



Bristol University's Temple Quarter Enterprise Campus is a key part of the regeneration of the city's historic Temple Meads area. Preparation of the 5 acre site overlooking Temple Meads station and the River Avon began in 2019, and construction is due to complete in 2022.



SERVICE	3D Modelling & Aerial Surveying (3MAS)
CLIENT	Kier Construction
PROJECT	Bristol University's Temple Quarter Enterprise Campus
LOCATION	Cattle Market Road, Bristol, BS1

KIER'S REQUIREMENT

Responsible for preparing the site, Kier needed a way of keeping track of progress, and to share topographic, volumetric and other survey data with key stakeholders to ensure the success of the initial design and ongoing development planning.

SCOPE OF WORKS & OUTPUTS

Site Manager Damon Johnson engaged our aerial survey team, already familiar with the cost advantages of aerial surveys, and wanting to give stakeholders the best possible data.

Our first survey was led by Ground Modelling & Aerial Survey Manager Raife Crookes.

Preliminary work included preparing a flight plan, obtaining the necessary permissions (in this case from Network Rail) and satisfying Kier's internal health and safety requirements for drone workers.

On the day, multiple ground control points (GCPs) were installed and 2 flights at different heights were flown to ensure that the necessary raw data was collected.

This data was then quickly transformed by Raife's team into highly accurate 3D digital models. Kier received online interrogable data within 24 hours of the flight and the full output within 3 working days.

Subsequent surveys followed, including a survey in May 2020 to help with the return from coronavirus and kick-off the delivery of the site's Materials Management Plan.



How is Kier benefiting from aerial surveys?

Unlike traditional survey methods, aerial surveys make it easy to capture on-site data.



Any doubts people have about aerial site surveys disappear as soon as they've had their first survey. They then often become as passionate as we are about the benefits and potential of this new technology.

Mike Nicholas -
MD T&P Regeneration



From the output of the aerial survey in May 2020

QUICK TURNAROUND TIMES



Traditional survey methods, which involve people on site with GPS equipment, take time. With aerial surveys, Kier saves hours of valuable on-site survey time, minimises health and safety risks, and receives the results of on-site surveys within days if not hours.

BETTER COST CONTROL



Drones collect tens of millions of data points, so Kier gets extraordinarily accurate digital models to use and share, including 3D point clouds, 3D textured meshes, and 2D orthomosaic models. Greater accuracy means better cost control across all areas of a project.






EASY COMMUNICATION



The digital models that are the outputs of an aerial survey can be stored and worked on in the cloud. This means they can be accessed any time from anywhere with an internet connection, making it easy for Kier to share and collaborate with other stakeholders.

WHY CHOOSE T&P REGENERATION FOR YOUR AERIAL SURVEY?

Here are 5 reasons to choose us for your next aerial survey

-  Latest drones and flight planning technology
-  Industry leading PIX4D & Autodesk software
-  Fully geo-referenced and interrogable 2D and 3D models
-  All surveys led by Civil Aviation recognised pilots
-  Free training sessions



T&P REGENERATION

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