

<b>Application Number</b>	<b>14/1691/S73</b>	<b>Agenda Item</b>	
<b>Date Received</b>	24th October 2014	<b>Officer</b>	Mr John Evans
<b>Target Date</b>	23rd January 2015		
<b>Ward</b>	Queen Ediths		
<b>Site</b>	Land South Of Robinson Way West Of The Forvie Site Robinson Way Cambridge		
<b>Proposal</b>	S73 Application to vary condition 63 to read: no occupation of any clinical research and treatment (D1 and/or clinical in-patient treatment), or biomedical and biotech research and development (B1b), or higher education building under use classes B1 and D1, or sui generis medical research institute uses shall take place, until the off-site highway works at Hills Road/Fendon Road/Robinson Way roundabout and Queen Ediths Way/Mowbray Road/Fendon Road have been fully laid out and implemented in accordance with the approved schemes/plans set out in the Highway Design Report 140546/DS/KTP/01 dated Oct 2014		
<b>Applicant</b>	Cambridge Medipark Limited		

<p>SUMMARY</p>	<p>The development accords with the Development Plan for the following reasons:</p> <ol style="list-style-type: none"> <li>1. The amended pedestrian focused scheme significantly improves connectivity across the Addenbrooke's roundabout and compliments the shift in policy to aid more sustainable modes of transport.</li> <li>2. There will be a slight reduction in motor vehicle capacity for Addenbrooke's roundabout, however when balanced with the positive improvements to cycle and pedestrian connectivity this reduction is acceptable.</li> </ol>
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	<p>3. Contributions will be secured for Fendon Road roundabout which will enable the County Council to provide a comprehensive improvement to this roundabout.</p> <p>4. The proposed changes to <b>Condition 63</b> still achieve, albeit by different means, the reason for the original condition which was to safeguard highway safety and network capacity.</p>
RECOMMENDATION	APPROVAL

## 1.0 SITE DESCRIPTION/AREA CONTEXT

- 1.1 The main application site relates to the Cambridge Biomedical Campus (CBC), an irregular shaped area of agricultural land to the west and south west of the main Addenbrooke's campus covering a total area of 28.8 ha.
- 1.2 Outline permission was granted for a mix of uses on the site to secure the 2020 Vision in 2009. Reserved matters approval has recently been granted for Papworth Hospital and AstraZeneca projects within CBC.
- 1.3 **Condition 63** of the outline permission relates to three off site highway works, which are part of a suite of highway improvements required to mitigate the transport impact of the approved development and improve vehicle capacity and promote sustainable modes of transport. These locations are:
- Hills Road/Fendon Road/ Robinson Way roundabout. (Main Addenbrooke's roundabout).
  - Queen Ediths Way/ Mowbray Road/Fendon road. (Fendon Road roundabout).
  - Long road Trumpington high street interchange.

- 1.4 The improvements to the Long Road and Trumpington Road junction have already been implemented.
- 1.5 The application proposal therefore affects the following two roundabouts described below:

#### Addenbrooke's Roundabout

- 1.6 The existing junction at Addenbrooke's roundabout consists of a four arm roundabout, approached from Hills Road – north, Fendon Road, Hills Road – south and the entrance to Addenbrooke's hospital. (Referred to as Addenbrooke's roundabout in this report). The existing roundabout has two circulatory lanes and two lane approaches on each arm. The roundabout is part signalised for vehicular traffic. It has two advanced stop boxes and partial on road cycle lanes around the gyratory.

#### Fendon Round Roundabout

- 1.7 The existing Fendon Road roundabout is a four arm roundabout, approached from Queen Ediths Way – west, Mowbray Road, Queen Ediths Way- east and Fendon Road. (Referred to as 'Fendon Road roundabout' in this report'). This roundabout is not signalised and there are no controlled pedestrian or cycle facilities. Pedestrians and cyclists are able to use the controlled crossing.

#### Original outline permission

- 1.8 The original scheme secured by **Condition 63** required vehicle capacity enhancements to Addenbrooke's roundabout consisting of an additional lane on the gyratory. **Condition 63** required further enhancements to vehicle capacity for the Fendon Road roundabout.
- 1.9 Details of the roundabout upgrades are required prior to commencement. The new Papworth Hospital project is expected to commence in this month. To avoid delays to this project, a 7 month extension has been provided to agree the works required under **Condition 63** through the recent approval of the concurrent Section 73 application **14/2094/S73**, in March 2015.

## 2.0 THE PROPOSAL

- 2.1 Permission is sought for the variation of **Condition 63** to agree an alternative pedestrian focused design for the Addenbrooke's roundabout and the provision of contributions to upgrade the Fendon Road roundabout.

### Proposed changes to Addenbrooke's roundabout

- 2.2 The application proposal is a pedestrian focused scheme which introduces five signalised controlled crossing points around the connecting roads.
- 2.3 The pedestrian islands on the road arms will be slightly enlarged and graded for level access. Pedestrian barriers will be removed.
- 2.4 Advanced stop boxes (orange boxes for cyclists to position themselves ahead of waiting traffic) are also proposed. A section of on road cycle lane is provided to the eastern most carriageway. The footway surrounding the roundabout will be made dual use for pedestrians and cyclists.
- 2.5 The original submission had a 'wishbone' pedestrian/cycleway running through the centre of the roundabout connecting crossings. This element has been removed from the amended proposal following public consultation and views from the highway authority.

### Fendon Road Roundabout

- 2.6 Improvements to this roundabout have been allocated through the S106 Southern Corridor Area Transport Plan scheme (SCATP). The County Council have therefore indicated that to ensure coordinated, cost effective improvements to this roundabout the applicant should make a financial contribution.
- 2.7 Given the above, the upgrades to the Fendon Road roundabout originally proposed in the application submission have been withdrawn.

- 2.8 To secure these changes **condition 63** will be amended as follows:

*No occupation of any floorspace for clinical research and treatment (D1 and/or clinical in-patient treatment), or biomedical and biotech research and development (B1b) or higher education building under use classes B1 and D1 or sui generis medical research institute uses shall take place until:*

*(i) the offsite highways works at Hills Road/Fendon Road/Robinson Way shall have been fully laid out and implemented in accordance the approved schemes/plans in the Highway Design Report prepared by Lanmoor Consulting dated March 2015, reference 140546/DS/KTP/01 Rev C.*

*(ii) the offsite highways works to improve pedestrian connectivity at the Queen Ediths Way/Mowbray Road/Fendon Road have been facilitated. A scheme shall be agreed by the Local Planning Authority within 24 months, and the work carried in accordance with the agreed scheme within 36 months of the date of this permission.*

*Reason: In order to safeguard highway safety and network capacity (Cambridge Local Plan 2006 policies 3/7, 8/2 and 8/11).*

- 2.9 The application as submitted was accompanied by the following supporting information:

1. Planning Statement
2. Highway Design Report October 2014

### **Amended plans and Additional Information**

- 2.10 The following amendments are proposed which reflect the description of proposal above:

#### Additional information

- Summary report of consultation event held on 28 January 2014.
- Commitment to securing funding for the Fendon Road roundabout.

- The originally proposed scheme for Fendon Road roundabout is no longer proposed in this application. A revised scheme is to be re-designed and re-consulted upon by Cambridgeshire County Council at a later date.
- Counsel opinion on the legal mechanism for securing funding for the Fendon Road roundabout.
- Revised Highway Design Report dated March 2015.

#### Design Changes to Addenbrooke's roundabout

- Amended layout plan for the Addenbrooke's roundabout providing:
- Removal of wishbone pathway across the centre of the roundabout.
- Additional crossing points signalised to assist crossing safely.
- Introduction of dual use footpaths around the Addenbrooke's roundabout.
- A cycle 'off slip' added towards Addenbrooke's roundabout from Fendon Road.
- Partial on carriageway cycle lanes reinstated and four cycle advance stop boxes added.
- Pedestrian islands graded to provide level access.
- Additional street scene visuals and supporting technical calculations.
- Revised Highway Design Report.

### **3.0 SITE HISTORY**

<b>Reference</b>	<b>Description</b>	<b>Outcome</b>
06/0796/OUT	Outline application for up to 215,000sqm floorspace (excluding plant areas) comprising 60,000sqm of clinical research and treatment (D1), 115,000sqm	Approved

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 25,000sqm of either clinical research and treatment (D1) or higher education or sui generis medical research institute uses, and including related support activities within use classes A1, A3, B1 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. All matters are reserved for subsequent approval.

14/2094/S73 Section 73 to vary condition 63 to extend the timeframe for submission and agreement of Off-Site Highway Works. Approved

#### **4.0 PUBLICITY**

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

#### **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 Plan 2006	Local	3/4 3/11 4/4 4/13 8/2 8/3 8/4

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> <p>Ministerial Statement (1 December 2014) by Brandon Lewis Minister of State for Housing and Planning (Department of Communities and Local Government)</p>
	<p><u>City Wide Guidance</u></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>
County Guidance	Transport Strategy for Cambridge and South Cambridgeshire
Background papers and other relevant documents	Equality Impact Assessment

#### 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 the following policies in the emerging Local Plan are of relevance:

Policy 16: Cambridge Biomedical Campus

Policy 80: Supporting sustainable access to development

Policy 81: Mitigating the transport impact of development

## 6.0 CONSULTATIONS

### **Cambridgeshire County Council (Transport)**

**(Full Consultation response is attached as APPENDIX A)**

#### Summary of response on application as submitted

- 6.1 The original scheme proposed for the Addenbrooke's access gyratory on Hills Road was a scheme intended to provide additional highway capacity.
- 6.2 The City Deal identifies Addenbrooke's roundabout as being subject to a scheme in the second tranche of works.
- 6.3 In the intervening years since the outline permission there have been significant changes to the transport policy in the NPPF and Transport Strategy for Cambridge and South Cambridgeshire. The approach to dealing with traffic from developments has also changed. The committed growth levels of traffic predicted in the outline Transport Assessment have not occurred.

- 6.4 Recent policies at national and local level have concentrated more on facilitating a modal shift away from the private car to pedestrian, cycle and public transport based trips.
- 6.5 With this in mind the Highway Authority requested the developer to look again at the junction design. The resultant revised scheme, which is acceptable to the Highway Authority, provides improved pedestrian connectivity across the junction. There are also benefits, albeit more limited, for cyclists.
- 6.6 Minor changes to figures required on the Addenbrooke's gyratory junction modelling. Four minor changes required to the detailed design of the roundabout.

#### Summary of comments on amended plans

- 6.7 The proposed amended design of Addenbrooke's roundabout and provision of contributions for Fendon Road roundabout is supported.
- 6.8 Wishbone path: The Highway Authority would consider removal of this facility acceptable.
- 6.9 The provision of a signalised crossing on the inbound arm of the access to Addenbrooke's on the amended plans provides additional controlled linkage for pedestrians and cyclists.
- 6.10 Whilst the provision for on-carriageway cyclists is not improved greatly by the proposals, the current scheme is seen as providing those improvements that can reasonably and practically be provided within the scope of developers works whilst not resulting in significant disincentive to cyclists, as may have resulted from implementation of the original scheme.
- 6.11 The scheme as proposed enhances connectivity, particularly for pedestrians, which feeds into the toolkit for achieving aspirations of the developing City Deal strategy.

#### Summary of comments for Fendon Road roundabout

- 6.12 Members of both the City and County Council and local residents have agreed to develop a scheme to improve connectivity in the area around the junction through the SCATP.

- 6.13 With a resolution by the Council to progress a scheme in the immediate future it is considered more appropriate for the developer to provide a financial contribution towards the wider scheme, avoiding wasted time, cost and disruption, whilst contributing to wider benefits.

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

#### Comments on Application as Submitted

- 6.14 The proposal for this roundabout provides some improvement at some arms of the roundabout for pedestrians but it does not address many of the safety and convenience issues for vulnerable users travelling to and through the area. The roundabout will remain a significant barrier to those considering cycling and walking to Addenbrooke's.
- 6.15 As part of the Transport Strategy for Cambridge and South Cambridgeshire, and as included in schemes to be funded through the City Deal, bus priority measures are proposed between Addenbrooke's and Newmarket Road, around the ring road and this may impact on this junction. Extending the dutch-style cycleways approved for Hills Road further south to this junction and beyond may also be considered in the future.
- 6.16 It is important to consider, therefore, the future of this junction and ensure that any works provide the best improvements for vulnerable users possible in the timescales available and, at a minimum, do not impede any future plans for the roundabout.

#### Comments on application as amended

- 6.17 Amendments supported.

### **Environment Agency**

- 6.18 No objections.

## **Cambridge City Council Access Officer**

### Comments on application as Submitted

- 6.19 Priority in the scheme is for disabled pedestrians. The Equality Impact Assessment shows the scheme will make improvements for vulnerable users navigating the junction.
- 6.20 Not many pedestrians use the Addenbrooke's roundabout as a crossing point. Those coming south along Hills Road would probably cross to the hospital side well before the roundabout. The scheme does not solve the poor overall connectivity.
- 6.21 Support for the puffin or toucan crossings even if this results in losing cycle reservoirs.

### Comments on application as amended

- 6.22 Application as amended is supported. Removing the central wishbone pathway is acceptable because the signalised crossing helps vulnerable users.
- 6.23 Additional crossing point to Hills Road south supported.
- 6.24 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**

### Comments on the application as submitted

- 7.1 Councillor Tim Moore has commented on this application. His comments are set out below:
- Pedestrian access improvements welcomed, particular for those approaching from Fendon Road.
  - The proposed use of the centre of the Addenbrookes roundabout will not suit everyone, especially the more vulnerable and has significant implications in terms of adjusting its internal routes to accommodate pedestrian traffic.
  - The roundabout is dangerous to all who walk or cycle near to it and most people go out of their way to avoid it.
  - The proposed lights must be sensitive to slower moving people.

- The crossing points should have tactile paving and be free from trip hazards.
- Other wider access problems not addressed in this application.
- Cycle traffic passing through the roundabout needs the relative safety of the cycle lanes which are removed from this submission.
- The Fendon Road roundabout does not have a separate path which is considered dangerous.

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

8 Kinnaird Way  
 269 Hills Road  
 255 Hills Road  
 292a Hills Road  
 301 Hills Road  
 317 Hills Road  
 5 Fendon Road  
 6 Fendon Road  
 7 Fendon Road  
 10 Fendon Road  
 44 Fendon Road  
 1 Elm Road  
 25 Nightingale Avenue  
 23 Rathmore Road  
 27 Rathmore Road  
 23 Violet Close  
 University Medical Library, Addenbrooke's  
 Mitochondrial Biology Unit, Medical Research Council  
 Whitlocks, High Street, Trumpington

7.3 The representations can be summarised as follows:

*Comments on application presentation*

- The application submission is unclear.
- The works need to be explained with clear visuals.
- Poor Consultation.

*Principle of development*

- The general attempt to improve roundabout is supported.
- Support not implementing vehicle capacity improvements.

- The rationale for not increasing vehicle capacity on the Addenbrooke's roundabout is unclear.
- What are the wider plans for pedestrian and cycle access with the growth of CBC.
- The layout of the Perne Road improvements should inform the design.

#### *Comments on technical matters*

- The proposed Fendon Road crossing is located too far from the roundabout to be used.
- The proposed Fendon Road crossing should be located further to the north east closer to Fendon Road roundabout.
- The proposed Fendon Road crossing would conflict with the driveways of adjacent residential properties.
- The proposed Fendon Road crossing is not cost effective.
- The proposed Fendon Road is dangerous because vehicles are accelerating away from the roundabout.
- There is too much vegetation on the Addenbrooke's roundabout which inhibits visibility.
- The existing crossing points have steep gradients which is difficult for wheelchair users.

#### *Cycle related concerns*

- It is dangerous to stack up cyclists left of traffic a junction.
- This is a missed opportunity to improve pedestrian and cyclist safety at the Fendon Road/Queen Ediths Way/Mowbray Road roundabout.
- The pavement outside 307 Hills Road is not wide enough to accommodate cyclists and pedestrians.
- Object to any loss of cycle space around the roundabout.

#### *Trees*

- Any lost trees should be replaced.
- Hills Road should be improved with landscaping.

#### *Wider access related issues*

- The guided busway route out the back of the proposed research quarter should be improved with adequate lighting.

- There is great need to have a controlled crossing either in Fendon Road at the Queen Ediths Way end or in Mowbray Road as well as the proposed crossing in Queen Ediths Way.
- This need is generated by the location of local nursery, primary, secondary schools, colleges and other services.
- Permanent lights at the end of Fendon Road: traffic already waits in Fendon Road when approaching the junction with Hills Road and Robinson Way.
- A scheme is needed to improve cycling further to the south on Hills Road.

### *Other Issues*

- Additional traffic fumes may result from idling engines waiting for the Fendon Road crossing point.

### Cambridge University Hospitals: NHS Foundation Trust

- There are no safe pedestrian crossings on or close to the Hills Road/Fendon Road/Addenbrookes entrance.
- Attempts welcomed to improve the safety of this complex and heavily used junction.
- There are currently no safe pedestrian crossings on or close to the Hills Road/Fendon Road/Robinson Way entrance.
- The proposed wishbone path through the centre of the roundabout does not cater for all the access roads.
- Pedestrians are directed towards the footpath between bus entry and exit points without provision of a safe crossing point.
- Currently there are only two advance cycle stop boxes. The proposal removes some of the on road cycle lanes which is of concern.
- The proposals are not the most effective use of funds to deal with the issues.

### Camsight

- Improvements to pedestrian connectivity welcomed.
- Signalised crossing points need to be sensitive to those who need more time to cross.
- It would be helpful if the cycle routes are kept as clear as possible from the footway.

## Comments on Application as Amended

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

31 Hinton Road  
15 Shelly Garden

7.5 The representations can be summarised as follows:

- The scheme does not reduce the overall hostility of the junction for cyclists at the entrance to Addenbrooke's.
- Advanced stop lines on the roundabout do nothing to improve the situation.
- There has been a general lack of consultation.
- Dual use paths are unsatisfactory.
- A more ambitious scheme is required.

### Cambridge University Hospitals: NHS Foundation Trust

- The updated design addresses issues pedestrians face in order to cross the linked routes.
- The new design establishes safe crossing routes reducing the issues pedestrians face when using this junction on their journey.
- Support that the new design makes best use of existing traffic light infrastructure whilst creating new crossing points where there are none at present.
- These are much needed and appreciated improvements.
- The position of the Fendon Road junction is unfortunate but it is understood there would be an adverse effect on vehicle capacity if it were sited closer to Addenbrooke's roundabout.
- The overall design of the junction does need updating and it is hoped this will be included in the City Deal or similar funding in the coming years.
- Until this time, the proposed crossing measures suitably address a number of issues faced when using this junction and are the most suitable resolution to the discharge of the current planning condition.

7.6 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. Context of site, design and external spaces
3. Disabled access
4. Residential amenity
5. Third party representations

### Principle of Development

#### Purpose of Condition 63 – Mitigating impact of CBC

8.2 The original intention of the highway upgrades secured through **Condition 63** was to increase vehicle capacity deemed necessary to mitigate the impact of the proposed CBC development. Since the grant of approval, and the drafting of **Condition 63**, the County Highways Authority requirements have changed and improvements to pedestrian connectivity is considered the greater priority. The revised approach is because of three reasons:

8.3 Firstly, the estimated committed growth set out in the original Transport Assessment since 2004 has not been fully realised in accordance with those originally projected figures. This means that the extra lane on the Addenbrooke's roundabout gyratory is no longer required to mitigate the impact of this development. This is evidenced by traffic monitoring<sup>1</sup> undertaken by the County Council which shows that, since 2004, there has been a 13% decline in car movements across the River Cam screenline, and an increase of just 2% in car movements across all of the main radial routes into Cambridge despite continued housing and economic growth in the sub-region.

8.4 Secondly, there has been a greater modal shift from car based journeys to sustainable modes within CBC. The revised junction modelling data takes account of the employee modal shift which is linked to the evolution and future compliance with the site wide Addenbrooke's Travel Plan and which will sit

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<sup>1</sup> *Traffic Monitoring Report 2013 Cambridgeshire County Council*

above individual travel plans for occupiers such as Papworth Hospital and AstraZeneca. The 2013 travel survey has continued to show a reduction in staff using the private car and an increase in sustainable modes of transport. The modal share for walking and cycling in 2013 was 31% for staff which has increased from 22% in 2005 and 27% in 2009, which further evidences that the additional vehicular lane on the Addenbrooke's gyratory within the original consent is no longer required.

- 8.5 Thirdly, recent policies at national and local level now strongly promote a modal shift away from the private car to pedestrian, cycle and public transport based trips, or linked trips using these modes, such as park and ride or park and cycle. This is also the broad principle of the strategy within the developing City Deal. The National Planning Policy Guidance (paragraph 6) states that Travel Plans, Transport Assessments and Statements should reduce the need for new development to increase existing road capacity or provide new roads.
- 8.6 This policy position is also rehearsed in the 2014 Transport Strategy for Cambridge and South Cambridgeshire and the emerging 2014 Cambridge Local Plan. This shift in policy emphasis on sustainable travel modes and transport impact mitigation justifies the revised pedestrian focused design improvements now proposed.
- 8.7 In addition to the above three reasons, increases in capacity locally have been found to encourage additional car based trips, and that capacity has often disappeared in advance of the full development generation appearing. Furthermore, by allowing local traffic growth at specific locations, this can exacerbate existing problems elsewhere on the network. This is a phenomenon that has been observed to follow implementation of many schemes, nationally, and verified by research which contributes to the overall officer view that the originally proposed extra lane on the gyratory will not provide any lasting vehicular capacity in the short to medium term.
- 8.8 The original scheme, when considered against this approach, would not provide any pedestrian connectivity improvements and would be likely to further deter cyclists from using what is, already, a challenging junction.

8.9 The County Council have already carried out the original works to the Long road Trumpington High Street interchange as required by **Condition 63**.

Wider strategic projects

8.10 There are two strategic projects which may affect both Addenbrookes and Fendon Road roundabouts in the medium and /or long term:

1) S106 funding from the SCATP has been allocated for the Fendon Road roundabout.

2) The City Deal (phase 2) may enable a more comprehensive redesign of the Addenbrookes roundabout as part of wider treatment of this corridor.

8.11 Given that funding is now allocated for an improvement scheme for the Fendon Road roundabout, all parties consider a financial contribution should now be provided to facilitate these works. This will be secured through the revised wording of **Condition 63** attached to this permission, which is linked to a Deed offered by the applicant. The Council's solicitor is considering the precise wording of **Condition 63** to ensure it fulfils all of the tests of reasonableness and precision. I will provide an update on the pre Committee amendment sheet of any alterations which are deemed necessary.

8.12 The facilitation of works through a Deed is not considered appropriate for the Addenbrooke's roundabout because there is no committed scheme in the short to medium term. The roundabout is only identified as a phase 2 project in City Deal, which has an uncertain time frame. On this basis, the application proposal is considered an appropriate intermediate measure to enhance pedestrian connectivity without major reconfiguration of the junction.

8.13 The CBC development triggered a number of transport improvements, of which the two roundabout upgrades formed a small part. These included the Addenbrooke's Access Road, contributions to the Cambridgeshire Guided Busway (including revenue contributions), SCATP payments, improvements to the M11 (Junction 11) as well as the requirement for travel plans,

limiting through traffic, parking surveys and implementation of parking controls (if required).

- 8.14 It is considered that the principle of a pedestrian focused scheme for the Addenbrooke's roundabout and the provision of contributions to facilitate works to Fendon Road roundabout is acceptable and in accordance with Cambridge Local Plan policies 3/4 and 8/4 and guidance contained within the Framework.

### **Pedestrian, Cycle and Vehicle Connectivity**

- 8.15 The key issue is the design issue is the detailed design and function of the Addenbrooke's roundabout upgrades and the impact on different users.

#### Pedestrian connectivity

- 8.16 The application proposal is a pedestrian focused scheme. The revised proposal provides signals to three of the roundabout arms and a new crossing on Fendon Road which will allow the junction to be crossed more safely from all directions. In taking a pedestrian focused approach, the proposal accords with the key principles for walking and cycling accessibility set out in Local Plan policy 8/4 and paragraph 35 of the Framework.
- 8.17 Concerns raised regarding the distance along Fendon Road at which the Toucan crossing is provided are noted. Its position approximately 40m from the main roundabout is not optimum for convenience of walking around the roundabout. However, on balance its location is an appropriate compromise given the need for such a crossing to increase all round connectivity and the negative impact on vehicle capacity if the crossing point was moved closer to the roundabout. The proposed location avoids conflict with existing driveways and provides sufficient reaction time for drivers exiting the gyratory to stop. Its proposed position does not present a risk to highway safety.
- 8.18 The amended proposal provides an additional Toucan crossing on the Hills Road south exit. The junction modelling submitted shows this results in a reduction in vehicle capacity in the region of 4%. This is considered acceptable when weighed against the benefit to pedestrian connectivity gained from the additional crossing point. County Officers have found there to be some

minor discrepancies in the calculations which underpin the traffic flows entered into the junction modelling assessment and have requested some further modelling. An update to Committee will be provided on the amendment sheet. This notwithstanding, an appropriate weight is given to sustainable travel modes over the car, in accordance with part a of Cambridge Local Plan 2006 policy 8/4.

8.19 The amended application proposal removes the originally proposed central wishbone dual use pedestrian/cycleway path across the centre of the roundabout. This course of action is in response to numerous concerns raised at the consultation event on 28 January that the pathway was unlikely to be used. The wishbone pathway would have required four stops at controlled crossings to cross the roundabout which was considered unduly tortuous for pedestrians. The revised crossing points on all four arms of the roundabout provide a continuous safe route for pedestrians, in particular more vulnerable users. This means that the tree planting in the centre of the roundabout can be left intact.

8.20 The amendments ensure maximum convenience for walking through improvements to the existing roundabout function. Improved links with the surrounding walking network are achieved, which accords with the principles for walking accessibility within Cambridge Local Plan policy 8/4 and paragraphs 17, 32 and 35 of the Framework.

#### Cycle connectivity

8.21 The proposed scheme provides some improvement for cycle connectivity across the Addenbrooke's roundabout. This includes some improvements for more confident on road cyclists and the provision of dual use footpaths off the main carriageway.

8.22 The original application as submitted proposed the removal of the four short sections of on road cycle lane. The revised plans reinstate these lanes, so there is no reduction in cycle demarcation on the carriageway. This change is in response to comments raised through the application process and consultation event held by the application in January 2015.

- 8.23 The application as amended now provides an additional four advance stop boxes around the gyratory and three arms of the roundabout. These advance stop boxes enable cyclists to wait ahead of queuing traffic and gain priority at these signalised areas of the roundabout. Provision of these features, in addition to the new section of on carriageway cycle lane improves cycle connectivity, in accordance with Cambridge Local Plan 2006 policy 8/4.
- 8.24 Whilst the provision for on-carriageway cyclists is not a comprehensive improvement, the current scheme provides changes that can reasonably and practically be provided within the scope of **Condition 63**. The original scheme would have resulted in a significant disincentive to cyclists through provision of an additional vehicular lane on the gyratory. It is against this fallback position, which could still be implemented, that the current proposals should be assessed.

#### Vehicle Connectivity

- 8.25 The original intention of the infrastructure upgrades required by **Condition 63** was to improve vehicle capacity. Addenbrooke's roundabout is nearing capacity and experiences queuing along all arms of the roundabout at peak times. In light of the County Highways Authority's updated requirements for a pedestrian focused scheme (for the reasons set out in the principle of development subsection), the applicant has carried out revised junction modelling to demonstrate that the roundabout will still operate satisfactorily under the proposed revised layout. This modelling accounts for the likely development commitments which will place further strain on infrastructure.
- 8.26 The junction modelling uses industry-standard software (called LINSIG) to assess the operation of the junction. This assessment shows that the revised application proposal results in a slight reduction in vehicle capacity at the junction of around 4%. This reduction in overall capacity is not considered significant given the improvements the signalised crossing points will bring to pedestrians.
- 8.27 Furthermore, and as noted in paragraph 8.7 above, although the originally proposed scheme would, on a 'predict and provide' basis, provide some localised increase in highway capacity at the junction itself, this is unlikely to bring any

significant traffic benefits overall due to constraints elsewhere on the network and would further increase pedestrian severance.

- 8.28 Strategic improvements to the Hills Road corridor overall, which may require significant remodeling of the Addenbrooke's roundabout junction, will be considered through the second tranche of City Deal proposals in the medium to long term and through any additional development proposed beyond the CBC outline approval. It is not within the remit of this Section 73 application to mandate wholesale reconfiguration of this challenging junction.
- 8.29 In my opinion the pedestrian focused proposal will not significantly harm vehicle capacity at the Addenbrooke's roundabout and provides an appropriate interim solution for the short to medium term. The application is compliant with Cambridge Local Plan (2006) policy 3/4, 8/2 and 8/4.

### **Disabled access**

#### Equality Impact Assessment

- 8.30 Officers have carried out an Equality Impact Assessment to inform the assessment of the scheme. Safety and directness of crossing are the key issues which affect disabled people, older people with reduced mobility and access related issues relevant to pregnancy and maternity.
- 8.31 Addenbrooke's roundabout is a barrier to connectivity, particular for people with reduced mobility and wheelchair users. Any scheme which seeks to improve connectivity will need to balance the conflicting requirements of different modes which use the roundabout.
- 8.32 The new signalised crossing points introduce a safe route around the junction which does not involve judging vehicle speeds and assessing risk, which is currently the case. This is a significant improvement as compared with current situation and the originally approved scheme in the outline permission.
- 8.33 The omission of the wishbone pathway through the centre of the roundabout will not reduce the safety and convenience of

crossing the junction as compared with the originally submitted scheme.

- 8.34 The amended scheme improves access for wheelchair users through graded level treatment of the pedestrian islands at the crossing points. In so doing appropriate provision is made for access through the roundabout in accordance with Cambridge Local Plan 2006 policy 8/4.

### **Visual amenity and landscaping**

- 8.35 The key issue relates to the visual appearance of the improvements to the Addenbrooke's roundabout in context.
- 8.36 The revised application proposal removes the central wishbone pathway across the centre of the Addenbrooke's roundabout. As such there will be no tree removals or changes to the green amenity within the centre of the roundabout, which would have been substantially reduced by the application proposal as originally submitted.
- 8.37 The design of the signalised Toucan crossing points are to the standard County specification. In my opinion the proposal is compliant with Cambridge Local Plan (2006) policy 3/4.

### **Residential Amenity**

#### Impact on amenity of neighbouring occupiers

- 8.38 The proposed crossing points will have minimal impact on the amenities of adjacent residential properties. The proposed toucan crossing will not emit a crossing noise, so will not result any disturbance for residential properties.
- 8.39 It is considered unlikely the signalised crossing points will result in greater air pollution from idling vehicles, as compared with the current situation.
- 8.40 It is considered that the proposal adequately respects the residential amenity of adjacent residential properties and the constraints of the site and I consider that it is compliant with and Cambridge Local Plan (2006) policy 3/4.

## Third Party Representations

8.41 The issues raised in the representations received have been considered in the above report and are summarised in table 1 below:

**Table 1: Representations received**

Issue	Officer Comment/report section
<p>The application submission is not clear what is proposed.</p> <p>The works need to be explained with clear visuals.</p> <p>Poor Consultation.</p>	<p>The applicant carried out a consultation evening on 28 January 2015 in order to consult on amendments to the design and explain the proposals to interested parties.</p> <p>Clear, colour plans of the changes have been provided together with non-technical summaries of how the changes affect different travel modes.</p>
<p>The proposed use of the centre of the Addenbrooke's roundabout will not suit everyone, especially the more vulnerable and has significant implications in terms of adjusting its internal routes to accommodate pedestrian traffic.</p>	<p>In response to the majority of views at the consultation event the originally proposed wishbone pathway in the centre of the Addenbrooke's roundabout has been removed. See paragraphs 2.5 and 8.29.</p>
<p>This is a missed opportunity to improve pedestrian and cyclist safety at the Fendon Road/Queen Ediths Way/Mowbray Road roundabout.</p>	<p>The revised Addenbrooke's scheme makes a significant improvement to pedestrian safe and accessibility.</p>

<p>Permanent lights at the end of Fendon Road: traffic already waits in Fendon Road when approaching the junction with Hills Road and Robinson Way.</p>	<p>The impact of the Fendon round signalled crossing has been modelled. It will not significantly affect vehicle capacity in the proposed location 40m from the junction.</p>
<p>The crossing points should have tactile paving and be free from trip hazards.</p>	<p>The new crossing points include tactile paving.  Pedestrian island will be graded for level access. See paragraph 8.30.</p>
<p>Cycle traffic passing through the roundabout need the relative safety of the cycle lanes which are removed from this submission.</p>	<p>The partial on road cycle lanes have been reinstated in response to concerns raised through the representations received. See paragraph 8.17.</p>
<p>The scheme does not reduce the overall hostility of the junction for cyclists at the entrance to Addenbrooke's.</p>	<p>The proposal is not a comprehensive redesign of the roundabout. This would be beyond the scope of works required under <b>Condition 63</b> of the outline permission.</p>
<p>The guided busway route out the back of the proposed research quarter should be improved with adequate lighting.</p>	<p>This is not within the scope of this Section 73 application.  Lighting proposals for the Cambridge Guided Bus are covered by the Cambridge Guided Busway Order.</p>
<p>Any lost trees should be replaced.  Hills Road should be improved with landscaping.</p>	<p>The amended scheme no longer proposes any tree removals.  General landscaping along Hills Road is outside the scope of this S73 application.</p>
<p>The rationale for not increasing vehicle capacity on the Addenbrooke's roundabout is unclear.</p>	<p>See Paragraphs 8.3, 8.4 and 8.5.</p>

## 9.0 CONCLUSION

- 9.1 The additional lane on the Addenbrooke's roundabout gyratory secured as part of the outline CBC development (06/0796/OUT) is no longer required. The proposed amended scheme will provide significant improvements to pedestrian connectivity for the Addenbrooke's roundabout and some improvement for cycle connectivity. Junction modelling demonstrates there will not be a significant impact on vehicle capacity. Financial contributions for the Fendon Road roundabout will be secured through the revised **Condition 63** and associated Deed. Approval is recommended.

## 10.0 RECOMMENDATION

**APPROVE** subject to the following conditions:

### Start Date

1. Application for approval of the reserved matters shall be made to the Local Planning Authority before 15 October 2021

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

### Time period for Development of Reserved Matters Approvals

2. The development hereby permitted shall be begun before the expiration of two years from the date of approval of the last of the reserved matters to be approved.

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

### Reserved Matters Approval for Development Phases

3. No development on any phase shall commence until approval of the details of the access, appearance, landscaping, layout and scale within that phase (hereinafter called the reserved matters) has been obtained from the Local Planning Authority in writing.

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, 9/5).

### **Environmental Statement**

4. The development shall be carried out in accordance with the mitigation measures set out in the Environmental Statement of October 2006, Volumes 1, 2 and 3, including Vol. 3 addendum dated June 2007 unless provided for in any other conditions attached to this planning permission.

Reason: To ensure that the development takes place in accordance with the principles and parameters contained within the Environmental Statement (Cambridge Local Plan 2006 policies 9/3, 9/5 and 10/1).

### **Planning Parameters: Piazza and Circus**

5. Unless otherwise agreed in writing by the Local Planning Authority, the following parameters for the proposed Piazza and Circus shall be provided:
  - a) a minimum of 46.5m width and a minimum of 6,000sqm in area for the Piazza.
  - b) a minimum of 104m in diameter and a minimum of 7,000 sqm in area for the Circus.
  - c) a maximum 1000sqm in gross floor area for buildings within the Circus.

Reason: To ensure that sufficient space is afforded to the Circus and Piazza areas to enable them to function as a strategic area of public realm within the Addenbrooke's Site and to ensure the proposal accords with approved plan PP2 (Cambridge Local Plan 2006 policies 3/4, 3/7, 3/11 and 9/5).

### **Planning Parameters: Parameter Plans**

6. Unless otherwise agreed in writing by the Local Planning Authority, the development shall be substantially in accordance with the following parameters:

- a) Maximum building heights above ground level (including roof level plant but excluding flues) shall not exceed those specified on approved plan PP2.
- b) Maximum building envelopes shall not exceed those specified on approved plan PP2.
- c) Building lengths and widths shall accord with the maximum and minimum parameters as specified in the text to approved plan PP3.
- d) Building heights above ground level shall be no lower than those specified on approved plan PP4.
- e) Flue heights shall not exceed 8m as shown on approved plan PP3.
- f) Building facades facing south onto the southern spine road shall occupy no more than 60% of their plot width, as measured from and along the southern spine road, within 12m of the boundary with the southern spine road.
- g) West facing building facades within the allocated biomedical and biotech research and development area, shall occupy no more than 60% of their plot width, as measured from and along the 35m building line, within 9m of the boundary with the 35m building line.
- h) Building facades which face the Boulevard (except those facades facing east onto the Boulevard north of the Cambridgeshire Guided Busway route), shall occupy between 20% and 70% of their plot width, as measured from and along the boundary with the Boulevard, within 6m of the permitted maximum building envelope extent adjacent to the Boulevard.
- i) Building facades which face the Circus or Piazza shall exceed 60% of their plot width within 6m of the permitted maximum building envelope extent where facing the Circus or Piazza.

Reason: In order to mitigate the visual impact of the proposed development on the setting and special character of Cambridge, the retained Green Belt, the Green Corridor and surrounding open countryside and to ensure subsequent development responds positively to key areas of public realm (Cambridge Local Plan 2006 policies 3/2, 3/4, 3/6, 3/7, 3/11, 3/12, 4/2, 4/3, 9/3, and 9/5).

## **Planning Parameters: Strategic Gaps**

7. A minimum of two gaps of at least 25m in width shall be provided within the biomedical and biotech research and development area shown on parameter plan 1 south of the Cambridgeshire Guided Busway route between buildings. The gaps shall run from the western boundary adjacent to the railway to the eastern boundary adjacent to the Boulevard and shall not be occupied by any buildings. Unless otherwise agreed in writing by the Local Planning Authority, the precise location of the first gap shall be submitted to and approved in writing by the Local Planning Authority concurrently with the first submission of reserved matters for buildings within the allocated biomedical and biotech research and development area south of the Cambridgeshire Guided Busway route and the precise location of the second gap shall be submitted to and approved in writing by the Local Planning Authority concurrently with the second submission of reserved matters for buildings within the allocated biomedical and biotech research and development area south of the Cambridgeshire Guided Busway route.

Reason: In order to mitigate the visual impact of the proposed development on the setting and special character of Cambridge, the retained Green Belt, the Green Corridor and surrounding open countryside and to ensure subsequent development responds positively to key areas of public realm (Cambridge Local Plan 2006 policies 3/2, 3/4, 3/6, 3/7, 3/11, 3/12, 4/2, 4/3, 9/3, and 9/5).

## **Planning Parameters: Land Use**

8. Unless otherwise agreed in writing by the Local Planning Authority, land uses shall substantially accord with the land use locations as specified on approved plan PP1.

Reason: To ensure that the development takes place in accordance with the principles and parameters contained within the approved plans and Environmental Statement (Cambridgeshire and Peterborough Structure Plan 2003 policies 6/1 and 9/8 and Cambridge Local Plan 2006 policies 9/3, 9/5 and 10/1).

## **Planning Parameters: Allocation of Floorspace**

9. Unless otherwise agreed in writing by the Local Planning Authority, the development shall not exceed 215,000sqm of gross external floor space (excluding areas for plant and car parking structures. Areas for plant would include areas for plant within passive void areas between useable floor levels) and shall not exceed gross external floor space limits for the following uses:
- a) 115,000sqm of biomedical and biotech research and development (B1(b)).
  - b) 60,000sqm for clinical research and treatment (D1 and/or clinical in-patient treatment).
  - c) 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.
  - d) 15,000sqm of biomedical and biotech research and development (B1(b)) or clinical research and treatment (D1 and/or clinical in-patient treatment).

Reason: To ensure that the development takes place in accordance with the principles and parameters contained within the description of development and Environmental Statement and to provide flexibility within the allocated floor space tolerances should Papworth Hospital decide to no longer relocate to the site and given the unknown floorspace size of Papworth Hospital (Cambridge Local Plan 2006 policy 9/5).

## **Planning Parameters: Ancillary Uses**

10. Unless otherwise agreed in writing by the Local Planning Authority, ancillary uses for individual occupiers within use classes A1, A3, B1, D1 (crèches/nurseries) or sui generis ancillary uses shall not individually exceed 500sqm gross floor space.

Reason: To ensure the balance of uses is appropriate to the site (Cambridge Local Plan 2006 policy 9/5).

## **Permitted Development Restriction**

11. Notwithstanding the provisions of Schedule 2, Part 2, Class A of the Town and Country Planning (General Permitted Development) Order 1995 (or any Order revoking and re-enacting that order with or without modification) the erection, construction, maintenance, improvement or alteration of a gate, fence, wall or other means of enclosure shall not be allowed without the granting of planning permission or reserved matters approval.

Reason: In order to safeguard the character and appearance of the development of the site (Cambridge Local Plan 2006 policies 3/4, 3/7 and 3/12).

## **Materials**

12. No development of a building shall take place until sample panels of the materials to be used in the construction of its external surfaces has been submitted to and approved in writing by the Local Planning Authority. The panels shall show the proposed combination of external materials to be used. The development shall be constructed in accordance with the approved samples.

Reason: To ensure that the appearance of the external surfaces is appropriate (Cambridge Local Plan 2006 policies 3/4, 3/7 and 3/12).

## **Levels**

13. No development of a building shall take place until full details of the proposed levels of the building, associated structures and associated building plot, compared to existing levels of the site, have been submitted to and approved in writing by the Local Planning Authority. The approved development shall be constructed in accordance with the approved levels details unless otherwise agreed in writing by the Local Planning Authority.

Reason: In order to safeguard the character and appearance of the area (Cambridge Local Plan 2006 policies 3/4, 3/7 and 3/12).

## **Amenity Space Strategy**

14. Concurrent with the submission of any reserved matters application for any clinical development, an Informal Amenity Space Strategy shall be submitted to and approved in writing by the Local Planning Authority. The Strategy shall examine the requirement for informal landscaped open space within the associated clinical building plot to meet the needs of visitors, patients and employees of the proposed clinical development. The size, location and timing of provision for any such space shall accompany the Strategy. The amenity space shall be provided in accordance with the approved Strategy and shall be capable of use no later than the occupation of the associated clinical development.

Reason: To ensure the needs of visitors, patients and employees associated with the clinical development of the site are adequately addressed (Cambridge Local Plan 2006 policies 3/7, 3/11, 9/3).

## **Ecology: Site Wide Nature Conservation Management Plan**

15. The development shall be carried out in accordance with the Site Wide Nature Conservation Management Plan dated September 2010.

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).

## **Ecology: Reserved Matters Applications**

16. Any reserved matters application shall demonstrate how it accords with the aims and objectives of the Nature Conservation Management Plan and shall detail which specific ecological measures are proposed and the timing for their delivery. 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).

## **Strategic Site Surface Water**

17. The development shall be carried out in accordance with the Cambridge Biomedical Campus Extension Surface Water Strategy Report dated 20 October 2011.

Reason: In order to safeguard against the risk of flooding, to ensure adequate flood control, maintenance and efficient use and management of water within the site, to ensure the quality of the water entering receiving water courses is appropriate and monitored and to promote the use of sustainable urban drainage systems to limit the volume and rate of water leaving the site (Cambridge Local Plan policy 3/1).

## **Individual Site Surface Water**

18. Any reserved matters application shall include a detailed surface water strategy pursuant to the reserved matters site for which approval is sought. The strategy shall demonstrate how the management of water within the reserved matters application site for which approval is sought accords with the approved details of the strategic site wide surface water strategy. The strategy shall be based upon a SUDS hierarchy, as espoused by DTI publication 'Sustainable Drainage Systems CIRIA C609' and this Council's adopted supplementary planning document 'Sustainable Design and Construction' (2007). The strategy shall maximise the use of measures to control water at source as far as practicable to limit the rate and quantity of run-off and improve the quality of any run-off before it leaves the site or joins any water body.

If source control infiltration SUDS methods are demonstrated to be impracticable or only partly feasible, the strategy shall promote other measures such as swales, surface water retention ponds, wetlands or other surface water retention measures to promote infiltration and mimic as far as possible existing natural greenfield run-off patterns (rates and volumes).

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

Reason: In order to safeguard against the increased risk of flooding, to ensure adequate flood control, maintenance and efficient use and management of water within the site, to ensure the quality of the water entering receiving water courses is appropriate and monitored and to promote the use of sustainable urban drainage systems to limit the volume and rate of water leaving the site (Cambridge Local Plan policy 3/1).

### **Ground Water**

19. The development shall be carried out in accordance with the Groundwater Assessment Report Cambridge Biomedical Campus September 2011.

Reason: To safeguard the ground water spring flow of Nine Wells Local Nature Reserve (Cambridge Local Plan 2006 policy 4/6).

### **Surface Water Modelling: Hobson's Brook/Conduit and Vicar's Brook**

20. The development shall be carried out in accordance with the Cambridge Biomedical Campus Hydraulic Modelling Report dated August 2010.

Reason: To ensure that proposed drainage for the 2020 site, combined with proposed drainage for Clay Farm, Bell School and Glebe Farm sites, do not result in any increased flooding within Hobson's Brook/Conduit and Vicar's Brook systems and that suitable mitigation is carried out if required (Cambridge Local Plan 2006 policy 3/1).

## **Foul Water**

21. The development shall be carried out in accordance with plans: 53337/K/02 Proposed Foul Drainage Layout, 60196686/SK-03 Proposed route of plumbing main, 60196686/SK-04, 53337/K/22 Infrastructure and external services details sheet 2 (foul water), 53337/K/27 Infrastructure and external services details foul water pumping station, AO/12576 Issue C sheet 1 General Arrangement of pumps, 53337/K/30 RevZ2 pump station compound details.

Reason: To prevent the increased risk of pollution to the water environment and to prevent an increased risk of flooding to existing property (Cambridge Local Plan 2006 policy 8/18).

## **Construction Environmental Management Plan**

22. The development shall be carried out in accordance with the Cambridge Biomedical Campus Extension Side Wide Construction Environmental Management Plan October 2011.

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).

## **Construction Method Statement**

23. 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 details of construction criteria A-U (except criteria E) of the Construction Environmental Management Plan (CEMP). In addition to criteria A-U, the CMS shall also provide a specific construction programme and a plan identifying: the contractor site storage area/compound; screening and hoarding locations; access arrangements for vehicles, plant and personnel; building material, plant and equipment storage areas; contractor parking arrangements for construction and personnel vehicles; and the location of contractor offices.

Thereafter the development shall be undertaken in accordance with the agreed details unless the Local Planning Authority agrees in writing to the variation of any detail in advance of it being undertaken.

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).

## **Detailed Waste Management Plan for Construction**

24. Prior to the commencement of development of any approved reserved matters phase, a Detailed Waste Management Plan (DWMP) shall be submitted to and approved in writing by the Local Planning Authority for that phase. The DWMP shall demonstrate how the construction of the reserved matters approval will accord with the details of the principles of the Outline Waste Management Plan. The DWMP shall include details of:
- a) the anticipated nature and volumes of waste.
  - b) measures to ensure the maximisation of the reuse of waste.

- c) measures to ensure effective segregation of waste at source including waste sorting, storage, recovery and recycling facilities to ensure the maximisation of waste materials both for use within and outside the site.
- d) any other steps to ensure the minimisation of waste during construction.
- e) the location of facilities pursuant to criteria b/c/d.
- f) proposed monitoring and timing of submission of monitoring reports.
- g) the proposed timing of submission of a Waste Management Closure Report to demonstrate the effective implementation, management and monitoring of construction waste during the construction lifetime of the development.

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

Reason: To ensure the sustainable management of construction waste (Cambridge Local Plan policy 3/1 and Cambridge City Council Sustainable Design and Construction SPD 2007).

## **Foundations**

25. In the event that the foundations of any building require piling, prior to any piling taking place in association with that building, a method statement shall be submitted to and approved in writing by the Local Planning Authority detailing the type of piling to be used, potential noise and vibration levels at the nearest noise sensitive locations in accordance with British Standard 5228 - Part 4 and mitigation measures to be undertaken in order to safeguard the amenity of adjacent residents/occupiers. The piling mitigation shall be carried out in accordance with the approved details.

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

## **Construction Times**

26. Unless otherwise agreed in writing by the Local Planning Authority pursuant to criteria C of the Construction Environmental Management Plan, no construction work shall be carried out or plant operated other than between the following hours: 0730 to 1800 Monday to Friday, 0800 to 1300 on Saturdays and at no time on Sundays, Bank or Public Holidays.

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

## **Collection and Delivery Times**

27. Unless otherwise agreed in writing by the Local Planning Authority pursuant to criteria D of the Construction Environmental Management Plan, there shall be no collection or deliveries to the site for the purposes of construction outside the hours of 0730 to 1800 Monday to Friday, 0800 to 1300 on Saturdays and at no time on Sundays, Bank or Public Holidays.

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

## **Lighting: West Facing Facades**

28. Unless otherwise agreed in writing by the Local Planning Authority, except for building access points, no west facing external facades of buildings adjacent to the railway line and no south facing external facades of buildings adjacent to the southern spine road shall be directly lit by external up-lighters or down-lighters.

Reason: To safeguard the character and setting of the Green Corridor and surrounding open countryside and to encourage the continued foraging of bats (Cambridge Local Plan 2006 policies 3/2, 3/4, 3/11, 3/12, 4/2, 4/3, 9/3 and 9/5).

## **Lighting: Individual Development Plots**

29. Prior to the erection or installation of any outdoor lighting associated with the development of an individual building plot, a detailed outdoor lighting scheme applicable to that plot and associated building/s shall be submitted to and approved in writing by the Local Planning Authority. The scheme shall specify the method of lighting (including details of the type of lights, orientation/angle of the luminaries, the spacing and height of lighting columns/fixings), the extent/levels of illumination over the site and on adjacent land and measures to be taken to contain light within the curtilage of the site. The scheme shall be implemented in accordance with approved details and shall thereafter be maintained as such.

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).

## **Extraction Equipment**

30. No occupation of a building shall take place until details of equipment for the purpose of extraction and/or filtration of fumes, odours and/or hazardous material such as airborne bacterial and viral organisms from the building have been submitted to and approved in writing by the Local Planning Authority. The approved extraction/filtration scheme shall be fully installed before the use hereby permitted is commenced.

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

## **Insulation**

31. No occupation of a building shall take place until a scheme for the insulation of the building(s) and/or plant in order to minimise the level of noise emanating from the building(s) and/or plant has been submitted to and approved in writing by the Local Planning Authority. The insulation scheme shall be fully implemented before the use hereby permitted is commenced.

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

## **Waste**

32. No development of a building shall take place until full details of on-site storage facilities for that building for trade waste, including waste for recycling, have been submitted to and approved in writing by the Local Planning Authority. Such details shall identify the specific positions of where wheelie bins, paladins or any other means of storage will be stationed and the arrangements for the disposal of waste. The approved facilities shall be provided prior to the commencement of the use hereby permitted and shall be retained thereafter unless alternative arrangements are agreed in writing by the Local Planning Authority.

Reason: To protect the amenities of nearby residents/occupiers, to safeguard visual amenity and to ensure adequate waste storage and recycling provision (Cambridge Local Plan 2006 policies 3/12 and 4/13).

## **Contaminated Land: Assessment and Remedial Strategy**

33. Notwithstanding the submitted contamination report as part of the Environmental Statement, no development of an approved reserved matters phase shall take place until a contaminated land assessment and associated remedial strategy, together with a timetable of works for that phase, have been submitted to and agreed in writing by the Local Planning Authority. The contaminated land assessment and associated remedial strategy shall adhere to the following points.
- a) The site investigation strategy shall be carried out in accordance with the approved Geo-environmental Remediation and Mitigation Strategy (September 2011).
  - b) The site investigation, including relevant soil, soil gas, surface and groundwater sampling, shall be carried out by a suitably qualified and accredited consultant/contractor in accordance with a quality assured sampling and analysis methodology.

- c) A site investigation report detailing all investigative works and sampling on site, together with the results of the analysis, risk assessment to any receptors and a proposed remediation strategy shall be submitted to the Local Planning Authority. The Local Planning Authority shall approve such remedial works as required prior to any remediation commencing on site. The works shall be of such a nature as to render harmless the identified contamination given the proposed end use of the site and surrounding environment including any controlled waters.
- d) 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.
- e) If, during the works, contamination is encountered which has not previously been identified then the additional contamination shall be fully assessed and an appropriate remediation scheme agreed with the Local Planning Authority.
- f) Upon completion of the works, this condition shall not be discharged until a closure report has been submitted to and approved by the Local Planning Authority. The closure report shall include details of the proposed remediation works and quality assurance certificates to show that the works have been carried out fully in accordance with the approved methodology. Details of any post-remedial sampling and analysis to show the site has reached the required clean-up criteria shall be included in the closure report together with the necessary documentation detailing what waste materials have been removed from site.

Reason: In order to ensure that any contamination of the site is identified and remediation measures are appropriately undertaken to secure full mitigation (Cambridge Local Plan 2006 policy 4/13).

## **Contaminated land: Gas Risk**

34. Should the contaminated land assessment and associated remedial strategy identify the presence of material with 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 buildings (Cambridge Local Plan 2006, policy 4/13).

## **Renewable Energy: 10% Requirement**

35. No development of a building shall take place until a renewable energy statement for that particular building, which demonstrates that at least 10% of the building's total predicted energy requirements will be from on-site renewable energy sources, has been submitted to and approved in writing by the Local Planning Authority. The statement shall include the total predicted energy requirements for that building in the form of an Energy Statement of the building and shall set out a schedule of proposed on-site renewable energy technologies, their respective energy contributions, location, design and a maintenance programme. The approved renewable energy technologies shall be fully installed and operational prior to the occupation of the approved building and shall thereafter be maintained and remain fully operational in accordance with the approved maintenance programme, unless otherwise agreed in writing by the Local Planning Authority.

Reason: In the interests of reducing carbon dioxide emissions (Cambridge Local Plan 2006 policy 8/16 and Supplementary Planning Document 'Sustainable Design & Construction' 2007).

## **Renewable Energy: LDF Percentage Flexibility**

36. If any reserved matters application for the development of a building is submitted after three years from the date of outline planning permission and if a specific policy regarding renewable energy that stipulates a higher on-site renewable energy percentage requirement than 10% is formally adopted as part of the Local Development Framework prior to the making of any such reserved matters application and it is not demonstrated that to require full compliance would not be economically or technically viable, the specified higher on-site renewable energy percentage requirement specified by the new policy shall apply pursuant to condition 35. The Energy Statement, installation, operation and maintenance of the renewable energy technologies shall continue to apply pursuant to condition 35.

Reason: The period of consent for which outline planning permission is given is for a longer period than the standard 3-year permission. There is likelihood, given that Government policy on sustainable development and renewable energy is moving rapidly, that new policies will be adopted within the Local Development Framework that will require a higher renewable energy percentage requirement that, without this condition, could not be accounted for. The Local Planning Authority considers that this approach is consistent with the aims and objectives of PPS1 Delivering Sustainable Development (2005).

## **BREEAM and NEAT Building Standards**

37. No development of a building shall take place until a pre-assessment BREEAM report or, in the case of an NHS building, a pre-assessment NEAT report, which is prepared by an approved BREEAM or NEAT assessor, indicating that the building is capable of achieving at least a 'very good' rating or above, has been submitted to and approved in writing by the Local Planning Authority. No later than 6 months after occupation of the building, a BREEAM or NEAT certificate shall be submitted to and approved in writing by the Local Planning Authority demonstrating that applicable building achieves at least a "very good" BREEAM or NEAT rating or above. In the event that such a rating is replaced by a comparable national measure of sustainability for building design, that measure shall be applicable to the proposed building 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 & Construction' 2007).

## **Tree Protection Robinson Way: Assessment Surveys**

38. No development within a building plot that is within 20m of Robinson Way shall take place until a land survey, tree survey and arboricultural implications assessment, which are applicable to the associated building plot, in accordance with BS:5837:2005, have been submitted to and approved in writing by the Local Planning Authority: The surveys shall include:
- a) The location of all trees, shrub masses and hedges.
  - b) The location of streams, buildings and other structures, boundary features and services.
  - c) Spot heights of ground level throughout the site.
  - d) The location of trees on land adjacent to or which overhang the development site.
  - e) A categorization of trees or groups of trees for their quality and value in accordance with table 1 of the British Standard.

Reason: In the interests of accurately establishing the quality and value of trees on or adjacent to the site and the implications for development (Cambridge Local Plan 2006 policies 4/3 and 4/4).

### **Tree Protection Robinson Way: Method Statements and Plan**

39. No development within a building plot that is within 20m of Robinson Way shall take place until an arboricultural method statement, tree constraints plan and tree protection plan, which are applicable to the associated building plot, in accordance with BS:5837:2005, have been submitted to and approved in writing by the Local Planning Authority. These shall include:
- a) Plans showing trees to be removed, identified by number.
  - b) Plans showing trees to be retained, identified by number, with canopies accurately plotted.
  - c) A tree constraints plan that identifies root protection areas of retained trees.
  - d) The precise location and design details for the erection of protective tree barriers and any other physical protection measures.
  - e) A method statement in relation to construction operations in accordance with paragraph 7.2 of the British Standard.

Development shall be carried out in accordance with the approved details.

Reason: In the interests of visual amenity and safeguarding trees that are worthy of retention (Cambridge Local Plan 2006 policies 4/3 and 4/4).

### **Tree Protection Robinson Way: Protective Fencing**

40. No development within a building plot that is within 20m of Robinson Way shall take place until fencing for the protection of any retained tree within the associated building plot has been fully erected in accordance with the approved plans and particulars. The fencing shall be retained intact for the full duration of the development until all equipment, materials and surplus materials have been removed from the site. Nothing shall be stored or placed in any fenced area in accordance with this condition and the ground levels within those areas shall not be altered, nor shall any excavations be made without the written consent of the Local Planning Authority.

Reason: In the interests of visual amenity and safeguarding trees that are worthy of retention (Cambridge Local Plan 2006 policies 4/3 and 4/4).

### **Tree Protection Robinson Way: Excavation Trenches**

41. No development within a building plot that is within 20m of Robinson Way shall take place until full details of the position and proposed depth of excavation trenches for all services (including cables, pipes, surface water drains, foul water drains and public utilities) and their means of installation which pass underneath the canopy of any existing tree adjacent to Robinson Way, have been submitted to and approved in writing by the Local Planning Authority. Development shall be carried out in accordance with the approved details.

Reason: In the interests of visual amenity and safeguarding trees that are worthy of retention (Cambridge Local Plan 2006 policies 4/3 and 4/4).

### **Structural Landscaping: Site Wide Scheme**

42. Structural Landscaping along the western edge of the allocated biotech and biomedical research and development area shown on parameter plan 1, south of the Cambridgeshire Guided Bus embankment shall be carried out in accordance with the following drawings:

Drawing No 1777/C42/001C: Landscape Proposals Western Boundary

Drawing No 1777/C42/003E: Tree Pit Details Longitudinal Section

Drawing No 1777/C42/004E: Tree Pit Details Cross Section  
Western Boundary Landscape Specification Revision A

Unless, any alternative scheme(s) which provides a minimum 12-14m structural woodland landscaping scheme, with additional 3m x 4.8m deep tree blocks positioned at a maximum of 15m centres, in accordance with parameter plan 6 and plan 1700/SK180707.01B, along the western edge of the allocated biotech and biomedical research and development area shown on parameter plan 1, south of the Cambridgeshire Guided Bus embankment are approved through subsequent discharge of this condition by the local planning authority. Development shall then be carried out in accordance with the approved details.

Reason: In order to mitigate the visual impact of the proposed development on the setting and special character of Cambridge, the retained Green Belt, the Green Corridor and surrounding open countryside. Details for part (a) of the structural landscaping have already been agreed. (Cambridge Local Plan 2006 policies 3/2, 3/4, 3/6, 3/7, 3/11, 3/12, 4/2, 4/3, 9/3, and 9/5).

### **Structural Landscaping: Implementation and Replacement**

43. All planting, seeding or turfing comprised in the approved structural landscaping scheme shall be fully carried out in the first planting and seeding seasons following the commencement of development of any building, or in accordance with a landscaping phasing plan that is submitted to and approved in writing by the Local Planning Authority. Any trees or plants which within a period of 5 years from the completion of the development die, are removed or become seriously damaged or diseased, shall be replaced in the next planting season with others of similar size and species as those originally planted, unless the Local Planning Authority gives written consent to any variation.

Reason: In order to mitigate the visual impact of the proposed development on the setting and special character of Cambridge, the retained Green Belt, the Green Corridor and surrounding open countryside (Cambridge Local Plan 2006 policies 3/2, 3/4, 3/6, 3/7, 3/11, 3/12, 4/2, 4/3, 9/3, and 9/5).

## **Structural Landscaping: Management Plan**

44. The Management of the Structural Landscaping approved through condition 42 shall be carried out in accordance with the Cambridge Biomedical Campus Western Boundary Landscape Management Specification Revision A dated 04 November 2011.

If any alternative structural landscaping scheme is agreed through condition 42, then a replacement landscape management plan for the approved structural landscaping scheme including long-term design objectives, management responsibilities and management and maintenance schedules for all landscape areas for a minimum period of 25 years, shall be submitted to and approved by the Local Planning Authority prior to the commencement of any planting. The landscape management plan shall be carried out as approved.

Reason: To ensure satisfactory arrangements are in place to ensure the proper management and maintenance of landscaped areas (Cambridge Local Plan 2006 policies 3/2, 3/4, 3/6, 3/7, 3/11, 3/12, 4/2, 4/3, 9/3, and 9/5).

## **Landscaping: Development Plot Schemes**

45. Unless otherwise agreed in writing by the Local Planning Authority, any reserved matters application for the erection of a building shall include an accompanying landscaping scheme for the associated plot. The landscaping scheme shall include 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. No development within the site for which reserved matters approval is sought shall commence until the landscaping scheme has been approved in writing by the Local Planning Authority. The scheme shall be carried out in accordance with the approved details unless otherwise agreed in writing by the Local Planning Authority.

Reason: In order to mitigate the visual impact of the proposed development on the setting and special character of Cambridge, the retained Green Belt, the Green Corridor and surrounding open countryside (Cambridge Local Plan 2006 policies 3/2, 3/4, 3/6, 3/7, 3/11, 3/12, 4/2, 4/3, 9/3, and 9/5).

### **Landscaping: Development Plot Implementation and Replacement**

46. All planting, seeding or turfing comprised in the approved landscaping schemes for the individual plots shall be fully carried out in the first planting and seeding seasons following the commencement of development, or in accordance with a landscaping phasing plan that is submitted to and approved in writing by the Local Planning Authority. Any trees or plants which within a period of 5 years from the completion of the development die, are removed or become seriously damaged or diseased, shall be replaced in the next planting season with others of similar size and species as those originally planted, unless the Local Planning Authority gives written consent to any variation. The landscaping shall be fully completed in accordance with the approved scheme and/or phasing plan within the respective development plot.

Reason: In order to mitigate the visual impact of the proposed development on the setting and special character of Cambridge, the retained Green Belt, the Green Corridor and surrounding open countryside (Cambridge Local Plan 2006 policies 3/2, 3/4, 3/6, 3/7, 3/11, 3/12, 4/2, 4/3, 9/3, and 9/5).

### **Landscaping: Development Plot Management**

47. A landscape management plan for any building plot including long-term design objectives, management responsibilities and management and maintenance schedules for all landscape areas for a minimum period of 25 years, shall be submitted to and approved by the Local Planning Authority prior to the occupation of any part of the buildings for which reserved matters approval is being sought. The landscape management plan shall be carried out as approved.

Reason: To ensure satisfactory arrangements are in place to ensure the proper management and maintenance of landscaped areas (Cambridge Local Plan 2006 policies 3/2, 3/4, 3/6, 3/7, 3/11, 3/12, 4/2, 4/3, 9/3, and 9/5).

## **Earthworks**

48. Prior to the commencement of development of any approved reserved matters phase, details of earthworks associated with that phase shall be submitted to and approved in writing by the Local Planning Authority. These details shall include the proposed grading and mounding of land areas including the levels and contours to be formed, showing the relationship of proposed grading and mounding to existing vegetation and surrounding landform including timing. Development shall be carried out in accordance with the approved details.

Reason: In the interests of visual amenity and to ensure that any earthworks are appropriate to the site context and surrounding landscape (Cambridge Local Plan 2006 policies 3/4, 3/11 and 3/12).

## **Hard Landscaping**

49. Unless otherwise agreed in writing by the Local Planning Authority, no development of a building shall take place until full details of hard landscape works associated with its plot have been submitted to and approved in writing by the Local Planning Authority and these works shall be carried out as approved prior to the occupation of any part of the building hereby approved. These details shall include: proposed finished levels or contours; means of enclosure; car parking layouts; other vehicle and pedestrian access and circulation areas; hard surfacing materials; minor artefacts and structures; furniture; refuse or other storage units; signs; any proposed public art.

Reason: In the interests of visual amenity and to ensure that suitable hard landscape is provided as part of the development (Cambridge Local Plan 2006 policies 3/4, 3/11 and 3/12).

## **Transport: The Boulevard**

50. Any reserved matters application for the development of the proposed Boulevard shall include a detailed engineering scheme/plan showing all footway/footpath/cycleway links comprising dimensions, levels, forms of construction, kerbing, surface water drainage, street lighting systems and traffic calming measures, together with a phasing plan that is linked to the occupation of buildings on the site. The scheme/plan shall substantially accord with approved parameter plans PP7, PP8, PP9 and PP10 and shall include:

- a) Intersections with the Addenbrooke's Access Road and Cambridgeshire Guided Bus (including details of a signalised crossing).
- b) Proposed intersections and alterations to all existing roads, footpaths and cycleways (including Robinson Way).
- c) Details of the proposed location of all bus stops together with details of proposed alterations to existing bus stops within Addenbrooke's.
- d) Details of the proposed upgrading of public footpath no.47 (or an equivalent route) within the site.
- e) Details of all proposed cycle routes, both dedicated and on-road.
- f) Details of all proposed materials and finishes.
- g) Detailed design of all proposed street furniture (including all signs, lighting, bollards, bus stops/shelters, cycle parking).
- h) a planting scheme for attenuation ponds.
- i) a single avenue of large tree planting (including specification) either side of the Boulevard.
- j) Details of management and maintenance responsibilities for all planting.

The development shall be carried out in accordance with the approved details.

Reason: In order to safeguard highway safety and to secure an appropriate means of access for users of the development (Cambridge Local Plan 2006 policies 3/7, 8/2 and 8/11).

## **Transport: Southern Spine Road**

51. Any reserved matters application for the development of the proposed Southern Spine Road shall include a detailed engineering scheme/plan showing all footway/footpath/cycleway links comprising dimensions, levels, forms of construction, kerbing, surface water drainage, street lighting systems and traffic calming measures, together with a phasing plan that is linked to the occupation of buildings on the site. The scheme/plan shall substantially accord with approved parameter plans PP7, PP8, PP9 and PP10 and shall include:
- a. Intersections with the Addenbrooke's Access Road.
  - b. Proposed intersections and alterations to all existing roads, footpaths and cycleways (including Robinson Way).
  - c. Details of the proposed location of all bus stops together with details of proposed alterations to existing bus stops within Addenbrooke's campus.
  - d. Details of all proposed cycle routes, both dedicated and on-road.
  - e. Details of all proposed materials and finishes.
  - f. Detailed design of all proposed street furniture (including all signs, lighting, bollards, bus stops/shelters, cycle parking).
  - g. a half avenue of large tree and hedge planting on the northern side of the Southern Spine Road.
  - h. Details of management and maintenance responsibilities for all planting.

The development shall be carried out in accordance with the approved details.

Reason: In order to safeguard highway safety and to secure an appropriate means of access for users of the development (Cambridge Local Plan 2006 policies 3/7, 8/2 and 8/11).

## **Car Parking: On-Plot research and Development**

52. 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 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 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 (Cambridgeshire and Peterborough Structure Plan 2003 policies 6/1 and 9/8 and Cambridge Local Plan 2006 policies 8/10 9/3, 9/5 and 10/1).

### **Car Parking: Clinical, Higher Education or Sui Generis (Employee)**

53. 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 (Cambridgeshire and Peterborough Structure Plan 2003 policies 6/1 and 9/8 and Cambridge Local Plan 2006 policies 8/10 9/3, 9/5 and 10/1).

### **Car Parking: Clinical, Higher Education or Sui Generis (Patients and Visitors)**

54. 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).

### **Car Parking: Disabled Spaces**

55. Unless otherwise agreed in writing by the Local Planning Authority, 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).

### **Car Parking: Existing Modal Share**

56. The submission of any reserved matters application for approval of any building shall include a summary from the Addenbrooke's Annual Travel Survey showing the current modal share for staff, patients and visitors cycling to Addenbrooke's.

Reason: To enable an accurate estimation of the modal share of people cycling to Addenbrooke's Campus (Cambridge Local Plan 2006 policy 8/6).

### **Car Parking: Trip Estimation**

57. The submission of any reserved matters application for approval of any building shall include an estimation of the total number of staff, patients and visitors that will visit the building in a typical day.

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).

## **Car Parking: Calculation of Spaces Required**

58. 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).

## **Cycle Parking: Details of Facilities**

59. No development of a building shall commence until details of facilities for the covered, secure parking of bicycles relevant to that building have been submitted to and approved in writing by the Local Planning Authority. The facilities shall be provided in accordance with the approved details prior to the occupation of the building for which permission is sought and shall thereafter be retained and shall not be used for any other purpose unless otherwise agreed in writing by the Local Planning Authority.

Reason: To ensure appropriate provision for the secure storage of bicycles (Cambridge Local Plan 2006 policy 8/6).

## Archaeological

60. Notwithstanding the submitted archaeological mitigation strategy, no development of a building or material operation constituting development relating to any roadway/footpath or area of public realm shall take place until the implementation of a programme of archaeological work, in accordance with a written scheme of investigation relating to that building or material operation constituting development relating to any roadway/footpath or area of public realm, has been submitted by the applicant, approved in writing by the Local Planning Authority and carried out in accordance with the approved details.

This written scheme will include the following components, completion of each of which will trigger the phased discharging of the condition:

a) fieldwork in accordance with the agreed written scheme of investigation.

b) post-excavation assessment (to be submitted within six months of the completion of fieldwork, unless otherwise agreed in writing in advance with the Local Planning Authority).

c) completion of post-excavation analysis, preparation of site archive ready for deposition at a store approved by the Local Planning Authority, completion of an archive report, and submission of a publication report (to be completed within two years of the completion of fieldwork, unless otherwise agreed in advance in writing with the Local Planning Authority).

Reason: To ensure that an appropriate archaeological investigation of the site has been implemented before development commences (Cambridge Local Plan 2006 policy 4/9).

## **Shop Front Design Guide**

61. Prior to the occupation of any A1 or A3 use, a tenants' shopfront design guide shall be submitted to and approved in writing by the Local Planning Authority. Thereafter the development shall be undertaken in accordance with the agreed signage protocol unless otherwise agreed in writing by the Local Planning Authority.

Reason: To ensure that the details of development respect the character and appearance of the public realm (Cambridge Local Plan 2006 policy 3/15).

## **Public Realm Design Strategy**

62. Unless otherwise agreed in writing by the Local Planning Authority, any reserved matters application in respect of the development of the proposed Circus and Piazza, shall include a comprehensive Public Realm Design Strategy applicable to the entirety of the proposed Circus and Piazza areas. The Strategy shall set out a vision for the proposed Circus and Piazza areas and shall include detailed information and accompanying plans of the following items:

### Movement Strategy

A Movement Strategy that includes:

- a) Detailed guidance on the provision of measures to promote the use of the Circus and Piazza as a space that is principally for use for pedestrians, cyclists and the Cambridgeshire Guided Bus and which limits the ability of any other vehicles to utilise the Circus and Piazza for primary access and/or service delivery requirements.
- b) A plan with cross-sections showing proposed roads, bus lanes, footpaths and cycleways (widths and specifications).
- c) Detailed design and location of speed restraint measures.

### Car Parking

- a) The location of car parking spaces and measures to control their use.
- b) The location of drop-off spaces.

## Drainage

A Sustainable Drainage Scheme that includes:

a) Design standards and methodology for the implementation of a sustainable urban drainage system (using a SUD's hierarchy), including the detailed design of specific features and their maintenance/management requirements and how the system relates to the strategic management of water within the site.

## Soft Landscaping

A Soft Landscaping Scheme that includes:

a) Planting plans and written specifications/details of the species, mix, size, distribution and density of all trees/hedges/shrubs to be planted, the timing of planting and management and maintenance responsibilities.

b) Tree locations and planting specifications where adjacent to or within the highway.

c) The design and location of incidental green/informal spaces/enclosures.

d) The design and location of key focal points.

## Hard Landscaping

A Hard Landscaping Scheme that includes:

a) The design and location of all bus stops and shelters.

b) The design and location of all CCTV cameras and associated cabling.

c) The design and location of all cycle parking stands and shelters.

d) The design and location of all seating.

e) The design and location of all bollards, signage and bins.

f) Samples of paving materials and finishes.

g) Details of carriageway materials and finishes.

h) Proposed levels changes.

i) A strategy for the provision of public utilities equipment which includes consultation with statutory undertakers and agreement in respect of the location and appearance of statutory undertakers' plant, compounds and associated structures.

## Public Art Strategy

a) The submission of a Public Art Strategy in accordance with the requirements of the relevant schedule of the S106 agreement and conditions 64, 65 and 66 of this permission.

## Lighting

A Lighting Scheme that includes:

a) The design and location of all lighting, including amenity lighting, within the Circus and Piazza, including guidance on the height of the lighting columns and the types, colour and brightness of proposed lights, and measures to limit light pollution.

## Coordinated Development

a) Consideration of how the proposed design and layout of the Piazza will integrate with plans and scheduling for works within the extended Piazza promoted as part of the Forum site adjacent.

b) Consideration of how the proposed design and layout of the Circus and Piazza will integrate with the Boulevard, the Cambridgeshire Guided Busway and proposed alterations to Robinson Way.

c) The provision of detailed design principles to be used to guide the detailed design of the public realm on the proposed development parcels where they adjoin the Circus and Piazza.

## Phasing

a) Detailed guidance on how the provision of the Circus and Piazza and those elements that are contained within it are to be provided.

## Management and Maintenance

A Management and Maintenance Strategy that identifies:

a) Responsibilities for all elements, including SUD's, contained within the Circus and Piazza.

Should the detailed design and/or location of any of the items listed not be included within the Public Realm Design Strategy, then the phased provision of such information shall be agreed in writing with the Local Planning Authority prior to the commencement of works within the Circus and Piazza. The approved Public Realm Design Strategy shall be carried out in accordance with the agreed details, unless otherwise agreed in writing by the Local Planning Authority.

Reason: In the interests of the amenity of the intended users of the Circus and Piazza and to secure a high quality environment that is befitting the strategic importance of the space (Cambridge Local Plan 2006 policies 3/4, 3/7, 3/11, 3/12, 4/15, 8/4, 9/3 and 9/5).

### **Off-Site Highways Works**

63. No occupation of any floorspace for clinical research and treatment (D1 and/or clinical in-patient treatment), or biomedical and biotech research and development (B1b) or higher education building under use classes B1 and D1 or sui generis medical research institute uses shall take place until:

(i) the offsite highways works at Hills Road/Fendon Road/Robinson Way shall have been fully laid out and implemented in accordance the approved schemes/plans in the Highway Design Report prepared by Lanmoor Consulting dated March 2015, reference 140546/DS/KTP/01 Rev C.

(ii) the offsite highways works to improve pedestrian connectivity at the Queen Ediths Way/Mowbray Road/Fendon Road have been facilitated. A scheme shall be agreed by the Local Planning Authority within 24 months, and the work carried in accordance with the agreed scheme within 36 months of the date of this permission. "

Reason: In order to safeguard highway safety and network capacity (Cambridge Local Plan 2006 policies 3/7, 8/2 and 8/11).

## **Public Art Details**

64. Where the approved Public Art Strategy secured under the S106 agreement associated with this application indicates, a reserved matters application shall include the following details of public art to be provided within that relevant phase:
- a) Details of the consultation, approval and commissioning process for artists and associated proposed public art.
  - b) Details of community engagement and consultation including measures to promote public involvement in the evolution of the public art.
  - c) Descriptions, plans and images of the public art that will be realised.
  - d) Details of how the public art complies with any approved public realm strategy for the development.
  - e) Project timescales.
  - f) Delivery mechanisms.
  - g) The total amount allocated for the proposed public art including a breakdown of the total cost of the implementation of the public art and the apportionment of the costs across its various elements, including maintenance and decommissioning costs (if applicable).

Reason: To ensure that the details of public art come forward at the appropriate stage in the planning process in accordance with the Public Art Strategy and that the proposed public art positively contributes to its context within the public realm (Cambridge Local Plan policies 3/4, 3/7, 3/11, 3/12, 9/5 and 10/1).

## **Public Art Maintenance and Implementation Details**

65. No development of a reserved matters phase that contains an approved element of public art within it shall commence until such time as the following implementation and maintenance details have been submitted to and approved in writing by the Local Planning Authority:
- a) Phasing and dates for the installation of the approved public art.
  - b) Legal ownership and insurance details.
  - c) Responsibility for implementation.

- d) Responsibility for maintenance and maintenance schedules.
- e) Details of decommissioning including timescales and reparation (if applicable).

Reason: To ensure that details of the maintenance and implementation of public art come forward at the appropriate stage in the planning process and that details surrounding subsequent ownership, maintenance, insurance and decommissioning are thoroughly considered (Cambridge Local Plan policies 3/4, 3/7, 3/11, 3/12, 9/5 and 10/1).

### **Provision and Maintenance of Public Art**

66. In relation to any reserved matters phase containing an approved element of public art, the public art as defined in the S106 agreement shall be provided and managed and maintained in accordance with the approved Public Art Strategy secured under the S106 agreement and the approved public art details and the approved public art implementation and maintenance details unless otherwise agreed in writing by the Local Planning Authority. The public art shall not be moved or removed once implemented either permanently or temporarily other than in accordance with the agreed details or other written approval of the Local Planning Authority.

Reason: To ensure that the public art is implemented at an appropriate stage in the phased development of the site and that the public art once provided is properly managed and maintained (Cambridge Local Plan policies 3/4, 3/7, 3/11, 3/12, 9/5 and 10/1).

### **Informatives**

#### *Section 73 approval*

The original outline planning permission 06/0796/OUT continues to subsist, as well as this new outline approval granted under Section 73 of the Town and Country Planning Act 1990.

## *Environmental Health*

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

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).

In relation to environmental construction noise impact we recommend the developer uses the standard the City Council requires in relation to noise levels when letting contracts, known as clause 109 Noise Control.

The developer is advised to contact the Health & Safety Executive, 14 Cardiff Road, Luton, LU1 1PP: -Tel No: 01582 444200 concerning health and safety regulation requirements associated with the construction and operational phases.

To satisfy the condition relating to noise insulation, the noise level from all plant and equipment, vents etc (collectively) associated with this application should not raise the existing background level (L90) by more than 3 dB(A) both during the day (0700 to 2300 hrs over any one hour period) and night time (2300 to 0700 hrs over any one 5 minute period), 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 5 dB(A) correction. This is to guard against any creeping background noise in the area and prevent unreasonable noise disturbance to other premises.

It is recommended that the agent/applicant submits a noise prediction survey/report in accordance with the principles of BS4142: 1997 "Method for rating industrial noise affecting mixed residential and industrial areas" or similar. Noise levels shall be predicted at the boundary having regard to neighbouring residential premises.

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.

To satisfy the standard condition relating to fume filtration/extraction, it is recommended that an effective and appropriate odour/fume extract system be installed to ensure an odour nuisance is not caused to the occupiers of neighbouring premises. The system will need to deal with the two main phases of contaminants within cooking emissions: the particulate (grease, small food and smoke particles) and gaseous (odour vapour/volatile organic compounds).

It is recommended that flue terminals do not impede the final discharge termination point.

The flue / duct height should terminate at least one metre above the roof ridge level to which it is attached and a minimum operating efflux velocity of 10 to 15 metres a second should be achieved. However, the effectiveness of this system is dependent on buildings nearby. If buildings nearby are likely to have an effect on the dispersion and dilution of odour, the flue height should be at least one metre above the ridge of those buildings.

It is not likely that any significant ground remediation will be required at the site, although if any deposited materials are encountered the Local Planning Authority should be informed and the materials should be dealt with in an appropriate manner.

The applicants are advised that the ES has identified that buildings should be subject to gas protection measures to ensure any risk from the build up of dangerous gases is adequately mitigated.

### *Waste Management*

The applicants are advised to contact Cambridgeshire County Council Waste Management Team to discuss the content of any outline or detailed Waste Management Plan prior to submission.

### *S106*

This planning permission should be read in conjunction with the associated deed of planning obligation prepared under s.106 of the Town and Country Planning Act 1990 (as amended). References in the conditions to the S106 agreement are references to that associated deed.

### *Strategic and On-Plot Surface Water Drainage Strategies*

The applicants are advised that notwithstanding the submitted Flood Risk Assessment, that strategic and on-plot surface water drainage strategies should demonstrate that the minimum discharge rate from any control structure is no less than 3 l/sec. The overall discharge rate for the site to remain unchanged. Site-specific strategies shall be within the management, maintenance and responsibility of a single site-wide management company. This is to ensure that drainage within the site is strategically managed and to minimise the risk of flooding to property and land. The discharge rates shown in Appendix C revision 29/05/07 with 5 flow controls for the site with varying flow rates are acceptable, in principle, to the Environment Agency.

## *Trees*

The applicants are advised to appoint a competent arboriculturalist to oversee the project. The arboriculturalist should monitor, record and confirm the implementation and maintenance of tree protection measures as set out in the conditions of the planning permission. All arboricultural works should be carried out by a competent tree contractor, proficient in both root zone and aerial arboricultural work and shall follow strictly the agreed method statements and specifications. The applicants are advised to arrange a pre-construction site meeting between site agent, the developer's chosen arboriculturalist and the Council's delegated arboricultural officer.

## *Considerate Contractors*

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).

## *Cycle Parking*

The level of staff cycle parking provision for a building that is estimated to have 2,778 staff would be calculated as follows: 2,222 (or 80%) of those staff would be assumed to be on site on a typical day. The 2006 cycling mode share from the Addenbrooke's Travel Survey for staff is 25%. 10% would be added (i.e. 35%) meaning that the number of staff cycle parking spaces that would have to be provided would be 778.

The level of patient and visitor cycle parking provision for a building which is estimated to have 526 patients and visitors would be calculated as follows: The 2006 cycling mode share for patients and visitors from the Addenbrooke's Travel Survey is 3%. 10% would be added (i.e. 13%). Given that it is assumed that cycle parking spaces will turn over 3 times per day, the number of patient and visitor cycle parking spaces that would have to be provided for would be 23.

### *Recommended Planting Mix*

The following woodland planting mixes are recommended:

#### East and West of the Railway Line

(to be planted at 1.5m centres in groups of 5-7 of the same species)

Species	Planting size cm	% mix
Quercus robur	Feathered 125/150	10
Fraxinus excelsior	10-12	5
Tilia cordata	10-12	5
Prunus avium	10-12	5
Taxus baccata	100/125	15
Acer campestre	Feathered 125/150	15
Ilex aquifolium	60-80	15
Crataegus monogyna	60-80	20
Corylus avellana	60-80	10

Within the woodland belt to the east of the railway line (20/20 site) the mix should be supplemented with 14-16cm girth Tilia cordata and Fraxinus excelsior trees on a double planting grid of 15m north-south as shown on plan 1700/SK180707.01B (which may or may not be staggered depending on the final design) or a grid to coincide with the wider areas of the planting belt. Within the woodland belt to the west of the railway (Hobsons Brook GC) the mix shall be supplemented as above on a planting grid to be agreed.

N.B. The planting on the west of the railway must not be compromised by the spoil deposit from Clay Farm, i.e. the bunding adjacent to the railway.

*Woodland Mix for South of 20/20 adjacent to Nine Wells*

(to be planted at 1.5m centres in groups of 5-7 of the same species)

Species	Planting size cm	% mix
Fagus sylvatica	Feathered 125/150	10
Sorbus torminalis	10-12	5
Quercus robur	Feathered 125/150	5
Prunus avium	12-14	5
Taxus baccata	100/125	15
Acer campestre	Feathered 175/200	15
Ilex aquifolium	60-80	15
Crataegus monogyna	60-80	20
Corylus avellana	60-80	10