



Tom Gray,
Planning Officer,
Greater Cambridge Shared Planning
Cambourne Business Park
Cambourne
Cambridge CB23 6EA.

Date 5th July 2020

Dear Mr Gray

**Re Planning Application Queens' College, Owlstone Croft, Cambridge.
Reference 22/02066/FUL**

On behalf of Friends of Paradise, the committee writes to object to the above application on the grounds the proposed development would have a significant adverse impact upon both the character of the Newnham Croft Conservation Area and the special character and ecological, recreational and amenity value of Paradise Nature Reserve as a natural asset, and its contribution to the City of Cambridge and the wider area.

Friends of Paradise Nature Reserve was formed and constituted in 2018. The aims of the Friends Group are to protect and enhance the biodiversity of the Reserve. Friends liaise and work with the City Council Officers and with volunteer work parties to maintain the natural wildlife habitat. The current membership is 162.

1. National Planning Policy Framework and Local Plan policies and information requirements

In this letter we refer to planning policies and supporting documents that are most relevant to consideration of the planning application 22/02066/FUL. The policies are drawn from the National Planning Policy Framework, the Cambridge Local Plan 2018, the Biodiversity Supplementary Planning Document, and the Newnham Croft Conservation Area Appraisal 2013.

Best practice place-making requires applicants to establish whether the site is suitable for development by identifying the site problems, notably the Conservation Area and Paradise Nature Reserve policy context, and then preparing evidence to test the possibility of solutions to these problems and, then and only then, if it is possible, prepare a scheme informed by evidence-based solutions to the policy requirements.



Our review of the application and the evidence on which it relies has informed the following conclusions:

1. It appears the applicant has prepared a proposal to fit their brief and then prepared evidence which purports the resulting raft of policy problems have been either addressed or do not matter enough to be given weight.
2. As matters stand, before this application can be considered and a judgement made on the balance of benefits and policy-based harm, further evidence-based studies are needed to meet the requirements of various National Planning Policy Framework and Local Plan policies and supporting documents.
3. In the absence of such further evidence, there are two National Planning Policy Framework and sixteen Cambridge Local Plan justifiable policy grounds to refuse the application.

Site and Policy context

The application site is the garden to the Owlstone Croft buildings. It is bounded to the north by the playing field of Newnham Croft Primary School, a protected open space in the Cambridge Local Plan 2018, to the south and east by the Paradise Nature Reserve and Owlstone Croft to the west.

The site is a constituent part of the green river corridor that stretches alongside the River Cam from Sheep's Green to the gates at Owlstone Road and beyond to Grantchester Meadows. In this context, the application site is part of the setting of the Newnham Croft Conservation Area and serves as a buffer to the narrowest and most fragile part of the Paradise Nature Reserve.

The 2.17 ha Paradise Nature Reserve was declared a Statutory Local Nature Reserve in 1996 and a City Wildlife Site in the Cambridge Local Plan 2018 (N12-14). It is owned and managed by Cambridge City Council and qualifies as a City Wildlife Site for Greater Pond Sedge swamp. It also qualifies as a County Wildlife Site because it supports at least 0.5 ha of Alder – Stinging Nettle woodland. The site is also within the Wildlife Corridor in the Cambridge Local Plan 2018.

The Cambridge City Council Open Space and Recreational Strategy October 2011 identifies Paradise Nature Reserve as protected in the natural and semi-natural green spaces category. Paradise Nature Reserve fulfills all the criteria of environmental importance with its river and trees and provides an important green break, as part of a network of open spaces in Cambridge. It is enjoyed visually by walkers daily and provides wildlife habitats for rare and endangered species.



Policy Grounds 1 and 2 National Planning Policy Framework paras 199 and 200

The applicant quotes Paragraph 199 which sets out that:

‘when considering impacts of development on the significance of a designated heritage asset, great weight should be given to the asset’s conservation.’

and Paragraph 200:

‘any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction or from development within its setting), should require clear and convincing justification.’

The applicant has neglected to provide sufficient evidence to demonstrate the proposed development would not result in any harm to, or loss of, the significance of Paradise Nature Reserve. In the absence of such evidence, the applicant cannot demonstrate beyond doubt a clear and convincing justification for the development.

In this context, National Planning Policy Framework policies 199 and 200 provide grounds for refusal.

Policy Ground 3: Cambridge Local Plan Policy 69 Protection of sites of biodiversity and geodiversity importance

This policy sets out a presumption against approval, *‘where development is proposed within, adjoining or which will otherwise affect a locally designated nature conservation site.’*

Paradise Nature Reserve is a designated City Wildlife Site, County Wildlife Site and Local Nature Reserve (LNR) in the Cambridge Local Plan 2018.

The planning application shows the applicant has not undertaken the vital tests required under Cambridge Local Plan Policy 69 to demonstrate the proposal will not have an adverse effect on biodiversity. Test One requires comprehensive surveys of the historic and existing biodiversity importance of the site. Test Two requires a professional ecological assessment of the impact of the proposed development. Where adverse impacts have been identified, Test Three requires applicants to provide details of measures to protect and enhance the habitats or species identified.

The garden of Owlstone Croft, which is the development site, is described by the applicant as ‘the rather bland carpet of grass currently in evidence’, which would be improved by constructing buildings. This disregards the fact that the site is adjoining a locally designated nature conservation site, Paradise Nature Reserve, which would be affected by the proposed development.

In this context, the Cambridge Local Plan Policy 69 provides grounds for refusal.



Policy Ground 4: Cambridge Local Plan Policy 70 Protection of priority species and habitats

This policy states: *Where development is proposed within or adjoining a site hosting priority species and habitats, or which will otherwise affect a national priority species or a species listed in the national and Cambridgeshire-specific biodiversity action plans (BAPs), an assessment of the following will be required:*

- i) Current status of the species population*
- ii) The species' use of the site and other adjacent habitats*
- iii) The impact of the proposed development on legally protected species, national and Cambridgeshire specific BAP species and their habitats and*
- iv) Details of measure to fully protect the species and habitats identified*

The policy identifies additional habitats within Cambridge as local priorities for action in the Cambridgeshire and Peterborough Biodiversity Action Plan:

- Rivers and streams (within Cambridge this would include the River Cam and its tributaries)*
- Floodplain grassland (this would include Cambridge's commons)*
- Veteran trees, including pollard willow (particularly along the River Cam)*
- Scrub and*
- Drainage ditches and ponds*

The Cambridge Local Plan 2018 identifies at Table 7.1 the following priority species which are found in the Paradise Nature Reserve: water vole and four rare species of bat (Common Pipistrelle, Daubenton's, Long Eared and Noctule. It further identifies priority habitats wet woodland (Paradise Nature Reserve being the only such site in Cambridge).

Surveys have recorded 8 bat species at Paradise Nature Reserve as follows: Common Pipistrelle, Soprano Pipistrelle, Nathusius Pipistrelle, Brown Long-Eared Bat, Serotine Bat, Noctule Bat, Barbastelle Bat.

Of the 11 mammal species identified on the International Union for Conservation of Nature's red list as being at imminent risk of extinction, 4 are bats. Of these, the light sensitive Barbastelle and Serotine have been recorded at Paradise Nature Reserve. Of the 2 bat species identified as 'near threatened' the Nathusius Pipistrelle has also been recorded at Paradise Nature Reserve. Bats are protected by the Wildlife and Countryside Act (1981) (as amended) and Conservation of Habitats and Species Regs (2017) (as amended).



In addition, the hedge between Newnham Croft School and the application site is ancient, species-rich and important. It consists mainly of a row of mature lime trees and introduced laurel. However, the understory includes a further 12 species of native woody species, an average of 5.8 per 30 yards, indicating an estimated age of the hedge to be 500-600 years (Hooper's Rule). The Field Maple, Spindle and two Viburnum species are of particular interest, indicating original native hedgerow flora. The full list being: Spindle, Prunus, Hawthorn, Ash, Wild Privet, Beech, Dog Rose, Lime, Elder, Field Maple, Wayfaring tree (*Viburnum lantana*) and Guelder rose (*V. Opulus*). (Appx 1 C)

The policy requires proposals that will potentially affect a protected habitat or species, or a species or habitat listed in Cambridgeshire's Biodiversity Action Plans to have sufficient upfront information in the planning application (listed in create e – h of Policy 70) to assess the impact on local biodiversity.

The aim of any proposal should be to leave any protected species in situ.

The letter of 28th June from Bioscan (UK) Limited 'Ecological concerns relating to impacts on bat activity in Paradise Local Nature Reserve, states:

It is assessed that the application site must be considered to have at the very least 'moderate' suitability for bats, if not higher. The Bat Conservation Trust Survey Guidelines state that for sites with 'moderate' suitability for bats the following bat surveys are recommended to achieve a reasonable survey effort in relation to habitat suitability:

'Transect / spot counts / timed search surveys: one survey visit per month (April to October) in appropriate weather conditions for bats. At least one of the surveys should comprise dusk and pre-dawn within one 24-hour period

Automated / static bat detector surveys: two locations per transect, data to be collected on five consecutive nights per month (April to October) in appropriate weather conditions for bats'.

The submitted Nocturnal Bat Survey, Queens' College Owlstone Croft, MKA Ecology 19/04/22, was found to comprise 3 bat activity surveys focused only on investigating whether the site supported any bat roosts, with no automated / static surveys and inappropriate seasonal coverage (all three surveys were carried out in July-August 2021).

The evidence presented in Bioscan's letter, demonstrates a need for the applicant to provide an appropriate level of bat survey information. The Bioscan survey findings raise doubt about the appropriateness of the current scheme given identified impacts development would have on bats within the LNR, including the rare and light-sensitive species Barbastelle and potentially also the Nathusius Pipistrelle.



In this context, Cambridge Local Plan Policy 70 provides grounds for refusal.

Policy Ground 5 Cambridge Local Plan Policy 34: Light pollution control

The policy states: *‘Development proposals that include new external lighting or changes to existing external lights will be permitted where it can be demonstrated that ... d). it minimizes impact to wildlife and landscape character, particularly at sites on the edge of Cambridge.’*

Bioscan in its letter of 28th June 2022 stated it is appropriate to use guidelines set out in ‘Bats and Artificial Lighting in the UK’ (Bat Conservancy Council). These guidelines state,

‘Where ‘complete darkness’ on a feature or buffer is required, it may be appropriate to consider this to be where illuminance is below 0.2 lux on the horizontal plane and below 0.4 lux on the vertical plane. The ‘Lighting Impact Assessment for Owlstone Croft, Cambridge (Hoare LEA, April 2022) indicates these cut off levels would be exceeded by the resultant illumination (total value post development) at four locations on the boundary with Paradise Nature Reserve.’

The report continues:

‘lighting impacts would be expected to impact upon bats on the western side of Paradise Local Nature Reserve and could potentially even sever commuting routes along this edge of the woodland.’

This presents a significant material consideration as the identified bat species include the rare and light-sensitive species Barbastelle and potentially the Nathusius Pipistrelle.

In addition, there are wider concerns about light pollution from buildings proposed close to the boundary with the Paradise Nature Reserve. Artificial light from the gable end windows overlooking the reserve and from the extensive glass windows and doors opening onto BBQ and socializing areas would impact on flight paths and the behaviour patterns of birds and insects (as well as bats).

There has been extensive research published on the negative impacts of light pollution on wildlife and biodiversity, including by Anna Levin.

‘The impact of lighting on bats and the nature reserve are something that the Local Planning Authority will have to take into consideration as part of the application process, and a specific ecology report will have to be submitted for this purpose, an Ecological Impact Assessment or similar, by an ecological consultancy’. *Rachel Bates Cambridgeshire Bat Group*



'Bats feed on flying insects. Both the bats themselves and the insects can be badly affected by light pollution. In 2018 efforts were made by Friends of Paradise to reduce the amount of artificial light pollution, both at the Owlstone Croft and around the Lammas Land car park area. Replacement of white street-lights with orange and also some shielding were undertaken. Although there was some improvement, the problem remains, particularly from the windows of buildings immediately adjacent to the Reserve. It would not be possible to mitigate or reduce light pollution from the windows of these new buildings.' *Dr. Olwen Williams, contributing author of NatHistCam project 2016-2022.*

The Local Planning Authority has raised concerns in the Pre-Application advice about the ability to mitigate successfully light spill with planting, given the proximity of the buildings to the boundary, especially on the Eastern block, as follows:

'Because of the proximity of the building to the boundary fence there is little space for meaningful mitigation planting ...it would need to be able to grow to at least 5 -6 metres and possibly more to mitigate light spill. For a hedge to grow to that height more width would be required or risk creating a very hemmed-in view from the building and problems maintaining it.' *Letter to applicant 9th March 2022 following 3rd Pre-App meeting.*

These concerns are well-based given the issues we have previously raised with Queens' College regarding lights left on overnight along the boundary with the Paradise Nature Reserve, most recently over the weekend of 10 – 12 June 2022. The impact is considerable – see photo.

Appendix 1 Photo of security lights at Owlstone Croft along the boundary with the LNR

Cambridge Local Plan Policy 34 provides grounds due to the impact of light pollution on the habitat of the Paradise Nature Reserve, noting the presence of 2 of the 11 native to Britain mammals identified on the International Union for Conservation of Nature's as being at imminent risk of extinction.

Policy Ground 6 Cambridge Local Plan Policy 35: Protection of human health and quality of life from noise and vibration

This policy states: *development will only be permitted when it is demonstrated that:*

- a) *It will not lead to significant adverse effects and impacts, including cumulative effects and construction phase impacts wherever applicable, on health and quality of life/amenity from noise and vibration; and*
- b) *Adverse noise effects/impacts can be minimised by appropriate reduction and/or mitigation measures secured through conditions or planning obligations, as appropriate.*



Noise will be generated through all stages of the construction process and on completion from residents of and visitors to the buildings. The construction process would commence with the demolition of existing extensions and continue with on-site concrete-batching plant and vehicle wheel-washing plant and vehicle movements, and the construction of the new buildings, requiring extensive pile-driving.

Following completion there would be a permanent impact on Paradise Nature Reserve due to light pollution (see above) and noise. These impacts would be due to the following developments: an increase in the resident population, with people living in proximity to Paradise Nature Reserve, development of a café and an open space for social gatherings.

The evidence for deleterious impacts of Artificial Light at Night (ALAN) on biodiversity conservation - including birds, insects, and other taxa - is clear, and the problem is gaining more and more attention among scientists and in the public domain. Impacts of noise pollution, for example on bird breeding seasons, are also becoming apparent. Reporting on a recent study in the United States, Masuyuki Senzaki and his co-authors (*Senzaki, M., Barber, J.R., Phillips, J.N. et al. (2020) Sensory pollutants alter bird phenology and fitness across a continent. Nature 587, 605–609*) demonstrated that anthropogenic noise and light can substantially affect when birds first laid eggs, clutch size, partial hatching success, clutch failure and whether nestlings successfully fledged, and concluded that their findings indicate the need to consider sensory pollutants alongside the traditional dimensions of the environment that typically inform biodiversity conservation. And with respect to insects, Douglas Boyes and his co-authors found that ALAN strongly reduced moth caterpillar abundance compared with unlit sites in southern England and affected caterpillar development, and that introduction of ALAN to previously unlit sites affected the feeding behaviour of nocturnal caterpillars (*Douglas H. Boyes, Darren M. Evans et al (2021) Street lighting has detrimental impacts on local insect populations. Science Advances*). Moths, of course, provide essential food sources for birds and other animals, and are important pollinators.

These two studies are a tiny sample of a growing number of publications on the threat of ALAN to natural ecological processes and biodiversity - a threat which is now getting more and more attention in the popular press.

In this context, Cambridge Local Plan Policy 35 provides grounds for refusal.

Policy Ground 7 Cambridge City Council Biodiversity Supplementary Planning Document to the Cambridge Local Plan 2018

The SPD sets out policies and text to guide the preparation of planning applications with potential negative impacts on species and habitats.

Site selection stage *'The easiest way to avoid a negative impact on species and habitats and to maximise the gain for biodiversity that can be achieved from a development is to select a site that has low existing ecological value and low strategic*



potential for habitat creation, buffering or connectivity” and “can contribute to wider strategic potential for habitat creation by providing links between green corridors or linking up wildlife corridors. It should be noted that ecological value should be measured by a suitably qualified professional and not judged on appearance, as sites that may appear to be degraded could include features of particular significance to certain species.’

Biodiversity Issue B2 – Protection of irreplaceable habitats

The Biodiversity SPD states that: *Developers will be expected to avoid direct and indirect impacts on irreplaceable habitats and embed measures to achieve this within the design of any development proposal.*

To meet policy requirements (NH/4 item6, NH/7 and Policy 71), the councils will refuse applications that would result in the loss, deterioration, or fragmentation of irreplaceable habitats unless the need for, and benefits of, the development clearly outweigh the loss, and a suitable compensation strategy exists. In these situations, biodiversity net gain is not achievable. As per NPPF 2021, there would have to be wholly exceptional reasons for this to be the case with the burden of proof for these falling to developers.

In this context, the Biodiversity SPD reinforces the case for applying NPPF policies 199 and 200 and Cambridge Local Plan Policies 69 and 70 as grounds for refusal.

Policy Ground 8 Cambridge City Council Local Plan 2018. Policy 71: Trees

The policy states that: *‘Development will not be permitted which involves felling, significant surgery (either now or in the foreseeable future) and potential root damage to trees of amenity or other value, unless there are demonstrable public benefits accruing from the proposal which clearly outweigh the current and future amenity of the trees.*

Development proposals should:

- a). Preserve, protect, and enhance existing trees and hedges and have amenity value as perceived from the public realm;*
- b). Provide appropriate replacement planting where felling is proved necessary; and*
- c). Provide sufficient space for trees and other vegetation to mature’.*

The application Planning Statement says that:

‘It is necessary to fell five individual trees and one group of trees to achieve the proposed layout.’

These are identified in the Schedule of Trees (AIA) prepared by Harveys as three Poplar trees and two semi mature twin stemmed Ash adjacent to the boundary with the Paradise Nature Reserve.



In addition, it is proposed to subject five trees and two landscape features to tree surgery to permit construction space or access.

The Local Planning Authority expressed concerns about these proposals and the landscaping plan in Pre-Application Advice dated 9th March 2022 (see policy 59) as follows:

‘Twenty years is a significant timeframe and the addition of other tree losses towards the east of the site would have a material impact on the character of the area, especially the adjacent LNR. It would further damage the verdant screen that is required to mitigate the impact of the built forms on the LNR and public amenity.’

We share the Local Planning Authority’s concerns about mature and semi mature trees being felled on this boundary. A recent dusk bat survey has identified these trees as a vital component of a corridor for night foraging. In the light of the Local Planning Authority’s comments and the evidence from the bat survey, the planting of saplings and new trees, and offers to plant in the Paradise Nature Reserve would neither undo nor mitigate the harm.

In this context, Cambridge Local Plan Policy 71 provides grounds for refusal.

Policy Ground 9 Cambridge Local Plan Policy 52: Protection of Garden Land

The Policy states, *‘Proposals for development on sites that form part of a garden are only permitted if the form height and layout is appropriate to the character of the area and there is sufficient space around buildings retained, equally retaining trees and spaces for their importance to biodiversity’.*

The Supporting text at 6.4 adds, *‘Gardens are an important environmental resource and are a vital component of Cambridge’s character. They provide space and a semi-natural habitat for the movement of wildlife through the urban environment.’*

The application site which is the garden to Owlstone Croft is an important element of the Newnham Croft Conservation Area and the vital buffer to the sensitive biodiversity of the LNR.

The overbearing form, height and layout of the proposed development is inappropriate to the open landscape setting – as part of the green river corridor – and would harm the habitat and ecology of the LNR.

In this context, Cambridge Local Plan Policy 52 provides grounds for refusal.

Policy Ground 10 Cambridge Local Plan Policy 55: Responding to context

The Policy states, *‘Development will be supported where it is demonstrated that it responds positively to its context and has drawn inspiration from the key*



characteristics of its surroundings to help create distinctive and high-quality places. Development will:

- a). identify and respond positively to existing features of natural, historic, or local importance on and close to the proposed development site... and*
- c). use appropriate local characteristics to help inform the use, siting, massing, scale, form materials and landscape design of a new development.'*

The supporting text at 7.3 adds... *'Proposals for new development should create a scale and form that is appropriate to existing buildings, the public realm, and open spaces, which complement the local identity of the area.'*

The Local Planning Authority in giving Pre- Application advice on 9th March 2022, expressed concerns about the impact of the development on Paradise Nature Reserve and whether there is sufficient space for the planting proposed as mitigation, especially adjacent to the eastern block:

'where there will be most visual impact on the LNR on account of the impact of urban development upon the rural and wild characteristics of this adjacent space.'

The applicant claims the proposed development would have:

'A beneficial impact on the character and appearance of the Conservation Area"... providing areas of attractive landscaping, and constructing buildings which respect the form, typology, and materials of the prevailing townscape character of the area.'

We beg to differ. The site is not connected to the Newnham streetscape at all but is in the centre of protected green space. The prevailing character of the area is one of open space, the site context is framed by the distinctive and high-quality green river corridor comprising the school playing field, the application site, and the Paradise Nature Reserve.

Contrary to Local Plan Policy 55, the proposed development presents a negative response to the Paradise Nature Reserve as an existing feature of natural, historic, and local importance immediately adjacent to the proposed development site.

It appears the proposal was informed by a client brief and not informed by the site and planning policy context. To meet the brief, the proposed layout, scale, massing, and height of the building has resulted in an incongruous urban wedge. The applicant has then sought to produce evidence and narratives to justify the development. A scheme informed by the site context, as part of a contiguous open space of the green river corridor, and the policy context of protecting and enhancing the Conservation Area and the species and habitat of the Paradise Nature Reserve would have informed a decision not to develop.

In this context, Cambridge Local Plan Policy 55 provides grounds for refusal.



Policy Ground 11 Cambridge Local Plan Policy 57: Design of new buildings

This policy states: *'High quality buildings will be supported where it can be demonstrated that they: a have a positive impact on their setting in terms of location on the site, height, scale and form, materials and detailing, ground floor activity, wider townscape and landscape impacts and available views.'*

The Local Planning Authority raised concerns in Pre-Application Advice on 9th March 2022:

'With regards to the blocks overwhelming impact on the Local Nature Reserve ...concerns were strengthened given that the total heights of the buildings would be around 10.5 metres in height and be sited approximately 1.5 metres above board walk level.'

We concur. This development fails the Local Plan policy test for new buildings, to make positive impact on its setting in terms of location on the site, height, scale and form and wider landscape impacts and available views.

In this context, Cambridge Local Plan Policy 57 provides grounds for refusal.

Policy Ground 12 Cambridge Local Plan Policy 59: Designing landscape and the public realm

The Policy states: *'High quality development will be supported where it is demonstrated that: b. existing features including trees, natural habitats, boundary treatments and.... surfaces that positively contribute to the quality and character of an area are retained and protected'.*

The supporting text adds at 7.13: *'Buildings and the spaces around them should be thought about holistically, with the landscape and the public realm being as important as the building itself.'*

The proposal is to develop, immediately adjacent to Paradise Nature Reserve, four 2.5 and 3 storey accommodation blocks for postgraduate students, a café, cycle store, and car park for 10 spaces. The applicant's Planning Statement acknowledges:

'A negative impact comes from building on what is otherwise relatively open land visible from the nature reserve.'

This statement amounts to admission of failure to comply with Local Plan Policy 69. It confirms that the proposed layout, siting, massing, and height of the four accommodation blocks fail to positively contribute to existing features - trees, natural habitats and boundary treatments of Paradise Nature Reserve and to contribute to the quality and character of the area.



The Local Planning Authority has noted in Pre-Application Advice dated 9th March 2022 that felling of trees for the development would have a material negative impact on the character of the area (see Policy Ground 7).

In this context, Cambridge Local Plan Policy 57 provides grounds for refusal.

Policy Ground 13 Cambridge Local Plan Policy 61: Conservation and enhancement of Cambridge historic environment

This policy states: *“To ensure the conservation and enhancement of Cambridge’s historic environment, proposals should:*

- a) Preserve or enhance the significance of heritage assets of the City, their setting and the wider townscape, including views into, within and out of conservation areas.*
- b) Retain ... spaces, of loss of which would cause harm to the character or appearance of the conservation area,*
- c) be of an appropriate scale, form, height, massing, alignment, and detailed design which will contribute to local distinctiveness, complement the built form, and scale of heritage assets and respect the character, appearance and setting of the locality*
- d) Demonstrate a clear understanding of the significance of the asset and of the wider context in which the asset sits, alongside assessment of the potential impact of the development on the heritage asset and its context*
- e) Provide clear justification for any works that would lead to harm or substantial harm to a heritage asset yet be of substantial public benefit through detailed analysis of the asset and the proposal.*

The proposal fails to meet the tests under Cambridge Local Plan Policy 61 as follows:

- a) It fails to recognize the setting of the application site including views into, within and out of the conservation area
- b) It would result in the loss of open space and harm to the character and appearance of the conservation area
- c) It is of inappropriate scale, form, height, massing, and alignment that is incongruent to the character, appearance, and setting of the locality
- d) It fails to provide evidence that demonstrates an understanding of the significance of the conservation area and heritage assets of the green river corridor and the Paradise Nature Reserve and the impact of development on them
- e) It fails to provide a detailed assessment of the heritage assets required to provide clear justification for any works.

Section 8.2 – Protection of the setting of the Newnham Croft Conservation Area Appraisal states:



'The setting of the Conservation Area is provided on several sides by open green spaces including Sheep's Green, the mill leat, the River Cam, playing fields, and the water meadows leading towards Grantchester. Lammas Land, a large public park, and The Paradise Nature Reserve also lie within the Conservation Area. Together these provide the Conservation Area with an attractive setting and a rural ambiance which is one of its main characteristics.

These landscape features are already protected by being open spaces in public ownership, but some land, including private gardens, is not under public control and there will inevitably be pressure for new development including the sub-division of plots or the addition of over-large extensions. **These must be strongly resisted** although the redevelopment of neutral or negative 20th century buildings, and their replacement with a building of similar size and bulk, might be acceptable subject to the usual controls'.

In this context, Cambridge Local Plan Policy 61 provides grounds for refusal.

Cambridge Local Plan Policy 67 provides policy protection for strong resistance to development of open space in private ownership.

Policy Ground 14 Cambridge Local Plan: Policy 67 Protection of open spaces

The Policy states: *'Development proposals will not be permitted which would harm the character of or lead to the loss of open space or environmental and/or recreational importance.'*

Under this policy previously unidentified sites qualify as protected open space if they meet one or more of the criteria to assess open space set out in Appendix L of the Cambridge Local Plan 2018.

The three sets of questions used to assess whether an open space meets the criteria for environmental importance are:

- a) Does the site make a major contribution to the setting, character, structure, and the environmental quality of the city?
 - i) *Does it make a major contribution to the setting of Cambridge?*
 - ii) *Does it have positive landscape features and / or a sense of place sufficient for it make a major contribution to the setting of the city?*
 - iii) *Is the site an important green break in the urban framework?*
 - iv) *Does it have significant historical, cultural, or known archaeological interest?*
- b) Does the site make a major contribution to the character and environmental quality of the local area? If so: -
 - i) *Does it have positive features such as streams, trees, hedgerows, or meadow lands which give it a sense of place sufficient to make a major contribution to the character of the local area?*



- ii) Is it an important green break in the framework of the local area?*
- iii) Does it form part of a network of open spaces in the local area?*
- iv) It is enjoyed visually on a daily basis from public places (eg footpaths and vantage points)?*
- v) Does it have local historical or cultural interest?*

b) Does the site contribute to the wildlife value and biodiversity of the city?

- i) Does it have any nature conservation designation?*
- ii) Is it adjacent to or an important link to sites with nature conservation designation?*
- iii) Does it contain important habitats or species sufficient to make it worthy of consideration for any nature conservation designation?*
- iv) Is it an important wildlife oasis in an area with limited wildlife value?*

Against the first set of criteria (a above), the site makes a major contribution to the setting, character, structure, and the environmental quality of the Newnham Croft conservation area.

Against the second set of criteria (b above), the site makes a major contribution to the contiguous green river corridor of open space which is significant to the character and environmental quality of the local area.

Against the third set of criteria (c above), the site contributes to the wildlife value and biodiversity of the city. This is due to the site being adjacent to, and an important link/buffer to the LNR.

Given the site self-evidently meets several of the above criteria and there is a clear presumption against the loss of open space of environmental and or recreational importance (Section 7.47 Cambridge Local Plan 2018), we request Local Planning Authority to commission an assessment against the above criteria.

See Appendix 2 Table showing environmental importance of Owlstone Croft garden within the green river corridor according to criteria listed in Cambridge City Council Open Space and Recreation Strategy October 2011

In this context, Cambridge Local Plan Policy 67 provides grounds for refusal.

Policy Ground 15 Cambridge Local Plan Policy 32: Flood Risk.

The policy states potential flood risk from the development: *Development will be permitted providing it is demonstrated that: a). the peak rate of run-off over the lifetime of the development, allowing for climate change, is no greater for the developed site than it was for the undeveloped site.*



The Environment Agency has stated:

'In accordance with the National Planning Policy Framework paragraph 162, development should not be permitted if there are reasonably available sites appropriate for the proposed development in areas with lower probability of flooding'.

The Environment Agency continues:

'It is for the Local Planning Authority to determine if the Sequential Test has to be applied and whether or not there are other sites available at lower flood risk as required by the sequential test of the NPPF.'

The Friends of Paradise note the availability of sites at West Cambridge and Eddington for student accommodation.

Cambridge Local Plan Policy 35 provides grounds for refusal in the absence of a sequential test and evidence-based justifications as to why this site should take precedence over allocated and available alternative sites at lower flood risk.

Policy Ground 16 Cambridge Local Plan Policy 31: Integrated water management and water cycle

This policy states: *Development will be permitted provided that, among other things: the run-off from all hard surfaces shall receive an appropriate level of treatment in accordance with Sustainable Drainage Systems guidance, SUDS Manual (CIRIA C753), to minimize risk of pollution, and development adjacent to a water body actively seeks to enhance the water body in terms of its hydro morphology, biodiversity potential and setting.*

The supporting text notes: *'there is little or no capacity in our rivers and watercourses that eventually receive surface water run-off from Cambridge, and it needs to be adequately managed so that flood risk is not increased elsewhere.*

The Lead Local Flood Authority in their letter of 21st June 2022, confirmed that:

'At present we (are) unable to support the grant of planning permission for the following reasons. A need to amend the drainage system to ensure there is no surcharging during the 100% annual exceed probability (AEP) storm event, recalculation of infiltration rates in accordance BRE 365/CIRIA 156, ordinary watercourse consent, signage in multi-function open space areas and green roof design, construction, and maintenance.'

The Lead Local Flood Authority adds:

'surface water and groundwater bodies are highly vulnerable to pollution and the impact of construction activities. It is essential that the risk of pollution particularly during the construction phase is considered and mitigated appropriately'



As noted above the construction process would commence with the demolition of existing extensions and continue with on-site concrete batching-plant and vehicle-wheel washing plant, vehicle movements, and construction. There is, therefore, a very high risk of polluted water draining into the wet woodland Paradise Nature Reserve.

The Bioscan report notes:

‘It is understood that drainage channels are proposed to be cut through the Paradise Nature Reserve as part of the Drainage Strategy. Yet no studies on the ecological effects on the nature reserve appear to have been carried out by MKA Ecology (the applicant’s consultant), so the impacts this may have on the ecology of the nature reserve are unknown.’

The failure to provide studies on the ecological effects on the nature reserve is at odds with the applicant’s Environmental Plan, which aims to:

‘Promote environmental sustainability, with a view to conserve and enhance natural resources and to prevent environmental pollution’. Section 3 of the Plan ‘seeks to ensure that improvements, purchases, and developments are environmentally sound.... in order to minimise the adverse environmental impact of any new developments.’

The Friends of Paradise invite the applicant to live up to their claim and prepare the evidence and proposals to fulfil it.

The context is challenging.

The surface water run-off from Owlstone Croft flows into the ditch within the site along the boundary with the Reserve. This ditch and a parallel ditch on the reserve side of the boardwalk drain north towards the car park and merge at the start of the boundary with Newnham Croft School as the reserve ditch passes under the boardwalk. Halfway along the school boundary the merged flow passes under the boardwalk into the seasonal stream feeding the lake within the Paradise Nature Reserve. Given enough flow, the lake drains into the river Cam.

The Paradise Nature Reserve is part of a floodplain, an area of marshland and wetland running alongside the River Cam. It is low-lying and largely on the same level as the River Cam. When it heavily rains the ground quickly becomes saturated with the river joining up with the lake, and surface water floods the area making the walkways impassable. Climate change is already increasing the intensity of rainfall which is contributing towards more frequent and serious flood events.

The proposed development would increase surface water volumes and the proposed ditches could be predicted to further exacerbate flooding of the Reserve. Houses in nearby Grantchester Meadows have been informed they are now in a flood risk area



for the first time. Hard surfaces in the proposed development will increase the buildup of flood water.

During the demolition and later construction phases there is an as yet uncalculated risk of dust, cement and chemicals polluting ground and surface water draining into the Paradise Nature Reserve and the River Cam with potentially disastrous and irreversible damage to fauna and flora of the lake and central area of the reserve.

A review of Part 1 and 3 of the submitted Flood Risk and Drainage Strategy report by Smith and Wallwork identified the following points:

- i) Anglia Water Authority say their drainage system can take sewage flows but the foul drainage from this development is in the catchment of Cambridge Water Recycling Centre which currently does not have capacity to treat the flows from the development site. This is not mentioned in paragraph 7.68 of the Planning Statement.
- ii) There are many pages of calculations but not much clear interpretations of the results
- iii) The Drainage Strategy Report at page 15 asserts the existing drainage is generally in good condition albeit with some minor defects. The survey by Amethyst of the existing drains (Appendix B) reports several severe defects including at run 32 a hole in a drain, at runs 14 and 27 broken drains and at runs 22, 29 and 33 collapsed drains.
- iv) Some manholes will be surcharged and there will be a flood risk at one swale and outfall during the storm with a return period of 30 years and several manholes will be surcharged and there will be a flood risks at three swales for the storm with a return period of 100 years.
- v) There is no drawing showing the locations of each manhole.

In addition to a need for a comprehensive independent review to test the robustness of the Flood Risk and Drainage Strategy, the questions to be answered are:

1. What would be the impact of polluted surface and ground water have on the Paradise Nature Reserve ecosystem and habitat?
2. What effective measures could be put in place, monitored and managed to guarantee prevention of polluted surface and ground water draining into the Paradise Nature Reserve during and after the construction?
3. Would the ditches be robust enough to channel the water at peak times?
4. Would the Council, as landowner, allow ditches to be built across the Paradise Nature Reserve.

Cambridge Local Plan Policy 35 provides grounds for refusal.



2. The wildlife value of Paradise Nature Reserve

Paradise Nature Reserve is a priority habitat for priority species. It is the wet woodland in Cambridge and identified as a 'Priority Habitat' in Table 7.1 of the Cambridge Local Plan 2018. It provides habitat for a wider variety of plants, mosses, and liverworts, fungi, invertebrates, reptiles, birds, and mammals.

The ecological data on the Paradise Nature Reserve is detailed and striking:

260 species of vascular plants

103 species of invertebrates (including 14 dragonflies and Damselflies, 13 bugs, 14 butterflies and 7 moths). In Spring, mayflies are abundant and provide food for fish, birds, and bats.

72 species of fungi

15 species of fish

8 species of bats

68 species of birds have been recorded in the reserve and River Cam. The resident breeding birds include Robin, Dunnock, Blue Tit, Long-Tailed Tit, Great Tit, Treecreeper, Blackbird, Song Thrush, Wren, Collared Dove, Wood Pigeon, Stock Dove, Moorhen, Chaffinch, Goldfinch, Greenfinch, Great Spotted Woodpecker, Kingfisher, Black Headed Gull, Mallard, Snipe, Mute Swan, and Little Egret. Little Grebe have been seen both on the river and the lake.

Summer visitors include Blackcap, Whitethroat, Willow Warbler, nesting Chiffchaff and recently a cuckoo returned after an absence of 30 years.

There is a large winter roost of up to 300 Rooks and Jackdaws in the taller trees of the Reserve, and the adjacent Paradise Island, which is taken over by Herons in the spring, with up to 12 nests. Jays and Magpies are regular visitors.

8 species of bats, which are a protected species, are particularly sensitive to light pollution. They include common pipistrelle, Daubentons, Long Eared and Nuctule bats (identified as a 'Priority Species' in Table 7.1 of the Cambridge Local Plan).

Mammals include stoats, shrews, harvest mice, and otters. Water voles, another protected species, are becoming established in the area.

Frogs are found in the wetter parts of the reserve.

There are toads in the area of the reserve adjacent to the Owlstone Croft access.

Trees within the LNR include Willow, Alder, Ash, Horse Chestnut and Hawthorn, fungi includes the rare 'chicken-in-the-woods', and butterbur which is notable as it has been recorded in this location for 400 years. Other plants include Reed Sweet Grass, four species of Sedge, Gypsywort, Amphibious Bistort and Lady's smock.



The proposed developments would result in substantial harm to wildlife. It would displace insects, birds, and bats due to blocking and otherwise disrupting flight paths, reducing foraging ground and increasing light pollution and noise. No mitigation or compensatory proposals could overcome these irreversible losses.

The applicant's Planning Statement claims:

'through the creation of new habitats including damp grassland, bee lawns and enhanced hedgerows, the development will produce a 57% Biodiversity Net Gain across the site.'

The applicant is no position to reasonably claim a Biodiversity Net Gain due to failure to submit a full-ecological assessments on the existing biodiversity of the adjoining Paradise Nature Reserve, the impact of the proposed development on this biodiversity and measures to avoid and mitigate such impacts. Such assessments would require a substantial body of work in respects of bats alone.

The planned destruction and harm to biodiversity though is evident with the planned felling of 5 mature trees and cutting back 5 more to enable access. The hedgerow on the boundary with the school is already species rich and diverse, so cannot be enhanced, and is threatened by the proximity of construction and new development which would overshadow it. The pockets of wildflower planting would take time to mature, are unlikely to flourish in narrow beds shaded by the housing terraces and would have to be maintained in perpetuity.

The Local Planning Authority has raised doubts about the lack of space on the boundary with the Paradise Nature Reserve for 'meaningful mitigation planting' and the fact that it would take 20 years for trees planted there to mature enough to provide sufficient screening. (Pre- Application Advice 9th March 2022)

Robert McFarlane, the renowned author on landscape and environment, makes the following points in his objection to the planning application:

'Above all I object on grounds of the substantive consequences of the proposed development for the Paradise Nature Reserve. The ecological data on PNR is detailed and striking: 260 species of vascular plants, 72 species of fungi, 15 species of fish, and 8 species of bats, along with 67 species of birds. It is a rare form of habitat, falling as it does between the banks of the Cam and the edge of the village/suburb of Newnham Croft, and including as it does wet woodland (necessitating the construction of the boardwalk that winds through the Reserve). It is also remarkable in terms of atmosphere/aura; it allows visitors to enter a small, maturely wooded semi-swamp, in which the busy-ness of the Cam's banks up and down-stream is briefly left behind, and the walker -- whether children from the local schools and nurseries, or city workers on a break from the office, or tourists/visitors to the city.



Access for all to nearby nature is widely recognised in science and increasingly in politics/legislation as vital for mental and physical health. The construction of four three-storey blocks, hard by the boundary with the Nature Reserve, will substantively alter the character of the Reserve. Noise and light pollution will impact the non-human residents of PNR for the long-term; there will also be the short-medium term impacts of water pollution and ecological disruption during the construction period.

PNR is a tiny, fragile fragment of 'wildness', unique in Cambridge, and of immense value in its own right (that is, intrinsically), as well as emotionally-culturally to those who enter it, and also in terms of the 'ecosystem services' it quietly and cheaply provides to the city and its inhabitants. It needs protecting, both within and without its boundaries'.

Professor Sir Partha Dasgupta describes nature as 'Our most precious asset' in his Review for the UK Treasury in 2019 on 'The Economics of Diversity'. He is the Patron of Friends of Paradise, and has commented:

'Essentially, what we are witnessing is constant nibbling at nature, bits here, bits there, to expand concrete. In the present instance sites chosen for student housing should not destroy what little nature that is still present within what are already densely populated urban spaces.'

3. The social and amenity value of Paradise Nature Reserve

The wildlife value of the Paradise Nature Reserve creates in turn social and amenity value. In this context, the reserve is a green lung for the whole city that confers benefits of physical and spiritual well-being. The reserve is astonishingly beautiful, and the peace and tranquility are appreciated by all, as are the landscape, trees and green and river views seen from the boardwalks. The wildlife and sense of wilderness and peace in Paradise Nature Reserve is enhanced by the buffer zone of the green garden space of Owlstone Croft which is adjacent to the Reserve.

We contend the overbearing impact of the proposed development, due to its proximity to the reserve boundary, height 12m above the reserve, scale and massing would replace the sense of solitude gained from wandering in wild woodland, with an urban experience of close-up views of buildings, noise and light pollution.

A survey conducted by the South Newnham Neighbourhood Forum on 29th January, 16th February and 27th February, 2022, showed that even in winter, on fine days over 130 people per hour, of all ages and walks of life visited Paradise Nature Reserve. They came from the local community, Cambridge city, the villages, and nearby towns. Further afield they came from London, elsewhere in England, and internationally from all over the world. The number is much higher in the summer months.



Virtually all visitors came for the enjoyment of nature, and 'wildness' and 'beauty' were the most used descriptive words, followed by tranquillity, greenness, views and landscape. They commented, 'I value it and love the greenery, the pond and wild aspects.' 'It's an oasis, it is not spoilt, it is left to be just nature.'

Paradise Nature Reserve is valued for physical, mental and emotional health, and as such it is a priceless amenity and natural asset. Support for its protection as an iconic and tranquil wild green space comes from everywhere, from the local community to international visitors.

Paradise has educational value as an important site of research for Cambridge University scientists and school groups. Friends of Paradise organize regular lectures and talks by ecologists, naturalists and scientists, such as dawn chorus and bat walks, which are well-attended and greatly enjoyed.

4. The planning balance

Members of the Friends of Paradise committee attended the workshop, zoom webinar and site visit organised by Queens' College on their proposed development.

On behalf of members, the Chair voiced serious concerns about the harm to the biodiversity of this unique natural asset that would be caused by light and noise pollution during and after construction. She concluded, 'Sadly, contrary to your comment during the site visit that, 'wildlife will just return when the building is finished', habitats and wildlife once disturbed or destroyed cannot be easily reinstated, if at all. We therefore feel that the plans threaten the nature reserve in all its beauty and tranquillity.'

The Friends of Paradise contend, that the dominant and overbearing layout, scale, massing, and height of the proposed development would result in irrevocable harm to the fragile ecosystem of the Paradise Nature. Indirect harm would arise from development of the Owlstone Croft garden which forms part of the ecological connectivity in the green river corridor that runs from the centre of the city to Grantchester and buffer providing open space for flight paths and foraging for birds and (eight species of) bats, insects, and water voles. Direct harm would arise through light, noise, and drainage. No on-site mitigation and off-site compensatory measures could compensate for such harm due to the unique nature and biodiversity of the wet woodland ecosystem and resulting special character, recreational and amenity value of the reserve.

The planning balance between benefits and harm of the proposed development needs to be informed by policy and evidence. At this stage we contend it is not possible to make a judgement on the planning balance due to the scope and extent of gaps in the evidence base.



As matters stand, a raft of National Planning Policy Framework and Cambridge Local Plan 2018 policies insist great weight should be given to protecting and enhancing this unique wet woodland to support a wide range of species and protect the public's enjoyment of this place for future generations. In the absence of the applicant providing overwhelming and exceptional reasons for building in this location, the Friends of Paradise respectfully ask the Council to refuse this application in accordance with national and Local Plan policies.



APPENDIX 1 – Photo of security lights at Owlstone Croft along the boundary with the LNR



APPENDIX 2 – Cambridge City Council Space and Recreation Strategy October 2011

GREEN SPACES IN GREEN RIVER CORRIDOR	Sheep's Green, Snob's Brook and the Rush	Lamma's Land	Paradise Nature Reserve	The Grove Garden	Newnham Croft School playing field and wild garden	Owlstone Croft Garden	Skaters' Meadow
DESIGNATION OF PROTECTED GREEN SPACE	CWS11 NAT06	P&G11	LNR09 CWS10 NAT05	NAT35	SPO34		CWS13
ENVIRONMENTAL IMPORTANCE							
a) Does the site make a major contribution to the setting, character, structure, and the environmental quality of the city?							
<i>i) Does it make a major contribution to the setting of Cambridge?</i>	*	*	*	*	*	*	*
<i>ii) Does it have positive landscape features and / or a sense of place sufficient for it make a major contribution to the setting of the city?</i>	*	*	*	*	*	*	*
<i>iii) Is the site an important green break in the urban framework?</i>	*	*	*	*	*	*	*
<i>iv) Does it have significant historical, cultural, or known archaeological interest?</i>	*	*	*	*	*	*	*
b) Does the site make a major contribution to the character and environmental quality of the local area? If so							
<i>i) Does it have positive features such as streams, trees, hedgerows, or meadow lands which give it a sense of place sufficient to make a major contribution to the character of the local area?</i>	*	*	*	*	*	*	*
<i>ii) Is it an important green break in the framework of the local area?</i>	*	*	*	*	*	*	*
<i>iii) Does it form part of a network of open spaces in the local area?</i>	*	*	*	*	*	*	*
<i>iv) It is enjoyed visually on a daily basis from public places (e.g. footpaths and vantage points)?</i>	*	*	*	*	*	*	*
<i>v) Does it have local historical or cultural interest?</i>	*	*	*	*	*	*	*
c) Does the site contribute to the wildlife value and biodiversity of the city?							
<i>i) Does it have any nature conservation designation?</i>	*	*	*	*	*	*	*
<i>ii) Is it adjacent to or an important link to sites with nature conservation designation?</i>	*	*	*	*	*	*	*
<i>iii) Does it contain important habitats or species sufficient to make it worthy of consideration for any nature conservation designation?</i>	*	*	*	*	*	*	*
<i>iv) Is it an important wildlife oasis in an area with limited wildlife value?</i>	*	*	*	*	*	*	*

