

05 Masterplan Masterplan Development

A viability review of the existing accommodation buildings was undertaken to assess the work required to create teaching spaces within the accommodation blocks.

The existing plans suit individual bedrooms, either side of a central corridor making it necessary to move the corridor from the centre of the plan to one side to accommodate classroom sizes. There would be structural implications of converting the blocks to teaching accommodation, which would include strengthening floor slab and additional steel columns and beams. Classrooms would be still be poor quality with low existing floor to soffit height of approx 2.5m. Given the unsuitability of the buildings to be reused, the applicant decided to remove these buildings.

this is also in line with the engagement in DRP#01 where the panel felt removal of these blocks would open up the potential of the masterplan, the decision was taken to remove the two accommodation blocks rather than convert them.

With the decision to demolish the accommodation this part of the site became a significant opportunity to develop the masterplan. The other significant amendment to the brief was the decision by the applicant to reduce the number of seats in a performance space to a more modest scale.

We tested the options that these two changes this opened up. This included the use of a 'superblock' with perimeter classrooms and a large space in the central volume which could become the school hall. (top right hand image) This is a typology often used in large secondary schools and has benefits in terms of minimising the external envelope. However, this would create a large single mass in the centre of the site which would be at odds with the more refined footprint of the listed buildings.

Locating the sports centre nearest to Whitton Dene and the teaching building centrally (as shown in the two options to the right) cuts off the area of Category A trees



Early masterplan design iterations retaining accommodation blocks

to the northern part of the site and doesn't put landscape at the heart of the masterplan. In addition the sports centre has the least active frontages of all the buildings due to the nature of the activity inside (sports halls need to be large 'boxes') and so would be the less interesting facade for neighbours to look onto.

We were encouraged to make the masterplan landscape led by the DRP. Our conclusion was that swapping the teaching building and sports centre places landscape at the heart and gave focus to the existing trees, as well as providing Whitton Dene with an active frontage. This is shown on the following page.



Early masterplan design option removing accommodation blocks



Early masterplan design option removing accommodation blocks

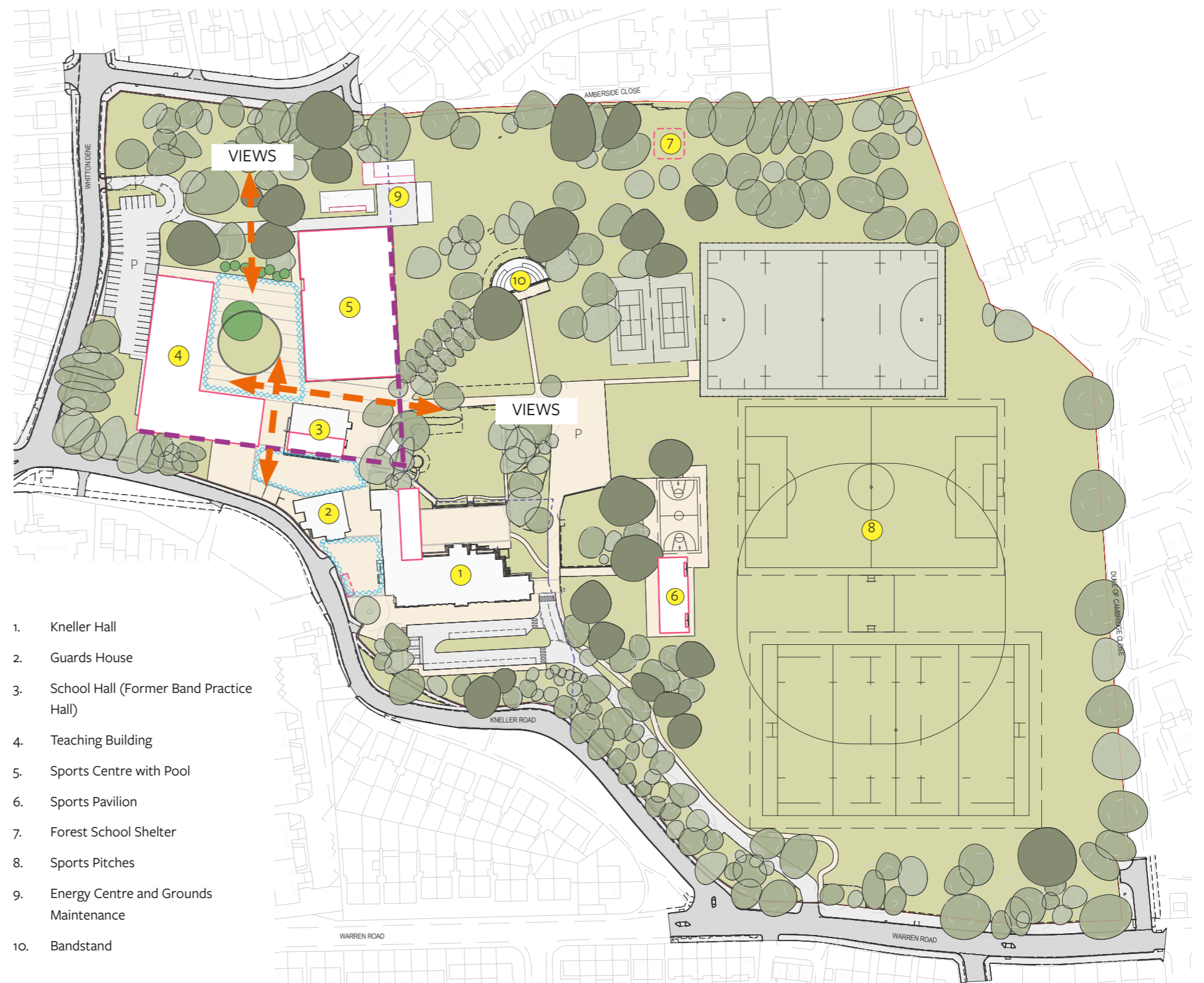
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Masterplan Concept

The concept for the masterplan places the two largest new buildings in the area of the site opened up by the removal of the accommodation blocks. The buildings frame a new courtyard that organises the new part of the campus, with views north towards the most significant trees and views east towards the MOL. This pulls the landscape through into the heart of the school.

The sports centre is placed centrally as the largest mass, aligning its east elevation along the MOL line on the grid established by the Hall. The teaching building moves off the formal grid and responds to the boundary line, the south-west group of trees and the line of the Band Practice Hall.

- + Sports hall and swimming pool are consolidated in one building and placed away from the boundary
- + The New teaching building addresses the boundary with its more active elevations. It's alignment address the tree grouping and orientation of the Band Practice Hall
- + The two buildings create a new external space that links to the wider landscape
- + The Band Practice Hall is repurposed for a new school hall
- + Vehicles movements are kept to the edges with the staff carpark accessed from the opened up Whitton Dene entrance
- + The new sports pavilion is located on the footprint of existing building
- + Series of connected external spaces between the buildings
- + Existing buildings are re-purposed for the Energy Centre



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Response to DRP 02

- + **Parade Ground** - this has been designed to retain the openness of the parade ground but will improved materials in a design that respond to the symmetrical elevations of the Hall. This can be used by the school as a hard landscaped area. Transport is treated as a secondary use . The south-west gate will be restored for occasional access but will not be used day to day due to H&S concerns on the narrow pavement outside at this point and the angle of the gate.
- + **Main Entrance to Kneller Hall:** The DRP suggested that a new structure be considered to make a statement and announce a sense of arrival. In response to this we have considered the new entrance approach of steps and ramps with signage and canopy to provide this sense of arrival. The site is constrained at this point and routes for maintenance and emergency vehicles would preclude an extension here.
- + **External Spaces:** There are several different courtyards with different characters. We have added more detail to show how we anticipate these will be used (see the landscape design report) such as the Mellon Yard to the south of the dining space being used for spill out and al-fresco dining. The terrace to the rear is existing and feedback from the conservation officer is that a formal approach would be retained rather than the naturalistic approach of Repton who did not cover this part of the grounds in his design.
- + **Sports Centre:** The Massing of the sports centre has been carefully considered and is discussed more Section 09. The plan has been cranked which breaks the long line at eye level as well as responding the site more sensitively. Elevations have been articulated further within the constraints of the building's use. The pool has views onto the landscape from its western elevation. The roof profile has been reviewed and whilst rooflights are retained to bring natural light into the hall they are not expressed on the elevations. Whilst the use of brick unifies the different parts of the sports centre, the two main elements are treated differently at the upper floors. The sports hall has standing seam metal cladding with varying panel widths. The upper part of the swimming pool has textured brick pattern. The sports centre has a generous foyer space for the community to break-out into when using the sports centre. This will include vending machines. A larger hall space for community use is suggested, this function can be provided by the open activity studio, the School Hall or the sports pavilion.
- + **Sports Centre and Teaching building locations:** The rationale for the respective locations is discussed on page 26. The DRP noted that the teaching building's location would mean the classrooms would overlook the carpark. Whilst this is true of the classrooms in the northern part of the building, they are specialist classrooms and pupils will be moving around the building, and we believe the impact is negligible. The rest of the building will look out onto trees and landscaped courtyards.
- + **Teaching Building:** elevations have been developed in response to both Pre-app feedback and DRPo2. Greater articulation and variety has been incorporated and increased richness in the detailing such as the more decorative metal panels to the ground floor. Ventilation openings are located behind these ground floor panels to allow for secure night-time purging in warm weather. Sustainability calculations show that the CIBSE requirements for overheating will be met.







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Proposed Masterplan

The final proposed masterplan develops the concept on the previous page but refines it further in response to DRP#02 as follows:

- + The two parts of the sports hall are cranked around the point of the main entrance. This breaks down the long line of the building from eye-height within the courtyard and MOL and it unites the two axes on the site. In addition it gives some 'breathing space' around the end of the tree lined avenue and the orthogonal route between the swimming pool and school hall creates a stronger connection to the path into the wider landscape.
- + The forest school shelter is moved out of the MOL and connects to the northern route from the formal courtyard.
- + The footprint of the extension to Kneller Hall west wing is refined and articulated.

Key

	Existing Building		New Tree
	Proposed Buildings/ Extension		Existing Tree (Category A)
	Bike Store		Existing Tree (Category B)
	Artificial Sport Pitches		Existing Tree (Category C)
	Hard Landscape		MOL Boundary
	Swale		Site Boundary



1. Kneller Hall
2. Guards House
3. School Hall (Former Band Practice Hall)
4. Teaching Building
5. Sports Centre with Pool
6. Sports Pavilion
7. Forest School Shelter
8. Sports Pitches
9. Energy Centre and Grounds Maintenance
10. Bandstand