



CAMBRIDGESHIRE QUALITY PANEL

REPORT OF PANEL MEETING

Scheme: Wellcome Genome Campus Masterplan

Date: Monday 4th June 2018

Venue: Wellcome Genome Campus, Hinxton

Time: 9:15 – 12:30

Quality Panel Members

Robin Nicholson (Chair)

Steve Platt

Luke Engleback

Phil Jones

Ashely Bateson

David Pritchard

Panel secretariat and support

Judit Carballo - Cambridgeshire County Council

Local Authority Attendees

Toby Williams – Shared Planning Service, Cambridge City Council

Trovine Monteiro – South Cambridgeshire District Council

Jon Finney – Highways, Cambridgeshire County Council

Applicant and Representatives

Dr Martin Dougherty– Chief Operating Officer, Genome Campus

Tom Clarke - Planning Director, Wellcome Trust Limited

Kim Wilkie – Kim Wilkie

Matthew Sharpe – Director, Quod

Imogen Blanning – Planner, Quod

Alison Brooks – Alison Brooks Architects

Lydia Lewis – Associate Landscape Architect, Arup

Stephen Neil- Director, Aspire Development Management



1. Scheme description and presentation

Architect/Designer: Arup, Alison Brooks Architects, Architecture 00, Kim Wilkie, Vectos

Applicant: Wellcome Trust

Planning status: Masterplan

2. Overview

The Wellcome Trust has been at the forefront of developments in genomics and biodata innovation for the last two decades, since the establishment of the Sanger Institute at Hinxton in 1993. It is a significant part of the Cambridge life-sciences hub and rivals the biomedical and genomics hubs in Boston, USA and Beijing, China. The genomics industry attracts significant investment and is an expanding and dynamic area of science in which the UK is a genuine world leader.

The existing campus is not sufficient to accommodate the future growth needed to ensure that it remains at the forefront of research and education. The masterplan therefore seeks to significantly expand the campus to strengthen its role as the pre-eminent world centre for scientific, business, cultural and educational activities associated with the genomic and biodata industry.

The proposal is to submit an outline application for up to 175,000sqm of new B1 office and/or research and development employment floor space, up to 1,500 homes, nursery school, primary school and university technical college provision, new retail space, hotel provision, open space, common land and landscaping, highway and transport infrastructure provision including alterations to the A1301 (Mill Lane), and new utility/energy infrastructure provision. The development would be phased over 10+ years.

The growth of the campus is proposed to be mainly on a triangular area of land to the east of the existing campus, between the A1301 and the A11, referred to as the Expansion Land. This land is located on higher ground, has significant level changes (for the Cambridgeshire context: approx. 25m difference between the lowest and highest points of the site, west-to-east) and has a topography that is articulated by a small valley in its middle. Views to the church spires at Hinxton/Ickleton and hills to the SE and SW, beyond the site, are possible. The site consists of arable land with some mature vegetation including good quality woodland that runs along a disused former railway corridor, managed hedgerows along field boundaries/road corridors and young woodland planting of 12yrs just taking shape.

The site is 122ha and comprises land to the south of the existing campus known as Southfield and the Expansion Land. The application site will also include parts of the A1301. Employment on-campus would increase from 2,500 persons at present to approximately 6-7,000.

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3. Cambridgeshire Quality Panel views



Introduction

The Panel welcomed the site visit and presentation of the proposals.

It was noted that a project board has been set up to deliver the masterplan and that the Wellcome Trust will have the stewardship of the project.

The Panel's advice reflects the issues associated with each of the four 'C's' in the Cambridgeshire Quality Charter. The comments below include both those raised in the open session of the meeting and those from the closed session discussions.

Community

The proposals will increase the amount of research and development floor space considerably as 175,000sqm are proposed on the masterplan. Many companies have already approached the Genome Campus requesting a building on the new site. Current staff needs and skills and the proximity to advanced infrastructure are among the main reasons why these companies want to move to the expansion site.

The applicant explained that their intention is that the majority of the housing proposed will be used by staff working at the Genome Campus. The proposal will be likely to have a split of 70% apartments and 30% houses, and it is expected that a large proportion of them will be for rent. Although there are going to be mostly 1 and 2 bed apartments, there will be dwellings with 3 and 4 bedrooms as well to cater for the expected number of young families. The average staff member age is between 30 and 40 years olds.

The Panel welcomed the inclusion of housing within the employment area and the fact that they are moving away from a science park campus typology where housing is not integrated. The Panel thought it needed to be clear whether it was going to be more of a campus than a village. The applicant explained that their intention is to provide a working and living community and that the housing is to be mainly for people working in campus.

The Panel noted that 5,000 dwellings are likely to be proposed in the emerging Uttlesford Local Plan in the form of a Garden Village settlement to the east of the site across the A11 in Essex. The Panel considered that the masterplan should be future proofed to allow opportunities to link to North Uttlesford Garden Village should the site be brought forward for development

It was noted that South Cambridgeshire District Council has refused an outline planning permission for an AgriTech Technology Park located to the north of the site. The Panel considered it wise to consider the impact of any development to the north of the site.

Connectivity

The A1301 presents one of the biggest challenges for the development and this is recognised by the applicant. The current road is heavily tree lined with vehicular speeds of 50mph with a fence along one side. The intention is to open this up and incorporate walking and cycling on the route, but questions were raised about how this could be achieved.

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If the intention is to connect the two sides then the speed limit would need to be reduced considerably. Comparisons were made with Kew Green for size but the speeds there are slower. The applicant is currently considering signalised crossing points for pedestrians and cyclists but the Panel were unconvinced that the provision of just signalised crossing points would work. The County Council's highways officer explained that the majority of accidents happen at these crossing points and quoted Queens Road in Cambridge where there are 4 signalised points and they are where the majority of accidents occur.

The Panel felt that just one crossing wouldn't make a campus and the discussion revolved around the possibility of wholly or partially lowering the road and making an underpass or providing land-bridges. There is also a need to change the rural cues that make drivers go faster which may include some built form closer to the road and loss of vegetation. The question was raised as to how a young child would get from their home, across the road to meet their parents after work and how safely this could be achieved.

The Panel was pleased to learn that the intention is to develop the existing good Campus' relationship with Hinxton and Ickleton villages by allowing residents to walk through the campus grounds. The intention is to provide security on a building-by-building basis to allow for this.

The Panel recognised the importance and the need for a travel plan showing how to integrate public transport and facilitate those journeys and movements from the railway station. Routes needed to be planned for busses through the whole site.

The Panel suggested consideration should be given to possible connections to the proposed new Uttlesford Garden Village on the other side of the A11 and opening conversations with all stakeholders involved despite it being in another county.

Climate

The Panel welcomed the aspirations for the site and were interested in how the masterplan's vision of achieving zero carbon is to be managed across the whole campus; they questioned how the management strategy and the carbon reduction focus will enable this long-term vision.

Clarification is sought as to how zero carbon targets would affect the design of the buildings and typologies and how they would change the design of these new low carbon buildings compared to the existing buildings. There may be a need to evaluate the massing and building forms as a result of this.

The Panel considered the flood mitigation approach adequate but questioned how the landscape in the car parking would be treated and how the proposals would support health and wellbeing. It was advised that water is contained as close as possible to its point of contact with the site.

The Panel were pleased to learn of the provision of electric charging points but wondered where the additional electricity would come from and sought clarity regarding whether the multi-storey car parks and the move towards electric vehicles have been built into the applicant's forward thinking in terms of the energy needs of the site.

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The aspiration to mix uses was welcomed but there were some concerns about the housing “fingers” being separated from each other and from other activities.

The applicant was invited to think beyond carbon reduction and consider carbon capture as well, as in Almere in Holland. The Panel was encouraged by the proposed programme of restoring the soil’s organic content and thought that the use of the land for sustainable agriculture could be an exemplar, demonstrating strong links with the Wellcome Trust’s primary goals of improving health and well-being.

The SUDs and landscape should be integrated at both general and detailed scales to provide a sustainable and healthy site. Allotments are welcomed for their social and nutritional benefits (there should be a mix of sizes) and the idea of the Common was welcomed although the scale of it was questioned. Other matters discussed included the environmental benefits of woodlands, permeable paving and “edible” streets.

Character

The Panel felt the scale and character of the scheme lacked a logical coherence and relationship to land-form. There was no sense of three-dimensionality, scale of spaces, or sense of arrival. Questions were asked about internal traffic, walking distances and routes and whether the walking routes have sufficient shelter.

It is questioned why buildings are so far from the road, although retaining an element of working farmland is essential.

The masterplan didn’t relate to any Cambridge precedents to illustrate the ambition for the site. The Panel noted that the proposed research buildings are very big so there is a need to explore how the areas between buildings work.

Questions were raised about whether the applicant’s intentions were for the buildings to be seen or hidden and the Panel felt that there was a good case to be made for them to be displayed with pride. The Panel is very keen on the streets being designed as streets rather than just the space between uncoordinated buildings.

Road sections will need to be provided and show how primary and secondary streets are organised and how these relate to the car parking. It was felt that at the moment all movements within the masterplan are unclear including access to public facilities such as cafes.

4. Conclusion

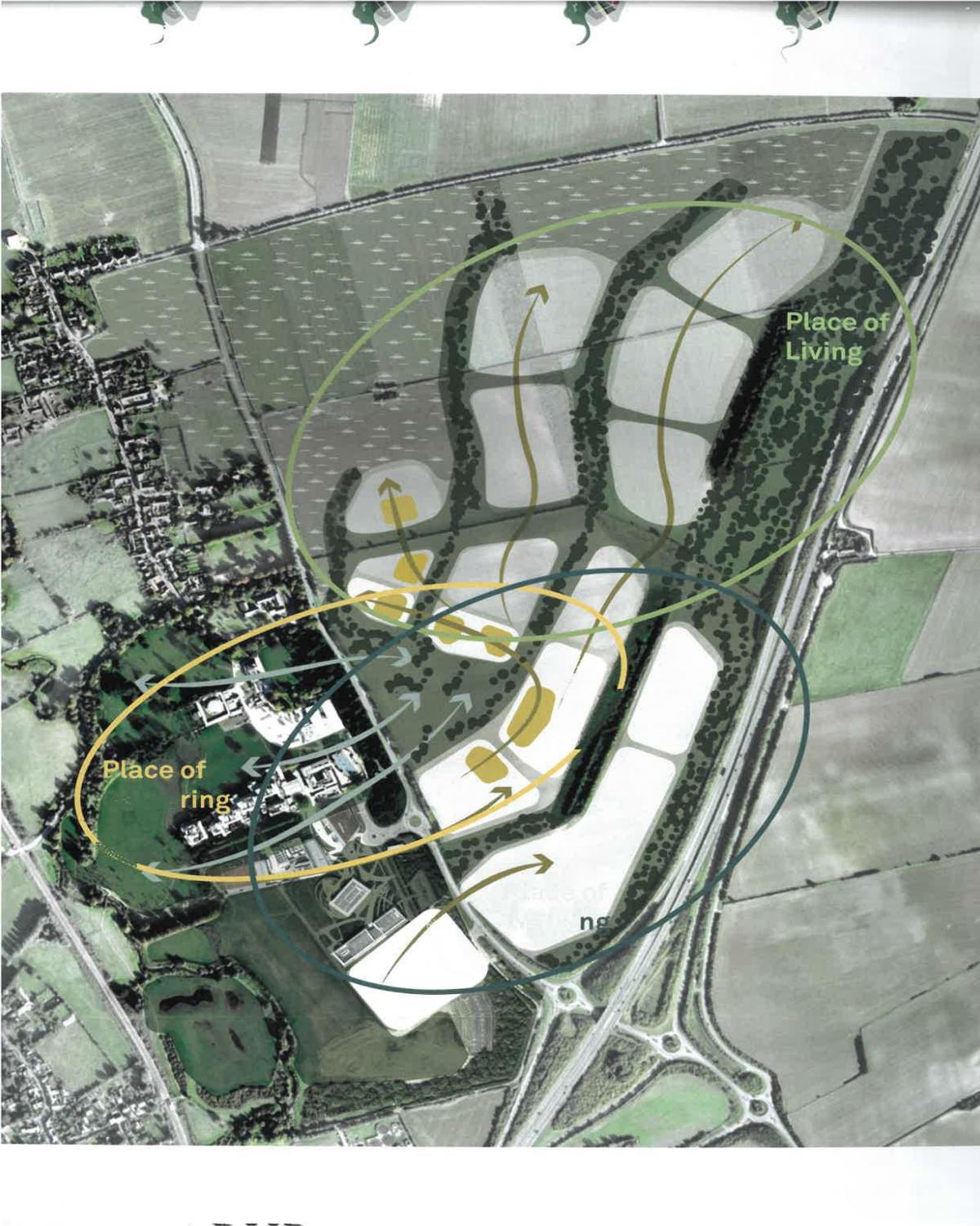
The Panel was very supportive of the project and really liked the idea of this pre-eminent hi-tech research campus being a sustainable place to live and work. The stewardship and governance structure proposed is very encouraging. However, the site presents two big issues, the treatment of the A1301 and the proposals planned for North Uttlesford Garden Village.

The Panel made the following specific recommendations, further details can be found above:

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1. Consider the options of lowering the A1301 versus providing bridges over the road together with surface (at grade) interventions to ensure easy pedestrian/cycle flows from one side to the other.
2. The masterplan should include connectivity options to the proposed North Uttlesford Garden Village.
3. Provide sketches of arrival sequences and examine the scale of the Common. The identity/signature of the place needs to be more coherently and strongly presented.
4. Encourage a positive appearance of the campus from surrounding roads.
5. Provide clarity about whether the people who will be living on site will be in a truly mixed use campus and not in a separate adjacent village finger. The provision of mixed use areas and de-zoning is strongly encouraged.
6. Encourage a management plan for reconditioning the soil, improving the biome of the site and making connections between health and well-being and work undertaken by Wellcome.
7. Consider how zero carbon affects building design and provide a management strategy for this. Explore renewable energy options.
8. More work is required regarding public transport routes within the site
9. Encourage the development of a long term travel plan.
10. Provide cross-sections to understand the spaces between the buildings and the amount of car parking needed.
11. Consider energy for the electric cars in the rural context.
12. Consider shelter along the walking routes.





CAMBRIDGESHIRE QUALITY PANEL

REPORT OF PANEL MEETING

Scheme: Wellcome Trust Genome Campus

Date: Monday 8th October 2018

Venue: Wellcome Trust Genome Campus, Hinxton

Time: 09:30 – 12:45

Quality Panel Members

Robin Nicholson (chair)

Amy Burbidge

Meredith Bowles

Luke Engleback

John Dales

Kirk Archibald

Panel secretariat and support

Judit Carballo – Cambridgeshire County Council

Local Authority Attendees

Toby Williams - Shared Planning Service, Cambridge City Council

Annemarie de Boom – South Cambridgeshire District Council

Applicant and Representatives

Tom Clarke - Planning Director, Wellcome Trust

Matthew Sharpe – Director, Quod

Sowmya Parthasarathy - Associate Director, Arup

Lidia Lewis – Associate Landscape Architect, Arup

Malcom Smith – Arup

James Edwards – Buro Happold

Georgina Chamberlain – Buro Happold

Susan Quick - Wellcome Trust

Stuart Morse – Vectos



1. Scheme description and presentation

Architect/Designer	Arup, Alison Brooks Architects, Architecture 00, Aspire, Quod, Vectos, Buro Happold, Kim Wilkie
Applicant	Wellcome Genome Campus
Planning status	Masterplan

2. Overview

The Wellcome Trust's (WT) proposals for the Genome Campus were presented to the Panel on 4 June 2018. The Panel raised a number of issues and queries on the emerging plans and asked the WT for further clarification and work related to:-

1. Options of lowering the A1301 versus providing bridges over the road together with surface (at grade) interventions to ensure easy pedestrian/cycle flows from one side to the other.
2. Connectivity options to the proposed North Uttlesford Garden Village.
3. Arrival sequences, scale of the Common. The identity/signature of the place.
4. Encouraging a positive appearance of the campus from surrounding roads.
5. Clarity on mixed uses and separate village fingers, encouraging de-zoning.
6. The development of the restorative sustainability strategy.
7. Exploring renewable energy management options and towards zero carbon.
8. Public transport routes within the site.
9. Travel planning.
10. Cross-sections to understand the spaces between the buildings and car parking needed.
11. Energy and connection points for electric cars.
12. Shelter along the walking routes.

The masterplanning process has been carried out with further public consultation and officer negotiations. WT expect to submit the outline planning application to expand their Hinxton Campus in early November 2018.

The North Uttlesford Garden Village (NUGV) to the south east of the Genome Campus (across the A11) has been proposed by Uttlesford District Council as part of their emerging Local Plan. This will be likely to be subject to an Examination in Public next year (2019). An appeal against the refusal of permission for the proposed agritech site to the north of the Genome Campus has been made. A public inquiry is currently scheduled for June 2019.

3. Cambridgeshire Quality Panel views

Introduction

The Panel welcomed seeing the development again and recognised the progress made since the last review. Previously, the Panel were very supportive of WT's ambition for the scheme and were pleased to see that the applicant had responded to the majority of issues raised before, including greater mixed use, a smaller common and the treatment of

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the A1301. The Panel welcomed the opening up of the Campus to the wider public and appreciated the use of V-R to explain aspects of the scheme.

The Panel's advice reflects the issues associated with each of the four 'C's' in the Cambridgeshire Quality Charter and the comments below include both those raised in the open session of the meeting and those from the closed session discussions.

Community

The applicant explained the philosophy of the place as: "convening, wandering and collaborating". A key element of this scheme is that this is a place of work and a place for living. Whilst the majority of the houses are to be located in the northern part of the site, there is an opportunity to provide for mixed uses in this location too, just as there will be some residential located to the south, which is predominantly the research area.

The different type of working patterns and contracts at the Wellcome Genome Campus makes the demography of this site different from other more conventional new communities. Contracts may be from a minimum of 3 months up to 9 years in duration and the majority of the staff are likely to be young professionals. The WT plan to manage all of the buildings, including the houses, on the campus and although some home owners will eventually sell their houses, these will remain only available for new people working on campus who meet the requirements set out by the WT.

The applicant explained their aspirations for a community in a rural setting with low density residential development. The Panel supported this approach and suggested strengthening ties with the established local community by providing good links to Hinxton - an important community hub with a pub- and other nearby villages.

The Panel asked where the primary school would be located. The applicant explained that at present they are in discussions with Cambridgeshire Education Authority on this matter because the housing mix proposed does not currently require a new primary school. It was noted that Hinxton does not have a primary school so the closest primary school is in Duxford. If school children need to go to this school then these links need to be fully considered to ensure they are safe.

The Panel asked how this place would work for older and retired people and whether there would be sufficient facilities to meet their needs. It was explained that the purpose of the housing was to meet the needs of the Genome campus workers to ensure the campus remains internationally competitive. Retirement housing would have to be made by individuals off-site as necessary.

The Panel considered what it would be like to live on this campus; as a comparison Great Chesterford has a preschool and primary school which as well as providing local education gives a sense of community to the village. It was felt that there are opportunities for mixed uses but they did not come across to the Panel when they looked at through the virtual reality images. It was explained by the WT that the proposed uses within the scheme would also likely include a health and well-being facility, a gym, a nursery and other complimentary uses including a further/adult education facility. These would be centred around the Common which was considered to be the heart of the site.

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The Panel suggested an audit of existing community infrastructure so, when the new social infrastructure is delivered as part of this development, it would not be to the detriment to what is currently being provided in nearby villages.

The Panel suggested changing the name of the A1301 to Mill Road to encourage a sense of a place. This would need to be discussed with the relevant transport authority.

Connectivity

The applicant explained that integrating the A1301 with new crossing points has been an important element of their work and that since the last panel meeting, they have looked at three different options:

1. Land bridge over the A1301;
2. At-grade crossings; and
3. Subway.

The applicant's preferred approach is to encourage pedestrians and cyclists to cross at-grade as part of a speed-calmed A1301. They are awaiting feedback from the County Council following a safety audit review.

In general, the at-grade crossing proposed was supported by the Panel and it was considered a good strategy with the inclusion of a second northern access roundabout with a group of buildings close by, to help reduce speeds. The Panel would have liked to see further details on how the pedestrian / cycle crossings throughout the corridor would work, such as type of crossing, proposed planting and how they align with pedestrian desire lines, such as links with the village as noted above. The Panel noted that pedestrians may not always cross where predicted and reflected that junction design needs to consider how exactly pedestrian movement would be accommodated. The Panel encouraged wide crossing options with the use of good quality materials.

Clarifications were sought in relation to where the A1301 speed limit reductions from 50 mph to 30 mph would be located to the north and from 70 to 30 arriving from the south.

The Panel noted that there is currently a free bus service from Whittlesford Parkway railway station for employees on the campus and supported the applicant's intention to encourage travel by train by improving the links, including cycle routes.

The Panel questioned the impact on traffic movements if a primary school is not provided on site and recommended looking at historical movement patterns in other similar villages. The Panel were concerned about the number of trips likely to be made at peak times and wondered whether school trips could be partnered with the existing bus service to encourage more sustainable trips rather than using the parents' cars.

The Panel asked that links to other villages be considered.

Character

The Panel was pleased that the size of the Common had been reduced from 5 hectares to 2.7 hectares to enable a more legible and animated space by adjacent buildings.

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The Panel welcomed the restorative landscape strategy and the green infrastructure and it's reaching out to the existing landscape, including the river, using the topography and new habitats to promote biodiversity.

Some concerns were raised about the massing of the buildings and how they will be seen from outside the site, especially from the other side of the valley to the west as at present, there is little to break the blocks down. The Panel suggested the applicant look at the coloration of the buildings and early landscape planting.

The Panel noted the proposed small field nature of the agricultural land to the north and asked if, assuming this structure is retained, it would still be suitable for arable farming or whether there would be any livestock farming as a substitute. The Panel questioned whether there might be an option of increasing the woodland planting close to the A1301. The WT explained that the public consultation process had elicited a general view that the retained agricultural land should remain open and that they were increasing the amount of woodland from 5Ha (retained) to provide a net increase of 16Ha with nine new habitat areas. It was likely that the land would continue in arable use but this was a matter to be discussed with the tenant farmer.

The Panel were concerned about the secondary road shown on the indicative parameter plan running parallel to A1301 and the extensive setbacks of the building. The Panel asked about the character and function of the space between buildings and the road. The WT committed to removing the road from the masterplan. The Panel observed that the character of the A1301 would need to change to make it a "street" but that this would be a very different character to that of the A1301 as it travels through Great Shelford – something new and different was needed and the Panel urged the WT to have a think about what this would be.

The Panel welcomed the long term strategy and governance proposals for the site. It was confirmed that the WT is interested in owning residential and research facilities to maintain a long term interest in all aspects of the development to ensure a high quality of place.

Climate

The Panel welcomed the aspirations of the scheme, however, some questions were raised such as how the energy strategy would be implemented over time and what system would be used to heat or cool the buildings.

The Panel also questioned whether there would be electric vehicle charging points and how flexible and robust the strategy is if energy systems change over the build-out period. It was explained by the WT that the energy strategy is currently agnostic and would respond to the most suitable renewable energy source at the appropriate time.

The Panel asked about the water strategy for the site as in NWC they are recycling the non-potable water.

There were some concerns about how the applicant would deal with traffic noise coming from the A1301. The applicant explained that a noise assessment would be carried out as part of the planning process and any mitigation required implemented.

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Given that overheating is such a common problem in new developments, especially in urban areas, the Panel questioned how the applicant would avoid this potential problem.



With regard to electric vehicles, the applicant explained that they won't provide electric charging points to every house, although they will consider EV charging points around the site and in key car parking structures. The strategy for provision needs to take account of changing technology and they do not want to over-install technology that subsequently becomes redundant.

The Panel was concerned about the proposed Combined Heat and Power (CHP) since the viability of some of these systems is being undermined by the more rapid decarbonisation of the Grid than had been anticipated, particularly for CHP using gas fired boilers. It was recommended the Applicant look at NW Cambridge before committing to CHP.

The Panel was delighted that the Restorative Sustainability strategy included working with the Circular Economy.

4. Conclusion

The Panel welcomed the progress made on the proposals since the last panel session on 4th June 2018. The Panel considered the scheme to be very interesting and thanked the applicant for the presentation and supporting materials provided.

The Panel made the following comments and recommendations on which further details can be found above:

Community

- Mix of uses is critical to creating a balanced development as well as strengthening the relationship with Hinxton village.
- Consider future review of needs of older and retired/semi-retired campus workers.
- Consider pedestrian/cycle links via desire lines to key off-site infrastructure and facilities such as the village pub.
- Strengthen links to surrounding villages and consider how places such as Great Chesterford operate in terms of community.
- Consider whether the Common and the community buildings around it are in the right place for the new community.
- Consider the need for post-occupation evaluation.

Connectivity

- Details of the slowed dual carriageway and its landscape will need to support the reduction of speed.
- Continue to pursue the speed limit proposals over the central section between the roundabouts and beyond.
- Resolve any outstanding design issues concerning the formal pedestrian crossing and number of people using it, encouraging a high standard of design in terms of width and materials.

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- Develop a strategy for travel to school if there is no primary school to be provided on site.
- Develop a strategy for the management of car parking spaces across the site.

Climate

- Develop the plans for restorative sustainability and become a model for how to do this well and improve biodiversity.
- Provide clarity regarding the long term sustainability strategy, look at future proofing for electric vehicles, overheating and water recycling.
- Review information about how CHP is working on other sites and whether this is viable.

Character

- The greater extent of enclosure to the Common is a step forward.
- Consider how to integrate landscape views both into and out of the site.
- Explore the coloration of the buildings.
- Consider incorporating more woodland.
- Consider the character of the A1301 – how to make it a “street” but with a character that works and is appropriate to the adjacent land uses.
- Develop the detail of the landscape to the west of the A1301 as this is going to be very important and clarify the landscape treatment to the SW corner of the site.
- Consider how the sense of enclosure in the centre of the site is to be achieved.
- Consider how the mixed uses are going to be managed and change over time.

Closed discussion

As part of the closed discussion the Panel noted that were some unanswered questions about water management and how this is to be dealt with on site.

There were also questions about what other design alternatives there might be to the roundabouts.

5. Drawings

