

Application Number	15/1653/FUL	Agenda Item	
Date Received	1st September 2015	Officer	Mr Tony Collins
Target Date	27th October 2015		
Ward	Trumpington		
Site	Department Of Chemistry Lensfield Road Cambridge Cambridgeshire CB2 1EW		
Proposal	Relocation of the existing liquid nitrogen (LN2) tank, Denios unit and cycle parking facilities, and scheme of archaeological investigative works.		
Applicant	Chancellor, Masters and Scholars c/o Agent United Kingdom		

SUMMARY	<p>The development conflicts with the Development Plan for the following reason:</p> <p>Noise from deliveries of liquid nitrogen to the relocated tank would cause unacceptable harm to the residential amenity of neighbours. This harm is not outweighed by the public benefits which would arise from the extension to the Department of Chemistry (and the research programmes to be housed therein) which the relocation of the nitrogen tank would enable.</p>
RECOMMENDATION	REFUSAL

1.0 SITE DESCRIPTION/AREA CONTEXT

- 1.1 The Department of Chemistry and its satellite buildings occupy a large site filling the majority of the block enclosed by Lensfield Road, Hills Road, Union Road and Panton Street. To the east, the remaining part of this block is filled by the Scott Polar Institute, the Catholic Church of Our Lady and the English Martyrs, and St Alban's RC primary school, together with a small number of office premises.

- 1.2 To the south of the site, a significant area is occupied by the Perse Girls' School, on the opposite side of Union Road. Otherwise, the areas to the south, west and north of the site are chiefly in residential use, containing both family houses and buildings in multiple occupation, generally housing students. Union Road, and Panton Street, the two streets adjoining the main works proposed in this application, are relatively narrow streets serving a significant residential population, but also carrying heavy flows of pedestrian, cycle and motor vehicle journeys to and from the many schools within the Newtown area.
- 1.3 A line of trees runs along the western and northern edges of the Chemistry site. These trees are the subject of Tree Preservation Orders.
- 1.4 The site lies within the Newtown and Glisson Road part of City of Cambridge Conservation Area No.1 (Central). There are no statutorily or locally listed buildings within the application site or immediately adjacent to it, but the terrace at 41-57 Lensfield Road, which contains houses and a hotel, and whose end gable faces the Chemistry main car park area across Panton Street, are listed Grade II. The Scott Polar Institute, which stands close to the Chemistry building, but is hidden from the relevant parts of this application site by that building, is also listed Grade II.
- 1.5 The site falls within the controlled parking zone.

2.0 THE PROPOSAL

- 2.1 The proposal seeks consent for a series of small works required to prepare for and enable the development of a new Chemistry of Health building on the site of the present Department of Chemistry car park fronting Union Road. The works are:
- ☐ The relocation of the existing liquid nitrogen tank from the car park area to the south of the main Chemistry building to a position off Panton Street currently occupied by cycle parking.
 - ☐ The relocation of the existing Denios (chemical waste) unit from a position south of the main Chemistry building to a position alongside the east wing of Chemistry.
 - ☐ Archaeological investigations within the car park alongside Union Road.

- ☐ The creation of additional cycle parking spaces in a number of locations on the Chemistry site including double-stacker spaces in the area around the proposed liquid nitrogen tank.
 - ☐ Minor alterations to access points.
- 2.2 The application is accompanied by a Design, Access and Heritage Statement, which includes the following supporting information.
 - ☐ Archaeological Investigation brief project specification
 - ☐ Construction method statement
 - ☐ Noise Measurement Report
 - ☐ Arboricultural Assessment.
- 2.3 The substantive application for the major extension to the Department of Chemistry, to enable which the works sought in the present application are required, has been received by the Council under reference 15/1683/FUL. It is currently under consideration. The proposed extension would house the Molecular Production and Characterisation Centre, the Centre for Protein Misfolding Diseases, and the Chemistry of Health Incubator.
- 2.4 The Design and Access Statement states that ‘the expected outcomes for the three main research projects serviced by this facility include novel diagnostic and therapeutic strategies for neurodegenerative disorders including Alzheimer’s and Parkinson’s diseases.’
- 2.5 Although the delegation scheme would allow this application to be determined under delegated powers, it has been brought to Committee by officers (following discussion with Chair, Vice-Chair and Spokes) because of the extent of neighbour objections and the connection to the associated major application for the extension to the Department of Chemistry.

3.0 SITE HISTORY

- 3.1 The Department of Chemistry site has an extensive planning history, but most of the past applications are not of relevance to the present case. Those which are relevant are listed below.

3.2

Reference	Description	Outcome
72/0427	Erection of liquid nitrogen	Approved with

84/0672	tank Erection of liquid nitrogen tank	conditions Approved with conditions
91/0905	tank Erection of liquid nitrogen tank	Approved with conditions
11/0828	Installation of cycle parking hoops	Approved with conditions
15/0988	Relocation of liquid nitrogen tank, Denios unit and cycle parking facilities	Under consideration
15/1683	Extension to Department of Chemistry	Under consideration

- 3.3 The present application has been submitted to address concerns about the design of the proposal submitted under 15/0988 which were raised by the urban design and conservation team.

4.0 PUBLICITY

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

5.0 POLICY

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

5.1 Central Government Advice

National Planning Policy Framework 2012
National Planning Practice Guidance 2014
Circular 11/95 – The Use of Conditions in Planning Permissions (Annex A)

5.2 Cambridge Local Plan 2006

3/1 Sustainable development
3/4 Responding to context
3/7 Creating successful places
3/12 The design of new buildings

4/4 Trees
4/10 Listed Buildings
4/11 Conservation Areas
4/13 Pollution and amenity
7/5 Faculty development in the Central Area, University of Cambridge
8/2 Transport impact
8/6 Cycle parking
8/9 Commercial vehicles and servicing
8/10 Off-street car parking

5.3 Supplementary Planning Documents

Cambridge City Council (May 2007) – Sustainable Design and Construction

5.4 Material Considerations

City Wide Guidance

Cambridge and South Cambridgeshire Strategic Flood Risk Assessment (November 2010)
Strategic Flood Risk Assessment (2005)
Cambridge and Milton Surface Water Management Plan (2011)

Area Guidelines

New Town and Glisson Road Conservation Area Appraisal (2012)

5.5 Status of Proposed Submission – Cambridge Local Plan

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

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

Policy 35 Protection of human health from noise and vibration
Policy 43 University faculty development

6.0 CONSULTATIONS

Cambridgeshire County Council (Highways Development Management)

6.1 No adverse impact.

Environmental Health

First comment (22nd September 2015)

- 6.2 The submitted acoustic assessment concludes that the Cambridge City Council criterion is exceeded by 1-3 dB during refuelling. Full calculation details are required on how this result was yielded. Rating level penalties, in accordance with BS4142:2014 are also required to be discussed and added, if required. It is likely the sound of refuelling would be impulsive, have clearly identifiable on/off conditions (intermittent) and possibly tonal.
- 6.3 Further clarification is required of the potential periodic hiss being emitted from the LN2 tank. The proposed relocation may be further away from other existing plant and any periodic hiss may be audible to the locality.
- 6.4 Full details of the raw data of the measurements are required, including the times and dates of the measurements. The background sound level of the locality needs to be representative of the more sensitive hours in the morning and evening when traffic has subsided. It is unknown from the acoustic assessment at what time the reported background levels (48-50 dB) were established.
- 6.5 For the above reasons, it is not possible properly to assess the application. Additional information is needed. (If the application is permitted, restrictions on delivery hours are recommended.)

Second comment (11th November 2015)

6.6 Following our earlier comments, a noise impact assessment in accordance with BS 4142: 2014 has been submitted.

6.7 Issues are:

- ☐ Lack of clarity on exact location of assessment points
- ☐ Facades of houses opposite not considered to be the nearest noise-sensitive locations (rear gardens and elevations of houses to the south of the site are closer)
- ☐ Background noise level understated
- ☐ Inappropriate screening and distance correction factors used
- ☐ Unclear whether valve opening and delivery vehicle noise have been treated as a single noise source
- ☐ Unclear where main noise source on delivery vehicle is located
- ☐ No justification given for not using impulsivity and intermittency corrections
- ☐ Possibility of hissing noise occurring outside delivery times not fully discussed
- ☐ Use of average dB level for refuelling noise rather than maximum level is not justified
- ☐ 30 min length of delivery time not confirmed
- ☐ Possible increase of nitrogen use in the future not discussed
- ☐ Potential noise from two-tier cycle racks requires addressing

6.8 It is concluded that the application does not demonstrate with a reasonable degree of certainty that noise associated with the proposals will not give rise to an unacceptable impact on the amenity of existing neighbouring noise-sensitive residential premises, contrary to Cambridge Local Plan policy 4/13 paragraphs 109, 120 and 123 of the Framework.

Urban Design and Conservation team

6.9 Location of tank acceptable in conservation area terms subject to getting the screening right both for bikes and for tank and ancillary equipment. The problem evaporators have now been relocated to a less visually intrusive place. Brick wall to Panton Street now successfully screens the cycle storage. New brickwork and proper coping will solve the problem of the poor quality of the existing wall.

6.10 Wall continues into the car park area creating a successful screen to that side for the bikes. Tank is screened by louvered metal gates. Their acceptability and that of other metalwork will be down to the detailed design and finish.

6.11 No objection to archaeological works

6.12 If the Denios unit is to be temporary, the length of time it can stay must be fixed. Permanence would be to the detriment of the conservation area.

6.13 Supported subject to conditions

Streets and Opens Spaces (Trees)

6.14 The removal of all trees in the carpark is required to accommodate archaeological investigation. The loss of these trees will be detrimental to amenity and the character of the area.

Cambridgeshire County Council (Archaeology)

6.15 Written scheme of investigation is acceptable. Condition required to ensure reporting of results.

6.16 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 objecting to the proposal:

9 Brookside	12 Panton Street
21 Brookside	16 Panton Street
23 Brookside	19 Panton Street
33 Brookside	19a Panton Street
41 Lensfield Road	20 Panton Street
89 Norwich Street	21 Panton Street
92 Norwich Street	23 Panton Street
2 Panton Street	26 Panton Street
4 Panton Street	35 Panton Street
10 Panton Street	57 Panton Street

59 Panton Street
60 Panton Street
66 Panton Street
3 Pemberton Terrace
4 Pemberton Terrace

16 Russell Court
1 Saxon Street
2 Saxon Street
1 St Eligius Place

and 85 Barrons Way, Comberton (on behalf of the church at 14 Panton Street)

7.2 The objections can be summarised as follows.

Neighbour amenity

- ☐ noise from hissing
- ☐ noise from delivery vehicles
- ☐ condition should enforce limit of one 30min delivery per week
- ☐ danger of tank rupturing
- ☐ proximity to smoking area is dangerous
- ☐ cycle store roofs threaten security of 19 Panton Street
- ☐ double-stacker cycle stores will create more noise
- ☐ too many cycle storage spaces massed in one place
- ☐ wall should be raised to higher level to protect neighbours from noise

Conservation

- ☐ harm to the conservation area
- ☐ visually unsightly
- ☐ loss of trees

Alternative solutions

- ☐ nitrogen should be manufactured on site
- ☐ other locations are more suitable
- ☐ should be located underground or moved to NW Cambridge
- ☐ no cost-benefit analysis has been undertaken

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

Principle of Development

- 8.1 This application does not involve change of use, but relocation of parts of the Department of Chemistry's operation from one part of its site to another. In my opinion, the principle of the development is acceptable and in accordance with policy 7/5 of the Cambridge Local Plan 2006, which permits redevelopment of the University's faculty sites.

Context of site, design and external spaces

- 8.2 The nitrogen tank enclosure has been designed to limit visibility of the equipment in the public realm, and in my view this is successful. I consider that the new wall would enhance the appearance of the conservation area in Panton Street, and I concur with the advice of the conservation officer that the overall impact of the proposal is acceptable. I acknowledge that the top of the nitrogen tank would be visible from upper-storey windows across the street. However, this is at a distance of 17 metres, and I do not consider the appearance of the top of the tank to be seriously harmful by comparison with the cycle store roof which is in this position at present.
- 8.3 I note the conservation officer's advice that the move of the Denios unit to a position adjacent to the east wing of the Chemistry building should only be permitted on a temporary basis. This could be addressed by condition.
- 8.4 In my opinion the proposal is compliant with Cambridge Local Plan (2006) policies 3/4, 3/7, 3/11, 3/12.

Residential Amenity

- 8.5 The liquid nitrogen tank is a potential source of noise at the time of deliveries. Noise is caused by opening the vaporiser valves to relieve pressure, an operation which produces noise considerably above the background level; noise is also caused by the delivery vehicle and the connection process. The application also proposes double-stacker cycle parking in an area which has previously accommodated almost entirely ground level cycle parking spaces (there are at present only eight upper-tier spaces, and they are not

close to the common boundary with residential units. Upper-tier cycle parking can generate noise because of the movement of the metal components of the upper tier.

- 8.6 The environmental health team have advised me that there are shortcomings in the applicants' assessment of the likely noise impact of both deliveries of liquid nitrogen to the tank, and the double-stacker cycle parking on the amenity of residential occupiers in Panton Street. These shortcomings are listed in paragraph 6.7 above. It is the view of that team that they cannot be confident that the proposal will not result in unacceptable levels of noise.
- 8.7 Since this advice was given, there has been a meeting (13th November 2015) between the environmental health officer and the applicant's agent about how the concerns could be resolved. Two sets of additional information have been submitted by the applicants (16th November 2015, and 17th November 2015) following this meeting, but the advice of the Environmental Health team remains that the noise impact of nitrogen deliveries on the amenity of neighbours would be unacceptable, and that there is no practical way to mitigate this impact. I expect to receive formal advice to this effect, and I will update Committee either on the amendment sheet or by a separate circulation.
- 8.8 A number of representations raise issues about the safety implications of the positioning of the tank near to Panton Street. The safety of such installations is controlled by the Health and Safety Executive, and is not a planning matter.
- 8.9 Representations also suggest that the more robust structure of the proposed new cycle rack roofs would enable easier access by intruders to the rear gardens of Nos. 19-23 Panton Street than the lightweight character of the existing cycle storage. I do not consider that this additional risk is significant; I do not consider that potential intruders would be deterred by the nature of the existing racks
- 8.10 I am of the view that the issue of noise from cycle racks could be addressed by condition, but this is not the case with respect to the noise from deliveries. In the light of advice from the environmental health team it is my view that the expected noise from nitrogen deliveries would cause unacceptable harm to the residential

amenity of neighbours and I consider that it is in conflict with Cambridge Local Plan (2006) policies 3/4 and 4/13, and government advice in paragraphs 109, 120 and 123 of the Framework.

Highway Safety

- 8.11 The highway authority is of the view that this application has no implications for highway safety. I concur with this view.
- 8.12 In my opinion the proposal is compliant with Cambridge Local Plan (2006) policy 8/2.

Trees

- 8.13 The arboricultural officer has objected to the proposal on the basis that the loss of trees in the car park (necessary for the archaeological investigation), would be harmful to the amenity of the area. I accept that the loss of these trees would be harmful, but in my view, this is outweighed by the public benefit of the new research building which these works would enable. In my view, a condition would be necessary to ensure that replacement landscaping is secured, whether or not approval is granted for an extension to the Chemistry Department. Subject to such a condition, in my view, the proposal is in accordance with policy 4/4 of the Cambridge Local Plan 2006.

Car and Cycle Parking

- 8.14 Existing cycle parking levels on the Chemistry site will be maintained by the use of some double-stacking racks and reordering of cycle parking along the Lensfield Road edge of the site. Double-stacker cycle parking is not appropriate for all users, but in this situation, where they form only a minority of the provision on the site, and a high proportion of users are likely to be able to use the upper tier, I consider this solution to be acceptable. Concentration of cycle parking already exists in this area, and the proposals would not exacerbate the situation. Car parking is not affected
- 8.15 In my opinion the proposal is compliant with Cambridge Local Plan (2006) policy 8/6.

Third Party Representations

- 8.16 I have addressed the majority of the issues raised in the paragraphs indicated in the table below. Beneath the table, I address the issues not already covered

noise from hissing	8.5-8.7
noise from delivery vehicles	8.5-8.7
condition should enforce limit of one 30min delivery per week	8.6-8.7 Condition would be possible
danger of tank rupturing	8.8
proximity to smoking area is dangerous	8.8
cycle store roofs threaten security of 19 Panton Street	8.9
double-stacker cycle stores will create more noise	8.5 and 8.10
too many cycle storage spaces massed in one place	8.14
wall should be raised to higher level to protect neighbours from noise	8.5-8.7
harm to the conservation area	8.2
visually unsightly	8.2
loss of trees	8.13

- 8.17 The planning system does not require the applicant in a case of this sort to provide a justification for the development, nor to consider alternative locations within or beyond this site, nor to undertake cost-benefit analysis. There is no provision in local or national policy for any such evidence to be required. The application must be assessed on its own merits, not by comparison with other sites or technical solutions.

9.0 RECOMMENDATION

REFUSE for the following reason

1. The noise impacts of deliveries of nitrogen to the proposed tank would cause unacceptable harm to the residential amenity of surrounding occupiers, contrary to policies 3/4 and 4/13 of the Cambridge Local Plan 2006 and government guidance in the National Planning Policy Framework 2012.