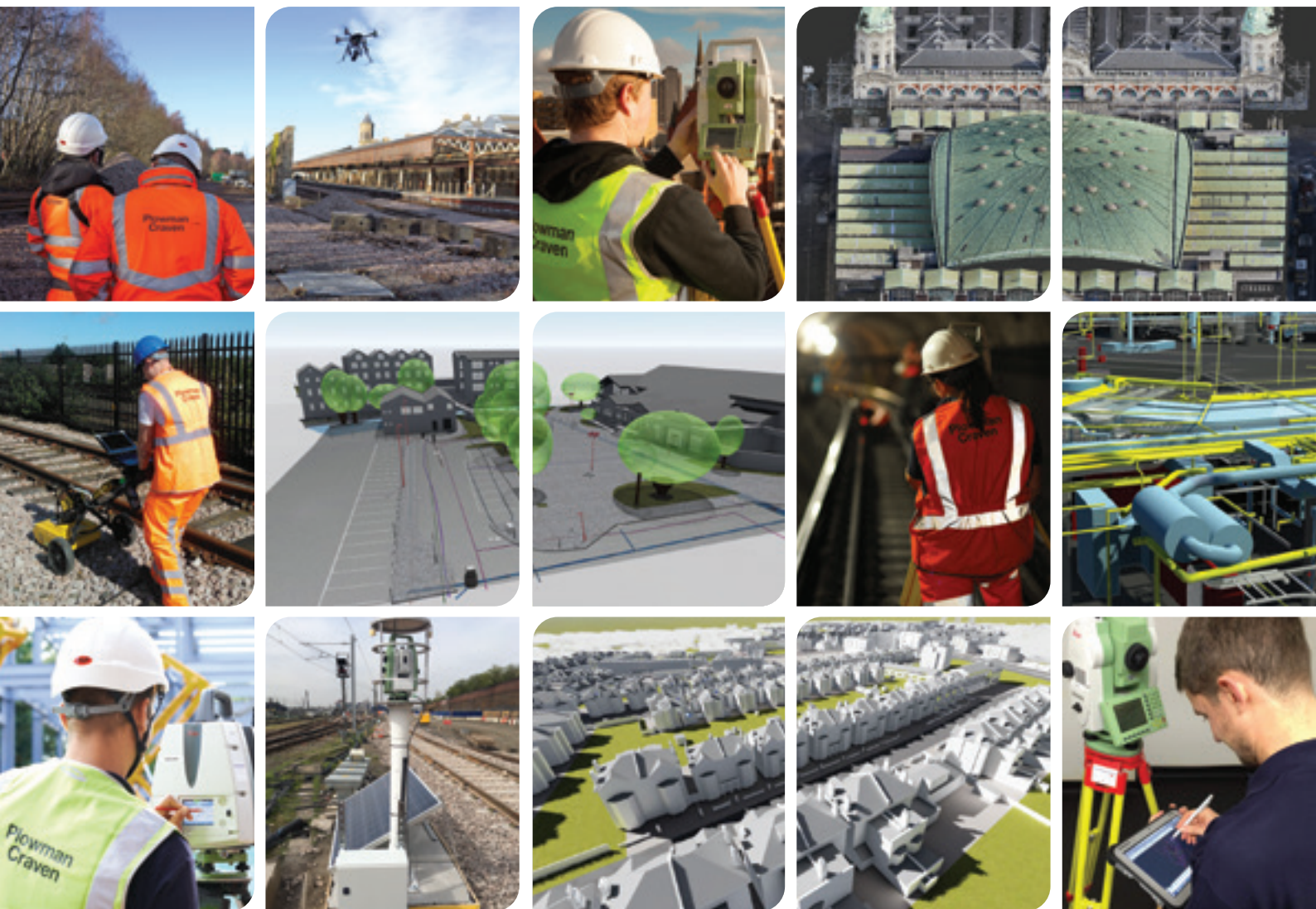


# Plowman Craven



Integrated measurement and consultancy services  
to the property and infrastructure markets.

[www.plowmancraven.co.uk](http://www.plowmancraven.co.uk)

**Consult. Trust. Innovate.**



# Welcome to **Plowman Craven**

As one of the largest surveying companies in the UK, we've spent more than 50 years providing a range of measurement and surveying services to the property, rail and infrastructure markets.

With offices at Harpenden in Hertfordshire and Central London, we work in both the private and public sector, playing a key role in some of the most prestigious development projects in the UK and overseas.



## We're not just a Survey Company...

We provide the data that helps inform and underpin our clients' plans. We measure and scan. We survey and record. We model and monitor. We interpret and advise.

Combining our technical expertise with the latest equipment, we serve a broad client base that includes developers, architects, contractors, engineers, project managers, commercial agents, estate managers, investors and government bodies.

In a typical week we could be consulting on a commercial property development, flying UAVs along Network Rail routes or laser scanning and 3D modelling a heritage building.



FS 550038  
EMS 552807  
OHS 594669  
IS 660395



“ For the last 50 years we’ve been at the forefront of survey and measurement innovation, pioneering new technologies and techniques that enable us to deliver a first-class service.

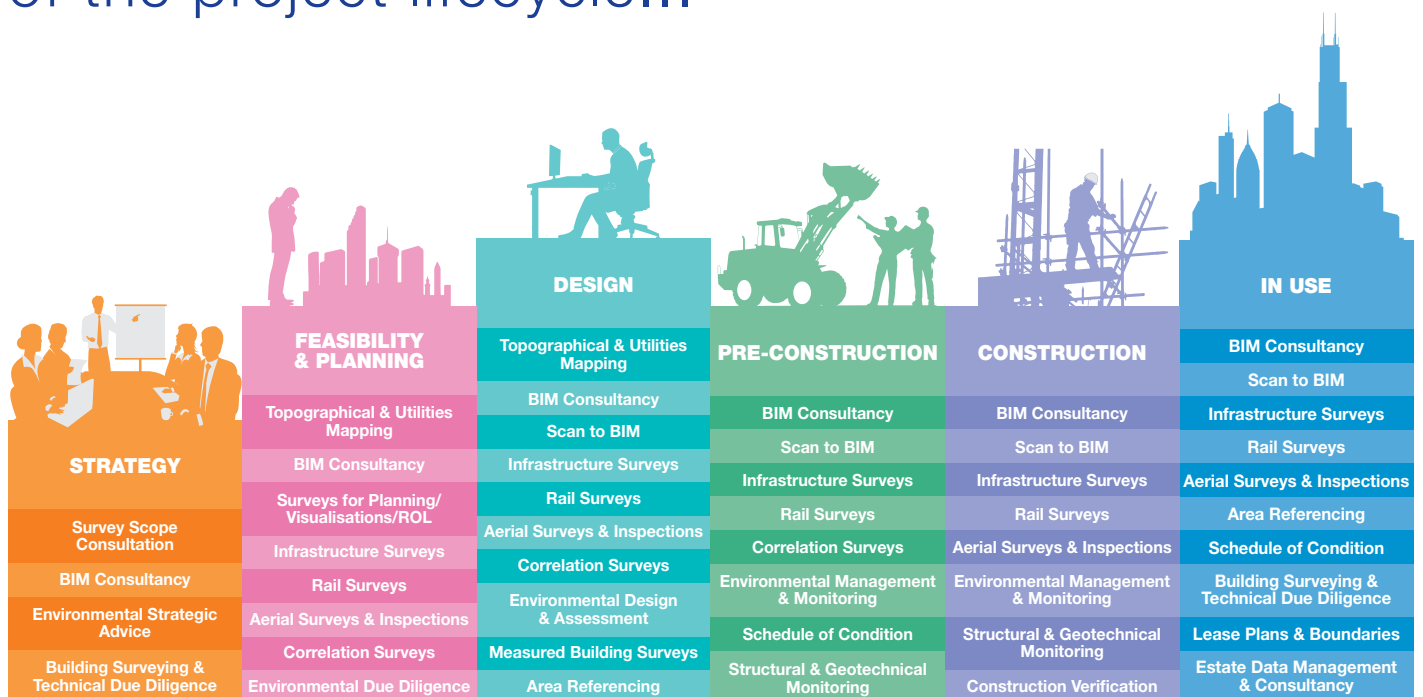


Where once it was chains and primitive measuring devices, we now deploy laser scanners, drones and 3D digital models to supply deliverables that add real value to projects. Everything we do, however, is underpinned by the customer-centric values that forged our reputation in the first place – accuracy, reliability, integrity.

Scanning and surveying services remain a core offering, but the modern-day Plowman Craven has become a multi-disciplinary firm delivering advice, services and solutions at every stage of the project lifecycle. We have grown, but we haven’t lost sight of what’s important: our customers.”

**Andy Molloy,**  
**Managing Director**

# Advice, services & solutions at every stage of the project lifecycle...





# Aerial Surveys & Inspection

With the ability to reach even the most inaccessible, hazardous or large-scale sites, Plowman Craven's **Unmanned Aerial Vehicle (UAV)** teams use the latest drone technology to provide a wide range of surveying and inspection services.

Using state-of-the-art aircraft and high-resolution cameras, our trained pilots are fully certified by the Civil Aviation Authority to operate in even the most congested areas, capturing highly-accurate geospatial survey data and high-resolution imagery of challenging or inaccessible locations - in a fraction of the time taken by traditional survey methods.

## Key Benefits

Rapid Data Capture | Survey-Grade Accuracy  
Inaccessible Locations | Improved Safety  
Less Manpower | More Cost-Effective  
More and Better Data Capture | Wide Range of Deliverables

## Measurement & Surveying Solutions

Topographical Surveys | Rail Track Measurement  
Measurement and Condition Surveys | Property Inspections  
Health and Safety Assessments | Site Visualisations  
Conservation, Ecological and Heritage Surveys |  
Planning and Rights of Light  
Building Information Modelling (BIM)

## Our Work

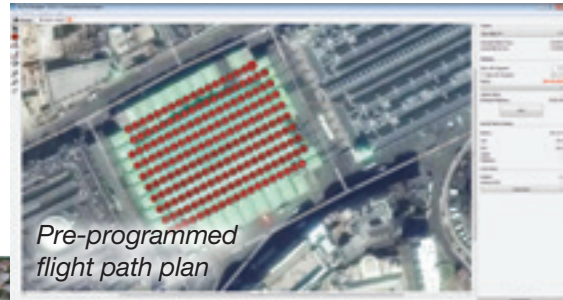
Urban | Rural | Coastal | Industrial  
Property Developments | Historic Buildings | Inaccessible  
Rooftops | Tall Buildings | Construction Sites  
Railways | Bridges | Ports | Waterways | Highways |  
Power Stations | Wind Turbines | Renewable Energy



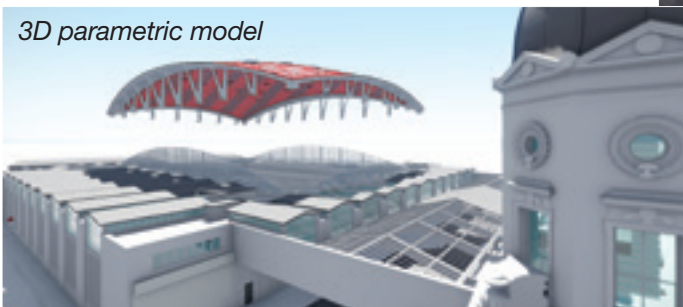
## Smithfield Market

Surveying London's iconic Smithfield Market presented a significant challenge, with a requirement for the City of London Corporation to scan and model the entire building, including the iconic domed roof.

Our UAV team surveyed the roof, canopies and all connected structures to capture high resolution images to deliver geospatial data of the external structures and interactive panoramic imagery of the roof. All data collected was seamlessly integrated with internal laser scanning and 360° photography to deliver a Condition Survey and comprehensive 3D Model.



*3D parametric model*

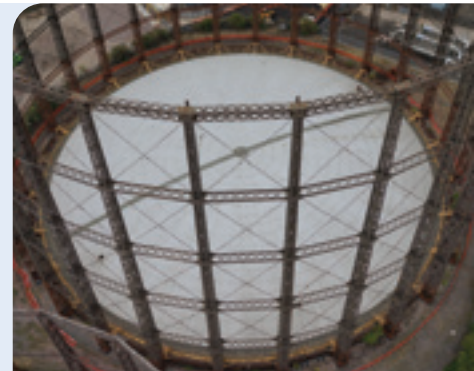


**Vogel Freedom** is a revolutionary new service from our experts. This **UAV**-based system enables comprehensive surveying and inspection of **Infrastructure** to an unprecedented level of accuracy in a fraction of the time of a traditional survey.

Vogel Freedom delivers sub-5mm accuracy and is perfectly suited to infrastructure surveying where access is difficult. For rail surveys, Vogel Freedom completely removes the need to access the track, drastically reducing workers exposure to risk.

### At A Glance

Live Railway Networks | Bridges and Viaducts  
Waterways and Ports | Oil Rigs and Power Stations  
Renewable Energy | Highways and Transport  
Tower Blocks | Housing | Multi-Story Developments





# Property Development & Consulting Services

With extensive measurement and consultative experience in Property Development and Refurbishment projects, Plowman Craven delivers a wide range of survey requirements through all phases of a project.

As experts in our field, we quickly become a valued member of your team, working alongside key stakeholders at every stage whether it's assisting with an overall survey scope or the application of appropriate expertise and technology to deliver a "best-fit" solution.



## Building Information Modelling

**Plowman Craven** measurement services play a key role in the Building Information Modelling (BIM) process, particularly within the built environment.

Our collaborative approach and 3D laser scanning expertise has allowed us to develop a process which delivers fast and accurate survey information in a BIM-ready model. Our workflow processes and the technological enhancements we apply makes us a distinguished industry leader with the ability to provide and implement a range of BIM deliverables such as Revit®.

Our dedicated BIM team is highly experienced in developing BIM-ready models which create a rich database of information to provide the platform for a project's success.



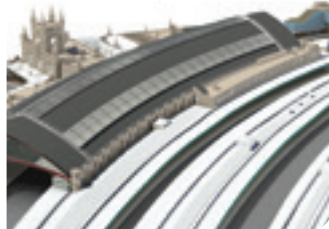
### At A Glance

- Improved understanding of planned v actual
- Reduced errors and increased productivity
- Design integrated into existing built environment
- Linked to survey data and control framework
- Ability to incorporate topography and utilities data

### BIM in Rail & Infrastructure

Our early adoption of BIM has proven essential in a number of significant Rail and Infrastructure projects including Crossrail and Bristol Temple Meads Railway Station.

Our specialist rail teams use a range of surveying techniques including laser scanning and UAV data capture to collect 3D survey data for BIM-ready models.



### BIM in Underground Services

Our wealth of experience in delivering information in strict accordance with current BIM standards enables us to offer Underground Services deliverables in Revit®, allowing surveys to be read in the 3D environment alongside associated 3D topography and built asset surveys.

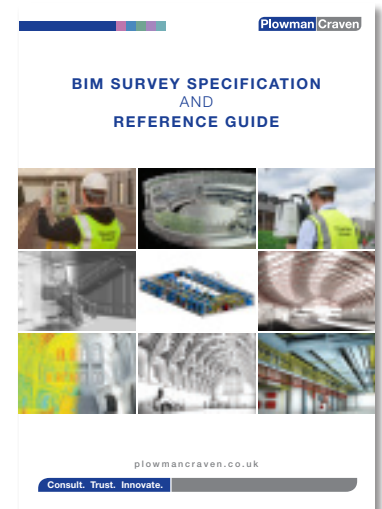


### BIM Survey Specification and Reference Guide

At Plowman Craven, we know that every BIM project is unique and that delivery requirements are considerably varied.

A well-defined set of guidance notes is a necessity in order to ensure levels of detail and requirements are clearly defined from the very beginning.

If you're involved in the procurement and production of BIM-related measurement services you can streamline the process with our comprehensive BIM Survey Specification and Reference Guide.



Highly regarded within the industry, this survey specification has become the accepted standard for BIM projects amongst our clients.

## BIM Consultancy Services

Independent advice and consultancy for your survey and BIM-related activities.

The Government's BIM Level 2 mandate deadline might have already passed, but there is clearly still an industry-wide difficulty in adopting BIM. This apprehension could be down to incomplete knowledge, bad experiences or simply a lack of understanding of what BIM entails.

That's where Plowman Craven comes in. We support the client, design and build teams - collaborating with them to help achieve Level 2 compliance. In real terms, that means supplying them with knowledge that empowers them to build their own BIM implementation strategies and successfully integrate them into current design and build processes.



#### At A Glance

Support with onboarding and familiarisation of BIM throughout the project lifecycle

Identification of objectives and requirements - we'll even write your Employers Information Requirements Document

Building of specific assessment templates and evaluation of supply chain

Evaluation, establishment and management of the common data environment

Project information management and assessment plans

Management of federated models and clash detection

Production of COBie datasheets and assistance with implementation of BIM-enabled CAFM systems



# Measured Building Surveys

Plowman Craven is firmly established as one of Europe's leading measured building survey experts.

Using a wide range of the latest technologies, including unmanned aerial vehicles (UAVs), to provide real-time data analysis, our services provide a solution for all your building plan needs.

Surveys are delivered in a variety of 2D, 3D and BIM-compatible formats and scan data can also be accessed through panoramic point cloud viewers to provide instant remote access and dimensional interrogation.



## At A Glance

Floor Plans, Elevations and Sections

3D Models | BIM-Compatible

TruView Global and Instant Point Cloud Access

3D Plant Refurbishment and Replacement Models

## Project Profile

### Parliamentary Estate

Having been the surveyor of choice for the Houses of Parliament since the 1970s, Plowman Craven has a rich history of scanning, measuring and documenting this UNESCO World Heritage Site. In 2016, we were awarded the coveted five-year framework contract to survey the entire Parliamentary Estate, as part of the Restoration and Renewal Programme. With more than 2,000 rooms in the main Parliament building alone, this was a mammoth task. We also provided a range of additional services including sewer surveys, asbestos tests and structural monitoring.



The measurement data captured was used to produce a comprehensive 3D model, enabling interested parties to "virtually" explore every inch of the Parliamentary Estate, extracting measurements and viewing all elements in fine detail. The 3D model was supported by thousands of high-resolution panoramic photographs to provide a full visual record of the condition of the Estate, enabling the planning, design and construction phases to proceed.





## Construction Verification

By precisely auditing and recording what has been constructed against what was designed, our Construction Verification services enable clients to mitigate some of the risk, time and cost impacts of complex construction projects.

Our construction verification surveys, including setting-out and floor-flatness assessments in a variety of environments such as logistics warehouses, help to minimise delays, clash detection, re-works, package creep, legal and financial variations.

### At A Glance

Provision of documented, independent certification of positional accuracy and content of installations

An “insurance policy” against potential variation claims

Proves conformance to contractual tolerance set by design teams



## Correlation Surveys

When a development involves piling or other sub-surface works, it is essential that the geospatial relationship of items both above and below ground is determined to a high degree of accuracy and reliability.

Plowman Craven works closely with developers and underground asset owners to deliver precise correlation surveys for projects where Network Rail, London Underground and Thames Water assets are present.

### At A Glance

Expert consultancy on survey grids

In-depth understanding of Network Rail, London Underground and Utility environments

Robust survey practice delivering reliable and accurate data

Cutting edge and rapid data collection techniques enabling multiple, value-added deliverables

ClearRoute analysis to aid design of monitoring regimes



## Surveys for Planning

We understand that accurate and reliable information is essential to meet rigorous requirements of planning applications and public enquiries.

Working closely with local councils, developers and architects, our specialist consultants and surveyors deliver a range of survey data and graphic information to assist in maximising potential on proposed sites and developments.



## Accurate Visual Representation

Accurate Visual Representations (AVRs) are integral in supporting planning applications. They ensure that proposed landscape and building schemes are depicted as accurately as possible. Whether you need Photomontages, Verified Views or 3D Models, we'll work with you to deliver the required output to relevant guidelines and frameworks.

### At A Glance

Ideal for Urban Regeneration projects

An accurate visual representation that all interested parties can understand

Visualise the proposed development at multiple stages

Understand impact on Rights of Light and privacy

Methodology statement to explain the verification process

Aids submissions for planning approval



## Rights of Light

Our Rights of Light survey specialists always work in collaboration with those analysing and reporting on the data. This ensures that reports delivered to developers maximise potential for their site, reduce the likelihood of any actionable claim for loss of daylight and establish the base data for on-going design, planning and construction.

### At A Glance

Measurement data in 2D and 3D format ("footprint" plans, elevations and roof spaces)

Common reference grids and datums in which all parties may have confidence

ROL Calculations | Massing Models | BRE Daylight | Sunlight Tests

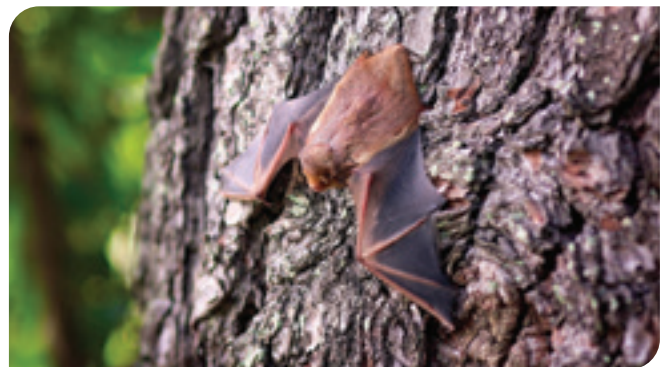


# Environmental Planning Services

Our specialist environmental division, **PC Enviro**, provides a range of environmental planning services including surveying, monitoring and consultancy.

With extensive experience across all sectors, PC Enviro offers support at every stage of the project lifecycle from feasibility/pre-acquisition, through design, planning, construction and use. Our services are designed to minimise risks to clients by combining expert technical knowledge, cutting edge technology and a consultative approach to stakeholder engagement.

These environmental services are fully integrated with Plowman Craven's broader surveying and measurement services. This integrated approach saves clients valuable time, working with one company rather than several, and creates efficiencies in our delivery, leading to significant cost-savings.



## Services

- Pre-Acquisition Surveys and Environmental Due Diligence
- Planning Application Support
- Environmental Impact Assessment, Management and Co-ordination
- Stakeholder Engagement
- Noise, Vibration and Air Quality Monitoring
- Construction Environmental Management
- Planning Condition Discharge
- Pre-Completion Air Tightness and Sound Insulation Testing



## Project Profile

### Priority School Building Programme

The Priority School Building Programme (PSBP) is a £4.4bn undertaking to rebuild and refurbish school buildings across the UK. The first phase covered 260 schools, with a further 277 schools to feature in phase two (PSBP2). Working for Mace, Plowman Craven delivered a full spectrum of surveying and measuring services to help identify the buildings most in need of attention in PSBP2. This also included a range of environmental services and mobilising PC Enviro specialists alongside Plowman Craven surveyors reduced the burden of access arrangements and disruption on sites during the busy term time. Preliminary Ecological Appraisals (PEAs), Arboricultural Constraints Surveys, Asbestos Management and Preliminary Flood Risk Appraisals were delivered to support feasibility studies and identify potential risks.



# Infrastructure Surveys

Infrastructure projects are complex and varied, requiring a range of measurement solutions that are accurate, effective, timely and delivered by experts.

Whether it's providing expert consultancy on a multi-faceted urban regeneration scheme such as King's Cross, delivering unique, innovative solutions for drilling crews on Crossrail, or working in confined spaces undertaking line and level surveys in Victorian sewers, our consultative approach means we manage everything through to delivery including access, health and safety and liaison with public authorities.



## Line & Level Sewer Surveys

We are the only survey company in the South East approved by Thames Water to undertake Line & Level Sewer Surveys.

Only the latest survey instruments are used to ensure highest levels of accuracy. We provide OS19/21 Condition Inspection Reports which highlight defects in sewer walls, both pre- and post-construction.

Working with approved suppliers we also undertake sewer cleaning and provide Chapter 8 traffic management if required.



### At A Glance

Thames Water CP2 Confined Space Qualified Surveyors

OS19/21 Sewer Condition Inspection Surveys

2D and 3D Deliverables to Thames Water Standards

Non-Man Entry Line and Level Sewer Surveys

Chapter 8 Traffic Management Coordination



# Underground Utilities Mapping

Pinpointing the exact location of utilities is vital when planning and undertaking both design and construction work. We use the latest innovative technology and tracing methods to provide a comprehensive understanding of infrastructure both above and below ground.

Our wide-ranging solutions include the tracing, identifying and mapping of all utilities and service routes such as gas, water, telecommunications, electricity and drainage.

We also go beyond the traditional 2D mapping of services. When combined with our leading topographic surveying capabilities, our utility tracing methodologies provide a comprehensive 3D understanding of infrastructure above and below the ground.

We also undertake CCTV condition surveys of drainage networks, lifting all manhole covers and using high definition video cameras to identify and measure content, defects and blockages.



## At A Glance

Ground Penetrating Radar (GPR) – including TSA Level 6 and PAS 128 Methodology

Methods and Delivery Aligned with Industry Standards

Radio Frequency Location

Laser Scanning | MEP BIM Models

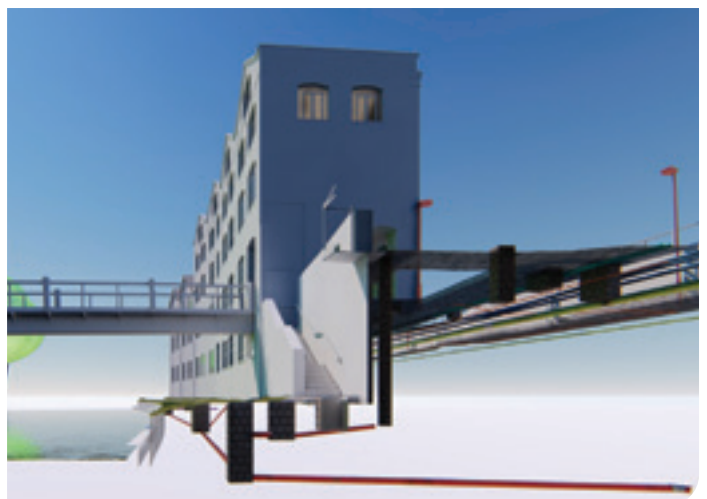
3D Utility Survey Data Capture and Modelling

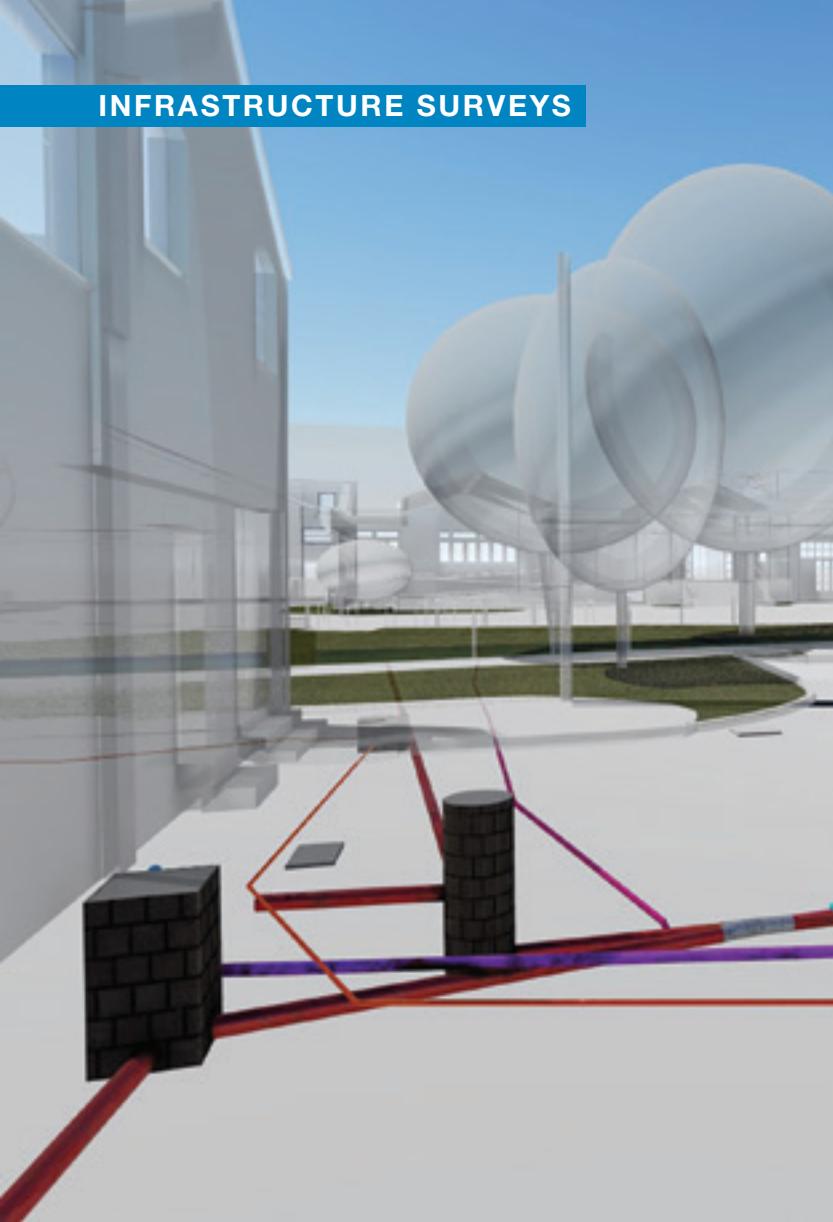
Confined Space Working | Vehicle Mounted GPR

Gyroscopic Surveys | 3D Chamber Surveys

Man-Entry Surveys | Building Services Tracing

CCTV Surveys





## BIM Underground Services

Plowman Craven has a wealth of experience in the delivery of industry-compliant information in strict accordance with the suite of current Building Information Modelling (BIM) standards including PAS1192, BS1192 and BS8541. This enables us to offer Underground Service Revit® deliverables, allowing surveys to be read in the 3D environment alongside associated 3D topography and built asset surveys.

### At A Glance

Easy to understand the connectivity between below ground, above ground services and adjacent buildings

Provides the design team with an industry standard compliant BIM-ready model

More data and information than a traditional 2D/3D AutoCAD services survey

Object-based information as opposed to line-based information

Fully classified information in accordance with Uniclass 1.4 and Uniclass 2015

Potential for design team to pass survey data into analysis software to ascertain current capacities and conditions

## Topographical Surveys

We've been involved on many of the UK's major urban regeneration schemes including Brent Cross Cricklewood, White City, Earls Court, King's Cross Central, Greenwich Peninsular, Elephant and Castle and Croydon.

Producing topographical surveys for greenfield, brownfield and development sites, data is captured in either 2D or 3D using the latest Total Station, GPS, laser scanning and UAV technology, applying innovative terrestrial, mobile and aerial techniques.

### At A Glance

GPS Primary Control Establishment

Aerial Surveys and Inspections

Small and Large Scale Topographic Surveys

Digital Terrain Models | Mobile Mapping





## Urban Regeneration Services & Consultancy

As a leading supplier of measurement survey services, Plowman Craven has extensive experience in the Urban Regeneration sector working closely with public sector, public-private partnerships and the multi-national arena.

Having been involved in some of the largest urban regeneration schemes in the UK, we have the knowledge and experience to deliver a wide range of survey requirements across all phases of a development project.

As experts in our field, we quickly become a valued member of your team. From assisting with the composition of the overall survey scope to delivering best-fit solutions and hosting all essential data files, our involvement and consultative approach from the onset means a “right first time” methodology to minimise risk of repetition, returns to site and subsequent downtime.



### Project Profile

## King's Cross Central

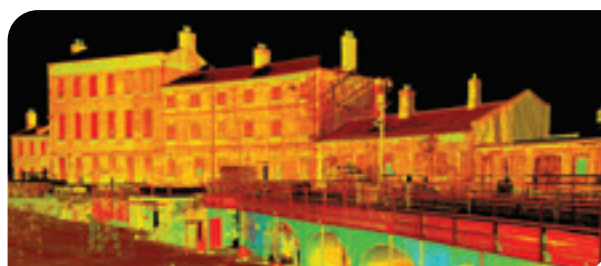
Since putting in place the original control grid at King's Cross station back in 2002, Plowman Craven has been the primary survey contractor on the 67-acre King's Cross Central regeneration site, an area of extraordinary scale and significance. Over the years we've surveyed, measured and collated relevant information from across the whole site covering buildings, railway lines, tunnels and utilities. We've provided insight and advice throughout the complete lifecycle of the project including cost-saving approaches to data acquisition and management so data could be used for multiple purposes throughout the programme.

Over the years, data has been acquired through:

- **3D Laser Scanning**
- **Measured Building Surveys**
- **Heritage Recording**
- **Manual Structural Monitoring**
- **Infrastructure Surveys**
- **Rail Surveys**
- **Correlation Survey**
- **Area Referencing Surveys**

In addition to the multiple uses of the data by the developer, architects, engineers and design teams, we have also used it to create:

- **Building Information Modelling**
- **3D Models**
- **Visualisations**
- **Underground Utilities Mapping**
- **Rights of Light Reporting**
- **As-Built Records**





# Structural & Environmental Monitoring

Plowman Craven has specialist divisions dedicated to providing structural and environmental monitoring solutions and consultancy services.

**PC Monitoring** and **PC Enviro** are fully integrated into Plowman Craven's broader surveying and measurement services and help clients identify risks and maximise the potential for their developments.



## PC Monitoring

Part of the **Plowman Craven** group

PC Monitoring is at the forefront of many major tunnelling and construction developments in the UK.

With a consultative approach, PC Monitoring works with clients to advise on and manage all structural, monitoring and engineering services requirements throughout the project lifecycle, offering a seamless solution to the construction and engineering industries.





# An Integrated Approach

Ensuring all buildings and surrounding structures remain stable and that all parameters are met throughout a construction project is just one of the many challenges faced when undertaking major developments.

Whether it's a requirement for rail track or structural monitoring, analysing risks to underground assets and tunnels or verifying accuracies in the construction of pre-fabricated modular tower blocks, our consultative and expert approach minimises risk and creates programme efficiencies.

## At A Glance

### Structural Monitoring

Tilt | Crack-Width | Load | Vibration  
Convergence | Distortion | Settlement  
Heave | Rotation

### Environmental Monitoring

Noise | Vibration | Air Quality

### Engineering Services

Site Control | Grid Lines and Datums  
Verification | Glazing Surveys | As-Builts

## Project Profile

### Crossrail Train Depot

Due to its extensive expertise of Network Rail infrastructure monitoring projects, PC Monitoring was selected to provide a track and structural monitoring system to record any movement of the sensitive assets bordering the new Crossrail Train Depot at Old Oak Common.

It was vital that strict Network Rail standards and measurement parameters were met and a system encompassing track prisms mounted along both running rails was installed allowing core parameters of cant, twist and displacement to be recorded. This was supplemented by structural prisms on retaining walls adjacent to a canal.

Monitoring was initially carried out using manual methods before high-precision Robotic Total Stations were installed. Based on concrete pads and powered by photovoltaic cells, prisms were automatically read with data transmitted via the mobile network to a dedicated, web-based visualisation software package. Emails and SMS messages were transmitted to the project team should pre-defined thresholds be breached.



## Project Profile

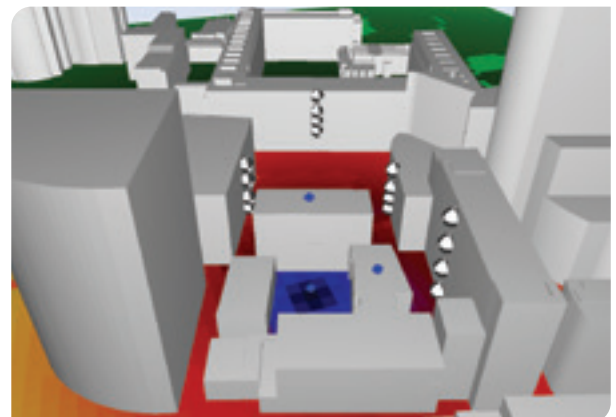
### 21 Moorfields

**PC Enviro**  
Part of the **Plowman Craven** group

With 21 Moorfields surrounded by residential and commercial buildings and built directly above a Crossrail ticket hall, noise, vibration and air quality relating to construction were identified as key environmental risks.

We undertook construction-dust risk and noise assessments, providing the contractors with information about which works might lead to complaints. Innovative 3D noise modelling installations predicted levels of noise and resulting data helped to identify mitigation requirements. Data was also fed into the local authority Section 61 applications for 'prior consent' to work.

Noise and vibration monitoring trials identified if works were likely to impact London Underground and continual real-time monitoring of noise, vibration and air quality monitoring took place throughout construction delivering live, web-accessible data to all stakeholders.



# Rail Surveys

The continual improvement and upgrading of the UK's rail infrastructure is a key focus for Plowman Craven, working closely with clients to provide accurate and efficient measurement solutions that assist the maintenance of a safe and cost-effective rail and underground network.



Evidence of our commitment to the rail sector is shown in our continued investment in emerging technologies such as mobile 3D laser scanning, track measuring systems, digital photography and unmanned aerial vehicles (UAVs) while embracing new approaches such as Building Information Modelling and UAV rail surveys using our new Vogel Freedom system.

Our dedicated in-house safety-accredited/passed rail surveying teams offer an experienced workforce capable of undertaking any rail project ranging from highly accurate track measurement for gauging purposes to full 3D models of stations.



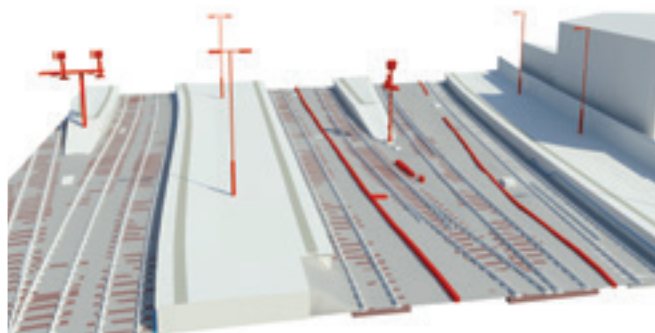
## At A Glance

Track Alignment and Topographic P-Way Surveys  
Structural Gauging and ClearRoute™ Analysis  
GNSS Control Surveys | Mobile 3D Laser Scanning  
OLE Height and Stagger Surveys  
Slab Track and Tamping Surveys | Tunnel Surveys

## BIM in Rail

Combining traditional survey techniques with the latest technology, our rail teams deploy laser scanners and UAVs (Unmanned Aerial Vehicles) to capture high-accuracy 3D survey data for rail-related BIM requirements.

Our early adoption and application of Building Information Modelling combined with our considerable experience within the rail sector has led to our involvement in numerous BIM associated rail projects, including Crossrail and Bristol Temple Meads Railway Station.







**Vogel Freedom** is Plowman Craven's revolutionary, UAV-based solution that enables the comprehensive surveying of rail infrastructure to a sub-5mm accuracy in a fraction of the time of a traditional survey.

Superior to any other method of data capture, including static laser scanning and train or trolley-based kinematic scanning systems, Vogel Freedom covers the busiest and most inaccessible areas of the rail network. This innovative new product is the next generation of the company's Vogel R3D system, building on its capabilities with additional compelling features. The updated platform can now accurately determine its location without as many ground control points, so that ground control can be off-track or even outside Network Rail's boundaries.

Working from a height of just 25m, data is captured from a position of safety even during traffic hours, removing the need for possessions and line blocks and drastically reducing the exposure of workers to risk.

Vogel Freedom delivers sub-5mm accuracy that meets Network Rail's Band 1 accuracy requirements and is suitable for track alignment and topographic survey at all GRIP stages.

### Enhanced Deliverables

Track Alignments for P-Way Design | Topographical Surveys  
3D Point Clouds | Building Information Models  
Orthophotos | High-Resolution Imagery for Asset Inspection  
Site Visualisations and TruView

### Key benefits:

- Less Risk:** removes the need to physically access the track
- Less Cost:** reduces the expense of possessions and line blocks
- Less Time:** shortens programmes as data capture is significantly faster
- More Speed:** rapid mobilisation means no waiting for next available possession
- More Value:** high definition photography supplements current survey deliverables
- More Accuracy:** proven to deliver sub-5mm accuracy





# Property Investment & Management Services

IPMS  
www.ipms.org



As one of the most respected firms in the industry, Plowman Craven provides independent advice on everything from measurement and building surveying to technical and environmental due diligence, offering a tailored service package to suit your requirements.

Our experience and reputation is built on our capacity to deliver, whether it is on a single transaction, property developments, portfolio disposals and investments, or as the framework surveyor for a prestigious estate.

We've delivered a range of property investment and management services to notable clients, buildings and developments including Centre Point, The Shard, 20 Fenchurch Street (the Walkie Talkie), The Crown Estate and NHS properties.



## Area Referencing

Using the most up-to-date technology, our specialist area measurement teams have a reputation for rapid response, expertise, accuracy and timely delivery.

Whether dealing with commercial, retail or mixed-used portfolios, digital delivery enables investors, developers and owner-occupiers to access their reports anywhere in the world.

### At A Glance

Expert on International Property Measurement Standard (IPMS): Office Buildings; Residential; Industrial

Experience on some of the most valuable portfolio transactions in the UK and abroad

Enabling clients to compare and benchmark facilities management across portfolios

Net and Gross Internal Area (NIA & GIA)

Retail Zoning (ITZA)

Independent assignable Duty of Care

Knowledge of international measurement codes

Pre-build desktop plan assessment



# Building Surveying Services & Technical Due Diligence

Whether you're an investor, developer, landlord or occupier, Plowman Craven's Property Consultancy team provides independent advice on all aspects of commercial building surveying throughout the property lifecycle.

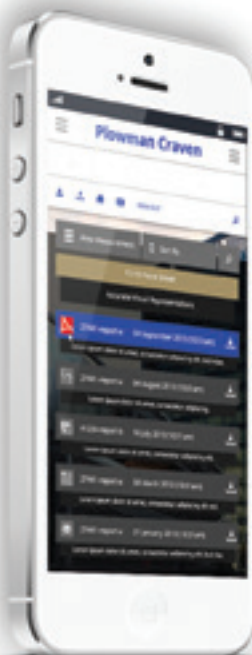
From a single commercial property through to large, mixed-use property portfolios our wide-range of services mitigate the need to commission a variety of different parties, allowing a more consistent approach, increased operating efficiency and controlled risk management – all resulting in an immediate cost saving.

## At A Glance

Pre-Acquisition Surveys | Vendors Packs  
Building Cost Reinstatement Assessments  
Dilapidations | Schedules of Condition  
Planned Preventative Maintenance Surveys  
M&E, Lift and Asbestos Surveys

A wide range of environmental surveys available through our specialist PC Enviro team

## Innovation



Innovation is at the heart of what we do and we continue to pioneer the early adoption of the latest technology for the benefit of our clients. This ranges from the delivery of reports via a secure, web-based portal to our unique, interactive 'Condition Capture' offering which combines a written report with 360° immersive panoramic photography and a site location plan, all of which are interconnected for a seamless delivery that benefits all stakeholders.



## Estate Data Management Services

We record, update and manage spatial data for several prominent estates including the Parliamentary Estates Directorate, The Crown Estate and the Royal Household Property Section.

During the lifecycle of a building, there is always a need to maximise efficiency and manage costs. Having up-to-date geospatial data is a key element of this whether it supports a Computer-Aided Facility Management (CAFM) system, integral BIM approach or provides a plan reference.

### At A Glance

Geospatial platform for CAFM systems  
Data-rich survey information for BIM  
Conservation, renovation, restoration and refurbishment plans  
Assessment of environmental issues and risk assessments

## Lease & Title Plans

Regulated by RICS, we offer professional expertise in the surveying and reporting of commercial property boundaries.

Our experience, coupled with a close working relationship with the Land Registry, has facilitated the production of compliant plans across the entire spectrum of properties.



### At A Glance

Lease Plans | Boundary Dispute Resolution  
Expert Witness | Conveyance Plans

## Health, Safety, Quality & the Environment

Health and Safety is of paramount importance to us at Plowman Craven. We fully recognise the need to minimise risks in the workplace and maintain a high degree of health and safety for our people, our clients, suppliers and members of the public, as supported by our continued compliance to the requirements of the BSI OHSAS 18001:2015 standard. We are Achilles/RISQS Link-Up approved and a member of Constructionline and Constructing Better Health.

We are committed to preventing pollution and to protecting the environment in which we work. We also maintain a fully accredited Quality Management System.



FS 550038  
EMS 552807  
OHS 594669  
IS 660395



## Our Commitment to Data Security

Plowman Craven's ISO 27001:2013 accreditation confirms our position as a market leader in the safe provision of measurement services, with the company being the first in its sector to be fully compliant with this international data security standard.

**“** We're delighted to have secured this certification - attaining ISO 27001:2013 clearly demonstrates our ongoing commitment to the most rigorous security practices and risk management policies. By benchmarking our own procedures against this globally recognised Information Security Management System Standard, our customers and partners can be assured of the integrity and resilience of our service. **”**

**David Norris,**  
Technical Director







# Why Choose Plowman Craven?

## ■ Our People

Our knowledgeable and committed staff are the lifeblood of the company. We're proud of them and their expertise. By investing heavily in our industry-leading training and development programmes, and providing excellent career-progression opportunities, we are ensuring that we can fully deliver on the wide range of projects we're involved in.

## ■ Our Clients

Long standing partnerships and client advocacy is achieved through the delivery of great results and great relationships. We're not just a survey company. We provide the data that helps inform and underpin our clients' plans. We measure and scan. We survey and record. We model and monitor. We interpret and advise.

## ■ Our Innovation

Our innovation is what sets us apart, whether we're offering a unique product or challenging our methodology to become more effective.

## ■ Our Quality

We're committed to quality at every level of the business. We understand there is no compromise on this and we continually invest in technology, staff development and health and safety to ensure we achieve the highest standards of service. We ensure that the very best standards exist right through our supply chain.

## ■ Our Environment

We are fully committed to improving our environmental performance across all our activities and areas of business in order to minimise damage to our environment.

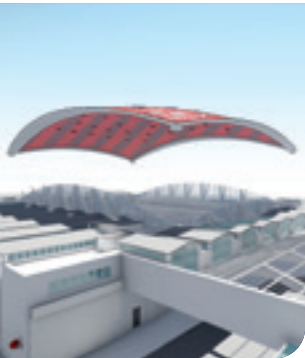
## ■ Our Suppliers

Our trusted partners and suppliers are as committed to delivering innovative solutions as we are, and take great pride in meeting the impeccable standards expected of them. We have a number of long-established relationships across the UK and beyond, ensuring a seamless extension of our resource and allowing us to be bold in the projects we deliver.

## ■ Our Community Work

We are firm believers in supporting the Community both at home and abroad. We regularly donate to a number of local projects and, as a result of working in Sierra Leone many years ago, we have a long-running association with the Borbor Pain School of Hope – a non-profit, charity school for orphans and children living in poverty.

Education  
Government & Public Bodies  
Health  
Heritage, Arts & Leisure  
Industrial & Logistics  
Office  
Rail & Transport  
Residential  
Retail  
Urban Regeneration  
Utilities



Aerial Surveys & Inspection  
Area Referencing Surveys  
Building Information Modelling & Consultancy  
Building Surveying Services & Technical Due Diligence  
Condition Surveys  
Construction Verification  
Correlation Surveys  
Environmental Planning Services  
Estate Data Management Services  
Heritage Recording  
Infrastructure Surveys  
Lease & Title Plans  
Line & Level Sewer Surveys  
Measured Building Surveys  
Rail Surveys  
Structural & Environmental Monitoring  
Surveys for Planning, AVR & Rights of Light  
Topographical Surveys  
Underground Utilities Mapping  
Visualisation  
3D Modelling

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