, such as tree planting or green buffers;
 - Supporting, creating and improving links between recreational assets and settlements, particularly where growth is planned; and
 - Improving green infrastructure within settlements and through new development, particularly in relation to urban fringe and growth areas such as south-east Cambridge, by providing accessible greenspace and potentially creating new biodiverse grasslands.

- 3.17 A Landscape Character Assessment was undertaken as part of the SCDC and CCC Cambridge Inner Green Belt Boundary Study (November 2015). Under this analysis, the western extent of the study area and the central area of the study area were identified within Landscape Character Area (LCA) 4B 'Granta Valley' within the River Valleys Landscape Type. LCA 4B is characterised by low-lying, gentle topography with woodland that increases the greenness of the landscape setting, and screens views. In addition, the LCA is influenced by the relatively built-up and suburban character of its villages, with settlement comprising a relatively large proportion of the land area and providing a more suburban feel on the approaches to the city.
- 3.18 The south eastern extent of the study area lies within LCA 3B 'Gog Magog Chalk Hills' within the Chalk Hills Landscape Type that extends to the east. This includes the Gog Magog Hills and White Hill to the south east of the study area which are distinctive and predominantly undeveloped. The Gog Magog Hills offer key views across greater Cambridge looking back towards some of Cambridge's most distinctive landmarks. The chalk hills feature areas of woodland and ancient interspersed amongst agriculture fields. Any development, change, or enhancement within the greenbelt in these landscape character areas should be conscious of their distinctive qualities.
- 3.19 In May 2020, Chris Blandford Associates were instructed to prepare a Landscape Character Assessment (LCA) of the Greater Cambridge area as part of the evidence base for the new Greater Cambridge Local Plan. Once published, the study will provide an up-to-date and consistent assessment of the current landscape character of the Greater Cambridge landscape to inform the Local Plan. An Interim Draft LCA Report (September 2020) indicates that the western extent of the study area and the lower lying areas of the eastern extent of the study area fall within the Lowland Clay LCA. The River Cam valley is identified as part of the River Valleys LCA. The higher areas of ground of White Hill within the eastern extent of the study area are identified as part of the Wooded Claylands LCA.
- 3.20 In relation to development on the edge of Cambridge, the Draft LCA Report concludes that *"in general terms, the Fens (to the north-east and east), the Cam River Valley to the north-east and south-west), the eastern part of the Western Claylands and Lowland Claylands (to the west) and the Gog Magog Chalk Hills (to the south) have sensitive landscape characteristics that are likely to be particularly vulnerable/susceptible to changes from major urban extensions than other landscape types around the edge of Cambridge."*
- 3.21 These sensitive areas relevant to the study area are described as follows:
- **Chalk Hills** – distinctive, elevated and undeveloped hills and ridges, open, panoramic views across Greater Cambridge and beyond, scattered woodland including ancient woodland on summits and slopes, and the tranquil often remote landscape character are inherent sensitivities of this landscape that are vulnerable to change.
 - **Lowland Claylands** – the rural tranquillity, scattered pattern of small woodlands, surviving moated sites and the dispersed, rural settlement pattern are inherent sensitivities of this landscape that are vulnerable to change.
 - **Cam River Valley** - a tranquil, intimate landscape, and the dense scattering of trees and scrub and small-scale pastoral fields along the river courses are inherent sensitivities of this landscape that are vulnerable to change.

- 3.22 When considering spatial options, the Draft LCA Report recognises the importance of key views of the City (such as from the Gog Magog Hills and Wimpole Ridge) and a sense of coalescence with the necklace of rural villages surrounding Cambridge. For all spatial options, the Draft LCA Report concludes *“it would be advisable to consider developing suitable landscape policies in the new Local Plan that require provision of strategic landscape mitigation and enhancement measures for integrating new development around the edges of Cambridge and rural villages in South Cambridgeshire into the surrounding countryside.”*
- 3.23 Cambridge has a distinctive skyline that combines towers, turrets, chimneys and spires with large trees. Famous buildings, such as King’s College Chapel, and St John’s College Chapel are treasured landmarks. Cambridge’s relatively flat topography limit the number of vantage points offering city-wide panoramas. However, there are a number of long-distance views from the south-east, south-west, and west, as well as from other parts of the city’s Green Belt.
- 3.24 The October 2018 Cambridge Local Plan, Appendix F: Tall Buildings provides guidance to maintain the character and quality of the Cambridge skyline, ensure that tall buildings, which break the established skyline are well considered and appropriate to their context, and support only new buildings which are appropriate to their context and contribute positively to both near and distant views. In the Cambridge context, a tall building is defined by Appendix F as: *“Any structure that breaks the existing skyline and/or is significantly taller than the surrounding built form”*. Within the suburbs, and therefore Cambridge South, buildings of four storeys and above trigger the need to address the criteria set out within the Tall Buildings guidance.
- 3.25 Appendix F: Tall Buildings recognises that views from the rural hinterland of Cambridge from both elevated and level views of the spires and towers in the historic core are limited and generally distant. The guidance recognises a number of important long and medium distance views which are important and relevant to Cambridge South, particularly from Lime Kiln Hill, and the Gogs. The following strategic views are also identified as being important to the Cambridge South development:
- M11/A1308 Elevated Roundabout
 - Little Trees Hill, Magog Downs
 - Limekiln Road
 - Worts’ Causeway/Shelford Road
- 3.26 Appendix F: Tall Buildings recognises that one of the most important characteristics of Cambridge is the relationship between the rural setting of the city within a partial ‘bowl’ of generally low-lying landscape with higher ground to the south-east, south and west and low-lying fen and clay lands to the north and east. The built environment of the city occupies a level area of land generally between 5m and 15m AOD (Above Ordnance Datum) with discrete areas above 20m AOD and Castle Mound at approximately 32m AOD which affords the only significant panoramic view within the city not taken from a building. To the south-east, the chalk ridge including the high point of the Gog Magog Hills, rises to 74m AOD. The western extent of the study area comprises a number of arable fields around 10-30m Above Ordnance Datum (AOD). This area slopes gradually south and westwards towards the River Cam with Stone Hill being the highest point. The western and north eastern extents of the eastern parcel of the study area follow a similar topography which gently rises to the centre and south of the site at White Hill. This leads to the higher land of the Gog Magog Hills. More widely within South Cambridge, although the topography is subtle, the gently undulating surface has largely

determined the pattern and character of human settlement. Watershed, ridge lines, and promontories are articulated as commons grazing land, stable ground for settlements and causeway transportation routes. The topography shapes key views and ultimately the pattern of future southerly expansion of Cambridge.

- 3.27 The eastern extent of the study area comprises a number of arable fields with hedgerow of varying quality, with a small number being of high landscape value. The land within this area is in use as arable farmland. The study area includes the Nine Wells LNR, a small rectangular woodland which includes a Grade II listed monument.
- 3.28 There are two Public Rights of Way (PRoW) within the study area including one PRoW (198/2) located within the eastern development zone which connects Nine Wells with Granham's Road as well as between Granham's Road and Cambridge Road in the centre of the study area (PRoW 98/1). Outside of study area there are PRoWs along Dame Mary Archer Way (PRoW 39/47) along the northern boundary of the study area and around the Gog Magog Hills to the south east of Cambridge South.
- 3.29 There are a number of ecological and heritage sites within Cambridge South and its surrounds, further details on which are provided within the respective themes below. Views from these designations will a critical consideration for future growth at Cambridge South.
- 3.30 As the above policy analysis confirms, the Cambridge South site has an important place within the local landscape, offering views from the high points of the Gog Magog Hills of the city, as well as being visible from distance given the nature of the topography and the generally uniform and low rise nature of buildings in the wider area. Views from the following will be particularly important to recognise and protect, as appropriate, in any future expansion:
- Viewpoints of the historic city core and landmarks from Little Trees Hill (Magog Down), Wandlebury Country Park, Worts Causeway/Shelford Road, Limekiln Road and PRoWs that run through these areas.
 - Views from the Gog Magog Hills to the south east facing the north west across Cambridge South and towards the city.
 - Views from the corridor associated with Hobson's Brook within the centre of the study area and from viewpoints further northwards, including from Hobson's Park.
 - Views from M11/A1309 roundabout facing east across the study area. Cambridge South is seen in the foreground of views from approaches to the city and countryside west of the M11 and provides an important role in framing the historic city.
 - Views from Trumpington Meadows to the north of the study area;
 - Views from Conservation Areas, associated Grade I and II* buildings and other heritage assets within these areas (see Historic Environment below), particularly those to the south of Cambridge South.
 - Existing and future sensitive receptors in close proximity to Cambridge South including the residential properties situated within the study area along Granham's Road and within the existing linear development along Cambridge Road, off Babraham Road, along the southern boundary of the study area as well as users of the Addenbrooke Hospital and future planned developments to the north.

- Within the Cambridge South study area including from the Nine Wells Monument, the Scheduled Monuments and the River Cam as well as the PRow that runs through the study area.
- 3.31 Views from the M11/A1309 roundabout facing east and from Little Trees Hill facing the north west across Cambridge South, as well as Castle Hill Mound, Shire Hall are identified as Strategic Viewpoints (Viewpoints 6, 7 and 1, respectively) under CCC's adopted Local Plan. Initial analysis has been undertaken on the impact of future growth at Cambridge South on Viewpoints 6 and 7 which is provided within the Spatial Masterplan Report. Further landscape and visual analysis will be used to inform the development of the masterplan and built form.
- 3.32 The Cambridge Inner Green Belt Boundary Study (November 2015) assesses the importance of areas for Green Belt purposes and advises on potential areas for land to be released for development. Under the heading 'Visually Detracting Townscape/Landscape' the following features of relevance to the site are recognised as areas and features of visually detracting townscape and landscape in Cambridge and its setting: the M11 parts of Addenbrooke's Hospital. The report recognises that *"views from the landscape east and south east of Cambridge are adversely affected by the presence of large, industrial and service buildings and structures in the railway corridor, at Cambridge Airport and Addenbrooke's Hospital. They detract from the edge and skyline of the city, and dominate the more subtle profiles of historic buildings in the historic core."*
- 3.33 Of particular relevance to the eastern extent of the study area is Section '9 A Soft Green Edge to the City' which recognises that *"A distinctive feature of Cambridge is its appearance as a densely treed city with a soft, green edge merging into an agricultural landscape. Where new, and particularly large scale, development occurs on the edge of the city and forms a boundary that appears abrupt and predominantly hard (such as the A14, Cambridge Airport buildings and Addenbrooke's Hospital) it does not contribute positively to the setting and special character of Cambridge."*
- 3.34 New development therefore provides an opportunity to create a robust, permanent but soft green edge to the city and help integrate the existing and proposed built form more successfully into the landscape. In this location, building heights will need to be carefully sited and controlled to ensure they sit appropriately as a collection of forms in the landscape and do not detract from the views towards the city from elevated points to the south east.
- 3.35 The GI Opportunities mapping undertaken for the emerging Local Plan, identifies a number of Broad Opportunity Zones for landscape, cultural heritage and sense of place within Cambridge South and its surrounding area including:
- **Gog Magog Hills and South Cambridge urban fringe (1e)** - Key opportunity to expand high-quality GI to help accommodate growth and absorb recreational pressure, enhancing existing landscape features within the fringes of south Cambridge towards the Gog Magog Hills. Whilst the Cambridge South site is not situated directly within the opportunity area identified in the report, its proximity to the Gog Magog Hills and location within the wider Southern Cambridge urban fringe makes it a key consideration.
 - **Chalk rivers corridor (1I)** - Enhancement of the Hobson's and Vicar's Brook forming the chalk river corridor and the creation of a link from the city's southern fringes into the Gog Magog Hills.

- **Cambridge city urban greening and public realm improvements (1m)** - Develop a public realm strategy to include urban greening interventions e.g. street trees, SuDS and green roofs, ensuring it enhances the historic character of streets, public spaces and GI assets. Also, seek to protect existing significant trees and tree-lined ways in the urban environment and list important views out of the city where feasible.

Cambridge South Response

- 3.36 Initial landscape and visual analysis has been undertaken to inform the emerging landscaped masterplan. The 2003 Landscape Character Assessment and initial findings from the emerging Local Plan Landscape Character Assessment have informed this, and further work is planned to inform the emerging vision. As a final LCA is expected to be published imminently, this further work will seek to ensure that the concept masterplan supports the defined Character Areas and protects the character of identified strategic viewpoints.
- 3.37 At a broad level, the Initial Draft LCA report, concludes that development the location of Cambridge South would concentrate urban development, which could reduce the urbanising impact of development across the wider Greater Cambridge landscapes as a whole.
- 3.38 At the heart of the proposals is the Landowner's commitment to creating a permanent improvement to the Green Belt to protect the villages in south Cambridge from encroachment by the city. This has been a design driver for the project and includes the delivery of one hectare of enhanced green space for every hectare developed at Cambridge South. In addition, the integration of a country park will protect the Green Belt from further future development and provide a vehicle to improve accessibility, health and wellbeing and biodiversity. The Landowners recognise that Cambridge South can deliver landscape enhancements on a substantial scale which would align to the opportunities identified by the emerging evidence base for the Local Plan, including:
- Providing a comprehensive network of high quality green infrastructure which is linked through a network of accessible walking and cycling routes to the city and wider countryside, which would help to absorb recreational pressure and enhance existing landscape features within.
 - Maintaining a rural setting to the new edge of the city.
 - Softening and enhancing views of the city from its western and eastern approaches and from the high ground to the south through strategic landscaping and design of built form.
 - Extending the River Cam green infrastructure corridor.
 - Providing a green buffer to the M11 corridor which would help improve the quality of open space.
 - Create a strong landscape structure to screen/soften built development as experienced in views from adjacent landscape types.
 - Providing a comprehensive landscape, open space and green infrastructure strategy which is multi-functional providing nature recovery, water management, noise, climate change and health benefits.
 - Improving opportunities to enhance people's enjoyment of the area while protecting levels of tranquillity.

- Long term governance where landscape is managed and maintained to ensure it successfully establishes and continues to thrive.

3.39 The Landowners recognise the role of the landscape in this area in providing a rural edge to the city of Cambridge, which protects the historical character of the surrounding towns and villages, and the sensitivity of views across land towards the city from its western and south eastern approaches and from higher ground to the south (Gog Magog Hills and Magog Down).

3.40 Development at Cambridge South would incorporate the following key principles to address these issues:

- Protection of landscape features of high value by set backs to development, e.g. Nine Wells LNR and high value hedgerows/tree belts.
- Avoiding development on areas of higher ground associated with White Hill.
- Ensuring building heights step down in height towards the south and siting taller elements along the northern extents, closest to the existing built-up areas on the southern extent of Cambridge.
- Incorporating a substantial green buffer to development in the south eastern corner closest to Magog Down and Gog Magog Hills.
- Limiting building heights to ensure views towards the city from the south.
- Maintaining a strategic countryside gap between development and the historic settlement of Stapleton and Great Shelford to the south and providing a soft green edge to new development.
- Higher density of development around the north east corner of the western development zone, adjacent to the city fringe with lower density towards the south, in keeping with the surrounding residential area.
- A strategic countryside gap between development and the historic settlements of Little Shelford and Great Shelford to the south to protect their character and separate identity, together with a soft green edge to new development.
- Substantial green buffers to development from the sensitive Cam River Valley corridor.

3.41 The Landowners are committed to ensuring that landscape is the heart of the masterplan for the Cambridge South development. This is evidenced by commitment to deliver one hectare of enhanced green space for every hectare of development.

Summary of Cambridge South Response

- **Design a connected, landscape-led masterplan** to deliver a place which offers a significant recreational asset for the city of Cambridge and surrounding areas and opportunities to reduce pressure elsewhere.
- **Delivery of 1 ha of green space enhancement for every 1 ha of development.**
- **A multi-functional landscape**, with benefits for nature recovery, water management and climate change.

- **Protect and enhance key views** across Cambridge South towards the historic city of Cambridge through sensitive zoning of development and out of the city, incorporation of setbacks and buffers and implementation of **strategic landscaping** to provide visual screening and provide a soft green edge to the new city fringe.
- **Protect and enhance the sensitive** Cam River Valley and expand a tranquil landscape where possible.
- Positive landscape management to ensure the **successful establishment and continued thriving** of the proposals.

Historic Environment

Key Considerations

- 3.42 At the heart of adopted and emerging planning policy for Cambridge is the need to protect the area's important historic buildings, conservation areas and historic landscapes that form an integral part of the region's context. Conserving the value of heritage assets, in particular their setting, will be a key consideration for any future proposals across Cambridge South. A summary of the key heritage assets relative to Cambridge South is provided below and illustrated in Figures 2 and 3.
- 3.43 The Grade II listed Nine Wells Monument is the only listed structure within the study area. Located within Nine Wells Local Nature Reserve, it is a memorial to Thomas Hobson, the founder of Hobson's Conduit, which was built to bring fresh water into the city from the springs at Nine Wells. In addition, whilst undesignated, the Hobson's Conduit / Hobson's River / Cambridge New River is a major landscape feature of high historical importance for the city and surrounding region. Given the Hobson's Conduit originates from the springs at Nine Wells, it provides a connection between the eastern extent of the study area and the city.
- 3.44 Three Conservation Areas, located to the south of Cambridge South, recognise the setting and special character of the historic settlements of Hauxton, Little Shelford, Great Shelford, Stapleford and Trumpington. Their distances from the closest boundary of the Cambridge South study area are as follows:
- Little Shelford CA (250m south east of the western extent of the study area).
 - Great Shelford CA (250m south east of the western extent of the study area).
 - Hauxton CA (480m south west of the western extent of the study area).
 - Stapleford CA (1km south west of the eastern extent of the study area).
 - Trumpington CA (520m north of the study area).
- 3.45 These Conservation Areas form part of the rural setting to parts of Cambridge South and the wider setting of Cambridge, the conservation and enhancement of which is a significant priority for Greater Cambridge. These Conservation Areas include numerous Grade II listed buildings. The closest Grade I and II* listed buildings are as follows:
- Grade I Church of St Mary within Greater Shelford CA, 530m south of the study area.

- Grade II* Middlefield and Garden Wall south of Hinton Way, 650m south of the study area.
- Grade II* Church of St Andrew 1km south of the study area within Stapleford CA.
- Grade II* Rectory Farmhouse, Grade II* Little Shelford Manor and Grade II* Church of all Saints within Little Shelford and Greater Shelford CAs, approximately 450-530m south west of the study area.

3.46 A small number of Grade II listed buildings are located close to Cambridge South, including:

- Granham Farm (adjacent to the southern boundary of the study area).
- Thatched Cottage (adjacent to the south east corner of the study area).
- Milestone (adjacent to the northern boundary of the study area at the A1309 Hauxton Road / A1301 Addenbrookes Road junction).
- Four Grade II listed structures at De Freville Farm situated adjacent to the southern boundary of the study area.

3.47 The closest Registered Parks and Gardens is the Botanic Garden (Grade II*) situated 2.6km north of the study area. In addition, Sawston Hall (Grade II) and Pampisford Hall (Grade II*) are situated over 4km from the study area and therefore unlikely to be affected.

3.48 The city of Cambridge is renowned worldwide for its historic environment, which defines the character of the city and makes it a popular tourist destination. The 'historic core' is a large conservation area deemed to be of particular historic interest, with over 1,000 listed buildings largely clustered in the central and western parts of the city centre. Cambridge South forms a key feature in the landscape for views to and from this historic city.

3.49 Cambridge South lies within an archaeologically rich landscape with the Cambridge Southern Fringe identified as an area of archaeological significance. Three Scheduled Monuments (Site revealed by aerial photography W of White Hill Farm, Settlement complex North of Hauxton and Causewayed enclosure at Great Shelford) are situated within the study area with the former located within the centre of the study area the latter two Scheduled Monuments situated close to the River Cam, in arable fields.

3.50 A number of other Scheduled Monuments are located in the vicinity of the study area, including Wandlebury Camp Scheduled Monument, a hill fort, and Little Trees Hill Scheduled Monument, located to the south of the study area on the crest of the Gog Magog Hills. Two further Scheduled Monuments are located in the floodplain to the south of the River Cam. Views of Cambridge South may be relevant to the setting of these historic assets and will be carefully considered.

3.51 The gravel terraces and chalk slopes are rich in the remains of later prehistoric (Iron Age) and Roman settlements, mostly identified through cropmarks. The Roman road connecting Duroliponte (the Castle area of Cambridge) to the south-east and Colchester (Camulodunum) may have intersected with another road aligned along Worts Causeway (Scheduled Monument) to the east of the study area (a Scheduled Monument). The villages of Grantchester, Trumpington, Hauxton and Great Shelford are Medieval with probable Saxon origins.

- 3.52 The remains of the Second World War anti-tank defence, known as the GHQ Line, are also known to the present across parts of the eastern extent of the study area. Dug in 1940, this ditch – up to 6 m wide and 2 m deep - was part of the final defence for the City of Cambridge against the threat of a German land invasion.
- 3.53 It is recognised that Cambridge South lies within an area with dense, multi-period archaeological evidence and undiscovered archaeological remains likely to be associated with earlier settlement and land use (Neolithic, Bronze Age, Iron Age and Roman). The density of Prehistoric and Roman settlements in the area suggests that the archaeological potential in areas of undisturbed land is high.

Cambridge South Response

- 3.54 The Landowners are committed to ensuring that development at Cambridge South protects and enhances the setting of heritage assets in line with national planning policy and this forms a key element of placemaking.
- 3.55 The designated heritage assets within the study area include three Scheduled Monuments and Grade II listed Nine Wells Monument would not be directly affected by the development.
- 3.56 A multifunctional river corridor along the River Cam would offer opportunities to enhance the setting of both Scheduled Monuments situated in close proximity to the River Cam and their interpretation through carefully designed access and green infrastructure. The development of an ecological and historical corridor along the River Cam could provide a new gateway, in line with the aspirations of the GI Opportunity Mapping Baseline Report, between the emerging development at CBC and the city of Cambridge to the north and the wider countryside (including two further SMs) to the south. The Spatial Masterplan Report shows that there would be no built development in these areas and development zones would be suitable set back to protect their setting.
- 3.57 The Grade II listed Nine Wells Monument within the study area would be celebrated as an asset with opportunities to enhance connectivity to the Monument, providing improved recreational and educational opportunities. This would tie into improving access and interpretation of the Local Nature Reserve (LNR) at Nine Wells which surrounds the Monument as well as the Hobson's Conduit which is recognised as a valuable heritage asset for Cambridge. Proposals for this area would be sensitively designed to respect to the existing ecological and geological value of the Nine Wells LNR.
- 3.58 It is recognised that Cambridge South will be visible in views from heritage assets, in particular Conservation Areas to the south and Scheduled Monuments located south of the River Cam, Magog Down to the south and west of Nine Wells Monument. The role of the Cambridge South in the setting of all heritage assets will be carefully examined, however, the form of the development and approach to strategic landscaping will be designed to protect the historic built character of the settlements to the south and other assets from where Cambridge South can be viewed. The built form and massing of the development will be limited to retain and enhance long distant views of the historic city of Cambridge, particularly from the Gog Magog Hills, as shown by the Spatial Masterplan Report. As detailed under Landscape and Visual, strategic green infrastructure in the south east of the study area in particular offers a significant opportunity to soften the existing built southern and western fringes of Cambridge.

- 3.59 Sensitive design and strategic landscape planting along the southern boundary across the study area would be capable of protecting and enhancing the setting of Conservation Areas and the Grade II* and Grade I listed structures identified above. Development has been set back from the southern extents of the Cambridge South site to preserve views from these areas and from the Gog Magog Hills.
- 3.60 Archaeological investigations would be undertaken as part of any future proposals across Cambridge South which would further understanding of the archaeological heritage of the area and allow the masterplan to evolve in response and protect important assets wherever possible.
- 3.61 The Landowners are committed to exploring further opportunities to enhance the setting of heritage assets through other means, for example through reducing noise levels, active travel offer to reduce traffic and land management.
- 3.62 The Landowners are also committed to ensuring that development celebrates heritage assets within and around Cambridge South as part of a cultural strategy which would include interpretive and educational material.

Summary of Cambridge South Response

- **Protection and enhancement of the setting of designated heritage assets** within Cambridge South through appropriate landscape treatment and buffer zones.
- **Improved access** to, as well as **enjoyment and understanding** of the heritage assets within Cambridge South through interpretation.
- **Protection and** enhancement of surrounding heritage assets through careful design of strategic landscape, access and sensitive integration of new development. Key views of the City from heritage assets will be safeguarded through limiting building envelopes.
- Explore opportunities to design layout to **protect undesignated archaeological** assets, where possible, as informed by evaluation.

Biodiversity, Geodiversity and Green Infrastructure

Key Considerations

- 3.63 The Cambridge South study area comprises over 400ha, the majority of which is presently in arable use bound by hedgerows of varying quality. Whilst full ecological surveys have not yet been undertaken, the Cambridge South study area is likely to support some areas of priority habitat and species, although there are also significant opportunities for biodiversity enhancements.
- 3.64 The closest European designations, Eversden and Wimpole Woods Special Area of Conservation (SAC) and Devil's Dyke SAC are situated 9km west of the western extent of the study area and 15km north east of the eastern extent of the study area, respectively, and are therefore considered to be sufficient distance so as to avoid any adverse effects from growth at Cambridge South.

- 3.65 Statutory and non-statutory designated ecological sites most relevant to Cambridge South are illustrated in Figure 4 including Sites of Special Scientific Interest (SSSI), Local Nature Reserves, (LNR), Local Geological Sites (LGS) and City and County Wildlife Sites (CiWS / CWS). No ancient woodland is present within Cambridge South or the local area.
- 3.66 As illustrated in Figure 4, the area includes a number of important but isolated nature sites which lack connectivity. Nature recovery opportunities in the area therefore include connecting these isolated nature reserves and network of habitats on the Magog Hills (Nine Wells, Magog Downs, Wandlebury, Beechwoods, Roman Road, Fleam Dyke and East Pit) for the benefit of biodiversity and people. This wider area of chalk grasslands and connected habitats around the Gog Magog Hills and River Cam corridor will be a key opportunity for future development at Cambridge South and has been identified as one of several strategic conservation opportunity areas for Cambridgeshire.
- 3.67 Situated to the north east of the study area are the SSSIs, LNR, CiWS and CWS associated with Cherry Hinton Pit and the Lime Kiln Reservoirs. The road leading to these sites is also a Protected Road Verge (PRV). In addition, the Beechwoods LNR, Gog Magog Golf Course SSSI, Worts Causeway CWS, Roman Road SSSI and Wandlebury Country Park CWS are situated to the east of the study area. Both Cherry Hinton Pit and Gog Magog Golf Course SSSIs are both designated for their chalk grassland habitat. Magog Down is not yet designated as an LNR but will be assumed as such in recognition of its biodiversity value.
- 3.68 The Nine Wells LNR and LGS is situated within the northern section of the study area and is a historically important LNR containing several chalk springs which form the source of Hobson's Conduit. The LNR comprises a small woodland area surrounded by agricultural land which is accessible via a small number of public and permissive paths. The site was previously designated as a SSSI for rare freshwater invertebrates, however this status was lost in the drought of 1976.
- 3.69 Adjacent to the northern boundary of the study area are CiWSs associated with the Red Cross Lane drain and hedgerows west of Babraham Road. The Hobson's Brook (Mid and South) is also designated as a CiWS as a chalk stream habitat. The River Cam is designated as a CWS and provides an important connection to Trumpington Meadows Country Park and Byron's Pool LNR to the north.

Cambridge South Response

- 3.70 Due to their distance from Cambridge South, significant effects on internationally designated sites from the development are not considered likely. The adjacent SSSI at Gog Magog Golf Course is unlikely to be affected by increased recreational pressure as access is already managed. Significant air quality effects, such as nitrogen deposition, would be avoided through landscape buffers, careful design of access and sustainable transport strategies.
- 3.71 The location of Cambridge South provides a unique opportunity to fulfil GCSP's wider aspirations to improve the green infrastructure and Nature Recovery Network, avoid further fragmentation and reconnect isolated designated sites and habitats. This is due to the proximity of Cambridge South to both the Gog Magog Hills and River Cam as well as Hobson's Brook. This would be delivered through landscape-scale GI as part of planned Green Belt enhancements which would also be important to the wider response to climate change, as explored below.

- 3.72 Development at Cambridge South would seek to avoid losing biodiversity and natural capital in the first place through retaining and enhancing assets wherever possible. In line with the requirements of the Environment Bill, the Landowners are also committed to ensuring that development of Cambridge South delivers at least 10% biodiversity net gain. This would be delivered through habitats within the development areas and within the substantial areas of land which would be dedicated to green infrastructure. The Landowners are committed to delivering 1 ha of green space for every 1 ha of development which offers a real opportunity for the Nature Recovery Network and biodiversity.
- 3.73 Development across the eastern extent of the study area in particular would play a key role in delivering restored and connected habitats from Nine Wells LNR through to Magog Down, Gog Magog Hills and wider countryside. These habitats would also be delivered within the development area as part of an integrated landscape and open space design and would include chalk grassland, woodland, enhanced hedgerows and other priority habitats. In line with the Doubling Nature vision, opportunities to buffer and expand the flower rich chalk grasslands of the Gog Magog Hills and southern Cambridge network will be maximised.
- 3.74 The development would include a strong ecological buffer to the Nine Wells LNR and will offer a network of pathways through landscaped areas with features of interest and alternative opportunities for recreation and amenity. This will help to protect this important local biodiverse and geodiverse site. The development also offers opportunity to improve water quality through changes in land management and protection of the base water flow to this LNR which could help restore its former value for freshwater invertebrates. These opportunities are also important with respect to Hobson's Brook which is situated in the centre of the study area. Development at Cambridge South could deliver recreational and biodiversity enhancements along Hobson's Brook whilst also ensuring protection from base water flow to improve water quality of the water course.
- 3.75 Development within the western extent of the study area would deliver green corridors and enhancements to the riverside. The River Cam corridor presents a valuable opportunity to increase the amount of wetland habitat such as wet woodland and wet meadows, strengthening the biodiversity value. This would deliver a new corridor of habitats along the M11 northwards towards Trumpington Meadows.
- 3.76 The development areas that include buildings would also include connected habitats and stepping stone greening measures to optimise habitat connectivity whilst also serving to sequester carbon and maximise health and wellbeing benefits.
- 3.77 In providing green corridors and recreational and open space, growth at CBC would also encourage delivery of Cambridgeshire's vision for Doubling Nature by creating a connected network of new habitats including wetland habitats, meadows, calcareous grasslands, new copses, woodlands, hedgerows and roadside planting. This would ensure that the habitat and wildlife potential of Cambridge South is significantly enhanced. The GI strategy on-site would tie into other key environmental considerations for Cambridge South, such as water management, climate change resilience and health and wellbeing.
- 3.78 The future proposals would take a positive approach to accommodating the green space needs of the future population on-site but also other users. A comprehensive network of green space would be provided across Cambridge South, including the provision of a country park. This

new natural green space would be well positioned and connected with the fringe of Cambridge and settlements to the south, to help to relieve the existing recreational pressure on existing wildlife sites.

3.79 Cambridge South therefore provides a significant opportunity to deliver accessible nature-rich green space which could help improve people's general health, wellbeing and happiness. This new green space would be accessible to all, with new footpaths, cyclepaths and bridleways creating routes through the area, linking to the city, surrounding communities and the countryside including Wandlebury Country Park and Magog Down.

Summary of Cambridge South Response

- Protect existing biodiversity.
- Deliver a biodiversity net gain across Cambridge South and contribution to the **Doubling Nature** targets.
- Provision of a landscape-scale GI strategy to **provide recreation and open space** requirements of the future population on-site whilst **maximising the habitat and wildlife potential** of Cambridge South and contributing to the Cambridge Nature Recovery Network.
- **Creation of multi-functional green** spaces that will provide flood risk attenuation, carbon sequestration and access to recreational opportunities in the countryside.
- Expand and reconnect flower rich chalk grasslands and woodland of the Gog Magog Hills.

The Water Environment

Key Considerations

3.80 The south western extent of the study area is bounded by the River Cam, a main river, which flows northwards towards Cambridge and is designated as a County Wildlife Site. The Environment Agency has classified the River Granta to be at moderate water quality status in 2016. One of the reasons for only achieving a moderate status is that the hydrological regime "Does Not Support Good". There are no other main rivers or watercourses within the Cambridge South study area. Hobson's Brook, a chalk stream, also flows northwards through the centre of the study area towards Hobson's Park and Cambridge.

3.81 The flood risk across Cambridge South can be summarised as follows:

- Fluvial Flood Zone 3 (1 in 100 or greater chance of flooding) associated with the River Cam which is situated along the southern western extent of the study area. Localised areas of high to medium surface water flood risk are identified in the western extent of the study area.
- Flood Zone 3 extends into the north eastern corner of the study area. This area is also subject to high to medium surface water flood risk.

- 3.82 Detailed hydraulic modelling of the eastern extent of the study area (which included a 40% climate change allowance) was undertaken in 2016 by Peter Brett Associates which proves that the Flood Zone 3 identified on Environment Agency mapping is due to surface water overland flow and not due to fluvial flood risk. As such, this Flood Zone 3 extent does not pose a constraint to development.
- 3.83 Cambridge South is underlain by Chalk Bedrock, which is classified as a Principal Aquifer. Groundwater in the chalk flows broadly from the high topographic areas (e.g. under the Gog Magog Hills) north / north westwards towards the River Granta and River Cam valleys. The springs of Nine Wells LNR and LGS are groundwater fed and are the main source of water for Hobson's Conduit which flows northwards.
- 3.84 Sustainable drainage design, particularly within the western extent of the study area, will have to have regard to relevant safeguarding criteria associated with the Cambridge International Airport.
- 3.85 Cambridge South is not located within a Groundwater Source Protection Zone (SPZ) however there is a notably large SPZ situated 500m south east of the study area which extends over the East Anglian Chalk.
- 3.86 Protection of local water resources from pollution, in particular from surface water runoff, including the River Cam and Nine Wells, Hobson's Brook and Cherry Hinton Brook will be critical. The eastern extent of the study area lies in close proximity to Opportunities Zone 3a of the GI Opportunities Mapping Baseline Report which identifies restoration of the River Cam's tributaries, notably along the Hobson's Brook, to improve water quality.
- 3.87 Water infrastructure including water supply and wastewater capacity is recognised as an important consideration for any future development at Cambridge South. At present, water supplied to Greater Cambridge through increased abstraction from the Chalk aquifer has placed the aquifer under unsustainable abstraction pressure. Longer term solutions are being explored through regional (Water Resources East) efforts although these would not be realised until the mid-2030s.
- 3.88 Relocation of the Cambridge Water Recycling Centre (WRC) is targeted for operation by March 2028 and will be designed to accommodate future planned Local Plan growth.

Cambridge South Response

- 3.89 The Landowners are committed to delivering a development which adopts an integrated water management approach, which helps to tackle the challenges of drought and climate resilience, water quality, and flooding risks, whilst also offering other benefits.
- 3.90 All built development would be substantially set back from the River Cam Flood Zone 3 and therefore there would be no risk of fluvial flooding to the development.
- 3.91 As referenced in paragraph 3.82 above, recent detailed hydraulic modelling of the eastern extent of the study area concluded that Flood Zone 3 identified by Environment Agency mapping relates to surface water and therefore not pose a constraint to development. This surface water flood risk can be readily mitigated through well designed surface water drainage strategy. The surface water drainage strategy for the study area would also include a

management train of SuDS measures to mimic natural drainage to avoid adverse effect on watercourses and groundwater and to improve water quality where possible. An integrated approach would be taken to SuDS and GI to promote biodiversity, increase soil and water quality and enhance landscape character. Importantly, this SuDS approach would be accompanied by a commitment from the Landowners to explore the implementation of land management principles designed to protect and improve water quality which is likely to be affected currently by present agricultural practices.

- 3.92 The location of the western extent of the study area, in particular, presents a unique opportunity to explore restoration of some of the floodplain along the River Cam corridor or create additional wetland areas in-line with the opportunities identified by the Greater Cambridge Integrated Water Management Study (IWMS) and the GI Baseline Mapping Report. Sensitively planned, this would offer opportunities to improve biodiversity, water quality and potentially reduce downstream flood risks by holding more water within the floodplain for longer.
- 3.93 The River Cam corridor could provide an opportunity to plant wet woodlands (as indicated in the Spatial Masterplan Report) which could help offset increases in nutrient loads, improve water quality, slow rates of runoff and increase recharge to groundwater, as well as providing GI enhancements and potentially contribute towards carbon neutrality. This would help contribute towards the Doubling Nature vision to *“increase groundwater protection to recover our natural, chalk springs”*. This is particularly important in light of the existing unsustainable pressure being exerted on the groundwater resource of the East Anglian Chalk.
- 3.94 The IWMS recognises that from a water management perspective, the best place to build new homes is in new settlements or large developments on the edge of Cambridge. This is because they can be designed from the outset for efficient and integrated water management, rather than having to ‘bolt on’ to existing infrastructure.
- 3.95 Relocation of the Cambridge Wastewater Treatment Plant offers opportunities to expand capacity to support growth at Cambridge South.
- 3.96 To minimise pressure on water supply, the Landowners are committed to encouraging grey / green water recycling as part of any future proposals, to go beyond the Building Regulations standard requirement of 125 l/p/d, with aspirations to meet 110 l/p/d. A high standard of water efficiency measures would be employed across all future proposals at Cambridge South.
- 3.97 By concurrently bringing forward extensive biodiversity, environmental and landscape improvements with the development needed to support demand, Cambridge South will help support wider local priorities including reducing water pollution and potentially reducing downstream flooding. Development will lead to significant additional demand for water supply and wastewater treatment infrastructure which would be minimised through high standards of design. The Landowners recognise the existing pressures on water supply and are therefore committed to also exploring opportunities for education to support behavioural change and effective stewardship.

Summary of Cambridge South Response

- Integrate GI, SuDS and flood attenuation requirements to alleviate surface water pressure by mimicking natural drainage.
- Ensure **no detriment** to the flood risk of downstream communities and betterment where possible.
- Maximise opportunities to **recharge groundwater resources** of the East Anglian Chalk.
- **Minimise water demand** from any future development and encourage grey/green water recycling.

Land and Agriculture

Key Considerations

- 3.98 The majority of Cambridge South is in agricultural use for arable crops. Agricultural Land Classification (ALC) data indicates that Cambridge South comprises predominantly Grade 2 (Very Good) agricultural land with localised areas of Grade 3 (Good to Moderate) identified around White Hill in the eastern extent of the study area and along the southern extent of the study area (see Figure 6). National planning policy recognises the need to make efficient use of Greater Cambridge's land resources by minimising the loss of best and most versatile (BMV) agricultural land.
- 3.99 Cambridge South is underlain by chalk bedrock and is not situated within a Groundwater Protection Zone. There are no areas of historic or authorised landfill on-site therefore the risk of significant contamination is limited. There is one historic landfill within a 2km radius of Cambridge South, approximately 550m east of the study area, named Hill Trees. There are no areas of authorised landfill within 2km of Cambridge South. Overall, sources of ground contamination at Cambridge South are likely to be limited to predominantly agricultural use on-site.

Cambridge South Response

- 3.100 It is recognised that development of Cambridge South would result in a loss of BMV land due to changes in land use. The high-grade soil will therefore no longer be available for agricultural use. This loss would be unavoidable and would occur with development at other locations on the fringe of Cambridge due to the prevalence of BMV.
- 3.101 The loss of BMV land would be mitigated through appropriate re-use of soil resources on / off-site and maximisation of agricultural potential of BMV areas on remaining undeveloped land wherever possible, although it is noted that some land may be subject to Agricultural Holdings Act 1986 (AHA) tenancies. Opportunities to integrate food growing uses as multi-functional greenspaces such as allotment gardens, orchards and grazing have been incorporated into the masterplan which would contribute to the GI aspirations of the GCSP emerging Joint Local Plan.
- 3.102 The Landowners recognise the loss of BMV land that would result from development at Cambridge South and will explore methods to improve land stewardship of any retained

agricultural land, such as using practices which provide an opportunity for carbon sequestration.

Summary of Cambridge South Response

- Incorporate **food growing opportunities** such as allotments and small-scale sustainable agriculture into the GI network.
- **Re-use soil resources** on/off-site wherever possible.
- Explore opportunities to **maximise agricultural potential** of BMV areas on remaining undeveloped land within Cambridge South.

Air Quality

Key Considerations

3.103 The Greater Cambridge area has three air quality management areas (AQMA), one covering Cambridge city centre, and two in South Cambridgeshire along the A14 and M11. The City of Cambridge Council declared an AQMA during 2004 due to persistent exceedances of the Air Quality objective for annual mean NO₂. The southern edge of the Cambridge (City Centre) AQMA is located approximately 2.2km north of the study area at its closest point.

3.104 Air quality monitoring data in the vicinity of Cambridge South indicates that the annual mean concentrations of NO₂ in the vicinity of Cambridge South were below the relevant AQS objective of 40 µg/m³ during 2019. Monitoring located on Addenbrooke's Road had an annual mean concentration of 16 µg/m³ during 2019, indicating a good level of existing air quality in the vicinity of the proposed development. Local monitoring also demonstrates that concentrations of NO₂ have decreased since 2015.

3.105 Nearby residents, hospitals and ecological designations will be sensitive to air quality effects associated with the proposed development. Whilst the Greater Cambridge emerging Joint Local Plan HRA identified Devil's Dyke SAC, Ouse Washes SAC, SPA and Ramsar as sensitive to air quality changes, these are considered to be a sufficient distance from Cambridge South to not be affected by the development.

3.106 In addition, to help protect the health of future residents and users of Cambridge South, air quality emissions from the M11 and adjacent A-roads would need to be considered as part of any future proposals for the development and vehicle emissions minimised from the development itself.

Cambridge South Response

3.107 The Landowners are committed to improving health and wellbeing and are therefore seeking to deliver a development which is based on the fundamental principle of avoiding the need to travel by private car through a unique planned mix of complementary uses and a travel strategy which is centred around walking, cycling and public transport.

- 3.108 The travel strategy would include reliance of electric vehicles, and would be further developed and tested to ensure that it does not adversely impact on air quality or expose sensitive users to poor air quality.
- 3.109 The development is also ideally located to take advantage of excellent existing connections to local public transport such as the existing park and ride and busway connections provided at the Trumpington and Babraham facilities, as well as the transport infrastructure improvements in the area being planned by the Greater Cambridge Partnership. This would further help reduce vehicle journeys and emissions on the roads in Cambridge.
- 3.110 The inclusion of micro consolidation centres across Cambridge South to better manage the movement of and delivery of goods is a key component of the wider mobility strategy. The centres would form part of the last mile element of the supply chain, collating deliveries to a single location for onward delivery by more sustainable and less intrusive methods, rather than allowing for goods to be delivered separately. This coordinated approach would reduce freight traffic travelling through Cambridge South.
- 3.111 Overall, the focus of the Transport Strategy for Cambridge South on meeting the needs of CBC employees locally (including housing, education and recreation), delivering and enhancing active travel corridors and integrating with the public transport network would reduce reliance on cars and minimise future air quality emissions for Cambridge South and its surrounding area.
- 3.112 The development would seek to avoid potential nitrogen deposition effects on ecological receptors associated with vehicular traffic through sensitive siting of access points, setbacks and use of landscape buffers as well as by minimising traffic flows on the A1307 adjacent to the SSSI.
- 3.113 The implementation of a multifunctional river corridor within the western extent of the study area will enhance air flow and filter out pollutants, contributing to improved air quality as well as providing GI, flood risk and amenity benefits. Expansion of this river corridor northwards along the M11 would also help to provide appropriate mitigation for future users of Cambridge South – this would tie into the noise mitigation requirements on site (see below).

Summary of Cambridge South Response

- Colocation of uses which reduces the need to travel by car.
- Implement an sustainable travel strategy.
- **Multifunctional mitigation** design features that provide benefits to air quality, noise, blue and green infrastructure.

The Noise Environment

Key Considerations

- 3.114 Considering noise in design is paramount to the collective health and safety and quality of life of those who live, work and play within the new spaces. The noise environment within the western extent of the study area is heavily influenced by road traffic noise from the adjacent M11, Hauxton Road and Addenbrookes Road, and to a lesser extent the railway line which forms the southern boundary of the Cambridge South study area. Available sources indicate that a significant portion of the western extent of the study area is exposed to levels of appropriately $L_{Aeq,T}$ 60 dB daytime which is only slightly above the standard required (set at 55 dB for outdoor living areas). Current noise levels would be minimised through a suite of mitigation measures for both outdoor areas and internal spaces, which are explored below.
- 3.115 The eastern extent of the study area is influenced by road traffic noise from the adjacent Babraham Road (A1307) as well as the London to Cambridge railway line which runs through the centre. Future noise sources may be introduced to Cambridge South and the surrounding area through development of the emerging transport infrastructure schemes including the South Cambridge Railway Station and Phase 2 of the Cambridge South East Transport scheme.
- 3.116 Existing noise levels associated with some of the above noise sources would affect the quality of life those living and working at Cambridge South without appropriate treatment.
- 3.117 Unmanaged noise generated as a result of development at Cambridge South, such as through increased vehicular trips on the surrounding road network, has the potential to impact nearby sensitive receptors and also impact the setting of heritage assets.

Cambridge South Response

- 3.118 The Landowners are committed to ensuring that the development avoids significant noise impacts on the health and quality of life of those living, working and enjoying Cambridge South and avoids adverse impacts on other sensitive receptors.
- 3.119 The travel strategy is based on the fundamental principle of avoiding the need to travel through a unique planned mix of complementary uses. Mobility would be centred around walking, cycling and public transport, thus minimising road traffic and avoiding significant adverse effects on existing sensitive receptors.
- 3.120 Good acoustic design principles would be applied across Cambridge South to ensure appropriate noise conditions are provided within Cambridge South for existing and future sensitive receptors.
- 3.121 Where appropriate, acoustic design measures will be integrated into other opportunities across other key themes within this Environmental Appraisal. An extended green corridor adjacent to the northern side of the M11 provides an example of where the creation of new landscape features which are compatible with the character of the river valley would provide noise attenuation whilst delivering a number of other benefits. Embedding noise mitigation measures into the GI strategy will be important to creating tranquil natural green spaces for the public to enjoy.

3.122 Throughout the future design of development at Cambridge South, consideration will be given to strategic, thoughtful massing which seeks to place less sensitive uses within more sensitive spaces, i.e. locating commercial provision closer to existing noise sources and residential uses in quieter areas.

3.123 Where single function noise mitigation measures are required, such as noise bunds and acoustic fencing along the M11, these would be carefully designed within the wider landscape setting.

Summary of Cambridge South Response

- Provision of **noise attenuation** along the M11 to ensure noise conditions are suitable across the western extent of the study area.
- Create a noise environment which **promotes good health and a good quality of life** for the benefit of all.
- Development of a **20-minute neighbourhood** to minimise car use and therefore reduce development-generated road traffic noise.

Wellbeing and Social Inclusion

Key Considerations

3.124 As noted in the Issues and Options report, whilst Greater Cambridge, as a whole, is considered overall to be a prosperous area, not all communities and individuals within Greater Cambridge experience the benefits of this wealth because of the inequalities present within the region. To the north of Cambridge South, Cambridge has been identified as the most unequal city in the UK and includes some of the UK's most deprived areas. Communities across the wider areas of South Cambridge to the south, east and west of Cambridge South face issues of limited access to services and transport. Growth at Cambridge South can therefore positively contribute to levelling out opportunity and access for all whilst promoting healthy living, improved wellbeing and social inclusion.

3.125 A survey commissioned by Cambridge University Hospitals in 2020 identified the specific issues faced by hospital staff:

- Cambridge is one of the least affordable housing markets in the country, a challenge furthered by the range of salaries afforded to staff.
- There is an affordability gap between incomes of £25,000 to £45,000, above the threshold to qualify for social rent but below the threshold to be able to comfortably meet costs in the private rented sector (PRS).
- The increase in the amount of households within the PRS indicates that there are an increasing number of people unable to make the jump to owner occupation due to cost. High rents in the local market require a higher than average proportion of household salary paid towards rent, leaving households unable to save to buy a home.

- An increase in outward migration for 30-44 year olds indicates that worsening housing affordability is also not allowing current owner occupiers to move to homes within the area that better meet their needs, so they are moving elsewhere. This means employees are faced with longer commutes which puts pressure on transport infrastructure.

3.126 These present serious issues on housing affordability in Cambridge, and for both staff attraction and retention at CBC.

Cambridge South Response

3.127 The Landowners are committed to creating a healthy and inclusive community at Cambridge South. Growth at CBC provides an opportunity to create homes and jobs for the area, improving the provision of suitable and affordable housing and creating learning opportunities and employment. In addition, the provision of schools, healthcare, local services and community, sport and recreational facilities will improve access for all and will be accessible not only to future residents at CBC but also the wider community.

3.128 A minimum of 40% of homes would be affordable (approx. 2,000 homes) and designed to meet the very specific needs of hospital and CBC campus staff.

3.129 The proposed mix of uses and open spaces would be located in ways which promote social interaction and meet a variety of needs in the community, at all ages.

3.130 Noise, carbon and air quality emissions as a result of growth at CBC will be minimised through a focus on sustainable transport design and initiatives to minimise car use and the development of an integrated GI strategy that will seek to provide noise attenuation, flood mitigation and carbon sequestration. This will help to promote good health and a good quality of life.

3.131 Community engagement will be a key part of evolving the masterplan and will allow existing communities to help shape future proposals at CBC. This will ensure the Landowners are creating safe, accessible and inclusive communities that meet the variety of needs of the area's existing and future population.

3.132 New green spaces would be help create wellbeing by providing places to relax and socialise, and support healthy lifestyles by providing places for play and sport. Public access to nature within easy walking distances would also be available to all, which is known to have health and well-being benefits.

Summary of Cambridge South Response

- Creation of a healthy and inclusive community that promotes wellbeing and social inclusion for all.
- Provision of **suitable and affordable housing** to meet local needs and ensure accessibility for all.

- Creation of jobs and learning opportunities.
- Provision of a broad range of local services including **education, healthcare, open space and recreation** facilities.

Natural Resources

Key Considerations

- 3.133 Under the adopted Minerals Plan (2011), a Minerals Safeguarded Area (MSA) encroaches Cambridge South in the south west corner of the study area, adjacent to the M11 and the River Cam. The MSA is designated for deposits of sand and gravel that are considered to be of current or future economic importance. In addition, under the MWLP 2019 Proposed Submission Plan areas within both sites of Cambridge South are identified as MSAs for sands and gravel (in the north east corner of the study area) and chalk (in the western extent of the study area).
- 3.134 Future development at CBC will need to ensure sufficient capacity of waste infrastructure to accommodate future development.

Cambridge South Response

- 3.135 The Landowners are committed to seeking opportunities to use locally sourced and sustainable materials during construction, to minimise embodied carbon and mitigate climate change. In addition, early consideration will be given to Circular Economy principles as part of the masterplan's evolution and CBC's Vision 2050. The Landowners are committed to working with stakeholders to develop solutions that are viable, effective and will support wider priorities.
- 3.136 Provision of waste infrastructure on-site would be delivered in line with GCSP, SCDC and CCC requirements and consultation will be undertaken with the Councils to ensure adequate capacity of waste infrastructure for future development at Cambridge South. Opportunities to incorporate on-site sustainable waste management measures will be explored.

Summary of Cambridge South Response

- Opportunities to use **locally sourced and sustainable materials** during construction will be maximised.
- Exploration of integration of **Circular Economy** principles within Cambridge South.
- Provision of **waste infrastructure** in-line with requirements.

Conclusions

- 4.1 Cambridge South provides a unique opportunity to deliver much needed homes at scale alongside new employment floorspace and supporting infrastructure to address current CBC shortcomings whilst also planning for future growth in the most sustainable way possible.
- 4.2 Cambridge South has a rich history and forms a key gateway for Cambridge within the wider historic landscape. The site is shaped by its historical character including the Scheduled Monuments and Grade II listed Nine Wells Monument, the River Cam and the rising topography towards the Gog Magog Hills and Magog Down to the south east.
- 4.3 The Landowners are committed to maximising environmental opportunity across Cambridge South to support the vision and aspirations of national, regional and local policy including the emerging Greater Cambridge Joint Local Plan and Cambridgeshire and Peterborough's Doubling Nature vision. The environmental considerations outlined in this Environmental Appraisal have shaped the emerging masterplan and the future evolution of the scheme would be further informed by technical evidence to ensure that the key visionary principles set out in this document continue to form an integral part of the design.
- 4.4 Core to that commitment is the Landowners' principle of delivering one hectare of enhanced green space for every hectare of development that comes forward. The proposals are designed to deliver a rich mix of green spaces, recreational opportunities and nature recovery areas to serve not only the campus itself, but also the neighbouring communities to Cambridge South whilst providing the development needed to support CBC's Vision 2050.
- 4.5 Overall, the Landowners are committed to delivering growth that meets the needs of CBC and its employees locally, whilst also providing benefits for the wider existing community.

Figures

Figure 1: Site Plan

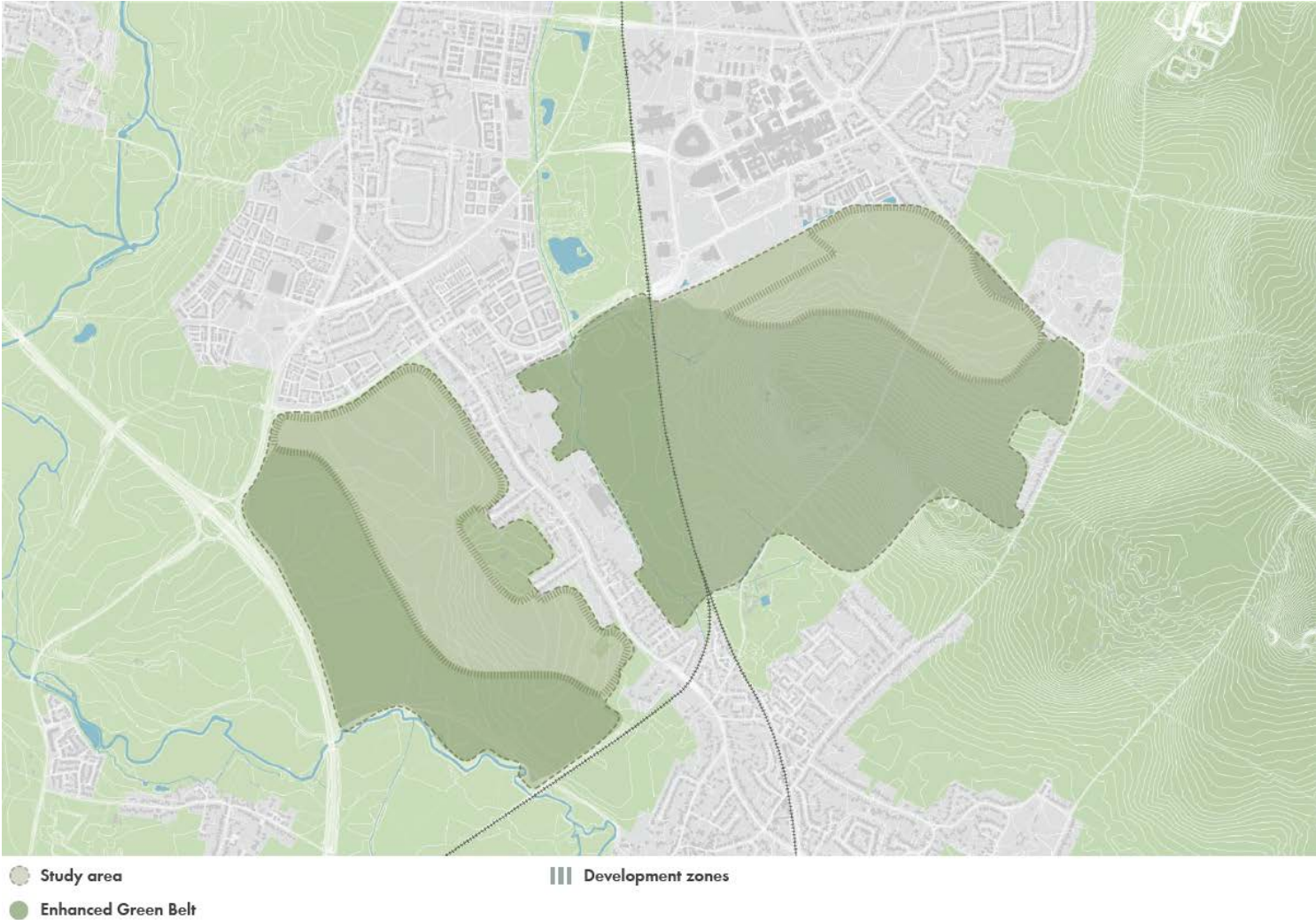


Figure 2: Designated Built Heritage Assets

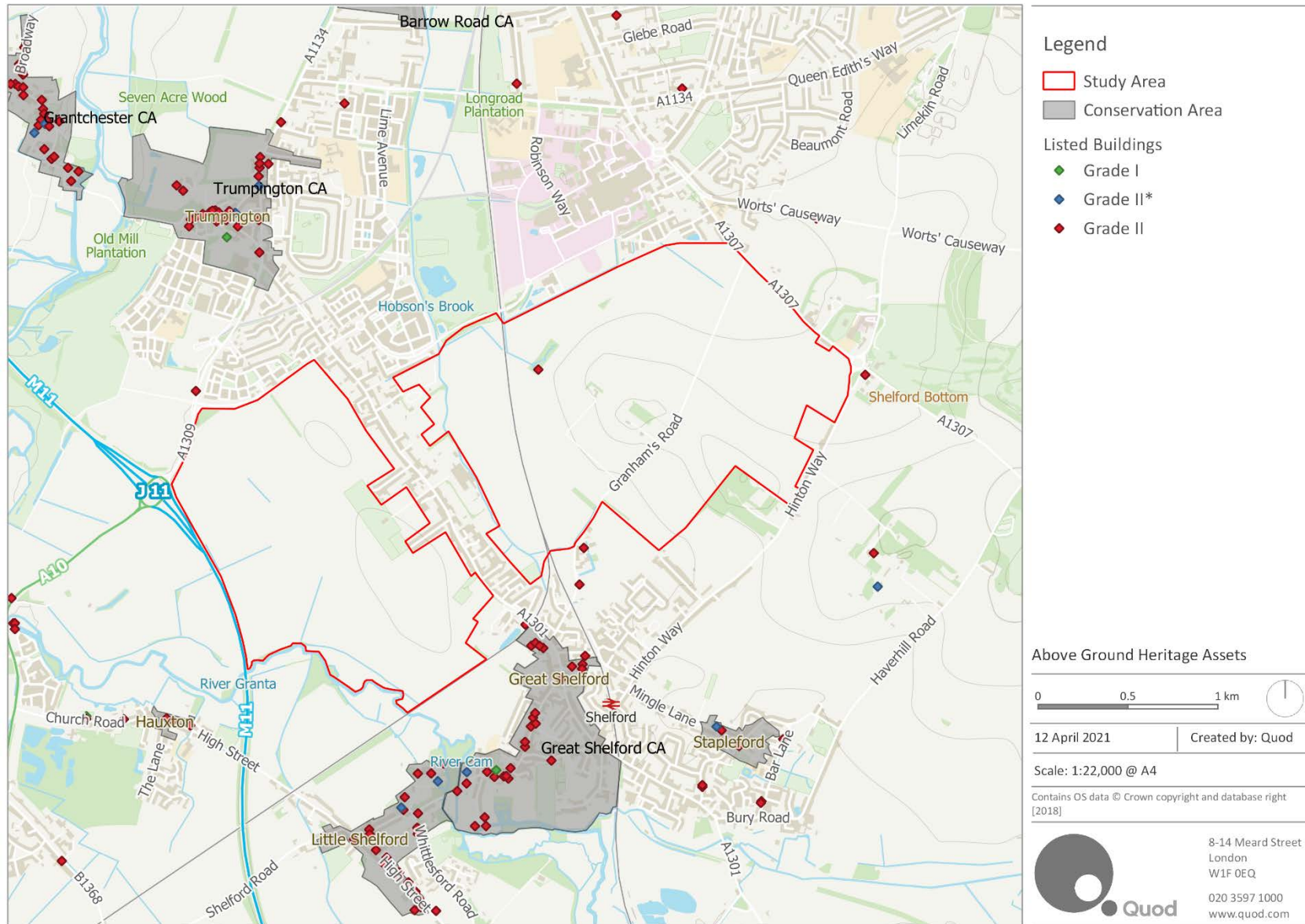


Figure 3: Designated Below Ground Heritage Assets

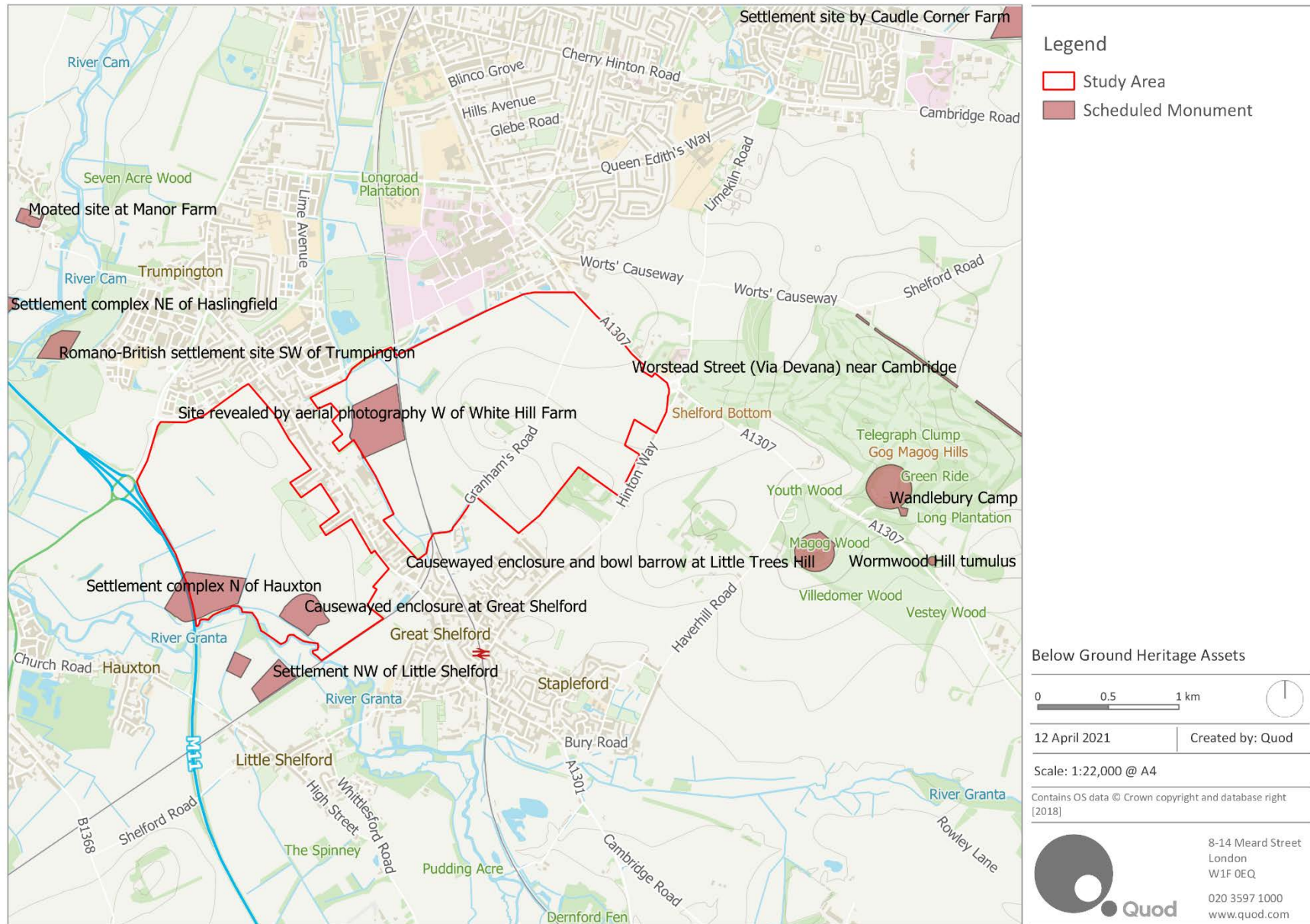


Figure 4: Ecological Designations

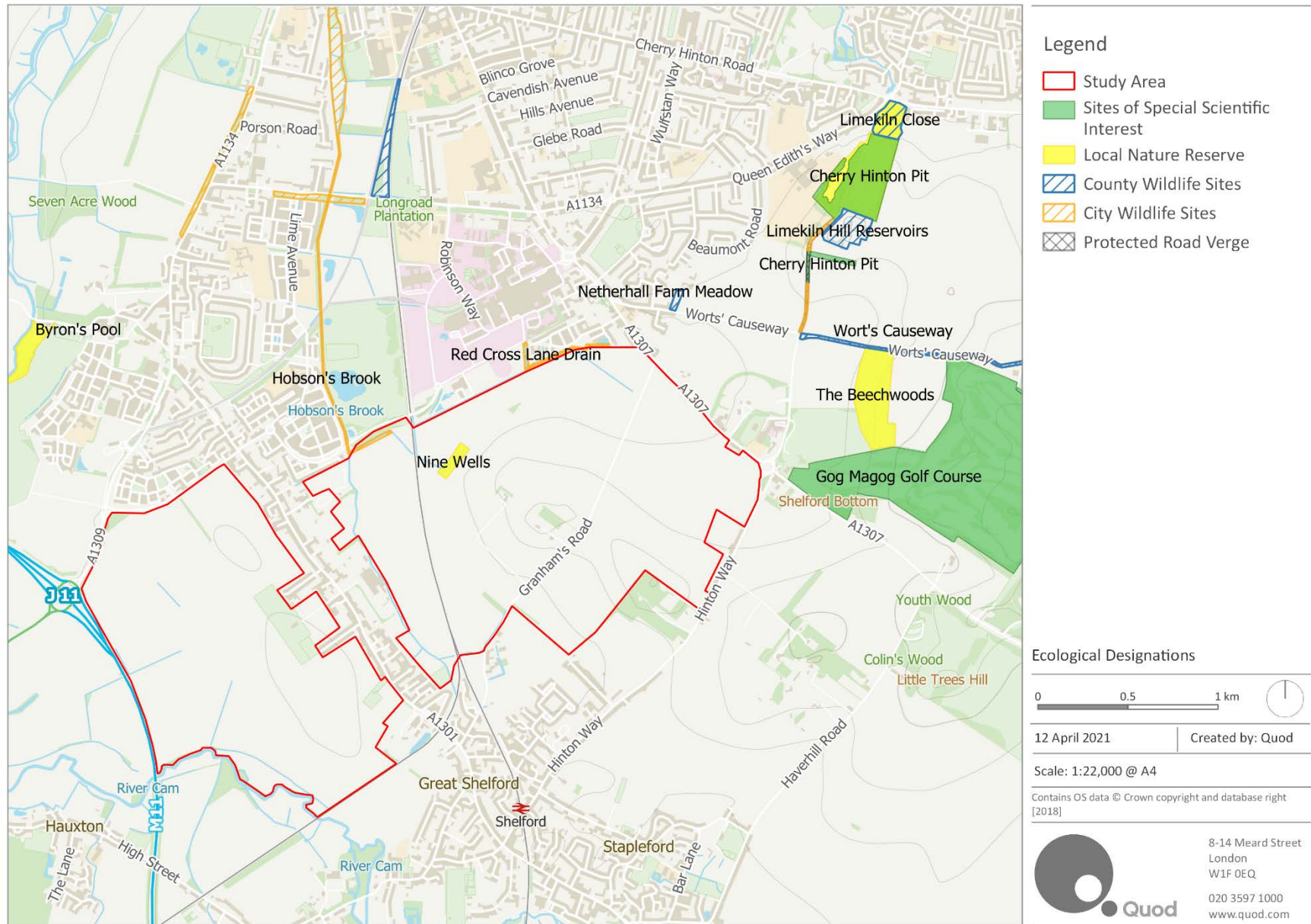


Figure 5: Fluvial Flood Risk Zones

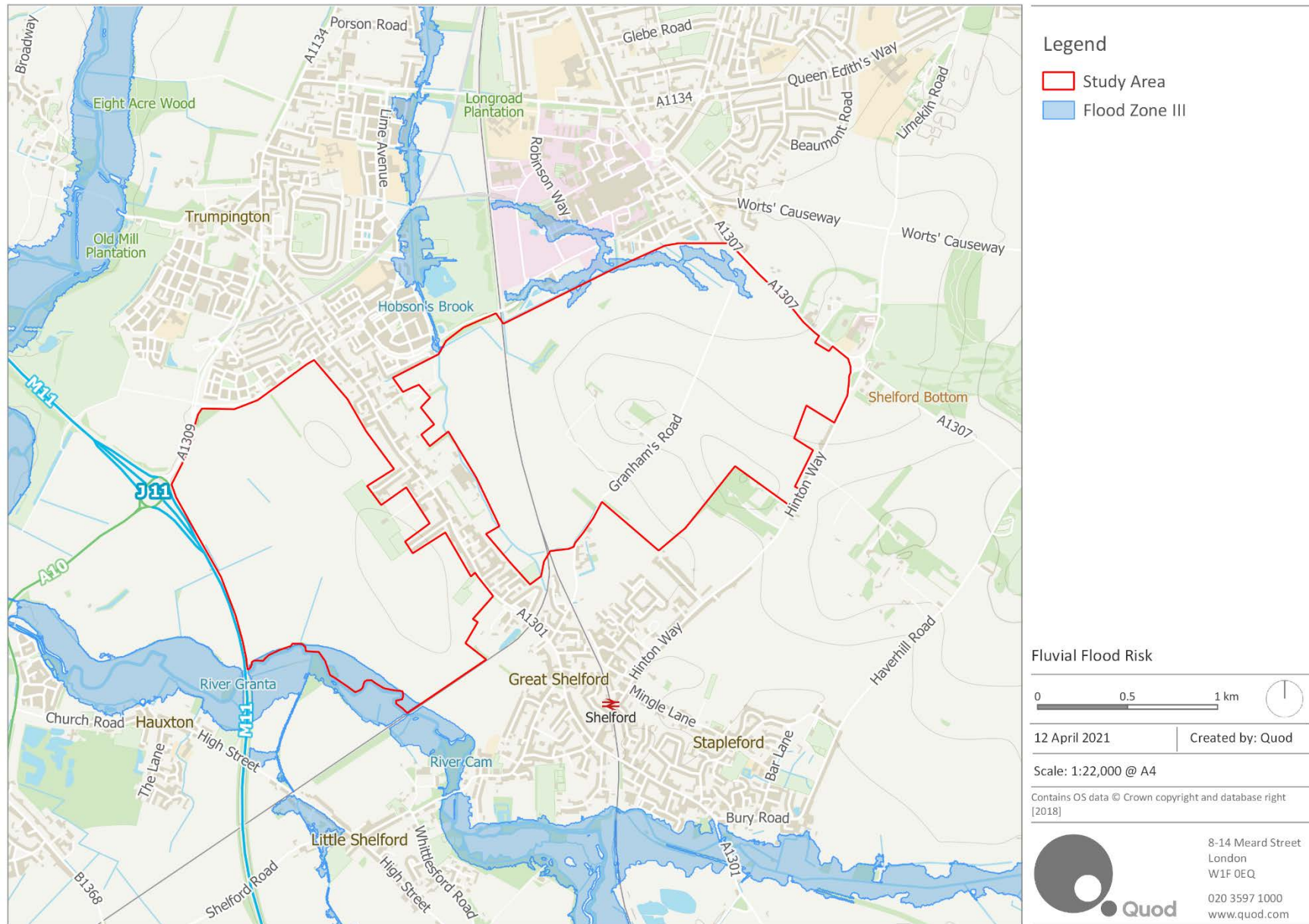
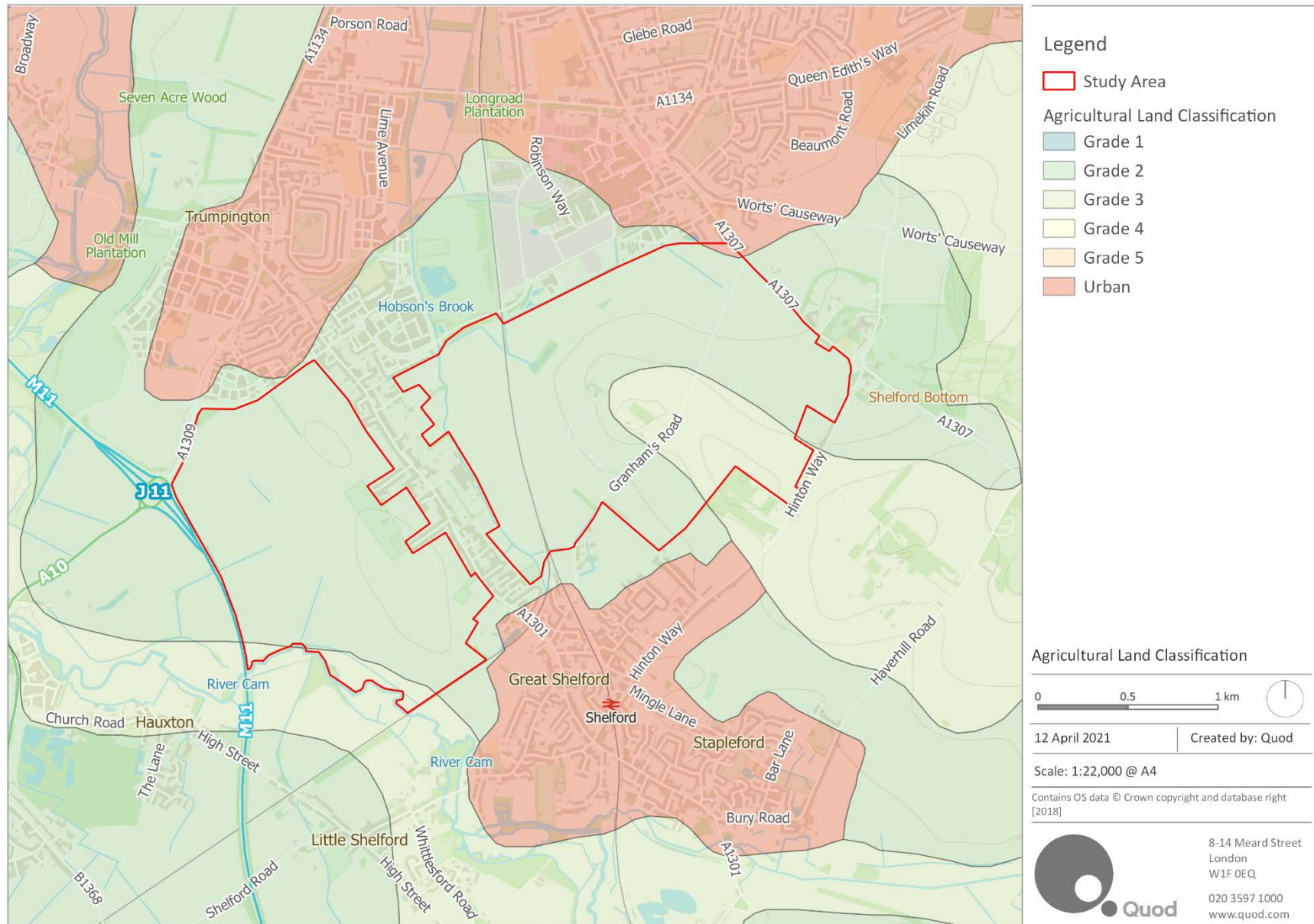


Figure 6: Agricultural Land Classification



Sources

Policy

National Policy

[National Planning Policy Framework \(NPPF\) \(2019\)](#)

[Defra's A Green Future: Our 25 Year Plan to Improve the Environment](#)

[Environment Bill](#)

[Climate Change Act 2008 \(2050 Target Amendment\) Order 2019](#)

Regional Policy

[Oxford-Cambridge Arc](#)

[Oxford-Cambridge Arc Spatial Framework \(February 2021\)](#)

[National Infrastructure Commission Partnering for Prosperity: A New Deal for the Cambridge-Milton Keynes-Oxford Arc](#)

[Government Response to 'Partnering for Prosperity: A New Deal for the Cambridge-Milton Keynes-Oxford Arc'](#)

[Natural Cambridgeshire Doubling Nature: A Vision for the Natural Future of Cambridgeshire & Peterborough in 2050 \(2019\)](#)

[Cambridgeshire and Peterborough Minerals and Waste Local Development Framework 2011](#)

[Cambridgeshire Green Infrastructure Strategy \(2011\)](#)

[RECAP \(Cambridgeshire and Peterborough Waste Partnership\) Waste Management Design Guide and Toolkit](#)

[Cambridgeshire and Peterborough Local Industrial Strategy \(July 2019\)](#)

Local Policy

Greater Cambridge Shared Planning

[First Conversation \(Issues and Options\) including accompanying Equality Impact Assessments by Cambridge City Council and South Cambridgeshire City Council, Habitat Regulations Assessment Scoping Report, Sustainability Appraisal of Issues and Options and the Sustainability Appraisal Scoping Report](#)

[Development Strategy Options – Summary Report \(Greater Cambridge Shared Planning Service\) November 2020 \(pdf\)](#)

[Strategic spatial options for testing – methodology document \(Greater Cambridge Shared Planning Service\) November 2020 \(pdf\)](#)

[Employment Land Review & Economic Evidence Base Study \(GL Hearn, with SQW, Cambridge Econometrics, and Icen Projects\) November 2020 \(pdf\)](#)

[Housing and Employment Relationships Report \(GL Hearn with Icen Projects, Justin Gardner and Cambridge Econometrics\) November 2020 \(pdf\)](#)

[Implications for carbon emissions \(Bioregional and Etude\) November 2020 \(pdf\)](#)

[Integrated Water Management Study \(Stantec\) November 2020 \(pdf\)](#)

[Green Infrastructure Opportunity Mapping Baseline Report \(Land Use Consultants\) November 2020 \(pdf\)](#)

[Strategic spatial options assessment Green Infrastructure Opportunity Mapping \(Land Use Consultants\) November 2020 \(pdf\)](#)

[Habitats Regulations Assessment \(Land Use Consultants\) November 2020 \(pdf\)](#)

[Equalities Impact Assessment \(Greater Cambridge Planning Service\) November 2020 \(pdf\)](#)

[Landscape & Townscape \(Chris Blandford Associates\) November 2020 \(pdf\)](#)

[Housing Delivery Study – Interim Findings \(AECOM\) November 2020 \(pdf\)](#)

[Employment \(GL Hearn, with SQW, Cambridge Econometrics, and Icen Projects\) November 2020 \(pdf\)](#)

[Existing Transport Conditions Report \(Cambridgeshire County Council Transport Infrastructure Policy and Funding Team\) November 2020 \(pdf\)](#)

[Transport Evidence report \(Cambridgeshire County Council Transport Infrastructure Policy and Funding Team\) November 2020 \(pdf\)](#)

[Infrastructure Delivery Plan \(Stantec\) November 2020 \(pdf\)](#)

[Viability Assessment \(Aspinall Verdi\) November 2020 \(pdf\)](#)

[Sustainability Appraisal \(Land Use Consultants\) November 2020 \(pdf\)](#)

Call for Sites:

[First Conversation consultation and Call for Sites data release – summary report \(pdf\)](#)

[Site submissions \(interactive map\)](#)

[Map of sites submitted across the whole of Greater Cambridge \(pdf\)](#)

Call for Green Sites:

[First Conversation consultation and Call for Sites data release – summary report \(pdf\)](#)

[Site submissions \(interactive map\)](#)

[Map of sites submitted across the whole of Greater Cambridge \(pdf\)](#)

[Greater Cambridge Sustainable Design and Construction Supplementary Planning Document \(SPD\) adopted January 2020](#)

[Cambridge Water: Water Resources Management Plan \(2019\)](#)

[Cambridge and South Cambridgeshire Level 1 Strategic Flood Risk Assessment \(2010\)](#)

[South Cambridgeshire District Council](#)

[Adopted South Cambridgeshire Local Plan](#)

[Adopted Policies Map](#)

[Cambridgeshire and Peterborough Minerals and Waste Local Development Framework 2011](#)

[Cambridge Southern Fringe Area Action Plan 2008](#)

[South Cambridgeshire Zero Carbon Strategy](#)

[SCDC Local Air Quality Strategy \(2008\)](#)

[Cambridge City Council](#)

[Cambridge Local Plan](#)

[Adopted Policies Map](#)

[Cambridgeshire and Peterborough Minerals and Waste Local Development Framework 2011](#)

[Climate Change Strategy \(2016-2021\)](#)

CCC Air Quality Action Plan 2018-2023 (2019)

Site-Specific Studies

Natural England National Character Area (NCA) Profile – 87 East Anglian Chalk

Cambridge South Infrastructure Enhancements Scoping Report (December 2020, ref: 20/05054/CTY, SCDC)

Cambridge South East Transport (CEST) Phase 2 Scoping Report (October 2020) (ref: 20/04320/CTY, SCDC)

Cambridge South West Travel Hub Scoping Report (July 2019) and Environmental Statement (May 2020) (ref: CCC/20/040/FUL, Cambridgeshire County Council)

Newbury Farm Environmental Statement (August 2019) (ref: 19/1168/OUT)

Cambridge South Archaeological Desktop Assessment (June 2009).

The value of the green belt south of Cambridge to populations of farmland birds. J Meed. December 2020.

SCDC Local Plan Representations (October 2016) for 'Phase 3' of the CBC Expansion Land and Supporting Evidence Base including: Flood Modelling and Drainage Strategy Report, Landscape and Visual Appraisal, Ecological Appraisal and Arboricultural Assessment.

Data

Magic Map – Defra: <https://magic.defra.gov.uk/MagicMap.aspx>

LNR: https://naturalengland-defra.opendata.arcgis.com/datasets/b1d690ac6dd54c15bdd2d341b686ecd7_0

CiWS/CWS: ES Volume 2 Figure 6.1, ref: 19/1168/OUT

Environment Agency Flood Risk Mapping: <https://flood-warning-information.service.gov.uk/long-term-flood-risk>

Natural England Regional Agricultural Land Classification Maps (2010) <http://publications.naturalengland.org.uk/category/5954148537204736>

Provisional Agricultural Land Classification (2019) https://naturalengland-defra.opendata.arcgis.com/datasets/5d2477d8d04b41d4bbc9a8742f858f4d_0

Historic Landfills: <https://data.gov.uk/dataset/17edf94f-6de3-4034-b66b-004ebd0dd010/historic-landfill-sites>

Air Quality Management Areas - Defra <https://uk-air.defra.gov.uk/aqma/>

Extrium England Noise Mapping <http://www.extrium.co.uk/noiseviewer.html>

