

The Greater Cambridge Design Review Panel



Brookmount Court, Cambridge

(PPA/22/0019)

27th October 2022

Confidential

The [Cambridgeshire Quality Charter for Growth](#) sets out the core principles for the level of quality to be expected in new development across Cambridgeshire. The [Greater Cambridge Design Review Panel](#) provides independent, expert advice to developers and local planning authorities against the four core principles of the Charter: connectivity, character, climate, and community.

Attendees

Panel Members:

Maggie Baddeley (Chair) - Planner and Chartered Surveyor

Aram Mooradian (Character, Architecture/Community) – Director, Mooradian Studio

Prisca Thielmann (Character, Architecture) - Associate Director at Maccreanor
Lavington

Parthena (Nopi) Exizidou (Character, Climate) - Net Zero Transition Lead for the
British Antarctic Survey

Sarah Morrison (Character, Conservation) - Conservation Architect, Historic England

Vanessa Ross (Character, Landscape) - Chartered Landscape Architect, Director,
arc Landscape Design and Planning Ltd

Applicant Team:

Martin Rose, Executive Associate at Fairhurst Design Group (Architecture)

Howard Redhouse – Director at Berwick Hill Properties (Applicant)

Matt Sharpe – Senior Director at Quod (Planning)

Kirsten Elder – Partner, Scoth and Partners (Sustainability)

LPA Officers:

Joanne Preston – Principal Urban Design Officer and Design Review Panel Manager

Nick Yager – Planning Case Officer

Bana Elzein - Principal Landscape Architect

Scheme Description and Background

The Site

The site is a brownfield employment site, consisting of three 1980s buildings previously in use as offices, together with a driving test centre (sui generis) with associated parking, situated within an employment cluster on the southern side of Kings Hedges Road. The largest of these buildings is subdivided into two units, meaning there are 4.no. office units in total on the site (Units A-D). The current uses onsite are supported by c.75 car parking spaces, with access taken from Kilmaine Close and Kirkwood Road.

The site is surrounded to the immediate west, south and south east by industrial and employment development as part of the Kilmaine Close and Kirkwood Road employment area, consisting of two storey sheds in various B and E Class uses with associated car parking. To the north of the site on the opposite side of Kings Hedges Road lies the Cambridgeshire Guided Busway, Cambridge Science Park and Cambridge Regional College.

Beyond the immediate surrounding Kirkwood Road employment area lies two-storey residential properties to the north west and east of the site. To the east lies Nuns Way Recreational Ground.

To the north of the site across King Hedges Road lies an area allocated for mixed use development in the emerging North East Cambridge Area Action Plan.

The key site constraints are:

- The site is a Protected Industrial Site as identified on the Policies Map.
- The site lies within the Cambridge Airport Safeguarding Zone.
- The site is adjacent to but outside the emerging North East Cambridge APP boundary. To the north east of the site and within the AAP area, the general location for a 'Local Landmark Building' is identified (see Planning History below).

Planning History

With the Regulation 19 formal consultation on the pre-submission North East Cambridge Area Action Plan (AAP) being paused until 2024, so as to coordinate with the awaited development consent order application for relocating the Cambridge waste water treatment plant, limited weight ought to be attached at the present time to the proposed inclusion of a 'Local Landmark Building' in the AAP in future iterations of Brookmount Court's speculative redevelopment proposals. The 'Local Landmark Building' was not included in the AAP Regulation 18 consultation; it was a new addition into the Council-approved version of the pre-submission Regulation 19 Plan, to address consultee responses regarding tall buildings. This aspect of the emerging AAP has not been directly consulted on as yet.

The Proposal

The applicant is seeking to develop the site for up to 6,500sqm of employment uses in a single building. This is an increase from the existing 1,950sqm of employment use on the site. The proposed development is intended to contribute towards meeting technology and life science sector needs, with the potential of accommodating one or multiple occupiers and leading to an increase of employment floorspace. The proposal would lead to the development of office and laboratory floorspace, meeting and function room spaces, and rooftop amenity. The proposal would incorporate cycle storage and car parking in a basement area underneath the building.

The applicant has entered into a Planning Performance Agreement with the Local Planning Authority for Pre-Application advice for the redevelopment of Brookmount Court for life science uses. The proposal would lead to a significant development of the site, including new public realm and landscaping works. Officers have attended two meetings with the applicant to date which have been focussed on the spatial design and layout of the scheme.

Declarations of Interest

There are no conflicts of interest.

Previous Panel Reviews

This is the first time the scheme has been reviewed by the Panel.

Greater Cambridge Design Review Panel views

Summary

The Panel supports the objective of the Columbia Threadneedle (CT) brief for this site, of providing and retaining an exemplar building that will be fit for purpose in 25 to 50 years' time. Noting that a full planning application reflecting pre-application and design review feedback is intended to be submitted by Christmas 2022, and that application material is being put together now by the design team, the Panel's fundamental recommendation is that specific sustainability targets should be embedded in its evolving design. If as landowner, CT wants other developers to look at this building and seek to emulate it, there are other specific design elements that the Panel also recommends for review. Priorities include: investigating the potential to remove the proposed podium altogether, so as to achieve the fullest possible integration of new public realm with the existing streetscape; treating the current rooftop elements as an additional, albeit set back floor; and exploring the scope to provide additional landscaping to the south of the building.

Climate

While the applicant team has emphasised how CT has sustainability credentials that are very high on the company's core agenda, and their specification brief for the Brookmount Court redevelopment contains targets for certifications, the Panel could only conclude that it is very hard to see how any of those climate-related targets are being embedded in the emerging design. The presentation and additional information provided in the review has limited content on sustainability. Mention is made of high-level targets, but very little information has been provided to date on how those targets would be achieved. It is expected that the design team have already undertaken this work, given the stage of the project, but it does not obviously appear. Specifically, the Panel would have liked to see how the project's sustainability strategy links directly with the UN Sustainable Development Goals. In response to the applicant team explaining that changing the use of the existing buildings' limited floorspace had been considered but concluded to be unviable in requiring too high a level of intervention (their cladding would require replacement due to flammability issues) and the building dimensions not being fit for R & D

purposes, the Panel highlighted how the proposed demolition will release a great deal of carbon. This observation underlines the wider importance of having set net zero targets to work to. The Panel notes that the design team will evaluate the potential for re-using steel from demolition of the existing buildings; again, this potential for re-use underlines how set targets are needed for the proposed percentage of re-used building materials (and bio-based materials).

Acknowledging that the applicant team has held sustainability-related in-house workshops, is aiming for a 35-40% reduction against Part L Building Regulations and is using Low Energy Transformation Initiative (LETI) guidance to help transition to meeting net zero carbon, the Panel is disappointed that the project is currently achieving only BREEAM 'excellent'. While it is accepted that the applicant team's aspiration is for BREEAM 'outstanding' (and their tracker is indicating that this is achievable), this ought to be one amongst many stated targets that all aim for the highest ratings. The Panel also recommends that the applicant team considers using PAS 2080, a global standard for managing infrastructure carbon that provides a framework for looking at the entire value chain, aiming to reduce carbon - and costs - through more intelligent design, construction and use.

Reference to taking a 'Fabric First' approach is currently rather cursory therefore the Panel suggests also considering applying Passivhaus approaches and standards for delivering net zero carbon solutions in the development. Passivhaus will assist the project in demonstrating how solar gains that are wanted in some periods will be managed in others, so as to reduce cooling needs.

Specifically on energy, limited information has been provided to date other than how power has already been secured for the all-electric new building. It is clearly understood by the Panel that the design team cannot predict electricity demands of the building in use but if such elements are embedded in the design, in order to minimise those energy demands, they can actually make a difference for occupiers. The LETI target of 50 kWh/m².yr for renewable energy available is, according to the design team, 'very much stretched' and as this is a 'lab-led' development, the team is 'working as hard as it can towards' 70 kWh/m².yr. Reference has been made to air

source heat pumps being suggested by an initial feasibility study, together with rooftop PVs that would potentially be supplemented by others e.g., integrated into the south west façade, in plant areas, and possibly incorporated in plant screening (currently proposed on the roof to be louvred). Altogether however, these PVs are acknowledged as not having a huge output. Therefore, the Panel suggests increasing solar capacity by using additional PVs, not only to provide shaded spaces on the accessible areas of the roof (that ought to be relocated from the north eastern to the south western side) but also in the form of transparent panels incorporated in the building's facades.

Turning to water supply and drainage as further sustainability factors, the applicant team already acknowledges that because Cambridge is in area of high water stress, the development needs to do more to incorporate further measures regarding supply. For water re-use, the proposal already provides an area in the basement for rainwater harvesting for landscape irrigation. Also included is an inaccessible, partially 'blue' roof (intended too, for contributing to bio-diversity net gain). These initial proposals are supported by the Panel, with the suggestion that a comprehensive water supply and expanded re-use strategy should be considered.

Specifically with regard to the applicant 's intention to achieve 'significantly greater' than a 10% bio-diversity net gain on-site – and the work to date by workshopping and by the client's ecologists - the Panel questions the current approach to landscaping on the site. Accepting that the plant selection has not been made yet and that it will 'ensure diversity', providing e.g., pollinator-friendly planting is not the same as creating bio-diversity net gain, which instead is about meeting a very specific requirement. The choice of species is one element but creating habitat is another. The Panel therefore advises that the design team needs to be realistic about what can be achieved on-site, what is wanted of the outdoor spaces, and how they will function. A biodiversity management plan will in any event be needed. Overall, the applicant team's reference to the intention of measuring and monitoring the development in relation to its adaptability to climate change is supported as a principle by the Panel, although no details have been provided of how any findings will be responded to.

Character

The Panel is aware that CT acquired this brownfield site in 2021 and agrees that making use of such land is important. Noting too that the existing buildings are predominantly vacant, having been on the market without interest for some time both before and after acquisition – and that there is an excess of demand over supply for life sciences’ property, with many enterprises wanting to relocate to Cambridge due to the University – the Panel nonetheless has some uncertainty about the proposal’s emerging form, its massing and its orientation. Despite the proposed development being for a single building that does not form part of a wider science park, it still ought to be considered in its immediate context i.e. that of Kings Hedges Road, Kirkwood Road and Kilmaine Close. The Panel understands why the design team is pushing the building northwards on the site but suggests that more thought could be given to adjoining land uses. When this site is redeveloped, the existing small scale, mixed employment-based uses and ‘shed’ buildings on Kirkwood Road and Kilmaine Close will not necessarily remain unchanged. There is therefore a Panel concern regarding the south-western side of the site, where in the emerging scheme, bin stores, a ‘land grabbing’ vehicle turning head and ramp, and further MEP are located. Potentially at some point in the future, that area will become the central point of this parcel and its immediate environs. Accepting that the proposed pedestrian entrance to the replacement building is on the north-eastern side, the Panel nonetheless considers that it needs to be more balanced on all sides, to anticipate this change.

The design team is clearly cognisant of the emerging AAP Framework and its suggested 3- to 6-storey building heights for the proposed ‘business space’ immediately to the north-east of the Guided Busway. In pre-app discussions, seeking to retain the primacy of the AAP-proposed ‘local landmark building’ (of up to 25m, or 8-storey if residential) - and this project being subordinate - has been advised. Proposing that the local landmark building in the AAP should talk to any redevelopment of this site, the proposed building is currently 17.4 m in height (ground plus 3 storeys, with setback MEP on the southern part of the roof). The Panel’s overall response to this approach is supportive in principle but it is considered to be very difficult to successfully design on this site for the ‘local

landmark'. While the height of the proposed building as shown is seen as acceptable in relation to the emerging AAP, an equally important consideration is the relationship that the proposal will have with existing buildings along the Guided Busway, and with the predominantly residential character of Kings Hedges Road itself. On the north eastern side of the Busway, existing buildings (such as the Bio-Innovation Centre on Cambridge Science Park Road) are of a very similar scale to each other, i.e. three storeys, with some kind of plinth. In view of this existing character, and the value of the applicant team not only wanting the science community to be able to collaborate within the building but also integrating the proposal in terms of use into the current and future North East Cambridge development, the Panel suggests that the Novartis Biomedical Research Centre is referenced, as part of a campus designed to encourage exchange and symbiosis.

Turning to landscape character, the Panel agrees with the principle that the proposed space fronting Kings hedges Road should be immersive and attractive from the kerbside. To achieve these aims, public realm provided in front of the building needs to connect to the north-western and south-eastern streetscape. The Panel welcomes how the podium has been reduced in height from 1m to 500mm wide but it still requires 3 steps and a short ramp. According to the applicant team, the building has been lowered as much as possible on the Kings Hedges Road frontage, with a full basement now being proposed that has to be mechanically ventilated for fire safety reasons. While the podium is stated to be as low as possible on the Kings hedges Road frontage, the retention of any podium at all, however low, interrupts the streetscape and undermines the intention of dissolving the edge of the development and blurring the transition from the street using landscaping. The podium has the appearance of having 'landed' in its current form, and that has led to the simple tapering triangles of green space proposed. The Panel therefore suggests considering addressing the podium to the street better, in terms of its shape and direction; it is not entirely clear yet, why it has to be retained at all.

For these reasons, and others that are landscape and community-related, the Panel suggests that the design team further explores the already-identified opportunity for planting at the rear of the building. More green space could be built into the project

here, e.g. with the provision of a terrace space that demonstrates how this building could become the heart of the immediate area, as it changes.

Accepting that the building itself has been set back in response to the emerging AAP as part of making sure it is subordinate to the proposed 'local landmark', and while an appealing set piece of landscape design is currently proposed on the Kings Hedges Road frontage, consideration needs to be given to the area's microclimate and how the building's proposed massing will impact on it. Although the landscaped area is described as green and verdant, in reality its very designed landscape is unverdant (this conclusion being based also on the extent of tree removal currently proposed). A manual for management and maintenance, with a very prescriptive monthly regime, would be necessary for ensuring that this space (and any other landscaped area on-site) remains attractive, and as designed. Thinking about seasonality when making planting selections is relevant here; consideration should also be given to sourcing from the UK, and preferably locally. Overall, the Panel considers that the public realm on-site requires re-examination, not only in terms of where and how it is provided, and its possible uses, but also in relation to any reconsideration of the form of the building (for example, a central courtyard would generate other considerations).

In terms of massing, the proposed building has been designed to have a long, low façade. In the verified views provided, the Panel agrees that the proposal's massing is mostly masked. In the design process, the team advises that a variety of ways of arranging the floorspace differently has been looked at, in part for minimising the building's frontage width. In terms of its layout principles, the Panel notes that three zones within the development site have now been defined by the design team: (i) front (the landscaped podium/ improvement of public realm/ links with public transport stops (and the proposed provision of toucan crossing); (ii) central (the building itself, divided into thirds with labs on the south western side, dry labs and writing-up space on the north eastern side, with views into the streetscape); and rear (at-grade servicing and access to the basement). A double height entrance is proposed on the podium for a sense of arrival into the building.

Agreeing with the design team that there being access on three sides of the site creates both opportunities and constraints for fitting in all of these required elements, the Panel confirms that because the scheme is not part of a science park, the block also has to acknowledge the existing streetscape better. The Panel does not agree that the proposal for the site sits well in the existing streetscape, either at ground or roof level. In terms of its height and the design team already being conscious that the proposal will be 2 storeys higher than most of the existing residential development on Kings Hedges Road, the Panel is concerned that two out of four corners have heads of emergency stairs that are very exposed and difficult to disguise, even with cladding. Although a veil of MEP louvres is an understandable approach to rooftop provision, in the centre of the rooftop, there is also a core with lifts, a multi-function room and associated facilities. With the combination of the rooftop MEP, stair heads and useable floorspace being proposed, the Panel is of the view that the rooftop spaces and structures instead need to be integrated into the façade and volume of the building as another floor, and be not seen, or perceived as now as add-ons.

It is already very clear that the roof design is at a point where general ideas of how it is to function have been formulated. A wide range of uses has resulted; the roof's useability and the likely good views from it are worth optimising, although the Panel points out that there is a need to better understand how its uses can be optimised, taking into account different areas of shade, wind and micro-climate.

At this stage in design development, the applicant team is understandably still working on the building envelope and its facades, to determine what gives best efficiencies and using these to then drive design. Although the proposed elevations are described as having very different appearances, this is not yet the case. Solar control is currently shown – in the Panel's view erroneously and unnecessarily - on all 4 facades, when it is needed only on the south-western and south-eastern elevations. While no information has been provided, the Panel's assumption is that panels will be moveable and adjustable, either manually or with sensors. While the intention is that as a unifying element, some panels will be for decorative purposes and others for views' control on the other two facades, this element of the proposal clearly necessitates a great deal more work.

Assuming that the design team continues to look at further breaking down the elevations, for ways to accentuate horizontality in the facades, and disguise variations in fenestration for the various activities in the building, the Panel recommends referring to the gridded façade of the Novartis visitor centre building in Basel by Peter Märkli, where without shifts and turns of fins, vertical changes are achieved over height.

The Panel is not in a position to comment on materiality, as the design team is only just starting to develop materials, by looking at many buildings in the existing streetscape to provide context. So far, green metal fins are being suggested to control views and solar gain, as part of the intention to create a simple and efficient envelope with brise soleil characterising the look and feel of the building. The only detailed comment by the Panel would be that as currently presented, the use of brick on the podium and a different materiality elsewhere is questionable. There is a need for these elements of the building to read better together.

Connectivity

Although the design team refers consistently to the very strong intention to make a connection between the development and the streetscape, the Panel has a sense that while the site is generous and new open space created, it has only one orientation and the podium persists as a physical barrier to that intention. It is in effect creating an enclosed enclave. The Panel has its own strongly-held view, that in contributing to creating this wider area for the next 50 to 100 years, the site's development principles and detailed design have to be very much about bringing in opportunities for future connectivity. Travel (and not just commuting) by non-car modes must be a central consideration, as is avoiding conflict between car and cycle, and while the design team are attempting to factor in both, design details do not do so yet. For example, cyclist arrivals being at the back of building, with their access leading into the basement, should also be reconsidered if commuting by bicycle is to be successfully promoted. The service lifts from the basement also need to be two-sided. Visitor cycle spaces on the podium need to be reconsidered, as they appear to be randomly dotted on, simply for increasing parking numbers. If they are there for

policy reasons, so many uncovered spaces in the public realm may well lead to unresolved tensions.

Community

The Panel endorses the applicant's intention to look at opportunities for apprenticeships, as well as the ongoing public engagement exercises that are apparently yielding positive responses. Community feedback from these exercises should be used to further revise the proposals.

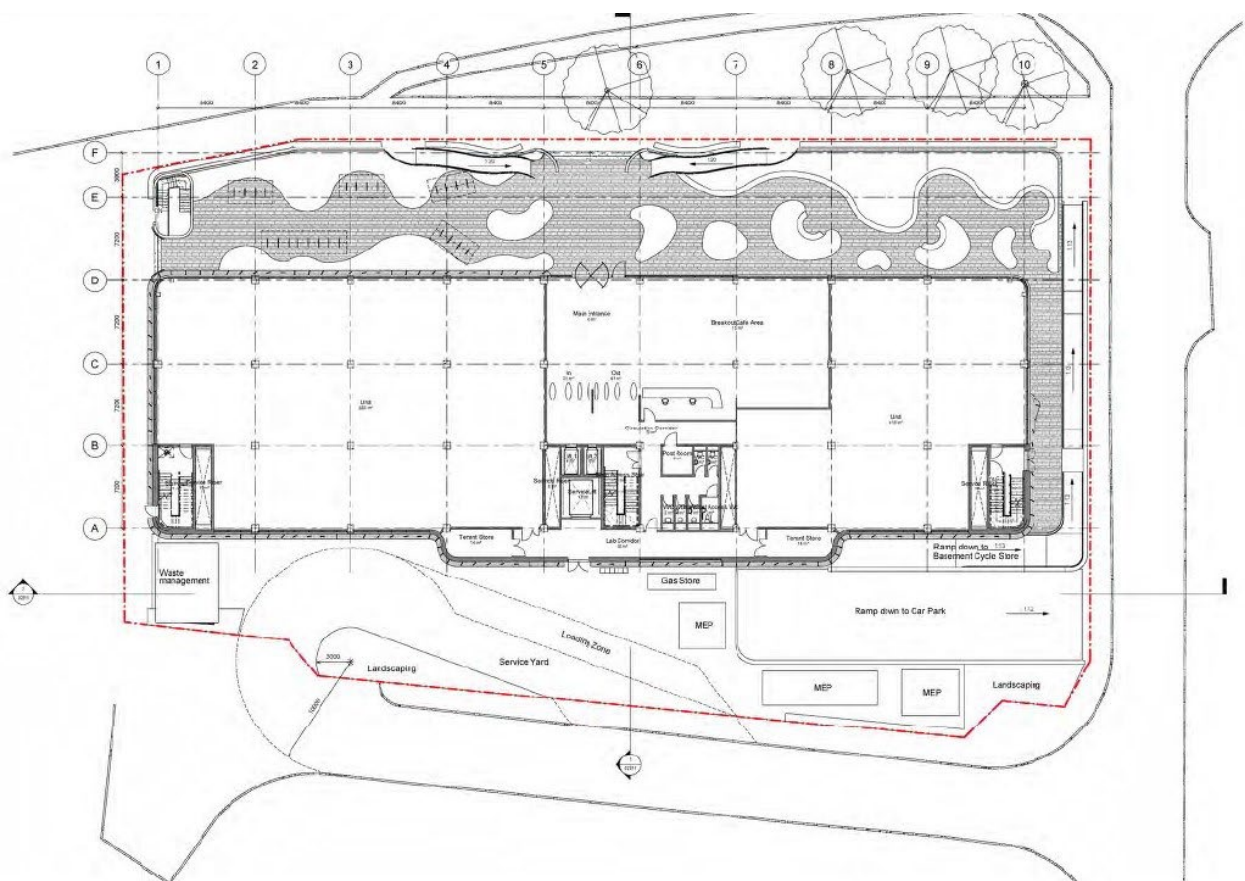
As a matter of principle, the Panel also supports the health and wellbeing aspects of the proposal, including encouraging people to be outside. There is a clear opportunity here for providing something very interesting for the community, for improving connectivity and making a positive contribution to the area.

The employment and residential areas and their communities surrounding the site are in very close proximity, therefore having a building that provides outdoor space for their use that is not 'sealed off', is important. Providing a crossing to other areas beyond the Guided Busway where there may be existing or new public realm is beneficial, but insufficient.

Noting that the applicant team is aiming to reinforce streetscape nature with the project, there is also a wonderful opportunity for community interaction at street level. In the Panel's view, there should be no barrier to the public entering the landscaped space currently shown on the podium. But while it is laudably intended to be welcoming and stated that the public can easily access the space, the actual relationship between the public and private realm and the transition between them via the podium does not seem to work yet. The Panel acknowledges that it is problematic to do more in design terms when there is no known end user for the building and security may be an issue; it is accepted that the extent to which the frontage landscaping can be 'open and welcoming' may change. As currently designed however, the Panel is uncertain as to how often, and where the building's users and the public will make use of it. The new public realm is north-east facing and although it will be possible for landscaping to work here, it will have its own

microclimate and will be quite dark and cool, such that it is likely to be less inviting than intended. There is also a tension with providing public space on Kings Hedges Road (or alternatively at its junction with Kirkwood Road), in the ways being suggested for employees, visitors and the local community, as both locations are on roads that are busy at certain times of day.

At present, the proposal gives little to the street; consideration could be given to creating space for e.g. food vans for increasing daytime activation. A link with the Daily Bread Cooperative in Kilmaine Close e.g., welcoming them into the ground floor of the building as a public use could also prove highly successful.



Proposed Ground Floor Plan – extracted from the applicant’s presentation document

The above comments represent the views of the Greater Cambridge Design Review Panel and are made without prejudice to the determination of any planning application should one be submitted. Furthermore, the views expressed will not bind

the decision of Elected Members, should a planning application be submitted, nor prejudice the formal decision making process of the council.

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