

Appendix A Summary of bus services

Route Number	Route Description	Weekday Frequency in Off-Peak	Weekday Frequency in Peak Period	Weekday First / Last Service	Saturday Frequency	Sunday Frequency
16A	Great Thurlow, Fulborne, Teversham, Cambridge City Centre	One per day	-	16:54	No Service	No Service
75	Cambridge City Centre, Long Standing, St. Ives	One per day	-	16:17	No Service	No Service
Citi 7	Cambridge City Centre, Sawston, Saffron Walden	3 per hour	6 per hour	07:20 / 23:39	3 per hour	2 per hour
Busway A	Trumpington, Cambridge, St. Ives	4 per hour	4 per hour	06:46 / 20:16	4 per hour	No Service
Busway C	Rail Station – Central Cambridge - Longstanton - Somersham	One per day	-	16:18	No Service	No Service

Summary of bus services accessible from existing stops at Robinson Way

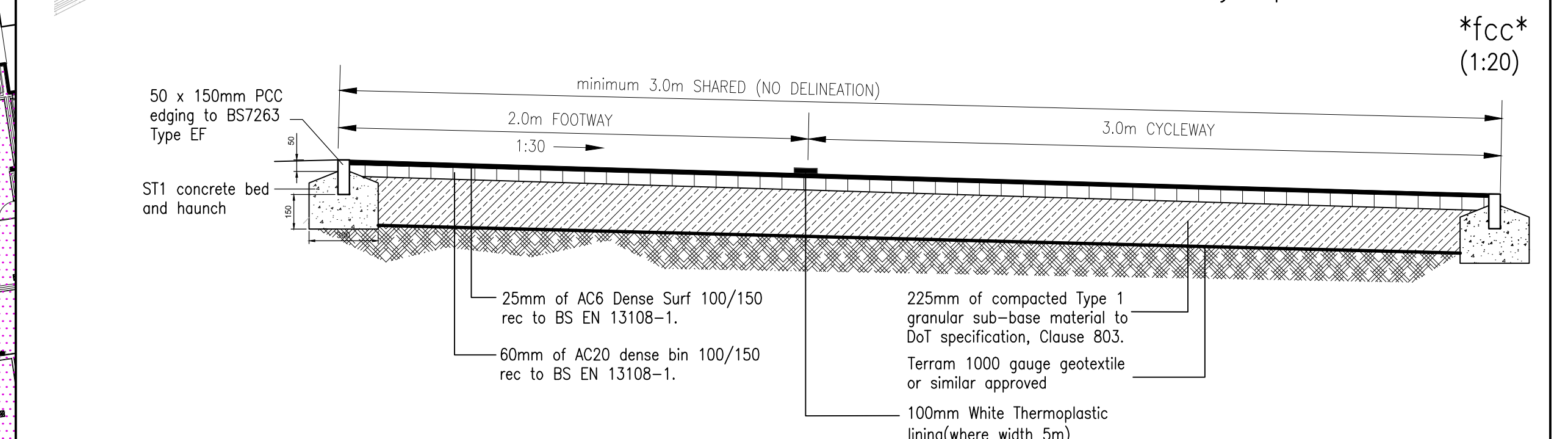
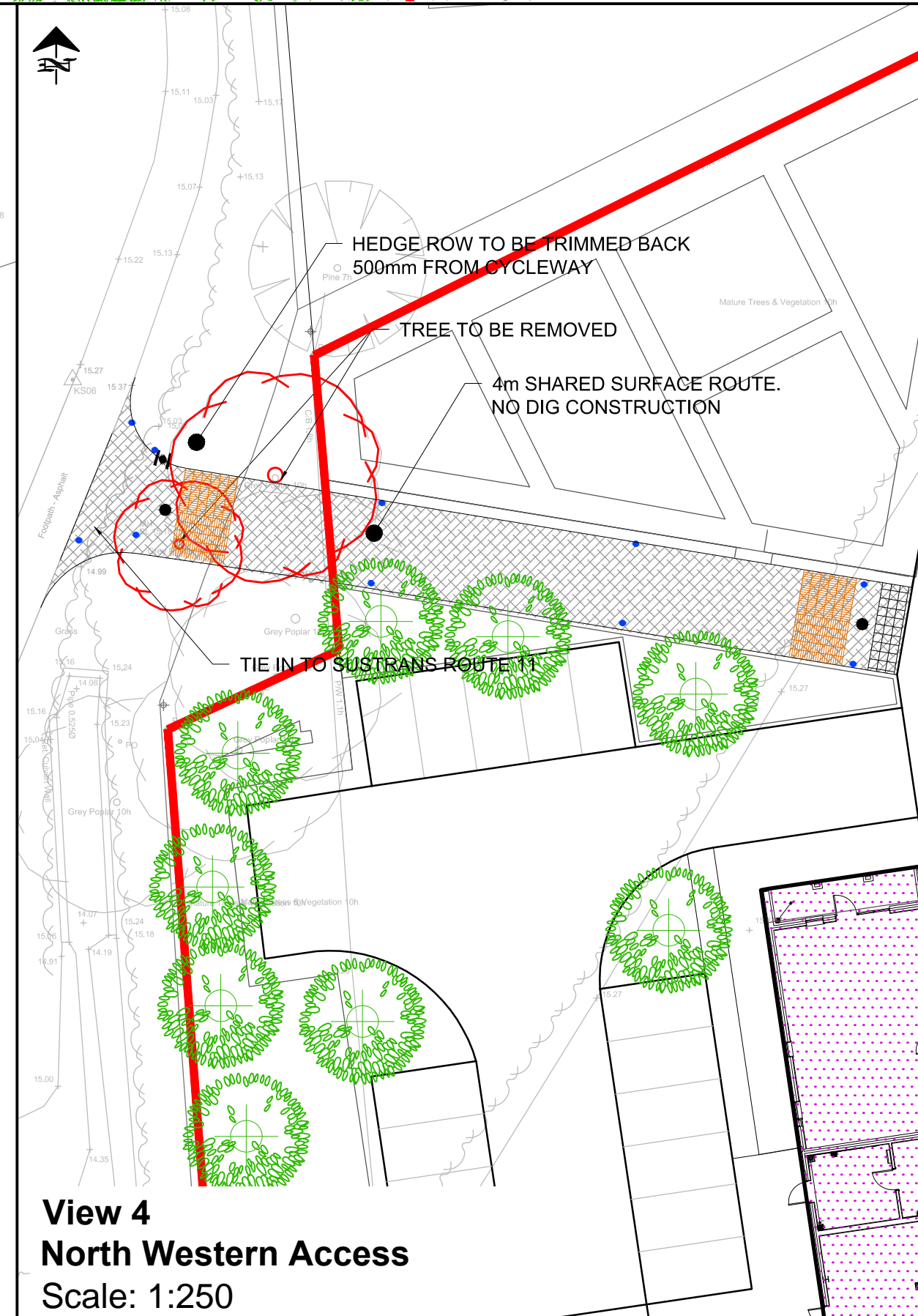
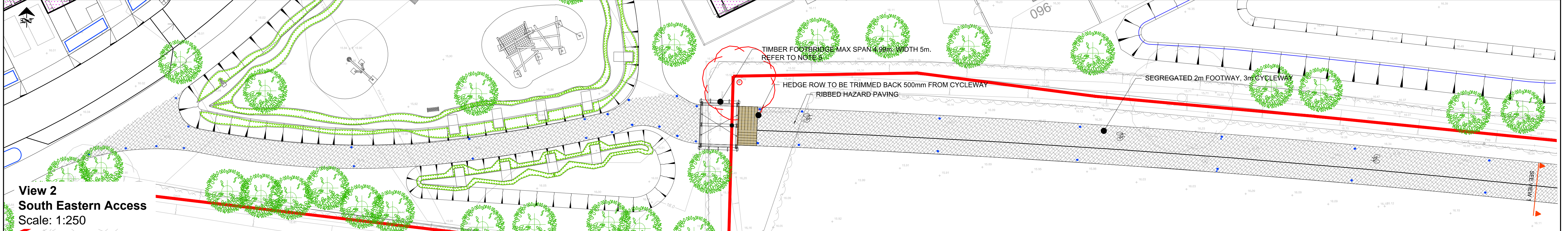
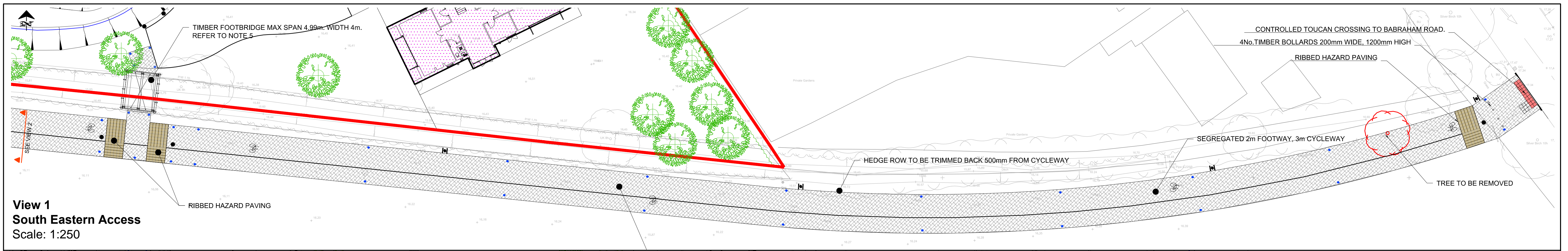
Preliminary Site Access Study
Proposed Extension to Bio-Medical Campus, Cambridge

Route Number	Route Description	Weekday Frequency	Weekday Frequency in Peak Period	Weekday First / Last Service	Saturday Frequency	Sunday Frequency
13	Cambridge Railway Station, Drummer Bus Station	One per hour	2 per hour	07:00-22:18	One per hour	One per hour
13A	Cambridge Railway Station, Drummer Bus Station	One per hour	One per hour	06:30-17:28	One per hour	No Service
13B	Haverhill - Cambridge	One per day	-	07:47	No Service	No Service
16A	Cambridge – Long Rd. – Teversham – Fulborne – Balsham – Great Thurlow	One per day	-	08:05	No Service	No Service
31	Barley – Fowlmere – Stapleford - Cambridge	One per day	One per hour	08:05	One per day	No Service
115	Addenbrooke Hospital – Newmarket Park & Ride	One per hour	One per hour	08:50-17:50	One per hour	No Service
PR3	Cambridge – Brabraham Road P&R – Milton P&R	6 per hour	6 per hour	07:11-20:25	6 per hour	4 per hour
114	Addenbrookes – Beehive – Grafton - Cambridge	One per hour	-	09:30-13:30	One per hour	No Service
X13	Kedington – Haverhill – Linton - Cambridge	3 per day	One per hour	07:16-08:26	No Service	No Service
132	Cambridge – Duxford – Saffron Walden	No Service	No Service	No Service	No Service	One per hour
Citi 1	Fulborne – Addenbrookes – City Centre	6 per hour	6 per hour	06:30-00:09	6 per hour	2 per hour
Citi 2	Addenbrookes – City Centre – Chesterton – Science Park - Waterbeach	6 per hour	6 per hour	06:49-22:39	6 per hour	2 per hour
Citi 7	Saffron Walden – Sawston – Cambridge	3 per hour	3 per hour	06:42-23:42	3 per hour	2 per hour
UNI4	Addenbrooke's – City Centre – West Cambridge	3 per hour	3 per hour	07:20-19:40	No Service	No Service

Summary of bus services accessible from bus station at main access to the Addenbrooke's Campus

Appendix B ff site cycle links works

PEP Drawing 404511/206



THIS DRAWING IS COPYRIGHT AND MUST NOT BE REPRODUCED WHOLLY OR IN PART WITHOUT PRIOR PERMISSION.

NOTES:

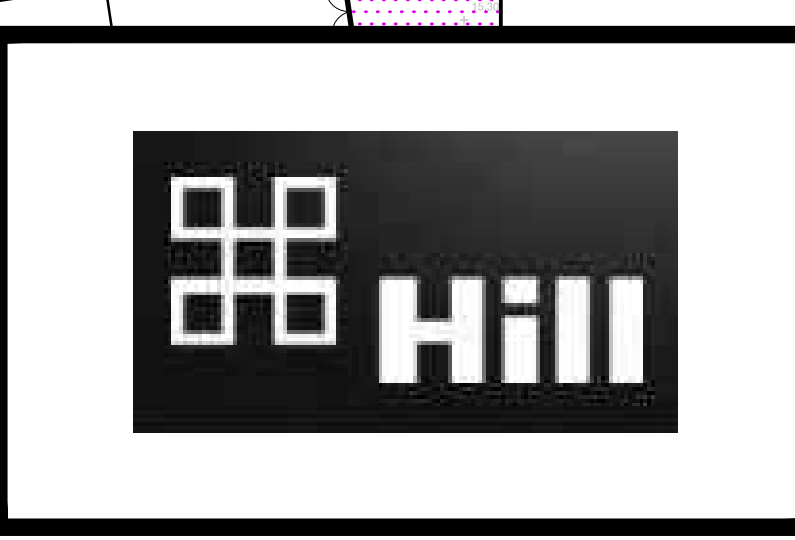
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT DETAILS, DRAWINGS, SPECIFICATIONS, REPORTS AND OTHER DOCUMENTS ISSUED BY THE ARCHITECT AND OTHER DESIGN TEAM MEMBERS.
- REPORT ANY DISCREPANCIES IMMEDIATELY AND AWAIT FURTHER INSTRUCTIONS BEFORE PROCEEDING WITH ANY ASSOCIATED CONSTRUCTION WORKS. IF A DETAIL APPEARS UNCLEAR, OR THERE IS ANY DOUBT, THEN CONTACT PEP FOR FURTHER ADVICE.

- CONTRACTORS ARE NOT TO WORK TO THIS DRAWING UNLESS IT IS AT FOR CONSTRUCTION STATUS, AS THE DESIGN MAY NOT HAVE BEEN FINALISED.
- DO NOT SCALE FROM THIS DRAWING. WORK TO GIVEN DIMENSIONS ONLY.
- TIMBER FOOTBRIDGES TO BE DESIGNED TO BD29/04 AND CONSTRUCTED OF HARD WOOD. THE PARAPET HEIGHT WILL BE 1.4M. THE SURFACE OF THE BRIDGE WILL BE TREATED WITH A HIGH GRIP SURFACE SUCH AS A POLYURETHANE RESIN.
- APPROPRIATE SIGNAGE TO CHAPTER 5 OF THE TRAFFIC SIGNS MANUAL AND TSRGD 2002 TO BE PROVIDED
- THIS DRAWING REPLACES THE PREVIOUS DRAWING 404511-160F

KEY:

- FLEXIBLE FOOTWAY
25mm DBM Surface Course
60mm DBM Binder Course
225mm TYPE 1 SUB-BASE
1000 Gauge geotextile
- Tree to be removed
- Hedge row to be removed/Cut back
- Cycleway solar stud, maximum 18m centres both sides of cycleway. Clearview Traffic F Type stud installed as per manufacturers instructions. Studs to be installed where street lighting does not exist.

REV	BY	CHK	AMENDMENTS	DATE



APPROVAL

STATUS	CHK'D	APR'D			
PRELIMINARY					
FOR COMMENT					
FOR APPROVAL	BB	BB			
FOR CONSTRUCTION					
FINAL CONSTRUCTION ISSUE					
DRAWN	CPR	CHK'D	BB	APR'D	BB
SCALE	AS SHOWN @ A1		DATE	03.07.13	

PEP
Civil & Structures Ltd

PEP House
Stoney Lane, Bourne End
Hemel Hempstead
Herts, HP1 2SR
Tel: 01442 869400
Fax: 01442 869401
Web: www.pepgroup.co.uk
E-Mail: design@pepgroup.co.uk

CONTRACT
**BELL SCHOOL SITE
CAMBRIDGE**

TITLE
**OFF SITE CYCLE
LINK WORKS**

JOB No
404511

DRG No
206

REV
-



Cambridgeshire County Council

Cambridge Bio-Medical Campus

LANDSCAPE AND VISUAL APPRAISAL

September 2016

FPCR Environment and Design Ltd

Registered Office: Lockington Hall, Lockington, Derby DE74 2RH

Company No. 07128076. [T] 01509 672772 [F] 01509 674565 [E] mail@fpcr.co.uk [W] www.fpcr.co.uk

This report is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without the written consent of FPCR Environment and Design Ltd. Ordnance Survey material is used with permission of The Controller of HMSO, Crown copyright 100018896.

Rev	Issue Status	Prepared / Date	Approved/Date
-	DRAFT	OFD / 20.08.2016	MGH / 12.08.2016
A	Revision A	OFD / 25.08.2016	MGH / 25.08.2016
B	Revision B	OFD / 14.09.2016	MGH / 14.09.2016

CONTENTS

1.0 INTRODUCTION 2

2.0 METHODOLOGY..... 3

3.0 PLANNING POLICY 6

4.0 BASELINE CONDITIONS..... 10

5.0 LANDSCAPE PROPOSALS..... 17

6.0 LANDSCAPE AND VISUAL EFFECTS 18

7.0 SUMMARY AND CONCLUSIONS 23

FIGURES

- Figure 1: Site Location Plan
- Figure 2: Aerial Photograph
- Figure 3: Landscape Character
- Figure 4: Topography Plan
- Figure 5: Designations Plan
- Figure 6: Visual Appraisal
- Figure 7: Photo Viewpoints

1.0 INTRODUCTION

- 1.1 This Landscape and Visual Appraisal (LVA) has been carried out for the proposed land allocation, by FPCR Environment and Design Ltd (FPCR). The purpose of this LVA study is to provide an assessment of the likely landscape and visual effects of the proposed allocation. The landscape and visual effects have been considered in relation to the Indicative Masterplan (7307-L-01).
- 1.2 FPCR are a multi-disciplinary environmental and design consultancy with over 50 years' experience of architecture, landscape, ecology, urban design, masterplanning and environmental impact assessment. The practice is a member of the Landscape Institute and Institute of Environmental Management and Assessment and are frequently called upon to provide expert evidence on landscape and visual issues at Public and Local Plan Inquiries.

Site Location

- 1.3 The site is situated to the south of Addenbrooke's Hospital on the southern edge of Cambridge. The site is currently bound by agricultural fields to the south east and west. The field adjacent to the north of the site has planning permission for development of phase 2 of the extension to the Cambridge Bio-Medical Campus. Phase 1 of the Cambridge Bio-Medical Campus to the north of Addenbrooke's road is currently under construction. The site is bounded on all sides by footpath/cycleways, including Public Right of Way 39/8 which passes to the south of the southern site boundary, separated from the site by a thin tree belt. There is a railway line approximately 100m to the west of the site. The closest roads are Addenbrooke's Road and Dame Mary Archer Way, located between 50m-150m from the northern site boundary.
- 1.4 Figure's 1 and 2 show the location and context of the site.

Proposed Allocation

- 1.5 The proposed allocation is for phase 3 of the extension to the existing Cambridge Bio-Medical Campus to the south of Cambridge within the current Cambridge Green Belt. The site is approximately 8.91ha and will comprise a mix of office blocks and laboratories up to 3 storeys, multi-storey parking provision up to 4 storeys with associated roads and green infrastructure, including 5 – 15m landscape buffer around the boundaries. Potential access is proposed through the phase 2 consented development to the north of the site, connecting through to Dame Mary Archer Way.

2.0 METHODOLOGY

2.1 This LVA has been prepared based upon the Guidelines for Landscape and Visual Impact Assessment, third edition (GLVIA3), published by the Landscape Institute and the Institute of Environmental Management and Assessment, in 2013.

2.2 In summary the GLVIA3 states:

“Landscape and Visual impact assessment (LVIA), is a tool used to identify and assess the significance of and the effects of change resulting from development on both landscape as an environmental resource in its own right and on people’s views and visual amenity.”

2.3 There are two components of LVIA:

- Assessment of landscape effects; assessing effects on the landscape as a resource in its own right;
- Assessment of visual effects: assessing effects on specific views and on the general visual amenity experienced by people.

2.4 The components of this report include: baseline studies; description and details of the landscape proposals and mitigation measures to be adopted as part of the scheme; identification and description of likely effects arising from the proposed development; and an assessment of the significance of these effects.

2.5 In terms of baseline studies the assessment provides an understanding of the landscape in the area to be affected, its constituent elements, character, condition and value. For the visual baseline this includes an understanding of the area in which the development may be visible, the people who may experience views, and the nature of views.

Assessment of Landscape Effects

2.6 GLVIA3 states that *“An assessment of landscape effects deals with the effects of change and development on landscape as a resource”*. The baseline landscape is described by reference to existing landscape character assessments and by a description of the site and its context.

2.7 A range of landscape effects can arise through development. These can include:

- Change or loss of elements, features, aesthetic or perceptual aspects that contribute to the character and distinctiveness of the landscape
- Addition of new elements that influence character and distinctiveness of the landscape
- Combined effects of these changes

2.8 The characteristics of the existing landscape resource are considered in respect of the susceptibility of the landscape resource to the change arising from this development. The value of the existing landscape is also considered.

2.9 Each effect on landscape receptors is assessed in terms of size or scale, geographical extent of the area influenced and its duration and reversibility. In terms of size or scale, the judgement takes account of the extent of the existing landscape elements that will be lost or changed, and the degree to which the aesthetic or perceptual aspects or key characteristics of the landscape will be altered by removal or addition of new elements.

- 2.10 The overall landscape effect is determined by considering the sensitivity of the landscape receptors and the magnitude of effect on the landscape. Final conclusions on the overall landscape effects are drawn from the assessment components described.
- 2.11 This appraisal describes the nature of the landscape effects. The criteria used in the appraisal are set out in Appendix A.

Assessment of Visual Effects

- 2.12 An assessment of visual effects deals with the effects of change and development on the views available to people and their visual amenity.
- 2.13 The first stage in the assessment is to map approximate visibility. This can be done by a computer Zone of Theoretical Visibility (ZTV), or by manual methods, using map study and field evaluation. A series of viewpoints are included within the assessment that are representative of views towards the site from surrounding visual receptors. Other views of the site are included where it supports the description and understanding of the site's landscape and visual characteristics.
- 2.14 The views also typically represent what can be seen from a variety of distances from the development and different viewing experiences.
- 2.15 It is important to remember that visual receptors are all people. For each affected viewpoint the assessment considers both susceptibility to change in views and the value attached to views. The visual receptors most susceptible to change are generally likely to include:
- residents at home
 - people engaged in outdoor recreation, including use of public rights of way, whose attention or interest is likely to be focused on the landscape or particular views;
 - visitors to heritage assets or other attractions, where views of surroundings are an important contributor to the experience;
 - communities where views contribute to the landscape setting enjoyed by residents in the area.
- 2.16 Travellers on road, rail or other transport routes tend to fall into an intermediate category of susceptibility to change. Where travel involves recognised scenic routes awareness of views is likely to be particularly high.
- 2.17 Visual receptors likely to be less sensitive to change include:
- People engaged in outdoor sport or recreation which does not involve or depend upon appreciation of views of the landscape;
 - People at their place of work whose attention may be focused on their work or activity, not on their surroundings.
- 2.18 Each of the visual effects is evaluated in terms of its size or scale, the geographical extent of the area influenced and its duration or reversibility.
- 2.19 In terms of size or scale, the magnitude of visual effects takes account of:
- The scale of the change in the view with respect to the loss or addition of features in the view and changes in its composition, including proportion of the view occupied by the proposed development;

- The degree of contrast or integration of any new features or changes in the landscape with the existing or remaining landscape elements and characteristics in terms of form, scale and mass, line height, colour and texture;
 - The nature of the view of the proposed development, in terms of the relative amount of time over which it will be experienced and whether views will be full, partial or glimpses.
- 2.20 The geographical extent of the visual effect in each viewpoint is likely to reflect:
- The angle of view in relation to the main activity of the receptor
 - The distance of the viewpoint from the proposed development
 - The extent of the area over which the changes would be visible.
- 2.21 As with landscape effects, the duration of the effect could be short to long term or permanent and the same definitions apply. The criteria used in this appraisal are included at Appendix A.

Overall Landscape and Visual Effects

- 2.22 The final conclusions on effects, whether adverse or beneficial, are drawn from the separate judgements on the sensitivity of the receptors and the magnitude of the effects. This overall judgement involves a reasoned professional overview of the individual judgements against the criteria, to then make the overall judgement.
- 2.23 For this appraisal, the following descriptive thresholds have been used with regard to effects:-
- Major: An effect that will fundamentally change and be in direct contrast to the existing landscape or views;
 - Moderate: An effect that will markedly change the existing landscape or views but may retain or incorporate some characteristics/ features currently present;
 - Minor: An effect that will entail limited or localised change to the existing landscape/ views or will entail more noticeable localised change but including both adverse and beneficial effects and is likely to retain or incorporate some characteristics/ features currently present;
 - Negligible: An effect that will be discernible yet of very limited change to the existing landscape or views.

3.0 PLANNING POLICY

National Planning Policy

National Planning Policy Framework (NPPF, 2012)

- 3.1 The NPPF sets out the Government's economic, environmental and social planning policy and in combination these policies give the Government's vision of sustainable development. The NPPF emphasises the need for good design, promoting healthy communities and conserving and enhancing the natural environment.
- 3.2 Regarding landscape and green infrastructure, the Natural Environment section of the NPPF provides a policy context for open countryside and green infrastructure. The key objectives are to protect valued landscapes and, where possible, provide net gains in biodiversity.

Planning Practice Guidance (PPG, 2014)

- 3.3 The PPG came into force on the 6th March 2014 and is an online planning resource which provides guidance on the NPPF and the planning system. The NPPF continues to be the primary document for decision making.

Local Planning Policy

Core Strategy DPD (Adopted January 2007)

- 3.4 South Cambridgeshire District Council produced a Core Strategy Local Development Framework comprising Development Plan Documents, Policies and Proposals for development and land use in the District. South Cambridgeshire District Council are currently preparing a new Local Plan 2011 - 2031. Once the emerging local plan has been adopted this Core Strategy document will be revoked. However until then the following policies are of relevance to the site and proposed allocation:

POLICY ST/1 Green Belt

A Green Belt will be maintained around Cambridge which will define the extent of the urban area. The detailed boundaries of the Green Belt will be established in the Development Plan Documents.

POLICY ST/8 Employment Provision

Policies in Local Development Documents will ensure sufficient employment land is available to enable further development of the high technology clusters and meet local needs. Additional land will be brought forward for employment development at the Strategic Employment Locations of Northstowe, Cambridge East and Northwest Cambridge.

... The Local Development Framework must ensure sufficient provision of a range of suitable employment land, to respond to the Cambridgeshire and Peterborough Structure Plan 2003 guidelines. Land must be available, capable of being developed, and provide a variety of sites to meet differing needs. Sites must also be consistent with the development principles detailed earlier in this document.

Cambridge Southern Fringe Area Action Plan (Adopted February 2008)

- 3.4 South Cambridgeshire District Council produced an Action Plan with policies for development for the Cambridge Southern Fringe Area. This Action Plan forms part of the adopted Local Development Framework (2007) and should be read alongside the South Cambridgeshire Development Control Policies DPD, as well as with the Cambridge Local Plan. The site is located within the Cambridge Southern Fringe Area and the following policies are of relevance to landscape and visual matters and the proposed allocation:

POLICY CSF/1 The Vision for the Cambridge Southern Fringe

Cambridge Southern Fringe will be a modern, high quality, vibrant, innovative and distinctive urban extension of Trumpington, which will complement and enhance the character of the city. Development will secure a Countryside Enhancement Strategy comprising landscape, biodiversity and public access enhancements in the surrounding countryside, which will complement the existing landscape character of the area and protect and enhance the setting of Cambridge

Other Relevant Strategies, Guidelines or DocumentsCambridgeshire Green Infrastructure Strategy

- 3.5 This strategy aims to shape and co-ordinate the delivery of Green Infrastructure across Cambridgeshire. The site lies within South Cambridgeshire, on the edge of Cambridge.
- 3.6 Within the 'Green Infrastructure priorities for South Cambridgeshire' section, the following is of relevance:
- *Providing Green Infrastructure to meet the needs of the expanding population of the district, Cambridge and sub-region.*
 - *Securing new and enhanced Green Infrastructure and improved links to the wider network as part of the major developments on the Cambridge fringes and at Northstowe.*
 - *Seeking opportunities with all new developments to incorporate and link to Green Infrastructure.*
 - *Connecting and reinforcing habitats and landscape features.*
 - *Conserving, enhancing and increasing the enjoyment of the district's rural and historic character.*
 - *Improving access to Green Infrastructure across the District.*
 - *Engaging with and supporting people, groups and initiatives to help deliver Green Infrastructure.*
 - *Making real improvements to places and quality of life.*
 - *Reducing the causes and impacts of climate change.*

Cambridge Inner Green Belt Boundary Study (November 2015)

- 3.7 Cambridge City Council together with South Cambridge District Council have produced a report assessing the Inner Green Belt Boundary for Cambridge. This reports assesses the importance of areas for Green Belt purposes and advises on potential areas for land to be released for development.

Under the heading ‘*Visually Detracting Townscape/Landscape*’ the following extracts are of relevance for the immediate surrounding context to the site:

‘In Cambridge and its setting, areas and features of visually detracting townscape and landscape include the M11 and A14, the railway corridor within the city, the hangar buildings at Cambridge Airport, parts of Addenbrooke’s Hospital and to a lesser extent a line of pylons running across the Fen and Fen Edge landscape types east of Teversham.

Views from the landscape east and south east of Cambridge are adversely affected by the presence of large, industrial and service buildings and structures in the railway corridor, at Cambridge Airport and Addenbrooke’s Hospital. They detract from the edge and skyline of the city, and dominate the more subtle profiles of historic buildings in the historic core.’

The following extract is taken from Section ‘9 A Soft Green Edge to the City’ and is of relevance to the immediate site context:

‘A distinctive feature of Cambridge is its appearance as a densely treed city with a soft, green edge merging into an agricultural landscape. Where new, and particularly large scale, development occurs on the edge of the city and forms a boundary that appears abrupt and predominantly hard (such as the A14, Cambridge Airport buildings and Addenbrooke’s Hospital) it does not contribute positively to the setting and special character of Cambridge. Large scale developments currently under construction present hard or disrupted edges to the countryside at present. However, their masterplans indicate that significant planting is proposed along the new edges which will in time soften them.’

Section ‘10. Good Urban Structure with Well Designed Edges to the City’ includes the following paragraph of relevance to the site and proposed allocation:

‘This quality is of relevance to National Green Belt purpose 1. One of the factors that contributes to urban sprawl is poorly designed urban edges which do not create a well considered long-term edge to a city. Because the city edge does not appear ‘finished’, it can be easy to justify greenfield development beyond the existing edge, extending the city further and creating sprawl. Many of the edges around the east side of Cambridge are poorly designed, which may lead to pressure for future development in these areas.’

‘*Comparison with the Councils’ 2012 Inner Green Belt Boundary Study*’ has the following relevant extract for the site and proposed allocation:

This study identifies that, notwithstanding their importance to Green Belt purposes, certain areas of land around the south and south-eastern edges of the city could be developed without significant harm to Green Belt purposes, provided any development meets specified parameters...

- 3.8 The site lies within Sector 10 South of Addenbrooke’s and within Sub Area 10.2 – North of Granham’s Road. The following extracts are of relevance for the site and proposed allocation:

‘Implications of Green Belt release for development...

... limited development in the northern and eastern parts of the sector could be undertaken without significant long-term harm to Green Belt purposes, if carefully planned and designed in accordance with the parameters set out below...’

‘Parameters for Green Belt release

- *Land released from Green Belt should be restricted to the relatively flat ground (as more specifically defined in the following points) and should not encroach onto the sloping ground leading onto the Gog Magog foothills, which includes White Hill falling within sub areas 10.2 and 10.3.*
- *Land released along the northern edge of sub area 10.2 should extend no further from the existing Green Belt boundary than the northern corner of sub area 10.3, except at the east end where a wider area of land could be released to tie in with a new urban gateway on Brabraham Road...*
- *Any new development on land released from Green Belt should be designed to create a robust, permanent edge to the city in this sector. The new urban edge should be planted to create a soft green edge to the city, to help integrate built form and to minimise the urbanising effects of development on the countryside.*
- *Parameters should be set for any large scale buildings on the released land to ensure they are no more prominent in views from elevated land to the south east than the existing buildings at Addenbrooke's (taking into account of the fact that new buildings will be in front of the existing buildings as seen in such views).'*

4.0 BASELINE CONDITIONS

Landscape Character

4.1 National Character Area (NCA) profiles have prepared by Natural England for the 159 NCA's defined across England. These NCA profiles include a description of the natural and cultural features that shape the landscape, how the landscape has changed over time, the current key drivers for ongoing change, and a broad analysis of each area's characteristics.

4.2 At this very broad landscape scale, the site within Natural England's National Character Area (NCA) 87 'East Anglian Chalk'. NCA 87 'East Anglian Chalk' stretches from Newmarket in the north east to Letchworth in the south west. Under Key Characteristics the NCA description includes the following references of relevance for the site and the proposed allocation:

- *...Landscape is predominantly of low relief. In places erosion has left incised but shallow valleys, now dry or holding small watercourses, sometimes with associated mires.*
- *The chalk aquifer is abstracted for water to supply Cambridge and its surroundings and also supports flows of springs and chalk streams; features associated with a history of modification include watercress beds, culverts and habitat enhancements.*
- *The rolling downland, mostly in arable production, has sparse tree cover but distinctive beech belts along long, straight roads. Certain high points have small beech copses or 'hanger', which are prominent and characteristic features in the open landscape. In the east there are pine belts.*
- *Remnant chalk grassland, including road verges, supports chalkland flora and vestigial populations of invertebrates, such as great pignut and the chalkhill blue butterfly.*
- *Settlement is focused in small towns and in villages. There are a number of expanding commuter villages located generally within valleys. Letchworth Garden City is a nationally significant designed garden city.*
- *The NCA is traversed by the Icknield Way, an ancient route that is now a public right of way. Roads and lanes strike across the downs perpendicularly and follow historical tracks that originally brought livestock to their summer grazing. Today major roads and railways are prominent landscape characteristics of the NCA.*

4.3 The description also states 'Cambridge is one of the fastest-growing cities in Western Europe and its expanding southern developments in the greenbelt influence the built-up character of this area.'

4.4 In the Statements for Environmental Opportunity section the following is of relevance to the site and the proposed allocation;

SEO 4: Conserve the settlement character and create or enhance sustainable urban drainage systems and green infrastructure within existing and new developments, particularly in relation to the urban fringe and growth areas such as south-east Cambridge, to provide recreation opportunities, increase soil and water quality and enhance landscape character.

For example, by:

- *Avoiding or minimising further erosion of tranquillity by ensuring that development is appropriate to the setting and incorporates suitable measures, such as tree planting or green buffers.*

- *Supporting, creating and improving links between recreational assets and settlements, particularly where growth is planned.*
- *Improving green infrastructure within settlements and through new development, particularly in relation to urban fringe and growth areas such as south-east Cambridge, by providing accessible greenspace and potentially creating new biodiverse grasslands.*
- *Targeting the development of sustainable urban drainage systems and greenspace within urban centres to filter pollutants. This will be increasingly important as building continues to expand the commuter villages and towns.*
- *Conserving and enhancing historic earthworks and routes that evidence past settlement by scrub removal. This will also provide access to and enhance biodiversity corridors, for example Icknield Way, Worsted Street and Fleam Dyke.*
- *Encouraging further provision of cycle routes and, exploring the feasibility, in the long term of new rail routes.*
- *Engaging with communities and owners of heritage features in celebrating and conserving the historic environment, including developing skills in historic environment conservation, historic landscape management and conservation*

Cambridge Inner Green Belt Boundary Study (November 2015)

- 4.5 A Landscape Character Assessment for Cambridge has been undertaken as part of the Cambridge Inner Green Belt Boundary Study. It subdivides the landscape into Landscape Character Types and Areas; see Figure 3 Landscape Character. The site falls within Landscape Character Type 4 'River Valleys' and the following extract is of relevance for the character of this landscape:

'Cambridge is surrounded by river valley landscapes on its south west and southern edges. These valleys have been formed by rivers eroding the chalk clay bedrock to create broad valleys, with a very gently undulating landform. There are numerous streams and tributaries. The alluvial sediment makes the land relatively fertile, allowing arable agriculture in higher areas, and pasture/ meadows in flood plains closer to watercourses. Numerous villages have developed in river valleys due to the proximity of fresh water. Many established at the crossing-points of watercourses and grew to become major settlements. Other villages have expanded in a linear form along the roads which follow the river valleys. Traditional building materials include render, stone, thatch, brick and tile. The relative ease of river transport made it relatively easy to import building materials from the surrounding areas.'

- 4.6 The site lies within Landscape Character Area 4B 'Granta Valley', the following description is of relevance to the site:

'The Granta Valley is situated to the south of Cambridge. It has the low-lying, gentle topography of the River Valley landscape type, but its character is distinguished by its wooded appearance and by the relatively built-up and suburban character of its villages. The woodland within the landscape gives it a relatively enclosed character, increases the "greenness" of the landscape setting, and screens views. This restricts views to the villages, as well as more distant views to Cambridge.

'Settlement comprises a relatively large proportion of the land area. Many villages have developed along key routes into Cambridge, including the A10 and the A1301. The majority of these villages (which include Sawston, Shelford and Harston) have expanded through cluster or ribbon

development, and this has led to a more suburban feel on the approaches to the city through this area'

Topography

- 4.7 The following should be read in conjunction with Figure 4.
- 4.8 The site lies at approximately 15 – 20m AOD. The site is mostly flat with a barely noticeable slope from north east to south west.
- 4.9 To the north and west of the site the landform is generally flat, with the land falling gradually down to the river valley along the Hobson's Brook and Vicar's Brook at approximately 10 – 15m AOD. Immediately to the south of the site the landform rises up to form a series of small hills at approximately 45 – 50m AOD, with White Hill immediately to the south of the site at 45m AOD.

Designations

- 4.10 Figure 5 illustrates the location of the landscape designations.
- The site currently falls within the Cambridge Green Belt on the edge, adjacent to an area of permitted development in the south of Cambridge. Refer to policy section 3.7 Cambridge Inner Greenbelt Boundary Study (2015) for Green Belt assessment and relevant extracts regarding potential land for release from the Green Belt.
- 4.11 Within the wider context of the site are a small number of listed buildings including the Grade II listed Nine Wells Monument located approximately 200m to the south of the site. A Scheduled Ancient Monument is located approximately 360m to the south west of the site.

Nine Wells Local Nature Reserve

- 4.12 The Nine Wells Nature Reserve lies approximately 40m to the south west of the site. Due to the proximity of the Nature Reserve to the site, the potential effects of the proposed development will be considered and landscape mitigation proposals will aim to minimise any potential adverse effects upon the Nine Wells Nature Reserve (refer to landscape proposals section 5.3).

Site and Immediate Context

- 4.13 An assessment of the landscape character of the site and its immediate context has been carried out, providing a finer level of assessment than the published studies.
- 4.14 The site comprises one arable field and is bound to the west by a mature hedgerow and to the south by a thin belt of trees. A footpath/cycleway runs along the northern and western boundary of the site, connecting Great Shelford with South Cambridge and Addenbrooke's Hospital. The east of the site is bound by another footpath which joins up with Public Right of Way 39/8 which runs parallel with the southern site boundary, separated by the thin belt of trees.
- 4.15 The site is surrounded by agricultural fields on all sides and the field adjacent to the north of the site has permitted development for phase 2 of the extension to the Cambridge Bio-Medical Campus, which is currently under construction.

Landscape Value

- 4.16 In terms of "landscape value" it is appropriate to examine the role of the site and its immediate context in terms of the range of local factors set out in the GLVIA3 (Box 5.1, page 84), and summarised in the methodology. This considers the landscape in terms of a range of factors as set out below. As a starting point, landscape designations have been considered.
- 4.17 Landscape Designations: The site and much of the area to the south of the site is located within the Cambridge Green Belt. The site and its wider landscape context (including its Visual Envelope (Figure 6)) are not subject to any other national, local or other landscape designations. There are a small number of listed buildings, one scheduled monument and a Local Nature Reserve within the immediate surrounding context of the site.
- 4.18 Landscape Quality (Condition): The site comprises one arable field with a mature hedgerow along the western boundary and a thin belt of trees/shrubs along the southern boundary.
- 4.19 Scenic Quality: The site is considered to be a reasonably attractive arable field on the edge of the settlement and adjacent to surrounding arable fields. The site is unremarkable for this area and is influenced by the adjacent settlement of Cambridge, including large scale hospital buildings.
- 4.20 Rarity and Representativeness: The site is currently in use as arable farmland and is not considered to be a rare landscape for this area. There are no unusual landscape features.
- 4.21 Conservation Interest: The site has no ecological designations. Due to the arable use of the site biodiversity and ecological interest is limited. Other than potential for bird species within the field interior ecological interest is confined to the site's perimeter. The northern boundary ditch, western boundary hedgerow and southern boundary hedgerows and trees may provide habitat and foraging for protected species.
- 4.22 Recreational Value: The recreational value for the site is considered to be relatively low as the site is currently in use as arable farmland; with little opportunity for recreation within the site itself. Footpaths/cycleways run along the western, northern and eastern boundaries of the site connecting South Cambridge with Great Shelford and the surrounding landscape and providing some recreational use along the edges of the site.
- 4.23 Perceptual Aspects and Associations: Due to the location of the site in relatively close proximity to the existing Cambridge Bio-Medical Campus, the site is not considered to be especially tranquil or wild. The adjacent settlement of Cambridge is currently undergoing development with new housing and employment buildings influencing the site. There are no known associations for the site or immediate surrounding context.
- 4.24 In conclusion and having appraised the above factors it is judged that the site and the immediate landscape is of **medium** landscape value.

Visual Baseline

- 4.25 A visual appraisal has been undertaken for the site. This has explored the nature of the existing visual amenity of the area and sought to establish the approximate visibility of the site from surrounding locations and receptors. A series of photo viewpoints have been selected which support this analysis.
- 4.26 Photographs have been taken to illustrate a view from a specific vantage point, or to demonstrate a representative view for those receptors that are moving through the landscape, e.g. Public Rights of Way users. The photographs may demonstrate varying degrees of visibility and include both

								As this is a transient receptor any effects will only be experienced for a short time period as users travel by. As the receptors get further away from the site the site will encompass a smaller proportion of the view and will become more filtered by intervening vegetation. Due to the scale of change in the view for the majority of the footpaths with views the effects are considered to be moderate adverse upon completion. Once the 5 – 15m landscape buffer around the boundaries has matured the development will become softened and filtered further and the effects are likely to be reduced to moderate – minor adverse .			
M	Informal footpaths/cycleways within new open space to north of Addenbrooke's Road	Medium	Medium – Low	100m – 700m	Partial	Transient	Construction: Low – Medium Completion: Low – Medium Year 10: Low	Users of the footpaths and cycleways within the new open space will experience filtered and partial views of the new buildings within the site, seen as an extension to the existing and consented buildings associated with Cambridge Bio-Medical Campus. The new buildings will be partially screened by the raised section of Addenbrooke's Road, preventing views of the new development from certain areas within the open space. The new buildings will partially screen further views south towards White Hill and therefore the initial effect of the proposed development is considered to be minor – moderate adverse . This is likely to reduce to minor adverse once the development has become established and the structure planting within the open space to the north of Addenbrooke's Road has matured filtering views south.	Minor – Moderate Adverse	Minor – Moderate Adverse	Minor Adverse

short and long range views. The photographs were taken in May and July 2016 and seasonal differences have been taken into account when determining the visual effects on these receptors.

Photo Viewpoints

- 4.27 An assessment of the likely visual effects of the proposed development upon surrounding receptors is detailed in the subsequent section. Figure 6 details the location of the Photo Viewpoints and Figure 7 illustrates the photo viewpoints. They are briefly described below.

Viewpoint 1: View north west from Public Right of Way 39/8

- 4.28 View taken adjacent to the eastern corner of the site facing north west. The open arable field within the site is clear within the foreground of this view, with the belt of trees visible forming the southern boundary. The western boundary hedgerow can be seen beyond the site with the recent residential developments off Addenbrooke's Road and vegetation alongside Hobson's Brook forming the horizon. Addenbrooke's Road is visible raised above the railway line and the construction work associated with phase 1 of the Cambridge Bio-Medical Campus extension is visible to the north of Dame Mary Archer Way. Construction work for a new residential development can also be seen adjacent to the northern corner of the site, filtered by existing mature trees.

Viewpoint 2: View south from Dame Mary Archer Way

- 4.29 This view faces south, with views across the adjacent field with permitted development and towards the site. The footpath/cycleway that joins up with the site can be viewed to the left, adjacent to existing vegetation adjacent to the boundary with the new residential development. The belt of trees along the southern boundary of the site forms the horizon preventing any further views south. The Dame Mary Archer Way is clear within this view, with the Addenbrooke's Road visible beyond raised above the railway. New properties and vegetation further to the south west are just perceptible, filtered by trees.

Viewpoint 3: View east from rail bridge, Addenbrooke's Road

- 4.30 This view is taken from the footpath on Addenbrooke's Road, raised above the landscape with views east across to the site and landscape beyond. The construction work and new development associated with phase 1 of the Cambridge Bio-Medical Campus extension can be clearly seen to the north. The new multi-storey car park is clear within the view, seen in front of a number of existing buildings associated with Addenbrooke's Hospital. The Dame Mary Archer Way can be seen joining up with Addenbrooke's Road which is prominent in the foreground. The site and permitted development land are clear within the view with the new residential development and existing properties visible beyond, filtered by mature vegetation. To the south and east, beyond the site, is the gently rolling landscape of fields and woodlands.

Viewpoint 4: View north from permissive path

- 4.31 This viewpoint looks north across an open arable field which dominates the foreground of the view. A property and associated barn and horse paddock can be seen adjacent to the footpath as the land rises up with a small woodland forming the backdrop. Addenbrooke's Road can be seen to the north where it rises up and over the railway. A woodland block can be seen beyond the arable field, screening further views. Construction work and buildings associated with phase 1 of the

Cambridge Bio-Medical Campus extension can be seen above the landform which rises up screening the site from view.

Viewpoint 5: View north from Granham's Road

- 4.32 This view is taken from a field gate off Granham's Road looking across an arable field towards the site which is hidden from view by the sloping landform. The construction work and new development associated with phase 1 of the Cambridge Bio-Medical Campus extension and the buildings associated with Addenbrooke's Hospital can be seen above the sloping landform. The new residential developments to the north and east of the site can also be seen, filtered by vegetation and adjacent to existing residential properties, with built form dominating the horizon to the north.

Viewpoint 6: View north east from Granham's Road

- 4.33 From this location the arable fields to the east of the site dominate the view, with overgrown and gappy field boundary hedgerows cutting across and filtering further views. The raised land at White Hill and mature trees and woodlands to the south of the site can be seen above the hedgerows. Construction work and new buildings associated with phase 1 of the Cambridge Bio-Medical Campus extension can be partially seen above the new properties adjacent to the northern corner of the site.

Viewpoint 7: View east from new open space north of Addensbrooke's Road

- 4.34 This viewpoint faces east towards the location of the site which is screened from view by intervening vegetation and Addenbrooke's Road which rises up above the railway line, limiting further views south. The construction work and new buildings associated with phase 1 of the Cambridge Bio-Medical Campus extension are visible to the east with new tree planting in the foreground and the structure planting alongside the railway line just visible. To the south the land rises up forming the horizon.

Summary of Visual Baseline

- 4.35 The baseline analysis results in a number of reasoned conclusions which are summarised below:
- The site has a limited Visual Envelope (Figure 6) due to the generally flat topography combined with a relatively high level of intervening vegetation and built form in the immediate surrounding context of the site.
 - There are a number of footpaths/cycleways which pass by adjacent/close to the site, including Public Right of Way 39/8, which will have filtered views across the site and towards the existing Cambridge Bio-Medical Campus.
 - A small number of roads have views of the site, including Dame Mary Archer Way, Addenbrooke's Road and a small section of Brabraham Road to the south east.
 - The site is generally well contained and there are no long distance views.
 - There may be views of the site from users of Addenbrooke's Hospital.

- A number of properties to the west off Addenbrooke's Road may have views of the site, however these views will be restricted by the raised section of Addenbrooke's Road and intervening vegetation.
- Properties to the east may have partial views of the site filtered by existing garden vegetation associated with the properties.

5.0 LANDSCAPE PROPOSALS

Introduction

- 5.1 The indicative layout and design for the proposed allocation are indicated on the accompanying Indicative Compliance Masterplan 7307-L-01. The existing landscape resource and the visual receptors and amenity of the site have been considered by the planning and design process and have informed the resultant scheme. This approach has entailed collaboration between landscape, urban design, ecological and other professionals. The landscape components of the scheme are an important integral part of the proposals.

Landscape Design and Green Infrastructure (GI) Proposals

- 5.2 The landscape GI proposals for the scheme will be fully detailed in future planning applications for the site. For the purposes for the proposed allocation the layout and proposals are indicative.
- 5.3 Green Infrastructure will be included across the site, with existing vegetation retained where possible, including the hedgerow along the western boundary and trees along the southern boundary. A landscape buffer of 5m will be proposed along the eastern boundary with a 15m landscape buffer for the northern, western and southern boundaries, providing a dense buffer between the proposed buildings and the Nine Wells Nature Reserve to the south west.
- 5.4 New tree and shrub planting will be included across the whole site, softening the development, increasing biodiversity and providing habitats. SUDS features will be included within the Public Open Space across the development, collecting run off water from the buildings and hard standing areas. Public Open Space within the proposed development will provide accessible and attractive spaces to encourage workers of the offices and labs to use the open space within the site rather than the Nine Wells Nature Reserve to the south west.

Landscape Management

- 5.5 All of the landscape areas and public open space features will be managed and maintained. This would be achieved through the implementation of a comprehensive Landscape Management Plan (LMP), to ensure the successful establishment and continued thriving of the landscape proposals.

6.0 LANDSCAPE AND VISUAL EFFECTS

- 6.1 The following section outlines the likely landscape and visual effects that would arise from proposed development on the site. Schedules detailing these likely landscape and visual effects for the receptors are included in Appendices B and C respectively. Please refer to these in conjunction with the following descriptions.

Landscape Effects

Construction

- 6.2 The location and design of temporary site compounds, lighting, signage and perimeter screen fencing, combined with effective project management would seek to ensure that the potential landscape effects are minimised during the construction phase. It is anticipated that the construction working methods would adopt best practices and be agreed with the Local Planning Authorities and Statutory Bodies where necessary.
- 6.3 In terms of National Landscape Character the effect during construction is considered to be **negligible** due to the scale of the proposed development in relation to the Landscape Character Areas (LCA) and location adjacent to the existing Addenbrooke's Hospital and consented development for Phase 2 of the Cambridge Bio-Medical Campus. The site is located near the edge of the National Character Area and therefore shares few of its characteristics. Although the site is located on the edge of existing similar developments, these existing developments are outside of the Cambridge Landscape Character Type and Landscape Character Area and therefore the proposed allocation may have an initial **minor adverse – negligible** effect.
- 6.4 Vegetation across the site is limited to the western boundary hedgerow and a strip of trees and shrubs along the southern boundary; where possible the existing vegetation of value will be retained. Future development will permanently alter the use of the site, changing from an open arable field to a number of laboratories/office blocks, multi-storey parking and associated, roads, footpaths and green infrastructure including SUDS. The proposed allocation will appear as an extension to the existing and consented development, however due to the level of change in land use for the site the overall effect for the site and immediate context will be **minor – moderate adverse**.
- 6.5 In landscape terms, overall the effects arising during the construction phase would not lead to any long term harm as the construction phase is transitory in nature and over the short term.

Operation (following Completion)

- 6.6 Upon completion the site will have undergone a number of changes in order to accommodate office blocks/laboratories with associated roads, footpaths and green infrastructure. The initial masterplanning process has sought to minimise the impact of development upon the landscape. This includes the conservation of the site hedgerows and trees of value and the creation of new green infrastructure including, tree and shrub planting and SUDS.
- 6.7 Upon completion, the effect of the proposed allocation upon the landscape character of the wider site context including the National Character Area (NCA) 87 '*East Anglian Chalk*', Cambridge Landscape Character Type (LCT) 4 '*River Valleys*' and Cambridge Landscape Character Area (LCA) 4B '*Granta Valley*' is considered to be **negligible**. The site is a small section of a much larger NCA and the proposed allocation will be seen as an extension to the existing and consented

developments at Addenbrooke's Hospital and Cambridge Bio-Medical Campus. Although there are currently no developments of this type in the Cambridge LCT/LCA, the site is located on the edge of the development and after an initial **minor adverse – negligible** effect, after 10 years the development will have softened within the landscape and the effect will become reduced to **negligible**.

- 6.8 The site will be permanently altered by any future development; changing in use from open arable land to a development with a number of buildings up to three storeys, multi-storey parking provision up to 4 storeys and green infrastructure. The proposed allocation is for an extension to the adjacent Cambridge Bio-Medical Campus and therefore will be in context with, and appear as an extension of, the land to the north. The initial effect is considered to be **moderate adverse**. The new buildings and trees will reduce the amount of open space within the site, although there will be some **minor beneficial** effects due to the planting and green infrastructure across the site. Therefore the overall effect is likely to be **minor adverse** once the new development has become established within the landscape.
- 6.9 Existing vegetation within the site is limited, any future development on the site will retain the existing vegetation of value, including the western boundary hedgerow and southern boundary trees. There will also be new planting within the green infrastructure associated with new development which once established would provide some **minor beneficial** effects for the site.
- 6.10 There are no watercourses currently on the site. It is likely that the proposed development would include SUDS features which once established may provide **minor beneficial** effects for the site. The topography of the site is very flat and therefore in general the landform will be retained, after 10 years any localised changes, caused by levelling out for development and provision of SUDS features, will be **negligible**.
- 6.11 Overall, the assessed effects on the landscape character and landscape features ranges from **moderate adverse – negligible** initially, however by year 10 in general the effects would have lessened as the development would have become softened within the landscape and as green infrastructure planting becomes established resulting in some **minor beneficial** effects and an overall **minor adverse** effect.

Visual Effects

Visual Envelope

- 6.12 The Visual Envelope (Figure 6) of the proposed development identifies the surrounding land from within which views towards any part of the proposed development are likely to be possible. The Visual Envelope is not however, an indicator of the effect of the proposed development on the view but simply, its visible extent in the surrounding landscape.
- 6.13 The Visual Envelope of the proposed development is relatively small due to the landform and level of intervening built form and vegetation within the immediate surrounding context of the site. The Visual Envelope extends south as the land rises up to White Hill, which combined with the woodlands prevents further views from the south. Views to the north are restricted by the buildings associated with Addenbrooke's Hospital and the newly constructed buildings associated with the Cambridge Bio-Medical Campus. Views to the east and west are limited by residential properties and mature vegetation preventing further long range views.

Construction

- 6.14 All construction works will be carried out in accordance with best practice procedures to minimise, as far as practicable, adverse effects on visual amenity.
- 6.15 Construction activities and plant movements within the site would be visible from a relatively limited number of receptors. The clearest views towards the activities and plant movements etc. would be experienced by localised receptors, such as residents of a small number of properties to the east and west, nearby roads, Public Rights of Way and the employment buildings associated with Addenbrooke's Hospital and Cambridge Bio-Medical Campus. It is considered that there will be no long range views of the proposed allocation due to the generally flat topography combined with intervening buildings and vegetation resulting in a relatively small Visual Envelope (Figure 6).
- 6.16 The receptors with the greatest visual effect during the construction period are those receptors in closest proximity to the site boundaries. The nearby footpaths including Public Right of Way 39/8 adjacent to the southern site boundary will experience a relatively high degree of visual change over the construction period with the construction of a number of buildings and associated green infrastructure replacing views of the arable field and the consented land for phase 2 of the Cambridge Bio-Medical Campus (yet to be built). Residents of the flats adjacent to the north eastern corner of the site will also experience a high degree of change in the view during the construction phase, with new buildings visible from upper and lower storeys, in close proximity and filtered in places by intervening vegetation. These visual receptors are likely to have a **major - moderate adverse** effect during the construction phase.
- 6.17 Other residents; off Brabraham Road to the east and Addenbrooke's Road to the west will experience more filtered and distant views of the construction work for the proposed allocation, seen within the context of the existing and consented buildings to the north. These effects are considered to be **minor adverse** and **minor – moderate adverse** during the construction phase.
- 6.18 Roads within the area in general will have limited views, with the exception of Addenbrooke's Road which is raised over the railway line and has clear views across the site. The construction work will be visible from this location adjacent to the existing and consented developments and resulting in a **moderate adverse** effect. Users of the Dame Mary Archer Way may have glimpsed views, however the adjacent consented development for phase 2 of the Cambridge Bio-Medical Campus (yet to be built) will screen the majority of the proposed allocation site from view. Users of Brabraham Road and Granham's Road are likely to experience glimpsed views of the new buildings, in context with the existing and consented development to the north. Due to the transient nature of these receptors, effects will be short term as users travel by; therefore resulting in a **minor adverse** effect at construction.
- 6.19 Users of Addenbrooke's Hospital and Cambridge Bio-Medical Campus in general will have restricted views due to intervening buildings, providing glimpsed or partial views of the construction work within the site and therefore resulting in a **minor adverse – negligible** effect for users of Addenbrooke's Hospital. The users of buildings within the consented area of the Cambridge Bio-Medical Campus, adjacent to the site will experience clear views across the site during the construction period and will therefore experience **moderate adverse** effects.
- 6.20 The visual effects for all of these receptors would vary during the course of construction and would generally increase at the peak of construction activity. The overall visual effects during the construction phase would be over a relatively short duration and consequently there would be a short term effect as a result.

Operation (following Completion)

- 6.21 The following provides a summary of the visual effects assessment included at Appendix C.

Residential Properties and Settlement

- 6.22 The majority of residents within the immediate surrounding context will have no views of the proposed development due to the level of intervening vegetation and other buildings preventing further views. However, a small number of residents off Brabraham Road will experience views of the new buildings filtered by intervening garden vegetation. New buildings will appear as an extension to the existing built form and at a distance, therefore resulting in an overall **negligible** effect.
- 6.23 Residents of properties off Addenbrooke's Road will also experience views of the new buildings, again at a distance and in context with the Cambridge Bio-Medical Campus and adjacent Addenbrooke's Hospital. Views from these properties already include detracting features and therefore once the buildings have become established and planting has matured the effects are likely to be **minor adverse**.
- 6.24 The proposed allocation will have a greater effect upon the residents of the recent development to the west of Brabraham Road due to the close proximity. These properties will experience views from upper and lower storey windows filtered in places by boundary vegetation. New buildings will be replacing views of open arable fields and woodlands and therefore the effects initially will be **moderate adverse**. Buildings are set back with a 5 – 15m landscape buffer, which once established will provide a soft edge to the development reducing the overall effects to **moderate – minor adverse**.

Public Rights of Way (PROW) and Other Footpaths

- 6.25 Public Right of Way 198/2 adjacent to the site, will have filtered views of the new development, seen in context to the adjacent consented development and existing settlement beyond. As this is a transient receptor effects will be experienced over a relatively short timeframe as users travel through. Other informal footpaths/cycleways within the area will also experience a relatively high degree of change due to the proposed allocation, especially those footpaths immediately adjacent to the site which will have clear open views of the new buildings, filtered in places by intervening vegetation. As footpaths get further away the effects will lessen.
- 6.26 Effects are considered to be **moderate adverse** initially due to the scale of the change in view, in close proximity. However once the proposed green infrastructure around the boundaries has matured the development will become softened and filtered and the effects will become reduced to **moderate – minor adverse**.

Roads/Railway

- 6.27 Due to the transient nature of these receptors, any visual effects will be short term as users travel by. In general views from the roads are restricted by intervening hedgerows, trees and buildings. Brabraham Road and Granham's Road are likely to experience views of the new buildings, filtered in places along the roads. The new buildings will be seen at a distance and backgrounded by existing and consented development. Once the landscape buffer has become established the overall effect upon these receptors will be **negligible**.

- 6.28 Users of the Dame Mary Archer Way may have glimpsed views of the new buildings beyond the adjacent consented development for phase 2 of the Cambridge Bio-Medical Campus. Due to the level of screening and further filtering because of the proposed landscape buffer planting, the overall effects are likely to be **negligible**.
- 6.29 Addenbrooke's Road will have clearer views of the proposed development at the section raised over the railway. New buildings will be seen as an extension to the existing and consented Bio-Medical Campus, and once the development has become established the effects are deemed to be **minor adverse**.
- 6.30 Users of the railway will experience fleeting views of the new buildings as the train travels past at speed upon the approach into Cambridge from the south, with the existing and consented buildings seen behind. The new development will appear in context to the existing settlement and after 10 years the effects will be **negligible**.

Employment

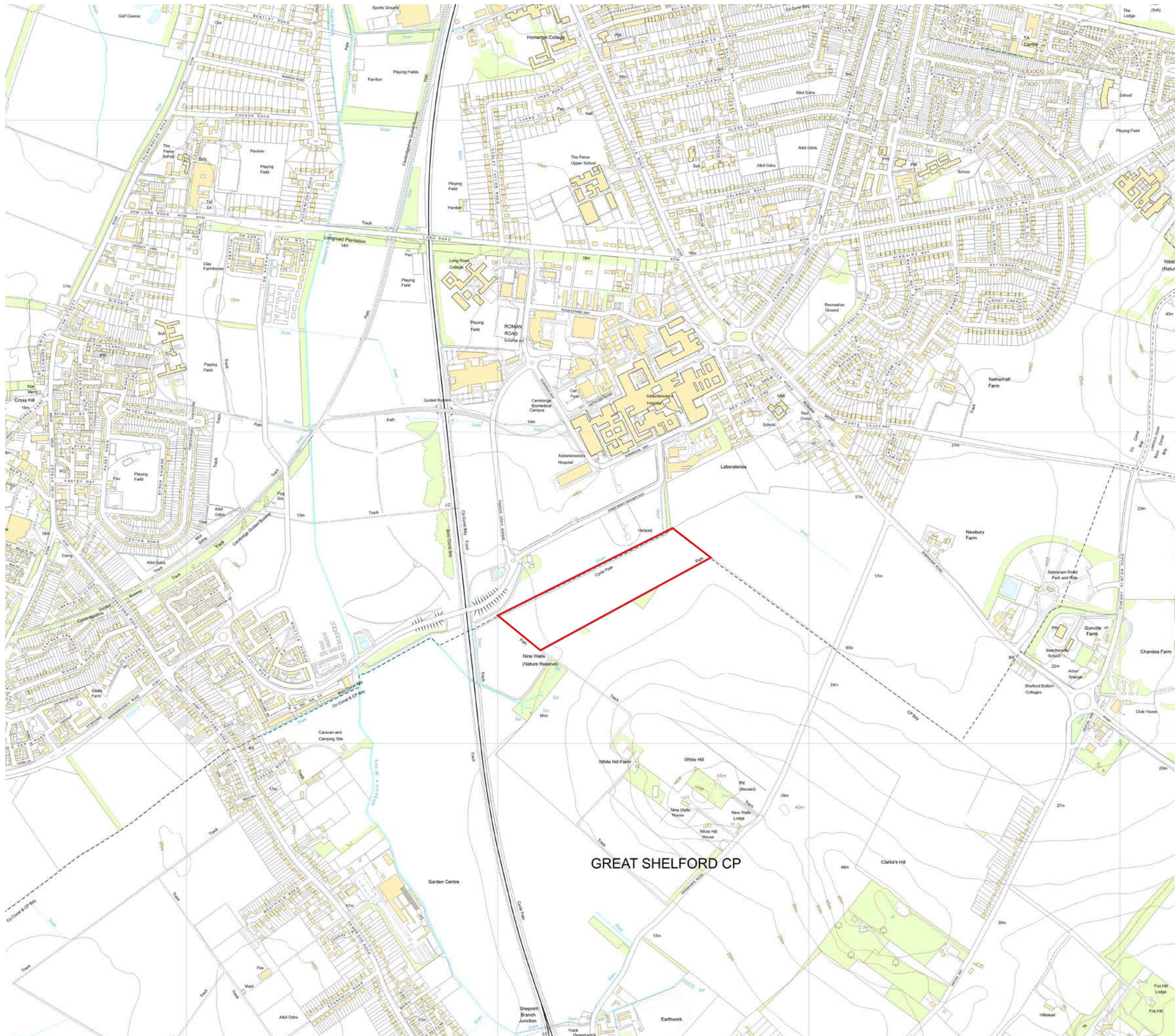
- 6.31 Users of the Cambridge Bio-Medical Campus not directly adjacent to the proposed site are likely to have partial views of the new buildings and green infrastructure seen in the gaps between intervening buildings. Clearest views will be from buildings adjacent to the site, which will experience clear views of the new buildings and associated green infrastructure seen in context to the existing adjacent buildings. The effects of the proposed allocation upon this receptor in general are considered to be **moderate - minor adverse** due to the close proximity and clear views from certain locations within the campus. This is likely to reduce to **minor adverse** once structure planting along the northern site boundary has matured, providing a buffer, filtering views of the new buildings.
- 6.32 Users of Addenbrooke's Hospital may experience glimpsed views of new buildings from upper storey windows, existing and consented buildings will be clearly visible in foreground of views and will partially screen views towards the proposed allocation. Any views of the proposed development will be seen in context with the surrounding Cambridge Bio-Medical Campus buildings and other buildings associated with Addenbrooke's Hospital. Therefore it is considered that the effects at the outset will be **minor adverse – negligible** reducing to **negligible** once fully established.

Nine Wells Nature Reserve

- 6.33 Users of the Nine Wells Nature Reserve, to the south west of the site, have limited views north towards the site due to the dense woodland within the Reserve and the existing woodland belt along the southern site boundary. The additional proposed structure planting within the Public Open Space along the southern site boundary will assist with further filtering of views. It is possible that users of the Nine Wells Nature Reserve may experience glimpsed and heavily filtered views of the tops of the buildings, however due to the level of intervening vegetation effects are considered to be **negligible** overall.

7.0 SUMMARY AND CONCLUSIONS

- 7.1 This LVA has assessed landscape character and visual amenity and the resulting landscape and visual effects of the proposed allocation on the receiving landscape and visual resource. The landscape and visual effects have been considered in relation to the proposed allocation and the layout as specified on the Indicative Compliance Masterplan (7307-L-01).
- 7.2 Whilst there would inevitably be some adverse landscape and visual effects at the outset (Year of completion), it is judged that the effects of the proposed development and the consequential effects would, however, be localised and limited in their extent.
- 7.3 The proposed allocation will comprise of a number of office blocks/laboratories up to 3 storeys, multi-storey parking provision up to 4 storeys and associated parking and green infrastructure, including a 5 – 15m landscape buffer around the boundaries, tree planting and SUDS features. Existing hedgerows and trees of value will be retained where possible.
- 7.4 Overall, the effects of the proposed allocation on the landscape character and landscape features for the site and immediate context ranges from **moderate adverse – negligible** initially. However once the development and associated green infrastructure has become established the effects in general would have lessened as the new buildings would have become softened within the landscape. The introduction of SUDS and green infrastructure will initially have a **minor adverse** effect however once established will provide **minor beneficial** effects for the site and proposed development. Due to the location on the edge of Cambridge, adjacent to an area of existing and consented development, the proposed allocation site is influenced by the settlement edge and would appear in context. The overall effect on landscape character and landscape features is considered to be **minor adverse**.
- 7.5 The Visual Envelope for the site is well contained due to the flat topography combined with intervening tree cover and buildings, as a result there are no long range visual receptors and the majority of visual receptors are in relatively close proximity to the site.
- 7.6 Visual effects range from **moderate adverse to minor adverse – negligible** upon completion with the greatest effect of the proposed allocation upon those receptors immediately adjacent to the site including: users of footpaths and Public Right of Way 39/8 and residents of residential properties to the west of Brabraham Road. The users of the roads, residents of properties off Brabraham Road and Addenbrooke's Road and the users of the Cambridge Bio-Medical Campus and Addenbrooke's Hospital will have lesser effects due to distance, intervening buildings and filtered views.
- 7.7 Effects will reduce further by year 10 once the landscape buffer planting and green infrastructure around the development has become established assisting with filtering of views. Effects are likely to reduce to **moderate – minor adverse** for those receptors adjacent to the site with the remainder of receptors reducing to **minor adverse to negligible**, resulting in an overall **minor adverse** effect upon visual receptors.
- 7.8 To conclude, it is assessed that the landscape character and visual amenity of the site has the ability in which to absorb change through the introduction of high quality development. The proposed allocation for a number of laboratories/office buildings up to 3 storeys, multi-storey parking provision up to 4 storeys and associated green infrastructure would be appropriate within this landscape context and it is judged that the effects, as a result of the proposed allocation, would not give rise to any unacceptable landscape and visual harm.



This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without written consent of FPCR Environment and Design Ltd.

Ordnance Survey material - Crown Copyright. All rights reserved. Licence Number: 100019980 (Centremapslive.com)



client
Cambridgeshire County Council
project
Cambridge Bio-Medical Campus

drawing title
SITE LOCATION PLAN

scale
1:12,500x @ A3
drawing / figure number
drawn
ELB
issue date
27 May 2016
rev



Figure 1



This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without written consent of FPCR Environment and Design Ltd.

Ordnance Survey material - Crown Copyright. All rights reserved. Licence Number: 100019980 (Centremapslive.com)

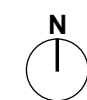


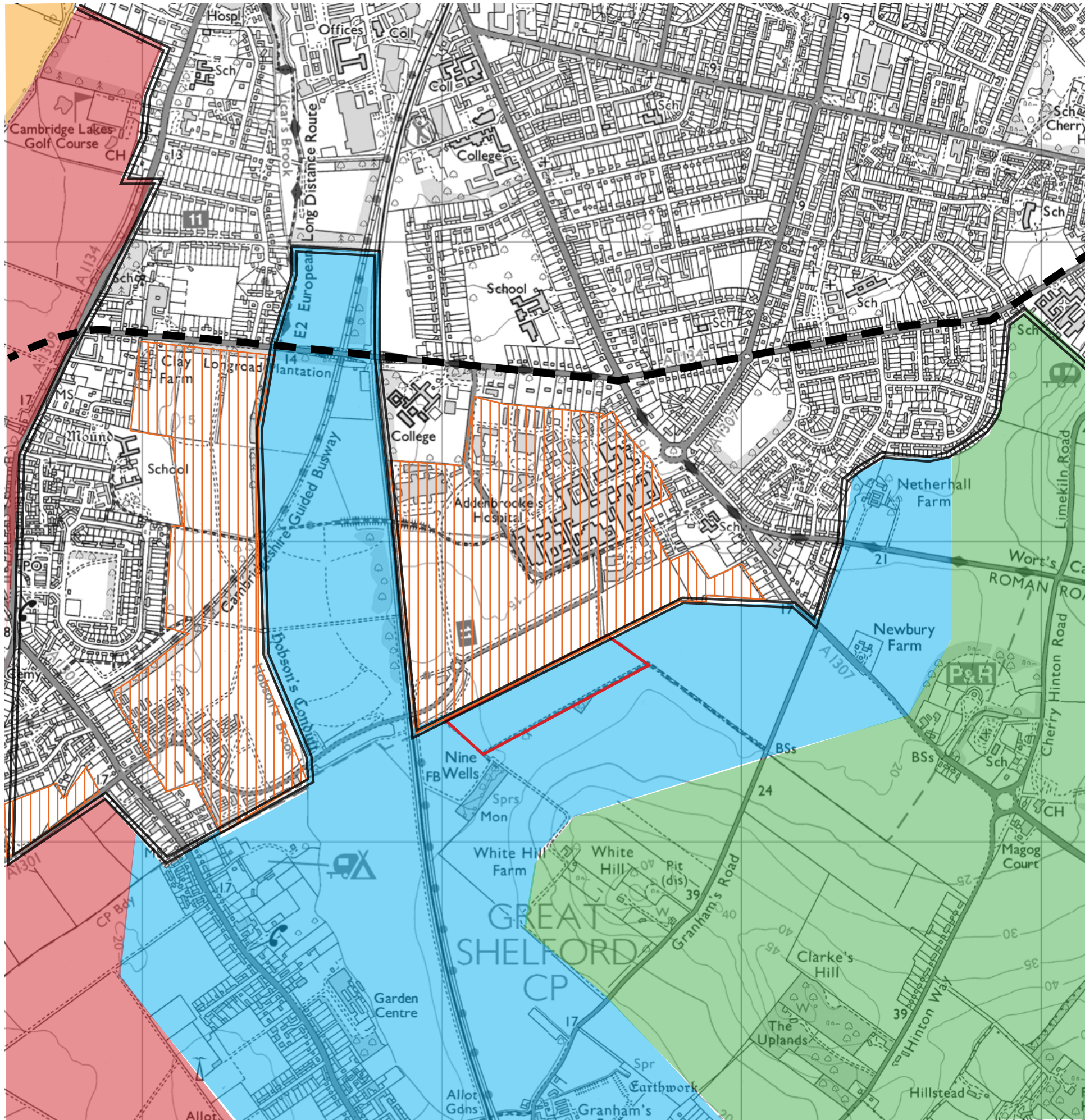
client
Cambridgeshire County Council
project
Cambridge Bio-Medical Campus
drawing title
VIEWPOINT LOCATION PLAN

scale
NTS @ A3
drawing / figure number
Figure 2

drawn
OFD

issue date
14 September 2016
rev
B





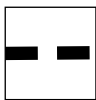


This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without written consent of FPCR Environment and Design Ltd.



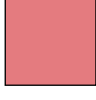

Ordnance Survey material - Crown Copyright. All rights reserved. Licence Number: 100019980 (Centremapslive.com)

NCA 88 Bedfordshire and Cambridgeshire Claylands


NCA 8 East Anglian Chalk

-  Site Boundary
-  Developments Under Construction / Permitted
- National Character Areas**
-  National Character Area Boundary

LDA Design Cambridge Green Belt Study

Landscape Character	Landscape Type
	Granta Valley River Valleys
	Gog Magog Chalk Hills Chalk Hills
	Rhee and Bourn Valleys River Valleys
	Western Claylands Claylands

Area within Townscape Character Study

-  Townscape Character Boundary

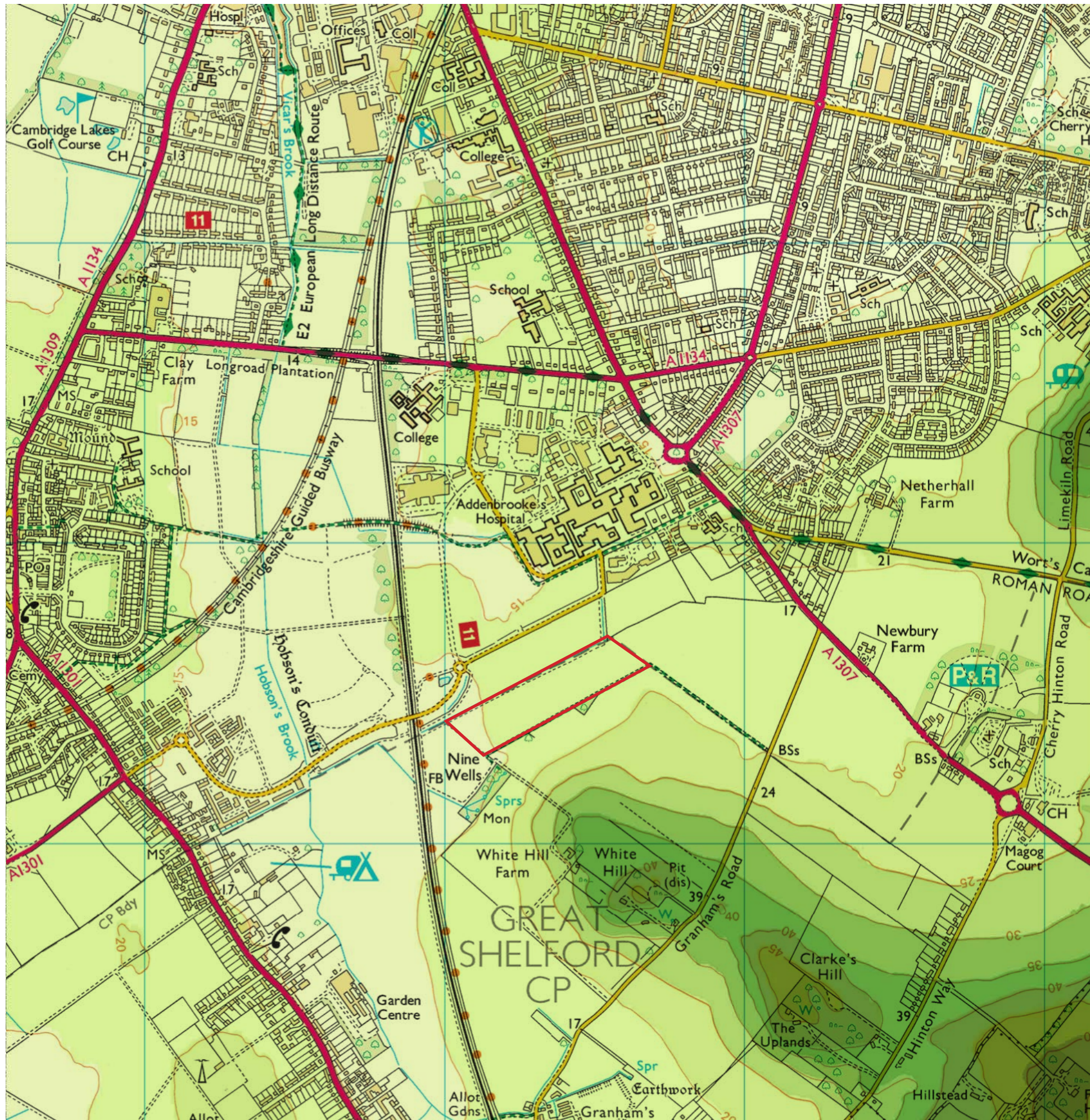
client
Cambridgeshire County Council
project
Cambridge Bio-Medical Campus

drawing title
LANDSCAPE CHARACTER PLAN

scale
1:12,500 @ A3
drawing / figure number
Figure 3

drawn
MDP
issue date
27 May 2016
rev





This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without written consent of FPCR Environment and Design Ltd.

Ordnance Survey material - Crown Copyright. All rights reserved. Licence Number: 100019980 (Centremapslive.com)



client
Cambridgeshire County Council
project
Cambridge Bio-Medical Campus

drawing title
TOPOGRAPHY PLAN

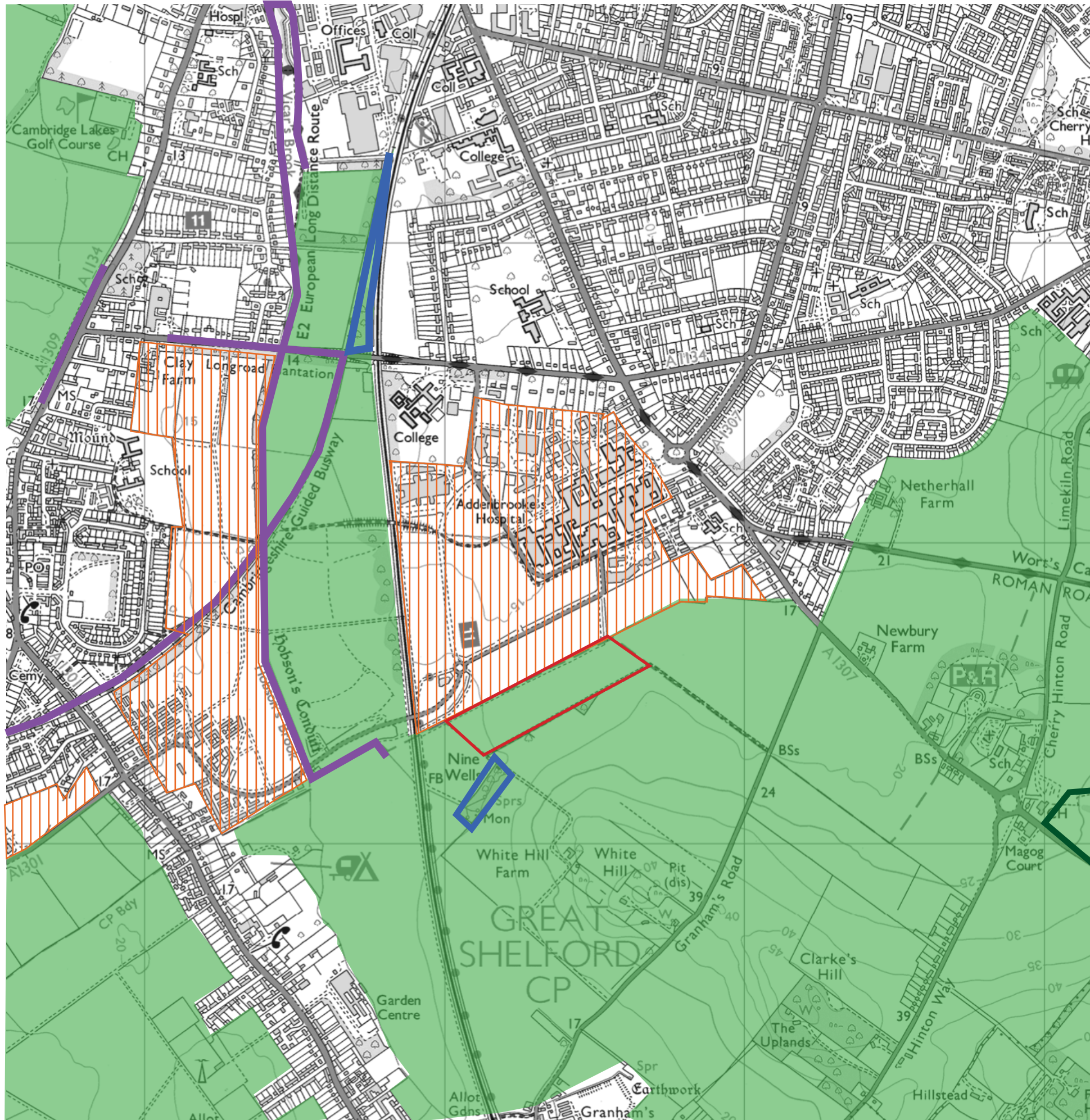
scale
1:12,500 @ A3
drawing / figure number

drawn
ELB

issue date
27 May 2016
rev



Figure 4



This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without written consent of FPCR Environment and Design Ltd.

Ordnance Survey material - Crown Copyright. All rights reserved. Licence Number: 100019980 (Centremapslive.com)

-  Application Site
-  Developments Under Construction/ Permitted
- Designations**
-  Green Belt
-  Site of Special Scientific Interest (SSSI)
-  Local Nature Reserve
-  City Wildlife Site

client
Cambridgeshire County Council
project
Cambridge Bio-Medical Campus

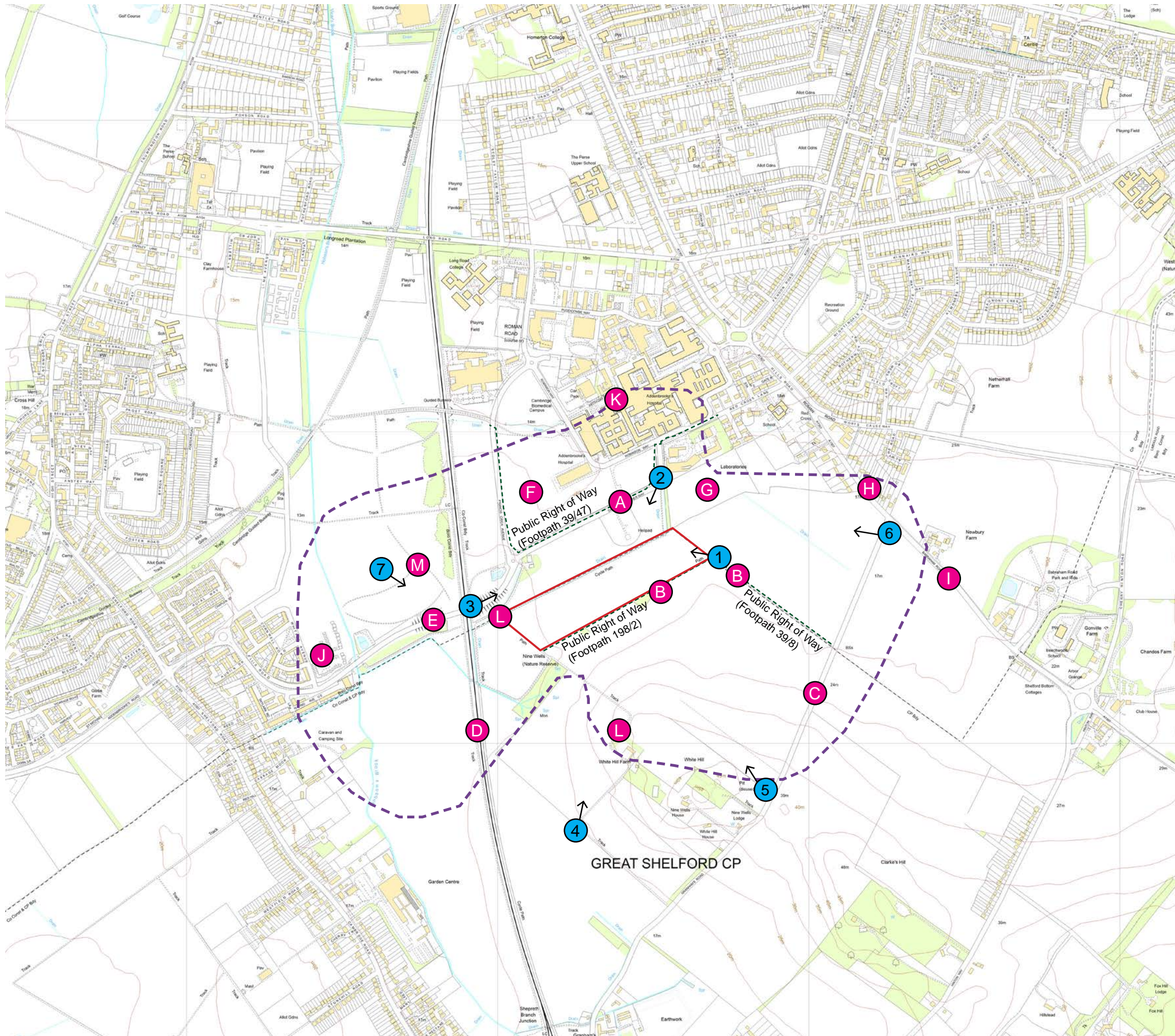
drawing title
DESIGNATIONS PLAN

scale
1:12,500 @ A3
drawing / figure number
drawn
MDP/OFD
issue date
25 August 2016
rev









Figure 5

A



This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without written consent of FPCR Environment and Design Ltd.

Ordnance Survey material - Crown Copyright. All rights reserved. Licence Number: 100019980 (Centremapslive.com)

-  Site Boundary
-  Public Rights of Way
-  Informal Footpaths/Cycleways
-  Viewpoint Location
-  Visual Envelope
-  Visual Receptors

- A. Users of Dame Mary Archer Way Road and Public Right of Way (Footpath 39/47)
- B. Users of Public Right of Way (Footpath 39/8 and Footpath 198/2)
- C. Users of Granham's Road
- D. Users of Railway Line
- E. Users of Addenbrooke's Road
- F. Users of Cambridge Bio-Medical Campus
- G. Residents of recent residential development off Brabraham Road
- H. Residents off Brabraham Road
- I. Users of Brabraham Road
- J. Residents of recent residential development off Addenbrooke's Road
- K. Users of Addenbrooke's Hospital
- L. Users of Footpaths/Cycleways
- M. Users of footpaths/cycleways within new open space to north of Adenbrooke's Road

client
Cambridgeshire County Council

project
Cambridge Bio-Medical Campus

drawing title
VIEWPOINT LOCATION PLAN

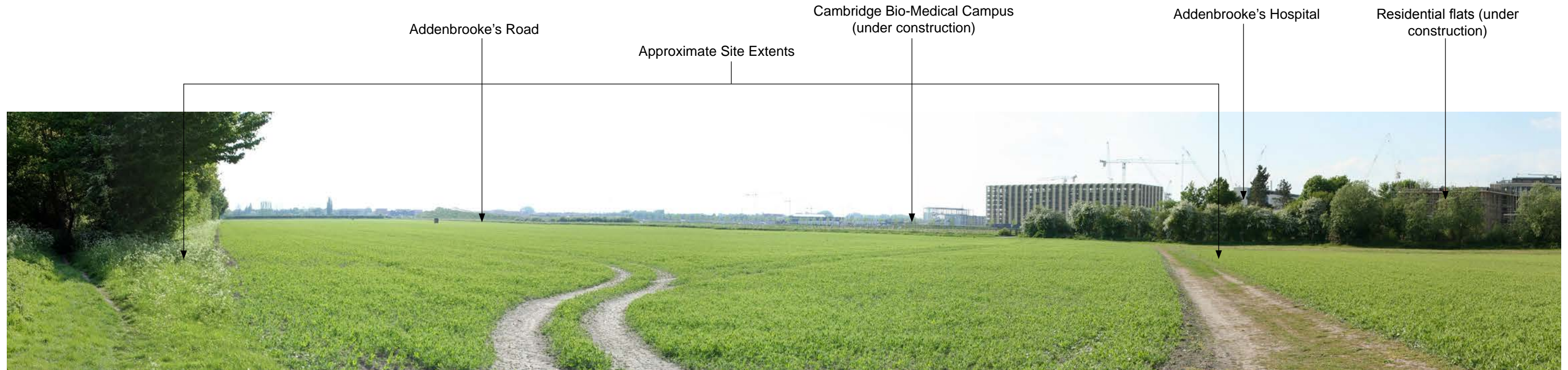
scale
1:12,500 @ A3

drawn
OFD

issue date
14 September 2016

drawing / figure number
Figure 6

rev
B



PH T VIEWP INT 1: View north west from Public Right of Way 39/8



PH T VIEWP INT 2: View south from Dame Mary Archer Way

client
Cambridgeshire County Council

project
Cambridge Bio Medical Campus

drawing title
PHOTO VIEWPOINTS 1 & 2

scale
NTS @ A3

drawn
RGL/OFD

issue date
25 August 2016

rev
A

Figure



PH T VIEWP INT 3: View east from rail bridge, Addenbrooke's Road



PH T VIEWP INT 4: View north from permissive path

client
Cambridgeshire County Council

project
Cambridge Bio Medical Campus

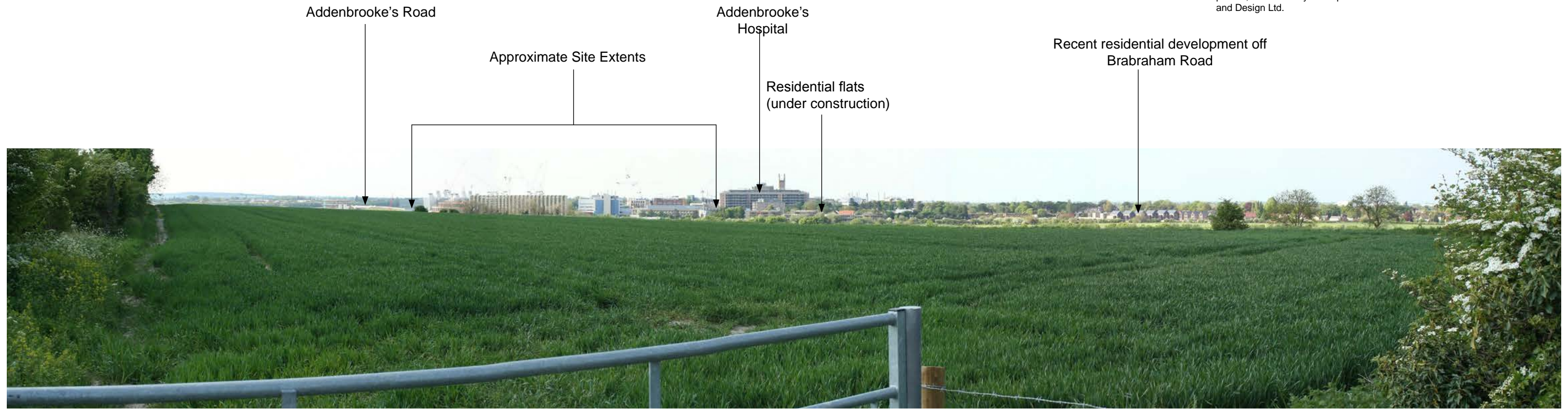
fpcr PHOTO VIEWPOINTS 3 & 4

scale
NTS @ A3

drawn
RGL/OFD

issue date
25 August 2016

drawing / figure number
Figure A



PH T VIEWP INT 5: View north from Granham's Road



PH T VIEWP INT 6: View north east from Granham's Road at junction with Brabraham Road

client
Cambridgeshire County Council

project
Cambridge Bio Medical Campus

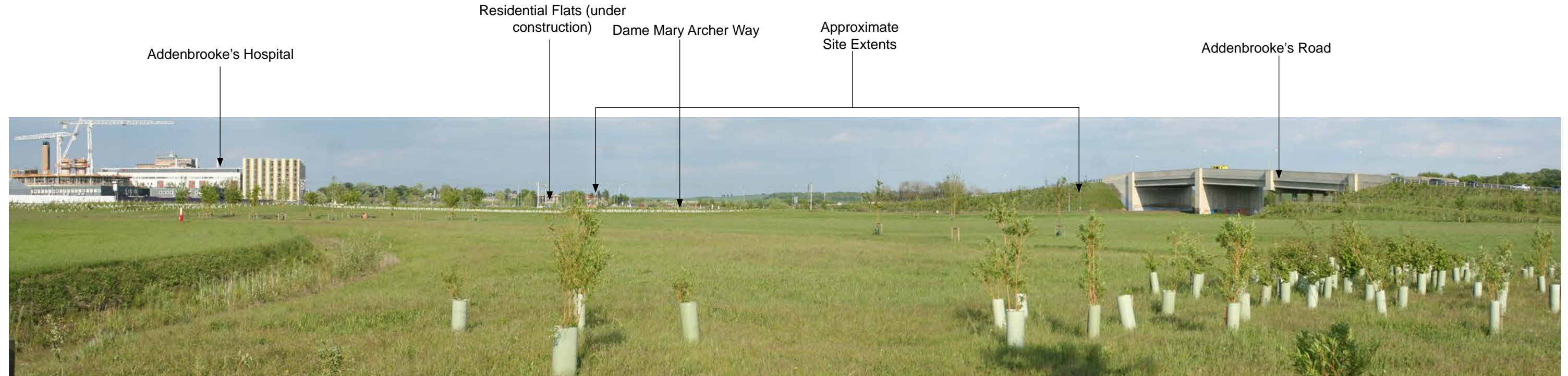
fpcr PHOTO VIEWPOINTS 5 & 6

scale
NTS @ A3

drawn
RGL/OFD

issue date
25 August 2016

drawing / figure number
Figure A



PH T VIEWP INT : View east from new open space north of Addensbrooke's Road

client
Cambridgeshire County Council

project
Cambridge Bio Medical Campus

fpcr PHOTO VIEWPOINTS 7 & 8

scale
NTS @ A3

drawn
RGL/OFD

issue date
25 August 2016

drawing / figure number
Figure

rev
A

Appendix A

Landscape and Visual Appraisal – Methodology and Assessment Criteria

Introduction

The methodology for the landscape and visual appraisal undertaken for the proposed development is detailed in the appraisal report. The following information should be read in conjunction with this methodology.

As advised in the Guidelines for Landscape and Visual Impact Assessment (3rd Edition) (GLVIA3), the judgements made in respect of both landscape and visual effects are a combination of an assessment of the sensitivity of the receptor and the magnitude of the landscape or visual effect. The following details the definitions and criteria used in assessing sensitivity and magnitude for landscape and visual receptors.

Where it is determined that the assessment falls between or encompasses two of the defined criteria terms, then the judgement will be described as High/ Medium or Minor/ Moderate etc. This indicates that the receptor is assessed to lie between the respective definitions or to encompass aspects of both.

Landscape

Landscape Sensitivity

Landscape receptors are assessed in terms of their 'Landscape Sensitivity'. This combines judgements on the value to be attached to the landscape and the susceptibility to change of the landscape from the type of change or development proposed. The definition and criteria adopted for these contributory factors is detailed below.

There can be complex relationships between the value attached to landscape receptors and their susceptibility to change which can be especially important when considering change within or close to designated landscapes. For example an internationally, nationally or locally valued landscape does not automatically or by definition have a high susceptibility to all types of change. The type of change or development proposed may not compromise the specific basis for the value attached to the landscape.

Landscape Value

Value can apply to a landscape area as a whole, or to the individual elements, features and aesthetic or perceptual dimensions which contribute to the character of the landscape. The following criteria have been used to categorise landscape value. Where there is no clear existing evidence on landscape value, an assessment is made based on the criteria/ factors identified below (based on the guidance in GLVIA3 Box 5.1 Page 84).

- Landscape quality (condition)
- Scenic quality
- Rarity

- Representativeness
- Conservation interest
- Recreation value
- Perceptual aspects
- Associations

Landscape Value	Definition
High	Landscape receptors of high importance based upon factors of quality, rarity, representativeness, conservation interest, recreational value, perceptual qualities and associations. Limited potential for substitution.
Medium	Landscape receptors of medium importance based upon factors of quality, rarity, representativeness, conservation interest, recreational value, perceptual qualities and associations. Capable of substitution.
Low	Landscape receptors of low importance based upon factors of quality, rarity, representativeness, conservation interest, recreational value, perceptual qualities and associations. Potential for landscape improvement and creation.

Landscape Susceptibility to Change

This means the ability of the landscape receptor (overall character type/ area or individual element/ feature) to accommodate the proposed development without undue consequences for the maintenance of the baseline position and/ or the achievement of landscape planning policies and strategies. The definition and criteria for the assessment of Landscape Susceptibility to Change is as follows:

Landscape Susceptibility to Change	Definition
High	A highly distinctive and cohesive landscape receptor, with positive characteristics and features and no or very few detracting or intrusive elements. Landscape features intact and in very good condition and/ or rare. Limited capacity to accept the type of change/ development proposed.
Medium	Distinctive and more commonplace landscape receptor, with some positive characteristics/ features and some detracting or intrusive elements. Landscape

	features in moderate condition. Capacity to accept well planned and designed change/ development of the type proposed.
Low	Landscape receptor of mixed character with a lack of coherence and including detracting or intrusive elements. Landscape features that may be in poor or improving condition and few that could not be replaced. Greater capacity to accept the type of change/ development proposed.

Magnitude of Landscape Effects

The magnitude of landscape effects is the degree of change to the landscape receptor in terms of its size or scale of change, the geographical extent of the area influenced and its duration and reversibility. The table below sets out the categories and criteria adopted in respect of the separate considerations of Scale or Size of the Degree of Change and Reversibility. The geographical extent and duration of change are described where relevant in the appraisal.

Scale or Size of the Degree of Landscape Change

Scale or Size of the Degree of Landscape Change	Definition
High	Total loss of or major alteration to key characteristics / features and the introduction of new elements totally uncharacteristic to the receiving landscape. Overall landscape receptor will be fundamentally changed.
Medium	Partial loss of or alteration to one or more key characteristics / features and the introduction of new elements that would be evident but not necessarily uncharacteristic to the receiving landscape. Overall landscape receptor will be obviously changed.
Low	Limited loss of, or alteration to one or more key characteristics/ features and the introduction of new elements evident and/ or characteristic to the receiving landscape. Overall landscape receptor will be perceptibly changed.
Negligible	Very minor alteration to one or more key characteristics/ features and the introduction of new elements characteristic to the receiving landscape. Overall landscape receptor will be minimally changed.
None	No loss or alteration to the key characteristics/ features, representing 'no change'.

Reversibility

Reversibility	Definition
Irreversible	The development would be permanent and the site could not be returned to its current/ former use.
Reversible	The development could be deconstructed/ demolished and the site could be returned to broadly its current/ historic use (although that may be subject to qualification depending on the nature of the development).

Visual

Sensitivity of Visual Receptors

Visual sensitivity assesses each visual receptor in terms of their susceptibility to change in views and visual amenity and also the value attached to particular views. The definition and criteria adopted for these contributory factors is detailed below.

Visual Susceptibility to Change

The susceptibility of different visual receptors to changes in views and visual amenity is mainly a function of; firstly, the occupation or activity of people experiencing the view at particular locations; and secondly, the extent to which their attention or interest may therefore be focussed on the views and visual amenity they experience.

Visual Susceptibility to Change	Definition
High	Residents at home with primary views from ground floor/garden and upper floors. Public rights of way and footpaths where attention is focussed on the landscape and on particular views. Visitors to heritage assets or other attractions whose attention or interest is likely to be focussed on the landscape and/ or on particular views. Communities where views make an important contribution to the landscape setting enjoyed by residents. Travellers on recognised scenic routes.
Medium	Residents at home with secondary views (primarily from first floor level). Public rights of way and footpaths where attention is not focussed on the landscape and/ or particular views. Travellers on road, rail or other transport with a focus on the landscape.

Low	Users of outdoor recreational facilities where the view is less important to the activities (e.g. sports pitches). Travellers on road, rail or other transport where views are primarily focussed on the transport route. People at their place of work where views of the landscape are not important to the quality of the working life.

Value of Views

The value attached to a view takes account of any recognition attached to a particular view and/or any indicators of the value attached to views, for example through guidebooks or defined viewpoints or references in literature or art.

Value of Views	Definition
High	A unique or identified view (eg. shown as such on Ordnance Survey map, guidebook or tourist map) or one noted in literature or art. A view where a heritage asset makes an important contribution to the view.
Medium	A typical and/ or representative view from a particular receptor.
Low	An undistinguished or unremarkable view from a particular receptor.

Magnitude of Visual Effects

Magnitude of Visual Effects evaluates each of the visual effects in terms of its size or scale, the geographical extent of the area influenced and its duration and reversibility. The table below sets out the categories and criteria adopted in respect of the Scale or Size (including the degree of contrast) of Visual Change. The distance and nature of the view and whether the view will be permanent or transient are also detailed in the Visual Effects Table.

Scale or Size of the Degree of Visual Change	Definition
High	The proposal will result in a large and immediately apparent change in the view, being a dominant and new and/ or incongruous feature in the landscape.
Medium	The proposal will result in an obvious and recognisable change in the view and will be readily noticed by the viewer.
Low	The proposal will constitute a minor component of the wider view or a more

	recognisable component that reflects those apparent in the existing view. Awareness of the proposals will not have a marked effect on the overall nature of the view.
Negligible/ None	Only a very small part of the proposal will be discernible and it will have very little or no effect on the nature of the view.

Level of Effect

The final conclusions on effects, whether adverse or beneficial, are drawn from the separate judgements on the sensitivity of the receptors and the magnitude of the effects. This overall judgement involves a reasoned professional overview of the individual judgements against the criteria, to then make the overall judgement.

Whilst GLVIA3 notes at paragraph 5.56 that there are no hard and fast rules about the level of effects, the criteria adopted for this landscape and visual appraisal are defined as follows:

- Major: An effect that will fundamentally change and be in direct contrast to the existing landscape or views;
- Moderate: An effect that will markedly change the existing landscape or views but may retain or incorporate some characteristics/ features currently present;
- Minor: An effect that will entail limited or localised change to the existing landscape/ views or will entail more noticeable localised change but including both adverse and beneficial effects and is likely to retain or incorporate some characteristics/ features currently present;
- Negligible: An effect that will be discernible yet of very limited change to the existing landscape or views.

APPENDIX B LANDSCAPE EFFECTS TABLE (LET)								
Landscape Receptor and Reference	Judged Sensitivity of Landscape		Judged Magnitude of Landscape Effect		Description Notes	Overall Effect at Construction Phase	Overall Effect upon Completion	Overall Effect at 10 Years post Completion
	Susceptibility to Change	Landscape Value	Scale or Size of the Degree of Change including degree of contrast/integration) at Stages of Project	Where applicable, are the Effects Reversible?				
	High Medium Low	High Medium Low	High Medium Low Negligible None	Yes No N/A		Major Moderate Minor Negligible None	Major Moderate Minor Negligible None	Major Moderate Minor Negligible None
National Landscape Character								
Natural England, National Character Area Profile (NCA) 87 'East Anglian Chalk'	Medium (Variations may occur)	Medium (Variations may occur)	Construction: Negligible Completion: Negligible Year 10: Negligible	No	The site comprises a relatively small area of this large NCA which stretches from Newmarket in the north east to Letchworth in the south west. The site is located near the edge of this NCA and therefore shares few of its characteristics. Due to the scale of the site in relation to the NCA the effects are likely to be negligible overall.	Negligible	Negligible	Negligible
Landscape Character Assessment (LCA) County District								
Landscape Character Assessment for Cambridge – Cambridge Inner Greenbelt Boundary Study (2015) Landscape Character Type 4 'River Valleys'	Medium	Medium	Construction: Low – Negligible Completion: Low – Negligible Year 10: Negligible	No	This is an extensive LCT which covers a large section of the south of Cambridge. The site is of a relatively small scale in relation to the whole LCT and is located on the edge, adjacent to the settlement and an area of recent and consented development. The site will appear as an extension of the existing built form, although the existing developments are outside of the LCT and therefore new development may have an initial minor adverse – negligible effect. Due to the scale and location on the edge, any new development will appear in context and once established the effects will be negligible overall for this LCT.	Minor Adverse – Negligible	Minor Adverse – Negligible	Negligible
Landscape Character Assessment for Cambridge – Cambridge Inner Greenbelt Boundary Study (2015) Landscape Character Area 4B 'Granta Valley'	Medium	Medium	Construction: Low – Negligible Completion: Low – Negligible Year 10: Negligible	No	This LCA encompasses a relatively large area which already includes a significant proportion of detracting features, including residential developments, roads and a railway line. The character area description states that 'Settlement comprises a relatively large proportion of the land area'. Therefore new development will not appear out of character within this LCA. There are no developments of this type within this LCA, and so there may be some minor adverse effects initially. Once established within the landscape and due to the context of the settlement edge the effects will become reduced to negligible after 10 years.	Minor Adverse – Negligible	Minor Adverse – Negligible	Negligible

APPENDIX B LANDSCAPE EFFECTS TABLE (LET)								
Landscape Receptor and Reference	Judged Sensitivity of Landscape		Judged Magnitude of Landscape Effect		Description Notes	Overall Effect at Construction Phase	Overall Effect upon Completion	Overall Effect at 10 Years post Completion
	Susceptibility to Change	Landscape Value	Scale or Size of the Degree of Change including degree of contrast/integration) at Stages of Project	Where applicable, are the Effects Reversible?				
	High Medium Low	High Medium Low	High Medium Low Negligible None	Yes No N/A		Major Moderate Minor Negligible None	Major Moderate Minor Negligible None	Major Moderate Minor Negligible None
Landscape Character Site and Immediate Context								
Site and Immediate Context	Medium - Low	Medium	Construction: Medium Completion: Medium Year 10: Low	No	<p>The site will be permanently changed by any future development, altering from an open arable field to a built development with office blocks/labs and associated roads, footpaths and green infrastructure. Where possible landscape features of value will be retained and new planting within the green infrastructure will help to compensate for the loss of the arable field.</p> <p>The site is located on the southern edge of an area of recent and consented development, with Addenbrooke's Hospital and Cambridge Bio-Medical Campus, and will therefore be heavily influenced by this settlement edge. Although the site is within an area of agricultural farmland, the topography and nearby tree cover encloses the site to the south. The proposed allocation is for an extension to the adjacent Cambridge Bio-Medical Campus and therefore will be in context with the land to the north, resulting in a moderate adverse effect initially. This is likely to reduce to minor adverse once the new development has become established within the landscape.</p>	Moderate Adverse	Moderate Adverse	Minor Adverse
Site Landscape Features Characteristics								
Site Landscape Features <i>Landform</i>	Low	Low	Construction: Low Completion: Low Year 10: Low	No	<p>The landform within the site is currently very flat with a barely noticeable gentle slope from north east to south west. The landform will be altered slightly with minor level changes for new buildings and to ensure correct gradients for roads and footpaths. Any SUDS features will also require some minor localised earthworks. However in general the topography of the site will be retained, and after 10 years any localised changes will be negligible.</p>	Minor Adverse	Minor Adverse	Negligible
Site Landscape Features <i>Woodland, Trees, Hedgerows and Vegetation</i>	Medium	Medium	Construction: Low Completion: Low Year 10: Low	No	<p>Existing vegetation within the site is limited due to the current agricultural use of the site as arable farmland with a western boundary hedgerow and southern boundary trees. Future development on the site will retain the existing vegetation of value where possible, including the western boundary hedgerow and southern boundary trees. There will also be new planting within the green infrastructure associated with new development which once established would provide some minor beneficial effects for the site, helping to compensate for the loss of the arable field and resulting in a minor beneficial effect overall.</p>	Minor Adverse	Minor Adverse	Minor Beneficial

APPENDIX B LANDSCAPE EFFECTS TABLE (LET)								
Landscape Receptor and Reference	Judged Sensitivity of Landscape		Judged Magnitude of Landscape Effect		Description Notes	Overall Effect at Construction Phase	Overall Effect upon Completion	Overall Effect at 10 Years post Completion
	Susceptibility to Change	Landscape Value	Scale or Size of the Degree of Change including degree of contrast/integration) at Stages of Project	Where applicable, are the Effects Reversible?				
	High Medium Low	High Medium Low	High Medium Low Negligible None	Yes No N/A		Major Moderate Minor Negligible None Adverse Beneficial	Major Moderate Minor Negligible None Adverse Beneficial	Major Moderate Minor Negligible None Adverse Beneficial
Site Landscape Features <i>Water Features and Watercourses</i>	Low	Low	Construction: Low Completion: Low Year 10: Low	No	There are no watercourses currently on the site and it is likely that the proposed development would include SUDS features which may have minor beneficial effects for the site.	Minor Adverse	Minor Adverse	Minor Beneficial
Site Landscape Features <i>Land Use and Open Space</i>	Medium - Low	Medium	Construction: Medium Completion: Medium Year 10: Low	No	The open space within the site will be affected by the proposed development as the site will be changing in use from an open arable field to a more enclosed development with a number of buildings, up to 3 storeys, and associated green infrastructure with tree planting. The new buildings and trees will reduce the amount of open space within the site, although there will be some minor beneficial effects due to the planting and green infrastructure across the site. Overall after 10 years the likely effects will be minor adverse .	Moderate Adverse	Moderate Adverse	Minor Adverse

APPENDIX C VISUAL EFFECTS TABLE (VET)											
Re	Receptor Type and Location <small>(including approx no. of dwellings where applicable)</small>	Judged Sensitivity of Visual Receptor		Judged Magnitude of Visual Effects				Description Notes	Overall Effect at Construction Phase	Overall Effect upon Completion	Overall Effect 10 Years post Completion
		Susceptibility to Change	Value	Distance from Site Boundary (or Built Development where stated) (approx. m/km)	Nature of View	Is the View Permanent or Transient?	Size/Scale of Visual Effect (incl. degree of contrast/integration) (at Stages of Project)		Major Moderate Minor Negligible None	Major Moderate Minor Negligible None	Major Moderate Minor Negligible None
		High Medium Low	High Medium Low		Full Partial Glimpse None		High Medium Low Negligible/ None	Adverse or Beneficial	Adverse or Beneficial	Adverse or Beneficial	
A	Users of Dame Mary Archer Way Road and Public Right of Way (Footpath 39/47)	Low	Low	150m	Partial	Transient	Construction: Low Completion: Low Year 10: Negligible	<p>New development may be glimpsed beyond the adjacent consented development for phase 2 of the Cambridge Bio-Medical Campus (yet to be built). New buildings will be seen in context to the other existing and consented buildings. The consented development between the proposed allocation site and this receptor will have a greater impact on the receptor once built due to the close proximity. This consented development will assist with partially screening the site and new development.</p> <p>Due to the transient nature of this receptor any effects will be short term, seen glimpsed as users travel by and therefore the effects are considered to be minor adverse initially. Once established within the landscape the effects will become negligible.</p>	Minor Adverse	Minor Adverse	Negligible
B	Users of Public Right of Way (Footpath 39/8 and Footpath 198/2)	High – Medium	Medium – Low	0m – 500m	Full – Partial	Transient	Construction: High – Medium Completion: Medium Year 10: Medium – Low	<p>At the closest point, adjacent to the site, the majority of this Public Right of Way will have filtered views of new buildings and associated green infrastructure which will replace the current views of arable farmland and the consented land for phase 2 of the Cambridge Bio-Medical Campus (yet to be built). As this is a transient receptor, views further south along the Public Right of Way will only encompass part of the view at longer range. Any effects will be experienced over a relatively short timeframe as users travel through.</p> <p>During construction and upon completion the effects are considered to be moderate adverse due to the scale of the change in view in close proximity to the majority of the receptor. The new development will be seen in context to the adjacent consented development (yet to be built) and existing developments beyond. Once the green infrastructure and 5 – 15m landscape buffer around the boundaries has matured the development will become softened and filtered further and the effects will become reduced to moderate - minor adverse.</p>	Major – Moderate Adverse	Moderate Adverse	Moderate – Minor Adverse

C	Users of Granham's Road	Low	Medium	500m – 1km	Glimpse – None	Transient	Construction: Low Completion: Low Year 10: Negligible	<p>Views of new buildings will be possible glimpsed in places from gaps in the mature hedgerow alongside the road. New development will be seen backgrounded by existing and consented buildings and due to the transient nature of the receptor, effects will only be short term as users travel by.</p> <p>The majority of the road will experience no views due to the large hedgerow preventing further views north. Therefore the overall effect of the proposed development upon this receptor will be minor adverse at the outset, reducing to negligible once established.</p>	Minor Adverse	Minor Adverse	Negligible
D	Users of Railway Line	Low	Low	120m – 230m	Partial	Transient	Construction: Low – Negligible Completion: Low – Negligible Year 10: Negligible	<p>Due to the nature of this receptor any views of the proposed development will be seen fleetingly as the train travels past at speed. The new development will be visible upon the approach into Cambridge from the south, with the existing and consented buildings seen behind. The train then enters central Cambridge and therefore the new development will appear in context to the existing settlement. Therefore the effects at the outset will be minor adverse – negligible reducing to negligible once established.</p>	Minor Adverse – Negligible	Minor Adverse – Negligible	Negligible
E	Users of Addenbrooke's Road	Low	Low	60m	Partial – Full	Transient	Construction: Medium Completion: Medium – Low Year 10: Low	<p>The clearest view will be from the raised section of road over the railway, from this location there are likely to be clear views over the majority of the proposed allocation, seen as an extension to the existing and consented Bio-Medical Campus. Further east the road enters the campus and the site and new development will become screened by the existing and consented development adjacent to the road. Further to the west the road enters a built up area past Hobson's Brook and the site disappears from view.</p> <p>Therefore from the section of road with the clearest views the effects of the proposed development are likely to be moderate - minor adverse initially. The proposed 15m landscape buffer to the northern and western site boundaries will assist with filtering of views of the new buildings, and therefore once matured the green infrastructure across the site will soften the development reducing the effects to minor adverse.</p>	Moderate Adverse	Moderate – Minor Adverse	Minor Adverse
F	Users of Cambridge Bio-Medical Campus (Under construction/ consented development)	Low	Low - Medium	5m	Full – Partial	Permanent	Construction: Medium Completion: Medium – Low Year 10: Low	<p>The users of buildings from the southernmost area (consented development land for phase 2 Cambridge Bio-Medical Campus - yet to be built) adjacent to the site will have the clearest views of any future development on the site due to the close proximity. Users are likely to experience a change in view from an open arable field, backgrounded by trees, to a number of 3 storey buildings with associated roads and green infrastructure.</p> <p>Users of the Cambridge Bio-Medical Campus not directly adjacent to the proposed site are likely to have partial views of the new buildings and green infrastructure seen in the gaps between buildings associated with the phase</p>	Moderate Adverse	Moderate – Minor Adverse	Minor Adverse

								2 development. The effects of the proposed allocation upon this receptor in general is considered to be moderate – minor adverse due to the close proximity and clear views from certain locations within the campus. This is likely to reduce to minor adverse once the green infrastructure has matured and the development has become established. Structure planting along the northern site boundary will provide a buffer, filtering views of the new buildings.			
G	Residents of Residential Development to the west of Brabraham Road (Residential flats and houses up to 3 storeys currently under construction)	High	Medium	20m	Partial	Permanent	Construction: High – Medium Completion: Medium Year 10: Medium – Low	The majority of properties and flats within this recent residential development are unlikely to experience views of the proposed development due to intervening vegetation and other properties. However, a number of the flats and properties along the southern boundary, with windows facing towards the site, will experience a change in views. New buildings will be seen within views adjacent to views of open arable fields and woodlands. Residents closest to the site will experience the clearest views of the new buildings, from upper and lower storey windows, filtered in places by existing mature trees adjacent to the receptor. Residents of a small number of properties further from the proposed development will experience filtered views, from upper storey windows, of the new buildings and associated green infrastructure, seen at a greater distance and therefore with a lesser impact. Initially it is deemed that the effects will be moderate adverse due to the close proximity of receptors and level of change in the views, with views from upper and lower storey windows for a number of the properties. Once the structure planting and landscaping within the development has become established the new buildings will be softened and effects are likely to reduce to moderate – minor adverse .	Major – Moderate Adverse	Moderate Adverse	Moderate – Minor Adverse
H	Residents of Brabraham Road (approx. 5 dwellings)	High	Medium	490m – 620m	Glimpse	Permanent	Construction: Low Completion: Low Year 10: Negligible	Views of the new development may be restricted from these receptors due to a high level of intervening vegetation from field boundary hedgerows and close proximity garden vegetation associated with the properties. From upper storey windows residents may experience filtered, partial views of the new buildings at a distance and as an extension to the existing and consented buildings associated with Cambridge Bio-Medical Campus. It is considered that the effects will be minor adverse initially as the new buildings will be in context with the existing buildings already glimpsed within views. After 10 years once the development has become established the effects are likely to be negligible .	Minor Adverse	Minor Adverse	Negligible
I	Users of Brabraham Road	Low	Medium – Low	530m – 2km	Glimpse	Transient	Construction: Low Completion: Low Year 10: Negligible	Views of the new development may be limited from this receptor due to intervening field boundary hedgerows and the hedgerow trees alongside the west of the road. Users may experience filtered and glimpsed views of the new buildings at a distance and in context to the existing and consented	Minor Adverse	Minor Adverse	Negligible

								buildings associated with Cambridge Bio-Medical Campus adjacent to the site. Due to the transient nature of this receptor, any visual effects caused by new buildings within the site will be experienced over a relatively short timeframe as users travel north along the road before entering the residential area of Red Cross. It is considered that the effects will be minor adverse initially as the new buildings will appear as an extension to the existing urban area, however after 10 years once the development has become established the effects will lessen to negligible .			
J	Residents of Residential Development off Addenbrooke's Road (Residential flats and houses up to 3 storeys)	High	Medium – Low	500m	Glimpse – Partial	Permanent	Construction: Medium – Low Completion: Medium – Low Year 10: Low	New buildings within the site may be seen to south of the raised Addenbrooke's Road from upper and lower storey windows of these receptors. New buildings will appear as an extension to the existing built area and will partially screen views of the trees and hills beyond. New buildings will be seen in context to existing and consented development and within views which already include detracting features such as the buildings within the Bio-Medical Campus to the north of Addenbrooke's Road and Addenbrooke's Road itself. Therefore resulting in a minor - moderate adverse effect initially. Recent structure planting along Addenbrooke's Road will assist with softening views of the new development once established. Combined with the 15m structure planting buffer along the western edge it is likely that the new buildings will become filtered and the long term effect will be minor adverse .	Minor – Moderate Adverse	Minor – Moderate Adverse	Minor Adverse
K	Users of Addenbrooke's Hospital	Low	Low	300m	Glimpse	Permanent	Construction: Low – Negligible Completion: Low – Negligible Year 10: Negligible	There may be glimpsed views of new buildings from upper storey windows from buildings within Addenbrooke's Hospital. However, existing and consented buildings will be clearly visible in foreground of views and will partially screen views towards the proposed allocation. There are unlikely to be views of the proposed development from lower storeys or from the roads and footpaths associated with Addenbrooke's Hospital. Any views of the proposed development will be seen in context with the surrounding Cambridge Bio-Medical Campus buildings and other buildings associated with Addenbrooke's Hospital. Therefore it is considered that the effects at the outset will be minor adverse – negligible reducing to negligible once fully established.	Minor Adverse – Negligible	Minor Adverse – Negligible	Negligible
L	Informal footpath/cycleway network	Medium	Medium – Low	0m – 600m	Full – Partial	Transient	Construction: High – Medium Completion: Medium Year 10: Medium – Low	Adjacent to the site, the majority of footpaths and cycleways will have clear views of new buildings and associated green infrastructure which will replace the current views of arable farmland and the consented land for phase 2 of the Cambridge Bio-Medical Campus (yet to be built).	Major – Moderate Adverse	Moderate Adverse	Moderate – Minor Adverse