4.0 ALTERNATIVES & DESIGN EVOLUTION

Introduction

4.1 Regulation 18 of the EIA Regulations require an applicant to provide:

"a description of the reasonable alternatives studied by the developer, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the development on the environment".

4.2 Schedule 4 (2) is worded slightly differently and requires:

"A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects."

- 4.3 Alternative options typically comprise:
 - The 'do nothing' alternative, where the Development is not progressed;
 - Consideration of Alternative Locations or Uses; and
 - Consideration of Alternative Designs.

The 'do nothing' Alternative and the Consideration of Alternative Locations and Uses

The 'do nothing' Alternative

4.4 Under the 'do nothing' scenario, the Development would not be progressed. In this situation, the existing configuration of the Site would not make the most efficient use of the Site for the delivery of high quality housing. In addition, the beneficial and adverse effects outline in the ES relating to the Development would not occur. Therefore, this option has been discounted.

Consideration of Alternative Locations and Uses

- 4.5 The Applicant owns the Site and no alternative locations were considered.
- 4.6 As outlined in Chapter 1 Introduction of the ES, the Site forms part of a wider redevelopment

across the entire Richmond upon Thames College campus, which is the subject of an Outline Planning consent (ref: 15/3038/OUT (dated August 2016)) and includes a new secondary school, new main college building, STEM building and a technical hub. The Site makes up the identified 'Residential Development Zone' of this Outline Planning consent.

- 4.7 A subsequent reserved matters approval was granted by LBRuT in August 2019 for the: 'demolition of existing college buildings, removal of hardsurfacing, site clearance and groundworks together with the redevelopment of the site to provide 180 residential units together with associated parking for 160 vehicles, open space and landscaping. '(LBRuT ref: 18/4157/RES).
- 4.8 As set out in the formal description above, the reserved matters approval is for 180 residential units and this includes both houses and flats (45 x 1 bed, 81 x 2 bed, 36 x 3 bed and 18 x 4 bed). The proposed building heights are 3 storeys for the houses and a mixture of 4/5 storey blocks of flats. Proposed vehicle access to the consented reserved matters scheme is via a single vehicular access point from Marsh Farm Lane in the north-west corner of the site. The proposals include three separate but connected public open spaces in the centre of the site.
- 4.9 The Applicant now considers that the consented reserved matters scheme can be enhanced, and thus a new detailed planning application (supported by this ES) for the Development, has been submitted to LBRuT to do so. In comparison to the alternative reserved matters scheme, the Development has been designed to increase the number of affordable homes, improve the central landscaped area, include some zero carbon homes and improve the access arrangements consented as part of the reserved matters scheme (ref: 18/4157/RES). The Development also includes changes to the internal layouts of some of the homes, which is especially important following the Covid-19 pandemic and the emerging changes in working habits. Furthermore, no significant changes to the height and massing of the Outline planning consent (ref: 15/3038/OUT) are proposed.
- 4.10 The principle of the Development is to help to address local housing needs and optimise the potential of the Site, thereby creating long term affordable and high quality housing in LBRuT and new construction employment opportunities.

Consideration of Alternative Designs

4.11 The design of the Development has been guided by the following key social and environmental visions and objectives:

Social Vision

 To create a high quality neighbourhood that will be inclusive for all, adaptable to all stages of life and contribute towards a vibrant, healthy community.

Objectives

- To create inclusive, multi-generational spaces that offer equal opportunity to everyone;
- To include active spaces that improve personal wellbeing and enable residents to live a healthy lifestyle;
- To design spaces that are vibrant and interesting and promote a sense of pride and community stewardship; and
- To nurture the formation of a cohesive community through the design of social spaces that encourage frequent and informal interactions along with larger organised activities.

Environmental Vision

• Embrace a multi-layered environmental approach to create a diverse and resilient landscape that is healthier for the planet than the one it replaces.

Objectives

- To create external spaces that can adapt to the future pressures associated with climate change;
- To design external spaces and the routes between them that promote use of sustainable transport methods and make walking and cycling safe and enjoyable;
- To embrace the principles of sustainability in the specification and sourcing of materials with lower whole life carbon; and
- To include a variety of planting and habitat types to increase biodiversity within the site and improve urban greening and local green infrastructure.
- 4.12 Further detail on the key social and environmental visions and objectives is provided in the Design and Access Statement submitted with the planning application.

Consultation and Engagement

4.13 As set out in Chapter 2 EIA Methodology of the ES, the planning application is the culmination of an extensive design process which has involved extensive consultation with LBRuT, statutory consultees, the local community and other local stakeholders.

- 4.14 A number of methods of engagement have been applied to raise awareness of the Development with the local community and this has been fundamental to the evolution of the Development.
- 4.15 Letters were issued to notify residents of the key details of the proposals, the details of the project website, and dedicated email, telephone and postal addresses for contact/ feedback. Leaflets were also sent to a wide range of local stakeholder groups. Social and press media were also utilised to inform the public of the website and contact details. The project website has been dedicated to the consultation and engagement process. The website contained key information on the proposals, a pre-recorded presentation and detailed images.
- 4.16 The local community was invited to join three public exhibition webinars at the end of January 2021. Further targeted engagement was undertaken with the ward's Councillors, and local community groups, including the Friends of the River Crane Environment group (FORCE) and the Richmond College Development Group (REEC).
- 4.17 The Applicant has also engaged extensively with the LBRuT during the design process, through pre-application meetings undertaken with Officers in June and July 2020 and in February and March 2021. Urban Design and Housing officers were present during the preapplication process, and feedback was also received from the Council's transport officers.
- 4.18 The Development submitted for approval is the result of a thorough analysis of environmental constraints and opportunities, access issues and market demand. Consultation with LBRuT, the statutory consultees, the local community and other local stakeholders has been a key influence in design evolution. The consultation process has allowed the Development to evolve to suit their needs and ensure that the Applicant's objectives can be achieved.

Design Evolution

4.19 A number of changes have occurred over the course of the design evolution, which have included:

Blocks 1-4 & 5

• The 5th storey elements of Blocks 3 & 4 were stepped away from the northern boundary of the Site to reducing overlooking towards the College, whilst not impacting on

overshadowing;

- The internal layouts of many of the apartments in Blocks 1 5 were amended, including ground floor plans, to reorder proposed cycle stores such that each building had a designated cycle store for increased security;
- The design of Block 5 was developed to target a proportion of new dwellings Net Zero Carbon during operation;
- The proposed elevational treatment of the blocks were amended but this was in keeping with the original design intent of the Reserved Matters planning application consent (ref: 18/4157/RES); and
- Efficiencies in the typical plans allowed for an increased number of dwellings and thus contributed to the Applicants enhanced affordable housing offer.

Block 6 Footprint and Landscape

- The new building footprint of Block 6 was marginally increased with the addition of return elements to the building corners, in order to help enclose a new communal courtyard space to the rear of the block and to improve on back gardens abutting this edge;
- Deck access allowed for increased dual aspect apartments whilst offering opportunity for neighbourly interaction and surveillance over the shared gardens; and
- The Reserved Matters planning application consent (ref: 18/4157/RES) included a significant number of high value townhouses and the Applicant aimed to reduce the number of these, replacing them with more modest apartments offered as Shared Ownership.

Terrace Houses

- The design of the street scene was revised following the initial energy appraisal and pre application meetings with LBRuT, to increase the energy performance of the proposed houses and to deliver eight houses as Net Zero Carbon in operation; and
- Cycle stores, previously shown in rear gardens, were relocated to the front of the properties for easy access.

Wider Design Amendments

- The proposed ecological buffer to the north of the Development as well as the communal gardens and landscaping were enhanced, with the inclusion of a variety of planting and habitat types to increase biodiversity, following pre-application discussions with LBRuT;
- The road between Block 5 and Blocks 3 & 4 was removed to fully enclose and pedestrianise the communal gardens, thereby increasing the level of planting within the

Development; and

- Reliance on a gas heating system was removed and replaced by Air Source Heat Pumps (ASHP).
- 4.20 Table 4.1 below summarises the comparative environmental effects of the consented reserved matters scheme (Ref: 18/4157/RES) and the Development submitted for planning approval. Detailed assessments using EIA significance criteria were not undertaken by the technical consultants during the design evolution process. Therefore, the assessment in Table 4.1 is based on professional judgment and the iterative technical analysis for those disciplines dependent massing (townscape and visual). Assessment is made against the previous design alternative, demonstrating that effects are either comparable or less adverse with the iteration.

Table 4.1: Comparative Environmental Assessment

Technical Discipline	The Development (August 2021)
Townscape & Visual	Less adverse than the consented reserved matters scheme (refer to
Effects	Chapter 6 of this ES for detailed assessment of effects)
Transport & Access	Comparable effects to the consented reserved matters scheme
Air Quality	
Noise	