

**Transforming the retail landscape.
Bringing a city centre back to life.
Challenge accepted.**

HOARE LEA & CABOT CIRCUS



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Big plans for Bristol city centre. Meet you onsite?

In 2008, Cabot Circus set a new benchmark for high performing, sustainable retail centres. It altered the industry's expectation of what could be achieved when experts from across disciplines work together.

By breathing life into the project via the first fully covered, open streetscape of its kind, we were helping to create a new landmark in urban regeneration. In doing so, we also helped re-establish Bristol as a sought-after retail and leisure destination.

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Opportunity of a lifetime. See you there.

○ “Stood in a derelict car park by a crumbling office block, we imagined a revolutionary leisure experience for Bristol.”

PHIL GREW
PARTNER, HEAD OF RETAIL AND CABOT CIRCUS PROJECT LEAD

CLIENT: HAMMERSON AND
LAND SECURITIES
ARCHITECT: CHAPMAN TAYLOR
SITE SIZE: 36 ACRES



Our approach. Meet Phil Grew, Partner, Head of Retail and Cabot Circus project lead.

“From the start, it was clear that Cabot Circus could redefine what Bristol city centre meant to local communities. Our job was to bring the space to life in a way that would inspire and excite. It was incredible to think this was my first project for the city in a 20-year career. As a Bristolian and an engineer, I couldn’t wait to get started.”



REGENERATED REALITIES.

With 140 shops, 15 luxury flagship stores, 300 residential apartments, 2,000 space car park and large public streetscapes, Cabot Circus would inject a vibrant social space into the heart of the city.

It was to be one of the first new build schemes not to be fully enclosed and temperature controlled.

Adding to the project’s scope, Cabot Circus was to be a test bed for BRE and its new BREEAM for Retail assessment tool.

No pressure then.

PARTNERS IN PROGRESS.

On our journey, we forged invaluable and trusting relationships with the scheme’s master planners and collaborators. The team was made up of our client the Bristol Alliance (formed of Hammerson and Land Securities), and architects Chapman Taylor, along with Alec French and Stanton Williams.

Together, we developed the solutions that would allow this ambitious project to become a reality.

SERVICES PROVIDED

- BUILDING PHYSICS
- FIRE ENGINEERING
- INTELLIGENT BUILDINGS
- LIGHTING DESIGN
- MEP
- SUSTAINABILITY
- UTILITIES & ENERGY INFRASTRUCTURE
- VERTICAL TRANSPORTATION

PROJECT PIONEERS

**ENABLING WORKS:
LAYING THE
FOUNDATIONS.**

The enabling works we undertook to provide the all-important utility and energy infrastructure to the site were substantial.

During a near two-year enabling period, the inner-city ring road was moved hundreds of metres back up the M32 to form a new junction, primary electrical substation plant was repositioned, and parts of the Cutlers Mills culvert were relocated (with the help of some specialist Welsh mining know-how).

With 14 telecoms service providers affected, it required the best of our team's utility infrastructure experience. The result was one of the largest trenchshare agreements we had ever seen.

**DATA NETWORKS:
LARGE-SCALE
COMPLEXITY.**

Designing the project's IT services was just as demanding. At the time of the design, the aim was ambitious – to have all of the electronic systems on site carried by a single multi-fibre network. This meant everything from CCTV and BMS to car-parking controls and telecoms.

With the cabling running back to fibre hubs, we reduced the amount of distributed systems data cabling

usually associated with such large-scale retail schemes. The result was the largest converged data network in the UK at that time, which became an award-winning example of the complex IT challenges we tackle.

**INTERNAL MODELLING:
A BALANCING ACT.**

Defining the acceptability standards and modelling the internal environment required some juggling.

With conflicting demands from the client's leasing agents and development directors, we liaised closely with both to ensure the environmental variables anticipated in an open, covered space were fully understood.

Our building physics experts performed computerised acoustic, wind, rain, solar, and smoke modelling. The architects used our findings to better inform the development of the canopies, while our detailed smoke modelling of the roof structure demonstrated that the three-storey arcade required no mechanical ventilation. This was critical in demonstrating the viability of the fire strategy to local Fire Officers.

The result – we could treat the entire space as a streetscape rather than a retail mall... smoke detection, fire alarms, and sprinklers were not required.

**Grade I
listed Dominican
friary renovation**

1
multi-fibre
network for all
electronic systems

17.5M
predicted
annual footfall
to consider

MAKING IT HAPPEN



CFD

modelling ensured user comfort throughout.

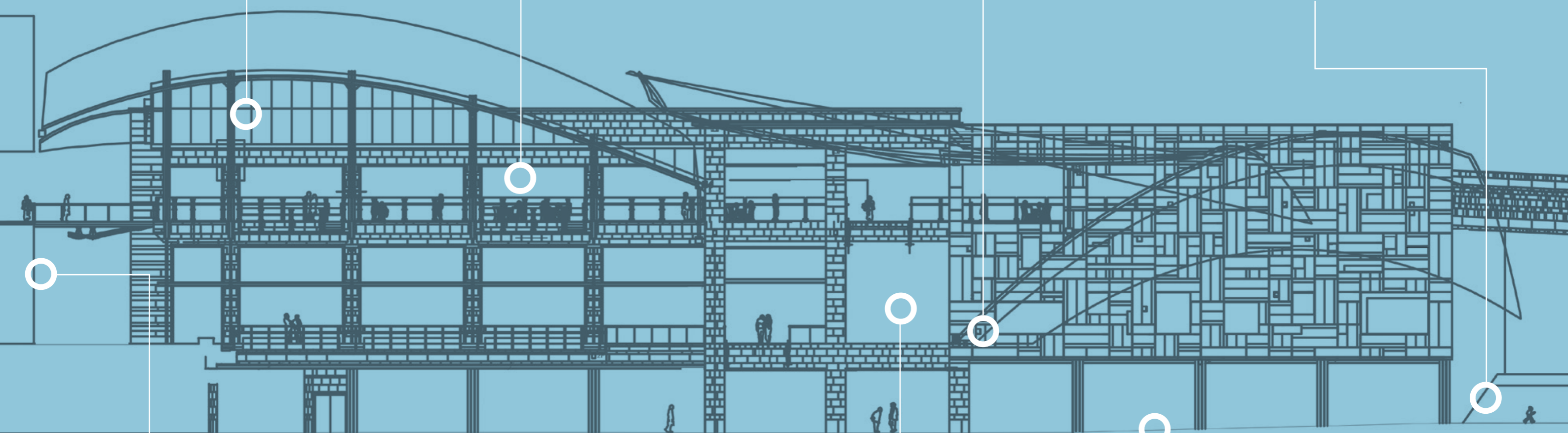
'Street' style.

A less intense 'streetscape' lighting design is integrated into the building façades. Textures, patterns, and colours make for a warm, ambient night-time environment.

Commercially-procured on-site electricity infrastructure network.

Public realm.

The design included a barrier-free public realm incorporating new artworks, and the sympathetic restoration of the Qakers Friars Grade I listed building into an up-market restaurant.



260

residential units.

18-place jump.

In 2007, pre Cabot Circus' opening, Bristol was 27th on the Venuescore national hierarchy of UK shopping centres. A year later, the city jumped to 9th place.

140

new shops.

UK's largest trenchshare system.

THE BIGGER PICTURE



UNDER THE CANOPY:
Three tiers of shopping and leisure in a safe, open environment, whatever the weather.



Project impact. Bringing people back to the centre of Bristol.

Sometimes, when you work so intensely on a project of such magnitude, it's challenges are all-consuming. It's only when you take a step back, and see how real people interact with a space, that your achievements become clear. This was the case for our pioneering work at Cabot Circus.



“When Cabot Circus opened and people filled the space, we understood the true scale of what we had helped create.”

PHIL GREW
PARTNER, HEAD OF RETAIL AND CABOT CIRCUS PROJECT LEAD

A REVOLUTION IN RETAIL.

Our work on Cabot Circus set the benchmark for future retail developments. The naturally ventilated covered spaces we engineered meant the elements traditionally associated with covered malls could be re-thought and re-imagined with a more human focus.

With no mechanical ventilation, heating or cooling, energy efficiency improved dramatically. A fact reflected back to tenants.

The retail construction industry has changed and we're proud to have helped engineer its evolution.

LASTING IMPACT

ENGINEERING THE INVISIBLE



“It has changed the entire city, and for one shopping centre to do that is quite an achievement.”

JUDGES' COMMENTS
MAPIC RETAIL AWARDS 2008

A CITY REAWAKENED.

The area of Bristol city centre that Cabot Circus transformed had become tired, unloved, and suffered from under investment. Ultimately, it was unfit for a modern, aspirational city like Bristol.

In the months after opening, the affects of this ambitious regeneration became apparent.

By re-establishing residential uses in the city centre – along with the public realm enhancements throughout – new neighbourhood communities began to develop.

While Cabot Circus' vibrant public spaces reinvigorated the area, its positive impact also extended beyond the project's perimeters – its presence makes for a warm, welcoming Bristol experience for tourists and residents alike.

The project's many technical achievements are proud accomplishments for our team, but the true measure of success is the city centre's transformation.

Ultimately, Cabot Circus captured Bristol's spark – revitalising its spirit, and helping the city take its place in the UK's top 10 centres.

“The retail experience has evolved, and Cabot Circus helped change it.”

A LEADING EXAMPLE OF A RETAIL-LED, MIXED-USE URBAN REGENERATION SCHEME



Achievements recognised.

- The first retail-led development of its kind to achieve a BREEAM Excellent rating.
- Gold Award In-Town Retail Scheme 300,000ft² or more, 2008 BCSC Awards.
- Supreme Gold, 2008 BCSC Awards.
- Best Shopping Centre, 2008 MAPIC Retail Awards.
- Winner, Best Use of IT, 2009 Building Services Awards.
- Winner, Infrastructure (medium firm), 2010 ACE Awards.



COMPLETED WITH PRIDE





Engineers of human experiences.

Hoare Lea is an award-winning engineering consultancy with a creative team of engineers, designers, and technical specialists. We provide innovative solutions to complex engineering and design challenges for buildings.

Irrespective of the scale or complexity of a project, we provide a full range of MEP, environmental, and sustainability services, bringing buildings to life and ensuring that they perform in operation as well as they look.

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