

## CAMBRIDGE FRINGES JOINT PLANNING COMMITTEE

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<b>Reports by:</b>	Patsy Dell, Head of Planning Services	
<b>Application Number</b>	C/11/1114/OUT	<b>Agenda Item</b>
<b>Date Received</b>	23 <sup>rd</sup> September 2011	<b>Officer</b>
<b>Parishes/Wards</b>	Castle	
<b>Site Proposal</b>	Land between Madingley Road and, Huntingdon Road, CB3 0LH Proposed development comprising up to 3,000 dwellings; Up to 2,000 student bedspaces; 100,000 sq.m. employment floorspace, of which: up to 40,000 sq.m. commercial floorspace (Class B1(b) and sui generis research uses) and at least 60,000 sq.m. academic floorspace (Class D1); up to 5,300 sq.m. gross retail floorspace (Use Classes A1 to A5) (of which the supermarket is 2,000 sq.m. net floorspace); Senior Living, up to 6,500sq.m. (Class C2); Community Centre; Indoor Sports Provision; Police; Primary Health Care; Primary School; Nurseries (Class D1); Hotel (130 rooms); Energy Centre; and associated infrastructure including roads (including adaptations to Madingley Rd and Huntingdon Rd), pedestrian, cycle and vehicle routes, parking, drainage, open spaces and earthworks.	
<b>Applicant</b>	University of Cambridge	
<b>Recommendation Application Type</b>	Approve subject to conditions and completion of S106 agreement Outline (approving access points at this stage)	<b>Departure: No</b>

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<b>Application Number</b>	S/1886/11	<b>Agenda Item</b>
<b>Date Received</b>	23 <sup>rd</sup> September 2011	<b>Officer</b>
<b>Parishes/Wards</b>	Girton	
<b>Site Proposal</b>	Land between Madingley Road and, Huntingdon Road, CB3 0LH Proposed development comprising up to 3,000 dwellings; Up to 2,000 student bedspaces; 100,000 sq.m. employment floorspace, of which: up to 40,000 sq.m. commercial floorspace (Class B1(b) and sui generis research uses) and at least 60,000 sq.m. academic floorspace (Class D1); up to 5,300 sq.m. gross retail floorspace (Use Classes A1 to A5) (of which the supermarket is 2,000 sq.m. net floorspace); Senior Living, up to 6,500sq.m. (Class C2); Community Centre; Indoor Sports Provision; Police; Primary Health Care; Primary School; Nurseries (Class D1); Hotel (130 rooms); Energy Centre; and associated infrastructure including roads (including adaptations to Madingley Rd and Huntingdon Rd), pedestrian, cycle and vehicle routes, parking, drainage, open spaces and earthworks.	
<b>Applicant</b>	University of Cambridge	
<b>Recommendation Application Type</b>	Approve subject to conditions and completion of S106 agreement Outline (approving access points at this stage)	<b>Departure: No</b>

The above application(s) have been reported to the Joint Development Control Committee for determination by Members in accordance with the Scheme of Delegation for the Joint Development Control Committee for the Cambridge Fringes

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## **0.0 INTRODUCTION AND BACKGROUND**

- 0.1 This is a proposal for a mixed-use extension to the north-west of Cambridge, known as the 'Land Between Huntingdon Road and Madingley Road' or the 'University site'. The scheme comprises up to 3,000 dwellings (of which 1,500 are to be affordable key worker units), 2,000 student bed spaces, 100,000sqm of employment floorspace (of which at least 60,000sqm will be academic employment space), a primary school, open space, recreational facilities, and a local centre which includes retail and community facilities, a hotel, police, health facilities, senior living accommodation and an energy centre.
- 0.2 The University site was proposed as an area to be released from the Green Belt through the review of the 2003 Cambridgeshire and Peterborough Structure Plan, and is allocated for predominately Cambridge University related uses in the Cambridge Local Plan, adopted in 2006. The policy required that the land was only to be released from the Green Belt in order to meet University needs, given the importance of the University locally, nationally and internationally.
- 0.3 The North-West Cambridge Area Action Plan (NWCAAP) was subsequently prepared jointly by South Cambridgeshire District Council and Cambridge City Council, working with Cambridgeshire County Council, and adopted in 2009.
- 0.4 The NWCAAP established a footprint for the development, and revised the Green Belt boundary. It planned for the site comprehensively, and set the development principles, including high-level design integrated with the City and connected to the countryside, and established the housing, educational, commercial and community principles for the site, alongside aspirations for transport, sustainability and the environment.
- 0.5 The applications were originally submitted in September 2011, with amendments submitted in April and June 2012 addressing the concerns raised by the local authorities.
- 0.6 The site is one of three sites in the north-west of Cambridge released from the Green Belt. The 'NIAB1 site', located to the north of the University site, between Huntingdon Road and Histon Road will provide for a predominantly residential development, comprising 1780 dwellings, a local centre with mixed retail and commercial facilities, a primary school, open space and recreational facilities. A site adjacent to this land, between the administrative boundary and A14, has also been allocated for residential development through South Cambridgeshire's Site Specific DPD (NIAB2).

## **1.0 SITE DESCRIPTION/AREA CONTEXT**

- 1.1 The application site is located on the north-western edge of the City of Cambridge, to the south and west of the village of Girton. It is bounded by the M11 and the A14 to the west, Huntingdon Road to the north-east and Madingley Road to the south. It is currently functioning as a University

farm, with some academic and research functions at 307 Huntingdon Road, to the rear of 181 Huntingdon Road, and also in the area to the north of Madingley Rise.

- 1.2 The north-eastern boundary of the site consists mainly of large residential dwellings, the Travellers Rest restaurant (with Hotel to rear), and some existing farm buildings at the northern tip of the site which front onto Huntingdon Road. The southern boundary, along Madingley Road, consists of a mix of residential dwellings, most significantly at Conduit Head and Landsdown Roads, Colleges, University buildings and a Park & Ride, managed by the County Council. To the south-east, the site is bounded by residential properties in All Soul's Lane and Storey's Way, Ascension Parish Burial Ground and the University Observatory, which is accessed from Madingley Road.
- 1.3 At present the site accommodates the University farm and outbuildings, a significant area of arable farmland and livestock, other University research facilities, a Site of Special Scientific Interest (SSSI) known as the Traveller's Rest Pit, and some areas of ecological value such as the Washpit Brook, which is an awarded watercourse. For the most part the site is free from landscape features away from its fringes, although the site does contain a veteran Oak tree, located broadly in the middle of the site, an avenue of Horse Chestnut trees that line the access to a range of farm buildings from Huntingdon Road, and various trees and hedgerows around existing field boundaries, most notably in the vicinity of the western edge. Along the southern edge of the site is located an area of ridge and furrow field that separates the Park & Ride site from dwellings in Lansdowne Road. Located within the site, but excluded from the application site area, is the World Conservation Monitoring Centre (WCMC), immediately adjacent to the aforementioned SSSI.
- 1.4 The site broadly features a topography at its highest along the Huntingdon Road boundary, with a relatively flat profile initially. The land then falls away towards the M11 at approximately its mid-point, from a distinct ridge that serves to broadly connect the farm buildings located in the northern tip of the site with the residential properties to the south-east, in Conduit Head Road.
- 1.5 The site is largely screened from immediate public view, by existing residential development on Huntingdon Road to the north, and residential development at Conduit Head Road, University-related development, and the Madingley Park & Ride, to the south. Views are afforded into parcels of the site where soft landscape features exist, most notably along the Huntingdon Road frontage near to the Travellers Rest restaurant. The site does not have a significant frontage, aside from its western edge, which runs parallel to the M11. Long-distance views are afforded into the site from Madingley (to the west), across various agricultural fields located between the village and the M11.

- 1.6 The proposed development falls within the administrative boundaries of Cambridge City Council and South Cambridgeshire District Council, whilst the site is located entirely within the joint NWCAAP boundary area.

## **2.0 THE PROPOSALS**

- 2.1 Outline planning applications were submitted to both South Cambridgeshire District Council and Cambridge City Council on 23<sup>rd</sup> September 2011, and amended on 3<sup>rd</sup> April 2012. This report relates to both applications, although two separation decisions will need to be reached.

- 2.2 The proposals seek outline planning permission, in their totality, for the following development, with details of appearance, landscaping, layout, and scale (save for the matters submitted in respect of zones A and C) reserved:

- Up to 3,000 dwellings; (Class C3 and C4)
- Up to 2,000 student bedspaces; 98,000 sq.m. (Class C2)
- Up to 100,000 sq.m. new employment floorspace, of which:
  - Up to 40,000 sq.m. commercial employment floorspace (Class B1(b) and sui generis research uses)
  - At least 60,000 sq.m. academic employment floorspace (Class D1)
- Up to 5,300 sq.m. gross retail floorspace (Use Class A1/A2/A3/A4/A5) (of which the supermarket is not more than 2,000 sq.m. net floorspace)
- Senior living; up to 6,500sq.m. (Class C2)
- Community centre; up to 500-600 sq.m. (Class D1)
- Indoor sports provision, up to 450 sq.m. (Class D1)
- Police; up to 200 sq.m. (Class B1)
- Primary Health Care; up to 700 sq.m. (Class D1)
- School; up to 3,750 sq.m. (Class D1)
- Nurseries; up to 2,000 sq.m. (Class D1)
- Community Residential; up to 500 sq.m. (Class C3)
- Hotel (130 rooms); up to 7,000 sq.m. (Class C1)
- Access roads
- Pedestrian, cycle and vehicle routes
- Parking
- Energy Centre; up to 1,250 sq.m.
- Provision and/or upgrade of services and related service media and apparatus including pumping stations, substations and pressure regulators
- Drainage works (including sustainable ground and surface water attenuation and control)
- Open space and landscaping (including parks, play areas, playing fields, allotments, water features, formal/informal open space, maintenance sheds, pavilions and support facilities)
- Earthworks to provide revised ground contours
- Demolition of existing buildings

- 2.3 Proposals for which full permission is sought include:

Huntingdon Road - Highway and Utility Works involving:

- Construction of a new three arm and a new four arm signal controlled junctions, including pedestrian and cycle crossings, to provide access to the proposed development from Huntingdon Road
- Installation of a toucan crossing across Huntingdon Road
- Construction of an unsegregated footway/cycleway on the southern side of Huntingdon Road
- Diversion and/or replacement and/or protection of existing utilities affected by the proposed highway works
- Provision of new telecommunications infrastructure and connection to existing utility infrastructure situated along Huntingdon Road
- Related landscaping, accommodation works, street furniture, drainage, telemetry and utilities

Madingley Road - Highway and Utility Works involving:

- Junction improvement works at the High Cross/Madingley Road junction to alter it from a three arm priority junction to a four arm signal controlled junction, including pedestrian and cycle crossings, to provide access to the proposed development
- Installation of a toucan crossing across Madingley Road
- Diversion and/or replacement and/or protection of existing utilities affected by the proposed highway works
- Construction of an unsegregated footway/cycleway on the northern side of Madingley Road
- Installation of a retaining wall along Madingley Road
- Provision of a new pumped foul water rising main, including chamber connection, and new telecommunications, electricity and gas infrastructure and the associated connection to existing utility infrastructure situated along Madingley Road
- Related landscaping, accommodation works, street furniture, drainage, telemetry

Documents accompanying the application

2.4 The application is accompanied by the submission of the following documents:

- Planning Statement (March 2012)
- Design, Access and Landscaping Statement (March 2012)
- Statement of Community Involvement (September 2011)
- Environmental Statement, including: Flood Risk Assessment, Geological Site Management Plan, Construction Environment Management Plan and Biodiversity Strategy (updates in March and June 2012)
- Transport Assessment (September 2011, with March 2012 addendum)
- Travel Plan (September 2011)
- Sustainability Statement (September 2011, with March 2012 clarification)
- Carbon Reduction Strategy (September 2011)

- Sustainable Resource and Waste Management Strategy (September 2011, with March 2012 addendum)
- Site Waste Management Plan (September 2011)
- Key Worker Housing Statement (September 2011)
- Retail Impact Assessment (September 2011)
- Hotel Needs Case (September 2011, with March 2012 clarification)
- Senior Care Needs Case (September 2011)
- Community/Faith Needs Case (September 2011)
- Health Impact Assessment (September 2011, with March 2012 clarification)
- Public Art Strategy (March 2012)

2.5 Although two separate applications have been submitted, this is to reflect the cross-authority boundary nature of the proposed development and for administrative purposes only. The development should be considered as a single entity, except where specific issues relate solely to land within either the South Cambridgeshire or City Council administrative boundaries. Any such issues will be addressed in detail within the assessment of the proposals.

2.6 The drawings and plans being approved are listed within condition 69.

### **3.0 RELEVANT SITE HISTORY**

3.1 The application site has an extensive planning history, related to its current use as a University farm and research facility. Numerous consents have been granted, over a significant period of time. Permissions have included consent for animal research facilities, laboratories (including the Centre of Agronomy, located to the north of the Travellers Rest SSSI – C/02/1214), agricultural buildings (including animal enclosures, glasshouses and chemical stores), and agricultural workers accommodation. The consented structures are largely contained in two main clusters. The first is located in the northern tip of the site, adjacent to Huntingdon Road. The second is located in the south-eastern corner of the site, located in the area adjoining Conduit Head Road and the University Observatory. The latter is accessed via either Madingley Rise (using the Madingley Road east junction that is proposed to be altered via the application), through the Observatory site, or from Huntingdon Road, via the Horse Chestnut lined avenue, which is to be retained as part of the application proposals. However, whilst some of these consents have the potential to give rise to contaminative uses on site (the consequences of which area addressed through the Environmental Statement that forms part of the application), there have been no previous applications for the type of development now proposed for the site.

3.2 Further to the history of the application site, there are a small number of adjoining sites that have uses which have some relevance to the current proposals.

3.3 These are:



- The Park & Ride site, located to the south of the application site, immediately adjacent to the proposed Madingley Road west junction (S/94/0806 & C/99/0769)
- The World Conservation Monitoring Centre (a research establishment), located immediately to the north of the Travellers Rest SSSI and accessed via Huntingdon Road (C/90/0700)
- The Travellers Rest Public House/Restaurant and Premier Inn Hotel, also located to the north of the Travellers Rest SSSI and immediately to the east of the proposed Huntingdon Road East junction and adjoining open space/sports pitches (06/1251/FUL & C/81/0748)

#### **4.0 PUBLICITY**

Advertisement	Yes
Adjoining Owners	Yes
Site Notice Displayed	Yes
Public Meeting/Exhibition	Yes

- 4.1 The applications have been subject to extensive consultation and publicity. In addition to standard consultation letters, statutory press notices and the display of site notices, an extensive series of public meetings/workshops and exhibitions have been convened leading up to and following the submission of the applications.
- 4.2 This community engagement has included a number of site-specific public exhibitions held between January 2005 and July 2010, alongside various meetings that the University of Cambridge have undertaken with Parish Councils, residents associations, student groups and faith groups between November 2009 and April 2011. Throughout the pre-application process a dedicated website was available informing the community of consultation events and hosted relevant material and news regarding the scheme. Further to the site specific briefings, the Councils' North West Forum has also provided a platform for public engagement as the scheme has been progressed.
- 4.3 In addition to the public consultation events, seven stakeholder events were staged between January 2005 and June 2010, whilst numerous task group meetings, dedicated to specific topic areas, took place between September 2009 and June 2011 to inform the application design process. A full statement of community and stakeholder engagement, outlining all dates of pre-application discussions, forms part of the application.
- 4.4 Following the submission of the applications, two further public consultation events were organised (15<sup>th</sup> and 20<sup>th</sup> October 2011) by Cambridge City Council and South Cambridgeshire District Council to present the applications and provide the opportunity for questions. Approximately 300 people attended these events. A summary of all consultation responses has been included in Appendix F. Full responses are available on the public file.

## **5.0 POLICY**

### **Government and Regional Guidance and Advice**

All relevant guidance is set out in Appendix A.

### **Structure Plan, Cambridge Local Plan and S. Cambs LDF Policies**

All relevant guidance is set out in Appendix B.

### **Supplementary Planning Documents and Material Considerations**

All relevant guidance is set out in Appendix C.

## **6.0 EXTERNAL AND INTERNAL CONSULTATIONS**

All external and internal consultee responses are set out in Appendices D and E respectively.

## **7.0 NEIGHBOUR REPRESENTATIONS**

All neighbour representations are set out in Appendix F.

## **8.0 ASSESSMENT**

8.1 From the consultation responses and representations received and from inspection of the site and the surroundings, the assessment has been structured under the following headings:

1. Principle of Development
2. Urban Design Principles and Visual Impact
3. Transport
4. Affordable Housing and Dwelling Mix
5. Community Development and Infrastructure
6. Open Space and Recreation
7. Local Centre and Retail Provision
8. Education
9. Employment
10. Sustainable Development
11. Flood Risk and Drainage
12. Ecology and Landscape/Heritage Assets
13. Environmental Health Considerations:
14. Lighting
15. Soil and Contamination
16. Noise and Vibration, Dust, Fumes and Odours
17. Air Quality
18. Health Impact
19. Waste Strategy and Management
20. Archaeology
21. Third Party Representations
22. S106 Planning Obligations

- 23. Conclusion
- 24. Recommendation

### **Principle of Development**

- 8.2 After the adoption of Regional Planning Guidance 6 (RPG6) in 2000, a sub-regional study was undertaken, and the Cambridgeshire and Peterborough Structure Plan Review considered sites that should be released from the Green Belt. Policy 9/2 of the Structure Plan stated that Local Plans shall make provision for housing land and mixed use development on land released from the Green Belt, specifically identifying the land between Madingley Road and Huntingdon Road for being reserved for predominantly University related uses, and only to be released once the University has demonstrated a clear need for the land to be released.
- 8.3 Although the status of RPG6 and the Structure Plan has been the subject of review through the Localism Bill process, the site allocation has remained through formal designation in the Cambridge Local Plan (Policy 9/7), allocating the site for predominantly University related uses. This was then subsequently superseded through the adoption of joint Cambridge City and South Cambridgeshire North West Cambridge Area Action Plan (NWCAAP) in October 2009.
- 8.4 The NWCAAP identified the site upon which the current proposals relate, recognising that the University's development needs relate not only to residential accommodation for staff and students, but that need arises from the University's research activities being carried out in collaboration with public and charitable sector research institutes and industry. Accordingly the policy reflects this relationship by allowing for a mixed-use development, provided that an adequate needs case is provided to support specific proposals.
- 8.5 Notwithstanding the needs of the University, the policy also recognises the need to maintain the purposes of the Green Belt and states that the proposals should provide an open space buffer in order to respect the setting of Girton and avoid coalescence with the City. This should link with the strategic gap, which straddles Huntingdon Road between Girton and Cambridge.
- 8.6 The policy also proposes several key objectives that relate to the quality of the environment, climate change and sustainability;
  - To create a sustainable community;
  - To make the best use of energy and other natural resources, to be built as an exemplar of sustainable living with low carbon and greenhouse gas emissions and be able to accommodate the impacts of climate change;
  - To secure a wide range of housing types and tenures;
  - To secure high quality development of both built form and open spaces;

- To create a community which respects and links with adjoining communities;
- To achieve a modal split of no more than 40% of trips to work by car (excluding car passengers) and to maximise walking, cycling and public transport use;
- To provide an appropriate landscape setting and high quality edge treatment for Cambridge;
- To provide standards for infrastructure provision including renewable energy, open space, car and cycle parking, sewerage and surface water drainage;
- To provide an appropriate level of community services and facilities to serve the development satisfactorily;
- To determine appropriate phasing of development taking into account that development should only proceed when the University can prove the need for it;
- To secure the infrastructure needs of the development, including green infrastructure; and
- To protect special geological interest, existing wildlife and wildlife corridors and secure a net increase in biodiversity.

8.7 All of the requirements in this policy are assessed within the relevant section of the report below as well as all other relevant policies in the Local Development Framework.

8.8 Some 'in principle' concerns were expressed through neighbour representations that there should not be any more loss of Green Belt land around Cambridge, that the full environmental impact should be assessed, and that the City will lose one of its 'green lungs'. The allocation of this land has gone through the due process, over a number of years, taking into account the special justification provided by the University. The principle of developing this land has therefore been established, and the proposal submitted has, by virtue of the accompanying Environmental Statement (ES), assessed the full environmental impact of the development in line with legislation. The Environmental Statement identifies a number of mitigation measures, including the provision and enhancement of strategic green spaces throughout the development, to ensure that it has an acceptable impact on the wider environment.

8.9 Subject to the detailed assessment below the broad principle of these applications is in accordance with Structure Plan Policies 9/2b and 9/2c and the joint North West Cambridge Area Action Plan, and therefore considered to be acceptable.

8.10 Since the submission of the applications, the Government has replaced the previous network of Planning Policy Guidance Notes and Statements (PPGs and PPS) with the National Planning Policy Framework (NPPF). The NPPF advises that, whilst it is a material planning consideration, full weight should continue to be given to policies adopted since 2004, meaning, therefore the NWCAAP policies remain in effect (an assessment of the NWCAAP against the NPPF is provided in Appendix L). Changes to national planning policy are reflected in the assessment, but as with the

suite of local policies, subject to the detailed assessment below, and recommendations contained therein, the development is considered to be acceptable in principle when considered against the NPPF.

### **Urban Design Principles and Visual Impact**

- 8.11 The NWCAAP requires a development of the highest quality in terms of design. Policies NW1 and NW2 outline the vision and the development principles for any proposal, which looks to set a high standard in terms of design, and how this site addresses its context in terms of character, connectivity, climate, and community. In addition to this Policy NW4 emphasises the importance of how this site impacts upon the setting of Cambridge and its relationship with the village of Girton.
- 8.12 The outline application is accompanied by a number of parameter plans (and parameter plan statements) for formal approval along with an indicative Masterplan and supporting Design, Access and Landscape Statement (DALs) in line with the requirements of policy NW3, and relevant legislation.
- 8.13 The DALs documents the design evolution of the Masterplan, from the work done to inform the NWCAAP process, through to the plan that evolved during the pre-application process, and finally submitted with the planning application. At every stage public and stakeholder consultation has played a key part of informing the process.
- 8.14 The DALs also details the influences from the surrounding environment and context that has gone into the design process. The Masterplan has taken strategic influences and drawn upon the character of Cambridge's open spaces, residential neighbourhoods, academic clusters, Colleges and local centres to help inform this mixed use development.
- 8.15 The Masterplan also has a duty to respond successfully with the constraints of the site. Elements such as the Green Belt boundary, topography, drainage, existing land features and the Site of Special Scientific Interest (SSSI), as well as noise and air quality issues all have to be address and integrated into the design.
- 8.16 The Cambridgeshire Quality Charter for Growth sets out four headings that development proposals should respond to: Connectivity, Character, Climate and Community. The proposal in design terms has been assessed under these headings below, cross-referencing the NWCAAP policies where relevant.

### **Connectivity**

- 8.17 The Masterplan aims to provide connected, walkable neighbourhoods, both internally within the site and externally to the surrounding residential areas and beyond. The connectivity must also provide strategic connections for public transport links and private vehicles in conformity with the NWCAAP.

- 8.18 Throughout the site strategic walking and cycling provision is made, starting with the 'Ridgeway', a cycle and pedestrian spine running through the centre of the site from Bunker's Hill (and Cambridge Road, Girton), through the local centre within the proposal, across the strategic gap and linking with Storey's Way to the southeast of the site. The route links with the orbital cycle way which runs from Madingley Road to Huntingdon Road, and then through the proposed NIAB development towards the North and Northeast of the City. The Ridgeway links in with a cycle route from Madingley Rise and the avenue of Horse Chestnut Trees connecting to Huntingdon Road. Links are also made with the green fingers within the development running down to the western edge.
- 8.19 Two main vehicular routes (primary streets) through the site are proposed as prescribed by Policies NW14 and NW15 (and Figure 6.1 in the NWCAAP), with several other routes serving as secondary and tertiary streets, which will form a permeable network around the site. It is envisaged that development will be at a higher density around the primary streets maximising opportunity to house people and employment uses close to the main transport routes proposed.
- 8.20 The primary and secondary streets, along with the primary and secondary cycle routes are fixed within Parameter Plan 02 (PP02). Each 'fixed' route has a certain level of flexibility that can allow for slight variation during the detailed design stage, but without compromising the principles of the route(s). Also set within PP02 is a restricted zone through the local centre, which will give public transport and softer modes of travel the ability to move through the local centre, with cars taking a more circuitous route.
- 8.21 PP02 also limits the proposal to vehicular access from only four access points: Huntingdon Road West, towards the northwest of the site close to Girton College, Huntingdon Road East to the west of the strategic gap opposite Hotel Felix, Madingley Road West adjacent to the existing Park & Ride, and Madingley Road East utilising Madingley Rise. The latter of these access points will not connect to other roads within the development (effectively a cul-de-sac for cars). All other access points (Bunkers Hill, Storey's Way and the Avenue of Horse Chestnut Trees) will be cycle and pedestrian provision only.
- 8.22 PP02 also establishes the principle that vehicle routes will be designed to low speeds. This commitment is consistent with Policy NW14. Indicative sections have been provided within the DALs to support this statement.
- 8.23 Overall the connectivity of this site, both internally within the site and externally both towards the City and either directly or indirectly to countryside destinations, is based on sound design principles. The street hierarchy is clear, and there is a commitment within the design towards supporting softer modes of travel consistent with the NWCAAP.

#### Character

- 8.24 The sheer extent of this site means that the development will have several character areas that will evolve from how the land uses, densities, heights, streets and open spaces are distributed across the site. The distribution of land uses around the site is informed by several factors including the constraints of the site, and the need to fit in with the character of adjacent land uses/designations.
- 8.25 There are four main neighbourhoods identified in the DALs, these are: The Local Centre, Storey's Field, Ridgeway Village and Huntingdon Road West. Below each neighbourhood is discussed in terms of character, and how this is represented within the parameter plans in terms of land use (PP04) and heights (PP05).

### Local Centre

- 8.26 The local centre is situated in the heart of the development adjacent to the strategic gap, well served by public transport and cycle/walking paths as required by NWCAAP Policy NW21. The local centre will be the primary focus for the community, and amenities such as shops and the primary school. The proximity to facilities and sustainable transport options along with its location in the centre of the site means that it has the potential to accommodate higher buildings and a greater density.
- 8.27 The local centre will be mixed use in nature comprising several community and commercial aspects, which gives vitality and viability to the proposal. PP04 complements this by allowing for a range of uses within the local centre such as retail uses (Use Class A1-A5) student units, senior care units and residential units (C1-C3), and non-residential Institutions (D1- health centre, nursery etc.), and assembly and leisure (D1- community centre).
- 8.28 Heights within this area are potentially up to 18m high (typically 5/6 storeys) to reflect the aspiration to have a high density near to facilities and transport node. That is not to say that all building in this area will be that high, merely that the flexibility is given here to establish greater height where appropriate at the detailed stage. The indicative details within the DALs show the potential for residential units above the retail elements within the scheme.
- 8.29 The buildings in the local centre will be diverse and will be tied together with strong public realm. The area will be vibrant and active with key frontage addressing the main streets, local centre, and strategic gap. The spaces will be well enclosed by the surrounding buildings.

### Storey's Field

- 8.30 Storey's Field neighbourhood sits to the east of the strategic gap and is predominantly residential in nature. The exception to this is the area to the south of Storey's Field adjacent to Conduit Head Road/Madingley Rise which is designated for Academic/Research use by PP04, forming a cluster with the existing University uses located off Madingley Rise.

Between the Academic/Research uses and the residential uses within Storey's Field is an additional zone proposed with PP04, which allows for uses such as local shops and/or a nursery if viable.

- 8.31 The heights set for Storey's Field vary to reflect the character of the site and adjacent land users. Zones S and T within PP05, which sit adjacent to residential properties, are limited to 10m high (which typically represents two storeys and a pitched roof). Zones P, Q, and R, which are the remaining zones within this part of the site, allow for buildings up to 15 metres high (5 storeys). This reflects a gradual increase in height as the scheme builds towards the centre.
- 8.32 This area of the site accommodates some key existing features such as the avenue of Horse Chestnut Trees and woodland as well as providing one of the key frontages addressing the strategic gap and SSSI. An important green finger runs east-west providing a green feature linking to the strategic gap.

#### Ridgeway Village

- 8.33 To the west of the local centre sits the 'Ridgeway Village' that will accommodate a number of different uses. To the east of the Ridgeway the use is residential with heights limited to 10 metres high to respond to the neighbouring context. The potential for higher buildings then moves up towards the Ridgeway allowing for up to 18 metres adjacent to the Ridgeway.
- 8.34 To the west of the Ridgeway the uses change to Academic/Research uses and Collegiate housing which will also address the western edge of the site and play a key role in the setting of the site and the city. The heights on this site edge are scaled down to 15 metres, and particular sensitivities about the design of these building and how they front the western edge will be something that will need a lot of discussion at the more detailed stages.
- 8.35 The Ridgeway Village will be a vibrant area with a mix of densities and uses with a strong frontage onto the Ridgeway itself. A small zone which allows for uses such as local shops and/or a nursery if viable is also situated here.

#### Huntingdon Road West

- 8.36 Huntingdon Road west represents the northwest tip of the development and will provide for two distinct areas for development. The area to the east of the primary road will be low density residential development which will include an element of residential fronting Huntingdon Road and complementing the existing character of that road.
- 8.37 On the opposite side of the primary road are Academic/Research buildings, which will act a potential landmark cluster and will be prominent from views from the A14 and M11. This area could also accommodate the



energy centre which does not form part of this application, but could come forward separately in the future.

### Density

- 8.38 Policy NW5 requires an average net density of at least 50 dwellings per hectare to be achieved across the site as a whole in order to ensure that efficient use of the land is made. Net density is calculated by working out the number of dwellings per hectare, when subtracting strategic space and infrastructure such as large open spaces, primary roads and elements such as the primary school.
- 8.39 The applicants have proposed that the density of residential development will vary significantly across the different areas of the site, taking into account the various character aspirations for the development and the existing constraints around the site. For example, they propose a much lower density on the edges of the site, to reflect the surrounding residential character as highlighted through neighbour representations, compared with a higher density in the local centre, away from existing properties and close to facilities and transport nodes. Overall, notwithstanding the need to meet such challenges, they propose to provide residential development to at least a minimum net density of 50 dwellings per hectare across the site, which therefore complies with Policy NW5.

### Impact on Neighbouring Properties

- 8.40 The limits on height are aimed to respond and reflect the character of the existing low density residential uses on the edge of the development, building up the heights and density more central to the site. A lot of consultation was undertaken with local people adjacent to the site and the complementary character of the areas on the perimeter of the site reflects that.
- 8.41 Through the amendments to the application an additional zone was introduced (Zone T) which limited height in that zone to 10 metres, reducing the potential impact for properties in Conduit Head Road, which was initially raised as a concern through the consultation process. To complement PP05 (the Parameter Plan which limits building heights) PP06 has been produced which limits the overall heights of buildings above ordnance datum (AOD).
- 8.42 The numbers set within zones on PP06 give the local authorities comfort that the overall height can be fixed (otherwise a building can still be 10 metres high, but the land can be built up several metres to extend the overall height to subsequently impact neighbours). This is considered necessary on a site such as this with a varied topography. Although Zone T was introduced at the amendment stage, PP06 did not vary with it resulting in concern that although buildings with zones T are limited to 10 metres the land could be built up significantly (up to 5 metres) while still sitting within the parameter plans. A condition (Condition 67) is therefore

suggested to protect the amenity of the properties on Conduit Head Road, which limits the AOD in Zone T to 33.5 AOD.

- 8.43 Neighbour representations generally support the low-density approach on the edge of the site, and the back to back relationship is supported by the architectural liaison officer as well as most residents. The depth of the building zones on the edge of the site is sufficient to allow relatively large back gardens, and although not explicitly secured through the parameter plans the 20m minimum distance requested by neighbours could be achieved at the reserved matters stage.
- 8.44 Some neighbour representations have asked for a minimum of 30 metre back gardens adjacent to the existing Huntingdon Road properties. While development at the reserved matters stage should reflect and respect the character of adjacent properties, and therefore slightly larger back gardens than normal could be justified, this has to be balanced with the efficient use of land on allocated sites such as this, and thirty metres would be extremely generous. It is considered that the parameters as proposed allow for back gardens that reflect adjacent character, and other issues of concern such as window orientation and removal of permitted development rights would be looked at, at the detailed stage and imposed if justified.
- 8.45 Clearly a site of this size will vary in character throughout taking influences from existing character adjacent, existing and proposed site features. While a lot more work will need to be done to evolve these characters through the design coding and reserved matters stage, the parameters proposed offer a robust platform to help realise the vision set in the NWCAAP.

#### Climate

- 8.46 The NWCAAP is ambitious in terms of sustainability, and that ambition is reflected in the documentation submitted with the application, (discussed in more detail later in this report). These sustainability aspects have been incorporated within the Masterplan design to ensure that it does not prejudice delivery.
- 8.47 Sustainable transport measures have been central to the evolution of the Masterplan, allowing for walking, cycling and public transport links throughout the development as discussed above. Sustainable Drainage Systems (SuDS) play a large part in the Masterplan design. They have influenced the strategic green space throughout the Masterplan and connecting green fingers throughout to allow a solid network of drainage and green spaces which work their way down towards the western edge.
- 8.48 The western edge itself has been designed to accommodate large storm events (discussed in more detail elsewhere in this report), and complement the SuDS system proposed.

- 8.49 The application proposes Code for Sustainable Homes (CfSH) Level 5 to be met on this site. In order to achieve this Combined Heat and Power (CHP) and district heating is proposed across the application site. The land uses proposed, their location and densities have been carefully sited throughout the site to ensure that CHP can work effectively and efficiently. Other aspects such as planting and ecology have been carefully designed to ensure optimum solutions are achieved.
- 8.50 A lot of the commitments to sustainable living are delivered through other strategies such as carbon reduction, waste, water and drainage. The Masterplan and corresponding Parameter Plans need to be able to accommodate these strategies to ensure they can be delivered at the detailed stage. To this end it is considered that the way the scheme has been designed should allow for the scheme to achieve its ambitious targets within the NWCAAP.

#### Community and Open Space

- 8.51 Social infrastructure is important to any new development. The Masterplan has to be designed so that it can help the community thrive with essential facilities accessible to all on the site. As outlined above the local centre sits within the heart of the development ensuring that it is easily accessible for all residents of the site. The elements that make up the local centre are important, as is the phasing of provision, and community support available, all of which are covered in detail later in the report. There are also potential neighbourhood hubs that are allowed for in the Parameter Plans should they be viable.
- 8.52 Community elements such as outdoor sports pitches, informal play space, children's play and allotments are distributed throughout the proposal ensuring that each area of the site has facilities locally. PP03 (Open Land and Landscape Areas) establishes where these open space areas will be within the development, identifying the Green Belt areas and open spaces. This will enable elements such as the Youth and Play Strategy (secured by Condition 9) to build on the plans in more detail.
- 8.53 Urban design officers have been closely involved in the development of the above design principles and support the scheme as amended, and consider that the proposed development has the potential to create an exciting and high quality new development.

#### Visual Impact

- 8.54 Policy NW4 of the NWCAAP requires development to create a high quality built edge to the urban area and provide an appropriate setting to Cambridge that maintains the purposes of the Cambridge Green Belt. Policy NW29 further seeks to secure the timing and delivery of strategic landscaping for the development, to ensure that the visual impact of the development is minimised. The Environmental Statement submitted as part of the application looks at the Landscape and Visual Impact of the development.

- 8.55 There are two main strategic elements to the visual setting of the site; the western edge, which provides the foreground of the site from westerly views which includes long distance views from Madingley and close up views from the M11, and the Strategic gap (sometimes referred to as the Girton gap) which is positioned to ensure separation is maintained between Cambridge and Girton village. Both of these areas are retained within the Green Belt. A third area of Green Belt to the west of the Park & Ride will provide additional green space for outdoor sport and allotments, however due to its position below the M11, and the existing woodland adjacent, this area doesn't have significant impact in terms of visual impact.

### Western Edge

- 8.56 The western edge of the development is the area of Green Belt between the development boundary as prescribed by the NWCAAP and the M11, which varies in width between 170 metres and 270 metres.
- 8.57 The western edge is an extremely important element of the proposal. The design evolution has been informed by responding to drainage, ecological and landscape issues while performing noise mitigation measures and providing parkland space adjacent to the development. It must also maintain a 'rural' element to the western side. The indicative design accommodates existing features and constraints, key aspects such as the Washpit Brook, existing planting and historical field patterns are used within the design. Elements such as phasing, landform, spoil and an existing gas main have been factored in at this stage also.
- 8.58 The NWCAAP rules out the use of an acoustic wall adjacent to the M11 and, therefore, the proposal is to carefully use topography, utilising arisings from the on-site construction activity, to act as a buffer from the road noise. The overarching concept is then to provide two 'sides' to the western edge; a more natural landscape to the west adjacent to the M11 providing a rural foreground to the development, and informal parkland to the east relating to the new development. The berms created by the arisings will be carefully crafted to adjust and control views into and out of the site. The berms will include tree planting helping to control the setting of the development.
- 8.59 The Washpit Brook will be integrated into the new landform with an additional channel to the east of the berms. The green spaces will provide for informal play and walking/cycling through the network of paths. These spaces will also provide for the floodplain area in large storm events. Ecological enhancements will be provided using the existing features and introducing habitat for Voles where possible. Some allotments are proposed to the north end of the western edge set behind the berm.
- 8.60 Noting English Heritage's comments, there is no doubt that this landscape form will differ greatly from the pastoral setting currently in situ. However it must be acknowledged that the site will change once developed and the

landscape form must respond to both its historical context and its new form. The indicative design submitted will provide for attractive, useable landscape which from within the development will limit views to the M11 (and limit noise from the M11), making the spaces between the berms and the development edge available for informal play and walks. Both English Heritage and Conservation officers note the importance of the buildings that front the new western edge, and great care and attention should be given to these buildings at both the design code, and reserved matters stage.

- 8.61 The views from the west and the M11 will change, however the new landscape form will provide an interesting and attractive foreground for the development helping soften the development form and creating a green edge to the city and the village of Girton. The landscape will still be designed so that, save for some very small areas, the landscape will be less than a 1:3 gradient. The green fingers set within the developed area will link up with the western edge allowing the western landscape to 'bleed' into the development.
- 8.62 The design submitted within the DALs is indicative, and the detailed elements and final landform will be subject to further discussion and detailed applications. A Parameter Plan (PP07) has been submitted, which details the topography in the western edge, and strategic gap, and gives some certainty over the proposal, however the contour lines are subject to a +/- 2.5m variance, which also allows some flexibility at the design stage.
- 8.63 Considering the various functions required of the Western Edge, landscape officers have noted that it will be important that the proposed typical gradients are not exceeded in public areas, as it will be difficult to walk on, plant and maintain.
- 8.64 Conscious of the comments from landscape officers, a statement has been introduced within PP03 that limits the earthworks visible from the west of the site to a 1:3 gradient, to ensure that the gradients proposed at the detailed stage are acceptable in visual terms as well as being useable spaces (i.e not too steep). Based on the level of information submitted reducing the variance from +/-2.5 to +/-1.5 could limit the flexibility at the detailed stage and therefore it is considered that the level of flexibility within parameter plan should remain as proposed.
- 8.65 The NWCAAP acknowledges that the built part of the development will be visible in the landscape, and it states that the Masterplan for the site ensures the provision of a complementary high quality and distinctive built edge to the extended urban area and appropriate landscaping. It is considered that the proposal as submitted conforms with this statement and is therefore consistent with Policies NW4 and NW29.

#### Strategic gap

- 8.66 The developable footprint as set out in the NWCAAP is set in two parts either side of the strategic gap. The principal function of this area of Green

Belt is to ensure that Girton does not coalesce with Cambridge. The challenge within the proposal is that while the space ensures the separation, it must also form a connecting part of the Masterplan providing a central open space, rich in amenity, biodiversity and recreation that bring the two areas of the site together, a concern repeated through neighbour and Parish Council representations.

- 8.67 As proposed through the Masterplan the strategic gap will be a series of spaces with different character, albeit all open spaces, and all Green Belt compliant. Towards the Madingley Road side of the gap, the existing ridge and furrow field (a system of ploughing used in the middle ages) will be retained and possibly used for grazing. The space then moves into the large central space (named Storey's Field within documentation submitted with the application), which is approximately the same size as Parker's Piece.
- 8.68 The proposed space will be different in character to Parker's Piece. Some elements will be similar (a cricket pitch is proposed to the south, which will also offer informal space when not in use, and a major cycle route runs through the centre of the space), but the location of the SSSI will give the space a much different feel. The SSSI will be 'open' allowing people to access the base of the SSSI area, and the applicants are exploring with Natural England a route through the bank of the SSSI which would enhance access further. At the north end of the open space the existing World Conservation Monitoring Centre will continue to operate. There will need to be careful attention paid to how this area integrates with the open space at the reserved matters stage.
- 8.69 The space then moves through a narrowed area (in reality this narrowed area will be around 30 metres wide) between land behind the Traveller's Rest restaurant and the primary school site. This element of the Primary School site is indicatively shown to be the school playing fields, which will complement the openness of the gap from long views. Through the narrowing the space opens up to land that can be seen from Huntingdon Road. This area will have some low-key formal outdoor sports (floodlighting is excluded in this area within PP03), and informal space with planting around the edges.
- 8.70 Girton Parish Council has asked for further design work to be carried out before the proposals are considered to be acceptable. The level of detail provided thus far is compatible with the status of the application as an outline submission, but does provide some comfort that a number of landscape solutions are possible for the site. Detailed design proposals will come forward through the reserved matters application process, during which the Parish Council will be consulted.
- 8.71 The Strategic Gap, as proposed, fulfils the aims of the NWCAAP and the statements approved with PP03 limit the development of this Green Belt space to uses compliant with Green Belt policy, as set out in PPG2 and reaffirmed in the NPPF. PP03 also identifies the secondary open space within the development, which connects the two strategic open spaces as

well as identifying those elements of existing open land that will be retained. Tertiary open land isn't identified on PP03 as these will be the spaces that are identified at the detailed design stage.

### Parameter Plans

- 8.72 The application comprises a set of nine Parameter Plans and Parameter Plan statements for approval. Many of these Parameter Plans (PP 02, 03, 04, 05, 06, and 07) are discussed above. In addition to this, PP01 sets three zones which are referred to in the description of development; Zone A being the Huntingdon Road and proposed junctions, Zone B is the development site, and Zone C is the Madingley Road and site access. Parameter Plans 08 and 09 relate to highways and utilities works, which will be discussed within the transport section.
- 8.73 All the Parameter Plans contain a 'for approval' box, which will be the information that is formally approved on the plan, and a 'contextual information' box that would not be formally approved. The Parameter Plan statements are also recommended to be formally approved.

### Contextual Plans

- 8.74 To supplement the Parameter Plans a number of contextual plans have submitted which, although not for approval at this stage, give some key background or supporting information such as land ownership, tree preservation orders and landscaping options at the access junctions.
- 8.75 The Masterplan is also not for approval at this stage. The Masterplan is illustrative and represents one way in which the scheme, using the Parameter Plans submitted, could be drawn up. The Masterplan provides comfort that the Parameters can work and achieve the aims set within policy. Although an important tool in assessing the application, the DALs is also contextual and doesn't get formally approved through any granting of permission. A lot of the concepts and illustrations within the document will be subject to further scrutiny and testing at the design code and reserved matters stages.

### Conclusion

- 8.76 The Masterplan has been worked up over a long period involving input from officers at district and county level, key stakeholders, and members of the public and amendments to the proposal were made in April, to address some key issues raised. The Masterplan has then be drawn back into more general 'Parameters', which create a successful balance between fixing key elements of the site to ensure an acceptable development in policy terms, and allowing some flexibility for the design to evolve at a later stage.
- 8.77 Urban Design officers are supportive of the proposal, and both CABE/Design Council and Cambridgeshire's Quality Panel have acknowledged the qualities of the masterplan, the former stating that the

Masterplan is clear and logical, well connected and respectful to its surrounding and commending the resolution to the western edge, and the strategic gap. All parties acknowledge that the work done to date needs to be built on through detailed design to ensure the development provides the highest possible quality.

- 8.78 Responding to English Heritage's concerns about the width of the green fingers, the amendments to the application widened these spaces to allow for views around the site and glimpses into the wider city. Their comments in relation to landmark buildings not necessarily requiring height are also noted, and will be taken on board at the design stage. Concerns from third parties about the density are noted, although the NWCAAP does establish a minimum density to ensure efficient use of this land, this shouldn't come at the expense of neighbour amenity for quality of housing provided. Parish Council and Residents' comments about the respecting local character with design and general quality of design are also noted, and something that is set as a key objective in the NWCAAP.
- 8.79 It is considered that the proposal represents a well-considered and robust Masterplan both in terms of design and landscape. The next stage of design will be a design code, which will help bridge the gap between the broad parameters proposed here, and the detailed design stage. A condition (Condition 7) is therefore suggested to secure a site wide design code that will help steer reserved matters applications. The proposal in terms of urban design and visual impact is compliant with the vision and aims of NWCAAP Policies NW1, NW2, NW3, NW4 and NW29.

## **Transport**

### **Introduction**

- 8.80 The NWCAAP emphasises the importance of sustainable travel in relation to the proposed development. Policy NW11 states that development will be planned in order to reduce the need to travel, and maximise the use of sustainable transport modes encouraging people to use non-car modes of travel. It aims to achieve a modal share of no more than 40% of trips to work by car.
- 8.81 The NWCAAP also identifies policies in relation to highway infrastructure, vehicular access, highway provision and linkages, as well as directing the need for public transport, cycling and walking provision. How the development relates to these policies is assessed below.
- 8.82 Through the documentation submitted with the application, namely the Environmental Statement, Transport Assessment, Travel Plan and supporting plans the applicant has tried to show that the policies can be achieved through providing a combination of: complementary land uses on site, focussed travel demand measures, encouraging the use of non-car modes of transport, discouraging the use of the car and ensuring that future residents can access work, amenities and recreational facilities locally without the need to use a car.



- 8.83 Throughout the public consultation both at pre-application stage, and during the application transport issues have accounted for a significant proportion of comments and concerns. The applicants have worked with the County Council, and the Highway Agency to ensure that all the issues relating to transport can be addressed through some form of mitigation to address concerns and comply with policy.
- 8.84 The site is well located with respect to existing public transport, pedestrian and cycle infrastructure as well as being well connected to the local road network through two arterial routes (Huntingdon and Madingley Road), both of which are busy at peak times. The site also offers links to the strategic network (A14 and M11), although the two, existing, local junctions are limited to westbound (A14) and southbound (M11) carriageway access in the immediate vicinity.

#### Transport Assessment

- 8.85 The applicant has assessed the likely impact of the proposed development using a methodology agreed with both Cambridgeshire County Council and the Highways Agency. The Cambridge Sub Regional Model (CSRM) has been used which is an integrated land use and transportation model and incorporates the County's SATURN highway model, providing a high quality representation of the capacity and traffic flows on roads through the sub-region, ensuring that crucial congestion effects are represented. The model also includes individual public transport services such as bus, guided bus, park and ride and rail and allows also for Cambridge's unique transport patterns in terms of walking and cycling. The assessment used 2026 as the assessment year (when this site, and other anticipated growth development will be fully built out), to provide a robust assessment of the full impact.
- 8.86 The applicant also independently checked the predicted impacts from the development using the CSRM with a 'Person Trip Model' to help give greater confidence to the estimated figures.
- 8.87 The CSRM has been used to examine the area-wide implications of development growth in Cambridgeshire, and the need for infrastructure enhancements where applicable. In addition to development-related tests, the model has also been used to examine the impact of transport proposals including the Highways Agency's A14 Ellington to Fen Ditton scheme.
- 8.88 The Department for Transport (DfT) sets challenging standards which transport models need to comply with so that investment and planning decisions can be taken based on robust evidence. These standards are set out in guidance documents known as WebTAG (web-based Transport Appraisal Guidance) and DMRB (Design Manual for Roads and Bridges). The CSRM complies with these standards.
- 8.89 The model has been set up to:

- For a 'base year' of 2006 for which data on observed patterns of behaviour are used to 'calibrate' and 'validate' the model;
- For a number of future years to provide forecasts of future transport patterns using information about existing and predicted future homes, employment, education, shopping development, as well as existing and proposed transport links.

8.90 For the purposes of this proposal, a 2026 future assessment year has been used as this reflects the likely completed development assessment year set out in the Environmental Statement. Two runs of the model have been undertaken for 2026 to reflect the following scenarios

- 2026 'Do minimum' option test- which includes all existing, committed and consulted development and transport infrastructure in 2026, but *excluding* all the new road links and trips generated by the proposed development.
- 2026 'Do something' option test- which is the same as above but including the proposed development and associated new roads and links.

8.91 These model runs help identify both the growth of trips regardless of the proposed development, and the number of additional vehicular trips generated by this development on the transport network in the assessment year. A 'Person Trip Analysis' was also undertaken to understand in more detail how the local internal trip-making patterns work within the development.

### Results

8.92 Detailed results of all the traffic impact analysis are contained within the Transport Assessment. This identifies first and foremost the percentage difference in peak hour flows between the 2006 Base model, and the 2026 'Do Minimum' (without the development), which shows that through background growth (i.e not trips created by the development) that the M11 and A14 both experience significant increases in peak hour flow (8%-25% and up to 30% respectively), as does the A428 (increase of at least 53%). There are also increases in the peak hour flow on both arterial routes into the city (Madingley Road and Huntingdon Road).

8.93 The results of the comparison between the 2026 'Do minimum' and 'Do something', essentially the impact that this development will have are key to identifying the impact of this particular proposal on the highway network.

### Impact on Strategic Network

8.94 Policy NW12 requires sufficient highway capacity in order to support the proposal, and that development must contribute to measures to mitigate any significant adverse traffic impacts on the M11 and/or A14. Discussions with the Highway Agency throughout the pre-application process, and

following submission of the application have taken place to ensure that the Transport Assessment identifies any potential impact.

- 8.95 The results show that there is minimal influence on the strategic network (A14 and M11) as a result of this development. When comparing the 2026 Do minimum scenario and 2026 Do something scenario model flows show (between various junctions) generally between a 1.4% increase to a 0.8% decrease. The exceptions to this are the section of Dry Drayton Road to the M11 merge on the A14, which shows a 2% increase in the AM peak, and the A14 and A14 service roads - from the M11 merge to A14 Eastbound slip - which shows a 1.9% and 3.7% decrease in the AM and PM peak respectively. The A428 experiences an increase of between 5% and 7%. It should be noted that these are changes in traffic flow in 2026 between the 'with' and 'without' development scenarios. Under both scenarios there is still significant growth in traffic from the base year of 2006
- 8.96 The Highway Agency is satisfied that these changes will not have a material impact on the strategic network, and has not objected to the proposal. The strength of the proposed travel plan will ensure that any impact can be monitored during the lifetime of the development. The applicant proposes to provide additional transport measures beyond those incorporated into the model which should reduce the impact further. The applicants will also monitor the use of the M11 J13 slip road, and should levels exceed those anticipated a cascade of penalties for the applicant could be enforced, starting with enhanced travel plan measures, and as a final fallback physical works to the M11 slip road or alternative payments.
- 8.97 The applicant remains in a unique position, in that they are able to influence trip patterns into the city through changes to other employment areas within the city. Although the University already have a University-wide travel plan, by targeting employees at other sites, who have real potential to change their trip into the city (for example those who live close to the Guided Bus). Measures such as a car sharing scheme, extended car club scheme, and subsidised bus passes could reduce the AM peak trips into the city by as much as 695 car trips. This would also have significant benefit to both Huntingdon and Madingley Road.
- 8.98 The Highway Agency has no objection to the application subject to securing the University Site Wide Travel Plan, which includes the mechanism to monitor and secure if necessary the improvement works at the J13 slip road, and a Construction Environmental Management Plan. The application is, therefore, compliant with Policy NW12 in this respect.

#### Local Roads

- 8.99 As a result of this development, the profile of traffic on Huntingdon Road will change. Peak hour traffic going both ways west of the new Huntingdon Road West access will increase by around 270 vehicles, however flows on the sections of Huntingdon Road to the east of that junction will decrease by around 70 vehicle trips in the AM peak and 150 vehicle trips in the PM

peak. It should be noted that these are changes in 2026 between the 'with' and 'without development' scenarios; both scenarios show increased traffic flows on Huntingdon Road compared to the base year.

- 8.100 This reflects the likely changes in travel patterns across the area, including the change of modes and public transport services. It is also reflective of the application site creating a new orbital transit route through to Madingley Road, intercepting vehicles that would otherwise have exited the A14 and travelled the length of Huntingdon Road onto either Storey's Way or Mount Pleasant to access the Madingley Road area. Overall the journey time along Huntingdon Road increases by approximately 45 seconds in the AM peak, this is primarily due to the two new signalised junctions.
- 8.101 There is a similar impact on Madingley Road. The two way flow on Madingley Road to the west of the new site access is predicted to increase by around 200 vehicular trips. However, on the section to the east of the new High Cross junction the two way flows decrease by 170 vehicles, reflecting the changes in travel patterns and improved public transport. The average journey time increase in both directions in both peaks is around 23 seconds, again brought about by the new signalised junctions. Again, it should be noted that these are changes in 2026 between the 'with' and 'without development' scenarios.
- 8.102 Most local roads experience small changes as a result of this development although there is a large increase in vehicular movements through Windsor Road and Oxford Road between 45% and 41% in the AM and PM peak respectively. The applicant proposes S106 contributions for mitigation of this impact. There are also increases in traffic along Girton Road and Grange Road identified by the model, however it also shows a significant reduction in traffic through Storey's Way.
- 8.103 The table in Appendix N shows a summary of the total vehicle movements from the 'Do Minimum' and 'Do Something' tests. The origin of the journey is listed down the left hand side as the (row headers), and the destination of the journey is listed along the top (column headers). Two sets of two tables are shown, one comparing the AM Peak and one showing the PM Peak. By comparing the figures in the bottom right hand box the overall impact on the network as a result of this development, when compared to without the development (but including background growth) can be identified.

#### Transport Strategy

- 8.104 In order to reduce trips by the private car and encourage more sustainable transport modes an Access and Movement Strategy has been included within the transport assessment and factored into the model results above. The strategy has been derived to ensure that the development complies with Policy NW11.

### *Land uses*

- 8.105 The Policy requires good levels of day-to-day facilities within the local centre to help internalise trips. The applicant has proposed a good range of facilities on site, including shops, community facilities and primary school to ensure reducing the need to travel of day-to-day needs.

### *Walking and Cycling Strategy*

- 8.106 The proposed development needs to enhance and expand on the existing cycle and pedestrian network in Cambridge. Parameter Plan 02 identifies the pedestrian and cycle connections between the proposed development and the existing network. In addition to the site access points (discussed in more detail below) cycle and pedestrian connectivity is provided to connect with Huntingdon Rd at Bunker's Hill linking to Cambridge Rd, Girton, at the eastern side of the strategic gap, linking to the western side of the NIAB development, and at the avenue of Horse Chestnut trees.
- 8.107 The proposal has links to Madingley Road, via Madingley Rise, which along with the Madingley Road access point allows for connections to the West Cambridge development and the Coton footpath. There is also a proposed cycle and pedestrian access point at Storey's Way which links into the Ridgeway (a cycle and pedestrian highway), which runs through the heart of the site up to Bunker's Hill.
- 8.108 Adjacent to the site, a new cycleway will be provided from the junction with Cambridge Road, Girton to the new Huntingdon Road west access. Improvements will also be made to the cycleway on the north side of Madingley Road, linking in with the current County Council scheme to improve the cycle provision on that road. The S106 will also provide for improvements in the local area, described in greater detail in that section of the report.
- 8.109 Walking and cycling links to the countryside have also been secured. The provision is outlined in detail in paragraphs 8.271 to 8.276 below. It is considered that the proposals comply with Policies NW17 and 18 of the NWCAAP.

### *Public Transport*

- 8.110 Policy NW16 of the NWCAAP requires high quality public transport to be provided as part of the development. The proposal provides for a comprehensive public transport strategy, developed by the applicant in conjunction with the County Council to address this policy. This strategy identifies the phasing of, and long-term viability of the various route options for public transport on this site.
- 8.111 The Public Transport Strategy concludes that the following services be provided as a result of the proposed development.

- In year 1 (as soon as practically possible) the Uni 4 service will be extended into the site, with its existing 20 minute frequency. A 30 minute frequency Saturday service is introduced at the same time. This service will connect the site with the western part of the city, with an option to link to the Railway Station and will connect with Addenbrooke's Hospital.
- Once the commercial/academic floorspace is provided on site the Uni 4 service will be increased in frequency to every 10 minutes. Concurrently with this the Citi 4 service will not need to divert through the West Cambridge Site and can operate directly on Madingley Road connecting Cambourne with the edge of this site, through to the city centre.
- At 800 dwellings a new service (Citi 8) running between the site and the city centre will be introduced and will operate every 20 minutes Monday-Saturday daytimes and hourly in the evenings and on Sunday.
- Once the commercial/academic floorspace is provided (and on completion of the radial route through the site) on site the Citi 5 service (Bar Hill to the city centre) is to be diverted via the site, and will operate every 10 minutes on Monday-Saturday daytimes and every 30 minutes in the evening and on Sunday. Once this service is in place it will supersede the Citi 8 route in the above.
- Upon completion of the NIAB through road (which will complete the orbital route, and have public transport priority) and after 400 dwellings completed on this site, an orbital hourly service from West Cambridge to the Science Park will be provided.

8.112 The applicants will provide subsidy for these services in the early years, to ensure that the bus is there, even when unviable in the early years, to establish habit for residents of the development.

8.113 The applicants will provide subsidy for these services in the early years, to ensure that the bus is there, even when unviable in the early years, to establish habit for residents of the development.

#### *Car and Cycle Parking Provision*

8.114 The NWCAAP identifies the car and cycle parking standards for the development. These are expressed as a maximum for car parking and a minimum for cycle parking.

8.115 The applicant has made a commitment through the Transport Assessment to comply with the maximum standards, which will be monitored through the reserved matters applications. There is a clear balance to be struck ensuring that adequate provision is provided, as lack of available spaces often leads to illegal/dangerous parking and harming amenity and ensuring

that use of the car is not encouraged. A distinction needs to be made between car ownership and car usage.

- 8.116 A condition (Condition 40) limiting the overall car parking spaces on the site is suggested, ensuring that some flexibility between development parcels can be accepted (some parcels of family housing may want to exceed the 1.5 total average), without concern that the overall site limit will be exceeded. A condition (Condition 41) is also proposed to look at the local centre comprehensively where parking for different uses may be covered through one central parking area. This gives comfort that parking will not be significantly under, or over provided.
- 8.117 In terms of cycle parking, applying the standards in the NWCAAP will result in over 12,000 cycle parking spaces on the site. The applicants are committed to meeting the standards, and where necessary to achieve code for sustainable homes (CfSH) level 5, exceed them. In addition to this BREEAM standards will require things such as showers, changing facilities and lockers, and drying space for wet clothes to be provided in the non-residential uses.
- 8.118 The applicant has identified areas where reducing the car parking further could potentially reduce trips on the network further. This is supported in principle, however this needs to be achieved in context and carefully considered. Under-providing for parking could result in detriment to the streetscene, with fly-parking and loss of amenity, or overspill into the streets outside the development site. Lower levels of parking for key worker and employment uses would appear to be achievable through the implementation of the University Wide Travel Plan measures, whilst inhibiting fly-parking and loss of amenity will be managed through the wider estate management proposals being put forward by the applicant.
- 8.119 A commitment at this stage has been provided to adhere to the NWCAAP standards, with the Transport Assessment outlining a target to significantly better the standards, by considering the potential mix of units on site and the various Travel Plan measures being proposed. The maximum parking provision, outline above, will be monitored and enforced through the detailed application stage. As such the proposal is compliant with Policy NW19.

#### *Internal Roads*

- 8.120 Policy NW13 requires that the vehicular access points into the development be minimised, and a concept diagram is shown in the NWCAAP identifying three points of access, two from Huntingdon Road and one from Madingley Road. These roads are shown as an orbital route, which runs parallel to the strategic gap, and a radial route, which runs parallel with the western edge. The proposed development is consistent with the NWCAAP and can, therefore, be supported in principle.
- 8.121 Policy NW14 states that 'a new route will be developed linking Madingley Road with Huntingdon Road'. The policy requires its design to be based on

low vehicle speeds, with priority for pedestrian and cyclists. Parameter Plan 02 states that 'All vehicle routes will be speed limited to 20mph, or less', meaning that the through detailed design of the road, it is anticipated that speeds will be kept within this target. Indicative sections of the internal roads are provided to support this statement, for primary routes this involves a narrow carriageway with planting either side, and a separate cycleway, and pedestrian footpath. Secondary and tertiary routes will provide for narrow carriageways with on street parking and planting, with cyclists on road. While the detail will be approved through the reserved matters applications the indicative sections show that the low design speed on the site can be achieved and the policy adhered to.

*Travel Demand management Strategy/Framework Travel Plan*

- 8.122 Managing travel at this site is key to reducing the number of trips on the network. The broad objectives of the travel plan(s) will be to reduce reliance on the car, promote the softer modes of travel, promote car sharing, encourage behavioural change. The travel plan should aim to achieve and exceed the NWCAAP policy of less than 40% car driver mode share.
- 8.123 A Framework Travel Plan has been submitted with the application which highlights the measures available to help manage movements to and from this site. The overall demand management strategy looks at five 'tiers' of travel planning ranging from the location itself and the built environment to a travel plan coordinator, the services and facilities and promotional strategy.
- 8.124 The site is in a sustainable location, and with good design and layout such as permeable footway and cycleways, high levels of cycle parking, 20 mph limit to internal roads and good public transport links the proposal lays a foundation for sustainable travel.
- 8.125 The applicant has committed to provide sufficient resource to a Development Transport Co-ordinator, who will be supported by community 'champions' and individual work place/school/residential co-ordinators. Also provided will be funding for a stakeholder group consisting of representatives from the residents' groups, major occupiers, the Councils and the applicant.
- 8.126 Proposals within the travel plan include cycle pools/hubs that will be located near nodes of activity, cycle 'clinic' facility in the local centre for works and repairs to cycles, the creation of a cycle club and cycle discounts. Car Club spaces will be located on the site, at the rate of 1 space per 200-250 residents which will result in between 12-15 car club parking spaces on site. Extra incentives for key workers to use the car club could be provided increasing the number of car club spaces further.
- 8.127 There will also be a large marketing/advertising campaign for sustainable travel. This will involve recruiting champions, creating social networks within the community and developing a dedicated website with up to date



information. Staff induction packs and household welcome packs will include maps, bus information with health and financial benefit information.

- 8.128 Funding will be set aside for measures within the travel plan, as well as money set aside to address any shortfalls in targets for the travel plan. The travel plan will be a working document, monitored annually and adapted over time to be as effective as possible. It will be secured through the S106.

#### Further mitigation measures

- 8.129 The 'Do Something' Model runs have incorporated the benefit of the Travel Demand Management Strategy highlighted above including the public transport measures proposed, and the results show a negligible impact on the network. Notwithstanding this the applicants are proposing additional measures to ensure that the development creates even less of an impact than the model results show.
- 8.130 These further mitigation measures are either secured through condition, S106, or are part of the travel plan. The measures look to minimise vehicle trip reduction such as looking at reduced parking spaces or funding promotion of the Guided Bus, or look at preserving/enhancing capacity on the network such as improvements at the Queen St/Madingley Road/Northampton St Junction, or demand management such as MOVA/SCOOT at junctions (see below). There are also improvements for pedestrian and cyclist movement within the nearby roads.

#### Junction Analysis

- 8.131 The proposed development introduces three new controlled junctions, and changes to an existing junction on Madingley Road. The Transport Assessment has applied the most appropriate modelling software to look at the capacity and operation of the proposed junctions, as well as the impact of the proposed development on existing junctions in close proximity of the site to ensure that they can work within capacity and operate safely for cyclists and pedestrians.
- 8.132 Detailed drawings of all junctions have been applied for at this stage and therefore will not be reserved for further approval. Therefore, the detailed design needs to be fully interrogated now. Indicative roadmarkings and signal heads have been provided on the plans.

#### *Huntingdon Road West*

- 8.133 The Huntingdon Road West junction will be situated opposite Grange Drive, close to Girton College. The junction will be a new four-arm signal controlled junction, including pedestrian and cycle crossings. The modelling carried out on this junction showed that all arms operate well below 100% in the assessment year, and the maximum queue length can be accommodated within the space available without any knock-on impacts.

- 8.134 To help this junction operate efficiently with the other junction proposed on Huntingdon Road, and the new junction serving the NIAB developments MOVA/SCOOT (a linked electronic signal optimisation system, that connects the junctions to manage traffic flow by responding to demand) will be provided to help reduce any delay. This junction also facilitates the movement of the 40 mph sign on Huntingdon Road to the west of this junction.
- 8.135 Indicative landscaping plans have been provided to show how the junction can be softened in design terms to help fit in with the character of Huntingdon Road. Although one protected tree will need to be removed as part of the junction, this tree has little amenity value, and the loss can be compensated for through the new planting provided. This junction is therefore considered acceptable.
- 8.136 The junction plan also shows the provision of a cycleway connecting the cycleway that ends just west of the junction with Cambridge Road, Girton. The cycleway proposed will help aid cyclists travelling to the north-west part of the development. Third Party correspondence has been received raising concern that this cycleway could have an impact both on highway safety (conflict with egress of residents on Huntingdon Road), and the trees that are subject to a Tree Preservation Order, and questioning whether it is necessary at all.
- 8.137 Illustrative Junction Plan 1 submitted with the amendments to the application shows the visibility splays (in alternate green and orange colours as they overlap) indicating that a 2.4 x 25m visibility splay is available (for the off carriageway elements), and will allow private vehicles and cyclists to see one another. On carriageway elements are not affected. All of the houses have sufficient space within their cartilage to enter and leave the properties in forward gear. It is considered that the link is necessary in order to promote cycling as a viable alternative to the private car.
- 8.138 The protected trees are important to the setting and character of Huntingdon Road, and to that end it is agreed that the provision of the cycleway should not compromise the trees. There are locations where rooting may be infringed upon although not enough to ultimately damage or impact the trees. The illustrative junction plan includes a topographical survey (so reliance isn't just based on an ordinance survey base). The suggested condition requiring details of this junction/cycleway prior to implementation includes a requirement for further details of tree root zones, and construction details where the carriageway infringes on a protected root zone. Subject to this suggested condition (Condition 45) it is considered that the proposal complies with NWCAAP policy.

#### *Huntingdon Road East*

- 8.139 The Huntingdon Road East junction will be situated to the western side of the strategic gap as identified within the NWCAAP completing the 'long

stagger' with the NIAB junction. The junction will be a three arm signalised junction and provide for cycle and pedestrian crossings, including a demand activated crossing on the eastern side of the strategic gap which will link up with the strategic cycleway on the western edge of the NIAB proposal.

- 8.140 The junction modelling shows that the junction would operate very near to capacity with city bound traffic in the AM peak and outbound in the PM peak. The junction would provide enough space for stacking vehicles and therefore would not interfere with any other junction. Although close to capacity the junction analysis has been carried out in a 'worst case scenario' not taking into account the further mitigation measures proposed by the applicant, and not including the addition of MOVA/SCOOT operating system proposed which will enhance efficiency and effectiveness. While it operates close to capacity in the peak hours, the junction operates well below capacity the rest of the time, on balance it would not be justified to require a larger junction just to cope with the peak time period.
- 8.141 The landscaping proposals, indicatively shown, result in significant changes to the appearance of the strategic gap, including the loss of the existing hedge along the roadside. While it is unfortunate that the hedge will be lost, inserting a junction in this location, for a scheme of this size mean it is necessary in this instance. A comprehensive planting scheme will be proposed to complement the new junction and will, over time more than compensate for the loss of the hedge.
- 8.142 Work was undertaken with the applicant to see if the left-hand turn into the site from Huntingdon Road, going outbound was necessary. The results showed that, with the loss of that lane, stacking queues would interfere with the adjacent junction. It is therefore necessary. Safe pedestrian and cycle provision is provided at the junction.

#### *Madingley Road West*

- 8.143 The Madingley Road west junction serves as the only access point from Madingley Road that connects through to Huntingdon Road. It is proposed in a location consistent with the NWCAAP, to the west of the Ridge and Furrow field adjacent to the Park and Ride. The junction is a complex one requiring a four arm signalised junction and being situated in close proximity to the P&R junction and the junction with the M11. There are also issues with ground levels in this area.
- 8.144 The model testing for this junction is done alongside all the other junctions in close proximity for the assessment year. All arms of the junction, and associated junctions will work within capacity, and the stacking lengths can be accommodated so that the queuing at one junction won't interfere with the others. The MOVA/SCOOT system will be fitted to the signalised junctions optimising the system along Madingley Road and reducing delays to traffic along the corridor. Public transport priority would be fitted to the junction to ensure that the bus service has priority.

8.145 Due to the nature of the junction and the levels involved there will be a loss of mature vegetation between Madingley Road and the Ridge and Furrow field. This is an unfortunate loss as this planting enhances the character of Madingley Road. While regrettable, this loss is unavoidable given that this is the location earmarked within the NWCAAP, and given that it can be replaced comprehensively with new planting to mitigate the impact, on balance, it is acceptable. Modelling was carried out to test whether the park and ride could be accessed from the proposed junction, regaining some of the Madingley Road frontage for landscaping. This arrangement resulted in over capacity at the junction and there was not considered viable.

8.146 Any replanting scheme must help keep the character of Madingley Road intact and should also be provided along the new road into the site including the area between the road and the P&R if possible, to help minimise the impact of lighting on residents in the adjacent roads.

#### *Madingley Road East*

8.147 The Madingley Road east junction already exists with Madingley Rise, which will simply be extended into the site. The junction will remain a priority junction but a crossing will be provided close to the junction to assist with pedestrian and cycle movements across the road. The road into the development will essentially be a cul-de-sac for cars, but will allow for connection into the rest of the site for cyclists and pedestrians. There are no junction capacity concerns at this junction.

#### *Junction analysis conclusion*

8.148 The proposed junctions have been subject to stage 1 safety audit and no significant safety issues have arisen. Conditions (Conditions 45, 46, 47, and 48) for each of the junctions are suggested which will require the submission and agreement of the MOVA/SCOOT details, road markings, landscaping details, and any additional works applicable to that junction, along with the relevant timing of the works.

8.149 The location of the junctions proposed are consistent with those identified through the NWCAAP and have been agreed with the County Council. All of the junctions work within capacity, with available space for stacking of cars for queuing in the peak periods. The methodology used for the work has been agreed with the County Council. The figures are robust figures using the assessment year, and do not include improvements that could be made through the further mitigation measures proposed by the applicant or the MOVA/SCOOT addition at the signalised junctions.

8.150 While the new junctions inevitably impact on the character of the existing roads, with the loss of some landscape features, the applicants will be required to provide for a satisfactory solution in terms of replanting which will both complement the new junctions, and the character of the arterial roads.

## Parameter Plans 8 and 9

- 8.151 In addition to the Parameter Plans 1-7 discussed earlier in this report, two additional Parameter Plans are proposed to cover the extent of highway works. PP08 relates to Huntingdon Road, identifying the zones where works are required to facilitate access to the proposed development and associated utility diversions. Zones are also identified for installation of utility apparatus. PP09 identifies similar works associated with Madingley Road.

## Third Party Representations

- 8.152 The agents for the neighbouring NIAB development have expressed concern that the NIAB2 development has not been considered within the Transport Assessment. The applicant had agreed the scope and methodology of the TA with both the County Council and Highway Agency, which should include NIAB1, but as NIAB2 is not a committed development (only allocated and not a submitted application) it does not need to be included. The NIAB2 application will need to be assessed with the traffic generation from this proposal included. Other queries are made in relation to the potential routing of traffic, however the model allows for access into the site from both Huntingdon and Madingley Road, and therefore the model will allocate the most appropriate access used based on cost/time for that particular trip.
- 8.153 With regard to a query raised on contextual information within the submitted plans; where this occurs on parameter plans it is intended to be just information only and provides just background context and is not being approved, where this occurs on detailed drawings such as highway plans, the intention is that elements of the drawing that are contextual will be secured through condition. This allows for tweaks through the safety audit process to evolve prior to final sign off and implementation.
- 8.154 With regard to a query regarding the ability of the transport model to reflect higher than national average mobility in the Cambridge region, it is important to remember that the CSRSM was developed for Cambridgeshire County Council, and is one of the most sophisticated models in the country for assessing the impact of new developments. It is largely based on locally derived data and so reflects Cambridgeshire-specific features, such as high levels of cycling, and it has been calibrated and validated against local observations which demonstrates its robustness. Some national relationships are built into the model, but these will not tend to have a significant impact on model results. For example, Cambridge City might experience higher levels of 'churn' within housing compared to the national average. However, the types of residents who contribute to this higher turnover will typically have similar behaviours to those they replace, which means this has limited impact on the model results.
- 8.155 With regard to the red line for the application, the land, subject to the application, is situated either within the highway boundary or the

applicant's ownership. Any cross over with third party land is due to the red line 'thickness' and the scale of the plan.

### Construction Traffic

- 8.156 The transport assessment has identified the peak period in construction movement associated with the development, and has assessed the effects of these movements on the highway network. Phase 1, which contains a significant amount of road carriageway and non-residential development such as the foodstore and other local centre uses, as well as the provision of some earthworks and balancing ponds should be the peak of construction traffic, and the movements anticipated have been used as the basis for the assessment.
- 8.157 The transport assessment provides a clear estimate of the peak construction traffic, which when looking at all of the activity in phase 1 will be a total of 544 total movements per day. This figure comprises 274 light vehicle movements, and 270 HGV movements. These movements have been inserted into the transport model, and shows that they can be easily accommodated due to the fact that most deliveries will not take place within peak hours to ensure reliability of delivery.
- 8.158 In terms of the construction impact the largest increase in flows would be in terms of HGV flows on Madingley Road between the M11 and the site access. There would be a circa 60% increase in HGVs, although this would remain well within the overall capacity of the road. The increase in traffic during the construction process in terms of impact on the road network is considered negligible. A Construction Environment Management Plan is suggested as a condition (Condition 52), which will control the environmental impacts and management aspects of the construction process.

### Conclusion

- 8.159 The Transport Assessment (TA) submitted with the application is considered to be a robust document supported by both the Highways Agency and the County Council. Although both Girton and Coton Parish Council, and a number of neighbours, have raised concerns regarding specific details contained therein, the methodology and modelling were undertaken in accordance with Department for Transport guidelines, using up-to-date information and the subsequent conclusions within the TA are, therefore, considered sound.
- 8.160 Where an impact has been identified within the TA, suitable mitigation has been identified and will be secured through the S106 agreement (see S106 section of the report below). The Framework Travel Plan is considered to be a strong, realistic document, which will be monitored and updated through the lifetime of the development, and will also be secured through the S106.

- 8.161 The applicant's strategies to minimise the use of the car through masterplanning, with strong walking, cycling and public transport strategies make for sustainable development in line with the ambitions of the NWCAAP. The proposed junctions, are consistent with the locations sited within the NWCAAP, and operate within capacity when the development is completed and including other growth within the city. While these junctions will have an impact in landscape and character terms initially, comprehensive replanting will be required which will mitigate any impact in the long term.
- 8.162 The Transport Assessment has identified those trips to work that will be from a car driver over a 12 hour period which shows that the trips associated with residents and employment on this site will be approximately 36% of all work based trips, in conformity with Policy NW11 of the NWCAAP.
- 8.163 The proposal is deemed to have negligible impact on the strategic network, and it is hoped through wider travel planning by the application it could have an overall positive impact. Subject to the suggested conditions regarding the proposed junctions, parking strategies, and location of car club spaces as well as securing location of bus stops and a mechanism for public transport priority through the local centre, and, subject to mitigation measures through the S106, it is considered that the proposal accords with policies NW11, NW12, NW13, NW14, NW15, NW16, NW17, NW18 and NW19 of the NWCAAP.

### **Affordable Housing and Dwelling Mix**

- 8.164 Prior to the 2003 Cambridgeshire and Peterborough Structure Plan the University of Cambridge identified this site to address its long-term development needs for a number of uses, including housing for their key workers. The Structure Plan accepted that the proposal site should be released from the Green Belt for the needs of the University and developed once evidence for the need can be shown.
- 8.165 The University's Housing Needs Study 2008 (UHNS 2008) was produced as evidence by the University for the examination into the NWCAAP, and identified a clear need for the land to be brought forward for development, with a current need for University key worker housing. Due to the longstanding difficulties in the local housing market, the University needs to achieve a fourfold increase in its provision of housing available to staff in order to deal with recruitment and retention problems arising from local house prices and rental levels. The findings set out within study are still relevant today, and survey work carried out by the University post 2008 continues to support the findings within the UHNS.
- 8.166 Policy NW6 of the NWCAAP requires housing development on this site to provide 50% affordable housing, in the form of University key worker housing. The occupation of these units would be limited to Cambridge University and College key workers in housing need and available in the long-term. To respond to this policy, and Policy NW7 relating to balanced

and sustainable communities, the applicant has submitted a Key Worker Housing Statement (KWHS) that identifies the policy context, the allocation principles, key worker characteristics and how the proposal will achieve a mixed and balanced community.

### Allocation Principles

8.167 The proposed development provides for 3000 dwellings, 1500 (50%) of which will be key worker housing in line with the above policy. Despite this new housing, the University will not be able to meet its full need for key worker housing through the proposed development and, therefore, further work has been undertaken to determine how to prioritise the housing that will become available as a result of this development.

8.168 The UHNS 2008 identified housing needs across all University staff groups:

- Academic staff (lecturers as well as support staff including administrative, technical and manual posts). These posts are usually a permanent contract, and are a small proportion of the 2,100 staff recruited per annum.
- Contract research staff (researchers who are nearly always appointed on a fixed term contract and have a high turnover- in post for 2.5 years on average).
- Academic related staff (administrative, computing, technical and library staff).
- Assistant staff (supporting functions such as clerical, secretarial and manual occupations). Turnover is high for support staff- staff staying in post 4 years on average.

8.169 Annual recruitment rates will continue to increase in the future as staff numbers continue to grow. The growth of the University is likely to focus on its research functions, therefore growth in contract research staff will be the most significant. Consequently, contract research staff are likely to be a high proportion of the priority key workers targeted here.

8.170 Another important aspect of the survey work completed by the University relates to where staff are recruited from. Approximately half the staff recruited in the five-year period 2004-2009 moved from elsewhere in the UK or abroad. This in-migration to Cambridge, both from elsewhere in the UK and from overseas, clearly adds to the existing pressures in the Cambridge housing market, and these employees are generally those who will not know the local housing market and will be in greatest need of housing support.

8.171 As the need for this housing still exceeds the supply, principles need to be established to decide which staff are given priority. Allocation principles have evolved through discussions with the local authorities and, as such, a four-step approach will be applied to all housing applicants.



- 8.172 Firstly there is a need to establish eligibility. Remembering that this housing is for employees who cannot afford open market rent, anyone who, on the basis of 30% of net household income, can afford open market rent is excluded (and so would not take part in the next steps identified below). The applicant must also have a contract with the University (or College, or affiliated organisation) with at least 12 months remaining, and exceeding 18 hours per week. It should be noted that this is total net household income, not individual net income, so a partner in the same household earning would mean that someone in the higher grades would probably be ineligible access to the affordable housing on this site.
- 8.173 The level of affordability identified on this site (30% of net median household income) is consistent with advice in the City Council's Affordable Housing SPD (Annex 1 para 5.9) which states that for intermediate rent; rents are not to exceed 30% net median household incomes.
- 8.174 The second step is to prioritise those people in 'hard to fill posts'. The University will work with their HR division to identify posts that have been vacant for considerable time and/or can only be filled by a small specialist workforce. These people will be prioritised in the context of the University needing to remain competitive with other international Universities. This criterion could also apply to existing staff that need to be retained.
- 8.175 The third step will be to assess the geographical classification, which will prioritise those people who are totally new to Cambridge, or coming from overseas who would be unfamiliar with the City, its geography and housing market.
- 8.176 Finally within each priority group, applicants will be reviewed to take into account their individual/family circumstances and immediacy of housing need. Applicants in greater need will be given a +1, +2, +3 etc. and those with lower priority -1 etc.
- 8.177 Tenancy agreements/contracts will be for one year at a time, and there will be a review of the tenant to ensure they still meet the eligibility criteria. However, the University will not discontinue tenancies without reason, creating unnecessary churn in properties, or inconvenience for the key worker. Typically it is envisaged that the occupation by key worker households will run for 2 or 3 years at a time.
- 8.178 The research work undertaken by the applicant shows that the estimated profile of the site (by applying the allocations policy to likely applicants, and making assumptions about family circumstances and additional household income) is likely to comprise 73% research: 24% support and 3% academic occupiers.
- 8.179 Within each of those groups identified above research workers (74% of the total) most are paid at Grade 5 level (£26,523 median) and grade 7 level (£32,620 median), support staff (24% of the total) has a much greater

spread of people on lower grades (with most paid on Grades 1-5 representing medians of £14,550 - £26,523). Academic workers (3% of total) are generally paid on Grade 7, 9 or above, however most paid at the higher end of the grade scale would not be eligible for the key worker housing.

#### Mixed and balanced community

8.180 Once the above steps have been taken the key worker will be allocated a housing size depending on whether they are single, a couple with no children, or have a family. The work undertaken for the UHNS 2008 has shown that to respond to the likely profile of the key workers a high number of 1 and 2 bedroom properties will be required (82%). This is to accommodate the fact that the key worker housing will be predominantly occupied by research staff who, due to their age, are typically single or part of a couple without children, who can occupy a 1 bedroom property, or with younger children, who can occupy a 2 bedroom unit. Family sized units of 3 and 4 bedrooms will make up approximately 15% of the key worker units to accommodate those key workers with larger families. The other 3% of units will be 4 bedroom units that can be a shared property (four individuals).

8.181 The proposed mix of key worker units is based on the evidence undertaken by the applicant and is considered acceptable as the housing on this site has to respond to the need identified. The market housing mix provides for a balanced mix across both smaller and larger units.

Unit size	Key worker units	% of KWH	Market units	% of Market	Total units	% of Total
1 bed	645	43	240	16	885	29.5
2 bed	585	39	555	37	1140	38
3 bed	190	13	380	25	570	19
4 bed	80	5	325	22	405	13.5
Total	1500	100	1500	100	3000	100

*Table 1 - Indicative Housing Mix*

8.182 Policy NW7 of the NWCAAP requires that the affordable housing be intermingled with the market housing in small groups or clusters, whilst the student housing can be provided in a number of groups distributed across each phase. The aim of this policy is to minimise social exclusion and avoid the creation of tenure monocultures.

8.183 The proposal has been designed to avoid tenure monocultures. This development is different from other fringe sites development, as it is a true mixed-use development, which assists in breaking down monocultures. The mix of land uses across the site as identified within the land use parameter plan ensures that there will be a good integration of uses between residential, student, employment and local centre uses. This is

enhanced further with uses such as senior care housing, a hotel and the provision of neighbourhood hubs that may include a local shop and/or nursery.

- 8.184 In addition to the differing land uses, there will be a further requirement for the residential element of the scheme to be broken down to ensure the clustering of tenures (market and key worker housing) as per the policy. The subtext to the policy indicates clusters of 6-25 units would achieve the policy aim. Significant discussion with the applicant has taken place regarding this aspect, as there is the need to balance the requirements of the policy with practical elements such as energy efficiency and management.
- 8.185 The NWCAAP policy requiring Code for Sustainable Homes Level 5 is a challenge for any development, but achievable here largely because of the high proportion of units that will be owned by the applicant, and the links with other University uses on site. The provision of the key worker dwellings and student accommodation at medium and high density enables the implementation of a cost effective district heating system. The economics of the district heating system are enhanced here by the fact that the University may privately provide the electricity it produces to its own buildings rather than sell to the open market. EU law, however, outlaws private electricity supplies to market houses and therefore all those properties must have a connection to public supply. Therefore 'pepperpotting', or small clusters of different tenures would compromise the energy efficiencies required to hit code level 5.
- 8.186 While the applicant has noted that the affordable housing on this site will, by its very nature, experience 100% employment the local authorities still require a successful integration of housing to ensure a balanced community. The key worker housing will, to an extent, be a more transient population changing occupier(s) every 2-3 years which may provide a tension with longer term residents in the market housing which supports justification for slightly larger clusters than prescribed. There is merit in placing together residents who will be in the same 'boat', and will be able to advise and support new residents, but a balance between keeping these key workers together, and mixing with the 'market house' residents has to still be achieved.
- 8.187 Mindful of all the above and the general need for the applicant to manage its housing and wider estate efficiently, but conscious of the need to achieve tenure balance across the site, the detailed designs will, for the housing areas, be designed so that no more than 25 key worker houses will have an interface with any one street. This means that, for example, there could be a block of back to back key worker houses; 50 in total, but the streets they front onto would be mixed with market housing. Key worker housing would have front doors to the street encouraging interaction and community cohesion, and making sure the units don't turn their back on the street. The KWHS contains an illustration as to how this can be achieved.

- 8.188 For the apartment blocks in the high density areas there will generally be more key worker units than market units, and clustering with the numbers indicated within the policy would be difficult to achieve. Many of the apartment blocks in themselves will exceed the 25 units within the policy. Sensible planning of high-density units will mean that they are generally located around the local centre and main transport nodes throughout the proposal. This places them close to areas of high social interaction and movement, and will minimise any potential social exclusion. The provision of the community and recreational elements of the scheme in the local centre and other neighbourhood nodes, discussed elsewhere in the report will have a strong influence on the successful integration of key worker and market housing occupiers on this site.
- 8.189 It is considered that the proposal will conform to the policy and enable the development to be laid out to minimise social exclusion and avoid tenure monocultures. While the numbers within the policy will be 'flexed' for justifiable reasons, the aims of the policy can fully achieved and therefore on balance there can be no objection. All of the development will be designed 'tenure blind' making sure that key worker housing and the market housing is indistinguishable architecturally. Policy NW7 also requires a proportion of new homes to be designed to lifetime homes standards and a condition (condition 22) is suggested to achieve this.

#### Rental Principles and Monitoring

- 8.190 Rental policy on this site is extremely important if it is to achieve the aims set out in the NWCAAP. Rents will be based on 30% the occupier's net household incomes, and less than 30% for a shared four-bedroom property. If an individual chooses to rent a larger property than they would otherwise be allocated, a higher rent to reflect this would be negotiated. Rental levels will be subject to review on renewal of tenancy agreements.
- 8.191 The University will be required to provide an annual report to the local planning authorities to report on the implementation of the key worker allocations. The annual report will cover rental levels applied, the University's salary profiles across different grades, and a review of occupier incomes versus rents applied at the application site. It will also contain a review of the allocation principles to ensure that if the University's targeted staff groups change, the modifications are reflected in the allocation principles. Following the annual report, the University's representatives will hold a meeting with the local authorities if required. The provision of this annual report will be secured through the legal agreement.

#### Student accommodation

- 8.192 Policy NW5 requires the housing supply on the site to provide for approximately 2000 units of student accommodation. The proposal conforms with this policy in terms of quantum, and identifies two areas within PP04 for student development, one area to the west of the local

centre, adjacent to the proposed sports pitches, and one area situated to the western end of the development either side of the primary road.

- 8.193 The locations proposed for student accommodation are considered acceptable, well linked to cycling and walking connections and local facilities and amenities. The student units will have to be designed to deal with elements such as noise, but student accommodation is more flexible in design terms and it is considered that noise can be designed out at the detailed stage. Policy NW7 accepts that the student properties can be grouped in large clusters as proposed due to the nature of the use.

#### Faith Worker Housing

- 8.194 The application proposes four residential units (in addition to the 3000 proposed) for the specific use by faith workers. There are many benefits of providing housing for faith workers early on in the life of a development, faith leaders will be able to take an active part in community life, engage with residents and provide a number of social activities and enable new residents to adapt quickly into the local neighbourhood where a range of existing facilities are present, as well as the wider network within the City. The housing will complement the on-site community facility where larger gatherings can take place. Two of the four properties will be located within the local centre, in the first phase.

- 8.195 The concept is supported by the Cambridgeshire Horizons study on Facilities for Faith in New Communities (2008), and will be a valuable asset to the site and community. The units will be offered at affordable rent (30% of net household income of the occupier), and it is expected that the four units will provide accommodation for between 4-12 residents. In any event that there is no take up of a faith unit, the property will temporarily act as an additional key worker unit, with a period of review built in to ensure that it reverts to faith worker accommodation as soon as it is required.

- 8.196 In conclusion, the proposals put forward through this application are consistent with the aims of the NWCAAP and build on the evidence provided historically. It is considered that the principles contained within the Key Worker Housing Statement submitted with this application comply with NWCAAP Policies NW6 and NW7. Conditions are suggested to secure provision of 15% lifetime homes on the site, as well as the adequate clustering of the family housing as detailed in the paragraphs above (Conditions 20 and 22). The legal agreement will secure the use of the key worker dwellings for that purpose in perpetuity. The proposal also complies with Policy NW5 in respect of providing for students accommodation on the site.

#### **Community Infrastructure and Support**

##### NWC Community Strategy

8.197 Policy NW20 states that: “the development will provide an appropriate level and type of high quality services and facilities in suitable locations to serve all phases of the development. In order to identify the appropriate level, detailed assessments and strategies will be required to be prepared with key stakeholders prior to granting planning permission.”

8.198 In addition the NWCAAP highlights the importance of the following issues in relation to community provision:

- Given that the development will take place over a long period of time, that adequate provision being made at all stages.
- The provision of community development workers to help establish a cohesive and distinct new community.
- The role of high quality management regimes to provide properly for the long-term, including arrangements for adoption and maintenance. Strategies for these to be agreed ahead of granting planning permission.

8.199 In this context, the applicant has provided a detailed Community Strategy to support the outline planning application. This has been subject to extensive negotiation over several months with the district councils in particular, with input and advice from the City Council’s Heads of Community Development, Streets and Open Spaces and Arts and Recreation, City Council portfolio holders, SCDC key officers and portfolio holders. There has also been coordination with a number of non-local authority service providers, including the Primary Care Trust, Police and faith groups. The final version of the Community Strategy will be appended to the S106.

8.200 The Community Strategy sets out the applicant’s approach to the following key aspects of community infrastructure provision:

- Community centre –interim and permanent provision;
- Timing of provision in relation to phasing of development;
- Community development support provision;
- Community engagement strategy;
- Management and maintenance strategy.

#### Community Centre – Temporary and Permanent Provision and Timing

8.201 The local authorities have identified a need for a permanent community building of a minimum of 500 square metres to serve the development. This would be similar in size to Browns Field community centre in Chesterton (although the functionality of the facility would be different in focus). In response, the applicant has committed to the provision of a multi-purpose community building of between 500-600 square metres to be located within the local centre (and within the City Council administrative boundary but serving the whole development), which will be delivered as part of Phase 1 of the overall development. The precise layout and size of the building would need to be subject to the design development process that would take place at a later stage, as it will be

important that the final design reflects the outcomes of consultation with key stakeholders including the local authorities, Girton Parish Council, residents and other community groups and the emerging new community within the development itself. However, a strategic design brief setting out the principles that the design development process should address, including consultation as described above.

8.202 There have been extensive negotiations in relation to the timing of the opening of the community centre and officers have been mindful of the need to ensure that the community facilities are available for use as early as possible, to fit in with early occupations on the site. It should be noted in this respect, that the residential part of Phase 1 will be predominantly University key worker housing. However, the local centre, within which the community building will be located, is complex in terms of delivery logistics and construction demands. It is likely that the building would be surrounded by construction sites for a considerable period. The applicant has therefore proposed that a temporary community building should be provided for the earliest stages of the development, whilst the local centre around the permanent community building is under construction. This could take the form of a temporary building, use of vacant units within the local centre (depending on construction constraints), or re-use of existing farm buildings. An outline schedule of accommodation for the temporary building is included within the Community Strategy that would be appended to the S106. Safe and convenient access and satisfactory opening hours would also need to be secured.

8.203 The temporary facilities are proposed to be provided on commencement of residential development and the permanent community building on first key worker occupation, approximately mid-2015 (it should be noted that the key worker housing is likely to be occupied in large tranches rather than more gradually, coinciding with college terms).

8.204 The above proposals, which have been discussed in detail with the City Council's Head of Community Development and relevant SDCD officers, are considered to be acceptable and in accordance with the requirements of Policy NW20 of the NWCAAP, subject to a number of key provisions being secured through the S106. These would include:

- Strategic design brief for the community centre setting out the key principles for the design development process, including community and key stakeholder engagement;
- Procurement and delivery process;
- Community access agreement, setting out opening hours for both the permanent and temporary buildings, terms of hire, booking arrangements etc.;
- Final details of the temporary community building;
- Triggers for community facilities.

#### Management and Maintenance Strategy

- 8.205 The University has expressed a strong wish to retain ownership of its community assets and to manage and maintain these itself. Land transfers or transfers of community assets in these circumstances (either to local authorities or alternative bodies) can only take place when both parties are in agreement. The local authorities cannot therefore compel the University to transfer the community assets within the development either to the local authorities or to third parties.
- 8.206 However, given the large scale of the development and the need to ensure that the community centre, which will have an important role in promoting community cohesion, is managed to ensure optimum benefits and access for all sectors of the residential population of the development and the wider community, extensive negotiations have taken place over the last six months in relation to the management strategy for the community centre.
- 8.207 It is therefore proposed that the permanent community building will be managed and maintained via a Joint Management Vehicle (JV) arrangement that will be set up by the University and Cambridge City Council (to also cover Storey's Field open space). The principle of the City Council entering into JV arrangement was agreed by the Council's Strategy and Resources Scrutiny Committee on 9 July 2012, with a funding commitment being secured through Council on 19 July 2012.
- 8.208 The JV would potentially take the form of a company limited by guarantee or most probably a charitable company and would be a legal entity separate from the Council. It is proposed that the JV body would have control over the two assets, based on a 50: 50 split of governance control between the University and the City Council and that a 101 year lease of the assets would be vested in it, at a peppercorn rent. In terms of the ongoing costs of the managing and maintaining the JV assets (less income generated), it has been agreed between the parties that they would be split 50:50, (including the administrative costs associated within the set up and running of the JV) but that the City Council would not contribute towards the costs until Year 13, so that the structure agreed effectively provides for a twelve year commuted sum period, similar to more standard management and maintenance arrangements where assets are transferred to the City Council. The University would therefore cover all the costs for the first twelve years.
- 8.209 Details of the JV arrangements would be secured through the S106 as well as fall back arrangements for management of the community building in the event that the JV is wound up.

#### Community Development Support

- 8.210 The applicant has agreed to provide an S106 contribution to the local authorities towards the provision of 1.5 FTE community development workers to serve the market and key worker housing population within the development as well as a community chest contribution. It is likely that the community development worker(s) would be based at the community buildings within the development for at least part of the time, particularly in



the very early stages of the development. Given the expected demographics of this site a requirement for youth project workers was not considered justified and youth project work will be carried out by community development workers who will have a wider remit in relation to this development.

- 8.211 The student part of the development will be supported through the University's existing arrangements. The applicant has provided confirmation that high levels of pastoral and tutorial support will be provided and each student would have a personal tutor. Colleges are also required to provide sports and social facilities, health care and counselling. These proposals are considered to be acceptable.

#### Community Engagement

- 8.212 The applicant's community strategy outlines in detail how the facilities on site will be managed, setting out who will be responsible for all facilities and areas of open space. This includes taking into account the various management bodies being proposed, such as the JV and the estate management company, and establishes the principles for how they will engage with Girton Parish Council and the various community groups that will have an interest in the site through the development of the site, initially, and once it is established.

- 8.213 In combination with the applicant's strategy local authority chief officers have informally agreed a community engagement strategy for the NW Quadrant developments, building on experiences from the Southern Fringe, Orchard Park and Northstowe. The North West Forum will oversee community engagement across all the NW Quadrant developments and provide a focus for community consultation and engagement activity at key stages of the individual developments as they move forward post outline permission stage.

#### Public Services Infrastructure

- 8.214 Policy NW31 requires that the application provide suitable arrangements for infrastructure, both in terms of provision and phasing in order to make the proposal acceptable in planning terms. Policy NW21 indicates that both provision for health care and for the police should be made within the local centre.

#### Health Provision

- 8.215 Cambridgeshire NHS have been consulted throughout the pre-application and application stage and have viewed the provision of healthcare strategically across the north west including the adjacent NIAB site. Once full development levels were known Cambridgeshire NHS concluded that there should be two separate health facilities, one on the NIAB site and one on this site.

- 8.216 The Environmental Statement submitted with the application states that the requirement for Primary Medical services and supporting Community Health services, for the population proposed on this site is a 700sqm, 5 GP health facility. This view is supported by the advice from Cambridgeshire NHS and the proposed development provides for this amount in terms of floorspace.
- 8.217 The timing of this provision is important, and advice is that it should be provided early on in the development, due to the lack of capacity to pick up provision elsewhere. As the first phase of the proposed development will be located around the local centre, there is no need to provide for a temporary facility, and the permanent facility will be made available for the NHS either (a) before the occupation of the 400<sup>th</sup> key worker unit or (b) before the occupation of the 250<sup>th</sup> market unit, or (c) before a total of 575 dwellings have been occupied, whichever trigger is the sooner. The facility will then be provided rent free for a period of 10 years then stepped rents by 20% per year up to year 15, enabling the facility to be open in the early years of the development which it would otherwise run at a loss.
- 8.218 The above terms have been accepted by Cambridgeshire NHS (although still subject to full board approval) and will be secured through the S106 agreement. Subject to the completion of the legal agreement it is considered that the proposal mitigates the impact of development in terms of health provision and complies with NWCAAP Policy NW31. Although the proposal allows for provision within the local centre the exact location of the facility will be determined at the reserved matters stage. Notwithstanding this, the proposal is compliant with NWCAAP Policy NW21.

#### Police Office

- 8.219 Provision for a police office was requested by Cambridge Constabulary to cater for the new developments in the northwest. During discussions of the NIAB proposal adjacent it was considered that one facility to cover both sites would be sufficient. It was considered that this should be provided on this site (balancing out uses across both sites) and payment towards fit out was secured through NIAB proposal.
- 8.220 The police office would serve as touchdown space and working offices for police officers and community support officers (B1 use). The facility may not be permanently staffed but would provide a base for officers to go out into the community with space for administration and meeting members of the public. It would not serve as a typical Police Station (Sui Generis use) as there will be no traditional enquiry office or ancillary elements. The applicant will provide the facility and, along with the contributions from the NIAB developer, fit out costs, and the facility will be officered at a peppercorn rent prior to the 1,200<sup>th</sup> residential unit. It is considered that through securing this provision through S106 agreement the proposal accords with Policy NWCAAP Policy NW31.

#### Fire and Rescue

8.221 Cambridgeshire Fire and Rescue have considered the nature of the development, and requested that provision be made for fire hydrants to be installed on site. They have not deemed it a necessary for a designated facility to be provided on-site. Provision for fire hydrants is proposed to be secured by planning condition (Condition 65).

### Public Art

8.222 Policy NW22 requires that public art be provided as part of the development to help generate pride in the area, increase sense of ownership, develop cultural identity, create distinction, character and identity and contribute to quality of life. The policy requires a Public Art Strategy (PAS) to support the application and that the value of the public art should be equal to 1% of the construction cost of the project.

8.223 A PAS has been submitted with the outline submission which identifies six key strands that will be delivered throughout the lifetime of the development. These are:

1. Habitation – Artist Research and Residency Programme
2. A Distributed Collection – Public Art Commissions
3. Activation: Temporary and Event Programme
4. Making Place - Naming Commission
5. Education Programme
6. Legacy

8.224 The strands are interlinked, with public art commissions and temporary programme developed by artists participating in the residency programme. The PAS also identifies strategic themes that set an agenda that will run through all strands above. These themes include 21<sup>st</sup> Century Communities, History and Archaeology, Ecology, and Sustainability. The PAS shows the largest major commissions will take place within the open spaces/landscape and local centre which are both important community hubs.

8.225 The PAS sets out the principles of public art on this site, as well as the management structure moving forward, the role of the applicant, public art advisory panel and the role of the local authorities. This section of the PAS is very much supported, although it is considered that the project steering group must include members of the community/local residents and this should be followed through by the applicant moving forward.

8.226 The PAS also identifies an overall budget for public art on this site, this value in £3,428,000 and which is exclusive of the on-going maintenance budget. This budget was identified by working up the cost of producing the strands within the strategy for the lifetime of the development.

8.227 The City Council's SPD states that "there is a good case for saying that 1% is not an appropriate measure in the case of very large developments and Areas of Major Change where the capital value runs into tens or

hundreds of millions of pounds and which bear very significant costs for infrastructure and other community benefits. In such cases, it is more appropriate to negotiate the level of public art support so that it is able to meet the objectives set rather than calculated from a formula". The SPD notes that South Cambridgeshire District Council's Public Art SPD is consistent with this flexible approach. The budget proposed is consistent (when considered pro-rata as this site is larger and includes non-residential uses) with the public art monies obtained on other growth sites, and is considered adequate to fulfil the objectives and aims of the PAS.

- 8.228 Reserved Matters submissions will need to provide a Public Art Delivery Plan (PADP) showing how the public art proposed relates to the PAS. A condition is suggested to ensure that this is provided, and is done so in accordance with supplementary planning guidance in terms of required content including community involvement referred to above. It is considered that with the condition (Condition 64) suggested the PAS, and therefore the proposal, complies with Policy NW22 of the NWCAAP.

### Conclusion

- 8.229 By virtue of the measures outlined above, including physical infrastructure, such as the community centre, health and police facilities, and the non-physical measures proposed, including the provisions for community development workers, public art, and the wider management and maintenance arrangements for facilities, the development is considered to adequately provide for community infrastructure, arts and culture, in accordance with the standards set out in Policies NW20, NW21, NW22 and NW31.
- 8.230 The provision and timing of delivery of these facilities, with a focus upon permanent facilities being concentrated in the local centre at the heart of the development, alongside arrangements for interim provisions to meet the needs of early residents, are to be secured through the S106 agreement. The timing of the provision will be in line with requirements as they arise from the build-out of the development, ensuring the delivery of facilities at the earliest viable opportunity, with long-term arrangements in place to reflect the changing implications arising from a growing population on site as more houses are occupied.

### Open Space and Recreation

- 8.231 Policy NW23 of the NWCAAP requires the development to provide public open space facilities in accordance with the Open Space and Recreation Standards set out in Appendix 3. It also requires the development to provide improved linkages to the adjacent open countryside.
- 8.232 The standards set out in the Appendix provide for five separate types of open space and recreation:
- Outdoor Sports Facilities (playing pitches, courts and greens)
  - Indoor Sports Provision (e.g. sports halls and swimming pools)

- Provision for children and teenagers (equipped areas of play and youth provision)
- Informal Open Space (recreation grounds, parks and natural green space)
- Allotments

8.233 Based on the proposed population identified within the Environmental Statement, (6,490 people excluding the 2000 students and 100 senior care occupants) the required open space on the site is set out in the table below along with the proposed amount submitted through the application.

Type of space	Standard set out in NWCAAP policy	Population proposed	Required amount	Proposed amount
Outdoor sports	1.2ha per 1,000 people	6,490	7.8ha	6.2ha (inc. All Weather Pitch)
Indoor sports	1 sports hall per 13,000 people	6,490	0.5 sports hall	Access to West Cambridge facilities or 450sqm on site
	1 swimming pool per 50,000 people		0.1 swimming pool	Access to West Cambridge facilities or Commuted sum
Children and Teenagers	0.3ha per 1,000 people	6,490	1.95ha	1.95ha
Informal Open space	1.8ha per 1,000 people	8,490 (students included)	15.45ha	38.15ha
Allotments	0.4ha per 1,000 people	6,490	2.59ha	2.59ha

*Table 2 - open space provision*

- 8.234 The above table sets out the provision proposed in terms of quantity, however a qualitative assessment also needs to be made with regard to the appropriateness of the proposed open space locations in practical, and planning terms to fully adhere to the policy.
- 8.235 The Open Land and Landscape Areas Parameter Plan (PP03) identifies those areas of the site set aside for open space provision and excludes these areas from other land use development. Most of this space is within the Green Belt boundary, however there is also space provided within the developable area to ensure open space is spread across the development and allow strategic open space connections.
- 8.236 Previous National Planning Policy Guidance (PPG2) stated that 'Once Green Belts have been defined, the use of land in them has a positive role to play in fulfilling the certain objectives. These objectives include; providing opportunities for access to the open countryside for the urban population, providing opportunities for outdoor sport and outdoor recreation near urban areas, and to retain attractive landscapes, and enhance landscapes, near to where people live. Although PPG2 has been superseded by the NPPF the principles have been carried over and the use of the Green Belt for recreational use is therefore supported in principle.

#### Outdoor Sports Facilities

- 8.237 PP03 identifies three areas where formal sports provision could be located. The main grouping of the formal pitches is located to the south west of the site, between the Park and Ride, and the M11. This area constitutes 3.7ha of sports pitches including an All Weather Pitch (AWP) complete with floodlighting.
- 8.238 Table 2 above shows an under provision in quantity of outdoor sports (6.2ha instead of 7.8ha). It is considered that the carrying capacity of a floodlit AWP, allowing late night play in the winter months, and durability in wet conditions is equal to that of three grass pitches (a standard that has been used elsewhere on other urban extensions). Therefore the 6.2ha, which includes 0.79ha of AWP, is an acceptable alternative to 7.8ha of grass provision in this instance.
- 8.239 Floodlighting would not normally be encouraged within a Green Belt location. However, given the proximity of the site to the Park and Ride facility on Madingley Road, which has previously established the principle of lighting in this location, additional lighting to serve the AWP would be read against this context and, through appropriate design, would not serve to significantly alter the impact or appearance of the site upon the Green Belt. Accordingly, provided that it is contained within this area, the principle of floodlighting is considered acceptable for such a facility here.
- 8.240 A second area of sports pitches are situated within the strategic gap, to the north of the primary school playing fields, with a third, shown as a cricket pitch located central to the site to the west of the local centre. While the

parameter plan drawing does not identify the types of pitches, or exact location, (something that will form the basis of detailed applications to follow), the illustrative Masterplan shows one way that the provision could be achieved in a successful manner. For each of the areas, ancillary elements such as changing facilities and car parking will be provided accordingly. Both the NPPF and PPG2 support the principle of outdoor sport within the Green Belt, and allow for associated structures, such as changing facilities, to be located within it. Accordingly, the proposal to incorporate such facilities in the Green Belt is acceptable, in principle, subject to the detailed design process.

- 8.241 Sports pitches will be delivered in phases throughout the development, in relation to detailed build out. The first pitch(es) totalling 1ha will be provided by occupation of the 400<sup>th</sup> unit, and then further pitches will be provided at triggers of 400 units beyond that. The exact location of these pitches will need to relate to the development build out (i.e logically linked to development parcels and not isolated surrounded by a construction site). This phased provision is considered to be acceptable.

#### Indoor sports

- 8.242 Provision for indoor sports covers two categories; sports hall based provision and swimming pool provision.

#### *Sports hall*

- 8.243 The requirement generated by the development/population proposed is 0.5 of a sports hall. Originally, the applicant proposed sports hall provision on site (450sqm). However, the applicant has reconsidered this requirement in the context of the wider area, as the University has recently commenced development on phase 1 of a sports centre on the neighbouring West Cambridge site. This sports centre comprises a large main sports hall (Sport England eight badminton court standard), multi-purpose sports rooms, weights room, fitness suite, sports courts, changing rooms and entrance hall and café). The provision of this large-scale facility would be likely to have an adverse impact on the viability of any smaller indoor sports facility in the immediate locality, such as on the NWC site. The applicant therefore proposes to make the West Cambridge indoor sports facilities available to occupiers of the NWC development instead of providing additional indoor sports facilities on the NWC site. The principle of this is considered to be acceptable, given the close proximity of the West Cambridge facilities to the NWC development. However, as no additional facilities are being proposed for West Cambridge, beyond those previously approved, the University has been required to demonstrate additionality to mitigate the impact of the NWC development, in relation to public accessibility and physical linkages between the developments in order to comply with NWCAAP policy.
- 8.244 Given the wide range of indoor sports facilities already being provided on West Cambridge the approach to demonstrating additionality has focused around enhancing public access to the facilities. This is in accordance with

the City Council's Sports Strategy 2009-2013 (which was informed by a study carried out by Sport England in partnership with the County Council and SCDC that tested five locations for provision of a new indoor sports hall – Northstowe, Cambridge Regional College, Cambridge University, Southern Fringe and Cambridge East) which states in paragraph 4.7.5 in relation to future need for indoor sports halls:

- 8.245 "Because the unmet demand is spread throughout the area of study, there is no one location in the area where a new hall could be justified on these grounds alone...The study concludes that the Council should pursue a programme of refurbishment and negotiating community use in existing facilities...(other than in Southern Fringe and Cambridge East)"
- 8.246 The outline permission for the West Cambridge site limited access of this facility to recognised sports or community groups. This would mean that residents of the NWC site would not be able to gain access to the facilities, unless they were associated with a recognised sports or community group. The applicant has now agreed the principle of widening access to the West Cambridge facilities to the general public. The City Council's Head of Arts and Recreation and relevant SCDC community officers support the proposals. This will be formalised through a Deed of Variation to the West Cambridge s106. As such a proposal to vary the S106 for the West Cambridge site was reported to the City's Planning Committee in July on the above basis. This will enable not just residents of this site, but existing city and SCDC residents to access the facilities. For an annual registration fee (set between £30- £40 in 2013-2014), the public will be able to access facilities on a paid basis (in line with pricing policies for a similar standard local authority facility).
- 8.247 City Planning Committee approved the variation and the variation will be executed should this proposed development be approved by the JDCC. The recently approved reserved matters application for phase 1 of the sports centre contains a condition, which states:

*Prior to first use of the sports centre, a management strategy for the use of the building hereby permitted, which will include the level of access for members of the public, sports and community groups, shall be submitted to, and approved in writing by the local planning authority. The development shall then be run in accordance with the management strategy with such further variations as the City Council may agree in writing.*

- 8.248 The University have committed to develop a management strategy in consultation with sports and recreation officers from Cambridge City Council and SCDC as well as building on the University's existing links with organised sports and recreation groups across the City. The sports centre will then be managed in accordance with the approved strategy as secured through the above condition, as well as the NWC community strategy which will be appended to the NWC S106. The West Cambridge facilities will be wholly funded by the University.



- 8.249 Given that the works for the first phase of the sport centre has commenced the provision of this facility in a timescale to marry up with the development is fairly certain and the University's current programme is for the facilities to be open for use in September 2013. According to the phasing information provided so far, this would be ahead of the first major tranche of occupations on the NWC development. However, in the unlikely event that the sports centre is not completed, a fall back scenario has been proposed for NWC which would involve a 450 sqm gym and dance studio, located in the local centre to be provided. This would be secured through the S106.
- 8.250 In addition, improved walking and cycling linkages between the West Cambridge and NWC developments would also be secured through the S106.

#### *Swimming Pool*

- 8.251 The open space standards within the NWCAAP require 0.1 of a swimming pool as a result of the new population on this development. Given this small percentage requirement, there is no justification for the applicant to provide a new facility on this site, but as with sports hall provision above, there is potential for provision to be made on the neighbouring West Cambridge site.
- 8.252 The swimming pool element of the sports centre is phase 2 of the overall scheme, and the applicant is currently undertaking business planning for this part of the scheme with the expectation that it will be delivered within five years. The applicant will be focusing on securing funding for the pool for a three year period, followed by a delivery programme of about 32-38 months. It is therefore considered that the swimming pool commuted sum for this development be directed towards the facility on West Cambridge in the first instance, as through the variation to the outline S106 mentioned above, the facility will be open to the wider public. This will be a significant benefit to the wider City and SCDC areas, as well as the residents of the NWC development.
- 8.253 Should the second phase of the sports facility not be forthcoming, then the commuted sum would be directed at an appropriate fall back scheme agreed by the local authorities.
- 8.254 Subject to securing the variation to the West Cambridge S106, improved access between the West Cambridge and NWC sites and the fall back schemes/commuted sums in the event that the sports centre building is not forthcoming, the proposals in respect of indoor sport are considered to comply with NWCAAP policy.

#### Children and Teenager Provision

- 8.255 Provision of 1.95ha of children's play space will be provided in accordance with the NWCAAP standards. There will be a range and mix of play areas distributed evenly across the entire site situated both within the built area,

along green fingers and within pocket parks, and within the Green Belt where appropriate, close to the development edge.

- 8.256 The applicants are looking to move away from the more traditional approach of Local Areas of Play (LAPs), Local Equipped Areas of Play and Neighbourhood Equipped Areas of Play (LEAPs and NEAPs). It is proposed that the spaces take a more flexible approach designed to complement the site and the conditions in the locality to provide more natural play.
- 8.257 The spaces proposed are to be a mix of 'doorstep' play for 0-5 year olds, local playable space for 0-11 year olds, neighbourhood playable space for all ages and youth space for 12 year olds plus. These spaces will provide adequately for a range of children without strict reliance on the standard fixed play equipment- something that is supported by officers. In order to ensure that the provision is looked at comprehensively a site wide strategy for a Youth and Play Strategy condition is suggested (condition 9). The detailed treatment of individual areas would then be approved through reserved matters applications (Condition 10). A phased build out of the Children's Play Areas are secured through the S106 agreement providing a total of 0.26ha every 400 units and will need to be highlighted on the detailed phasing plan to ensure they complement the wider build out of the site.

#### Informal Open Space

- 8.258 The proposed development allows for informal open space distributed across the development. In total the development allows for over 38ha of informal space, well in excess of the 15.4ha set by the adopted standards. The strategic gap accommodates some of this informal open space integrating other elements such as formal pitches, children's play, the SSSI, and the ridge and furrow field.
- 8.259 The central part of this gap which includes the SSSI is approximately the size of Parker's Piece, albeit different in nature. This area will maintain the separation between Girton and the City and provide a central open space rich in biodiversity, landscape, recreation and amenity ensuring a cohesive development, as required by Policy NW4.
- 8.260 The green fingers proposed throughout the development, which accommodate swales as part of the sustainable drainage system will also include recreational pedestrian and cycle links as well as play space and planting. These spaces will be at least 25m wide (when a drainage channel is included) helping to provide green spaces within the developed area. Where there is no drainage channel the spaces will be at least 20m wide.
- 8.261 Informal open space is also accommodated within the western edge. The evolution of the western edge has required consideration responding to several aspects of the development in order to look at how to address the visual, recreational, ecological and drainage impact of the development as

well as looking at how best to mitigate noise from the M11. The recreational benefits in terms of informal open space within the western edge will centre around walking and cycling provision, with dry and wet meadow areas, and informal play space closer to the development edge. The western edge connects into the development through the green fingers, helping legibility from the western edge into the built area.

- 8.262 The first informal open space is to be provided by the 200<sup>th</sup> residential unit (0.78ha), and another 0.78ha will be provided at the 400<sup>th</sup> unit. Beyond that triggers are identified as the residential elements build out, and additional triggers for informal open space are provided for both the student accommodation and senior care facility.

### Allotments

- 8.263 Allotment provision is provided in two locations, with overall provision of 2.59ha in line with the NWCAAP standards. Almost 2ha of this provision is located in the south-western section of the site, between the existing Park and Ride site and the proposed sports pitches. The remaining allotments will be situated at the north-western end of the site close to the development edge. Both areas will be provided with necessary ancillary elements such as water points, security measures, storage facilities and composting areas, details of which will be secured by planning condition, alongside the relevant management details (Condition 17).
- 8.264 Due to archaeological sensitivities (requiring an impermeable cap over the existing soil) and construction practicalities around the area adjacent to the Park and Ride the initial allotment provision will be delayed until the 1600<sup>th</sup> occupation, while this is unfortunate after this delay the allotments will be delivered comprehensively, and will have 'caught up' with, and for a time exceed, the housing numbers.

### Management Strategy

- 8.265 Through the proposed community strategy, the applicant has set out their intentions for management of the public realm across the application site. Table 3, below, summarises the management strategy for each type of sport/open space facilities.

Facility	Location	Strategy	Funding	Public access
Storey's Field informal open space	City	JV	University and City Council	General public access
Other informal open spaces	City and SCDC	University-led	Estate management charge (except Western Edge)	General public access
Sports	City	University	University	General public

pitches and pavilions		Sports Syndicate		access but prioritisation to occupiers of development
Play areas	City and SCDC	University-led	Estate management charge	General public access
Allotments	City and SCDC	University-led, in accordance with LA Policy	University	General public access as per LA policy
Indoor Sport	City	University led, in accordance with management strategy agreed with LAs	University	General public access

*Table 3 - Summary of Management Strategy*

8.266 Alongside the proposed JV, which would manage the community building and adjoining Storey's Field informal open space (which includes the Travellers Rest SSSI), the applicants intend to establish an estate management board, to retain and be ultimately responsible for all remaining areas of informal open land within the site, whilst formal sports pitches would be managed by the University's Sports Syndicate.

8.267 Through the terms of the community strategy, which would be appended to the S106, the applicant has undertaken to commit to the following:

- The estate management board to comprise: 2 market housing representatives, 1 commercial/retail representative, 1 student representative, 2 key worker housing representatives, 2 University representatives, and a University nominated chair. Cambridge City and South Cambridgeshire Councils would each have a non-voting representative on the board,
- The booking arrangements for formal sports pitches and community facilities would be prioritised to provide access to estate residents first, with open access thereafter,
- The charging schedule for facilities would be in-line with public facilities currently owned by Cambridge City Council,
- Allotments would be managed in accordance with the Cambridge Allotments Policy for Growth Sites,
- Decision making for all on-site facilities would be undertaken in consultation with the North West Cambridge Development Community Group. This group would include Parish Councillors, Ward Councillors, Residents Associations, Faith Groups and other relevant stakeholders.

- 8.268 The Estate Management Company would be a not-for-profit organisation and the cost of its operation, including staffing, would be recharged at cost. The operation of the Estate Management Company would be funded by an estate charge on properties (freeholders and head lessees) within the estate, which includes all the market dwellings, flats, key worker housing, student bedspaces, commercial and academic floorspace, and local centre commercial uses. The primary school, police office, and community centre would not be subject to the charge.
- 8.269 The current estimate is that the estate would require an annual budget of £2.35M per year to provide high quality management, which means that for a medium sized 3 bedroom semi-detached house, the monthly charge would be around £40 a month.

#### Sports Development Officer

- 8.270 The S106 will require payment (total £23,625 over 3 years) towards a Sports Development Officer (SDO). The SDO post will co-ordinate community sport across the northwest and therefore is apportioned between all the sites. The central role of the SDO is to increase participation in sport of all kinds, and also address issues of health, often working with organisations such as health boards, schools, and sports governing bodies. They work in partnership with government bodies to deliver government initiatives relating to sport. The SDO will help create an inclusive new community through sport, which is necessary to deliver sustainable development principles in local and national policy.

#### Links to the open countryside

- 8.271 Policy NW23 requires the development to provide improved linkages to the adjacent open countryside. This is supported by criterion (c) in Policies NW17 and NW18 (Cycling Provision and Walking Provision respectively) which states that the development should be linked with the surrounding walking and cycling network and orbital routes including links to nearby villages and open countryside.
- 8.272 The proposed development, through new transport improvements and junctions, allows for better links to the adjacent network of footpaths and cycle ways. The new Huntingdon Road west junction will allow for better access between footpath no.4 and no.5 towards the north-western section of the development, linking the site with the northern part of Girton.
- 8.273 The footpath under the M11, where no.5 links into footpath no.3 will be improved, both in terms of the underpass itself and along the length route, with contributions secured through this development providing a more attractive link towards Madingley. Several other routes in this area have been looked at to help improve links to Madingley village and complement the network already in place. Unfortunately due to land ownership issues, (the land is not owned by the applicant) it has not been possible to secure

additional upgrades and it would be unreasonable to withhold consent if the land is not in control of the applicant.

- 8.274 The Huntingdon Road east junction provides for a demand activated crossing which links this site into the orbital cycle route that runs along the western edge of the NIAB development, this then links into routes to be secured through that consent into the south eastern side of Girton.
- 8.275 The Madingley Road junction will provide improved crossing points linking to the West Cambridge Site. A new footpath along the southern side of Madingley Road isn't possible due to future road upgrade secured through the West Cambridge S106, so it is not possible to link into footpath 30 which runs parallel to the M11. The applicant has committed to providing a designated Public Right of Way through the West Cambridge Site, which will link up with either footpath 30 or 31a (Coton footpath) allowing access from this site to the Coton Countryside Reserve. A route has been agreed in principle. The detailed route/location will be confirmed either through the future review of the West Cambridge development Masterplan, which is anticipated shortly, or if the West Cambridge Masterplan isn't reviewed within a reasonable period, by virtue of a modification to the existing access arrangements for the West Cambridge development, to complement the existing Masterplan. The arrangements for the provision of this route, including the necessary fall-back criteria, will be secured through the S106.
- 8.276 The proposal has secured adequate links to the open countryside and therefore conforms with the NWCAAP Policies. There are limitations to what can be achieved in terms of deliverable off-site improvements due to land ownership issues. Improvements must also be reasonable and mitigate the impact of this development in order to comply with the tests of the planning circular.

### Conclusion

- 8.277 While the parameter plans proposed don't set out the detail of the open space areas, the application has adequately demonstrated that it can successfully meet, and in some instances exceed the required open space standards. Although the quantity of formal outdoor sports is slightly under the required standard, the quality of the provision through the All Weather Pitch is considered to compensate for this, and will allow a more diverse range of sports, and greater use in the evenings and during the winter months. Sport England has confirmed that they support the proposals subject to securing the provision through legal agreement.
- 8.278 The provision and timing of delivery of these pitches are to be secured through the S106 agreement, along with the provision of the ancillary elements such as pavilions and parking. The timing of the provision will be in line with the development build out, ensuring that adequate provision is provided in the early stages of development and continue to develop as more houses are occupied.

8.279 With enhancements to the open countryside secured through the S106, it is considered that the development adequately provides for public open space, sports facilities and countryside access in accordance with the standards set out in Policy NW23.

### **Local Centre and Retail Provision**

8.280 The NWCAAP seeks to create a local centre that will act as the focus for, and heart of, the development of the North West Cambridge site, whilst also providing facilities that will service not just the proposed community, but also help meet the needs of the wider quadrant.

8.281 Policies NW1 and NW21 set out the vision and approach for the local centre, identifying that it should be the home for all services and facilities within the development, where appropriate, and also setting out an approximate location for it, adjacent to the strategic gap and within reasonable distance of all parts of the development. The latter policy, particularly, identifies a range of services and facilities that would be expected to be found in the local centre, including: primary school and pre-school care; an appropriate level of local shopping and other services; a library; flexible community meeting rooms and spaces; provision for emergency services, including the police; a children's play area; a neighbourhood recycling point; and healthcare provision, although it was also accepted that some facilities could be located outside of the North West site, subject to their location being appropriate to the intended function.

8.282 Building upon the above, Policy NW9 seeks to establish criteria against which small scale employment uses, within the local centre, should perform. It seeks to limit their size to under 300sqm, in order to be of a size compatible with a generally residential area, and provided as demand requires.

8.283 Throughout all policies, the accessibility of the local centre and its various functions via sustainable transport modes, and most particularly walking and cycling, is critically important. Although not directly focussed upon the local centre, Policies NW11, NW17 and NW20 set out various sustainable transport and accessibility aspirations against which the local centre will need to perform.

8.284 In addition to the NWCAAP policies, Cambridge City Council and South Cambridgeshire Councils undertook a study of foodstore provision in the north west Cambridge quadrant to analyse the needs of residents in the area and address how to meet those needs for existing and new residents in the quadrant going forward, as the various new developments within the area (Orchard Park, the NIAB sites and the University site) progress. The Council's adopted Informal Planning Policy Guidance on Foodstore Provision in North West Cambridge (IPPG) in March 2011 sets out the required quantum and timing of facilities for each of the growth sites. For the University site, it was established that one medium sized supermarket of 2,000sqm net floorspace should be provided within the local centre,

delivering mainly convenience goods (food and everyday essential items), in an accessible location, to high quality and sustainable design, and should be delivered within the early phases of development, to anchor the local centre and create linked trips to other shops and community facilities.

8.285 In response to the NWCAAP and other policy aspirations, the applicants have proposed that the local centre will be delivered within first phase of the development. The various submission documents, but most notably in Parameter Plan 04, identify the local centre as being a residential and complementary mixed use area, located immediately to the west of the strategic gap known as Storey's Field (the local centre area is coloured in dark purple on the parameter plan).

8.286 The components proposed within the local centre constitute the following:

- Primary school, up to 3,750sqm (Class D1),
- Pre-school, in total up to 2,000sqm (Class D1), although this figure includes sufficient floorspace for a number of nurseries which will be distributed into smaller district centres located across the development and identified on Parameter Plan 04,
- Community Building and indoor sport, up to a combined maximum floorspace of 950sqm (Class D1),
- Retail up to 5,300sqm, of which the foodstore is a maximum 2,000sqm (Use Classes A1/A2/A3/A4/A5), although, as with the pre-school facilities, it is likely that some of this floorspace will be distributed into smaller district centres located across the development and identified on Parameter Plan 04,
- Energy Centre, up to 1,250sqm (Class B2, Sui Generis),
- Flats/Houses, up to 1,600 units (Classes C3 and C4 – Market and Key Worker),
- Police touchdown/office, up to 200sqm (Class B1),
- Health facility, up to 700sqm (Class D1),
- Faith residential (one/two units) (Class C4),
- Hotel (130 bedroom), up to 7,000sqm (Class C1),
- Senior Care Facility, up to 6,500sqm (Class C2).

#### Location and Accessibility

8.287 The local centre is proposed to be located broadly at the central point in the development, immediately adjacent to the western edge of the Storey's Field strategic gap, at a point where both primary vehicular and pedestrian/cycle streets into the site intersect (namely the orbital and radial vehicular routes, and the ridgeway pedestrian/cycle route, combined within the radial pedestrian/cycle route that links the NIAB development through the strategic gap through to the West Cambridge site – see Parameter Plan 02).

8.288 Secondary vehicular and pedestrian/cycle routes are proposed to complement the primary connections to the local centre and further build linkages with the surrounding development, to the mainly residential proposals in Storey's Field to the east, the mixed residential and



commercial land uses in the west, and the area of informal open space along the western edge of the site, as well as the immediately adjacent strategic gap, with its various amenity and formal sporting functions.

- 8.289 To preserve the nature of the local centre as a pedestrian friendly space, whilst maintaining accessibility, the applicants have proposed a restricted access zone to cut through the local centre. This area would be limited to access by public transport and service vehicles only.
- 8.290 Given the proposed location of the local centre, with its various primary and secondary vehicular and pedestrian/cycling connections, it is clear that the applicants have sought to meet the NWCAAP aspirations for a local centre well connected within the development site, as well as being accessible to the wider community by virtue of not only those linkages, but also through the provision of the public transport route through the site.

#### Mix of uses

- 8.291 From the list of uses proposed within the local centre, the applicants have provided a complementary set of uses that clearly mirror the intentions set out in Policy NW21 to provide for a diverse and mixed-use centre.
- 8.292 There are a number of elements to the local centre, however, that will need to be delivered carefully, within the parameters proposed by the applicants, to ensure that they fully comply with the NWCAAP aspirations, whilst other uses were not originally envisaged by the NWCAAP and need further detailed consideration. The issues are as follows:

#### Retail

- 8.293 The overall retail provision proposed for the development equates to 5,300sqm. Whilst the NWCAAP does not set out upper limits for the total quantum of retail floorspace to be provided within the local centre, Policy NW9 does seek to place an upper floorspace limit of 300sqm per unit on business premises within the local centre, whilst both Policy NW21 and the IPPG discuss the need to provide a mix of A1 to A5 retail uses of an appropriate scale to the location such as to provide variety and diversity without one use dominating or attracting a significant proportion of inward movement such as to place an undue burden upon the transport network. In any regard, Policy NW30 requires a needs statement to be submitted with any application to demonstrate that the University has a need for the land to be released for the proposed development.
- 8.294 In response to this, the applicants have provided a retail impact study that sets out the intended breakdown of the intended floorspace, outlining that this would take the form of a 2,000sqm net floorspace foodstore, supplemented by a local pub of circ 185sqm net floorspace and an additional 790sqm net floorspace retail uses (A1 to A5 uses) which would provide small scale shop units.

- 8.295 Whilst the NWCAAP did not originally make provision for a foodstore of this size and nature, the size of store proposed is in line with the IPPG, which has been adopted by both South Cambridgeshire District Council and Cambridge City Council.
- 8.296 The indicative amount of floorspace within the local centre is acceptable and evidence for the IPPG concluded that there is a need for main foodstore provision in this part of Cambridge and, therefore, it should be viable.
- 8.297 However, units should be designed to be flexible spaces in case there are problems with viability. The retail proposed also includes a University cafeteria and a number of small individual shops to serve the local population, which would be acceptable. Through the design code and reserved matters processes it will be necessary to carefully develop the design and development principles relating to the foodstore and the local centre to ensure that such flexibility is built in and retained to ensure that the local centre becomes and remains a vibrant space going forward.

#### Community Services and Facilities

- 8.298 The proposed local centre includes provision for a primary school, community building, health facility, police office and nursery.
- 8.299 As with the retail provision on site, the location of these facilities within the local centre is welcomed, as it helps to underline the purpose of the area as the heart of the development, and should serve to draw people into the area. The detailed design process will need to include provisions for accessibility, both taking into account the need to access such facilities by motorised transport and within the design and layout of the buildings, to ensure that they meet their intended function. This will also need to include their design and location within the setting out of the local centre as a whole, to ensure that elements such as the restricted access zone don't serve to impede users. The S106 agreement will secure the quantum of floorspace to be provided, in combination with the timing and management principles for the facilities, having been previously agreed with the relevant service providers.
- 8.300 With regard to the issues relating to the education and community facilities, these are addressed within the specific detailed sections of the report, whilst the timing of facilities overall is addressed within the S106 planning obligations section. Provisions related to the appropriate trigger and specifications for delivery have been discussed in detail to ensure that the final facilities are delivered in accordance with the needs of the development. Overall though, the underlying principle of delivering the local centre in the first phase of the development is welcomed and will serve to overcome some of the issues encountered within other growth sites where community facilities have been delayed, causing problems for the initial intake of residents to the development.

#### Uses not Identified in the NWCAAP

8.301 Within the local centre the applicants have proposed two particular uses where the NWCAAP is silent, namely the Hotel and Senior Care Facilities.

8.302 With regard to the Hotel, and in response to Policy NW30 of the NWCAAP, the applicants have submitted a hotel needs assessment. The assessment includes a comprehensive range of evidence in support of the development of a mid-range, 130-bed hotel within the development, located within the local centre.

8.303 The assessment considers the following:

- a study of hotel demand in Cambridge, which considers current demand and expected levels of market growth,
- the nature of, and occupancy rates for, current hotel provision within the city and the northwest quadrant,
- a study of planned new hotels in the city and surrounding area and where they fit into the market, and
- a sequential study of potential alternative sites for new hotels to come forward to meet demand

8.304 The evidence submitted identifies that there currently exists an unmet demand for additional accommodation within the mid-tier (three star) market sector. In addition to current unmet demand, the assessment projects a 23% market growth by 2018, creating additional demand for hotel accommodation within the vicinity of the site and wider city.

8.305 At the request of officers the applicants have provided further information to support this calculation and what this represents in terms of bedrooms. The assessment builds upon a study undertaken on behalf of EEDA in March 2011, taking into account Cambridge's role in driving the local economy in a number of areas and how this affects demand for varying types of hotel accommodation. Essentially, the study identifies that, despite the current national recession, by virtue of the city's role as a hub for high tech business and research, and its role as an international visitor destination and regional centre, the economy in the city is expected to experience continuing annual growth, with a resultant demand for increased supporting infrastructure including hotel provision of an appropriate nature to the activities driving demand.

8.306 Furthermore, it is apparent that whilst there are other hotels coming forward within the city, there is no other provision planned within the northwest quadrant, which would meet the identified increased demand that the applicant's proposal intends to service. The sequential assessment has demonstrated that there are no city centre sites, which are preferable to the application site.

8.307 Officers have assessed this information and determined that, whilst the assessment has overlooked some sites that are expected to come forward in the city and surrounding area, the overall structure of the assessment and its findings are reasonable, and identify a gap in the market that would

otherwise be likely to continue to remain vacant that the proposal intends to service. Importantly, the findings of the report are broadly consistent with the recent Cambridge Hotel Futures report, commissioned by the City Council and published in April 2012, which concluded that, although there has been a moderate slowing in market growth recently, over the period to 2031 significant additional demand for mid-to-high end hotel accommodation in the city area will arise from factors such as the corporate sector, university related activities, leisure and tourism and through health related activities associated with the development of Addenbrookes. Accordingly, the scheme would be unlikely to prejudice other planned and consented hotel provision elsewhere in the City centre and inner city area, and also does not prevent uses anticipated within the NWCAAP from coming forward.

- 8.308 In respect of the Senior Care facility, the applicants have provided a needs statement outlining provision of such facilities in the vicinity of the application site and contrasted this with predicted demand for such facilities, demonstrating an existing shortfall.
- 8.309 Overall, although the NWCAAP is silent on such provision, national and local policy would serve to support Senior Care provision within the scheme, as it can assist in the creation of a mixed and balanced new community on the site by allowing opportunities for an increased diversity of population. The location of such a facility within the local centre would allow for eased accessibility for residents to community facilities and would be compatible with its purpose. The evidence presented by the applicants suggests that there is a need for this type of use and, therefore, this is supported by Policies NW2, NW7 and NW30 of the NWCAAP. In order to ensure the effective use of the facility, and securing the sought community diversity by stipulating occupancy restrictions, provisions will be secured through the S106 agreement.
- 8.310 The hotel, and senior care accommodation, as well as the foodstore are all put forward as enabling development, additional to those put forward in the NWCAAP, to secure additional capital and revenue funding for the proposed development. These are valid arguments that support the application and are in line with the National Planning Policy Framework, and will help secure essential amenities and facilities in phase 1 around the local centre.

### Conclusion

- 8.311 Overall the applicant's proposals for the local centre area present an exciting opportunity to provide an accessible, vibrant space. The confluence of uses should complement one another and serve to underpin the function of the local centre as the heart of the development, in accordance with Policy NW21. Whilst the hotel, senior living and foodstore were not originally envisaged within the NWCAAP, their inclusion within the scheme does not undermine or detract from the purpose of the local centre, and could serve to support its viability in the long-term, nor do they come at the expense of any conforming uses.

8.312 Whilst the proposals at present are at the outline stage, the indicative design proposals contained within the DALs illustrate how the combination of uses proposed could be shaped to provide a well-scaled, active, inclusive and accessible space, in accordance with the NWCAAP aspirations. The commentary provided within the DALs should provide the basis for the development of more a detailed design code, design briefs and reserved matters submissions going forward.

### **Education**

8.313 The NWCAAP requires through Policy NW31 the improvement, or provision of infrastructure necessary to make the development acceptable in planning terms, and through Policy NW21 services such as early years and childcare and a primary school are to be provided in or around the local centre. This policy acknowledges that some of the facilities, for example secondary school provision, may be provided outside the development on the land to the north of Huntingdon Road (NIAB site).

### **Site demographics and child yield**

8.314 The Environmental Statement includes a socio-economic chapter that highlights the anticipated population of the finished development. The population and age profiles and estimated child yield have been determined using a demographic model that relates average household sizes to household tenure and type. These models have been based on research, ONS census data, NOMIS labour market statistics and the University's own Housing Need Survey 2008.

8.315 These demographic forecasts have been developed in conjunction with, and reviewed by, the County Council. The forecasts and assumptions set out in the Environmental Statement accord with those produced by the County Council.

### **Early years provision**

8.316 The forecasts set out in the Environmental Statement demonstrate the development would create demand for an additional 339 early years places. These forecasts accord with those produced by the County Council.

8.317 To provide capacity to meet this demand, the applicant is proposing a day nursery, providing 100 spaces for 0-4 year olds, within the first phase of the development. This would be in addition to the accommodation for early years provision the County Council will provide. The applicant is proposing to provide two additional nurseries as part of later phases of the development. These will be located within two of the neighbourhood centres, and will provide additional capacity to meet the demand from later phases of the development.

8.318 In addition to this provision, the applicant is contributing, through the S106, towards a children's centre to meet the demands of the whole North West Quadrant. This children's centre will be co-located with the primary school on the NIAB development to provide support and services for children 0-5 years old and their families.

#### Primary school provision

8.319 The proposed development is forecast to result in demand for around 466 primary school places, for children 4-10 years old. This equates to around 2.2 forms of entry (FE). These forecasts accord with those produced by the County Council. To provide for this demand, and ensure sufficient future capacity, the development proposals include a 3ha primary school site. This provides sufficient capacity to provide a 3 FE (630 place) primary school and on-site provision for early years and childcare provision. In addition, to the site, the applicant, through the S106, is providing capital for a 480 place school.

8.320 The school site, which is identified on Parameter Plan 04, is located to the north-east of the local centre adjacent to the strategic gap, part of which will form the playing field portion of the school site. The County Council are satisfied that the size and location of the primary school, proposed by the applicant, is adequate to address the needs of this development.

8.321 The capital costs of the school (land and capital) will be secured through the S106 agreement. The S106 will also provide an initial pump priming revenue contribution to the County Council should this be required following the Government's review of school funding arrangements.

#### Secondary school provision

8.322 The demographic forecasts suggest that the development will create demand for 236 secondary school places, for children 11-15, which equates to 1.57 FE, once development is complete. This accords with the County Council's forecasts. The lower numbers of secondary-aged pupils reflect the impact of the housing mix and tenure arrangements for the key worker homes to be built as part of the development. These are forecast to have a significantly lower proportion of secondary aged pupils than would be expected on other sites.

8.323 The County Council has adopted a strategic approach in planning secondary school provision for the North West Quadrant. A Secondary school site is to be provided as part of the NIAB application (C/07/0003/OUT), on land within the NIAB2 development. This site has an allocation within the SCDC Site Specific DPD for primarily residential use. However, the supporting text states that:

"A secondary school is proposed on the site to serve the needs of all proposed new development in the north-west part of Cambridge both north and south of Huntingdon Road. As such, the secondary school must be provided according

to a trigger point relating to development in the whole quadrant, which may be ahead of development on the site in South Cambridgeshire. An appropriate mechanism will be included in the planning obligation for the site to ensure timely provision of this key community facility.”

8.324 Although the S106 securing the NIAB site is still under consideration, it is well advanced, and, therefore, has a high likelihood of being completed. The applicant has, therefore, been asked to contribute towards the capital and, if applicable, initial pump priming revenue costs of that secondary school to accommodate children from this site.

8.325 In any event that the S106 referred to above is not signed, or development is delayed/not implemented on the NIAB site, the monies obtained through this proposal will be used to create capacity for secondary education elsewhere by the County Council. Triggers and costs for both scenarios have been secured through the S106 agreement.

#### Post 16 provision

8.326 The proposed development will create demand for around 113 spaces for post-16 education when completed. The County Council has advised that there is sufficient capacity within Cambridge City to meet this demand. Therefore, as there is no justification under the CIL regulations, no contribution has been sought. This is consistent with the approach on NIAB and Cambridge southern fringe.

#### Conclusion

8.327 It is considered that, with the provision across all forms of education, as outlined above, the proposals comply with Policies NW21 and NW31 of the NWCAAP.

#### Employment

8.328 Evidence from the applicant during the formulation of the NWCAAP indicated that the University has a need for a further 100,000 sqm of D1 (higher education uses) and B1(b) (sui-generis research institutes and commercial research) uses in the long-term. This was accepted by the Inspector, and through Policy NW10 approximately 60,000sqm of D1 and up to 40,000sqm of B1(b) floorspace has been allocated.

8.329 In addition to Policy NW10, Policy NW8 of the NWCAAP seeks to ensure that any occupier of the employment floorspace that come forward on the site can demonstrate that they have a special need to be located close to the University and that the occupation is subsequently restricted as such for a period of 10 years from first occupation.

8.330 The application makes provision, through PP04, for land to be given over to Academic/Research uses on a number of sites along the Western Edge

and adjacent to Madingley Rise, in order to accommodate the floorspace specified in Policy NW10.

- 8.331 The long-term need for additional employment space is accepted and the proposed land-uses and accompanying level of detail are considered compatible and sufficient with the status of the application as an outline submission, compliant with Policy NW8 and NW10. Policy NW30 relating to need recognises there are other sites that should be developed in advance of this one (namely West Cambridge), and given the need for occupiers to demonstrate their need to be located near to the University to comply with the terms of Policy NW8, reserved matters applications for individual land parcels will need to be accompanied by a needs case, providing justification for the release of the land at that time, along with details of the end user of the building to ensure that the reserved matters submission is in accordance with policy. There may still be justification for reasons such as clustering with neighbouring departments for land to come forward in advance of other sites being built out; the suggested condition allows for such circumstances.
- 8.332 The requirement to submit a needs case with any reserved matters application, and the subsequent restriction of occupation upon first users and for a period of ten years thereafter are secured through planning conditions (Condition 18 and 19).
- 8.333 The provision of the employment floorspace within the application was strongly supported by the East of England Development Agency, recognizing the positive impact that this space would have on the economy.

## **Sustainable Development**

### **Carbon Reduction**

- 8.334 Policy NW24 of the NWCAAP identifies the requirements of the plan with regard to climate change and sustainable design and construction. In response to this policy the applicants have submitted a detailed Carbon Reduction Strategy and Sustainability Statement as part of the outline application.
- 8.335 The proposed development seeks to achieve the standards set out in Policy NW24; namely meeting Code for Sustainable Homes (CfSH) Level 5 for residential development, BREEAM 'excellent' standards for non-residential, and showing that the development has been designed to adapt to future climate change. In order to achieve these levels, the NWCAAP recognises that some form of decentralised energy will be required.
- 8.336 The Carbon Reduction Strategy sets out the opportunities and constraints of the site and identifies the baseline for consumption and emissions. For each of the building types on this site (residential, student, desk based and laboratory based commercial and academic research, primary school, foodstore etc.) building design and efficiency has been looked at, along



with daylighting requirements. All low and zero carbon technologies have been assessed as to their appropriateness to the proposed development, given the scale, and mix of uses on site.

- 8.337 A hierarchical approach to carbon reduction is proposed, starting first with the enhancement of the fabric performance of the building. It then looks at orientation, daylighting, ventilation, and energy efficiency, and finally the use of low carbon and renewable technologies, allowing the housing on the site to meet CfSH level 5, and setting out the applicant's commitment to reach level 6 beyond 2016.
- 8.338 The document identifies the short, medium and long-term strategy for meeting the requirements of the policy. In the short term the strategy is based around technologies that are currently available and proven. Modular gas fired Combined Heat and Power (CHP) is to be implemented in an energy centre within the local centre, with the heat distributed around the site via a main provided from the outset. The modular system is capable of increasing its capacity as the development progresses, with different phases connecting to the mains heat as appropriate.
- 8.339 To supplement this, other elements to the strategy are proposed such as a district cooling network connected to some of the commercial and academic buildings, export of heat from refrigeration at the foodstore, solar thermal panels and ground source heat pumps where effective and the widespread use of photovoltaic panels throughout the site. A 20% reduction in carbon emissions through the use of renewable energy technology will be achieved across the site on the non-residential development.
- 8.340 Another encouraging element of the strategy is the proposal to use the energy centre as an educational facility to teach residents and visitors about the sustainable technologies across the site. It is recognised that the physical infrastructure is one element, but needs to be supplemented with the supporting and educating of residents through the education centre, smart metering, variable energy tariffs and home visits and information packs, to help people make the transition to lower carbon lifestyles.
- 8.341 In the medium and long term, acknowledging that in the lifetime of the proposed development new technologies and fuels will become available which offer more optimal solutions, a site has been set aside in the north west corner of the site which will be reserved for a future renewable energy use. This would allow a new technology to 'plug' into the district network within, and then potentially beyond, this site. No formal approval for this reserved land is being proposed through this application, and any detailed proposal would need a separate application in its own right in the future.
- 8.342 The Carbon Reduction Strategy is a well-considered and comprehensive document that responds positively to an ambitious policy within the NWCAAP. It is considered that the strategy fully embraces carbon reduction and carbon footprinting (options for reducing indirect carbon

emissions across the site dealing with transport, waste, consumables and public services), and achieves the objectives set out in the plan, helping the development become an exemplar in terms of sustainable development.

### Sustainability

- 8.343 The proposed development also contains a Sustainability Statement that sets out clearly a holistic approach to sustainable development. The document shows how the development considers sustainable measures in relation to thirteen principles ranging from CO<sub>2</sub> emissions, water, food and ecology through to construction materials, internal environment, transport and pollution. The statement also provides example CfSH and BREEAM assessments to help give certainty that the requirements within the NWCAAP can be met.
- 8.344 The comprehensive coverage of the statement is welcomed; as is the way in which the principles are then covered within the other application documents such as the Drainage Strategy, Transport Assessment and Design and Access Statement. The document clearly references climate change adaptation looking at issues such as overheating, and sets out the requirements for thermal modelling of all buildings to be undertaken taking into account both current and future data.
- 8.345 References are also made as to how the applicant will embed these principles in the evolution of the detailed design, through design codes and design briefs and the selection of developers for specific development phases. These are important elements to ensure sustainability is designed in at the earliest stage.
- 8.346 Policy NW1 of the NWCAAP sets out the vision for the proposed development, which states that 'the development will embody best practice in environmental sustainability'. The objectives of the plan are set out in Policy NW2 and state that the development must 'make the best use of energy and other natural resources, to be built as an exemplar of sustainable living with low carbon and greenhouse gas emissions and be able to accommodate the impacts of climate change'.
- 8.347 Planning conditions (Conditions 23, 24 and 25) with regard to securing the CfSH level 5 for residential development, BREEAM excellent and 20% renewable energy for non-residential uses are suggested along with a condition relating to 15% of all residential buildings being built to lifetime homes standards (Condition 22). Also proposed is a condition (Condition 21) to secure super-fast broadband for future occupants to aid home working. Due to the long-term nature of the development it is important to ensure that, by giving consent at this moment in time, the local authorities are committing to lower sustainability standards than will otherwise be achieved in the future. Therefore a condition (Condition 25) to secure a future uplift in renewable energy, should government or local policy specify as such after a seven-year period from the date of the permission, provided it is technically and financially viable is also suggested.

8.348 It is considered that, with the conditions suggested above, in combination with the documentation submitted with the outline submission, the proposed development has clearly demonstrated that it can achieve the strategic aims in Policies NW1 and NW2, as well as the more detailed requirements within Policy NW24 and is therefore acceptable.

### **Flood Risk and Drainage**

8.349 Policy NW25 of the NWCAAP requires that the surface water drainage for this site should be designed, as far as possible, as a sustainable drainage system (SuDS). The policy aims to reduce overall run off volumes leaving the site, control the rate of flow, and improve water quality before it joins any watercourse. The SuDS will need to be capable of reducing the downstream floodrisk associated with rainfall events, and take into account climate change. The NPPF supports this view ensuring that as a result of a development flood risk is not increased elsewhere.

8.350 The current site is made up of primarily arable farmland associated with the University Farm. The Washpit Brook (a tributary of the Cottenham Lode/Beck Brook catchment) flows through the western part of the site, and is classified as an Award Watercourse. Downstream of the site, it is designated as a Main River. The geology of the site varies with head gravels in the north eastern part of the site (above the proposed Ridgeway), and head deposits (mainly clays) in the south western part of the site. In the eastern part of the site, reworked Chalk Marl is locally present.

8.351 As a greenfield site there is limited public surface water sewers, and public foul water sewers within the application boundary. There are no potable water supply mains located within the site, however, there are water supply mains servicing existing development along Madingley Road and Huntingdon Road.

### **Flood Risk to the Development**

8.352 The flood map for the area published by the Environment Agency shows that, with the exception of a small area to the northern part of the site, the site sits within Flood Zone 1 (Flood Zone 1 comprises land assessed as having a less than 1 in 1000 annual probability of river or sea flooding (<0.1%) in any year). The areas immediately adjacent to the Washpit Brook is partly located in Zones 2 and 3 as a result of predicted flooding from the watercourse.

8.353 To overcome this issue the Environmental Statement and Flood Risk Assessment (FRA) state that, by applying a sequential test to the land use on the proposed site, the least vulnerable development (things such as open space, landscaped areas or car parking) will be located in the higher flood risk areas. This process will ensure that all main buildings would mainly be located within Flood Zone 1. This approach is consistent with the Parameter Plans submitted.

## Flood Risk as a Result of the Development

### *Surface Water Management Strategy*

- 8.354 As identified by the NWCAAP policy a cascading system of SuDS are proposed in order to attenuate and improve the quality of runoff. This is set out within the surface water management strategy developed as part of the FRA. The management system proposed has been sized to ensure that the rate and volume of surface runoff discharged from the site will not be increased above current greenfield runoff rates for all events up to and including the 1 in 100 year event including climate change.
- 8.355 There are two separate components to surface water runoff namely; (1) roof runoff, which will be attenuated at source using green roofs or directed to an underground collection tank by each dwelling and used for internal uses such as flushing toilets or external uses such as gardening, and (2) runoff from roads and other hard standing, which will be collected and attenuated locally in swales, porous paving, filter drains and underground cellular storage. The swales will direct the discharge to control features such as retention ponds in the western edge, which will hold and treat the water (the retention time will allow sediments and pollutants to settle) before discharging to the watercourse.

### *Flood Alleviation*

- 8.356 There is potential for flooding downstream if no mitigation is undertaken, therefore this development must, at very least, not make that situation any worse than existing. Several representations from the public identified a particular issue at Dodford Lane in Girton. In order to reduce risk to, and from the application site, the proposed development includes an online flow control structure (general location secured by Parameter Plan 03) within the Washpit Brook and a two-stage channel capable of storing attenuated flood waters.
- 8.357 This strategy enables the existing peak flow downstream of the site to be reduced for a range of return periods and for excess flow to be stored within the landscaped areas of the proposed development. The hydraulic modeling submitted with the application indicates that with the proposed measures in place, existing peak flows downstream of the application site may be reduced by up to 25% for a 1 in 20 year event, and 10% for a 1 in 100 year event.
- 8.358 In an extreme event there is some potential for surface runoff to be transferred between the peripheral areas of the proposal and the existing dwelling that sit adjacent to the site. This is especially true in the eastern part of the site, where water eventually extends to one of the wetspots identified in the Cambridge and Milton Surface Water Management Plan. Surface runoff from the proposed development which falls towards the wetspot will be intercepted and either recycled within the proposed buildings or attenuated within long term storage devices and discharged

via the proposed surface water drainage network to the Washpit Brook. The surface water management strategy will effectively control run off that is discharged from the site towards the wetspot, and existing watercourse that extends adjacent to Thornton Road and Wellbrook Road and will thereby potentially reduce flood risk to peripheral areas of the existing residential development.

#### *Design of Sustainable Drainage System*

- 8.359 Through the amendments submitted to the application an addendum to the FRA was included, which built upon the original strategy and provided further detail, and added robustness to satisfy both Council officers and the Environment Agency. The addendum to the FRA highlighted one way that the strategy could be worked up which demonstrates that as well as alleviating the flood risk issue, the scheme can work in terms of landscape, ecology, noise and provide recreational space.
- 8.360 The scheme provides for swales within the strategic green fingers, which run down the natural gradient to the western edge, where linear ponds will be located to attenuate to runoff. Prior to entering the swales the water is temporarily stored at source where it is reused or is allowed to soak back into the ground. The water will then pass under the landscaped berms, through a culvert into a low flow channel. This channel is at the bottom of a larger channel that will be designed to accommodate floodwater storage in storm events. Eventually the low flow channel feeds into the Washpit Brook and water runs downstream after being regulated by the flow control structure than ensures that there is a reduction of the pre development peak flow downstream.

#### *Potable Water*

- 8.361 The proposed development will require considerable potable water resources and as a result several measures will be incorporated into the proposed development, to reduce overall water demand from dwellings and non-residential buildings. These measures will include water efficiency measures, visible water meters, rainwater harvesting and greywater recycling. The proposed potable water demand will have to comply with the standards set out in the Code for Sustainable Homes for Level 5 and 6. Cambridge Water Company's final Water Resource Management Plan identifies that there is no immediate threat to water resources within Cambridge Water's resource zone, and that there is capacity within its current licensed abstractions for the forecast development.

#### Wastewater

- 8.362 The development will create a large amount of wastewater requiring treatment and discharge. Anglian Water has been consulted during the application process and has indicated that discharges should be directed to the Cambridge Wastewater Treatment Works, and that there is sufficient capacity within the exiting works.

8.363 This Wastewater will not affect groundwater, and due to the nature of the proposed uses on site there are unlikely to be significant volumes of fuels and/or chemicals stored on site. In order to ensure that there is a satisfactory foul (wastewater) strategy a condition has been suggested (Condition 30). With the satisfactory discharge of this condition the application will comply with Policy NW26 (Foul Drainage and Sewage Disposal). All relevant stakeholders would be consulted in the discharge of this condition.

#### Management and Maintenance

8.364 Policy NW27 of the NWCAAP requires details of the management regime of the drainage features in order to ensure that there is comprehensive management in perpetuity. At this point in time there is a lot of uncertainty regarding the management of drainage systems on the back of the Flood and Water Management Act 2010.

8.365 There are still some elements of that Act which are unclear, and which will be resolved over time. The sustainable drainage system proposed at this stage in outline form is above adoption standards, and consultation is ongoing with the Councils and drainage bodies such as Anglian Water and Cambridge Water. The details of the SuDS will be required through the reserved matters applications, and will have to be provided in accordance with the County's SuDS handbook, and the City Council's SuDS adoption design guide. While the full implications of the Act are yet to be understood, the proposed scheme in terms of drainage is provided to a high standard, which will, subject to approving the detail, comply with adoption guidelines if they are offered for adoption. The proposal, in so far as it can at this stage, complies with Policy NW27.

#### Conclusions

8.366 The information submitted with the application, both in terms of the FRA and Drainage Strategy has been worked up with, and has gained support from, both internal officers at the Councils and the Environment Agency. The FRA addendum expands on the outline strategy and provides sufficient evidence that not only can the site provide a reduction in the existing flood risk downstream by reducing runoff rate and volume, but can work in design terms when looking at other aspects such as ecology, landscape, noise and recreation.

8.367 Conditions (Conditions 26 and 27) have been suggested by the Environment Agency requiring a surface water strategy, that builds on the submission documents, to be submitted, and that each reserved matters application shows how it contributes to that strategy, i.e. downstream runoff and volume must be controlled at each development stage.

8.368 Parameter Plan 07 identifies contour lines (which have a +/-2.5m flex) which ensures that the strategy can be carried out giving comfort on flood attenuation, but allowing for the design to be finalised through the reserved matters applications. Parameter Plan 03 identifies the zone for the location

of the flow control (which will need detailed permission), and a zone for any works to the Washpit Brook, if required.

- 8.369 The proposal in terms of drainage, subject to the conditions suggested, is strongly supported and complies with Policies NW25, NW26 and NW27 within the NWCAAP.

### **Ecology and Landscape/Heritage Assets**

- 8.370 The application site is predominately made up of arable land combined with various landscape elements such as mature hedgerows along field boundaries, an avenue of protected Horse Chestnut trees, a protected veteran Oak tree located centrally, and the Washpit Brook award drain, which runs along the south western boundary of the site. In addition to these elements, there are two further landscape features of significant interest. The first is the Travellers Rest SSSI, which represents itself as a depressed landform located centrally within the site, to the south of the World Conservation Monitoring Centre, accessed from Huntingdon Road. The second is an area of historic Ridge and Furrow field pattern, located between the Madingley Road Park and Ride site and Conduit Head Road. Although no significant historic buildings are located on the site, there are a number of older buildings and residential properties on the fringes of the site that provide a setting and visual inter-relationship that will need to be considered through the application process.

- 8.371 Policies NW1, NW2 and NW4 of the NWCAAP seek to preserve the setting of Cambridge and the land surrounding the development, prevent undue harm to historic, ecological and landscape features and promote biodiversity throughout the new development.

- 8.372 The applicants have responded to the NWCAAP aspirations by undertaking a number of desktop and field surveys on the application site and the surrounding area. The surveys have identified the various ecological, landscape and cultural assets on and around the site, including the presence of Bats, Farmland Birds, Water Voles, Brown Hare, Amphibians, Otters, Invertebrates, Reptiles and Badgers; historic field patterns, the Travellers Rest SSSI, various important and protected trees and the absence of any statutorily protected buildings on the site itself.

### **Ecology and Landscape**

- 8.373 The Masterplan for the development has been designed with the ecological constraints identified through the survey work in mind. Where possible the Masterplan has used the ecological constraints within the submitted design, and, where ecological impacts cannot be avoided, a package of on-site and off-site mitigation measures are proposed to compensate for the identified impact.

- 8.374 The submitted Environmental Statement details the mitigation measures proposed in the design of the development principles for lasting on-site solutions, the necessary off-site measures proposed where it is not

otherwise possible to incorporate such measures within the new development, as well as providing a site-wide Construction Environmental Management Plan which details the protection measures proposed during the construction phase of the development.

- 8.375 The 'green corridors' theme, which serves to connect the informal landscape area along the western edge of the site with the development areas, as illustrated on Parameter Plan 03, will help to enhance the ecological potential on site, creating habitats and transit routes for animals through the development, and also creating the opportunity for areas of wetland using swales and berms as part of the overall SuDS system. Although there is not a proliferation of existing hedgerows on site, the contextual plans within the DALs show that the majority of the existing on-site hedgerows and ditches have been incorporated within the Masterplan design, with some of the drainage channels, such as the Washpit Brook, enhanced to create increased opportunities for water retention within the site, to increase habitat for wetland species.
- 8.376 The on-site SuDS system has been designed to deliver ecological benefits. As much water as possible within the proposed drainage strategy will run through open swales and ditches that will include planting and aim to incorporate permanent water. Concern has been raised in respect of how wide the green corridors will need to be to successfully incorporate such drainage and landscape features whilst also providing a recreational and amenity function, with adjustments made to the DALs to account for these concerns. The detailed design process will need to establish further how all features can be accommodated successfully.
- 8.377 The overall package of on-site water retention features, such as the berms located within the Western Edge particularly, have been the subject of detailed design discussions to enhance ecology, such as the creation of steep banks in places for water vole burrowing to allow these species to be enhanced on site. Native planting and habitat manipulation can also provide for badger foraging opportunities within the scheme as well as provision for grassland strips seeded with native wildflower grassland mix for wildlife. Detailed reserved matters applications will need to develop these themes further to ensure delivery, but it is considered that the parameters illustrated at this stage provide comfort that such benefits can be achieved in the final, detailed, proposals.
- 8.378 Overall, the Western Edge will provide an important landscape feature, providing a multitude of functions, including drainage, and informal recreational functions, as well as providing a landscape edge to the site when viewed from the M11 and beyond. The applicants have provided additional detail and indicative sections of this area, to provide reassurance that all facets to this space can be delivered successfully. Officers have been comforted by the level of detail provided to date, and are of the opinion that this space can be designed to meet its various aims through the detailed design process. Following amendments to the submitted parameter plans, particularly Parameter Plan 07 which sets out the proposed topography of this space within a tolerance of +/- 2.5m,



officers are satisfied that sufficient flexibility exists within the plans to allow for a suitable design solution to be delivered, although careful regard will need to be had to ensure that the vision proposed through the outline scheme is delivered through detailed design submissions, especially allowing for the likely long-term and phased nature of the delivery of the western edge, which is to be formed using 'cut and fill' from the developed parts of the site.

- 8.379 Following amendments to the Environmental Statement, Geological Site Management Plan (GSMP) and Construction Environment Management Plan (CEMP), Natural England is supportive of the survey work undertaken and proposed mitigation and enhancement measures. Notwithstanding the submission of the current CEMP, a further submission of a revised CEMP is to be secured by condition (Condition 52) to ensure that the ecology of the site is protected during each development phase and best practice is applied, alongside other construction phase specific issues discussed elsewhere.
- 8.380 One outstanding area of concern for Natural England relates to specific references within the DALs to enhancement works within the Travellers Rest SSSI, including references to ramped footpaths/cycleways through the site and lighting proposals for that space. Whilst Natural England does not object, in principle, to some form of low-level activity within the SSSI, it is concerned that construction works within the SSSI could prove harmful to the landform. As any such works would constitute an engineering operation, they would require the submission of a reserved matters planning application. Any such application would be required to include the necessary level of detail to satisfy Natural England that their concerns have been overcome.
- 8.381 Due to the nature of the proposed development, the ES has identified that it is not possible to either retain or provide alternative habitats for certain species of farmland animals, due to the very nature of the site no longer being retained as arable land. Accordingly, the ES proposes that off-site mitigation measures are proposed for skylark and brown hares. Through discussions with the Council's Ecology officers, it has been accepted that off-site delivery of such mitigations is acceptable, with a potential receptor site identified. Timing and implementation of such off-site measures will be secured through the S106 agreement for the scheme.
- 8.382 In respect of the existing landscape features on site, for the most part the applicants have presented proposals that respect the value that these assets bring to the site. There are, however, two areas where officers are concerned that the development presents the potential to impinge upon important landscape assets, namely the Veteran Oak tree with adjoining Ash Tree, located in the centre of the application, and the avenue of Horse Chestnut trees, located towards the eastern end of the site, within the proposed 'Storey's Field' district.
- 8.383 In both instances, by virtue of the scale of the parameter plans, but also given some of the indicative arrangements illustrated within the DALs,

there is concern that these important features will either not benefit from sufficient space for the plants to survive, or that the space illustrated does not work to provide them with a suitable setting, which latterly could threaten their well-being and retention once the development is occupied and pressure is exerted to enable elements such as sunlight within residential curtilages to proliferate. Given the importance of these specific assets, conditions (Conditions 12, 13 and 14) are proposed to stipulate protection zones for these features, and other previously unidentified features worthy of retention. The detailed design coding and reserved matters processes will also need to have careful regard to ensure that the features are suitably accommodated into the surrounding development and form an active part of the scheme moving forward.

### Cultural/Heritage Assets

- 8.384 The DALs is a comprehensive document that seeks to draw design cues from a range of local assets, both in Cambridge and the wider area. The analysis of views into and out of the area is generally supported, with no dramatic views of the City Centre from the site or the M11 to provide a contextual relationship.
- 8.385 However, the importance of the wider setting is still relevant and whilst there are no historic buildings or listed structures located within the application site, there are areas where the submitted ES has failed to identify undesignated heritage assets (historic buildings) outside of the site, for example the former Country Centre on the north side of Huntingdon Road, which was built around 1852 as an imposing country residence (now in use as the Hotel Felix). The success of the scheme will be based upon providing a contextual relationship with adjoining buildings and the impact on the adjacent Conservation Areas, listed buildings and other heritage assets. Whilst some concern exists around how these elements will be reflected in the scheme, this will depend very much on detail and things such as the design and final scale of the buildings, and through the quality of materials proposed.
- 8.386 There is also some concern over the height of the buildings proposed in the Storey's Field section of the site as this will have an impact on Churchill College and the West Cambridge Conservation Area. The design of the buildings in this area and any 'landmark' building proposed will need to take the sensitive surroundings into account to ensure that no harm arises. The design coding process (secured by Condition 7) and reserved matters applications will need to provide parameters for reflecting the surrounding heritage context within the development as it progresses through the detailed design and implementation stages.
- 8.387 With the provision of a strong CEMP the value of this site in ecological terms will be equal to and in many cases greatly enhanced from the existing arrangement. The CEMP required by condition (Condition 52) will be implemented during construction to mitigate and control any adverse impacts that may occur.

- 8.388 It is accepted that the proposed development will have impacts in terms of ecology and biodiversity. The ES submitted with the application, incorporating the site wide CEMP, GSMP, and Biodiversity Strategy, satisfactorily highlights the potential conflicts and suggests mitigation measures that will not only compensate for the development, but also serve to enhance the local area in terms of ecology and biodiversity.
- 8.389 With regard to the various landscape and heritage assets on and around the site, it is considered that although a number of unregistered heritage assets have not been identified within the submissions, on balance the development suitably makes provision for, and respects the setting of, these assets in outline terms. However, given the level of detail proposed at this stage, and the inherent potential for detailed design considerations to have an impact going forward, careful attention will need to be paid through the design coding and reserved matters applications processes to ensure specific relationships are preserved and, where possible, enhanced.
- 8.390 One area where specific concerns have been raised by residents relates to the relationship between the site and the adjoining areas within Storey's Way Conservation Area, including the potential impact of the development upon the Ascension burial ground and the impact on the existing trees located in the area at which the Ridgeway cycle route is proposed to exit into Storey's Way. With regard to the first point, the applicants have amended PP03 to remove an area of secondary open land that was previously shown abutting the Ascension burial ground. This has served to overcome concerns from residents who had requested a Development Control Forum regarding the long-term security of the site, which could have been compromised by an area of open space, with no significant purpose, adjoining the relatively low wall boundary wall to the church yard. No Development Control Forum took place as the change was agreed with the applicant removing the need for the forum.
- 8.391 With regard to the existing trees and the potential impact of the Ridgeway route, the applicants have provided an updated survey of the trees in this area and how the route could travel through this zone. Although the details have not been submitted for approval at this stage, they do serve to provide some comfort that a solution can be identified whereby the cycle route can be achieved without compromising the long-term health of the trees, which provide a significant level of amenity to the Conservation Area and adjoining residential properties. The full detail of this route will be secured through the reserved matters process.
- 8.392 Subject to the conditions proposed, and the strategic measures being secured through the S106 process, it is considered that development complies with the NWCAAP.

## **Environmental Health Considerations**

### **Lighting**

- 8.393 Policy NW2 of the NWCAAP seeks to resist development where it would result in an unacceptable level of light pollution, whilst the supporting text to the policy seeks the submission of a lighting strategy, to assess the effects of lighting on residential and wider amenity, adjoining land uses, and address lighting of key buildings, routes across the strategic gap and the lighting treatment of the urban edge.
- 8.394 In response, the ES includes a review of existing lighting, identifying a baseline lighting condition, identifying and assessing the sensitivity of receptors, setting out required lighting provisions for the proposed development, and assessing and benchmarking the baseline to cumulative lighting condition variance, both due to the construction phase of development, and at stages of completion. No detailed proposals are included as the application is at the outline stage only. It is, therefore, proposed that lighting details be included within the design codes, and a separate condition (Condition 51) is proposed to agree final site lighting.
- 8.395 Concerns have been expressed through the consultation process that lighting from the new junctions will impact on residential amenity, including where the new access routes will result in the removal of some existing landscape screening for existing light sources, such as the Park and Ride site on Madingley Road. Care will be needed with regards to the position of road signs and the design of street lighting all of which will be necessary associated infrastructure. Although the junctions are proposed for approval as part of this application, the details submitted provide limited information in this respect. As with the lighting for the proposed All Weather Pitch, which will adjoin the Park and Ride site (discussed in paras 8.237 to 8.239 above), officers will need to work with the applicant to provide a suitable landscape screen to ensure that light spill from these facilities does not affect the amenity of existing and proposed adjoining residents. Accordingly, although officers have already been working with the applicants to consider options for advanced landscaping around the Park and Ride site to minimise disruption to residents ahead of development commencing, conditions (Conditions 45, 46, 47, and 48) are proposed requiring details of the lighting, traffic signals and landscaping, alongside the other technical elements of the junctions to be submitted for approval ahead of works commencing.

#### Soil and Contamination

- 8.396 Although the majority of the site is given over to arable land, it has been the subject of a mixture of uses through its role as a University facility, with a number of agricultural buildings remaining on site at present.
- 8.397 A desktop study recorded potential sources of contamination, including laboratories, former gravel and quarry pits and above ground fuel tanks. Intrusive ground investigations have been undertaken across the site, and did not record any significant contamination. However, given the size and nature of the site, with some buildings and uses remaining on site, Environmental Health officers have recommended that further testing in some areas of the site should be undertaken through the construction

phase of development. It is not considered that there are any pollutants on site that would preclude development and therefore subject to further testing where necessary, with mitigation and remediation where relevant, the proposal conforms to Policy NW2 of the NWCAAP. To ensure the necessary testing and remediation is carried out to an acceptable standard a condition (Condition 49) is proposed to require all the necessary details to be agreed prior to the commencement of development. In addition to this, although a Construction Environment Management Plan (CEMP) has been submitted that addresses the main issues on the site to an acceptable standard, detailed soil management plans for each phase of development will be required to ensure that any contaminated soil that is discovered is suitably managed. Accordingly, a condition (Condition 52) requiring a further CEMP to be submitted to include such details is also proposed, in addition to the other elements listed within the condition.

#### Noise and Vibration, Dust, Fumes and Odours

- 8.398 Policy NW2 of the NWCAAP states that planning permission will not be granted where a development would be exposed to (inter alia) levels of noise, vibration and other forms of pollution that are unacceptable in relation to the nature of that development. Policy NW28 seeks to prevent disruption to adjoining land uses throughout the construction phase of the development. This proposal raises a number of issues that will need to be addressed effectively in order to minimise both the potential adverse effects on the existing local residents in proximity to the site, and provide a suitable environment for the future occupants of the both the dwellings and other uses included within the proposed development.

#### *Impact on future occupiers of the site*

- 8.399 The Environmental Statement submitted with the application provides data to support the application in terms of both its impact on the existing population, and the amenity of future occupiers of the site. The report uses the NEC categories identified in PPG24 and assesses the suitability of the site for residential development.
- 8.400 The report identified that the adjoining M11 carriageway, alongside the A14 and Huntingdon Road corridors, as well as internal site traffic noise, are significant sources of noise and, therefore, present design requirements upon residential properties to ensure that noise levels within the development are managed to an acceptable standard. Measures proposed include the location of non-noise sensitive buildings on the western perimeter of the developed area of the site, and the use of building massing, internal layouts of specific buildings, employment of appropriate stand-off distances from internal site roads and the specification of appropriate glazing and ventilation. The design of the western edge, with the inclusion of the landscaped berms, has also been proposed to reduce noise and improve the amenity value within this area of informal public open space.

8.401 Environmental Health officers accept the findings of the survey work and agree that an integrated design mitigation approach can serve to intrinsically “design out” traffic noise impact, negating the need for a noise insulation scheme in the majority of cases. However, they raise concerns that this may not be possible for all cases, whilst also raising some concerns about the specific technologies proposed to assist with the designing out process. Accordingly, given that the layout and footprints of residential premises are not finalised at this stage, they have recommended that a condition (Condition 50) be imposed to ensure the submission of suitable design and mitigation for each phase of residential development.

*Impact on existing residential properties*

8.402 The ES recognises that noise and dust from the construction of the proposal has the potential to affect nearby residents, whilst the introduction of the new access points into the site presents the potential for long-term noise impacts upon adjoining existing residents. Increased traffic upon the surrounding road network also has the potential to increase noise and disturbance to residents.

8.403 Environmental Health Officers have suggested a number of conditions relating to various aspects of the construction phase, alongside conditions to mitigate the noise impacts of the new junctions. The proposed conditions include details of the Construction Environmental Management Plan (CEMP), Construction Method Statement, construction phasing, piling details, limits on hours of construction and hours of delivery (Conditions 5, 31, 52, 53).

8.404 Further to this, the Transport Assessment proposes mitigation measures at various points in the wider area to overcome the potential increase in traffic in residential areas. These measures are being secured through the S.106 process.

8.405 By virtue of the proposed conditions and mitigation measures, officers are satisfied that there will be no undue adverse impacts through noise to existing residents.

*Impact of proposed local centre and other non-residential uses.*

8.406 The development proposes a mix of non-residential uses, with a particular concentration in the local centre and along the western edge of the development. Such uses may have an impact on adjoining residential properties, particularly within the local centre and in close proximity to it, where development density is higher.

8.407 As such, careful regard will need to be had when designing the local centre, its component elements and the other non-residential uses across the site (including elements such as school playing field equipment, Multi-use games areas etc.), to take into account proximity of uses and the potential noise and other disturbance, for example through air conditioning

or other mechanical elements, or through associated activities such as timing and nature of deliveries. Although conditions of consent would be premature at this stage to address such issues, Environmental Health officers have recommended a number of informatives to be attached to any consent, to advise the applicants of the various elements that should be considered when identifying design solutions, whilst also commenting that regard will need to be given to potentially limiting hours of operation, timings of deliveries and other elements, at the time of considering specific reserved matters submissions.

### Air Quality

- 8.408 Policy NW2 of the NWCAAP states that, inter alia, 'planning permission will not be granted where the proposed development or associated mitigation measures would have an unacceptable adverse impact on air quality'.
- 8.409 The application site lies in close proximity to the Cambridge Air Quality Management Area (AQMA), which covers the junction of Huntingdon Road, Histon Road, Victoria Road and Castle Hill and also the South Cambridgeshire AQMA which runs along the A14 and the A10/Histon Road junction. The traffic movements generated from this development will impact on both of these AQMAs and, therefore, an Air Quality Assessment (contained within Chapter 14 of the Environmental Statement) has been provided to quantify the impact and identify mitigation methods to reduce or neutralise the impact.
- 8.410 The assessment provided has been evaluated by the Councils' Scientific officers who, despite noting a number of limitations, agree with the findings that there will be a degree of adverse effect as a result of this development. They do, however, advise that, by virtue of the limitations of the model, the overall impact is likely to have been under-estimated.
- 8.411 While it is almost impossible for development of this scale to have no adverse impact on air quality, through design, and mitigation measures the impacts can be reduced considerably. Commitments through both the site wide and University-wide travel plans, to reduce car dependency and mitigate the need for longer trips into the City from further afield, such as car clubs, enhanced public transport provision, adequate cycle parking provision, as well as speed limits imposed through the development, will help reduce the impact. There are also wider strategies that will help improve air quality over the long term. It is also proposed that a level of verification monitoring for air quality is carried out before occupancy of the site and continued post occupation. The monies for this monitoring are being sought through the S106 agreement.
- 8.412 Further to the proposed mitigation measures outlined above, the Councils' Scientific officers have requested that the a range of transport related emissions reduction measures are secured and that the type of fuel to be used within the Energy Centre is restricted to those already tested through the ES (these are secured through the Travel Plan, S106 obligations,

Code for Sustainable Homes, and Condition 61). They have also requested that facilities to meet the needs of new residents be provided in the early stages of development, to mitigate the need for extended off-site trips which would also have a resultant impact upon air quality. This is being secured via the triggers imposed for the delivery of facilities under the various relevant S106 obligations. Officers have also recommended a number of informatives, to be attached to any consent, to advise the applicants of best practice and other consents likely to be required outside of the planning application process.

- 8.413 In isolation it could be considered that the proposal has a small negative effect on air quality and thus is contrary to Policy NW2 of the NWCAAP. This consideration must, however, be balanced against the overall aims of the Area Action Plan and site allocation, discussed in this report, that aim to meet the long-term needs of the University of Cambridge and provide a high-quality mixed use development that will benefit the City and surrounding area. Mitigating measures are proposed to ensure any negative impact is as minimal as possible.

#### Health Impact

- 8.414 The applicants have submitted a detailed Health Impact Assessment (HIA) as part of their proposals, which considers the health care requirements of the new residents, and assesses how those needs will be fulfilled, taking into consideration existing facilities within the area. Through this assessment, the need for additional facilities has been identified, resulting in the proposal to incorporate a health care facility within the local centre of the development.
- 8.415 The HIA has been assessed by both the Council's Public Health Specialist and the NHS, with the findings accepted. Discussions regarding the method of delivering the health care facility have resulted in S106 obligations, the details of which are addressed below.

#### Waste Strategy and Management

- 8.416 Policy NW2 of the NWCAAP requires that the development proposed provides for integrated refuse and recycling facilities and reduces the amount of waste produced, through good design. In addition to this, the RECAP Waste Management Design Guide Supplementary Planning Document was adopted by Cambridgeshire County Council on 22 February 2012. This SPD addresses the issue of waste management in new developments and redevelopments of a residential, commercial or mixed use nature. The application has been supported by a Site Waste Management Plan, and an addendum to this covering the proposed system of collection on this site was submitted with the amendments to the application.

#### Construction Phase



- 8.417 It is anticipated that the construction phase across all of the uses on this site will produce around 109,000m<sup>3</sup> of waste. This figure is based on published data and recently completed projects. It is considered that through the use of a challenging and robust Site Waste Management Plan this level of waste can be significantly reduced. Reducing waste will add credits towards the BREEAM excellent standards and Code for Sustainable Homes Level 5 being achieved on this site.
- 8.418 A Construction Environmental Management Plan will include the requirement for an Outline Waste Management Plan (OWMP), which will provide a statement of site specific reuse and recycling objectives with appropriate targets, compliance training for sub-contractors, construction code of conduct together with regular auditing and reporting on target achievements and quantities disposed. Each reserved matters submission will then require a Detailed Waste Management Plan for that particular phase (Condition 54). With the suggested conditions imposed the proposed development complies with Policy NW28 of the NWCAAP.

#### Waste Strategy for Occupied Development

- 8.419 It is expected, when fully completed, that the development will produce in the region of 6,091 tonnes of waste per annum. The applicants looked at options for possible waste solutions to this site given policy encouragement to look at innovate solutions. The local authorities and County Council took part in the assessment of the possible solutions.
- 8.420 During the feasibility assessment for waste a communal, underground vertical bin system scored highest for both high density and medium density residential buildings. Conventional wheelie bins scored highest for low-density residential properties, where an underground system would be less efficient serving fewer properties in any 30m radius, however it is considered that a single site solution for the residential element would be most efficient, allowing for reduced vehicle movements. Above ground compounds scored highest for commercial/education waste on the site due to the potential for specific waste collection requirements, for example clinic waste.

#### *Underground bin system*

- 8.421 In addition to the policies noted at the start of this chapter the City Council (through its Environment Scrutiny Committee 15 March 2011) has an approved 'Household Waste and Recycling Policy'. Policy 7 (New Developments) which recognizes the benefits of underground schemes in terms of aesthetics, reduction in fly tipping and efficiencies of collection. It states that underground bins should be considered by developers for high-density housing developments, and notes that these underground systems are innovative, but are becoming more popular with local authorities in this country. They are already being used extensively in mainland Europe, e.g Germany, Denmark, Spain and Portugal.

- 8.422 The RECAP design guide is also supportive of underground systems and states that 'as an alternative (to more conventional systems) developers are encouraged to consider underground storage of waste. Such systems may be particularly suitable for use within multi-occupancy residential developments'.
- 8.423 The proposed underground system comprises a concrete bunker set in the ground, a bin-liner or container which holds the waste and is located in the bunker, and a surface entry point, which often looks like a conventional street waste bin mounted on a section of paving or platform. All that is visible at the street level is the input receptacle (an example is shown in Appendix O). Although examples of this system are present in Peterborough, Tower Hamlets and are proposed in Edgbaston (Birmingham), this scheme would be the first in this country at this size and scale.
- 8.424 The underground bins will be situated in groups of 3 (or multiples of 3 if one location serves a high number of residents). The three bins will allow for the following streams of waste; dry recycling, paper and residual waste including residual food waste. Fortnightly collection of residual and co-mingled recycling is anticipated with up to every 6 weeks for paper although an automatic fill indicator will allow for optimum emptying frequencies to be obtained. It is anticipated that a solution will also be provided for batteries with the underground banks. Kitchens within residential properties will be provided with adequate built-in storage for waste in accordance with the Code for Sustainable Homes, Level 5 to complement the underground system.
- 8.425 Organic waste will be dealt with through promotion of home composting. All dwellings with gardens will be provided with composting facilities for grass and hedge clippings, dead plants, flowers etc. and also some food waste; for example vegetable peelings. All areas that have managed gardens such as apartments will be covered through a management company will be covered by an onsite in vessel composting facility that will be run by the applicant.
- 8.426 There are clear benefits to the underground system in terms of visual amenity, and there are some economic and operation cost benefits/efficiencies that can also be attributed to the underground system; for example a reduction in vehicle movements on site, reducing the carbon impact. The applicant has discussed with the local authorities how potential fly-tipping will be monitored and dealt with, as well as ensuring that assisted collection is available for elderly, infirm, and disabled residents with impaired mobility or sight. 90% of the bins will be within a 30m radius of any one property with 100% being within 35m. In the higher density areas the distance is likely to be significantly less than this.

#### *Management and Delivery*

- 8.427 Detailed conversations have taken place with representatives from both local authorities regarding both the scheme proposed and the practicalities

of collection. It was considered that it would be most cost/time efficient to have one waste collection authority collecting for the entire site. Both the City Council's Environment Scrutiny Committee and the South Cambridgeshire's Portfolio holder for Waste have agreed in principle, subject to a service level agreement being put in place, that the City Council will collect on behalf of both authorities.

8.428 Costs with regard to the operation of the underground system are yet to be fully determined because the applicant is yet to procure the bin system, and costs are difficult to estimate due to the fact that there are no precedents from elsewhere to derive similar costs from. As a result the estimated costs with regard to collection, maintenance, replacement and repair cannot be established precisely at this stage (there is considerable difference between different systems) meaning that the amount of (if any) money to pay the Councils cannot be determined now. Should the system cost more than the baseline service (currently an alternate weekly wheeled bin service operated throughout the City and South Cambridgeshire) the applicant has committed to covering any additional operational and replacement costs to ensure that the Councils do not pay anything more than they would have done through operation of the baseline service and are therefore not adversely financially affected.

8.429 A formula is being drawn up which, with the correct inputs when known post procurement, will confirm the amount payable to the local authorities (the amount above the costs of the baseline service). The formula will calculate an annual cost based on the difference between the underground system and the baseline service, and this amount will then be payable to the local authorities in perpetuity through the S106. Formulae are also being drawn up to secure a contribution for a vehicle 'upgrade' (above baseline costs of a normal vehicle) to enable collection from the underground system.

#### Bring Sites and Recycling Centres

8.430 The RECAP design guide requires developments of this size to provide for bring sites. The expectation within the guide is that one additional Bring Site facility will be required for significant residential developments for every 800 residential dwellings. Policy NW21 of the NWCAAP requires one to be located within the local centre, and given that in order to comply with the design guide 4 bring sites will be required in total a condition (Condition 59) is suggested to secure these within the local centre and the three other neighbourhood centres identified within Parameter Plan 04. These sites will provide for additional streams of recycling such as textiles, small waste electrical and electronic equipment etc.

8.431 The condition proposed also requires temporary recycling facilities to be installed prior to the 50<sup>th</sup> occupation, and thereafter incrementally provided upon the completion of every 800 dwellings to ensure suitable interim provisions are in place until the permanent bring site is completed.

8.432 A network of Household Recycling Centres are provided by Cambridgeshire County Council. The sites are positioned in strategic locations across the county and enable the public to bring and deposit bulky household wastes and other waste types of household waste that are not normally taken as part of the normal collection round. Sites encourage the segregation of waste for recycling and reuse. This site is not allocated to provide a Household Recycling Centre, but a financial contribution to be secured through the S106 will be provided to give increased capacity and help provide a permanent replacement for existing temporary facility at Milton.

### Conclusion

8.433 The proposal by the applicant introduces an innovative waste solution to this site which should help encourage responsible waste management and recycling for future residents, provide economic efficiencies and improve the aesthetics of the built environment. Contributions are being secured through legal agreement to ensure that the cost to the local authority is no greater than the baseline conventional system. It is therefore considered that the proposal complies with both the NWCAAP policies and the RECAP design guide.

### Archaeology

8.434 The NWCAAP requires that the development of the site will take into account existing site conditions and ensure that there will be no unacceptable adverse impact upon a broad range of issues. Policy NW2 sets the development principles for the site, and seeks to ensure that, amongst other elements, that there will be no adverse impact upon archaeological interests on the site.

8.435 In response, the applicants have undertaken an extensive investigation of the site, the results of which are published fully within Chapter 9 of the submitted Environmental Statement, supplemented by a range of mitigations proposed within the Construction Environmental Management Plan.

8.436 By undertaking a combination of a desktop study and various on-site investigations, carried out in accordance with the criteria set out within PPS5, the applicants have identified that, whilst twelve distinct archaeological areas of the site exist with evidence/findings across a broad spectrum of dates, none is of such importance to warrant statutory designation, and therefore worthy of in-situ preservation.

8.437 However, given the nature of the findings, and inability to access some parts of the site at the time of the initial investigations, either due to the presence of existing structures, or nature of current uses, a condition (Condition 63) will be required to secure a programme of archaeological work through the construction phase of development to ensure the suitable identification, recording and preservation of assets uncovered at that stage. Subject to this condition being imposed the County Council do not

object to the principle of development on this site and therefore the proposal complies with policy.

### **Third Party Representations (not addressed in previous sections)**

- 8.438 The majority of third party representations have been addressed through the detailed assessment of various elements of the scheme above.
- 8.439 In addition to the points previously addressed, however, third party representations have raised additional concerns in respect of the potential for the development to ultimately be perceived as a University enclave, with limited accessibility through the site and queried the impact it will have upon the value of adjoining properties.
- 8.440 In respect of the first point, although a significant proportion of the site will be retained by the applicant for University related uses, the principle for this was established at the time of the site being released from the Green Belt and further detailed through the adoption of the NWCAAP. To ensure that the scheme is inclusive, it has been designed to include a permeable layout and establishes principles to ensure that the development is tenure blind, and represents a mixed and vibrant community. In combination with this, the applicant has committed to an estate management structure and level of consultation with stakeholders and public bodies that will ensure that the long-term interests of all elements of the existing and future community will be incorporated into the development as it is established.
- 8.441 In respect of concerns regarding the impact of the development upon the value of adjoining development, although there is no evidence submitted to support or disprove such a claim, such impact is not a material planning consideration for members. Notwithstanding this point, the NWCAAP seeks to provide a high quality development that respects its setting and brings benefit to existing residents that will neighbor the new development. Through the introduction of new community and leisure facilities, retail opportunities and other publicly accessible elements, such as the proposed additional areas of informal open space, the development is considered to represent an enhanced environment that will meet the aims of the NWCAAP, and one from which existing residents will also benefit in the long-term.

### **S106 Planning Obligations**

#### **CIL Regulations and NWCAAP Policy**

- 8.442 The Community Infrastructure Levy Regulations 2010 have introduced the requirement for all local authorities to make an assessment of any planning obligation in relation to three tests. If the planning obligation does not pass the tests then it is unlawful. The tests are that the planning obligation must be:
- (a) necessary to make the development acceptable in planning terms;
  - (b) directly related to the development; and

(c) fairly and reasonably related in scale and kind to the development.

8.443 The applicants have indicated their willingness to enter into a S106 planning obligation in accordance with the requirements of the NWCAAP.

8.444 Policy NW31 in the NWCAAP relates to Planning Obligations and Infrastructure Provision and requires any proposal to make suitable arrangements for the improvement or provision of Infrastructure, services and facilities necessary to make the scheme acceptable in planning terms.

#### Section 106 Obligations

8.445 Appendix K provides a summary of the Heads of Terms within the S106 to be secured as part of any permission granted. The summary identifies the description of the S106 item, the cost of the contribution and the triggers proposed. The summary is split into key themes as identified below. If any substantial changes are made to the triggers post committee then these changes will be reported back to the Joint Development Control Committee. Minor changes to the changes would be reported to Chair, Vice Chair and Spokespersons.

#### *Affordable Housing*

8.446 This will secure the use of 50% of the units on the site as affordable key worker housing in perpetuity, and will ensure that the provision of these units is brought forward alongside the delivery of market housing. It will also provide for the faith worker units and the associated triggers.

#### *Open Space and Sports Provision*

8.447 The S106 will secure the timely provision all open spaces and sports facilities on the site, along with children's play spaces and allotments (All provided to relevant specifications). The S106 will also require provision of pavilions associated with sports pitches.

8.448 Triggers for open space will be secured so that open space is provided early on for early residents and that after that it comes forward contemporaneously with the residential completions in accessible locations.

8.449 The S106 will also cover the management and maintenance of the above facilities and will secure the widening of access to the Indoor Sports Facility on West Cambridge. A Contribution towards a sports development officer that will work across the NW area is also secured.

#### *Ecology*

8.450 As a result of the development there is a requirement for some off-site Biodiversity mitigation measures (to improve habitat for farmland birds and brown hares). This will be secured through the S106

### *Access to the Countryside*

- 8.451 Provisions for upgrades to the M11 underpass and footpath (upgrade to Bridleway standard) leading up to Madingley village, as well as the creation of through the West Cambridge Site linking the proposal will routes towards Coton and Coton Countryside reserve are secured.

### *Community Infrastructure*

- 8.452 The S106 will secure the provision of the on-site community centre (total area between 500-600 sqm) and a trigger of the first key worker occupation. A temporary facility will be provided on the commencement of residential development to ensure that there is provision for the earliest residents.
- 8.453 Indoor sports provision will be secured though the opening up of access to the West Cambridge Sports Centre, but if this is not achieved within the first 3 years of residential development on this site, then a fall back scenario of a dance studio/fitness suite on this site will be provided.
- 8.454 The Health facility (700sqm) will be provided before the 400<sup>th</sup> key worker unit or 250<sup>th</sup> market dwelling (or a total of 575 dwellings) whichever is the sooner to secure adequate health facilities on this site. The Police Office (200sqm) will also be provided on by the 1200<sup>th</sup> residential occupation. A contribution will also be made to library sit out costs on the adjacent NIAB site.
- 8.455 Money is also provided for a community chest payment (£5000) upon occupation of the first residential dwelling and community development worker(s) for 3 years.

### *Education*

- 8.456 Payment towards the children's centre on the adjacent site is secured through the S106 and both provision for primary education (on site) and secondary education (off site) along with revenue payments (if applicable) are identified in the legal agreement.

### *Waste*

- 8.457 Payments to the County Council for an off-site Household Recycling Centre is secured through the S106. The S106 also secures any money necessary to cover the waste collection authority in the event that the costs are above baseline collection costs, this includes a contribution for a vehicle upgrade necessary to complement the bin system chosen.

### *Transport*

- 8.458 The S106 will secure the travel plan associated with the development, a framework for which was submitted with the application. This travel plan will have to take into account the items raised from both the County

Council and Highways Agency. This travel plan will be implemented from the first residential occupation and will be monitored (and amended/adapted as necessary) throughout the lifetime of the development. Money will be set aside for the travel plan measures will include promotional campaign for the Guided Busway, University wide Travel Plan Measures, monitoring for a need of a Controlled Parking Zone in nearby residential streets and possible works to the M11 slip road (dependent on monitoring).

- 8.459 Payments are also secured for bus revenue (to help fund public transport during the 'unviable' stages, and physical improvements such as traffic calming measures on Oxford/Windsor Road, enhancements to cycle provision along Huntingdon Road and at the junction with Victoria Road/Castle Street. Improvements will also be provided to Madingley Road/Queen St/Northampton Street junction and payment of £235,000 to the WCATP is also provided that could provide traffic mitigation in the local area.

*Other payments/obligations*

- 8.460 The S106 secures funds for Public Art across the site, and monitoring for air quality. There is also a payment for S106 monitoring to ensure that the local authorities have the resources to monitor the provisions in the agreement.
- 8.461 The applicant has accepted the need for air quality monitoring in principle. The Councils' Scientific Officers propose that monitoring is done in two forms, firstly by diffusion tubes which will be installed on the site and measure Nitrogen Dioxide, and secondly by continuous monitoring for which equipment has already been purchased and installed on the corner of Girton/Huntingdon Road. This second form of monitoring not only records Nitrogen Dioxide but also PM10 and PM2.5 which were highlighted in the Environmental Impact Assessment. This continuous monitoring equipment was funded via Cambridgeshire Horizons Growth Area Bid in anticipation of the development of NW Cambridge.
- 8.462 The contribution for air quality monitoring set out in the Heads of Terms (Appendix K) identifies a sum that covers the cost of the first form of monitoring only. The second form is still the subject of on-going discussions, being led by South Cambridgeshire, as it relates to the air quality monitoring zone in its area. A formal written request was made in June 2012. A sum of £88,000 has been requested to cover revenue costs over a 10 year period, including data collection, service and maintenance and electricity supply).
- 8.463 At present the applicant has not agreed to meet the costs associated with the second form of monitoring. Discussions on this will to continue with the applicants regarding this point, as part of the S106 process moving forward. An update to members will be provided at Committee.



## Viability

- 8.464 Section 70(2) of the Town and Country Planning Act states that in determining planning applications, a local planning authority 'shall have regard to, *inter alia*, any local financial considerations, so far as material to the application'. Viability of any development is therefore material in assessing a planning application.
- 8.465 In terms of overall viability of the scheme the applicants have not raised any viability issues; that is to say that all S106 requirements, including 50% affordable housing can be provided over the lifetime of the development. The applicants have however raised issues with cash flow in the first phase, which is heavy in terms of up-front costs, where significant infrastructure is required in terms of utilities improvements, provision of new roads in to the site as well as the community, educational and sports facilities.
- 8.466 The application has included provision for a hotel and senior care facility in order to assist with this viability of this first phase, and will help offset the up-front investment that the applicant will need to provide the early facilities. As discussed in the report above there are other benefits that result from these facilities in terms of place making and addressing need, and these elements do not come at the expense of any of the provisions within the NWCAAP (i.e they are not replacing housing or employment provision which was key to release of the land in the first place).
- 8.467 It is therefore considered that as the local centre first phase is crucial to placemaking, and providing facilities early on in the development encouraged by the NWCAAP Policy NW20, and given that there is no loss of facilities expressly highlighted in the NWCAAP, then both the senior care facility and the hotel should be considered favourably given their role in the viability of the first phase.

## Phasing

- 8.468 NW30 of the NWCAAP relating to phasing and need, requires a needs statement to be submitted with any planning application to demonstrate that the University has a need for that land to be released for the specific development the subject of the application. The University has already provided significant evidence that there is a need for housing and therefore it is not necessary to require this for every reserved matters application.
- 8.469 The outline submission included a needs case for all other uses such as retail, hotel and senior care facility which have been accepted by the local authorities. The release of the employment land will still need to be proven at the time of the reserved matters application and is therefore subject of condition (condition 18).
- 8.470 The policy states that 'phasing for the development will be determined through masterplanning and as the needs of the university are proven'. In

addition to this Policy NW20 requires high quality community services, and facilities to serve all phases of development.

- 8.471 Lessons learnt from elsewhere support the approach proposed by the applicant that the first phase will be centred around the local centre creating facilities and amenities in the early phase and creating a community hub. A large amount of key worker housing and market housing will also form part of this first phase which will provide the orbital link from Madingley Road to Huntingdon Road, as well as open space and works to the western edge.
- 8.472 Beyond this first phase indicative phasing shown in the Design, Access and Landscape Statement shows housing then being developed in a logical manner both sides of the strategic gap, with residential development making its way towards the north west of the site. It is expected that the employment uses on the western edge will be the last development to take place due to the fact that the need will have to be proven once other site have been built out. A final, more detailed phasing plan, which will need to account of the S106 triggers, other strategies such as drainage, and elements such as strategic landscaping (Required by Policy NW29) will be secured through condition (Condition 11).

#### Adoption Strategy

- 8.473 The County Council's note on New Estate Road Adoption (April 2010) establishes that the construction of new highways on housing estates is the responsibility of the developer, and that the developer can choose whether to offer these roads for adoption. The applicants are proposing to hand over for adoption the primary routes through the site (radial and orbital route), and designate the orbital cycle way through the strategic gap as a public right of way. All secondary and tertiary roads on the site will remain in the applicant's control.
- 8.474 An Adoption Strategy has been developed and will be appended to the S106 which sets out the principles for both the adopted roads and non-adopted roads in terms of maintenance and management of street furniture, street trees, SuDS, etc. and ensuring that these elements are provided consistent with elsewhere in the City and South Cambridgeshire. It also ensures that where roads are not adopted, the road will meet guidance for things such as load bearing requirements (for removal, fire and waste vehicles).
- 8.475 The Strategy includes an access agreement, which will be given to all three authorities and will subsist for the life of the development. This will ensure that agreed routes are kept open at all times and are kept clear and unobstructed, that bus routes will be made available for the bus companies, that refuse vehicles can access the street etc. It also ensures that street cleaning is consistent with the rest of the City and South Cambridgeshire, and illumination of routes.

8.476 Funding for the non-adopted roads will be collected through an estate management charge, and an estate management company will maintain, repair and replace the non-adopted roads. Estate charge for the Key Worker Units will be covered by the University, which would also cover facilities such as the school, police, and community facility.

## **9.0 CONCLUSION**

- 9.1 The current proposals are the result of extensive negotiation over a prolonged period, both at pre application stage and during the application process, engaging the views of council officers, external stakeholders, members of the public and other public bodies. The above assessment, undertaken against both the new National Planning Policy Framework and local planning policy, as well as supplementary planning documents, concludes that the development, should be supported subject to the relevant conditions and S106 agreement.
- 9.2 In looking at the proposed scheme which provides for 50% affordable housing in the form of University key worker housing, it successfully achieves the aims and principles identified as the reason the site was originally released from the Green Belt through the review of the 2003 Cambridgeshire and Peterborough Structure Plan, Cambridge Local Plan 2006 and subsequently set out in detail through the adoption of the North West Cambridge Area Action Plan in 2009.
- 9.3 More comprehensively, the proposal has assessed the environmental impacts associated with the development in line with the EIA regulations 2011. The Environmental Statement (ES) associated with the application covers all relevant environmental factors and the mitigations measures and proposes a suite of mitigation measures which are secured either through being inherent to the proposal itself, secured through condition, or secured through S106 legal agreement. Table 2.1 within the ES provides a summary of the measures to avoid, reduce, or manage any adverse effects and/or to deliver beneficial effects identified in each of the individual chapters. The works within this table are conditioned (Condition 6)
- 9.4 The scheme has involved, and will continue to involve, the local community. Both neighbouring residents of the site and future residents of the scheme have helped, or will help, shape the development and its future, illustrated through the provision of the applicant's Community Strategy.
- 9.5 The proposal, through the establishment of on-site facilities and relationships with the adjoining West Cambridge and NIAB sites, provides a good level of social infrastructure and open space, along with local shops and services. The applicants have committed to bringing facilities forward at an early stage through the creation of the local centre within the first phase of the development.
- 9.6 The proposed scheme establishes a layout that will enable good public transport and integration with surrounding roads/neighbourhoods to encourage walking and cycling. Street design within the development will encourage low vehicular speeds and prioritise softer modes of travel. The proposed travel plans will ensure a sustainable development which meets

policy expectations in terms of reducing carbon and encourages sustainable lifestyles.

- 9.7 The proposal further sets out to achieve an exemplar standard of sustainable development, through the commitment to delivering homes and non-residential buildings to Code for Sustainable Homes Level 5 and the BREEAM 'Excellent' Standard, and through the provision of a bespoke, innovative waste collection system. Sustainable drainage underpins the development of the Masterplan and will be employed on the site to reduce flood risk and enhance biodiversity and ecology. The Masterplan provides a solid base for a full range of house types, styles, sizes and tenures all to be integrated within a high landscaped setting and open space.
- 9.8 Overall this proposal represents an urban expansion that will connect to Cambridge, but also respect its relationship as a gateway to the adjoining villages and surrounding Green Belt. It is entirely consistent with the vision and objectives of the NWCAAP and will provide for a development that will ensure future residents can enjoy a good quality and sustainable lifestyle, whilst meeting the long-term development needs of the University of Cambridge. The proposal complies with all national, regional and local policy and therefore is recommended for approval.

## **10 RECOMMENDATIONS**

### **C/11/1114/OUT**

#### **APPROVE subject to the following:**

- 1) The satisfactory execution of the S106 agreement incorporating the Heads of Terms identified in Appendix K by December 21 2012
- 2) Agreement on any outstanding S106 items, including phasing and triggers, that are still under negotiation
- 3) Addition to the reasons for approval to reflect discussion at the Joint Committee
- 4) The following conditions:

### **S/1886/11**

#### **APPROVE subject to the following:**

- 1) The satisfactory execution of the S106 agreement incorporating the Heads of Terms identified in Appendix K by December 21 December 2012
- 2) Agreement on any outstanding S106 items, including phasing and triggers, that are still under negotiation
- 3) Addition to the reasons for approval to reflect discussion at the Joint Committee
- 4) The following conditions:

## **11 PROPOSED CONDITIONS**

1. No development on any individual development parcel shall commence until approval of the details of the appearance, landscaping, layout and scale (hereinafter called the reserved matters) within that parcel has been obtained from the local planning authority in writing. The development shall be carried out as approved.

**REASON** To ensure that all necessary details are acceptable In accordance with the requirements of section 51 of the Planning and Compulsory Purchase Act 2004.

2. The first application for approval of reserved matters shall be made to the local planning authority no later than three years from the date of this permission.

**REASON** In accordance with the requirements of section 51 of the Planning and Compulsory Purchase Act 2004.

3. The commencement of each development parcel pursuant to this outline consent shall begin before the expiration of two years from the date of the last reserved matter of that parcel to be approved.

**REASON** To prevent the accumulation of unimplemented planning permissions and in accordance with the requirements of section 51 of the Planning and Compulsory Purchase Act 2004.

4. Application(s) for approval of all the reserved matters shall be made to the local planning authority before the expiration of 10 years, in respect of any residential development, and 20 years, for all other uses, from the date of this permission.

**REASON** To prevent the accumulation of unimplemented planning permissions and in accordance with the requirements of section 51 of the Planning and Compulsory Purchase Act 2004 and provide a consistent approach to the development of the site alongside adjoining developments.

### **Phasing**

5. Prior to or concurrently with the submission of the first of the reserved matters application(s), a Site Wide Phasing Plan which accords with the section 106 triggers shall be submitted to the local planning authority for approval. The Phasing Plan shall include the sequence of providing the following elements:
  - (a) development parcels
  - (b) major distributor roads/routes within the site, including timing of provision and opening of access points into the site
  - (c) the local centre
  - (d) strategic foul surface water features and SUDS
  - (e) open space and allotments
  - (f) strategic electricity and telecommunications networks

- (g) environmental mitigation measures

No development shall commence apart from enabling works agreed in writing by the Local Planning Authority until such time as the phasing plan has been approved in writing by the Local Planning Authority. The development shall be carried out in accordance with the approved phasing contained within the phasing plan.

**REASON:** To clarify how the site is to be phased to assist with the determination of subsequent reserved matters applications and in order to ensure that major infrastructure provision and environmental mitigation is provided in time to cater for the needs and impacts arising out of the development. North West Cambridge Area Action Plan Policies NW1, NW2 and NW30.

### **Environmental Statement**

6. The development shall be carried out in accordance with the mitigation measures as set out in Chapter 2 (table 2.1) of the Environmental Statement, dated March 2012, and the amended Construction Environment Management Plan and Geological Site Management Plan, dated June 2012.

**REASON:** To ensure that the development takes place in accordance with the principles and parameters contained within the Environmental Statement. North West Cambridge Area Action Plan Policies NW1 and NW2.

### **Design Code**

7. Prior to or concurrently with the submission of the first of the reserved matters applications for the development, a Design Code, shall be submitted to the Local Planning Authority for approval. The Design Code shall be prepared in accordance with the principles and parameters established by this outline approval and shall include both strategic and detailed elements. The Design Code shall include:
- a) The overall vision of the development;
  - b) The character, mix of uses and heights established through the approved parameter plans and include the block principles and the structure of public spaces, making reference to the phasing of land parcels
  - c) The street hierarchy, including the principles and extent of the adoptable highway, along with traffic calming measures;
  - d) Typical street cross-sections which will include details of tree planting, tree species, underground utility/service trenches, and on street parking;
  - e) How the design of the streets and spaces takes into account mobility and visually impaired users;
  - f) Block principles to establish use, density and building typologies. In addition, design principles including primary frontages, pedestrian access points, fronts and backs and threshold definition shall be provided;



- g) Key groupings and other key buildings including information about height, scale, form, level of enclosure, building materials and design features;
- h) Approach to incorporation of ancillary infrastructure/buildings such as substations, pumping stations, pipes, flues, vents, meter boxes, external letterboxes, fibres wires and cables required by statutory undertakers as part of building design;
- i) Details of the approach to vehicular parking across the entire site including the location and layout of parking for people with disabilities and for each building type, including details of a design approach for access points into and the ventilation of undercroft/underground parking;
- j) Details of the approach to cycle parking for all uses and for each building type, including the distribution (resident/visitor parking and location in the development), type of rack, spacing and any secure or non-secure structures associated with the storage of cycles.
- k) The approach to the character and treatment of the structural planting to the development areas within the primary open land and secondary open land (including the approach to SuDS design integration into the green fingers);
- l) The approach to the treatment of any hedge or footpath corridors and retained trees and woodlands;
- m) The conceptual design and approach to the public realm (making reference to the Public Art Strategy, materials, signage, utilities and any other street furniture).
- n) The conceptual design and approach to the lighting strategy and how this will be applied to different areas of the development with different lighting needs, so as to maximise energy efficiency, minimise light pollution and avoid street clutter;
- o) Details of waste and recycling provision for all building types and underground recycling points.
- p) Utility routes, type and specification
- q) Measures to demonstrate how the design can to maximise resource efficiency and climate change adaptation through external, passive means, such as landscaping, orientation, massing, and external building features,
- r) Details of measures to minimise opportunities for crime,
- s) Measures to show how design will address/minimise the impact of traffic noise etc on future residents,
- t) Details of the Design review procedure and of circumstances where a review shall be implemented.

The Design Code shall explain its purpose, structure and status and set out the mandatory and discretionary elements where the Design Code will apply, who should use the Design Code, and how to use the Design Code. No development apart from enabling works agreed in writing by the Local Planning Authority shall commence until the Design Code for the entire site has been approved in writing by the Local Planning Authority.

**REASON** To ensure high quality design and coordinated development. North West Cambridge Area Action Plan Policy NW3.

8. Applications for reserved matters shall include a Design Code Statement that demonstrates how the application accords with the approved site wide Design Code.

**REASON** To ensure high quality design and coordinated development. North West Cambridge Area Action Plan Policy NW3.

### **Youth and Play Strategy**

9. Prior to or concurrently with the submission of the first of the reserved matters application(s) for residential development, a Strategy for Youth Facilities and Children's Play provision, in accordance with the principles set out in the Design and Access Statement and Community Strategy, shall be submitted to the Local Planning Authority for approval. The strategy shall include sufficient details to demonstrate the implementation of that strategy including specifications, location and phasing. Development shall take place in accordance with the approved strategy.

**REASON** To ensure that appropriate facilities for youth facility and children's play provision are provided in relation to the development of the site. North West Cambridge Area Action Plan Policies NW20 and NW23.

10. Any reserved matters application which includes youth facilities or children's play provision pursuant to this outline approval shall include the detailed design and specification of youth facility and play provision within the reserved matters site for which approval is sought and include full details of all adventure play and play equipment areas, including surfacing materials. The details shall be accompanied by a Play Statement that demonstrates how the proposal accords with the approved Strategy for Youth Facilities and Children's Play provision and any emerging or approved details sought as part of a Design Code for the site. The youth facilities and play provision shall be provided in accordance with the approved phasing programme, unless an alternative programme for provision is otherwise agreed in writing by the local planning authority. The youth facilities and play provision shall be implemented in accordance with the approved details.

**REASON** To ensure that appropriate facilities for youth facility and children's play provision are provided in relation to the development of the site. North West Cambridge Area Action Plan Policies NW20 and NW23.

### **Landscape and Trees**

11. Within any reserved matters application for landscaping details pursuant to this approval the details required by condition 1 shall include detailed landscape designs and specifications for the associated reserved matters site. The details shall be accompanied by a design statement that demonstrates how the landscaping scheme accords with any emerging or approved details sought as part of the design code for the site and shall

include the following:

#### Soft Landscaping

- a) Full details of planting plans and written specifications, including cultivation proposals for maintenance and management associated with plant and grass establishment, details of the mix, size, distribution, density and levels of all trees/hedges/shrubs to be planted and the proposed time of planting. The planting plan shall use botanic names to avoid misinterpretation. The plans should include a full schedule of plants.
- b) 1:100 plans (or at a scale otherwise agreed) with cross-sections of mounding, ponds, ditches and swales and proposed treatment of the edges and perimeters of the site.
- c) The landscape treatment of roads (primary, secondary, tertiary and green) through the development.
- d) A specification for the establishment of trees within hard landscaped areas including details of space standards (distances from buildings etc.) and tree pit details.
- e) The planting and establishment of structural landscaping to be provided in advance of all or specified parts of the site as appropriate.
- f) Full details of any proposed alterations to existing watercourses/drainage channels.
- g) Details and specification of proposed earth modelling, mounding, re-grading and/or embankment areas or changes of level across the site to be carried out including soil quantities, topsoil storage to BS 3882 : 2007, haul routes, proposed levels and contours to be formed, sections through construction to show make-up, and timing of works.

#### Hard Landscaping

Full details, including cross-sections, of all bridges and culverts.

- i) The location and specification of minor artefacts and structures, including furniture, refuse or other storage units, signs and lighting columns/brackets.
- j) 1:200 plans (or at a scale otherwise agreed) including cross sections, of roads, paths and cycleways.
- k) Details of all hard surfacing materials (size, type and colour)

The landscaping within the application site areas shall be implemented in accordance with the approved plans for implementation and replacement of landscaping.

**REASON:** In the interests of the amenity of residents and to ensure that a detailed approach to the development of the built-up area (or parcels thereof) is agreed, in order to safeguard the setting and special character of the site

and its surroundings, and to ensure a suitable relationship and integration of the built development with its surroundings. North West Cambridge Area Action Plan Policies NW2 and NW29.

12. Within any reserved matters application for landscaping details pursuant to this approval, the details required by condition 1 shall include a land survey, tree and hedge survey and arboriculture implications assessment, applicable to the associated phase, in accordance with the relevant British Standard(s), shall be submitted to and approved in writing by the local planning authority: The surveys shall include:
- a) Plans showing the location of all trees, shrub masses and hedges, categorizing the trees or groups of trees for their quality and value in accordance with the British Standard(s).
  - b) Plans showing trees to be removed identified by number.
  - c) Plans showing trees to be retained identified by number, with canopies accurately plotted
  - d) A tree constraints plan that identifies root protection areas of retained trees within, adjacent to, or which overhang the development site.
  - e) The precise location and design details for the erection of protective tree barriers and any other physical protection measures.
  - f) The location of streams, buildings and other structures, boundary features and services.
  - g) Spot heights of ground level throughout the site.
  - h) A method statement in relation to construction operations in accordance with paragraph 7.2 of the British Standard.

**REASON** In the interests of accurately establishing the quality and value of trees and hedges on or adjacent to the site and the implications for development. North West Cambridge Area Action Plan Policies NW2 and NW29.

13. Within any reserved matters application for development adjacent to the protected trees in the centre of the site, (TPO number 01/2009), or adjacent to the avenue of horse chestnut trees (TPO number 20/1992), a protection zone, in accordance with BS 5837:2012 Trees, in relation to design, demolition and construction, shall be provided.

**REASON** To protect and safeguard the trees subject to Tree Preservation Orders. North West Cambridge Area Action Plan Policy NW2.

14. No development within a site for which reserved matters approval has been granted shall take place until such time as fencing for the protection of any retained tree within, adjacent to, or which overhangs the development site, has been fully erected in accordance with the approved plans and particulars. The fencing shall be retained intact for the full duration of the adjacent development until all equipment, materials and surplus materials have been removed from the site. Nothing shall be stored or placed in any fenced area in accordance with this condition and the ground levels within those areas

shall not be altered, nor shall any excavations be made without the written consent of the local planning authority.

**REASON** In the interests of visual amenity and safeguarding trees that are worthy of retention. North West Cambridge Area Action Plan Policies NW2 and NW29.

15. No development within a site for which reserved matters approval has been granted, and which require the installation of services, shall take place until such time as full details of the position and proposed depth of excavation trenches for all services (including cables, pipes, surface water drains, foul water drains and public utilities) and their means of installation which pass underneath the canopy of any retained tree within, adjacent to, or which overhangs the relevant land for which permission is being sought, have been submitted to and approved in writing by the local planning authority. Development shall be carried out in accordance with the approved details.

**REASON** In the interests of visual amenity and safeguarding trees that are worthy of retention. North West Cambridge Area Action Plan Policies NW2 and NW29.

16. Any trees or plants provided as any part of any landscaping scheme which, within a period of 5 years from the planting date, die, are removed or become seriously damaged or diseased, shall be replaced in the next planting season with others of a similar size and species as those originally planted.

**REASON** In the interests of visual amenity and safeguarding trees that are worthy of retention. North West Cambridge Area Action Plan Policies NW2 and NW29.

### **Allotments**

17. Any reserved matters applications which incorporate allotment provision shall include an allotments strategy with the following details:
- A. Management guidelines to show how they will be managed and how the provision of plots will potentially adapt following the occupation of the allotments and community gardens to meet the needs of future plot holders and local residents;
  - B. A plan of the allotments, principles of plot layout and design providing for a range of plot sizes designed to allow flexibility to meet the needs of future plot holders and access to areas for the communal storage of, for example, manure and compost.
  - C. Shadow studies to the allotments, taking into account proposed landscaping and boundary treatment and buildings both within and adjacent to the site demonstrating that adequate levels of sunlight, rainfall and nutrition will be available to the allotments;
  - D. Provision of good quality soil to British Standard or equivalent, with structure and texture to allow free drainage and cropping;
  - E. Access and parking arrangements to allow easy and safe access to the allotments, including regular access by plot holders and for the

occasional delivery of bulk goods. This should include vehicular access and a turning area, access for those with disabilities and cycle and vehicle parking on site and / or within the adjacent residential area;

- F. Permeability of the sites to encourage access to communal areas, enjoyment of biodiversity and natural surveillance whilst maintaining security and integrity of food growing areas and standing crops;
- G. Location and form of the communal buildings including secure storage for tools, seeds and crops serving allotments and community gardens, provision for administration with toilet provision, possibly including a composting toilet;
- H. Boundary treatment, including security arrangements for the allotments;
- I. Location of communal areas;
- J. Water supply, including use of stored rainwater and SUDS for watering crops

No development apart from enabling works agreed in writing by the local planning authority shall commence until such time as the Allotments Strategy has been approved in writing by the local planning authority. The provision of allotments shall be carried out in accordance with the approved details and accordance with the approved phasing programme.

**REASON** To ensure that appropriate allotments are provided in relation to the development of the site. North West Cambridge Area Action Plan Policies NW23.

### **Employment**

- 18. With any submission of reserved matters for Academic/Research floorspace (use classes D1, B1(b), and sui generis, within the areas illustrated on drawing ref. NWC/OPA/PAR/04/A) a needs assessment, to demonstrate that the University has a need for the land to be released for development shall be submitted to the Local Planning Authority.

**REASON** The strategic need for development at this site has been accepted; however other sites which are currently under development should remain the priority for development until they have reached capacity, unless a suitable needs-based argument can be established for the early release of land on the application site. North West Cambridge Area Action Plan Policy NW30.

- 19. Prior to first occupation of any of the Academic/Research floorspace (use classes D1, B1(b), and sui generis, within the areas illustrated on drawing ref. NWC/OPA/PAR/04/A) approved by this permission, or prior to any subsequent occupier within the first 10 years from the date of first occupation, details of the proposed occupier(s) shall be submitted to the local authority for approval.

- a) The proposed occupier(s) for any D1 educational use, associated sui generis research establishment or academic research institute shall

demonstrate that their need to be located on this site is either in the national interest, or can show a special need to be located close to the University of Cambridge.

- b) The proposed occupier(s) for any commercial research within Use Class B1 (b) shall demonstrate a special need to be located close to the University of Cambridge.

No employment building shall be occupied until the local authority has agreed in writing that the occupier conforms to the criteria above, and the building shall then only be occupied by those previously approved.

After 10 years from the date of first occupation for each building, the occupier is not limited to the above criteria, only the Use Class.

**REASON** To ensure that any occupier on this site has an essential need for a Cambridge location, and hence balance the growth of the local economy with the local housing need and protection of the environment. North West Cambridge Area Action Plan Policy NW8.

### **Affordable Housing**

- 20. Any reserved matters application for residential development shall include a plan showing the distribution of market and key worker units, including a schedule of dwelling size (by number of bedrooms) within the reserved matters site for which approval is sought.

Where the key worker housing is proposed in any zone excluding zones J, K, E (fronting the Primary pedestrian route) and G (fronting the Primary pedestrian route) on drawing number NWC/OPA/PAR/O5/A, the number of total key worker units (including any apartments or duplex units) that have a frontage any street shall not exceed 25 units.

The distribution of the key worker units shall then be provided in accordance with the approved details.

**REASON** To ensure that there is a mixed and balanced distribution of tenure types across the development. North West Cambridge Area Action Plan Policy NW7.

### **Sustainability**

- 21. Prior to the commencement of any residential development, a strategy to facilitate super-fast broadband for future occupants of the site shall be submitted to and approved in writing by the Local Planning Authority. The strategy shall seek to ensure that upon occupation of a dwelling, either a landline or ducting to facilitate the provision of a broadband service to that dwelling from a site-wide network, is in place and provided as part of the initial highway works and in the construction of frontage thresholds to dwellings that abut the highway, unless evidence is put forward and agreed in writing by the Local Planning Authority that technological advances for the

provision of a broadband service for the majority of potential customers will no longer necessitate below ground infrastructure. The development of the site shall be carried out in accordance with the approved strategy.

**REASON:** To ensure that the needs of future residents to connect to the internet does not necessarily entail engineering works to an otherwise finished and high quality living environment. North West Cambridge Area Action Plan Policies NW1, NW11 & NW31.

22. A minimum of 50% of all residential units shall be designed to meet Lifetime Home standards. In the event that such standards are replaced by a comparable national measure for building design, the equivalent measures shall be applicable to the proposed development.

**REASON** To ensure that new dwellings cater for the needs of residents throughout their lifetime, including the possibility of impaired mobility. North West Cambridge Area Action Plan Policy NW7(2).

23. No development of a residential building on any development parcel shall commence until an interim certificate following a design stage review, based on design drawings, specifications and commitments, has been issued by a Code for Sustainable Homes Licensed Assessor to the Local Planning Authority for that phase, indicating that the building is capable of achieving a minimum of level 5 of the Code for Sustainable Homes.

Where the interim certificate shows a shortfall in credits for level 5, a statement shall be submitted identifying how the shortfall will be addressed.

All residential buildings shall be developed to a minimum of level 5 of the Code for Sustainable Homes. In the event that such a rating is replaced by a comparable national measure of sustainability for building design, the equivalent level of measure shall be applicable to the proposed development.

Upon receipt of the final certificate(s) for that development parcel a copy shall be submitted to the local planning authority for their records.

**REASON** In the interests of reducing carbon dioxide emissions and promoting principles of sustainable construction and efficient use of buildings. North West Cambridge Area Action Plan Policy NW24.

24. Prior to, or concurrently with, the submission of the reserved matters applications, which include non-residential uses, a plan illustrating the non-residential uses, prepared by an accredited BREEAM Assessor, shall be submitted to the Local Planning Authority for approval.

The details and plans shall indicate the location and floorspace of the proposed non-residential buildings, which shall be constructed to at least BREEAM 'excellent' rating.

Where the interim certificate shows a shortfall in credits for BREEAM 'Excellent', a statement shall be submitted identifying how the shortfall will be



addressed.

All non-residential buildings, except for those exempt from BREEAM standards shall be developed to a minimum of BREEAM 'Excellent'. In the event that such a rating is replaced by a comparable national measure of sustainability for building design, the equivalent level of measure shall be applicable to the proposed development.

Upon receipt of the final certificate(s) for that building/development parcel a copy shall be submitted to the local planning authority for their records.

**REASON** In the interests of reducing carbon dioxide emissions and promoting principles of sustainable construction and efficient use of buildings. North West Cambridge Area Action Plan Policy NW24.

25. Prior to, or concurrently with, the first reserved matters application for non-residential development, a Renewable Energy Strategy for the non-residential element of the site as a whole shall be submitted to, and approved by, the local planning authority. The Strategy should demonstrate that at least 20% of the total predicted carbon emissions associated with non-residential floorspace across the site as a whole will be reduced through the implementation of on-site renewable energy sources. For each phase of non-residential development the strategy shall set out a schedule of proposed on-site renewable energy technologies, their respective carbon reduction contributions set against the overall 20% requirement, size and specification, location, design and maintenance programme.

Each subsequent reserved matters application for non-residential development will be required to update this strategy and identify its renewable energy contribution, set against the site wide cumulative contribution. It shall also include an assessment of any air quality, noise, or odour impact and mitigation measures required to maintain amenity and prevent nuisance. The development shall then be carried out in accordance with the agreed details.

After 7 years from the date of this permission the site wide Renewable Energy Strategy shall be updated to include any uplift beyond 20%, if such an uplift has been formally adopted through the Local Development Framework, for any buildings that do not have reserved matters approval, unless it is demonstrated that to require full compliance of the new policy would not be economically or technically viable.

**REASON** In the interests of reducing carbon dioxide emissions, and because the period of consent for which outline planning permission is given is for a longer period than standard. Given that Government policy on sustainable development and renewable energy is moving rapidly, new policies may be adopted within the Councils respective Local Development Frameworks which could require a higher renewable energy percentage requirement that, without this condition, could not be accounted. North West Cambridge Area Action Plan Policy NW24(3).

## Flood Risk and Sustainable Drainage Systems

26. Prior to, or concurrently with, the submission of the first reserved matters application, a strategic site wide surface water strategy building on that set out in the Surface Water Management Strategy within the Environmental Statement shall be submitted to and approved in writing by the local planning authority.

The strategy will complement the site wide phasing plan, secured by condition 5, and shall include the provision of details of any alterations to the Washpit Brook associated with flood reduction measures (if applicable), surface and foul water drainage infrastructure (as set out in the agreed Site wide Strategy), and pollution control measures.

The development shall be fully carried out in accordance with the approved details prior to the occupation of any building.

**REASON** In order to safeguard against the risk of flooding, to ensure adequate flood control, maintenance and efficient use and management of water within the site, to ensure the quality of the water entering receiving water courses is appropriate and monitored and to promote the use of sustainable urban drainage systems to limit the volume and pace of water leaving the site. North West Cambridge Area Action Plan Policies NW25, NW26 and NW27.

27. Any reserved matters application shall include a detailed surface water strategy, which must be in accordance with the agreed Site Wide Surface Water Strategy (above), pursuant to the reserved matters site for which approval is sought.

The strategy shall include details of the design, location and capacity of all such SUDS features and shall include ownership, long-term management/maintenance and monitoring arrangements/responsibilities, including detailed calculations to demonstrate the capacity of receiving on-site strategic water retention features without the risk of flooding to land or buildings. The strategy should also demonstrate that the exceedence of the designed system has been considered through the provision of overland flow routes. The development shall be carried out in accordance with the approved details and no building pursuant to the particular reserved matters for which approval is being sought shall be occupied or used until such time as the approved detailed surface water measures have been fully completed in accordance with the approved details.

**REASON** In order to safeguard against the risk of flooding, to ensure adequate flood control, maintenance and efficient use and management of water within the site, to ensure the quality of the water entering receiving water courses is appropriate and monitored and to promote the use of sustainable urban drainage systems to limit the volume and pace of water leaving the site. North West Cambridge Area Action Plan Policies NW25, NW26 and NW27.

28. No development shall commence until such time as a full flood reduction

scheme is submitted to reduce flood risk downstream in accordance with the Addendum to Level 3 FRA dated September 2001 and addendum March 2012 and Design, Access and Landscape Statement dated March 2012, and must be accordance with NPPF 2012 guidance. The final model and flood alleviation measures offered by possible Washpit Brook modifications must be submitted to and approved in writing by the Local Planning Authority prior to commencement of development. The final channel modifications and associated works must be constructed in accordance with the satisfactory flood reduction scheme. The model and associated works shall ensure the following 6 points:

- a) The minimum percentage reduction in peak flow downstream of the Application Site shall be at least 25% and 10% for events with a return period of 1 in 20 and 1 in 100 years (including an allowance for climate change) respectively.
- b) The flow control structure shall be designed ensuring that the peak flood level at the M11 culverts does not exceed 12.54mAOD and 12.76mAOD for events with a return period of 1 in 20 and 1 in 100 years (including an allowance for climate change) respectively.
- c) Floodwater shall be stored within landscaped areas of the area designated as Primarily Open Land 5 as shown on Drawing No NWC/OPA/PAR/03/A dated February 2012 on Parameter Plan 03 and shall not encroach upon structures within the Proposed Development including any surface water attenuation features. The Landscape Management Plan shall compliment this and shall recognise floodwater areas that must be able to naturally drain back into the Washpit Brook and those which shall be promoted as wetted areas.
- d) The new (proposed) fluvial flood extent including Flood Zones 2 and 3 shall not result in any encroachment into the built development except that shown within Figure E of the Addendum to the Level 3 FRA dated March 2012. This encroachment area will be fully mitigated against flooding.
- e) Cleaned modelled outlines and levels are produced in order to consider these within the context of the EA flood maps.
- f) The final model will contain manning's n values that satisfactorily represent the roughness values for the Primarily Open Land 5

The flood reduction scheme shall include precise specification and detail of the works/measures required and an assessment of the downstream and upstream impacts of the proposed works once completed.

The works/measures shall be carried out in accordance with an agreed phasing plan, and the approved details.

**REASON** To ensure that the development does not result in any increased flooding within the Washpit Brook catchment and offers an amount of reduced flood risk downstream. North West Cambridge Area Action Plan Policies NW25, NW26 and NW27.

29. Prior to commencement of development a strategy to outline the provision of water supply to the site shall be submitted to and approved by the Local

Planning Authority. The water supply strategy should identify how the supply meets the requirements of the Code for Sustainable Homes Level 5, and identify adoption, management and maintenance bodies for the water supply.

**REASON** To ensure that there is adequate supply of water for the site and long term management. North West Cambridge Area Action Plan Policies NW25, NW26 and NW27.

30. Prior to the commencement of any development a detailed Foul Water Drainage Strategy, based on that within the FRA and Drainage Strategy, dated March 2012, shall be submitted and agreed in writing with the Local Authority. The strategy should include the phasing of such works. The strategy shall include details of any necessary improvement of the existing sewerage system to ensure that sufficient capacity exists to cater for the needs of the development. The works/scheme shall be constructed and completed in accordance with the approved plans/specification and such time(s) as may be specified in the approved scheme.

**REASON** To prevent environmental and amenity problems arising from flooding and ensure that sufficient capacity exists within the sewerage network to meet the needs of the development. North West Cambridge Area Action Plan Policies NW25, NW26 and NW27.

31. No infiltration of surface water drainage into the ground is permitted other than with the express written consent of the Local Planning Authority, which may be given for those parts of the site where it has been demonstrated that there is no resultant unacceptable risk to controlled waters. The development shall be carried out in accordance with the approval details.

**REASON** To protect the quality of inland fresh waters and groundwaters in accordance with Policies P9-6 and P4-1 to P4-12 of the Environment Agency's Groundwater Protection: Policy and Practice (GP3) document. The infiltration of surface water through land affected by contamination can result in the pollution of coastal waters, inland fresh waters and groundwaters. We encourage the use of sustainable drainage systems; however they must be carefully considered and controlled. North West Cambridge Area Action Plan Policies NW25, NW26 and NW27.

32. Piling or any other foundation designs using penetrative methods shall not be permitted other than with the express written consent of the Local Planning Authority, which may be given for those parts of the site where it has been demonstrated that there is no resultant unacceptable risk to groundwater. The development shall be carried out in accordance with the approved details.

**REASON** To protect the quality of inland fresh waters and groundwaters in accordance with Policy P10-3 of the Environment Agency's Groundwater Protection: Policy and Practice (GP3). Piling through contaminated ground can result in the pollution of coastal waters, inland fresh waters and groundwaters. Foundation options should be carefully considered and controlled. North West Cambridge Area Action Plan Policies NW25, NW26

and NW27.

33. Prior to the commencement of any development, a scheme for the provision and implementation of pollution control of the water environment, shall be submitted and agreed in writing with the Local Authority. The works/scheme shall be constructed and completed in accordance with the approved plans.

**REASON** To prevent the increased risk of pollution to the water environment. North West Cambridge Area Action Plan Policies NW25, NW26 and NW27.

### **Ecology**

34. Prior to, or concurrently with, the submission of the first of the reserved matters application for residential development for the site, a site wide Biodiversity Strategy shall be submitted to the local planning authority for approval. The plan shall set out how the development will improve the biodiversity of the site in accordance the principles proposed in the Environmental Statement and ancillary documents/strategies submitted with the application and include:
- a) Full details of appropriate habitat and species surveys (pre, during and post-construction), and reviews where necessary,
  - b) Full details of measures to ensure protection and suitable mitigation to all legally protected species and those habitats and species identified as being of importance to biodiversity both during construction and post-development, including consideration and avoidance of sensitive stages of species life cycles, such as the bird breeding season, together with details of any protective fencing and/or phasing of works to ensure the provision of advanced habitat areas and minimise disturbance of existing features.
  - c) Identification of habitats and species worthy of management and enhancement together with the setting of appropriate conservation objectives for the site. Prescriptions shall be provided to detail how habitat and species management and enhancement shall be provided alongside measures to provide habitat restoration and creation to deliver targets in the Cambridgeshire and UK Biodiversity Action Plans such as: the provision of bat and bird boxes on buildings and on trees around the site; the provision of other nesting features for bird species such as kingfisher nest banks; reptile hibernacula; the creation of new aquatic habitats including specific measures for water vole and otter conservation; measures for badger conservation; measures for amphibian conservation; the management of grassland, orchards and veteran trees.
  - d) A summary work schedule table, confirming the relevant dates and/or periods that the prescriptions and protection measures shall be implemented or undertaken by within, and who will specifically over-see their delivery and compliance, such as an Ecological Clerk of Works.
  - e) Monitoring shall be carried out in accordance with the

- Biodiversity Strategy, part 7, with an annual report provided to the Local Planning Authorities.
- f) Long-term maintenance, management and monitoring responsibilities for a period of 15 years to ensure an effective implementation of the Ecological Management Plan ensuring periodic review of the objectives and prescriptions.

No development shall commence until such time as the Biodiversity Strategy has been approved in writing by the Local Planning Authority. All species and habitat protection, enhancement, restoration and creation measures shall be carried out in accordance with the approved Strategy. Any variation to the prescriptions, measures, timing of delivery and/or personnel shall be agreed in writing and formally submitted as an approved variation to the Strategy.

**REASON** To ensure that the development of the site conserves and enhances ecology. North West Cambridge Area Action Plan Policy NW2.

35. Any reserved matters application shall include a site Biodiversity Survey and Assessment that demonstrates how it accords with the aims and objectives of the Biodiversity Strategy. It shall detail which specific ecological enhancement and/or mitigation measures are proposed and the timing for their delivery. No development shall commence within the site for which reserved matters approval is being sought until such time as the Biodiversity Survey and Assessment has been approved in writing by the Local Planning Authority. The development shall only commence in full accordance with the approved details.

**REASON** To ensure that the development of the site conserves and enhances ecology. North West Cambridge Area Action Plan Policy NW2.

### **Transport and Parking**

36. No dwelling shall be occupied until any road and/or footway linking that building to a public highway network is complete to base course level; main services installed and available for connection to said building; and the relevant underground bin compound installed and operational for the benefit of occupants of said building.

**REASON** In the interests of the amenity of the occupants of the proposed dwellings and in the interests of highway safety. North West Cambridge Area Action Plan Policy NW15.

37. Notwithstanding the provisions of Schedule 2, Part 1, Class F of the Town and Country Planning (General Permitted Development) Order 1995 (or any Order revoking and re-enacting that order with or without modification) the hard surfacing of front gardens shall not be carried out without the granting of specific planning permission or reserved matters approval from the local planning authority.

**REASON** In the interests of visual amenity ensuring that front gardens are retained as attractive landscape elements and in the interests of sustainable

travel ensuring that there is no uncontrolled proliferation of car parking within the site. North West Cambridge Area Action Plan Policies NW2 and NW19.

38. No development, apart from enabling works agreed in writing by the Local Planning Authority, shall commence until such a time as details relating to the location, design, specification, management and maintenance and phasing of bus stops within the development have been submitted to and approved by the local planning authority. Development shall then be carried out in accordance with the approved details.

**REASON** To ensure that adequate public transport is provided for future residents of the site. Policy NW16 of the adopted North West Cambridge Area Action Plan 2009.

39. No development, apart from enabling works agreed in writing by the Local Planning Authority, shall commence until such a time as details relating to the location, design, specification, management and maintenance and phasing of means by which the controlled public transport route within the development will control access to the private car have been submitted to and approved by the local planning authority. Any details shall include any associated CCTV provision. Development shall then be carried out in accordance with the approved details.

**REASON** To ensure that adequate public transport is provided for future residents of the site. North West Cambridge Area Action Plan Policies NW14 and NW16.

40. Car parking for residential properties shall be provided in accordance with the standards set out in the North West Cambridge Area Action Plan.

The total number of residential parking spaces for the entire development will not exceed 4000 spaces. The development could also provide for visitor spaces as appropriate, which shall be on street and not be allocated to any individual residential property, and shall be marked as such. The approved car parking spaces shall be laid out in accordance with the approved plans prior to occupation of the associated dwelling(s).

**REASON** To ensure an appropriate level of car parking provision, and to ensure that highway safety and amenity is not compromised by ad hoc parking. North West Cambridge Area Action Plan Policy NW19.

41. Prior to, or concurrently with, the submission of the first reserved matters application for any development within the Residential and complementary mixed uses (as defined by drawing number NWC/OPA/PAR/04A), a strategy for the provision of car parking within this area shall be submitted to and approved by the local planning authority. Subsequent reserved matters submissions shall then be submitted in line with the approved strategy.

**REASON** To ensure there is an appropriate level of car parking for the amenities and services in the local centre comprehensively, but allow flexibility for individual plots. North West Cambridge Area Action Plan Policy

NW19.

42. Prior to, or concurrently with, the submission of the first reserved matters application for development, a strategy for the provision and distribution of a minimum of 12 spaces across the entire site to be used exclusively used for car club(s), shall be submitted to, and agreed in writing with the Local Planning Authority. The spaces shall be provided in accordance with the approved strategy.

**REASON** To ensure the appropriate provision of the car club spaces and sustainable transport options throughout the development. North West Cambridge Area Action Plan Policy NW11.

43. Any reserved matters application for a residential unit, non-residential building or public open space shall include details of facilities for the covered, secure parking of bicycles for use in connection with the approved development and demonstrate that the provision is in accordance with the approach to cycle parking approved as part of the Design Code for site. The facilities shall be provided in accordance with the approved details before use of the development commences and shall thereafter be retained and shall not be used for any other purpose.

**REASON** To ensure appropriate provision for the secure storage of bicycles. North West Cambridge Area Action Plan Policy NW19.

44. Prior to the occupation of any residential property, details of the Parking Management Arrangements relating to that phase (prior to any formal adoption) for the Highway shall be submitted to and approved in writing by the Local Planning Authority. The details shall include:
- a) how parking within the development is to be managed and controlled so that it occurs within designated vehicular parking bays.
  - b) how the proposed measures are to be publicised to potential purchasers.
  - c) how the subsequent enforcement of parking that occurs outside designated vehicular parking bays is to be managed.
  - d) what transitional arrangement will be put in place and secured with the Highway Authority to ensure that such arrangements or similar continue, should the roads be offered for adoption.

Prior to the use of any highway for access to an occupied residential property, the submitted Parking Management Arrangements shall be implemented in accordance with the approved details.

**REASON** To avoid the proliferation of parking across the site that is uncontrolled and can limit the proper functioning of the site, to ensure that parking management of the site is consistent at an early stage in its development, in the interests of sustainable travel choice and to ensure that the site does not become a parking refuge for commuters. North West Cambridge Area Action Plan Policy NW19.



45. No development of the Huntingdon Road West junction (Drawing number NWC/OPA/APP/03/A) shall commence until the details of the scheme for the following have been submitted to and agreed with the Local Planning Authority.

- (a) Provision of Scoot and Mova traffic signal optimisation to link with the Huntingdon Road East Junction (if developed), and the Lawrence Weaver Way junction
- (b) Demand responsive pedestrian and cyclist crossings
- (c) Proposed cycleway along south side of Huntingdon Road between Bunker's Hill and the proposed junction.
- (d) Final road markings, signal heads and kerbs, including the proposed repositioning of the 40mph speed limit on Huntingdon Road.
- (e) Adjacent landscaping
- (f) Details of the method proposed for constructing the access, junction and cycleway in the area adjacent to the retained TPO trees (to include 'no-dig' construction where necessary to conform with Arboriculture Practice Note APN1 as issued by the Arboricultural Advisory and Information Service)

The works shall then be carried out in accordance with the approved details, and the junction remain closed for vehicular access until the approved works have been implemented and completed to the satisfaction of the Local Planning Authority.

The junction shall be opened for vehicular access prior to occupation of the first academic (D1) or commercial B1(b) building (with the exception of any such uses located within the Residential and Complementary Mixed Uses area illustrated on drawing number NWC/OPA/APP/04/A), unless an earlier trigger is agreed relating to residential units through condition 5), whichever is the sooner.

**REASON** To ensure suitable junction design and connectivity. North West Cambridge Area Action Plan Policies NW12 and NW14.

46. No development of the Huntingdon Road East junction (Drawing number NWC/OPA/APP/04/A) shall commence until the details of the scheme for the following have been submitted to and agreed with the Local Planning Authority.

- (a) Provision of Scoot and Mova traffic signal optimisation to link with the Lawrence Weaver Way junction and the Huntingdon Road West Junction (if developed)
- (b) Provision of toucan crossing linking the strategic cycleway from the development to the cycleway adjacent to Whitehouse Lane
- (c) Final road markings, signal heads and kerbs.
- (d) A scheme of permanent noise attenuation / mitigation measures to protect residential premises in close proximity to the access
- (e) Adjacent landscaping

The works shall then be carried out in accordance with the approved details,

and the junction remain closed for vehicular access until the approved works for criteria (b), (c), (d) and (e) have been implemented and completed to the satisfaction of the Local Planning Authority. The junction shall be opened for vehicular access prior to the occupation of the first non-residential occupation within the Residential and Complementary Mixed Uses area illustrated on drawing number NWC/OPA/PAR/O4/A or the occupation of the 400<sup>th</sup> residential unit on the site, whichever is the sooner.

**REASON** To protect the amenity of nearby properties and to ensure suitable junction design and connectivity. North West Cambridge Area Action Plan Policies NW2, NW12 and NW14.

47. Prior to implementation of any employment uses in the areas identified as R and T on Drawing number NWC/OPA/PAR/05/A details of the

- (a) road markings
- (b) toucan crossing
- (c) signal heads

in association with the Madingley Road East Junction (Drawing number NWC/OPA/APP/06/A) shall be submitted to and approved by the local planning authority.

The approved details shall then be carried out in accordance with the approved plans prior to occupation of employment uses in the areas identified as R and T on Drawing number NWC/OPA/PAR/05/A

**REASON** To ensure suitable junction design and connectivity. North West Cambridge Area Action Plan Policies NW12 and NW14.

48. No development of the Madingley Road West junction (NWC/OPA/APP/05/A) shall commence until the details of the scheme for the following have been submitted to and agreed with the Local Planning Authority.

- (a) Provision of Scoot and Mova traffic signal optimisation to link with M11 J13 Northbound off slip road, M11 J13 Southbound on slip road, Park and Ride Junction and West Cambridge Site junctions.
- (b) Details of the cycle path improvement along Madingley Road (as shown on Drawing number NWC/OPA/APP/05/A and 06/A)
- (c) Final roadmarkings, signal heads and kerbs.
- (d) Adjacent landscaping

The works shall then be carried out in accordance with the approved details, and the junction remain closed for vehicular access until the approved works for criteria (c) and (d) have been implemented and completed to the satisfaction of the Local Planning Authority.

The junction shall be opened for vehicular access prior to the 1<sup>st</sup> residential occupation on the site.

Criterion (a) shall have been completed to the satisfaction of the Local

Planning Authority prior to occupation of the first academic (D1) or commercial building B1(b). Criterion (b) shall have been completed to the satisfaction of the Local Planning Authority prior to occupation of the 400th residential unit.

**REASON** To ensure suitable junction design and connectivity. North West Cambridge Area Action Plan Policies NW12 and NW14.

### **Land Contamination**

49. Notwithstanding the submitted contamination report as part of the Environmental Statement, prior to the commencement of development on any land parcel, a contaminated land assessment and associated remedial strategy, together with a timetable of works for that development parcel, shall be submitted to and approved in writing by the local planning authority. The contaminated land assessment and associated remedial strategy shall adhere to the following points:
- (a) The contaminated land assessment shall include a desk study to be submitted to the Local Planning Authority for approval. The desk study shall detail the history of the site uses for that particular area of the site and propose a site investigation strategy based on the relevant information discovered by the desk study. The strategy shall be approved by the Local Planning Authority prior to investigations commencing on site.
  - (b) The site investigation, including relevant soil, soil gas, surface and groundwater sampling, shall be carried out by a suitable qualified and accredited consultant/contractor in accordance with a quality assured sampling and analysis methodology.
  - (c) A site investigation report detailing all investigative works and sampling on site, together with the results of the analysis, risk assessment to any receptors and a proposed remediation strategy shall be submitted to the Local Planning Authority. The Local Planning Authority shall approve such remedial works as required prior to any remediation commencing on that development parcel. The works shall be of such a nature as to render harmless the identified contamination given the proposed end use of the site and surrounding environment including any controlled waters.

No development within that parcel shall commence until a contaminated land assessment and associated remedial strategy, has been submitted to, and been approved by the local planning authority. This applies to paragraphs a), b) and c). The results of each stage will help decide if the following stage is necessary.

- (d) Approved remediation works shall be carried out in full on each development parcel under a quality assurance scheme to demonstrate compliance with the proposed methodology and best practice guidance.
- (e) If, during the works contamination is encountered which has not previously been identified then the additional contamination shall be

fully assessed and an appropriate remediation scheme agreed with the Local Planning Authority. Upon completion of the works, this condition shall not be discharged until a closure report has been submitted to and approved by the Local Planning Authority. The closure report shall include details of the proposed remediation works and quality assurance certificates to show that the works have been carried out in full in accordance with the approved methodology.

- (f) Details of any post-remedial sampling and analysis to show the site has reached the required clean-up criteria shall be included in the closure report together with the necessary documentation detailing what waste materials have been removed from site.

No buildings with the development parcel shall be occupied prior to the completion of any remedial works and a validation report(s) being submitted to, and approval from, the Local Planning Authority. This applies to paragraphs d), e) and f).

**REASON** In order to ensure that any contamination of the site is identified and remediation measures are appropriately undertaken to secure full mitigation in the interests of environmental and public safety. North West Cambridge Area Action Plan Policy NW2.

### **Noise**

- 50. Within any reserved matters application for residential premises pursuant to this approval a noise attenuation / insulation scheme (having regard to the building fabric, glazing and mechanical ventilation requirements) for the residential units, to protect occupants from M11, A14, Huntingdon Road and internal site traffic noise, shall be submitted to and approved in writing by the Local Planning Authority.

The noise insulation scheme shall demonstrate that the “good” external and internal noise levels recommended in British Standard 8233:1999 “Sound Insulation and noise reduction for buildings-Code of Practice” shall be reasonably achieved and shall include a timescale for phased implementation, as necessary.

The scheme as approved shall be fully implemented before the residential use hereby permitted is commenced / prior to occupation of the residential units and shall be retained thereafter and not altered without prior approval.

**REASON** To ensure that sufficient noise attenuation is provided to all residential properties to protect residents from the impact of M11, A14, Huntingdon Road and internal site traffic noise and safeguard the amenity and health of future residents. North West Cambridge Area Action Plan Policy NW2.

### **Lighting**

- 51. Within any reserved matters application pursuant to this approval the reserved matters details required by condition 1 shall include details of the

height, type, position and angle of glare of any final site lighting / floodlights including isolux contours. The details and measures so approved shall be carried out and maintained in accordance with the approved lighting scheme/plan.

**REASON** To protect the amenity of the nearby residential properties. North West Cambridge Area Action Plan Policy NW2.

### **Construction**

52. Prior to the commencement of development, a site wide Construction Environmental Management Plan (CEMP) shall be submitted to and approved in writing by the local planning authority. The CEMP shall accord with and give effect to the principles for such a Statement proposed in the Environmental Statement submitted with the application and shall include, but not be limited to, the consideration of the following aspects of construction:
- a) Site wide construction and phasing programme.
  - b) Contractors' access arrangements for vehicles, plant and personnel including the location of construction traffic routes to, from and within the site, details of their signing, monitoring and enforcement measures, along with location of parking for contractors and construction workers.
  - c) Construction and demolition hours, which shall be carried out between 0800 hours to 1800 hours Monday to Friday, and 0800 hours to 1300 hours on Saturday and at no time on Sundays, Bank or Public Holidays, unless in accordance with agreed emergency procedures for deviation.
  - d) Prior notice and agreement procedures for works outside agreed limits and hours.
  - e) Delivery and collection times for construction purposes.
  - f) Outline Waste Management Plan (OWMP), providing a statement of site specific reuse and recycling objectives with appropriate targets, compliance training for sub-contractors, construction code of conduct together with regular auditing and reporting on target achievements and quantities disposed, ensuring that such materials are only consigned to authorised treatment/recovery or disposal facilities, including consideration of participation in a Materials Re-use and Recycling Forum.
  - g) Soil Management Plan/Strategy, including the reuse of potentially contaminated recycled building materials onsite and any importation and storage.
  - h) Noise and Vibration (including piling) impact / prediction assessment, monitoring, recording protocols and consideration of mitigation measures in accordance with BS 5528, 2009 - Code of Practice for Noise and Vibration Control on Construction and Open Sites Parts 1 - Noise and 2 -Vibration (or as superseded) including the use of best practical means to minimise noise and vibration disturbance from construction works.
  - i) Confirmation on whether a concrete crusher will be used
  - j) Dust suppression management and wheel washing measures,

- including the deposition of all debris on the highway
- k) Site lighting details.
- l) Drainage control measures including the use of settling tanks, oil interceptors and bunds.
- m) Screening and hoarding details.
- n) Access and protection arrangements around the site for pedestrians, cyclists and other road users.
- o) Procedures for interference with public highways, (including public rights of way), permanent and temporary realignment, diversions and road closures.
- p) External safety and information signing and notices.
- q) Liaison, consultation and publicity arrangements including dedicated points of contact.
- r) Consideration of ecological and other sensitive receptors.
- s) Membership of the Considerate Contractors Scheme.
- t) Complaints procedures, including complaints response procedures.
- u) Location of Contractors compound and method of moving materials, plant and equipment around the site.

The detail requested above shall include and expand on, where necessary, the Construction Management Plan dated May 2012. Development shall be carried out in accordance with approved details.

**REASON** To ensure the environmental impact of the construction of the development is adequately mitigated and in the interests of the amenity of nearby residents/occupiers. North West Cambridge Area Action Plan Policies NW2 and NW28.

53. Prior to the commencement of development of any reserved matters approval, a Construction Method Statement (CMS) shall be submitted to and approved in writing by the local planning authority. The CMS shall demonstrate how the construction of the reserved matters approval accords with the details of construction criteria A-R (except criteria F) of the Construction Environmental Management Plan (CEMP). In addition to criteria A-U, the CMS shall also provide a specific construction programme and a plan identifying: the contractor site storage area/compound; screening and hoarding locations; site lighting; wheel washing and dust suppression measures; the need or otherwise for a concrete crushing machine on site; access arrangements for vehicles, plant and personnel; building material, plant and equipment storage areas; contractor parking arrangements for construction and personnel vehicles; and the location of contractor offices. Thereafter the development shall be undertaken in accordance with the agreed details.

**REASON** To ensure the environmental impact of the construction of the development is adequately mitigated and in the interests of the amenity of nearby residents/occupiers. North West Cambridge Area Action Plan Policies NW2 and NW28.

### **Construction waste**

54. Prior to the commencement of development of any reserved matters approval, a Detailed Waste Management Plan (DWMP) shall be submitted to and approved in writing by the local planning authority. The DWMP shall demonstrate how the construction of the reserved matters approval will accord with the details of the principles of the Outline Waste Management Plan. The DWMP shall include details of:
- a) the anticipated nature and volumes of waste.
  - b) Measures to ensure the maximisation of the reuse of waste.
  - c) measures to ensure effective segregation of waste at source including waste sorting, storage, recovery and recycling facilities to ensure the maximisation of waste materials both for use within and outside the site.
  - d) any other steps to ensure the minimisation of waste during construction
  - e) the location and timing of provision of facilities pursuant to criteria b/c/d.
  - f) proposed monitoring and timing of submission of monitoring reports.
  - g) the proposed timing of submission of a Waste Management Closure Report to demonstrate the effective implementation, management and monitoring of construction waste during the construction lifetime of the development.

Thereafter the implementation, management and monitoring of construction waste shall be undertaken in accordance with the agreed details and no individual building subject to a Detailed Waste Management Plan shall be occupied until the Waste Management Closure Report has been submitted to and approved in writing by the Local Planning Authority.

**REASON** To ensure the sustainable management of construction waste. North West Cambridge Area Action Plan Policies NW2 and NW28.

### **Waste**

55. Within any reserved matters application for residential development pursuant to this approval the details required by condition 1 shall include full details of the on-site storage facilities for waste including waste for recycling:
- (i) For any residential dwellings details shall include
    - (a) The detailed position and layout including capacity size of underground bin compounds
    - (b) The provision of protection bollards and/or high kerbs adjacent to underground bin compounds
    - (c) Proposals for lighting of the bin compounds
    - (d) A layout which precludes parking spaces which will impede collection of the underground bin compounds
    - (e) A tracking diagram showing collection route, turning circles, and operational safety zone for the crane lifting.
    - (f) The walking distances for all residential properties to the

- underground bin compounds
  - (g) Proposals for assisted collection
  - (h) The provision of home composting facilities
- (ii) For any residential apartment or dwelling with communal garden details shall include
  - (a) The detailed position and layout including capacity size of underground bin compounds
  - (b) The provision of protection bollards and/or high kerbs adjacent to underground bin compounds
  - (c) Proposals for lighting of the bin compounds
  - (d) A layout which precludes parking spaces which will impede collection of the underground bin compounds
  - (e) A tracking diagram showing collection route, turning circles, and operational safety zone for the crane lifting.
  - (f) The walking distances for all residential properties to the underground bin compounds
  - (g) Proposals for assisted collection
  - (h) Details of maintenance and management for disposal of green waste in association with the apartments proposed

The approved facilities shall be provided, along with a remote fill level monitoring and alert system for all containers, access system to restrict and monitor access to all containers by designated users, and scheme for battery collection prior to the commencement of the use hereby permitted and shall be retained thereafter unless alternative arrangements are agreed in writing by the local planning authority.

**REASON** To ensure the provision of waste collection infrastructure on site and to protect the amenities of nearby residents/occupiers and in the interests of visual amenity. North West Cambridge Area Action Plan Policy NW2.

56. Within any reserved matters application for student accommodation pursuant to this approval the details required by condition 1 shall include full details of the on-site storage facilities for waste including waste for recycling:
- (a) The detailed position and layout including capacity size of underground bin compounds
  - (b) The provision of protection bollards and/or high kerbs adjacent to underground bin compounds
  - (c) Proposals for lighting of the bin compounds
  - (d) A layout which precludes parking spaces which will impede collection of the underground bin compounds
  - (e) A tracking diagram showing collection route, turning circles, and operational safety zone for the crane lifting.
  - (f) Details of maintenance and management for disposal of green waste in association with the apartments proposed
  - (g) Collection contract details



The approved facilities shall be provided, along with a remote fill level monitoring and alert system for all containers, access system to restrict and monitor access to all containers by designated users, and scheme for battery collection prior to the commencement of the use hereby permitted and shall be retained thereafter unless alternative arrangements are agreed in writing by the local planning authority.

In the event that an underground solution for student accommodation is not proposed full details of the on-site storage facilities for waste including waste for recycling shall be identified on a plan. Such details shall identify the specific positions of where facilities for domestic bins, or any other means of storage will be stationed and the arrangements for the disposal of waste, and shall identify collection contract details. The approved facilities shall be provided prior to the commencement of the use hereby permitted and shall be retained thereafter unless alternative arrangements are agreed in writing by the local planning authority.

**REASON** To ensure the provision of waste collection infrastructure on site and to protect the amenities of nearby residents/occupiers and in the interests of visual amenity. North West Cambridge Area Action Plan Policy NW2.

57. Within any reserved matters application for commercial and employment uses pursuant to this approval the details required by condition 1 shall include full details of the on-site storage facilities for waste including waste for recycling. Such details shall identify the specific positions of where facilities for commercial or industrial waste, or any other means of storage will be stationed and the arrangements for the disposal of waste, and shall identify collection contract details. The approved facilities shall be provided prior to the commencement of the use and shall be retained thereafter unless alternative arrangements are agreed in writing by the local planning authority.

**REASON** To ensure the provision of waste collection infrastructure on site and to protect the amenities of nearby residents/occupiers and in the interests of visual amenity. North West Cambridge Area Action Plan Policy NW2.

58. Prior to, or concurrently with, the first submission of reserved matters for development full details of the in-vessel composting solution for on-site green waste and/or food waste shall be submitted to, and approved by the local planning authority. The details shall include final location and phasing for provision. The permanent compound shall be retained thereafter in accordance with a management scheme agreed with the local planning authority which shall include hours of operation for at least 2 hours on one week day evening and two hours at the weekend.

Should a temporary arrangement be required full details of a temporary solution shall be submitted to and approved by the local planning authority. The temporary arrangements shall then be implemented prior to occupation of the first building and retained until a permanent in-vessel compound is provided.

In the event an in-vessel solution cannot be delivered alternative arrangements for the disposal of green waste shall be submitted to and approved by the local planning authority. The alternative solution shall then be carried in accordance with the approved details and thereafter retained.

**REASON** To ensure the provision of waste collection infrastructure on site and to protect the amenities of nearby residents/occupiers and in the interests of visual amenity. North West Cambridge Area Action Plan Policy NW2.

59. No more than the number of dwellings in column one, in the table below, shall be occupied across the entire site until the number of temporary and permanent neighbourhood waste recycling facilities in column two are provided on site in accordance with details submitted to and approved in writing by the Local Planning Authority.

50 dwellings	1 temporary facility (or 1 permanent facility)
850 dwellings	1 temporary facility and 1 permanent facility (or 2 permanent facilities*)
1650 dwellings	1 temporary facility and 2 permanent facilities* (or 3 permanent facilities*)
2450 dwellings	1 temporary facility and 3 permanent facilities* (or 4 permanent facilities*)
3000 dwellings	4 permanent facilities*

\*Or the equivalent capacity on fewer sites, if considered more appropriate

The temporary facilities shall remain in place until one of the permanent 'bring site' facilities are provided and available for use. The land on which the temporary facility is sited shall be made good within a period of 3 months from the installation of the permanent bring site.

**REASON** To ensure that future residents have adequate temporary and permanent means by which to recycle prior to permanent North West Cambridge Area Action Plan Policies NW2 and NW28.

60. Within the any reserved matters application that includes the local centre, or a neighbourhood centre (both defined as Residential and complementary mixed use areas within the Land Use Parameter Plan (NWC/OPA/PAR/04/A)), details relating to the location, design, specification, management and maintenance, and phasing of permanent underground recycling 'bring sites' to be located in those areas shall be submitted to and approved by the local planning authority. A total of four bring sites (or the equivalent capacity on fewer sites if considered more appropriate) shall be provided across the site. Development shall then be carried out in accordance with the approved details.

**REASON** To ensure that future residents have adequate means by which to recycle. North West Cambridge Area Action Plan Policy NW2 and NW21.

## **Energy Centre**

61. The gas fired Energy Centre incorporating a combined heat and power (CHP) and associated boiler system shall only be fuelled by natural gas. The use of any other fuel type shall not be permitted.

**REASON** To prevent deterioration of air quality the vicinity of the Energy Centre and an unacceptable adverse impact on the air quality in the wider environment. North West Cambridge Area Action Plan Policy NW2.

## **Health Impact**

62. The development shall be carried out in accordance with the health impact and needs mitigation measures as set out in the North West Cambridge, Health Impact Assessment, September 2011 and Health Impact Assessment Clarification statement, March 2012, unless otherwise agreed in writing by the Local Planning Authority. Statements shall be submitted at milestones confirming the measures and facilities that have been put in place during the relevant development period in compliance with the principles established within the HIA

**REASON** To ensure that the development takes place in accordance with the principles and parameters contained within the North West Cambridge, Health Impact Assessment. North West Cambridge Area Action Plan Policies NW1 and NW2.

## **Archaeology**

63. No development shall take place the implementation of a programme of archaeological works in accordance with a written scheme of investigation which has been submitted to and approved by the Local Planning Authority. Development within areas identified for archaeological investigation in the approved written scheme shall not commence until the archaeological fieldwork in those areas has been completed and the Local Planning Authority has confirmed in writing that the archaeological fieldwork has been completed satisfactorily. The 'archive report and publication shall be submitted to the Local Planning Authority within 6 months following completion of the archaeological investigations

**REASON** To ensure the implementation of an appropriate archaeological investigation, recording, reporting and publication. North West Cambridge Area Action Plan Policy NW2.

## **Public Art**

64. Within any reserved matters application a Public Art Delivery Plan shall be submitted which accords with the approved Public Art Strategy dated March 2012. The Public Art Delivery Plan shall include the details as set out in Appendix 2 and 4 of the Cambridge City Council Public Art SPD. If no Public Art is proposed for that reserved matters submission then a short statement

referring back to the Public Art Strategy should be submitted.

**REASON** To ensure that the site provides public art in a satisfactory way that relates to the agreed Public Art Strategy and that accords with policy. North West Cambridge Area Action Plan Policy NW22.

### **Fire Hydrants**

65. Within any reserved matters application a scheme for the provision of fire hydrants shall be submitted to the local planning authority. Development shall be carried out in accordance with the approved details and the approved scheme shall be fully operational prior to the first occupation of that development parcel.

**REASON** To ensure the provision of adequate water supply infrastructure to protect the safe living and working environment for all users and visitors. North West Cambridge Area Action Plan Policy NW2.

### **Development Limits**

- 66 Any development carried out under this permission, when combined with any development carried out under planning approval S/1886/11 OR C/11/1114/OUT [Delete as relevant] shall not exceed the development levels set out in the description of development at the top of this decision notice (and set out within the Description of Development and Application Drawings document March 2012)

**REASON** To ensure that all necessary details are acceptable and that the level of development on the site does not exceed those assessed. In accordance with the requirements of section 51 of the Planning and Compulsory Purchase Act 2004.

### **Parameter Plans**

- 67 Notwithstanding the details on NWC/OPA/PER/06/A (Building Heights Parameter Plan), an area equal to that represented by Zone T on NWC/OPA/PER/05/A (Building Zones Parameter Plan) shall be limited to a maximum of 33.5 AOD.

**REASON** In the interest of neighbour amenity. Cambridge North West Area Action Plan Policy NW2.

- 68 Notwithstanding the details on NWC/OPA/PER/04/A (Land Use Parameter Plan), the table within the Parameter Plan Statement shall have a total maximum of 7,400 square metres for D1 and D2 uses.

**REASON** To be consistent with the description of development and ensure that the floorspace approved is consistent with that tested through the Environmental Statement. Cambridge North West Area Action Plan Policy NW2.

## Drawing Numbers

69 The development, hereby permitted, shall be carried out in accordance with the following approved plans:

- NWC/OPA/APP/01A (Application Site Boundary South Cambridgeshire District Council) Date stamped 21<sup>st</sup> September 2011)
- NWC/OPA/APP/01B (Application Site Boundary Cambridge City Council) Date stamped 21<sup>st</sup> September 2011)
- NWC/OPA/APP/02/A (Demolition Plan) Date Stamped 3<sup>rd</sup> April 2012
- NWC/OPA/APP/03/A (Huntingdon Road Junction West) Date stamped 3<sup>rd</sup> April 2012
- NWC/OPA/APP/04/A (Huntingdon Road Junction East) Date stamped 3<sup>rd</sup> April 2012
- NWC/OPA/APP/05/A (Madingley Road Junction West) Date stamped 3<sup>rd</sup> April 2012
- NWC/OPA/APP/06/A (Madingley Road Junction East) Date stamped 3<sup>rd</sup> April 2012
- NWC/OPA/PAR/01/A (Zone Parameter Plan) Date stamped 3<sup>rd</sup> April 2012
- NWC/OPA/PAR/02/A (Access Parameter Plan: Zone B) Date stamped 3<sup>rd</sup> April 2012
- NWC/OPA/PAR/03/A (Open Land and Landscape Areas Parameter Plan: Zone B) Date stamped 3<sup>rd</sup> April 2012
- NWC/OPA/PAR/04/A (Land Use (Built Development and Ancillary Space) Parameter Plan: Zone B) Date stamped 3<sup>rd</sup> April 2012
- NWC/OPA/PAR/05/A (Development Building Zones Parameter Plan: Zone B) Date stamped 3<sup>rd</sup> April 2012
- NWC/OPA/PAR/06/A (Building Heights Parameter Plan: Zone B) Date stamped 3<sup>rd</sup> April 2012
- NWC/OPA/PAR/07/A (Topography Parameter Plan: Zone B) Date stamped 3<sup>rd</sup> April 2012
- NWC/OPA/PAR/08 (Parameter Plan: Huntingdon Road Highway and Utility Works) Date stamped 21<sup>st</sup> September 2011
- NWC/OPA/PAR/09 (Parameter Plan: Madingley Road Highway and Utility Works) Date stamped 21<sup>st</sup> September 2011

**REASON** To facilitate any future application to the Local Planning Authority under Section 73 of the Town and Country Planning Act 1990.

## Proposed Informatives

### Construction

i. To satisfy the above the applicant should have regard to the CCC's Supplementary Planning Document – Sustainable Design and Construction 2007, and the Control of dust and emissions from construction and demolition - Best Practice Guidance produced by the London Councils.

ii. During construction there shall be no bonfires or burning of waste on site except with the prior permission of the Environmental Health Officer in

accordance with best practice and existing waste management legislation.

iii. Considerate contractors informative: New development can sometimes cause inconvenience, disturbance, and disruption to local residents, businesses and passers by. As a result the City council runs a ' Considerate Contractors Scheme' aimed at promoting high standards of care during construction. The City Council encourages the developer of the site, through its building contractor, to join the scheme and agree to comply with the model Code of Practice, in the interests of good neighbourliness. Information about the scheme can be obtained from the Considerate Contractor Project Officer in the Planning Department.

iv. Notification to the Environmental Protection Team will be required under the Pollution Prevention and Control Regulations if an on site concrete crusher will be used during the demolition stage. Please refer to permit issued to operator.

### **Noise Condition- Noise Attenuation / Insulation Scheme for M11, A14, Huntingdon Road Traffic Noise Impact on Development**

To satisfy the noise insulation scheme condition to provide an adequate level of protection against M11, A14, Huntingdon Road and internal primary road traffic noise, residential units shall be carefully designed and or acoustically protected by a noise insulation scheme to ensure noise levels within habitable rooms and in external private amenity areas comply with British Standard 8233:1999 "Sound Insulation and noise reduction for buildings-Code of Practice" derived from the World Health Organisation Guidelines for Community Noise: 2000.

In terms of a hierarchy of traffic noise mitigation / attenuation measures, the careful orientation / internal configuration of habitable rooms and the location of external amenity areas should be considered first in the early design stages. A noise insulation scheme for the external building envelope with an alternative form of mechanical ventilation as necessary should only be considered as a last resort.

Where sound insulation requirements of the building envelope preclude the opening of windows for rapid ventilation and or thermal comfort / summer cooling, acoustically treated mechanical ventilation may also need to be considered within the context of this internal design noise criteria. Compliance with Building Regulations Approved Document F 2006: Ventilation will also need consideration.

If internal acceptable noise levels cannot be achieved with windows partially open for ventilation (assuming a 13dB reduction across / for an open window) and where the associated rooms are not dual aspect (to a quieter facade), mechanical ventilation should be provided.

AD F- Ventilation does not control ventilation noise but advises that self-generated ventilation system noise should not discourage their use by occupants. In duct attenuation / lined ducting may be required for whole

house systems. It will therefore be necessary to demonstrate that the operating sound level of any system does not discourage the use by occupiers and an internal Noise Rating level of 30 to 35 dB is recommended. Ventilation systems should be tested in accordance with ISO 3741:2010: Acoustics -- Determination of sound power levels and sound energy levels of noise sources using sound pressure -- Precision methods for reverberation test rooms or similar.

Each complete window system, including frames, glass and seals should be tested in accordance with BS EN ISO 140-3:1995 and rated in accordance with BS EN ISO 717-1:1997 or as superseded. The test certificates should be provided to the LPA when available.

### **General Environmental Health**

The Food & Health & Safety Team, South Cambridgeshire District Council, or the Food & Occupational Safety Team at Cambridge City Council for advice concerning the proposed premises design/layout, Food and Occupational Safety/Welfare Regulations/requirements and Food Premises Registration, Tel No: 01954 713111 and or The Food & Health & Safety Team, Health & Environmental Services, South Cambridgeshire District Council, Tel No: 03450 450 063.

The Housing Act 2004 introduces the HHSRS as a way to ensure that all residential premises provide a safe and healthy environment to any future occupiers or visitors.

Each of the dwellings must be built to ensure that there are no unacceptable hazards for example ensuring adequate fire precautions are installed; all habitable rooms have adequate lighting and floor area etc.

The applicant/agent is advised to contact The Housing Standards Team of the Refuse and Environment Service at Cambridge City Council on telephone number (01223) 457890 and or Health & Environmental Services at South Cambridgeshire District Council on 03450 450 063 or e-mail a request to: [env.health@scambs.gov.uk](mailto:env.health@scambs.gov.uk) for further information.

Anglia Water, Tel No: 0800 145145 regarding the installation of a grease trap for the foul water. If drains are to be altered the foul water from the kitchen should be passed through fat/oil/grease interceptor facilities (prior to entering any shared private drain and/or the public sewer), designed and constructed to the satisfaction of the Local Planning Authority (LPA).

### **Contamination**

The Environment Agency recommends that developers should:

- 1) Follow the risk management framework provided in CLR11, Model Procedures for the Management of Land Contamination, when dealing with land affected by contamination.

2) Refer to the Environment Agency Guiding Principles for Land Contamination for the type of information required in order to assess risks to controlled waters from the site. The Local Authority can advise on risk to other receptors, e.g. human health.

3) Refer to our website at [www.environment-agency.gov.uk](http://www.environment-agency.gov.uk) for more information.

The Council's document 'Developers Guide to Contaminated Land in Cambridge' and SCDC's Supplementary Planning Document - "District Design Guide: High Quality and Sustainable Development in South Cambridgeshire", Adopted March 2010: Chapter 10- Environmental Health & associated appendices provide further details on the responsibilities of the developers and the information required to assess potentially contaminated sites. It can be found at the City Council's website on

<http://www.cambridge.gov.uk/ccm/content/environment-and-recycling/pollution-noise-and-nuisance/land-pollution.en>.

Hard copies can also be provided upon request.

### **Sustainable Drainage Systems**

In accordance with the Environment Agency's Groundwater Protection: Policy and Practice (GP3) document, we offer the following advice on Sustainable Drainage Systems (SUDS).

Soakaways must be constructed in line with guidance provided in Building Research Establishment 365 (BRE365) – Soakaway Design.

SUDS must be constructed in line with guidance provided in Construction Industry Research and Information Association C697 (CIRIA C697) - The SUDS Manual. Direct discharges into groundwater of surface water runoff are not acceptable.

All infiltration structures (permeable pavements, infiltration trenches, soakaways, etc.) should be constructed to as shallow a depth as possible to simulate natural infiltration.

The maximum acceptable depth for infiltration structures is two metres below existing ground level with the base of these infiltration structures at least 1.20 metres above the highest seasonal groundwater-table. Deep bore and other deep soakaway systems are not considered by the Environment Agency to be appropriate in areas where groundwater constitutes a significant resource (i.e. where aquifer yield may support or already supports abstraction).

Infiltration structures must not be constructed in contaminated ground. Only clean, uncontaminated water should be discharged to any infiltration structure.

Infiltration structures should only be used in areas on site where they would not present a risk to groundwater. If permitted, their location must be



approved in writing by the Local Planning Authority (LPA).

Prior to being discharged into any surface water sewer or soakaway system, all surface water drainage from parking areas and hard standings susceptible to oil contamination should be passed through an oil separator designed and constructed to have a capacity and details compatible with the site being drained. Roof water should not pass through the interceptor and should discharge to separate infiltration systems to those used for road and vehicle parking areas. Any SUDS from car or lorry parking areas would need to incorporate suitable measures for the protection of water quality; this is likely to include measures to mitigate the discharge of hydrocarbons to surface water or ground. Details of treatment techniques are outlined in CIRIA Report C609. The Environment Agency would wish to be consulted on any protection measures. Any oil interceptors should include separate provision for the interception and removal of sediment (as collection of solids within the interceptor will reduce the capacity and function of the interceptor). Any oil interceptors/sediment chambers should be regularly maintained in accordance with manufacturer's guidelines.

Waste storage and Processing areas: Any facilities, above ground, for the storage of potentially polluting substances should be sited on impervious bases and surrounded by impervious bund walls. The entire area where any potentially polluting substances are delivered, stored and processed should be isolated from the surface water drainage system, open ground or other porous surfaces. Potentially contaminated water and spills should be directed through an oil interceptor and prevented from seeping into the soil and groundwater below the site. The interceptor should be an adequate size to serve the surface area catchment of the site.

### **Piling**

In accordance with Policy 10-3 of the Environment Agency's Groundwater Protection: Policy and Practice (GP3) document we recommend that piling on contaminated sites underlain by aquifers is avoided where possible, and that non-invasive methods, such as rafts, should be used instead. Where there is no alternative to piling, a method should be selected that minimises the risks of groundwater pollution or gas migration. Mitigation measures and/or environmental monitoring may need to be incorporated into the design. The method selected should be presented in a "Foundation Works Risk Assessment Report" which should be submitted to and approved by the Local Planning Authority before development commences.

Due to the proximity of this site to existing residential premises and other noise sensitive premises, impact pile driving is not recommended.

### **CEMP - Soil Management Plan /Strategy -Contaminated Land**

Within the submission of the Construction Method Statement (CMS) with each reserved matters, In order to discharge details under criterion G of Construction Environment Management Plan details will be required relating to the management, re-use, importation, storage and specification of soil for

use within the site. Detailed soil management plans (SMP) produced for each phase of the development and should include the following details:

- Strict chain of evidence should be kept for any material recycled on site. It should document the location from which the soil originated and where it was subsequently placed (in order to avoid reusing unsuitable material). Depending on the source of the recycled material we might still request additional testing for a full suite of contaminants.
- Any material imported on site will need to be tested for a full suite of contaminants. The results of the chemical testing should be submitted to the local authority for review **prior** to soil importation.
- Any imported material within the private gardens should be tested for full suite of contaminants at a sampling rate of 1 sample every 20m<sup>3</sup> or one per lorryload, whichever is greater. If the material originates from a 'clean source' the developer should contact the Scientific Team for further advice and recommendations.
- Material imported in other areas (including landscaped areas) could be tested at a different sampling frequency. The sampling frequency could be agreed with the local authority once the details of the source material have been provided to the local authority.

### **Lighting: artificial lighting scheme**

When submitting details of any artificial lighting scheme, the submission.

The artificial lighting scheme / assessment as required by condition????? , shall include details of any external commercial, recreational and residential lighting of the site such as street lighting, floodlighting, security / advertisement lighting and an assessment of impact on any sensitive residential premises on and off site, shall be carried out.

This information shall include layout plans / elevations with luminaire locations annotated, full vertical and horizontal isolux contour maps, hours and frequency of use, a schedule of equipment in the lighting design (luminaire type / profiles, mounting height, aiming angles / orientation, angle of glare, operational controls) and shall assess artificial light impact in accordance with the Institute of Lighting Professionals "*Guidance Notes for the Reduction of Obtrusive Light GN01:2011*".

Artificial lighting to the development must conform to requirements to meet the Obtrusive Light Limitations for Exterior Light Installations for Environmental Zone – E2, contained within Table 1 of the Institute of Lighting Professionals "*Guidance Notes for the Reduction of Obtrusive Light GN01:2011*".

### **Air Quality**

The applicant is advised that in addition to planning permission and or building regulation approval any flue, chimney and arrestment plant

associated with the Energy Centre incorporating the proposed Combined Heat & Power and boiler combustion system and any other combustion / heating appliance may require a separate “Chimney Height Approval” under The Clean Air Act 1993.

In addition any large combustion plant depending on the size and rate of fuel use may also require a pollution control permit under the Environmental Permitting (England & Wales) regulations 2010.

The purpose of any approval / permit is to ensure that emissions of any pollutants are at a safe height and dispersed sufficiently in the atmosphere so that they will not be detrimental to health or cause a nuisance and, in particular, to help improve air quality.

Further information and advice can be obtained by contacting the Refuse and Environment Service at Cambridge City Council on telephone number (01223) 457890 and Health & Environmental Services at South Cambridgeshire District Council on 03450 450 063 or e-mail your request to: [env.health@scambs.gov.uk](mailto:env.health@scambs.gov.uk).

### **Noise (other than traffic impact related) & Odour**

Any reserved matters applications should consider / assess and conditions may be imposed in relation to but not exclusively, the following topics / matters:

#### *Noise*

- Noise assessment and mitigation / insulation scheme for industrial , trade or business and academic use buildings, operational plant and equipment, delivery yards, recreational uses and in particular MUGAs, local household waste recycling points, renewables including the Energy Centre and the proposed in vessel composting facility
- Opening hours of and collections / deliveries to industrial , trade or business premises
- Noise management strategies

#### *Odour*

Odour / fumes assessment and mitigation / abatement scheme for odour / fume generating uses as necessary such as industrial , trade or business and academic uses including any food premises and the proposed in vessel composting facility.

### **Drainage Strategies**

The strategy identified in condition 26 shall be based upon a SUDS management train, as espoused by publication 'Sustainable Drainage Manual CIRIA C697' The strategy shall promote, where practicable, measures to control water at source to limit the rate and quantity of run-off.

If source control infiltration SUDS methods are demonstrated to be impracticable or only partly feasible, the strategy shall promote other

measures such as swales, surface water retention ponds, wetlands or other surface water retention measures to promote infiltration and mimic, as far as possible, Greenfield run-off patterns.

The strategy shall include a full site detailed technical drawing setting out the final location of the strategic SuDS features and show details of each catchment area and give the associated allowable impermeable area, discharge rates and attenuation volumes.

This drawing may also contain sub catchment information. This drawing will compliment the Site Wide Strategy which will hold full details of the design, location and capacity of all such strategic SUDS features, including flow control systems and shall include ownership, long-term management/maintenance and monitoring arrangements/responsibilities, including detailed calculations to demonstrate the capacity of the measures to adequately manage surface water within the site without the risk of flooding to land or buildings.

The strategy identified in condition 27 must demonstrate that it is in accordance with the Landscape Maintenance and Management Plan for this site. The strategy shall demonstrate how the management of water within the reserved matters application site for which approval is sought accords with the approved details of the strategic site wide surface water strategy. The strategy shall be based upon a SUDS management train, as espoused by publication 'Sustainable Drainage Manual CIRIA C697' The strategy shall promote, where practicable, measures to control water at source to limit the rate and quantity of run-off. If source control infiltration SUDS methods are demonstrated to be impracticable or only partly feasible, the strategy shall promote other measures such as swales, surface water retention ponds, wetlands or other surface water retention measures to promote infiltration and mimic as far as possible Greenfield run-off patterns. Drainage Infiltration structures will not be permitted, and must not be constructed in contaminated ground.

## **Waste**

Guidance on suitable arrangements e.g. specifications, locations, numbers required, capacities etc will be contained within an Informative and include reference to the Recycling in Cambridgeshire and Peterborough (RECAP) Waste Design Guide Supplementary Planning Document (February 2012).

## **Landscaping and Highways**

Adjacent landscaping within conditions 45, 46 and 48 is taken to mean the landscaping that is directly adjacent to the junction(s) so as to make the junction(s) acceptable in terms of visual impact and compatible with surrounding character, the extent of which, but not the detail, should be consistent with contextual plans 04, 05, and 06 submitted with the application. It does not include areas that will be covered through condition 1 for other parts of the site.

## 11.0 REASONS FOR APPROVAL

This development has been approved subject to conditions and following the prior completion of a S106 planning obligation because subject to those requirements, and in accordance with the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 2011 (SI 2011/1824) as amended and Environmental Statement submitted with the application dated September 2006, and amended in March with subsequent additions in June 2012, it is considered to generally conform to the Development Plan, particularly the following policies:

- National Planning Guidance: The National Planning Policy Framework; Outgoing Planning Policy Guidance Notes and Statements: PPS1, PPG2, PPS3, PPS9, PPS10, PPS12, PPG13, PPG15, PPG16, PPG17, PPS22, PPS23, PPG24, PPS25; Circulars: 11/95, 05/05; Community Infrastructure Levy: An overview (March 2010).
- Cambridgeshire and Peterborough Structure Plan (CPSP) 2003 policies: P6/1, P8/10, P9/2B, P9/2C, P9/8 and P9/9.
- Cambridgeshire and Peterborough Waste Local Plan 2003 (Saved Policies): WLP18 and WLP20.
- Cambridge Local Plan (CLP): 3/1, 3/2, 3/3, 3/4, 3/5, 3/6, 3/7, 3/8, 3/11, 3/12, 3/13, 4/1, 4/2, 4/3, 4/4, 4/6, 4/9, 4/10, 4/11, 4/13, 4/14, 4/15, 4/16, 5/1, 5/5, 5/9, 5/10, 5/12, 5/13, 5/14, 7/1, 7/2, 8/2, 8/3, 8/4, 8/5, 8/6, 8/7, 8/10, 8/11, 8/16, 8/18, 9/1, 9/2, 9/3, 9/7, 9/8 and 10/1.
- South Cambridgeshire District Council LDF: ST/1, ST/2, DP/1, DP/2, DP/3, DP/4, DP/5, DP/6, DP/7, GB/1, GB/2, GB/3, SF/7, NE/4, NE/6, NE/9, NE/10, NE/11, NE/12, NE/14, NE/15, NE/16, NE/17, CH/2, TR/1, TR/3
- Cambridge City and South Cambridgeshire District Council Joint Policy, North West Cambridge Area Action Plan (2009): NW/1, NW/2, NW/3, NW/4, NW/5, NW/6, NW/7, NW/8, NW/9, NW/10, NW/11, NW/12, NW/13, NW/14, NW/15, NW/16, NW/17, NW/18, NW/19, NW/20, NW/21, NW/22, NW/23, NW/24, NW/25, NW/26, NW/27, NW/28, NW/29, NW/30, NW/31

This decision has been made having had regard to all other material planning considerations and in particular those areas where objection have been lodged. As such, it is considered that the proposal adequately addresses issues and objections to all issues highlighted in the officer's report particularly with regard to design issues, transport impact, drainage and flooding.

Revised plans to the application and EIA documentation were received to address many objections to the original submission. The final approved plans are listed on this decision notice.

Transport issues have been thoroughly addressed and neither the Highway Authority nor Highway Agency object to the proposal subject to the conditions and legal agreement being secured as part of this consent. Despite the objections raised locally, the scheme is considered to accord with the relevant local and national policies.

Drainage and floodrisk issues have been comprehensively considered with consultation with the relevant water providers, the Environment Agency and the Cambridge City Council technical Officers. It is considered that the proposal conforms to the principles set out within PPS25 and local policies within the CLP and SCDC LDF.

The proposal provides for sufficient open space and recreational provision, and provides for both primary and secondary education to the satisfaction of Cambridgeshire County Council. Community facilities have been adequately provided for and secured through the S106 agreement. The proposal meets sustainability policies in terms of design and renewable energy, ecology, biodiversity and waste management and sufficient mitigation is provided for noise and contamination issues. Air Quality issues can only be adequately addressed on a strategic level. Notwithstanding that there are slight adverse impacts on air quality, only a combination of strategic action on transport issues and full use of sustainable development principles can maintain current levels of air quality and deliver growth of Cambridge. For these reasons, it is not considered that it would be reasonable to refuse the application under the terms of NWCAAP policy NW2.

Having considered all the representations it is not considered that any of those representations made constitute a significant material reason to refuse permission. Many of the representations have been addressed through revisions to the application or the proposed conditions as outlined in the Committee report. These reasons for approval are a summary of the reasons of the reasons for the grant of planning permission, for further detail on the decision please see the officer report by visiting either Councils' Planning Department.

## **ALTERNATIVE RECOMMENDATION IN THE EVENT OF THE S106 NOT BEING SEALED**

Unless prior agreement has been obtained from the Head of Planning Services, and the Chair, Vice Chair and Spokespersons of this Committee to extend the period for completion of the Planning Obligation required in connection with this development, if the obligation has not been completed by 21<sup>st</sup> December 2012 it is recommended that the application be brought back before this Committee with a recommendation for refusal. The reasons for this refusal would reflect the reason why the S106 has not been sealed.