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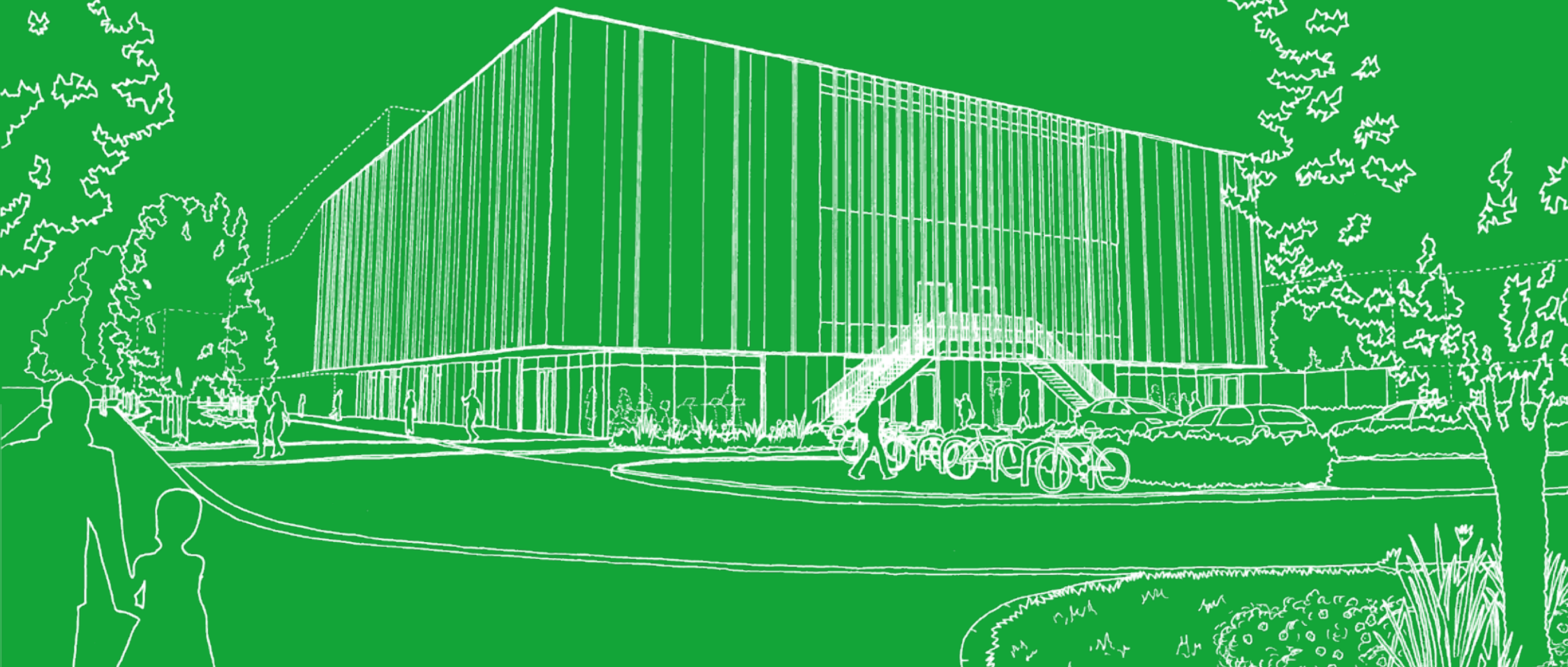
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# Richmond-upon-Thames College and The Richmond upon Thames School Sports Facility

## Design and Access Statement

May 2017



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# The Purpose of the Statement

This Design and Access Statement has been prepared to accompany the Reserved Matters Application to London Borough of Richmond-upon-Thames for the combined Richmond upon Thames College and The Richmond upon Thames School Sports Facility. This forms part of the second phase of development at Richmond-upon-Thames College. The new Sports building will replace the existing college Sports Hall and provide a dual facility fit for education and community purposes.

The proposed development will consist of two 4-court sports halls along with gym, activity studio and changing facilities. A number of staff and visitor parking spaces will be provided on site together with cycle parking.

The Design and Access Statement will assess the local context in relation to the development, explain the design principles and concepts derived from analysis of the local context and how these are reflected in the proposals.

The Design and Access Statement will address the following considerations:

- Assessment of the site
- Evaluation of decisions
- Layout
- Scale
- Appearance
- Landscaping
- Access and Movement

The proposed development will enable the College and the School to improve the education of younger people and contribute to the local community. The new Sports Facility for Richmond upon Thames College and The Richmond upon Thames School will provide an enhanced community offer, envisioning the promotion of health and well-being.



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Introduction

# 1. Introduction

## 1.1. Document Aims

This Design and Access Statement has been prepared by Atkins, it solely refers to the 'Building Zone 3' of the College Development Zone; the proposal is currently referred to as the Sports Building and is located towards the south west corner of the College campus.

The college redevelopment is part of a wider education campus known as Richmond Education and Enterprise Campus (REEC). The REEC redevelopment was submitted as an Outline Planning Application to London Borough of Richmond-upon-Thames, the application was granted on the 16th August 2016.

Subsequently, Reserved Matters applications have been submitted for College Building Zone 1 and Schools Building Zone, the former is awaiting Reserved Matters determination whilst the latter has been approved.

Details for Marsh Farm Lane redevelopment will be submitted together with the Reserved Matters application for the STEM building.

This Design and Access Statement will accompany the Reserved Matters for the Sports Building (College Building Zone 3).



Outline Planning Parameter Plan PL-04 - Site Building Zones



## 1.2. Richmond Education and Enterprise Campus

The ambition with the overall campus is to create an outstanding campus for education, skills and enterprise, bringing with it significant community benefits and urban improvements.

REEC is made up of key partners:

- Richmond-upon-Thames College,
- Haymarket Media Group,
- Harlequins,
- Clarendon School,
- Waldegrave School,
- Richmond Council,
- Achieving for Children

The organisations involved are committed to working together to create an innovative campus:

### Vision

The vision is to create a new Campus for Education and Enterprise: an innovative College of further and higher education working in partnership with Haymarket, Harlequins, their partners and other successful global companies and local employers; a new, much needed 11-16, five form secondary school; purpose built accommodation for Clarendon School's secondary pupils; and, Haymarket's new "Tech Hub" and digital media incubator.

The Campus will provide unparalleled opportunities for developing skills and pursuing employment through work experience, apprenticeships and, ultimately, jobs.

Through partners who share a strong common commitment to quality, innovation and enterprise, this is a unique opportunity to bring high quality teaching and learning together with a commercial and business portfolio and a new community offer.

Building on the success of the current organisations and the strength and expertise of their staff, the partnership will act as a launch pad for a new venture of national significance in the heart of Richmond-upon-Thames.

By sharing estate the College and schools will operate from a coherent basis, providing seamless access to facilities and expertise. The Richmond Education and Enterprise Campus (REEC) will provide:

- Opportunities for joint curriculum development between the schools and College, and transition planning between them;
- Greater educational choice on a single site;
- Access to shared facilities and staff expertise that would not be possible in most school settings
- Opportunities to share best practice in teaching and learning;
- Economies of scale that strengthen the business model and provide a platform for further innovative developments;
- Access to work experience opportunities, internships and Apprenticeships – with Haymarket, Harlequins, and other local employers;
- For Clarendon School, the Borough's day community special school, there will be a purpose built school for its secondary aged pupils with improved transition arrangements to and from courses, as well as a more accessible location in the borough;
- Co-location with a mainstream secondary school and the College will also improve the opportunities for inclusion for Clarendon's students;
- Access to the new Haymarket "Tech Hub", through the Haymarket Skills Academy, providing state of the art facilities, industry standard technology and the opportunity to work with established professionals.

### 1.3. Executive Summary of Proposals

The Sports Facility forms part of the second phase of the REEC redevelopment and is located on the western edge of the site, adjacent to the proposed STEM building. The footprint of the Sports Facility spans two separate land ownerships; the western half occupies College land while the eastern half sits within the School site.

The building is part of the wider development and is a key factor in accomplishing the educational aim which is to achieve the following;

- Renew and rationalise the estate;
- Create a versatile and fit for purpose estate;
- Support economic growth;
- Develop technical talent to support SME growth;

The building is funded via combination of land sale revenues and capital funding support from the LEP and EFA. Construction works will commence following completion of the College Phase 1 building, once existing buildings located within the proposed footprint have been demolished.

The design proposal remains consistent with the Outline Planning Application submitted to the LBRUT and is within the relevant design parameters set by the submission.

#### Design Proposal Summary

The second phase of the Richmond Education and Enterprise Campus consists of a site area of 2,470sqm, and approximately 3,192sqm of accommodation (GEA) split over 3 storeys.

The new Sports Facility was designed as a building to be shared by Richmond upon Thames College and The Richmond upon Thames School, as part of the vision to include shared facilities within the Campus. Internally, it is divided in two distinct areas with appropriate secure lines between. The College area is located along Marsh Farm Lane, to the west, while the School side faces east and its respective site.

The Sports Facility will provide two 4-court Sports Halls, as well as including a Fitness Gym, Sports/Massage Lab, Activity Studio and changing facilities.

The internal layout responds to the building orientation along Marsh Farm Lane and visual connections were created between key internal spaces on the ground floor and the outside.

The material palette has been designed to articulate a simple building form and respond positively to the Campus and the surrounding context.

The landscape for the phase 2 development follows the masterplan principles for the Campus, maintaining a cohesive and unified feel and creating safe and comfortable environments where supervision and secure boundaries are key.

#### **1.4. Existing Facilities**

Richmond Upon Thames College have a dated historic site with a considerable amount of planned maintenance liabilities. The accommodation is not fit for purpose and does not provide a modern environment for students. An education provision has existed on the College site since 1937, and the site has undergone many alterations over the last 80 years.

The existing Sports Hall and Fitness Suite sits in the north west of the site, between the A316 Chertsey Road and Langhorn Drive.

The demolition of the existing KLM building will be required to develop the phase 2 development zone.

#### **1.5. Proposed Facilities**

The newly redeveloped Sports Facility building presents itself as part of the College vision to re-organise its learning areas and create a Lifestyle and Well-being Centre, while being part of an integrated education campus and sharing the building with The Richmond upon Thames School, providing a dual facility fit for education and community purposes.

This new development will offer two 4-court Sports Hall, an Activity Studio, Sports Massage/Lab and a Fitness Gym, together with changing facilities. The Sports Halls will provide multifunctional space, sporting activities will include (but not exclusively), basketball, netball, football and martial arts. The Halls can also be used for exams, career fairs and other events.



# 2 Assessment

## 2. Assessment and Character

### 2.1. Site Location & Context

The proposed site is located in Twickenham, part of the London Borough of Richmond upon Thames in south west London, Twickenham being just west of Richmond, separated by the River Thames.

The large aerial photograph of the site (opposite) gives a good indication of the character of the area, including Twickenham Stadium to the north of the proposed site and the Harlequins Stadium to the west. Twickenham main line railway station is located to the south east of the proposed site, a ten minute walk.

The proposed site for the Sports Facility occupies the current KLM building of the existing College.

The proposed site is adjacent to Marsh Farm Lane, which runs from the A316 (Chertsey Road) past the College's Main & Playing Field sites. In accordance with the specific planning guidance for the site, Marsh Farm Lane will be upgraded, as it serves as an important pedestrian and cycle route to the College site. This upgraded route will improve the connectivity for the College, encouraging the pedestrian and cycle access to the site, as well as providing vehicular access to the proposed Sports Facility building. The proposal will act as a key landmark in the important approach to the site from the South in addition to advertising the whole Richmond Education and Enterprise Campus.

The proposed Sports Facility is sited close to new parking on the southern boundary. The spaces allow for staff parking during the day and community parking out-of-hours.

Generally, the topography of the site is relatively flat with approximately 200-300mm variation. This has allowed the ground finish floor level to be set in accordance with the outline planning application and remain within the height parameters.

In close proximity to the site is Nuffield Health, Challenge Court and the Twickenham Stoop, respectively 14m, 53m and 63m away from the proposed development. The buildings are largely formed of concrete, brick and metal cladding. Considering the scale and mass of the proposed scheme, referencing larger scale buildings in the local context is considered more appropriate moreover than smaller scale residential development. Larger buildings in the local context will therefore provide the relevant architectural clues when considering the new Sports Facility.

The combination of residential to the east and stadia to the north and west and the surrounding proposed education/commercial use as part of the masterplan provides a varied local context for the proposed site. In addition, the position of the proposed site next to Marsh Farm Lane will be a key consideration of the detailed design with regard to height, scale and massing of the proposed building.

Further information about the history of the site can be found in Appendix 7.1.



Proposed Phase 2 Site





Site Location

## 2.2. Design Code Character Analysis

The proposals are driven by the Design Code submitted as part of the Outline Planning Application. The code states that “the redeveloped site will be composed from a collection of places, each with their own distinct character”.

Through the character analysis and with reference to the Design Code the design will need to promote the following design principles:

- Sustaining and enhancing the local character
- Promoting legible development that has a clear and understandable layout
- Promoting clear and legible access points and entrances
- Enhancing and creating a successful relationship between public and private space.
- Promoting a cohesive development
- Promoting quality and identity
- Promoting sustainable, innovative and inclusive design.

An analysis of the surrounding built context has been undertaken to inform an appropriate scale and form of the proposed development of the Sports Facility to enable its integration into the overall campus masterplan and into the wider urban fabric.

The analysis has to a degree informed an appropriate, contemporary architectural response to the development proposals, particularly drawing inspiration from larger buildings in the wider context; Twickenham Stadium and Harlequins Stadium. The proposed position fronting Marsh Farm Lane has also influenced our architectural response to the site.

Full analysis of the surrounding area is contained in Appendices 7.2 - 7.6.







**Key:**

-  Primary Vehicular Route
-  Secondary Vehicular Route
-  Existing Site Access
-  Existing Public Footpath
-  Proposed Phase 2 Site
-  Existing College Landmark
-  Prevailing Wind
-  Sun Path
-  Watercourse
-  Existing Trees
-  Existing Vegetation
-  Parking
-  Existing College
-  Existing Built Environment

Site Analysis Diagram for Phase 1 Site

### 2.3. Illustrative Masterplan and Principles

The site masterplan has evolved through an iterative process involving all stakeholders in the Richmond Education and Enterprise Campus (Richmond upon Thames College, Haymarket Media Group, Harlequins, Clarendon School, Richmond Council and Richmond upon Thames College Free School Trust). The comments received at each stage have helped to inform the formation and structure of the masterplan. The evolving education briefs of both the College and schools has played a vital role informing the design of the masterplan. The building mass, height and internal layouts has in turn helped to inform the position of main entrances, service access and external landscaping.

The Illustrative masterplan (opposite) has been agreed and signed by all stakeholders at the site development group.



Illustrative Masterplan

### Access Principles

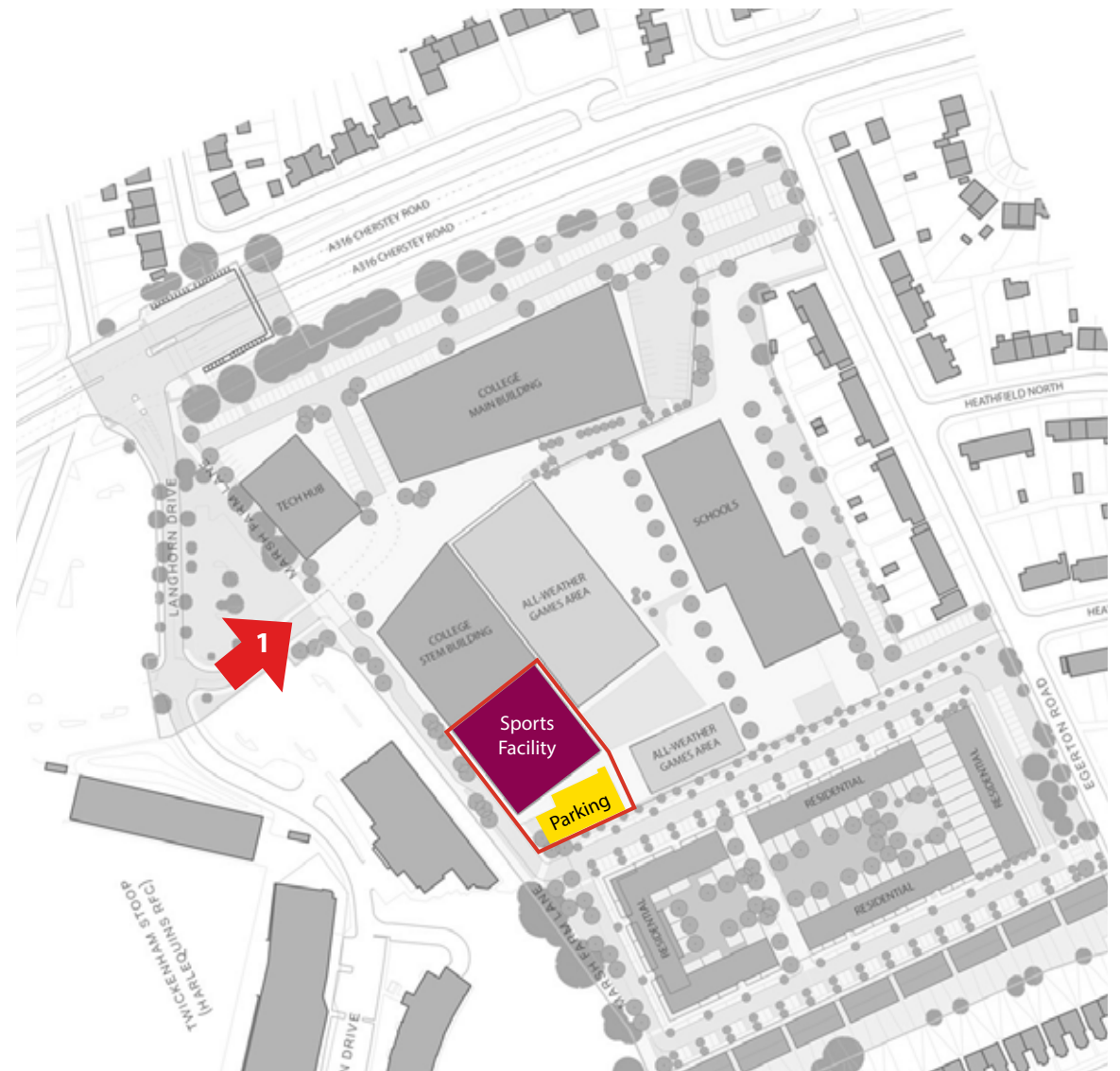
The Sports Facility will be accessed via Langhorn Drive (1) which will be suitable for general and service vehicles. Marsh Farm Lane will have a designated vehicular route clearly distinct from the pedestrian.

### Building Elements

The Sports Facility phase 2 building (purple) with three storeys will provide the necessary building mass and frontage along Marsh Farm Lane and will act to promote and advertise the Campus to the local and wider community, on acting as landmark building from the south, as per section 2.2.4.5 of the Design Code.

### Parking

Parking for the building is located adjacent to the southern boundary of the site and incorporated into the external landscaping. Visitors will also be able to use the parking located around the main College building to access the Sports Facility. Larger vehicles such as refuse vehicles and coaches won't be able to use this parking, as it is sized for small vehicles and one mini-bus only.



Proposed Sports Facility Access Point and Parking

### Vehicular Routes

Vehicular access to the proposed Sports Facility will be from the A316 (Chertsey Road), via Langhorn Drive and across Marsh Farm Lane. This will provide access to the phase 2 building and car parking area.

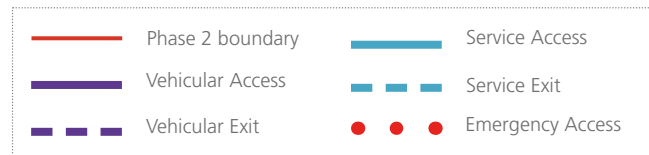
The primary egress from the car park will be via Langhorn Drive. An emergency access / egress point is provided on Marsh Farm Lane.

The connection to adjoining parts of Marsh Farm Lane is limited to pedestrians, cyclists and emergency service vehicles.

With regard to conditions U07963 and U07964 two of the eight required disabled parking spaces are provided in this second phase of development.

In relation to condition U07965, the relatively flat nature of the site provides uninterrupted and accessible routes for disabled people to gain access to the building and wider site.

The design ensures that where buildings are positioned some way back from the public highway, road access for fire appliances is provided. Any entrance through which appliances may need to pass shall be a clear 3.1m in width with minimum 3.7m headroom and there must be adequate space to enable appliances to turn. Entrance to the car park is 4.1m wide.



Proposed Masterplan Vehicular Access

### Pedestrian and Cycling Routes

The primary access point to the proposed Sports Facility will be via Marsh Farm Lane, on the western boundary.

It is envisaged that the primary pedestrian route to the building will be via Marsh Farm Lane, both for College students and for the community. A second entrance is located on the eastern side of the site, promoting access from the School.

Marsh Farm Lane will provide a dedicated cycle route that will connect into the planned cycle highway along Chertsey Road.



Proposed Masterplan Pedestrian Access



## 2.4. Site Constraints and Opportunities

As part of the design process and site analysis the constraints and opportunities associated with the site have been assessed and summarised as the following:

### Constraints











- Development to acknowledge existing buildings and constraints imposed by the proposed masterplan
- Outline planning parameter plans and Design Code
- Aircraft noise associated with the Heathrow flight path
- High water table
- Public Right of Way across the site for Harlequins to be maintained

### Opportunities

- Relatively flat gradient site allowing flexibility in building location
- Building orientation to maximise daylighting and passive energy strategy
- Opportunity to create a positive contribution to the street scene along Marsh Farm Lane
- Opportunity to create positive contribution to central green space at the heart of the masterplan
- Enhance existing pedestrian and cycle flows through and around the site
- Respond to distant views within the site to create a distinctive building
- Opportunity to enhance ecological biodiversity through boundary treatments and open space
- Opportunity to create high quality public realm
- Potential to expand quality public realm
- Potential to connect proposed College site with the proposed Free School site
- Opportunity to create a shared facility between the College and Free School



**Key:**

-  Primary Vehicular Route
-  Secondary Vehicular Route
-  Pedestrian Route
-  Proposed Phase 2 Development
-  Student Plaza
-  Traffic Noise
-  Key Entrances
-  Views Out
-  Trees
-  Parking

Site Constraints and Opportunities Plan for Phase 2 site





# 3 Vision and Design Evaluation

## 3.0. Vision and Design Evaluation

### 3.1. Sports Facility Requirement and Brief

The design of the Sports Building will need to respect the property legal 'red line' to enable the School and College elements of the building to operate independently, whilst maintaining the feeling of a cohesive whole. The Sports facility should exploit opportunities to share facilities and resources and in parallel provide separate and distinct accommodation for each institution, which ensures safeguarding and separation of School and College students.

A wide range of sporting activities are required to be catered for in the sports hall spaces. This includes providing floor markings, floor sockets where required (e.g. Volleyball), infrastructure for a spotting rig for trampolining, dividing cricket nets, and other fixed equipment. Direct access is also required to appropriate stores for specialist sporting equipment, mats and PE equipment. The School's sport hall will need to have adequate capacity for 80 (no.) tables/chairs for exam use.

The sport halls will be used for exams during exam periods in the academic year and each sports hall must be designed appropriately to account for this. Acoustic separation will be specified to enable exams to be taking place concurrently in adjacent halls. The design must also respect the different heating and ventilation requirements during exam periods (particularly in winter months) which are different to sporting needs.

The Activity Studio is required for School use, providing a multipurpose space for dance, PE and drama. A Fitness Gym and Sports Massage/Lab is required for College use. Both elements of the building require office space for staff to have a permanent

base, providing passive surveillance. The main reception area for community use is positioned on the west side of the building and accessed directly from Marsh Farm Lane.

Within the School's side of the building, changing rooms should be provided allowing for 90 (no.) students to change at one time with 4 sensor driven showers with adequate hot water provision. Changing rooms for the College should allow 60 (no.) places, plus 90 (no.) for the Fitness Gym facilities. The accessible changing rooms are also required to have a shower. It has been agreed that staff changing is only required on the College side.

The finishes need to be robust and suitable for the high activity areas. All floor surfaces must be fit for purpose for the range of activities within each space. There needs to be adequate storage for School and College equipment and the equipment for community use. The ease of access with regard to door widths and heights should be considered within the design.

Access control will be reviewed and installed on all appropriate doors including stores, on external doors and on any doors between the College and School's sports facilities. Hardware will be compatible with that used in the College and School developments. ICT infrastructure, fire and intruder alarm systems should link back to main panels in the reception areas of each respective building.

The external landscaping should provide a functional space with cycle parking for 40 (no.) bikes and 19 (no.) car parking spaces.



Precedent Reference Images

### 3.2. Building Design Objectives

The key design objectives for the new Sports Facility building and phase 2 site are in accordance with the Design Code and are as follows:

- The site occupies a key location within the proposed masterplan as such the building needs to be of high design quality and a positive contribution to the public realm (Design Code 2.2.4.5 and 5.1.9)
- Entrances into the building need to address both legibility from different modes of travel on arrival (Design Code 2.2.4.6 and 5.4.1)
- The new building should encourage pedestrian and cyclist flow from the phase 1 site and along Marsh Farm Lane (Design Code 2.2.3.1 and 3.3.7.2)
- The new building should take advantage of its site and the opportunities offered by both short and long distant views (Design Code 3.3.2, 3.3.3, 3.3.4 and 3.3.7)
- The sustainability strategy for the new building should adopt a 'fabric first' approach and a high aspiration for minimising use of resources (Design Code 1.3.28)
- The building appearance should be contemporary and high quality, with a neutral material palette and simplicity in the detail (Design Code 5.1.9 and 5.1.10)
- The new building should consider all developments to date as a complement of the whole development
- Create a high quality, contemporary environment with external space to complement the building function and architectural design (Design Code 2.2.3.1 and 3.2.7)

### 3.3. Inclusive Design

The key inclusive design objectives for the new Sports Facility building and phase 2 site are in accordance with section 1.3.29 of the Design Code and are as follows:

- Ensure safe access to principle entrances (Design Code 3.2.3)
- Provide levelled and sheltered access (Design Code 5.4.1)
- Design a building that is simple to navigate with clear routes and easily identifiable entrances
- Create forms of vertical circulation (lifts and stairs) that are compliant with current standards
- Provide sufficient circulation space to ensure the accommodation is accessible to all
- Spread appropriate sanitary facilities throughout the building
- Explore the use of similar materials to create an inclusive environment that does not differentiate.

These objectives will be paramount in discharging condition U07960.

### 3.4. Sustainability Strategy and Objectives

The key sustainability strategy and objectives for the new Sports Facility building and phase 2 site are in accordance with the Design Code and are as follows:

- Achieve a BREEAM "Excellent" rating (Design Code 2.2.5.1)
- Create a building with carbon emission within and below current building standards to achieve full compliance with GLA requirements
- Explore simple and low cost effective passive approaches to optimise the building energy consumption (Design Code 1.3.28)
- Use tried and tested renewable technologies such as solar panels coupled with heat pumps (Design Code 1.3.28)
- Where possible use material with reduced environmental impact (Design Code 1.3.28)
- Reduce water consumption and conserve water where possible (Design Code 1.3.28)
- Explore construction methods to reduce waste and manage/reduce waste leaving site as a consequence of the construction process (Design Code 1.3.28)



# 4 Consultation and Engagement

## 4.0. Consultation and Engagement

### 4.1. Public Consultation

Since the proposal to redevelop the Richmond upon Thames College site was announced in 2012, there has been extensive consultation on the plans, thousands of people have been given the opportunity to have their say. This includes:

#### Initial Visioning Consultation (January 2013)

This consultation gave residents and stakeholders the opportunity to comment on the high level proposals. This feedback helped inform later designs.

#### Three Pre-Planning Consultations

As the proposals were developed, each iteration was presented to the public and stakeholders for feedback in April 2014 / October 2014 and January 2015.

A public meeting was held on the 21st April 2015, enabling residents to hear the latest plans and see how their views had been incorporated.

#### Community Liaison Officer

The S106 Agreement for the Outline Application has a requirement for a Community Liaison Officer (CLO) to be appointed by the Council. The CLO will coordinate the Richmond College Development Monitoring Group, responsible for monitoring community liaison in respect of the development. The CLO will also be the principal point of contact between local residents, users of the College and School Development Zone and the College in dealing with any issues arising from the development.

### College Reserved Matters Application

In December 2016, the College submitted a Reserved Matters planning application for their phase 1 development zone. The application included detailed proposals for the external appearance of the College building and external hard and soft landscaping areas. As part of the application, both local residents and stakeholders were given the opportunity to comment on the proposals, as they had done for the Outline Application.

### School Reserved Matters Application

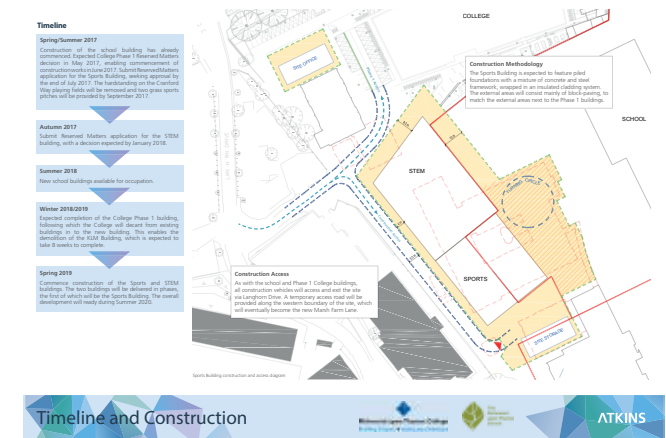
In August 2016, the Council submitted a Reserved Matters planning application for the new Secondary School and SEN School within the School Development Zone. The application included detailed proposals for the external appearance of the school building and external hard and landscape areas. Again, as part of the application, both local residents and stakeholders were given the opportunity to comment on the proposals, as they had done for the Outline Application.

### 4.2. Sports Facility Reserved Matters Application

Richmond Council and Richmond upon Thames College commenced the consultation process on the detailed design proposals for the Sports Facility 'Reserved Matters' on Monday 24 April 2017. The consultation ran to midnight on Wednesday 10 May 2017 and considered external elevations, landscaping, parking, materials and construction access.

A drop in session was held on Wednesday 3 May from 6pm - 8.30pm at Richmond upon Thames College. Consultation boards were prepared which were also available as handouts. Around 10 people attended the event during the evening.

Attendees were also invited to fill out a survey at the drop in session and the survey was also available on the Council's website. In total 11 complete surveys were received. Key issues raised include appearance, sustainability and parking.



Example of public consultation board

### Appearance

The Sports Facility has been design to comply with section 5.1.9. of the Design Code, which specifies that materials should be high quality, durable and resilient. Fibre cement and metal panels in neutral tones complementing each other whilst providing continuity with material selections elsewhere in the development, creating a holistic campus.

### Sustainability

The Sports Facility has been designed to achieve BREEAM 'Excellent' in accordance with discharging condition U07954 and proposes a green roof which will cover approximately 40% of the potential roof plate.

### Parking

150 shared car parking spaces are proposed across the College development zone in accordance with discharging condition U08002. The majority of these car parking spaces will be located around the main College building.

## 4.3. Sharing Principles and Community Use

The new Sports Facility was designed as a shared building, as part of the vision to include shared facilities within the new Education and Enterprise Campus.

The building will be jointly owned and run by Richmond upon Thames College and The Richmond upon Thames School, with both users benefiting from separate facilities within their respective area of the building and appropriate secure lines between, combined with the opportunity to utilise all facilities offered within the overall building and shared costs of operation.

All the areas will be available for community use outside College/School teaching hours. Local residents will be able to access the Fitness Gym via a membership system and hire spaces for use at the evenings and weekends and during holiday periods.

In accordance with the commitments set out in Section 106 agreement attached to the OPA consent, all of the spaces above will be available for community use outside College/School hours.





# 5 Final Design Proposals

## 5.0. Final Design Proposals

### 5.1. Design Concept within Masterplan

The proposed design follows the guidelines set out in the redevelopment Design Code. This section will outline the ways in which this is addressed.

The design concept for phase 2 of the proposed College development has been influenced by numerous external factors. A primary consideration is the proposed REEC masterplan.

In securing a fixed masterplan proposal accepted by all REEC stakeholders further exploration of the proposed phase 2 building commenced. As part of the vision and approach to sharing facilities within the new campus, the development of a shared Sports building has evolved. The design has been further influenced through the engagement workshops with both College and the School, enabling an analysis of key internal relationships and separation between users.

Key to the feedback received was the vision for a Sports hub that would act as link between the College, the Free School and the Community, helping to create an inclusive campus that provides seamless access to facilities and commercial services to the local residents.

### 5.2. Use

The proposed new Sports Facility is a purpose built 3 storey building which will be jointly owned and run by Richmond upon Thames College and The Richmond upon Thames School. It provides two 4-court Sports Halls, as well as a Fitness Gym, Sports Massage/Lab, Activity Studio and associated changing facilities.

### 5.3. Amount

The application is for a total of 3,192sqm gross external floor area, split over 3 floors.

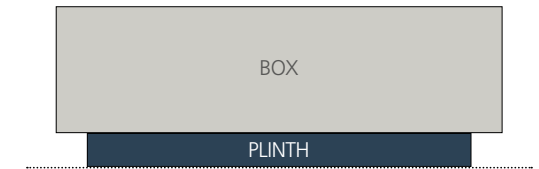
The proposed Sports Building conveys a simple massing made up of two key components: the 'plinth' and the 'box'. The plinth provides an active frontage, identifying key entrances and accommodating teaching and changing facilities. Plus, it forms a solid grounding element to support the cantilevering box above. The box is largely driven by the functional requirements of the sports halls which it contains.

The box projects over the ground floor providing a sheltered route around the building. Entrances are defined through external lighting at ground floor, ensuring intuitive access to the building. The design of the entrances are in accordance with section 5.4 of the Design Code, being fully integrated with the architecture of the building and retaining the continuity of the street frontage.

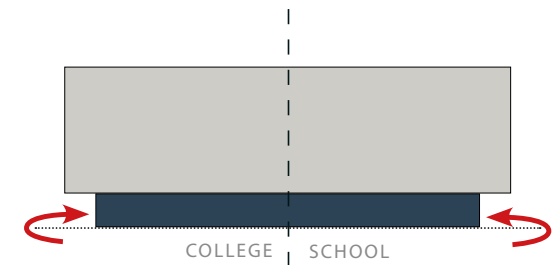
Taking into account the proposed accommodation, the scale and grain of the surrounding larger buildings, as well as the masterplan massing. It is considered that the proposed building represents an appropriate amount of development on this site and is in accordance with the OPA parameter plans

The massing and scale of the development has been carefully considered during the formation of the brief and during the development of the design so that the resultant schedule of accommodation provides an efficient utilisation of space.

Externally, the site includes a new car park to the south of college building zone 3 in accordance with section 2.2.3.7 of the Design Code. Staff and visitors parking and two accessible spaces are provided and integrated with the landscape.



### Elements



### Access



### Active Frontage



Aerial View of the proposed Sports Facility within the wider development

## 5.4. Design Development

The original design concept developed during the feasibility stage of the project has evolved through the development of the brief and input from both College and School teams.

The building form responds to the OPA masterplan, site constraints and opportunities, and has further been influenced by internal adjacencies and functional requirements.

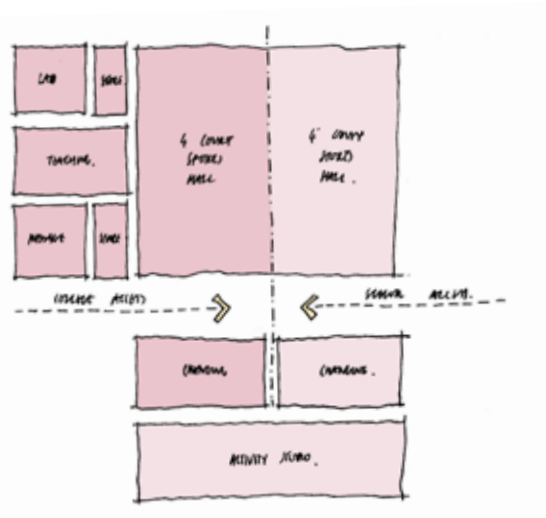
Internally, the building has been simply organised on a north/south axis into 3 key areas:

- Access,
- Changing
- Teaching

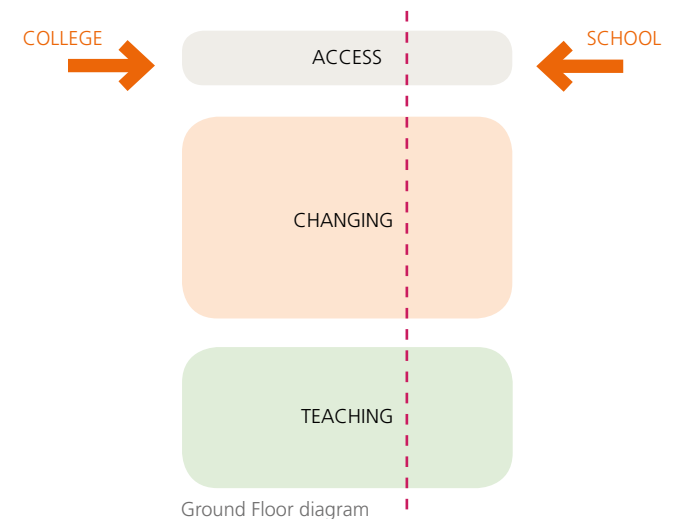
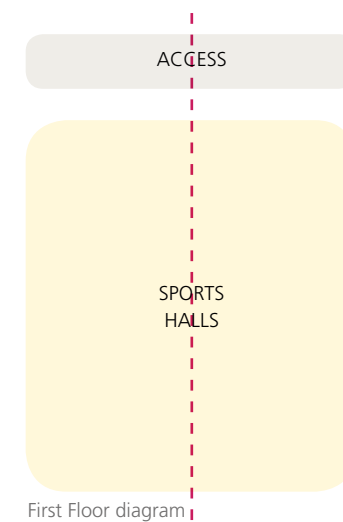
Key to the building design was understanding the need to accommodate two distinct institutions, delivering the educational need and designing an open facility available to the wider community. Careful consideration has been given to providing suitable separation and secure lines, allowing each facility to operate independently during the day. As well as the opportunity and logistics of opening up the facility in the evenings and at weekends for a wider offer.

Consideration has been given to the connection of the Sports facility to the STEM development in the future. Connection would be along the north elevation and internal connections would be via the 'College' side of the Sports Building.

### Initial Building Diagram



### Building Diagram



## 5.5. Secure by Design

In accordance with the Design Code (sections 1.3.30, 3.2.4, 4.2.8, & 5.1.4) the design should be safe and secure and 'design-out' crime.

As part of the process, Atkins has been in consultation with the Designing Out Crime Officer to ensure that the Sports Facility meets the Secure by Design requirements.

Crimes will be mitigated through the provision of supervised and secure places that are well managed and maintained with prevention measures including:

- A comprehensive and integrated CCTV network and well equipped campus security will provide passive supervision at all times
- Boundary treatments where practicable will be secure and robust
- External lighting will provide uniformity, particularly at entrances
- Where practicable, access control should be installed on all appropriate doors including stores, external doors and any doors between the College and School's sports facilities
- Alarm systems should be sufficient and comply with British Standards

## 5.6. Layout

### Site Plan and Floor Plan Overview

The layout responds to its surroundings, taking into consideration the orientation in respect of the Marsh Farm Lane and student access from the north plaza, and the simple plan arrangement responds to the site context and Design Code in the following ways:

- The building orientation addresses Marsh Farm Lane from the west and the residential development at the south, creating active frontages
- The building is located in a key position on site, and it is designed to reflect its role as a landmark
- Regular footprint along Marsh Farm Lane to provide definition and security to the School's open space
- Main internal corridor connects both entrances and reflects a shared site vision
- Clear visual connections between key internal spaces on the ground floor and the outside

In essence, the layout tries to make the building easy to understand from all users perspective, providing safe, logical positions for entrances and exits, and it has been designed to integrate needs of people with limited mobility, sight or hearing impairment and learning difficulties.

### Active Frontages

Section 5.2 of the Design Code requires that street level frontages should activate the adjoining public realm to ensure that the development engages with its context and to promote passive supervision and security.

The diagram below shows the proposed design's active frontages which front onto Marsh Farm Lane to the west and the car park to the south. The Fitness Gym, Sports Lab and Activity Studio will engage with the public realm offering active and lively uses to pedestrians walking by.

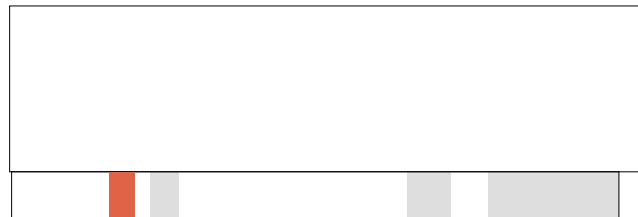


Ground floor plan with Active Frontages highlighted in red

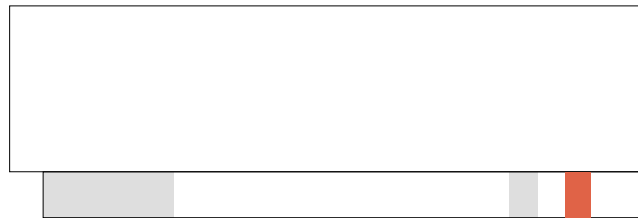
### Entrances

The building orientation, footprint, landscape and external lighting funnel College students and visitors into the entrance from the west, and School pupils from the east, ensuring that it is well marked. This is described in section 5.4 of the Design Code.

An illuminated perforated panel identifies the access to the building from the outside, while preserving the continuity of the street frontage. The Reception is clearly visible from the College entrance on Marsh Farm Lane for users navigating the building for the first time.



West elevation with College entrance highlighted in red



East elevation with School entrance highlighted in red

### Ecological Enhancement Measures

In order to comply with discharging condition U07943, a bat box is to be incorporated at roof level, as the proposed building sits alongside the Marsh Farm Lane corridor, adjacent to the bat commuting habitat.

## Internal Planning

The Sports Facility, designed as a single building, is to be shared by Richmond upon Thames College and the Richmond Free School. Internally, it is divided in two distinct areas with appropriate secure lines between. The College area is located along Marsh Farm Lane, to the west, while the School side faces east and its respective site.

Secure lines will be opened during periods of community use allowing visitors to use all the facilities.

Circulation is efficient and the building is easy to navigate for first time users, with a simple and neutral material palette using resin screed floor and white walls, while signage will help to identify the key internal spaces. All vertical circulation and main storage rooms are located to the north of the building.

A primary access corridor runs east to west connecting the two entrances, two further corridors run north to south on each side of the building to connect to changing and teaching accommodation. In the centre of the building, changing rooms are split between College, community and School users, whilst curriculum spaces are located towards the south of the building, providing an active frontage to the development.

The Fitness Gym and Sports Lab/Massage room are part of the College curriculum but will be designed with a commercial awareness to appeal to local residents and users.

The first floor is equally divided by a central wall separating the two 4-court Sports Halls and respective ancillary store rooms. The material palette here is also natural, with wood boarding to 3m height, concealing the storage doors and creating identity in these two key spaces. On the second level, a glazed screen overlooks the College Sports Hall for student and visitor spectators.

The structural design of the Sports Facility has been developed to

keep the structural zones to a minimum in order to maximise the internal space while keeping the building envelope compact. The ground floor slab is suspended, and the first floor is designed as a 350mm thick reinforced concrete flat slab with concrete columns down to ground level. This solution was selected as it provides a clear soffit to allow high-level services to run uninterrupted, maximising headroom height in the spaces below. Above, the first floor structure is a cost-effective lightweight steel frame with columns at 3m centres to reduce the wall build-up. The roofing system consists of insulated panels topped with photo-voltaic panels and a lightweight green roof.

Ceilings are exposed, and the servicing strategy has been designed with the majority of service running through at high level. Underfloor heating will be used in the Sports Halls and along the perimeter of the building at ground floor for internal comfort.

## Sport England Guidance

Facilities within the Sports building are provided as part of the whole REEC development, within the context of the wider Sports amenities and the new College and School. The proposed Sports Facility is designed to fit the needs of both College and School.

The scheme is not fully compliant with Sport England's latest standards. This does not though in any way limit the capacity of the Sports Facility to deliver the College or School curriculum and does not impact the community offer.

Key areas of the design which are noncompliant are:

- Sports Halls size
- Changing accommodation and shower quantities
- Wash down facilities

Each Sports Hall is sized to previous Sport England standard (33m

x 18m) this delivers the needs of both College and School curricula and does not impact use for any sporting activity. Sport England recommend a minimum hall size of 34.5m x 20m, which only offers a minimal benefit of support space for sporting activities. The minimum 7.5m height is achieved.

The building zone as defined in the Outline Planning Application, (PL-08 Rev A) constrains the footprint of College Building Zone 3 to 39m max. Therefore it is not possible to achieve the Sport England minimum recommended size of each Sports Hall without compromising the legal boundary between the College and the School through the centre of the building (see sections 3.1 and 5.4 for reference).

The building envelope is designed within the parameters of College Building Zone 3. Increasing the building width to the west would affect compliancy with the OPA. An increase to the east would encroach on the school MUGA boundary fence and would impact suitable access for maintenance of the building facade.

With regard to the number of changing places in relation to shower provision, Sports England recommend one shower point to every six changing places. This high number of shower facilities was not required by the College or School. The number of facilities has been agreed based on typical experience and current use.

Due to the range of activities based in the Sports building, not all changing spaces require full wash-down facilities as recommended by Sport England. Wash down facilities will be provided in changing areas with direct external access (to west).

Partial noncompliance with Sport England's latest standards has been discussed, reviewed and agreed with College and School representatives during the design development process.

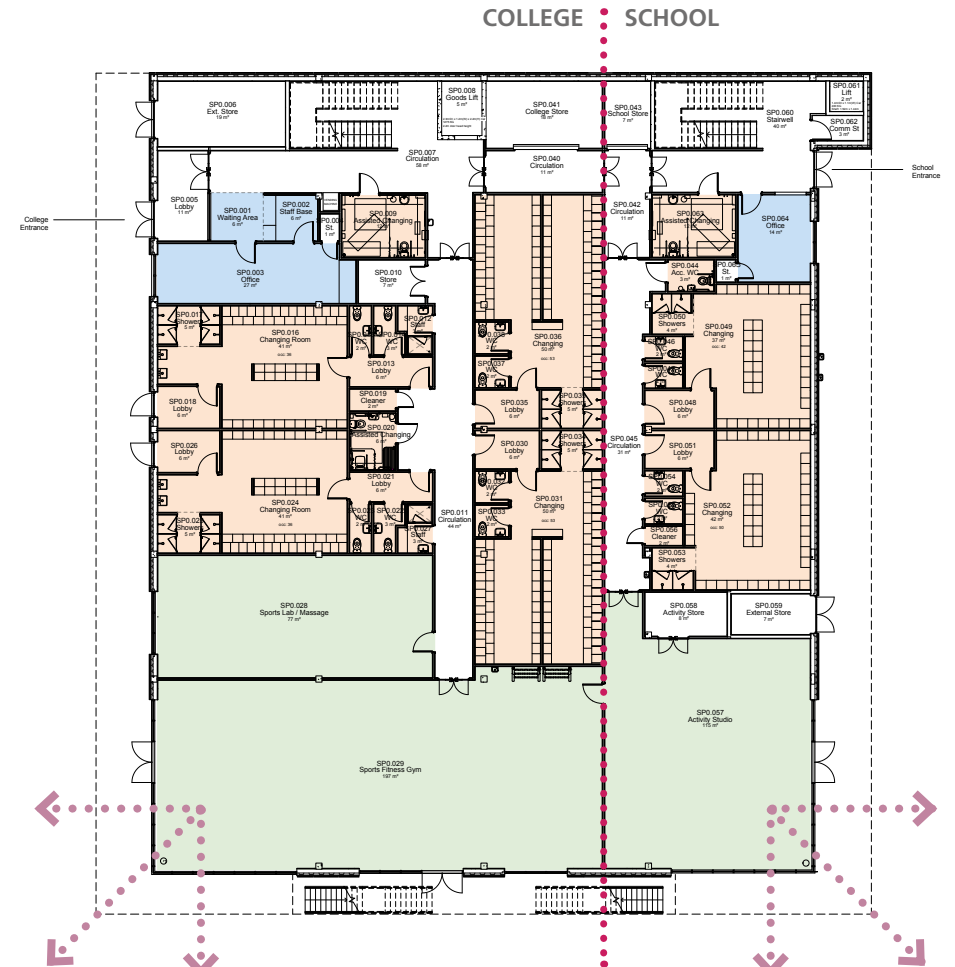
## Key Internal Spaces

The internal layouts have been key drivers in developing the proposal for the Sports Facility. Being divided in two parts, the key spaces within the building on the ground floor include a Fitness Gym and Sports Massage/Lab on the College side, and an Activity Studio on the School side; and two 4-court Sports Halls on the first floor.

Changing accommodation is provided on the ground floor, for the College, Free School and community users of the Fitness Gym and the Sports Pitches.



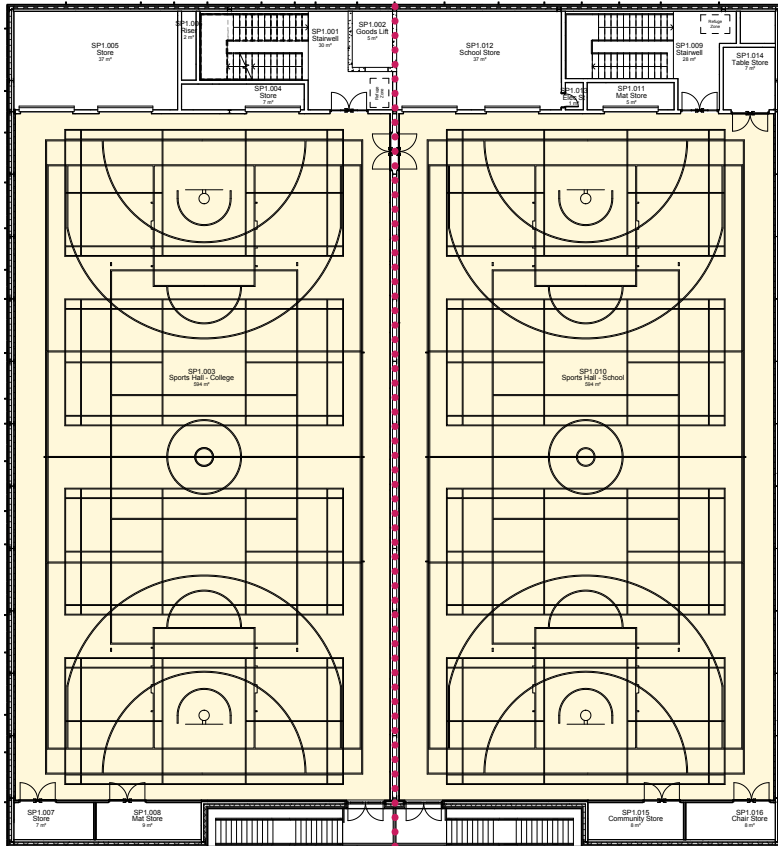
Precedent Reference Images



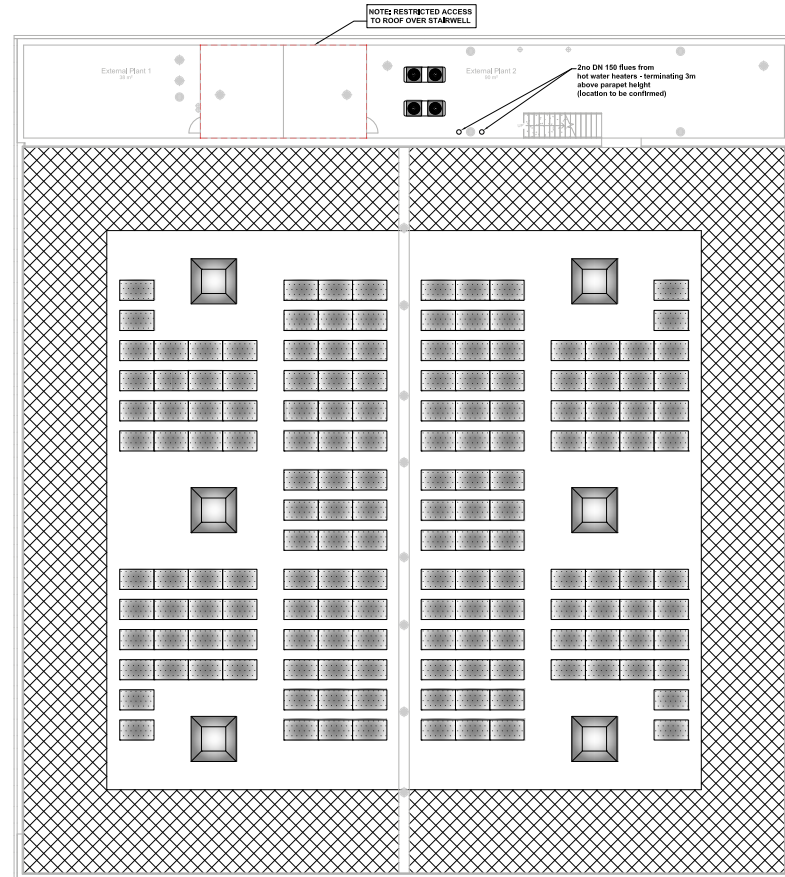
Level 00 - Layout showing Sports Facility areas  
Refer to drawing 5137898-ATK-SP-00-DR-A-1000 for enlarged plan



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Level 01 - Layout showing Sports Facility areas  
Refer to drawing 5137898-ATK-SP-01-DR-A-1001 for enlarged plan



Roof Level  
Refer to drawing 5137898-ATK-SP-04-DR-A-1003 for enlarged plan

## 5.7. Scale

### Building Height & Massing

The proposed Sports building is designed in accordance with the masterplan, parameter plans and Design Code. The building is designed to suit the mixed urban grain of the surrounding area, and at an appropriate scale for its urban context.

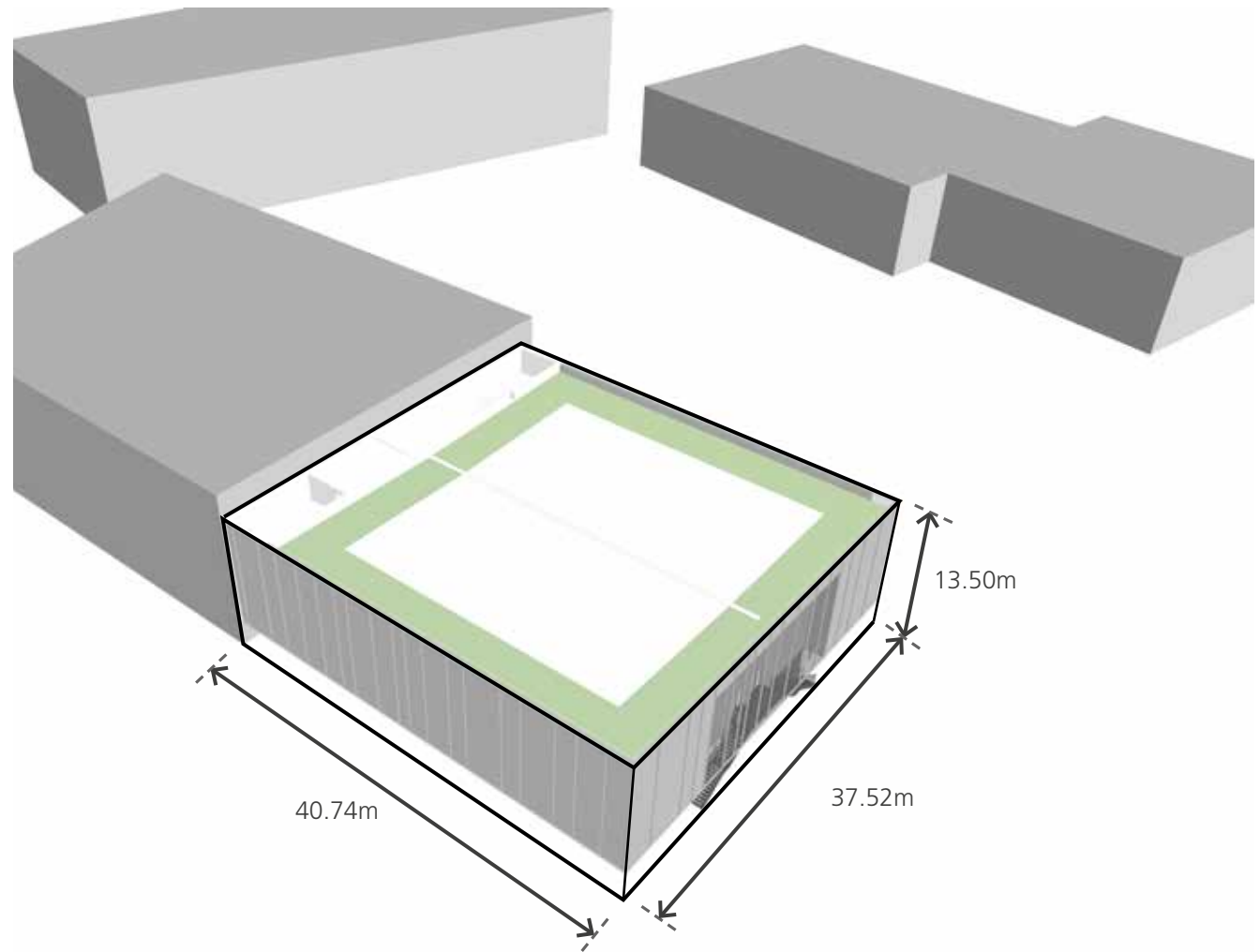
The building sits next to the proposed College STEM building, creating a unified front along Marsh Farm Lane and providing definition and security to the School's open space. Section 5.6 of the Design Code requires that the 'building massing should be consistent and continuous to define the urban block and street layout', which the design fulfils.

The area surrounding the campus is a mixture of small to medium size residential developments in addition to numerous larger industrial sites and sports facilities, in particular, Twickenham Stadium and The Stoop.

The Sports building has been designed in response to larger buildings in the local surroundings, as well as the other proposed and approved developments, such as the College and the School developments. The design responds to the future masterplan and prominent position to the west of the site along Marsh Farm Lane.

The proposed building height is comparable to larger buildings in the surrounding area, with the proposal being slightly higher than The Stoop but significantly lower than Twickenham Stadium. As a direct comparison, the height of the proposed building is approximately 6.5m lower than the proposed College building and 1m higher than the proposed School building.

The double height Sports Halls have a consistent and continuous facade, creating a floating 'box' which announces the building. The uniformity of the facade is broken down with articulation of the



Proposed Sports Facility Massing - all dimensions are within the limits set out on parameter plan drawing PL-04

cladding and the vertical mullions. The fire stairs at the south are expressed as a building feature, being partly enclosed for safety reasons.

The overall design is simple with a neutral palette, but still visually stimulating with an appropriate scale of composition, The appearance and tone of the cladding will feel warm and inviting.

### Rooftop Plant

The mechanical plant at roof level comprises two air-cooled heat pumps, as well as a number of roof ventilation cowls to the Sports Halls. The air-cooled heat pumps will, in effect, be mounted at second floor level, which is nominally 1.6m below roof level. Including mounts, the units will be about 1.75m high, so they will only marginally protrude above roof level.

Ventilation to the Sports Halls will be provided by six mixed-mode units mounted at high level within the Sports Hall. Outdoor air to these will be entered via low profile roof cowls. These are below 900mm high, so they will be below the height of the perimeter parapet, complying with the height parameters set out in Section 5.9 of the Design Code and outline planning drawings PL-05, PL-07 and PL-08.

As part of the strategy to achieve a 35% reduction in regulated carbon emissions compared with Approved Document L2A, an extensive array of photo-voltaic panels will be mounted on roof level. This is currently assessed as 265m<sup>2</sup> of panel. These will be configured in 'portrait' to optimise the energy collection without the excessive height impact.

A sedum roof is provided at 4m around the perimeter of the roof to support biodiversity, in accordance with Section 5.8 of the Design Code. This is a hardy solution and will provide coverage throughout the year.



Indicative aerial view from the south west corner