RICHMOND-UPON-THAMES COLLEGE REDEVELOPMENT

DESIGN CODE



REVISION NOTES

Prepared for Outline Planning Application submission.

Issued 2015.11.27

- References to accessible & adaptable and wheelchair housing updated to reflect optional Building Regulations Requirements M4(2) and M4(3) that came into effect in October 2015, and which have been adopted in updated GLA & LBRuT planning guidance - refer to sections 0.3, 1.3.27, 1.3.29 and 5.12.2.
- Section 1.3.27 corrected to read '...1-,2-,3- bedroom ...'.
- Section 2.2 (College Development Zone) updated to reflect the division of the old College Building Zone 2 into two separate building zones, and to add additional zonespecific design requirements.
- Section 2.4 (Schools Development Zone) updated to add additional zone specific design requirements.
- Section 2.5 (Residential Development Zone) updated to add zone specific design requirements, clarify requirements for dual aspect dwellings and to eliminate duplicate requirements referenced in section 5.12 (as revised).
- References to College Building Zone 2 updated where these now relate to the new College Building Zone 3 in sections 3.3.2, 3.3.6.4, 3.3.7.1-2, 3.3.7.4, 6.1.2 and diagrams 3.3.11-12, 3.5.12-13, 3.5.17.
- Cross references in Section 3.4 updated.
- References to solid/void ratio of residential streets added in order to provide a clear delineation between the street and private amenity spaces within the block, ensure adequate enclosure of the street, maximise active frontages, and retain potential for visual permeability where appropriate. Refer to sections 3.5.7.3, 3.5.8.3, 3.5.9.3, and 3.5.10.3
- Duplicate text in section 4.8 (Landscape Areas) removed.
- Section 5.1.2 updated to relocate residential-specific requirement to section 5.12 (as revised).
- Section 5.2 (Active Frontages) updated to clarify constrains limiting inactive frontages.
- Section 5.3 (Defensible Spaces) updated to ensure that private spaces do not encroach
 on areas of Public Realm.
- Section 5.5 (Building Height) reference to parameter plan corrected to read PL-05.
- Section 5.12 (Residential Standards) updated to clarify requirements relating to Accessible & Adaptable Housing; Wheelchair Housing; Blue Badge Parking; Minimum Unit Sizes; Cycle Parking; Air Circulation, Daylight & Sunlight (including ceiling heights); and the London Housing Design Guide.
- Diagrams 2.2.4, 2.2.6-7, 2.4.6, 2.5.3-8 updated to reflect revised parameter plan PL-06 A.
- Diagrams (now 3.3.16 and 3.3.17) renumbered to eliminate duplicate references.
- Caption to diagrams 4.4.1 and 4.5.1 updated for imporved consistency.
- Diagrams 2.2.2-3, 2.2.5, 2.2.8, 2.3.2-5, 2.4.2-5, 2.4.7-8, 2.5.2, 2.5.9-12, 2.6.2-3, 3.1.1, 3.3.1-2, 3.3.6, 3.3.9, 3.3.12, 3.3.14, 3.3.17, 3.4.1-2, 3.4.4, 3.4.8, 3.4.10, 3.4.12-13, 3.4.15, 3.4.20, 3.5.1-4, 3.5.9, 3.5.11-12, 3.5.14, 3.5.16, 3.5.19, 3.5.21, 4.1.1, 4.3.1, 4.3.3, 4.4.1, 4.5.1, 4.6.2, 4.7.1, 4.8.1 and keyplans to illustrative views updated to reflect revised parameter plan PL-17 A.
- Illustrative views in diagrams 3.3.7, 3.3.8, 3.3.10-11, 3.3.15-16, 3.4.3, 3.4.7, 3.4.9, 3.4.13-14, 3.4.18-19, 3.4.23, 3.5.3, 3.5.7-8, 3.5.12-13, 3.5.17-18, 3.5.22, 4.3.2, 4.6.1, 4.6.5, updated to reflect revised illustrative masterplan (primarily reduced building heights). Note Illustrative view in diagram 4.6.5 moved to reflect revised illustrative plan.
- Additional views of open spaces around Craneford Way Playing Fields added refer to diagrams 4.8.2-4.
- Glossary updated to reflect changes to accessible & adaptable and wheelchair housing, clarify the definitions of active frontages and rooftop plant, provide a definition of inactive frontages, and correct typographic errors.

FOREWORD

0.0 FOREWORD

This Foreword has been prepared to explain the various documents submitted with the *Outline Planning Application* being made by Richmond-upon-Thames College (*RuTC*) for the redevelopment of the existing College site at Egerton Road, Twickenham.

The Outline Planning Application includes a number of documents that are submitted for approval ('the *Primary Control Documents*'), whilst others will provide background, illustrative and supporting information ('the *Secondary Control Documents*'). These are submitted to assist the London Borough of Richmond (*LBRuT*) and Greater London Authority (*GLA*) to reach a decision on whether to grant consent for the proposed development.

This Foreword explains the relationship between the application documents and is included to help the planning authority, consultees, stakeholders and other interested parties navigate the planning application.

0.1 THE PRIMARY CONTROL DOCUMENTS

The Primary Control Documents comprise the following:

- (i) Site Location Plan, (PL-01) which identifies the extent of the Application Site (within which development is proposed) and the extent of land within the ownership of the Applicant.
- (ii) The Development Specification. This essentially sets out what is proposed in the outline planning application. It describes the principal components of the proposed development and defines the form and content of the outline planning application. This will then inform the assessment of effects of the proposed development during the various phases of its construction and when operating when the development is complete. It will also provide the framework within which applications for the approval of reserved matters for each element of the scheme will need to be sought.
- (iii) The Parameter Plans and the detailed access plans show how the proposed development can be accommodated on the site. Collectively they define:
- the extent of the proposed uses (the <u>Development Zones</u>);
- the extent and scale of the proposed buildings within these zones against allowable deviations/tolerances (the <u>Building Zones</u>);
- access arrangements to/from the site, and between the development and building zones; and
- the potential treatment of the spaces between these zones, buildings and accesses.
- (iv) The <u>Design Code</u> (this document) sets out what the proposed development is expected to look like. It sets out the general design principles for the proposed development. It provides a set of illustrated <u>design requirements</u>, which will inform the detail design and appearance of the both the buildings and landscape of the individual development zones

NOTES ON FORMATTING

Specialist terminology and defined terms are highlighted in *red italics* when they first appear in this document. Definitions of these terms can be found in the Glossary at the end of this document.

and the site as a whole. Although the Code is not meant to be prescriptive, it establishes a 'benchmark' for the future design of all aspects of the proposed development and against which applications for approval of reserved matter involving appearance will be assessed.

0.2 THE SECONDARY CONTROL DOCUMENTS

The following documents are also submitted in support the Primary Control Documents to provide information to help the planning authority determine the outline planning application. These Secondary Control Documents comprise:

- (i) Planning Statement prepared by CgMs Consulting which explains the relationship between the proposed development and the policies of the development plan. It also sets out why the proposed development is being promoted and what benefits are expected to flow from it.
- (ii) Design & Access Statement prepared by HOK explains the design evolution of the proposed development and is organised in three parts. The first part explains the context for the application, identifying constraints and opportunities that have informed the proposals. The following parts explain how the proposals have responded to and evolved from that contextual analysis to define the development parameters for which planning permission is sought. The final part of the Design & Access Statement explores one way (but, importantly, not the only way) in which the scheme might be delivered and includes an Illustrative Masterplan for the development.
- (iii) This Illustrative Masterplan (PL-17) is also submitted to demonstrate how a scheme of the scale proposed might fit within the parameters for which permission is being sought. It is not submitted for approval, but shows one way in which development of the type and scale proposed could comply with the Primary Control Documents referred to paragraph (iii) above;
- (iv) Environmental Statement and Non-Technical Summary prepared by Cascade Consulting, which presents the findings of the technical environmental assessments that have been undertaken to understand the likely significant environmental effects of the Proposed Development. These assessments are based on the Primary Control Documents referred to above, and, where appropriate, also test the Illustrative Masterplan. The ES takes account of the proposed variation in layout, scale and appearance of future development, and access arrangements as allowed for in the control documents and is based on the 'worst case scenarios' (which may vary from topic to topic).
- (v) Transport Assessment prepared by Transport Planning Practice (TPP);
- (vi) Energy Statement prepared by NDY;
- (vii) Sustainability Statement prepared by Cascade;
- (viii) Flood Risk Assessment prepared by ESI;
- (ix) Draft Heads of Terms for the Proposed Legal Agreement(s) prepared by the applicant; and
- (x) Statement of Community Involvement prepared by RuTC.

The information contained in these Secondary Control Documents does not form part of the development for which approval is sought, but has been submitted with the aim of assisting in the evaluation or the proposals. Where these documents make commitments and recommendations in order to make the proposed development acceptable and/or mitigate any unacceptable effects, it is clearly stated, along with the mechanism for securing the commitment (e.g. through a planning condition).

0.3 THE DESIGN CODE

The Design Code is structured to reflect the organisation of the redevelopment into development zones, whilst ensuring that the overall redevelopment forms a coherent, valuable and high quality addition to the context in which it will be situated.

The redeveloped site will be composed from a collection of places, each with their own distinct character. These places have been categorised into different sections for ease of understanding, specifically Development Zones (including Building Zones), Streets, and Open Spaces. Each section contains subsections on the types of places of that type. These subsections provide a context for each place and offer guidelines covering the topics relevant to that place.

Along with the sections identified above, there is a further section on Building Design Guidelines. This section covers specific issues, which, where relevant, any building in the redevelopment will be expected to comply with; including, for example, the scheme's compliance with Residential Standards, such as Building Regulations Requirements M4(2) and M4(3) (accessible & adaptable and wheel-chair user dwellings). The aim of this section is to ensure the built fabric of the redevelopment is of an appropriately high standard and that building design ensures a safe, attractive and successful Public Realm.

Finally, this document covers the topic of *Townscape* by highlighting the considerations which should be taken into account when viewing the scheme from sensitive locations within the vicinity. This *Townscape* assessment is explained in more detail in the supporting documents to this application.

A glossary of terms used is provided at the end of this document.

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SECTION 1 INTRODUCTION

1.1 SITE LOCATION

The redevelopment is located on the site of Richmond-upon-Thames College, in Twickenham, in the London Borough of Richmond-upon-Thames.

1.1.1 SITE LOCATION

The London Borough of Richmond-upon-Thames⁽¹⁾ is located in south-west London. The Borough forms part of outer London. The Borough is located to the south of Hounslow and Ealing, north of Kingston upon Thames, and to the west of Hammersmith & Fulham and Wandsworth. Heathrow Airport is to the west, and the flight paths to the airport pass over the borough.

The Redevelopment Site is located in Twickenham. Twickenham is a large suburban town 10 miles (16 km) south-west of central London. It is the administrative headquarters of the Borough and one of the locally important district centres identified in the London Plan. Twickenham has two Rugby stadia: Twickenham Stadium, the home of English Rugby & the RFU, and Twickenham Stoop, the home of London Harlequins RFC.

Twickenham is also the home of Richmond-upon-Thames College⁽²⁾, the redevelopment site. The College is located to the north-west of Twickenham town centre and rail station, and occupies a site divided into two adjacent plots, which for the purposes of this report are labelled the *Main Site* and the *Playing Fields Site*.

The Main Site is approximately 58,750m² or 14.5 acres (5.9 hectares). It is a splayed rectangular shape, roughly 330m north-south, tapering from c.240m wide in the north to c.180m in the south. The site is divided by a private road into northern (roughly 1/3 of the area) and southern sections (roughly 2/3). The northern section is occupied by a 4 court sports hall with associated facilities, a grass sports pitch, and a car park in the north-east corner. The southern section of the Main Site is occupied by a disorganised collection of buildings housing the College's academic and workshop facilities. The Main Site is largely level.

The Playing Fields Site is approximately 26,700m² (6.6 acres / 2.7 hectares) in area, designated as *Metropolitan Open Land (MOL)*. It is broadly rectangular in shape, bent across the centre of the site, approximately 240mx160m, and is bounded to the south by a strip of Environment Agency (EA) land adjoining the River Crane, to the west by a right-of-way that crosses the River Crane, to the north by Craneford Way (a public road), and to the east by private housing. The site is open and slopes gently towards the southern end. The southern half of the playing field site lies within a designated flood zone.

To the east of the College is an existing residential neighbourhood known as the Heatham Estate. To the west of the Main Site is the *Harlequins Site*, through which the main vehicular access to the educational redevelopment is proposed via Langhorn Drive, an *unadopted road*. To the south of playing fields, across the River Crane, is an area of scrubland known as Twickenham Rough.



DIAGRAM 1.1.1
LOCATION OF THE BOROUGH WITHIN
GREATER LONDON

Source: Open Street Map

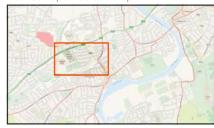


DIAGRAM 1.1.2 LOCATION OF TWICKENHAM WITH THE BOROUGH

Source: Open Street Map



DIAGRAM 1.1.3 LOCATION OF THE COLLEGE WITHIN TWICKENHAM

Copyright: Google, Bluesky

- 1. The London Borough of Richmondupon-Thames is abbreviated in this report as "the Borough" or as "LBRuT".
- 2. Richmond-upon-Thames College is abbreviated in this report as "the College" or as "RuTC".

1.2 PURPOSE

This document is intended to establish a design standard for the Masterplan and provide a robust framework for its development to ensure a high quality and contextually appropriate development.

1.2.1 PURPOSE OF THE CODE

This document sets out a series of Design Guidelines that any future Reserved Matters Applications should follow unless there is a good and justified reason to depart from them.

The *Masterplan* has been developed to establish discreet and distinct Development Zones which are defined in the Parameter Plans that constitute part of the Outline Planning Application. It is intended that each of these Development Zones should be able to be submitted separately for Reserved Matters applications and that Planning Obligations should be specific to individual Development Zones.

Within each Development Zone a single Building Zone or multiple Building Zones have been identified. These should provide the edges and definition to the Open Spaces within the redevelopment.

The Masterplan places importance on the Open Spaces or *Places* that are to be created, including streets & paths, *school grounds*, and both *communal* and *private* open spaces, rather than only the individual buildings that enclose them.

Consequently, a Reserved Matters Application for the design of buildings and open spaces within a Development Zone in the Masterplan (within the Specified Parameters) would need to demonstrate how their design approach meets the Design Guidelines set out for that specific Development or Building Zone as well as for the places surrounding it. In particular, development of any part of the Richmond Education and Enterprise Campus Site (REEC Site), which is formed of the College, Tech Hub and Schools Development Zones, should be designed with regards to the other parts.

The Design Code therefore provides detail and definition for each type of place within the Masterplan. The Guidelines for each place are intended to provide guidance for future design teams, to ensure the overriding design philosophy is followed, whilst allowing sufficient flexibility to encourage variety and richness within the Proposed Development. They should not inhibit creativity but instead establish a platform from which to begin a detailed design.

1.2.2 THE ILLUSTRATIVE SCHEME

In order to test and validate the Outline Planning Application, an Illustrative Scheme has been produced. This scheme provides a vehicle for examining the architectural, environmental, technological, operational and social implications

of the project. It remains schematic but it conforms to the rules as defined in the Development Specification, Parameter Plans and Design Code. It has been essential in testing these Design Parameters. The Illustrative Scheme is not a design template; it represents one possible way the principles as defined in the above listed documents could be interpreted/achieved and developed into a design.

This Illustrative Scheme has been used to generate the images and diagrams for the Design Code. Additional abstract illustrations are provided to illustrate Design Guidelines.

1.2.3 DEMONSTRATING COMPLIANCE

With each Reserved Matters application that follows the approval of the Outline Planning Application, the designers should demonstrate how their proposals are 'compliant' with the Parameter Plans and the Design Code. This should take the form of a Design Compliance Statement.

As the Design Code is intended to act as guidance to ensure a high minimum standard for the redevelopment, the intention is that each Reserved Matters Application should set out to meet all the relevant key points within the Design Code that are applicable to the proposals contained within that application.

It is however recognised that there may occasionally be instances where there is a good and justified reason to depart from one or more of the guidelines in this document. In particular, it is not the intention of the Design Code to limit the quality of the redevelopment or constrain alternative means of ensuring a high quality redevelopment that is compliant with relevant policies. In these instances, a clear and robust justification should be made for the reasons, suitability and benefit of deviation from the guidance enclosed in this document. This justification should be put forward for reasonable consideration and acceptance by the Local Planning Authority.

1.3 PRINCIPLES

The following key principles reflect an understanding of the site's context, express the vision of the proposed redevelopment, and establish a framework that should enable the successful redevelopment of the site as a series of places with a distinct and valuable character.

1.3.1 OPEN SPACE NETWORK

The redevelopment should reflect and reinforce the existing open space network around the site, and in particular the series of parks, natural areas and other open spaces along the River Crane.

Refer to diagram 1.3.1 for illustration of the open space network in the area. Detailed guidance on residential open spaces is provided in section 4.6 and 4.7.

1.3.2 RESIDENTIAL CONTEXT

The Residential Site should be located to reflect the existing residential context, and should be planned to integrate potential future developments and existing context into a coherent whole.

Refer to diagram 1.3.2 for illustration of the existing residential context and potential for new residential areas on the site to improve the coherence of the existing context.

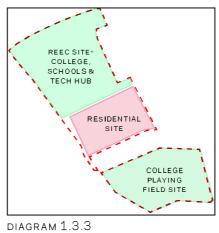
1.3.3 DISTINCT IDENTITIES & ACCESS

The redevelopment should provide distinct areas for the REEC Site and the Residential Site. These two parts of the redevelopment should be separated with a clear division and enable separate and easily managed access to all parts of the site in accordance with the Access Principles in sections 1.3.7-1.3.10.

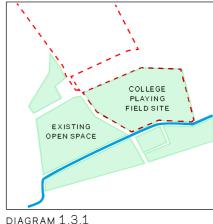
Refer to diagram 1.3.3 for illustration of the overall redevelopment masterplan. A detailed illustrative masterplan is provided as part of the application as a separate document.

1.3.4 PHASED REDEVELOPMENT

The parts of the redevelopment site that can readily accommodate redevelopment should be used to provide the initial phase of construction for the College, Secondary and SEN Schools. Phasing should ensure that the College is able to continue operating successfully throughout the redevelopment.



OVERALL SITE MASTERPLAN



OPEN SPACE NETWORK

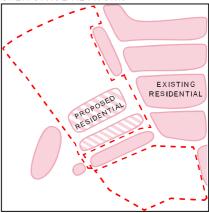


diagram 1.3.2

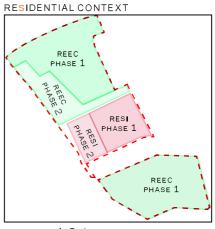


DIAGRAM 1.3.4
PHASED REDEVELOPMENT

While the educational and residential redevelopments may be phased, they should provide a coherent site when they are completed.

Refer to diagram 1.3.4 for illustration of the areas of the phases of the redevelopment. Detail on the intended project phasing, and potential variations, is provided in the Development Specification.

1.3.5 UPGRADE MARSH FARM LANE

The redevelopment should provide an important benefit to the wider community through improvements and widening of the existing pedestrian and cycle route along Marsh Farm Lane. The benefit of this upgraded route should be maximised by encouraging its use to provide pedestrian and cycle access to the site.

Where the pedestrian route crosses vehicular routes, pedestrian use should be prioritised and made explicit through the design and construction of the crossing. Where the route connects to other proposed local transportation upgrades it should be designed to accommodate these upgrades.

Refer to diagram 1.3.5 for illustration of the location of the upgraded Marsh Farm Lane. For detailed guidance on Marsh Farm Lane refer to section 3.3 of this document.

1.3.6 RESPECT THE EXISTING STREET PATTERN

New streets on the Redevelopment Site should be designed to reflect the scale and geometry of the existing street network, and their character should support and integrate the redevelopment into the existing urban grain.

Refer to diagram 1.3.6 for illustration of potential extensions to the existing street network. For detailed guidance refer to section 3.5 of this document.

1.3.7 RESIDENTIAL ACCESS

The residential site should be provided with vehicular access via the A316 to minimise the impact of the redevelopment on the Heatham Estate.

Pedestrian and cycle access to and across the Residential Site should be encouraged, and should be designed to integrate the new residential area with the existing neighbourhood, and maximise the benefit of improved connections to the town centre.

Refer to diagram 1.3.7 for illustration of access to the residential site. Detailed access proposals are provided as separate documents.

1.3.8 COLLEGE & TECH HUB ACCESS

Pedestrian and cycle access to the College via the upgraded Marsh Farm Lane should be encouraged and prioritised. Pedestrian links to the College on the redevelopment site should be provided as part of the College redevelopment.

Vehicular access to the College and Tech Hub should be off the A316 via Langhorn Drive, to minimise the impact of the redevelopment on the Heatham Estate.

Refer to diagram 1.3.8 for illustration of access to the College and Tech Hub sites. Detailed access proposals are provided as separate documents.



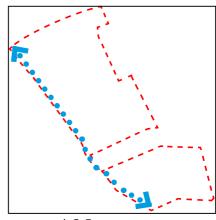


DIAGRAM 1.3.5

UPGRADE MARSH FARM LANE

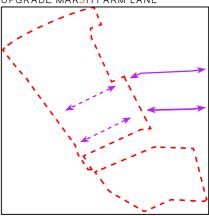


diagram 1.3.6

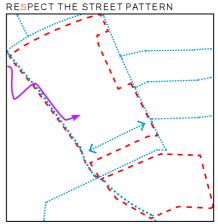


diagram 1.3.7

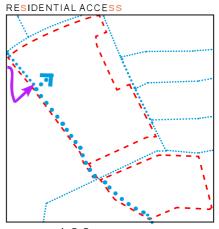


DIAGRAM 1.3.8

COLLEGE & TECH HUB ACCESS

1.3.9 SECONDARY SCHOOL ACCESS

Pedestrian and cycle access to the Secondary School should be via a distributed network of routes reflecting the local population that the school is intended to serve. Pedestrian and cycle access should be encouraged and prioritised.

Vehicular access to the Secondary School should be primarily off the A316 via the Northern Part of Egerton Road, to minimise the impact of the redevelopment on the Heatham Estate. A barrier on Egerton Road preventing shortcutting through the Heatham Estate should be retained.

Refer to diagram 1.3.9 for illustration of access to the secondary school. Detailed access proposals are provided as separate documents.

1.3.10 SEN SCHOOL ACCESS

Pedestrian and cycle access to the SEN School will - by nature of the school's population - be limited. Nevertheless, pedestrian and cycle access should be encouraged and prioritised.

Vehicular access to the SEN School should be through the Heatham Estate.

Refer to diagram 1.3.10 for illustration of access to the SEN school. Detailed access proposals are provided as separate documents.

1.3.11 RELOCATE EXISTING RIGHT-OF-WAY

The existing right-of-way that crosses the site should be re-routed to allow for a coherent campus to be designed.

Refer to diagram 1.3.11 for illustration of the relocated right-of-way. Detailed guidance on the cross-site right-of-way is provided in section 3.5 of this document.

1.3.12 A COHESIVE WHOLE

The design of the REEC Site should form a cohesive whole, with a coherent and unified look and feel. This should be apparent in the design of the buildings and open spaces, as well as in the elements which make them up, such as street furniture and signage. This should be reinforced by the provision of safe connections between the different parts of the REEC Site and managed sharing of facilities.

1.3.13 CENTRAL EDUCATION AREA

The College and the Schools should be organised around a central and secure open space. This area should provide the majority of their outdoor educational, recreational and social spaces and serve as an important interface between the Schools and the College. The design of the central area should be vibrant and characterful, should promote coherence between the different parts of the space, and should manifest a sense of being part of a common educational campus. It should contain areas for play as well as areas of a landscape garden character.

The central education area should accommodate adequate areas for each of the College and the Schools, in a manner that enables managed sharing of spaces, provides a safe and comfortable environment and ensures safeguarding principles are delivered. Where boundaries within the space are required for practical and safeguarding reasons, these should be designed to be attractive and discreet; they should exploit functional separations, landscaping and managed spaces to

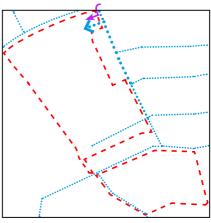


diagram 1.3.9

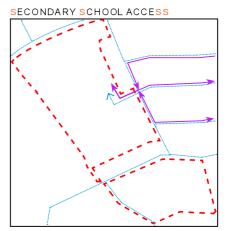
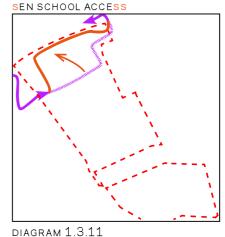


diagram 1.3.10



RELOCATE THE RIGHT-OF-WAY

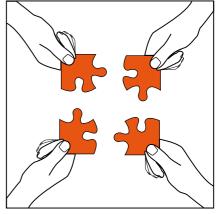


DIAGRAM 1.3.12

MAKE A COHESIVE WHOLE

create edges; and they should avoid creating a sense of division between the Colleges and Schools.

Refer to diagram 1.3.13 for illustration of the central education area. Detailed guidance on the central education area is provided in section 4 of this document.

1.3.14 CAMPUS OF BUILDINGS

The buildings of the College and Schools should enclose their shared open space, in order to provide it with definition, shelter and security. This enclosure should shelter the open spaces from external sources of noise and pollution, in particular from the A316. Similarly, this enclosure should shelter residential neighbours from the noises of the College and School sites.

Refer to diagram 1.3.14 for illustration of a campus of buildings related to each other and enclosing the shared central space. Detailed guidance on buildings is provided in section 5 of this document.

1.3.15 LANDMARK LOCATIONS

The importance of those parts of the redevelopment that will be key landmarks in their context should be reflected in their design. Buildings and parts of buildings that are prominent in views and will serve to aid in wayfinding and in the creation of meaningful places should be designed to reflect their importance. *Landmark* buildings (or parts of buildings) in suitable locations should be permitted to be taller than their general context where this would support their role as landmarks.

Refer to diagram 1.3.15 for illustration of prominent locations that would be suitable for landmark buildings. Detailed guidance on landmark buildings (or parts of buildings) is provided in section 5.11 of this document.

1.3.16 ENTRANCE AREAS

Each of the College, Secondary School and SEN School should be provided with an entrance area appropriate to their use, location and importance within their context. These spaces should welcome students and visitors, act as a bridge between the public and private spaces of the campus, and provide an expression of the College or School from the public realm. As befits the intended ties between the Tech Hub and College, these organisations should share their entrance area. Where vehicular access points cross, or are in proximity to entrance areas, pedestrian use should be prioritised and made explicit through the design and construction of the area.

Refer to diagram 1.3.16 for illustration of the location of entrance areas for the College, Tech Hub and Schools. Detailed guidance on entrance areas is provided in section 4.3 of this document.

1.3.17 CAR PARKING AREAS

Car Parking for the REEC Site should be located around the perimeter of the site. Car parking should be dispersed so as to avoid the creation of large areas of tarmac, and ensure that car parking does not dominate the Public Realm.

The amount of car parking on the REEC Site that is accessible from Egerton Road should be no more than 30 spaces to reduce the impact of the education site on the Heatham Estate. Parking on the residential site should be provided in accordance with prevailing planning guidance. It should be provided as a combination

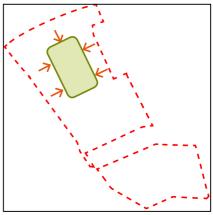


DIAGRAM 1.3.13
PROVIDE A SHARED CENTRAL AREA

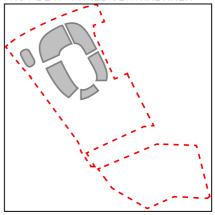


diagram 1.3.14

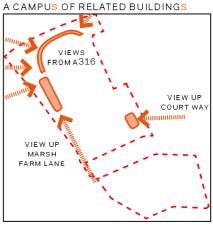


DIAGRAM 1.3.15
PROVIDE MEANINGFUL LANDMARKS

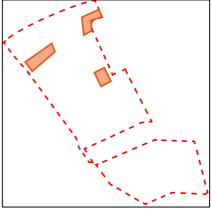


DIAGRAM 1.3.16
PROVIDE SEPARATE ENTRANCE AREAS

of on and off-street parking and may include below-ground or undercroft car parking.

Refer to diagram 1.3.17 for illustration of the location of car parking areas for the College, Tech Hub and Schools. Detailed guidance on car parking areas is provided in section 3.6 of this document.

1.3.18 SPORTS PITCHES

Sports Pitches should be provided on the Schools Site and on the College Playing Field Site, and should represent a net improvement of provision compared to the currently available facilities. The College Playing Fields should provide at least two pitches (at least one of which should be all-weather and porous), constructed to a high standard, properly-oriented and designed in sympathy with their surroundings. In order to maximise community benefit, sports pitches should be designed and located in a manner that supports managed access outside of school/college hours.

To prevent potential harmful impacts on habitat, no flood lighting should be provided to the sports pitches on the College Playing Field Site. To minimise nuisance impacts, any floodlit sports pitches on the Schools Site should be sheltered from existing residential properties.

Refer to diagram 1.3.18 for illustration of the location of sports pitches. Detailed guidance on Sports Pitches is provided in section 4.10 of this document.

1.3.19 PROTECT PROMINENT & HEALTHY TREES

Existing trees and habitat areas should be retained and protected particularly where these are healthy and form an important and valuable part of the existing environment. In particular the mature row of trees along the A316, along Egerton Road and the habitat areas along the River Crane should be protected.

Refer to diagram 1.3.19 for illustration of the location of prominent and healthy trees in the redevelopment that should be retained. Detailed guidance on trees & habitat areas is provided in section 4.9 of this document.

1.3.20 SOFT EDGES & MANAGED BOUNDARIES

The perimeters of the redevelopment should be designed to be attractive where overlooked and should accommodate activities appropriate to their location. Where practical, these areas should provide native-species rich habitat areas (such as hedgerows), and should be linked up to create habitat corridors where possible.

Where the edges of the redevelopment border onto existing private gardens, soft edges should provide a buffer to protect the security and amenity those gardens provide. Preference should be given to locating private gardens where the residential site borders onto existing private gardens.

Refer to diagram 1.3.20 for illustration of the locations of soft landscape areas to be provided to the redevelopment. Detailed guidance on Perimeter Education Site Areas is provided in section 4.4 of this document, while for Private Gardens refer to section 4.7. Detailed guidance on other Landscape Areas is provided in section 4.8.

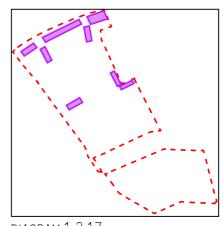


DIAGRAM 1.3.17
CAR PARKING AROUND PERIMETER

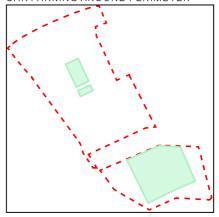


DIAGRAM 1.3.18
SPORTS PITCH LOCATIONS

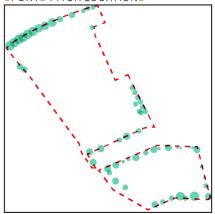


DIAGRAM 1.3.19
RETAIN PROMINENT & HEALTHY TREES

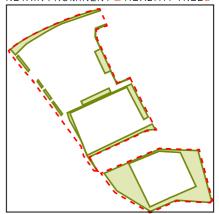


DIAGRAM 1.3.20
PROVIDE SOFT EDGES

1.3.21 SHARED AMENITY AREAS

The residential redevelopment should include Shared Amenity Areas that should form an important contribution to the existing open space network, in addition to any Private Amenity Spaces that are provided. These shared ares should provide playspaces for children and young people that exceed the GLA's minimum requirements, and should be easily accessed from all parts of the residential development. Insofar as is practical, these spaces should be accessible from the majority of dwellings (and in particular those without private gardens), without crossing roadways, and should be designed to be attractive, secure and to encourage a sense of ownership amongst residents.

Refer to diagram 1.3.21 for illustration of the shared residential area. Detailed guidance on the shared amenity area is provided in section 4.6 of this document.

1.3.22 INCREASE TOTAL OPEN SPACE

The redevelopment should increase the total amount of open space on the site.

Refer to diagram 1.3.22 for illustration of the proposed increase in open space.

1.3.23 MINIMISE CAR PARKING

The redevelopment should promote sustainable forms of transport and reduce car parking on the REEC Site. This should include the implementation of Green Travel Plans. Total Car Parking for educational uses should be reduced from current levels, as illustrated in diagram 1.3.23.

Parking for the residential site should be provided in accordance with the relevant LBRuT and GLA standards, balancing the goals of minimising area dedicated to cars with the need to provide adequate levels of car parking. The residential development should not increase demand for on-street parking in the Heatham Estate

1.3.24 DESIGN PLACES

The redevelopment should prevent the design of individual buildings in isolation, as this can lead to the creation of incoherent, confusing, unattractive and unsafe places. Instead buildings should be designed to create and define coherent and meaningful places and ensure an attractive, amenable and safe public realm. Diagram 1.3.24 illustrates the difference in these two approaches.

Therefore, the designers of individual parts of the masterplan should consider the relationship of that part to the rest of the masterplan and in particular the role their building can play in supporting the character of the open spaces adjacent to their building and the ways that the landscape can respond to and enhance the use of the adjoining buildings.

To secure this goal, this Design Code is organised around the proposed external spaces and defines the requirements that the designers of these spaces, as well as buildings fronting onto these spaces will be expected to achieve. Reserved Matters Applications should show how their proposals comply with the Design Guidelines for their part of the masterplan as well as for the places surrounding it.

1.3.25 CONTEXTUAL BUILDING HEIGHTS

Buildings should be sensitive to their context, and building heights should be lower where they are near existing or approved buildings that are lower and higher

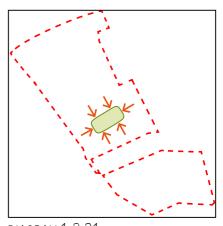


DIAGRAM 1.3.21
PROVIDE SHARED AMENITY AREAS

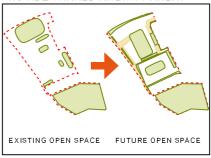


DIAGRAM 1.3.22
INCREASE TOTAL OPEN SPACE

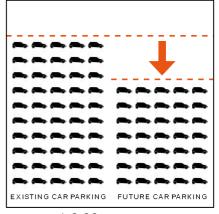


DIAGRAM 1.3.23
REDUCE CAR PARKING FOR EDUCATION



DIAGRAM 1.3.24

DESIGN SHOULD NOT BE IN ISOLATION

where they are near existing or approved buildings that are higher. As building heights increase from south to north and east to west in the existing context, new buildings should conform to this general pattern, as illustrated in diagram 1.3.25.

Building heights should also be appropriate to the scale of new spaces which they will adjoin to ensure that these spaces are well defined and that the buildings support the character and use of the spaces they enclose. Building heights should rise to a maximum of five storeys, in accordance with site's adopted planning brief.

1.3.26 ACTIVE FRONTAGES

The redevelopment should engage with the public realm to encourage activity and promote security. Where practical this should include public and private spill out spaces and activities, as well as views in and out of buildings and outdoor spaces where appropriate, as illustrated in diagram 1.3.26.

Guidance on suitable locations for active frontages is provided in section 2, whilst specific design guidance on active frontages is provided in section 5.2 of this document.

1.3.27 A RANGE OF HOUSING TYPES

The residential redevelopment should provide a mix of dwelling types, sizes and tenures, including:

- Homes, Flats, and Maisonettes;
- A mix of 1-, 2-, 3- bedroom and larger dwellings;
- Market, Intermediate, and Social Rent Housing;
- Accessible and adaptable dwellings & Wheelchair user dwellings offering a choice of size, aspect and floor level.

Detail on housing mix and tenure is included in the Development Specification.

1.3.28 SUSTAINABLE DESIGN & CONSTRUCTION

A sustainable approach to the design, construction and production of all facilities should deliver a cost-effective and resource-efficient redevelopment that:

- Optimises passive design measures, including Fabric First principles;
- Minimises the use of resources;
- Minimises the demand for energy and water use;
- Minimises waste and emissions;
- Allows opportunities for recycling during the Works Period;
- Optimises the use of low-energy solutions and be designed and constructed to respond
 to specific site constraints and opportunities, and to the future impact of climate
 change;
- Provides effective measuring and monitoring of the performance of the buildings in operation:
- Includes operational plans that record all targets for the key aspects of environmental performance;
- Includes assessment against BREEAM criteria, or an approved alternative environmental
 assessment standard such as Passivhaus or LEED. If BREEAM rating are used the aim
 should be to achieve a rating of "very good" or better. If alternative standards are used,
 these should ensure a standard equivalent to or better than BREEAM "very good".
- For the residential development, achieves or exceeds the sustainability (including energy, water and materials efficiency) standards identified in the Mayor of London's Housing Strategy.

Guidance on sustainability is incorporated throughout this document.

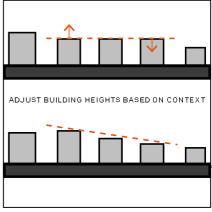


DIAGRAM 1.3.25

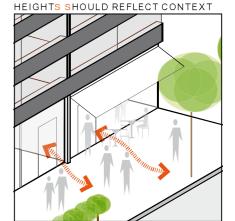


diagram 1.3.26

INCLUDE ACTIVE FRONTAGES

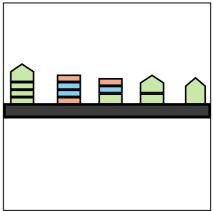


diagram 1.3.27

PROVIDE A RANGE OF HOUSING TYPES



DIAGRAM 1.3.28
DESIGN SUSTAINABLY

1.3.29 INCLUSIVE DESIGN

All areas of the redevelopment - including buildings and both public and private open areas - should be designed to maximise access through and to all parts of the redevelopment, its facilities and services for people who are residents, visitors, students and members of staff regardless of disability and as required by local, regional and national policy:

- To ensure that required standards for accessibility are met and as part of mainstream Inclusive Design wherever possible;
- To design inclusively, which means designing beyond the minimum requirements of the Building Regulations Part M and Part K to ensure that all people, regardless of age, sex or ability can use and enjoy the built environment;
- To address the anticipated, substantial increase of older people in proportion to the working-age population and their future needs;
- To meet the aims of the Equality Act (2010) where applicable;
- To follow design guidance given in relevant British Standards and other currently published good practice guidance about meeting the needs of disabled people and Inclusive Design; and
- To address the principles relating to Accessible and Adaptable Dwellings, Wheelchair User Dwellings and the GLA's Accessible London SPG; including relevant future alterations

Guidance on accessibility is incorporated throughout this document.

1.3.30 SAFETY & SECURITY

The redevelopment should be safe and secure, and should 'design-out' crime. Streets and paths should be designed to ensure safety of pedestrians, cyclists and vehicle users.

Safety should be promoted through the creation of readily supervised and secure places that encourage ownership and use by those they are intended for and that are easily supervised, well managed and maintained. The use of defensive furniture and structures should be minimised.

The design of roads and paths should ensure safety for all users through the separation of users, the provision of pedestrian and cycle priority at junctions, and the use of design strategies that ensure slow speeds and good visibility.

Guidance on safety & security is incorporated throughout this document.

1.3.31 DESIGN QUALITY

The built fabric of the redevelopment should be of an appropriately high standard and building design should ensure a safe, attractive and successful Public Realm. The Public Realm, private spaces and buildings in the redevelopment should be appropriate to their context and intended use, and should provide a meaningful contribution to the location within which they are situated. The redevelopment should be vibrant and characterful and should seek to maximise benefits of the redevelopment.

To secure this goal, this Design Code provides definition of the parts of the development (section 2), as well as detailed guidance on streets & paths (section 3), open spaces (section 4) and buildings (section 5).



DIAGRAM 1.3.29
PROMOTE INCLUSIVITY

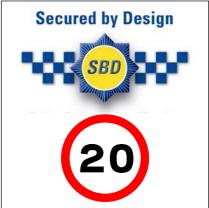


DIAGRAM 1.3.30
PROMOTE SAFETY THROUGH DESIGN

SECTION 2	DEVELOPMENT ZONES

2.1 SITE OVERVIEW

This planning application divides the site into a series of Development Zones.

2.1.1 DEVELOPMENT ZONES

The site is divided into the following five Development Zones:

- 1. College Development Zone
- 2. Tech Hub Development Zone
- 3. Schools Development Zone
- 4. Residential Development Zone
- 5. College Playing Fields Development Zone

The extent of each of these zones is identified on the Development Zones Parameter Plan PL-03, as reproduced in diagram 2.1.1.

These Development Zones are discussed in detail in sections 2.2-2.7.

The College Playing Fields Development Zone is occasionally referred to as the Playing Fields Site. The area of the first 4 Development Zones are collectively referred to as the Main Site. The Main Site is subdivided into two areas: the *Residential Site* (which matches the Residential Development Zone) and the Richmond Education and Enterprise Campus Site or *REEC Site* (which contains the College, Tech Hub, and Schools Development Zones).

2.1.2 PARAMETER PLANS

These Development Zones' Parameters are defined in Parameter Plans as follows:

- 1. College Development Zone (PL-07, PL-08)
- 2. Tech Hub Development Zone (PL-09, PL-10)
- 3. Schools Development Zone (PL-11, PL-12)
- 4. Residential Development Zone (PL-13, PL-14, PL-15)
- 5. College Playing Fields Development Zone PL-16

Detail on these Parameters is provided in sections 2.2-2.8.

2.1.3 BUILDING ZONES

Each of these Development Zones include areas where buildings can be located. These are termed Building Zones. These are defined in Parameter Plans (PL-07, PL-09, PL-11 and PL-13) via a series coordinates (*northings* & eastings), with key setbacks are indicated in Parameter Plan PL-04. Additional detail on these Building Zones is provided in sections 2.2-2.7.



DIAGRAM 2.1.1
DEVELOPMENT ZONES



2.2 COLLEGE DEVELOPMENT ZONE

The College Development Zone incorporates a number of key features, including parameters specific to this zone.

2.2.1 LOCATION

The College Development Zone occupies the majority of the north-western area of the Main Site.

2.2.2 ACCESS

The College site should be provided with access via the A316 in order to minimise impacts on the existing neighbourhood, in accordance with the policy set out in the *RuTC Planning Brief SPG*. Access is illustrated in diagram 2.2.2, whilst Streets and Paths in the redevelopment are defined in detail in section 3 of this document.

2.2.2.1 PEDESTRIAN & CYCLE ACCESS

Pedestrian and cycle access to the College Development Zone should be possible from a number of directions via the A316 and Marsh Farm Lane.

Pedestrian and cycle access to the College Site should be encouraged, and should be designed to maximise the benefit of improved connections to the town centre, particularly via Marsh Farm Lane and the new footpath through Twickenham Rough to the Rail Station and Town Centre being delivered by unrelated projects.

2.2.2.2 VEHICULAR ACCESS

The College Development Zone should incorporate access connections onto the site from the A316 via Langhorn Drive as shown in Parameter Plan PL-02. This connection should provide access to the College, Tech Hub and Schools Development Zones. This connection should link up to the Cross-Site Right-of-Way and to those parts of Marsh Farm Lane with limited vehicular access.

2.2.3 EXTERNAL AREAS

2.2.3.1 ENTRANCE AREA

The College should be provided with a generous entrance plaza to serve as both a place of arrival on the College site and as the principal gathering place for the College. It should be designed as a pedestrian priority predominantly hard-surfaced area with high-quality surfaces and street furniture appropriate to its important position as an extension of the Public Realm. Design Guidance on this area is provided in section 4.3. This area is illustrated in diagram 2.2.3.

2.2.3.2 GARDEN AREA

The College Development Zone should incorporate a secure educational open space with a landscape garden character, as illustrated in diagram 2.2.3. Design Guidance on this areas is provided in section 4.4.



COLLEGE DEVELOPMENT ZONE

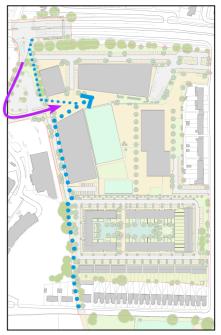


DIAGRAM 2.2.2
ACCESS



2.2.3.3 LANDSCAPE / HABITAT AREA

The College Development Zone should incorporate a landscape area along the A316, in particular to protect the existing row of mature trees in this location, as illustrated in diagram 2.2.3. Design Guidance on this area is provided in sections 4.8 & 4.9.

2.2.3.4 MARSH FARM LANE

The College Development Zone should include the entirety Marsh Farm Lane (north of Craneford Way) and its associated landscaping, excepting the stretch of the lane that is in the Tech Hub Development Zone. Design Guidance on this area is provided in section 3.3. Marsh Farm Lane is illustrated in diagram 2.2.4.

2.2.3.5 CROSS-SITE RIGHT-OF-WAY

The College Development Zone should incorporate an east-west vehicular connection across the site providing the main vehicular access to the REEC Site as well as a second means of egress from the Harlequins Site, as illustrated in diagram 2.2.4. Design Guidance on this area is provided in section 3.4.

2.2.3.6 SERVICE ACCESS & DELIVERY AREA

The College Development Zone should incorporate a *Service Area* for the College and Schools sites, as well as access to a separate area for the Tech Hub. These areas should be accessed off of the Cross-Site Right-of-Way. Design Guidance on these areas is provided in section 3.2. These are illustrated in diagram 2.2.4.

2.2.3.7 CAR PARKING

The College Development Zone may incorporate several areas of car parking. These should be accessed from the A316, and should be provided to the north and north-west of the College Buildings. An additional car parking area may be provided to the south of College Building Zone 3. In total, the College should have no more than 150 car parking places, including 8 accessible spaces and 1 minibus parking places. Design Guidance on these areas is provided in section 3.6. These areas are illustrated in diagram 2.2.5.

2.2.4 BUILDING ZONES

The College Development Zone incorporates three Building Zones, as illustrated in diagram 2.2.6. These are defined in Parameter Plan PL-07, with key setbacks indicated in Parameter Plan PL-04. These building zones are anticipated to be delivered in two phases, with College Building Zone 1 delivered before Zones 2&3. A detailed description of anticipated phasing and maximum area of buildings is provided in the Development Specification.

2.2.4.1 BUILDING ALIGNMENT

Whilst it is expected that any buildings in the College Building Zones should be predominantly in line with the geometry indicated in the Parameter Plans, variation from this geometry should be allowed provided the building(s) do not exceed the boundaries of their Building Zones.

2.2.4.2 BUILDING HEIGHTS

The maximum heights of buildings in the College Building Zones are indicated on Parameter Plan PL-08. These heights reflect the opportunity for higher buildings to the north and east of the site, reflecting the urban grain of the context as identified in the *RuTC Planning Guidelines SPG*.



DIAGRAM 2.2.3
EXTERNAL AREAS



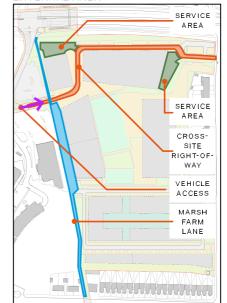


DIAGRAM 2.2.4

ACCESS ROUTES ON COLLEGE SITE



DIAGRAM 2.2.5
COLLEGE CAR PARKING AREAS



1

2.2.4.3 **COLLEGE BUILDING ZONE 1**

The minimum setbacks required for College Building Zone 1 are indicated in Parameter Plan PL-04. The minimum setback to the north is measured from the property boundary adjoining the A316. The minimum setback from the east is measured from the existing boundary wall. The minimum setback to the south is measured from the Schools Building Zone. All other setbacks are measured from the boundaries of Development Zones.

The permitted extents, including maximum and minimum heights, of College Building Zone 1 are indicated on Parameter Plan PL-08. The permitted height is to accommodate a maximum of 5 storeys of educational development.

2.2.4.4 COLLEGE BUILDING ZONE 2

The minimum setbacks required for College Building Zone 2 are indicated in Parameter Plan PL-04. The minimum setback to the west is measured from the existing boundary wall along Marsh Farm Lane. This setback should ensure that the width of the lane at this point is suitable to accommodate the proposed uses in this area and to ensure that the building zone is not too close to the edge of the site. There is no setback to College Building Zone 3 in order to allow these buildings to be joined. All other setbacks are measured from the boundaries of Development Zones.

The permitted extents, including maximum and minimum heights, of College Building Zone 2 are indicated on Parameter Plan PL-08. The permitted height is to accommodate a maximum of 5 storeys.

2.2.4.5 COLLEGE BUILDING ZONE 3

The minimum setbacks required for College Building Zone 3 are indicated in Parameter Plan PL-04. The minimum setback to the west is measured from the existing boundary wall along Marsh Farm Lane. This setback should ensure that the width of the lane at this point is suitable to accommodate the proposed uses in this area and to ensure that the building zone is not too close to the edge of the site. There is no setback to College Building Zone 2 in order to allow these buildings to be joined. All other setbacks are measured from the boundaries of Development Zones.

The permitted extents, including maximum and minimum heights, of College Building Zone 3 are indicated on Parameter Plan PL-08. The permitted height is to accommodate a maximum of 5 storeys.

LANDMARK ELEMENTS

The redevelopment site occupies an important location in the arrival into Greater London from the west. College Building Zone 1 should feature in long views along the A316 from the west: because of its prominence and visibility the north-west corner of the College in particular should be designed to reflect the role it will serve as a Landmark in the Public Realm. Similarly, the southern end of College Building Zone 3 should be highlighted in the important approach to the site from the South and should be designed accordingly. The main entrances to the College Buildings should also be distinct and visible in order to assist in wayfinding and placemaking. Refer to diagram 2.2.7.

Design Guidance on Landmark Elements is provided in section 5.11.

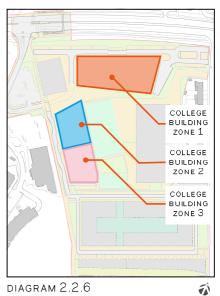


diagram 2.2.6 COLLEGE BUILDING ZONES

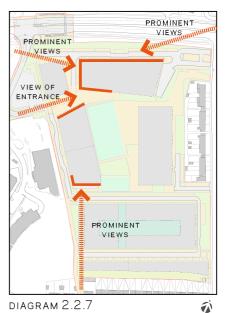


diagram 2.2.7 LANDMARK FLEMENTS

2.2.4.6 ENTRANCES & ACTIVE FRONTAGES

The main entrances to the College Buildings should be visible from the arrival point at the entrance area in order to ensure intuitive access to the buildings and to promote passive supervision and security of the site and its approaches.

The ground floors of buildings that front directly onto the Public Realm should be designed as *Active Frontages* wherever possible. The locations with Active Frontages would also be suitable locations for any additional entrances to the College that may be required.

Locations for main entrances and active facades in the College Development Zone are illustrated in diagram 2.2.8. Design Guidance on Entrances and Active Frontages is provided in section 5.

2.2.5 ZONE-SPECIFIC GUIDANCE

2.2.5.1 SUSTAINABLE DESIGN

The College buildings should achieve the requirements for BREEAM Excellent for Further Education.

2.2.5.2 DESIGN STANDARDS

The internal environment of the college buildings should be of a high standard appropriate to their context and intended use. Accordingly, they should be designed in accordance with recognised design standards including BS8233:2014, BS4142:2014 and BB93 for acoustics, BS EN 12464 and BS EN 5489 for lighting, and CIBSE Guide A for ventilation.

Staff accommodation should be designed in accordance with the Health and Safety Regulatory Standards Approved Code of Practice and guidance.

2.2.5.3 SPACE STANDARDS

The college buildings should provide space standards appropriate to their context and intended use. Accordingly, they should be designed to provide adequate floorspace for teaching in accordance with an assessment of planned student contact hours (known as guided learning hours) in accordance with the methodology set out in the LSC document "Guidance for Further Education Colleges on the Management of Floor Space."



DIAGRAM 2.2.8
ENTRANCES & ACTIVE FRONTAGES

2.3 TECH HUB DEVELOPMENT ZONE

The Tech Hub Development Zone incorporates a number of key features, including parameters specific to this zone.

2.3.1 LOCATION

The Tech Hub Development Zone occupies part of the north-western area of the Main Site.

2.3.2 ACCESS

The Tech Hub site should be provided with access via the A316 in order to minimise impacts on the existing neighbourhood, in accordance with the policy set out in the RuTC Planning Brief SPG. Access is illustrated in diagram 2.3.2, whilst Streets and Paths in the redevelopment are defined in detail in section 3 of this document.

2.3.2.1 PEDESTRIAN & CYCLE ACCESS

Pedestrian and cycle access to the Tech Hub Development Zone should be possible from a number of directions via the A316 and Marsh Farm Lane.

Pedestrian and cycle access to the Tech Hub should be encouraged, and should be designed to maximise the benefit of improved connections to the town centre, particularly via Marsh Farm Lane and the new footpath through Twickenham Rough to the Rail Station and Town Centre.

2.3.2.2 VEHICULAR ACCESS

The Tech Hub Development Zone should be provided with vehicular access via the Cross-Site Right-of-Way.

2.3.3 EXTERNAL AREAS

2.3.3.1 MARSH FARM LANE

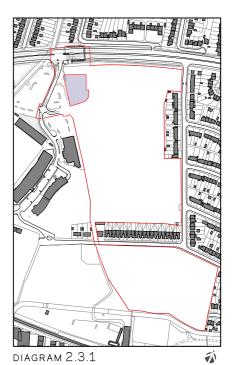
The Tech Hub Development Zone includes a stretch of the western boundary of the Main Site, indicated in diagram 2.3.3, including an area of associated land-scaping. Detailed guidance on this space is provided in section 3.3.

2.3.3.2 CROSS-SITE RIGHT-OF-WAY

The Tech Hub Development Zone incorporates an area bordering onto the cross-site-right-of-way, as indicated in diagram 2.3.3 This area will incorporate an area of car parking, as well as landscaping. Detailed guidance on this space is provided in section 3.4.

2.3.3.3 ENTRANCE AREA

The Tech Hub Zone will incorporate a part of the large entry plaza that should be shared with the College, as indicated in diagram 2.3.3. This should be designed



TECH HUB DEVELOPMENT ZONE



DIAGRAM 2.3.2
ACCESS



as an integral and seamless part of the same space as the area in the College Development Zone. Design Guidance on this areas is provided in section 4.3.

2.3.3.4 CAR PARKING & SERVICE & DELIVERY AREA

The Tech Hub Development Zone incorporates a delivery area to the north of the Tech Hub, as indicated in diagram 2.3.3 This area should be accessed off of the Cross Site Right-of-Way and will incorporate an area of car parking. The total number of car parking places for the Tech Hub should not exceed 10 spaces, including 1 accessible space. Detailed guidance on this area is provided in section 3.2.13.

2.3.4 BUILDING ZONES

The Tech Hub Development Zone has one Building Zone, as indicated in Parameter Plans PL-09 and PL-10, as illustrated in diagram 2.3.4. By virtue of the Tech Hub's location, where it will be visible from the Public Realm on all sides, it should be designed as a pavilion set within an attractive public realm.

2.3.4.1 TECH HUB BUILDING ZONE

The minimum setbacks required for the Tech Hub Building Zone are indicated in Parameter Plan PL-04. The minimum setback to the north is measured from the property boundary adjoining the A316. The minimum setback to the west is measured from the existing fence-line / wall to the west of Marsh Farm Lane. This setback should ensure that the width of the lane at this point is suitable to accommodate the proposed uses in this area and to ensure that the Building Zone is not overly proximate to the edge of the site.

The permitted extents, including maximum and minimum heights, of the Tech Hub Building Zone are indicated on Parameter Plan PL-10. The permitted height is to accommodate a maximum of 3 storeys of development.

2.3.4.2 BUILDING ALIGNMENT

Whilst it is expected that any buildings in the Tech Hub Building Zone should be predominantly in line with the geometry indicated in the Parameter Plans, variation from this geometry should be allowed, provided the building(s) do not exceed the boundaries of its Building Zone.

2.3.4.3 RELATIONSHIP WITH COLLEGE BUILDING ZONES

The redevelopment site occupies an important location in the arrival into Greater London from the west. This should be reflected in the design of the College buildings, and the design of the Tech Hub should reinforce the reflect the role the College will serve as an important local landmark in the Public Realm, and should not compete for prominence.

2.3.4.4 ENTRANCES & ACTIVE FRONTAGES

The ground floor of the Tech Hub building(s) that front directly onto the Public Realm should be designed as Active Frontages wherever possible. In particular, the front of the building should face onto the entrance area should be active across the majority of its frontage and this activity and extend around the sides of the building insofar as is practical. Additionally, the main entrance should be evident on approach to the entrance area. Refer to illustrated in diagram 2.3.5.

Design Guidance on Entrances and Active Frontages is provided in section 5.



DIAGRAM 2.3.3 EXTERNAL AREAS





DIAGRAM 2.3.4
TECH HUB BUILDING ZONE



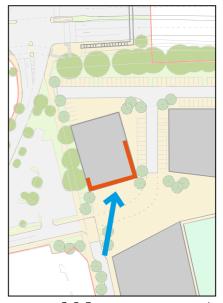


DIAGRAM 2.3.5
ENTRANCES & ACTIVE FRONTAGES



2.4 SCHOOLS DEVELOPMENT ZONE

The Schools Development Zone incorporates a number of key features, including parameters specific to this zone.

2.4.1 LOCATION & OVERVIEW

The Schools Development Zone occupies the north-eastern area of the Main Site.

The Schools Development Zone should accommodate a Secondary School and an SEN School, each of which should be provided with separate entrances and access, but which should be designed to facilitate opportunities for pupil integration, shared educational pathways, and sharing of resources. Accordingly, this section is organised with separate access sections for both schools.

2.4.2 SECONDARY SCHOOL ACCESS

2.4.2.1 PEDESTRIAN & CYCLE ACCESS

Pedestrian and cycle access to the Secondary School should be encouraged and should be possible from a number of directions via the northern part of Egerton Road. This access is illustrated in diagram 2.4.2. Pedestrian access routes should avoid conflicts with vehicular routes wherever possible.

2.4.2.2 VEHICULAR ACCESS

The Secondary School should be provided with access via the A316 from the northern part of Egerton Road in order to minimise impacts on the existing neighbourhood, in accordance with the policy set out in the RuTC Planning Brief SPG. This access is illustrated in diagram 2.4.2. Parental drop-off should be discouraged and this should be reflected in the Secondary School's Travel Plan.

2.4.3 SEN SCHOOL ACCESS

2.4.3.1 PEDESTRIAN & CYCLE ACCESS

Pedestrian and cycle access to the SEN School should be encouraged and should be possible from a number of directions via the southern part of Egerton Road. This access is illustrated in diagram 2.4.3. Pedestrian access routes should avoid conflicts with vehicular routes wherever possible.

2.4.3.2 VEHICULAR ACCESS

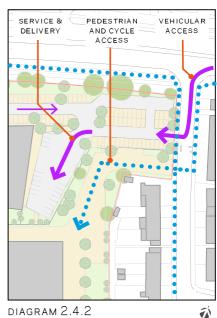
As the SEN school is the smaller of the Schools, it should be the only one provided with access through the existing neighbourhood in order to minimise impacts on the existing neighbourhood, in accordance with the policy set out in the RuTC Planning Brief SPG. This access is illustrated in diagram 2.4.3.

Due to the nature of the SEN School's pupils' needs, secure drop-off area(s) should be accommodated in the design of the SEN School entrance area.



DIAGRAM 2.4.1

SECONDARY SCHOOL DEVELOPMENT
ZONF



SECONDARY SCHOOL ACCESS

2.4.4 EXTERNAL AREAS

2.4.4.1 CROSS-SITE RIGHT-OF-WAY & CAR PARKING AREA

The Secondary School Development Zone should incorporate part of the east-west connection across the site providing the vehicular access to the REEC Site as well as a second means of egress from the Harlequins Site, as illustrated in diagram 2.4.4. Design Guidance on this area is provided in section 3.3.

This will incorporate an area of car parking for the Secondary School. The total number of car parking places for the Secondary School should not exceed 40 spaces, including 2 accessible spaces and 1 minibus space. Detailed guidance on car parking is provided in section 3.6.

2.4.4.2 SECONDARY SCHOOL ENTRANCE AREA

The Secondary School should be provided with a large pedestrian only entrance area, as indicated in diagram 2.4.4. Design Guidance on this areas is provided in section 4.3.

2.4.4.3 SECONDARY SCHOOL GARDEN AREA

The Secondary School should incorporate a secure educational open space with a landscape garden character, as illustrated in diagram 2.4.4. This space should be designed to accommodate quieter activities to provide a buffer to the adjoining residential properties. Design Guidance on this areas is provided in section 4.4.

2.4.4.4 SECONDARY SCHOOL PLAY AREA

The Secondary School should incorporate a secure educational open space accommodating formal sports and play spaces, as illustrated in diagram 2.4.4. Design Guidance on this areas is provided in section 4.5.

2.4.4.5 SEN SCHOOL ENTRANCE AREA

The SEN School should be provided with a large entrance area, as indicated in diagram 2.4.5. Due to the nature of the SEN School's pupils' needs, this area should include a multifunctional drop-off area for minibuses.

This area will also incorporate an area of car parking for the SEN school. The total number of car parking places for the SEN School should not exceed 30, including 2 accessible spaces and 2 minibus spaces.

Design Guidance on this areas is provided in section 4.3.

2.4.4.6 SEN SCHOOL GARDEN AREA

The SEN School should incorporate a secure educational open space with a landscape garden character, as illustrated in diagram 2.4.5. Design Guidance on this areas is provided in section 4.4.

2.4.4.7 SEN SCHOOL PLAY AREA

The SEN School should incorporate a secure educational open space accommodating formal sports and play spaces, as illustrated in diagram 2.4.5. Design Guidance on this areas is provided in section 4.5.

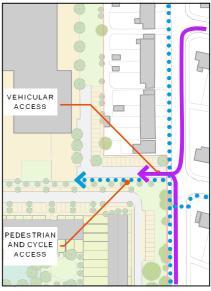


DIAGRAM 2.4.3
SEN SCHOOL ACCESS





DIAGRAM 2.4.4 SECONDARY SCHOOL EXTERNAL AREAS



DIAGRAM 2.4.5
SEN SCHOOL EXTERNAL AREAS

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2.4.5 BUILDING ZONES

The Schools Building Zone is defined in Parameter Plans PL-11 and PL-12, and illustrated in diagram 2.4.6. It should be designed to accommodate both the SEN and Secondary School in an inter-connected facility with distinct entrances.

2.4.5.1 SCHOOLS BUILDING ZONE

The minimum setbacks required for the Schools Building Zone are indicated in Parameter Plan PL-04. The minimum setback to the east is measured from the existing boundary wall between the School site and the adjoining residential properties. This setback will ensure that the School is set back further from the boundary than the existing buildings in this area. The minimum setback to the south is to the Schools Development Zone boundary and should ensure that the School is adequately setback from Residential Building Zone 1 and to ensure usable open space within the Schools Development Zone. The minimum setback to the north is to College Building Zone 1.

The maximum permitted extents, including maximum and minimum heights, of the Schools Building Zone are indicated on Parameter Plan PL-10. The permitted height is to accommodate a maximum of 3 storeys of educational development. The maximum area of building(s) in the Schools Building Zone is indicated in the Development Specification.

2.4.5.2 **BUILDING ALIGNMENT**

Whilst it is expected that any buildings in the Schools Building Zones should be predominantly in line with the geometry indicated in the Parameter Plans, variation from this geometry should be allowed, provided the building(s) do not exceed the boundaries of its Building Zone.

2.4.5.3 **ENTRANCES**

Insofar as is practical the entrances to the Secondary and SEN schools should be visible from the site entrance in order to ensure intuitive access to the buildings and to promote passive supervision and security of the site and its approaches. Where this is not possible, alternatives should be provided to mitigate this shortcoming. Refer to diagram 2.4.7.

ACTIVE FRONTAGES 2.4.5.4

By virtue of the location of the Schools Building Zone within the Schools Development Zone, it is not anticipated that there will be any facades fronting directly onto the Public Realm. Nevertheless, as at times the entrance areas may function similarly to practical extensions of the public realm, active facades facing these entrances areas should be encouraged, to encourage passive supervision of these areas at such times. Refer to diagram 2.4.8.

Design Guidance on Entrances and Active Frontages is provided in section 5.

2.4.6 ZONE-SPECIFIC GUIDANCE

DESIGN STANDARDS 2.4.6.1

The schools should be designed to meet the Education Funding Agencies Facilities Output Specification, and the design of the schools buildings should be based on EFA exemplars.



diagram 2.4.6 SCHOOLS BUILDING ZONE

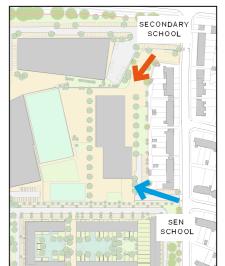


DIAGRAM 2.4.7 SCHOOLS ENTRANCES



diagram 2.4.8 **ACTIVE FRONTAGES**



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2.5 RESIDENTIAL DEVELOPMENT ZONE

The Residential Development Zone incorporates a number of key features, including parameters specific to this zone.

2.5.1 LOCATION

The Residential Development Zone occupies the southern area of the Main Site.

2.5.2 ACCESS

The residential site should be provided with pedestrian access via the Heatham Estate in order to integrate the new residential area with the existing neighbourhood, and vehicular access via the A316 to minimise the impact of traffic on the Heatham Estate. Access is illustrated in diagram 2.5.2, whilst Streets and Paths in the redevelopment are defined in detail in section 3 of this document.

2.5.2.1 PEDESTRIAN & CYCLE ACCESS

Pedestrian and cycle access to the Residential Development Zone should be possible from a number of directions via Egerton Road and Marsh Farm Lane. Pedestrian and cycle access to the Residential Site should be encouraged, and should take be designed to maximise the benefit of improved connections to the town centre.

2.5.2.2 VEHICULAR ACCESS

The Residential Development Zone should incorporate access to the A316 via Langhorn Drive and the upgraded Marsh Farm Lane. Vehicular access on the site should be through a coherent network of residential streets as described in Section 3.5.

2.5.2.3 CAR PARKING

The Residential Development Zone should incorporate on-street car parking distributed across the residential site. The development zone may also include areas of 'Podium' car parking as described in Section 2.5.3.2. The total number of parking places for the Residential Development Zone should not exceed 190 spaces. Detailed guidance on Car Parking is provided in section 3.6.

2.5.2.4 ACCESS WITHIN THE DEVELOPMENT ZONE

Hardstanding areas within the Residential Development Zone should allow for limited emergency, service and delivery access. These areas should be designed to prevent the connection of the street network to the south and east of the redevelopment site to the A316. Additional Emergency Access onto the site should be possible via Craneford Way and Marsh Farm Lane.

2.5.3 BUILDING ZONES

The Residential Development Zone incorporates four Building Zones. These are defined in Parameter Plan PL-13, with key setbacks indicated in Parameter Plan

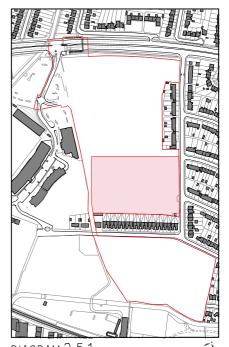


DIAGRAM 2.5.1
RESIDENTIAL DEVELOPMENT ZONE

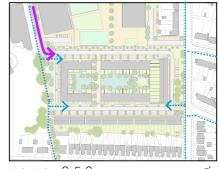


DIAGRAM 2.5.2 ACCESS



PL-04. These building zones are anticipated to be delivered in two phases, with Residential Building Zones 1 & 2 delivered before Building Zones 3 & 4. A detailed description of intended phasing is provided in the Development Specification, as are maximum building areas of each building zone.

2.5.3.1 BUILDING ALIGNMENT

Whilst it is expected that any buildings in the Residential Building Zones will be predominantly orthogonal in line with the geometry indicated in the Illustrative Scheme, variation from this geometry should be allowed.

However, the alignment of the facades of the Residential Zone should be coordinated with the adjoining streetscape and should follow a related geometry. This is illustrated in diagram 2.5.3, and should emphasise the relationship between the buildings and provide a clear boundary to the residential site.

2.5.3.2 PODIUM CAR PARKING

The development zone may also include *Podium Car Parking* where the car parking is provided beneath a solid deck that provides shared or private residential amenity spaces above. 'Podium' Car parking areas may be integrated within Residential Building Zones 1 & 3, as indicated on Parameter Plan PL-06, and illustrated in diagram 2.5.4.

The Podium Car Parking may be provided as one or more separate areas, but access points should be minimised to ensure an attractive, safe and pedestrian friendly streetscape. Podium Car Parking may be at surface level or partially below grade, and must be contained within the maximum building envelope as indicated in Parameter Plans PL-05, PL-14 and PL-15. Detailed guidance on Podium Car Parking is provided in section 3.6.

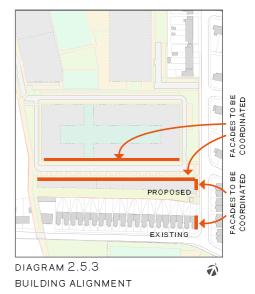
2.5.3.3 RESIDENTIAL BUILDING ZONE 1

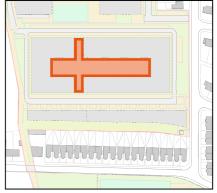
The minimum setbacks required for the Residential Building Zone 1 are indicated in Parameter Plan PL-04. The minimum setback to the east of the zone is measured from the street-side face of the existing boundary wall in order to preserve the existing mature trees and existing street character along Egerton Road. A setback is provided between Building Zones 1 and 2, in order to comply with the requirements set out in the LBRuT Small & Medium Housing Sites SPG. A reduced setback is indicated between Residential Building Zones 1 and 3 to allow flexibility in planning of these zones, as facing windows may not be required in these facades.

The permitted extents, including maximum and minimum heights, of Residential Building Zone 1 are indicated on Parameter Plan PL-14. The permitted height facing Egerton Road is to accommodate a maximum of 3 storeys of residential development, in keeping with the existing College buildings in this location. The building height should step-up to a maximum of 4 and 5 storeys to the west and north to mediate between the greater height of the existing and proposed adjoining development in these directions with lower development to the south and east. A podium car parking area may be incorporated into this zone as described in section 2.5.3.2.

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Residential Building Zone 1 is illustrated in diagram 2.5.5.





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DIAGRAM 2.5.4 PODIUM CAR PARKING



DIAGRAM 2.5.5
BUILDING ZONE 1

2.5.3.4 RESIDENTIAL BUILDING ZONE 2

The minimum setbacks required for the Residential Building Zone 2 are indicated in Parameter Plan PL-04. The minimum setback to the east of the zone is measured from the street-side face of the existing boundary wall and the new buildings should be no closer to the boundary than a line drawn parallel to Egerton Road from the row of existing semi-detached houses along Craneford Way in order to integrate the development with the existing urban grain. The minimum setback from the south is measured from the existing boundary wall, and is sized to ensure adequate private gardens can be provided to these dwellings in accordance with the standards set out in the LBRuT Development Management Plan. A setback is provided between Building Zones 1 and 2, in order to comply with the requirements set out in the LBRuT Small & Medium Housing Sites SPG.

The permitted extents, including maximum and minimum heights, of Residential Building Zone 2 are indicated on Parameter Plan PL-14. The permitted height of 2.5 storeys is to accommodate a maximum of 2 storeys of residential development, with an additional part-storey (or "loft") above eaves level, in keeping with the existing residential buildings near this location. The building height is constrained to relate to the scale of the existing development to the south and east. The buildings in Residential Building Zone 2 & 4 should be similar in scale and design to each other to maintain a coherent urban fabric.

Residential Building Zone 2 is illustrated in diagram 2.5.6.

2.5.3.5 RESIDENTIAL BUILDING ZONE 3

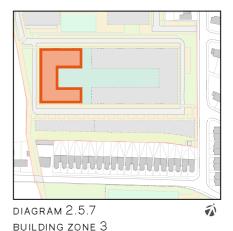
The minimum setbacks required for the Residential Building Zone 3 are indicated in Parameter Plan PL-04. The minimum setback to the west of the zone measured from the development zone boundary is set to accommodate an access route and open space between the building and Marsh Farm Lane. A setback is provided between Building Zones 3 and 4, in order to comply with the requirements set out in the <code>LBRuT Small & Medium Housing Sites SPG</code>. A reduced setback is indicated between Residential Building Zones 1 and 3 to allow flexibility in planning of these zones, as facing windows may not be required in these facades.

The permitted extents, including maximum and minimum heights, of Residential Building Zone 3 are indicated on Parameter Plan PL-14. The permitted height is to accommodate a maximum of 5 storeys of residential development, stepping-up to the west and north to mediate between the greater height of the existing and proposed adjoining development in these directions with lower development to the south and east. A podium car parking are may be incorporated into this zone as described in section 2.5.3.2.

Residential Building Zone 3 is illustrated in diagram 2.5.7.



diagram 2.5.6 Building zone 2



2.5.3.6 RESIDENTIAL BUILDING ZONE 4

The minimum setbacks required for the Residential Building Zone 4 are indicated in Parameter Plan PL-04. The minimum setback to the west of the zone is measured from the edge of the Residential Development Zone and the new buildings should be no closer to the existing wall bounding Marsh Farm Lane to the east than the existing garages accessed off of Craneford Way in this area to avoid overconstraining this approach. The minimum setback from the south is measured from the existing boundary wall, and is sized to ensure adequate private gardens can be provided to these dwellings in accordance with the standards set out in the LBRuT Development Management Plan. A setback is provided between Building Zones 3 and 4, in order to comply with the requirements set out in the LBRuT Small & Medium Housing Sites SPG.

The permitted extents, including maximum and minimum heights, of Residential Building Zone 4 are indicated on Parameter Plan PL-15. The permitted height of 2.5 storeys is to accommodate a maximum of 2 storeys of residential development, with an additional part-storey (or "loft") above eaves level, in keeping with the existing residential buildings near this location. The building height is constrained to relate to the scale of the existing development to the south and east. The buildings in Residential Building Zone 2 & 4 should be similar in scale and design to each other to maintain a coherent urban fabric.

Residential Building Zone 4 is illustrated in diagram 2.5.8.

2.5.4 EXTERNAL AREAS

The Residential Development Zone should incorporate a number of Private Gardens as well as area(s) of Shared Amenity Space, including area(s) providing play space for children and young people. This provision should take into account the existing open spaces in the area, as well as the spaces being provided in the other Development Zones.

2.5.4.1 OPEN SPACES & HABITAT AREAS

The Residential Development Zone should also incorporate an Open Space protecting the existing mature trees and habitat along Egerton Road, as illustrated in diagram 2.5.9. Design Guidance on this space is provided in section 4.8 and 4.9.

2.5.4.2 SHARED AMENITY SPACES

Residential Building Zone 1 and 3 should incorporate meaningful and appropriate Shared Amenity Space(s), as illustrated in diagram 2.5.10. The Reserved Matters Application(s) should demonstrate that suitable management arrangements are in place to ensure that the space(s) will be appropriately managed and maintained. Design Guidance on Shared Amenity Spaces is provided in section 4.6.

2.5.4.3 PRIVATE AMENITY SPACES

All Dwellings should be provided with Private Amenity Space in accordance with the *Mayor of London's Housing Design Standards* and the *LBRuT DMP*.

Ground floor units should be provided with Private Gardens wherever possible. Where the residential site abuts existing Private Gardens, the adjoining space should preferably be used for Private Gardens. Insofar as is practical, Private Gardens should not adjoin unsecured parts of the Public Realm. Where private dwellings front onto the Public Realm, these should be designed with private



DIAGRAM 2.5.8
BUILDING ZONE 4



OPEN SPACES & HABITAT AREAS



DIAGRAM 2.5.10
SHARED AMENITY AREAS



DIAGRAM 2.5.11
PRIVATE AMENITY AREAS

Defensible Spaces. Upper level units should be provided with private amenity spaces as balconies (whether recessed or not) or as setbacks in the building form.

Locations which should be provided with Private Gardens are illustrated in diagram 2.5.11. Design Guidance on Private Amenity Spaces is provided in section 4.7. Detailed Guidance on balconies is provided in section 5.7.

2.5.4.4 ACTIVE FRONTAGES & SECURE BOUNDARIES

Ground floor facades that face onto the Public Realm should, with limited exceptions, be designed as Active Frontages wherever there are non-private uses. In particular, common entrances to the buildings and communal spaces should located along these facades and should be designed to engage with the Public Realm. Wherever practical, ground floor units should be provided with private external entrances and defensible spaces.

Where active frontages cannot be provided, boundaries should be clear, continuous, overlooked and secure.

Locations which should be provided with Active Frontages & Secure boundaries are illustrated in diagram 2.5.12. Design Guidance on Entrances, Active Frontages & Defensible Spaces is provided in section 5.

2.5.5 ZONE-SPECIFIC GUIDANCE

2.5.5.1 DESIGN QUALITY

The Residential Site should be designed and built in accordance with best practice design principles, including design quality, unit sizes and provision of accessible & adaptable and wheelchair user dwellings. Refer to guidance in section 5.12.

2.5.5.2 OVERLOOKING

Dwellings should be designed to minimise overlooking of adjacent dwellings. Windows in habitable rooms facing each other should have a minimum horizontal separation of 20m. Where windows are obscured, are at high level only, or are only from ancillary spaces this dimension may be reduced.

Overlooking of habitable rooms in neighbouring buildings should be kept to a minimum and the privacy for the individual unit respected. In particular, the Reserved Matters Application(s) should demonstrate an adequate level of privacy between bedrooms and neighbouring properties, streets and public spaces.

2.5.5.3 **VIEWS**

Views from habitable rooms and external amenity areas should be maximised. All dwellings with 2 or more bedrooms should have at least 2 aspects.

2.5.5.4 DAYLIGHT & OVERSHADOWING

The massing of residential buildings should ensure good light penetration to all dwellings and should minimise overshadowing of external amenity areas. Further design guidance on Daylight & Overshadowing is provided in section 5.12.

2.5.5.5 NOISE

Dwellings should be laid out to minimise the transmission of noises to sound sensitive rooms within neighbouring dwellings, and in particular to bedrooms, by ensuring that the sound insulation exceeds the requirements of Building Regulations Part E by at least 3dB. Measures should also be undertaken to limit noise levels due to external sources in accordance with BS8233:2004.

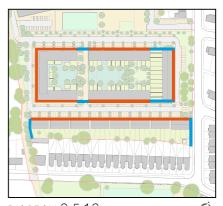


DIAGRAM 2.5.12

ACTIVE FRONTAGES & SECURE
BOUNDARIES

2.6 COLLEGE PLAYING FIELDS DEVELOPMENT ZONE

The College Playing Fields Development Zone incorporates a number of key features, including parameters specific to this zone.

2.6.1 OVERVIEW

The College Playing Field Development Zone occupies the entirety of the Redevelopment Site to the south of Craneford Way. The zone is designated as Metropolitan Open Land (MOL), and any redevelopment of the site should be compatible with this designation. The College Playing Fields Development Zone is illustrated in diagram 2.6.1.

2.6.1.1 MARSH FARM LANE

The College Playing Field Development Zone includes the existing and improved areas of Marsh Farm Lane (south of Craneford Way) and its associated landscaping, as illustrated in diagram 2.6.2. Design Guidance on this area is provided in section 3.3.

2.6.1.2 VEHICULAR ACCESS

There should only be vehicular access onto the College Playing Fields site for construction, maintenance, service and emergency purposes. There should be no car parking in the College Playing Field Development Zone.

2.6.1.3 ENVIRONMENT AGENCY SETBACK

A minimum 8m setback to the River Crane should be provided, in accordance with Environment Agency requirements and standards.

2.6.1.4 FUTURE RIVER CRANE PATH

The redevelopment of the College Playing Fields should allow room for a footpath along the River Crane to be provided in the future at the southern end of the Playing Field Site, as described in the RuTC Planning Brief SPG.

2.6.1.5 SPORTS PITCHES & OUTDOOR SPACE

The College Playing Field Development Zone should incorporate two formal sports pitches as well as areas of open space, including open areas for informal sport, areas with public use and access, landscape areas, and habitat area, as illustrated in diagram 2.6.2.

The areas of open space to the south and east of the Sports Pitches should prioritise the provision of additional scrub habitats and native species-rich hedgerows around the periphery for breeding birds and hedgehogs and unmanaged grassland areas to enhance the potential for habitat for invertebrates and improve the existing foraging resource for bats. An informal path through this area with access off of Marsh Farm Lane and Craneford Way should be included as part of the detailed proposals.

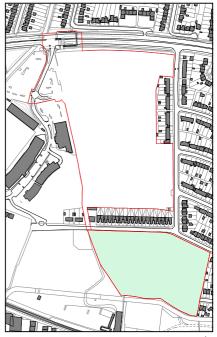


DIAGRAM 2.6.1
COLLEGE PLAYING FIELDS
DEVELOPMENT ZONE



DIAGRAM 2.6.2

OPEN SPACE WITH PUBLIC ACCESS

AROUND SPORTS PITCHES

The area to the west of the Sports Pitch Zone should be flexible in use, to provide for additional sporting and non-sporting activities. Refer to section 4.8 for detailed guidance on landscape areas.

2.6.1.6 EXISTING TREES & HABITAT AREAS

Existing trees and habitat areas to the perimeter of the College Playing Fields Development Zone should be retained unless these are unhealthy or unsafe. Refer to section 4.9 for detailed guidance on trees and habitat areas.

2.6.2 SPORTS PITCH ZONE

The College Playing Field Development Zone incorporates one Sports Pitch Zone. This is illustrated in Parameter Plan PL-16 and diagram 2.6.3.

2.6.2.1 SPORTS PITCH ZONE SETBACKS

The setbacks required for the Sports Pitch Zone is indicated in Parameter Plan PL-04, and reflect the minimum distance to any enclosure around the sports pitches. The minimum setback to the west of the site is measured from the existing boundary wall, while to the south the setback is to the top of the existing flood defence wall along the River Crane. The setback to the east is measured to the site boundary.

2.6.2.2 PITCH ENCLOSURE

Fences should be provided around the formal sports pitches. Refer to diagram 2.6.3. Internal fencing within the Sports Pitch Zone may also be provided around or between sports pitches.

Fences should be of a high quality and should be resistant to vandalism and should not be climbable. The fences should be designed to protect the character and openness of the College Playing Field Development Zone, and to maintain the ability to see across the site in order to preserve safety and visual amenity. Fence design should also accommodate the formal demands of the sports that the pitches are designed for.

Access points to the enclosure should be provided for safe use and escape from the playing fields. These should be designed in keeping with the overall enclosure, and where they are from an all-weather surface should be provided with exit across hardstanding areas that are connected to the surrounding path network to ensure accessibility and safe exit.

2.6.2.3 PITCH ALIGNMENT & ORIENTATION

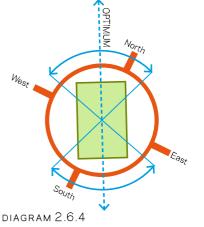
The pitches should be oriented with their long axis on a northwest-southeast direction to optimise their use from late morning to early evening. Refer to diagram 2.6.4.

The illustrative scheme aligns the pitches with the site boundary along Craneford Way which corresponds very closely with the optimum pitch orientation.

2.6.2.4 PITCH STANDARDS

At least one of the redeveloped pitches should be all-weather, and all pitches should be designed to be porous and of a high standard in accordance with current best-practice. The pitches should be designed to maintain the character and openness of the College Playing Field Development Zone. Pitches should be designed in accordance with Sport England standards, except where this would





PITCH ORIENTATION

not accord with the available site area or MOL designation. Retractable ball-catch nets should be provided behind goals.

2.6.2.5 **LIGHTING**

No floodlighting to the Pitches on the College Playing Field Development Zone should be provided.

2.6.2.6 HARD LANDSCAPING

Areas of hard landscaping should be provided within the College Playing Field Development Zone to accommodate arrivals, gathering, briefing and teaching of those using the pitches. Large areas of hardstanding should be avoided, and if unavoidable these should be designed to be porous. All access and exit routes to all-weather surfaces should be via hardstanding areas to ensure accessibility and safe exit.

2.6.2.7 MINOR STRUCTURES

Goals and similar structures should be permitted within the Sports Pitch Zone.

No changing rooms or other permanent structures should be proposed as part of the redevelopment, unless required for essential utility infrastructure.

SECTION 3 STREETS & PATHS

3.1 STREETS & PATHS SITE-WIDE

A series of streets and pedestrian routes should create a coherent and organised Public Realm network, connecting different places and offering a wide choice of routes around the redevelopment site.

3.1.1 INTRODUCTION

An upgraded pedestrian & cycle route and two distinct roadways are proposed as part of the redevelopment, alongside a series of car parking and service areas. This network is illustrated in diagram 3.1.1.

These paths and streets should make up an important part of the Public Realm of the redevelopment. Their design is therefore just as critical as the design of the buildings themselves when creating a sense of place. Design Guidelines intended to ensure that these are appropriate spaces suitable to provide sufficient space for pedestrian and vehicular movement, taking account of access to and between the Development Zones are presented in sections 3.2-3.6 of this design code. These take the form of general guidelines applicable to all streets and paths, and guidelines specific to each street or path.

3.1.2 STREET & PATH NETWORK







3.2 GENERAL DESIGN PRINCIPLES

The street and path network should be an integral part of the redevelopment, and should serve to connect the redevelopment to its context. In order to secure a high quality Public Realm the network should conform to the following design guidelines.

3.2.1 GENERAL DESIGN PRINCIPLES

All streets and paths should be attractive, pleasant to walk along, well lit at a level appropriate to their context and use, and have high-quality street furniture and well-considered signage integrated into their design. Paths should be accessible without needing to cross grass or other soft landscaping.

3.2.2 PEDESTRIAN PRIORITY

The street and path network and layout should be designed to give priority to pedestrians while encouraging cycling and allowing appropriate access for vehicles. Where possible, pedestrian and cycle routes should be separated from vehicles.

Pedestrian street crossings should be provided level with the adjoining footway to increase pedestrian safety, improve accessibility and minimise conflicts with surface runoff.

3.2.3 INCLUSION & ACCESSIBILITY

The street and path network should be designed for inclusion and accessibility. All main access routes including streets, paths, ramps and entrances should be fully negotiable, including by people with limited mobility. Where existing barriers to mobility exist, where practical, the redevelopment should seek to amend adjoining external areas to improve accessibility.

Tactile paving should be designed to maximise clarity. Complex tactile paving situations should be avoided, and where unavoidable should be designed to identify the special situation and prioritise the most important tactile messages.

Appropriate areas should be provided for accessible setting down points and accessible car parking places for blue-badge holders. Suitable designated parking spaces should be as close as possible to blocks of flats and in particular wheelchair accessible dwellings and where practical access to buildings from such spaces should be under cover.

3.2.4 SAFETY AND SUPERVISION

The street and path networks should be designed to be easily supervised, and where possible designed to encourage passive surveillance. They should be well-lit, with clear lines of site, and where possible should not be surrounded by high vegetation or outbuildings. Streets should be designed in accordance with Secure by Design principles.

3.2.5 FRONTAGES AND ENCLOSURE

Building frontages should be of appropriate height to offer a strong definition to streets and paths, and the relationship between the frontage and the street should be considered.

3.2.6 DAYLIGHT, SUNLIGHT & MICROCLIMATE

The design of each street and path should be cognisant of its microclimate and take measures to ensure a pleasant environment is created for people to enjoy. Built frontages should be designed to ensure streets achieve adequate levels of daylight & sunlight over the course of the day and year.

3.2.7 MATERIALITY

The Redevelopment Site's street hierarchy should have appropriate materials assigned to different places depending on their character and use. All paving materials should be high quality, durable and resilient, and where possible they should be natural. The palette of materials should be chosen to complement each other and their use should provide continuity between different places within and around the redevelopment. Surfacing should be chosen to avoid the creation of large areas of tarmac, and permeable materials should be used wherever possible to reduce run-off. Streetside car parking should be materially distinct from the roadway to improve legibility; to reduce the apparent width of the roadway, reduce speeds and improve safety; and to enhance the appearance of the public realm by minimising areas of tarmac.

3.2.8 STREET PLANTING

Streets should be bordered by a tree planting zone lining the edge of the footpath and lending a generosity to the width of the pavements. Street furniture and any ventilation grilles (etc) should be integrated into this zone with a rhythm to complement the tree planting. Tree pit grilles should be restricted to this zone and be detailed flush with the footpath so as not to impede pedestrian circulation.

Streetside car parking spaces may be integrated into this zone. Parking spaces and tree planting should be coordinated with important building entrances to ensure sufficient footpath space is offered outside the entry point.

3.2.9 STREET FURNITURE

Street furniture should be designed and sited to avoid clutter, visual intrusion and should not create risks to safety or have adverse implications for disabled people. 'Defensive' street furniture such as bollards and railings should be kept to a minimum. All street furniture should be high quality, durable and resilient, and where possible they should be made of natural materials. Where intended for seating, street furniture should be comfortable and designed for inclusivity. Street furniture should be strategically sited to encourage natural surveillance, lingering & meeting and a vibrant Public Realm. Street furniture can be provided both inside and outside of building zones.

3.2.10 LIGHTING

Lighting within streets and landscaping should reflect the use and character of each space with the primary aim of creating a secure and pleasant environment. Vehicular routes should provide sufficient illumination for vehicles and pedestrians, taking into account trees and street furniture, whilst minimising light spillage.

Light fittings should be chosen to minimise light pollution and glare, and should be sited to reinforce clear lighting and wayfinding strategies.

The hierarchy of streets should be consistently reflected in the choice of lighting equipment and types and levels of lighting deployed. For example, pedestrian routes and landscaping will benefit from more localised lighting, resulting in a subtler, more gentle and more pleasant illumination; this, in turn, is acknowledged to improve visibility through reduced glare, encourage and extend appropriate use of the public realm and increase safety through improved supervision of the public realm.

Creative use of buildings and street furniture to house or conceal light fittings serving the adjacent Public Realm (thereby minimising potentially obtrusive poles and other elements) should be encouraged.

3.2.11 CONTROLLED ACCESS

Entry and exit points to the REEC Site should enable a monitored process of entry and exit to the College and Schools, either through security or physical barriers to entry or exit with acknowledgement and authorisation processes. The main entrances to the REEC Site should allow clear visual supervision from the main building entrance in order for the College and Schools to manage the safe and secure movement of pupils and visitors onto and off the REEC Site.

Similarly, the main access points onto the residential site should be overlooked, to encourage site safety and engender a sense of ownership amongst residents. Where staffed communal entrances are provided, preference should be given to locating these entrances to enable passive supervision of site entrances. Whilst the residential site should not be a 'gated development', access should be designed to encourage College and School students to take the paths and connections provided for them as part of the designs for those development zones, and to discourage short-cutting through the residential redevelopment.

3.2.12 EMERGENCY SERVICES

The site design should take account of access needs of the emergency services and resolve potential conflicts between different movements, ensuring the safety and security of residents, pupils, staff and visitors. Where buildings are setback from public highways, access for fire appliances on suitable substrate should be provided.

All routes intended for use by the Emergency Services should be a minimum of 3.7m in width. Any entrances (or other similar localised constraints) through which fire appliances may need to pass should be a clear 3.1m in width with minimum 3.7m headroom, and where no through route is available there should be adequate space to enable appliances to turn.

3.2.13 SERVICE ACCESS & SERVICE/DELIVERY AREAS

Safe access for service and delivery vehicles should be provided. Where possible, service access points should be separated from main entrances and routes used by pedestrians and cyclists, and in particular pupils and young people. Where separate service routes are provided, they should be well-signposted, controlled and maintained to ensure they are used as intended.