

<b>Application Number</b>	16/0176/OUT	<b>Agenda Item</b>	
<b>Date Received</b>	2nd February 2016	<b>Officer</b>	Ms Janine Richardson
<b>Target Date</b>	3rd May 2016		
<b>Ward</b>	Queen Ediths		
<b>Site</b>	Land South Of Dame Mary Archer Way Cambridge Biomedical Campus Cambridge Cambridgeshire		
<b>Proposal</b>	Development of up to 75,000 sqm floorspace (excluding plant areas) of Research and Development (B1b) and Clinical (C2 and/or D1), sui generis and higher education uses, including related support activities within use class B1; ancillary uses in addition (A1, A3, A4, A5, D1 and/or D2); up to two multi storey car parks; open space and landscaping and all other associated supporting infrastructure.		
<b>Applicant</b>	Cambridge Medipark Ltd, Cambridge University Hospital C/o: Agent		

<p>SUMMARY</p>	<p>The development accords with the Development Plan for the following reasons:</p> <p>The principle of development is acceptable in providing a mix of biomedical research and development, clinical and ancillary uses within an allocated site.</p> <p>The amount and scale of the scheme is appropriate for site.</p> <p>The necessary mitigation measures, such as transport improvements will be secured through the section 106 agreement and will be triggered as development comes forward on the site.</p>
<p>RECOMMENDATION</p>	<p>APPROVAL</p>

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

- 1.1 The application site is located to the south of the existing Cambridge Biomedical Campus (CBC) being developed around Addenbrooke's Hospital, approximately 2 miles south of the centre of Cambridge.
- 1.2 The Cambridge Biomedical Campus forms an integral part of a major urban extension on the southern fringe of the City comprising clinical facilities and biomedical and biotechnology activities, related higher education and research institutes, and new housing. Sites currently under construction are the AstraZeneca buildings and the new Papworth hospital. The new development of Clay Farm lies to the west separated from the site by the railway line and open space known as the 'Green Corridor'.
- 1.3 To the immediate west of the site is the Addenbrooke's Road and roundabout leading to Dame Mary Archer Way, which runs east west along the northern boundary of the site. To the east of the site is the Bell School site, currently under construction. The southern boundary of the site is defined by a ditch and cycle path (National Cycle Network Route 11). Approximately 400m south of the site is Nine Wells Local Nature Reserve. The surrounding landscape is relatively flat, open agricultural land that is delineated by hedgerows, scattered copses and small areas of woodland. To the southeast of the site, the landscape starts to rise in the form of a chalkland ridge that forms a series of hills known as White Hill, Clarke's Hill and the Gog Magog Hills/Down.
- 1.4 The application site is approximately 9.33 ha in size with a long rectangular form and orientated east to west. It is currently undeveloped land comprising low-level managed grass and scrub, having been previously used for arable purposes. The temporary helipad associated with Addenbrooke's Hospital is currently located on the eastern side of the site. The site is predominantly flat sitting between 15m and 20 above ordnance datum (AOD), falling slightly from Dame Mary Archer Way to the southern ditch.
- 1.5 The site does not fall within a Conservation Area and no listed buildings are sited either on or adjacent to the site. There are no

Tree Preservation Orders protecting existing trees. The site falls outside the Controlled Parking Zone.

## **2.0 THE PROPOSAL**

2.1 The planning application seeks outline planning approval for development of up to 75,000 sqm floorspace (excluding plant areas) of research and development (B1b) and clinical (C2 and/or D1), sui generis and higher education uses, including related support activities within use Class B1, and ancillary uses in addition (A1, A3, A4, A5, D1 and/or D2), up to two multi storey car parks, open space and landscaping and all other associated supporting infrastructure. All matters are reserved for subsequent approval.

The application is accompanied by the following documents:

- Planning Application Form
- Design and Access Statement
- Planning Statement (including Statement of Community Involvement)
- Site and location plans
- Parameter plans
- Illustrative compliance study plans
- Sustainability Report
- Transport Assessment and Outline Travel Plan
- Public Art Strategy
- Utilities Strategy
- Site Waste Management Plan
- Flood Risk Assessment
- Ecological Impact Assessment
  
- An Environmental statement is submitted with the application. It is divided into three different volumes:
  - Volume 1: main report provides an analysis of the following topics: Society and Economy; Transport; Noise and Vibration; Ecology; Soil and Contamination; Surface Water and Flood Risk; Local Air Quality; Cultural Heritage and Archaeology; Landscape and Visual Impact Assessment; Cumulative Effects.
  - Volume 2: Provides Technical Appendices
  - Volume 3: Provides a Non-Technical Summary of the Environmental Statement.

2.2 In addition to a red line plan, a series of five parameter plans and associated parameter plan text accompany the proposal. The parameters constitute the formal element of the application for which outline planning permission is sought. The parameter plans provide a framework within which to assess the environmental impact of the scheme. The parameter plans are not a substitute for detailed plans; they simply clarify the upper and lower limits of the formal proposal. The parameter plans and text include the following:

- Parameter Plan 1 Land Use: defines the part of the site that is 'developable' and the residual areas that would be for landscaping, access and supporting infrastructure. It defines that the site is split approximately two thirds for commercial research and development and related uses and one third for clinical and related uses. It also defines approximate locations of two multi-storey car parks at each end of the site. An allowance is given within the multi storey car parks (within the ground floors) for ancillary A1, A3, A4, A5 and/or D1 uses and up to 1,500 sqm at roof top level of the western car park.
- Parameter Plan 2 Maximum Building Heights: defines three zones contained within the developable area for the maximum height of any building in that part of the site. The heights are based against fixed datum points running along Dame Mary Archer Way and along the southern boundary.
- Parameter Plan 3 Access: defines that there will be two principle vehicular access points off Dame Mary Archer Way to then form a spine road within the site along the southern boundary. The plan defines the zone in which each access point could be located. The plan commits to a pedestrian crossing across Dame Mary Archer Way and a cycle link to the south west of the site onto the existing strategic cycle network.
- Parameter Plan 4 Open Space and Landscape Framework: defines the space outside of the developable area and describes four landscape zones to the north, east, south and west of the developable area. The text defines the landscape characters areas.
- Parameter Plan 5 Development Principles: defines that there will be a minimum of two clear views across the site from Dame Mary Archer Way through to the countryside to the south in addition to the two primary access routes. It also defines that no less than 50% of the land to the southern

development line will extend to a minimum depth of 40m perpendicular to that southern development line.

2.3 Illustrative compliance studies have been provided to explain how the site could be developed in accordance with the Parameter Plans.

2.4 Since the original application was submitted additional information has been provided in a Planning Statement Addendum and a technical note covering traffic data, noise and air quality to clarify and provide further information in response to consultation responses.

### 3.0 SITE HISTORY

<b>Reference</b>	<b>Description</b>	<b>Outcome</b>
16/0165/FUL	Erection of a building for Biotech and Biomedical research and development and production together with associated supporting Headquarters and Logistics function along with associated infrastructure to include; access, services, drainage, electric and gas infrastructure, external ancillary structures, car and cycle parking and hard and soft landscaping.	Pending

Relevant history for adjacent Phase 1 site:

<b>Reference</b>	<b>Description</b>	<b>Outcome</b>
16/1078/OUT	Outline Application with all matters reserved for up to 14,193 sqm (excluding plant areas) of biomedical and biotech research and development (Use Class B1(b)); landscaping; car and cycle parking areas and all other associated infrastructure.	Pending
16/0653/REM	Reserved matters pursuant to outline approval 06/0796/OUT (varied by S73 application reference 14/2094/S73) for a 9,033sqm (Gross External Area excluding plant) Biotech and Biomedical Research and Development building, including associated car and cycle parking, hard and soft landscaping, internal access roads , supporting facilities and ancillary infrastructure.	Pending
15/1171/REM	Resurfacing of land at Keith Day Road to provide new public realm with 0.22ha associated landscaping.	Approved with conditions
15/1141/REM	Reserved matters application for public realm (known as circus/piazza) totalling 1.57ha in area, pursuant to outline application 06/0796/OUT.	Approved with conditions
14/2094/S73	Section 73 to vary condition 63 (to extend the timeframe for submission and agreement of Off-Site Highway Works) of planning approval 06/0796/OUT	Approved with conditions
14/1633/REM	Reserved matters application pursuant to outline approval 06/0796/OUT for a total of 59,821sqm (Gross External Area excluding plant) Biotech and Biomedical Research and Development floorspace, to include	Approved with conditions

11/0780/REM	Reserved matters application (access, appearance, landscaping, layout and scale details) for a 1,228 space multi-storey car park (33,141sqm gross external floor area) and perimeter access road at the south west corner of Addenbrooke's campus, to serve Addenbrooke's as it expands and the new Papworth Hospital (pursuant to outline approval 06/0796/OUT).	Approved with conditions
14/0120/FUL	Redevelopment of existing parking area to provide education centre (3,985 sqm), private hospital (10,405 sqm), hotel and conference centre (12,540 sqm), ancillary hot food takeaway (Class A5, 605 sqm) and ancillary D1 (530 sqm) and associated car parking and public realm works known as The Forum Cambridge	Approved with conditions
14/1411/REM	Reserved matters application pursuant to outline approval 06/0796/OUT for New Papworth hospital and associated amenity space, planting, vehicle drop off area, cycle parking, energy centre/plant room and servicing area.	Approved with conditions
C/05009/12/C W	Erection of Energy Innovation centre (EIC) of 2,675sqm GEA as part of the wider expansion of Addenbrooke's Hospital to form part of the Cambridge Biomedical Campus authorised under planning application ref:06/0796/OUT	Approved with conditions
06/0796/OUT	Up to 215,000sqm floorspace (excluding plant areas) comprising 60,000sqm of clinical research and treatment (D1 and/or clinical in-patient treatment), 115,000sqm of biomedical and biotech research and development (B1(b)), 15,000sqm of biomedical and biotech research and development (B1(b)) or clinical research and treatment (D1 and/or clinical in-patient treatment), and	Approved with conditions

25,000sqm of either clinical research and treatment (D1 and/or clinical in-patient treatment) or higher education or sui generis medical research institute uses, and including related support activities within use classes A1, A3, B1, D1 (creches/nurseries) or sui generis uses, with no individual premises used for support activities to exceed 500sqm; new areas of public realm; landscaping; parking areas; highway works; drainage works and all other associated infrastructure.

#### 4.0 PUBLICITY

4.1 Advertisement: Yes  
 Adjoining Owners: Yes  
 Site Notice Displayed: Yes

4.2 There was a pre-application developer presentation to Planning Committee members on 14 October 2015.

4.3 Proposals were exhibited at the Southern Fringe Community Forum on 30 September 2015.

#### 5.0 POLICY

5.1 See Appendix 1 for full details of Central Government Guidance, Cambridge Local Plan 2006 policies, Supplementary Planning Documents and Material Considerations.

5.2 Relevant Development Plan policies

PLAN		POLICY NUMBER									
Cambridge	Local	3/1	3/2	3/3	3/4	3/6	3/7	3/8	3/9	3/11	
Plan 2006		3/12	3/13								
		4/1	4/2	4/3	4/4	4/6	4/8	4/9	4/13	4/14	4/15

	<p>5/14 5/15</p> <p>6/10</p> <p>7/1 7/2 7/4</p> <p>8/1 8/2 8/3 8/4 8/5 8/6 8/8 8/9 8/10 8/11 8/16 8/17 8/18</p> <p>9/3 9/5</p> <p>10/1</p>
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### 5.3 Relevant Central Government Guidance, Supplementary Planning Documents and Material Considerations

Central Government Guidance	<p>National Planning Policy Framework March 2012</p> <p>National Planning Policy Framework – Planning Practice Guidance March 2014</p> <p>Circular 11/95</p>
Supplementary Planning Guidance	<p>Sustainable Design and Construction (May 2007)</p> <p>Cambridgeshire and Peterborough Waste Partnership (RECAP): Waste Management Design Guide Supplementary Planning Document (February 2012)</p> <p>Cambridge City Council (March 2010) – Planning Obligation Strategy</p> <p>Cambridge City Council (January 2010) - Public Art</p> <p>Cambridge Walking and Cycling Strategy (2002)</p> <p>Air Quality in Cambridge – Developers Guide (2008)</p>

<p>Material Considerations</p>	<p><u>City Wide Guidance</u></p> <p>Cambridge Landscape and Character Assessment (2003)</p> <p>Cambridge Southern Fringe Area Development Framework (2006)</p> <p>Cambridge City Nature Conservation Strategy (2006)</p> <p>Cambridge and South Cambridgeshire Strategic Flood Risk Assessment (November 2010)</p> <p>Strategic Flood Risk Assessment (2005)</p> <p>Cambridge City Council (2011) - Open Space and Recreation Strategy</p> <p>Cambridgeshire Quality Charter for Growth (2008)</p> <p>Cambridge City Council - Guidance for the application of Policy 3/13 (Tall Buildings and the Skyline) of the Cambridge Local Plan (2006) (2012)</p> <p>Cambridge Walking and Cycling Strategy (2002)</p> <p>Protection and Funding of Routes for the Future Expansion of the City Cycle Network (2004)</p> <p>Cambridgeshire Design Guide For Streets and Public Realm (2007)</p> <p>Air Quality in Cambridge – Developers Guide (2008)</p>
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	<u>Cambridgeshire County Council</u> Local Transport Plan (2014)  Transport Strategy for Cambridge and South Cambridgeshire (2014)  Cambridgeshire Long Term Transport Strategy (2014)  Greater City Deal programme (2014)
	<u>Area Guidelines</u>  Cambridge City Council (2002)–Southern Corridor Area Transport Plan

#### 5.4 Status of Proposed Submission – Cambridge Local Plan

Planning applications should be determined in accordance with policies in the adopted Development Plan and advice set out in the NPPF. However, after consideration of adopted plans and the NPPF, policies in emerging plans can also be given some weight when determining applications. For Cambridge, therefore, the emerging revised Local Plan as published for consultation on 19 July 2013 can be taken into account, especially those policies where there are no or limited objections to it. However it is likely, in the vast majority of instances, that the adopted development plan and the NPPF will have considerably more weight than emerging policies in the revised Local Plan.

For the application considered in this report, policies 2 (para 2.39), 13, 16 (para. 3.46) and 40 in the emerging Local Plan are relevant. Policy 2 relates to the spatial strategy for the location of employment development, Policy 13 relates to Areas of major change, Policy 16 relates to Cambridge Biomedical Campus (including Addenbrooke’s Hospital) Area of Major Change, Policy 40 to development and expansion of business space and Policy 75 relates to Healthcare facilities.

## 6.0 CONSULTATIONS

### Cambridgeshire County Council (Transport Assessment Team)

#### *On scheme as submitted*

- 6.1 Holding Objection: Considerable discussion has taken place with the applicant on the Transport Assessment and mitigation measures that are required.

Clarity required on a number of points raised in the Transport Assessment, including on traffic counts and accident data, committed developments, pedestrian and cycle routes and future public transport facilities. Further details and information on the parking requirements and parking strategy, trip generation, mode shares and sustainable transport trip distribution and travel plan required. Clarity and further information required for the highway network scope of assessment and baseline modelling.

#### *On additional information*

- 6.2 Technical notes have been provided from the applicant and ongoing discussions have been carried out.

A cycle/pedestrian link will be provided to the Bell School site, this should be secured by condition.

Now satisfied that trip rates have been assessed appropriately for the purposes of the application.

Car parking provision on site should be provided in line with the car driver mode share from the Addenbrooke's Travel Survey and therefore the maximum that can be provided on the CBC Phase 2 site overall will be 1 space per 80sqm based on 80% of staff attendance on any one day.

Cycle parking provision should be determined at the reserved matters stage against Addenbrooke's Travel Survey cycle mode share at that time, with cycle parking to be provided at 10% above surveyed levels.

On-street parking surveys in surrounding residential areas should be carried out by the developer to establish if managed parking schemes are required.

Trip generation identified is considered to be appropriate for the purposes of this application. Appropriate to use the Addenbrooke's mode share for the purposes of this application. To provide reassurances that the mode share identified can be achieved the applicant has identified a sustainable transport investment fund. This will be used to by the developer to

promote sustainable transport to the site beyond the Travel Plan initiatives already identified.

A mitigation package has been identified which supports the increase in person trips across the development.

The applicant has committed to undertake bus capacity surveys in advance of employees occupying the site to ensure adequate capacity is in place.

A Travel Plan specific to the development should be submitted as part of each reserved matters application.

The junction modelling is considered to be acceptable for the purposes of this assessment. Mitigation measures are sought which can be secured through the Section 106 for junctions that need improvement or alternative measures. The holding objections are removed subject to mitigation measures being secured through the Section 106 or conditions.

### **Cambridgeshire County Council (Archaeology)**

- 6.3 The site is located in a landscape of high archaeological potential. Do not object to the proposed development but recommend that the site should be subject to an archaeological investigation which can be secured by condition.

### **Highways England**

- 6.4 The Transport Assessment indicates relatively minor increases in trips to and from the proposal development that would use the Strategic Road Network. These increases are unlikely to result in a severe impact on the Strategic Road Network. Offer no objection in this case.

### **Environmental Health**

*On scheme as submitted*

- 6.5 Concerns raised regarding infrastructure to link to the Energy Innovation Centre.  
Condition phasing of development to avoid concentration of development to avoid a concentration of development in short space of time.  
Condition route for construction traffic.  
Require calculation of road traffic noise figures/data.  
Relocation of helipad to be considered as it is an inherently noise operation.

Concern of location of eastern car park given proximity to residential.

Noise and Air Quality Assessment are not acceptable as different traffic flow data is used.

Proposed Section 106 for installation of air quality monitoring station.

*On additional information*

Reviewed the Environmental Statement. Reference to work commencing in 2016 running to 2026. Phasing of the construction of the site to mitigate the impact on the transport network and nearby residential and sensitive sites such as hospital and schools. Construction traffic should not be permitted to use Long Road for the development.

Agree with the approach taken for noise assessments and conditions are recommended. Additional information on traffic data now correlates with the data supplied to support the Air Quality Assessment.

The relocation of the Helipad needs to be considered given it is inherently noisy operation.

The design of the car park will influence exposure to noise and subsequently, mitigation.

Pollution from the demolition and construction phases has the potential to affect the amenity of surrounding properties if not controlled. Conditions to control these aspects are recommended.

The proposed development is acceptable subject to conditions relating to:

Land contamination, materials management, emergency generators, construction hours, piling, dust, air quality mitigation, Construction Environmental Management Plan, Construction Method Statement, extraction equipment, plant noise, lighting, energy demand, combustion plant details, low NOx boilers (the various oxides of nitrogen), electric vehicle charging points. Proposed Section 106 for installation of air quality monitoring station.

Informatives are recommended in relation to these conditions.

## **Refuse and Recycling**

- 6.6 This is the first of many stages for this extensive development and the submitted Site Waste Management Plan struggles to offer examples of likely figures for when the whole site is operational. However it is nonetheless comprehensive in its

recognition of the many types of waste arising and how these should be managed.

- 6.7 Much emphasis is put on the "Reserved Matters Application Stage" and it is then that Cambridge City Council will need to approve/comment on the plans of the operating company/ies (Facilities Management team) to ensure it complies or exceeds the requirements for such a high profile sustainable development. Recommend condition on waste collection arrangement for commercial waste.

### **Urban Design and Conservation Team**

- 6.8 *On scheme as submitted*

The parameter plans identify the key thematic layers required to inform the subsequent Reserved Matters applications. Flexibility needs to be built into the plans to allow different forms of development to come forward. The concept of a series of landscape courtyards on the southern boundary are intended to help provide a more broken edge to the south and integrate landscape and built form. Parameter Plan 5 is crucial setting out the maximum built to unbuilt edge along this boundary. This will then be reflected in the address of buildings to Dame Mary Archer Way and the creation of the more urban public realm courtyards to the north of the site. The Parameter Plans will help to deliver a clear and proportional relationship between built form and landscape. The design concept is therefore supported in urban design terms.

*On additional information*

- 6.9 The development is acceptable subject to a condition for a sample panel of materials. An appropriate mechanism to require the timely delivery of the pedestrian/cycle crossing and connections will be needed.

Parameter Plan 2 should fix both Above Ground Level (AGL) and Above Ordnance Datum (AOD) levels. This is to be consistent with the information provided for CBC Phase 1 and to provide greater clarity about the maximum building height on the development site.

Parameter Plan 3 should indicate a pedestrian and cycle link to the north-east boundary corner. This can be secured by condition as suggested by the applicant.

## Conservation

- 6.10 There are no material Conservation issues with the proposals.

### **Senior Sustainability Officer (Design and Construction)**

- 6.11 The overall approach to sustainable design and construction and energy/carbon emissions and the development of a Bespoke Sustainability Strategy for the CBC Phase 2 site is supported.
- 6.12 Conditions are required for all future reserved matters applications to be carried out in accordance with the Bespoke Sustainability Strategy and accompanied by a Sustainability Statement demonstrating how the targets set out in the Bespoke Sustainability Strategy have been met. The strategy and targets therein shall be reviewed on a three yearly basis.

### **Head of Streets and Open Spaces (Landscape Team)**

#### *On scheme as submitted*

- 6.13 The amount of space allowed for on the southern and eastern (south) boundaries remains inadequate to accommodate two rows of forest scale trees. Even though Addenbrooke's and CBC Phase 1 already exists and will be the backdrop to Phase 2 in views from the south, and that there is an existing hedgerow with young supplementary planting 150m to the south of the site, we believe that a minimum of two rows of forest scale trees along the southern boundary is the minimum required to mitigate the CBC Phase 2 development.

In addition, the 50% along the southern boundary that would be 40m deep landscaped areas should be reserved mainly for landscape and the other features such as drainage and cycle parking that preclude tree planting should be limited in those areas.

These issues should be resolved prior to determination through revisions to the parameter plan text to give a minimum depth of landscape space north of the access road on the 50% of the boundary that are not courtyard areas and a minimum area that should be able to be planted with tree planting within the 40m deep courtyards.

*On additional information*

- 6.14 The concept of development for the Phase 2 site on the southern edge of the Cambridge Biomedical Campus is fully supported. The landscape proposals for the development have been the subject of lengthy discussions and much work has been done to advance the proposals to those submitted in the application. Remained concerned that there is inadequate space being allowed along the southern boundary to successfully deliver landscape mitigation. Appreciate that there has been much advancement of the landscape proposals and as a result some landscape mitigation can be achieved. However there is an amount of risk involved concerning the amount of landscape mitigation that can be delivered given the restricted areas allocated for landscape, particularly along the 50% of the southern boundary that does not accommodate a 40m deep landscaped area.

**Head of Streets and Open Spaces (Walking and Cycling Officer)**

*On scheme as submitted*

- 6.15 Dame Mary Archer Way should be designed to a 20mph speed limit. Provision of a safe route should be provided across the roundabout for those cycling or walking from the west along the off-road provision on the northern side of the AAR to access the site.
- 6.16 Adequate connections to the existing cycle network need to be provided. These should include:
- A connection from the cycle path to the south of the site into the access roads within the site
  - A connection from the south eastern corner of the site to the cycle path to the south of the Bell School site
  - A connection to the cycle path at the north eastern corner of the site as it exits the Bell school site.

*On additional information*

- 6.17 The following proposed conditions are welcomed:
- Provision of land to provide a connection at the north east corner of the site from the local cycle route to the Bell School site
  - Provision of cycle and pedestrian facilities along the northern site boundary on Dame Archer Way – the design

of how this facility crosses the site accesses should give priority to cyclists and pedestrians.

- Pedestrian and cycle crossing facilities at the Papworth Access junction – these should be one-stage crossings.
- Provision of two cycle links to NCN11 at the south eastern and south western ends of the site
- Cycle improvements at the Red Cross Lane access.

The proposal to improve the crossing facilities for pedestrians and cyclists at the Addenbrooke's Road/ Francis Crick Avenue/ Dame Archer Way roundabout is welcomed but must also include a 3m link from this crossing into the site, connecting to the facility along the northern site boundary as detailed above.

As part of the first phase a link across from the pedestrian/cycle link to the south of the ABCAM site to NCN 11 should be provided south of the site.

#### **Head of Streets and Open Spaces (Nature Conservation Officer)**

- 6.18 Pleased to see the outline plan seeks to leave a buffer to the Red Cross Land Drain City Wildlife Site that will reduce the impact of shading by the adjacent block. Detailed designs, method statement and long term management plans will be required as reserved matters to ensure the wildlife site remains in a favourable condition.

#### **Cambridgeshire County Council (Flood and Water Management)**

- 6.19 The applicant has met the minimum requirements of the NPPF. Conditions are recommended on to place restrictions in run-off as outlined in the Flood Risk Assessment and Surface Water Drainage Strategy and details of the long term maintenance for the surface water drainage system.

#### **Head of Streets and Open Spaces (Sustainable Drainage Officer)**

*On scheme as submitted*

- 6.20 The outline surface water drainage strategy is consistent with the principles adopted for the wider CBC surface water drainage strategy in terms of discharge rates and there is a

commitment to provide a level of treatment to the water prior to it being discharged from the proposed site.

- 6.21 A condition is required for any reserved matters application to include a detailed surface water drainage strategy, which must be in accordance with the Cambridge Biomedical Campus Phase 2 Flood Risk Assessment, pursuant to the reserved matters site for which approval is sought.

*On additional information*

Original comments remain valid.

### **Environment Agency**

*On scheme as submitted*

- 6.22 The Agency objects as the Flood Risk Assessment (FRA) is considered inadequate. A full assessment of flood risk to the site must be carried out showing that Hobson Brook flows backing up the site and upstream flows for the south ditch catchment can be accommodated onsite. This needs to inform the master planning of the site with no increased risk of flooding to the proposed use as well as not increasing flood risk elsewhere by flood storage being appropriately accommodated onsite. All watercourses should remain open and be made a feature of the site.

The applicant must demonstrate that a connection to the public foul water sewer is available and that the sewerage network has sufficient residual capacity to accept any increase arising from the development.

*On additional information*

#### Floodrisk

- 6.23 The FRA addendum is acceptable and demonstrates the application site is not within Flood Zone 3 and the risk of flooding is considered low, therefore the development is not contrary to NPPF. We recommend that in order to ensure the risk of flooding does not increase the South Ditch is maintained with the same channel capacity such that flood water can be conveyed and stored entirely within the South Ditch for a 1 in 100 year flood event including an allowance for climate change for the lifetime of the development.

6.24 Informatives are recommended with advice on pollution prevention, foul and surface water drainage.

### **Anglian Water**

6.25 Conditions are recommended regarding assets owned by Anglian Water close to the development boundary. The foul drainage is in the catchment of Cambridge Water Recycling Centre that will have available capacity for these flows. For foul sewerage a condition is required for details of a foul water strategy. An informative is recommended regarding discharge of trade effluents.

### **Hobsons Conduit Trust**

6.26 No comments to make on the application.

### **Waste Shared Service**

6.27 The County Waste Officer has reviewed the waste management strategy submitted with the application and considers that it is acceptable and provides an acceptable strategy for handling of different waste streams. Conditions are recommended for any approval which requires the submission of a Construction Environment Management Plan (CEMP) and Detailed Waste Management and Minimisation Plan (DWMMP).

### **Fire and Rescue Service**

6.28 Adequate provision should be made for fire hydrants, this can be secured by condition.

### **Access Officer**

6.29 Acceptable outline application. No objections to the proposals

### **Wildlife Trust**

6.30 Would be concerned with the potential impacts on the adjacent Red Cross Lane Drain City Wildlife Site, such as changes to drainage/water table levels, or overshadowing from adjacent planting. As this will however be looked at by the City Nature Conservation Officer no further comments are made.

## **Natural England**

- 6.31 The proposal is unlikely to affect any statutorily protected sites or landscapes. Standing advice is available on protected species. The application may provide opportunities to incorporate features into the design which are beneficial to wildlife such as the incorporation of roosting opportunities for bats or the installation of bird nest boxes. Measures to enhance the biodiversity of the site should be secured.

## **Network Rail**

- 6.32 The developer/applicant must ensure that their proposal, both during construction and after completion of works on site, does not encroach onto Network Rail land, affect the safety, operation or integrity of the company's railway and its infrastructure, place additional load on cuttings, adversely affect any railway land or structure, over-sail or encroach upon the air-space of any network Rail land, cause to obstruct or interfere with any works or proposed works or Network Rail development both now and in the future.

Advice is given to the developer/applicant in relation to future maintenance, drainage, plant and materials, scaffolding, piling, fencing, lighting, noise and vibration, landscaping and vehicle incursion which may affect Network Rail.

## **National Grid**

- 6.33 Subject to a diversion of the High Pressure Gas pipeline, there would be no objection to the development.

## **Health and Safety Executive**

- 6.34 The Health and Safety Executive (HSE) is a statutory consultee for certain developments within the Consultation Distance of major hazard sites and major accident hazard pipelines. This is such a development and also within the consultation distance of a major accident hazard pipeline, which has been considered using HSE's land use planning methodology. Consequently the HSE does not advise, on safety grounds, against the granting of planning permission. As the proposed development is within the Consultation Distance of a major hazard pipeline the pipeline operator should be contacted.

## **Department for Communities and Local Government**

6.35 No comments to make on the application.

### **Historic England**

6.36 Do not wish to offer any comments on the application. The application should be determined in accordance with national and local policy guidance, and on the basis of your specialist conservation advice.

### **Great Shelford Parish Council**

6.37 Concern regarding:

- Small distance between buildings, new road and watercourse to south of site.
- 20m buffer should be adhered to so a good landscaped edge can be created.
- Indicative building heights are too great and do not give a stepped down effect at edge of site.
- Buildings would be overbearing in to houses on Bell School site.
- The proposed multi-storey car parks would be visually intrusive and have an adverse impact on open landscape and views from south.
- Every effort should be made to reduce the number of car journeys to the site – Trumpington Residents' Association comments are supported in this respect.

### **Cambridge Past, Present and Future**

6.38 No objections if not in safeguarded land.

### **Cambridge Cycling Campaign**

6.39 Object to the application. The current path of National Cycle Network Route 11 through the CBC site gives cyclists the lowest priority of all traffic. Route 11 is a key north-south route connecting Cambridge to outlying villages and towns. Important to consider cyclists passing straight through as well as cyclists travelling to and from Addenbrooke's. New development will increase traffic of all types thereby making any problems caused by poor design worse. This issue must be resolved as

part of this development, but ask that the design of the entire roundabout area is reviewed with cycling commitments in mind.

### **Cambridgeshire Quality Panel (Meeting of 13<sup>th</sup> October)**

6.40 The conclusions of the Panel meeting(s) were as follows:

*Community* – access to facilities for the people working on Phase 2 was highlighted.

*Connectivity* – needed to see evidence of how the scheme connects into the wider CBC across Dame Mary Archer Way and through to the future ‘high street’.

*Character* – the landscape character and appropriate species and understanding of the scale of spaces being proposed was highlighted. The ability to make courtyards the location for ‘productive landscape’ was supported.

*Climate* – Panel questioned how swales etc. could be successfully incorporated when such flexibility is being sought.

6.41 The relevant section of the minutes of the panel meeting(s) are attached to this report as Appendix A.

The above responses are a summary of the comments that have been received. Full details of the consultation responses can be inspected on the application file.

## **7.0 REPRESENTATIONS**

7.1 The owners/occupiers of the following addresses have made representations:

18 Greenlands  
41 Raeburn House, Lapwing Avenue

The representations can be summarised as follows:

- Use public transport daily. Surrounding roads can hardly cope with traffic now, how will they cope with additional traffic?
- The proposed additional erections will be hugely visible from this area of Trumpington.
- Concerns over notification of the applications for those most affected by the development.

- Applications' gross underestimates of traffic flow which affect many suggesting extraordinarily that total rush-hour traffic following completion of the developments will be two thirds of that currently logged on just one of the four access roads.

### **Trumpington Residents' Association**

7.2 Support in principle of this phase of expansion of Cambridge Biomedical Campus. Object on a number of specific aspects of the plans.

- Very concerned at the anticipated level of car use and consequences of this. A much more ambitious parking strategy and travel plan aimed at further reducing car use should be sought and a more ambitious plan for bus routes and services to the development.
- Concerned at the total number of additional car parking spaces being proposed and urge that these be reduced. Availability of spaces inevitably encourages users to come to the site by car rather than use public transport.
- Aware that road junctions are already operating at or over their design capacity and that residential routes are becoming increasingly congested and polluted. Specifically object to the proposed changes to Addenbrooke's Road/Shelford Road.
- Not noticed any comments in the application on the impact of the development on the roads within CBC. Given limited capacity of the route from Hills Road we assume most users will travel from Addenbrooke's Road or Long Road, accentuating the pressure on those routes.
- The location of the western car park is too intrusive at the interface between the development and the countryside and too massive at such an important edge position.
- The buildings facing the Green Belt at the southern perimeter should be more sensitive to their location. With considerable bulk at 27m high these buildings are nearly as high as MSCP2, which seems to be completely inappropriate for this location.

7.3 The above representations are a summary of the comments that have been received. Full details of the representations can be inspected on the application file.

## **8.0 ASSESSMENT**

8.1 From the consultation responses and representations received and from my inspection of the site and the surroundings, I consider that the main issues are:

1. Principle of development
2. Land use mix
3. Employment
4. Transport Impacts
5. Car parking strategy
6. Cycle parking
7. Air Quality
8. Soil and contamination
9. Visual Impact and landscape
10. Ecology
11. Archaeology
12. Residential impact
13. Light pollution
14. Waste management
15. Renewable energy and sustainability
16. Public Art
17. Third party representations
18. Other issues
19. Planning Obligations (s106 Agreement)

### **Principle of Development**

8.2 The principle of the development is supported by The National Planning Policy Framework (NPPF) in Chapter 1 'Building a Strong, Competitive Economy' paragraph 19 where it states that "The Government is committed to ensuring that the planning system does everything it can to support sustainable economic growth. Planning should operate to encourage and not act as an impediment to sustainable growth. Therefore significant weight should be placed on the need to support economic growth through the planning system".

8.3 The principal local plan 2006 policy for this site is 9/5 'Southern Fringe'. This policy releases the CBC site from the Green Belt and allocates the site for clinical, biomedical and biotechnology research and development, related higher education and sui-generis medical research institute and related ancillary uses. The land is identified on the Proposals Map (site 9.09).

- 8.4 As part of Policy 9/5 at criteria 'E' it states that "Up to 10.28ha of land will be safeguarded until after 2016 for future clinical development and research uses. The respective portions being determined at Plan Review". Local Plan policies 5/15, 7/2 and 7/4 provide further advice concerning development at Addenbrooke's and the selective management and promotion of cluster development of appropriate uses.
- 8.5 The emerging local plan, which is currently under examination includes the site under Policy 16. It refers to the site as the 'expansion area' (para 3.46) and states that approximately a third of the land will be developed for NHS and private clinical development and two thirds for biomedical and biotechnology R&D activities. Compliance with this land split is set out in the parameter plan (parameter plan 1- Land use).
- 8.6 The application adequately demonstrates that the proposed clinical uses are required to meet Addenbrooke's health care needs. As such, it accords with policies 5/15, 7/4 and 9/5 of the Local Plan.

### **Land Use mix**

- 8.7 Since the granting of outline consent in 2009 reserved matters approval has been granted and construction is now completed or well advanced on a number of high profile projects within CBC, including; the New MRC Laboratory of Molecular Biology LMB (07/0651/FUL), New Papworth Hospital (14/1411/REM), the new Global R&D Centre and the new Corporate Headquarters for AstraZeneca (14/1633/REM). Table 1.0 provides a breakdown of the various planning permissions on Phase 1.
- 8.8 An application for Plot 8 has been submitted (as also on this agenda for Bellatrix ref: 16/0653/REM) for biomedical and biotech research and development use, and also a further outline application has also been recently submitted for additional further biomedical and biotech research and development floorspace (ref 16/1078/OUT).
- 8.9 The Phase 1 research and development land is therefore all allocated and committed for development as shown in table 1 below. The location of these developments is shown in the map

in Appendix A. To allow for the continuing growth of the Campus the developer has therefore submitted this application for Phase 2 development.

Approved and committed floorspace for CBC Phase 1

Floorspace Type (Square metres)	Biomedical and Biotech R&D (B1(b))	Clinical research and treatment (D1 and/or clinical in-patient treatment)	Clinical research and treatment (D1 and/or clinical in-patient treatment) OR Higher Education OR Sui generis medical research institute uses	Biomedical and Biotech R&D (B1(b)) OR Clinical research and treatment (D1 and/or clinical in-patient treatment)	Total
Outline permission (06/0796/OUT)	115,000	60,000	25,000	15,000	215,000
LMB Building (07/0651/FUL)	25,209	-	-	-	25,209
New Papworth Hospital (14/1411/REM)	-	-	18,300	15,000	33,300
AstraZeneca (14/1633/REM)	59,821	-	-	-	59,821
	20,884	-	-	-	20,884

AstraZeneca Phase 2 <i>Committed*</i>					
Plot 8 Bellatrix (16/0653/REM ) <i>Pending consideration</i>	9,033	-	-	-	9,033
Plot 9 (16/1078/OUT) <i>Pending consideration</i>	14,193	-	-	-	14,193
<b>Total Detailed Floorspace Approved</b>	<b>85,030</b>	<b>0</b>	<b>18,300</b>	<b>15,000</b>	<b>118,330</b>
Total Pending	44,110	0	0	0	9,033
Total Committed	129,140				
Total remaining/ uncommitted.	20,884	60,000	6,700	0	87,637

*\*Committed = subject to land agreements/contract but not yet granted detailed planning permission*

8.10 As the table above shows the commercial Biomedical and Biotech research and development (B1(b)) use threshold approved under the Phase 1 outline has been reached and for the parcel of residual land (Plot 9) on which no buildings or other uses have been brought forward, an outline application has been submitted (16/1078/OUT) for an additional 14,193 square metres as this would be beyond the threshold approved under Phase 1.

8.11 The remaining clinical research and treatment spaces for Phase 1 will be delivered separately by the Cambridge University

Hospitals NHS Foundation Trust in accordance with the hospital masterplan and their specific needs and funding arrangements.

- 8.12 It has been demonstrated by the applicant that all commercial floorspace and land at Phase 1 of the CBC is now either occupied, under development or is contractually committed and therefore unavailable for any other commercial users. The bringing forward of the Phase 2 land for development is therefore considered necessary and appropriate at this time. This is demonstrated by the immediate needs of Abcam to form the first occupier of this land and a full application alongside this outline application has been submitted.
- 8.13 The proposed development for this outline application also includes ancillary uses including; A1 (Shops), A3 (restaurants and cafes), A4 (drinking establishments), A5 (Hot food takeaways), D1 (non-residential institutions), and/or D2 (Assembly and Leisure). The inclusion of these ancillary uses is required as it is recognised that the development when fully developed could accommodate around 3,500 employees. In order to cater for the needs of these people ancillary facilities will be required such as; cafes, gyms, sandwich shops. These would be of a scale to support the main campus use rather than being destination venues in their own right. The proposals are not specific as to where these ancillary facilities will go but Parameter Plan 1 does allow the possibility of flexible ground floor space of the proposed multi storey car parks. The parameter plan also has a particular allowance for the top storey to accommodate an ancillary use, such as a centralised meeting space available for Campus users. Details of these facilities will be secured at the reserved matters stage.
- 8.14 In order to assist with the determination of subsequent reserved matters applications and to ensure that infrastructure provision and environmental mitigation is provided in time to cater for the needs and impacts arising out of the development a site wide phasing plan will be required. Condition 7 is therefore recommended to secure this.

#### Prejudicing comprehensive development

- 8.15 The South Cambridgeshire District Council Proposed Modification Joint Consultation Report December 2015 sets out proposed modifications to the South Cambridgeshire Local

Plan. A new Policy E/1B for Cambridge Biomedical Campus Extension is proposed that relates to Main Modification PM/SC/8/A which allocates land to the south of CBC Phase 2. This is a provisional modification and additional technical evidence on surface water flood risk, groundwater hydrology, biodiversity and scope for mitigation and enhancement and transport impact is being sought before the provisional allocation is confirmed.

- 8.16 In the interests of comprehensive planning the outline proposals for Phase 2 should not prejudice the future development of the site currently under consideration. The parameter plans and illustrative masterplans within the application include access from Dame Mary Archer Way that allows for a spine road of a design that could extend south to provide vehicular access to the expansion land should the site allocation come forward.
- 8.17 The proposed use of the site for clinical, biomedical and biotechnological research and development, related higher education and sui-generis medical research institute and related ancillary uses is therefore considered acceptable and accords with Cambridge Local Plan policies 3/7, 5/15, 7/2, 7/4 and 9/5. Assessment of other impacts of the development against relevant policies is set out in the rest of this report.

#### Employment

- 8.18 The Local Plan through Policies 7/2 and 7/4 promotes employment development proposals which fosters innovation and helps reinforce the existing high technology and research clusters of Cambridge, particularly in healthcare biomedical and biotechnology research and development related activities.
- 8.19 The proposed development could accommodate approximately 3500 staff when fully occupied. This growth in employment represents a significant boost to the local economy and will contribute towards the continuing success of the City as a centre for biomedical and biotechnology research and development activities.

#### Transport Impacts

- 8.20 The Environmental Assessment for the application assesses the full impact of the development including the transport

impact. The Transport Assessment has been updated with a Technical Note from the applicants clarifying the data used and queries raised by the Highway Authority. Policy 8/2 of the Cambridge Local Plan discourages further traffic growth and allows development where it does not have an unacceptable transport impact. Policy 8/3 requires development that places demand on the transport system to secure suitable mitigation measures. Growth can be supported and accommodated through enhanced sustainable transport use.

8.21 The key road infrastructure to link the CBC Phase 2 site to the existing network is already in place with access to be provided off Dame Mary Archer Way, off the roundabout with the Addenbrooke's Road. The site is approximately 500m from the centre of the CBC. There are a number of existing cycle and pedestrian routes within the area close to the site. A number of highly frequent bus services which serve the site will be within 550m, linking the site with the City Centre and the railway station and key villages and towns surrounding Cambridge. The site is therefore highly accessible and sustainable and should therefore encourage staff and visitors to travel by modes other than the private car.

8.22 The following paragraphs analyses the assessment of the transport impacts, looking at the expected transport impact that the quantum of development will have on the transport network and how this can be mitigated against or reduced by encouraging sustainable modes of transport.

#### Trip generation

8.23 The Transport Assessment (TA) has taken account of the predicted traffic generated by the permitted developments located on or in the vicinity of CBC that have yet to be developed. Due to the congested nature of the local road network, the transport assessment has assumed no further growth. The TA makes no account for the variation in AM and PM peak periods due to the nature of the hospitals operations, the peak hours are slightly different to those for research and development. Both peaks have been assumed to occur in parallel.

8.24 In order to determine the level of person trips generated by the proposed development, the TA has referenced the consented

person trips for the research and development and general clinical elements of the CBC Phase 1 planning application. The trips for commercial are adjusted to reflect the proposed gross floor area of 58,295 sqm and uplifted to reflect the proposed staff density of 1 employee per 21 sqm. For the clinical element of the development the combined person trips generated for Papworth and General Clinical in the CBC Phase 1 application have been utilised. These have been updated to reflect current mode shares and the updated trips rates have been applied to the proposed level of clinical floor area of 16,697 sqm.

8.25 The transport assessment anticipates that the development will generate the following trips:

<b>Trips (two-way)</b>	<b>AM Peak (08:00 – 09:00)</b>	<b>PM peak (17:00-18:00)</b>	<b>Over course of day (07:00 – 19:00)</b>	<b>% Modal share</b>
All modes	1,274	1,032	8,166	100%
Car	357	288	2,430	30
Walk	161	130	1001	12
Cycle	405	327	2496	30
Bus	310	250	1929	24
Other*	41	36	310	4

(\*includes car passenger and motor cycle)

The mode shares from the Addenbrooke's Travel Survey have been used to derive the number of person trips per mode that would occur in the AM and PM peaks and over the course of the day. From the survey it has been identified vehicular trips make up a mode share of 26.5%.

8.26 The Highway Authority has accepted the predicted trip generation for the site and the mode shares. In order to provide reassurances that the mode share identified can be achieved the applicant has identified a sustainable transport investment fund which will be drawn upon in the event the single vehicle trip targets are not met. This can be secured through the S106 as detailed in paragraph 8.121 of this report.

## Vehicular Trip Distribution

- 8.27 For the TA the study area for the assessment of vehicular trip distribution was agreed with the Highway Authority. 13 junctions on the local road network and the consented Dame Mary Archer Way / Papworth Access signalized 'T' junction and the two proposed site access junctions with Dame Mary Archer Way were included. Traffic surveys and queue length surveys were carried out. By using the data collected from these surveys, the committed developments and the proposed developments trip generation, the transport assessment has assessed a baseline 2014 scenario, a 2018 and 2026 scenarios, the opening and future years, 'Without Development' and 'With Development' scenarios. Modelling of the junctions within the study area was carried out. The TA confirms that the result of the baseline 2014 scenario that during existing operational conditions, six of the 13 junctions assessed are shown to be operating at or above capacity during one or both of the peak periods.
- 8.28 Comparison of the 2018 'Without Development' and 'With Development' flows at the junctions within the study area are given in the TA to establish the percentage increase in vehicular trips that would occur at each of the junctions as a result of the traffic associated with the proposed development.
- 8.29 The Highway Authority considers the junction modelling that has been carried for the TA to be acceptable. As a result of the TA findings appropriate mitigation measures have been identified to those junctions that require improvements as a result of the development, or where not appropriate, alternative mitigation measures sought in agreement with the Highway Authority. The Hauxton Road/ Addenbrooke's Road, Addenbrooke's Road/ Glebe Road and Papworth Entrance are shown to be impacted upon as a result of the development trips. However these junctions remain within capacity. The Addenbrooke's Road Access roundabout is impacted upon as a result of the development. However CBC phase 1 includes proposals to include pedestrian crossing facilities at the junction. This junction is also included as part of the ongoing A1307 City Deal study and therefore directing funding towards adding capacity for alternative modes rather than added highway capacity for vehicular traffic is considered appropriate.

8.30 The two main junctions that improvements works are sought for are crossing facilities for pedestrians and cyclists at the Addenbrooke's Road/Francis Crick Avenue/Dame Mary Archer Way roundabout and improvements to Shelford Road/Addenbrooke's Road junction. Full details of the measures required and are given in Section 8 of the report which relate to the heads of terms for the Section 106 Agreement.

#### Sustainable Transport Trip Distribution

8.31 In the TA, pedestrian, cycle and public transport trips have been distributed across the campus entrance and exit points using existing survey data. It is shown that the development will cause additional trips on the network and impacts on the network as a result of these have been identified. A number of improvement/mitigation measures which support the increase in person trips across the development and to mitigate the development impacts are therefore required which have been agreed with the Highway Authority and the applicant. These are listed in Appendix B and will be secured through the S106 Agreement.

8.32 The Highway Authority have raised concerns over the bus occupancies levels across services which operate on the Addenbrooke's campus and whether sufficient capacity is available on services in the future to support the mode share target identified. The applicant has committed to undertaking bus capacity surveys in advance of employees occupying the site and liaising with bus operators to ensure adequate capacity is in place. The surveys provide some reassurance that any shortfalls in capacity will be highlighted to the operator in advance of staff commencing on site and there is the potential for the sustainable transport investment fund to be put towards such measures if they are shown to cause an issue (see Section 8.121 of the report).

#### Travel Plan

8.33 An Outline Travel Plan has been included with the application which sets a basis for the business/organisations of CBC Phase 2 for their individual travel plans. In order to ensure that the mode share targets are achieved from day one of the occupation of the development the Highway Authority require

each individual reserved matters application to provide an interim Travel Plan detailing which measures are intended to be taken for to ensure that that the targets are met. The County Council have also requested that for businesses relocating to the CBC campus that the Travel Plan includes early engagement with staff prior to relocation to ensure they are advised of the transport options available to them in advance of moving to the site. The Travel Plans will be secured through the Section 106 and this is included in the package of measures as set out in Section 8.121 of the report.

#### Future pedestrian and cyclist facilities

- 8.34 The proposed cycle/ pedestrian link to Bell School site in the north east corner of the site will be provided as part of the adjacent Bell School development. To ensure that this is implemented as it is within the CBC Phase 2 land it is recommended that this is included within the S106 Agreement that the land is made available. The link should also be completed prior to the first occupation of the site.
- 8.35 The details of the cycle and pedestrian facilities along the northern site boundary on Dame Archer Way to give priority to cyclists and pedestrians will be needed. These details will need to come forward in each reserved matters application and be implemented prior to occupation of each phase of development to ensure these modes are given priority. Condition 30 is recommended to secure these details.
- 8.36 The Cycling and Walking Officer has raised a number of areas that will require upgrading or additional works to ensure that cycling and pedestrian links to and around the site are acceptable. Cambridge Cycling Campaign has also made representations with concerns that cyclists are given the lowest priority of all traffic through the CBC site. A balance between the priorities of all modes needs to be achieved and to ensure that safety is maintained. The pedestrian and cycle crossings at the Papworth Access junction on Dame Mary Archer Way will be upgraded to signalised facilities. Links to the National Cycle Network Route 11 at the south eastern and south western ends of the site will need to be provided (see recommended Condition 44) and cycle improvements at the Red Cross Lane access. These works can be secured through the Section 106 Agreement (as set out in Section 8.121 of the report).

## Construction Traffic Management Plan

- 8.37 In order to reduce the impact of construction of the development on the local highway network a construction traffic management plan will be needed. The most significant impact that is likely to occur is the journeys of construction vehicles on the local highway network. Condition 17 is recommended for a Construction Environmental Management Plan (CEMP) which will require details of construction traffic routes. The applicant has confirmed that there will be no construction traffic through the main Addenbrooke's access when travelling to and from the site. The routing of traffic routes to main roads avoiding surrounding villages will also need to be taken into account in the CEMP.
- 8.38 The County Council has not raised an objection to the updated TA and the package of measures being put forward. The proposed mitigating measures to accommodate the transport growth to sustainable modes to off-set the transport impacts of the scheme are acceptable and the development is therefore considered acceptable in accordance with the policy framework and Cambridge Local Plan Policies 8/2 and 8/3.

### **Car parking strategy**

- 8.39 There is a Cambridge University Hospitals NHS Foundation Trust CBC Parking Strategy for the CBC site, which was reviewed in 2015 and is included in the appendices of the TA. This takes account of the changes in parking requirements since the last review in 2014 and as a result of Travel Plan targets. It identifies how parking needs can be met up to 2025 by use of the residual Phase 1 land (2020 land) for temporary surface car parking and the possible use of MSCP 4, the commercial multi-story car park proposed under this outline, in order to support the opening of anticipated future developments including ACRC GSK extension, Project Capella, Papworth Hospital, the Forum, Heart and Lung Research Institute and Children's Hospital and the remainder of the permitted CBC Phase 1 clinical development and that proposed under this outline application.
- 8.40 The Parking Strategy review takes into consideration the reduction in staff parking levels as a result of the Travel Plan

impacts on site over the Parking Strategy period. The Travel Plan has been very successful with the current percentage of staff travelling to work by car alone has reduced from 29% to 25% (in 2014) resulting in achieving the single occupancy car use targets of 25% by 2017 set out in the Travel Plan.

- 8.41 The proposed car parking strategy for this outline application considers parking provision for clinical development and parking provision for research and development uses separately. The parking strategy addresses the cumulative parking needed on the campus and takes into account the phasing of car parking requirements for the overall site as developments come forward and as travel plan targets are achieved.
- 8.42 CBC Phase 1 outline planning consent allows for up to 2,300 car parking spaces (with maximum temporary provision, allowing time for businesses to reduce their parking requirements from 1 space per 50 sqm to 1 space per 72 sqm through implementation of the travel plan), the total under 1 space per 72 sqm of 1,597 spaces. The outline consent Section 106 includes a Schedule (the 14<sup>th</sup> Schedule) to control car parking provision. (There was a Deed of Variation to this Schedule when the reserved matters for MSCP 2 were approved on Phase 1 to allow for off plot parking for clinical uses). The Section 106 and Parking Strategy ensures that the allocated spaces for each development are provided in line with the consented number of car parking spaces and to reduce these where possible due to the reduction of staff car parking requirements as a result of the successful travel plan and staff using alternative means of travel.
- 8.43 Two multi-story car parks (MSCP) are proposed on the Phase 2 site. A commercial MSCP would be located at the western end of the site with 694 car parking spaces and a MSCP at the eastern end of the site with 1,200 spaces to be utilised by Addenbrooke's hospital and clinical uses. This would cater for 945 additional spaces associated with CBC Phase 1 (those developments approved under outline 06/0796/OUT), the remainder will be for the Phase 2 clinical development. The table below sets out the car parking provision proposed.

## Summary of car parking provision proposed

Development use	Summary of Car parking provision in CBC Phase 2		
	Spaces in MSCP	Surface parking spaces (inc disabled)	Total number of spaces
CBC Phase 2 commercial	694	35	729
CBC Phase 2 Clinical	239	15	254
<b>Sub-total</b>	<b>933</b>	<b>50</b>	<b>983</b>
CBC Phase 1 & Addenbrooke's Clinical need	961	0	961
<b>Total</b>	<b>1894</b>	<b>50</b>	<b>1944</b>

### Clinical

- 8.44 The proposed car parking strategy for the Clinical development is to provide a car parking ratio for staff, patients and visitors similar to that currently provided at Addenbrooke's and CBC Phase 1. This equates to one space per 72m<sup>2</sup> for staff and one space per 773m<sup>2</sup> for patients and visitors. The higher ratio for patients and visitors is explained by the turnover of spaces during the course of a day.
- 8.45 The adopted car parking standard contained within appendix C of the Local Plan does not specify a particular ratio for Hospitals and states that provision must be treated on merit. The emerging Local Plan retains the same parking standards. The approach to parking provision for the clinical development is considered sound. The staff parking ratio is based upon a modal share that is concurrent with existing levels, which have seen a decrease through an effective travel plan. The level of provision for patients and visitors is based upon an established approach that is equitable with the wider campus and therefore has merit under the terms of the policy. The Highway Authority are satisfied that the clinical staff trips associated with the proposed clinical development and those associated with the CBC phase 1 uses that will utilise the proposed clinical MSCP have been assessed appropriately for the purpose of the

application. Conditions 32 and 33 are recommended to ensure that this parking ratio is adhered to.

#### Research and Development

- 8.46 The applicants propose an on-plot car parking ratio of 1 space per 80 sqm for the commercial uses. The County Council is satisfied that the detail provided by the applicant for this ratio is acceptable. It demonstrates they are appropriate to achieve mode share identified, which was taken from the Addenbrooke's Travel survey.
- 8.47 The Local Plan adopted car parking standards for business and industrial uses, which includes research and development, laboratories and hi tech uses (B1b) for sites outside the controlled parking zone, sets a maximum ratio of provision at 1 space per 40 sqm. As such, the proposed ratio of 1 space per 80 sqm accords with the adopted standard. This is also a reduction from the ratios set out in the CBC Phase 1 outline consent which has a ratio of 1 space per 72 sqm. Condition 31 is recommended to ensure that this parking ratio is adhered to.

#### Parking for mobility impaired

- 8.48 The parking strategy provides for a minimum of 6% of the total number of car parking spaces provided to be designated for use by the mobility impaired. These are to be located close to building entrances. This equates to a greater provision than the Local Plan standards which are 5% of spaces but also requiring higher ratios in some cases such as at medical facilities. Condition 34 is recommended to ensure that this ratio is achieved. The proposal is considered in accordance with local plan policy 8/10.

#### Off street mitigation

- 8.49 The Highway Authority has considered the impact that those travelling to the development may park on-street in surrounding residential areas. In order to mitigate this potential impact the applicant will undertake surveys of on-street parking within a 25 minute walking distance of the development to assess the impacts of the CBC Phase 2 employees. In the event that the surveys demonstrate there to be an issue, a consultation (funded by the developer) will be undertaken of residents in the

affected streets to establish whether there is support amongst residents for a managed parking scheme. In the event that additional measures are shown to be required these will be funded by the developer. The survey work and funded can be secured through the Section 106 agreement as set out in section 8.120 of the report. It is noted that the nearby new developments of Clay Farm, Glebe Farm and Bell School have interim on-street parking controls and will be subject to traffic regulation orders preventing on-street parking once the roads are adopted by the Highway Authority.

#### Car parking strategy conclusion

- 8.50 There is a critical balance to be struck in achieving the right level of car parking on the site and delivering a truly sustainable package of measures. There is an inevitable tension between the commercial viability and competitiveness of the site, its sustainability credentials and what is achievable under the adopted standards in considering this issue. All of these factors have to be balanced against the potential spillage of cars into the surrounding street network and also the level of provision within the existing Addenbrooke's Campus.
- 8.51 With the transport mitigation measures proposed, the Travel Planning and parking strategy reviews, the car parking levels being sought are considered justified and acceptable on the basis of existing policies and are equitable with provision across Addenbrooke's.

#### **Cycle parking**

- 8.52 Cambridge Local Plan cycle parking standards do not define provision for research and development or clinical uses. The cycle parking numbers proposed have therefore been calculated on the basis of the CBC Phase1 outline planning consent (as required by Condition 58) to ensure a consistent approach. The condition states:

*Condition 58 (of outline 06/0796/OUT)*

*Unless otherwise agreed in writing by the Local Planning Authority, the submission of any reserved matters application for approval of any building shall include a quantum of cycle parking provision that is equivalent to:*

*a) For staff provision, a level which will provide a total number of spaces which cater for at least 10% more than the existing modal share percentage of staff cycling to work as shown by the latest Addenbrooke's Annual Travel Survey. The final level of provision to be calculated shall assume that only 80% of staff will be on-site at any one time.*

*b) For patients and visitors, a level which will provide a total number of spaces which cater for at least 10% more than the existing modal share percentage of patients and visitors cycling to work as shown by the latest Addenbrooke's Annual Travel Survey. The final level of provision to be calculated shall assume that cycle parking spaces are used 3 times daily.*

*Reason: To ensure that the proposed level of cycling provision is appropriate to the nature of the proposed building and its use (Cambridge Local Plan 2006 policy 8/6).*

8.53 It is therefore recommended that for this application a similar approach is applied and that the final cycle parking numbers are determined at reserved matters stage. This will ensure that current data on employees and up-to-date results of the Travel Plans is used. The cycle parking provision will be determined at the reserved matters stage against the Addenbrooke's Travel Survey cycle mode share at that time with cycle parking to be provided at 10% above surveyed levels. For example the Addenbrooke's Travel Survey currently shows a 33% cycle mode share, plus 10% additional provision results in a need for 43% of cycle parking for staff based on an 80% occupancy rate on site for any one building.

8.54 The applicant has provided expected levels of cycle parking that would be required for the quantum of development that has been applied for which predicted staff numbers would be as set out in the following table (based on 2014 Travel Survey results).

## Predicted cycle parking numbers

Development Use	Summary of Cycle Parking Provision at CBC Phase 2		
	Number of Staff cycle spaces	Number of visitor / patient cycle spaces	Total number of cycle spaces
CBC Phase 2 Commercial	955	24	979
CBC Phase 2 Clinical	79	9	88
Total	1034	33	1067

8.55 Given the long-term build out period for the site, it is considered that the level of cycle parking provision should be flexible to reflect the most up-to-date travel survey available for Addenbrooke's; always providing a level of provision 10% more than the existing modal share.

8.56 Condition 35 in line with that applied to the CBC Phase 1 consent is therefore recommended which allows further information on staffing, patient and visitor levels to be provided for development plots in the calculation of the required quantum of cycle parking provision. The development is considered to be in accordance with Policy 8/6 of the Cambridge Local Plan.

### **Air Quality**

8.57 The relevant policies of the Local Plan are 4/13 and 4/14. Policy 4/14 seeks to protect air quality within Air Quality Management Areas (AQMA). The supporting text to 4/14 allows the local planning authority to assess proposals that are not within or adjacent to an AQMA if they could generate significant pollution which may have a detrimental effect on it. The emerging local plan Policy 36 requires that proposals demonstrate that they would not lead to significant adverse effects on health, the environment or amenity from polluting or malodorous emissions, or dust or smoke emissions to air; or where a development is a sensitive end-use that there will not be any significant adverse effects on health, the environment or amenity arising from existing poor air quality, sources of odour or other emissions to air.

8.58 The Environmental Statement provides an assessment of potential impact of the development on local air quality. The development site is not within an Air Quality Management Area but there is an AQMA to the north of the site.

#### Construction Phase

8.59 The dust emission during construction of the site has the potential to be large given the size of the site. As construction traffic data is not known, but has the potential to be considerable the construction dust will need to be controlled. A construction and dust management plan will be required. This can be secured by Condition 29.

8.60 The emissions from plant being used on site can be significant, if transient source of air pollution. Condition 8 for details on Non-Road / Mobile Machinery (NRMM)/plant used during demolition or construction works is recommended given the sites build out will take place over many years and as it is located adjacent to highly sensitive receptors (i.e. hospital/residential).

#### Operational Phase

8.61 The Environmental Assessment considers the increase in traffic flows on local road network, new traffic emissions from the multi-storey car parks and new emissions from gas boilers serving the proposed building. Various scenarios have been assessed on the cumulative impact of development. Concentrations of the pollutants nitrogen dioxide (NO<sub>2</sub>) and particles (PM<sub>10</sub>) have been predicted. These pollutants can affect human health at high concentrations. Sources can be from traffic and emissions from the proposed buildings. The Air Quality Assessment within the Environmental Statement has assessed the impact of air quality before and predicted the impact with the development using buildings and traffic data. Clarification on traffic flows has been provided by the applicant that includes Heavy Goods Vehicles and Light Goods Vehicles. These are more realistic and have been accepted by the County Council for the purposes of this application. The City Council Environmental Health Scientific Officers have taken this in to account when assessing the proposals for impact on air quality.

- 8.62 As the details of the buildings and exact emissions not known at this stage an expected 'building input data' has assessed the indicative proposed boilers serving each of the buildings in CBC Phase 2. Assumptions have been made to enable indicative modelling to be undertaken as the actual form and energy requirement have not yet been decided. Each commercial building is anticipated to have gas condensing boilers and ultragas low NOx boilers (*which reduce the level of nitric oxide, an environmentally unfriendly gas – a by-product of gas-fired central heating boilers*). The exhaust locations are anticipated to be arranged across the centre of each roof and 1 metre above roof level. As low NOx boilers are assumed it is recommended that this is secured by condition 10 to ensure that these are installed.
- 8.63 Expected traffic flows for predicted emissions have been taken into account which has included queuing and congestion modelling on Addenbrooke's Access Road using a traffic speed of 5mph.
- 8.64 The City Council Scientific Officers in assessing the air quality assessment have noted that the recent modelling of the building emissions from the CBC Phase 1 undertaken by Cambridge City Council and confirmed by Cambridge Environmental Research Consultants (CERC), has shown that the impact of emissions from buildings is likely to be greater than had been anticipated. This has two implications, firstly that the total annual mean levels of nitrogen dioxide and particulate matter will be higher than predicted and secondly that the true impact of building emissions can be estimated but not confirmed until building details are provided under Reserved Matters applications. If the emissions of the CBC Phase 1 are followed then the predicted impact could be higher. Information from Phase 1 (provided in support of reserved matters applications under Phase 1) is demonstrating that the air quality impact of building emissions has been underestimated in the past and that emissions vary, depending upon the end use of each building. This information also shows that the energy demand and therefore the impact of each reserved matters development vary considerably. It is noted that some buildings with high energy demands have a more innovative approach to energy supply and with some consideration are able to propose lower

carbon technologies (for example, ground source heat pumps, photovoltaic panels) and thus have lower emissions to air.

- 8.65 The modelling undertaken for the buildings emissions has been based on a typical energy demand of 350 W/m<sup>2</sup>. Energy demand and use can often exceed the typical research centre energy demands, therefore Condition 9 is proposed to limit building emissions. This limit on emissions could be achieved by using different technologies/energy sources. Condition 9 will help to avoid additional and unavoidable emissions to air, above what has been predicted for the purposes of this application, and to ensure that energy requirements and how to manage them are considered early in the planning of the reserved matters applications.
- 8.66 The mitigation measures of restricting buildings emissions is required because there is a negative impact on air quality in an area of intense development with sensitive receptors (residential and hospital). The proposed development for this outline application cannot be considered in isolation. As the construction of the Energy Innovation Centre has been delayed which could have provided an energy supply for some of the buildings in CBC Phase 1, several individual independent energy type centres are already being installed locally. The cumulative impact of air pollution from various point sources has an impact at all levels, and any increases in air pollution have to be controlled so that the negative adverse impact on human health in this sensitive hospital area is minimised.
- 8.67 The City Council Scientific Officer has advised that the adverse impact of emissions on local air quality can be mitigated by increasing the combustion appliance flue heights to improve dispersion and dilution. Parameter Plan 2 - Maximum Building Heights allows for a flue height of up to 8 metres above the maximum building height. The Scientific Officer recommends that the heights are increased to the maximum permitted as this would be the most effective way to reduce the impact of new polluting sources and reduce the impact on public health and also to ensure that future development in the area is not prejudiced and the cumulative impact can be minimised. A balance has to be made between the visual impact of the development, the scale and massing and how this relates to the surrounding character and the public health impacts. The parameter plan would not preclude a flue being up to 8m in

height and each reserved matter application and the predicted emission levels and mitigation for each individual building will need to be considered at the reserved matter stage. The proposed height for any required flues can therefore be determined at the reserved matters stage.

- 8.68 The Scientific Officer has also recommended that the development should have the facility to be connected to the Energy Innovation Centre (EIC) on CBC Phase 1, which has been designed to provide flexibility and expansion capability to accommodate the future expansion of the Addenbrooke's hospital and biomedical campus, with the provision of space to allow for the provision of further plant should this be required to meet future energy needs. Whilst this would be achievable for some clinical uses of Phase 2, the proposals for the energy and waste will be bespoke for each building relating to the biomedical research uses and these will not be connected to the EIC. The clinical uses may be able to link into the proposed EIC and condition 12 is recommended to ensure that this is secured if achievable when the reserved matters come forward or to have potential to link up in the future.
- 8.69 It is also recommended by the Scientific Officer that more EV charge points for electrical vehicles are required. If the infrastructure for the future installation of charge points is established at the point of construction, future retrofit should have a lower cost and therefore a reduce barriers to implementation. Condition 12 is recommended to secure this additional provision. In ensuring that charging points for the use of electric vehicles is available in the future this can help minimise air pollutants in aiding the use of electric vehicles.
- 8.70 In order to ensure that acceptable air quality levels are achieved the installation of air quality monitoring stations are required to monitor NO<sub>2</sub> (Nitrogen Oxide), PM<sub>10</sub> and PM<sub>2.5</sub> (Particulates). This will confirm the actual levels of pollution in the areas, before construction commences and during the construction and operational phases. This can be secured through the Section 106 Agreement. Conditions 49 require full details of a mitigation scheme to address the impacts on air quality for each reserved matters phase and Condition 50 to ensure that these are implemented before first occupation.

## Air quality conclusion

- 8.71 The CBC Phase 2 site is within an area where there are sensitive receptors and air quality needs to be maintained at an acceptable level. The strategy to ensure that this is achieved, is to manage the levels by setting targets for each building that will come forward for reserved matters and ensure that the targets are adhered to. By ensuring low NO<sub>x</sub> boilers are used, suitable flue heights, monitoring the air quality in the area, and ensuring that sustainable modes of transport are encouraged through implementation of the Travel Plan and provision of EV charging points are all measures by which the air quality can be maintained at an acceptable level. With these measures in place the proposal is considered compliant with The National Planning Policy Framework (NPPF) and policy 4/14 of the Cambridge Local Plan.

## Soil and contamination

- 8.72 The relevant policy of the Local Plan is 4/13. This seeks to only allow development that does not lead to significant adverse effects on health, the environment and amenity. The policy allows for the use of appropriate mitigation through remediation, secured through conditions on planning permissions.
- 8.73 Within the Environmental Statement a Geotechnical and Geo-Environmental Desk Study Report has been provided. A review of historic records identified that the site has generally been undeveloped with the exception of a pumping station in the northwest corner of the site and a helicopter pad located towards the east of the site. A summary of Geo-Environmental Risks has been prepared and recommendations for further intrusive investigation proposed. The key objectives of the further investigation are acceptable in principle. Given the presence of a helipad on the site it is recommended that a photo-ionisation detector (PID) is used during the ground investigation. This will help to determine presence or not of solvents such as engine coolants/anti-freeze that may have spilt over time.
- 8.74 Advice from the City Environmental Health officers is that the report is silent on the findings of other site investigations in close proximity to the site where elevated levels of ground gas, primarily attributed to the geology of the area, have been

identified. In view of this the Risk Rating of Low given to the 'possible requirement for gas protection' is not considered to be appropriate. Furthermore, when the monitoring of ground gas is undertaken particular care and attention is required in the design, location and installation of the monitoring wells due the flooding potential already identified for the site. Conditions are therefore recommended for a contamination assessment and proposals for an intrusive investigation submitted, site investigation report and remediation strategy and completion report (Conditions 20, 21, 22, 23, 24 and 25).

- 8.75 With the recommended conditions the proposals will take account of any land contamination issues and therefore are considered compliant with Cambridge Local Plan (2006) policy 4/13.

### **Visual impact and Landscape**

- 8.76 The relevant policies of the Local Plan are 3/2, 3/4, 3/7, 3/11, 3/12, 3/13, 4/2, 4/3, 9/3, and 9/5. The policies provide a framework to assess the application in terms of its location on the southern edge of Cambridge and its potential impact on the setting and special character of Cambridge, including the retained Green Belt, the Green Corridor and open countryside.
- 8.77 The site is highly visible from public vantage points from the south and from the west. The character of the landscape to the south is well-managed farmland with large, open arable fields and scattered deciduous woodland on gently rolling countryside. The area has elevated views from the south which reveals almost the full extent of the city, including its historic core, with the Addenbrooke's site and CBC dominating the foreground. Views of the CBC Phase 2 site from the south include the backdrop of CBC Phase 1 development and Addenbrooke's Hospital. 150m to the south of CBC Phase 2 is a mature hedgerow containing recently planted supplementary planting delivered through the S.106 agreement for CBC Phase 1.
- 8.78 The design evolution of the proposed parameter plans and illustrative compliance study plans have been informed by the context of the site and its relationship with the existing development (and that consented) on CBC Phase 1 and the adjacent Bell School site to the east and the Green Belt to the

south. The restrictions that will be secured by the parameter plans take account of the visual impact and sensitive edge of the site to the Green Belt and the context of the site. The parameter plans for CBC Phase 1 have a step down to the southern boundary in building heights which this proposal will follow with lower building heights along the southern boundary.

- 8.79 In response to the Green Belt edge the parameter plans ensure that there will be breaks in the built form with expanses of open space extending north into the developable area to appear as 'green finger' extending in from the Green Belt. Parameter Plan 5 – Development Principles establishes that along the southern edge no less than 50% of the length of the southern development line shall be edged by landscape and that the landscape areas should extend to a minimum depth of 40 meters. The parameter also requires that two clear views across the site perpendicular to the development line should be maintained at a minimum width of 6 meters (see parameter plan 5). These parameters will ensure that the development will provide sufficient landscape to break up the edge to the Green belt and allow views in through (and out) of the development to the wider CBC site.
- 8.80 The Environmental Statement and Design and Access Statement for the application assesses the visual impact of the proposed development and a full landscape visual impact assessment (LVIA) has been carried out. From this assessment the parameter plans have evolved to ensure that the development will have an acceptable visual impact. The LVIA shows that the proposed buildings when seen from the south from with the Green Belt that they will be seen in the backdrop of the built area of Cambridge, mainly against CBC Phase1 and the Addenbrooke's Campus. As such the proposed buildings would be seen in context as part of the existing built form. With the landscape areas required by the parameter plans this will further soften the built form of the development facing the Green Belt.
- 8.81 The approach to how the landscape proposals could be developed within the parameter plans has been assessed in the Design and Access Statement. The northern part of the site would be more urban in character servicing the development in providing areas for building access and servicing, seating and cycle stands and formal arrangement of tree planting. The

southern part of the site extends the natural woodland character of the southern boundary with native planting and clusters of trees. The illustrative compliance study plans show two options of the form that the development could take. A series of landscape courtyards on the southern boundary are intended to help provide a more broken edge to the south and integrate landscape and built form. The Parameter Plans will help to deliver a clear and proportional relationship between built form and landscape.

8.82 The Landscape Officer remains concerned that there will be sufficient space along the southern boundary for the growth of large scale trees given the proposed access road, ditch and the easement for the rising main as this may limit the landscape mitigation of the buildings. There will be a strip of land retained to the south of indicative internal access road where a row of tree planting can be achieved. The details of this area and appropriate measures to ensure that suitable scaled trees can be secured will need to be considered at the reserved matters stage. The details will need to take account of restrictions such as utility routes to ensure that the scale of planting as proposed is implemented, especially along the southern boundary where the buildings will be closer to the southern edge. The larger landscaped areas between buildings as required through parameter plan 5 will ensure that sufficient landscape can be accommodated.

8.83 It is noted that the Main Modification new policy proposal to the South Cambridgeshire Local Plan could change the land to the south which would push the Green Belt boundary further away from the site boundary; however this has not been determined at the time of writing this report. It therefore has little material weight in concluding the recommendation for this application.

#### Building heights

8.84 Height restrictions on the consented parameter plans for CBC Phase 1 range from 8m to 36m with heights reducing towards the edges of the site. CBC Phase 2 site has a gradual slope south and is slightly lower than Phase 1. The building heights parameter plan for CBC Phase1 restricts building heights along the southern edge of Phase 1 to no greater than 26m (Above Ground Level). The proposed Parameter Plan for CBC Phase 2 proposes a maximum height of 46.5m Above Ordnance Datum

(AOD) which, when taking account of the ground levels, is 31m. The southern edge has a reduced maximum height restriction of 42.5m AOD which when taking account of ground levels is 27.5m. The eastern edge is reduced to 30.5m AOD which would restrict building heights to 15.5m.

- 8.85 Whilst the parameter plan maximum heights allow up to 31m the approximate building height of the Abcam building (subject to the full application to be determined at this committee) is 22 metres, well within the parameter plan heights. The Design and Access statement provides an assessment of the potential building heights in relation to the consented CBC Phase1 development. The sections demonstrate that the maximum building heights proposed for CBC Phase 2 would sit comfortably in context with the existing campus and reduce in height to the development edges.
- 8.86 The proposed parameter plan restrictions would also ensure that there would be a varied roofscape, with the changes in maximum build height allowances and breaks between buildings allowing landscape to penetrate into the site. The maximum build heights include plant and services. A flue height of up to 8m above the maximum build height is allowed above the maximum heights. As these will be occasional features and unable to be specified at outline stage the details of these will need to be given careful consideration at reserved matters stage taking into account the requirements for air quality control and balancing this with the visual impact.
- 8.87 Given the extent of the proposed landscaping, parameter heights and associated parameter text, it is considered that the proposed development can be suitably mitigated and would be acceptable in its context and would not have an undue adverse impact on the Green Belt or setting of Cambridge. The proposal is considered acceptable and in line with Local Plan policies 3/2, 3/4, 3/7, 3/11, 3/12, 3/13, 4/2, 4/3, 9/3, and 9/5.

#### Quality Panel

- 8.88 The Cambridgeshire Quality Panel comments on the proposed development relate to access for facilities for people working on Phase 2 and creating a suitable environment. The mix of uses proposed, as set out in paragraph 8.13, will help promote a sense of community on the campus to supplement those

ancillary uses already on CBC Phase 1. The connectivity of the site to the existing campus will be achieved by the proposed cycle and pedestrian links and the improvements that will be secured through the transport mitigation measures. The detail of the design of the buildings and landscape planting scale and pallet and sustainable drainage system details will come through at the reserved matters stage to ensure that an appropriate character of the site is achieved.

## **Ecology**

- 8.89 Policy 4/3 of the Local Plan states that development proposals should seek to enhance features of the landscape, which are of importance for amenity or nature conservation and that development resulting in adverse effects or loss of those features will not be permitted. Policy 4/6 seeks to safeguard sites of local conservation importance from adverse impacts, including Local Nature Reserves (LNR's). The policies allow for mitigation measures to minimise adverse effects, reinstatement or equivalent replacement of the feature affected and proposals for long-term management.
- 8.90 The Ecological Impact Assessment submitted as part of the application along with the Environmental Statement assesses the ecological impacts expected as a result of the development. The proposals will remove the habitat with low ecological value (amenity grassland under active management), but woodland habitats will be retained within the scheme and whilst this habitat is currently comprised on young planted trees, it has potential value to enhance through maturation. The scheme will enhance this habitat through woodland edge planting and appropriate management of the site. Extensive planting, including scrub, grassland and wildflower proposed will significantly enhance opportunities for wildlife in the local area.
- 8.91 No objections to the proposal are raised by Natural England or the Wildlife Trust, subject to the consideration of the impacts on the adjacent Red Cross Lane Drain City Wildlife Site and that opportunities are taken to incorporate features into the design that are beneficial to wildlife and measures to enhance the biodiversity of the site secured. The City Council Nature Conservation Officer also raises no objection to the scheme. There will be a landscape buffer as set out in Parameter Plan 4 along the eastern edge that will reduce the impact of shading by

buildings to the Red Cross Land Drain City Wildlife Site. Condition 37 is recommended for a Site Wide Ecological Conservation Management Plan to be submitted and approved to ensure that the development of the site conserves and enhances ecology. Condition 40 is also recommended to ensure that reserved matters applications demonstrate how the proposals accord with the aims and objectives of the approved site wide conservation management plan.

- 8.92 Subject to the imposition of conditions 36 and 37 to secure appropriate consideration of construction impact and conservation management, onsite ecological interests will be suitably safeguarded and the proposal is considered in accordance with Local Plan policies 4/3, 4/6 and 4/8.

### **Archaeology**

- 8.93 The relevant policy of the Local Plan is 4/9. The policies seek to ensure that potential archaeological remains on sites put forward for development are fully examined, appropriately preserved, recorded and archived.

- 8.94 The Environmental Statement considers the impacts on cultural heritage and archaeology. The County Council Archaeologist has advised that the site is located in a landscape of high archaeological potential. Archaeological investigations undertaken in advance of development to the immediate north have revealed extensive evidence for Bronze Age and Roman settlement and agriculture. The proposed development site has been subject to an archaeological evaluation, the results of which demonstrate that elements of the Roman landscape extend into the site. Significant archaeological remains survive in the area which would be severely damaged or destroyed by the proposed development. The County Council Archaeologist raises no objection to the development subject to a condition securing a programme of archaeological investigation. Condition 38 is therefore recommended.

### **Residential impact**

- 8.95 Local Plan Policy 3/12 requires new buildings to have a positive impact on their setting in terms of location on the site, height, scale and form. To the east of the site is the Bell School residential site currently under construction. The closest

building to the shared boundary is an apartment building to provide accommodation to the over 55s. At the time of the application submission this building had not been constructed; the applicant has in the Design and Access Statement considered the likely impact of the development on this building and assessed the potential in terms of overbearing and overlooking. The proposed parameter plans, to take account of this relationship has a reduced building height area as a triangular wedge along the eastern boundary restricting development height to in the order of 15m (see parameter plan 2). The landscape framework parameter plan 4 also has a zone along the eastern edge that must be characterised by tree planting and circulation route. Given these restrictions the relationship with Bell School site is considered acceptable.

8.96 Environmental Health Officers have also raised the potential impact of the eastern car park on residential amenity through noise and air quality pollution. The detailed design of the car park will need to ensure that mitigation of these impacts is taken into account. Concerns have also been raised regarding the relocation of the helipad which is currently located on the CBC Phase 2 site. As the Cambridge University Hospital NHS Foundation Trust is a joint applicant a replacement helipad will be delivered at an appropriate time. A new site will be subject to planning permission and will need to take account of noise and disturbance impacts on residential amenity.

8.97 The detailed design for the reserved matters of the proposed MSCP at the eastern edge of the site will need to take account of the parameter plan restrictions and take into account any potential impact on the residential amenity of the Bell School residents. It is considered that this can be achieved within the parameters set and the development is therefore acceptable in accordance with Local Plan policy 3/12.

### **Light Pollution**

8.98 The relevant policy of the Local Plan is 4/15. The policy seeks to ensure that lighting measures provide for public safety and crime prevention whilst also minimising light spillage to avoid impacts on residential amenity, wildlife, the landscape and setting of the City. The most sensitive receptors to light pollution will be from the Green Corridor and residential

properties to the east and west and from the Gog Magog Hills and public viewpoints from the south.

- 8.90 The most significant light pollution is most likely to emanate from the illumination of car parking areas and internally from rooms in buildings that are lit up at night. Any surface car parking is likely to be located within the northern part of the site and be partially screened from view by landscaping along the southern and eastern boundaries, however it will be necessary to ensure appropriate lighting of the vehicular circulation and surface parking areas. At the detailed reserved matters stage it will also be necessary to consider external façade lighting of eastern and southern facing building facades visible from the Green Corridor and public vantage points from the south. It is not possible to control the lighting of individual rooms within buildings.
- 8.91 Subject to the appropriate control over lighting impacts associated with the development of the site through the imposition of condition 14, the proposed development accords with Local Plan policy 4/15.

### **Flood risk and Sustainable drainage**

- 8.92 National Planning Policy Framework (NPPF) requires local planning authorities to consider flood risk and use opportunities offered by new development to reduce the causes and impacts of flooding. More efficient use and management of water, such as with the use of more efficient water related appliances within buildings and with incorporation of SUDS, should be sought.
- 8.93 The application is supported by a Flood Risk Assessment (FRA) and Surface Water Drainage Strategy. The proposed development area is shown to be within Flood Zone 3 on the Environment Agency flood risk map, however additional modelling carried out as part of the Phase 1 development the surrounding residential developments has shown that the site is within Flood Zone 1 and this has been agreed by the Environment Agency. The FRA considers the nature of residual flood risk at the site and advises that surface water runoff management strategy will ensure that there is no detrimental increase in downstream flood risk arising from the proposed development site for the design storm return periods to which the new drainage networks will be designed. The FRA

concludes that matters can be adequately mitigated/minimised through the application of 'best practice' design principles at the detailed design stage.

- 8.94 The proposals include a Sustainable Urban Drainage System (SuDS) as the development would result in additional surface water runoff. Existing ground conditions and high local water table restrict the potential for infiltration of surface water from the site and therefore surface water will be directed into an existing ditch to the south of the site. Surface water run-off from the site will be stored within a combination of geocellular attenuation features and above ground flood storage areas located within individual plots. Discharge from these on-plot attenuation features into the receiving system will be via pumped outfall. The attenuation features will be designed to accommodate the surface water run-off from all rainfall events up to and including the 1 in 100 year plus climate change. The surface water run-off will be discharged at the agreed run-off rates to the existing ditch course (the ditch which runs east-west to the south of the site) via a new primary swale and surface water pumping station arrangement.
- 8.95 The City Council Sustainable Drainage Engineer is satisfied that the surface water drainage strategy is consistent with the principles adopted for the wider CBC surface water drainage strategy in terms of discharge rates. There is also a commitment to provide a level of treatment to the water prior to it being discharged from the proposed site which is supported. The reserved matters applications will need to include detailed surface water drainage strategies which must be in accordance with the Flood Risk Assessment as submitted with this application to ensure that the principles of the strategy are delivered through the detailed design. The strategies will need to include details of the design, location and capacity of the SuDS features and need to include ownership, long-term management/maintenance and monitoring arrangements/responsibilities, including detailed calculations to demonstrate the capacity receiving surface water management features without the risk of flooding to land or buildings. The strategy should also demonstrate that the exceedance of the designed system has been considered through the provision of overland flow routes. Conditions 39 and 40 are recommended to secure these details.

8.96 Subject to these conditions the City Council's Sustainable Drainage officer has raised no objection to the proposed strategy and the Flood Risk and Drainage Strategy approach is therefore considered to comply with national policy in this respect.

### **Waste Management**

8.97 The relevant policies of the Local Plan are 3/12 and 4/13. The policies seek to ensure the incorporation of facilities for waste recycling, the use of sustainable construction processes and materials and the minimisation of pollution arising out of waste management.

8.98 A Site Waste Management Strategy has been submitted as part of the application. This sets out a framework to mitigate construction and operational waste arising from the development. Each reserved matters application will need to have its own individual and site specific waste management plan. This can be controlled through recommended condition 46 to ensure maximising waste re-use and recycling opportunities during construction is achieved.

8.99 For each reserved matters application the provision of adequate recycling and waste storage facilities for each proposed building will need to be provided. The Site Waste Management Strategy sets out the principles that should be met for the proposed uses and how each type of waste stream should be managed including; technical waste, clinical, non-infectious healthcare waste, chemical waste, gas cylinder waste, research and development waste, recyclables and food waste. As the quantum of clinical waste and operational waste arising from the commercial and clinical operations are not known at this stage a detailed waste strategy for each reserved matters will be required. Appropriate storage for waste streams will also need to be secured. Condition 47 is recommended.

8.100 The waste management strategy presented is acceptable and provides an acceptable strategy for handling of different waste streams which will be generated within the development and satisfies Policy 4/13 of the Local Plan.

## **Renewable energy and sustainability**

8.101 Policy 3/1 permits development if it meets the principles of sustainability. Policy 8/16 of the Local Plan requires major developments to provide at least 10% of predicted energy requirements on-site, from renewable energy sources. The SPD requires the submission of an Energy Statement that addresses these issues. The emerging Policy 27 in the Draft Local Plan requires development to take a holistic approach to sustainability and consider the approach to adaptation to climate change, carbon reduction, water management, site waste management and use of material in proposals.

8.102A Bespoke Sustainability Strategy has been submitted as part of the application which is based around the following topics:

- Building and strong and competitive economy for Cambridge;
- Promoting sustainable transport within Cambridge;
- Supporting modern communications technology in Cambridge;
- Delivering sustainable design;
- Conserving and protecting the historic environment of Cambridge;
- Creating a healthy place;
- The sustainable use of land in Cambridge;
- Tackling climate change in Cambridge; and
- Protecting and managing resources in Cambridge.

8.103 For each of these topics a series of targets are identified to ensure that sustainable design and construction and responding to our changing climate are integrated into the design of the future buildings on the CBC Phase 2 land. These targets include:

- The provision of 5 electric vehicle charging points to be included in the multi storey car park to encourage the take up of low emissions vehicles [ST05];
- Recognition that cycle parking needs to include provision for non-standard bikes including cargo bikes and trailers [ST04];
- The commitment to the delivery of sustainable design workshops at RIBA stages 1 (preparation and brief) and 3 (Developed Design) [DES04];
- The promotion of architectural responses to issues such as overheating [HEA01];
- The recognition of the role that multifunctional green

infrastructure has to play in well-designed developments [GB01]. With regards to the target related specifically to Flood Risk [CCFR09], it is recommended that reference be made in the target to the agreed discharge rate for the site which, from discussions with the Council's Sustainable Drainage Engineer is 2 litres/second/hectare;

- The identification of possible renewable energy technologies for future reserved matters applications, notably photovoltaics and air source heat pumps, and the requirement for all reserved matters applications to assess the feasibility and suitability of renewable and low carbon technologies [CCEN04]
- The requirement for each reserved matters application to target the BREEAM excellent requirements for energy/carbon reduction (ENE01), and where credits are not possible for this to be offset by the targeting of additional credits related to other aspects of the sustainability framework such as water [CCCA06];
- The commitment to monitoring the operation usage and associated carbon emissions of each building for the first 12 months of occupation, which will help to inform future building strategies [CCCA07].

8.104 The Council's Sustainability Officer (Design and Construction) has strongly recommended that all future reserved matters applications look to prioritise architectural approaches that 'design out' climate issues and to be more ambitious in relation to water use. All of the measures included in the strategy are supported. It will be important to ensure that all future reserved matters implement the bespoke framework as envisaged within the strategy itself, and therefore the use of a condition is considered appropriate in order to give the framework appropriate status. Condition 41 is therefore recommended.

8.105 It is recognised that that development of the CBC Phase 2 land will take place over a number of years, an issue that has been recognised by Quality Panel. To ensure that the targets in the framework do not get left behind by future iterations to Building Regulations or national and local planning policy, it is noted that the strategy reference is made to the framework being reviewed periodically during the lifetime of the development, a reference that is welcomed. It is recommended that as the development of the bespoke framework is supported in lieu of the outline application meeting current policy requirements related to renewable energy provision, a condition be used to secure the

review of the framework on a suggested three yearly basis. Condition 42 is recommended to achieve this aim.

8.106 The overall approach to sustainable design and construction and energy/carbon emissions and the development of a Bespoke Sustainability Strategy for the CBC Phase 2 site is supported and subject to the conditions recommended the proposal is in accordance with Local Plan policies 3/1, 8/16 and the Sustainable Design and Construction SPD 2007.

### **Public Art**

8.107 A Public Art Strategy has been submitted with the application. The public art strategy proposes to showcase contemporary arts and culture of the same intellectual and international standard as the scientific research, education and healthcare offers on the Campus. The focus of the strategy is to embed high profile projects within the fabric of the scheme which are developed in close partnership with the schemes design and their development teams. The CBC Public Art Steering group established in 2011 through the Phase 1 Public Art Strategy will have responsibility for overseeing the implementation of the Public Art Strategy.

8.108 The Public Art Strategy for CBC Phase 2 proposes a 2-strand cultural commission programme to embed contemporary arts practice into schemes conceptual development and physical infrastructure;

- Art & public realm – Quads, Plazas & Promenade
- Art & Architecture – the Multi Storey Car Park (MSCP west)

8.109 To ensure that the reserved matters satisfy the Local Plan policy requirements (3/7) for the delivery of public art a planning agreement will require;

- The submission and approval of a Public Art Strategy and Delivery Plan, to include detail of the art, community engagement, budget, and maintenance and insurance details.

8.110 Subject to this being secure the proposal is considered compliant with Cambridge Local Plan (2006) policies 3/7 and 10/1 and the Public Art SPD 2010.

## **Third Party Representations**

8.111 Third party representations have raised concern regarding traffic generated by the proposals. This has been addressed in the Transport Impacts section of the report and the mitigation measures that are sought through the Section 106 and conditions. Concerns raised regarding the visual impact have been addressed in Section 8.76 of the report. The publicity of the application was widened to include the occupants of the new developments to the south that may be affected by the proposals, namely Clay Farm. No further representations following these consultations have been received.

8.112 Great Shelford Parish Council and Trumpington Residents' Association have raised a number of objections to the proposals. These relate to transport, parking and traffic congestion. These issues have been addressed in the transport section of the report. Concern is also raised regarding the location of the proposed western car park and the bulk of the buildings. The visual impact and how the development will relate to the Green Belt have been addressed in section 8.76 of the report.

## **Other Issues**

8.113 The Fire and Rescue Service require that adequate provision is made for fire hydrants within the scheme. This can be secured by condition 43.

8.114 Network Rail has raised a number of points regarding the developer/applicant's responsibilities during construction and after completion of works that may affect Network Rail land. The advice has been passed to the applicant for consideration.

8.115 National Grid has raised no objection to the development subject to the diversion of the High Pressure Gas Main (HP). A Utilities Assessment has been provided with the application. There is an existing HP that runs across the site, part of which was diverted in 2011 to run parallel to Dame Mary Archer Way. The existing HP main runs across the site from approximately half way along Dame Mary Archer Way to the south east corner of the site. It is proposed that this is diverted to continue along Dame Mary Archer Way and along the south east boundary of the site, running parallel to the boundary with the Bell School

site. The details of the phasing of when this will be diverted are included in the proposed phasing condition 6 to ensure that this is considered in the phasing of future reserved matters parcels.

### **Planning Obligations (s106 Agreement)**

8.116 The Community Infrastructure Levy (CIL) Regulations 2010 have introduced the requirement for all local authorities to make an assessment of any planning obligation in relation to three tests. Each planning obligation needs to pass three statutory tests to make sure that it is

(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.

In bringing forward my recommendations in relation to the Planning Obligation for this development I have considered these requirements.

8.117 In line with the CIL Regulations, councils can pool no more than five S106 contributions towards the same project. The new 'pooling' restrictions were introduced from 6 April 2015 and relate to new S106 agreements. This means that all contributions now agreed by the city council must be for specific projects at particular locations, as opposed to generic infrastructure types within the city of Cambridge.

8.118 The development will bring about a number of impacts as set out in the report that need to be mitigated against. These are considered necessary and directly related to the development.

8.119 A full schedule of the Section 106 requirements is attached in Appendix B.

### Transport

8.120 In discussions with the Highway Authority the following transport mitigation measures are considered necessary and the applicants have agreed to secure these in principle. These are a combination of financial contributions towards schemes or relate to works that will be carried out by the developer.

8.121 The triggers for when these contributions are delivered will have to be agreed with the applicant to ensure that the necessary measures are implemented at the appropriate time to facilitate the development and to mitigate against the development as it is delivered.

8.122 Financial contributions are secured towards the following:

- A Sustainable Transport Investment Fund, if the agreed Travel Plan car driver mode share target has not been achieved.
- To cover cost of RTPI at a bus stop on Dame Mary Archer Way in the event that bus services are routed along it.
- A fund for recalibrating the Trumpington Road/ Long Road junction traffic signals M11 junction improvements.
- A fund monitoring of parking activity on a weekday within an agreed zone around the development site, prior to opening and every year thereafter Cambridge Guided Bus revenue.
- The cost of extending parking controls in the local area and the associated public consultation.
- Hills Rd City Deal Cycle Scheme.
- Western Orbital Bus Route Scheme.
- Queen Edith's Way/ Fendon Rd Cycle scheme.
- NCN 11 improvement scheme.
- Cycle improvements at Red Cross Lane access to campus.
- Park & Ride Expansion.
- Fund for recalibrating the Trumpington Road/Long Road junction traffic signals.

8.123 Other works to be carried out by the developer:

- Carry out improvement works to the crossing facilities for pedestrians and cyclists at the Addenbrooke's Road / Francis Crick Avenue / Dame Mary Archer Way three-arm roundabout.
- Deliver an updated Travel Plan (to include bus occupancy surveys).
- Carry out improvements to the A1301 Shelford Road /Addenbrooke's Road junction.
- Provide land within applicant control necessary to delivery connection at north east corner of site from local cycle route into Bell School site.

- Upgrade with signalised facilities the pedestrian and cyclist crossing facilities at the Dame Mary Archer Way / Papworth Access signalised 'T' junction.
- Provide a shelter at a bus stop on, on Dame Mary Archer Way in the event that bus services are routed along it.
- Provision of land within applicant control necessary to delivery connection at north east corner of site from local cycle route into Bell School site.
- Car parking provisions and controls.

### Public Art

8.124 Obligations relating to the Public Art strategy will require;

- o The submission and approval of a Public Art Strategy

### Air Quality Monitoring

8.125 Obligations relating to air quality will require;

- Installation of air quality monitoring stations to monitor NO<sub>2</sub> (Nitrogen Oxide), PM<sub>10</sub> and PM<sub>2.5</sub> (Particulates) before and during construction and during the operational phase.

8.126 Subject to the completion of a S106 planning obligation to secure the above it is considered that the proposal accords with Cambridge Local Plan (2006) policies 4/13, 8/2, 8/3, 8/4, 8/13, 9/5 and 10/1 and the Planning Obligation Strategy 2010.

### Planning Obligations Conclusion

8.127 It is considered that the planning obligation is necessary, directly related to the development and fairly and reasonably in scale and kind to the development and therefore the Planning Obligation passes the tests set by the Community Infrastructure Levy Regulations 2010.

## **9.0 CONCLUSION**

9.1 Through assessment of the application it is considered that the proposal complies with the approved development plan.

9.2 The points made in the representations received have been carefully considered, none of the points raised offer sufficient

reasoning or justification to part with the development plan in this instance.

## 10.0 RECOMMENDATION

**APPROVE** subject to completion of the s106 Agreement by 26 October 2016 and the following conditions:

### 1. Approved plans

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

Location Plan MP-A(10)110 P3

Site Plan MP-A(10)111 P1

Parameter Plan 1 - Land Use MP-A(10)101 P11

Parameter Plan 2 - Maximum building heights MP-A(10)102 P10

Parameter Plan 3 - Access MP-A(10)106 P8

Parameter Plan 4 - Open Space and Landscape Framework MP-A(10)103 P8

Parameter Plan 5 - Development Principles MP-A(10)108 P6

Reason: In the interests of good planning, for the avoidance of doubt and to facilitate any future application to the Local Planning Authority under Section 73 of the Town and Country Planning Act 1990.

### 2. Reserved matters

No development on any individual phase shall commence until approval of the details of the access, appearance, landscaping, layout and scale (hereinafter called the reserved matters) within that phase 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 (Cambridge Local Plan 2006 policies 3/2, 3/4, 3/7, 3/11, 3/12, 4/2, 4/3, 4/4, 9/3, 9/8).

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

Reason: In accordance with the requirements of section 51 of the Planning and Compulsory Purchase Act 2004.

4. The development of each phase pursuant to this outline consent shall begin before the expiration of two years from the date of the last reserved matter of that phase 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.

5. Application (s) for approval of all the reserved matters shall be made to the local planning authority before the expiration of six years 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.

6. Environmental Statement

The development shall be carried out in accordance with the mitigation measures as set out in the Environmental Statement.

Reason: To ensure that the development takes place in accordance with the principles and parameters contained within the Environmental Statement (Cambridge Local Plan policies 9/3, 9/8 and 10/1).

7. Phasing

Prior to or concurrently with the submission of the first of the reserved matters application(s) for residential development for the site, 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) the reserved matters parcels
- b) major distributor roads/routes within the site
- c) strategic foul surface water features and SUDS
- d) car parking

- e) diversion of high pressure gas main
- f) cycle and pedestrian links
- g) strategic electricity and telecommunications networks
- h) environmental mitigation measures and landscaped areas

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 timing contained within the phasing plan unless otherwise agreed in writing by the Local Planning Authority.

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 (Cambridge Local Plan 2006 policies 9/3, 9/8 and 10/1).

#### 8. Non-Road Mobile Machinery Plant

All Non-Road Mobile Machinery (NRMM) of net power between 37kW and 560 kW used during demolition or construction works or similar, shall meet the emissions standards in Stage IIIA of EU Directive 97/68/ EC (as amended) for both Nitrogen Oxides (NOx) and Particulate matter (PM). If Stage IIIA equipment is not available the requirement may be met using the following techniques:

- o Reorganisation of NRMM fleet
- o Replacing equipment
- o Retrofit abatement technologies
- o Re-engineering

All eligible NRMM shall meet the requirement above unless it can be demonstrated that the machinery is not available or that a comprehensive retrofit for both PM and NOx is not feasible. In this situation every effort should be made to use the least polluting equipment available including retrofitting technologies to reduce particulate emissions.

Developers will be required to provide a written statement of their commitment and ability to meet the requirement within their Construction and Demolition Management plans.

An inventory of all NRMM must be kept on site and all machinery should be regularly serviced and service logs kept on site for inspection. Records should be kept on site which details proof of emission limits for all equipment. This documentation should be made available to local authority officers as required.

Reason: To protect local air quality and human health by ensuring that the production of air pollutants such as nitrogen dioxide and particulate matter are kept to a minimum during the lifetime of the development, to contribute toward National Air quality Objectives in accordance with the National Planning Policy Framework (NPPF) and policy 4/14 of the Cambridge Local Plan (2006).

## 9. Energy Demand

The total energy demand to be supplied by locally polluting combustion sources (such as but not limited to natural gas, biogas, biodiesel, diesel and biomass) for buildings coming forward under each individual Reserved Matters application as part of the CBC Phase 2 development shall not exceed 350 W/m<sup>2</sup> (energy demand includes heating, ventilation, air conditioning, process energy requirements, including the normal regular operation of back up plant).

Reason: To protect local air quality and human health by ensuring that the production of air pollutants such as nitrogen dioxide and particulate matter are kept to a minimum during the lifetime of the development, to contribute toward National Air quality Objectives in accordance with the National Planning Policy Framework (NPPF) and policy 4/14 of the Cambridge Local Plan (2006).

## 10. Combustion Plant

Details of any combustion appliance / plant shall be submitted to and approved in writing by the local planning authority prior to its installation. These details shall include the selected plant (including size / rating, abatement equipment, technologies, location/ height of exhaust stack / flue and discharge velocity, NOx emissions standards, as appropriate), their emissions and maintenance schedule. Any boilers shall not have NOx emissions exceeding 40mg/kWh of dry NOx (at 0% O<sub>2</sub>). Any CHP plant shall not have NOx emissions exceeding 50mg/Nm<sup>2</sup> (at 5% O<sub>2</sub>) and a NOx emission test certificate or other evidence to demonstrate that every installed boiler meets the approved emissions standard shall be submitted to the local planning authority for its approval. The details shall demonstrate compliance with the agreed emissions limits and stack heights. The scheme as approved shall be fully carried out in accordance with the approved details before first occupation and shall be thereafter retained.

Reason: To protect local air quality and human health by ensuring that the production of air pollutants such as nitrogen dioxide and particulate matter are kept to a minimum during the lifetime of the development, to contribute toward National Air quality Objectives in accordance with the National Planning Policy Framework (NPPF) and policy 4/14 of the Cambridge Local Plan (2006).

## 11. Low NOx boilers

The development shall utilise low NOx boilers, i.e. appliances that meet a dry NOx emission rating of 40mg/kWh, to minimise emissions from the development that may impact on air quality. Details of these shall be provided within each reserved matters application. The development shall be carried out in accordance with the approved details.

Reason: To protect local air quality and human health by ensuring that the production of air pollutants such as nitrogen dioxide and particulate matter are kept to a minimum during the lifetime of the development, to contribute toward National Air quality Objectives in accordance with the National Planning Policy Framework (NPPF) and policy 4/14 of the Cambridge Local Plan (2006).

## 12. EV Charge Points

A minimum of 3% of car park spaces shall have electric vehicle charge points installed at the point of construction and a minimum of 15% of car parking spaces shall have infrastructure for the future provision of electric vehicles charge points.

Reason: To protect local air quality and human health by ensuring that the production of air pollutants such as nitrogen dioxide and particulate matter are kept to a minimum during the lifetime of the development, to contribute toward National Air quality Objectives in accordance with the National Planning Policy Framework (NPPF) and policy 4/14 of the Cambridge Local Plan (2006).

## 13. Link to Energy Innovation Centre

Within each reserved matters application for a clinical building for Cambridge University Hospitals NHS Foundation Trust a strategy for energy for that building shall be submitted. The strategy shall set out how the building will connect to, or allow for future connection to, any existing or future hospital energy centre unless otherwise demonstrated that it is technically and viably impractical or does not represent the most sustainable approach. The strategy shall include a plan showing the pipe route and connection point to the wider network, high level technical specification and date of implementation and connection. The development shall be carried out in accordance with the approved strategy.

Reason: To protect local air quality and human health by ensuring that the production of air pollutants such as nitrogen dioxide and particulate matter are kept to a minimum during the lifetime of the development, to contribute toward National Air quality Objectives in accordance with the National Planning Policy Framework (NPPF) and policy 4/14 of the Cambridge Local Plan (2006).

#### 14. Lighting

Prior to the commencement of use of an individual building plot an artificial lighting scheme shall be submitted to and approved in writing by the local planning authority. The scheme shall include details of any artificial lighting of the site and an artificial lighting impact assessment with predicted lighting levels at the nearest light sensitive receptor shall be. Artificial lighting on and off site must meet the Obtrusive Light Limitations for Exterior Lighting Installations contained within the Institute of Lighting Professionals Guidance Notes for the Reduction of Obtrusive Light - GN01:2011 for Environmental Zone E2 (or as superseded).

The approved lighting scheme shall be installed, retained and operated in accordance with the approved details and measures.

Reason: In the interests of visual amenity and to ensure that the development will not result in unacceptable light pollution (Cambridge Local Plan 2006 policies 3/11, 4/13 and 4/15).

#### 15. Plant Noise Insulation

Before the development/use hereby permitted is occupied for any approved reserved matters application, a scheme for the insulation of the plant in order to minimise the level of noise emanating from the plant shall be submitted to and approved in writing by the local planning authority and the scheme as approved shall be fully implemented before the use hereby permitted is commenced and retained thereafter.

Reason: To protect the amenity of nearby properties (Cambridge Local Plan 2006 policy 4/13).

#### 16. Extraction Equipment

Prior to the occupation/use of a building, details of equipment for the purpose of extraction and filtration of fumes, odours and/or hazardous material such as airbourne bacterial and viral organisms shall be submitted to and approved in writing by the local planning authority. The approved extraction/filtration scheme shall be installed before the use hereby permitted is commenced and shall thereafter be retained as such.

Reason: To protect the amenity of nearby properties.  
(Cambridge Local Plan 2006 policy 4/13)

## 17. Demolition and Construction Environmental Management Plan

Prior to the commencement of development, a site wide Demolition and Construction Environmental Management Plan (DCEMP) shall be submitted to and approved in writing by the local planning authority. The DCEMP shall include the consideration of the following aspects of demolition and construction:

- a) Demolition, 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.
- c) Construction/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. Prior notice and agreement procedures for works outside agreed limits and hours.
- d) Delivery times for construction/demolition purposes shall be carried out between 0800 to 1800 hours Monday to Friday, 0800 to 1300 hours on Saturdays and at no time on Sundays, bank or public holidays, unless otherwise agreed in writing by the local planning authority in advance.
- e) Soil Management Strategy.
- f) Noise method, monitoring and recording statements in accordance with the provisions of BS 5228-1: 2009.
- g) Maximum noise mitigation levels for construction equipment, plant and vehicles.
- h) Vibration method, monitoring and recording statements in accordance with the provisions of BS 5228-2: 2009.
- i) Maximum vibration levels.
- j) Dust management and wheel washing measures in accordance with the provisions of Control of dust and emissions during construction and demolition - supplementary planning guidance 2014
- k) Prohibition of the burning of waste on site during demolition/construction.

- l) Site lighting.
- m) Drainage control measures including the use of settling tanks, oil interceptors and bunds.
- n) Screening and hoarding details.
- o) Access and protection arrangements around the site for pedestrians, cyclists and other road users.
- p) Procedures for interference with public highways, including permanent and temporary realignment, diversions and road closures.
- q) External safety and information signing and notices.
- r) Consideration of sensitive receptors.
- s) Prior notice and agreement procedures for works outside agreed limits.
- t) Complaints procedures, including complaints response procedures.
- u) Membership of the Considerate Contractors Scheme.

Reason: To protect the amenity of the adjoining properties.  
Cambridge Local Plan 2006 policy 4/13.

## 18. Construction Method Statement

Prior to the commencement of development of any approved reserved matters phase, a Construction Method Statement (CMS) shall be submitted to and approved in writing by the local planning authority for that phase. The CMS shall demonstrate how the construction of the reserved matters approval accords with the construction criteria A-U of the Demolition and Construction Environmental Management Plan (DCEMP). In addition to criteria A-U, the CMS shall also provide a specific construction programme and plan identifying: the contractor site storage area/compound; screening and hoarding locations; 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 the 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.  
Cambridge Local Plan 2006 policy 4/13.

19. Contaminated Land Gas Risk

Should the contaminated land assessment and associated remedial strategy identify the presences of material with the potential to generate an identifiable ground gas risk for a building, prior to the commencement of development of that building, a specification for gas protection to be incorporated into the building design to prevent build-up of potentially asphyxiating gases shall be submitted to and approved in writing by the Local Planning Authority. The development shall be carried out in accordance with the approved details.

Reason: In order to safeguard the health and safety of future occupants of the buildings. (Cambridge Local Plan 2006, policy 4/13).

20. Prior to the commencement of the development (or phase of) or investigations required to assess the contamination of the site, the following information shall be submitted to and approved in writing by the local planning authority:

(a) Desk study to include:

-Detailed history of the site uses and surrounding area (including any use of radioactive materials)

-General environmental setting.

-Site investigation strategy based on the information identified in the desk study.

(b) A report setting set out what works/clearance of the site (if any) is required in order to effectively carry out site investigations.

Reason: To adequately categorise the site prior to the design of an appropriate investigation strategy in the interests of environmental and public safety in accordance with Cambridge Local Plan 2006 Policy 4/13.

21. Submission of site investigation report and remediation strategy:

Prior to the commencement of the development (or phase of) with the exception of works agreed under condition 20 and in accordance with the approved investigation strategy agreed under clause (b) of condition 20, the following shall be submitted to and approved in writing by the local planning authority:

(a) A site investigation report detailing all works that have been undertaken to determine the nature and extent of any contamination, including the results of the soil, gas and/or water analysis and subsequent risk assessment to any receptors

(b) A proposed remediation strategy detailing the works required in order to render harmless the identified contamination given the proposed end use of the site and surrounding environment including any controlled waters. The strategy shall include a schedule of the proposed remedial works setting out a timetable for all remedial measures that will be implemented.

Reason: To ensure that any contamination of the site is identified and appropriate remediation measures agreed in the interest of environmental and public safety in accordance with Cambridge Local Plan 2006 Policy 4/13.

22. Implementation of remediation

Prior to the first occupation of the development or (or each phase of the development where phased) the remediation strategy approved under clause (b) to condition 21 shall be fully implemented on site following the agreed schedule of works.

Reason: To ensure full mitigation through the agreed remediation measures in the interests of environmental and public safety in accordance with Cambridge Local Plan 2006 Policy 4/13.

23. Completion report

Prior to the first occupation of the development (or phase of) hereby approved the following shall be submitted to, and approved by the local planning authority.

(a) A completion report demonstrating that the approved remediation scheme as required by condition 21 and implemented under condition 22 has been undertaken and that the land has been remediated to a standard appropriate for the end use.

(b) Details of any post-remedial sampling and analysis (as defined in the approved material management plan) shall be included in the completion report along with all information concerning materials brought onto, used, and removed from the development. The information provided must demonstrate that the site has met the required clean-up criteria.

Thereafter, no works shall take place within the site such as to prejudice the effectiveness of the approved scheme of remediation.

Reason: To demonstrate that the site is suitable for approved use in the interests of environmental and public safety in accordance with Cambridge Local Plan 2006 Policy 4/13.

#### 24. Material Management Plan

Prior to importation or reuse of material for the development (or phase of) a Materials Management Plan (MMP) shall be submitted to and approved in writing by the Local Planning Authority. The MMP shall:

- a) Include details of the volumes and types of material proposed to be imported or reused on site
- b) Include details of the proposed source(s) of the imported or reused material
- c) Include details of the chemical testing for ALL material to be undertaken before placement onto the site.
- d) Include the results of the chemical testing which must show the material is suitable for use on the development
- e) Include confirmation of the chain of evidence to be kept during the materials movement, including material importation, reuse placement and removal from and to the development.

All works will be undertaken in accordance with the approved document.

Reason: To ensure that no unsuitable material is brought onto the site in the interest of environmental and public safety in accordance with Cambridge Local Plan 2006 policy 4/13.

## 25. Unexpected Contamination

If unexpected contamination is encountered whilst undertaking the development which has not previously been identified, works shall immediately cease on site until the Local Planning Authority has been notified and/or the additional contamination has been fully assessed and remediation approved following steps (a) and (b) of condition 21 above. The approved remediation shall then be fully implemented under condition 22.

Reason: To ensure that any unexpected contamination is rendered harmless in the interests of environmental and public safety in accordance with Cambridge Local Plan 2006 Policy 4/13.

## 26. Emergency or backup generator

Before the development/use hereby permitted is occupied, a scheme for the insulation of the emergency generator in order to minimise the level of noise emanating from the said generator shall be submitted to and approved in writing by the local planning authority. The scheme as approved shall be fully implemented before the use hereby permitted is commenced and shall thereafter be retained as such. The scheme shall include the following:

### (i) Generator - Use

The generator shall only be used in the event of mains power failure or in accordance with (ii) below. It shall not be used as an alternative supply in the event of disconnection from the mains supply following for example non-payment.

### (ii) Generator - Hours of Running for Maintenance

Running of the generator as part of routine maintenance and repair shall only take place for the length of time specified by the manufacturer between the hours of 8am - 6pm Monday to Friday, 9am -1pm Saturday and no time Sunday or Public Holidays.

Reason: To protect the amenity of nearby properties (Cambridge Local Plan 2006 policy 4/13).

## 27. Construction Demolition Noise

Prior to the commencement of the development hereby approved (including any pre-construction, demolition, enabling works or piling), the applicant shall submit a report in writing, regarding the demolition / construction noise and vibration impact associated with this development, for approval by the local authority. The report shall be in accordance with the provisions of BS 5228:2009 Code of Practice for noise and vibration control on construction and open sites and include full details of any piling and mitigation measures to be taken to protect local residents from noise and or vibration. Development shall be carried out in accordance with the approved details.

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

Reason: To protect the amenity of nearby properties (Cambridge Local Plan 2006 policy 4/13).

## 28. Piling

In the event of the foundations for the proposed development requiring piling, prior to the development taking place the applicant shall provide the local authority with a report / method statement for approval detailing the type of piling and mitigation measures to be taken to protect local residents from noise and/or vibration. Potential noise and vibration levels at the nearest noise sensitive locations shall be predicted in accordance with the provisions of BS 5228-1&2:2009 Code of Practice for noise and vibration control on construction and open sites. Development shall be carried out in accordance with the approved details.

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

Reason: To protect the amenity of the adjoining properties. (Cambridge Local Plan 2006 policy 4/13).

29. Dust

No development shall commence until a programme of measures to minimise the spread of airborne dust from the site during the demolition / construction period has been submitted to and approved in writing by the Local Planning Authority. The development shall be implemented in accordance with the approved scheme.

Reason: To protect the amenity of nearby properties Cambridge Local Plan 2006 policy 4/13.

30. Cycle and pedestrian facilities

Within each reserved matters application details of the cycle and pedestrian facilities along the northern site boundary on Dame Archer Way will be provided. The work/scheme shall be constructed and completed in accordance with the approved plans prior to occupation of each phase of development.

Reason: To ensure appropriate priority to sustainable transport modes (Cambridge Local Plan Policies 8/4 and 8/5).

31. Car Parking, On-Plot Research and Development

On-plot car parking provision for any biotech or biomedical research and development use shall be provided at a ratio of 1 space for every 80 square metres of gross floor area measured externally or any such ratio agreed in writing with the Local Planning Authority that provides a lesser amount of on-plot car parking provision.

Reason: To ensure that the development takes place in accordance with the principles and parameters contained within the Environmental Statement, to ensure the predicted impacts of vehicular movements are not exceeded and to ensure the proposal encourages sustainable modes of transport to and from the site (Cambridge Local Plan 2006 policies 8/10, 9/3, 9/5 and 10/1).

32. Car Parking, Clinical, Higher Education or Sui Generis (Employee)

Car parking provision for employees of any clinical research and treatment (D1 and/or clinical in-patient treatment) or higher education or sui generis medical research institute uses shall be provided at a ratio of 1 space for every 72 square metres of gross floor area measured externally or any such ratio agreed in writing with the Local Planning Authority that provides a lesser amount of car parking provision.

Reason: To ensure that the development takes place in accordance with the principles and parameters contained within the Environmental Statement, to ensure the predicted impacts of vehicular movements are not exceeded and to ensure the proposal encourages sustainable modes of transport to and from the site (Cambridge Local Plan 2006 policies 8/10 9/3, 9/5 and 10/1).

33. Car Parking, Clinical, Higher Education or Sui Generis (Patients and Visitors)

Car parking provision for patients and visitors for any clinical research and treatment (D1 and/or clinical in-patient treatment) or higher education or sui generis medical research institute uses shall be provided at a ratio of 1 space for every 773 square metres of gross floor area measured externally or any such ratio agreed in writing with the Local Planning Authority that provides a lesser amount of car parking provision.

Reason: To ensure that the development takes place in accordance with the principles and parameters contained within the Environmental Statement, to ensure the predicted impacts of vehicular movements are not exceeded and to ensure the proposal encourages sustainable modes of transport to and from the site (Cambridge Local Plan 2006 policies 8/10 9/3, 9/5 and 10/1).

34. Car Parking, Disabled Spaces

Disabled car parking spaces shall constitute at least 5% of the total number of spaces provided.

Reason: To ensure that the development provides sufficient disabled parking (Cambridge Local Plan 2006 policy 8/10).

### 35. Cycle Parking: Calculation of Spaces Required

Unless otherwise agreed in writing by the Local Planning Authority, the submission of any reserved matters application for approval of any building shall include a quantum of cycle parking provision that is equivalent to:

a) For staff provision, a level which will provide a total number of spaces which cater for at least 10% more than the existing modal share percentage of staff cycling to work as shown by the latest Addenbrooke's Annual Travel Survey. The final level of provision to be calculated shall assume that only 80% of staff will be on-site at any one time.

b) For patients and visitors, a level which will provide a total number of spaces which cater for at least 10% more than the existing modal share percentage of patients and visitors cycling to work as shown by the latest Addenbrooke's Annual Travel Survey. The final level of provision to be calculated shall assume that cycle parking spaces are used 3 times daily.

Reason: To ensure that the proposed level of cycling provision is appropriate to the nature of the proposed building and its use (Cambridge Local Plan 2006 policy 8/6).

### 36. Ecology and Biodiversity

Prior to or concurrently with the submission of the first of the reserved matters application for the site, a site wide Ecological Conservation Management Plan shall be submitted to the local planning authority for approval. The plan shall set out how the development will improve the net biodiversity of the site and shall accord with and give effect to the principles for such a Plan proposed in the Environmental Statement submitted with the application and include:

- a) Contractor responsibilities, procedures and requirements.
- b) Full details of appropriate habitat and species surveys (pre and post-construction), and reviews where necessary, to identify areas of importance to biodiversity.

- c) 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, protective fencing and phasing of works to ensure the provision of advanced habitat areas and minimise disturbance of existing features.
- d) 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 bird ledges; reptile hibernacula including small log and rubble piles; the creation of new aquatic habitats where possible within permanent areas of open water of minimum depth 0.5m; the provision of wetland margins and habitat islands; the management of grassland
- e) A summary work schedule table, confirming the relevant dates and/or periods that the prescriptions and protection measures shall be implemented or undertaken within.
- f) Monitoring/Environmental Audits carried out four times annually during the construction phase.
- g) Confirmation of suitably qualified personnel responsible for over-seeing implementation of the EMP commitments, such as an Ecological Clerk of Works, including a specification of role.
- h) Long-term maintenance, management and monitoring responsibilities for a period of 12 years to ensure an effective implementation of the Ecological Conservation Management Plan ensuring periodic review of the objectives and prescriptions.

No development shall commence until such time as the Ecological Conservation Management Plan 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 Ecological Conservation Management Plan.

Reason: To ensure that the development of the site conserves and enhances ecology (Cambridge Local Plan 2006 policies 4/3, 4/6, and 4/8).

### 37. ECMP Reserved matters

Any reserved matters application shall include an Ecological Conservation Management Plan Statement that demonstrates how it accords with the aims and objectives of the Ecological Conservation Management Plan. It shall detail which specific ecological 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 Ecological Conservation Management Plan Statement has been approved in writing by the Local Planning Authority. The ecological measures shall be carried out in accordance with the approved details and timing of delivery.

Reason: To ensure that the development of the site conserves and enhances ecology (Cambridge Local Plan 2006 policies 4/3, 4/6, and 4/8).

### 38. Archaeology

No development shall take place until the applicant, their agent, or successors in title, has secured the implementation of a programme of archaeological works in accordance with a written scheme of investigation which has been submitted by the applicant 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 (Cambridge Local Plan 2006 policy 4/9).

### 39. Drainage reserved matters

Any reserved matters application shall include a detailed surface water drainage strategy, which must be in accordance with the Cambridge Biomedical Campus Phase 2 Flood Risk Assessment, pursuant to the reserved matters site for which approval is sought.

The strategy shall include details of the design, location and capacity of such SuDS features and shall include ownership, long-term management/maintenance and monitoring arrangements/responsibilities, including detailed calculations to demonstrate the capacity receiving surface water management features without the risk of flooding to land or buildings. The strategy should also demonstrate that the exceedance 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: To ensure a satisfactory method of surface water drainage in accordance with the National Planning Policy Framework (NPPF).

### 40. Drainage maintenance

Details for the long term maintenance arrangements for any parts of the surface water drainage system which will not be adopted (including all SuDS features) to be submitted to and approved in writing by the Local Planning Authority prior to the first occupation of any building. The submitted details should identify runoff sub-catchments, SuDS components, control structures, flow routes and outfalls. In addition, the plan must clarify the access that is required to each surface water management component for maintenance purposes. The maintenance plan shall be carried out in full thereafter.

Reason: To ensure the satisfactory maintenance of unadopted drainage systems in accordance with the requirements of paragraphs 103 and 109 of the National Planning Policy Framework.

#### 41. Bespoke Sustainability Strategy

All future reserved matters applications shall be carried out in accordance with the approved Turley Associates Bespoke Sustainability Strategy (January 2016). Each application will be accompanied by a Sustainability Statement demonstrating how the targets set out in the Bespoke Sustainability Strategy have been met, unless otherwise agreed in writing by the local planning authority.

Reason: In the interests of reducing carbon dioxide emissions and promoting principles of sustainable construction and efficient use of buildings (Cambridge Local Plan 2006 policy 8/16 and Supplementary Planning Document Sustainable Design and Construction 2007).

#### 42. Review of the bespoke Sustainability Strategy

The Bespoke Sustainability Strategy and the targets therein, shall be reviewed on a three yearly basis from the date of approval of the outline application. The revised Strategy shall be submitted to and approved in writing by the local planning authority.

Reason: In the interests of reducing carbon dioxide emissions and promoting principles of sustainable construction and efficient use of buildings (Cambridge Local Plan 2006 policy 8/16 and Supplementary Planning Document Sustainable Design and Construction 2007).

#### 43. Fire hydrants

Development shall not commence on any reserved matters application within the built-up area until a scheme for the provision and location of fire hydrants to serve that reserved matters application site has been submitted to and approved by the local planning authority. No development shall take place other than in accordance with the approved scheme.

Reason: To ensure the provision of adequate water supply infrastructure to protect the safe living and working environment for all users and visitors (Cambridge Local Plan 2006 policies 3/7, 3/12 and 8/18).

44. Pedestrian cycle link to the NCN Route

No occupation of a building shall take place until a programme of works and details for the cycle connections in the south west corner of the site to the National Cycle Network route number 11 has been submitted to and approved in writing by the Local Planning Authority. The development shall be carried out in accordance with the approved details and phasing.

Reason: To ensure that the transport improvements are delivered. (Cambridge Local Plan 2006 policies 8/1, 8/2, 8/3, 8/4 and 8/5).

45. Foul water strategy

No development shall commence until a foul water strategy has been submitted to and approved in writing by the local planning authority. No buildings shall be occupied until the works have been carried out in accordance with the approved foul water strategy.

Reason: To prevent environmental and amenity problems arising from flooding in accordance with the requirements of the National Planning Policy Framework and Cambridge Local Plan 2006 Policy 8/18.

46. Detailed Waste Management and Minimisation Plan

Prior to the commencement of development of any reserved matters phase a Detailed Waste Management and Minimisation Plan (DWMMP) shall be submitted to and approved in writing by the local planning authority. The DWMMP shall include details of:

- a) Construction waste infrastructure including a construction material recycling facility to be in place during all phases of construction
- b) anticipated nature and volumes of waste and measures to ensure the maximisation of the reuse of waste.
- c) measures and protocols 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 a/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.

h) proposals for the management of municipal waste generated during the occupation phase of the development, to include the design and provision of permanent facilities e.g. internal and external segregation and storage of recyclables, non-recyclables and compostable material; access to storage and collection points by users and waste collection vehicles

The Detailed Waste Management and Minimisation Plan shall be implemented in accordance with the agreed details, unless otherwise agreed in writing by the Local Planning Authority.

Reason: In the interests of maximising waste re-use and recycling opportunities; and to comply with policy CS28 of the Cambridgeshire and Peterborough Minerals and Waste Core Strategy (2011); and to comply with the National Planning Policy for Waste October 2014; and Guidance for Local Planning Authorities on Implementing Planning Requirements of the European Union Waste Framework Directive (2008/98/EC), Department for Communities and Local Government, December 2012.

#### 47. Waste

Within reserved matters application full details of the on-site storage facilities for trade waste, including waste for recycling and the arrangements for the disposal of waste detailed shall be provided. The approved arrangements shall be retained thereafter unless alternative arrangements are agreed in writing by the local planning authority.

Reason: To protect the amenities of nearby residents/occupiers and in the interests of visual amenity in accordance with policies 4/13 and 6/10 of the Cambridge Local Plan 2006.

## 48. Landscape

Within any reserved matters application pursuant to this approval, the landscaping details required by condition 2 shall include detailed landscape designs and specifications for the associated reserved matters site. The landscape designs and specifications 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) 1:200 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.
- h) Ecological mitigation and bio-diversity enhancement proposals.

## Hard Landscaping

- i) Full details of all proposed methods of boundary treatment including details of all gates, fences, walls and other means of enclosure both within and around the edge of the site.
- j) Full details, including cross-sections, of all bridges and culverts.
- k) Utility routes, type and specification.
- l) The location and specification of minor artefacts and structures, including furniture, refuse or other storage units, signs and lighting columns/brackets.
- m) 1:200 plans (or at a scale otherwise agreed) including cross sections, of roads, paths and cycleways.
- n) Details of all hard surfacing materials (size, type and colour)

All hard landscaping shall be completed prior to the occupation/use of any part of the building(s) approved through the relevant reserved matters, unless otherwise agreed in writing by the local planning authority. All planting, seeding or turfing comprised in the approved details of soft landscaping, shall be carried out in the first planting and seeding seasons following the occupation of the buildings or completion of the development, whichever is the sooner, unless an alternative landscaping phasing plan is submitted to and approved in writing by the local planning authority.

Reason: In the interests of the amenity of future occupants and to ensure that a detailed approach to the development of the built-up area (or parcels thereof) is agreed to safeguard the setting and special character of Cambridge, the retained Green belt, surrounding open countryside and to ensure a suitable relationship and integration of the built development with its surroundings. (Cambridge Local Plan 2006 policies 3/2, 3/4, 3/7, 3/11, 3/12, 4/3, 9/3 and 9/5).

## 49. Air Quality

Prior to the commencement of development of any approved reserved matters phase, full details of a mitigation scheme to address the impacts on air quality arising from the development shall be submitted to, and approved in writing by the Local Planning Authority.

Reason: To protect human health in accordance with policy 4/14 of the Cambridge Local Plan (2006).

50. Air Quality Implementation

The Air Quality mitigation scheme approved under condition 49 shall be implemented in accordance with the approved details before the first occupation of each reserved matters phase and shall thereafter be retained as such.

Reason: To protect human health in accordance with policy 4/14 of the Cambridge Local Plan (2006).

**INFORMATIVE:** To satisfy the plant noise insulation condition, the rating level (in accordance with BS4142:2014) from all plant, equipment and vents etc (collectively) associated with this application should be less than or equal to the existing background level (L90) at the boundary of the premises subject to this application and having regard to noise sensitive premises.

Tonal/impulsive noise frequencies should be eliminated or at least considered in any assessment and should carry an additional correction in accordance with BS4142:2014. This is to prevent unreasonable noise disturbance to other premises. This requirement applies both during the day (0700 to 2300 hrs over any one hour period) and night time (2300 to 0700 hrs over any one 15 minute period).

It is recommended that the agent/applicant submits a noise prediction survey/report in accordance with the principles of BS4142: 2014 "Methods for rating and assessing industrial and commercial sound" or similar, concerning the effects on amenity rather than likelihood for complaints. Noise levels shall be predicted at the boundary having regard to neighbouring premises.

It is important to note that a full BS4142:2014 assessment is not required, only certain aspects to be incorporated into a noise assessment as described within this informative.

Such a survey / report should include: a large scale plan of the site in relation to neighbouring premises; noise sources and measurement / prediction points marked on plan; a list of noise sources; details of proposed noise sources / type of plant such as: number, location, sound power levels, noise frequency spectrums, noise directionality of plant, noise levels from duct intake or discharge points; details of noise mitigation measures (attenuation details of any intended enclosures, silencers or barriers); description of full noise calculation procedures; noise levels at a representative sample of noise sensitive locations and hours of operation.

Any report shall include raw measurement data so that conclusions may be thoroughly evaluated and calculations checked.

**INFORMATIVE:** Dust condition informative

To satisfy the condition requiring the submission of a program of measures to control airborne dust above, the applicant should have regard to:

-Council's Supplementary Planning Document - "Sustainable Design and Construction 2007":

<http://www.cambridge.gov.uk/public/docs/sustainable-design-and-construction-spd.pdf>

-Guidance on the assessment of dust from demolition and construction

[http://iaqm.co.uk/wp-content/uploads/guidance/iaqm\\_guidance\\_report\\_draft1.4.pdf](http://iaqm.co.uk/wp-content/uploads/guidance/iaqm_guidance_report_draft1.4.pdf)

-Control of dust and emissions during construction and demolition - supplementary planning guidance

[https://www.london.gov.uk/sites/default/files/Dust%20and%20Emissions%20SPG%208%20July%202014\\_0.pdf](https://www.london.gov.uk/sites/default/files/Dust%20and%20Emissions%20SPG%208%20July%202014_0.pdf)

**INFORMATIVE:** To satisfy the backup generator condition the noise level from the generator associated with this application should not raise the existing background level (L90) by more than 5 dB(A) at the boundary of the premises subject to this application and having regard to noise sensitive premises.

Note: Only in exceptional circumstances where the applicant has shown that the above cannot be achieved and the need is for real emergencies (e.g. hospital operating theatre or emergency services) the following standard may be used

To satisfy the emergency generator condition the noise level from the emergency generator associated with this application should not raise the existing background level (L90) by more than 10 dB(A) at the boundary of the premises subject to this application and having regard to noise sensitive premises.

**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 Contractor 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 Good Practice, in the interests of good neighbourliness. Information about the scheme can be obtained from The Considerate Contractor Project Officer in the Planning Department (Tel: 01223 457121).

**INFORMATIVE:** The site investigation, including relevant soil, soil gas, surface and groundwater sampling should be carried out by a suitably qualified and accredited consultant/contractor in accordance with a quality assured sampling, analysis methodology and relevant guidance. The Council has produced a guidance document to provide information to developers on how to deal with contaminated land. The document, 'Contaminated Land in Cambridge- Developers Guide' can be downloaded from the City Council website on <https://www.cambridge.gov.uk/land-pollution>. Hard copies can also be provided upon request

**INFORMATIVE:** Approved remediation works shall be carried out in full on site under a quality assurance scheme to demonstrate compliance with the proposed methodology and best practice guidance.

**INFORMATIVE:** Any material imported into the site shall be tested for a full suite of contaminants including metals and petroleum hydrocarbons prior to importation. Material imported for landscaping should be tested at a frequency of 1 sample every 20m<sup>3</sup> or one per lorry load, whichever is greater. Material imported for other purposes can be tested at a lower frequency (justification and prior approval for the adopted rate is required by the Local Authority). If the material originates from a clean source the developer should contact the Environmental Quality Growth Team for further advice.

**INFORMATIVE:** Electricity substations are known to emit electromagnetic fields. The Radiation Protection Agency has set standards for the release of such fields in relation to the nearest premises. The applicant should contact The National Grid EMF unit on 0845 702 3270 for advice regarding the electric/magnetic fields that are associated with electric substations.

**INFORMATIVE:** A premises licence may be required for this development in addition to any planning permission. A premises licence under the Licensing Act 2003 may be required to authorise:

- The supply of alcohol
- Regulated entertainment e.g.
- Music (Including bands, DJ's and juke boxes)
- Dancing
- The performing of plays
- Boxing or wrestling
- The showing of films
- Late Night Refreshment (The supply of hot food or drink between 23:00-05:00)

A separate licence may be required for activities involving gambling including poker and gaming machines.

The applicant is advised to contact The Licensing Team of Environmental Health at Cambridge City Council on telephone number (01223) 457899 or email [Licensing@cambridge.gov.uk](mailto:Licensing@cambridge.gov.uk) for further information.

**INFORMATIVE:** As the premises is intended to be run as a food business the applicant is reminded that under the Food Safety Act 1990 (as amended) the premises will need to be registered with Cambridge City Council. In order to avoid additional costs it is recommended that the applicant ensure that the kitchen, food preparation and food storage areas comply with food hygiene legislation, before construction starts. Contact the Commercial Team of the Refuse and Environmental Service at Cambridge City Council on telephone number (01223) 457890 for further information.

**INFORMATIVE:** Demolition/Construction noise/vibration report

The noise and vibration report should include:

a) An assessment of the significance of the noise impact due to the demolition/construction works and suitable methods for this are to be found in BS 5228:2009 Part 1 Annex E - Significance of noise effects. It is recommended that the ABC method detailed in E.3.2 be used unless works are likely to continue longer than a month then the 2-5 dB (A) change method should be used.

b) An assessment of the significance of the vibration impact due to the demolition/construction works and suitable methods for this are to be found in BS 5228:2009 Part 2 Annex B - Significance of vibration effects.

If piling is to be undertaken then full details of the proposed method to be used is required and this should be included in the noise and vibration reports detailed above.

Following the production of the above reports a monitoring protocol should be proposed for agreement with the Local Planning Authority. It will be expected that as a minimum spot checks to be undertaken on a regular basis at site boundaries nearest noise sensitive premises and longer term monitoring to be undertaken when:-

- Agreed target levels are likely to be exceeded
- Upon the receipt of substantiated complaints
- At the request of the Local Planning Authority / Environmental Health following any justified complaints.

Guidance on noise monitoring is given in BS 5228:2009 Part 1 Section 8.4 - Noise Control Targets and in Annex G - noise monitoring.

A procedure for seeking approval from the Local Planning Authority (LPA) in circumstances when demolition/construction works need to be carried out at time outside the permitted hours. This should incorporate a minimum notice period of 10 working days to the Local Planning Authority and 5 working days to neighbours to allow the Local Planning Authority to consider the application as necessary. For emergencies the Local Planning Authority should be notified but where this is not possible the Council's Out of Hours Noise service should be notified on 0300 303 3839.

Contact details for monitoring personnel, site manager including out of hours emergency telephone number should be provided.

**INFORMATIVE:** It is a requirement of the Clean Air Act 1993 that no furnace shall be installed in a building or in any fixed boiler or industrial plant unless notice of the proposal to install it has been given to the local authority. Details of any plant to be installed should be provided using the Chimney Height Calculation form (available here: <https://www.cambridge.gov.uk/chimney-height-approval>).

**INFORMATIVE:** Where detail relating to furnaces, boilers or industrial plant is required to be submitted, the form to calculate this information is available on-line at: <https://www.cambridge.gov.uk/chimney-height-approval>.

**INFORMATIVE:** In drawing up the written scheme of archaeological investigation the timetable for the investigation should be included within the details of the agreed scheme. A brief for the archaeological works can be obtained from the County Archaeology office.

**INFORMATIVE:** As this is an ordinary watercourse, any proposals to alter the flow regime may require a prior written consent under the Land Drainage Act 1991 and must be discussed with the Flood and Water Team at Cambridgeshire County Council. The County also has a culverting policy and culverting of large sections of watercourse is prohibited. The watercourse must be made a feature of the development. Please contact the team on [floodandwater@cambridgeshire.gov.uk](mailto:floodandwater@cambridgeshire.gov.uk) or tel: 01223 706140.

**INFORMATIVE:** An application to discharge trade effluent must be made to Anglian Water and must have been obtained before any discharge of trade effluent can be made to the public sewer. Anglian Water recommends that petrol/oil interceptors be fitted in all car parking/washing/repair facilities. Failure to enforce the effective use of such facilities could result in pollution of the local watercourse and may constitute an offence.