



St Mary's School CAMBRIDGE

Welcome to our public exhibition

An opportunity to view future development plans for St. Mary's School

St Mary's prides itself on nurturing UK and international girls aged 4 to 18 years. Established in Cambridge 120 years ago, the Senior School has been located on Bateman Street for the past 118, but has not engaged in any major building project or renovation on site since the 1970s. It is now seeking to redevelop and extend the existing facilities to create a school that meets the needs of 21st century girls.

We are presenting two projects here. The objective is not to increase pupil numbers, but to improve facilities for current students. Options to refurbish existing facilities were considered first, and then, where re-working buildings would not meet the school's needs, opportunities for new accommodation were investigated.



Introduction

St. Mary's School is situated in the New Town and Glisson Road Conservation Area. To the south of the school is the Cambridge University Botanic Garden. The north the school is bordered by Bateman Street. There are a number of Grade II listed buildings, and locally listed buildings around the St. Mary's 6th Form Centre. The north side of Bateman Street is characterised by Victorian-era terraced housing, while the south side has larger stand alone or semi-detached Victorian villas. A number of these villas have been converted to education facilities, a health clinics and offices.

We have 3 Victorian villas on our site, The Elms, Paston House, and No. 47. Although The Elms and No. 47 have remained distinct, Paston House has become hidden by the various extensions. No 47 is the current art department and is separated from the rest of the school by an access road to the Botanic Garden. Between the 1900s and the 1970s, the space between The Elms and Paston

House was filled-in with tall buildings that rather dominate the street.

Bateman Street links two arteries of Cambridge, Trumpington Road and Hills Road. It is congested with cars, delivery lorries and cyclists, while the pavement in front of the school is narrow. The refurbishment project is driven by our ambition to improve this.

In addition, the projects seek to provide large spaces suitable for teaching a modern curriculum, that cannot be catered for in the small classrooms of the existing buildings.

Representatives from the school and the design team are present this evening to answer any questions you may have. Please do provide us with your observations by completing a comments form so that we can capture your feedback.



St. Mary's Senior School site highlighted in red, with Bateman Street to the north and the Botanic Garden to the South. (Image credit: Google maps)



Existing plan of St. Mary's Senior School site and the surrounding area.



View of school from Bateman Street, east of school site



View of school from west end of Bateman Street

Two projects to improve quality of teaching spaces



Refurbishment on Bateman Street

The first project - the refurbishment on Bateman Street - rationalises internal spaces to create larger classrooms, improves circulation, signage and accessibility, and creates a large, new entrance lobby to ensure the school is more open to the street. There was a previous planning permission for improvements to the entrance.

- New classroom extension & stair enclosure
 - Remove high walls on street front
 - Increased public space
 - Improved landscaping
 - Improved teaching spaces
 - Improved accessibility and encloses the existing external fire escape
- New 'breakout bays' & entrance lobby
 - Improved teaching & study spaces
 - Improved entrance lobby
 - Increased signage
 - Increased visibility into the public face of the school.
 - Improved accessibility with the introduction of a new lift

The thermal performance of the building fabric is improved at each point of intervention.

New Creative Arts Hub

The second project - the new Creative Arts Hub - provides additional teaching spaces for the art department. The new building is built behind No. 47, which is the existing art department, and creates a new Hub for Creative Arts. The rooms in No.47 are small, ideal for 6th form art teaching, but not a full class of senior school students. The new building provides fit-for-purpose facilities for teaching Resistant Materials, Textiles and Food Technology, as well as good sized art rooms.

The building will be highly energy efficient. It will be clad in brick in response to the prevailing character of the Conservation Area.

The Creative Arts Hub will be built on an existing car park, which means that all parking will be removed, thereby reducing some of the traffic along Bateman Street that is associated with the school.

The site had a previous planning permission for a four storey building for St. Mary's.

Refurbishment on Bateman Street



Existing view of St. Mary's main entrance, looking west along Bateman Street



Existing view south along Panton Street



Existing view east along Bateman Street - in direction of Hills Road

Creating an open, visible & well-framed entrance

The refurbishment on Bateman Street includes re-thinking the experience of how one approaches the school entrance. We plan to relocate our main entrance, create a more generous lobby, and ensure it is clearly visible and easily accessible to all. Where the existing reception is hidden behind brick walls, the new glazed façade at ground floor level will create a light-filled entrance and reception that is open to the street and to the community with views through to the garden.

Accessibility into and around the buildings will be improved. A new lift will be installed so that the science department can be reached without using the stairs.

For girls arriving at school, or for parents waiting at pick-up, there is greater space created at the entrance for gathering and waiting. The existing railings are removed and new planting and seating is installed instead.

A new metal clad canopy will mark the entrance and draw visitors into the building. The entrance is further marked by metal clad 'breakout bays' that not only provide more versatile teaching and meeting spaces, but engage with Bateman Street. Vertical windows looking down Bateman Street and Pantan Street give glimpses of activity in and out of the school. Signage further highlights the entrance and announces the school to the street.



Artist's impression of view west along Bateman Street - in direction of Trumpington Road showing new canopy and entrance



Artist's impression of view south along Pantan Street to main entrance with 'breakout bays' above



Artist's impression of view east along Bateman Street - in direction of Hills Road illustrating 'break out bays' and new landscape



Proposed Ground Floor Plan
Do not scale

Refurbishment on Bateman Street



Existing view west along Bateman Street - in direction of Trumpington Road



Existing view of Paston House with Crush buildings in the background. View looking west - in direction of Trumpington Road.



Existing view east along Bateman Street with the Crush building on the right - in direction of Hills Road

Removing high walls improves the external area in front of the school

Plans to redevelop the Bateman Street frontage revolve around the desire to open the school up to the street, by removing high walls, pushing back from the pavement, creating more green space and making more of the three Victorian villas as part of our streetscape heritage.

The lean-to accommodation is removed and this space is landscaped with planting, benches and an improved pavement surface. The space for people in front of the school buildings will be wider and more spacious so that the tall buildings are less imposing. Vibrant plant species will create interest at eye level.

Improving teaching spaces also improves identity of existing buildings

The untidy and outdated external fire escape is made internal in a building that completes the unfinished gable of the Crush building. Next, a new classroom is added at the first floor. This classroom is metal clad and creates a breakpoint between the buildings. This improves the identity of Paston House, which will once again be understood as a stand-alone villa, rather being hidden by various extensions.

The design represents a cohesive approach to the whole elevation, that gives clear identity to each individual building. The developments will enable us to educate our girls in classrooms that are fit for modern use, with break out spaces and meeting rooms, whilst remaining sympathetic to the heritage of the site.



Artist's impression of view west along Bateman Street - in direction of Trumpington Road



Artist's impression of view of Paston House with new classroom extension and new enclosure to fire escape shown. New school entrance shown in background.



Artist's impression of view east along Bateman Street - in direction of Hills Road with high wall and lean-to accommodation removed

Paston House
Villa c.1860

Crush building
c.1900

David Roberts' Building
1959

David Roberts' Building
1962

The Elms
Villa c.1850



Paston House is understood as being a stand alone villa

New stair enclosure completes unfinished gable of Crush building.

Improved landscaping and added seating.

New classroom extension at first floor

Lean-to accommodation demolished to make pavement wider.

New welcoming entrance with views through to cortile garden, canopy and signage.

'Breakout bays' above with teaching and meeting spaces.

New lift to improve accessibility

New gathering space and garden created at entrance. Kitchen extended to in-fill undercroft.

Glazed corridor is replaced and landscaping is improved.

Proposed Bateman Street - North Elevation
Do not scale

A new Creative Arts Hub



New fit-for-purpose facilities

St Mary's prides itself on its visual arts provision but does not currently have suitably sized, dedicated spaces in which to teach subjects such as Design, Textiles or Resistant Materials. This limits our ability to support our girls' ambition to go on to study art, design, architecture and engineering at degree level. The proposed plans will create a purpose-built, imaginative and inspiring, eco-friendly space in which to achieve this aim.

The new building is located behind the existing art department so that the two can support the same curriculum. The classrooms within the existing building are remodelled to provide bigger spaces where possible.

The corner of the new building is curved, directing attention towards the entrance and drawing people into the building. The entrance is recessed, inverting the bay window on No.47. A new entrance courtyard is created between the new building and the new entrance to No. 47. It is the intention that a new route across the access road will be created, so that pupils do not have to go out onto the pavement to get to art classes.

The building is tightly planned to provide the accommodation necessary to teach the curriculum. The entrance lobby is a generous, double height space where visitors can meet and see into the workshop. The curved stair connects workshops for Resistant Materials on the ground floor, Food Technology on the first floor, Textiles on the second floor, and 2 large art rooms on the third floor. There are generous lobbies on each landing with glazed screens to the workshops. The external space on the south side of the building is designed as an external work space for students.



Planting & seating proposed in landscape strategy

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Views of the Creative Arts Hub

These images give an impression of the new Creative Arts Hub from different perspectives along Bateman Street, Francis Passage and Bateman Mews.



View No.14
View west along Bateman Street. New Creative Arts Hub is not visible until passed Woodlands surgery on the left.



View No. 13
View south from Francis Passage towards No. 47 Bateman Street. Woodlands Surgery is on the left and the new Creative Arts Hub is seen behind No.47 Bateman Street.



View No. 11
View south from Bateman Street, opposite No. 47 Bateman Street with the new Creative Arts Hub visible in the background.



View No. 12
View south-east towards No. 47 Bateman Street with Woodlands Surgery in the background. The new Creative Arts Hub is just visible.



View No. 09
View east, towards entrance of new Creative Arts Hub from the school yard.



(ABOVE)
View No. 10
View south-east on Bateman Street, towards No. 47 Bateman Street.

(LEFT)
View No. 15
View west from Bateman Mews.



View 10 Existing Photo
No. 47 Bateman Street with a staff car park behind



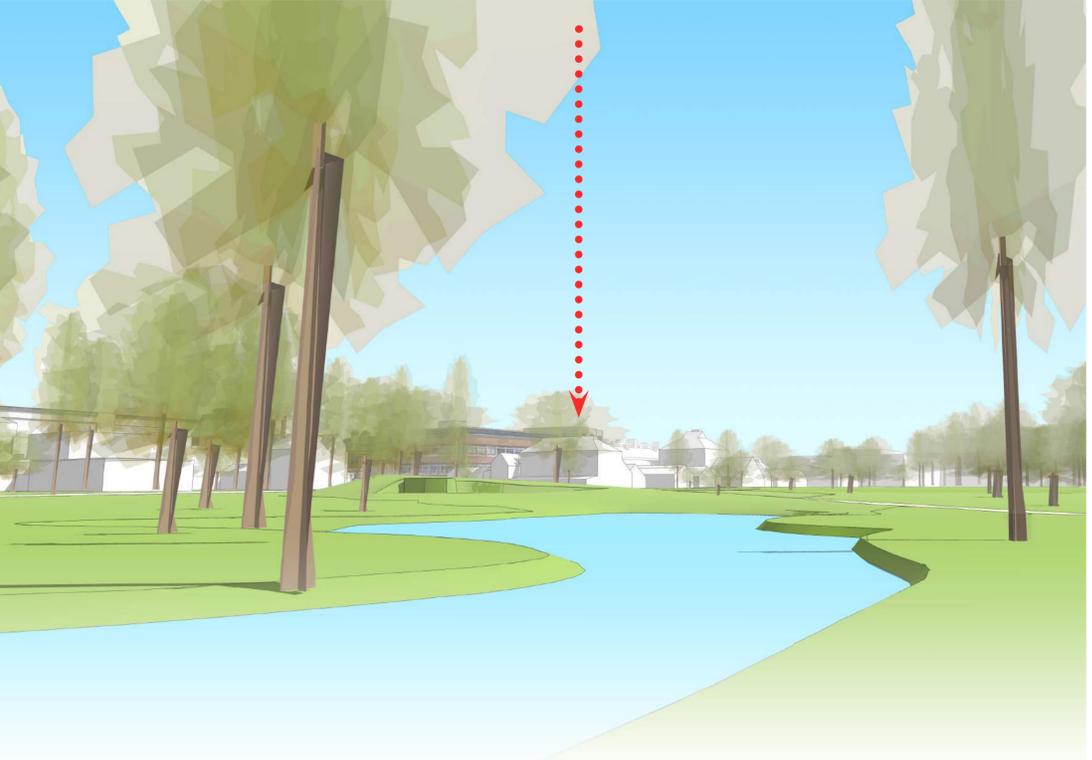
Site plan giving location of viewpoints

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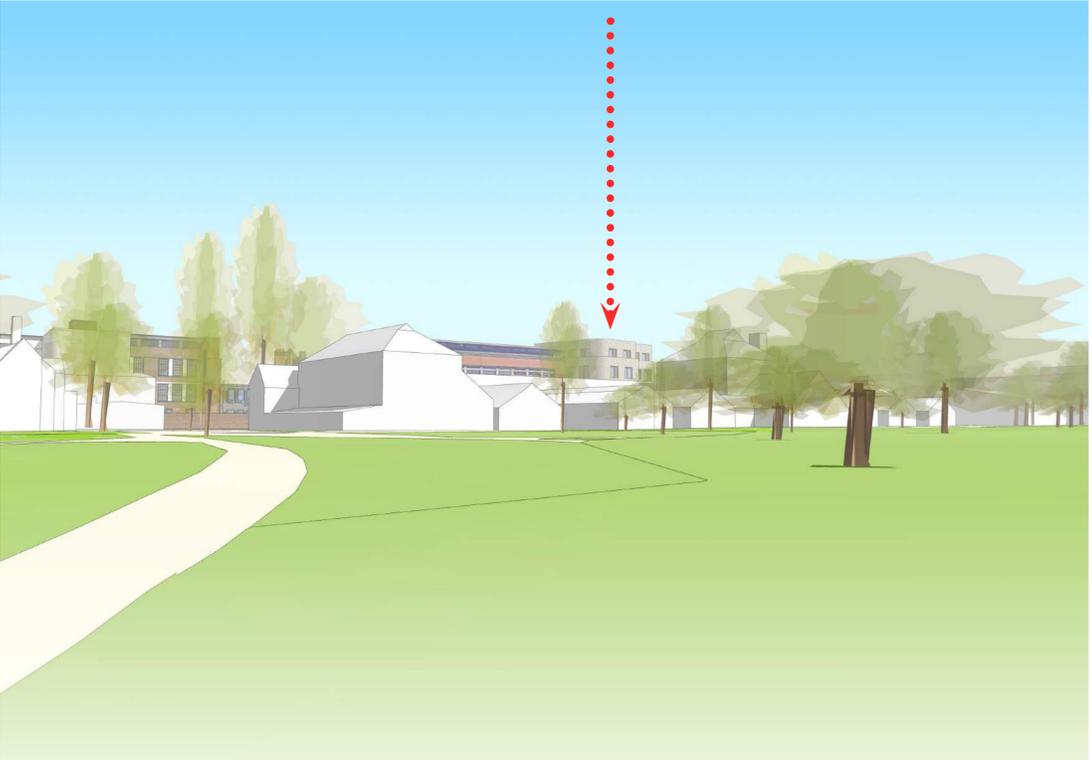
Views of the Creative Arts Hub from the Botanic Garden



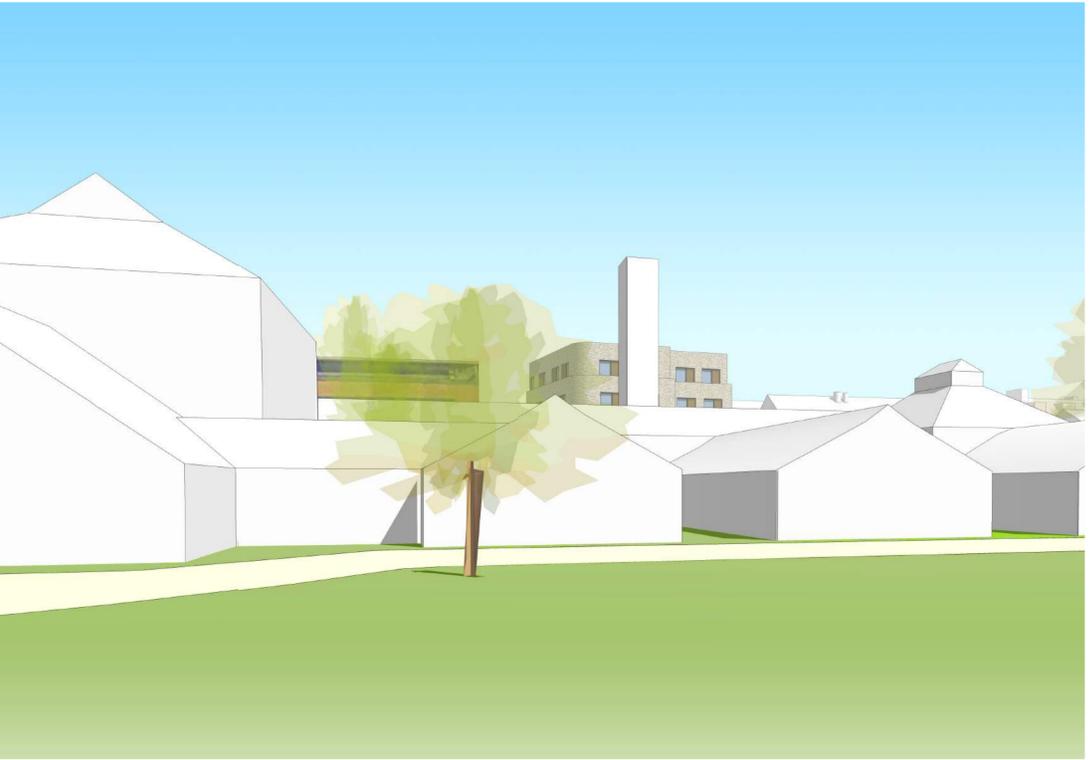
View No. 16 (see map on right)
The existing school buildings are visible behind the Botanic Garden's education centre, but the new Creative Arts Hub is not visible.



View No. 17 (see map on right)
The existing school buildings and the new Creative Arts Hub are visible behind the Botanic Garden's greenhouses. The new Creative Arts Hub is just visible behind the lefthand greenhouse.



View No. 18 (see map on right)
The existing school buildings and the new Creative Arts Hub are visible behind the greenhouses of the Botanic Garden.



View No. 19 (see map on right)
The existing school buildings are visible behind the greenhouses. The new Creative Arts Hub is also visible behind the Botanic Garden's chimney.

Designed with the surrounding context

The design of the Creative Arts Hub has been considered from the point of view of a visitor to the Botanic Garden. The new building is visible from the Botanic Garden but reads, along with other existing school buildings, as part of the city backdrop of the Garden, so that it does not distract from the historic environment. The material selection of brick is felt to be in keeping, not only with Cambridge, but with the artisan feeling of a garden that relies heavily on craft as well as science.

The images on this board have been discussed with the Botanic Garden and the construction of the project will be carried out in full consultation with them to ensure that disruption is minimised and that safe access for the Garden's staff is maintained.

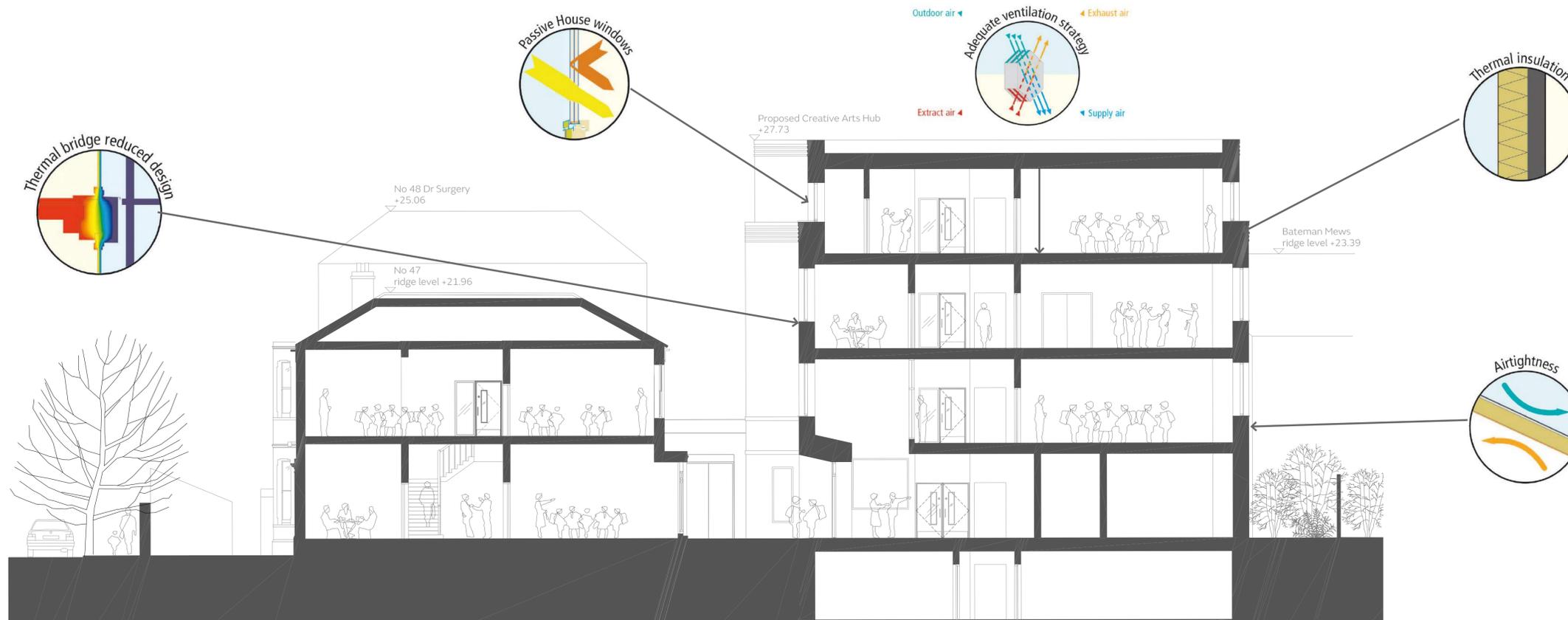


View No. 19 (see map below) Existing View



Site plan giving location of viewpoints

Sustainability Strategy



Section through No. 47 Bateman Street and the new Creative Arts Hub, with key elements of sustainability strategy highlighted

Pioneering energy efficiency

It was necessary to carefully think through our sustainability options for these projects, as the refurbishment and new build projects each require a bespoke approach. The school's commitment to staying on this site in the heart of Cambridge makes the most sustainable use of existing buildings and relies on well established public transport routes, rather than creating a new out-of-town campus.

Each intervention in the refurbishment works improves the thermal performance of the building fabric and make more efficient use of energy.

The new Creative Arts Hub will be Passivhaus, which is the world's leading standard for energy efficiency in buildings. The primary aim of Passivhaus construction is to dramatically reduce the energy needed for space heating and cooling, while also creating excellent indoor comfort levels. This is achieved by high levels of insulation forming an unbroken thermal envelope, stringent detailing to ensure exceptional levels of build quality and airtightness, and the use of highly efficient mechanical ventilation with heat recovery.

The primary structure of the Creative Arts Hub will be cross laminated timber to reduce embodied energy and sequester carbon.

All plant species used for both projects will be selected in agreement with the Botanic Garden, to ensure that no disease or invasive species ever threatens the historic park.

Material Strategy



Lener Court, Clare College, Cambridge

This is a previous project by van Heyningen and Haward architects in the city of Cambridge. It is a brick, metal and timber clad building of a contemporary design, that remains respectful to the neighbouring Gilbert-Scott building.



Science & Technology Building, Oundle School, Northamptonshire

This is another previous project by van Heyningen and Haward architects that uses brick in a contemporary manner. Similar detailing of volumes will be employed in the new Creative Arts Hub.



Art, Design & Technology Building, St. Benedict's School, London

In this previous project by van Heyningen and Haward architects metal clad study bays are used to define activity. The metal cladding complements the colour and texture of the brick. A similar approach and material palette will be employed in the refurbishment project on Bateman Street.

Material selection that is in keeping with the surrounding area

Self-supporting brick cladding will give a high quality and long lasting finish, that is in keeping with the nature of the conservation area it sits in.

The images on the left are examples of buildings that van Heyningen and Haward architects have completed, that have similar material selection. For St. Mary's School, a similar level of design and build quality can be expected, through the development of brickwork details and the way the brick interfaces with rest of the material palette.

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