

# Cambridge South East Transport

## Consideration of Green Belt Issues

May 2020

A 17 Minster Precincts  
Peterborough  
PE1 1XX  
United Kingdom  
T 01733 310 471

W [www.lda-design.co.uk](http://www.lda-design.co.uk)

LDA Design Consulting Ltd  
Registered No. 09312403  
17 Minster Precincts, Peterborough, PE1 1XX

---



7290\_GB\_report

## Contents

1.0 Introduction.....	1
2.0 Policy and Previous Studies.....	6
3.0 Overarching Green Belt Considerations.....	10
4.0 Methodology .....	12
5.0 Baseline Studies and Analysis.....	16
6.0 Qualities Relevant to Openness and Green Belt Purposes .....	24
7.0 Introduction to Sector Assessments .....	32
8.0 Assessment of Sector I: South of Addenbrooke’s.....	33
9.0 Assessment of Sector II: East of Great Shelford and Stapleford.....	41
10.0 Assessment of Sector III: North and East of Sawston.....	50
11.0 Assessment of Sector IV: South of Babraham .....	56
12.0 Assessment of Sector V: A11 and eastern corridor .....	69
13.0 Conclusions.....	74

Version: 0.3  
Version date: 12/05/20  
Comment Final

*This document has been prepared and checked in accordance with ISO 9001:2015.*

## **Figures**

Figure 1: Study Area

Figure 2: Assessment Sectors and Sub Areas

Figure 3: Environmental Designations

Figure 4: Cultural Heritage Designations

Figure 5: Recreational Routes and Country Parks

Figure 6: Topography and Drainage

Figure 7: Townscape Character

Figure 8: Landscape Character

Figure 9: Visual Assessment

Figure 10: Gateways and Approaches

Figure 11: Townscape and Landscape Role and Function

Figure 12: Sector I Analysis

Figure 13: Sector II Analysis

Figure 14: Sector III Analysis

Figure 15: Sector IV Analysis

Figure 16: Sector V Analysis

Figure 17: Photographs 1 and 2

Figure 18: Photographs 3 and 4

Figure 19: Photographs 5 and 6

Figure 20: Photographs 7 and 8

Figure 21: Photograph 9

Figure 22: Photograph 10

Figure 23: Photograph 11

Figure 24: Photograph 12

Figure 25: Photograph 13

Figure 26: Photographs 14 and 15

Figure 27: Photograph 16

Figure 28: Photograph 17

Figure 29: Photograph 18

Figure 30: Photograph 19

## **1.0 Introduction**

### **1.1 Appointment and Scope**

- 1.1.1. This study was commissioned by Cambridgeshire County Council on behalf of the Greater Cambridge Partnership (GCP) in January 2020. The study considers potential options for the alignment of a stretch of the proposed public transport link between Cambridge and Haverhill, between the Cambridge Biomedical Campus (CBC) and the A11. This stretch of the route will run through the Cambridge Green Belt.
- 1.1.2. This stretch of the proposed public transport link forms part of the longer proposed Phase 2 route between Cambridge and Haverhill, with the stretch from the A11 to Haverhill being located outside the Green Belt.
- 1.1.3. A series of options for the alignment of the public transport link between CBC and the A11 have been consulted on during 2019 by GCP. The routes would run via Sawston, Stapleford and Great Shelford, and provide connections to Babraham, the Babraham Research Campus and Granta Park, including stops along the route. In addition to the route options, three options for a Travel Hub, which would be a flexible transport interchange allowing access to the public transport link, have also been consulted on. Two of these options are located within the Green Belt; one west of the A11 and north of the route of the old Cambridge to Haverhill railway with access from the A505, and one between Babraham and the A11 with access from the A1307. The third option is located outside the Green Belt north of Little Abington, with access from the A1307, but would require a new bridge over the A11 through the Green Belt.
- 1.1.4. This report assesses Green Belt considerations in relation to the route options presented in the public consultation document, as well as the three Travel Hub options. A further route option is also considered in the report, which was suggested by 5<sup>th</sup> Studio, an architectural consultancy, in a response to the 2019 consultation. This further option is referred to as the Robinson Way Alternative within this report. These routes are described in further detail at paragraph 1.2.3 below and shown on Figure 1.
- 1.1.5. Further detailed design work will be required on the alignment of these route options as a preferred option is identified and the alignment becomes fixed. At this stage, the routes are still relatively indicative and the assessment presented in this report makes assumptions and assesses the likely worst-case scenario for each route. Further consideration will be required of the preferred route option at a later date.
- 1.1.6. This report forms one of many considerations in assessing the emerging preferred options for the public transport link.

### **1.2 Proposed Development**

- 1.2.1. The Cambridge South East Better Public Transport project would provide better public transport and sustainable options for those who travel in the A1307 and A1301 area, improving journey times and linking communities and employment sites in the area south east of Cambridge and beyond. It aims to:
  - Provide better public transport;

- Provide better shared-use paths;
- Connect homes with places of work or study;
- Reduce congestion and improve air quality; and
- Secure future economic growth and quality of life.

1.2.2. It is a scheme promoted by the Greater Cambridge Partnership, an agreement set up between a partnership of local organizations and Central Government, to help secure future economic growth and quality of life in the Greater Cambridge city region.

1.2.3. Figure 1 shows the potential route options considered in this study, as well as the three Travel Hub options (which would be similar to existing Park & Ride sites around Cambridge). In brief, the route and Travel Hub options are as follows, with further detail provided in Sections 8-12 of this report:

- GCP route between CBC and Great Shelford - would leave CBC at the base of the embankment of the existing Addenbrooke's Road bridge. It would run west of White Hill, along the side of the existing London to Cambridge railway line, before crossing Granham's Road adjacent to the access to White Hill Farm. A bridge structure would be required to cross Hobson's Brook, a spring that runs between Nine Wells and Hobson's Conduit. Whilst the bridge has not yet been designed, early indications assume that it would have a deck width of approximately 14m, a span of approximately 10m and have a clearance of a minimum of 1m above the existing ground level, with earth embankments approaching the bridge and a parapet height of approximately 1.5m above the assumed deck height of at least 2m. It would run through an existing gap in the hedgerow between Great Shelford and Clarke's Hill, then on to Hinton Way, east of Great Shelford.
- Robinson Way Alternative route between CBC and Great Shelford - would leave CBC through the parcel of land south of CBC that was released from the Green Belt as part of the 2018 Cambridge City Local Plan. It would run up the sloping landform towards White Hill, crossing Granham's Road on the eastern side of White Hill. It would continue over the ridgeline between White Hill and Clarke's Hill and then descend along the western side of woodland on Clarke's Hill, set back from the edge of Stapleford, to meet the GCP route option at Hinton Way.
- Route between Great Shelford and Sawston – South of Hinton Way, the route would continue up the slope of Magog Down, before curving round the east of Great Shelford and Stapleford to join Haverhill Road. A stop is proposed on the southern side of Hinton Way, west of the route alignment. A second stop is proposed south of Haverhill Road and west of the route, to serve Stapleford. From Haverhill Road the route would descend down to the River Granta. The crossing of the River Granta is yet to be designed but would require a bridge structure. However, early indications assume that the bridge structure would have a deck width of approximately 14m, with a maximum span of 166m to avoid embankments within Flood Zone 3, and a deck height of approximately 6m above the existing ground level. The earth embankments approaching the bridge would potentially extend for a minimum of 82m to the south and 49m to the north. From the River Granta, the proposed route option would cross open fields to run to the

east of the disused railway line and the existing/future eastern edge of Sawston, crossing Babraham Road on the eastern edge of Sawston and then continuing to follow an alignment parallel to the disused railway line. A stop is proposed on the southern side of Babraham Road, west of the route alignment. South west of Babraham and north west of High Street, approximately at the point where the disused railway line becomes a more substantial tree belt, the proposed route option splits into the five separate route options that would provide access to the different Travel Hub options.

- Purple Route - this route option would serve Travel Hub Site A. It would run across the arable field south of Babraham, running parallel to and offset by approximately 20m from the Shelford to Haverhill disused railway line, to High Street. It would then continue along the disused railway towards the A11/A505 junction. The proposed Purple Route would run along the side of an existing hedgerow and over the undulating landform to proposed Travel Hub Site A.
- Pink Route – this route option would serve Travel Hub Site B. It would follow the alignment of the proposed Purple Route as far as the location of proposed Travel Hub Site A, where it would continue running parallel to the disused railway line and then curve around the A11/A505 junction to run parallel to the A11. It would then cross the River Granta and enter the southern corner of Travel Hub Site B. The crossing of the River Granta is yet to be designed but would require a bridge structure. However, early indications assume that the bridge structure would have a deck width of approximately 14m, with a maximum span of 26m, and a clearance of approximately 4.25m above the existing ground level, with earth embankments approaching the bridge and a parapet height of approximately 1.5m above the assumed deck height of at least 5m.
- Brown Route - this route option would serve Travel Hub Site B. The alignment would curve away from the disused railway line to cross High Street approximately another 20m north of the Pink, Purple and Black route options. It would then run to the north of the high point of a minor ridgeline, crossing the River Granta before curving round to enter Travel Hub Site B from the west, close to the existing footpath and cycleway link. The crossing of the River Granta is yet to be designed but would require a bridge structure. However, early indications assume that the bridge structure would have a deck width of approximately 14m, with a maximum span of 166m to avoid embankments within Flood Zone 3, and a deck height of approximately 6m above the existing ground level. The earth embankments approaching the bridge would extend approximately 52m either side of the bridge.
- Black Route - this route option would serve Travel Hub Site C. It would follow the alignment of the proposed Pink Route as far as the River Granta. It would then curve slightly west, away from the A11, to allow it to curve round and cross the A11 at right angles to the north of the existing pedestrian bridge. The bridge is yet to be designed but would need to ramp up to be able to cross over the A11. However, early indications assume that the bridge structure would have a deck width of approximately 14m, with a maximum span of 40m, and clearance of approximately 5.3m above the existing ground level, with earth embankments approaching the bridge and a parapet height of approximately 1.5m above the

assumed deck height of at least 6m. The proposed Black Route would cross Newmarket Road adjacent to a former café site. This route option would also require a stop adjacent to the existing footpath and cycle route and the upgrades to the shared access route and existing footbridge over the A11.

- Blue Route - this route option would serve Travel Hub Site C. It would follow the alignment as the proposed Brown Route as far as Travel Hub Site B. It would then continue over the A11, crossing at right angles and to the south of the existing pedestrian bridge. It would then run northwards to cross Newmarket Road adjacent to the former café site, slightly further south than the Black Route. The bridge is yet to be designed, but would need to ramp up to be able to cross over the A11 and would incorporate an upgraded multiuser route over the A11. However, early indications assume that the bridge structure would have a deck width of approximately 14m, with a maximum span of 50m, and clearance of approximately 5.3m above the existing ground level, with earth embankments approaching the bridge and a parapet height of approximately 1.5m above the assumed deck height of at least 6m. This route option would also require a stop adjacent to the existing footpath and cycle route.
- Travel Hub Site A – this option would be located to the west of the A11, on the highest point of the minor ridgeline south west of the River Granta, to the north of the disused railway line and south of Babraham. Current proposals indicate that vehicular access to the Travel Hub would be via new roundabouts off the A505, close to its junction with the A11, only the northern of which would be located within the Green Belt. The public transport route to Travel Hub A would be the proposed Purple Route from the north west. New shared access routes are also proposed to Babraham and Babraham Research Campus, along the southern side of the public transport link and then via High Street, and Granta Park along the vehicular access route to the south east.
- Travel Hub Site B - this option would be located on slightly lower ground adjacent to the western edge of the A11, to the south east of Babraham. Current proposals indicate that vehicular access to the Travel Hub would be via a new junction off the A1307, at the point where existing vegetation around the A3017 and A11 junction stops. Upgraded shared access routes are also proposed to Babraham, Babraham Research Campus and Granta Park, upgrading the existing cycleway and footpath, which would also require an upgrade of the existing bridge over the A11 to allow multiusers. This bridge is yet to be fully designed. The public transport route to Travel Hub B would be either the proposed Pink Route from the south or the Brown Route from the west. Improved shared access routes are also proposed to Babraham, Babraham Research Campus and Granta Park, upgrading existing routes.
- Travel Hub Site C – this option would be located to the east of the A11 and north of the A1307, outside of the Green Belt. Current proposals indicate that access would be via a new roundabout of the A1307. The public transport route to Travel Hub C would be either the proposed Black Route or the Blue Route. Improved shared access routes are also proposed to Babraham, Babraham Research Campus and Granta Park, upgrading existing routes.



**1.3. Structure of the Report**

- 1.3.1. Section 2 summarises the relevant policy background applicable to Green Belt openness and purposes in the Cambridge context and reviews relevant previous policy and studies that have identified specific elements or qualities of Cambridge and its surrounding landscape that are relevant to Green Belt purposes.
- 1.3.2. Section 3 outlines the overarching considerations that apply to the proposed route options for the public transport route through the Cambridge Green Belt, as well as those relating to the Travel Hub options within the Green Belt.
- 1.3.3. Section 4 describes the methodology used in carrying out this study.
- 1.3.4. Section 5 presents the results of baseline studies and analysis, which enable Cambridge and its surroundings to be understood in the context of Green Belt openness and purposes.
- 1.3.5. Section 6 draws out qualities of the city and its surrounding landscape that contribute to the performance of Green Belt purposes.
- 1.3.6. Section 7 introduces the sector assessments for the different sectors.
- 1.3.7. Sections 8-12 contain detailed assessments of the proposed route and Travel Hub options within each of the Green Belt sectors, in terms of whether the routes or Travel Hub facilities preserve the openness of the Green Belt or would conflict with Green Belt purposes. The test in the National Planning Policy Framework 2019 (NPPF) has then been applied to identify any potential harm to Green Belt that would arise from the different options, before a separate judgement has been made on the degree of any potential harm to the Green Belt.
- 1.3.8. Section 13 provides conclusions in relation to the route and Travel Hub options.

## 2.0 Policy and Previous Studies

### 2.1. Green Belt Policy Tests

- 2.1.1. Paragraph 146 of the National Planning Policy Framework (NPPF) states that certain forms of development are ‘not inappropriate’, provided they preserve the openness of the Green Belt and do not conflict with the purposes of including land in Green Belt. These forms of development include ‘local transport infrastructure which can demonstrate a requirement for a Green Belt location’. The Planning Appraisal prepared by Strutt & Parker demonstrates that a Green Belt location is required for the proposed development.
- 2.1.2. On the basis that the proposed public transport link would comprise 'local transport infrastructure which can demonstrate a requirement for a Green Belt location', the test under paragraph 146 is whether the scheme would preserve the openness of the Green Belt and not conflict with the purposes of including land in Green Belt.
- 2.1.3. Paragraph 143 states that inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances. Paragraph 144 states that, when considering any planning application, local planning authorities should ensure that substantial weight is given to any harm to the Green Belt. ‘Very special circumstances’ will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations.
- 2.1.4. This report therefore firstly considers whether the proposed route options and Travel Hub sites preserve the openness of the Green Belt and avoid conflict with Green Belt purposes. Where the report identifies that openness is not preserved or there is conflict with any Green Belt purposes, the report identifies the degree of potential harm to the Green Belt. The Planning Appraisal prepared by Strutt & Parker sets out wider considerations regarding the overall planning balance of the scheme, including matters related to Green Belt and whether the proposals are not inappropriate development or whether very special circumstances are considered to be required.

### 2.2. Openness of the Green Belt

- 2.2.1. Paragraph 133 of the NPPF states that the fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open. The essential characteristics of Green Belts are their openness and their permanence. Whilst the NPPF does not contain a definition of openness, it is usually understood to mean the absence of built development.
- 2.2.2. In addition, Planning Practice Guidance on Green Belt identifies matters that may need to be taken into account when assessing the impact of proposals on Green Belt, including:
- openness is capable of having both spatial and visual aspects – in other words, the visual impact of the proposal may be relevant, as could its volume;

- the duration of the development, and its remediability – taking into account any provisions to return land to its original state or to an equivalent (or improved) state of openness; and
  - the degree of activity likely to be generated, such as traffic generation.
- 2.2.3. Since both the proposed public transport link and the Travel Hub facility are intended to be permanent, the relative duration of all proposed options is not considered further in this report. Remediability of the proposed options is not considered in sections 8-12 as each option is considered on the basis of the proposal being permanent. As the proposed public transport link will only be used by buses and occasional maintenance or emergency vehicles, the degree of activity will be low; this is taken into account where appropriate in the assessments in sections 8-12 of this report. However, the Travel Hub facility is likely to generate a much higher degree of activity, which is also taken into account where appropriate in the assessments in sections 8-12 of this report.
- 2.2.4. Since the Planning Practice Guidance on Green Belt was published there has been a Supreme Court ruling in relation to the relationship between visual impact and openness of the Green Belt. The judgement in *R (on the application of Samuel Smith Old Brewery (Tadcaster) and others) (Respondents) v North Yorkshire County Council (Appellant)*, February 2020, indicates that the visual quality of a landscape is not in itself an essential part of the openness for which the green belt is protected. The reference to openness in paragraph 146 of the NPPF "*does not imply freedom from any form of development*" and "*is not necessarily a statement about the visual qualities of the land*". However, the ruling does indicate that visual impact can still be relevant to the question of whether openness will be preserved. This report continues to consider the visual aspect of the proposed public transport link which are, in the author's professional judgement, relevant considerations of the proposals' potential effects on the openness of the Green Belt or potential to conflict with Green Belt purposes.

### 2.3. Green Belt Purposes

- 2.3.1. At the national level, paragraph 134 of the NPPF sets out five purposes for Green Belt. The five purposes are as follows:
1. To check the unrestricted sprawl of large built-up areas
  2. To prevent neighbouring towns merging into one another
  3. To assist in safeguarding the countryside from encroachment
  4. To preserve the setting and special character of historic towns
  5. To assist in urban regeneration, by encouraging the recycling of derelict and other urban land.
- 2.3.2. These purposes are referred to in this report as the **National Green Belt purposes**. Although they are not numbered in the NPPF, they are numbered in this report for ease of reference.
- 2.3.3. National Green Belt purpose 5 appears from its wording to be equally applicable to all Green Belt land and is therefore not relevant in identifying the relative importance of

different areas of Green Belt land to the performance of Green Belt purposes. In addition, the route chosen for the proposed public transport link or Travel Hub facility does not make any difference to the degree to which this purpose is performed. Consequently, it is not considered further in this study.

- 2.3.4. At a local level, three purposes have been defined for the Cambridge Green Belt in local policy<sup>1</sup>. They are as follows:
1. Preserve the unique character of Cambridge as a compact, dynamic city with a thriving historic centre
  2. Maintain and enhance the quality of its setting
  3. Prevent communities in the environs of Cambridge from merging into one another and with the city.
- 2.3.5. These are referred to as the **Cambridge Green Belt purposes** in this report and have similarly been numbered for ease of reference, although they are unnumbered in the relevant policy documents.
- 2.3.6. The principal relationships between the Cambridge Green Belt purposes and the National Green Belt purposes are readily apparent from their wording. Cambridge Green Belt purpose 1 (character) and 2 (setting) derive from National Green Belt purpose 4. Cambridge Green Belt purpose 3 (merging) clearly relates to National Green Belt purpose 2 but, since the presence of necklace villages<sup>2</sup> close to the outskirts of Cambridge is widely recognised as a key element of the city’s character, it is also relevant to National Green Belt purpose 4. When the qualities that contribute to character and setting are considered in greater detail, other relationships between the Cambridge Green Belt purposes and the National Green Belt purposes become apparent. For example, various aspects of the character and setting of Cambridge also contribute to the performance of National Green Belt purposes 1, 2 and 3. These interrelationships are highlighted further in section 6 of this report, particularly within the table in section 6.1.

## 2.4. Previous Studies

- 2.4.1. The Cambridge Inner Green Belt Boundary Study, November 2015, was undertaken by LDA Design for Cambridge City Council and South Cambridgeshire District Council. Section 2.3 of the Study sets out a series of policy documents and previous studies that have identified relevant qualities of Cambridge and its surrounding landscape that contribute to the performance of Green Belt purposes. This study does not repeat that information, but accepts the conclusion of that chapter of the 2015 study, as follows:

<sup>1</sup> Refer to Cambridge Local Plan 2018, Adopted October 2018. Cambridge Green Belt purposes identified at paragraph 2.52 and South Cambridgeshire Local Plan, Adopted September 2018. Cambridge Green Belt purposes identified at paragraph 2.30.

<sup>2</sup> Necklace villages are villages that, due to their close proximity to Cambridge, play a particularly important role in the immediate setting of the city.

*“Whilst there is significant variation in the number of Green Belt qualities mentioned in the various studies and policy documents, there is notable consistency among those mentioned, with a number of substantively the same qualities mentioned in several different documents. The up to date analysis undertaken in the course of the present study largely confirms the relevance of the previously identified qualities as criteria for the Green Belt assessment.”*

- 2.4.2. In addition, in 2017 LDA Design undertook an assessment of route options for Phase 1 of the Cambourne to Cambridge Rapid Transport Route (RTR) on behalf of Greater Cambridge Partnership. This was followed in 2019 by a similar study for Phase 2 of the same transport route. These studies developed the methodology employed in this current study.

### 3.0 Overarching Green Belt Considerations

#### 3.1. Strategic Approach to Development around Cambridge

3.1.1. Cambridge City Council and South Cambridgeshire District Council, under the duty to cooperate and given the interdependencies between the two Councils through the location of key employment sites, patterns of travel to work and access to services and facilities, have jointly considered the approach to sustainable development in and around Cambridge. South Cambridgeshire District set out at paragraph 2.44 of their Adopted Local Plan (September 2018) that the challenges for sustainable development strategy include:

*“balancing the sustainability merits of land on the edge of Cambridge in terms of accessibility to services and facilities and reducing emissions with the sustainability merits of land in the Green Belt on the edge of Cambridge in terms of protecting the special characteristics of Cambridge as a compact historic city”.*

3.1.2. Paragraph 2.46 goes on to state:

*“Cambridge City Council and South Cambridgeshire District Council jointly reached the view on the extent of change on the edge of Cambridge where only minor revisions to the inner Green Belt boundary are proposed in the Local Plans”.*

3.1.3. The Adopted version of the Cambridge Local Plan (October 2018) indicates at paragraph 2.21 that sustainable transport capacity needs:

*“to be provided in the sub-region between the key economic hubs in and around the city and where people live and access services. The strategy plans to further improve the sustainable transport network around the economic hubs and the hi tech clusters in and around the city, by making movement between them straightforward and convenient. The transport strategy has been prepared in parallel with the two new local plans and will set out the mitigation and infrastructure requirements necessary to promote sustainable travel as part of the development strategy of the two plans.”*

3.1.4. Paragraph 2.25 indicates that the sustainable development strategy is:

*“a considerable challenge for the Cambridge area. There is a need for new homes to support the jobs. The aim is to provide as many of those new homes as close to the new jobs as possible to minimise commuting and to minimise and mitigate harmful effects for the environment, climate change and quality of life. The need for jobs and homes has to be considered within the context of a tightly-drawn Green Belt, which aims to protect the unique character of Cambridge as a compact, dynamic city with a thriving historic centre, maintain and enhance the quality of the city’s setting, and prevent the city merging with the ring of necklace villages. The Green Belt and its purposes help underpin the quality of life and place in Cambridge, which are fundamental to economic success. Achieving an appropriate balance between these competing arms of sustainable development is a key objective of the development strategy for the new local plans”.*

3.1.5. Paragraph 3.56 states the vision for the Southern Fringe Area of Major Change is:

*“to meet a range of needs for the Cambridge area, including additional housing, secondary and primary schools, local community and retail uses, and improved access to the countryside.”*

- 3.1.6. Paragraph 3.64 highlights that planning applications within this area should take opportunities:

*“to enhance amenity and biodiversity in the associated Green Belt land and access to this and the open countryside beyond. Key features to be taken into account include Hobson’s Brook and other features important for biodiversity, existing trees, and the sensitive transition between the urban fringe and the open countryside.”*

- 3.1.7. Paragraphs 9.12 focuses on the land for public transport and states that:

*“Congestion is a problem in Cambridge, and it is vital for buses to be free from other traffic, where possible, in order for them to deliver on reliability and speed of journey. For this reason, it is important to safeguard land for new public transport infrastructure, such as bus lanes, interchange facilities and junction improvements.”*

- 3.1.8. This provides the context for the consideration of a proposed improved public transport route from Cambridge to Haverhill, of which the proposed stretch of public transport link from the Biomedical Campus to the A11/A505 and the proposed Travel Hub facility, would form part.

## 4.0 Methodology

### 4.1. Introduction

- 4.1.1. This study draws significantly from Cambridge Inner Green Belt Boundary Study (November 2015) (the 2015 study). The principal requirement of that study is to assess how land in the Inner Cambridge Green Belt performs against Green Belt purposes. Both National Green Belt purposes (with the exception of purpose 5) and Cambridge Green Belt purposes are considered, as identified in section 2.4 of this study.
- 4.1.2. This study is required to take the assessment process a stage further than the 2015 study and assess whether the different route and Travel Hub options would preserve the openness of the Green Belt or conflict with the purposes of including land in Green Belt. In situations where openness is not preserved or there would be potential conflict with Green Belt purposes, the degree of Green Belt conflict that would result is then considered.
- 4.1.3. The methodology set out below mirrors the approach taken by LDA Design in assessing route options and potential park & ride sites for the Cambourne to Cambridge Rapid Transport Route in 2017 (Phase 1) and 2019 (Phase 2).

### 4.2. Methodology

- 4.2.1. The methodology for this study has four stages:
- Stage 1: Identification of sectors and sub areas within the Green Belt to form the basis of the assessment;
  - Stage 2: Baseline studies and analysis to inform considerations relevant to openness of the Green Belt and potential conflict with Green Belt purposes;
  - Stage 3: Identification of qualities to inform the assessment of preservation of openness and the identification of any conflict with Green Belt purposes; and
  - Stage 4: Assessment of sectors to identify:
    - whether the proposed route options preserve the openness of the Green Belt; and
    - whether the proposed route options conflict with Green Belt purposes.
- 4.2.2. These stages are described in further detail below.
- Stage 1: Identification of Sectors and Sub Areas within the Inner Green Belt**
- 4.2.3. The sectors and sub areas used for the assessment are shown on Figure 2. The sectors are defined using clearly visible features such as roads or watercourses to divide one sector from another, utilising the sector identified as part of the 2015 study south of the Biomedical Campus as a starting point. This provides a clear and robust structure for the presentation of the assessment.
- 4.2.4. The definition of the sectors, as described in the previous paragraph, does not reflect variations in land use, character or context, which occur in the majority of the sectors. To address this, all sectors are therefore divided into sub areas where there are clear



changes in these characteristics that would affect the application of the assessment criteria to different areas of land. This enables a robust and transparent assessment of the various sub areas.

### **Stage 2: Baselines Studies and Analysis (Section 5 of this Report)**

- 4.2.5. A series of studies were undertaken as part of the 2015 study, to build up an understanding of Cambridge and its surrounding landscape, in the context of the considerations which are relevant to the performance of Green Belt purposes and to inform the assessment of openness. These extended out far enough to cover all of the proposed route and Travel Hub options from CBC to the A11. The studies cover a range of aspects which have a bearing on how the issues raised by Green Belt purposes (sprawl, merging, encroachment, setting and character) are manifested in Cambridge and its surrounding landscape or are perceived by residents or visitors to the city. They include matters relating to the physical form and scale of the city, its historical development, its relationship to its hinterland, townscape and landscape character, the experience of approaching and arriving at the city, and how the city is perceived from the surrounding landscape.
- 4.2.6. Townscape character assessment assists not only in identifying the historic core of the city but also in identifying other areas of townscape which are distinctive to Cambridge and contribute to its particular character. Its findings reflect the historical development of the city and contribute to an understanding of the nature of the urban edges which adjoin the Green Belt, and the character of the villages within the Green Belt. Landscape character assessment assists in identifying important components of the landscape setting of the city and the wider countryside, enabling it to be studied within its context, and the relationship between the city and its surroundings to be properly understood. These assessments are therefore of particular relevance to National Green Belt purpose 4 and Cambridge Green Belt purposes 1 and 2.
- 4.2.7. The findings of the baseline studies, so far as relevant to the areas affected by the route and Travel Hub options, are summarised in section 5 of this report and are taken directly from the 2015 study.
- 4.2.8. The findings of the baseline studies and analysis are presented on a series of drawings and photograph panels. Figures 3-11 show the extent of the proposed route and Travel Hub options. Figures 12-16 illustrate the key Green Belt considerations that relate to each sector. Figures 17-30 are photograph panels that illustrate the findings of the baseline analysis.

### **Stage 3: Identification of Qualities Relevant to Openness and Green Belt Purposes (Section 6 of this Report)**

- 4.2.9. This stage draws from the surveys and analysis work in stage 2 to identify how the 16 qualities of the city and its surrounding landscape identified in the 2015 study, which directly contribute to openness and the performance of Green Belt purposes, relate to each of the assessment sectors.

**Stage 4: Assessment of Sectors (Sections 8-12 of this Report)**

- 4.2.10. Sections 8-12 of this report contain detailed assessments of the proposed route and Travel Hub options within each of the Green Belt sectors, in terms of whether the options preserve the openness of the Green Belt or would conflict with Green Belt purposes.
- 4.2.11. Initially, the 16 qualities identified in stage 3 are used as the criteria against which the sectors and sub areas are considered to identify key considerations relevant to openness and Green Belt purposes within each sub area. The assessments are presented in a tabulated format for each sector, with summary text at the end of the table drawing out the key points from the criteria-based assessment of each sub area under the two headings of openness and Green Belt purposes.
- 4.2.12. Within each sub area, the degree to which the openness of the Green Belt would be preserved is considered for each of the different route or Travel Hub options. This has two main aspects in relation to this assessment, the volume or physical size of the proposed development and its visual impact. Where either of these two aspects indicates a potential reduction in openness, other aspects are considered, including the duration of the effect and the purpose of the development.
- 4.2.13. For the purposes of the assessment, it is considered that:
- Where the route is constructed over flat landform or across the face of a slope requiring relatively modest and balanced cut and fill to create the route, the necessary earthworks would not reduce openness. A reduction in openness could arise where the route is significantly elevated above existing ground levels or where there is more substantial cut and fill or a significant imbalance between cut and fill.
  - Where there would be a visible change to the character of the landscape, there may be a reduction in openness.
  - The introduction of buildings, shelters or built structures may result in a reduction in openness.
  - The surface of the public transport link and footway/cycleway, and any physical guides alongside the route would not reduce openness, subject to the extent of cut and fill required, as these are ordinary and unremarkable features of any road or local transport infrastructure within the Green Belt of a scale and nature that would not appear out of place.
  - The small-scale loss of parts of a field to hard standing, such as associated with the proposed bus stops, that are not substantive and would not be out of context with the surroundings may not result in a reduction in openness.
  - Where the loss of agricultural land is of a scale that in its wider landscape context could be considered minimal, this may not cause a conflict with Green Belt purposes.
  - Signage, lighting and road markings near road crossings or proposed bus stops would not reduce openness as these are typical features that can occur along any road or local transport infrastructure within the Green Belt.

4.2.14. Within each sub area, any potential conflict with Green Belt purposes as a result of the different route options is also assessed, using the 16 ‘Qualities Relevant to Openness and Green Belt Purposes’ identified at stage 3 as the starting point. At this stage of the scheme design the likely worst-case scenario for each route option is assessed, with further consideration required at a later date of the detailed design of the preferred option. For the purposes of this report, any negative effect on a particular Green Belt purpose, even if only slight, is considered to be a conflict with the Green Belt purpose. However, the degree of this conflict may not be sufficient to exceed the test of paragraph 146 of the NPPF and is given further consideration in the Planning Appraisal prepared by Strutt & Parker.

4.2.15. The assessments conclude with commentary on whether the option preserves openness or conflicts with Green Belt purposes. This is followed by a separate judgement on the degree of any reduction in openness or potential Green Belt conflict. The following scale is used for the degree of reduction in openness or conflict:

<b>Major</b>	Total or major alteration to key elements, features, qualities or characteristics relevant to Green Belt openness or purposes, such that post development the baseline would be fundamentally changed.
<b>Moderate</b>	Partial alteration to key elements, features, qualities or characteristics relevant to Green Belt openness or purposes, such that post development the baseline would be noticeably changed.
<b>Minor</b>	Minor alteration to key elements, features, qualities or characteristics relevant to Green Belt openness or purposes, such that post development the baseline would be largely unchanged despite discernible differences.
<b>Negligible</b>	Very minor alteration to key elements, features, qualities or characteristics relevant to Green Belt openness or purposes, such that post development the baseline would be fundamentally unchanged with barely perceptible differences.

4.2.16. It may be possible for a proposal to reduce the openness of the Green Belt in a specific location whilst overall openness is preserved or to conflict with a Green Belt purpose to some degree without compromising the overall purposes of the Green Belt. This forms part of the planning balance and the considerations under paragraph 146 of the NPPF.

## **5.0 Baseline Studies and Analysis**

### **5.1. Introduction**

- 5.1.1. As stated above, this section summaries the key findings of a series of studies undertaken in the 2015 study, which build up an understanding of Cambridge and its surrounding landscape, focussing on considerations that are relevant to the performance of Green Belt purposes. These covered a range of aspects that have a bearing on how the issues raised by Green Belt purposes are manifested in Cambridge and its surrounding landscape or are perceived by residents or visitors to the city. They include matters relating to the physical form and scale of the city, its historical development, its relationship to its hinterland, townscape and landscape character, the experience of approaching and arriving at the city, and how the city is perceived from the surrounding landscape. Whilst these studies were originally undertaken to understand the contribution of the Cambridge Green Belt to Green Belt purposes, they also inform consideration of openness.
- 5.1.2. The material has been checked, validated and updated as necessary for the purposes of the present study, by means of desktop studies, site survey and analysis.

### **5.2. Historical Development of Cambridge and the Villages**

- 5.2.1. Key points:
- Location of Cambridge at a meeting point of several landscapes: Fens to the north and east, Claylands to the west, Chalk Ridge to the south and east.
  - A small town until the 19<sup>th</sup> century.
  - Substantial growth during the 19<sup>th</sup> and 20<sup>th</sup> centuries, continuing into the early 21<sup>st</sup> century.
  - Expansion of the city southwards has included Addenbrooke's Hospital/CBC and early mid 20<sup>th</sup> century leafy estates.
  - Varied local factors influencing the location and form of villages.
  - Distinctive character of many villages and notable landscape features within them.

### **5.3. Environmental Designations**

- 5.3.1. There are numerous environmental designations within Cambridge and the Green Belt, covering a range of habitats and with many different reasons for designation, which contribute to the character and setting of the city. Those within the area covered by the proposed public transport link and Travel Hub facilities are shown on Figure 3.
- 5.3.2. Key points:
- Several environmental designations in the vicinity of the proposed route options and Travel Hub facilities.
  - SSSIs covering Gog Magog Golf Course (Gog Magog Hills), Sawston Hall Meadows, and Dernford Fen.

- Local Nature Reserves covering the Nine Wells south of CBC and The Beechwoods east of Babraham Road Park and Ride.
- A City Wildlife Site covering a hedgerow west of Babraham Road, on the boundary of the CBC.
- County Wildlife Sites covering the Shelford-Haverhill Disused Railway (section between High Street and A505 slip road) and the River Granta.

#### **5.4. Cultural Heritage Designations**

5.4.1. Figure 4 shows cultural heritage designations within the relevant section of the Cambridge Green Belt, which contribute to the character and setting of the city.

5.4.2. Key points:

- Conservation Areas and listed buildings in Great Shelford and Stapleford, the southern part of Sawston, Great and Little Abington and Babraham.
- Registered Parks/Gardens and listed buildings at Sawston Hall and Pampisford Hall.
- Scheduled Monument at Hobson’s Brook west of Nine Wells, within Wandlebury Country Park and Magog Down, along road verge of A505 at Pampisford, at River Cam west of Sawston and Whittlesford.
- Further listed buildings at Nine Wells, Middlefield, between Sawston and Babraham, and east of the A11 on Newmarket Road.

#### **5.5. Recreational Routes and Country Parks**

5.5.1. Figure 5 shows recreational routes within and through the Cambridge Green Belt, as well as the locations of country parks close to the edge of Cambridge. These contribute to the character and setting of the city, and also allow access into the countryside close to the edge of the city.

5.5.2. Key points:

- Limited rural rights of way network, predominantly direct routes between villages e.g. Great Shelford and Stapleford, Babraham and Sawston.
- Long distance footpath route through area (E2 European Long Distance Route between CBC and A11), east of Wandlebury Country Park.
- National Cycle Route through area (from CBC to A505), through Great Shelford and Sawston.
- Wandlebury Country Park in the rural landscape east of the A1307.

#### **5.6. Topography and Geology**

5.6.1. Figure 6 illustrates the topography of the Cambridge Green Belt and the surrounding area.

#### 5.6.2. Key points:

- Topography reflects one of the three main landscapes that surround Cambridge: Chalk Hills. It also reflects the additional River Valleys landscapes present south and east of Cambridge.
- Proposed route options run through gently undulating river valleys of Hobson Brook and the River Granta, occasionally rising up the lower valley slopes of the chalk hills.
- The Robinson Way Alternative option would pass over the north westernmost extent of the Gog Magog foothills at White Hill and Clarke's Hill.
- Proposed Travel Hub facilities A and B located on slightly higher but gently undulating landform either side of the River Granta.

### 5.7. Townscape Character

5.7.1. Townscape character assessment (see Figure 7) assists not only in identifying the historic core of the city but also in identifying other areas of townscape which are distinctive to Cambridge and contribute to its particular character. For this report the townscape character of Sawston and Babraham has been identified to be consistent with other settlements, as this has previously only been identified for Cambridge and Green Belt villages considered to be necklace villages.

#### 5.7.2. Key points:

- The southern fringe of Cambridge consists of a mix of Colleges and University Buildings, 21st Century Mixed Use Development and 1900-1945 Suburban Housing.
- Great Shelford and Stapleford retain historic cores surrounded by predominantly Post-war Suburban Housing, with limited 21st Century Mixed Use Development.
- Sawston also retains a historic core but has rapidly expanded with Post-war Suburban Housing and 21st Century Mixed Use Development.
- Babraham has experienced very little modern development.

### 5.8. Landscape Character

5.8.1. The characterisation approach adopted for the built area of Cambridge has been extended into the landscape (see Figure 8). Understanding landscape character is fundamental to understanding what gives a landscape its distinctive identity. Landscape character assessment assists in identifying important components of the landscape setting of a settlement. It enables the settlement to be studied within its context, and the relationship between the settlement and its surroundings to be properly understood. This assessment has only been undertaken within the boundaries of the Green Belt, since areas beyond the Green Belt boundary are not relevant to this study.

#### 5.8.2. Key points:

- One of the main landscapes around Cambridge is present in the form of the Chalk Hills. The River Valleys landscape type is also present.

- All route options pass through areas of the River Valleys and an area of the Chalk Hills.
- Travel Hub A and Travel Hub B options are located within the River Valleys.

## 5.9. Green Corridors into Cambridge

5.9.1. Green corridors are widths of countryside or green space, with public access, penetrating from the open countryside into the urban fabric of Cambridge. They provide the settings for open approaches into the city, access for pedestrians and cyclists out into the countryside, corridors for wildlife, and a landscape setting to some edges of the city. They are shown on Figure 7.

5.9.2. Key points:

- The green corridor along Hobson’s Brook provides the setting for an important open approach into the city from the south, along the railway line. However, the green corridor does not continue further south into the Green Belt.

## 5.10. Visual Assessment

5.10.1. Figure 9 shows the results of a visual assessment of Cambridge, with particular emphasis on the interrelationship between the city edge and the surrounding landscape.

5.10.2. Key points:

- Views of CBC buildings as key landmarks on the edge of the city.
- Key views to Cambridge from the surrounding landscape, including elevated views from Clarke’s Hill, Fox Hill and Magog Down. However, views are generally away from the proposed route and Travel Hub options.
- Character of the urban edge as seen from the countryside is generally mixed.

## 5.11. Approaches and Gateways

5.11.1. This section describes the relevant aspects of the approaches and gateways to Cambridge shown on Figure 10. Approaches to Cambridge from the surrounding countryside generally have a rural character. Approaches to and within the urban area provide the viewpoints from which most visitors see the city and gain their perception of its scale. Distance and travel time between open countryside and Distinctive Cambridge (i.e. the historic core and areas of Distinctive townscape/landscape), and the character of the approaches, play an important role in determining people’s perception of the character and scale of the city. The length of approaches therefore provides a fair representation of how people perceive the scale of Cambridge, given that an important part of its character is its compactness.

### Hills Road

5.11.2. The south eastern approach to Cambridge along Babraham Road and Hills Road is a historic route, which passes over the Gog Magog Hills. The first view of the city is an elevated panoramic view from the top of the hill near the Haverhill Road junction. The

urban gateway is marked by suburban housing and CBC, which is a prominent landmark on the edge of the city. Hills Road is a green treed road with large detached and semi-detached houses set back from the road.

#### **Rail approach from the South (London)**

- 5.11.3. The rail approach to Cambridge from the south is mainly green and rural in character, as the railway line passes through a green corridor alongside Hobsons Brook, although ongoing development at CBC and Clay Farm are visible. The urban gateway is marked by CBC to the east, which is a prominent landmark on the edge of the city, and Clay Farm.

#### **5.12. Pattern of Distribution of Villages**

- 5.12.1. Cambridge is surrounded by an open rural landscape containing a number of villages. Villages are scattered throughout the Cambridge Green Belt, with patterns related to their origins and development over time. Figure 8 shows landscape types and character areas, each with their characteristic settlement pattern. Villages in the Chalk Hills landscape type south and east of Cambridge are relatively scarce due to the shortage of ground or surface water and settlement is often limited to a few scattered farms. Numerous villages have developed in the River Valley landscape type to the south due to the proximity of fresh water, many having been established at the crossing-points of watercourses.
- 5.12.2. Analysis has identified a circle of inner necklace villages, which are shown on Figure 7. These are villages that, due to their close proximity to Cambridge, play a particularly important role in the immediate setting of the city. More distant villages also play a role, particularly as people see them as they travel to and from Cambridge, and as they are seen in panoramic views of the city.
- 5.12.3. Great Shelford and Stapleford combined form one of the necklace villages around Cambridge and remain physically separated from Cambridge within the area of interest by Hobson's Brook and the railway corridor to the north and White Hill and Clarke's Hill to the north-east.
- 5.12.4. Sawston forms one of the villages located within the Granta Valley and along the A1301 that has expanded through cluster development and remains physically separated from Cambridge by the River Granta and the wider countryside.
- 5.12.5. Babraham, to the east of Sawston, remains physically separated from Cambridge by both physical distance and the Gog Magogs.
- 5.12.6. Great Abington to the east is located outside the Green Belt, so is not relevant to this study.
- 5.12.7. Key points:
- Villages scattered throughout the Green Belt, with their distribution reflecting local landscape characteristics.
  - Presence of villages close to Cambridge contributes significantly to the quality of the setting of the city.



- Maintaining separation between Cambridge and the inner necklace villages, and between the villages themselves is important to the setting of the city but is under threat in some instances.

### **5.13. Character and Identity of Villages**

- 5.13.1. Each village possesses qualities which contribute positively to their character and identity and therefore to the quality of the setting of Cambridge.
- 5.13.2. Great Shelford and Stapleford have combined to form one of the large necklace villages around Cambridge. The scale and form of the settlements has been radically changed by the extensive recent development, which has also continued in a north-west direction along Cambridge Road, towards Trumpington causing these adjacent villages to merge. It retains its historic core at the centre of the village, with areas of countryside immediately adjacent to this historic core, south and east of the village. Sawston also retains its historic core and has undergone cluster expansion. Babraham has remained a linear settlement but has undergone limited expansion with the exception of the Babraham Research Campus to the north which has a separate character and identity.
- 5.13.3. Key points:
- Villages vary in their size, form and other qualities, so that each village has its own particular character and identity.
  - Individual identity is most intact in villages which avoided large 20th century expansion but has been diluted in those which saw significant 20th century growth.
  - Inner necklace villages enrich the setting of Cambridge and emphasise the rural character of the landscape surrounding the city.

### **5.14. Townscape and Landscape Role and Function**

- 5.14.1. The assessment of the ‘function’ that townscape and landscape plays in contributing to the distinctiveness of Cambridge (see Figure 11) and its setting is based on a methodology established by LDA Design and endorsed by the Countryside Agency (The Countryside Agency and Scottish Natural Heritage, 2002). This methodology was piloted in Winchester (Landscape Design Associates, 1998) and subsequently developed on other projects relating to historic towns and cities.
- 5.14.2. Supportive Townscape/Landscape consists of those areas of townscape/landscape that support the character of the Historic Core and Distinctive areas of the city. They provide the backdrop and ambience, and bolster the sense of place of the city and its approaches. Supportive areas and features are of a kind that may be found in other towns and cities but, due to their particular location or the way they influence the character and setting of the city, they are locally distinctive, recognisable to those familiar with the city as important elements of its character and identity.
- 5.14.3. Connective Townscape/Landscape consists of those areas of townscape/landscape that are an integral part of the city and its environs but may lack individual distinction or do not make a significant contribution to the setting of the city. This does not signify

that these areas are unimportant or lacking in their own identity; they may have significant merit in their own right. Rather, they are often areas with little relationship to their landscape setting, or to landmarks within the Historic Core or its landscape setting. Due to their location or character, they may contribute little to views of the city or other elements of its setting. Generic development forms with little sense of place can also contribute to the loss of local identity.

5.14.4. Key points:

- Supportive landscape south of the city, including the Gog Magog Hills, which lie close to the city and provide elevated vantage points for panoramic long distance views across open countryside in the foreground and the city in the middle distance.
- Areas of Connective townscape/landscape present along the western edge of Great Shelford and around CBC, and may still be important but, depending on individual circumstances, may have potential to accommodate change.
- Landscape south of Great Shelford and Gog Magog Hills is classified as Outer rural areas of the Green Belt.

**5.15. Summary of Baseline Studies and Analysis**

5.15.1. The studies and analysis presented in this section enable a thorough understanding of aspects of Cambridge and its surrounding landscape that are relevant to openness and Green Belt purposes. The main findings arising from the various studies that are relevant to the proposed public transport link and Travel Hub facility are summarised below and lead to the identification of qualities that directly contribute to openness and the performance of Green Belt purposes. These qualities are set out in section 6.

5.15.2. The main findings drawn from the studies and analysis contained in this section are:

- There are relatively few environmental and cultural heritage designations in the vicinity of any of the proposed route or Travel Hub options., with key designations including the Registered Parks and Gardens at Sawston Hall and Pampisford Hall, Conservation Areas in the main villages and the County Wildlife Sites at Nine Wells and along the River Granta and part of the disused Shelford-Haverhill railway line.
- The rights of way network in the vicinity of the route and Travel Hub options is relatively sparse, although there are still good links between settlements.
- The city has its origins at the meeting point of three landscapes which, in terms of topography and landscape character, are still readily apparent in the landscape surrounding the city at the present day. The route and Travel Hub options are located along the edge of the chalk hills associated with the Gog Magogs.
- There is an area of Supportive landscape along the southern edge of Cambridge, reflecting the important role played by the landscape in the setting of the city.
- The villages surrounding Cambridge are a notable feature, with their distribution reflecting the historic qualities of the landscape, and some villages very close to the

city edge. Great Shelford, Stapleford and Sawston have all undergone expansion but retain a rural setting, and separated from Cambridge by open countryside, the chalk hills and in the case of Sawston the River Granta.

## 6.0 Qualities Relevant to Openness and Green Belt Purposes

### 6.1. Introduction

- 6.1.1. The baseline studies and analysis summarised in section 5 were undertaken to gain a good understanding of Cambridge and its surroundings, focussing on considerations which are relevant to the performance of Green Belt purposes and openness. From this work, it is apparent that the National Green Belt purposes, Cambridge Green Belt purposes and openness are manifested and performed in various ways specific to Cambridge and its surrounding landscape. This section draws from the 2015 study, which defined 16 qualities of Cambridge and its surrounding landscape which directly contribute to the performance of Green Belt purposes.
- 6.1.2. The 16 qualities are explained in detail in the 2015 study, which is replicated in the remainder of this section where relevant to this study. Further information that is not relevant to the areas covered by this study is provided in the 2015 study. The qualities are not listed in order of importance. They are all important and each contributes to the performance of Green Belt purposes, as well as an understanding of openness.
- 6.1.3. In terms of Green Belt purposes, the table on the following pages shows the relationship between each of the 16 qualities, the National Green Belt purposes and Cambridge Green Belt purposes. The majority of these qualities contribute to the performance of more than one Green Belt purpose. The table also identifies which qualities are relevant to each of the assessment sectors, as some of the qualities relate more specifically to the edge of the city, whilst others are more relevant in the rural areas.
- 6.1.4. As set out in the methodology in Section 4 of this report, the 16 qualities are used as the criteria for assessing the current level of openness and the contribution to Green Belt purposes of the three sectors and sub areas discussed in section 4.2 and shown on Figure 2. This forms the starting point for the assessment of any potential conflict with Green Belt purposes resulting from the different route and Travel Hub options. The test relating to preservation of openness is addressed separately, as discussed in Section 4.2.

Qualities Relevant to Openness and Green Belt Purposes	National Green Belt Purposes				Cambridge Green Belt Purposes			Relevance to Green Belt Sectors				
	1. Sprawl	2. Merging	3. Encroachment	4. Setting/ Character	1. Character	2. Setting	3. Merging	Sector I	Sector II	Sector III	Sector IV	Sector V
1. A large historic core relative to the size of the city as a whole	*			*	*			*				
2. A city focussed on the historic core				*	*			*				
3. Short and/or characteristic approaches to the historic core from the edge of the city	*			*		*		*				
4. A city of human scale easily crossed by foot and by bicycle	*			*	*			*				
5. Topography providing a framework to Cambridge				*		*		*	*	*	*	*
6. Long distance footpaths and bridleways providing access to the countryside				*		*		*	*	*	*	*
7. Key views of Cambridge from the surrounding landscape				*		*		*	*			
8. Significant areas of Distinctive and Supportive townscape and landscape				*	*	*		*	*			
9. A soft green edge to the city			*	*		*		*				
10. Good urban structure with well-designed edges to the city	*							*				
11. Green corridors into the city	*			*	*	*		*				
12. The distribution, physical and visual separation of the necklace villages		*		*	*	*	*	*	*	*	*	*
13. The scale, character, identity and rural setting of the necklace villages		*		*		*	*	*	*	*	*	*
14. Designated sites and areas enriching the setting of Cambridge				*		*		*	*	*	*	*
15. Elements and features contributing to the character and structure of the landscape	*			*		*		*	*	*	*	*
16. A city set in a landscape which retains a strongly rural character			*	*		*		*	*	*	*	*

## 6.2. Qualities

### 1. A Large Historic Core Relative to the Size of the City as a Whole

- 6.2.1. This quality is concerned with compactness, identified by Holford and Myles Wright in their 1950 report (The Holford Report) as being an important characteristic of the city. Cambridge Green Belt purpose 1 refers to 'a compact, dynamic city with a thriving historic centre'. In addition to being a key part of the special character of the city, it is also relevant to the issue of urban sprawl, which would reduce the relative size of the historic core in proportion to the size of the entire city.
- 6.2.2. In the case of Cambridge, its special historic character depends not only on the relatively large and intact historic core, but also on the fact that this has not been 'swamped' by more recent development. Despite the presence of business parks and post-war peripheral housing estates and other development, the scale of the historic core relative to the overall city is such that Cambridge still retains its historic character. If substantial peripheral development were to be permitted in Cambridge, more modern development would begin to dominate and, as the scale of the historic core is fixed, it would be inevitable that the overall historic character of the settlement would begin to be eroded. If Cambridge were to grow beyond a certain point, it would no longer have the character of a historic city, but rather would become merely a city with a historic core - a very different character of settlement. Development has already extended furthest from the historic core to the east and south of the city, in a largely unstructured way that gives the impression of urban sprawl.
- 6.2.3. The issue of scale is, therefore, of vital significance to the protection of the special character of Cambridge. It needs to retain the feeling of being a small city, one still dominated by its historic core, if it is to retain its special character. The Green Belt has an essential role to play in this and the prevention of sprawl.

### 2. A City Focused on the Historic Core

- 6.2.4. This quality is also relevant to compactness and to Cambridge Green Belt purpose 1. The study by Colin Buchanan and Partners in 2001 (The Buchanan Report) emphasised the importance of the city's historic core and associated university colleges as part of the special character of Cambridge. The buildings and historic core are also identified as Defining Character in the Cambridge Landscape Character Assessment of 2003 (CLCA).
- 6.2.5. The 2015 study describes how Cambridge did not expand much beyond its medieval limits until the 19th century. Today, despite extensive expansion since that time, Cambridge is formed of a network of neighbourhood hubs and commercial areas or developments (such as industrial development around the railway and Cambridge Science Park) located around a single core, which is focused on the medieval area. The core is a vibrant social, cultural and economic focus to the city. There are a finite number of compact, single centred historic cities in the England and this aspect of

Cambridge is an important quality that should be safeguarded. The Green Belt plays an important role in this.

- 6.2.6. There is a danger that, if the city expands much beyond its current size, the existing core will not be accessible to residents of the outer areas of the city due to the distance, and inconvenience of travelling, between residential areas and the centre. This might lead to the development of alternative urban cores that provide the economic and social focus for large areas of the city, competing with the historic centre and irretrievably altering the historic form and function of Cambridge.

### **3. Short and/or Characteristic Approaches to the Historic Core from the Edge of the City**

- 6.2.7. This quality is again associated with compactness and sprawl and is also key to the perception of Cambridge as a historic city when approaching and arriving. The Holford Report identified *'open countryside near the centre of the town on its west side'* as an important characteristic, which is reflected in short, characteristic approaches to the historic core from the west. The importance of a sense of arrival is also emphasised in the CLCA.
- 6.2.8. Approach routes into Cambridge provide the viewpoints from which most visitors see the city and gain their initial perception of it. Short and/or characteristic approaches are shown on Figure 10. The shortest and most characteristic approaches between open countryside and distinctive Cambridge lie to the south and west. The railway line into Cambridge from the south passes through open countryside or green landscape almost to the station. These approaches should be safeguarded. However, the road approaches into Cambridge from the south are longer and less distinctive.
- 6.2.9. It is also important that longer and unremarkable approaches into the city are not degraded further as they all play a role in contributing to people's perception of Cambridge. In particular, ribbon development along all routes into Cambridge should be avoided, especially where this would narrow the gap between the city and necklace villages.

### **4. A City of Human Scale Easily Crossed by Foot and by Bicycle**

- 6.2.10. This quality is also concerned with compactness and sprawl but is unrelated to Cambridge's historic character. It is concerned with how people living and working in the city perceive its compact scale in their day to day lives.
- 6.2.11. Cambridge has a tradition of cycling. Much of the population, particularly students, travel the city by foot or by bicycle. This is made possible by the relatively small size of the city. As Cambridge expands, so does the distance of travel between different parts of the city.
- 6.2.12. The centre and the west sides of Cambridge are of a small, human scale and easily crossed by foot and bicycle. This is a quality of Cambridge, in which the Green Belt plays an important part.

- 6.2.13. The north, east and south sides are much larger and the quality of Cambridge as a city of human scale, easily crossed by foot and by bicycle, has already been eroded. Further erosion of this quality can be prevented by ensuring that Cambridge does not expand significantly further, and by creating and managing a good network of paths and cycleways.

**5. Topography Providing a Framework to Cambridge**

- 6.2.14. This quality is central to understanding the setting and history of the city, reflecting Cambridge’s origins and location at the meeting point of three landscapes. The significance of topography as a component of the setting of the city is recognised in the CLCA, which identifies ‘high ground’ as Defining Character.
- 6.2.15. The landform surrounding Cambridge is illustrated on Figure 6. The relationship of the city to the topography is one of the key defining qualities of Cambridge.

**6. Long Distance Footpaths and Bridleways Providing Access to the Countryside**

- 6.2.16. Once Green Belts have been defined, the NPPF states that they have positive roles to play, including “*looking for opportunities to provide access*” (paragraph 81). The accessibility of the countryside surrounding Cambridge is an important aspect of its setting, enabling people to appreciate the landscape setting and the relationship between the city and countryside.
- 6.2.17. Long distance routes, and also shorter, local footpaths and bridleways providing access into the countryside in the immediate vicinity of Cambridge, are important qualities of the setting and special character of the city that should be preserved and continue to be enhanced.

**7. Key Views of Cambridge from the Surrounding Landscape**

- 6.2.18. This quality is also an important element of the setting of Cambridge. Views of the historic core are one of the aspects that were identified in the Structure Plan 2003 to be of particular importance to the quality of the city. They are also identified as Defining Character in the CLCA and are identified in the South Cambridgeshire Local Plan 2018 (SCLP) as an aspect of the special character of Cambridge.
- 6.2.19. There are a number of viewpoints that are important, and the qualities of these views should be preserved and, where possible, enhanced. The viewpoints identified on Figure 9 are amongst the most important on the west side of the city, as it is from these locations that people can best appreciate the various qualities of Cambridge. All viewpoints identified provide different views of landmark features or defining characteristics of the city.
- 6.2.20. There are key views towards the southern edge of Cambridge from the Gog Magog Hills, including Clarke’s Hill, Fox Hill and Magog Down. In many of these views, Addenbrooke’s Hospital and the Biomedical Campus are prominent in views. Care must be taken to ensure these remaining key views are not degraded further by inappropriate peripheral development. However, the proposed Travel Hub options are



located in the opposite direction to the majority of key views and beyond the approximate area of the Green Belt from which Cambridge can be seen.

### **8. Significant Areas of Distinctive and Supportive Townscape and Landscape**

- 6.2.21. The 2015 study demonstrates how areas of Distinctive and Supportive townscape and landscape contribute most strongly to the distinctiveness of Cambridge and its setting. They are, therefore, important areas to protect. However, as discussed in that study, these areas are not in every respect of greater importance than the remaining areas of influence (with the exception of Visually Detracting Townscape/Landscape), as all areas play a crucial role in the setting and perception of the city. The importance of Connective Townscape/Landscape and Outer Rural Areas lies in linking between and forming a foil to areas of Historic Core and Distinctive and Supportive townscape and landscape.
- 6.2.22. Figure 11 identifies Supportive townscape and landscape as the most essential areas to be safeguarded from the adverse effects of development. However, other areas should also be safeguarded from change which would cause adverse effects on the qualities of the setting and special character of Cambridge.

### **9. A Soft Green Edge to the City**

- 6.2.23. The Buchanan Report referred to the interface between the city and the countryside as being an aspect of Cambridge's special character and the CLCA refers to edges as having the potential to be either Defining Character or Supporting Character. Soft green edges contribute significantly to the setting of the city, particularly on its west side. They also play a role in National Green Belt purpose 3 in reducing the urbanising influences of the built area on the adjacent countryside.
- 6.2.24. It is important to preserve existing soft green edges and to seek opportunities for planting to improve existing or future city edges which lack this quality. However, the southern edge of Cambridge is currently mixed rather than green, although designed to have a soft green edge in the future as it matures.

### **10. Good Urban Structure with Well Designed Edges to the City**

- 6.2.25. This quality is of relevance to National Green Belt purpose 1. One of the factors that contribute to urban sprawl is poorly designed urban edges which do not create a well-considered long-term edge to a city. From the available plans, developments currently under construction at CBC will have a good urban structure and provide a well-designed edge to the city that can be expected to endure for the long term.

### **11. Green Corridors into the City**

- 6.2.26. The Holford Report referred to '*green wedges along the river*' as being an important quality and they are also identified as such in the Buchanan Report, the City Council's 2002 Inner Green Belt Boundary Study, the Structure Plan 2003, the CLCA and the SCLP. They are key components of the character and setting of the city and also play an important role in maintaining urban structure and thus reducing sprawl. These

corridors should be safeguarded from development that would harm their character or compromise their function.

- 6.2.27. The Cam corridor is a key defining element of historic Cambridge and its setting and it is essential that it should be preserved. The Hobson’s Brook green corridor should remain open and provides opportunities for enhanced access between the city and the countryside, as is beginning to occur as a result of the ongoing developments at CBC and Clay Farm.

**12. The Distribution, Physical and Visual Separation of the Necklace Villages**

- 6.2.28. This quality is also mentioned in the Holford Report, the Buchanan Report, the City Council’s 2002 Inner Green Belt Boundary Study, the Structure Plan, the CLCA and the SCLP. It has long been regarded as an important component of the character and setting of the city and is clearly related to National Green Belt purpose 2.

- 6.2.29. It is essential to preserve the pattern of distribution of villages around Cambridge and their physical separation from other settlements. The Green Belt provides protection for the countryside around and between settlements. Although all areas of open countryside in the Green Belt play a role to a greater or lesser extent in separating settlements, those areas of land that are considered to be most critical in separating settlements within the immediate setting of Cambridge must be protected. The role of individual areas in maintaining separation between settlements requires careful consideration of topography and vegetation, which can prevent intervisibility, and of land that is perceived as being part of the setting of a particular village and thus ‘belonging’ to that village rather than another.

**13. The Scale, Character, Identity and Rural Setting of the Necklace Villages**

- 6.2.30. The Buchanan Report specifically refers to the character of the villages surrounding the city, and the qualities of setting, scale and character of the villages are also referred to in the SCLP. The varying sizes and character of the villages, each with their own distinct identity, is an important component of the setting of the city.

- 6.2.31. It is apparent that the villages that saw significant growth in the 20<sup>th</sup> century have become more generic and are less distinctive than those that saw little growth, where the historic character and the relationship between all parts of the village and the surrounding landscape remains largely intact.

- 6.2.32. The rural setting of villages is also a fundamental component of their character. Despite the proximity of Cambridge, all the villages within the study area retain an entirely or largely rural character and it is essential that this should remain the case. The Green Belt has a critical role to play in protecting these qualities of the necklace villages.

**14. Designated Sites and Areas Enriching the Setting of Cambridge**

- 6.2.33. Designated sites are identified as Supporting Character in the CLCA or, in some circumstances, potentially Defining Character. The SCLP identifies them as a component of the special character of Cambridge.

- 6.2.34. All features, sites and areas covered by environmental, cultural and access designations are important elements that enrich the appearance of the landscape and people’s experience of it. They are all part of the setting and special character of Cambridge that should be preserved.

**15. Elements and Features Contributing to the Character and Structure of the Landscape**

- 6.2.35. This quality is defined as Supporting Character or, on occasion, Defining Character in the CLCA and is identified in the SCLP as a component of the special character of Cambridge. In addition to contributing to the character and setting of the city, this quality is relevant to National Green Belt purpose 1 in that a strong landscape structure provides containment and natural barriers to inhibit urban sprawl.
- 6.2.36. There is a pattern of elements and features within the city and the landscape, ranging from large scale features such hills, rivers, woodlands and tall University buildings, to smaller scale elements such as hedgerows, farm buildings, and a network of smaller watercourses, that are fundamental to the character of different landscape character areas, and also to the setting and special character of Cambridge.

**16. A City Set in a Landscape which Retains a Strongly Rural Character**

- 6.2.37. The *‘open countryside near the centre of the town on its west side’* is identified as important in the Holford Report, and the SCLP identifies this quality as a component of the special character of Cambridge. In addition to character and setting, it is also relevant to National Green Belt purpose 3, in that a strongly rural landscape indicates that encroachment on the countryside is being resisted, whereas countryside that is significantly affected by urban influences creates a perception of encroachment.
- 6.2.38. It is important that the landscape surrounding Cambridge retains this rural character. The rural nature of the landscape around Cambridge is a key quality of the setting and special character of the city, particularly in providing a setting to the urban form when seen from key views, in providing settings to necklace villages, and in contributing to people’s perception of the city as they approach it along communication routes.

## **7.0 Introduction to Sector Assessments**

### **7.1. Introduction**

- 7.1.1. The following sections of the report assess the three sectors of the Green Belt identified on Figure 2 to understand the key considerations for each sector in relation to openness and their performance in relation to Green Belt purposes, consider whether the proposed route or Travel Hub options could be delivered whilst preserving the openness of the Green Belt, identify any potential conflicts with Green Belt purposes, and finally to identify the degree of any potential Green Belt conflict.
- 7.1.2. The sector assessments are presented in a consistent manner using a standard template. After a brief introduction giving an overview of the sector, the sector is assessed against each of the qualities identified in section 6.2, that are relevant to the sectors being assessed (see table at the end of Section 6.1), to ensure that each sector is considered in relation to all criteria which are relevant to the Green Belt openness and purposes. All sectors are divided into sub areas where the assessment of one or more criteria differs between one part of the sector and another. Sub areas are presented as separate columns within the sector assessment but, where the assessment against a particular criterion is the same for all sub areas, the columns are merged. If the proposed public transport link or Travel Hub facility is unlikely to affect a particular sub area, assessment of that sub area has been omitted. This is the case for sub areas I.A, III.A, III.B and IV.A.
- 7.1.3. Following the criteria-based assessment, conclusions relevant to openness and Green Belt purposes are summarised, drawing out the key points from the criteria-based assessment. This is followed by assessment of the extent to which the openness of the Green Belt will be preserved by the proposals, identification of any potential conflicts with Green Belt purposes, and where necessary, identification of the degree of any potential Green Belt conflict.

### **7.2. Green Belt Sector Assessments**

- 7.2.1. The assessment of the sectors and sub areas is set out on the following pages. The 2015 study showed that almost all areas of land within the Inner Green Belt are important to Green Belt purposes, but the reasons differ from one area to another. It identified that south of the city, the Inner Green Belt plays a critical role in preventing sprawl of the city and in maintaining open land at the foot of the Gog Magog Hills, which form the backdrop to all views out from and across Cambridge in this direction. The Green Belt also prevents further coalescence with villages such as Great Shelford and is important to the green approaches to the city from the south.

**8.0 Assessment of Sector I: South of Addenbrooke’s**

**8.1. Description of Sector**

- 8.1.1. Sector I is located to the south of Cambridge, between the city and Great Shelford, and extends onto the foothills of the Gog Magog Hills (see Figure 12). It formed Sector 10 of the 2015 study. Pursuant to a recommendation in the 2015 study, an area of land south of CBC was removed from the Green Belt and therefore from this sector. CBC and associated new developments, including housing on the Bell School site, form the northern boundary, creating a barrier between this sector of Green Belt and the rest of the city. The A1307 forms the eastern boundary of this sector. The Cambridge-London railway line forms the western boundary of the sector. Granham’s Road is located to the south of much of the sector, with a single field located to the south of Granham’s Road, forming sub area I.A and extending south to the parallel Hinton Way. Sub area I.C contains the distinctive landform of White Hill.
- 8.1.2. Land use is predominantly arable farmland throughout the sector (see Photograph 4 on Figure 18). Much of the farmland is large scale, but smaller field parcels are located on White Hill, along with a wooded hilltop and tree belts (see Photograph 3 on Figure 18). This sector also includes Nine Wells Local Nature Reserve in the north west and a hedgerow west of the A1307 Babraham Road, on the northern boundary, that is designated as a City Wildlife Site. Rights of way through the area are limited to a single route from Granham’s Road to Nine Wells (see Photographs 1-2 at Figure 17).
- 8.1.3. Three sub areas have been identified within this sector. Of these, the proposed public transport link options are unlikely to affect sub area I.A, given distance from the options. Sub area I.A is therefore not assessed below.

**8.2. Baseline Assessment of Qualities Relevant to Green Belt Openness and Purposes**

8.2.1. Figure 12 illustrates the key considerations relevant to both openness and Green Belt purposes in sector I.

<b>Qualities Relevant to Green Belt Openness and Purposes</b>	<b>Sub Area I.B – north of Granham’s Road</b>	<b>Sub Area I.C – White Hill</b>
1.A large historic core relative to the size of the city as a whole	Despite the ongoing development associated with CBC and of substantial housing areas south of the historic core, the scale of the historic core relative to the overall city still currently remains such that Cambridge as a whole retains its historic character. This sector is relatively remote from the historic core, with the adjacent development having little sense of connection with the historic character of the city. The extent of development on this side of the city gives an impression of urban sprawl. This sector plays an important role in restricting further growth of the city in	

<b>Qualities Relevant to Green Belt Openness and Purposes</b>	<b>Sub Area I.B – north of Granham’s Road</b>	<b>Sub Area I.C – White Hill</b>
	this direction.	
2.A city focussed on the historic core	The presence of the CBC creates a physical barrier between this sector and the historic core, obstructing any visual connection from the sector to the landmark features in the city centre.	
3.Short and/or characteristic approaches to the historic core from the edge of the city	The rail approach to Cambridge from the south is mainly green and rural in character, as the railway line passes along the western boundary of this sector. In addition, the south eastern approach to Cambridge along Babraham Road, on the eastern boundary of the sector, is a historic route that passes over the Gog Magog Hills. The first view of the city on this approach is an elevated panoramic view from the top of the hill near the Haverhill Road junction, south east of this sector. The urban gateway is marked by suburban housing and CBC at the northern corner of the sector.	
4.A city of human scale easily crossed by foot and by bicycle	This quality has already been eroded to a certain extent to the south east of Cambridge, due to the extent of suburban development already present and the ongoing expansion of the CBC. Consequently, the compactness of the city has been reduced and this sector is relatively far from the historic core for people to walk or cycle into the centre. However, well used cycle and pedestrian routes are apparent including the Sustrans route along the railway to the west and a cycle lane along Babraham Road/Hills Road to the east.	
5. Topography providing a framework to Cambridge	The chalk hills of the Gog Magog Hills are a key element of the topographic bowl in which Cambridge is located, providing physical and visual containment to the south east of the city. They provide a marked contrast to the lower lying ground on which Cambridge is located and the Fen landscape to the north and east of the city, physically manifesting the underlying geology. These are the closest areas of high ground to the edge of Cambridge, with the high point of Wandlebury located to the south east of this sector.	
	The northern and eastern parts of this sub area are relatively flat and part of the	White Hill is itself a prominent area of landform in relatively close proximity

<b>Qualities Relevant to Green Belt Openness and Purposes</b>	<b>Sub Area I.B – north of Granham’s Road</b>	<b>Sub Area I.C – White Hill</b>
	bowl landform in which Cambridge is located. The central, western and southern parts are on the Gog Magog foothills.	to the edge of Cambridge, forming the north westernmost extent of the Gog Magog foothills.
6. Long distance footpaths and bridleways providing access to the countryside	The route of Sustrans National Cycle Route 11 follows the eastern edge of the railway line along the western edge of the sector, before turning along the northern boundary of the sector. This provides a well-used cycle link between the centre of Cambridge and Great Shelford. Public access into the remainder of the sector is relatively limited, with the exception of a public footpath leading from Granham’s Road to Nine Wells Local Nature Reserve.	
7. Key views of Cambridge from the surrounding landscape	There are no defined key views within this sector, but the sector is visible in key views from Magog Down and Babraham Road close to Wandlebury Country Park, as well as other viewpoints on roads on higher ground to the south of the sector. Views of the large buildings at CBC (which are recognisable landmarks) are possible from much of this sector, in the context of the ongoing development on the campus, and obstruct views to the historic city centre landmarks to the north.	
8. Significant areas of Distinctive and Supportive townscape and landscape	All of this sector is identified as Supportive landscape. Much of it lies on the lower foothills of the Gog Magog Hills, which are an important feature of the setting of Cambridge in their own right and also form the backdrop in views out of and across the city. The Gog Magog Hills are the major component of the sense of place associated with the areas south east of Cambridge, influencing the perception of the city from this direction. White Hill in sub area I.C is a particularly noticeable expression of this landform. The flatter land in the northern and eastern parts of this sector forms part of the rural foreground to the city as seen in elevated views from the south east.	

<b>Qualities Relevant to Green Belt Openness and Purposes</b>	<b>Sub Area I.B – north of Granham’s Road</b>	<b>Sub Area I.C – White Hill</b>
9. A soft green edge to the city	In much of this sector, the city is lacking a green edge where new developments are occurring around CBC. New housing development at the Bell School site off Babraham Road, as well as the expansion of CBC, are very visible and present a hard urban edge at present. A softer green edge will become apparent as new planting associated with the developments matures.	
10. Good urban structure with well-designed edges to the city	The masterplans for the developments at CBC and the Bell School site indicate that the developments have been designed to create long-term edges to the city.	
11. Green corridors into the city	This sector is adjacent to the green corridor along Hobson’s Brook west of the railway. It is separated from the green corridor by the railway line, with limited connections across the railway into the green corridor.	
12. The distribution, physical and visual separation of the necklace villages	Development at CBC is currently extending the edge of Cambridge further southwards. The open countryside of this sector, and particularly the landform and vegetation of White Hill, are key in maintaining separation between Cambridge and Great Shelford. Despite the existing ribbon development along the A1301 Cambridge/Shelford Road to the west, there is still a sense of separation between Great Shelford and Cambridge that is important to retain.	
13. The scale, character, identity and rural setting of the necklace villages	The western part of this sector (sub area I.C and the part of sub area I.B lying west of I.C) forms part of the rural setting of Great Shelford.	
14. Designated sites and areas enriching the setting of Cambridge	This sector includes Nine Wells Local Nature Reserve in the north west. In addition to its ecological importance, it has important heritage associations as the historic source of clean water for the city. A hedgerow west of the A1307 Babraham Road, on the northern boundary, is designated as a City Wildlife Site.	
15. Elements and features contributing positively to the character and structure of the landscape	The small number of mature hedgerows and the treed approach into Cambridge along the A1307 Babraham Road are important features in this sub area. Small	The distinctive landform of White Hill forms a key element in the setting of Cambridge in this vicinity. The wooded hilltop makes it particularly distinctive.



<b>Qualities Relevant to Green Belt Openness and Purposes</b>	<b>Sub Area I.B – north of Granham’s Road</b>	<b>Sub Area I.C – White Hill</b>
	woodland blocks, including the Nine Wells Local Nature Reserve, also enhance the setting of Cambridge. The lack of a strong landscape structure increases the risk of urban sprawl if development is extended into the sector in the future.	
16. A city set in a landscape which retains a strongly rural character	This sector retains a rural character to the south, becoming more urbanised to the north as a result of the new development that is occurring, which creates a sense of encroachment into the countryside. The effect of the ongoing CBC and Babraham Road developments should reduce once development is completed and the surrounding planting begins to mature.	

**8.3. Key Considerations Relevant to Green Belt Openness**

8.3.1. The variation in landform and relative lack of vegetation within much of sector I are key considerations in relation to openness within this sector, with the elevated landform of White Hill being part of the foothills of the Gog Magog Hills but also being more vegetated than the rest of the sector. The relative lack of a green urban edge allows views out from the southern edge of Cambridge, both at CBC and adjacent residential developments, into sector I. The sector retains a rural character in the south but is more urbanised in the north adjacent to the existing urban edge. There is limited built development within sector I, which consists predominantly of open farmland with the White Hill Farm complex located within sub area I.C and occasional individual properties along the A1307.

**8.4. Key Considerations Relevant to Green Belt Purposes**

8.4.1. This sector plays an important role in the setting of the south of Cambridge, located immediately adjacent to the existing urban edge and adjacent to the key green approach to the city from the south along the railway line. It forms an area of Supportive landscape. The sector is visible from the approaches to Cambridge along the railway and along the A1307. It also forms the separation between the edge of Cambridge and the foothills of the Gog Magog Hills, with White Hill forming the most north westerly part of the foothills.

8.4.2. The sector also forms part of the rural setting to Great Shelford, preventing sprawl of Cambridge further south and further coalescence to the north east of the village. It

forms part of the lower lying context to the village, before the landform rises up to the chalk hills. Access is limited through much of the sector, although the Sustrans cycle route through the west of sub area I.B is a key cycle route out of Cambridge and the public footpath to Nine Wells is well used. Development within the sector is restricted to isolated properties on White Hill and along the A1307.

## **8.5. Proposed Route Options within the Sector**

- 8.5.1. GCP option - The route option proposed by GCP would enter the sector in the north west of sub area I.B, at the base of the embankment of the existing Addenbrooke's Road bridge, requiring relatively limited vegetation removal. It would curve around the base of the embankment to run along the eastern edge of the cycleway and railway line, requiring a short section of hedgerow to be removed. It would remain entirely within sub area I.B, following the south western side of the hedgerow along the boundary of sub areas I.B and I.C, and join Granham's Road close to the access to White Hill Farm, requiring a short section of hedgerow to be removed. It would create a new carriageway approximately 7.3m wide with grass verges to either side. The current proposals indicate that a branch would be created off the existing cycleway at the point where the public transport route begins to turn away from the cycleway and railway line, creating a new 3m wide shared use route south of the public transport route. Where the route crosses Hobson's Brook a new bridge structure would be required. Whilst the bridge has not yet been designed, early indications assume that it would have a deck width of approximately 14m and have a clearance of a minimum of 1m above the existing ground level, with earth embankments approaching the bridge. Tree and hedgerow planting is also indicated on the current proposals, between the route and the existing cycleway, and either side of the route as far as Granham's Road, with species rich grassland between the route and Nine Wells.
- 8.5.2. Robinson Way Alternative option - The Robinson Way Alternative route option would enter the sector through the parcel of land removed from the Green Belt south of CBC. It would pass through an existing woodland belt on the edge of the allocated land, requiring a section of the belt to be removed. It would run up the sloping landform towards White Hill, crossing Granham's Road on the eastern side of White Hill in the vicinity of an existing low hedgerow. This option is currently less developed in design terms than the Greater Cambridge Partnership options and careful consideration would need to be given as to where the route could cross Granham's Road due to visibility on the sloping landform. Vegetation removal along Granham's Road is likely to be required to aid visibility. Careful consideration of cut and fill requirements would also be required, given the sloping terrain of this route option.

## **8.6. Preservation of Green Belt Openness**

- 8.6.1. The stretches of either route option that run through CBC, along with any associated stops, would be located outside of the Green Belt and would therefore preserve the openness of the Green Belt.

- 8.6.2. The route option proposed by GCP would predominantly cross undeveloped countryside from the point that it exits CBC. Given that this area is relatively flat, there would be minimal requirement for cut and fill operations, aside from the bridge over Hobson’s Brook, meaning that there would be no significant volume of development to reduce the openness of the Green Belt. The route would be constructed at grade, minimising the visual effect of the proposals. This is considered to preserve the openness of the Green Belt in sub area I.B.
- 8.6.3. Although the design of any bridge over Hobson’s Brook is yet to be undertaken, it would introduce a built structure into the Green Belt, and as indicated above it is currently assumed that this would have a minimum of 1m clearance above the existing ground level and have ramped approaches. This would introduce a volume of new development within sub area I.B. Whilst this volume of development is likely to be relatively small, there would be some visibility of the structure from the surrounding area in the context of the adjacent railway line. It is considered that there would be a reduction in the openness of the Green Belt within sub area I.B due to the creation of the bridge, although it may be possible to minimise the reduction in openness during the detailed design of the bridge.
- 8.6.4. Given the sloping landform within the eastern part of sub area I.B, there is likely to be a requirement for cut and fill operations to ensure appropriate gradients for the Robinson Way Alternative route option, which would result in a small volume of development within the Green Belt. Whilst the sloping landform also increases the visibility of the route, the cut and fill required would be relatively modest and could be balanced with careful design. Consequently, the openness of the Green Belt within sub area I.B will be preserved by the Robinson Way Alternative route option.

**8.7. Potential for Conflict with Green Belt Purposes**

- 8.7.1. As mentioned above, the stretches of either of the route options that pass through CBC would be outside the Green Belt and there would be no conflict with Green Belt purposes.
- 8.7.2. The route option proposed by GCP would extend development into undeveloped countryside but would broadly follow the existing corridor created by the railway line and adjacent existing cycleway. The route option would run along the lower lying landform but would not be located directly between the southern edge of Cambridge and White Hill as a foothill of the Gog Magog Hills. The location on the lower lying ground would minimise visibility of the proposals from the edge of Cambridge, with the exception of the proposed bridge over Hobson’s Brook. In this sector, the route option would be far enough from the edge of Great Shelford to avoid any impacts on the setting of the village and to prevent settlements merging with each other. Whilst the proposed route would pass through an area of Supportive landscape, it would continue to perform its role as Supportive landscape with the route through it and there is therefore no conflict with Green Belt purposes as a result of this route option.

8.7.3. The Robinson Way Alternative route option would also extend development into undeveloped countryside. This route option would also require the removal of vegetation on the edge of Cambridge and would travel up the sloping landform of White Hill. Both of these factors would increase the visibility of the proposed route option from within Cambridge. The route option within this sector is separated from the edge of Great Shelford by landform, which would avoid any impacts on the setting of the village and prevent settlements merging with each other. However, the visibility of the proposal from the east, the introduction of development extending up to the ridge of White Hill, part of the foothills of the Gog Magog Hills, and the physical removal of vegetation along the edge of Cambridge would directly affect the setting of Cambridge. These effects would occur within an area of Supportive landscape. There would be some conflict with Cambridge Green Belt purpose 2, which also equates to some conflict with National Green Belt purpose 4.

**8.8. Reduction in Openness or Degree of Green Belt Conflict**

8.8.1. Whilst the Robinson Way Alternative route option would preserve the openness of the Green Belt, the proposed bridge over Hobson’s Brook as part of the GCP proposed route would introduce a volume of new development that would reduce openness.

8.8.2. The route option proposed by GCP would avoid conflict with Green Belt purposes. The Robinson Way Alternative route option would result in some conflict with Green Belt purposes.

8.8.3. The anticipated degree of harm as a result of a reduction in openness and/or conflict with Green Belt purposes of the nature described above would be as follows:

- The proposed bridge over Hobson’s Brook and any associated ramped approaches as part of the GCP proposed route would introduce a volume of additional built development into open countryside. This would potentially reduce openness and could result in a Minor degree of harm to Green Belt arising from the reduction in openness. It may be possible to design a bridge structure that reduces the potential harm and preserves openness as part of the detailed design of the structure.
- By introducing new built development in views out of Cambridge, rising up to the ridge of White Hill as part of the foothills of the Gog Magog Hills where development is currently limited, the Robinson Way Alternative route option would result in a change to the character of the setting to Cambridge. The route would also require the removal of vegetation along the existing edge of Cambridge and would pass through an area of Supportive landscape. These would be partial alterations to key elements and characteristics that relate to the setting of Cambridge, which would result in a Moderate degree of harm to Green Belt arising from a conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4. This conflict would be permanent given the physical change to the area of Supportive landscape.

**9.0 Assessment of Sector II: East of Great Shelford and Stapleford**

**9.1. Description of Sector**

- 9.1.1. Sector II is located to the east of Great Shelford and Stapleford (see Figure 13). The northern boundary follows the boundary of Sector I along Granham’s Road and the hedgerow east of Clarke’s Hill. The north eastern boundary follows the edges of woodland on the higher ground of Clarke’s Hill, Fox Hill and Magog Down, which form part of the foothills of the Gog Magog Hills, with the eastern boundary following a tree belt and mature hedgerow that coincides with the Babraham parish boundary. The southern boundary follows the River Granta and its associated riparian vegetation. The western boundary follows the Green Belt boundary along the edge of Stapleford and Great Shelford, with a short section of the boundary in the north west corner following a tree belt along the boundary of a smaller scale landscape associated with Granham’s Farm.
- 9.1.2. The sector forms the separation between Great Shelford, Stapleford and the foothills of the Gog Magog Hills. Land use in most of the sector is large scale arable farmland (see Photographs 5-7 and 9-10 at Figures 19-22). However, there are some smaller scale areas immediately adjacent to the villages (see Photograph 8 at Figure 20). The larger arable fields are undulating and contain limited hedgerows. There are almost no public rights of way through this sector, with the exception of a bridleway close to the southern boundary. The River Granta is a County Wildlife Site
- 9.1.3. Three sub areas have been identified within this sector. The most northly (II.A) falls between Granham’s Road and Hinton Way. The second (II.B) is located between Hinton Way and Haverhill Road. The final (II.C) is between Haverhill Road and the River Granta. The proposed route options pass through all three sub areas and they are therefore all assessed below.

**9.2. Baseline Assessment of Qualities Relevant to Green Belt Openness and Purposes**

- 9.2.1. Figure 13 illustrates the key considerations relevant to both openness and Green Belt purposes in sector II.

<b>Qualities Relevant to Green Belt Openness and Purposes</b>	<b>Sub area II.A – north west of Clarke’s Hill</b>	<b>Sub area II.B – south west of Fox Hill</b>	<b>Sub area II.C – north of River Granta</b>
5. Topography providing a framework to Cambridge	This sector forms the lower landform immediately adjacent to the edge of both Great Shelford and Stapleford. It then begins to rise up the slopes of the group of hills forming the foothills of the Gog Magog Hills; Clarke’s Hill, Fox Hill and Magog Down. The chalk hills of the Gog Magog Hills are a key element of the topographic bowl in which Cambridge is located, providing physical and visual containment to the south east of the city. They provide a marked contrast		

<b>Qualities Relevant to Green Belt Openness and Purposes</b>	<b>Sub area II.A – north west of Clarke’s Hill</b>	<b>Sub area II.B – south west of Fox Hill</b>	<b>Sub area II.C – north of River Granta</b>
	to the lower lying ground on which Cambridge is located, physically manifesting the underlying geology. These are the closest areas of high ground to the edge of Cambridge.		
6. Long distance footpaths and bridleways providing access to the countryside	There are no public rights of way, cycleways or long distance routes through these sub areas.	There is a single bridleway in the south of this sub area, running from the edge of Stapleford towards Babraham.	
7. Key views of Cambridge from the surrounding landscape	There are no key views in or through this sector. Vegetation along the tops of the hills forming the foothills of the Gog Magogs would largely prevent visibility from key locations to the east.		
8. Significant areas of Distinctive and Supportive townscape and landscape	The northern edge of this sub area is within an area of Supportive landscape associated with the setting of the southern edge of Cambridge. The remainder of the sub area is within the outer rural area of the Green Belt.	These sub areas fall within the outer rural area of the Green Belt.	
12. The distribution, physical and visual separation of the	Great Shelford and Stapleford form part of the necklace of villages surrounding Cambridge. This sector immediately adjoins both settlements.		

<b>Qualities Relevant to Green Belt Openness and Purposes</b>	<b>Sub area II.A – north west of Clarke’s Hill</b>	<b>Sub area II.B – south west of Fox Hill</b>	<b>Sub area II.C – north of River Granta</b>
necklace villages	The open countryside of this sub area, and the landform and vegetation of Clarke’s Hill, form part of the remaining separation between Cambridge and Great Shelford. Despite the existing ribbon development along the A1301 Cambridge/ Shelford Road to the west, there is still a sense of separation between Great Shelford and Cambridge that is important to retain.	Although the villages have largely coalesced, the open countryside of this sub area forms part of the remaining separation between Great Shelford and Stapleford.	This sub area does not form part of the separation between Great Shelford, Stapleford and Cambridge. It does however, form part of the separation between Stapleford and Sawston to the south, which is reinforced by the presence of the River Granta.
13. The scale, character, identity and rural setting of the necklace villages	This sector immediately adjoins both Great Shelford and Stapleford. It contributes the lower lying landform adjacent to the villages before the landform rises up to the foothills of the Gog Magogs. The relationship between the villages and this low lying landscape setting is a key part of their identity, which has been lost in areas to the north west of the villages and where the villages have coalesced.		
14. Designated sites and areas enriching the setting of Cambridge	There are no environmental or cultural designations within these sub areas.	The River Granta along the southern boundary of the sub areas is a County Wildlife Site.	

<b>Qualities Relevant to Green Belt Openness and Purposes</b>	<b>Sub area II.A – north west of Clarke’s Hill</b>	<b>Sub area II.B – south west of Fox Hill</b>	<b>Sub area II.C – north of River Granta</b>
15. Elements and features contributing positively to the character and structure of the landscape	There are relatively few hedgerows through the sector. Those that do occur are often low, clipped features, running perpendicular to the pattern of roads through the sector. Containment is provided by the woodland and tree belts along the higher ground of the Gog Magog foothills and on some boundaries of the villages.		The River Granta has a noticeable character of its own, with riparian vegetation located along it.
16. A city set in a landscape which retains a strongly rural character	This sector retains a rural character, with only occasional glimpses of any features identifying the close proximity of Cambridge to the north of the sector. Great Shelford and Stapleford, as nucleated villages with relatively little modern sprawl to the east, do not detract from the rural character of the sector.		

**9.3. Key Considerations Relevant to Green Belt Openness**

9.3.1. The sloping landform and relative lack of vegetation within much of sector II are key considerations in relation to openness within this sector. It has a rural character, despite the presence of Great Shelford and Stapleford to the west. There is limited built development outside the villages within sector II, which consists predominantly of open farmland. Both the villages and the foothills of the Gog Magog Hills, in locations where access is possible, have views across this sector.

**9.4. Key Considerations Relevant to Green Belt Purposes**

9.4.1. This sector plays a limited role in the wider setting of the south of Cambridge, given its physical separation from the city, which is also visual separation in most cases, although the northern edge of sub area II.A is recognised as part of the Supportive landscape south of Cambridge. The contrast in character between the largely open lower lying landscape within the sector and the elevated and wooded landscape of the foothills of the Gog Magogs is an important feature of the setting of Great Shelford and Stapleford throughout this sector. Development within the sector, outside of the villages, is very limited, retaining a rural character throughout the majority of the sector. The River Granta and its valley form a key characteristic in the south of the sector.



## 9.5. Proposed route options through the Sector

- 9.5.1. Within sub area II.A, the GCP and Robinson Way Alternative route options would remain separate. They join at Hinton Way, the boundary between II.A and II.B, leaving a single route option through II.B and II.C. Both options would require the removal of some hedgerow along the northern edge of Hinton Way.
- 9.5.2. 5<sup>th</sup> Studio option - The Robinson Way Alternative route option would enter sub area II.A on the eastern side of White Hill. It would continue over the ridgeline between White Hill and Clarke's Hill and then descend along the western side of woodland on Clarke's Hill, set back from the edge of Stapleford, to meet the GCP route option at Hinton Way. This option is currently less developed in design terms than the GCP options and careful consideration of cut and fill requirements would be required, given the sloping terrain of this route option. Vegetation removal along the hedgerow between Great Shelford and Clarke's Hill would be required. Detailed design of the proposals, including any proposed planting, would be required once the final option has been chosen.
- 9.5.3. GCP option - The route option proposed by GCP would enter sub area II.A on the western side of White Hill at a lower elevation than the Robinson Way Alternative option. It would utilise an existing gap at the centre of the hedgerow between Great Shelford and Clarke's Hill, minimising the requirements for vegetation removal. This alignment would be closer to the edge of Great Shelford than the Robinson Way Alternative option. The current proposals indicate that the new 3m wide shared use route would be located south of the public transport route. Woodland planting is also indicated as part of the current proposals, between the route and woodland on Clarke's Hill, as well as enhancement of hedgerows along the edge of Great Shelford.
- 9.5.4. South of Hinton Way, where the GCP and Robinson Way Alternative route options join, the GCP route would continue up the slope of Magog Down, before curving round the east of Great Shelford and Stapleford to join Haverhill Road. This would require removal of a stretch of hedgerow on the southern side of Hinton Way. The alignment remains east of a low hedgerow between Great Shelford and Stapleford. A stop is proposed on the southern side of Hinton Way, west of the route alignment. A second stop is proposed south of Haverhill Road and west of the route, to serve Stapleford. Hedgerow removal would be required on the north side of Haverhill Road only. From Haverhill Road the route would descend down to the River Granta, requiring potential removal of a stretch of hedgerow east of Stapleford. The current proposals indicate woodland planting on the eastern edge of Stapleford, as well as hedgerow strengthening between Great Shelford and Stapleford and along the bridleway east of Stapleford. The crossing of the River Granta is yet to be designed, but early indications assume that the bridge structure would have a deck width of approximately 14m, with a maximum span of 166m to avoid embankments within Flood Zone 3, and a deck height of approximately 6m above the existing ground level, with earth embankments approaching the bridge.

**9.6. Preservation of Green Belt Openness**

- 9.6.1. Given the sloping landform within sub area II.A, there is likely to be a requirement for cut and fill operations to ensure appropriate gradients for the Robinson Way Alternative route option, which would result in a small volume of development within the Green Belt. Whilst the sloping landform also increases the visibility of the route, which would run through open countryside, the cut and fill required would be relatively modest and could be balanced with careful design. Consequently, the openness of the Green Belt within sub area II.A would be preserved by the Robinson Way Alternative option.
- 9.6.2. The route option proposed by GCP would also cross undeveloped countryside through sub area II.A. Given that this area is relatively flat, there would be minimal requirement for cut and fill operations, meaning that there would be no significant volume of development to affect the openness of the Green Belt. The sustainable transport route would be constructed at grade, minimising the visual effect of the proposals. This is also considered to preserve the openness of the Green Belt in sub area II.A.
- 9.6.3. The route option through sub areas II.B and II.C would continue to cross undeveloped countryside. There is some undulation in the route, particularly east of Great Shelford, but it is generally relatively flat. There would be minimal requirement for cut and fill operations, meaning that there would be no significant volume of development to affect the openness of the Green Belt. The sustainable transport route would be constructed largely at grade, minimising the visual effect of the proposals. This is also considered to preserve the openness of the Green Belt in sub area II.B and II.C.
- 9.6.4. The proposed stops would require a small amount of built development within the Green Belt at two separate locations within the sector. Although the locations of the stops are relatively flat, there is still likely to be a requirement for cut and fill operations to ensure level parking and turning areas, which will result in a volume of development within the Green Belt. The exact design of the stops would determine how large a volume of cut and fill would be required. There would also be a requirement for bus shelters and covered cycle parking at the stops, which would add built development within the Green Belt. In addition, the stops would introduce additional hard surfacing, on which there would be small numbers of vehicle movements and parked vehicles throughout the day, and the requirement for lighting, which would be visible infrastructure during the day and new lit areas at night. The introduction of increased signage, lighting and road markings near the proposed road junctions at accesses into the stops are not considered to reduce openness. Visibility of the proposed stops could be reduced over time by planting around them where possible, but visibility would remain in the short to medium term or longer in locations where planting is not possible and the spatial aspect of loss of openness resulting from the volume of proposed development would not be reduced. Consequently, there would be a reduction in openness of the Green Belt within both sub areas II.B and II.C.

- 9.6.5. Although the design of any bridge over the River Granta is yet to be undertaken, it is likely to require the removal of some vegetation along the river and would introduce a built structure into the Green Belt, with a span of up to 166m and a deck height of approximately 6m with ramped approaches. This would introduce a volume of new development within sub area II.C. This volume of development could be substantial but would have limited visibility from the surrounding area due to the vegetated character of the sub area. It is considered that there could be a reduction in the openness of the Green Belt within sub area II.C due to the creation of the bridge.

**9.7. Potential for Conflict with Green Belt Purposes**

- 9.7.1. The Robinson Way Alternative route option would continue to extend development into undeveloped countryside. This route option would require the removal of vegetation in the hedgerow between Great Shelford and Clarke’s Hill and would be located higher up the sloping landform of Clarke’s Hill, although slightly further from the edge of Great Shelford, than GCP’s proposed option. Both of these factors would increase the visibility of the proposed route option from Great Shelford. This would have an impact on the setting of the village, which strongly relates to the undeveloped separation between the village and the higher ground of the foothills of the Gog Magogs. The visibility of the proposal and the introduction of development on the slopes of the foothills of the Gog Magog Hills would directly affect the setting of Great Shelford as a necklace village and consequently the wider setting of Cambridge. The proposed route would also pass through an area of Supportive landscape. There could be some conflict with Cambridge Green Belt purpose 2, which also equates to some conflict with National Green Belt purpose 4.
- 9.7.2. The route option proposed by GCP through sub area II.A would also continue to extend development into undeveloped countryside. The route option would continue to run along the lower lying landform but would be located directly between the eastern edge of Great Shelford and Clarke’s Hill as a foothill of the Gog Magog Hills. The location on the lower lying ground would minimise visibility of the proposals from the edge of Great Shelford, although the route option would be physically closer to the village. This would have some impact on the setting of the village and the relationship with the foothills of the Gog Magogs. The introduction of development on the slopes of the foothills of the Gog Magog Hills would directly affect the setting of Great Shelford as a necklace village and consequently the wider setting of Cambridge. The proposed route would also pass through an area of Supportive landscape. There would be some conflict with Cambridge Green Belt purpose 2, which also equates to some conflict with National Green Belt purpose 4.
- 9.7.3. The continuation of the GCP route option through sub areas II.B and II.C would similarly be located in the lower lying landform between the villages and the foothills of the Gog Magog Hills. Whilst there are no areas of Supportive landscape within these sub areas, the introduction of development on the slopes would continue to directly affect the setting of the two necklace villages and consequently the wider setting of

Cambridge. There would continue to be some conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4.

- 9.7.4. The proposed stops are intended to be located between the proposed route and the villages, for ease of access by residents. There would be some visibility of the stops from the edge of the villages, although they would be less visible than if they were located higher up the slopes. Again, there would be some conflict with Cambridge Green Belt purpose 2, through impact on the setting of the villages, which also equates to some conflict with National Green Belt purpose 4.
- 9.7.5. The crossing of the River Granta, which is assumed to be a bridge, would be physically remote from Great Shelford and Stapleford and would have no impact on the setting of the villages and there would therefore be no conflict with Green Belt purposes within sector II as a result of the bridge and its approach ramps.

**9.8. Reduction in Openness or Degree of Green Belt Conflict**

- 9.8.1. Whilst the route options would preserve the openness of the Green Belt, the proposed stops would introduce a volume of new development, hard paved areas with parked vehicles and lighting with a permanent visual effect on the openness of the Green Belt and the bridge over the River Granta would also introduce a volume of new development. There could be some reduction in openness as a result of the proposed stops.
- 9.8.2. The two proposed route options, as well as the proposed stops, could result in some conflict with Green Belt purposes.
- 9.8.3. The anticipated degree of harm as a result of reduction in openness and/or conflict with Green Belt purposes of the nature described above would be as follows:
- For the Robinson Way Alternative route option, the introduction of new built development in views out from Great Shelford, rising up the slopes of Clarke’s Hill as the foothills of the Gog Magog Hills where development is currently limited, would result in a change to the character of the setting to Great Shelford and consequently of Cambridge. The route would also require the removal of vegetation along the hedgerow between Great Shelford and Clarke’s Hill and would pass through an area of Supportive landscape. These would be partial alterations to key elements and characteristics that relate to the setting of Great Shelford and Cambridge, which could result in a Moderate degree of harm to Green Belt arising from some conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4. There would be some potential to reduce the degree of harm, through appropriate planting along the western side of the route to reinstate a wooded character to views from the village.
  - The route option through sub area II.A proposed by GCP would also result in physical encroachment in views out from Great Shelford, in the lower lying land between the village and the slopes of Clarke’s Hill/the foothills of the Gog Magog Hills, where development is currently limited. The location of the route on lower

lying land would reduce visibility of the proposals from within the village, although the route would be physically closer to the village. This would result in a minor alteration to the setting of the village, resulting in a Minor degree of harm to Green Belt arising from a conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4. There would be some potential to reduce the degree of harm, through appropriate planting along the western side of the route to reinstate a wooded character to views from the village. This degree of harm would also be applicable through sub areas II.B and II.C as a result of the proposed route alignment.

- The stops proposed along the route would introduce additional built development in close proximity to the edge of the villages. This would reduce openness and affect the setting of the villages, resulting in a Minor degree of harm to Green Belt arising from both the reduction on openness and from the conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4. Planting around the stops could reduce this conflict with purposes over time, although if lighting is required, a Minor degree of harm could remain even once new planting is established. The Minor harm to openness would continue on a permanent basis even if planting is introduced.
- The proposed bridge over the River Granta and any associated ramped approaches would introduce a volume of additional built development into open countryside. This could reduce openness and result in a Moderate-minor degree of harm to Green Belt arising from the reduction in openness. It may be possible to design a bridge structure that reduces the potential harm as part of the detailed design of the structure.

**10.0 Assessment of Sector III: North and East of Sawston**

**10.1. Description of Sector**

- 10.1.1. Sector III is located to the north and east of Sawston, abutting the existing and future edges of the village (see Figure 14). The northern boundary follows the boundary of Sector II along the River Granta. The eastern boundary follows the tree belts around Babraham Research Campus and continues along High Street, the road between Babraham and the A505. The southern boundary follows a combination of the woodland belts around the parkland at Sawston Hall and the Green Belt boundary around Sawston. The western boundary follows the A1301.
- 10.1.2. Land use in most of the sector is large scale arable farmland (see Photographs 11-13 at Figures 23-25). However, there are some smaller scale areas immediately adjacent to the village and particularly south of the disused railway line. The area south of the River Granta is also more vegetated and has a slightly different character to some of the larger scale parts of the sector. The larger arable fields are undulating and contain limited hedgerows. There are a number of public rights of way through this sector, particularly in the eastern half between Sawston and Babraham. The River Granta is a County Wildlife Site. There are historic parklands at Sawston Hall and Pampisford Hall, but these are located outside the sector.
- 10.1.3. Three sub areas have been identified within this sector, responding to the field patterns and substantive tree belts or woodland. Of these, the proposed route options are unlikely to affect any sub areas other than III.C, with the next-closest sub area III.B physically and visually separated from the proposed route option by an existing woodland belt and vegetation along the route of the disused railway line. Only sub area III.C is therefore assessed below.

**10.2. Baseline Assessment of Qualities Relevant to Green Belt Openness and Purposes**

- 10.2.1. Figure 14 illustrates the key considerations relevant to both openness and Green Belt purposes in sector III.

<b>Qualities Relevant to Green Belt Openness and Purposes</b>	<b>Sub Area III.C – East of Sawston</b>
5. Topography providing a framework to Cambridge	This sector forms the slightly elevated landform between the River Granta and the River Cam. Whilst river valleys are a feature of the landscape south and east of Cambridge, they do not form a prominent feature in the setting of the city and the sub area is separated from Cambridge by the more prominent topography at the foothills of the Gog Magogs.
6. Long distance footpaths and	There is a limited network of rights of way through this sector, linking Sawston to the west with Babraham and the

<b>Qualities Relevant to Green Belt Openness and Purposes</b>	<b>Sub Area III.C – East of Sawston</b>
bridleways providing access to the countryside	Babraham Research Campus to the east. There are no long distance routes or cycleways through the sector.
12. The distribution, physical and visual separation of the necklace villages	Sawston to the west of the sector is an inset village that is excluded from the Green Belt. The sector forms part of the physical separation between Sawston and Stapleford to the north and Babraham to the east.
13. The scale, character, identity and rural setting of the necklace villages	<p>Whilst Sawston has not historically been considered a necklace village, it is within the rural outer areas of the Green Belt, which contribute to the wider setting of Cambridge. The River Granta and its valley currently create physical separation between Sawston and Stapleford.</p> <p>Recent Green Belt releases have resulted in Sawston expanding further east towards Babraham, reducing the distance between the two villages.</p>
14. Designated sites and areas enriching the setting of Cambridge	The River Granta along the northern boundary of the sector is a County Wildlife Site.
15. Elements and features contributing positively to the character and structure of the landscape	<p>The River Granta has a noticeable character of its own, with riparian vegetation located along it.</p> <p>The route of the disused railway line is a noticeable feature through this sector. It becomes more defined and prominent further south in the sub area.</p>
16. A city set in a landscape which retains a strongly rural character	This sector retains a rural character, being predominantly open arable land. There is no visibility of Cambridge from the sector. However, the edge of Sawston does have an urbanising influence on the rural character of the sub area and will continue to do so as the allocated housing sites are built out.

**10.3. Key Considerations Relevant to Green Belt Openness**

10.3.1. The gently sloping landform and relative lack of vegetation within much of sub area III.C are key considerations in relation to openness within this sector. Whilst Sawston has an increasing influence on the rural character of the sub area, with views into the sub area, there continues to be limited built development outside the villages, and sub

area III.C consists predominantly of open farmland. Minor roads through the sub area have open views across it.

#### **10.4. Key Considerations Relevant to Green Belt Purposes**

- 10.4.1. This sector plays a limited role in the setting of the south of Cambridge, given its physical and visual separation from the city, although it contributes to the wider rural setting of the city. The open, gently undulating landform is important to the character of the sector, along with its relationship to the River Granta through the sector. The River Granta and its valley form a key characteristic in the north of the sector.
- 10.4.2. The expansion eastwards of Sawston has some localised influence on the rural character of sub area III.C. However, development within the sector, outside of the village, is very limited. The disused railway line is a characteristic of the sector and delineates the edge of Sawston.

#### **10.5. Proposed Route Options within the Sector**

- 10.5.1. The route option proposed by GCP would enter sub area III.C at the crossing point of the River Granta on the boundary with sub area II.C. As indicated in relation to Sector II, this crossing point would potentially require removal of a stretch of hedgerow east of Stapleford. The crossing of the River Granta is yet to be designed but would require a bridge structure and elevated approach ramps. However, early indications assume that the bridge structure would be approximately 14m wide, with a maximum span of 166m to avoid embankments within Flood Zone 3, and a deck height of approximately 6m above the existing ground level, with earth embankments approaching the bridge.
- 10.5.2. From the River Granta, the proposed route option would cross open fields to run to the east of the disused railway line and the existing/future eastern edge of Sawston, crossing Babraham Road on the eastern edge of Sawston and then continuing to follow an alignment parallel to the disused railway line. Some vegetation removal would be required in the area to the north east of the boundary of sub area III.B and at the location where the proposed route would cross a byway running north east from the edge of Sawston. The current proposals indicate that the new 3m wide shared use route would be located south of the public transport route. Hedgerow planting is also indicated as part of the current proposals, generally along the eastern side of the proposed route.
- 10.5.3. South west of Babraham and north west of High Street, approximately at the point where the disused railway line becomes a more substantial tree belt, the proposed route option splits into the five separate route options that would provide access to the different Travel Hub options. The Pink, Purple and Black route options continue running parallel to the disused railway line, offset by approximately 20m from the disused railway line, as far as High Street. These route options would require the removal of a stretch of hedgerow along High Street. The Blue and Brown routes would curve away from the disused railway line to cross High Street approximately another 20m north of the Pink, Purple and Black route options. This would also require the



removal of a stretch of hedgerow along High Street. All proposed route options through the south eastern part of sub area III.C indicate hedgerow planting along the northern side of the proposed route and hedgerow and woodland planting to enhance or fill gaps in the alignment of the disused railway line.

- 10.5.4. A stop is proposed on the southern side of Babraham Road, west of the route alignment. The current proposals indicate woodland planting around the proposed stop.

**10.6. Preservation of Green Belt Openness**

- 10.6.1. The landform within much of sector III is gently undulating, although relatively flat to the north east of Sawston. This should minimise the requirement for cut and fill operations to construct the proposed route. The route options through sub area III.C would continue to cross undeveloped countryside. The sustainable transport route would be constructed largely at grade, minimising the visual effect of the proposals. This is considered to preserve the openness of the Green Belt in sub area III.C. This would remain true for all five route options where they begin to separate in the vicinity of High Street in the south east of the sub area.

- 10.6.2. The proposed stop on the eastern edge of Sawston would require a small amount of built development within the Green Belt. The location of the stop is relatively flat, reducing the likely requirement for cut and fill operations to ensure level parking and turning areas. The exact design of the stops would determine how large a volume of cut and fill would be required. There would also be a requirement for bus shelters and covered cycle parking at the stop, which would add built development within the Green Belt. In addition, the stop would introduce hard surfacing, on which there would be small numbers of vehicle movements and parked vehicles throughout the day, and the requirement for lighting, which would be visible infrastructure during the day and new lit areas at night. The introduction of increased signage, lighting and road markings near the proposed road junctions at accesses into the stop are not considered to affect openness. Visibility of the proposed stops could be reduced over time by planting around them where possible, but visibility would remain in the short to medium term or longer in locations where planting is not possible and the spatial aspect of loss of openness resulting from the volume of proposed development would not be reduced. Consequently, there would be a reduction in openness of the Green Belt within sub area III.C.

- 10.6.3. Although the design of any bridge over the River Granta is yet to be undertaken, it is likely to require the removal of some vegetation along the river and would introduce a built structure into the Green Belt, with a span of up to 166m and a deck height of approximately 6m with ramped approaches. This would introduce a volume of new development within sub area III.C. This volume of development could be substantial but would have limited visibility from the surrounding area due to the vegetated character of the sub area. It is considered that there would be a reduction in the openness of the Green Belt within sub area III.C due to the creation of the bridge.

**10.7. Potential for Conflict with Green Belt Purposes**

- 10.7.1. The route option would run across gently undulating landform and would be located directly adjacent to the edge of Sawston. Whilst the existing and future edge of Sawston already reduce the rural character of the landscape east of the village, the route option through sub area III.C would extend development into undeveloped countryside. The introduction of development immediately adjacent to the village would directly affect the setting of the village but, given the extensive modern development in the eastern part of Sawston, it would not affect the character of the village and consequently would not affect the wider setting of Cambridge. The proposed route would not affect the separation between Sawston and Stapleford or Babraham. There is therefore no conflict with Green Belt purposes within sector III as a result of the proposed route option. This would remain true for all five route options where they begin to separate in the vicinity of High Street in the south east of the sub area.
- 10.7.2. The proposed stop is intended to be located between the proposed route and Sawston, for ease of access by residents. This would increase visibility of the stop from the edge of the villages but, again given the extensive and ongoing modern development in the eastern part of Sawston, it would not affect the character of the village and consequently would not affect the wider setting of Cambridge. There is therefore no conflict with Green Belt purposes within sector III as a result of the proposed stop.
- 10.7.3. The crossing of the River Granta, which is assumed to be a bridge, would be physically remote from Great Shelford and Stapleford and would have no impact on the setting of the villages or other qualities identified above and there is therefore no conflict with Green Belt purposes within sector III as a result of the bridge and its approach ramps.

**10.8. Reduction in Openness or Degree of Green Belt Conflict**

- 10.8.1. Whilst the route options would preserve the openness of the Green Belt, the proposed stop and the bridge over the River Granta with its ramped approaches would introduce a volume of new development, hard paved areas with parked vehicles and lighting with a permanent visual effect on the openness of the Green Belt and the bridge over the River Granta would also introduce a volume of new development. There could be some reduction in openness as a result of the proposed stop and the proposed bridge.
- 10.8.2. There would be no conflict with Green Belt purposes as a result of the proposed route options, the proposed stop or the bridge over the River Granta.
- 10.8.3. The anticipated degree of harm as a result of some reduction in openness of the nature described above would be as follows:
  - The stop proposed adjacent to the edge of Sawston would introduce additional built development in close proximity to the edge of the village. This would reduce openness resulting in a Minor degree of harm to Green Belt arising from the

reduction in openness. Planting around the stop would not change the Minor reduction in openness.

- The proposed bridge over the River Granta and any associated ramped approaches would introduce a volume of additional built development into open countryside. This would reduce openness and could result in a Moderate-minor degree of harm to Green Belt arising from the reduction in openness. It may be possible to design a bridge structure that minimises the reduction in openness as part of the detailed design of the structure.

**11.0 Assessment of Sector IV: South of Babraham**

**11.1 Description of Sector**

- 11.1.1. Sector IV is located to the south of Babraham, between the A11, A505 and A1307 (see Figure 15). The north eastern boundary is formed by the southern extent of the hedgerow and area of woodland along the A1307. The south eastern and southern boundaries are formed by the western and northern edge of the vegetation along the A11 and A505. The western boundary is formed by High Street, the minor road between Babraham and the A505, and the north western boundary is formed by High Street through Babraham and the Green Belt boundary around the southern edge of Babraham.
- 11.1.2. Land use is predominantly arable farmland throughout the sector (see Photograph 13-18 on Figures 25-29). Much of the farmland is large scale, but smaller field parcels are located around Babraham and along the River Granta (see Photograph 16 on Figure 27). This sector includes the River Granta and the disused railway line, both of which are designated as County Wildlife Sites. The sector also abuts Babraham Conservation Area. Rights of way through the area are limited to a single route from Babraham to the A11 (see Photographs 15 and 16 at Figures 26 and 27).
- 11.1.3. Three sub areas have been identified within this sector. Of these, the proposed route and Travel Hub options are unlikely to affect sub area IV.A, given distance from the options and the separation created by the vegetation along the disused railway line. Sub area IV.A is therefore not assessed below.

**11.2. Baseline Assessment of Qualities Relevant to Green Belt Openness and Purposes**

- 11.2.1. Figure 15 illustrates the key considerations relevant to both openness and Green Belt purposes in sector IV.

<b>Qualities Relevant to Green Belt Openness and Purposes</b>	<b>Sub Area IV.B – south of River Granta</b>	<b>Sub Area IV.C – north of River Granta</b>
5. Topography providing a framework to Cambridge	This sector is formed of two parts that both slope down towards the River Granta through the centre of the sector. Whilst river valleys are a feature of the landscape south and east of Cambridge, they do not form a prominent feature in the setting of the city and the sub area is separated from Cambridge by the more prominent topography at the foothills of the Gog Magogs.	
6. Long distance footpaths and bridleways providing access to the countryside	There is a limited network of rights of way through this sector, restricted to a single route linking Babraham and the Babraham Research Campus in the north to Granta Park to the south. This provides a well-used footpath and cycle link between the key employment areas, although the route	

<b>Qualities Relevant to Green Belt Openness and Purposes</b>	<b>Sub Area IV.B – south of River Granta</b>	<b>Sub Area IV.C – north of River Granta</b>
	across the fields is unpaved and cyclists are required to use the footbridge over the A11. Public access into the remainder of the sector is relatively limited, with no long distance routes or cycleways through the sector.	
12. The distribution, physical and visual separation of the necklace villages	Babraham to the north of the sector is an inset village that is excluded from the Green Belt. The sector forms part of the physical separation between Sawston to the west and Babraham to the north. Although not far apart, there is significant visual separation between the settlements due to topography and tree cover.	
13. The scale, character, identity and rural setting of the necklace villages	<p>Whilst Babraham has not historically been considered a necklace village, it lies within the rural outer areas of the Green Belt, which contribute to the wider setting of Cambridge, and has retained much of its historical integrity. This sector forms the setting to the south of the village, which has little relationship with the landscape to the north due to the physical barrier of walls and tree belts around the Babraham Research Campus.</p> <p>Recent Green Belt releases at Sawston have resulted in it expanding further east towards Babraham, reducing the distance between the two villages.</p>	
14. Designated sites and areas enriching the setting of Cambridge	This sector includes the River Granta, which is designated as a County Wildlife Site.	
	This sub area includes the disused railway line, which is also designated as a County Wildlife Site.	The sub area abuts Babraham Conservation Area.
15. Elements and features contributing positively to the character and structure of the landscape	The River Granta has a noticeable character of its own, with riparian vegetation located along it, located along the boundary between the two sub areas.	
	The route of the disused railway line is a noticeable feature along the boundary of this sub area.	<p>Woodland blocks and the proximity to Babraham contribute positively to the character of the landscape within this sub area.</p> <p>The footbridge over the A11, which allows movement between Babraham, Babraham</p>

Qualities Relevant to Green Belt Openness and Purposes	Sub Area IV.B – south of River Granta	Sub Area IV.C – north of River Granta
		Research Campus and Granta Park, is a prominent feature in the landscape.
16. A city set in a landscape which retains a strongly rural character	This sector retains a rural character, being predominantly open arable land, despite the proximity of the A11. Vegetation along the A11, combined with the landform, reduce visibility of the A11 and traffic along it. There is no visibility of Cambridge from the sector.	

**11.3. Key Considerations Relevant to Green Belt Openness**

11.3.1. Within this sector landform and vegetation combine to create a degree of enclosure. Although fields are often large scale, minor ridgelines to the north east and south west of the River Granta means that in views from the north west the A11 is not visible and conversely that in views from the south east Babraham is often not visible. Strong belts of vegetation along the River Granta and the disused railway line also mean that intervisibility between the three sub areas is limited. There is limited built development within sector IV which consists predominantly of open farmland with the Home Farm complex located within sub area IV.C on the southern edge of Babraham.

**11.4. Key Considerations Relevant to Green Belt Purposes**

11.4.1. This sector plays a limited role in the wider setting of the south of Cambridge, given its physical and visual separation from the city. The gently undulating landform is important to the character of the sector, along with its relationship to the River Granta. The River Granta and its vegetated valley form a key characteristic through the middle of the sector, as does the disused railway line. Small blocks of woodland are also a feature of the sector.

11.4.2. Babraham’s conservation area and the location of the Babraham Research Campus to the north of it have restricted expansion of the village. It remains a small linear settlement along High Street, although there is some encroachment of built development around Home Farm. Access is very limited within the sector, but the footpath and cycleway south east from Babraham is well used.

**11.5. Proposed Route and Travel Hub Options within the Sector**

11.5.1. Travel Hub Site A – this Travel Hub option would be located in the centre of sub area IV.B, on the highest point of the minor ridgeline south west of the River Granta. Current proposals indicate that vehicular access to the Travel Hub would be via new roundabouts off the A505, close to its junction with the A11, only the northern of

which would be located within the Green Belt. The public transport route to Travel Hub A would be the proposed Purple Route from the north west. New shared access routes are also proposed to Babraham and Babraham Research Campus, along the southern side of the public transport link and then via High Street, and Granta Park along the vehicular access route to the south east. Existing vegetation along the disused railway line would be retained, but a stretch of low hedgerow that currently runs to the north of the disused railway line would be removed. Vegetation around the new roundabouts off the A505 would also need to be removed. Current proposals indicate new planting in the form of woodland belts around all sides of the Travel Hub and linking to the woodland along the disused railway line. The detailed design of this planting has yet to be undertaken.

- 11.5.2. Travel Hub Site B – this Travel Hub option would be located in the east of sub area IV.C, on slightly lower ground adjacent to the A11. Current proposals indicate that vehicular access to the Travel Hub would be via a new junction off the A1307, at the point where existing vegetation around the A3017 and A11 junction stops. The public transport route options to Travel Hub B would be either the proposed Brown Route from the west or the proposed Pink Route from the south west. Upgraded shared access routes are also proposed to Babraham, Babraham Research Campus and Granta Park, upgrading the existing cycleway and footpath through sub area IV.C, which would also require an upgrade of the existing bridge over the A11 to provide ramped approaches for all users. This bridge is yet to be fully designed but is assumed to be of similar scale to the existing bridge. Existing vegetation along the River Granta, the A11 and the woodland block between the proposed travel Hub and Babraham would all be retained, although small areas of vegetation removal may be required for the upgrades to the bridge over the A11 and the vehicular access into the site. Current proposals indicate new planting in the form of tree belts to the north west of the Travel Hub, linking the existing areas of woodland. The detailed design of this planting has yet to be undertaken.
- 11.5.3. Purple Route – this route option would serve Travel Hub Site A. It would enter Sub Area IV.B from sector III along High Street, approximately 20m from the disused railway line and would continue to run parallel to the disused railway line into the Travel Hub. It would be located in a slight low point in the minor ridgeline south west of the River Granta. This route option would require the removal of a short stretch of hedgerow along High Street. Current proposals indicate a proposed hedgerow linking to woodland planting around the Travel Hub, to the east of the route.
- 11.5.4. Pink Route – this route option would serve Travel Hub Site B. It would enter Sub Area IV.B at the same point as the Purple Route, and follow the same alignment until the location of Travel Hub Site A, where it would continue running parallel to the disused railway line, and then curve around the A11/A505 junction to run parallel to the A11. It would then cross the River Granta and enter the southern corner of Travel Hub Site B. It would run below the higher point of the minor ridgeline. The crossing of the River Granta is yet to be designed but would require a bridge structure. However, early indications assume that the bridge structure would have a deck width of

approximately 14m, with a maximum span of 26m, and a clearance of approximately 4.25m above the existing ground level, with earth embankments approaching the bridge. This route option would require the removal of a short stretch of hedgerow along High Street, another stretch of the hedgerow that currently runs to the north of the disused railway line and some vegetation along the River Granta at the crossing point. Current proposals indicate a proposed hedgerow to the north of the route, linking to and strengthening the existing hedgerow to the north of the disused railway line.

- 11.5.5. Brown Route – this route option would serve Travel Hub Site B. It would enter Sub Area IV.B from sector III along High Street, approximately 20m from the location of the Purple, Pink and Black route options. It would then run to the north of the high point of the minor ridgeline, crossing the River Granta mid-way along the boundary between sub areas IV.B and IV.C. The crossing of the River Granta is yet to be designed but would require a bridge structure. However, early indications assume that the bridge structure would have a deck width of approximately 14m, with a maximum span of 166m to avoid embankments within Flood Zone 3, and a deck height of approximately 6m above the existing ground level, with earth embankments approaching the bridge. The route would then curve round to enter Travel Hub Site B from the west, close to the existing footpath and cycleway link. This route option would require the removal of a short stretch of hedgerow along High Street and some vegetation along the River Granta at the crossing point. Current proposals indicate a proposed hedgerow to the north and south of the route.
- 11.5.6. Black Route – this route option would serve Travel Hub Site C, which is located east of the A11 and outside the Green Belt. It would follow the same alignment as the proposed Pink Route as far as the River Granta. It would then curve slightly west away from the A11 to allow it to curve round and cross the A11 at right angles to the north of the existing pedestrian bridge. The bridge is yet to be designed. However, early indications assume that the bridge structure would have a deck with of approximately 14m, with a maximum span of 40m, and clearance of approximately 5.3m above the existing ground level, with earth embankments approaching the bridge. It is also assumed that pedestrian and cycle access would be provided over this bridge and a crossing would be provided over the route to allow access to the existing footpath and cycle route to Babraham. This route option would also require a stop adjacent to the existing footpath and cycle route through the sector and the same upgrades to the shared access route and bridge over the A11 as described in relation to Travel Hub Site B. Current proposals indicate a hedgerow along the north and west of the proposed route, linking to and strengthening the existing hedgerow to the north of the disused railway line.
- 11.5.7. Blue Route - this route option would serve Travel Hub Site C. It would follow the same alignment as the proposed Brown Route as far as Travel Hub Site B. It would then continue over the A11, crossing at right angles to the south of the existing pedestrian bridge. The bridge is yet to be designed. However, early indications assume that the bridge structure would have a deck width of approximately 14m, with a maximum



span of 50m, and clearance of approximately 5.3m above the existing ground level, with earth embankments approaching the bridge, and would incorporate an upgraded pedestrian and cycle route over the A11 to replace the existing footbridge over the A11. It is also assumed that a crossing would be provided over the route with a new link provided to allow access to the existing footpath and cycle route to Babraham. This route option would also require a stop adjacent to the existing footpath and cycle route through the sector and the same upgrades to the shared access route as described in relation to Travel Hub Site B. Current proposals indicate a proposed hedgerow to the north and south of the route.

## **11.6. Preservation of Green Belt Openness**

- 11.6.1. Travel Hub Site A – given the undulating landform within sub area IV.B, there will be a requirement for cut and fill operations to ensure acceptable gradients for parking areas, which will result in a volume of development within the Green Belt. The exact design of the Travel Hub would determine how large a volume of cut and fill would be required. There would also be a requirement for small buildings such as ticket offices and/or bus shelters within the Travel Hub, which would add built development within the Green Belt. In addition, the parking areas within the Travel Hub would introduce movement and activity into the area, as well as hard surfacing, on which large numbers of vehicles would be parked throughout the day, and the requirement for lighting, which would be visible infrastructure during the day and new lit areas at night. The proposed roundabout on the A505 and the access road into the Travel Hub are likely to require cut and fill operations to ensure appropriate gradients for the access road, which would result in a small volume of development within the Green Belt. Whilst the sloping landform also increases the visibility of the route, the cut and fill required would be relatively modest and could be balanced with careful design and the openness of the Green Belt would be preserved. The introduction of increased signage, lighting and road markings near the proposed A505 roundabout is not considered to affect openness. The removal of vegetation around the proposed A505 roundabout would increase the visibility of the Travel Hub from the south, although the A505 slip road is cut into the landform. The location of the site on the high point of the minor ridgeline would also increase visibility from the north and west. This visibility could be reduced over time by planting around the Travel Hub, but visibility would remain in the short to medium term or longer in locations where replacement planting is not possible. Consequently, there would be a reduction in openness of the Green Belt within sub area IV.B.
- 11.6.2. Travel Hub Site B – given the undulating landform within sub area IV.C, there will be a requirement for cut and fill operations to ensure acceptable gradients for parking areas, which will result in a volume of development within the Green Belt. The exact design of the Travel Hub would determine how large a volume of cut and fill would be required. There would also be a requirement for small buildings such as ticket offices and/or bus shelters within the Travel Hub, which would add built development within the Green Belt. In addition, the parking areas within the Travel Hub would introduce

movement and activity into the area, as well as hard surfacing, on which large numbers of vehicles would be parked throughout the day, and the requirement for lighting, which would be visible infrastructure during the day and new lit areas at night. The proposed access road into the Travel Hub would be relatively flat and there would be minimal requirement for cut and fill operations, meaning that there would be no significant volume of development to affect the openness of the Green Belt. The introduction of increased signage, traffic signals (if required), lighting and road markings near the proposed A1307 junction is not considered to affect openness. The location of the site on lower ground east of the minor ridgeline, together with the existing woodland block, would minimise visibility from the north and west. This visibility could be further reduced over time by planting around the Travel Hub. However, the introduction of the Travel Hub would result in a reduction in openness of the Green Belt within sub area IV.C. The structure of the ramp for the upgraded multi-user bridge would result in a physical volume of new development, which would also be visible in views from the north and west, dependant on the final design and height of the structure. This would cause a reduction in the openness of the Green Belt within sub area IV.C.

- 11.6.3. Purple Route – given that this area is relatively flat, there would be minimal requirement for cut and fill operations, meaning that there would be no significant volume of development to affect the openness of the Green Belt. The route would be constructed at grade, minimising the visual effect of the proposals. This is considered to preserve the openness of the Green Belt in sub area IV.B.
- 11.6.4. Pink Route – given that this route option would run over the minor ridgeline within sub area IV.B, there is likely to be a requirement for cut and fill operations to ensure appropriate gradients for the sustainable transport route, which would result in a small volume of development and approach ramps within the Green Belt. The landform and existing vegetation combine to reduce visibility of the route, and the cut and fill required would be relatively modest and could be balanced with careful design. Consequently, the openness of the Green Belt within sub area IV.B will be preserved by this route option. Although the design of any bridge over the River Granta is yet to be undertaken, it is likely to require the removal of some vegetation along the river and would introduce a built structure into the Green Belt. The presence of the structure would introduce a volume of new development within sub areas IV.B and IV.C. This volume of development could be substantial but would have limited visibility from the surrounding area due to the vegetated character of the sub area. It is considered that there could be a reduction in the openness of the Green Belt within sub areas IV.B and IV.C due to the creation of the bridge.
- 11.6.5. Brown Route – given that this route option would run over the minor ridgeline within sub area IV.B, there is likely to be a requirement for cut and fill operations to ensure appropriate gradients for the sustainable transport route, which would result in a small volume of development within the Green Belt. The cut and fill required would be relatively modest and could be balanced with careful design. The alignment of this route option would increase visibility from the north and west. This visibility could be

reduced over time by appropriate planting. Consequently, the openness of the Green Belt within sub area IV.B will be preserved by this route option. Although the design of any bridge over the River Granta is yet to be undertaken, it is likely to require the removal of some vegetation along the river and would introduce a built structure and approach ramps into the Green Belt. The presence of the structure would introduce a volume of new development within sub areas IV.B and IV.C. This volume of development could be substantial and would have limited visibility from the surrounding area due to the vegetated character of the sub area. It is considered that there could be a reduction in the openness of the Green Belt within sub areas IV.B and IV.C due to the creation of the bridge.

- 11.6.6. Black Route – the effects of this route option on the openness of the Green Belt within sector IV would be largely as for the proposed Pink Route for the stretch where the two routes are concurrent. However, in addition the proposed Black Route would include a proposed stop within sub area IV.C. Given the location of the stop, it is not anticipated that parking spaces would be provided as there would be no vehicular access. There would be a requirement for bus shelters and covered cycle parking at the stop, which would add built development within the Green Belt, and the requirement for lighting, which would be visible infrastructure during the day and new lit areas at night. Visibility of the proposed stop could be reduced over time by planting, but visibility would remain in the short to medium term or longer in locations where planting is not possible and the spatial aspect of loss of openness resulting from the volume of proposed development would not be reduced. Consequently, there could be a reduction in openness of the Green Belt within sub area IV.C due to the introduction of the stop. In addition, this route option would introduce the requirement for a new bridge over the A11. The bridge would fall within sector V, but the ramped embankment up to the bridge would be located within sector IV. The earthworks for the ramp would result in a physical volume of new development, which would also be visible in views from the north and west. This could cause a reduction in the openness of the Green Belt within sub area IV.C.
- 11.6.7. Blue Route - the effects of this route option on the openness of the Green Belt within sector IV would be largely as for the proposed Brown Route for the stretch where the two routes are concurrent. However, in addition the proposed Blue Route would include a proposed stop within sub area IV.C. Given the location of the stop, it is not anticipated that parking spaces would be provided as there would be no vehicular access. There would be a requirement for bus shelters and covered cycle parking at the stop, which would add built development within the Green Belt, and the requirement for lighting, which would be visible infrastructure during the day and new lit areas at night. Visibility of the proposed stop could be reduced over time by planting, but visibility would remain in the short to medium term or longer in locations where planting is not possible and the spatial aspect of loss of openness resulting from the volume of proposed development would not be reduced. Consequently, there could be a reduction in openness of the Green Belt within sub area IV.C due to the introduction of the stop. In addition, this route option would introduce the

requirement for a combined vehicular and multi-user bridge over the A11. The bridge would fall within sector V but ramps up to the bridge would be located within sector IV. The earthworks for the ramp would result in a physical volume of new development, which would also be visible in views from the north and west. This could cause a reduction in the openness of the Green Belt within sub area IV.C.

### **11.7. Potential for Conflict with Green Belt Purposes**

- 11.7.1. Travel Hub Site A – would be located in undeveloped countryside within sub area IV.B. This would introduce a large scale development into an area where very little development is currently visible. The location of the proposed Travel Hub on a localised ridgeline would increase visibility of the proposals from the north and west, although visual containment is provided to the south and east by the disused railway line and vegetation along the A11. This would result in some conflict with National Green Belt purpose 3, which is consequently conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4 in that it would affect the strongly rural character of the landscape around Cambridge. The proposed Travel Hub option would be located far enough west from the edge of Babraham and of Sawston to avoid changes to the character of the setting of either village and consequently the setting of Cambridge, which equates to no conflict with Cambridge Green Belt purpose 2 or National Green Belt purpose 4 in this regard. The location of the proposed Travel Hub option is also far enough from existing settlements to prevent settlements merging into one another, avoiding conflict with Cambridge Green Belt purpose 3 and National Green Belt purpose 2.
- 11.7.2. Travel Hub Site B – would be located in undeveloped countryside within sub area IV.C. This would introduce development into an area where very little development is currently visible. The location of the proposed Travel Hub set down in the landscape between the localised ridgeline and the A11 would reduce visibility of the proposals from the north and west, and visual containment is provided to the south and east by existing vegetation along the A11 and A1307. The ramp structure for the upgraded multi-user bridge over the A11 would also be visible in some views, given the current visibility of the existing footbridge. The scale of the overall proposed Travel Hub Site B, particularly the amount of hardstanding and other associated infrastructure, would remain in conflict with National Green Belt purpose 3, which is consequently conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4 in that it would affect the strongly rural character of the landscape around Cambridge. However, the proposed Travel Hub option would be located far enough east from the edge of Babraham and of Sawston to avoid changes to the character of the setting of either village and consequently the setting of Cambridge, which equates to no conflict with Cambridge Green Belt purpose 2 or National Green Belt purpose 4 in this regard. The location of the proposed Travel Hub option is also far enough from existing settlements to prevent settlements merging into one another, avoiding conflict with Cambridge Green Belt purpose 3 and National Green Belt purpose 2.

- 11.7.3. Purple Route –this route option would extend development into undeveloped countryside but would broadly follow the historic corridor created by the disused railway line. The route option would run along relatively flat landform, which would minimise visibility of the proposals from the surrounding area. In this sector, the route option would be far enough from settlements to avoid any impacts on the setting of the nearby villages and to prevent settlements merging with each other. This route option would therefore avoid conflict with Green Belt purposes within sector IV.
- 11.7.4. Pink Route – this route option would also extend development into undeveloped countryside. This route option would also travel across the undulating landform of the minor ridgeline south west of the River Granta. Both of these factors would increase the visibility of the proposed route option from the north and west. The route option within this sector is separated from the edge of both Babraham and Sawston, which would avoid any impacts on the setting of the villages and prevent settlements merging with each other. The crossing of the River Granta, which is assumed to be a bridge as described earlier in this section, would be physically remote from Babraham and would have no impact on the setting of the village and there is no therefore no conflict with Green Belt purposes within sector IV as a result of the proposed Pink Route.
- 11.7.5. Brown Route – this route option would also extend development into undeveloped countryside. This route option would travel across the undulating landform of the minor ridgeline south west of the River Granta, on the northern side of the ridgeline. Both of these factors would increase the visibility of the proposed route option from the north and west. The route option within this sector is separated from the edge of both Babraham and Sawston, which would avoid any impacts on the setting of the village and prevent settlements merging with each other. The crossing of the River Granta, which is assumed to be a bridge as described earlier in this section, would be physically remote from Babraham and would have no impact on the setting of the village and there is no therefore no conflict with Green Belt purposes within sector IV as a result of the proposed Brown Route.
- 11.7.6. Black Route – the effects of this route option on the purposes of the Green Belt within sector IV would be largely as for the proposed Pink Route. However, in addition the proposed Black Route would include a proposed stop within sub area IV.C. The stop would be physically remote from Babraham and would have very little effect on the rural setting of the village. In addition, this route option would introduce the requirement for a new bridge over the A11. The bridge would fall within sector V, but the ramp up to the bridge would be located within sector IV. The earthworks for the ramp of the road bridge would be visible in views from the north and west, affecting the strongly rural character of the landscape in a much more noticeable way than the existing stepped access to the footbridge over the A11. There would be some conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4, on a permanent basis.

11.7.7. Blue Route - the effects of this route option on the purposes of the Green Belt within sector IV would be largely as for the proposed Brown Route. However, in addition the proposed Blue Route would include a proposed stop within sub area IV.C. The stop would be physically remote from Babraham and would have very little effect on the rural setting of the village. In addition, this route option would introduce the requirement for a combined vehicular and multi-user bridge over the A11. The bridge would fall within sector V, but the ramp up to the bridge would be located within sector IV. The earthworks for the ramp would be visible in views from the north and west, affecting the strongly rural character of the landscape in a much more noticeable way than the existing stepped access to the footbridge over the A11. There would be some conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4, on a permanent basis.

**11.8. Reduction in Openness or Degree of Green Belt Conflict**

11.8.1. Both of the proposed Travel Hub Site options proposed in this sector would introduce a volume of new development, hard paved areas with parked vehicles and lighting with a permanent visual reduction in the openness of the Green Belt. The Purple Route would preserve the openness of the Green Belt. The bridge over the River Granta associated with either the Pink Route or the Brown Route would introduce a volume of new development. There could be some reduction in openness as a result of the proposed bridge. The Black Route and the Blue Route would introduce a volume of new development, hard paved areas with parked vehicles and lighting with a permanent visual effect on the openness of the Green Belt at the proposed stop, the bridge over the River Granta and in relation to the ramps associated with the proposed bridges over the A11. There could be some reduction in openness as a result of the proposed stop and the proposed bridge.

11.8.2. Both of the proposed Travel Hub Site options proposed in this sector would have some conflict with Green Belt purposes, as would the Black Route and the Blue Route. The Purple Route, Pink Route and Brown Route would avoid conflict with Green Belt purposes.

11.8.3. The anticipated degree of harm as a result of some reduction in openness and/or conflict with Green Belt purposes of the nature described above would be as follows:

- Travel Hub Site A - the proposed Travel Hub would introduce development into a currently undeveloped area. The location of the proposed Travel Hub on a localised ridgeline would increase visibility of the proposals from the north and west, although visual containment is provided to the south and east by the disused railway line and vegetation along the A11. This could result in a moderate degree of encroachment into undeveloped countryside. Overall, there would be partial changes to relevant aspects of the landscape, resulting in a Moderate degree of harm to Green Belt arising from both the reduction in openness and a potential conflict with National Green Belt purpose 3, Cambridge Green Belt purpose 2 and National Green Belt purpose 4. Planting around the perimeters of the Travel Hub

could reduce the potential conflict over time to a Moderate-minor degree of conflict with Green Belt purposes. The reduction in openness would remain unchanged.

- Travel Hub Site B - the proposed Travel Hub would introduce development into a currently undeveloped area. The location of the proposed Travel Hub would reduce visibility of the proposals from the north and west, as it would be set down in the landscape between the localised ridgeline and the A11. This could result in a moderate-minor degree of encroachment into undeveloped countryside. Overall, there would be partial changes to relevant aspects of the landscape, resulting in a Moderate degree of harm to Green Belt arising from both the reduction in openness and a potential conflict with National Green Belt purpose 3, Cambridge Green Belt purpose 2 and National Green Belt purpose 4. Planting along the northern boundary of the proposed Travel Hub could reduce this conflict over time to a Moderate-minor degree of conflict with Green Belt purposes. The reduction in openness would remain unchanged.
- Pink Route - The proposed bridge over the River Granta and any associated ramped approaches would introduce a volume of additional built development into open countryside. This would reduce openness and result in a Moderate-minor degree of harm to Green Belt arising from the reduction in openness. It may be possible to design a bridge structure that minimises the reduction in openness as part of the detailed design of the structure.
- Brown Route – The proposed bridge over the River Granta and any associated ramped approaches would introduce a volume of additional built development into open countryside. This would reduce openness and result in a Moderate-minor degree of harm to Green Belt arising from the reduction in openness. It may be possible to design a bridge structure that minimises the reduction in openness as part of the detailed design of the structure.
- Black Route – the introduction of the proposed stop would introduce additional built development into an area that is currently undeveloped. This would reduce openness, resulting in a Minor degree of harm to Green Belt arising from the reduction in openness. The Minor reduction in openness would continue even if planting around the stop is introduced.
- Black Route - The proposed bridge over the River Granta and any associated ramped approaches would introduce a volume of additional built development into open countryside. This would reduce openness and result in a Moderate-minor degree of harm to Green Belt arising from the reduction in openness. It may be possible to design a bridge structure that minimises the reduction in openness as part of the detailed design of the structure.
- Black Route – the introduction of the new bridge over the A11 would introduce additional built development into an area that is currently undeveloped. This would reduce openness and affect the rural setting of both Babraham and the wider rural landscape, resulting in a Moderate-minor degree of harm to Green Belt arising from the reduction in openness and some conflict with Cambridge Green Belt

purpose 2 and National Green Belt purpose 4. It may be possible to design a bridge structure that minimises the reduction in openness and reduces the potential conflict with purposes as part of the detailed design of the structure.

- Blue Route - the introduction of the proposed stop would introduce additional built development into an area that is currently undeveloped. This would reduce openness resulting in a Minor degree of harm to Green Belt arising from the reduction in openness. The Minor reduction in openness would continue even if planting around the stop is introduced.
- Blue Route – The proposed bridge over the River Granta and any associated ramped approaches would introduce a volume of additional built development into open countryside. This would reduce openness and result in a Moderate-minor degree of harm to Green Belt arising from the reduction in openness. It may be possible to design a bridge structure that minimises the reduction in openness as part of the detailed design of the structure.
- Blue Route - the introduction of the combined vehicle and multiuser bridge over the A11 would introduce additional built development into an area that is currently undeveloped. This would reduce openness and affect the rural setting of both Babraham and the wider rural landscape, resulting in a Moderate-minor degree of harm to Green Belt arising from the reduction in openness and some conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4. It may be possible to design a bridge structure that minimises the reduction in openness and reduces the potential conflict with purposes as part of the detailed design of the structure.



**12.0 Assessment of Sector V: A11 and eastern corridor**

**12.1 Description of Sector**

12.1.1. Sector V is located along the A11 and includes the area of land between the A11 and Newmarket Road, the former alignment of the A11 (see Figure 16). The northern boundary follows the vegetation around the junction of the A11 and the A1307. The eastern boundary follows the Green belt boundary, which corresponds with the vegetation along the western side of Newmarket Road. The southern boundary follows the Green Belt Boundary, which corresponds with the vegetation along the northern side of the A505. The western boundary adjoins sector IV and is formed by the western edge of the vegetation along the A11.

12.1.2. The A11 is a dual carriageway through the sector. It includes verges along either side, which frequently include semi-mature woodland, and a narrow central reserve (see Photograph 18 on Figure 29). East of the A11 is a strip of land between the A11 and Newmarket Road. This strip includes scattered development, including a car sales show room, a garage and residential properties. The remainder of the sector is grassland, some of which appears to be unused. There is a tree belt along the western side of Newmarket Road and the fields between the two road corridors are sub divided by tall hedgerows and tree belts. The River Granta runs through the sector, passing under Newmarket Road, and is designated as a County Wildlife Site. Rights of way through the area are limited to a single route to the A11 (see Photograph 19 at Figure 30). The route crosses the A11 at a footbridge that forms a prominent feature in the local landscape.

12.1.3. Two sub areas have been identified within this sector. Route options for the access to proposed Travel Hub Site C would pass through both sub areas and they are therefore assessed below.

**12.2 Baseline Assessment of Qualities Relevant to Green Belt Openness and Purposes**

12.2.1. Figure 16 illustrates the key considerations relevant to both openness and Green Belt purposes in sector V.

<b>Qualities Relevant to Green Belt Openness and Purposes</b>	<b>Sub Area V.A – A11 corridor</b>	<b>Sub Area V.B – west of Newmarket Road</b>
5. Topography providing a framework to Cambridge	The River Granta runs through this sector and creates a shallow valley through it. However, the sector as a whole is relatively flat. Whilst river valleys are a feature of the landscape south and east of Cambridge, they do not form a prominent feature in the setting of the city.	
6. Long distance footpaths and bridleways providing	There is a limited network of rights of way through this sector, restricted to a single route linking Babraham and the Babraham Research Campus to the west with Granta Park	

<b>Qualities Relevant to Green Belt Openness and Purposes</b>	<b>Sub Area V.A – A11 corridor</b>	<b>Sub Area V.B – west of Newmarket Road</b>
access to the countryside	to the south. This provides a well-used footpath and cycle link between the key employment areas, although cyclists are required to use the footbridge over the A11 and the route across the fields is unpaved. Public access into the remainder of the sector is relatively limited, with no long distance routes or cycleways through the sector.	
12. The distribution, physical and visual separation of the necklace villages	Babraham to the west of the sector is an inset village that is excluded from the Green Belt. The sector is physically separated from Babraham by sector IV and there is no visual relationship. Little Abington and Great Abington to the east and south east of the sector are located outside the Green Belt.	
13. The scale, character, identity and rural setting of the necklace villages	Sector V is sufficiently distant from Babraham to avoid any effect on its character, identity and rural setting. Vegetation along the corridor of the A11 also creates physical and visual separation. Newmarket Road provides physical and visual separation between the sector and Little Abington and Great Abington, which are outside the Green Belt.	
14. Designated sites and areas enriching the setting of Cambridge	This sector includes the River Granta, which is designated as a County Wildlife Site.	
15. Elements and features contributing positively to the character and structure of the landscape	The River Granta has a noticeable character of its own, with riparian vegetation located along it, located along the boundary between the two sub areas. The footbridge over the A11, which allows movement between Babraham, Babraham Research Campus and Granta Park, is a prominent and detrimental feature in the landscape.	
	There are tree belts along either side of the A11 that create physical and visual containment to the landscape.	There are tree belts along either side of the A11 that create physical and visual containment to the landscape.
16. A city set in a landscape which retains a strongly rural character	This sub area does not have a strongly rural feel, given the presence of road infrastructure and the high volumes of traffic.	This sub area does not have a strongly rural feel, given the presence of road infrastructure and the high volumes of traffic.

**12.3. Key Considerations Relevant to Green Belt Openness**

12.3.1. The containment of both sub areas by existing vegetation is a key consideration in relation to openness within this sector. The vegetation provides visual and physical containment from the surrounding landscape. Sub area V.A contains extensive existing road infrastructure. Sub area V.B has a semi-rural character, despite the presence of road infrastructure to the west. There is existing built development within sub area V.B, in the form of intermittent houses and businesses within and adjacent to the sub area.

**12.4. Key Considerations Relevant to Green Belt Purposes**

12.4.1. This sector plays a minimal role in the wider setting of the south of Cambridge, given its physical and visual separation from the city. The woodland belts along the roads through and adjacent to the sector are important to the character of the local landscape and a positive feature, helping to integrate the A11 into the surroundings. They also provide containment to the sector and prevent visual intrusion from the A428 to the north. Access is very limited within the sector, but the footpath and cycleway south east from Babraham is well used.

**12.5. Proposed Route Options within the Sector**

12.5.1. Black Route – this route option would serve Travel Hub Site C, which is located east of the sector and outside the Green Belt. It would enter the sector north of the existing footbridge over the A11. It would cross the A11 at right angles and then cross sub area V.B to cross Newmarket Road adjacent to a former café site. The bridge is yet to be designed but would need to ramp up within sector IV to be able to cross over the A11 as a bridge in sub area V.A and then ramp back down in sub area V.B. Early indications assume that the bridge structure would have a deck width of approximately 14m, with a maximum span of 40m, and clearance of approximately 5.3m above the existing ground level, with earth embankments approaching the bridge. The route option would require the removal of vegetation along the A11 and along Newmarket Road at the points where the bridge and route alignment cross through tree belts. Current proposals indicate a hedgerow either side of the proposed route.

12.5.2. Blue Route - this route option would also serve Travel Hub Site C. It would enter the sector south of the existing footbridge over the A11. It would cross the A11 at right angles and then run northwards through sub area V.B to cross Newmarket Road adjacent to the former café site, slightly further south than the Black Route. The bridge is yet to be designed but would need to ramp up within sector IV to be able to cross over the A11 as a bridge in sub area V.A and then ramp back down in sub area V.B. It would also incorporate the upgraded multiuser route over the A11, meaning that the existing footbridge could be removed. Early indications assume that the bridge structure would have a deck width of approximately 14m, with a maximum span of 50m, and clearance of approximately 5.3m above the existing ground level, with earth

embankments approaching the bridge. The route option would require the removal of vegetation along the A11 and along Newmarket Road at the points where the bridge and route alignment cross through tree belts. Current proposals indicate a hedgerow either side of the proposed route.

## **12.6. Preservation of Green Belt Openness**

- 12.6.1. The construction of the physical structure of any bridge over the A11 would lead to the creation of a volume of new development. The construction of either route option proposed within this sector would require the construction of a single combined bridge, linking into existing pedestrian and cycle routes. For both route options, the creation of the ramp for the bridge over the A11 would require earthworks. In addition, there would also be a requirement for structures associated with the ramped access to the multi-user bridge, particularly where this would be a separate structure. The presence of these earthworks and structures would in themselves mean that there would be a volume of new development within sub area V.B. Whilst this volume of development would be relatively small and would not be seen from the surrounding area due to the vegetated character of the sub area, there would also be a reduction in openness of the Green Belt by the creation of the ramp or ramps. Consequently, there would be a reduction in openness of the Green Belt within both sub areas of sector V.
- 12.6.2. Given that the sector is relatively flat, there would be minimal requirement for cut and fill operations for either of the route options after the bridge ramps, meaning that there would be no significant volume of development to affect the openness of the Green Belt. The routes, where they are no longer on the bridge ramps, would be constructed at grade, minimising the visual effect of the proposals. This is considered to preserve the openness of the Green Belt in sub area V.B.

## **12.7. Potential for Conflict with Green Belt Purposes**

- 12.7.1. Black Route – this route option would introduce the requirement for a new bridge over the A11. The bridge would cross the existing A11 within sub area V.A, which already contains extensive road infrastructure and the existing footbridge over the A11. The route through sub area V.B would be contained by existing vegetation along the A11 and Newmarket Road. In this sector, the route option would be far enough from settlements to avoid any impacts on the setting of the nearby villages and to prevent settlements merging with each other. This route option would therefore avoid conflict with Green Belt purposes within sector V.
- 12.7.2. Blue Route - this route option would introduce the requirement for a new bridge over the A11. The bridge would cross the existing A11 within sub area V.A, which already contains extensive road infrastructure, and would replace the existing footbridge over the A11. The route through sub area V.B would be contained by existing vegetation along the A11 and Newmarket Road. In this sector, the route option would be far enough from settlements to avoid any impacts on the setting of the nearby villages and

to prevent settlements merging with each other. This route option would therefore avoid conflict with Green Belt purposes within sector V.

**12.8. Reduction in Openness or Degree of Green Belt Conflict**

12.8.1. The physical bridge structures over the A11 and the approach ramps to them would lead to a reduction in openness of the Green Belt within both sub areas of sector V for both route options. The remainder of the elements of both of the proposed route options would preserve the openness of the Green Belt.

12.8.2. Both proposed route options would avoid conflict with Green Belt purposes.

12.8.3. The anticipated degree of harm as a result of a reduction in openness of the nature described above would be as follows:

- Black Route - this route option would introduce the requirement for a new bridge over the A11. The construction of the physical structure of the bridges over the A11 and the associated access ramps would lead to the creation of a volume of new development. The resultant reduction in openness of the Green Belt within sector V would be Minor, given that road infrastructure is already present in sub area V.A.
- Blue Route - this route option would introduce the requirement for a single new bridge over the A11. The construction of the physical structure of the bridge over the A11 and the associated access ramp would lead to the creation of a volume of new development. The resultant reduction in openness of the Green Belt within sector V would also be Minor, given that an existing bridge would be replaced, and road infrastructure is already present in sub area V.A.

### 13.0 Conclusions

- 13.1.1. All of the proposed route options for the proposed public transport link would preserve the openness of the Green Belt. However, the various proposed stops and bridges along the route options would potentially reduce the openness of the Green Belt and therefore fail to preserve openness.
- 13.1.2. The route proposed by GCP would have some conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4 between Granham's Road and the River Granta. The Robinson Way Alternative route differs from the GCP route between the southern edge of Cambridge and Hinton Way, Great Shelford and would also have some conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4.
- 13.1.3. The stops proposed at Great Shelford and Stapleford along the proposed route would have some conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4.
- 13.1.4. The proposed bridges over the A11 would also have some conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4.
- 13.1.5. The anticipated degree of harm for each of the proposed route options, as a result of some reduction in openness and/or conflict with Green Belt purposes of the nature described above, would be as follows:
- For the GCP route between Granham's Road and the River Granta there would be a minor degree of harm to Green Belt arising from some conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4, as a result of physical encroachment in views out from Great Shelford and Stapleford, in the lower lying land between the villages and the slopes of Clarke's Hill and Magog Down as the foothills of the Gog Magog Hills, where development is currently limited.
  - For the Robinson Way Alternative route there would be a moderate degree of harm to Green Belt arising from some conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4, as a result of introducing new built development in views out of Cambridge and Great Shelford, rising up to the ridge of White Hill and up the slopes of Clarke's Hill as part of the foothills of the Gog Magog Hills where development is currently limited, and a change to the character of the setting to Cambridge. There would be some potential to reduce the degree of harm, through appropriate planting along the western side of the route adjacent to Great Shelford, to reinstate a wooded character to views from the village.
  - The stops proposed along the route at Great Shelford and Stapleford would introduce additional built development in close proximity to the edge of the villages. This would reduce openness and affect the setting of the villages, resulting in a Minor degree of harm to Green Belt arising from both the reduction in openness and some conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4. Planting around the stops could reduce this conflict over time, although if lighting is required, a Minor degree of harm would remain even once new planting is established, and the Minor reduction in openness would

continue. The stop proposed adjacent to the edge of Sawston would also introduce additional built development in close proximity to the edge of the village. This would only result in a reduction in openness resulting in a Minor degree of harm to Green Belt arising from the reduction in openness. Planting around the stop could reduce this conflict with purposes over time, although if lighting is required, a Minor degree of harm would remain even once new planting is established, and the Minor reduction in openness would continue.

- The proposed bridge over Hobson’s Brook and any associated ramped approaches would introduce a volume of additional built development into open countryside. This would reduce openness and result in a Minor degree of harm to Green Belt arising from the reduction in openness. It may be possible to design a bridge structure that minimises the reduction in openness as part of the detailed design of the structure.
- The proposed bridge over the River Granta between Stapleford and Sawston, and any associated ramped approaches, would introduce a volume of additional built development into open countryside. This would reduce openness and result in a Moderate-minor degree of harm to Green Belt arising from the reduction openness. It may be possible to design a bridge structure that minimises the reduction in openness as part of the detailed design of the structure.
- The proposed Pink Route would include the requirement for a bridge over the River Granta and associated ramped approaches, which would introduce a volume of additional built development into open countryside. This would reduce openness and result in a Moderate-minor degree of harm to Green Belt arising from the reduction in openness. It may be possible to design a bridge structure that minimises the reduction in openness as part of the detailed design of the structure.
- The proposed Brown Route would also include the requirement for a bridge over the River Granta and associated ramped approaches, adjacent to the A11, which would introduce a volume of additional built development into open countryside. This would reduce openness and result in a Moderate-minor degree of harm to Green Belt arising from the reduction in openness. It may be possible to design a bridge structure that minimises the reduction in openness as part of the detailed design of the structure.
- The proposed Black Route would include the requirement for a proposed stop, a bridge over the River Granta and a new bridge over the A11, including ramped approaches. This would introduce additional built development into an area that is currently undeveloped, which would reduce openness and affect the rural setting of both Babraham and the wider rural landscape. The proposed stop would result in a Minor degree of harm to Green Belt arising from the reduction in openness. The proposed bridge over the River Granta would reduce openness and result in a Moderate-minor degree of harm to Green Belt arising from the reduction in openness. The proposed bridge over the A11 would reduce openness and have some conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4, resulting in a Moderate-minor degree of harm to Green Belt arising from

both the reduction in openness and some conflict with Green Belt purposes. It may be possible to design bridge structures that minimise the reduction in openness and reduce the potential conflict with purposes as part of the detailed design of the structure.

- The proposed Blue Route would include the requirement for a proposed stop, a bridge over the River Granta and a new bridge over the A11, including ramped approaches. This would introduce additional built development into an area that is currently undeveloped, which would impact both openness and the rural setting of both Babraham and the wider rural landscape. The proposed stop would result in a Minor degree of harm to Green Belt arising from the reduction in openness. The proposed bridge over the River Granta would reduce openness and result in a Moderate-minor degree of harm to Green Belt arising from the reduction in openness. The proposed bridge over the A11 would reduce openness and have some conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4, resulting in a Moderate-minor degree of harm to Green Belt arising from both the reduction in openness and some conflict with Green Belt purposes. It may be possible to design bridge structures that minimise the reduction in openness and reduce the potential conflict with purposes as part of the detailed design of the structure.

13.1.6. Both of the proposed Travel Hub Sites that are located within the Green Belt would introduce a volume of new development with a permanent visual and spatial effect on the openness of the Green Belt. In addition, the parking areas within both of the Travel Hub Sites would introduce hard surfacing, on which large numbers of vehicles would be parked throughout the day, and the requirement for lighting, which would be visible infrastructure during the day and new lit areas at night. They would also both have some conflict with National Green Belt purpose 3, Cambridge Green Belt purpose 2 and National Green Belt purpose 4. However, whilst both Travel Hubs would have similar conflict with Green Belt purposes, Travel Hub Site B fits slightly better with its landscape context, being closer to the A11 and at a lower elevation.

13.1.7. The anticipated degree of harm for the two proposed Travel Hub Sites located within the Green Belt, as a result of some reduction in openness and/or conflict with Green Belt purposes of the nature described above, would be as follows:

- Travel Hub Site A - the proposed Travel Hub would introduce development into a currently undeveloped area. The location of the proposed Travel Hub on a localised ridgeline would increase visibility of the proposals from the north and west, although visual containment is provided to the south and east by the disused railway line and vegetation along the A11. This would result in a moderate degree of encroachment into undeveloped countryside. Overall, there would be partial changes to relevant aspects of the landscape, resulting in a Moderate degree of harm to Green Belt arising from both the reduction in openness and some conflict with National Green Belt purpose 3, Cambridge Green Belt purpose 2 and National Green Belt purpose 4. Planting around the perimeters of the Travel Hub could



reduce this conflict over time to a Moderate-minor degree of harm to Green Belt purposes.

- Travel Hub Site B - the proposed Travel Hub would introduce development into a currently undeveloped area. The location of the proposed Travel Hub would reduce visibility of the proposals from the north and west, as it would be set down in the landscape between the localised ridgeline and the A11. This would result in a moderate-minor degree of encroachment into undeveloped countryside. Overall, there would be partial changes to relevant aspects of the landscape, resulting in a Moderate degree of harm to Green Belt arising from both the reduction in openness and some conflict with National Green Belt purpose 3, Cambridge Green Belt purpose 2 and National Green Belt purpose 4. Planting along the northern boundary of the proposed Travel Hub could reduce this conflict over time to a Moderate-minor degree of harm to Green Belt purposes.

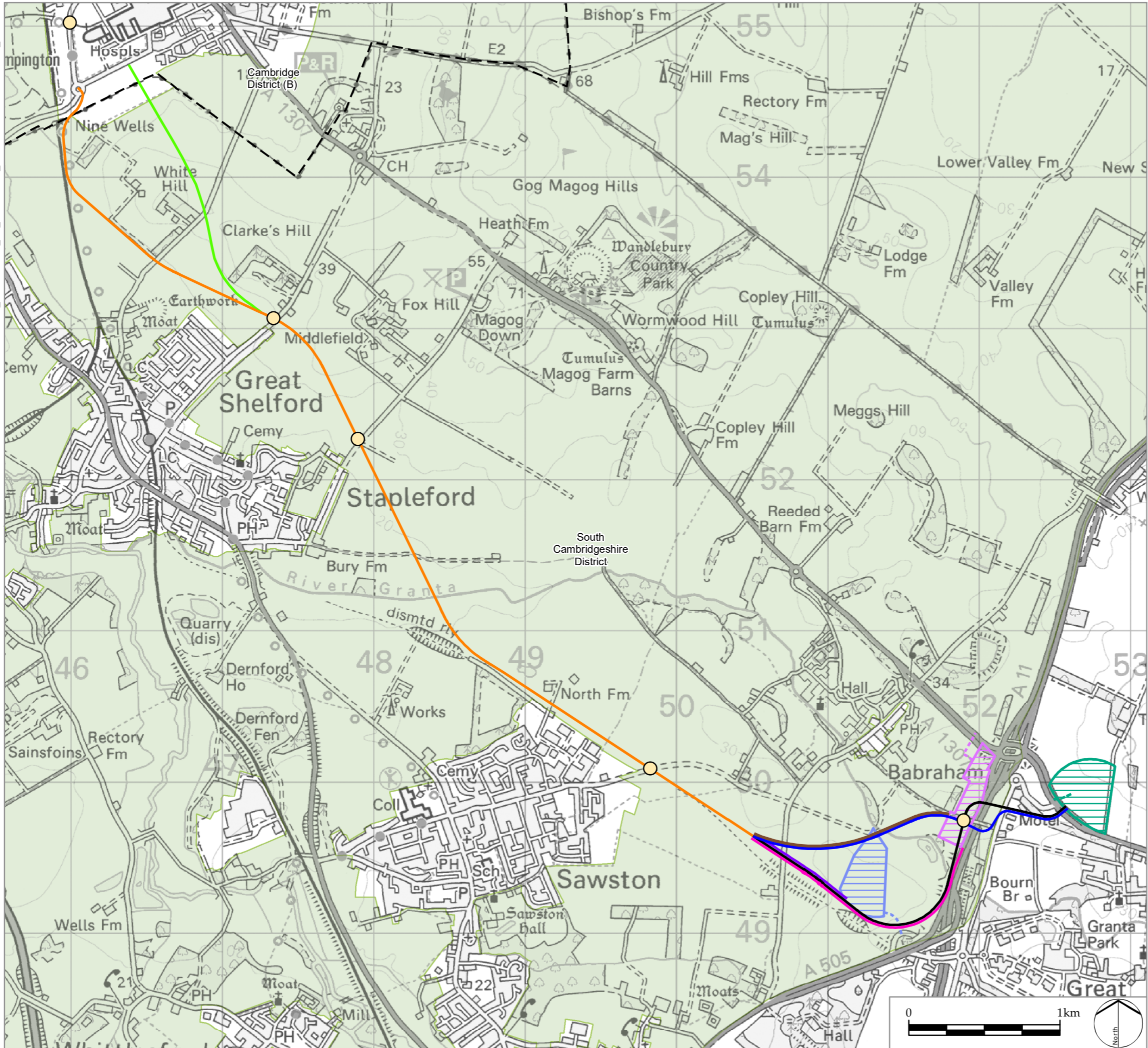
13.1.8. The outcomes of the assessment of the various route and Travel Hub options are summarised in the table on the following pages.

	<b>Preservation of Openness</b>	<b>Conflict with Purposes</b>	<b>Degree of Harm</b>
<b>Sector I</b>			
GCP route between CBC and Great Shelford (within sub area I.B)	Yes	No	N/A
GCP proposed bridge over Hobson’s Brook (within sub area I.B)	No	No	Minor
Robinson Way Alternative route between CBC and Great Shelford (within sub area I.B and I.C)	Yes	Yes	Moderate
<b>Sector II</b>			
GCP route between CBC and Great Shelford (within sub area II.A)	Yes	Yes	Minor
Robinson Way Alternative route between CBC and	Yes	Yes	Moderate, with potential to reduce through planting

	<b>Preservation of Openness</b>	<b>Conflict with Purposes</b>	<b>Degree of Harm</b>
Great Shelford (within sub area II.A)			
GCP route between Great Shelford and River Granta (within sub area II.B and II.C)	Yes	Yes	Minor
Proposed stops	No	Yes	Minor
Proposed bridge over River Granta	No	No	Moderate-minor
<b>Sector III</b>			
All GCP Route options (within sub area III.C)	Yes	No	N/A
Proposed stop (within sub area III.C)	No	No	Minor
Proposed bridge over River Granta (within sub area III.C)	No	No	Moderate-minor
<b>Sector IV</b>			
Travel Hub Site A (within sub area IV.B)	No	Yes	Moderate, reducing to Moderate-minor with planting
Travel Hub Site B (within sub area IV.C)	No	Yes	Moderate, reducing to Moderate-minor with planting
Purple Route	Yes	No	N/A
Pink Route	Yes	No	N/A
Pink Route - proposed bridge over River Granta (within sub areas IV.B and IV.C)	No	No	Moderate-minor
Brown Route	Yes	No	N/A
Brown Route - proposed bridge over River Granta (within	No	No	Moderate-minor

	<b>Preservation of Openness</b>	<b>Conflict with Purposes</b>	<b>Degree of Harm</b>
sub areas IV.B and IV.C)			
Black Route	Yes	No	N/A
Black Route - proposed stop (within sub area IV.C)	No	No	Minor
Black Route - proposed bridge over River Granta (within sub areas IV.B and IV.C)	No	No	Moderate-minor
Black Route - proposed bridge over A11 (within sub area IV.C)	No	Yes	Moderate-minor
Blue Route	No	Yes	Minor
Blue Route - proposed stop (within sub area IV.C)	No	No	Minor
Blue Route - proposed bridge over River Granta (within sub areas IV.B and IV.C)	No	No	Moderate-minor
Blue Route - proposed bridge over A11 (within sub area IV.C)	No	Yes	Moderate-minor
<b>Sector V</b>			
Black Route	Yes	No	N/A
Black Route - proposed bridge over A11	No	No	Minor
Blue Route	Yes	No	N/A
Blue Route - proposed bridge over A11	No	No	Minor

X:\JOBS\7290\_CAMBRIDGE\_TO\_HAVERHILL\_RTR\GIS\PROJECTS\7290\_001.MXD



- LEGEND**
- Proposed GCP Route
  - Proposed Purple Route (Site A)
  - Proposed Pink Route (Site B)
  - Proposed Brown Route (Site B)
  - Proposed Black Route (Site C)
  - Proposed Blue Route (Site C)
  - Proposed Robinson Way Alternative Route
  - Proposed Travel Hub Site A
  - Proposed Travel Hub Site B
  - Proposed Travel Hub Site C
  - Proposed Stop Locations
  - Access to Proposed Travel Hub Site A
  - Access to Proposed Travel Hub Site B
  - Access to Proposed Travel Hub Site C
  - District Boundary
  - Green Belt

# LD A DESIGN

PROJECT TITLE  
**CAMBRIDGE SOUTH EAST TRANSPORT**

DRAWING TITLE  
**Figure 1:  
Study Area**

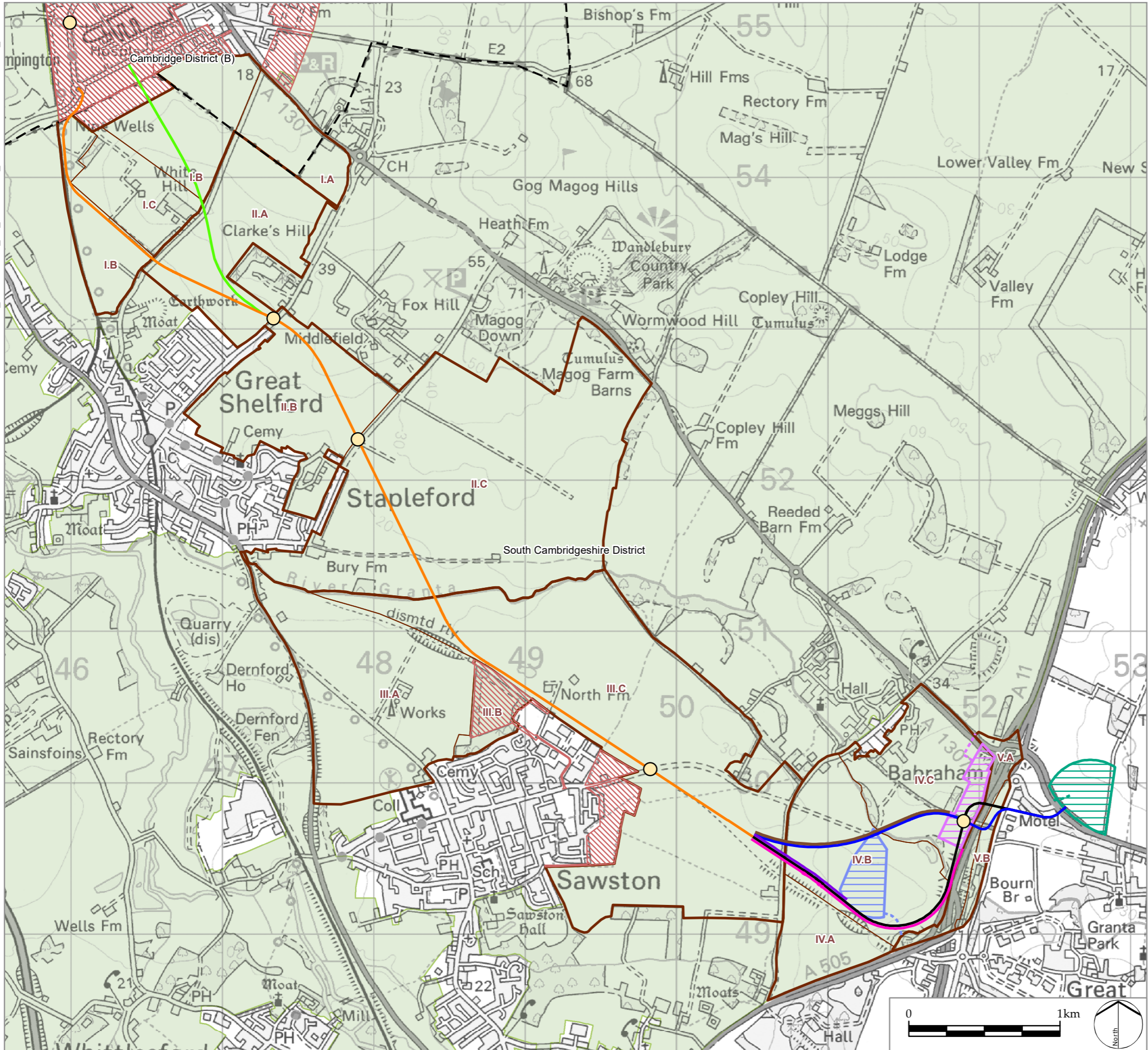
ISSUED BY	Peterborough	T: 01733 310 471
DATE	May 2020	DRAWN MSo
SCALE @A3	1:25,000	CHECKED RK
STATUS	Final	APPROVED ChC

**DWG. NO. 7290\_001**

No dimensions are to be scaled from this drawing.  
All dimensions are to be checked on site.  
Area measurements for indicative purposes only.

© LDA Design Consulting Ltd. Quality Assured to BS EN ISO 9001 : 2008

Sources: Ordnance Survey, Cambridge City Council, Mott Macdonald, 5th Studio



- LEGEND**
- Proposed GCP Route
  - Proposed Purple Route (Site A)
  - Proposed Pink Route (Site B)
  - Proposed Brown Route (Site B)
  - Proposed Black Route (Site C)
  - Proposed Blue Route (Site C)
  - Proposed Robinson Way Alternative Route
  - Proposed Travel Hub Site A
  - Proposed Travel Hub Site B
  - Proposed Travel Hub Site C
  - Proposed Stop Locations
  - ⋯ Access to Proposed Travel Hub Site A
  - ⋯ Access to Proposed Travel Hub Site B
  - ⋯ Access to Proposed Travel Hub Site C
  - District Boundary
  - Green Belt
  - Developments under Construction/Permitted
  - Green Belt Assessment Sector
  - I.A Green Belt Assessment Sub Area

# LD A DESIGN

PROJECT TITLE  
CAMBRIDGE SOUTH EAST TRANSPORT

DRAWING TITLE  
Figure 2:  
Assessment Sectors and Sub Areas

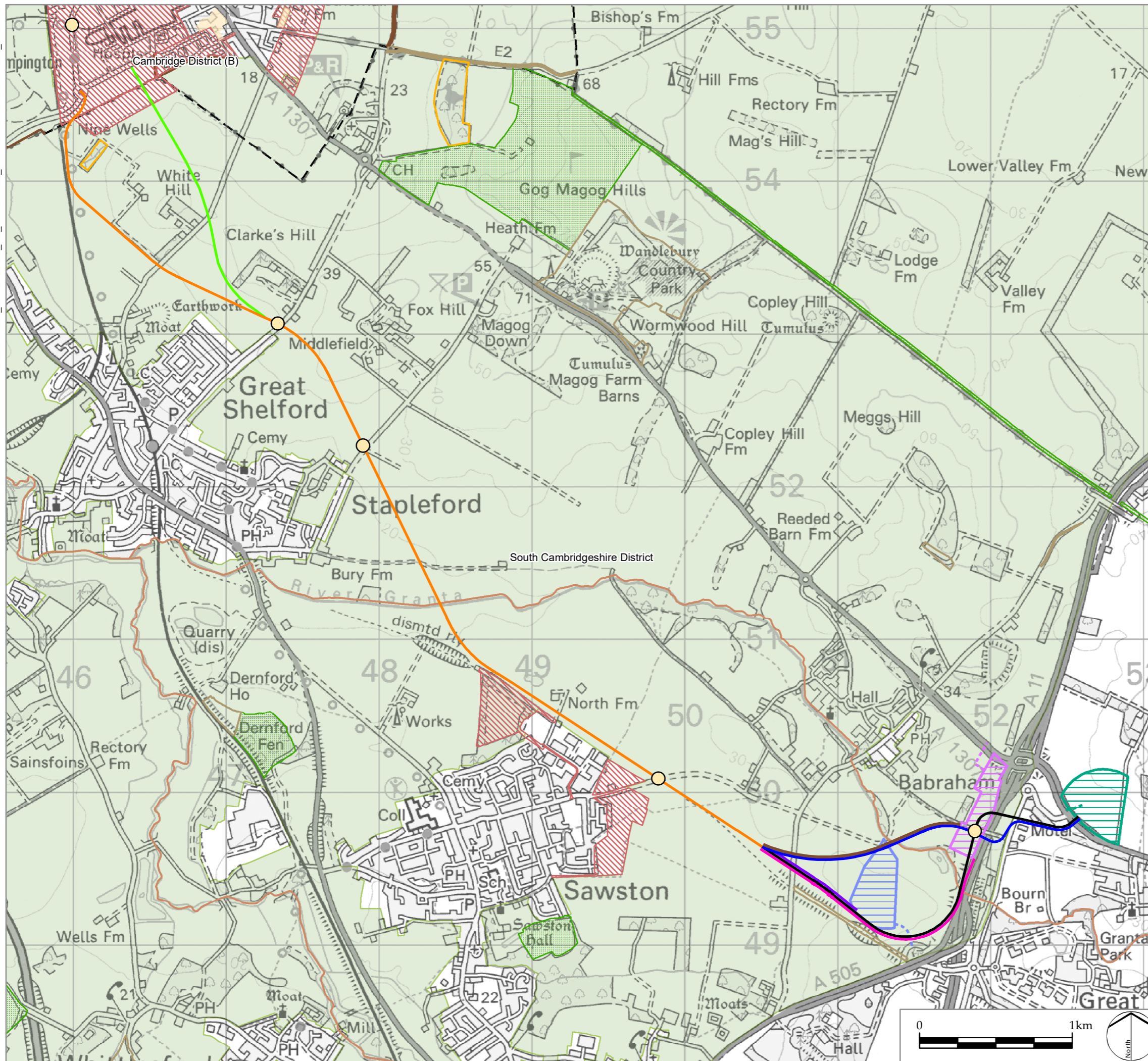
ISSUED BY	Peterborough	T: 01733 310 471
DATE	May 2020	DRAWN MSo
SCALE @A3	1:25,000	CHECKED RK
STATUS	Final	APPROVED ChC

**DWG. NO. 7290\_002**

No dimensions are to be scaled from this drawing.  
All dimensions are to be checked on site.  
Area measurements for indicative purposes only.

© LDA Design Consulting Ltd. Quality Assured to BS EN ISO 9001 : 2008

Sources: Ordnance Survey, Cambridge City Council, Mott Macdonald, 5th Studio



LEGEND

- Proposed GCP Route
- Proposed Purple Route (Site A)
- Proposed Pink Route (Site B)
- Proposed Brown Route (Site B)
- Proposed Black Route (Site C)
- Proposed Blue Route (Site C)
- Proposed Robinson Way Alternative Route
- Proposed Travel Hub Site A
- Proposed Travel Hub Site B
- Proposed Travel Hub Site C
- Proposed Stop Locations
- - - - Access to Proposed Travel Hub Site A
- - - - Access to Proposed Travel Hub Site B
- - - - Access to Proposed Travel Hub Site C
- District Boundary
- Green Belt
- Developments under Construction/Permitted
- Site of Special Scientific Interest
- Ancient Woodland
- Local Nature Reserve
- City Wildlife Site
- County Wildlife Site
- County Wildlife Site (Rivers)
- Protected Open Space

# LDA DESIGN

PROJECT TITLE  
CAMBRIDGE SOUTH EAST TRANSPORT

DRAWING TITLE  
Figure 3:  
Environmental Designations

ISSUED BY	Peterborough	T: 01733 310 471
DATE	May 2020	DRAWN MSo
SCALE @A3	1:25,000	CHECKED RK
STATUS	Final	APPROVED ChC

**DWG. NO. 7290\_003**

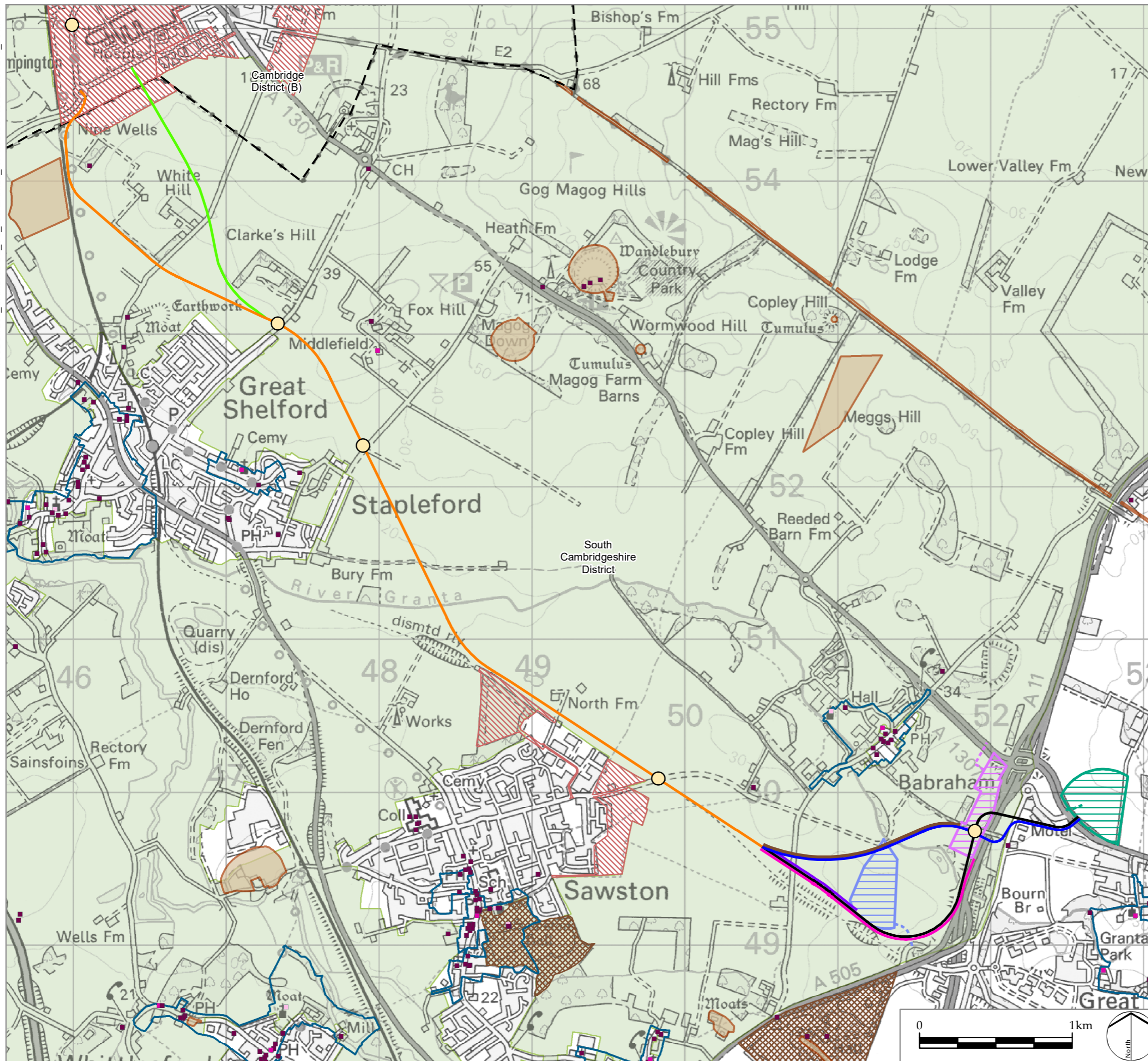
No dimensions are to be scaled from this drawing.  
All dimensions are to be checked on site.  
Area measurements for indicative purposes only.

© LDA Design Consulting Ltd. Quality Assured to BS EN ISO 9001 : 2008

Sources: Ordnance Survey, Natural England, Cambridge City Council,  
South Cambridgeshire District Council, Mott MacDonald,  
5th Studio



X:\JOBS\7290\_CAMBRIDGE\_TO\_HAVERHILL\_RTR\GIS\PROJECTS\7290\_004.MXD



- LEGEND**
- Proposed GCP Route
  - Proposed Purple Route (Site A)
  - Proposed Pink Route (Site B)
  - Proposed Brown Route (Site B)
  - Proposed Black Route (Site C)
  - Proposed Blue Route (Site C)
  - Proposed Robinson Way Alternative Route
  - Proposed Travel Hub Site A
  - Proposed Travel Hub Site B
  - Proposed Travel Hub Site C
  - Proposed Stop Locations
  - Access to Proposed Travel Hub Site A
  - Access to Proposed Travel Hub Site B
  - Access to Proposed Travel Hub Site C
  - District Boundary
  - Green Belt
  - Developments under Construction/Permitted
  - Conservation Area
  - Scheduled Monument
  - Registered Park and Garden
  - Listed Building

# LDA DESIGN

PROJECT TITLE  
**CAMBRIDGE SOUTH EAST TRANSPORT**

DRAWING TITLE  
**Figure 4:  
Cultural Heritage Designations**

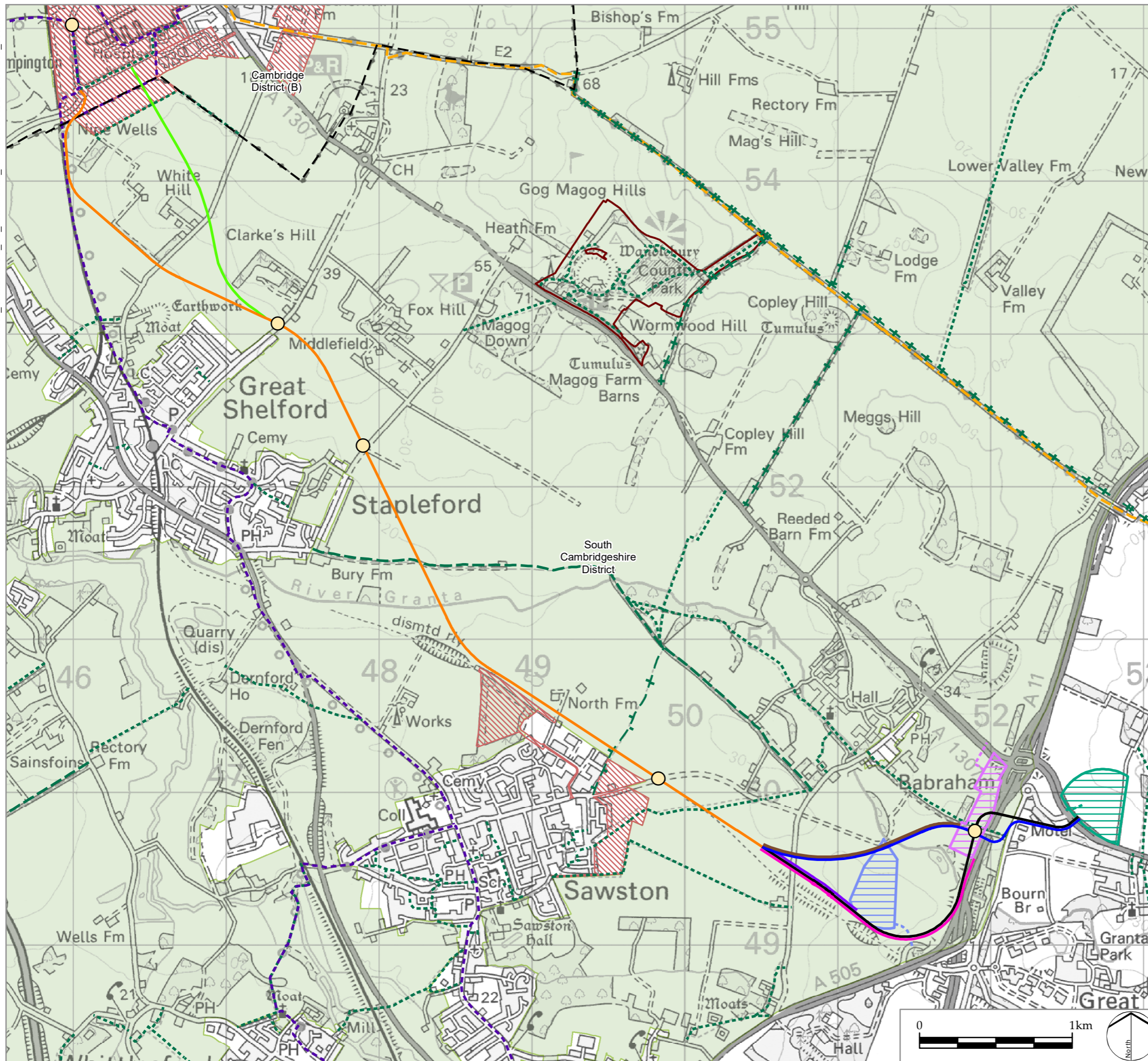
ISSUED BY	Peterborough	T: 01733 310 471
DATE	May 2020	DRAWN MSo
SCALE @A3	1:25,000	CHECKED RK
STATUS	Final	APPROVED ChC

**DWG. NO. 7290\_004**

No dimensions are to be scaled from this drawing.  
All dimensions are to be checked on site.  
Area measurements for indicative purposes only.

© LDA Design Consulting Ltd. Quality Assured to BS EN ISO 9001 : 2008

Sources: Ordnance Survey, Cambridge City Council, South Cambridgeshire District Council, Historic England, Mott MacDonald, 5th Studio



- LEGEND**
- Proposed GCP Route
  - Proposed Purple Route (Site A)
  - Proposed Pink Route (Site B)
  - Proposed Brown Route (Site B)
  - Proposed Black Route (Site C)
  - Proposed Blue Route (Site C)
  - Proposed Robinson Way Alternative Route
  - Proposed Travel Hub Site A
  - Proposed Travel Hub Site B
  - Proposed Travel Hub Site C
  - Proposed Stop Locations
  - - - - - Access to Proposed Travel Hub Site A
  - - - - - Access to Proposed Travel Hub Site B
  - - - - - Access to Proposed Travel Hub Site C
  - District Boundary
  - Green Belt
  - Developments under Construction/Permitted
  - Country Park
  - - - - - Long Distance Footpath
  - - - - - Footpath
  - - - - - Bridleway
  - + + + Byway
  - + + + Restricted Byway
  - - - - - National Cycle Route 11 and link

# LD A DESIGN

PROJECT TITLE  
**CAMBRIDGE SOUTH EAST TRANSPORT**

DRAWING TITLE  
**Figure 5:  
Recreational Routes and Country Park**

ISSUED BY	Peterborough	T: 01733 310 471
DATE	May 2020	DRAWN MSo
SCALE @A3	1:25,000	CHECKED RK
STATUS	Final	APPROVED ChC

**DWG. NO. 7290\_005**

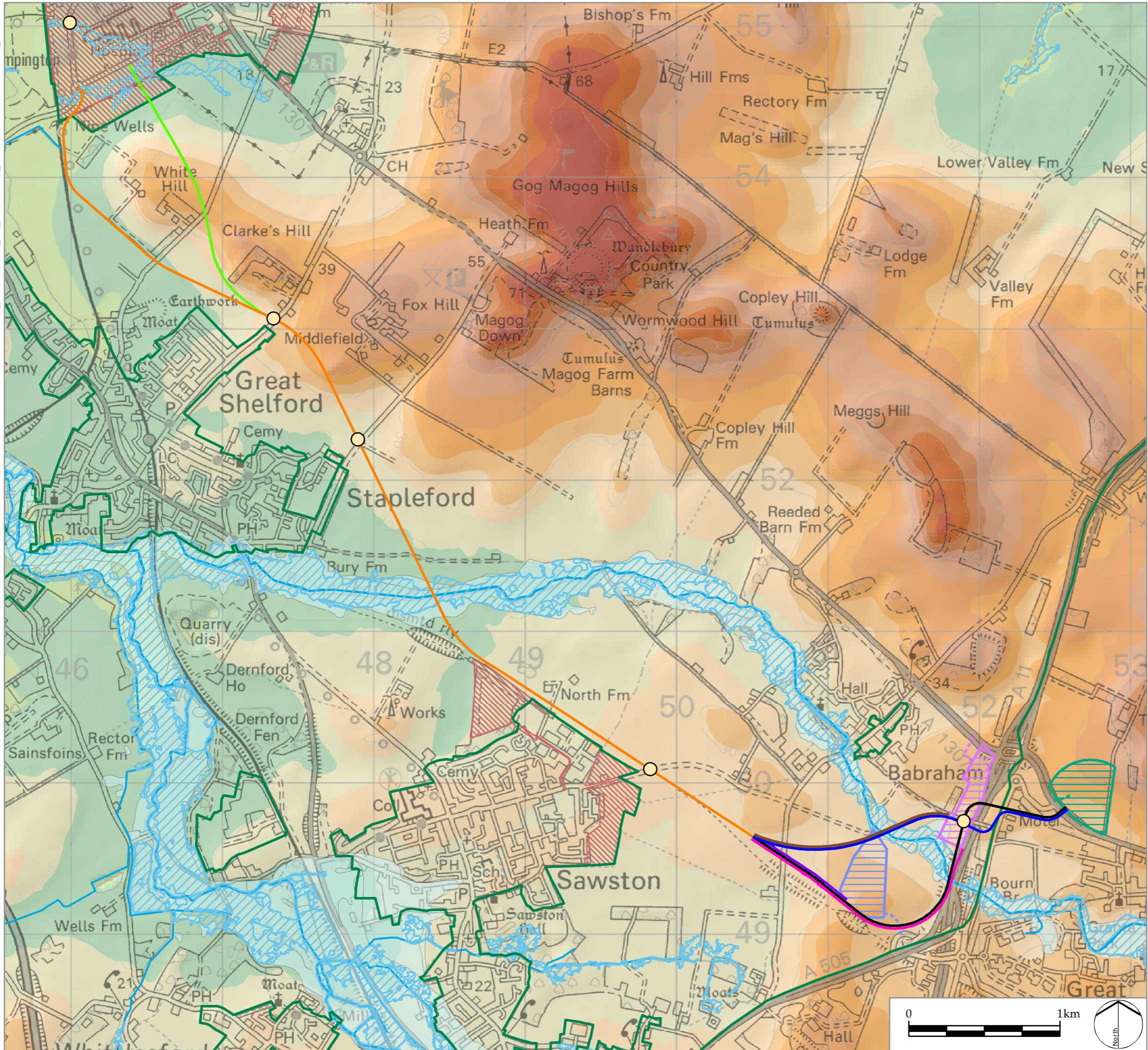
No dimensions are to be scaled from this drawing.  
All dimensions are to be checked on site.  
Area measurements for indicative purposes only.

© LDA Design Consulting Ltd. Quality Assured to BS EN ISO 9001 : 2008

Sources: Ordnance Survey, Cambridge City Council, Natural England, Mott MacDonald, 5th Studio, Sustrans







**LEGEND**

- Proposed GCP Route
- Proposed Purple Route (Site A)
- Proposed Pink Route (Site B)
- Proposed Brown Route (Site B)
- Proposed Black Route (Site C)
- Proposed Blue Route (Site C)
- Proposed Robinson Way Alternative Route
- Proposed Travel Hub Site A
- Proposed Travel Hub Site B
- Proposed Travel Hub Site C
- Proposed Stop Locations
- - - - - Access to Proposed Travel Hub Site A
- - - - - Access to Proposed Travel Hub Site B
- - - - - Access to Proposed Travel Hub Site C
- Green Belt Boundary
- Developments under Construction/Permitted
- Main River
- Floodplain (Environment Agency Flood Zone 3)
- Recorded Flood (Historic Flood)

**Elevation m (AOD)**

70 - 75	50 - 55	30 - 35	
65 - 70	45 - 50	25 - 30	
60 - 65	40 - 45	20 - 25	
55 - 60	35 - 40	15 - 20	
		10 - 15	

# LD A DESIGN

PROJECT TITLE  
CAMBRIDGE SOUTH EAST TRANSPORT

DRAWING TITLE  
Figure 6:  
Topography and Drainage

ISSUED BY	Peterborough	T: 01733 310 471
DATE	May 2020	DRAWN MSO
SCALE @A3	1:25,000	CHECKED RK
STATUS	Final	APPROVED ChC

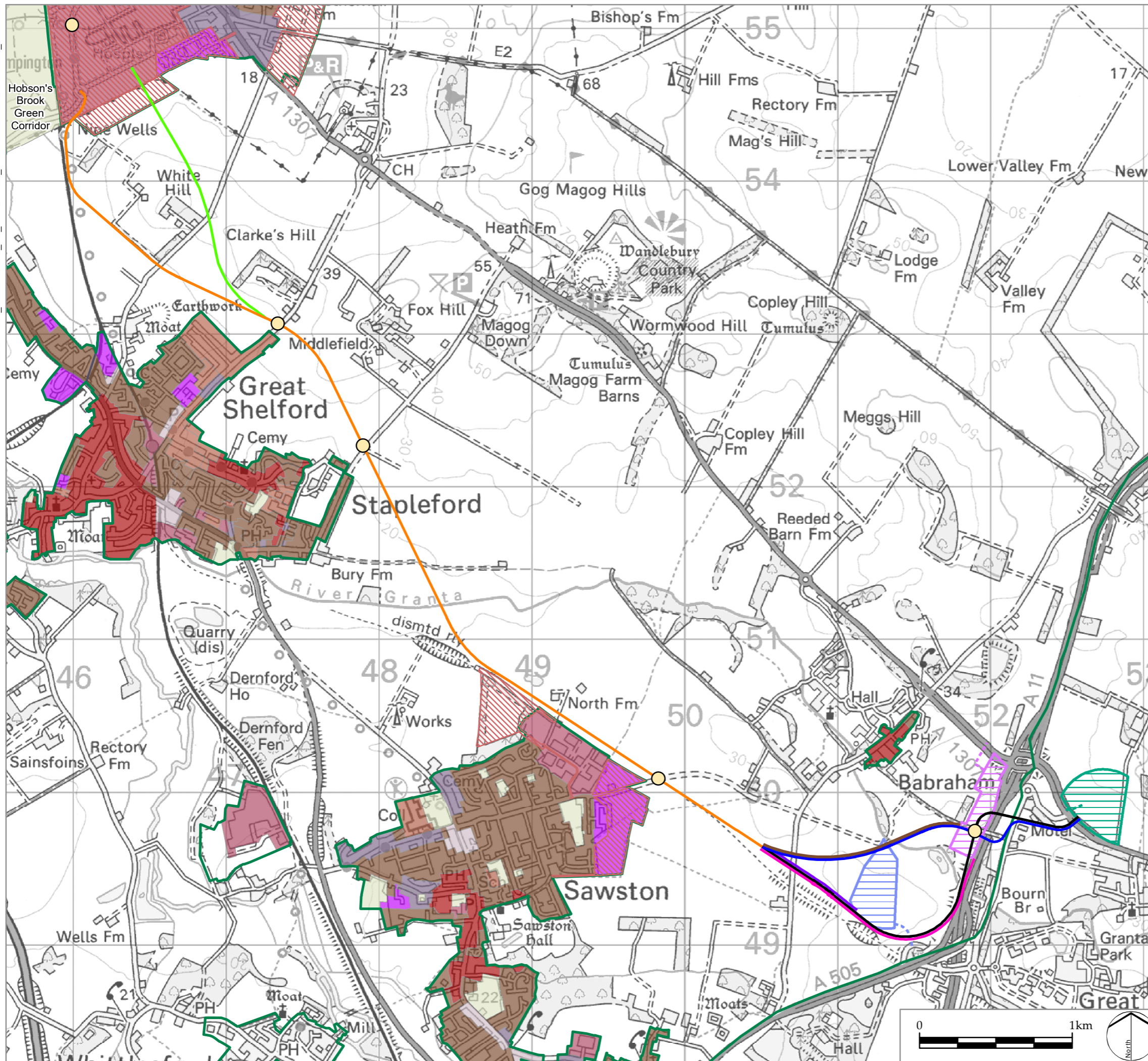
**DWG. NO. 7290\_006**

No dimensions are to be scaled from this drawing.  
All dimensions are to be checked on site.  
Area measurements for indicative purposes only.

© LDA Design Consulting Ltd. Quality Assured to BS EN ISO 9001 : 2008

Sources: Ordnance Survey, Cambridge City Council, NextMap25,  
Mott Macdonald, 5th Studio





**LEGEND**

- Proposed GCP Route
- Proposed Purple Route (Site A)
- Proposed Pink Route (Site B)
- Proposed Brown Route (Site B)
- Proposed Black Route (Site C)
- Proposed Blue Route (Site C)
- Proposed Robinson Way Alternative Route
- Proposed Travel Hub Site A
- Proposed Travel Hub Site B
- Proposed Travel Hub Site C
- Proposed Stop Locations
- Access to Proposed Travel Hub Site A
- Access to Proposed Travel Hub Site B
- Access to Proposed Travel Hub Site C
- Green Belt Boundary
- Developments under Construction/Permitted

**Townscape Character Type**

- Historic Core
- Bespoke Houses, Colleges and University Buildings
- Green Spaces and Green Corridors
- Victorian/Edwardian Terraced Housing
- Large Scale Commercial, Industrial and Service Development
- 1900-1945 Suburban Housing
- Post-war Suburban Housing
- 21st Century Mixed Use Development
- Necklace Village

# LDĀ DESIGN

PROJECT TITLE  
**CAMBRIDGE SOUTH EAST TRANSPORT**

DRAWING TITLE  
**Figure 7:  
 Townscape Character**

ISSUED BY	Peterborough	T: 01733 310 471
DATE	May 2020	DRAWN MSo
SCALE @A3	1:25,000	CHECKED RK
STATUS	Final	APPROVED ChC

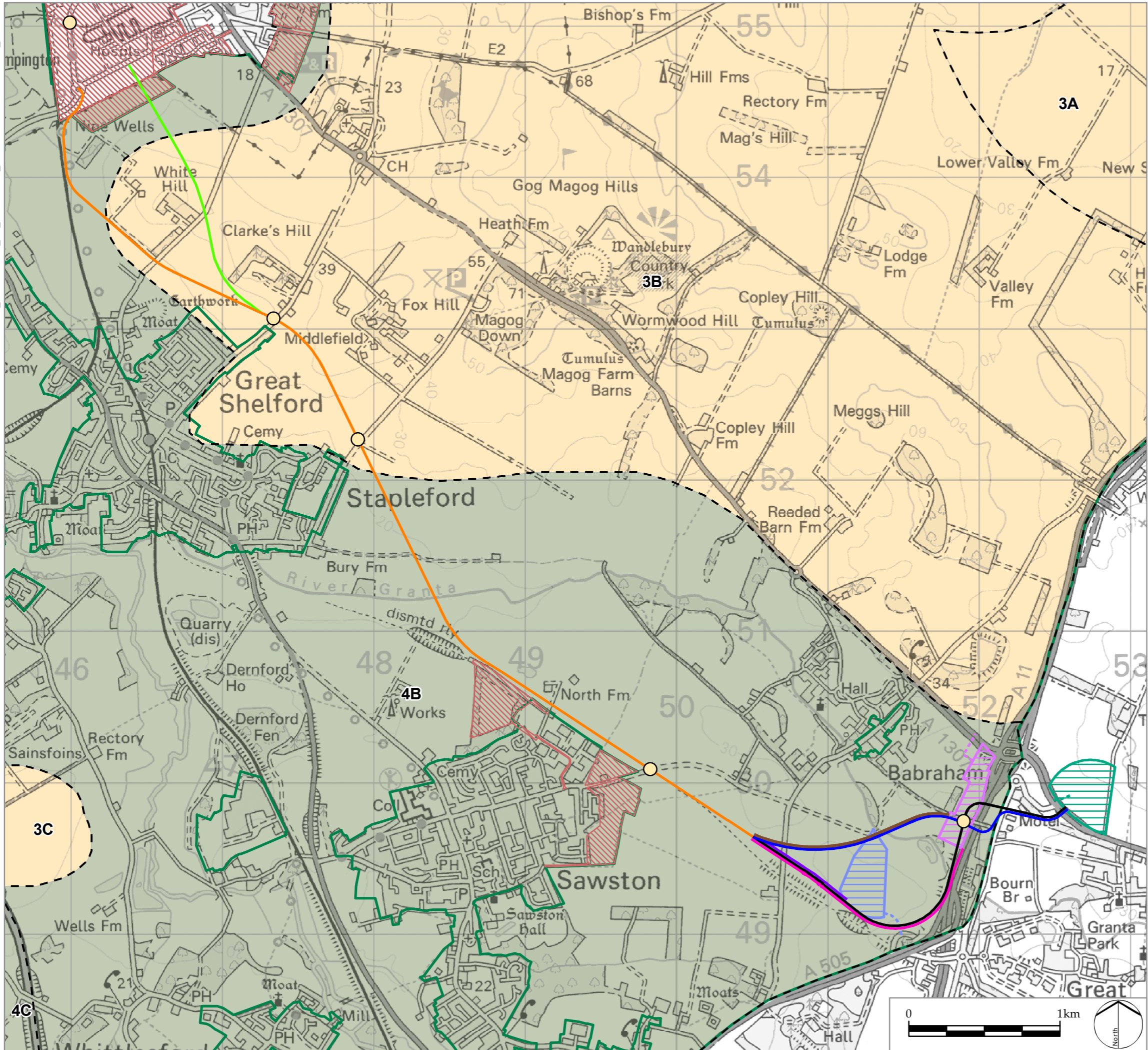
**DWG. NO. 7290\_007**

No dimensions are to be scaled from this drawing.  
 All dimensions are to be checked on site.  
 Area measurements for indicative purposes only.

© LDA Design Consulting Ltd. Quality Assured to BS EN ISO 9001 : 2008

Sources: Ordnance Survey, Cambridge City Council, Mott Macdonald, 5th Studio





**LEGEND**

- Proposed GCP Route
- Proposed Purple Route (Site A)
- Proposed Pink Route (Site B)
- Proposed Brown Route (Site B)
- Proposed Black Route (Site C)
- Proposed Blue Route (Site C)
- Proposed Robinson Way Alternative Route
- Proposed Travel Hub Site A
- Proposed Travel Hub Site B
- Proposed Travel Hub Site C
- Proposed Stop Locations
- - - - Access to Proposed Travel Hub Site A
- - - - Access to Proposed Travel Hub Site B
- - - - Access to Proposed Travel Hub Site C
- Green Belt Boundary
- Developments under Construction/Permitted

Landscape Type	Landscape Character Area
<span style="background-color: orange; width: 20px; height: 10px; display: inline-block;"></span> Chalk Hills	3A. North East Chalk Hills 3B. Gog Magog Chalk Hills 3C. Newton Chalk Hills
<span style="background-color: green; width: 20px; height: 10px; display: inline-block;"></span> River Valleys	4B. Granta Valley 4C. Rhee and Bourn Valleys
<span style="border-bottom: 1px dashed black; width: 20px; display: inline-block;"></span>	Landscape Character Area boundary

# LD A DESIGN

PROJECT TITLE  
**CAMBRIDGE SOUTH EAST TRANSPORT**

DRAWING TITLE  
**Figure 8:  
Landscape Character**

ISSUED BY	Peterborough	T: 01733 310 471
DATE	May 2020	DRAWN MSO
SCALE @A3	1:25,000	CHECKED RK
STATUS	Final	APPROVED ChC

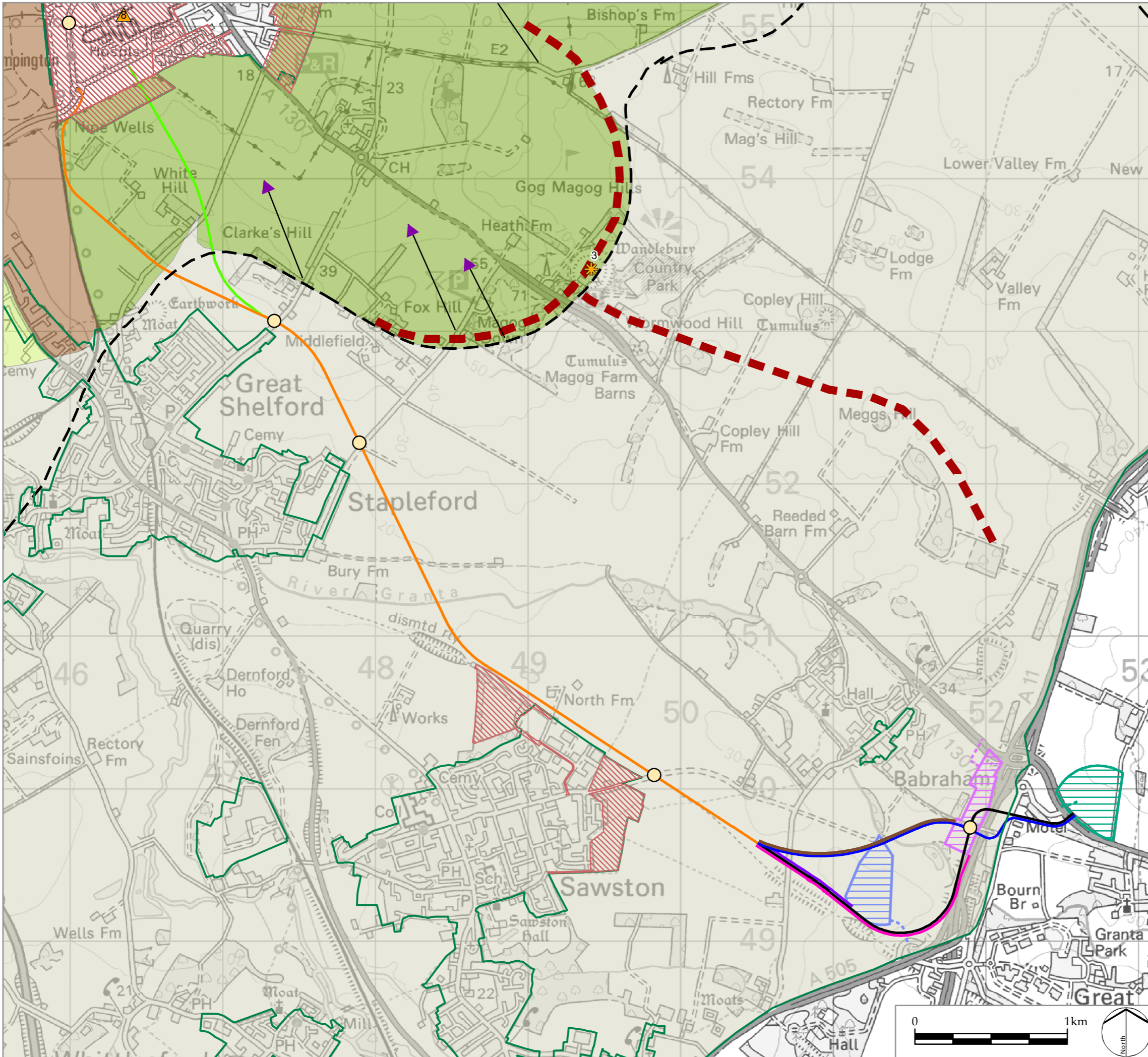
**DWG. NO. 7290\_008**

No dimensions are to be scaled from this drawing.  
All dimensions are to be checked on site.  
Area measurements for indicative purposes only.

© LDA Design Consulting Ltd. Quality Assured to BS EN ISO 9001 : 2008

Sources: Ordnance Survey, Cambridge City Council, Mott Macdonald, 5th Studio





**LEGEND**

- Proposed GCP Route
- Proposed Purple Route (Site A)
- Proposed Pink Route (Site B)
- Proposed Brown Route (Site B)
- Proposed Black Route (Site C)
- Proposed Blue Route (Site C)
- Proposed Robinson Way Alternative Route
- Proposed Travel Hub Site A
- Proposed Travel Hub Site B
- Proposed Travel Hub Site C
- Proposed Stop Locations
- - - Access to Proposed Travel Hub Site A
- - - Access to Proposed Travel Hub Site B
- - - Access to Proposed Travel Hub Site C
- Green Belt Boundary
- Developments under Construction/Permitted
- Approximate area of Green Belt from which Cambridge may be seen
- Key elevated view
- - - Ridgeline
- ★ Distinctive / memorable features in the setting of Cambridge
- ★ 3. Wandlebury woodland on hill top
- ▲ Landmarks
- ▲ 8 Addenbrooke's Hospital

Townscape / countryside interface - elevation, foreground character and built edge character as seen in immediate views from routes close to Cambridge

- Elevated views, countryside foreground, mixed urban edge
- Level views, countryside foreground, mixed urban edge
- Level views, mixed foreground, mixed urban edge
- Rural setting with scattered villages

# LD A DESIGN

PROJECT TITLE  
CAMBRIDGE SOUTH EAST TRANSPORT

DRAWING TITLE  
Figure 9:  
Visual Assessment

ISSUED BY	Peterborough	T: 01733 310 471
DATE	May 2020	DRAWN MSo
SCALE @A3	1:25,000	CHECKED RK
STATUS	Final	APPROVED ChC

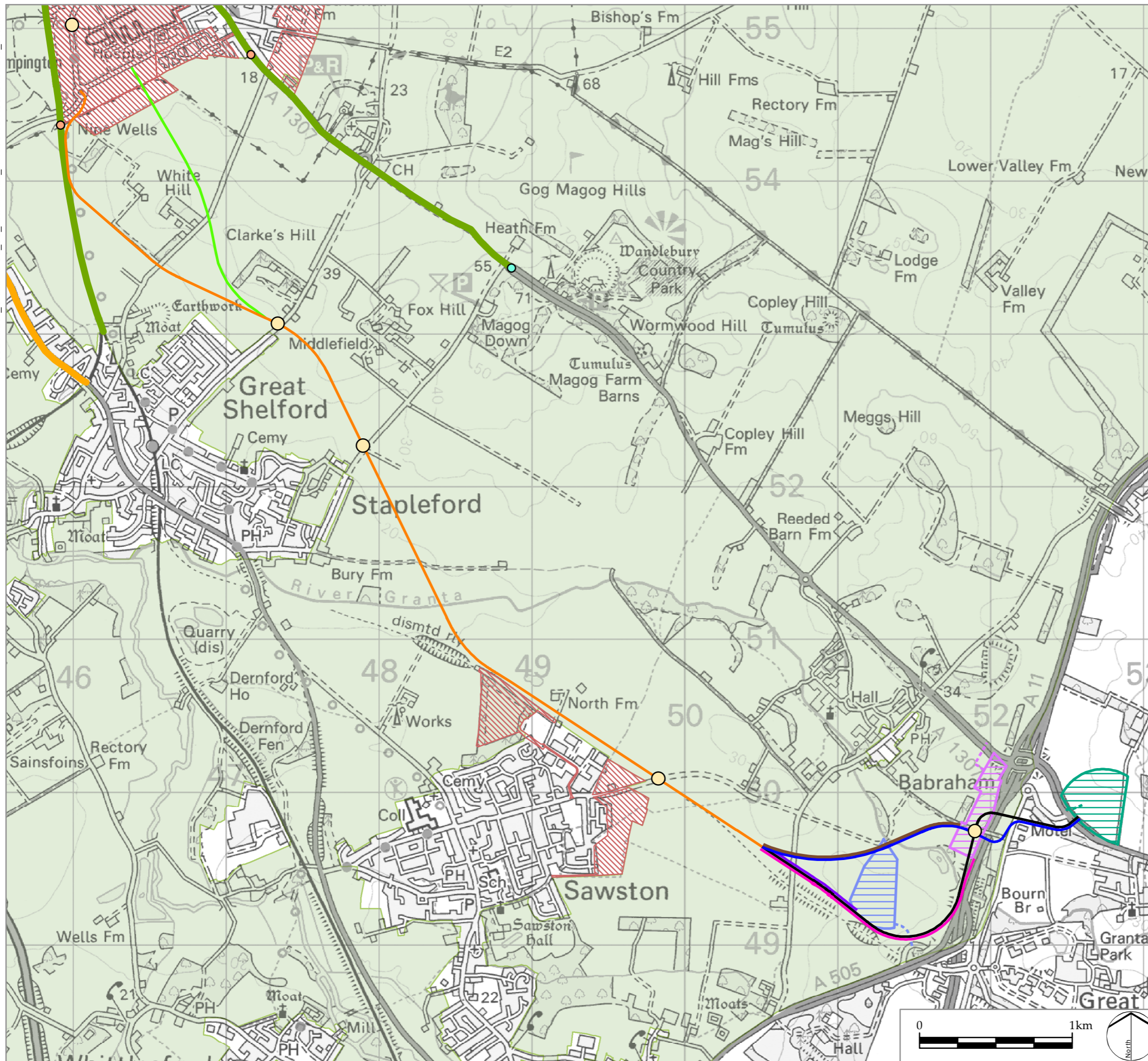
**DWG. NO. 7290\_009**

No dimensions are to be scaled from this drawing.  
All dimensions are to be checked on site.  
Area measurements for indicative purposes only.

© LDA Design Consulting Ltd. Quality Assured to BS EN ISO 9001 : 2008

Sources: Ordnance Survey, Cambridge City Council, Mott Macdonald, 5th Studio

X:\JOBS\7290\_CAMBRIDGE\_TO\_HAVERHILL\_RTR\GIS\PROJECTS\7290\_010.MXD



- LEGEND**
- Proposed GCP Route
  - Proposed Purple Route (Site A)
  - Proposed Pink Route (Site B)
  - Proposed Brown Route (Site B)
  - Proposed Black Route (Site C)
  - Proposed Blue Route (Site C)
  - Proposed Robinson Way Alternative Route
  - Proposed Travel Hub Site A
  - Proposed Travel Hub Site B
  - Proposed Travel Hub Site C
  - Proposed Stop Locations
  - - - Access to Proposed Travel Hub Site A
  - - - Access to Proposed Travel Hub Site B
  - - - Access to Proposed Travel Hub Site C
  - Green Belt
  - Developments under Construction/Permitted
- Gateways**
- Urban gateway
  - First view of Cambridge
- Character of Approach**
- Green/treed
  - Suburban

# LDĀ DESIGN

PROJECT TITLE  
**CAMBRIDGE SOUTH EAST TRANSPORT**

DRAWING TITLE  
**Figure 10:  
Gateways and Approaches**

ISSUED BY	Peterborough	T: 01733 310 471
DATE	May 2020	DRAWN MSo
SCALE @A3	1:25,000	CHECKED RK
STATUS	Final	APPROVED ChC

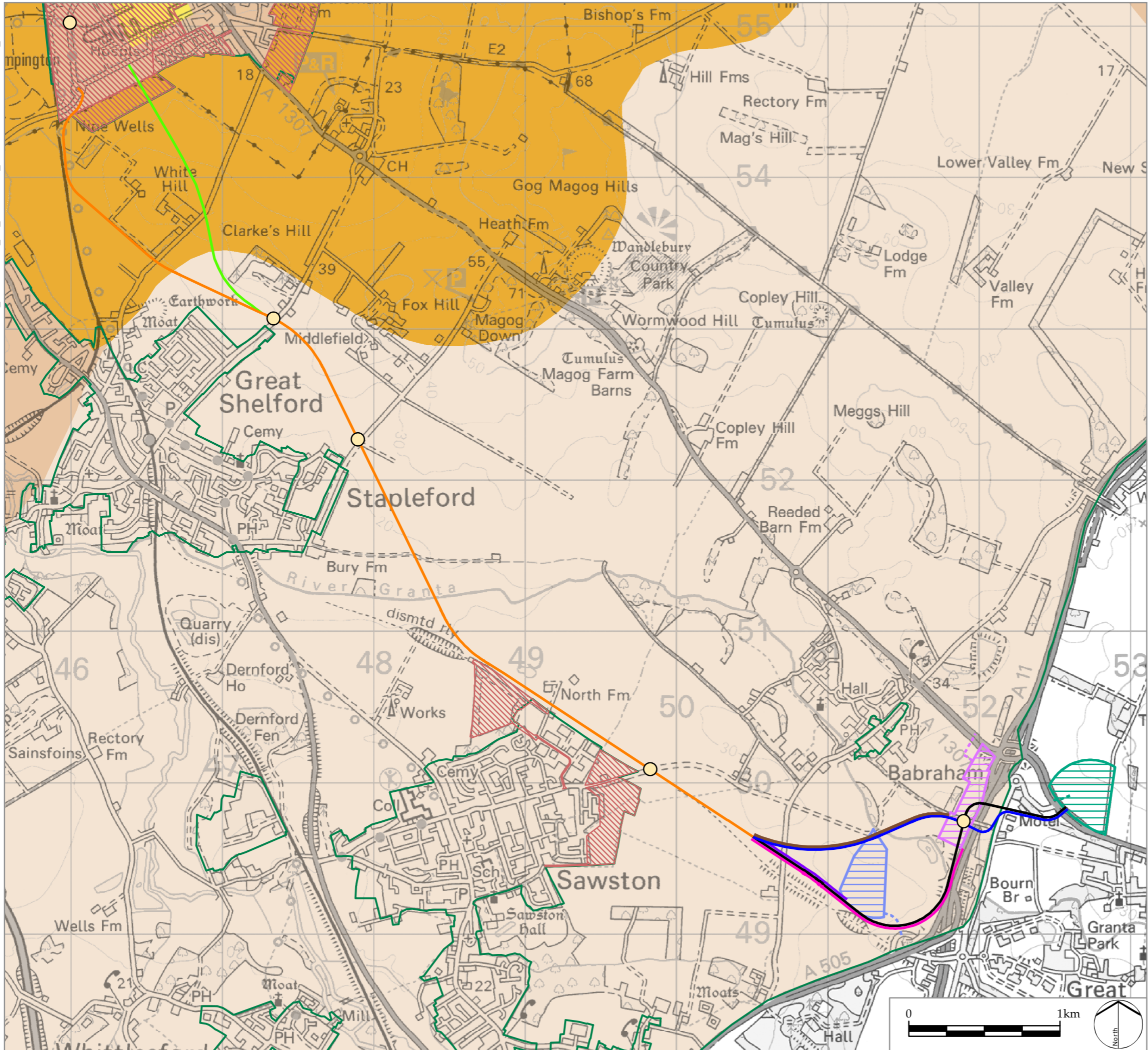
**DWG. NO. 7290\_010**

No dimensions are to be scaled from this drawing.  
All dimensions are to be checked on site.  
Area measurements for indicative purposes only.

© LDA Design Consulting Ltd. Quality Assured to BS EN ISO 9001 : 2008

Sources: Ordnance Survey, Cambridge City Council, Mott Macdonald, 5th Studio





- LEGEND**
- Proposed GCP Route
  - Proposed Purple Route (Site A)
  - Proposed Pink Route (Site B)
  - Proposed Brown Route (Site B)
  - Proposed Black Route (Site C)
  - Proposed Blue Route (Site C)
  - Proposed Robinson Way Alternative Route
  - Proposed Travel Hub Site A
  - Proposed Travel Hub Site B
  - Proposed Travel Hub Site C
  - Proposed Stop Locations
  - Access to Proposed Travel Hub Site A
  - Access to Proposed Travel Hub Site B
  - Access to Proposed Travel Hub Site C
  - Supportive townscape/landscape
  - Connective townscape/landscape
  - Visually detracting townscape/landscape
  - Outer rural areas of the Green Belt
  - Green Belt Boundary
  - Developments under Construction/Permitted

# LD A DESIGN

PROJECT TITLE  
**CAMBRIDGE SOUTH EAST TRANSPORT**

DRAWING TITLE  
**Figure 11:  
Townscape and Landscape Role and Function**

ISSUED BY	Peterborough	T: 01733 310 471
DATE	May 2020	DRAWN MSo
SCALE @A3	1:25,000	CHECKED RK
STATUS	Final	APPROVED ChC

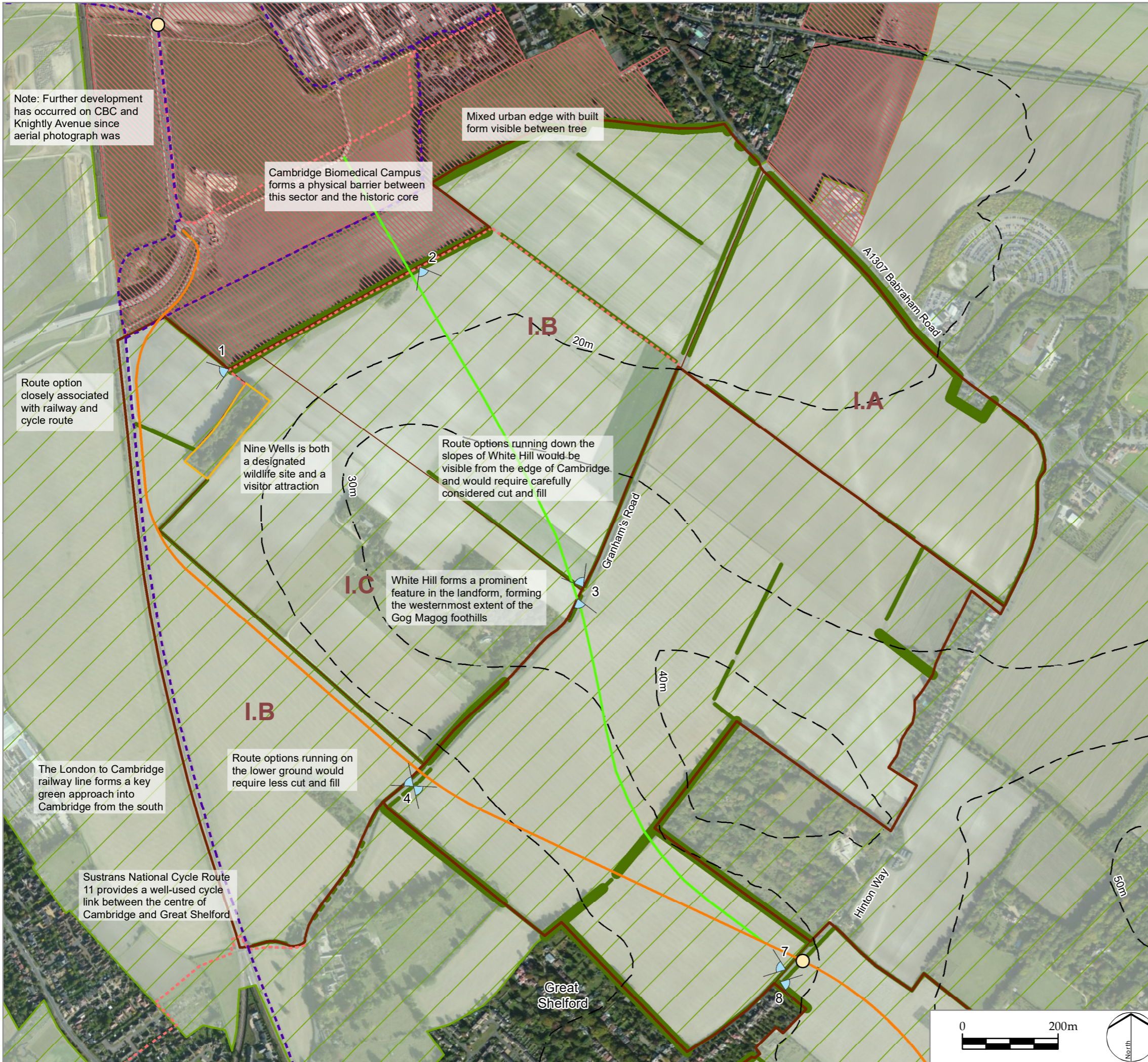
**DWG. NO. 7290\_011**

No dimensions are to be scaled from this drawing.  
All dimensions are to be checked on site.  
Area measurements for indicative purposes only.

© LDA Design Consulting Ltd. Quality Assured to BS EN ISO 9001 : 2008

Sources: Ordnance Survey, Cambridge City Council, Mott Macdonald, 5th Studio





Note: Further development has occurred on CBC and Knightly Avenue since aerial photograph was

Cambridge Biomedical Campus forms a physical barrier between this sector and the historic core

Mixed urban edge with built form visible between tree

Route option closely associated with railway and cycle route

Nine Wells is both a designated wildlife site and a visitor attraction

Route options running down the slopes of White Hill would be visible from the edge of Cambridge and would require carefully considered cut and fill

White Hill forms a prominent feature in the landform, forming the westernmost extent of the Gog Magog foothills

The London to Cambridge railway line forms a key green approach into Cambridge from the south

Route options running on the lower ground would require less cut and fill

Sustrans National Cycle Route 11 provides a well-used cycle link between the centre of Cambridge and Great Shelford

Great Shelford

- LEGEND**
- Proposed GCP Route
  - Proposed Robnson Way Alternative Route
  - Proposed Stop Locations
  - Green Belt Boundary
  - Developments under Construction/Permitted
  - Assessment Sectors
  - Assessment Sub Areas
  - Local Nature Reserve
  - Footpath
  - National Cycle Route 11 and link
  - Clipped hedgerow
  - Tall hedgerow or tree/woodland belt
  - Photograph locations

# LDĀ DESIGN

PROJECT TITLE  
CAMBRIDGE SOUTH EAST TRANSPORT

DRAWING TITLE  
Figure 12:  
Sector I Analysis

ISSUED BY	Peterborough	T: 01733 310 471
DATE	May 2020	DRAWN MSo
SCALE @A3	1:8,000	CHECKED RK
STATUS	Final	APPROVED ChC

**DWG. NO. 7290\_012**

No dimensions are to be scaled from this drawing.  
All dimensions are to be checked on site.  
Area measurements for indicative purposes only.  
© LDA Design Consulting Ltd. Quality Assured to BS EN ISO 9001 : 2008  
Sources: Esri, Cambridge City Council, Mott Macdonald, 5th Studio



- LEGEND**
- Proposed GCP Route
  - Proposed Robinson Way Alternative Route
  - Proposed Stop Locations
  - Green Belt Boundary
  - Developments under Construction/Permitted
  - Assessment Sectors
  - II.A Assessment Sub Areas
  - - - Footpath
  - - - Bridleway
  - + + + Byway
  - Clipped hedgerow
  - Tall hedgerow or tree/woodland belt
  - ◁ Photograph locations

# LDĀ DESIGN

PROJECT TITLE  
CAMBRIDGE SOUTH EAST TRANSPORT

DRAWING TITLE  
**Figure 13:  
Sector II Analysis**

ISSUED BY	Peterborough	T: 01733 310 471
DATE	May 2020	DRAWN MSo
SCALE @A3	1:12,500	CHECKED RK
STATUS	Final	APPROVED ChC

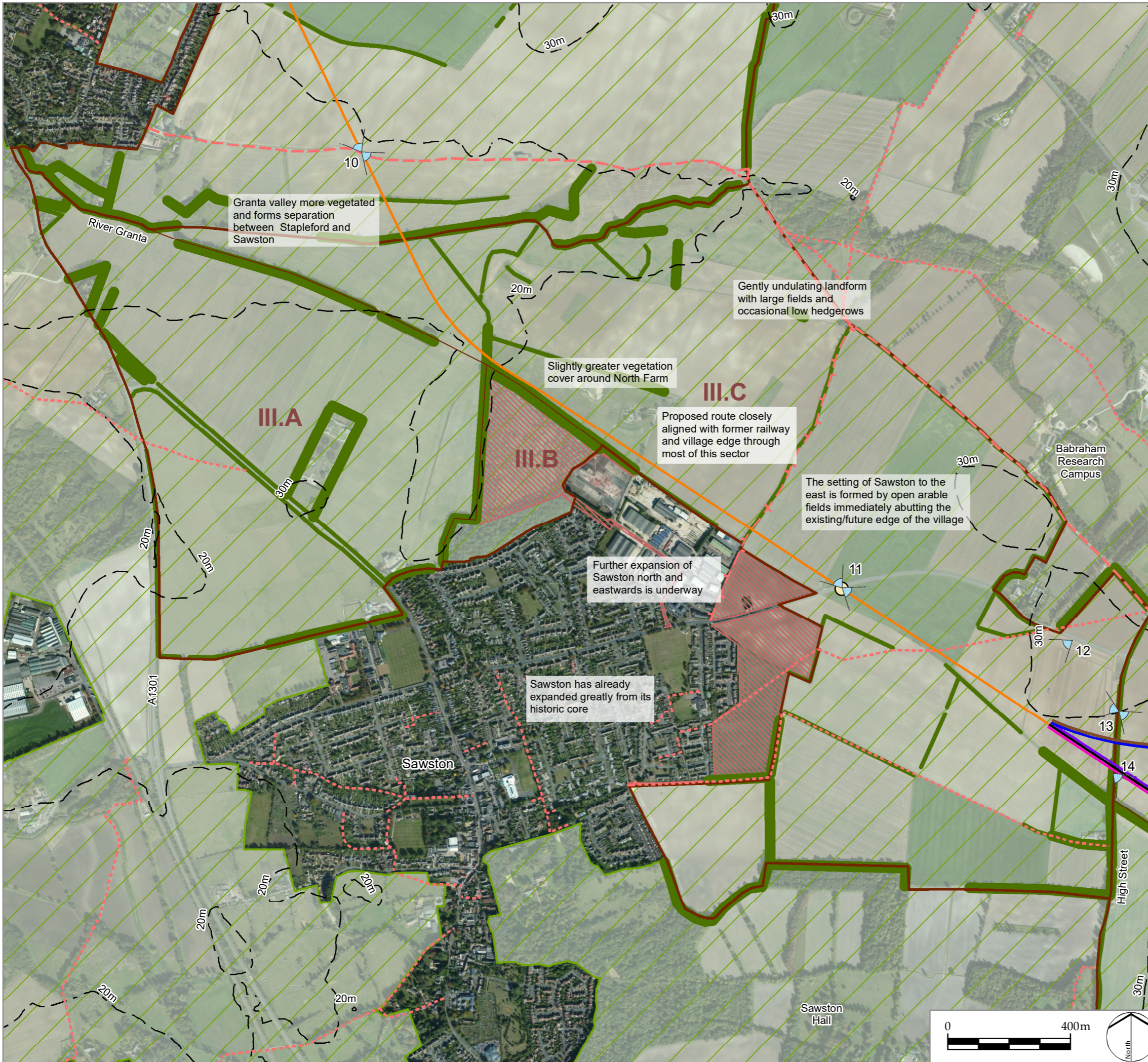
**DWG. NO. 7290\_013**

No dimensions are to be scaled from this drawing.  
All dimensions are to be checked on site.  
Area measurements for indicative purposes only.

© LDA Design Consulting Ltd. Quality Assured to BS EN ISO 9001 : 2008

Sources: Esri, Cambridge City Council, Mott Macdonald, 5th Studio





**LEGEND**

- Proposed GCP Route
- Proposed Purple Route (Site A)
- Proposed Pink Route (Site B)
- Proposed Brown Route (Site B)
- Proposed Black Route (Site C)
- Proposed Blue Route (Site C)
- Proposed Stop Locations
- Green Belt Boundary
- Developments under Construction/Permitted
- Assessment Sectors
- II.A Assessment Sub Areas
- ..... Footpath
- - - - - Bridleway
- + + + Byway
- + + + Restricted Byway
- Clipped hedgerow
- Tall hedgerow or tree/woodland belt
- ◁ Photograph locations

# LDĀ DESIGN

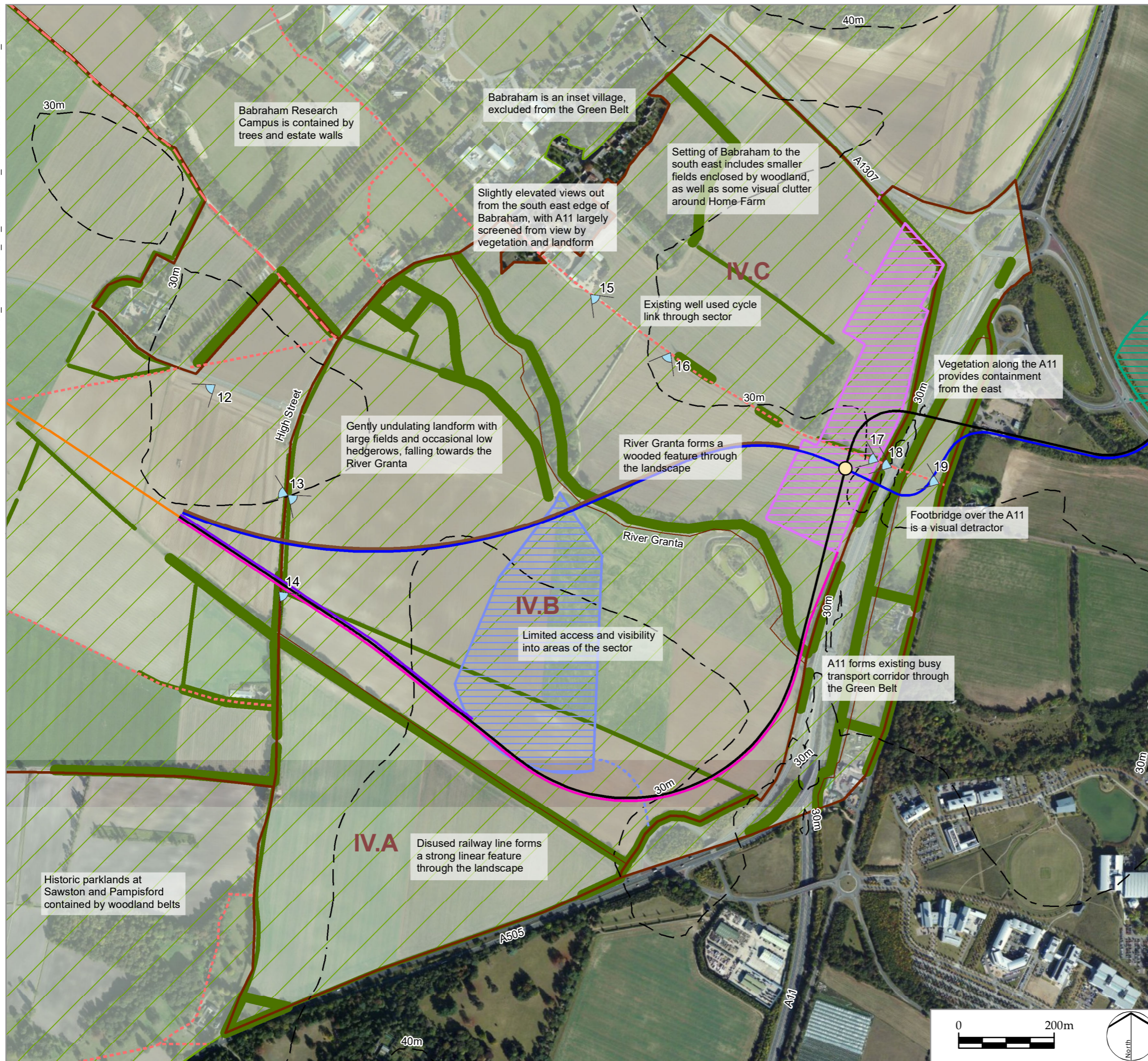
PROJECT TITLE  
CAMBRIDGE SOUTH EAST TRANSPORT

DRAWING TITLE  
**Figure 14:  
Sector III Analysis**

ISSUED BY	Peterborough	T: 01733 310 471
DATE	May 2020	DRAWN MSo
SCALE @A3	1:12,500	CHECKED RK
STATUS	Final	APPROVED ChC

**DWG. NO. 7290\_014**

No dimensions are to be scaled from this drawing.  
All dimensions are to be checked on site.  
Area measurements for indicative purposes only.  
© LDA Design Consulting Ltd. Quality Assured to BS EN ISO 9001 : 2008  
Sources: Esri, Cambridge City Council, Mott Macdonald, 5th Studio



- LEGEND**
- Proposed GCP Route
  - Proposed Purple Route (Site A)
  - Proposed Pink Route (Site B)
  - Proposed Brown Route (Site B)
  - Proposed Black Route (Site C)
  - Proposed Blue Route (Site C)
  - Proposed Stop Locations
  - Proposed Travel Hub Site A
  - Proposed Travel Hub Site B
  - Proposed Travel Hub Site C
  - - - - Access to Proposed Travel Hub Site A
  - - - - Access to Proposed Travel Hub Site B
  - - - - Access to Proposed Travel Hub Site C
  - Green Belt Boundary
  - Assessment Sectors
  - I.A Assessment Sub Areas
  - - - - Footpath
  - - - - Bridleway
  - Clipped hedgerow
  - Tall hedgerow or tree/woodland belt
  - ◁ Photograph locations

# LDĀ DESIGN

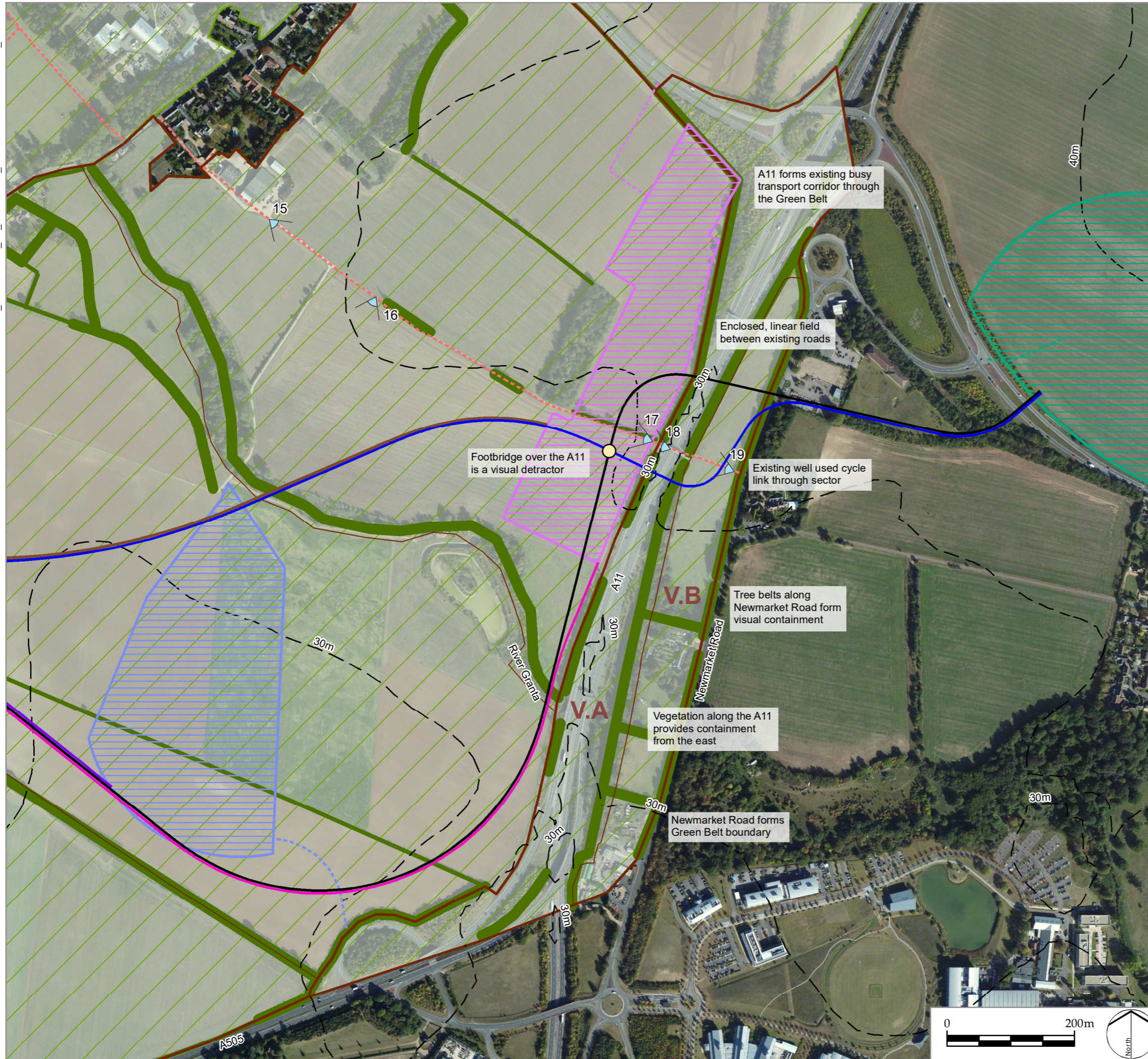
PROJECT TITLE  
**CAMBRIDGE SOUTH EAST TRANSPORT**

DRAWING TITLE  
**Figure 15:  
 Sector IV Analysis**

ISSUED BY	Peterborough	T: 01733 310 471
DATE	May 2020	DRAWN MSO
SCALE @A3	1:8,000	CHECKED RK
STATUS	Final	APPROVED ChC

**DWG. NO. 7290\_015**

No dimensions are to be scaled from this drawing.  
 All dimensions are to be checked on site.  
 Area measurements for indicative purposes only.  
 © LDA Design Consulting Ltd. Quality Assured to BS EN ISO 9001 : 2008  
 Sources: Esri, Cambridge City Council, Mott Macdonald, 5th Studio



- LEGEND**
- Proposed Purple Route (Site A)
  - Proposed Pink Route (Site B)
  - Proposed Brown Route (Site B)
  - Proposed Black Route (Site C)
  - Proposed Blue Route (Site C)
  - Proposed Stop Locations
  - Proposed Travel Hub Site A
  - Proposed Travel Hub Site B
  - Proposed Travel Hub Site C
  - Access to Proposed Travel Hub Site A
  - Access to Proposed Travel Hub Site B
  - Access to Proposed Travel Hub Site C
  - Green Belt Boundary
  - Assessment Sectors
  - II.A Assessment Sub Areas
  - Footpath
  - Clipped hedgerow
  - Tall hedgerow or tree/woodland belt
  - ▲ Photograph locations

# LDĀ DESIGN

PROJECT TITLE  
**CAMBRIDGE SOUTH EAST TRANSPORT**

DRAWING TITLE  
**Figure 16:  
 Sector V Analysis**

ISSUED BY	Peterborough	T: 01733 310 471
DATE	May 2020	DRAWN MSo
SCALE @A3	1:6,000	CHECKED RK
STATUS	Final	APPROVED ChC

**DWG. NO. 7290\_016**

No dimensions are to be scaled from this drawing.  
 All dimensions are to be checked on site.  
 Area measurements for indicative purposes only.  
 © LDA Design Consulting Ltd. Quality Assured to BS EN ISO 9001 : 2008  
 Sources: Esri, Cambridge City Council, Mott Macdonald, 5th Studio

X:\JOBS\7290\_Cambridge\_to\_Haverhill\_RTR\6docs\Photopanels\7290\_017\_VP1\_2.indd



Photograph 1: Footpath to Nine Wells Local Nature Reserve, north of Nine Wells  
 This viewpoint gives low level views westwards towards the existing edge of Cambridge, across the London-Cambridge railway line that forms a key approach to the city from the south. This farmland, which is also immediately adjacent to the southern edge of Cambridge at the Biomedical Campus, forms part of the Supportive landscape south of Cambridge.  
 The route option proposed by the Greater Cambridge Partnership would enter the field at the end of the hedgerow along the right hand side of the view and run around the northern end of the field, before running alongside the railway line.



Photograph 2: Footpath to Nine Wells Local Nature Reserve, south of Cambridge Biomedical Campus  
 This viewpoint gives low level views from the southern edge of Cambridge out towards White Hill, Clarke's Hill and the Gog Magog Hills in the distance.  
 The Robinson Way Alternative route option proposed would run from approximately the location of the viewpoint and cross the foreground field, reaching Granham's Road at the end of a clipped hedgerow that is visible in front of the woodland around White Hill Farm.

ISSUED BY Peterborough t: 01733 310471  
 DATE May 2020 DRAWN MSo  
 SCALE@A3 NTS CHECKED RK  
 STATUS Final APPROVED CC

**DWG. NO. 7290\_017\_VP1\_2**

PROJECT TITLE  
**CAMBRIDGE SOUTH EAST TRANSPORT**

DRAWING TITLE  
**Figure 17:  
 Photographs 1 and 2**

X:\JOBS\7290\_Cambridge\_to\_Haverhill\_RTR\6docs\Photopanels\7290\_018\_VP3\_4.indd



Photograph 3: Granham's Road, east of White Hill Farm looking north  
 This viewpoint gives elevated views from White Hill towards the southern edge of Cambridge and the Biomedical Campus. The mixed urban edge of Cambridge is visible, including numerous buildings at the Biomedical Campus and housing at the Ninewells development. The Robinson Way Alternative route option would leave the Cambridge Biomedical Campus towards the centre of the group of Campus buildings visible in the photograph, crossing the arable field in the foreground to cross Granham's Road approximately at the location of the viewpoint.



Photograph 4: Granham's Road, west of White Hill Farm looking north  
 This viewpoint gives level views across farmland towards the southern edge of Cambridge. The rising landform of White Hill prevents visibility of much of the Cambridge Biomedical Campus. The London to Cambridge railway line is visible in the left of the view, forming a key approach to Cambridge. The route option proposed by the Greater Cambridge Partnership would run along the western side of the low hedgerow through the middle of the view, to cross Granham's Road adjacent to the access to White Hill Farm.

ISSUED BY Peterborough t: 01733 310471  
 DATE May 2020 DRAWN MSo  
 SCALE@A3 NTS CHECKED RK  
 STATUS Final APPROVED CC

DWG. NO. 7290\_018\_VP3\_4

PROJECT TITLE  
 CAMBRIDGE SOUTH EAST TRANSPORT

DRAWING TITLE  
 Figure 18:  
 Photographs 3 and 4

X:\JOBS\7290\_Cambridge\_to\_Haverhill\_RTR\6docs\Photopanels\7290\_019\_VP5\_6.indd



Photograph 5: Granham's Road, west of White Hill Farm looking south

This viewpoint gives low level views across arable farmland towards the eastern edge of Great Shelford. Clarke's Hill rises up to the left of the view, with a narrow gap of lower ground between the edge of the village and the wooded higher ground.

The route option proposed by the Greater Cambridge Partnership would cross the arable field from the left of the view and pass through the existing gap in the hedgerow in the middle distance, before continuing to the hedgerow beyond. The Robinson Way Alternative route option would cut through the left hand side of the hedgerow in the middle distance and run along the side of the Clarke's Hill woodland to meet the next hedgerow at the same point as the Greater Cambridge Partnership route.



Photograph 6: Granham's Road, east of White Hill Farm looking south

This viewpoint gives elevated views across arable farmland towards the eastern edge of Great Shelford. The village is located on lower lying land in the Cam/Granta valley and appears well vegetated. Low lying farmland provides separation between the village and Clarke's Hill. The Robinson Way Alternative route option would cross Granham's Road in the vicinity of the viewpoint, before running down the slope to the corner of the woodland on Clarke's Hill and cutting through the hedgerow. The Greater Cambridge Partnership route option would cross Granham's Road on the lower ground at the bottom of White Hill and run across the arable field on lower ground before passing through the hedgerow at the existing gap.

ISSUED BY	Peterborough	t: 01733 310471	
DATE	May 2020	DRAWN	MSo
SCALE@A3	NTS	CHECKED	RK
STATUS	Final	APPROVED	CC

DWG. NO. 7290\_019\_VP5\_6

PROJECT TITLE  
CAMBRIDGE SOUTH EAST TRANSPORT

DRAWING TITLE  
Figure 19:  
Photographs 5 and 6

X:\JOBS\7290\_Cambridge\_to\_Haverhill\_RTR\6docs\Photopanels\7290\_020\_VP7\_8.indd



Photograph 7: Hinton Way, Great Shelford, looking north  
 This viewpoint is located in the lower lying gap between Great Shelford and Clarke's Hill. It looks along the gap towards White Hill and the southern edge of Cambridge in the distance.  
 The route option proposed by the Greater Cambridge Partnership would cross the adjacent arable field, having passed through the gap in the hedgerow in the middle distance. The Robinson Way Alternative route option would require a gap to be made in the hedgerow adjacent to the Clarke's Hill woodland, before crossing the field.



Photograph 8: Hinton Way, Great Shelford, looking south  
 This viewpoint is located in the lower lying gap between Great Shelford and Clarke's Hill. It looks up the sloping landform towards the wooded crest of Fox Hill, from the eastern edge of Great Shelford.  
 The proposed Greater Cambridge Partnership and Robinson Way Alternative route options would have joined by this point. The route would pass through the small field in the foreground and run up the slope towards the group of coniferous vegetation in the skyline, before passing over the crest of the landform. A proposed stop would be located in the small field.

ISSUED BY Peterborough t: 01733 310471  
 DATE May 2020 DRAWN MSo  
 SCALE@A3 NTS CHECKED RK  
 STATUS Final APPROVED CC

**DWG. NO. 7290\_020\_VP7\_8**

PROJECT TITLE  
**CAMBRIDGE SOUTH EAST TRANSPORT**

DRAWING TITLE  
**Figure 20:  
 Photographs 7 and 8**

X:\JOBS\7290\_Cambridge\_to\_Haverhill\_RTR\6docs\Photopanels\7290\_021\_VP9.indd



Photograph 9: Haverhill Road, Stapleford, looking east

This viewpoint is located on the eastern edge of Stapleford on lower lying land before the landform begins to slope up towards Magog Down. The view looks along lower lying land towards the Granta Valley, as well as Babraham and higher ground beyond. The proposed route would cross the field in the foreground of the view, with a stop located to the left hand side of the view, before passing behind properties on the eastern edge of Stapleford.

ISSUED BY	Peterborough	t: 01733 310471	
DATE	May 2020	DRAWN	MSo
SCALE@A3	NTS	CHECKED	RK
STATUS	Final	APPROVED	CC

**DWG. NO. 7290\_021\_VP9**



X:\JOBS\7290\_Cambridge\_to\_Haverhill\_RTR\6docs\Photopanels\7290\_022\_VP10.mxd



Photograph 10: Bridleway east of Stapleford looking north  
 This viewpoint is located in the lower lying Granta valley and looks towards the mixed edge of Stapleford in the left of the view and the wooded hills at Fox Hill, Clarke's Hill and White Hill in the right of the view. The landform remains lower lying north east of Stapleford, before rising up to the hills.  
 The proposed route would cross the field in the foreground, from approximately the location of the viewpoint to meet Haverhill Road to the right of the last properties on the edge of Stapleford.



Photograph 10: Bridleway east of Stapleford looking south  
 In this direction the view looks along the valley of the River Granta, with its layers of riparian vegetation creating a level of enclosure. Sawston is contained by vegetation in the view, with limited built development currently visible.  
 The proposed route would cross the field in the foreground from approximately the location of the viewpoint, then crossing the River Granta and continuing towards the wooded edge of Sawston.

ISSUED BY Peterborough t: 01733 310471  
 DATE May 2020 DRAWN MSo  
 SCALE@A3 NTS CHECKED RK  
 STATUS Final APPROVED CC

**DWG. NO. 7290\_022\_VP10**

PROJECT TITLE  
**CAMBRIDGE SOUTH EAST TRANSPORT**

DRAWING TITLE  
**Figure 22:  
 Photograph 10**

X:\JOBS\7290\_Cambridge\_to\_Haverhill\_RTR\Docs\Photopanel\7290\_023\_VP11.indd



Photograph 11: Cycleway along Babraham Road, Sawston, looking north

This viewpoint is located on slightly elevated land between the valleys of the River Granta and the River Cam, on the eastern edge of Sawston. Looking north, ongoing development on the edge of Sawston, which is extending the village further east, is visible. Large scale arable farmland is located immediately adjacent to the edge of the village, divided by occasional hedgerows, with the higher ground of the foothills of the Gog Magogs visible in the distance. The route of the disused railway line is no longer clearly distinguishable in this direction. The proposed route would run along the edge of Sawston, offset slightly from the edge of the village and the former alignment of the disused railway line, to approximately the location of the viewpoint.



Photograph 11: Cycleway along Babraham Road, Sawston, looking south

Looking south, large scale arable farmland remains the main land use. The edge of the Babraham Research Campus is visible to the left, marked by mature trees. In the distance, the woodland associated with the historic parks at Sawston and Pampisford are visible, as is higher ground beyond the A11. The route of the disused railway line is partially delineated by an intermittent hedgerow. The proposed route would run from approximately the location of the viewpoint, offset slightly from the edge of the village and the former alignment of the disused railway line. A stop is proposed to the right of the viewpoint, between the route and the village.

ISSUED BY	Peterborough	t: 01733 310471	
DATE	May 2020	DRAWN	MSo
SCALE@A3	NTS	CHECKED	RK
STATUS	Final	APPROVED	CC

**DWG. NO. 7290\_023\_VP11**

PROJECT TITLE  
CAMBRIDGE SOUTH EAST TRANSPORT

DRAWING TITLE  
Figure 23:  
Photograph 11

X:\JOBS\7290\_Cambridge\_to\_Haverhill\_RTR\6docs\Photopanel17290\_024\_VP12.mxd



Photograph 12: Sawston Road, west of Babraham Research Campus, looking south  
 This viewpoint is located on slightly elevated land between the valleys of the River Granta and the River Cam, to the west of Babraham and the Babraham Research Campus. Looking south, the route of the disused railway line is clearly distinguishable as a wooded corridor in the middle distance, lower down the valley slopes.  
 The proposed route options would be located just beyond the landform, offset from the alignment of the disused railway line. Travel Hub Site A would be visible in the distance, beyond High Street, with the different route options just visible beyond High Street as well.



Photograph 12: Sawston Road, east of Babraham Research Campus, looking west  
 Looking west, the route of the disused railway line is partially delineated by an intermittent hedgerow. In the distance, ongoing development on the edge of Sawston can be seen, extending the village further east. Large scale arable farmland remains the main land use. Wooded areas at Sawston Hall form the horizon for most of the view.  
 The proposed route option would be visible running through the arable field, offset slightly from the alignment of the disused railway line. The proposed stop on the edge of Sawston would also be visible adjacent to the edge of the village.

ISSUED BY Peterborough t: 01733 310471  
 DATE May 2020 DRAWN MSo  
 SCALE@A3 NTS CHECKED RK  
 STATUS Final APPROVED CC

DWG. NO. 7290\_024\_VP12

PROJECT TITLE  
 CAMBRIDGE SOUTH EAST TRANSPORT

DRAWING TITLE  
 Figure 24:  
 Photograph 12

X:\JOBS\7290\_Cambridge\_to\_Haverhill\_RTR\6docs\Photopanel17290\_025\_VP13.mdd



Photograph 13: High Street, south of Babraham, looking south

This viewpoint is located on the road between Babraham and the A11/A505 roundabout. It looks over roadside vegetation and across undulating arable farmland. The disused railway line is delineated by a tree belt. Vegetation along the A11 is visible and the footbridge over the A11 can be glimpsed through vegetation along the River Granta.

The proposed brown and blue route options would run through the middle of the field in the foreground, cutting through vegetation to the right of the view and crossing the River Granta to the left of the view. The proposed pink and black route options would run adjacent to the vegetation along the A11 in the distance. Proposed Travel Hub Site A would be located on the higher ground in the middle distance of the view.



Photograph 13: High Street, south of Babraham, looking west

Looking west, the route of the disused railway line is partially delineated by an intermittent hedgerow. In the distance, ongoing development on the edge of Sawston can be seen, extending the village further east. Large scale arable farmland is the main land use.

The proposed pink, purple and black route options would run adjacent to the disused railway line, with the proposed blue and brown route options located further east. All route options would combine into a single proposed route options in the vicinity of the end of the wooded stretch of the disused railway line. The proposed stop on the edge of Sawston would be largely screened by the landform.

ISSUED BY	Peterborough	t: 01733 310471	
DATE	May 2020	DRAWN	MSo
SCALE@A3	NTS	CHECKED	RK
STATUS	Final	APPROVED	CC

DWG. NO. 7290\_025\_VP13

PROJECT TITLE  
CAMBRIDGE SOUTH EAST TRANSPORT

DRAWING TITLE  
Figure 25:  
Photograph 13

X:\JOBS\7290\_Cambridge\_to\_Haverhill\_RTR\6docs\Photopanels\7290\_026\_VP14\_15.indd



Photograph 14: High Street, adjacent to Shelford to Haverhill disused railway line  
 This viewpoint is located on the road between Babraham and the A11/A505 roundabout. It looks through a gap in roadside vegetation and across undulating arable farmland. The disused railway line is delineated by a tree belt and the landform prevents visibility of the A11. The proposed pink, purple and black route options would run from the viewpoint, along the hedgerow to the left of the view and over the landform that forms the current horizon. The proposed brown and blue route options would be located beyond the hedgerow, out of view. Proposed Travel Hub Site A would be located on the higher ground and extend beyond the hedgerow to the left of the view.



Photograph 15: Footpath and cycleway on southern edge of Babraham, looking south east  
 This viewpoint is located on the edge of the village and looks across arable farmland towards the A11. The landform combines with a low clipped hedgerow in the middle distance and vegetation along the A11 to prevent visibility of the A11 itself. Proposed Travel Hub Site B would be located on lower ground adjacent to the A11, largely screened from view by the landform, as would the proposed pink, purple and black route options. The proposed brown and blue route options would be located beyond the hedgerow in the middle distance, passing through in a gap in vegetation along the River Granta. The existing footpath and cycleway would potentially be upgraded as part of the proposals.

ISSUED BY Peterborough t: 01733 310471  
 DATE May 2020 DRAWN MSo  
 SCALE@A3 NTS CHECKED RK  
 STATUS Final APPROVED CC

DWG. NO. 7290\_026\_VP14\_15

PROJECT TITLE  
 CAMBRIDGE SOUTH EAST TRANSPORT

DRAWING TITLE  
 Figure 26:  
 Photographs 14 and 15

X:\JOBS\7290\_Cambridge\_to\_Haverhill\_RTR\6docs\Photopanels\7290\_027\_VP16.indd



Photograph 16: Footpath and cycleway south of Babraham, looking south east

This viewpoint is located on the footpath and cycleway from Babraham towards Granta Park. The view in this direction looks across undulating arable farmland towards the treed Granta valley and the A11, which is largely screened from view by roadside vegetation. Proposed Travel Hub Site B would be located on lower ground adjacent to the A11, from the vegetation along the River Granta at the centre of the view and continuing behind the tree belt at the left of the view. The proposed pink and black route options would run adjacent to the A11, continuing over the River Granta and around the edge of the large field on the opposite side of the river, although largely sitting behind the landform. The proposed brown and blue route options would cross the centre of the view, with a possible stop located along them as part of some route options. The existing footpath and cycleway would potentially be upgraded as part of the proposals.



Photograph 16: Footpath and cycleway south of Babraham, looking south west

The view in this direction continues to look across the wooded valley of the River Granta, with undulating landform glimpsed beyond. The southern edge of Babraham is also glimpsed, with trees associated with the Babraham Research Campus visible beyond. The proposed brown and blue route options would cross the River Granta in the approximate location of the existing gap in vegetation along the river. Proposed Travel Hub Site A would be located on the rising landform on the other side of the River Granta.

ISSUED BY	Peterborough	t: 01733 310471	
DATE	May 2020	DRAWN	MSo
SCALE@A3	NTS	CHECKED	RK
STATUS	Final	APPROVED	CC

**DWG. NO. 7290\_027\_VP16**

PROJECT TITLE  
CAMBRIDGE SOUTH EAST TRANSPORT

DRAWING TITLE  
Figure 27:  
Photograph 16

X:\JOBS\7290\_Cambridge\_to\_Haverhill\_RTR\6docs\Photopanel17290\_028\_VP17.indd



Photograph 17: Footpath and cycleway adjacent to A11, looking south west  
 The view in this direction looks across arable farmland towards the wooded valley of the River Granta, with undulating landform glimpsed beyond. The southern edge of Babraham is screened by the woodland towards the right hand edge of the view. Proposed Travel Hub Site B would be located immediately in front of the viewpoint, running almost to the vegetation along the River Granta. The proposed pink and black route options would cross the River Granta at the left hand side of the view and run along the edge of the field. The proposed brown and blue route options would cross the River Granta further right in the view and run through the middle of the field, with the blue route crossing the A11 on a bridge to the left of the viewpoint. Proposed Travel Hub Site A would be located on the rising landform on the other side of the River Granta.



Photograph 17: Footpath and cycleway adjacent to A11, looking north  
 The view in this direction looks across arable farmland towards woodland and the vegetation along the A1307. The southern edge of Babraham is screened by the woodland. Proposed Travel Hub Site B would be located immediately in front of the viewpoint, running around the southern edge of the woodland and up to the edge of the vegetation along the A1307. The proposed black route options would cross the A11 on a bridge to the right of the viewpoint.

ISSUED BY	Peterborough	t: 01733 310471	
DATE	May 2020	DRAWN	MSo
SCALE@A3	NTS	CHECKED	RK
STATUS	Final	APPROVED	CC

DWG. NO. 7290\_028\_VP17

PROJECT TITLE  
 CAMBRIDGE SOUTH EAST TRANSPORT

DRAWING TITLE  
 Figure 28:  
 Photograph 17

X:\JOBS\7290\_Cambridge\_to\_Haverhill\_RTR\6docs\Photopanels\7290\_029\_VP18.mdd



Photograph 18: Footbridge over the A11, looking south west

The view in this direction looks across arable farmland towards the wooded valley of the River Granta, with undulating landform glimpsed beyond. The southern edge of Babraham is screened by the woodland towards the right hand edge of the view. Proposed Travel Hub Site B would be located immediately in front of the viewpoint, running almost to the vegetation along the River Granta. The proposed pink and black route options would be screened by vegetation along the A11 at the left hand side of the view. The proposed brown and blue route options would cross the River Granta further right in the view and run through the middle of the field, with the blue route crossing the A11 on a bridge to the left of the viewpoint. Proposed Travel Hub Site A would be located on the rising landform on the other side of the River Granta.



Photograph 18: Footbridge over the A11, looking north

The view in this direction looks across arable farmland towards woodland and the vegetation along the A1307. The southern edge of Babraham is screened by the woodland. Proposed Travel Hub Site B would be located immediately in front of the viewpoint, running around the southern edge of the woodland and up to the edge of the vegetation along the A1307. The proposed black route options would cross the A11 on a bridge to the right of the viewpoint.

ISSUED BY	Peterborough	t: 01733 310471	
DATE	May 2020	DRAWN	MSo
SCALE@A3	NTS	CHECKED	RK
STATUS	Final	APPROVED	CC

**DWG. NO. 7290\_029\_VP18**

PROJECT TITLE  
CAMBRIDGE SOUTH EAST TRANSPORT

DRAWING TITLE  
Figure 29:  
Photograph 18



X:\JOBS\7290\_Cambridge\_to\_Haverhill\_RTR\6docs\Photopanel17290\_030\_VP19.mdd



Photograph 19: Footpath and cycleway adjacent to Newmarket Road, looking south west  
 This viewpoint is located in a narrow strip of land between the A11 and Newmarket Road, the old A11. It looks across an area of disused land towards the vegetation along the A11. The proposed blue route would cross the A11 on a bridge towards the right hand side of the view, before turning right and running along the field.



Photograph 19: Footpath and cycleway adjacent to Newmarket Road, looking north  
 This viewpoint is located in a narrow strip of land between the A11 and Newmarket Road, the old A11. It looks across an area of disused land towards the vegetation along the A11. Gantries along the A11 are visible above the vegetation. The footpath/cycleway is visible as worn route across the field, with the footbridge over the A11 also visible. The proposed blue route would cross the A11 on a bridge off the left hand side of the view, before turning right and running along the field. The proposed black route would cross the A11 on a bridge half way between the existing bridge and the gantry.

ISSUED BY Peterborough t: 01733 310471  
 DATE May 2020 DRAWN MSo  
 SCALE@A3 NTS CHECKED RK  
 STATUS Final APPROVED CC

DWG. NO. 7290\_030\_VP19

PROJECT TITLE  
 CAMBRIDGE SOUTH EAST TRANSPORT

DRAWING TITLE  
 Figure 30:  
 Photograph 19