



Clydesdale and Birks Residential Project

Design and Access Statement

University of Exeter

DECEMBER 2020

0803 - CAB - PL - DAS

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1 INTRODUCTION

PURPOSE AND SCOPE OF THIS DOCUMENT

This Design and Access Statement supports an outline application, with all matters reserved, for the demolition of existing student residences and erection of new student accommodation, and associated facilities, infrastructure, estate roads, solar panels and landscaping at the University of Exeter's Streatham Campus. The application includes the refurbishment of an existing student residences at Birks Grange Village A-E and the creation of a new footpath at Streatham Drive.

This application should be read in conjunction with a separate but linked application for land on the Streatham Campus at Rennes Drive. The linked application proposals are for facilities to replace the Estate Services Centre at Clydesdale Avenue which will be demolished to make way for student accommodation.

This document presents relevant planning policy and contextual analysis, key design principles and information in response to key stakeholder engagement which helped inform the parameter plans. The parameter plans will act as a flexible framework, guiding any future detailed design application.

An indicative masterplan is presented within this document to demonstrate how the submitted parameter plans might be successfully interpreted.

In addition to this statement, the application is supported by a Planning Statement and technical and environmental surveys and reports.

2 THE APPLICATION

2.1 APPLICATION DESCRIPTION

An Outline permission is sought for an:

Outline planning application at the Clydesdale, Birks and Nash halls of residence, (the submitted Outline application) to build student accommodation, ancillary/amenity facilities, plant space and bike stores (up to a maximum of 49,821 sq metres gross internal floor area), with associated infrastructure, demolition of existing buildings, provision of solar panels at Holland Hall Car Park and landscaping (all matters reserved).

The application is made by the University of Exeter.

This application should be read in conjunction with a separate but linked application for land on the Streatham Campus at Rennes Drive. The linked application proposals are for facilities to replace the Estate Services Centre at Clydesdale Avenue which will be demolished to make way for student accommodation.

The proposals at Rennes Drive are for:

Outline planning permission at Rennes Drive for a new Estate Services Centre comprising offices, workshop, glasshouses, polytunnels, growing area and storage buildings, with associated infrastructure and landscaping (all matters reserved).).



Site locations in relation to the campus

3 THE APPLICANT

3.1 THE APPLICANT - THE UNIVERSITY OF EXETER

Formed in 1955, the University of Exeter combines world-class research with excellent student satisfaction at its campuses in Exeter and Cornwall. Exeter is a member of the Russell Group, which represents 24 leading UK universities committed to maintaining the very best research, an outstanding teaching and learning experience, and unrivalled links with business and the public sector.

The University has 20,912 FTE students at the Streatham Campus for the year 2020 - 2021.

Exeter is amongst the top 150 universities worldwide according to the Times Higher Education World University Rankings. The University is ranked 164th in the QS World University Rankings.

The 2020 Guardian league table lists Exeter in 10th position out of 121 higher education institutions, with four subjects ranked in the top 5, eight in the top 10 and 25 in the top 20. The Times and Sunday Times Good University Guide ranks Exeter in 12th position in the UK. The Complete University Guide, published in the Independent, lists Exeter in 11th place. The University is ranked 8th in the Russell Group of leading research intensive universities.

Exeter has always been among the leaders for student satisfaction in the National Student Survey. The senior management team has sought to build on this strength by putting student service at the centre of its strategy. The Students' Guild is involved at the earliest stages of strategic planning and given a major role in making spending decisions through a specially created Budget Scrutiny Group. This has led to a remarkable degree of joint thinking and teamwork.

An Economic Impact report, commissioned by the University of Exeter and undertaken by Viewforth Consulting, was undertaken in Summer 2017. The report gives a breakdown of the economic impact generated by the University in the academic and financial year 2015/16 (the latest year for which data was available).

The University generated £540.1m in output within the local authority district of Exeter. The institution makes a significant contribution to the local economy, supporting 8% of GVA (£320.5m)⁽¹⁾ and 7% of employment (5,346 FTE jobs).

International students and their visitors generated £113.5m in output, supported 1,111 FTE jobs and contributed £66.2m (1.6% of the total) to Exeter's GVA through tuition fees, charges for residence and catering and their off campus expenditure.

1. Calculated using ONS estimate of GVA for the local authority district of Exeter of £4,085m in 2015. Source: Office for National Statistics

4 PLANNING POLICY

A detailed Planning Statement accompanies this application.

4.1 PLANNING POLICY REVIEW

The statutory development plan for Exeter currently comprises the following:

- Exeter Core Strategy (2012)
- Saved Policies from the Exeter Local Plan First Review 1995-2011 (2005)

The Local Plan Proposals Map denotes that the Streatham Campus (including the Clydesdale and Birks application sites) is covered by saved Policy E4 (Exeter University Campus) of the Local Plan Review. In addition, the site is identified as a Site of Local Interest for Nature Conservation and a Historic Park and Garden.

4.2 EXETER CORE STRATEGY

The Core Strategy was adopted in February 2012. It sets out policies to guide future development for the period up to 2026. The policies of most relevance to the application proposals have been summarised below.

- Policy CP5: specifically supports the provision of purpose-built student accommodation. The accompanying text to Policy CP5 at paragraph 6.28 recognises the importance of the University of Exeter to the prosperity of the city. It also recognises the increasing student population in Exeter and describes that ideally this demand should be met through the provision of purpose built accommodation on, or close to, the University Campuses.
- Policy CP4: describes that in meeting the development targets, increased densities clearly have an important role to play. Policy CP4 states that Residential development should achieve the highest appropriate density compatible with the protection of heritage assets, local amenities, the character and quality of the local environment and the safety and convenience of the local and trunk road network.
- Policy CP17: requires that all proposals for development will exhibit a high standard of sustainable design that is resilient to climate change and complements or enhances Exeter’s character, local identity and cultural diversity.

4.3 SAVED POLICIES FROM THE EXETER LOCAL PLAN FIRST REVIEW

The Exeter Local Plan First Review was adopted in March 2005 and expired in 2011. The Secretary of State confirmed in 2008 that the majority of the Local Plan First Review policies will be saved until they are replaced by policies in the Local Development Framework. However, the National Planning Policy Framework (NPPF) that was issued in 2013 effectively supersedes policies in the Local Plan Review. Notwithstanding the limited weight that can be attributed to the Local Plan Review, of the saved policies the following are considered to be of most relevance to the proposals:

- Policy E4: specifically relates to the university campus and states that the development of education uses, student housing and research and development initiatives, including ancillary production will be permitted on the university campus provided that the character and setting of the campus is protected.
- Policy H5: states that the development of special needs or student housing will be permitted provided that:
 - a) *The scale and intensity of use will not harm the character of the building and locality and will not cause an unacceptable reduction in the amenity of neighbouring occupiers or result in on-street parking problems;*
 - b) *The proposal will not create an over concentration of the use in any one area of the city which would change the character of the neighbourhood or create an imbalance in the local community;*
 - c) *Special needs housing is located close to local shops and services, community facilities and bus routes;*
 - d) *Student accommodation is located so as to limit the need to travel to the campus by car.*

4.4 DEVELOPMENT RELATED TO THE UNIVERSITY OF EXETER SPG (JUNE 2007)

The 2007 SPG contained 9 principles in relation to development related to the University of Exeter, which are summarised as follows:

1. *Supports the intention of the University to expand. The City Council, where appropriate, will impose planning conditions or seek a planning obligation to ensure that expansion in the University’s teaching, research and general facilities is accompanied by the provision of*

significant increases in purpose-built student residential accommodation, such that 75% or more of the additional student numbers are accommodated.

2. *Expects spaces on Streatham campus to be reserved to meet any additional requirements for teaching related (non-accommodation) facilities. The biodiversity of the site should be conserved and enhanced.*
3. *Seeks the provision of as much purpose-built student housing as possible to reduce the impact on the private sector housing market.*
4. *Recognises that relatively high-density managed accommodation on appropriate sites will need to make a significant contribution to meeting future needs. Developments will be permitted subject to management and supervision arrangements appropriate to the size, location and nature of occupants of schemes. A standard form of planning obligation relating to management arrangements is available from the Council. The planning obligation is enforceable against owners of the land and they will be required to ensure through terms of tenancy agreements that tenants adhere to the management scheme.*
5. *Favours provision of further student accommodation in the following general locations:*
 - a. *The City Centre*
 - b. *St David’s Station/Cowley Bridge Road area.*
 - c. *More intensive use of the Duryard Campus*
6. *Seeks the investigation of student accommodation as a priority for use of any surplus land at St Luke’s campus.*
7. *Will seek further operational (staff and maintenance related) car parking for student housing schemes than in the past and expects the University and accommodation providers to rigidly enforce no car tenancies.*
8. *Will expect the University to significantly improve its commitment to sustainable travel, in particular by funding improved bus services to the campus to provide services throughout the day and into the evening.*
9. *Will expect any further major University developments to make significant advances in sustainable development/ construction.*

4.5 UNIVERSITY OF EXETER MASTERPLAN FRAMEWORK SPD (2010)

The Council has prepared a Masterplan Framework for the University’s Streatham Campus, to guide its future development over the period to 2026. The purpose of the masterplan framework is to provide a comprehensive strategy for the development of the university campus taking

into the account the need to provide additional student accommodation and academic buildings to meet the increasing student population.

The masterplan framework assessed available and underused parts of the campus to meet these expanded needs.

The spatial plan of the Masterplan Framework reinforces the principle of additional student accommodation at higher densities to the east and west of the campus heart. In relation to Mardon Park, where the Clydesdale and Birks halls of residences are located, the potential for redevelopment is described as follows:

“Additional student residences could be created by the consolidation and redevelopment of the cluster of student residences in the Clydesdale area of the Campus. The existing family centre and creche could be redeveloped to provide a higher density development”.

In addition the following requirements are sought:

- Any new development should ensure that it creates a sense of place, with clear fronts and backs and entrances that overlook the key public spaces.
- Any new development should respond carefully to the topography and to views out over the wider landscape.
- Open up and improve the spatial structure of the woodland.
- Develop and interpret the arboricultural interest at Birks Bank

5 SITE AND CONTEXT

5.1 A DESCRIPTION OF THE SITES

The University of Exeter's Streatham Campus is located to the north of Exeter, approximately one mile from the city centre. The site sits at the north western corner of the Streatham Campus.

The site incorporates four distinct development areas:

- The Clydesdale and Nash Grove student residences.
- The Estate Services Centre.
- The Birks Grange Village refectory.
- Birks Grange Village student residences A – E.

All of the sites are previously developed.

Taking each of the development areas in turn.

5.2 CLYDESDALE AND NASH GROVE

The Clydesdale and Nash Grove student residences site sits between the Birks Bank Pinetum and Holland Hall and Mardon Hall. The site is steeply sloping, with the underlying gradient at 1 in 6. It rises from +52m AOD along Clydesdale Avenue in the north west corner to +80m AOD at the highest point adjacent to Holland Hall. Also known as Mardon Park (reference the Streatham Campus SPD) the site is part of one of the two principal student residential areas on campus.

Working clockwise, the site is bounded on the west by the Birks Bank Pinetum, a part of the University's Botanic Garden that comprises some exceptionally rare tree species. To the north, the site is bounded by Grafton Road a stepped footpath which has a band of mature trees and hedging, beyond which lies detached private residences. To the east of the site lies Holland Hall (2004), a 3 – 5 storey student residential development, and Mardon Hall (1933), a grand 3-storey halls of residence. The southern boundary of the site is formed by Streatham Drive and the garden to High Ridge, 32 Streatham Drive, a grand detached house in large grounds. There are mature landscape trees to the south east. The boundary to 32 Streatham Drive is formed by a mix of mature trees, shrubs and a fence. The Estate Service Centre (1960) sits in the south western corner of the Clydesdale and Nash development area.

The Clydesdale and Nash (1989-1992) development area is typical of the Streatham campus. Student residential properties sit in a generous landscape. There are a number of semi-mature landscape trees throughout the site which relate to the development layout. The boundaries to the north, south and west have more mature trees including some very large specimen trees at the top of the Birks Bank

Pinetum. The site includes tennis courts adjacent to Mardon Hall. Parking is distributed throughout the development area with a larger area of parking, associated with Holland Hall, to the north east.

The development area contains 12 residential buildings and the Clydesdale House Postgraduate Centre. Set at a series of levels up the hillside, the residential buildings are two and three storey brick buildings with pitched roofs, distributed as pavilions in the landscape. The architecture is of a large domestic / campus scale. In addition to the residences, there are a number of smaller associated structures which house bike and bin stores and services infrastructure.

An adjacent site on Glenthorne Road has planning consent for student accommodation, reference 17/1198/FUL, which had not been implemented at the time of writing.

The proposals include the demolition of all buildings with this development area.



Existing Site

5 SITE AND CONTEXT



Holland Hall set above the stepped and terraced car



The link road from Mardon Hall to Holland Hall.



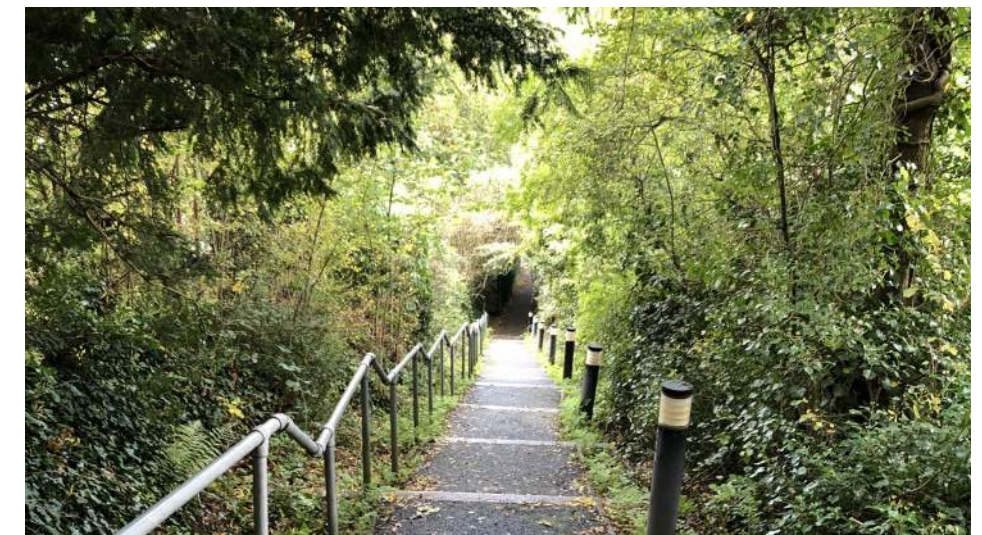
Stepped car park is utilitarian in character with mature shrub planting to provide visual breaks



Clydesdale Rise at the western gable onto Grafton Road



A steep bank with mature trees separates Clydesdale Rise buildings from Clydesdale Avenue.



The improved section of Grafton Road which forms the northern boundary of the site.

5 SITE AND CONTEXT



Clydesdale House and Court are low density and site into the landscape



Landscape trees to the north of Clydesdale Road



Clydesdale House sits in attractive landscape



Open space to the south of Nash Grove



Nash Grove to the west of Clydesdale Avenue - low density at two storeys and stepped into the hill.



Mardon Hall west facing range with Holland Hall in the background



Tennis courts separated from Mardon Hall by a steep bank with specimen trees



Category A trees at the access to Mardon Hall from Streatham Drive

5 SITE AND CONTEXT

5.3 THE ESTATE SERVICES CENTRE

The Estate Service Centre development area sits at the southern end of the site, and is currently the home of the University’s Grounds team.

A grounds team of 31 staff work on the grounds, nursery and outdoor sports facilities throughout the year, maintaining the Streatham Campus which covers 114 hectares including a large area of sports pitches. The Streatham Campus is acknowledged as one of the most beautiful and botanically interesting of any UK University. It has been recognised as one of the UK’s best public spaces, winning Green Flag Awards for the last nine years.

The work of the Grounds staff includes:

- The care of specialist plant collections.
- Botanical specimen propagation.
- Tree and arboricultural works, looking after the 10,000 trees on campus.
- Pot and bedding plant production.
- Football, hockey, rugby, lacrosse, cricket and tennis playing surface maintenance.
- Preparing, planting and maintaining plant beds across campus.
- Litter management across campus.
- Ensuring roads and major pedestrian areas are gritted when necessary over the winter months.
- Taking positive action to conserve and enhance biodiversity on the University’s sites.

The Estate Service Centre development area consists of large and level yard containing a collection of single storey buildings containing offices, workshops, storage, vehicles stores, plant and greenhouses. Poly tunnels and grow-on areas for plant propagation sit at the south of the site. Originally constructed in the 1960, the site has been developed and extended over time in an ad-hoc manner with no single style or predominant material.

The Estate Services Centre sits at +50m AOD, towards the top of the Birks Bank slope. The service yard is cut into the natural ground level. The site is bounded to the north by the Birks Bank Pinetum and to the east by High Ridge, a substantial detached private residence that sits in large grounds with a mature tree screen boundary. To the south are four residential properties: Hillcot, Hidden House, St Clair and Summer Court. The boundary is formed by a fence with intermittent tree planting. To the west is a steep open bank which falls to a large Western Power substation at +39m AOD, beyond which are the residential properties of Elmbridge Gardens.

The facilities at the Estate Services Centre are tired and in need of modernising. The access to the site is via a steep track which presents two problems. Firstly, it is not capable of taking large delivery vehicles and secondly it is not suitable for use in snow or icy conditions.

The Estate Service Centre will be demolished as part of the proposals. The facilities and operations will be transferred to a new site on the campus at Rennes Drive. The proposed new centre is subject to a separate but linked application.



The Estate Services Centre is accessed via a steep single track - unsuitable for deliveries.



The large greenhouses are tired and no longer meet the needs of the Grounds team.



The yard is cut into the landform with steep banks to the eastern side.

5 SITE AND CONTEXT

5.4 BIRKS GRANGE VILLAGE REFECTORY

The Birks Grange Village Refectory (1965) (also known as the Central Block) sits within the centre of the Birks Grange residences site. The two storey, flat roofed, concrete and blue brick building contains a refectory, commercial kitchen, shop, security office and administration spaces. The building sits low within the landscape at +26.4m AOD, 1.5m lower than the pedestrian piazza to the east. To the west of the building is a small terrace of four-storey student townhouses (Building K). To the north are accommodation buildings H and I, which are six storeys. Building H contains the reception and administrative functions for the site and some communal space for students. The refectory is the oldest building within the Birks Grange Village, and was part of the original Birks Halls development (Circa 1965). The rest of the buildings on the site date from 2011 (with the exception of Building A-E (2005)) and are a mix of brick, render and panel.

The refectory building will be demolished as part of the proposals.



The 1960's refectory sits in amongst accommodation built in 2009-2011.



The large Magnolia tree at the entrance pre-dates the building and is a Category A tree.



The central courtyard and arrival space for Birks Grange sits to the west of the refectory.

5 SITE AND CONTEXT

5.5 BIRKS GRANGE VILLAGE A – E

Birks Grange Village A – E (2005) is a four and five storey student residential development to the north of the Birks Grange Village. The building is of brick in contrasting bands of buff and red, forming an east facing courtyard. The pitched roof is of slate with raised copper sections at roof junctions. There are two bike stores, a bin store and substation located to the east of the building. Birks Grange A-E provides 360 student bedrooms arranged in cluster flats. There is a large surfaced car park and access ramps to the courtyard which are utilitarian in appearance.

The building is bounded on the north by Grafton Road, a stepped footpath with a mature tree belt to the southern side, beyond which are the gardens to private residences 10 and 6 Glenthorne Road. To the east are buildings F and G which are six-storey student accommodation blocks. A large grassed courtyard sits to the south, which is focussed around a large mature Oak. To the west is a deep band of mature trees and a bank down to Cowley Bridge Road.

Birks Grange Village A – E will be retained and refurbished as part of the proposals



The southern side of Birks Grange A-E benefits from a courtyard focussed on a large Oak tree.



The entrance courtyard to the building has utilitarian parking and ramps - a negative setting



Entrances to the building are at the lower level accessed from the eastern courtyard

6 DESIGN EVOLUTION

This chapter considers the design evolution of the project, illustrative design solution and project parameter plans and the consultation process that has informed the emerging design.

The University had intended on submitting the application in April 2020, but submission has been delayed due to the Covid-19 pandemic.

6.1 THE BRIEF

The University provided a clear brief for the project as part of their process to select a multi-disciplinary design team to undertake the planning for the project. The brief:

- Sets out the strategic context for the project.
- Provides an understanding of the drivers and objectives for the development.
- Clearly defines the scope of services required.
- Defines the operational requirements of the project.

The design team selected have had a long-term relationship with the University, delivering accommodation projects at Birks Grange Village, Lafrowda, Duryard, Moberly and Spreytonway. One of the benefits of the arrangement is that there is a deep understanding and shared expectations between the parties in terms of the quality of both building design and service delivery. The team also had an excellent knowledge of the campus, its surroundings and the planning policy context. The University understood the capabilities of the design team and their approach to contextual led design.

A detailed brief was developed in collaboration between the parties following internal consultations with the University staff and Estate team. A consolidated brief was prepared and updated at RIBA Workstage 1 (Preparation and Briefing) and Workstage 2 (Concept Design). The brief included space standards for all accommodation.

6.2 CONSULTATION

The design evolution has been informed by a formal stakeholder consultation and dialogue with planning officers through the pre-application process.

The University benefits from having undertaken extensive consultation with student stakeholders in the last three years for the residential projects at East Park, Moberly and Spreytonway. The feedback from these events was captured and has informed the brief. The Student Guild were invited to comment on the stakeholder consultation submission,

and a student only consultation event was planned for March 2020. Due to the Covid-19 crisis this became a virtual meeting.

The formal stakeholder consultation was held at the University on the 18th and 19th of February. Members of the local community, local Councillors, University staff and students were invited to the event where members of the University Estate team and their consultants were on hand to answer questions. The event was well attended by the local community. Full details of the event feedback and design responses can be found in the Statement of Community Involvement that accompanies the application. Details of how the scheme has evolved in response to stakeholder consultation is detailed in the Engagement Timeline chapter.

There was a pre-application process with officers of Exeter City Council which has informed the planning submission. Design evolution took place in dialogue with officers of the Council through a series of meetings and correspondence. Pre-application meetings were attended by representatives of the University along with their consultants. The Council, led by the case officer, Mr Paul Jeffrey, attended meetings with specialist officers when required. Mr Chris Westlake informed the feedback in relation landscape design and Landscape and Visual Appraisal. Mr Bill Broadbent of the Devon Wildlife Trust was consulted in respect of ecology and biodiversity.

In advance of meetings with Council officers, the University's professional team prepared drawn and written information detailing the emerging proposals. Responses from the meetings were recorded and additional clarification was provided by officers, by email. The feedback from the Council's officers informed the design evolution to support the iterative approach to design. Mr Jeffrey referred to comments received from other parties during these meetings, for example, issues raised by Councillors or concerned neighbours.

The objective of the pre-application process was to develop a proposal that was acceptable to the Council's officers and to the University, such that the Planning Application could be recommended for approval. The process of engagement with Council's officers was very positive.

As recommended by the Council's officers, the design proposals were assessed by the Design Review Panel. The Design Review Panel is made up of built environment professionals selected to have the right mix of skills and experience to provide clear, objective advice. The Panel consisted of four Architects, one Landscape Architect, one Urban Designer and one Project Manager. Proposals and

explanatory material were provided to the panel in advance of the review which was held on February 20th. The session was attended by the design team, representatives of the University and Mr Paul Jeffrey from the Council.

Prior to the review, a lengthy site visit was held, and members of the panel walked the site and adjoining areas. The designers were given the opportunity to present the proposals, the key constraints, opportunities, design principles and justifications. This was followed by a discussion session. The panel then took the opportunity to confer in private before providing a panel summary of feedback. The Panel Administrator produced a written report via email, which constitutes the formal response.

The Design Review Panel (DRP) process was very positive. Details of how their input has informed the proposals is contained in the Engagement Timeline chapter of the DAS. A copy of the Design Review Panel feedback is contained in the Statement of Community Involvement.

Revised proposals, which addressed comments received from the public consultation and DRP were due to be presented to the Council's Planning Members Working Group, however, this meeting was cancelled due to Covid-19 restrictions. The presentation was issued to Paul Jeffrey the case officer who was able to provide feedback which is detailed in the Engagement Timeline.

The good quality early engagement with a wide range of stakeholders has been effective. It has informed the design and improved the quality of the application. The design team were able to establish the fundamental issues of concern for neighbours and matters of principle for the Council's officers; and respond to these positively.

6 DESIGN EVOLUTION

Details of design changes resulting from consultation are described in the Engagement Timeline (Chapter 7) and Statement of Community Involvement.

6.3 DESIGN PROCESS

The Outline planning application will determine the parameters which are set for a future reserved matters application. To ensure that the parameter plans are appropriate and can deliver an acceptable development requires that an illustrative scheme is prepared to allow officers and stakeholders to consider the potential effects of a future proposal. This section describes the principles of the design process. A detailed explanation of the design evolution and response to feedback is contained in the Engagement Timeline.

The designs for the Site were developed iteratively. Designs were developed by the professional team and considered at regular meetings by the University project team and officers from the Council. The designs were tested for their effects throughout their evolution by use of computer modelling and computer-generated images. This imagery was made available to Council officers and formed part of the stakeholder consultation and Design Review Panel presentations. A Landscape and Visual Appraisal containing photomontage wire frame images was produced to test visual impacts. Key views were assessed and the location of these determined in consultation with officers.

To ensure accuracy and feasibility, building designs were based on detailed proposals for the accommodation. Student study bedrooms form the building blocks for the development, and it is therefore essential that the proposals meet the University's requirements in terms of space and amenity standards. Agreement was also reached regarding flat sizes and arrangements for social and kitchen spaces within cluster flats.

A full professional team were appointed to ensure the feasibility of proposals. Specifically, roads and paths, services infrastructure capacity, environmental sustainability, projected carbon emissions and plant requirements for services have been assessed and incorporated into the design. Landscape, arboricultural and ecology specialists prepared surveys and designs in conjunction with the architects.



Study bedrooms form the building blocks of the proposal. Rooms have been designed in detail to ensure the proposals meet the University and student demands for accommodation.



The proposals contain a mix of ensuite study bedrooms and rooms where bathrooms are shared 1 between 2..

6 DESIGN EVOLUTION

6.4 CONSTRAINTS, OPPORTUNITIES AND KEY PRINCIPLES

The broad themes of the site constraints which informed the design process are detailed below. The awareness of constraints relating to impact upon neighbouring properties, impact upon distant views, ecology and tree protection informed all stages of design work. As the design proposals evolved and became more detailed, a set of comprehensive specialist surveys and reports supported the emerging design proposals. The requirements for surveys and reports was informed by the dialogue with the local planning authority.

SUSTAINABILITY

During the initial stages of design the University published their Environment and Climate Emergency Working Group White Paper (November 2019). The paper makes recommendations for goals and targets, including challenging targets for reductions in carbon emissions. The University's Estate team have determined that adopting the Passivhaus methodology is the best way of achieving these targets. The requirement to achieve Passivhaus certification became an additional requirement of the brief; and has been a fundamental driver of the design solution.

The University is committed to taking action to tackle the climate and environment emergency. The institution is taking radical action to reduce direct emissions. This project is an opportunity to develop an exemplar of environmentally sustainable buildings; moving well beyond statutory compliance to provide a new standard of low-carbon student accommodation. Details of the approach to sustainability are contained within the Sustainability, Energy and Passivhaus Report that accompanies the application.

NEAR NEIGHBOURS

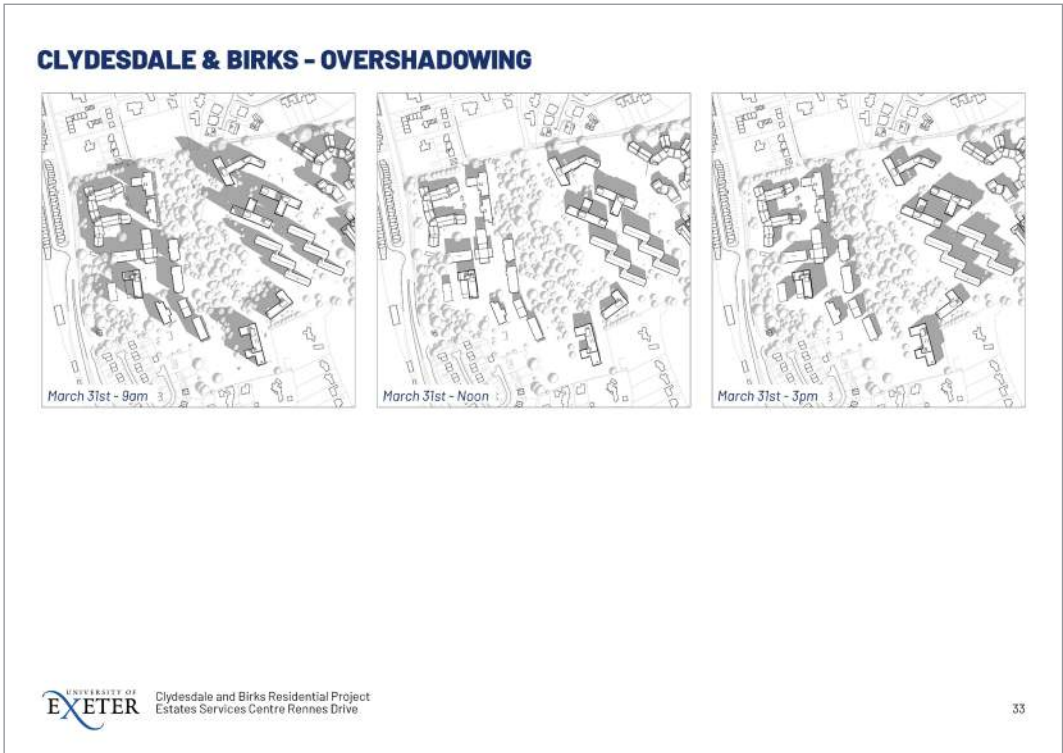
The initial assessment of the site, presented to Officers at Planning Meeting 1, identified the boundary relationships as a constraint to development and highlighting the requirement for sensitivity at the boundaries with neighbouring residential properties in respect of scale, mass and overlooking. The planning consultant and architect were able to accompany the case officer, Mr Paul Jeffrey, on a tour of the site to further assess the relationships between residential properties and the site. Topographical surveys of the site allowed detailed site sections and modelling to be produced which explored these boundary relationships, which were shared with the Council's officers and formed part of the public consultation material.



A landscape constraints plan presented during the dialogue with the planning authority.



Site sections were used to assess the emerging scheme and relationships with neighbours.



Studies from the public consultation to demonstrate that proposals would not overshadow neighbours

6 DESIGN EVOLUTION

LANDSCAPE AND VISUAL APPRAISAL

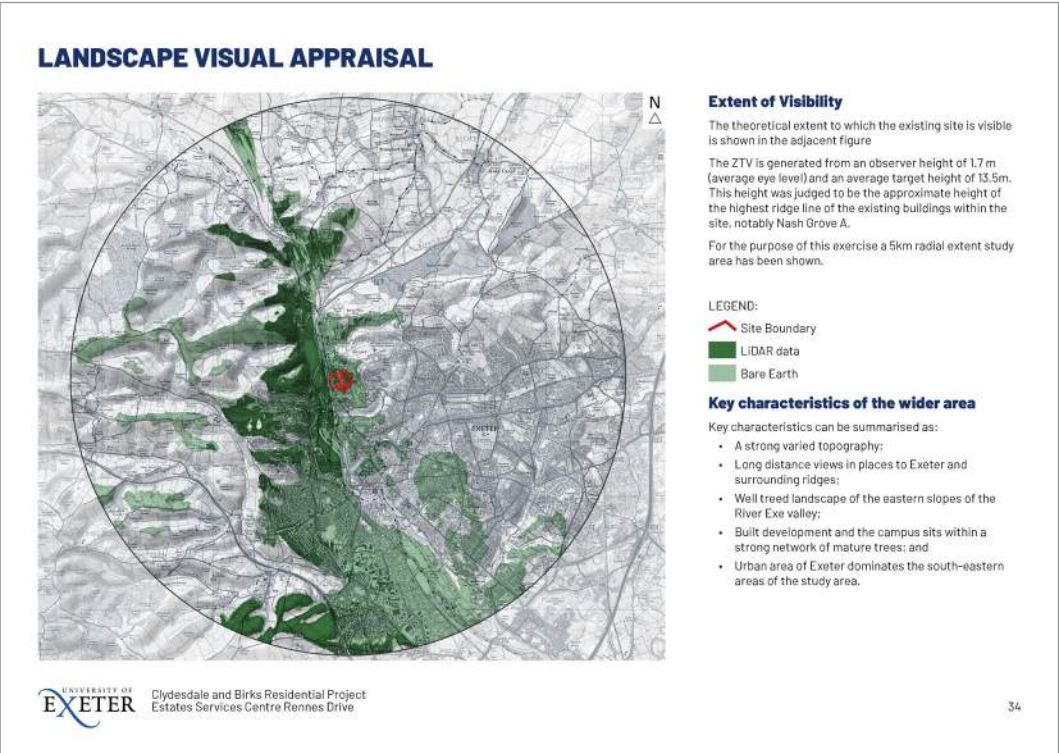
At the outset of the scheme it was agreed that it was essential that an assessment of the effects of development on distant views was prepared. The impact of building height and massing had been a key issue in the determination of the East Park outline planning application and the team sought an unambiguous method for assessing visual impact. Balloon tests had been used to assess both East Park and the Birks Grange Village developments, however it was felt that the balloon test does not allow a comprehensive appraisal as they focus on individual points and not the cumulative effect of development in a wider context. A Landscape and Visual Appraisal, produced by The Landmark Practice in compliance with the Landscape Institute Guidelines for Landscape and Visual Impact Assessment, accompanies the application. This appraisal has been used as a design tool; iterations of the assessment have been produced as the design has evolved to inform decision making and advise planning officers of the visual impact from selected views. The final Appraisal is submitted in support of the application.

ECOLOGY

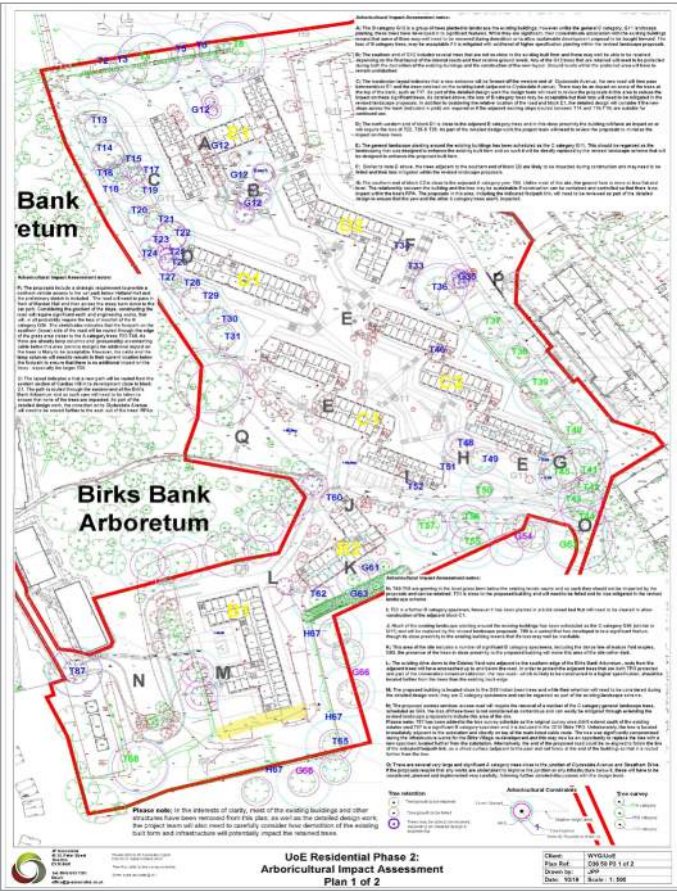
The Landmark Practice was instructed to assess the potential ecological impacts associated with the proposed development of the site. A proposal for the scope of studies was submitted to Devon Wildlife Trust for comment. Desktop and field studies have been undertaken and are fully described within the supporting reports. The ecologists have confirmed that the redevelopment of the site will have a low impact on wildlife as it is located on man-made habitats, hardstanding, buildings or highly modified habitats, as well as amenity and ornamental planting. The proposals have been zoned to retain all ecological valued habitats. The report provides recommendations for demolition, vegetation clearance, lighting and the management of boundary features. The report also provides recommendations in respect of new planting and the inclusion of features such as bird, bat and hedgehog boxes

ARBORICULTURE

Mr Jeremy Peirce of JPA was appointed to conduct a full tree survey. An arboricultural constraints plan was prepared which informed the design and was developed into an Arboricultural Impacts Assessment (AIA) which accompanies this application. The AIA identifies tree by category, provides root protection areas and comments on the impact of development upon trees. The report specifically identifies areas which will require further design input at the detailed design stage to minimise loss of trees in the reserved matters application.



The Landscape and Visual Appraisal was used as a tool throughout the evolution of the proposals.



An Arboricultural Impact Assessment accompanies the application and has informed the design process.

6 DESIGN EVOLUTION

KEY PRINCIPLES

Key design principles have been consistently applied throughout the design process to inform the emerging illustrative proposals.

- Focussing the highest density and tallest buildings in the centre of the site;
- Providing a high-quality landscaped space at the heart of the development which can provide external social space and level access to the accommodation;
- Zoning the development to bring the social functions into the centre of the site away from sensitive boundaries, creating a social and administrative focus which can serve the site and wider Mardon Park group;
- Zoning the accommodation and controlling building heights at boundaries with residential neighbours to avoid over-bearing relationships;
- Arranging massing to sit comfortably with the character of the hillside when seen from distant views;
- Grouping accommodation into discrete sites which can develop a distinct identity through detailed design;
- Minimising impacts on mature trees, particularly at the perimeter of the site; and
- Providing a mix of room types with ensuite and economy accommodation;

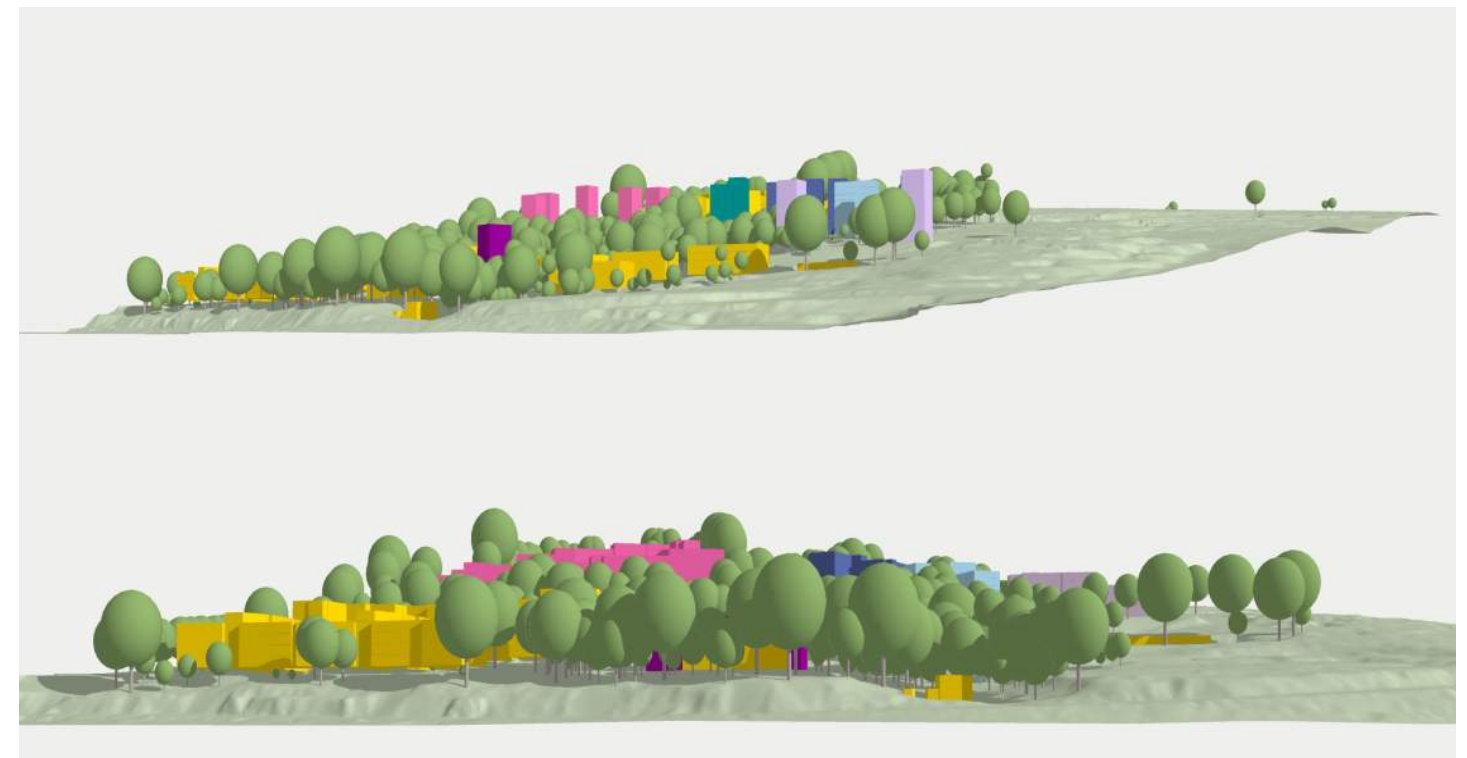
OPPORTUNITIES

The application proposals present an opportunity to replace poor quality accommodation and buildings with high quality development that will meet the needs and aspirations of students and the University. Birks Grange Building A-E will be converted from catered to self-catered in line with changing student demands. Birks Grange will also benefit from a Passivhaus EnerPHit refurbishment programme which will radically reduce carbon emissions and improve resident comfort. The proposals for new build accommodation will provide an exemplar in sustainable, low-carbon student residences, and on completion will be one of the largest Passivhaus schemes in the UK. In addition to meeting the accommodation requirements of the University, the proposals provide an opportunity to unite the wider Mardon Park collection of accommodation with improved connections and centrally located facilities.

The proposals would significantly improve pedestrian permeability across the site. Improvements to Streatham Drive footpaths will provide a safe link to the south. The amendments to the road system will help separate vehicular movements from pedestrian movement and provide a link for essential Estate traffic between Birks Grange Village and the rest of the Streatham campus. The creation of a one-way system through the site will aid with Arrivals Day allowing an efficient process for students and their families to deliver belongings to their rooms at the start of the year.



Development zoning and movement sketch used at the Design Review Panel. 19th February 2020.



Early massing models used to assess visual impact of options for building heights.

7 ENGAGEMENT TIMELINE

18th October 2019.

UNIVERSITY MEETING. GROUNDS TEAM BRIEF.

Tim Abram from Willmore Iles Architects met with the University's Grounds Team to discuss the spatial and operational needs for the proposed accommodation at Rennes Drive. The discussions referred to the wider operational requirements of the Ground's Team and the retention of key features at the Clydesdale site.

- This meeting further clarified the brief.

5th November 2019.

UNIVERSITY PROJECT TEAM MEETING.

The regular project meeting was held to monitor progress and seek the University's input into the design. The design team were able to share the outcome of the meeting with the planning case officer and explore boundary issues in more detail with the Estate team. The visual assessment was explained and reviewed. Detailed proposals for the Birks Grange refurbishment were presented. Detailed proposals for accommodation types, room layouts and specifications were shared and a process for agreeing the sign-off of the brief was agreed.

An increased fire safety specification was agreed in principle. There was a debate about the sustainability standards to be adopted; with Passivhaus raised as an alternative to BREEM.

6th December.

INSTRUCTION TO ADOPT PASSIVHAUS STANDARD.

The University published their Environment and Climate Emergency Working Group White Paper on the 11th of November. The paper makes recommendations for goals and targets, including challenging targets for reductions in carbon emissions. The University's Estate team determined that adopting the Passivhaus methodology is the best way of achieving these targets and the requirement to achieve Passivhaus certification became an additional requirement of the brief.

As a result of this instruction:

- The brief for sustainability standards were significantly increased and improved..
- The incorporation of the Passivhaus methodology into the design process had a significant impact on built form and services infrastructure outcomes.

11th December 2020

UNIVERSITY WORKSHOP. SOCIAL AND AMENITY REQUIREMENTS.

Tim Abram from Willmore Iles Architects undertook a workshop with members of the University's operational staff to consider social, administrative, shop and amenity space within the residential accommodation. The outline application will not contain details of the proposals but it will identify adequate and well-located space for resolution at reserved matters stage. A diagram mapping the typical daily movements of students, along with considerations of topography and servicing informed the proposed location of facilities.

- The research undertaken to inform this workshop clarified design principles in relation to student journeys and the key nodes for pedestrian movement.
- The workshop clarified the extent and preferred locations for student amenities.

17th December 2019

UNIVERSITY PROJECT TEAM MEETING.

The design team presented a concept proposal to the University including an initial capacity study. The presentation began with a detailed review of planning policy, followed by an assessment of site constraints and opportunities. The site services infrastructure, ecology and vehicular and pedestrian movement were all assessed.

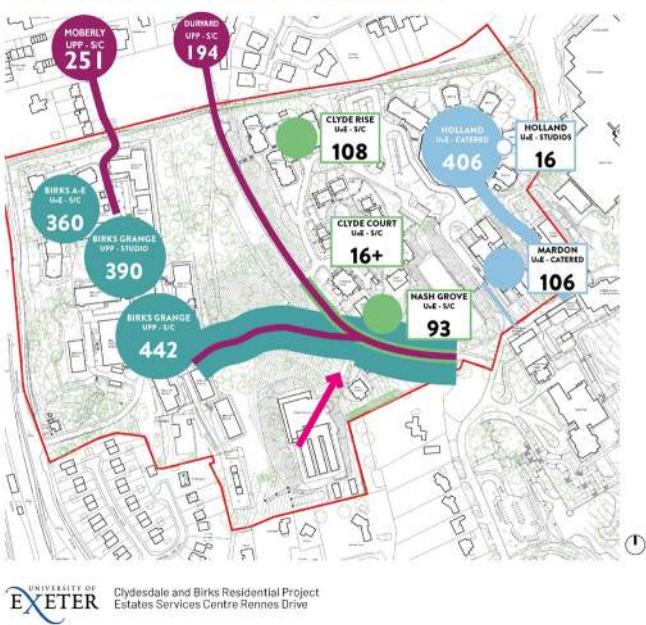
A study presented the various character areas on the site and assessed the impacts of building heights from the Station Road Car Park viewpoint. Locations were selected in each of the character areas and a column mass was modelled. Each column was 10m by 10m in plan and ten storeys high. Using this approach as a design tool, the team were able to begin assessing appropriate heights for development that would allow the character of the hillside to be maintained.

In parallel with the heights assessment a scheme was prepared to understand the capacity of the site and explore issues of zoning and movement. The capacity study showed buildings ranging from 4 to 8 storeys and would deliver in the order of 1770 new bedrooms.

A basic modelling process was undertaken to assess visual impact from a range of views.

The University supported the approach taken in developing the design and were able to consider the outcome of the capacity study in terms of the University's strategic approach to accommodation.

SITE MOVEMENT - PEDESTRIAN FLOWS



11th December 2019. Movement diagram used in the University Workshop to inform decisions about the location of shared facilities.



17th December 2019. Early capacity study layout exploring development potential before Passivhaus orientation was adopted.

SITE CONSTRAINTS & OPPORTUNITIES



DRAFT "PILLAR" AVR'S
The Actual Visual Representations (AVR's) have been developed by The Landmark Practice using the character areas and pillars described above. The coloured pillars describe a 10 x 10m column at 10 storeys. Intermediate 'floor levels' are shown at 4, 6 and 8 storeys. Dashed lines indicate where the building would be filtered by trees.



GUIDE TO STOREY HEIGHTS
The indicative massing above is a useful guide to inform the capacity study. The yellow line indicates the initial thoughts on acceptable heights from one key view. The proposed heights respond to the characteristics of the site and other constraints from neighbouring properties and public viewpoints. This study informs the capacity and layout exercise.

VISUAL IMPACT

- DEVELOPMENT ZONES
- AVR'S
- Birks Grange Refectory
 - The Estates Services Yard
 - Nash Grove
 - Tennis Courts
 - Clydesdale Court
 - Clydesdale Rise

- SUGGESTED MASSING
- Birks Grange Refectory
- 1 6 storeys. 4 storeys accommodation above social and amenity spaces. Height limited by relationship to neighbouring buildings.
- Clydesdale Rise
- 2 - 4 4 storeys adjacent to neighbours (Grafton Road) rising to 8 storeys at the centre of the site. Height restricted to avoid breaking the skyline above trees to backdrop.
- Tennis Courts and Nash Grove
- 5 - 8 8 - 6 storeys. Rising from south to north. The Mardon Hall roofscape would remain visible from this view.
- The Estates Services Yard
- 7 4 storeys. Height limited by relationship to neighbours and visual impact from a range of views.

17th December 2019. Assessment of potential heights using 10m x 10m columns at key location on the site.

7 ENGAGEMENT TIMELINE

19th December 2019

PLANNING OFFICER MEETING 2.

Attended by Mr Paul Jeffrey and Mr Chris Westlake from the Council, the meeting was a presentation of the material reviewed by the University on 17th December.

The meeting was an opportunity to introduce the University's Climate Change Emergency White Paper, and Mr Peter Bilverstone from the University explained the goals of the paper and how the University would be using the Passivhaus methodology for new build and refurbishment. Mr Paul Jeffrey confirmed that Passivhaus is welcomed by the Local Authority as a principle. It was recognised that the Council will need to take consideration of the limitations on specification associated with low carbon construction and explanatory material should accompany the application and continue through to reserved matters. The mechanism to secure Passivhaus was discussed.

The LVA was presented with an explanation of the selected views. Mr Chris Westlake requested a review of internal views within the site.

The capacity study was presented. Officers requested that in future all plans show the footprints of buildings to be demolished to establish the impact of new development. Mr Jeffrey noted that purpose of the meeting was to discuss and agree the principles of the process of design, not the design or constraints of the site themselves. The design team were requested to prepare a revised version of the presentation so that officers could provide a formal comment after greater consideration.

Mr Jeffrey asked that the application included a schedule of accommodation, both existing and proposed, following the demolition of the buildings. The schedule should include the proposed new buildings, conversion of Birks Grange A-E and the East Park scheme coming online. This should explain the net gain, compared to student numbers against the Council's own records and University expected growth. This would inform members on the impact of the development on the city.

- *This engagement helped to refine the requirements for the planning submission.*
- *Officers were able to explore the Visual Appraisal as a design tool and comment on selected viewpoints.*

7 ENGAGEMENT TIMELINE

7th January 2020

PASSIVHAUS INTRODUCTORY WORKSHOP

Ms Sally Godber of WARM Low Energy Building Practice, supported by Mr Peter Bilverstone from the University, led a workshop in the principles of Passivhaus. The workshop was attended by members of the design team as well as the University’s Estate team. The workshop explored relevant issues for student accommodation design and services. Ms Godber demonstrated the carbon saving improvements that could be achieved by adopting the Passivhaus methodology, using a range of past projects.

WARM have been appointed as consultants to the project and their input informs the project design, particularly in respect of orientation, built form, window design and services strategy.

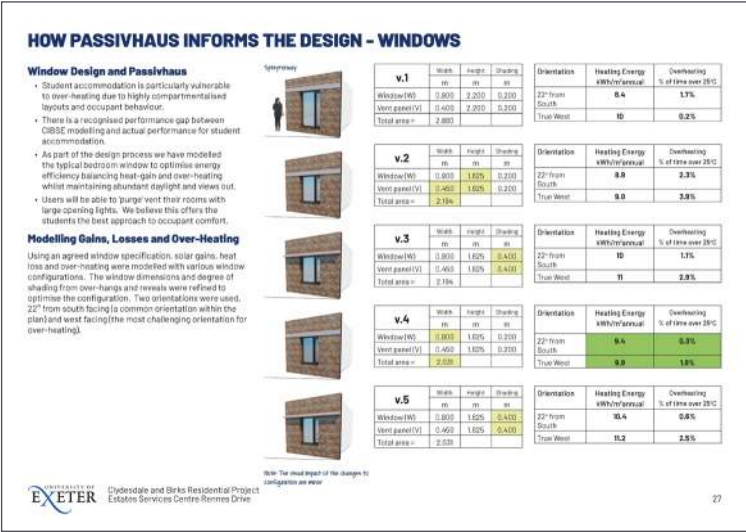
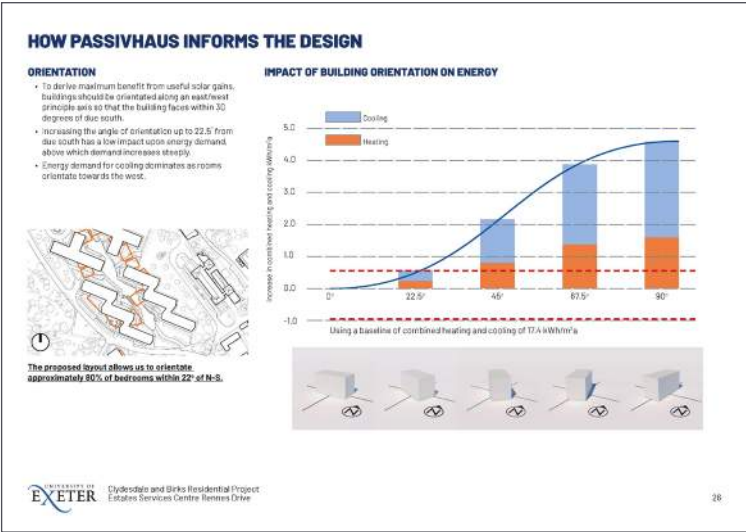
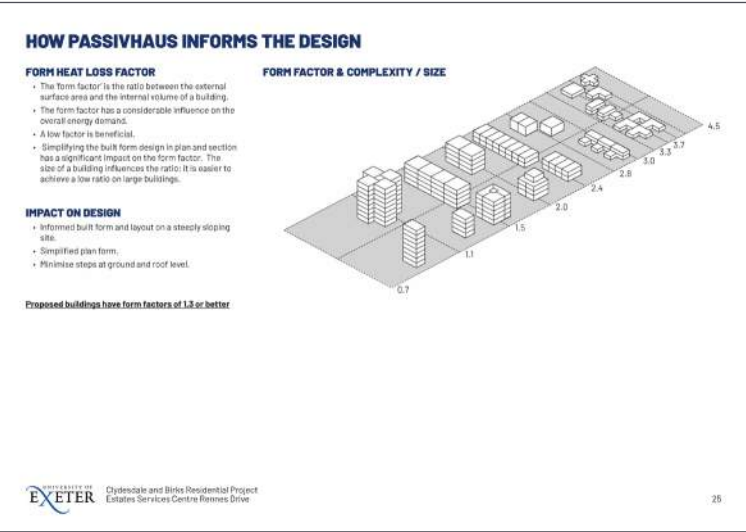
The continued engagement with the Passivhaus consultants has informed all aspects of the design:

- The application of the Passivhaus methodology had a fundamental impact on the design of the buildings. The Passivhaus input has fed into all aspects of the design and will continue to inform the detailed proposals at reserved matters stage.
- **Layout and orientation.** The Passivhaus modelling shows that buildings should be orientated so that the greatest number of bedroom windows face within 30 degrees of north or south. This has informed the design layout. In the centre of the site where there is the greatest freedom, buildings C1 and C2 adopt a distinctive stepped form to ensure that 100% of bedrooms meet the orientation criteria. Where the sites are more constrained, or there is a boundary relationship with neighbours, the orientations have been designed to balance the needs of Passivhaus orientation with concerns regarding overlooking and impact on landscape.
- **Built Form.** In line with Passivhaus principles, the building designs have evolved to simplify them as much as possible in plan form and modelling. Internal layouts have been adjusted to locate bedrooms on north and south facing facades, with living rooms and circulation cores on east and west facing facades. This approach will lead to some interesting opportunities to derive a new architectural language.
- **Treatments.** The Passivhaus methodology discourages modelled features such as projecting bays or porches, which might normally be used to bring elevations to life. The detailed design proposals are an opportunity to develop a new architectural language

using material changes to articulate the facades. The simplicity of the buildings will also demand the use of high-quality surface materials.

- **Service Strategy / Plant Rooms.** The services strategy to minimise carbon in use has been developed with the consultant team. The preference is to use Air Source Heat Pumps which need to be located to minimise distribution losses. This plant will ideally be located on roofs and will need to be predominantly open to the air. The rooftop plant areas will need to be integral to the design and use screening where appropriate. The plant room requirements have been factored into the parameter plan heights and areas.
- **Windows.** Detailed window and over-heating calculations have been undertaken to understand the implications for detailed design and inform illustrative material. Window size and treatment is critical to the success of the Passivhaus strategy and will be further refined at the next stage.

Examples of Passivhaus studies which have been used to inform the design. Form Factors, Orientation and Window Size.



7 ENGAGEMENT TIMELINE

16th January 2020

UNIVERSITY PROCUREMENT TEAM.

The design and project management teams met with the University procurement team to ensure that the form of any outline approval and planning conditions would be appropriate for the future procurement of the construction with a development partner.

This meeting informed the discussions with the local authority in respect of planning conditions relating to Passivhaus certification.

13th February 2020.

PLANNING OFFICER MEETING 3.

This meeting was attended by Mr Jeffrey and Mr Westlake from the council along with members of the design team and the University. The meeting gave an opportunity to present the latest scheme proposals, discuss arrangements for the forthcoming consultation events and present a detailed Landscape and Visual Appraisal (LVA) of the emerging scheme.

Administrative and procedural arrangements for the application contents were discussed and agreed, including how the linked application for the relocation of Estate Services Centre could be managed. Mr Jeffrey helpfully noted the key issues which required detailed explanation in the submission. The form of the parameter plans was discussed, and Mr Jeffrey welcomed draft proposals for review in advance of the formal submission.

The approach to securing the benefits of Passivhaus by way of planning condition were agreed.

The LVA was presented by Mr Spargo from the Landmark Practice who prepared the material. Officers noted that they need time to assess the visual impact but supported the approach adopted.

- *The proposals for Block E1 were felt to be out of character with the hillside at six storeys, as the building sat well above the skyline. The proposals for Building E1 were presented at the Stakeholder Consultation Event and amended in response to feedback.*



13th February 2020. Wire frame photo montages presented at Planning Meeting 3.

7 ENGAGEMENT TIMELINE

18-19th February 2020

STAKEHOLDER CONSULTATION EVENT

A Statement of Community Involvement (SCI) is submitted in support of the application which gives full details of the stakeholder consultation, including the design responses to the feedback received from stakeholders. This section provides a high-level summary only.

The Stakeholder event took place over two days. The proposals were summarised on a series of consultation boards. Representatives of the University and their professional team were available to answer questions and provide clarifications throughout the event. The presentation material was made available on-line and stakeholders were encouraged to provide feedback through a number of channels.

A total of 49 people signed the exhibition register over the two days. Most people attending signed the register. The exhibition website containing the consultation material received over 1,000 unique page views during February and March.

A total of 62 formal responses were received (30 hard copy feedback forms, 14 emailed feedback forms, and 18 online submissions through the University consultation website). A wide range of matters were raised, the following were commonly raised design issues with the responses.

AUTHOR	ISSUE	RESPONSE
Local resident	The proposals will increase footfall along Streatham Drive that currently has no footway. Will a new footway be provided as part of the development?	The proposals have been amended to include a new footway along Streatham Drive.
Local Residents in the Dunvegan Close / Lodge Hill/ Elmbridge Gardens area	Impact of proposed 6 and 4 storey accommodation on the existing compound site (Block B1) in terms of visual dominance, overlooking, loss of light, noise and lighting. Particular concern as the existing Estate Services Centre is at the top of a steep bank.	<ul style="list-style-type: none">• The height of proposed Block B1 has been reduced from 6 and 4 storeys as presented at the public consultation to 4 and 3 storeys. As a result of this change, the approximate number of bedrooms in this block has also reduced from 182 to 134 bedrooms.• A number of cross section drawings and visual images have been prepared to demonstrate that the relationship with neighbouring properties, as amended, is considered to be acceptable.• The submitted Land Use Parameter Plans shows a southern extent of the development zone so that an appropriate buffer/separation distance is maintained. The parameter includes a further zone in which windows must not directly overlook neighbouring properties.• There are opportunities to provide landscaping within the buffer zone to further reduce the impact of the development.• Blank gables have been located closest to the southern boundary to minimise overlooking. Whilst some bedroom windows may be seen, these have been located at a reasonable distance from the boundary.

Local Residents in the Clydesdale Road / Highcroft Court area	Impact of proposed 6, 5 and 3 storey accommodation (Block E1) at the north of the site in terms of visual dominance, overlooking, loss of light, noise and lighting.	<p>The height of proposed Block E1 has been reduced from 6 and 4 storeys as presented at public consultation to 4 storeys throughout.</p> <p>The design of the block has also been amended to an 'H' shape to reduce the number of windows facing north towards neighbouring properties.</p> <p>As a result of these changes, the approximate number of bedrooms in this block has also reduced from 192 to 182 bedrooms.</p> <p>A number of cross section drawings and visual images have been prepared to demonstrate that the relationship with neighbouring properties, as amended, is considered to be acceptable.</p> <p>The submitted Land Use Parameter Plans also show a northern extent of the development zone so that an appropriate buffer/ separation distance is maintained.</p> <p>There are opportunities to provide landscaping within the buffer zone to further reduce the impact of the development through planting and to ensure that these areas do not contain areas for students to congregate.</p>
Local Resident	Loss of a Magnolia tree on the left of the entrance to the Birks Grange village refectory block to be demolished. It was protected by scaffolding during previous developments.	The tree specialist and Director of Grounds tree specialists have agreed that the application should leave the opportunity open to explore retaining this tree in any reserved matters application. Clearly there are some significant challenges in trying to retain this tree which will require intrusive investigations, and a decision cannot be determined prior to outline submission. Building A1 has been amended in the illustrative layout to move the footprint outside of the Magnolia's root protection zone.

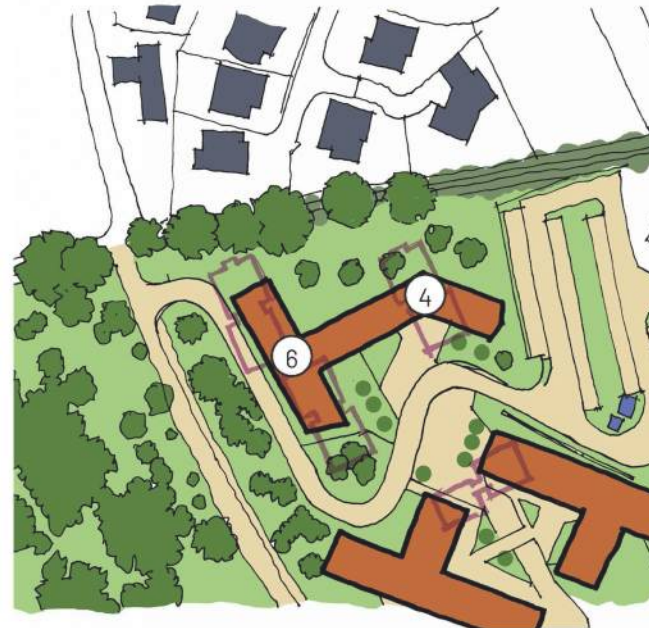
The changes resulting from the stakeholder consultation will have positive benefits to neighbouring properties. As a result of these changes there is a reduction of 62 bed spaces from the scheme presented at consultation (although it should be stressed that the number of bed spaces is indicative at this stage)

7 ENGAGEMENT TIMELINE

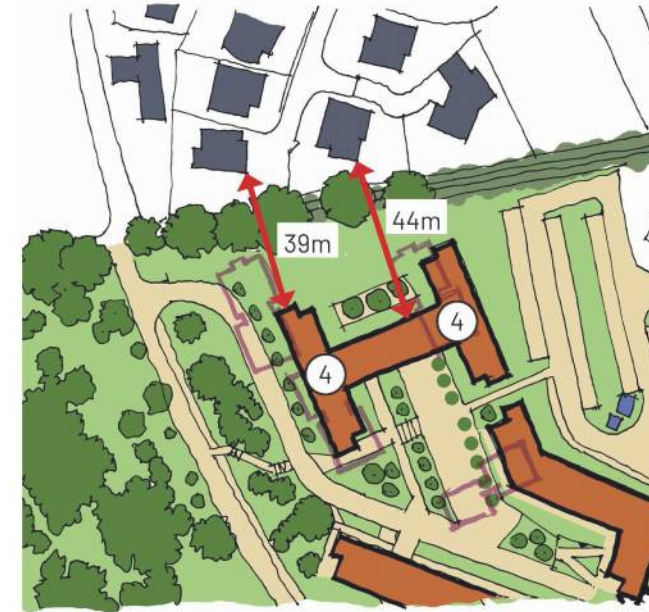
EXISTING



CONSULTATION



PROPOSED



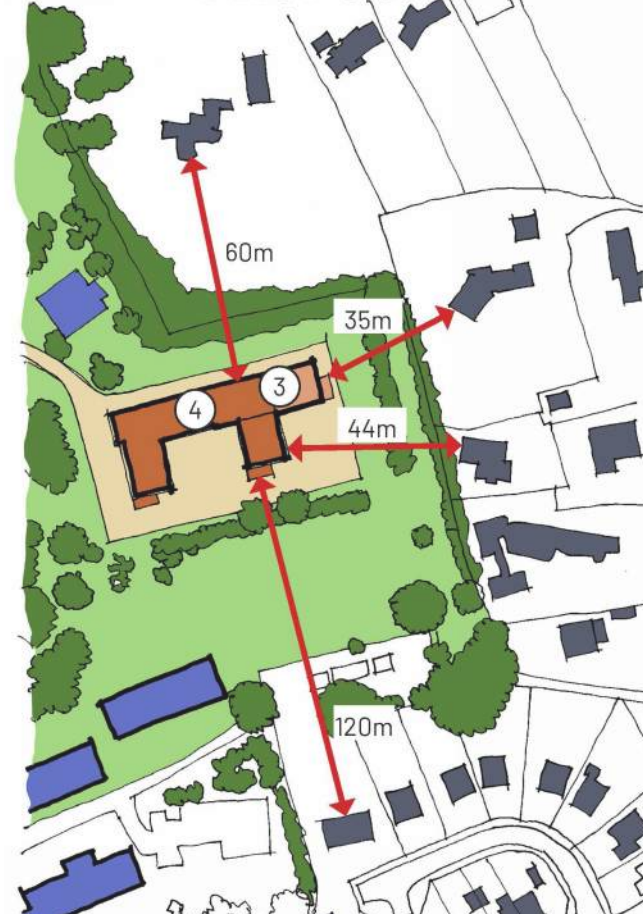
The relationship with the boundary at the northern end of the site was amended following consultation:

- The height of proposed Block E1 has been reduced from 6 and 4 storeys, to 4 storey throughout.
- The design of the block has also been amended to an 'H' shape to reduce the number of windows facing north towards neighbouring properties.
- As a result of these changes, the approximate number of bedrooms in this block has reduced from 192 to 182 bedrooms.

EXISTING



PROPOSED



The relationship with the boundary at the southern end of the site was amended following consultation:

- The height of proposed Block B1 has been reduced from 6 and 4 storeys generally, and from 4 and 3 storeys at the southern end.
- As a result of this change, the approximate number of bedrooms in this block has also reduced from 182 to 134 bedrooms.

7 ENGAGEMENT TIMELINE

20th February 2020

DESIGN REVIEW PANEL

The Design Review Panel (DRP) is made up of built environment professionals who assess the emerging proposals and provide objective design advice. Proposals and explanatory material were provided to the panel in advance of the review. There was also a guided site visit where members of the panel walked the site and adjoining areas. The designers were given the opportunity to present the proposals, the key constraints, opportunities, design principles and justifications. This was followed by a discussion session. The panel then took the opportunity

to confer in private before providing a panel summary of feedback. The Panel Administrator produced a written report via email, which constitutes the formal response. The full report is contained within the Statement of Community Involvement. The panel supported the principles and aspirations of the project and noted that the design approach was exemplary.

The following section details key features of the feedback and provides design responses.

ISSUE	RESPONSE
A further attempt to engage with students during the design process may be helpful.	<p>A workshop with the Student Guild was organised in response to the comment. Due to the social distancing recommendations implemented as a result of the Covid-19 crisis, this was changed to a virtual meeting which took place on Wednesday 25th March involving four representatives of the Guild, with verbal feedback on the day and email notes from two representatives.</p> <p>The reserved matters application will be subject to further staff and student consultation.</p>
Generally, the landscape led approach was supported. The external passive spaces are welcomed, but a more detailed consideration of key intersections was recommended. Integration with the wider landscape and relationship with Mardon Hall require consideration.	Since the DRP, a detailed illustrative landscape parameter plan has been completed and forms part of the application. This plan details the design at key intersections. The relationship with Mardon Hall and interventions to routes and landscape to improve the relationship and increase permeability have been introduced.
A wider definition of sustainability beyond carbon saving could be considered. There may be opportunities for additional harvesting and renewables measures.	The University is committed to taking action to tackle the climate and environment emergency. The institution is taking radical action to reduce carbon emissions, reduce plastics and paper use, increase recycling rates and improve the environment. This is an on-going concern and detailed design proposals will consider wider sustainability issues in addition to the Passivhaus measures adopted.
There is concern about an overly homogenous appearance to the buildings, consideration should be given to softening their appearance.	The appearance of the buildings is a reserved matter, however, the illustrative material considers the architectural devices that can be used to soften the appearance of the development. Buildings are stepped in plan and elevation. A variety of roof forms, materials and treatments are used to help define the buildings within individual character areas. Landscape treatments and tree planting soften the development.
A Design Code approach may offer benefits to the future development proposals – securing design quality.	This will be considered at the reserved matters stage.

20th February 2020

PLANNING OFFICER REVIEW

Mr Paul Jeffrey attended the Design Review Panel and was able to give additional informal feedback after the event to support the Panel's advice.

In combination with the verbal feedback from the DRP, the event gave clear direction for the design development leading up to the planning submission.

16th March 2020

EXTERNAL EVENT – LIMITS ON FURTHER MEETINGS.

The government introduce social distancing guidelines which prevent further group meetings.

17th March 2020

PLANNING MEMBERS WORKING GROUP

This meeting could not take place due to social distancing measures.

25th March 2020

STUDENT WORKSHOP

A workshop with the Student Guild was changed to a virtual meeting following the social distancing recommendations implemented as a result of the Covid-19 crisis. This took place on Wednesday 25th March, with verbal feedback and email notes from two representatives.

26th March 2020

EMAIL FEEDBACK FROM MR PAUL JEFFREY.

In place of a final meeting before the submission of the application, draft parameter plans were submitted to the council for feedback.

The principle of the parameter plans was generally acceptable and the approach to the parameter height plans was agreed.

Mr Jeffrey responded to the request for feedback on the illustrative plan noting that the revised plans created relationships with neighbours which were sensible and appeared to be acceptable in plan. However, Mr Jeffrey noted that he will need to assess from the potentially affected properties.

Further feedback was received requesting that illustrative material explored ways of visually breaking-up the development when seen from distant views.

This feedback enabled the team to finalise the application submission with confidence.

2nd April 2020

RESPONSE TO THE FINALISED TREE SURVEY.

The arboriculturalist, Mr Jeremy Peirce, concluded in his report that the Magnolia tree which sits at the entrance of the Birks Grange Village Refectory might possibly be retained; subject to intrusive surveys and detailed investigations. Previously it was thought that the demolition of the refectory would necessitate its removal.

The plan for Block A1 in the illustrative masterplans has been amended so that the footprint of the building sits outside of the root protection area of the tree. The proposals to investigate the retention of this tree have been welcomed by all parties.

April 2020

APPLICATION DELAYED DUE TO COVID 19.

The Outline application was prepared in April 2020, but was not submitted to Exeter City Council due to Covid-19. The University undertook a review of the proposals in November 2020 to ensure that they are fit for purpose in the event of a future pandemic similar in nature to Covid-19. A Covid 19 Statement accompanies the application.

CONSULTATION SUMMARY

In summary the consultation and engagement process has been comprehensive and positive. The dialogue with stakeholders has allowed the designs to be refined to address areas raised as concerns by officers and neighbours. The Design Review Panel provided further detailed advice which has been incorporated into the design and will feed into the reserved matters application.

8 THE PROPOSALS

8.1 THE PROPOSALS - A WALK AROUND THE SITE

This section of the Statement takes the reader on a route to, around and through the site, describing the illustrative proposals and how they have responded to the constraints and opportunities described in the Site and Context chapter. The route is described on plan to help in visually interpreting this narrative.

8.2 THE APPROACH FROM THE SOUTH

- (1) Arriving from the south along Streatham Drive, a new footpath to the eastern side of the road is provided. This path is not to be lit as this area already benefits from street lighting. The path will serve students from the Mardon Park group of residences, including students living in the proposed residences, offering a safe route from the residences to the southern end of the campus and Exeter City Centre.
- (2) Moving north along Streatham Drive, the parameter plans indicate that there may be a requirement for minor road and junction improvements in the section of road between Reed Hall and Holland Hall.

8.3 MARDON HALL / HOLLAND HALL

The following route will predominantly be used by residents and visitors to Mardon and Holland Hall.

- (3) The section of road outside of Mardon Hall is adjusted to increase the width to allow improved two-way access. In addition, a footpath is installed on the western side, with footpath links into the new site between the retained trees.
- (4) A new section of road links the T-junction at the northern end of Mardon Hall to the Holland Hall car park. This arrangement will improve pedestrian safety, separating vehicular movements to the Holland Hall car park from pedestrian movement in the new development.
- (5) A continuous footpath will allow safe access to the car park and connect to the new development with stepped footpaths leading onto the central pedestrian spine of the new development.
- (6) The existing parking areas to the Holland Hall car park to have solar panels on frames installed above them, similar to the arrangements at Car Park B to the east of the campus. A number of electrical charging points will also be provided.



Existing Site

8 THE PROPOSALS

8.4 THE CENTRAL SPINE

- (7) The main pedestrian route into the new Clydesdale development will be from the southern end of Clydesdale Avenue. The new access is attractively landscaped distinct space, creating a sense of arrival. The group of mature trees at this junction will be retained and incorporated into the landscape proposals creating a soft edge to the development area and retaining the visual break between the site and Reed Hall.
- (8) From the entrance point it will be possible to see the new landscaped central spine. Buildings C1 and C2 frame the spine at the southern end, with a glimpsed view through the site to different character areas. Building E1 terminates this view, enclosing the central, active, area of the site.
- (9) Moving into the spine, the landscape opens up into a wide pedestrianised space. The spine is a busy 'student realm' space containing a variety of character areas and functional spaces. A mix of hard and soft landscaping is used to manage the level changes across the site. The scheme has been designed so that level access to all buildings is possible from the central spine using a combination of ramps, lifts and bridges. Tree planting is used throughout this area, using landscape to visually 'contain' the central space.
- The central spine will be accessed controlled for use by fire, refuse collection or planned maintenance vehicles only. On arrivals weekend, at the start of term, this route will be open to vehicles at allotted times to allow the efficient off-loading of student's belongings.
- The materials palette and architectural treatments vary along the length of the spine, defining building groups. The identity of these groups will be reinforced through the use of naming, signage, colour schemes and landscape treatments.
- Breaking down the development into smaller groupings, with a unique identity, will help foster a sense of ownership and belonging at a 'collegiate' level. Social and well-being programmes can be delivered at the level of the collegiate group.
- The distinctive saw tooth forms of Buildings C1 and C2 help to break up the massing of the buildings, creating a series of linked squares.

8.5 BUILDING C1/C2

- (10) Building C1 and C2 rise in height from south to north, increasing density in the centre of the site. C1 rises from 6 to 7 storeys and C2 rises from 6 to 8 storeys.

Buildings C1 and C2 are the buildings which are most exposed to the distant view and use materials palettes which are sympathetic to the wider campus and landscape character. The dominant material will be brick; selected to be in character with best brick buildings on campus. Two brick types are used in C1 and C2 to differentiate between the three distinct forms in each building. An accent material is used to break up the facades with attic storeys, stair cores, entrances and living spaces picked out in coloured zinc.

- The Visual Appraisal, used to assess the impact on distant views informed the decision to use pitched roofs on C1 and C2. The combination of pitched roofs and angled gable ends introduced complexity into these views, reflecting the character of the wider landscape.
- The angle and forms of C1 and C2 were developed using Passivhaus modelling to minimise carbon in use and over-heating of bedrooms.

8.6 THE CENTRAL FACILITIES

- (11) The main reception and student facilities are located at the centre of the site in Building C1. To manage level changes this reception building will be at two levels. Deliveries and those arriving by car will access the reception from Clydesdale Avenue (+62m AOD), a double height space and platform lift will connect this level with the central spine (+66m AOD).
- In Building C2, opposite C1, will be another smaller social space containing a lift to take residents up to the higher platform to access entrances to C2 and D2 at +69m AOD. The use of lifts simplifies the accessible movement strategy and limits the need for extensive ramps within the central landscape space.
- The landscape treatments and signage will reinforce the importance of this area which has been chosen as it falls at the cross-roads of major pedestrian movements across the site. Small pocket piazzas and landscape interventions such as small amphitheatre spaces will be located through the spine providing a variety of characters along its length.
- The recurring motif of angled steps and terraces, used throughout the landscape, echoes the Italianate terraced gardens of the listed Reed Hall.



Illustrative Scheme. Central spine, looking north from C1/C2, a high quality stepped and terraced landscape.



Illustrative Scheme. Central spine looking east between C1 and D1. Central facilities are located at the meeting points of pedestrian routes.

8 THE PROPOSALS

8.7 BUILDINGS D1 / D2

- (12) Buildings D1 and D2 are the tallest buildings on the site, located in the centre of the site away from neighbouring properties. This location is afforded good screening by the taller trees in Birks Bank. The materials palette and elevational treatments contrast with C1/C2. Building orientation has been determined by Passivhaus studies and modelling.
- The route to the east of D1 allows a one-way system for any service vehicles accessing the central spine to exit onto Clydesdale Avenue.

8.8 BUILDING E1

- (13) Building E1 sits on the site of accommodation blocks which are to be demolished as part of this project. The existing blocks were at three storeys with pitched roofs. The new accommodation is at four storeys with the building stepping up the slope.
- Building E1 forms an H in plan. The plan form responds to the context of residential neighbours on the northern boundary, locating windows to habitable rooms at least 45m away from the neighbours. Gable ends to the north are blank and contain escape stairs only and are more than 25m from residential properties at the nearest point. Access will be from the southern courtyard, which has a complex arrangement of steps and terraces to manage level changes. The northern courtyard will be landscaped with tree planting to reinforce the mature tree screening to Grafton Road.
 - Although adopting a similar language, the buildings have simpler architectural treatments appropriate for the reduced scale of the building. To address overlooking issues with neighbouring properties, and create a termination to the central spine, the building has a different orientation.

8.9 CLYDESDALE AVENUE

- (14) The access road adjacent to D1 leads onto Clydesdale Avenue, a University owned estate road. The tree planting to the eastern side of the road will be retained and provide a soft edge to the development. The Birks Bank Pinetum falls outside of the application boundary and there are no works within this area.
- There are stepped paths leading from Clydesdale Avenue into the new development. Improvements to Clydesdale Avenue will be considered as part of the detailed design process at reserved matters.

8.10 ARRIVAL POINT

- (15) There is a significant movement node on Clydesdale Avenue, at the meeting of the road with the Cardiac Hill path and the access road to Building B1. Students living in the Birks Grange, Moberly, Duryard and INTO accommodation sites pass this point on their route to the campus. A population of circa 1500 residents.
- The reception and security to the new site has been located at this point to maximise accessibility to services and provide passive surveillance at night.
 - The landscape design provides a sense of arrival uniting the various routes. The reception will receive post and parcel deliveries, making this a busy area on the site. Vehicle turning, taxi drop-off and guest parking have been incorporated into the landscape design, positioned away from the primary pedestrian routes.

8.11 BUILDINGS B1/B2

- (16) Building B2 is located on the site of two of the existing Nash Grove student residential buildings. These are two storeys, with a small element of additional under-storey, and pitched roofs. The replacement building is four storeys. The mature trees to the southern boundary, which form a screen to the residential neighbours in High Ridge, will remain and can be reinforced with additional planting subject to detailed design.
- The access road which served the Grounds compound may be upgraded as part of the works. Any amendments to the road will be to the southern side away from the routes to existing trees.
- (17) Building B1 is sited on the location of the former University Estate Services Centre. The site is a large and level platform which contained a large service yard, greenhouses, workshops and stores. The buildings were an ad hoc mixture of forms and styles but all single storeys.
- The new accommodation is four storeys at the northern end and three storeys adjacent to the southern boundary with residential properties. Detailed modelling studies and feedback from public consultation informed the layout and massing.
 - The building contains only residential accommodation.
 - The blank, three storey, southern gable of the building is set over 35m from the residential properties Summer Court and St Clair.
 - The building sits at over 90m from the houses in Elmbridge Gardens to the west and benefits from partial tree screening, however, the elevated



Illustrative Scheme. Looking north from D1 towards E1/D2 showing pedestrian permeability through the site.



Illustrative Scheme. Central spine looking east from C1 towards E1.

8 THE PROPOSALS

position of the site gives the potential for this building to have negative effects on these properties. The design was amended to reduce storey heights following feedback from public consultation and modelling exercises. At detailed design stage there is the potential to explore tree planting to further reduce intervisibility.

8.12 BIRKS BANK LINK

- (18) The new road that links the Birks Grange site with Clydesdale Avenue is access controlled and for use of University staff from Grounds, Estate and Security only. This road will reduce the number of traffic movements on New North Road as University movements can be contained within the campus.
- A pedestrian path will be provided along the desire line between Birks Grange and B2.

8.13 BUILDING A1

- (19) Building A1 sits on the site of the demolished refectory. The six storey building has an element of social and amenity space on the ground floor and accommodation on upper floors. The provision of social space will be less than contained in the refectory, as some functions have been transferred and consolidated in the new development at C1. It is anticipated that vehicle movements will reduce as there will no longer be deliveries to the refectory kitchen.
- In response to feedback from neighbours and the arboriculturalist, Building A1 has been sited to allow the potential to retain the large Magnolia tree which sits at the south east corner of the building. It is not possible to be certain if this tree can be retained without further intrusive studies - however, the design leaves the opportunity for retention if it proves technically feasible.
- Architectural design and treatments will respond to the immediate neighbours in Birks Grange Village.

8.14 BIRKS GRANGE A-E

- (20) Birks Grange Village A – E is a four and five storey student residential development to the north of the Birks Grange Village. Constructed in 2004, the building is of brick in contrasting bands of buff and red, forming an east facing courtyard. The pitched roof is of slate with raised copper sections at roof junctions. There is a large surfaced car park and access ramps to the courtyard which are utilitarian in appearance. Birks Grange A-E provides 360 student bedrooms arranged in cluster flats.

- The building will be retained, refurbished and converted from a catered halls to self-catered cluster flats. As part of these works the environmental sustainability will be radically improved using the Passivhaus EnerPHit methodology. Details of the physical alterations are to be determined at reserved matters, but could include a replacement of the roof, windows and new treatments to elevations. Solar panels are likely to be installed on the southern and western slopes of the roof. The refurbishment also presents an opportunity to improve the landscape setting. Improvements will bring the building closer in amenity and appearance to the other residences on the Birks Grange Village site.



Illustrative Scheme. The stepped and terraced landscape at E1 to manage complex levels and improve pedestrian permeability.



Illustrative Scheme. The route from the central spine to Holland Hall and Mardon Hall. The common area in C2 has lifts to access the upper terraces.

8 THE PROPOSALS

8.15 AMOUNT

The illustrative proposals create 49,821m² of new floor area (including plant rooms and cycle storage). 8,874m² of accommodation will be demolished.

The following table describes the rooms created in the illustrative proposals along with the net gain on campus, accounting for rooms lost due to demolition or in the refurbishment of buildings A-E.

At the reserved matters stage the total net increase in bedspaces may change as the detailed design explores the opportunities and constraints of the site in more detail, however the development is expected to yield between approximately 1,200 and 1,250 bedrooms..

NEW BEDSPACES CREATED				
Building	Ensuite	Standard	Accessible	Total bed spaces
A1	104	0	0	104
B1	133	0	0	133
B2	87	0	0	87
C1	196	96	2	294
C2	220	96	2	318
D1	156	0	2	158
D2	220	0	2	222
E1	58	128	2	188
TOTALS	1174	320	10	1504

BUILDINGS DEMOLISHED	
Clydesdale and Nash Grove	-217

REFURBISHMENT BIRKS A-E	
Birks A - E Existing	360
Birks A - E Refurbished	290
Change in bedspaces	-70

BEDSPACES NET CHANGE	
Net change in bedspaces	1217

9 LANDSCAPE, ECOLOGY AND BIODIVERSITY

The Clydesdale and Birks residential project sits within the wider Streatham Campus.

The Campus's wider landscape characteristics are reflected within the project area:

- A well treed sloping landscape affording views to the west.
- Strong mature tree belts.
- Dense perimeter buffer planting and mature trees.
- An array of well maintained open spaces.

The Birks Bank Pinetum is a distinctive feature to the west of the Clydesdale development area, containing a collection of pine trees of national importance. Reed Hall lies to the south west with a fine Italianate garden of steps and terraces.

The objective of the proposed development and associated landscape scheme is to retain, protect and enhance where possible the above characteristics, increasing the number of trees and shrub species mix present on site and enhancing biodiversity value.

It is proposed to introduce more pollinators as part of proposed tree and shrub planting to assist in defining character areas and positively contribute to the visual richness and amenity of the landscape.

We will improve connectivity and legibility within the project area and the wider campus, incorporate green infrastructure to aid and enhance the cycling and walking experience around campus.

A priority aim is to create character areas and a hierarchy of social spaces with a landscape that students will be attracted to, will enjoy and respect.

A central pedestrian spine is created between Clydesdale and Birks, this allows accessible routes to all residences leading off this spine. The spine comprises a series of landscaped terraces (which help to negotiate the level changes within site) and a hierarchy of social spaces.

- An open courtyard with views towards the Pinetum and further afield.
- Small incidental social spaces and courtyards where seating has been positioned for social interaction.
- Quiet study spaces.
- Areas of green space.
- The topography and level changes have been treated as an opportunity to explore options for rain-gardens and sustainable drainage solutions.

In addition the refurbishment of the of Birks Grange courtyard will provide a new high-quality landscaped space in the residential campus.

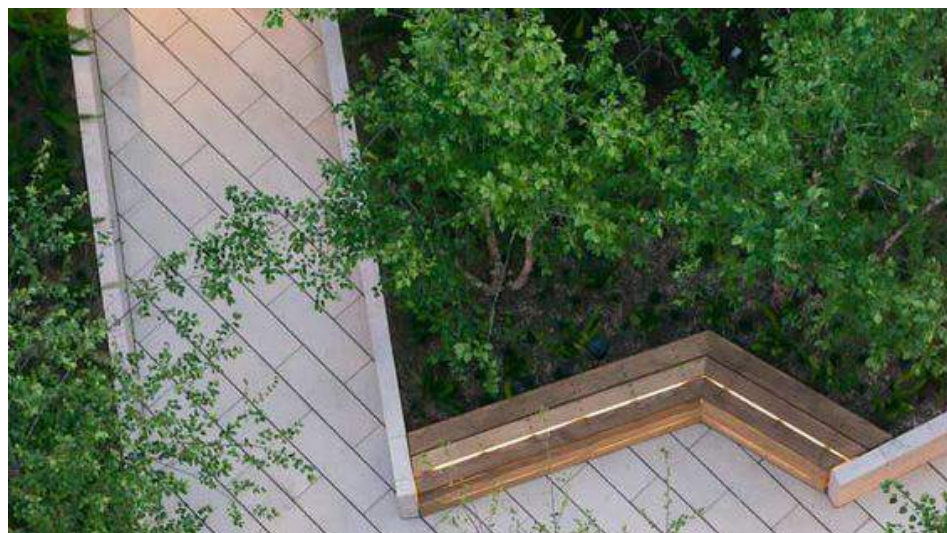
The proposed design includes for two reception areas, one comprising the main social hub, a drop off/taxi pick up area and wayfinding improvements. Connectivity routes/links throughout the project area and on to the wider context are improved through the use of a strong materials palette, retaining features, clear sight lines and lighting.

The existing habitats on site are predominantly hardstanding, buildings or highly modified habitats as well as amenity and ornamental planting, which have a relatively low intrinsic value for biodiversity. It is therefore considered the proposed development will have a low impact on wildlife subject to implementation of identified measures to avoid effects on protected species. An Ecological Assessment forms part of the application.



Illustrative Masterplan.

9 LANDSCAPE, ECOLOGY AND BIODIVERSITY



LANDSCAPE PRECEDENT IMAGES

10 THE PARAMETER AND PRINCIPLES PLANS

10.1 THE PARAMETER PLANS

A series of parameter plans have been developed through a thorough analysis and understanding of the site context and the opportunities and constraints it presents. These plans will provide the basis of the future development of the site for purpose-built student accommodation, informing the future reserved matter applications. They are supported by principle plans and illustrative material.

The parameter plans will be determined through the planning application process and fix the attributes of any future reserved matters application. The principle plans and illustrative material give one solution as to how the parameter plans could be interpreted successfully. The development of the parameter plans has been undertaken in parallel with the design of the illustrative proposal. This has allowed the designers and planning officers to assess the impacts of the illustrative proposal, particularly the effects of development upon the distant views to the site. These effects are assessed in the Landscape and Visual Appraisal which accompanies the application.

10.2 LAND USE PARAMETER

The land use parameter plan defines the site zones, total development floor area and extent of development at the northern and southern boundaries with residential neighbours.

The site falls within the area described as Mardon Park within the 2010 Masterplan Framework. Mardon Park is one of the two principal student residential areas on campus, the other being Lafrowda, Pennsylvania, Lopes and East Park on the eastern side of the campus.

The Masterplan describes Mardon Park as an ‘area with potential for development’ subject to more detailed analysis and local sensitivity. It goes on to further define the area as within Zone A, an area where development already exists, and new development would seek to complement the existing buildings or building groupings.

The Masterplan landscape framework, denotes the site as “Park Living” area, defined as a range of building forms and scales set within a fairly mature landscape. The landscape framework notes that the character should be maintained with tree cover maintained with a regime of felling and replanting.

The masterplan states that the Mardon Park area should be developed to create attractive and vibrant living spaces; noting that the area could provide a higher density of development. The built form should create a sense of place, with clear fronts and backs and entrances that overlook the key public spaces.

In consultation with the university an illustrative proposal has been developed and a schedule of accommodation has been produced identifying that circa 49,821m² of accommodation can be provided on the site. This equates to between 1200 and 1250 bedrooms. The identified area includes all residential accommodation and communal facilities such as reception, administration offices, social space, shop, study space and a café. A provision of 1,170m² has been identified as study space to future proof the accommodation in the event of a future pandemic event. (Please see supporting Covid 19 Statement).

The land use plan identifies two zones, one for residential only development and a separate designation where mixed use is acceptable. The mixed-use areas have been located in areas away from residential neighbours and convenient for deliveries and access by residents. This will direct activity away from sensitive boundaries.

Outside of the development boundary the landscape and movement zone identifies areas where there can be hard or soft landscaping works associated with the development including paths, roads and biodiversity enhancement.

The land use plan gives two lines which determine the northern and southern extent of development, which will impose a no-build buffer zone between new development and existing private residences. The northern extent of built development is positioned on the two existing three storey student residences. The southern extent of built development is positioned on the line of the southern gable ends to the existing greenhouses.

10.3 BUILDING HEIGHT PARAMETER

The 2012 Masterplan describes the Potential for redevelopment as: “Additional student residences could be created by the consolidation and redevelopment of the cluster of student residences in the Clydesdale area of the Campus. The existing family centre and creche could be redeveloped to provide a higher density development”. Building Form proposals should, “ensure that it creates a sense of place, with clear fronts and backs and entrances that overlook the key public spaces” and “respond carefully to the topography and to views out over the wider landscape”.

The building heights parameter plan has been informed by detailed landscape and visual appraisal which accompanies the application. The designers iterated their proposals using the Landscape and Visual Appraisal (LVA) to inform decisions on height and siting. The LVA uses precise modelling a recognised standard methodology to identify key views into the site and produce photo-montage images to show how the effects of proposed development. The LVA uses the illustrative scheme to demonstrate these effects.

The parameter plan sets maximum heights within defined zones. All new development and structures will be required to sit below the maximum parameter heights, including plant rooms, safety equipment (for example handrails), but excluding roof top flues from plant.

A further zone is defined on the plan which will control the location of windows which overlook boundaries to the north and south. Within these zones, any windows from habitable rooms (bedrooms and kitchen living dining rooms) must not be angled within 45 degrees of a line perpendicular to the boundary with neighbouring properties. This will prevent direct overlooking in these areas.

10.4 LANDSCAPE AND BIODIVERSITY PARAMETER

The Landscape and Biodiversity Parameter plan sets the framework for development, analysing the site and considering the landscape, environmental and biodiversity characteristics, constraints and potential.

10.5 PRINCIPLE PLANS

The principle plans and illustrative material give one possible solution as to how the parameter plans could be interpreted successfully.

10.6 DEMOLITION PRINCIPLE PLAN

The demolition plan indicates which buildings are likely to be demolished as part of the proposals.

10.7 MOVEMENT PRINCIPLES PLAN

The Movement Principles Plan describes the proposed key access and movements points around the site and how these will work when the site is operational.

With the exception of the footpath improvements to Streatham Drive, there are no changes to public roads.

Vehicular access to the Clydesdale and Nash will continue to be from Streatham Drive. Vehicular access to Birks Grange Village will remain from New North Road.

To improve connectivity across the campus it is proposed to provide an internal estate road between the Birks site and Clydesdale Avenue. This new route will be access controlled and for University Estate staff only. This new link will reduce vehicular movements on the public road network. In particular it will allow grounds maintenance vehicles, for example lawn mowers, to remain within the estate. A new section of road is also proposed to allow traffic to service Holland Hall and use the adjacent car park without introducing vehicular movements into the new residential development. A further vehicular route links the central spine with the northern end of Clydesdale Avenue. The indicative routes are shown on the Movement Principles Plan and illustrative material. These routes have been tested for viability but are not intended to fix the design proposals at reserved matters.

The design proposals have a large central landscaped spine running south to north in the centre of the Clydesdale development area. This pedestrian priority space will form the primary pedestrian access to the residential buildings and the supporting social, study and administrative functions. It will contain the primary landscaped external social spaces for students. This route will be used for limited maintenance and traffic, operating as a one-way system exiting to Clydesdale Avenue via a new section of road to the north. The one-way system will be beneficial in allowing an orderly approach on arrivals weekend, when this route will be open for students and their families to deliver their belongings to the accommodation. The central spine is zoned on the Movement Principles Plan with the opportunity to realign this at the reserved matters stage by up to 10m.

Road improvements will be considered along Streatham Drive to improve vehicular access and pedestrian safety. The area in front of Mardon Hall and the nearby junctions are highlighted as areas for improvement. A detailed proposal for the footpath to the section of road west of Reed Hall is included as part of the application. This footpath is unlit.

New pedestrian links across the development will link into the existing network and provide improved permeability, recognising desire lines. The central spine will carry most of

10 THE PARAMETER AND PRINCIPLES PLANS

the pedestrian routes between campus an accommodation. A link is proposed between the top of the 'Cardiac Hill' footpath and Holland Hall. This route passes through the land-use 'mixed zone' and will therefore pass through or adjacent to the primary social and administrative functions on the site. This will also allow it to link with passenger lifts as part of the accessible movement strategy. Connecting paths along desire lines link the northern end of the site with Holland Hall and anticipate a short cut from Cardiac Hill to Building C1. Further connections are proposed between the site and Mardon Hall.

10.8 THE ILLUSTRATIVE MASTERPLAN

The Illustrative Masterplan presents a detailed proposal which could address the constraints and opportunities presented by the site and satisfy the conditions of the parameter plans. It has been designed to meet the spatial and operational brief presented by the University and therefore can offer some certainty on the ability of the outline application to deliver the quantum of accommodation described in the proposals.

The illustrative material brings the parameter and principles to life and has been invaluable in describing the scheme to stakeholders and at public consultation. The size, shape and position of buildings shown are not fixed at this stage. The reserved matters application that follows will be the outcome of further detailed design work. The outline application is seeking permission for the parameters of the development and not the layout in the illustrative masterplan.

10.9 OTHER ILLUSTRATIVE MATERIAL

Imagery supporting the application and within this statement is similarly illustrative and does not seek to fix size, shape, position or appearance of the buildings; which are issues for the reserved matters application.

11 CONSIDERATIONS FOR THE RESERVED MATTERS APPLICATION

The purpose of the illustrative scheme is to test the feasibility of the parameter plans and to allow an assessment of the effects of development by stakeholders and planning officers. The illustrative design has been developed from a comprehensive brief and robust assumptions have been made where full information is not available. However, the proposals are not a detailed design that would be appropriate for a full plans submission.

In formulating the illustrative scheme a number of issues have emerged as key considerations for the future detailed design. The list below highlights these and makes recommendations for the design team to pursue at reserved matters.

11.1 MASSING PERCEIVED FROM THE DISTANT VIEW

The Landscape and Visual Appraisal has been an invaluable tool in assessing the effects of development on the distant view. A similar exercise would be useful at the detailed design stage to inform the proposals for reserved matters.

The illustrative material within the LVA is taken to the level of a massing model and does not include materials and treatments. At the next stage the design team should explore all opportunities to employ architectural techniques to reduce the perceived massing of the building forms. These techniques should be used to visually break the forms both vertically and horizontally.

Building on the work undertaken in developing the illustrative scheme, designers should consider:

- Clustering buildings into groups of distinct character, which will read as distinct elements from the distant view.
- Creating breaks in plan form and steps in building heights to differentiate buildings of similar character through a depth of modelling.
- Exploring a variety of roof forms, including pitched and dormers which feature on many campus buildings.
- Using a variety and mix of materials to differentiate buildings and clusters. The use of a brick as the predominant facing material is encouraged. A brick which complements the brown brick used throughout the older campus buildings, and of muted colour, would be appropriate for the landscape setting.
- Adopting horizontal devices such as attic storeys, string courses and a differentiated ground floor will add visual interest and reduce repetition.

- Using treatments to group windows horizontally and vertically, with framing or materials changes, will break the repetitive window patterning common to student accommodation.
- Tree planting will reduce the perceived massing from distant views over time and species and locations should be considered with this aim.

11.2 BOUNDARY RELATIONSHIPS

The illustrative proposal has been developed to carefully manage boundary relationships; taking into account stakeholder consultation feedback and comments from planning officers. The topography of the site has been taken into account in terms of the potential for over-bearing. The resulting parameter plans take care to determine: extent of development, areas where overlooking windows are excluded and building heights. Plan configurations place blank gable ends nearest to neighbouring buildings. Proposed buildings have been proven to not overshadow neighbouring properties using shadow path modelling.

Future design work should build upon these proposals and demonstrate that relationships are equal or better than the illustrative plan using sections and modelling.

11.3 ENVIRONMENTAL SUSTAINABILITY

The Passivhaus approach has informed the siting, form, massing, orientation and treatment of the buildings. The modelling undertaken so far provides a solid base for future detailed design.

The Passivhaus methodology sets the standards for thermal comfort and energy use, which drives the design solution. Designing to Passivhaus standards therefore results in new architectural approaches. Forms and detailing are simpler to reduce heat loss at junctions. Modelling the optimum efficiency for energy use determines building orientation and window sizes.

The illustrative proposals have been developed with the benefit of advice from the UK's leading Passivhaus consultants, and early modelling has been used to confirm that the energy targets are achievable. At the reserved matters stage, the Passivhaus consultant's advice will be required from the outset of detailed design and will be central to the design process.

It is important that the Passivhaus process is effectively communicated to stakeholders throughout the design process. The future reserved matters application should describe how the balance is being achieved between carbon saving design and other planning matters, such as the relationship at boundaries and elevational treatments.

The project is set to be one of the largest Passivhaus schemes in the UK and opportunities should be explored to maximise the benefits of this exemplar project in the construction industry and University sector.

11.4 ACCESSIBILITY

The illustrative proposals have been developed with a strategy for achieving level access across the site. The detailed design should build upon this approach and seek to provide simple solutions to extend accessibility to and around the site.

11.5 STUDENT EXPERIENCE

The next stage of design will include the detailed design of social, study and amenity spaces for students. The location and design of these facilities should be considered with the student experience at the heart of the process. Designs should maximise the opportunities for students to engage with one another and the wider University. Well-being should be considered, including using the experience of the University's Residence Life to inform the design. Passive security measures should be built into the design to create a feeling of safety.

11.6 STUDENT CONSULTATION

Workshops with students should inform the design process. Engagement with student groups should be taken at each step of the design process to inform design decisions.

11.7 TREE RETENTION

The outline proposals have been informed by a detailed tree survey and are accompanied by an Arboricultural Impact Assessment. The impact on trees is described on the parameter plans. At the next stage of design all opportunities should be taken to explore how high quality trees can be retained and incorporated into the design.

11.8 SUMMARY

The above issues are key considerations for the future design evolution process. This is not exhaustive list, but these items should be considered as essential activities to build upon the good analysis and design work completed at outline stage.

12 WASTE AND RECYCLING

The University provides guidance on Waste and Recycling at:

<https://www.exeter.ac.uk/sustainability/wasteandrecycling/>

12.1 REFUSE MANAGEMENT

The University’s operational partner will manage the refuse arrangements on site.

The University promote the principle of maximising recycling waste. The site-specific solution for waste management will take into consideration legislative compliance, targeting maximising recycling at source, and staff and student expectations of an environmentally responsible organisation.

The detailed planning application will be accompanied by a detailed refuse and recycling strategy. The illustrative material accompanying the application explores solutions to waste and recycling that would comply with the parameter plans.

12.2 WASTE & RECYCLING

In line with other University residences the separation of general waste from recyclable material will be undertaken by students in their accommodation. Kitchens will be provided with four compartment recycling bins which will allow the separation of materials and separate general refuse bins. Waste food collection will be in a separate caddy.

- 45 litre - Card and paper
- 45 litre –Plastic
- 45 litre - Steel and aluminium tins and foil
- 45 litre - Glass
- Flip top bin for general waste
- 10 litre - Food caddy to worktop

Waste and recycling will be collected in colour coded bin bags. Glass will be collected separately with a dedicated collection point. The waste contractors will collect ‘difficult’ waste, such as waste electrical and electronic equipment, by arrangement with the site staff.

Refuse and recycling will be collected from shared kitchens by cleaning staff several times per week. The refuse and recycling sacks are collected by cleaning staff, delivered to the secure bin stores and deposited in 1100 litre Eurobins. Eurobins will be colour-coded to indicate refuse or recycled material. At weekends students will have access to bin stores should they wish to dispose of waste themselves.

Waste contractors will collect waste and recycling from the centralised bin stores using 32 tonne vehicles.

Students will be informed of the recycling strategy and waste collection plan in the greeting pack that they receive on moving into the residences. The message to recycle will be reinforced with information posters displayed in the communal kitchens detailing what packaging can be collected in the recyclable bags. Social Media and the Residents Handbook will also be used as an awareness tool.

12.3 BIN STORE LOCATION

Bin stores will be located for convenience and concealed as far as possible from main pedestrian routes and social spaces. Bin stores will be contained with walls in a sympathetic material to the main buildings but will not have roofs – this is an insurance requirement. Floor slabs will be laid to falls with a drainage gully and lockable bib taps to allow wash down.

12.4 FIXED BINS

Small fixed waste and recycling bins will be provided in the courtyard spaces.

12.5 SPECIAL WASTE

In addition to the stores described above there will be an area for electrical waste collection for small domestic appliances.

12.6 SPECIAL COLLECTIONS

At the end of the academic year additional provision will be made for the collection of waste and recycling, including the temporary installation of skips for bulkier waste. These will be placed at convenient locations close to block entrances.

12.7 THE STUDENT RE-USE PROJECT

The Moving On project (formerly the Student Re-use Project) redirects unwanted items that have been donated by University students leaving accommodation Halls to charity. The average student generates between 10-20kg of reusable items a year, including stationery, kitchen appliances, books, clothes and bedding. Often many items are thrown away at the end of term, though many are in very good condition. The project runs from May until September and offers volunteering opportunities to both students and staff throughout this period.

The project is run in partnership with the British Heart Foundation and will give students the convenience of donation points within halls of residence, as well as collection banks on campus. The donations and collections that took place at the University of Exeter over the course of 2016 raised over £44,000 for the British Heart Foundation.

13 TRANSPORT

A Transport Statement accompanies the application.

13.1 SITE ACCESS

The site has excellent access. Vehicle access to the Clydesdale site is from Clydesdale Avenue via Streatham Drive, which is a private road. The access to the Birks site is from New North Road. There are no proposed works to the public highway.

13.2 PUBLIC TRANSPORT - BUS

There are bus stops within the campus at Knightley and Queens Drive to the south of the Clydesdale site. The Birks site has a vehicular access from New North Road to the west. A bus stop is located adjacent to the access to the Birks site.

13.3 PUBLIC TRANSPORT - RAIL

St David’s train station is located circa 800m to the south of both sites. St David’s is the principle station for Exeter and is served by long and short distance services.

13.4 CYCLING

Cycling provides a valid alternative mode of transport to car use. The centre of the Streatham Campus, Exeter St David’s Railway Station and the City Centre are all comfortably within a 5km radius of the proposed student residences. There are also local cycling routes within the city that provide access to the City Centre and Route 34.

13.5 WALKING

The main facilities of the Streatham Campus are within an acceptable walking distance.

Footways are provided along all roads connecting the site with Exeter St David’s Station. The city centre is just over 1.5km from the site. The proposals include new footways along Streatham Drive to improve safe access to the south.

13.6 CYCLE PARKING

Bicycle storage will be provided in external cycle stores at one space for every two additional bedrooms on the site. Stores will be covered and secure, and accessed by card controlled locks. Lighting will be switched by movement sensors.

The details of the cycle storage will form part of the reserved matters application.

13.7 CAR PARKING PROVISION

The location, number and details of car parking will form part of the reserved matters application. There will be no parking provided for students, with the exception very limited spaces for blue badge holders.

13.8 SERVICE VEHICLES

Fire and refuse vehicles will access the site from Streatham Drive or New North Road and service the development from within the curtilage of the site. Post and other services such as taxis and supermarket deliveries will be provided with a drop off point adjacent to the student reception and security office.

13.9 TRACKING ASSESSMENTS

AutoTrack assessments for a fire tender and large delivery vehicles have been undertaken to test the illustrative plan is feasible and the internal arrangements are adequate to accommodate service vehicles.

13.10 TRAVEL PLAN

No specific Travel Plan has been prepared for the development, however, the University’s Sustainable Travel Plan will apply to this site.

13.11 CHARGING POINTS

Electric charging points will be provided, details of the number and locations will form part of the reserved matters application.

14 ACCESS STATEMENT

This Access Statement accompanies an outline planning application with all matters reserved. The statement will be developed and expanded upon for any future detailed planning application. It will also inform the future developer in respect to the expectations relating to design and services under the Equality Act 2010.

The illustrative material accompanying the application explores solutions to accessibility that would comply with the parameter plans.

14.1 GUIDANCE

The guidance referred to in the production of this statement includes:

- Building Regulations Approved Document M: Access to and use of buildings – Volumes 1 and 2.
- BS8300-1:2018 Design of an accessible and inclusive built environment. External environment. Code of practice.
- BS8300-2:2018 Design of an accessible and inclusive built environment. Buildings. Code of practice
- Codes of Practices issued by Equality and Human Rights Commission (EHRC)

The University promote equality and diversity through policy and strategy. Relevant University guidance is as follows:

- University of Exeter Disability Policy Statement (March 2005) – ‘The University will maximise accessibility to its services and schools for disabled staff, students, alumni, visitors and prospective staff and students, and ensure that no-one is treated less favourably on the grounds of disability.’
- University of Exeter Action Plan – Equality and Diversity Action Plan.
- University of Exeter’s Equality, Diversity & Inclusivity Annual Report.

14.2 THE SERVICE PROVIDER

The service provider for this project is the University of Exeter.

The University of Exeter, in accordance with ‘service provider duties’ under the Equality Act are committed to inclusive design and accessibility for everyone, where reasonably possible, including learners, staff and visitors with a range of physical, sensory, cognitive and learning impairments.

14.3 ACCESS STRATEGY

The proposed accommodation will be purpose designed and fully accessible, complying with Part M of the Building Regulations and BS 8300. In order to help students make the right accommodation choice, the University’s Wellbeing Service advisors are on hand to help and give advice on which accommodation would best suit their needs.

14.4 ACCESS TO THE SITES

The Clydesdale and Birks Grange Village sites are located in the north west corner of the University of Exeter’s Streatham Campus. Clydesdale and Birks Grange Village sit in close proximity, separated by the Birks Bank Pinetum.

The Clydesdale site is steeply sloping, the natural gradient of the land is circa 1 in 6. The site contains student residences, tennis courts, car parking and Estate facilities that will be demolished as part of the development proposals.

The Birks Grange Village site sits at the bottom of Birks Bank (which has a gradient of 1 in 4.5). The Birks Grange Village contains student residences and associated facilities. The existing refectory will be demolished as part of these proposals and replaced with accommodation and associated facilities.

The Clydesdale site can only be accessed by vehicles from within the campus via Streatham Drive and Clydesdale Avenue. There are bus stops within the campus at Knightley and Queens Drive to the south of the Clydesdale site.

The Birks site has a vehicular access from New North Road to the west. A bus stop is located adjacent to the access to the Birks site.

St David’s train station is located circa 800m to the south of both sites.

There are good pedestrian links to the main campus facilities, affording access to bus stops, residential / teaching / administrative / ancillary facilities and secondary access routes. However, suitable wheelchair access connectivity to the main campus is limited due to the natural topography of the campus. All access roads and paths to the sites exceed the maximum gradients described within ‘Approved Document M: Access to and use of buildings’.

14.5 VEHICLE ACCESS AND PARKING

The University actively discourage students from bringing cars on to campus or the surrounding residential areas for the duration of their studies. Disabled students who are blue badge holders are entitled to a parking permit that will allow them to park on campus. Designated disabled parking bays are to be provided close to the principal building entrances for disabled students living in accessible bedrooms. Visitor disabled parking bays will be located adjacent to the reception.

The University of Exeter and their operational partners will be responsible for managing the use of the parking spaces.

Designated disabled parking bays will be created in accordance with best practice guidance within BS 8300.

14.6 MOVEMENT AROUND THE SITE

Once on site, level access will be provided to the principal entrance of all buildings. The parameter plans propose a central spine which would meet the definition of ‘level’ or ‘gently sloping’ within BS8300. In order to access the wider site, and to minimize the extent of ramps within the landscape, it would be possible to provide access using a limited number of lifts within communal spaces. There will be direct access to all non-residential facilities which are grouped around the central spine

Access routes across the site will be formed in accordance with best practice guidance (specifically BS 8300) inclusive of but not limited to:

- Ramped access routes where necessary and reasonable, along with stepped access where appropriate.
- The elimination of single steps.
- Use of non-slip/low slip surfaces.
- Visual/tactile contrast to ramp surfaces and landings.
- Contrasting nosings and handrails to steps.
- Tactile warning and drop kerbs.
- Sufficient lighting levels.
- Bollards, bins and street furniture located so as to prevent a hazard.
- Provision of seating in suitable positions, particularly to longer pedestrian routes.

14.7 APPROACH TO BUILDINGS

The approaches to the principal reception at lower ground floor is to be level from the parking area. All other areas will be approached from the central spine.

Access between the internal/external communal spaces at ground floor is to be level; in line with the BS 8300.

Where the natural topography of the site makes level routes impractical, a stepped approach is to be provided. Steps will be created in accordance with best practice guidance within BS 8300. An alternative accessible route will be provided using lifts in communal areas.

14.8 LIFTS

Lifts will be provided in accordance with current best practice guidance within BS 8300. Lift access will be limited to resident use only.

14.9 PROVISION OF WHEELCHAIR ACCESSIBLE RESIDENTIAL ACCOMMODATION

The University provides wheelchair accessible bedrooms on a campus-wide basis. Resources to provide accessibility are best spent on central campus rooms and the brief has been developed based on likely demand.

At detailed design stage the University will determine the number of rooms on the Clydesdale site which will be designed for those with a mobility impairment. The number of access rooms within the development will be considered in light of:

- The wider context of the University’s portfolio of existing residences.
- Works to the existing Birks Grange Village A-E.
- Distance, gradient and characteristics of the route to campus facilities.
- Historic data on disability amongst the user group.
- Anticipating future trends in demand.

Accessible bedrooms will be distributed evenly across the site and distributed amongst the proposed accommodation types. All accessible bedrooms will be located on the ground floor.

14.10 EMERGENCY EGRESS / FIRE

Evacuation and fire-fighting lifts will be determined by the fire strategy that accompanies the detailed planning application.

15 FIRE STATEMENT

The University of Exeter have developed Fire Prevention Guidelines for new projects, which are in excess of statutory requirements. These guidelines will apply to the Clydesdale and Birks Residences Project.

Most importantly the guidelines insist on sprinkler systems to all residential properties and that more than one means of vertical escape is provided in buildings over three storeys.

15.1 OBJECTIVE

The objective of the guidelines is to provide a project management process to ensure suitable fire preventive and protective measures are provided to mitigate the impact of fire, on all persons during the building design, construction and operational phases. The guidance applies to all campuses of the University of Exeter.

15.2 EXPECTATION

The University expects best practice when designing new buildings or altering existing buildings, to deliver a safer environment for all staff and students.

15.3 GUIDANCE

As the Client the University of Exeter considers the following as mandatory:

- All designs must provide suitable and effective fire preventive and protective measures to mitigate the impact of fire, on all persons who will feasibly occupy the building.
- All designs shall reflect ease of fire safety management. They will not propose complex or inappropriate measures for aesthetics or convenience, which require fire safety management controls on occupation, by the University.
- All fire strategies will be dynamic and shall reflect alterations to building design throughout the construction phase until completion.
- All designs will adopt a simultaneous evacuation strategy and provide a minimum of a Category L2 fire detection and alarm system (Category L1 for all residential buildings).
- All designs shall provide an inclusive means of escape that will be suitable for persons with assisted needs (a minimum width of 1200mm).
- All new external cladding systems and all elements of the cladding system (including render materials, insulation materials and any rain-screen cladding but not including elements such as gaskets, sealants or similar) must be non-combustible (or as a

minimum, materials of limited combustibility) and achieve European classification of Class A1 or A2. Regardless of building height or a property being non-sleeping accommodation.

- All new lifts will be designed to meet BS999 with suitable arrangements for the safe evacuation of all persons expected to use them, including persons with assisted needs.
- A sprinkler system to all floors must be installed in all new residential buildings, irrelevant of height.
- There will be more than one means of vertical escape (protected staircase) from any part of all new residential buildings which is more than three storeys in height.

15.4 PROHIBITED

As the Client the University of Exeter prohibits the following:

- Complex or inappropriate measures for aesthetics or convenience, which require fire safety management controls on occupation, by the University.

15.5 ASSURANCE

Project Managers are to successfully complete the Design Checklist and provide compliant plans & a suitable Fire Strategy before the construction phase begins.

16 CONCLUSIONS

The scheme proposals would provide managed student accommodation on a university campus in a sustainable location. They would replace outdated accommodation which no longer meets the expectations of students.

The proposals are of high quality and have benefited from comprehensive consultation and dialogue with planning officers and stakeholders, which has allowed the designs to be refined to address areas raised as concerns.

The proposals were prepared by an experienced and coordinated professional team.

The application is accompanied by a Landscape and Visual Appraisal (LVA) which has been used to thoroughly assess and visual effects from key distant views. The LVA has been used as a design tool to inform the design evolution of illustrative proposals and parameter plans.

The parameter plans, that would be determined in this application, have been thoroughly tested through the preparation of an illustrative scheme. This report makes recommendations for the reserved matters application to inform the detailed design stage of the project.

The proposals would achieve very high levels of environmental sustainability and significantly reduced carbon emissions. The proposals are set to be the largest student accommodation project to achieve Passivhaus certification and will be an exemplar project for the university sector.

The proposals will complement the wider University campus and its offer to potential students as an attractive, high quality, enhanced residential environment.