COMPANY Hampshire County Council

LOCATION United Kingdom

SOFTWARE AEC Collection

Delivering regeneration projects with tangible social impact, underpinned by BIM maturity



Photo Credit: Andy Matthews

Background

Hampshire County Council (HCC) is responsible for supporting the **1.4m** residents of Hampshire County in the UK by implementing central Government policy and delivering a broad range of services for its citizens.

With a focus on 'Keeping Hampshire safe, improving the health and well-being of the residents and delivering high-performing services,' HCC is responsible for maintaining 5,500 miles of local road network, educating over 170,000 School children, and supporting a thriving and prosperous £66Bn local economy, all while maintaining and cherishing the heritage of the local area that HCC serves.

The Property Services Team - community value by integration

Within the Council's administration sits the Property Services team. A 400-strong multi-disciplinary team that works for HCC and its partner organisations, other local authorities and public bodies across the south-east of England.

Its purpose is to shape, design, deliver, maintain and operate the buildings and sites that provide key public services and places for the communities that HCC serves.

Property Services core objective is to deliver great public value outcomes, that improve the lives of Hampshire residents. The team delivers capital projects ranging from new schools and care homes to libraries and fire stations as well as museums and art galleries plus many more.

Digital by design, integrated in execution

Property Services acts as an integrated team bringing together multiple disciplines and their respective stakeholders, skills and capabilities in order to deliver projects successfully.

To foster this strong collaboration, the team is guided by 3 core principles: to be digital by default, to be digitally capable and to be data driven in decision making.

Central to Property Services' principles is a commitment to innovate through Building Information Modelling (BIM). By enabling BIM processes that create and manage information throughout the lifecycle of the estate, Property Services is combining information-rich 3D models with structured data to deliver greater positive outcomes for the residents of Hampshire.



Photo Credit: Andy Matthews





Image courtesy of Hampshire County Council

Harnessing the benefits of BIM for the Oakmoor School project

Oakmoor School is a secondary school at the heart of a new development in Whitehill and Bordon, Hampshire. With a capacity for up to 900 pupils aged 11 to 16, Oakmoor represents an important site to support the wider regeneration of the area.

The school is the result of a comprehensive joint effort between Hampshire County Council, East Hampshire District Council, the Defence Infrastructure Organisation, Whitehill & Bordon Regeneration Company, the Department for Education, the M3 LEP and the University of Chichester Academy Trust.

The Property Services team led a multi-disciplinary team to design and deliver the Oakmoor School project including Architects, Landscape Architects, Interior Designers, Structural, Mechanical, Electrical and Civil Engineers, Quantity Surveyors and Building Inspectors.

The team adopted a BIM process by leveraging the Autodesk AEC Collection to deliver the project. This approach enabled the team to solve multiple complex challenges and keep the project on track.

One such challenge was to address the uncertainty of where to position the drainage system given the high-water table at the site. The storm water storage needed to be shallow covering a large surface area and the best location was identified to be underneath a central courtyard in the middle of the surrounding school buildings.

This location presented a risk of clashing with mechanical and electrical services also designated for the area that could have led to costly rework in construction phases.

Through a coordinated 3D model, the teams were able to test different solutions and understand implications of making changes immediately to find the most optimal approach for the drainage system saving considerable time and resources. Throughout the project, similar challenges were anticipated in advance and solutions proactively engineered to ensure the project could be delivered more quickly, thereby satisfying the public service value criteria.

The team successfully delivered the Oakmoor School project providing a state-of-the-art facility, representing a new identity for staff and students as well as a greater sense of pride in the school and community. The new inspirational environment has raised educational aspirations for the school.

Driving a digital mature future at HCC

Establishing improved project collaboration workflows through BIM processes has transformed how projects such as Oakmoor School are delivered. Technology plays an important role to achieving this.

The Property Services team utilise the Autodesk AEC Collection to provide a comprehensive toolkit of digital tools to support HCC's transition from 2D CAD workflows to 3D information rich BIM workflows to deliver conceptual design, modelling, coordination and documentation in project delivery. This flexibility is helping the team to mobilise faster to support projects and increase quality in work output.

Looking to the future, the team is exploring how they might further enhance their approach particularly focused on driving cost efficiencies and achieving sustainability targets. Work is underway to enable their broader contractor supply-chain to adopt a standardised approach through cloud integrations. The team is also assessing the embodied carbon in design activities to inform proposals as part of the ongoing drive towards net zero.

