

Project
King Edmund's School

Client name
Mace

Sector
Education

Deliverables

- Control grid
- Measured building survey, including floor plans, stairwells, external elevations and floor-by-floor elevations
- Virtual tour with 360° 4k photographic Matterport tour

As part of its School Rebuilding Programme (SRP) project, the school identified a need for a complete measured building survey of all the buildings on-site to be undertaken on the same grid and a 360˚ 4k virtual tour of the school to be developed. This would create a snapshot in time of the school and enable delivery consultants and construction experts, Mace to 'visit' the school virtually, without having to return to site.

Measured building survey and 4k virtual tour of school provides accurate data and visual tool to aid school redevelopment programme

01928 734 473
surveyors@powersuk.com
powersuk.com





PROJECT

King Edmunds School (KES) was originally opened as Rochford Secondary Modern School in 1937. It provided local children with a basic education to prepare them for work, which was largely manual. It was renamed The King Edmund School in 1961. More recently, as part of its School Rebuilding Programme (SRP) project the school identified a need for a complete measured building survey of all the buildings on-site to be undertaken on the same grid and a 360˚ 4k virtual tour of the school to be developed. This would create a snapshot in time of the school and enable delivery consultants and construction experts, Mace to 'visit' the school virtually, without having to return to site. This reduced the number of trips to the school which meant that the consultants didn't have to go through a costly and lengthy security clearance process, due to attending site in the presence of children, and making the project more environmentally sustainable by not having consultants and stakeholders driving to site to discuss plans and developments.

CLIENT REQUIREMENT

Powers was commissioned to develop a comprehensive measured building survey and a 360˚ 4k photographic virtual tour of King Edmund's School in Essex.

The measured building survey includes accurate floorplans, stairwell measurements, external elevations and floor-by-floor elevations, and shows where the buildings are sited in relation to each other, including the size and scale of each building.

The virtual photographic tour can then be viewed alongside the accurately measured drawings of the same building. The measured building survey and the 360° 4k photographic Matterport tour combined, offer the opportunity to remotely 'visit' the school and understand the size and scale of the buildings with accurate data, and how the buildings relate to each other.

As the work was being carried out at a school, it was necessary for it to take place in the school holidays when the students were off. Powers surveyors all have enhanced Disclosure and Barring Service checks, which allows them



to work within schools during school hours. However, it was agreed that the curiosity of pupils in the equipment and what it could do, would slow the team down and prevent deadlines being met. The result of this was that two of Powers surveyors agreed to work to tight deadlines on-site, carrying out the photography for the virtual tour and gathering data for floor plans and elevations, during the late week-long half term holiday.

There were also a number of other contractors working on-site, taking advantage of the students being on holiday, so coordination with them too, to ensure that they didn't appear in shot, was required.

OUTCOME

The measured building survey and virtual tour provides a more advanced way for Powers' clients to collaborate with their stakeholders on a project as it allows them all to access the virtual tour of the school whilst reviewing the accurately measured floor plans and elevations. This demonstrates the scale and character of the building, as opposed to the just the factual data usually required.

Once the images had been captured, they were linked together and uploaded to the Matterport website. The Matterport digital twin provided a 3D tour of the school, with the opportunity to add comments within the images, include precise measurements and generating 4K print quality photos, schematic floor plans and guided tours.

The measured building survey and virtual tour formed part of a pack of information which went to tendering contractors so that they could clearly understand the scope of work without having to disrupt the school day. The Matterport data is owned by the client and Powers moved the Matterport tour across to the client's own Matterport account once all the work was complete.

> The benefit of having a comprehensive measured building survey and virtual tour of a site means that it is easier to collaborate with others without having to spend unnecessary time on site. This is particularly advantageous when the site in question is a school and access is restricted to out of school hours.

Jack Knott
Senior Project Manager, Mace