

<b>Application Number</b>	17/1896/FUL	<b>Agenda Item</b>	
<b>Date Received</b>	6 <sup>th</sup> November 2017	<b>Officer</b>	John Evans
<b>Target Date</b>	5th February 2018		
<b>Ward</b>	Newnham		
<b>Site</b>	Land to the West of JJ Thomson Avenue and to the North of University Residences, Cambridge, CB3 0FA.		
<b>Proposal</b>	Mixed use building 4907 sq m in total, comprising 3411 sq m of D1 academic floor space on the first and second floors; 1421 sq m of A3 (Café and restaurant) space on the ground floor; 75 sq m of A1 (retail) on the ground floor; all associated infrastructure, including drainage, service yard area, utilities, landscape and cycle parking; modifications to JJ Thomson Avenue to provide disabled car parking and a substation building.		
<b>Applicant</b>	Chancellor, Masters and Scholars of the University of Cambridge		

<b>SUMMARY</b>	The development accords with the Development Plan for the following reasons:  <ol style="list-style-type: none"><li>1. The proposal is in accordance with Policy 18 of the emerging Local Plan which supports densification of the site.</li><li>2. The proposed new building is of high quality design and will successfully integrate in the context of surrounding buildings and the emerging outline masterplan strategy.</li></ol>
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	<p>3. There will be no significant adverse visual impact on neighbouring residential properties.</p> <p>4. Potential noise and amenity impacts arising from the development can be addressed by imposition of appropriate conditions.</p>
RECOMMENDATION	APPROVAL

### Existing West Cambridge Site

- A.1 The application site falls within the West Cambridge Site, a major new academic campus undertaken by the University of Cambridge. The wider campus covers 66 Hectares situated between Madingley Road to the north and the M11 to the west. The site area is wholly within proposals site 7.06 of the Cambridge Local Plan 2006 and site M13 of the emerging Local Plan.
- A.2 An extant 1999 masterplan has been partially implemented. This related to a scheme of 244,212 sq m floor space, which includes pre 1999 developments. The principal roads through the site have been implemented along with numerous key buildings including The Centre for Physics of Medicine, the Cavendish Laboratory's Maxwell Centre, a new academic research building for Materials Science and Metallurgy and new academic research buildings for the University's Electrical Engineering Division. In addition, the East and West Forums and lake area have been developed, which are the main areas of public realm on the campus. (See Appendix 2 – masterplan as implemented).

### Future Strategy

- A.3 Policy 18 of the emerging Cambridge Local Plan (which is currently under examination) supports the principle of significant densification of the West Cambridge site, subject to provision of a revised site wide masterplan that takes an 'integrated and comprehensive approach to development'. This would include making more efficient use of land, increasing opportunities to meet employment need and provision of more shared social spaces and

other ancillary support services to enhance the vibrancy of the area.

- A.4 The emerging policy 18 supports (D1) educational uses, associated sui generis research establishments and academic research institutes and commercial research (B1(b), where it will support knowledge transfer and/or open innovation. Small scale community facilities, amenities, shops and student accommodation are also supported to enhance vibrancy.
- A.5 An application for a new outline planning application for the West Cambridge Site was submitted in June 2016. (See appendix 3: illustrative masterplan). The outline application has been under consideration since submission to resolve key issues regarding landscape and visual impact, transport, drainage, trees, environmental and amenity concerns. A single package of amended information was submitted in October 2017 for full reconsideration. It is anticipated that the outline application will be presented to Planning Committee later this year.
- A.6 The proposed West Cambridge outline application is anticipated to have a total floorspace of 500,280 sq m (by 2031). This is broken down into 257,900 sq m academic and 210,386 sq m commercial floorspace. Phase 1 (2021), which includes the application proposal, would provide 284,310 sq m, composed of 167,159 sq m of academic floorspace and 92,386 sq m of commercial floorspace. This includes the previously approved Civil Engineering Building (CEB) scheme (16/1811/FUL) of 4500 sq m and Cavendish III complex (17/1799/FUL) totalling 37,160 sq m.

#### Context for separate full planning application

- A.7 The site falls within the red line boundary of the wider West Cambridge outline application. The reason it is being brought forward ahead of the outline is because the proposed Shared Facilities Hub (SFH) is to be delivered as part of the same contract as the recently approved new building for the Cavendish Laboratory. The Cavendish III project was awarded a significant grant of £75 million in the 2015 Government Autumn Statement. The terms of this funding requires the planning outcome by early 2018 to comply with the spending timescales set by Government.

A.8 For this reason, this application will need to be determined ahead of the outline application which is currently under consideration. Provided there is full scrutiny of the application and the proposals are in accordance with the emerging wider masterplan, prior determination will not in the view of officers prejudice determination of outline application in due course.

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

### Outline layout

1.1 The application proposal forms a part of the University's 'key phase 1' developments at West Cambridge. It adjoins 'The Green' key place and Central Green Link within the Design Guide which accompanies the current West Cambridge outline application.

### Proposed SFH Application Site

1.2 The proposed application site is situated on the west side of JJ Thomson Avenue on the existing paddocks which are used in connection with the School of Veterinary Medicine (Vet School). The site is 0.532 hectares and is currently used to graze animals.

1.3 North of the plot, approval has recently been granted for a new open space 'JJ Thomson Gardens' and the Cavendish III laboratory. This site is currently laid to pasture awaiting development. Further east are buildings related to the department of Engineering and Computer Laboratory. Beyond, to the east of the wider campus (approximately 500 m) are the residential properties of Perry Court and the Lawns and the West Cambridge Conservation Area.

1.4 To the south of the site (approximately 18m) is the University nursery and residences, comprising of 4, four storey buildings. Beyond, is the Broers Building and East Forum, which is separated from the open fields to the south (Cambridge Green Belt) by the Southern Ecological Corridor, a hedgerow belt (City Wildlife Site), east-west footpath/cycleway and the Coton footpath.

1.5 To the west beyond is the Vet school complex, other undeveloped plots and the Schlumberger Gould Research Centre, a Grade 2\* Listed Building.

- 1.6 The site falls outside of the Controlled Parking Zone.
- 1.7 The site is outside of the Air Quality Management Area.
- 1.8 Cavendish III falls within Flood Risk zone 1.

## **2.0 THE PROPOSAL**

- 2.1 Full planning permission is sought for the erection of a new mixed use building to provide a SFH, providing communal shared amenities at West Cambridge. The building totals 4907 sq m of floor space. The ground floor contains a café bar, cafeteria and restaurant with associated kitchen areas and a shop unit. The first and second floors contain a mix of lecture theatres (100 seat lecture hall, 50 seat lecture hall and 30 seat lecture hall), study areas, seminar rooms, library space, meeting rooms and a contemplation room (University Chaplaincy space). The building includes the University's Central Production Kitchen (CPK) which is to be relocated from its current premises on Granta Place in the City centre.
- 2.2 Externally, there is a service yard area in the south west corner, with the refuse store and access to the kitchen and building services. Adjacent to this, to the north west corner of the site is the 'productive garden', a landscaped area for growing herbs and vegetables. The development area includes public realm to the north which forms part of 'JJ Thomson Gardens' recently approved through the Cavendish III application in February 2017. The eastern side of the building includes external seating areas.
- 2.3 The building has 3 levels of accommodation and stands 13m to the main third level parapet. A recessed roof level plant screen measures, from ground level, between 14m to 16.4m at its highest point at the eastern end of the building. The external elevations of the building are finished with a mix of glazing, perforate screens and metal cladding. The roof plant screen is proposed to be formed from metal mesh.
- 2.4 Permission is sought for the café/bar to be used 07:00 to 23:00 Monday to Friday and 09:00 to 20:00 Saturdays, Sundays and Bank Holidays. Permission is sought for the shop element to open 07:00 to 23:00 Monday to Friday and 07:00 to 20:00 Saturdays, Sundays and Bank Holidays.

- 2.5 The development provides 176 cycle parking spaces which are located to the south of the building adjacent to the southern plaza.
- 2.6 The development will provide 2 car parking spaces for disabled people to the east of the site on JJ Thomson Avenue.
- 2.7 A small substation (4m x 4m) is proposed in the south east corner of the site.
- 2.8 The application is accompanied by the following supporting information:
  1. Planning Statement
  2. Design and Access Statement (DAS)
  3. Transport Assessment (TA)
  4. Travel Plan
  5. Energy and Sustainability Strategy
  6. Flood Risk Assessment
  7. Drainage Strategy
  8. Arboricultural Impact Assessment
  9. Statement of Community Involvement
  10. Ground investigation report
  11. Lighting report
  12. Public art delivery plan

### **Amended Plans and Additional Information**

- 2.9 The following supplements the original submission:
  - Amendments to the design and layout of Southern Plaza.
  - Minor alterations to the design of the service yard.
  - Provision of additional cycle parking (176 cycle parking spaces).
  - Additional signage details.
  - Additional visuals which model the parapet and roof plant.
  - Minor amendments to the noise report.
  - Response to the Commercial Waste Manager comments.
  - Response to Transport comments.
  - Response to landscape comments.
  - Large scale plan of the ground source heat pump array.
  - Response to issues raised by Quality Panel, Disability Panel and third parties.

### 3.0 SITE HISTORY

Reference	Description	Outcome
97/0961/OP	Outline application for the development of 66.45ha of land for University academic departments (73,000sq.m), research institutes (24,000sq.m), commercial research (41,000sq.m) and associated infrastructure	Approved
99/0042/FUL	Erection of three storey building to form Computer Sciences Faculty with associated parking and landscaping. (William Gates Building).	Approved
C/04/0614	Erection of part two part three storey building for academic research "purposes, pursuant to C/97/0961/OP. (CAPE building).	Approved
13/1564/FUL	Construction of an annexe to the Centre for Advances Photonics and Electronics (CAPE) Building	Approved
16/1134/OUT	Outline planning permission with all matters reserved is sought for up to 383,300m <sup>2</sup> of development comprising up to 370,000m <sup>2</sup> of academic floorspace (Class D1 space), commercial/research institute floorspace.	<b>Submitted June 2016, currently under determination</b>
17/0163/SCOP	Request for a scoping opinion, proposed Cavendish III, West Cambridge.	Scoping Issued March 2017

17/1942/FUL Construction of two concrete slabs (10m by 10m and 13m by 15m) for the purposes of testing vibration impacts from surrounding uses. Approved

17/1799/FUL Proposed Cavendish III laboratory, 37,160 sq m in D1 academic floorspace, JJ Thomson Gardens and enhancements to JJ Thomson Avenue. Approved.

#### 4.0 PUBLICITY

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

#### 5.0 POLICY

5.1 Relevant Development Plan policies:

PLAN	POLICY NUMBER
Cambridge Local Plan 2006	3/1 3/2 3/4 3/6 3/7 3/9 3/11 3/12 3/13 3/15 4/1 4/4 4/9 4/11 4/13 4/14 4/15 5/11 7/1 7/2 7/3 7/4 7/5 7/6 8/2 8/3 8/4 8/5 8/6 8/9 8/10 8/16 10/1

5.2 Relevant Central Government Guidance, Supplementary Planning Documents and Material Considerations:

Central Government	National Planning Policy Framework March 2012
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Guidance	<p>National Planning Policy Framework – Planning Practice Guidance March 2014</p> <p>Circular 11/95</p>
Supplementary Planning Guidance	<p>Sustainable Design and Construction (May 2007)</p> <p>Cambridgeshire and Peterborough Waste Partnership (RECAP): Waste Management Design Guide Supplementary Planning Document (February 2012)</p> <p>Planning Obligation Strategy (March 2010)</p> <p>Public Art (January 2010)</p>
Material Considerations	<p><u>City Wide Guidance</u></p> <p>Arboricultural Strategy (2004)</p> <p>Cambridge Landscape and Character Assessment (2003)</p> <p>Cambridge City Nature Conservation Strategy (2006)</p> <p>Criteria for the Designation of Wildlife Sites (2005)</p> <p>Cambridge and South Cambridgeshire Strategic Flood Risk Assessment (November 2010)</p> <p>Strategic Flood Risk Assessment (2005)</p> <p>Cambridgeshire Quality Charter for Growth (2008)</p> <p>Cambridge Walking and Cycling Strategy (2002)</p> <p>Protection and Funding of Routes for the</p>

	<p>Future Expansion of the City Cycle Network (2004)</p> <p>Cambridgeshire Design Guide For Streets and Public Realm (2007)</p> <p>Cycle Parking Guide for New Residential Developments (2010)</p> <p>Air Quality in Cambridge – Developers Guide (2008)</p> <p>Department for Transport - Cycleway Guidance (IAN 195/16) 2016</p> <p>Transport Strategy for Cambridge and South Cambridgeshire 2013</p> <p>Greater Cambridge Partnership – A428 Cambourne to Cambridge project</p>
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### 5.3 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. Whilst the adopted development plan and the NPPF are overriding, emerging policy 18 can be given some weight.

For the application considered in this report, the following policies in the emerging Local Plan are of relevance:

Policy 18 West Cambridge

### 5.4 Cambridge City Council and the University of Cambridge have agreed a Statement of Common Ground to inform the Local Plan

examination. There are now no areas of disagreement between the parties in relation to Policy 18 and its supporting text.

## **6.0 CONSULTATIONS**

### **Cambridgeshire County Council (Highways Development Management)**

#### Comments on application as amended

- 6.1 Application is supported overall subject to the mitigation measures, pedestrian/cycle crossing, bus stop improvements and travel plan.

#### *Supporting analysis*

- 6.2 The overall approach to the cycle accumulation study is supported. The likelihood of linked trips to other buildings on the campus informs the demand for 81 spaces to service the SFH.

#### *Mitigation*

- 6.3 A crossing point is proposed for pedestrians and cyclists on Madingley Road, between Lady Margaret Road and Grange Road. This is subject to detailed design and safety audits and should be provided by the developer.
- 6.4 Bus stop improvements nearest to the SFH are required for the south bound and north bound stops on JJ Thomson Avenue. The southdown side should include real time passenger information.
- 6.5 A construction management plan and travel plan are also required.

#### Comments on application as submitted

- 6.6 Clarification is required on various aspects of the TA. This includes the mode share information and survey data.
- 6.7 A commitment to providing real time timetable information on the bus shelters is required.
- 6.8 Further information on the use of the building is required. This includes evening use and the likely usage of the lecture theatres and shop unit.

- 6.9 A plan is required of the proposed cycle zebra crossing on Madingley Road.

### **Highways England**

- 6.10 No objections. Whilst the outline application is still under negotiation, this application falls within the scope of the overall long standing extant permission on the site.

### **Environmental Health**

- 6.11 No objection in principle to this full application providing the following environmental health issues and any associated impacts are controlled by the imposition of conditions to protect the health and quality of life (amenity) of existing residential units, in particular residential to the South at Franklin and Fawcett Court approx. 20m from application site boundary.
- 6.12 The team concludes that the proposals are acceptable in all respects and the recommended environmental health related conditions provide a high level of protection for the quality of life (amenity) / health of existing residential properties and other occupiers of the West Cambridge Campus.
- 6.13 In the context of the medium and longer term the same high level of protection of the quality of life (amenity) of existing residential properties can be secured by the imposition of the same or similar conditions on the Cambridge West Masterplan outline application (Planning Ref. 16/1134/OUT), currently under consideration.

### **Refuse and Recycling**

- 6.14 Whilst the refuse store opens directly onto the service yard which is ideal for the collection contractors it is quite far removed from the smaller kitchen. Furthermore, being long and narrow it is likely that the full space of the store will not be used. If it were changed to having an access door allowing the store to be 'walk through' this would be an improved design.
- 6.15 It is recommended the store have a central drainage point (or gutter running the length of the store) and a tap/hose to enable occasional wash-down. Automatic lighting is also advised as well as ventilation points to avoid odour build-up. The main double

doors should be locked/unlocked via a key-code rather than keys which can be lost/broken.

- 6.16 Outside there should be yellow no parking zone marked alongside building to allow contractor's RCVs to back up to the refuse store without hindrance, this also allows the preferred safety procedure of exiting the site forwards.

## **Urban Design and Conservation Team**

### Comments on application as amended

- 6.17 Overall the above changes are considered acceptable in urban design terms and have addressed all of the Team's concerns. Accordingly the application is now supported.
- Screens walls and planting have been added to the eastern and western boundaries of the service yard and accordingly have secured the back of house area. The amendment is acceptable in design terms.
  - The planting and cycle parking in the southern plaza have been rationalised to create a better connection/arrival space for the southern entrance of the SFH.
  - Additional views have been provided to demonstrate that the plant on the roof will not be seen from key views across the West Cambridge Campus.

### Comments on application as submitted

- 6.18 The scale and massing is consistent with the emerging Parameter Plans for the West Cambridge site. The eastern section of the building has a raised raked parapet to create a degree of prominence and to enable screening of roof top plant. This approach is considered acceptable in design terms. However the overall height of the parapet on the southern side may need to increase to effectively screen the plant equipment in longer views.
- 6.19 The layout has been configured to allow active uses to spill out onto the surrounding public realm creating active frontages.
- 6.20 There was concern that 'back of house' functions such as delivery cages etc. would be visible from the public realm. In addition, the open route from the Southern Plaza creates a route that has poor surveillance along this boundary.

6.21 The overall distribution of cycle parking spaces is acceptable in design terms ensuring that stands are placed close to the main building entrances. The team has some concerns about the strategy for future expansion of the number of stands and the impact that these will have on the surrounding public realm and width of footways.

6.22 We are also concerned that future expansion of the number of racks will require the relocation of electric vehicle charging points. It is not identified where these will relocate to:

- Amendments to the eastern and western boundaries of the service yard to provide a contained and secure 'back of house' area.
- Increase in proposed parapet to eastern end of the SFH to adequately screen proposed plant from longer views.
- Introduce a secondary plant screen to shield plant when looking east.
- Removal of ground cover planting and rationalisation of hard paving in the southern plaza to open up views of the entrance and retail space and to ensure that adequate circulation space is created.
- Adjustment to the position of the electric vehicle charging points to ensure that adequate circulation space for removal of refuse bins from the nursery is maintained.
- Demonstration that the landscape proposals do not impact on the swept path turning area in the service yard.
- Confirmation that expanded cycle parking in the currently proposed service yard will not impact on its long term functionality.
- Confirmation of the location of the relocated electric vehicle charging spaces following expansion of the cycle parking.
- Signage and lighting locations need to be identified on the elevations.

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

6.23 Application supported. The proposals incorporate a number of sustainable design and construction features in response to planning policy and the Sustainability Assessment Matrix that has been prepared for the West Cambridge site overall. This includes achievement of BREEAM 'excellent'.

6.24 Consideration be given to whether the SAM's targets for water efficiency need to be reviewed or whether it may be possible to

group buildings together when considering ways to reduce potable water consumption.

- 6.25 With regards to the energy strategy for the site, the proposal is for the SFH to connect to the ground source heat pump array being provided as part of the Cavendish III proposal forming one of the clusters envisaged by the Energy Strategy Addendum which forms part of the outline planning strategy for the wider West Cambridge site.
- 6.26 A large scale drawing as shown on page 37 of the Energy and Sustainability Strategy is required which shows the indicative layout of the ground source heat pump array.

### **Access Officer**

- 6.27 Disability Panel's comments are supported. Double doors will need to be powered or be asymmetrical with one leaf being at least 900mm and having an opening force of less than 20N.

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

#### Comments on application as amended

- 6.28 Generally supportive of the information submitted; however there are some concerns about the existing semi mature Plane trees and hedge along the southern boundary of the application site, particularly the 4 central trees. We require a re-distribution of the cycle racks to allow the existing grass verge to be retained for an area of 1.5m around the trunk.

#### Comments on application as submitted

- 6.29 The team is generally supportive of the information submitted; however we have the following comments and requests for more information prior to determination.
- 6.30 Prior to determination, more details including a detailed plan along the entire length of the southern boundary together with dimensioned sections through the trees/hedge and proposed cycle parking and various hard paving types. A method statement should also be included explaining how the new surfacing can be installed whilst maintaining the health of the hedge and trees.

6.31 Several other points of detail are raised by the Council's Landscape Officer (slot drains, terrace planting/soil specification/tree pit details).

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

6.32 Application supported, subject to a condition requiring a revised surface water drainage scheme.

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

6.33 Application supported. The proposed discharge rate of 2.59l/s/ha is well supported and represents a 10% betterment on the 1in1 year greenfield runoff rate. The overall surface water drainage approach is in line with the West Cambridge Outline Drainage plans.

6.34 A variety of sustainable drainage features such as rain gardens, permeable and paving are proposed for the site to meet the CIRIA pollution index requirements. This network outfalls to a surface water sewer to the east of the site as part of the wider West Cambridge masterplanning proposals.

6.35 Whilst overall we are supportive of the proposals there are a number of additional details which are required in order to be confirm that these SuDS features can be delivered successfully across the site.

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

6.36 The proposals do not impact on the site wide ecology designations. However, there is no reference as to how the proposals fit within the site wide ecology strategy. Biodiversity enhancements should be incorporated and a condition for an Ecological Design Strategy (EDS) is recommended to capture the exact number, specification and locations of features such as nest boxes, biodiverse roofs and log piles.

6.37 The potential for Protected and other species to use the area should be considered within the Construction Method Statement to ensure that trenches are covered overnight.

## **Environment Agency**

- 6.38 No objections in principle subject to recommendations and informatives. Anglian Water should be consulted to demonstrate that adequate sewerage and disposal systems serve the development and whether existing abstraction licenses can be used.
- 6.39 A waste management and minimisation plan should be included. Waste prevention, reuse and recycling should be a site objective.

## **Anglian Water**

- 6.40 Application supported in principle subject to conditions regarding surface water drainage.

## **Cambridgeshire Constabulary (Architectural Liaison Officer)**

- 6.41 Application supported. This appears to be a very acceptable design and layout in terms of Crime Prevention and Community Safety. This office would be happy to discuss Secured by Design and measures to reduce the vulnerability to crime, disorder and the fear of crime with the applicant and consult in relation to any Security Needs Assessment required for BREEAM.

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

- 6.42 It is not considered that archaeological works are required in connection with the above development.
- 6.43 The site lies outside the known areas of significant activity identified by previous archaeological works in the vicinity. It is therefore unlikely that archaeological investigation would contribute to our understanding of the area.

## **Cambridgeshire Quality Panel (Meeting of 7 July 2017)**

- 6.44 The Cavendish III proposals were reviewed by the Cambridgeshire Quality Panel against the four 'C's' of Community, Climate, connectivity and Character on the 10 August 2016. Overall the Panel felt the building showed strong character potential. The Panel were pleased to have the opportunity to comment on the

application before submission. Full comments are contained within Appendix 2 and summarised in the design sub section below.

### **Disability Consultative Panel (Meeting of 27 June 2017)**

6.45 The Panel's comments were as follows:

6.46 Hearing enhancement - induction loops. The designers are advised to take every precaution to minimise interference.

6.47 Public uses (seminar rooms). The Panel welcome the proposal to make these spaces available for public use.

6.48 Accessible WCs. The designers are reminded to consider wheelchair accessibility with room provided to allow either left or right transfer.

#### *Conclusion*

6.49 Although not as fully developed as the Cavendish III scheme; an impressive design nevertheless with some good access features proposed. Once again, a site visit once completed would be welcomed.

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

## **7.0 REPRESENTATIONS**

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

19 Albemarle Way  
14 St Peters Road, Coton  
31 Brooke House, Kinsley Walk

7.2 The representations can be summarised as follows:

#### *Cycle parking*

- Cycle parking provision (44 spaces) is insufficient for the number of lecture theatre seats.

## **West Cambridge Active Travel group (WCAT)**

- WCAT is a grassroots organisation seeking to help enable walking, cycling and public transport on and around the West Cambridge site.

### *Cycle Parking*

- The proposed 44 spaces are insufficient. 18 are inferior double stacking design and 26 are uncovered.
- At least 200 cycle parking spaces are needed just for the lecture theatres.
- Although the Design and Access Statement mentions a future extension to 176 then 320 spaces, the initial provision is insufficient.

### *Detailed comments on documents*

- 5km is too short a distance to use for cycle planning.
- Additional deficiencies to existing cycle provision in the vicinity of the site are described.
- Most of the cycleways on the campus are of poor quality, either shared or poorly segregated.
- Linked trips have not been properly taken into account.
- Exam periods need to be considered in the TA.
- Trips generated by the teaching spaces have not been taken into account. At least 258 spaces would be needed.
- The 56 visitor spaces allocated for non-teaching space is an underestimate.

### *Public Realm*

- Tar and chip is a poor quality surface and should not be used.

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

## **8.0 ASSESSMENT**

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

1. Principle of development
2. Context of site, design and external spaces
3. Residential amenity
4. Renewable energy and sustainability
5. Transport
6. Drainage
7. Ecology
8. Disabled access
9. Refuse arrangements
10. Public Art
11. Third party representations
12. Planning Obligations (s106 Agreement)

### **Principle of Development**

#### *Current 2006 Local Plan and 1999 Masterplan*

8.2 Development for University needs will be permitted on the West Cambridge Site, during the local plan period and beyond in accordance with Cambridge Local Plan 2006 policy 7/6 (West Cambridge). Further development which accords with the provisions of the masterplan will be permitted. The broad principle of the application proposal is in accordance with the extant policy 7/6.

8.3 In terms of the extant 1999 masterplan, the proposed site falls within the original Design Guidelines Plot D, which envisaged the site to remain used for paddocks for the Vet School and did not anticipate significant new buildings. Typically, guidelines for the other plots on West Cambridge allowed for buildings between 8.5m and 12.0m above finished ground level (corresponding to two and three storeys for academic and research uses). There is however no specific height or massing guidelines for plot D. In my view, the 1999 masterplan has limited weight on the basis of the current

situation. Assessment of the proposed development as a separate full planning application turns on its design in context, on its own merits, which is discussed in the relevant design subsections below.

*Emerging Local Plan Policy 18 and outline Parameter Plans as submitted*

8.4 The parameter plans submitted as part of the outline application (latest December 2016 revision still under review) will, if approved, fix the key principles for the development. The Parameter Plans are:

- Development Building Zones 01
- Land Use Parameter Plan 02
- Access and Movement 03
- Landscape and Public Realm 04
- Maximum Building Heights 05

8.5 The outline is at present an undetermined application. It will be brought to this Committee for determination in due course. It is therefore important that this application in no way pre determines the outline application and is considered on its own merits on the basis of the current situation.

8.6 The proposed SFH is located in a 'primary amenities zone' within the emerging outline Design Guide. The undetermined outline masterplan intends to locate amenities with a site wide reach and importance in this area to ensure that ground floors animate the adjacent public realm.

*Proposed SFH floor space in context*

8.7 The extant 1999 permission at West Cambridge allowed for development of 176,120 sq m floor space in total. To date, 103,722 sq m remains to be implemented. On this basis this full application must be considered in the context of the remaining floor space available through the 1999 masterplan. The proposed development, in combination with what has already been constructed on site totals 206,617 sq m. This is over 4 fifths of the total potential 1999 masterplan (244,212 sq m). The relative increase in floor space in relation to the extant permission is relevant to any future mitigation, which is set out in the relevant

subsections below. Table 1 below summaries the proposed floor space in context with other development at West Cambridge.

*Table 1: Proposed floor space in context*

	<b>Overall floor space</b>
<b>Existing implemented West Cambridge development</b>	164,550
<b>1999 outline not implemented</b>	103,722
<b>Cavendish III</b>	37,160
<b>Proposed SFH, Cavendish III and existing implemented (including CEB)</b>	206,617
<b>Proposed SFH</b>	4907
<i>For information only – not part of SFH application</i>	
New outline masterplan 16/1134/OUT	383,300
Total potential under new masterplan	500,280

### *Retail and Community Facilities*

- 8.8 Development for use class A3 and A4 will only be permitted where the proposal will not give rise to unacceptable environmental problems or nuisance and that the cumulative impact of the development is considered acceptable. In addition, the development must be located in an existing centre or in a mixed use urban extension, as set out in Local Plan policy 6/10. The proposed SFH is within the West Cambridge Site, a major academic extension to the City, in an area of the site which is identified for further amenities in the emerging masterplan. Subject to environmental impacts being acceptable (discussed in

the amenity subsection below), the proposed development is not therefore in conflict with the criteria of policy 6/10.

- 8.9 Proposals for development of new community facilities, for which there is a local need, is supported by Local Plan policy 5/12. This is particularly critical in areas which currently lack facilities, as is the case on the existing West Cambridge Site. Local Plan policy 5/12 states that flexible buildings should be designed to accommodate as many different community and leisure activities as possible. This approach has been central to the SFH which contains a variety of uses to support the needs of the existing community at West Cambridge. Small scale community facilities and amenities (A1 local shop, A3 Café, A4 public house, D1 creche and student accommodation) will be supported at West Cambridge in accordance with part 5 of emerging Local Plan policy 18. The proposed SFH fully accords with Cambridge Local Plan 2006 policies 6/10, 5/12, emerging policy 18 and is therefore acceptable in principle.
- 8.10 The proposed SFH will be a unique building at West Cambridge. This is because it will provide communal teaching and catering facilities which will encourage collaboration between departments and enable more efficient use of resources. The SFH is the first of a series of planned 'hubs' whereby facilities are not provided internally within departments, but externally as a shared resource.
- 8.11 The scale of the SFH has been considered in relation to the existing population of the campus and anticipated need. Currently there are approximately 4,450 site users at West Cambridge. This is on the basis of 2,100 academic staff, 1000 commercial research workers and 2,350 students (which varies through the day). While the University consider the amount of catering floorspace sufficient to meet current demand, the location of current facilities and the nature of the offer do not support the social life of the campus.
- 8.12 The proposed SFH will provide the main catering provision for the Cavendish III laboratory. A total of 320 seats will be provided in the restaurant area which is significantly more than the existing 258 seats provided at the existing Cavendish II. There will be provision for 600-800 people over the lunchtime period. The proposed SFH will therefore provide a much needed focus for catering and general amenity, which is supported by emerging

Local Plan policy 18 and essential to the continued success of the campus.

- 8.13 To date, shared facilities have not been delivered as originally intended in the extant 1999 masterplan on the campus. The majority of this component remains undelivered, which the University seek to partly address through the SFH. It is essential that the ground floor of the building remains in A3 for perpetuity. This can be secured through the imposition of **condition 38: ground floor use**.
- 8.14 The outline masterplan will determine phasing and sequencing for other facilities on the campus to cater for the University's intended future site user population (circa 14,000 site users). This is likely to include further nursery provision which is currently identified adjacent to the existing sports centre.

#### *Archaeology*

- 8.15 The site lies outside the known areas of significant activity identified by previous archaeological works in the vicinity. The County Archaeology Team has considered the application and is satisfied that further excavation is not required on this site. The application has adequately considered the impact on archaeological areas, in accordance with Cambridge Local Plan 2006 policy 4/9.

#### **Context of site, design and external spaces**

- 8.16 The key design issues are the detailed design and appearance of the new building in its setting and its relationship with the wider assessment of the outline application 16/1134/OUT.
- 8.17 The location of the SFH is considered to be appropriate in the context of the emerging outline. While the emerging Design Guide directs the majority of amenities provision to the East and West forum, officers recognise the advantages of close proximity to The Green, Cavendish III and JJ Thomson Avenue. Its location is an appropriate response to the emerging site context, in accordance with Local Plan policy 3/4.

#### *Design and Layout*

- 8.18 The site location means that the building should respond positively to the existing residential apartments to the south and the potentially challenging shaded north elevation, which will address JJ Thomson Gardens in future. The design of the building is intended to be as permeable as possible. This is provided by a north and south entrance and windows surrounding the majority of the ground floor at the eastern end.
- 8.19 The eastern end is configured to provide a dual aspect, permeable facade space to maximise natural light. This also enables the (amended) South Plaza area to be better connected to the café bar, which will provide an attractive, useable space, particularly in the winter months. The design of the building maximises the opportunities of the site afforded by its orientation and is a positive response to context in accordance with Cambridge Local Plan 2006 policies 3/4, 3/7 and 3/12.
- 8.20 The staggered footprint provides articulation to the building, improving its relationship with the surrounding external spaces. It allows for more evening summer sunshine from the west on the external amenity areas to the north of the building. Through this approach, the active frontage along the north, east and west elevation is maximised to provide an attractive environment, in accordance with Cambridge Local Plan 2006 policies 3/4, 3/7 and 3/12.
- 8.21 The reconfigured shop, which also has a dual frontage to South Plaza and the cafeteria, is supported. The revised design facilitates a better internal layout in relation to South Plaza. The design and location of the shop is well connected with its immediate locality in accordance with Local Plan policy 3/4, which should enhance its future viability, an issue which has hampered earlier proposals to provide facilities on the campus.
- 8.22 Officers are satisfied that the opportunities for dual aspect design of the ground floor have been maximised. We note that the sizing of the Central Production Kitchen (CPK) largely reflects the needs of the actual building. The developer team have confirmed the estate wide distribution element does not significantly add to the floor space required, which demonstrates that the design of the building is not compromised by its wider catering function.

*Scale and massing*

- 8.23 The proposed SFH stands well below the proposed maximum height parameter plan within the outline application. The 13m height of the main third level parapet is well proportioned in context with the existing University Residences and the recently approved Cavendish III complex.
- 8.24 From longer perspective views along JJ Thomson Avenue, the overall height of the building will appear as three main levels of accommodation, with the recessed plant screen above. This will positively frame the emerging JJ Thomson Gardens and is in proportion with the width of the adjacent public realm.
- 8.25 The longer range view from east to west towards the Grade 2 \* Listed Schlumberger will be respected through the siting of the SFH. It is positioned between 7m and 11m from the pavement edge of JJ Thomson Avenue and the presence of the east elevation will contribute a denser, better defined street frontage which is envisaged for the wider site. This is part of the 'campus transformation' that is central to the wider West Cambridge development.
- 8.26 The additional visuals provided give comfort that the level of roof top plant will be enclosed within the roof top plant enclosure. The amount of plant currently proposed represents the worst case scenario and it may be reduced as the building moves to the detailed design stage of its development. For this reason officers consider the imposition of **condition 12: rooftop screening** appropriate to enable the final roof top screen enclosure to be agreed.

*Detailed design and materials*

- 8.27 The submitted elevations and Design and Access Statement provide detailed information on the proposed materials palette for the SFH. Overall the building expresses a horizontal form through the use of 'continuous banding' with various perforate and glazed panels at each floor. The base is expressed in a more solid manner with ribbed concrete block work along with the glazed and perforate metal sections.
- 8.28 Signage and lighting have the potential to impact significantly on the quality of the elevations. The amended and additional

information submitted set out a clear hierarchy and family of signage for the SFH. The elevations identify signage zones and there has been consideration of how the building will be illuminated at night. The illustrated approach is considered acceptable and will be considered in further detail through the discharge of **condition 3: materials** should the application be approved.

- 8.29 The contemporary approach to the elevations and overall palette of materials and proposed finishes are considered to be acceptable in design terms. All materials will be considered in detail through the discharge of **conditions 3: materials** should the application be approved.

#### *External Spaces and trees*

- 8.30 Sunlight and shadow diagrams are provided within the Design and Access Statement. This analysis identified external seating zones through the year. Officers are satisfied the public areas will not be unduly compromised by their northerly aspect and that a range of attractive threshold spaces will be useable through the year. This analysis informs the landscaping strategy and seating areas for both the SFH and JJ Thomson Gardens.
- 8.31 Some concerns remain regarding the siting of some of the Sheffield cycle stands in relation to four of the London Plane trees. The proposed SFH is sited 7m from the London Plane trees within the adjacent University Nursery site to the south of the site. The applicant has demonstrated how nine Sheffield stands can be reconfigured immediately adjacent to the south wall of the refuse store. Subject to this minor adjustment achieved through **condition 19: cycle parking southern boundary**, the external spaces of the scheme are considered well designed, usable, safe and enjoyable to use, compliant with Cambridge Local Plan 2006 policy 3/7 and 3/11.
- 8.32 Details of fencing prior to commencement of development can be secured through the imposition of **condition 7: tree protection**. Subject to these measures the Council's Landscape and Arboriculture Officers are satisfied that adequate provision is made for their retention.
- 8.33 Part of the design intention is to integrate planting within the building itself, in the interests of the health and wellbeing of future

users. While the Landscape Team has some reservations about the conditions for the interior planting, the principle is supported and the details of the planting regime can be agreed through the discharge of **condition 20: hard and soft landscaping**.

Cambridgeshire Quality Panel

8.34 The Cambridgeshire Quality Panel reviewed the emerging proposal on 7 July 2017. The Panel were very supportive of the proposals overall. A number of specific comments and recommendations were made to further enhance the scheme, which are set out in table 2 below. The application overall has responded positively to comments made by Quality Panel. The full minutes are attached as Appendix 1.

*Table 2: Quality Panel Issues and officer responses*

<b>Issues and recommendations of Quality Panel</b>	<b>Officer response</b>
<p><i>Community</i></p> <p>The Panel were very supportive of the shared amenity building which was considered an important part of the site infrastructure.</p> <p>The Panel thought there was an opportunity to make the shop space more open and welcoming.</p> <p>The Panel were pleased to hear there is a public art and cultural strategy.</p> <p>There is an opportunity to develop a 'productive</p>	<p>Delivery of the SFH will be an important development of the wider campus, providing important much needed amenities and facilities.</p> <p>Following the meeting, the design of the ground floor was enhanced to provide more views of the shop from central plaza. Internally, the shop was made more accessible from inside the building.</p> <p>There are opportunities to integrate public art into the proposals which will be secured through <b>condition 19: public art</b>.</p> <p>A 'productive landscape' area was</p>

<p>landscape' in the gardens and around the building.</p> <p>There is an opportunity to further develop the social activity within the building with places where interactions can happen.</p> <p>The application submission should demonstrate how the building can be flexible over time.</p>	<p>introduced in the north west corner of the site. This will allow users to grow vegetable and herbs, providing opportunities for community engagement.</p> <p>A hierarchy of spaces have been provided within the building and there will be range of informal spaces for meetings and interaction. The shop has been opened up with dual frontage.</p> <p>The upper floors of the building could be repurposed for office or general academic use in the future. It is however the intention to secure the ground floor as A1 and A3 café space in perpetuity in the interests of ensuring there are adequate social spaces on the campus.</p>
<p><i>Connectivity</i></p> <p>Panel supported the provision for cyclists and provision for storage but had some concerns with security.</p> <p>Removal of internal running stair was disappointing.</p>	<p>A secure area for 24 cycle spaces is provided for staff.</p> <p>The application proposal reintroduces a large central stair which provides opportunities for seating and gathering between floors of the building, which was part of the original design concept.</p>
<p><i>Character</i></p> <p>Proposals to bring landscape into the building were supported.</p> <p>Panel supported design of the elevations. The detailing</p>	<p>See paragraph 8.27.</p> <p>See paragraph 8.33.</p>

<p>of the upper levels of the building should be developed further.</p> <p>The proposed internal timber wall should be incorporated along the length of the building.</p> <p>The western service yard area could also be made dual aspect.</p> <p>Panel felt the raking roof enclosure was disappointing and that more could be made of the roof space as an amenity. Rooflights could also be considered.</p>	<p>The linear bookcase is designed to unify the internal space and runs the length of the building.</p> <p>Dual aspect design has been considered for the entire ground floor, but it is not practicable because of the back of house uses, including kitchens, which needs to be accommodated. The eastern end of the ground floor and all of the upper floors are dual aspect.</p> <p>It is not considered possible to use the rooftop because of the amount of plant and PV panels which need to be accommodated. Rooflights have however been incorporated where possible.</p>
<p><i>Climate</i></p> <p>Panel would have liked to have seen the sunlight and shadow study to judge the impact of the building on the open space to the north.</p> <p>Panel liked the inclusive approach to wellbeing which had been considered in the design of the building.</p>	<p>The external seating areas has been informed by the daylight and shadow analysis submitted in support of the application.</p> <p>The scheme provides internal planting and a 'productive garden' in the interests of wellbeing for future building users.</p>

### Fire Strategy

8.35 A statement on the approach to the buildings fire strategy accompanies the application. This includes recommendations for

alarm and detection systems, protected escape routes, structural fire resistance profile and smoke ventilation. In the view of officers the development has adequately considered a fire strategy at this stage in the process, demonstrating design safe and accessible for future users, in accordance with part b of Local Plan policy 3/12.

## **Residential Amenity**

### Impact on amenity of neighbouring occupiers

- 8.36 The nearest residential properties are located 20m south at Franklin and Fawcett Court and the University Nursery at West Cambridge at 8 Charles Babbage Road.
- 8.37 The key amenity issues are the potential disturbance from deliveries, noise and vibration operational noise, operational odour and dust, artificial lighting, contaminated land and air quality.

### *Impact on residential properties*

- 8.38 Given the 20m distance of separation from the rear of the proposed SFH and the rear of the residential apartments and nursery to the south, there is not considered to be significant harm by way of direct visual impacts, enclosure or over shadowing resulting from the development.
- 8.39 The upper two levels of accommodation in the SFH have limited window openings which reduce the likelihood overlooking. The main potential impact is likely to result from the use of the first floor rear balcony, particularly in the summer months. However, the retention of the existing London Plane trees will largely filter views of the SFH terrace, which given the 6m distance to the common boundary is in the view of officers a neighbourly relationship.
- 8.40 The use of the building, in particular the café bar element has the potential to cause noise and disturbance. It is intended that the eastern end can operate as a semi-autonomous unit, independent from the CPK. Subject to a noise insulation scheme being agreed in order to minimise the level of noise emanating from these areas on neighbouring residential premises, the proposed maximum 23:00 opening is considered acceptable. The noise insulation scheme will consider potential uses of the café/bar including the

playing of amplified music. This will be secured through the imposition of **condition 14: Café and bar areas**.

#### *Construction phase impacts*

- 8.41 The wider Cambridge West Masterplan is likely to be constructed in phases over approximately a 15 year period. Extensive demolition and construction, (some of which will be relatively close to existing residential premises) will occur and it is paramount that pollution such as noise / vibration and dust / emissions to air from the demolition and construction phases are controlled and minimised by the use of best practical mitigation means.
- 8.42 With appropriate mitigation measures in place any adverse impact resulting from the construction works including construction related vehicle movements should be minimised so that there would not be any significant effect from the nearest residential properties.

#### *Operational Noise – delivery yard and services*

- 8.43 The noise assessment considers the significance of the delivery yard noise and impact of plant services.
- 8.44 An acoustic noise survey has been undertaken in order to establish the existing acoustic environment and baseline noise levels. The levels can also be used to formulate operational noise compliance and related conditions.
- 8.45 The impact of all operational noise sources either individually or cumulatively is likely to be negligible or at worst case low / minor at the nearest noise sensitive residential premises. The impact assessment is in accordance with the Environmental Health Team's requirements to match existing background noise levels. This is the case even when they are lower during a typical weekend.
- 8.46 However, the proposed mitigation measures rely on the implementation of precise engineering / noise insulation scheme design and operational noise measures, some of which are still subject to further detailed design and construction. **Conditions 13, 14 and 15** are therefore recommended to ensure potential impacts are mitigated.

## *Air Quality*

- 8.47 The submitted Shared Facilities Hub Transport Assessment (produced by AECOM and dated October 2017) demonstrates that due to the proposed use of the building as a 'hub' the majority of trips associated with this development will be on cycle or foot. It is stated that there is likely to be limited / minimal peak and daily vehicle trips on the road network as a direct result of the building, linked to staff numbers and delivery services associated with the relocation of the university catering service. This position is agreed. However the building will implement measures to aid the use of sustainable transport through a travel plan and modal shift away from the private car.
- 8.48 The submitted Energy and Sustainability indicates that the development will utilise a shared ground source energy loop with the proposed Cavendish III development thus minimising emissions to air. Two Low Temperature Hot Water (LTHW) boilers (sized to meet 100% of peak heating load as back up) will be installed to provide top up hot water during peak demand and as a system back up in times of servicing or failure of the Ground Source Heat Pumps (GSHP). Officers welcome the proposed use of GSHP for core heating and cooling which will minimise emissions to air. The use of Low Nitrogen Oxide (NOx) boilers can be secured by use of a **condition 16: low NOx boilers**.
- 8.49 No further information is required in relation to the impact on air quality from traffic emissions for the proposed development as this will be incorporated, as agreed, into the site wide West Cambridge Masterplan.

## *Kitchens - Odour and fumes*

- 8.50 It is proposed to relocate the University of Cambridge CPK from Granta Place in Cambridge city centre, to the development site, where food will be prepared and distributed to buildings on the University of Cambridge estate. Cafeteria and Café Bar Areas are also proposed on the ground floor.
- 8.51 Ventilation systems serving commercial type / size kitchens or similar will need to be designed to prevent harm to local amenity. This can be ensured through the imposition of **condition 18: ventilation and extraction**.

### *Artificial lighting*

- 8.52 The proposed new building (in terms of height and mass) will be closer to existing residential premises and has the potential to materially alter lighting levels and cause harm because the area is currently relatively dark.
- 8.53 The additional information provided to support the application details the likely scheme of illumination, which is low level lighting of the key public areas and building façade. Notwithstanding final details of the proposed external lighting can be adequately agreed through **condition 33: artificial lighting**.

### *Contaminated Land*

- 8.54 A satisfactory desk study, scope of work and intrusive investigation has been completed and submitted with the application. It is concluded that no specific remediation is required. A Watching Brief for unexpected contamination will be kept and details on materials to be imported will be included in the Material Management Plan. We look forward to receiving the recommended Environmental Specification for unexpected contamination in due course.
- 8.55 Contaminated land has been adequately considered. However, a number of bespoke contaminated land conditions and associated informatives are recommended to ensure the development is in accordance with the contaminated land submissions and to ensure any unexpected contamination that may be encountered is remediated and rendered harmless.
- 8.56 In my opinion the proposal provides a high-quality living environment and an appropriate standard of residential amenity for future occupiers, and I consider that in this respect it is compliant with Cambridge Local Plan (2006) policies 3/7 and 3/12.

### *Amenity for future building users*

- 8.57 The proposed SFH is sited south of JJ Thomson Gardens, which is a challenging orientation to provide a mix of amenity spaces throughout the year. Daylight and sunlight impacts have been modelled which analyse the impact of different spaces within and

outside of the building. Overall, a high quality of amenity will be provided.

- 8.58 The development incorporates a 'productive garden' in response to Quality Panel recommendations that health and wellbeing are considered in the design. This provides a visual amenity and allotment area to the benefit of the wider campus.

### **Renewable energy and sustainability**

- 8.59 The proposed SFH is intended to connect with the ground source heat pump array being provided as part of the Cavendish III building (17/1799/FUL). This will form an energy cluster envisaged in the Energy Strategy Addendum provided as part of the West Cambridge outline application. The ground source heat pump would provide for both heating and cooling of the building and will be 90% of the dominant loads, which is supported.
- 8.60 There is also potential to include a photovoltaic panel array on the roof of the building although this is subject to the final design and can be secured through **condition 12: solar PV**.
- 8.61 The final layout of the proposed ground source heat pumps will need to be agreed, taking into account the drainage strategy, landscape and trees. Officers are satisfied this can be ensured through the imposition of **condition 9: ground source heat pump array**.
- 8.62 The development overall will achieve BREEAM excellent, which demonstrates construction in a sustainable manner required by local plan policy part c3/12 and is strongly supported. The implementation of the energy strategy will be secured and monitored through condition, and the achievement of the BREEAM standard through **condition 11: design stage certificate**.

### *Outline Masterplan Strategy*

- 8.63 The emerging outline energy strategy for the wider West Cambridge site is focussed on a site wide approach to energy provision. The outline strategy assumes that some earlier buildings on the site, notably the Civil Engineering Building (CEB), Cavendish III and the SFH, would precede the construction of the

energy centre associated with this network and as such would need their own energy solution.

- 8.64 The proposed ground source heat pump is in keeping with the medium term energy strategy for the West Cambridge site, which includes the use of heat pumps to serve the heat network, located within individual building plots. As such, the energy strategy for this scheme is supported. In my opinion the applicants have suitably addressed the issue of sustainability and renewable energy and the proposal is in accordance with Cambridge Local Plan (2006) policy 8/16 and the Sustainable Design and Construction SPD 2007.

## **Transport**

### Highway Impact Assessment

#### *Trip Generation*

- 8.65 The proposed development is ancillary to the existing West Cambridge Campus and therefore the majority of trips relate to staff and students already on the site. The facility is designed to take trips off the network to enable the campus to be more self-sufficient for day to day needs of users. The intention of the SFH is to provide amenities for the existing on site population, rather than attract visitors from a wider catchment.
- 8.66 The TA utilises a café Nero in Westminster to calculate the estimated trips for the café element of the SFH. This is because it provides a peak at lunchtime with constant use throughout the day. This is considered an appropriate comparison with which to assess the likely trip numbers from this element of the SFH.
- 8.67 The proposed lecture theatre component of the SFH will be used by students already at the West Cambridge Site. Historically, departments have a high proportion of under used teaching spaces. This is inefficient and is being addressed through an estate wide strategy of pooling resources. The purpose of the lecture spaces in the SFH is to provide shared spaces which can cater for peak demand across the wider campus. This will reduce the need for tertiary teaching spaces in new departments in future.

- 8.68 While the total number of daily trips from all the different components of the building are estimated to be around 7000, it is considered that 97% will come from within West Cambridge. The residual trips off site would number 238 with 184 undertaken by vehicles (cars and servicing). The peak impact is considered minimal.
- 8.69 In terms of total vehicle based trips, the traffic survey data is derived from survey work from the Travel to Cambridge survey 2015, which has been updated with new data in the amendments submission. The County Transport Team is in agreement this data is now robust. There will be 22 vehicle arrivals during the AM peak and 16 departures during the PM peak. The surrounding highway network, in particular the A1303 Madingley Road/ Eddington Avenue/High Cross junction will suffer minimal additional impact as a result of the proposed development. This has been considered together with the recently approved Cavendish III development.
- 8.70 In light of the above, some limited off site mitigation is considered necessary to address the additional impact of new trips which are generated from the development. A crossing enhancement for pedestrians and cyclists has been identified for Madingley Road, between Storey's Way and Lady Margaret Road to reduce the impact of the vehicle increase on vulnerable modes. An indicative scheme for a pedestrian crossing is supported in principle by the County Council, although some concerns are raised with safety of the cycle crossing point in this location. A full safety audit will inform the final design. The final detailed scheme for enhancement for pedestrian connectivity and cycle connectivity will be agreed through the accompanying S106 Agreement.
- 8.71 In addition, the County Council has identified a need for bus stop enhancements on JJ Thomson Avenue, immediately adjacent to the proposed SFH. The provision of a shelter and real time passenger information would encourage use of the southbound side and make a better environment for passengers alighting in all weather. This will be secured through **condition 34: Bus stop improvements**.
- 8.72 In the view of officers, the package of mitigation addresses the transport impact of the development over and above the current situation. Appropriate mitigation for walking and cycling is provided, in accordance with Local Plan policy 8/2 and 8/3.

### *Highway Safety*

- 8.73 The County Council is satisfied that adequate turning space is provided in the rear service yard for deliveries.
- 8.74 The proposed indicative crossing point proposed as mitigation will require a safety audit. Therefore its final design is subject to further review.
- 8.75 To the south of the SFH a small area of public realm is provided which will eventually link into an east/west pedestrian cycle route through The Green. While in future it may be preferable to segregate cycles from pedestrians, at this stage the proposed 5m shared space is appropriate. This will be reviewed when the later phases of The Green are submitted.

### *Deliveries*

- 8.76 The site is expected to generate the need for 134 two way delivery trips per day. This is mainly as a result of the catering facilities, including the relocated CPK which will prepare food for delivery across the wider estate. The service yard has been designed to receive this number of vehicle movements. The accompanying noise assessment demonstrates this will not be harmful to the amenities of residential properties to the south.

### *Construction Traffic*

- 8.77 The proposed development is likely to generate 14 daily construction related traffic movements, of which 6 will be HGV's. Construction hours are likely to mean that employees will be on the site before the AM and PM peak periods. The impact of construction traffic is considered to be relatively small overall and can be adequately managed through the discharge of the **Construction Environmental Management Plan (CEMP) condition 6**.

### *Outline Masterplan Strategy*

- 8.78 The mitigation package for the outline masterplan is still under negotiation. This is independent and will not be prejudiced by the proposed mitigation outlined for the SFH, the focus of which is to

secure an appropriate contribution for the amount of development, its impact, in the context of the extant 1999 permission.

### Car Parking

- 8.79 The 2006 Cambridge Local Plan car parking standards indicate a maximum of 32 spaces should be provided to serve the proposed development, although the use of the building does not fit comfortably within any of the criteria. For this reason a car parking accumulation study was carried out in the TA which sets out that 24 car parking spaces will be required to cater for the staff working at the SFH. The County Council agrees this is an appropriate level to cater for the proposed development.
- 8.80 No new car parking will be provided with the exception of two disabled spaces and three spaces for electric delivery vans in the service yard area. The anticipated demand will be provided for within the existing pooled car parks south of Charles Babbage Road where there is already existing capacity, as demonstrated within the TA. Car parking demand and provision is summarised in table 3 below:

*Table 3: Summary of Car Parking*

<b>Car Parking</b>	<b>Car parking spaces</b>
Identified demand for proposed SFH	24
Existing capacity to meet demand for SFH	Surface car parks in areas 15, 18, 20, 23 and 41
New disabled car parking	2 spaces on JJ Thomson Avenue
Electric van spaces	3 in service yard

### *Car parking for disabled people*

- 8.81 The 2006 Adopted Car Parking Standards states that at least 5% of the total number of car parking spaces should be reserved for disabled people, rounded up to the nearest whole space. The proposed development provides two spaces in very close proximity

to the main entrance on JJ Thomson Avenue. This exceeds the minimum requirement and is supported.

### *Outline Masterplan Strategy*

- 8.82 The wider approach to car parking is currently subject to the ongoing transport assessment work for the outline planning application. However the TA as submitted for the outline sets out the University's long term commitment to managing car parking. It is currently proposed that the maximum number of car parking spaces reduces towards the later phases of West Cambridge, reflecting the increased frequency and coverage of public transport in future. This will however need to be carefully managed and timed to follow wider transport improvements.
- 8.83 Whilst the application proposal is for full planning permission, it will form a part of Key Phase 1 of the main outline application. As part of this initial phase, the University is seeking consent for a total of 2,571 car parking spaces. This provision is 579 spaces lower than the 1999 extant permission. Whilst this overall modal shift from private car use to sustainable modes will be determined through the outline permission, approval of the SFH proposal will not prejudice the outcome of these negotiations. This is because it has been clearly demonstrated that there is an over provision of car parking adjacent to the application site.
- 8.84 In summary, in the view of officers, adequate car parking is retained to meet the needs of future building occupiers in the short to medium term. The approach to car parking provision in the SFH is fully in accordance with the emerging outline strategy of reducing car trips and travel demand management. Approval of this application will not prejudice the Council's position in relation to the ongoing work associated with the outline Transport Assessment (16/1134/OUT). The proposal is therefore compliant with Cambridge Local Plan (2006) policies 8/6 and 8/10.

### Cycle Parking

- 8.85 There are no set standards for this type of mixed use building within the Adopted 2006 Cycle Parking Standards. As such, a cycle parking accumulation study is contained in the TA to determine the requirements through the day. It is estimated that 81 spaces are required, which is agreed by the County Transport

Team. This is on the basis that there are likely to be large number of linked trips, whereby the SFH would be visited on foot from other nearby institutes.

8.86 Notwithstanding, the application as amended will provide a total of 176 cycle parking spaces from day 1. This addresses concerns raised by third parties that the originally proposed 76 would be insufficient. Because the building is the first of its kind for the University, it is agreed that regular monitoring through the travel plan (**condition 24**) and cycle parking monitoring (**condition 37**) will be required to ensure the an appropriate level of cycle parking is provided. If this monitoring shows an under provision on the site, a further expansion of 144 cycle parking spaces will be implemented.

8.87 The applicant has demonstrated that the additional future expansion of cycle parking spaces will not impact on the functionality of the service yard area. The exact arrangement would be agreed through compliance with **condition 37: cycle parking monitoring**.

8.88 Comments from third parties have queried whether the proposed amount of cycle parking will cater for peak demand during exam times. Exam periods are exceptional in terms of demand and this will be provided at Cavendish III when teaching is not taking place. The University would provide temporary cycle parking in the event that further provision is needed during exam times, which can be adequately monitored through the travel plan. The proposed cycle parking is summarised in table 4 below.

*Table 4: Schedule of cycle parking*

<b>Cycle parking location</b>	<b>Provision</b>
Covered staff cycle parking	24
Covered double stacked cycle parking	38
Uncovered cycle parking	114
<b>Total day 1 Provision</b>	<b>176</b>

Future provision (if required through the Travel Plan)	320
Exam period provision (exceptional peak usage)	To be accommodated at Cavendish III or through temporary racks.

### *Outline Masterplan Strategy*

- 8.89 To accommodate the likely 3,600 students and 7,200 staff within Key Phase 1, the initial development will be provided with around 7000 cycle parking spaces. Their distribution will come forward with each reserved matters. The University is also investigating cycle hubs to provide a further pooled facility. The County Council is content with the standards identified for cycle parking and are content that approval of this full application does not prejudice assessment of the outstanding masterplan outline application 16/1134/OUT.

### **Drainage**

- 8.90 The overall surface water drainage approach is in line with the West Cambridge outline drainage scheme. The proposed discharge rate of 2.59l/s/ha is well supported and represents a 10% betterment on the 1in1 year greenfield runoff rate. This will ensure there is no increase in flood risk.
- 8.91 The development proposes to discharge surface water drainage to a separate sewer outfall to JJ Thomson Avenue. There is one network and an attenuation tank to the east of the building. This is required in order to deal with the volume of storage needed for the higher return periods.
- 8.92 A variety of sustainable drainage features such as rain gardens, permeable paving and blue roofs are proposed for the site to meet the CIRIA pollution index requirements. Whilst officers are supportive of the proposals the detailed drainage calculations and design of the SuDS features will need to be agreed through the discharge of **conditions 5 and 6**.

8.93 Because of the servicing and photovoltaic panel requirements, a green roof has not been incorporated. In light of the benefits of the overall drainage strategy this is considered acceptable. Overall the application successfully addresses sustainable drainage issues in accordance with Cambridge Local Plan policy 3/7 and 8/18.

### **Ecology**

8.94 The Council's Ecology Officer is content that the site has limited ecological value, and that the proposals do not impact on the site wide ecology designations. Habitats that have been identified through the wider West Cambridge masterplan application will not be adversely affected by the proposed development. Further details of ecological enhancements to the site, including nest boxes and log piles can be ensured through **condition 6: ecological design strategy**.

### **Disabled access**

8.95 The application has been presented to Disability Panel. As recommended induction loops will be fitted and a changing places toilet has been introduced to the ground floor. The Access Officer's comments on the entrance door specification will be considered by the developer team at the detailed design stage.

8.96 Two disabled car parking spaces are provided which exceeds the minimum standards and are conveniently located. Overall, in my opinion the proposal is compliant with Cambridge Local Plan (2006) policies 3/7 and 3/12.

### **Refuse Arrangements**

8.97 Refuse storage has been integrated into the design and will be accommodated within the service yard in the north west corner. A walk through room as suggested by the Commercial Waste Manager is not considered practical, although the space provided for refuse is considered acceptable. A central drainage point, hose and key code access will be considered further at the detailed design stage. The proposed SFH integrates waste storage successfully and is compliant with Cambridge Local Plan 2006 policy 3/12.

### *Outline Masterplan Strategy*

8.98 Refuse requirements are being considered in the context of servicing arrangements for the wider West Cambridge Site. Measures to reduce waste will be set out in the Sustainability Assessment Matrix which provides objectives for new occupants on the site. In my opinion the proposal is compliant with Cambridge Local Plan (2006) policy 3/12.

### **Public Art**

8.99 The proposed SFH can potentially accommodate public art as part of the overall strategy for West Cambridge. The walls of the SFH could incorporate art and it is recommended that an art workshop and exhibition space is considered. The applicant has submitted a commissioning strategy which sets out the overall strategy for The Green, the new area of public realm to be delivered through the outline masterplan.

8.100 The further detail of the specific commission can only come forward following selection of an artist. The recruitment and selection process is set to start shortly, which will have specific proposals from that artist. This next step in the process requires a planning decision. The submitted strategy at this stage is in accordance with the Council's Public Art SPD. Officers are satisfied that a scheme for public art, either on site or in the immediate locality, can be satisfactorily agreed through the imposition of planning **condition 17: public art**. In my opinion the proposal is compliant with Cambridge Local Plan (2006) policies 3/7 and 10/1 and the Public Art SPD 2010.

### *Outline Masterplan Strategy*

8.101 The University has developed a site wide public art strategy which identifies different themes and priorities for public art across the site. This will be developed by the University over the coming months and provides the strategic framework for reserved matters applications in the future. The key area for incorporating public art is likely to be the SFH which is likely to be presented to Committee in March.

8.102 In my opinion the proposal is compliant with Cambridge Local Plan (2006) policies 8/6 and 8/10.

### **Third Party Representations**

8.103 The issues raised have been addressed in the above report and are summarised in table 5 below:

*Table 5: Summary of third party representations*

<b>Issue</b>	<b>Officer Comment/Report section</b>
<p><i>Design Issues</i></p> <p>Tar and chip is a poor quality surface and should not be used.</p> <p>Most of the cycleways on the campus are of poor quality, either shared or poorly segregated.</p>	<p>Officers agree that the areas of public realm identified as tar and chip needs to result in a bound finish. This will be secured through <b>condition 20 landscaping</b>.</p> <p>Noted. This will be considered further as part of the outline application.</p>
<p><i>Cycle parking</i></p> <p>The proposed amount of cycle parking to be provided from day one is not sufficient for the likely use of the building.</p> <p>Although the Design and Access Statement mentions a future extension to 176 then 320 spaces, the initial provision is insufficient.</p> <p>Exam periods need to be considered in the TA.</p>	<p>The amended plans now provide 176 cycle parking spaces from day 1, which potential for further expansion if required. Monitoring will be undertaken.</p> <p>This will be accommodated at Cavendish III or through temporary racks.</p>
<p><i>Trips</i></p> <p>Trips generated by the teaching spaces have not</p>	<p>See from paragraph 8.68.</p>

been taken into account. At least 258 spaces would be needed.	
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### **Planning Obligations (s106 Agreement)**

8.104 The Community Infrastructure Levy Regulations 2010 (as amended) 'CIL Regulations' have introduced the requirement for all Local Planning Authorities to make an assessment of any planning obligation in relation to three tests. Each planning obligation needs to pass three statutory tests to make sure that it is

- (a) necessary to make the development acceptable in planning terms;
- (b) directly related to the development; and
- (c) fairly and reasonably related in scale and kind to the development.

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

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

### Transport Infrastructure

8.106 County Council officers have confirmed that mitigation measures are needed to address the demands imposed on the transport network as a result of the development. This primarily relates to the slight increase in trip numbers. Officers at the County Council have assessed the transport information submitted by the applicant and have reached the view that the proposed measures are appropriate in the context of the 1999 extant permission on West Cambridge and on the basis of the impact of this development over and above the current situation. The mitigation measures proposed are:

- A scheme to enhance pedestrian and cycle connectivity (subject to safety audit) identified for Madingley Road, between Storey's Way and Lady Margaret Road.
- Bus stop improvements to the two stops nearest the development on JJ Thomson Avenue. This will include a shelter on the southbound side, raised kerb and real time passenger information. The northbound side will be upgraded with real time passenger information. A scheme of maintenance will also be secured.
- Travel Plan, which will be secured by condition.
- Construction management plan, which will be secured by condition.

8.107 The above measure is considered an appropriate package of mitigation based on the likely impact of the development and limited additional trips, which are likely to be along Madingley Road. The mitigation package will directly tackle this impact by improving the environment for vulnerable modes and will be delivered and monitored in future through the accompanying S106 Agreement.

8.108 Subject to the completion of a S106 planning obligation to secure this infrastructure provision, officers are satisfied that the proposal accords with Cambridge Local Plan (2006) policy 10/1 and the Planning Obligation Strategy 2010.

#### *Greater Cambridge Partnership Schemes*

8.109 Contributions to the A428 Cambridge to Cambourne project is under negotiation for the outline planning application and is not considered appropriate for the SFH, in the context of the extant 1999 permission.

#### Planning Obligations Conclusion

8.110 It is my view that the planning obligation is necessary, directly related to the development and fairly and reasonably in scale and kind to the development and therefore the Planning Obligation

passes the tests set by the Community Infrastructure Levy Regulations 2010.

## **9.0 CONCLUSION**

### Planning Balance

- 9.1 The NPPF in paragraph 14 sets out a presumption in favour of sustainable development, with proposals that accord with the Development Plan to be approved without delay. The proposed development will provide a high quality building for shared amenities at West Cambridge. It is in accordance with the existing strategy for West Cambridge set out in Local Plan policy 7/6 and the future strategy detailed in policy 18 of the emerging Local Plan. The emerging policy 18 carries some weight because there is an agreed Statement of Common Ground and there are no outstanding objections.
- 9.2 The potential disbenefits of the scheme include some construction related impacts, a slight impact from the limited additional trips off site and some visual impact from the building upon the existing University residences. The benefits are significant and are overriding. These include much needed social facilities to support the existing and growing campus to serve its day to day needs. This includes public realm, publically accessible catering and café facilities, bar facility and ancillary spaces for the University Chaplaincy. Appropriate mitigation will be secured for the additional impacts over and above the current situation through the accompanying S106 Agreement and conditions. APPROVAL is recommended.

## **10.0 RECOMMENDATION**

**APPROVE** subject to completion of the s106 Agreement and the following conditions:

### **Implementation**

1. The development hereby permitted shall be begun before the expiration of three years from the date of this permission.

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

## **Approved Drawings**

2. The development hereby permitted shall be carried out in accordance with the approved plans as listed on this decision notice.

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

## **Prior to commencement (with exception) - Materials**

3. Prior to the commencement of the development hereby approved, with the exception of below ground works, full details including samples of the materials (including glazing) to be used in the construction of the external surfaces shall be submitted to and approved in writing by the local planning authority. This shall include details of signage. Development shall be carried out in accordance with the approved details.

Reason: To ensure that the appearance of the external surfaces is appropriate. (Cambridge Local Plan 2006 policies 3/4, 3/12 and 3/14).

## **Prior to commencement: surface water drainage**

4. No development hereby permitted shall be commenced until a surface water drainage scheme based on sustainable drainage principles (including the use of water as a resource) and following the drainage hierarchy has been submitted to and approved in writing by the Local Planning Authority. The drainage system should be designed such that there is no surcharging for a 1 in 30 year event and no internal property flooding or flooding of third party land for a 1 in 100 year event + 40% for climate change. The submitted details shall:
  - a) Provide information about the proposed SuDS features, design storm period and intensity, the method employed to delay and control the surface water discharged from the site and the measures taken to prevent pollution of the receiving groundwater and/or surface waters; and

- b) Provide a management and maintenance plan for the lifetime of the development which shall include the arrangements for adoption by any public authority or statutory undertaker and any other arrangements to secure the operation of the scheme throughout its lifetime.

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

Reason: To ensure the proposed surface water drainage scheme reflects the current situation and will not give rise to flooding, Cambridge Local Plan 2006 policy 8/18.

**Prior to commencement: foul drainage**

5. No development hereby permitted shall be commenced until details of foul water drainage works have been submitted to and approved in writing by the local planning authority. The development shall be carried out in accordance with the approved details.

Reason: To ensure the proposed surface water drainage scheme reflects the current situation and will not give rise to flooding, Cambridge Local Plan 2006 policy 8/18.

**Prior to commencement - CEMP**

6. Prior to the commencement of development, a Construction Environmental Management Plan (CEMP) shall be submitted to and approved in writing by the local planning authority. The CEMP shall include the consideration of the following aspects of construction:
  - a) Construction and phasing programme.
  - b) Contractors' access arrangements for vehicles, plant and personnel including the location of construction traffic routes to, from and within the site, details of their signing, monitoring and enforcement measures, construction compound arrangements / set up.

- c) Construction hours which shall only be carried out between 0800 hours to 1800 hours Monday to Friday, and 0800 hours to 1300 hours on Saturday and at no time on Sundays, Bank or Public Holidays, unless in accordance with agreed emergency procedures for deviation. Prior notice and agreement procedures for works outside agreed limits and hours.
- d) Delivery and collection times for construction purposes, which shall only be carried out between 0800 to 1800 hours Monday to Friday, 0800 to 1300 hours on Saturdays and at no time on Sundays, bank or public holidays, unless otherwise agreed in writing by the local planning authority in advance.
- e) Soil / Materials Management Strategy having particular regard to potential contaminated land and the reuse / recycling of soil / materials for use on site, the importation and storage of soil / materials including audit trails.
- f) Noise impact assessment methodology, mitigation measures, noise monitoring and recording statements / procedures in accordance with the provisions of BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites.
- g) Vibration impact assessment methodology, mitigation measures, vibration monitoring and recording statements / procedures in accordance with the provisions of BS 5228-2: 2009+A1:2014 Code of practice for noise and vibration control on construction and open sites.
- h) Dust management / monitoring plan and wheel washing measures. Non-Road Mobile Machinery (NRMM), construction works or similar, emissions standards. Use of concrete crushers.
- i) Prohibition of the burning of waste on site during construction.
- j) Site artificial lighting. Site artificial lighting during construction including hours of operation, position and impact on neighbouring properties.

- k) Drainage control measures including the use of settling tanks, oil interceptors and bunds.
- l) Screening and hoarding details.
- m) Access and protection arrangements around the site for pedestrians, cyclists and other road users.
- n) Procedures for interference with public highways, including permanent and temporary realignment, diversions and road closures.
- o) External safety and information signing and notices.
- p) Consideration of sensitive receptors.
- q) Prior notice and agreement procedures for works outside agreed limits or protocols.
- r) Implementation of a Stakeholder Engagement / Residents Communication Plan- CEMP Monitoring, Review and Complaints procedures, including complaints response.
- s) Membership of the Considerate Contractors Scheme.  
Thereafter all phases of the development shall be undertaken in accordance with the approved site wide CEMP.

Reason: To protect human health and amenity in terms of noise and local air quality in accordance with policies 4/13 and 4/14 of the Cambridge Local Plan (2006).

**Tree Protection: before any equipment, machinery or materials are brought onto the site**

7. Details of the specification and position of fencing, or any other measures to be taken for the protection of any trees from damage during the course of development, shall be submitted to the Local Planning Authority for its written approval, and implemented in accordance with that approval before any equipment, machinery or materials are brought onto the site for the purpose of development (including demolition). Tree protection means shall include

adequate plan and section details of proposed surfacing such as no dig construction to show existing and proposed levels, specific method of construction together with details of the installation of landscape features such as cycle racks. The agreed means of protection shall be retained on site until all equipment, and surplus materials have been removed from the site. Nothing shall be stored or placed in any area protected in accordance with this condition, and the ground levels within those areas shall not be altered nor shall any excavation be made without the prior written approval of the Local Planning Authority.

Reason: To protect the visual amenity of the area and to ensure the retention of the trees on the site (Cambridge Local Plan 2006 policies 3/4, 3/11 and 4/4).

**Prior to commencement: ecological design strategy**

8. Prior to above ground works, an ecological design strategy (EDS) detailing proposed enhancements shall be submitted to and approved in writing by the local planning authority.

The EDS shall include the following:

- a) Purpose and conservation objectives for the proposed works.
- b) Review of site potential and constraints.
- c) Detailed design(s), specifications and/or working methods to achieve stated objectives.
- d) Number, extent and location/area of proposed works on appropriate scale maps and plans.
- e) Type and source of materials to be used where appropriate, e.g. native species of local provenance.
- f) Timetable for implementation demonstrating that works are aligned with the proposed phasing of development.
- g) Persons responsible for implementing the works.
- h) Details of initial aftercare and long-term maintenance (if required)
- i) Details for monitoring and remedial measures (if required)

The EDS shall be implemented in accordance with the approved details and all features shall be retained in that manner thereafter.

Reason: In the interest of providing adequate provision for the enhancement of biodiversity on the site, Cambridge Local Plan policy 4/3.

**Prior to commencement - ground source heat pump array (GSHP)**

9. Prior to commencement of the development a plan showing the final location of the ground source heat pump array shall be submitted to and approved in writing by the Local Planning Authority. The plan shall include trees and drainage features. The development shall be carried out in accordance with the approved plan.

Reason: In the interests of reducing carbon dioxide emissions and to ensure that the siting of the GSHP are coordinated with trees and drainage. (Cambridge Local Plan 2006 policy 8/16).

**Prior to commencement -Drainage Utility Connection**

10. No development shall commence until confirmation of water service connections have been submitted to and approved in writing to the Local Planning Authority. The development shall be carried out in accordance with the approved details.

Reason: In order that adequate provision is made for utilities connections, Cambridge Local Plan 2006 policy 8/18.

**Prior to commencement: Design Stage Certificate**

11. Within 12 months of commencement, a BRE issued Design Stage Certificate demonstrating that the development has achieved a BREEAM rating of 'excellent' 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 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).

**Prior to commencement of roof mounted equipment - Roof top plant and solar panels**

12. Prior to the commencement of installation of any roof mounted equipment, full details of all roof top plant and solar panels and/or photovoltaic cells, including type, dimensions, materials, location, fixing, etc. along with the required screening shall be submitted to and approved in writing by the local planning authority. The plant and screening details should be accompanied by ground floor view points from at least two near views and two far views. The development shall be carried out in accordance with the approved details.

Reason: To ensure that the external appearance of the development is in keeping with the existing character of the area. (Cambridge Local Plan 2006 policies 3/4, 3/12 and 3/14).

**Before the development/use hereby approved is commenced - noise insulation scheme**

13. Prior to any above ground works, a noise insulation scheme for all operational plant and equipment to include mechanical and electrical building services, electricity transformers, emergency generators, ventilation systems and combustion appliances in order to minimise the level of noise emanating from the said plant and equipment shall be submitted to and approved in writing by the local planning authority.

The noise insulation / mitigation scheme shall be in accordance with the principles, operational noise levels, mitigation measures and recommendations detailed in the submitted "*UNIVERSITY OF CAMBRIDGE SHARED FACILITIES HUB – PLANNING APPLICATION NOISE REPORT, January 2018 (Job no. 1620002239- Report no. R02 – Revision 04)*" and shall demonstrate compliance with the operational sound / noise rating levels detailed in condition 28 (Total Noise Levels) below.

The development shall be constructed, operated and fully maintained thereafter in strict accordance with the operational plant and equipment noise and vibration insulation/mitigation scheme as approved.

Reason: To protect / safeguard the health and quality of life (amenity) of existing residential premises from noise in accordance with paragraphs 109, 120, 123 of the National Planning Policy Framework (NPPF), March 2012 and aims of Policy 4/13 – Pollution & Amenity of the adopted Cambridge Local Plan 2006.

**Prior to any above ground works - Cafeteria and Café Bar Areas**

14. Prior to any above ground works, a noise insulation scheme for the ground floor Cafeteria and Café Bar Areas giving consideration to the potential uses of these areas and associated external areas including the playing of amplified music and airborne and flanking sound, in order to minimise the level of noise emanating from these areas on neighbouring residential premises, (having regard to internal noise generation and acoustic performance of building fabric, glazing, openings and ventilation system requirements) shall be submitted to and approved in writing by the local planning authority. The scheme as approved shall be fully implemented before the use hereby permitted is commenced and shall be retained thereafter.

Reason: To protect / safeguard the health and quality of life (amenity) of existing premises from noise in accordance with paragraphs 109, 120, 123 of the National Planning Policy Framework (NPPF), March 2012 and aims of Policy 4/13 – Pollution & Amenity of the adopted Cambridge Local Plan 2006.

**Prior to occupation of development a Servicing and Operational Noise Minimisation Management Plan / Scheme**

15. Prior to occupation of development a Servicing and Operational Noise Minimisation Management Plan for the deliveries yard shall be submitted in writing to the Local Planning Authority (LPA) for approval. This shall include details of measures to be undertaken and implemented to mitigate and reduce noise activities / operations as far as is reasonably practicable. The approved plan / scheme shall be implemented and retained thereafter and shall be reviewed and revised as necessary at the reasonable request of the LPA.

The Plan / Scheme should include consideration of but not exhaustively the following:

- a) Advice and policy for drivers of service vehicles to minimise noise during collections and deliveries
- b) Implementation of a complaints procedure for verifying and responding to complaints about noise / vibration

Reason: To protect / safeguard the health and quality of life (amenity) of existing residential premises in accordance with paragraphs 109, 120, 123 of the National Planning Policy Framework (NPPF), March 2012 and aims of Policy 4/13 – Pollution & Amenity of the adopted Cambridge Local Plan 2006.

**Prior to installation of boilers - Low Nitrogen Oxide (NOx) boilers**

16. The development hereby approved shall utilise low Nitrogen Oxide (NOx) boilers, i.e., boilers that meet a dry NOx emission rating of 40mg/kWh, to minimise emissions from the development that may impact on air quality. Details of the boilers shall be submitted to the local planning authority for approval prior to installation.

A manufacturers NOx emission test certificate or other evidence to demonstrate that every installed boiler meets the approved emissions standard shall be submitted to and approved by the local planning authority. The details shall demonstrate compliance with the agreed emissions limits. The scheme as approved shall be fully carried out and implemented in accordance with the approved details before first occupation and shall be thereafter retained.

Reason: To protect local air quality and human health by ensuring that the production of air pollutants such as nitrogen dioxide and particulate matter are kept to a minimum during the lifetime of the development, to contribute toward National Air Quality Objectives in accordance with the requirements of the National Planning Policy Framework (NPPF) and policies 4/13 and 4/14 of the Cambridge Local Plan 2006.

**Prior to the occupation: Post Construction Certification**

17. Prior to the occupation, or within 6 months of occupation, a certificate following a post-construction review, shall be issued by an approved BREEAM Assessor to the Local Planning Authority, indicating that the approved BREEAM rating has been met. In the event that such a rating is replaced by a comparable national measure of sustainability for building design, the equivalent level of measure shall be applicable to the proposed development 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).

**Prior to the occupation/use of the development, an extraction/filtration and abatement odour scheme**

18. Prior to the occupation/use of the development, an extraction/filtration and abatement scheme to include details of equipment and systems for the purpose of extraction, filtration and abatement of odours and fumes shall be submitted to and approved in writing by the local planning authority. The approved extraction/filtration and abatement scheme / details as approved shall be installed before the use hereby permitted is commenced and shall be retained thereafter.

Any approved scheme or system installed shall be regularly maintained in accordance with the manufacturer's specification / instructions to ensure its continued satisfactory operation to the satisfaction of the Local Planning Authority.

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

**Prior to occupation - Public Art**

19. Prior to occupation of the building hereby approved, full details of a scheme of public art shall be submitted to and approved in writing by the Local Planning Authority. The submitted scheme will need to meet the Council's requirement for public art as set out in the Planning Obligation Strategy 2010 and the associated public art plan for Cambridge. The approved scheme for public art shall be carried out in accordance with the approved details not later than 6 months after the first occupation of the building or within a timeframe set out and agreed within the submitted scheme.

Reason: In the interest of creating successful, high quality, attractive environments, Cambridge Local Plan 2006 policy 3/7.

**Prior to occupation - Hard and soft landscaping**

20. Prior to above ground works, full details of both hard and soft landscape works shall be submitted to and approved in writing by the local planning authority and these works shall be carried out as approved. These details shall include proposed finished levels or contours; hard surfacing materials; tree pit details and technical details of sustainable drainage features within landscaped areas. Soft Landscape works shall include planting plans; written specifications (including cultivation and other operations associated with plant and grass establishment); reinforced grass areas; planting for detention basins, swales, rain gardens, schedules of plants, noting species, plant sizes and proposed numbers/densities where appropriate and an implementation programme.

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

**Prior to occupation – cycle parking adjacent southern boundary**

21. Prior to occupation of the development details of facilities for the secured parking of bicycles adjacent to the southern boundary, for use in connection with the development hereby permitted shall be submitted to and approved by the local planning authority in writing. The details shall identify that there is no harmful encroachment into the root protection zones of the nearby London Plane Trees. The approved facilities shall be provided in accordance with the approved details.

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

**Prior to occupation – Landscape maintenance**

22. No occupation of the proposed development shall take place before a landscape maintenance plan and schedule for a period of 20 years has been submitted to and approved in writing by the local planning authority. The schedule shall include details of the programme and arrangements for its implementation.

Reason: To ensure that the landscaped areas are maintained in a healthy condition in the interests of visual amenity. (Cambridge Local Plan 2006 policies 3/4, 3/11 and 3/12).

### **Prior to occupation - Renewables maintenance**

23. The approved renewable energy technologies shall be fully installed and operational prior to the first occupation of the development and shall thereafter be retained and remain fully operational in accordance with a maintenance programme, which shall be submitted to and agreed in writing by the local planning authority.

Reason: In the interests of reducing carbon dioxide emissions and to ensure that the development does not give rise to unacceptable pollution. (Cambridge Local Plan 2006 policy 8/16).

### **Prior to the occupation - Travel Plan**

24. Prior to the first occupation of the building hereby approved, full details of a travel plan detailing the measures taken to promote sustainable travel modes shall be submitted to and approved by the Local Planning Authority. The travel plan shall be implemented in accordance with the agreed details.

Reason: In the interests of promoting sustainable travel modes for future users of the building, Cambridge Local Plan 2006 policy 8/3.

### **Non-Road Mobile Machinery Plant (NRMM)**

25. All Non-Road Mobile Machinery (NRMM) of net power between 37 kW and 560 kW used during demolition and construction works or similar, shall meet the emissions standards in Stage IIIA of EU Directive 97/68/EC emission of gaseous and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery and as amended) and "Non-Road Mobile Machinery (Emission of Gaseous and Particulate Pollutants) Regulations 1999" for both Nitrogen Oxides (NOx) and Particulate Matter (PM). If Stage IIIA equipment is not available the requirement may be met using the following techniques:

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

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

An inventory of all NRMM, including evidence of emission limits for all equipment must be kept on site and all machinery should be regularly serviced and service logs shall be kept on site for inspection. This documentation shall be made available to local authority officers upon request.

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

### **Service yard**

26. The use of forklifts or similar equipment used for the lifting, carrying and movement of materials / items including loading and unloading activities and the use of powered plant and equipment on the ground floor within the service / deliveries yard associated with the approved use shall only be permitted between the hours of 0700 hrs and 1900 hrs Monday to Saturday.

Reason: To protect / safeguard the health and quality of life (amenity) of existing residential premises from noise in accordance with paragraphs 109, 120, 123 of the National Planning Policy Framework (NPPF), March 2012 and aims of Policy 4/13 – Pollution & Amenity of the adopted Cambridge Local Plan 2006.

### **Collections and deliveries**

27. All collections from and deliveries to the service / deliveries yard during the operational phase shall only be permitted between the hours of 0700 hrs and 1900 hrs Monday to Saturday. There shall be no collections or deliveries on Sundays and any Bank / Public Holiday.

No bottles or other commercial refuse / waste or recycling material shall be emptied into receptacles, taken out or moved around the external area of the site, between 2200 to 0700 hrs.

Reason: To protect / safeguard the health and quality of life (amenity) of existing residential premises from noise in accordance with paragraphs 109, 120, 123 of the National Planning Policy Framework (NPPF), March 2012 and aims of Policy 4/13 – Pollution & Amenity of the adopted Cambridge Local Plan 2006.

**Total noise levels**

28. Save for collections from and deliveries to the approved use, the ‘rating level’ (as defined in BS 4142: 2014 – Methods for rating and assessing industrial and commercial sound or any successor document) of all sources of sound / noise from and attributable to operation of the site and approved use when collectively measured at the development site red line boundary shall not exceed the Operational Sound / Noise Rating Levels on any day, in the table below:

Operational Sound / Noise Rating Levels

Operational Sound / Noise Rating Levels (all free field)		
Time Period	Normal Conditions	Emergency Conditions (use of backup generators / smoke extract systems)
Day (0800 – 1900hrs) during any single one hour reference period	46 dB LAeq, 1 hour	51 dB LAeq, 1 hour
Evening (1900 – 2300hrs) during any single one hour reference period	46 dB LAeq, 1 hour	51 dB LAeq, 1 hour

Night (2300 – 0800hrs) during any single 15 minute reference period	39 dB LAeq, 15 mins maximum noise level of 55 dB LAmax for individual events	44 dB LAeq, 15 mins maximum noise level of 55 dB LAmax for individual events
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Noise rating levels shall be measured directly or derived from a combination of measurement and calculation using propagation corrections. All noise measurements and rating levels shall be carried out in accordance with the requirements of BS 4142: 2014 and BS 7445- Parts 1 to 3 : Description and measurement of environmental noise, or as superseded.

Following written notification from the Local Planning Authority (LPA) that it is their view that the above Operational Sound / Noise Rating Levels are being exceeded the applicant shall undertake a noise impact assessment (methodology and approach shall be submitted to and approved in writing by the LPA in advance) to assess compliance with the said levels.

The noise impact / compliance scheme assessment shall be commenced within 21 days of the notification, unless a longer time is approved in writing by the LPA.

The applicant shall provide to the LPA a copy of the impact / compliance scheme assessment within a time period to be agreed.

If the said assessment confirms non-compliance with the operational noise rating levels the applicant shall submit in writing to the LPA a noise mitigation scheme employing the best practical means to ensure compliance with the said operational noise rating levels. Following the written approval by the LPA of the scheme and a timescale for its implementation the scheme shall be activated forthwith and thereafter retained.

Reason: To protect / safeguard the health and quality of life (amenity) of existing residential premises from noise in accordance with paragraphs 109, 120, 123 of the National Planning Policy Framework (NPPF), March 2012 and aims of Policy 4/13 – Pollution & Amenity of the adopted Cambridge Local Plan 2006.

**Unidentified/unexpected contaminated land**

29. If previously unidentified/unexpected contaminated land is encountered whilst undertaking the development, all site works shall immediately cease until the Local Planning Authority has been notified and/or the additional contamination has been fully assessed and the following approved in writing by the County Council Planning Authority:

- A site investigation strategy detailing the works required to assess the previously unidentified contamination
- A site investigation report detailing all works that have been undertaken to determine the nature and extent of any contamination, including the results of the soil, gas and/or water analysis and subsequent risk assessment to any receptors
- A proposed remediation strategy detailing the works required in order to render harmless the identified contamination given the proposed end use of the site and surrounding environment including any controlled waters. The strategy shall include a schedule of proposed remedial works setting out a timetable for all remediation measures that will be implemented.

Prior to the first occupation of the development the contamination remediation strategy approved shall be fully implemented on site.

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

**Prior to occupation: Bus stops**

30. Prior to occupation of the proposed building, details for the upgrading of the northbound and southbound bus stops nearest the development on JJ Thomson Avenue shall be submitted and approved by the Local Planning Authority. The details shall include a new shelter on the southbound side, raised kerbs, real time passenger information and a 5 year scheme of maintenance. The northbound bus stop on JJ Thomson Avenue details shall include real time passenger information and a 5 year scheme of maintenance. The development shall be carried out in accordance with the approved details.

Reason: In order to provide sustainable transport modes and to mitigate the impact of the additional trips generated by the

proposed development, Cambridge Local Plan 2006 policy 8/3.

**Prior to the first occupation – Land contamination completion report**

31. Prior to the first occupation of the development hereby approved the following shall be submitted to and approved in writing by the Local Planning Authority:
- A land contamination completion report demonstrating that the approved remediation scheme as implemented under condition 29 (Unidentified/unexpected contaminated land)
  - has been undertaken and that the land has been remediated to a standard appropriate for the end use.
  
  - Details of any post remedial sampling and analysis (as defined in the approved Material Management Plan as required by Condition 32) shall be included in the completion report along with all information concerning materials brought onto, used, and removed from the development. The information provided must demonstrate that the site has met the required clean up criteria.

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

Reason: To ensure full mitigation through any agreed remediation measures and to demonstrate that the site and land is suitable for approved use in the interests of environmental and public safety in accordance with Cambridge Local Plan 2006 Policy 4/13.

**Prior to importation or reuse of material - Materials Management Plan (MMP)**

32. Prior to importation or reuse of material for the development a Materials Management Plan (MMP) shall be submitted to and approved in writing by the Local Planning Authority. The MMP shall:
- Include details of the volumes and types of material proposed to be imported or reused on site (for landscaping, piling and engineering)
  - Include details of the proposed supplier(s) of the imported or reused material.

- Include details of the chemical testing for ALL material to be undertaken before placement onto the site.
- Include the results of the chemical testing which must show the material is suitable for use on the development.
- Include confirmation of the chain of evidence to be kept during the materials movement, including material importation, reuse placement and removal from and to development.

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

### **Prior to the installation of any artificial lighting - Artificial Lighting**

33. Prior to the installation of any artificial lighting an external artificial lighting scheme / impact assessment shall be submitted to and approved in writing by the local planning authority. The scheme shall include details of any artificial lighting of the site (external and internal building lighting) and an artificial lighting impact assessment with predicted lighting levels at proposed and existing properties shall be undertaken (including horizontal / vertical isolux contour light levels and calculated glare levels). Artificial lighting on and off site shall meet the Obtrusive Light Limitations for Exterior Lighting Installations for an Environmental Zone - E2 in accordance with the Institute of Lighting Professionals - Guidance Notes for the Reduction of Obtrusive Light - GN01:2011 (or as superseded) and any mitigation measures to reduce and contain potential artificial light spill and glare as appropriate shall be detailed.

The artificial lighting scheme as approved shall be fully implemented before the use hereby permitted is commenced and shall be retained thereafter.

Reason: To protect the amenity of nearby properties. (Paragraph 125 of the National Planning Policy Framework and Cambridge Local Plan 2006 policy 4/13.

### **Standby Emergency Backup Generator Operation**

34. Any emergency backup generator shall only operate as follows:
- (i) Emergency Use Only

Any emergency backup generator shall only be used in the event of standard mains electricity supply interruption / failure or in accordance with (ii) below. It shall not be used to supplement general energy demand, to feed electricity into the utility grid or as an alternative supply in the event of disconnection from the mains supply following for example non-payment or similar.

(ii) Hours of Running for Testing, Maintenance & Repair

Running of any backup generator as part of routine periodic testing, maintenance and repair shall only take place for the length of time specified by the manufacturer between the hours of 8am – 6pm Monday to Friday, 9am – 1pm Saturday and at no time on Sunday or Public Holidays. Periodic testing, maintenance and repair shall only occur for a maximum duration of 15 hours in any calendar year. Accurate records of any testing shall be kept on site and shall be available for inspection at the request of the local planning authority.

(iii) In the event that the emergency backup generator is operated for an *“unforeseen extended period of time”* the local planning authority shall be immediately informed and a review / reassessment of the local air quality impacts of such operation shall be undertaken. The air quality impacts review / reassessment shall be agreed in writing with the local planning authority and if unacceptable adverse air quality impacts / effects are likely to arise an emergency generator air quality mitigation scheme shall be submitted in writing for approval. The approved scheme shall be implemented within a timescale to be agreed and shall be retained thereafter.

For the avoidance of any doubt an *“unforeseen extended period of time”* shall be defined as intermittent or continuous operation for a cumulative period greater than a week (168 hours) in any calendar month, exclusive of the permitted hours detailed in (ii) above for periodic testing, maintenance and repair.

Reason: To protect human health and amenity in terms of noise and local air quality in accordance with policies 4/13 and 4/14 of the Cambridge Local Plan (2006).

## **Heating and cooling**

35. Heating and cooling of the building shall only be provided by a ground source heat pump (GSHP) system with heat recovery supplemented by back up, low nitrogen oxides emitting gas boilers and general ventilation systems.

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

### **Energy Strategy**

36. The energy strategy for the approved buildings shall be implemented in accordance with the ground source heat pump driven cluster approach set out in the Shared Facilities Hub Energy and Sustainability Strategy (Hoare Lee, 20 October 2017, Rev P02). The approved building shall be connected to the Ground Source Heat Pump array being provided as part of the Cavendish III proposal. The development shall be implemented in accordance with the approved Strategy and shall thereafter be retained and remain fully operational in accordance with a maintenance programme, which shall be submitted to and agreed in writing by the local planning authority.

No review of this requirement on the basis of grid capacity issues can take place unless written evidence from the District Network Operator confirming the detail of grid capacity and its implications has been submitted to, and accepted in writing by, the local planning authority. Any subsequent amendment to the level of renewable/low carbon technologies provided on the site shall be in accordance with a revised scheme submitted to and approved in writing by, the local planning authority.

Reason: In the interests of reducing carbon dioxide emissions, promoting principles of sustainable construction and efficient use of buildings and to ensure that the development does not give rise to unacceptable pollution (Cambridge Local Plan 2006 policies 4/13 and 8/16, Supplementary Planning Document 'Sustainable Design and Construction' 2007).

## **Cycle Parking Monitoring**

37. For the first 3 years following occupation of the building hereby approved 2 separate monitoring days per annum shall be carried out which monitor the hourly use of the cycle parking provided. The results of the cycle parking studies shall be submitted to the local planning authority and if the results show that the cycle parking is either at, or beyond full capacity details of additional cycle parking spaces shall be agreed with the local planning authority and constructed on site with 3 months.

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

## **Ground floor use**

38. The primary use of the ground floor of the proposed building shall only be for A1 and A3 uses (retail, café and restaurant) as approved on plan EM00041-JW-ZZ-00-DR-1001 P04.

Reason: In the interests providing and maintaining adequate social facilities and amenities on the West Cambridge Campus, Cambridge Local Plan 2006 policies 5/4 and 7/6.

## **Hours of use**

39. The proposed ground floor A3 café and restaurant use hereby permitted shall not operate outside of the following hours: 07:00 to 23:00 Monday to Friday and 09:00 to 20:00 Saturdays, Sundays and Bank Holidays.

Reason: In the interests of maintaining neighbouring amenity, Cambridge Local Plan 2006 policies 3/4 and 4/13.

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

The noise and vibration report should include:

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

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

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

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

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

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

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

## **INFORMATIVE: Dust condition informative**

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

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

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

-Guidance on the assessment of dust from demolition and construction

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

- Air Quality Monitoring in the Vicinity of Demolition and Construction Sites 2012

[http://www.iaqm.co.uk/wp-content/uploads/guidance/monitoring\\_construction\\_sites\\_2012.pdf](http://www.iaqm.co.uk/wp-content/uploads/guidance/monitoring_construction_sites_2012.pdf)

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

[https://www.london.gov.uk/sites/default/files/Dust%20and%20Emissions%20SPG%2008%20July%202014\\_0.pdf](https://www.london.gov.uk/sites/default/files/Dust%20and%20Emissions%20SPG%2008%20July%202014_0.pdf)

## **INFORMATIVE: Ventilation associated with fume and microbiological cupboards / cabinets**

Ventilation associated with fume and microbiological cupboards / cabinets shall be installed (including consideration of flue / exhaust termination discharge heights that are required for adequate dispersion) in accordance with national and industry standards, codes of practice and technical guidance, such as:

- Building Regulations

- BS EN 14175 - 'Fume Cupboards' - Parts 1 to 7

- BS 7989:2001 Specification for re-circulatory filtration fume cupboards

- BS 5726 various - Microbiological safety cabinets.

## **INFORMATIVE: CAANI - Clean Air Act**

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

### **INFORMATIVE: Remediation Works Informative – Contaminated Land**

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

### **INFORMATIVE: Materials Chemical Testing Informative – Contaminated Land**

Any material imported into the site shall be tested for a full suite of contaminants including metals and petroleum hydrocarbons **prior** to importation. Material imported for landscaping should be tested at a frequency of 1 sample every 20m<sup>3</sup> or one per lorry load, whichever is greater. Material imported for other purposes can be tested at a lower frequency (justification and prior approval for the adopted rate is required by the Local Authority). If the material originates from a clean source the developer should contact the Environmental Quality Growth Team for further advice at Cambridge City Council on telephone number (01223) 457890.

### **INFORMATIVE: Permitted Process - Medium Sized Combustion Plant Directive – Informative**

The Medium Combustion Plant Directive (MCPD), adopted in November 2015, is part of The EU Clean Air Package published in December 2013. It introduces a system of registration/permitting for 1-50MW plant, emission limits for nitrogen oxides, sulphur dioxide and particulate matter and monitoring of emissions by operators. Medium combustion plant include boilers, engines, turbines and backup generators running on natural gas, solid and liquid fuels, including biomass and biogas. New plant will need to

be registered and meet emission limits in late 2018 and existing plants by 2025 and 2030 depending on size.

The proposed planning application involves the installation of plant that is likely to require regulation. The applicant is advised to ensure that the design and installation of any relevant plant takes into account the requirements of this Directive.

Further advice can be obtained from the Environmental Quality and Growth team at Cambridge City Council on telephone number (01223) 457890.

### **INFORMATIVE: Building ventilation fresh air intake louvres / points**

To limit building re-entrainment / recirculation to inside the building of exhaust emissions to air from any proposed fume cupboards, dust and odour extraction systems, combustion plant or similar (preventing exhaust from re-entering the facility through fresh air supply ventilation systems, doors, and windows), it is recommended that any fresh air intake louvres / points for building ventilation or heating, ventilation and air conditioning or handling (HVAC) systems are located as far as possible from fume cupboards, dust and odour associated flues/stacks discharge terminations and where possible upwind of the flues/stacks from prevailing winds.

### **INFORMATIVE: Food Registration / Safety Informative**

As the premises may have a kitchen providing food for staff or similar or facilities for food preparation the applicant is reminded that under the Food Safety Act 1990 (as amended) the premises will need to be registered with Cambridge City Council. In order to avoid additional costs it is recommended that the applicant ensure that the kitchen, food preparation and foods storage areas comply with food hygiene legislation, before construction starts.

The premises may also require a Premises Licence under the Licensing Act 2003 for the sale or supply of alcohol and the provision of regulated entertainment.

Contact the Commercial Team at Cambridge City Council on telephone number (01223) 457890 for further information.

### **INFORMATIVE: Trade Effluent**

An application to discharge trade effluent must be made to Anglian Water and have been obtained before any discharge of trade effluent can be made to the public sewer.

Anglian Water recommends that petrol/oil receptors be fitted in all car parking areas. Failure to enforce the effective use of such facilities could result in pollution of the watercourse and may constitute an offence.

In the event that the application is refused, and an Appeal is lodged against the decision to refuse this application, delegated authority is sought to allow officers to negotiate and complete the Planning Obligation required in connection with this development.